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TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/15/2017	0404	PDT	San Diego	73
				Early this morning...water vapor imagery shows upper level low pressure centered near Point Conception. This low pressure system will move inland across Southern California today and into Arizona Tuesday. The marine layer has deepened to around 6000 feet with satellite imagery showing greatest stratus coverage on the coastal mountain slopes with patchier coverage towards the coast and over the coastal waters. Radars show a few light showers from the coastal mountain slopes westward to the inner coastal waters with greatest coverage at 345 am along the coastal slopes of the San Gabriel Mountains in Los Angeles County. Measurable amounts have been quite limited so far...0.02 at Crestline...0.01 at Lake San Marcos...and a trace at Fullerton. Occasional light showers will continue along and west of the mountains through early Tuesday with greatest coverage during the night and morning hours with less this afternoon.	
Area Forecast Discussion	5/15/2017	0841	PDT	San Diego	75
				Scattered light showers are moving over and west of the mountains this morning, according to radar imagery. Precipitation amounts have been fairly light, with a few reports of 0.01-0.03 inches in San Diego and Orange counties (with a peak amount of 0.06 inch in Laguna Hills). Heaviest amounts have been in the San Bernardino county mountains near the Lytle Creek area, where 0.04-0.28 inch amounts occurred. On water vapor satellite imagery, a trough and associated vort max can be seen moving into extreme Southwestern California from the west. ...The trough will swing down through the region through Tuesday morning, resulting in a continued deep marine layer, mostly cloudy skies and scattered light showers over and west of the mountains, and much cooler conditions (highs down to 15-25 degrees below normal for inland areas and about 5 degrees below normal at the coast). Locally strong and gusty west winds exist in the desert slopes and passes, with White Water (in the San Geronio Pass) gusting to 57 mph currently. Onshore pressure gradients are strong at the moment, with the San Diego to Las Vegas showing a gradient of 10.4 mb. Winds should diminish a little later this morning into the afternoon before picking up again tonight into early Tuesday as another vort max rotates around the low and into our region, with locally strong wind gusts in those same areas reaching 50-60 mph. The vort max will also serve to bring an increase in shower activity this evening into early Tuesday morning. The snow level looks to be at around 5000 feet this morning and will increase to around 6500 feet later today and then down to 6000 feet tonight. A trace of snow is possible above 5000 feet. Total precipitation amounts should be only a few hundredths of an inch to a tenth of an inch (locally up to 0.20 inches) in the coast and valleys, with highest amounts in San Diego county. Meanwhile, the mountains could get 0.1-0.4 inches. The deserts should see mostly dry conditions with maybe a trace of rain.	
Area Forecast Discussion	5/15/2017	0844	MST	Phoenix	78
				An upper level trough is currently moving into the west coast with a PV anomaly centered over Southern California. PWAT values with this low pressure system are only around 0.5 inches which is certainly limiting precipitation development over California but a few light showers are being observed over orographically favored areas like the Southern Sierra. ...Cooler air will continue to spill into our region for the next 24 hours which will limit high temperatures to the mid-80s today for the Phoenix metro while areas closer to the cooler upper level low, specifically the deserts of SE California, will see highs in the upper 70s.... Aviation....Earlier gustiness at KIPL has subsided, but is expected to pick up again this afternoon with gusts to 25 to 30 kt. Somewhat weaker winds are expected at KBLH, though gusts could still reach 25 kt. Conditions will improve this evening as winds taper off between 04z and 06z.	

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/15/2017	1322	PDT	San Diego	81
Area Forecast Discussion	5/15/2017	1443	MST	Phoenix	84
Southwestern California Temperature and Precipitation Summary	5/15/2017	1630	PDT	San Diego	87
Urgent Weather Message	5/15/2017	1835	MST	Phoenix	90

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	5/15/2017	2040	MST	Phoenix	91
Area Forecast Discussion	5/15/2017	2102	PDT	San Diego	94

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968
FXUS66 KSGX 131042
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
342 AM PDT Sat May 13 2017

.SYNOPSIS...

A trough of low pressure near the West Coast will bring a cooling trend through Monday. Deepening of the marine layer on Sunday night into Monday will bring a slight chance of light rain from the coast to the coastal mountain slopes. High pressure off the West Coast will bring slow warming for Tuesday and Wednesday with greater warming for Thursday into next weekend. Onshore flow will bring periods of gusty southwest to west winds for the mountains and deserts through Wednesday. The marine layer will become shallower the latter part of next week with night and morning ow clouds and fog not extending as far into the valleys.

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

.SHORT TERM (Today through Monday)...

Closed upper level low pressure will remain over the Pacific Northwest and southern British Columbia through Sunday with a secondary trough of low pressure moving inland through California Sunday and Monday.

This will bring stronger onshore flow with a cooling trend into Monday with high temperatures on Monday around 5 degrees below average near the coast...and 15 to 25 degrees farther inland for the inland valleys...mountains...and deserts.

The marine layer is near 3500 feet deep early this morning with areas of stratus from the inner coastal waters inland to the lower coastal mountain slopes. The higher resolution models show greater clearing near the coast today than Friday afternoon with the stratus not extending quite as far inland tonight into Sunday morning with patchier coverage farther north in areas bordering Los Angeles County.

For Sunday night and Monday...the marine layer is expected to deepen to around 4500 to 5000 feet with light rain possible from a deep saturated layer below the inversion base inland to the lower coastal mountain slopes.

Onshore flow will gradually strengthen into Monday with periods of gusty southwest to west winds in the mountains and deserts...
strongest during the late afternoon through late evening each day.

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.LONG TERM (Tuesday through Friday)...

Low pressure over Southern California Monday...will move into Arizona Monday night and Tuesday. A closed low pressure system over the Pacific Northwest on Tuesday...will move into the Great Basin on Wednesday...and into the central Rockies Thursday. High pressure aloft over the eastern Pacific will strengthen on Friday and move towards the West Coast on Saturday,

Stronger onshore flow will continue through Wednesday with periods of gusty west winds in the mountains and deserts. A deeper marine layer will continue into Wednesday morning with night and morning low clouds and patchy fog extending onto the coastal mountain slopes with slow or limited clearing towards the coast on Monday and Tuesday afternoons. With the strengthening high pressure aloft off the West Coast late in the week...the marine layer will become shallower the latter part of next week with night and morning coastal low clouds and fog not extending as far into the valleys.

Slow warming is possible for Tuesday and Wednesday...with greater warming for Thursday into next weekend with high temperatures warming to near average on Friday...and a little above average on Saturday.

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.AVIATION...

131000...Coast/Valleys...Low clouds, with bases 1000-1500 ft MSL and tops around 2200 ft, will continue to develop along the coast this evening and push inland to the mountains by early Saturday morning. VIS of 3-5 sm BR is expected inland where low clouds near higher terrain. Stratus will clear towards the coast by late Saturday morning, with FEW/SCT low clouds Saturday afternoon.

Mountains and Deserts...Mostly clear with unrestricted VIS through Saturday evening.

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.MARINE...

Northwest wind gusts of 20-25 kt will continue over portions of the outer waters through late this evening. A Small Craft Advisory remains in effect for the area through 11pm. Winds will weaken somewhat on Saturday, then increase again early to mid next week as a few disturbances move across the region.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...None.

PZ...None.

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905
FXUS65 KPSR 131603
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
900 AM MST Sat May 13 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest bringing gradually cooler and occasionally breezy conditions through Wednesday. A warming trend is then expected through the end of the week as high pressure builds eastward from the Pacific.

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.DISCUSSION...

This mornings WV satellite imagery shows several distinct elevated frontal boundaries pushing through the SW Conus ahead of a deeper negative height anomaly sprawled across the Pacific NW. Downstream H5 height falls have been maximized over the western Great Basin ahead of a lead shortwave with more subtle reductions through southern Arizona (3dm per 12Z KTWG sounding). Nevertheless, temperatures this morning are similar to Friday, though gradual erosion of warmer air aloft (through especially the western half of the CWA) will hold afternoon highs somewhat cooler than Friday. Only minimal changes were made this morning to account for short term trends leading into a fairly typical mid May afternoon.

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.PREVIOUS DISCUSSION...

/441 AM MST Sat May 13 2017/

Latest streamline analysis shows a broad trough across the western United States, while the ridge has migrated eastward into the Plains. Southern extension of the larger trough will swing through Nevada and Utah today, bringing breezy conditions to eastern Arizona and some modest cooling, particularly across southern California. However, temperatures will remain above average across south-central Arizona, including the Phoenix area.

Sunday, a final vort max swinging around the larger Western vortex will move towards the California coast, which will induce an anomalously strong southerly low-level jet across Arizona. The breezy conditions combined with low RHs across southern Arizona will result in a high fire danger across portions of southern Maricopa and Pinal Counties. Latest models indicate this system will weaken while migrating eastward Monday, only to give way to yet another short-wave trough further south. This will yield continued thickness/height decreases along with a return of the breezy conditions during the afternoon. The trough axis will then move

May 15, 2017 Exceptional Event, Imperial County

through the area Tuesday with a reinforcing shot of cooler air.
Forecast high temperatures range from 12 to 16 degrees below normal.

One last low pressure system will drop out of the Great Basin and towards the region Wednesday. Operational GFS/ECMWF have come into much better agreement, with a trend towards a weaker system and somewhat weaker winds. Nevertheless, another period of breezy conditions is anticipated during the afternoon. Although the models depict discernible moisture transport along an advancing frontal boundary Wednesday, there is no indication of any precipitation potential and PoPs remain near 0 percent.

NAEFS ensemble suggests a Pacific ridge will build eastward late next week. This will result in a gradual warming trend, though below normal temperatures will likely persist through Friday.

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.AVIATION...

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

A large upper level low pressure system remains centered over the NW CONUS and B.C. Canada with dry southwesterly flow aloft. An embedded disturbance moving through that trough has left behind a dry and weak north-south oriented frontal zone that has stalled out over western Arizona. For south-central Arizona, south and southwesterly winds in the lower troposphere will strengthen during the day with surface winds following suit. Expect surface southwesterly gusts to peak in the 22Z-02Z time frame before weakening. Meanwhile over SE CA and SW AZ, winds will be lighter and favor northwest and north directions. Otherwise, clear skies.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Monday through Friday:

The dry southern end of a large low pressure system will move across SE CA Monday and across AZ on Monday night and Tuesday. Breezy conditions can be expected Monday with lighter winds on Tuesday. Temperatures will be significantly cooler (compared to the preceding weekend) with highs on the lower elevations in the low 80s by Tuesday. Minimum humidities will be in the teens at most places but with good overnight recovery. A follow-on system moves through Wednesday and Thursday for renewed breezy to locally windy conditions. Once again, moisture will be limited with only slight precipitation chances limited to the higher terrain of south-central AZ on Thursday. This means humidities will be fairly low and in fact overnight recovery will decline. This second system doesn't appear to be quite as windy as previously thought but conditions may still flirt with critical thresholds in some

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

areas. The system exits the region Friday for lighter winds and warmer temperatures.

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.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed this week.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Fire Weather Watch from Sunday morning through Sunday afternoon for AZZ132.

CA...None.

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DISCUSSION...MO/Hirsch

AVIATION...AJ

FIRE WEATHER...AJ

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709
FXUS66 KSGX 132027
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Area Forecast Discussion
National Weather Service San Diego CA
126 PM PDT Sat May 13 2017

.SYNOPSIS...

A trough of low pressure near the West Coast will bring a cooling trend through Monday. Deepening of the marine layer Sunday night into Monday will bring the chance of a few light rain showers along and west of the mountains. Continued cool into midweek, then warmer into next weekend as high pressure over the Pacific expands eastward toward the West Coast. Strong onshore flow will keep gusty southwest to west winds over the mountains and deserts at times through Wednesday. The marine layer and associated low clouds will decrease after Wednesday.

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

A patch of stratus was evident over far NW San Diego and southern Orange Counties at 1 PM PDT. It was mostly clear over the remainder of the CWA. Surface pressure gradients had stabilized at weak to moderate onshore at midday. Winds were mostly light.

Look for the marine stratus to return overnight along the coast, with a strong Catalina Eddy forecast to develop after Midnight. Southerly winds may be gusty at times along the coast through midday Sunday. Clearing may once again be limited over coastal areas as the marine layer deepens. Increasing onshore flow will keep inland areas cool with gusty winds across the mts/deserts.

A longwave trough will be deepening along the West Coast through Mon. This will continue a cool pattern over SoCal into the middle of next week as several shortwaves dive SE through the trough. The largest height-falls and associated cooling aloft is slated for Monday, when several models are indicating some light rain showers west of the mts. Low POPS are in the forecast through Mon night for light accumulations.

The onshore flow will deepen the marine layer into Wed along the coastal slopes and force gusty winds over the mts/deserts, with some areas of blowing dust possible, mainly evenings.

Global models show the breadth and depth of the trough peaking over the Rockies on Thu, before slowly lifting NE into the northern High Plains. A corresponding shift in the East Pacific ridge will increase heights/thickness over SoCal, while the marine layer thins

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

back toward the Coast for the latter half of next week.

Daytime temperatures inland will be below average through the middle of next week, possibly as much as 20 degrees F below average over the far inland valleys and mts on Mon. It should be noticeably warmer on Fri with highs forecast near average, further warming is possible into next weekend.

Looking beyond the current forecast period...The latest suite of 12Z global model solutions favor split flow developing over the EastPac after next week as the ridge shifts to higher latitudes and low pressure develops along 30N. This lessens the chance for any big warm-up for SoCal after next week.

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.AVIATION...

132018Z...Coast/Valleys...Other than a patch of BKN-SCT clouds 2000-3000 ft msl over southern Orange county and the Camp Pendleton area, expect FEW clouds 2000-3000 ft msl and P6SM vis to continue through 14/0300 UTC. 14/0300-1500 UTC, BKN stratus gradually re-developing, with breezy S to SE surface winds occurring by 14/0900 UTC. Expect bases around 1500-2000 ft msl, tops around 2500 ft msl and local vis 3-5 sm.

Mountains/Deserts...Mostly SKC with P6SM vis through Sunday morning.

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.MARINE...

A decently strong coastal eddy is likely to spin up late tonight into Sunday morning, with south to southeasterly winds sustained 10-15 kt with gusts to 20 kt over the inner waters. Meanwhile, the San Clemente Basin buoy is reporting seas of 11 feet and hi-res models now show northwest winds increasing to 15-20 kt with 25 kt gusts over the outer waters this afternoon and evening. Although winds and seas will decrease a little late tonight, northwest winds will strengthen again Sunday afternoon and continue moderate to occasionally strong through Wednesday as a series of troughs move across the region. A Small Craft Advisory has been issued for the outer waters effective this afternoon through late Sunday night.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...None.

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

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FXUS65 KPSR 132110
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
210 PM MST Sat May 13 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest bringing gradually cooler and occasionally breezy conditions through Wednesday. A warming trend is then expected through the end of next week as high pressure builds eastward from the Pacific.

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.DISCUSSION...

This afternoon's WV satellite imagery shows several elevated frontal boundaries pushing through the SW Conus ahead of a deeper negative height anomaly sprawled across the Pacific NW. With one shortwave lifting towards the northern Rockies, downstream H5 height falls have been maximized over the Great Basin with more subtle reductions through southern Arizona on the tail end of these frontal boundaries (3dm per 12Z KTWC sounding). Through the middle of next week, several similar shortwaves digging through a mean western Conus trough will result in much below average temperatures and frequently breezy conditions.

On Sunday, another vorticity maximum will swing into central California around the larger Western vortex. While local height falls will not be overwhelming, low level pressure falls through the Great Basin will induce an anomalously strong southerly LLJ into southern Arizona. Breezy conditions during the late afternoon combined with low humidity values will result in an elevated fire danger across portions of far SW Maricopa County. However, only a very small portion of the area could be briefly affected by critical fire weather conditions, so the watch area was cancelled. These breezy conditions will be most evident near ridge tops of southern Arizona as well as downwind of the San Diego mountains. Otherwise, temperature trends will continue downward with Sunday afternoon highs some 2F-5F cooler than today.

Models indicate this central California vorticity center will weaken (fill and become a more open wave) while migrating southeast Monday and Tuesday through northern Arizona. This will yield continued thickness/height decreases along with a return of the breezy conditions during the afternoon hours (primarily Monday). The trough axis will finally move through the area Tuesday with a reinforcing shot of cooler air. Remarkably, high temperatures will generally range 10F-15F below normal (2nd time this May we've experienced such pronounced anomalies).

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

One final intense low pressure system will translate through the Great Basin with jet energy and lower heights skirting the forecast area Wednesday and Thursday. Operational GFS/ECMWF have come into much better agreement with a trend towards a slightly weaker jet core and somewhat weaker sfc winds locally. Nevertheless, another period of breezy conditions is likely Wednesday afternoon. Although the models depict discernible moisture transport along an advancing frontal boundary Wednesday, there is no indication of any precipitation potential and PoPs remain near 0 percent. NAEFS ensemble suggests a Pacific ridge will build eastward late next week. This will result in a gradual warming trend though there is uncertainty on how rapidly heights increase, and somewhat below normal temperatures will still likely persist through Friday.

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.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
Occasional gusts (<25kts) will persist this afternoon with winds gradually veering to the west. Gusts will diminish this evening before switching back to the east early tomorrow morning. Slightly stronger winds are forecast for Sunday as a dry low pressure system approaches our area. There will be a period of gusty southerly winds on Sunday, much like today, before they gradually veer to our west. Only high clouds expected for Sunday with no other aviation concerns.

Southeast California/Southwest Arizona including KIPL and KBLH:
Relatively light winds across the TAF sites this afternoon although gusty westerly winds are possible at KIPL this evening. A southwesterly flow will develop on Sunday ahead of a dry low pressure system with gusty (20-30kts) afternoon and evening winds. Only high clouds across the area for Sunday with no other aviation concerns.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Tuesday through Saturday:
A series of weather disturbances will keep the districts much cooler than average (10-15 degrees below normal) for much of the week before a warming trend develops into the weekend. The greatest concern is for periods of gusty afternoon winds during the middle of the week. At this time, it appears Wednesday would be the breeziest day. With the cooler weather, minimum afternoon humidity values will generally only fall into a 10-20% range with a return to the more typical May single digits by the end of the week. Good overnight recovery during the middle of the week will become only fair by the weekend.

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May 15, 2017 Exceptional Event, Imperial County**Appendix A**

.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed through next week.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...MO/Hirsch

AVIATION...Wilson

FIRE WEATHER...MO

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FXUS65 KPSR 140350
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
850 PM MST Sat May 13 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest bringing gradually cooler and occasionally breezy conditions through Wednesday. A warming trend is then expected through the end of next week as high pressure builds eastward from the Pacific.

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.DISCUSSION...

Early this evening, a large area of low pressure was situated over the northwestern CONUS, primarily centered over the PAC Northwest. Dry southwest flow aloft ahead of the trof was present across much of the desert southwest including Arizona. IR imagery showed clear skies area-wide at 8 pm. Despite 500mb heights that earlier dropped off 40-50m, the boundary layer still remained warm and under full sunshine the central deserts climbed back into the 90s. Phoenix even reached a high of 99 - warmer than yesterday - likely due to increased breeziness in the afternoon that favored the south.

Typical afternoon breezes developed over the deserts, with many locales seeing gusts over 20kt but the winds have started to taper off and will continue to do so as the atmosphere decouples. For the rest of tonight expect genly clear skies, with a few high clouds spreading in from the west late. Winds will become light after midnight. Forecasts look to be in good shape and no updates are needed at this time.

.PREVIOUS DISCUSSION...

This afternoon's WV satellite imagery shows several elevated frontal boundaries pushing through the SW Conus ahead of a deeper negative height anomaly sprawled across the Pacific NW. With one shortwave lifting towards the northern Rockies, downstream H5 height falls have been maximized over the Great Basin with more subtle reductions through southern Arizona on the tail end of these frontal boundaries (3dm per 12Z KTCW sounding). Through the middle of next week, several similar shortwaves digging through a mean western Conus trough will result in much below average temperatures and frequently breezy conditions.

On Sunday, another vorticity maximum will swing into central California around the larger Western vortex. While local height falls will not be overwhelming, low level pressure falls through the Great Basin will induce an anomalously strong southerly LLJ into southern Arizona. Breezy conditions during the late afternoon combined with low humidity values will result in an elevated fire

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

danger across portions of far SW Maricopa County. However, only a very small portion of the area could be briefly affected by critical fire weather conditions, so the watch area was cancelled. These breezy conditions will be most evident near ridge tops of southern Arizona as well as downwind of the San Diego mountains. Otherwise, temperature trends will continue downward with Sunday afternoon highs some 2F-5F cooler than today.

Models indicate this central California vorticity center will weaken (fill and become a more open wave) while migrating southeast Monday and Tuesday through northern Arizona. This will yield continued thickness/height decreases along with a return of the breezy conditions during the afternoon hours (primarily Monday). The trough axis will finally move through the area Tuesday with a reinforcing shot of cooler air. Remarkably, high temperatures will generally range 10F-15F below normal (2nd time this May we've experienced such pronounced anomalies).

One final intense low pressure system will translate through the Great Basin with jet energy and lower heights skirting the forecast area Wednesday and Thursday. Operational GFS/ECMWF have come into much better agreement with a trend towards a slightly weaker jet core and somewhat weaker sfc winds locally. Nevertheless, another period of breezy conditions is likely Wednesday afternoon. Although the models depict discernible moisture transport along an advancing frontal boundary Wednesday, there is no indication of any precipitation potential and PoPs remain near 0 percent. NAEFS ensemble suggests a Pacific ridge will build eastward late next week. This will result in a gradual warming trend though there is uncertainty on how rapidly heights increase, and somewhat below normal temperatures will still likely persist through Friday.

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.AVIATION...

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

Upper troffing will persist across the northwest CONUS keeping dry southwest flow in place across the lower deserts through the weekend. We can expect more of the same conditions again on Sunday; as winds return to the southeast after midnight, they will again strengthen from the south during the late morning Sunday and then become breezy from the southwest by 20-22Z. Expect gusts to 25kt at times at the TAF sites by 21Z, continuing into the evening hours. Skies will be clear most of tonight and then some mainly high thin cirrus will spread into the Phoenix area during the morning on Sunday.

Southeast California/Southwest Arizona including KIPL and KBLH:

The only aviation concern will be wind over the next 24 hours or more as dry southwest flow aloft will remain in place through the weekend. West winds at KIPL will stay breezy past midnight, then decrease but there will be another round of gusty southwest winds

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

developing later Sunday afternoon with gusts over 25kt likely through the evening tomorrow. Winds at Blythe will follow similar patterns but will favor the south especially during the mid day hours on Sunday. Skies to be genly clear most of tonight with some high thin cirrus moving in during the day Sunday.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Tuesday through Saturday:

A series of weather disturbances will keep the districts much cooler than average (10-15 degrees below normal) for much of the week before a warming trend develops into the weekend. The greatest concern is for periods of gusty afternoon winds during the middle of the week. At this time, it appears Wednesday would be the breeziest day. With the cooler weather, minimum afternoon humidity values will generally only fall into a 10-20% range with a return to the more typical May single digits by the end of the week. Good overnight recovery during the middle of the week will become only fair by the weekend.

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.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed through next week.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...CB

PREVIOUS DISCUSSION...MO/Hirsch

AVIATION...CB

FIRE WEATHER...MO

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UNIVERSITY**

College of Ag

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FXUS65 KPSR 141022
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
322 AM MST Sun May 14 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest, bringing gradually cooler and occasionally breezy conditions through Wednesday. A frontal boundary will also bring a slight chance of showers and thunderstorms Thursday, particularly across the higher terrain north and east of Phoenix. A warming trend is then expected through the end of the week as high pressure builds eastward from the Pacific.

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.DISCUSSION...

Latest water vapor imagery and streamline analysis show a broad trough across the Pacific Northwest, which is showing signs of becoming more disorganized. Further south along the California coast, a vort max has fractured from the main Western vortex. Latest model guidance continues to indicate further strengthening of the corresponding short-wave trough as it moves into southern California overnight. Ahead of this system, an anomalously strong southerly low-level jet will develop this afternoon across Arizona. The breezy conditions combined with low RHs across southern Arizona will result in an elevated fire risk across localized areas of southern Maricopa and Pinal Counties. There is also a threat of patchy blowing dust across portions of the area. Meanwhile, gradual height/thickness decreases will yield temperatures generally 2 to 5 degrees cooler than those observed yesterday. Continued cooling and afternoon breeziness will continue Monday as the trough slides eastward.

Latest GFS/ECMWF depict another vort max rotating through the western and southern flanks of the trough, which will reinvigorate the system as it moves through the region Tuesday. Main impact across the Desert Southwest will be a reinforcing shot of cool air. Latest forecast is weighted heavily towards the National Blend, which suggests high temperatures will struggle to reach the lower 80s (approximately 12 to 18 degrees below normal).

One final low pressure system will drop out of the Great Basin and towards the region Wednesday. Operational GFS/ECMWF have come into much better agreement, with a trend towards a less compact system and subsequently weaker winds. However, nearly all models show improved moisture transport ahead of an advancing frontal boundary Wednesday. Both the global models and CAMs now indicate some potential for precipitation moving southward through the higher terrain, mainly north and east of Phoenix. Convective

- **May 15, 2017 Exceptional Event, Imperial County**
parameters also suggest some threat for lightning and this has been introduced into the forecast.

Latest operational models hint at the trough being somewhat slower to eject eastward than previous runs. This is also corroborated by the latest GEFS/NAEFS and it certainly wouldn't be out of the realm of possibility to see the trough linger into Friday, given recent model trends and persistence. A gradual warming trend is likely late in the week and into next weekend as a Pacific ridge builds eastward, though temperatures will likely not exceed the second tercile.

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.AVIATION...

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

Upper troffing will persist across the northwest CONUS keeping dry southwest flow in place across the lower deserts through the weekend. We can expect more of the same conditions again on Sunday; as winds return to the southeast after midnight, they will again strengthen from the south during the late morning Sunday and then become breezy from the southwest by 20-22Z. Expect gusts to 25kt at times at the TAF sites by 21Z, continuing into the evening hours. Skies will be clear most of tonight and then some mainly high thin cirrus will spread into the Phoenix area during the morning on Sunday.

Southeast California/Southwest Arizona including KIPL and KBLH:

The only aviation concern will be wind over the next 24 hours or more as dry southwest flow aloft will remain in place through the weekend. West winds at KIPL will stay breezy past midnight, then decrease but there will be another round of gusty southwest winds developing later Sunday afternoon with gusts over 25kt likely through the evening tomorrow. Winds at Blythe will follow similar patterns but will favor the south especially during the mid day hours on Sunday. Skies to be genly clear most of tonight with some high thin cirrus moving in during the day Sunday.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday:

A series of weather disturbances will keep the districts much cooler than average (10-15 degrees below normal) for much of the week before a warming trend develops into the weekend. The greatest concern is for periods of gusty afternoon winds during the middle of the week. At this time, it appears Wednesday would be the breeziest day. With the cooler weather, minimum afternoon humidity values will generally only fall into a 10-20% range with a return to the more typical May single digits by the end of the week. Good overnight

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

recovery during the middle of the week will become only fair by the weekend.

&&

.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

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DISCUSSION...Hirsch

AVIATION...CB

FIRE WEATHER...MO

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177
FXUS66 KSGX 141033
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
333 AM PDT Sun May 14 2017

.SYNOPSIS...

A trough of low pressure near the West Coast will bring a cooling trend through Monday. Deepening of the marine layer Sunday night into Monday will bring the chance of a few light rain showers along and west of the mountains. Continued cool into midweek, then warmer into next weekend as high pressure over the Pacific expands eastward toward the West Coast. Strong onshore flow will keep gusty southwest to west winds over the mountains and deserts at times through Wednesday. The marine layer and associated low clouds will decrease after Wednesday.

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

A low pressure system centered along the northern California coast will move into central California on Monday...into Southern California Monday night and into Arizona Tuesday. A second low pressure system over the Pacific Northwest on Tuesday...will move slowly southeastward through the Great Basin on Wednesday and Thursday.

Stronger onshore flow will persist into Wednesday with periods of gusty southwest to west winds in the mountains and deserts through Monday...and west to northwest for Tuesday and Wednesday with strongest winds from late afternoon through late evening each day.

Early this morning the marine layer is around 3500 feet deep...but with a very weak inversion with stratus coverage quite patchy. The marine layer will deepen to around 5000 to 5500 feet for late tonight into Monday...then remain deep through Tuesday into early Wednesday. Higher resolution models show the potential for some light precipitation at times from the coast to the coastal mountain slopes from late tonight into Tuesday morning. Much of the time should be dry and total amounts should be light.

High temperatures will continue to cooling into Monday with slow warming for Tuesday and Wednesday. For Thursday into next weekend...high pressure aloft off the West Coast will strengthen. This will bring a warming trend for Thursday through next weekend with high temperatures returning to near average on Saturday and a few degrees above average on Sunday. The marine layer will become shallower with night and morning coastal low clouds and fog

May 15, 2017 Exceptional Event, Imperial County

not extending as far inland.

&&

.AVIATION...

140945Z...Coast/Valleys...Patchy stratus with bases near 3000 ft mainly in the San Diego and Riverside county valleys this morning. Elsewhere skies will remain mostly clear, though an occasional CIG 2500-3500 ft MSL is possible at KSAN and KCRQ 12-16Z. SCT-BKN stratus becoming more widespread west of the mountains this evening with bases 2500-3500 ft MSL.

Mountains/Deserts...SCT clouds AOA 20000 ft MSL and unrestricted vis through Monday morning. SW-W winds with sfc gusts to 40 kt developing this afternoon through the mountains and along the desert slopes. Associated UDDFS and pockets of LLWS possible over and NE/E of the mountains. Winds gradually weakening late tonight into Monday morning.

&&

.MARINE...

Northwest winds will strengthen again this afternoon with gusts to 25 kt. Combined seas near 10 ft and steep waves are possible during this time as well. Winds will weaken tonight, then strengthen again for late Monday through Wednesday as a series of troughs move across the region. A Small Craft Advisory remains in effect for the outer coastal waters through tonight.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...None.

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

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PUBLIC...17

AVIATION/MARINE...SS

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521
FXUS65 KPSR 141541
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
840 AM MST Sun May 14 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest bringing gradually cooler and occasionally breezy conditions through Wednesday. A frontal boundary will also bring a slight chance of showers and thunderstorms Thursday, particularly across the higher terrain north and east of Phoenix. A warming trend is then expected through the end of the week as high pressure builds eastward from the Pacific.

&&

.DISCUSSION...

Two distinct PV anomalies were pivoting off the central California coast forcing an enhanced subtropical jet and upper level moisture slug into the Southwest. While the lead wave was already lifting northeast towards the Sierra chain, the trailing secondary wave and the stronger jet streak will be the primary weather feature for the local forecast area over the next 3 days.

Objective analysis indicates lower sfc pressures consolidating over southern NV this morning and further strengthening should invigorate southerly winds in the lower troposphere later this afternoon.

However, the timing of this PV anomaly and height falls into Arizona appears delayed slightly versus previous model output; and subsequently, winds aloft mixed to the surface should be somewhat less than previously anticipated. In addition, thicker cloud cover would also tend to inhibit more effective deep mixing. Nevertheless, gusty S/SW winds late this afternoon and evening will still lead to an enhanced fire danger.

Speaking of cloud cover, the cirrus stream emanating from the East Pacific is rather thick with the presumed back edge of the ascent still off the San Diego coast. Thus while some clearing would be expected by late afternoon, the impact of reduced insolation may cause reduced or absent superadiabatic sfc lapse rates. Therefore, have locally trimmed 1F-3F from afternoon forecast highs and would not be surprised if the impact could be even another degree or two.

&&

.PREVIOUS DISCUSSION...

/512 AM MST Sun May 14 2017/

Latest model guidance continues to indicate further strengthening of the corresponding shortwave trough as it moves into southern California overnight. Ahead of this system, an anomalously strong

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

southerly low-level jet will develop this afternoon across Arizona. The breezy conditions combined with low RHs across southern Arizona will result in an elevated fire risk across localized areas of southern Maricopa and Pinal Counties. There is also a threat of patchy blowing dust across portions of the area. Continued cooling and afternoon breeziness will continue Monday as the trough slides eastward.

Latest GFS/ECMWF depict another vort max rotating through the western and southern flanks of the trough, which will reinvigorate the system as it moves through the region Tuesday. Main impact across the Desert Southwest will be a reinforcing shot of cool air. Latest forecast is weighted heavily towards the National

Blend, which suggests high temperatures will struggle to reach the lower 80s (approximately 12 to 18 degrees below normal).

One final low pressure system will drop out of the Great Basin and towards the region Wednesday. Operational GFS/ECMWF have come into much better agreement, with a trend towards a less compact system and subsequently weaker winds. However, nearly all models show improved moisture transport ahead of an advancing frontal boundary Wednesday. Both the global models and CAMs now indicate some potential for precipitation moving southward through the higher terrain, mainly north and east of Phoenix. Convective parameters also suggest some threat for lightning and this has been introduced into the forecast.

Latest operational models hint at the trough being somewhat slower to eject eastward than previous runs. This is also corroborated by the latest GEFS/NAEFS and it certainly wouldn't be out of the realm of possibility to see the trough linger into Friday, given recent model trends and persistence. A gradual warming trend is likely late in the week and into next weekend as a Pacific ridge builds eastward, though temperatures will likely not exceed the second tercile.

&&

.AVIATION...

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

Upper trough centered along west Coast providing strong southwesterly flow in the mid and upper troposphere. Lower troposphere winds (including the surface) will strengthen this morning with predominantly southerly winds by midday with gusts of 15-20 kts before southwesterly directions slowly develop during the afternoon along with gusts to 25 kts after 21Z (isolated brief gusts to 30 kts possible). Some localized patchy blowing dust possible over Pinal County could possibly affect KIWA, but expect prevailing vsbys to remain above 6SM. Westerly winds this evening slowly weaken and trend toward southeasterly after midnight. No significant clouds - just cirrus.

Southeast California/Southwest Arizona including KIPL and KBLH:

Upper trough centered along west Coast providing strong

May 15, 2017 Exceptional Event, Imperial County

southwesterly flow in the mid and upper troposphere. Lower troposphere winds (including the surface) will strengthen this morning with predominantly southerly winds by midday over southwest AZ and the Lower Colorado River Valley with gusts of 15-20 kts before southwesterly directions slowly develop during the afternoon along with gusts to 25 kts after 21Z (isolated brief gusts to 30 kts possible). West of the Lower Colorado River Valley (including the Imperial Valley), gusty southwesterly winds will be slower to develop but will last longer through the evening. No significant clouds - just cirrus.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday:

The coolest day of the week looks to be Tuesday with highs in the lower 80s at most lower desert locations. The last low pressure trough in the series moves through on Wednesday and Thursday. This will lead to renewed breezy to windy conditions. There will also be a slight chance of showers and thunderstorms over the higher terrain of south-central Arizona. High pressure begins to slowly build in from the west late in the week with highs climbing back into the 90s. Despite the below normal temperatures, minimum humidities struggle to climb above 15-20% at most lower elevations before dropping into the single digits late in the week. Overnight recovery starts off in the Good range but steadily declines during the latter half of the week.

&&

.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...MO/Hirsch

AVIATION...AJ

FIRE WEATHER...AJ

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324
FXUS66 KSGX 142028
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
128 PM PDT Sun May 14 2017

.SYNOPSIS...

A deepening low pressure trough along the West Coast will bring a cooling trend through Monday. Deepening of the marine layer tonight into Monday will bring the chance for light rain showers along and west of the mountains. Continued cool into midweek, then warmer into next weekend as high pressure over the Pacific expands eastward toward the West Coast. Strong onshore flow will keep gusty southwest to west winds over the mountains and deserts at times through Wednesday. The marine layer and associated low clouds will decrease after Wednesday.

&&

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

Marine stratus had mostly mixed out by midday, and high clouds had slid off to the east leaving skies mostly sunny across the forecast area. Surface pressure gradients continued to accelerate onshore KSAN to NV at 9 MBS by 1 PM PDT. Meanwhile, onshore gradients were holding around 6 MBS to the lower deserts. Gusty southerly winds have been reported along the coast, while gusty SW winds were reported over the mts/deserts, but peak wind gusts have been mostly below 30 MPH through midday.

Expect marine stratus will develop rapidly later today/this evening and spread inland to the coastal slopes tonight with some light precip breaking out along and west of the mts. Some roads may be wet for the morning commute even though amounts are expected to remain scattered and light.

A longwave trough, over the West, will drift slowly eastward this week. A shortwave moving through the trough will pass over SoCal Mon night, deepening the marine layer and likely sparking some light precip at times with the greatest chance Mon night. Another, stronger wave will follow, but dig into the Great Basin. This will maintain the onshore flow and the marine layer over SoCal, but is less likely to produce showers this far south.

After midweek, the trough lifts NE into the northern High Plains, allowing heights/thickness to rise across the West. This will decrease the marine layer and bring warmer weather for the latter half of the week. More weak troughing is forecast to develop across the SW next week which should keep the weather seasonal with periods

May 15, 2017 Exceptional Event, Imperial County

of marine clouds/fog over the coastal basin.

Precipitation...It is looking increasingly likely that some scattered, light rain will fall along the coastal slopes of the mountains, westward tonight through Tuesday morning. This will be initially be driven by the deepening marine layer and orographics, then more traditional synoptic forcing later Mon through Tue morning. Amounts will be enhanced as this layer is orographically lifted along the coastal mtn slopes. The latest hires guidance suggests amounts of around one-half inch are possible there, with lesser amounts farther south and west toward the coast. The deserts should stay dry.

Temperatures...Expect daytime highs to run from around 15, to locally 25 degrees F below average inland through Wednesday. Along the coast, expect highs to run around 5 degrees below average. A warming trend will begin on Thursday with temps rising to around average or a bit higher Fri into next weekend.

Winds...Locally strong and gusty S-SW winds are likely through Wednesday over the mts/deserts. Strongest winds are expected late Tue night/Wed morning. The 12Z local WRFEMS implies gusts could reach 60 MPH in wind prone areas of the desert slopes. If these winds develop, some blowing dust is likely in the deserts.

&&

.AVIATION...

141957Z...Mostly P6SM vis all areas with FEW-SCT clouds 2000-3000 ft msl over the coast, valleys and portions of the coastal slopes with mainly SKC elsewhere. 15/0000-1600 UTC, stratus increasing over and west of the mountains and likely reaching into the mountain passes, with mountain obscuration of coastal slopes likely and isol-sct drizzle/light showers. Bases of stratus 2000-3000 ft msl and tops 4500-5000 ft msl, with local vis 3-5 sm in the foothills. In the deserts and desert slopes, P6SM vis should continue with FEW-SCT clouds AOA 20000 ft msl.

After 2100 UTC, SW to W winds 15-30 kt with gusts to 40 kt developing along mountain ridges, desert slopes, through passes/canyons and into wind-favored adjacent desert areas. This will result in mod-stg UDDFS and pockets of LLWS over and NE or E of the mountains. Winds gradually weakening late tonight into Monday morning.

&&

.MARINE...

Northwest winds will strengthen again this afternoon with gusts to 25 kt over the outer waters. Combined seas near 10 ft and steep waves are possible during this time as well. Winds will weaken late tonight, then strengthen again for Monday afternoon and evening. A Small Craft Advisory remains in effect for the outer coastal waters and has been extended through late Monday night. Another round of

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

strong northwest winds is possible late Wednesday as another trough moves through.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...None.

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

&&

\$\$

PUBLIC...JAD

AVIATION/MARINE...Harrison

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Area Forecast Discussion
National Weather Service Phoenix AZ
155 PM MST Sun May 14 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest bringing gradually cooler and occasionally breezy conditions through Wednesday. A frontal boundary will also bring a slight chance of showers and thunderstorms Thursday, particularly across the higher terrain north and east of Phoenix. A warming trend will begin at the end of the week as high pressure builds eastward from the Pacific.

&&

.DISCUSSION...

Two distinct PV anomalies were pivoting off the central California coast forcing an enhanced subtropical jet and upper level moisture slug into the Southwest this afternoon. While the lead wave was already lifting northeast into the Rockies, the trailing secondary wave and the stronger jet streak diving towards the SW Conus will be the primary feature affecting the local forecast area over the next 3 days. Thereafter, a kicker system will fill into the void left by this initial wave ejecting into the central plains reinforcing cooler and unsettled weather beyond the midweek period.

In the short term, objective analysis indicates lowering sfc pressures continuing to consolidate over central/southern NV which has partially invigorated gusty southerly winds in the lower troposphere. However, the delayed timing of this trailing PV anomaly and height falls into Arizona appears to have slightly muted potential wind gusts (not to mention the impact of thicker cloud cover today on mixing depths). On the other hand, the back edge of cirrus cover will clear central Arizona by late afternoon, so a heightened fire danger still exists in addition to the potential for local blowing dust.

Height falls aloft will become more pronounced Monday as the H5 cold core translates into SE California by the evening hours. Pressure falls will be maximized over the four corners and winds during the late afternoon and evening will likely be similar to speeds experienced today (sans communities in the lee of the San Diego mountains who will see far stronger winds this evening). This may especially be the case along a subtle H8-H7 frontal boundary cutting through central Arizona. This will again lead to a locally elevated fire danger for a few hours. Otherwise, high temperatures Monday and Tuesday will fall another 4F-8F cooler than readings today.

One final low pressure system will drop out of the Great Basin and

May 15, 2017 Exceptional Event: Imperial County

towards the region Wednesday and Thursday. The operational GFS/ECMWF have come into much better agreement with a trend towards a less compact system and subsequently weaker winds. However, nearly all models show improved moisture transport ahead of an advancing frontal boundary Wednesday. Both the global models and CAMs now indicate some potential for precipitation moving southward through the higher terrain, mainly north and east of Phoenix on Thursday. Convective parameters also suggest some threat for lightning, and the greatest concern is thunderstorms Thursday with little to no rainfall leading to scattered fire starts through forested high terrain.

Latest operational models (mostly the ECMWF) hint at several lobes of vorticity rotating within the larger trough causing a slower eastward ejection. This ECMWF solution is partially corroborated by the latest GEFS/NAEFS though not with an overwhelming majority. But, it certainly wouldn't be out of the realm of possibility to see the trough linger into Friday given recent model trends and persistence. A gradual warming trend is likely very late in the week and through the weekend as a Pacific ridge builds eastward though temperatures will likely only reach back towards the seasonal average.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:
Gusty southwesterly winds will continue into the early evening before tapering off. High BKN clouds are also expected to clear this evening while winds switch back to easterly late this evening/tonight. Looks like we will again have a period of gusty southerly winds (<20kts) late Monday morning/early afternoon before switching to the SW. Skies will be mostly clear tomorrow with a FEW clouds (6-9kft) moving in during the evening.

Southeast California/Southwest Arizona including KIPL and KBLH:
Gusty winds will develop late this afternoon and persist through the evening before tapering off early tomorrow morning. Outside of a few high clouds, skies will remain clear. The southwest to westerly flow will persist through Monday with another round of afternoon/evening gusty winds.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

Temperatures will still be in the mid 80s on Wednesday for the lower deserts with afternoon RH minimums between 15-25%. Wednesday afternoon could also be breezy (sustained 15-20kts) as another trough approaches our area from the north. A chance of showers, mainly confined to Gila county and northward, begins Wednesday night and lasts through early Thursday afternoon although amounts will be rather light over our area (<0.05 inches). The lower deserts will

May-15, 2017 Exceptional Event, Imperial County**Appendix A**

once again reach the 90s by either Friday or Saturday with afternoon RH dropping into the single digits. Overnight recoveries early next weekend may only range from 25-35%.

&&

.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...MO/Hirsch

AVIATION...Wilson

FIRE WEATHER...Wilson

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230
FXUS65 KPSR 150356
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
855 PM MST Sun May 14 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest bringing gradually cooler and occasionally breezy conditions through Wednesday. A frontal boundary will also bring a slight chance of showers and thunderstorms Thursday, particularly across the higher terrain north and east of Phoenix. A warming trend will begin at the end of the week as high pressure builds eastward from the Pacific.

&&

.DISCUSSION...

Early this evening, another Pacific upper level low pressure trof could be seen taking shape along the northern CA coast; it was evident in the 00z plot data as well as satellite imagery. Dry southwest flow aloft was in place ahead of the trof and over the deserts of far SE California as well as southern AZ. Variable amounts of mainly high cirrus were spreading through the flow and across central AZ per the 8pm IR imagery. Low/mid level gradients have tightened ahead of the Pacific trof, and this resulted in breezy southwest to west winds late this afternoon and evening over the deserts; mainly locales reported gusts in excess of 25 mph and speeds over 30 mph were present across the favored areas of southwestern Imperial County. There will be little change in the pattern across the area for the rest of tonight as the dry southwest flow will persist ahead of the approaching trof. Winds should continue to taper off overnight but will remain locally breezy across portions of far SE CA. Current forecasts are in good shape and no updates are needed.

.PREVIOUS DISCUSSION...

Two distinct PV anomalies were pivoting off the central California coast forcing an enhanced subtropical jet and upper level moisture slug into the Southwest this afternoon. While the lead wave was already lifting northeast into the Rockies, the trailing secondary wave and the stronger jet streak diving towards the SW Conus will be the primary feature affecting the local forecast area over the next 3 days. Thereafter, a kicker system will fill into the void left by this initial wave ejecting into the central plains reinforcing cooler and unsettled weather beyond the midweek period.

In the short term, objective analysis indicates lowering sfc pressures continuing to consolidate over central/southern NV which has partially invigorated gusty southerly winds in the lower troposphere. However, the delayed timing of this trailing PV anomaly

May 15, 2017 Exceptional Event, Imperial County

and height falls into Arizona appears to have slightly muted potential wind gusts (not to mention the impact of thicker cloud cover today on mixing depths). On the other hand, the back edge of cirrus cover will clear central Arizona by late afternoon, so a heightened fire danger still exists in addition to the potential for local blowing dust.

Height falls aloft will become more pronounced Monday as the H5 cold core translates into SE California by the evening hours. Pressure falls will be maximized over the four corners and winds during the late afternoon and evening will likely be similar to speeds experienced today (sans communities in the lee of the San Diego mountains who will see far stronger winds this evening). This may especially be the case along a subtle H8-H7 frontal boundary cutting through central Arizona. This will again lead to a locally elevated fire danger for a few hours. Otherwise, high temperatures Monday and Tuesday will fall another 4F-8F cooler than readings today.

One final low pressure system will drop out of the Great Basin and towards the region Wednesday and Thursday. The operational GFS/ECMWF have come into much better agreement with a trend towards a less compact system and subsequently weaker winds. However, nearly all models show improved moisture transport ahead of an advancing frontal boundary Wednesday. Both the global models and CAMs now indicate some potential for precipitation moving southward through the higher terrain, mainly north and east of Phoenix on Thursday. Convective parameters also suggest some threat for lightning, and the greatest concern is thunderstorms Thursday with little to no rainfall leading to scattered fire starts through forested high terrain.

Latest operational models (mostly the ECMWF) hint at several lobes of vorticity rotating within the larger trough causing a slower eastward ejection. This ECMWF solution is partially corroborated by the latest GFS/NAEFS though not with an overwhelming majority. But, it certainly wouldn't be out of the realm of possibility to see the trough linger into Friday given recent model trends and persistence. A gradual warming trend is likely very late in the week and through the weekend as a Pacific ridge builds eastward though temperatures will likely only reach back towards the seasonal average.

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.AVIATION...

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

Weather pattern has become rather predictable and persistent as a series of low pressure trofs to our west will keep dry southwest flow in place across the greater Phoenix area, and lead to continued episodes of breezy southwest to west winds at the terminals during the afternoon and evening hours. West winds will gradually taper off and after midnight will return to the southeast mostly less than 10kt. Again expect several hours of gusty south wind Monday midday ahead of the next advancing trof with gusts over 20kt likely. Winds

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

then will shift to the southwest/west after 21z with the occasional gust over 25kt expected at the TAF sites. Winds to stay breezy into the middle of the evening. Mid high cloud decks to thin and shift east after midnight with skies genly clear Monday.

Southeast California/Southwest Arizona including KIPL and KBLH:

An approaching upper trof will keep breezy south to southwest winds in place over the area tonight through Monday with winds to favor the southwest at KIPL and the south at KBLH. Although winds will taper off to mostly less than 15kt after midnight tonight, they will strengthen again by early afternoon on Monday with gusts over 25kt likely. Breezy conditions to persist well into the evening hours

tomorrow. Skies to be mostly clear next 24 hours. Do not expect any blowing dust...at least not enough to cause sharply restricted visibilities...but it cannot be completely ruled out. No mention will be made in the TAFs at this time.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

Temperatures will still be in the mid 80s on Wednesday for the lower deserts with afternoon RH minimums between 15-25%. Wednesday afternoon could also be breezy (sustained 15-20kts) as another trough approaches our area from the north. A chance of showers, mainly confined to Gila county and northward, begins Wednesday night and lasts through early Thursday afternoon although amounts will be rather light over our area (<0.05 inches). The lower deserts will once again reach the 90s by either Friday or Saturday with afternoon RH dropping into the single digits. Overnight recoveries early next weekend may only range from 25-35%.

&&

.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...CB

PREVIOUS DISCUSSION...MO/Hirsch

126
FXUS66 KSGX 151104
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
404 AM PDT Mon May 15 2017

.SYNOPSIS...

trough of low pressure over California today will move into Arizona on Tuesday bring more cooling today...occasional light showers along and west of the mountains through early Tuesday...and periods of strong gusty west winds in the mountains and deserts into Wednesday. High pressure off the West Coast will bring slow warming for Tuesday and Wednesday with greater warming for Thursday into next weekend. The marine layer will become shallower the latter part of next week into next weekend.

&&

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

Early this morning...water vapor imagery shows upper level low pressure centered near Point Conception. This low pressure system will move inland across Southern California today and into Arizona Tuesday. The marine layer has deepened to around 6000 feet with satellite imagery showing greatest stratus coverage on the coastal mountain slopes with patchier coverage towards the coast and over the coastal waters. Radars show a few light showers from the coastal mountain slopes westward to the inner coastal waters with greatest coverage at 345 am along the coastal slopes of the San Gabriel Mountains in Los Angeles County. Measurable amounts have been quite limited so far...0.02 at Crestline...0.01 at Lake San Marcos...and a trace at Fullerton. Occasional light showers will continue along and west of the mountains through early Tuesday with greatest coverage during the night and morning hours with less this afternoon.

The trough of low pressure will also bring stronger onshore flow with periods of strong gusty west winds in the mountains and deserts into Wednesday with strongest winds Tuesday night.

Today is expected to be the coolest day with slow warming for Tuesday and Wednesday. The marine layer will remain quite deep into Wednesday with night and morning low clouds extending onto the coastal mountain slopes. The marine layer will be shallower the latter half of the week through next weekend.

A low pressure system moving from the Pacific Northwest into Utah on Wednesday will maintain onshore with the lower level flow becoming weakly offshore for inland areas on Thursday and Friday.

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

High pressure aloft off the West Coast will bring greater warming for Thursday into next weekend with high temperatures returning to near average on Friday and a little above average next weekend.

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.AVIATION...

151000Z...Coast, Valleys, and Coastal Mountain Slopes, low clouds will continue with bases near 3000-4000 feet msl and tops near 6000 feet msl. Locally reduced vis between those elevations. Some breaks in the cloud deck and also isolated light showers or drizzle. Some clearing between 18Z and 24Z, but with some lingering cigs at around 3000 feet msl. A similar cloud coverage and extent expected after 02Z this evening and overnight. Mostly clear skies eastern mountains and deserts today and tonight. Occasionally gusty winds through mountain passes and on desert slopes.

&&

.MARINE...

Northwest winds will continue with gusts to 25 kt in the outer coastal waters through tonight. A Small Craft Advisory remains in effect through tonight for the winds and choppy conditions. These winds and choppy conditions are expected again Tuesday and Wednesday evenings. No additional hazardous marine weather is expected after Wednesday night.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 6 PM Tuesday to 8 AM PDT Wednesday 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.

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

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PUBLIC...17

AVIATION/MARINE...MM

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213
FXUS66 KSGX 151541
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
841 AM PDT Mon May 15 2017

.SYNOPSIS...

A trough of low pressure over California today will move into Arizona on Tuesday bring more cooling today, mostly cloudy skies and scattered light showers along and west of the mountains through early Tuesday, and periods of strong gusty west winds in the mountains and deserts into Wednesday. High pressure off the West Coast will bring slow warming for Tuesday and Wednesday with greater warming for Thursday into next weekend. The marine layer will become shallower the latter part of this week into next weekend with night and morning clouds and fog mainly near the coast.

&&

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

Scattered light showers are moving over and west of the mountains this morning, according to radar imagery. Precipitation amounts have been fairly light, with a few reports of 0.01-0.03 inches in San Diego and Orange counties (with a peak amount of 0.06 inch in Laguna Hills). Heaviest amounts have been in the San Bernardino county mountains near the Lytle Creek area, where 0.04-0.28 inch amounts occurred. On water vapor satellite imagery, a trough and associated vort max can be seen moving into extreme Southwestern California from the west. The 12Z Miramar sounding shows a much deeper marine layer, with an inversion up to about 6000 feet. The trough will swing down through the region through Tuesday morning, resulting in a continued deep marine layer, mostly cloudy skies and scattered light showers over and west of the mountains, and much cooler conditions (highs down to 15-25 degrees below normal for inland areas and about 5 degrees below normal at the coast). Locally strong and gusty west winds exist in the desert slopes and passes, with White Water (in the San Geronio Pass) gusting to 57 mph currently. Onshore pressure gradients are strong at the moment, with the San Diego to Las Vegas showing a gradient of 10.4 mb. Winds should diminish a little later this morning into the afternoon before picking up again tonight into early Tuesday as another vort max rotates around the low and into our region, with locally strong wind gusts in those same areas reaching 50-60 mph. The vort max will also serve to bring an increase in shower activity this evening into early Tuesday morning. The snow level looks to be at around 5000 feet this morning and will increase to around 6500 feet later today and then down to 6000 feet tonight. A

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

trace of snow is possible above 5000 feet. Total precipitation amounts should be only a few hundredths of an inch to a tenth of an inch (locally up to 0.20 inches) in the coast and valleys, with highest amounts in San Diego county. Meanwhile, the mountains could get 0.1-0.4 inches. The deserts should see mostly dry conditions with maybe a trace of rain.

By Tuesday afternoon, all shower activity should have dissipated, but clouds over and west of the mountains may not clear much. Nevertheless, the trough by that time will be to the east and we'll be under rising 500 mb heights in northwest flow aloft, which should allow for very slight warming. However, it'll still be 10-20 degrees below normal inland and a few degrees below normal at the coast.

The marine layer will remain deep on Wednesday, but despite a cold low pressure system moving by to our northeast, 500 mb heights over us will continue to rise, so expect more warming to take place. Also, hi-res models indicate better clearing of clouds taking place that afternoon. However, that low-pressure system will bring stronger northwest to west winds aloft which, in addition to strong onshore pressure gradients, will create strong and gusty winds (gusting 45-55 mph and locally 65 mph) in the mountain ridges/desert slopes/passes and wind favored adjacent desert areas Tuesday night through early Wednesday morning, so a Wind Advisory is in effect for that time in those areas.

Flow turns offshore on Thursday, bringing clearer skies and additional warming. Ridging will build in from the west beginning Friday and continuing through the weekend, creating further warming. By Friday, highs reach back to around normal, and then above normal on Saturday. The marine layer will also become much shallower, with night and morning stratus/fog mainly near the coast.

&&

.AVIATION...

151500Z...Coast, Valleys, and Coastal Mountain Slopes, sct-bkn clouds with bases 3000-4000 feet msl and tops near 6000 feet msl. Obscuration will occur where clouds intersect terrain on the coastal mountain slopes. A few showers will continue from the coast to the coastal mountain slopes through early Tue morning. Where the showers hit, brief MVFR will occur. However, VFR will be the rule. Mostly clear skies will prevail across the desert mountain slopes and the deserts through Tue. Occasionally gusty winds through mountain passes and on desert slopes.

&&

.MARINE...

Northwest winds will continue with gusts to 25 kt in the outer coastal waters through tonight. A Small Craft Advisory remains in effect through tonight for the winds and choppy conditions. These

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

winds and choppy conditions are expected again Tuesday and Wednesday evenings. No additional hazardous marine weather is expected after Wednesday night.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 6 PM Tuesday to 8 AM PDT Wednesday 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.

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

&&

\$\$

PUBLIC...Harrison

AVIATION/MARINE...Gregoria

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Facebook

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250
FXUS65 KPSR 151544
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
844 AM MST Mon May 15 2017

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

&&

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest this week bringing cooler temperatures, breezy conditions, and a slight chance of showers and thunderstorms to the higher terrain. The coolest day of the week will be Tuesday with many desert locations in the 70s. A warming trend will begin during the latter half of the week with highs next weekend approaching the 100 degree mark on the deserts.

&&

.DISCUSSION...

An upper level trough is currently moving into the west coast with a PV anomaly centered over Southern California. PWAT values with this low pressure system are only around 0.5 inches which is certainly limiting precipitation development over California but a few light showers are being observed over orographically favored areas like the Southern Sierra. On the other hand, a high amplitude ridge just downstream is bringing anomalously warm weather to the plains. For us, we are already feeling the effects of the upper level trough as it continues to march eastward advecting cooler air into our area. Analysis of the 12Z Tucson sounding shows 850 mb temperatures have cooled approximately 3.5F over the last 24 hours while surface temperatures in the Phoenix metro are running 2-6F cooler than this time yesterday.

Cooler air will continue to spill into our region for the next 24 hours which will limit high temperatures to the mid-80s today for the Phoenix metro while areas closer to the cooler upper level low, specifically the deserts of SE California, will see highs in the upper 70s. This is anywhere from 10 degrees (Phoenix area) to roughly 20 degrees (SE California) below normal for this time of year. The mild weather will continue through most of the week before ridging returns this weekend.

&&

.PREVIOUS DISCUSSION...

Today and Tuesday:

Water vapor shows a large upper trough affecting portions western

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

North America and the NE Pacific. The southern portion of that trough is deepening and becoming more neutrally tilted as it swings into southern California. Models continue to show it becoming a closed low this morning and tracking eastward through southern CA and AZ today and Tuesday. A vort max at the bottom of the trough this morning will track through SE CA and western AZ today. However, there isn't much moisture to work with and thus no PoPs for our area through tonight. However, there will be cool advection for lower high temperatures - especially noticeable over SE CA and SW AZ with highs in the 70s. Breezy to locally windy conditions continue as well (most noticeably in the afternoon and evening). The trough axis with this system moves across AZ on Tuesday. DivQ fields show some dynamical forcing associated with the main vort max. This, plus cooling aloft and some subtle moist advection will lead to a slight chance of showers and thunderstorms over the higher terrain of south-central Arizona (mainly in the afternoon). PoPs drop off Tuesday night with the axis shifting into New Mexico. There will be additional cooling for south-central AZ with desert highs in the 70s. Overall, Tuesday looks to be the coolest day this week. Breezy conditions continue.

Wednesday through Friday:

A deeper and colder upper low (within the broad upper trough - now shifted further east) quickly follows later Wednesday with a cold front and dynamical forcing from a vort lobe. The upper low center settles near the UT/CO border Thursday into Friday with vort lobes rotating around it before it begins to shift northeastward Friday afternoon. However, the brunt of all of this stays north of our forecast area. Plus, there isn't much moisture to work with. But with the previous system having had something of a pre-conditioning effect to cool the airmass, the lifting mechanisms we do have will be a little bit more effective - though not much. Still only looking at slight chance PoPs for south-central AZ (mainly higher terrain) Wednesday night through Thursday night. We won't see additional cooling with this system since the associated cold front struggles to sag southward. In fact, temps will be warmer than on Tuesday.

Saturday and Sunday:

The upper trough continues to shift eastward for rising heights and thicknesses. There may be a very weak upper low that drifts in within southern branch flow undercutting a ridge over the northeast Pacific but it will have little effect. So, a warmer temperatures and light winds can be expected next weekend. Anticipate highs in the upper 90s to around 100.

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.AVIATION...

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

The pattern of afternoon breeziness will continue today. Until then, winds will veer this morning with a period of southerly crosswinds expected at KPHX. Southerly gusts this morning will

May 15, 2017 Exceptional Event, Imperial County

likely reach 20 to 25 kt. Peak gusts this afternoon out of the west-southwest could reach as high as 25 to 30 kt. The windy conditions will continue into this afternoon, before subsiding somewhat after 04z. With the presence of a low pressure system to our west, a switch back to easterly flow is not anticipated early Tuesday morning.

Southeast California/Southwest Arizona including KIPL and KBLH: Earlier gustiness at KIPL has subsided, but is expected to pick up again this afternoon with gusts to 25 to 30 kt. Somewhat weaker winds are expected at KBLH, though gusts could still reach 25 kt. Conditions will improve this evening as winds taper off between 04z and 06z.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Wednesday through Sunday:

The final in a series of low pressure systems will drop southward through Utah Wednesday and towards the Four Corners Thursday. Another period of breezy conditions is likely Wednesday afternoon ahead of this system, however critical fire weather thresholds will not be reached with Min RHs generally ranging from 15 to 25 percent. A frontal boundary will bring a slight chance of showers and thunderstorms to the higher terrain north and east of Phoenix Thursday. Thereafter, a warming trend is expected. Below normal temperatures will persist through Friday followed by above normal temperatures through the weekend.

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.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...AJ

AVIATION...Hirsch

FIRE WEATHER...Hirsch

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957
FXUS66 KSGX 152022
AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
122 PM PDT Mon May 15 2017

.SYNOPSIS...

A trough of low pressure over California today will move into Arizona on Tuesday bring more cooling today, mostly cloudy skies and scattered light showers along and west of the mountains and in the High Deserts through early Tuesday, and periods of strong gusty west winds in the mountains and deserts into Wednesday. High pressure off the West Coast will bring slow warming for Tuesday and Wednesday with greater warming for Thursday into next weekend. The marine layer will become shallower the latter part of this week into next weekend with night and morning clouds and fog mainly near the coast.

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

Latest radar imagery shows that shower activity has lessened over Orange and San Diego counties, but increased over extreme southwest San Bernardino county over the past few hours. Precipitation amounts have been fairly light, with a few reports of 0.01-0.03 inches in San Diego county, 0.02-0.08 inches in Orange county, and 0.04-0.08 inches in the San Bernardino county portion of the Inland Empire. Heaviest amounts have been in the San Bernardino county mountains near the Lytle Creek area, where 0.08-0.51 inch amounts occurred. On water vapor satellite imagery, a trough can be seen moving into extreme Southwestern California from the west. The trough will swing down through the region through Tuesday morning, resulting in a continued deep marine layer, mostly cloudy skies over and west of the mountains, and much cooler conditions (highs down to 15-25 degrees below normal for inland areas and about 5 degrees below normal at the coast). Locally strong and gusty west winds exist in the desert slopes and passes, with White Water (in the San Geronio Pass) gusting to 52 mph currently, but other locations only gusting into the 30s. Onshore pressure gradients are strong at the moment, with the San Diego to Las Vegas showing a gradient of 11.2 mb. Winds should pick up again tonight into early Tuesday as a vort max rotates around the low and into our region, with locally strong wind gusts near White Water likely reaching near or above 60 mph, but most areas below Advisory strength once again. The vort max will also serve to bring an increase in shower activity this evening into early Tuesday morning. The snow level looks to be at around 6500-7000 feet right now and will lower down to 6000 feet

May 15, 2017 Exceptional Event, Imperial County

tonight. A trace of snow is possible above 6000 feet. Total precipitation amounts should be only a few hundredths of an inch to a tenth of an inch in the coast and valleys, with highest amounts in San Diego county. Meanwhile, the mountains could get 0.1-0.5 inches and the High Deserts a trace to 0.05 inches. The lower deserts should see mostly dry conditions.

By Tuesday afternoon, all shower activity should have dissipated, but clouds over and west of the mountains may not clear much. Nevertheless, the trough by that time will be to the east and we'll be under rising 500 mb heights in northwest flow aloft, which should allow for very slight warming. However, it'll still be 10-20 degrees below normal inland and a few degrees below normal at the coast.

The marine layer will remain deep on Wednesday, but despite a cold low pressure system moving by to our northeast, 500 mb heights over us will continue to rise, so expect a little more warming to take place. Also, hi-res models indicate better clearing of clouds taking place that afternoon. However, that low-pressure system will bring stronger northwest to west winds aloft which, in addition to strong onshore pressure gradients, will create strong and gusty winds (gusting 45-55 mph and locally 65 mph) in the mountain ridges/desert slopes/passess and wind favored adjacent desert areas Tuesday night through early Wednesday morning, so a Wind Advisory is in effect for that time in those areas.

Flow turns offshore on Thursday, bringing clearer skies and additional warming. Ridging will build in from the west beginning Friday and continuing through the weekend, creating further warming. By Friday, highs reach back to around normal, and then above normal on Saturday. The marine layer will also become much shallower, with night and morning stratus/fog mainly near the coast.

&&

.AVIATION...

152000Z...Coast, Valleys, and Coastal Mountain Slopes, SCT clouds with bases 3000-4000 feet msl and tops near 6000 feet msl will be the rule through the afternoon becoming SCT-BKN this evening. Obscuration will occur where clouds intersect terrain on the coastal mountain slopes. A few showers are forecast to develop again over the ocean tonight and move inland, affecting areas from the coast to the coastal mountain slopes through Tue morning. Where the showers hit, brief MVFR will occur. However, thinking that ceilings will continue to prevail in the VFR category (just above 3000 FT), though there is a slight chance a deck near 2500 FT could develop. Mostly clear skies will prevail across the desert mountain slopes and the deserts through Tue. Occasionally gusty winds through mountain passes and on desert slopes.

&&

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

.MARINE...

Northwest winds will continue with gusts to 20-25 kt in the outer coastal waters through tonight before subsiding. A Small Craft Advisory remains in effect through 3 AM Tue for the outer waters. Winds will subside a tad Tue into Wed, but another brief period of stronger winds is possible Wed afternoon across the outer waters (gusts again 20-25 kt possible).

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 6 PM Tuesday to 8 AM PDT Wednesday for Apple and Lucerne Valleys-Riverside County Mountains-San Bernardino County Mountains-San Diego County Deserts-San Diego County Mountains-San Geronio Pass Near Banning.

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

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PUBLIC...Harrison

AVIATION/MARINE...Gregoria

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493
FXUS65 KPSR 152143
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
243 PM MST Mon May 15 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest this week bringing cooler temperatures, breezy conditions, and a slight chance of showers and thunderstorms to the higher terrain. The coolest day of the week will be Tuesday with many desert locations in the 70s. A warming trend will begin during the latter half of the week with highs next weekend approaching the 100 degree mark on the deserts.

&&

.DISCUSSION...

An upper level trough is currently moving into the west coast with a PV anomaly centered over Southern California. PWAT values with this low pressure system are only around 0.5 inches which is certainly limiting precipitation development but a few light showers are being observed over California and Nevada this afternoon, mainly confined to orographically favored areas. On the other hand, a high amplitude ridge just downstream is bringing anomalously warm weather to the plains. For us, we are already feeling the effects of the upper level trough as it continues to march eastward advecting cooler air into our area. Analysis of the 12Z Tucson sounding shows 850 mb temperatures have cooled approximately 3.5F over the last 24 hours while surface temperatures in the Phoenix metro are running around 5 degrees cooler than this time yesterday afternoon.

Cooler air will continue to spill into our region overnight bringing daytime high temperatures down into the upper 70s for the lower deserts on Tuesday! This is anywhere from 15 to 20 degrees below average for our CWA and will certainly be the coolest day of the week. A vort max associated with the upper level low will rotate through our area Tuesday morning/early afternoon bringing a chance of showers/thunderstorms over orographically favored areas (Gila County). However, chances look slim ($\leq 20\%$) and any precipitation that does fall will be rather light. The vort lobe will move through by the evening hours ending all precipitation chances.

Another upper level low dropping down from the Pacific NW will approach our area late Wednesday into early Thursday. This could bring breezy conditions Wednesday afternoon (sustained 15-20mph) but nothing unusual for this time of year. A line of vorticity with this next trough will move through the area Thursday morning

May 15, 2017 Exceptional Event, Imperial County

and may once again provide enough lift for a slight chance of showers for Gila county with anything falling being light. Despite heights being suppressed by this secondary trough, highs will continue to warm on Thursday as the late May sun relentlessly warms the lower troposphere.

By Friday, the trough moves out and temperatures continue their upward climb. By late weekend, temperatures could once again be back into the triple digits for the lower deserts. This warm and dry weather looks to continue through our extended period with highs hovering a few degrees above normal.

&&

.AVIATION...

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

Gusty south to southwest winds will be the greatest aviation problem through Tuesday morning. Directions should remain out of the southwest late this afternoon and evening with gusts nearing 30kt. Though speeds decrease tonight, the direction should remain out of the SW through sunrise though a period of variable direction is possible after sunrise. Otherwise, some clouds in a 6K-8K ft level will eventually move into central Arizona, though the chance for cigs to develop around the 6K ft layer is less than 20% and not mentioned in this TAF package.

Southeast California/Southwest Arizona Including KIPL and KBLH: Periods of gusty W/SW winds will be the primary aviation concern through Tuesday morning, particularly at KIPL. Gusts will be strongest at KIPL after sunset with speeds 30-35 kt likely for a few hours. Prevailing west winds will continue into Tuesday morning though speeds will fall below 15kt. Otherwise, mostly clear skies will prevail.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Thursday through Monday:

The final in a series of low pressure systems will linger over the four corners Thursday and Friday resulting in another day of cooler than normal temperatures. This low pressure system and associated frontal boundary will bring a slight chance of showers and thunderstorms to the higher terrain north and east of Phoenix Thursday. Concern is that storms and lightning over high terrain Thursday may be accompanied by little to no rainfall causing additional fire starts. Through the weekend, a warming trend will begin though readings will not be unusually hot for the middle of May. By early next week, afternoon humidity levels will once again start falling into the single digits with only poor to fair overnight recovery.

&&

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Wilson

AVIATION...MO

FIRE WEATHER...MO

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RTPSGX

:SOUTHWESTERN CALIFORNIA TEMPERATURE AND PRECIPITATION SUMMARY
:NATIONAL WEATHER SERVICE SAN DIEGO CA
:430 PM PDT MON MAY 15 2017
:
:***** PRELIMINARY *****
:
:17 HOUR HIGH AND LOW TEMPERATURES AS OF 4 PM TODAY.
: * DENOTES 24 HOUR HIGH TEMPERATURES BETWEEN 4 PM YESTERDAY
: AND 4 PM TODAY. OCCASIONALLY THE HIGH TEMPERATURE MAY HAVE
: OCCURRED AFTER 4 PM YESTERDAY.
:
:PRECIPITATION FOR THE PAST 24 HOURS. M DENOTES MISSING.
: T DENOTES TRACE OF PRECIPITATION
:
.BR SGX 0515 P DH15/TAIRZS/TAIRZI/PPDRZZ/SDIRZZ
:
: ID : STATION ELEV : HIGH / LOW / PCPN / SNOPEP
: FEET INCHES
:
: ...COASTAL AREAS...
:
SDYBL: YORBA LINDA 370 : 71 / 54 / 0.00 /
FUL : FULLERTON AIRPORT 96 : 67 / 57 / 0.00 /
ANAC1: * ANAHEIM 335 : 68 / 56 / M /
STAC1: SANTA ANA 135 : 67 / 56 / 0.01 /
SDHTB: HUNTINGTON BEACH 5 : 67 / 55 / 0.00 /
SNA : JOHN WAYNE AIRPORT 55 : 67 / 57 / 0.01 /
3L3 : * NEWPORT BEACH 10 : 61 / 58 / 0.00 /
LAGC1: LAGUNA BEACH 35 : M / M / M /
SDDPC: DANA POINT 305 : 62 / 56 / 0.00 /
SDFRH: LAKE FOREST 970 : 62 / 51 / 0.02 /
L34 : OCEANSIDE HARBOR 10 : 63 / 58 / 0.00 /
OKB : OCEANSIDE AIRPORT 28 : 67 / 57 / 0.00 /
SDVIS: VISTA 330 : 62 / 54 / 0.01 /
CRQ : CARLSBAD AIRPORT 328 : 61 / 56 / T /
SDETS: ENCINITAS 270 : 64 / 54 / 0.00 /
SOL : SOLANA BEACH 75 : 63 / 55 / 0.00 /
SDDMB: DEL MAR BEACH 10 : 60 / 57 / 0.00 /
NKX : MIRAMAR 477 : 66 / 57 / 0.00 /
MYF : MONTGOMERY FIELD 420 : 63 / 55 / T /
SAN : SAN DIEGO INT'L AP 15 : 65 / 58 / 0.00 /
L13 : CABRILLO NATL MNMT 364 : M / M / M /
SDNAC: NATIONAL CITY 25 : 66 / 57 / 0.00 /
CVAC1: CHULA VISTA 65 : 63 / 56 / 0.00 /
NRS : IMPERIAL BEACH 23 : 63 / 54 / 0.00 /
SDM : BROWN FIELD 525 : 62 / 53 / T /
:
: ...INLAND AREAS...
:
:

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

ONT :	ONTARIO	943 :	62 /	51 /	0.14 /
CNO :	CHINO	652 :	70 /	50 /	0.00 /
SDALO:	RANCHO CUCAMONGA	1940 :	56 /	49 /	0.10 /
SDSBO:	SAN BERNARDINO	1050 :	63 /	54 /	0.00 /
AJO :	CORONA	531 :	67 /	42 /	T /
RAL :	RIVERSIDE AIRPORT	818 :	68 /	51 /	0.00 /
UCRC1:	RIVERSIDE	986 :	68 /	53 /	0.00 /
RIV :	RIVERSIDE MARCH	1542 :	63 /	49 /	0.00 /
BUO :	BEAUMONT	2680 :	59 /	46 /	0.00 /
SDLEL:	LAKE ELSINORE	1275 :	67 /	53 /	0.00 /
SDHET:	HEMET	2050 :	62 /	47 /	0.00 /
SDTEC:	TEMECULA	1020 :	63 /	52 /	0.00 /
SDFBK:	FALLBROOK	698 :	65 /	53 /	0.00 /
VCFC1:	VALLEY CENTER	1312 :	62 /	49 /	0.00 /
SDSMP:	SAN MARCOS	630 :	61 /	53 /	0.00 /
ESCC1:	ESCONDIDO	645 :	67 /	54 /	0.00 /
PSQC1:	SAN PASQUAL VALLEY	255 :	67 /	52 /	0.00 /
RNM :	RAMONA AIRPORT	1393 :	62 /	49 /	0.01 /
SGX :	RANCHO BERNARDO	690 :	62 /	53 /	T /
SDPOY:	POWAY	648 :	65 /	53 /	0.00 /
ALPC1:	ALPINE	1695 :	60 /	48 /	0.01 /
SDLAM:	LA MESA	500 :	62 /	52 /	0.00 /
SDSNL:	SANTEE	435 :	64 /	55 /	0.00 /
ELJC1:	EL CAJON	405 :	63 /	54 /	0.00 /
SDRSC:	RANCHO SAN DIEGO	400 :	63 /	53 /	0.00 /
LMGC1:	LEMON GROVE	427 :	61 /	54 /	0.00 /
:					
:	...MOUNTAIN AREAS...				
:					
ECSC1:	EL CARISO	2730 :	59 /	44 /	0.00 /
SDWRT:	WRIGHTWOOD	5980 :	46 /	32 /	0.02 /
SDARN:	LAKE ARROWHEAD	5180 :	47 /	36 /	0.00 /
BBLC1:	BIG BEAR LAKE	6768 :	42 /	28 /	0.00 /
SDBDN:	BALDWIN LAKE	6770 :	45 /	28 /	0.00 /
SDAOK:	ANGELUS OAKS	5800 :	45 /	31 /	0.00 /
SDPCV:	PINE COVE	6299 :	41 /	29 /	0.00 /
IDYC1:	IDYLLWILD	5380 :	49 /	29 /	0.00 /
NZAC1:	ANZA	3939 :	54 /	38 /	0.00 /
PYNC1:	PINYON PINES	4060 :	58 /	40 /	0.00 /
PLRC1:	* PALOMAR MOUNTAIN	5550 :	54 /	32 /	0.00 /
JULC1:	JULIAN	4240 :	45 /	37 /	0.00 /
MLNC1:	* MOUNT LAGUNA	5920 :	58 /	33 /	0.01 /
CPMC1:	* CAMPO COOP	2615 :	65 /	45 /	0.00 /
:					
:	...DESERT AREAS...				
:					
HESC1:	HESPERIA	3055 :	60 /	46 /	0.00 /
APLC1:	APPLE VALLEY	2780 :	67 /	45 /	0.00 /
PSP :	PALM SPRINGS	425 :	80 /	58 /	0.00 /
IDOC1:	INDIO	-21 :	79 /	61 /	0.00 /
TRM :	THERMAL	-117 :	81 /	61 /	0.00 /
BROC1:	BORREGO SPRINGS	805 :	M /	M /	0.00 /
OCWC1:	OCOTILLO WELLS	390 :	70 /	56 /	0.00 /
TYEC1:	JOSHUA TREE N.P.	1975 :	74 /	52 /	0.00 /

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

BLH : BLYTHE 397 : 79 / 61 / 0.00 /

IPLPSG IMPERIAL -56 : 75 / 59 / T /

.END

THESE DATA ARE PRELIMINARY AND HAVE NOT UNDERGONE FINAL QUALITY CONTROL BY THE NATIONAL CLIMATIC DATA CENTER (NCDC). THEREFORE, THESE DATA ARE SUBJECT TO REVISION. FINAL AND CERTIFIED CLIMATE DATA CAN BE ACCESSED AT WWW.NCDC.NOAA.GOV.

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WWUS75 KPSR 160135
NPWPSR

URGENT - WEATHER MESSAGE
National Weather Service Phoenix AZ
635 PM MST Mon May 15 2017

CAZ562-566-567-160600-
/O.NEW.KPSR.WI.Y.0017.170516T0135Z-170516T0600Z/
Imperial County Southwest-Imperial County West-Imperial Valley-
Including the cities of Mountain Spring, Coolidge Springs,
Salton City, Winona, Coyote Wells, Ocotillo, Plaster City,
El Centro, Calexico, Alamo, and Brawley
635 PM PDT Mon May 15 2017

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

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

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

* TIMING...Tuesday evening

* WINDS...25 to 35 mph with gusts up to 45 mph

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

PRECAUTIONARY/PREPAREDNESS ACTIONS...

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

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FXUS65 KPSR 160340
AFDPSR

Area Forecast Discussion
National Weather Service Phoenix AZ
840 PM MST Mon May 15 2017

.SYNOPSIS...

A series of low pressure systems will move through the Desert Southwest this week bringing cooler temperatures, breezy conditions, and a slight chance of showers and thunderstorms to the higher terrain. The coolest day of the week will be Tuesday with many desert locations in the 70s. A warming trend will begin during the latter half of the week with highs next weekend approaching the 100 degree mark on the deserts.

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.DISCUSSION...

Upper level low pressure trof, centered over far srn Nevada/ecntrl Ca was steadily approaching Arizona from the west early this evening and it is on course to move across the area later tonight and Tuesday. We have already seen strong gusty southwest winds across the deserts this afternoon and evening - especially in the Imperial valley - reflecting the tightening of the low/mid level gradients ahead of the trof - and as the system moves in from the west later tonight mid clouds will thicken up as lift increases ahead of approaching wave. Progs call for rather impressive QG forcing across Arizona tonight with a prominent bullseye of mid level Q convergence, but moisture in the low levels will be limited and as such precipitation is not expected with the passage of this system. We can expect partly cloudy skies across the area tonight into Tuesday along with continued breezy conditions at times and we will see continued cooling as well. High at Phoenix dropped to 88 degrees today and is forecast to fall to 79 degrees on Tuesday. That would be 16 degrees below seasonal normals. So, for the rest of the night we can expect gradually diminishing wind along with some increase in mid level cloudiness and relatively cool overnight low temps. Wind advisory will remain in effect through 11 pm in the Imperial valley and most likely will be allowed to expire on schedule.

.PREVIOUS DISCUSSION...

An upper level trough is currently moving into the west coast with a PV anomaly centered over Southern California. PWAT values with this low pressure system are only around 0.5 inches which is certainly limiting precipitation development but a few light showers are being observed over California and Nevada this afternoon, mainly confined to orographically favored areas. On the other hand, a high amplitude ridge just downstream is bringing anomalously warm weather to the plains. For us, we are already feeling the effects of the upper level trough as it continues to march eastward advecting cooler air into our area. Analysis of the

May 15, 2017 Exceptional Event, Imperial County

12Z Tucson sounding shows 850 mb temperatures have cooled approximately 3.5F over the last 24 hours while surface temperatures in the Phoenix metro are running around 5 degrees cooler than this time yesterday afternoon.

Cooler air will continue to spill into our region overnight bringing daytime high temperatures down into the upper 70s for the lower deserts on Tuesday! This is anywhere from 15 to 20 degrees below average for our CWA and will certainly be the coolest day of the week. A vort max associated with the upper level low will rotate through our area Tuesday morning/early afternoon bringing a chance of showers/thunderstorms over orographically favored areas (Gila County). However, chances look slim ($\leq 20\%$) and any precipitation that does fall will be rather light. The vort lobe will move through by the evening hours ending all precipitation chances.

Another upper level low dropping down from the Pacific NW will approach our area late Wednesday into early Thursday. This could bring breezy conditions Wednesday afternoon (sustained 15-20mph) but nothing unusual for this time of year. A line of vorticity with this next trough will move through the area Thursday morning and may once again provide enough lift for a slight chance of showers for Gila county with anything falling being light. Despite heights being suppressed by this secondary trough, highs will continue to warm on Thursday as the late May sun relentlessly warms the lower troposphere.

By Friday, the trough moves out and temperatures continue their upward climb. By late weekend, temperatures could once again be back into the triple digits for the lower deserts. This warm and dry weather looks to continue through our extended period with highs hovering a few degrees above normal.

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.AVIATION...

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

Gusty southwest/west winds will gradually diminish overnight ahead of an approaching low pressure system. Winds should return to the southeast after midnight at KIWA but may struggle to back around to the east at KPHX. Expect a general westerly component to the winds rest of tonight and thru the day Tuesday with a few hours of light variable or light south after around 10Z. Mid level cloudiness will thicken up later tonight and thru the morning Tuesday as the low moves into the area with most bases aor 7k feet. May see a CIG at times but will probably keep cloud decks mostly in the SCT category for now. Expect a bit less gustiness to the southwest/west wind Tue afternoon as compared to today.

Southeast California/Southwest Arizona Including KIPL and KBLH:

Strong gusty west wind will persist at KIPL and KBLH this evening

May 15, 2017 Exceptional Event, Imperial County**Appendix A**

with gusts to around 30kt at times, then winds to diminish starting around midnight as an upper low moves into the area and gradients begin to relax. Winds will stay locally breezy at Imperial into the afternoon on Tuesday with an occasional gust over 20kt and will favor the west. At KBLH, winds to favor the south/southwest with speeds mostly less than 15kt after midnight although a few higher gusts may occur during the afternoon on Tuesday. Cloud decks this evening mostly aoa 10k feet with clearing after midnight and skies becoming mostly clear.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Thursday through Monday:

The final in a series of low pressure systems will linger over the four corners Thursday and Friday resulting in another day of cooler than normal temperatures. This low pressure system and associated frontal boundary will bring a slight chance of showers and thunderstorms to the higher terrain north and east of Phoenix Thursday. Concern is that storms and lightning over high terrain Thursday may be accompanied by little to no rainfall causing additional fire starts. Through the weekend, a warming trend will begin though readings will not be unusually hot for the middle of May. By early next week, afternoon humidity levels will once again start falling into the single digits with only poor to fair overnight recovery.

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.SPOTTER INFORMATION STATEMENT...

Spotter reports should not be needed.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...Wind advisory for CAZ562-566>567 through 11 pm PDT.

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

DISCUSSION...CB

PREVIOUS DISCUSSION...Wilson

AVIATION...CB

FIRE WEATHER...MO

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AFDSGX

Area Forecast Discussion
National Weather Service San Diego CA
902 PM PDT Mon May 15 2017

.SYNOPSIS...

A trough of low pressure aloft will move into Arizona on Tuesday, continuing cool conditions and a threat of scattered, light showers along and west of the mountains, with gusty westerly winds in the mountains and deserts into Wednesday. A warming trend will begin on Wednesday, and continue into the weekend as high pressure off the Coast expands eastward and shrinks the marine layer back to the coast.

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

NWS radar shows an increase in shower activity this evening off the San Diego County Coast, moving east. These are generally light and are expected to continue to remain isolated to widely scattered through the night and into Tue morning. The 00Z Miramar sounding had a weak inversion near 6500 FT MSL with weak instability below, and unidirectional winds from about 240 degrees. This favors shower development in island generated bands, which will likely localize a lot of the accumulating rain overnight.

A closed low was centered near Death Valley this evening, with a trailing wave swinging cyclonically south and then SE overnight. This will keep unstable conditions across the region with a threat of scattered, mostly light showers into Tue morning. The latest HRRR guidance has most of the showers in western San Diego County and on the Riverside County mtn coastal slopes, diminishing by Noon on Tue.

The low will be kicked east rather rapidly on Tue as a stronger wave fills into the Great Basin from the NW. This system will maintain, and actually increase the onshore flow, and keep a deep marine layer over the coastal basin through Wed. Thickness gradually rises after Thursday, and the marine layer diminishes as the low grudgingly moves east and high pressure off the Coast expands. This will push daytime temperatures over the coastal basin back above average by the weekend, with average temps farther inland.

A Wind Advisory has been posted for the mountains and deserts beginning 6 PM PDT on Tue. Expect a few gusts over 60 MPH near the windier passes through Wed morning. Please see LAXNPWSGX for details.

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.AVIATION...

160325Z...Coast/Valleys/Coastal Mountain Slopes...SCT-BKN cloud layers with bases 2000-5000 ft and tops to 6000 ft will continue through Tuesday evening, obscuring higher terrain at times. ISO-SCT light showers continuing through about 15Z, then tapering off during the day Tuesday.

Desert Mountain Slopes/Deserts...West surface wind gusts 35-45 kt along the desert slopes, through the passes, and locally into the deserts through about 10Z tonight and again Tuesday afternoon and evening. Areas of associated MOD-STG UDDFS and LLWS possible over/E of the mountains. Otherwise SCT-BKN clouds AOA 20000 FT MSL and unrestricted vis through Tuesday evening.

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.MARINE...

Northwest winds will continue with gusts to 20-25 kt in the outer coastal waters through tonight before subsiding. A Small Craft Advisory remains in effect through 3 AM Tue for the outer waters. Another brief period of stronger winds is possible Wed afternoon across the outer waters with gusts 20-25 kt.

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.SKYWARN...

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

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 6 PM Tuesday to 8 AM PDT Wednesday 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.

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

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PUBLIC...JAD

AVIATION/MARINE...SS