Appendix A
Public Notification that a potential event was occurring
(40 CFR §50.14(c)(1)(i))

FIGURE A-1
NATIONAL WEATHER SERVICE PUBLIC ZONES

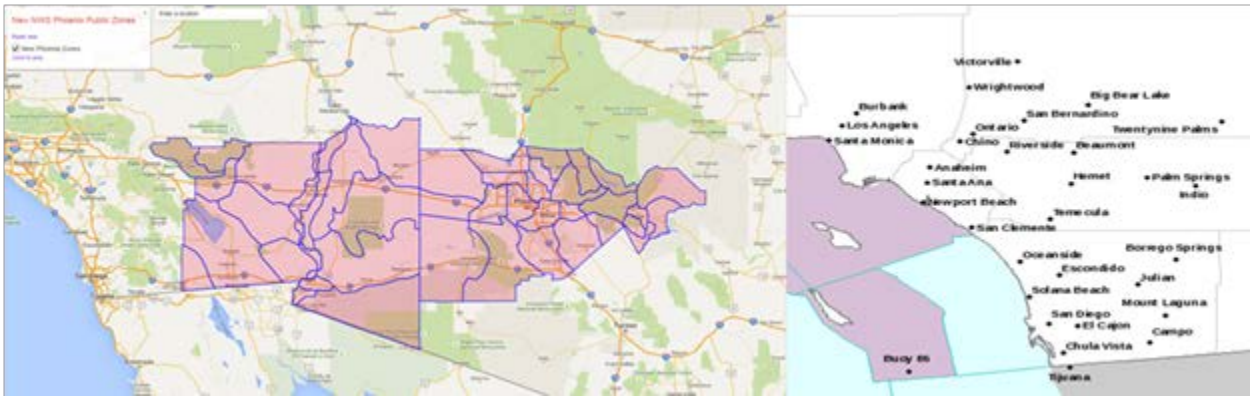

Fig A-1: Illustrates the public zones serviced by the National Weather Service Office in Phoenix and San Diego. Imperial County, including southeast sections of Riverside County are part of the reporting public zone areas from the Phoenix office

FIGURE A-2
NWS SAN DIEGO OFFICE AREA FORECAST DISCUSSION

National Weather Service Forecast Office
San Diego, CA

www.weather.gov

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Hurricane Center
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Area Forecast Discussion

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```
FXUS66 KSGX 290444
  AFDSGX

  AREA FORECAST DISCUSSION
  NATIONAL WEATHER SERVICE SAN DIEGO CA
  844 PM PST THU JAN 28 2016

  .SYNOPSIS...
  HIGH PRESSURE ALOFT AND WEAK OFFSHORE FLOW WILL CONTINUE FAIR AND
  MILD WEATHER THROUGH FRIDAY. COLDER THIS WEEKEND AS A PACIFIC STORM
  SYSTEM MOVES ONSHORE WITH RAIN...MOUNTAIN SNOW...AND STRONG...GUSTY
  WINDS. WARMER AND DRY AGAIN NEXT WEEK AS HIGH PRESSURE AND OFFSHORE
  FLOW RETURN.

  &&

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

  DEWPOINTS HAVE JUMPED AT SOME COASTAL STATIONS THIS EVENING...BUT AT
  8 PM PST...FEW...IF ANY LOWER CLOUDS WERE VISIBLE BELOW SCATTERED
  HIGH CLOUDS DRIFTING SOUTH ACROSS THE REGION. THE 00Z MIRAMAR
  SOUNDING HAD A SFC-BASED INVERSION AND LIGHT AND VARIABLE WINDS BELOW
  7K FT. SURFACE PRESSURE GRADIENTS REMAIN OFFSHORE FROM NV TO SAN
  DIEGO WITH AN OFFSHORE TREND OVER THE PAST FEW HOURS. WINDS WERE
  LIGHT MOST AREAS.

  A CHANCE FOR DENSE FOG CONTINUES FOR LATE TONIGHT AND FRI MORNING
  ALONG THE COASTAL STRIP...BUT GIVEN THE OFFSHORE TRENDS AND LITTLE
  INLAND PENETRATION OF MARITIME AIR. THE FOG LOOKS LESS LIKELY...OR AT
  MOST CONFINED TO THE IMMEDIATE COAST AS THE OFFSHORE DENSITY GRADIENT
  WIND IS FAVORED THROUGH THE NIGHT. FAIR AND MILD WEATHER WILL RETURN
  FOR FRI UNDER THE COLLAPSING RIDGE ALOFT.

  LATEST MODEL GUIDANCE FROM THE ECMWF AND 00Z NAM12 SHOW SOME LIGHT
  PRECIP BREAKING OUT SAT EVENING AND REMAINING LIGHT THROUGH SUN BEFORE
  INCREASING WITH FRONTAL PASSAGE EARLY EVENING. THIS IS SLIGHTLY
  SLOWER THAN PREVIOUS RUNS...BUT AMOUNTS LOOK SIMILAR.

  OF CONCERN WILL BE THE FORECAST FOR LATER SUN/SUN NIGHT WHEN THE
  OPERATIONAL GFS MODEL CONTINUES ON THE DEEP END OF THE GUIDANCE
  WITH SFC PRESSURE OVER NV. GIVEN THE 19 MB GRADIENT FORECAST FROM
  LAS VEGAS TO SAN DIEGO...AND THE FORCING GENERATED AS THE SFC LOW
  DROPS TO 991 MBS 00Z-06Z MON...IT MAY BE MORE PRUDENT TO GO WITH A
  WPC-FAVORED BLEND OF THE ENSEMBLE SOLUTIONS. INCLUDING THE
  OPERATIONAL ECMWF AND 00Z NAM12 RUNS...THE MAJORITY OF THIS GUIDANCE
  SUGGESTS THE SURFACE PRESSURE GRADIENT WOULD BE AROUND 8 MBS
  WEAKER...WHICH HAS SIGNIFICANT IMPLICATIONS FOR THE WIND FORECAST
  ACROSS SOCAL. WE WILL NEED TO MONITOR THE WIND POTENTIAL CLOSELY OVER
  THE NEXT COUPLE OF DAYS. BECAUSE IF THE 18Z GFS RUN VERIFIES...THERE
  WILL BE SIGNIFICANT WIND IMPACTS REGION-WIDE.

  FROM PREVIOUS DISCUSSION....

  A SHORTWAVE TROUGH WILL QUICKLY MOVE ACROSS THE REGION LATE
  SATURDAY...CREATING LIGHT PRECIPITATION AND GUSTY WEST WINDS TO
  65 MPH OVER THE MOUNTAINS AND ALONG DESERT MOUNTAIN SLOPES. THE
  MAIN FORECAST CHALLENGE IS IN THE DETAILS OF A DEEP UPPER-LEVEL
  TROUGH MOVING ACROSS THE REGION EARLY SUNDAY THROUGH MONDAY
  MORNING. THIS SYSTEM WILL CREATE STRONG AND GUSTY WESTERLY WINDS
  ACROSS THE REGION SUNDAY MORNING THROUGH MONDAY MORNING...WITH
  STRONGEST WINDS EXPECTED SUNDAY EVENING AS A 145 KT 300 MB JET
  BECOMES CENTERED OVER SW CA. GUSTS NEAR 75 MPH ARE POSSIBLE IN THE
  MOUNTAINS...60 MPH IN THE DESERTS...AND 35 MPH IN THE VALLEYS AND
  ALONG THE COAST. ISOLATED GUSTS NEAR 85 MPH ARE POSSIBLE IN THE
  SAN DIEGO COUNTY MOUNTAINS...ESPECIALLY NEAR MT
  LAGUNA. AREAS OF BLOWING DUST ARE POSSIBLE IN THE DESERTS BEFORE
  PRECIP BEINGS. THE LATEST GFS/CANADIAN/ECMWF ARE SIMILAR WITH
  TIMING OF THE SYSTEM...WHILE THE ECMWF IS A LITTLE DRIER ON
  PRECIPITATION. HEAVIEST PRECIP IS FORECAST TO FALL LATE SUNDAY
  MORNING THROUGH SUNDAY AFTERNOON AS PRECIPITABLE WATER VALUES RISE
  TO JUST OVER AN INCH.

  ...FORECAST STORM TOTAL PRECIP (IN) SAT THROUGH MON...
  DESERTS.........0.25 TO 0.50
```

COAST/VALLEYS...0.50 TO 0.75
MOUNTAINS.....1.25 TO 3.00

SNOW LEVELS WILL START OUT AROUND 7500 FT **SAT** NIGHT...LOWER TO 6000 FT SUNDAY MORNING...4000 FT SUNDAY EVENING AND 3500 FT MONDAY MORNING.

...FORECAST **STORM** TOTAL SNOWFALL (IN) **SAT** THROUGH MON...
3500 TO 4000 FT...**TRACE** TO 1
4000 TO 5000 FT...1 TO 3
5000 TO 6000 FT...4 TO 10
6000 TO 7000 FT...10 TO 16
ABOVE 7000 FT.....14 TO 22

LOWER HEIGHTS ALOFT WILL DROP HIGH TEMPERATURES 5 TO 15 DEG F BELOW SEASONAL NORMALS SUNDAY THROUGH TUESDAY. GIVEN THAT THE EVENT IS STILL 48 HOURS OUT AND CONFIDENCE ON TIMING IS NOT HIGH...WILL WAIT TO ISSUE ANY POSSIBLE WINTER AND WIND PRODUCTS FOR THE TIME BEING.

WEAK RIDGING AND SURFACE **OFFSHORE FLOW** WILL CREATE DRY AND WARMER WEATHER FOR THE MIDDLE OF NEXT WEEK...WITH HIGHS CLOSER TO NORMAL.

&&

.AVIATION...
290440Z...SKIES WERE CLEAR AT 04Z. THIS IS A CHALLENGING LOW CLOUD/DENSE **FOG** FORECAST TONIGHT. THE THINKING THIS EVENING IS THAT IT WILL NOT REACHING KSAN TONIGHT...WITH LIGHT EASTERLY SURFACE WINDS KEEPING THE **LOW CLOUDS** JUST OFF THE COAST. SIMILAR THOUGHTS ABOUT THE **LOW CLOUDS** AND **FOG** CHANCES AT KCRQ AND KSNA.

ELSEWHERE...EXPECT FEW-SCT CLOUDS **AOA** 20000 FT **MSL** BECOMING SKC BY 2000 **UTC**...WITH UNRESTRICTED **VIS** THROUGH FRIDAY MORNING.

&&

.MARINE...
840 PM...AREAS OF DENSE **FOG** POSSIBLE FORM OVER THE **COASTAL WATERS** TONIGHT INTO FRIDAY MORNING...RESULTING IN VISIBILITIES OF 1 NM OR LESS.

TONIGHT THROUGH SATURDAY MORNING: A LARGE LONG-PERIOD WEST-NORTHWEST SWELL WILL PRODUCE **SEAS** OF 10-12 FEET TONIGHT THROUGH EARLY SATURDAY OVER THE OUTER WATERS.

SUNDAY AFTERNOON THROUGH MONDAY NIGHT: A STRONG **TROUGH** OF LOW PRESSURE MOVING THROUGH THE REGION WILL BRING VERY STRONG NORTHWEST WINDS TO THE **COASTAL WATERS** WITH GALE-FORCE WIND GUSTS OF 35-45 KT. THE STRONG WINDS AND A LARGE SHORT-PERIOD WIND DRIVEN SWELL FROM 14-18 FEET WILL RESULT IN DANGEROUS SEA CONDITIONS FOR SUNDAY AFTERNOON THROUGH MONDAY NIGHT. A **MARINE WEATHER STATEMENT** WITH A **GALE OUTLOOK** HAS BEEN ISSUED.

&&

.BEACHES...
840 PM...A LARGE LONG-PERIOD WEST-NORTHWEST SWELL WILL ARRIVE TONIGHT...PEAK FRIDAY AT 12 FEET/17 SECONDS AT THE SAN CLEMENTE **BASIN** BUOY...AND LOWER A BIT ON SATURDAY. THIS SHOULD PRODUCE HIGH SURF OF AROUND 6-10 FEET WITH SETS TO 12 FEET FRIDAY INTO EARLY SATURDAY FOR NORTHERN ORANGE COUNTY AND SOUTHERN SAN DIEGO COUNTY BEACHES...ALONG WITH STRONG RIP CURRENTS AND BEACH EROSION. A HIGH SURF **ADVISORY** IS IN EFFECT THROUGH 10 PM SATURDAY.

AN EVEN LARGER SWELL...PERHAPS REACHING 14-18 FEET IN THE OUTER WATERS...BUT WITH A SHORTER PERIOD OF AROUND 10 SECONDS...WILL BRING ANOTHER ROUND OF HIGH SURF AND STRONG RIP CURRENTS LATE SUNDAY INTO MONDAY.

&&

.SKYWARN...
SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...
CA...**HIGH SURF ADVISORY** FROM 10 PM THIS EVENING TO 10 PM **PST** SATURDAY FOR ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS.

PZ...NONE.
&&

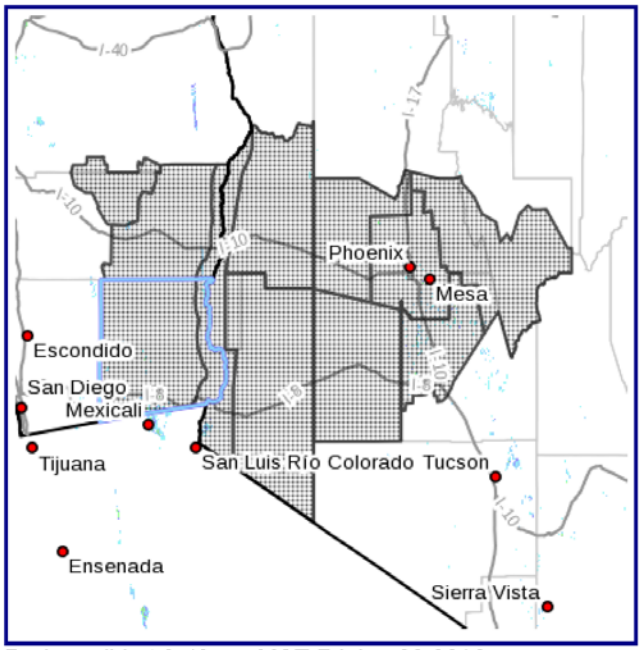
PUBLIC...JAD/JJT
AVIATION/MARINE/BEACHES...MOEDE

Fig A-2: An area forecast discussion issued by the NWS San Diego office at 8:44 p.m. PST on January 28, 2016. Source: http://www.weather.gov/wrh/

FIGURE A-3
NWS PHOENIX OFFICE SPECIAL WEATHER STATEMENT

Interactive NWS Alert

Special Weather Statement for Imperial, CA
Sent via Email at 343 am MST, Jan 29th 2016



Radar valid at 3:43 am MST Fri Jan 29 2016

NWS Alert User Alert Area

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654
WWUS85 KPSR 291043
SPSPSR

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE PHOENIX AZ
343 AM MST FRI JAN 29 2016

AZZ020>028-CAZ030>033-300045-
LOWER COLORADO RIVER VALLEY AZ-WEST CENTRAL DESERTS-
NORTHWEST MARICOPA COUNTY-GREATER PHOENIX AREA-
SOUTHERN GILA COUNTY/TONTO NATIONAL FOREST FOOTHILLS-
YUMA/MARTINEZ LAKE AND VICINITY-SOUTHWEST DESERTS-
SOUTHWEST MARICOPA COUNTY-NORTHWEST AND NORTH CENTRAL PINAL COUNTY-
JOSHUA TREE NATIONAL PARK-LOWER COLORADO RIVER VALLEY CA-
RIVERSIDE COUNTY/EASTERN DESERTS-IMPERIAL COUNTY-
INCLUDING THE CITIES OF...EHRENBERG...PARKER...BOUSE...QUARTZSITE...
SALOME...BUCKEYE...LAKE PLEASANT...MORRISTOWN...NEW RIVER...TONOPAH...
WICKENBURG...CAREFREE...CAVE CREEK...CHANDLER...FOUNTAIN HILLS...
GILBERT...GLENDALE...MESA...PEORIA...PHOENIX...SCOTTSDALE...
SUN CITY...TEMPE...GLOBE...MIAMI...SAN CARLOS...SUPERIOR...
TOP-OF-THE-WORLD...ALSO INCLUDING APACHE...BARTLETT...CANYON...
HORSESHOE...ROOSEVELT...AND SAGUARO LAKES...FORTUNA FOOTHILLS...
SAN LUIS...SOMERTON...YUMA...DATELAND...TACNA...WELLTON...GILA BEND...
APACHE JUNCTION...CASA GRANDE...COOLIDGE...FLORENCE...
COTTONWOOD VISITOR CENTER...KEYS VIEW...LOST HORSE...BLYTHE...
CHIRIACO SUMMIT...DESERT CENTER...EAGLE MOUNTAIN...BRAWLEY...
CALEXICO...EL CENTRO...GLAMIS...IMPERIAL...THE SALTON SEA
343 AM MST FRI JAN 29 2016 /243 AM PST FRI JAN 29 2016/

...A COLD...WET...AND WINDY PACIFIC STORM EXPECTED TO MOVE INTO THE
REGION LATE SUNDAY AFTERNOON AND SUNDAY NIGHT...

A STORM WAS SLOWLY DEVELOPING OVER THE NORTH PACIFIC THIS
MORNING...AND IS FORECAST TO INTENSIFY AS IT DEEPENS TOWARD THE
REGION THIS WEEKEND. THE PACIFIC STORM IS EXPECTED TO BODILY MOVE
```

Fig A-3: A Special Weather Statement issued by the NWS Phoenix office at 2:43 am PST on January 29, 2016. Source: https://inws.ncep.noaa.gov/a/a.php?i=45507[2/1/2016 9:41:38 AM]

FIGURE A-4
NWS SAN DIEGO OFFICE AREA FORECAST DISCUSSION

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San Diego, CA

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Aviation Weather
Fire Weather
Marine Weather
Severe Weather
Hurricane Center
User Defined Area
Travel
Fastlinks
Hydrology
Rivers and Lakes
Forecasts / Obs
Climate
Local
National
Drought
More...
Climate portal
Weather Safety
Preparedness
Weather Radio
SkyWarn™
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USA.gov

Area Forecast Discussion

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FXUS66 KSGX 292201
  AFDSGX

  AREA FORECAST DISCUSSION
  NATIONAL WEATHER SERVICE SAN DIEGO CA
  201 PM PST FRI JAN 29 2016

  .SYNOPSIS...
  A LOW PRESSURE SYSTEM OFF THE WEST COAST ON SATURDAY WILL MOVE
  INLAND THROUGH SOUTHERN CALIFORNIA SATURDAY NIGHT AND SUNDAY
  BRINGING COOLING...STRONG GUSTY WEST WINDS...WITH LOCALLY HEAVY
  PRECIPITATION...MOSTLY ON SUNDAY. SHOWERS WILL DECREASE SUNDAY
  NIGHT. FOR NEXT WEEK...HIGH PRESSURE ALOFT WILL STRENGTHEN NEAR
  THE WEST COAST CREATING DRY WEATHER WITH A WARMING TREND.

  &&

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

  AT 1 PM PST...WATER VAPOR SATELLITE IMAGERY DISPLAYED WET...ZONAL
  FLOW OVER NORTHERN CA/OREGON...AND NW FLOW ALOFT OVER SW CA. PATCHY
  FOG MAY DEVELOP TONIGHT ALONG THE COAST AS THE MARINE LAYER
  REDEVELOPS WITH LOWERING HEIGHTS ALOFT.

  A SHORTWAVE TROUGH MOVING ACROSS THE REGION LATE SATURDAY WILL
  INCREASE ONSHORE FLOW...AND CREATE GUSTY WESTERLY WINDS IN THE
  MOUNTAINS AND DESERTS. GUSTS TO AROUND 60 MPH ARE POSSIBLE NEAR
  MOUNTAIN RIDGES AND ALONG DESERT MOUNTAIN SLOPES LATE SATURDAY
  THROUGH EARLY SUNDAY. LIGHT PRECIPITATION OF A FEW HUNDREDTHS IS
  POSSIBLE...MAINLY OVER THE MOUNTAINS...DURING THE PERIOD. LIGHT
  SNOWFALL IS EXPECTED ABOVE 7500 FT.

  A DEEPER...MORE SIGNIFICANT TROUGH WILL MOVE ACROSS THE REGION
  SUNDAY THROUGH EARLY MONDAY. THIS WILL CREATE STRONG WESTERLY
  WINDS ACROSS MOST AREAS THROUGH THE PERIOD...AND MODERATE TO
  HEAVY PRECIPITATION OVER AND WEST OF THE MOUNTAINS AS THE FRONT
  MOVES SOUTHEAST. HIGH-RES MODELS SHOW HEAVIER PRECIP BEGINNING IN
  NORTHERN AREAS MID SUNDAY AFTERNOON AS PRECIPITABLE WATER VALUES
  RISE TO JUST ABOVE ONE INCH...AND DEVELOP PRECIP TO THE SE
  THROUGH SUN EVENING. H850 WINDS AROUND 50 KT MAY CREATE GUSTY
  WINDS EVEN ALONG THE COAST AND IN THE VALLEYS AS THE FRONT PASSES.
  WESTERLY GUSTS NEAR 75 MPH ARE POSSIBLE IN THE MOUNTAINS AND
  DESERTS...AND 60 MPH IN THE VALLEYS AND ALONG THE COAST.
  STRONGEST GUSTS ARE EXPECTED IN THE VALLEYS AND ALONG THE COAST
  AS THE FRONT MOVES SOUTHEAST. AREAS OF BLOWING DUST ARE POSSIBLE
  IN THE DESERTS BEFORE PRECIP BEGINS.

  ...FORECAST STORM TOTAL PRECIP (IN) LATE SAT THROUGH EARLY MON...
  DESERTS.........0.25 TO 0.50
  COAST/VALLEYS...0.50 TO 1.00
  MOUNTAINS.......1.50 TO 2.50...WITH LOCALLY GREATER AMOUNTS

  SNOW LEVELS WILL START OUT AROUND 8000 FT SAT EVENING...LOWER TO
  7000 FT SUNDAY MORNING...6000 FT SUNDAY AFTERNOON AND 3500 FT
  SUNDAY NIGHT.

  ...FORECAST STORM TOTAL SNOWFALL (IN) LATE SAT THROUGH EARLY MON...
  3500 TO 4000 FT...TRACE TO 1
  4000 TO 5000 FT...2 TO 5
  5000 TO 6000 FT...3 TO 10
  6000 TO 7000 FT...8 TO 16
  ABOVE 7000 FT.....10 TO 20

  LOWER HEIGHTS ALOFT WILL DROP HIGH TEMPERATURES 5 TO 15 DEG F
  BELOW SEASONAL NORMALS SUNDAY THROUGH TUESDAY. PRECIP SHOULD END
  EARLY MONDAY MORNING...WITH GUSTY WINDS SLOWLY DIMINISHING MONDAY
  AFTERNOON. A WINTER STORM WATCH HAS BEEN ISSUED FOR THE MOUNTAINS
  FOR THE STRONG WINDS AND HEAVY SNOWFALL. A HIGH WIND WATCH IS IN
  EFFECT FOR THE DESERTS SATURDAY AFTERNOON THROUGH MONDAY
  MORNING...AND FOR THE COAST/VALLEYS SUNDAY MORNING THROUGH MONDAY
  MORNING.

  WEAK RIDGING AND SURFACE OFFSHORE FLOW WILL CREATE DRY AND WARMER
  WEATHER FOR THE MIDDLE OF NEXT WEEK...WITH HIGHS CLOSER TO
  NORMAL THROUGH THE PERIOD.
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National Weather Service - NWS San Diego

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&&

.AVIATION...
292120Z...MOSTLY CLEAR THROUGH 02Z. BTWN 02-06Z...BKN004-008
DEVELOPING NEAR THE COAST...THEN MOVING 15-20 MI INLAND THROUGH 14Z.
LOCAL VIS AOB 2SM POSSIBLE OVER HIGHER COASTAL TERRAIN AND COASTAL
MESAS...INCLUDING KCRQ AND KMYF.

&&

.MARINE...
AT 120 PM...THE SAN CLEMENTE BASIN BUOY REPORTED A 10 FOOT SWELL AT
14 SECONDS. THIS LARGE LONG-PERIOD WEST-NORTHWEST SWELL WILL PRODUCE
SEAS OF 9-12 FEET OVER THE OUTER COASTAL WATERS THROUGH TONIGHT.

SUNDAY AFTERNOON THROUGH MONDAY NIGHT...GALE WATCH IN EFFECT SUNDAY
AND MONDAY. A STRONG COLD FRONT MOVING THROUGH THE REGION WILL BRING
NORTHWEST GALE-FORCE WIND GUSTS OF 35-45 KT. THE STRONG WINDS
COMBINED WITH A LARGE SHORT-PERIOD SWELL OF 14-18 FEET WILL RESULT
IN DANGEROUS BOATING CONDITIONS SUNDAY AFTERNOON THROUGH MONDAY
EVENING. SEE THE GALE WATCH (LAXMWWSGX) FOR MORE INFORMATION.

&&

.BEACHES...
120 PM...A HIGH SURF ADVISORY IS IN EFFECT THROUGH 10 PM SATURDAY.
SURF OF 6-10 FEET WITH SETS TO 12 FEET ARE LIKELY AT THE BEACHES IN
NORTHERN ORANGE COUNTY AND SOUTHERN SAN DIEGO COUNTY. THERE WILL
ALSO BE STRONG RIP CURRENTS AND BEACH EROSION.

A LARGER WEST-NORTHWEST SWELL OF 14-18 FEET IN THE OUTER WATERS WILL
BRING ANOTHER ROUND OF HIGH SURF AND STRONG RIP CURRENTS LATE SUNDAY
INTO MONDAY.

&&

.SKYWARN...
SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE
 ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...
CA...WINTER STORM WATCH FROM SATURDAY AFTERNOON THROUGH MONDAY
     MORNING FOR RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO
     COUNTY MOUNTAINS-SAN DIEGO COUNTY MOUNTAINS.

     HIGH WIND WATCH FROM SATURDAY AFTERNOON THROUGH MONDAY MORNING
     FOR APPLE AND LUCERNE VALLEYS-COACHELLA VALLEY-SAN DIEGO
     COUNTY DESERTS-SAN GORGONIO PASS NEAR BANNING.

     HIGH WIND WATCH FROM SUNDAY MORNING THROUGH MONDAY MORNING FOR
     ORANGE COUNTY COASTAL AREAS-ORANGE COUNTY INLAND AREAS-SAN
     BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-
     SAN DIEGO COUNTY COASTAL AREAS-SAN DIEGO COUNTY VALLEYS-
     SANTA ANA MOUNTAINS AND FOOTHILLS.

     HIGH SURF ADVISORY UNTIL 10 PM PST SATURDAY FOR ORANGE COUNTY
     COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS.

PZ...GALE WATCH FROM SUNDAY MORNING THROUGH MONDAY AFTERNOON 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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Fig A-4: An area forecast discussion issued by NWS San Diego office at 2:01 pm PST on January 29, 2016. Source: http://www.wrh.noaa.gov/total_forecast/getprod.php?afos=xxxafdsgx&wfo=sgx&font=120&version=29

FIGURE A-5
WIND ADVISORY IN EFFECT FOR IMPERIAL COUNTY

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142
WWUS75 KPSR 301313
NPWPSR

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PHOENIX AZ
613 AM MST SAT JAN 30 2016

...WINDY CONDITIONS EXPECTED ACROSS SOUTHEASTERN CALIFORNIA
SUNDAY THROUGH MONDAY...

CAZ030>033-311300-
/O.CON.KPSR.WI.Y.0001.160131T2200Z-160202T0000Z/
JOSHUA TREE NATIONAL PARK-LOWER COLORADO RIVER VALLEY CA-
RIVERSIDE COUNTY/EASTERN DESERTS-IMPERIAL COUNTY-
INCLUDING THE CITIES OF...COTTONWOOD VISITOR CENTER...KEYS VIEW...
LOST HORSE...BLYTHE...CHIRIACO SUMMIT...DESERT CENTER...
EAGLE MOUNTAIN...BRAWLEY...CALEXICO...EL CENTRO...GLAMIS...
IMPERIAL...THE SALTON SEA
513 AM PST SAT JAN 30 2016

...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM SUNDAY TO 4 PM PST
MONDAY...

* AFFECTED AREA...SOUTHEASTERN CALIFORNIA INCLUDING EL CENTRO...
  BLYTHE AND JOSHUA TREE NATIONAL PARK.

* TIMING...SUNDAY AFTERNOON THROUGH MONDAY AFTERNOON.

* WINDS...SUSTAINED WINDS 35 MPH WITH GUSTS UP TO 50 MPH.

* IMPACTS...MOTORISTS WILL ENCOUNTER HAZARDOUS CROSS WINDS. THIS
  WILL ESPECIALLY BY THE CASE FOR HIGH PROFILE VEHICLES. BLOWING
  DUST WILL ALSO BE POSSIBLE CAUSING RAPID REDUCTIONS IN
  VISIBILITY.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN
30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND
58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY
FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT
AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER
A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA
CAUTION.

&&

$$
```

Fig A-5: An Urgent Weather Message issued by the NWS Phoenix office at 5:13am PST contained a reiteration of a Wind Advisory that was initially issued at 4:48am that morning. The affected areas included Brawley, Calexico, El Centro, Glamis, Imperial and the Salton Sea. Source: Iowa Environmental Mesonet; https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201601301313

FIGURE A-6
NWS PHOENIX OFFICE AREA FORECAST DISCUSSION

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Phoenix, AZ

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Forecasts
Forecast Discussion
Local Area
Activity Planner
Aviation Weather
Fire Weather
Severe Weather
Hurricane Center
User Defined Area
Travel
Air Quality
GIS
Hydrology
Rivers and Lakes
CBRFC
Climate
Local
National
Drought
More...
Climate portal
Weather Safety
Preparedness
Weather Radio
SkyWarn™
Heat Safety
Monsoon Safety
Additional Info
Items of Interest
Other Useful Links
Education Resources
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Area Forecast Discussion

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FXUS65 KPSR 301546
  AFDPSR

  AREA FORECAST DISCUSSION
  NATIONAL WEATHER SERVICE PHOENIX AZ
  846 AM MST SAT JAN 30 2016

  .SYNOPSIS...
  HIGH PRESSURE SYSTEM OVER THE REGION WILL WEAKEN TODAY AS A STRONG
  COLD FRONT APPROACHES FOR SUNDAY. A WINDY AND COLD WEATHER SYSTEM IS
  FORECAST TO MOVE THROUGH THE AREA SUNDAY AFTERNOON AND NIGHT...ALONG
  WITH SCATTERED SHOWERS AND OR PERIODS OF RAIN...PARTICULARLY OVER
  PORTIONS OF SOUTHWEST AND SOUTH-CENTRAL ARIZONA. THE SNOW LEVEL WILL
  FALL TO NEAR 3000 FEET BY MONDAY MORNING...WITH 2 TO 6 INCHES OF SNOW
  BETWEEN 4000 AND 6000 FEET IN SOUTH CENTRAL ARIZONA. CLEARING SKIES
  AND COLD TEMPERATURES WILL LINGER TUESDAY THROUGH THURSDAY. WARMER
  WEATHER WILL RETURN NEXT FRIDAY AND SATURDAY.

  &&

  .DISCUSSION...
  PERSISTENT HIGH PRESSURE RIDGE THAT BROUGHT US BEAUTIFUL WEATHER
  CONDITIONS THIS WEEK CONTINUES TO BREAK DOWN AHEAD OF A STRONG
  APPROACHING PACIFIC STORM. MOST ARE WAKING UP TO CLEAR SKIES...SAVE
  FOR SOME THIN BANDS OF HIGH LEVEL CIRRUS. ON AND OFF HIGH LEVEL
  CLOUDS WILL BE THE NORM TODAY WITH DAYTIME HIGHS PEAKING INTO THE
  70S AND POSSIBLY THE LOW 80S FOR THE SW AZ AND SE CA DESERTS. MINOR
  ADJUSTMENTS WERE MADE TO THE GRIDS TODAY TO MATCH CURRENT SKY
  TRENDS...OTHERWISE NO OTHER SHORT TERM UPDATES NEEDED.

  &&

  .PREVIOUS DISCUSSION...

  TODAY AND TONIGHT...

  THE HIGH PRESSURE SYSTEM OF LATE WILL BEGIN TO BREAK DOWN LATER
  TODAY AND TONIGHT AS A DEVELOPING PACIFIC LOW PRESSURE SYSTEM
  APPROACHES THE REGION. WARM ADVECTION AND SOME BREEZINESS FROM THE
  SOUTH SHOULD BOOST TODAYS TEMPERATURES A FEW DEGREES OVER YESTERDAY.
  PARTLY CLOUDY SKIES AND WARMER CONDITIONS ARE EXPECTED TONIGHT.

  SUNDAY AND SUNDAY NIGHT...

  THE MUCH ADVERTISED STRONG...COLD...AND WET PACIFIC TROF/COLD FRONT
  IS STILL ON TRACK TO MOVE INTO OUR FORECAST AREA...SOUTHEAST CA TO
  SOUTH CENTRAL AZ LATER SUNDAY AND SUNDAY NIGHT...MOVING RAPIDLY WEST
  TO EAST.  AGAIN...MODELS HAVE BEEN VERY CONSISTENT FORECASTING THIS
  SYSTEM...AND STORM DETAILS ARE MUCH CLEARER...ALONG WITH MORE
  FORECAST CONFIDENCE.

  AS MENTIONED ABOVE...A STRONG AND WET FRONTAL BAND WILL MOVE WEST TO
  EAST...FROM SOUTHEAST CA LATE SUNDAY AFTERNOON TO SOUTHEAST AZ BY
  12Z MON. IN THE INTERIM...VERY STRONG PRE-FRONTAL WINDS WILL DEVELOP
  SUNDAY IN SOUTHEAST CA AND FAR SOUTHWEST AZ...IN THE 40 TO 50 MPH
  RANGE. WIND ADVISORIES HAVE BEEN POSTED.  GUSTY WINDS IN SOUTHEAST
  CA/COLORADO RIVER WILL BE FOLLOWED BY SHOWERS TOWARD EVENING.
  SHOWERS ARE EXPECTED TO INTENSIFY EAST OF THE COLORADO RIVER VALLEY
  SUNDAY NIGHT...ESPECIALLY OVER SOUTH CENTRAL AZ INCLUDING THE
  GREATER PHOENIX AREA.  STRONG HEIGHT FALLS OVER THE AREA SUGGEST
  RAPID AIRMASS DESTABILIZATION FOR POSSIBLE THUNDERSTORMS SUNDAY
  NIGHT.

  THIS IS A COLD SYSTEM...AND SINCE MOST OF THE PRECIP WILL FALL OVER
  OUR SOUTH CENTRAL AZ ZONES...OR GENERALLY THE DESERTS AROUND PHOENIX
  EAST...SNOW CONCERNS WILL BE CONFINED TO THIS AREA. SINCE THIS
  SYSTEM IS A TAD SLOWER...SNOW LEVELS IN SOUTH CENTRAL AZ WILL START
  OUT NEAR 8000 FEET SUN EVENING...LOWER TO AROUND 6500 FEET BY SUN
  MIDNIGHT...DOWN TO 3700 FEET MONDAY MORNING...THEN COLLAPSE NEAR
  3200 FEET BY LATE MONDAY MORNING. THE PRESENCE OF ABUNDANT LOW LEVEL
  MOISTURE MAY DEFER HEAVY SNOW ACCUMULATION TIL MONDAY MORNING...WITH
  1-3 INCHES ABOVE 4000 FEET AND 4 TO 6 INCHES ABOVE 5500 FEET
  POSSIBLE MONDAY.

  MONDAY AND MONDAY NIGHT...

  A COLD UNSTABLE AIRMASS WILL CONTINUE TO COVER MAINLY SOUTH CENTRAL
  AZ WITH SCT INSTABILITY SHOWERS OVER A LARGE AREA INCLUDING PHOENIX.
  THE SNOW LEVEL WILL LOWER TO AROUND 3000 FEET WITH SOME LIGHT SNOW
  LIKELY IN THE PHOENIX HIGHER ELEVATION SUBURBS...WITH ACCUMULATING
```

SNOW IN SOUTHERN GILA COUNTY. THE MOST VULNERABLE AREA FOR ACCUMULATING SNOW IS ON THE SAN CARLOS INDIAN RESERVATION ABOVE 5000 FEET...INCLUDING AREAS NEAR SAWMILL..THE BLACK RIVER CROSSING...AND AREAS BORDERING THE WHITE MOUNTAINS.

TUESDAY THROUGH SATURDAY...

CLEARING AND COLDER CONDITIONS ARE FORECAST TUESDAY THROUGH THURSDAY. NEW MODELS ARE SHOWING THE AIRMASS IS MUCH COLDER THAN INITIALLY THOUGHT. FOR EXAMPLE...A FORECAST OF 34 DEGREES F AT PHOENIX SKY HARBOR AIRPORT TUE AND WED MORNING...NORMALLY THE WARMEST LOCATION IN THE PHOENIX VALLEY...SUGGEST **TEMPS** IN THE MID 20S TO LOWER 30S ELSEWHERE ON THE REMOTE DESERTS AND PHOENIX SUBURBS. BREEZY NORTH WINDS WITH CONSIDERABLE MIXING IN SOUTHEAST CALIFORNIA AND THE COLORADO RIVER VALLEY WILL LIKELY KEEP OVERNIGHT TEMPERATURES FROM HITTING THE FREEZING MARK. MUCH WARMER WEATHER IS FORECAST FRIDAY AND SATURDAY.

&&

.AVIATION...
SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL...
SOUTHEAST CALIFORNIA/SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...

ONE MORE DAY OF QUIET CONDITIONS BEFORE THE SUNDAY **STORM** SYSTEM ROLLS INTO THE AREA. LIGHT WINDS FAVORING TYPICAL **DIURNAL** DIRECTIONAL SHIFTS ARE EXPECTED FOR THE PHOENIX AREA TERMINALS. LIGHT WINDS INITIALLY FOR KBLH AND KIPL WILL TURN BREEZY OUT OF THE WEST SOUTHWEST LATER TODAY WITH GUSTS APPROACHING 25 **KTS**. WINDS WILL INCREASE FURTHER FOR SUNDAY IN ADDITION TO A PERIOD OF RAIN AND POSSIBLY THUNDER AS A STRONG **COLD FRONT** MOVES THROUGH THE AREA LATE SUNDAY.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...
MONDAY THROUGH FRIDAY...
AN EXITING STRONG WEATHER SYSTEM WILL AFFECT THE REGION EARLY IN THE PERIOD BRINGING WELL BELOW NORMAL TEMPERATURES THROUGH WEDNESDAY. LINGERING SHOWER CHANCES ARE IN THE FORECAST FOR MONDAY...WITH BEST CHANCES ACROSS THE HIGHER TERRAIN NORTH AND EAST OF PHOENIX. STRONG WESTERLY WINDS ARE EXPECTED ON MONDAY WITH GUSTS OF 35-45 MPH ACROSS MUCH OF THE AREA. GRADUAL DRYING IS FORECAST FOR THE MIDDLE OF NEXT WEEK AS HIGH PRESSURE TAKES OVER STARTING TUESDAY. LIGHTER WINDS ARE EXPECTED FOR THE REST OF THE WEEK...BUT OCCASIONAL AFTERNOON BREEZINESS IS STILL LIKELY ON MOST DAYS. AFTERNOON **HUMIDITY** LEVELS OF 20-30 PERCENT ON MONDAY WILL GRADUALLY LOWER BACK DOWN TO 10-20 PERCENT THROUGH THE REST OF THE WEEK.

&&

.SPOTTER INFORMATION STATEMENT...
SPOTTERS ARE ENCOURAGED TO REPORT BASED ON STANDARD OPERATING PROCEDURES.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...
AZ...**WINTER WEATHER ADVISORY** FROM MIDNIGHT SUNDAY NIGHT TO 5 PM **MST** MONDAY FOR AZZ024.

CA...**WIND ADVISORY** FROM 2 PM SUNDAY TO 4 PM **PST** MONDAY FOR CAZ030>033.

&&

Fig A-6: An area forecast discussion issued by NWS Phoenix office at 7:46am PST on January 30, 2016. Source: http://www.wrh.noaa.gov/total_forecast/getprod.php?afos=xxxafdpsr&wfo=psr&font=120&version=11

FIGURE A-7
NWS SAN DIEGO OFFICE AREA FORECAST DISCUSSION

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San Diego, CA

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Severe Weather
Hurricane Center
User Defined Area
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Area Forecast Discussion

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FXUS66 KSGX 301749
  AFDSGX

  AREA FORECAST DISCUSSION
  NATIONAL WEATHER SERVICE SAN DIEGO CA
  949 AM PST SAT JAN 30 2016

  .SYNOPSIS...
  A WINTER STORM WILL MOVE THROUGH SOUTHERN CALIFORNIA SUNDAY AND
  SUNDAY NIGHT. THIS WILL CREATE PERIODS OF STRONG GUSTY WEST WINDS
  IN THE MOUNTAINS AND DESERTS THROUGH MONDAY AND FOR COASTAL AND
  VALLEY AREAS LATE SUNDAY AFTERNOON THROUGH MONDAY. LIGHTER
  PRECIPITATION IS POSSIBLE AS EARLY AS TONIGHT...WITH HEAVY
  PRECIPITATION EXPECTED FOR SUNDAY AFTERNOON AND EARLY EVENING WITH
  DECREASING SHOWERS SUNDAY NIGHT AND EARLY MONDAY. COOLING THROUGH
  SUNDAY...THEN DRY WITH SLOW WARMING EARLY IN THE WEEK AND GREATER
  WARMING TO A LITTLE ABOVE AVERAGE FOR THE LATTER HALF OF THE WEEK.

  &&

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

  AT 9 AM PST...WATER VAPOR SATELLITE IMAGERY DISPLAYED MOIST...ZONAL
  FLOW ACROSS NORTHERN CA...AND AN UPPER-LEVEL TROUGH AROUND 1000
  MILES OFF THE COAST OF NORTHERN CA. VISIBLE SATELLITE SHOWED LOW
  CLOUDS SURGING INLAND INTO THE VALLEYS. LOWERING HEIGHTS ALOFT AND
  INCREASING ONSHORE PRESSURE GRADIENTS WILL ALLOW FOR COOLER
  WEATHER TODAY...WITH HIGHS AROUND 5 TO 10 DEG F LOWER THAN
  YESTERDAY. TIGHTENING PRESSURE GRADIENTS FROM THE
  APPROACHING...DEEPENING UPPER-LEVEL TROUGH WILL STRENGTHEN WEST
  WINDS OVER MOUNTAIN RIDGE TOPS AND DESERT MOUNTAIN SLOPES TODAY
  THROUGH OVERNIGHT. GUSTS TO 55 MPH ARE POSSIBLE IN THE
  DESERTS...AND GUSTS TO 70 MPH ARE POSSIBLE ALONG MOUNTAIN RIDGES
  AND DESERT MOUNTAIN SLOPES. THE WIND ADVISORY CURRENTLY IN EFFECT
  HAS BEEN EXPANDED TO INCLUDE THE HIGH DESERT THROUGH THIS EVENING.
  LIGHT ISOLATED TO SCATTERED SHOWERS MAY DEVELOP TONIGHT THROUGH
  SUNDAY MORNING ALONG COASTAL MOUNTAIN SLOPES DUE TO UPSLOPE FLOW.

  THE DEEP UPPER-LEVEL TROUGH WILL MOVE ACROSS SW CA SUNDAY
  AFTERNOON THROUGH SUNDAY EVENING. THIS WILL CREATE MODERATE TO
  HEAVY PRECIPITATION MAINLY OVER AND WEST OF THE MOUNTAINS THROUGH
  THE PERIOD...WITH HEAVIEST PRECIPITATION DEVELOPING OVER THE
  COASTAL MOUNTAIN SLOPES FROM UPSLOPE FLOW. INSTABILITY ALOFT WILL
  CREATE THE POSSIBILITY OF ISOLATED THUNDERSTORMS...AND PERIODS OF
  HEAVY PRECIPITATION OVER THE COAST AND VALLEYS...AS WELL. LOWER
  LEVEL DIRECTIONAL AND SPEED SHEAR ARE BORDERLINE FOR ISOLATED
  WATERSPOUT DEVELOPMENT NEAR THE FRONT. A STRONG UPPER-LEVEL JET
  WILL ALSO SUPPORT THE GENERATION OF HEAVY PRECIPITATION...AND
  STRONG WEST WINDS OVER ALL AREAS...ESPECIALLY THE MOUNTAINS.
  GUSTS OF 75 TO 85 MPH ARE POSSIBLE OVER THE MOUNTAINS AND IN THE
  DESERTS...AND H850 WINDS OF 50 KT MAY MIX TO THE SURFACE DURING
  AND AFTER THE FRONTAL PASSAGE...CREATING ISOLATED GUSTS TO 60 MPH
  IN THE VALLEYS AND ALONG THE COAST.

  ...FORECAST STORM TOTAL PRECIP (IN) LATE TODAY THROUGH EARLY MON...
  DESERTS.........0.25 TO 0.50
  COAST/VALLEYS...0.50 TO 1.00
  MOUNTAINS.......1.50 TO 3.00...WITH LOCALLY GREATER AMOUNTS

  SNOW LEVELS WILL START OUT AROUND 8000 FT THIS EVENING...LOWER TO
  7000 FT SUNDAY MORNING...6000 FT SUNDAY AFTERNOON AND 3500 FT
  SUNDAY NIGHT.

  ...FORECAST STORM TOTAL SNOWFALL (IN) LATE TODAY THROUGH EARLY MON...
  3500 TO 4000 FT...TRACE TO 1
  4000 TO 5000 FT...2 TO 5
  5000 TO 6000 FT...3 TO 9
  6000 TO 7000 FT...6 TO 12
  ABOVE 7000 FT.....12 TO 20

  SHOWERS WILL TAPER OFF MONDAY MORNING ACROSS THE REGION...WITH
  WINDS DIMINISHING THROUGH MONDAY NIGHT. SEE LAXNPWSGX AND
  LAXWSWSGX FOR DETAILS ON THE WIND ADVISORIES...HIGH WIND
  WARNINGS...WINTER STORM WARNINGS AND WINTER WEATHER ADVISORIES
  CURRENTLY IN EFFECT.
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HIGH PRESSURE ALOFT OFF THE WEST COAST WILL AMPLIFY MID TO LATE NEXT WEEK...CREATING DRY WEATHER WITH A WARMING TREND. HIGH TEMPERATURES WILL RISE TO NEAR TO SLIGHTLY ABOVE AVERAGE FOR THE END OF THE WEEK...WITH WEAK SURFACE **OFFSHORE FLOW** AT TIMES.

&&

.AVIATION...
301700Z...AREAS OF **LOW CLOUDS** WITH BASES AROUND 1000 FT **MSL** AND AREAS OF **FOG** WITH **VIS** 3 TO 6 SM...LOCALLY 1SM OR LESS WHERE CLOUDS AND TERRAIN INTERSECT. BASES GRADUALLY LIFTING TO 1500-2000 FT **MSL** AFTER 18Z. **LOW CLOUDS** HAVE SPREAD INLAND TO THE COASTAL MOUNTAIN SLOPES WITH HIGHER TERRAIN PARTIALLY OBSCURED. SOME BREAKS WILL DEVELOP IN THE AFTERNOON. **DRIZZLE** AND ISOLATED SHOWERS WILL BE POSSIBLE AFTER 00Z ALONG AND WEST OF THE **MTNS.**

WEST WINDS STRENGTHENING AFTER 18Z WITH **SFC** GUSTS 35-50 KT ALONG **MTN** RIDGES AND LOCALLY INTO THE DESERTS THROUGH THIS EVENING. WINDS WEAKENING SLIGHTLY LATE THIS EVENING THROUGH SUN MORNING. STG-SVR UP/DOWNDRAFTS AND **LLWS** WILL BE LIKELY OVER AND E OF THE **MTNS.**

&&

.MARINE...
900 AM...**COMBINED SEAS** NEAR 10 FT OVER PORTIONS OF THE OUTER **COASTAL WATERS** WILL SLOWLY LOWER THROUGH TODAY. SUNDAY AFTERNOON THROUGH MONDAY NIGHT...A **GALE WATCH** REMAINS IN EFFECT LATE SUNDAY MORNING THROUGH EARLY TUESDAY. A STRONG **COLD FRONT** MOVING THROUGH THE REGION WILL BRING NORTHWEST WIND GUSTS OF 35-45 KT. STRONG WINDS AND **COMBINED SEAS** OF 14 TO 18 FT WILL RESULT IN DANGEROUS BOATING CONDITIONS SUNDAY AFTERNOON THROUGH EARLY TUESDAY MORNING. PLEASE SEE THE **GALE WATCH**...LAXMWWSGX...FOR MORE INFORMATION.

&&

.BEACHES...
900 AM...A **HIGH SURF ADVISORY** REMAINS IN EFFECT THROUGH 10 PM TODAY. SURF OF 5-8 FEET WITH SETS TO 10 FEET IS LIKELY AT THE BEACHES IN NORTHERN ORANGE COUNTY AND SOUTHERN SAN DIEGO COUNTY. STRONG RIP CURRENTS AND MINOR BEACH EROSION WILL ACCOMPANY THE SURF.

A LARGER SHORT PERIOD WEST-NORTHWEST SWELL WILL BRING ANOTHER ROUND OF HIGH SURF AND STRONG RIP CURRENTS LATE SUNDAY INTO MONDAY.

&&

.SKYWARN...
SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...
CA...**HIGH WIND WARNING** FROM 6 PM SUNDAY TO 6 PM **PST** MONDAY FOR APPLE AND LUCERNE VALLEYS-COACHELLA VALLEY-RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS-SAN DIEGO COUNTY DESERTS-SAN DIEGO COUNTY MOUNTAINS-SAN GORGONIO PASS NEAR BANNING.

WINTER WEATHER ADVISORY FROM 6 PM SUNDAY TO 4 AM **PST** MONDAY FOR SAN DIEGO COUNTY MOUNTAINS.

WIND ADVISORY UNTIL 6 PM **PST** SUNDAY FOR RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS-SAN DIEGO COUNTY MOUNTAINS-SAN GORGONIO PASS NEAR BANNING.

WIND ADVISORY UNTIL 10 PM **PST** THIS EVENING FOR APPLE AND LUCERNE VALLEYS.

WINTER STORM WARNING FROM NOON SUNDAY TO MIDNIGHT **PST** SUNDAY NIGHT FOR RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS.

WIND ADVISORY FROM 4 PM SUNDAY TO 6 PM **PST** MONDAY FOR ORANGE COUNTY COASTAL AREAS-ORANGE COUNTY INLAND AREAS-SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-SAN DIEGO COUNTY COASTAL AREAS-SAN DIEGO COUNTY VALLEYS-SANTA ANA MOUNTAINS AND FOOTHILLS.

HIGH SURF ADVISORY UNTIL 10 PM **PST** THIS EVENING FOR ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS.

PZ...**GALE WATCH** FROM SUNDAY MORNING THROUGH LATE MONDAY NIGHT 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.

&&

Fig A-7: An area forecast discussion issued by NWS San Diego office at 9:49 am PST on January 31, 2016. Source: http://www.wrh.noaa.gov/total_forecast/getprod.php?afos=xxxafdsgx&wfo=sgx&font=120&version=9

FIGURE A-8
NWS PHOENIX OFFICE AREA FORECAST DISCUSSION

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CBRFC
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Area Forecast Discussion

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FXUS65 KPSR 302144
  AFDPSR

  AREA FORECAST DISCUSSION
  NATIONAL WEATHER SERVICE PHOENIX AZ
  244 PM MST SAT JAN 30 2016

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  HIGH PRESSURE SYSTEM OVER THE REGION WILL WEAKEN TODAY AS A STRONG
  COLD FRONT APPROACHES FOR SUNDAY. A WINDY AND COLD WEATHER SYSTEM IS
  FORECAST TO MOVE THROUGH THE AREA SUNDAY AFTERNOON AND NIGHT...ALONG
  WITH SCATTERED SHOWERS AND OR PERIODS OF RAIN...PARTICULARLY OVER
  PORTIONS OF SOUTHWEST AND SOUTH-CENTRAL ARIZONA. THE SNOW LEVEL WILL
  FALL TO NEAR 3000 FEET BY MONDAY MORNING...WITH 2 TO 6 INCHES OF SNOW
  BETWEEN 4000 AND 6000 FEET IN SOUTH CENTRAL ARIZONA. CLEARING SKIES
  AND COLD TEMPERATURES WILL LINGER TUESDAY THROUGH THURSDAY. WARMER
  WEATHER WILL RETURN NEXT FRIDAY AND SATURDAY.

  &&

  .DISCUSSION...
  WEAK UL WAVE TRAVELING THROUGH THE DECAYING RIDGE HEIGHTS HAS
  GENERATED A BIT MORE HL CLOUD COVERAGE...WITH AREA CIGS HOLDING
  GENERALLY ABOVE 20KFT. CLOUDS WILL CONTINUE TO CLEAR TO THE
  EAST...WITH CLEAR SKIES OBSERVED CURRENTLY OVER SE CA. DESPITE THE
  CLOUD COVER...FAIR MIXING CONDITIONS AND WAA HAVE TRENDED
  TEMPERATURES WARMER THAN READINGS THIS TIME YESTERDAY...WITH MANY
  LOCALES IN SE CA 8 TO 10 DEGREES WARMER. ADDITIONAL HL CLOUDS WILL
  INTRUDE IN FROM THE WEST-NORTHWEST INTO THE EVENING AND ALONG WITH
  THE WARM AFTERNOON...OVERNIGHT LOWS WILL BE RATHER MILD AND ABOVE
  SEASONAL NORMALS. MEANWHILE UPSTREAM...THE NEXT VIGOROUS AND COLD
  PACIFIC TROUGH AND ASSOCIATED ATMOSPHERIC RIVER ARE TAKING SHAPE OVER
  THE CENTRAL WEST COAST AND NORTHEAST PACIFIC.

  LITTLE HAS CHANGED BY WAY OF DETAILS WITH THIS WELL ADVERTISED
  PACIFIC SYSTEM...TRACKING INTO CENTRAL AND SOUTHERN CA BY SUNDAY AND
  INTO ARIZONA SUNDAY LATE AFTN/EVENING. FAIRLY OPEN AND UNBLOCKED FLOW
  DOWNSTREAM ALONG WITH STRONG PACIFIC JL WINDS WILL ALLOW FOR RAPID
  MOVEMENT TO THE EAST...CREATING A TIGHT WINDOW OF MOISTURE AND
  FRONTAL INTERACTION OVER SOUTH-CENTRAL AZ OVERNIGHT SUNDAY. STRONG
  AND WET FRONTAL BAND WILL MOVE WEST TO EAST...FROM SE CA LATE SUNDAY
  AFTERNOON TO SE AZ BY 12Z MON. IN THE INTERIM...VERY STRONG PRE-
  FRONTAL WINDS WILL DEVELOP SUNDAY IN SOUTHEAST CA AND FAR SOUTHWEST
  AZ WITH GUSTS OF 40 TO 50 MPH POSSIBLE. AS SUCH...WIND ADVISORIES
  HAVE BEEN ISSUED. IN ADDITION TO THE STRONG GUSTY WINDS...AREAS OF
  BLOWING DUST AND LOFTED HAZE ARE POSSIBLE IN SE CA...THE LOWER
  COLORADO RIVER VALLEY AND SW AZ.

  INCREASING CLOUDS AND VERY LIGHT SHOWER ACTIVITY WILL DEVELOP AND BE
  ON-GOING OVER THE PENINSULAR AND COASTAL RANGES AS EARLY OVERNIGHT
  TONIGHT...WITH MOSTLY LIGHT AMOUNTS PER HI-RES MODEL SOLNS AND
  ENSEMBLES. COVERAGE AND QPF AMOUNTS WILL BEGIN TO INCREASE DURING THE
  DAY SUNDAY AS THE MAIN FRONT AND 850-700MB THERMAL PACKING MOVE INTO
  SOUTHEAST CA. SHOWERS ARE EXPECTED TO INTENSIFY EAST OF THE COLORADO
  RIVER VALLEY SUNDAY NIGHT...ESPECIALLY OVER SOUTH CENTRAL AZ
  INCLUDING THE GREATER PHOENIX AREA. STRONG HEIGHT FALLS OVER THE AREA
  SUGGEST RAPID AIRMASS DESTABILIZATION FOR POSSIBLE THUNDERSTORMS
  SUNDAY NIGHT. SREF AND NAEFS QPF VALUES AND PROBS INDICATE MOSTLY
  LIGHT STORM TOTAL AMOUNTS...OF A FEW HUNDREDTHS TO A TENTH OF AN
  INCH OR SO OVER THE SE CA. FAVORABLE TERRAIN ORIENTATION...STRONG
  UPSLOPE FLOW AND FRONTAL PACKING WILL GENERATE HIGHER AMOUNTS OVER
  THE SOUTH- CENTRAL AZ DESERTS AND THE HIGHER TERRAIN N/E OF PHOENIX.

  THIS IS A COLD SYSTEM...AND SINCE MOST OF THE PRECIP WILL FALL OVER
  OUR SOUTH CENTRAL AZ ZONES...OR GENERALLY THE DESERTS AROUND PHOENIX
  EAST...SNOW CONCERNS WILL BE CONFINED TO THIS AREA. SINCE THIS
  SYSTEM IS A TAD SLOWER...SNOW LEVELS IN SOUTH CENTRAL AZ WILL START
  OUT NEAR 8000 FEET SUN EVENING...LOWER TO AROUND 6500 FEET BY SUN
  MIDNIGHT...DOWN TO 3700 FEET MONDAY MORNING...THEN COLLAPSE NEAR
  3200 FEET BY LATE MONDAY MORNING. THE PRESENCE OF ABUNDANT LOW LEVEL
  MOISTURE MAY DEFER HEAVY SNOW ACCUMULATION TIL MONDAY MORNING...WITH
  1-3 INCHES ABOVE 4000 FEET AND 4 TO 6 INCHES ABOVE 5500 FEET
  POSSIBLE MONDAY.

  MONDAY AND MONDAY NIGHT...
  A COLD UNSTABLE AIRMASS WILL CONTINUE TO COVER MAINLY SOUTH CENTRAL
  AZ WITH SCT INSTABILITY SHOWERS OVER A LARGE AREA INCLUDING PHOENIX.
  THE SNOW LEVEL WILL LOWER TO AROUND 3000 FEET WITH SOME LIGHT SNOW
  LIKELY IN THE PHOENIX HIGHER ELEVATION SUBURBS...WITH ACCUMULATING
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SNOW IN SOUTHERN GILA COUNTY. THE MOST VULNERABLE AREA FOR ACCUMULATING SNOW IS ON THE SAN CARLOS INDIAN RESERVATION ABOVE 5000 FEET...INCLUDING AREAS NEAR SAWMILL..THE BLACK RIVER CROSSING...AND AREAS BORDERING THE WHITE MOUNTAINS.

TUESDAY THROUGH SATURDAY...
CLEARING AND COLDER CONDITIONS ARE FORECAST TUESDAY THROUGH THURSDAY. NEW MODELS ARE SHOWING THE AIRMASS IS MUCH COLDER THAN INITIALLY THOUGHT. FOR EXAMPLE...A FORECAST OF 34 DEGREES F AT PHOENIX SKY HARBOR AIRPORT TUE AND WED MORNING...NORMALLY THE WARMEST LOCATION IN THE PHOENIX VALLEY...SUGGEST **TEMPS** IN THE MID 20S TO LOWER 30S ELSEWHERE ON THE REMOTE DESERTS AND PHOENIX SUBURBS. BREEZY NORTH WINDS WITH CONSIDERABLE MIXING IN SOUTHEAST CALIFORNIA AND THE COLORADO RIVER VALLEY WILL LIKELY KEEP OVERNIGHT TEMPERATURES FROM HITTING THE FREEZING MARK. MUCH WARMER WEATHER IS FORECAST FRIDAY AND SATURDAY.

&&

.AVIATION...
SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL...
HIGH PRESSURE OVER THE REGION AND DRY SOUTHWESTERLY **FLOW** ALOFT WILL KEEP WINDS ON THE LIGHT SIDE...MAINLY FAVORING TYPICAL **DIURNAL** DIRECTIONAL TRENDS...THROUGH SUNDAY EVENING WITH FEW-SCT **CIRRUS** CLOUDS LAYERS WITH BASES MAINLY **AOA** 20K FEET PREVAILING THROUGH THE **TAF** PERIOD AS WELL. A TURN TOWARDS MUCH STRONGER WINDS AND A PERIOD OF RAIN...WITH EVEN A FEW THUNDERSTORMS...IS STILL EXPECTED FROM LATE SUNDAY NIGHT INTO MONDAY AS A VERY STRONG WINTER **STORM** AND ASSOCIATED **COLD FRONT** MOVES INTO AND ACROSS THE PHOENIX AREA.

SOUTHEAST CALIFORNIA/SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...
DRY CONDITIONS WITH JUST SOME HIGH CLOUDINESS...WITH BASES MAINLY **AOA** 25K FEET IS EXPECTED TO PREVAIL THROUGH MIDDAY SUNDAY. A STRONG PACIFIC **STORM** APPROACHING FROM THE WEST BRINGS A CHANCE FOR SHOWERS...STRONG...AND GUSTY SOUTHWESTERLY WINDS...AND POSSIBLE BLOWING DUST TO BOTH KIPL AND KBLH ON SUNDAY AFTERNOON. EARLY EVENING WESTERLY TO SOUTHWESTERLY BREEZES THIS EVENING ARE FORECAST TO DIMINISH TONIGHT AND EARLY SUNDAY BEFORE INCREASING AGAIN ON SUNDAY AFTERNOON. SUSTAINED WINDS IN THE 25-30 MPH RANGE WITH GUSTS TO AS HIGH AS 40 MPH ARE POSSIBLE BY LATE SUNDAY AFTERNOON AT BOTH **TAF** SITES.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...
MONDAY THROUGH FRIDAY...
AN EXITING STRONG WEATHER SYSTEM WILL AFFECT THE REGION EARLY IN THE PERIOD BRINGING WELL BELOW NORMAL TEMPERATURES THROUGH WEDNESDAY. LINGERING SHOWER CHANCES ARE IN THE FORECAST FOR MONDAY...WITH BEST CHANCES ACROSS THE HIGHER TERRAIN NORTH AND EAST OF PHOENIX. STRONG WESTERLY WINDS ARE EXPECTED ON MONDAY WITH GUSTS OF 35-45 MPH ACROSS MUCH OF THE AREA. GRADUAL DRYING IS FORECAST FOR THE MIDDLE OF NEXT WEEK AS HIGH PRESSURE TAKES OVER STARTING TUESDAY. LIGHTER WINDS ARE EXPECTED FOR THE REST OF THE WEEK...BUT OCCASIONAL AFTERNOON BREEZINESS IS STILL LIKELY ON MOST DAYS. AFTERNOON **HUMIDITY** LEVELS OF 20-30 PERCENT ON MONDAY WILL GRADUALLY LOWER BACK DOWN TO 10-20 PERCENT THROUGH THE REST OF THE WEEK.

&&

.SPOTTER INFORMATION STATEMENT...
SPOTTERS ARE ENCOURAGED TO REPORT BASED ON STANDARD OPERATING PROCEDURES.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...
AZ...**WINTER WEATHER ADVISORY** FROM MIDNIGHT SUNDAY NIGHT TO 5 PM **MST** MONDAY FOR AZZ024.

CA...**WIND ADVISORY** FROM 2 PM SUNDAY TO 4 PM **PST** MONDAY FOR CAZ030>033.

&&

Fig A-8: An area forecast discussion containing a wind advisory issued by NWS Phoenix office at 1:44 pm PST on January 30, 2016. Source: http://www.wrh.noaa.gov/total_forecast/getprod.php?afos=xxxafdpsr&wfo=psr&font=120&version=10

FIGURE A-9
NWS PHOENIX OFFICE AREA FORECAST DISCUSSION

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE PHOENIX AZ
850 PM MST SAT JAN 30 2016

.SYNOPSIS...
HIGH PRESSURE SYSTEM OVER THE REGION WILL WEAKEN TODAY AS A STRONG COLD FRONT APPROACHES FOR SUNDAY. A WINDY AND COLD WEATHER SYSTEM IS FORECAST TO MOVE THROUGH THE AREA SUNDAY AFTERNOON AND NIGHT...ALONG WITH SCATTERED SHOWERS AND OR PERIODS OF RAIN...PARTICULARLY OVER PORTIONS OF SOUTHWEST AND SOUTH-CENTRAL ARIZONA. THE SNOW LEVEL WILL FALL TO NEAR 3000 FEET BY MONDAY MORNING...WITH 2 TO 6 INCHES OF SNOW BETWEEN 4000 AND 6000 FEET IN SOUTH CENTRAL ARIZONA. CLEARING SKIES AND COLD TEMPERATURES WILL LINGER TUESDAY THROUGH THURSDAY. WARMER WEATHER WILL RETURN NEXT FRIDAY AND SATURDAY.

&&

.DISCUSSION... FLAT UPPER RIDGE WAS PRESENT OVER THE DESERT SOUTHWEST EARLY THIS EVENING...AHEAD OF THE UPCOMING PACIFIC STORM SYSTEM THAT IS EXPECTED TO BRING WIDESPREAD RAIN TO THE CENTRAL DESERTS TOMORROW NIGHT. DESPITE MINOR 20-40M 500MB HEIGHT FALLS...THE HIGH TEMPERATURES OVER THE GREATER PHOENIX AREA TODAY WERE THE WARMEST THEY WERE ALL WEEK...WITH A HIGH OF 74 DEG AT PHOENIX. THIS WAS LIKELY DUE TO MINOR WAA AHEAD OF THE UPPER TROF/COLD FRONT. IR IMAGERY AT 8 PM SHOWED A PATCH OF HIGH CLOUDS OVER THE GREATER PHOENIX AREA WITH GENLY CLEAR SKIES ELSEWHERE. FLAT UPPER RIDGE IS FORECAST TO REMAIN OVERNIGHT...WITH SKIES TO STAY MOSTLY CLEAR. FORECAST FOR TONIGHT LOOKS TO BE IN GOOD SHAPE AND NO UPDATES ARE NEEDED.

.PREVIOUS DISCUSSION...
WEAK UL WAVE TRAVELING THROUGH THE DECAYING RIDGE HEIGHTS HAS GENERATED A BIT MORE HL CLOUD COVERAGE...WITH AREA CIGS HOLDING GENERALLY ABOVE 20KFT. CLOUDS WILL CONTINUE TO CLEAR TO THE EAST...WITH CLEAR SKIES OBSERVED CURRENTLY OVER SE CA. DESPITE THE CLOUD COVER...FAIR MIXING CONDITIONS AND WAA HAVE TRENDED TEMPERATURES WARMER THAN READINGS THIS TIME YESTERDAY...WITH MANY LOCALES IN SE CA 8 TO 10 DEGREES WARMER. ADDITIONAL HL CLOUDS WILL INTRUDE IN FROM THE WEST-NORTHWEST INTO THE EVENING AND ALONG WITH THE WARM AFTERNOON...OVERNIGHT LOWS WILL BE RATHER MILD AND ABOVE SEASONAL NORMALS. MEANWHILE UPSTREAM...THE NEXT VIGOROUS AND COLD PACIFIC TROUGH AND ASSOCIATED ATMOSPHERIC RIVER ARE TAKING SHAPE OVER THE CENTRAL WEST COAST AND NORTHEAST PACIFIC.

LITTLE HAS CHANGED BY WAY OF DETAILS WITH THIS WELL ADVERTISED PACIFIC SYSTEM...TRACKING INTO CENTRAL AND SOUTHERN CA BY SUNDAY AND INTO ARIZONA SUNDAY LATE AFTN/EVENING. FAIRLY OPEN AND UNBLOCKED FLOW DOWNSTREAM ALONG WITH STRONG PACIFIC JL WINDS WILL ALLOW FOR RAPID MOVEMENT TO THE EAST...CREATING A TIGHT WINDOW OF MOISTURE AND FRONTAL INTERACTION OVER SOUTH-CENTRAL AZ OVERNIGHT SUNDAY. STRONG AND WET FRONTAL BAND WILL MOVE WEST TO EAST...FROM SE CA LATE SUNDAY AFTERNOON TO SE AZ BY 12Z MON. IN THE INTERIM...VERY STRONG PRE-FRONTAL WINDS WILL DEVELOP SUNDAY IN SOUTHEAST CA AND FAR SOUTHWEST AZ WITH GUSTS OF 40 TO 50 MPH POSSIBLE. AS SUCH...WIND ADVISORIES HAVE BEEN ISSUED. IN ADDITION TO THE STRONG GUSTY WINDS...AREAS OF BLOWING DUST AND LOFTED HAZE ARE POSSIBLE IN SE CA...THE LOWER COLORADO RIVER VALLEY AND SW AZ.

INCREASING CLOUDS AND VERY LIGHT SHOWER ACTIVITY WILL DEVELOP AND BE ON-GOING OVER THE PENINSULAR AND COASTAL RANGES AS EARLY OVERNIGHT TONIGHT...WITH MOSTLY LIGHT AMOUNTS PER HI-RES MODEL SOLNS AND ENSEMBLES. COVERAGE AND QPF AMOUNTS WILL BEGIN TO INCREASE DURING THE DAY SUNDAY AS THE MAIN FRONT AND 850-700MB THERMAL PACKING MOVE INTO SOUTHEAST CA. SHOWERS ARE EXPECTED TO INTENSIFY EAST OF THE COLORADO RIVER VALLEY SUNDAY NIGHT...ESPECIALLY OVER SOUTH CENTRAL AZ INCLUDING THE GREATER PHOENIX AREA. STRONG HEIGHT FALLS OVER THE AREA SUGGEST RAPID AIRMASS DESTABILIZATION FOR POSSIBLE THUNDERSTORMS SUNDAY NIGHT. SREF AND NAEFS QPF VALUES AND PROBS INDICATE MOSTLY LIGHT STORM TOTAL AMOUNTS...OF A FEW HUNDREDTHS TO A TENTH OF AN INCH OR SO OVER THE SE CA. FAVORABLE TERRAIN ORIENTATION...STRONG UPSLOPE FLOW AND FRONTAL PACKING WILL GENERATE HIGHER AMOUNTS OVER THE SOUTH- CENTRAL AZ DESERTS AND THE HIGHER TERRAIN N/E OF PHOENIX.

THIS IS A COLD SYSTEM...AND SINCE MOST OF THE PRECIP WILL FALL OVER OUR SOUTH CENTRAL AZ ZONES...OR GENERALLY THE DESERTS AROUND PHOENIX

EAST...SNOW CONCERNS WILL BE CONFINED TO THIS AREA. SINCE THIS SYSTEM IS A TAD SLOWER...SNOW LEVELS IN SOUTH CENTRAL AZ WILL START OUT NEAR 8000 FEET SUN EVENING...LOWER TO AROUND 6500 FEET BY SUN MIDNIGHT...DOWN TO 3700 FEET MONDAY MORNING...THEN COLLAPSE NEAR 3200 FEET BY LATE MONDAY MORNING. THE PRESENCE OF ABUNDANT LOW LEVEL MOISTURE MAY DEFER HEAVY SNOW ACCUMULATION TIL MONDAY MORNING...WITH 1-3 INCHES ABOVE 4000 FEET AND 4 TO 6 INCHES ABOVE 5500 FEET POSSIBLE MONDAY.

MONDAY AND MONDAY NIGHT...
A COLD UNSTABLE AIRMASS WILL CONTINUE TO COVER MAINLY SOUTH CENTRAL AZ WITH SCT INSTABILITY SHOWERS OVER A LARGE AREA INCLUDING PHOENIX. THE SNOW LEVEL WILL LOWER TO AROUND 3000 FEET WITH SOME LIGHT SNOW LIKELY IN THE PHOENIX HIGHER ELEVATION SUBURBS...WITH ACCUMULATING SNOW IN SOUTHERN GILA COUNTY. THE MOST VULNERABLE AREA FOR ACCUMULATING SNOW IS ON THE SAN CARLOS INDIAN RESERVATION ABOVE 5000 FEET...INCLUDING AREAS NEAR SAWMILL..THE BLACK RIVER CROSSING...AND AREAS BORDERING THE WHITE MOUNTAINS.

TUESDAY THROUGH SATURDAY...
CLEARING AND COLDER CONDITIONS ARE FORECAST TUESDAY THROUGH THURSDAY. NEW MODELS ARE SHOWING THE AIRMASS IS MUCH COLDER THAN INITIALLY THOUGHT. FOR EXAMPLE...A FORECAST OF 34 DEGREES F AT PHOENIX SKY HARBOR AIRPORT TUE AND WED MORNING...NORMALLY THE WARMEST LOCATION IN THE PHOENIX VALLEY...SUGGEST TEMPS IN THE MID 20S TO LOWER 30S ELSEWHERE ON THE REMOTE DESERTS AND PHOENIX SUBURBS. BREEZY NORTH WINDS WITH CONSIDERABLE MIXING IN SOUTHEAST CALIFORNIA AND THE COLORADO RIVER VALLEY WILL LIKELY KEEP OVERNIGHT TEMPERATURES FROM HITTING THE FREEZING MARK. MUCH WARMER WEATHER IS FORECAST FRIDAY AND SATURDAY.

&&

.AVIATION...
SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL...
HIGH PRESSURE OVER THE REGION AND DRY SOUTHWESTERLY FLOW ALOFT WILL KEEP WINDS ON THE LIGHT SIDE...MAINLY FAVORING TYPICAL DIURNAL DIRECTIONAL TRENDS...THROUGH SUNDAY AFTERNOON/EARLY EVENING WITH FEW-SCT CIRRUS CLOUDS LAYERS WITH BASES MAINLY AOA 20K FEET PREVAILING THROUGH THE TAF PERIOD AS WELL. A TURN TOWARDS MUCH STRONGER WINDS AND A PERIOD OF RAIN...WITH EVEN A FEW THUNDERSTORMS...IS STILL EXPECTED FROM LATE SUNDAY NIGHT INTO MONDAY AS A VERY STRONG WINTER STORM AND ASSOCIATED COLD FRONT MOVES INTO AND ACROSS THE PHOENIX AREA. STARTING BY 03Z MONDAY EXPECT WIDESPREAD CIGS TO LOWER TO 5K OR LOWER OVER THE GREATER PHOENIX AREA AS SHOWERS BECOME WIDESPREAD

ONE ADDITIONAL NOTE...LATEST GUIDANCE SUGGESTS A SHALLOW LAYER OF MOISTURE BELOW 850 MB WILL OVERSPREAD THE DESERTS STARTING SHORTLY AFTER SUNRISE ON SUNDAY WHICH MAY LEAD TO EARLY DEVELOPMENT OF CU/SC DECKS IN THE PHOENIX AREA. ALTHOUGH WE EXPECT MOSTLY SCATTERED DECKS AT THIS TIME...WE COULD SEE OCCASIONAL CIGS WITH BASES 4-5K FEET BY 15Z. DUE TO LOWER CONFIDENCE WE WILL KEEP THE DECKS AS SCT IN THE TAFS FOR NOW. SOMETHING TO WATCH FOR.

SOUTHEAST CALIFORNIA/SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...
DRY CONDITIONS WITH JUST SOME HIGH CLOUDINESS...WITH BASES MAINLY AOA 25K FEET IS EXPECTED TO PREVAIL THROUGH MIDDAY SUNDAY. A STRONG PACIFIC STORM APPROACHING FROM THE WEST BRINGS A CHANCE FOR SHOWERS...STRONG...AND GUSTY SOUTHWESTERLY WINDS...AND POSSIBLE BLOWING DUST TO BOTH KIPL AND KBLH ON SUNDAY AFTERNOON. EARLY EVENING WESTERLY TO SOUTHWESTERLY BREEZES THIS EVENING ARE FORECAST TO DIMINISH TONIGHT AND EARLY SUNDAY BEFORE INCREASING AGAIN ON SUNDAY AFTERNOON. SUSTAINED WINDS IN THE 25-30 MPH RANGE WITH GUSTS TO AS HIGH AS 40 MPH ARE POSSIBLE BY LATE SUNDAY AFTERNOON AT BOTH TAF SITES. EXPECT SCT CUMULUS DECKS AOA 5K FEET ALONG WITH SCT-BKN MID DECKS TO SPREAD IN FROM THE WEST AHEAD OF THE MAIN TROF AFTER 12Z AND AS WE HAVE ADDED THIS TO THE TAFS. CIGS WILL LIKELY LOWER FURTHER AS WE MOVE INTO THE AFTERNOON AND THE COLD FRONT PASSES THRU THE AREA. NO THUNDER MENTIONED IN THE TAFS AT THIS TIME DUE TO VERY LOW CONFIDENCE.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...
MONDAY THROUGH FRIDAY...
AN EXITING STRONG WEATHER SYSTEM WILL AFFECT THE REGION EARLY IN THE PERIOD BRINGING WELL BELOW NORMAL TEMPERATURES THROUGH WEDNESDAY. LINGERING SHOWER CHANCES ARE IN THE FORECAST FOR MONDAY...WITH BEST

Fig A-9: An Area Forecast Discussion issued by the NWS Phoenix office forecasted strong pre-frontal winds developing Sunday, January 31, 2016 as the frontal system moved in. Wind gusts were expected to reach 50 mph and create blowing dust. Source: Iowa Environmental Mesonet; https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201601310350

FIGURE A-10
NWS SAN DIEGO OFFICE URGENT WEATHER MESSAGE

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URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE SAN DIEGO CA
851 PM PST SAT JAN 30 2016

...PERIODS OF STRONG SOUTHWEST TO WEST WINDS THROUGH MONDAY...

...STRONGEST AND POTENTIALLY DAMAGING WINDS SUNDAY EVENING
THROUGH EARLY MONDAY...

.ONSHORE FLOW WILL STRENGTHEN IN ADVANCE OF A WINTER STORM THAT
WILL MOVE THROUGH SOUTHERN CALIFORNIA SUNDAY AND SUNDAY NIGHT
RESULTING IN STRONG WINDS OVER MUCH OF THE REGION. GUSTY WINDS
WILL CONTINUE THROUGH THE NIGHT IN THE MOUNTAINS...THEN INCREASE
LATER SUNDAY AND SUNDAY NIGHT...STRONGEST ALONG THE DESERT SLOPES
OF THE MOUNTAINS. THE STRONGEST AND MOST WIDESPREAD WINDS ARE
EXPECTED SUNDAY EVENING FOLLOWING THE PASSAGE OF THE COLD FRONT.
DAMAGING WIND GUSTS ARE POSSIBLE. GUSTY WEST TO NORTHWEST WINDS
WILL CONTINUE MONDAY...SUBSIDING MONDAY EVENING.

CAZ060-311300-
/O.CAN.KSGX.WI.Y.0006.000000T0000Z-160131T0600Z/
/O.CON.KSGX.HW.W.0001.160201T0200Z-160202T0200Z/
APPLE AND LUCERNE VALLEYS-
851 PM PST SAT JAN 30 2016

...HIGH WIND WARNING REMAINS IN EFFECT FROM 6 PM SUNDAY TO 6 PM
PST MONDAY...
...WIND ADVISORY IS CANCELLED...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS CANCELLED THE WIND
ADVISORY.

* WINDS FOR SUNDAY NIGHT THROUGH EARLY MONDAY...WEST 30 TO 40 MPH
  WITH GUSTS 60 TO 70 MPH.

* WINDS FOR LATE MONDAY MORNING THROUGH MONDAY AFTERNOON...WEST
  TO NORTHWEST 25 TO 35 MPH WITH GUSTS TO 60 MPH.

* LOCATION...STRONGEST WINDS NEAR MOUNTAIN RIDGE TOPS AND ALONG
  DESERT MOUNTAIN SLOPES.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED POWER LINES...AND OTHER DEBRIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A HIGH WIND WARNING MEANS A HAZARDOUS HIGH WIND EVENT IS EXPECTED
OR OCCURRING. SUSTAINED WIND SPEEDS OF AT LEAST 40 MPH OR GUSTS
OF 58 MPH OR MORE CAN LEAD TO PROPERTY DAMAGE.

&&

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CAZ055-056-058-065-311300-
/O.CON.KSGX.HW.W.0001.160201T0200Z-160202T0200Z/
/O.CON.KSGX.WI.Y.0006.000000T0000Z-160201T0200Z/
SAN BERNARDINO COUNTY MOUNTAINS-RIVERSIDE COUNTY MOUNTAINS-
SAN DIEGO COUNTY MOUNTAINS-SAN GORGONIO PASS NEAR BANNING-
851 PM PST SAT JAN 30 2016

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST SUNDAY...
...HIGH WIND WARNING REMAINS IN EFFECT FROM 6 PM SUNDAY TO 6 PM
PST MONDAY...

* WINDS THROUGH SUNDAY AFTERNOON...WEST 20 TO 30 MPH WITH GUSTS TO
  55 MPH. STRONGEST WINDS TONIGHT WITH ISOLATED GUSTS TO 65 MPH.

* WINDS FOR SUNDAY NIGHT THROUGH EARLY MONDAY...WEST 30 TO 40
  MPH WITH GUSTS TO 70 MPH. ISOLATED DAMAGING GUSTS TO 85 MPH.

* WINDS FOR LATE MONDAY MORNING THROUGH MONDAY AFTERNOON...WEST
  TO NORTHWEST 25 TO 35 MPH WITH GUSTS TO 60 MPH.
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* LOCATION...STRONGEST WINDS NEAR MOUNTAIN RIDGE TOPS AND ALONG
  DESERT MOUNTAIN SLOPES.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED POWER LINES...AND OTHER DEBRIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A HIGH WIND WARNING MEANS A HAZARDOUS HIGH WIND EVENT IS EXPECTED
OR OCCURRING. SUSTAINED WIND SPEEDS OF AT LEAST 40 MPH OR GUSTS
OF 58 MPH OR MORE CAN LEAD TO PROPERTY DAMAGE.

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS
THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH
PROFILE VEHICLES. USE EXTRA CAUTION.

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CAZ061-062-311300-
/O.CON.KSGX.HW.W.0001.160201T0200Z-160202T0200Z/
COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-
851 PM PST SAT JAN 30 2016

...HIGH WIND WARNING REMAINS IN EFFECT FROM 6 PM SUNDAY TO 6 PM
PST MONDAY...

* WINDS THROUGH SUNDAY AFTERNOON...LOCALLY GUSTY WEST WINDS 20
  TO 30 MPH WITH GUSTS TO 45 MPH.

* WINDS FOR SUNDAY NIGHT THROUGH EARLY MONDAY...WEST 25 TO 35
  MPH WITH GUSTS TO 65 MPH. ISOLATED DAMAGING GUSTS TO 75 MPH.

* WINDS FOR LATE MONDAY MORNING THROUGH MONDAY AFTERNOON...WEST
  TO NORTHWEST 20 TO 30 MPH WITH GUSTS TO 55 MPH.

* LOCATION...WINDS STRONGEST NEAR DESERT MOUNTAIN SLOPES.

* VISIBILITY...REDUCED IN BLOWING DUST AND BLOWING SAND AT
  TIMES...MAINLY INTO EARLY SUNDAY AFTERNOON AND AGAIN MONDAY.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED POWER LINES...AND OTHER DEBRIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A HIGH WIND WARNING MEANS A HAZARDOUS HIGH WIND EVENT IS EXPECTED
OR OCCURRING. SUSTAINED WIND SPEEDS OF AT LEAST 40 MPH OR GUSTS
OF 58 MPH OR MORE CAN LEAD TO PROPERTY DAMAGE.

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CAZ043-048-050-057-552-554-311300-
/O.CON.KSGX.WI.Y.0006.160201T0000Z-160202T0200Z/
SAN DIEGO COUNTY COASTAL AREAS-
SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-
SAN DIEGO COUNTY VALLEYS-SANTA ANA MOUNTAINS AND FOOTHILLS-
ORANGE COUNTY COASTAL AREAS-ORANGE COUNTY INLAND AREAS-
851 PM PST SAT JAN 30 2016

...WIND ADVISORY REMAINS IN EFFECT FROM 4 PM SUNDAY TO 6 PM PST
MONDAY...

* WINDS...WEST 20 TO 30 MPH WITH GUSTS TO 45 MPH. DAMAGING GUSTS
  TO 55 MPH POSSIBLE SUNDAY EVENING.

* TIMING...STRONGEST WINDS WITH THE FRONTAL PASSAGE LATE SUNDAY
  AFTERNOON AND EARLY EVENING...AND FOLLOWING THE FRONTAL PASSAGE
  SUNDAY NIGHT. PERIODS OF GUSTY WINDS WILL CONTINUE THROUGH MONDAY
  AFTERNOON.

* LOCATION...STRONGEST GUSTS NEAR THE COAST.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY FOR
  MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN TREE
  LIMBS...DOWNED PALM FRONDS...AND OTHER DEBRIS. BEFORE THE WINDS
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Fig A-10: An Urgent Weather Message issued by NWS San Diego Office at 8:51 pm PST on January 30, 2016 containing information of the high wind warning for the San Diego County desert area. Source: Iowa Environmental Mesonet; https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWSGX&e=201601310451

FIGURE A-11
DEEPENING SURFACE LOW AND TIGHTENING PRESSURE GRADIENTS

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
930 PM PST SAT JAN 30 2016

.SYNOPSIS...
A WINTER STORM WILL MOVE THROUGH SOUTHERN CALIFORNIA SUNDAY AND SUNDAY NIGHT. THIS WILL BRING COOLER WEATHER...ALONG WITH STRONG AND GUSTY WINDS THROUGH MONDAY. LIGHT PRECIPITATION WILL OCCUR AT TIMES OVERNIGHT INTO SUNDAY MORNING...BECOMING HEAVIER DURING THE DAY AS A STRONG COLD FRONT MOVES THROUGH. HEAVY SNOW IS LIKELY AT THE HIGHER MOUNTAIN RESORTS SUNDAY EVENING. FAIR AND DRY WITH A SLOW WARMING TREND THROUGH THE END OF THE WEEK.

&&

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

SATELLITE IMAGERY EARLY THIS EVENING SHOWED EXTENSIVE LOW CLOUDS COVERING THE COASTAL BASIN AND THE ADJACENT WATERS. FARTHER TO THE NORTH...A THICK BAND OF HIGHER CLOUDS WAS ADVANCING EAST ACROSS CENTRAL PARTS OF THE STATE. RADAR AND SFC REPORTS SHOWED SOME VERY LIGHT PRECIPITATION BREAKING OUT IN SPOTS...OTHERWISE IT WAS DRY MOST AREAS AT 8 PM PST. THE SURFACE PRESSURE GRADIENT WAS ACCELERATING ONSHORE BETWEEN 4 AND 8 MBS TO THE DESERTS...AND THE WINDS WERE RESPONDING WITH PEAK GUSTS OF 40-60 MPH IN WIND-PRONE MOUNTAIN AND DESERT AREAS. THE 00Z MIRAMAR SOUNDING HAD A 4 DEGREE C INVERSION BASED NEAR 3850 FT MSL AND A PW OF 0.70 INCH. WINDS ALOFT WERE INCREASING AND VEERING WESTERLY.

NO CHANGES ANTICIPATED TO THE CURRENT FORECAST AT THIS TIME. MAIN CONCERN CONTINUES TO BE THE AFTERNOON AND EVENING ON SUNDAY WHEN A SHARP COLD FRONT WILL TRAVERSE THE AREA FROM NW TO SE. FORECAST SOUNDINGS SHOW MODEST INSTABILITY AND STRONG WINDS ALOFT. IF A FEW THUNDERSTORMS DO FORM AND MIX DOWN SOME OF THE MOMENTUM INDICATED JUST A COUPLE OF THOUSAND FEET OFF THE SURFACE...WIND GUSTS COULD EASILY TOP 50 MPH WEST OF THE MOUNTAINS. IN ADDITION...A SFC LOW WILL BE RAPIDLY DEEPENING AS IT MOVES INLAND OVER THE LA BASIN 00Z-06Z MON. THIS SETS UP A STRONG LOCAL SFC GRADIENT FROM S TO N OVER THE CA BIGHT IN THE AFTERNOON. GIVEN THE GEOGRAPHY AND ISALLOBARIC FORCING...FAVOR THE STRONGER MODEL WIND SOLUTIONS OVER THE NEARSHORE WATERS AND ADJACENT COASTAL AREAS. THE LATEST 00Z WRFEMS SHOWS GOOD POTENTIAL WITH SW WINDS AT 30 AGL FORECAST TO REACH 50 KTS OVER SW SAN DIEGO COUNTY AROUND 00Z MON.

A NUMBER OF ADVISORIES/WARNINGS ARE IN EFFECT FOR WIND AND WINTER WEATHER TO COVER THE EVENT. PLEASE SEE LAXNPWSGX AND LAXWSWSGX FOR DETAILS. HEAVY SNOWFALL IS MOST LIKELY ABOVE 6500 FEET SINCE ELEVATIONS BELOW THIS LEVEL ARE FORECAST TO RECEIVE A CONSIDERABLE AMOUNT OF PRECIP IN THE FORM OF RAIN. ALTHOUGH BRIEF...LOCAL RAINFALL RATES IN EXCESS OF ONE-HALF INCH PER HOUR MAY BE SUFFICIENT FOR SOME LOCAL URBAN FLOODING ISSUES BY EVENING.

EXPECT TO DROP THE WIND ADVISORY OVER THE HIGH DESERT BEFORE 10 PM AND EXPECT SCATTERED LIGHT SHOWERS/DRIZZLE TO CONTINUE OVERNIGHT INTO SUN MORNING WITH MINOR ACCUMULATIONS.

NEXT BEST CHANCE FOR RAIN IS ON OR ABOUT FEBRUARY 13 BASED ON EXTENDED GFS GUIDANCE.

FROM PREVIOUS DISCUSSION...

THE DEEP UPPER-LEVEL TROUGH WILL MOVE ACROSS SW CA SUNDAY AFTERNOON THROUGH SUNDAY EVENING. THIS WILL CREATE MODERATE TO HEAVY PRECIPITATION MAINLY OVER AND WEST OF THE MOUNTAINS THROUGH THE PERIOD...WITH HEAVIEST PRECIPITATION DEVELOPING OVER THE COASTAL MOUNTAIN SLOPES FROM UPSLOPE FLOW. INSTABILITY ALOFT WILL CREATE THE POSSIBILITY OF ISOLATED THUNDERSTORMS...AND PERIODS OF HEAVY PRECIPITATION OVER THE COAST AND VALLEYS...AS WELL. MINOR URBAN FLOODING IS LIKELY AS THE HEAVY RAIN MOVES ACROSS THE AREA. FLASH FLOODING IS POSSIBLE WHERE THE HEAVIEST PRECIPITATION FALLS BELOW THE SNOW LEVEL...AND WHERE CELLS TRAIN. LOWER LEVEL DIRECTIONAL AND SPEED SHEAR ARE BORDERLINE FOR ISOLATED WATERSPOUT DEVELOPMENT NEAR THE FRONT. A STRONG UPPER-LEVEL JET WILL ALSO

SUPPORT THE GENERATION OF HEAVY PRECIPITATION...AND STRONG WEST
WINDS OVER ALL AREAS...ESPECIALLY THE MOUNTAINS. GUSTS OF 75 TO 85
MPH ARE POSSIBLE OVER THE MOUNTAINS AND IN THE DESERTS...AND H850
WINDS OF 50 KT MAY MIX TO THE SURFACE DURING AND AFTER THE FRONTAL
PASSAGE...CREATING ISOLATED GUSTS TO 60 MPH IN THE VALLEYS AND
ALONG THE COAST.

...FORECAST STORM TOTAL PRECIP (IN) LATE TODAY THROUGH EARLY MON...
DESERTS.....0.15 TO 0.50
COAST/VALLEYS...0.75 TO 1.00
MOUNTAINS.....1.50 TO 3.00...WITH LOCALLY GREATER AMOUNTS

SNOW LEVELS WILL START OUT AROUND 8000 FT THIS EVENING...LOWER TO
7500 FT SUNDAY MORNING...6500 FT SUNDAY AFTERNOON AND 3500 FT
SUNDAY NIGHT. A DUSTING OF SNOW IS POSSIBLE DOWN TO 3000 FT MONDAY
MORNING.

...FORECAST STORM TOTAL SNOWFALL (IN) LATE TODAY THROUGH EARLY MON...
3500 TO 4000 FT...UP TO 1
4000 TO 5000 FT...2 TO 5
5000 TO 6000 FT...3 TO 9
6000 TO 7000 FT...6 TO 12
ABOVE 7000 FT.....12 TO 20

SHOWERS WILL TAPER OFF MONDAY MORNING ACROSS THE REGION...WITH
WINDS DIMINISHING THROUGH MONDAY NIGHT. SEE LAXNPWSGX AND
LAXWSWSGX FOR DETAILS ON THE WIND ADVISORIES...HIGH WIND
WARNINGS...WINTER STORM WARNINGS AND WINTER WEATHER ADVISORIES
CURRENTLY IN EFFECT.

HIGH PRESSURE ALOFT OFF THE WEST COAST WILL AMPLIFY MID TO LATE
NEXT WEEK...CREATING DRY WEATHER WITH A WARMING TREND. HIGH
TEMPERATURES WILL RISE TO NEAR TO SLIGHTLY ABOVE AVERAGE FOR THE
END OF THE WEEK...WITH WEAK SURFACE OFFSHORE FLOW AT TIMES.

&&

.AVIATION...

300500Z...LOW CLOUDS WITH SCATTERED TO OVERCAST BASES 1000-3000 FT
MSL COVER MOST OF THE REGION THROUGH SUNDAY NIGHT. HIGHER MOUNTAIN
TERRAIN WILL REMAIN OBSCURED IN SOME LOCATIONS. DRIZZLE AND LIGHT
RAIN WILL CONTINUE OVERNIGHT ALONG THE COAST AND INLAND 10-20 MILES.

WEST WINDS STRENGTHENING SUNDAY MORNING THROUGH SUNDAY NIGHT...
PEAKING SUNDAY AFTERNOON AND EVENING...WITH GUSTS UP TO 50 KNOTS FOR
THE COAST AND VALLEYS...AND UP TO 70 KNOTS MOUNTAINS AND DESERTS.
STG-SVR UP/DOWNDRAFTS AND LLWS WILL BE LIKELY OVER AND E OF THE MTNS
DURING THIS TIME PERIOD.

THUNDERSTORMS POSSIBLE COAST AND VALLEYS BETWEEN ABOUT 22Z-02Z
SUNDAY AFTERNOON. HEAVY RAIN AND SNOW WITH VSBY REDUCED TO ONE-HALF
MILE WILL BE POSSIBLE DURING THIS TIME FRAME. SNOW LEVELS DROPPING
RAPIDLY SUNDAY NIGHT BETWEEN 06-12Z...REACHING ELEVATIONS AS LOW AS
2500 FEET MSL BY 12Z MONDAY MORNING.

&&

.MARINE...

900 PM...SUNDAY AFTERNOON THROUGH MONDAY NIGHT...A GALE WARNING IS
NOW IN EFFECT. A STRONG COLD FRONT MOVING THROUGH THE REGION WILL
BRING NORTHWEST WINDS WITH GUSTS OF 35-45 KT. STRONG WINDS AND
COMBINED SEAS OF 14 TO 18 FT WILL RESULT IN DANGEROUS BOATING
CONDITIONS SUNDAY AFTERNOON THROUGH EARLY TUESDAY MORNING.
PLEASE SEE THE GALE WARNING...LAXMWWSGX...FOR MORE INFORMATION.

&&

.BEACHES...

LARGE SHORT-PERIOD WEST-NORTHWEST SWELL WILL BRING ANOTHER ROUND OF
HIGH SURF AND STRONG RIP CURRENTS LATE SUNDAY THROUGH MONDAY. A HIGH
SURF ADVISORY HAS BEEN ISSUED DURING THIS TIME PERIOD.

&&

.SKYWARN...
SKYWARN ACTIVATION IS NOT REQUESTED. HOWEVER WEATHER SPOTTERS ARE
ENCOURAGED TO REPORT SIGNIFICANT WEATHER CONDITIONS.

Fig A-11: An excerpt from an Area Forecast Discussion issued by the NWS San Diego office forecasted winds caused by a deepening surface low and tightening pressure gradients January 30, 2016 through January 31, 2016. Source: Iowa Environmental Mesonet;
https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201601311206

FIGURE A-12
NWS SAN DIEGO OFFICE URGENT WEATHER MESSAGE

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r
458
WWUS76 KSGX 311125
NPWSGX

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE SAN DIEGO CA
325 AM PST SUN JAN 31 2016

...PERIODS OF STRONG SOUTHWEST TO WEST WINDS TODAY...
...PERIODS OF STRONG WEST TO NORTHWEST WINDS TONIGHT THROUGH
MONDAY...
...STRONGEST AND POTENTIALLY DAMAGING WINDS TONIGHT...

.ONSHORE FLOW WILL STRENGTHEN TODAY AS A LOW PRESSURE SYSTEM
INTENSIFIES AS IT MOVES INLAND ACROSS SOUTHERN CALIFORNIA THROUGH
TONIGHT. STRONG SOUTHWEST TO WEST WINDS THROUGH THIS MORNING WILL
BECOME WEST TO NORTHWEST DURING THE AFTERNOON INTO MONDAY. THE
STRONGEST AND POTENTIALLY DAMAGING WINDS ARE EXPECTED TONIGHT WITH
THE STRONGEST WINDS IN THE MOUNTAINS AND DESERTS.

CAZ055-056-058-065-312130-
/O.EXT.KSGX.HW.W.0001.160131T2000Z-160202T0200Z/
/O.EXT.KSGX.WI.Y.0006.000000T0000Z-160131T2000Z/
SAN BERNARDINO COUNTY MOUNTAINS-RIVERSIDE COUNTY MOUNTAINS-
SAN DIEGO COUNTY MOUNTAINS-SAN GORGONIO PASS NEAR BANNING-
325 AM PST SUN JAN 31 2016

...WIND ADVISORY NOW IN EFFECT UNTIL NOON PST TODAY...
...HIGH WIND WARNING NOW IN EFFECT FROM NOON TODAY TO 6 PM PST
MONDAY...

* WINDS THROUGH MID MORNING...WEST 20 TO 30 MPH WITH GUSTS TO 50
  MPH. ISOLATED GUSTS TO 60 MPH.

* WINDS FOR LATE THIS MORNING THROUGH TONIGHT...WEST 30 TO 40 MPH
  WITH GUSTS TO 70 MPH. ISOLATED DAMAGING GUSTS TO 85 MPH. WINDS
  BECOMING WEST TO NORTHWEST DURING THE LATE AFTERNOON.

* WINDS FOR MONDAY...WEST TO NORTHWEST 25 TO 35 MPH WITH GUSTS TO
  55 MPH. ISOLATED GUSTS TO 65 MPH.

* LOCATION...STRONGEST WINDS NEAR MOUNTAIN RIDGE TOPS AND ALONG
  DESERT MOUNTAIN SLOPES.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED POWER LINES...AND OTHER DEBRIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A HIGH WIND WARNING MEANS A HAZARDOUS HIGH WIND EVENT IS EXPECTED
OR OCCURRING. SUSTAINED WIND SPEEDS OF AT LEAST 40 MPH OR GUSTS
OF 58 MPH OR MORE CAN LEAD TO PROPERTY DAMAGE.

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS
THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH
PROFILE VEHICLES. USE EXTRA CAUTION.

&&

$$

CAZ060>062-312130-
/O.EXT.KSGX.HW.W.0001.160131T2000Z-160202T0200Z/
APPLE AND LUCERNE VALLEYS-COACHELLA VALLEY-
SAN DIEGO COUNTY DESERTS-
325 AM PST SUN JAN 31 2016

...HIGH WIND WARNING NOW IN EFFECT FROM NOON TODAY TO 6 PM PST
MONDAY...

* WINDS FOR THIS AFTERNOON...AREAS OF SOUTHWEST TO WEST WINDS 25
  TO 35 MPH WITH GUSTS TO 60 MPH. ISOLATED DAMAGING GUSTS TO 75
  MPH.

* WINDS FOR TONIGHT...WEST TO NORTHWEST 25 TO 35 MPH WITH GUSTS
  TO 65 MPH. ISOLATED DAMAGING GUSTS TO 75 MPH.

* WINDS FOR MONDAY...WEST TO NORTHWEST 20 TO 30 MPH WITH GUSTS TO
```

```
  55 MPH. ISOLATED GUSTS TO 65 MPH.

* LOCATION...WINDS STRONGEST NEAR DESERT MOUNTAIN SLOPES.

* VISIBILITY...REDUCED IN BLOWING DUST AND BLOWING SAND AT
  TIMES...MAINLY THIS MORNING AND AGAIN MONDAY.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED POWER LINES...AND OTHER DEBRIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A HIGH WIND WARNING MEANS A HAZARDOUS HIGH WIND EVENT IS EXPECTED
OR OCCURRING. SUSTAINED WIND SPEEDS OF AT LEAST 40 MPH OR GUSTS
OF 58 MPH OR MORE CAN LEAD TO PROPERTY DAMAGE.

&&

$$

CAZ043-048-050-057-552-554-312130-
/O.EXT.KSGX.WI.Y.0006.160131T1800Z-160202T0200Z/
SAN DIEGO COUNTY COASTAL AREAS-
SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-
SAN DIEGO COUNTY VALLEYS-SANTA ANA MOUNTAINS AND FOOTHILLS-
ORANGE COUNTY COASTAL AREAS-ORANGE COUNTY INLAND AREAS-
325 AM PST SUN JAN 31 2016

...WIND ADVISORY NOW IN EFFECT FROM 10 AM THIS MORNING TO 6 PM
PST MONDAY...

* WINDS FOR LATE MORNING THROUGH EARLY AFTERNOON...SOUTH TO
  SOUTHWEST INCREASING TO 20 TO 30 MPH WITH GUSTS TO 45 MPH NEAR
  THE COAST.

* WINDS FOR LATE THIS AFTERNOON THROUGH MONDAY...AREAS OF WEST TO
  NORTHWEST WINDS 20 TO 30 MPH WITH GUSTS TO 45 MPH. ISOLATED
  GUSTS TO 55 MPH...MAINLY THROUGH THIS EVENING.

* LOCATION...STRONGEST GUSTS NEAR THE COAST.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED PALM FRONDS...AND OTHER DEBRIS. BEFORE THE
  WINDS BEGIN...SECURE LOOSE OUTDOOR ITEMS SUCH AS LAWN AND
  PATIO FURNITURE...AWNINGS...AND TRASH CANS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS
THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH
PROFILE VEHICLES. USE EXTRA CAUTION.
```

Fig A-12: An urgent weather message containing a wind advisory issued by NWS San Diego office at 3:25 am PST on January 31, 2016. Source: https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWSGX&e=201601311125

FIGURE A-13
NWS SAN DIEGO OFFICE AREA FORECAST DISCUSSION

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r
438
FXUS66 KSGX 311206
AFDSGX

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE SAN DIEGO CA
406 AM PST SUN JAN 31 2016

.SYNOPSIS...
A WINTER STORM WILL MOVE THROUGH SOUTHERN CALIFORNIA THROUGH TONIGHT.
THIS WILL BRING PERIODS OF STRONG GUSTY SOUTHWEST TO WEST WINDS
TODAY AND WEST TO NORTHWEST WINDS TONIGHT AND MONDAY...STRONGEST
IN THE MOUNTAINS AND DESERTS...AND STRONGEST AND POTENTIALLY
DAMAGING TONIGHT. LIGHTER PRECIPITATION WILL CONTINUE THIS
MORNING WITH HEAVY PRECIPITATION THIS AFTERNOON WITH THE COLD
FRONTAL PASSAGE. SHOWERS WILL DECREASE FROM THE NORTHWEST TONIGHT.
COOLER BEHIND THE FRONT TONIGHT AND MONDAY...THEN DRY AND
GRADUALLY WARMER NEXT WEEK WITH HIGH PRESSURE ALOFT OFF THE
CALIFORNIA COAST.

&&

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

A LOW PRESSURE SYSTEM WILL INTENSIFY AS IT MOVES INLAND ACROSS
SOUTHERN CALIFORNIA THROUGH TONIGHT. THE COLD IS EXPECTED TO MOVE
ACROSS FAR SOUTHERN CALIFORNIA BEGINNING DURING EARLY AFTERNOON.

WINDS...ONSHORE FLOW WILL STRENGTHEN WITH GUSTY WEST WINDS IN THE
MOUNTAINS AND DESERTS STRENGTHENING DURING THE MORNING INTO THE
AFTERNOON. FOR COASTAL AREAS...SOUTH TO SOUTHWEST WINDS AHEAD OF
THE COLD FRONT WILL STRENGTHEN DURING THE LATE MORNING INTO THE
EARLY AFTERNOON...INCREASING TO 20 TO 30 MPH WITH GUSTS TO 45 MPH.
GUSTS TO 55 MPH ARE POSSIBLE NEAR THE COAST WITH THE COLD FRONTAL
PASSAGE. BEHIND THE COLD FRONT...WINDS WILL SHIFT TO THE WEST TO
NORTHWEST WITH THE STRONGEST WINDS EXPECTED TONIGHT. DAMAGING WIND
GUSTS TO 85 MPH ARE POSSIBLE IN THE MOUNTAINS AND DESERTS WITH
ISOLATED DAMAGING GUSTS TO 55 MPH POSSIBLE NEAR THE COAST. GUSTY
WEST TO NORTHWEST WINDS WILL CONTINUE THROUGH MONDAY.

PRECIPITATION...LIGHT PRECIPITATION WILL CONTINUE INTO THIS
MORNING ALONG AND WEST OF THE MOUNTAINS. SINCE EARLY SATURDAY
EVENING...RAINFALL HAS RANGED FROM A FEW HUNDREDTHS OF AN INCH
NEAR THE COAST TO ONE TENTH TO ONE QUARTER INCH ON THE SOUTH
SLOPES OF THE SAN BERNARDINO COUNTY MOUNTAINS WITH LOCALLY GREATER
AMOUNTS. PRECIPITATION WILL INTENSITY DURING THE LATE MORNING
ALONG THE SOUTH SLOPES OF THE SAN BERNARDINO COUNTY MOUNTAINS AND
BECOME HEAVY AT TIMES WITH THE COLD FRONTAL PASSAGE DURING THE
AFTERNOON. SHOWERS WILL DECREASE FROM THE NORTHWEST TONIGHT.
THROUGH TONIGHT...RAINFALL IS EXPECTED TO RANGE FROM ONE HALF TO
THREE QUARTERS OF AN INCH NEAR THE COAST TO 1.5 TO 2.5 INCHES IN
THE MOUNTAINS WITH LOCAL AMOUNTS EXCEEDING 3 INCHES. RAINFALL
AMOUNTS IN THE DESERTS WILL MOST BE ONE QUARTER TO ONE THIRD INCH.
A SNOW LEVEL ABOVE 7500 FEET THIS MORNING...WILL LOWER TO NEAR
6000 FEET DURING THE LATE AFTERNOON...5000 FEET EARLY THIS
EVENING...AND AROUND 4000 FEET BY MONDAY MORNING. SNOWFALL OF A
FEW INCHES IS POSSIBLE DOWN TO AROUND 4500 FEET...WITH SNOWFALL OF
4 TO 8 INCHES ABOVE 5500 FEET...AND 12 TO 20 INCHES ABOVE 7000
FEET.

THUNDERSTORMS...ISOLATED THUNDERSTORMS ARE POSSIBLE NEAR THE
FRONTAL PASSAGE. HIGHER RESOLUTION MODELS SHOW SHOW SUFFICIENT
LOWER LEVEL SHEAR IN COMBINATION WITH THE WEAK INSTABILITY TO
SUPPORT ISOLATED WATERSPOUTS NEAR THE FRONT DURING THE EARLY TO
MID AFTERNOON AS THE FRONT MOVES INLAND ALONG THE COAST.

THE COLD FRONT WILL BRING COOLING FOR TONIGHT AND MONDAY...THEN
DRY AND GRADUALLY WARMER FOR MUCH OF THE WEEK WITH HIGH PRESSURE
ALOFT OFF THE CALIFORNIA COAST.

&&

.AVIATION...
310950Z...MULTIPLE STRATUS LAYERS IN THE 1000-6000 FT LEVEL AND
AREAS OF -DZ/-RA OVER AND WEST OF THE MTNS THROUGH THE EARLY
AFTERNOON. A COLD FRONT WILL BRING WIDESPREAD MODERATE TO LOCALLY
HEAVY PRECIPITATION AND A CHANCE OF TS AFTER 18Z. CIGS BLO 1000 FT
```

MSL AND AREAS OF 1-2 SM VIS LIKELY IN HEAVIER SHOWERS/THUNDERSTORMS. PRECIPITATION TAPERING OFF AFTER 01/03Z WITH CLOUDS BASES LIFTING TO 2500-3500 FT MSL AND SCATTERING OUT OVERNIGHT. PRECIP ENDING BY MONDAY MORNING.

SOUTHWEST TO WEST WINDS STRENGTHENING TODAY AND CONTINUING THROUGH MONDAY MORNING...PEAKING DURING THE AFTERNOON AND EVENING WITH GUSTS 35 TO 45 KT IN THE COAST AND VALLEYS...AND 50 TO 70 KT IN MOUNTAINS AND DESERTS. ISOLATED GUSTS NEAR 50 KT POSSIBLE ALONG THE IMMEDIATE COAST. STG-SVR UP/DOWNDRAFTS AND LLWS WILL BE LIKELY OVER AND E OF THE MTNS.

&&

.MARINE...
200 AM...GUSTY SOUTHWEST WINDS 30-40 KT DEVELOPING AHEAD OF AN APPROACHING COLD FRONT LATE THIS MORNING...SHIFTING TO THE WEST-NORTHWEST AND INCREASING TO 35 TO 45 KT...LOCALLY AS HIGH AS 50 KT...LATE THIS AFTERNOON. WINDS LOWER SOMEWHAT TO AROUND 30-40 KT FOR MONDAY. STRONG WINDS AND STEEP COMBINED SEAS OF 14 TO 18 FT WILL RESULT IN DANGEROUS BOATING CONDITIONS THIS AFTERNOON THROUGH EARLY TUESDAY MORNING. PLEASE SEE THE GALE WARNING...LAXMWSGX...FOR MORE INFORMATION. THERE IS ALSO THE POTENTIAL FOR STRONG TO SEVERE THUNDERSTORMS AND ISOLATED WATERSPOUTS THIS AFTERNOON AND EVENING AS THE COLD FRONT MOVES THROUGH. SEE THE MARINE WEATHER STATEMENT...LAXMWSSGX...FOR MORE DETAILS.

&&

.BEACHES...
205 AM...A LARGE SHORT-PERIOD WEST-NORTHWEST SWELL WILL BRING ANOTHER ROUND OF HIGH SURF AND STRONG RIP CURRENTS LATE TODAY THROUGH MONDAY. VERY ROUGH SURF OF 5 TO 8 FT WITH LOCAL SETS TO 10 FT POSSIBLE TONIGHT AND MONDAY. SEE THE HIGH SURF ADVISORY...LAXCFWSGX...FOR MORE DETAILS.

&&

.SKYWARN...
SKYWARN ACTIVATION IS REQUESTED FOR THIS AFTERNOON AND EVENING.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...
CA...HIGH WIND WARNING FROM NOON TODAY TO 6 PM PST MONDAY FOR APPLE AND LUCERNE VALLEYS-COACHELLA VALLEY-RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS-SAN DIEGO COUNTY DESERTS-SAN DIEGO COUNTY MOUNTAINS-SAN GORGONIO PASS NEAR BANNING.

WINTER WEATHER ADVISORY FROM 4 PM THIS AFTERNOON TO 4 AM PST MONDAY FOR SAN DIEGO COUNTY MOUNTAINS.

WIND ADVISORY UNTIL NOON PST TODAY FOR RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS-SAN DIEGO COUNTY MOUNTAINS-SAN GORGONIO PASS NEAR BANNING.

WINTER STORM WARNING FROM 10 AM THIS MORNING TO 10 PM PST THIS EVENING FOR RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS.

WIND ADVISORY FROM 10 AM THIS MORNING TO 6 PM PST MONDAY FOR ORANGE COUNTY COASTAL AREAS-ORANGE COUNTY INLAND AREAS-SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-SAN DIEGO COUNTY COASTAL AREAS-SAN DIEGO COUNTY VALLEYS-SANTA ANA MOUNTAINS AND FOOTHILLS.

HIGH SURF ADVISORY FROM 10 PM THIS EVENING TO 3 AM PST TUESDAY FOR ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS.

PZ...GALE WARNING FROM 10 AM THIS MORNING TO 2 AM PST TUESDAY 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.

Fig A-13: An area forecast discussion issued by NWS San Diego office at 4:06 am PST on January 31, 2016. Source: https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDSGX&e=201601311206

FIGURE A-14
NWS PHOENIX OFFICE URGENT WEATHER MESSAGE

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527
WWUS75 KPSR 311242
NPWPSR

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PHOENIX AZ
542 AM MST SUN JAN 31 2016

...WINDY CONDITIONS EXPECTED ACROSS SOUTHEASTERN CALIFORNIA
TODAY THROUGH MONDAY...

CAZ030>033-010045-
/O.CON.KPSR.WI.Y.0001.160131T2200Z-160202T0000Z/
JOSHUA TREE NATIONAL PARK-LOWER COLORADO RIVER VALLEY CA-
RIVERSIDE COUNTY/EASTERN DESERTS-IMPERIAL COUNTY-
INCLUDING THE CITIES OF...COTTONWOOD VISITOR CENTER...KEYS VIEW...
LOST HORSE...BLYTHE...CHIRIACO SUMMIT...DESERT CENTER...
EAGLE MOUNTAIN...BRAWLEY...CALEXICO...EL CENTRO...GLAMIS...
IMPERIAL...THE SALTON SEA
442 AM PST SUN JAN 31 2016

...WIND ADVISORY REMAINS IN EFFECT FROM 2 PM THIS AFTERNOON TO
4 PM PST MONDAY...

* AFFECTED AREA...SOUTHEASTERN CALIFORNIA INCLUDING EL CENTRO AND
  PORTIONS OF THE SALTON SEA...JOSHUA TREE NATIONAL PARK...AND THE
  COLORADO RIVER VALLEY INCLUDING BLYTHE CALIFORNIA.

* TIMING...THIS AFTERNOON THROUGH MONDAY AFTERNOON.

* WINDS...SUSTAINED WINDS 35 MPH WITH GUSTS UP TO 50 MPH.

* IMPACTS...MOTORISTS WILL ENCOUNTER HAZARDOUS CROSS WINDS. THIS
  WILL ESPECIALLY BY THE CASE FOR HIGH PROFILE VEHICLES. BLOWING
  DUST WILL ALSO BE POSSIBLE CAUSING RAPID REDUCTIONS IN
  VISIBILITY.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN
30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND
58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY
FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT
AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER
A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA
CAUTION.
```

Fig A-14: An urgent weather message containing a wind advisory issued by NWS Phoenix office at 4:42 am PST on January 31, 2016. Source: https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201601311242

FIGURE A-15
NWS SAN DIEGO OFFICE URGENT WEATHER MESSAGE

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URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE SAN DIEGO CA
126 PM PST SUN JAN 31 2016

...PERIODS OF STRONG WEST TO NORTHWEST WINDS THROUGH MONDAY...

.STRONG SOUTHWEST TO WEST WINDS EARLY THIS AFTERNOON WILL BECOME
WEST TO NORTHWEST DURING THE AFTERNOON FOLLOWING A COLD FRONT AND
CONTINUING INTO MONDAY. THE STRONGEST AND POTENTIALLY DAMAGING
WINDS ARE EXPECTED TONIGHT WITH THE STRONGEST WINDS IN THE
MOUNTAINS AND DESERTS.

CAZ055-056-058-060>062-065-010600-
/O.CON.KSGX.HW.W.0001.000000T0000Z-160202T0200Z/
SAN BERNARDINO COUNTY MOUNTAINS-RIVERSIDE COUNTY MOUNTAINS-
SAN DIEGO COUNTY MOUNTAINS-APPLE AND LUCERNE VALLEYS-
COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-
SAN GORGONIO PASS NEAR BANNING-
126 PM PST SUN JAN 31 2016

...HIGH WIND WARNING REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

* WINDS THROUGH TONIGHT...WEST 30 TO 40 MPH WITH GUSTS TO 70 MPH.
  ISOLATED DAMAGING GUSTS TO 85 MPH. WINDS BECOMING WEST TO
  NORTHWEST DURING THE LATE AFTERNOON.

* WINDS FOR MONDAY...WEST TO NORTHWEST 25 TO 35 MPH WITH GUSTS
  TO 55 MPH. ISOLATED GUSTS TO 65 MPH.

* LOCATION...STRONGEST WINDS NEAR MOUNTAIN RIDGE TOPS AND ALONG
  DESERT MOUNTAIN SLOPES.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED POWER LINES...AND OTHER DEBRIS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A HIGH WIND WARNING MEANS A HAZARDOUS HIGH WIND EVENT IS EXPECTED
OR OCCURRING. SUSTAINED WIND SPEEDS OF AT LEAST 40 MPH OR GUSTS
OF 58 MPH OR MORE CAN LEAD TO PROPERTY DAMAGE.

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS
THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH
PROFILE VEHICLES. USE EXTRA CAUTION.

&&

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CAZ043-048-050-057-552-554-010600-
/O.CON.KSGX.WI.Y.0006.000000T0000Z-160202T0200Z/
SAN DIEGO COUNTY COASTAL AREAS-
SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-
SAN DIEGO COUNTY VALLEYS-SANTA ANA MOUNTAINS AND FOOTHILLS-
ORANGE COUNTY COASTAL AREAS-ORANGE COUNTY INLAND AREAS-
126 PM PST SUN JAN 31 2016

...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST MONDAY...

* WINDS THROUGH EARLY AFTERNOON...SOUTH TO SOUTHWEST INCREASING
  TO 20 TO 30 MPH WITH GUSTS TO 45 MPH NEAR THE COAST.

* WINDS LATE THIS AFTERNOON THROUGH MONDAY...WEST TO NORTHWEST
  WINDS 20 TO 30 MPH WITH GUSTS TO 45 MPH. ISOLATED GUSTS TO 55
  MPH...MAINLY THROUGH THIS EVENING.

* LOCATION...STRONGEST GUSTS NEAR THE COAST.

* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY
  FOR MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN
  TREE LIMBS...DOWNED PALM FRONDS...AND OTHER DEBRIS. BEFORE THE
  WINDS BEGIN...SECURE LOOSE OUTDOOR ITEMS SUCH AS LAWN AND
  PATIO FURNITURE...AWNINGS...AND TRASH CANS.
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Fig A-15: An Urgent Weather Message issued by NWS San Diego Office at 1:26 pm PST on January 31, 2016 containing information of the high wind warning for the San Diego County desert area. Source: https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWSGX&e=201601312126

FIGURE A-16
NWS PHOENIX OFFICE AREA FORECAST DISCUSSION

National Weather Service Forecast Office
Phoenix, AZ

www.weather.gov

HomeNewsOrganizationFAQ Share Search WR NWS ALL NOAA

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Current Hazards
Outlooks
Submit Report
Local Storm Reports
Current Conditions
Observations
Radar
Satellite
Precipitation
Rainfall Reports
NOAA Weather Radio
Forecasts
Forecast Discussion
Local Area
Activity Planner
Aviation Weather
Fire Weather
Severe Weather
Hurricane Center
User Defined Area
Travel
Air Quality
GIS
Hydrology
Rivers and Lakes
CBRFC
Climate
Local
National
Drought
More...
Climate portal
Weather Safety
Preparedness
Weather Radio
SkyWarn™
Heat Safety
Monsoon Safety
Additional Info
Items of Interest
Other Useful Links
Education Resources
COOP Observer
Our Office
Four Peaks Post
NWS News
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Contact Info
Feedback
FAQ

Area Forecast Discussion

• Go Back • Print Friendly • Version: 5 Newer Older Jump To • Font: A A A A •
• Turn Dictionary Off • Product FAQ •
This is NOT the current version and may no longer be valid.

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FXUS65 KPSR 312124
  AFDPSR

  AREA FORECAST DISCUSSION
  NATIONAL WEATHER SERVICE PHOENIX AZ
  224 PM MST SUN JAN 31 2016

  .SYNOPSIS...
  A WINDY AND COLD PACIFIC WEATHER SYSTEM IS FORECAST TO MOVE INTO THE
  REGION LATER THIS EVENING...ALONG WITH DEVELOPING
  SHOWERS...PARTICULARLY OVER PORTIONS OF SOUTHWEST AND SOUTH-CENTRAL
  ARIZONA. THE SNOW LEVEL WILL FALL TO NEAR 3000 FEET BY MONDAY
  MORNING...WITH 2 TO 6 INCHES OF SNOW BETWEEN 4000 AND 6000 FEET IN
  SOUTH CENTRAL ARIZONA. CLEARING SKIES AND A VERY COLD AIRMASS WILL
  LINGER TUESDAY THROUGH THURSDAY...WITH WIDESPREAD FREEZING
  TEMPERATURES DURING THE MORNINGS AT MANY DESERT LOCATIONS. WARMER
  WEATHER WILL RETURN NEXT FRIDAY AND SATURDAY.

  &&

  .DISCUSSION...
  WINDS HAVE BEEN ON THE INCREASE AROUND THE REGION TODAY AHEAD OF A
  STRONG PACIFIC STORM SYSTEM AND ASSOCIATED COLD FRONT. LOCATIONS
  ACROSS THE MOGOLLON RIM AND UP ALONG THE CO RIVER VALLEY BEGAN
  BLOWING IN THE LATE MORNING WITH GUSTS IN THE 30-40 MPH RANGE. SOME
  DUST HAS BEEN KICKED UP...PER SOCIAL MEDIA TRAFFIC...OUT ALONG THE
  CO RIVER VALLEY AND DUSTY CONDITIONS WILL CONTINUE INTO THE EVENING
  AS WINDS INCREASE FURTHER WITH STRONG PRE-FRONTAL WINDS OF 40-50KTS
  AT 850MB MIXING DOWN TO THE SFC AHEAD OF AND ALONG FROPA. WIND
  ADVISORIES REMAIN IN EFFECT FOR THE WESTERN FORECAST ZONES FOR THE
  STRONG WINDS THE REST OF TODAY. TRAVELERS SHOULD BE PREPARED FOR
  RAPIDLY CHANGING ROAD CONDITIONS WITH STRONG CROSS
  WINDS...CHALLENGING WINDS OVER MTN PASSES AND REDUCED VSBYS IN
  BLOWING DUST. GONE ARE THE CLEAR SKIES FROM EARLIER THIS
  MORNING...WITH INCREASING ML CLOUD COVERAGE ACROSS MUCH OF THE REGION
  ALONG WITH SHOWER ACTIVITY ACROSS SOCAL AND UP TO THE PENINSULAR
  RANGES. FOR THE REST OF THE AFTERNOON...CLOUDS AND WINDS WILL BE ON
  THE INCREASE WITH TEMPERATURES PEAKING IN THE LOW TO MID 70S FOR MANY
  LOWER DESERT LOCALES.

  THE FEATURE OF INTEREST TONIGHT WILL BE A STRONG AND WET COLD FRONTAL
  PASSAGE...WITH A TIGHT 850-500 THETA-E GRADIENT AND ACCOMPANYING JL
  CORE WINDS PUSHING INTO THE 100-125KT RANGE. LL WIND PROFILE IS JUST
  AN IMPRESSIVE PRE-FRONTAL AND RIGHT ALONG THE FRONT WITH SOME
  LOCATIONS UPSTREAM ON THE SOCAL SAMPLING NEAR 50KT WINDS JUST 5KFT
  OFF THE SFC PER RECENT AIRCRAFT SOUNDINGS. NOW THAT THE FORECAST
  PERIOD IS WITHIN THE PERIOD OF HI-RES MODELS SOME SUBTLE TIMING
  DIFFERENCES ARE PRESENTING THEMSELVES RE FROPA TIMING. DIFFERENCES DO
  NOT APPEAR TO BE ENOUGH TO DRASTICALLY CHANGE THE GENERAL PICTURE OF
  FROPA INTO SE CA AROUND 01/00Z...THE CO RIVER VALLEY AROUND 01/03Z
  AND INTO SW AND SOUTH-CENTRAL AZ AROUND OR AFTER 01/06Z.
  SHOWERS...SOME WITH SOME EMBEDDED THUNDER AND VERY STRONG
  WINDS...WILL BEGIN TO DEVELOP ACROSS THE WESTERN DESERTS AND TRACK
  EASTWARD AHEAD OF AND ALONG THE FRONT.

  SHOWERS ARE EXPECTED TO INTENSIFY EAST OF THE COLORADO RIVER VALLEY
  TONIGHT ALONG A TIGHT INTERSECTION OF DEEPER MOISTURE AND STRONGEST
  HEIGHT FALLS ACT UPON UNSEASONABLY HIGH LL MOISTURE VALUES. FCST
  850MB DEWPOINTS RANGE 3-5C AND PWATS NEAR 0.75 INCHES...WHICH ARE IN
  THE 90TH TO NEAR MAX VALUES THIS TIME OF YEAR PER SOUNDING CLIMO FOR
  KTWC. STILL LOOKING AT THE POTENTIAL FOR SOME EMBEDDED THUNDER ALONG
  WITH PRECIP ACTIVITY THIS EVENING WITH THE STRONG UPSTREAM HEIGHT
  FALLS. LIGHTNING COVERAGE SO FAR THIS AFTERNOON HAS BEEN LIMITED TO A
  FEW STRIKES UP AROUND THE LAS VEGAS AREA. SREF AND NAEFS QPF VALUES
  AND PROBS STILL HOLD TO LIGHT STORM TOTAL AMOUNTS...OF A FEW
  HUNDREDTHS TO A TENTH OF AN INCH OR SO OVER SE CA. FAVORABLE TERRAIN
  ORIENTATION...STRONG UPSLOPE FLOW AND FRONTAL PACKING WILL GENERATE
  HIGHER AMOUNTS OVER THE SOUTH-CENTRAL AZ DESERTS AND THE HIGHER
  TERRAIN N/E OF PHOENIX. STRONG POST-FRONTAL WINDS AND SUBSIDENT FLOW
  WILL DEVELOP INTO RAIN SHADOWING ACROSS SE CA BY THIS
  EVENING...RAPIDLY TAPERING OFF THEIR PRECIP CHANCES TOWARDS MONDAY
  AM. MEANWHILE...SOME WRAP-AROUND SHOWERS AND LINGERING BL MOISTURE
  COULD GENERATE ON-GOING PRECIP ACTIVITY ACROSS SOUTH-CENTRAL AZ FOR
  THE MONDAY AM COMMUTE.

  SNOW LEVELS WILL BEGIN TO DROP DURING THE EVENING AND EVENTUALLY
  DROP INTO THE 3000-3500FT RANGE BY MONDAY AM. WITH PRECIPITATION
  ENDING GENERALLY AROUND 01/06Z ACROSS THE WESTERN FORECAST
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ZONES...ACCUMULATING SNOWFALL IS NOT A CONCERN. THE FOCUS FOR SNOW TAKES SHAPE OVER THE HIGHER TERRAIN NORTH/EAST OF PHOENIX WITH AMOUNTS WARRANTING A **WINTER WEATHER ADVISORY** FOR ELEVATIONS ABOVE 4000FT FOR ACCUMULATIONS OF 1 TO 3 INCHES BEGINNING OVERNIGHT AND LINGERING INTO MONDAY **AFTN**. CANNOT RULE OUT SOME MIXED PRECIP OR **FLURRIES** BY MONDAY MORNING OVER THE FOOTHILLS ON THE NORTH/EAST PHX PERIPHERY...BUT PRESENCE OF ABUNDANT LOW LEVEL **MOISTURE** MAY DEFER THE CHANGE OVER AS WELL ANY **HEAVY SNOW** ACCUMULATION TIL MONDAY MORNING...WITH 1-3 INCHES ABOVE 4000 FEET AND 4 TO 6 INCHES ABOVE 5500 FEET POSSIBLE MONDAY. THE MOST VULNERABLE AREAS FOR ACCUMULATING SNOW IS ON THE SAN CARLOS INDIAN RESERVATION ABOVE 5000 FEET...INCLUDING AREAS NEAR SAWMILL.. THE BLACK RIVER CROSSING...AND AREAS BORDERING THE WHITE MOUNTAINS.

TUESDAY THROUGH SATURDAY...
CLEARING AND COLDER CONDITIONS ARE FORECAST TUESDAY THROUGH THURSDAY. NEW MODELS ARE SHOWING THE AIRMASS IS MUCH COLDER THAN INITIALLY THOUGHT. FOR EXAMPLE...A FORECAST OF 34 DEGREES F AT PHOENIX SKY HARBOR AIRPORT TUE AND WED MORNING...NORMALLY THE WARMEST LOCATION IN THE PHOENIX VALLEY...SUGGEST **TEMPS** IN THE MID 20S TO LOWER 30S ELSEWHERE ON THE REMOTE DESERTS AND PHOENIX SUBURBS. BREEZY NORTH WINDS WITH CONSIDERABLE MIXING IN SOUTHEAST CALIFORNIA AND THE COLORADO RIVER VALLEY WILL LIKELY KEEP OVERNIGHT TEMPERATURES FROM HITTING THE FREEZING MARK. MOST LOCALES LOOK TO ESCAPE SEVERAL HOURS OF FREEZING TEMPERATURE TUESDAY AM WITH LINGERING BL **MOISTURE**...WITH WEDNESDAY LOOKING LIKE THE COOLEST MORNING BEFORE **WAA** FROM THE SOUTHWEST HELPS MAINTAIN SOME WARMER **TEMPS** WED-THU AFTNS. WILL ISSUE AN **SPS** FOR TUESDAY AM AND HIGHLIGHT POTENTIAL FOR A POSSIBLE UPGRADE TO FREEZE HEADLINES IF THE FORECAST CONTINUES ON **TRACK**. MUCH WARMER WEATHER IS FORECAST FRIDAY AND SATURDAY.

&&

.AVIATION...
SOUTH-CENTRAL ARIZONA INCLUDING KPHX...KIWA...AND KSDL...

A STRONG WINTER **STORM** AND ASSOCIATED **SFC COLD FRONT** WILL BE MOVING INTO THE GREATER PHOENIX AREA LATER THIS EVENING. A DRAMATIC LOWERING OF CIGS AND INCREASING WINDS ARE EXPECTED AT ALL OF THE PHX AREA TERMINALS...ALONG WITH A PERIOD OF RAIN AS WELL. CIGS ARE EXPECTED TO BEGIN TO LOWER BY 02-03Z...WITH SCATTERED CLOUD LAYERS WITH BASES IN THE 4-6K FOOT RANGE LIKELY BY THEN. WESTERLY WINDS...WITH SUSTAINED SPEEDS IN THE 10-15 KT RANGE AND GUSTS AS HIGH AS 25 KNOTS ARE POSSIBLE. A PERIOD OF STEADY RAIN WITH CIGS IN THE 2-4K FOOT RANGE AND WINDS IN THE 15-20 KT RANGE...WITH GUSTS AS HIGH AS 30 **KTS**...WILL THEN ARRIVE IN THE 04-06Z TIME FRAME AS THE **SFC** COLD **FRONT** MOVES INTO THE PHX AREA. VISIBILITIES COULD BRIEFLY DROP INTO THE 2-4 MILE RANGE IN THE HEAVIEST SHOWERS. THERE IS ALSO A REMOTE CHANCE FOR A **THUNDERSTORM** AS WELL...BUT CONFIDENCE IS WAY TOO LOW TO INCLUDE THEM IN THE TAFS.

CONDITIONS ARE THEN EXPECTED TO IMPROVE AFTER 10-11Z ON MONDAY AS SOMEWHAT DRIER AIR MOVES INTO THE REGION FROM THE WEST. HOWEVER...SCT-BKN CIGS IN THE 4-6K FOOT RANGE WITH BKN-OVC MID CLOUD DECKS WILL LIKELY LAST THROUGH MUCH OF THE DAY ON MONDAY...ALONG WITH POSSIBLE SPRINKLES/LIGHT SHOWERS AND GUSTY WESTERLY WINDS AS ANOTHER...MUCH WEAKER WEATHER DISTURBANCE PASSES OVER THE REGION.

SOUTHEAST CALIFORNIA/SOUTHWEST ARIZONA INCLUDING KIPL AND KBLH...

A STRONG PACIFIC **STORM** MOVING ACROSS THE REGION WILL PRODUCE VERY STRONG WESTERLY WINDS AT KIPL AND SOUTHWESTERLY WINDS AT KBLH THIS EVENING AND TONIGHT...WITH THE WINDS SLOWLY DIMINISHING ON MONDAY. **SUSTAINED WIND** SPEED **AOA** 30 **KTS** AND GUSTS **AOA** 40 **KTS** ARE POSSIBLE AT KIPL LATER THIS EVENING...WITH SOMEWHAT LIGHT WINDS EXPECTED AT KBLH...ALONG WITH AREAS OF BLOWING DUST. CIGS IN THE 5-7K FOOT RANGE ARE ALSO EXPECTED AT BOTH **TAF** SITES AS WELL THIS EVENING...ALONG WITH A BRIEF SHOWER AT KBLH...WITH SKIES CLEARING LATER TONIGHT.

AVIATION DISCUSSION NOT UPDATED FOR AMENDED TAFS.

&&

.FIRE WEATHER...
TUESDAY THROUGH SATURDAY...
AN EXITING STRONG WEATHER SYSTEM WILL BRING WELL BELOW NORMAL TEMPERATURES THROUGH WEDNESDAY WITH GRADUAL WARMING THROUGH THE END OF THE WEEK. WINDS WILL STILL BE BREEZY ON TUESDAY AREAWIDE AND THEN ACROSS THE LOWER COLORADO RIVER VALLEY DURING THE DAYTIME HOURS NEARLY EVERY DAY THROUGH SATURDAY. GRADUAL DRYING IS FORECAST FOR THE MIDDLE OF THE WEEK AS HIGH PRESSURE TAKES OVER STARTING TUESDAY. AFTERNOON **HUMIDITY** LEVELS WILL GENERALLY DROP INTO THE 10-20 PERCENT RANGE THROUGH THE ENTIRE PERIOD.

&&

.SPOTTER INFORMATION STATEMENT...
SPOTTERS ARE ENCOURAGED TO REPORT BASED ON STANDARD OPERATING PROCEDURES.

&&

.PSR WATCHES/WARNINGS/ADVISORIES...
AZ...**WINTER WEATHER ADVISORY** FROM MIDNIGHT TONIGHT TO 5 PM **MST** MONDAY FOR AZZ024.

CA...**WIND ADVISORY** UNTIL 4 PM **PST** MONDAY FOR CAZ030>033.

&&

Fig A-16: An area forecast discussion containing a wind advisory issued by NWS Phoenix office at 1:24 pm PST on January 31, 2016. Source: http://www.wrh.noaa.gov/total_forecast/getprod.php?afos=xxxafdpsr&wfo=psr&font=120&version=5

FIGURE A-17
NWS PHOENIX OFFICE URGENT WEATHER MESSAGE

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555
WWUS75 KPSR 312227
NPWPSR

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PHOENIX AZ
327 PM MST SUN JAN 31 2016

...WINDY CONDITIONS EXPECTED ACROSS SOUTHEASTERN CALIFORNIA TODAY
THROUGH MONDAY...

CAZ031>033-011300-
/O.NEW.KPSR.DU.Y.0001.160131T2227Z-160201T1300Z/
/O.CON.KPSR.WI.Y.0001.000000T0000Z-160202T0000Z/
LOWER COLORADO RIVER VALLEY CA-RIVERSIDE COUNTY/EASTERN DESERTS-
IMPERIAL COUNTY-
INCLUDING THE CITIES OF...BLYTHE...CHIRIACO SUMMIT...
DESERT CENTER...EAGLE MOUNTAIN...BRAWLEY...CALEXICO...EL CENTRO...
GLAMIS...IMPERIAL...THE SALTON SEA
227 PM PST SUN JAN 31 2016

...BLOWING DUST ADVISORY IN EFFECT UNTIL 5 AM PST MONDAY...
...WIND ADVISORY REMAINS IN EFFECT UNTIL 4 PM PST MONDAY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A BLOWING DUST
ADVISORY...WHICH IS IN EFFECT UNTIL 5 AM PST MONDAY.

* AFFECTED AREA...SOUTHEASTERN CALIFORNIA INCLUDING EL CENTRO AND
  PORTIONS OF THE SALTON SEA...AND THE COLORADO RIVER VALLEY
  INCLUDING BLYTHE CALIFORNIA.

* TIMING...THROUGH MONDAY AFTERNOON.

* WINDS...SUSTAINED WINDS 35 MPH WITH GUSTS UP TO 50 MPH.

* VISIBILITY...DOWN AS LOW AS ONE MILE IN THE MOST CONCENTRATED DUST
  AND OR SAND. BLOWING DUST AND OR SAND WILL CAUSE RAPID REDUCTIONS
  IN VISIBILITY.

* IMPACTS...MOTORISTS WILL ENCOUNTER HAZARDOUS CROSS WINDS. THIS WILL
  ESPECIALLY BY THE CASE FOR HIGH PROFILE VEHICLES. BLOWING DUST WILL
  ALSO BE POSSIBLE CAUSING RAPID REDUCTIONS IN VISIBILITY. USE EXTRA
  CAUTION WHEN TRAVELING AT NIGHT.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN
30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND
58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY
FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT
AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER
A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA
CAUTION.

BE READY FOR A SUDDEN DROP IN VISIBILITY. IF YOU ENCOUNTER
BLOWING DUST OR BLOWING SAND ON THE ROADWAY OR SEE IT
APPROACHING...PULL OFF THE ROAD AS FAR AS POSSIBLE AND PUT YOUR
VEHICLE IN PARK. TURN THE LIGHTS ALL THE WAY OFF AND KEEP YOUR
FOOT OFF THE BRAKE PEDAL.

REMEMBER...PULL ASIDE...STAY ALIVE.

&&

$$

AZZ020-021-025-026-011300-
/O.NEW.KPSR.DU.Y.0001.160131T2227Z-160201T1300Z/
LOWER COLORADO RIVER VALLEY AZ-WEST CENTRAL DESERTS-
YUMA/MARTINEZ LAKE AND VICINITY-SOUTHWEST DESERTS-
INCLUDING THE CITIES OF...EHRENBERG...PARKER...BOUSE...
QUARTZSITE...SALOME...FORTUNA FOOTHILLS...SAN LUIS...SOMERTON...
YUMA...DATELAND...TACNA...WELLTON
327 PM MST SUN JAN 31 2016

...BLOWING DUST ADVISORY IN EFFECT UNTIL 6 AM MST MONDAY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A BLOWING DUST
ADVISORY...WHICH IS IN EFFECT UNTIL 6 AM MST MONDAY.
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Fig A-17: An Urgent Weather Message issued by NWS Phoenix Office at 2:27 pm PST on January 31, 2016 containing a wind advisory. Source: https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201601312227

FIGURE A-18
NWS PHOENIX OFFICE URGENT WEATHER MESSAGE

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056
WWUS75 KPSR 312339
NPWPSR

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PHOENIX AZ
439 PM MST SUN JAN 31 2016

...WINDY CONDITIONS EXPECTED ACROSS SOUTHEASTERN CALIFORNIA AND
SOUTHWEST ARIZONA THIS EVENING THROUGH MONDAY...

AZZ020-021-025-026-011300-
/O.EXB.KPSR.WI.Y.0001.160201T0000Z-160202T0000Z/
/O.CON.KPSR.DU.Y.0001.000000T0000Z-160201T1300Z/
LOWER COLORADO RIVER VALLEY AZ-WEST CENTRAL DESERTS-
YUMA/MARTINEZ LAKE AND VICINITY-SOUTHWEST DESERTS-
INCLUDING THE CITIES OF...EHRENBERG...PARKER...BOUSE...
QUARTZSITE...SALOME...FORTUNA FOOTHILLS...SAN LUIS...SOMERTON...
YUMA...DATELAND...TACNA...WELLTON
439 PM MST SUN JAN 31 2016

...BLOWING DUST ADVISORY REMAINS IN EFFECT UNTIL 6 AM MST
MONDAY...
...WIND ADVISORY IN EFFECT UNTIL 5 PM MST MONDAY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A WIND
ADVISORY...WHICH IS IN EFFECT UNTIL 5 PM MST MONDAY.

* AFFECTED AREA...SOUTHWESTERN DESERTS OF ARIZONA INCLUDING YUMA AND
  LA PAZ COUNTY AS WELL AS THE EASTERN PORTION OF THE LOWER COLORADO
  RIVER VALLEY.

* TIMING...THROUGH MONDAY AFTERNOON.

* WINDS...SUSTAINED WINDS 35 MPH WITH GUSTS UP TO 50 MPH.

* VISIBILITY...DOWN AS LOW AS ONE MILE IN THE MOST CONCENTRATED
  DUST AND OR SAND. BLOWING DUST AND OR SAND WILL CAUSE RAPID
  REDUCTIONS IN VISIBILITY.

* IMPACTS...MOTORISTS WILL ENCOUNTER HAZARDOUS CROSS WINDS. THIS
  WILL ESPECIALLY BY THE CASE FOR HIGH PROFILE VEHICLES. BLOWING
  DUST WILL ALSO BE POSSIBLE CAUSING RAPID REDUCTIONS IN
  VISIBILITY. USE EXTRA CAUTION WHEN TRAVELING AT NIGHT.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN
30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND
58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY
FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT
AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER
A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA
CAUTION.

BE READY FOR A SUDDEN DROP IN VISIBILITY. IF YOU ENCOUNTER
BLOWING DUST OR BLOWING SAND ON THE ROADWAY OR SEE IT
APPROACHING...PULL OFF THE ROAD AS FAR AS POSSIBLE AND PUT YOUR
VEHICLE IN PARK. TURN THE LIGHTS ALL THE WAY OFF AND KEEP YOUR
FOOT OFF THE BRAKE PEDAL.

REMEMBER...PULL ASIDE...STAY ALIVE.

&&

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CAZ031>033-011300-
/O.CON.KPSR.DU.Y.0001.000000T0000Z-160201T1300Z/
/O.CON.KPSR.WI.Y.0001.000000T0000Z-160202T0000Z/
LOWER COLORADO RIVER VALLEY CA-RIVERSIDE COUNTY/EASTERN DESERTS-
IMPERIAL COUNTY-
INCLUDING THE CITIES OF...BLYTHE...CHIRIACO SUMMIT...
DESERT CENTER...EAGLE MOUNTAIN...BRAWLEY...CALEXICO...EL CENTRO...
GLAMIS...IMPERIAL...THE SALTON SEA
339 PM PST SUN JAN 31 2016

...BLOWING DUST ADVISORY REMAINS IN EFFECT UNTIL 5 AM PST
MONDAY...
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Fig A-18: An Urgent Weather Message issued by NWS Phoenix Office at 3:39 pm PST on January 31, 2016 containing a wind advisory. Source: https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201601312339

FIGUREA A-19
NWS SAN DIEGO OFFICE PUBLIC INFORMATION STATEMENT

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506
NZUS96 KSGX 010156
LLLSGX
CAZ043-048-050-055>058-060>062-065-552-554-011356-

PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE SAN DIEGO CA
556 PM PST SUN JAN 31 2016

...WIND REPORTS PAST 24 HOURS...

LOCATION                        SPEED     TIME/DATE       ELEVATION

...CALIFORNIA...
OCEANSIDE JETTY              60 MPH    0228 PM 01/31   18 FT
MISSION BEACH                56 MPH    0242 PM 01/31   52 FT
LA JOLLA (SCRIPPS PIER)      51 MPH    0242 PM 01/31   0 FT
PACIFIC BEACH (CRYSTAL PIER) 49 MPH    0249 PM 01/31   15 FT
SAN DIEGO BROADWAY PIER      48 MPH    0306 PM 01/31   0 FT
SAN CLEMENTE BASIN BUOY      47 MPH    0150 PM 01/31   0 FT
IMPERIAL BEACH PIER          45 MPH    0353 PM 01/31   40 FT
SCRIPPS PIER                 41 MPH    0240 PM 01/31   13 FT
SHELTER ISLAND               36 MPH    0455 PM 01/31   9 FT

...COACHELLA VALLEY-INCLUDING THE PALM SPRINGS SOUTH COAST DESERT DISTRICT...
PALM DESERT (5 S)            51 MPH    1000 PM 01/30   980 FT
THOUSAND PALMS               38 MPH    0934 PM 01/30   272 FT
COACHELLA                    36 MPH    1255 PM 01/31   110 FT
COACHELLA                    36 MPH    1255 PM 01/31   -100 FT

...ORANGE COUNTY COASTAL...
LAGUNA BEACH (1 NE)          57 MPH    0154 PM 01/31   60 FT
SAN CLEMENTE PIER (3 S)      46 MPH    0254 PM 01/31   32 FT
DANA POINT BEACH             45 MPH    0208 PM 01/31   50 FT
SANTA ANA (SNA)              40 MPH    1256 PM 01/31   50 FT
SUNSET BEACH (1 SE)          39 MPH    0216 PM 01/31   9 FT
SUNSET BEACH                 39 MPH    0224 PM 01/31   13 FT
HUNTINGTON BEACH             38 MPH    0150 PM 01/31   16 FT
COSTA MESA                   38 MPH    0247 PM 01/31   59 FT
DANA POINT                   38 MPH    0510 PM 01/31   298 FT
FOUNTAIN VALLEY (3 W)        38 MPH    0529 PM 01/31   20 FT
2 SE SEAL BEACH              37 MPH    0144 PM 01/31   29 FT
SAN CLEMENTE PIER            37 MPH    0155 PM 01/31   24 FT
CRYSTAL COVE                 37 MPH    0238 PM 01/31   33 FT
LAGUNA BEACH (1 SW)          36 MPH    0443 PM 01/31   84 FT

...ORANGE COUNTY INLAND...
BELL CANYON                  47 MPH    0251 PM 01/31   793 FT
SAN CLEMENTE RIDGE           46 MPH    0430 PM 01/31   770 FT
IRVINE                       44 MPH    0154 PM 01/31   74 FT
LOS ALAMITOS (1 SSE)         41 MPH    0243 PM 01/31   36 FT
ORANGE                       40 MPH    0218 PM 01/31   263 FT
ORTEGA                       39 MPH    0220 PM 01/31   1123 FT
CYPRESS                      38 MPH    0250 PM 01/31   42 FT
FULLERTON AIRPORT            37 MPH    0211 PM 01/31   96 FT
BELL CANYON                  36 MPH    0220 PM 01/31   504 FT
SAN CLEMENTE (4 ENE)         35 MPH    0210 PM 01/31   352 FT
SANTA ANA (1 SE)             35 MPH    0218 PM 01/31   73 FT

...RIVERSIDE COUNTY MOUNTAINS-INCLUDING THE SAN JACINTO RANGER DISTRICT OF THE SAN BERNARDINO NATIONAL FOREST...
MT SAN JACINTO               58 MPH    1017 PM 01/30   7000 FT
VISTA GRANDE                 56 MPH    0401 PM 01/31   4906 FT
POPPET FLAT                  54 MPH    1114 AM 01/31   3830 FT
MT SAN JACINTO               44 MPH    0653 PM 01/30   8616 FT
PINYON                       42 MPH    0836 PM 01/30   4060 FT
KEENWILD RAWS                41 MPH    0417 PM 01/31   4920 FT
TORO PEAK                    39 MPH    0505 PM 01/30   8690 FT
ANZA SOUTHEAST               38 MPH    0449 PM 01/30   3920 FT
ANZA                         37 MPH    0354 PM 01/31   3939 FT

...SAN BERNARDINO COUNTY MOUNTAINS-INCLUDING THE MOUNTAIN TOP AND FRONT COUNTRY RANGER DISTRICTS OF THE SAN BERNARDINO NATIONAL FOREST...
HEAPS PEAK                   71 MPH    0215 PM 01/31   6350 FT
BURNS CANYON                 66 MPH    0651 PM 01/30   6284 FT
CONVERSE                     46 MPH    0309 PM 01/31   5618 FT
WRIGHTWOOD                   45 MPH    0135 PM 01/31   6371 FT
BIG BEAR CITY AIRPORT        44 MPH    0235 PM 01/31   6752 FT
BIG PINE FLAT                43 MPH    0335 PM 01/31   6861 FT
FAWNSKIN                     43 MPH    0343 PM 01/31   7000 FT
ROCK CAMP                    42 MPH    0302 PM 01/31   4900 FT
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BIG BEAR CITY (2 SE)	40 MPH	0350 PM 01/31	6790 FT
LAKE ARROWHEAD	40 MPH	0248 PM 01/31	5225 FT
GREEN VALLEY LAKE	40 MPH	0312 PM 01/31	6926 FT
ARROWHEAD NORTHWEST	39 MPH	1054 AM 01/31	5450 FT
BIG BEAR LAKE	36 MPH	0155 PM 01/31	6768 FT
LAKE ARROWHEAD	35 MPH	0317 PM 01/31	4921 FT

...SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE...

LAKE MATHEWS	53 MPH	0316 PM 01/31	1516 FT
CHINO AIRPORT	47 MPH	0213 PM 01/31	680 FT
HIGHLAND SPRINGS	47 MPH	0216 PM 01/31	2233 FT
TEMECULA (8 NE)	46 MPH	0259 PM 01/31	1775 FT
TEMECULA	46 MPH	0149 PM 01/31	1190 FT
HORSETHIEF CANYON	45 MPH	0227 PM 01/31	1460 FT
RIVERSIDE AIRPORT	43 MPH	0240 PM 01/31	818 FT
SAGE	42 MPH	1014 AM 01/31	2560 FT
LAKE ELSINORE (9 WNW)	40 MPH	0227 PM 01/31	1350 FT
TEMESCAL	40 MPH	0341 PM 01/31	1708 FT
PERRIS (2 NW)	40 MPH	0300 PM 01/31	1901 FT
ONTARIO AIRPORT	39 MPH	0231 PM 01/31	947 FT
LAKE ELSINORE (7 WNW)	38 MPH	0333 PM 01/31	1391 FT
CLARK	38 MPH	0354 PM 01/31	1722 FT
MURRIETA/TEMECULA	38 MPH	0255 PM 01/31	1339 FT
NORTH STATION (3 SW TEMECULA	38 MPH	0226 PM 01/31	1098 FT
CORONA AIRPORT	37 MPH	1240 PM 01/31	531 FT
BEAUMONT #2	37 MPH	1138 AM 01/31	2610 FT
MARCH AFB	37 MPH	0316 PM 01/31	1538 FT
TEMECULA (2 NNW)	36 MPH	0245 PM 01/31	1164 FT

...SAN DIEGO COUNTY COASTAL AREAS...

SILVER STRAND BEACH	59 MPH	0243 PM 01/31	30 FT
RED BEACH AIRPORT	58 MPH	0304 PM 01/31	88 FT
LAS FLORES	53 MPH	0322 PM 01/31	760 FT
NORTH ISLAND	53 MPH	0243 PM 01/31	26 FT
OCEANSIDE AIRPORT	52 MPH	0229 PM 01/31	28 FT
BROWN FIELD	51 MPH	0305 PM 01/31	525 FT
LA JOLLA HEIGHTS	49 MPH	0300 PM 01/31	409 FT
MIRAMAR	48 MPH	0257 PM 01/31	478 FT
SAN DIEGO	48 MPH	0244 PM 01/31	15 FT
MISSION VALLEY	47 MPH	0250 PM 01/31	206 FT
TECOLOTE CANYON	47 MPH	0250 PM 01/31	273 FT
DEL MAR HEIGHTS	46 MPH	0320 PM 01/31	294 FT
SAN DIEGO	46 MPH	0400 PM 01/31	13 FT
MISSION VALLEY	45 MPH	0245 PM 01/31	301 FT
CAMP PENDLETON SOUTH	45 MPH	0323 PM 01/31	245 FT
POINT LOMA LIGHTHOUSE	45 MPH	0245 PM 01/31	20 FT
MONTGOMERY FIELD	44 MPH	0301 PM 01/31	420 FT
ELFIN FOREST	44 MPH	0254 PM 01/31	625 FT
LINDA VISTA	44 MPH	0255 PM 01/31	270 FT
SOLANA BEACH	44 MPH	0330 PM 01/31	13 FT
MOONLIGHT BEACH	44 MPH	0239 PM 01/31	36 FT
TIERRASANTA	43 MPH	0303 PM 01/31	626 FT
SPRING VALLEY (2 SW)	43 MPH	0305 PM 01/31	1141 FT
3 N SAN DIEGO	43 MPH	0303 PM 01/31	319 FT
SAN MIGUEL	43 MPH	0250 PM 01/31	424 FT
MIRAMAR	43 MPH	0300 PM 01/31	445 FT
DEL MAR	43 MPH	0155 PM 01/31	9 FT
CORONADO CAYS	43 MPH	0227 PM 01/31	45 FT
TORREY PINES GLIDER PORT	42 MPH	0514 PM 01/31	370 FT
FIESTA ISLAND	42 MPH	0346 PM 01/31	16 FT
CARLSBAD	41 MPH	0250 PM 01/31	71 FT
LEMON GROVE (1 W)	41 MPH	0330 PM 01/31	448 FT
SAN MIGUEL	41 MPH	0240 PM 01/31	500 FT
CAMP PENDLETON	41 MPH	0218 PM 01/31	75 FT
OCEANSIDE	40 MPH	0431 PM 01/31	45 FT
NORTH PARK	40 MPH	0300 PM 01/31	298 FT
PT. LOMA CABRILLO	39 MPH	0129 PM 01/31	350 FT
CARLSBAD AIRPORT	38 MPH	0434 PM 01/31	328 FT
CHULA VISTA (3 SE)	38 MPH	0400 PM 01/31	133 FT
BAY PARK	38 MPH	0401 PM 01/31	34 FT
KENSINGTON	37 MPH	0313 PM 01/31	374 FT
CARLSBAD (3 E)	37 MPH	0201 PM 01/31	328 FT
LEMON GROVE	36 MPH	0339 PM 01/31	439 FT
NATIONAL CITY	36 MPH	0300 PM 01/31	12 FT
OCEANSIDE	35 MPH	0510 PM 01/31	88 FT
BROWN FIELD (5 SE)	35 MPH	0430 PM 01/31	565 FT

...SAN DIEGO COUNTY DESERTS-INCLUDING THE ANZA BORREGO DESERT STATE PARK...

OCOTILLO WELLS	52 MPH	0419 PM 01/31	436 FT
IN KO PAH	45 MPH	0430 PM 01/31	3221 FT
BORREGO SPRINGS (2 E)	42 MPH	0400 PM 01/31	720 FT

BORREGO SPRINGS (3 W)	42 MPH	0400 PM 01/31	820 FT
BORREGO SPRINGS	41 MPH	1141 PM 01/30	587 FT

...SAN DIEGO COUNTY INLAND VALLEYS...

OTAY MOUNTAIN	74 MPH	0414 PM 01/31	3283 FT
MISSION TRAILS	68 MPH	0300 PM 01/31	901 FT
ALPINE (1 NE)	59 MPH	0330 PM 01/31	2667 FT
LYONS PEAK	59 MPH	0435 PM 01/31	3760 FT
RAMONA AIRPORT	59 MPH	0308 PM 01/31	1393 FT
COUNTRY ESTATES	56 MPH	0320 PM 01/31	1849 FT
SKY VALLEY	56 MPH	0330 PM 01/31	2248 FT
MATEO RIDGE	56 MPH	0322 PM 01/31	810 FT
MT. WOODSON	55 MPH	0645 AM 01/31	2850 FT
HARBISON CANYON (3 SE)	55 MPH	0320 PM 01/31	1807 FT
DYE MOUNTAIN	54 MPH	0320 PM 01/31	2998 FT
NORTH BOULDER CREEK	54 MPH	0340 PM 01/31	3091 FT
PALA	54 MPH	0350 PM 01/31	455 FT
ROUND POTRERO	54 MPH	0400 PM 01/31	2634 FT
RAINBOW (1 E)	53 MPH	0302 PM 01/31	2037 FT
OTAY MOUNTAIN	53 MPH	0410 PM 01/31	3359 FT
BARRETT JUNCTION	51 MPH	0340 PM 01/31	1221 FT
GOOSE VALLEY	51 MPH	0352 PM 01/31	1835 FT
LOVELAND RESERVOIR	51 MPH	0320 PM 01/31	1375 FT
OLIVENHAIN	51 MPH	0230 PM 01/31	1167 FT
SPANGLER PEAK (SD COUNTRY ES	51 MPH	0320 PM 01/31	1684 FT
VIEJAS	51 MPH	0330 PM 01/31	2345 FT
WEST RANCHO BERNARDO	51 MPH	0340 PM 01/31	749 FT
FALLBROOK	50 MPH	0230 PM 01/31	953 FT
TALEGA RAWS	50 MPH	0222 PM 01/31	1203 FT
ALPINE	49 MPH	0352 PM 01/31	2810 FT
CUCA RANCH (5 E PAUMA VALLEY	49 MPH	0320 PM 01/31	2579 FT
DEHESA ROAD	48 MPH	0320 PM 01/31	762 FT
ALPINE (4 E)	48 MPH	0330 PM 01/31	2754 FT
OTAY	48 MPH	0300 PM 01/31	862 FT
SANTA YSABEL RANCH	48 MPH	0330 PM 01/31	2943 FT
WITCH CREEK	48 MPH	0320 PM 01/31	2517 FT
BARONA	47 MPH	0320 PM 01/31	1319 FT
SAN MARCOS (1 S)	47 MPH	0243 PM 01/31	393 FT
BARRETT JUNCTION (6 NW POTRE	46 MPH	0350 PM 01/31	2395 FT
CREELMAN (1 S RAMONA)	46 MPH	0320 PM 01/31	1443 FT
HIGHLAND VALLEY	46 MPH	0300 PM 01/31	1358 FT
SUNSET OAKS (4 NE RAMONA)	46 MPH	0320 PM 01/31	2337 FT
WISECARVER	46 MPH	0320 PM 01/31	2552 FT
ALPINE	45 MPH	0219 PM 01/31	1229 FT
DEERHORN VALLEY	45 MPH	0340 PM 01/31	2384 FT
LAKE WOHLFORD	45 MPH	0430 PM 01/31	1642 FT
POTRERO	45 MPH	0400 PM 01/31	2360 FT
SANTA YSABEL (5 SE)	45 MPH	0340 PM 01/31	2604 FT
WEST ALPINE	45 MPH	0330 PM 01/31	1554 FT
CARVEACRE	44 MPH	0400 PM 01/31	1806 FT
JAPATUL VALLEY ROAD	44 MPH	0330 PM 01/31	2834 FT
DULZURA	43 MPH	0320 PM 01/31	1425 FT
HODGES DAM	43 MPH	0300 PM 01/31	375 FT
HELLHOLE CANYON	43 MPH	0330 PM 01/31	2001 FT
ALPINE (3 SE)	43 MPH	0330 PM 01/31	1840 FT
HIDDEN MEADOWS	42 MPH	0240 PM 01/31	1542 FT
SYCAMORE CANYON	42 MPH	0300 PM 01/31	1038 FT
CREST	41 MPH	0240 PM 01/31	1485 FT
LA MESA	41 MPH	0302 PM 01/31	941 FT
LAWSON VALLEY	41 MPH	0330 PM 01/31	1590 FT
ARCHIE MOORE (RAMONA)	40 MPH	0300 PM 01/31	1479 FT
BARONA MESA	40 MPH	0340 PM 01/31	1924 FT
RANCHO SAN DIEGO	40 MPH	0315 PM 01/31	438 FT
ALPINE (1 W)	40 MPH	0316 PM 01/31	1745 FT
LILAC	40 MPH	0320 PM 01/31	999 FT
MUSSEY GRADE (4 SW RAMONA)	40 MPH	0320 PM 01/31	1594 FT
NORTH POTRERO	40 MPH	0440 PM 01/31	2532 FT
ALPINE (1 N)	40 MPH	0320 PM 01/31	1602 FT
TURNER LAKE	40 MPH	0220 PM 01/31	1249 FT
BONSALL (4 E)	39 MPH	0250 PM 01/31	653 FT
LOS COCHES (1 E LAKESIDE)	39 MPH	0320 PM 01/31	780 FT
LA MESA (1 W)	39 MPH	0343 PM 01/31	488 FT
JAMUL (1 E)	39 MPH	0320 PM 01/31	1052 FT
RINCON (5 E)	39 MPH	0320 PM 01/31	2457 FT
POWAY (1 W)	39 MPH	0300 PM 01/31	771 FT
PALA (4 N)	39 MPH	0300 PM 01/31	2196 FT
TALEGA (12 NW FALLBROOK)	39 MPH	0100 PM 01/31	1451 FT
WEST POTRERO	39 MPH	0400 PM 01/31	2302 FT
BONSALL	38 MPH	0428 PM 01/31	222 FT
SANTEE	38 MPH	0300 PM 01/31	435 FT
FRUITVALE	38 MPH	0320 PM 01/31	1835 FT

PALA TEMECULA ROAD (4 E RAIN	38 MPH	0300 PM 01/31	1292 FT
BLOSSOM VALLEY	37 MPH	0320 PM 01/31	1191 FT
COLE GRADE	37 MPH	0300 PM 01/31	1693 FT
VALLEY CENTER (3 SE)	37 MPH	0434 PM 01/31	1998 FT
PAMO VALLEY	37 MPH	0140 PM 01/31	1010 FT
RAINBOW VALLEY	37 MPH	0220 PM 01/31	1094 FT
RANCHO PENASQUITOS	37 MPH	0340 PM 01/31	830 FT
GILLESPIE FIELD AIRPORT	37 MPH	0315 PM 01/31	384 FT
AMMO DUMP (2 W FALLBROOK)	36 MPH	0250 PM 01/31	542 FT
BLACK CANYON (5 NE RAMONA)	36 MPH	0320 PM 01/31	1897 FT
HIDEAWAY LAKE (2 NW VALLEY C	36 MPH	0300 PM 01/31	1421 FT
HIDDEN MEADOWS	36 MPH	0330 PM 01/31	1360 FT
PAUMA VALLEY	36 MPH	0240 PM 01/31	411 FT
RINCON	36 MPH	0320 PM 01/31	896 FT
AVACADO (FALLBROOK)	35 MPH	0240 PM 01/31	648 FT
LA MESA	35 MPH	0317 PM 01/31	570 FT
POWAY (1 E)	35 MPH	0309 PM 01/31	584 FT

...SAN DIEGO COUNTY MOUNTAINS-INCLUDING THE PALOMAR AND DESCANSO RANGER DISTRICTS OF THE CLEVELAND NATIONAL FOREST...

HARRISON PARK	85 MPH	0330 PM 01/31	4861 FT
LUCKY FIVE RANCH	80 MPH	0330 PM 01/31	4740 FT
VOLCAN MOUNTAIN	73 MPH	0340 PM 01/31	5154 FT
JULIAN (4 W)	72 MPH	0330 PM 01/31	3738 FT
PALOMAR MTN (HIGH POINT LOOK	70 MPH	0314 PM 01/31	6142 FT
MOUNT LAGUNA	67 MPH	0755 PM 01/30	6300 FT
LAKE CUYAMACA	67 MPH	0330 PM 01/31	4779 FT
JULIAN (2 SE)	64 MPH	0341 PM 01/31	4487 FT
BOUCHER HILL	64 MPH	1247 PM 01/31	5440 FT
INAJA PARK (SANTA YSABEL)	64 MPH	0330 PM 01/31	3314 FT
WEST WYNOLA	64 MPH	0330 PM 01/31	3553 FT
WEST SANTA YSABEL	62 MPH	0320 PM 01/31	3291 FT
MATAGUAY	61 MPH	0320 PM 01/31	2803 FT
GUATAY	60 MPH	0340 PM 01/31	3892 FT
RANCHITA	60 MPH	0330 PM 01/31	4128 FT
BOULEVARD WEST	59 MPH	0400 PM 01/31	3404 FT
JULIAN	57 MPH	0330 PM 01/31	4201 FT
SILL HILL	57 MPH	0330 PM 01/31	3556 FT
CRESTWOOD	56 MPH	0400 PM 01/31	4114 FT
MESA GRANDE	56 MPH	0400 PM 01/31	3349 FT
WARNERS	56 MPH	0320 PM 01/31	2842 FT
SCHOOL HOUSE CANYON (5 NW JU	55 MPH	0330 PM 01/31	4284 FT
CAMPO	54 MPH	0353 PM 01/31	2630 FT
BIG BLACK MOUNTAIN	53 MPH	0217 PM 01/31	4055 FT
OAK GROVE	53 MPH	0340 PM 01/31	2756 FT
CAMERON (7 N CAMPO)	52 MPH	0230 PM 01/31	3212 FT
DESCANSO	52 MPH	0417 PM 01/31	3567 FT
DESCANSO (1 SW)	52 MPH	0340 PM 01/31	3394 FT
LA POSTA	51 MPH	0400 PM 01/31	4000 FT
DESCANSO (4 N)	50 MPH	0316 PM 01/31	3329 FT
EAST WARNERS	50 MPH	0330 PM 01/31	3242 FT
JULIAN CDF	50 MPH	0355 PM 01/31	4238 FT
VIEJAS GRADE	50 MPH	0330 PM 01/31	3211 FT
BOULEVARD	49 MPH	0350 PM 01/31	3267 FT
RANCHITA (RAWS)	49 MPH	0407 PM 01/31	4415 FT
SANTA YSABEL NORTH	49 MPH	0330 PM 01/31	3009 FT
8 WNW PINE VALLEY	48 MPH	0330 PM 01/31	3609 FT
CAMPO	47 MPH	0340 PM 01/31	2433 FT
CAMERON CORNERS	46 MPH	0410 PM 01/31	2848 FT
BOULDER CREEK	45 MPH	0330 PM 01/31	3706 FT
CAMERON (7 N CAMPO)	45 MPH	0417 PM 01/31	3268 FT
CORTE MADERA	45 MPH	0400 PM 01/31	4004 FT
TIERRA DEL SOL	45 MPH	0400 PM 01/31	3544 FT
PINE VALLEY	44 MPH	0400 PM 01/31	3939 FT
LAGUNA	43 MPH	0400 PM 01/31	5030 FT
NORTH DESCANSO	43 MPH	0400 PM 01/31	3377 FT
PALOMAR MTN	43 MPH	0315 PM 01/31	5486 FT
SHOCKEY TRAIL (CAMPO)	43 MPH	0400 PM 01/31	2886 FT
BUCKMAN SPRINGS	41 MPH	0200 PM 01/31	3263 FT
CHIHUAHUA VALLEY	41 MPH	0340 PM 01/31	4610 FT
LAKE MORENA	41 MPH	0440 PM 01/31	3085 FT
LOS COYOTES (3 SE WARNER SPR	40 MPH	0330 PM 01/31	3815 FT
PINE HILLS (RAWS)	40 MPH	0417 PM 01/31	3651 FT
MT LAGUNA OBSERVATORY	40 MPH	0154 PM 01/31	6110 FT
WYNOLA	39 MPH	0330 PM 01/31	4131 FT
MT PALOMAR	38 MPH	0320 PM 01/31	5483 FT
PINE HILLS	38 MPH	0130 PM 01/31	4058 FT
SUNRISE HIGHWAY	38 MPH	0400 PM 01/31	4010 FT
SUNSHINE SUMMIT	36 MPH	0340 PM 01/31	3244 FT
MT LAGUNA	35 MPH	0452 PM 01/31	5737 FT
LAKE CUYAMACA	35 MPH	0155 PM 01/31	4635 FT

Fig A-19: A Public Information Statement issued by San Diego Office at 5:56 pm PST on January 31, 2016 containing a wind advisory. Source:

https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=LLLSGX&e=201602010156

FIGURE A-19
NWS SAN DIEGO OFFICE AREA FORECAST DISCUSSION

National Weather Service Forecast Office
San Diego, CA

www.weather.gov

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Area Forecast Discussion

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FXUS66 KSGX 010533
  AFDSGX

  AREA FORECAST DISCUSSION
  NATIONAL WEATHER SERVICE SAN DIEGO CA
  933 PM PST SUN JAN 31 2016

  .SYNOPSIS...
  RAIN AND SNOW SHOWERS WILL CONTINUE OVERNGIHT...DECREASING TOWARD
  MORNING...WHILE WINDS REMAIN STRONG AND GUSTY MOST AREAS. THE LOW
  PRESSURE TROUGH RESPONSIBLE WILL MOVE EAST OF THE REGION ON
  MONDAY...TAKING THE PRECIPITATION AND WIND WITH IT. COOL THROUGH
  TUESDAY...THEN DRY AND WARMER THROUGH NEXT WEEKEND AS HIGH PRESSURE
  REBUILDS ALONG THE WEST COAST.

  &&

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

  AT 8 PM PST...RADAR SHOWED SHOWERS MOVING FROM NW TO SE OVER THE
  COASTAL WATERS...AND CONTINUING OVER THE MOUNTAINS. THE SNOW LEVEL
  HAS FALLEN CONSIDERABLY...SO PRECIP IS LIKELY FALLING AS SNOW ABOVE
  4000 FEET. THE 00Z MIRAMAR SOUNDING HAD WSW WINDS 50 KT AROUND 3K
  FT....INCREASING ALOFT. THE PW WAS ONLY 0.69 INCH... WHICH ENDED UP
  A BIT LOWER THAN FORECAST. RAINFALL RANGED FROM BELOW ONE-QUARTER
  INCH IN PORTIONS OF THE INLAND EMPIRE...LOWER DESERTS... AND COASTAL
  AREAS...INCLUDING SAN DIEGO...TO OVER FOUR INCHES ON THE WETTER
  COASTAL SLOPES OF THE SAN BERNARDINO MTS. OROGRAPHICS OBVIOUSLY
  PLAYED A MAJOR ROLE IN THIS EVENT. THE SURFACE PRESSURE GRADIENT WAS
  STILL NEARLY 12 MBS FROM SAN DIEGO TO TONOPAH AT 9 PM PST. STRONG
  WINDS WERE CONTINUING OVER MOST OF THE AREA WITH LOCAL GUSTS
  EXCEEDING 60 MPH.

  A WINTER STORM WARNING HAS BEEN EXTENDED FOR THE SAN BERNARDINO AND
  RIVERSIDE COUNTY MTS.

  THE WINTER WEATHER ADVISORY HAS BEEN EXTENDED FOR THE SAN DEG MTS
  WITH A LOWER LEVEL FOR ACCUMULATING SNOW INCLUDING PORTIONS OF
  THE I-8.

  A HIGH WIND WARNING HAS BEEN ISSUED FOR COASTAL AREAS UNTIL 6 AM FOR
  POTENTIALLY DAMAGING WIND GUSTS OF 50-60 MPH AT TIMES...ESPECIALLY
  ALONG THE IMMEDIATE COAST.

  AFTER THE LAST IMPULSE ASSOCIATED WITH THIS PACIFIC STORM ROTATES
  THROUGH THE BASE OF THE TROUGH TONIGHT...WINDS WILL BEGIN TO DROP
  OFF ON MONDAY. IT WILL STILL BE QUITE WINDY ON MON...SO ADVISORIES
  WILL REMAIN WEST OF THE MTS...WITH A HIGH WIND WARNING CONTINUING
  OVER AND EAST OF THE MTS. ANOTHER WEAK IMPULSE WILL MOVE OVER THE
  REGION IN NW FLOW ALOFT CONTINUING THE COOL NORTHERLY FLOW BEFORE
  HEIGHTS/THICKNESS BEGIN TO RECOVER. THE RECOVERY WILL BE SUBSTANTIAL
  BY NEXT WEEKEND...AND A SHARPENING OF THE RIDGE ALONG THE WEST COAST
  MAY FORCE MODERATE TO STRONG OFFSHORE FLOW EARLY NEXT WEEK.

  THE 00 UTC RUN OF THE EXTENDED GFS STILL POINTS TO OUR NEXT CHANCE
  FOR PRECIPITATION AROUND FEBRUARY 12.

  &&

  .AVIATION...

  010500Z...-SHRA WILL REDEVELOP AT KCRQ AND KSAN AFTER 0900Z DUE TO
  ISLAND BANDING AND CONTINUE THROUGH ABOUT 1500Z MONDAY MORNING.
  OTHER TERMINALS SHOULD BE PRETTY MUCH DONE WITH THE PRECIPITATION
  FOR THE REMAINDER OF THE PERIOD. VERY STRONG WINDS WILL CONTINUE
  ACROSS THE REGION. THE STRONGEST WEST-NORTHWEST WINDS WILL BE AT THE
  COAST AND OVER THE MOUNTAINS AND DESERT SLOPES WITH OCCASIONAL GUSTS
  TO 40-50 KNOTS. INLAND VALLEYS WILL STILL BE STRONG BUT NOT NEARLY
  SO WITH GUSTS IN THE 30-40 KNOT RANGE. SNOW LEVELS 3000-4000 FT MSL
  WILL BRING MOUNTAIN OBSCURATIONS THROUGH ABOUT MONDAY 1800Z WITH SFC
  VSBY AS LOW AS 1/2 SM AT TIMES. BLOWING DUST ALSO POSSIBLE IN THE
  DESERTS WITH SFC VSBY AS LOW AS 1 SM AT TIMES THERE. STG-SVR
  UP/DOWNDRAFTS AND LLWS WILL BE LIKELY OVER AND E OF THE MTNS THROUGH
  00Z TUESDAY.
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&&

.MARINE...

900 PM...CONTINUED STRONG WINDS AND STEEP **COMBINED SEAS** OF 15 TO 19 FT WILL RESULT IN DANGEROUS BOATING CONDITIONS THROUGH EARLY TUESDAY MORNING. **GALE WARNING** IS IN EFFECT THROUGH TUESDAY MORNING...SEE LAXMWWSGX FOR MORE INFORMATION. SEE THE MARINE WEATHER STATEMENT...LAXMWSSGX...FOR MORE DETAILS.

&&

.BEACHES...

930 PM...VERY STRONG WINDS OVER THE **COASTAL WATERS** WILL CONTINUE TO BRING VERY LARGE SHORT-PERIOD WEST-NORTHWEST SWELL WILL BRING ANOTHER ROUND OF HIGH SURF AND STRONG RIP CURRENTS THROUGH MONDAY. VERY ROUGH SURF OF 5 TO 8 FT WITH OCCASIONAL SETS TO 10 FT WILL THROUGH MONDAY AFTERNOON. THE **HIGH SURF ADVISORY** WILL CONTINUE IN EFFECT THROUGH EARLY TUESDAY MORNING. PLEASE SEE LAXCFWSGX FOR MORE INFO.

&&

.SKYWARN...
SKYWARN ACTIVATION IS NOT REQUESTED FOR TONIGHT.

&&

.SGX WATCHES/WARNINGS/ADVISORIES...
CA...**HIGH WIND WARNING** UNTIL 6 PM **PST** MONDAY FOR APPLE AND LUCERNE VALLEYS-COACHELLA VALLEY-RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS-SAN DIEGO COUNTY DESERTS-SAN DIEGO COUNTY MOUNTAINS-SAN GORGONIO PASS NEAR BANNING.

WINTER WEATHER ADVISORY UNTIL 6 AM **PST** MONDAY FOR SAN DIEGO COUNTY MOUNTAINS.

WINTER STORM WARNING UNTIL 6 AM **PST** MONDAY FOR RIVERSIDE COUNTY MOUNTAINS-SAN BERNARDINO COUNTY MOUNTAINS.

WIND ADVISORY UNTIL 6 PM **PST** MONDAY FOR ORANGE COUNTY INLAND AREAS-SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-SAN DIEGO COUNTY VALLEYS-SANTA ANA MOUNTAINS AND FOOTHILLS.

HIGH WIND WARNING UNTIL 6 AM **PST** MONDAY FOR ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS.

HIGH SURF ADVISORY UNTIL 3 AM **PST** TUESDAY FOR ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS.

WIND ADVISORY FROM 6 AM TO 6 PM **PST** MONDAY FOR ORANGE COUNTY COASTAL AREAS-SAN DIEGO COUNTY COASTAL AREAS.

PZ...**GALE WARNING** UNTIL 2 AM **PST** TUESDAY 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.

Fig A-19: An area forecast discussion containing a wind advisory issued by NWS San Diego office at 9:33 pm PST on January 31, 2016. Source: http://www.wrh.noaa.gov/total_forecast/getprod.php?afos=xxxafdsgx&wfo=sgx&font=120&version=3

FIGURE A-20
IMPERIAL VALLEY AIR QUALITY ALERT

Imperial Valley Air Quality Alert

Niland - English Road

Sunday, January 31 - 3:00 PM
PM2.5 AQI reached 116 - Unhealthy for Sensitive Groups

PM2.5 AQI 101-150 People with respiratory or heart disease, the elderly, and children are the groups most at risk, especially when they are physically active. There is an increased likelihood of respiratory symptoms in sensitive individuals, and aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly. U.S. EPA cautions that "people with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion." 'Prolonged' generally means four or more hours with short rest periods. 'Heavy exertion' is that which would increase the resting breathing rate four fold or greater. You can reduce exposure to particulate material by: - Reducing the intensity and duration of your outdoor activities - Postponing outdoor activities to days when particulate levels are lower

Current Maximum AQI for Other Imperial Valley Cities

Brawley - 220 Main Street: Moderate (PM10)

Calexico - Ethel Street: Good (PM2.5)

El Centro - 9th Street: Good (PM10)

Westmorland - 570 Cook St: Good (Ozone)

This notification was issued by the Imperial Valley Air Pollution Control District.
Visit http://www.imperialvalleyair.org for current readings, ozone movies, and additional air quality information.
The current PM2.5 AQI shown in this Air Alert message is calculated using EPA's NowCast methodology and not the 24-hour average. The NowCast was developed to better reflect and communicate current PM2.5 readings. Since PM2.5 readings can fluctuate considerably over the course of a 24-hour period, the PM2.5 AQI shown in this Air Alert may vary from the final 24-hour average PM2.5 AQI.
All observational data on this web site are not verified or validated and should be considered preliminary. From time to time error codes are included into the calculations for the AQI – for verification please contact the Air District office.
To change your AirAlert subscription, go to http://www.imperialvalleyair.org/airalert.cfm.

Fig A-20: An Air Quality Alert issued by the Air District at 3:00 pm PST on January 31, 2016. Source: www.imperialvalleyair.org

FIGURE A-21
DUST IDENTIFIED OVER SOUTHEASTERN CALIFORNIA

Saturday, January 30, 2016

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY THROUGH 0145Z January 31, 2016

No significant areas of smoke were observed.

Blowing Dust â€“ An area of blowing dust was observed originating from White Sands and extending just to the NE further to the west another area of blowing dust was originating just east of Cochise, Arizona, and extending ESE towards the Central New Mexico International Border. Another small area of blowing dust was observed just to the southwest of the Salton Sea in southern California and moving to the east.

Hanna

THIS TEXT PRODUCT IS PRIMARILY INTENDED TO DESCRIBE SIGNIFICANT AREAS OF SMOKE ASSOCIATED WITH ACTIVE FIRES AND SMOKE WHICH HAS BECOME DETACHED FROM THE FIRES AND DRIFTED SOME DISTANCE AWAY FROM THE SOURCE FIRE..TYPICALLY OVER THE COURSE OF ONE OR MORE DAYS. AREAS OF BLOWING DUST ARE ALSO DESCRIBED. USERS ARE ENCOURAGED TO VIEW A GRAPHIC DEPICTION OF THESE AND OTHER PLUMES WHICH ARE LESS EXTENSIVE AND STILL ATTACHED TO THE SOURCE FIRE IN VARIOUS GRAPHIC FORMATS ON OUR WEB SITE:

JPEG: http://www.ospo.noaa.gov/Products/land/hms.html
GIS: http://www.firedetect.noaa.gov/viewer.htm
KML: http://www.ssd.noaa.gov/PS/FIRE/kml.html
ANY QUESTIONS OR COMMENTS REGARDING THIS PRODUCT SHOULD BE SENT TO SSDFireTeam@noaa.gov

---

Unless otherwise indicated:

- Areas of smoke are analyzed using GOES-EAST and GOES-WEST Visible satellite imagery.
- Only a general description of areas of smoke or significant smoke plumes will be analyzed.
- A quantitative assessment of the density/amount of particulate or the vertical distribution is not included.
- Widespread cloudiness may prevent the detection of smoke even from significant fires.

Fig A-21: A copy of NOAA's Satellite Services Division Smoke Text Product identified dust drifting over portions of southeastern California in the vicinity of the Salton Sea. The notice was effective through 17:45 PST January 30, 2016, confirming the windblown dust entering Imperial County as early as January 30, 2016. Source: http://www.ssd.noaa.gov/PS/FIRE/DATA/SMOKE/2016/2016A310611.html

FIGURE A-22
DESERT WEATHER WIND ADVISORY

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH PROFILE VEHICLES. USE EXTRA CAUTION.

WIND ADVISORY

MORONGO BASIN (CAZ525)

Effective: Mon, Feb 1, 2016 02:02pm PST
Updated: Mon, Feb 1, 2016 02:02pm PST
Expires: Mon, Feb 1, 2016 06:00pm PST
Areas Affected: Morongo Basin; Western Mojave Desert

Severity: Minor
Urgency: Expected
Certainty: Likely

Alert:

```
...WIND ADVISORY IN EFFECT UNTIL 6 PM PST THIS EVENING...
...HIGH WIND WARNING IS CANCELLED...
THE HIGH WIND WARNING HAS BEEN CANCELLED.
* TIMING...WINDS WILL CONTINUE THROUGH LATE AFTERNOON BEFORE
DECREASING EARLY EVENING.
* WINDS...NORTHWEST 20 TO 30 MPH WITH GUSTS 40 TO 50 MPH.
* IMPACTS...STRONG CROSSWINDS WILL CREATE DIFFICULT DRIVING
CONDITIONS FOR HIGH PROFILE VEHICLES. BRIEFLY LOWERED
VISIBILITIES IN BLOWING SAND AND DUST...ESPECIALLY NEAR DRY
LAKE BEDS.
```

Instructions:
USE CAUTION WHEN DRIVING DURING HIGH WINDS. TAKE ACTION TO SECURE LOOSE OR LIGHTWEIGHT OUTDOOR OBJECTS.

WIND ADVISORY

IMPERIAL COUNTY (CAZ033)

Effective: Mon, Feb 1, 2016 01:30pm PST
Updated: Mon, Feb 1, 2016 01:30pm PST
Expires: Mon, Feb 1, 2016 06:00pm PST
Areas Affected: Imperial County; Joshua Tree National Park; Riverside County, Eastern Deserts

Severity: Minor
Urgency: Expected
Certainty: Likely

Alert:

```
...WINDY CONDITIONS EXPECTED ACROSS SOUTHEASTERN CALIFORNIA
THROUGH THIS EVENING...
...WIND ADVISORY REMAINS IN EFFECT UNTIL 6 PM PST THIS EVENING...
* AFFECTED AREA...SOUTHEASTERN CALIFORNIA INCLUDING JOSHUA TREE
NATIONAL PARK
* TIMING...THROUGH THIS EVENING.
* WINDS...SUSTAINED WINDS 35 MPH WITH GUSTS UP TO 50 MPH.
* IMPACTS...MOTORISTS WILL ENCOUNTER HAZARDOUS CROSS WINDS. THIS
WILL ESPECIALLY BY THE CASE FOR HIGH PROFILE VEHICLES. BLOWING
DUST WILL ALSO BE POSSIBLE CAUSING RAPID REDUCTIONS IN
VISIBILITY. USE EXTRA CAUTION WHEN TRAVELING AT NIGHT.
```

Instructions:
A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN 30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND 58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA CAUTION.

NO WARNINGS, WATCHES, OR ADVISORIES

COACHELLA VALLEY-INCLUDING THE PALM SPRINGS SOUTH COAST DESERT DISTRICT CALIFORNIA (CAZ061)

Effective: ---
Updated: Mon, Feb 1, 2016 02:15pm PST
Expires: ---
Areas Affected: Coachella Valley

Severity: None
Urgency: None
Certainty: None

Alert:

No alerts for Coachella Valley-Including The Palm Springs South Coast Desert District California

NO WARNINGS, WATCHES, OR ADVISORIES

RIVERSIDE COUNTY MOUNTAINS-INCLUDING THE SAN JACINTO RANGER DISTRICT OF THE SAN BERNARDINO NATIONAL

FOREST CALIFORNIA (CAZ056)

Effective: ---
Updated: Mon, Feb 1, 2016 02:15pm PST
Expires: ---
Areas Affected: Riverside County Mountains

Severity: None
Urgency: None
Certainty: None

Alert:

No alerts for Riverside County Mountains-Including The San Jacinto Ranger District Of The San Bernardino National Forest California

Warning Map

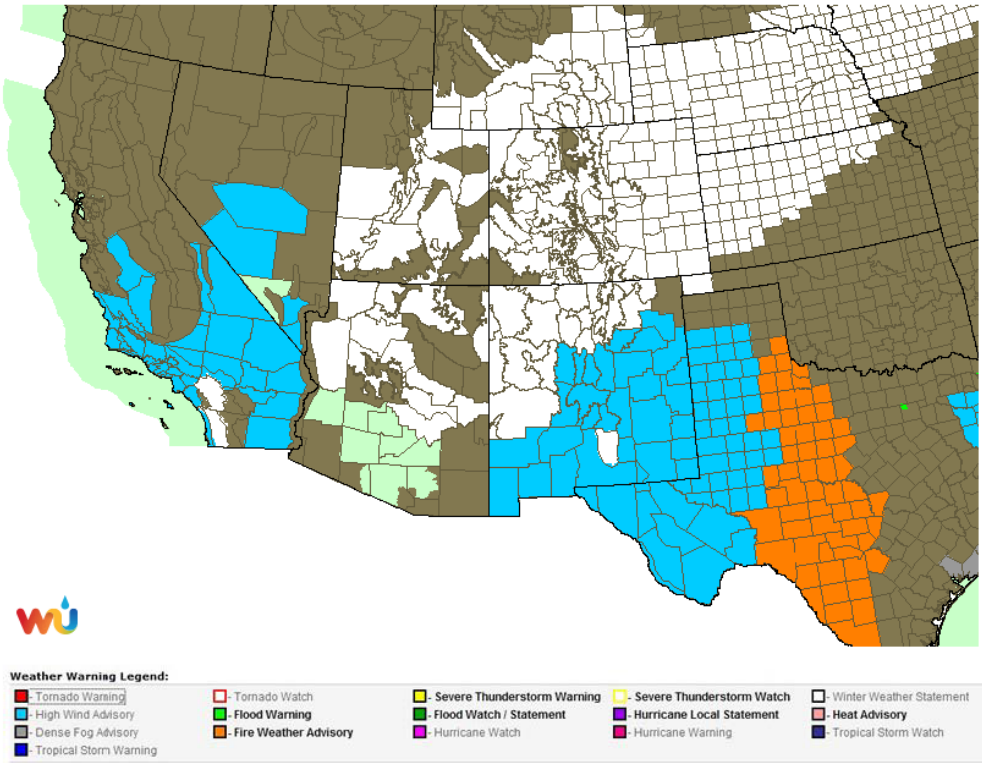

Fig A-22: An excerpt from the Desert Weather website containing a wind advisory for Imperial County. Source: http://desertweather.com/warningsAtom.php?zone=CAZ033&loc=Imperial+County

FIGURE A-23
IMPERIAL VALLEY AIR QUALITY ALERT

Imperial Valley Air Quality Alert

Brawley - 220 Main Street

Monday, February 1 - 4:00 AM
PM10 (24-hr average) AQI reached 212 - Very Unhealthy

PM10 AQI 201-300 People with respiratory or heart disease, the elderly, and children are the groups most at risk. Persons with cardiopulmonary disease and the elderly may experience significant aggravation of heart or lung disease and premature mortality. The general population may experience a significant increase in respiratory effects. U.S. EPA cautions that "people with heart or lung disease, older adults, and children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion." 'Prolonged' generally means four or more hours with short rest periods. 'Heavy exertion' is that which would increase the resting breathing rate four fold or greater. You can reduce exposure to particulate material by: - Reducing the intensity and duration of your outdoor activities - Postponing outdoor activities to days when particulate levels are lower

Current Maximum AQI for Other Imperial Valley Cities

Calexico - Ethel Street: Moderate (PM10)

El Centro - 9th Street: Moderate (PM10)

Niland - English Road: Unhealthy (PM10)

Westmorland - 570 Cook St: Good (Ozone)

This notification was issued by the Imperial Valley Air Pollution Control District.
Visit http://www.imperialvalleyair.org for current readings, ozone movies, and additional air quality information.
All observational data on this web site are not verified or validated and should be considered preliminary. From time to time error codes are included into the calculations for the AQI – for verification please contact the Air District office.
To change your AirAlert subscription, go to http://www.imperialvalleyair.org/airalert.cfm
For more information on how the AQI is calculated, visit Air Now.

Fig A-23: An Air Quality Alert issued by the Air District at 4:00 pm PST on February 1, 2016. Source: www.imperialvalleyair.org

FIGURE A-24
IMPERIAL VALLEY AIR QUALITY ALERT

Imperial Valley Air Quality Alert

Niland - English Road

Monday, February 1 - 12:00 AM
PM10 (24-hr average) AQI reached 153 - Unhealthy

PM10 AQI 151-200 People with respiratory or heart disease, the elderly, and children are the groups most at risk, especially when they are physically active. Persons with cardiopulmonary disease and the elderly may experience increased aggravation of heart or lung disease and premature mortality. The general population may experience increased respiratory effects. U.S. EPA cautions that "people with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion. Everyone else should reduce prolonged or heavy exertion." 'Prolonged' generally means four or more hours with short rest periods. 'Heavy exertion' is that which would increase the resting breathing rate four fold or greater. You can reduce exposure to particulate material by: - Reducing the intensity and duration of your outdoor activities - Postponing outdoor activities to days when particulate levels are lower

Current Maximum AQI for Other Imperial Valley Cities

Brawley - 220 Main Street: Unhealthy for Sensitive Groups (PM10)

Calexico - Ethel Street: Moderate (PM2.5)

El Centro - 9th Street: Good (PM10)

Westmorland - 570 Cook St: Good (Ozone)

This notification was issued by the Imperial Valley Air Pollution Control District.
Visit http://www.imperialvalleyair.org for current readings, ozone movies, and additional air quality information.
All observational data on this web site are not verified or validated and should be considered preliminary. From time to time error codes are included into the calculations for the AQI – for verification please contact the Air District office.
To change your AirAlert subscription, go to http://www.imperialvalleyair.org/airalert.cfm
For more information on how the AQI is calculated, visit Air Now.

Fig A-24: An Air Quality Alert issued by the Air District at 12:00 am PST on February 1, 2016. Source: www.imperialvalleyair.org

FIGURE A-25
AIR QUALITY INDEX

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health alert: everyone may experience more serious health effects.
Hazardous	301 to 500	Health warnings of emergency conditions. The entire population is more likely to be affected.

Fig A-25: The Air Quality Index The AQI is an index for reporting daily air quality. It tells you how clean or polluted your air is, and what associated health effects might be a concern for you. The AQI focuses on health effects you may experience within a few hours or days after breathing polluted air. EPA calculates the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, EPA has established national air quality standards to protect public health .Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country. Source: https://airnow.gov/index.cfm?action=aqibasics.aqi

FIGURE A-26
IMPERIAL COUNTY ISSUED NO BURN DAY

Imperial County Air Pollution Control District
Daily Weather and Ag. Burning Information

Date: Sunday, January 31, 2016

Yesterday's Weather Observations at Imperial Airport (ASOS) FAA/NWS

LOCAL TIME	TEMP °F	WINDS MILES PER HOUR	VISIBILITY MILES
7 AM	48	WSW-3	10
8 AM	53	CALM	10
9 AM	60	E-3	6
10 AM	67	S-5	9
11 AM	75	SSW-13	9
NOON	82	SW-17	10
1 PM	84	WSW 20G26	10
2 PM	83	WSW 24G31	10
3 PM	82	WSW-22	10
4 PM	80	SW-18	10
5 PM	75	WSW 21G28	10
6 PM	70	WSW 22G30	10
7 PM	68	SSW-13	10
Max. Temperature yesterday was 84 degrees			

Today's Mt. Signal Visibility at 7:30 AM clear NKX 12Z 500 MB Height _____
1Y7 12Z 500 MB Height _____

Forecasts
High Today 66-71

	Local Forecast (Issued 8 AM Local)		Computer Forecast (RUC 40KM 12Z)	
Est. Time Mixing Height reaches 3000 feet	N/A		10:00 AM	
Forecast of Maximum Mixing Height	N/A	feet	5,280	feet
Forecast for Morning surface winds	W 10-20	mph	W 10-20	mph
Forecast for afternoon surface winds	SW 25-35	mph	SW 25-35	mph
Forecast for evening surface winds	SW 25-35	mph		
Forecast 10 AM - 3 PM transport winds	SW 25-35	mph		

Comments/Complaints: **Wind advisory today (gusts up to 50 mph)**

Burn Hours _____ ARB No Burn Day _____ District called No Burn Day XXXX
Total actually burned today _____ acres Crops burned _____

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT 2011 Int FG

Fig A-26: Is a copy of the Imperial County Air Pollution Control District official record of the conditions as they existed for a determination of a "No Burn" day on January 31, 2016

FIGURE A-27

IMPERIAL COUNTY ISSUED NO BURN DAY

Imperial County Air Pollution Control District
Daily Weather and Ag. Burning Information

Date: Monday, February 1, 2016

Yesterday's Weather Observations at Imperial Airport (ASOS) FAA/NWS

LOCAL TIME	TEMP °F	WINDS MILES PER HOUR	VISIBILITY MILES
7 AM	57	ESE-7	10
8 AM	58	S-8	10
9 AM	64	SSW-10	6
10 AM	68	SSE-13	9
11 AM	70	S-12	9
NOON	71	SE-9	10
1 PM	74	SE-9	10
2 PM	75	SW-21G26	10
3 PM	74	SW-26G37	9
4 PM	n/a	n/a	n/a
5 PM	62	WSW-22G37	2.5
6 PM	60	SW-13	10
7 PM	57	WSW-31G40	10
Max. Temperature yesterday was 70 degrees			

Today's Mt. Signal Visibility at 7:30 AM cloudy NKX 12Z 500 MB Height _____
1Y7 12Z 500 MB Height _____

Forecasts
High Today 60-65

	Local Forecast (Issued 8 AM Local)		Computer Forecast (RUC 40KM 12Z)	
Est. Time Mixing Height reaches 3000 feet	N/A		8:30 AM	
Forecast of Maximum Mixing Height	N/A	feet	8,910	feet
Forecast for Morning surface winds	W 20-30	mph	W 20-30	mph
Forecast for afternoon surface winds	W 20-30	mph	W 20-30	mph
Forecast for evening surface winds	W 20-30	mph		
Forecast 10 AM - 3 PM transport winds	W 20-30	mph		

Comments/Complaints: **Wind advisory today (gusts up to 40 mph)**

Burn Hours _____ ARB No Burn Day _____ District called No Burn Day XXXX
Total actually burned today _____ acres Crops burned _____

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT 2011 Int FG

Fig A-27: Is a copy of the Imperial County Air Pollution Control District official record of the conditions as they existed for a determination of a "No Burn" day on January 31, 2016

FIGURE A-28
ICAPCD SMOKE COMPLAINT

IMPERIAL COUNTY
AIR POLLUTION CONTROL DISTRICT
COMPLAINT # 6954

Date	Time	Initial	Supplemental
2-1-2016	2:30pm	E.S.	

Complainant Name: Ellen Sample
Complainant Address: Desert Shores

Phone: 760-395-5140

Smoke:	Dust:	Open Fire:	Ag Related:	Odors:	Other:

There has been smoldering at the property located on 3600 Hwy 86 for the last few days. Smoke is impacting other residences

Statement of Source (Inspector's Report):

Fig A-28: Is a complaint the Air District received on February 1, 2016 regarding smoke in the Desert Shores area

FIGURE A-29
FOX 5 SAN DIEGO WINDSTORM COVERAGE

Cold, windy winter storm hits San Diego

POSTED 11:38 AM, JANUARY 31, 2016, BY FOX 5 DIGITAL TEAM, *UPDATED AT 06:55PM, JANUARY 31, 2016*

This is an archived article and the information in the article may be outdated. Please look at the time stamp on the story to see when it was last updated.

Downed Trees, Powerlines Wreak Havoc Throughout San Diego County

SAN DIEGO - A winter storm moved down the coast and into San Diego County Sunday bringing cold temperatures and damaging winds.

At mid-morning, a forecaster said the area was getting "the initial pre-frontal showers, before the cold front later this afternoon." National Weather Service Forecaster Tina Stall said"the wind is starting to pick up."

> Rain casualty: 90 foot Torrey pine tree uprooted on street. https://t.co/CD3NSdz3U0—
> Robert Burns (@RobertBurnsTV) January 31, 2016

Heavy winds and saturated grounds uprooted a 90 foot Torrey pine tree from in front of an Escondido home.

The tree luckily landed just feet away from a family car and 25 feet from a house.

"I went and got the paper. 10 minutes later, while reading the paper I hear a huge cracking thunderous sound," said Brett Drury. "

"We were just really blessed," said Dana Drury. "We're very fortunate that the winds didn't push it the way it was leaning which would have come right in (our daughter's) room."

The Farmers Insurance Open professional golf tournament experienced delays due to the strong winds and occasional downpours. PGA Tour officials postponed the final round of the tournament one day. It'll resume at 8 a.m. Monday.

Play @FarmersInsOpen has been called for the day. Will resume at 8am Monday. @PGATOUR

— PGA TOUR Media (@PGATOURmedia) January 31, 2016

Wind and rain, go away. pic.twitter.com/GOETOfSTLS

— PGA TOUR (@PGATOUR) January 31, 2016

Excess rain water caused flooding on local roads in Spring Valley and Mission Valley.

Flooding turning some drivers around, others muscling through. #SanDiegoWX #springvalley pic.twitter.com/ZPt3xIJmh9

— Robert Burns (@RobertBurnsTV) January 31, 2016

The National Weather Service issued a high wind warning for the mountains and deserts for the 24 hours through 6 p.m. tonight. Wind gusts could reach as high as 85 miles per hour in the mountains.

A high surf advisory was in effect until 10 p.m. for San Diego coastal areas, including strong rip currents and minor beach erosion expected from 8-foot wave sets.

Julian, Pine Valley and the Laguna Mountains should see snow, including the higher elevations of Interstate 8 east of Alpine, as the snow level could drop to the 3,000-foot elevation by Monday morning, forecasters said.

Up to an inch of rain was forecast for San Diego's coast and inland valley, as much as three inches in the mountains. Minor urban flooding is likely, according to the weather service.

The expected storm is keeping crews busy clearing out drainage areas.

@fox5sandiego strong winds take down a fence in Chula Vista pic.twitter.com/szadeFI3YB

— samantha rivera (@Sammy4257) January 31, 2016

Fig A-29: An excerpt from Fox 5 San Diego news posted at 11:38 am PST on January 31, 2016 covering a large windstorm that hit San Diego

FIGURE A-30
SAN DIEGO UNION TRIBUNE WINDSTORM COVERAGE

Fierce storm unleashes on San Diego

By **Lyndsay Winkley and Gary Robbins**

JANUARY 31, 2016, 1:34 AM

A fierce Pacific storm brought heavy rain and wild winds to San Diego Sunday, causing power outages, interrupting -- then delaying -- the final round of the Farmers Insurance Open golf tournament at Torrey Pines, and toppling trees including one that killed a motorist in Pacific Beach.

Winds gusted to about 50 mph along the coast, and were strong enough to uproot the 80-foot-tall tree in Pacific Beach that crushed three parked cars and one passing by on Ingraham Street near Fortuna Avenue, causing fatal injuries to a person inside.

San Diego Fire-Rescue Department Capt. Joe Amador called the incident "unimaginable," noting that the car could have been easily missed by the falling tree.

"Even five seconds one way or the other and this wouldn't have happened," Amador said. "Our thoughts and hearts are with the family. We're in the life-saving business and it's hard when it doesn't turn out that way."

Related:

One person dead after falling tree crushes car in Pacific Beach

The fatal accident was just one of the instances that had emergency crews scrambling across the county. Falling trees damaged cars and homes, roadways were flooded or littered with debris and crashes clogged busy thoroughfares.

The storm arrived in on-again off-again waves that had golfers at Torrey Pines seeking shelter from 40 mph winds and rain one moment, then returning to the squishy course the next to play under blue skies. But the winds wouldn't relent. The media tent eventually had to be evacuated because it appeared on the verge of taking flight. At 3:30 p.m., tournament organizers postponed all play, saying they'd finish the competition Monday.

"One of the caddies told me it's the worst (weather) he's seen, and he's been doing it for 20-some years," said Wayne Birch, who caddied for Andrew Loupe.

The National Weather Service said that the system was expected to drop about one inch of rain in San Diego by early Monday, and at least twice as much in some foothills and valleys. The air was expected to turn cold enough to produce several inches of snow on the county's highest mountain peaks, with flakes falling all the way down to the 5,500-foot level.

View the photo gallery: Blustery winds, soaking rains hit county

The storm originated in the western Pacific, which is fairly common during an El Niño year, but forecaster Phil Gonsalves noted that the El Niño contribution to Sunday's system was impossible to gauge, as it is with any storm.

As the system rolled across the county, about 38,000 San Diego Gas & Electric customers lost power.

Some of those outages were blamed on downed power poles and all were weather related, an SDG&E spokeswoman said. One power pole snapped in half and pulled a second pole down onto state Route 78 in Carlsbad. Another was knocked down by a tree off Interstate 15 near Pala Mesa, sparking a fire.

The National Weather Service said winds gusted up to 74 mph at Volcan Mountain near Julian and 61 mph at Mount Laguna. There were gusts recorded at 52 mph in Anza Borrego, 49 mph in Point Loma and more than 40 mph at Del Mar

and Torrey Pines.

Gusts turned umbrellas inside out, pulled boats away from their moorings and toppled dozens of trees.

A 50-foot Torrey Pine tree fell onto Genesee Avenue near Governor Drive blocking traffic until crews could chop and haul it away. Some were completely uprooted and blown into freeways. They fell onto cars, and homes in Pala, the College Area and Oceanside were damaged.

Monitor Southern California Edison power outages. ... Real-time traffic conditions ... Farmers Insurance Open weather update ...

On Palomar Mountain, wind speeds topped 70 mph just after 3 p.m.

"I saw on the forecast 75 mph winds could be possible up here and we agree with that number," said Bonnie Phelps, who lives on the mountain. "It has really been crazy, crazy windy."

Phelps said she saw rockslides and several tree branches down as she took an afternoon drive around Palomar, but didn't spot any big trees toppled by the gusty winds. There was no snow, either.

"We are going to have to have the temperatures drop a little more to get snow tonight," Phelps said. "We don't say that this kind of weather is bad – this is good. We love the four seasons and we love this beautiful rain and we really love the snow."

Prior to the start of Sunday's storm, San Diego's Lindbergh Field had recorded 3.07 inches of rain in January, which is ıed an additional 0.16 of an inch.

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wide. Dozens of vehicles spun out into guardrails, signs ebsite. Near East Village, an SUV lost traction, and careened down an embankment onto its side about 10:40 a.m.

Flooding and mud also blocked thoroughfares. Quarry Road in Spring Valley was closed from state Route 125 to Lakeview due to flooding, according to the San Diego County Public Works Department. Lanes across the county were blocked by all sorts of debris, from tumbleweeds and bushes to rocks and signs.

Updated: Sample of Sunday's rainfall totals, through 5 p.m.:

Palomar Observatory: 3.36"

Lake Wohlford: 1.57"

Poway: 1.34"

Valley Center: 1.31"

Escondido: 1.24"

Alpine: 1.09"

Rancho Bernardo: 1.00"

Fallbrook: 0.74"

San Marco: 0.72"

Del Mar: 0.61"

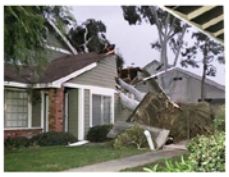
Fig A-30: An excerpt from The San Diego tribune posted at 1:34 am PST on January 31, 2016 covering a large windstorm that hit San Diego. Source: http://www.sandiegouniontribune.com/sdut-wind-rain-weekend-2016jan31-htmlstory.html

FIGURE A-31
CBS NEWS 8 WINDSTORM COVERAGE

Pacific storm wreaks havoc across San Diego County

Updated:

By CBS News 8 Weather Team Connect



This photo, captured by CBS News 8 photographer Ann Marie Spaulding, shows a tree that fell through a home in Oceanside Sunday, January 31, 2016.

8 Weather Update: February 1, 2016 (6:32 a.m.)

SAN DIEGO (CNS) - The rain and snow from the winter storm that wreaked havoc on San Diego County roadways over the weekend, caused widespread power outages and delayed play in the Farmers Insurance PGA tournament were easing up Monday morning, but potentially damaging wind is expected to continue blowing into Monday afternoon.

A National Weather Service winter storm advisory for the mountains, including Pine Valley and Julian, is set to expire at 6 a.m. Monday, but wind advisories affecting the entire county will remain in effect until 6 p.m.

Forecasters said mountain areas between 3,500 and 4,500 feet would likely end up with 1 to 3 inches of snow, 3 to 5 inches would accumulate in locales of 4,500 to 5,500 feet and 4 to 8 inches are expected above 5,500 feet.

West to northwest winds of 25 to 45 mph and gusts to 70 mph are also expected in the mountains this morning, as are winds of 25 to 35 mph and gusts to 55 mph in the deserts, winds of 20 to 30 mph and gusts to 40 in the valleys and 20- to 30- mph winds and up to 55 mph near the beaches, forecasters said. The winds are expected to weaken somewhat Monday afternoon.

Forecasters said the strongest winds would blow near mountain ridgetops and along desert mountain slopes. The wind may lead to hazardous driving conditions, especially for motorists in high-profile vehicles, and may be again strong enough to down power lines and tree branches.

On Sunday, the storm caused power outages, downed trees, flooded roadways and prompted authorities to suspend play several times at the Farmers Insurance PGA tournament at Torrey Pines Golf Course. Wind gusts in Harrison Park in the mountains even reached 85 mph.

In a 48-hour period ending shortly before 10 p.m. Sunday, automated gauges elsewhere in the county logged peak gusts of 80 mph at the Lucky Five Ranch; 73 mph on Volcan Mountain; 72 mph in Julian; 70 mph on Palomar Mountain; 67 mph at Lake Cuyamaca; 64 mph in Santa Ysabel, Wynola and Point Loma; 60 mph in coastal Oceanside; 59 mph in Mission Beach, Coronado and Del Mar ; 57 mph in Borrego Springs; 52 mph in Ocotillo Wells; and 51 mph in La Jolla and Camp Pendleton, according to unofficial data from the weather service. Numerous other locations clocked gusts of 50 mph or less.

The trough of low pressure responsible for the wintry weather is expected to move east out of

Links

- CBS News 8 MicroClimate Weather
- CoolZones.org
- National Weather Service: San Diego
- San Diego County Emergency Site
- San Diego County HHSA - Cool Zones
- San Diego County Water Authority
- SDG&E Cool Zones

San Diego Bay

Panda Cam

Chopper 8

Pacific Terrace Cam

the region Monday and take with it the rain and snow Monday morning, and the wind this afternoon, according to the NWS.

> *"Wind gusts 41mph in #sandiego and #Oceanside. 57 mph near border. It will stay very gusty until late afternoon. pic.twitter.com/iy8x8BdQCT— Heather Myers (@HeatherCBS8) February 1, 2016"*

> *"Three years in #SanDiego and this is the first time I've seen wind snap a palm tree. #sandiegoweather @CBS8 pic.twitter.com/KFXtO8Evu9— Dominic Garcia (@DomCBS8) February 1, 2016"*

> *"Here's a look minutes later pic.twitter.com/z3tLeXa8bV— Brandon Lewis (@BrandonCBS8) January 31, 2016"*

> *"Storm preps in place near Tijuana River Valley. Minor flooding driving in. pic.twitter.com/ZPlxGNNR6L— Brandon Lewis (@BrandonCBS8) January 31, 2016"*

> *"Giant tree falls down at Genesee Ave & Governor Drive blocking streets and causing police to divert traffic. @CBS8 ?? pic.twitter.com/WqvM55lFul— Heather HOPE (@HopeCBS8) January 31, 2016"*

Fig A-31: An excerpt from The San Diego tribune posted at 6:32 am PST on February 1, 2016 covering a large windstorm that hit San Diego. Source: http://www.cbs8.com/story/9532416/pacific-storm-brings-rain-strong-winds-to-san-diego-county

FIGURE A-32
KUSI NEWS WINDSTORM COVERAGE

Winter storm hitting San Diego County Sunday

Posted: Jan 30, 2016 3:57 PM PST
Updated: Feb 06, 2016 12:14 PM PST

SAN DIEGO (KUSI) - **Sunday -** A cold, windy and wet winter storm came down the coast into San Diego County Sunday.

National Weather Service Forecaster Tina Stall said at midmorning San Diego saw "the initial pre-frontal showers, before the cold front later this afternoon" and "the wind is starting to pick up."

The Farmers Insurance Open professional golf tournament experienced delays. The 10 a.m. start time was suspended about 40 minutes after it began.

There is a high wind warning for the mountains and deserts for the next 24 hours through 6 p.m. Sunday night. Wind gusts could reach as high as 85 miles per hour in the mountains.

A high surf advisory was in effect until 10 p.m. for San Diego coastal areas, including strong rip currents and minor beach erosion expected from 8-foot wave sets.

Julian, Pine Valley and the Laguna Mountains should see snow, including the higher elevations of Interstate 8 east of Alpine, as the snow level could drop to the 3,000-foot elevation by Monday morning, forecasters said.

Up to an inch of rain was forecast for San Diego's coast and inland valley, as much as three inches in the mountains. Minor urban flooding is likely, according to the weather service.

The expected storm is keeping crews busy clearing out drainage areas, and many weather-related crashes were reported Sunday morning.

Saturday - A cold, windy and wet winter storm is bearing down on San Diego County this weekend, with the worst of it expected by Sunday night.

The National Weather Service has issued a high wind warning for the mountains and deserts beginning Sunday at 6 p.m. through Monday at 6 p.m. Wind gusts are expected to reach highs as fast as 85 mph in the mountains.

A high surf advisory is in effect until 10 p.m. Saturday for San Diego coastal areas, warning of strong rip currents and minor beach erosion expected from 8-foot sets.

The snow level could drop to the 3,000-foot level by Monday morning. Up to an inch of rain is forecast for San Diego's coast and inland valley, as much as three inches in the mountains. Minor urban flooding is likely, according to the weather service.

The expected storm is keeping crews busy clearing out drainage areas. The Farmers Insurance Open professional golf tournament at Torrey Pines has moved tee times earlier Sunday in an attempt to avoid the harsh weather.

A warming trend is expected next week.

Fig A-32: An excerpt from The San Diego tribune posted at 3:57 pm PST on January 30, 2016 covering a large windstorm that hit San Diego. Source: http://www.kusi.com/story/31099192/san-diego-county-is-expecting-cold-weather-with-high-winds-this-weekend

FIGURE A-33
IMPERIAL COUNTY AFFIDAVIT OF 30 DAY PUBLIC NOTICE

AFFIDAVIT OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of Imperial

I am a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk* of the printer of the

Imperial Valley Press

a newspaper of general circulation, printed and published daily in the City of El Centro, County of Imperial and which newspaper has been adjudged a newspaper of genera circulation by the Superior Court of the County of Imperial, State of California, under the date of October 9, 1951, Case Number 26775; that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

11/19 .

all in the year 2017

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

SIGNATURE

Name of Account: I C AIR POLLUTION CONTROL
Order Number: 11118243
Ad Number: 31335544

* Printer, Foreman of the Printer, or Principal Clerk of the Printer
Date: 20 th day of November, 2017.
at El Centro, California.

This space is for the County Clerk's Filling Stamp:

Proof of Publication of:

NOTICE OF AVAILABILITY
OF THE DEMONSTRATION OF THE OCCURRENCE
OF THREE EXCEPTIONAL EVENTS (EE) FOR
MAY 2015 AND JAN/FEB 2016

The Imperial County Air Pollution Control District (Air District) has prepared three Draft Exceptional Event (EE) Demonstrations, which support the requested exclusion of the measured concentrations at the Brawley, Niland and Westmorland monitors on May 18, 2015, May 21-22, 2015 and January 31-February 1, 2016. (See below).

May 18, 2015
Brawley 24 hr concentration from the Federal Reference Method monitor of 304 ug/m3

May 21-22, 2015
Brawley 24 hr concentration from the Federal Equivalent Method BAM monitor of 225 ug/m3
Niland 24 hr concentration from the Federal Equivalent Method BAM monitor of 171 ug/m3
Brawley 24 hr concentration from the Federal Equivalent Method BAM monitor of 227 ug/m3

January 31-February 1, 2016
Brawley 24 hr concentration from the Federal Reference Method monitor of 218 ug/m3
Brawley 24 hr concentration from the Federal Equivalent Method BAM monitor of 236 ug/m3
Niland 24 hr concentration from the Federal Reference Method monitor of 225 ug/m3
Niland 24 hr concentration from the Federal Equivalent Method BAM monitor of 259 ug/m3
Westmorland 24 hr concentration from the Federal Equivalent Method BAM monitor of 344 ug/m3
Brawley 24 hr concentration from the Federal Equivalent Method BAM monitor of 208 ug/m3

The public and all interested parties are encouraged to review and comment on the Draft EE's for May 18, 2015, May 21-22, 201 and January 31-February 1, 2016. These demonstrations provide the supporting evidence that on the days indicated for 2015 and 2016 the Brawley, Niland and Westmorland monitors were affected by entrained elevated levels of particulate matter of an aerodynamic size less than 10 microns (PM10). West winds, which precede a weather system, entrained PM10 into the region affecting Riverside, Imperial and San Diego counties. The Draft EE Demonstrations provide the scientific justification for the requested exclusions. The Air District is soliciting and accepting comments for 30 days commencing the date of the publication of this notice. The final closing date for submitting comments is December 20, 2017 by close of business.

The Draft EE's for May of 2015 and January/February 2016 are available for download at the Air District website at www.co.imperial.ca.us, under "Air Pollution". To view a hard copy of the Draft EE demonstrations, please visit the Air Pollution Control District office at 150 S. 9th Street, El Centro. Should you have any questions or concerns please feel free to call our office between 8am and 5pm at (442) 265-1800 and ask for Monica N. Soucier.
L584 N19

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NOV 27 2017
AIR POLLUTION
CONTROL DISTRICT

Fig A-33: Is a copy of the Imperial County Air Pollution Control District official record (affidavit) affirming the publication of the notice of availability of the Exceptional Events Demonstration for January 31, 2016. The date for closing comments was December 20, 2017

FIGURE A-34
IMPERIAL COUNTY COMMENTS REGARDING THE JANUARY 31, 2016 AND FEBRUARY 1, 2016 EE DEMONSTRATION

No Comments were received during the 30 day public review period