June 28, TYPE	, <mark>2018 E</mark> DATE	<mark>хсер</mark> ти		nal Ever	It, Imperial County Appendix A DESCRIPTION	PAGE
Area Forecast Discussion	6/25/2018				Low pressure returns after midweek, bringing cooler weather into the weekend, a deeper marine layer, and breezy conditions in the mountains and desertsThe onshore sfc pressure gradients were holding at 6-9 MBS KSAN to the deserts, with 30-40 MPH peak westerly wind gust reports at 8 PM PDT near the desert passes.	39
Area Forecast Discussion	6/26/2018	0254	PDT	San Diego	Low pressure returns after midweek, bringing cooler weather into the weekend, a deeper marine layer, and breezy conditions in the mountains and deserts.Breezy conditions will develop in the mountains and deserts each afternoon and evening.	41
Area Forecast Discussion	6/26/2018	1323	PDT	San Diego	Additionally, the trough will produce stronger winds through the mountains and into the deserts those afternoons and evenings. Southern California will be sitting in a no man's land, neither under high pressure or low pressure, but in between four versions of them.	43
Area Forecast Discussion	6/26/2018	2229	PDT	San Diego	.UPDATEUpdated Aviation discussionAVIATIONSouth-Central Arizona including KPHX, KIWA, and KSDL and Southeast California/Southwest Arizona including KIPL and KBLH: No aviation concerns are expected through Wednesday evening as skies remain mostly clear through the TAF period. Light easterly winds will continue into the morning hours for the Phoenix sites before becoming westerly by late morning with gusts to 20 knots possible between 21- 03Z. Winds will generally remain between S-SE and westerly at the southeast California sites with speeds staying below 10 knots through early afternoon. Gusts to 20-25 knots will be possible by early afternoon at KBLH and late afternoon at KIPL and remain elevated into the evening hours.	45
Area Forecast Discussion	6/27/2018	0237	MST	Phoenix	Breezy conditions will exist on Thursday afternoon, with gusts of 20-30 mph, perhaps enough to generate some localized blowing dust over southeast California.	47
Area Forecast Discussion	6/27/2018	0313	PDT	San Diego	For Thursday through the weekenda trough of low pressure will move inland through the western states. This will strengthen the onshore flow across Southern CaliforniaThe onshore flow will bring periods of gusty southwest to west winds in the mountains and desertsmainly during the late afternoon through late evening each day.	49
Area Forecast Discussion	6/27/2018	0859	PDT	San Diego	For Thursday through the weekenda trough of low pressure will move inland through the western states. This will strengthen the onshore flow across Southern California spreading cooling inland and deepening the marine layer into the far inland valleys. For early next weeklow pressure will weaken with inland warming and with the marine layer becoming a little shallower. The onshore flow will bring periods of gusty southwest to west winds in the mountains and desertsmainly during the late afternoon through late evening each day.	51
Area Forecast Discussion	6/27/2018	1310	MST	Phoenix	Updated AviationSouth-Central Arizona including KPHX, KIWA, and KSDL and Southeast California/Southwest Arizona including KIPL and KBLH: There are no major aviation weather concerns through tonight. The winds will follow typical diurnal patterns and mostly remain near 10 knots. However, there will be a few hours of some occasional gusty winds upwards of 20-25 knots across all terminals but those gusts should subside no later than sunset. Otherwise, skies will remain mostly clear.	53

					it, Imperial County Appendix A	L .
ТҮРЕ	DATE	TIP	ME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	6/27/2018	1347	PDT	San Diego	Low pressure aloft will arrive over the West and bring cooler weather through the weekend. Coastal cloudsd will extent farther inland during the nights and mornings. Brisk westerly winds will blow in the mountains and deserts.	55
Area Forecast Discussion	6/27/2018	2104	PDT	San Diego	Brisk westerly winds will blow in the mountains and deserts. Higher pressure will build next week for warmer weather and less extensive coastal clouds.	57
Area Forecast Discussion	6/27/2018	2153	MST	Phoenix	Along with the cooling, some gusty winds, and even isolated areas of blowing dust are likely across parts of SE CA on Thursday afternoon.	59
Area Forecast Discussion	6/28/2018	0256	PDT	San Diego	A trough of low pressure near the West Coast will move slowly inland through Fridaythen weaken for the weekend. This will spread cooling inland through Saturday	61
Area Forecast Discussion	6/28/2018	0535	MST	Phoenix	Satellite imagery shows convection over northwest Mexico is starting to wind down for the nightThe upper trough in the Westerlies is digging southeastward. The models depict that trend continuing today and tonight as well as the CONUS anticyclone amplifying and becoming centered over the eastern CONUSAVIATIONSoutheast California/Southwest Arizona including KIPL and KBLH: Gusty afternoon SW winds will be the primary aviation impact under mostly clear skies. KBLH will see gusts 20-25kt by early afternoon though speeds will decrease somewhat after sunset. On the other hand, KIPL will see its strongest gusts around 30kt near and just after sunset. Some lofted blowing dust could affect slantwise visibilities, particularly at KIPL.	63
Area Forecast Discussion	6/28/2018	1401	PDT	San Diego	A trough of low pressure will bring cooler weather across the regionA low pressure trough bearing down on the West will boost winds in the mountains and deserts this afternoon and evening, rather brisk in the usual passes and adjacent deserts. Isolated gusts such as in San Gorgonio Pass will exceed 40 mph, but lots of areas will gust 30-40 mph.	65

Г

148 FXUS66 KSGX 260343 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 845 PM PDT Mon Jun 25 2018

.SYNOPSIS...

High pressure aloft will continue through Wednesday, bringing warmer weather and less coastal low clouds. Low pressure returns after midweek, bringing cooler weather into the weekend, a deeper marine layer, and breezy conditions in the mountains and deserts. As the upper trough retreats to the north, the weather will turn warmer again early next week with less extensive coastal clouds.

&&

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

The marine clouds have been much less extensive this evening and slower to form. The 00Z Miramar sounding had a 9.5C inversion based near 1800 FT MSL. The inversion was over 400 FT lower than yesterday evening and will keep overnight marine cloud development more limited and closer to the Coast. The onshore sfc pressure gradients were holding at 6-9 MBS KSAN to the deserts, with 30-40 MPH peak westerly wind gust reports at 8 PM PDT near the desert passes. No forecast changes this evening.

From Previous Discussion...

Tuesday's weather picture will look nearly identical to today. If there's any trend it would be slightly less coastal cloud coverage and slightly higher daytime temperatures. The marine inversion looks strong enough to keep some low clouds all day at some beaches through Thursday. The shallowest marine layer and lowest extent of clouds appear to be Wednesday morning, but falling heights aloft will begin to reverse the pattern. It will help nudge the onshore flow Thursday and begin to trend the marine layer deeper, with more extensive clouds that should shave off a couple of degrees from inland temperatures. It should weaken the inversion enough to allow for full coastal clearing. The trough will also boost winds through mountains and into portions of the deserts. As a trough of low pressure settles over the West, the coastal clouds should visit the inland valleys again during the nights and mornings Friday and Saturday. The trough weakens and lifts out over the weekend, which will reverse the marine layer and temperature trend yet again. Very seasonal weather to start July.

8/21/2018

IEM :: AFD from NWS SGX June 28, 2018 Exceptional Event, Imperial County

Appendix A

.AVIATION...

260315Z...Coast/Valleys...Low clouds now returning to the coastal areas will increase in coverage and spread up to 20 miles inland by 15Z Tuesday. Bases are 1500-2000 ft MSL with tops to 2500 ft MSL, and CIG impacts at KSAN and KCRQ are likely by 06. CIG impacts at KSNA are expected by 08Z. VIS of 2-4 SM BR will develop for inland areas where low clouds near higher terrain. Clearing to the coast is expected between 16Z and 19Z Tue.

Mountains/Deserts...Mostly clear with unrestricted VIS through Tuesday.

&&

.MARINE... No hazardous marine weather through Friday.

&&

.FIRE WEATHER...

With the marine layer lowering over the next few days, RH values will lower to around 8-15% each afternoon over the mountains and across the deserts. The onset of the sea breeze in these areas, coupled with the low RH and very warm conditions, will elevate the threat of wildfire.

&&

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES... CA...NONE. PZ...NONE.

&&

\$\$

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

631 FXUS66 KSGX 260954 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 254 AM PDT Tue Jun 26 2018

.SYNOPSIS...

High pressure aloft will continue through Wednesday, bringing warmer weather and less coastal low clouds. Low pressure returns after midweek, bringing cooler weather into the weekend, a deeper marine layer, and breezy conditions in the mountains and deserts. As the upper trough retreats to the north, the weather will turn warmer again early next week with less extensive coastal clouds.

&&

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

Marine layer low clouds are less extensive this morning, remaining over the coastal basin and in the western San Diego County valleys. Skies were clear elsewhere. The tiny inland warming trend continues today with temps a degree or two higher than yesterday. A stronger marine inversion under the building ridge will help keep clouds around at the beaches through the afternoon. Almost identical weather is expected Wednesday. Cooling will follow for Thursday through Saturday as an upper level trough of low pressure moves through. High temps during this period will be around 3 to 5 degrees below normal. There will also be a gradual deepening of the marine layer with low clouds extending into portions of the inland valleys over the weekend. Breezy conditions will develop in the mountains and deserts each afternoon and evening. The trough is pushed north Sunday into early next week as upper highs strengthen over the Desert Southwest and East Pacific for subtle warming and a less extensive night and morning low clouds.

&&

.AVIATION... 260945Z...Coast/Valleys...Stratus, with bases 1200-1500 ft MSL and tops near 1700 ft MSL, will continue to develop 15-30 SM inland from the coast this morning. VIS of 2-4 SM BR can be expected for higher

```
elevations where low clouds near terrain. Conditions will improve by
late morning as clouds clear towards the immediate coast. Low clouds
will redevelop along the coast this evening and push around 25 SM
inland tonight, with slightly lower tops and bases.
Mountains/Deserts...Mostly clear with unrestricted VIS through
Wednesday morning.
&&
.MARINE...
No hazardous marine weather is expected through Saturday.
&&
.SKYWARN...
Skywarn activation is not requested. However weather spotters are
encouraged to report significant weather conditions.
&&
.SGX WATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.
&&
$$
PUBLIC...SS
AVIATION/MARINE...JJT
```

Appendix A

8/21/2018

Г

June 28, 2018 Exceptional Event, Imperial County

IEM :: AFD from NWS SGX

Appendix A

226 FXUS66 KSGX 262023 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 123 PM PDT Tue Jun 26 2018

.SYNOPSIS...

High pressure aloft will continue through Wednesday, bringing warm weather and less extensive coastal clouds. Lower pressure Thursday and Friday will bring cooler weather, more extensive low clouds, and breezy conditions in the mountains and deserts. As the upper trough retreats to the north, the weather will turn warmer again early next week with less extensive coastal clouds.

&&

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

The clearing was full and the sun shone brightly in all areas including the beaches today. So much for the theory that there would be some persistent clouds at the coast. High pressure overhead will peak in strength through Wednesday, which will keep our air mass warm and suppress the marine layer just a little more, meaning coastal clouds not reaching as far inland the next two mornings. Mountain and desert temperatures ought to be a couple of degrees higher as well. A weak low pressure trough gradually settles over the West Thursday and Friday. That will bring an onshore trend and turn the marine layer deeper and the nocturnal clouds more extensive. Inland temperatures will drop a few degrees. Additionally, the trough will produce stronger winds through the mountains and into the deserts those afternoons and evenings. The trough lifts out and high pressure aloft tries to build from both the east and the west this weekend. With the retreating trough to the north and a weak inverse trough to the south, Southern California will be sitting in a no man's land, neither under high pressure or low pressure, but in between four versions of them. What that means is we'll have warmer inland weather again, with quite average temperatures, along with seasonal low cloud coverage for early July. Model guidance differs as usual towards the fourth of July holiday, with some guidance suggesting a strong hot ridge and other indicating a cooler West Coast trough. There is overall agreement on some form of a northwest trough and a southwest ridge, with Southern California stuck in between. For now the forecast is for no big changes.

&&

.AVIATION...

262030Z...Coast/Valleys...Clear skies will prevail through early https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201806262023

IEM :: AFD from NWS SGX 8/21/2018 June 28, 2018 Exceptional Event, Imperial County-evening. Stratus will spread 20-25 miles inland tonight, with onset of CIGS at coastal airports 03Z-09Z. Bases will be 900-1400 ft MSL with tops to 2000 ft MSL, with local vis below 1 mile in fog in the inland valleys 09Z-15Z Wed. Stratus will clear most areas by 17Z Wed. Mountains/Deserts...Mostly clear with unrestricted VIS through Wed. && .MARINE... No hazardous marine weather is expected through Sunday. && .SKYWARN... Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions. && .SGX WATCHES/WARNINGS/ADVISORIES... CA...NONE. PZ...NONE. && \$\$ PUBLIC...MM AVIATION/MARINE...Maxwell



College of Ag Department of Agronomy

Department of Agronomy 716 Farm House Ln Ames, IA 50011

akrherz@iastate.edu 515-294-5978 phone

Appendix A

Appendix A

438 FXUS65 KPSR 270529 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 1029 PM MST Tue Jun 26 2018

.UPDATE... Updated Aviation discussion.

&&

.SYNOPSIS...

Temperatures will remain above normal through Thursday nearing 110 degrees each day for the warmest locations as high pressure rebuilds over the Southwest. A very minor cooldown will occur heading into the weekend. Moisture may begin slowly moving into southeast Arizona Friday and this weekend, but south-central Arizona is currently expected to remain dry for the time-being.

&&

.DISCUSSION...

The only immediate weather concern for the area will be the above normal temperatures today through Thursday with daytime highs nearing 110 for most desert locations each afternoon. The upper air analysis from this morning shows a strong ridge of high pressure sitting over the Western US with dry westerly flow aloft. Blue skies will prevail as all the decent moisture remains to our east.

The ridge will strengthen slightly tomorrow before a shortwave trough passes by to our north, weakening the ridge over our area enough to allow temperatures to cool closer to seasonal normal values by Friday...a similar pattern to what we experienced last week. As the trough moves eastward, the surface pressure gradient across the region will tighten resulting in breezy conditions Friday and Saturday with gusts as strong as 20-30 miles per hour for Southeast California and South-Central Arizona. Some areas of blowing dust will be possible, particularly in the Imperial Valley area.

The forecast becomes a bit more interesting by Saturday when the mid and upper level winds become more southerly across Arizona and may be able to draw some moisture into the state. The most likely area to receive enough moisture for any thunderstorms will be Southeast Arizona in the NWS Tucson forecast area. However, model guidance is quite varied with the GFS and NAM being a bit more aggressive compared to the ECMWF regarding thunderstorm potential near our area. At this time, the most likely outcome is for storms to form well off in the distance and nothing of real direct impact. That said, the chance of a stray thunderstorm or dust storm for the https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201806270520 IEM :: AFD from NWS PSR June 28, 2018 Exceptional Event, Imperial County eastern half of our forecast area still cannot be ruled out by the weekend.

&&

.AVIATION...

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

No aviation concerns are expected through Wednesday evening as as skies remain mostly clear through the TAF period. Light easterly winds will continue into the morning hours for the Phoenix sites before becoming westerly by late morning with gusts

to 20 knots possible between 21-03Z. Winds will generally remain between S-SE and westerly at the southeast California sites with speeds staying below 10 knots through early afternoon. Gusts to 20-25 knots will be possible by early afternoon at KBLH and late afternoon at KIPL and remain elevated into the evening hours.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Friday through Tuesday:

Temperatures will begin to cool down closer to seasonal normal values through the weekend. Some moisture will begin to creep into region, particularly through eastern Arizona including the Tonto NF, allowing minimum relative humidity values to increase slightly into the 10-15 percent range. Minimum RH values in western Arizona and throughout SE California will remain below 10 percent. In addition, a dry weather system will allow stronger winds to materialize Thursday and Friday afternoons with gusts as strong as 25 mph. These values, despite remaining below critical thresholds, will elevate fire weather concerns. Lastly, the modest increase in moisture over the weekend may be enough for an isolated thunderstorm or two across portions of Gila County but there is great uncertainty in whether those storms will materialize.

&&

.SPOTTER INFORMATION STATEMENT...

Spotter activation will not be needed through at least the middle of the week.

&&

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

954 FXUS65 KPSR 270937 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 237 AM MST Wed Jun 27 2018

.SYNOPSIS...

Another day of above-normal temperatures are expected today as temperatures approach 110 degrees for the warmest locations. A very minor cooldown will occur heading into the weekend. Moisture may begin slowly moving into southeast Arizona Friday and this weekend, but south-central Arizona is currently expected to remain dry for the time-being.

&&

.DISCUSSION...

Morning satellite imagery remains nearly identical to the previous morning, featuring a dry air mass across most of the Southwest and a mid-level anticyclone over New Mexico. The one exception -- a convective carcass over northwest Mexico has sent some clouds a little farther north and these have actually crossed the international border into southeast Arizona. The gradient of tropospheric moisture remains fairly tight, with the 1-inch PW contour still relegated to Sonora, Mexico. Otherwise, hot temperatures are once again expected today (it is late June, after all) amidst wall-to- wall sunshine. The 00Z Tucson sounding observed an 850-mb temperature of 31 C, which is just above the 90th percentile for the date. Still expecting a high temperature at 110 degrees at Phoenix, and 108 degrees at Yuma today - enough for moderate heat impacts.

Broad troughing returning to the west will act to weaken the anticyclone over the Southwest, and support a very minor cooling trend into the weekend. In fact, the slight lowering of midlevel heights will result in temperatures returning back to seasonal normals (or even a degree or two below) by Saturday. Breezy conditions will exist on Thursday afternoon, with gusts of 20-30 mph, perhaps enough to generate some localized blowing dust over southeast California.

The other potential scenario worth monitoring this weekend is the northward return of moisture into Arizona. Most guidance supports at least a modest increase in moisture, but the deterministic GFS and GEFS remain the most aggressive, with the

latter exhibiting an ensemble mean PW around 1.2 inches by Friday. While these values are sufficient for at least the possibility of convective buildups across the higher terrain of south-central Arizona, still expect any thunderstorm potential to be isolated/limited -- with higher chances existing across southeast Arizona eastern Arizona. Will have to monitor for the potential of blowing dust spreading northwestward from any thunderstorms that may develop across southeast Arizona, but as is typical this time of year, confidence remains quite low. Regardless, with troughing remaining firmly entrenched across the Pacific Northwest and Great Basin for at least the next week, this will keep richer moisture from spreading westward towards the lower deserts of southwest and south-central Arizona for the time being.

&&

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

No aviation concerns are expected through Wednesday evening as as skies remain mostly clear through the TAF period. Light easterly winds will continue into the morning hours for the Phoenix sites before becoming westerly by late morning with gusts to 20 knots possible between 21-03Z. Winds will generally remain between S-SE and westerly at the southeast California sites with speeds staying below 10 knots through early afternoon. Gusts to 20-25 knots will be possible by early afternoon at KBLH and late afternoon at KIPL and remain elevated into the evening hours.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Friday through Tuesday:

Temperatures will begin to cool down closer to seasonal normal values through the weekend. Some moisture will begin to creep into region, particularly through eastern Arizona including the Tonto NF, allowing minimum relative humidity values to increase slightly into the 10-15 percent range. Minimum RH values in western Arizona and throughout SE California will remain below 10 percent. In addition, a dry weather system will allow stronger winds to materialize Thursday and Friday afternoons with gusts as strong as 25 mph. These values, despite remaining below critical thresholds, will elevate fire weather concerns. Lastly, the modest increase in moisture over the weekend may be enough for an isolated thunderstorm or two across portions of Gila County but there is great uncertainty in whether those storms will

827 FXUS66 KSGX 271013 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 313 AM PDT Wed Jun 27 2018

.SYNOPSIS...

High pressure aloft will continue seasonally warm to hot weather for inland areas today while the marine layer and onshore flow keeps coastal areas cooler with night and morning coastal low clouds extending into portions of the western valleys. For Thursday through the weekend...a trough of low pressure will move inland through the western states. This will strengthen the onshore flow across Southern California spreading cooling inland and deepening the marine layer into the far inland valleys. For early next week...low pressure will weaken with inland warming and with the marine layer becoming a little shallower. The onshore flow will bring periods of gusty southwest to west winds in the mountains and deserts...mainly during the late afternoon through late evening each day.

&&

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

High pressure aloft will begin to weaken today across Southern California as a trough of low pressure moves toward the West Coast. This will bring slight cooling for today. The marine layer is near 1500 to 1800 feet deep with widespread coastal stratus extending inland into portions of the western valleys.

For Thursday into the weekend...the trough of low pressure will move inland through the western states strengthening the onshore flow across Southern California. This will spread cooling inland. The stronger onshore flow combined with a coastal eddy for Friday will deepen the marine layer with coastal low clouds extending into portions of the inland valleys for the weekend.

For early next week...low pressure will weaken with slow warming. The marine layer will become a little shallower with coastal low clouds not extending as far inland into the valleys.

&&

Appendix A

```
.AVIATION...
270945Z...Coast/Valleys...Stratus with bases 700-1200 ft MSL
spreading 15-20 miles inland this morning. Local vis below 2 SM in
fog in the valleys through 15Z. Stratus clearing to the coast 15-
18Z, with some beaches possibly remaining BKN-OVC through the
afternoon Stratus spreading back inland after 28/01Z with bases 900-
1500 ft MSL and tops to 2000 ft MSL, possibly reaching the far W and
S portions of the Inland Empire overnight, including KONT.
Mountains/Deserts...A few high clouds this afternoon through
Thursday morning and unrestricted vis.
&&
.MARINE...
No hazardous marine weather is expected through Sunday.
&&
.SKYWARN...
Skywarn activation is not requested. However weather spotters are
encouraged to report significant weather conditions.
&&
.SGX WATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.
&&
$$
PUBLIC...17
```

AVIATION/MARINE...SS

Г

090 FXUS66 KSGX 271559 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 859 AM PDT Wed Jun 27 2018

.SYNOPSIS...

High pressure aloft will continue seasonally warm to hot weather for inland areas today while the marine layer and onshore flow keeps coastal areas cooler with night and morning coastal low clouds extending into portions of the western valleys. For Thursday through the weekend...a trough of low pressure will move inland through the western states. This will strengthen the onshore flow across Southern California spreading cooling inland and deepening the marine layer into the far inland valleys. For early next week...low pressure will weaken with inland warming and with the marine layer becoming a little shallower. The onshore flow will bring periods of gusty southwest to west winds in the mountains and deserts...mainly during the late afternoon through late evening each day.

&&

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

The low clouds this morning stepped up to the door of the Inland Empire and looked in, but didn't enter. Clearing today will be much like that of yesterday and right now it looks good for the coast as well. It will be another hot day in the mountains and deserts, but maybe a degree or two off yesterday's pace. The high pressure aloft today will begin to weaken through Thursday as a low pressure trough deepens over the West. That will cool the air mass, increase the onshore flow and develop a coastal eddy. Temperatures in all areas will come down several degrees. The coastal low clouds will get admission to enter the Inland Empire again, a little bit Thursday, but more coverage on Friday and Saturday mornings. The trough weakens and lifts out over the weekend to reverse the trend for warmer weather and less extensive coastal clouds next week. As usual, model solutions begin to diverge beyond five days out. Some solutions offer a strong high pressure ridge to bring very hot inland weather, while others favor a West Coast trough to keep things mild through the holiday. Some guidance even hints at monsoon moisture next Tuesday and beyond, but that solution is an outlier and not very credible unless or until subsequent runs of the model and other models climb on board with that idea. In sum, expect cooler weather with more extensive low clouds nights and mornings Thursday through Saturday, then warmer weather next week with less extensive coastal clouds.

IEM :: AFD from NWS SGX June 28, 2018 Exceptional Event, Imperial County

Appendix A

&&

.AVIATION...

271600Z...Coast/Valleys...Stratus with bases around 1200 ft MSL will clear most coastal areas by 18Z. Most vis will be 6+ miles the rest of today. Stratus will spread back inland tonight with bases 1000-1500 ft MSL and tops to 2000 ft MSL. Arrival of BKN cigs at Coastal airports will be 02Z-08Z with inland extent 20-30 miles including far W and S parts of the Inland Empire, including KONT. Local vis will be below 2 miles in the valleys in fog 08Z-15Z Thu. Stratus will likely clear more slowly Thu.

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

&&

.MARINE...

No hazardous marine weather is expected through Monday.

&&

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES... CA...NONE. PZ...NONE.

&&

\$\$

PUBLIC...MM AVIATION/MARINE...Maxwell 352 FXUS65 KPSR 272010 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 110 PM MST Wed Jun 27 2018

... Updated Aviation...

&&

.SYNOPSIS...

Another day of above-normal temperatures are expected today as temperatures approach 110 degrees for the warmest locations. A very minor cooldown will occur heading into the weekend. Moisture may begin slowly moving into southeast Arizona Friday and this weekend, but south-central Arizona is currently expected to remain dry for the time-being.

&&

.DISCUSSION...

Morning satellite imagery remains nearly identical to the previous morning, featuring a dry air mass across most of the Southwest and a mid-level anticyclone over New Mexico. The one exception -- a convective carcass over northwest Mexico has sent some clouds a little farther north and these have actually crossed the international border into southeast Arizona. The gradient of tropospheric moisture remains fairly tight, with the 1-inch PW contour still relegated to Sonora, Mexico. Otherwise, hot temperatures are once again expected today (it is late June, after all) amidst wall-to- wall sunshine. The 00Z Tucson sounding observed an 850-mb temperature of 31 C, which is just above the 90th percentile for the date. Still expecting a high temperature at 110 degrees at Phoenix, and 108 degrees at Yuma today - enough for moderate heat impacts.

Broad troughing returning to the west will act to weaken the anticyclone over the Southwest, and support a very minor cooling trend into the weekend. In fact, the slight lowering of midlevel heights will result in temperatures returning back to seasonal normals (or even a degree or two below) by Saturday. Breezy conditions will exist on Thursday afternoon, with gusts of 20-30 mph, perhaps enough to generate some localized blowing dust over southeast California.

The other potential scenario worth monitoring this weekend is the northward return of moisture into Arizona. Most guidance supports at least a modest increase in moisture, but the deterministic GFS and GEFS remain the most aggressive, with the latter exhibiting an ensemble mean PW around 1.2 inches by Friday. While these values are sufficient for at least the possibility of

9/8/2019

IEM :: AFD from NWS PSR

Appendix A

June 28, 2018 Exceptional Event, Imperial County convective buildups across the higher terrain of south-central Arizona, still expect any thunderstorm potential to be isolated/limited -- with higher chances existing across southeast Arizona eastern Arizona. Will have to monitor for the potential of blowing dust spreading northwestward from any thunderstorms that may develop across southeast Arizona, but as is typical this time of year, confidence remains quite low. Regardless, with troughing remaining firmly entrenched across the Pacific Northwest and Great Basin for at least the next week, this will keep richer moisture from spreading westward towards the lower deserts of southwest and south-central Arizona for the time being.

&&

.AVIATION...

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

There are no major aviation weather concerns through tonight. The winds will follow typical diurnal patterns and mostly remain near 10 knots. However, there will be a few hours of some occasional gusty winds upwards of 20-25 knots across all terminals but those gusts should subside no later than sunset. Otherwise, skies will remain mostly clear.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Friday through Tuesday:

Temperatures will begin to cool down closer to seasonal normal values through the weekend. Some moisture will begin to creep into region, particularly through eastern Arizona including the Tonto NF, allowing minimum relative humidity values to increase slightly into the 10-15 percent range. Minimum RH values in western Arizona and throughout SE California will remain below 10 percent. In addition, a dry weather system will allow stronger winds to materialize Thursday and Friday afternoons with gusts as strong as 25 mph. These values, despite remaining below critical thresholds, will elevate fire weather concerns. Lastly, the modest increase in moisture over the weekend may be enough for an isolated thunderstorm or two across portions of Gila County but there is great uncertainty in whether those storms will materialize.

&&

.SPOTTER INFORMATION STATEMENT... Spotter activation will not be needed through at least the middle of the week. 343 FXUS66 KSGX 272047 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 147 PM PDT Wed Jun 27 2018

.SYNOPSIS...

Low pressure aloft will arrive over the West and bring cooler weather through the weekend. Coastal cloudsd will extent farther inland during the nights and mornings. Brisk westerly winds will blow in the mountains and deserts. Higher pressure will build next week for warmer weather and less extensive coastal clouds. &&

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

Low clouds cleared beautifully from the coast again today. Temperatures at 1 pm are pretty much the same, within a degree or two of what they were yesterday at this time. The high pressure aloft today will retreat through Thursday as a low pressure trough deepens over the West. That will cool the air mass, increase the onshore flow and develop a coastal eddy. Temperatures in all inland areas will come down several degrees. The coastal low clouds will gain admission to the Inland Empire again: a little bit Thursday, but more coverage on Friday and Saturday mornings. The trough weakens and lifts out over the weekend to reverse the trend for warmer weather and less extensive coastal clouds next week. As usual, model solutions begin to diverge beyond five days out. Some solutions offer a strong high pressure ridge to bring very hot inland weather, while others favor a West Coast trough to keep things mild through the holiday. Most recent models delay the hot weather ridge more toward the latter half of next week and also do not feature monsoon moisture that raises any eyebrows. In sum, expect cooler weather with more extensive low clouds nights and mornings Thursday through Saturday, then slightly warmer weather next week with less extensive coastal clouds.

&&

.AVIATION...

272030Z...Coast/Valleys...Mostly clear skies will prevail the rest of this afternoon. Stratus will spread back inland tonight with bases 1000-1500 ft MSL and tops to 2000 ft MSL. Arrival of BKN cigs at coastal airports will be 01Z-08Z with inland extent 20-30 miles including far W and S parts of the Inland Empire, including KONT. Local vis will be below 2 miles in the valleys in fog 08Z-15Z Thu. Stratus will likely clear more slowly Thu, with coastal airports clearing 17Z-19Z.

Mountains/Deserts...Mostly clear with unrestricted vis through Thu. https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201806272047

June 2	IEM :: AFD from NWS SGX 28, 2018 Exceptional Event, Imperial County	Appendix A
&&		
.MARINE		
No hazardou	is marine weather is expected through Monday.	
&&		
.SKYWARN		
-	ivation is not requested. However weather spotters are to report significant weather conditions.	
&&		
.SGX WATCHE	S/WARNINGS/ADVISORIES	
CANONE.		
PZNONE.		
&&		
\$\$		
PUBLICM	1	
AVIATION/MA	ARINEMaxwell	

Г

160 FXUS66 KSGX 280404 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 904 PM PDT Wed Jun 27 2018

.SYNOPSIS...

Low pressure aloft will arrive over the West and bring cooler weather through the weekend. Coastal clouds will extent farther inland during the nights and mornings. Brisk westerly winds will blow in the mountains and deserts. Higher pressure will build next week for warmer weather and less extensive coastal clouds. &&

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

...Update...

Abundant sunshine was seen today with highs again ranging from the upper 60s and 70s near the coast with 80s and 90s elsewhere, except in the 100s across the lower deserts with the max temp being 113F degrees at Ocotillo Wells.

Marine layer stratus has re-developed near the coast this evening and will continue pushing 20-30 miles inland overnight with a clear sky elsewhere.

No significant changes were needed to the forecast this evening. See previous discussion below for further forecast details.

... Previous Discussion (Issued at 147 PM PDT Wed Jun 27 2018)...

Low clouds cleared beautifully from the coast again today. Temperatures at 1 pm are pretty much the same, within a degree or two of what they were yesterday at this time. The high pressure aloft today will retreat through Thursday as a low pressure trough deepens over the West. That will cool the air mass, increase the onshore flow and develop a coastal eddy. Temperatures in all inland areas will come down several degrees. The coastal low clouds will gain admission to the Inland Empire again: a little bit Thursday, but more coverage on Friday and Saturday mornings. The trough weakens and lifts out over the weekend to reverse the trend for warmer weather and less extensive coastal clouds next week. As usual, model solutions begin to diverge beyond five days out. Some solutions offer a strong high pressure ridge to bring very hot inland weather, while others favor a West Coast trough to keep things mild through the holiday. Most recent models delay the hot weather ridge more toward the latter half of next week and also do not feature monsoon moisture that raises any eyebrows. In

https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201806280404

8/21/2018 IEM :: AFD from NWS SGX June 28, 2018 Exceptional Event, Imperial County sum, expect cooler weather with more extensive low clouds nights Appendix A and mornings Thursday through Saturday, then slightly warmer weather next week with less extensive coastal clouds. && .AVIATION... 280340Z...Coast/Valleys...Low clouds now moving into the coastal areas will spread inland tonight with bases 1000-1500 ft MSL and tops to 2000 ft MSL. CIGS have already reached KCRQ, and will reach KSAN and KSNA 05Z-07Z. Low clouds will extend 20-30 miles inland by 15Z, reaching far W and S parts of the Inland Empire, including KONT. Local vis will be below 2 miles in the valleys due to fog 08Z-15Z Thu. Low clouds will likely clear 17Z-19Z at coastal airports. Mountains/Deserts...FEW-SCT clouds at or abv 20000 ft with unrestricted vis through Thu. && .MARINE... No hazardous marine weather is expected through Monday. && .SKYWARN... Skywarn activation is not requested. However weather spotters are encouraged to report significant weather conditions. && .SGX WATCHES/WARNINGS/ADVISORIES... CA...NONE. PZ...NONE. && \$\$ PUBLIC...Gregoria (Update)/MM (Prev Discussion) AVIATION/MARINE...PG

IOWA STATE UNIVERSITY

College of Ag Department of Agronomy

8/21/2018

Г

Appendix A

475 FXUS65 KPSR 280453 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 953 PM MST Wed Jun 27 2018

.UPDATE....Updated Aviation Discussion...

&&

.SYNOPSIS...

Another day of above-normal temperatures are expected today as temperatures approach 110 degrees for the warmest locations. A very minor cooldown will occur heading into the weekend. Moisture may begin slowly moving into southeast Arizona Friday and this weekend, but south-central Arizona is currently expected to remain dry for the time-being.

&&

.DISCUSSION...

The good news is that a cooling trend is still on the way over the next few days, as an upper trof that is just now reaching the west coast moves into the Great Basin. Although the vast majority of the cooler air associated with this trof is expected to pass well to our north, some cooling aloft can be still be expected, with 500mb heights falling from the current 591-494dm range into the 585-588dm range by Friday. These lowering heights should knock about 2-3C off the 500mb temps, which should push lower desert temps into the 101-104F range by Saturday. Along with the cooling, some gusty winds, and even isolated areas of blowing dust are likely across parts of SE CA on Thursday afternoon.

Although the airmass is expected to initially remain very dry, there are still indications (assuming the GFS model is right), that some tropical moisture could be pulled northward from Friday onward into Sunday as the upper trof swings across the region. The GFS emsemble mean is pulling PWAT's up into the 1.00-1.25 inch range across South-Central AZ during the FRI-SUN period. Although these PWAT values are above normal for late June, they are not excessively so, running around 1SD above the mean. Given these PWAT values and the small amounts of CAPE that are now showing up in the forecast soundings, will continue to keep slight chance POPS in the grids over the higher terrain of extreme eastern Maricopa/southern Gila counties during the Fri-Sun period, with single-digit POPS across the lower deserts. These numbers being tempered somewhat by the fact that the EURO model continues to show a much drier soln. At this point, there is also the outside chance that some outflows/blowing dust could spread northward from storms over SE AZ oN both Friday and Saturday evenings as well.

8/21/2018

IEM :: AFD from NWS PSR

Appendix A

June 28, 2018 Exceptional Event, Imperial County It now appears that drier air will likely return for early next week as both the EURO and GFS push another upper trof towards the region from the west, with increasing southwesterly flow aloft. This trof is also expected to keep temperatures from rising too much, with most lower desert locations remain at/below 110F through a least the middle of next week.

&&

.AVIATION...

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

There are no major aviation weather concerns through Thursday. The winds will follow typical diurnal patterns and mostly remain near 10 knots. However, there will a period of some gusty winds upwards of 20 knots across all terminals Thursday afternoon. Otherwise, skies will remain mostly clear.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday: Temperatures will begin to cool down closer to seasonal normal values through the weekend. Some moisture will begin to creep into region, particularly through eastern Arizona including the Tonto NF, allowing minimum relative humidity values to increase slightly into the 10-15 percent range. Minimum RH values in western Arizona and throughout SE California will remain below 10 percent. In addition, a dry weather system will allow stronger winds to materialize Thursday and Friday afternoons with gusts as strong as 30 mph across parts of SE CA on Thursday. These values, despite remaining below critical thresholds, will likely elevate fire danger levels. Lastly, the modest increase in moisture over the weekend may be enough for an isolated thunderstorm or two across portions of Gila County, but little, if any rain is expected from any storms that do form, with dry lightning being a significant threat. Drier air moving into the region from the west should and the thunderstorm threat by early next week.

&&

.SPOTTER INFORMATION STATEMENT...

Spotter activation will not be needed through at least the middle of the week.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

&&

733 FXUS66 KSGX 280956 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 256 AM PDT Thu Jun 28 2018

.SYNOPSIS...

A trough of low pressure moving inland through the western states will spread cooling inland through Saturday with high temperatures falling from near average today...to around 5 degrees below average on Saturday. This will be followed by minor day to day differences for early next week. A warming trend is expected for the latter half of next week. Night and morning coastal low clouds will spread farther into the valleys for the weekend...then mainly into the western valleys for early next week. Onshore flow will bring periods of gusty southwest to west winds in the mountains and deserts...mainly during the late afternoon through late evening each day.

&&

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

.SHORT TERM (Today through Saturday)...

A trough of low pressure near the West Coast will move slowly inland through Friday...then weaken for the weekend. This will spread cooling inland through Saturday. This will take high temperatures from near average today...to around 5 degrees below average on Saturday and locally 5 to 10 degrees below average in some valley locations.

The marine layer is near 1500 to 2000 feet deep early this morning with widespread coastal stratus spreading inland into the western valleys. Deepening of the marine layer is expected to take the stratus farther into the valleys for tonight into Friday morning...and into the far inland valleys for the weekend. A coastal eddy on Friday could keep afternoon coastal clearing quite limited.

&&

.LONG TERM (Sunday through Wednesday)... High pressure aloft centered off the West Coast on Sunday...will weaken and move towards the west as a trough of low pressure develops near the British Columbia and Pacific Northwest coast and off the California coast. High pressure aloft over Texas on Monday will expand into the central plains for Tuesday and Wednesday...then begin to expand across the southwest states for the latter half of next week.

https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201806280256

IEM :: AFD from NWS SGX June 28, 2018 Exceptional Event, Imperial County

Minor day to day differences are expected across Southern California for early next week with a warming trend for the latter half of next week. Areas of night and morning coastal low clouds and fog will not extend quite as far into the valleys for early next week.

&&

.AVIATION...

280945Z...Coast/Valleys...Low clouds with bases 1100-1700 ft MSL and tops to 2000 ft MSL will continue to spread 20-30 miles inland through 15Z, possibly reaching KONT by 12Z. Local vis 3-5 SM in the

valleys through 15Z. Low clouds clearing inland 15-17Z and along the coast 17-19Z. Clouds will begin to move back inland after 29/02Z and into portions of the inland Valleys overnight. Bases will be around 1300-1800 ft MSL with tops to 2200 ft MSL.

Mountains/Deserts...FEW clouds at or abv 20000 ft with unrestricted vis through Fri. West winds increasing over the desert slopes of the mountains and into adjacent desert areas around 22Z. Sfc gusts 30-40 kt and areas of MOD UDDFS and LLWS possible over and east of the mountains through this evening.

&&

.MARINE... No hazardous marine weather is expected through Monday.

&&

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

&&

```
.SGX WATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.
```

&&

\$\$

PUBLIC...17 AVIATION/MARINE...SS 593 FXUS65 KPSR 281235 AFDPSR

Area Forecast Discussion National Weather Service Phoenix AZ 535 AM MST Thu Jun 28 2018

... Updated Aviation...

.SYNOPSIS...

A modest decrease in temperatures begins today and continues into Saturday. There will be slight chance of thunderstorms over the higher terrain east of metro Phoenix Friday and Saturday. Storm chances during the first half of next week will retreat eastward a bit. Meanwhile, anticipate a slow warming trend with temperatures climbing above normal.

&&

.DISCUSSION...

Satellite imagery shows convection over northwest Mexico is starting to wind down for the night. Some minor cirrus associated with that has is moving northward across Arizona and far southeast CA early this morning. Water vapor imagery shows a complex flow pattern over and near the western CONUS and northwest Mexico. Subtropical high pressure over portions of the CONUS and the northeast Pacific is being pinched into two more distinct anticyclonic regions by an upper trough in the Westerlies that is moving into the NW CONUS and western Canada. On the south side of the anticyclonic regions (especially the CONUS one) are a variety of cyclonic circulations and inverted troughs. At even more southerly latitudes are Tropical Storm Emilia and a tropical disturbance well southeast of that (neither of which look to be a factor for us).

The upper trough in the Westerlies is digging southeastward. The models depict that trend continuing today and tonight as well as the CONUS anticyclone amplifying and becoming centered over the eastern CONUS. The GFS goes on to depict some moisture from Sonora getting pulled into the southeastern third of Arizona. with 1000-700mb mean mixing ratios reaching ~10 g/kg. The NAM and ECMWF are less optimistic in depicting similar moisture levels not getting much past Cochise County and being gone by Saturday. The GEFS plumes support the GFS in depicting a significant rise in precipitable water for much of AZ and even into far SE CA. However, the GFS is a bit more optimistic than the mean and there is more dispersion in the solutions for our area as opposed to SE AZ. Even taking the GFS solution at face value, southwesterly steering flow will keep storm chances for our area on Friday and Saturday limited to the higher terrain areas east of metro Phoenix. For the south-central AZ deserts (incl. metro Phoenix), there would be a better chance for a dust storm than precip. Too

9/8/2019

IEM :: AFD from NWS PSR June 28, 2018 Exceptional Event, Imperial County early to put blowing dust in the forecast at this point given the uncertainties. With weaker high pressure over us, temps trend down. We will likely also see more cirrus around which will help that process. Not looking at a big cool-off though.

Next week, CONUS ridging expands westward as the trough in the Westerlies weakens and departs. There is a decline in storm chances as well for Sunday and Monday. The ridge expansion is slowed by renewed troughing along/west of the West Coast. Thus highs don't shoot up dramatically. Per coordination, held on to some slight chance PoPs for our easternmost areas. During the latter half of next week however, it is looking like very strong high pressure will be centered roughly near the Four Corners.

Loosely, that is a favorable synoptic pattern for thunderstorm potential but indications are that we won't have much moisture. Thus anticipate some very hot temperatures possible after Wednesday.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL: No major aviation concerns through Friday morning under mostly clear skies. Winds should turn back to westerly earlier than usual late this morning, then obtain some gusts around 20 kt this afternoon. A westerly component should prevail into the overnight hours.

Southeast California/Southwest Arizona including KIPL and KBLH: Gusty afternoon SW winds will be the primary aviation impact under mostly clear skies. KBLH will see gusts 20-25kt by early afternoon though speeds will decrease somewhat after sunset. On the other hand, KIPL will see its strongest gusts around 30kt near and just after sunset. Some lofted blowing dust could affect slantwise visibilities, particularly at KIPL.

Aviation Discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday:

Just enough moisture is anticipated for a slight chance of thunderstorms on Saturday for the higher terrain areas east of metro Phoenix (namely southern Gila County). However, if any storms develop they will produce little if any rain but dry lightning instead. Temperatures climb slowly above normal next week. There will be a subtle eastward retreat of storm chances but lingering slight chances for areas east of Globe. Overall, anticipate familiar June conditions with breezy afternoons and evenings and low humidities. Anticipate very hot temperatures during the latter half of next week.

Appendix A

Appendix A

481 FXUS66 KSGX 282101 AFDSGX

Area Forecast Discussion National Weather Service San Diego CA 201 PM PDT Thu Jun 28 2018

.SYNOPSIS...

A trough of low pressure will bring cooler weather across the region and more extensive coastal clouds during the nights and mornings through Saturday. There will be brisk onshore winds this evening in parts of the mountains and deserts. As the low pressure retreats early next week, expect slightly warmer weather and slightly less cloud coverage.

&&

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

After the quick clearing this morning, patchy low clouds decided to persist at some beaches, but have now cleared quite fully. A low pressure trough bearing down on the West will boost winds in the mountains and deserts this afternoon and evening, rather brisk in the usual passes and adjacent deserts. Isolated gusts such as in San Gorgonio Pass will exceed 40 mph, but lots of areas will gust 30-40 mph. The trough will inject the marine layer with a little more onshore oomph tonight and develop a coastal eddy, both of which will push coastal clouds farther into the inland valleys the next two nights. The trough begins to weaken and lift out Friday and Saturday with weaker onshore winds. The coastal eddy fades late Saturday while high pressure aloft makes a timid return. So next week we're forecasting less extensive coastal clouds and slightly higher temperatures. Not much change in our early summer doldrum pattern through the holiday. Later next week, most guidance suggests a strong ridge of high pressure over the central U.S. will build into the Southwest and include Southern California, but with different strengths. It looks good for hotter inland weather Thursday and beyond.

&&

.AVIATION... 282045Z...Coast/Valleys...Clouds will spread inland tonight through the San Diego County Valleys and into west and south parts

Appendix A

of the Inland Empire with bases 1400-1800 ft MSL and tops to 2300 ft MSL. Stratus should reach coastal airports between 02Z and 07Z with clearing likely 16Z-19Z Fri. Local vis below 2 miles in fog will occur in the valleys 08Z-15Z Fri.

Mountains/Deserts...Mostly clear skies with unrestricted vis will continue through Fri. Areas of surface west winds 15-25 KT with local gusts 30-40 KT will develop on desert slopes and through San Gorgonio Pass 22Z today through 08Z tonight, with similar winds likely again late Fri afternoon.

&&

.MARINE...

No hazardous marine weather is expected through Monday.

&&

.SKYWARN...

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

&&

```
.SGX WATCHES/WARNINGS/ADVISORIES...
CA...NONE.
PZ...NONE.
```

&&

\$\$

PUBLIC...MM AVIATION/MARINE...Maxwell