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|--------------------------|------------|------|--------|-------------|--|--|
| Area Forecast Discussion | 10/16/2017 | 2101 | MST    | Phoenix     | <p>....<b>Thursday night through next Monday...Heights will continue to lower for the latter half of the week and into the early weekend as deep troughing expands into much of the western CONUS by Friday.</b> Model agreements in timing remain with minor differences in strength. Moisture parameters are fairly underwhelming, with drier air quickly advecting into the area during the day Friday. Best pocket for height falls and jet influenced ascent still remain to our north so PoPs are very low. Non-zero to account for trough passage but low enough to not generate any weather. <b>What will be noticeable through the region, outside of a slight cool down in temperatures, will be increased winds for Friday and to a lesser extent Saturday afternoons. Gusts around 20mph will be possible over the lower AZ desert locales while spots downwind of the Peninsular Ranges in southeast CA could see gusts nearing 30mph at peak on Friday. While timing is still a ways out, could not rule near advisory conditions in the SW corner of Imperial County sometime late Thursday PM into Friday, as winds through the gap/pass respond well to trough passages.</b> Temperatures dip closer towards seasonal normals for the weekend, but the cool down will be short lived.</p> |  |
| Area Forecast Discussion | 10/16/2017 | 2122 | PDT    | San Diego   | <p><b>On Thursday and Friday a broad longwave trough moves into the Pacific Northwest where rain is likely. Farther south in our area the precip chances are minimal, but the trough will bring cooling, a deeper marine layer, and stronger onshore flow with gusty afternoon and evening west winds in the mountains and deserts.</b></p>  |  |
| Area Forecast Discussion | 10/17/2017 | 0245 | PDT    | San Diego   | <p>....<b>That's when a big low pressure trough moving through the Northwest will increase the onshore flow</b> and generate a pretty decent coastal eddy. The coastal clouds never really establish a foothold Thursday before the cooler air aloft appears to erode whatever marine inversion can get established. All that means we'll have partly cloudy skies Thursday into Saturday. <b>The trough will boost winds through mountains and into deserts, particularly Friday.....</b></p>   |  |
| Area Forecast Discussion | 10/17/2017 | 0339 | MST    | Phoenix     | <p><b>By Friday, another stronger Pacific trough will move into the Pacific Northwest with heights trailing southward through the Great Basin.</b> Trough heights will weakly swing through the Southwest overnight Friday into Saturday, ushering in a drier airmass and slightly cooler temperatures for the weekend. Best pocket for height falls and jet influenced ascent have been drawn well to our north with the latest deterministic and ensemble runs. <b>Increasing winds will be the first sensible impact across the region, with breezy to windy conditions for Friday and to a lesser extent Saturday afternoons. Gusts around 20mph will be possible over the lower AZ desert locales while spots downwind of the Peninsular Ranges in southeast CA could see gusts nearing 30mph at peak on Friday. While timing is still a ways out, could not rule near advisory conditions in the SW corner of Imperial County sometime Friday into Saturday, as winds through the gap/pass respond well to trough passages.</b> Second sensible impact with be a cooling trend for temperatures, dipping closer towards seasonal normals for the weekend.</p>  |  |

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| Area Forecast Discussion | 10/17/2017 | 0914 | PDT    | San Diego   | <p>...<b>A cooling trend will begin on Wednesday and continue through Friday as the large-scale trough deepens further and moves inland over the Pacific Northwest.</b> The coolest day will be Friday when highs fall to 5-10 degrees below normal. <b>Onshore flow will strengthen as a result, with strong and gusty west winds in the mountains and deserts (gusts 30-40 mph, local 50 mph).</b> Finally, the marine layer will deepen each day, eventually reaching around 3500-4000 ft msl on Friday. Expect night and morning marine layer stratus clouds over the coast and portions of the valleys. There may be just enough moisture and lift Friday morning for some drizzle or isolate light showers over and west of the coastal slopes of the mountains...</p>   |  |
| Area Forecast Discussion | 10/18/2017 | 0218 | MST    | Phoenix     | <p>...<b>Elsewhere, a Pacific trough is just beginning to edge its way into the Pacific Northwest and will begin to influence our weather pattern come later this week.</b> .....This disturbance will quickly move off to our east by late Thursday afternoon reducing the threat of showers to near 0. <b>Behind this, drier air will begin filtering in and the aforementioned Pacific trough will be quickly approaching the desert southwest.</b> Unfortunately, the atmosphere will be rather dry (PWs ~ 0.5 inches) when this trough and its associated dynamics move overhead come late Friday. Therefore, no precipitation is expected. <b>The biggest change will be the cooler temperatures come Friday and Saturday with some breezy conditions, mainly in SE California.</b> .....</p>  |  |
| Area Forecast Discussion | 10/18/2017 | 0243 | PDT    | San Diego   | <p>...<b>Today will be cooler as a low pressure trough deepens to our north and onshore flow increases.</b>.....For a brief time Friday morning these coastal clouds will thicken enough to produce patchy drizzle west of the mountains. <b>The increased onshore flow will produce westerly winds through mountain passes and into the deserts Thursday evening and night. Top gusts in top spots will exceed 40 mph. Still breezy Friday, but not as strong.</b> The trough moves through the interior West Friday night and high pressure begins to build over California this the weekend.</p>  |  |
| Area Forecast Discussion | 10/18/2017 | 0846 | PDT    | San Diego   | <p>...<b>The cooling trend will continue through Friday as the trough continues to deepen and move inland,</b> with possibly enough lift and moisture for some drizzle and/or light showers over and west of the coastal slopes Friday morning. Expect highs 5-10 degrees below normal by Friday. <b>Onshore flow will strengthen as well, with onshore pressure gradients forecast to reach around 10 mb from San Diego to Las Vegas on Friday, so expect west winds gusting 35-45 mph with local gusts to 50 mph in the mountains and deserts Thursday and Friday.</b> The marine layer will continue to deepen as well (up to 4000-4500 ft msl), with stratus filling the coastal basin and likely moving into the passes and coastal slopes Thursday night/Friday morning and again Friday night before offshore winds clear clouds out from the north Saturday morning...</p> |  |

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| Area Forecast Discussion | 10/18/2017 | 1340 | PDT    | San Diego   | <p>..Afternoon water vapor satellite imagery shows a weak short-wave trough moving east over Southern Nevada/San Bernardino county with a few high clouds over the deserts associated with this trough....The cooling trend will continue through Friday as the trough continues to deepen and move inland, with possibly enough lift and moisture for some drizzle and/or light showers over and west of the coastal slopes Friday morning. Expect highs 5-10 degrees below normal by Friday. <b>Onshore flow will strengthen as well, with onshore pressure gradients forecast to reach around 10 mb from San Diego to Las Vegas on Friday, so expect west winds gusting 35-45 mph with local gusts to 50 mph in the mountains and deserts Thursday and Friday.</b> The marine layer will continue to deepen as well (up to 4000-4500 ft msl), with stratus filling the coastal basin and likely moving into the passes and coastal slopes Thursday night/Friday morning and again Friday night before offshore winds clear clouds out from the north Saturday morning.</p> |  |
| Area Forecast Discussion | 10/18/2017 | 1440 | MST    | Phoenix     | <p><b>Midlevel heights will remain relatively suppressed into the weekend as a secondary and stronger upper trough moves across the western CONUS,</b> with most forcing for ascent remain focused to the north of the region. The biggest effect on our weather will be a slight cooling trend into Saturday, closer to seasonal averages. <b>West winds will also become breezy area-wide on Friday, while remaining gusty out of the north across southeast California on Saturday.</b> This system will remain dry.</p>   |  |
| Area Forecast Discussion | 10/18/2017 | 2117 | PDT    | San Diego   | <p><b>.AVIATION...</b> Mountains/Deserts...SCT AOA 20,000 ft MSL, unrestricted visibility, and light winds will continue through 22Z Thursday. <b>Westerly winds will increase after 22Z, resulting in mountain wave activity over and east of the desert slopes,</b> areas of LLWS and moderate up/downdrafts. <b>Patchy BLDU is also possible.</b> KPSP and KTRM will see increasing NW winds after 22Z. Forecast confidence is high.</p>   |  |
| Area Forecast Discussion | 10/18/2017 | 2240 | MST    | Phoenix     | <p><b>...UPDATE...</b>Updated Aviation Discussion...<b>Southeast California/Southwest Arizona including KIPL and KBLH:</b> SCT/BKN mid/high cloud layers to persist through tonight before gradually clearing on Thursday as drier air moves in from the west. <b>Winds to mainly follow typical diurnal trends through Thursday afternoon, then increase Thursday afternoon/evening (from a westerly to southwesterly direction) as a Pacific weather system begins to approach from the west.</b></p>   |  |
| Area Forecast Discussion | 10/19/2017 | 0252 | PDT    | San Diego   | <p><b>...A long wave trough currently around 500 mi off the Pac NW coast will gradually progress eastward today and Friday,</b> bringing continued cooling, a deepening marine layer, <b>and breezy conditions in the mountains and deserts.</b> Another 5-10 degrees of cooling is expected each day through Friday. As the southern fringes of the trough axis moves through So Cal, the marine layer will be sufficiently deep to produce some drizzle or light rain from the coastal mountain slopes westward late Thursday night through Friday morning.....<b>AVIATION...</b>Mountains/Deserts...SCT clouds AOA 20000 ft MSL, unrestricted visibility, and light winds will continue through 22Z. <b>West winds will increase after 22Z, resulting in areas of LLWS and moderate up/downdrafts over and east of the mtns. Patchy BLDU is also possible in the desert areas.</b> KPSP and KTRM will see increasing NW winds after 22Z. Forecast confidence is high.</p>  |  |

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| Area Forecast Discussion | 10/19/2017 | 0303 | MST    | Phoenix     | <p><b>For Friday into the weekend, a deeper upper level trough passing by to our north will begin to influence the Desert Southwest.</b> Upper level heights and temperatures will fall modestly Friday into Saturday with the main trough axis passing through Arizona early Saturday. Highs Friday will drop back into the upper 80s across most lower desert locales with another degree or two drop on Saturday. Skies are expected to be clear to mostly clear under drying conditions. <b>Strong surface high pressure will build across the Great Basin Friday into early Saturday resulting in a modest pressure gradient setting up across the northern half of Arizona and southern California. Westerly surface winds will become breezy on Friday across southern Arizona and windy at times across portions of southeast California. Near-advisory level winds across Imperial County on Friday may result in some patchy blowing dust.</b></p>  |  |
| Area Forecast Discussion | 10/19/2017 | 0401 | MST    | Phoenix     | <p><b>.UPDATE...Updated aviation and fire weather discussions. Southeast California/Southwest Arizona including KIPL and KBLH: Westerly winds will continue at KIPL today and tonight with even stronger westerlies this evening. Winds will favor the southwest at KBLH today and remain at or below 10 kts. Only a few passing high clouds are expected at both terminals today.</b></p>  |  |
| Area Forecast Discussion | 10/19/2017 | 0930 | PDT    | San Diego   | <p><b>...Low pressure trough was off the Pac NW coast and will shift east to just inland from most of the West Coast by Friday morning.</b> Trough axis moves through So-Cal mid-morning Friday, and with a deep marine layer and the morning timing with higher low-level relative humidities, there could be drizzle or light showers. .... <b>Westerly winds just above the surface of 10-15 MPH could orographically enhance the precip on west-facing slopes.</b> Will add mostly 30 POPS to the forecast for mainly Friday morning. <b>Areas of gusty winds will occur Friday on the east mountain slopes and could reach advisory criteria...AVIATION...</b>After 20/0000 UTC, <b>west winds 15-25 kt with gusts 35-40 kt over mountain ridges, desert slopes and into adjacent desert areas</b> will create mod-stg udfs/llws over and E of the mountains. <b>Patchy BLDU is also possible in the desert areas.</b> KPSP and KTRM will see increasing NW winds after 2200 UTC. Forecast confidence is high.</p> |  |
| Area Forecast Discussion | 10/19/2017 | 1400 | PDT    | San Diego   | <p><b>.AVIATION...</b> After 20/0000 UTC, <b>west winds 15-25 kt with gusts 35-40 kt over mountain ridges, desert slopes and into adjacent desert areas</b> will create mod-stg udfs/llws over and E of the mountains. <b>Patchy BLDU is also possible in the desert areas.</b> KPSP and KTRM will see increasing NW winds after 2200 UTC. Forecast confidence is high.</p>   |  |
| Urgent Weather Message   | 10/19/2017 | 1405 | MST    | Phoenix     | <p>Imperial County Southwest-Including the city of Mountain Spring<br/> <b>...WIND ADVISORY IN EFFECT FROM 5 PM THIS AFTERNOON TO 11 PM PDT FRIDAY...</b>The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 5 PM this afternoon to 11 PM PDT Friday.<br/> <b>* AFFECTED AREA...</b>Far southwestern Imperial County.<br/> <b>* TIMING...</b>Late Thursday afternoon through Friday evening.<br/> <b>* WINDS...</b>Sustained 30-40 mph with gusts of 45-55 mph.<br/> <b>* IMPACTS...</b>Motorists traveling on Interstate 8 near the San Diego County border will encounter difficult handling conditions due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous.</p>   |  |

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| Area Forecast Discussion | 10/19/2017 | 1413 | MST    | Phoenix     | <p>....A weak cold front will move through the region tomorrow afternoon, resulting in increasing westerly winds across the entire area. Sustained speeds around 15-20 mph, with some gusts to 30 mph, across the lower deserts of south-central and southwest Arizona will be possible. Even stronger winds are expected locally across parts of southeast California, and a Wind Advisory has been issued for southwest Imperial County (including a segment of I-8) beginning this evening through late Friday evening. Patchy blowing sand and blowing dust will also be possible mainly across Imperial County tomorrow afternoon. Winds will weaken into Saturday</p>   |
| Area Forecast Discussion | 10/19/2017 | 1505 | MST    | Phoenix     | <p>.UPDATE...Updated Aviation and Fire Weather sections.<b>Southeast California/Southwest Arizona including KIPL and KBLH: Southwest and west winds will become more prevalent through 00Z before beginning to weaken after 03Z. Surface winds will be strongest over central, and especially western, portions of Imperial County with gusts to 25 kts common through early evening.</b> There will be some weakening of the surface winds by late evening but winds in the lower levels above the surface will remain strong. Some places could flirt with LLWS criteria until the inversion breaks after 16Z Friday. <b>Gusty surface winds resume by midday Friday.</b> No significant ceilings, just cirrus.</p>   |
| Area Forecast Discussion | 10/19/2017 | 2116 | PDT    | San Diego   | <p><b>Onshore gradients are increasing and gusty winds have already been occurring in the high deserts with gusts around 35 mph.</b> The San Diego to Daggett gradient is up to 6 mb and will increase a bit more on Friday. <b>Gusts near advisory level will be possible on Friday over the desert slopes of the mountains and especially into the deserts where some blowing dust and sand will be possible.</b><b>AVIATION...Windy in the mountains and deserts through Friday evening with 15-30 kt winds gusting to 40 kt over the mountains and down the slopes into the deserts</b> with mod-stg uddfs/llws. <b>Areas of BLDU in and around PSP and TRM Friday.</b></p>   |
| Area Forecast Discussion | 10/19/2017 | 2235 | MST    | Phoenix     | <p>.UPDATE...Updated Aviation Discussion...<b>Southeast California/Southwest Arizona including KIPL and KBLH: A Pacific weather system approaching from the west will bring gradually increasing westerly winds to KBLH and increasing southwesterly winds at KIPL. Wind gusts as high as 30 kts are possible by late morning/early afternoon at both taf sites. There is also a chance for some blowing dust,</b> but confidence is too low to include dust in the tafs at this time. Cloudiness will be limited to FEW-SCT high cirrus layers during the entire taf period.</p>   |
| Urgent Weather Message   | 10/20/2017 | 0057 | MST    | Phoenix     | <p>...Salton Sea-Chuckwalla Mountains-Imperial County Southeast-Imperial County West-Imperial Valley-Including the cities of Desert Shores, Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamo, and Brawley...<b>WIND ADVISORY IN EFFECT FROM 11 AM THIS MORNING TO 11 PM PDT THIS EVENING...</b>The National Weather Service in Phoenix has issued a Wind Advisory, which is in effect from 11 AM this morning to 11 PM PDT this evening.<br/>                     * <b>AFFECTED AREA...</b>Imperial County.<br/>                     * <b>TIMING...</b>Friday morning through Friday evening.<br/>                     * <b>WINDS...</b>Sustained 25-35 mph with gusts 35-45 mph.<br/>                     * <b>IMPACTS...</b>Motorists traveling on Interstate 8, Highway 111, and Highway 78 will encounter difficult handling conditions due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous.</p> |

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| Area Forecast Discussion | 10/20/2017 | 0241 | PDT | San Diego | <p>...Aside from the clouds and potential showers, <b>the trough will bring further cooling today and slightly stronger west winds in the mountains and deserts. Strongest winds will be along the ridges and upper desert mountain slopes as well as below the passes where gusts of 50-60 mph are likely. A Wind Advisory will be in effect for the mountains and deserts excluding the Coachella Valley from 5 AM through 9 PM.....AVIATION...Windy in the mountains and deserts through this evening with west winds 15-30 kt gusting to 40 kt over the mountains.</b> This will bring mod-stg uddfs/llws over and east of the mtns. <b>Areas of BLDU in and around PSP and TRM will be possible today.</b></p>  |      |
| Urgent Weather Message   | 10/20/2017 | 0250 | PDT | San Diego | <p><b>...GUSTY WEST WINDS IN PORTIONS OF THE MOUNTAINS AND DESERTS TODAY...UNSEASONABLY HOT WEATHER IN THE COASTAL AREAS AND VALLEYS MONDAY AND TUESDAY....A trough moving inland across the West Coast will bring gusty west winds in portions of the mountains and deserts today, diminishing tonight.</b> Santa Ana Winds and strong high pressure aloft will develop this weekend and bring a strong warming trend. By Monday, many locations west of the mountains will have temperatures at or above 100 degrees. Tuesday will likely be the hottest day, with local temperatures around 105 degrees. In some locations, maximum temperatures will be 25 degrees above late October normals...<b>San Diego County Mountains-Apple and Lucerne Valleys- San Diego County Deserts-San Gorgonio Pass Near Banning-...Borrego Springs, Banning, and Desert Hot Springs.....WIND ADVISORY IN EFFECT UNTIL 9 PM PDT THIS EVENING...</b>The National Weather Service in San Diego has issued a Wind Advisory...which is in effect until 9 PM PDT this evening.</p> <ul style="list-style-type: none"> <li>* <b>WINDS...</b>West winds 25 to 35 mph with gusts 45 to 55 mph.</li> <li>* <b>TIMING...</b>Through this evening.</li> <li>* <b>LOCATION...</b>Mainly north of Lucerne Valley and east of I-15 in the high desert, through the San Gorgonio Pass, along the ridges and desert slopes of the mountains, and locally into the San Diego County Deserts.</li> <li>* <b>VISIBILITY...</b>Visibility locally reduced in blowing dust and sand.</li> <li>* <b>IMPACTS...</b>Hazardous travel for high profile vehicles. Small tree limbs may be broken.</li> </ul> |      |
| Area Forecast Discussion | 10/20/2017 | 0324 | MST | Phoenix   | <p><b>...The weak shortwave trough that affected the region on Thursday has exited well to the east while a more significant trough digs into the Pacific Northwest and northern California early this morning.</b> Drying conditions aloft will promote generally clear skies today into the weekend with further drying occurring in the lower levels. <b>Gusty winds areawide and some potential for blowing dust across Imperial County will be the concern for today. The Wind Advisory for far western Imperial County has been expanded eastward, essentially covering the rest of the county where wind gusts will approach 45 mph at times this afternoon.</b> The deep trough to our north will quickly slide eastward across the Great Basin and northern portions of the Desert Southwest into tonight....</p>   |      |
| Area Forecast Discussion | 10/20/2017 | 0449 | MST | Phoenix   | <p><b>.UPDATE...</b>Updated aviation discussion.<b>Southeast California/Southwest Arizona including KIPL and KBLH: An approaching system will bring gusty westerly winds to KIPL and KBLH today. Winds will be gusting to around 25 kts at KBLH and to around 30-35kts at KIPL this afternoon.</b> <b>There is also a chance for some blowing dust, mainly at KIPL,</b> but confidence is too low to include it in the TAFs at this moment. Winds will die down after sunset but breezy conditions will persist well into the evening. Clouds will be limited to FEW-SCT high cirrus layers during the entire TAF period.</p>  |      |

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| Urgent Weather Message   | 10/20/2017 | 0606 | MST | Phoenix   | <p>...Imperial County West-Imperial Valley-Including the cities of Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, and Brawley</p> <p>...<b>WIND ADVISORY NOW IN EFFECT UNTIL 11 PM PDT THIS EVENING</b>...</p> <p>* <b>AFFECTED AREA</b>...Southwestern Imperial County</p> <p>* <b>TIMING</b>...Through Friday evening.</p> <p>* <b>WINDS</b>...Sustained 25-35 mph with gusts 35-45 mph.</p> <p>* <b>IMPACTS</b>...Motorists traveling on Interstate 8, Highway 111, and Highway 78 will encounter difficult handling conditions due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous. <b>INCLUDING</b> - Imperial County Southwest-Including the city of Mountain Spring and Salton Sea-Chuckwalla Mountains-Imperial County Southeast-Including the cities of Desert Shores, Imperial Hot Mineral Springs, and Winterhaven</p>  |      |
| Area Forecast Discussion | 10/20/2017 | 0858 | PDT | San Diego | <p>...Most of the showers so far have dropped less than a tenth inch, and mostly in the foothills. These will gradually decrease during the day from northwest to southeast. <b>Winds are gusting to over 40 mph mainly in the mountains and locally into deserts, and those will continue through this evening. We even have some breezy winds along the coast.</b> The trough axis moves east tonight and high pressure aloft begins to build this weekend...<b>AVIATION...Mountain/Deserts</b>...Terrain obscurations in clouds/fog/isolated -SHRA will continue below 6000 ft MSL on coastal slopes through 19Z. <b>Windy conditions will continue from the mountain crests east into the deserts through this evening with west winds 15-30 kt and local gusts 40-50 kt.</b> This will bring mod-stg uddfs/llws over and east of the mtns. <b>Local BLDU vcnty PSP and TRM will be possible today.</b></p>  |      |
| Urgent Weather Message   | 10/20/2017 | 1115 | MST | Phoenix   | <p>...Blowing Dust Possible...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, Alamorio, and Brawley</p> <p>...<b>BLOWING DUST ADVISORY IN EFFECT UNTIL 6 PM PDT THIS EVENING.....WIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING</b>...The National Weather Service in Phoenix has issued a Blowing Dust Advisory, which is in effect until 6 PM PDT this evening.</p> <p>* <b>AFFECTED AREA</b>...Imperial County.</p> <p>* <b>TIMING</b>...Now through Friday evening.</p> <p>* <b>WINDS</b>...Sustained 25-35 mph with gusts 35-45 mph.</p> <p>* <b>VISIBILITY</b>...Below 1 mile.</p> <p>* <b>Impacts</b>...Motorists traveling on Interstate 8, Highway 111, and Highway 78 will encounter difficult handling conditions due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous.</p> |      |

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| Urgent Weather Message   | 10/20/2017 | 1303 | PDT    | San Diego   | <p><b>..GUSTY WEST WINDS IN PORTIONS OF THE MOUNTAINS AND DESERTS THROUGH THIS EVENING....Strong and gusty west winds in portions of the mountains and deserts will continue through this evening and diminish overnight....</b>San Diego County Mountains-Apple and Lucerne Valleys-San Diego County Deserts-San Gorgonio Pass Near Banning-...Borrego Springs, Banning, and Desert Hot Springs.....<b>WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM PDT THIS EVENING...</b></p> <p>* <b>WINDS</b>...West winds 25 to 35 mph with gusts 45 to 55 mph.</p> <p>* <b>TIMING</b>...Through this evening.</p> <p>* <b>LOCATION</b>...Mainly in the high desert, through the San Gorgonio Pass, along the ridges and desert slopes of the mountains, and locally into the San Diego County Deserts.</p> <p>* <b>VISIBILITY</b>...Visibility locally reduced in blowing dust and sand.</p> <p>* <b>IMPACTS</b>...Hazardous travel for high profile vehicles. Small tree limbs may be broken.</p>                    |  |
| Area Forecast Discussion | 10/20/2017 | 1330 | PDT    | San Diego   | <p>...A few mountain spots received up to two tenths inch, lower elevations a few hundredths or only a trace. <b>Winds are gusting to over 45 mph mainly in the mountains and locally into deserts, and those will continue through this evening, then decrease overnight. It will even be breezy along the coast.</b> The trough axis moves east tonight and high pressure aloft begins to build this weekend.....<b>AVIATION...Mountain/Deserts...</b>Areas of terrain obscurations in clouds/fog/isolated -SHRA will continue below 6000 ft MSL on coastal slopes through 23Z. <b>Windy conditions will continue from the mountain crests east into the deserts through this evening with west winds 15-30 kt and local gusts 40-50 kt.</b> This will bring mod-stg udfs/llws over and east of the mtns. <b>Local BLDU vcnty PSP and TRM will be possible this afternoon.</b> In the San Bernardino County Mountains, winds will become northeast after 10Z Sat 15-30 kt with gusts to 35-45 kt....</p> |  |
| Area Forecast Discussion | 10/20/2017 | 1441 | PDT    | San Diego   | <p>...Aside from the clouds and potential showers, <b>the trough will bring further cooling today and slightly stronger west winds in the mountains and deserts. Strongest winds will be along the ridges and upper desert mountain slopes as well as below the passes where gusts of 50-60 mph are likely. A Wind Advisory will be in effect for the mountains and deserts excluding the Coachella Valley from 5 AM through 9 PM....</b>Elsewhere, SCT AOA 20000 ft with unrestricted vis. <b>Windy in the mountains and deserts through this evening with west winds 15-30 kt gusting to 40 kt over the mountains.</b> This will bring mod-stg udfs/llws over and east of the mtns. Areas of BLDU in and around PSP and TRM will be possible today.</p>  |  |
| Area Forecast Discussion | 10/20/2017 | 1447 | MST    | Phoenix     | <p><b>.SYNOPSIS....Gusty winds this afternoon will lead to areas of blowing dust across parts of southeast California and southwest Arizona.</b></p> <p><b>....DISCUSSION...Primary concerns in the short term revolve around blowing dust and strong winds, especially across southwest Arizona and southeast California. Satellite imagery and observations indicate plumes of blowing sand and dust have developed across Imperial and Yuma Counties, with visibilities locally restricted down to one mile. This is in response to strong westerly flow moving across southern California into Arizona, supporting gusts of 40-50 mph across the I-8 corridor primarily from Yuma County westward. ....The Blowing Dust Advisory, mainly for Imperial and Yuma Counties, remains in effect until 01Z, while a Wind Advisory remains in effect until 06Z.</b></p>   |  |



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|--------------------------|------------|------|--------|-------------|---|--|
| Area Forecast Discussion | 10/20/2017 | 1538 | MST    | Phoenix     | .UPDATE...Updated AVIATION and FIRE WEATHER sections. <b>Southeast California/Southwest Arizona including KIPL and KBLH: Very strong westerly winds (gusting 35-45 kts) will continue over Imperial County the rest of the afternoon before beginning to weaken after 03Z. Expect areas of blowing dust and sand causing reduced visibilities below 3SM with brief/localized reductions below 1 mile (near open desert). Winds will be lighter over Riverside County and southwest AZ. However, blowing dust will waft over these areas as well (most notably the Interstate 8 corridor).</b> Northerly winds at the surface and aloft begin to develop toward morning Saturday. Expect some moderate gustiness over the Lower Colorado River Valley after 16Z. Otherwise, only very minor cirrus.  |  |
| Urgent Weather Message   | 10/20/2017 | 1744 | MST    | Phoenix     | ...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, Alamorio, and Brawley<br>... <b>WIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING.....BLOWING DUST ADVISORY WILL EXPIRE AT 6 PM PDT THIS EVENING...</b><br>* <b>AFFECTED AREA</b> ...Imperial County.<br>* <b>TIMING</b> ...Now through Friday evening.<br>* <b>WINDS</b> ...Sustained 25-35 mph with gusts 35-45 mph.<br>* <b>Impacts</b> ...Motorists traveling on Interstate 8, Highway 111, and Highway 78 will encounter difficult handling conditions due to very strong winds. Areas of reduced visibilities in blowing dust are also possible.  |  |
| Area Forecast Discussion | 10/20/2017 | 2129 | PDT    | San Diego   | Some rain fell across portions of Southern California today with most locales receiving just a trace to a few hundredths of an inch. However, some of the coastal slopes received more with the max total of 0.23" reported at Rim Forest in the San Bernardinos. <b>Gusty winds continue from the mountain ridges to the deserts. Peak gusts across these areas has averaged 30-50 mph, although a few of the windier locales peaked at near 70 mph (such as Volcan Mountain/San Diego County).</b> It was a cool day with highs ranging from only 52F degrees at Lake Arrowhead to 87F degrees at Thermal. <b>The rain has ended and winds will gradually relax overnight as the trough exits to the east..AVIATION...Mountain/Deserts...Windy conditions will continue from the mountain crests east into the deserts through this evening with west winds 15-30 kt and gusts 40-50 kt.</b> This will bring mod-stg udfs/llws over and east of the mtns. <b>BLDU vcnty PSP and TRM will be possible this evening.</b> In the San Bernardino County Mountains, winds will become northeast after 10Z Sat 15-30 kt with gusts to 35-45 kt. |  |
| Area Forecast Discussion | 10/20/2017 | 2232 | MST    | Phoenix     | .UPDATE...Updated aviation discussion. <b>Southeast California/Southwest Arizona including KIPL and KBLH: Diminishing winds aloft to allow westerly winds that are currently affecting the region to continue to diminish through the rest of tonight.</b> Northerly winds at the surface and aloft begin to develop toward morning Saturday. Expect some moderate gustiness over the Lower Colorado River Valley after 16Z. Very dry air moving in from the west to allow skies to pretty much clear completely over the region.   |  |

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FXUS65 KPSR 170401  
AFDPSR

Area Forecast Discussion  
National Weather Service Phoenix AZ  
901 PM MST Mon Oct 16 2017

.UPDATE...Updated Aviation Discussion...

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.SYNOPSIS...

High pressure will persist across the region through the middle of the week allowing for continued very warm and dry conditions. High temperatures for lower desert communities will generally reach into the middle and upper 90s. Somewhat cooler weather with more cloud cover will arrive during the end of the week. High pressure returns quickly by the end of the weekend, sending temperatures back to above normal readings.

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.DISCUSSION...

.Tonight through Tuesday Night...

Continued dry conditions and above normal temperatures through this period, but with the beginnings of a modest cooling trend, as the very strong ridging that is now in place over the region is flattened by a series of strong shortwaves that are forecast to moving into the Pac NW/Northern Rockies. Highs on Tuesday are expected to be a degree or so cooler than today as 500mb heights fall to around 588dm.

.Wednesday through Thursday morning...

A bit of a change is expected during this period as a weak trof moving into the region interacts with moisture streaming northward from the remains of a tropical disturbance that is currently located about 900 miles west of the southern tip of Baja California.

Although some decent moisture is forecast by all of the global models to move into our region (PWATS in the 0.75-.00 inch range), model soundings are indicating that the vast majority of the moisture will remain aoa 600mb. This high-level moisture combined with very warm air aloft (500mb temps in the -8C to -10C range) is expected to keep impacts limited to just an increase in mid/high level cloudiness and perhaps some virga/sprinkles. The increase in cloudiness will likely also lower daytime highs a bit, with lower desert highs remaining in the mid/upper 90s. The increase in sfc dewpoints and cloudiness will likely keep overnight lows elevated, with many urban locations seeing lows in the 70s.

**October 20, 2017 Exceptional Event, Imperial County****Appendix A**

.Thursday night through next Monday...

Heights will continue to lower for the latter half of the week and into the early weekend as deep troughing expands into much of the western CONUS by Friday. Model agreements in timing remain with minor differences in strength. Moisture parameters are fairly underwhelming, with drier air quickly advecting into the area during the day Friday. Best pocket for height falls and jet influenced ascent still remain to our north so PoPs are very low. Non-zero to account for trough passage but low enough to not generate any weather. What will be noticeable through the region, outside of a slight cool down in temperatures, will be increased winds for Friday and to a lesser extent Saturday afternoons. Gusts around 20mph will be possible over the lower AZ desert locales while spots downwind of the Peninsular Ranges in southeast CA could see gusts nearing 30mph at peak on Friday. While timing is still a ways out, could not rule near advisory conditions in the SW corner of Imperial County sometime late Thursday PM into Friday, as winds through the gap/pass respond well to trough passages. Temperatures dip closer towards seasonal normals for the weekend, but the cool down will be short lived.

Deterministic and ensemble members indicate strong ridging will build back into the region, stronger than the ridge we currently are under to start this week. Regional 500mb heights head towards 594dm at the end of available model forecasts, which could mean record warmth would open the last week of October for the Southwest Deserts.

&&

.AVIATION...

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

Easterly winds will again mainly dominate through the majority of the period with only a few hour period late Tuesday afternoon/evening where westerlies may be seen. Clouds will increase tonight into Tuesday becoming BKN Tuesday afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH:

Expect rather light winds next 24 hours over the western deserts as low level gradients relax. Lots of light/variable winds at KBLH otherwise they will favor the north to northeast below 10kt. Winds may favor the west overnight at KIPL but otherwise they will be rather light and variable as well. High clouds will increase to BKN at times by Tuesday morning before diminishing later in the day.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

# October 20, 2017 Exceptional Event, Imperial County

# Appendix A

Thursday through Monday:

Weak disturbance moving through generally westerly flow aloft may produce a few light showers on Thursday, but for the most part high temperatures will stay well above normal, and minimum RH values will be on the low side, between 10 and 15 percent. Locally breezy southwest winds are expected during the afternoon hours. After that, Friday into the weekend a large area of low pressure will push across the great basin bringing a cooling trend with the coolest day likely to be Saturday. Desert highs by Saturday will fall into the upper 80s to low 90s and minimum RH values will stay mostly in the teens. It will be breezy again Friday into Saturday, especially in far southeast California, with winds favoring the west Friday then turning more to the north on Saturday. Strong high pressure aloft will build back into the area from the west Sunday into Monday bringing another warming trend, with the warmest lower deserts climbing back into the mid 90s by Monday. Drier air will accompany the warming; by Monday minimum RH values will dive back into the single digits over the deserts. Less wind is expected both Sunday and Monday as well.

Extended period forecasts are coming together such that a much warmer solution is looking more likely with strong ridging returning to the region. This could result in another stretch of above normal temperatures, with a shot at triple-digit readings not out of the question by the end of the forecast period.

&&

.CLIMATE...

|            |          |        |             |
|------------|----------|--------|-------------|
| PHOENIX    | Forecast | Normal | Record      |
| Tue Oct 17 | 98       | 88     | 102 in 2009 |

|            |          |        |             |
|------------|----------|--------|-------------|
| YUMA       | Forecast | Normal | Record      |
| Tue Oct 17 | 100      | 90     | 104 in 1959 |

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Percha/Nolte

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FXUS66 KSGX 170422

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

922 PM PDT Mon Oct 16 2017

.SYNOPSIS...

Weakening high pressure aloft will bring another hot day to the region on Tuesday. A weak trough may trigger an isolated thunderstorm on Wednesday, but the chances are small. The trough will bring cooling Thursday and Friday along with a deeper marine layer and gusty west winds in the mountains and deserts. There is the potential of a Santa Ana wind event and heat wave across southwest California beginning next Sunday and lasting into the middle part of next week as high pressure builds.

&&

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

It was another hot day away from the beaches with temps well into the 90s and even some triple digit readings. Two record highs were reached today - Ramona hitting 99F degrees (previous record 96 in 1997) and El Cajon hitting 101F degrees (previous record 100 in 1997.) A tranquil evening prevails and will continue overnight.

The flow aloft will become more zonal on Tuesday, but surface cooling will be minor, and tomorrow will be another very warm day with temperatures 10-15 degrees above average west of the mountains, and 5-10 degrees above average in the mountains and deserts.

On Tuesday night and Wednesday a couple of weak Pacific shortwaves traverse central and southern CA. The first wave passes over Santa Barbara and San Bernardino County Tuesday night. Moisture advection is not in phase with this first shortwave and that will limit the potential for elevated convection. Deeper moisture is available with the second wave on Wednesday. The WRF point sounding forecast shows near saturation in the 400-600 mb layer resulting in a PW of 1.57" Wednesday afternoon. Most unstable CAPE values range from 200-400 J/kg Wednesday, and the NAM High Level Total Totals reach 31-33, which has historically been the trigger values for isolated to scattered thunderstorms. Have introduced a slight chance of

thunderstorms on Wednesday to the mountains and parts of the deserts and valleys. This will be likely be adjusted over the next few shifts as more hi-rez model data becomes available. Precip amounts, if any, will be light with most of the precip evaporating in the dry subcloud layer. Best chances for measurable rain will be in the mountains.

On Thursday and Friday a broad longwave trough moves into the Pacific Northwest where rain is likely. Farther south in our area the precip chances are minimal, but the trough will bring cooling, a deeper marine layer, and stronger onshore flow with gusty afternoon and evening west winds in the mountains and deserts.

On Saturday the trough moves east and a strong ridge of high pressure will build over the West. This Santa Ana weather pattern will bring another round of hot, dry weather and elevated fire weather concerns early next week.

&&

.AVIATION...

170400Z...FEW-SCT clouds AOA FL200 and unrestricted vis through Tuesday evening.

&&

.MARINE...

No hazardous marine weather is expected through Thursday. Winds will increase to around 20 kt or more on Friday as a front traverses the region.

&&

.BEACHES...

A south southwest swell from 200 degrees will peak Tuesday-Wednesday at 3-4 ft/16-18 seconds. This will produce 3-6 ft surf with sets to 7 ft north of Del Mar. Highest surf will occur along southwest facing beaches. Strong rip and longshore currents will accompany the elevated surf. Swell and surf will begin to lower on Thursday. A Beach Hazard Statement is in effect for elevated surf and strong rip currents Tuesday and Wednesday.

&&

.FIRE WEATHER...

Light winds, hot weather and low humidities will continue through Tuesday. The RH will start to increase and temperatures start to cool Wednesday and Thursday as the ridge aloft weakens and onshore

flow and the marine layer slowly return. A weak disturbance aloft interacting with increasing midlevel moisture may trigger an isolated thunderstorm Wednesday. Measurable rain is unlikely except in the mountains, where 0.01-0.10" are possible with any storms that do form.

Thursday and Friday...Onshore winds will be increasing over mtn/desert areas and become strong and gusty from the west with increasing RH driving well inland.

Outlook...Saturday looks to be a transition day from onshore flow to offshore. A Santa Ana wind event and heat wave looks possible beginning on Sunday and lasting through at least next Wednesday. We will continue to closely monitor this potential in the coming days.

&&

.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...Beach Hazards Statement from 6 AM PDT Tuesday through Wednesday evening for Orange County Coastal Areas-San Diego County Coastal Areas.

PZ...NONE.

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PUBLIC...Gregoria/Moede

AVIATION/MARINE...SS

**IOWA STATE  
UNIVERSITY**

College of Ag

Department of Agronomy

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FXUS66 KSGX 170945

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

245 AM PDT Tue Oct 17 2017

.SYNOPSIS...

Today will be rather hot again, but a cooling trend will get started. Low pressure will bring onshore flow and cooler air into the region through Friday. The marine layer and coastal low clouds will redevelop each night and morning, along with some winds in the mountains and deserts. On Saturday the flow turns offshore as high pressure builds. That will bring Santa Ana conditions, clear skies and hot weather next week.

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

High pressure aloft continues to grip our area and maintain the dry interior air over our area. To our west there is a weak cutoff low that is drawing up some high level moisture that will manifest itself as thickening high clouds across Southern California today into Wednesday. For two reasons the cooling trend will get started today. Offshore flow drops off and allows the onshore flow to spread more marine air farther inland. And we'll have more high clouds occasionally filtering out the sunshine. This blob of clouds will track through California Wednesday and there is some instability in the blob. Elevated convection is expected, but any showers at 10-15 thousand feet will try dropping rain through the really dry air below that, and evaporate. That's why we are only carrying slight chances of precip in the mountains (less dry air to fall through before hitting the ground) where a few sprinkles or light showers are possible. Coastal clouds don't seem to get

the message to form until Wednesday night and Thursday. That's when a big low pressure trough moving through the Northwest will increase the onshore flow and generate a pretty decent coastal eddy. The coastal clouds never really establish a foothold Thursday before the cooler air aloft appears to erode whatever marine inversion can get established. All that means we'll have partly cloudy skies Thursday into Saturday. The trough will boost winds through mountains and into deserts, particularly Friday.

Temperatures will drop well below average on Friday. The trough



axis gets through our region Saturday morning and flow turns offshore over the weekend while high pressure aloft builds quite a bit. Yes, another Santa Ana event, complete with the hot and dry weather. Right now it doesn't appear to be too windy, but the usual foothills and adjacent valleys will get some locally strong winds that for now appear strongest on Monday and Tuesday. Temperatures will head back into the 90s and approach or hit the century mark on those days for many spots west of the mountains.

&&

.AVIATION...

170910Z...FEW-SCT clouds AOA FL200 and unrestricted vis through Tuesday evening.

&&

.MARINE...

No hazardous marine weather is expected through Thursday. Winds will increase to around 20 kt or more in the outer waters on Friday.

&&

.BEACHES...

A south southwest swell from 200 degrees will peak today-Wednesday at 3-4 ft/16-18 seconds. This will produce 3-6 ft surf with sets to 7 ft north of Del Mar. Highest surf will occur along southwest facing beaches. Strong rip and longshore currents will accompany the elevated surf. Swell and surf will begin to lower on Thursday. A Beach Hazard Statement is in effect for elevated surf and strong rip currents today and Wednesday.

&&

.FIRE WEATHER...

Very warm and dry weather will continue today, but with light winds. A very slight chance of an isolated shower or thunderstorm Wednesday is forecast for the mountains, with a very small chance of isolated dry lightning strikes. Cooler and more humid onshore flow will take control Thursday and Friday. Gusty westerly onshore winds in mountains and deserts Thursday and Friday. On Saturday and Sunday flow turns offshore and lower elevations heat up. Dry Santa Ana conditions are forecast for west of the mountains, strongest on Monday and Tuesday.

&&

.SKYWARN...

Skywarn activation is not requested. However weather spotters are

encouraged to report significant weather conditions.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Beach Hazards Statement from 6 AM PDT this morning through  
Wednesday evening for Orange County Coastal Areas-San Diego  
County Coastal Areas.

PZ...NONE.

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PUBLIC/FIRE...MM

AVIATION/MARINE/BEACHES...PG

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FXUS65 KPSR 171039

AFDPSR

## Area Forecast Discussion

National Weather Service Phoenix AZ

339 AM MST Tue Oct 17 2017

## .SYNOPSIS...

High pressure will persist across the region through the middle of the week allowing for continued very warm and dry conditions. High temperatures for lower desert communities will generally reach into the middle and upper 90s. Somewhat breezy and cooler weather with more cloud cover will arrive during the end of the week. High pressure returns quickly by the end of the weekend, sending temperatures back to above normal readings.

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## .DISCUSSION...

Upper level ridge axis has cleared the area per evening streamline analysis with the ML axis over western AZ/southern NV this evening. Scattered to broken high level cirrus is streaming into the region from the west, a more visible signal of the flattening ridge heights and early indication of the transition more zonally oriented flow is underway. 500mb heights will gradually lower a decameter or two through the day, with the 590dm line progged to sink southward as the first in a series of shortwave troughs moves across the northern Rockies. Daytime temperatures will continue their above normal trend again, with mid to upper 90s forecast for all the lower desert elevations. Passing high cloud cover, albeit thin, in combination with the lowering heights should shave a degree or two off of high's compared to those from Monday.

By mid-week, higher thicknesses and ridge heights will be removed to our south and east as troughing moves on-shore into the West. One shortwave of interest in the increasingly zonal flow will have a tropical origin and is currently west of the Baja Peninsula around 120W. The feature will transition through SoCal and into northern AZ Wednesday and Thursday, bringing increased cloudiness and some moisture into region. PWAT forecasts continue to bump into the 0.75-1.00" range (75% of the moving average per SPC Sounding climo for Tucson) across the CWA and southern AZ. Majority of the moisture remains in the mid layers and is not all together cohesive/deep as forecast soundings indicate a few periods where dry layers develop at different levels on and off Wednesday and Thursday. Sub-cloud layer remains very dry and

conditions do not look all promising to overcome the high temp/dewpoint spreads at the surface. Impacts remain limited with the forecast, increasing mid/high level clouds, plenty of virga and a few sprinkles possible overnight Wednesday into Thursday.

By Friday, another stronger Pacific trough will move into the Pacific Northwest with heights trailing southward through the Great Basin. Trough heights will weakly swing through the Southwest overnight Friday into Saturday, ushering in a drier airmass and slightly cooler temperatures for the weekend. Best pocket for height falls and jet influenced ascent have been drawn well to our north with the latest deterministic and ensemble runs. Increasing winds will be the first sensible impact across the region, with breezy to windy conditions for Friday and to a lesser extent Saturday afternoons. Gusts around 20mph will be possible over the lower AZ desert locales while spots downwind of the Peninsular Ranges in southeast CA could see gusts nearing 30mph at peak on Friday. While timing is still a ways out, could not rule near advisory conditions in the SW corner of Imperial County sometime Friday into Saturday, as winds through the gap/pass respond well to trough passages. Second sensible impact will be a cooling trend for temperatures, dipping closer towards seasonal normals for the weekend.

Model agreement in the extended is pretty good for being 5-6 days out, with run to run continuity further boosting forecast confidence. Upper level pattern reamplifies with a strong ridge of high pressure developing over much of the U.S. West Coast. Initial 500mb height forecasts are stronger than the ridging from Monday (that produced a high of 99 and 97 for Phoenix and Yuma respectively) and NAEFS percentiles already are in the 90-97.5 percentiles for temperatures and heights across much of CA and eastward into AZ. Resultant forecast has temperatures returning to the mid 90s for Sunday and mid to upper 90s for Monday and Tuesday for the lower elevations. Forecasts could run 10 degrees above late October normals and threaten records in some locations.

&&

.AVIATION...

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

Easterly winds will again mainly dominate through the majority of the period with only a few hour period late Tuesday afternoon/evening where westerlies may be seen. Clouds will increase tonight into Tuesday becoming BKN Tuesday afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH:

Expect rather light winds next 24 hours over the western deserts as low level gradients relax. Lots of light/variable winds at KBLH otherwise they will favor the north to northeast below 10kt. Winds may favor the west overnight at KIPL but otherwise they will be rather light and variable as well. High clouds will increase to BKN at times by Tuesday morning before diminishing later in the day.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Thursday through Monday:

Weak disturbance moving through generally westerly flow aloft may produce a few light showers on Thursday, but for the most part high temperatures will stay well above normal, and minimum RH values will be on the low side, between 10 and 15 percent. Locally breezy southwest winds are expected during the afternoon hours. After that, Friday into the weekend a large area of low pressure will push across the great basin bringing a cooling trend with the coolest day likely to be Saturday. Desert highs by Saturday will fall into the upper 80s to low 90s and minimum RH values will stay mostly in the teens. It will be breezy again Friday into Saturday, especially in far southeast California, with winds favoring the west Friday then turning more to the north on Saturday. Strong high pressure aloft will build back into the area from the west Sunday into Monday bringing another warming trend, with the warmest lower deserts climbing back into the mid 90s by Monday. Drier air will accompany the warming; by Monday minimum RH values will dive back into the single digits over the deserts. Less wind is expected both Sunday and Monday.

Extended period forecasts are coming together such that a much warmer solution is looking more likely with strong ridging returning to the region. This could result in another stretch of above normal temperatures, with a shot at triple-digit readings not out of the question by the end of the forecast period.

&&

.CLIMATE...

|            |          |        |        |             |
|------------|----------|--------|--------|-------------|
| PHOENIX    | Forecast | Normal | Record |             |
| Tue Oct 17 | 98       |        | 88     | 102 in 2009 |
| YUMA       | Forecast | Normal | Record |             |
| Tue Oct 17 | 100      | 90     |        | 104 in 1959 |

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

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

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DISCUSSION...Nolte  
AVIATION...Kuhlman  
FIRE WEATHER...Nolte  
CLIMATE...Nolte

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FXUS66 KSGX 171614

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

914 AM PDT Tue Oct 17 2017

.SYNOPSIS...

Light offshore winds and high pressure aloft will result in another very warm day today, with scattered high clouds. An upper level disturbance may bring some sprinkles or light showers to the mountains Wednesday, with a small chance of thunderstorms. A deepening trough over the West will bring a cooling trend Wednesday through Friday with the marine layer returning and deepening. Expect night and morning clouds over the coast and portions of the valleys. On Saturday the flow turns offshore as high pressure builds. That will bring Santa Ana conditions, clear skies and hot weather, especially Sunday and Monday.

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

Infrared satellite imagery this morning shows cold cloud tops and thunderstorms associated with a short-wave trough offshore of Point Conception, while mid and high level clouds can be seen starting to stream into Southern California from the southwest. The 12Z Miramar sounding indicated a dry layer from the surface up through 700 mb, a moist layer from about 660-580 mb, and then dry air above that. There's no hint of a marine layer returning to the coast yet, as dewpoints along the coast are only in the 30s-40s. This is due to offshore pressure gradients continuing across the region, with the San Diego to Tonopah gradient at 8.8 mb and the San Diego to Las Vegas gradient at 3.8 mb. On water vapor satellite, an upper level ridge can be seen over much of the Southwest. This ridge and the light offshore flow will result in another warm day across Southern California today, with highs 5-15 degrees above normal. The ridge will start to get flattened and pushed south tonight as a low pressure system from Alaska moves south off the coast of British Columbia. This will result in onshore flow returning and likely a return of the marine layer at the coast. There could be dense fog along the coast late tonight into Wednesday morning, but confidence is low at the moment as the HRRR and other hi-res models do not show much.

On Wednesday, the aforementioned short-wave trough gets picked up by the west flow aloft as the large scale trough off of British Columbia deepens further. The short-wave trough will move across Point Conception early Wednesday morning and then across San Bernardino county mid Wednesday morning into Wednesday afternoon. The bulk of the moisture and lift will be close to the short-wave while the best elevated instability will be south into Riverside and San Diego counties. With those parameters not really lining up, confidence in any widespread elevated convection occurring is low at the moment, with best chances for some isolated thunderstorms being in San Bernardino county and the best chances for any measurable rainfall being in the mountains where the rain will not have to go through a deep dry layer.

A cooling trend will begin on Wednesday and continue through Friday as the large-scale trough deepens further and moves inland over the Pacific Northwest. The coolest day will be Friday when highs fall to 5-10 degrees below normal. Onshore flow will strengthen as a result, with strong and gusty west winds in the mountains and deserts (gusts 30-40 mph, local 50 mph). Finally, the marine layer will deepen each day, eventually reaching around 3500-4000 ft msl on Friday. Expect night and morning marine layer stratus clouds over the coast and portions of the valleys. There may be just enough moisture and lift Friday morning for some drizzle or isolate light showers over and west of the coastal slopes of the mountains.

Surface high pressure building over the Great basin will turn the flow offshore starting Saturday which, in addition to a building upper level ridge, will create significant drying and warming. It will continue to get hotter Sunday and Monday as the ridge builds further and becomes anomalously strong, with the ECMWF showing 500 mb heights of around 594 dm on Sunday and 596 dm on Monday. Santa Ana winds will continue (right now looking to be around moderate strength) as well, so expect it to get pretty hot even all the way to the coast.

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.AVIATION...

171615Z...SCT clouds at/above 15000 ft MSL will prevail through Wed with unrestricted vis. There is a small chance of thunderstorms Wed, mainly over the mountains, likely with bases above 10000 ft MSL.

Stratus/fog is unlikely in coastal areas tonight or early Wed.

&&



.MARINE...

No hazardous marine weather is expected through Thursday. Winds will increase to 20-25 kt in the outer coastal waters Friday, decreasing by Saturday.

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.BEACHES...

A south southwest swell from 200 degrees will peak today-Wednesday at 3-4 ft/16-18 seconds. This will produce 3-6 ft surf with sets to 7 ft north of Del Mar. Highest surf will occur along southwest facing beaches. Strong rip and longshore currents will accompany the elevated surf. Swell and surf will lower Thursday. A Beach Hazard Statement is in effect for elevated surf and strong rip currents through Wednesday.

&&

.FIRE WEATHER...

Very warm and dry weather (humidity once again down to 5-10 percent) will continue today, but with light winds. An upper level disturbance may bring some sprinkles/light showers over San Bernardino county tomorrow, with a small chance for isolated dry lightning strikes. Increasingly cool and more humid Wednesday through Friday as a trough moves in over the West. Gusty westerly onshore winds in mountains and deserts Thursday and Friday, with gusts 30-40 mph and local 50 mph.

Another round of moderate Santa Ana winds likely Saturday through Monday, with day-time humidity falling down to at least 10 percent Sunday and Monday (with poor overnight recoveries) along with hot conditions and gusty northeast winds. This would likely result in critical fire weather conditions through and below the mountain passes and into the coastal slopes and foothills Sunday and Monday.

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.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 Wednesday evening for Orange County Coastal Areas-San Diego County Coastal Areas.

PZ...NONE.

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FXUS65 KPSR 180918  
AFDPSR

Area Forecast Discussion  
National Weather Service Phoenix AZ  
218 AM MST Wed Oct 18 2017

.SYNOPSIS...

Warm conditions will continue today as a weak disturbance approaches from the west. This will bring a slight chance for very light showers over south central Arizona Thursday morning but will quickly move out of our area by late Thursday afternoon. A cooler airmass will settle in over the weekend before high pressure returns, sending temperatures well above normal by early next week.

&&

.DISCUSSION...

High pressure remains over the desert southwest this morning under a nearly zonal flow aloft. This westerly flow is bringing in some high level moisture and clouds to our area while conditions at the surface remain relatively calm. Elsewhere, a Pacific trough is just beginning to edge its way into the Pacific Northwest and will begin to influence our weather pattern come later this week.

Temperatures will once again warm above average today as a weak shortwave approaches from our west. While 850 mb temperatures should hold steady through this afternoon, additional cloud cover from the approaching wave could help cool temperatures a degree or two from yesterday mainly across south central Arizona. By late tonight and into tomorrow morning, the shortwave will create a broad area of lift over Arizona. This combined with a bit of elevated moisture over our area (PWs ~ 1.0 inches) will bring the possibility of some very light showers to the lower desert of south central AZ and areas to the east. However, below 10kft the atmosphere will be very dry so many of these showers will likely evaporate before reaching the ground. 500 mb temperatures will also be dropping overnight with the coldest air settling over AZ by early Thursday morning. This will act to destabilize the atmosphere so wouldn't be too surprised to hear a rumble or two of thunder during Thursday morning if enough moisture is available.

This disturbance will quickly move off to our east by late Thursday afternoon reducing the threat of showers to near 0. Behind this, drier air will begin filtering in and the aforementioned Pacific trough will be quickly approaching the desert southwest. Unfortunately, the atmosphere will be rather dry (PWs ~ 0.5 inches) when this trough and its associated dynamics move overhead come late Friday. Therefore, no precipitation is

**October 20, 2017 Exceptional Event, Imperial County**

expected. The biggest change will be the cooler temperatures come Friday and Saturday with some breezy conditions, mainly in SE California. Beyond this, global circulation models are in good agreement of rebuilding high pressure across the SW US bringing a warming trend to our area starting Sunday. Guidance suggest temperatures could warm 8 to 12 degrees above normal come early next week with highs pushing the upper 90s here in Phoenix!

&&

.AVIATION...

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

Weak sfc pressure gradients to allow winds to remain mainly on the light side (8 kts or less) through the taf period. Wind directions to mainly follow typical diurnal trends at all of the Phx area terminals. Winds to remain mainly from a westerly direction at KIPL. Northerly winds to continue at KBLH through the rest of tonight, then become light/variable through the morning hours on Wednesday before becoming light southerly Wednesday afternoon. Expect variable amounts of mid/high clouds to persist through the taf period at all of the terminals.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Friday through Tuesday:

A broad area of low pressure will pass by mainly to the north of Arizona Friday into Saturday, bringing dry northwest flow aloft along with cooler high temperatures. High temperatures over the warmer lower deserts will drop to around 90 by Saturday. Expect breezy mainly west winds Friday afternoon becoming more northerly on Saturday. Minimum RH values Friday will be a bit elevated and range mostly from the mid teens through low 20s; drying will occur Saturday as RH values fall into the 10 to 15 percent range. Sunday into early next week we can expect strong high pressure to quickly build into the area from the west bringing much warmer and drier conditions; by Monday high temperatures over the warmer lower deserts should reach back into the mid to upper 90s and minimum RH values will fall well into the single digits. Winds each day will be light across south central Arizona, with some local breezes from the north across the western deserts each afternoon.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Wilson

AVIATION...Percha

FIRE WEATHER...CB

# IOWA STATE UNIVERSITY

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FXUS66 KSGX 180943

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

243 AM PDT Wed Oct 18 2017

.SYNOPSIS...

A deepening trough over the West will bring a cooling trend and more marine layer clouds through Friday. On Saturday the flow turns offshore as high pressure builds. That will bring Santa Ana conditions, clear skies and hot weather next week.

&&

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

Scattered high clouds and just a hint of fog around Imperial Beach are all we got in the sky this morning. Today will be cooler as a low pressure trough deepens to our north and onshore flow increases. This trough will also help spin up a coastal eddy that will rebuild a marine layer and develop some coastal clouds. Patchy coastal clouds should develop tonight into Thursday, then increase and spread over the entire coastal basin Thursday night and Friday morning. For a brief time Friday morning these coastal clouds will thicken enough to produce patchy drizzle west of the mountains. The increased onshore flow will produce westerly winds through mountain passes and into the deserts Thursday evening and night. Top gusts in top spots will exceed 40 mph. Still breezy Friday, but not as strong. The trough moves through the interior West Friday night and high pressure begins to build over California this the weekend. The marine layer will get somewhat suppressed and diminished by early Saturday and then the offshore flow will flush it out completely. Offshore pressure gradients from the Great Basin don't look too steep Sunday, but they max out Monday and Tuesday mornings for some gusts in the foothills that could exceed 35 mph in spots. At the same time high pressure really builds on top of California to bring more heat. Offshore flow will bring legitimate warm Santa Ana conditions with those winds. The winds do not look very strong or very widespread, but will help cook the already hot air and push it to the coast. Temperatures appear to top out Monday and Tuesday with lots of 90s, even at a few beaches, along with some 100-degree readings at lower elevations. It will be a dry heat to be sure, and that also

means nights will cool off efficiently.

&&

.AVIATION...

180840Z...SCT clouds AOA 15000 ft through Wednesday with unrestricted vis. Low clouds and fog is unlikely this morning. Low clouds/fog will likely return late this evening.

&&

.MARINE...

No hazardous marine weather is expected through Thursday. Winds will increase to 20-25 kt in the outer coastal waters late Thursday night and Friday, decreasing by Saturday.

&&

.BEACHES...

A south southwest swell from 200 degrees from 3-4 ft/17 seconds will peak today. This will produce 3-6 ft surf with sets to 7 ft over Orange County and northern San Diego County. Highest surf will be on southwest facing beaches. Strong rip and longshore currents will accompany the elevated surf. Swell and surf will lower Thursday but surf to 6 ft with strong rip currents will continue. As a result, the beach Hazard Statement has been extended to 5 pm Thursday.

&&

.FIRE WEATHER...

Hot and dry weather will return this weekend as high pressure builds aloft and offshore flow develops. The dry air and winds will start through and below the Cajon Pass on Saturday, then spread across the entire region Sunday. Offshore winds will peak Monday and Tuesday mornings, and those days will be the hottest and driest as well. Relative humidity will fall to single digits Sunday through Tuesday away from the coast. Humidity recovery will be poor in localized areas where winds persist during the nights. Critical fire weather conditions are likely at least in the windy areas of the foothills and downstream valleys.

&&

.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...Beach Hazards Statement through Thursday afternoon for Orange  
County Coastal Areas-San Diego County Coastal Areas.  
  
PZ...NONE.  
  
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\$\$  
  
PUBLIC/FIRE...MM  
AVIATION/MARINE/BEACHES...PG

# IOWA STATE UNIVERSITY

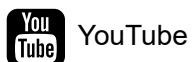
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FXUS66 KSGX 181546

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

846 AM PDT Wed Oct 18 2017

.SYNOPSIS...

A deepening trough over the West will bring a cooling trend and a deepening marine layer through Friday. Expect night and morning marine layer clouds over the coast and western valleys tonight and Thursday morning and then over the coast, valleys and coastal slopes with possible drizzle Thursday night and Friday morning. Strong and gusty west winds also likely in the mountains and deserts Thursday and Friday. Santa Ana winds and a building strong ridge of high pressure will bring significant warming and drying to the region Saturday through Monday. Hot conditions possible all the way to the coast Sunday and Monday, with weather almost as hot on Tuesday except at the coast where some cooling may occur.

&&

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

A weakening upper level short-wave trough moving through San Bernardino county is noted on the morning water vapor satellite imagery, bringing some mid and high level clouds and not much else. Models have continued to back off on the instability, moisture and lift associated with this trough, so we are no longer expecting any elevated showers/thunderstorms in our forecast area today. Humidity observations at the coast indicate dew points in the 50s/60s, which shows that the marine layer has finally returned. The 12Z Miramar sounding shows a surface based marine layer inversion and a moist layer from around 700 mb to 400 mb. Pressure gradients continue to trend onshore this morning, with the San Diego to Thermal gradient up to 3.4 mb onshore, while 24 hours ago it was only 1.3 mb onshore. With the return of onshore flow and large scale trough deepening over the Pacific Northwest, expect today to be the start of a cooling trend for Southern California (although highs today will still be several degrees above normal). Local WRF shows that marine layer stratus/fog will likely develop tonight in the coast and western valleys, with help from a coastal eddy.



The cooling trend will continue through Friday as the trough continues to deepen and move inland, with possibly enough lift and moisture for some drizzle and/or light showers over and west of the coastal slopes Friday morning. Expect highs 5-10 degrees below normal by Friday. Onshore flow will strengthen as well, with onshore pressure gradients forecast to reach around 10 mb from San Diego to Las Vegas on Friday, so expect west winds gusting 35-45 mph with local gusts to 50 mph in the mountains and deserts Thursday and Friday. The marine layer will continue to deepen as well (up to 4000-4500 ft msl), with stratus filling the coastal basin and likely moving into the passes and coastal slopes Thursday night/Friday morning and again Friday night before offshore winds clear clouds out from the north Saturday morning.

On Saturday, surface high pressure over the Great Basin will build in the wake of the trough that moves over that area. This will create offshore pressure gradients at around 7 mb from San Diego to Tonopah, resulting in weak Santa Ana winds that day. A building ridge from the southwest, in addition to the Santa Ana winds, will result in significant warming that day in the coast and valleys, as well as clearing out the marine layer. The ridge will continue to build over the region Sunday through Monday, becoming anomalously strong by Monday with 500 mb heights reaching 597 dm according to the ECMWF and Canadian models (GFS is weaker at around 595 dm). Although they do not look strong at the moment (offshore pressure gradients from San Diego to Tonopah increasing to 10 mb with 850 mb winds of only 10-15 kt), the Santa Ana winds will continue as well, bringing hot weather all the way to the coast. The ECMWF also shows 850 mb temperatures reaching 25 deg C on Monday, which translates to 103+ degree surface temperatures west of the mountains. Once again, the GFS isn't as warm, showing 850 mb temperatures around 23-24 deg C. Although we start to trend back onshore on Tuesday (which means it should be cooler at the coast that day), the ridge could be almost as strong which means that inland areas may be almost as hot as they were on Monday, and in the case of the mountains and deserts they may be even hotter.

&&

.AVIATION...

181545Z...SCT clouds above 15000 ft will continue today, then mostly decrease tonight.

Near the coast, stratus will likely return this evening and continue until Thursday morning. Bases will likely be somewhere between 500 and 1000 ft MSL, though cig height and timing are somewhat low confidence. There is a chance of fog with visibilities below 3 miles over higher coastal terrain late tonight and early Thursday.

&&

.MARINE...

No hazardous marine weather is expected through Thursday. Winds will increase to 20-25 kt in the outer coastal waters late Thursday night and Friday, decreasing by Saturday.

&&

.BEACHES...

A south-southwest swell from 200 degrees from 3-4 ft/16-17 seconds will continue today. This will produce 3-6 ft surf with sets to 7 ft over Orange County and northern San Diego County. Highest surf will be on southwest facing beaches. Strong rip and longshore currents will accompany the elevated surf. Swell and surf will lower Thursday but some surf to 6 ft with strong rip currents will continue. The Beach Hazard Statement continues for this return until 5 pm Thursday.

&&

.FIRE WEATHER...

Increasingly cool and more humid Today through Friday as a trough moves in over the West. Gusty westerly onshore winds in mountains and deserts Thursday and Friday, with gusts 30-40 mph and local 50 mph.

Another round of possibly moderate strength Santa Ana winds likely Saturday through at least Monday, with day-time humidity falling down to at or below 10 percent Sunday and Monday (with very poor overnight recoveries) along with hot conditions and gusty northeast winds (15-25 mph gusting 35-45 mph). This would likely result in critical fire weather conditions through and below the mountain passes and into the coastal slopes and foothills Sunday through Monday, and possibly into Tuesday as well.

&&

.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 Thursday afternoon for Orange County Coastal Areas-San Diego County Coastal Areas.

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076

FXUS66 KSGX 191652

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

930 AM PDT Thu Oct 19 2017

.SYNOPSIS...

A trough of low pressure will move through the West Coast Friday. This will result in a cooling trend through Friday, with a deep marine layer bringing stratus with drizzle or light showers late tonight and Friday morning from the coastal mountain slopes west to the coast. A Santa Ana wind will develop this weekend and continue early next week and bring hot dry weather along with occasional gusty winds especially through and below passes and canyons. Cooling may not occur until Wednesday or Thursday of next week.

&&

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

Stratus spread into both coastal and valley locations last night but has mostly cleared at mid-morning. NKX sounding this morning showed marine inversion base around 2000 ft MSL with considerable cooling--mostly 5 to 10 deg C in the 875-975 MB layers and slight cooling up to 750 MB. Most areas will be about 5 deg F cooler today, except more than that in the inland valleys and lower coastal mountain foothills due to the intrusion of the marine air.

Low pressure trough was off the Pac NW coast and will shift east to just inland from most of the West Coast by Friday morning. Trough axis moves through So-Cal mid-morning Friday, and with a deep marine layer and the morning timing with higher low-level relative humidities, there could be drizzle or light showers. Models have been consistent with showing some measurable precip, mostly under 1/10 inch, over mainly the valleys and foothills. WRF Bufkit soundings show the marine air reaching 5000 feet or higher over some areas from the mountains west to the coast, especially San Diego County. Westerly winds just above the surface of 10-15 MPH could orographically enhance the precip on west-facing slopes. Will add mostly 30 POPS to the forecast for mainly Friday morning. Areas of gusty winds will occur Friday on the east mountain slopes and could reach advisory criteria.

The big issue will be the Santa Ana winds beneath a strong ridge of high pressure Saturday through Tuesday or Wednesday. This will bring hot conditions, peaking Monday and Tuesday. The hot conditions could reach the immediate coast as most of the driving of the offshore flow will be the surface pressure gradients, with smaller effects from the mountain wave as cold air advection will be weaker than with most Santa Ana wind events at least Sunday through Tuesday, so any inversion which would support a mountain wave would be weak. There could be an inversion initially Saturday near the mountain crests which could support mountain waves for locally strong gusty winds southwest of the mountains. Temperatures will likely reach 100 or higher Monday and Tuesday in many areas west of the mountains. In the forecast this afternoon, will go above MOS guidance as it tends to be too low in this pattern in October. GFS and ECMWF have been quite consistent with their temperature profile run-to-run and have 850 MB temps peaking around 24-25 deg C west of the mountains Mon/Tue. Some areas may need an excessive heat watch for around Mon/Tue. Current wind guidance suggests gusts in the 40-50 MPH range Saturday mainly below the San Bernardino County Mountains, slightly weaker Sunday and Monday, then probably 40-50 MPH again Tuesday as the surface high pressure strengthens over the Great Basin.

After a peak in the upper high over California somewhere in the 596-599 DM range at 500 MB Mon-Tue, the heights lower as a relatively weak trough approaches from the north. All models have lower heights Wednesday, but many solutions of the GFS ensemble have modest height falls. Cooler weather should start Wednesday, but it might be Thursday until more substantial cooling occurs.

&&

.AVIATION...

191508Z...Patchy clouds over the coast and portions of the valleys, with bases around 1500-2000 ft msl, tops 1900-2200 ft msl and local vis down to 1/4 sm in fog in some inland valley locations (KRNM and KRIV for example), will clear out through 1700 UTC, while P6SM and FEW-SCT clouds AOA 20000 ft msl continues elsewhere. 1700-20/0000 UTC, primarily P6SM vis and FEW-SCT clouds AOA 20000 ft msl for all areas. 20/0000-1500 UTC, OVC-BKN stratus will develop over the coast, valleys, coastal slopes and into the passes, with bases 2000-3500 ft msl, tops around 4000-5000 ft msl, mountain obscuration of coastal slopes, and drizzle/isol light showers. Elsewhere, P6SM vis and FEW-SCT clouds AOA 20000 ft msl will continue.

After 20/0000 UTC, west winds 15-25 kt with gusts 35-40 kt over mountain ridges, desert slopes and into adjacent desert areas will create mod-stg uddfs/llws over and E of the mountains. Patchy BLDU is also possible in the desert areas. KPSP and KTRM will see increasing NW winds after 2200 UTC. Forecast confidence is high.

&&

.MARINE...

A trough moving in over the West will strengthen the northwest winds across the coastal waters this evening through Friday, with wind gusts of 25 kt likely, accompanied by short-period combined seas of 5-9 ft. Highest seas and strongest winds can be expected near and south of San Clemente Island. Conditions will slowly improve on Saturday, with light winds and calmer seas expected early next week.

&&

.BEACHES...

A 2-3 ft/14-15 second south southwest swell from 200 degrees will continue to impact beaches north of Solana Beach through today. This will produce elevated surf of 3-5 ft with sets to 6 ft, along with strong rip and longshore currents. A Beach Hazard Statement remains in effect through this afternoon. The south southwest swell will diminish tonight, and be replaced by an elevated short period northwest swell Friday and Saturday in addition to a long-period steep angled northwest swell from 295 degrees.

&&

.FIRE WEATHER...

Critical fire weather conditions are likely due to a Santa Ana wind event Saturday through Tuesday, with biggest concerns Sunday through Tuesday as temperatures increase and low relative humidity is more widespread. The concern is more of the duration of the hot dry windy conditions versus as 6-hour durations of sustained 25 MPH winds and 35 MPH gusts may not necessarily be reached each day when RH values are below 15 percent, but many areas will be close. Current guidance has strongest winds Saturday with some mountain wave potential and then again Tuesday with strongest surface pressure gradients. Will have an update on any possible fire weather watch early this afternoon.

&&

.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...Small Craft Advisory for winds from 8 PM this evening to 1 AM PDT Saturday 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.

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PUBLIC/FIRE WEATHER...Maxwell  
AVIATION/MARINE/BEACHES...Harrison

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598

FXUS66 KSGX 182040

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

140 PM PDT Wed Oct 18 2017

.SYNOPSIS...

A deepening trough over the West will bring a cooling trend and a deepening marine layer through Friday. Expect night and morning marine layer clouds over the coast and western valleys tonight and Thursday morning and then over the coast, valleys and coastal slopes with possible drizzle Thursday night and Friday morning. Locally strong and gusty west winds also likely in the mountains and deserts Thursday and Friday. Santa Ana winds and a building strong ridge of high pressure will bring significant warming and drying to the region Saturday through Monday. Hot conditions possible all the way to the coast Sunday and Monday, with weather almost as hot on Tuesday.

&&

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

Afternoon water vapor satellite imagery shows a weak short-wave trough moving east over Southern Nevada/San Bernardino county with a few high clouds over the deserts associated with this trough.

Humidity observations at the coast indicate dew points in the 50s/60s, which shows that the marine layer has finally returned. The 12Z Miramar sounding shows a surface based marine layer inversion and a moist layer from around 700 mb to 400 mb. Pressure gradients continue to trend onshore this morning, with the San Diego to Thermal gradient up to 4.5 mb onshore, while 24 hours ago it was only 2.3 mb onshore. With the return of onshore flow and large scale trough deepening over the Pacific Northwest, temperatures at 1 pm are around 5-10 degrees lower than 24 hours ago, although highs today will still be several degrees above normal. Local WRF shows that marine layer stratus will likely develop and deepen tonight in the coast and western valleys, with help from a coastal eddy which appears to already be developing according to coastal wind observations.

The cooling trend will continue through Friday as the trough continues to deepen and move inland, with possibly enough lift and

moisture for some drizzle and/or light showers over and west of the coastal slopes Friday morning. Expect highs 5-10 degrees below normal by Friday. Onshore flow will strengthen as well, with onshore pressure gradients forecast to reach around 10 mb from San Diego to Las Vegas on Friday, so expect west winds gusting 35-45 mph with local gusts to 50 mph in the mountains and deserts Thursday and Friday. The marine layer will continue to deepen as well (up to 4000-4500 ft msl), with stratus filling the coastal basin and likely moving into the passes and coastal slopes Thursday night/Friday morning and again Friday night before offshore winds clear clouds out from the north Saturday morning.

On Saturday, surface high pressure over the Great Basin will build in the wake of the trough that moves over that area. This will create offshore pressure gradients at around 7 mb from San Diego to Tonopah, resulting in weak Santa Ana winds that day. A building ridge from the southwest, in addition to the Santa Ana winds, will result in significant warming that day in the coast and valleys, as well as clearing out the marine layer. The ridge will continue to build over the region Sunday through Monday, becoming anomalously strong by Monday with 500 mb heights reaching 596 dm according to the ECMWF and Canadian models (GFS is weaker at around 595 dm). Although they do not look strong at the moment (offshore pressure gradients from San Diego to Tonopah increasing to 10 mb with 850 mb winds of only 10-15 kt), the Santa Ana winds will continue as well, bringing hot weather all the way to the coast. The ECMWF also shows 850 mb temperatures reaching 24 deg C on Monday, which translates to 101+ degree surface temperatures west of the mountains. Once again, the GFS isn't as warm, showing 850 mb temperatures around 23 deg C. Although we start to trend back onshore on Tuesday, the ridge could be almost as strong which means that inland areas may be almost as hot as they were on Monday, and in the case of the mountains and deserts they may be even hotter.

&&

.AVIATION...

182000Z...FEW-SCT clouds above 15000 ft will continue this afternoon, then mostly decrease tonight.

Near the coast, stratus will likely return this evening and continue until Thursday morning. Bases will likely be somewhere between 700 and 1200 ft MSL, though cig height and timing are somewhat low confidence. There is a chance of fog with visibilities below 3 miles over higher coastal terrain and coastal valleys late tonight and early Thursday.

&&



.MARINE...

No hazardous marine weather is expected through Thursday. Winds will increase to 20-25 kt in the outer coastal waters late Thursday night and Friday, decreasing by Saturday.

&&

.BEACHES...

A south-southwest swell from 200 degrees from 3-4 ft/16 seconds will continue this afternoon. This will produce 3-6 ft surf with sets to 7-8 ft over Orange County and northern San Diego County. Highest surf will be on southwest facing beaches. Strong rip and longshore currents will accompany the elevated surf. Swell and surf will lower Thursday but some surf to 6 ft with strong rip currents will continue. The Beach Hazard Statement continues for this reason until 5 pm Thursday.

&&

.FIRE WEATHER...

Increasingly cool and more humid Today through Friday as a trough moves in over the West. Gusty westerly onshore winds in mountains and deserts Thursday and Friday, with gusts 30-40 mph and local 50 mph.

Weak to moderate strength Santa Ana winds likely Saturday through at least Monday, with day-time humidity falling down to at or below 10 percent Sunday and Monday (with very poor overnight recoveries) along with hot conditions and gusty northeast winds (15-25 mph gusting 30-40 mph and locally 50 mph). This would likely result in critical fire weather conditions through and below the mountain passes and into the coastal slopes and foothills Sunday through Monday, and possibly into Tuesday as well. Also, late Saturday there could be critical fire weather conditions near the Cajon Pass.

&&

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

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FXUS65 KPSR 182140  
AFDPSR

Area Forecast Discussion  
National Weather Service Phoenix AZ  
240 PM MST Wed Oct 18 2017

.SYNOPSIS...

A slight chance for very light showers over south central Arizona will exist Thursday morning as a weak disturbance moves through the region, but will quickly move out of our area by late Thursday afternoon. A cooldown will occur into this weekend, before high pressure rebuilds over the region leading to well above normal temperatures by early next week.

&&

.DISCUSSION...

Mid-high level cloud cover associated with a weak disturbance over southern California is spreading eastward across Arizona this afternoon. A modest increase in moisture aloft has occurred, with precipitable water values near about 0.75 inch, but low-level moisture is still lacking. Latest high-resolution model guidance continues to show some weak showers developing mainly north and east of Phoenix overnight, but may primarily be in the form of virga across the lower deserts given the dry air near the ground. A marginally better chance for measurable rain will be possible in higher elevations.

Midlevel heights will remain relatively suppressed into the weekend as a secondary and stronger upper trough moves across the western CONUS, with most forcing for ascent remain focused to the north of the region. The biggest effect on our weather will be a slight cooling trend into Saturday, closer to seasonal averages. West winds will also become breezy area-wide on Friday, while remaining gusty out of the north across southeast California on Saturday. This system will remain dry.

Unfortunately, the cooldown will be short-lived, as a prominent ridge of high pressure builds over the Southwest. Latest NAEFS mean 500-mb heights suggest magnitudes will be near the 99th percentile. It currently appears that Monday and Tuesday will be the hottest days of the week, with temperatures climbing into the upper 90s across the lower deserts, which will be near or above daily temperature records at many spots. The heat may abate by a couple degrees by the middle of the next week, but above-normal temperatures look likely to continue into the foreseeable future as a blocking pattern becomes established across North America.

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**October 20, 2017 Exceptional Event, Imperial County****Appendix A**

.AVIATION...

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

Mid/high clouds continue to thicken from the west across south-central Arizona, and should persist into the late evening. Some weak virga showers will be possible overnight, and could result in brief/spotty gusty winds. Better chances for light showers will exist north/east of Phoenix away from area terminals. Outside of any brief virga-induced wind gusts, winds should remain diurnal in nature with minimal aviation concerns.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday:

Temperatures hovering near average over the weekend will rebound back close to 10F above normal on Monday and Tuesday. High pressure and dry air will become locked over the districts ensuring no chance of rain. Afternoon minimum humidity levels in a 10-20% range over the weekend will fall into the single digits next week while overnight recovery deteriorates from good down to poor to fair levels. Breezy westerly winds are possible area-wide on Saturday, and gusty northerly winds developing on Sunday across southeast California, but speeds will remain well below critical thresholds.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Rogers

AVIATION...Rogers

FIRE WEATHER...Rogers/MO

☐

251

FXUS66 KSGX 190418

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

917 PM PDT Wed Oct 18 2017

.SYNOPSIS...

A deepening trough over the West will bring a cooling trend and a deepening marine layer through Friday. Expect night and morning marine layer clouds over the coast and western valleys tonight and Thursday morning and then over the coast, valleys and coastal slopes with possible drizzle Thursday night and Friday morning. Locally strong and gusty west winds also likely in the mountains and deserts Thursday and Friday. Santa Ana winds and a building strong ridge of high pressure will bring significant warming and drying to the region Saturday through Monday. Hot conditions possible all the way to the coast Sunday and Monday, with weather almost as hot on Tuesday.

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

...No changes were made to the forecast this evening. The previous forecast discussion remains valid, below...

Afternoon water vapor satellite imagery shows a weak short-wave trough moving east over Southern Nevada/San Bernardino county with a few high clouds over the deserts associated with this trough.

Humidity observations at the coast indicate dew points in the 50s/60s, which shows that the marine layer has finally returned. The 12Z Miramar sounding shows a surface based marine layer inversion and a moist layer from around 700 mb to 400 mb. Pressure gradients continue to trend onshore this morning, with the San Diego to Thermal gradient up to 4.5 mb onshore, while 24 hours ago it was only 2.3 mb onshore. With the return of onshore flow and large scale trough deepening over the Pacific Northwest, temperatures at 1 pm are around 5-10 degrees lower than 24 hours ago, although highs today will still be several degrees above normal. Local WRF shows that marine layer stratus will likely develop and deepen tonight in the coast and western valleys, with help from a coastal eddy which appears to already be developing according to coastal wind observations.

The cooling trend will continue through Friday as the trough continues to deepen and move inland, with possibly enough lift and moisture for some drizzle and/or light showers over and west of the coastal slopes Friday morning. Expect highs 5-10 degrees below normal by Friday. Onshore flow will strengthen as well, with onshore pressure gradients forecast to reach around 10 mb from San Diego to Las Vegas on Friday, so expect west winds gusting 35-45 mph with local gusts to 50 mph in the mountains and deserts Thursday and Friday. The marine layer will continue to deepen as well (up to 4000-4500 ft msl), with stratus filling the coastal basin and likely moving into the passes and coastal slopes Thursday night/Friday morning and again Friday night before offshore winds clear clouds out from the north Saturday morning.

On Saturday, surface high pressure over the Great Basin will build in the wake of the trough that moves over that area. This will create offshore pressure gradients at around 7 mb from San Diego to Tonopah, resulting in weak Santa Ana winds that day. A building ridge from the southwest, in addition to the Santa Ana winds, will result in significant warming that day in the coast and valleys, as well as clearing out the marine layer. The ridge will continue to build over the region Sunday through Monday, becoming anomalously strong by Monday with 500 mb heights reaching 596 dm according to the ECMWF and Canadian models (GFS is weaker at around 595 dm). Although they do not look strong at the moment (offshore pressure gradients from San Diego to Tonopah increasing to 10 mb with 850 mb winds of only 10-15 kt), the Santa Ana winds will continue as well, bringing hot weather all the way to the coast. The ECMWF also shows 850 mb temperatures reaching 24 deg C on Monday, which translates to 101+ degree surface temperatures west of the mountains. Once again, the GFS isn't as warm, showing 850 mb temperatures around 23 deg C. Although we start to trend back onshore on Tuesday, the ridge could be almost as strong which means that inland areas may be almost as hot as they were on Monday, and in the case of the mountains and deserts they may be even hotter.

&&

.AVIATION...

190330Z...Coast/Valleys...Low clouds will continue to form along the coast and over the western valleys through 15Z Thursday. Look for ceilings near 1,000 ft MSL and tops around 1,600 ft MSL. Reduced visibility of 1 SM or less is possible near higher coastal and valley terrain. Clearing is expected between 16z and 18Z Thursday, with SCT AOA 20,000 ft MSL and light winds between 18Z Thursday and 00Z Friday. Low clouds will return to the coast after 00Z Friday, with bases near 2000 ft MSL. Forecast confidence is moderate.

Mountains/Deserts...SCT AOA 20,000 ft MSL, unrestricted visibility, and light winds will continue through 22Z Thursday. Westerly winds will increase after 22Z, resulting in mountain wave activity over and east of the desert slopes, areas of LLWS and moderate up/downdrafts. Patchy BLDU is also possible. KPSP and KTRM will see increasing NW winds after 22Z. Forecast confidence is high.

&&

.MARINE...

Quiet conditions over the coastal waters on Thursday will give way to more unsettled weather Friday as a front traverses the region. Northwest winds will increase to 15-25 kt Friday, and be accompanied by combined seas of 5-9 ft. Highest seas and strongest winds can be expected near and south of San Clemente Island. Conditions will slowly improve on Saturday, with light winds and tamer seas forecast for early next week.

&&

.BEACHES...

A 2-3 ft/14-16 second south southwest swell will continue to impact beaches north of Solana Beach through Thursday. This will produce elevated surf of 3-5 ft with sets to 6 ft, along with strong rip and longshore currents. A Beach Hazard Statement remains in effect through Thursday evening to account for these conditions. The south southwest swell will diminish Thursday night, and be replaced by an elevated short period northwest swell Friday and Saturday.

&&

.FIRE WEATHER...

Increasingly cool and more humid Today through Friday as a trough moves in over the West. Gusty westerly onshore winds in mountains and deserts Thursday and Friday, with gusts 30-40 mph and local 50 mph.

Weak to moderate strength Santa Ana winds likely Saturday through at least Monday, with day-time humidity falling down to at or below 10 percent Sunday and Monday (with very poor overnight recoveries) along with hot conditions and gusty northeast winds (15-25 mph gusting 30-40 mph and locally 50 mph). This would likely result in critical fire weather conditions through and below the mountain passes and into the coastal slopes and foothills Sunday through Monday, and possibly into Tuesday as well. Also, late Saturday there could be critical fire weather conditions near the Cajon Pass.

&&

.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 Thursday evening for Orange County Coastal Areas-San Diego County Coastal Areas.

PZ...NONE.

&&

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PUBLIC/FIRE WEATHER...Harrison/JMB  
AVIATION/MARINE/BEACHES...Albright

# IOWA STATE UNIVERSITY

College of Ag  
Department of Agronomy

## Department of Agronomy

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FXUS65 KPSR 190540 AAA

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

1040 PM MST Wed Oct 18 2017

.UPDATE...Updated Aviation Discussion...

.SYNOPSIS...

A slight chance for very light showers over south central Arizona will exist Thursday morning as a weak disturbance moves through the region, but will quickly move out of our area by late Thursday afternoon. A cooldown will occur into this weekend, before high pressure rebuilds over the region leading to well above normal temperatures by early next week.

&&

.DISCUSSION...

Mid-high level cloud cover associated with a weak disturbance over southern California is spreading eastward across Arizona this afternoon. A modest increase in moisture aloft has occurred, with precipitable water values near about 0.75 inch, but low-level moisture is still lacking. Latest high-resolution model guidance continues to show some weak showers developing mainly north and east of Phoenix overnight, but may primarily be in the form of virga across the lower deserts given the dry air near the ground. A marginally better chance for measurable rain will be possible in higher elevations.

Midlevel heights will remain relatively suppressed into the weekend as a secondary and stronger upper trough moves across the western CONUS, with most forcing for ascent remain focused to the north of the region. The biggest effect on our weather will be a slight cooling trend into Saturday, closer to seasonal averages. West winds will also become breezy area-wide on Friday, while remaining gusty out of the north across southeast California on Saturday. This system will remain dry.

Unfortunately, the cooldown will be short-lived, as a prominent ridge of high pressure builds over the Southwest. Latest NAEFS mean 500-mb heights suggest magnitudes will be near the 99th percentile. It currently appears that Monday and Tuesday will be the hottest days of the week, with temperatures climbing into the upper 90s across the lower deserts, which will be near or above



daily temperature records at many spots. The heat may abate by a couple degrees by the middle of the next week, but above-normal temperatures look likely to continue into the foreseeable future as a blocking pattern becomes established across North America.

&&

.AVIATION...

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

A weak weather disturbance moving eastward across the region will continue to push SCT-BKN mid/high cloud decks across the region through Thursday morning with some clearing expected Thursday afternoon/evening as the disturbance moves off to the east. There is also a remote chance for a light sprinkle/showers as well tonight/early Thursday, with showers more likely over the higher terrain to the north and east. Weak sfc pressure gradients to keep winds on the light side through midday on Thursday with somewhat stronger westerly winds developing Thursday afternoon. Wind directions to mainly follow typical diurnal trends through Thursday afternoon, but with westerly winds persisting later than usual into Thursday night.

Southeast California/Southwest Arizona including KIPL and KBLH:

SCT/BKN mid/high cloud layers to persist through tonight before gradually clearing on Thursday as drier air moves in from the west. Winds to mainly follow typical diurnal trends through Thursday afternoon, then increase Thursday afternoon/evening (from a westerly to southwesterly direction) as a Pacific weather system begins to approach from the west.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday:

Temperatures hovering near average over the weekend will rebound back close to 10F above normal on Monday and Tuesday. High pressure and dry air will become locked over the districts ensuring no chance of rain. Afternoon minimum humidity levels in a 10-20% range over the weekend will fall into the single digits next week while overnight recovery deteriorates from good down to poor to fair levels. Breezy westerly winds are possible area-wide on Saturday, and gusty northerly winds developing on Sunday across southeast California, but speeds will remain well below critical thresholds.

&&

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

&&

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

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

# IOWA STATE UNIVERSITY

College of Ag  
Department of Agronomy

## Department of Agronomy

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FXUS66 KSGX 190952

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

252 AM PDT Thu Oct 19 2017

.SYNOPSIS...

A deepening trough will bring cooling, with more widespread marine layer clouds, and breezy conditions in the mountains and deserts through Friday. Santa Ana winds and a building ridge of high pressure will bring significant warming and drying to the region Saturday through Tuesday.

&&

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

Coastal low clouds are back with a vengeance this morning, having already filled into the western valleys. Otherwise there were a few high clouds moving in from the west. Low clouds should clear inland by mid-morning, but may linger along parts of the coast through the day.

A long wave trough currently around 500 mi off the Pac NW coast will gradually progress eastward today and Friday, bringing continued cooling, a deepening marine layer, and breezy conditions in the mountains and deserts. Another 5-10 degrees of cooling is expected each day through Friday. As the southern fringes of the trough axis moves through So Cal, the marine layer will be sufficiently deep to produce some drizzle or light rain from the coastal mountain slopes westward late Thursday night through Friday morning.

The weather changes dramatically on Saturday behind the departing trough. Surface high pressure building over the Great Basin will bring another round of offshore flows. Low clouds should be gone by Saturday morning, and gusty northeast winds will develop through and below the passes and canyons. Some warming will occur west of the mountains due to downsloping winds, but cold air advection from the north will keep temperatures in the mountains and deserts a few degrees below normal.

For Sunday through Tuesday...an upper level high amplifying over

California will bring significant warming with highs as much as 15-25 degrees above normal Monday and Tuesday. Surface pressure gradients relax slightly on Sunday for weaker winds, but strengthen again Monday into Tuesday. Wind gusts of 35 to 50 MPH are possible below the favored passes and canyons in San Bernardino/Riverside/Orange Counties, and around 25-40 MPH along the coastal slopes and foothills of San Diego County. Both the upper ridge and offshore flow begin to weaken on Wednesday, though high temps will remain well above normal.

&&

.AVIATION...

190945Z...Coast/Valleys...Low clouds will increase in coverage through 15Z, spreading up to 20 miles inland. Cloud bases are around 1000 ft MSL and tops around 1600 ft MSL. Reduced visibility of 1 SM or less is possible near higher terrain. Clearing is expected between 16z and 18Z, with SCT clouds AOA 20000 ft MSL and light winds between 18Z today and 00Z Friday. Low clouds will return to the coast after 00Z Friday, with bases near 2000 ft MSL. Forecast confidence is moderate for timing.

Mountains/Deserts...SCT clouds AOA 20000 ft MSL, unrestricted visibility, and light winds will continue through 22Z. West winds will increase after 22Z, resulting in areas of LLWS and moderate up/downrafts over and east of the mtns. Patchy BLDU is also possible in the desert areas. KPSP and KTRM will see increasing NW winds after 22Z. Forecast confidence is high.

&&

.MARINE...

Northwest winds will increase to 15-25 kt this evening through Friday, accompanied by combined seas of 5-9 ft. Highest seas and strongest winds can be expected near and south of San Clemente Island. Conditions will slowly improve on Saturday, with light winds and calmer seas expected early next week.

&&

.BEACHES...

A 2-3 ft/14-16 second south southwest swell will continue to impact beaches north of Solana Beach through today. This will produce elevated surf of 3-5 ft with sets to 6 ft, along with strong rip and longshore currents. A Beach Hazard Statement remains in effect through this afternoon. The south southwest swell will diminish tonight, and be replaced by an elevated short period northwest swell Friday and Saturday.

&amp;&amp;

.FIRE WEATHER..

Santa Ana winds are forecast to develop Saturday through at least Wednesday, likely peaking Monday and Tuesday. Gusty northeast winds of 15-25 mph gusting 30-40 mph are possible Saturday, then weaken slightly for Sunday. For Monday and Tuesday, northeast winds will be about 15-25 mph with gusts 35-50 mph. High temperatures 15-25 degrees above normal and offshore flow will result in daytime humidity at or below 10 percent Sunday through Tuesday with little to no overnight recovery in the wind prone areas. This will lead to critical fire weather conditions through and below the mountain passes and canyons and along the coastal slopes and foothills Saturday through at least Tuesday, with the greatest and most widespread threat Monday and Tuesday.

&amp;&amp;

.SKYWARN...

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

&amp;&amp;

.SGX WATCHES/WARNINGS/ADVISORIES...

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

PZ...Small Craft Advisory for winds from 8 PM this evening to 1 AM PDT Saturday 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.

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PUBLIC/FIRE WEATHER...SS

AVIATION/MARINE/BEACHES...PG

228  
FXUS65 KPSR 191003  
AFDPSR

Area Forecast Discussion  
National Weather Service Phoenix AZ  
303 AM MST Thu Oct 19 2017

.SYNOPSIS...

A few isolated light showers will be possible across eastern Arizona through this afternoon as a weak disturbance moves through the region. Drier and cooler air will settle into the region into this weekend before high pressure rebuilds over the region leading to well above normal temperatures by early next week.

&&

.DISCUSSION...

A weak shortwave trough centered near Las Vegas early this morning will slowly move east northeastward today with a trailing trough axis moving through the southern half of Arizona. Modest moisture levels still exist across much of the region, but the bulk of the moisture exists in the mid to upper levels of the atmosphere. The best chance for light showers today will be focused across the higher terrain northeast and east of Phoenix. The combination of weak diffluence aloft and the passage of the trough axis this morning into early this afternoon should result in at least a few light showers over the high terrain. Any showers that develop over the south-central Arizona deserts should only result in sprinkles at best due to the very dry sub-cloud layer below 14k feet. The trough axis and the chances for showers will exit into New Mexico by late afternoon. Temperatures today will again be well above normal, but some slight cooling will be seen across southeast California and southwest Arizona. Behind the exiting trough, drier air aloft will begin to gradually filter into the region.

For Friday into the weekend, a deeper upper level trough passing by to our north will begin to influence the Desert Southwest. Upper level heights and temperatures will fall modestly Friday into Saturday with the main trough axis passing through Arizona early Saturday. Highs Friday will drop back into the upper 80s across most lower desert locales with another degree or two drop on Saturday. Skies are expected to be clear to mostly clear under drying conditions. Strong surface high pressure will build across the Great Basin Friday into early Saturday resulting in a modest pressure gradient setting up across the northern half of Arizona and southern California. Westerly surface winds will become breezy on Friday across southern Arizona and windy at times across portions of southeast California. Near-advisory level winds across Imperial County on Friday may result in some patchy blowing dust.

Winds will weaken into Saturday and turn northerly across the Lower Colorado River Valley as the surface high shifts further eastward into the Central Rockies. This turn to northerly winds will bring rapid drying in the low levels on Saturday dropping surface dew points into the teens across the Lower Colorado River Valley and into the 20s and 30s across southern Arizona. Eventually, the eastward shifting surface high will set up an easterly flow across the majority of southern Arizona beginning Saturday night, lasting into early Monday.

An unseasonably strong ridge of high pressure is forecast to build over the Pacific just west of the Baja peninsula Friday into Saturday and eventually shifting northward into the Desert Southwest Sunday into early next week. The NAEFS ensemble mean forecast shows record or near record climo 500mb heights late Sunday into Monday across southern Arizona, but this doesn't last very long as the ridge center shifts well to the northwest by Monday night. Either way, we are looking at a quick turn-around in temperatures starting Sunday. Highs Sunday should easily make it back into the lower 90s followed by middle to upper 90s for Monday and Tuesday. Though forecast highs fall short of records on Monday by several degrees, the forecast high of 97 degrees for Phoenix on Tuesday would top the previous record of 96. Some gradual cooling is likely going through the middle of next week as the upper level ridge weakens, but temperatures should still remain several degrees above seasonal normals.

&&

.AVIATION...

## October 20, 2017 Exceptional Event: Imperial County

## Appendix A

A weak weather disturbance moving eastward across the region will continue to push SCT-BKN mid/high cloud decks across the region through Thursday morning with some clearing expected Thursday afternoon/evening as the disturbance moves off to the east. There is also a remote chance for a light sprinkle/showers as well tonight/early Thursday, with showers more likely over the higher terrain to the north and east. Weak sfc pressure gradients to keep winds on the light side through midday on Thursday with somewhat stronger westerly winds developing Thursday afternoon. Wind directions to mainly follow typical diurnal trends through Thursday afternoon, but with westerly winds persisting later than usual into Thursday night.

Southeast California/Southwest Arizona including KIPL and KBLH:

SCT/BKN mid/high cloud layers to persist through tonight before gradually clearing on Thursday as drier air moves in from the west. Winds to mainly follow typical diurnal trends through Thursday afternoon, then increase Thursday afternoon/evening (from a westerly to southwesterly direction) as a Pacific weather system begins to approach from the west.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday:

Temperatures hovering near average over the weekend will rebound back close to 10F above normal on Monday and Tuesday. High pressure and dry air will become locked over the districts ensuring no chance of rain. Afternoon minimum humidity levels in a 10-20% range over the weekend will fall into the single digits next week while overnight recovery deteriorates from good down to poor to fair levels. Breezy westerly winds are possible area-wide on Saturday, and gusty northerly winds developing on Sunday across southeast California, but speeds will remain well below critical thresholds.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Kuhlman

AVIATION...Percha

FIRE WEATHER...Rogers/MO

## IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

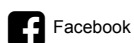
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FXUS65 KPSR 191101

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

401 AM MST Thu Oct 19 2017

.UPDATE...Updated aviation and fire weather discussions.

&&

.SYNOPSIS...

A few isolated light showers will be possible across eastern Arizona through this afternoon as a weak disturbance moves through the region. Drier and cooler air will settle into the region into this weekend before high pressure rebuilds over the region leading to well above normal temperatures by early next week.

&&

.DISCUSSION...

A weak shortwave trough centered near Las Vegas early this morning will slowly move east northeastward today with a trailing trough axis moving through the southern half of Arizona. Modest moisture levels still exist across much of the region, but the bulk of the moisture exists in the mid to upper levels of the atmosphere. The best chance for light showers today will be focused across the higher terrain northeast and east of Phoenix. The combination of weak diffluence aloft and the passage of the trough axis this morning into early this afternoon should result in at least a few light showers over the high terrain. Any showers that develop over the south-central Arizona deserts should only result in sprinkles at best due to the very dry sub-cloud layer below 14k feet. The trough axis and the chances for showers will exit into New Mexico by late afternoon. Temperatures today will again be well above normal, but some slight cooling will be seen across southeast California and southwest Arizona. Behind the exiting trough, drier air aloft will begin to gradually filter into the region.

For Friday into the weekend, a deeper upper level trough passing by to our north will begin to influence the Desert Southwest. Upper level heights and temperatures will fall modestly Friday into Saturday with the main trough axis passing through Arizona early Saturday. Highs Friday will drop back into the upper 80s across most lower desert locales with another degree or two drop



on Saturday. Skies are expected to be clear to mostly clear under drying conditions. Strong surface high pressure will build across the Great Basin Friday into early Saturday resulting in a modest pressure gradient setting up across the northern half of Arizona and southern California. Westerly surface winds will become breezy on Friday across southern Arizona and windy at times across portions of southeast California. Near-advisory level winds across Imperial County on Friday may result in some patchy blowing dust.

Winds will weaken into Saturday and turn northerly across the Lower Colorado River Valley as the surface high shifts further eastward into the Central Rockies. This turn to northerly winds will bring rapid drying in the low levels on Saturday dropping surface dew points into the teens across the Lower Colorado River Valley and into the 20s and 30s across southern Arizona. Eventually, the eastward shifting surface high will set up an easterly flow across the majority of southern Arizona beginning Saturday night, lasting into early Monday.

An unseasonably strong ridge of high pressure is forecast to build over the Pacific just west of the Baja peninsula Friday into Saturday and eventually shifting northward into the Desert Southwest Sunday into early next week. The NAEFS ensemble mean forecast shows record or near record climo 500mb heights late Sunday into Monday across southern Arizona, but this doesn't last very long as the ridge center shifts well to the northwest by Monday night. Either way, we are looking at a quick turn-around in temperatures starting Sunday. Highs Sunday should easily make it back into the lower 90s followed by middle to upper 90s for Monday and Tuesday. Though forecast highs fall short of records on Monday by several degrees, the forecast high of 97 degrees for Phoenix on Tuesday would top the previous record of 96. Some gradual cooling is likely going through the middle of next week as the upper level ridge weakens, but temperatures should still remain several degrees above seasonal normals.

&&

.AVIATION...

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

A weak disturbance moving through this morning will bring isolated areas of virga to mainly the east valley with perhaps a few sprinkles reaching the ground. This threat will quickly end by late morning as the disturbance moves off to our east. Beyond this, winds will follow typical diurnal tendencies this afternoon with no other aviation concerns.

Southeast California/Southwest Arizona including KIPL and KBLH:

Westerly winds will continue at KIPL today and tonight with even stronger westerlies this evening. Winds will favor the southwest at KBLH today and remain at or below 10 kts. Only a few passing high clouds are expected at both terminals today.

&&

.FIRE WEATHER...

Saturday through Wednesday:

Temperatures hovering near average over the weekend will rebound back close to 10F above normal on Monday and Tuesday. High pressure and dry air will become locked over the districts ensuring no chance of rain. Afternoon minimum humidity levels in a 10-20% range over the weekend will fall into the single digits next week while overnight recovery deteriorates from good down to poor to fair levels. Breezy northwesterly winds are likely in SE California and along the Lower Colorado River Valley on Saturday, but speeds will remain below critical thresholds. Winds are forecast to weaken by Sunday.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

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DISCUSSION...Kuhlman

AVIATION...Wilson

FIRE WEATHER...Wilson/Rogers/MO

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FXUS66 KSGX 192110

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

200 PM PDT Thu Oct 19 2017

.SYNOPSIS...

A trough of low pressure will move through the West Coast Friday. This will result in a cooling trend through Friday, with a deep marine layer bringing stratus with drizzle or light showers late tonight and Friday from the coastal mountain slopes west to the coast. A Santa Ana wind will develop this weekend and continue early next week and bring hot dry weather along with occasional gusty winds especially through and below passes and canyons. A gradual cooling trend will likely occur Wednesday and Thursday of next week.

&&

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

Rather thick high clouds were drifting over most of the region this afternoon with a few lingering low clouds near the coast. Temperatures were mostly 5-12 deg F lower this afternoon due to the cooler profile and deeper marine layer.

Low pressure trough was off the Pac NW coast and will shift east to just inland from most of the West Coast by Friday morning. Trough axis moves through So-Cal mid-morning Friday, and with a deep marine layer and the morning timing with higher low-level relative humidities, there could be drizzle or light showers. Models have been consistent with showing some measurable precip, mostly under 1/10 inch, over mainly the valleys and foothills. This models do have some moisture lingering into Friday afternoon, so precip may locally linger at least near the foothills accordingly. WRF Bufkit soundings show the marine air reaching 5000 feet or higher over some areas from the mountains west to the coast, especially San Diego County. Westerly winds just above the surface of 10-15 MPH could orographically enhance the precip on west-facing slopes. Added mostly 20-30 POPS to the forecast for mainly Friday morning. Areas of gusty winds will occur Friday on the east mountain slopes and could reach advisory criteria.

The big issue will be the Santa Ana winds beneath a strong ridge of

high pressure Saturday through Tuesday or Wednesday. This will bring hot conditions, peaking Monday and Tuesday. The hot conditions could reach the immediate coast as most of the driving of the offshore flow will be the surface pressure gradients, with smaller effects from the mountain wave as cold air advection will be weaker than with most Santa Ana wind events at least Sunday through Tuesday, so any inversion which would support a mountain wave would be weak. There could be an inversion initially Saturday near the mountain crests which could support mountain waves for locally strong gusty winds southwest of the mountains. Temperatures will likely reach 100 or higher Monday and Tuesday in many areas west of the mountains, with a few areas possibly 105-106. In the forecast this afternoon, I mostly went above MOS guidance as it tends to be too low in this pattern in October. GFS and ECMWF have been quite consistent with their temperature profile run-to-run and have 850 MB temps peaking around 24-25 deg C west of the mountains Mon/Tue, and gusty easterly winds could keep many areas quite . warm Mon night. Issued an excessive heat watch for Mon/Tue west of the mountains. Current wind guidance suggests gusts in the 40-50 MPH range Saturday mainly below the San Bernardino County Mountains, slightly weaker Sunday and Monday, then probably 40-50 MPH again Tuesday but over more locations as the surface high pressure strengthens over the Great Basin.

After a peak in the upper high over California somewhere in the 596-599 DM range at 500 MB Mon-Tue, the heights lower as a relatively weak trough approaches from the north. All models have lower heights Wednesday, but many solutions of the GFS ensemble have modest height falls. Cooler weather should start Wednesday, but it might be Thursday until more substantial cooling occurs.

&&

.AVIATION...

191927Z...Through 20/0000 UTC, primarily P6SM vis and FEW-SCT clouds AOA 20000 ft msl for all areas, with any local SCT-BKN clouds 1500-2500 ft msl likely clearing out by 2200 UTC. 20/0000-1500 UTC, OVC-BKN stratus will develop over the coast, valleys, coastal slopes and into the passes, with bases 2000-3500 ft msl, tops around 4000-5000 ft msl, mountain obscuration of coastal slopes, and drizzle/isol light showers. Elsewhere, P6SM vis and FEW-SCT clouds AOA 20000 ft msl will continue.

After 20/0000 UTC, west winds 15-25 kt with gusts 35-40 kt over mountain ridges, desert slopes and into adjacent desert areas will create mod-stg udfs/llws over and E of the mountains. Patchy BLDU is also possible in the desert areas. KPSP and KTRM will see increasing NW winds after 2200 UTC. Forecast confidence is high.

&&

.MARINE...

A trough moving in over the West will strengthen the northwest winds across the coastal waters this evening through Friday, with wind gusts of 25 kt likely, accompanied by short-period combined seas of 5-9 ft. Highest seas and strongest winds can be expected near and south of San Clemente Island. Conditions will slowly improve on Saturday, with light winds and calmer seas expected early next week.

&&

.BEACHES...

A 2-3 ft/14-15 second south southwest swell from 200 degrees will continue to impact beaches north of Solana Beach through today. This will produce elevated surf of 3-5 ft with sets to 6 ft, along with strong rip and longshore currents. The south southwest swell and surf will diminish tonight, and be replaced by a short-period elevated northwest swell in addition to a long-period steep angled northwest swell from 295 degrees late Friday through Saturday. This will likely bring another increase in the surf up to 3-6 ft along with an increased rip current threat. Although surf lowers somewhat on Sunday, rip currents will still be a concern. The Beach Hazards Statement has been extended through Sunday afternoon.

&&

.FIRE WEATHER...

Critical fire weather conditions are likely due to a Santa Ana wind event Saturday through Tuesday, with biggest concerns Sunday through Tuesday as temperatures increase and low relative humidity is more widespread. The concern is more of the duration of the hot dry windy conditions as 6-hour durations of sustained 25 MPH winds and 35 MPH gusts may not necessarily be reached each day when RH values are below 15 percent, but many areas will be close. Current guidance has strongest winds Saturday with some mountain wave potential and then again Tuesday with strongest surface pressure gradients. Issued a fire weather watch starting Saturday for the SBD mountains, Inland Empire and SNA mountains, then starting Sunday for the rest of Orange County, valleys and mountains of San Diego County and the mountains of Riverside County, with all areas continuing through Tuesday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Fire Weather Watch from Sunday morning through Tuesday afternoon for Orange County Coastal Areas-Orange County Inland Areas-Riverside County Mountains-Including The San Jacinto Ranger District Of The San Bernardino National Forest-San Diego County Inland Valleys-San Diego County Mountains-Including The Palomar And Descanso Ranger Districts of the Cleveland National Forest.

Fire Weather Watch from Saturday morning through Tuesday afternoon for San Bernardino County Mountains-Including The Mountain Top And Front Country Ranger Districts Of The San Bernardino National Forest-San Bernardino and Riverside County Valleys -The Inland Empire-Santa Ana Mountains-Including The Trabuco Ranger District of the Cleveland National Forest.

Excessive Heat Watch from Monday morning through Tuesday evening for Orange County Coastal Areas-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Coastal Areas-San Diego County Valleys.

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

PZ...Small Craft Advisory for winds from 8 PM this evening to 1 AM PDT Saturday 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.

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PUBLIC/FIRE WEATHER...Maxwell  
AVIATION/MARINE/BEACHES...Harrison

☐

062

WWUS75 KPSR 192105

NPWPSR

URGENT - WEATHER MESSAGE

National Weather Service Phoenix AZ

205 PM MST Thu Oct 19 2017

CAZ562-200915-

/O.NEW.KPSR.WI.Y.0025.171020T0000Z-171021T0600Z/

Imperial County Southwest-

Including the city of Mountain Spring

205 PM PDT Thu Oct 19 2017

...WIND ADVISORY IN EFFECT FROM 5 PM THIS AFTERNOON TO 11 PM PDT  
FRIDAY...

The National Weather Service in Phoenix has issued a Wind  
Advisory, which is in effect from 5 PM this afternoon to 11 PM  
PDT Friday.

\* AFFECTED AREA...Far southwestern Imperial County.

\* TIMING...Late Thursday afternoon through Friday evening.

\* WINDS...Sustained 30-40 mph with gusts of 45-55 mph.

\* IMPACTS...Motorists traveling on Interstate 8 near the San Diego  
County border will encounter difficult handling conditions due  
to very strong winds. There may also be reduced visibility at  
times due to blowing dust which will make conditions even more  
hazardous.

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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401  
FXUS65 KPSR 192113  
AFDPSR

Area Forecast Discussion  
National Weather Service Phoenix AZ  
213 PM MST Thu Oct 19 2017

.SYNOPSIS...  
A weak upper disturbance will shift eastward out of Arizona this evening, with drier air overspreading the region from west to east. Winds will increase as a cold front moves eastward tonight and tomorrow, bringing cooler temperatures this weekend. High pressure will rebuild over the region into early next week leading to well above normal temperatures.

&&

.DISCUSSION...  
Satellite imagery from this afternoon shows a narrow band of ascent focused over Gila County into east-central Arizona, accompanying a weak shortwave disturbance moving through the region. Showers and a few thunderstorms have been observed since early this morning, but with the leading edge of drier air aloft spreading eastward, should continue to see rapid west-east clearing through this evening.

A weak cold front will move through the region tomorrow afternoon, resulting in increasing westerly winds across the entire area. Sustained speeds around 15-20 mph, with some gusts to 30 mph, across the lower deserts of south-central and southwest Arizona will be possible. Even stronger winds are expected locally across parts of southeast California, and a Wind Advisory has been issued for southwest Imperial County (including a segment of I-8) beginning this evening through late Friday evening. Patchy blowing sand and blowing dust will also be possible mainly across Imperial County tomorrow afternoon. Winds will weaken into Saturday while turning out of the north across the lower Colorado River Valley, as high pressure builds over the Great Basin. Locally gusty winds will still be possible here, while even drier low-level air continues to spread into the Southwest.

The other more pleasant effect on our weather will be the modest cooling trend that will take place, as high temperatures in the upper 80s to lower 90s are likely tomorrow, and mid-80s for high temperatures on Saturday. Unfortunately, this will be short-lived, as pattern amplification occurs in response to a very strong ridge of high pressure building just east of the Pacific Coast. Well above-normal temperatures will return by Monday, approaching record levels on Tuesday. The heat will moderate slightly later in the week in response to northern Rockies upper trough, but highs will still remain in the 90s at most lower desert locations.

&&

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

A weak disturbance moving through this morning will bring isolated areas of virga to mainly the east valley with perhaps a few sprinkles reaching the ground. This threat will quickly end by late morning as the disturbance moves off to our east. Beyond this, winds will follow typical diurnal tendencies this afternoon with no other aviation concerns.

Southeast California/Southwest Arizona including KIPL and KBLH:

Westerly winds will continue at KIPL today and tonight with even stronger westerlies this evening. Winds will favor the southwest at KBLH today and remain at or below 10 kts. Only a few passing high clouds are expected at both terminals today.

&&

.FIRE WEATHER...  
Saturday through Wednesday:  
Temperatures hovering near average over the weekend will rebound back close to 10F above normal on Monday and Tuesday. High pressure and dry air will become locked over the districts ensuring no chance of rain. Afternoon minimum humidity levels in a 10-20% range over the weekend will fall into the single digits next week while overnight recovery deteriorates from good down to poor to fair levels. Breezy northwesterly winds are likely in SE



# October 20, 2017 Exceptional Event, Imperial County

# Appendix A

California and along the lower Colorado River Valley on Saturday, but speeds will remain below critical thresholds. Winds are forecast to weaken by Sunday.

&&

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

&&

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

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

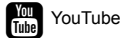
## IOWA STATE UNIVERSITY

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Department of Agronomy

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FXUS65 KPSR 192205

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

305 PM MST Thu Oct 19 2017

.UPDATE...

Updated Aviation and Fire Weather sections.

&&

.SYNOPSIS...

A weak upper disturbance will shift eastward out of Arizona this evening, with drier air overspreading the region from west to east. Winds will increase as a cold front moves eastward tonight and tomorrow, bringing cooler temperatures this weekend. High pressure will rebuild over the region into early next week leading to well above normal temperatures.

&&

.DISCUSSION...

Satellite imagery from this afternoon shows a narrow band of ascent focused over Gila County into east-central Arizona, accompanying a weak shortwave disturbance moving through the region. Showers and a few thunderstorms have been observed since early this morning, but with the leading edge of drier air aloft spreading eastward, should continue to see rapid west-east clearing through this evening.

A weak cold front will move through the region tomorrow afternoon, resulting in increasing westerly winds across the entire area. Sustained speeds around 15-20 mph, with some gusts to 30 mph, across the lower deserts of south-central and southwest Arizona will be possible. Even stronger winds are expected locally across parts of southeast California, and a Wind Advisory has been issued for southwest Imperial County (including a segment of I-8) beginning this evening through late Friday evening. Patchy blowing sand and blowing dust will also be possible mainly across Imperial County tomorrow afternoon. Winds will weaken into Saturday while turning out of the north across the lower Colorado River Valley, as high pressure builds over the Great Basin. Locally gusty winds will still be possible here, while even drier low-level air continues to spread into the Southwest.

The other more pleasant effect on our weather will be the modest cooling trend that will take place, as high temperatures in the upper 80s to lower 90s are likely tomorrow, and mid-80s for high temperatures on Saturday. Unfortunately, this will be short-lived, as pattern amplification occurs in response to a very strong ridge of high pressure building just east of the Pacific Coast. Well above-normal temperatures will return by Monday, approaching record levels on Tuesday. The heat will moderate slightly later in the week in response to northern Rockies upper trough, but highs will still remain in the 90s at most lower desert locations.

&&

.AVIATION...

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

Surface winds will favor southeast directions until 23Z-00Z before southwesterly directions prevail this evening. Some portions of metro Phoenix may maintain surface wind directions in the southeast quadrant. Otherwise, surface winds return to southeasterly after 06Z. Aloft however, southwest and west winds will slowly strengthen overnight. Not strong enough in the lower levels to reach LLWS criteria. Anticipate earlier than normal development of southwesterly surface winds Friday (before 18Z) along with some gustiness after 21Z. No significant clouds, just some cirrus.

Southeast California/Southwest Arizona including KIPL and KBLH:

Southwest and west winds will become more prevalent through 00Z before beginning to weaken after 03Z. Surface winds will be strongest over central, and especially western, portions of Imperial County with gusts to 25 kts common through early evening. There will be some weakening of the surface winds by late evening but winds in the lower levels above the surface will remain strong. Some places could flirt with LLWS criteria until the inversion breaks after 16Z Friday. Gusty surface winds resume by midday Friday. No significant ceilings, just cirrus.

&&

.FIRE WEATHER...

Sunday through Wednesday:

A warming trend begins Sunday with temperatures rebounding close to 10F above normal on Monday and Tuesday. Minimum humidities will remain below 15% (even at higher terrain locations) and overnight recovery will be fair to good (at best). Winds will be light

overall (favoring north and northwest directions during the daytime) except for breezy easterly winds on Wednesday.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

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

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Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Rogers

AVIATION...AJ

FIRE WEATHER...AJ

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FXUS66 KSGX 200417 AAA

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

916 PM PDT Thu Oct 19 2017

.SYNOPSIS...

A trough of low pressure will move through the West Coast Friday. This will result in a cooling trend through Friday, with a deep marine layer bringing stratus with drizzle or light showers late tonight and Friday from the coastal mountain slopes west to the coast. A Santa Ana wind will develop this weekend and continue early next week and bring hot dry weather along with occasional gusty winds especially through and below passes and canyons. A gradual cooling trend will likely occur Wednesday and Thursday of next week.

&&

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

...Evening update...

The high clouds from earlier today are starting to push out of the region this evening. This should allow widespread coastal stratus to spread inland into the valleys through Friday morning. Onshore gradients are increasing and gusty winds have already been occurring in the high deserts with gusts around 35 mph. The San Diego to Daggett gradient is up to 6 mb and will increase a bit more on Friday. Gusts near advisory level will be possible on Friday over the desert slopes of the mountains and especially into the deserts where some blowing dust and sand will be possible. Friday will be another cool day like Thursday, even a bit cooler with onshore flow maximized and the upper level trough overhead. Some light showers also remain in the forecast mainly Friday morning into midday with QPF up to one-tenth of an inch. The only updates to the forecast database this evening were for coordination of chances for rain across all of Orange County and spreading the possibility of dust/sand over all of the desert areas. No other changes at this time.

...Previous forecaster discussion...

Rather thick high clouds were drifting over most of the region this

afternoon with a few lingering low clouds near the coast. Temperatures were mostly 5-12 deg F lower this afternoon due to the cooler profile and deeper marine layer.

Low pressure trough was off the Pac NW coast and will shift east to just inland from most of the West Coast by Friday morning. Trough axis moves through So-Cal mid-morning Friday, and with a deep marine layer and the morning timing with higher low-level relative humidities, there could be drizzle or light showers. Models have been consistent with showing some measurable precip, mostly under 1/10 inch, over mainly the valleys and foothills. This models do have some moisture lingering into Friday afternoon, so precip may locally linger at least near the foothills accordingly. WRF Bufkit soundings show the marine air reaching 5000 feet or higher over some areas from the mountains west to the coast, especially San Diego County. Westerly winds just above the surface of 10-15 MPH could orographically enhance the precip on west-facing slopes. Added mostly 20-30 POPS to the forecast for mainly Friday morning. Areas of gusty winds will occur Friday on the east mountain slopes and could reach advisory criteria.

The big issue will be the Santa Ana winds beneath a strong ridge of high pressure Saturday through Tuesday or Wednesday. This will bring hot conditions, peaking Monday and Tuesday. The hot conditions could reach the immediate coast as most of the driving of the offshore flow will be the surface pressure gradients, with smaller effects from the mountain wave as cold air advection will be weaker than with most Santa Ana wind events at least Sunday through Tuesday, so any inversion which would support a mountain wave would be weak. There could be an inversion initially Saturday near the mountain crests which could support mountain waves for locally strong gusty winds southwest of the mountains. Temperatures will likely reach 100 or higher Monday and Tuesday in many areas west of the mountains, with a few areas possibly 105-106. In the forecast this afternoon, I mostly went above MOS guidance as it tends to be too low in this pattern in October. GFS and ECMWF have been quite consistent with their temperature profile run-to-run and have 850 MB temps peaking around 24-25 deg C west of the mountains Mon/Tue, and gusty easterly winds could keep many areas quite . warm Mon night. Issued an excessive heat watch for Mon/Tue west of the moutnains. Current wind guidance suggests gusts in the 40-50 MPH range Saturday mainly below the San Bernardino County Mountains, slightly weaker Sunday and Monday, then probably 40-50 MPH again Tuesday but over more locations as the surface high pressure strengthens over the Great Basin.

After a peak in the upper high over California somewhere in the 596-599 DM range at 500 MB Mon-Tue, the heights lower as a relatively weak trough approaches from the north. All models have lower heights

Wednesday, but many solutions of the GFS ensemble have modest height falls. Cooler weather should start Wednesday, but it might be Thursday until more substantial cooling occurs.

&&

.AVIATION...

200400Z...BKN-OVC015-025 expanding in coverage through 15Z Friday west of the mountains with tops 4000-5000 ft. Areas of light rain and drizzle west of the mountains late tonight through midday Friday. The foothills and coastal mountain slopes below 5000 ft will be obscured at times in Clds/-RA/DZ through 20Z Friday. Partial clearing after 20Z with BKN-OVC020-030 becoming SCT-BKN020-030 through 00Z Saturday. Mostly clear in the deserts and in the mountains above 5000 feet.

Windy in the mountains and deserts through Friday evening with 15-30 kt winds gusting to 40 kt over the mountains and down the slopes into the deserts with mod-stg uddfs/llws. Areas of BLDU in and around PSP and TRM Friday.

&&

.MARINE...

Small Craft Advisory in Effect Through 1 AM Saturday. A trough moving in from the northwest will bring strong northwest winds to the coastal waters Friday. Wind gusts of 25 kt combined with short-period combined seas of 5-9 ft will result in hazardous boating for small craft. Highest seas and strongest winds will be near and south of San Clemente Island. Sea state and weather conditions will slowly improve on Saturday. Lighter winds and calmer seas are expected next week.

&&

.BEACHES...

A 2-3 ft/14-15 second south to southwest swell from 200 degrees will diminish tonight. This swell will be replaced by a short-period northwest swell and a long-period steep angled northwest swell from 295 degrees late Friday through Saturday. This will bring another round of elevated surf from 3-6 ft and an increased rip current threat. Although surf lowers somewhat on Sunday, rip currents will still be a concern. A Beach Hazards Statement is in effect through Sunday afternoon.

&&

.FIRE WEATHER...

Critical fire weather conditions are likely due to a Santa Ana wind event Saturday through Tuesday, with biggest concerns Sunday through Tuesday as temperatures increase and low relative humidity is more widespread. The concern is more of the duration of the hot dry windy conditions as 6-hour durations of sustained 25 MPH winds and 35 MPH gusts may not necessarily be reached each day when RH values are below 15 percent, but many areas will be close. Current guidance has strongest winds Saturday with some mountain wave potential and then again Tuesday with strongest surface pressure gradients. Issued a fire weather watch starting Saturday for the SBD mountains, Inland Empire and SNA mountains, then starting Sunday for the rest of Orange County, valleys and mountains of San Diego County and the mountains of Riverside County, with all areas continuing through Tuesday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Fire Weather Watch from Sunday morning through Tuesday afternoon for Orange County Coastal Areas-Orange County Inland Areas-Riverside County Mountains-Including The San Jacinto Ranger District Of The San Bernardino National Forest-San Diego County Inland Valleys-San Diego County Mountains-Including The Palomar And Descanso Ranger Districts of the Cleveland National Forest.

Fire Weather Watch from Saturday morning through Tuesday afternoon for San Bernardino County Mountains-Including The Mountain Top And Front Country Ranger Districts Of The San Bernardino National Forest-San Bernardino and Riverside County Valleys -The Inland Empire-Santa Ana Mountains-Including The Trabuco Ranger District of the Cleveland National Forest.

Excessive Heat Watch from Monday morning through Tuesday evening for Orange County Coastal Areas-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Coastal Areas-San Diego County Valleys.

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



PZ...Small Craft Advisory for winds from 8 PM this evening to 1 AM PDT Saturday 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.

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PUBLIC/FIRE WEATHER...Maxwell/JMB  
AVIATION/MARINE/BEACHES...Moede

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 FXUS65 KPSR 200535 AAA  
 AFDPSR

Area Forecast Discussion  
 National Weather Service Phoenix AZ  
 1035 PM MST Thu Oct 19 2017

.UPDATE...Updated Aviation Discussion...

&&

.SYNOPSIS...

A weak upper disturbance will shift eastward out of Arizona this evening, with drier air overspreading the region from west to east. Winds will increase as a cold front moves eastward tonight and tomorrow, bringing cooler temperatures this weekend. High pressure will rebuild over the region into early next week leading to well above normal temperatures.

&&

.DISCUSSION...

Satellite imagery from this afternoon shows a narrow band of ascent focused over Gila County into east-central Arizona, accompanying a weak shortwave disturbance moving through the region. Showers and a few thunderstorms have been observed since early this morning, but with the leading edge of drier air aloft spreading eastward, should continue to see rapid west-east clearing through this evening.

A weak cold front will move through the region tomorrow afternoon, resulting in increasing westerly winds across the entire area. Sustained speeds around 15-20 mph, with some gusts to 30 mph, across the lower deserts of south-central and southwest Arizona will be possible. Even stronger winds are expected locally across parts of southeast California, and a Wind Advisory has been issued for southwest Imperial County (including a segment of I-8) beginning this evening through late Friday evening. Patchy blowing sand and blowing dust will also be possible mainly across Imperial County tomorrow afternoon. Winds will weaken into Saturday while turning out of the north across the lower Colorado River Valley, as high pressure builds over the Great Basin. Locally gusty winds will still be possible here, while even drier low-level air continues to spread into the Southwest.

The other more pleasant effect on our weather will be the modest cooling trend that will take place, as high temperatures in the upper 80s to lower 90s are likely tomorrow, and mid-80s for high temperatures on Saturday. Unfortunately, this will be short-lived, as pattern amplification occurs in response to a very strong ridge of high pressure building just east of the Pacific Coast. Well above-normal temperatures will return by Monday, approaching record levels on Tuesday. The heat will moderate slightly later in the week in response to northern Rockies upper trough, but highs will still remain in the 90s at most lower desert locations.

&&

.AVIATION...

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

After a period of typical easterly drainage winds through the remainder of tonight and early Friday morning, westerly winds are expected to develop earlier than normal as a Pacific weather system approaches from the west, during the mid-morning hours on Friday. Stronger breezes are likely during the afternoon and early evening hours Friday, with these westerly winds persisting well into the night. Cloudiness will be limited to FEW-SCT high cirrus layers during the entire taf period.

Southeast California/Southwest Arizona including KIPL and KBLH:

A Pacific weather system approaching from the west will bring gradually increasing westerly winds to KBLH and increasing southwesterly winds at KIPL. Wind gusts as high as 30 kts are possible by late morning/early afternoon at both taf sites. There is also a chance for some blowing dust, but confidence is too low to include dust in the tafs at this time. Cloudiness will be limited to FEW-SCT high cirrus layers during the entire taf period.

&&

# October 20, 2017 Exceptional Event, Imperial County

# Appendix A

..FIRE WEATHER...

Sunday through Wednesday:

A warming trend begins Sunday with temperatures rebounding close to 10F above normal on Monday and Tuesday. Minimum humidities will remain below 15% (even at higher terrain locations) and overnight recovery will be fair to good (at best). Winds will be light overall (favoring north and northwest directions during the daytime) except for breezy easterly winds on Wednesday.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

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

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DISCUSSION...Rogers

AVIATION...Percha

FIRE WEATHER...AJ

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URGENT - WEATHER MESSAGE  
 National Weather Service Phoenix AZ  
 1257 AM MST Fri Oct 20 2017

CAZ563>567-202200-  
 /O.EXB.KPSR.WI.Y.0025.171020T1800Z-171021T0600Z/  
 Salton Sea-Chuckwalla Mountains-Imperial County Southeast-  
 Imperial County West-Imperial Valley-  
 Including the cities of Desert Shores,  
 Imperial Hot Mineral Springs, Winterhaven, Coolidge Springs,  
 Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,  
 El Centro, Calexico, Alamo, and Brawley  
 1257 AM PDT Fri Oct 20 2017

...WIND ADVISORY IN EFFECT FROM 11 AM THIS MORNING TO 11 PM PDT  
 THIS EVENING...

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

\* AFFECTED AREA...Imperial County.

\* TIMING...Friday morning through Friday evening.

\* WINDS...Sustained 25-35 mph with gusts 35-45 mph.

\* IMPACTS...Motorists traveling on Interstate 8, Highway 111, and  
 Highway 78 will encounter difficult handling conditions due to  
 very strong winds. There may also be reduced visibility at times  
 due to blowing dust which will make conditions even more  
 hazardous.

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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CAZ562-202200-  
 /O.CON.KPSR.WI.Y.0025.00000T0000Z-171021T0600Z/  
 Imperial County Southwest-  
 Including the city of Mountain Spring  
 1257 AM PDT Fri Oct 20 2017

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

\* AFFECTED AREA...Far southwestern Imperial County.

\* TIMING...Through Friday evening.

\* WINDS...Sustained 30-40 mph with gusts of 45-55 mph.

\* IMPACTS...Motorists traveling on Interstate 8 near the San  
 Diego County border will encounter difficult handling  
 conditions due to very strong winds. There may also be reduced  
 visibility at times due to blowing dust which will make  
 conditions even more hazardous.

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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FXUS66 KSGX 200941

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

241 AM PDT Fri Oct 20 2017

.SYNOPSIS...

A trough of low pressure will move through the West Coast today, resulting in further cooling trend and patchy drizzle or light showers through this afternoon from the coastal mountain slopes west to the coast. Local gusty west winds will continue in the mountains and deserts through this evening. A Santa Ana event will develop this weekend and continue early next week, bringing hot and dry weather along with occasional gusty winds, especially through and below passes and canyons. A gradual cooling trend will likely occur Wednesday and Thursday of next week.

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

The marine layer has deepened quite a bit with low clouds pushing through the Cajon and San Geronio Passes, though cloud coverage remains somewhat patchy. No reports of drizzle let alone any measurable precipitation yet, but with the trough axis approaching perhaps something will develop later this morning. Have left slight chance of showers in the forecast for this morning and afternoon. Aside from the clouds and potential showers, the trough will bring further cooling today and slightly stronger west winds in the mountains and deserts. Strongest winds will be along the ridges and upper desert mountain slopes as well as below the passes where gusts of 50-60 mph are likely. A Wind Advisory will be in effect for the mountains and deserts excluding the Coachella Valley from 5 AM through 9 PM.

Not much change in the extended as the main story continues to be the strong building ridge of high pressure and developing offshore flow. Some warming will occur Saturday behind the departing trough. North-northeast winds will develop by mid-morning, mainly below the Cajon Pass and Santa Ana Mountains. 00Z model runs have changed the timing/strength of the winds, now showing them strengthening slightly and becoming more widespread on Sunday and weakening Monday, then peaking Tuesday morning. Winds below the passes/canyons and along the coastal slopes and foothills will generally be in the 30-45 MPH range for the duration of the event, with gusts to around 50 MPH in the favored spots Sunday and Tuesday mornings. The upper level ridge 500 mb heights peak at around 596-598 dm Monday and Tuesday, with widespread temps in the upper 90s to around 105 possible west of the mountains and in the

**October 20, 2017 Exceptional Event, Imperial County**

low desert. The Fire Weather Watch and Excessive Heat Watch remain unchanged.

Gradual cooling will take place Wednesday with more significant cooling later in the week as the ridge breaks down and onshore flow returns.

&&

.FIRE WEATHER...

Critical fire weather conditions are likely due to a Santa Ana wind event Saturday through Tuesday, with biggest concerns Sunday through Tuesday as temperatures peak and widespread daytime humidity of 10 percent or less develops. The concern is more of the long duration of the hot, dry, and windy conditions, though Red Flag conditions won't necessarily be widespread each day. Current guidance has strongest winds Sunday and again Tuesday when local gusts to 50 MPH are possible in the favored passes/canyons and coastal mountain slopes. A Fire Weather Watch remains in effect from Saturday for the San Bernardino mountains, Inland Empire and Santa Ana mountains, then starting Sunday for the rest of Orange County, the valleys and mountains of San Diego County and the mountains of Riverside County, with all areas continuing through Tuesday.

&&

.AVIATION...

200900Z...Coast/Valleys...Low clouds, increasing in coverage this morning, will likely impact all TAF sites west of the mtns with BKN-OVC cigs 2000-3000 ft MSL through 20Z. Coastal mountain slopes below 5000 ft will be obscured at times. Partial clearing after 20Z with bases around 3000 ft MSL.

Elsewhere, SCT AOA 20000 ft with unrestricted vis.

Windy in the mountains and deserts through this evening with west winds 15-30 kt gusting to 40 kt over the mountains. This will bring mod-stg udfs/llws over and east of the mtns. Areas of BLDU in and around PSP and TRM will be possible today.

&&

.MARINE...

Small Craft Advisory in Effect Through 1 AM Saturday. A low pressure system with a weakening cold front moving in from the northwest will bring strong northwest winds to the coastal waters today. Wind gusts of 25 kt with steep waves will result in hazardous boating for small craft. Highest seas and strongest winds will be near and south of San Clemente Island. Conditions will slowly improve on Saturday. Lighter winds and calmer seas are expected next week.

&&

**October 20, 2017 Exceptional Event, Imperial County****Appendix A**

.BEACHES...

A 2-3 ft/14-15 second south swell from 200 degrees will continue to subside today. A short-period northwest swell from 290 degrees and a long-period northwest swell from 295 degrees will build late today through Saturday. This will bring another round of elevated surf from 3-6 ft and an increased rip current threat. Although surf lowers somewhat on Sunday, rip currents will still be a concern. A Beach Hazards Statement is in effect through Sunday afternoon.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Fire Weather Watch from Sunday morning through Tuesday afternoon for Orange County Coastal Areas-Orange County Inland Areas-Riverside County Mountains-Including The San Jacinto Ranger District Of The San Bernardino National Forest-San Diego County Inland Valleys-San Diego County Mountains-Including The Palomar And Descanso Ranger Districts of the Cleveland National Forest.

Wind Advisory from 5 AM early this morning to 9 PM PDT this evening for Apple and Lucerne Valleys-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.

Excessive Heat Watch from Monday morning through Tuesday evening for Orange County Coastal Areas-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Coastal Areas-San Diego County Valleys.

Fire Weather Watch from Saturday morning through Tuesday afternoon for San Bernardino County Mountains-Including The Mountain Top And Front Country Ranger Districts Of The San Bernardino National Forest-San Bernardino and Riverside County Valleys -The Inland Empire-Santa Ana Mountains-Including The Trabuco Ranger District of the Cleveland National Forest.

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

PZ...Small Craft Advisory for winds until 1 AM PDT Saturday 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

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WWUS76 KSGX 200950

NPWSGX

URGENT - WEATHER MESSAGE

National Weather Service San Diego CA

250 AM PDT Fri Oct 20 2017

...GUSTY WEST WINDS IN PORTIONS OF THE MOUNTAINS AND DESERTS TODAY...

...UNSEASONABLY HOT WEATHER IN THE COASTAL AREAS AND VALLEYS MONDAY AND TUESDAY...

.A trough moving inland across the West Coast will bring gusty west winds in portions of the mountains and deserts today, diminishing tonight. Santa Ana Winds and strong high pressure aloft will develop this weekend and bring a strong warming trend. By Monday, many locations west of the mountains will have temperatures at or above 100 degrees. Tuesday will likely be the hottest day, with local temperatures around 105 degrees. In some locations, maximum temperatures will be 25 degrees above late October normals.

CAZ055-056-058-060-062-065-202100-

/O.NEW.KSGX.WI.Y.0030.171020T1200Z-171021T0400Z/

San Bernardino County Mountains-Riverside County Mountains-

San Diego County Mountains-Apple and Lucerne Valleys-

San Diego County Deserts-San Gorgonio Pass Near Banning-

Including the cities of Crestline, Lake Arrowhead, Big Bear City, Big Bear Lake, Running Springs, Wrightwood, Idyllwild-Pine Cove, Julian, Pine Valley, Victorville, Hesperia, Apple Valley, Borrego Springs, Banning, and Desert Hot Springs

250 AM PDT Fri Oct 20 2017

...WIND ADVISORY IN EFFECT UNTIL 9 PM PDT THIS EVENING...

The National Weather Service in San Diego has issued a Wind Advisory...which is in effect until 9 PM PDT this evening.

\* WINDS...West winds 25 to 35 mph with gusts 45 to 55 mph.

\* TIMING...Through this evening.

\* LOCATION...Mainly north of Lucerne Valley and east of I-15 in the high desert, through the San Gorgonio Pass, along the ridges and desert slopes of the mountains, and locally into the San



Diego County Deserts.

\* VISIBILITY...Visibility locally reduced in blowing dust and sand.

\* IMPACTS...Hazardous travel for high profile vehicles. Small tree limbs may be broken.

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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CAZ043-048-050-552-554-202100-

/O.CON.KSGX.EH.A.0005.171023T1700Z-171025T0300Z/

San Diego County Coastal Areas-

San Bernardino and Riverside County Valleys-The Inland Empire-

San Diego County Valleys-Orange County Coastal Areas-

Orange County Inland Areas-

Including the cities of Vista, Carlsbad, Encinitas, Chula Vista,

National City, San Diego, Riverside, San Bernardino, Ontario,

Moreno Valley, Fontana, Rancho Cucamonga, Corona, Escondido,

El Cajon, San Marcos, La Mesa, Santee, Poway, Huntington Beach,

Costa Mesa, Santa Ana, Anaheim, Garden Grove, Irvine, Orange,

Fullerton, and Mission Viejo

250 AM PDT Fri Oct 20 2017

...EXCESSIVE HEAT WATCH REMAINS IN EFFECT FROM MONDAY MORNING THROUGH TUESDAY EVENING...

\* TEMPERATURE...Daytime maximums between 98 and 106. Nighttime minimums in wind prone locations could remain in the 70s.

\* IMPACTS...Heat related illness is likely for those involved in strenuous outdoor activity, or those with health conditions that do not have adequate access to air conditioning. If untreated, heat illness events could be fatal. Never leave children or pets inside a parked car!

\* OUTLOOK...Gradual cooling will likely occur Wednesday and Thursday.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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478

WWUS76 KSGX 200950

NPWSGX

URGENT - WEATHER MESSAGE

National Weather Service San Diego CA

250 AM PDT Fri Oct 20 2017

...GUSTY WEST WINDS IN PORTIONS OF THE MOUNTAINS AND DESERTS TODAY...

...UNSEASONABLY HOT WEATHER IN THE COASTAL AREAS AND VALLEYS MONDAY AND TUESDAY...

.A trough moving inland across the West Coast will bring gusty west winds in portions of the mountains and deserts today, diminishing tonight. Santa Ana Winds and strong high pressure aloft will develop this weekend and bring a strong warming trend. By Monday, many locations west of the mountains will have temperatures at or above 100 degrees. Tuesday will likely be the hottest day, with local temperatures around 105 degrees. In some locations, maximum temperatures will be 25 degrees above late October normals.

CAZ055-056-058-060-062-065-202100-

/O.NEW.KSGX.WI.Y.0030.171020T1200Z-171021T0400Z/

San Bernardino County Mountains-Riverside County Mountains-

San Diego County Mountains-Apple and Lucerne Valleys-

San Diego County Deserts-San Gorgonio Pass Near Banning-

Including the cities of Crestline, Lake Arrowhead, Big Bear City, Big Bear Lake, Running Springs, Wrightwood, Idyllwild-Pine Cove, Julian, Pine Valley, Victorville, Hesperia, Apple Valley,

Borrego Springs, Banning, and Desert Hot Springs

250 AM PDT Fri Oct 20 2017

...WIND ADVISORY IN EFFECT UNTIL 9 PM PDT THIS EVENING...

The National Weather Service in San Diego has issued a Wind Advisory...which is in effect until 9 PM PDT this evening.

\* WINDS...West winds 25 to 35 mph with gusts 45 to 55 mph.

\* TIMING...Through this evening.

\* LOCATION...Mainly north of Lucerne Valley and east of I-15 in the high desert, through the San Gorgonio Pass, along the ridges and desert slopes of the mountains, and locally into the San

Diego County Deserts.

\* VISIBILITY...Visibility locally reduced in blowing dust and sand.

\* IMPACTS...Hazardous travel for high profile vehicles. Small tree limbs may be broken.

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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CAZ043-048-050-552-554-202100-

/O.CON.KSGX.EH.A.0005.171023T1700Z-171025T0300Z/

San Diego County Coastal Areas-

San Bernardino and Riverside County Valleys-The Inland Empire-

San Diego County Valleys-Orange County Coastal Areas-

Orange County Inland Areas-

Including the cities of Vista, Carlsbad, Encinitas, Chula Vista,

National City, San Diego, Riverside, San Bernardino, Ontario,

Moreno Valley, Fontana, Rancho Cucamonga, Corona, Escondido,

El Cajon, San Marcos, La Mesa, Santee, Poway, Huntington Beach,

Costa Mesa, Santa Ana, Anaheim, Garden Grove, Irvine, Orange,

Fullerton, and Mission Viejo

250 AM PDT Fri Oct 20 2017

...EXCESSIVE HEAT WATCH REMAINS IN EFFECT FROM MONDAY MORNING THROUGH TUESDAY EVENING...

\* TEMPERATURE...Daytime maximums between 98 and 106. Nighttime minimums in wind prone locations could remain in the 70s.

\* IMPACTS...Heat related illness is likely for those involved in strenuous outdoor activity, or those with health conditions that do not have adequate access to air conditioning. If untreated, heat illness events could be fatal. Never leave children or pets inside a parked car!

\* OUTLOOK...Gradual cooling will likely occur Wednesday and Thursday.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

879  
FXUS65 KPSR 201024  
AFDPSR

Area Forecast Discussion  
National Weather Service Phoenix AZ  
324 AM MST Fri Oct 20 2017

.SYNOPSIS...

A fast moving low pressure system will pass by to the north today while increasing winds across much of the Desert Southwest. Cooler air will also settle into the region as highs drop back closer to normal levels through Saturday. High pressure will rebuild over the region starting Sunday, lasting through much of next week. This will result in warm and dry conditions and well above normal temperatures.

&&

.DISCUSSION...

The weak shortwave trough that affected the region on Thursday has exited well to the east while a more significant trough digs into the Pacific Northwest and northern California early this morning. Drying conditions aloft will promote generally clear skies today into the weekend with further drying occurring in the lower levels. Gusty winds areawide and some potential for blowing dust across Imperial County will be the concern for today. The Wind Advisory for far western Imperial County has been expanded eastward, essentially covering the rest of the county where wind gusts will approach 45 mph at times this afternoon.

The deep trough to our north will quickly slide eastward across the Great Basin and northern portions of the Desert Southwest into tonight. This will bring in cooler air across the region today as highs should finally only reach into the middle to upper 80s across the lower deserts. By Saturday, the trough will already be moving into the Plains States with ridging starting to build into the Desert Southwest. Though heights aloft will be rising on Saturday, temperatures will not yet start to rise as highs will be similar to today's readings.

For Sunday into the middle part of next week, the building high pressure off the Baja Peninsula will edge northward into the Desert Southwest raising 500mb heights to as high as 595dm, or near record climatology for the period. Forecast highs are a bit warmer than median guidance with lower desert highs easily into the middle 90s for Monday through Wednesday. Phoenix could tie or set records on Tuesday and Wednesday as previous records stand at 96 for both days. Model guidance shows the ridge breaking down during the middle of next week as a fast moving trough moves through the Pacific Northwest. This should lower our heights and bring some mild relief for late next week, but temperatures will still remain several degrees above seasonal normals.

&&

.AVIATION...

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

After a period of typical easterly drainage winds through the remainder of tonight and early Friday morning, westerly winds are expected to develop earlier than normal as a Pacific weather system approaches from the west, during the mid-morning hours on Friday. Stronger breezes are likely during the afternoon and early evening hours Friday, with these westerly winds persisting well into the night. Cloudiness will be limited to FEW-SCT high cirrus layers during the entire taf period.

Southeast California/Southwest Arizona including KIPL and KBLH:

A Pacific weather system approaching from the west will bring gradually increasing westerly winds to KBLH and increasing southwesterly winds at KIPL. Wind gusts as high as 30 kts are possible by late morning/early afternoon at both taf sites. There is also a chance for some blowing dust, but confidence is too low to include dust in the tafs at this time. Cloudiness will be limited to FEW-SCT high cirrus layers during the entire taf period.

&&

.FIRE WEATHER...

Sunday through Wednesday:

A warming trend begins Sunday with temperatures rebounding close

# October 20, 2017 Exceptional Event, Imperial County

# Appendix A

to 10F above normal on Monday and Tuesday. Minimum humidities will remain below 15% (even at higher terrain locations) and overnight recovery will be fair to good (at best). Winds will be light overall (favoring north and northwest directions during the daytime) except for breezy easterly winds on Wednesday.

&&

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

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 11 PM PDT this evening for CAZ562.

Wind Advisory from 11 AM this morning to 11 PM PDT this evening  
 for CAZ563>567.

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Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Kuhlman

AVIATION...Percha

FIRE WEATHER...AJ

## IOWA STATE UNIVERSITY

College of Ag  
 Department of Agronomy

### Department of Agronomy

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FXUS65 KPSR 201149

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

449 AM MST Fri Oct 20 2017

.UPDATE...Updated aviation discussion.

&&

.SYNOPSIS...

A fast moving low pressure system will pass by to the north today while increasing winds across much of the Desert Southwest. Cooler air will also settle into the region as highs drop back closer to normal levels through Saturday. High pressure will rebuild over the region starting Sunday, lasting through much of next week. This will result in warm and dry conditions and well above normal temperatures.

&&

.DISCUSSION...

The weak shortwave trough that affected the region on Thursday has exited well to the east while a more significant trough digs into the Pacific Northwest and northern California early this morning. Drying conditions aloft will promote generally clear skies today into the weekend with further drying occurring in the lower levels. Gusty winds areawide and some potential for blowing dust across Imperial County will be the concern for today. The Wind Advisory for far western Imperial County has been expanded eastward, essentially covering the rest of the county where wind gusts will approach 45 mph at times this afternoon.

The deep trough to our north will quickly slide eastward across the Great Basin and northern portions of the Desert Southwest into tonight. This will bring in cooler air across the region today as highs should finally only reach into the middle to upper 80s across the lower deserts. By Saturday, the trough will already be moving into the Plains States with ridging starting to build into the Desert Southwest. Though heights aloft will be rising on Saturday, temperatures will not yet start to rise as highs will be similar to today's readings.

For Sunday into the middle part of next week, the building high pressure off the Baja Peninsula will edge northward into the

Desert Southwest raising 500mb heights to as high as 595dm, or near record climatology for the period. Forecast highs are a bit warmer than median guidance with lower desert highs easily into the middle 90s for Monday through Wednesday. Phoenix could tie or set records on Tuesday and Wednesday as previous records stand at 96 for both days. Model guidance shows the ridge breaking down during the middle of next week as a fast moving trough moves through the Pacific Northwest. This should lower our heights and bring some mild relief for late next week, but temperatures will still remain several degrees above seasonal normals.

&&

.AVIATION...

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

Westerly winds will develop earlier than normal today and persist longer into the night as a Pacific weather system approaches our area. Additionally, winds will be a bit stronger with southwesterly to westerly gusts to around 20 kts this afternoon. Clouds will be limited to FEW-SCT high cirrus layers during the entire TAF period.

Southeast California/Southwest Arizona including KIPL and KBLH:

An approaching system will bring gusty westerly winds to KIPL and KBLH today. Winds will be gusting to around 25 kts at KBLH and to around 30-35kts at KIPL this afternoon. There is also a chance for some blowing dust, mainly at KIPL, but confidence is too low to include it in the TAFs at this moment. Winds will die down after sunset but breezy conditions will persist well into the evening. Clouds will be limited to FEW-SCT high cirrus layers during the entire TAF period.

&&

.FIRE WEATHER...

Sunday through Wednesday:

A warming trend begins Sunday with temperatures rebounding close to 10F above normal on Monday and Tuesday. Minimum humidities will remain below 15% (even at higher terrain locations) and overnight recovery will be fair to good (at best). Winds will be light overall (favoring north and northwest directions during the daytime) except for breezy easterly winds on Wednesday.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind Advisory until 11 PM PDT this evening for CAZ562.

Wind Advisory from 11 AM this morning to 11 PM PDT this evening  
for CAZ563>567.

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Visit us on Facebook, Twitter, and at [weather.gov/phoenix](http://weather.gov/phoenix)

DISCUSSION...Kuhlman

AVIATION...Wilson

FIRE WEATHER...AJ

# IOWA STATE UNIVERSITY

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WWUS75 KPSR 201306

NPWPSR

URGENT - WEATHER MESSAGE

National Weather Service Phoenix AZ

606 AM MST Fri Oct 20 2017

CAZ566-567-202200-

/O.EXT.KPSR.WI.Y.0025.171020T1306Z-171021T0600Z/

Imperial County West-Imperial Valley-

Including the cities of Coolidge Springs, Salton City, Winona, Coyote Wells, Ocotillo, Plaster City, El Centro, Calexico, Alamorio, and Brawley

606 AM PDT Fri Oct 20 2017

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

\* AFFECTED AREA...Southwestern Imperial County

\* TIMING...Through Friday evening.

\* WINDS...Sustained 25-35 mph with gusts 35-45 mph.

\* IMPACTS...Motorists traveling on Interstate 8, Highway 111, and Highway 78 will encounter difficult handling conditions due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous.

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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CAZ562-202200-

/O.CON.KPSR.WI.Y.0025.000000T0000Z-171021T0600Z/

Imperial County Southwest-

Including the city of Mountain Spring  
606 AM PDT Fri Oct 20 2017

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

- \* AFFECTED AREA...Far southwestern Imperial County
- \* TIMING...Through Friday evening.
- \* WINDS...Sustained 30-40 mph with gusts of 45-55 mph.
- \* IMPACTS...Motorists traveling on Interstate 8 near the San Diego County border will encounter difficult handling conditions due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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CAZ563>565-202200-  
/O.CON.KPSR.WI.Y.0025.171020T1800Z-171021T0600Z/

Salton Sea-Chuckwalla Mountains-Imperial County Southeast-  
Including the cities of Desert Shores,  
Imperial Hot Mineral Springs, and Winterhaven  
606 AM PDT Fri Oct 20 2017

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

- \* AFFECTED AREA...Imperial County.
- \* TIMING...Friday morning through Friday evening.
- \* WINDS...Sustained 25-35 mph with gusts 35-45 mph.
- \* IMPACTS...Motorists traveling on Interstate 8, Highway 111, and Highway 78 will encounter difficult handling conditions

due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous.

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

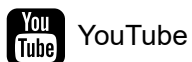
College of Ag  
Department of Agronomy

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FXUS66 KSGX 201558

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

858 AM PDT Fri Oct 20 2017

.SYNOPSIS...

A trough of low pressure will move through the West Coast today, bringing cool weather, along with some light showers mainly in the coastal mountain slopes. Locally strong west winds will continue in the mountains and deserts through this evening. Offshore flow will develop this weekend and continue through at least Tuesday, bringing hot and dry weather along with occasional gusty northeast winds, especially through and below passes and canyons. Weak onshore flow is forecast to develop Wednesday and Thursday for a modest cooling trend.

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

The marine layer has some muscle to it this morning, with a low pressure trough moving through the northwest states. Low clouds are not your typical flat stratus, but the lumpy stratocumulus that are producing scattered light showers. Most of the showers so far have dropped less than a tenth inch, and mostly in the foothills. These will gradually decrease during the day from northwest to southeast. Winds are gusting to over 40 mph mainly in the mountains and locally into deserts, and those will continue through this evening. We even have some breezy winds along the coast. The trough axis moves east tonight and high pressure aloft begins to build this weekend. The trough will leave behind cold air into the Great Basin, which will lead to surface high pressure and an offshore pressure gradient. That will force offshore winds through and below mountain passes starting Saturday morning mainly through and below Cajon Pass and into eastern Orange County. For more on anticipated critical fire weather conditions, see fire weather discussion below. These locally breezy offshore winds continue Sunday, then increase in coverage and strength Monday through Tuesday. Top gusts Tuesday morning will exceed 40 mph in, and adjacent to, foothills. With strong high pressure aloft combining with dry offshore flow, temperatures will soar each day. The hottest days Monday and Tuesday will feature some

areas exceeding 100 degrees west of the mountains and even 90+ degrees along parts of the coast. It will be wise to avoid strenuous outdoor activity during those days, but saying that, it will be a dry heat, enabling the human cooling system and nights to cool efficiently. The offshore flow diminishes Tuesday night and the strong high pressure ridge begins to break down Wednesday and Thursday. That will bring a tepid cooling trend, but daytime temps will continue above average. At some point later next week the onshore flow would bring back some coastal clouds.

&&

.AVIATION...

201600Z...Coast/Valleys...Mostly BKN-OVC stratus with variable cigs 2000-4500 ft MSL and tops to 6000 ft MSL will continue through 18Z, then very slowly decrease through this afternoon. Isolated -SHRA will occur through 18Z. Most vis will remain above 5 miles, except where higher terrain is obscured. Only patchy stratus is expected tonight, mainly San Diego County, with bases mostly above 2000 ft MSL. Otherwise, SCT clouds above 20000 ft MSL will continue.

Mountain/Deserts...Terrain obscurations in clouds/fog/isolated -SHRA will continue below 6000 ft MSL on coastal slopes through 19Z. Windy conditions will continue from the mountain crests east into the deserts through this evening with west winds 15-30 kt and local gusts 40-50 kt. This will bring mod-stg udfs/llws over and east of the mtns. Local BLDU vcnty PSP and TRM will be possible today.

&&

.MARINE...

Small Craft Advisory continues through 1 AM Saturday. A low pressure system with a weakening cold front moving in from the northwest will bring strong northwest winds to the coastal waters today. Wind gusts of 25-30 kt with steep waves will result in hazardous boating for small craft. Highest seas and strongest winds will be near and south of San Clemente Island. Conditions will slowly improve late tonight and Saturday morning. Lighter winds and calmer seas are expected next week.

&&

.BEACHES...

A 2-3 ft/14-15 second south swell from 200 degrees will continue to subside today. A short-period northwest swell from 290 degrees and a long-period northwest swell from 295 degrees will build late today through Saturday. This will bring another round of elevated surf from 3-6 ft and an increased rip current threat. Although surf lowers somewhat on Sunday, rip currents will still be a concern. A

Beach Hazards Statement is in effect through Sunday afternoon.

&&

.FIRE WEATHER...

Critical fire weather conditions develop Saturday and continue through Tuesday. Biggest concern is for Monday through Tuesday as temperatures peak and widespread daytime humidity in single digits develops away from the coast. The concern is more of the long duration of the hot, dry, and windy conditions through certain areas and corridors, although Red Flag conditions won't necessarily be widespread each day. Current guidance has strongest winds Monday and especially Tuesday in the favored passes/canyons and coastal mountain slopes. A Fire Weather Watch remains in effect from Saturday for the San Bernardino mountains, Inland Empire and Santa Ana mountains, then starting Sunday for the rest of Orange County, the valleys and mountains of San Diego County and the mountains of Riverside County, with all areas continuing through Tuesday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Fire Weather Watch from Sunday morning through Tuesday afternoon for Orange County Coastal Areas-Orange County Inland Areas-Riverside County Mountains-Including The San Jacinto Ranger District Of The San Bernardino National Forest-San Diego County Inland Valleys-San Diego County Mountains-Including The Palomar And Descanso Ranger Districts of the Cleveland National Forest.

Wind Advisory until 9 PM PDT this evening for Apple and Lucerne Valleys-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.

Excessive Heat Watch from Monday morning through Tuesday evening for Orange County Coastal Areas-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Coastal Areas-San Diego County Valleys.

Fire Weather Watch from Saturday morning through Tuesday

afternoon for San Bernardino County Mountains-Including The Mountain Top And Front Country Ranger Districts Of The San Bernardino National Forest-San Bernardino and Riverside County Valleys -The Inland Empire-Santa Ana Mountains-Including The Trabuco Ranger District of the Cleveland National Forest.

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

PZ...Small Craft Advisory for winds until 1 AM PDT Saturday 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.

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PUBLIC/FIRE...MM

AVIATION/MARINE/BEACHES...Maxwell

# IOWA STATE UNIVERSITY

College of Ag  
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## Department of Agronomy

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279  
 WWUS75 KPSR 201815  
 NPWPSR

URGENT - WEATHER MESSAGE  
 National Weather Service Phoenix AZ  
 1115 AM MST Fri Oct 20 2017

...Blowing Dust Possible...

CAZ562>567-210600-  
 /O.NEW.KPSR.DU.Y.0025.171020T1815Z-171021T0100Z/  
 /O.CON.KPSR.WI.Y.0025.000000T0000Z-171021T0600Z/  
 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  
 1115 AM PDT Fri Oct 20 2017

...BLOWING DUST ADVISORY IN EFFECT UNTIL 6 PM PDT THIS EVENING...  
 ...WIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING...

The National Weather Service in Phoenix has issued a Blowing Dust Advisory, which is in effect until 6 PM PDT this evening.

\* AFFECTED AREA...Imperial County.

\* TIMING...Now through Friday evening.

\* WINDS...Sustained 25-35 mph with gusts 35-45 mph.

\* VISIBILITY...Below 1 mile.

\* Impacts..Motorists traveling on Interstate 8, Highway 111, and Highway 78 will encounter difficult handling conditions due to very strong winds. There may also be reduced visibility at times due to blowing dust which will make conditions even more hazardous.

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.

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>532-535-536-CAZ569-210100-  
 /O.NEW.KPSR.DU.Y.0025.171020T1815Z-171021T0100Z/  
 Parker Valley-Kofa-Yuma-Southeast Yuma County-Gila River Valley-  
 Palo Verde Valley-  
 Including the cities of Parker, Ehrenberg, Palm Canyon, Yuma,  
 Fortuna Foothills, Ligurta, Martinez Lake, Blythe, Palo Verde,  
 and Ripley  
 1115 AM MST Fri Oct 20 2017 /1115 AM PDT Fri Oct 20 2017/

...BLOWING DUST ADVISORY IN EFFECT UNTIL 6 PM MST /6 PM PDT/ THIS EVENING...

The National Weather Service in Phoenix has issued a Blowing Dust Advisory, which is in effect until 6 PM MST /6 PM PDT/ this evening.

\* AFFECTED AREA...Yuma County.

\* TIMING...Now through Friday evening.

\* WINDS...Gusts over 40 mph.



**October 20, 2017 Exceptional Event, Imperial County****Appendix A**

\* 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.

Remember, pull aside, stay alive.

&&

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WWUS76 KSGX 202003

NPWSGX

URGENT - WEATHER MESSAGE

National Weather Service San Diego CA

103 PM PDT Fri Oct 20 2017

...GUSTY WEST WINDS IN PORTIONS OF THE MOUNTAINS AND DESERTS THROUGH THIS EVENING...

...VERY HOT WEATHER IN THE COASTAL AREAS AND VALLEYS MONDAY AND TUESDAY...

.Strong and gusty west winds in portions of the mountains and deserts will continue through this evening and diminish overnight.

Offshore winds and strong high pressure aloft will develop this weekend and bring a strong warming trend. On Monday and Tuesday, temperatures at many locations west of the mountains will exceed 100 degrees. Not as hot weather is expected Wednesday and beyond.

CAZ055-056-058-060-062-065-210400-

/O.CON.KSGX.WI.Y.0030.000000T0000Z-171021T0400Z/

San Bernardino County Mountains-Riverside County Mountains-

San Diego County Mountains-Apple and Lucerne Valleys-

San Diego County Deserts-San Gorgonio Pass Near Banning-

Including the cities of Crestline, Lake Arrowhead, Big Bear City, Big Bear Lake, Running Springs, Wrightwood, Idyllwild-Pine Cove, Julian, Pine Valley, Victorville, Hesperia, Apple Valley,

Borrego Springs, Banning, and Desert Hot Springs

103 PM PDT Fri Oct 20 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 9 PM PDT THIS EVENING...

\* WINDS...West winds 25 to 35 mph with gusts 45 to 55 mph.

\* TIMING...Through this evening.

\* LOCATION...Mainly in the high desert, through the San Gorgonio Pass, along the ridges and desert slopes of the mountains, and locally into the San Diego County Deserts.

\* VISIBILITY...Visibility locally reduced in blowing dust and sand.

\* IMPACTS...Hazardous travel for high profile vehicles. Small

tree limbs may be broken.

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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CAZ043-048-050-552-554-210430-  
/O.CON.KSGX.EH.A.0005.171023T1700Z-171025T0300Z/  
San Diego County Coastal Areas-  
San Bernardino and Riverside County Valleys-The Inland Empire-  
San Diego County Valleys-Orange County Coastal Areas-  
Orange County Inland Areas-  
Including the cities of Vista, Carlsbad, Encinitas, Chula Vista,  
National City, San Diego, Riverside, San Bernardino, Ontario,  
Moreno Valley, Fontana, Rancho Cucamonga, Corona, Escondido,  
El Cajon, San Marcos, La Mesa, Santee, Poway, Huntington Beach,  
Costa Mesa, Santa Ana, Anaheim, Garden Grove, Irvine, Orange,  
Fullerton, and Mission Viejo  
103 PM PDT Fri Oct 20 2017

...EXCESSIVE HEAT WATCH REMAINS IN EFFECT FROM MONDAY MORNING THROUGH TUESDAY EVENING...

\* TEMPERATURE...Daytime highs between 98 and 106. Nighttime lows in windy areas will remain in the 70s.

\* IMPACTS...Heat related illness is likely for those involved in strenuous outdoor activity, or those with health conditions that do not have adequate access to air conditioning. If untreated, heat illness events could be fatal. Never leave children or pets inside a parked car!

\* OUTLOOK...Gradual cooling will likely occur Wednesday and Thursday.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

An Excessive Heat Watch means that a prolonged period of very high temperatures is expected. The very hot weather will create a dangerous situation in which heat illnesses are possible. Drink plenty of fluids, stay in an air-conditioned room, stay out of the sun, and check up on relatives and neighbors.

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FXUS66 KSGX 202030

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

130 PM PDT Fri Oct 20 2017

.SYNOPSIS...

A trough of low pressure will move through California tonight, with isolated showers ending and mountain and desert winds decreasing. Offshore flow will develop this weekend and continue through at least Tuesday, bringing hot and dry weather along with occasional gusty northeast winds, especially through and below passes and canyons. Weak onshore flow is forecast to develop Wednesday and Thursday for a modest cooling trend.

&&

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

Our marine layer has enough fortitude to present isolated light showers, mainly in San Diego County. These are decreasing so measurable rain will be very isolated. A few mountain spots received up to two tenths inch, lower elevations a few hundredths or only a trace. Winds are gusting to over 45 mph mainly in the mountains and locally into deserts, and those will continue through this evening, then decrease overnight. It will even be breezy along the coast. The trough axis moves east tonight and high pressure aloft begins to build this weekend. The trough will leave behind cold air into the Great Basin, which will lead to surface high pressure and an offshore pressure gradient aligned toward Southern California. That will force offshore winds through and below mountain passes starting Saturday morning mainly through and below Cajon Pass and into eastern Orange County. For more on anticipated critical fire weather conditions, see fire weather discussion below. These locally breezy offshore winds continue Sunday, then increase in coverage and strength Monday through Tuesday. Top gusts Monday and Tuesday mornings will exceed 40 mph in, and adjacent to, foothills. With strong high pressure aloft combining with dry offshore flow, temperatures will soar each day. The hottest days Monday and Tuesday will feature some areas exceeding 100 degrees west of the mountains and even exceeding 90 along parts of the coast. It will be wise to avoid strenuous outdoor activity during those days, but saying that, it

will be a dry heat, enabling the human cooling system to cool efficiently. Nights will cool efficiently for most areas, except those that remain breezy during the nights. Temps there will stay in the 70s both nights. The offshore flow diminishes Tuesday night and the strong high pressure ridge begins to break down Wednesday and Thursday. That will bring a tepid cooling trend, but daytime temps will continue above average. Onshore flow will try to return, which would eventually bring some coastal clouds and fog, but another offshore push may develop instead.

&&

.AVIATION...

202030Z...Coast/Valleys...Mostly BKN stratocumulus with variable cigs 2000-4500 ft MSL and tops to 6000 ft MSL will continue through this afternoon. Isolated -SHRA will occur through 22Z. Most vis will remain above 5 miles, except where higher terrain is locally obscured. Stratocumulus will gradually become more patchy tonight, but linger longest in San Diego County, with bases mostly above 2000 ft MSL. Wind shear from northeast winds will develop vcnty KSNA, KONT, KRAL, KSBD Sat after 12Z with local surface winds 15-30 kt with gusts to 35-45 kt.

Mountain/Deserts...Areas of terrain obscurations in clouds/fog/isolated -SHRA will continue below 6000 ft MSL on coastal slopes through 23Z. Windy conditions will continue from the mountain crests east into the deserts through this evening with west winds 15-30 kt and local gusts 40-50 kt. This will bring mod-stg uddfs/llws over and east of the mtns. Local BLDU vcnty PSP and TRM will be possible this afternoon. In the San Bernardino County Mountains, winds will become northeast after 10Z Sat 15-30 kt with gusts to 35-45 kt.

&&

.MARINE...

Small Craft Advisory was extended through 4 AM Saturday. A low pressure system with a weakening cold front moving in from the northwest will bring strong northwest winds to the coastal waters today. Wind gusts of 25-30 kt with steep waves will result in hazardous boating for small craft. A combination of the wind waves and a longer period WNW swell to bring seas around 10 feet to the outer waters. Highest seas and strongest winds will be near and south of San Clemente Island. Conditions will slowly improve late tonight and Saturday morning. Lighter winds and calmer seas are expected next week.

&&

**.BEACHES...**

A 2-3 ft/14-15 second south swell from 200 degrees will continue to subside this afternoon. A short-period northwest swell from 290 degrees and a long-period northwest swell from 295 degrees will build late today through Saturday. This will bring another round of elevated surf from 3-6 ft and an increased rip current threat. Although surf lowers somewhat on Sunday, rip currents will still be a concern. A Beach Hazards Statement is in effect through Sunday afternoon.

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**.FIRE WEATHER...**

Critical fire weather conditions develop Saturday and continue through Tuesday. Biggest concern is for Monday through Tuesday as temperatures peak and widespread daytime humidity in single digits develops away from the coast. The concern is more of the long duration of the hot, dry, and windy conditions through certain areas and corridors, although Red Flag conditions won't necessarily be widespread each day. Current guidance has strongest winds Monday and especially Tuesday in the favored passes/canyons and coastal mountain slopes. Consult the Red Flag Warning for details on timing and location of critical conditions.

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**.SKYWARN...**

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

&amp;&amp;

**.SGX WATCHES/WARNINGS/ADVISORIES...**

CA...Fire Weather Watch from Sunday morning through Tuesday afternoon for Orange County Coastal Areas-Orange County Inland Areas-Riverside County Mountains-Including The San Jacinto Ranger District Of The San Bernardino National Forest-San Bernardino County Mountains-Including The Mountain Top And Front Country Ranger Districts Of The San Bernardino National Forest-San Bernardino and Riverside County Valleys -The Inland Empire-San Diego County Inland Valleys-San Diego County Mountains-Including The Palomar And Descanso Ranger Districts of the Cleveland National Forest-Santa Ana Mountains-Including The Trabuco Ranger District of the Cleveland National Forest.

Wind Advisory until 9 PM PDT this evening for Apple and Lucerne Valleys-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County

Mountains-San Gorgonio Pass Near Banning.

Excessive Heat Watch from Monday morning through Tuesday evening for Orange County Coastal Areas-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Coastal Areas-San Diego County Valleys.

Red Flag Warning from 10 AM Saturday to 6 AM PDT Sunday for San Bernardino County Mountains-Including The Mountain Top And Front Country Ranger Districts Of The San Bernardino National Forest-San Bernardino and Riverside County Valleys -The Inland Empire-Santa Ana Mountains-Including The Trabuco Ranger District of the Cleveland National Forest.

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

PZ...Small Craft Advisory until 4 AM PDT Saturday 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.

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PUBLIC/FIRE...MM

AVIATION/MARINE/BEACHES...Maxwell

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FXUS65 KPSR 202147

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

247 PM MST Fri Oct 20 2017

&&

.SYNOPSIS...

Gusty winds this afternoon will lead to areas of blowing dust across parts of southeast California and southwest Arizona. Winds will decrease into Saturday, except across the lower Colorado River Valley. Near-normal temperatures will make a brief return this weekend, before a strong area of high pressure builds over the Western U.S. This will result in another warming trend with dry conditions and well above normal temperatures throughout much of next week.

&&

.DISCUSSION...

Primary concerns in the short term revolve around blowing dust and strong winds, especially across southwest Arizona and southeast California. Satellite imagery and observations indicate plumes of blowing sand and dust have developed across Imperial and Yuma Counties, with visibilities locally restricted down to one mile. This is in response to strong westerly flow moving across southern California into Arizona, supporting gusts of 40-50 mph across the I-8 corridor primarily from Yuma County westward. Some increase in west-southwesterly winds has been noted this afternoon across south-central Arizona, but the best phasing of the strongest flow aloft with peak heating will remain focused west of the Phoenix area. The Blowing Dust Advisory, mainly for Imperial and Yuma Counties, remains in effect until 01Z, while a Wind Advisory remains in effect until 06Z.

By tomorrow, winds should generally weaken area-wide, except near the lower Colorado River Valley, where north winds of 15-25 mph will remain possible. The coolest daytime temperatures in awhile will also occur in the wake of the fast-moving storm system. High temperatures in the mid-80s are expected across most lower-desert locations. Unfortunately, a rapid return to well above-normal temperatures will occur by Monday, as the large-scale pattern becomes highly amplified with a ridge building across the Pacific coast. Temperatures in the mid-upper 90s are expected Monday



through Wednesday.

Longer-range models are now trending towards another pattern change by next weekend, developing the coldest and most expansive upper trough of the season across the northern Rockies/northern Plains into the Four Corners region. This will likely result in a strong cold front sweeping south-southeastward across the Great Basin, potentially clipping western/central Arizona and bringing cooler temperatures by next weekend. With the tight height/pressure gradients, the degree of cooling and strength of winds over the Southwest will be sensitive to any longitudinal displacement of the large-scale features will on, so it is worth watching. Bottom line -- the well above-normal temperatures don't look like they'll last quite as long as previously advertised. Regardless, precipitation chances will remain minimal throughout the next week.

&&

.AVIATION...

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

Westerly winds will develop earlier than normal today and persist longer into the night as a Pacific weather system approaches our area. Additionally, winds will be a bit stronger with southwesterly to westerly gusts to around 20 kts this afternoon. Clouds will be limited to FEW-SCT high cirrus layers during the entire TAF period.

Southeast California/Southwest Arizona including KIPL and KBLH:

An approaching system will bring gusty westerly winds to KIPL and KBLH today. Winds will be gusting to around 25 kts at KBLH and to around 30-35kts at KIPL this afternoon. There is also a chance for some blowing dust, mainly at KIPL, but confidence is too low to include it in the TAFs at this moment. Winds will die down after sunset but breezy conditions will persist well into the evening. Clouds will be limited to FEW-SCT high cirrus layers during the entire TAF period.

&&

.FIRE WEATHER...

Sunday through Wednesday:

A warming trend begins Sunday with temperatures rebounding close to 10F above normal on Monday and Tuesday. Minimum humidities will remain below 15% (even at higher terrain locations) and overnight recovery will be fair to good (at best). Winds will be light overall (favoring north and northwest directions during the

daytime) except for breezy easterly winds on Wednesday.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Blowing Dust Advisory until 6 PM MST this evening for AZZ530>532-535-536.

CA...Blowing Dust Advisory until 6 PM PDT this evening for CAZ562>567-569.

Wind Advisory until 11 PM PDT this evening for CAZ562>567.

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DISCUSSION...Rogers

AVIATION...Wilson

FIRE WEATHER...AJ

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FXUS65 KPSR 202238

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

338 PM MST Fri Oct 20 2017

.UPDATE...

Updated AVIATION and FIRE WEATHER sections.

&&

.SYNOPSIS...

Gusty winds this afternoon will lead to areas of blowing dust across parts of southeast California and southwest Arizona. Winds will decrease into Saturday, except across the lower Colorado River Valley. Near-normal temperatures will make a brief return this weekend, before a strong area of high pressure builds over the Western U.S. This will result in another warming trend with dry conditions and well above normal temperatures throughout much of next week.

&&

.DISCUSSION...

Primary concerns in the short term revolve around blowing dust and strong winds, especially across southwest Arizona and southeast California. Satellite imagery and observations indicate plumes of blowing sand and dust have developed across Imperial and Yuma Counties, with visibilities locally restricted down to one mile. This is in response to strong westerly flow moving across southern California into Arizona, supporting gusts of 40-50 mph across the I-8 corridor primarily from Yuma County westward. Some increase in west-southwesterly winds has been noted this afternoon across south-central Arizona, but the best phasing of the strongest flow aloft with peak heating will remain focused west of the Phoenix area. The Blowing Dust Advisory, mainly for Imperial and Yuma Counties, remains in effect until 01Z, while a Wind Advisory remains in effect until 06Z.

By tomorrow, winds should generally weaken area-wide, except near the lower Colorado River Valley, where north winds of 15-25 mph will remain possible. The coolest daytime temperatures in awhile will also occur in the wake of the fast-moving storm system. High temperatures in the mid-80s are expected across most lower-desert locations. Unfortunately, a rapid return to well above-normal

temperatures will occur by Monday, as the large-scale pattern becomes highly amplified with a ridge building across the Pacific coast. Temperatures in the mid-upper 90s are expected Monday through Wednesday.

Longer-range models are now trending towards another pattern change by next weekend, developing the coldest and most expansive upper trough of the season across the northern Rockies/northern Plains into the Four Corners region. This will likely result in a strong cold front sweeping south-southeastward across the Great Basin, potentially clipping western/central Arizona and bringing cooler temperatures by next weekend. With the tight height/pressure gradients, the degree of cooling and strength of winds over the Southwest will be sensitive to any longitudinal displacement of the large-scale features will on, so it is worth watching. Bottom line -- the well above-normal temperatures don't look like they'll last quite as long as previously advertised. Regardless, precipitation chances will remain minimal throughout the next week.

&&

.AVIATION...

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

Southwest winds gusting 20-25 kts will can be expected through at least 01Z before slowly weakening and trending toward familiar drainage patterns after 06Z. Above the surface, winds will remain westerly. Anticipate reduced slant visibilities the rest of the afternoon due to lofted dust wafting in from the California deserts. Otherwise, over very minor cirrus.

Southeast California/Southwest Arizona including KIPL and KBLH:

Very strong westerly winds (gusting 35-45 kts) will continue over Imperial County the rest of the afternoon before beginning to weaken after 03Z. Expect areas of blowing dust and sand causing reduced visibilities below 3SM with brief/localized reductions below 1 mile (near open desert). Winds will be lighter over Riverside County and southwest AZ. However, blowing dust will waft over these areas as well (most notably the Interstate 8 corridor). Northerly winds at the surface and aloft begin to develop toward morning Saturday. Expect some moderate gustiness over the Lower Colorado River Valley after 16Z. Otherwise, only very minor cirrus.

&&

.FIRE WEATHER...

Monday through Friday:

Expect high temperatures to be about 10F above normal on Monday and Tuesday before a cooling trend takes place during the latter half of next week. Minimum humidities will remain below 15% (even at higher terrain locations) and overnight recovery will be modest. Winds will be light during the first half of next week except for some minor north and northeasterly breeziness Tuesday and Wednesday. Some southwesterly breeziness is possible at times during the latter half of next week.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Blowing Dust Advisory until 6 PM MST this evening for AZZ530>532-535-536.

CA...Blowing Dust Advisory until 6 PM PDT this evening for CAZ562>567-569.

Wind Advisory until 11 PM PDT this evening for CAZ562>567.

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DISCUSSION...Rogers

AVIATION...AJ

FIRE WEATHER...AJ

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**October 20, 2017 Exceptional Event, Imperial County****Appendix A**

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 735  
 WWUS75 KPSR 210044  
 NPWPSR

URGENT - WEATHER MESSAGE  
 National Weather Service Phoenix AZ  
 544 PM MST Fri Oct 20 2017

CAZ562>567-210600-  
 /O.EXP.KPSR.DU.Y.0025.00000T0000Z-171021T0100Z/  
 /O.CON.KPSR.WI.Y.0025.00000T0000Z-171021T0600Z/  
 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  
 544 PM PDT Fri Oct 20 2017

...WIND ADVISORY REMAINS IN EFFECT UNTIL 11 PM PDT THIS EVENING...  
 ...BLOWING DUST ADVISORY WILL EXPIRE AT 6 PM PDT THIS EVENING...

\* AFFECTED AREA...Imperial County.

\* TIMING...Now through Friday evening.

\* WINDS...Sustained 25-35 mph with gusts 35-45 mph.

\* Impacts..Motorists traveling on Interstate 8, Highway 111, and  
 Highway 78 will encounter difficult handling conditions due to  
 very strong winds. Areas of reduced visibilities in blowing dust  
 are also possible.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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AZZ530>532-535-536-CAZ569-210145-  
 /O.EXP.KPSR.DU.Y.0025.00000T0000Z-171021T0100Z/  
 Parker Valley-Kofa-Yuma-Southeast Yuma County-Gila River Valley-  
 Palo Verde Valley-  
 Including the cities of Parker, Ehrenberg, Palm Canyon, Yuma,  
 Fortuna Foothills, Ligurta, Martinez Lake, Blythe, Palo Verde,  
 and Ripley  
 544 PM MST Fri Oct 20 2017 /544 PM PDT Fri Oct 20 2017/

...BLOWING DUST ADVISORY WILL EXPIRE AT 6 PM MST /6 PM PDT/ THIS  
 EVENING...

Winds have diminished across the region, reducing the amount of  
 blowing dust across the region, with visibilities now mainly  
 greater than 1 mile.

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FXUS66 KSGX 210429

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

929 PM PDT Fri Oct 20 2017

.SYNOPSIS...

A trough of low pressure will exit California overnight with mountain and desert winds decreasing. Offshore flow will develop this weekend and continue through at least Tuesday, bringing hot and dry weather along with occasional gusty northeast winds, especially through and below passes and canyons. Weak onshore flow is forecast to develop Wednesday and Thursday for a modest cooling trend.

&&

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

...Update...

Some rain fell across portions of Southern California today with most locales receiving just a trace to a few hundredths of an inch. However, some of the coastal slopes received more with the max total of 0.23" reported at Rim Forest in the San Bernardinos.

Gusty winds continue from the mountain ridges to the deserts. Peak gusts across these areas has averaged 30-50 mph, although a few of the windier locales peaked at near 70 mph (such as Volcan Mountain/San Diego County).

It was a cool day with highs ranging from only 52F degrees at Lake Arrowhead to 87F degrees at Thermal.

The rain has ended and winds will gradually relax overnight as the trough exits to the east.

A warming trend will commence on Saturday with a heat wave early next week as well as Santa Anas. See previous discussion below for additional forecast details.

...Previous Discussion (Issued at 130 PM PDT Fri Oct 20 2017)...

Our marine layer has enough fortitude to present isolated light showers, mainly in San Diego County. These are decreasing so measurable rain will be very isolated. A few mountain spots received up to two tenths inch, lower elevations a few hundredths or only a trace. Winds are gusting to over 45 mph mainly in the mountains and locally into deserts, and those will continue through this evening, then decrease overnight. It will even be breezy along the coast. The trough axis moves east tonight and high pressure aloft begins to build this weekend. The trough will leave behind cold air into the Great Basin, which will lead to surface high pressure and an offshore pressure gradient aligned toward Southern California. That will force offshore winds through and below mountain passes starting Saturday morning mainly through and below Cajon Pass and into eastern Orange County. For more on anticipated critical fire weather conditions, see fire weather discussion below. These locally breezy offshore winds continue Sunday, then increase in coverage and strength Monday through Tuesday. Top gusts Monday and Tuesday mornings will exceed 40 mph in, and adjacent to, foothills. With strong high pressure aloft combining with dry offshore flow, temperatures will soar each day. The hottest days Monday and Tuesday will feature some areas exceeding 100 degrees west of the mountains and even exceeding 90 along parts of the coast. It will be wise to avoid strenuous outdoor activity during those days, but saying that, it will be a dry heat, enabling the human cooling system to cool efficiently. Nights will cool efficiently for most areas, except those that remain breezy during the nights. Temps there will stay in the 70s both nights. The offshore flow diminishes Tuesday night and the strong high pressure ridge begins to break down Wednesday and Thursday. That will bring a tepid cooling trend, but daytime temps will continue above average. Onshore flow will try to return, which would eventually bring some coastal clouds and fog, but another offshore push may develop instead.

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#### .AVIATION...

210400Z...Coast/Valleys...Stratus and stratocumulus will linger through late tonight, the longest likely in San Diego County, with bases mainly above 2000 ft MSL. Wind shear from northeast winds will develop vcnty KSNA, KONT, KRAL, KSBD Sat after 12Z with surface winds 15-30 kt with gusts to 35-45 kt.

#### Mountain/Deserts...

Windy conditions will continue from the mountain crests east into the deserts through this evening with west winds 15-30 kt and gusts 40-50 kt. This will bring mod-stg udfs/llws over and east of the mtns. BLDU vcnty PSP and TRM will be possible this evening. In the



San Bernardino County Mountains, winds will become northeast after 10Z Sat 15-30 kt with gusts to 35-45 kt.

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.MARINE...

A Small Craft Advisory remains in effect through 4 AM Saturday. A low pressure system with a weakening cold front moving in from the northwest will bring strong northwest winds to the coastal waters today. Wind gusts of 25-30 kt with steep waves will result in hazardous boating for small craft. A combination of the wind waves and a longer period WNW swell to bring seas around 10 feet to the outer waters. Highest seas and strongest winds will be near and south of San Clemente Island. Conditions will slowly improve late tonight and Saturday morning. Lighter winds and calmer seas are expected next week.

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.BEACHES...

A short-period northwest swell from 290 degrees and a long-period northwest swell from 295 degrees will build through Saturday. This will bring another round of elevated surf from 3-6 ft and an increased rip current threat. Although surf lowers somewhat on Sunday, rip currents will still be a concern. A Beach Hazards Statement is in effect through Sunday afternoon.

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.FIRE WEATHER...

Critical fire weather conditions develop Saturday and continue through Tuesday. Biggest concern is for Monday through Tuesday as temperatures peak and widespread daytime humidity in single digits develops away from the coast. The concern is more of the long duration of the hot, dry, and windy conditions through certain areas and corridors, although Red Flag conditions won't necessarily be widespread each day. Current guidance has strongest winds Monday and especially Tuesday in the favored passes/canyons and coastal mountain slopes. Consult the Red Flag Warning for details on timing and location of critical conditions.

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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...Fire Weather Watch from Sunday morning through Tuesday afternoon for Orange County Coastal Areas-Orange County Inland Areas-Riverside County Mountains-Including The San Jacinto Ranger District Of The San Bernardino National Forest-San Diego County Inland Valleys-San Diego County Mountains-Including The Palomar And Descanso Ranger Districts of the Cleveland National Forest.

Wind Advisory until 9 PM PDT this evening for Apple and Lucerne Valleys-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Gorgonio Pass Near Banning.

Excessive Heat Watch from Monday morning through Tuesday evening for Orange County Coastal Areas-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Coastal Areas-San Diego County Valleys.

Red Flag Warning from 10 AM Saturday to 6 PM PDT Tuesday for San Bernardino County Mountains-Including The Mountain Top And Front Country Ranger Districts Of The San Bernardino National Forest-San Bernardino and Riverside County Valleys -The Inland Empire-Santa Ana Mountains-Including The Trabuco Ranger District of the Cleveland National Forest.

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

PZ...Small Craft Advisory until 4 AM PDT Saturday 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.

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