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Area Forecast Discussion	8/30/2017	1500	MST	Phoenix	46
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Area Forecast Discussion	8/31/2017	0321	PDT	San Diego	54
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Area Forecast Discussion	8/31/2017	1425	MST	Phoenix	60
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Area Forecast Discussion	9/1/2017	0336	PST	San Diego	69
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TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	9/1/2017	1427	MST	Phoenix	80
<p>...Currently, the 500 mb high is centered along the Oregon/California border and Tropical Storm Lidia is centered over the southern Baja California Peninsula....Lidia will continue to weaken as the system continues to interact with the higher terrain along the Baja California Peninsula. <b>Even more weakening will occur tomorrow when Lidia moves over the cold Pacific, with Lidia then expected to quickly decay into a remnant low.</b> She is currently moving to the north-northwest at 10 mph and will continue to do so for the next 72 hours or so. <b>Thereafter, her track will shift more to the west-northwest around the mid-level high over the southwest United States. For us, moisture will be on the increase as TS Lidia continues her generally northwestward progression. Both the GEFS and NAEFS mean Precipitable Water forecast show the greatest moisture and thus highest PWs staying south and west of Arizona, with the greatest values from Yuma to El Centro. During the Saturday evening to Sunday morning time frame, EMC GEFS plumes are indicating mean PWsincreasing to close to 2 inches in El Centro and a little bit over 2 inches in Yuma.</b></p>					
Area Forecast Discussion	9/1/2017	2018	MST	Phoenix	83
<p>....UPDATE....<b>Updated Aviation discussion....Southeast California/Southwest Arizona including KIPL and KBLH:</b> Latest models indicate that a surge of humid air and <b>strong southerly flow will move steadily out of the Gulf of California and into southwestern AZ/southeastern CA overnight.</b> However, there is some uncertainty with regard to the timing. <b>Most likely time for the wind shift will occur around 10z at KIPL and 12z at KBLH. If the surge materializes, a prolonged period of winds with gusts to 25-30 kt is possible. Isolated thunderstorms also remain a possibility Saturday afternoon,</b> though probabilities remain low that they will directly affect KIPL/KBLH.</p>					
Area Forecast Discussion	9/1/2017	2125	PST	San Diego	86
<p>....Some mid and high clouds forming ahead of Tropical Storm Lidia have drifted north into our forecast area....<b>Hi-res models are showing quite the gulf surge tonight into Saturday. If this is indeed what happens, there could be low clouds developing in the low deserts and mountain slopes tonight and will keep temps much lower tomorrow,</b> though the increase in humidity won't make it feel any more pleasant. <b>Thunderstorm chances increase tomorrow, mainly over the mountains and deserts, with this surge of moisture.</b> Elsewhere hot conditions will prevail and the Heat Advisories and Excessive Heat Warnings remain in effect through Saturday evening. <b>Tropical Storm Lidia is still forecast to move north through the Baja peninsula before heading west off the northern Mexico and</b></p>					
Area Forecast Discussion	9/1/2017	2235	MST	Phoenix	89
<p>....UPDATE....<b>Updated Aviation discussion....Southeast California/Southwest Arizona including KIPL and KBLH:</b> Latest models indicate that a <b>surge of humid air and strong southerly flow will move steadily out of the Gulf of California and into southwestern AZ/southeastern CA overnight.</b> However, there is some uncertainty with regard to the timing. <b>Most likely time for the wind shift will occur around 08z at KIPL and 09z at KBLH. A prolonged period of winds with gusts to 25-30 kt is also possible at both sites.</b> Isolated showers/thunderstorms also remain a possibility Saturday afternoon/evening, though probabilities remain low that they will directly affect KIPL/KBLH.</p>					

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
Area Forecast Discussion	9/2/2017	0302	MST	Phoenix	92
Area Forecast Discussion	9/2/2017	0500	PST	San Diego	95
Area Forecast Discussion	9/2/2017	0500	MST	Phoenix	98
Area Forecast Discussion	9/2/2017	0944	PDT	San Diego	101
Area Forecast Discussion	9/2/2017	1247	MST	Phoenix	105

TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
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Area Forecast Discussion	9/2/2017	1402	MST	Phoenix	108
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Special Weather Statement	9/2/2017	1417	MST	Phoenix	115
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TYPE	DATE	TIME	AGENCY	DESCRIPTION	PAGE
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Area Forecast Discussion	9/2/2017	2116	PDT	San Diego	121
Area Forecast Discussion	9/2/2017	2218	MST	Phoenix	124
Area Forecast Discussion	9/3/2017	0257	MST	Phoenix	128



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FXUS65 KPSR 302200

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

300 PM MST Wed Aug 30 2017

.SYNOPSIS...

Above normal temperatures will continue this week as strong high pressure remains firmly entrenched over the interior West. Thunderstorm chances will remain limited across lower desert communities through the rest of the week with activity focused mainly over mountain areas. However, areas of strong gusty Thunderstorm outflows are possible each afternoon and evening over the south-central Arizona deserts. The potential for cooler temperatures and increasing moisture improves across the region by the weekend.

&&

.DISCUSSION...

Even less storm activity over the higher terrain early this afternoon than 24 hrs ago. An exception is southern California with storms over the San Bernardino and San Jacinto Mountains and even some over eastern Riverside County including Joshua Tree National Park. Some of the CAMs are indicating at least some weak convection lingering in that area overnight and Thursday (possibly aided by an upper trough centered near the Pacific Northwest coast). Earlier versions of the HRRR even had showers popping up as far south as Imperial County. They are also indicating late night/early morning convection development over southern Yavapai and Mohave Counties which brushes La Paz County.

Overall, storms over the lower deserts will be even harder to come by over the next couple days as precipitable water over southern Arizona and southeast California trends down. There will be enough lingering moisture over northern Arizona for an ongoing opportunity for storms there. However, the steering flow changes a bit as the high weakens and sags south (due to a trough passing far to the north) which leads to an east-southeasterly direction as opposed to a northeasterly direction.

An increase in moisture is anticipated to begin over the weekend as a tropical storm (currently centered south-southeast of Cabo San Lucas) tracks northward and gradually pushes deeper moisture



north and into the lower deserts. The GFS is slower with the arrival than the ECMWF. It is important to note that the system overall will stall and then push westward into the Pacific as the upper high reforms over the great basin with the high setting up again to the north of Phoenix. Thus the system will not bodily

move north of the border. Despite the moisture increase, CAPE does not get excessive and with high temps falling, monsoon storm chances remain on the low side. Again, even the rather bullish NAEFS POPs guidance mostly keep POPs in the slight chance category for our area this weekend into early next week. MEX MOS numbers are also surprisingly low, mostly in the single digits for Phoenix this weekend and then rising into the teens or 20s early next week. Thus we will keep the rather low grade monsoon conditions in place for the extended period, with a rather broad- brush forecast in place. Overall very little change has been made to the POPs/Weather/Sky elements over the 7 day forecast period.

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.AVIATION...

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

Isolated thunderstorm activity is expected to remain relegated to the higher terrain north and east of Phoenix this afternoon and again Thursday. The probability of an outflow boundary from these storms reaching the Phoenix area is quite low. Otherwise, winds will generally remain out of the east with speeds less than 10 kt.

Southeast California/Southwest Arizona including KIPL and KBLH: Latest model guidance suggests a low probability of thunderstorms overnight at KIPL and KBLH. Will keep the mention of VCTS out of the TAFs for now, but this bears watching. Winds will generally remain light, except in the vicinity of thunderstorms.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Saturday through Wednesday...

Conditions will generally remain drier than normal as high pressure becomes reestablished across the intermountain West.

There will be a below normal chance of thunderstorms and wetting rains, however latest model guidance suggests a slight potential for tropical moisture reaching the Desert Southwest around Sunday morning.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...Excessive Heat Warning until 8 PM MST this evening for AZZ530-532-533-536-540-543-544-546-548-550-551.

CA...Excessive Heat Warning until 8 PM PDT this evening for CAZ561-563-565>570.

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DISCUSSION...AJ/CB

AVIATION...Hirsch

FIRE WEATHER...Hirsch

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FXUS66 KSGX 310416

AFDSGX

#### Area Forecast Discussion

National Weather Service San Diego CA

916 PM PDT Wed Aug 30 2017

#### .SYNOPSIS...

Hot weather will continue through the weekend and into next week with nearly stationary high pressure over the Western US. Monsoon moisture will bring chances of thunderstorms each day, mainly over the mountains. More widespread convection is possible Sunday and Monday.

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

A few light showers are lingering over the high desert this evening, and elsewhere convection has ended. A weak wave moving by to the north may maintain light showers overnight, mainly in San Bernardino and Riverside Counties. Patchy dense fog will likely develop along portions of the coast late tonight into early Thursday morning.

Highs temperatures will lower a couple degrees Thursday as the upper-level trough passes by to the north, then increase a few degrees west of the mountains on Friday as weak offshore flow develops. Highs will still be 10 deg F above normal on Saturday, therefore the Heat Advisories and Excessive Heat Warnings have been extended through 10 pm Saturday. Record highs will likely be broken at a few sites each day through Friday. High pressure will rebuild aloft over the Great Basin next week, keeping high temperatures above seasonal normals through the period.

Monsoon moisture lingering over the region will continue the chance for showers and thunderstorms over portions of the mountains and deserts each afternoon through early next week. Some drying will occur Friday and Saturday, limiting the potential for afternoon convection. Tropical Storm Lidia, currently located around 160 mi south of the southern tip of Baja California, is forecast to track north-northwest through early next week. Though it will likely weaken to a Tropical Depression as it nears Southern California, moisture and weak troughing on the fringes of

the system may generate more widespread convection, including areas west of the mountains, sometime Sunday into Monday. It's too early to say for sure, but with this massive ridge in place the forecast track probably won't change much over the coming days.

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.AVIATION...

310415Z...Coast...Patchy stratus with bases 200-500 ft MSL and associated vis 1SM or less is possible along portions of the coast and locally extending up to 5 mi inland between 09-15Z. After 15Z, SCT cloud layers AOA 8000 ft MSL and unrestricted vis through Thursday evening.

Valleys/Mountains/Deserts...Isolated showers and thunderstorms continuing tonight over portions of mountains and high deserts, mainly in San Bernardino County. SCT SHRA/TSRA developing over the mountains, deserts, and inland valleys Thursday afternoon and evening. CB bases near 8000 ft MSL with tops 25-30 kft MSL.

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.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.

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.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT Saturday for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County Mountains.

Excessive Heat Warning until 10 PM PDT Saturday for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County Valleys-San Geronio Pass Near Banning-Santa Ana Mountains and Foothills.

PZ...NONE.

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FXUS65 KPSR 310954

AFDPSR

## Area Forecast Discussion

National Weather Service Phoenix AZ

255 AM MST Thu Aug 31 2017

## .SYNOPSIS...

Above normal temperatures will continue through Friday but will trend sharply downward this weekend as deeper tropical moisture moves into the area from the south. Thunderstorm chances will remain very limited across lower desert communities through the rest of the work week with activity focused mainly over mountain areas. As moisture and humidity increase this weekend, the threat of showers and thunderstorms increases especially over the southwest Arizona and far southeast California deserts. Drier and warmer conditions return early next week along with isolated mainly afternoon and evening thunderstorms.

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## .DISCUSSION...

Early this morning, the upper high to our north (centered near the 4 corners) continued to weaken as 500mb heights at the center had fallen to around 592dm. Weak east/southeast steering flow remained in place over south-central Arizona, but as the atmosphere continued to dry very little convection developed upstream last night and at 2 am IR imagery showed genly clear skies across the AZ deserts. Latest soundings from Phoenix and Tucson showed PWAT below one inch...just 0.77 inches at TUS) along with virtually no CAPE. Slightly more moisture/instability continues out west at 2 am with a few weak storms going mainly north and west of Parker. With the high slowly weakening, high temperatures fell slightly and Phoenix only reached 108 yesterday and little change in high temps are expected thru Friday. For the next couple of days, today through Friday, we can expect similarly meager convection over the area as moisture will continue to thin from the east. PWAT values over the lower deserts will drop well below one inch, CAPE becomes nearly zero and 850mb dewpoints will drop well below 8C. So expect for an isolated storm over higher terrain areas of Joshua Tree NP and southern Gila County, we don't expect desert storms thru Friday...just mostly clear skies.

Probably the most interesting feature of note at this time - weather wise - is the tropical system currently spinning along the NW Mexican coast just off the southern tip of Baja CA. This system has been forecast to ride north along the southern tip of Baja and then turn west out to sea under the influence of easterly steering flow around the high to our north. Latest GFS guidance has thrown us a bit of a curveball with this idea; it is now tracking the system further to the north and does not start turning it west until it reaches far northern Baja Sunday into next Monday. As a result of

the much closer approach to southern Arizona, we see a substantial import of deep tropical moisture into primarily the southwest AZ deserts and much of far SE California. Deeper moisture appears to mainly stay west of the greater Phoenix area however. PWAT values climb over 2 inches to our west but despite the increase in moisture the atmosphere is forecast to be relatively stable over the weekend and into next week with very modest CAPE and a moist-adiabatic lapse rate. Thus any weather that develops will likely be more showery than strongly convective. As such we have raised POPs over our western deserts this weekend but still - in keeping with current NAEFS POP trend - POPs mostly stay in the slight chance category, between 15 and 25 percent. We have also lowered high temperatures quite a bit especially out west, with some cooler deserts falling into the 90s such as at Imperial. Even the Phoenix area, despite not seeing the deepest moisture or thickest cloud cover, drops to near 100 by Sunday.

For the period next Monday through Wednesday: the upper high that has been present to our north really strengthens yet again and centers itself to our north, over the interior west bringing stronger easterly steering flow into southern AZ and as this occurs the bulk of the tropical moisture as well as its decaying circulation center shifts further to the west and mostly out of our weather picture. We return to a low to moderate grade and sort of "broad brushed" forecast each day as convection forms along the rim, then some of it moves westward and into the lower deserts during the evening hours. High temps climb back above normal and in fact, if the drier ECMWF forecast pans out, with its higher 500mb heights, we may see high temps again approach 110 over the hotter deserts west of Phoenix sometime early next week.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:  
Easterly flow will continue for the TAF sites through late Thursday afternoon. There is indication that winds will again go variable during the late afternoon and into the evening hours before going back easterly. Storms will stay well away from the TAF sites Thursday so the chance of an outflow impacting the terminals remains very low to near zero.

Southeast California/Southwest Arizona including KIPL and KBLH:  
Latest model guidance has back off on the low probability of thunderstorms overnight at KIPL and KBLH. For now, FEW clouds at 12kft will continue with little to no chance of storms Thursday afternoon. Winds will follow typical diurnal tendencies.

Aviation discussion not updated for amended TAFs.

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.FIRE WEATHER...

Saturday through Wednesday...

Conditions will generally remain drier than normal as high pressure becomes reestablished across the intermountain West. There will be a below normal chance of thunderstorms and wetting rains, however latest model guidance suggests a slight potential for tropical moisture reaching the Desert Southwest around Sunday morning.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...CB

AVIATION...Wilson

FIRE WEATHER...Hirsch

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FXUS66 KSGX 311021

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

321 AM PDT Thu Aug 31 2017

.SYNOPSIS...

Hot weather will continue through the weekend and into next week with nearly stationary high pressure over the Western US. Monsoon moisture will bring chances of thunderstorms each day, mainly over the mountains. Tropical Storm Lidia, currently just South of the Southern Baja California Peninsula, is forecast to move northward, but eventual dissipate as it begins to turn more westerly near Central Baja. Peripheral moisture from this system may move into Southern California early next week, potentially increasing the risk of showers and thunderstorms.

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

Upper level divergence and sufficient moisture has allowed a few showers and thunderstorms to develop across the area overnight. The activity has been focused over the San Bernardino and Riverside County mountains, though a few cells have made it to lower elevations as well. The activity has been moving, so rainfall amounts have stayed in check with max rainfall of 0.20" over the San Bernardinos at Crest Park.

Highs temperatures today will be very similar to what occurred on Wednesday, then increase a few degrees west of the mountains on Friday as weak offshore flow develops. GFS MOS numbers look too high for highs Friday, so have stayed close to the going forecast using a blended approach. Highs will still be 10 deg F above normal even on Saturday. Therefore, the Heat Advisories and Excessive Heat Warnings continue in effect through 10 pm Saturday. Record highs will likely be broken at a few sites each day through Friday. High pressure will rebuild aloft over the Great Basin next week, keeping high temperatures above seasonal normals through the period.

Monsoon moisture lingering over the region will continue the chance for showers and thunderstorms over portions of the

mountains and deserts each afternoon through early next week. Some drying will occur Friday and Saturday, limiting the potential for afternoon convection.

Tropical Storm Lidia, currently located 115 mi ESE of Cabo, is forecast to track NNW up through central Baja California then turn more westerly as it encounters the ridge to the north. Lidia is forecast to degenerate into a post-tropical depression by Sunday morning while turning westward. However, peripheral moisture could move into Southern California. GFS is more aggressive with a tropical moisture surge Sun-Mon (PW rising to 2"+), while the EC keeps the bulk of the moisture south of the border as it depicts a stronger ridge holding over the SW United States. So there is uncertainty in the northward extent of the tropical moisture. For now it is prudent to add a slight chance of showers/tstorms Sun-Mon and we will continue to assess this in the days to come.

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.AVIATION...

310900Z...Coast...Patchy low clouds and fog near KSAN and possibly KCRQ through 15Z. Where/when cigs occur, bases 200-300 feet msl with vis 0-5SM BR. Very little if any fog tonight into Friday.

Valleys/Mountains/Deserts...SCT-BKN clouds and isolated -shra/-tsra this morning, increasing in coverage after 19Z mostly north of San Diego County. Bases 8000-10000 feet msl with tops growing to as high as 30000 feet msl. Gusty and erratic winds possible around any thunderstorm. -shra/-tsra gradually decreasing tonight after 03Z.

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.MARINE...

No hazardous marine weather is expected through Monday.

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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...Heat Advisory until 10 PM PDT Saturday for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County

Mountains.

Excessive Heat Warning until 10 PM PDT Saturday for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County Valleys-San Gorgonio Pass Near Banning-Santa Ana Mountains and Foothills.

PZ...NONE.

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PUBLIC...Gregoria

AVIATION/MARINE...MM

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FXUS65 KPSR 311100

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

400 AM MST Thu Aug 31 2017

...Updated Aviation and Fire Weather...

.SYNOPSIS...

Above normal temperatures will continue through Friday, but will trend sharply downward this weekend as deeper tropical moisture moves into the area from the south. Thunderstorm chances will remain very limited across lower desert communities through the rest of the work week with activity focused mainly over mountain areas. As moisture and humidity increase this weekend, the threat of showers and thunderstorms increases especially over the southwest Arizona and far southeast California deserts. Drier and warmer conditions return early next week along with isolated mainly afternoon and evening thunderstorms.

&&

.DISCUSSION...

Early this morning, the upper high to our north (centered near the 4 corners) continued to weaken as 500mb heights at the center had fallen to around 592dm. Weak east/southeast steering flow remained in place over south-central Arizona, but as the atmosphere continued to dry with very little convection developing upstream last night and at 2 am, IR imagery showed generally clear skies across the AZ deserts. Latest soundings from Phoenix and Tucson showed PWAT below one inch (just 0.77 inches at TUS) along with virtually no CAPE. Slightly more moisture/instability continues out west at 2 am with a few weak storms going mainly north and west of Parker. With the high slowly weakening, high temperatures fell slightly and Phoenix only reached 108 yesterday and little change in high temps are expected thru Friday. For the next couple of days, today through Friday, we can expect similarly meager convection over the area as moisture will continue to thin from the east. PWAT values over the lower deserts will drop well below one inch, CAPE becomes nearly zero and 850mb dewpoints will drop well below 8C. So expect for an isolated storm over higher terrain areas of Joshua Tree NP and southern Gila County, we don't expect desert storms thru Friday...just mostly clear skies.

Probably the most interesting feature of note at this time - weather

wise - is the tropical system currently spinning along the NW Mexican coast just off the southern tip of Baja CA. This system has been forecast to ride north along the southern tip of Baja and then turn west out to sea under the influence of easterly steering flow around the high to our north. Latest GFS guidance has thrown us a bit of a curveball with this idea; it is now tracking the system further to the north and does not start turning it west until it reaches far northern Baja Sunday into next Monday. As a result of the much closer approach to southern Arizona, we see a substantial import of deep tropical moisture into primarily the southwest AZ deserts and much of far SE California. Deeper moisture appears to mainly stay west of the greater Phoenix area however. PWAT values climb over 2 inches to our west but despite the increase in moisture the atmosphere is forecast to be relatively stable over the weekend and into next week with very modest CAPE and a moist-adiabatic lapse rate. Thus any weather that develops will likely be more showery than strongly convective. As such we have raised POPs over our western deserts this weekend but still - in keeping with current NAEFS POP trend - POPS mostly stay in the slight chance category, between 15 and 25 percent. We have also lowered high temperatures quite a bit especially out west, with some cooler deserts falling into the 90s such as at Imperial. Even the Phoenix area, despite not seeing the deepest moisture or thickest cloud cover, drops to near 100 by Sunday.

For the period next Monday through Wednesday: the upper high that has been present to our north really strengthens yet again and centers itself to our north over the interior west bringing stronger easterly steering flow into southern AZ and as this occurs the bulk of the tropical moisture as well as its decaying circulation center shifts further to the west and mostly out of our weather picture. We return to a low to moderate grade and sort of "broad brushed" forecast each day as convection forms along the rim, then some of it moves westward and into the lower deserts during the evening hours. High temps climb back above normal and in fact, if the drier ECMWF forecast pans out, with its higher 500mb heights, we may see high temps again approach 110 over the hotter deserts west of Phoenix sometime early next week.

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.AVIATION...

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

Sfc winds should remain mostly easterly through Friday morning though will likely be variable in direction around sunset as the usual west component fights against the prevailing pressure gradient. Just a FEW clouds through the day with thunderstorms staying well north of terminal sites.

Southeast California/Southwest Arizona including KIPL and KBLH: Showers/storms should remain north of the terminal sites with only lingering FEW-SCT midlevel clouds through Friday morning. Some outflow from storms to the north could create a brief period shifting and erratic winds though the overall tendency will be towards a southeast component.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday...

Central Arizona should remain mostly dry through the middle of next week, however increasing midlevel moisture from a decaying tropical system will push towards SW Arizona and SE California over the weekend. These western districts will have the best shot of wetting rains as well as the highest humidity values through the weekend and early next week. This moisture increase will also allow temperatures to moderate closer to the seasonal average. Winds through the weekend will favor an prolonged easterly direction and could have some stronger gusts resulting from the tropical system influence.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...CB

AVIATION...MO

FIRE WEATHER...MO

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542

FXUS65 KPSR 312125

AFDPSR

## Area Forecast Discussion

National Weather Service Phoenix AZ

225 PM MST Thu Aug 31 2017

## .SYNOPSIS...

Above normal temperatures will continue through Friday, but will trend sharply downward this weekend as deeper tropical moisture moves into the area from the south. Thunderstorm chances will remain very limited across lower desert communities through the rest of the work week with activity focused mainly over mountain areas. As moisture and humidity increase this weekend, the threat of showers and thunderstorms increases especially over the southwest Arizona and far southeast California deserts. Drier and warmer conditions return early next week along with isolated mainly afternoon and evening thunderstorms.

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## .DISCUSSION...

Today through Friday: High pressure centered along the CO/NM border is supplying us with very dry easterly flow. PWs this morning at KPHX were down to .76 inches and dropping! This weather pattern will generally remain in place tomorrow with little changes. High temperatures each day will continue to be very hot with highs in the 100-110 range in south-central Arizona, increasing to 110 to 115 degrees in southwest Arizona/southeast California.

## Saturday through Sunday:

Tropical Storm Lidia, which is currently near the southern edge of the Baja peninsula will continue to track north-northwestward over the next 24 hours before being steered to the northwest and eventually west around the mid-level high over the southwest U.S. Although the GFS is showing a track into the northern Gulf of Mexico and eventually somewhere near Yuma, it still remains the outlier compared to other model solutions. In addition, the aforementioned mid-level high is expected to strengthen which will act like a blocking mechanism and keep Lidia from progressing too far north into Arizona. As Lidia continues to travel over the mountainous terrain and cooler waters, she will weaken, becoming a remnant low by Sunday.

Even though confidence is pretty high that Lidia won't move into Arizona, there is no doubt that we will see a significant increase in moisture and cloud cover, as well as a significant decrease in temperatures. Although the bulk of the moisture will stay south of our area, there will still be a big jump in PWs from where we currently stand. EMCs GEFS plumes for KYUM show a mean PW around 2.1 inches on Sunday and for KPHX it is showing a mean PW around



1.6 inches on Sunday.

All in all, moisture and cloud cover will be on the increase starting in southeast Cali and southwest AZ Saturday and then spreading east into the central parts of our forecast area Sunday. Cloudiness with pockets of rain/heavy rain are what we expect to occur at this time. However, confidence still remains a bit low on exactly what the impacts will be. We will definitely continue to monitor this system over the next couple of days.

Monday through Wednesday: the upper high that has been present to our north really strengthens yet again and centers itself to our north over the interior west bringing stronger easterly steering flow into southern AZ and as this occurs the bulk of the tropical moisture as well as its decaying circulation center shifts further to the west and mostly out of our weather picture. We return to a low to moderate grade and sort of "broad brushed" forecast each day as convection forms along the rim, then some of it moves westward and into the lower deserts during the evening hours. High temps climb back above normal and in fact, if the drier ECMWF forecast pans out, with its higher 500mb heights, we may see high temps again approach 110 over the hotter deserts west of Phoenix sometime early next week.

&&

.AVIATION...

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

Strong easterly flow aloft will likely keep winds blowing from an easterly direction through the taf period, other than a short period of light/variable conditions early this evening. Some gustiness is possible for a time during the late morning hours on Friday. Drier air moving from the east will keep skies mainly clear, except for some thin smoke layers (originating from fires in the Northern Rockies) aloft 20k feet, with any convective activity remaining well off to the north and east.

Southeast California/Southwest Arizona including KIPL and KBLH:

Rather dry air over the region will keep skies mainly clear through the taf period, with just some thin cirrus moving overhead from time-to-time. Winds to mainly favor an easterly to southeasterly direction through the taf period as well.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday...

Central Arizona should remain mostly dry through the middle of next week, however increasing midlevel moisture from a decaying tropical system will push towards SW Arizona and SE California over the

weekend. These western districts will have the best shot of wetting rains as well as the highest humidity values through the weekend and early next week. This moisture increase will also allow temperatures to moderate closer to the seasonal average. Winds through the weekend will favor an prolonged easterly direction and could have some stronger gusts resulting from the tropical system influence.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Hernandez

AVIATION...Percha

FIRE WEATHER...MO

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FXUS66 KSGX 010417

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

917 PM PDT Thu Aug 31 2017

.SYNOPSIS...

Hot weather will continue through the weekend with minor cooling next week. Monsoon moisture will bring chances of thunderstorms each day. Tropical Storm Lidia, currently located over the southern tip of the Baja peninsula, is forecast to move northward, but eventually dissipate as it begins to turn to the west near Central Baja. Some moisture from this system may move into Southern California Sunday into Monday, potentially bringing widespread showers and thunderstorms.

&&

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

It was another hot day with several locations breaking or tying records, including Ramona with tied its all time record high of 111 set on July 22, 2006. Temperatures this evening are running several degrees lower than this time yesterday, thanks in part to earlier convection which helped cool things off. Showers and thunderstorms have since dissipated and no activity is anticipated overnight. Patchy dense fog was developing along the coast and should become more widespread overnight.

The high pressure ridge will continue to bring hot conditions through the forecast period. High temperatures Friday will be similar to or today or even slightly higher west of the mountains as offshore flow develops. Drier air will move into the region with shower and thunderstorm chances mainly limited to the San Bernardino County mountains and deserts. Mid and upper level moisture will begin to increase during the day Saturday as Tropical Storm Lidia lifts north, with showers and thunderstorms becoming more widespread across the mountains and deserts. Though some cooling is expected due to the increasing cloud cover and lowering heights, it will still be plenty warm. The Heat Advisories and Excessive Heat Warnings continue in effect through 10 pm Saturday. Record highs will likely be broken at a few sites each day through Saturday.

Tropical Storm Lidia, currently over the southern Baja peninsula, is still forecast to track NNW up through central Baja California then turn more westerly as it encounters the ridge to the north. Lidia is forecast to degenerate into a post-tropical depression by Sunday morning while turning westward. It is looking likely that moisture from this system will move into So Cal and the adjacent coastal waters by Sunday morning. GFS and NAM remain the most aggressive in terms of moisture, while the EC is drier. Have increased shower/thunderstorm chances and made them more widespread for Saturday night and Sunday, however amounts are still uncertain. It's possible we could even get some gusty east winds out of this system on Sunday depending on the track.

For Monday through Wednesday...we remain under moist south-southeast flow aloft as a giant upper level high remains parked over the Great Basin. this will maintain thunderstorm chances over the mountains and deserts and above normal temps.

&&

.AVIATION...

010415Z...Coast...Areas of BKN-OVC stratus and fog will occur overnight with cloud bases 200-600 ft MSL and tops to 800 ft MSL with local vis below 1 mile. This will impact KSAN through 06Z but timing after that is low confidence as the stratus/fog could retreat towards the ocean. There is about a 50 percent chance low cigs/vis will reach KCRQ and 30 percent for KSNA. Most areas will clear by 15Z Fri. Otherwise, FEW-SCT clouds at/above 10000 ft MSL will prevail through Fri.

Valleys/Mountains/Deserts...Clouds at/above 10000 ft MSL will gradually decrease through 07Z with generally FEW-SCT conditions after 07Z, continuing through Fri with mostly unrestricted vis. There is a slight chance of TSRA Fri afternoon in the San Bernardino County Mountains.

&&

.MARINE...

A shallow marine layer will bring patchy dense fog tonight and early Friday morning.

Possible remnant moisture from Tropical Storm Lidia may result in some showers and thunderstorms over the coastal waters Sunday or Monday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT Saturday for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County Mountains.

Excessive Heat Warning until 10 PM PDT Saturday for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County Valleys-San Gorgonio Pass Near Banning-Santa Ana Mountains and Foothills.

PZ...NONE.

&&

\$\$

PUBLIC...SS

AVIATION/MARINE...Maxwell

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FXUS65 KPSR 011003

AFDPSR

## Area Forecast Discussion

National Weather Service Phoenix AZ

300 AM MST Fri Sep 1 2017

## .SYNOPSIS...

Thunderstorm chances will remain limited today, however increasing moisture and humidity over the weekend will lead to better chances of showers and thunderstorms. The best chance of accumulating rainfall will occur over the southwest Arizona and far southeast California deserts. After a cooler and mostly cloudy weekend, warmer conditions will return next week along with more typical isolated afternoon thunderstorms.

&amp;&amp;

## .DISCUSSION...

A previously blocked Conus flow pattern was in the process of readjusting this morning with strong East Pacific ridging in the northern stream progressively folding into the western Conus while Tropical Storm Lidia (and other subtropical features) were caught in "retrogressive" easterly flow. The main forecast challenges over the next 72-96 hours revolves around the movement of Lidia in relation to the sprawling midtropospheric high settling into the Great Basin and the effects on poleward moisture advection and veracity of model output handling this part of the tropical/continental interaction.

In the near term, very little change today from conditions the past several days as subsident deep easterly flow reinforces an unusually dry early September airmass. In fact, 00Z regional sounding data sampling Pwats around 0.5 inches are below the 10th percentile for this time of year, and boundary layer mixing ratios under 5 g/kg essentially preclude any better deep convection. Only slightly lower heights aloft will dampen afternoon highs somewhat (especially over SE California), yet still remain above average and not terribly far from a persistence forecast. Any isolated thunderstorms should be confined to northern Arizona with only minimal chances of outflows reaching into the Phoenix metro area.

Despite the lack of storms and otherwise quiet weather today, there are several interesting features coming together tonight and Saturday morning. First, several models hint at a shortwave and slug of moisture in the 500-600mb layer propagating from New Mexico into central Arizona. While this could produce some mountain showers, very dry air below H7 may limit activity to virga (especially consider lack of other deep ascent mechanisms). Secondly with the combined influence of Lidia approaching and thermal low pressure developing inland, virtually all model output is screaming for a classic Gulf of California surge overnight with shallow 65F-75F dewpoints spreading northeast. Lastly, the thicker cirrus shield

from Lidia will spread over most of the forecast area Saturday morning adding additional moisture to the atmospheric column. While these latter two mechanisms will lead to total column Pwats increasing, it will not totally ameliorate the drier airmass with persistent easterly flow reinforcing dry air within the H8-H7 layer until Saturday night.

Through the weekend, Lidia will track northwest along the Baja peninsula eventually being steered west as a remnant low into the colder Pacific around the aforementioned building Great Basin ridge. While this blocking high will keep the central circulation of Lidia well from Arizona and California, moisture will continue to be shed along the northern periphery of the storm. Thick clouds will hinder insolation throughout the weekend and many locations will struggle to reach 100F (and many areas in SE California may actually not even reach 90F on any given day should clouds and showers persist during daylight hours).

The ten thousand dollar question is how much rain will result from this moisture increase and how long will it last. As with any approaching tropical system, there are a couple competing signals affecting rainfall chances and coverage. Moisture increase is certainly a positive and most model output indicates a substantial jump in Pwats through Yuma/El Centro areas by Saturday afternoon (Pwats forecast 2.0-2.2 inches). However, steeper midlevel lapse rates will be erased with the introduction of a more tropical environment and thicker clouds will limit insolation such that total instability of only a couple hundred J/kg may be realized. Thus, better deep layer ascent associated with a vorticity band from the remnant tropical system may be needed to release the moisture content. SREF mean QPF has averaged around 1/3 inch the past several runs, however the ensemble range has been from 0 to 2.10 inches. So, the potential for heavy, flooding rain is present, but with most ensemble members (and virtually all operational output) packed into the lower end of the distribution curve, confidence is low that amounts will exceed the ensemble mean.

There is good model agreement that the large H5 high stationed over the Great Basin will maintain its predominance next week with 596dm heights centered over Nevada only gradually weakening with time. The remnants of Lidia will have floated harmlessly west into the Pacific while deep troughing and large negative height anomalies blast into the eastern Conus. While the return to east/northeast flow next week may look similar to the current pattern, there may be more residual moisture present. There is also a resounding signal towards a backdoor front Tuesday afternoon/evening pulling a piece of a shortwave and deep moisture convergence from New Mexico into central Arizona. Thus, while much of next week may be characterized by mountain storms and only lower elevation outflow boundaries, Tuesday could be the one more active day of the bunch. Correspondingly with the drier conditions and H5 heights 591-594dm, temperatures will return to an above normal range though probably staying just short of excessive or record territory.



&&

.AVIATION...

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

Easterly flow will redevelop tonight with some gustiness possible for a time during the late morning hours and lasting possibly through the afternoon on Friday. Drier air will continue to keep skies mainly clear, except for some thin smoke layers (originating from fires in the Northern Rockies) aloft 20k feet. Convective activity will remain well off to the north and east of the TAF sites Friday afternoon.

Southeast California/Southwest Arizona including KIPL and KBLH:

Rather dry air over the region will keep skies mainly clear through the taf period, with just some thin cirrus moving overhead from time-to-time. Winds to mainly favor an easterly to southeasterly direction through the taf period as well.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Saturday through Wednesday...

Central Arizona should remain mostly dry through the middle of next week, however increasing midlevel moisture from a decaying tropical system will push towards SW Arizona and SE California over the weekend. These western districts will have the best shot of wetting rains as well as the highest humidity values through the weekend and early next week. This moisture increase will also allow temperatures to moderate closer to the seasonal average. Winds through the weekend will favor an prolonged easterly direction and could have some stronger gusts resulting from the tropical system influence.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...MO

AVIATION...Wilson/Percha

FIRE WEATHER...MO

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FXUS66 KSGX 011036

AFDSGX

## Area Forecast Discussion

National Weather Service San Diego CA

336 AM PDT Fri Sep 1 2017

...Continued Very Hot Inland Through Saturday...

...Moisture from Lidia to Bring Increasing Shower/Tstorm Chances  
Saturday Night Through Monday...

...Gusty Easterly Winds Developing Saturday Night-Sunday...

## .SYNOPSIS...

Very hot conditions will continue across the area through Saturday with a slight chance of thunderstorms over the mountains and deserts. Tropical Storm Lidia near the southern Baja peninsula will track north then eventually west off the central to northern Baja coast while dissipating. The remnant moisture from this system will move from south to north across Southern California Saturday night through Monday, bringing an increasing chance of showers and thunderstorms to the area. Winds will increase out of the east Saturday night through Sunday and become quite gusty, especially on east facing mountain slopes.

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

High pressure at upper levels resides off the Northern California coast. This ridge will build eastward into the Great Basin through early next week. Meanwhile, Tropical Storm Lidia, currently just off the coast of Baja California Sur, is forecast to move north along the Baja Peninsula while weakening and eventually dissipating into a post-tropical/remnant low by Saturday night while pulling off the central to northern Baja coast. Global models suggest that this low will eventually move northwest off the Southern California coast while getting absorbed by an upper level low which is projected to be off the coast then.

Ahead of the tropical moisture will be continued blazing heat across inland areas today and again on Saturday. In fact, today looks as hot as what was felt yesterday, and even hotter at some locales as weak offshore flow develops and that continues on Saturday, promising yet another scorcher.

Tropical moisture arrives from south to north Saturday night through Sunday associated with the remnants of Lidia. GFS continues faster and more aggressive with the moisture across

Southern California compared to the EC, but even that model shows a formidable increase. This will lead to increasing clouds from south to north Sat night-Sunday along with an increasing chance of showers and thunderstorms. Have increased POPS this period area wide. It is possible an area of stratiform rainfall even moves in, especially across far southern San Diego County, but confidence is low so kept scattered POPS going for now and we can assess if POPS need a further increase in time.

Rainfall amounts look to average 0.10-0.25" most locales (less in the high desert/Coachella Valley), but locally higher amounts are possible, especially along the desert slopes of the San Diego County mountains where 1"+ is possible.

Wind fields will be on the increase Saturday night as a squeeze play develops between the remnant low and high pressure to the northeast. GEFS mean H85 wind at San Diego is at 35 KT at 12Z Sunday. So winds will become gusty out of the east with strongest winds along east facing mountain slopes where gusts of 40-50 mph will be possible. Elsewhere, gusts of 30-40 mph will be possible. A Wind Advisory may be needed and this will be assessed in later shifts.

The high moisture will eventually lift out and away from the area Sunday night-Monday but still isolated to scattered showers and a few thunderstorms will be possible. Thereafter, a ridge becomes the dominant force again with above normal temps continuing along with the potential of afternoon thunderstorms over the mountains each day next week.

&&

.AVIATION...

011000Z...Coast...Patchy stratus and dense fog will occur through mid morning with cloud bases 200-600 ft MSL and tops to 800 ft MSL and with vis restrictions down to 1/2 SM. This will impact KSAN through 12Z but timing after that is very low confidence as the stratus/fog could retreat towards the ocean. Low CIGS and VSBY may also impact KCRQ. Most areas will clear by 15Z Fri. Otherwise, FEW-SCT clouds at/above 10000 ft MSL will prevail through tonight.

Valleys/Mountains/Deserts...Scattered clouds at/above 10000 ft MSL continuing today with mostly unrestricted vis. There is a slight chance of TSRA this afternoon in the San Bernardino County Mountains.

&&

.MARINE...

A shallow marine layer will bring patchy dense early this morning.

The remnant circulation and moisture plume from Tropical Storm Lidia will bring scattered showers and thunderstorms on Sunday to the coastal waters. In addition to the precipitation, there is a chance that winds will be strong enough to produce steep seas up to 7 feet

and brisk winds to small craft advisory criteria. Conditions will gradually improve Sunday night and into Monday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT Saturday for Orange County Coastal

Areas-Riverside County Mountains-San Bernardino County  
Mountains-San Diego County Coastal Areas-San Diego County  
Mountains.

Excessive Heat Warning until 10 PM PDT Saturday for Apple and  
Lucerne Valleys-Coachella Valley-Orange County Inland Areas-  
San Bernardino and Riverside County Valleys-The Inland  
Empire-San Diego County Deserts-San Diego County Valleys-  
San Geronio Pass Near Banning-Santa Ana Mountains and  
Foothills.

PZ...NONE.

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PUBLIC...Gregoria

AVIATION/MARINE...Brotherton

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028

FXUS65 KPSR 011232

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

532 AM MST Fri Sep 1 2017

.UPDATE...Updated Aviation and Fire Weather Discussions...

&&

.SYNOPSIS...

Thunderstorm chances will remain limited today, however increasing moisture and humidity over the weekend will lead to better chances of showers and thunderstorms. The best chance of accumulating rainfall will occur over the southwest Arizona and far southeast California deserts. After a cooler and mostly cloudy weekend, warmer conditions will return next week along with more typical isolated afternoon thunderstorms.

&&

.DISCUSSION...

A previously blocked Conus flow pattern was in the process of readjusting this morning with strong East Pacific ridging in the northern stream progressively folding into the western Conus while Tropical Storm Lidia (and other subtropical features) were caught in "retrogressive" easterly flow. The main forecast challenges over the next 72-96 hours revolves around the movement of Lidia in relation to the sprawling midtropospheric high settling into the Great Basin and the effects on poleward moisture advection and veracity of model output handling this part of the tropical/continental interaction.

In the near term, very little change today from conditions the past several days as subsident deep easterly flow reinforces an unusually dry early September airmass. In fact, 00Z regional sounding data sampling Pwats around 0.5 inches are below the 10th percentile for this time of year, and boundary layer mixing ratios under 5 g/kg essentially preclude any better deep convection. Only slightly lower heights aloft will dampen afternoon highs somewhat (especially over SE California), yet still remain above average and not terribly far from a persistence forecast. Any isolated thunderstorms should be confined to northern Arizona with only minimal chances of outflows reaching into the Phoenix metro area.

Despite the lack of storms and otherwise quiet weather today, there

are several interesting features coming together tonight and Saturday morning. First, several models hint at a shortwave and slug of moisture in the 500-600mb layer propagating from New Mexico into central Arizona. While this could produce some mountain showers, very dry air below H7 may limit activity to virga (especially consider lack of other deep ascent mechanisms). Secondly with the combined influence of Lidia approaching and thermal low pressure developing inland, virtually all model output is screaming for a classic Gulf of California surge overnight with shallow 65F-75F dewpoints spreading northeast. Lastly, the thicker cirrus shield from Lidia will spread over most of the forecast area Saturday morning adding additional moisture to the atmospheric column. While these latter two mechanisms will lead to total column Pwats increasing, it will not totally ameliorate the drier airmass with persistent easterly flow reinforcing dry air within the H8-H7 layer until Saturday night.

Through the weekend, Lidia will track northwest along the Baja peninsula eventually being steered west as a remnant low into the colder Pacific around the aforementioned building Great Basin ridge. While this blocking high will keep the central circulation of Lidia well from Arizona and California, moisture will continue to be shed along the northern periphery of the storm. Thick clouds will hinder insolation throughout the weekend and many locations will struggle to reach 100F (and many areas in SE California may actually not even reach 90F on any given day should clouds and showers persist during daylight hours).

The ten thousand dollar question is how much rain will result from this moisture increase and how long will it last. As with any approaching tropical system, there are a couple competing signals affecting rainfall chances and coverage. Moisture increase is certainly a positive and most model output indicates a substantial jump in Pwats through Yuma/El Centro areas by Saturday afternoon (Pwats forecast 2.0-2.2 inches). However, steeper midlevel lapse rates will be erased with the introduction of a more tropical environment and thicker clouds will limit insolation such that total instability of only a couple hundred J/kg may be realized. Thus, better deep layer ascent associated with a vorticity band from the remnant tropical system may be needed to release the moisture content. SREF mean QPF has averaged around 1/3 inch the past several runs, however the ensemble range has been from 0 to 2.10 inches. So, the potential for heavy, flooding rain is present, but with most ensemble members (and virtually all operational output) packed into the lower end of the distribution curve, confidence is low that amounts will exceed the ensemble mean.

There is good model agreement that the large H5 high stationed over the Great Basin will maintain its predominance next week with 596dm

heights centered over Nevada only gradually weakening with time. The remnants of Lidia will have floated harmlessly west into the Pacific while deep troughing and large negative height anomalies blast into the eastern Conus. While the return to east/northeast flow next week may look similar to the current pattern, there may be more residual moisture present. There is also a resounding signal towards a backdoor front Tuesday afternoon/evening pulling a piece of a shortwave and deep moisture convergence from New Mexico into central Arizona. Thus, while much of next week may be characterized by mountain storms and only lower elevation outflow boundaries, Tuesday could be the one more active day of the bunch. Correspondingly with the drier conditions and H5 heights 591-594dm, temperatures will return to an above normal range though probably staying just short of excessive or record territory.

&&

.AVIATION...

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

Easterly flow should remain dominant through the majority of the period. Winds tonight may become variable at times or even briefly switch out of the southwest as moisture surges northward out of southwest Arizona. The initial dry air will continue to keep skies mainly clear through this evening, but high clouds will increase after 06Z Sat and become BKN to OVC later Saturday morning.

Southeast California/Southwest Arizona including KIPL and KBLH:

Clear skies initially will give way to increasing high clouds tonight. South to southeast winds AOB 10 kts will affect both KIPL and KBLH through early evening before a strong surge of southeasterly winds moves into the area between 06-09Z. This will bring gusty winds to 25 kts at times through around 12Z Saturday.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday...

Improved moisture levels, but still on the low side for monsoon season, will affect the area into next week. Slight chances of showers and thunderstorms will affect mainly high terrain locations during the period with best chances occurring on Tuesday. Aside from near to below normal temperatures on Sunday, above normal temperatures will be present over the region next week. Minimum humidities will drop from 20-35% on Sunday to the



teens starting Monday. Winds will overall remain light outside of thunderstorm areas.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...MO

AVIATION...Kuhlman

FIRE WEATHER...Kuhlman

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FXUS66 KSGX 011626

AFDSGX

## Area Forecast Discussion

National Weather Service San Diego CA

926 AM PDT Fri Sep 1 2017

## .SYNOPSIS...

Very hot weather will continue through Saturday with a slight chance of thunderstorms over the mountains and deserts. Tropical moisture from the south will bring more widespread showers on Sunday. Hot weather and small chances of thunderstorms mainly for the mountains will follow Monday and beyond.

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

Except for patchy dense fog along parts of the coast, skies were mostly clear this morning. The atmosphere is starting out a lot drier than it was yesterday at this time. Some offshore breezes are helping the drying too. Will it be dry enough for no showers or thunderstorms today? There might be an isolated shower or thunderstorm, most likely in the San Bernardino and San Gabriel mountains, but it looks mostly dry today. Although the air mass is still somewhat humid, it remains hot, and temps should skyrocket pretty well today with unencumbered sunshine. You know the story: strong high pressure aloft will continue to bring excessively hot weather today through Saturday. You should be extra cautious about strenuous activity outside. A few daily max temp records will fall today and Saturday, which is when the heat hazards will finish up their long life. The monsoon moisture increases Saturday, but only slightly, so there should be a few more mountain thunderstorms, but not widespread. A change comes Sunday. The remnants of tropical storm Lidia, which on Sunday becomes a tropical depression, will bring a deep swath of moisture and cloudiness that will flow through Southern California. The greater depth of the moisture will stay offshore, but enough over land to produce widespread showers. The air will be more stable and cloudy, but there is still a chance of thunderstorms. Best chances will be mountains westward and any time early Sunday morning through afternoon. Some winds from the east and south could accompany the depression: you might say a glancing blow. The details are fraught with uncertainty and models are all over the map as far as where, when and if showers and winds happen. Hence, confidence is high for some precip west of the mountains, but low on the spatial and temporal details. On Labor Day the deep moisture moves out and we transition to a more regularly scheduled monsoon pattern that will continue for the rest of the week. High pressure aloft continues strong, but not like this past week, and temperatures should be

above average, but not excessive. Expect small chances of thunderstorms mainly in mountains and deserts each afternoon.

&&

.AVIATION...

011545Z...Coast...Patchy low clouds and dense fog will continue along the immediate coast through mid morning, with cloud bases 200-600 ft MSL and tops to 800 ft MSL. Local vis restrictions down to 1/2 SM will be possible. This could impact KSAN and KCRQ through 17Z but confidence is low as the stratus/fog retreats west away from the coast. Otherwise, FEW-SCT clouds at/above 10000 ft MSL will prevail through tonight.

Valleys/Mountains/Deserts...Scattered clouds at/above 10000 ft MSL continuing today with mostly unrestricted vis. There is a slight chance of TSRA this afternoon in the San Bernardino County Mountains.

&&

.MARINE...

A shallow marine layer will again bring patchy dense fog early Saturday morning.

The remnant low and moisture from Tropical Storm Lidia will bring scattered showers and thunderstorms on Sunday to the coastal waters. In addition to the precipitation, there is a chance that winds will be strong enough to produce rough seas up to 7 feet with steep waves. Conditions will gradually improve Sunday night into Monday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT Saturday for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County Mountains.

Excessive Heat Warning until 10 PM PDT Saturday for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County Valleys-San Geronio Pass Near Banning-Santa Ana Mountains and Foothills.

PZ...NONE.

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FXUS66 KSGX 012049

AFDSGX

## Area Forecast Discussion

National Weather Service San Diego CA

149 PM PDT Fri Sep 1 2017

## .SYNOPSIS...

Very hot weather will continue through Saturday with a slight chance of thunderstorms over the mountains and deserts. Tropical moisture from the south will bring more widespread showers on Sunday. Hot weather and small chances of thunderstorms mainly for the mountains will follow Monday and beyond.

&amp;&amp;

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

Hot weather dominates the weather headlines today. Many coastal sites, particularly in San Diego County shot up to 90+ degrees before noon, but the sea breeze has since stopped the mercuric rise. Inland temps are blowing past 100 like nothing. High dew points and humidity have dampened temps in the desert, only in the lower 100s, but with a heat index in the 110s. Cumulus clouds are forming off the mountains and drifting west, but so far no showers or thunderstorms. They are unlikely this afternoon so a slight chance is the way to go, most likely in the San Bernardino and San

Gabriel mountains. Strong high pressure aloft will continue to bring excessively hot weather through Saturday. A few daily max temp records will fall today and Saturday, which is when the heat hazards will finish up their long life. The monsoon moisture and chance of thunderstorms increases a little Saturday. On Saturday night and Sunday, the remnants of tropical storm Lidia, which on Sunday becomes a tropical depression, will bring a deep swath of moisture and cloudiness that will flow through Southern California. The greater depth of the moisture will stay offshore, but enough over land to produce widespread showers. The air will be a little more stable and cloudy, but there is still a chance of thunderstorms. Best chances will be in mountains and southern zones any time late Saturday night through Sunday evening. Some winds from the east and south could accompany the depression: you

might say a glancing blow. The details are fraught with uncertainty and models are all over the map as far as where, when and if showers and winds happen. However, 12Z model runs have backed off the precip amounts, keeping the higher amounts south and west. Hence, confidence is high for some precip west of the mountains, but low on the spatial and temporal details. On Labor Day the deep moisture moves out and we transition to a more regularly scheduled monsoon pattern that will continue through at least Thursday. High pressure aloft continues strong, but not like

this past week, and temperatures should be above average, but not excessive. Expect small chances of thunderstorms mainly in mountains and deserts each afternoon. Models are indicating some west coast trough that would nudge aside the moisture later in the week for dry weather by Friday.

&&

.AVIATION...

012050Z...Coast...Patchy low clouds and dense fog will return to the immediate coast late tonight, with cloud bases 300-600 ft MSL and tops to 700 ft MSL. Local vis restrictions down to 1/2 SM will be possible. This could impact KSAN and KCRQ aft 09Z but timing is very

uncertain. Otherwise, FEW-SCT clouds at/above 10000 ft MSL will prevail through Sat morning.

Valleys/Mountains/Deserts...Scattered clouds at/above 10000 ft MSL with unrestricted vis will continue this afternoon. There is a slight chance of SHRA/TSRA this afternoon in the San Bernardino County Mountains.

&&

.MARINE...

A shallow marine layer will again bring patchy dense fog early Saturday morning.

The remnant low and moisture from Tropical Storm Lidia will bring scattered showers and thunderstorms on Sunday to the coastal waters. In addition to the precipitation, there is a chance that winds will be strong enough to produce rough seas up to 7 feet with steep waves. Conditions will gradually improve Sunday night into Monday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT Saturday for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County Mountains.

Excessive Heat Warning until 10 PM PDT Saturday for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County Valleys-San Geronio Pass Near Banning-Santa Ana Mountains and Foothills.

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337

FXUS65 KPSR 012127

AFDPSR

## Area Forecast Discussion

National Weather Service Phoenix AZ

227 PM MST Fri Sep 1 2017

## .SYNOPSIS...

Thunderstorm chances will remain limited today, however increasing moisture and humidity over the weekend will lead to better chances of showers and thunderstorms. The best chance of accumulating rainfall will occur over the southwest Arizona and far southeast California deserts. After a cooler and mostly cloudy weekend, warmer conditions will return next week along with more typical isolated afternoon thunderstorms.

&amp;&amp;

## .DISCUSSION...

Currently, the 500 mb high is centered along the Oregon/California border and Tropical Storm Lidia is centered over the southern Baja California Peninsula. A few showers and thunderstorms are developing mainly across the White Mountains, with activity staying in this general area the rest of the day. Thereafter, TS Lidia will start to influence parts of our forecast area.

Lidia will continue to weaken as the system continues to interact with the higher terrain along the Baja California Peninsula. Even more weakening will occur tomorrow when Lidia moves over the cold Pacific, with Lidia then expected to quickly decay into a remnant low. She is currently moving to the north-northwest at 10 mph and will continue to do so for the next 72 hours or so. Thereafter, her track will shift more to the west-northwest around the mid-level high over the southwest United States.

For us, moisture will be on the increase as TS Lidia continues her generally northwestward progression. Both the GEFS and NAEFS mean Precipitable Water forecast show the greatest moisture and thus highest PWs staying south and west of Arizona, with the greatest values from Yuma to El Centro. During the Saturday evening to Sunday morning time frame, EMC GEFS plumes are indicating mean PWs increasing to close to 2 inches in El Centro and a little bit over 2 inches in Yuma. Further east, near Phoenix, mean PWs are forecast to rise to near 1.3 inches. The biggest uncertainty is how cloud cover will play a role. If thick cloud cover exists during the day Saturday, it's looking more like a rain/ isolated heavy rain event. However, if there are breaks in cloud cover and we are able to heat up a bit more and thus destabilize, it could get interesting in the Yuma to El Centro area. If you look at the SPC Sounding Climatology Page for Yuma. The record PW for the September 2nd 12Z sounding is 1.75 inches and for the September

3rd 12Z sounding it's 1.59 inches. So we will definitely have a lot of moisture for this time of year in southwest AZ and southeast Cali.

All in all there's still a little uncertainty to exactly what the storm mode will be tomorrow through Sunday. As we get closer to the event we will start to get a clearer picture. But, it is certain our temperatures will drop a few degrees, which will provide us Arizonans with a little bit of relief for this Labor Day weekend.

Monday through Wednesday:

There is good model agreement that the large H5 high stationed over the Great Basin will maintain its predominance next week with 596dm heights centered over Nevada only gradually weakening with time. The remnants of Lidia will have floated harmlessly west into the Pacific while deep troughing and large negative height anomalies blast into the eastern Conus. While the return to east/northeast flow next week may look similar to the current pattern, there may be more residual moisture present. There is also a resounding signal towards a backdoor front Tuesday afternoon/evening pulling a piece of a shortwave and deep moisture convergence from New Mexico into central Arizona. Thus, while much of next week may be characterized by mountain storms and only lower elevation outflow boundaries, Tuesday could be the one more active day of the bunch. Correspondingly with the drier conditions and H5 heights 591-594dm, temperatures will return to an above normal range though probably staying just short of excessive or record territory.

&&

.AVIATION...

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

Easterly flow should remain dominant through this evening. Winds later tonight and early Saturday will likely become variable at times or even briefly switch out of the southwest as moisture surges northward out of southwest Arizona. Winds are then expected to become southerly during the mid-morning through afternoon hours on Saturday. The initial dry air will continue to keep skies mainly clear through this evening, but high clouds will increase after 06Z Sat and become BKN to OVC later Saturday morning.

Southeast California/Southwest Arizona including KIPL and KBLH:

Clear skies initially will give way to increasing high clouds tonight. South to southeast winds AOB 10 kts will affect both KIPL and KBLH through early evening before a strong surge of southeasterly winds moves into the area between 06-09Z. This will bring gusty winds to 25 kts at times during the early/mid-morning hours on Saturday, with winds diminishing somewhat during the

afternoon hours.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday...

Improved moisture levels, but still on the low side for monsoon season, will affect the area into next week. Slight chances of showers and thunderstorms will affect mainly high terrain locations during the period with best chances occurring on Tuesday. Aside from near to below normal temperatures on Sunday, above normal temperatures will be present over the region next week. Minimum humidities will drop from 20-35% on Sunday to the teens starting Monday. Winds will overall remain light outside of thunderstorm areas.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Hernandez/MO

AVIATION...Percha

FIRE WEATHER...Kuhlman

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

**Department of Agronomy**

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Ames, IA 50011



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FXUS65 KPSR 020318

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

818 PM MST Fri Sep 1 2017

.UPDATE...Updated Aviation discussion.

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.SYNOPSIS...

Thunderstorm chances will remain limited today, however increasing moisture and humidity over the weekend will lead to better chances of showers and thunderstorms. The best chance of accumulating rainfall will occur over the southwest Arizona and far southeast California deserts. After a cooler and mostly cloudy weekend, warmer conditions will return next week along with more typical isolated afternoon thunderstorms.

&amp;&amp;

.DISCUSSION...

Currently, the 500 mb high is centered along the Oregon/California border and Tropical Storm Lidia is centered over the southern Baja California Peninsula. A few showers and thunderstorms are developing mainly across the White Mountains, with activity staying in this general area the rest of the day. Thereafter, TS Lidia will start to influence parts of our forecast area.

Lidia will continue to weaken as the system continues to interact with the higher terrain along the Baja California Peninsula. Even more weakening will occur tomorrow when Lidia moves over the cold Pacific, with Lidia then expected to quickly decay into a remnant low. She is currently moving to the north-northwest at 10 mph and will continue to do so for the next 72 hours or so. Thereafter, her track will shift more to the west-northwest around the mid-level high over the southwest United States.

For us, moisture will be on the increase as TS Lidia continues her generally northwestward progression. Both the GEFS and NAEFS mean Precipitable Water forecast show the greatest moisture and thus highest PWs staying south and west of Arizona, with the greatest values from Yuma to El Centro. During the Saturday evening to Sunday morning time frame, EMC GEFS plumes are indicating mean PWs increasing to close to 2 inches in El Centro and a little bit over 2 inches in Yuma. Further east, near Phoenix, mean PWs are forecast to rise to near 1.3 inches. The biggest uncertainty is how cloud cover will play a role. If thick cloud cover exists during the day Saturday, it's looking more like a rain/ isolated heavy rain event. However, if there are breaks in cloud cover and

we are able to heat up a bit more and thus destabilize, it could get interesting in the Yuma to El Centro area. If you look at the SPC Sounding Climatology Page for Yuma. The record PW for the September 2nd 12Z sounding is 1.75 inches and for the September 3rd 12Z sounding it's 1.59 inches. So we will definitely have a lot of moisture for this time of year in southwest AZ and southeast Cali.

All in all there's still a little uncertainty to exactly what the storm mode will be tomorrow through Sunday. As we get closer to the event we will start to get a clearer picture. But, it is certain our temperatures will drop a few degrees, which will provide us Arizonans with a little bit of relief for this Labor Day weekend.

Monday through Wednesday:

There is good model agreement that the large H5 high stationed over the Great Basin will maintain its predominance next week with 596dm heights centered over Nevada only gradually weakening with time. The remnants of Lidia will have floated harmlessly west into the Pacific while deep troughing and large negative height anomalies blast into the eastern Conus. While the return to east/northeast flow next week may look similar to the current pattern, there may be more residual moisture present. There is also a resounding signal towards a backdoor front Tuesday afternoon/evening pulling a piece of a shortwave and deep moisture convergence from New Mexico into central Arizona. Thus, while much of next week may be characterized by mountain storms and only lower elevation outflow boundaries, Tuesday could be the one more active day of the bunch. Correspondingly with the drier conditions and H5 heights 591-594dm, temperatures will return to an above normal range though probably staying just short of excessive or record territory.

&&

.AVIATION...

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

Latest guidance suggests winds should be diurnally driven overnight with light west winds switching over to typical downslope flow. There is however a slight chance that a surge of moisture from the Gulf of California could prolong the westerly flow through Saturday morning. Thereafter, increasing influence from Tropical Storm Lidia to the south should mean a stronger than normal southerly component to the flow Saturday afternoon. However, winds will generally remain than less 10 kt. Otherwise, probabilities remain low for any isolated convection reaching the Phoenix terminals.

Southeast California/Southwest Arizona including KIPL and KBLH:

Latest models indicate that a surge of humid air and strong

southerly flow will move steadily out of the Gulf of California and into southwestern AZ/southeastern CA overnight. However, there is some uncertainty with regard to the timing. Most likely time for the wind shift will occur around 10z at KIPL and 12z at KBLH. If the surge materializes, a prolonged period of winds with gusts to 25-30 kt is possible. Isolated thunderstorms also remain a possibility Saturday afternoon, though probabilities remain low that they will directly affect KIPL/KBLH.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday...

Improved moisture levels, but still on the low side for monsoon season, will affect the area into next week. Slight chances of showers and thunderstorms will affect mainly high terrain locations during the period with best chances occurring on Tuesday. Aside from near to below normal temperatures on Sunday, above normal temperatures will be present over the region next week. Minimum humidities will drop from 20-35% on Sunday to the teens starting Monday. Winds will overall remain light outside of thunderstorm areas.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Hernandez/MO

AVIATION...Hirsch

FIRE WEATHER...Kuhlman

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429

FXUS66 KSGX 020425

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

925 PM PDT Fri Sep 1 2017

.SYNOPSIS...

Very hot weather will continue through Saturday with a slight chance of thunderstorms over the mountains and deserts. Tropical moisture from the south will bring more widespread showers and thunderstorms on Sunday. Hot weather and small chances of thunderstorms mainly for the mountains will follow Monday and beyond.

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

It's another toasty evening with temperatures currently running 5 to 10 degrees higher than this time yesterday. Some mid and high clouds forming ahead of Tropical Storm Lidia have drifted north into our forecast area. This may disrupt the development of coastal low clouds this evening, but patches of dense fog could still form along the coast tonight.

Hi-res models are showing quite the gulf surge tonight into Saturday. If this is indeed what happens, there could be low clouds developing in the low deserts and mountain slopes tonight and will keep temps much lower tomorrow, though the increase in humidity won't make it feel any more pleasant. Thunderstorm chances increase tomorrow, mainly over the mountains and deserts, with this surge of moisture. Elsewhere hot conditions will prevail and the Heat Advisories and Excessive Heat Warnings remain in effect through Saturday evening.

Tropical Storm Lidia is still forecast to move north through the Baja peninsula before heading west off the northern Mexico and Southern CA coast as a remnant low. This will bring increasing clouds, chances of showers and thunderstorms, and gusty east winds, especially in the mountains and coastal foothills, Saturday night and Sunday. The 00Z NAM and GFS still keep the bulk of the moisture and precip off the coast, but sufficient moisture and elevated instability exist for at least some light or locally

moderate showers and thunderstorms elsewhere. Mid level flow of 30-40 kt means storms will be fast moving, so not expecting much of a flash flood threat. Precipitation chances drop off Sunday night as the tropical depression drifts further west.

High pressure locked in over the Great Basin will maintain hot weather and south-southeast flow aloft Monday through at least Thursday. Thunderstorm chances will continue each afternoon and evening over portions of the mountains and deserts. A more established marine layer will keep coastal areas cooler with more widespread nocturnal low clouds and fog each night. There are hints of a trough moving into Central CA late in the week which may finally bring some more significant cooling.

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.AVIATION...

020430Z...Coast...Patchy low clouds and dense fog will be possible late tonight, though confidence is low of arrival at KSAN or KCRQ. If low clouds/fog arrive at KSAN or KCRQ, the timing is most likely between 10Z and 15Z Sat. Bases will likely be 400 feet or lower MSL with local vis 1/4 mile or less. Otherwise, SCT-BKN clouds at/above 10000 feet will prevail through Sat.

Valleys/Mountains/Deserts...SCT-BKN clouds at/above 10000 ft MSL with unrestricted vis will continue through Saturday. There is a slight chance of SHRA/TSRA Saturday afternoon mainly in the mountains.

&&

.MARINE...

A shallow marine layer could bring patchy dense fog early Saturday morning.

The remnant low and moisture from Tropical Storm Lidia will bring scattered showers and thunderstorms Sunday to the coastal waters. In addition to the precipitation, there is a chance that winds will be strong enough to produce rough seas up to 7 feet with steep waves. Conditions will gradually improve Sunday night and Monday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT Saturday for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County Mountains.

Excessive Heat Warning until 10 PM PDT Saturday for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County Valleys-San Geronimo Pass Near Banning-Santa Ana Mountains and Foothills.

PZ...NONE.

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PUBLIC...SS

AVIATION/MARINE...Maxwell

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504

FXUS65 KPSR 020535

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

1035 PM MST Fri Sep 1 2017

.UPDATE...Updated Aviation discussion.

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.SYNOPSIS...

Thunderstorm chances will remain limited today, however increasing moisture and humidity over the weekend will lead to better chances of showers and thunderstorms. The best chance of accumulating rainfall will occur over the southwest Arizona and far southeast California deserts. After a cooler and mostly cloudy weekend, warmer conditions will return next week along with more typical isolated afternoon thunderstorms.

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.DISCUSSION...

Currently, the 500 mb high is centered along the Oregon/California border and Tropical Storm Lidia is centered over the southern Baja California Peninsula. A few showers and thunderstorms are developing mainly across the White Mountains, with activity staying in this general area the rest of the day. Thereafter, TS Lidia will start to influence parts of our forecast area.

Lidia will continue to weaken as the system continues to interact with the higher terrain along the Baja California Peninsula. Even more weakening will occur tomorrow when Lidia moves over the cold Pacific, with Lidia then expected to quickly decay into a remnant low. She is currently moving to the north-northwest at 10 mph and will continue to do so for the next 72 hours or so. Thereafter, her track will shift more to the west-northwest around the mid-level high over the southwest United States.

For us, moisture will be on the increase as TS Lidia continues her generally northwestward progression. Both the GEFS and NAEFS mean Precipitable Water forecast show the greatest moisture and thus highest PWs staying south and west of Arizona, with the greatest values from Yuma to El Centro. During the Saturday evening to Sunday morning time frame, EMC GEFS plumes are indicating mean PWs

increasing to close to 2 inches in El Centro and a little bit over 2 inches in Yuma. Further east, near Phoenix, mean PWs are forecast to rise to near 1.3 inches. The biggest uncertainty is how cloud cover will play a role. If thick cloud cover exists during the day Saturday, it's looking more like a rain/ isolated heavy rain event. However, if there are breaks in cloud cover and we are able to heat up a bit more and thus destabilize, it could get interesting in the Yuma to El Centro area. If you look at the SPC Sounding Climatology Page for Yuma. The record PW for the September 2nd 12Z sounding is 1.75 inches and for the September 3rd 12Z sounding it's 1.59 inches. So we will definitely have a lot of moisture for this time of year in southwest AZ and southeast Cali.

All in all there's still a little uncertainty to exactly what the storm mode will be tomorrow through Sunday. As we get closer to the event we will start to get a clearer picture. But, it is certain our temperatures will drop a few degrees, which will provide us Arizonans with a little bit of relief for this Labor Day weekend.

Monday through Wednesday:

There is good model agreement that the large H5 high stationed over the Great Basin will maintain its predominance next week with 596dm heights centered over Nevada only gradually weakening with time. The remnants of Lidia will have floated harmlessly west into the Pacific while deep troughing and large negative height anomalies blast into the eastern Conus. While the return to east/northeast flow next week may look similar to the current pattern, there may be more residual moisture present. There is also a resounding signal towards a backdoor front Tuesday afternoon/evening pulling a piece of a shortwave and deep moisture convergence from New Mexico into central Arizona. Thus, while much of next week may be characterized by mountain storms and only lower elevation outflow boundaries, Tuesday could be the one more active day of the bunch. Correspondingly with the drier conditions and H5 heights 591-594dm, temperatures will return to an above normal range though probably staying just short of excessive or record territory.

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.AVIATION...

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

Gulf surge is now evident on GOES-16 satellite and local radars. The TAFs have consequently been adjusted to include a southerly wind, which may initially be gusty around 08z and present a



hazardous crosswind at KPHX. Southerly flow is expected to persist through the day Saturday. Otherwise, probabilities remain low for any isolated convection reaching the Phoenix terminals.

Southeast California/Southwest Arizona including KIPL and KBLH:

Latest models indicate that a surge of humid air and strong southerly flow will move steadily out of the Gulf of California and into southwestern AZ/southeastern CA overnight. However, there is some uncertainty with regard to the timing. Most likely time for the wind shift will occur around 08z at KIPL and 09z at KBLH. A prolonged period of winds with gusts to 25-30 kt is also possible at both sites. Isolated showers/thunderstorms also remain a possibility Saturday afternoon/evening, though probabilities remain low that they will directly affect KIPL/KBLH.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Sunday through Thursday...

Improved moisture levels, but still on the low side for monsoon season, will affect the area into next week. Slight chances of showers and thunderstorms will affect mainly high terrain locations during the period with best chances occurring on Tuesday. Aside from near to below normal temperatures on Sunday, above normal temperatures will be present over the region next week. Minimum humidities will drop from 20-35% on Sunday to the teens starting Monday. Winds will overall remain light outside of thunderstorm areas.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Hernandez/MO

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846

FXUS65 KPSR 021002

AFDPSR

## Area Forecast Discussion

National Weather Service Phoenix AZ

302 AM MST Sat Sep 2 2017

## .SYNOPSIS...

A surge in tropical moisture will bring considerable cloudiness through tonight with chances of showers and thunderstorms across southeast California and southwest Arizona. Slight chances of thunderstorms will be mostly confined to higher terrain areas for Sunday and Monday. Best chances for storms into the Phoenix area will occur on Tuesday with lowering chances for the latter part of the week. Temperatures into next week will mostly remain above seasonal normals with the warmest days likely being Monday and Tuesday.

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## .DISCUSSION...

As of early this morning, Tropical Storm Lidia is looking more disorganized as it tracks over the Baja. A strong Gulf of California moisture surge is currently pushing through south-central Arizona with much of the area now seeing surface dew points near 70 degrees. A gradual increase in mid and upper level moisture will also overspread southern California and southern Arizona today as Lidia tracks to the northwest. Although considerable moisture will be in place today with PWATs of 1.30" in Phoenix to 2.00" in Yuma, overall unfavorable conditions for thunderstorm development is expected. Forecast soundings from Phoenix to El Centro initially show plenty of CAPE this morning, but it is all above a strong low level temperature inversion through 18Z. After 18Z, strong mid level warm air advection will lead to much more stable conditions and little to no available CAPE. Recent model runs continue to show lower rain chances across the area, so as a result we have lowered area PoPs somewhat.

Best rain chances will remain across far southwest Arizona and southeast California this evening into tonight, but it seems unlikely many locations will see much more than a tenth of an inch. The only high-res CAM that is showing any heavier rain for late this afternoon/early evening is the HRRR. Although it is possible a band of thunderstorms may form this afternoon moving through southwest Arizona into southeast California, the overall flood threat is small due to a storm motion of 20-25 kts out of the southeast. Rain chances for the Phoenix area and north through Sunday are rather small with PoPs generally near 10 percent or less.

By Sunday, Lidia will have pushed to the west of the Baja peninsula while an upper level high center temporarily establishes itself near the Four Corners area. Mostly dry air will flow around this high center into eastern Arizona on Sunday and then westward into southeast California for Monday. This dryer air will not completely dry us out as PWATs of 1.00-1.30" will remain, but skies will again turn mostly sunny by Monday. Storm chances on Monday will mostly be confined to higher terrain areas with outflow winds into the lower deserts.

As the upper level high center shifts a bit farther northwest ending up over the Great Basin early next week, it will allow for at least one shortwave to move out of Colorado/New Mexico into eastern Arizona. The first shortwave still looks like it will enhance thunderstorm development for Tuesday afternoon/evening over eastern Arizona with decent chances of at least isolated activity moving into the lower deserts. A second shortwave may also move through on Wednesday providing for another possible semi active day, but overall chances do drop some from Tuesday. Low end storm chances should remain through the end of next week, but a shifting of the flow for next Thursday and Friday may lead to drier air working into eastern Arizona.

Temperatures through the period will mostly remain above seasonal normals with the coolest days being today and Sunday. Highs near normals this weekend will affect south-central Arizona locations, but extensive cloudiness will result in highs near 100 across southeast California and southwest Arizona. Warming temperatures Monday into Tuesday will bring above normal highs with widespread 105-110 degrees over the lower deserts. Little relief from the heat is seen through next Friday with highs generally falling between 103-108.

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.AVIATION...

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

Gulf surge is now evident on GOES-16 satellite and local radars. The TAFs have consequently been adjusted to include a southerly wind, which may initially be gusty around 08z and present a hazardous crosswind at KPHX. Southerly flow is expected to persist through the day Saturday. Otherwise, probabilities remain low for any isolated convection reaching the Phoenix terminals.

Southeast California/Southwest Arizona including KIPL and KBLH:

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Aviation discussion not updated for amended TAFs.

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Improved moisture levels, but still on the low side for monsoon season, will affect the area into next week. Slight chances of showers and thunderstorms will affect mainly high terrain locations during the period with best chances occurring on Tuesday. Aside from near to below normal temperatures on Sunday, above normal temperatures will be present over the region next week. Minimum humidities will drop from 20-35% on Sunday to the teens starting Monday. Winds will overall remain light outside of thunderstorm areas.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Kuhlman

AVIATION...Hirsch

FIRE WEATHER...Kuhlman

# IOWA STATE UNIVERSITY

College of Ag

Department of Agronomy

☐

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FXUS65 KPSR 021159

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

500 AM MST Sat Sep 2 2017

...Updated Aviation and Fire Weather...

.SYNOPSIS...

A surge in tropical moisture will bring considerable cloudiness through tonight with chances of showers and thunderstorms across southeast California and southwest Arizona. Slight chances of thunderstorms will be mostly confined to higher terrain areas for Sunday and Monday. Best chances for storms into the Phoenix area will occur on Tuesday with lowering chances for the latter part of the week. Temperatures into next week will mostly remain above seasonal normals with the warmest days likely being Monday and Tuesday.

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Best rain chances will remain across far southwest Arizona and southeast California this evening into tonight, but it seems unlikely many locations will see much more than a tenth of an inch. The only high-res CAM that is showing any heavier rain for late this afternoon/early evening is the HRRR. Although it is possible a band of thunderstorms may form this afternoon moving

through southwest Arizona into southeast California, the overall flood threat is small due to a storm motion of 20-25 kts out of the southeast. Rain chances for the Phoenix area and north through Sunday are rather small with PoPs generally near 10 percent or less.

By Sunday, Lidia will have pushed to the west of the Baja peninsula while an upper level high center temporarily establishes itself near the Four Corners area. Mostly dry air will flow around this high center into eastern Arizona on Sunday and then westward into southeast California for Monday. This dryer air will not completely dry us out as PWATs of 1.00-1.30" will remain, but skies will again turn mostly sunny by Monday. Storm chances on Monday will mostly be confined to higher terrain areas with outflow winds into the lower deserts.

As the upper level high center shifts a bit farther northwest ending up over the Great Basin early next week, it will allow for at least one shortwave to move out of Colorado/New Mexico into eastern Arizona. The first shortwave still looks like it will enhance thunderstorm development for Tuesday afternoon/evening over eastern Arizona with decent chances of at least isolated activity moving into the lower deserts. A second shortwave may also move through on Wednesday providing for another possible semi active day, but overall chances do drop some from Tuesday. Low end storm chances should remain through the end of next week, but a shifting of the flow for next Thursday and Friday may lead to drier air working into eastern Arizona.

Temperatures through the period will mostly remain above seasonal normals with the coolest days being today and Sunday. Highs near normals this weekend will affect south-central Arizona locations, but extensive cloudiness will result in highs near 100 across southeast California and southwest Arizona. Warming temperatures Monday into Tuesday will bring above normal highs with widespread 105-110 degrees over the lower deserts. Little relief from the heat is seen through next Friday with highs generally falling between 103-108.

&&

.AVIATION...

South-Central Arizona including KPHX, KIWA, and KSDL:  
Identifying and timing wind shifts will be the main aviation problem through Sunday morning under thickening high clouds. South winds associated with a moisture surge has washed out and east winds will prevail into the afternoon. Any west wind will likely arrive later than usual this afternoon. Outflow boundaries may eventually affect the terminals later this evening and model output is highlighting a

brief period of north winds before settling into an easterly component overnight.

Southeast California/Southwest Arizona including KIPL and KBLH: Seasonally strong S/SE winds will persist across the area in association with a moisture surge and pressure gradient ahead of a tropical system over the Baja of Mexico. Increased moisture levels may lead to sct showers and storms late tonight, however confidence in coverage only justifies a vicinity mention at this time. High clouds will thicken today, and lowering cigs may become an issue at KIPL later Sunday morning.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday...

Increased moisture levels will cover the area next week, however only lead to a slight chance of showers and thunderstorms. The greatest storm coverage will be mainly over high terrain locations of central Arizona though better chances of storms impacting lower elevations will arrive on Tuesday. Temperatures will rebound back above normal next week under light winds. Minimum afternoon humidity levels will generally fall in a 15-25% range following good overnight recovery.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Kuhlman

AVIATION...MO

FIRE WEATHER...MO

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FXUS66 KSGX 021200

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

500 AM PDT Sat Sep 2 2017

.SYNOPSIS...

Very hot weather away from the beaches will continue today with a slight chance of afternoon thunderstorms for the mountains and deserts. For late tonight through Sunday into Sunday evening...the center of the remnants of Tropical Storm Lidia will track northwestward off the coast of northern Baja and Southern California. This will bring more clouds...increasing chances for showers and thunderstorms...and take the edge off the heat on Sunday. For Monday through much of next week...high temperatures will be around 5 degrees above average with mid level moisture in southeast flow aloft bringing a slight chance of afternoon thunderstorms...mainly for the mountains and deserts.

&&

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

Early this morning...a weak low pressure system over the eastern Pacific near 28N/130W is drawing mid level moisture from Tropical Storm Lidia across the coastal waters of Southern California and adjacent coastal areas. There is also a gulf surge across the lower deserts with dewpoints in the lower to mid 70s spreading northwestward through the Coachella Valley. This increase in lower level moisture should result in high temperatures that are several degrees lower than on Friday for the lower deserts with lesser decreases for the mountains into the inland valleys. Not much relief from the heat is expected towards the coast today.

For late tonight through Sunday into Sunday evening...the center of the remnants of Tropical Storm Lidia will track northwestward off the coast of northern Baja and Southern California. This will bring more moisture and clouds into southwestern portions of Southern California and take the edge off the excessive heat of this past week. The greatest chances for showers and thunderstorms will be for late tonight through Sunday into Sunday evening across the coastal waters into adjacent coastal areas with lesser chances farther inland. There will also be gusty southeast to east winds



on Sunday...especially across portions of San Diego County and the adjacent coastal waters with winds decreasing towards the north.

For Monday through much of next week...low pressure off the California coast and high pressure over the interior west will maintain south southeasterly flow aloft across Southern California. High temperatures will fluctuate around 5 degrees above average. with mid level monsoonal moisture bringing a slight chance of thunderstorms for the mountains and deserts each afternoon. The night and morning coastal stratus will return and spread locally into the far western valleys at times.

&&

.AVIATION...

020900Z...Coast...Patchy low clouds and dense fog may be noted near the coast around sunrise this morning, although not expected to impact the coastal TAF sites. Otherwise, SCT-BKN clouds at/above 10000 feet will prevail through Sunday morning. Scattered showers and thunderstorms developing after 12Z Sunday due to the remnants of TS Lidia.

Valleys/Mountains/Deserts...SCT-BKN clouds at/above 10000 ft MSL with unrestricted vis will continue through tonight. There is a chance of SHRA/TSRA from late this afternoon through tonight mainly in the mountains. Scattered showers and thunderstorms developing Sunday morning into the afternoon due to the remnants of TS Lidia.

&&

.MARINE...

A shallow marine layer could bring patchy dense fog early this morning to the coastal waters.

The remnant low and moisture from Tropical Storm Lidia will bring scattered showers and thunderstorms from late tonight into Sunday to the coastal waters. In addition to the precipitation, gusty winds are likely on Sunday due to the remnant low pressure area passing by to the west of the coastal waters, with gusts of 25 knots at times. Seas will also be rough at times, up to 7 feet with steep waves. Conditions will gradually improve late Sunday night and Monday.

&&

.SKYWARN...

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

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT this evening for Orange County  
Coastal Areas-Riverside County Mountains-San Bernardino  
County Mountains-San Diego County Coastal Areas-San Diego  
County Mountains.

Excessive Heat Warning until 10 PM PDT this evening for Apple  
and Lucerne Valleys-Coachella Valley-Orange County Inland  
Areas-San Bernardino and Riverside County Valleys-The  
Inland Empire-San Diego County Deserts-San Diego County  
Valleys-San Geronio Pass Near Banning-Santa Ana Mountains  
and Foothills.

PZ...Small Craft Advisory from 10 AM to 8 PM PDT Sunday for Coastal  
Waters from San Mateo Point to the Mexican Border and out  
to 30 nm-Waters from San Mateo point to the Mexican Border  
Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...17

AVIATION/MARINE...Brotherton

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FXUS66 KSGX 021644

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

944 AM PDT Sat Sep 2 2017

.SYNOPSIS...

Warm and relatively muggy conditions will be with us for one more day, especially west of the mountains where temperatures will be 10-20 degrees above normal this afternoon. The most anomalous heat will be felt at along the coast. Cooler weather with showers and thunderstorms for Sunday, with rain chances increasing from north to south. Near normal conditions will prevail on Labor Day, with a transition to slightly above average temperatures and a weak to moderate monsoon pattern for the middle part of next week.

&&

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

.SYNOPSIS...

At 930 AM, a strong 596 DM ridge remained in place over the Great Basin, with Tropical Storm Lidia infringing on the ridge from the south. Lidia was located over Sebastian Vizcaino Bay with sustained winds of 35 kt and gusts to 45 kt. Mid-level moisture from Lidia was continuing to filter into the region, bringing a notable increase in cloud cover. Temperatures remained unusually warm across the region due to easterly flow and a minimal marine layer.

Temperatures will be the main story for the rest of today, as 100 degree readings in the valleys and upper 80s to mid 90 degree temperatures at the coast hang on for one more day. Doesn't look like the heat will be record breaking today, but with the elevated humidity it will feel oppressive. A push of mid-level moisture ahead of Lidia will increase insatiability late this afternoon and evening, with MU CAPE of 200-1200 j/kg expected over the region. Though weak capping may limit convection some, there is still the potential for isolated thunderstorm activity over the mountains/deserts and Inland Empire this afternoon and evening. Gusty winds and minor urban flooding would be the main concerns

with any storms that form.

Temperatures will remain well above normal tonight with increasing easterly downslope flow and cloud cover limiting overnight cooling. The potential for showers and thunderstorms will also be on the rise as the core of Lidia draws nearer. There is some potential for flash flooding in San Diego County, where a prevailing SE to NW flow, PW increasing to near 2 inches, the track of Lidia, and marginal instability may lead to training of heavier showers.

Sunday will be all about the abrupt shift to cooler weather and the potential for rain and thunderstorms. Lidia's is forecast to track just southwest of San Clemente Island, placing our region in the favorable NE quadrant of the system. Instability looks limited due to warming in the 700-300 mb layer, but significant increases in moisture and a deep saturated layer should be sufficient for widespread stratiform showers over San Diego County and the coastal waters. The best potential for thunderstorms will be over the deserts/mountains and Inland Empire during the afternoon. Flash flooding does appear possible, especially in San Diego County where the threat for training showers is more pronounced. Rainfall totals of 0.15-0.75 inches with isolated totals of more than an inch appear possible in San Diego County. Lighter and more sporadic amounts are expected for points northward.

Drier weather and near average temperatures will settle in for Labor Day as the remnants of Lidia shift west and high pressure takes hold. This should result in a very nice end to the Labor Day weekend.

High pressure will continue to dominate Tuesday-Thursday, bringing slightly above average temperatures and weak-moderate monsoon activity. Any precipitation chances will be limited to inland areas, and focus mostly on the afternoon and evening hours. Temperatures will not be as warm as this past week.

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.AVIATION...

021620Z...SCT-BKN100 through 03Z. After 03Z...skies becoming BKN050-100 with increasing east-southeast winds 10-20 kt with gusts to 30 kt, shifting south after 12Z Sunday. Scattered showers and thunderstorms developing after 09Z Sunday from the remnants of TS Lidia.

Valleys/Mountains/Deserts...SCT-BKN100 with unrestricted vis through

tonight. There is a chance of SHRA/TSRA from late this afternoon through tonight mainly in the mountains. Scattered showers and thunderstorms Sunday morning into the afternoon due to the remnants of TS Lidia.

&&

.MARINE...

Tropical Storm Lidia impacts will be twofold tonight and Sunday: gusty east-southeast winds and scattered showers and thunderstorms.

A Small Craft Advisory will be in effect Sunday for east winds from 15-25 kt tonight. The winds will shift southeast Sunday morning, and then to the south Sunday afternoon. Rough seas are likely. Conditions will gradually improve late Sunday night and Monday.

Remnant moisture from Tropical Storm Lidia will bring scattered showers and thunderstorms from late tonight through Sunday over the coastal waters.

&&

.BEACHES...

Moisture from Tropical Storm Lidia will bring showers and a chance for thunderstorms to the beaches Sunday.

&&

.SKYWARN...

Skywarn activation is anticipated for today. However weather spotters are encouraged to report significant weather conditions. Skywarn activation is possible Sunday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT this evening for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County Mountains.

Excessive Heat Warning until 10 PM PDT this evening for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County

Valleys-San Gorgonio Pass Near Banning-Santa Ana Mountains  
and Foothills.

PZ...Small Craft Advisory from 10 AM to 8 PM PDT Sunday for Coastal  
Waters from San Mateo Point to the Mexican Border and out  
to 30 nm-Waters from San Mateo point to the Mexican Border  
Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC...Albright

AVIATION/MARINE...Moede

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FXUS65 KPSR 021947

AFDPSR

## Area Forecast Discussion

National Weather Service Phoenix AZ

1247 PM MST Sat Sep 2 2017

## .SYNOPSIS...

A surge in tropical moisture will bring considerable cloudiness through tonight with chances of showers and thunderstorms across southeast California and southwest Arizona. Slight chances of thunderstorms will be mostly confined to higher terrain areas for Sunday and Monday. Best chances for storms into the Phoenix area will occur on Tuesday with lowering chances for the latter part of the week. Temperatures into next week will mostly remain above seasonal normals with the warmest days likely being Monday and Tuesday.

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## .DISCUSSION...

Tropical Storm Lidia is currently centered in central Baja California and has become a lot less organized. As the system continues to move over the cold water in the Pacific, she is expected to weaken even more becoming a remnant low within the next 24 hours. She continues to move to the northwest, with this motion expected over the next 36 hours. Thereafter, her movement will shift more to the west-northwest as she interacts with an upper-level low off of the southwest U.S. coast.

It's extremely evident that this system has brought us a significant increase in moisture. As an example, in east Mesa, the dewpoints jumped from the 40s to 70s overnight and the PHX 12Z sounding showed a PW of 1.32 inches, which is .61 inches greater than yesterday mornings sounding. As the day progresses, moisture and associated cloud cover from Lidia will continue to spread northward across our area, with chances for precipitation also on the increase.

Currently, showers are primarily confined to Pima county south of our forecast area. Expecting the greatest chances for precipitation for us to be primarily from southern Maricopa county westward to Imperial county (south of I8) after 21Z (2PM MST/PDT). Instability does not look as impressive, so expecting activity to be composed of mainly showers with isolated thunderstorms. Since we do have abnormally high PWs, stronger storms will be capable of producing higher rainfall amounts. But all in all, expecting accumulation totals to be less than 1/4 inch, with isolated areas seeing up to 1 inch. Also, storm motion should be relatively fast, so that should help minimize the flash flood threat.

By Sunday, Lidia will have pushed to the west of the Baja peninsula while an upper level high center temporarily establishes itself near the Four Corners area. Mostly dry air will flow around this high center into eastern Arizona on Sunday and then westward into southeast California for Monday. This dryer air will not completely dry us out as PWATs of 1.00-1.30" will remain, but skies will again turn mostly sunny by Monday. Storm chances on Monday will mostly be confined to higher terrain areas with outflow winds into the lower deserts.

As the upper level high center shifts a bit farther northwest ending up over the Great Basin early next week, it will allow for at least one shortwave to move out of Colorado/New Mexico into eastern Arizona. The first shortwave still looks like it will enhance thunderstorm development for Tuesday afternoon/evening over eastern Arizona with decent chances of at least isolated activity moving into the lower deserts. A second shortwave may also move through on Wednesday providing for another possible semi active day, but overall chances do drop some from Tuesday. Low end storm chances should remain through the end of next week, but a shifting of the flow for next Thursday and Friday may lead to drier air working into eastern Arizona.

Temperatures through the period will mostly remain above seasonal normals with the coolest days being today and Sunday. Highs near normals this weekend will affect south-central Arizona locations, but extensive cloudiness will result in highs near 100 across southeast California and southwest Arizona. Warming temperatures Monday into Tuesday will bring above normal highs with widespread 105-110 degrees over the lower deserts. Little relief from the heat is seen through next Friday with highs generally falling between 103-108.

&&

.AVIATION...

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

Identifying and timing wind shifts will be the main aviation problem through Sunday morning under thickening high clouds. South winds associated with a moisture surge has washed out and east winds will prevail into the afternoon. Any west wind will likely arrive later than usual this afternoon. Outflow boundaries may eventually affect the terminals later this evening and model output is highlighting a brief period of north winds before settling into an easterly component overnight.

Southeast California/Southwest Arizona including KIPL and KBLH: Seasonally strong S/SE winds will persist across the area in association with a moisture surge and pressure gradient ahead of a tropical system over the Baja of Mexico. Increased moisture levels may lead to sct showers and storms late tonight, however confidence in coverage only justifies a vicinity mention at this time. High clouds will thicken today, and lowering cigs may become an issue at KIPL later Sunday morning.



Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Monday through Friday...

Increased moisture levels will cover the area next week, however only lead to a slight chance of showers and thunderstorms. The greatest storm coverage will be mainly over high terrain locations of central Arizona though better chances of storms impacting lower elevations will arrive on Tuesday. Temperatures will rebound back above normal next week under light winds. Minimum afternoon humidity

levels will generally fall in a 15-25% range following good overnight recovery.

&&

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Hernandez/Kuhlman

AVIATION...MO

FIRE WEATHER...MO

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021

FXUS65 KPSR 022102

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

202 PM MST Sat Sep 2 2017

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

&&

.SYNOPSIS...

A surge in tropical moisture will bring considerable cloudiness through tonight with chances of showers and thunderstorms across southeast California and southwest Arizona. Slight chances of thunderstorms will be mostly confined to higher terrain areas for Sunday and Monday. Best chances for storms into the Phoenix area will occur on Tuesday with lowering chances for the latter part of the week. Temperatures into next week will mostly remain above seasonal normals with the warmest days likely being Monday and Tuesday.

&&

.DISCUSSION...

Tropical Storm Lidia is currently centered in central Baja California and has become a lot less organized. As the system continues to move over the cold water in the Pacific, she is expected to weaken even more becoming a remnant low within the next 24 hours. She continues to move to the northwest, with this motion expected over the next 36 hours. Thereafter, her movement will shift more to the west-northwest as she interacts with an upper-level low off of the southwest U.S. coast.

It's extremely evident that this system has brought us a significant increase in moisture. As an example, in east Mesa, the dewpoints jumped from the 40s to 70s overnight and the PHX 12Z sounding showed a PW of 1.32 inches, which is .61 inches greater than yesterday mornings sounding. As the day progresses, moisture and associated cloud cover from Lidia will continue to spread northward across our area, with chances for precipitation also on the increase.

Currently, showers are primarily confined to Pima county south of our forecast area. Expecting the greatest chances for precipitation for us to be primarily from southern Maricopa

county westward to Imperial county (south of I8) after 21Z (2PM MST/PDT). Instability does not look as impressive, so expecting activity to be composed of mainly showers with isolated thunderstorms. Since we do have abnormally high PWs, stronger storms will be capable of producing higher rainfall amounts. But all in all, expecting accumulation totals to be less than 1/4 inch, with isolated areas seeing up to 1 inch. Also, storm motion should be relatively fast, so that should help minimize the flash flood threat.

By Sunday, Lidia will have pushed to the west of the Baja peninsula while an upper level high center temporarily establishes itself near the Four Corners area. Mostly dry air will flow around this high center into eastern Arizona on Sunday and then westward into southeast California for Monday. This dryer air will not completely dry us out as PWATs of 1.00-1.30" will remain, but skies will again turn mostly sunny by Monday. Storm chances on Monday will mostly be confined to higher terrain areas with outflow winds into the lower deserts.

As the upper level high center shifts a bit farther northwest ending up over the Great Basin early next week, it will allow for at least one shortwave to move out of Colorado/New Mexico into eastern Arizona. The first shortwave still looks like it will enhance thunderstorm development for Tuesday afternoon/evening over eastern Arizona with decent chances of at least isolated activity moving into the lower deserts. A second shortwave may also move through on Wednesday providing for another possible semi active day, but overall chances do drop some from Tuesday. Low end storm chances should remain through the end of next week, but a shifting of the flow for next Thursday and Friday may lead to drier air working into eastern Arizona.

Temperatures through the period will mostly remain above seasonal normals with the coolest days being today and Sunday. Highs near normals this weekend will affect south-central Arizona locations, but extensive cloudiness will result in highs near 100 across southeast California and southwest Arizona. Warming temperatures Monday into Tuesday will bring above normal highs with widespread 105-110 degrees over the lower deserts. Little relief from the heat is seen through next Friday with highs generally falling between 103-108.

&&

.AVIATION...

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

Thick high clouds continue to slowly spread northward, with broken to overcast layer expected to lower to around 20 thousand feet

this evening and persist into Sunday. Any shower and thunderstorm activity should generally remain south/west of the Phoenix area, with low confidence in a northward moving outflow this evening.

A substantial southerly/crosswind component was observed at KPHX and center field wind observations as of 21Z, and expect it to persist through late afternoon (23-00Z) before more typical west-southwesterly winds should take hold at KPHX. Easterly winds will develop overnight and may persist a bit later than typical on Sunday.

Southeast California/Southwest Arizona including KIPL and KBLH: Seasonally strong S/SE winds will persist across the area in association with a moisture surge and pressure gradient ahead of a tropical system over the Baja of Mexico. Isolated showers and thunderstorms may affect the Yuma area this afternoon, with lower confidence at KIPL later this afternoon and evening. KBLH is expected to remain north of any shower/thunderstorm activity. High clouds will continue to thicken, with cigs perhaps lowering to 9K feet overnight at KIPL.

Aviation discussion not updated for amended TAFs.

&&

.FIRE WEATHER...

Tuesday through Saturday...A modest increase in moisture will result in slight chances for thunderstorms each afternoon and evening. Temperatures will remain slightly above normal with minimum afternoon humidity values generally in the 15-25% range and good overnight recovery. A slight cooling trend to near normal temperatures will occur into the weekend as a seasonably strong low pressure system is forecast to develop near the northern California coast. Increasing southerly flow across the region. may increase moisture levels and precipitation potential during this time, but confidence is still not high this far in advance.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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FXUS66 KSGX 022104

AFDSGX

Area Forecast Discussion

National Weather Service San Diego CA

204 PM PDT Sat Sep 2 2017

.SYNOPSIS...

Warm and relatively muggy conditions will continue into tonight. The most anomalous heat will be felt at along the coast this afternoon with minimal overnight cooling for the valleys. Sunday will be cooler for all areas, with a chance of showers and thunderstorms. The best potential for persistent rain will be in San Diego County, while more widespread thunderstorms are possible in the mountains and deserts during the afternoon. Near normal conditions on Labor Day, will transition to slightly above average temperatures and a weak to moderate monsoon pattern for the abbreviated workweek.

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

.SYNOPSIS...

At 200 PM, a strong 596 DM ridge remained in place over the Great Basin, with Tropical Storm Lidia infringing on the ridge from the south. Lidia was located over Sebastian Vizcaino Bay with sustained winds of 35 kt and gusts to 45 kt. Moisture from Lidia continued to filter into the region, bringing scattered cumulus and a few light showers to inland areas. Offshore flow continued to prop up temperatures especially over the valleys and coast.

Very warm conditions and increasing moisture will result in MU CAPE values of 400-1200 j/kg over inland areas this afternoon.

This will be sufficient for continued cumulus buildups near

favorable convergence areas. Isolated showers and thunderstorms will also be possible where instability can overcome the strong easterly flow in the mid levels and weak cap. Temperatures will

remain unusually warm into tonight as easterly flow and increasing cloud cover limit radiational cooling. Some areas in the valleys will see overnight lows in the 80s yet again.

Sunday will be all about the abrupt shift to cooler weather and

the potential for rain and thunderstorms. Lidia's remains are forecast to track just southwest of San Clemente Island, placing our region in the favorable NE quadrant of the system. Instability looks limited along the coast due to warming in the 700-300 mb layer, but significant increases in moisture and a deep saturated layer should be sufficient for widespread showers over San Diego County and the coastal waters. The best potential for thunderstorms will be over the deserts/mountains and Inland Empire during the afternoon. Flash flooding does appear possible, mainly in San Diego County where the threat for training showers is more pronounced, and in the upper deserts during the afternoon. Rainfall totals of 0.15-0.75 inches with isolated totals of more than an inch appear possible in San Diego County. Rainfall will be more sporadic elsewhere, with isolated thunderstorms producing local rainfall totals of an inch or more. Gusty east winds will continue Sunday, with peak gusts near 50 mph through the mountain pass of Riverside and San Diego Counties.

Drier weather and near average temperatures will settle in for Labor Day as the remnants of Lidia shift west and high pressure takes hold. This should result in a very nice end to the Labor Day Weekend.

High pressure will continue to dominate Tuesday-Thursday, bringing slightly above average temperatures and weak-moderate monsoon activity. Precipitation chances will be focused in the inland areas during the afternoon and evening hours. Temperatures will not be as warm as this past week.

&&

.AVIATION...

022000Z....Coastal...SCT-BKN100 through 03Z. After 03Z...skies becoming BKN050-100 through 09Z Sunday. After 09Z winds increasing to 10-20 kt, then shifting south 10-20 kt with gusts to 25 kt through 23Z. Scattered showers and thunderstorms after 12Z Sunday from the remnants of TS Lidia.

Valleys/Mountains/Deserts...SCT080-100 with a chance of SHRA/TSRA from late this afternoon through tonight. Gusty east winds 15-25 kt with gusts to 45 kt in the mountains through Sunday. Scattered showers and thunderstorms Sunday from the remnants of TS Lidia.

&&

.MARINE...

Tropical Storm Lidia impacts will be twofold tonight and Sunday with gusty east-southeast winds and scattered showers and thunderstorms.

A Small Craft Advisory will be in effect Sunday for both the Inner and Outer Waters for gusty winds and choppy seas. East to southeast winds will increase to 15-25 kt tonight through Sunday morning, then shift to the south Sunday afternoon. Rough seas are likely. Conditions will gradually improve Sunday night and Monday.

Moisture from Tropical Storm Lidia will bring scattered showers and thunderstorms from late tonight through Sunday over the coastal waters.

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.BEACHES...

Showers and a chance for thunderstorms at the beaches Sunday.

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.FIRE WEATHER...

Breezy easterly winds will continue in the mountains and valleys for the remainder through Sunday. These winds along with minimum relative humidity values of 20-30% and very warm conditions this afternoon will increase the potential for fire starts. Though winds will continue into Sunday, increased moisture and the potential for rain will bring improving conditions.

&&

.SKYWARN...

Skywarn activation is not anticipated for today. However weather spotters are encouraged to report significant weather conditions. Skywarn activation is possible Sunday.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Heat Advisory until 10 PM PDT this evening for Orange County Coastal Areas-Riverside County Mountains-San Bernardino County Mountains-San Diego County Coastal Areas-San Diego County Mountains.

Excessive Heat Warning until 10 PM PDT this evening for Apple and Lucerne Valleys-Coachella Valley-Orange County Inland Areas-San Bernardino and Riverside County Valleys-The Inland Empire-San Diego County Deserts-San Diego County Valleys-San Geronimo Pass Near Banning-Santa Ana Mountains and Foothills.

PZ...Small Craft Advisory from 3 AM to 8 PM PDT Sunday for Coastal Waters from San Mateo Point to the Mexican Border and out to 30 nm-Waters from San Mateo point to the Mexican Border Extending 30 to 60 nm out including San Clemente Island.

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PUBLIC/FIRE WEATHER...Albright  
AVIATION/MARINE...Moede

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Special Weather Statement  
National Weather Service Phoenix AZ  
217 PM MST SAT SEP 2 2017

AZZ536-539-022200-  
Gila River Valley AZ-Gila Bend AZ-  
217 PM MST SAT SEP 2 2017

...SIGNIFICANT WEATHER ADVISORY FOR EAST CENTRAL YUMA AND MARICOPA  
COUNTIES UNTIL 300 PM MST...

At 216 PM MST, Doppler radar was tracking strong thunderstorms along  
a line extending from Sentinel to near Tacna. Movement was northwest  
at 15 mph.

Dime size hail and wind gusts up to 50 mph will be possible with  
these storms.

Locations impacted include...  
Wellton, Tacna, Sentinel, Paloma, Tyson, Dateland, Mohawk and Roll.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Locally dense blowing dust is possible. If you encounter blowing  
dust while driving, pull over as far off the roadway as possible and  
park. Turn off your headlights and keep your foot off the brake.

&&

LAT...LON 3266 11430 3268 11429 3301 11344 3283 11305  
3255 11396  
TIME...MOT...LOC 2116Z 119DEG 13KT 3288 11323 3267 11386

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JR

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764  
WWUS85 KPSR 022206  
SPSPSR

Special Weather Statement  
National Weather Service Phoenix AZ  
306 PM MST SAT SEP 2 2017

AZZ531-532-535-536-CAZ565-569-022245-  
Gila River Valley AZ-Southeast Yuma County AZ-Kofa AZ-Yuma AZ-  
Imperial County Southeast CA-Palo Verde Valley CA-  
306 PM MST SAT SEP 2 2017

...SIGNIFICANT WEATHER ADVISORY FOR SOUTHWESTERN LA PAZ...  
NORTHWESTERN YUMA AND EASTERN IMPERIAL COUNTIES UNTIL 345 PM MST/345  
PM PDT/...

At 306 PM MST/306 PM PDT/, Doppler radar was tracking a strong  
thunderstorm near Kinter, or 11 miles north of Fortuna Foothills,  
moving northwest at 30 mph.

Dime size hail and winds in excess of 40 mph will be possible with  
this storm.

Locations impacted include...  
Yuma, Fortuna Foothills, Wellton, Blaisdell, Kinter, Ligurta,  
Winterhaven and Araby.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Torrential rainfall is also occurring with this storm, and may lead  
to localized flooding. Do not drive your vehicle through flooded  
roadways.

&&

LAT...LON 3289 11399 3255 11421 3271 11467 3316 11425  
TIME...MOT...LOC 2206Z 116DEG 28KT 3282 11436

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Hirsch

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202  
WWUS85 KPSR 022239  
SPSPSR

Special Weather Statement  
National Weather Service Phoenix AZ  
339 PM MST SAT SEP 2 2017

AZZ532-CAZ565-569-022330-  
Yuma AZ-Imperial County Southeast CA-Palo Verde Valley CA-  
339 PM MST SAT SEP 2 2017

...SIGNIFICANT WEATHER ADVISORY FOR WEST CENTRAL YUMA AND  
SOUTHEASTERN IMPERIAL COUNTIES UNTIL 430 PM MST/430 PM PDT/...

At 339 PM MST/339 PM PDT/, Doppler radar was tracking a strong  
thunderstorm over Araby, or near Yuma, moving west at 30 mph.

Dime size hail and winds in excess of 40 mph will be possible with  
this storm.

Locations impacted include...  
Yuma, Somerton, Gadsden, Fortuna Foothills, San Luis, Algodones  
Dunes, Andrade, Winterhaven and Araby.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Torrential rainfall is also occurring with this storm, and may lead  
to localized flooding. Do not drive your vehicle through flooded  
roadways.

&&

LAT...LON 3249 11479 3251 11482 3255 11479 3256 11481  
3262 11481 3263 11478 3272 11472 3270 11492  
3277 11494 3286 11450 3256 11438 3246 11472  
TIME...MOT...LOC 2239Z 076DEG 26KT 3267 11454

\$\$

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208  
 WGUS85 KPSR 022255  
 FLSPSR

Flood Advisory  
 National Weather Service Phoenix AZ  
 355 PM MST SAT SEP 2 2017

AZC027-CAC025-030200-  
 /O.NEW.KPSR.FA.Y.0116.170902T2255Z-170903T0200Z/  
 /00000.N.ER.000000T0000Z.000000T0000Z.000000T0000Z.00/  
 Yuma AZ-Imperial CA-  
 355 PM MST SAT SEP 2 2017

The National Weather Service in Phoenix has issued a

- \* Urban and Small Stream Flood Advisory for...  
 West central Yuma County in southwestern Arizona...  
 Southeastern Imperial County in southeastern California...
- \* Until 700 PM MST/700 PM PDT/
- \* At 353 PM MST/353 PM PDT/, Doppler radar indicated heavy rain due to thunderstorms. This will cause urban and small stream flooding in the advisory area. Up to a half of an inch of rain has already fallen in portions of the Yuma area. An additional half of an inch of rain is possible through 5 pm.
- \* Some locations that will experience flooding include...  
 Yuma, Somerton, Winterhaven, Araby and Andrade.

LAT...LON 3259 11480 3262 11481 3263 11478 3272 11472  
 3272 11474 3276 11472 3275 11446 3251 11454

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Iowa Environmental Mesonet

## MENU

SEARCH

## National Weather Service Raw Text Product

Displaying AFOS PIL: **LSRPSR** Received: **2017-09-03 00:24 UTC**

[← Previous in Time](#)

[View All KPSR Products for 03 Sep 2017](#)

Next in Time ➡

## Latest Product

View As Image

800  
NWUS55 KPSR 030024  
LSRPSR

PRELIMINARY LOCAL STORM REPORT  
NATIONAL WEATHER SERVICE PHOENIX AZ  
524 PM MST SAT SEP 2 2017

```

..TIME...    ...EVENT...      ...CITY LOCATION...    ...LAT.LON...
..DATE...    ....MAG....      ..COUNTY LOCATION..ST.. ...SOURCE....
              ..REMARKS..

```

0500 PM	HEAVY RAIN	2 SE YUMA		32.68N 114.60W
09/02/2017	M0.20 INCH	YUMA	AZ	TRAINED SPOTTER

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174  
WGUS85 KPSR 030033  
FLSPSR

Flood Advisory  
National Weather Service Phoenix AZ  
533 PM MST SAT SEP 2 2017

AZC027-CAC025-030041-  
/O.CAN.KPSR.FA.Y.0116.000000T0000Z-170903T0200Z/  
/00000.N.ER.000000T0000Z.000000T0000Z.000000T0000Z.00/  
Yuma AZ-Imperial CA-  
533 PM MST SAT SEP 2 2017

...THE URBAN AND SMALL STREAM FLOOD ADVISORY HAS BEEN CANCELLED FOR  
WEST CENTRAL YUMA AND SOUTHEASTERN IMPERIAL COUNTIES...

The heavy rain has ended, and flooding is no longer expected to pose  
a threat. However, there may still be some ponding on roadways. Use  
caution when driving through these areas.

LAT...LON 3259 11480 3262 11481 3263 11478 3272 11472  
3272 11474 3276 11472 3275 11446 3251 11454

\$\$

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FXUS66 KSGX 030416  
AFDSGX

Area Forecast Discussion  
National Weather Service San Diego CA  
916 PM PDT Sat Sep 2 2017

.SYNOPSIS...

Warm weather will continue tonight, especially in the inland valleys where east winds strengthen. Sunday will be cooler with a chance of showers and thunderstorms. The best potential for widespread showers will be in San Diego County. Near normal conditions on Labor Day will transition to slightly above average temperatures for the remainder of the week. Slight chances of thunderstorms will continue over portions of the mountains and deserts each afternoon Monday through Friday.

&&

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

The outer cirrus shield from Tropical Depression Lidia has begun to overspread San Diego and Imperial Counties this evening. Low level moisture has surged into the low deserts, with Thermal Airport reporting a dew point of 72 degrees. In the valleys, east winds have kept temperatures up this evening. As of 8 PM it was still 97 degrees in Santee and 94 degrees in Otay Mesa and Poway. The 00Z KNKX sounding shows increasing moisture with PW up to 1.55 inches and east flow of 20-35 kt in the mid levels.

Tropical Depression Lidia will continue to track northwest overnight as it transitions to a remnant low. Deeper layer moisture will overspread Southern CA early Sunday morning into the afternoon as the remnant low approaches. GFS is still showing PW of 2-2.25 inches along the coast by Sunday afternoon. Sufficient surface based and elevated instability exist for scattered to numerous showers and thunderstorms in the morning, even at the coast and over the coastal waters. Thunderstorm potential decreases during the afternoon for the coast but remains high inland, especially over the mountains, deserts, and Inland Empire. Given the high precipitable water, if any stronger storms or training cells develop, locally heavy rainfall and flash flooding will be possible. Precipitation will taper off as Lidia drifts further west and subsidence/drier air move in behind her.

In addition to the precipitation, east flow will strengthen tonight as Lidia nears. Models still showing mid-level flow of anywhere from 35-50 kt. Gusty winds will develop over most of the forecast area by Sunday morning, with the strongest gusts along the ridges, favored west-facing mountain slopes, and through the

San Gorgonio Pass in the Inland Empire. Local gusts in excess of 50 mph are possible in these locations, with gusts elsewhere west of the mountains generally in the 30-45 MPH range. A Wind advisory has been issued for the mountains, valleys, San Gorgonio Pass, and coastal areas, valid 4 AM-8 PM Sunday.

Monday will be considerably more quiet with high temperatures near normal and only a slight chance of thunderstorms over the mountains during the afternoon. The upper ridge remains in place over the Great Basin through Thursday, bringing slightly above normal temps. Somewhat moist south-southeast flow aloft will lead to a slight chance of showers/thunderstorms over the mountains and deserts each afternoon through Thursday. Coastal low clouds and fog will develop each night and morning. A pattern change may finally be in store for next weekend as a trough begins to push into the west coast, bringing cooler and drier conditions.

&&

.AVIATION...

030415Z....Clouds will gradually increase through Sunday morning, with bases mostly at/above 5000 ft MSL. Scattered showers and thunderstorms will develop Sunday, with best chances 18Z Sunday-03Z Monday, and most likely in San Diego County. Local vis of 3-5 miles in rain could occur Sunday afternoon. Areas of east-southeast surface winds 15-25 kt with gusts to 45 kt will develop late tonight and continue through most of Sunday, with strongest winds in the mountains and foothills, especially San Diego County.

&&

.MARINE...

Former Tropical Storm Lidia will move by to the south and west of the coastal waters tonight and Sunday. This will bring east to southeast winds, increasing to 15-25 kt with gusts to 30 kt Sunday and associated choppy seas of 4-7 feet. A Small Craft Advisory is in effect Sunday for the Inner and Outer Waters. There will also be showers and possible thunderstorms over the coastal waters Sunday into Sunday evening. Conditions will improve Sunday night.

&&

.BEACHES...

There will be showers and a chance of thunderstorms at the beaches Sunday, with highest chances Sunday afternoon and in San Diego County.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...

CA...Wind Advisory from 3 AM to 8 PM PDT Sunday for Orange County  
Coastal Areas-Orange County Inland Areas-Riverside County  
Mountains-San Bernardino County Mountains-San Bernardino



and Riverside County Valleys-The Inland Empire-San Diego  
County Coastal Areas-San Diego County Mountains-San Diego  
County Valleys-San Gorgonio Pass Near Banning-Santa Ana  
Mountains and Foothills.

PZ...Small Craft Advisory from 3 AM to 8 PM PDT Sunday for Coastal  
Waters from San Mateo Point to the Mexican Border and out  
to 30 nm-Waters from San Mateo point to the Mexican Border  
Extending 30 to 60 nm out including San Clemente Island.

&&

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PUBLIC...SS

AVIATION/MARINE/BEACHES...Maxwell

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FXUS65 KPSR 030518  
AFDPSR

Area Forecast Discussion  
National Weather Service Phoenix AZ  
1018 PM MST Sat Sep 2 2017

.UPDATE...Updated Aviation Discussion.

&&

.SYNOPSIS...

A surge in tropical moisture will bring considerable cloudiness through tonight with chances of showers and thunderstorms across southeast California and southwest Arizona. Slight chances of thunderstorms will be mostly confined to higher terrain areas for Sunday and Monday. Best chances for storms into the Phoenix area will occur on Tuesday with lowering chances for the latter part of the week. Temperatures into next week will mostly remain above seasonal normals with the warmest days likely being Monday and Tuesday.

&&

.DISCUSSION...

Tropical Storm Lidia is currently centered in central Baja California and has become a lot less organized. As the system continues to move over the cold water in the Pacific, she is expected to weaken even more becoming a remnant low within the next 24 hours. She continues to move to the northwest, with this motion expected over the next 36 hours. Thereafter, her movement will shift more to the west-northwest as she interacts with an upper-level low off of the southwest U.S. coast.

It's extremely evident that this system has brought us a significant increase in moisture. As an example, in east Mesa, the dewpoints jumped from the 40s to 70s overnight and the PHX 12Z sounding showed a PW of 1.32 inches, which is .61 inches greater than yesterday mornings sounding. As the day progresses, moisture and associated cloud cover from Lidia will continue to spread northward across our area, with chances for precipitation also on the increase.

Currently, showers are primarily confined to Pima county south of our forecast area. Expecting the greatest chances for precipitation for us to be primarily from southern Maricopa county westward to Imperial county (south of I8) after 21Z (2PM MST/PDT). Instability does not look as impressive, so expecting activity to be composed of mainly showers with isolated thunderstorms. Since we do have abnormally high PWs, stronger storms will be capable of producing higher rainfall amounts. But all in all, expecting accumulation totals to be less than 1/4

inch, with isolated areas seeing up to 1 inch. Also, storm motion should be relatively fast, so that should help minimize the flash flood threat.

By Sunday, Lidia will have pushed to the west of the Baja peninsula while an upper level high center temporarily establishes itself near the Four Corners area. Mostly dry air will flow around this high center into eastern Arizona on Sunday and then westward into southeast California for Monday. This dryer air will not completely dry us out as PWATs of 1.00-1.30" will remain, but skies will again turn mostly sunny by Monday. Storm chances on Monday will mostly be confined to higher terrain areas with outflow winds into the lower deserts.

As the upper level high center shifts a bit farther northwest ending up over the Great Basin early next week, it will allow for at least one shortwave to move out of Colorado/New Mexico into eastern Arizona. The first shortwave still looks like it will enhance thunderstorm development for Tuesday afternoon/evening over eastern Arizona with decent chances of at least isolated activity moving into the lower deserts. A second shortwave may also move through on Wednesday providing for another possible semi active day, but overall chances do drop some from Tuesday. Low end storm chances should remain through the end of next week, but a shifting of the flow for next Thursday and Friday may lead to drier air working into eastern Arizona.

Temperatures through the period will mostly remain above seasonal normals with the coolest days being today and Sunday. Highs near normals this weekend will affect south-central Arizona locations, but extensive cloudiness will result in highs near 100 across southeast California and southwest Arizona. Warming temperatures Monday into Tuesday will bring above normal highs with widespread 105-110 degrees over the lower deserts. Little relief from the heat is seen through next Friday with highs generally falling between 103-108.

&&

.AVIATION...

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

As TS Lidia continues on its northwest movement expect a gradual decrease in the already modest chances of showers and thunderstorms across the valley, although we will hold on to a slight chance of showers and storms throughout the period. In addition expect the outer bands of Lidia's high cloud cirrus shield to gradually thin out with its thicker high-cloud shield staying well to the southwest of the terminals by mid to late in the TAF period. As a result, expect mostly cloudy skies with FEW-SCT low to mid cloud from 080-150Kft and BKN high clouds to gradually become partly cloudy and scatter out by early to mid morning. Otherwise winds will be mostly light and favor normal diurnal sequences combined with episodes of light and variable to occasionally calm

conditions. Late Sunday night around 06Z expect west winds to become briefly breezy and gusty with gusts of 18-22kt.

Southeast California/Southwest Arizona including KIPL and KBLH:

With TS Lidia continuing on its northwest path expect a chance of mainly showers or possibly isolated thunderstorms in the vicinity of the sites throughout the period. Expect breezy southeasterly and southerly winds to develop at KIPL by 12Z with gusts near 20kt along with mostly cloudy skies including BKN mid-high clouds from 100-200Kft. Skies will then become partly cloudy by mid afternoon. KBLH can expect mostly cloudy skies with FEW-SCT mid clouds from 100-150Kft and BKN high cloud at 200kft. Skies will gradually become partly cloudy with FEW-SCT mid to high clouds by late morning. Expect moderate southerly winds today to become southwesterly and breezy this evening at 12 gusting to 18kt.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...

Monday through Friday:

Seasonably hot temperatures combined with moderate Monsoon moisture will dominate the region resulting in a slight to moderate chance of afternoon and evening T-storms through Wednesday evening over the deserts and high country, and through Friday over just the high terrain of Gila county. However, expect the best storm chances over the higher elevations of Gila county with the more modest chances across the lower deserts of Arizona. A few of the stronger storms may produce only a slight chance of wetting rain. Seasonably breezy southerly and southwesterly winds near 10 mph with gusts of 15-20 mph can be expected from SE CA to SW AZ by late afternoon and early evening each day through Wednesday. Min RH values in the 15-19 percent range over the lower deserts on Mon will gradually peak at the 17-23 percent range by Thu. Expect overnight recoveries to be fair to good over southeast CA and good to excellent elsewhere.

&&

&&

.FIRE WEATHER...

Tuesday through Saturday...A modest increase in moisture will result in slight chances for thunderstorms each afternoon and evening. Temperatures will remain slightly above normal with minimum afternoon humidity values generally in the 15-25% range and good overnight recovery. A slight cooling trend to near normal temperatures will occur into the weekend as a seasonably strong low pressure system is forecast to develop near the northern California coast. Increasing southerly flow across the region. may increase moisture levels and precipitation potential during this time, but confidence is still not high this far in advance.

&amp;&amp;

.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

&amp;&amp;

.PSR WATCHES/WARNINGS/ADVISORIES...

AZ...None.

CA...None.

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DISCUSSION...Hernandez/Kuhlman

AVIATION...Sawtelle

FIRE WEATHER...Rogers

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FXUS65 KPSR 030957

AFDPSR

Area Forecast Discussion

National Weather Service Phoenix AZ

257 AM MST Sun Sep 3 2017

.SYNOPSIS...

Slight chances of thunderstorms will exist today and Monday, but will mostly be confined to higher terrain areas of Arizona. Best chances for storms over the Phoenix area will occur on Tuesday with lowering chances for the latter part of the week. Temperatures this week will mostly remain above seasonal normals with the warmest days likely being Monday and Tuesday.

&&

.DISCUSSION...

The effects from now Tropical Depression Lidia have so far been fairly limited across the area, but chances for showers and thunderstorms will remain through the rest of today mainly across southeast California. High-res CAM solutions mostly depict isolated to scattered showers and a few thunderstorms across Imperial county this afternoon while drier air begins to filter into Arizona from the east. As the remnants of Lidia continue to push further out into the Pacific into Monday, the upper level high center over Utah will become the dominant weather feature across the Desert Southwest.

Moisture levels for Monday will remain sufficient for at least convectively induced high terrain thunderstorms, but chances should be limited across the lower deserts. As the upper level high center shifts a bit farther to the northwest into Tuesday, models continue to indicate a weak shortwave will drop down out of northern New Mexico into eastern Arizona Tuesday afternoon/evening. Although the signal is a bit more muted compared to yesterday's model runs, a slight uptick in moisture and CAPE is definitely noted. Still feel Tuesday could be a somewhat active day across eastern Arizona, possibly extending into the lower south-central Arizona deserts. The main threat should be strong gusty winds, but a weak northeasterly steering flow may also allow for some localized flooding due to slow storm motion.

Drier air will gradually filter into the area from the east and northeast starting Wednesday which will start to limit daytime

storm activity. We have mostly kept slight chance PoPs in most areas, but better chances will remain across the higher terrain of eastern Arizona. Much more uncertainty comes in play for next weekend as models continue to struggle with a potential closed low off the California coast. The last few models runs have trended away from a deep closed low nearing the Desert Southwest, but they still mostly show a modestly moist southerly flow affecting the area. This should at least keep the chances for storms going into next weekend.

Temperatures this week will for the most part remain above seasonal normals. Though clouds will affect temperatures across southeast California and southwest Arizona again today, temperatures should increase a few degrees across south-central Arizona. Warming temperatures Monday into Tuesday will bring above normal highs with widespread 105-110 degrees over the lower deserts. Little relief from the heat is seen through the rest of the week with highs generally falling between 103-108.

&&

.AVIATION...

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

As TS Lidia continues on its northwest movement expect a gradual decrease in the already modest chances of showers and thunderstorms across the valley, although we will hold on to a slight chance of showers and storms throughout the period. In addition expect the outer bands of Lidia's high cloud cirrus shield to gradually thin out with its thicker high-cloud shield staying well to the southwest of the terminals by mid to late in the TAF period. As a result, expect mostly cloudy skies with FEW-SCT low to mid cloud from 080-150Kft and BKN high clouds to gradually become partly cloudy and scatter out by early to mid morning. Otherwise winds will be mostly light and favor normal diurnal sequences combined with episodes of light and variable to occasionally calm conditions. Late Sunday night around 06Z expect west winds to become briefly breezy and gusty with gusts of 18-22kt.

Southeast California/Southwest Arizona including KIPL and KBLH:

With TS Lidia continuing on its northwest path expect a chance of mainly showers or possibly isolated thunderstorms in the vicinity of the sites throughout the period. Expect breezy southeasterly and southerly winds to develop at KIPL by 12Z with gusts near 20kt along with mostly cloudy skies including BKN mid-high clouds from 100-200Kft. Skies will then become partly cloudy by mid afternoon. KBLH can expect mostly cloudy skies with FEW-SCT mid clouds from 100-150Kft and BKN high cloud at 200kft. Skies will gradually become

partly cloudy with FEW-SCT mid to high clouds by late morning. Expect moderate southerly winds today to become southwesterly and breezy this evening at 12 gusting to 18kt.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...

Monday through Friday:

Seasonably hot temperatures combined with moderate Monsoon moisture will dominate the region resulting in a slight to moderate chance of afternoon and evening T-storms through Wednesday evening over the deserts and high country, and through Friday over just the high terrain of Gila county. However, expect the best storm chances over the higher elevations of Gila county with the more modest chances across the lower deserts of Arizona. A few of the stronger storms may produce only a slight chance of wetting rain. Seasonably breezy southerly and southwesterly winds near 10 mph with gusts of 15-20 mph can be expected from SE CA to SW AZ by late afternoon and early evening each day through Wednesday. Min RH values in the 15-19 percent range over the lower deserts on Mon will gradually peak at the 17-23 percent range by Thu. Expect overnight recoveries to be fair to good over southeast CA and good to excellent elsewhere.

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.SPOTTER INFORMATION STATEMENT...

Spotters should follow standard reporting procedures.

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