	TYPE	DATE	TIN	ΜE	AGENCY	DESCRIPTION	PAGE
Area I	Forecast Discussion	4/26/2018	0309	MST	Phoenix	Note - identifying the Pacific low systems but forecasting primarily for Phoenix metro (eastern Arizona)Temperatures Friday will drop a couple degrees from today's highs as heights aloft lower from the approaching Pacific trough that begins to move onshore across northern California and Oregon. This trough will be slow to progress eastward this weekend as the low center only reaches Idaho by Sunday nightThe trough will remain mostly to the north of our area this weekend as it slowly drifts eastward, but it will bring increased breeziness and a cooling trendThe trough will open up and become more expansive next Monday intoTuesday while a shortwave trough digs southward down the backside of the trough	66
Area I	Forecast Discussion	4/26/2018	0337	PDT	San Diego	A low pressure system off the West Coast will move slowly inland during the weekend. This will bring stronger onshore flow to Southern California with slow cooling spreading inlandStronger onshore flow will also bring periods of gusty southwest to west winds in the mountains and deserts during the afternoons and evenings	69
Area I	Forecast Discussion	4/26/2018	1400	MST	Phoenix	Note - identifying the Pacific low systems but forecasting primarily for Phoenix metro (eastern Arizona)The larger east Pacific trough will slowly progress inland over the weekend gradually unlocking the downstream blocking pattern with the primary central circulation only reaching Idaho Sunday night. This slow propagation will yield only modest height falls and pressure packing along and behind a theta-e boundary crossing the region, somewhat limiting the strength of winds than otherwise could occur this time of yearThe overall longwave trough will open up and become more expansive Monday into Tuesday while a potent shortwave digs southward down the western periphery of this longwave along the west coast. Though there's still notable ensemble and operational model spread regarding timing and depth of this shortwave, the general consensus depicts another closed low (or family of closed shortwaves) traversing the SW Conus during the middle of next week (most likely on Wednesday)	71
Area I	Forecast Discussion	4/26/2018	2145	PDT	San Diego	A low pressure system currently off the coast of northern California will move slowly inland during the weekend. This will bring stronger onshore flow to Southern California with slow cooling spreading inland Stronger onshore flow will also bring periods of gusty southwest to west winds in the mountains and deserts during the afternoons and evenings	74
Area I	Forecast Discussion	4/27/2018	0257	MST	Phoenix	Note - identifying the Pacific low systems but forecasting primarily for Phoenix metro (eastern Arizona)The aforementioned Pacific system will slowly move onshore Saturday with the center of circulation over central Oregon. This will strengthen the southwesterly flow aloft over Arizona pushing any lingering chances for thunderstorms out of our area by Saturday nightBy early next week, the trough will open over the western half of the country. Several models depict additional shortwaves circling through the upper air pattern with the possibility of a secondary system impacting Arizona by the middle of the week.	76
Area I	Forecast Discussion	4/27/2018	0332	PDT	San Diego	A low pressure system centered off the coast of northern California will move into the Pacific Northwest on Saturday and then into the Great Basin on Sunday. This will slowly strengthen the onshore flow across Southern Californiaand bring stronger and gusty southwest to west winds in the mountains and deserts during the afternoons and evenings. The winds are expected to strengthen each day with the strongest winds for late Sunday afternoon through Sunday night with advisory strength winds on the desert slopes of the mountains into the deserts.	79

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ТҮРЕ	DATE	TIF	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/27/2018	0908	PDT	San Diego	The atmospheric pattern features a large trough of low pressure hovering off the coast of Northern California exerting just enough influence to deepen our marine layer here in the south. Within this trough will rotate a series of short waves in the coming days. Today the first one swings through Northern California. That will keep our marine layer deep and also initiate a coastal eddy circulationThese short waves will also boost winds in the mountains and deserts each afternoon and evening. The next wave moves through California Saturday and the next one Sunday afternoon. Each one keeping the marine layer deep and propped up, and the winds blowing in mountains and deserts. Sunday looks windiest at this time. On Monday and Tuesday the entire trough decides to finally amplify and move through the state. This appears to bring enough energy to the marine layer to wring out some drizzle or light showers as we finish April and start May. The chances are not high and any amounts would be rather light. Models diverge on when this main trough moves out, with some lingering weak trough in the area or a ridge of high pressure. After cooler than average weather for the next five days, it looks just a little warmer Wednesday and Thursday.	81
Area Forecast Discussion	4/27/2018	2055	MST	Phoenix	Note - identifying the Pacific low systems but forecasting primarily for Phoenix metro (eastern Arizona)At 8 pm this evening, a large upper low could be seen spinning just off the Pacific northwest coast allowing the high pressure ridge over the desert southwest to shift east;	83
Area Forecast Discussion	4/27/2018	2114	PDT	San Diego	The upper trough axis crosses Socal on Saturday allowing for a stronger onshore flow but well mixed marine layer (cloud burn off) and finally cooling into the lower deserts. We will also see stronger and longer duration winds in the deserts on Saturday. Will consider advisory for this, though the strongest winds are expected on Sunday. On Sunday a fast moving short wave trough brings a 6 hour period of 40-50 knots at 700 mb. The well mixed air mass should translate to a stronger period of winds in the Coachella Valley, desert slopes and High Deserts with impact including dust. This period looks to be solid wind advisory or low end warning	86
Area Forecast Discussion	4/28/2018	0300	MST	Phoenix	Note - identifying the Pacific low systems but forecasting primarily for Phoenix metro (eastern Arizona)At Latest water vapor imagery reveals a large vortex just off the Oregon coast. This low pressure system will slide eastward into the intermountain West this weekend while weakening. Along the southern end of this system, a dry southwesterly flow will prevail across the Desert Southwest.	89
Area Forecast Discussion	4/28/2018	0314	PDT	San Diego	A low pressure system moving slowly into the Pacific Northwest this weekend and into the Great Basin on Monday will strengthen onshore flow into Sunday with onshore flow weakening slightly on Monday. Cooling will continue to spread inland through Monday. The onshore flow will bring periods of stronger and gusty southwest to west winds in the mountains and deserts. Winds will be stronger and more widespread each late afternoon through late evening. The strongest winds are expected for late Sunday afternoon into Sunday night with advisory strength winds likely in portions of the mountains and deserts	91
Area Forecast Discussion	4/28/2018	0522	MST	Phoenix	.UPDATEUpdated Aviation and Fire Weather sections. Southeast California/Southwest Arizona including KIPL and KBLH: Anticipate something of a repeat of yesterday with light downvalley/drainage winds this morning before strengthening and favoring southwest and west directions (southerly over the Lower Colorado River Valley) in the afternoon. Expect gusts of 20-30 kts (strongest over Imperial County) in the afternoon and evening (lingering over Imperial County). Otherwise, skies will be clear through Saturday night.	94

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ТҮРЕ	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/28/2018	0857	PDT	San Diego	At 8 AM PDT Surface pressure gradients of around 7 MBS KSAN to the deserts were supporting some peak wind gusts over 40 MPH through the passes, but most places in the mts/deserts were had gusts under 25 MPH.	97
Area Forecast Discussion	4/28/2018	1317	PDT	San Diego	At 1 PM PDTSurface pressure gradients of 7-8 MBS KSAN to the deserts were supporting some peak wind gusts of 30 to 40 MPH through the passes and into the deserts, but most places in the mts/deserts had gusts under 25 MPH. While breezy this evening over the mts/deserts, winds will increase late on Sunday and Sunday evening when a Wind Advisory will be needed on the deserts and lee slopes of the mts. Expect some gusts to exceed 55 MPH in the windiest spots. A longwave trough will develop over the West early next week, steering several disturbances across California. The first will move across the State rather quickly late Sunday, followed by a digging, colder system on Tuesday, and then a final weaker trough early Wednesday. This will bring an active weather pattern across SoCal for the first half of next week. The first short-wave will rev up the west winds over the mts/deserts a bit more on Sun evening and build the marine layer onto the coastal slopes of the mts. A few sprinkles or patchy drizzle cannot be ruled out into Mon morning, but nothing of significance is expected. The stronger, digging wave will close off a compact upper-level low over SoCal on Tue. As this occurs, upper levels will cool significantly as 500H heights fall, setting the stage for some high elevation, spring snowfall and even a few thunderstorms. While some precip is likley, the showery nature of it precludes nailing times and amounts in any spot. The upper low moves slowly east on Wed with a hang-back trough over SoCal, possibly supporting lingering showers. Cooling will begin with the shortwave on Sunday, and peak on Tuesday with the upper low when daytime highs will be some 20 degrees F below average inland	100
Urgent Weather Message	4/28/2018	1336	MST	Phoenix	Imperial County Southwest-Imperial County West-Including the cities of Mountain Spring, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster CityWIND ADVISORY IN EFFECT FROM 2 PM SUNDAY TO 2 AM PDT MONDAYThe National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM Sunday to 2 AM PDT Monday. * AFFECTED AREASouthwest Imperial County including Interstate 8. * TIMINGSunday afternoon into Sunday night. * WINDSWest winds 30 to 35 mph with localized gusts 40 to 50 mph. * IMPACTSDangerous driving conditions will exist for high profiles vehicles. In addition, areas of dense blowing dust are possible.	103

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TYPE	DATE	_	ME	AGENCY	DESCRIPTION AppendIX A	PAGE
Area Forecast Discussion	4/28/2018	1443	MST	Phoenix	Note - identifying the Pacific low systems but forecasting primarily for Phoenix metro (eastern Arizona) Currently, PWs near 0.5-0.7 inches exist across the eastern half of AZ while much drier air (PW ~ 0.2 inches) from California is being ushered into the state. This is in response to the southwesterly flow aloft which is supported by an incoming trough of low pressure currently positioned over the Pacific Northwesta series of short waves pinwheeling around this trough will move through our region. By late Sunday, the first shortwave will move through our region but is not expected to bring any precipitation as the system is relatively moisture starved. However, height falls will tighten surface pressure gradients and drive strong winds, mainly over SE California. Areas of blowing dust will be the major concern over much of SE California on Sunday and could make for particularly difficult travel near El Centro and along highway 78 and 86. Gusts 35-45 mph are expected over the area with speeds reaching 50 mph in windiest locationsWeaker, although sill breezy winds are expected for Monday as cooler air continues to filter into our CWABy Tuesday, yet another system will move through our area. Strong winds look to be a near certainty for SE California yet again with gusts similar to what we are expecting for Sunday. Blowing dust will also likely cause an issue for travelers and create more air quality concerns. One difference with this system is that there is decent moisture advection out ahead of it. This will bring a chance of precipitation over our area Starting Tuesday evening.	105
Urgent Weather Message	4/28/2018	1540	PDT	San Diego	Strong Winds in the Mountains and Deserts through Early Monday San Bernardino County Mountains-Riverside County Mountains-San Diego County Mountains-Apple and Lucerne Valleys-Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning-Including the cities of Crestline, Lake Arrowhead, Big Bear City, Big Bear Lake, Running Springs, Wrightwood, Idyllwild-Pine Cove, Julian, Pine Valley, Victorville, Hesperia, Apple Valley, Indio, Palm Springs, Cathedral City, Palm Desert, Palm Desert Country, La Quinta, Coachella, Borrego Springs, Banning, and Desert Hot SpringsWIND ADVISORY IN EFFECT UNTIL 5 AM PDT MONDAYThe National Weather Service in San Diego has issued a Wind Advisorywhich is in effect until 5 AM PDT Monday. * WindsWest 20 to 30 mph with gusts to 50 mph. Isolated gusts to 60 mph along the desert slopes in San Diego County. * TimingThrough early Monday. Strongest winds Sunday afternoon and evening. * LocationMountain ridges, desert slopes and deserts. * VisibilityLocally reduced to 1 mile or less in blowing dust and sand. * ImpactsTemporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand.	108

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TYPE	DATE	TIF	ΜE	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/28/2018	2100	MST	Phoenix	Early this evening, a strong upper low continued to move inland and into the Pacific northwest; as it approached mid level gradients tightened resulting in breezy to windy conditions across much of the area this afternoon. Imperial recorded wind gusts to around 30kt earlier and the southwest flow ahead of the approaching low ushered in drier air and allowed the high based cu to dissipate;At 8 pm, winds had tapered off a bit but were still breezy in some locales such as the Imperial Valley; Imperial was still reporting gusts around 25kt. For the rest of tonight expect clear skies along with locally breezy conditions mainly over the western deserts and over typical wind prone areas such as western Imperial County or Joshua Tree NPAVIATION Southeast California/Southwest Arizona including KIPL and KBLH: Look for breezy southwest to west winds to persist past midnight at the TAF sites with some gusts over 20kt at times before tapering off below 12kt by 09z or so. As a strong upper low moves into the area, gusty southwest/west winds will develop again on Sunday after 20z with gusts from 25 to 35kt at times expected at both KIPL and KBLH. Gusts may approach 40kt at times at KIPL during the evening hours and may be strong enough to generate some blowing dust as well as reducing visibility below 5sm	110
Area Forecast Discussion	4/28/2018	2137	PDT	San Diego	At 9 PM, a trough of low pressure remained in place along the West Coast, with dry northwest flow dominating in SoCal Winds were breezy in the deserts with gusts in the 25-35 mph range on the desert floor, and isolated gusts into the mid 50s along the desert slopes. Areas of blowing dust were evident on visible satellite in San Diego and Imperial Counties prior to sunset. The trough will remain anchored along the West Coast through Monday, resulting in continued onshore flow and slow height falls Gusty west winds in the deserts will continue to be the primary weather impact in the region. Winds should peak Sunday afternoon/evening as a weak shortwave and associated jet round the base of the larger trough. This should result in the strongest winds of the weekend in the deserts with gusts in the 30-50 mph range (isolated 60 mph gusts along the wind prone desert slopes), while travel may be difficult at times for high profile vehicles along Interstates 8, 10 and 15, and Highways 62, 74, 78, 86, 111, and 247. Blowing dust and sand are also likely. A second stronger shortwave will rotate through the base of the trough Tuesday. Gusty winds, will again be possible in the deserts, with impacts similar to Sunday evening. Setting the winds aside, this second shortwave should have a greater pool of cold air aloft associated with it. Resulting in increased mid level lapse rates and sufficient instability over the region for scattered showers (potentially a few thunderstorms), despite limited moistureNot to be total forgotten, Tuesday should be the coolest day of the week with inland highs running 10-25 degrees below average.	113

ТҮРЕ	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	4/29/2018	0245	PDT	San Diego	Strong Winds in the Mountains and Deserts through Early Monday San Bernardino County Mountains-Riverside County Mountains-San Diego County Mountains-Apple and Lucerne Valleys-Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning-Including the cities of Big Bear City, Julian, Victorville, Hesperia, Apple Valley, Indio, Palm Desert, Palm Desert Country, La Quinta, Coachella, Borrego Springs, Banning, and Desert Hot SpringsWIND ADVISORY NOW IN EFFECT UNTIL 4 AM PDT MONDAY * WindsWest 20 to 30 mph with gusts to 50 mph. Isolated gusts to 60 mph along the desert slopes in San Diego County and in the northern Coachella Valley below the San Gorgonio Pass. * TimingThrough early Monday. Strongest winds this afternoon and evening. * LocationMountain ridges, desert slopes and deserts. * VisibilityLocally reduced to 1 mile or less in blowing dust and sand in the deserts. * ImpactsTemporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand in the deserts	116
Area Forecast Discussion	4/29/2018	0318	MST	Phoenix	Further upstream, a large vortex is evident across the Pacific Northwest. This feature will weaken somewhat today as it migrates eastward, though a reinforcing short-wave trough will drop southward into southern California this evening. Ahead of this system, the pressure gradient will tighten resulting in widespread windy conditions across the Desert Southwest. The strong winds will be most pronounced in the gaps and channels of southern California late this afternoon where gusts could reach 35 to 50 mph. Gusts of this magnitude will also be sufficient to produce areas of blowing dust, which will be advected downstream towards the Imperial Valley and possibly further east into Yuma County. Winds will subside somewhat Monday behind the axis of the short-wave trough, though conditions will still remain generally breezy. The aforementioned vortex will become reinvigorated Tuesday as another vort max moves into southern California. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be as moisture-starved as the previous one, with low-level mixing ratios inching up towards 4-5 g/kg.	117
Urgent Weather Message	4/29/2018	0331	MST	Phoenix	*Second Advisory includes Imperial County Southwest and West Imperial Valley-Including the cities of El Centro, Calexico, Alamorio, and BrawleyWIND ADVISORY IN EFFECT FROM 2 PM THIS AFTERNOON TO 2 AM PDT MONDAYThe National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM this afternoon to 2 AM PDT Monday. * AFFECTED AREAThe Imperial Valley including El Centro and Brawley. * TIMINGVery strong winds develop during the latter half of this afternoon before weakening after midnight. * WINDSWest winds 30 to 35 mph with gusts 40 to 50 mph. * IMPACTSDangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficultespecially for high profile vehicles on north- south oriented roads.	120

TYPE	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/29/2018	0339	PDT	San Diego	A low pressure system moving inland from the Pacific Northwest to Great Basin today will strengthen the onshore flow across Southern California. The onshore flow will continue to spread cooling inland. The onshore flow will bring stronger and gusty southwest to west winds in the mountains and desertsstrongest and most widespread during the afternoon and eveningFor Tuesdaya cold and compact low pressure system moving southward just off the West Coast will move into Southern California bringing greater cooling with inland high temperatures around 20 degrees below averagealong with showers and a slight chance of thunderstorms Tuesday afternoon. Showers are most likely from late Tuesday morning into Tuesday evening.	123
Area Forecast Discussion	4/29/2018	0552	MST	Phoenix	.UPDATEUpdated Aviation and Fire Weather sections. Southeast California/Southwest Arizona including KIPL and KBLH: Southwest and west flow aloft from near the surface up through troposphere will strengthen as the day progresses due to a large low pressure system slowly moving through the western states. Surface winds will be light in most places this morning. An exception being western and central portions of Imperial County which has already seen off-and-on gustiness early this morning. By early afternoon, surface winds strengthen and become southwesterly with gusts of 15-25 kts. Anticipate further strengthening - especially west of the Lower Colorado River Valley - by 00Z. Winds will be strongest west of the Lower Colorado River Valley with gusts of 35-40 kts. With those winds, expect areas of blowing dust and sand reducing visibility below 10 miles and occasionally in localized spots dipping below 3 miles. Surface winds will be quite a bit weaker by 09Z. Flow aloft trends weaker by then as well	126
Area Forecast Discussion	4/29/2018	0818	PDT	San Diego	surface pressure gradients were trending a bit more onshore from yesterday at 7-8 MBS KSAN to the deserts, keeping several of our windier mtn/desert areas gusting above 30 MPH. Peak gusts of around 45 MPH were nearer the passes.	129
Area Forecast Discussion	4/29/2018	0930	MST	Phoenix	A large, slow moving circulation center was spinning across eastern Oregon this morning with a notable shortwave and enhanced jet streak diving down the western periphery of this larger trough. Wind speeds were just beginning to accelerate through the far western reaches of the CWAEarly look at 12Z guidance only reinforces the idea windy conditions and blowing dust through parts of Imperial and Riverside counties later today. Current high clouds are obscuring any look at GOES-16 dust products, but that should change later today and advisory and/or warning statements may be necessary for locations near and west of El Centro.	132
Area Forecast Discussion	4/29/2018	1018	MST	Phoenix	.UPDATEUpdated Aviation DiscussionSoutheast California/Southwest Arizona including KIPL and KBLH: Surface winds will quickly strengthen and become southwesterly with gusts to 25 kts by early afternoon. Anticipate further strengthening, across Southeast California by late afternoon. Winds will peak late this afternoon and early evening with gusts to around 35kts. With those winds, expect areas of blowing dust and sand reducing visibility below 10 miles and occasionally in localized spots dipping below 3 miles. Surface winds will be quite a bit weaker by 09Z. Skies will remain mostly clear through theperiod with only some high cirrus at times.	135

TYPE	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/29/2018	1325	PDT	San Diego	The surface pressure gradients were trending a bit more onshore from yesterday at 8-9 MBS KSAN to the deserts, keeping several of our windier mtn/desert areas gusting above 30 MPH. A weak shortwave trough will pass over SoCal this evening, supporting stronger wind gusts over the mts/deserts where a Wind Advisory is in effect. Peak gusts near 60 MPH are possible on the desert slopes and near passes, while most areas on the desert floor peak in the 30 to 40 MPH range. Some blowing dust is likley. Winds will decrease slightly late tonight into Monday as the marine layer deepens further due to the well developed coastal eddy spinning offshore The deep marine layer will ensure another cool day on MondayFor Tue/Wed A cold low pressure system will drop south over CA gathering up modest amounts of atmospheric moisture and sparking rounds of showers. Isolated thunderstorms are possible as colder air aloft filters in Tue afternoon/evening. Snow is possible above 5500 FT, with significant accumulations above 6500 FT. Gusty SW to W winds will continue over the mts/deserts as well	138
Urgent Weather Message	4/29/2018	1344	PDT	San Diego	Strong Winds in the Mountains and Deserts through tongiht San Bernardino County Mountains-Riverside County Mountains-San Diego County Mountains-Apple and Lucerne Valleys-Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning-Including the cities of Big Bear City, Julian, Victorville, Hesperia, Apple Valley, Indio, Palm Desert, Palm Desert Country, La Quinta, Coachella, Borrego Springs, Banning, and Desert Hot SpringsWIND ADVISORY REMAINS IN EFFECT UNTIL 4 AM PDT MONDAY * WindsWest 20 to 35 mph with gusts to 55 mph. Isolated gusts to 65 mph along the desert slopes and through and below the passes. * TimingThrough early Monday. Strongest winds this afternoon and evening. * LocationMountain ridges, desert slopes and deserts. * VisibilityLocally reduced to 1 mile or less in blowing dust and sand in the deserts. * ImpactsTemporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand in the deserts.	141
Urgent Weather Message	4/29/2018	1409	MST	Phoenix	*Second Advisory includes Imperial County Southwest and West Imperial Valley-Including the cities of El Centro, Calexico, Alamorio, and BrawleyWIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT MONDAY * AFFECTED AREAThe Imperial Valley including El Centro and Brawley. * TIMINGStrong winds will peak late this afternoon and early evening before weakening after midnight. * WINDSWest winds 25 to 35 mph with gusts 40 to 45 mph. * IMPACTSDangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficultespecially for high profile vehicles on north- south oriented roads.	142

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ТҮРЕ	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/29/2018	1430	MST	Phoenix	A large, slow moving circulation center was still spinning across eastern Oregon this afternoon with a notable shortwave and enhanced jet streak punching into central California and towards the Las Vegas area. Wind speeds were slowly accelerating through the western reaches of the CWA coincident with a focused area of H8-H7 frontogenesis and leading edge of the H5 jet nose. Conditions should only deteriorate later this afternoon and evening as the jet crosses closer to the forecast area and becomes coincident with a more temporally favored high wind period. GOES-16 dust products have yet to see any blowing dust, but that should change later today and advisory and/or warning statements may be necessary for locations near and west of El Centro. The specific shortwave and jet core aiding in the weather impacts today will lift into the Great Basin though the overall cyclonic flow aloft will be maintained with trailing energy digging through the east Pacific basin. Modestly higher humidity levels should help fire weather concerns, but very localized blowing dust could still be problematic. While winds will not be nearly as strong, there will be periods of stronger gusts, particularly through western Imperial County associated with mountain rotors under the more defined jetcore. For clarity sake, have held off on more wind advisory headlines, but a small area near In-Ko-Pah pass may necessitate another advisory Monday evening. A deepening vorticity lobe will sweep through the SW Conus Tuesday and Wednesday with global models in generally good agreement regarding depth and timing. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be quite as moisture starved as the previous one with low-level mixing ratios inching up towards 4-5 g/kg.	145
Urgent Weather Message	4/29/2018	1955	MST	Phoenix	*Second Advisory includes Imperial County Southwest and West Imperial Valley-Including the cities of El Centro, Calexico, Alamorio, and BrawleyWIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT MONDAY * AFFECTED AREAThe Imperial Valley including El Centro and Brawley. * TIMINGStrong winds will peak late this afternoon and early evening before weakening after midnight. * WINDSWest winds 25 to 35 mph with gusts 40 to 45 mph. * IMPACTSDangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficultespecially for high profile vehicles on north- south oriented roads.	148
Public Information Statement	4/29/2018	2000	PDT	San Diego	Peak 24-Hour Wind Gusts Enidng 8 PM Sunday	150

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ТҮРЕ	DATE	TIF	ME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Messac	ge 4/29/2018	2001	PDT	San Diego	San Bernardino County Mountains-Riverside County Mountains-San Diego County Mountains-Apple and Lucerne Valleys-Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning-Including the cities of Big Bear City, Julian, Victorville, Hesperia, Apple Valley, Indio, Palm Desert, Palm Desert Country, La Quinta, Coachella, Borrego Springs, Banning, and Desert Hot SpringsWIND ADVISORY REMAINS IN EFFECT UNTIL 4 AM PDT MONDAY * WindsWest 10 to 20 mph with gusts to 40 mph. Isolated gusts to 55 mph along the desert slopes and through and below the passes. * TimingThrough early Monday. * LocationMountain ridges, desert slopes and deserts. * VisibilityLocally reduced to 1 mile or less in blowing dust and sand in the deserts. * ImpactsTemporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand in the deserts.	153
Area Forecast Discussio	n 4/29/2018	2105	MST	Phoenix	A strong upper level low continued to settle in over the western conus this afternoon and evening allowing low/mid level gradients to tighten and strong gusty winds to develop over far SE California and portions southern Arizona. For the most part, winds never really got out of hand with gusts over the lower AZ deserts generally 30mph or lower and even across the wind-prone areas of far SE California - including Joshua Tree NP, Mountain Springs Grade and El Centro - wind gusts were mostly below 40 mph. As such wind advisory criteria winds did not really develop for the most part and we have allowed the advisory to expire for Joshua Tree NP. Winds may continue to flirt with criteria at times over western Imperial County so the advisory will continue there. As a result of the winds not getting out of hand, blowing dust has not really been an issue; we have not received any reports of dense blowing dust, surface observations reported vis values mostly well above 5sm and the GOES-R RGB Dust imagery only depicted modest dust/elevated dust occurring over the deserts of far SE CA, not enough to warrant blowing dust advisories. For the rest of tonight, as the low continues to settle into the area, we expect winds to gradually taper off but remain locally breezy especially over the western deserts,	154
Area Forecast Discussio	n 4/29/2018	2106	PDT	San Diego	At 9 PM, a broad trough of low pressure remained in place over the Western U.S. Strong northwest flow around Point Conception was helping to maintain a coastal eddy in the SoCal Bight, In the deserts skies were fair with breezy west to northwest winds. This evenings peak gust winner was Whitewater, with a gust of 67 mph. Winds will decrease slightly late tonight into Monday as the marine layer deepens further due to the well developed coastal eddy spinning offshore The deep marine layer will ensure another cool day on Monday and clearing may be limited in some areas west of the mountainsFor Tuesday/Wednesday, a cold low pressure system will drop south over CA gathering up modest amounts of atmospheric moisture and sparking rounds of showers. Isolated thunderstorms are possible as colder air aloft filters in Tuesday afternoon/evening. Snow is possible above 5500 FT, with modest accumulations possible above 6500 FT. Travel impacts probable at times along mountain roadways (Hwys 18 & 38). Gusty southwest to west winds will return in the mountains and deserts	158

					Imperial County Southwest-Imperial County West-Imperial Valley-Including the	
Urgent Weather Message	4/30/2018	0229	MST	Phoenix	cities of Mountain Spring, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, and BrawleyWIND ADVISORY HAS EXPIRED	161
Area Forecast Discussion	4/30/2018	0345	MST	Phoenix	Today: A broad area of low pressure will remain in place over the region ahead of the main storm system that is currently centered over IdahoPrimarily after 21Z, there will be another round of gusty winds in Imperial County, with the strongest winds across far southeastern Imperial county where mountain waves will tap into the stronger winds aloft and create gusts up to 30 to 40 mph. Patchy blowing dust will be possible in this area. Tuesday: The aforementioned storm system will dig south into southern California by Tuesday morning. Associated with this upper-level trough is a surface cold front that is forecast to be situated in southeast California by 12Z Tuesday and in Western Arizona by OOZ Wednesday. Strong southerly winds will develop ahead of the front, with strong westerlies forecast behind the front. Winds will generally be gusting in the 20 to 30 mph range, with stronger gusts to 40 mph expected across southeast California. Due to stronger wind speeds, patchy blowing dust will also be a possibility on Tuesday	162
Area Forecast Discussion	4/30/2018	0345	PDT	San Diego	A colder low pressure system moving southward just off the West Coast will move into Southern California on Tuesdaythen move slowly inland on Wednesday. Scatteredmostly light showers are possible for tonight into Tuesday along and west of the mountainsColder air aloft will arrive later Tuesday morning destabilizing the atmosphere with greater shower coverage and amounts for late Tuesday morning into Tuesday evening. There is also a slight chance of thunderstorms for Tuesday afternoon. Showers may linger into Wednesday along with a slight chance of thunderstorms for inland areas on Wednesday afternoon. Given the showery nature of the precipitationamounts will be somewhat variablebut generally range from around one tenth inch near the coast to one quarter to one half inch in the mountains with local amounts to around one inch in the San Bernardino County mountains with one quarter inch or less in the upper deserts and one tenth inch or less in the lower deserts. The snow level will lower to around 5500 feet for Tuesday night and Wednesday with a few inches of snowfall possible above 6000 feet. Tuesday is expected to be the coolest day for most areas with inland high temperatures around 20 degrees below average. Slow	165
Urgent Weather Message	4/30/2018	0444	MST	Phoenix	Imperial County Southwest-Including the city of Mountain SpringWIND ADVISORY IN EFFECT FROM 4 PM THIS AFTERNOON TO 8 AM PDT TUESDAYThe National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 4 PM this afternoon to 8 AM PDT Tuesday. * AFFECTED AREAFar southwest Imperial County including I-8 near the San Diego County border. * TIMINGStrong winds develop in the latter part of the afternoon and continue through the night. * WINDSWest winds of 25-35 mph with gusts of 40-50 mph. * IMPACTSDangerous driving conditions due to more difficult handlingespecially for high profile vehiclesand the potential for blowing dust to cause suddenly reduced visibility.	168

ТҮРЕ	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/30/2018	0542	MST	Phoenix	.UPDATEUpdated Aviation and Fire Weather sections. Southeast California/Southwest Arizona including KIPL and KBLH: Southwesterly flow aloft will temporarily weaken today before strengthening again tonight. Expect light surface winds this morning before southwesterly winds develop early this afternoon and increase. Anticipate a bit lighter winds at most places this afternoon as compared to Sunday but gusts of 25 kts will be common after 22Z. Over western portions of Imperial County strong winds will develop with gusts of 30-40 kts after 22Z. Skies will be clear early this morning before cirrus increases from the northwest.	169
Area Forecast Discussion	4/30/2018	0852	PDT	San Diego	The onshore sfc pressure gradients have weakened considerably from yesterday and stood at only 3 MBS KSAN to SW NV, but were still around 6 MBS KSAN to the lower deserts. Peak wind gusts at 8 AM PDT through the passes were between 40 and 50 MPH, down from gusts over 60 MPH last night	172
Area Forecast Discussion	4/30/2018	1313	PDT	San Diego	The onshore sfc pressure gradients were running 5-6 MBS KSAN to the deserts. Peak wind gusts at Noon PDT over the mts/deserts were between 30 and 40 MPH, down from gusts over 60 MPH last night. Expect only peeks at sun west of the mts for the remainder of the dayA positively tilted longwave trough is setting up over the west with several disturbances rotating through it. The first will move over SoCal on Tue. Even though an impressive jet accompanies this feature, instability and lift remain modest, so models do not generate any organized, heavy precip. A second feature drops south over the CA Bight Tue night and helps to deepen the trough and develop a closed low. This sets up wrap-around moisture into the CWA from the NE and helps to organize precip better Tue night into early Wed. So expect on and off, scattered showers anytime Tue through Wed	175
Urgent Weather Message	4/30/2018	1339	PDT	Phoenix	*Second Advisory includes Imperial County SouthwestImperial County West-Including the cities of Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster CityWIND ADVISORY IN EFFECT FROM 1 PM TO 9 PM PDT TUESDAYThe National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 1 PM to 9 PM PDT Tuesday. * AFFECTED AREAWestern Imperial County. * TIMINGTuesday afternoon and evening. * WINDSGusts of 40 to 50 mph from the west. * IMPACTSChallenging driving conditions, especially on north- south oriented roads. This includes highway 86 on the western side of the Salton Sea and portions of I-8 west of El Centro. Periods of reduced visibility due to blowing sand and dust are also possible.	178
Area Forecast Discussion	4/30/2018	1430	MST	Phoenix	A large, slow moving vortex continues to spin over the intermountain West with one circulation center lifting into southern Montana and a potent secondary PV anomaly quickly descending southward towards the California coast. An enhanced jet and persistently tight pressure gradient through the area will continue to support locally windy weather. This will particularly be the case in the lee of the San Diego mountains where rotors and downsloping winds will once again produce strong, gusty winds and some blowing dust in SW Imperial County into the overnight hours	180

ТҮРЕ	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	4/30/2018	2130	PDT	San Diego	Showers were increasing over western San Diego County, with numerous gauges reporting a few hundredths of an inch this evening. Ohterwise, skies were mostly cloudy, with fog in the mountains. The showers, mostly light, will continue at times overnight as the moisture is up to about 6500 feet above sea level with moderately strong onshore flow, around 7 MB from San Diego to Imperial. The cold upper low will dig into southern California Tuesday with about a 110-knot jet over northern Baja California. The trough axis will be over So-Cal Tuesady night when the moisture will be deepest, with near saturation extending above 700 MB. More showers will occur Tuesday, and we currently have a slight chance of thunderstorms in the afternoonAVIATIONDesert Mountain Slopes/DesertsWest winds gusts of 35-45 kt will continue into Tuesday morning along desert mountain slopes and below the San Gorgonio Pass. ISO-SCT -SHRA and possibly TSRA will move into the deserts Tuesday evening.	183
Urgent Weather Message	5/1/2018	0140	MST	Phoenix	*Other Wind Advisories for Imperial County Southwest and Imperial County WestSalton Sea-Chuckwalla Mountains-Imperial County Southeast- Imperial Valley-Including the cities of Desert Shores, Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico, Alamorio, and BrawleyWIND ADVISORY IN EFFECT FROM 2 PM THIS AFTERNOON TO 11 PM PDT THIS EVENINGThe National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM this afternoon to 11 PM PDT this evening. * AFFECTED AREACentral and eastern portions of Imperial Countyincluding the Imperial Valleyand the Chuckwalla Mountains of eastern Riverside County. * TIMINGVery strong winds develop during the latter half of the afternoon and continue through evening before weakening. * WINDSWest winds of 25-35 mph with gusts of 40-50 mph. * IMPACTSDangerous driving conditions due areas of blowing dust and sand as well as more difficult handlingespecially for high profile vehicles. Affected roadways include I-8 and Highway 78.	186
Area Forecast Discussion	5/1/2018	0315	MST	Phoenix	Today through Wednesday: Currently, the upper-level low is centered near the Idaho/Nevada/Utah border. This system will continue to dig south, with the center forecast to be in the southwest CONUS by this evening. At the surface, a cold front willexist in southeast California this morning and enter central Arizona late tonight This tightened pressure gradient will lead to continued breeziness today, especially along and west of the Colorado River Valley. A wind advisory remains in place for western Imperial county through 5 AM Wednesday where gusts to 50 to 55 mph will be possible. In addition, winds will start to pick up this afternoon across the central and eastern portions of Imperial county and parts of eastern Riverside county where gusts to 50 mph will be likely. Due to very breezy conditions in southeast California, patchy areas of blowing dust will be possible and those driving on I-10 and I-8 should use extra caution this afternoon	189

TYPE	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/1/2018	0357	PDT	San Diego	A low pressure system will move into Southern California today then move slowly eastward on WednesdayThere have widespread generally light measurable rainfall amounts overnight from the coast to the mountains from drizzle and occasional bands of light showersPeriods of showers will continue into Wednesday along with a slight chance of thunderstorms for this afternoon and early evening as much colder air aloft destabilizes the atmosphere with very weak instability for this afternoon into early this eveningAVIATIONDesert Mountain Slopes/DesertsAreas of winds gusting to 25-35 kt today through this evening. Isolated -SHRA and very isolated -TSRA	192
Area Forecast Discussion	5/1/2018	0547	MST	Phoenix	.UPDATEUpdated Aviation and Fire Weather sections.Southeast California/Southwest Arizona including KIPL and KBLH: A strengthening low pressure system will lead to another round of widespread strong winds this afternoon and evening accompanied by areas of blowing dust and sand. As usual, the strongest winds will be west of the Lower Colorado River Valley (strongest over Imperial County with gusts of 35-40 kts common after 23Z). West of the Imperial Valley, very strong winds have been underway since yesterday and will continue until Wednesday morning. Higher terrain areas will have a slight chance of showers and thunderstorms this afternoon and tonight. FEW-SCT cumulus is possible (mainly east of the Lower Colorado River Valley) but otherwise anticipate cloud decks to remain AOA FL120).	194
Area Forecast Discussion	5/1/2018	0944	PDT	San Diego	At 9 AM PDT, water vapor satellite imagery displayed an upper-level low east of Point Conception, with an associated shortwave moving southeast towards our areaThe aforementioned shortwave will move across the region today. Additional showers will develop across the area this afternoon, and a few thunderstorms may develop as the unstable air moves over northern portions of our area from the upper-level lowAVIATIONDesert Mountain Slopes/DesertsAreas of winds gusting to 35 kt through this evening with isolated SHRA and TSRA.	198
Urgent Weather Message	5/1/2018	1202	MST	Phoenix	*Other Wind Advisories for Imperial County Southwest and Imperial County WestSalton Sea-Chuckwalla Mountains-Imperial County Southeast-Imperial Valley-Including the cities of Desert Shores, Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico, Alamorio, and BrawleyWIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING. *AFFECTED AREACentral and eastern portions of Imperial Countyincluding the Imperial Valleyand the Chuckwalla Mountains of eastern Riverside County. * TIMINGVery strong winds develop during the latter half of the afternoon and continue through evening before weakening. * WINDSWest winds of 25-35 mph with gusts of 40-50 mph. * IMPACTSDangerous driving conditions due areas of blowing dust and sand as well as more difficult handlingespecially for high profile vehicles. Affected roadways include I-8 and Highway 78.	200

TYPE	DATE	П	ME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	5/1/2018	1216	MST	Phoenix	*Included Palo Verde along with other Wind Advisories for Imperial County Southwest and Imperial County WestSalton Sea-Chuckwalla Mountains-Imperial County Southeast-Imperial Valley-Including the cities of Desert Shores, Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico, Alamorio, and Brawley WIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING. * AFFECTED AREACentral and eastern portions of Imperial Countyincluding the Imperial Valleyand the Chuckwalla Mountains of eastern Riverside County. * TIMINGVery strong winds develop during the latter half of the afternoon and continue through evening before weakening. * WINDSWest winds of 25-35 mph with gusts of 40-50 mph. * IMPACTSDangerous driving conditions due areas of blowing dust and sand as well as more difficult handlingespecially for high profile vehicles. Affected roadways include I-8 and Highway 78.	203
Area Forecast Discussion	5/1/2018	1226	MST	Phoenix	Winds have been a bit stronger than previously forecast in southeastern California, so we retrended windsthat best matched current observations. This blend expanded our area of sustained winds in excess of 30 mph east one zone into the lower Colorado River Valley/Lake Martinez area from 2-11 pm. Otherwise, the Wind Advisory remains unchangedfor some strong wind gusts capable of causing localized blowing dust over open areasThis tightened pressure gradient will lead to continued breeziness today, especially along and west of the Colorado River Valley. A wind advisory remains in place for western Imperial county through 5 AM Wednesday where gusts to 50 to 55 mph will be possible. In addition, winds will start to pick up this afternoon across the central and eastern portions of Imperial county and parts of eastern Riverside county where gusts to 50 mph will be likely. Due to very breezy conditions in southeast California, patchy areas of blowing dust will be possible and those driving on I-10 and I-8 should use extra caution this afternoon	207
Area Forecast Discussion	5/1/2018	1521	MST	Phoenix	.AVIATIONSoutheast California/Southwest Arizona including KIPL and KBLH: There are several aviation weather concerns for today with the encroachment of a weather system. Strong westerly to southwesterly winds will prevail into tonight with gusts up to 40 kts, particularly for KIPL and terminals west of the Colorado River. Reduced visibility from blowing dust is likely this afternoon as well as slantwise visibility issues. An outside chance for a thunderstorm or shower does exist; however, the greatest threat lies well east of the Colorado River.	211
Quantitative Point Forecast	5/1/2018	1536	PDT	San Diego	Quantitative Point Fiorecast with discussion on light showers and snowfall in San Diego County mountains	215
Urgent Weather Message	5/1/2018	2108	MST	Phoenix	Salton Sea-Chuckwalla Mountains-Imperial County Southeast-Imperial Valley-Palo Verde Valley-Including the cities of Desert Shores, Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico, Alamorio, Brawley, Martinez Lake, Blythe, Palo Verde, and RipleyWIND ADVISORY IS CANCELLED The National Weather Service in Phoenix has cancelled the Wind Advisory. Advisories for Imperial County Southwest and West remain in effect.	219

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County Appendix A

TYPE	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/1/2018	2123	PDT	San Diego	Clouds were widespread from the mountains to the coast this evening. At 9 PM PDTRadar showed scattered showers, mostly light, over SW San Diego and San Bernardino CountyAt lower elevations, most areas had less than one-tenth of an inch. Surface pressure gradients were 7-8 MBS KSAN to the deserts, and were supporting gusty winds over the mts/deserts. Passes were strongest with peak gusts 45 to 55 MPH.	221
Area Forecast Discussion	5/2/2018	0249	PDT	San Diego	The unseasonably deep low pressure trough overhead is beginning to move slowly eastward. In the northerly flow some showers coming from the deserts will track across the region this morning along with some coastal showers tracking ashore in San Diego CountySnow is beginning to accumulate above 5000 feet, but we expect only a couple inches at higher elevations.	224
Urgent Weather Message	5/2/2018	452	MST	Phoenix	Imperial County Southwest-Including the city of Mountain SpringWIND ADVISORY WILL EXPIRE AT 5 AM PDT EARLY THIS MORNING Westerly winds will remain breezy to at times windy today, but remain below advisory level. County West-Including the cities of Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster CityWIND ADVISORY WILL EXPIRE AT 5 AM PDT EARLY THIS MORNING Westerly winds will remain breezy to at times windy today, but remain below advisory level.	226

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

533 FXUS65 KPSR 261009 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 309 AM MST Thu Apr 26 2018

.SYNOPSIS...

Very warm and dry conditions will continue into the first part of the weekend as lower desert high temperatures reach into the middle to upper 90s each day. A slight chance for showers will exist across southern Gila County Friday and Saturday afternoon as a weak storm system moves across the area. A cooling trend starting Sunday will eventually lead to below normal temperatures starting early next week.

&&

.DISCUSSION...

A deep Pacific low off the West Coast will help to build heights a bit further over the region today leading to highs to around 100 degrees for the warmest desert locations. Further east a cold front will dive southward through the western Plains states and the central Rockies. Eventually this cold front will push westward through New Mexico early tonight and then into far eastern Arizona by early Friday morning. This cold front will bring a short period of modestly strong southeasterly low level winds into eastern Arizona. Low and mid level moisture levels will also increase behind the front allowing for enough moisture for isolated showers and maybe a few thunderstorms across the eastern Arizona high terrain starting Friday afternoon. A southwesterly steering flow will keep any rain activity over the high terrain, but we can't completely rule out the possibility of outflow winds traveling westward far enough to reach the foothills or lower deserts in Pinal and eastern Maricopa Counties.

Temperatures Friday will drop a couple degrees from today's highs as heights aloft lower from the approaching Pacific trough that begins to move onshore across northern California and Oregon. This trough will be slow to progress eastward this weekend as the low center only reaches Idaho by Sunday night. Shower and thunderstorm chances will again return across eastern Gila County for the daytime hours Saturday with better upper level support as the trough nears the region. Rain chances will however come to an end Saturday evening as westerly flow increases pushing much drier air through the region. The trough will remain mostly to the north of our area this weekend as it slowly drifts eastward, but it will bring increased breeziness and a cooling trend. Highs Saturday will still be several degrees above normals, but Sunday's readings should drop into the upper 80s to around 90 over the deserts, or right around normals.

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

The trough will open up and become more expansive next Monday into Tuesday while a shortwave trough digs southward down the backside of the trough. Though there is still some model spread, models mostly agree another closed low will develop from this diving shortwave trough. This could result in a closed low moving through the Desert Southwest sometime during the middle of next week, most likely on Wednesday. This scenario would bring at least a slight chance of showers and thunderstorms to the high terrain, possibly even some high based storms over the deserts in an ideal situation where moisture levels are high enough and the low center passes through southern Arizona. Temperatures for next week should take a decent hit with highs easily falling into the middle 80s, possibly lower 80s in some lower desert spots.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

High pressure aloft and weak gradients will result in winds following typical diurnal tendencies for the next 24 hours at speeds mostly below 10kt. There will be some high clouds at times with FEW-SCT decks above 20k feet and by Thursday morning expect some CIGs as well but much of the BKN decks will be on the thin side. No aviation concerns at any of the terminals for the next 24 hours.

Southeast California/Southwest Arizona including KIPL and KBLH:

No aviation weather concerns are anticipated through Thursday evening. Light diurnal winds with mostly clear skies are anticipated. Winds to favor the west at KIPL and the south to southwest at KBLH.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday... Very warm temperatures will exist on Saturday before cooling slightly by Sunday. A weak weather disturbance and modest moisture increase will bring a slight chance for thunderstorms, primarily for Gila County, on Saturday afternoon. Any rainfall amounts will be minimal and conditions favorable for dry lightning will exist. Otherwise, some afternoon breezes are possible each day, with the strongest gusts on Monday and Tuesday afternoons.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

&&

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County Appendix A

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Kuhlman

AVIATION...CB

FIRE WEATHER...Rogers

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



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862 FXUS66 KSGX 261037 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 337 AM PDT Thu Apr 26 2018

.SYNOPSIS...

A low pressure system off the West Coast will move slowly inland during the weekend. This will bring stronger onshore flow to Southern California with slow cooling spreading inland and gusty southwest to west winds in the mountains and deserts in the afternoons and evenings. Slow deepening of the marine layer will spread night and morning coastal low clouds and fog into the western valleys this morning...and into the far inland valleys through the weekend. For Monday and Tuesday...a low pressure system from the northwest will bring more cooling...stronger onshore flow will stronger and gusty northwest to west winds in the mountains and deserts...and deepening of the marine layer onto the coastal mountain slopes with small chances for light precipitation along and west of the mountains.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

A low pressure system off the West Coast will move slowly inland during the weekend. This will bring stronger onshore flow to Southern California with slow cooling spreading inland.

That low pressure system will draw subtropical moisture with some mid and high clouds into Southern California today...decreasing for tonight and Friday. The marine layer is near 1600 feet deep. Areas of coastal low clouds and fog will spread into portions of the western valleys early this morning. As the marine layer slowly deepens...night and morning coastal low clouds and fog will spread into the far inland valleys for Friday through the weekend. Stronger onshore flow will also bring periods of gusty southwest to west winds in the mountains and deserts during the afternoons and evenings.

For early next week...the global models are in better agreement with a low pressure system from the northwest that will move into

Southern California Tuesday. This will bring additional cooling for Monday and Tuesday. There will be stronger and gusty northwest to west winds in the mountains and deserts. The marine layer will deepen onto the coastal mountain slopes. There are small chances for light precipitation west of the mountains early Monday and slightly greater chances for light precipitation along and west of the mountains for Tuesday into early Wednesday.

&&

.AVIATION...

260900Z...Coast/Valleys...Low clouds will cover coastal areas and head into portions of the inland valleys by sunrise. Cloud bases will be around 1200-1500 feet msl with tops to 2000 feet. Reduced vis along higher terrain within that elevation layer. Clearing from inland to the coast will occur 15-19Z. Coastal clouds will move ashore after 02Z this evening with similar bases and tops, but probably lift overnight and extend a little farther inland.

Mountains/Deserts...Local surface wind gusts 25-35 knots from the west-northwest will occur late this afternoon/evening over portions of the desert mountain slopes and through San Gorgonio Pass.

&&

.MARINE...

No hazardous marine conditions are expected through tonight. Stronger onshore flow will bring winds that are forecast to cause choppy and hazardous conditions Friday through Monday, mainly in the outer coastal waters.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

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T 456 FXUS65 KPSR 262101 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 200 PM MST Thu Apr 26 2018

.SYNOPSIS...

Very warm conditions will continue the remainder of the week with widespread highs in the 90s at lower elevations. A slight chance for thunderstorms will exist across southern Gila County Friday and Saturday afternoon, however most locations will not see rainfall. A distinct cooling trend will spread into the region for at least the first half of next week with only occasionally breezy weather.

&&

.DISCUSSION...

A seasonally deep negative height anomaly over the east Pacific basin has invigorated an active subtropical jet, pulling a stream of upper level moisture into the SW Conus today. Despite the detrimental insolation influence of this thicker band of high clouds, 12Z TWC sounding data sampled both H5 heights and H7 temperatures near the 90th percentile yielding afternoon highs well into the 90s. Further east, the highly amplified and partially blocked downstream pattern, along with a deep PV anomaly over the southern high plains has resulted in a stout westward moving cold front which will pass into eastern AZ overnight. This front will bring a short period of modestly strong southeasterly low level winds across ridge top and foothill locations of southern Gila/eastern Maricopa counties Friday morning potentially creating large gradients in low temperatures.

A period of backed winds in the H8-H5 layer Friday morning will also allow modest moisture advection through much of eastern Arizona with BUFR sounding data suggesting well mixed 4-5 g/kg spilling into the eastern CWA. With H5 heights still hovering around 580dm and good diurnal heating, temperatures well above average juxtaposed with this marginal moisture could result MUCape reaching aoa 50 J/kg and a few very isolated towering Cu/thunderstorms through the eastern sections of Gila County. The very dry subcloud layer will likely preclude much, if any actual rainfall; and mean flow veering during the afternoon should steer any activity and resultant gusty winds away from the bulk of the forecast area. In all likelihood, the greatest hazard will be potential fire starts from lightning strikes given the lack of appreciable rainfall.

The larger east Pacific trough will slowly progress inland over the weekend gradually unlocking the downstream blocking pattern with the primary central circulation only reaching Idaho Sunday night. This slow propagation will yield only modest height falls and pressure

April 29, 2018 to May 1, 2018 Exceptional Event Imperial County packing along and behind a theta-e boundary crossing the region,

somewhat limiting the strength of winds than otherwise could occur this time of year. Enough residual midlevel moisture will linger over far eastern Gila County Saturday such that a few thunderstorms could be possible, however strengthening SW flow should quickly take any activity and impacts well into the White Mountains and western New Mexico.

The overall longwave trough will open up and become more expansive Monday into Tuesday while a potent shortwave digs southward down the western periphery of this longwave along the west coast. Though there's still notable ensemble and operational model spread regarding timing and depth of this shortwave, the general consensus depicts another closed low (or family of closed shortwaves) traversing the SW Conus during the middle of next week (most likely on Wednesday). This scenario would bring at least a slight chance of showers and thunderstorms to the high terrain, possibly even some high based storms over the deserts in an ideal situation where moisture levels are high enough and the low center passes through southern Arizona. Temperatures next week will almost certainly take a decent hit with highs easily falling into the middle 80s, possibly lower 80s in some lower desert communities.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
No major aviation weather concerns today with light and diurnal winds across the Phoenix area. Thick high clouds will likely persist throughout the day and overnight, but bases should remain above 20K feet. Some clouds around 11-12K feet may also develop overnight into Friday, but coverage should remain FEW or SCT.

Southeast California/Southwest Arizona including KIPL and KBLH: Stronger winds will be of concern this afternoon, especially for KIPL, with gusts up to 20-25 kts. The winds at KBLH will not be as strong but some afternoon breeziness can be expected. Otherwise, the wind speeds should settle a bit after sunset.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday:

Much cooler weather will affect the districts during the first part of next week with temperatures eventually falling to around 5F below average. The weather disturbances causing this cooling will also lead to locally breezy conditions with some afternoon gusts in the 20-30 mph range, particularly in the better upslope regions. However, this cooler weather will also aid humidity levels with afternoon minimums only falling into a 10-20% range. Overnight recovery will also benefit into a fair to good category.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...MO/Kuhlman AVIATION...Rogers/Deemer FIRE WEATHER...MO

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



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004 FXUS66 KSGX 270449 AAA AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 945 PM PDT Thu Apr 26 2018

.SYNOPSIS...

Gradually cooler through the weekend, with increasing low clouds spreading inland to the coastal mountain slopes. Expect stronger onshore flow with strong and gusty southwest to west winds in the mountains and deserts during the afternoons and evenings. For Monday and Tuesday...cooler with stronger onshore flow and gusty northwest to west winds in the mountains and deserts, further deepening of the marine layer with small chances for light precipitation along and west of the mountains.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

No major changes were made this evening. Still looks like possibly reaching wind advisory criteria by Saturday afternoon into Saturday night.

A low pressure system currently off the coast of northern California will move slowly inland during the weekend. This will bring stronger onshore flow to Southern California with slow cooling spreading inland. The low pressure system will draw subtropical moisture with some mid and high clouds into Southern California today...decreasing tonight and Friday. As the marine layer slowly deepens...night and morning low clouds and fog will spread inland to the coastal slopes Friday through the weekend. Stronger onshore flow will also bring periods of gusty southwest to west winds in the mountains and deserts during the afternoons and evenings.

For early next week...the global models are in better agreement with a low pressure system from the northwest that will move into Southern California Tuesday. This will bring additional cooling for Monday and Tuesday. There will be stronger and gusty northwest to west winds in the mountains and deserts. The marine layer will deepen onto the coastal mountain slopes. There are small chances for light precipitation west of the mountains early Monday and slightly greater chances for light precipitation along

and west of the mountains for Tuesday into early Wednesday.

For next Thursday and Friday...An upper level ridge building in from the west will bring fair and warmer weather with lighter winds and a shallower marine layer.

&&

.AVIATION...

270330Z...Coast/Valleys...Stratus, with bases around 1500-1800 ft MSL and tops to 2500 ft MSL will spread into the inland valleys overnight. Areas of 3-5 SM vis possible in the inland valleys 09-16Z. Stratus and vis restrictions clearing 15-18Z. SCT-BKN clouds with bases near 2000 ft MSL spreading back inland after 28/02Z.

Mountains/Deserts...Local west-northwest wind gusts of 30-40 kt will occur through tonight and again Friday afternoon and evening over portions of the desert mountain slopes and through San Gorgonio Pass. Otherwise a few high clouds and unrestricted vis through Friday evening.

&&

.MARINE...

No hazardous marine conditions are expected through Friday morning. West to northwest winds will strengthen Friday afternoon, with gusts of 25 to 30 kt possible through Saturday evening over the outer waters. Combined seas will also increase to 6-9 ft. A Small Craft Advisory has been issued for the period. Winds will temporarily diminish late Saturday into Sunday morning, but increase again Sunday afternoon through Monday night.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory from 2 PM Friday to 10 PM PDT Saturday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

992 FXUS65 KPSR 270957 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 257 AM MST Fri Apr 27 2018

.SYNOPSIS...

Very warm conditions will continue the remainder of the week with widespread highs in the upper 90s at lower elevations. A slight chance for thunderstorms will exist across southern Gila County Friday and Saturday afternoon; however, most locations will not see rainfall. A distinct cooling trend will spread into the region for at least the first half of next week with only occasionally breezy weather.

&&

.DISCUSSION...

There is little change in the short term forecast and overall weather pattern. The high pressure ridge will remain in place through today, although an approaching Pacific system will begin to lower H5 heights and introduce some cooling aloft. In addition, a backdoor cold front is currently pushing through New Mexico and into eastern Arizona that will bring some breezy conditions and cooler temperatures to the eastern portions of our CWA by sunrise. The south-southeasterly low level winds will also advect some moisture into the area that, combined with some daytime heating, could result in upwards of 100 j/kg MUCAPE across the higher terrain by this afternoon. Any thunderstorm development is most likely to be isolated with minimal rainfall accumulation. However, the threat for dry lightning that could initiate wildfires is concerning.

Thunderstorm chances peak Saturday afternoon, primarily for locations in Gila County and further east. CAPE values may increase somewhat but again, the biggest hazard will be dry lightning strikes. The aforementioned Pacific system will slowly move onshore Saturday with the center of circulation over central Oregon. This will strengthen the southwesterly flow aloft over Arizona pushing any lingering chances for thunderstorms out of our area by Saturday night. Otherwise, temperatures will remain well above normal before a recognizable cooling trend begins Sunday as more substantial height falls occur as the trough expands further inland.

By early next week, the trough will open over the western half of the country. Several models depict additional shortwaves circling through the upper air pattern with the possibility of a secondary system impacting Arizona by the middle of the week. While there is still uncertainty on the timing and exact trajectory, the

9/11/2019 April 29 2018 to May 1 2018 Exceptional Event, Imperial County disturbance would bring favorable dynamics for at least a slight

chance for showers or thunderstorms for most locations across the area. As such, the forecast PoP values were increased to 10-20 percent range for late Tuesday-Wednesday with the highest values over the mountains north and east of Phoenix. While this forecast might be a little on the aggressive side those values are just in the 20th percentile for the period. In the meantime, daytime high temperatures will drop into the mid to low 80's through Wednesday before a modest warmup heading into next weekend.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Although strong high pressure aloft will persist, it will still allow considerable mainly high clouds to spread across the terminals tonight into Friday morning. Expect continued cigs with bases aoa 20k feet, and there will be FEW-SCT mid decks as well down to around 12k feet at times. By tomorrow afternoon we may see a few high based cumulus in the greater Phoenix area but those decks - with bases down around 10k feet - should mostly be on the FEW side. Any significant cloud buildups Friday afternoon/evening will stay over higher terrain well to the east of Phoenix. Winds will continue to display typical diurnal tendencies with speeds less than 10kt; expect east to southeast winds thru early Fri afternoon before veering to the southwest. Overall, no significant aviation concerns for the next 24 hours at the terminals.

Southeast California/Southwest Arizona including KIPL and KBLH: A large upper low approaching from the west will result in generally clear skies at the terminals through Friday evening but will also result in somewhat stronger winds mainly during the afternoon and evening on Friday. Winds to favor the west next 24 hours at KIPL but should start to gust over 20kt by late Friday afternoon. Expect winds to favor the south to southwest at KBLH with some afternoon gustiness tomorrow mostly from the south.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday:

Much cooler weather will affect the districts during the first part of next week with temperatures eventually falling to around 5F below average. The weather disturbances causing this cooling will also lead to locally breezy conditions with some afternoon gusts in the 20-30 mph range, particularly in the better upslope regions. However, this cooler weather will also aid humidity levels with afternoon minimums only falling into a 10-20% range. Overnight recovery will also benefit into a fair to good category.

&&

.SPOTTER INFORMATION STATEMENT ... 2018 Exceptional Event, Imperial County

Spotters are encouraged to follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

DISCUSSION...Deemer

AVIATION...CB

FIRE WEATHER...MO

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



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907 FXUS66 KSGX 271032 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 332 AM PDT Fri Apr 27 2018

.SYNOPSIS...

Gradually cooler through the weekend, with increasing low clouds spreading inland to the coastal mountain slopes. Expect stronger onshore flow with strong and gusty southwest to west winds in the mountains and deserts during the afternoons and evenings. For Monday and Tuesday...cooler with stronger onshore flow and gusty northwest to west winds in the mountains and deserts and with further deepening of the marine layer with small chances for light precipitation along and west of the mountains.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

.SHORT TERM (Today through Sunday)...

The marine layer early this morning has deepened to 2500 to 3000 feet with satellite imagery showing the coastal stratus spreading into portions of the inland valleys.

A low pressure system centered off the coast of northern California will move into the Pacific Northwest on Saturday and then into the Great Basin on Sunday.

This will slowly strengthen the onshore flow across Southern California. This will spread slow cooling inland...bring slow deepening of the marine layer with night and morning coastal low clouds and fog spreading into the far inland valleys...and bring stronger and gusty southwest to west winds in the mountains and deserts during the afternoons and evenings. The winds are expected to strengthen each day with the strongest winds for late Sunday afternoon through Sunday night with advisory strength winds on the desert slopes of the mountains into the deserts.

&&

.LONG TERM (Monday through Thursday)...

A low pressure system off the Pacific Northwest coast on early

Monday will move southward near the coast...moving into Southern California on Monday night and Tuesday...then gradually weaken and move east on Wednesday and Thursday.

Slow cooling will continue on Monday with greater cooling on Tuesday. Depending on how long the upper troughing lingers in the southwest states...warming on Wednesday may be slow with the greater warming delayed until Thursday through the weekend.

The marine layer will deepen onto the coastal mountain slopes with small chances for precipitation along and west of the mountains for late Monday night into early Wednesday.

&&

.AVIATION...

270830Z...Coast/Valleys...Stratus bases 1500-2000 ft MSL with tops to 2500 ft MSL from the coast into the inland valleys this morning with vis 4-5 miles at KONT and KSBD through 16Z. Stratus clearing back to the coast through 18Z. SCT-BKN020 spreading back inland after 28/02Z.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts 30-40 kt this afternoon and evening over the desert mountain slopes and through the San Gorgonio Pass.

&&

.MARINE...

A Small Craft Advisory will be in effect over the Outer Waters from 2 PM today to 10 PM Saturday for west to northwest winds of 15 to 25 kt gusting to 30 kt. Combined seas will increase to 6-9 ft. Winds will temporarily diminish Saturday night into Sunday morning, but increase again Sunday afternoon through Monday night when another Small Craft Advisory may be needed over the Outer Waters.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory from 2 PM this afternoon to 10 PM PDT Saturday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente 676 FXUS66 KSGX 271608 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 908 AM PDT Fri Apr 27 2018

.SYNOPSIS...

Gradually cooler through the weekend, with increasing low clouds spreading inland to the coastal mountain slopes. Expect stronger onshore flow with strong and gusty southwest to west winds in the mountains and deserts during the afternoons and evenings. For Monday and Tuesday...even cooler with stronger onshore flow and gusty northwest to west winds in the mountains and deserts and with further deepening of the marine layer with small chances for light precipitation along and west of the mountains.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO
COUNTIES...

Coastal clouds went pretty far inland this morning, filling the coastal basin to the mountain slopes up to about 2600 feet. The marine inversion is pretty strong so clouds will take a little longer to clear today than they have in recent days. The atmospheric pattern features a large trough of low pressure hovering off the coast of Northern California exerting just enough influence to deepen our marine layer here in the south. Within this trough will rotate a series of short waves in the coming days. Today the first one swings through Northern California. That will keep our marine layer deep and also initiate a coastal eddy circulation. That will keep the low clouds filling the coastal basin each night and morning. However, the colder air aloft will serve to weaken the marine inversion, so the low clouds may not be a solid or thick this weekend. These short waves will also boost winds in the mountains and deserts each afternoon and evening. The next wave moves through California Saturday and the next one Sunday afternoon. Each one keeping the marine layer deep and propped up, and the winds blowing in mountains and deserts. Sunday looks windiest at this time. On Monday and Tuesday the entire trough decides to finally amplify and move through the state. This appears to bring enough energy to the marine layer to wring out some drizzle or light showers as we finish April and start May. The chances are not high and any amounts would be rather light.

Models diverge on when this main trough moves out, with some lingering weak trough in the area or a ridge of high pressure. After cooler than average weather for the next five days, it looks just a little warmer Wednesday and Thursday.

&&

.AVIATION...

271540Z...Coast/Valleys...Widespread low clouds with bases around 2000 ft MSL and tops to 2500 ft MSL from the coast to the foothills with vis 1-4 miles at KONT and KSBD. Clearing has begun at the inland edges of the low cloud deck and will progress westward with clearing at the coast between 17Z and 19Z, although some low clouds may linger at the beaches into the afternoon. Expect the low clouds to begin spreading inland again after 02Z Sat with bases and tops a little higher.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts 30-40 kt this afternoon and evening will produce weak-moderate up/downdrafts and LLWS over and east of the mtns.

&&

.MARINE...

Winds of 15 to 25 kt gusting to 30 kt, and combined seas of 6-9 ft with steep waves will result in conditions hazardous to small craft. These conditions will prevail mainly in the outer waters between this afternoon and Saturday night. Winds will temporarily diminish Saturday night into Sunday morning, but increase again Sunday afternoon through Monday night when another Small Craft Advisory may be needed over the Outer Waters.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory from 2 PM this afternoon to 10 PM PDT Saturday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

891 FXUS65 KPSR 280356 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 855 PM MST Fri Apr 27 2018

.SYNOPSIS...

Very warm conditions will continue through the weekend with widespread high temperatures in the mid to upper 90s at lower elevations. A slight chance for thunderstorms will exist across southern Gila County on Friday and Saturday afternoon, but most locations will not see measurable rainfall. A distinct cooling trend will occur for at least the first half of next week, with a slight chance of showers possible on Tuesday into early Wednesday morning. Breezy winds will be possible on Sunday and Monday, with stronger wind gusts on Tuesday.

&&

.DISCUSSION...

At 8 pm this evening, a large upper low could be seen spinning just off the Pacific northwest coast allowing the high pressure ridge over the desert southwest to shift east; 00z plot data showed the ridge axis near the New Mexico border. Ahead of the approaching low, dry southwest flow aloft was spreading into the western deserts and IR imagery showed generally clear skies from Phoenix west into far SE CA. East of Phoenix, flow was more south/southeast and modest amounts of mid level moisture had advected into the higher terrain allowing high based cumulus to form over portions of southern Gila county as well as the eastern mountains. So far no high based storms or lightning strikes were noted over the high terrain east of Phoenix despite the modest mid level instability present. High temp today in Phoenix reached 100 degrees under sunny skies and this should be the last day where high temperatures threaten the triple digit mark; the low to our west will gradually push inland and drop heights leading to a substantial cooling trend that will eventually drop deserts highs to around 80 by the early to middle part of next week. For the rest of tonight expect the clouds to our east to continue to dissipate while skies remain genly clear from Phoenix westward. Current forecasts look to be in good shape and no updates are needed.

.PREVIOUS DISCUSSION...

Temperatures have once again climbed into the 90s for most areas with a few spots in the Colorado River valley near 100 degrees as Central Arizona and southeast California remains under a mid-to-upper level ridge of high pressure. Some parts of Phoenix will reach 100 today as skies continue to remain clear with relatively strong subsidence. Clouds continue to develop over the higher terrain in Gila County where cooler temperatures generally in the 80s are in place along a dissipating back door cold front.

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County Additional daytime heating and increasing MUCAPE values above 100

J/kg may allow for a few isolated thunderstorms to develop there late this afternoon into the evening hours, but most hi-res models including the HRRR keep this activity well northeast or just south of our area. Any thunderstorm that does develop will most likely not produce measurable rainfall, but there is a threat of lightning that could initiate wildfires.

Thunderstorm chances still appear to peak tomorrow afternoon for locations northeast of our region, but most hi-res models suggest this activity will be northeast of Gila County. However, global models continue to suggest the potential for measurable QPF over far northeast Gila County, and MUCAPE values will be a little higher tomorrow with greater moisture in place. Thus, we have retained the mention of thunderstorms over this area, with the biggest hazard remaining lightning strikes with a low chance of measurable rainfall. Temperatures tomorrow may be a little cooler tomorrow with this slight increase in moisture, but a more substantial 3-5 degree cooling will occur on Sunday as the ridge weakens further and heights fall ahead of a slowly digging trough centered over the Pacific Northwest.

Temperatures will decrease to near or slightly below normal by Monday as a vorticity maximum breaks off and rapidly digs along the California coast and a dissipating front moves into western Arizona. Global models show this low becoming cutoff along the southern CA-AZ border on Tuesday, with dynamic forcing associated with this cold core possibly triggering isolated thunderstorms over higher terrain in southeast California. This trough should lift northeast over Arizona Tuesday night into Wednesday morning, which should allow for some shower activity at higher elevations with perhaps some isolated showers into the I-10 corridor as weak SW-NE isentropic ascent overspreads the region. Thus, we have increased POPs closer to 15-20 percent for the Phoenix metro with 20-30 POPs further northeast and below 10 percent further west. This forecast is dependent on the low tracking directly over or just west of the region with enough moisture aloft, with an eastward deviation making measurable rainfall more unlikely. At the current moment, we only have a few hundredths of an inch of rain well northeast of the Phoenix metro, but models trending even cooler continues to look more likely.

Breezy winds will be possible on Sunday and Monday, with stronger wind gusts in excess of 30 mph at higher elevations possible on Tuesday mainly due to dynamic forcing from the low. Temperatures for Tuesday and Wednesday were decreased a few degrees from the previous forecast. Temperatures are close to the previous forecast for the second half of next week as the model ensemble exhibits considerable spread in whether or not a more progressive pattern will occur or additional shortwaves will break off from the main flow and push through the region. For now, we sided with the more progressive pattern shown by the GFS, leading to a fairly rapid warmup in temperatures closer to climatological normals.

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Expect skies in the greater Phoenix area to remain genly clear until Saturday afternoon when another round of high-baed cumulus will develop over the higher terrain off to our east. Should any storms develop over the mountains tomorrow afternoon/evening, we do not expect any outflow winds or dust to reach into the Phoenix area or affect the terminals. Winds next 24 hours will follow typical diurnal tendencies, with potential for some afternoon southwest gusts tomorrow reaching into the teens or low 20s.

Southeast California/Southwest Arizona including KIPL and KBLH:

Upper low approaching from the west will provide dry southwest flow aloft and result in genly clear skies through Saturday evening. Expect winds to favor the west at KIPL next 24 hours, with gusts to around 25kt thru midnight tonight and again tomorrow late afternoon and evening. Winds to favor the south to southwest at KBLH with some gusts also expected Saturday afternoon. Do not expect any blowing dust with the gustiness.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday:

Breezy to windy conditions will impact the districts Monday and Tuesday with the strongest gusty winds of 20 to 35 mph Tuesday afternoon. Cooler than average temperatures along with modestly increased moisture values will keep humidity values elevated slightly above critical thresholds. Afternoon minimum humidity values will generally fall in a 15 to 25% range during the first half of the week, falling to a 10-15% range by the end of the week. Overnight recovery will generally be good. Wind speeds will decrease substantially later in the week as temperatures warm back up near and above the seasonal normal.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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331 FXUS66 KSGX 280414 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 914 PM PDT Fri Apr 27 2018

.SYNOPSIS...

The first of a couple Pacific troughs is moving across northern California and leading to a cooling trend. The marine layer has deepened but is thin allowing for clearing during the days. The next 2 systems will move further south and impact Southern California. This will bring windy conditions to the deserts Saturday evening and then especially during Sunday afternoon and evening. A deeper upper level system is forecast to move into the region and push a moderate cold front with precipitation into Southern California on Tuesday. The cool air and instability will lead to lingering showers on Wednesday.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

Marine clouds deepened up to 2300 feet per evening sounding in San Diego. However, the marine layer is thin and clearing was widespread and mixed out with the upper trough now crossing northern California today. Evening satellite shows only a small strip of coastal clouds reforming in San Diego County, though this should expand with radiational cooling overnight. The onshore flow has increased with the cyclonic flow in place and now gusts to 30 mph occurring at Coachella Valley floor and 50 mph in the San Gorgonio pass.

The upper trough axis crosses Socal on Saturday allowing for a stronger onshore flow but well mixed marine layer (cloud burn off) and finally cooling into the lower deserts. We will also see stronger and longer duration winds in the deserts on Saturday. Will consider advisory for this, though the strongest winds are expected on Sunday.

On Sunday a fast moving short wave trough brings a 6 hour period of 40-50 knots at 700 mb. The well mixed air mass should translate to a stronger period of winds in the Coachella Valley, desert

slopes and High Deserts with impact including dust. This period looks to be solid wind advisory or low end warning.

Next week the forecast is increasingly wet with a deep upper trough progged to dive into Socal on Tuesday bringing a strong cold front and potential for widespread precipitation with the frontal band on Tuesday...becoming showers Tuesday night. The showers could linger into Wednesday as additional upstream energy keeps the main closed upper low in the proximity of Socal. This pattern is somewhat rare for late April but usually we see one or in May. The track of the system is key and could still change this far out or become drier if we get on the back side too quick.

&&

.AVIATION...

280400Z...Coast/Valleys...Low clouds will continue to gradually fill in the coastal basin and spread well inland again through Saturday morning. Due to the strong onshore flow and considerable mixing we will likely see some breaks in the overcast during most of this time although coastal TAF sites plus KONT should see considerable ceilings in general. Low cloud bases will be 1500-2500 ft MSL and tops to 3000 ft. Expect vsby as low as 1 SM in fog where clouds and terrain intersect. Confidence is not as high for continuous ceiling impacts at the TAF sites. Expect clearing to the beaches by 18Z Sat.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts to 40 kt through late tonight will produce moderate up/downdrafts and LLWS over and east of the mtns. Renewed strong winds are likely again Saturday afternoon and evening over and east of the mtns.

&&

.MARINE...

Winds of 15 to 25 kt gusting to 30 kt, and combined seas of 6-9 ft with steep waves will result in conditions hazardous to small craft. These conditions will prevail mainly in the outer waters between this afternoon and Saturday night. Winds will temporarily diminish Saturday night into Sunday morning, but increase again Sunday afternoon through Monday night when another Small Craft Advisory may be needed over the Outer Waters.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 10 PM PDT Saturday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...Tardy
AVIATION/MARINE...Brotherton

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone



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April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

FXUS65 KPSR 281000 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 300 AM MST Sat Apr 28 2018

.SYNOPSIS...

Above normal temperatures will persist this weekend, however a gradual cooling trend is expected through Wednesday as a series of low pressure systems move through the Western states. The strongest of these lows will bring an increased threat of showers and thunderstorms to the Desert Southwest Tuesday, followed by well below normal temperatures Wednesday. Temperatures will rebound thereafter as high pressure returns to the area.

&&

.DISCUSSION...

Latest water vapor imagery reveals a large vortex just off the Oregon coast. This low pressure system will slide eastward into the intermountain West this weekend while weakening. Along the southern end of this system, a dry southwesterly flow will prevail across the Desert Southwest. Anomalously high PWATs currently reside across mainly central and eastern Arizona. However, latest suite of CAMs indicate that this moisture will be scoured out with any convection relegated to far eastern Arizona this afternoon. In terms of sensible weather, sunny skies and seasonably breezy conditions will prevail. A gradual decrease in heights/thicknesses will result in a cooling trend, though temperatures will remain above normal.

Temperatures will drop below normal Monday behind a vort max extending southward from the aforementioned low pressure system. Operational models continue to indicate that a reinforcing short wave trough will drop into southern California Tuesday. This will result in additional cooling along with widespread vorticity and jet-forced ascent across Arizona. Latest hi-res CAMs suggest a discernible threat of showers and thunderstorms across the area mainly Tuesday and Tuesday night, though GEFS CAPE remains marginal at best. Highest precipitation chances (30-40 percent) will be focused along the higher terrain, north and east of Phoenix and forecast PoPs were adjusted above the National Blend, and closer to the 60th percentile of all model guidance.

A subsident air mass will overspread the region Wednesday as the vort max lifts into northern Arizona. Latest guidance continues to trend cooler, with the ECMWF ensemble MOS indicating high temperatures as low as the lower to mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, general model consensus points to a building ridge along with gradually

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County increasing heights and a warming trend Thursday through Saturday.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Expect skies in the greater Phoenix area to remain genly clear until Saturday afternoon when another round of high-based cumulus will develop over the higher terrain off to our east. Should any storms develop over the mountains tomorrow afternoon/evening, we do not expect any outflow winds or dust to reach into the Phoenix area or affect the terminals. Winds next 24 hours will follow typical diurnal tendencies, with potential for some afternoon southwest gusts tomorrow reaching into the teens or low 20s.

Southeast California/Southwest Arizona including KIPL and KBLH:

Upper low approaching from the west will provide dry southwest flow aloft and result in genly clear skies through Saturday evening. Expect winds to favor the west at KIPL next 24 hours, with gusts to around 25kt thru midnight tonight and again tomorrow late afternoon and evening. Winds to favor the south to southwest at KBLH with some gusts also expected Saturday afternoon. Do not expect any blowing dust with the gustiness.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday:

Breezy to windy conditions will impact the districts Monday and Tuesday with the strongest gusty winds of 20 to 35 mph Tuesday afternoon. Cooler than average temperatures along with modestly increased moisture values will keep humidity values elevated slightly above critical thresholds. Afternoon minimum humidity values will generally fall in a 15 to 25% range during the first half of the week, falling to a 10-15% range by the end of the week. Overnight recovery will generally be good. Wind speeds will decrease substantially later in the week as temperatures warm back up near and above the seasonal normal.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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220 FXUS66 KSGX 281014 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 314 AM PDT Sat Apr 28 2018

.SYNOPSIS...

Through Monday...onshore flow will spread cooling inland with periods of stronger and gusty southwest to west winds in the mountains and deserts...strongest during the late afternoon through late evening each day. Areas of night and morning coastal low clouds and fog will spread farther inland and onto the coastal slopes Sunday night into Monday morning. On Tuesday...a colder and compact low pressure system moving southward along the West Coast will move into Southern California bringing much cooler high temperatures along with showers and a slight chance of thunderstorms. Some showers could linger into Wednesday. For Thursday into next weekend...high pressure aloft will strengthen near the West Coast bringing dry weather with a warming trend.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

.SHORT TERM (Today through Monday)...

A low pressure system moving slowly into the Pacific Northwest this weekend and into the Great Basin on Monday will strengthen onshore flow into Sunday with onshore flow weakening slightly on Monday. Cooling will continue to spread inland through Monday.

The onshore flow will bring periods of stronger and gusty southwest to west winds in the mountains and deserts. Winds will be stronger and more widespread each late afternoon through late evening. The strongest winds are expected for late Sunday afternoon into Sunday night with advisory strength winds likely in portions of the mountains and deserts.

Weakening of the marine inversion resulted in much patchier stratus coverage on Friday evening. A weak coastal eddy has developed with areas of low clouds along the northern Baja coast and San Diego County coast spreading northward and increasing in coverage. Higher resolution models show weak coastal eddies developing the following two nights. The marine layer will deepen

with coastal low clouds spreading onto the coastal mountain slopes by Sunday night into Monday morning.

&&

.LONG TERM (Tuesday through Friday)...

A compact and cold low pressure system moving southward along the West Coast will move into Southern California on Tuesday. There remain some small differences on the track and timing of the coldest air aloft on Tuesday.

Tuesday high temperatures will be much cooler for inland areas with high temperatures in those areas around 20 degrees below average. There is enough over water trajectory with the current model tracks to bring showers and a slight chance of thunderstorms to portions of Southern California on Tuesday. Some showers could linger into Wednesday.

For Thursday and Friday...there remain differences as to what extend weaker troughing may linger across portions of the southwest states and northwestern Mexico as high pressure aloft strengthens near the West Coast. Dry weather with a warming trend trend is expected for Thursday into next weekend.

&&

.AVIATION...

280930Z...Coast/Valleys...Non-uniform low cloud deck this morning with BKN-OVC013-018 at KSAN and KCRQ, but at 09Z the skies were clear at KSNA, KONT and KSBD at 09Z. CIGS are still possible between 11Z and 17Z as the low clouds expand in coverage 16Z. Vis restriction of 3-5 miles in fog/haze possible at KONT and KSBD. Skies will clear through 18Z. BKN-OVC015-020 spreading back inland between 02-08Z Sunday.

Mountains/Deserts...West-northwest winds $15\text{-}25~\mathrm{kt}$ with gusts to 40 kt today with moderate up/downdrafts and LLWS over and east of the mtns.

&&

.MARINE...

Small Craft Advisory in effect over the Outer Waters through 10 PM this evening for northwest winds 15-25 kt gusting to 30 kt, and combined seas of 6-9 ft. The winds will temporarily diminish Saturday night into Sunday morning, but increase again Sunday afternoon through Monday night when another Small Craft Advisory may be needed over the Outer Waters.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 10 PM PDT this evening for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...17
AVIATION/MARINE...Moede

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



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FXUS65 KPSR 281222 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 522 AM MST Sat Apr 28 2018

.UPDATE...

Updated Aviation and Fire Weather sections.

88

.SYNOPSIS...

Above normal temperatures will persist this weekend, however a gradual cooling trend is expected through Wednesday as a series of low pressure systems move through the Western states. The strongest of these lows will bring an increased threat of showers and thunderstorms to the Desert Southwest Tuesday, followed by well below normal temperatures Wednesday. Temperatures will rebound thereafter as high pressure returns to the area.

&&

.DISCUSSION...

Latest water vapor imagery reveals a large vortex just off the Oregon coast. This low pressure system will slide eastward into the intermountain West this weekend while weakening. Along the southern end of this system, a dry southwesterly flow will prevail across the Desert Southwest. Anomalously high PWATs currently reside across mainly central and eastern Arizona. However, latest suite of CAMs indicate that this moisture will be scoured out with any convection relegated to far eastern Arizona this afternoon. In terms of sensible weather, sunny skies and seasonably breezy conditions will prevail. A gradual decrease in heights/thicknesses will result in a cooling trend, though temperatures will remain above normal.

Temperatures will drop below normal Monday behind a vort max extending southward from the aforementioned low pressure system. Operational models continue to indicate that a reinforcing short wave trough will drop into southern California Tuesday. This will result in additional cooling along with widespread vorticity and jet-forced ascent across Arizona. Latest hi-res CAMs suggest a discernible threat of showers and thunderstorms across the area mainly Tuesday and Tuesday night, though GEFS CAPE remains marginal at best. Highest precipitation chances (30-40 percent) will be focused along the higher terrain, north and east of Phoenix and forecast PoPs were adjusted above the National Blend, and closer to the 60th percentile of all model guidance.

A subsident air mass will overspread the region Wednesday as the

vort max lifts into northern Arizona. Latest guidance continues to

trend cooler, with the ECMWF ensemble MOS indicating high temperatures as low as the lower to mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, general model consensus points to a building ridge along with gradually increasing heights and a warming trend Thursday through Saturday.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Anticipate redevelopment of some shallow buildups over the higher terrain east of metro Phoenix (deeper over the White Mountains) and some scattered mid clouds (bases AOA FL120) over eastern portions of metro Phoenix. Expect easterly winds this morning at the surface and up through 4-7 kft ASL (westerly above that). Southwest and westerly winds develop 18Z-20Z at the surface and in the lower levels above the surface. There will be some afternoon and early evening gustiness of the surface winds but generally less than 25 kts (mostly 15-20kts).

Southeast California/Southwest Arizona including KIPL and KBLH: Anticipate something of a repeat of yesterday with light downvalley/drainage winds this morning before strengthening and favoring southwest and west directions (southerly over the Lower Colorado River Valley) in the afternoon. Expect gusts of 20-30 kts (strongest over Imperial County) in the afternoon and evening (lingering over Imperial County). Otherwise, skies will be clear through Saturday night.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday:

A low pressure system over the West will lead to continued cooling on Monday along with breezy to locally windy conditions. The system will deepen over the Southwest on Tuesday. This will lead to even stronger breeziness (windy over southeast California) as well as additional cooling. Expect highs in the upper 70s to low 80s on the lower deserts. Humidities improve significantly due to cooler temperatures and somewhat higher dew points. Thus, conditions are anticipated to fall short of critical thresholds. Look for a bit of additional cooling Wednesday over south- central AZ followed by a warming trend across the region as the system departs and high pressure builds in. Winds will be lighter but humidities decline.

&&

.SPOTTER INFORMATION STATEMENT...

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County Spotters are encouraged to follow standard reporting procedures:

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Hirsch AVIATION...AJ

FIRE WEATHER...AJ

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











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Area Forecast Discussion National Weather Service San Diego CA 857 AM PDT Sat Apr 28 2018

.SYNOPSIS...

Persistent onshore flow will spread cooling and clouds farther inland on gusty southwest to west winds, strongest over the mountains and deserts. Some fog will reach the coastal slopes of the mountains, with a few sprinkles or patchy drizzle possible by Monday morning. On Tuesday...a colder storm system will move into Southern California with scattered showers and a slight chance of thunderstorms. Some showers could linger into Wednesday morning before the system moves east. Dry and warmer for the second half of next week.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

At 8 AM PDT...satellite imagery showed rapidly evaporating low cloud patches west of the mts, under otherwise clear skies. Despite the lack of stratus inland, the marine layer was 2K FT deep based on the 12Z Miramar sounding. Surface pressure gradients of around 7 MBS KSAN to the deserts were supporting some peak wind gusts over 40 MPH through the passes, but most places in the mts/deserts were had gusts under 25 MPH.

Looks like another nice day. No forecast changes this morning.

From previous discussion...

.SHORT TERM (Today through Monday)...

A low pressure system moving slowly into the Pacific Northwest this weekend and into the Great Basin on Monday will strengthen onshore flow into Sunday with onshore flow weakening slightly on Monday. Cooling will continue to spread inland through Monday.

The onshore flow will bring periods of stronger and gusty southwest to west winds in the mountains and deserts. Winds will be stronger and more widespread each late afternoon through late evening. The strongest winds are expected for late Sunday

afternoon into Sunday night with advisory strength winds likely in portions of the mountains and deserts.

Weakening of the marine inversion resulted in much patchier stratus coverage on Friday evening. A weak coastal eddy has developed with areas of low clouds along the northern Baja coast and San Diego County coast spreading northward and increasing in coverage. Higher resolution models show weak coastal eddies developing the following two nights. The marine layer will deepen with coastal low clouds spreading onto the coastal mountain slopes by Sunday night into Monday morning.

&&

.LONG TERM (Tuesday through Friday)...

A compact and cold low pressure system moving southward along the West Coast will move into Southern California on Tuesday. There remain some small differences on the track and timing of the coldest air aloft on Tuesday.

Tuesday high temperatures will be much cooler for inland areas with high temperatures in those areas around 20 degrees below average. There is enough over water trajectory with the current model tracks to bring showers and a slight chance of thunderstorms to portions of Southern California on Tuesday. Some showers could linger into Wednesday.

For Thursday and Friday...there remain differences as to what extend weaker troughing may linger across portions of the southwest states and northwestern Mexico as high pressure aloft strengthens near the West Coast. Dry weather with a warming trend trend is expected for Thursday into next weekend.

&&

.AVIATION...

281540Z...Coast/Valleys...The clearing process has begun but areas of low clouds remain at this time with cigs at KSAN and KSNA. Cloud bases are around 2000 ft MSL with tops to 2500 ft MSL. Expect clearing at all locations by 18Z. Low clouds will begin to spread inland again after 02Z Sun with bases 1500-2000 ft MSL and tops to 2500 ft MSL. Low clouds could reach the foothills by 12Z Sun with vis restricted to 1-3 miles where clouds and terrain intersect.

Mountains/Deserts...West-northwest winds $15-25~\rm kt$ with gusts to $40~\rm kt$ today with moderate up/downdrafts and LLWS over and east of the mtns.

&&

.MARINE...

Northwest winds 15-25 kt gusting to 30 kt, and combined seas of 6-9 ft over the outer waters expected to continue through 10 pm this evening. The winds will temporarily weaken tonight into Sunday morning, but increase again Sunday afternoon through Monday night when another Small Craft Advisory may be needed over the Outer Waters.

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.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 10 PM PDT this evening for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...10/17
AVIATION/MARINE...PG

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone

282 FXUS66 KSGX 282019 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 117 PM PDT Sat Apr 28 2018

.SYNOPSIS...

Persistent onshore flow will spread cooling and clouds farther inland on gusty westerly winds this weekend, strongest over the mountains and deserts. By Monday...Some fog will reach the coastal slopes of the mountains, with a few sprinkles or patchy drizzle possible. On Tuesday...a colder storm system will move into Southern California with scattered showers, even a few thunderstorms are possible. Some showers could linger into Wednesday morning before the system moves east. Dry and warmer for the second half of next week.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

At 1 PM PDT...Satellite imagery showed clear skies across the forecast area. Surface pressure gradients of 7-8 MBS KSAN to the deserts were supporting some peak wind gusts of 30 to 40 MPH through the passes and into the deserts, but most places in the mts/deserts had gusts under 25 MPH. While breezy this evening over the mts/deserts, winds will increase late on Sunday and Sunday evening when a Wind Advisory will be needed on the deserts and lee slopes of the mts. Expect some gusts to exceed 55 MPH in the windiest spots.

A longwave trough will develop over the West early next week, steering several disturbances across California. The first will move across the State rather quickly late Sunday, followed by a digging, colder system on Tuesday, and then a final weaker trough early Wednesday. This will bring an active weather pattern across SoCal for the first half of next week.

The first short-wave will rev up the west winds over the mts/deserts a bit more on Sun evening and build the marine layer onto the coastal slopes of the mts. A few sprinkles or patchy drizzle cannot be ruled out into Mon morning, but nothing of significance is expected. The stronger, digging wave will close off a compact upper-level low over SoCal on Tue. As this occurs, upper levels will cool

significantly as 500H heights fall, setting the stage for some high elevation, spring snowfall and even a few thunderstorms. While some precip is likley, the showery nature of it precludes nailing times and amounts in any spot. The upper low moves slowly east on Wed with a hang-back trough over SoCal, possibly supporting lingering showers.

Cooling will begin with the short-wave on Sunday, and peak on Tuesday with the upper low when daytime highs will be some 20 degrees F below average inland. Continued cool on wednesday under the hang-back trough, but strong late April sun, and increasing thickness values should allow for modest warming. A more pronounced warming is slated into the end of the week as the marine layer shrinks under building high pressure aloft. daytime temps could be well above normal by the end of the week.

&&

.Hydrology...

There is building consensus that the system on Tue will be dynamic and cold enough to spark measurable precip across SoCal. What remains more of a question is quantity, timing, and distribution of the more significant showers. At this time, instability looks sufficient for thunderstorms, which on their own suggest large disparities in rainfall accumulation from point to point. Precipitable water values are mostly under one inch, so large quantities of rainfall necessary for any widespread flooding issues look minimal. However, due to the convective showers expected, spot rainfall rates could be high. In general rainfall accumulations of from one-quarter to one inch are possible across the area.

&&

.AVIATION...

281945Z...Coast/Valleys...Clear, except for a few clouds with bases abv 3000 ft MSL vcnty KONT and KSBD. Low clouds will begin to spread inland again after 02Z Sun with bases around 2000 ft MSL and tops to 2500 ft MSL. Low clouds could reach the foothills by 12Z Sun with vis restricted to 1-3 miles where clouds and terrain intersect. Clearing to the coast likely between 16Z and 18Z Sun.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts to 40 kt through this afternoon with moderate up/downdrafts and LLWS over and east of the mtns.

&&

.MARINE...

Northwest winds 15-25 kt gusting to 30 kt, and combined seas of 6-9

ft over the outer waters expected to continue through 10 pm this evening. The winds will temporarily weaken tonight into Sunday morning, but increase again Sunday afternoon through Monday night when another Small Craft Advisory may be needed over the Outer Waters.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 10 PM PDT this evening for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...10
AVIATION/MARINE...PG

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone

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WWUS75 KPSR 282036
NPWPSR
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URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 136 PM MST Sat Apr 28 2018

CAZ562-566-290845-

/O.NEW.KPSR.WI.Y.0013.180429T2100Z-180430T0900Z/ Imperial County Southwest-Imperial County West-Including the cities of Mountain Spring, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City 136 PM PDT Sat Apr 28 2018

...WIND ADVISORY IN EFFECT FROM 2 PM SUNDAY TO 2 AM PDT MONDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM Sunday to 2 AM PDT Monday.

- * AFFECTED AREA...Southwest Imperial County including Interstate 8.
- * TIMING...Sunday afternoon into Sunday night.
- * WINDS...West winds 30 to 35 mph with localized gusts 40 to 50 mph.
- * IMPACTS...Dangerous driving conditions will exist for high profiles vehicles. In addition, areas of dense blowing dust are possible.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ560-290845-/O.NEW.KPSR.WI.Y.0013.180429T2100Z-180430T0300Z/ Joshua Tree NP West-Including the cities of Cottonwood Visitor and Lost Horse-Keys Village 136 PM PDT Sat Apr 28 2018

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

...WIND ADVISORY IN EFFECT FROM 2 PM TO 8 PM PDT SUNDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM to 8 PM PDT Sunday.

- * AFFECTED AREA...The western parts of Joshua Tree National Park.
- * TIMING...Sunday afternoon and early evening.
- * WINDS...West winds near 30 mph with gusts 40 to 45 mph.
- * IMPACTS...Dense blowing dust is possible which will make driving extremely hazardous. Lightweight camping items may be easily blown away.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone



T 308 FXUS65 KPSR 282143 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 243 PM MST Sat Apr 28 2018

.SYNOPSIS...

Above normal temperatures will persist this weekend, however a gradual cooling trend is expected through Wednesday as a series of low pressure systems move through the Western states. The strongest of these lows will bring an increased threat of showers and thunderstorms to the Desert Southwest Tuesday, followed by well below normal temperatures Wednesday. Temperatures will rebound thereafter as high pressure returns to the area.

&&

.DISCUSSION...

Convection is firing over eastern Arizona this afternoon as a bit of moisture combined with orographic lift has been enough to generate scattered thunderstorms. Currently, PWs near 0.5-0.7 inches exist across the eastern half of AZ while much drier air (PW ~ 0.2 inches) from California is being ushered into the state. This is in response to the southwesterly flow aloft which is supported by an incoming trough of low pressure currently positioned over the Pacific Northwest. Near the surface, temperatures remain unseasonably warm as many lower desert locations are seeing readings in the mid to upper 90s this afternoon.

Temperatures are forecast to gradually cool each day through Wednesday as the aforementioned trough moves over the Great Basin. As it does so, a series of short waves pinwheeling around this trough will move through our region. By late Sunday, the first shortwave will move through our region but is not expected to bring any precipitation as the system is relatively moisture starved. However, height falls will tighten surface pressure gradients and drive strong winds, mainly over SE California. Areas of blowing dust will be the major concern over much of SE California on Sunday and could make for particularly difficult travel near El Centro and along highway 78 and 86. Gusts 35-45 mph are expected over the area with speeds reaching 50 mph in windiest locations.

Weaker, although sill breezy winds are expected for Monday as cooler air continues to filter into our CWA. Given current model solutions, temperatures will hover in the mid to upper 80s for most lower desert locations. By Tuesday, yet another system will move through our area. Strong winds look to be a near certainty for SE California yet again with gusts similar to what we are expecting for Sunday. Blowing dust will also likely cause an issue

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County for travelers and create more air quality concerns. One

difference with this system is that there is decent moisture advection out ahead of it. This will bring a chance of precipitation over our area Starting Tuesday evening. During this period, POPs are expected to be in the 20-40% range with better chances over the orographically favored areas of eastern Maricopa and Gila counties. The NAM has indicated possible thunderstorms with this system but confidence is low as CAPE values are only around 100 J/Kg.

A subsident air mass will overspread the region Wednesday as the vort max lifts into northern Arizona however there may be enough moisture and instability to keep showers going through the early afternoon. Latest guidance continues to trend cooler, with the ECMWF ensemble MOS indicating high temperatures as low as the lower to mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, general model consensus points to a building ridge along with gradually increasing heights and a warming trend Thursday through Saturday.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Only minimal aviation impacts will affect the terminal sites through Sunday afternoon as clouds and TS remain well east along the AZ/NM border. Occasionally gusty west winds into this evening and again Sunday afternoon will be the primary concern. West winds should hold longer tonight, then become re-established earlier Sunday than is typical. Speeds Sunday afternoon will likely be stronger than the past several days.

Southeast California/Southwest Arizona including KIPL and KBLH: Under clear skies, increasingly gusty winds will be the primary aviation impacts through Sunday afternoon. Stronger gusts in a 20-30kt range will settle over the terminal sites late this afternoon, however as in the past several days weaken towards sunrise. Much stronger winds will impact the area Sunday afternoon where local gusts should exceed 30kt. Lofted blowing dust will likely be common, and there is some chance to flight category restrictions at KIPL due to more dense blowing dust into early Sunday evening.

Aviation Discussion not updated for amended TAFs.

88

.FIRE WEATHER...

Tuesday through Saturday:

A low pressure system will deepen over the Southwest Tuesday leading to locally strong winds as well as much cooler air over the districts. In many cases, temperatures will fall to more than 10 degrees below the seasonal average Tuesday and Wednesday. Humidities improve significantly due to cooler temperatures and somewhat higher dewpoints. Thus despite the windy conditions,

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County critical thresholds should not be expected. A fairly rapid warming

trend will affect the districts later in the week as the weather system departs and high pressure builds in. Winds will be much lighter, but afternoon humidities decline back below 10%. &&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from noon to 7 PM MST Sunday for AZZ133.

CA...Wind Advisory from 2 PM to 8 PM PDT Sunday for CAZ560.

Wind Advisory from 2 PM Sunday to 2 AM PDT Monday for CAZ562-566.

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DISCUSSION...Wilson/Hirsch AVIATION...MO FIRE WEATHER...MO

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone



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420 WWUS76 KSGX 282240 NPWSGX

URGENT - WEATHER MESSAGE National Weather Service San Diego CA 340 PM PDT Sat Apr 28 2018

CAZ055-056-058-060>062-065-291200-

...Strong Winds in the Mountains and Deserts through Early Monday...

/O.NEW.KSGX.WI.Y.0015.180428T2240Z-180430T1200Z/
San Bernardino County Mountains-Riverside County MountainsSan Diego County Mountains-Apple and Lucerne ValleysCoachella Valley-San Diego County DesertsSan Gorgonio Pass Near BanningIncluding the cities of Crestline, Lake Arrowhead, Big Bear City,
Big Bear Lake, Running Springs, Wrightwood, Idyllwild-Pine Cove,
Julian, Pine Valley, Victorville, Hesperia, Apple Valley, Indio,
Palm Springs, Cathedral City, Palm Desert, Palm Desert Country,
La Quinta, Coachella, Borrego Springs, Banning,
and Desert Hot Springs
340 PM PDT Sat Apr 28 2018

...WIND ADVISORY IN EFFECT UNTIL 5 AM PDT MONDAY...

The National Weather Service in San Diego has issued a Wind Advisory...which is in effect until 5 AM PDT Monday.

- * Winds...West 20 to 30 mph with gusts to 50 mph. Isolated gusts to 60 mph along the desert slopes in San Diego County.
- * Timing...Through early Monday. Strongest winds Sunday afternoon and evening.
- * Location...Mountain ridges, desert slopes and deserts.
- * Visibility...Locally reduced to 1 mile or less in blowing dust and sand.
- * Impacts...Temporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

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Albright

IOWA STATE UNIVERSITY

College of Ag
Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

878
FXUS65 KPSR 290400
AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 900 PM MST Sat Apr 28 2018

.SYNOPSIS...

Above normal temperatures will persist this weekend, however a gradual cooling trend is expected through Wednesday as a series of low pressure systems move through the Western states. The strongest of these lows will bring an increased threat of showers and thunderstorms to the Desert Southwest Tuesday, followed by well below normal temperatures Wednesday. Temperatures will rebound thereafter as high pressure returns to the area.

&&

.DISCUSSION...

Early this evening, a strong upper low continued to move inland and into the Pacific northwest; as it approached mid level gradients tightened resulting in breezy to windy conditions across much of the area this afternoon. Imperial recorded wind gusts to around 30kt earlier and gusts over 25kt were seen in the greater Phoenix area this afternoon. Although there were a few buildups present over the higher terrain well east of Phoenix this afternoon, no lightning strikes were observed over southern Gila County, and the southwest flow ahead of the approaching low ushered in drier air and allowed the high based cu to dissipate; at 8 pm IR imagery showed genly clear skies area-wide. 500mb plots indicated little or no height changes and as such, under sunny skies this afternoon high temperatures over the lower deserts again reached into the mid to upper 90s. Phoenix came in with a high of 98 degrees. At 8 pm, winds had tapered off a bit but were still breezy in some locales such as the Imperial Valley; Imperial was still reporting gusts around 25kt. For the rest of tonight expect clear skies along with locally breezy conditions mainly over the western deserts and over typical windprone areas such as western Imperial County or Joshua Tree NP. Forecasts look to be in decent shape and no updates are needed.

.PREVIOUS DISCUSSION...

Convection is firing over eastern Arizona this afternoon as a bit of moisture combined with orographic lift has been enough to generate scattered thunderstorms. Currently, PWs near 0.5-0.7 inches exist across the eastern half of AZ while much drier air (PW ~ 0.2 inches) from California is being ushered into the state. This is in response to the southwesterly flow aloft which is supported by an incoming trough of low pressure currently positioned over the Pacific Northwest. Near the surface, temperatures remain unseasonably warm as many lower desert locations are seeing readings in the mid to upper 90s this afternoon.

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

Temperatures are forecast to gradually cool each day through Wednesday as the aforementioned trough moves over the Great Basin. As it does so, a series of short waves pinwheeling around this trough will move through our region. By late Sunday, the first shortwave will move through our region but is not expected to bring any precipitation as the system is relatively moisture starved. However, height falls will tighten surface pressure gradients and drive strong winds, mainly over SE California. Areas of blowing dust will be the major concern over much of SE California on Sunday and could make for particularly difficult travel near El Centro and along highway 78 and 86. Gusts 35-45 mph are expected over the area with speeds reaching 50 mph in windiest locations.

Weaker, although sill breezy winds are expected for Monday as cooler air continues to filter into our CWA. Given current model solutions, temperatures will hover in the mid to upper 80s for most lower desert locations. By Tuesday, yet another system will move through our area. Strong winds look to be a near certainty for SE California yet again with gusts similar to what we are expecting for Sunday. Blowing dust will also likely cause an issue for travelers and create more air quality concerns. One difference with this system is that there is decent moisture advection out ahead of it. This will bring a chance of precipitation over our area Starting Tuesday evening. During this period, POPs are expected to be in the 20-40% range with better chances over the orographically favored areas of eastern Maricopa and Gila counties. The NAM has indicated possible thunderstorms with this system but confidence is low as CAPE values are only around 100 J/Kg.

A subsident air mass will overspread the region Wednesday as the vort max lifts into northern Arizona however there may be enough moisture and instability to keep showers going through the early afternoon. Latest guidance continues to trend cooler, with the ECMWF ensemble MOS indicating high temperatures as low as the lower to mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, general model consensus points to a building ridge along with gradually increasing heights and a warming trend Thursday through Saturday.

88

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Gusty west winds will continue to taper off, eventually becoming east/southeast after midnight. Expect another round of southwest to west wind again tomorrow afternoon and evening as a strong upper low moves into the area. After about 19z, winds should return to the southwest and we should see occasional gusts between 25 and 35kt during the afternoon and evening hours. Winds may be able to generate some blowing dust which could restrict visibility at the

TAF sites but confidence in this too low at this time to mention the

restriction in the TAFs. Skies should be generally clear with maybe FEW-SCT cirrus decks developing during the day.

Southeast California/Southwest Arizona including KIPL and KBLH:

Look for breezy southwest to west winds to persist past midnight at the TAF sites with some gusts over 20kt at times before tapering off below 12kt by 09z or so. As a strong upper low moves into the area, gusty southwest/west winds will develop again on Sunday after 20z with gusts from 25 to 35kt at times expected at both KIPL and KBLH. Gusts may approach 40kt at times at KIPL during the evening hours and may be strong enough to generate some blowing dust as well as reducing visibility below 5sm. At this time, confidence too low to mention the lower vis in the TAFs. Skies should be genly clear next 24 hours with only FEW-SCT mainly thin cirrus decks developing during the day Sunday.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday:

A low pressure system will deepen over the Southwest Tuesday leading to locally strong winds as well as much cooler air over the districts. In many cases, temperatures will fall to more than 10 degrees below the seasonal average Tuesday and Wednesday. Humidities improve significantly due to cooler temperatures and somewhat higher dewpoints. Thus despite the windy conditions, critical thresholds should not be expected. A fairly rapid warming trend will affect the districts later in the week as the weather system departs and high pressure builds in. Winds will be much lighter, but afternoon humidities decline back below 10%. &&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from noon to 7 PM MST Sunday for AZZ133.

CA...Wind Advisory from 2 PM to 8 PM PDT Sunday for CAZ560.

Wind Advisory from 2 PM Sunday to 2 AM PDT Monday for CAZ562-566.

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DISCUSSION...CB

PREVIOUS DISCUSSION...Wilson/Hirsch

811 FXUS66 KSGX 290437 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 937 PM PDT Sat Apr 28 2018

.SYNOPSIS...

A cooling trend will continue through Tuesday, with gusty winds in the deserts each afternoon and evening. Strongest winds Sunday and Tuesday. Scattered shower Tuesday and Wednesday, with a couple rumbles of thunder possible. Late season snow showers possible above 5,500 ft. Temperatures should return to above average readings by the end of the week as high pressure regains control.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

At 9 PM, a trough of low pressure remained in place along the West Coast, with dry northwest flow dominating in SoCal. As such skies were mostly clear, apart from a few patches of low clouds along the coast. Winds were breezy in the deserts with gusts in the 25-35 mph range on the desert floor, and isolated gusts into the mid 50s along the desert slopes. Areas of blowing dust were evident on visible satellite in San Diego and Imperial Counties prior to sunset.

The trough will remain anchored along the West Coast through Monday, resulting in continued onshore flow and slow height falls. Afternoon high temperatures should tick down a couple degrees each day. Gusty west winds in the deserts will continue to be the primary weather impact in the region. Winds should peak Sunday afternoon/evening as a weak shortwave and associated jet round the base of the larger trough. This should result in the strongest winds of the weekend in the deserts with gusts in the 30-50 mph range (isolated 60 mph gusts along the wind prone desert slopes). Moderate impacts are probable. Temporary outdoor structures like tents and awnings may be damaged or lofted, while travel may be difficult at times for high profile vehicles along Interstates 8, 10 and 15, and Highways 62, 74, 78, 86, 111, and 247. Blowing dust and sand are also likely.

A second stronger shortwave will rotate through the base of the trough Tuesday. Gusty winds, will again be possible in the deserts, with impacts similar to Sunday evening. Setting the winds aside, this second shortwave should have a greater pool of cold air aloft associated with it. Resulting in increased mid level lapse rates and sufficient instability over the region for scattered showers (potentially a few thunderstorms), despite limited moisture. Though some uncertainty remains, model trends suggest the greatest potential for impactful precipitation in the San Bernardino County Mountains Tuesday afternoon/evening, where the increased elevation and light upslope flow below 800 mb should help erode a capping inversion just below 700 mb. West-northwest flow in mid levels may also help keep the zone of greatest instability over the mountains. Anyway, this is just a bunch of jargon, and a long winded way of saying late season snow showers and/or thunderstorms appear possible in the San Bernardino Mountains. A couple inches of snow accumulation may produce travel impacts above 5,500 ft. Away from this area instability appears lower, but showers are certainly possible. Rain amounts should be sporadic and range from 0.00 to 1.00 inches. Not to be total forgotten, Tuesday should be the coolest day of the week with inland highs running 10-25 degrees below average.

Some shower activity may linger into Wednesday, with the ECMWF and GFS hinting at another weak short wave that may rotate through the base of the trough. The uncertainty, is a little higher than Tuesday.

Weak ridging should return to end the week, bringing drier and warmer weather. Afternoon highs will likely return to near/slightly above average readings by the weekend.

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.AVIATION...

290415Z...Coast/Valleys...Areas of BKN-OVC stratus will develop gradually tonight with bases 1500-2000 ft MSL and tops to 3000 ft MSL and higher terrain locally obscured. Where stratus develops will be somewhat disorganized, with some areas remaining SKC-SCT most of the night. Most vis will remain above 6 miles. Stratus will be slow to clear Sunday, mostly 17Z-21Z, with bases rising to 2500-3000 ft MSL. Areas of stratus will likely redevelop Sunday evening.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts to 40 kt will continue this evening and then redevelop Sunday late afternoon and evening with moderate up/downdrafts and LLWS over and east of the mtns.

&&

.MARINE...

Northwest winds 15-25 kt with occasional gusts 25-30 kt will occur in the outer coastal waters through Monday night, along with choppy combined seas of 6-9 ft. We will extend the small craft advisory through 3 AM Tuesday. Winds will generally be strongest each day during the late afternoons and evenings, though model guidance shows some gusts over 20 kt could occur during other times of day too. Winds will decrease Tuesday.

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.SKYWARN...

Skywarn activation will not be needed through Sunday.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory until 5 AM PDT Monday for Apple and Lucerne Valleys-Coachella Valley-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.

PZ...Small Craft Advisory until 3 AM Tuesday for Waters from San Mateo point to the Mexican Border extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...Albright
AVIATION/MARINE...Maxwell



College of Ag

Department of Agronomy

204 WWUS76 KSGX 290945 NPWSGX

URGENT - WEATHER MESSAGE National Weather Service San Diego CA 245 AM PDT Sun Apr 29 2018

...Strong Winds in the Mountains and Deserts through Early Monday...

CAZ055-056-058-060>062-065-292130/O.EXT.KSGX.WI.Y.0015.000000T0000Z-180430T1100Z/
San Bernardino County Mountains-Riverside County MountainsSan Diego County Mountains-Apple and Lucerne ValleysCoachella Valley-San Diego County DesertsSan Gorgonio Pass Near BanningIncluding the cities of Big Bear City, Julian, Victorville,
Hesperia, Apple Valley, Indio, Palm Desert, Palm Desert Country,
La Quinta, Coachella, Borrego Springs, Banning,
and Desert Hot Springs
245 AM PDT Sun Apr 29 2018

- ...WIND ADVISORY NOW IN EFFECT UNTIL 4 AM PDT MONDAY...
- * Winds...West 20 to 30 mph with gusts to 50 mph. Isolated gusts to 60 mph along the desert slopes in San Diego County and in the northern Coachella Valley below the San Gorgonio Pass.
- * Timing...Through early Monday. Strongest winds this afternoon and evening.
- * Location...Mountain ridges, desert slopes and deserts.
- * Visibility...Locally reduced to 1 mile or less in blowing dust and sand in the deserts.
- * Impacts...Temporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand in the deserts.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

185 FXUS65 KPSR 291018 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 318 AM MST Sun Apr 29 2018

.SYNOPSIS...

An approaching low pressure system will bring an increase in wind to the region today along with areas of blowing dust and slightly cooler temperatures. Another low pressure system will bring a continued cooling trend along with a second bout of increased wind and the threat of blowing dust Tuesday. There will also be a chance of showers and thunderstorms, mainly from Phoenix north and eastward. Benign conditions are likely by the end of the week and through next weekend as high pressure builds across the region, resulting in a return to above normal temperatures.

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.DISCUSSION...

Latest water vapor imagery reveals considerable drying in the mid-levels, which is also being observed at the surface with dewpoints as low as the single digits across central Arizona. Further upstream, a large vortex is evident across the Pacific Northwest. This feature will weaken somewhat today as it migrates eastward, though a reinforcing short-wave trough will drop southward into southern California this evening. Ahead of this system, the pressure gradient will tighten resulting in widespread windy conditions across the Desert Southwest. The strong winds will be most pronounced in the gaps and channels of southern California late this afternoon where gusts could reach 35 to 50 mph. Gusts of this magnitude will also be sufficient to produce areas of blowing dust, which will be advected downstream towards the Imperial Valley and possibly further east into Yuma County.

Winds will subside somewhat Monday behind the axis of the short-wave trough, though conditions will still remain generally breezy. Meanwhile, temperatures will drop below average in response to steady height/thickness falls. The aforementioned vortex will become reinvigorated Tuesday as another vort max moves into southern California. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be as moisture-starved as the previous one, with low-level mixing ratios inching up towards 4-5 g/kg. Latest CAMs continue to suggest a line of convection will develop late Tuesday afternoon, generally from Maricopa County eastward. Convective parameters including CAPE remain marginal, though widespread vorticity and jet-forced ascent will provide favorable conditions for at least isolated showers. PoPs were again nudged above the latest National Blend and closer to the 60th percentile

Latest model trends indicate that reinforcing vorticity from the Great Basin will slow the eastward progression of the trough Wednesday. The atmosphere will generally be subsident, though residual moisture will be sufficient for isolated showers, particularly from Phoenix northward. Latest guidance continues to trend cooler as well, with the ECMWF ensemble MOS indicating high temperatures as low as the mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, models are tightly clustered and point to a building ridge along with gradually increasing heights and a warming trend Thursday through Sunday. Numerous models again point to Sunday as the day when high temperatures of 100 degrees will likely return to Phoenix.

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9/11/2019

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Gusty west winds will continue to taper off, eventually becoming east/southeast after midnight. Expect another round of southwest to west wind again tomorrow afternoon and evening as a strong upper low moves into the area. After about 19z, winds should return to the southwest and we should see occasional gusts between 25 and 35kt during the afternoon and evening hours. Winds may be able to generate some blowing dust which could restrict visibility at the TAF sites but confidence in this too low at this time to mention the restriction in the TAFs. Skies should be generally clear with maybe FEW-SCT cirrus decks developing during the day.

Southeast California/Southwest Arizona including KIPL and KBLH:

Look for breezy southwest to west winds to persist past midnight at the TAF sites with some gusts over 20kt at times before tapering off below 12kt by 09z or so. As a strong upper low moves into the area, gusty southwest/west winds will develop again on Sunday after 20z with gusts from 25 to 35kt at times expected at both KIPL and KBLH. Gusts may approach 40kt at times at KIPL during the evening hours and may be strong enough to generate some blowing dust as well as reducing visibility below 5sm. At this time, confidence too low to mention the lower vis in the TAFs. Skies should be genly clear next 24 hours with only FEW-SCT mainly thin cirrus decks developing during the day Sunday.

Aviation Discussion not updated for amended TAFs.

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.FIRE WEATHER...

Tuesday through Saturday:

A low pressure system will deepen over the Southwest Tuesday leading to locally strong winds as well as much cooler air over the districts. In many cases, temperatures will fall to more than

lighter, but afternoon humidities decline back below 10%.

Humidities improve significantly due to cooler temperatures and somewhat higher dewpoints. Thus despite the windy conditions, critical thresholds should not be expected. A fairly rapid warming trend will affect the districts later in the week as the weather system departs and high pressure builds in. Winds will be much

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from noon today to 7 PM MST this evening for AZZ133.

CA...Wind Advisory from 2 PM this afternoon to 8 PM PDT this evening for CAZ560.

Wind Advisory from 2 PM this afternoon to 2 AM PDT Monday for CAZ562-566-567.

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DISCUSSION...Hirsch AVIATION...CB FIRE WEATHER...MO



College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone

Appendix A

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WWUS75 KPSR 291031

NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 331 AM MST Sun Apr 29 2018

CAZ567-292245-

/O.EXA.KPSR.WI.Y.0013.180429T2100Z-180430T0900Z/
Imperial ValleyIncluding the cities of El Centro, Calexico, Alamorio, and Brawley
331 AM PDT Sun Apr 29 2018

...WIND ADVISORY IN EFFECT FROM 2 PM THIS AFTERNOON TO 2 AM PDT MONDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM this afternoon to 2 AM PDT Monday.

- * AFFECTED AREA...The Imperial Valley including El Centro and Brawley.
- * TIMING...Very strong winds develop during the latter half of this afternoon before weakening after midnight.
- * WINDS...West winds 30 to 35 mph with gusts 40 to 50 mph.
- * IMPACTS...Dangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficult...especially for high profile vehicles on north-south oriented roads.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ562-566-292245-

O.CON: KPSR.WI.Y.0013.180429121002-180430109002/ Event, Imperial County

Imperial County Southwest-Imperial County West-Including the cities of Mountain Spring, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City 331 AM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM THIS AFTERNOON TO 2 AM PDT MONDAY...
- * AFFECTED AREA...Southwest Imperial County including Interstate 8 and Highway 86.
- * TIMING...Winds strengthen this afternoon and continue through the evening before weakening after midnight.
- * WINDS...West winds 30 to 35 mph with gusts 40 to 50 mph.
- * IMPACTS...Dangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficult...especially for high profile vehicles on north- south oriented roads.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ560-292245-

/O.CON.KPSR.WI.Y.0013.180429T2100Z-180430T0300Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys Village

331 AM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM THIS AFTERNOON TO 8 PM PDT THIS EVENING...
- * AFFECTED AREA...Mainly western portions of Joshua Tree National Park.
- * TIMING...Mid afternoon through early evening.
- * WINDS...West winds near 30 mph with gusts 40 to 45 mph.

* April 29, 2018 to May 1, 2018 Exceptional Event Imperial County IMPACTS...Dangerous driving conditions due to localized dense blowing dust and more difficult handling...especially for high profile vehicles. Recreational activities including camping and rock climbing will be hindered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone



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257 FXUS66 KSGX 291039 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 339 AM PDT Sun Apr 29 2018

.SYNOPSIS...

Through Monday...onshore flow will spread cooling inland with periods of stronger and gusty southwest to west winds in the mountains and deserts...and areas of night and morning coastal low clouds and fog. On Tuesday...a colder and compact low pressure system moving southward along the West Coast will move into Southern California bringing much cooler high temperatures along with showers and a slight chance of thunderstorms. Some showers could linger into Wednesday. For Thursday through Saturday...high pressure will bring dry weather with a warming trend.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

A low pressure system moving inland from the Pacific Northwest to Great Basin today will strengthen the onshore flow across Southern California. The onshore flow will continue to spread cooling inland. The onshore flow will bring stronger and gusty southwest to west winds in the mountains and deserts...strongest and most widespread during the afternoon and evening.

The marine layer is around 3000 to 3500 feet early this morning...capped by a weak inversion. Satellite imagery shows greatest stratus coverage over portions of the San Diego County coastal waters and adjacent coastal areas...and in eastern and southern portions of the Inland Empire with much patchier coverage elsewhere for coastal and valley areas.

On Monday...cooling will continue to spread inland with coverage of night and morning low clouds and fog greater for coastal and valley areas onto the lower coastal mountain slopes.

For Tuesday...a cold and compact low pressure system moving southward just off the West Coast will move into Southern

California bringing greater cooling with inland high temperatures around 20 degrees below average...along with showers and a slight chance of thunderstorms Tuesday afternoon. Showers are most likely from late Tuesday morning into Tuesday evening.

Scattered showers could linger through Wednesday along with a slight chance of thunderstorms on Wednesday afternoon...mainly for inland areas.

There could also be periods of stronger and gusty southwest to west winds for the mountains and deserts for Tuesday afternoon into Tuesday night.

Dry weather with a significant warming trend for inland areas will follow for Thursday through Saturday.

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.AVIATION...

290940Z...Coast/Valleys...Areas of BKN-OVC stratus with bases 2000-3000 ft MSL and tops to 3500 ft MSL will continue west of the mountains this morning. Portions of Orange County and western Inland Empire may remain mostly clear through the morning. Stratus becoming FEW-SCT 17Z-21Z. Stratus redeveloping after 30/00Z with bases near 2500-3500 ft MSL and spreading into the valleys overnight.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts to 40 kt will develop this afternoon and evening with moderate up/downdrafts and LLWS over and east of the mtns. Winds will weaken Monday morning.

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.MARINE...

Northwest winds 15-25 kt with occasional gusts 25-30 kt will occur in the outer coastal waters through Monday night, along with choppy combined seas of 6-9 ft. The Small Craft Advisory remains in effect through 3 AM Tuesday. Winds will decrease Tuesday. However, showers and possible thunderstorms will move over the coastal waters Tuesday into Wednesday morning.

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.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory until 4 AM PDT Monday for Apple and Lucerne Valleys-Coachella Valley-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.

PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...17
AVIATION/MARINE...SS

IOWA STATE UNIVERSITY

College of Ag
Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











195 FXUS65 KPSR 291252 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 552 AM MST Sun Apr 29 2018

.UPDATE...

Updated Aviation and Fire Weather sections.

88

.SYNOPSIS...

An approaching low pressure system will bring an increase in wind to the region today along with areas of blowing dust and slightly cooler temperatures. Another low pressure system will bring a continued cooling trend along with a second bout of increased wind and the threat of blowing dust Tuesday. There will also be a chance of showers and thunderstorms, mainly from Phoenix north and eastward. Benign conditions are likely by the end of the week and through next weekend as high pressure builds across the region, resulting in a return to above normal temperatures.

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.DISCUSSION...

Latest water vapor imagery reveals considerable drying in the mid-levels, which is also being observed at the surface with dewpoints as low as the single digits across central Arizona. Further upstream, a large vortex is evident across the Pacific Northwest. This feature will weaken somewhat today as it migrates eastward, though a reinforcing short-wave trough will drop southward into southern California this evening. Ahead of this system, the pressure gradient will tighten resulting in widespread windy conditions across the Desert Southwest. The strong winds will be most pronounced in the gaps and channels of southern California late this afternoon where gusts could reach 35 to 50 mph. Gusts of this magnitude will also be sufficient to produce areas of blowing dust, which will be advected downstream towards the Imperial Valley and possibly further east into Yuma County.

Winds will subside somewhat Monday behind the axis of the short-wave trough, though conditions will still remain generally breezy. Meanwhile, temperatures will drop below average in response to steady height/thickness falls. The aforementioned vortex will become reinvigorated Tuesday as another vort max moves into southern California. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be as moisture-starved as the previous one, with low-level mixing ratios inching up towards 4-5 g/kg. Latest CAMs continue to suggest a line of convection will develop late

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County Tuesday afternoon, generally from Maricopa County eastward.

Convective parameters including CAPE remain marginal, though widespread vorticity and jet-forced ascent will provide favorable conditions for at least isolated showers. PoPs were again nudged above the latest National Blend and closer to the 60th percentile of the multi-model ensemble.

Latest model trends indicate that reinforcing vorticity from the Great Basin will slow the eastward progression of the trough Wednesday. The atmosphere will generally be subsident, though residual moisture will be sufficient for isolated showers, particularly from Phoenix northward. Latest guidance continues to trend cooler as well, with the ECMWF ensemble MOS indicating high temperatures as low as the mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, models are tightly clustered and point to a building ridge along with gradually increasing heights and a warming trend Thursday through Sunday. Numerous models again point to Sunday as the day when high temperatures of 100 degrees will likely return to Phoenix.

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.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
Southwest and west flow aloft from near the surface up through troposphere will strengthen as the day progresses due to a large low pressure system slowly moving through the western states.
Surface winds will be light this morning favoring easterly directions. By early afternoon, surface winds strengthen and become southwesterly. Anticipate strongest winds 23Z-03Z with frequent gusts of 25-30 kts. Dust prone areas south of metro Phoenix may see some localized blowing dust during the time of strongest winds. Surface winds will be quite a bit weaker by 08Z becoming light and variable by 12Z Monday. Flow aloft trends weaker by then as well. Thus, LLWS criteria is not expected to be met. No significant clouds - just some minor cirrus.

Southeast California/Southwest Arizona including KIPL and KBLH: Southwest and west flow aloft from near the surface up through troposphere will strengthen as the day progresses due to a large low pressure system slowly moving through the western states. Surface winds will be light in most places this morning. An exception being western and central portions of Imperial County which has already seen off-and-on gustiness early this morning. By early afternoon, surface winds strengthen and become southwesterly with gusts of 15-25 kts. Anticipate further strengthening especially west of the Lower Colorado River Valley - by 00Z. Winds will be strongest west of the Lower Colorado River Valley with gusts of 35-40 kts. With those winds, expect areas of blowing dust and sand reducing visibility below 10 miles and occasionally in localized spots dipping below 3 miles. Surface winds will be quite a bit weaker by 09Z. Flow aloft trends weaker by then as well. Thus, LLWS criteria is not expected to be met. No significant

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

Aviation Discussion not updated for amended TAFs.

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.FIRE WEATHER...

Tuesday through Saturday:

A low pressure system deepens over California and Arizona Tuesday and Wednesday leading to a slight chance of showers and thunderstorms. Precipitation amounts - if any - will be quite modest. There will be continued cooling as well with high temperatures dropping well below normal by Wednesday (mid-upper 70s on the lower deserts). Windy conditions can be expected Tuesday with lingering breezes on Wednesday. With improved humidities, critical fire weather thresholds are not expected to be met. During the latter half of the week, high pressure builds into the western states for a rapid warmup. Accordingly, humidities decline sharply. However, winds will be lighter overall except perhaps for some minor breeziness on Saturday.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from noon today to 7 PM MST this evening for

CA...Wind Advisory from 2 PM this afternoon to 8 PM PDT this evening for CAZ560.

Wind Advisory from 2 PM this afternoon to 2 AM PDT Monday for CAZ562-566-567.

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DISCUSSION...Hirsch
AVIATION...AJ
FIRE WEATHER...AJ



068 FXUS66 KSGX 291518 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 818 AM PDT Sun Apr 29 2018

.SYNOPSIS...

Persistent onshore flow has deepened the marine layer this morning onto the coastal slopes and up into the passes on gusty westerly winds. The winds will increase this afternoon and become quite gusty over the mountains and deserts through this evening. Cooler on Monday with limited clearing in some areas as the marine layer deepens further, possibly leaking some drizzle at times. On Tuesday and Wednesday low pressure will move into Southern California with scattered showers, and maybe a few thunderstorms. Dry and warmer for the second half of next week as the system moves east.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

A strong eddy was centered just east of San Clemente Isl. this morning with marine stratus well up into the passes and on the coastal slopes. Webcams show fog up to at least 5000 Ft in the San Bernardino Mts, but not as deep in San Diego County. This is confirmed by the 12Z Miramar sounding, which had the base of a 5-6 degree C inversion near 3500 FT. surface pressure gradients were trending a bit more onshore from yesterday at 7-8 MBS KSAN to the deserts, keeping several of our windier mtn/desert areas gusting above 30 MPH. Peak gusts of around 45 MPH were nearer the passes.

It will be cooler today, and clearing may be limited in some areas due to the strong eddy circulation offshore and the surge of moisture up into the foothills and coastal slopes. No forecast updates planned.

From previous discussion...

A low pressure system moving inland from the Pacific Northwest to Great Basin today will strengthen the onshore flow across Southern California. The onshore flow will continue to spread cooling inland. The onshore flow will bring stronger and gusty southwest to west winds in the mountains and deserts...strongest and most

widespread during the afternoon and evening.

The marine layer is around 3000 to 3500 feet early this morning...capped by a weak inversion. Satellite imagery shows greatest stratus coverage over portions of the San Diego County coastal waters and adjacent coastal areas...and in eastern and southern portions of the Inland Empire with much patchier coverage elsewhere for coastal and valley areas.

On Monday...cooling will continue to spread inland with coverage of night and morning low clouds and fog greater for coastal and valley areas onto the lower coastal mountain slopes.

For Tuesday...a cold and compact low pressure system moving southward just off the West Coast will move into Southern California bringing greater cooling with inland high temperatures around 20 degrees below average...along with showers and a slight chance of thunderstorms Tuesday afternoon. Showers are most likely from late Tuesday morning into Tuesday evening.

Scattered showers could linger through Wednesday along with a slight chance of thunderstorms on Wednesday afternoon...mainly for inland areas.

There could also be periods of stronger and gusty southwest to west winds for the mountains and deserts for Tuesday afternoon into Tuesday night.

Dry weather with a significant warming trend for inland areas will follow for Thursday through Saturday.

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.AVIATION...

91515Z...Coast/Valleys...Areas of BKN-OVC low clouds with bases 2000-3000 ft MSL and tops to 5000 ft MSL will continue west of the mountains this morning. Portions of Orange County will likely remain mostly clear today, including KSNA. Low clouds becoming FEW-SCT 17Z-20Z. Low clouds redeveloping after 30/00Z with bases near 2500-3500 ft MSL and spreading into the valleys overnight.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts to 40 kt will develop this afternoon and evening, producing moderate up/downdrafts and LLWS over and east of the mtns. Winds will weaken Monday morning.

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.MARINE...

Northwest winds 15-25 kt with occasional gusts 25-30 kt will continue in the outer coastal waters through Monday night, along with choppy combined seas of 6-9 ft. The Small Craft Advisory remains in effect through 3 AM Tuesday. Winds will decrease Tuesday. However, showers will move over the coastal waters late Tuesday into Wednesday morning with a chance for thunderstorms.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

- CA...Wind Advisory until 4 AM PDT Monday for Apple and Lucerne Valleys-Coachella Valley-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.
- PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...10/17
AVIATION/MARINE...PG



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April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

T 134 FXUS65 KPSR 291630 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 930 AM MST Sun Apr 29 2018

.SYNOPSIS...

An approaching low pressure system will bring an increase in wind to the region today along with areas of blowing dust and slightly cooler temperatures. Another low pressure system will bring a continued cooling trend along with a second bout of increased wind and the threat of blowing dust Tuesday. There will also be a chance of showers and thunderstorms, mainly from Phoenix north and eastward. Benign conditions are likely by the end of the week and through next weekend as high pressure builds across the region, resulting in a return to above normal temperatures.

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.DISCUSSION...

A large, slow moving circulation center was spinning across eastern Oregon this morning with a notable shortwave and enhanced jet streak diving down the western periphery of this larger trough. Wind speeds were just beginning to accelerate through the far western reaches of the CWA coincident with a focused area of H8-H7 frontogenesis and leading edge of the H5 jet nose. Early look at 12Z guidance only reinforces the idea windy conditions and blowing dust through parts of Imperial and Riverside counties later today. Current high clouds are obscuring any look at GOES-16 dust products, but that should change later today and advisory and/or warning statements may be necessary for locations near and west of El Centro.

Regarding fire weather concerns, the overall weather induced components still look somewhat marginal for critical conditions; however, other fuel and land usage considerations make up for any other deficiency necessitating the continuation of the warning. Fortunately, any convection and lightning activity has shifted well east into New Mexico. Otherwise, the morning update has incorporated a better hourly transition in temperatures, dewpoints, and winds considering observational data.

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.PREVIOUS DISCUSSION...

/552 AM MST Sun Apr 29 2018/

A large vortex evident across the Pacific Northwest will weaken somewhat today as it migrates eastward, though a reinforcing shortwave trough will drop southward into southern California this evening. Ahead of this system, the pressure gradient will tighten

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County resulting in widespread windy conditions across the Desert

Southwest. The strong winds will be most pronounced in the gaps and channels of southern California late this afternoon where gusts could reach 35 to 50 mph. Gusts of this magnitude will also be sufficient to produce areas of blowing dust, which will be advected downstream towards the Imperial Valley and possibly further east into Yuma County.

Winds will subside somewhat Monday behind the axis of the shortwave trough, though conditions will still remain generally breezy. Meanwhile, temperatures will drop below average in response to steady height/thickness falls. The aforementioned vortex will become reinvigorated Tuesday as another vort max moves into southern California. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be as moisture-starved as the previous one, with low-level mixing ratios inching up towards 4-5 g/kg. Latest CAMs continue to suggest a line of convection will develop late Tuesday afternoon, generally from Maricopa County eastward. Convective parameters including CAPE remain marginal, though widespread vorticity and jet-forced ascent will provide favorable conditions for at least isolated showers. PoPs were again nudged above the latest National Blend and closer to the 60th percentile of the multi-model ensemble.

Latest model trends indicate that reinforcing vorticity from the Great Basin will slow the eastward progression of the trough Wednesday. The atmosphere will generally be subsident, though residual moisture will be sufficient for isolated showers, particularly from Phoenix northward. Latest guidance continues to trend cooler as well, with the ECMWF ensemble MOS indicating high temperatures as low as the mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, models are tightly clustered and point to a building ridge along with gradually increasing heights and a warming trend Thursday through Sunday. Numerous models again point to Sunday as the day when high temperatures of 100 degrees will likely return to Phoenix.

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.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
Southwest and west flow aloft from near the surface up through
troposphere will strengthen as the day progresses due to a large
low pressure system slowly moving through the western states.
Surface winds will be light this morning favoring easterly
directions. By early afternoon, surface winds strengthen and
become southwesterly. Anticipate strongest winds 23Z-03Z with
frequent gusts of 25-30 kts. Dust prone areas south of metro
Phoenix may see some localized blowing dust during the time of
strongest winds. Surface winds will be quite a bit weaker by 08Z
becoming light and variable by 12Z Monday. Flow aloft trends
weaker by then as well. Thus, LLWS criteria is not expected to be
met. No significant clouds - just some minor cirrus.

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

Southeast California/Southwest Arizona including KIPL and KBLH: Southwest and west flow aloft from near the surface up through troposphere will strengthen as the day progresses due to a large low pressure system slowly moving through the western states. Surface winds will be light in most places this morning. An exception being western and central portions of Imperial County which has already seen off-and-on gustiness early this morning. By early afternoon, surface winds strengthen and become southwesterly with gusts of 15-25 kts. Anticipate further strengthening especially west of the Lower Colorado River Valley - by 00Z. Winds will be strongest west of the Lower Colorado River Valley with gusts of 35-40 kts. With those winds, expect areas of blowing dust and sand reducing visibility below 10 miles and occasionally in localized spots dipping below 3 miles. Surface winds will be quite a bit weaker by 09Z. Flow aloft trends weaker by then as well. Thus, LLWS criteria is not expected to be met. No significant clouds - just some minor cirrus.

Aviation Discussion not updated for amended TAFs.

88

.FIRE WEATHER...

Tuesday through Saturday:

A low pressure system deepens over California and Arizona Tuesday and Wednesday leading to a slight chance of showers and thunderstorms. Precipitation amounts - if any - will be quite modest. There will be continued cooling as well with high temperatures dropping well below normal by Wednesday (mid-upper 70s on the lower deserts). Windy conditions can be expected Tuesday with lingering breezes on Wednesday. With improved humidities, critical fire weather thresholds are not expected to be met. During the latter half of the week, high pressure builds into the western states for a rapid warmup. Accordingly, humidities decline sharply. However, winds will be lighter overall except perhaps for some minor breeziness on Saturday.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from noon today to 7 PM MST this evening for AZZ133.

CA...Wind Advisory from 2 PM this afternoon to 8 PM PDT this evening for CAZ560.

Wind Advisory from 2 PM this afternoon to 2 AM PDT Monday for

535 FXUS65 KPSR 291718 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 1018 AM MST Sun Apr 29 2018

.UPDATE...Updated Aviation Discussion...

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.SYNOPSIS...

An approaching low pressure system will bring an increase in wind to the region today along with areas of blowing dust and slightly cooler temperatures. Another low pressure system will bring a continued cooling trend along with a second bout of increased wind and the threat of blowing dust Tuesday. There will also be a chance of showers and thunderstorms, mainly from Phoenix north and eastward. Benign conditions are likely by the end of the week and through next weekend as high pressure builds across the region, resulting in a return to above normal temperatures.

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.DISCUSSION...

A large, slow moving circulation center was spinning across eastern Oregon this morning with a notable shortwave and enhanced jet streak diving down the western periphery of this larger trough. Wind speeds were just beginning to accelerate through the far western reaches of the CWA coincident with a focused area of H8-H7 frontogenesis and leading edge of the H5 jet nose. Early look at 12Z guidance only reinforces the idea windy conditions and blowing dust through parts of Imperial and Riverside counties later today. Current high clouds are obscuring any look at GOES-16 dust products, but that should change later today and advisory and/or warning statements may be necessary for locations near and west of El Centro.

Regarding fire weather concerns, the overall weather induced components still look somewhat marginal for critical conditions; however, other fuel and land usage considerations make up for any other deficiency necessitating the continuation of the warning. Fortunately, any convection and lightning activity has shifted well east into New Mexico. Otherwise, the morning update has incorporated a better hourly transition in temperatures, dewpoints, and winds considering observational data.

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.PREVIOUS DISCUSSION... /552 AM MST Sun Apr 29 2018/ A large vortex evident across the Pacific Northwest will weaken April 29, 2018 to May 1, 2018 Exceptional Event Imperial County somewhat today as it migrates eastward, though a reinforcing short-

wave trough will drop southward into southern California this evening. Ahead of this system, the pressure gradient will tighten resulting in widespread windy conditions across the Desert Southwest. The strong winds will be most pronounced in the gaps and channels of southern California late this afternoon where gusts could reach 35 to 50 mph. Gusts of this magnitude will also be sufficient to produce areas of blowing dust, which will be advected downstream towards the Imperial Valley and possibly further east into Yuma County.

Winds will subside somewhat Monday behind the axis of the shortwave trough, though conditions will still remain generally breezy. Meanwhile, temperatures will drop below average in response to steady height/thickness falls. The aforementioned vortex will become reinvigorated Tuesday as another vort max moves into southern California. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be as moisture-starved as the previous one, with low-level mixing ratios inching up towards 4-5 g/kg. Latest CAMs continue to suggest a line of convection will develop late Tuesday afternoon, generally from Maricopa County eastward. Convective parameters including CAPE remain marginal, though widespread vorticity and jet-forced ascent will provide favorable conditions for at least isolated showers. PoPs were again nudged above the latest National Blend and closer to the 60th percentile of the multi-model ensemble.

Latest model trends indicate that reinforcing vorticity from the Great Basin will slow the eastward progression of the trough Wednesday. The atmosphere will generally be subsident, though residual moisture will be sufficient for isolated showers, particularly from Phoenix northward. Latest guidance continues to trend cooler as well, with the ECMWF ensemble MOS indicating high temperatures as low as the mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, models are tightly clustered and point to a building ridge along with gradually increasing heights and a warming trend Thursday through Sunday. Numerous models again point to Sunday as the day when high temperatures of 100 degrees will likely return to Phoenix.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Southwesterly winds will increase into this afternoon with gusts approaching 25-30kts at times late this afternoon and early evening. These strong winds may promote blowing dust, but only expecting lofted dust possibly lowering slantwise VIS, and not impacting surface at area terminals. Winds will slowly diminish this evening and eventually settle out of the west southwest at 10 kt or less through around 12Z. Winds will likely switch around to the east for a few hours early Monday morning, but will likely

April 29, 2018 to May 1, 2018 Exceptional Event Imperial County switch back to the west by late Monday morning. No significant clouds - just some minor cirrus.

Southeast California/Southwest Arizona including KIPL and KBLH:

Surface winds will quickly strengthen and become southwesterly with gusts to 25 kts by early afternoon. Anticipate further strengthening, across Southeast California by late afternoon. Winds will peak late this afternoon and early evening with gusts to around 35kts. With those winds, expect areas of blowing dust and sand reducing visibility below 10 miles and occasionally in localized spots dipping below 3 miles. Surface winds will be quite a bit weaker by 09Z. Skies will remain mostly clear through the period with only some high cirrus at times.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday:

A low pressure system deepens over California and Arizona Tuesday and Wednesday leading to a slight chance of showers and thunderstorms. Precipitation amounts - if any - will be quite modest. There will be continued cooling as well with high temperatures dropping well below normal by Wednesday (mid-upper 70s on the lower deserts). Windy conditions can be expected Tuesday with lingering breezes on Wednesday. With improved humidities, critical fire weather thresholds are not expected to be met. During the latter half of the week, high pressure builds into the western states for a rapid warmup. Accordingly, humidities decline sharply. However, winds will be lighter overall except perhaps for some minor breeziness on Saturday.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning until 7 PM MST this evening for AZZ133.

CA...Wind Advisory from 2 PM this afternoon to 8 PM PDT this evening for CAZ560.

Wind Advisory from 2 PM this afternoon to 2 AM PDT Monday for CAZ562-566-567.

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636 FXUS66 KSGX 292025 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 125 PM PDT Sun Apr 29 2018

.SYNOPSIS...

A coastal eddy and gusty onshore flow has deepened the marine layer onto the coastal slopes of the mountains today. The winds will increase into the evening, becoming quite strong and gusty over wind-prone mountain and desert areas. Cooler on Monday with limited clearing in some areas as the marine layer deepens further, possibly leaking some drizzle at times. On Tuesday and Wednesday low pressure will move into Southern California with scattered showers, and maybe a few thunderstorms. Dry and much warmer for the second half of next week as high pressure builds.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

A large coastal eddy was centered just east of San Clemente Isl. this afternoon. Much of the marine stratus had dissipated by 1 PM PDT, except over portions of the I.E....along the San Bernardino Mountain foothills. The surface pressure gradients were trending a bit more onshore from yesterday at 8-9 MBS KSAN to the deserts, keeping several of our windier mtn/desert areas gusting above 30 MPH.

A weak shortwave trough will pass over SoCal this evening, supporting stronger wind gusts over the mts/deserts where a Wind Advisory is in effect. Peak gusts near 60 MPH are possible on the desert slopes and near passes, while most areas on the desert floor peak in the 30 to 40 MPH range. Some blowing dust is likley.

Winds will decrease slightly late tonight into Monday as the marine layer deepens further due to the well developed coastal eddy spinning offshore. Some drizzle is possible from the deep moist layer overnight into Mon morning, especially on the coastal slopes. The deep marine layer will ensure another cool day on Monday and clearing may be limited in some areas west of the mountains.

For Tue/Wed A cold low pressure system will drop south over CA gathering up modest amounts of atmospheric moisture and sparking

rounds of showers. Isolated thunderstorms are possible as colder air aloft filters in Tue afternoon/evening. Snow is possible above 5500 FT, with significant accumulations above 6500 FT. Gusty SW to W winds will continue over the mts/deserts as well.

As the storm system moves east on Thu, a weak upper-level trough will hang back over SoCal, diminishing by Friday as high pressure builds aloft for next weekend. Daytime temps will swing from around 20 degrees F below average on Tue, to 10 degrees above average on Fri/Sat. Of course these swings will be felt most over the interior as the coastal areas are moderated by the sea breeze.

&&

.Hydrology...

There remains fair model consensus with the timing and track of the storm system on Tue/Wed. Most model solutions over many runs have measurable precip over SoCal both Tue and Wed. Instability still looks marginal with the main upper-level jet swinging south and east of the forecast area, but cyclonic flow and cooling aloft should be sufficient for widespread lift and light precip. A slight chance of thunder remains in the forecast. Even the deserts should see a little rainfall, with the bulk of it over the high deserts where one to two tenths of an inch are expected. Precipitable water values are mostly under one inch, so large quantities of rainfall necessary for widespread flooding issues look minimal. However, due to the convective showers expected, spot rainfall rates could be moderate to heavy over short-durations, especially in thunderstorms. Current QPF ranges from around one inch in the San Bernardino Mts, to one-half inch over the San Diego County Mts, to 0.15 to 0.40 inches west of the mts.

&&

.AVIATION...

292015Z...Coast/Valleys...Areas of SCT-BKN low clouds with bases 2500-3500 ft MSL and tops to 5000 ft MSL this afternoon. Low clouds increasing in coverage after 30/00Z and spreading into the valleys overnight with similar bases. Partial clearing expected on Monday between 17Z and 20Z.

Mountains/Deserts...West-northwest winds 15-25 kt with gusts to 40 kt will develop this afternoon and evening, producing moderate up/downdrafts and LLWS over and east of the mtns. Winds will weaken Monday morning.

&&

.MARINE...

Northwest winds 15-25 kt with occasional gusts 25-30 kt will continue in the outer coastal waters through Monday night, along with choppy combined seas of 6-9 ft. The Small Craft Advisory remains in effect through 3 AM Tuesday. Winds will decrease Tuesday. However, showers will move over the coastal waters late Tuesday into Wednesday morning with a chance for thunderstorms. &&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

- CA...Wind Advisory until 4 AM PDT Monday for Apple and Lucerne Valleys-Coachella Valley-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.
- PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC/HYDROLOGY...10 AVIATION/MARINE...PG



College of Ag
Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011 610 WWUS76 KSGX 292044 NPWSGX

URGENT - WEATHER MESSAGE National Weather Service San Diego CA 144 PM PDT Sun Apr 29 2018

...Strong Winds in the Mountains and Deserts through tongiht...

CAZ055-056-058-060>062-065-300515/O.CON.KSGX.WI.Y.0015.000000T0000Z-180430T1100Z/
San Bernardino County Mountains-Riverside County MountainsSan Diego County Mountains-Apple and Lucerne ValleysCoachella Valley-San Diego County DesertsSan Gorgonio Pass Near BanningIncluding the cities of Big Bear City, Julian, Victorville,
Hesperia, Apple Valley, Indio, Palm Desert, Palm Desert Country,
La Quinta, Coachella, Borrego Springs, Banning,
and Desert Hot Springs
144 PM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 4 AM PDT MONDAY...
- * Winds...West 20 to 35 mph with gusts to 55 mph. Isolated gusts to 65 mph along the desert slopes and through and below the passes.
- * Timing...Through early Monday. Strongest winds this afternoon and evening.
- * Location...Mountain ridges, desert slopes and deserts.
- * Visibility...Locally reduced to 1 mile or less in blowing dust and sand in the deserts.
- * Impacts...Temporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand in the deserts.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

840

WWUS75 KPSR 292109

NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 209 PM MST Sun Apr 29 2018

CAZ567-300900-

/O.CON.KPSR.WI.Y.0013.000000T0000Z-180430T0900Z/
Imperial ValleyIncluding the cities of El Centro, Calexico, Alamorio, and Brawley
209 PM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT MONDAY...
- * AFFECTED AREA...The Imperial Valley including El Centro and Brawley.
- * TIMING...Strong winds will peak late this afternoon and early evening before weakening after midnight.
- * WINDS...West winds 25 to 35 mph with gusts 40 to 45 mph.
- * IMPACTS...Dangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficult...especially for high profile vehicles on north- south oriented roads.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ562-566-300900-

/O.CON.KPSR.WI.Y.0013.000000T0000Z-180430T0900Z/
Imperial County Southwest-Imperial County WestIncluding the cities of Mountain Spring, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City
209 PM PDT Sun Apr 29 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT MONDAY...

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

- * AFFECTED AREA...Southwest Imperial County including Interstate 8 and Highway 86.
- * TIMING...Strong winds will persist into this evening before weakening after midnight.
- * WINDS...West winds 30 to 35 mph with gusts 40 to 50 mph.
- * IMPACTS...Dangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficult...especially for high profile vehicles on north- south oriented roads.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ560-300300-

/O.CON.KPSR.WI.Y.0013.000000T0000Z-180430T0300Z/

Joshua Tree NP West-

Including the cities of Cottonwood Visitor and Lost Horse-Keys Village

209 PM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM PDT THIS EVENING...
- * AFFECTED AREA...Mainly western portions of Joshua Tree National Park.
- * TIMING...Today through early evening.
- * WINDS...West winds near 30 mph with gusts 40 to 45 mph.
- * IMPACTS...Dangerous driving conditions due to localized dense blowing dust and more difficult handling...especially for high profile vehicles. Recreational activities including camping and rock climbing will be hindered.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially 9/11/2019 IEM :: NPW from NWS PSR

April 29, 2018 to May 1, 2018 Exceptional Event Imperial County for high profile vehicles. In addition, strong winds over desert

areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











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Appendix A

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

FXUS65 KPSR 292130 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 230 PM MST Sun Apr 29 2018

.SYNOPSIS...

After locally breezy conditions and some blowing dust today, temperatures will begin cooling below average for the next several days. Another low pressure system will bring more windy weather and even cooler temperatures Tuesday and Wednesday. There will also be a chance of showers and thunderstorms, mainly from Phoenix north and eastward. Benign conditions, albeit much warmer with lower elevations touching 100 degrees, are likely by the weekend as high pressure builds across the region,

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.DISCUSSION...

A large, slow moving circulation center was still spinning across eastern Oregon this afternoon with a notable shortwave and enhanced jet streak punching into central California and towards the Las Vegas area. Wind speeds were slowly accelerating through the western reaches of the CWA coincident with a focused area of H8-H7 frontogenesis and leading edge of the H5 jet nose. Conditions should only deteriorate later this afternoon and evening as the jet crosses closer to the forecast area and becomes coincident with a more temporally favored high wind period. GOES-16 dust products have yet to see any blowing dust, but that should change later today and advisory and/or warning statements may be necessary for locations near and west of El Centro. Fire weather conditions were also worsening in the eastern part of the CWA as humidity levels have fallen below 10% and wind speeds were increasing. All advisories and warning remain valid through this evening.

The specific shortwave and jet core aiding in the weather impacts today will lift into the Great Basin though the overall cyclonic flow aloft will be maintained with trailing energy digging through the east Pacific basin. Heights and thicknesses will continue to gradually fall portending another 5F-7F fall in temperatures versus today. Modestly higher humidity levels should help fire weather concerns, but very localized blowing dust could still be problematic. While winds will not be nearly as strong, there will be periods of stronger gusts, particularly through western Imperial County associated with mountain rotors under the more defined jet core. For clarity sake, have held off on more wind advisory headlines, but a small area near In-Ko-Pah pass may necessitate another advisory Monday evening.

A deepening vorticity lobe will sweep through the SW Conus Tuesday

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County and Wednesday with global models in generally good agreement

regarding depth and timing. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be quite as moisture starved as the previous one with low-level mixing ratios inching up towards 4-5 g/kg. Latest CAMs (and even coarser model output) continue to suggest a broken line of convection developing late Tuesday afternoon, generally in the foothill/upslope area of eastern Maricopa County. Convective parameters including CAPE remain marginal with a warmer capping layer only slowly eroding, though widespread vorticity and jet-forced ascent will provide favorable conditions for at least isolated showers. Tried to focus POPs towards the more favored orographic regions with just a slight chance of some isold showers into the heart of Phoenix Tuesday evening.

Latest model trends indicate that reinforcing vorticity from the Great Basin will slow the eastward progression of the trough Wednesday. The atmosphere will generally be subsident, though residual moisture, cooler temperatures aloft, and steep lapse rates will be sufficient for isolated showers, particularly from Phoenix northward. Should boundary layer moisture not be scoured so readily Wednesday afternoon, POOPs may need to be increased despite the less favorable ascent structure. Latest guidance continues to trend cooler as well, with the ECMWF ensemble MOS indicating high temperatures as low as the mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, the 12Z GFS has diverged from previous solutions and the overwhelming majority of NAEFS members by attempting to retrograde a cutoff low into northern/central Sonora. Although the ECMWF advertised a similar outcome days ago, it has not offered this solution recently; and with almost no ensemble support, this GFS solution was entirely discounted. Instead, feel a resumption of flat ridging with H5 heights reaching near 582-585dm is more likely and high temperatures at lower elevations reaching 100F once again for the upcoming weekend.

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.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
Southwesterly winds will increase into this afternoon with gusts approaching 25-30kts at times late this afternoon and early evening. These strong winds may promote blowing dust, but only expecting lofted dust possibly lowering slantwise VIS, and not impacting surface at area terminals. Winds will slowly diminish this evening and eventually settle out of the west southwest at 10 kt or less through around 12Z. Winds will likely switch around to the east for a few hours early Monday morning, but will likely switch back to the west by late Monday morning. No significant clouds - just some minor cirrus.

Southeast California/Southwest Arizona including KIPL and KBLH: Surface winds will quickly strengthen and become southwesterly

with gusts to 25 kts by early afternoon. Anticipate further form

strengthening, across Southeast California by late afternoon. Winds will peak late this afternoon and early evening with gusts to around 35kts. With those winds, expect areas of blowing dust and sand reducing visibility below 10 miles and occasionally in localized spots dipping below 3 miles. Surface winds will be quite a bit weaker by 09Z. Skies will remain mostly clear through the period with only some high cirrus at times.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A low pressure system will linger over the districts Wednesday and Thursday with much cooler than normal temperatures. A slight chance of showers and possible thunderstorms will exist Wednesday afternoon though any wetting rains will be very isolated at best. Some minor breeziness will continue Wednesday, though with improved humidities, critical fire weather thresholds will not be met. During the latter half of the week, high pressure builds into the western states with a rapid warmup and sharply declining humidity levels. However, winds will be much lighter overall with only the typical upslope afternoon breezes.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning until 7 PM MST this evening for AZZ133.

CA...Wind Advisory until 8 PM PDT this evening for CAZ560.

Wind Advisory until 2 AM PDT Monday for CAZ562-566-567.

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DISCUSSION...MO/Hirsch AVIATION...Kuhlman FIRE WEATHER...MO/AJ 900

WWUS75 KPSR 300255 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 755 PM MST Sun Apr 29 2018

CAZ560-300400-

/O.EXP.KPSR.WI.Y.0013.000000T0000Z-180430T0300Z/
Joshua Tree NP WestIncluding the cities of Cottonwood Visitor and Lost Horse-Keys
Village
755 PM PDT Sun Apr 29 2018

...WIND ADVISORY WILL EXPIRE AT 8 PM PDT THIS EVENING...

It remains breezy to locally windy across portions of Joshua Tree National Park this evening but overall winds remain below advisory criteria and will likely remain below criteria into Monday morning. As a result, the Wind Advisory will be allowed to expire at 8 pm. Locally gusty west winds will persist for a few more hours but speeds should stay mostly below 30 mph.

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CAZ567-300900/O.CON.KPSR.WI.Y.0013.000000T0000Z-180430T0900Z/
Imperial ValleyIncluding the cities of El Centro, Calexico, Alamorio, and Brawley
755 PM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT MONDAY...
- * AFFECTED AREA...The Imperial Valley including El Centro and Brawley.
- * TIMING...Strong winds will peak late this afternoon and early evening before weakening after midnight.
- * WINDS...West winds 25 to 35 mph with gusts 40 to 45 mph.
- * IMPACTS...Dangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficult...especially for high profile vehicles on north- south oriented roads.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ562-566-300900-

/O.CON.KPSR.WI.Y.0013.000000T0000Z-180430T0900Z/
Imperial County Southwest-Imperial County WestIncluding the cities of Mountain Spring, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City
755 PM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT MONDAY...
- * AFFECTED AREA...Southwest Imperial County including Interstate 8 and Highway 86.
- * TIMING...Strong winds will persist into this evening before weakening after midnight.
- * WINDS...West winds 30 to 35 mph with gusts 40 to 50 mph.
- * IMPACTS...Dangerous driving conditions due to suddenly reduced visibility at times in blowing dust. Also, handling will be more difficult...especially for high profile vehicles on north- south oriented roads.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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NOUS46 KSGX 300304
PNSSGX
CAZ043-048-050-055>058-060>062-065-552-554-301454-
Public Information Statement
National Weather Service San Diego CA
800 PM PDT Sun Apr 29 2018
...Peak 24-Hour Wind Gusts Ending 8 PM Sunday...
... Top 10 Regional Wind Reports...
White Water Raws
                              67 MPH
Volcan Mountain
                              57 MPH
Harrison Park
                              54 MPH
Boulevard (1 W)
                              51 MPH
Thousand Palms (5 NNE)
                              49 MPH
Desert Hot Springs (5 W)
                             48 MPH
Palomar Mtn Lookout
                              47 MPH
Thousand Palms
                              45 MPH
2 NW Rancho Cucamonga
                             45 MPH
                             44 MPH
Victorville Airport
...Wind Reports by Zone...
Location
                              Speed
                                        Time/Date
                                                         Lat/Lon/Elev (ft.)
...San Gorgonio Pass Near Banning...
White Water Raws
                              67 MPH
                                        0350 PM 04/29
                                                         33.95N/116.66W/2546
Thousand Palms (5 NNE)
                              49 MPH
                                        0523 PM 04/29
                                                        33.89N/116.37W/1066
Desert Hot Springs (5 W)
                             48 MPH
                                        0245 PM 04/29
                                                        33.96N/116.59W/1510
Cabazon
                              35 MPH
                                        1114 AM 04/29
                                                        33.93N/116.81W/2154
... San Diego County Mountains...
                              57 MPH
Volcan Mountain
                                        0540 PM 04/29
                                                        33.10N/116.58W/5154
Harrison Park
                              54 MPH
                                        0630 PM 04/29
                                                         33.04N/116.56W/4861
Boulevard (1 W)
                              51 MPH
                                        0200 PM 04/29
                                                         32.66N/116.29W/3404
Palomar Mtn Lookout
                              47 MPH
                                        0653 PM 04/29
                                                        33.36N/116.84W/6142
Ranchita (1 NE)
                              41 MPH
                                        0407 PM 04/29
                                                        33.22N/116.50W/4415
Ranchita
                              40 MPH
                                        0600 PM 04/29
                                                        33.21N/116.51W/4128
Boulevard (5 NW)
                              38 MPH
                                        0310 PM 04/29
                                                        32.70N/116.35W/4114
                              36 MPH
Descanso (8 NE)
                                        0410 PM 04/29
                                                        32.93N/116.53W/4740
Warner Springs (4 SE)
                             36 MPH
                                        0220 PM 04/29
                                                         33.23N/116.61W/3242
Julian Fire Station
                             35 MPH
                                        0655 PM 04/29
                                                         33.08N/116.59W/4238
... San Diego County Deserts...
Borrego Springs (2 E)
                                        0520 PM 04/29
                                                         33.26N/116.35W/720
                             42 MPH
In Ko Pah
                             41 MPH
                                        0400 PM 04/29
                                                        32.64N/116.12W/3221
Borrego Springs
                             41 MPH
                                        0353 PM 04/29
                                                        33.27N/116.39W/2175
Julian (9 ESE)
                              39 MPH
                                        0446 PM 04/29
                                                        32.99N/116.44W/2011
Borrego Springs (3 W)
                             37 MPH
                                        1200 AM 04/29
                                                        33.26N/116.40W/820
                                        0330 PM 04/29
Borrego Springs (9 S)
                              36 MPH
                                                        33.14N/116.29W/768
```

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

San Bernardino County Mountains			
Banning (4 NW)	40 MPH	0413 PM 04/29	33.97N/116.91W/3609
Burns Canyon	36 MPH	0551 PM 04/29	34.21N/116.62W/6284
-			
Riverside County Mountain	ns		
Pinyon Pines	42 MPH	0236 PM 04/29	33.58N/116.45W/4060
-			
Coachella Valley			
Thousand Palms	45 MPH	0155 AM 04/29	33.82N/116.40W/272
Palm Desert (5 S)	42 MPH	0430 PM 04/29	33.65N/116.38W/980
Palm Springs Airport	39 MPH	0555 PM 04/29	33.83N/116.51W/474
Thousand Palms (5 NE)	39 MPH	0508 PM 04/29	33.88N/116.34W/1089
Thomas Ainnent	20 MDH	0000 DM 04/20	22 C2N/11C 1CU/ 110
Thermal Airport	38 MPH	0900 PM 04/28	33.63N/116.16W/-118
Apple and Luceppe Valley	_		
Apple and Lucerne Valley		024F PM 04/20	24 CON/117 201/2004
Victorville Airport	44 MPH	0245 PM 04/29	34.60N/117.38W/2884
Victorville (5 N)	41 MPH	0540 PM 04/29	34.61N/117.29W/4650
Adelanto	41 MPH	0545 PM 04/29	34.57N/117.53W/2943
Apple Valley Airport (KAPV)	41 MPH	0255 PM 04/29	34.58N/117.19W/3062
Means Lake	40 MPH	0326 PM 04/29	34.39N/116.52W/2818
Apple Valley (6 N)	39 MPH	0350 PM 04/29	34.59N/117.17W/3159
Victorville (6 SW)	38 MPH	0404 PM 04/29	34.50N/117.39W/3164
3 E Victorville	37 MPH	0551 PM 04/29	34.53N/117.28W/2746
El Mirage	36 MPH	0226 PM 04/29	34.63N/117.55W/2880
Hesperia (5 SW)	35 MPH	0141 PM 04/29	34.40N/117.40W/3723
Lucerne Valley (1 SW)	35 MPH	0741 PM 04/29	34.44N/116.98W/3034

Observations are collected from a variety of sources with varying equipment and exposures. We thank all volunteer weather observers for their dedication. Not all data listed are considered official.

\$\$

Albright

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011 10/24/2018

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County akrherz@iastate.edu **Appendix A**

515-294-5978 phone

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URGENT - WEATHER MESSAGE National Weather Service San Diego CA 801 PM PDT Sun Apr 29 2018

CAZ055-056-058-060>062-065-301100/O.CON.KSGX.WI.Y.0015.000000T0000Z-180430T1100Z/
San Bernardino County Mountains-Riverside County MountainsSan Diego County Mountains-Apple and Lucerne ValleysCoachella Valley-San Diego County DesertsSan Gorgonio Pass Near BanningIncluding the cities of Big Bear City, Julian, Victorville,
Hesperia, Apple Valley, Indio, Palm Desert, Palm Desert Country,
La Quinta, Coachella, Borrego Springs, Banning,
and Desert Hot Springs
801 PM PDT Sun Apr 29 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 4 AM PDT MONDAY...
- * Winds...West 10 to 20 mph with gusts to 40 mph. Isolated gusts to 55 mph along the desert slopes and through and below the passes.
- * Timing...Through early Monday.
- * Location...Mountain ridges, desert slopes and deserts.
- * Visibility...Locally reduced to 1 mile or less in blowing dust and sand in the deserts.
- * Impacts...Temporary outdoor structures like tents and awnings may be damaged or lofted. Difficult driving conditions for high profile vehicles along Interstates 8, 10 and 15, along with Highways 62, 74, 78, 86, 111, and 247. Reduced visibility in blowing dust and sand in the deserts.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that winds of 35 mph are expected. Winds this strong can make driving difficult...especially for high profile vehicles. Use extra caution.

&&

077 FXUS65 KPSR 300405 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 905 PM MST Sun Apr 29 2018

.SYNOPSIS...

After locally breezy conditions and some blowing dust today, temperatures will begin cooling below average for the next several days. Another low pressure system will bring more windy weather and even cooler temperatures Tuesday and Wednesday. There will also be a chance of showers and thunderstorms, mainly from Phoenix north and eastward. Benign conditions, albeit much warmer with lower elevations touching 100 degrees, are likely by the weekend as high pressure builds across the region,

&&

.DISCUSSION...

A strong upper level low continued to settle in over the western conus this afternoon and evening allowing low/mid level gradients to tighten and strong gusty winds to develop over far SE California and portions southern Arizona. For the most part, winds never really got out of hand with gusts over the lower AZ deserts generally 30mph or lower and even across the wind-prone areas of far SE California including Joshua Tree NP, Mountain Springs Grade and El Centro wind gusts were mostly below 40 mph. As such wind advisory criteria winds did not really develop for the most part and we have allowed the advisory to expire for Joshua Tree NP. Winds may continue to flirt with criteria at times over western Imperial County so the advisory will continue there. As a result of the winds not getting out of hand, blowing dust has not really been an issue; we have not received any reports of dense blowing dust, surface observations reported vis values mostly well above 5sm and the GOES-R RGB Dust imagery only depicted modest dust/elevated dust occurring over the deserts of far SE CA, not enough to warrant blowing dust advisories. For the rest of tonight, as the low continues to settle into the area, we expect winds to gradually taper off but remain locally breezy especially over the western deserts, and the high clouds that have been moving east across the deserts should dissipate and push off to the west leaving mostly clear skies by Monday morning. Current forecasts look to be in good shape and no updates are needed.

.PREVIOUS DISCUSSION...

A large, slow moving circulation center was still spinning across

eastern Oregon this afternoon with a notable shortwave and enhanced jet streak punching into central California and towards the Las Vegas area. Wind speeds were slowly accelerating through the western reaches of the CWA coincident with a focused area of H8-H7 frontogenesis and leading edge of the H5 jet nose. Conditions should only deteriorate later this afternoon and evening as the jet crosses closer to the forecast area and becomes coincident with a more temporally favored high wind period. GOES-16 dust products have yet to see any blowing dust, but that should change later today and advisory and/or warning statements may be necessary for locations near and west of El Centro. Fire weather conditions were also worsening in the eastern part of the CWA as humidity levels have fallen below 10% and wind speeds were increasing. All advisories and warning remain valid through this evening.

The specific shortwave and jet core aiding in the weather impacts today will lift into the Great Basin though the overall cyclonic flow aloft will be maintained with trailing energy digging through the east Pacific basin. Heights and thicknesses will continue to gradually fall portending another 5F-7F fall in temperatures versus today. Modestly higher humidity levels should help fire weather concerns, but very localized blowing dust could still be problematic. While winds will not be nearly as strong, there will be periods of stronger gusts, particularly through western Imperial County associated with mountain rotors under the more defined jet core. For clarity sake, have held off on more wind advisory headlines, but a small area near In-Ko-Pah pass may necessitate another advisory Monday evening.

A deepening vorticity lobe will sweep through the SW Conus Tuesday and Wednesday with global models in generally good agreement regarding depth and timing. This will again be the recipe for additional cooling, along with widespread windy conditions and blowing dust. This system will also not be quite as moisture starved as the previous one with low-level mixing ratios inching up towards 4-5 g/kg. Latest CAMs (and even coarser model output) continue to suggest a broken line of convection developing late Tuesday afternoon, generally in the foothill/upslope area of eastern Maricopa County. Convective parameters including CAPE remain marginal with a warmer capping layer only slowly eroding, though widespread vorticity and jet-forced ascent will provide favorable conditions for at least isolated showers. Tried to focus POPs towards the more favored orographic regions with just a slight chance of some isold showers into the heart of Phoenix Tuesday evening.

Latest model trends indicate that reinforcing vorticity from the Great Basin will slow the eastward progression of the trough Wednesday. The atmosphere will generally be subsident, though

residual moisture, cooler temperatures aloft, and steep lapse rates will be sufficient for isolated showers, particularly from Phoenix northward. Should boundary layer moisture not be scoured so readily Wednesday afternoon, POPs may need to be increased despite the less favorable ascent structure. Latest guidance continues to trend cooler as well, with the ECMWF ensemble MOS indicating high temperatures as low as the mid 70s in Phoenix, or roughly 15 degrees below normal. In the wake of this system, the 12Z GFS has diverged from previous solutions and the overwhelming majority of NAEFS members by attempting to retrograde a cutoff low into northern/central Sonora. Although the ECMWF advertised a similar outcome days ago, it has not offered this solution recently; and with almost no ensemble support, this GFS solution was entirely discounted. Instead, feel a resumption of flat ridging with H5 heights reaching near 582-585dm is more likely and high temperatures at lower elevations reaching 100F once again for the upcoming weekend.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Gusty southwest to west winds have been slowly tapering off and will continue to do so into the morning hours on Monday. Winds will likely take longer than normal, especially at KPHX, to return to the east/southeast and as such wind shifts in the TAFs don't occur til 10z or later. We expect another round of gusty southwest winds Monday afternoon with winds picking up after 20z; expect gusts over 20kt during the afternoon and early evening hours. Skies to be mostly on the clear skies with occasional cirrus decks moving through the flow aloft.

Southeast California/Southwest Arizona including KIPL and KBLH:

Strong gusty southwest to west winds will be the primary weather impact at the TAF sites next 24 hours, the result of a deep upper level low pressure system moving into the desert southwest. Expect gusts over 20kt to persist into the early morning hours at KIPL and KBLH before tapering off with speeds mostly below 12kt by 12z Monday. Another round of gusty wind expected Monday afternoon with W to SW wind gusts 20-25kt after 20z. Cannot rule out patchy blowing dust and lower vis at the TAF sites with these winds but confidence too low this far out to mention in the TAFs.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A low pressure system will linger over the districts Wednesday and Thursday with much cooler than normal temperatures. A slight chance of showers and possible thunderstorms will exist Wednesday afternoon though any wetting rains will be very isolated at best. Some minor breeziness will continue Wednesday, though with improved humidities, critical fire weather thresholds will not be met. During the latter half of the week, high pressure builds into the western states with a rapid warmup and sharply declining humidity levels. However, winds will be much lighter overall with only the typical upslope afternoon breezes.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 2 AM PDT Monday for CAZ562-566-567.

&&

\$\$

DISCUSSION...CB
PREVIOUS DISCUSSION...MO/Hirsch

AVIATION...CB

FIRE WEATHER...MO/AJ



College of Ag

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716 Farm House Ln Ames, IA 50011 964 FXUS66 KSGX 300406 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 906 PM PDT Sun Apr 29 2018

.SYNOPSIS...

Below average temperatures for Monday with mostly cloudy skies west of the mountains and fair skies in the deserts. Rain and late season mountain snow showers will affect Southern California Tuesday and Wednesday. An isolated thunderstorm is possible. Drier and warmer weather to end the week as high pressure takes command.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

At 9 PM, a broad trough of low pressure remained in place over the Western U.S. Strong northwest flow around Point Conception was helping to maintain a coastal eddy in the SoCal Bight, with associated lift aiding the development of low stratus over the coast and valleys. Areas of fog were occurring along the coastal slopes. In the deserts skies were fair with breezy west to northwest winds. This evenings peak gust winner was Whitewater, with a gust of 67 mph.

Winds will decrease slightly late tonight into Monday as the marine layer deepens further due to the well developed coastal eddy spinning offshore. Some drizzle is possible overnight over the coast and valleys, little to no accumulation expected. The deep marine layer will ensure another cool day on Monday and clearing may be limited in some areas west of the mountains. Afternoon highs will be 5-15 degrees below seasonal averages.

For Tuesday/Wednesday, a cold low pressure system will drop south over CA gathering up modest amounts of atmospheric moisture and sparking rounds of showers. Isolated thunderstorms are possible as colder air aloft filters in Tuesday afternoon/evening. Snow is possible above 5500 FT, with modest accumulations possible above 6500 FT. Travel impacts probable at times along mountain roadways (Hwys 18 & 38). Gusty southwest to west winds will return in the mountains and deserts. Afternoon highs will dip to 10-25

degrees below seasonal averages Tuesday. Overall, the impact of this precipitation event should be minor, with limited rain totals.

The subtropical ridge will nose its way into the region to end the week, ushering in a warming trend and dry weather. Afternoon highs should return to values that are 6-12 degrees above seasonal averages by next weekend.

&&

.Hydrology...

There remains fair model consensus with the timing and track of the storm system on Tue/Wed. Most model solutions over many runs have measurable precip over SoCal both Tue and Wed. Instability still looks marginal with the main upper-level jet swinging south and east of the forecast area, but cyclonic flow and cooling aloft should be sufficient for widespread lift and light precip. A slight chance of thunder remains in the forecast. Even the deserts should see a little rainfall, with the bulk of it over the high deserts where one to two tenths of an inch are expected. Precipitable water values are mostly under one inch, so large quantities of rainfall necessary for widespread flooding issues look minimal. However, due to the convective showers expected, spot rainfall rates could be moderate to heavy over short-durations, especially in thunderstorms. Current QPF ranges from around one inch in the San Bernardino Mts, to one-half inch over the San Diego County Mts, to 0.15 to 0.40 inches west of the mts.

&&

.AVIATION...

300400Z...Coast/Valleys...Areas of BKN-OVC stratus will continue overnight with variable bases of 1800-4000 ft MSL and tops to 5000 ft MSL and local drizzle. Higher terrain will be obscured, but most surface vis will remain above 6 miles below the clouds. Clearing will be slow Monday, generally 17Z-21Z with some areas only having partial afternoon clearing. Clouds will increase again Monday night with scattered -SHRA.

Mountains/Deserts...Areas of west-northwest winds 15-30 kt with gusts to 45 kt will continue through 07Z, producing moderate up/downdrafts and LLWS over and east of the mtns. Winds will weaken after 07Z, but more westerly winds 15-25 kt with gusts to 35 kt will develop again late Monday afternoon. Some coastal terrain, mainly at/below 5000 feet will be obscured in clouds/fog/drizzle at times through Monday, with clouds tops possibly 6000 feet or higher with scattered -SHRA Monday night.

&&

.MARINE...

Northwest winds 15-25 kt with occasional gusts 25-30 kt will continue in the outer coastal waters through Monday night, along with choppy combined seas of 6-9 ft. Winds will be strongest during the afternoons and evenings. The Small Craft Advisory remains in effect through 3 AM Tuesday. Winds will decrease Tuesday. However, showers will move over the coastal waters Tuesday through Wednesday with a slight chance of thunderstorms.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

- CA...Wind Advisory until 4 AM PDT Monday for Apple and Lucerne Valleys-Coachella Valley-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.
- PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC/HYDROLOGY...10/Albright AVIATION/MARINE...Maxwell



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316 WWUS75 KPSR 300929 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 229 AM MST Mon Apr 30 2018

CAZ562-566-567-301030/O.EXP.KPSR.WI.Y.0013.000000T0000Z-180430T0900Z/
Imperial County Southwest-Imperial County West-Imperial ValleyIncluding the cities of Mountain Spring, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamorio, and Brawley
229 AM PDT Mon Apr 30 2018

...WIND ADVISORY HAS EXPIRED...

Winds in the Advisory area have decreased below Advisory levels and thus the Advisory was allowed to expire. Lingering breeziness will continue and the Mountain Springs grade pass along Interstate 8 will still be windy.

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College of Ag
Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone

749 FXUS65 KPSR 301045 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 345 AM MST Mon Apr 30 2018

.SYNOPSIS...

Another round of locally breezy conditions and some blowing dust today in far southeast Imperial county. Temperatures will begin cooling below average for the next several days. Another low pressure system on Tuesday and Wednesday, will bring windy weather, even cooler temperatures, and a chance of showers and thunderstorms mainly from Phoenix north and eastward. In the wake of the weather system, high pressure builds across the region, with lower elevations touching 100 degrees by the weekend.

&&

.DISCUSSION...

Today: A broad area of low pressure will remain in place over the region ahead of the main storm system that is currently centered over Idaho. As this large system continues to dig south into our region through mid week, heights will continue to fall, with 500 mb heights dropping 2 to 4 dm today. Upper-level moisture will start to creep into the region from the northwest, with some thicker upper-level cirrus forecast to redevelop in the mid to late morning across southeast California and gradually spread into eastern Arizona by the early afternoon. The combination of height falls and a cooler airmass will lead to below average temperatures today with highs near the low to mid 80s forecast across lower deserts this afternoon. Primarily after 21Z, there will be another round of gusty winds in Imperial County, with the strongest winds across far southeastern Imperial county where mountain waves will tap into the stronger winds aloft and create gusts up to 30 to 40 mph. Patchy blowing dust will be possible in this area.

Tuesday: The aforementioned storm system will dig south into southern California by Tuesday morning. Associated with this upper-level trough is a surface cold front that is forecast to be situated in southeast California by 12Z Tuesday and in Western Arizona by 00Z Wednesday. Strong southerly winds will develop ahead of the front, with strong westerlies forecast behind the front. Winds will generally be gusting in the 20 to 30 mph range, with stronger gusts to 40 mph expected across southeast

California. Due to stronger wind speeds, patchy blowing dust will also be a possibility on Tuesday. In addition to strong winds and blowing dust, a nice plume of moisture will move into central and eastern Arizona ahead of the aforementioned cold front, with PWATs increasing into the .55 to .65" range. This plume of moisture is also associated with IVT values greater than 250 which is typically a good indication that the airmass is expected to be moist enough to produce some precipitation. In addition, these forecast IVT values are in the 90th to 99.5th climatological percentile, so it's safe to say we are getting a lot more moisture than we typically get this time of year. Since Tuesday isn't expected to be fully clouded over, the moist airmass will be allowed to destabilize a bit, with CAPE values near 200 to 300 J/kg forecast in the afternoon across eastern Maricopa county and southern Gila County. Convective Allowing Models are in pretty good agreement and indicate isolated to scattered shower/thunderstorm development near 21Z primarily from Phoenix eastward. Due to a large dewpoint temp spread below the cloud base, gusty winds and dry lightning will be the main impacts. The increase in moisture and continued drop in heights will lead to an even cooler day on Tuesday with highs ranging from the low 70s out west (post cold front) to the low 80s out east.

Wednesday: Through 00Z Wednesday, the aforementioned cold front will pass through Central and Eastern Arizona. Residual moisture and lift from the front, will lead to another shot of showers and thunderstorms, primarily across central and eastern Arizona as the front continues it's eastward progression. Greater instability, steep lapse rates, and much cooler temperatures aloft will lead to better chances for some isolated stronger storms on Wednesday. The dewpoint temperature spread will make gusty winds and dry lightning the main impacts again.

Thursday-Monday: High pressure will begin to develop in the wake of the weather system with heights gradually building. High temperatures will rise from the mid to upper 80s Thursday into the low 100s on Sunday and remain near those temperatures on Monday.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:

Gusty southwest to west winds have been slowly tapering off and will continue to do so into the morning hours on Monday. Winds will likely take longer than normal, especially at KPHX, to return to the east/southeast and as such wind shifts in the TAFs don't occur til 10z or later. We expect another round of gusty southwest winds Monday afternoon with winds picking up after 20z; expect gusts over

20kt during the afternoon and early evening hours. Skies to be mostly on the clear skies with occasional cirrus decks moving through the flow aloft.

Southeast California/Southwest Arizona including KIPL and KBLH:

Strong gusty southwest to west winds will be the primary weather impact at the TAF sites next 24 hours, the result of a deep upper level low pressure system moving into the desert southwest. Expect gusts over 20kt to persist into the early morning hours at KIPL and KBLH before tapering off with speeds mostly below 12kt by 12z Monday. Another round of gusty wind expected Monday afternoon with W to SW wind gusts 20-25kt after 20z. Cannot rule out patchy blowing dust and lower vis at the TAF sites with these winds but confidence too low this far out to mention in the TAFs.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

A low pressure system will linger over the districts Wednesday and Thursday with much cooler than normal temperatures. A slight chance of showers and possible thunderstorms will exist Wednesday afternoon though any wetting rains will be very isolated at best. Some minor breeziness will continue Wednesday, though with improved humidities, critical fire weather thresholds will not be met. During the latter half of the week, high pressure builds into the western states with a rapid warmup and sharply declining humidity levels. However, winds will be much lighter overall with only the typical upslope afternoon breezes.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 4 PM this afternoon to 8 AM PDT Tuesday for CAZ562.

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524 FXUS66 KSGX 301045 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 345 AM PDT Mon Apr 30 2018

.SYNOPSIS...

Onshore flow and a coastal eddy will bring more cooling and more coastal clouds today with gusty southwest to west winds in the mountains and deserts. For Tuesday into Wednesday...a cold low pressure system from the north will move inland across Southern California bringing more cooling along with showers and a slight chance of thunderstorms. Dry and warmer for Thursday through Saturday under high pressure. A return of onshore flow will begin to spread cooling inland for Sunday through early next week.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

For early this morning...a coastal eddy has brought more deepening of the marine layer with satellite imagery showing coastal stratus extending inland onto the coastal mountain slopes. This will bring greater cooling for the valleys and mountains today with lesser cooling continuing to spread into the deserts.

A colder low pressure system moving southward just off the West Coast will move into Southern California on Tuesday...then move slowly inland on Wednesday. Scattered...mostly light showers are possible for tonight into Tuesday along and west of the mountains with greatest coverage and amounts...though light...near the coastal mountain slopes.

Colder air aloft will arrive later Tuesday morning destabilizing the atmosphere with greater shower coverage and amounts for late Tuesday morning into Tuesday evening. There is also a slight chance of thunderstorms for Tuesday afternoon. Showers may linger into Wednesday along with a slight chance of thunderstorms for inland areas on Wednesday afternoon.

Given the showery nature of the precipitation...amounts will be somewhat variable...but generally range from around one tenth inch near the coast to one quarter to one half inch in the mountains with local amounts to around one inch in the San Bernardino County mountains with one quarter inch or less in the upper deserts and one tenth inch or less in the lower deserts. The snow level will lower to around 5500 feet for Tuesday night and Wednesday with a few inches of snowfall possible above 6000 feet.

Tuesday is expected to be the coolest day for most areas with inland high temperatures around 20 degrees below average. Slow warming is expected for Wednesday with dry weather and greater warming for Thursday through Saturday with inland high temperatures around 10 degrees above average for next Saturday. A weaker low pressure system developing near the West Coast to the north next weekend will bring a return of onshore flow with coastal cooling beginning to spread inland.

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.AVIATION... 300930Z...Coast/Valleys...Areas of BKN-OVC stratus will continue overnight with variable bases of 2500-4500 feet MSL and tops to 5500 feet. Local drizzle. Higher terrain will be obscured, but most surface vis will remain above 6 miles below the clouds. Clearing will be slow Monday, generally 17Z-21Z with some areas only having partial afternoon clearing. Clouds will increase again tonight with scattered -SHRA.

Mountains/Deserts...Mostly clear skies today and tonight. Westerly winds 15-25 kt with gusts to 35 kt will develop again after 22Z and continue tonight. Some coastal slopes of the mountains mainly at/below 5500 feet will be obscured in clouds/fog/drizzle at times today. Better chance of -SHRA tonight.

&&

.MARINE...

Strong northwest winds and choppy seas will continue in the outer coastal waters through late tonight, strongest during the afternoon and evening. Winds will decrease a little Tuesday, but showers will develop and even a slight chance of thunderstorms. Showers will taper off Tuesday night and Wednesday morning. No additional marine hazards are forecast Wednesday through Friday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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\$\$

PUBLIC...17
AVIATION/MARINE...MM

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











351 WWUS75 KPSR 301144 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 444 AM MST Mon Apr 30 2018

CAZ562-302345-

/O.NEW.KPSR.WI.Y.0014.180430T2300Z-180501T1500Z/ Imperial County Southwest-Including the city of Mountain Spring 444 AM PDT Mon Apr 30 2018

...WIND ADVISORY IN EFFECT FROM 4 PM THIS AFTERNOON TO 8 AM PDT TUESDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 4 PM this afternoon to 8 AM PDT Tuesday.

- * AFFECTED AREA...Far southwest Imperial County including I-8 near the San Diego County border.
- * TIMING...Strong winds develop in the latter part of the afternoon and continue through the night.
- * WINDS...West winds of 25-35 mph with gusts of 40-50 mph.
- * IMPACTS...Dangerous driving conditions due to more difficult handling...especially for high profile vehicles...and the potential for blowing dust to cause suddenly reduced visibility.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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995 FXUS65 KPSR 301242 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 542 AM MST Mon Apr 30 2018

.UPDATE...

Updated Aviation and Fire Weather sections.

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.SYNOPSIS...

Winds will be lighter today but there will still be some breeziness...stronger over Imperial County. Otherwise, expect noticeably cooler temperatures today. Another low pressure system on Tuesday and Wednesday will bring windy weather, even cooler temperatures, and a chance of showers and thunderstorms mainly from Phoenix north and eastward. In the wake of the weather system, high pressure builds across the region, with lower elevations touching 100 degrees by the weekend.

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.DISCUSSION...

Today: A broad area of low pressure will remain in place over the region ahead of the main storm system that is currently centered over Idaho. As this large system continues to dig south into our region through mid week, heights will continue to fall, with 500 mb heights dropping 2 to 4 dm today. Upper-level moisture will start to creep into the region from the northwest, with some thicker upper-level cirrus forecast to redevelop in the mid to late morning across southeast California and gradually spread into eastern Arizona by the early afternoon. The combination of height falls and a cooler airmass will lead to below average temperatures today with highs near the low to mid 80s forecast across lower deserts this afternoon. Primarily after 21Z, there will be another round of gusty winds in Imperial County, with the strongest winds across far southeastern Imperial county where mountain waves will tap into the stronger winds aloft and create gusts up to 30 to 40 mph. Patchy blowing dust will be possible in this area.

Tuesday: The aforementioned storm system will dig south into southern California by Tuesday morning. Associated with this upper-level trough is a surface cold front that is forecast to be situated in southeast California by 12Z Tuesday and in Western Arizona by 00Z Wednesday. Strong southerly winds will develop ahead of the front, with strong westerlies forecast behind the front. Winds will generally be gusting in the 20 to 30 mph range, with stronger gusts to 40 mph expected across southeast California. Due to stronger wind speeds, patchy blowing dust will also be a possibility on Tuesday. In addition to strong winds and blowing dust, a nice plume of moisture will move into central and eastern Arizona ahead of the aforementioned cold front, with PWATs increasing into the .55 to .65" range. This plume of moisture is also associated with IVT values greater than 250 which is typically a good indication that the airmass is expected to be moist enough to produce some precipitation. In addition, these forecast IVT values are in the 90th to 99.5th climatological percentile, so it's safe to say we are getting a lot more moisture than we typically get this time of year. Since Tuesday isn't expected to be fully clouded over, the moist airmass will be allowed to destabilize a bit, with CAPE values near 200 to 300 J/kg forecast in the afternoon across eastern Maricopa county and southern Gila County. Convective Allowing Models are in pretty good agreement and indicate isolated to scattered shower/thunderstorm development near 21Z primarily from Phoenix eastward. Due to a large dewpoint temp spread below the cloud base, gusty winds and dry lightning will be the main impacts. The increase in moisture and continued drop in heights will lead to an even cooler day on Tuesday with highs ranging from the low 70s out west (post cold front) to the low 80s out east.

Wednesday: Through 00Z Wednesday, the aforementioned cold front will pass through Central and Eastern Arizona. Residual moisture and lift from the front, will lead to another shot of showers and thunderstorms, primarily across central and eastern Arizona as the front continues it's eastward progression. Greater instability, steep lapse rates, and much cooler temperatures aloft will lead to better chances for some isolated stronger storms on Wednesday. The dewpoint temperature spread will make gusty winds and dry lightning the main impacts again.

Thursday-Monday: High pressure will begin to develop in the wake of the weather system with heights gradually building. High temperatures will rise from the mid to upper 80s Thursday into the low 100s on Sunday and remain near those temperatures on Monday.

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.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Southwesterly flow aloft will temporarily weaken today before strengthening again later tonight. Expect light surface winds this morning favoring south and southeast directions before stronger southwesterly winds develop early this afternoon. Anticipate a bit lighter winds this afternoon as compared to Sunday but gusts of 20-25 kts will be common after 22Z. Southwest and west winds will linger past midnight. Skies will be clear early this morning before cirrus increases from the west.

Southeast California/Southwest Arizona including KIPL and KBLH: Southwesterly flow aloft will temporarily weaken today before strengthening again tonight. Expect light surface winds this morning before southwesterly winds develop early this afternoon and increase. Anticipate a bit lighter winds at most places this afternoon as compared to Sunday but gusts of 25 kts will be common after 22Z. Over western portions of Imperial County strong winds will develop with gusts of 30-40 kts after 22Z. Skies will be clear early this morning before cirrus increases from the northwest.

Aviation Discussion not updated for amended TAFs.

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.FIRE WEATHER...

Wednesday through Sunday:

Well below normal temperatures can be expected on Wednesday along with some lingering breeziness. Thereafter, high pressure tracking across the western states will lead to a rapid warmup with highs at most desert locations reaching the 100 degree mark over the weekend. Winds will be light overall with some occasional minor breeziness at times. Otherwise, no strong wind events. Humdities decline sharply after Wednesday with single digit minimum values being common by Friday with very modest overnight recovery.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 4 PM this afternoon to 8 AM PDT Tuesday for CAZ562.

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472 FXUS66 KSGX 301553 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 852 AM PDT Mon Apr 30 2018

.SYNOPSIS...

Onshore flow and a coastal eddy will bring more cooling and marine clouds today, with gusty southwest to west winds in the mountains and deserts. For Tuesday into Wednesday...a cold low pressure system from the north will bring additional cooling, along with showers and a slight chance of thunderstorms. Dry and warmer Thursday through Saturday as high pressure rebuilds over the region. A return of onshore flow will begin to spread cooling back inland again early next week.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE...
SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO
COUNTIES...

Marine stratus was thick over the coastal basing this morning. Satellite imagery showed it well up the coastal slopes and into the passes. Above...A thinner veil of striated cirrus covered all of SoCal. The 12Z Miramar sounding had a weak inversion based near 4500 FT with 2K ft saturated layer below. PW stood at 0.58 inch. The onshore sfc pressure gradients have weakened considerably from yesterday and stood at only 3 MBS KSAN to SW NV, but were still around 6 MBS KSAN to the lower deserts. Peak wind gusts at 8 AM PDT through the passes were between 40 and 50 MPH, down from gusts over 60 MPH last night.

No forecast updates this morning.

From previous discussion...

A colder low pressure system moving southward just off the West Coast will move into Southern California on Tuesday...then move slowly inland on Wednesday. Scattered...mostly light showers are possible for tonight into Tuesday along and west of the mountains with greatest coverage and amounts...though light...near the coastal mountain slopes.

Colder air aloft will arrive later Tuesday morning destabilizing

the atmosphere with greater shower coverage and amounts for late Tuesday morning into Tuesday evening. There is also a slight chance of thunderstorms for Tuesday afternoon. Showers may linger into Wednesday along with a slight chance of thunderstorms for inland areas on Wednesday afternoon.

Given the showery nature of the precipitation...amounts will be somewhat variable...but generally range from around one tenth inch near the coast to one quarter to one half inch in the mountains with local amounts to around one inch in the San Bernardino County mountains with one quarter inch or less in the upper deserts and one tenth inch or less in the lower deserts. The snow level will lower to around 5500 feet for Tuesday night and Wednesday with a few inches of snowfall possible above 6000 feet.

Tuesday is expected to be the coolest day for most areas with inland high temperatures around 20 degrees below average. Slow warming is expected for Wednesday with dry weather and greater warming for Thursday through Saturday with inland high temperatures around 10 degrees above average for next Saturday. A weaker low pressure system developing near the West Coast to the north next weekend will bring a return of onshore flow with coastal cooling beginning to spread inland.

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.AVIATION...

301530Z...Coast/Valleys...Low clouds, with bases 1500-5000 ft MSL and tops to 5500 ft MSL, will continue this morning and be difficult to clear in some areas today due to a strong coastal eddy. San Diego County has the best chance of lingering low clouds today. -SHRA will develop tonight into Tuesday as an upper-level system approaches the area. VIS may lower to 1-3 SM in showers, with cloud bases down to 800 ft MSL at times.

Mountains/Deserts...FEW/SCT high clouds today. Westerly wind gusts of 40-50 kt kt will develop by late afternoon and continue into tomorrow morning along desert mountain slopes into adjacent deserts. Some coastal mountain slopes around 5500 ft will be obscured in clouds/fog/drizzle at times today. -SHRA tonight over the mountains.

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.MARINE...

West northwest wind gusts of 25 to 30 kt will develop again this afternoon and evening over the outer waters, along with combined seas of 6 to 9 ft. A Small Craft Advisory remains in effect through 3 AM Tuesday. Showers will develop across the area tonight through Wednesday, with a slight chance of thunderstorms on Tuesday. No

additional marine hazards are forecast late Wednesday through Friday.

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.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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IOWA STATE UNIVERSITY

AVIATION/MARINE...JJT

PUBLIC...10/17

College of Ag
Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone





926 FXUS66 KSGX 302013 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 113 PM PDT Mon Apr 30 2018

.SYNOPSIS...

The cool weather will continue through Wednesday as low pressure develops from the north. Widespread clouds and scattered showers will be the rule tonight through Wednesday, with the possibility of isolated thunderstorms. Dry and warmer Thursday through Saturday as high pressure rebuilds over the Southwest. A return of onshore flow will begin to spread cooling and marine clouds back inland again early next week.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

Marine stratus remained rather extensive over the coastal basin this afternoon. Satellite imagery showed it well up the coastal slopes and into the passes. Above...Cirrus clouds were visible, streaming SE. The onshore sfc pressure gradients were running 5-6 MBS KSAN to the deserts. Peak wind gusts at Noon PDT over the mts/deserts were between 30 and 40 MPH, down from gusts over 60 MPH last night.

Expect only peeks at sun west of the mts for the remainder of the day. The eddy offshore is forecast to weaken, but flow aloft will become increasingly cyclonic as colder air filters in. Pockets of showers are likely to spring up overnight and track toward the mts. No well organized activity is expected through Tue, which makes forecasting timing and amounts of rain problematic.

A positively tilted longwave trough is setting up over the west with several disturbances rotating through it. The first will move over SoCal on Tue. Even though an impressive jet accompanies this feature, instability and lift remain modest, so models do not generate any organized, heavy precip. A second feature drops south over the CA Bight Tue night and helps to deepen the trough and develop a closed low. This sets up wrap-around moisture into the CWA from the NE and helps to organize precip better Tue night into early Wed. So expect on and off, scattered showers anytime Tue through Wed. See the Hydrology section below for a further discussion on QPF

and hydrology.

It does appear that several inches of snow could accumulate in the San Bernardino Mts, and to a lesser extent on Mt. San Jacinto, especially Tue night into Wed Morning. A Winter Weather Advisory may be needed for this time period depending on how future model runs develop this incipient weather system.

The storm system gradually moves east on Thu, allowing heights/ thickness to rise dramatically into the coming weekend. This should usher in a large swing in daytime temps from around 15-20 degrees F below average on Tue/Wed...to 10-15 degrees F above normal by Saturday.

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HYDROLOGY... Scattered, mostly light showers will become more numerous overnight into Tuesday. Rainfall amounts are not expected to be sufficient for any flooding concerns, except near thunderstorms (which could develop) with brief, locally heavy rainfall rates. Instability and moisture availability will limit rainfall potential with this system. Peak PW values from 0.75 to 0.95 inch are expected.

On Tue night/Wed, northerly flow will develop, shifting the better instability and precip potential northward to the San Bernardino Mts and high deserts, but the chance of showers will continue most areas, especially in the mts. Preliminary two-day storm totals are for 0.15 to 0.25 Coast...0.15 to 0.50 Valleys...0.30 to 1.30 Mts...0.10 to 0.25 high desert...and trace to 0.10 lower deserts.

Snow could fall at 5500 FT, but the better potential for accumulating snow will be above 6000 FT in the San Bernardino Mts. There is a potential for 3 to 6 inches above 6K FT from late Tue through Wed.

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.AVIATION...

302000...Coast/Valleys...Low clouds, with bases 2500-5000 ft MSL and tops to 6500 ft MSL, will continue today due to a strong coastal eddy. -SHRA will develop tonight into Tuesday as an upper-level system approaches the area. VIS may lower to 1-3 SM in showers, with cloud bases down to 800 ft MSL at times. Isolated TSRA may develop Tuesday afternoon.

Mountains/Deserts...FEW/SCT high clouds today. Westerly wind gusts of 40-50 kt kt will develop by late afternoon and continue into tomorrow morning along desert mountain slopes into adjacent deserts.

Some coastal mountain slopes around 5500 ft will be obscured in clouds/fog/drizzle at times today. -SHRA tonight into Tuesday with isolated TSRA possible Tuesday afternoon over the mountains.

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.MARINE...

West northwest wind gusts of 25 to 30 kt will develop again this afternoon and evening over the outer waters, along with combined seas of 6 to 9 ft. A Small Craft Advisory remains in effect through 3 AM Tuesday. Showers will develop across the area tonight through Wednesday, with a slight chance of thunderstorms on Tuesday. No additional marine hazards are forecast late Wednesday through Friday.

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.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC/HYDROLOGY...10
AVIATION/MARINE...JJT



College of Ag

Department of Agronomy

503 WWUS75 KPSR 302039 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 139 PM MST Mon Apr 30 2018

CAZ566-010845-

/O.NEW.KPSR.WI.Y.0015.180501T2000Z-180502T0400Z/
Imperial County WestIncluding the cities of Coolidge Springs, Salton City, Winona,
Coyote Wells, Ocotillo, and Plaster City
139 PM PDT Mon Apr 30 2018

...WIND ADVISORY IN EFFECT FROM 1 PM TO 9 PM PDT TUESDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 1 PM to 9 PM PDT Tuesday.

- * AFFECTED AREA...Western Imperial County.
- * TIMING...Tuesday afternoon and evening.
- * WINDS...Gusts of 40 to 50 mph from the west.
- * IMPACTS...Challenging driving conditions, especially on northsouth oriented roads. This includes highway 86 on the western side of the Salton Sea and portions of I-8 west of El Centro. Periods of reduced visibility due to blowing sand and dust are also possible.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ562-010845-

/O.EXT.KPSR.WI.Y.0014.180430T2300Z-180502T0600Z/ Imperial County Southwest-Including the city of Mountain Spring 139 PM PDT Mon Apr 30 2018

- ...WIND ADVISORY NOW IN EFFECT UNTIL 11 PM PDT TUESDAY...
- * AFFECTED AREA...Far southwest Imperial County including I-8 near the San Diego County border.
- * TIMING...Now through Tuesday evening.
- * WINDS...West winds of 25-35 mph with gusts of 40-50 mph.
- * IMPACTS...Dangerous driving conditions due to more difficult handling...especially for high profile vehicles...and the potential for blowing dust to cause suddenly reduced visibility.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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716 Farm House Ln Ames, IA 50011 592 FXUS65 KPSR 302135 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 230 PM MST Mon Apr 30 2018

.SYNOPSIS...

A low pressure system will move through the region Tuesday and Wednesday bringing breezy conditions, some blowing dust, much cooler temperatures, and a slight chance of showers and thunderstorms to some communities. Widespread rainfall is not expected and will be primarily focused around and northeast of the Phoenix metro. In the wake of this weather disturbance, high pressure will build across the region with lower elevations touching 100 degrees by the weekend.

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.DISCUSSION...

A large, slow moving vortex continues to spin over the intermountain West with one circulation center lifting into southern Montana and a potent secondary PV anomaly quickly descending southward towards the California coast. An enhanced jet and persistently tight pressure gradient through the area will continue to support locally windy weather. This will particularly be the case in the lee of the San Diego mountains where rotors and downsloping winds will once again produce strong, gusty winds and some blowing dust in SW Imperial County into the overnight hours. Height falls will be reestablished heading through Tuesday morning in association with the trailing PV anomaly and current wind advisory was merely expanding through Tuesday afternoon.

An extremely anomalous cold core H5 low will deepen into southern California Tuesday (-25C central H5 temperatures near or better than daily records for the region) forcing a somewhat disorganized frontal boundary through the forecast area. Better synoptic winds will allow some measure of enhanced moisture to advect north ahead of the cyclonic jet core. Models are in good agreement that total column PWATs will increase into a 0.50-0.75 inch range though very important differences exist regarding the moisture profiles. NAM BUFR soundings suggest more concentrated boundary layer sfc-800mb moisture profiles incorporating 6-7 g/kg values leading to SBCapes nearing 300 J/kg. However, GFS BUFR data indicates boundary layer values near 5 g/kg yielding only minimal instability. In similar situations, NAM boundary layer moisture forecasts have been overzealous and feel the lesser instability values are more

realistic.

Regardless, vorticity and jet forced ascent (along with isentropic measures) may be more than sufficient to compensate for any deficiencies in instability. National and local high resolution CAM's are becoming far more optimistic about isold/sct showers and embedded thunder blossoming near the Phoenix area and lifting into foothill and higher terrain locations during the late afternoon and evening. Made some targeted increases to POPs during this time frame though quick movement of showers and isolated nature will probably not amount to much overall rainfall. Modestly large T/Td spread could also support gusty outflow winds with this convection. This potential outcome combined with the underlying synoptic stronger winds will yield a dust threat across the typical problem areas.

Cold air aloft will linger over much of the forecast area Wednesday creating a pocket a very steep lapse rates juxtaposed with residual low level moisture. Although large scale vertical motions will start becoming more subsident, better late spring sfc heating will combine with natural mountain circulations to create conditions favorable for moist convective updrafts. In all likelihood (and based on past similar situations), instability will actually be more pronounced Wednesday afternoon and convective showers more extensive over higher terrain areas. Further increases to POPs may be needed Wednesday afternoon. Nevertheless with the cold core nearly overhead and thicknesses tanking with this system, afternoon highs will struggle to get into the middle 70s (potentially the coolest day we see until November).

Thursday-Monday: High pressure will begin to develop in the wake of the weather system with H5 heights gradually building into a 585-588dm range. High temperatures will rise from the mid to upper 80s Thursday into the low 100s on Sunday and remain near those temperatures on Monday.

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.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Light southwesterly winds will increase this afternoon and become gusty through the evening hours. Speeds will likely not be enough to generate much in way of blowing dust. Westerly winds, though not as gusty, will persist into the early overnight hours with some light easterly winds likely by early Tuesday morning. Late Tuesday morning (after 16Z) we should see winds pick up from more of a southerly direction as a low pressure system moves in. We also may see some cigs start to develop around the Phoenix area at that time in the 5-6kft range. Limited chance of showers Tuesday afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH: Persistent breezy west/southwest winds expected into Tuesday afternoon due to an incoming low pressure system. There may be some periods of blowing dust at TAF sites, but timing and duration preclude from mentioning in TAFs.

Aviation Discussion not updated for amended TAFs.

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.FIRE WEATHER...

Thursday through Monday:

High pressure tracking across the western states will lead to a rapid warmup with highs at most lower desert locations reaching the 100 degree mark over the weekend. Winds will be light overall with some occasional minor upslope breeziness at times. Otherwise, no strong wind events. Humidities decline sharply after Wednesday with single digit minimum values being common by Friday with fair to poor overnight recovery.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 11 PM PDT Tuesday for CAZ562.

Wind Advisory from 1 PM to 9 PM PDT Tuesday for CAZ566.

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DISCUSSION...MO/Hernandez AVIATION...Iniguez FIRE WEATHER...MO/AJ 053 FXUS66 KSGX 010441 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 930 PM PDT Mon Apr 30 2018

.SYNOPSIS...

A deep low pressure system will move through the Southwest through Wednesday and bring occasional showers, with some snow in the mountains. There is a slight chance of a thunderstorm, mainly Tuesday afternoon and evening. Gusty winds will occur in parts of the mountains and deserts. It will be unseasonably cool through Wednesday, but then temperatures will increase Thursday through Saturday, with fair weather prevailing then through early next week.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

Showers were increasing over western San Diego County, with numerous gauges reporting a few hundredths of an inch this evening. Ohterwise, skies were mostly cloudy, with fog in the mountains. The showers, mostly light, will continue at times overnight as the moisture is up to about 6500 feet above sea level with moderately strong onshore flow, around 7 MB from San Diego to Imperial.

The cold upper low will dig into southern California Tuesday with about a 110-knot jet over northern Baja California. The trough axis will be over So-Cal Tuesady night when the moisture will be deepest, with near saturation extending above 700 MB. More showers will occur Tuesday, and we currently have a slight chance of thunderstorms in the afternoon. Despite a 500-mb temperature of around -23 deg C, the 00Z NAM and GFS are showing very little surface-based CAPE, and lifted indices mostly above zero, except in some of the high deserts of San Bernardino County, so thunderstorm chances are not looking very good right now. Snow levels should fall to 5500-6000 feet by Tuesday, with some light snow possible. During the day Tuesday, showers should be intermittent enough so that it will be difficult to get snow to accumulate, especially with the higher ground temperatures of May, except near the highest peaks. Tuesday night, with the lower nocturnal temperatures and saturated 700 MB flow from the north, could allow for a few inches to accumulate in the San Bernardino County Mountains. See hydrology

section below as some mountain locations could have an inch of precipitation, and there is not much change in overall precip amounts. Amounts will be variable over fairly short distances due to the showery nature of the precip. Overall, our greatest precipitation amounts will be Tuesday night due to the combination of the deepest moisture and an approaching vorticity maximum on the back side of the upper low. Showers should gradually taper Wednesday, with a ridge moving in from the west late in the week to bring fair and much warmer weather. After highs barely topping 60 in most areas west of the mountains Tuesday and Wednesday, we could reach 90 in some of the valleys Friday and Saturday, with 100 possible again in the lower deserts. A trough will move by to the north late in the weekend to bring some cooling and an increase in coastal stratus but no precipitation in our area.

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HYDROLOGY (From previous discussion)... Scattered, mostly light showers will become more numerous overnight into Tuesday. Rainfall amounts are not expected to be sufficient for any flooding concerns, except near thunderstorms (which could develop) with brief, locally heavy rainfall rates. Instability and moisture availability will limit rainfall potential with this system. Peak PW values from 0.75 to 0.95 inch are expected.

On Tue night/Wed, northerly flow will develop, shifting the better instability and precip potential northward to the San Bernardino Mts and high deserts, but the chance of showers will continue most areas, especially in the mts. Preliminary two-day storm totals are for 0.15 to 0.25 Coast...0.15 to 0.50 Valleys...0.30 to 1.30 Mts...0.10 to 0.25 high desert...and trace to 0.10 lower deserts.

Snow could fall at 5500 FT, but the better potential for accumulating snow will be above 6000 FT in the San Bernardino Mts. There is a potential for 3 to 6 inches above 6K FT from late Tue through Wed.

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.AVIATION...

010315Z...Coast/Valleys/Coastal Mountain Slopes...Low cloud layers with bases 1500-3500 ft MSL and tops to 6500 ft MSL continuing through Tuesday evening. Patchy DZ and -SHRA will become more widespread tonight into Tuesday. VIS may locally lower to 2-4 SM in showers, with cloud bases down to 1000 ft MSL at times. Isolated TSRA may develop Tuesday afternoon and evening. Mountains will remain obscured in clouds/fog/drizzle through Tuesday.

Desert Mountain Slopes/Deserts...West winds gusts of 35-45 kt

will continue into Tuesday morning along desert mountain slopes and below the San Gorgonio Pass. ISO-SCT -SHRA and possibly TSRA will move into the deserts Tuesday evening.

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.MARINE...

West northwest wind gusts of 25 to 30 kt and combined seas of 6 to 9 ft will continue this evening. A Small Craft Advisory remains in effect through 3 AM Tuesday. Showers will develop across the area tonight through Wednesday, with a slight chance of thunderstorms on Tuesday. No additional marine hazards are forecast late Wednesday through Friday.

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.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...Small Craft Advisory until 3 AM PDT Tuesday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...Maxwell
HYDROLOGY...10
AVIATION/MARINE...SS



College of Ag

Department of Agronomy

042 WWUS75 KPSR 010840 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 140 AM MST Tue May 1 2018

CAZ563>565-567-012045/O.EXB.KPSR.WI.Y.0014.180501T2100Z-180502T0600Z/
Salton Sea-Chuckwalla Mountains-Imperial County SoutheastImperial ValleyIncluding the cities of Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico

Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico,
Alamorio, and Brawley
140 AM PDT Tue May 1 2018

...WIND ADVISORY IN EFFECT FROM 2 PM THIS AFTERNOON TO 11 PM PDT THIS EVENING...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 2 PM this afternoon to 11 PM PDT this evening.

- * AFFECTED AREA...Central and eastern portions of Imperial County...including the Imperial Valley...and the Chuckwalla Mountains of eastern Riverside County.
- * TIMING...Very strong winds develop during the latter half of the afternoon and continue through evening before weakening.
- * WINDS...West winds of 25-35 mph with gusts of 40-50 mph.
- * IMPACTS...Dangerous driving conditions due areas of blowing dust and sand as well as more difficult handling...especially for high profile vehicles. Affected roadways include I-8 and Highway 78.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under

a mile at times in blowing dust or blowing sand. Use extra caution. && \$\$ CAZ562-012045-/O.EXT.KPSR.WI.Y.0014.000000T0000Z-180502T1200Z/ Imperial County Southwest-Including the city of Mountain Spring 140 AM PDT Tue May 1 2018 ...WIND ADVISORY NOW IN EFFECT UNTIL 5 AM PDT WEDNESDAY... * AFFECTED AREA...Far southwest Imperial County including I-8 near the San Diego County border. * TIMING...Now through early Wednesday morning. * WINDS...West winds of 30-40 mph with gusts of 45-55 mph. * IMPACTS...Dangerous driving conditions due to more difficult handling...especially for high profile vehicles...and the potential for blowing dust to cause suddenly reduced visibility. PRECAUTIONARY/PREPAREDNESS ACTIONS... A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution. && \$\$ CAZ566-012045-/O.EXT.KPSR.WI.Y.0015.180501T0840Z-180502T1200Z/ Imperial County West-Including the cities of Coolidge Springs, Salton City, Winona,

Coyote Wells, Ocotillo, and Plaster City

...WIND ADVISORY NOW IN EFFECT UNTIL 5 AM PDT WEDNESDAY...

140 AM PDT Tue May 1 2018

- * AFFECTED AREA...Western Imperial County.
- * TIMING...Now through early Wednesday morning.
- * WINDS...West winds of 25 to 35 mph with gusts of 40 to 50 mph.
- * IMPACTS...Challenging driving conditions, especially on northsouth oriented roads. This includes highway 86 on the western side of the Salton Sea and portions of I-8 west of El Centro. Periods of reduced visibility due to blowing sand and dust are can also be expected.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

&&

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IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone

561 FXUS65 KPSR 011015 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 315 AM MST Tue May 1 2018

.SYNOPSIS...

A low pressure system will move through the region Today and Wednesday bringing breezy conditions, areas of blowing dust, much cooler temperatures, and a slight chance of showers and thunderstorms. Greatest rain chances around and northeast of the Phoenix metro. In the wake of this weather disturbance, high pressure will build across the region with lower elevations in the low 100s this weekend.

&&

.DISCUSSION...

Today through Wednesday: Currently, the upper-level low is centered near the Idaho/Nevada/Utah border. This system will continue to dig south, with the center forecast to be in the southwest CONUS by this evening. At the surface, a cold front will exist in southeast California this morning and enter central Arizona late tonight and continue its eastward progression across the state Wednesday morning and early afternoon.

This tightened pressure gradient will lead to continued breeziness today, especially along and west of the Colorado River Valley. A wind advisory remains in place for western Imperial county through 5 AM Wednesday where gusts to 50 to 55 mph will be possible. In addition, winds will start to pick up this afternoon across the central and eastern portions of Imperial county and parts of eastern Riverside county where gusts to 50 mph will be likely. Due to very breezy conditions in southeast California, patchy areas of blowing dust will be possible and those driving on I-10 and I-8 should use extra caution this afternoon.

Ahead of the front/upper-level low, south/southwest winds will advect moisture from Mexico and the pacific resulting in an increase in surface dewpoints. Dewpoints this afternoon through tomorrow afternoon will be near .5 inches, with some isolated areas in central and eastern Arizona seeing values up to .75 inches. This atmospheric river will be transporting a decent amount of Water Vapor with NAEFS forecast IVT values between 250 and 350 kg/ms across central and southeastern Arizona. When IVT

values are greater than 250, it is usually a good sign for some measurable precipitation. These latest NAEFS forecast values are slightly higher than yesterdays run, with some forecast values in south-central and southeast Arizona being considered greater than all previous 00Z values for this afternoon, which is pretty impressive for this time of year. There will also be some instability this afternoon, with forecast MLCAPE values up to 300 J/Kg. In addition to instability and lift from orographic features, diffluence aloft ahead of the main upper-level low will also aid in some additional lift. With all that being said, confidence continues to grow that showers and isolated thunderstorms will develop this afternoon, primarily after 21Z, ahead of the cold front, with the greatest chances across the favored up-slope areas north and east of Phoenix. Even a few of the SPC HREF ensemble members are showing reflectivities greater than 40 dBZ this afternoon and evening. Due to a pretty large temp/dew point spread, any thunderstorm that develops will be capable of producing gusty downdraft winds, some isolated dry lightning, and blowing dust.

Lingering moisture, even better instability, and colder temperatures aloft resulting in steeper lapse rates, will lead to another chance of showers and isolated thunderstorms Wednesday morning and afternoon. CAMS are showing isolated to scattered showers early Wednesday morning in Arizona, eventually developing into isolated to scattered thunderstorms mainly from Maricopa county eastward, with the greatest coverage north and east of the Phoenix metro. Once again, a decent temp/dew point spread below the cloud base means any thunderstorm that develops will be capable of producing gusty downdraft winds, lightning, and blowing dust.

Thursday through Sunday: Still looks on track for high pressure to re-develop in the wake of the weather system with H5 heights gradually building into the 584-588 dm range. High temperatures will rise from the low to mid 80s Thursday into the low 100s on Sunday. Clear skies each day, with some slight increase in clouds this weekend.

Monday through Tuesday: There's still some spread among global models, however the general consensus is a shortwave moving across the desert southwest early next week. As it stands, this system will be pretty moisture deprived so precipitation chances will be pretty much non-existent. The main impact will be a slight dip in temperatures due to a slight drop in thicknesses.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Westerly flow will persist well into the night before easterlies form early Tuesday morning. Some model guidance suggest winds may stay westerly all night at KPHX so not extremely confident easterlies will even form. SCT ceilings around 5 kft will develop early tomorrow morning ahead of an approaching weather system. South to southwesterly winds will also develop early in the morning. There is a limited chance of showers Tuesday afternoon over the terminals so have mentioned VCSH for now starting late afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH: Strong westerly to southwest flow will weaken a bit tonight through Tuesday morning. Stronger winds will develop Tuesday afternoon with gusts up to 30-35 kts at KBLH and to 35-40 kts at KIPL. Blowing dust and reduced visibility will also be possible, especially at KIPL, but have precluded it from the TAF for now since confidence in timing is low.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Thursday through Monday:

High pressure tracking across the western states will lead to a rapid warmup with highs at most lower desert locations reaching the 100 degree mark over the weekend. Winds will be light overall with some occasional minor upslope breeziness at times. Otherwise, no strong wind events. Humidities decline sharply after Wednesday with single digit minimum values being common by Friday with fair to poor overnight recovery.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 5 AM PDT Wednesday for CAZ562-566.

Wind Advisory from 2 PM this afternoon to 11 PM PDT this evening for CAZ563>565-567.

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425 FXUS66 KSGX 011057 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 357 AM PDT Tue May 1 2018

.SYNOPSIS...

A low pressure system over the southwest states will bring cooler weather and periods of showers into Wednesday. For Thursday through Saturday...high pressure will bring dry weather with a warming trend. For Sunday through Tuesday...a weaker low pressure system to the north will bring a return of onshore flow which will spread cooling slowly inland.

&&

.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

A low pressure system will move into Southern California today... then move slowly eastward on Wednesday. The marine layer has continued to deepen and is around 6000 feet deep. There have widespread generally light measurable rainfall amounts overnight from the coast to the mountains from drizzle and occasional bands of light showers. Rainfall amounts have generally ranged from a few hundredths near the coast to one tenth to locally one quarter inch on the coastal mountain slopes.

Periods of showers will continue into Wednesday along with a slight chance of thunderstorms for this afternoon and early evening as much colder air aloft destabilizes the atmosphere with very weak instability for this afternoon into early this evening. Through Wednesday...rainfall amounts will be somewhat variable...but will generally range from one tenth to one quarter inch near the coast to one half to one inch in the mountains with locally greater amounts. Amounts in the upper deserts will be mostly less than one quarter inch with one tenth inch or less in the lower deserts. Snow levels will lower to around 5500 to 6000 feet for tonight into early Wednesday with a few inches of snowfall possible above 7000 feet.

High temperatures will be much cooler for inland areas today... generally 15 to 20 degrees below average...except 25 to 30 degrees below average in some mountain locations. High temperatures will

begin to warm on Wednesday.

For Thursday through Saturday...high pressure aloft will bring a strong inland warming trend with high temperatures returning to near average on Thursday and warming to 10 to 15 degrees above average for Saturday. For Sunday through Tuesday...a weaker trough of low pressure to the north will bring a return of onshore flow which will spread cooling slow inland but with inland high temperatures still remaining a little above average for Monday and Tuesday.

&&

.AVIATION...

010915...Coast/Valleys/Coastal Mountain Slopes...Low cloud layers with bases 1800-3500 feet MSL and tops to 6500 feet MSL will continue through Wednesday morning. Scattered DZ and -SHRA will also continue. VIS may locally lower to 3-5SM in -SHRA, with cloud bases down to 1000 feet MSL at times. A slight chance of -TSRA between 19-03Z today. Areas of mountains will remain obscured in clouds, fog and precip at times through Wednesday morning.

Desert Mountain Slopes/Deserts...Areas of winds gusting to 25-35 kt today through this evening. Isolated -SHRA and very isolated -TSRA.

&&

.MARINE...

Winds will remain rather breezy today, but not hazardous. Showers will continue across the coastal waters today through Wednesday morning, with a slight chance of thunderstorms mainly this afternoon and evening. Other than that, no marine weather hazards are forecast through Saturday.

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.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

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447 FXUS65 KPSR 011247 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 547 AM MST Tue May 1 2018

.UPDATE...

Updated Aviation and Fire Weather sections.

88

.SYNOPSIS...

A low pressure system will move through the region Today and Wednesday bringing breezy conditions, areas of blowing dust, much cooler temperatures, and a slight chance of showers and thunderstorms. Greatest rain chances around and northeast of the Phoenix metro. In the wake of this weather disturbance, high pressure will build across the region with lower elevations in the low 100s this weekend.

88

.DISCUSSION...

Today through Wednesday: Currently, the upper-level low is centered near the Idaho/Nevada/Utah border. This system will continue to dig south, with the center forecast to be in the southwest CONUS by this evening. At the surface, a cold front will exist in southeast California this morning and enter central Arizona late tonight and continue its eastward progression across the state Wednesday morning and early afternoon.

This tightened pressure gradient will lead to continued breeziness today, especially along and west of the Colorado River Valley. A wind advisory remains in place for western Imperial county through 5 AM Wednesday where gusts to 50 to 55 mph will be possible. In addition, winds will start to pick up this afternoon across the central and eastern portions of Imperial county and parts of eastern Riverside county where gusts to 50 mph will be likely. Due to very breezy conditions in southeast California, patchy areas of blowing dust will be possible and those driving on I-10 and I-8 should use extra caution this afternoon.

Ahead of the front/upper-level low, south/southwest winds will advect moisture from Mexico and the pacific resulting in an increase in surface dewpoints. Precipitable water values this afternoon through tomorrow afternoon will be near .5 inches, with some isolated areas in central and eastern Arizona seeing values up to .75 inches. This atmospheric river will be transporting a decent amount of Water Vapor with NAEFS forecast IVT values between 250 and 350 kg/ms across central and southeastern Arizona.

When IVI values are greater than 250, it is usually a good sign

for some measurable precipitation. These latest NAEFS forecast values are slightly higher than yesterdays run, with some forecast values in south-central and southeast Arizona being considered greater than all previous 00Z values for this afternoon, which is pretty impressive for this time of year. There will also be some instability this afternoon, with forecast MLCAPE values up to 300 J/Kg. In addition to instability and lift from orographic features, diffluence aloft ahead of the main upper-level low will also aid in some additional lift. With all that being said, confidence continues to grow that showers and isolated thunderstorms will develop this afternoon, primarily after 21Z, ahead of the cold front, with the greatest chances across the favored up-slope areas north and east of Phoenix. Even a few of the SPC HREF ensemble members are showing reflectivities greater than 40 dBZ this afternoon and evening. Due to a pretty large temp/dew point spread, any thunderstorm that develops will be capable of producing gusty downdraft winds, some isolated dry lightning, and blowing dust.

Lingering moisture, even better instability, and colder temperatures aloft resulting in steeper lapse rates, will lead to another chance of showers and isolated thunderstorms Wednesday morning and afternoon. CAMS are showing isolated to scattered showers early Wednesday morning in Arizona, eventually developing into isolated to scattered thunderstorms mainly from Maricopa county eastward, with the greatest coverage north and east of the Phoenix metro. Once again, a decent temp/dew point spread below the cloud base means any thunderstorm that develops will be capable of producing gusty downdraft winds, lightning, and blowing dust.

Thursday through Sunday: Still looks on track for high pressure to re-develop in the wake of the weather system with H5 heights gradually building into the 584-588 dm range. High temperatures will rise from the low to mid 80s Thursday into the low 100s on Sunday. Clear skies each day, with some slight increase in clouds this weekend.

Monday through Tuesday: There's still some spread among global models, however the general consensus is a shortwave moving across the desert southwest early next week. As it stands, this system will be pretty moisture deprived so precipitation chances will be pretty much non-existent. The main impact will be a slight dip in temperatures due to a slight drop in thicknesses.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
A strengthening low pressure system will move through the region today and Wednesday. For today, anticipate scattered cumulus decks before more widespread cloudiness develops late in the day. Look for more noticeable southerly winds late morning and early

April 29 2018 to May 1, 2018 Exceptional Event Imperial County afternoon before southwesterly directions become established.

Anticipate somewhat stronger afternoon breeziness as well. One notable difference from recent days is the potential for isolated showers and thunderstorms beginning late this afternoon and continuing overnight. For metro Phoenix, best chances will be over northern and eastern portions (better chances north and east of the metro). Anticipate winds becoming southeasterly this evening earlier than usual and stronger than usual as well. Decreased slantwise visibilities may be an issue Wednesday morning due to lofted dust wafting in from the California deserts.

Southeast California/Southwest Arizona including KIPL and KBLH: A strengthening low pressure system will lead to another round of widespread strong winds this afternoon and evening accompanied by areas of blowing dust and sand. As usual, the strongest winds will be west of the Lower Colorado River Valley (strongest over Imperial County with gusts of 35-40 kts common after 23Z). West of the Imperial Valley, very strong winds have been underway since yesterday and will continue until Wednesday morning. Higher terrain areas will have a slight chance of showers and thunderstorms this afternoon and tonight. FEW-SCT cumulus is possible (mainly east of the Lower Colorado River Valley) but otherwise anticipate cloud decks to remain AOA FL120).

Aviation Discussion not updated for amended TAFs.

&&

9/11/2019

.FIRE WEATHER...

Thursday through Monday:

A big warmup is in store for the latter half of the week as high pressure moves across the western states. That means highs on the lower deserts climbing from the 80s on Thursday to around 100 by Saturday. Highs of 100-105 will be common Sunday and Monday. Accordingly, humidities plummet with single digit minimum values being prevalent by Saturday and continuing through Monday. Overnight recovery will be modest at best. Winds will be light Thursday and Friday before more noticeable breeziness develops over the weekend. At this time, no critical fire weather thresholds are anticipated.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 5 AM PDT Wednesday for CAZ562-566.

IEM :: AFD from NWS PSR

April 29, 2018 to May 1, 2018 Exceptional Event Imperial County Wind Advisory from 2 M this afternoon to 11 PM PDT this evening for CAZ563>565-567.

Appendix A

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DISCUSSION...Hernandez AVIATION...AJ FIRE WEATHER...AJ

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











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752 FXUS66 KSGX 011644 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 944 AM PDT Tue May 1 2018

.SYNOPSIS...

A low pressure system over the southwest states will bring cooler weather and periods of showers into Wednesday. For Thursday through Saturday, high pressure will bring dry weather with a warming trend. For Sunday through Tuesday, a weaker low pressure system to the north will bring a return of onshore flow which will spread cooling slowly inland.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

At 9 AM PDT, water vapor satellite imagery displayed an upperlevel low east of Point Conception, with an associated shortwave moving southeast towards our area. Composite radar showed a few light showers over and west of the mountains. The top two precipitation totals as of 9 AM this morning were 0.82 inches at Tick Ridge and 0.62 inches at Palomar CRS. The precipitation summary was last updated just after 7 AM, and another update will be issued in the next hour. The aforementioned shortwave will move across the region today. Additional showers will develop across the area this afternoon, and a few thunderstorms may develop as the unstable air moves over northern portions of our area from the upper-level low. Best chances of thunderstorms are over San Bernardino county. One last shortwave will move across our area Wednesday morning. Precipitation is expected to increase in coverage, and will be a little heavier due to an increase in midlevel moisture. Snow levels will hover around 6500 ft today. Snow accumulations are not expected to be heavy and widespread, however a few inches of accumulations are possible above 7000 ft where stronger showers develop. High-res models show showers decreasing in coverage by Wednesday afternoon, and ending by late Wednesday evening.

High pressure then builds over the region through Saturday. High temperatures will increase to near normal Thursday, then jump to 5-10 degrees above normal Friday and peak at 5-15 degrees above

normal on Saturday. Weak inland offshore flow will limit the inland push of the seabreeze Friday, then onshore flow will increase through early next week as a weak upper-level trough moves across the Pacific Northwest Sunday into Monday. This will help lower highs back to seasonal normals by Monday. The ridge will create a shallow marine layer this weekend, with minimal stratus coverage along the coast. Low clouds will push more into the valleys early next week as the marine layer deepens.

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.AVIATION...

011500...Coast/Valleys/Coastal Mountain Slopes...Low cloud layers with bases 1800-3500 feet MSL and tops to 6500 feet MSL will continue through Wednesday morning. Scattered SHRA will continue at times. VIS may lower to 2SM in any heavier showers, with cloud bases down to 1000 feet MSL at times. A slight chance of -TSRA between 19-03Z today and this evening. Areas of mountains obscurations, fog and precip at times through Wednesday morning.

Desert Mountain Slopes/Deserts...Areas of winds gusting to 35 kt through this evening with isolated SHRA and TSRA.

&&

.MARINE...

Winds will remain breezy today but not hazardous. Showers will continue across the coastal waters through Wednesday morning, with a slight chance of thunderstorms mainly this afternoon and evening. Otherwise, no additional marine weather hazards likely through Saturday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

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PUBLIC...JJT

AVIATION/MARINE...Brotherton

493 WWUS75 KPSR 011902 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 1202 PM MST Tue May 1 2018

CAZ563>565-567-020500-

/O.CON.KPSR.WI.Y.0014.180501T2100Z-180502T0600Z/
Salton Sea-Chuckwalla Mountains-Imperial County SoutheastImperial ValleyIncluding the cities of Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico,
Alamorio, and Brawley
1202 PM PDT Tue May 1 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING...
- * AFFECTED AREA...Central and eastern portions of Imperial County...including the Imperial Valley...and the Chuckwalla Mountains of eastern Riverside County.
- * TIMING...Very strong winds develop during the latter half of the afternoon and continue through evening before weakening.
- * WINDS...West winds of 25-35 mph with gusts of 40-50 mph.
- * IMPACTS...Dangerous driving conditions due areas of blowing dust and sand as well as more difficult handling...especially for high profile vehicles. Affected roadways include I-8 and Highway 78.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ562-020500-/O.CON.KPSR.WI.Y.0014.000000T0000Z-180502T1200Z/ Imperial County Southwest-Including the city of Mountain Spring 1202 PM PDT Tue May 1 2018 ...WIND ADVISORY REMAINS IN EFFECT UNTIL 5 AM PDT WEDNESDAY... * AFFECTED AREA...Far southwest Imperial County including I-8 near the San Diego County border. * TIMING...Now through early Wednesday morning.

- * WINDS...West winds of 30-40 mph with gusts of 45-55 mph.
- * IMPACTS...Dangerous driving conditions due to more difficult handling...especially for high profile vehicles...and the potential for blowing dust to cause suddenly reduced visibility.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ566-020500-

/O.CON.KPSR.WI.Y.0015.000000T0000Z-180502T1200Z/

Imperial County West-

Including the cities of Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City 1202 PM PDT Tue May 1 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 5 AM PDT WEDNESDAY...
- * AFFECTED AREA...Western Imperial County.
- * TIMING...Now through early Wednesday morning.
- * WINDS...West winds of 25 to 35 mph with gusts of 40 to 50 mph.

* IMPACTS...Challenging driving conditions, especially on northsouth oriented roads. This includes highway 86 on the western side of the Salton Sea and portions of I-8 west of El Centro. Periods of reduced visibility due to blowing sand and dust are can also be expected.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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IOWA STATE UNIVERSITY

College of Ag
Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames. IA 50011

akrherz@iastate.edu 515-294-5978 phone







751 WWUS75 KPSR 011916 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 1216 PM MST Tue May 1 2018

CAZ569-020500-

/O.EXA.KPSR.WI.Y.0014.180501T2100Z-180502T0600Z/ Palo Verde Valley-Including the cities of Martinez Lake, Blythe, Palo Verde, and Ripley 1216 PM PDT Tue May 1 2018

...WIND ADVISORY IN EFFECT UNTIL 11 PM PDT THIS EVENING...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect until 11 PM PDT this evening.

- * AFFECTED AREA...Central and eastern portions of Imperial County...including Lake Martinez...the Imperial Valley...and the Chuckwalla Mountains of eastern Riverside County.
- * TIMING...Very strong winds develop during the latter half of the afternoon and continue through evening before weakening.
- * WINDS...West winds of 25-35 mph with gusts of 40-50 mph.
- * IMPACTS...Dangerous driving conditions due areas of blowing dust and sand as well as more difficult handling...especially for high profile vehicles. Affected roadways include I-8 and Highway 78.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ563>565-567-020500-

/O.CON.KPSR.WI.Y.0014.180501T2100Z-180502T0600Z/

Salton Sea-Chuckwalla Mountains-Imperial County Southeast-

Imperial Valley-

Including the cities of Desert Shores,

Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico,

Alamorio, and Brawley

1216 PM PDT Tue May 1 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING...

- * AFFECTED AREA...Central and eastern portions of Imperial County...including the Imperial Valley...and the Chuckwalla Mountains of eastern Riverside County.
- * TIMING...Very strong winds develop during the latter half of the afternoon and continue through evening before weakening.
- * WINDS...West winds of 25-35 mph with gusts of 40-50 mph.
- * IMPACTS...Dangerous driving conditions due areas of blowing dust and sand as well as more difficult handling...especially for high profile vehicles. Affected roadways include I-8 and Highway 78.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ562-020500-

/O.CON.KPSR.WI.Y.0014.000000T0000Z-180502T1200Z/

Imperial County Southwest-

Including the city of Mountain Spring

1216 PM PDT Tue May 1 2018

...WIND ADVISORY REMAINS IN EFFECT UNTIL 5 AM PDT WEDNESDAY...

- * AFFECTED AREA...Far southwest Imperial County including I-8 near the San Diego County border.
- * TIMING...Now through early Wednesday morning.
- * WINDS...West winds of 30-40 mph with gusts of 45-55 mph.
- * IMPACTS...Dangerous driving conditions due to more difficult handling...especially for high profile vehicles...and the potential for blowing dust to cause suddenly reduced visibility.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ566-020500-

/O.CON.KPSR.WI.Y.0015.000000T0000Z-180502T1200Z/ Imperial County West-Including the cities of Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City 1216 PM PDT Tue May 1 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 5 AM PDT WEDNESDAY...
- * AFFECTED AREA...Western Imperial County.
- * TIMING...Now through early Wednesday morning.
- * WINDS...West winds of 25 to 35 mph with gusts of 40 to 50 mph.
- * IMPACTS...Challenging driving conditions, especially on northsouth oriented roads. This includes highway 86 on the western side of the Salton Sea and portions of I-8 west of El Centro. Periods of reduced visibility due to blowing sand and dust are can also be expected.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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IOWA STATE UNIVERSITY

College of Ag Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone



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746 FXUS65 KPSR Ø11926 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 1226 PM MST Tue May 1 2018

.UPDATE...

Updated Wind Advisory and Discussion.

88

.SYNOPSIS...

A low pressure system will move through the region Today and Wednesday bringing breezy conditions, areas of blowing dust, much cooler temperatures, and a slight chance of showers and thunderstorms. Greatest rain chances around and northeast of the Phoenix metro. In the wake of this weather disturbance, high pressure will build across the region with lower elevations in the low 100s this weekend.

88

.DISCUSSION...

Winds have been a bit stronger than previously forecast in southeastern California, so we retrended winds based on a blend of the NMM6km, WRF4km, and the HRRR that best matched current observations. This blend expanded our area of sustained winds in excess of 30 mph east one zone into the lower Colorado River Valley/Lake Martinez area from 2-11 pm. Otherwise, the Wind Advisory remains unchanged.

We continue to monitor the potential for convection later this afternoon and evening, which several hi-res and global models show will be possible mainly for the northeastern sides of Phoenix and areas further north and east in higher terrain. Although aircraft soundings are currently a bit drier aloft then model forecasts, an increase in mid-to-upper level moisture is expected as the upper level low over southern California becomes cutoff and ejects northeast overnight. Assuming this increase in moisture materializes, convective temperatures should decrease into the 70s to allow for isolated showers and thunderstorms to develop beginning around 4-5 pm as southwest winds move up higher terrain. Shear remains very limited, but MUCAPE values of 100-300 J/kg (a portion of which will may be surface-based) and a brief window of DCAPE values in the 500-800 J/kg range prior to sunset may allow for some strong wind gusts capable of causing localized blowing dust over open areas. Our current POP and weather grids handle this threat well, so no changes have been made to the grids aside from retrending temperatures and slightly increasing dew points.

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

.PREVIOUS DISCUSSION...

Today through Wednesday: Currently, the upper-level low is centered near the Idaho/Nevada/Utah border. This system will continue to dig south, with the center forecast to be in the southwest CONUS by this evening. At the surface, a cold front will exist in southeast California this morning and enter central Arizona late tonight and continue its eastward progression across the state Wednesday morning and early afternoon.

This tightened pressure gradient will lead to continued breeziness today, especially along and west of the Colorado River Valley. A wind advisory remains in place for western Imperial county through 5 AM Wednesday where gusts to 50 to 55 mph will be possible. In addition, winds will start to pick up this afternoon across the central and eastern portions of Imperial county and parts of eastern Riverside county where gusts to 50 mph will be likely. Due to very breezy conditions in southeast California, patchy areas of blowing dust will be possible and those driving on I-10 and I-8 should use extra caution this afternoon.

Ahead of the front/upper-level low, south/southwest winds will advect moisture from Mexico and the pacific resulting in an increase in surface dewpoints. Precipitable water values this afternoon through tomorrow afternoon will be near .5 inches, with some isolated areas in central and eastern Arizona seeing values up to .75 inches. This atmospheric river will be transporting a decent amount of Water Vapor with NAEFS forecast IVT values between 250 and 350 kg/ms across central and southeastern Arizona. When IVT values are greater than 250, it is usually a good sign for some measurable precipitation. These latest NAEFS forecast values are slightly higher than yesterdays run, with some forecast values in south-central and southeast Arizona being considered greater than all previous 00Z values for this afternoon, which is pretty impressive for this time of year. There will also be some instability this afternoon, with forecast MLCAPE values up to 300 J/Kg. In addition to instability and lift from orographic features, diffluence aloft ahead of the main upper-level low will also aid in some additional lift. With all that being said, confidence continues to grow that showers and isolated thunderstorms will develop this afternoon, primarily after 21Z, ahead of the cold front, with the greatest chances across the favored up-slope areas north and east of Phoenix. Even a few of the SPC HREF ensemble members are showing reflectivities greater than 40 dBZ this afternoon and evening. Due to a pretty large temp/dew point spread, any thunderstorm that develops will be capable of producing gusty downdraft winds, some isolated dry lightning, and blowing dust.

Lingering moisture, even better instability, and colder temperatures aloft resulting in steeper lapse rates, will lead to another chance of showers and isolated thunderstorms Wednesday morning and afternoon. CAMS are showing isolated to scattered

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County showers early Wednesday morning in Arizona, eventually developing

into isolated to scattered thunderstorms mainly from Maricopa county eastward, with the greatest coverage north and east of the Phoenix metro. Once again, a decent temp/dew point spread below the cloud base means any thunderstorm that develops will be capable of producing gusty downdraft winds, lightning, and blowing dust.

Thursday through Sunday: Still looks on track for high pressure to re-develop in the wake of the weather system with H5 heights gradually building into the 584-588 dm range. High temperatures will rise from the low to mid 80s Thursday into the low 100s on Sunday. Clear skies each day, with some slight increase in clouds this weekend.

Monday through Tuesday: There's still some spread among global models, however the general consensus is a shortwave moving across the desert southwest early next week. As it stands, this system will be pretty moisture deprived so precipitation chances will be pretty much non-existent. The main impact will be a slight dip in temperatures due to a slight drop in thicknesses.

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.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
A strengthening low pressure system will move through the region today and Wednesday. For today, anticipate scattered cumulus decks before more widespread cloudiness develops late in the day. Look for more noticeable southerly winds late morning and early afternoon before southwesterly directions become established. Anticipate somewhat stronger afternoon breeziness as well. One notable difference from recent days is the potential for isolated showers and thunderstorms beginning late this afternoon and continuing overnight. For metro Phoenix, best chances will be over northern and eastern portions (better chances north and east of the metro). Anticipate winds becoming southeasterly this evening earlier than usual and stronger than usual as well. Decreased slantwise visibilities may be an issue Wednesday morning due to lofted dust wafting in from the California deserts.

Southeast California/Southwest Arizona including KIPL and KBLH: A strengthening low pressure system will lead to another round of widespread strong winds this afternoon and evening accompanied by areas of blowing dust and sand. As usual, the strongest winds will be west of the Lower Colorado River Valley (strongest over Imperial County with gusts of 35-40 kts common after 23Z). West of the Imperial Valley, very strong winds have been underway since yesterday and will continue until Wednesday morning. Higher terrain areas will have a slight chance of showers and thunderstorms this afternoon and tonight. FEW-SCT cumulus is possible (mainly east of the Lower Colorado River Valley) but otherwise anticipate cloud decks to remain AOA FL120).

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.FIRE WEATHER...

Thursday through Monday:

A big warmup is in store for the latter half of the week as high pressure moves across the western states. That means highs on the lower deserts climbing from the 80s on Thursday to around 100 by Saturday. Highs of 100-105 will be common Sunday and Monday. Accordingly, humidities plummet with single digit minimum values being prevalent by Saturday and continuing through Monday. Overnight recovery will be modest at best. Winds will be light Thursday and Friday before more noticeable breeziness develops over the weekend. At this time, no critical fire weather thresholds are anticipated.

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.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None

CA...Wind Advisory until 11 PM PDT this evening for CAZ563>565-567-569.

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DISCUSSION...LH

PREVIOUS DISCUSSION...Hernandez

AVIATION...AJ

FIRE WEATHER...AJ

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011 T 339 FXUS65 KPSR Ø12221 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 321 PM MST Tue May 1 2018

.SYNOPSIS...

A low pressure system will move through the region tonight and Wednesday, bringing breezy conditions and a slight chance of showers and thunderstorms with areas of localized blowing dust. The greatest rain chances will be mainly north and east of the Phoenix metro. After a brief period of cooler than normal temperatures, high pressure will build across the region with lower elevations in the low 100s this weekend to begin a prolonged period of above normal temperatures.

&&

.DISCUSSION...

Tonight through Wednesday: Moisture continues to increase above 600 hPa east of a closed mid-to-upper level low currently over southern California as evident on water vapor imagery, with broken to overcast cloud decks as low as 12-15kft as evident on visible imagery. However, aircraft soundings from PHX still display a pronounced dry layer and inversion at 700 hPa that is slowly eroding, but not as quickly as some of the more robust models with respect to QPF showed. In addition, the high clouds have helped curtail daytime warming today, which combined with dry stable air at midlevels, probably will not be enough to trigger much convection in Phoenix proper. However, the increase in low-level moisture from the southwest should help trigger isolated to scattered showers and a few thunderstorms along the higher terrain northeast of Phoenix late this afternoon into the evening hours, particularly as MLCAPE values increase with MUCAPE values in the 100-300 J/kg range. The HRRR appears to have a decent handle on convective activity and is an intermediate solution with respect to the rest of the ensemble hi-res model suite. Any thunderstorm that develops will be capable of producing lightning with or without measurable precipitation and gusty downdraft winds capable of causing localized blowing dust, particularly late this afternoon and early evening if DCAPE values increase well above 500 J/kg.

The closed low currently over southern California will track through northwest Arizona as it ejects to the northwest tomorrow. Dynamic forcing and additional height falls associated with this cold core low should allow for at least isolated showers tomorrow morning before most activity moves north and east of the CWA by mid-afternoon. We may have a little surface-based instability tomorrow with MUCAPE values of 100-300 J/kg tomorrow possibly

April 29, 2018 to May 1, 2018 Exceptional Event Imperial County able to support a few thunderstorms, but for now we have left

those out of the grids at this time. Any cells that develop will still carry a threat of lightning and gusty winds capable of causing localized blowing dust. Temperatures tomorrow will be a few degrees cooler than today with highs only expected to warm up into the lower to mid 70s across most of the region with 60s common at higher elevations. Winds will be weaker tomorrow as well due to a much weaker pressure gradient at the surface than what we have seen today.

Thursday through Tuesday: Skies will clear out for Thursday with northerly flow aloft to allow for a very pleasant day with highs in the mid 80s for most areas with 70s at higher elevations. This will most likely be the last pleasant day below 90 degrees for most of central Arizona and southeast California until at least October as a strong H500 ridge with 585-588 dm heights builds into the region. High temperatures will warm back up into the 90s on Friday and 100s on Saturday and Sunday. High temperatures this weekend have continued to trend warmer, so we generally used the 80th percentile of model guidance for high temperatures on those days. Beyond Sunday, models continue to diverge a bit with the GFS showing a weak trough and the ECMWF maintaining ridging aloft. Based on climatology and the broader model consensus, we shaded the forecast towards a slower cool down more in line with the ECWMF. Model guidance and the extended CPC outlooks suggest well above normal temperatures will continue through most of next week as well.

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.PREVIOUS DISCUSSION...

Winds have been a bit stronger than previously forecast in southeastern California, so we retrended winds based on a blend of the NMM6km, WRF4km, and the HRRR that best matched current observations. This blend expanded our area of sustained winds in excess of 30 mph east one zone into the lower Colorado River Valley/Lake Martinez area from 2-11 pm. Otherwise, the Wind Advisory remains unchanged.

We continue to monitor the potential for convection later this afternoon and evening, which several hi-res and global models show will be possible mainly for the northeastern sides of Phoenix and areas further north and east in higher terrain. Although aircraft soundings are currently a bit drier aloft then model forecasts, an increase in mid-to-upper level moisture is expected as the upper level low over southern California becomes cutoff and ejects northeast overnight. Assuming this increase in moisture materializes, convective temperatures should decrease into the 70s to allow for isolated showers and thunderstorms to develop beginning around 4-5 pm as southwest winds move up higher terrain. Shear remains very limited, but MUCAPE values of 100-300 J/kg (a portion of which will may be surface-based) and a brief window of DCAPE values in the 500-800 J/kg range prior to sunset may allow for some strong wind gusts capable of causing localized blowing

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County dust over open areas. Our current POP and weather grids handle

this threat well, so no changes have been made to the grids aside from retrending temperatures and slightly increasing dew points.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: There are several aviation weather concerns for today with the encroachment of a weather system. First, gusty westerly winds as strong as 25-30 kts will persist through this afternoon and into this evening. The winds may also be strong enough to whip up some localized areas of dense blowing dust reducing visibility and creating slantwise visibility issues. Moreover, there is a threat of isolated thunderstorms and showers across the terminal area and especially over the Mogollon after 0Z. However, any showers or thunderstorms may also produce sudden changes in wind direction and speed. Otherwise, ceilings will lower to to near 8-10k feet by this afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH: There are several aviation weather concerns for today with the encroachment of a weather system. Strong westerly to southwesterly winds will prevail into tonight with gusts up to 40 kts, particularly for KIPL and terminals west of the Colorado River. Reduced visibility from blowing dust is likely this afternoon as well as slantwise visibility issues. An outside chance for a thunderstorm or shower does exist; however, the greatest threat lies well east of the Colorado River.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Friday through Tuesday: Temperatures will increase considerably through the period with desert temperatures reaching 100-105 degrees by the weekend. The winds will remain fairly light but with some afternoon breeziness. With the increase of temperatures, minimum relative humidity values plummet below 10 percent during the afternoons. Overnight recoveries will be modest at best. Fortunately, no critical fire weather thresholds are anticipated at this time.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters are encouraged to report areas of dense blowing dust.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 11 PM PDT this evening for CAZ563>565-567-

Appendix A

Wind Advisory until 5 AM PDT Wednesday for CAZ562-566.

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DISCUSSION...LH
AVIATION...Deemer
FIRE WEATHER...Deemer

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











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IEM :: QPS from NWS SGX
   April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County
866
FSUS46 KSGX 012236
OPSSGX
Quantitative Precipitation Forecast
National Weather Service San Diego CA
336 PM PDT Tue May 1 2018
Precipitation Forecast in Inches in 6-Hour Periods...
  [ Beginning times for each period are in local time...
  [ For example...05Thu
           ...11Thu is a forecast for 5 AM to 11 AM Thursday
  [ For example...23Thu
           ...05Fri is a forecast for 11 PM Thursday to 5 AM Friday]
...Orange County Coastal Areas...
  17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu
  23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri
  Huntington Beach
  Newport Beach
  Laguna Beach
  San Clemente
  ...Orange County Inland Areas...
  17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu
  23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri
  Anaheim
  Fullerton
  0.02 0.02 0.02 0.02 0.00 0.00
                           0.00
                               0.00
                                    0.00
                                        0.00
  Brea
  Villa Park
  ... Santa Ana Mountains And Foothills...
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17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Fremont Canyon

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County Silverado Canyon, 3 Mi East of Silverado

0.11 0.08 0.03 0.02 0.00 0.00 0.00 0.00 0.00 0.00 Modjeska Preserve 0.16 0.09 0.02 0.02 0.00 0.00 0.00 0.00 0.00 0.00 Santiago Peak 0.14 0.13 0.04 0.03 0.00 0.00 0.00 0.00 Santa Rosa Plateau 0.03 0.16 0.06 0.02 0.00 0.00 0.00 0.00 0.00 0.00

... San Bernardino And Riverside County Valleys-The Inland Empire...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Ontario

San Bernardino 0.19 0.32 0.03 0.02 0.02 0.00 0.00 0.00 0.00 0.00 Beaumont 0.11 0.26 0.06 0.03 0.06 0.00 0.00 0.00 0.00 0.00 Riverside 0.06 0.25 0.03 0.02 0.00 0.00 0.00 0.00 0.00 0.00 Perris Valley Channel 0.02 0.19 0.05 0.02 0.02 0.00 0.00 0.00 0.00 0.00 Prado Dam 0.03 0.04 0.02 0.02 0.00 0.00 0.00 0.00 0.00 0.00 Temecula 0.02 0.12 0.04 0.02 0.00 0.00 0.00 0.00 0.00 0.00 Hemet

...Riverside County Mountains...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Idyllwild

0.13 0.19 0.13 0.05 0.04 0.00 0.00 0.00 0.00 0.00

...Coachella Valley...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Palm Springs

0.02 0.02 0.02 0.02 0.00 0.00 0.00 0.00 0.00 0.00 Thermal

...San Bernardino County Mountains...

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

San Antonio Dam

Lytle Creek Wrightwood 0.14 0.08 0.03 0.08 0.02 0.00 0.00 0.00 0.00 0.00 Lake Arrowhead 0.23 0.28 0.05 0.02 0.04 0.00 0.00 0.00 0.00 0.00 Big Bear Lake 0.07 0.28 0.04 0.03 0.02 0.00 0.00 0.00 0.00 Big Morongo Canyon

...Apple And Lucerne Valleys...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Hesperia

Victorville Apple Valley

...San Diego County Coastal Areas...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Oceanside

Miramar San Diego International Airport Chula Vista 0.00 San Ysidro

...San Diego County Valleys...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Fallbrook

April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County

Rancho Bernardo

...San Diego County Mountains...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Palomar Mountain

...San Diego County Deserts...

17Tue 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 23Tue 05Wed 11Wed 17Wed 23Wed 05Thu 11Thu 17Thu 23Thu 05Fri

Borrego Springs

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DISCUSSION...

Scattered, mostly light showers will continue into Wednesday morning along and west of the mountains. Developing low pressure near Las Vegas overnight may feed additional moisture and instability over southern San Bernardino County from the north later this evening, which is forecast to drift south and reach San Diego County early Wednesday morning. If this area develops as forecast, some moderate rain and snowfall is possible.

Storm total rainfall amounts will be quite variable...but range generally from one-tenth to one-quarter inch near the coast, to one-half to one inch in the mountains. Locally greater amounts are possible. Rainfall over the high desert will be one- quarter inch or less, with one-tenth inch or less in the lower deserts. Snow levels will lower to 5500 to 6000 feet tonight into early Wednesday with a few inches of snowfall possible above 6500 feet.

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WWUS75 KPSR 020408

NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 908 PM MST Tue May 1 2018

CAZ563>565-567-569-020515-/O.CAN.KPSR.WI.Y.0014.000000T0000Z-180502T0600Z/

Salton Sea-Chuckwalla Mountains-Imperial County Southeast-

Imperial Valley-Palo Verde Valley-

Including the cities of Desert Shores,

Imperial Hot Mineral Springs, Winterhaven, El Centro, Calexico, Alamorio, Brawley, Martinez Lake, Blythe, Palo Verde, and Ripley 908 PM PDT Tue May 1 2018

...WIND ADVISORY IS CANCELLED...

The National Weather Service in Phoenix has cancelled the Wind Advisorv.

Wind speeds have weakened across central and eastern portions of Imperial County to below advisory thresholds. Gusts to 35 mph will still be possible with patchy blowing dust in isolated locations.

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CAZ562-021200-

/O.CON.KPSR.WI.Y.0014.000000T0000Z-180502T1200Z/ Imperial County Southwest-Including the city of Mountain Spring 908 PM PDT Tue May 1 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 5 AM PDT WEDNESDAY...
- * AFFECTED AREA...Far southwest Imperial County including I-8 near the San Diego County border.
- * TIMING...Now through early Wednesday morning.
- * WINDS...West winds of 30-40 mph with gusts of 45-55 mph.
- * IMPACTS...Dangerous driving conditions due to more difficult handling...especially for high profile vehicles...and the potential for blowing dust to cause suddenly reduced visibility.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and April 29, 2018 to May 1, 2018 Exceptional Event, Imperial County 58 mph: Winds this strong can make driving difficult, especially

for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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CAZ566-021200/O.CON.KPSR.WI.Y.0015.000000T0000Z-180502T1200Z/
Imperial County WestIncluding the cities of Coolidge Springs, Salton City, Winona,
Coyote Wells, Ocotillo, and Plaster City
908 PM PDT Tue May 1 2018

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 5 AM PDT WEDNESDAY...
- * AFFECTED AREA...Western Imperial County.
- * TIMING...Now through early Wednesday morning.
- * WINDS...West winds of 25 to 35 mph with gusts of 40 to 50 mph.
- * IMPACTS...Challenging driving conditions, especially on northsouth oriented roads. This includes highway 86 on the western side of the Salton Sea and portions of I-8 west of El Centro. Periods of reduced visibility due to blowing sand and dust are can also be expected.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between 30 and 40 mph are expected, or wind gusts of between 40 and 58 mph. Winds this strong can make driving difficult, especially for high profile vehicles. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution.

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College of Ag

176 FXUS66 KSGX 020424 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 923 PM PDT Tue May 1 2018

.SYNOPSIS...

A low pressure system over the southwest states will bring cooler weather and periods of showers into Wednesday. Some snow accumulation is possible in the San Bernardino and San Jacinto Mountains through Wednesday morning. For Thursday through Saturday, high pressure will bring dry weather with a warming trend. Then cooler Sunday through Tuesday as onshore flow spreads cooling inland.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

- ...RRM updated for latest storm total rainfall...
- ...Record report issued for numerous record low maximums today...

Clouds were widespread from the mountains to the coast this evening. At 9 PM PDT...Radar showed scattered showers, mostly light, over SW San Diego and San Bernardino County. The 00Z Miramar sounding had the marine inversion level near 7300 FT MSL. Instability was marginal and PW stood at 0.57 inch. Greatest precip totals (0.5 to 0.90 inch) over the past 24 hours, were logged on the coastal slopes. Some higher amounts may have occurred there, but ALERT gage reports from San Bernardino County were not available. At lower elevations, most areas had less than one-tenth of an inch. Surface pressure gradients were 7-8 MBS KSAN to the deserts, and were supporting gusty winds over the mts/deserts. Passes were strongest with peak gusts 45 to 55 MPH.

The 00Z NAM has the disturbance moving through the Bight nailed, based on water vapor imagery. It will pass south in the next couple of hours and has only generated a few scattered showers. It has another disturbance slipping south just inland overnight as northerly flow develops around the back side of the upper low centered near Las Vegas. The latest 00Z WRFEMS run has dramatically reduced the forecast precip over the region tonight. But the 00Z run of the NAM and the latest HRRR keep showers going over the

San Bernardino Mts and even coastal San Diego County tonight with this feature, so even though amounts are light, the threat of rain and mountain snow continues into Wednesday morning although snowfall amounts reaching Advisory level look doubtful at this point. The snow level should be 5000 to 5500 FT.

No changes to the current forecast for now despite the lower precip amounts now in the forecast. LAXQPSSGX has been updated.

From previous discussion...

One last shortwave will move across our area Wednesday morning. Precipitation is expected to increase in coverage, and will be a little heavier due to an increase in mid-level moisture. Snow levels will hover around 6500 ft today and dip to 5500 ft tonight. Snow accumulations will mainly be 1-3 inches above 5500 ft, however up to 6 inches are possible where stronger showers develop. A Winter Weather Advisory has been issued for areas above 5500 ft in the San Bernardino and Riverside County Mountains. High-res models show showers decreasing in coverage by Wednesday afternoon, and ending by late Wednesday evening.

High pressure then builds over the region through Saturday. High temperatures will increase to near normal Thursday, then jump to 5-10 degrees above normal Friday and peak at 5-15 degrees above normal on Saturday. Weak inland offshore flow will limit the inland push of the seabreeze Friday, then onshore flow will increase through early next week as a weak upper-level trough moves across the Pacific Northwest Sunday into Monday. This will help lower highs back to seasonal normals by Monday. The ridge will create a shallow marine layer this weekend, with minimal stratus coverage along the coast. Low clouds will push more into the valleys early next week as the marine layer deepens.

&&

.AVIATION...

020330Z...Coast/Valleys/Coastal Mountain Slopes...Low cloud layers with bases 1500-3500 feet MSL and tops to 6500 feet MSL will continue through Wednesday evening. SCT -SHRA will continue through 15Z, then taper off during the afternoon and evening. VIS may lower to 2-4SM in heavier showers, with cloud bases down to 800 feet MSL at times. Mountain obscurations likely in clouds/fog/precip through Wednesday evening.

Desert Mountain Slopes/Deserts...ISO showers possible over the deserts through Wednesday afternoon. Otherwise SCT-BKN clouds 5000-10000 ft MSL and unrestricted vis.

&&

.MARINE...

Showers will continue across the coastal waters through early Wednesday afternoon. Otherwise, no additional marine weather hazards are expected through Sunday.

&&

.SKYWARN...

Skywarn activation is not requested at this time, but may be requested later this afternoon. Weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory from 8 PM this evening to 11 AM PDT Wednesday for Riverside County Mountains-San Bernardino County Mountains.

PZ...NONE.

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PUBLIC...10/JJT
AVIATION/MARINE...SS

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu

515-294-5978 phone

727 FXUS66 KSGX 020949 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 249 AM PDT Wed May 2 2018

.SYNOPSIS...

A low pressure system over the southwest states will bring another day of cool weather, along with scattered showers this morning. High pressure will rebuild and bring a significant warming trend heading into the weekend. Fair weather with near average temperatures are forecast next week with coastal clouds making their appearance nights and mornings.

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.DISCUSSION...FOR EXTREME SOUTHWESTERN CALIFORNIA INCLUDING ORANGE... SAN DIEGO...WESTERN RIVERSIDE AND SOUTHWESTERN SAN BERNARDINO COUNTIES...

The unseasonably deep low pressure trough overhead is beginning to move slowly eastward. In the northerly flow some showers coming from the deserts will track across the region this morning along with some coastal showers tracking ashore in San Diego County. All these showers will gradually taper off this afternoon. Not expecting much additional precip with amounts today largely less than a quarter inch. Snow is beginning to accumulate above 5000 feet, but we expect only a couple inches at higher elevations. There is just enough instability this afternoon for thunderstorms mainly over the higher mountains and high desert. It will be cool again today, but not quite like yesterday was. Skies will begin to break up from the coast to inland to reveal partial sunshine. High pressure aloft will rebuild quite nicely Thursday and Friday. Temperatures will peel rubber to warm up quickly. Ready for some 90s? A look at inland (Riverside) high temps will serve to illustrate the warming trend. Today: 16 degrees below average, Thursday: one degree below, Friday: 12 degrees above, Saturday: 15 degrees above (about 94 degrees). A touch of offshore flow Friday and Saturday will help boost temps, and should also prevent too much coastal cloudiness to develop. Next week the flow turns more onshore with a seasonal westerly flow aloft. Weak troughs moving through the West to our north will keep the onshore flow coming and will help re-establish a more seasonal marine layer. We're not exactly forecasting May Gray, but trending more in that direction with some gray nights and mornings.

&&

.AVIATION...

020855Z...Coast/Valleys/Coastal Mountain Slopes...Low cloudS with variable bases 1500-3500 feet MSL and tops to 9000 feet MSL will continue through this evening. ISOLD-SCT -SHRA will continue through 15Z, then taper off during the afternoon and evening. VIS may lower to 2-4SM at times during showers, with cloud bases down to 800 feet MSL at times. Mountain obscurations likely in clouds/fog/precip through this evening.

Desert Mountain Slopes/Deserts...ISO showers possible over the deserts through this afternoon. Otherwise SCT-BKN clouds 5000-10000 ft MSL and unrestricted vis.

&&

.MARINE...

Showers will continue across the coastal waters through this morning. Otherwise, no additional marine weather hazards are expected through Sunday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory until 11 AM PDT this morning for Riverside County Mountains-San Bernardino County Mountains.

PZ...NONE.

&&

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PUBLIC...MM

AVIATION/MARINE...PG

849

WWUS75 KPSR 021152

NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 452 AM MST Wed May 2 2018

CAZ562-021300-

/O.EXP.KPSR.WI.Y.0014.000000T0000Z-180502T1200Z/ Imperial County Southwest-Including the city of Mountain Spring 452 AM PDT Wed May 2 2018

...WIND ADVISORY WILL EXPIRE AT 5 AM PDT EARLY THIS MORNING...

Westerly winds will remain breezy to at times windy today, but remain below advisory level.

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CAZ566-021300-

/O.EXP.KPSR.WI.Y.0015.000000T0000Z-180502T1200Z/
Imperial County WestIncluding the cities of Coolidge Springs, Salton City, Winona,
Coyote Wells, Ocotillo, and Plaster City
452 AM PDT Wed May 2 2018

...WIND ADVISORY WILL EXPIRE AT 5 AM PDT EARLY THIS MORNING...

Westerly winds will remain breezy to at times windy today, but remain below advisory level.

\$\$

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

Department of Agronomy

716 Farm House Ln Ames, IA 50011