

NWS LAS Forecast Discussions for 6-11-14 ozone event

FXUS65 KVEF 102140

AFDVEF

AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE LAS VEGAS NV

240 PM PDT TUE JUN 10 2014

.SYNOPSIS...THERE WILL BE A SLIGHT CHANCE OF AFTERNOON AND EVENING THUNDERSTORMS NEAR THE SIERRA AND THE HIGHER TERRAIN OF CENTRAL NEVADA THROUGH WEDNESDAY. TEMPERATURES WILL RETREAT BACK CLOSER TO NORMAL BY THE WEEKEND.

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.SHORT TERM...THROUGH FRIDAY NIGHT...SATELLITE LOOP SHOWED PARTLY CLOUDY SKIES OVER MOST OF THE REGION...EXCEPT FOR SAN BERNARDINO COUNTY WHICH WAS **MOSTLY CLEAR**. SURFACE **OBS** SHOWED GUSTY WINDS AND TEMPERATURES ABOVE NORMAL. WEAK WAVE NEAR POINT CONCEPTION THIS AFTERNOON WILL PASS THROUGH WEDNESDAY...KNOCKING TEMPERATURES DOWN A FEW DEGREES AND REDUCING **THUNDERSTORM** CHANCES OVER THE SIERRA IN ITS WAKE. BY THURSDAY...INCREASING WESTERLY **FLOW** ASSOCIATED WITH THE NEXT **TROUGH** COMING INTO THE PACIFIC NORTHWEST WILL SCOUR OUT LINGERING **MOISTURE**...AND DRY CONDITIONS ARE EXPECTED AREA WIDE THURSDAY AND FRIDAY. TEMPERATURES WILL CHANGE LITTLE FROM WEDNESDAY THROUGH FRIDAY...JUST A FEW DEGREES ABOVE NORMAL FOR MOST STATIONS.

.LONG TERM...SATURDAY THROUGH MONDAY...MADE MINIMAL CHANGES TO THE OVERALL FORECAST. **TROUGH** LOCATED OVER THE INTERMOUNTAIN WEST FRIDAY EVENING/SATURDAY MORNING WILL MOVE OUT INTO THE PLAINS STATES BY THE AFTERNOON. **ENSEMBLE MOS** GUIDANCE IS STILL INDICATING UP TO 5-7 DEGREES OF COOLING FOR SATURDAY. WHILE WINDS WILL BE WEAKER ON SATURDAY COMPARED TO FRIDAY AND WE MAY NOT MIX FULLY...THINK THE AMOUNT OF COOLING SUGGESTED BY THE MODELS IS OVERDONE. DECIDED TO KEEP CURRENT TEMPERATURE FORECAST AS IS WITH NEAR NORMAL TO SLIGHTLY ABOVE NORMAL TEMPERATURES EXPECTED THROUGH THE PERIOD.

BEYOND MONDAY DIFFERENCES BEGIN TO EMERGE BETWEEN THE MODELS. THE **ECMWF** DEVELOPS A FAIRLY ROBUST **RIDGE** JUST OFF THE WEST COAST AND DROPS **TROUGH** INTO NORTHEASTERN NEVADA/NORTHERN UTAH. THE GEM AND DGEX AGREE FAIRLY WELL WITH THE **ECMWF**. THE **GFS** ON THE OTHER HAND...HAS A **CUTOFF LOW** UNDER CUT THE **RIDGE** SETUP JUST OFF THE SOUTHERN CALIFORNIA COAST. **GFS ENSEMBLE MEAN** IS LEANING TOWARDS A LESS AMPLIFIED VERSION OF THE **ECMWF**. WITH THE POTENTIAL FOR THE **RIDGE** TO BUILD BACK OVER THE AREA WE COULD SEE **TEMPS** BEGIN TO WARM LATE NEXT WEEK.

.AVIATION...FOR MCCARRAN...LITTLE OR NO OPERATIONALLY SIGNIFICANT WEATHER IS EXPECTED THROUGH FRIDAY.

FOR THE REST OF SOUTHERN NEVADA...NORTHWEST ARIZONA...AND SOUTHEAST CALIFORNIA...BREEZY CONDITIONS WILL CONTINUE THROUGH THIS EVENING...AND AFTER A LULL ON WEDNESDAY...WILL RETURN THURSDAY AND FRIDAY. A FEW THUNDERSTORMS MAY **POP** NEAR THE SIERRA CREST AND OVER THE HIGHER TERRAIN OF THE SOUTHERN GREAT **BASIN** LATE THIS AFTERNOON AND WEDNESDAY AFTERNOON...OTHERWISE...NO OPERATIONALLY SIGNIFICANT

WEATHER IS EXPECTED THROUGH FRIDAY.
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.VEF WATCHES/WARNINGS/ADVISORIES...
NV...NONE.
AZ...NONE.
CA...NONE.
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MORGAN/STUMPF

FXUS65 KVEF 110957
AFDVEF

AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE LAS VEGAS NV
257 AM PDT WED JUN 11 2014

.SYNOPSIS...AN **UPPER LEVEL DISTURBANCE** WILL BRING A SLIGHT CHANCE OF SHOWERS AND THUNDERSTORMS TO CENTRAL NEVADA AND THE SIERRA CREST THIS AFTERNOON. A **STORM** SYSTEM MOVING ONSHORE NORTH OF THE AREA WILL INCREASE WINDS FROM THE WEST ON THURSDAY AND FRIDAY. A RETURN TO ABOVE NORMAL TEMPERATURES EXPECTED EARLY NEXT WEEK.
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.SHORT TERM [TODAY THROUGH THURSDAY NIGHT]...

SHOWERS AND THUNDERSTORMS LINGERED IN LINCOLN COUNTY OVERNIGHT. THIS ACTIVITY WAS FEEDING OFF THE **INSTABILITY** CREATED BY THE NORTHERN END OF THE LOW LEVEL THERMAL **RIDGE** NUDGING INTO LINCOLN COUNTY AND COLD AIR ALOFT MOVING IN FROM THE WEST ASSOCIATED WITH A SMALL MID-LEVEL SHORT WAVE. MESOANALYSIS ALSO INDICATES A POCKET OF HIGHER SURFACE DEW POINTS ACROSS CENTRAL NEVADA AND UTAH WAS ALSO HELPING THE CAUSE. THE CONCERNS FOR THIS FORECAST PACKAGE CENTER ON WHETHER THESE FEATURES WILL STICK AROUND INTO THE AFTERNOON HOURS TODAY AND GENERATE ANOTHER ROUND OF OF SCATTERED TO ISOLATED SHOWERS/THUNDERSTORMS.

GIVEN THE GENERAL SPEED OF MOVEMENT OF THE **UPPER LEVEL** SHORT WAVE ONE WOULD CONCLUDE THAT ACTIVITY OVER LINCOLN COUNTY WOULD AGAIN BE AN ISSUE. THIS IS CONFIRMED BY A SERIES OF HIGH RESOLUTION MODELS WHICH INCREASE SHOWER ACTIVITY ACROSS CENTRAL NYE AND NORTHERN LINCOLN COUNTIES IN THE AFTERNOON. THEY ALSO SHOW MORE ACTIVITY OVER THE CREST OF THE SIERRAS WHICH MAY REMAIN A PROBLEM FOR THE OWENS VALLEY. WILL THEREFORE LEAVE IN A MENTION OF THUNDERSTORMS IN THESE AREAS FOR THE FORECAST TODAY.

AS WE GET INTO THURSDAY EVENING...MODELS ARE ALL IN GOOD AGREEMENT THAT A SMALL **CUTOFF LOW** WILL MOVE INTO THE PACIFIC NORTHWEST. THIS IS GOING TO INCREASE OUR WESTERLY **FLOW** AND BRING GUSTY WINDS THE AREA THURSDAY AFTERNOON THROUGH FRIDAY.

.LONG TERM [FRIDAY THROUGH TUESDAY]...

PRETTY STRAIGHT FORWARD FORECAST FOR FRIDAY AND THE WEEKEND WITH A LOW PRESSURE **TROUGH** MOVING ACROSS THE GREAT **BASIN** BRINGING GUSTY

WINDS TO THE AREA AND TEMPERATURES THAT SETTLE BACK TO NEAR NORMAL.

MODELS THEN BEGIN TO SHOW DIFFERENCES IN THEIR RESPECTIVE SOLUTIONS EARLY NEXT WEEK. THE **ECMWF** MAINTAINS CONSISTENCY WITH ITS EARLIER RUNS IN BRINGING AN ENERGETIC **CLOSED LOW** THROUGH WASHINGTON, IDAHO AND WYOMING. THE **GFS**/GEM/GFSENSEMBLE ARE IN BASIC AGREEMENT WITH THE EC SOLUTION BUT ARE MUCH WEAKER WITH THE NORTHERN JETSTREAM ENERGY AND THEY ALSO DEVELOP A WEAK **UPPER LEVEL CIRCULATION** OFF THE SOUTHERN CALIFORNIA COAST. IF THIS **CIRCULATION** DOES FORM, IT MAY BECOME A PLAYER AT SOME POINT AND INTERACT WITH REMNANT **MOISTURE** FROM WHAT IS NOW **HURRICANE CRISTINA**. CLIMATOLOGICALLY SPEAKING, THE **ECMWF** SOLUTION SEEMS THE WAY TO GO AND IT WAS FOLLOWED FOR THIS FORECAST CYCLE BUT THE EQUALLY PERSISTENT **GFS** NEEDS TO BE MONITORED AS IT COULD RESULT IN DEEPER **MOISTURE** AND MAYBE **PRECIPITATION** WORKING ITS WAY CLOSE TO OUR MOHAVE COUNTY DOORSTEP.

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.AVIATION...FOR MCCARRAN...ANOTHER ROUND OF EASTERLY WINDS EXPECTED AGAIN WEDNESDAY AFTERNOON FAVORING A CONFIG 2 OR 4 BETWEEN 16-21Z. DRAINAGE WINDS FROM HIGHER TERRAIN WILL KICK AND SWITCH BACK TO SOUTH-SOUTHWEST FOR THE EVENING. THURSDAY AND FRIDAY WILL SEE WESTERLY **FLOW** STRENGTHEN AND PREVENT THE AFTERNOON EASTERLY WINDS FROM DEVELOPING AND POSSIBLY PREVENTING A SWITCH TO AN UNFAVORABLE CONFIGURATION.

FOR THE REST OF SOUTHERN NEVADA...NORTHWEST ARIZONA...ISOLATED **SHRA/TSRA** POSSIBLE THIS AFTERNOON MAINLY OVER THE HIGHER ELEVATIONS OF THE SOUTHERN GREAT **BASIN** AND SIERRA CREST. THIS ACTIVITY SHOULD END BETWEEN 02Z AND 06Z THURSDAY. OTHERWISE EXPECT FEW-SCT CLOUDS **AOA** 8K-14K FEET AT MOST WITH WINDS FAVORING TYPICAL **DIURNAL** TRENDS. WINDS ARE EXPECTED TO INCREASE FROM THE WEST/SOUTHWEST ON THURSDAY AND FRIDAY WITH MANY AREAS ACROSS MOJAVE...SOUTHERN NEVADA AND NORTHEAST ARIZONA GUSTING TO 20-25 **KTS**.

.VEF WATCHES/WARNINGS/ADVISORIES...
NV...NONE.
AZ...NONE.
CA...NONE.

FXUS65 KVEF 112235
AFDVEF

AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE LAS VEGAS NV
335 PM PDT WED JUN 11 2014

.SYNOPSIS...GUSTY SOUTHWEST WINDS WILL DEVELOP ACROSS SOUTH CENTRAL NEVADA AND THE SOUTHERN NEVADA MOUNTAINS THURSDAY. SOUTHWEST WINDS WILL BECOME MORE WIDESPREAD ACROSS SOUTHEAST CALIFORNIA...MUCH OF SOUTHERN NEVADA AND NORTHWEST ARIZONA FRIDAY AS A LOW PRESSURE SYSTEM MOVES ACROSS THE GREAT **BASIN**. DRY CONDITIONS AND NEAR NORMAL TEMPERATURES CAN BE EXPECTED OVER THE WEEKEND INTO EARLY NEXT WEEK.
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.SHORT TERM...THROUGH FRIDAY NIGHT...VISIBLE SATELLITE LOOPS SHOWED **CUMULUS** CLOUDS BECOMING MORE EXTENSIVE ACROSS THE SOUTHERN SIERRA AND SOUTH CENTRAL NEVADA THIS AFTERNOON. WILL LIKELY SEE A FEW BRIEF

THUNDERSTORMS BEFORE SUNSET. **MOISTURE** WILL CLEAR OUT LATE TONIGHT AND THURSDAY AS DRY SOUTHWEST **FLOW** INCREASES AHEAD OF A LOW PRESSURE SYSTEM CURRENTLY DIVING INTO THE PACIFIC NORTHWEST.

THIS APPROACHING SYSTEM WILL PRIMARILY CREATE FIRE WEATHER CONCERNS THURSDAY AND FRIDAY AS THE GUSTY WINDS COMBINE WITH VERY DRY CONDITIONS. WINDS WILL INCREASE ACROSS THE SOUTHERN NEVADA MOUNTAINS AND SOUTH CENTRAL NEVADA THURSDAY THEN GUSTY WINDS WILL BE MORE WIDESPREAD FRIDAY AS THE **TROUGH** AXIS MOVES ACROSS NEVADA THEN PULLS AWAY TO THE EAST FRIDAY NIGHT. HIGH RESOLUTION MODELS INDICATE GUSTS OVER 40 MPH ARE POSSIBLE OVER THE WESTERN MOJAVE DESERT AND NORTHERN MOHAVE COUNTY FRIDAY BUT MOST OTHER AREAS ARE EXPECTED TO REMAIN BELOW **WIND ADVISORY** LEVELS. TEMPERATURES WILL DECREASE ANOTHER 5 OR SO DEGREES ACROSS THE NORTHERN ZONES BY FRIDAY BUT ONLY DIP 1-2 DEGREES ACROSS THE MOJAVE DESERT.

.LONG TERM...SATURDAY THROUGH TUESDAY...

PRETTY STRAIGHT FORWARD FORECAST FOR THE WEEKEND WITH A LOW PRESSURE **TROUGH** MOVING AWAY FROM THE GREAT **BASIN** AND TEMPERATURES NEAR NORMAL.

MODELS THEN BEGIN TO SHOW DIFFERENCES IN THEIR RESPECTIVE SOLUTIONS EARLY NEXT WEEK. THE **ECMWF** MAINTAINS CONSISTENCY WITH ITS EARLIER RUNS IN BRINGING AN ENERGETIC **CLOSED LOW** THROUGH WASHINGTON, IDAHO AND WYOMING. THE **GFS/GEM/GFS ENSEMBLE** ARE IN BASIC AGREEMENT WITH THE EC SOLUTION BUT ARE MUCH WEAKER WITH THE NORTHERN JETSTREAM ENERGY AND THEY ALSO DEVELOP A WEAK **UPPER LEVEL CIRCULATION** OFF THE SOUTHERN CALIFORNIA COAST. IF THIS **CIRCULATION** DOES FORM, IT MAY BECOME A PLAYER AT SOME POINT AND INTERACT WITH REMNANT **MOISTURE** FROM WHAT IS NOW **HURRICANE** CRISTINA. CLIMATOLOGICALLY SPEAKING, THE **ECMWF** SOLUTION SEEMS THE WAY TO GO AND IT WAS FOLLOWED FOR THIS FORECAST CYCLE BUT THE EQUALLY PERSISTENT **GFS** NEEDS TO BE MONITORED AS IT COULD RESULT IN DEEPER **MOISTURE** AND MAYBE **PRECIPITATION** WORKING ITS WAY CLOSE TO OUR MOHAVE COUNTY DOORSTEP.

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.AVIATION...FOR MCCARRAN...SOUTHWEST WINDS DEVELOPING LATE THIS AFTERNOON WILL CONTINUE OVERNIGHT. SOUTH TO SOUTHWEST WINDS WILL STRENGTHEN AND PERSIST THURSDAY AND FRIDAY AS A **LOW PRESSURE SYSTEM** SLOWLY MOVES ACROSS THE GREAT **BASIN**.

FOR THE REST OF SOUTHERN NEVADA...NORTHWEST ARIZONA...ISOLATED **SHRA/TSRA** THIS AFTERNOON OVER THE HIGHER ELEVATIONS OF THE SOUTHERN GREAT **BASIN** AND SIERRA CREST WILL END AROUND SUNSET. OTHERWISE EXPECT FEW-SCT CLOUDS **AOA** 8K-14K FEET AT MOST WITH WINDS FAVORING TYPICAL **DIURNAL** TRENDS. WINDS ARE EXPECTED TO INCREASE FROM THE WEST/SOUTHWEST ON THURSDAY AND FRIDAY WITH MANY AREAS ACROSS MOJAVE...SOUTHERN NEVADA AND NORTHEAST ARIZONA GUSTING TO 20-30 **KTS**.
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.FIRE WEATHER...CRITICAL FIRE WEATHER CONDITIONS CAN BE EXPECTED ACROSS SOUTH CENTRAL NEVADA AND THE SOUTHERN NEVADA MOUNTAINS THURSDAY AS GUSTY SOUTHWEST WINDS COMBINE WITH LOW **RELATIVE HUMIDITY**. STRONG SOUTHWEST WINDS WILL BECOME MORE WIDESPREAD ACROSS THE SOUTHERN SIERRA...MUCH OF SOUTHERN NEVADA AND NORTHWEST ARIZONA

FRIDAY. THESE WINDS WILL COMBINE WITH SINGLE DIGIT **RELATIVE HUMIDITY** VALUES TO CREATE CRITICAL FIRE WEATHER CONDITIONS. RED FLAG WARNINGS HAVE BEEN ISSUED FOR THE CORRESPONDING FIRE WEATHER ZONES THURSDAY AND FRIDAY.

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.VEF WATCHES/WARNINGS/ADVISORIES...

NV...**RED FLAG WARNING** FROM 11 AM TO 8 PM PDT THURSDAY FOR NVZ460>464.

RED FLAG WARNING FROM 11 AM TO 8 PM PDT FRIDAY FOR NVZ460>466.

AZ...**RED FLAG WARNING** FROM 11 AM TO 8 PM **MST** FRIDAY FOR AZZ101-102.

CA...**RED FLAG WARNING** FROM 11 AM TO 8 PM PDT FRIDAY FOR CAZ226.

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