Septembe	er 21, 20	)17 E	xce	ptional	Event, Imperial County Appendix A	4
TYPE	DATE	TII	ME	AGENCY		PAGE
Area Forecast Discussion	9/18/2017	0259	MST	Phoenix	A deep Pacific trough currently just entering the Pacific Northwest will stay well to our north through Tuesday, but a strong upper level jet is forecast to dig southward into the west side of the trough pushing the trough into the Great Basin Wednesday nightThe main trough axis will be slow to move through the Desert Southwest on Thursday into early Friday and the first shortwave is shown to be weakening as it pushes through Friday morningStrong height falls entering the Desert Southwest and a modest surface pressure gradient will result in breezy to windy conditions on Thursday with afternoon gusts to around 30 mph. Winds on Friday will again be breezy, but with gusts mostly remaining below 25 mph.	
Area Forecast Discussion	9/18/2017	0357	PDT	San Diego	For Tuesday and Wednesdaylow pressure will move into the Pacific Northwest with slowly strengthening onshore flow for Southern California bringing slow coolingThe trough of low pressure over the western states will strengthen for Thursday and Fridaythen weaken and move inland next weekend as high pressure aloft strengthens off the West Coast. This will bring stronger onshore flow across Southern California for Wednesday and Thursday with periods of stronger and gusty west winds for the mountains and deserts. The marine layer will deepen onto the coastal mountain slopes for Thursday into Friday. There are small chances for light precipitation along and west of the mountains for Thursday	
Area Forecast Discussion	9/18/2017	0917	PDT	San Diego	At 900 AMQuiet weather remained in place over SoCal, with a broad longwave trough over the Western USThe longwave trough over the West will amplify through the end of the workweek as it is reinforced by a pair of shortwave troughs. For SoCal this will mean the continuation of a deep marine layer, stubborn coastal low clouds, below average temperatures, and periods of breezy winds along/near the desert slopes. The coolest conditions will occur Thursday and Friday. There is a remote chance of a light shower west of the mountain ridges Thursday as the trough axis traverses the region.	
Area Forecast Discussion	9/18/2017	1333	MST	Phoenix	The aforementioned trough which is just entering the Pacific Northwest will stay well to our north through Tuesday, but a strong upper level jet is forecast to dig southward into the west side of the trough pushing the trough into the Great Basin Wednesday nightThe main trough axis will be slow to move through the Desert Southwest on Thursday into early Friday and the first shortwave is shown to be weakening as it pushes through Friday morning. The main drivers behind any shower and thunderstorm activity Wednesday night into Friday will be the weak to modest upper level dynamics associated with a strong upper level jet max to our northwest and low to mid level southwesterly upslope flow Strong height falls entering the Desert Southwest and a modest surface pressure gradient will result in breezy to windy conditions on Thursday with afternoon gusts to around 30 mph. Winds on Friday will again be breezy, but with gusts mostly remaining below 25 mph.	

Septembe	er 21, 20				Event, Imperial County Appendix A	
TYPE	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	9/18/2017	1354	PDT	San Diego	At 145 PMA broad longwave trough was over the Western US, resulting in quiet and cooler than average weather across SoCalThe longwave trough over the West will amplify through the end of the workweek as it is reinforced by a pair of shortwave troughs. For SoCal this will mean the continuation of a deep marine layer, recurrent/stubborn low clouds west of the mountains, below average temperatures, and periods of breezy winds over/near the desert slopes. The coolest conditions will occur Thursday and Friday, as the trough axis traverses the region and heights tumbleThere is some potential for a few light showers Thursday or Friday, but any precipitation should be very light.	
Area Forecast Discussion	9/18/2017	2044	PDT	San Diego	Onshore sfc pressure gradients were running 6-7 MBS KSAN to the deserts. The gradient to NV was considerably stronger than yesterday. Peak westerly wind gusts were running 25-35 MPH in wind-prone mtn/desert areasGiven the increasing onshore pressure gradients, some increase in marine layer depth is possible by morning. Otherwise a persistence forecast is prudent as heights change little through Tue and a dry westerly flow aloft continues. Bigger changes come Wed-Fri as the uppertrough amplifies and shortwaves energize lift and the marine layer for noticeably cooler days and perhaps even some light precipitation at times	
Area Forecast Discussion	9/19/2017	0257	MST	Phoenix	Starting Wednesday night, a strong shortwave trough is shown diving southeastward through northern California causing the southern portion of the deep trough to dig southward into the Great Basin region on ThursdayBreezy to windy conditions on Thursday still look very likely as the pressure gradient tightens in response to a deepening surface low over Utah. Gusts Thursday afternoon should reach 30-35 mph across portions of southeast California and to around 25 mph across southwest and south-central Arizona. The cold frontal passage on Thursday now looks to mainly pass through Thursday evening into the overnight hours, so highs on Thursday have been adjusted upward a couple degrees from previous forecastsLingering rain chances are possible through Friday afternoon across southern Gila county, but gradual drying will be taking place on Friday behind the cold front. Temperatures across th	
Area Forecast Discussion	9/19/2017	0324	PDT	San Diego	A low pressure system centered along the British Columbia coast will move southward along the West Coast through Thursday and Fridaythen weaken for the weekend into early next week as high pressure aloft strengthens off the West CoastOnshore flow will strengthen further for Wednesday afternoon through Thursday night with periods of strong gusty west winds from the mountain ridge tops into the deserts. There could be gusts to around 65 mph in the windier locations with strongest winds for Thursday afternoon and evening.	

Septembe		)T / F	:xce		Event, Imperial County Appendix I	4
TYPE	DATE	TII	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	9/19/2017	0931	PDT	San Diego	At 915 AM, A broad longwave trough remained in place over the Western US. Water vapor imagery showed a shortwave trough embedded within the longwave pattern off the coast of the Pacific NorthwestThe shortwave currently off the coast of the Pacific Northwest will dig along the coast, amplifying the longwave trough over the Western US Thursday and Friday. With this, heights will fall, onshore flow will increase and afternoon high temperatures will dip a few degrees further into the sub average category. Thursday looks to be the coolest day, with persistent low clouds and inland temperatures running 10-20 degrees below average. A few light showers are also possible Thursday. Winds winds will become gusty in the passes, along the desert slopes and into the desert floor Thursday evening, and a Wind Advisory may be needed for the desert slopes and deserts of Riverside, San Diego, and San Bernardino Counties. Local wind gusts may exceed 60 mph during this period along the desert slopes in Riverside and San Diego Counties.	
Area Forecast Discussion	9/19/2017	1423	MST	Phoenix	Thursday afternoon and evening does look to be rather breezy with gusts 20-30 miles per hour as a front associated with a strong Pacific trough approaches from the west	
Area Forecast Discussion	9/20/2017	0218	MST	Phoenix	Skies remain clear to mostly clear across the Southwest U.S. while a large upper level trough is situated across the Northwest U.S. Dry westerly flow still persists across the Desert Southwest to the south of the large trough, but this will shift more out of the southwest starting Thursday. This will occur as a strong shortwave trough digs down along the western edge of the large trough allowing it to dive into the Great Basin and southern California on Thursday. Deepening surface low pressure to our north on Thursday will promote a strong pressure gradient and breezy to windy conditions across the region with gusts across southeast California approaching Wind Advisory levels and gusts of 25-30 mph across southern ArizonaAs the trough moves into Arizona Thursday night into Friday, a strong but dry cold front will track across the area. The cold front will usher in the coolest air we have seen since mid May with highs dropping to between 85-90 degrees Friday. These cooler conditions will persist through the weekend with lower desert highs generally only rising into the middle to upper 80s.	
Area Forecast Discussion	9/20/2017	0218	PDT	San Diego	An unseasonably deep trough will drop out of Washington down the West Coast today and Thursday. This will increase the onshore flow and strengthen our coastal eddy. There is a weak front-like feature that pushes through Southern California Thursday late morning. It looks capable of producing light showers anywhere from the coast to the mountain crests. Some foothill locations might get more than a tenth inch, but only a hundredth or two is most likely in the lower elevations. Winds will crank up as well in the mountains and deserts Thursday afternoon and evening. Top gusts in the top spots, such as through mountain passes and adjacently downwind, will exceed 50 mph, but most areas will stay under 45 mph	
Area Forecast Discussion	9/20/2017	0938	PDT	San Diego	Winds will be picking up in the mountains and deserts by tomorrow and will be assessing whether a Wind Advisory may be needed for these areas for tomorrow and tomorrow night with latest guidance coming in	

Septembe	r 21, 20	)1/E	xce	ptional	Event, Imperial County Appendix	<u> </u>
TYPE	DATE	TIN	ME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	9/20/2017	1341	PDT	San Diego	* WindsWest to Southwest 20 to 30 mph with gusts of 40 to 50 mph.  * TimingThursday afternoon into Thursday night.  * LocationMountain tops to the desert floor. Windiest along the desert mountain slopes and through passes.  * VisibilityPatchy blowing dust could lead to visibility restrictions to briefly a half mile or less across portions of the deserts.  * ImpactsDifficult travel for high profile vehichles and potential for sudden reductions in visibility.  * OutlookWinds will gradually diminish early Friday morning.	
Area Forecast Discussion	9/20/2017	1403	PDT	San Diego	A mid-upper level trough will dig south and across Southern California Thu-Fri. Low level moisture will increase across the area. The moisture will be confined below about 6,000 FT, but looks to be enough for a few showers from the coast to especially the coastal mountain slopes beginning around the morning rush Thursday with the rain risk continuing through Thursday eveningWest to Southwest winds will increase as this trough moves by. H70 winds peak to around 35 KT. Very borderline for a Wind Advisory, but in coordination with neighbors, one was decided to be issued Thursday afternoon into Thursday night for the mountain tops to the desert floor. Peak wind gusts of 40-50 mph are forecast in the wind prone areasmountain tops, desert slopes and through passes.	
Urgent Weather Message	9/20/2017	1431	MST	Phoenix	Joshua Tree NP West-Joshua Tree NP East-Imperial County Southwest-Salton Sea-Imperial County West-Imperial Valley-Chiriaco Summit-Including the cities of Cottonwood Visitor, Lost Horse-Keys Village, Mountain Spring, Desert Shores, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, Brawley, and Chiriaco Summit  WIND ADVISORY IN EFFECT FROM 11 AM THURSDAY TO 1 AM PDT FRIDAY  The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 11 AM Thursday to 1 AM PDT Friday.  * AFFECTED AREAWestern Imperial County and portions of eastern Riverside county, including Joshua Tree National Park.  * TIMING11 AM Thursday to 1 AM PDT Friday  * WINDSSustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.	

					Event, Imperial County Appendix A	
ТҮРЕ	DATE	TII	ИΕ	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	9/20/2017	1459	MST	Phoenix	aloft centered over southwest Canada. Downstream is a ridge with undercutting flow over the eastern CONUS. Upstream of the low pressure region is a ridge being amplified by an upstream low centered near the western Aleutian islandsOver the next couple days, the low pressure region will change from an east-west orientation to more of a north-south orientationin response to the advancing upstream ridge. In the process, troughing will develop over the southwestern CONUS and a cold front will move through the region Thursday night and Friday. For our area, the system will largely be moisture starved and thus the main impacts will be wind and cooler temperatures. Winds get strong ahead of the front over southeast California Thursday and thus we have issued a Wind Advisory for portions of Imperial and eastern Riverside Counties (see WWA section below)	
Area Forecast Discussion	9/20/2017	2126	MST	Phoenix	.UPDATEUpdate Aviation Discussion. Southeast California/Southwest Arizona including KIPL and KBLH:Main aviation weather impact will be windy conditions developing Thursday afternoon. Winds will generally gust up to 25 kt, though an occasional gust to 30 kt is not out of the question at both KIPL and KBLH.	
Area Forecast Discussion	9/20/2017	2130	PDT	San Diego	At 9 PM PDT, water vapor satellite showed a deep upper-level trough across the PAC NW. Fog satellite showed stratus quickly filling in over areas west of the mountains. Low clouds will continue to develop along coastal mountain slopes and west to the coast overnight. Below normal highs, breezy westerly winds over the mountains and deserts and light showers west of the mountains are still on track for tomorrow. No changes were needed to the forecast this evening	
Urgent Weather Message	9/21/2017	0205	MST	Phoenix	WIND ADVISORY IN EFFECT FROM 11 AM THIS MORNING TO 1 AM PDT FRIDAYJoshua Tree NP West-Joshua Tree NP East-Imperial County Southwest-Salton Sea-Imperial County West-Imperial Valley-Chiriaco Summit-Including the cities of Cottonwood Visitor, Lost Horse-Keys Village, Mountain Spring, Desert Shores, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, Brawley, and Chiriaco Summit WIND ADVISORY REMAINS IN EFFECT FROM 11 AM THIS MORNING TO 1 AM PDT FRIDAY  * AFFECTED AREAWestern Imperial County and portions of eastern Riverside county, including Joshua Tree National Park.  * TIMING11 AM Thursday to 1 AM PDT Friday  * WINDSSustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.  * IMPACTSDifficult driving conditions, especially for high profile vehicles. In addition, briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Affected roadways include, but are not limited to, Interstate 10, Interstate 8, and California State Route 111.	

		1			Event, Imperial County Appendix I	
ТҮРЕ	DATE	TIN	ME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	9/21/2017	0222	PDT	San Diego	Strong winds in parts of the mountains and deserts today and tonightA deep trough of low pressure will bring strong winds to parts of the mountains and deserts through tonight. Winds will decrease overnight into Friday.  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, La Quinta, Coachella, Borrego Springs, and Desert Hot Springs WIND ADVISORY REMAINS IN EFFECT FROM 11 AM THIS MORNING TO 1 AM PDT FRIDAY  * WindsWest to southwest 20 to 30 mph with gusts of 40 to 50 mph.  * TimingToday and tonight.  * LocationStrongest winds will be on the mountain crests, through mountain passes, and into adjacent deserts.  * VisibilityBlowing dust could lead to greatly reduced visibility across parts of the desert.  * ImpactsDifficult travel for high profile vehicles and potential for sudden reductions in visibility.  * OutlookWinds will diminish early Friday morning.	
Area Forecast Discussion	9/21/2017	0230	PDT	San Diego	A big trough of low pressure, quite unseasonal for the last day of summer, will drop into Southern California todayWinds strengthen this afternoon and evening. Strongest winds will occur through mountain passes and east into adjacent deserts with top gusts over 45 mph	
Area Forecast Discussion	9/21/2017	0245	MST	Phoenix	Though the first vestiges of height falls and cold advection aloft are already impinging on SE California early this morning, the more pronounced impacts will be experienced late this afternoon and evening with a cold front and much lower theta-e airmass crossing the San Diego mountains. Fropa timing looks quite favorable for tapping and transferring momentum in the H8-H7 layer (40 kt above the shallow windward marine layer) and enhancement through the formation of stronger mountain rotors across the western half of Imperial County. The wind advisory was expanded slightly east towards terrain features into central Imperial County though impacts will be most evident along the I-8 corridor from El Centro westwardThe aforementioned cold front will forge through the state Friday, finally clearing into the New Mexico on Saturday	
Area Forecast Discussion	9/21/2017	0436	MST	Phoenix	.UPDATETo Aviation and Fire Weather DiscussionsSoutheast California/Southwest Arizona including KIPL and KBLH: Strong cool season frontal passage will generate windy conditions for the terminals today and into the overnight. Wind gusts 25-35kts will possible, more likely at KIPL than KBLH, from west-southwest headings by the afternoon. Skies will remain mostly clear and winds will subside into the overnight Thursday.	
Area Forecast Discussion	9/21/2017	0920	PDT	San Diego	UpdateWater vapor loop shows a trough digging south across California. A narrow moisture axis ahead of this trough will move south across Southern California todayWinds are on the increase out ahead of the trough. Max gusts are in the 35-45 mph range and expect this to continue. Wind prone locales such as Whitewater likely will hit 50+ mph this afternoon/early this evening before winds taper off tonight. A Wind Advisory continues in effect from the mountain crests to the desert floor. Patchy blowing dust and sand, creating restrictions in visibility, will be found across the deserts.	

		1			Event, Imperial County Appendix A	
ТҮРЕ	DATE	TIM	VIE	AGENCY	DESCRIPTIONStrong winds in parts of the mountains and deserts this afternoon and	PAGE
Urgent Weather Message	9/21/2017	1128	PDT	San Diego	tonightA deep trough of low pressure will bring strong winds to parts of the mountains and deserts through tonight. Winds will decrease overnight into Friday.  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, La Quinta, Coachella, Borrego Springs, and Desert Hot SpringsWIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT FRIDAY	
Area Forecast Discussion	9/21/2017	1429	PDT	San Diego	Water vapor imagery shows a trough digging south across California.  The base of the trough is currently moving into Southern California.  Temperatures this afternoon are only in the 80s in the Coachella  Valley!West-Southwest winds have picked up with gusts in the  mountains and deserts averaging 35-40 mph. However, some mountain ridges and pass locations have seen winds in the 45-55 mph range. Peak gust at Whitewater registered 55 mph at WhitewaterA few showers will  continue this evening. However, they will come to an end tonight as moisture gets shunted southeast of the area.	
Area Forecast Discussion	9/21/2017	1459	MST	Phoenix	Wind Advisory conditions are underway early this afternoon west of the Lower Colorado River Valley. METARs in the Imperial Valley have had gusts of 40-45 mph along with visibilities dipping down to 3 miles. These conditions (including the rest of the Advisory area) will continue the rest of the afternoon and most of the evening before winds become considerably lighter. At times, expect even lower visibilities in more dust/sand prone areas within the Advisory.	
Urgent Weather Message	9/21/2017	1503	MST	Phoenix	Joshua Tree NP West-Joshua Tree NP East-Imperial County Southwest-Salton Sea-Chuckwalla Mountains-Imperial County Southeast-Imperial County West-Imperial Valley-Chiriaco Summit-Including the cities of Cottonwood Visitor, Lost Horse-Keys Village, Mountain Spring, Desert Shores, Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, Brawley, and Chiriaco Summit WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT FRIDAY  * AFFECTED AREAImperial County and portions of eastern Riverside county, including Joshua Tree National Park.  * TIMINGUntil 1 AM PDT Friday.  * WINDSSustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.  * IMPACTSDifficult driving conditions, especially for high profile vehicles. In addition, briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Affected roadways include, but are not limited to, Interstate 8, Interstate 10, and California State Route 111.	

					Event, Imperial County Appendix I	1
ТҮРЕ	DATE	TII	ME	AGENCY	DESCRIPTION  LIDDATE Hadeted Assisting and Sira Weath assesting. Countries	PAGE
Area Forecast Discussion	9/21/2017	1555	MST	Phoenix	UPDATEUpdated Aviation and Fire Weather sectionsSoutheast California/Southwest Arizona including KIPL and KBLH: A cold front extending from roughly Salt Lake City to near Los Angeles as of 22Z will progress reach the Lower Colorado River Valley (LCRV) by 03Z-04Z. Strong southwest winds gusting 30-40 kts will be common near and west of the LCRV through 04Z before weakening. Expect areas of blowing dust reducing visibility well below 10SM with brief localized reductions of visibility down to 1 to 3SM. Winds will not be as strong east of the LCRV. Expect less wind on Friday. Otherwise, little or no cloudiness.	
Area Forecast Discussion	9/21/2017	2122	MST	Phoenix	.UPDATEUpdated discussion and Aviation Discussion. Southeast California/Southwest Arizona including KIPL and KBLH: Strong winds continue to be the biggest aviation weather concern. The wind direction will stay primarily westerly tonight and into Friday but gusts 20-30 kts will continue to impact the terminals through 07Z. Patches of blowing dust (BLDU) and restricted visibility are possible even though there currently is no mention of BLDU in the TAFs. Winds tomorrow should be weaker than today.	
Urgent Weather Message	9/22/2017	0053	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, La Quinta, Coachella, Borrego Springs, and Desert Hot Springs 1253 AM PDT Fri Sep 22 2017WIND ADVISORY WILL EXPIRE AT 1 AM PDT EARLY THIS MORNING Peak Wind gusts for Thursday in MPH Volcan Mountain SDGE 56 4 PM PDT Mountain Springs Grade 56 12 AM PDT White Water West RAWS 55 12 PM PDT White Water/Desert Hot Spgs 47 8 AM PDT Boucher Hill 46 1 PM PDT Harrison Park SDGE 46 3 PM PDT Thermal Airport 43 4 PM PDT	
Urgent Weather Message	9/22/2017	0058	MST	Phoenix	Joshua Tree NP West-Joshua Tree NP East-Salton Sea-Chuckwalla Mountains-Imperial County Southeast-Imperial County West-Imperial Valley-Chiriaco Summit-Including the cities of Cottonwood Visitor, Lost Horse-Keys Village, Desert Shores, Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, Brawley, and Chiriaco Summit 1258 AM PDT Fri Sep 22 2017 WIND ADVISORY IS CANCELLED  The National Weather Service in Phoenix has cancelled the Wind Advisory.  Strong winds have subsided over much of southeast California late this evening and as such the Wind Advisory will be cancelled on schedule at 1 AM PDT	
Urgent Weather Message	9/22/2017	0519	MST	Phoenix	Imperial County Southwest- Including the city of Mountain Spring 519 AM PDT Fri Sep 22 2017WIND ADVISORY HAS EXPIRED Winds have diminished from advisory levels and thus, the Wind Advisory expired on schedule at 5 AM PDT.	

45

TVD=				4.651.67	Liverit, Imperial County Appendix A	
ТҮРЕ	DATE	ПМЕ	Ł .	AGENCY		PAGE
Public Information Statement	9/22/2017	1015 F		San Diego	### DESCRIPTION Highest Observed Winds Gusts 10 AM Thursday to 10 AM Today San Diego County Mountains  Volcan Mountain 56 MPH 0420 PM 09/21 33.10N/116.58W/5154  Harrison Park 46 MPH 0320 PM 09/21 33.04N/116.56W/4861  Boucher Hill 44 MPH 0107 PM 09/21 33.33N/116.92W/5440  Descanso (8 NE) 41 MPH 0430 PM 09/21 32.93N/116.53W/4740  Ranchita (1 NE) 38 MPH 1207 PM 09/21 33.22N/116.50W/4415  Boulevard (5 NW) 36 MPH 0230 PM 09/21 32.70N/116.35W/4114  Boulevard (1 W) 36 MPH 0410 PM 09/21 32.66N/116.29W/3404 San Diego County Deserts  Borrego Springs (7 SE) 47 MPH 0428 PM 09/21 33.19N/116.28W/587  Ocotillo Wells (4 W) 37 MPH 0123 PM 09/21 33.15N/116.18W/436  In Ko Pah 37 MPH 0430 PM 09/21 32.64N/116.12W/3221  Borrego Springs (9 S) 35 MPH 1020 PM 09/21 33.14N/116.29W/768 Coachella Valley  Thermal Airport 43 MPH 0426 PM 09/21 33.63N/116.16W/-118  Coachella 42 MPH 0410 PM 09/21 33.67N/116.15W/110  Thousand Palms 40 MPH 0345 AM 09/22 33.82N/116.40W/272  Cathedral City (1 SW) 37 MPH 0452 PM 09/21 33.77N/116.48W/605  Thousand Palms (5 NE) 35 MPH 0240 PM 09/21 33.88N/116.34W/1089	PAGE

FXUS65 KPSR 180959 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 259 AM MST Mon Sep 18 2017

#### .SYNOPSIS...

Dry air over the Southwest will suppress thunderstorm activity over the region over the next couple days while temperatures remain near seasonal normals. A strong and expansive area of low pressure will develop over the Western U.S. during the latter part of the week bringing cooler temperatures, breezy conditions, and the chance for showers and a few thunderstorms to eastern portions of Arizona for Thursday and Friday. Well below normal temperatures and dry conditions will move in across the region this weekend.

#### &&

#### .DISCUSSION...

Clear skies under westerly zonal flow will persist across the Desert Southwest through Tuesday. Slight warming aloft will translate down to the surface starting today giving highs a couple degree boost. Highs today through Wednesday should end up in the upper 90s across the lower deserts.

A deep Pacific trough currently just entering the Pacific Northwest will stay well to our north through Tuesday, but a strong upper level jet is forecast to dig southward into the west side of the trough pushing the trough into the Great Basin Wednesday night. While this occurs, flow across Arizona will turn more southerly pulling up a thin layer of low level moisture out of northern Mexico into southeast and east-central Arizona. A few showers and thunderstorms will be possible as early as Wednesday evening across far east-central Arizona with increasing chances and spreading a bit farther west on Thursday.

The main trough axis will be slow to move through the Desert Southwest on Thursday into early Friday and the first shortwave is shown to be weakening as it pushes through Friday morning. The main drivers behind any shower and thunderstorm activity Wednesday night into Friday will be the weak to modest upper level dynamics associated with a strong upper level jet max to our northwest and low to mid level southwesterly upslope flow. Placement of the available moisture will limit rain chances to higher terrain areas east of Phoenix with the best chances likely falling between midday Thursday and Friday morning. Strong height falls entering the Desert Southwest and a modest surface pressure gradient will result in breezy to windy conditions on Thursday with afternoon gusts to around 30 mph. Winds on Friday will again be breezy, but with gusts mostly remaining below 25 mph.

IEM :: AFD from NWS PSR

September 21, 2017 Exceptional Event, Imperial County

Temperatures will take a decent hit on Thursday with increased

cloud cover and lower heights aloft resulting in highs near 90 across southeast California to near 95 in Phoenix. A weakening cold front is seen moving through Thursday night and Friday dropping highs on Friday into the middle to upper 80s across the lower deserts. Much drier air will also gradually move into the region by early Saturday ending any rain chances. The dry air and continued presence of the upper level trough will provide for very pleasant conditions this weekend. Highs should continue to run roughly 10 degrees below normal into Saturday and possibly Sunday.

&&

#### .AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL; and Southeast California/Southwest Arizona including KIPL and KBLH:

No aviation concerns through this evening under mostly clear skies. Wind shifts will follow typical timing and speeds should not be a major issue though a few gusts up to 20kt will be possible this afternoon.

Aviation Discussion not updated for amended TAFs.

&&

#### .FIRE WEATHER...

Wednesday through Sunday:

Persistent low pressure over the Great Basin will keep flow aloft mainly out of a west to southwest direction through the entire period. Dry conditions will persist over all of the districts through Wednesday. A modest increase in moisture will occur thereafter, bringing a slight chance of thunderstorms primarily to southern Gila County on Thursday and Friday. Gusty west to southwesterly winds are expected Wednesday and especially on Thursday, with the strongest winds occurring across parts of southeast California. Much cooler temperatures will arrive Friday behind a cold front, falling to around 10 degrees below normal for the date. Humidities to fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&8

**Appendix A** 

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...Kuhlman
AVIATION...Rogers
FIRE WEATHER...Percha/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



Facebook



**Twitter** 



Github



YouTube



RSS

Copyright © 2001-2019 Iowa State University of Science and Technology All rights reserved.

Non-discrimination Policy
Privacy Policy
Digital Access & Accessibility

**Appendix A** 

846 FXUS66 KSGX 181057 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 357 AM PDT Mon Sep 18 2017

.SYNOPSIS...

A little warmer today as low pressure weakens..then slow cooling for Tuesday and Wednesday with greater cooling for Thursday and Friday as another trough of low pressure moves into the western states. This trough will produce strong and gusty west winds in the mountains and deserts...along with increased clouds and maybe some light showers over and west of the mountains. Warmer for next weekend as high pressure aloft strengthens off the West Coast.

&&

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

.SHORT TERM (Today through Wednesday)...

A little warmer today as low pressure over the southwestern states weakens slight. Greatest warming is expected in the inland valleys. For Tuesday and Wednesday...low pressure will move into the Pacific Northwest with slowly strengthening onshore flow for Southern California bringing slow cooling. The marine layer will remain near 3000 feet deep with areas of night and morning coastal low clouds and patchy fog extending into portions of the valleys.

&&

.LONG TERM (Thursday through Sunday)...

The trough of low pressure over the western states will strengthen for Thursday and Friday...then weaken and move inland next weekend as high pressure aloft strengthens off the West Coast. This will bring stronger onshore flow across Southern California for Wednesday and Thursday with periods of stronger and gusty west winds for the mountains and deserts. The marine layer will deepen onto the coastal mountain slopes for Thursday into Friday. There are small chances for light precipitation along and west of the mountains for Thursday. There will be slow warming for Saturday and greater warming for Sunday and Monday. Weak offshore flow for Sunday and Monday could bring some gusty north to northeast winds near the coastal foothills and below passes and canyons.

&&

.AVIATION...

September 21, 2017 Exceptional Event, Imperial County 180900Z...Coast/Valleys...Low clouds will cover coastal areas and western valleys this morning. Bases will be 1800-2200 feet msl with tops to 3000 feet. Local vis 3-5sm along inland extent of clouds. Scatter out to occur 16-19Z in the valleys and 18-21Z in coastal areas with the possibility of local BKN cigs continuing after 21Z near the coast. Low clouds will redevelop after 02Z this evening and spread inland overnight.

IEM :: AFD from NWS SGX

Mountain/Deserts...Unrestricted visibility and clear skies will continue through tonight.

&&

.MARINE...

No significant marine weather is are expected through Wednesday. Increasing winds Thursday and building swell arriving Friday will lead to hazardous conditions particularly in 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...NONE.

&&

\$\$

PUBLIC...17

AVIATION/MARINE...MM

### IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

#### **Department of Agronomy**

716 Farm House Ln Ames, IA 50011 834 FXUS66 KSGX 181617 **AFDSGX** 

Area Forecast Discussion National Weather Service San Diego CA 917 AM PDT Mon Sep 18 2017

#### .SYNOPSIS...

Below average temperatures will continue for all areas through the end of the week. West of the mountains the marine layer will remain deep, resulting in persistent low clouds and slow to limited clearing each day along the coast. Some warming is possible over the weekend with the development of weak offshore flow.

#### &&

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

At 900 AM...Quiet weather remained in place over SoCal, with a broad longwave trough over the Western US. Dry air above the marine layer was bringing clear skies to inland areas, while the the marine layer stratus was impacting elevations below 3,000 ft west of the mountains. Winds were light from San Clemente Island to the deserts, with mild temperatures.

The marine layer stratus should slowly thin as we progress into this afternoon, with mostly sunny skies developing for most areas. The exception will be the coast, where stratus may linger or only partially clear. Afternoon high temperatures will be below normal for yet another day with the greatest departures being felt inland, were afternoon highs will be 5-10 degrees below seasonal averages. The stratus should return quickly this evening, again spreading into the valleys overnight.

The longwave trough over the West will amplify through the end of the workweek as it is reinforced by a pair of shortwave troughs. For SoCal this will mean the continuation of a deep marine layer, stubborn coastal low clouds, below average temperatures, and periods of breezy winds along/near the desert slopes. The coolest conditions will occur Thursday and Friday. There is a remote chance of a light shower west of the mountain ridges Thursday as the trough axis traverses the region.

The global models generally suggest a weakening of the trough over the West this weekend, and the development of a weak surface high over the Great Basin. The weak surface high, along with marginal mid level support (sub 700 mb northerly flow) may produce a weak offshore event. Los Angeles and San Bernardino Counties are the favored locations for offshore winds with this pattern. No notable **September 21, 2017 Exceptional Event, Imperial County** impacts are anticipated with this event at the moment, outside of temperatures returning to near/slightly above average readings west of the mountains. The deserts should remain near to slightly below average.

IEM :: AFD from NWS SGX

&&

.AVIATION...

181515Z...Coast/Valleys...Stratus with bases 1800-2500 ft MSL and tops to 3000 ft MSL becoming more widespread west of the mountains this morning. Expect slow clearing inland 16-19Z and partial clearing the coast 19-22Z. Stratus spreading back inland after 19/02Z and filling into the inland valleys overnight. Bases will be near 1600-2200 ft MSL with tops to 3000 ft MSL.

Mountain/Deserts...Clear with unrestricted vis through Tuesday morning.

&&

.MARINE...

No significant marine weather is are expected through Wednesday. Increasing winds Thursday and building swell arriving Friday will lead to hazardous conditions particularly in the outer waters.

&&

.SKYWARN...

Skywarn activation will not be needed this week.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

PUBLIC...Albright AVIATION/MARINE...SS

### IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

**Appendix A** 

300 FXUS65 KPSR 182033 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 133 PM MST Mon Sep 18 2017

#### .SYNOPSIS...

Dry air over the Southwest will suppress thunderstorm activity over the region over the next couple days while temperatures remain near seasonal normals. A strong and expansive area of low pressure will develop over the Western U.S. during the latter part of the week bringing cooler temperatures, breezy conditions, and the chance for showers and a few thunderstorms to eastern portions of Arizona for Thursday and Friday. Well below normal temperatures and dry conditions will move in across the region this weekend.

#### &&

.DISCUSSION...Very dry westerly flow will keep skies clear through tomorrow. With this very dry and stable airmass in place precipitation chances will be non-existent. Day time temperatures today and tomorrow will be just around normal with highs in the upper 90s across most lower desert locations. Overnight, temperatures will be slightly below normal, with lows in the upper 60s to mid 70s across the lower deserts.

A little update on Norma. Tropical Storm Norma, is currently situated west of southern Baja California. At 9AM MDT, Norma, had maximum sustained winds near 45 knots and was drifting slowly westward. During the next couple of days, Norma will gradually weaken as she enters cooler ocean waters, becoming a Tropical Depression by tomorrow evening. By Wednesday, she'll become a remnant low and gradually move northward ahead of an approaching Pacific trough.

The aforementioned trough which is just entering the Pacific Northwest will stay well to our north through Tuesday, but a strong upper level jet is forecast to dig southward into the west side of the trough pushing the trough into the Great Basin Wednesday night. While this occurs, flow across Arizona will turn more southerly pulling up a thin layer of low level moisture out of northern Mexico into southeast and east-central Arizona. A few showers and thunderstorms will be possible as early as Wednesday evening across far east-central Arizona with increasing chances and spreading a bit farther west on Thursday.

The main trough axis will be slow to move through the Desert Southwest on Thursday into early Friday and the first shortwave is shown to be weakening as it pushes through Friday morning. The main drivers behind any shower and thunderstorm activity Wednesday night into Friday will be the weak to modest upper level dynamics

September-21, 2017 Exceptional Event, Imperial County associated with a strong upper level jet max to our northwest and low to mid level southwesterly upslope flow. Placement of the available moisture will limit rain chances to higher terrain areas east of Phoenix with the best chances likely falling between midday Thursday and Friday morning. Strong height falls entering the Desert Southwest and a modest surface pressure gradient will result in breezy to windy conditions on Thursday with afternoon gusts to around 30 mph. Winds on Friday will again be breezy, but with gusts mostly remaining below 25 mph.

IEM :: AFD from NWS PSR

Temperatures will take a decent hit on Thursday with increased cloud cover and lower heights aloft resulting in highs near 90 across southeast California to near 95 in Phoenix. A weakening

cold front is seen moving through Thursday night and Friday dropping highs on Friday into the middle to upper 80s across the lower deserts. Much drier air will also gradually move into the region by early Saturday ending any rain chances. The dry air and continued presence of the upper level trough will provide for very pleasant conditions this weekend. Highs should continue to run roughly 10 degrees below normal into Saturday and possibly Sunday.

#### &&

#### .AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL; and Southeast California/Southwest Arizona including KIPL and KBLH:

No aviation concerns through this evening under mostly clear skies. Wind shifts will follow typical timing and speeds should not be a major issue though a few gusts up to 20kt will be possible this afternoon.

Aviation Discussion not updated for amended TAFs.

#### &&

#### .FIRE WEATHER...

Wednesday through Sunday:

Persistent low pressure over the Great Basin will keep flow aloft mainly out of a west to southwest direction through the entire period. Dry conditions will persist over all of the districts through Wednesday. A modest increase in moisture will occur thereafter, bringing a slight chance of thunderstorms primarily to southern Gila County on Thursday and Friday. Gusty west to southwesterly winds are expected Wednesday and especially on Thursday, with the strongest winds occurring across parts of southeast California. Much cooler temperatures will arrive Friday behind a cold front, falling to around 10 degrees below normal for the date. Humidities to fall mainly into the 15-30 percent range with good overnight recoveries.

.SPOTTER INFORMATION STATEMENT... Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...Hernandez/Kuhlman

AVIATION...Rogers FIRE

WEATHER...Percha/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



Facebook



Twitter





YouTube



FXUS66 KSGX 182054 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 154 PM PDT Mon Sep 18 2017

#### .SYNOPSIS...

Below average temperatures will persist for all areas through the end of the week. West of the mountains, a deep marine layer will remain in entrenched, resulting in persistent night and morning low clouds and slow to limited clearing each day along the coast. Some minor warming is possible over the weekend with the arrival of weak offshore flow, but most areas should remain at or below seasonal averages into early next week.

&&

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

At 145 PM...A broad longwave trough was over the Western US, resulting in quiet and cooler than average weather across SoCal. Skies were mostly sunny, apart from scattered marine layer stratus over the coastal waters, and winds were light from San Clemente Island to the deserts.

Continued onshore flow and a stable marine layer should allow the low stratus deck to push back inland around sunset or shortly thereafter. The low clouds should reach into the eastern valleys of San Diego County and the Inland Empire again tonight, with slow clearing likely again tomorrow morning. Afternoon highs tomorrow will be similar to today.

The longwave trough over the West will amplify through the end of the workweek as it is reinforced by a pair of shortwave troughs. For SoCal this will mean the continuation of a deep marine layer, recurrent/stubborn low clouds west of the mountains, below average temperatures, and periods of breezy winds over/near the desert slopes. The coolest conditions will occur Thursday and Friday, as the trough axis traverses the region and heights tumble. Afternoon highs on both days should be 10-15 degrees below seasonal averages for inland areas. There is some potential for a few light showers Thursday or Friday, but any precipitation should be very light.

The global models generally suggest a weakening of the trough over the West this weekend, and the development of a weak surface high over the Great Basin. This could bring weak offshore flow to the region by Sunday, with the pattern favoring Los Angeles and San Bernardino Counties. That said, the meek natures of the

September 21, 2017 Exceptional Event, Imperial County forcing/event should preclude any significant fire weather concerns, and temperatures will likely remain near or slightly below seasonal averages into early next week.

&&

.AVIATION...

181950Z...Coast/Valleys...Stratus with bases near 1600-2200 ft MSL and tops to 2800 ft MSL spreading back inland after 19/02Z and filling into the inland valleys overnight. Areas of vis 3-5 SM in BR developing in the valleys where stratus nears terrain. Gradual clearing occurring 19/16-19Z. Otherwise mostly clear with unrestricted vis through Tuesday afternoon.

Mountain/Deserts...Clear with unrestricted vis through Tuesday afternoon.

&&

.MARINE...

No significant marine weather is are expected through Wednesday. Northwest winds 20-25 kt Thursday afternoon into Friday will lead to hazardous boating conditions, particularly in the outer waters.

&&

.SKYWARN...

Skywarn activation will not be needed this week.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

PUBLIC...Albright AVIATION/MARINE...SS



College of Ag

Department of Agronomy

FXUS66 KSGX 190344 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 844 PM PDT Mon Sep 18 2017

#### .SYNOPSIS...

A low pressure trough over the West this week will maintain the marine layer and seasonally cool weather well inland. As the trough deepens midweek, nocturnal marine clouds will push farther inland and become more persistent as westerly winds increase and become gusty over the mountains and deserts. Some light precipitation may fall along and west of the mountains Thursday and Friday as well. Temperatures will remain below average into early next week.

&&

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

Satellite imagery showed patchy low clouds trying to form west of the mts, otherwise skies were clear. The 00Z Miramar sounding had a 5 degree C inversion based near 2700 FT MSL. Onshore sfc pressure gradients were running 6-7 MBS KSAN to the deserts. The gradient to NV was considerably stronger than yesterday. Peak westerly wind gusts were running 25-35 MPH in wind-prone mtn/desert areas.

Given the increasing onshore pressure gradients, some increase in marine layer depth is possible by morning. Otherwise a persistence forecast is prudent as heights change little through Tue and a dry westerly flow aloft continues. Bigger changes come Wed-Fri as the upper-trough amplifies and shortwaves energize lift and the marine layer for noticeably cooler days and perhaps even some light precipitation at times. No forecast changes.

From previous discussion...

Continued onshore flow and a stable marine layer should allow the low stratus deck to push back inland around sunset or shortly thereafter. The low clouds should reach into the eastern valleys of San Diego County and the Inland Empire again tonight, with slow clearing likely again tomorrow morning. Afternoon highs tomorrow will be similar to today.

The longwave trough over the West will amplify through the end of the workweek as it is reinforced by a pair of shortwave troughs. For SoCal this will mean the continuation of a deep marine layer, recurrent/stubborn low clouds west of the mountains, below average temperatures, and periods of breezy winds over/near the desert slopes. The coolest conditions will occu**so**Thursday and

September 21, 2017 Exceptional Event, Imperial County
Friday, as the trough axis traverses the region and heights

tumble. Afternoon highs on both days should be 10-15 degrees below seasonal averages for inland areas. There is some potential for a few light showers Thursday or Friday, but any precipitation should be very light.

The global models generally suggest a weakening of the trough over the West this weekend, and the development of a weak surface high over the Great Basin. This could bring weak offshore flow to the region by Sunday, with the pattern favoring Los Angeles and San Bernardino Counties. That said, the meek nature of the forcing/event should preclude any significant fire weather concerns, and temperatures will likely remain near or slightly

below seasonal averages into early next week.

&&

#### .AVIATION...

190330Z...Coast/Valleys...BKN/OVC stratus will continue to spread over coastal areas this evening and through most valleys by 09Z. Bases will be 1600-2200 ft MSL with tops to 2600 ft MSL. Local vis below 3 miles in fog will occur near the foothills 08Z-15Z Tue. Most valleys will clear 15Z-17Z Tue and coastal areas 17Z-20Z. Stratus will spread back inland Tue evening.

Mountain/Deserts...Clear with unrestricted vis through Tuesday evening. Local west wind gusts 25-35 knots will occur on desert slopes and through San Gorgonio Pass Tuesday late afternoon through evening.

&&

#### .MARINE...

No hazardous marine weather is expected through Wednesday. Northwest winds 20-25 kt Thursday afternoon through Friday will result in hazardous boating conditions, especially in the outer coastal waters. Lighter winds will likely return Saturday.

&&

#### .SKYWARN...

Skywarn activation will not be needed this week.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

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

Appendix A

FXUS65 KPSR 190957 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 257 AM MST Tue Sep 19 2017

#### .SYNOPSIS...

Dry air over the Southwest will persist through Wednesday as temperatures remain near seasonal normals across southeast California and southern Arizona. A strong and expansive area of low pressure will develop over the Western U.S. during the latter part of the week bringing cooler temperatures, breezy conditions, and the chance for showers and a few thunderstorms to eastern portions of Arizona for Thursday and Friday. Well below normal temperatures and dry conditions will move in across the region this weekend.

#### &&

#### .DISCUSSION...

Westerly dry flow still persists across the Desert Southwest with much of the region under clear skies. Near seasonal temperatures will again be seen today and even on Wednesday as an expansive low pressure trough remains situated across the Northwest U.S. Recent models runs have slowed up the progression of the upper level jet max diving southward along the western side of the closed low. This will keep our flow westerly through Wednesday with moisture remaining well south and east of our area.

Starting Wednesday night, a strong shortwave trough is shown diving southeastward through northern California causing the southern portion of the deep trough to dig southward into the Great Basin region on Thursday. As this occurs, our flow will turn more southerly allowing for at least some moisture seepage into southeast Arizona, but unlike the past several days models are now more stringent with how much moisture makes into eastern Arizona. Due to the slower progression of the low, PoPs for Wednesday and early Thursday have been lowered to below 10% while PoPs later Thursday into Friday have been lowered some across our eastern zones because of the decrease in expected moisture.

Breezy to windy conditions on Thursday still look very likely as the pressure gradient tightens in response to a deepening surface low over Utah. Gusts Thursday afternoon should reach 30-35 mph across portions of southeast California and to around 25 mph across southwest and south-central Arizona. The cold frontal passage on Thursday now looks to mainly pass through Thursday evening into the overnight hours, so highs on Thursday have been adjusted upward a couple degrees from previous forecasts.

- September 21, 2017 Exceptional Event, Imperial County across southern Gila county, but gradual drying will be taking place on Friday behind the cold front. Temperatures across the region on Friday will be the coolest since mid May as highs drop down into the mid to upper 80s across the lower deserts. The upper level trough is forecast to remain situated across the Southwest U.S. through the weekend as a strong ridge persists across the Eastern U.S. Dry westerly flow and continued cool conditions are in store for the region at least through the weekend and mostly likely into early next week. We should see temperatures start climbing back toward normals or even slightly above normals starting the middle of next week.

IEM:: AFD from NWS PSR

&&

.AVIATION... South-Central Arizona including KPHX, KIWA, and KSDL; and Southeast California/Southwest Arizona including KIPL and KBLH:

No aviation concerns through the taf period under mostly clear skies. Wind directions to mainly follow typical diurnal trends. Wind speeds to remain mainly on the light side through midday Tuesday, then increase a bit and become rather gusty on Tuesday afternoon, as low pressure begins to approach the region from the northwest.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...
Wednesday through Sunday:

Persistent low pressure over the Great Basin will keep flow aloft mainly out of a west to southwest direction through the entire period. Dry conditions will persist over all of the districts through Wednesday. A modest increase in moisture will occur thereafter, bringing a slight chance of thunderstorms primarily to southern Gila County on Thursday and Friday. Gusty west to southwesterly winds are expected Wednesday and especially on Thursday, with the strongest winds occurring across parts of southeast California. Much cooler temperatures will arrive Friday behind a cold front, falling to around 10 degrees below normal for the date. Humidities to fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&8

**Appendix A** 

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...Kuhlman
AVIATION...Percha
FIRE WEATHER...Percha/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



Facebook



**Twitter** 



Github



YouTube



RSS

Copyright © 2001-2019 lowa State University of Science and Technology All rights reserved.

Non-discrimination Policy

**Privacy Policy** 

Digital Access & Accessibility

FXUS66 KSGX 191024 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 324 AM PDT Tue Sep 19 2017

#### .SYNOPSIS...

A trough of low pressure over the western states will maintain stronger onshore flow and below average high temperatures through Friday with Thursday and Friday the coolest days. A deeper marine layer will continue with areas of night and morning coastal low clouds and patchy fog extending onto the lower coastal mountain slopes at times. There are small chances for light precipitation Thursday. Stronger onshore flow will bring periods of strong gusty west winds for the mountains and deserts Wednesday afternoon through Thursday night. High pressure aloft will strengthen off the West Coast this weekend with surface high pressure developing over the Great Basin early next week. This will bring a warming trend with periods of locally gusty northeast winds near the coastal foothills and below passes and canyons early next week.

88

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

Early this morning...the marine layer is near 3000 to 3500 feet deep with widespread stratus extending into the far inland valleys and into the Banning and Cajon passes.

A low pressure system centered along the British Columbia coast will move southward along the West Coast through Thursday and Friday...then weaken for the weekend into early next week as high pressure aloft strengthens off the West Coast.

Onshore flow will strengthen further for Wednesday afternoon through Thursday night with periods of strong gusty west winds from the mountain ridge tops into the deserts. There could be gusts to around 65 mph in the windier locations with strongest winds for Thursday afternoon and evening.

The marine layer will remain near 3000 to 3500 feet deep through Wednesday...then deepen further for Thursday with coastal low clouds extending onto the coastal slopes. There are small chances for light precipitation along and west of the mountains...mainly Thursday.

Cooler than average high temperatures will continue through Friday with Thursday and Friday the coolest days. Thursday is expected to be the coolest day west of the mountains with Friday the

### September 21, 2017 Exceptional Event, Imperial County coolest day farther inland.

High pressure aloft will strengthen off the West Coast this weekend with surface high pressure developing over the Great Basin early next week. This will bring a warming trend with high temperatures near to a little above average early next week. Periods of locally gusty northeast winds are possible near the coastal foothills and below passes and canyons early next week.

&&

.AVIATION...

190900Z...Coast/Valleys...Full coverage of low clouds this morning with bases around 2200-2500 feet msl and tops 3200 feet. Local vis below 3 miles in fog in foothills between those elevations. Most valleys will clear 16-18Z and coastal areas 17-20Z. Low clouds will redevelop and spread ashore after 02Z and inland overnight.

Mountain/Deserts...Clear today and tonight. Local west wind gusts 25-35 knots will occur on desert slopes and through San Gorgonio Pass late afternoon through evening.

&&

.MARINE...

No hazardous marine weather is expected through Wednesday. Northwest winds 20-25 kt Thursday afternoon through Friday will result in hazardous boating conditions, especially in the outer coastal waters. Lighter winds will likely return Saturday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

PUBLIC...17

AVIATION/MARINE...MM

808 FXUS66 KSGX 191631 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 931 AM PDT Tue Sep 19 2017

#### .SYNOPSIS...

Amplified onshore flow will contribute to continued below average temperatures through the weekend, with the coolest days occurring on Thursday and Friday. A deep marine layer will allow for persistent night and morning low clouds west of the mountains, with slow to limited clearing at times. Isolated light showers are possible west of the mountains on Thursday, with little to no accumulation. Gusty west winds and patchy blowing dust will impact the deserts slopes and deserts Thursday into Friday. A transition to offshore flow will produce a slow warming trend early next week.

&&

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

At 915 AM, A broad longwave trough remained in place over the Western US. Water vapor imagery showed a shortwave trough embedded within the longwave pattern off the coast of the Pacific Northwest. Locally, dry west northwest flow above 800 mb was keeping skies clear in the mountains and deserts, while a marine layer with a depth of around 3,500 ft MSL was allowing for widespread stratus from the mountain slopes to the coastal waters. Surface winds were light across the region.

For today through tonight, look for the marine stratus clear to the coast by late morning/early afternoon, leaving sunny skies for everyone this afternoon. Afternoon high temperatures will be below average yet again, generally by 5-10 degrees. Onshore flow will increase some this evening with peak gusts near 45 mph through the passes and along the desert slopes. The marine layer stratus should rebuild quickly after sunset, reaching the coastal slopes overnight with a depth of around 4,000 ft MSL. Elevations between 3,000 ft and 4,000 ft may experience patchy fog Wednesday morning.

The shortwave currently off the coast of the Pacific Northwest will dig along the coast, amplifying the longwave trough over the Western US Thursday and Friday. With this, heights will fall, onshore flow will increase and afternoon high temperatures will dip a few degrees further into the sub average category. Thursday looks to be the coolest day, with persistent low clouds and inland temperatures running 10-20 degrees below crage. A few

September 21, 2017 Exceptional Event, Imperial County light showers are also possible Thursday. Winds winds will become gusty in the passes, along the desert slopes and into the desert floor Thursday evening, and a Wind Advisory may be needed for the desert slopes and deserts of Riverside, San Diego, and San Bernardino Counties. Local wind gusts may exceed 60 mph during this period along the desert slopes in Riverside and San Diego Counties.

Global models agree on the overall synoptic pattern for next week. Suggesting that the longwave trough will weaken, transitioning to ridging with a cutoff upper low off the coast. This pattern would support the development of a weak surface high in the Great Basin and offshore flow early next week. At the moment this looks like

it will be sufficient for of a warming trend, and breezy winds below the Cajon Pass. This may result in locally elevated fire weather conditions (especially in the northern Inland Empire), but a significant offshore wind event is unlikely given current model projections.

&&

#### .AVIATION...

191525Z...Coast/Valleys...Widespread stratus with bases 2500-3500 ft MSL and tops to 4000 ft MSL gradually clearing to the coast 17-20Z. Low clouds will redevelop and spread back into the coastal areas 02-05Z before moving into the inland valleys overnight. Bases and tops will remain about the same. Areas of vis 3-5SM in BR/HZ developing in the valleys as stratus moves inland.

Mountain/Deserts...Clear with unrestricted vis through Wednesday morning. Local west wind gusts 25-35 knots will occur on desert slopes and through San Gorgonio Pass late this afternoon through the evening.

88

#### .MARINE...

No hazardous marine weather is expected through Wednesday. Northwest winds 20-25 kt Thursday afternoon through Friday will result in hazardous boating conditions, especially in the outer coastal waters. Lighter winds will likely return Saturday.

&&

#### .SKYWARN...

Skywarn activation will not be needed this week

&&

#### .SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

134 FXUS65 KPSR 192123 **AFDPSR** 

Area Forecast Discussion National Weather Service Phoenix AZ 223 PM MST Tue Sep 19 2017

#### .SYNOPSIS...

Dry air over the Southwest will persist through Wednesday as temperatures remain near seasonal normals across southeast California and southern Arizona. A strong and expansive area of low pressure will develop over the Western U.S. during the latter part of the week bringing cooler temperatures, breezy conditions, and the chance for showers and a few thunderstorms to eastern portions of Arizona for Thursday and Friday. Well below normal temperatures and dry conditions will move in across the region this weekend.

&&

#### .DISCUSSION...

Not much change in intermediate forecast as southwesterly flow aloft continues to supply plenty of dry air over the region. Mostly clear skies and near seasonal normal temperatures will continue through Thursday. Today's forecast calls for highs near 100 degrees for the lower desert with lows near 70. Then rinse and repeat, more or less, through Thursday. Thursday afternoon and evening does look to be rather breezy with gusts 20-30 miles per hour as a front associated with a strong Pacific trough approaches from the west.

The best weather in months, temperature wise, will begin to take root Friday and last through the weekend as the trough progresses through the region. On Friday, temperatures for many lower desert locations should sink a little below the 90 degree mark. Meanwhile, overnight lows will definitely be "open window weather" with temps in the 60s. The chance for precipitation with this system will leave much to be desired leaving the higher terrain with the best opportunity for rain.

Otherwise, dry westerly flow and continued cool conditions are in store for the region at least through the weekend and mostly likely into early next week. We should see temperatures start climbing back toward normals or even slightly above normals starting the middle of next week.

&&

.AVIATION... South-Central Arizona including KPHX, KIWA, and KSDL; and Southeast California/Southwest Arizona including KIPL and KBLH:

Minimal aviation concerns through the TAF periodsunder mostly clear

IEM :: AFD from NWS PSR September 21, 2017 Exceptional Event, Imperial County . Wind shifts will follow typical diurnal headings and speeds should not be a major issue with only a few gusts up to 20kt possible this afternoon and tomorrow afternoon.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Friday through Tuesday:

Persistent low pressure over the Great Basin will keep flow aloft mainly out of a west to southwest direction through Sunday before switching to a more northwesterly direction Monday through

Tuesday. A modest increase in moisture will occur Thursday through Friday, bringing a slight chance of thunderstorms primarily to southern Gila County. Dry conditions return Saturday through Tuesday. Much cooler temperatures will arrive Friday behind a cold front, falling to around 10 degrees below normal for the date. Humidities to fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...Deemer/Kuhlman

AVIATION...Hernandez

FIRE WEATHER...Hernandez



College of Ag

Department of Agronomy

987 FXUS65 KPSR 200918 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 218 AM MST Wed Sep 20 2017

#### .SYNOPSIS...

Dry conditions will last through Thursday while cooler air gradually filters into the region. A strong and expansive area of low pressure will begin to affect the Desert Southwest Thursday night, lasting into this weekend. This will result in breezy to windy conditions on Thursday followed by much cooler temperatures and a few showers or thunderstorms over far eastern portions of Arizona for Friday. The below normal temperatures will persist into early next week with dry conditions returning to the region by Saturday.

#### &&

#### .DISCUSSION...

Skies remain clear to mostly clear across the Southwest U.S. while a large upper level trough is situated across the Northwest U.S. Dry westerly flow still persists across the Desert Southwest to the south of the large trough, but this will shift more out of the southwest starting Thursday. This will occur as a strong shortwave trough digs down along the western edge of the large trough allowing it to dive into the Great Basin and southern California on Thursday. Deepening surface low pressure to our north on Thursday will promote a strong pressure gradient and breezy to windy conditions across the region with gusts across southeast California approaching Wind Advisory levels and gusts of 25-30 mph across southern Arizona.

Latest model runs continue to back off on the amount of low level moisture that advects into southeast Arizona on Thursday and Friday. There should be some isolated shower activity and maybe a few thunderstorms starting Thursday afternoon across far eastern Arizona, but this activity should mostly remain east of Globe. As the trough moves into Arizona Thursday night into Friday, a strong but dry cold front will track across the area. The cold front will usher in the coolest air we have seen since mid May with highs dropping to between 85-90 degrees Friday. These cooler conditions will persist through the weekend with lower desert highs generally only rising into the middle to upper 80s.

The deep trough will slowly track across the Intermountain West and Desert Southwest this weekend before finally lifting off to the east sometime early next week. The main trough axis likely won't move into New Mexico until Tuesday when we finally start to see a decent rise in temperatures. Long range model consensus then shows a high amplitude ridge building into the Western U.S for

IEM :: AFD from NWS PSR September 21, 2017 Exceptional Event, Imperial County the middle of next week which will bring lower desert high temperatures back well into the 90s.

&&

.AVIATION... South-Central Arizona including KPHX, KIWA, and KSDL; and Southeast California/Southwest Arizona including KIPL and KBLH:

Minimal aviation concerns through the TAF period under mostly clear skies. Wind shifts will follow typical diurnal headings and speeds should not be a major issue with only a few gusts up to 20kt possible this afternoon and tomorrow afternoon.

Aviation Discussion not updated for amended TAFs.

88

.FIRE WEATHER...

Friday through Tuesday:

Persistent low pressure over the Great Basin will keep flow aloft mainly out of a west to southwest direction through Sunday before switching to a more northwesterly direction Monday through Tuesday. A modest increase in moisture will occur Thursday through Friday, bringing a slight chance of thunderstorms primarily to southern Gila County. Dry conditions return Saturday through Tuesday. Much cooler temperatures will arrive Friday behind a cold front, falling to around 10 degrees below normal for the date. Humidities to fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...Kuhlman AVIATION...Hernandez FIRE WEATHER...Hernandez 432 FXUS66 KSGX 200918 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 218 AM PDT Wed Sep 20 2017

.SYNOPSIS...

A deep low pressure trough will bring cooler weather through Friday, along with mostly cloudy nights and partly cloudy days. There is a slight chance of showers Thursday. Strong westerly winds are expected in the mountains and deserts especially Thursday. Higher pressure and offshore flow develop over the weekend and next week leading to clear skies and warmer weather.

&&

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

Low clouds have settled into most of the coastal basin this morning, but curiously the massive cloud deck north and west of our region has disappeared. This is probably in response to the cooler air aloft that has begun to erode our marine inversion, which makes it hard for low clouds to form. Clouds will generally break up today, but could persist in some areas. Clouds will gather quickly this evening. An unseasonably deep trough will drop out of Washington down the West Coast today and Thursday. This will increase the onshore flow and strengthen our coastal eddy. There is a weak front-like feature that pushes through Southern California Thursday late morning. It looks capable of producing light showers anywhere from the coast to the mountain crests. Some foothill locations might get more than a tenth inch, but only a hundredth or two is most likely in the lower elevations. Winds will crank up as well in the mountains and deserts Thursday afternoon and evening. Top gusts in the top spots, such as through mountain passes and adjacently downwind, will exceed 50 mph, but most areas will stay under 45 mph. Temperatures will be mostly in the 70s, but 80s in the lower desert Thursday and Friday. That's 15-20 degrees below average for inland areas. On Friday the marine layer clouds will not be as solid, and even less so into Saturday. Most clouds on Friday will migrate inland and into foothills. Mother Nature is monitoring the calendar as we head into fall and has appropriately ordered up some fall weather with an offshore flavor. As the trough axis moves through California Friday and Saturday, dry northerly flow aloft develops and surface pressure gradients align into the offshore setup. That should take care of any residual clouds this weekend. Northeast winds will develop Sunday through and below the mountain passes into the inland valleys, mainly below Cajon Pass. Winds don't appear overly strong, although top spots around

IEM :: AFD from NWS SGX September 21, 2017 Exceptional Event, Imperial County Rialto could gust to 40 mph during the mornings through Tuesday.

Skies will turn crystal clear and humidity will go way down. Temperatures will climb each day next week, into the 80s and lower 90s at lower elevations by Tuesday. The warmup will be most notable west of the mountains as would be expected with offshore flow, but the dry air and the cool nights will make the warm weather fairly comfortable.

&&

#### .AVIATION...

200914Z...Coast/Valleys/Coastal Slopes... BKN-OVC stratus will continue to fill in over the coast, valleys, and lower coastal

slopes through 1500 UTC, with bases 2500-3500 ft msl, tops around 4000 ft msl, local vis 3-5 sm, and mountain obscuration of the coastal slopes. Forecast marine layer inversion strength of around 6 deg C at 1200 UTC. 1500-21/0000 UTC, stratus likely gradually clearing, although there's a chance that some areas may only partially clear. However, any cigs that occur should be mostly above 3000 ft msl. 21/0000-1500 UTC, stratus re-developing over the coast, valleys, coastal slopes and into the passes, with bases 2500-4000 ft msl, tops up to 5000 ft msl, possible -DZ/-SHRA and mountain obscuration of coastal slopes.

Mountain Ridges/Desert Slopes/Deserts...Mostly SKC with P6SM vis through Tonight. After 21/0000 UTC, west winds 20-30 kt with gusts 40 kt will create mod-stg uddfs/llws, and surface winds at KPSP and KTRM could gust to 30 kt at times.

&&

#### .MARINE...

Northwest wind gusts increasing to 25 kt Thursday afternoon through Friday. This, in addition a steep west-northwest swell of 6-8 ft/7-9 seconds, will likely result in hazardous conditions for small craft in the Outer Waters. Northwest winds will weaken this weekend with seas falling to 2-4 ft.

&&

#### .SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

FXUS66 KSGX 201638 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 938 AM PDT Wed Sep 20 2017

#### .SYNOPSIS...

A deep low pressure trough will bring cooler weather through Friday, along with mostly cloudy nights and partly cloudy days. There is a slight chance of showers Thursday. Strong westerly winds are expected in the mountains and deserts especially Thursday. Higher pressure and offshore flow develop over the weekend and next week leading to clear skies and warmer weather.

#### &&

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

#### ...Update...

Coastal eddy evident in satellite imagery and this really has the coast to inland valleys socked in with a stratus deck. Some sun is shining through in Orange County. Clouds will likely hang tough especially along the San Diego coast and valleys, though partial clearing is possible for a few hours this afternoon before status re-forms this evening. Winds will be picking up in the mountains and deserts by tomorrow and will be assessing whether a Wind Advisory may be needed for these areas for tomorrow and tomorrow night with latest guidance coming in.

.Previous Discussion (Issued at 218 AM PDT Wed Sep 20 2017)...

Low clouds have settled into most of the coastal basin this morning, but curiously the massive cloud deck north and west of our region has disappeared. This is probably in response to the cooler air aloft that has begun to erode our marine inversion, which makes it hard for low clouds to form. Clouds will generally break up today, but could persist in some areas. Clouds will gather quickly this evening. An unseasonably deep trough will drop out of Washington down the West Coast today and Thursday. This will increase the onshore flow and strengthen our coastal eddy. There is a weak front-like feature that pushes through Southern California Thursday late morning. It looks capable of producing light showers anywhere from the coast to the mountain crests. Some foothill locations might get more than a tenth inch, but only a hundredth or two is most likely in the lower elevations. Winds will crank up as well in the mountains and deserts Thursday afternoon and evening. Top gusts in the top spots, such as through mountain passes and adjagently downwind,

# IEM :: AFD from NWS SGX September 21, 2017 Exceptional Event, Imperial County will exceed 50 mph, but most areas will stay under 45 mph.

Temperatures will be mostly in the 70s, but 80s in the lower desert Thursday and Friday. That's 15-20 degrees below average for inland areas. On Friday the marine layer clouds will not be as solid, and even less so into Saturday. Most clouds on Friday will migrate inland and into foothills. Mother Nature is monitoring the calendar as we head into fall and has appropriately ordered up some fall weather with an offshore flavor. As the trough axis moves through California Friday and Saturday, dry northerly flow aloft develops and surface pressure gradients align into the offshore setup. That should take care of any residual clouds this weekend. Northeast winds will develop Sunday through and below the mountain passes into the inland valleys, mainly below Cajon

Pass. Winds don't appear overly strong, although top spots around Rialto could gust to 40 mph during the mornings through Tuesday. Skies will turn crystal clear and humidity will go way down. Temperatures will climb each day next week, into the 80s and lower 90s at lower elevations by Tuesday. The warmup will be most notable west of the mountains as would be expected with offshore flow, but the dry air and the cool nights will make the warm weather fairly comfortable.

&&

#### .AVIATION...

201530Z...Coast/Valleys/Coastal Slopes... BKN-OVC025-035 Tops 045 feet through 18Z. Stratus will be slow to clear today due to strong coastal eddy that will bring south winds to the coastal airports. Some areas may only partially clear this afternoon.

From 21/0000-1500Z, BKN-OVC025-035 Tops 045 with possible -DZ/-SHRA and mountain obscuration of coastal slopes.

Mountain Ridges/Desert Slopes/Deserts...Mostly SKC with P6SM vis through tonight. After 21/0000 UTC, west winds 20-30 kt with gusts 40 kt will create mod-stg uddfs/llws. Surface winds at KPSP and KTRM could gust to 30 kt at times.

&&

#### .MARINE...

Northwest wind gusts increasing to 25 kt Thursday afternoon through Friday. This, in addition a steep west-northwest swell of 6-8 ft/7-9 seconds, will likely result in hazardous conditions for small craft in the Outer Waters. Northwest winds will weaken this weekend with seas falling to 2-4 ft.

&&

#### .SKYWARN...

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

IEM :: AFD from NWS SGX

September 21, 2017 Exceptional Event, Imperial County

**Appendix A** 

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...NONE.

PZ...NONE.

&&

\$\$

PUBLIC...Gregoria (Update)/Prev Discussion (MM)
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



Facebook



Twitter



Github



YouTube



RSS

Copyright © 2001-2019 lowa State University of Science and Technology All rights reserved.

Non-discrimination Policy

Appendix A

946

WWUS76 KSGX 202041

**NPWSGX** 

URGENT - WEATHER MESSAGE National Weather Service San Diego CA 141 PM PDT Wed Sep 20 2017

...Increasing West to Southwest Winds Across the Mountains and Deserts Thursday into Thursday Night...

.A deepening trough will bring increasing West-Southwest winds to the mountain peaks to the desert floor Thursday into Thursday night.

CAZ055-056-058-060>062-065-211300-

/O.NEW.KSGX.WI.Y.0028.170921T1800Z-170922T0800Z/
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, La Quinta, Coachella,
Borrego Springs, and Desert Hot Springs
141 PM PDT Wed Sep 20 2017

...WIND ADVISORY IN EFFECT FROM 11 AM THURSDAY TO 1 AM PDT FRIDAY...

The National Weather Service in San Diego has issued a Wind Advisory...which is in effect from 11 AM Thursday to 1 AM PDT Friday.

- \* Winds...West to Southwest 20 to 30 mph with gusts of 40 to 50 mph.
- \* Timing...Thursday afternoon into Thursday night.
- \* Location...Mountain tops to the desert floor. Windiest along the desert mountain slopes and through passes.
- \* Visibility...Patchy blowing dust could lead to visibility restrictions to briefly a half mile or less across portions of the deserts.
- \* Impacts...Difficult travel for high profile vehichles and potential for sudden reductions in visibility.
- \* Outlook...Winds will gradually diminish early Friday morning.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Strong winds can make driving difficult...especially for high

September 21, 2017 Exceptional Event, Imperial County profile vehicles. Blowing dust in the deserts can lead to

restrictions in visibility. Drive with extra caution.

&&

\$\$ Gregoria

# **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











Copyright © 2001-2019 Iowa State University of Science and Technology All rights reserved.

Non-discrimination Policy **Privacy Policy** Digital Access & Accessibility T 388 FXUS66 KSGX 202103 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 203 PM PDT Wed Sep 20 2017

#### .SYNOPSIS...

An upper level trough will dig further south across Southern California Thursday through Friday, bringing temperatures well below normal for this time of the year, windy conditions to the mountains and deserts, and isolated showers from the coast to the coastal mountain slopes on Thursday. Surface high pressure will build in behind the trough over the Great Basin. This will lead to the development of offshore winds over the weekend and next week, leading to clear skies and warmer weather.

&&

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

A mid-upper level trough will dig south and across Southern California Thu-Fri. Low level moisture will increase across the area. The moisture will be confined below about 6,000 FT, but looks to be enough for a few showers from the coast to especially the coastal mountain slopes beginning around the morning rush Thursday with the rain risk continuing through Thursday evening.

Rain totals look to average a few hundredths of an inch along the coast to the inland valleys. Maxima looks to be along the San Bernardino coastal slopes in the Crestline-Yucaipa Ridge area where totals of just over a half an inch are forecast. There is a short period of decent upslope flow in concert with a narrow plume of moisture moving Southeast across the area to support this.

West to Southwest winds will increase as this trough moves by. H70 winds peak to around 35 KT. Very borderline for a Wind Advisory, but in coordination with neighbors, one was decided to be issued Thursday afternoon into Thursday night for the mountain tops to the desert floor. Peak wind gusts of 40-50 mph are forecast in the wind prone areas...mountain tops, desert slopes and through passes.

As the trough moves east, surface high pressure will build into the Great Basin. This will lead to the onset of offshore winds, bringing clearing skies and warming temperatures to the coast.

Northeast winds will develop Sunday through and below the mountain passes into the inland valleys, mainly below Cajon Pass. Winds don't appear overly strong, although top papts around Rialto

September 21, 2017 Exceptional Event; Imperial County could gust to 40 mph during the mornings through Tuesday. Skies will turn crystal clear and humidity will go way down.

Temperatures will climb each day next week, into the 80s and lower 90s at lower elevations by Tuesday. The warmup will be most notable west of the mountains as would be expected with offshore flow, but the dry air and the cool nights will make the warm

IEM :: AFD from NWS SGX

&&

#### .AVIATION...

weather fairly comfortable.

202040Z...Coast/Valleys/Coastal Slopes...SCT-BKN025-035 Tops 045 feet through 03Z. After 03Z skies becoming BKN-OVC020-030 Tops 050

through 18Z Thursday with -DZ/-SHRA between 12-18Z. Lower coastal slopes becoming obscured in clouds and fog.

Mountain Ridges/Desert Slopes/Deserts...Mostly SKC with P6SM vis through tonight. From 03-09Z...west winds 20-30 kt with gusts 40 kt with mod-stg uddfs/llws. Surface winds at KPSP and KTRM could gust to 25 kt at times.

&&

#### .MARINE...

Small Craft Advisory will be in effect over the Outer Waters Thursday afternoon through Thursday night for gusty northwest winds of 15-25 kt. The strong winds and steep west-northwest swells of 7 ft at 7 seconds will result in hazardous conditions for small craft. Winds will decrease early Friday morning, but then increase Friday afternoon to 10-20 kt. Lighter winds and smaller seas are forecast over the weekend.

88

#### .SKYWARN...

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

&&

#### .SGX WATCHES/WARNINGS/ADVISORIES...

- CA...Wind Advisory from 11 AM Thursday to 1 AM PDT Friday 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 from 11 AM Thursday to 1 AM PDT Friday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

156 WWUS75 KPSR 202131 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 231 PM MST Wed Sep 20 2017

CAZ560>563-566>568-210945-

/O.NEW.KPSR.WI.Y.0023.170921T1800Z-170922T0800Z/
Joshua Tree NP West-Joshua Tree NP East-Imperial County SouthwestSalton Sea-Imperial County West-Imperial Valley-Chiriaco SummitIncluding the cities of Cottonwood Visitor,
Lost Horse-Keys Village, Mountain Spring, Desert Shores,
Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo,
Plaster City, El Centro, Calexico, Alamorio, Brawley,
and Chiriaco Summit
231 PM PDT Wed Sep 20 2017

...WIND ADVISORY IN EFFECT FROM 11 AM THURSDAY TO 1 AM PDT FRIDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 11 AM Thursday to 1 AM PDT Friday.

- \* AFFECTED AREA...Western Imperial County and portions of eastern Riverside county, including Joshua Tree National Park.
- \* TIMING...11 AM Thursday to 1 AM PDT Friday
- \* WINDS...Sustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.
- \* IMPACTS...Difficult driving conditions, especially for high profile vehicles. In addition, briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Affected roadways include, but are not limited to, Interstate 10, Interstate 8, and California State Route 111.

### 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.

&&

771 FXUS65 KPSR 202159 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 259 PM MST Wed Sep 20 2017

#### .SYNOPSIS...

A region of low pressure will overspread the Western states the latter half of this week. The end result will be a significant cooling trend Thursday through Saturday along with breezy to windy conditions...mainly on Thursday. Precipitation chances will be slight and limited to the higher terrain of Arizona Thursday night through Saturday. Temperatures will slowly warm next week.

&&

#### .DISCUSSION...

Rest of today through Sunday...

Skies are clear over the Desert Southwest with the exception of some cumulus over southeast Arizona. Temperatures early this afternoon are running very close to what they were 24 hours ago and thus very close to normal for the date. Looking at the bigger picture, there is a large region of low pressure aloft centered over southwest Canada. Downstream is a ridge with undercutting flow over the eastern CONUS. Upstream of the low pressure region is a ridge being amplified by an upstream low centered near the western Aleutian islands.

Over the next couple days, the low pressure region will change from an east-west orientation to more of a north-south orientation in response to the advancing upstream ridge. In the process, troughing will develop over the southwestern CONUS and a cold front will move through the region Thursday night and Friday. For our area, the system will largely be moisture starved and thus the main impacts will be wind and cooler temperatures. Winds get strong ahead of the front over southeast California Thursday and thus we have issued a Wind Advisory for portions of Imperial and eastern Riverside Counties (see WWA section below). As for temperatures, highs on the lower deserts will drop to the mid 80s to near 90 on Friday. A follow-on short wave adds a little more cooling Saturday. Due to the lack of moisture, there will only be low end slight chance PoPs for our easternmost areas Friday into Saturday (east of Globe). The trough axis begins shifting to the Rockies on Sunday with little change in temperatures.

Monday through Wednesday...

Troughing will be slow to leave leave the interior West early next week but model consensus shows a high amplitude ridge building into the Western U.S by Wednesday which will bring lower desert high temperatures back well into the 90s. Of note, the GFS wants

- September 21, 2017 Exceptional Event, Imperial County to develop a new closed low but this is somewhat of an outlier (though not totally isolated from all GEFS members). The ECMWF does not depict this.

&&

.AVIATION... South-Central Arizona including KPHX, KIWA, and KSDL; and Southeast California/Southwest Arizona including KIPL and KBLH:

Clear skies will continue with generally light and diurnal winds. A few gusts around 15-20 kt are possible this afternoon out of the southwest, before diminishing after sunset. Otherwise, aviation concerns are expected to remain minimal.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Friday through Tuesday:

Cooler temperatures associated with a seasonably strong low pressure area over the Great Basin will persist throughout the weekend, about 10-15 degrees below seasonal normals. A slight chance of thunderstorms is possible across parts of southern Gila County, with the remainder of the forecast period dry. Humidities will fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 11 AM Thursday to 1 AM PDT Friday for CAZ560>563-566>568.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...AJ
AVIATION...Rogers
FIRE WEATHER...Rogers

971 FXUS65 KPSR 210426 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 926 PM MST Wed Sep 20 2017

.UPDATE...Update Aviation Discussion.

&&

#### .SYNOPSIS...

A region of low pressure will overspread the Western states the latter half of this week. The end result will be a significant cooling trend Thursday through Saturday along with breezy to windy conditions, mainly on Thursday. Precipitation chances will be slight and limited to the higher terrain of Arizona Thursday night through Saturday. Temperatures will slowly warm next week.

&&

#### .DISCUSSION...

Clear skies prevail across the Desert Southwest ahead of an anomalously deep trough across the Great Basin. Expecting near normal temperatures tonight and tomorrow before the cooling trend begins.

&&

#### .PREVIOUS DISCUSSION...

Rest of today through Sunday...

Looking at the bigger picture, there is a large region of low pressure aloft centered over southwest Canada. Downstream is a ridge with undercutting flow over the eastern CONUS. Upstream of the low pressure region is a ridge being amplified by an upstream low centered near the western Aleutian islands.

Over the next couple days, the low pressure region will change from an east-west orientation to more of a north-south orientation in response to the advancing upstream ridge. In the process, troughing will develop over the southwestern CONUS and a cold front will move through the region Thursday night and Friday. For our area, the system will largely be moisture starved and thus the main impacts will be wind and cooler temperatures. Winds get strong ahead of the front over southeast California Thursday and thus we have issued a Wind Advisory for portions of Imperial and eastern Riverside Counties (see WWA section below). As for temperatures, highs on the lower deserts will drop to the mid 80s to near 90 on Friday. A follow-on short wave adds a little more cooling Saturday. Due to the lack of moisture, there will only be low end slight chance PoPs for our easternmost areas Friday into Saturday (east of Globe). The trough axis beging shifting to the

# September 21, 2017 Exceptional Event, Imperial County Rockies on Sunday with little change in temperatures.

Monday through Wednesday...

Troughing will be slow to leave leave the interior West early next week but model consensus shows a high amplitude ridge building into the Western U.S by Wednesday which will bring lower desert high temperatures back well into the 90s. Of note, the GFS wants to develop a new closed low but this is somewhat of an outlier (though not totally isolated from all GEFS members). The ECMWF does not depict this.

&&

#### .AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Breezy conditions will develop during the afternoon ahead of a frontal boundary. Westerly gusts will reach as high as 20 to 25 kt, before subsiding during the evening. The onset of the easterly flow will consequently be delayed until at least 09z Friday at KPHX.

Southeast California/Southwest Arizona including KIPL and KBLH: Main aviation weather impact will be windy conditions developing Thursday afternoon. Winds will generally gust up to 25 kt, though an occasional gust to 30 kt is not out of the question at both KIPL and KBLH.

Aviation Discussion not updated for amended TAFs.

&&

#### .FIRE WEATHER...

Friday through Tuesday:

Cooler temperatures associated with a seasonably strong low pressure area over the Great Basin will persist throughout the weekend, about 10-15 degrees below seasonal normals. A slight chance of thunderstorms is possible across parts of southern Gila County, with the remainder of the forecast period dry. Humidities will fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 11 AM Thursday to 1 AM PDT Friday for CAZ560>563-566>568.

FXUS66 KSGX 210430 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 930 PM PDT Wed Sep 20 2017

#### .UPDATE...

At 9 PM PDT, water vapor satellite showed a deep upper-level trough across the PAC NW. Fog satellite showed stratus quickly filling in over areas west of the mountains. Low clouds will continue to develop along coastal mountain slopes and west to the coast overnight. Below normal highs, breezy westerly winds over the mountains and deserts and light showers west of the mountains are still on track for tomorrow. No changes were needed to the forecast this evening.

#### &&

#### .SYNOPSIS...

An upper level trough will dig further south across Southern California Thursday through Friday, bringing temperatures well below normal for this time of the year, windy conditions to the mountains and deserts, and isolated showers from the coast to the coastal mountain slopes on Thursday. Surface high pressure will build in behind the trough over the Great Basin. This will lead to the development of offshore winds over the weekend and next week, leading to clear skies and warmer weather.

#### &&

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

#### .PREV DISCUSSION...

A mid-upper level trough will dig south and across Southern California Thu-Fri. Low level moisture will increase across the area. The moisture will be confined below about 6,000 FT, but looks to be enough for a few showers from the coast to especially the coastal mountain slopes beginning around the morning rush Thursday with the rain risk continuing through Thursday evening.

Rain totals look to average a few hundredths of an inch along the coast to the inland valleys. Maxima looks to be along the San Bernardino coastal slopes in the Crestline-Yucaipa Ridge area where totals of just over a half an inch are forecast. There is a short period of decent upslope flow in concert with a narrow plume of moisture moving Southeast across the area to support this.

West to Southwest winds will increase as this trough moves by. H700 winds peak to around 35 KT. Very borderling for a Wind

**September 21, 2017 Exceptional Event, Imperial County** Advisory, but in coordination with neighbors, one was decided to be issued Thursday afternoon into Thursday night for the mountain tops to the desert floor. Peak wind gusts of 40-50 mph are forecast in the wind prone areas...mountain tops, desert slopes and through passes.

IEM :: AFD from NWS SGX

As the trough moves east, surface high pressure will build into the Great Basin. This will lead to the onset of offshore winds, bringing clearing skies and warming temperatures to the coast.

Northeast winds will develop Sunday through and below the mountain passes into the inland valleys, mainly below Cajon Pass. Winds don't appear overly strong, although top spots around Rialto

could gust to 40 mph during the mornings through Tuesday. Skies will turn crystal clear and humidity will go way down.

Temperatures will climb each day next week, into the 80s and lower 90s at lower elevations by Tuesday. The warmup will be most notable west of the mountains as would be expected with offshore flow, but the dry air and the cool nights will make the warm weather fairly comfortable.

#### &&

#### .AVIATION...

210345Z...Coast/Valleys/Coastal Slopes...Stratus with bases 2000-3000 ft MSL and tops to 4500 ft MSL filling in west of the mountains overnight, obscuring coastal mountain slopes. Patchy -DZ/-SHRA possible 10-18Z. Local MVFR CIGS/VIS possible with showers. Low clouds becoming SCT-BKN with bases mostly above 3000 ft MSL after 18-20Z, then becoming BKN-OVC again with bases lowering back to 2000-3000 ft MSL Thursday evening.

Mountain Ridges/Desert Slopes/Deserts...Mostly clear with unrestricted vis through Thursday evening. Through 09Z...west winds 15-25 kt with gusts 35 kt with mod-stg uddfs/llws. Winds will strengthen after 18Z with gusts to 45 kt possible below the passes, on desert slopes, and near the desert foothills.

#### &&

#### .MARINE...

Small Craft Advisory remains in effect over the outer coastal waters Thursday afternoon through Thursday night for gusty northwest winds of 15-25 kt. The strong winds and steep west-northwest swells of 7 ft at 7 seconds will result in hazardous conditions for small craft. Winds will decrease early Friday morning, but then increase Friday afternoon to around 20 kt. Lighter winds and smaller seas are forecast over the weekend.

#### &&

#### .SKYWARN...

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

# **September 21, 2017 Exceptional Event, Imperial County**

**Appendix A** 

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 11 AM Thursday to 1 AM PDT Friday 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 from 11 AM Thursday to 1 AM PDT Friday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

PUBLIC...Gregoria/JJT AVIATION/MARINE...SS



College of Ag

Department of Agronomy

#### **Department of Agronomy**

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone



Facebook



Twitter



Github



YouTube

```
Appendix A
```

973

WWUS75 KPSR 210905 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 205 AM MST Thu Sep 21 2017

CAZ564-565-212230-

/O.EXA.KPSR.WI.Y.0023.170921T1800Z-170922T0800Z/ Chuckwalla Mountains-Imperial County Southeast-Including the cities of Imperial Hot Mineral Springs and Winterhaven 205 AM PDT Thu Sep 21 2017

...WIND ADVISORY IN EFFECT FROM 11 AM THIS MORNING TO 1 AM PDT FRIDAY...

The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 11 AM this morning to 1 AM PDT Friday.

- \* AFFECTED AREA...Eastern Imperial County.
- \* TIMING...11 AM Thursday to 1 AM PDT Friday
- \* WINDS...Sustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.
- \* IMPACTS...Difficult driving conditions, especially for high profile vehicles. In addition, briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Affected roadways include, but are not limited to Interstate 8 and California State Route 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.

&&

\$\$

CAZ560>563-566>568-212230-

/O.CON.KPSR.WI.Y.0023.170921T1800Z-170922T0800Z/

Joshua Tree NP West-Joshua Tree NP East-Imperial County Southwest-Salton Sea-Imperial County West-Imperial Valleyechiriaco Summit-

September 21, 2017 Exceptional Event, Imperial County Including the cities of Cottonwood Visitor,

Lost Horse-Keys Village, Mountain Spring, Desert Shores, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, Brawley, and Chiriaco Summit 205 AM PDT Thu Sep 21 2017

- ...WIND ADVISORY REMAINS IN EFFECT FROM 11 AM THIS MORNING TO 1 AM PDT FRIDAY...
- \* AFFECTED AREA...Western Imperial County and portions of eastern Riverside county, including Joshua Tree National Park.
- \* TIMING...11 AM Thursday to 1 AM PDT Friday
- \* WINDS...Sustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.
- \* IMPACTS...Difficult driving conditions, especially for high profile vehicles. In addition, briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Affected roadways include, but are not limited to, Interstate 10, Interstate 8, and California State Route 111.

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.

&&

\$\$

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

### **Department of Agronomy**

716 Farm House Ln Ames, IA 50011 1 536

WWUS76 KSGX 210922

NPWSGX

URGENT - WEATHER MESSAGE National Weather Service San Diego CA 222 AM PDT Thu Sep 21 2017

 $\ldots$ Strong winds in parts of the mountains and deserts today and tonight...

.A deep trough of low pressure will bring strong winds to parts of the mountains and deserts through tonight. Winds will decrease overnight into Friday.

CAZ055-056-058-060>062-065-211900-

/O.CON.KSGX.WI.Y.0028.170921T1800Z-170922T0800Z/
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, La Quinta, Coachella,
Borrego Springs, and Desert Hot Springs
222 AM PDT Thu Sep 21 2017

- ...WIND ADVISORY REMAINS IN EFFECT FROM 11 AM THIS MORNING TO 1 AM PDT FRIDAY...
- \* Winds...West to southwest 20 to 30 mph with gusts of 40 to 50 mph.
- \* Timing...Today and tonight.
- \* Location...Strongest winds will be on the mountain crests, through mountain passes, and into adjacent deserts.
- \* Visibility...Blowing dust could lead to greatly reduced visibility across parts of the desert.
- \* Impacts...Difficult travel for high profile vehicles and potential for sudden reductions in visibility.
- \* Outlook...Winds will diminish early Friday morning.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Strong winds can make driving difficult...especially for high profile vehicles. Blowing dust in the deserts can lead to restrictions in visibility. Drive with extra caution.

&&

7 365 FXUS66 KSGX 210930 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 230 AM PDT Thu Sep 21 2017

#### .SYNOPSIS...

A trough of low pressure will drop into Southern California today and linger through Saturday. Today it will bring cooler and cloudier weather, some showers from the coast to the mountain crests, and areas of strong winds in the mountains and deserts. As the trough departs over the weekend, offshore flow will develop to bring clear skies and a warming trend next week.

&&

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

A big trough of low pressure, quite unseasonal for the last day of summer, will drop into Southern California today. Clouds have already filled the coastal basin pretty much to the brim, that is, to the mountain crests. A couple spots on the coastal slopes have already begun to measure a few hundredths of rain. Later this morning, a more organized band of legit showers will form along a surface wind discontinuity over the ocean, meaning some uplift will be generated along a line where southerly winds meet with westerly winds. This band of showers will bring light rainfall: below a tenth inch for most everywhere, but some foothill locations such as near Crestline could harvest a third inch or more. Winds strengthen this afternoon and evening. Strongest winds will occur through mountain passes and east into adjacent deserts with top gusts over 45 mph. Temperatures will be in the low 70s for most of the low elevations west of the mountains today, 15-20 degrees below average for the inland valleys. Residual moisture and onshore flow will keep skies partly cloudy and temperatures well below normal for Friday. A secondary shortwave within the big trough over the West will slow down the trough such that it won't really move out until Sunday. The surface flow will gradually go offshore and that will help clear the area of clouds over the weekend. Northeast winds will get started Sunday and appear each morning through at least Tuesday. Local gusts below Cajon Pass and in the Santa Ana Mountains could exceed 40 mph each morning, but overall this will not be a widespread or strong offshore event. This fall weather comes right on schedule as if the atmosphere knew it was time to start acting like fall. Temperatures will climb each day next week, topping 90 in a few spots by Monday, with 90s more common in the following days. Clouds will be hard to come by next week. The clear skies and dry air will allow temps to drop at night, providing some relief from the not days.

## September 21, 2017 Exceptional Event, Imperial County

&&

#### .AVIATION...

210900Z...Coast/Valleys/Coastal Slopes...widespread stratus over the coast, valleys, coastal slopes and mountain passes, with highly variable bases of 2500-4000 ft msl, tops of 5000-6000 ft msl, areas of -DZ/isol -SHRA producing local vis/cigs of 2-5 sm/1000-1500 ft msl, and mountain obscuration of coastal slopes below 6000 ft msl, will continue for the most part through 22/0000 UTC, although cloud coverage may become BKN-SCT after 1800 UTC with -DZ/-SHRA likely ending by 2100 UTC. 22/0000-1500 UTC, BKN-OVC stratus filling the coast, valleys and coastal slopes, with bases 2500-3500 ft msl, tops

4500-5000 ft msl and mountain obscuration of coastal slopes below 5000 ft msl.

Mountain Ridges/Desert Slopes/Deserts...Mostly SKC with P6SM vis through tonight. Through 1800 UTC, west winds 15-25 kt with gusts 35 kt with mod-stg uddfs/llws. Winds will strengthen after 1800 UTC with gusts to 45 kt possible below the passes, on desert slopes, and near the desert foothills, resulting in stg uddfs/llws as well as surface wind gusts at KPSP and KTRM possibly reaching 35 kt at times.

&&

#### .MARINE...

A Small Craft Advisory will be in effect for the outer coastal waters this afternoon through late tonight as a trough of low pressure creates moderate to strong onshore flow. Northwest wind gusts of 25 kt are likely in the outer waters, while the inner waters will see gusts mainly in the 15-20 kt rang (which is below Small Craft Advisory criteria). At the same time, there will also be short-period seas of 4-7 ft. Although winds will decrease early Friday morning, another increase in winds is expected late Friday afternoon with wind gusts in the outer waters mainly around 20 kt. Lighter winds and smaller seas are forecast over the weekend.

&&

#### .SKYWARN...

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

&&

#### .SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 11 AM this morning to 1 AM PDT Friday 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.

8/21/2019

IEM :: AFD from NWS SGX

Appendix A

September 21, 2017 Exceptional Event, Imperial County for Waters from San Mateo point to the Mexican Border

Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

PUBLIC...MM
AVIATION/MARINE...Harrison

# 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











Copyright © 2001-2019
Iowa State University
of Science and Technology
All rights reserved.

Non-discrimination Policy
Privacy Policy
Digital Access & Accessibility

FXUS65 KPSR 210945 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 245 AM MST Thu Sep 21 2017

#### .SYNOPSIS...

An area of low pressure and associated cold front will sweep through the region over the next two days. The end result will be substantially cooler temperatures along with occasionally breezy conditions. Precipitation chances will be neglible and limited to only some sprinkles over the higher terrain locations. Temperatures will only slowly warm back to near average next week.

&&

#### .DISCUSSION...

A positively tilted, yet seasonally deep negative height anomaly through the NW quarter of the Conus will nearly stall over the Great Basin and Southwest through early next week as downstream high amplitude ridging temporarily blocks the progression of the westerly flow pattern. H5 heights below 570dm will hover over the northern half of Arizona through the weekend easily providing the coolest weather of this burgeoning autumn season. The blocked flow regime will be stubborn to relinquish its hold on the country even into the middle of next week with somewhat lower heights likely lingering over the forecast area towards the end of the month. Despite this blocking pattern and larger anomaly framework, ensemble output displays remarkable agreement through early next week yielding better than expected forecast confidence.

Though the first vestiges of height falls and cold advection aloft are already impinging on SE California early this morning, the more pronounced impacts will be experienced late this afternoon and evening with a cold front and much lower theta-e airmass crossing the San Diego mountains. Fropa timing looks quite favorable for tapping and transferring momentum in the H8-H7 layer (40 kt above the shallow windward marine layer) and enhancement through the formation of stronger mountain rotors across the western half of Imperial County. The wind advisory was expanded slightly east towards terrain features into central Imperial County though impacts will be most evident along the I-8 corridor from El Centro westward. Otherwise further east into central Arizona, there is model evidence of enhanced sfc pressure packing along a pre-frontal trough such that some localized blowing dust coincident with 30 mph gusts along I-8 from Gila Bend to Casa Grande is also possible.

The aforementioned cold front will forge through the state Friday, finally clearing into the New Mexico on Saturday. Moisture availability along this boundary will be tenuous, at best with only a few model iterations suggesting a narrow moistatongue present

September 21, 2017-Exceptional Event, Imperial County within a frontal based orographic upslope regime (albeit before more supportive cooler temperatures aloft advect eastward). Based on forecast soundings, little more than a brief shower/sprinkle looks possible along this front. Winds will remain occasionally gusty Friday afternoon though begin to weaken after fropa and sunset Friday evening.

More notable through the weekend will be the unusually cool temperatures. Ensemble means depict heights and temperatures aloft within the trough core some 3 normalized standard deviations below normal, or below the 2nd percentile for the end of September. Closer to central Arizona, anomalies will be closer to the lowest 10th percentile, that is, historically equating to highs only in the

middle/upper 80s. Even more amazing will be overnight lows in the 50s and lower 60s and these readings some 10F-15F below average will persist into early next week.

The overall troughing structure will be maintained over the SW Conus into the middle of next week, however heights will slowly rise as weakening and filling of the trough begins. Downstream eastern Conus ridging will also weaken allowing for a pattern shift/adjustment by the end of next week. At this point, operational and ensemble output diverge with respect to how much vorticity/circulation remains centered over Arizona or gets displaced by high pressure building from the east Pacific. Regardless, temperatures will undoubtedly moderate much closer to the seasonal normal beyond the middle of the week.

&&

#### .AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Breezy conditions will develop during the afternoon ahead of a frontal boundary. Westerly gusts will reach as high as 20 to 25 kt, before subsiding during the evening. The onset of the easterly flow will consequently be delayed until at least 09z Friday at KPHX.

Southeast California/Southwest Arizona including KIPL and KBLH: Main aviation weather impact will be windy conditions developing Thursday afternoon. Winds will generally gust up to 25 kt, though an occasional gust to 30 kt is not out of the question at both KIPL and KBLH.

Aviation Discussion not updated for amended TAFs.

&&

#### .FIRE WEATHER...

Friday through Tuesday:

Cooler temperatures associated with a seasonably strong low pressure area over the Great Basin will persist throughout the weekend, about 10-15 degrees below seasonal normals. A slight chance of thunderstorms is possible across parts of southern Gila

**September 21, 2017 Exceptional Event, Imperial County** County, with the remainder of the forecast period dry. Humidities will fall mainly into the 15-30 percent range with good overnight recoveries.

IEM :: AFD from NWS PSR

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 11 AM this morning to 1 AM PDT Friday for CAZ560>563-566>568.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...MO
AVIATION...Hirsch
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





8/22/2019

IEM :: AFD from NWS PSR **September 21, 2017 Exceptional Event, Imperial County** 

**Appendix A** 



Github



YouTube



Copyright © 2001-2019 Iowa State University of Science and Technology All rights reserved.

Non-discrimination Policy **Privacy Policy** Digital Access & Accessibility 712 FXUS65 KPSR 211136 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 436 AM MST Thu Sep 21 2017

.UPDATE...To Aviation and Fire Weather Discussions...

&&

#### .SYNOPSIS...

An area of low pressure and associated cold front will sweep through the region over the next two days. The end result will be substantially cooler temperatures along with occasionally breezy conditions. Precipitation chances will be neglible and limited to only some sprinkles over the higher terrain locations. Temperatures will only slowly warm back to near average next week.

&&

#### .DISCUSSION...

A positively tilted, yet seasonally deep negative height anomaly through the NW quarter of the Conus will nearly stall over the Great Basin and Southwest through early next week as downstream high amplitude ridging temporarily blocks the progression of the westerly flow pattern. H5 heights below 570dm will hover over the northern half of Arizona through the weekend easily providing the coolest weather of this burgeoning autumn season. The blocked flow regime will be stubborn to relinquish its hold on the country even into the middle of next week with somewhat lower heights likely lingering over the forecast area towards the end of the month. Despite this blocking pattern and larger anomaly framework, ensemble output displays remarkable agreement through early next week yielding better than expected forecast confidence.

Though the first vestiges of height falls and cold advection aloft are already impinging on SE California early this morning, the more pronounced impacts will be experienced late this afternoon and evening with a cold front and much lower theta-e airmass crossing the San Diego mountains. Fropa timing looks quite favorable for tapping and transferring momentum in the H8-H7 layer (40 kt above the shallow windward marine layer) and enhancement through the formation of stronger mountain rotors across the western half of Imperial County. The wind advisory was expanded slightly east towards terrain features into central Imperial County though impacts will be most evident along the I-8 corridor from El Centro westward. Otherwise further east into central Arizona, there is model evidence of enhanced sfc pressure packing along a pre-frontal trough such that some localized blowing dust coincident with 30 mph gusts along I-8 from Gila Bend to Casa Grande is also possible.

September 21, 2017 Exceptional Event, Imperial County
The aforementioned cold front will forge through the state Friday,

finally clearing into the New Mexico on Saturday. Moisture availability along this boundary will be tenuous, at best with only a few model iterations suggesting a narrow moist tongue present within a frontal based orographic upslope regime (albeit before more supportive cooler temperatures aloft advect eastward). Based on forecast soundings, little more than a brief shower/sprinkle looks possible along this front. Winds will remain occasionally gusty Friday afternoon though begin to weaken after fropa and sunset Friday evening.

More notable through the weekend will be the unusually cool temperatures. Ensemble means depict heights and temperatures aloft

within the trough core some 3 normalized standard deviations below normal, or below the 2nd percentile for the end of September. Closer to central Arizona, anomalies will be closer to the lowest 10th percentile, that is, historically equating to highs only in the middle/upper 80s. Even more amazing will be overnight lows in the 50s and lower 60s and these readings some 10F-15F below average will persist into early next week.

The overall troughing structure will be maintained over the SW Conus into the middle of next week, however heights will slowly rise as weakening and filling of the trough begins. Downstream eastern Conus ridging will also weaken allowing for a pattern shift/adjustment by the end of next week. At this point, operational and ensemble output diverge with respect to how much vorticity/circulation remains centered over Arizona or gets displaced by high pressure building from the east Pacific. Regardless, temperatures will undoubtedly moderate much closer to the seasonal normal beyond the middle of the week.

&&

#### .AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Typical east-southeasterly AM winds will turn southerly midday while beginning to pick up in speed. A continued swing to west-southwest headings will occur between midday and early afternoon with gusts 20-25kts possible. Westerly oriented winds will stay longer in the terminals overnight than usual, switching early Friday AM to easterly headings for a brief period. Conditions will remain dry with limited thin high clouds possible early Friday AOA 25kft.

Southeast California/Southwest Arizona including KIPL and KBLH: Strong cool season frontal passage will generate windy conditions for the terminals today and into the overnight. Wind gusts 25-35kts will possible, more likely at KIPL than KBLH, from west-southwest headings by the afternoon. Skies will remain mostly clear and winds will subside into the overnight Thursday.

Aviation Discussion not updated for amended TAFs.

## September 21, 2017 Exceptional Event, Imperial County

&&

.FIRE WEATHER...

Saturday through Wednesday:

Post-frontal weekend temperatures will fall below seasonal normals for the districts with periodic breeziness possible over area ridgetops. Conditions will largely remain dry and under mostly clear skies as troughing holds over the region. Some moisture from the east may begin to be wrapped into trough circulation mid next week, raising area dewpoints and introducing some very slight chances for precipitation over southeast AZ and the White Mtns. Overall, humidities will fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...
Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory from 11 AM this morning to 1 AM PDT Friday for CAZ560>568.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...MO
AVIATION...Nolte
FIRE WEATHER...Nolte

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

#### **Department of Agronomy**

716 Farm House Ln Ames, IA 50011 591

Appendix A

FXUS66 KSGX 211620 **AFDSGX** 

Area Forecast Discussion National Weather Service San Diego CA 920 AM PDT Thu Sep 21 2017

.SYNOPSIS...

A trough of low pressure will drop into Southern California today and linger through Saturday. Today it will bring cooler and cloudier weather, some showers from the coast to the mountain crests, and areas of strong winds in the mountains and deserts. As the trough departs over the weekend, offshore flow will develop to bring clear skies and a warming trend next week.

&&

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

...Update...

Water vapor loop shows a trough digging south across California. A narrow moisture axis ahead of this trough will move south across Southern California today. PW on the morning San Diego sounding was 0.90 inches, up from 0.76 inches last evening. PW could rise to near 1 inch this afternoon, so nothing significant but enough low level moisture below about 6,000 FT for shower development ahead of the trough in upslope flow.

Light showers are developing and hi-res models show showers continuing to develop and focusing along the coastal mountain slopes as well as near the coast. Have adjusted POPS upward and made a slight uptick in QPF. Rainfall amounts will be light...less than a tenth of an inch, except 0.25-0.60 inches along the coastal slopes with maxima along the San Bernardino coastal slopes. Crestline has received 0.12 inches of rain so far this morning, the maximum in our service area so far.

Winds are on the increase out ahead of the trough. Max gusts are in the 35-45 mph range and expect this to continue. Wind prone locales such as Whitewater likely will hit 50+ mph this afternoon/early this evening before winds taper off tonight. A Wind Advisory continues in effect from the mountain crests to the desert floor. Patchy blowing dust and sand, creating restrictions in visibility, will be found across the deserts.

...Previous Discussion (Issued 230 AM PDT Thu Sep 21 2017)...

A big trough of low pressure, quite unseasonal for the last day of summer, will drop into Southern California toggey. Clouds have September 21, 2017 Exceptional Event, Imperial County already filled the coastal basin pretty much to the brim, that

is, to the mountain crests. A couple spots on the coastal slopes have already begun to measure a few hundredths of rain. Later this morning, a more organized band of legit showers will form along a surface wind discontinuity over the ocean, meaning some uplift will be generated along a line where southerly winds meet with westerly winds. This band of showers will bring light rainfall: below a tenth inch for most everywhere, but some foothill locations such as near Crestline could harvest a third inch or more. Winds strengthen this afternoon and evening. Strongest winds will occur through mountain passes and east into adjacent deserts with top gusts over 45 mph. Temperatures will be in the low 70s for most of the low elevations west of the mountains today, 15-20

degrees below average for the inland valleys. Residual moisture and onshore flow will keep skies partly cloudy and temperatures well below normal for Friday. A secondary shortwave within the big trough over the West will slow down the trough such that it won't really move out until Sunday. The surface flow will gradually go offshore and that will help clear the area of clouds over the weekend. Northeast winds will get started Sunday and appear each morning through at least Tuesday. Local gusts below Cajon Pass and in the Santa Ana Mountains could exceed 40 mph each morning, but overall this will not be a widespread or strong offshore event. This fall weather comes right on schedule as if the atmosphere knew it was time to start acting like fall. Temperatures will climb each day next week, topping 90 in a few spots by Monday, with 90s more common in the following days. Clouds will be hard to come by next week. The clear skies and dry air will allow temps to drop at night, providing some relief from the hot days.

#### &&

#### .AVIATION...

211530Z...Coast/Valleys/Coastal Slopes...widespread stratus over the coast, valleys, coastal slopes and mountain passes, with highly variable bases of 2500-4000 ft msl, tops of 5000-6000 ft msl, areas of -DZ/isol -SHRA producing local vis/cigs of 2-5 sm/1000-1500 ft msl, and mountain obscuration of coastal slopes below 6000 ft msl, will continue for the most part through 22/0000 UTC, although cloud coverage may become BKN-SCT after 1800 UTC with -DZ/-SHRA likely ending by 2100 UTC. 22/0000-1500 UTC, BKN-OVC stratus filling the coast, valleys and coastal slopes, with bases 2500-3500 ft msl, tops 4500-5000 ft msl and mountain obscuration of coastal slopes below 5000 ft msl.

Mountain Ridges/Desert Slopes/Deserts...Mostly SKC with P6SM vis through tonight. Through 1800 UTC, west winds 15-25 kt with gusts 35 kt with mod-stg uddfs/llws. Winds will strengthen after 1800 UTC with gusts to 45 kt possible below the passes, on desert slopes, and near the desert foothills, resulting in stg uddfs/llws as well as surface wind gusts at KPSP and KTRM possibly reaching 35 kt at times. Blowing dust & sand this afternoon and evening in the deserts.

IEM :: AFD from NWS SGX

### September 21, 2017 Exceptional Event, Imperial County

Appendix A

.MARINE...

A Small Craft Advisory will be in effect for the outer coastal waters this afternoon through late tonight as a trough of low pressure creates moderate to strong onshore flow. Northwest wind gusts of 25 kt are likely in the outer waters, while the inner waters will see gusts mainly in the 15-20 kt rang (which is below Small Craft Advisory criteria). At the same time, there will also be short-period seas of 4-7 ft. Although winds will decrease early Friday morning, another increase in winds is expected late Friday afternoon with wind gusts in the outer waters mainly around 20 kt. Lighter winds and smaller seas are forecast over the weekend.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory until 1 AM PDT Friday 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 1 AM PDT Friday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

&&

\$\$

PUBLIC...Gregoria (Update)/MM (Prev Discussion) AVIATION/MARINE...Brotherton



College of Ag

Department of Agronomy

378 MM1576 KS6

WWUS76 KSGX 211828 NPWSGX

URGENT - WEATHER MESSAGE National Weather Service San Diego CA 1128 AM PDT Thu Sep 21 2017

...Strong winds in parts of the mountains and deserts this afternoon and tonight...

.A deep trough of low pressure will bring strong winds to parts of the mountains and deserts through tonight. Winds will decrease overnight into Friday.

CAZ055-056-058-060>062-065-220800-

/O.CON.KSGX.WI.Y.0028.000000T0000Z-170922T0800Z/
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, La Quinta, Coachella,
Borrego Springs, and Desert Hot Springs
1128 AM PDT Thu Sep 21 2017

- ...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT FRIDAY...
- \* Winds...West to southwest 20 to 30 mph with gusts of 40 to 50 mph.
- \* Timing...Through 1 AM Friday.
- \* Location...Strongest winds will be on the mountain crests, through mountain passes, and into adjacent deserts.
- \* Visibility...Blowing dust could lead to greatly reduced visibility across parts of the desert.
- \* Impacts...Difficult travel for high profile vehicles and potential for sudden reductions in visibility.
- \* Outlook...Winds will diminish early Friday morning.

#### PRECAUTIONARY/PREPAREDNESS ACTIONS...

Strong winds can make driving difficult...especially for high profile vehicles. Blowing dust in the deserts can lead to restrictions in visibility. Drive with extra caution.

&&

\$\$

Appendix A

FXUS66 KSGX 212129 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 229 PM PDT Thu Sep 21 2017

#### .SYNOPSIS...

A trough of low pressure moving south into Southern California will linger through Saturday. This trough will bring cool and cloudier weather along with some showers from the coast to the mountain crests, and areas of strong winds in the mountains and deserts. As the trough departs over the weekend, offshore flow will develop to bring clear skies and a warming trend next week.

&&

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

Water vapor imagery shows a trough digging south across California. The base of the trough is currently moving into Southern California. Temperatures this afternoon are only in the 80s in the Coachella Valley! Temps at most other locales are only in the 60s and 70s, except only the 40s and 50s in the higher mountain elevations. Cool indeed!

West-Southwest winds have picked up with gusts in the mountains and deserts averaging 35-40 mph. However, some mountain ridges and pass locations have seen winds in the 45-55 mph range. Peak gust at Whitewater registered 55 mph at Whitewater.

A narrow band of slightly higher moisture lies just ahead of the trough with PW nearing 1 inch. The moisture is mostly confined below 6k FT. This along with upslope flow is producing some light showers across the area. The focus continues to be along the coastal mountain slopes of the San Gabriels and San Bernardinos where 0.15-0.25" has fallen. Just a trace to a few hundredths of an inch of rain has fallen west of the mountains.

A few showers will continue this evening. However, they will come to an end tonight as moisture gets shunted southeast of the area. As such, dry weather is forecast to return to the area tomorrow and through the weekend and next week.

The trough will continue in place through Saturday, then heights begin to rise early next week as ridging builds in. This will lead to warming temps early-mid next week. Winds will turn offshore as surface high pressure builds into the Great Basin. Winds do not look to get too strong, but gusts each morning look to be in the 30-40 mph range each morning during the early to

September 21, 2017 Exceptional Event, Imperial County middle part of next week. Highs in the 80s and even 90s will

become common across inland locales next week.

&&

#### .AVIATION...

212100Z...Coast/Valleys/Coastal Slopes...BKN-OVC stratus over the coast, valleys, coastal slopes and mountain passes, with highly variable bases of 2500-4000 ft msl, tops of 5000-6000 ft msl, areas of -DZ/isol -SHRA producing local vis/cigs of 2-5 sm/1000-1500 ft msl, and mountain obscuration of coastal slopes below 6000 ft msl, will continue for the most part through 22/00-03Z. After 06Z this evening, BKN-OVC stratus filling the coast, valleys and coastal

slopes, with bases 2500-3500 ft msl, tops 4500-5000 ft msl and mountain obscuration of coastal slopes below 5000 ft msl.

Mountain Ridges/Desert Slopes/Deserts...Mostly SKC with P6SM vis through Friday. Strong winds through late this evening with west winds 25-35 kt with gusts 45 kt with stg uddfs/llws below the passes, on desert slopes, and near the desert foothills, resulting in stg uddfs/llws as well as surface wind gusts at KPSP and KTRM possibly reaching 35 kt at times. Blowing dust & sand this evening in the deserts.

&&

#### .MARINE...

A Small Craft Advisory will be in effect for the outer coastal waters through late tonight as a trough of low pressure creates moderate to strong onshore flow. Northwest wind gusts of 25 kt are likely in the outer waters, while the inner waters will see gusts mainly in the 15-20 kt range (which is below Small Craft Advisory criteria). At the same time, there will also be short-period seas of 4-7 ft. Although winds will decrease early Friday morning, another increase in winds is expected late Friday afternoon with wind gusts in the outer waters mainly around 20 kt. Lighter winds and smaller seas are forecast over the weekend.

&&

#### .SKYWARN...

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

&&

### .SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory until 1 AM PDT Friday 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 1 AM PDT Friday for Waters from San Mateo point to the Mexican Border Extending 70 to 60 nm out

8/21/2019

September 21, 2017 Exceptional Event, Imperial County including San Clemente Island.

**Appendix A** 

&&

\$\$

PUBLIC...Gregoria
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



Facebook



Twitter



Github



YouTube



RSS

Copyright © 2001-2019 lowa State University of Science and Technology All rights reserved.

Non-discrimination Policy

**Privacy Policy** 

Digital Access & Accessibility

**Appendix A** 

699 FXUS65 KPSR 212159 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 259 PM MST Thu Sep 21 2017

#### .SYNOPSIS...

An area of low pressure will overspread the Desert Southwest tonight and Friday and remain in place over the weekend. The end result will be substantially cooler temperatures along with occasionally breezy conditions...especially tonight. Precipitation chances will be neglible and limited to only some sprinkles over the higher terrain locations. Temperatures will only slowly warm back to near average next week.

&&

#### .DISCUSSION...

Rest of Today through Saturday...

Wind Advisory conditions are underway early this afternoon west of the Lower Colorado River Valley. METARs in the Imperial Valley have had gusts of 40-45 mph along with visibilities dipping down to 3 miles. These conditions (including the rest of the Advisory area) will continue the rest of the afternoon and most of the evening before winds become considerably lighter. At times, expect even lower visibilities in more dust/sand prone areas within the Advisory. However, that will not be the only area where blowing dust may be a problem. It will still be quite breezy in areas east of the Lower Colorado River Valley. The more dust prone areas of Pinal County may see patchy blowing dust as well (possibly getting into portions of the southeast Valley). The cold front, which as roughly along a line from near Salt Lake City to Los Angeles at 2 pm, will continue advancing eastward tonight and reach the Phoenix area well after midnight (closer to sunrise).

The front is associated with a very large region of low pressure affecting much of western North America. The southern end of the system has very little moisture with it and thus we have no precip chances worth mentioning through Friday. But, temperatures drop nicely with highs in the upper 80s to around 90 on the lower deserts on Friday. With the upper trough over the interior West and a reinforcing short wave tracking through the southern end of it, the front stalls out over eastern AZ. In addition, a little bit more moisture gets pulled into the system and thus there will be a slight chance of some very weak convective showers over the higher terrain of south-central AZ late Friday and into Saturday. Plus high temperatures will be slightly cooler as well (mainly over our eastern areas).

### Appendix A

## September 21, 2017 Exceptional Event, Imperial County through Thursday... Sunday

The overall troughing structure will be maintained over the SW Conus into the middle of next week, however heights will slowly rise as weakening and filling of the trough begins. Downstream eastern Conus ridging will also weaken allowing for a pattern shift/adjustment by the end of next week. At this point, operational and ensemble output diverge with respect to how much vorticity/circulation remains centered over Arizona or gets displaced by high pressure building from the east Pacific. Regardless, temperatures will undoubtedly moderate much closer to the seasonal normal beyond the middle of the week.

&&

#### .AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: Typical east-southeasterly AM winds will turn southerly midday while beginning to pick up in speed. A continued swing to westsouthwest headings will occur between midday and early afternoon with gusts 20-25kts possible. Westerly oriented winds will stay longer in the terminals overnight than usual, switching early Friday AM to easterly headings for a brief period. Conditions will remain dry with limited thin high clouds possible early Friday AOA 25kft.

Southeast California/Southwest Arizona including KIPL and KBLH: Strong cool season frontal passage will generate windy conditions for the terminals today and into the overnight. Wind gusts 25-35kts will possible, more likely at KIPL than KBLH, from westsouthwest headings by the afternoon. Skies will remain mostly clear and winds will subside into the overnight Thursday.

Aviation Discussion not updated for amended TAFs.

88

#### .FIRE WEATHER...

Saturday through Wednesday:

Post-frontal weekend temperatures will fall below seasonal normals for the districts with periodic breeziness possible over area ridgetops. Conditions will largely remain dry and under mostly clear skies as troughing holds over the region. Some moisture from the east may begin to be wrapped into trough circulation mid next week, raising area dewpoints and introducing some very slight chances for precipitation over southeast AZ and the White Mtns. Overall, humidities will fall mainly into the 15-30 percent range with good overnight recoveries.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

September 21, 2017 Exceptional Event, Imperial County

**Appendix A** 

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 1 AM PDT Friday for CAZ560>568.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...AJ/MO

AVIATION...Nolte FIRE WEATHER...Nolte

# 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



Facebook



Twitter



Github



YouTube



RSS

365 WWUS75 KPSR 212203 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 303 PM MST Thu Sep 21 2017

#### CAZ560>568-220800-

/O.CON.KPSR.WI.Y.0023.000000T0000Z-170922T0800Z/
Joshua Tree NP West-Joshua Tree NP East-Imperial County SouthwestSalton Sea-Chuckwalla Mountains-Imperial County SoutheastImperial County West-Imperial Valley-Chiriaco SummitIncluding the cities of Cottonwood Visitor,
Lost Horse-Keys Village, Mountain Spring, Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamorio, Brawley, and Chiriaco Summit
303 PM PDT Thu Sep 21 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT FRIDAY...

- \* AFFECTED AREA...Imperial County and portions of eastern Riverside county, including Joshua Tree National Park.
- \* TIMING...Until 1 AM PDT Friday.
- \* WINDS...Sustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.
- \* IMPACTS...Difficult driving conditions, especially for high profile vehicles. In addition, briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Affected roadways include, but are not limited to, Interstate 8, Interstate 10, and California State Route 111.

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.

&&

\$\$

Appendix A

247 FXUS65 KPSR 212255 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 355 PM MST Thu Sep 21 2017

.UPDATE...

Updated Aviation and Fire Weather sections.

&&

#### .SYNOPSIS...

An area of low pressure will overspread the Desert Southwest tonight and Friday and remain in place over the weekend. The end result will be substantially cooler temperatures along with occasionally breezy conditions...especially tonight. Precipitation chances will be neglible and limited to only some sprinkles over the higher terrain locations. Temperatures will only slowly warm back to near average next week.

&&

#### .DISCUSSION...

Rest of Today through Saturday...

Wind Advisory conditions are underway early this afternoon west of the Lower Colorado River Valley. METARs in the Imperial Valley have had gusts of 40-45 mph along with visibilities dipping down to 3 miles. These conditions (including the rest of the Advisory area) will continue the rest of the afternoon and most of the evening before winds become considerably lighter. At times, expect even lower visibilities in more dust/sand prone areas within the Advisory. However, that will not be the only area where blowing dust may be a problem. It will still be quite breezy in areas east of the Lower Colorado River Valley. The more dust prone areas of Pinal County may see patchy blowing dust as well (possibly getting into portions of the southeast Valley). The cold front, which as roughly along a line from near Salt Lake City to Los Angeles at 2 pm, will continue advancing eastward tonight and reach the Phoenix area well after midnight (closer to sunrise).

The front is associated with a very large region of low pressure affecting much of western North America. The southern end of the system has very little moisture with it and thus we have no precip chances worth mentioning through Friday. But, temperatures drop nicely with highs in the upper 80s to around 90 on the lower deserts on Friday. With the upper trough over the interior West and a reinforcing short wave tracking through the southern end of it, the front stalls out over eastern AZ. In addition, a little bit more moisture gets pulled into the system and thus there will be a slight chance of some very weak convective showers over the higher terrain of south-central AZ late Friday and into Saturday.

Plus high temperatures will be slightly cooler as well (mainly over our eastern areas).

IEM :: AFD from NWS PSR

EM :: AFD from NWS PSR

Exceptional Event, Imperial County

IEM :: AFD from NWS PSR

EM :: AFD from NWS PSR

EM :: AFD from NWS PSR

IEM :: AFD from NWS PSR

Output

Description of the provided state of the provided

Sunday through Thursday...

The overall troughing structure will be maintained over the SW Conus into the middle of next week, however heights will slowly rise as weakening and filling of the trough begins. Downstream eastern Conus ridging will also weaken allowing for a pattern shift/adjustment by the end of next week. At this point, operational and ensemble output diverge with respect to how much vorticity/circulation remains centered over Arizona or gets displaced by high pressure building from the east Pacific. Regardless, temperatures will undoubtedly moderate much closer to the seasonal normal beyond the middle of the week.

&&

#### .AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
Southwest and west winds this afternoon and evening will be
stronger than usual due to the approach of a dry cold front.
Anticipate the front will reach metro well after 07Z but there
will not be a distinct wind shift with it. Also anticipate surface
winds to remain strong enough after sunset that LLWS criteria will
not be met for TAF purposes. However, winds in the lower levels
above the surface will be notable. Anticipate there will be a
period of time where light southeast winds will be common after
09Z before southwesterly winds resume by mid morning Friday.
Otherwise, little or no cloudiness.

Southeast California/Southwest Arizona including KIPL and KBLH: A cold front extending from roughly Salt Lake City to near Los Angeles as of 22Z will progress reach the Lower Colorado River Valley (LCRV) by 03Z-04Z. Strong southwest winds gusting 30-40 kts will be common near and west of the LCRV through 04Z before weakening. Expect areas of blowing dust reducing visibility well below 10SM with brief localized reductions of visibility down to 1 to 3SM. Winds will not be as strong east of the LCRV. Expect less wind on Friday. Otherwise, little or no cloudiness.

Aviation Discussion not updated for amended TAFs.

&&

#### .FIRE WEATHER...

Sunday through Thursday:

A low pressure system will linger over the interior West through Tuesday before beginning to shift eastward. Temperatures will climb to near or slightly above normal by Thursday. Humidities will be on the low side with minimum readings remaining well below 20% on the lower deserts and overnight recovery only fair to good. Anticipate north and northwesterly breeziness Sunday into Tuesday over southeast CA and southwest AZ. Otherwise, light winds.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...
AZ...None.

CA...Wind Advisory until 1 AM PDT Friday for CAZ560>568.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...AJ/MO
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









7 266 FXUS65 KPSR 220422 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 922 PM MST Thu Sep 21 2017

.UPDATE...Updated discussion and Aviation Discussion.

&&

#### .SYNOPSIS...

An area of low pressure will overspread the Desert Southwest tonight and Friday and remain in place over the weekend. The end result will be substantially cooler temperatures along with occasionally breezy conditions...especially tonight. Precipitation chances will be neglible and limited to only some sprinkles over the higher terrain locations. Temperatures will only slowly warm back to near average next week.

&&

#### .DISCUSSION...

Not much change to the short term forecast as the front continues to march through the region. Went ahead and lowered the morning low temperatures a few degrees for tomorrow based on current cooling rates, which were 2-4 degrees ahead of what was in the forecast. Otherwise, the strong winds should subside a bit through tonight. No changes to the long term forecast.

&&

#### .PREVIOUS DISCUSSION...

Rest of Today through Saturday...

Wind Advisory conditions are underway early this afternoon west of the Lower Colorado River Valley. METARs in the Imperial Valley have had gusts of 40-45 mph along with visibilities dipping down to 3 miles. These conditions (including the rest of the Advisory area) will continue the rest of the afternoon and most of the evening before winds become considerably lighter. At times, expect even lower visibilities in more dust/sand prone areas within the Advisory. However, that will not be the only area where blowing dust may be a problem. It will still be quite breezy in areas east of the Lower Colorado River Valley. The more dust prone areas of Pinal County may see patchy blowing dust as well (possibly getting into portions of the southeast Valley). The cold front, which as roughly along a line from near Salt Lake City to Los Angeles at 2 pm, will continue advancing eastward tonight and reach the Phoenix area well after midnight (closer to sunrise).

The front is associated with a very large region of low pressure

2/5

September 21, 2017 Exceptional Event, Imperial County affecting much of western North America. The southern end of the

system has very little moisture with it and thus we have no precip chances worth mentioning through Friday. But, temperatures drop nicely with highs in the upper 80s to around 90 on the lower deserts on Friday. With the upper trough over the interior West and a reinforcing short wave tracking through the southern end of it, the front stalls out over eastern AZ. In addition, a little bit more moisture gets pulled into the system and thus there will be a slight chance of some very weak convective showers over the higher terrain of south-central AZ late Friday and into Saturday. Plus high temperatures will be slightly cooler as well (mainly over our eastern areas).

Sunday through Thursday...

The overall troughing structure will be maintained over the SW Conus into the middle of next week, however heights will slowly rise as weakening and filling of the trough begins. Downstream eastern Conus ridging will also weaken allowing for a pattern shift/adjustment by the end of next week. At this point, operational and ensemble output diverge with respect to how much vorticity/circulation remains centered over Arizona or gets displaced by high pressure building from the east Pacific. Regardless, temperatures will undoubtedly moderate much closer to the seasonal normal beyond the middle of the week.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: The main aviation weather concern continues to be the strong winds. The surface wind speeds will continue to decrease through the night, although a few gusts up to 15 kts may be possible. The surface wind direction is likely to switch southeasterly late for KPHX and KIWA around 10Z before becoming westerly again early Friday. Wind speeds should be considerably weaker tomorrow.

Southeast California/Southwest Arizona including KIPL and KBLH: Strong winds continue to be the biggest aviation weather concern. The wind direction will stay primarily westerly tonight and into Friday but gusts 20-30 kts will continue to impact the terminals through 07Z. Patches of blowing dust (BLDU) and restricted visibility are possible even though there currently is no mention of BLDU in the TAFs. Winds tomorrow should be weaker than today.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday:

A low pressure system will linger over the interior West through Tuesday before beginning to shift eastward. Temperatures will climb to near or slightly above normal by Thursday. Humidities

September 21, 2017 Exceptional Event, Imperial County will be on the low side with minimum readings remaining well

below 20% on the lower deserts and overnight recovery only fair to good. Anticipate north and northwesterly breeziness Sunday into Tuesday over southeast CA and southwest AZ. Otherwise, light winds.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 1 AM PDT Friday for CAZ560>568.

&&

\$\$

Visit us on Facebook, Twitter, and at weather.gov/phoenix

DISCUSSION...Deemer
PREVIOUS DISCUSSION...AJ/MO
AVIATION...Deemer
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



```
056
```

WWUS76 KSGX 220753

**NPWSGX** 

URGENT - WEATHER MESSAGE National Weather Service San Diego CA

1253 AM PDT Fri Sep 22 2017

CAZ055-056-058-060>062-065-220900-

/O.EXP.KSGX.WI.Y.0028.000000T0000Z-170922T0800Z/

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, La Quinta, Coachella, Borrego Springs, and Desert Hot Springs 1253 AM PDT Fri Sep 22 2017

...WIND ADVISORY WILL EXPIRE AT 1 AM PDT EARLY THIS MORNING...

Peak Wind gusts for Thursday in MPH....

Volcan Mountain SDGE 56 4 PM PDT Mountain Springs Grade 56 12 AM PDT White Water West RAWS 55 12 PM PDT White Water/Desert Hot Spgs 47 8 AM PDT Boucher Hill 46 1 PM PDT Harrison Park SDGE 46 3 PM PDT Heaps Peak 45 1 PM PDT Thermal Airport 43 4 PM PDT

\$\$

JAD

# **IOWA STATE** UNIVERSITY

College of Ag

Department of Agronomy

**Appendix A** 

250 WWUS75 KPSR 220758 NPWPSR

URGENT - WEATHER MESSAGE National Weather Service Phoenix AZ 1258 AM MST Fri Sep 22 2017

CAZ560-561-563>568-220900/O.CAN.KPSR.WI.Y.0023.000000T0000Z-170922T0800Z/
Joshua Tree NP West-Joshua Tree NP East-Salton SeaChuckwalla Mountains-Imperial County SoutheastImperial County West-Imperial Valley-Chiriaco SummitIncluding the cities of Cottonwood Visitor,
Lost Horse-Keys Village, Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamorio, Brawley, and Chiriaco Summit
1258 AM PDT Fri Sep 22 2017

...WIND ADVISORY IS CANCELLED...

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

Strong winds have subsided over much of southeast California late this evening and as such the Wind Advisory will be cancelled on schedule at 1 AM PDT.

\$\$

CAZ562-221200-

/O.EXT.KPSR.WI.Y.0023.000000T0000Z-170922T1200Z/ Imperial County Southwest-Including the city of Mountain Spring 1258 AM PDT Fri Sep 22 2017

...WIND ADVISORY NOW IN EFFECT UNTIL 5 AM PDT EARLY THIS MORNING...

- \* AFFECTED AREA...Southwest corner of Imperial County including mountain pass elevations along Interstate 8.
- \* TIMING...Until 5 AM PDT Friday.
- \* WINDS...Sustained westerly winds 25 to 35 mph with gusts of 40 to 50 mph.
- \* IMPACTS...Difficult driving conditions, especially for high profile vehicles.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

a mile at times in blowing dust or blowing sand. Use extra

September 21, 2017 Exceptional Event, Imperial County 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

&&

caution.

\$\$

# 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











Copyright © 2001-2019 lowa State University of Science and Technology All rights reserved.

Non-discrimination Policy

September 21, 2017 Exceptional Event, Imperial County
iastate.edu

Index
Directory
Maps
Safety

# **Iowa State University**

Sign Ons

MENU SEARCH

# **Iowa Environmental Mesonet**

# National Weather Service Raw Text Product

Displaying AFOS PIL: NPWPSR Received: 2017-09-22 12:19 UTC

♦ Previous in Time
View All KPSR Products for 22 Sep 2017
Next in Time →
Latest Product
View As Image

atest Product | View As Image

WWUS75 KPSR 221219
NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
519 AM MST Fri Sep 22 2017

CAZ562-221330/O.EXP.KPSR.WI.Y.0023.000000T0000Z-170922T1200Z/
Imperial County SouthwestIncluding the city of Mountain Spring
519 AM PDT Fri Sep 22 2017

...WIND ADVISORY HAS EXPIRED...

Winds have diminished from advisory levels and thus, the Wind Advisory expired on schedule at 5 AM PDT.

\$\$

College of Ag

Department of Agronomy

### **Department of Agronomy**

716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone











Copyright © 2001-2019 Iowa State University of Science and Technology All rights reserved.

Non-discrimination Policy **Privacy Policy** Digital Access & Accessibility

```
September 21, 2017 Exceptional Event, Imperial County
677
NOUS46 KSGX 221715
PNSSGX
CAZ043-048-050-055>058-060>062-065-552-554-230515-
Public Information Statement
National Weather Service San Diego CA
1015 AM PDT Fri Sep 22 2017
...Highest Observed Winds Gusts 10 AM Thursday to 10 AM Today...
Location
                             Speed
                                        Time/Date
                                                        Lat/Lon/Elev (ft.)
...San Gorgonio Pass Near Banning...
Whitewater Raws (2 N)
                             55 MPH
                                        1250 PM 09/21
                                                        33.95N/116.66W/2546
Thousand Palms (5 NNE)
                             43 MPH
                                        0338 PM 09/21
                                                        33.89N/116.37W/1066
Whitewater
                             41 MPH
                                        1045 AM 09/21
                                                        33.96N/116.59W/1510
... San Diego County Mountains...
Volcan Mountain
                             56 MPH
                                        0420 PM 09/21
                                                        33.10N/116.58W/5154
Harrison Park
                             46 MPH
                                       0320 PM 09/21
                                                        33.04N/116.56W/4861
Boucher Hill
                             44 MPH
                                       0107 PM 09/21
                                                        33.33N/116.92W/5440
Descanso (8 NE)
                             41 MPH
                                       0430 PM 09/21
                                                        32.93N/116.53W/4740
                             38 MPH
                                        1207 PM 09/21
Ranchita (1 NE)
                                                        33.22N/116.50W/4415
Boulevard (5 NW)
                             36 MPH
                                        0230 PM 09/21
                                                        32.70N/116.35W/4114
Boulevard (1 W)
                             36 MPH
                                        0410 PM 09/21
                                                        32.66N/116.29W/3404
...San Diego County Deserts...
Borrego Springs (7 SE)
                             47 MPH
                                       0428 PM 09/21
                                                        33.19N/116.28W/587
Ocotillo Wells (4 W)
                             37 MPH
                                        0123 PM 09/21
                                                        33.15N/116.18W/436
In Ko Pah
                             37 MPH
                                        0430 PM 09/21
                                                        32.64N/116.12W/3221
Borrego Springs (9 S)
                             35 MPH
                                       1020 PM 09/21
                                                        33.14N/116.29W/768
...San Bernardino County Mountains...
Running Springs (2 NW)
                             45 MPH
                                       0115 PM 09/21
                                                        34.24N/117.14W/6350
Crestline
                             39 MPH
                                        0331 PM 09/21
                                                        34.24N/117.31W/5298
Mormon Rock
                             38 MPH
                                        0916 AM 09/21
                                                        34.32N/117.50W/3300
...Coachella Valley...
Thermal Airport
                             43 MPH
                                       0426 PM 09/21
                                                        33.63N/116.16W/-118
Coachella
                             42 MPH
                                       0410 PM 09/21
                                                        33.67N/116.15W/110
Thousand Palms
                             40 MPH
                                        0345 AM 09/22
                                                        33.82N/116.40W/272
Cathedral City (1 SW)
                             37 MPH
                                        0452 PM 09/21
                                                        33.77N/116.48W/605
Thousand Palms (5 NE)
                             35 MPH
                                        0240 PM 09/21
                                                        33.88N/116.34W/1089
...Apple and Lucerne Valleys...
Means Lake
                             41 MPH
                                       0426 PM 09/21
                                                        34.39N/116.52W/2818
Apple Valley (6 N)
                             40 MPH
                                       1150 AM 09/21
                                                        34.59N/117.17W/3159
Hesperia (5 SW)
                             39 MPH
                                       0132 PM 09/21
                                                        34.40N/117.40W/3723
Victorville Airport
                             39 MPH
                                       1155 AM 09/21
                                                        34.60N/117.38W/2884
Apple Valley Airport (KAPV)
                             37 MPH
                                        0455 PM 09/21
                                                        34.58N/117.19W/3062
                             37 MPH
Victorville (5 N)
                                        1204 PM 09/21
                                                        34.61N/117.29W/4650
Lucerne Valley (1 SW)
                             36 MPH
                                        1206 PM 109/121
                                                        34.44N/116.98W/3034
```

8/22/2019 IEM :: PNS from NWS SGX

September 21, 2017 Exceptional Event, Imperial County
Hesperia (4 SW) 35 MPH 0139 PM 09/21 34.37N/117.34W/3580 **Appendix A** 

...Maritime Stations... 33 WSW Del Mar 39 MPH 1100 PM 09/21 32.80N/117.80W/0

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.

\$\$

```
562
NOUS46 KSGX 221717
PNSSGX
CAZ043-048-050-055>058-060>062-065-552-554-230515-
Public Information Statement
National Weather Service San Diego CA
1015 AM PDT Fri Sep 22 2017
... Highest Observed Wind Gusts 10 AM Thursday to 10 AM Today...
Location
                              Speed
                                        Time/Date
                                                        Lat/Lon/Elev (ft.)
... San Gorgonio Pass Near Banning...
Whitewater Raws (2 N)
                             55 MPH
                                        1250 PM 09/21
                                                        33.95N/116.66W/2546
Thousand Palms (5 NNE)
                             43 MPH
                                        0338 PM 09/21
                                                        33.89N/116.37W/1066
Whitewater
                             41 MPH
                                        1045 AM 09/21
                                                        33.96N/116.59W/1510
... San Diego County Mountains...
Volcan Mountain
                             56 MPH
                                        0420 PM 09/21
                                                        33.10N/116.58W/5154
Harrison Park
                             46 MPH
                                        0320 PM 09/21
                                                        33.04N/116.56W/4861
Boucher Hill
                             44 MPH
                                        0107 PM 09/21
                                                        33.33N/116.92W/5440
Descanso (8 NE)
                             41 MPH
                                        0430 PM 09/21
                                                        32.93N/116.53W/4740
                             38 MPH
Ranchita (1 NE)
                                        1207 PM 09/21
                                                        33.22N/116.50W/4415
                             36 MPH
Boulevard (5 NW)
                                        0230 PM 09/21
                                                        32.70N/116.35W/4114
Boulevard (1 W)
                             36 MPH
                                        0410 PM 09/21
                                                        32.66N/116.29W/3404
...San Diego County Deserts...
Borrego Springs (7 SE)
                             47 MPH
                                        0428 PM 09/21
                                                        33.19N/116.28W/587
Ocotillo Wells (4 W)
                              37 MPH
                                        0123 PM 09/21
                                                        33.15N/116.18W/436
In Ko Pah
                             37 MPH
                                        0430 PM 09/21
                                                        32.64N/116.12W/3221
Borrego Springs (9 S)
                             35 MPH
                                        1020 PM 09/21
                                                        33.14N/116.29W/768
...San Bernardino County Mountains...
Running Springs (2 NW)
                             45 MPH
                                        0115 PM 09/21
                                                        34.24N/117.14W/6350
Crestline
                             39 MPH
                                        0331 PM 09/21
                                                        34.24N/117.31W/5298
Mormon Rock
                             38 MPH
                                        0916 AM 09/21
                                                        34.32N/117.50W/3300
...Coachella Valley...
Thermal Airport
                             43 MPH
                                        0426 PM 09/21
                                                        33.63N/116.16W/-118
Coachella
                             42 MPH
                                        0410 PM 09/21
                                                        33.67N/116.15W/110
Thousand Palms
                             40 MPH
                                        0345 AM 09/22
                                                        33.82N/116.40W/272
Cathedral City (1 SW)
                             37 MPH
                                        0452 PM 09/21
                                                        33.77N/116.48W/605
Thousand Palms (5 NE)
                             35 MPH
                                        0240 PM 09/21
                                                        33.88N/116.34W/1089
...Apple and Lucerne Valleys...
Means Lake
                             41 MPH
                                        0426 PM 09/21
                                                        34.39N/116.52W/2818
Apple Valley (6 N)
                             40 MPH
                                        1150 AM 09/21
                                                        34.59N/117.17W/3159
Hesperia (5 SW)
                             39 MPH
                                        0132 PM 09/21
                                                        34.40N/117.40W/3723
Victorville Airport
                             39 MPH
                                        1155 AM 09/21
                                                        34.60N/117.38W/2884
Apple Valley Airport (KAPV)
                             37 MPH
                                        0455 PM 09/21
                                                        34.58N/117.19W/3062
                             37 MPH
Victorville (5 N)
                                        1204 PM 09/21
                                                        34.61N/117.29W/4650
Lucerne Valley (1 SW)
                             36 MPH
                                        1206 PM 109621
                                                        34.44N/116.98W/3034
```

8/22/2019 IEM :: PNS from NWS SGX

September 21, 2017 Exceptional Event, Imperial County
Hesperia (4 SW) 35 MPH 0139 PM 09/21 34.37N/117.34W/3580

Appendix A

...Maritime Stations...

33 WSW Del Mar 39 MPH 1100 PM 09/21 32.80N/117.80W/0

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.

\$\$

# 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











Copyright © 2001-2019 Iowa State University of Science and Technology All rights reserved.

Non-discrimination Policy Privacy Policy