

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/3/2017	2028 MST	PhoenixHowever a cold Pacific low pressure system will approach the area this weekend, resulting in windy conditions Saturday and Sunday , and a cooling trend. The low pressure system will become stationary over the region Monday and Tuesday, with an increasing chance of showers and thunderstorms, and much colder weather.	62
Area Forecast Discussion	5/3/2017	2119 PDT	San Diego	The big story will be the upper trough moving into California Saturday with the low becoming closed Saturday night. ...The low will initially move into northern parts of So-Cal Sunday morning with strong onshore flow here and moisture extending from about 950 to over 700 mb. Showers look quite likely Sunday night, but with a possible track of the low to our south in northern Baja both at the surface and aloft, there could be a decrease in activity Monday as some offshore flow could develop, though the models could certainly change with this. ...Also, with the cold upper low, there will be snow possible in the mountains with 850 MB temps falling to 1-3 deg C at times with snow levels around 5000 feet, maybe even locally lower in convection. ... Gusty winds will occur at times, with best chances in the mountains/deserts Saturday/Sunday. ...	65
Area Forecast Discussion	5/4/2017	0250 MST	Phoenix	... Regardless, more pronounced height falls will descend into the area Saturday ahead of the cold core aloft while sfc pressure falls over southern Nevada tighten the low level gradient. Along this increased baroclinicity and pressure packing, a 30-40kt LLJ will develop though the region ahead of a frontal boundary. Deep mechanical mixing should tap part of this momentum yielding gusty afternoon S-SW winds and yielding threatening fire weather conditions....	68
Area Forecast Discussion	5/4/2017	0305 PDT	San DiegoSome onshore winds will pick up in parts of the mountains and deserts this afternoon as well. A big low pressure trough in the Gulf of Alaska will progress into the northwest U.S. and spawn a cutoff low that dives due south into California on Saturday....	72
Area Forecast Discussion	5/4/2017	1318 PDT	San Diego	...The weather will continue to cool Friday as a trough develops along the west coast and the upper level ridge moves east. The marine layer will continue to deepen as well. On Saturday, the trough deepens further and a closed low starts to split off from the trough and drop down into Central California. ...Onshore pressure gradients from San Diego to Las Vegas peak Saturday evening at 15-17 mb, with 850 mb winds of around 20-30 kt. This will result in strong west winds along the mountain ridges, desert slopes, through/below the passes/canyons and into the adjacent deserts. Widespread gusts of 40-50 mph will be possible in those areas Saturday afternoon and evening, with 60+ mph gusts in the windiest locations. ...	75
Area Forecast Discussion	5/4/2017	1455 MST	Phoenix	...Again, models are very consistent in their forecasts of developing and intensifying a Pacific low pressure system from central CA Saturday morning to southern CA Sunday. In general, as the cold front approaches Saturday, windy conditions will develop area-wide with southwest gusts in the 30 to 45 mph range. Due to low humidity Saturday, the Fire Weather Watch for southern AZ continues due to high fire danger. Breezy to windy conditions are expected Sunday but not as strong as the cold should have moved through most of AZ by afternoon....It appears that moisture will be limited, and any shower activity will be confined the cold unstable region near the upper low center in southeast CA and Colorado River Valley on Sunday.	78

TYPE	DATE	TIME		AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/4/2017	2125	PDT	San Diego	UPDATE...The Pops/Wx grids were tweaked a bit for Sunday and Sunday night to increase the pops a bit, especially over the mountains. The significant, late-season storm system is still on track to bring sensible weather impacts, beginning Saturday , with the brunt of the precipitation potential Sunday through Monday morning. No other significant changes were made to the forecast at this time.	81
Urgent Weather Message	5/5/2017	0224	MST	Phoenix	...Imperial County Southwest...Imperial County Southeast-Imperial County West-Imperial Valley-Including the cities of...Ocotillo,...El Centro, Calexico,...and Brawley..... WIND ADVISORY IN EFFECT FROM 2 PM TO 11 PM PDT SATURDAY... * AFFECTED AREA ...Imperial county including Interstate 8, Highway 111, and Highway 78. * TIMING ...Saturday afternoon through Saturday evening. * WINDS ...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph. * IMPACTS ...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.	84
Area Forecast Discussion	5/5/2017	0230	MST	PhoenixRegardless, as height falls translate down the California coast Saturday, sfc pressure falls will be maximized over cntrl/srn Nevada and Utah while a frontal boundary surges across the southern CA mountains and into the lower Colorado River Valley . Deep afternoon mixing juxtaposed with a 30-40kt LLJ aligned along the tightening baroclinicity should yield locally strong winds Saturday afternoon into early evening. Post frontal mountain rotors through SE California may yield the strongest wind gusts and more extensive blowing dust.	85
Urgent Weather Message	5/5/2017	0303	PDT	San Diego	...Periods of strong gusty west winds for the mountains and deserts for Saturday afternoon through late evening..... WIND ADVISORY IN EFFECT FROM 2 PM SATURDAY TO 2 AM PDT SUNDAY ...San Diego County Mountains-Coachella Valley-San Diego County Deserts...Including the cities of Julian, Indio, Palm Desert, Palm Desert Country, La Quinta, Borrego Springs, and Desert Hot Springs.. * WINDS ...Areas of west winds 20 to 30 mph with gusts to 55 mph. Isolated gusts to 65 mph. * TIMING ...Winds strengthening Saturday morning with strongest winds for Saturday afternoon and evening...decreasing late Saturday night. * LOCATION ...Strongest winds near mountain ridge tops and along desert mountain slopes into adjacent desert areas and in the northern Coachella Valley below the San Gorgonio Pass. * VISIBILITY ...Locally reduced in blowing sand and blowing dust in the deserts.	88
Area Forecast Discussion	5/5/2017	0336	PDT	San Diego	A trough of low pressure over the eastern Pacific will move slowly eastward to near the West Coast tonight... with a cold closed low pressure system developing just off the central California coast Saturday...then moving into Southern California Saturday night and Sunday . The center of the low pressure system will remain in the vicinity of Southern California and northern Baja into Monday...with the low pressure system weakening and moving slowly eastward for next Tuesday and Wednesday.	90

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/5/2017	0916	PDT	San Diego	93
				A closed low will develop within the base of the trough by Saturday morning as the trough deepens further, and then the low will cut-off from the trough and then move into Southern California Saturday night into Sunday, then move south into Baja/Southwest Arizona Monday-Tuesday before finally moving east Wednesday. Strong onshore flow on Saturday, with onshore pressure gradients peaking at around 16 mb from San Diego to Las Vegas, and 20-30 kt 850 mb westerly winds, will create strong and gusty southwest to west winds along mountain ridges/desert slopes, through/below canyons and passes, and into adjacent desert areas. Wind gusts of 45-55 mph are likely, with isolated wind gusts of 65 mph or greater. A Wind Advisory goes into effect for all mountain and desert areas at 2 pm Saturday and continues through 10 pm Saturday.	
Urgent Weather Message	5/5/2017	1254	PDT	San Diego	96
				...Periods of strong gusty west winds for the mountains and deserts for Saturday afternoon through late evening..... WIND ADVISORY REMAINS IN EFFECT FROM 2 PM SATURDAY TO 2 AM PDT SUNDAY ...San Diego County Mountains-Coachella Valley-San Diego County Deserts...Including the cities of Julian, Indio, Palm Desert, Palm Desert Country, La Quinta, Borrego Springs, and Desert Hot Springs..* WINDS ...Areas of west winds 20 to 30 mph with gusts to 55 mph. Isolated gusts to 65 mph. * TIMING ...Winds strengthening Saturday morning with strongest winds for Saturday afternoon and evening, decreasing late Saturday night. * LOCATION ...Strongest winds near mountain ridge tops and along desert mountain slopes into adjacent desert areas and in the northern Coachella Valley below the San Geronio Pass. * VISIBILITY ...Locally reduced in blowing sand and blowing dust in the deserts.	
Urgent Weather Message	5/5/2017	1339	MST	Phoenix	98
				...Imperial County Southwest...Imperial County Southeast-Imperial County West-Imperial Valley-Including the cities of...Ocotillo,...El Centro, Calexico,...and Brawley..... WIND ADVISORY NOW IN EFFECT FROM 2 PM TO 10 PM PDT SATURDAY ...* AFFECTED AREA ...Imperial county including Interstate 8, Highway 111, and Highway 78. * TIMING ...Saturday afternoon through Saturday evening. * WINDS ...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph. * IMPACTS ...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.	
Area Forecast Discussion	5/5/2017	1515	MST	Phoenix	100
				As a cold front approaches southern CA Saturday afternoon, strong gusty southwest winds will develop region wide, peaking in the 35 to 45 mph range by 5 pm MST . Dry desert and mountain vegetation, low humidity, and gusty wind will create high fire danger across the region. Fire Weather Watches have been upgraded to Red Flag Warnings for most of central and southern AZ on Saturday. Additionally, wind gusts will be sufficiently strong for Wind Advisories which are posted for southwest and south central AZ Saturday. There is also the potential for blowing dust across the lower deserts.	

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Urgent Weather Message	5/5/2017	2049	PDT	San Diego	103
Area Forecast Discussion	5/5/2017	2100	MST	Phoenix	105
Urgent Weather Message	5/5/2017	2213	MST	Phoenix	109
Area Forecast Discussion	5/6/2017	0310	MST	Phoenix	111

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Urgent Weather Message	5/6/2017	0347	MST	Phoenix	114
Area Forecast Discussion	5/6/2017	0505	PDT	San Diego	116
Urgent Weather Message	5/6/2017	0524	PDT	San Diego	119
Area Forecast Discussion	5/6/2017	0920	MST	Phoenix	121

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/6/2017	0955	PDT	San Diego	125
				Gradients will accelerate more strongly onshore this afternoon as surface low over southern Nevada deepens to 996 mb. Winds will ramp up accordingly. Wind support aloft will increase this afternoon as the cold upper trough off the central CA coast deepens to 546 dm over Pt Conception through 00Z. The trough becomes negatively tilted this evening as a strong low level jet rounds the base of the trough. 850 mb winds increase to 30-40 kt tonight, and sustained winds of 20-30 mph are likely in the mountains and deserts, gusting to 45-65 mph in the mountains and deserts through early tonight. Coastal and Valley areas will also experience gusty winds this afternoon and evening, strongest near the coast with gusts of 30 to 35 mph as the winds will come ashore unabated.	
Area Forecast Discussion	5/6/2017	1402	PDT	San Diego	128
				A strong coastal eddy and strong onshore flow have deepened the marine layer to 5000 feet this afternoon. Pockets of light rain are scattered across the area, with greatest coverage on the coastal mountain slopes. Winds have increased in all areas this afternoon. Strongest wind gusts of 40-50 mph were in the mountains. In the deserts, Palm Springs had a gust of 40 mph at Noon. Even the coast was windy with sustained winds of 20 mph at San Clemente Pier, and 22 mph at Solana Beach. Gradients will accelerate more strongly onshore through the evening to a 996 mb surface low over southern Nevada, so the strong winds will continue. Southwesterly 850 mb winds increase to 40 kt ahead of a cold upper trough diving down the west coast.A Wind Advisory is in effect until 10 pm tonight for 50-60 mph gusts in the mountains and down the desert slopes, and 35 to 45 mph wind gusts in the deserts. Gusty winds will continue in the coastal and valley areas with 15-30 mph winds, strongest near the coast with gusts of 35 mph as the winds come ashore unabated.	
Urgent Weather Message	5/6/2017	1422	PDT	San Diego	131
				...Strong Gusty West Winds in the Mountains and Deserts Through Tonight.....WIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT SUNDAY... San Diego County Mountains-Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning-Including the cities of Julian, Indio, Palm Desert, Palm Desert Country, La Quinta, Borrego Springs, and Desert Hot Springs* WINDS... Areas of west winds 20 to 30 mph with gusts to 55 mph. Isolated gusts to 65 mph. * LOCATION... Strongest winds near mountain ridge tops and along desert mountain slopes into adjacent desert areas and in the northern Coachella Valley below the San Gorgonio Pass. * VISIBILITY... Locally reduced in blowing sand and blowing dust in the deserts. * IMPACTS... The winds will make driving difficult, especially for motorists with high profile vehicles. Watch for broken tree limbs. * REPORTS... Palm Spring had a gust of 43 mph at Noon. Volcan Mountain had a gust to 53 mph at 1 PM.	
Area Forecast Discussion	5/6/2017	1501	MST	Phoenix	133
				...The far more impressive winds will occur behind the frontal boundary in Imperial County this evening. Models are in good agreement the frontal boundary will reach the Colorado River around 03Z, then into the Phoenix metro by 12Z Sunday. The timing of this front just removed from the San Diego mountains at sunset looks like a near perfect setup for persistent, organized mountain rotors; and NAM BUFR soundings for the El Centro area show a shallow mixed post-frontal boundary layer topped by 40-45kt no more than 1000ft from the sfc. Wind advisory caliber speeds throughout much of Imperial County look like a sure bet this evening...	

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Urgent Weather Message	5/6/2017	1615	MST	Phoenix	137
Urgent Weather Message	5/6/2017	1615	MST	Phoenix	139
Urgent Weather Message	5/6/2017	1746	MST	Phoenix	141

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Urgent Weather Message	5/6/2017	1746	MST	Phoenix	143
Urgent Weather Message	5/6/2017	1746	MST	Phoenix	145
Urgent Weather Message	5/6/2017	2011	MST	Phoenix	147
Urgent Weather Message	5/6/2017	2011	MST	Phoenix	148

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	5/6/2017	2011 MST	Phoenix	Imperial County Southwest-Salton Sea-Including the cities of Mountain Spring and Desert Shores... WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT SUNDAY... * AFFECTED AREA... Imperial county including Interstate 8, Highway 111, and Highway 78. * TIMING... Saturday afternoon through early Sunday morning. * WINDS... 25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph. * IMPACTS... Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.	149
Area Forecast Discussion	5/6/2017	2110 MST	Phoenix	During the afternoon and early evening hours, a deep and cold upper level closed low continued to drop south along the central CA coast as it developed, putting a strong southerly flow aloft ahead of it and into far SE CA and southern AZ. As 500mb heights drastically fell ahead of the advancing low (110m over portions of far southeast CA) temperatures today really dropped off. ... Very strong south to southwest winds developed area-wide this afternoon ahead of the low with many locations reporting peak gusts over 40 mph for much of the afternoon into the evening hours. Favored locations in Imperial County, such as Imperial and El Centro reported sustained winds over 40 mph with peak gusts to about 60 mph and a High Wind Warning was issued at 545 pm for the Imperial Valley. A Wind Advisory and Blowing Dust Advisory were also in effect for much of southwest and south-central AZ as well as Imperial County but as winds have started to taper off and no reports of dense dust were received, we allowed most of these products to expire at 8 pm. The wind advisory will continue for Imperial county through midnight tonight however, as gusts in excess of 40 mph persist in the Imperial valley.	151
Area Forecast Discussion	5/6/2017	2146 PDT	San Diego	Cold upper low center is dropping across the Southern California Bight this evening. This system will linger over SoCal and Northern Baja Mexico through Sunday night bringing a multitude of weather impacts to the region. Snow levels have rapidly dropped this evening and we received a report of sleet falling at Palomar Mountain a few hours ago. Snow levels will persist through Sunday night between 4000 to 5000 feet. Accumulations will be hit and miss at the lower elevations between 4000 to 6000 feet although even a quick inch of snow under a heavy snow shower can cause havoc on the busy mountain passes of SoCal, which is why the winter weather advisory will remain in effect through Sunday evening. Above 5000 or 6000 feet, accumulations are more likely, and we could see up to 6 inches or so at those higher elevations through Sunday evening. Showers will increase in intensity and coverage overnight as the low center approaches the region. Gustly SSW winds will continue this evening over the mountains and deserts and should diminish towards early Sunday morning. Have extended the northern deserts wind advisory through 2 am as winds continue to be gusty there and hovering around advisory criteria with a few reports of blowing dust and sand in the high deserts of San Bernardino County this evening.	155

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Urgent Weather Message	5/6/2017	2152	PDT	San Diego	159
				<p>...Strong Gusty West Winds in the Mountains and Deserts Through Tonight.....WIND ADVISORY REMAINS IN EFFECT UNTIL 2 AM PDT SUNDAY...Riverside County Mountains-San Diego County Mountains-Coachella Valley-San Diego County Deserts-San Gorgonio Pass Near Banning-Including the cities of Julian, Indio, Palm Desert, Palm Desert Country, La Quinta, Borrego Springs, and Desert Hot Springs* WINDS...Areas of west winds 20 to 30 mph with gusts to 55 mph. Isolated gusts to 65 mph. * LOCATION...Strongest winds near mountain ridge tops and along desert mountain slopes into adjacent desert areas and in the northern Coachella Valley below the San Gorgonio Pass. * VISIBILITY...Locally reduced in blowing sand and blowing dust in the deserts. * IMPACTS...The winds will make driving difficult, especially for motorists with high profile vehicles. Watch for broken tree limbs.</p>	

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AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
828 PM MST Wed May 3 2017

.SYNOPSIS...

A strong high pressure system will continue to build over the region through Friday, providing the some of the warmest temperatures of the year. However a cold Pacific low pressure system will approach the area this weekend, resulting in windy conditions Saturday and Sunday, and a cooling trend. The low pressure system will become stationary over the region Monday and Tuesday, with an increasing chance of showers and thunderstorms, and much colder weather.

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.DISCUSSION...

The heat dome continues to build across the Desert Southwest as the upper level ridge axis has now shifted into SE California. Temperatures today managed to hit 100 degrees across a good portion of the lower deserts, including Phoenix Sky Harbor Airport which hit the century mark for the first time this year. The KTWC 00Z raob showed roughly three degrees of warming in the mixed layer compared to 24 hours ago. The ridge axis will move across Arizona on Thursday, so we will add this the current heat by another couple of degrees. The current forecast is still looking good, so no changes are needed this evening.

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.PREVIOUS DISCUSSION...

Tonight through Friday...

A massive high pressure system, extending all the north into southwestern Canada, will continue to build over the western states the next couple of days. The center of the high pressure system is forecast to shift over Arizona Thursday and part of Friday for some of the warmest or hottest temperatures of the year. Clear skies and light winds are also expected.

Saturday and Sunday...

A Pacific low pressure system is forecast to continue to develop south along the California coast and intensify as it finally approaches southern California by late Sunday. As a result, strong gusty south to southwest winds are forecast area-wide Saturday afternoon, with windy conditions Sunday but not as strong. Red Flag warnings and Wind Advisories are also likely for Saturday. Also, increasing south winds aloft will import a considerable amount of

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mid/high level moisture from Mexico into the eastern third of AZ as depicted by the slight QPF forecast by the GFS model. The lower atmosphere will remain very dry so the GFS QPF representation is likely virga showers from Phoenix eastward.

Saturday afternoon temperatures will be cooler, with lower desert readings falling into the 90s after the 100+ degree heat Thursday and Friday. The best cooling will take place over southeast CA and southwest AZ, areas closer to the develop low pressure system.

Monday and Tuesday...

By this time a powerful and intense cutoff low will have developed, in the vicinity of the lower Colorado River at 500 mb. All models including ensembles have been consistent with this forecast and accepted. Although this system will be cold and dynamically strong, the prediction of entrained moisture into the system remains problematic. Recent satellite Total Precipitable Water Imagery showed moisture gathering in a broad area off the CA coast generally in the 0.70 to 0.90 inch range, but not much was noted over northwest Mexico. Therefore as the system starts to go through its intense spin-up gyrations in the coming days, we are likely to see incoming moisture sources we and the models didnt anticipate.

For now we have increased precip probabilities over southwest and south central AZ Monday through Tuesday. Also, different model iterations for the Monday afternoon period have wavered between vertical wind shear and unidirectional wind shear over parts of south central AZ for the potential of fast moving thunderstorms with organization potential. We will keep a vigil on this possibility especially because incoming moisture seems problematic at this point.

Much colder weather is also forecast with afternoon highs falling from the 100 deg mark on the lower deserts Thu and Fri, into the upper 70s Monday and Tuesday.

Wednesday...

At this point models are moving the AZ cutoff low quickly east into New Mexico with clear skies and warming temperatures forecast this period.

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.AVIATION...

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

Strong high pressure aloft will result in continued light relatively diurnal winds in the greater Phoenix area through Thursday. Skies genly clear with just a few very thin high cirrus decks from time to time. No aviation concerns of any kind.

Southeast California/Southwest Arizona including KIPL and KBLH:

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Strong high pressure will keep winds on the light side through midday Friday although winds may tend to favor the south/southeast at the TAF sites during the period with speeds mostly below 10kt. Outside of a few high thin cirrus decks skies should be genly SKC. No aviation concerns of any kind.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

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.FIRE WEATHER...

Saturday through Wednesday...

Elevated to critical fire weather conditions are expected to occur on Saturday. A ridge of high pressure aloft will begin to break down across the Southwest, but will maintain hot temperatures for early May, with highs remaining in the low-mid 90s across most areas. A dry air mass will remain fixed over the region, yielding single digit RH values with only modest humidity recovery overnight. Winds will also strengthen across the entire forecast area ahead of an approaching cold front, with sustained speeds of 15-30 mph and gusts to 45 mph possible.

A cold front will move through the region late Saturday and Sunday and will bring much cooler temperatures. However, winds will still be breezy out of the west in the wake of the cold front, amidst single digit RH values. Elevated fire weather conditions remain possible despite high temperatures in the upper 70s and low 80s.

An upper level low pressure system will move over the area by Monday, maintaining cool temperatures, while weaker winds and the potential for showers and a few thunderstorms increases. Similar conditions are expected Tuesday as the upper low slowly moves eastward, before a gradual warm up occurs Wednesday.

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.SPOTTER INFORMATION STATEMENT...

Amateur radio Skywarn net activation is not expected at this time.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Fire Weather Watch from Saturday morning through Saturday evening for AZZ132-133.

CA...None.

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Area Forecast Discussion
National Weather Service San Diego CA
919 PM PDT Wed May 3 2017

Updated aviation, marine, and beaches sections

.SYNOPSIS...

High pressure aloft will continue the fair weather through Friday with warm conditions inland. Areas of night and morning low clouds will occur, increasing Friday and Saturday. A cold upper level low pressure system from the north will arrive this weekend and bring much cooler weather with showers and possibly thunderstorms Sunday and Monday and some snow in the mountains. The low will move to the east Tuesday or Wednesday and allow fair weather to return.

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

(Previous discussion issued at 200 pm)

Mostly sunny skies prevailed this afternoon with temperatures mostly similar or a little higher than on Tuesday. The high pressure aloft will continue to pass over So-Cal today and then move east of the area Thursday while a trough develops in the Gulf of Alaska. Fair weather will prevail through Friday with weak to moderate onshore flow, and inland areas will continue to be quite warm. Near the coast, there should be a slight increase in the coverage of the night/morning low clouds, and with a possible stronger inversion Thursday, the stratus could take longer to clear.

The big story will be the upper trough moving into California Saturday with the low becoming closed Saturday night. Models are becoming in better agreement with the position of the low. The low will initially move into northern parts of So-Cal Sunday morning with strong onshore flow here and moisture extending from about 950 to over 700 mb. 500 mb temps fall to -25 C or below, so there will be the combination of dynamics/instability/moisture to bring widespread showers Sunday with a few thunderstorms possible. The low center will wobble around some with a strong wave possibly rotating through the flow from northern So-Cal to the coastal waters west of San Diego Monday morning, and moisture by Monday could extend to 400 mb. Showers look quite likely Sunday night, but with a possible track of the low to our south in northern Baja both at the surface and aloft, there could be a decrease in activity Monday as some offshore flow could develop, though the models could certainly change with this. Daytime heating where there are fewer clouds could

May 6, 2017 Exceptional Event, Imperial County

destabilize things enough for a few more thunderstorms Monday. Hail could occur with thunderstorms either Sunday or Monday. 12Z GFS and ECM show total QPF of over one inch in some locations, like most recent runs have, though precip amounts will be variable over short distances due to convection. Also, with the cold upper low, there will be snow possible in the mountains with 850 MB temps falling to 1-3 deg C at times with snow levels around 5000 feet, maybe even locally lower in convection. Several inches could accumulate in short periods of time, though in between the periods of snow, rapid melting could occur as it is now early May. Gusty winds will occur at times, with best chances in the mountains/deserts Saturday/Sunday. Models are trending downward with precip for Tuesday as the low shifts to the east/northeast, and fair weather will likely return by Wednesday.

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.AVIATION...

040340Z...Coasts/valleys...Areas of stratus with bases near 1000 ft MSL filling in along the coast this evening and spreading 10-15 mi inland overnight. Areas of vis 3-5 SM, locally 1 SM or less, developing over higher coastal terrain and on the coastal mesas as stratus moves inland. Clearing 15Z-18Z Thursday with mostly clear skies and unrestricted vis Thursday afternoon. Stratus moving back inland after 05/02Z with bases 1000-1500 ft MSL.

Mountains/Deserts...Mostly clear with unrestricted vis through Thursday evening.

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.MARINE...

No hazardous marine weather is expected through Friday. A late season storm will bring increasing west-northwest winds Saturday afternoon. Showers likely with a slight chance of thunderstorms Sunday and Monday. Precipitation will begin to taper off Tuesday.

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.BEACHES...

A long period SSW swell will bring elevated surf of 3-6 feet and strong rip currents to southwest facing beaches through Thursday, with the highest surf in Orange County. A Beach Hazards Statement remains in effect for Orange and San Diego Counties through Thursday.

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.SKYWARN...

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

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.SGX WATCHES/WARNINGS/ADVISORIES...

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CA...Beach Hazards Statement through Thursday evening for Orange
County Coastal Areas-San Diego County Coastal Areas.

PZ...None.

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PUBLIC...Maxwell/JMB

AVIATION/MARINE/BEACHES...SS

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Area Forecast Discussion
National Weather Service Phoenix AZ
250 AM MST Thu May 4 2017

.SYNOPSIS...

A strong high pressure system will continue to sit over the region leading to the warmest temperatures of the year today and Friday. However, a cold Pacific low pressure system will approach the area this weekend resulting in windy conditions and a cooling trend. This low pressure system will only slowly move across the area Monday and Tuesday with an increasing chance of showers and thunderstorms along with persistent cool weather.

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.DISCUSSION...

Western hemispheric WV imagery early this morning depicts a high amplitude and increasingly blocked flow pattern with expansive ridging currently dominating the SW Conus. 00Z regional sounding data sampled midtropospheric heights and temperatures solidly in the 90th percentile, and Wednesday afternoon temperatures did not disappoint breaching the 100F threshold at many desert locations. Forecast confidence is excellent regarding the unusually strong ridging and near record highs lingering over the forecast area the next couple days. However, the larger forecast conundrum exists next week handling a slow moving cold, cutoff system in a very blocked flow regime.

H5 heights at or just exceeding 586dm over central and southern Arizona will be maximized this afternoon where as thermal fields in the middle and lower levels hold onto a 90-95th percentile ranking Friday despite height falls edging into the region. Model spread during this time frame is quite small and all output of H8 temperatures near +24C today and +25C (or greater) Friday essentially guarantees 2 more days of widespread 100+F highs. At this point, the only potential problem may be increasing cloud cover Friday afternoon; however, even models that account for this trend point to near record level warmth.

An incredibly deep negative height anomaly will become situated through SE California and the northern Baja by early next week as a high amplitude omega block develops over the Conus. Ensemble means and operational members show this low center greater than 4 normalized standard deviations below normal and as deep a circulation as generally seen this time of year in the Southwest. All ensemble members also completely agree on this overall pattern, but as is typically the case with cutoff systems, precise placement and movement of the cold core becomes far less certain with time. Based on historical closed low trends and analysis of ensemble

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members, feel the slower and further south forecast from the ECMWF/CMC camp may end up being a better forecast.

Regardless, more pronounced height falls will descend into the area Saturday ahead of the cold core aloft while sfc pressure falls over southern Nevada tighten the low level gradient. Along this increased baroclinicity and pressure packing, a 30-40kt LLJ will develop though the region ahead of a frontal boundary. Deep mechanical mixing should tap part of this momentum yielding gusty afternoon S-SW winds and yielding threatening fire weather conditions. For the most part, the environment will remain dry ahead of this system Saturday, however SREF probabilities are heightened and NAM BUFR soundings show a narrow plume of moisture in the 600-700mb layer

juxtaposed with relatively steep lapse rates. Some models suggest a lead shortwave ejecting through the region ahead of the main system; and while this could be limited to more virga than anything else, these convective processes may actually tap and enhance wind speeds near any of these virga bursts.

By Sunday and Monday, the system will likely have attained a fully closed off and temporarily stationary position somewhere over southern California. While some showers are possible throughout the forecast area, there are two facets of this system that strongly indicate the initial impact from this system will not be associated with rainfall: 1) the northwest trajectory (especially this time of year) will carry little moisture with the circulation center initially, and 2) an anticipated trend towards a more south and slower positioning would keep ascent fields more removed from the CWA for a longer duration. The far more certain forecast parameter will be temperatures some 10F below average during this time. Should showers and thicker clouds spill north into a larger portion of the forecast area, an anomaly greater than even 10F will be possible.

The preponderance of model evidence suggests Tuesday as the most likely day for more prevalent showers and thunderstorms to affect the area. Should the more preferred southern location of the ECMWF and CMC H5 closed low come to fruition, a higher likelihood of better moisture entrainment will exist as well as decent potential for more robust instability and shear parameters Tuesday afternoon. Far too much uncertainty exists this far in advance, but pattern recognition would point towards semi-organized convection with gusty winds and widespread dense blowing dust as the greatest threats.

Beyond Tuesday, forecast confidence deteriorates substantially depending the proximity of a kicker wave over the NE Pacific and haste to eject the cold core from the local area. At some point, this system will be pushed into the plains undercutting the ridge axis of the omega block. But, past experience says this will occur slower than models currently forecast, so cooler weather, clouds, and light showers could linger over eastern Arizona even into Wednesday before warmer and clearing conditions return to the region for the latter part of the week.

&&

May 6, 2017 Exceptional Event, Imperial County**Appendix A****.AVIATION...**

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

Strong high pressure aloft will result in continued light relatively diurnal winds in the greater Phoenix area through Thursday. Skies genly clear with just a few very thin high cirrus decks from time to time. No aviation concerns of any kind.

Southeast California/Southwest Arizona including KIPL and KBLH:

Strong high pressure will keep winds on the light side through midday Friday although winds may tend to favor the south/southeast at the TAF sites during the period with speeds mostly below 10kt. Outside of a few high thin cirrus decks skies should be genly SKC.

No aviation concerns of any kind.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday...

Elevated to critical fire weather conditions are expected to occur on Saturday. A ridge of high pressure aloft will begin to break down across the Southwest, but will maintain hot temperatures for early May with highs remaining in the low-mid 90s across most areas. A dry air mass will remain fixed over the region yielding single digit RH values with only modest humidity recovery overnight. Winds will also strengthen across the entire forecast area ahead of an approaching cold front with sustained speeds of 15-30 mph and gusts to 45 mph possible.

A cold front will move through the region late Saturday and Sunday and will bring much cooler temperatures. However, winds will still be breezy out of the west in the wake of the cold front amidst single digit RH values. Elevated fire weather conditions remain possible despite high temperatures in the upper 70s and low 80s.

An upper level low pressure system will move over the area by Monday, maintaining cool temperatures while weaker winds and the potential for showers and a few thunderstorms increases. Similar conditions are expected Tuesday as the upper low slowly moves eastward before a gradual warm up occurs Wednesday.

&&

.CLIMATE...

Record Highs for Thursday and Friday:

Date	Phoenix AZ	Yuma AZ
-----	-----	-----
May 4th	106 in 1947	108 in 1947
May 5th	105 in 1989	109 in 1947

&&

.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed early next week.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Fire Weather Watch from Saturday morning through Saturday evening for AZZ132-133.

CA...None.

&&

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

DISCUSSION...MO

AVIATION...Kuhlman/CB

FIRE WEATHER...Rogers

CLIMATE...MO

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FXUS66 KSGX 041005
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
305 AM PDT Thu May 4 2017

.SYNOPSIS...

Strong high pressure will bring another very warm day to the region today. High pressure will break down and deepen the marine layer Friday and Saturday. A cold low pressure system from the north will arrive this weekend and bring strong winds Saturday, then much cooler weather with showers and possibly thunderstorms Sunday and Monday. The system will move east Tuesday and Wednesday and allow fair weather to return.

&&

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

Our marine layer and associated cloud deck are much more organized and extensive than they were yesterday. Today's weather will be quite warm much like yesterday except for the greater presence of coastal clouds this morning. Some onshore winds will pick up in parts of the mountains and deserts this afternoon as well. A big low pressure trough in the Gulf of Alaska will progress into the northwest U.S. and spawn a cutoff low that dives due south into California on Saturday. For Friday's weather, this will deepen the marine layer slightly and cool the coastal basin a bit. Areas of winds in the mountains and deserts will increase too. A coastal eddy gets generated as the cutoff low approaches Friday night which will deepen the marine layer such that clouds should entirely fill the coastal basin up into the foothills. With this rapid deepening, drizzle has been added to the forecast for the marine layer Saturday morning. As the cutoff low moves into Southern California, the chances of actual showers will increase from north to south and by Saturday night should be quite widespread. A deep moisture plume pushes in Sunday morning to enhance the showers. At the same time a cold core of the cutoff low moves overhead, destabilizing the atmosphere enough to produce thunderstorms. The showers and isolated thunderstorms will be convective, hit and miss, now and then. Snow levels will sharply drop to as low as 4000 feet Sunday morning. Snow will have a hard time accumulating on warm ground, but a few inches could fall on the mountain tops, with an inch or two as low as 5000 feet (it will melt rather quickly). The cutoff low slowly dives into Baja California Monday and moves east Tuesday. Warmer air aloft will decrease the chance of thunderstorms and raise the snow level from northwest to southeast. The 00Z GFS has now sped up the low to exit late Monday and Tuesday, while the Euro and Canadian models

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

move it out more slowly, late Tuesday and Wednesday. We'll lean toward the foreign model solutions of a slower exit since that matches cutoff low behavior (and previous runs) much better. Showers should gradually end during the day Tuesday. The nature of convective showers means a lot or a little storm total rainfall and a real challenge forecasting it for any one spot. The best we can project is around a tenth inch up to over a full inch. Fair and warmer weather will return Wednesday under a weak ridge.

&&

.AVIATION...

040900Z...Coasts/valleys...stratus with bases of 1000-1300 FT will prevail. Areas of vis 3-5 SM, locally 1 SM or less, could develop over higher coastal terrain and on the coastal mesas as stratus moves inland. Clearing 15Z-18Z today with mostly clear skies and unrestricted vis this afternoon. Stratus moving back inland after 05/02Z with bases 1000-1500 ft MSL.

Mountains/Deserts...Mostly clear with unrestricted vis through Thursday evening.

&&

.MARINE...

No hazardous marine weather is expected through Friday. That will change this weekend as a late season storm is poised to bring increasing west-northwest winds Saturday with gusts of 20-30 knots forecast for late Saturday into Sunday along with building seas. Showers will become likely along with the potential of a few thunderstorms Sunday into Monday. Precipitation will begin to taper off Tuesday.

&&

.BEACHES...

A long period SSW swell will bring elevated surf of 3-6 feet and strong rip currents to southwest facing beaches through this evening with the highest surf in Orange County. A Beach Hazards Statement remains in effect for Orange and San Diego Counties through this evening.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Beach Hazards Statement through this evening for Orange County Coastal Areas-San Diego County Coastal Areas.

PZ...None.

&&

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PUBLIC...MM

AVIATION/MARINE/BEACHES...Gregoria

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FXUS66 KSGX 042018
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
118 PM PDT Thu May 4 2017

.SYNOPSIS...

Strong high pressure will bring another warm day to the region today. A low pressure trough moving into the west coast will deepen the marine layer and bring cooling Friday and Saturday. A cold low pressure system from the north will arrive this weekend and bring strong winds Saturday along with some light showers, then much cooler weather with periods of scattered to numerous showers and isolated thunderstorms Sunday through Tuesday. The system will move east Wednesday and allow fair weather to return.

&&

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

Afternoon visible satellite imagery shows marine layer stratus trying to sneak up the southern San Diego county coast from Baja Mexico, while some flat cumulus clouds have formed over the mountain ridges. The 12Z sounding from Miramar shows a 10 deg C inversion at around 1200 feet, which indicates a deeper marine layer than yesterday morning. We continue to trend better onshore flow today, with the San Diego to Las Vegas pressure gradients at 1.0 mb onshore, whereas they were 0.7 mb offshore 24 hours ago. Today should be another warm day across the region, with slight cooling west of the mountains as the upper level ridge starts to move east, although high temperatures should still be 5-15 degrees above normal. The marine layer should deepen a little further tonight with strengthening onshore flow and lower 500 mb heights moving into the region, so expect marine layer clouds to move into the coast and valleys tonight/Friday morning.

The weather will continue to cool Friday as a trough develops along the west coast and the upper level ridge moves east. The marine layer will continue to deepen as well. On Saturday, the trough deepens further and a closed low starts to split off from the trough and drop down into Central California. The marine layer will likely be up to 5000 feet deep, and with onshore flow continuing to get stronger, there may only be partial clearing of marine layer clouds during the day Saturday, with potentially a strong coastal eddy helping to produce some marine layer drizzle. Onshore pressure gradients from San Diego to Las Vegas peak Saturday evening at 15-17 mb, with 850 mb winds of around 20-30 kt. This will result in strong west winds along the mountain ridges, desert slopes, through/below the passes/canyons and into

- May 6, 2017 Exceptional Event, Imperial County

the adjacent deserts. Widespread gusts of 40-50 mph will be possible in those areas Saturday afternoon and evening, with 60+ mph gusts in the windiest locations. With continued cooling, highs will likely lower to 5-15 degrees below normal.

The closed low will strengthen further and dip south into Southern California and become cut-off from the jet stream. Deep moisture up through 400-500 mb will move in with the low, along with most unstable cape of around 100-400 j/kg and 500 mb temperatures within the core of the low falling to around -25 deg C. This, in addition to lift provided by the low, should create showers and isolated (to maybe scattered) thunderstorms on Sunday. The cold air will result in the snow level lowering to 4000 feet Sunday morning, and then increasing to around 5500-6500 feet by late Sunday.

Model differences are apparent starting Monday, with the GFS keeping the low over Southern California before moving it east into Arizona by late Monday and resulting in a dry Tuesday. Meanwhile, the ECMWF and Canadian models move the low south of the border, perhaps bringing offshore winds and wrap-around moisture/precipitation. On Tuesday, the ECMWF and Canadian then show the low moving northeast from Baja into Arizona, with wrap-around showers continuing over Southern California. Since the GFS solution is the outlier and the ECMWF has had a better handle on this low throughout the week, will lean more towards the ECMWF solution with the forecast. It does not look like we dry out until Wednesday as the low moves east and a ridge moves into the area. Storm-total precipitation will be highly variable from one location to the next, due to the showery nature of the precipitation. Generally, 0.25 to 1+ inches is possible across the region, with a trace of snow down to 4000 foot elevation, 1-3 inches of snow from 5000-7000 feet, and 4-6 inches possible above 7000 feet. Instability still exists on Monday, so thunderstorms will be possible that day as well. The ECMWF and Canadian actually show a lot of instability on Tuesday (surface based CAPE of 300-700 j/kg), so have added a slight chance of thunderstorms during the day Tuesday. Any heavier convective cells/thunderstorms could produce locally heavy rain and possible urban/small stream flooding. The cold system will result in highs falling to 10-20 degrees below normal Sunday and Monday with slight warming Tuesday and Wednesday.

&&

.AVIATION...

042015Z...Coasts/Valleys...SCT010-015 at the coast becoming BKN-OVC010-015 through 04Z and spreading 20 miles inland through 14Z Friday. Areas of vis 3-5 miles over higher coastal terrain and inland valleys. Low clouds clearing from the coastal airports between 16Z-18Z Friday.

Mountains/Deserts...Mostly clear with unrestricted vis through tonight.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

&&

.MARINE...

No hazardous marine weather through Friday. A late season storm will bring increasing west-northwest winds Saturday with gusts of 20-30 knots late Saturday into Sunday along with building seas. Showers are likely Sunday into Monday with the potential for a few thunderstorms. Precipitation will begin to taper off Tuesday.

&&

.BEACHES...

Elevated surf of 3-6 feet and strong rip currents on southwest facing beaches through this evening. The highest surf will be in Orange County. A Beach Hazards Statement remains in effect for Orange and San Diego Counties through this evening.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Beach Hazards Statement until 8 PM PDT this evening for Orange County Coastal Areas-San Diego County Coastal Areas.

PZ...None.

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PUBLIC...Harrison

AVIATION/MARINE/BEACHES...Moede

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924
FXUS65 KPSR 042155
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
255 PM MST Thu May 4 2017

.SYNOPSIS...

A strong high pressure system will continue over the region on Friday, producing another day of unseasonably hot temperatures on the deserts. However, a Pacific low pressure system will approach the area this weekend, resulting in dry windy conditions Saturday, and significant cooler temperatures Sunday with a threat of showers in southeast California. As the low pressure system moves into Arizona Monday and Tuesday, much colder weather will develop, along with a threat of showers and thunderstorms. Clearing skies and warmer weather will return by the later part of next week.

&&

.DISCUSSION...

Tonight and Friday...

A strong high pressure system will continue over the region providing some of the warmest temperatures of the year again on Friday. Also, afternoon south to southwest breezes will increase Friday afternoon in response an approaching Pacific low pressure system. Otherwise clear skies are expected tonight and Friday.

Saturday and Sunday...

Again, models are very consistent in their forecasts of developing and intensifying a Pacific low pressure system from central CA Saturday morning to southern CA Sunday. In general, as the cold front approaches Saturday, windy conditions will develop area-wide with southwest gusts in the 30 to 45 mph range. Due to low humidity Saturday, the Fire Weather Watch for southern AZ continues due to high fire danger. Breezy to windy conditions are expected Sunday but not as strong as the cold should have moved through most of AZ by afternoon.

It appears that moisture will be limited, and any shower activity will be confined the cold unstable region near the upper low center in southeast CA and Colorado River Valley on Sunday.

A cooling trend is also expected with afternoon lower desert temperatures in southwest and south central AZ falling into the the mid to upper 70s.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

Monday and Tuesday...

By Monday, a powerful and intense cutoff low will have developed in the vicinity of the lower Colorado River at 500 mb. Cold unstable air aloft should extend into much of central and southern AZ for a threat of showers and possible thunderstorms, with a better chance on Tuesday. Unfortunately there will be no subtropical moisture tap from Mexico, and all advected moisture will come from the Pacific marine layer off the southern CA and Baja coasts.

Wednesday and Thursday...

The GFS ensemble mean, forecasts the AZ upper low to drift east into New Mexico by Wednesday afternoon, then into Oklahoma Thursday. Therefore clearing skies, lighter wind, and a warming trend will commence. Afternoon temperatures on Thursday should approach seasonal normals.

&&

.AVIATION...

South-Central Arizona Including KPHX, KIWA, and KSDL: Few aviation weather concerns for the area. Winds will stay relatively light below 10 kts and follow typical diurnal wind shifts. The only question is the exact timing of the east to west wind shift but the shift should occur for all TAF sites by 0z.

Southeast California/Southwest Arizona Including KIPL and KBLH: No major aviation weather concerns as winds remain light staying at or below 10 kts and follow typical diurnal patterns. Winds should shift out of the west by early afternoon.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday... A weather disturbance will bring in much cooler temperatures and moisture into the area. Gusty winds will continue through Sunday but should subside by Monday with an increase in moisture and some chances for rain. The greatest chances for rain will be Monday and Tuesday. Minimum humidities may still drop to near 15 percent but overnight will be pretty good.

&&

.CLIMATE...

Record Highs for Thursday and Friday:

Date	Phoenix AZ	Yuma AZ
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May 6, 2017 Exceptional Event, Imperial County**Appendix A**

May 4th 106 in 1947 108 in 1947
May 5th 105 in 1989 109 in 1947

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.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed early next week.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Fire Weather Watch from Saturday morning through Saturday evening for AZZ132-133.

CA...None.

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DISCUSSION...Vasquez

AVIATION...Deemer

FIRE WEATHER...Deemer

CLIMATE...MO

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FXUS66 KSGX 050424 AAA
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
925 PM PDT Thu May 4 2017

.SYNOPSIS...

Strong high pressure will bring another warm day to the region today. A low pressure trough moving into the west coast will deepen the marine layer and bring cooling Friday and Saturday. A cold low pressure system from the north will arrive this weekend and bring strong winds Saturday along with some light showers, then much cooler weather with periods of scattered to numerous showers and isolated thunderstorms Sunday through Tuesday. The system will move east Wednesday and allow fair weather to return.

&&

.UPDATE...

The Pops/Wx grids were tweaked a bit for Sunday and Sunday night to increase the pops a bit, especially over the mountains. The significant, late-season storm system is still on track to bring sensible weather impacts, beginning Saturday, with the brunt of the precipitation potential Sunday through Monday morning. No other significant changes were made to the forecast at this time.

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

(Previous discussion issued at 118 PM)

Afternoon visible satellite imagery shows marine layer stratus trying to sneak up the southern San Diego county coast from Baja Mexico, while some flat cumulus clouds have formed over the mountain ridges. The 12Z sounding from Miramar shows a 10 deg C inversion at around 1200 feet, which indicates a deeper marine layer than yesterday morning. We continue to trend better onshore flow today, with the San Diego to Las Vegas pressure gradients at 1.0 mb onshore, whereas they were 0.7 mb offshore 24 hours ago. Today should be another warm day across the region, with slight cooling west of the mountains as the upper level ridge starts to move east, although high temperatures should still be 5-15 degrees above normal. The marine layer should deepen a little further tonight with strengthening onshore flow and lower 500 mb heights moving into the region, so expect marine layer clouds to move into the coast and valleys tonight/Friday morning.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

The weather will continue to cool Friday as a trough develops along the west coast and the upper level ridge moves east. The marine layer will continue to deepen as well. On Saturday, the trough deepens further and a closed low starts to split off from the trough and drop down into Central California. The marine layer will likely be up to 5000 feet deep, and with onshore flow continuing to get stronger, there may only be partial clearing of marine layer clouds during the day Saturday, with potentially a strong coastal eddy helping to produce some marine layer drizzle. Onshore pressure gradients from San Diego to Las Vegas peak Saturday evening at 15-17 mb, with 850 mb winds of around 20-30 kt. This will result in strong west winds along the mountain

ridges, desert slopes, through/below the passes/canyons and into the adjacent deserts. Widespread gusts of 40-50 mph will be possible in those areas Saturday afternoon and evening, with 60+ mph gusts in the windiest locations. With continued cooling, highs will likely lower to 5-15 degrees below normal.

The closed low will strengthen further and dip south into Southern California and become cut-off from the jet stream. Deep moisture up through 400-500 mb will move in with the low, along with most unstable cape of around 100-400 j/kg and 500 mb temperatures within the core of the low falling to around -25 deg C. This, in addition to lift provided by the low, should create showers and isolated (to maybe scattered) thunderstorms on Sunday. The cold air will result in the snow level lowering to 4000 feet Sunday morning, and then increasing to around 5500-6500 feet by late Sunday.

Model differences are apparent starting Monday, with the GFS keeping the low over Southern California before moving it east into Arizona by late Monday and resulting in a dry Tuesday. Meanwhile, the ECMWF and Canadian models move the low south of the border, perhaps bringing offshore winds and wrap-around moisture/precipitation. On Tuesday, the ECMWF and Canadian then show the low moving northeast from Baja into Arizona, with wrap-around showers continuing over Southern California. Since the GFS solution is the outlier and the ECMWF has had a better handle on this low throughout the week, will lean more towards the ECMWF solution with the forecast. It does not look like we dry out until Wednesday as the low moves east and a ridge moves into the area. Storm-total precipitation will be highly variable from one location to the next, due to the showery nature of the precipitation. Generally, 0.25 to 1+ inches is possible across the region, with a trace of snow down to 4000 foot elevation, 1-3 inches of snow from 5000-7000 feet, and 4-6 inches possible above 7000 feet. Instability still exists on Monday, so thunderstorms will be possible that day as well. The ECMWF and Canadian actually show a lot of instability on Tuesday (surface based CAPE of 300-700 j/kg), so have added a slight chance of thunderstorms during the day Tuesday. Any heavier convective cells/thunderstorms could produce locally heavy rain and possible urban/small stream flooding. The cold system will result in highs

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

falling to 10-20 degrees below normal Sunday and Monday with slight warming Tuesday and Wednesday.

&&

.AVIATION...

050340Z...Coasts/Valleys...Stratus with bases 1000-1500 ft MSL spreading 20 miles inland overnight. Local vis 3-5 miles where stratus nears higher terrain in the valleys. Stratus clearing to the coast 17-19Z, then moving back inland after 06/23Z.

Mountains/Deserts...Mostly clear with unrestricted vis through Friday evening.

&&

.MARINE...

No hazardous marine weather through Friday. A late season storm will bring west-northwest winds with gusts of 20-30 knots late Saturday into Sunday along with building seas. Showers are likely Sunday into Monday with the potential for a few thunderstorms. Precipitation will begin to taper off Tuesday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...None.

PZ...None.

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PUBLIC...Harrison/JMB

AVIATION/MARINE...SS

**IOWA STATE
UNIVERSITY**

College of Ag

Department of Agronomy

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NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
224 AM MST Fri May 5 2017

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Imperial County Southwest-Salton Sea-Chuckwalla Mountains-
Imperial County Southeast-Imperial County West-Imperial Valley-
Including the cities of Mountain Spring, Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamo, and Brawley
224 AM PDT Fri May 5 2017

...WIND ADVISORY IN EFFECT FROM 2 PM TO 11 PM PDT SATURDAY...

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

- * AFFECTED AREA...Imperial county including Interstate 8, Highway 111, and Highway 78.
- * TIMING...Saturday afternoon through Saturday evening.
- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph.
- * IMPACTS...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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FXUS65 KPSR 050931
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
230 AM MST Fri May 5 2017

.SYNOPSIS...

One more day of unseasonably hot temperatures before a Pacific low pressure system moves into the area resulting in significantly cooler temperatures over the weekend and early next week. Breezy conditions with localized blowing dust will be likely Saturday, then a few showers and thunderstorms will roll through the area Monday and Tuesday. Dry weather will return with moderating temperatures during the middle of next week.

&&

.DISCUSSION...

Objective analysis, 00Z sounding data, and early morning WV imagery place the center of a pronounced ridge axis over far SE Arizona as the entire western hemisphere flow pattern becomes more blocked and meridional in appearance. 00Z regional data indicated H5 heights and temperatures above the 95th percentile though the tendency throughout the remainder of today will be towards ridge dampening and realignment eastward into the plains. This will occur in response to a seasonally deep negative height anomaly digging along the West Coast and cutting off through the SW Conus. Forecasting the slow progression and impacts of this cutoff system will be the paramount challenge through this weekend and early next week.

Despite the first vestiges of height falls moving into the bulk of the CWA today, the H8 thermal ridge will be shifted into central and eastern Arizona providing one more day of hot early May temperatures. Though SE California will be slightly cooler today vs Thursday, much of central Arizona should be several degrees warmer and threaten record highs (see Climate section below). The only potential negative influence against record temperatures will be the introduction of mid/high clouds late in the day though timing of any reduced insolation may be at and just beyond peak heating (and have minimal influence overall).

There continues to be only minor differences among operational and ensemble members through the weekend regarding the movement and placement of a deep negative height anomaly (nearly 4 normalized standard deviations below average) across SE CA/SW AZ/Baja peninsula. Interestingly, this appears to be the battle of model physics packages with GEFS members definitively in the camp of rotating this low through and out of the Southwest much quicker than the overwhelming majority of CMC and ECMWF members which lingers the circulation center further to the south and west over the Baja into Monday night. Based on historical trends and performance of cutoff

May-6, 2017 Exceptional Event, Imperial County**Appendix A**

spring lows in this part of the country, have a strong preference towards the slower CMC/ECMWF members.

Regardless, as height falls translate down the California coast Saturday, sfc pressure falls will be maximized over cntrl/srn Nevada and Utah while a frontal boundary surges across the southern CA mountains and into the lower Colorado River Valley. Deep afternoon mixing juxtaposed with a 30-40kt LLJ aligned along the tightening baroclinicity should yield locally strong winds Saturday afternoon into early evening. Post frontal mountain rotors through SE California may yield the strongest wind gusts and more extensive blowing dust. In addition to impacts directly from the winds, critical fire weather conditions will also likely exist through

central and eastern Arizona.

Given the trajectory of this system from the northwest and traversing along the immediate coastline, moisture will initially be limited and confined mainly to the cold core circulation center. With a preference to the further southwest and slower solution, have pared back POPs somewhat over the bulk of Arizona through the weekend feeling any showers/storms will rotate back to the west away from the region and towards the circulation center. Probably the most fascinating part of this system will be the marked cooling by Sunday with forecast highs only in the middle/upper 70s - quite an abrupt 30F change from yesterday and today.

The entire cold core system will finally (albeit still slowly) eject across the forecast area Monday and Tuesday. Again with a leaning towards a slower progression, feel the better chances for more widespread scattered showers and thunderstorms will be Tuesday afternoon. There is the possibility that if this system is even slower and further south, more moisture may become entrained in the circulation providing more robust rainfall chances (any type of rain in May is a rarity, so thunderstorm rains would be very uncommon). For the time being, have hedged towards an ECMWF/NAEFS type POP blend mostly in a 30-40% range. Though difficult to ascertain now depending on thermal fields, but gusty winds and blowing dust may be problematic with any of these storms due to the evaporational cooling and momentum transfer during peak heating (though highs in the 70s doesn't constitute much 'heating').

Though residual moisture and ascent may linger over higher terrain locations north and east of Phoenix Wednesday, by and large the pesky cutoff system will be ejecting into the plains during this period leaving the forecast area under synoptic scale sinking motion. There is some question regarding how quickly heights and temperatures rebound during the latter half of the week. Being mid May, feel the switch back to more seasonally average temperatures will be quite rapid and if the trailing ridge axis become more amplified and stronger, a run back towards the triple digits may be possible by the end of next week.

&&

May 6, 2017 Exceptional Event, Imperial County**Appendix A****.AVIATION...**

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

Strong high pressure aloft will keep skies generally clear at the TAF sites through Friday and will also result in weak winds favoring typical diurnal tendencies. Expect winds returning to the east after midnight, veering back around to the southwest after 19z Friday with a few gusts to 15kt or so possible in the afternoon. No aviation concerns at any of the terminals next 24 hours.

Southeast California/Southwest Arizona Including KIPL and KBLH:

Strong high pressure aloft will keep winds light tonight and mostly favoring the south at the TAF sites. Skies will be generally clear.

as the high moves east, winds will pick up a bit during the

afternoon Friday with speeds 12-18kt by mid to late afternoon at

KBLH and KIPL.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday...

A weather disturbance will bring in much cooler temperatures and moisture into the area. Gusty winds will continue through Sunday but should subside by Monday with an increase in moisture and some chances for rain. The greatest chances for rain will be Monday and Tuesday. Minimum humidities may still drop to near 15 percent but overnight will be pretty good.

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.CLIMATE...

Record Highs for Friday:

Date	Phoenix AZ	Yuma AZ
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May 5th	105 in 1989	109 in 1947

&&

.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed Saturday and again early next week.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Fire Weather Watch from Saturday morning through Saturday evening for AZZ132-133.

CA...Wind Advisory from 2 PM to 11 PM PDT Saturday for CAZ562>567.

&&

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WWUS76 KSGX 051003
NPWSGX

URGENT - WEATHER MESSAGE
National Weather Service San Diego CA
303 AM PDT Fri May 5 2017

...Periods of strong gusty west winds for the mountains and deserts for Saturday afternoon through late evening...

.A low pressure system moving southward near the West Coast will bring stronger onshore flow with periods of strong gusty west winds for the mountains and deserts for Friday afternoon through late evening.

CAZ055-060-052130-
/O.NEW.KSGX.WI.Y.0023.170506T2100Z-170507T0500Z/
San Bernardino County Mountains-Apple and Lucerne Valleys-
Including the cities of Crestline, Lake Arrowhead, Big Bear City,
Wrightwood, Victorville, Hesperia, and Apple Valley
303 AM PDT Fri May 5 2017

...WIND ADVISORY IN EFFECT FROM 2 PM TO 10 PM PDT SATURDAY...

The National Weather Service in San Diego has issued a Wind Advisory, which is in effect from 2 PM to 10 PM PDT Saturday.

- * WINDS...Areas of southwest winds 20 to 30 mph with gusts to 50 mph.
- * TIMING...Winds strengthening Saturday morning with strongest winds for Saturday afternoon and evening.
- * LOCATION...Strongest winds near mountain ridge tops and along desert mountain slopes into adjacent desert areas.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust in the deserts.
- * IMPACTS...The winds will make driving difficult...especially for motorists with high profile vehicles. Watch for broken tree limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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May 6, 2017 Exceptional Event, Imperial County**Appendix A**

CAZ056-058-061-062-065-052130-
/O.NEW.KSGX.WI.Y.0023.170506T2100Z-170507T0900Z/
Riverside County Mountains-San Diego County Mountains-
Coachella Valley-San Diego County Deserts-
San Geronio Pass Near Banning-
Including the cities of Julian, Indio, Palm Desert,
Palm Desert Country, La Quinta, Borrego Springs,
and Desert Hot Springs
303 AM PDT Fri May 5 2017

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

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

- * WINDS...Areas of west winds 20 to 30 mph with gusts to 55 mph.
Isolated gusts to 65 mph.
- * TIMING...Winds strengthening Saturday morning with strongest
winds for Saturday afternoon and evening...decreasing late
Saturday night.
- * LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas and in the
northern Coachella Valley below the San Geronio Pass.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust in
the deserts.
- * IMPACTS...The winds will make driving difficult...especially for
motorists with high profile vehicles. Watch for broken tree
limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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FXUS66 KSGX 051043
AFDSGX

FXUS66 KSGX 051036
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
336 AM PDT Fri May 5 2017

.SYNOPSIS...

A cold low pressure system will develop over Southern California during the weekend...then weaken early next week and move east during the middle of next week. Cooling will spread inland today with coolest high temperatures on Sunday...15 to 25 degrees below average for inland areas. Periods of showers are expected from Saturday through early next week along with a slight chance of thunderstorms for Saturday night through Monday. Strongest and gusty west winds for the mountains and deserts are expected for Saturday afternoon through late evening. Slow warming for early next week...with greater warming for the middle to latter part of next week with high temperatures returning to near average.

&&

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

A trough of low pressure over the eastern Pacific will move slowly eastward to near the West Coast tonight...with a cold closed low pressure system developing just off the central California coast Saturday...then moving into Southern California Saturday night and Sunday. The center of the low pressure system will remain in the vicinity of Southern California and northern Baja into Monday...with the low pressure system weakening and moving slowly eastward for next Tuesday and Wednesday.

Early this morning the marine layer continues to slowly deepen with satellite imagery showing widespread stratus over the coastal waters extending into the western valleys. Cooling will begin to spread inland today with high temperatures in the inland valleys returning to near average with high temperatures in far inland areas more than 5 degrees above average.

The marine layer will deepen onto the coastal slopes of the mountains for late tonight into Saturday morning with light precipitation possible Saturday morning from the coast inland to the mountains. Strongest onshore flow is expected for Saturday afternoon into Saturday with periods of strong gusty west winds for the mountains and deserts for Saturday afternoon through late

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

evening.

Showers may increase some in coverage Saturday afternoon with periods of showers and a slight chance of thunderstorms for Saturday night into Monday. The coldest mid level air moves into Southern California Saturday night and Sunday with colder air wrapping around the upper center from the north and northeast Sunday night...then moving into northern Baja and northwest Mexico Monday.

Given the convective nature of the precipitation...rainfall amounts will be somewhat variable...but could range from one half to locally one inch near the coast to 1 to 2 inches in the mountains with mostly one quarter inch or less in the deserts. Snow levels will lower to around 5000 feet on Sunday morning.

Showers may continue into Tuesday with drying for Wednesday and Thursday. High temperatures will cool into Sunday with high temperatures 15 to 25 degrees below average for inland areas on Sunday. Slow warming for Monday and Tuesday with greater warming for the middle to latter part of next week returning high temperatures to near average.

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.AVIATION...

050835Z...Coasts/Valleys...Low clouds with bases 1000-1500 ft MSL will spread about 20 miles inland by sunrise. Areas of vis 3-5 miles where clouds and terrain intersect. CIG and vis impacts at KONT and KSBD now appear likely by 12Z. Expect at least partial clearing to the coast 17-19Z, then moving back inland after 23Z.

Mountains/Deserts...Mostly clear with unrestricted vis through Friday evening.

&&

.MARINE...

No hazardous marine weather today. A late season storm will bring west-northwest winds with gusts of 20-30 knots late Saturday into Sunday along with building seas. Showers are likely Sunday into Monday with the potential for a few thunderstorms. Precipitation will begin to taper off and seas to subside Tuesday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 2 PM Saturday to 2 AM PDT Sunday for Coachella Valley-Riverside County Mountains-San Diego County Deserts-San Diego County Mountains-San Geronio Pass Near Banning.

Wind Advisory from 2 PM to 10 PM PDT Saturday for Apple and Lucerne Valleys-San Bernardino County Mountains.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

PZ...Gale Watch from Saturday afternoon through late Saturday night for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory from 2 AM to 11 PM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm- Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory for winds from 2 PM Saturday to 2 AM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

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PUBLIC...17

AVIATION/MARINE...PG

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FXUS66 KSGX 051616
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
916 AM PDT Fri May 5 2017

.SYNOPSIS...

A cold low pressure system will develop over Southern California during the weekend, then weaken early next week and move east during the middle of next week. Cooling will spread inland today with lowest high temperatures on Sunday, about 15 to 25 degrees below average for inland areas. Periods of showers are expected from Saturday through early next week along with a slight chance of thunderstorms for Saturday night through Monday. Strong and gusty west winds for the mountains and deserts are expected for Saturday afternoon through late evening. Slow warming for early next week, with greater warming for the middle to latter part of next week with high temperatures returning to near average.

&&

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

Morning marine layer stratus has moved into the western to central valley locations, according to visible satellite. The 12Z Miramar sounding shows a 9 deg C inversion based at around 2000 feet. Local WRF models indicate that stratus should clear out of the valleys but may stick at and near the beaches today. Meanwhile, a trough can be seen along the Pacific Northwest, on Water Vapor satellite imagery. This trough will continue to push the upper level ridge to the east and increase the onshore flow and lower 500 mb heights aloft today. This will result in cooling today for all areas, although the mountains and deserts will still be warmer than normal. The aforementioned trough will deepen along the west coast today, with onshore flow continuing to strengthen and gusty west winds along/in the desert slopes/passess/deserts tonight into Saturday morning. The marine layer will deepen further as well, reaching a depth of around 4000-5000 late tonight, with stratus filling the coastal basin and moving into the passes and coastal slopes. Models indicate that we may start to see some light showers/drizzle with the marine layer stratus by early Saturday morning.

A closed low will develop within the base of the trough by Saturday morning as the trough deepens further, and then the low will cut-off from the trough and then move into Southern California Saturday night into Sunday, then move south into Baja/Southwest Arizona Monday-Tuesday before finally moving east

May 6, 2017 Exceptional Event, Imperial County

Wednesday. Strong onshore flow on Saturday, with onshore pressure gradients peaking at around 16 mb from San Diego to Las Vegas, and 20-30 kt 850 mb westerly winds, will create strong and gusty southwest to west winds along mountain ridges/desert slopes, through/below canyons and passes, and into adjacent desert areas. Wind gusts of 45-55 mph are likely, with isolated wind gusts of 65 mph or greater. A Wind Advisory goes into effect for all mountain and desert areas at 2 pm Saturday and continues through 10 pm Saturday.

With south to southwest flow in advance of a cold front, scattered pre-frontal light showers are likely over and west of the mountains Saturday afternoon and early evening, with showers increasing in coverage and intensity late Saturday night into Sunday morning. Scattered to Numerous showers then expected pretty much all day Sunday and Sunday night. As the low moves South into Baja Monday, there may be some lulls in shower activity, with majority of showers occurring over the mountains in northeast to east flow aloft. Models then show another potential increase in showers on Tuesday mainly over the mountains and high deserts. Precipitation should be out of the area by Wednesday afternoon. Precipitation accumulation potential looks to be highly variable due to the showery nature of this system, but generally looking at 0.25 to 1 inch and locally 2 inches, mainly over and west of the mountains and also in the high deserts, with 0.05-0.15 inches and locally 0.50 inches in the lower deserts.

The low will bring some unseasonably cold air with it, with 500 mb temperatures reaching -26 deg C. The cold air aloft will create unstable conditions, with 200-500 j/kg of mixed layer most unstable CAPE Sunday. This will likely result in some thunderstorm activity on Sunday and Monday, with hail a possibility. Isolated thunderstorms are a possibility Tuesday afternoon as well, with models still showing 100-400 j/kg of mixed layer most unstable CAPE near the mountains with northerly flow aloft. Snow levels start out at around 8000-8500 feet during the day Saturday before lowering to 5000 feet Saturday evening. With the coldest air coming in early Sunday, the snow levels then lower to 4500 to locally 4000 feet. By Sunday afternoon, snow levels rise to 5000 feet, then are at around 6000-6500 feet Sunday evening through Monday, and then 8500-9000 feet Tuesday. A trace of snow is likely down to 4000 feet, with 1-3 inches possible from 5000 to 7000 feet, and several inches possible above 7000 feet. Significant cooling will begin on Saturday, with highs falling to 5-15 degrees below normal, then further cooling on Sunday with highs 15-25 degrees below normal. We then start to gradually warm Monday through Thursday as the low weakens and then gradually moves east, with highs not reaching back to normal until Thursday.

&&

.AVIATION...

051530Z...Coast...BKN-OVC010-015 TOPS 020 today with only partial clearing at KSAN, KSNA and KCRQ between 21-01Z. After 01Z...OVC015-

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

025 TOPS 035 spreading inland with areas of -RA/DZ after 06Z.

Local vis 3-5 miles in fog and mist.

Valleys...SKC-SCT015 with 3-5 mile vis in haze at KONT and KSBD through 19Z. Low clouds spreading inland after 03Z with vis 2-4 miles where clouds intersect terrain. Areas of drizzle after 06Z.

Mountains/Deserts...SCT-BKN200 today and tonight with unrestricted vis. Lower coastal becoming obscd in clouds/fog after 06Z.

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.MARINE...

No hazardous weather today. Increase A late season storm will bring west-northwest winds with gusts of 20-30 knots late Saturday into Sunday along with building seas. Showers are likely Sunday into Monday with the potential for a few thunderstorms. Precipitation will begin to taper off and seas to subside Tuesday.

&&

.BEACHES...

No hazardous weather today. Becoming windy Saturday afternoon and evening. Showers with isolated thunderstorms Sunday and Monday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 2 PM Saturday to 2 AM PDT Sunday for Coachella Valley-Riverside County Mountains-San Diego County Deserts-San Diego County Mountains-San Geronio Pass Near Banning.

Wind Advisory from 2 PM to 10 PM PDT Saturday for Apple and Lucerne Valleys-San Bernardino County Mountains.

PZ...Gale Watch from Saturday afternoon through late Saturday night for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory from 2 AM to 11 PM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory for winds from 2 PM Saturday to 2 AM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

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783
WWUS76 KSGX 051954
NPWSGX

URGENT - WEATHER MESSAGE
National Weather Service San Diego CA
1254 PM PDT Fri May 5 2017

...Periods of strong gusty west winds for the mountains and deserts for Saturday afternoon through late evening...

.A low pressure system moving southward near the West Coast will bring stronger onshore flow with periods of strong gusty west winds for the mountains and deserts for Saturday afternoon through late evening.

CAZ055-060-060500-
/O.CON.KSGX.WI.Y.0023.170506T2100Z-170507T0500Z/
San Bernardino County Mountains-Apple and Lucerne Valleys-
Including the cities of Crestline, Lake Arrowhead, Big Bear City,
Wrightwood, Victorville, Hesperia, and Apple Valley
1254 PM PDT Fri May 5 2017

...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM TO 10 PM PDT
SATURDAY...

- * WINDS...Areas of southwest winds 20 to 30 mph with gusts to 50 mph.
- * TIMING...Winds strengthening Saturday morning with strongest winds for Saturday afternoon and evening.
- * LOCATION...Strongest winds near mountain ridge tops and along desert mountain slopes into adjacent desert areas.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust in the deserts.
- * IMPACTS...The winds will make driving difficult, especially for motorists with high profile vehicles. Watch for broken tree limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ056-058-061-062-065-060500-

May 6, 2017 Exceptional Event, Imperial County

/O.CON.KSGX.WI.Y.0023.170506T2100Z-170507T0900Z/

Riverside County Mountains-San Diego County Mountains-
 Coachella Valley-San Diego County Deserts-
 San Gorgonio Pass Near Banning-
 Including the cities of Julian, Indio, Palm Desert,
 Palm Desert Country, La Quinta, Borrego Springs,
 and Desert Hot Springs
 1254 PM PDT Fri May 5 2017

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

* WINDS...Areas of west winds 20 to 30 mph with gusts to 55 mph.

Isolated gusts to 65 mph.

* TIMING...Winds strengthening Saturday morning with strongest
 winds for Saturday afternoon and evening, decreasing late
 Saturday night.

* LOCATION...Strongest winds near mountain ridge tops and along
 desert mountain slopes into adjacent desert areas and in the
 northern Coachella Valley below the San Gorgonio Pass.

* VISIBILITY...Locally reduced in blowing sand and blowing dust
 in the deserts.

* IMPACTS...The winds will make driving difficult, especially for
 motorists with high profile vehicles. Watch for broken tree
 limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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Harrison

IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

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498
WWUS75 KPSR 052039
NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
139 PM MST Fri May 5 2017

AZZ532-535-536-539-554-559-060845-
/O.EXB.KPSR.WI.Y.0015.170506T1800Z-170507T0300Z/
Yuma-Southeast Yuma County-Gila River Valley-Gila Bend-
West Pinal County-Sonoran Desert Natl Monument-
Including the cities of Yuma, Fortuna Foothills, Ligurta,
Gila Bend, and Sentinel
139 PM MST Fri May 5 2017 /139 PM PDT Fri May 5 2017/

...WIND ADVISORY IN EFFECT FROM 11 AM MST /11 AM PDT/ TO 8 PM MST
/8 PM PDT/ SATURDAY...

The National Weather Service in Phoenix has issued a Wind
Advisory, which is in effect from 11 AM MST /11 AM PDT/ to 8 PM
MST /8 PM PDT/ Saturday.

- * AFFECTED AREA...Southern Maricopa County and southern Yuma
County to include Interstate 8 between Stanfield and Yuma, and
Highway 85 between Buckeye and Gila Bend.
- * TIMING...Late Saturday morning until late Saturday evening.
- * WINDS...25 to 35 mph with gusts up to 40 mph.
- * IMPACTS...Strong winds and gusty conditions will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and other roads. Locally reduced visibilities will
also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ562>567-060845-
/O.EXT.KPSR.WI.Y.0015.170506T2100Z-170507T0500Z/

May 6, 2017 Exceptional Event, Imperial County

Imperial County Southwest-Salton Sea-Chuckwalla Mountains-
Imperial County Southeast-Imperial County West-Imperial Valley-
Including the cities of Mountain Spring, Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamo, and Brawley
139 PM PDT Fri May 5 2017

...WIND ADVISORY NOW IN EFFECT FROM 2 PM TO 10 PM PDT SATURDAY...

- * AFFECTED AREA...Imperial county including Interstate 8,
Highway 111, and Highway 78.
- * TIMING...Saturday afternoon through Saturday evening.
- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain
areas west of El Centro along I-8 will see the strongest winds
with gusts as high as 55 mph.
- * IMPACTS...Elevated winds and strong gusts will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and throughout Imperial County. Locally reduced
visibilities will also be possible due to blowing dust and
sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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**IOWA STATE
UNIVERSITY**

College of Ag

Department of Agronomy

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FXUS65 KPSR 052214
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
315 PM MST Fri May 5 2017

.SYNOPSIS...

The strong high pressure system over the region weaken considerably tonight, as a new cold Pacific storm slowly approaches the region. A cold front will approach the area Saturday, developing very windy conditions region wide. Windy conditions Saturday will be followed by an increasing chance of showers, spreading west to east from late Sunday through Tuesday. Afternoon temperatures in the mid 70s are forecast on the deserts Monday and Tuesday. Clearing skies with a warming trend will develop later next week.

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.DISCUSSION...

Tonight through Saturday night...

High clouds were beginning to spread into southeast CA and southwest AZ this afternoon, fore-runners of a large cold Pacific storm developing along the west coast.

As a cold front approaches southern CA Saturday afternoon, strong gusty southwest winds will develop region wide, peaking in the 35 to 45 mph range by 5 pm MST. Dry desert and mountain vegetation, low humidity, and gusty wind will create high fire danger across the region. Fire Weather Watches have been upgraded to Red Flag Warnings for most of central and southern AZ on Saturday. Additionally, wind gusts will be sufficiently strong for Wind Advisories which are posted for southwest and south central AZ Saturday. There is also the potential for blowing dust across the lower deserts.

It appears that the timing of the cold front will move across the Colorado River Valley shortly after midnight Saturday, then across the Phoenix area around 8 am Sunday.

Sunday through tuesday night...

A much colder airmass will filter into the region after the late Saturday night/early Sunday morning frontal passage. Sunday afternoon temperatures will drop precipitously into the mid to upper 70s on the lower desert which on Friday hit the 102-106 degree mark.

Also, recent precipitable water satellite imagery detected more and more boundary layer moisture gathering in the eastern Pacific off the CA and Baja coasts. Models have since picked up on this

May 6, 2017 Exceptional Event, Imperial County

increase which is reflected in the broad area of light QPF spreading into southeast CA and southwest AZ late Sunday afternoon and night near the dynamically evolving middle atmospheric low center. Precip probabilities were raised substantially across our portions of southeast CA and southwest AZ.

As the mid level low pressure center slowly migrates into southern AZ Monday and Tuesday, increasing precip probabilities will shift toward the south central AZ deserts and mountains including greater Phoenix and surrounding areas. Again, precip probabilities were raised for the above areas on Monday and Tuesday.

Wednesday...

Wednesday will be a transition day when the AZ upper low is forecast to move quickly into northern New Mexico by afternoon. In the interim there is still a slight chance of showers from Phoenix eastward the first half of Wednesday.

Thursday and Friday...

A low amplitude high pressure system is forecast to build into the region these days. Mostly clear skies are forecast along with substantial warming. Lower desert temperatures will make another run at the 100 degree mark on Friday.

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.AVIATION...

South-Central Arizona Including KPHX, KIWA, and KSDL: There are few aviation weather concerns for today. The timing of the east to west diurnal wind shift may be delayed to a little later in the afternoon. All of the terminals should be westerly by 23Z. There will be a few afternoon gusts near 15 kts but those should taper off by sunset.

Southeast California/Southwest Arizona Including KIPL and KBLH: The winds will become more westerly through the afternoon for the TAF sites with some afternoon gusts around 20 kts and diminish around sunset. Otherwise, there are few aviation weather concerns for the period.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday...

Cooler temperatures will continue through the first part of the week with afternoon highs well below normal. A gradual warmup will

May 6, 2017-Exceptional Event, Imperial County**Appendix A**

proceed through the week and the lower deserts will reach back into the low to mid 90s by Thursday. Monday and Tuesday look to be the best days for rain to include possible isolated thunderstorms. As a result, minimum relative humidities for these two days may stay in the 15-20 percent range with decent overnight recoveries. However, minimum RH values will drop to the single digits as the week progresses, albeit, with modest overnight recovery.

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.CLIMATE...

Record Highs for Friday:

Date	Phoenix AZ	Yuma AZ
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May 5th	105 in 1989	109 in 1947

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.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed Saturday and again early next week.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from 11 AM to 8 PM MST Saturday for AZZ132-133.

Wind Advisory from 11 AM MST /11 AM PDT/ to 8 PM MST /8 PM PDT/ Saturday for AZZ532-535-536-539-554-559.

CA...Wind Advisory from 2 PM to 10 PM PDT Saturday for CAZ562>567.

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DISCUSSION...Vasquez/MO

AVIATION...Deemer

FIRE WEATHER...Deemer

CLIMATE...MO

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WWUS76 KSGX 060349
NPWSGX

URGENT - WEATHER MESSAGE
National Weather Service San Diego CA
849 PM PDT Fri May 5 2017

...Periods of strong gusty west winds for the mountains and
deserts Saturday afternoon and evening...

.A low pressure system moving southward near the West Coast will
bring stronger onshore flow with periods of strong gusty west
winds for the mountains and deserts Saturday afternoon and evening.

CAZ055-060-061300-
/O.CON.KSGX.WI.Y.0023.170506T2100Z-170507T0500Z/
San Bernardino County Mountains-Apple and Lucerne Valleys-
Including the cities of Crestline, Lake Arrowhead, Big Bear City,
Wrightwood, Victorville, Hesperia, and Apple Valley
849 PM PDT Fri May 5 2017

...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM TO 10 PM PDT
SATURDAY...

- * WINDS...Areas of southwest winds 20 to 30 mph with gusts to 50
mph.
- * TIMING...Winds strengthening Saturday morning with strongest
winds for Saturday afternoon and evening.
- * LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.
- * IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ056-058-061-062-065-061300-
/O.CON.KSGX.WI.Y.0023.170506T2100Z-170507T0900Z/

May 6, 2017 Exceptional Event, Imperial County

Riverside County Mountains-San Diego County Mountains-
Coachella Valley-San Diego County Deserts-
San Geronio Pass Near Banning-
Including the cities of Julian, Indio, Palm Desert,
Palm Desert Country, La Quinta, Borrego Springs,
and Desert Hot Springs
849 PM PDT Fri May 5 2017

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

- * WINDS...Areas of west winds 20 to 30 mph with gusts to 55 mph.
Isolated gusts to 65 mph.
- * TIMING...Winds strengthening Saturday morning with strongest
winds for Saturday afternoon and evening, decreasing late
Saturday night.
- * LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas and in the
northern Coachella Valley below the San Geronio Pass.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.
- * IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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FXUS65 KPSR 060401
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
900 PM MST Fri May 5 2017

.SYNOPSIS...

The strong high pressure system over the region weaken considerably tonight, as a new cold Pacific storm slowly approaches the region. A cold front will approach the area Saturday, developing very windy conditions region wide. Windy conditions Saturday will be followed by an increasing chance of showers, spreading west to east from late Sunday through Tuesday. Afternoon temperatures in the mid 70s are forecast on the deserts Monday and Tuesday. Clearing skies with a warming trend will develop later next week.

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.DISCUSSION...

Early this evening, the strong upper ridge that resulted in triple digit high temperatures over the lower deserts had exited to the east of Arizona ahead of a deep upper trof currently developing along the west coast. H5 heights had fallen to near 580dm over far SW Arizona as seen in the 00z plot data but despite the height falls the boundary layer peaked in warmth this afternoon over the central deserts. Phoenix climbed to a high of 108 degrees smashing the old record of 105! IR imagery showed quite a bit of mainly high cloudiness spreading into the area from the west ahead of this developing system, with most of the moisture above 15k feet. However, the southerly flow ahead of the trof could be seen advecting areas of mid level moisture - around 10k feet - out of SE Arizona and into higher terrain areas to the east of Phoenix. Given increasing mid level UVV ahead of the advancing trof, scattered light showers could be seen on radar east of Phoenix and these were captured to a partial degree by some of the high-res models such as the NMM6km and the HRRR. Mesoscale guidance suggests these showers will dissipate and shift off to the north by midnight. Otherwise we will see a decrease in the mid/high clouds from the west after midnight with skies becoming mostly clear out west.

.PREVIOUS DISCUSSION...

Tonight through Saturday night...

High clouds were beginning to spread into southeast CA and southwest AZ this afternoon, fore-runners of a large cold Pacific storm developing along the west coast.

As a cold front approaches southern CA Saturday afternoon, strong gusty southwest winds will develop region wide, peaking in the 35 to 45 mph range by 5 pm MST. Dry desert and mountain vegetation, low humidity, and gusty wind will create high fire danger across the

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

region. Fire Weather Watches have been upgraded to Red Flag Warnings for most of central and southern AZ on Saturday. Additionally, wind gusts will be sufficiently strong for Wind Advisories which are posted for southwest and south central AZ Saturday. There is also the potential for blowing dust across the lower deserts.

It appears that the timing of the cold front will move across the Colorado River Valley shortly after midnight Saturday, then across the Phoenix area around 8 am Sunday.

Sunday through tuesday night...

A much colder airmass will filter into the region after the late Saturday night/early Sunday morning frontal passage. Sunday afternoon temperatures will drop precipitously into the mid to upper 70s on the lower desert which on Friday hit the 102-106 degree mark.

Also, recent precipitable water satellite imagery detected more and more boundary layer moisture gathering in the eastern Pacific off the CA and Baja coasts. Models have since picked up on this increase which is reflected in the broad area of light QPF spreading into southeast CA and southwest AZ late Sunday afternoon and night near the dynamically evolving middle atmospheric low center. Precip probabilities were raised substantially across our portions of southeast CA and southwest AZ.

As the mid level low pressure center slowly migrates into southern AZ Monday and Tuesday, increasing precip probabilities will shift toward the south central AZ deserts and mountains including greater Phoenix and surrounding areas. Again, precip probabilities were raised for the above areas on Monday and Tuesday.

Wednesday...

Wednesday will be a transition day when the AZ upper low is forecast to move quickly into northern New Mexico by afternoon. In the interim there is still a slight chance of showers from Phoenix eastward the first half of Wednesday.

Thursday and Friday...

A low amplitude high pressure system is forecast to build into the region these days. Mostly clear skies are forecast along with substantial warming. Lower desert temperatures will make another run at the 100 degree mark on Friday.

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.AVIATION...

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

May 6, 2017 Exceptional-Event, Imperial County**Appendix A**

Locally gusty southwest winds will gradually taper off through midnight and then will back towards the southeast by around 09z as a strong upper level low starts to approach from the west. Expect winds around 10kt from the SE thru late morning Saturday then increasing from the south by noon with gusts over 20kt. Quite breezy southwest/west winds expected during the afternoon with gusts to around 25kt by 21-22z. Clouds should not be an issue with bases mostly above 15k feet next 24 hours.

Southeast California/Southwest Arizona Including KIPL and KBLH:

Main concern will be much stronger winds developing during the afternoon on Saturday ahead of a strong upper low. Winds may be strong enough to generate patchy blowing dust but confidence at the moment too low to mention restricted vis values in the TAFs. For the rest of tonight and into Sat morning, winds to favor the west at KIPL mostly below 15kt. Expect sharply increasing winds after noon tomorrow with sustained speeds around 25kt and gusts at times to around 35kt. Winds at KBLH to favor the south overnight into Sat morning up to around 18kt with continued increasing speed after noon on Sat. Confidence high that some gusts over 30kt will develop by about 20z. Clouds should not be an issue next 24 hours, just few-sct decks mostly above 15k feet.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Monday through Friday...

Cooler temperatures will continue through the first part of the week with afternoon highs well below normal. A gradual warmup will proceed through the week and the lower deserts will reach back into the low to mid 90s by Thursday. Monday and Tuesday look to be the best days for rain to include possible isolated thunderstorms. As a result, minimum relative humidities for these two days may stay in the 15-20 percent range with decent overnight recoveries. However, minimum RH values will drop to the single digits as the week progresses, albeit, with modest overnight recovery.

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.CLIMATE...

Record Highs for Friday:

Date	Phoenix AZ	Yuma AZ
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May 5th	105 in 1989	109 in 1947

&&

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed Saturday and again early next week.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from 11 AM to 8 PM MST Saturday for AZZ132-133.

Wind Advisory from 11 AM MST /11 AM PDT/ to 8 PM MST /8 PM PDT/ Saturday for AZZ532-535-536-539-554-559.

CA...Wind Advisory from 2 PM to 10 PM PDT Saturday for CAZ562>567.

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

DISCUSSION...CB

PREVIOUS DISCUSSION...Vasquez/MO

AVIATION...Deemer

FIRE WEATHER...Deemer

CLIMATE...MO

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WWUS75 KPSR 060513
NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
1013 PM MST Fri May 5 2017

AZZ532-535-536-539-554-559-061400-
/O.CON.KPSR.WI.Y.0015.170506T1800Z-170507T0300Z/
Yuma-Southeast Yuma County-Gila River Valley-Gila Bend-
West Pinal County-Sonoran Desert Natl Monument-
Including the cities of Yuma, Fortuna Foothills, Ligurta,
Gila Bend, and Sentinel
1013 PM MST Fri May 5 2017 /1013 PM PDT Fri May 5 2017/

...WIND ADVISORY REMAINS IN EFFECT FROM 11 AM MST /11 AM PDT/ TO
8 PM MST /8 PM PDT/ SATURDAY...

* AFFECTED AREA...Southern Maricopa County and southern Yuma
County to include Interstate 8 between Stanfield and Yuma, and
Highway 85 between Buckeye and Gila Bend.

* TIMING...Late Saturday morning until late Saturday evening.

* WINDS...25 to 35 mph with some gusts reaching or exceeding 40
mph.

* IMPACTS...Strong winds and gusty conditions will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and other roads. Locally reduced visibilities
will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ562>567-061400-
/O.CON.KPSR.WI.Y.0015.170506T2100Z-170507T0500Z/
Imperial County Southwest-Salton Sea-Chuckwalla Mountains-
Imperial County Southeast-Imperial County West-Imperial Valley-
Including the cities of Mountain Spring, Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs,

May 6, 2017 Exceptional Event, Imperial County

Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamo, and Brawley

1013 PM PDT Fri May 5 2017

...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM TO 10 PM PDT
SATURDAY...

- * AFFECTED AREA...Imperial county including Interstate 8,
Highway 111, and Highway 78.
- * TIMING...Saturday afternoon through Saturday evening.
- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain
areas west of El Centro along I-8 will see the strongest winds
with gusts as high as 55 mph.
- * IMPACTS...Elevated winds and strong gusts will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and throughout Imperial County. Locally reduced
visibilities will also be possible due to blowing dust and
sand.

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
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FXUS65 KPSR 061012
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
310 AM MST Sat May 6 2017

.SYNOPSIS...

A cold front will approach the area later today with increasingly gusty winds through tonight. Windy conditions will be followed by an unusual early May chance of showers and thunderstorms, starting in southeast California Sunday and spreading into central Arizona by Tuesday. Afternoon highs will only reach the middle and upper 70s Sunday and Monday. Clearing skies with a warming trend will develop by the middle of next week.

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.DISCUSSION...

Ridging aloft which recently has supported regional record high temperatures was becoming dampened and shifting into the southern plains early this morning. This has been in response to a series of upstream PV anomalies descending down the California coast (H5 height falls on the order of 60 meters) in advance of developing blocked flow and a cutoff Southwest low. Forecast confidence has grown several steps in the past couple model iterations as the GFS members are now more aligned with the slower and further south timing and position offered (and previously preferred) by the operational ECMWF. The initial forecast problem deals with a frontal passage and strong winds late this afternoon and evening. Then, the slow movement and varying expanse of moisture and ascent surrounding the circulation will be the main forecast headache Sunday-Wednesday.

Modest height falls will gradually spread through the region today as the closed cold core circulation spins into the Los Angeles basin. The low level thermal ridge over SE Arizona will also shift east, however with the true frontal boundary still well to the west, mid 90s should still easily be attainable through central Arizona (though a much steeper cooling trend will exist through SE CA). Ahead of this front, a late afternoon southerly 30-40kt LLJ will develop through southern and central AZ. Deep mechanical mixing should tap a portion of this momentum along the I-8 corridor around Gila Bend leading to some localized strong gusts and possibly blowing dust.

The far more impressive winds will occur behind the frontal boundary in Imperial County this evening. Models are in good agreement the frontal boundary will reach the Colorado River around 03Z, then into the Phoenix metro by 12Z Sunday. The timing of this front just removed from the San Diego mountains at sunset looks like a near perfect setup for persistent, organized mountain rotors; and NAM BUFR soundings for the El Centro area show a shallow mixed post-

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

frontal boundary layer topped by 40-45kt no more than 1000ft from the sfc. Wind advisory caliber speeds throughout much of Imperial County look like a sure bet this evening.

Throughout the day Sunday, the cold core circulation will wobble through SE California eventually trending towards the northern Baja by Monday afternoon. Moisture will initially be confined to the immediate circulation center and along the southern California coastline, however should expand outward with time. There is a growing sentiment towards a nice band of H8 frontogenetical forcing Sunday morning through central AZ. Although warmth/capping aloft will limit the overall growth and coverage, an unusually good May low level moisture surge (8 g/kg) and small positive area below the inversion should support isold/sct showers lifting into northern Arizona Sunday afternoon. Otherwise, general lift around the immediate cold core through a deeper H7-H5 saturated layer in SE California looks sufficient for numerous light showers and a few embedded isold thunderstorms. Depending on the T/Td spread, gusty winds aided by evaporational cooling may be a concern through the western CWA Sunday afternoon.

As the circulation center dips into the northern Baja Monday, showers and storms will likely become relegated to points near and south of the international border. In fact, there is a growing likelihood that partial clearing and some measure of sinking motion will envelop the northern edges of the CWA. In this case, have reduced POPs and increased temperatures generally along and north of the I-10 corridor. Even so, highs in the middle and upper 70s equates to 10F-15F below normal and an incredible 30F difference Sunday and Monday from the record 108 in Phoenix Friday.

The entire negative height anomaly will begin to fill and lift through Arizona into the four corners Tuesday providing the best chance at more widespread rainfall to the Phoenix area. While lapse rates do not look to be impressive, total moisture entrained in the system may end up better than models suggest; and MLCAPE 250-500 J/kg Tuesday afternoon would not be unexpected. Kept POPs in a 40%-60% range which carries agreement from the SREF and NAEFS means.

Residual lingering moisture and spokes of vorticity rotating about the circulation exiting into New Mexico may keep a few showers going into Wednesday morning, but sinking motion and height rises will gradually be overtaking the forecast area. Then for the latter half of the week, shortwave ridging and H5 heights near 582dm will slide into the southwest leading to another run towards triple digits for lower elevation desert communities.

&&

.AVIATION...

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

Locally gusty southwest winds will gradually taper off through midnight and then will back towards the southeast by around 09z as a strong upper level low starts to approach from the west. Expect

May 6, 2017 Exceptional Event, Imperial County

winds around 10kt from the SE thru late morning Saturday then increasing from the south by noon with gusts over 20kt. Quite breezy southwest/west winds expected during the afternoon with gusts to around 25kt by 21-22z. Clouds should not be an issue with bases mostly above 15k feet next 24 hours.

Southeast California/Southwest Arizona Including KIPL and KBLH: Main concern will be much stronger winds developing during the afternoon on Saturday ahead of a strong upper low. Winds may be strong enough to generate patchy blowing dust but confidence at the moment too low to mention restricted vis values in the TAFs. For the rest of tonight and into Sat morning, winds to favor the west at KIPL mostly below 15kt. Expect sharply increasing winds after noon tomorrow with sustained speeds around 25kt and gusts at times to around 35kt. Winds at KBLH to favor the south overnight into Sat morning up to around 18kt with continued increasing speed after noon on Sat. Confidence high that some gusts over 30kt will develop by about 20z. Clouds should not be an issue next 24 hours, just few-sct decks mostly above 15k feet.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Monday through Friday...

Cooler temperatures will continue through the first part of the week with afternoon highs well below normal. A gradual warmup will proceed through the week and the lower deserts will reach back into the low to mid 90s by Thursday. Monday and Tuesday look to be the best days for rain to include possible isolated thunderstorms. As a result, minimum relative humidities for these two days may stay in the 15-20 percent range with decent overnight recoveries. However, minimum RH values will drop to the single digits as the week progresses, albeit, with modest overnight recovery.

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.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed this afternoon and evening, then again early next week.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning from 11 AM this morning to 8 PM MST this evening for AZZ132-133.

Wind Advisory from 11 AM MST /11 AM PDT/ this morning to 8 PM MST/8 PM PDT/ this evening for AZZ532-535-536-539-554-559.

CA...Wind Advisory from 2 PM this afternoon to 1 AM PDT Sunday for CAZ562>567.

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NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
347 AM MST Sat May 6 2017

CAZ562>567-062300-
/O.EXT.KPSR.WI.Y.0015.170506T2100Z-170507T0800Z/
Imperial County Southwest-Salton Sea-Chuckwalla Mountains-
Imperial County Southeast-Imperial County West-Imperial Valley-
Including the cities of Mountain Spring, Desert Shores,
Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamo, and Brawley
347 AM PDT Sat May 6 2017

...WIND ADVISORY NOW IN EFFECT FROM 2 PM THIS AFTERNOON TO 1 AM
PDT SUNDAY...

- * AFFECTED AREA...Imperial county including Interstate 8,
Highway 111, and Highway 78.
- * TIMING...Saturday afternoon through early Sunday morning.
- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain
areas west of El Centro along I-8 will see the strongest winds
with gusts as high as 55 mph.
- * IMPACTS...Elevated winds and strong gusts will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and throughout Imperial County. Locally reduced
visibilities will also be possible due to blowing dust and
sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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AZZ532-535-536-539-554-559-062300-
/O.CON.KPSR.WI.Y.0015.170506T1800Z-170507T0300Z/
Yuma-Southeast Yuma County-Gila River Valley-Gila Bend-

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

West Pinal County-Sonoran Desert Natl Monument-

Including the cities of Yuma, Fortuna Foothills, Ligurta,
Gila Bend, and Sentinel

347 AM MST Sat May 6 2017 /347 AM PDT Sat May 6 2017/

...WIND ADVISORY REMAINS IN EFFECT FROM 11 AM MST /11 AM PDT/
THIS MORNING TO 8 PM MST /8 PM PDT/ THIS EVENING...

* AFFECTED AREA...Southern Maricopa County and southern Yuma
County to include Interstate 8 between Stanfield and Yuma, and
Highway 85 between Buckeye and Gila Bend.

* TIMING...Late Saturday morning until late Saturday evening.

* WINDS...25 to 35 mph with some gusts reaching or exceeding 40
mph.

* IMPACTS...Strong winds and gusty conditions will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and other roads. Locally reduced visibilities
will also be possible due to blowing dust and sand.

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
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FXUS66 KSGX 061205
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
505 AM PDT Sat May 6 2017

.SYNOPSIS...

A cold low pressure system developing along the central California coast will move into Southern California tonight and Sunday bringing much cooler weather with periods of showers and a slight chance of thunderstorms for tonight through Sunday night. Snow levels will lower to around 4500 to 5000 feet for late tonight through Sunday evening with a few inches of snowfall possible above 5000 feet and isolated snowfall of more than 4 inches above 6000 feet. There will also be periods of strong gusty southwest to west winds in the mountains and deserts for this afternoon into tonight. Additional showers are expected...mainly near the mountains and inland valleys...for Monday afternoon with decreasing chances for showers into Tuesday. For Wednesday through Friday...high pressure aloft will move inland across California bringing dry and warmer weather with areas of night and morning low clouds and fog for coastal areas.

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

.SHORT TERM (Today through Monday)...

A cold low pressure system developing along the central California coast early this morning will move into Southern California tonight and Sunday bringing much cooler weather with periods of showers and a slight chance of thunderstorms for tonight through Sunday night. As the marine layer has deepened...there has been patchy drizzle overnight with light measurable amounts for San Diego inland to the coastal slopes and into the southern Inland Empire.

Onshore flow will strengthen today with strong gusty southwest winds to west winds for the mountains and deserts for this afternoon into night with isolated gusts exceeding 60 mph...mainly along the deserts slopes of the mountains of Riverside and San Diego Counties and in the northern Coachella Valley below the San Geronio Pass.

High temperatures will be much cooler today with high temperatures toward the coast a few degrees cooler than Friday with high temperatures in the inland valleys...mountains...and deserts 15 to 25 degrees cooler than Friday. Some of the mountain and desert areas will be another 10 to 15 degrees cooler on Sunday...35 to 40

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

degrees of cooling from Friday to Sunday. High temperatures are expected to be around 10 degrees warmer for most areas on Monday.

Patchy drizzle will continue along and west of the mountains this morning. Showers may increase some towards the coastal slopes of the mountains during the afternoon. Late this afternoon into tonight...much colder air aloft will spread into southwest California. This will increase shower coverage along and west of the mountains tonight with a slight chance for thunderstorms. Numerous showers and isolated thunderstorms are expected along and west of the mountains Sunday with showers decreasing from the north on Sunday night. Showers may linger near the mountains and inland valleys for Monday afternoon.

Through Sunday night...rainfall amounts are expected to range from one half to one inch near the coast to 1 to 2 inches in the mountains. Amounts in San Diego County are expected to a little greater with some totals near the coast of 1 to 1.5 inches and some amounts in the mountains of 2 to 3 inches. In the deserts...amounts will range from one quarter to one half inch in the upper deserts with around one quarter inch in the lower deserts. Snow levels will lower to around 4500 feet late tonight...then fluctuate around 4500 to 5000 feet into Sunday evening. A few inches of snowfall is expected down to around 5000 feet with isolated snowfall exceeding 4 inches possible...mostly above 6000 feet. A winter weather advisory may be needed for some of the mountains...some time between late tonight and Sunday evening...mostly above 5000 feet.

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.LONG TERM (Tuesday through Friday)...

Upper level low pressure centered over southern Arizona and northwest Mexico early Tuesday will weaken and move east with high pressure aloft moving across California for Wednesday and Thursday into the Rockies on Friday.

A few showers may linger...mainly over inland areas...into Tuesday. High temperatures will warm a little on Tuesday...but remain 5 to 10 degrees below average for inland areas. Dry with a warming trend for Wednesday through Friday with high temperatures for inland areas warming to near average on Thursday and a little above average on Friday. High temperatures near the coast will be near average with areas of night and morning low clouds and fog extending inland into portions of the valleys at times.

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.AVIATION...

060930Z...Widespread low clouds now extend inland to the coastal slopes. Bases are around 2500 feet MSL with tops to 3500 feet. Drizzle or light showers, fog and obscured terrain within and below the cloud layer will continue through 06Z Sun. Expect only limited clearing this afternoon, but mostly remaining BKN-OVC west of the

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

mountains at around 3000 feet MSL with tops to 5000 ft MSL. Showers will be increasing in coverage this evening.

In mountains and deserts, west winds will increase to 20-30 kt with gusts to 50 kt this afternoon and evening.

&&

.MARINE...

A late-season storm will bring strong west-northwest winds with gusts of 20-35 knots late today into Sunday along with combined seas of 6 to 12 feet. Showers are likely Sunday into Monday with the potential for thunderstorms. Precipitation will begin to taper off and seas to subside Tuesday.

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.SKYWARN...

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

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 2 PM this afternoon to 2 AM PDT Sunday for Coachella Valley-Riverside County Mountains-San Diego County Deserts-San Diego County Mountains-San Geronimo Pass Near Banning.

Wind Advisory from 2 PM this afternoon to 10 PM PDT this evening for Apple and Lucerne Valleys-San Bernardino County Mountains.

PZ...Small Craft Advisory from 2 AM to 11 PM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Gale Warning from 2 PM this afternoon to 2 AM PDT Sunday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory for winds from 2 PM this afternoon to 2 AM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

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PUBLIC...17

AVIATION/MARINE...PG

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NPWSGX

URGENT - WEATHER MESSAGE
National Weather Service San Diego CA
524 AM PDT Sat May 6 2017

...Periods of strong gusty west winds for the mountains and
deserts for this afternoon into tonight...

.A low pressure system moving southward along the central
California coast will move into Southern California tonight
bringing stronger onshore flow for this afternoon into tonight
with periods of strong gusty west winds for the mountains and
deserts for this afternoon into tonight.

CAZ055-060-062130-
/O.CON.KSGX.WI.Y.0023.170506T2100Z-170507T0500Z/
San Bernardino County Mountains-Apple and Lucerne Valleys-
Including the cities of Crestline, Lake Arrowhead, Big Bear City,
Wrightwood, Victorville, Hesperia, and Apple Valley
524 AM PDT Sat May 6 2017

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

- * WINDS...Areas of southwest winds 20 to 30 mph with gusts to 50
mph.
- * TIMING...Winds strengthening this morning with strongest winds
for this afternoon and evening.
- * LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.
- * IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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May 6, 2017 Exceptional Event, Imperial County**Appendix A**

CAZ056-058-061-062-065-062130-

/O.CON.KSGX.WI.Y.0023.170506T2100Z-170507T0900Z/

Riverside County Mountains-San Diego County Mountains-

Coachella Valley-San Diego County Deserts-

San Gorgonio Pass Near Banning-

Including the cities of Julian, Indio, Palm Desert,

Palm Desert Country, La Quinta, Borrego Springs,

and Desert Hot Springs

524 AM PDT Sat May 6 2017

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

- * WINDS...Areas of west winds 20 to 30 mph with gusts to 55 mph.
Isolated gusts to 65 mph.
- * TIMING...Winds strengthening this morning with strongest winds
for this afternoon and evening, decreasing late Saturday night.
- * LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas and in the
northern Coachella Valley below the San Gorgonio Pass.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.
- * IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

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201
FXUS65 KPSR 061620
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
920 AM MST Sat May 6 2017

.SYNOPSIS...

A cold front will approach the area later today with increasingly gusty winds through tonight. Windy conditions will be followed by an unusual early May chance of showers and thunderstorms, starting in southeast California Sunday and spreading into central Arizona by Tuesday. Afternoon highs will only reach the middle and upper 70s Sunday and Monday. Clearing skies with a warming trend will develop by the middle of next week.

&&

.DISCUSSION...

Conditions for most across the forecast area this morning are the calm before the storm moving into the area beginning later this afternoon. Mild morning temps in the 70s greeted many along and east of the Colorado River and many sites have already crested into the 80s. South-central AZ temps are in step with readings from this time Friday AM but conditions are cooler than 24hrs ago for Yuma, Blythe and Imperial/El Centro. Forecast focus today transitions from record warmth to wind/fire danger and a temp cool down as a unseasonably strong cutoff low develops to our west later today. Weak wave movement late yesterday and overnight generated some ACCAS and even weak shower echoes on northern AZ radars this AM has cleared to the NE, leaving the forecast area in-between PVA centers currently. The next more potent energy band and strong Theta-E/thermal front will begin to move through the Peninsular Ranges this early afternoon and then through the southeast CA deserts. Latest sounding profiles and hi-res precip plots have swift moving and albeit high based shower potential before 07/00z west of Yuma with the surface front reaching the CO River later in the evening and transitioning into Arizona around midnight. Southerly surface winds and dewpoints have increased in the last two hours over current forecast values, lending bit more credence to some high-based ACCAS/showers possible ahead of the main front.

&&

.PREVIOUS DISCUSSION /Issued at 310 AM MST/...

Ridging aloft which recently has supported regional record high temperatures was becoming dampened and shifting into the southern plains early this morning. This has been in response to a series of upstream PV anomalies descending down the California coast (H5 height falls on the order of 60 meters) in advance of developing

- May 6, 2017 Exceptional Event, Imperial County -

blocked flow and a cutoff Southwest low. Forecast confidence has grown several steps in the past couple model iterations as the GFS members are now more aligned with the slower and further south timing and position offered (and previously preferred) by the operational ECMWF. The initial forecast problem deals with a frontal passage and strong winds late this afternoon and evening. Then, the slow movement and varying expanse of moisture and ascent surrounding the circulation will be the main forecast headache Sunday-Wednesday.

Modest height falls will gradually spread through the region today as the closed cold core circulation spins into the Los Angeles basin. The low level thermal ridge over SE Arizona will also shift east, however with the true frontal boundary still well to the west,

mid 90s should still easily be attainable through central Arizona (though a much steeper cooling trend will exist through SE CA). Ahead of this front, a late afternoon southerly 30-40kt LLJ will develop through southern and central AZ. Deep mechanical mixing should tap a portion of this momentum along the I-8 corridor around Gila Bend leading to some localized strong gusts and possibly blowing dust.

The far more impressive winds will occur behind the frontal boundary in Imperial County this evening. Models are in good agreement the frontal boundary will reach the Colorado River around 03Z, then into the Phoenix metro by 12Z Sunday. The timing of this front just removed from the San Diego mountains at sunset looks like a near perfect setup for persistent, organized mountain rotors; and NAM BUFR soundings for the El Centro area show a shallow mixed post-frontal boundary layer topped by 40-45kt no more than 1000ft from the sfc. Wind advisory caliber speeds throughout much of Imperial County look like a sure bet this evening.

Throughout the day Sunday, the cold core circulation will wobble through SE California eventually trending towards the northern Baja by Monday afternoon. Moisture will initially be confined to the immediate circulation center and along the southern California coastline, however should expand outward with time. There is a growing sentiment towards a nice band of H8 frontogenetical forcing Sunday morning through central AZ. Although warmth/capping aloft will limit the overall growth and coverage, an unusually good May low level moisture surge (8 g/kg) and small positive area below the inversion should support isold/sct showers lifting into northern Arizona Sunday afternoon. Otherwise, general lift around the immediate cold core through a deeper H7-H5 saturated layer in SE California looks sufficient for numerous light showers and a few embedded isold thunderstorms. Depending on the T/Td spread, gusty winds aided by evaporational cooling may be a concern through the western CWA Sunday afternoon.

As the circulation center dips into the northern Baja Monday, showers and storms will likely become relegated to points near and south of the international border. In fact, there is a growing likelihood that partial clearing and some measure of sinking motion will envelop the northern edges of the CWA. In this case, have

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

reduced POPs and increased temperatures generally along and north of the I-10 corridor. Even so, highs in the middle and upper 70s equates to 10F-15F below normal and an incredible 30F difference Sunday and Monday from the record 108 in Phoenix Friday.

The entire negative height anomaly will begin to fill and lift through Arizona into the four corners Tuesday providing the best chance at more widespread rainfall to the Phoenix area. While lapse rates do not look to be impressive, total moisture entrained in the system may end up better than models suggest; and MLCAPE 250-500 J/kg Tuesday afternoon would not be unexpected. Kept POPs in a 40%-60% range which carries agreement from the SREF and NAEFS means.

Residual lingering moisture and spokes of vorticity rotating about the circulation exiting into New Mexico may keep a few showers going into Wednesday morning, but sinking motion and height rises will gradually be overtaking the forecast area. Then for the latter half of the week, shortwave ridging and H5 heights near 582dm will slide into the southwest leading to another run towards triple digits for lower elevation desert communities.

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.AVIATION...

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

An approaching low pressure system will bring strong southerly winds to the terminals today with gusts around 20 to 25 kts by late morning through early afternoon. Winds gradually veer to the SW and strengthen in the late afternoon with gusts around 30 kts before subsiding late tonight. Initially, this system will be rather dry so not expecting any ceiling issues today, just a few high clouds. Low level moisture moves in Sunday morning which could bring ceilings down to the 4-6kft range. Given how far out this is, confidence is low and have only mentioned SCT040 in the TAFs for now.

Southeast California/Southwest Arizona Including KIPL and KBLH: Main concern will be the strong winds that develop today. Winds may be strong enough this afternoon to generate patchy blowing dust but confidence at the moment is too low to mention restricted vis values in the TAFs. 7-10kft FEW/SCT clouds could develop as a late season cold front pushes through this afternoon but have only included them in the BLH TAF for now. Strong winds will stick around through early Sunday morning before winds decouple.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Monday through Friday...

Cooler temperatures will continue through the first part of the week with afternoon highs well below normal. A gradual warmup will begin on Wednesday with the lower deserts warming back into the

May 6, 2017 Exceptional Event, Imperial County

low to mid 90s by Thursday. Monday and Tuesday look to be the best days for showers with the possibility of an afternoon thunderstorm. As a result, minimum relative humidity for these two days should stay in the 15-25% range with decent overnight recoveries (45-60%). However, minimum RH values will drop to the single digits as temperatures warm back into the low to mid 90s during the latter half of the week.

&&

.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed this afternoon and evening, then again early next week.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning until 8 PM MST this evening for AZZ132-133.

Wind Advisory until 8 PM MST /8 PM PDT/ this evening for AZZ532-535-536-539-554-559.

CA...Wind Advisory from 2 PM this afternoon to 1 AM PDT Sunday for CAZ562>567.

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DISCUSSION...Nolte

PREVIOUS DISCUSSION...MO

AVIATION...Wilson

FIRE WEATHER...Wilson/Deemer

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Department of Agronomy

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FXUS66 KSGX 061659
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
955 AM PDT Sat May 6 2017

.SYNOPSIS...

A deep, cold upper low moving into Southern California tonight and Sunday will bring scattered showers and a slight chance of thunderstorms through Sunday night. Snow levels will lower to around 4500 feet with a few inches of snow possible above 5000 feet. Showers will continue Monday, mainly over the mountains and inland valleys. Showers will decrease in coverage Tuesday. Dry and warmer Wednesday through Friday with high pressure aloft.

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

Light rain and drizzle was reported over the inland valleys and the coastal mountain slopes this morning. Rain amounts were a few hundredths of an inch in most areas, with isolated higher amounts on the lower coastal slopes of the mountains. The primary forcing mechanism was rapid marine layer deepening to 5000 feet and increasing onshore pressure gradients.

Gradients will accelerate more strongly onshore this afternoon as surface low over southern Nevada deepens to 996 mb. Winds will ramp up accordingly. Wind support aloft will increase this afternoon as the cold upper trough off the central CA coast deepens to 546 dm over Pt Conception through 00Z. The trough becomes negatively tilted this evening as a strong low level jet rounds the base of the trough. 850 mb winds increase to 30-40 kt tonight, and sustained winds of 20-30 mph are likely in the mountains and deserts, gusting to 45-65 mph in the mountains and deserts through early tonight. Coastal and Valley areas will also experience gusty winds this afternoon and evening, strongest near the coast with gusts of 30 to 35 mph as the winds will come ashore unabated.

The leading edge of the cold core aloft moves in tonight. CAPE increases to 300-400 J/kg, and increasing low and midlevel moisture level will result in scattered showers and thunderstorms with hail and/or graupel tonight and Sunday.

From previous discussion

Through Sunday night...rainfall amounts are expected to range from one half to one inch near the coast to 1 to 2 inches in the mountains. Amounts in San Diego County are expected to a little

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

greater with some totals near the coast of 1 to 1.5 inches and some amounts in the mountains of 2 to 3 inches. In the deserts...amounts will range from one quarter to one half inch in the upper deserts with around one quarter inch in the lower deserts. Snow levels will lower to around 4500 feet late tonight...then fluctuate around 4500 to 5000 feet into Sunday evening. A few inches of snowfall is expected down to around 5000 feet with isolated snowfall exceeding 4 inches possible...mostly above 6000 feet. A winter weather advisory may be needed for some of the mountains...some time between late tonight and Sunday evening...mostly above 5000 feet.

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.LONG TERM (Tuesday through Friday)...

Upper level low pressure centered over southern Arizona and northwest Mexico early Tuesday will weaken and move east with high pressure aloft moving across California for Wednesday and Thursday into the Rockies on Friday.

A few showers may linger...mainly over inland areas...into Tuesday. High temperatures will warm a little on Tuesday...but remain 5 to 10 degrees below average for inland areas. Dry with a warming trend for Wednesday through Friday with high temperatures for inland areas warming to near average on Thursday and a little above average on Friday. High temperatures near the coast will be near average with areas of night and morning low clouds and fog extending inland into portions of the valleys at times.

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.AVIATION...

061525Z...Coastal slopes of the higher mountains westward can expect widespread low clouds based 1800-3000 feet MSL with tops to near 4500 feet MSL for drizzle or light showers. Coastal slopes below 4500 feet MSL frequently obscured in clouds and precipitation. Limited clearing this afternoon, then cloud tops rising to around 10-15 thousand feet MSL overnight with showers increasing in coverage and intensity. The risk of fairly strong winds overnight at KSAN looks good, so confidence is moderate-high on fairly strong coastal winds in the KSAN TAF continuing overnight.

Mountains and deserts can expect west winds increasing to around 20-30 kt with gusts to 50 kt this afternoon and evening.

&&

.MARINE...

A late-season low pressure system will bring strong west-northwest winds with gusts of 20-35 knots late today into Sunday along with combined seas of 6 to 12 feet. Showers are likely mainly Sunday into Monday, with the potential for thunderstorms beginning Sunday. Precipitation will begin to taper off with seas subsiding by Tuesday.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

&&

.BEACHES...

Windy this afternoon and evening. Showers with thunderstorms possible Sunday and Monday.

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.SKYWARN...

Skywarn activation may be requested Sunday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 2 PM this afternoon to 2 AM PDT Sunday for Coachella Valley-Riverside County Mountains-San Diego County Deserts-San Diego County Mountains-San Geronio Pass Near Banning.

Wind Advisory from 2 PM this afternoon to 10 PM PDT this evening for Apple and Lucerne Valleys-San Bernardino County Mountains.

PZ...Small Craft Advisory from 2 AM to 11 PM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Gale Warning from 2 PM this afternoon to 2 AM PDT Sunday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory for winds from 2 PM this afternoon to 2 AM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

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PUBLIC...17/Moede

AVIATION/MARINE...Small

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UNIVERSITY**

College of Ag

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FXUS66 KSGX 062102
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
202 PM PDT Sat May 6 2017

.SYNOPSIS...

A deep, cold upper low will bring scattered showers and isolated thunderstorms tonight through Sunday night. Snow levels will lower to around 4500 feet with a few inches of snow possible above 5000 feet. Showers will continue Monday into Tuesday, mainly over the mountains and inland valleys. Showers will decrease in coverage Tuesday night. Dry and warmer Wednesday through Friday with high pressure aloft.

&&

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

A strong coastal eddy and strong onshore flow have deepened the marine layer to 5000 feet this afternoon. Pockets of light rain are scattered across the area, with greatest coverage on the coastal mountain slopes. Not everyone had rain today, but the areas that did received from 0.01-0.05", with higher amounts of 0.10-0.20" on the coastal mountain slopes. This stratiform precip will continue through the afternoon, perhaps increasing in coverage through evening as low level moisture increases, with greatest amounts focused on the coastal slopes from the strong orographics.

Winds have increased in all areas this afternoon. Strongest wind gusts of 40-50 mph were in the mountains. In the deserts, Palm Springs had a gust of 40 mph at Noon. Even the coast was windy with sustained winds of 20 mph at San Clemente Pier, and 22 mph at Solana Beach.

Gradients will accelerate more strongly onshore through the evening to a 996 mb surface low over southern Nevada, so the strong winds will continue. Southwesterly 850 mb winds increase to 40 kt ahead of a cold upper trough diving down the west coast. The upper low will be near Pt Conception at 00Z, with trough becomes negatively tilted as the jet rounds the base of the trough. A Wind Advisory is in effect until 10 pm tonight for 50-60 mph gusts in the mountains and down the desert slopes, and 35 to 45 mph wind gusts in the deserts. Gusty winds will continue in the coastal and valley areas with 15-30 mph winds, strongest near the coast with gusts of 35 mph as the winds come ashore unabated.

The rain and drizzle will transition to showers and isolated

May 6, 2017 Exceptional Event, Imperial County

thunderstorms tonight and Sunday. The leading edge of the cold core aloft moves in tonight between 06Z-12Z, and the airmass destabilizes quickly with CAPE increasing to 300-500 J/kg. Dynamic forcing from embedded shortwaves, an increasingly unstable thermodynamic profile, and increasing low level moisture will generate scattered showers and thunderstorms tonight and Sunday. Small hail is likely with the strongest cells.

Forecast rain amounts remain the same as earlier. The totals will vary quite a bit due to the scattered nature of the precipitation, but the current storm track favors the highest amounts over San Diego County. Rain totals through Tuesday are for 0.50"-1.00 near the coast to 1 to 2 inches in the mountains. Amounts in San Diego County will range from 1 to 1.5 inches near the coast, and from 2 to 3 inches in the mountains. In the deserts...amounts will range from one quarter to one half inch in the upper deserts with around one quarter inch in the lower deserts.

A Winter Weather Advisory was issued for the mountains above 5000 feet for Sunday. Snow levels will fall quickly tonight as the low occludes and cold air wraps around the upper low from the southwest. Wet bulb θ level falls to 5000 feet early Sunday, with snow levels bottoming out between 4500-5000 feet. Pinpointing snow amounts and locations is challenging with these systems, and some areas may not see much snow, but 1-3 inches of snow is possible in some mountain between 5000-7000 feet. Greater amounts of 3-5 inches is possible above 7000 feet. Convective showers may briefly lower the freezing level to 4000 feet. Graupel or small hail is likely in the strongest convection.

Long Range Outlook: The upper low trundles southward off the coast of Baja Sunday night, then moves east toward southern AZ Monday and Tuesday. This is close enough for wrap-around showers over the mountains and deserts, perhaps into the inland valley if the moisture is deep enough. High pressure aloft Wednesday and Thursday will bring dry, warmer weather.

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.AVIATION...

062025Z...On the coastal slopes of the higher mountains westward, widespread low clouds based 1800-3000 feet MSL with tops to near 5000 feet MSL for drizzle and light showers. Coastal slopes below 5000 feet MSL frequently obscured in clouds and precipitation. After limited clearing this afternoon, the cloud tops will rise to around 15 thousand feet MSL overnight with showers increasing in coverage and intensity. The risk of fairly strong winds overnight at KSAN continues to look good, so confidence is moderate-high on fairly strong coastal winds in the KSAN TAF continuing overnight and into Sunday morning.

Mountains and deserts can expect west winds increasing to around 20-30 kt with gusts to 50 kt this afternoon through the overnight period.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

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.MARINE...

West-northwest winds associated with a late-season low pressure system will gust to around 20-35 knots late today into Sunday along with combined seas of 6 to 12 feet. Showers are likely mainly Sunday into Monday, with the potential for thunderstorms beginning Sunday. Precipitation will begin to taper off with seas subsiding by Tuesday.

&&

.BEACHES...

Windy this afternoon and evening. Showers with thunderstorms possible Sunday and Monday. A Beach Hazards Statement is in effect for Orange and San Diego Counties for Sunday.

&&

.SKYWARN...

Skywarn activation may be requested Sunday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory from midnight tonight to 9 PM PDT Sunday for Riverside County Mountains-San Bernardino County Mountains-San Diego County Mountains.

Wind Advisory until 2 AM PDT Sunday for Coachella Valley-Riverside County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.

Wind Advisory until 10 PM PDT this evening for Apple and Lucerne Valleys-San Bernardino County Mountains.

PZ...Small Craft Advisory from 2 AM to 11 PM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Gale Warning until 2 AM PDT Sunday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory for winds until 2 AM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

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NPWSGX

URGENT - WEATHER MESSAGE
National Weather Service San Diego CA
222 PM PDT Sat May 6 2017

...Strong Gusty West Winds in the Mountains and Deserts Through
Tonight...

.A deep cold low pressure system will move into Southern
California tonight bringing strong west winds to the mountains
and deserts.

CAZ055-060-070500-
/O.CON.KSGX.WI.Y.0023.000000T0000Z-170507T0500Z/
San Bernardino County Mountains-Apple and Lucerne Valleys-
Including the cities of Crestline, Lake Arrowhead, Big Bear City,
Wrightwood, Victorville, Hesperia, and Apple Valley
222 PM PDT Sat May 6 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 10 PM PDT THIS EVENING...

- * WINDS...Areas of southwest winds 20 to 30 mph with gusts to 55
mph.
- * LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.
- * IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.
- * REPORTS...Winds gusted to 40 mph at Hesperia and Barstow at 11 AM.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ056-058-061-062-065-070600-
/O.CON.KSGX.WI.Y.0023.000000T0000Z-170507T0900Z/
Riverside County Mountains-San Diego County Mountains-
Coachella Valley-San Diego County Deserts-

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

San Gorgonio Pass Near Banning-

Including the cities of Julian, Indio, Palm Desert,
Palm Desert Country, La Quinta, Borrego Springs,
and Desert Hot Springs

222 PM PDT Sat May 6 2017

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

* WINDS...Areas of west winds 20 to 30 mph with gusts to 55 mph.
Isolated gusts to 65 mph.

* LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas and in the
northern Coachella Valley below the San Gorgonio Pass.

* VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.

* IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.

* REPORTS...Palm Spring had a gust of 43 mph at Noon. Volcan
Mountain had a gust to 53 mph at 1 PM.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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083
FXUS65 KPSR 062201
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
301 PM MST Sat May 6 2017

.SYNOPSIS...

A cold front will approach the area later today with increasingly gusty winds through tonight. Windy conditions will be followed by an unusual early May chance of showers and thunderstorms, starting in southeast California Sunday and spreading into central Arizona by Tuesday. Afternoon highs will only reach the middle and upper 70s Sunday and Monday. Clearing skies with a warming trend will develop by the middle of next week.

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.DISCUSSION...

Skies have been clear for most of the day but CU coverage is starting to pick up across portions of central Arizona as well as southeast CA. CU field is more agitated between Yuma and El Centro as well as south of the border ahead of the next PV band nosing into the area from the south. Cannot rule out some limited shower development along the CO River through the evening with virga the extent of precipitation. Unseasonably strong low pressure cutoff in the low 550dam range at 500mb is deepening just off the SoCal coast and will eventually drop farther down the West Coast for the next several days -- sending a series of vort bands and ascent through the forecast area. Strong frontal boundary will advect a much cooler airmass into region, starting with western forecast zones later this evening and then into Arizona overnight into early Sunday. Ahead of this front, a late afternoon southerly 30-40kt LLJ will develop through southern and central AZ. Deep mechanical mixing should tap a portion of this momentum along the I-8 corridor around Gila Bend leading to some localized strong gusts and possibly blowing dust.

The far more impressive winds will occur behind the frontal boundary in Imperial County this evening. Models are in good agreement the frontal boundary will reach the Colorado River around 03Z, then into the Phoenix metro by 12Z Sunday. The timing of this front just removed from the San Diego mountains at sunset looks like a near perfect setup for persistent, organized mountain rotors; and NAM BUFR soundings for the El Centro area show a shallow mixed post-frontal boundary layer topped by 40-45kt no more than 1000ft from the sfc. Wind advisory caliber speeds throughout much of Imperial County look like a sure bet this evening.

Throughout the day Sunday, the cold core circulation will wobble through SE California eventually trending towards the northern Baja by Monday afternoon. Moisture will initially be confined to the

May 6, 2017 Exceptional Event, Imperial County

immediate circulation center and along the southern California coastline, however should expand outward with time. There is a growing sentiment towards a nice band of H8 frontogenetical forcing Sunday morning through central AZ. Although warmth/capping aloft will limit the overall growth and coverage, an unusually good May low level moisture surge (8 g/kg) and small positive area below the inversion should support isold/sct showers lifting into northern Arizona Sunday afternoon. Otherwise, general lift around the immediate cold core through a deeper H7-H5 saturated layer in SE California looks sufficient for numerous light showers and a few embedded isold thunderstorms. Depending on the T/Td spread, gusty winds aided by evaporational cooling may be a concern through the western CWA Sunday afternoon.

Latest round of morning model forecast solns continue the trend of taking the main circulation center farther into northern Baja Monday, maintaining the focus for precip and storm activity along the southern border. Clearing looks likely for a period Monday day and afternoon across northern portions of the CWA before another vort lobe transitions into the area from the southeast in the evening hours. Highs in the middle and upper 70s equates to 10F-15F below normal and an incredible 30F difference Sunday and Monday from the record 108 in Phoenix Friday. The entire negative height anomaly will begin to fill and lift through Arizona into the four corners Tuesday providing the best chance at more widespread rainfall to the Phoenix area. While lapse rates do not look to be impressive, total moisture entrained in the system may end up better than models suggest; and MLCape 250-500 J/kg Tuesday afternoon would not be unexpected. Kept POPs in a 40%- 60% range which carries agreement from the SREF and NAEFS means.

Residual lingering moisture and spokes of vorticity rotating about the circulation exiting into New Mexico may keep a few showers going into Wednesday morning, but sinking motion and height rises will gradually be overtaking the forecast area. Then for the latter half of the week, shortwave ridging and H5 heights near 582dm will slide into the southwest leading to another run towards triple digits for lower elevation desert communities.

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.AVIATION...

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

There are several aviation weather concerns for the period.

Strong south to southwesterly winds with gusts up to 35 kts will continue through the afternoon and evening. The gusts are likely to subside after sunset but westerly winds will stay relatively strong near 10-16 kts. The strong afternoon winds may loft enough dust in the atmosphere to also create slantwise visibility issues for approaches. Looking into very early Sunday morning, ceilings have a good chance of dropping between 4-6k feet between 12Z and 18Z but low ceilings may be more intermittent with prevailing ceilings AOA 6k feet.

May 6, 2017 Exceptional Event, Imperial County

Southeast California/Southwest Arizona Including KIPL and KBLH:

The strong winds and gusts continue to be a major aviation weather concern with sustained westerly winds 20-25 kts but gusts up to 35 kts continuing into the early Sunday morning hours. The winds will be able to loft enough dust to create slantwise visibility problems but may also create some patchy areas of thicker blowing dust at the surface. Otherwise, ceilings may also lower to 6-10k feet this afternoon with the chance of an isolate shower or two, primarily near terminals closer to the Colorado River. The coverage and extent of any showers is questionable so no mention of showers are in the TAFs at this time.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Tuesday through Saturday...

The cooler weather will continue Tuesday and Wednesday before reaching the 90s by Thursday. There is a chance of showers and isolated thunderstorms Tuesday for Central Arizona with just an outside chance for a few lingering showers Wednesday. Minimum humidities drop below 15 percent Thursday through Saturday while overnight recoveries are modest. The winds look like to be relatively calm with a few afternoon gusts.

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.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed this afternoon and evening, then again early next week.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Red Flag Warning until 8 PM MST this evening for AZZ132-133.

Wind Advisory until 8 PM MST /8 PM PDT/ this evening for AZZ532-535-536-539-554-559.

CA...Wind Advisory until 1 AM PDT Sunday for CAZ562>567.

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DISCUSSION...Nolte/MO

AVIATION...Deemer

FIRE WEATHER...Deemer

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WWUS75 KPSR 062315
NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
415 PM MST Sat May 6 2017

...Blowing Dust Possible...

AZZ532-536-539-554-559-070300-
/O.NEW.KPSR.DU.Y.0003.170506T2315Z-170507T0300Z/
/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0300Z/
Yuma-Gila River Valley-Gila Bend-West Pinal County-
Sonoran Desert Natl Monument-
Including the cities of Yuma, Fortuna Foothills, Ligurta,
Gila Bend, and Sentinel
415 PM MST Sat May 6 2017 /415 PM PDT Sat May 6 2017/

...BLOWING DUST ADVISORY IN EFFECT UNTIL 8 PM MST /8 PM PDT/ THIS
EVENING...
...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM MST /8 PM PDT/ THIS
EVENING...

The National Weather Service in Phoenix has issued a Blowing Dust
Advisory, which is in effect until 8 PM MST /8 PM PDT/ this
evening.

* AFFECTED AREA...Southern Maricopa County and southern Yuma
County to include Interstate 8 between Stanfield and Yuma, and
Highway 85 between Buckeye and Gila Bend.

* TIMING...Late Saturday morning until late Saturday evening.

* WINDS...25 to 35 mph with some gusts reaching or exceeding 40
mph.

* VISIBILITY...Below 1 mile.

* Impacts...Strong winds and gusty conditions will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and other roads. Locally reduced visibilities
will also be possible due to blowing dust and sand.

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.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

Be ready for a sudden drop in visibility. If you encounter blowing dust or blowing sand on the roadway or see it approaching, pull off the road as far as possible and put your vehicle in park. Turn the lights all the way off and keep your foot off the brake pedal.

Remember, pull aside, stay alive.

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CAZ564>567-070800-
/O.NEW.KPSR.DU.Y.0003.170506T2315Z-170507T0300Z/
/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/
Chuckwalla Mountains-Imperial County Southeast-
Imperial County West-Imperial Valley-
Including the cities of Imperial Hot Mineral Springs,
Winterhaven, Coolidge Springs, Salton City, Winona, Coyote Wells,
Ocotillo, Plaster City, El Centro, Calexico, Alamorio,
and Brawley
415 PM PDT Sat May 6 2017

...BLOWING DUST ADVISORY IN EFFECT UNTIL 8 PM PDT THIS EVENING...
...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT SUNDAY...

The National Weather Service in Phoenix has issued a Blowing Dust Advisory, which is in effect until 8 PM PDT this evening.

- * AFFECTED AREA...Imperial county including Interstate 8, Highway 111, and Highway 78.
- * TIMING...Saturday afternoon through early Sunday morning.
- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph.
- * VISIBILITY...Below 1 mile.
- * Impacts...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.

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

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

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

Be ready for a sudden drop in visibility. If you encounter blowing dust or blowing sand on the roadway or see it approaching, pull off the road as far as possible and put your vehicle in park. Turn the lights all the way off and keep your foot off the brake pedal.

Remember, pull aside, stay alive.

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AZZ530-531-533-538-553-CAZ569-570-070300-
/O.NEW.KPSR.DU.Y.0003.170506T2315Z-170507T0300Z/
Parker Valley-Kofa-Central La Paz-Tonopah Desert-
Northwest Pinal County-Palo Verde Valley-Chuckwalla Valley-
Including the cities of Parker, Ehrenberg, Palm Canyon, Brenda,
Harcuvar, Quartzsite, Vicksburg, Vicksburg Junction, Salome,
Arlington, Hassayampa, Tonopah, Wintersburg, Casa Grande,
Cactus Forest, Florence, Coolidge, Martinez Lake, Blythe,
Palo Verde, Ripley, and Midland
415 PM MST Sat May 6 2017 /415 PM PDT Sat May 6 2017/

...BLOWING DUST ADVISORY IN EFFECT UNTIL 8 PM MST /8 PM PDT/ THIS EVENING...

The National Weather Service in Phoenix has issued a Blowing Dust Advisory, which is in effect until 8 PM MST /8 PM PDT/ this evening.

- * AFFECTED AREA...Imperial and Riverside Counties in California...and...Portions of Yuma...La Paz...Maricopa...and Pinal Counties in Arizona
- * TIMING...Until 8 PM PDT/MST.
- * WINDS...Gusts over 40 mph.
- * VISIBILITY...Below 1 mile.
- * IMPACTS...Hazardous driving conditions from widespread blowing dust reducing visibility below 1 mile.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Be ready for a sudden drop in visibility. If you encounter blowing dust or blowing sand on the roadway or see it approaching, pull off the road as far as possible and put your vehicle in park. Turn the lights all the way off and keep your foot off the brake pedal.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

Remember, pull aside, stay alive.

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AZZ535-070300-

/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0300Z/

Southeast Yuma County-

415 PM MST Sat May 6 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM MST THIS EVENING...

* AFFECTED AREA...Southern Maricopa County and southern Yuma County to include Interstate 8 between Stanfield and Yuma, and Highway 85 between Buckeye and Gila Bend.

* TIMING...Late Saturday morning until late Saturday evening.

* WINDS...25 to 35 mph with some gusts reaching or exceeding 40 mph.

* IMPACTS...Strong winds and gusty conditions will create dangerous driving conditions for high profile vehicles along Interstate 8 and other roads. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ562-563-070800-

/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/

Imperial County Southwest-Salton Sea-

Including the cities of Mountain Spring and Desert Shores

415 PM PDT Sat May 6 2017

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

* AFFECTED AREA...Imperial county including Interstate 8, Highway 111, and Highway 78.

* TIMING...Saturday afternoon through early Sunday morning.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

* WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph.

* IMPACTS...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
546 PM MST Sat May 6 2017

...Blowing Dust Possible...

CAZ567-070800-
/O.NEW.KPSR.HW.W.0001.170507T0046Z-170507T0300Z/
/O.CON.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/
/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/
Imperial Valley-
Including the cities of El Centro, Calexico, Alamo, and Brawley
546 PM PDT Sat May 6 2017

...HIGH WIND WARNING IN EFFECT UNTIL 8 PM PDT THIS EVENING...
...BLOWING DUST ADVISORY REMAINS IN EFFECT UNTIL 8 PM PDT THIS
EVENING...
...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT SUNDAY...

The National Weather Service in Phoenix has issued a High Wind
Warning, which is in effect until 8 PM PDT this evening.

* AFFECTED AREA...Imperial county including Interstate 8,
Highway 111, and Highway 78.

* TIMING...Saturday afternoon through early Sunday morning.

* WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain
areas near and to the west of El Centro and Imperial along I-8
will see the strongest winds with sustained winds in excess of
40 mph and gusts as high as 60 mph through around 8 pm. Winds
will gradually taper off through the evening hours.

* VISIBILITY...Below 1 mile.

* Impacts...Elevated winds and strong gusts will create
dangerous driving conditions for high profile vehicles along
Interstate 8 and throughout Imperial County. Locally reduced
visibilities will also be possible due to blowing dust and
sand.

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

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

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

Be ready for a sudden drop in visibility. If you encounter blowing dust or blowing sand on the roadway or see it approaching, pull off the road as far as possible and put your vehicle in park. Turn the lights all the way off and keep your foot off the brake pedal.

Remember, pull aside, stay alive.

A High Wind Warning means a hazardous high wind event is expected or occurring. Sustained wind speeds of at least 40 mph or gusts of 58 mph or more can lead to property damage. In addition, strong winds over desert areas could result in briefly lowered visibilities to well under a mile at times in blowing dust or blowing sand. Use extra caution

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AZZ532-536-539-554-559-070300-
/O.CON.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/
/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0300Z/
Yuma-Gila River Valley-Gila Bend-West Pinal County-
Sonoran Desert Natl Monument-
Including the cities of Yuma, Fortuna Foothills, Ligurta,
Gila Bend, and Sentinel
546 PM MST Sat May 6 2017 /546 PM PDT Sat May 6 2017/

...BLOWING DUST ADVISORY REMAINS IN EFFECT UNTIL 8 PM MST /8 PM PDT/ THIS EVENING...

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM MST /8 PM PDT/ THIS EVENING...

* AFFECTED AREA...Southern Maricopa County and southern Yuma County to include Interstate 8 between Stanfield and Yuma, and Highway 85 between Buckeye and Gila Bend.

* TIMING...Late Saturday morning until late Saturday evening.

* WINDS...25 to 35 mph with some gusts reaching or exceeding 40 mph.

* VISIBILITY...Below 1 mile.

* Impacts...Strong winds and gusty conditions will create dangerous driving conditions for high profile vehicles along Interstate 8 and other roads. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

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.

Be ready for a sudden drop in visibility. If you encounter blowing dust or blowing sand on the roadway or see it approaching, pull off the road as far as possible and put your vehicle in park. Turn the lights all the way off and keep your foot off the brake pedal.

Remember, pull aside, stay alive.

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CAZ564>566-070800-

/O.CON.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/

/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/

Chuckwalla Mountains-Imperial County Southeast-

Imperial County West-

Including the cities of Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, and Plaster City

546 PM PDT Sat May 6 2017

...BLOWING DUST ADVISORY REMAINS IN EFFECT UNTIL 8 PM PDT THIS EVENING...

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

* AFFECTED AREA...Imperial county including Interstate 8, Highway 111, and Highway 78.

* TIMING...Saturday afternoon through early Sunday morning.

* WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph.

* VISIBILITY...Below 1 mile.

* Impacts...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Wind Advisory means that sustained wind speeds of between

May 6, 2017 Exceptional Event, Imperial County

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.

Be ready for a sudden drop in visibility. If you encounter blowing dust or blowing sand on the roadway or see it approaching, pull off the road as far as possible and put your vehicle in park. Turn the lights all the way off and keep your foot off the brake pedal.

Remember, pull aside, stay alive.

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AZZ530-531-533-538-553-CAZ569-570-070300-
/O.CON.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/
Parker Valley-Kofa-Central La Paz-Tonopah Desert-
Northwest Pinal County-Palo Verde Valley-Chuckwalla Valley-
Including the cities of Parker, Ehrenberg, Palm Canyon, Brenda,
Harcuar, Quartzsite, Vicksburg, Vicksburg Junction, Salome,
Arlington, Hassayampa, Tonopah, Wintersburg, Casa Grande,
Cactus Forest, Florence, Coolidge, Martinez Lake, Blythe,
Palo Verde, Ripley, and Midland
546 PM MST Sat May 6 2017 /546 PM PDT Sat May 6 2017/

...BLOWING DUST ADVISORY REMAINS IN EFFECT UNTIL 8 PM MST /8 PM
PDT/ THIS EVENING...

* AFFECTED AREA...Imperial and Riverside Counties in
California...and...Portions of Yuma...La Paz...Maricopa...and
Pinal Counties in Arizona

* TIMING...Until 8 PM PDT/MST.

* WINDS...Gusts over 40 mph.

* VISIBILITY...Below 1 mile.

* IMPACTS...Hazardous driving conditions from widespread blowing
dust reducing visibility below 1 mile.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Be ready for a sudden drop in visibility. If you encounter
blowing dust or blowing sand on the roadway or see it
approaching, pull off the road as far as possible and put your
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foot off the brake pedal.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

Remember, pull aside, stay alive.

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AZZ535-070300-

/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0300Z/

Southeast Yuma County-

546 PM MST Sat May 6 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 8 PM MST THIS EVENING...

* AFFECTED AREA...Southern Maricopa County and southern Yuma County to include Interstate 8 between Stanfield and Yuma, and Highway 85 between Buckeye and Gila Bend.

* TIMING...Late Saturday morning until late Saturday evening.

* WINDS...25 to 35 mph with some gusts reaching or exceeding 40 mph.

* IMPACTS...Strong winds and gusty conditions will create dangerous driving conditions for high profile vehicles along Interstate 8 and other roads. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ562-563-070800-

/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/

Imperial County Southwest-Salton Sea-

Including the cities of Mountain Spring and Desert Shores

546 PM PDT Sat May 6 2017

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

* AFFECTED AREA...Imperial county including Interstate 8, Highway 111, and Highway 78.

* TIMING...Saturday afternoon through early Sunday morning.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph.
- * IMPACTS...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
811 PM MST Sat May 6 2017

...Blowing Dust Possible...

CAZ567-070800-
/O.EXP.KPSR.HW.W.0001.000000T0000Z-170507T0300Z/
/O.EXP.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/
/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/
Imperial Valley-
Including the cities of El Centro, Calexico, Alamo, and Brawley
811 PM PDT Sat May 6 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT SUNDAY...
...HIGH WIND WARNING HAS EXPIRED...
...BLOWING DUST ADVISORY HAS EXPIRED...

* AFFECTED AREA...Imperial county including Interstate 8,
Highway 111, and Highway 78.

* TIMING...This evening through early Sunday morning.

* WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain
areas near and to the west of El Centro and Imperial along I-8
will see the strongest winds with a few gusts reaching to
around 50 mph.

* Impacts...Elevated winds and strong gusts will create dangerous
driving conditions for high profile vehicles along Interstate 8
and throughout Imperial County. Locally reduced visibilities
will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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AZZ532-536-539-554-559-070415-

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

/O.EXP.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/
/O.EXP.KPSR.WI.Y.0015.000000T0000Z-170507T0300Z/
Yuma-Gila River Valley-Gila Bend-West Pinal County-
Sonoran Desert Natl Monument-
Including the cities of Yuma, Fortuna Foothills, Ligurta,
Gila Bend, and Sentinel
811 PM MST Sat May 6 2017 /811 PM PDT Sat May 6 2017/

...BLOWING DUST ADVISORY HAS EXPIRED...
...WIND ADVISORY HAS EXPIRED...

Gusty south to southwest winds continued to taper off this evening and most locations were reporting wind gusts less than 40 mph. No reports of dense blowing dust had been received and as winds continue to decrease, dense blowing dust will no longer be a problem. Thus both the wind advisory and blowing dust advisory have been allowed to expire at 8 pm.

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CAZ564>566-070800-
/O.EXP.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/
/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/
Chuckwalla Mountains-Imperial County Southeast-
Imperial County West-
Including the cities of Imperial Hot Mineral Springs,
Winterhaven, Coolidge Springs, Salton City, Winona, Coyote Wells,
Ocotillo, and Plaster City
811 PM PDT Sat May 6 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PDT SUNDAY...
...BLOWING DUST ADVISORY HAS EXPIRED...

- * AFFECTED AREA...Imperial county including Interstate 8, Highway 111, and Highway 78.
- * TIMING...This evening through early Sunday morning.
- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 50 mph.
- * Impacts...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.

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

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

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

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AZZ530-531-533-538-553-CAZ569-570-070415-
/O.EXP.KPSR.DU.Y.0003.000000T0000Z-170507T0300Z/
Parker Valley-Kofa-Central La Paz-Tonopah Desert-
Northwest Pinal County-Palo Verde Valley-Chuckwalla Valley-
Including the cities of Parker, Ehrenberg, Palm Canyon, Brenda,
Harcuvar, Quartzsite, Vicksburg, Vicksburg Junction, Salome,
Arlington, Hassayampa, Tonopah, Wintersburg, Casa Grande,
Cactus Forest, Florence, Coolidge, Martinez Lake, Blythe,
Palo Verde, Ripley, and Midland
811 PM MST Sat May 6 2017 /811 PM PDT Sat May 6 2017/

...BLOWING DUST ADVISORY HAS EXPIRED...

Strong and gusty south to southwest winds continued to gradually taper off this evening and as a result, blowing dust decreased substantially. No reports of dense blowing dust were reported in the advisory area. As a result the blowing dust advisory was allowed to expire at 8 pm.

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AZZ535-070415-
/O.EXP.KPSR.WI.Y.0015.000000T0000Z-170507T0300Z/
Southeast Yuma County-
811 PM MST Sat May 6 2017

...WIND ADVISORY HAS EXPIRED...

Strong and gusty south to southwest winds continued to gradually taper off this evening over portions of Yuma County and most locations reported peak gusts below 40 mph. As a result the wind advisory was allowed to expire. It will remain quite breezy for the rest of the evening and into the early morning hours on Sunday however.

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CAZ562-563-070800-
/O.CON.KPSR.WI.Y.0015.000000T0000Z-170507T0800Z/
Imperial County Southwest-Salton Sea-
Including the cities of Mountain Spring and Desert Shores
811 PM PDT Sat May 6 2017

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

* AFFECTED AREA...Imperial county including Interstate 8,
Highway 111, and Highway 78.

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

- * TIMING...Saturday afternoon through early Sunday morning.
- * WINDS...25 to 35 mph with gusts up to 45 mph. Favored terrain areas west of El Centro along I-8 will see the strongest winds with gusts as high as 55 mph.
- * IMPACTS...Elevated winds and strong gusts will create dangerous driving conditions for high profile vehicles along Interstate 8 and throughout Imperial County. Locally reduced visibilities will also be possible due to blowing dust and sand.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
910 PM MST Sat May 6 2017

.SYNOPSIS...

A cold front will approach the area later today with increasingly gusty winds through tonight. Windy conditions will be followed by an unusual early May chance of showers and thunderstorms, starting in southeast California Sunday and spreading into central Arizona by Tuesday. Afternoon highs will only reach the middle and upper 70s Sunday and Monday. Clearing skies with a warming trend will develop by the middle of next week.

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.DISCUSSION...

During the afternoon and early evening hours, a deep and cold upper level closed low continued to drop south along the central CA coast as it developed, putting a strong southerly flow aloft ahead of it and into far SE CA and southern AZ. As 500mb heights drastically fell ahead of the advancing low (110m over portions of far southeast CA) temperatures today really dropped off. Phoenix fell to 98 degrees today (10 lower than yesterday) and Yuma only recorded a high of 88 degree. The low will eventually advect in quite a bit of moisture leading to a scattered/numerous shower threat but for now the air mass remains a bit on the dry side with pwat values below one half inch and central desert dewpoints in the 20s. Very strong south to southwest winds developed area-wide this afternoon ahead of the low with many locations reporting peak gusts over 40 mph for much of the afternoon into the evening hours. Favored locations in Imperial County, such as Imperial and El Centro reported sustained winds over 40 mph with peak gusts to about 60 mph and a High Wind Warning was issued at 545 pm for the Imperial Valley. A Wind Advisory and Blowing Dust Advisory were also in effect for much of southwest and south-central AZ as well as Imperial County but as winds have started to taper off and no reports of dense dust were received, we allowed most of these products to expire at 8 pm. The wind advisory will continue for Imperial county through midnight tonight however, as gusts in excess of 40 mph persist in the Imperial valley.

In addition to the wind and dust impacts, fire weather was a concern today as widespread red flag conditions developed across areas to the east of the lower Colorado River Valley. The Red Flag Warning verified nicely with at least 6 stations in the central deserts meeting criteria for 3 or more hours this afternoon and one station in fire weather zone 133 also verified. As the evening wore on and temperatures cooled, RH values climbed and red flag conditions were no longer met in most locations; as a result the Red Flag Warning

May 6, 2017 Exceptional Event, Imperial County

was allowed to expire at 8 pm.

For the rest of tonight, a dry cold front will continue to spread east across the western deserts, approaching the greater Phoenix area by around 12z. This looks to be a dry front and rain chances will be slim although we will see an increase in mainly mid level clouds over southwest/south central AZ later tonight as the front approaches the Phoenix area. Forecasts look to be in good shape and no updates are needed at this time.

.PREVIOUS DISCUSSION...

Skies have been clear for most of the day but CU coverage is starting to pick up across portions of central Arizona as well as southeast CA. CU field is more agitated between Yuma and El Centro as well as south of the border ahead of the next PV band nosing into the area from the south. Cannot rule out some limited shower development along the CO River through the evening with virga the extent of precipitation. Unseasonably strong low pressure cutoff in the low 550dam range at 500mb is deepening just off the SoCal coast and will eventually drop farther down the West Coast for the next several days -- sending a series of vort bands and ascent through the forecast area. Strong frontal boundary will advect a much cooler airmass into region, starting with western forecast zones later this evening and then into Arizona overnight into early Sunday. Ahead of this front, a late afternoon southerly 30-40kt LLJ will develop through southern and central AZ. Deep mechanical mixing should tap a portion of this momentum along the I-8 corridor around Gila Bend leading to some localized strong gusts and possibly blowing dust.

The far more impressive winds will occur behind the frontal boundary in Imperial County this evening. Models are in good agreement the frontal boundary will reach the Colorado River around 03Z, then into the Phoenix metro by 12Z Sunday. The timing of this front just removed from the San Diego mountains at sunset looks like a near perfect setup for persistent, organized mountain rotors; and NAM BUFR soundings for the El Centro area show a shallow mixed post-frontal boundary layer topped by 40-45kt no more than 1000ft from the sfc. Wind advisory caliber speeds throughout much of Imperial County look like a sure bet this evening.

Throughout the day Sunday, the cold core circulation will wobble through SE California eventually trending towards the northern Baja by Monday afternoon. Moisture will initially be confined to the immediate circulation center and along the southern California coastline, however should expand outward with time. There is a growing sentiment towards a nice band of H8 frontogenetical forcing Sunday morning through central AZ. Although warmth/capping aloft will limit the overall growth and coverage, an unusually good May low level moisture surge (8 g/kg) and small positive area below the inversion should support isold/sct showers lifting into northern Arizona Sunday afternoon. Otherwise, general lift around the immediate cold core through a deeper H7-H5 saturated layer in SE California looks sufficient for numerous light showers and a few

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

embedded isolated thunderstorms. Depending on the T/Td spread, gusty winds aided by evaporational cooling may be a concern through the western CWA Sunday afternoon.

Latest round of morning model forecast solns continue the trend of taking the main circulation center farther into northern Baja Monday, maintaining the focus for precip and storm activity along the southern border. Clearing looks likely for a period Monday day and afternoon across northern portions of the CWA before another vort lobe transitions into the area from the southeast in the evening hours. Highs in the middle and upper 70s equates to 10F-15F below normal and an incredible 30F difference Sunday and Monday from the record 108 in Phoenix Friday. The entire negative height anomaly will begin to fill and lift through Arizona into the four corners Tuesday providing the best chance at more widespread rainfall to the Phoenix area. While lapse rates do not look to be impressive, total moisture entrained in the system may end up better than models suggest; and MLCAPE 250-500 J/kg Tuesday afternoon would not be unexpected. Kept POPs in a 40%- 60% range which carries agreement from the SREF and NAEFS means.

Residual lingering moisture and spokes of vorticity rotating about the circulation exiting into New Mexico may keep a few showers going into Wednesday morning, but sinking motion and height rises will gradually be overtaking the forecast area. Then for the latter half of the week, shortwave ridging and H5 heights near 582dm will slide into the southwest leading to another run towards triple digits for lower elevation desert communities.

&&

.AVIATION...

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

Winds will continue to be an issue for most of tonight, as gusty south/southwest winds will persist ahead of an approaching cold front. Will likely see gusts over 20kt at times past midnight and at Phoenix winds will probably tend more towards southerly all night until the front arrives sometime between 11z and 13z. Expect a burst of stronger wind swinging more to the southwest as the front pushes through the area and as such probably won't see the normal winds backing to the east after midnight.

Expect lowering and thickening clouds after midnight ahead of the front with CIGS around 8-10k feet developing after 09z...and we could see few-sct decks around 5k feet as well. Have mentioned VCSH in the TAFS starting around 11Z and continuing into mid morning before dissipating as clouds start to thin. Also, we might see brief CIGS down around 5k feet with the main frontal passage.

Southeast California/Southwest Arizona Including KIPL and KBLH:

Expect continued strong gusty southwest winds to persist most of tonight, with peak gusts over 35kt at KIPL past midnight. Will

May 6, 2017 Exceptional Event, Imperial County

likely see some gusts over 25 kt at both KIPL and KBLH through 10z. Blowing dust threat will likely be pretty much over by 06z and as such will remove any vis restriction in the TAFS. Skies to be relatively clear overnight but expect increasing and thickening clouds during the morning hours with CIGS at 10k feet and above developing by around 18z. May see a few showers as well at KIPL and have mentioned VCSH in the KIPL TAF.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Tuesday through Saturday...

The cooler weather will continue Tuesday and Wednesday before reaching the 90s by Thursday. There is a chance of showers and isolated thunderstorms Tuesday for Central Arizona with just an outside chance for a few lingering showers Wednesday. Minimum humidities drop below 15 percent Thursday through Saturday while overnight recoveries are modest. The winds look like to be relatively calm with a few afternoon gusts.

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.SPOTTER INFORMATION STATEMENT...

Spotter reports of gusty winds and blowing dust may be needed this afternoon and evening, then again early next week.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 1 AM PDT Sunday for CAZ562>567.

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DISCUSSION...CB

PREVIOUS DISCUSSION...Nolte/MO

AVIATION...CB

FIRE WEATHER...Deemer

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AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
946 PM PDT Sat May 6 2017

.SYNOPSIS...

A deep, cold upper low will bring scattered showers and isolated thunderstorms through Sunday night. Snow levels will hover between 4000 to 5000 feet through Sunday evening with periodic snow showers and some snow accumulation likely especially above 6000 feet. Scattered showers will continue Monday into Tuesday, mainly over the mountains and inland valleys. Showers will decrease in coverage Tuesday night. Dry and warmer Wednesday through Friday with high pressure building in aloft.

&&

.EVENING UPDATE...

Cold upper low center is dropping across the Southern California Bight this evening. This system will linger over SoCal and Northern Baja Mexico through Sunday night bringing a multitude of weather impacts to the region.

Snow levels have rapidly dropped this evening and we received a report of sleet falling at Palomar Mountain a few hours ago. Snow levels will persist through Sunday night between 4000 to 5000 feet. Accumulations will be hit and miss at the lower elevations between 4000 to 6000 feet although even a quick inch of snow under a heavy snow shower can cause havoc on the busy mountain passes of SoCal, which is why the winter weather advisory will remain in effect through Sunday evening. Above 5000 or 6000 feet, accumulations are more likely, and we could see up to 6 inches or so at those higher elevations through Sunday evening.

Showers will increase in intensity and coverage overnight as the low center approaches the region. Gusty SSW winds will continue this evening over the mountains and deserts and should diminish towards early Sunday morning. Have extended the northern deserts wind advisory through 2 am as winds continue to be gusty there and hovering around advisory criteria with a few reports of blowing dust and sand in the high deserts of San Bernardino County this evening.

No other significant changes were made to the forecast this evening.

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

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

(remainder of the earlier forecaster discussion, issued at 202 pm)

The rain and drizzle will transition to showers and isolated thunderstorms tonight and Sunday. The leading edge of the cold core aloft moves in tonight between 06Z-12Z, and the airmass destabilizes quickly with CAPE increasing to 300-500 J/kg. Dynamic forcing from embedded shortwaves, an increasingly unstable thermodynamic profile, and increasing low level moisture will generate scattered showers and thunderstorms tonight and Sunday. Small hail is likely with the strongest cells.

Forecast rain amounts remain the same as earlier. The totals will vary quite a bit due to the scattered nature of the precipitation, but the current storm track favors the highest amounts over San Diego County. Rain totals through Tuesday are for 0.50"-1.00 near the coast to 1 to 2 inches in the mountains. Amounts in San Diego County will range from 1 to 1.5 inches near the coast, and from 2 to 3 inches in the mountains. In the deserts...amounts will range from one quarter to one half inch in the upper deserts with around one quarter inch in the lower deserts.

A Winter Weather Advisory was issued for the mountains above 5000 feet for Sunday. Snow levels will fall quickly tonight as the low occludes and cold air wraps around the upper low from the southwest. Wet bulb θ level falls to 5000 feet early Sunday, with snow levels bottoming out between 4500-5000 feet. Pinpointing snow amounts and locations is challenging with these systems, and some areas may not see much snow, but 1-3 inches of snow is possible in some mountain between 5000-7000 feet. Greater amounts of 3-5 inches is possible above 7000 feet. Convective showers may briefly lower the freezing level to 4000 feet. Graupel or small hail is likely in the strongest convection.

Long Range Outlook: The upper low trundles southward off the coast of Baja Sunday night, then moves east toward southern AZ Monday and Tuesday. This is close enough for wrap-around showers over the mountains and deserts, perhaps into the inland valley if the moisture is deep enough. High pressure aloft Wednesday and Thursday will bring dry, warmer weather.

&&

.AVIATION...

070430Z...Coast/valleys...showers will gradually increase overnight with cloud bases lowering to mostly 1500-2000 ft MSL, locally below 1000 ft MSL, and areas of vis 3-5 mi developing, locally lower. These conditions will improve little until probably Sunday evening. Terrain will be obscured at times. Isolated lightning strikes will occur, especially Sunday. Local wind gusts from the west around 30 knots will occur tonight, mainly near the immediate coast.

Mountains...widespread terrain obscurations in rain and snow showers and fog will occur through Sunday, with conditions improving

May 6, 2017 Exceptional Event, Imperial County**Appendix A**

somewhat Sunday evening, though some mountains will continue to be obscured in fog and scattered light precipitation. Isolated lightning strikes will occur, especially Sunday. Tops of the clouds will be 15000 feet or higher at times. Areas of southwest winds 20-30 knots with gusts 50-60 knots will occur mainly tonight, with decreasing winds Sunday.

Deserts...isolated/scattered showers or thunderstorms with bases around 5000 ft MSL will occur at times late tonight and Sunday. Areas of west winds 20-30 knots with gusts 40-55 knots will occur mainly tonight, with decreasing winds Sunday.

&&

.MARINE...

West-northwest winds associated with a late-season low pressure system will have gusts 25-35 knots overnight and Sunday morning with combined seas of 6 to 12 feet. Showers are likely mainly Sunday into Monday, with a chance of thunderstorms especially Sunday. Wind and seas will gradually lower late Sunday through Tuesday.

&&

.BEACHES...

Showers will continue at times through Sunday, decreasing somewhat Sunday night and Monday. There is a slight chance of thunderstorms mainly late tonight and Sunday. A Beach Hazards Statement is in effect for Orange and San Diego Counties Sunday.

&&

.SKYWARN...

Skywarn activation may be requested Sunday due to thunderstorms, heavy rain and snow.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Winter Weather Advisory from midnight tonight to 9 PM PDT Sunday for Riverside County Mountains-San Bernardino County Mountains-San Diego County Mountains.

Wind Advisory until 2 AM PDT Sunday for Coachella Valley-Riverside County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.

Wind Advisory until 2 AM PDT Sunday for Apple and Lucerne Valleys-San Bernardino County Mountains.

PZ...Small Craft Advisory from 2 AM to 11 PM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

May 6, 2017 Exceptional Event, Imperial County

Gale Warning until 2 AM PDT Sunday for Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

Small Craft Advisory for winds until 2 AM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm.

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PUBLIC...Moede/JMB

AVIATION/MARINE/BEACHES...Maxwell

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URGENT - WEATHER MESSAGE
National Weather Service San Diego CA
952 PM PDT Sat May 6 2017

...Strong Gusty West Winds in the Mountains and Deserts Through
Tonight...

.A deep cold low pressure system will continue to bring strong and
gusty westerly winds to Southern California mountains and
deserts this evening.

CAZ055-060-070900-
/O.EXT.KSGX.WI.Y.0023.000000T0000Z-170507T0900Z/
San Bernardino County Mountains-Apple and Lucerne Valleys-
Including the cities of Crestline, Lake Arrowhead, Big Bear City,
Wrightwood, Victorville, Hesperia, and Apple Valley
952 PM PDT Sat May 6 2017

...WIND ADVISORY NOW IN EFFECT UNTIL 2 AM PDT SUNDAY...

- * WINDS...Areas of southwest winds 20 to 30 mph with gusts to 55
mph.
- * LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas.
- * VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.
- * IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.
- * REPORTS...As of 930 PM there were still reports of isolated
blowing dust and wind gusts of 50 to 55 mph in the deserts.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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/O.CON.KSGX.WI.Y.0023.000000T0000Z-170507T0900Z/
Riverside County Mountains-San Diego County Mountains-

May 6, 2017 Exceptional Event, Imperial County

Coachella Valley-San Diego County Deserts-

San Geronio Pass Near Banning-

Including the cities of Julian, Indio, Palm Desert,
Palm Desert Country, La Quinta, Borrego Springs,
and Desert Hot Springs

952 PM PDT Sat May 6 2017

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

* WINDS...Areas of west winds 20 to 30 mph with gusts to 55 mph.
Isolated gusts to 65 mph.

* LOCATION...Strongest winds near mountain ridge tops and along
desert mountain slopes into adjacent desert areas and in the
northern Coachella Valley below the San Geronio Pass.

* VISIBILITY...Locally reduced in blowing sand and blowing dust
in the deserts.

* IMPACTS...The winds will make driving difficult, especially
for motorists with high profile vehicles. Watch for broken
tree limbs.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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jmb

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