

690
FXUS64 KFWD 230930
AFDFWD

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE FORT WORTH TX
330 AM CST WED DEC 23 2015

...SEVERE THREAT FOR OUR FAR EASTERN COUNTIES THROUGH MID MORNING...
...HEAVY RAIN THREAT NORTH AND EAST THIS WEEKEND...
...BRIEF TRANSITION TO ANY WINTRY WEATHER AT THE END OF THE WEEKEND
REMAINS UNCERTAIN...

.DISCUSSION...
SYSTEM NUMBER ONE IS CURRENTLY LIFTING OVER THE WESTERN HIGH
PLAINS AND WILL CONTINUE TO BE PROGRESSIVE IN MOVING A DEEP
SURFACE LOW AROUND 987MB EAST-NORTHEAST TOWARD KANSAS CITY THROUGH
MID MORNING. A NE-SW ORIENTED SURFACE TROUGH WAS CURRENTLY FROM
NEAR GAINESVILLE...TO MINERAL WELLS...TO COMANCHE WITH A FASTER
MOVEMENT EAST OF THE SURFACE TROUGH EXPECTED ACROSS THE NORTHERN
COUNTIES. INITIATION OF SCATTERED...STRONG TO SEVERE STORMS LOOKS
LIKELY TO OCCUR SOMETIME BETWEEN NOW AND SUNRISE FROM BONHAM/PARIS...
SW TOWARD TERRELL/CORSICANA/ATHENS WITHIN AN AXIS OF NEAR 1000
J/KG SBCAPE. DEPENDING ON WHICH HIGH-RESOLUTION MODEL YOU PREFER...
THIS COULD OCCUR AS EARLY AS 4 A.M. OR AS LATE AS 6 A.M. EITHER
WAY...HOPKINS COUNTY SOUTH THROUGH ANDERSON COUNTY REMAINS WITHIN
TORNADO WATCH 556 THROUGH 7 A.M...WHICH IS REASONABLE GIVEN THE
DYNAMIC NATURE OF THE DEEP LAYER SHEAR AND AFOREMENTIONED INSTABILITY.
THIS ACTIVITY COULD LINGER ACROSS OUR FAR SOUTHEAST COUNTIES AS
LATE AS MID-MORNING...BEFORE THE CLEARING SURFACE TROUGH AND
PROGRESSIVE SHORTWAVE SHUNTS ALL THE BETTER LIFT AND MOISTURE
EAST OF NORTH AND CENTRAL TEXAS. LOW CAA IS NOT IMPRESSIVE BEHIND
THE SURFACE TROUGH AND WITH PLENTY OF INSOLATION AND W/SWLY
FLOW...HAVE GONE SLIGHTLY WARMER THAN MOS GUIDANCE FOR HIGH
TEMPERATURES TODAY.

A BRIEF DRY PERIOD WILL EXIST AS FAST ZONAL FLOW ALOFT BECOMES
INCREASINGLY SWLY AHEAD OF OUR NEXT STRONG SYSTEM FORMING ACROSS
THE WESTERN CONUS. ANOTHER WEAK COLD FRONT WILL INTO THE REGION
LATE CHRISTMAS EVE INTO CHRISTMAS DAY. RICHEST MOISTURE AND
SURFACE DEW PTS WILL BE FROM CENTRAL TEXAS NORTHEAST INTO THE
ARKLATEX. SHOULD SEE MAINLY SHOWERS ACROSS THESE AREAS BY SUNRISE
CHRISTMAS DAY...BUT SOME SBCAPE WILL BE RESIDING ACROSS THE FAR
E/SE COUNTIES FOR AT LEAST A MENTION OF ISOLATED THUNDERSTORMS AS
WELL.

THE HOLIDAY WEEKEND IS WHEN DETERMINISTIC WEATHER BECOMES MORE
UNCLEAR...ESPECIALLY SUNDAY INTO MONDAY OF NEXT WEEK. MODELS ARE
IN VERY GOOD AGREEMENT WITH THE DEEPENING ENERGY OVER NORTHERN
MEXICO/SRN AZ/SRN NM THROUGH SATURDAY NIGHT. LARGE-SCALE ASCENT
ASSOCIATED WITH STRONG MOISTURE AND WARM ADVECTION WITH A LOW
LEVEL JET WILL INCREASE FRIDAY NIGHT INTO SATURDAY ACROSS...
ESPECIALLY ACROSS OUR NORTHERN COUNTIES WHERE SOME HEAVIER RAINS
WILL SET UP THIS WEEKEND. WE WILL BE LOOKING AT 2-4 INCHES

POSSIBLE FROM FRIDAY NIGHT INTO SUN NIGHT FROM I-20 TO THE RED RIVER...WITH 1-2 INCHES FURTHER SOUTH. MEANWHILE...WE/LL BE WATCHING A SHALLOW COLD AIRMASS DROPPING THROUGH THE HIGH PLAINS AND INTO THE TX/OK PANHANDLES AS WELL AS MUCH OF OKLAHOMA. THESE SHALLOW ARCTIC FRONTS CAN BE TRICKY TO TRACK BECAUSE: A.) THEIR SHEER DENSITY AND B.) THE HEIGHT FALLS OCCURRING OVER THE TOP OF THE FRONTAL INVERSION. ONE THING TO NOTE IS THAT THESE SHALLOW DENSE AIRMASSES DON/T REACT TO LARGE SCALE HEIGHT FALLS AND ASCENT OVER THE TOP DUE TO THE DENSITY AND SHALLOW NATURE OF THE FRONTAL SLOPE...SO MODELS AND FORECASTERS CAN REALLY STRUGGLE ON TRACKING THIS SHALLOW COLD AIR.

WITH THOSE CHALLENGES IN MIND...THE GFS IS BY FAR THE MOST PROGRESSIVE WITH LIFTING THE DEEP UPPER LOW NORTH ON SUNDAY NIGHT AND DRAGGING THE SHALLOW COLD AIR SOUTH ACROSS AT LEAST THE WESTERN HALF OF THE CWA. MEANWHILE...THE ECMWF/CANADIAN MAINTAIN A MUCH SLOWER SOLUTION ACROSS WEST-CENTRAL TX AND HOLD THE SHALLOW COLD AIR AT BAY FURTHER TO THE WEST. WE HAVE SIDED WITH THE LATTER ECMWF/GEM SOLUTIONS AND WPC/S THOUGHTS OF SLOWING THINGS DOWN DUE TO SUCH A STRONG UPPER JET MAXIMUM REMAINING ON THE UPSTREAM SIDE OF THE UPPER LOW. FINALLY...WITH THE SLOWER SOLUTION...THERE/S A GOOD BET THAT AT LEAST THE SW HALF OF THE CWA COULD GET DRY-SLOTTED AS THE STRONG UPPER JET MAX ROUNDS THE BASE OF THE UPPER LOW JUST WEST OF THE AREA AT THE END OF THE WEEKEND.

THE ONLY CHANGE WE DID MAKE WAS TO START TRANSITIONING WIDESPREAD CONVECTION OR THUNDERSTORMS TO MORE RAIN WITH ISOLATED THUNDERSTORMS ON SUNDAY...WITH JUST RAIN OR EVEN A BRIEF LIGHT RAIN/SNOW MIX OVER THE FAR NW COUNTIES LATE SUN NIGHT/EARLY MONDAY MORNING. OF COURSE...THIS IS ALL DEPENDING ON REMAINING MOISTURE...UPPER LOW TRACK AND WHERE THE DRY SLOT SETS UP AS THE SYSTEM LIFTS NE OVER THE TOP OF THE AREA ON MONDAY. IN A NUTSHELL...THIS IS A VERY COMPLEX SCENARIO WITH PLENTY OF UNCERTAINTY REGARDING THE COLD AIR ARRIVAL AND LEFTOVER MOISTURE FOR ANY PRECIPITATION. A BRIEF SHORTWAVE UPPER RIDGE WILL SET UP LATE MONDAY INTO MID WEEK WHICH SHOULD RESULT IN DRY AND COOL CONDITIONS WITH ANOTHER FRONTAL SURGE ARRIVING ON TUESDAY.

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FXUS64 KFWD 232126

AJDFWD

AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE FORT WORTH TX

326 PM CST WED DEC 23 2015

.DISCUSSION...

THE NEXT SEVERAL DAYS ARE SHAPING UP TO BE QUITE PLEASANT. THE MORNING CONVECTION HAS PUSHED WELL INTO THE EASTERN CONUS WITH ONLY A FEW HIGH CLOUDS LINGERING ACROSS THE AREA. EXPECT MOSTLY SUNNY SKIES FOR NORTH AND CENTRAL TEXAS THROUGH CHRISTMAS EVE. TEMPERATURES WILL CONTINUE TO BE UNSEASONABLY WARM THOUGH...WITH HIGHS IN THE 60S AND 70S AND LOWS IN THE 40S AND 50S. THE WESTERLY WINDS WILL QUIET DOWN THIS EVENING AND BECOME LIGHT AND VARIABLE THROUGH CHRISTMAS EVE AS WELL.

THE UPPER LEVEL PATTERN WILL BE RELATIVELY ZONAL THROUGH CHRISTMAS ACROSS THE SOUTH CENTRAL PLAINS BEFORE A DEEPENING TROUGH APPROACHES FROM THE WEST. SOUTHERLY FLOW WILL RETURN ON FRIDAY...BRINGING WARM...MOIST GULF AIR BACK INTO THE REGION. THIS WILL GRADUALLY MOISTEN THE ATMOSPHERIC PROFILE AHEAD OF THIS NEXT STORM SYSTEM. WITH THE MOISTURE RETURN...WARM TEMPERATURES...AND WEAK FORCING FOR ASCENT...LOW POPS REMAIN IN OUR EASTERN ZONES ON CHRISTMAS. THE REAL SHOW BEGINS ON SATURDAY THOUGH WHEN THE STRENGTHENING LOW CLOSES OFF AND MOVES INTO THE DESERT SOUTHWEST BEFORE MOVING OVER THE LONE STAR STATE.

WHILE THE MEDIUM RANGE MODEL GUIDANCE HAS BEEN SOMEWHAT WISHY WASHY REGARDING THE SOLUTIONS FOR THIS WEEKEND SYSTEM...THEY APPEAR TO BE CONVERGING ON A SOLUTION AS OF THIS FORECAST PACKAGE. THE GFS AND ECMWF CLOSE OFF THE LOW BY SATURDAY AND HAVE IT TRAVERSE THROUGH THE HEART OF TEXAS ON MONDAY BEFORE LIFTING OFF TO THE NORTHEAST MONDAY AFTERNOON. THE CANADIAN IS VERY SIMILAR BUT LINGERS IT OVER US A BIT LONGER. THE GFS AND EURO BOTH INDICATE HEAVY RAIN ACROSS NORTH TEXAS SATURDAY INTO SUNDAY WITH TRAINING STORMS POSSIBLE. KEEP IN MIND THAT THERE IS STILL ONGOING RIVER FLOODING ACROSS PARTS OF TEXAS AND AREA RESERVOIRS REMAIN QUITE FULL. THIS SYSTEM IS LIKELY TO AGGRAVATE RIVER FLOODING ACROSS THE REGION...AS WELL AS CREATE FLASH FLOODING PROBLEMS BECAUSE OF THE DORMANT VEGETATION...SATURATED SOILS...AND ANTICIPATED RAINFALL THIS WEEKEND. IT IS STILL TOO EARLY TO PUT OUT A FLASH FLOOD WATCH FOR THE AREA...BUT IF MODEL GUIDANCE CONTINUES TO SHOW SIMILAR SOLUTIONS...A WATCH WILL BE NECESSARY WITHIN THE NEXT COUPLE OF DAYS.

UNFORTUNATELY...THE MODELS ALSO INDICATE A CHANGE OVER TO A RAIN/SNOW MIX OVERNIGHT SUNDAY INTO MONDAY FOR OUR NORTHWESTERN COUNTIES AND APPROACHING THE DFW METROPLEX AFTER MIDNIGHT MONDAY MORNING. PREVIOUS RUNS INDICATED THAT THE FREEZING LINE WOULD REMAIN WEST OF OUR AREA UNTIL AFTER THE PRECIPITATION HAD ENDED. HOWEVER...THAT DOES NOT APPEAR TO BE THE CASE NOW. A SHARP COLD FRONT WILL PUSH INTO OUR NORTHWESTERN ZONES LATE ON SATURDAY AND

TRANSLATE THROUGH NORTH AND CENTRAL TEXAS ON SUNDAY...DROPPING TEMPERATURES BEHIND IT AND USHERING IN GUSTY NORTH WINDS. IT SHOULD BRIGHTEN THE FORECAST SOMEWHAT TO KNOW THAT THE FORECAST SOUNDINGS DO LEAN MORE TOWARDS A RAIN/SNOW MIX...THEN BRIEFLY CHANGING OVER TO ALL SNOW FOR THESE AREAS INSTEAD OF THE MORE TYPICAL ICE FORECAST THAT SHOWS UP FOR THIS PART OF THE COUNTRY. AT THIS TIME THOUGH...IT DOES NOT APPEAR THAT OUR AREA WILL SEE MANY IMPACTS FROM THE WINTRY PRECIPITATION FOR SEVERAL REASONS. THE CHANGE OVER TO SNOW WILL HAPPEN TOWARDS THE END OF THE STORM AND IS NOT EXPECTED TO PROVIDE MUCH ACCUMULATION. ALSO... GROUND TEMPERATURES SHOULD BE RELATIVELY WARM DUE TO OUR CURRENT WARM...MOIST SURFACES AND AIR TEMPERATURES SHOULD BE ABLE TO REBOUND ENOUGH ON MONDAY WITH THE SYSTEM MOVING AWAY AND THE SUN COMING OUT. THE BIGGER CONCERN FROM THIS SYSTEM WILL BE FLOODING IMPACTS THAT BEGIN ON SATURDAY FOR NORTH AND CENTRAL TEXAS.

BECAUSE THE EXACT TIMING OF THE TROUGH/S EXODUS IS A LITTLE UNCLEAR...WHEN THE PRECIPITATION ENDS AND HOW LONG THE SNOW HANGS AROUND WILL REMAIN DYNAMIC. THAT BEING SAID...THE PRECIPITATION WILL END FROM WEST TO EAST...MOST LIKELY ON MONDAY MORNING. THE DETAILS OF THIS FORECAST WILL BE FINE-TUNED AS THE EVENT DRAWS CLOSER AS THE EXACT LOCATION OF THE LOW...THE POSITION OF THE FRONTS...AND MESOSCALE FEATURES WILL LARGELY DRIVE THE OUTCOME.

IT DOES APPEAR THAT AFTER THIS SYSTEM EXITS...MORE SEASONABLE...AND DRY WEATHER WILL REMAIN IN PLACE OVER NORTH AND CENTRAL TEXAS AS WE FINISH OUT 2015. THIS YEAR HAS BEEN QUITE A RIDE...WEATHER-WISE...AND THE RAINFALL RECORDS ARE LIKELY NOT OVER WITH JUST YET FOR NORTH TEXAS.

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FXUS64 KFWD 241007
AFDFWD

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE FORT WORTH TX
407 AM CST THU DEC 24 2015

...SEVERE WEATHER POTENTIAL INCREASES SATURDAY AND SATURDAY EVENING...

...HEAVY RAIN POTENTIAL INCREASES ACROSS THE NORTHEAST HALF OF
THE AREA CHRISTMAS NIGHT THROUGH SUNDAY EVENING...

...A WINTRY MIX IS POSSIBLE ACROSS THE WESTERN HALF OF THE AREA
LATE SUNDAY NIGHT INTO MONDAY...

.DISCUSSION...

A RELATIVELY QUIET PERIOD IS EXPECTED FOR CHRISTMAS EVE INTO
CHRISTMAS DAY...BEFORE A SLOW-MOVING AND DEEP UPPER LEVEL LOW
MAKES ITS IMPACT ON THE REGION FOR THE HOLIDAY WEEKEND INTO
MONDAY. IT SURELY WILL NOT FEEL LIKE CHRISTMAS WITH TEMPERATURES
WELL ABOVE NORMAL TODAY INTO CHRISTMAS. YESTERDAY/S OLD WEAK
SURFACE FRONT HAD STALLED OVER THE TEXAS COASTAL AREAS THIS
MORNING. HIGHS BOTH DAYS WILL RANGE FROM THE UPPER 60S ALONG THE
RED RIVER VALLEY TO BETWEEN 75 AND 80 DEGREES ACROSS OUR CENTRAL
TEXAS COUNTIES. OUR NEXT SHORTWAVE DISTURBANCE WILL ARRIVE OUT OF
THE LARGER SCALE...WESTERN CONUS LONGWAVE TROUGH ON CHRISTMAS
DAY. MEANWHILE...ANOTHER WEAK COLD FRONT WILL MOVE INTO THE AREA
CHRISTMAS EVE NIGHT. A THIN PLUME OF BETTER MOISTURE AND INSTABILITY
WILL SET UP AHEAD OF THE COLD FRONT MOSTLY EAST/SOUTHEAST OF OUR
SOUTHEAST COUNTIES ON CHRISTMAS DAY. LOW CHANCES FOR SHOWERS AND A
FEW THUNDERSTORMS WILL SET UP ALONG THE WEAKENING FRONT BUT IT
APPEARS THE BETTER THREAT WILL REMAIN EAST OF OUR CWA.

THE WESTERN CONUS UPPER TROUGH WILL CONTINUE TO DEEPEN OVER THE
SOUTHWEST U.S AND OVER NORTHERN MEXICO CHRISTMAS NIGHT INTO
SATURDAY...AS SHALLOW ARCTIC AIR MARCHES SOUTH THROUGH THE LEE OF
THE CENTRAL ROCKIES AND INTO THE TX/OK PANHANDLES ON SATURDAY
MORNING. AS SWLY FLOW ALOFT INCREASES CHRISTMAS NIGHT...AN AXIS OF
STRONG WAA AND INCREASING ASCENT WILL OCCUR FURTHER EAST FROM
EASTERN NORTH TEXAS NORTHEAST INTO THE OZARKS AND TN VALLEY.
INCREASING BULK SHEAR ON THE ORDER OF 35-45 KTS AND INSTABILITY
TO NEAR 1000 J/KG IN THE WARM SECTOR WILL BEGIN A PERIOD OF
POTENTIAL SEVERE WEATHER EAST OF I-35. DEPENDING ON IF STORMS ARE
SURFACE-BASED OR ELEVATED IN NATURE LIKE WILL DICTATE WHAT MODES
SEVERE WEATHER WILL OCCUR ON SATURDAY. THE ARCTIC FRONT WILL PUSH
INTO AREAS WEST OF I-35 ON SATURDAY AND SATURDAY NIGHT WHILE
ADDING A SURFACE FOCUS TO THE SYSTEM. INCREASINGLY STRONG SW FLOW
ALOFT SATURDAY WILL INCREASE THE DEEP LAYER BULK SHEAR TO
COINCIDE WITH INCREASING INSTABILITY IN THE BROAD DEVELOPING WARM
SECTOR AHEAD OF THE COLD FRONT. THIS WILL BE OUR BEST PERIOD FOR
ALL MODES OF SEVERE WEATHER...INCLUDING ELEVATED STRONG TO SEVERE
CONVECTION BEHIND THE COLD FRONT AND ABOVE THE SHALLOW COLD AIR.

IN ADDITION TO THE DEVELOPING SEVERE WEATHER THREAT LATE CHRISTMAS NIGHT THROUGH SATURDAY...HEAVY RAINFALL AND ASSOCIATED FLOODING WILL BECOME A CONCERN ACROSS THE NORTHEAST HALF OF THE AREA. AS UPPER DIVERGENCE AHEAD OF THE DEEPENING UPPER LOW OVER NORTHERN MEXICO ARRIVES...FRONTOGENETICAL BANDING WILL SET UP WITH PERIODS OF MODERATE TO HEAVY RAIN. AMOUNTS OF 3-5 INCHES...WITH ISOLATED HIGHER AMOUNTS ARE FORECAST CURRENTLY. THROUGH COLLABORATION WITH SURROUNDING OFFICES AND WITH SOME UNCERTAINTY WHERE DRY SLOTTING SETS UP LATER IN THE WEEKEND...WE DECIDED AGAINST ISSUING A FLASH FLOOD WATCH WITH THIS PACKAGE. WE WILL HIT THE HEAVY RAIN AND FLOOD THREAT HARD IN OUR HAZARDS PRODUCTS AND ALLOW WPC AND OUR DAY CREW TO ASSESS THE HEAVY RAINFALL POTENTIAL MORE CLOSELY. THIS WILL ALLOW FOR MORE ACCURATE DECISIONS REGARDING SPATIAL AND TEMPORAL DECISION REGARDING A FLASH FLOOD FOR THE HOLIDAY WEEKEND. REGARDLESS... HOLIDAY TRAVELERS NEED TO BE AWARE OF BOTH THE SEVERE WEATHER AND FLOODING THREATS THAT WILL PRESENT THEMSELVES THIS WEEKEND.

MODELS ARE NOW COMING INTO GOOD AGREEMENT WITH THE EXPECTED DEEP UPPER LOW OVER MEXICO THIS WEEKEND NOW THAT IT IS BEING SAMPLED BETTER BY NATIONAL UPPER-AIR RUNS. THE STRONG COLD FRONT AND ASSOCIATED SEVERE WEATHER THREAT SHOULD CONTINUE ACROSS OUR SOUTHEAST COUNTIES SATURDAY NIGHT...BEFORE MAINLY A RAIN THREAT CONTINUES INTO SUNDAY. WITHIN THE COLD AIRMASS BEHIND THE COLD FRONT...TEMPERATURES SHOULD REMAIN ABOVE FREEZING WITH MAINLY A COLD RAIN WITH ISOLATED ELEVATED THUNDER POSSIBLE WHICH WILL CONTINUE SUNDAY INTO SUNDAY EVENING. IT WILL BE BRISK...COLD...RAW AND JUST PLAIN MISERABLE OUTSIDE DURING THIS PERIOD. IN ADDITION... THERE MAY BE FLOODING ONGOING ACROSS PARTS OF THE AREA. THE UPPER LOW WILL THEN LIFT NORTHEAST SUNDAY INTO MONDAY...BRINGING DYNAMIC COOLING OF THE ATMOSPHERIC COLUMN ACROSS THE WESTERN HALF OF THE AREA FOR A TRANSITION TO A WINTRY MIX OR SNOW. A DRY SLOT ASSOCIATED WITH THE UPPER JET MAX ROTATING THROUGH THIS FEATURE WILL POSE SOME PROBLEMS REGARDING SPATIAL DETAILS AND AMOUNTS THIS FAR OUT. MY GUT TELLS ME THE TRANSITION FROM RAIN TO ALL FROZEN WINTER PRECIPITATION SUCH AS SNOW OR SLEET/SNOW WOULD BE RAPID WITH SUCH AN INTENSE SYSTEM. RIGHT NOW...GROUND TEMPERATURES ARE WARM AND WE EXPECT MOST IMPACTS TO OCCUR ON ELEVATED SURFACES SUCH AS BRIDGES AND OVERPASSES. WE SHOULD KNOW MORE AS WE MOVE THROUGH THE HOLIDAY WEEKEND.

IN ADDITION...WIND CHILLS WILL FALL INTO THE UPPER TEENS...20S AND LOWER 30S WITH THE BLUSTERY NORTHWEST WINDS. HOLIDAY TRAVELERS NEED TO BE MONITORING WEATHER FORECASTS...WATCHES AND WARNINGS VIGILANTLY THIS HOLIDAY WEEKEND FOR ALL THE DIFFERENT WEATHER HAZARDS THAT ARE EXPECTED. WE STRONGLY ENCOURAGE YOU TO DO SO... EVEN IF ONLY TRAVELING LOCALLY. AGAIN THE FINE DETAILS WITH THE LIFE CYCLE OF THIS SYSTEM WILL BE BETTER KNOWN AS WE MOVE PAST CHRISTMAS DAY. COLD SURFACE HIGH PRESSURE WILL HOLD ACROSS THE AREA MUCH OF NEXT WEEK WITH ANOTHER DISTURBANCE AND REINFORCING COLD FRONT ARRIVING MID-LATE WEEK. HOW MUCH MOISTURE NEXT WEEK/S SYSTEM HAS TO WORK UPON IS STILL IN QUESTION. MUCH OF THE RICHEST MOISTURE SHOULD BE RELEGATED SOUTH AND EAST OF OUR AREA DUE TO THE SECOND COLD FRONT ON WEDNESDAY. WITH THIS IN MIND...I HAVE LEFT

THE FORECAST DRY FOR NEXT WEEK WITH CONFIDENCE BEING SO LOW ON
MOISTURE AND SYSTEM TRACK.

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FXUS64 KFWD 242119
AFDFWD

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE FORT WORTH TX
319 PM CST THU DEC 24 2015

.DISCUSSION...

AN INTERESTING HOLIDAY WEEKEND IS SHAPING UP ACROSS NORTH TEXAS WITH A POTENTIAL FOR SEVERE WEATHER SATURDAY...HEAVY RAIN AND FLASH FLOODING SATURDAY THROUGH SUNDAY AND EVEN SOME WINTER WEATHER SUNDAY NIGHT AND MONDAY. THE CULPRIT FOR ALL THIS ACTIVE WEATHER IS A DEVELOPING LOW PRESSURE SYSTEM WHICH IS CURRENTLY MOVING INTO THE PACIFIC NORTHWEST. THIS SYSTEM IS PROGGED TO DEEPEN AS IT DIVES SOUTHWARD TOWARD THE DESERT SOUTHWEST THROUGH SATURDAY...THEN EJECT NORTHEAST ACROSS NORTH AND CENTRAL TEXAS SUNDAY THROUGH MONDAY.

BEFORE THIS SYSTEM BEGINS TO IMPACT THE REGION...DRY AIR THAT IS CURRENTLY IN PLACE BEHIND A WEAK COLD FRONT WILL RETREAT NORTHWARD FRIDAY/FRIDAY NIGHT AND BE REPLACED BY INCREASING GULF MOISTURE. SOME WARM AIR ADVECTION SHOWERS AND ISOLATED STORMS WILL BE POSSIBLE FRIDAY AFTERNOON...ESPECIALLY ACROSS THE SOUTHEAST ZONES. BY FRIDAY NIGHT...SHOWER AND THUNDERSTORM CHANCES WILL INCREASE WITH INCREASING MOISTURE AND LARGE SCALE LIFT. IT WILL BE VERY MILD FRIDAY NIGHT WITH LOWS IN THE 60S.

BETTER THUNDERSTORM CHANCES WILL ARRIVE ON SATURDAY ALONG AND AHEAD OF A STRONG COLD FRONT. WITH AMPLE MOISTURE AND SHEAR IN PLACE ACROSS THE REGION THERE WILL BE A THREAT OF SEVERE THUNDERSTORMS EVEN THOUGH INSTABILITY WILL BE SOMEWHAT MARGINAL. THE PRIMARY HAZARD ASSOCIATED WITH STORMS THAT FORM IN THE WARM SECTOR AHEAD OF THE COLD FRONT WILL BE DAMAGING WINDS...AND TO A LESSER EXTENT HAIL. THERE WILL ALSO BE A WINDOW OF TIME WHEN ISOLATED TORNADOES WILL BE POSSIBLE...MAINLY SATURDAY AFTERNOON. FORCING ALONG THE COLD FRONT SHOULD ALSO RESULT IN AN ORGANIZED LINE OF STORMS WITH AN ENHANCED WIND THREAT.

BY SATURDAY NIGHT THE EVENT SHOULD BEGIN TO TRANSITION TO A HEAVY RAIN THREAT AS COPIOUS MOISTURE IS LIFTED OVER THE SHALLOW FRONTAL SURFACE. WE HAVE DECIDED TO ISSUE A FLASH FLOOD WATCH ALONG AND EAST OF A LINE FROM BOWIE TO GRANBURY TO KILLEEN AS A RESULT OF THE PERIODS OF HEAVY RAIN EXPECTED ALONG AND AHEAD OF THE FRONT AND THE ANTICIPATED POST-FRONTAL ACTIVITY. THE WATCH WILL BEGIN AT 6 AM SATURDAY AND END AT 6 AM MONDAY.

THE AIR BEHIND THE COLD FRONT WILL BE CONSIDERABLY COLDER THAN WE HAVE SEEN IN SEVERAL DAYS AND HIGHS SUNDAY SHOULD ONLY REACH THE 30S AND 40S IN THE NORTH AND CENTRAL ZONES. HAVE DECIDED TO KEEP HIGH TEMPERATURES IN THE SOUTHEAST ZONES IN THE 50S AND LOWER 60S BUT THESE TEMPERATURES SHOULD FALL THROUGH THE DAY SUNDAY.

PERIODS OF RAIN AND ISOLATED THUNDERSTORMS WILL CONTINUE THROUGH

THE DAY SUNDAY AND INTO SUNDAY EVENING. THE HEAVIEST RAINFALL WILL BE IN THE NORTHEAST ZONES WHERE LARGE SCALE DIFFLUENCE AND MOISTURE WILL BE GREATEST. RAINFALL TOTALS WILL LIKELY RANGE BETWEEN 5 AND 7 INCHES IN THE NORTHEAST ZONES WITH 3 TO 5 INCHES ACROSS THE REMAINDER OF THE WATCH AREA. THE WESTERN ZONES SHOULD BE MORE ON THE ORDER OF 1 TO 2 INCHES AND THAT IS WHY THEY WERE NOT INCLUDED IN THE FLASH FLOOD WATCH.

THE MODELS ARE IN DECENT AGREEMENT WITH REGARDS TO THE TRACK AND SPEED OF THE UPPER LOW AS IT EJECTS NORTHEAST SUNDAY NIGHT THROUGH MONDAY. SINCE THIS IS SUCH A COLD CORE SYSTEM IT WILL LIKELY PRODUCE SOME WINTER PRECIPITATION NEAR AND NORTH OF THE CENTER OF THE CIRCULATION. THEREFORE...WE WILL CONTINUE TO HIGHLIGHT THE POTENTIAL FOR LIGHT RAIN MIXING WITH LIGHT SNOW ACROSS THE NORTHWEST ZONES LATE SUNDAY NIGHT WITH A QUICK TRANSITION TO LIGHT SNOW BEFORE SUNRISE MONDAY. AT THIS TIME IT APPEARS THAT SURFACE TEMPERATURES SHOULD BE NEAR OR JUST BELOW FREEZING SO SOME LIGHT IMPACTS FROM THE FREEZING OF MELTED SNOW IS POSSIBLE. SINCE TEMPERATURES HAVE BEEN SO WARM THE LAST SEVERAL DAYS AND SOIL TEMPERATURES AROUND THE REGION ARE ABOVE 50 DEGREES WE DO NOT FEEL ACCUMULATIONS WILL BE SIGNIFICANT. FARTHER TO THE EAST...INCLUDING THE METROPLEX AND POSSIBLY AS FAR SOUTH AS TEMPLE...SOME LIGHT SNOW OR RAIN MIXED WITH SNOW WILL BE POSSIBLE MONDAY MORNING. HOWEVER...SURFACE TEMPERATURES SHOULD REMAIN ABOVE FREEZING AND NO IMPACTS ARE ANTICIPATED.

THE UPPER LOW IS PROGGED TO REACH THE ARKLATEX MONDAY AFTERNOON AND PRECIPITATION SHOULD END ACROSS THE ENTIRE REGION. CLOUDS AND COLD AIR ADVECTION WILL REMAIN IN PLACE MONDAY AND HIGHS WILL ONLY REACH THE 30S AND 40S.

ANOTHER UPPER LOW IS FORECAST TO FOLLOW ON THE HEELS OF THE WEEKEND SYSTEM BUT MOISTURE SHOULD BE TOO LIMITED TO PRODUCE ANY PRECIPITATION ACROSS NORTH AND CENTRAL TEXAS ON TUESDAY.

THE REST OF WEEK SHOULD BE DRY AND COLD WITH HIGHS MAINLY IN THE 40S AND LOWS IN THE 20S AND 30S.

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AFDFWD

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE FORT WORTH TX
437 AM CST FRI DEC 25 2015

.SYNOPSIS...

A POTENT STORM SYSTEM WILL IMPACT NORTH AND CENTRAL TEXAS THIS WEEKEND. SEVERE WEATHER WILL BE POSSIBLE SATURDAY AFTERNOON INTO SATURDAY NIGHT...AND HEAVY RAINFALL IS EXPECTED TO RESULT IN FLASH FLOODING. A STRONG COLD FRONT WILL MOVE THROUGH THE REGION SUNDAY AND SUNDAY NIGHT...BRINGING A CHANCE OF ACCUMULATING SNOWFALL TO PORTIONS OF NORTH AND CENTRAL TEXAS BEFORE THE PRECIPITATION COMES TO AN END ON MONDAY.

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.DISCUSSION...

DESPITE LIGHT WINDS OVERNIGHT...THE CHRISTMAS EVE COLD FRONT WAS CLEARLY DISCERNIBLE JUST SOUTHEAST OF OUR CWA. ON THE COASTAL PLAINS...DEW POINTS ARE IN THE 70S. THIS RICH GULF MOISTURE IS RIDING UP THE FRONTAL SLOPE...AND OUR SOUTHEAST ZONES ARE BLANKETED WITH A CLOUD DECK AROUND 850MB...WHERE WINDS ARE SOUTHERLY AROUND 20KTS. AS LOW-LEVEL TROUGHING DEVELOPS IN THE LEE OF THE ROCKIES...SOUTHERLY SURFACE WINDS WILL SURGE MOISTURE BACK INTO NORTH TEXAS. OUR STRING OF SUNNY DAYS WILL COME TO AN END... WITH A CLOUDY CHRISTMAS DAY. THE DEEPEST MOISTURE AND BEST INSTABILITY WILL REMAIN OVER EAST TEXAS TODAY...BUT A FEW SHOWERS OR ISOLATED THUNDERSTORMS WILL BE POSSIBLE ALONG THE EASTERN PERIPHERY OF THE CWA.

AS AN UPPER TROUGH INTENSIFIES OVER THE DESERT SOUTHWEST TONIGHT...A STRONG LOW-LEVEL JET WILL ENHANCE HEAT/MOISTURE TRANSPORT NORTHWARD OVER MUCH OF THE LONE STAR STATE. SHOWERS AND THUNDERSTORMS WILL DEVELOP...GRADUALLY INCREASING IN AREAL COVERAGE DURING THE EARLY MORNING HOURS SATURDAY. THE EXTENT OF THE MORNING CONVECTION MAY INITIALLY LIMIT THE DESTABILIZATION OF THE BOUNDARY LAYER DURING THE DAY SATURDAY. REGARDLESS...BY SATURDAY AFTERNOON...AS A COLD FRONT APPROACHES FROM THE NORTHWEST...THE WARM SECTOR WILL FEATURE TEMPERATURES IN THE 70S WITH DEW POINTS IN THE MID TO UPPER 60S. ALTHOUGH SOME INHIBITION WILL LINGER INTO THE AFTERNOON HOURS...ANY STORMS THAT ARE ABLE TO TAP THE INSTABILITY IN THE BOUNDARY LAYER WILL ALSO BENEFIT FROM STRONG DEEP LAYER SHEAR. THE SHEAR PROFILE WILL FAVOR ROTATING UPDRAFTS SUPPORTIVE OF LARGE HAIL AND DAMAGING WINDS. ENHANCED LOW-LEVEL ROTATION NEAR THE FRONTAL BOUNDARY COULD YIELD A FEW TORNADOES...BUT TORNADIC SUPERCELLS WILL ALSO BE POSSIBLE DEEPER INTO THE WARM SECTOR SATURDAY AFTERNOON AND EVENING.

AS THE MOISTURE FLUX INTENSIFIES SATURDAY INTO SATURDAY NIGHT...PW VALUES WILL APPROACH RECORD VALUES FOR DECEMBER. TRAINING CELLS WILL FURTHER ENHANCE THE THREAT OF HEAVY RAINFALL AND FLASH

FLOODING. WIDESPREAD TOTALS IN EXCESS OF 3 INCHES ARE LIKELY... WITH THE FOCUS FOR TOTALS OF 5 TO 8 INCHES REMAINING NORTHEAST OF THE DALLAS/FORT WORTH METROPLEX. WITH THE MAIN UPPER TROUGH LAGGING BEHIND THE FRONT...THE BOUNDARY IS LIKELY TO STALL SATURDAY NIGHT INTO SUNDAY. IF ITS POSITION IS WITHIN OUR CWA... THIS WOULD SET THE STAGE FOR ANOTHER DAY OF SEVERE POTENTIAL ON SUNDAY...AS WELL AS PROLONG THE THREAT OF HEAVY RAINFALL...WHICH WOULD INCREASE STORM TOTALS. THE FRONT WILL FINALLY SURGE THROUGH THE REGION SUNDAY NIGHT...USHERING IN MUCH COLDER AIR.

THERE IS DECENT AGREEMENT AMONG OPERATIONAL SOLUTIONS WITH THE TRACK OF THE UPPER LOW...BRINGING THE CORE THROUGH NORTH AND CENTRAL TEXAS SUNDAY NIGHT. DESPITE SOME EXPECTED SPREAD AMONG ENSEMBLE MEMBERS...THIS IS INCREASING CONFIDENCE THAT A TRANSITION TO SNOW WILL OCCUR BEFORE THE PRECIPITATION COMES TO AN END. OUR WARM WEATHER SHOULD MITIGATE THE IMPACTS TO SOME EXTENT...BUT WITH TEMPERATURES DROPPING BELOW FREEZING IN WESTERN ZONES MONDAY MORNING...RESIDENTS AND TRAVELERS SHOULD EXPECT THE POTENTIAL FOR IMPACTS TO TRAVEL. AT THIS TIME...IT APPEARS THE GREATEST POTENTIAL FOR ACCUMULATING SNOWFALL WILL BE IN AREAS WEST OF THE I-35 CORRIDOR. WINTER WEATHER ENTHUSIASTS MAY LATCH ONTO THE HIGHER AMOUNTS AMONG THE AVAILABLE GUIDANCE...BUT THE WIDELY VARYING AMOUNTS SHOW HOW DEPENDENT THE EVENTUAL TOTALS WILL HINGE ON THE TRACK OF THE UPPER LOW.

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FXUS64 KFWD 252138

AJDFWD

AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE FORT WORTH TX

338 PM CST FRI DEC 25 2015

.DISCUSSION...

TODAY WAS A WARM CHRISTMAS DAY WITH HIGH TEMPERATURES MAINLY IN THE 70S. THIS WARMING WAS LARGELY ATTRIBUTED TO ABUNDANT SUN AND THE STEADY RETURN OF GULF MOISTURE BACK INTO THE REGION.

LOW LEVEL SOUTH TO SOUTHEAST FLOW WILL INCREASE TONIGHT IN RESPONSE TO SURFACE CYCLOGENESIS FROM THE SOUTHERN HIGH PLAINS TO FAR WEST TEXAS. SCATTERED SHOWERS AND SOME THUNDERSTORMS WILL BE POSSIBLE TONIGHT BUT WILL INCREASE IN COVERAGE AND INTENSITY ON SATURDAY AS A STRONG UPPER LOW CUTS OFF AND APPROACHES FAR WEST TEXAS. MODELS CONTINUE TO INDICATE MODERATE INSTABILITY AS WELL AS ABUNDANT MOISTURE AND SHEAR ACROSS THE REGION ON SATURDAY AHEAD OF A COLD FRONT. THEREFORE...THERE WILL BE A POTENTIAL FOR SEVERE STORMS IN THE WARM SECTOR THROUGH THE DAY WITH A THREAT OF LARGE HAIL...DAMAGING WINDS AND EVEN A FEW TORNADOES. LOCALIZED HEAVY RAIN WILL ALSO POSE A THREAT BUT WILL INCREASE WITH THE ARRIVAL OF THE FRONT. THE COLD FRONT SHOULD REACH THE NORTHWEST ZONES BY SATURDAY AFTERNOON AND MOVE SOUTHEAST SATURDAY NIGHT. THUNDERSTORMS ARE EXPECTED TO ORGANIZE ALONG THE FRONT SATURDAY NIGHT AND THERE WILL BE A CONTINUED SEVERE THREAT ALONG WITH AN INCREASING HEAVY RAIN THREAT AS MOISTURE IS LIFTED OVER THE FRONTAL SURFACE. THEREFORE...WE WILL LEAVE THE FLASH FLOOD WATCH GOING FOR THE EASTERN TWO THIRDS OF NORTH TEXAS FROM SATURDAY MORNING THROUGH LATE SUNDAY NIGHT. MODEL CONSENSUS IS TO STALL THE FRONT ACROSS NORTH TEXAS EARLY SUNDAY MORNING BUT MOVE IT THROUGH THE ENTIRE FORECAST AREA SUNDAY AFTERNOON. PRECIPITATION CHANCES ARE EXPECTED TO DECREASE QUICKLY FROM WEST TO EAST SUNDAY AFTERNOON DUE TO AN INTRUSION OF DRY AIR MOVING THROUGH THE BASE OF THE UPPER LOW.

MODELS ARE A BIT MORE PROGRESSIVE NOW IN MOVING THE UPPER LOW OUT OF SOUTHWEST TEXAS SUNDAY AFTERNOON AND ACROSS NORTH TEXAS SUNDAY NIGHT. THE TRACK OF THE UPPER LOW IS VERY IMPORTANT SINCE SOME SNOW WILL LIKELY ACCOMPANY THIS VERY COLD CORE SYSTEM. AS OF NOW IT STILL APPEARS THAT A LIGHT RAIN/LIGHT SNOW MIX WILL BEGIN IN THE WESTERN ZONES SUNDAY EVENING AND FOLLOW THE UPPER LOW AS IT TRACKS NORTHEAST ACROSS THE REGION. THE RAIN/SNOW MIX WILL LIKELY CHANGE OVER TO ALL SNOW BEFORE ENDING MONDAY MORNING. THE MOST LIKELY LOCATIONS TO SEE A FEW HOURS OF LIGHT SNOW WILL BE GENERALLY ALONG AND WEST OF A LINE FROM BONHAM TO DALLAS TO KILLEEN. SINCE SURFACE TEMPERATURES ACROSS ALL BUT THE NORTHWEST ZONES SHOULD REMAIN ABOVE FREEZING WHILE THIS SNOW OCCURS... ACCUMULATIONS ON ANYTHING OTHER THAN ELEVATED SURFACES ARE UNLIKELY. THE ONLY EXCEPTION TO THIS MAY BE ACROSS THE NORTHWEST ZONES WHERE TEMPERATURES SHOULD FALL BELOW FREEZING EARLY MONDAY MORNING. THERE MAY BE SOME TRAVEL IMPACTS IN THAT REGION BUT CONFIDENCE IS STILL LOW ON ACCUMULATIONS.

THE UPPER LOW WILL MOVE QUICKLY TOWARD THE UPPER MIDWEST BY MIDDAY MONDAY AND MUCH COLDER AND DRIER AIR WILL FILTER INTO THE REGION. OVERNIGHT LOWS MONDAY NIGHT WILL RANGE FROM THE UPPER TEENS IN THE NORTHWEST TO THE LOWER 30S IN THE SOUTHEAST.

ANOTHER LOW PRESSURE SYSTEM IS STILL PROGGED TO FOLLOW BEHIND THE HOLIDAY SYSTEM ON TUESDAY NIGHT AND WEDNESDAY. HOWEVER...MOISTURE WILL BE LIMITED AND ONLY A FEW SHOWERS WILL BE POSSIBLE IN THE SOUTHERN ZONES. OTHERWISE...THE REST OF NEXT WEEK WILL BE COLD AND DRY WITH HIGHS MAINLY IN THE 40S AND LOWS IN THE 20S AND 30S.

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FXUS64 KFWD 261058

AJDFWD

AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE FORT WORTH TX

458 AM CST SAT DEC 26 2015

...WINTER STORM WATCH NOW IN EFFECT SUNDAY EVENING THROUGH MONDAY MORNING FOR AREAS ALONG AND WEST OF A LINE FROM CISCO...TO MINERAL WELLS...TO NOCONA...

.DISCUSSION...

A STRONG STORM SYSTEM WILL APPROACH TODAY...SETTING THE STAGE FOR HEAVY RAINFALL AND SEVERE WEATHER. A COLD FRONT WILL MOVE INTO NORTH TEXAS TODAY AND SLOWLY PUSH THROUGH THE REGION TONIGHT AND SUNDAY. MUCH COLDER AIR WILL FOLLOW...WITH SNOW LIKELY IN AREAS WEST OF THE I-35 CORRIDOR. THE WINTRY PRECIPITATION WILL COME TO AN END ON MONDAY...AND LITTLE ADDITIONAL PRECIPITATION IS EXPECTED THE REMAINDER OF THE UPCOMING WEEK. BELOW NORMAL TEMPERATURES WILL PREVAIL INTO THE NEW YEAR.

DESPITE A VIGOROUS LLJ OVERNIGHT AND THE STRONG MOIST ADVECTION IT HAS YIELDED...LAPSE RATES ABOVE THIS LAYER ARE UNREMARKABLE... AND THE LIFT ASSOCIATED WITH THE APPROACHING SYSTEM HAS YET TO ARRIVE. A FEW SHOWERS HAVE DEVELOPED IN NORTHEAST ZONES...AND ADDITIONAL ACTIVITY IS EXPECTED AS THE MORNING PROGRESSES. HOWEVER...DESPITE THE ONSET OF THE FLASH FLOOD WATCH AT 6 AM... HEAVY PRECIPITATION WILL NOT OCCUR UNTIL LATE IN THE DAY ONCE THE CELLS ARE ABLE TO TAP THE UNSTABLE BOUNDARY LAYER. EARLY MORNING TEMPERATURES ARE NEAR 70F...SO EVEN WITH CONSIDERABLE CLOUD COVER TODAY...EXTRAORDINARY LATE DECEMBER DEW POINTS IN THE 60S AND 70S WILL PUSH MLCAPE VALUES ABOVE 2000J/KG THIS AFTERNOON.

A COLD FRONT WILL REACH NORTH TEXAS LATE IN THE DAY...WITH THUNDERSTORMS LIKELY ONGOING. ALTHOUGH DISCRETE CELLS MAY INITIALLY FORM IN VICINITY OF THE SURFACE FRONT...A TRANSITION TO A MORE LINEAR STORM MODE WILL LIKELY OCCUR AS THE BOUNDARY PUSHES DEEPER INTO NORTH TEXAS THIS EVENING. SHEAR PROFILES CONTINUE TO FAVOR ROTATING UPDRAFTS SUPPORTIVE OF LARGE HAIL AND DAMAGING WINDS...BUT THE STORM MOTION SUGGESTS INDIVIDUAL UPDRAFTS MAY CROSS THE BOUNDARY TOO QUICKLY...LIMITING THEIR TORNADIC POTENTIAL. ACTIVITY DEEPER INTO THE WARM SECTOR MAY BE MORE LIKELY TO REMAIN DISCRETE BUT ALSO LESS LIKELY TO DEVELOP INTENSE UPDRAFTS ROOTED IN THE BOUNDARY LAYER.

AS THE FRONT SLOWS TONIGHT...THE SEVERE POTENTIAL WILL LINGER ACROSS THE SOUTHEASTERN HALF OF THE CWA. BEHIND THE BOUNDARY... GUSTY NORTHWEST WINDS WILL PLUNGE WIND CHILLS INTO THE 20S AND 30S. A COLD RAIN WILL PERSIST...BUT THE INTENSITY OF THE RAINFALL BEHIND THE BOUNDARY WILL STEADILY DIMINISH. WITH THE MAIN UPPER TROUGH STILL UPSTREAM...THE FRONT WILL LIKELY STALL. IT IS LOOKING INCREASINGLY LIKELY THAT THE BOUNDARY WILL BE WITHIN OUR CWA WELL INTO THE DAY ON SUNDAY. TRAINING ECHOES ALONG THE BOUNDARY WILL

HAVE MAINTAIN A PROLONGED THREAT OF HEAVY RAIN AND WIND DAMAGE.

BEHIND THE FRONT...A MARKEDLY COLDER DAY IS EXPECTED ON SUNDAY... WITH GUSTY WINDS AND OCCASIONAL RAIN. HIGH TEMPERATURES IN FAR WESTERN ZONES WILL REMAIN IN THE 30S...AND AS THE COLUMN CONTINUES TO COOL IN ADVANCE OF THE APPROACHING UPPER LOW...A TRANSITION TO SNOW WILL OCCUR. ALTHOUGH A FEW FLAKES MAY FALL BEFORE NIGHTFALL SUNDAY EVENING...THE BULK OF THE SNOW WILL FALL SUNDAY NIGHT. THE RAIN/SNOW LINE WILL CREEP EASTWARD...POTENTIALLY REACHING THE I-35 CORRIDOR EARLY MONDAY MORNING.

ALTHOUGH THERE REMAINS SOME DISPARITY AMONG GUIDANCE WITH RESPECT TO THE EXACT PLACEMENT AND TIMING...THE UPPER LOW IS EXPECTED TO TRACK DIRECTLY THROUGH NORTH TEXAS SUNDAY NIGHT. THE HEAVY RAIN WILL PUSH INTO EAST TEXAS...AND THE LOW WILL TUG DRY MID-LEVEL AIR INTO NORTH TEXAS. THIS PROCESS MAY ULTIMATELY LIMIT THE EXTENT OF WINTRY PRECIPITATION ALONG THE I-35 CORRIDOR...BUT AREAS TO THE WEST WILL LIKELY HAVE SNOW OF SUFFICIENT DURATION TO ACCUMULATE. FOR THE POPULATION CENTERS ALONG THE I-35 CORRIDOR...A RAIN/SNOW MIX OR TRANSITION TO ALL SNOW MAY OCCUR...BUT WITH TEMPERATURES REMAINING ABOVE FREEZING...LITTLE TO NO SNOW ACCUMULATION IS EXPECTED. HOWEVER...IF THE EVENTUAL TRACK OF THE UPPER LOW IS FARTHER SOUTH...THERE COULD BE MORE SIGNIFICANT SNOWFALL ALONG THE I-35 CORRIDOR.

A WINTER STORM WATCH HAS BEEN ISSUED FOR AREAS ALONG AND WEST OF A LINE FROM CISCO...TO MINERAL WELLS...TO NOCONA. SNOWFALL AMOUNTS OF 1 TO 3 INCHES ARE EXPECTED. ALTHOUGH RECENT WARMTH WILL INITIALLY MITIGATE SOME OF THE IMPACTS...TEMPERATURES WILL FALL INTO THE 20S MONDAY MORNING WITHIN THE WATCH AREA. ACCUMULATION OF SNOW ON MAIN ROAD SURFACES WILL OCCUR...AND STRONG WINDS WILL MAKE NAVIGATING SLICK ROADS MORE DIFFICULT. IN ADDITION...BLOWING SNOW WILL DIMINISH THE VISIBILITY. EVEN WITH SNOW ON THE GROUND...THE SUN WILL RETURN MONDAY AND HELP TO MELT MUCH OF WHAT FALLS.

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FXUS64 KFWD 262008
AFDFWD

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE FORT WORTH TX
208 PM CST SAT DEC 26 2015

.DISCUSSION...

WITH A TORNADO WATCH IN EFFECT FOR ALL OF NORTH AND CENTRAL TEXAS...WILL KEEP THE FORECAST DISCUSSION FOCUSED ON THE MAIN THREATS ASSOCIATED WITH THE UPPER LEVEL STORM SYSTEM APPROACHING FROM THE WEST.

SEVERE WEATHER THREAT: THE MAIN WINDOW OF OPPORTUNITY FOR SEVERE STORMS IS THIS AFTERNOON THROUGH OVERNIGHT TONIGHT...PRIMARILY ALONG AND SOUTHEAST OF A COLD FRONT MOVING SLOWLY SOUTHEAST ACROSS THE REGION.

FOR THIS AFTERNOON AND EVENING: THE 18Z FWD RAOB INDICATED OVER 2000 J/KG OF SURFACE BASED CAPE IN PLACE OVER THE REGION...WITH NO SIGNIFICANT CAP IN PLACE INHIBITING CONVECTION. DEEP LAYER AND LOW-LEVEL SHEAR PROFILES ARE SUPPORTIVE OF SUPERCELL THUNDERSTORMS CAPABLE OF PRODUCING TORNADOES. THE 18 UTC FWD RAOB NUMBERS RANK HIGHLY IN THE PARAMETER SPACE SUPPORTIVE OF SIGNIFICANT TORNADOES ACCORDING TO THE STORM PREDICTION CENTERS SEVERE WEATHER ENVIRONMENT CLIMATOLOGY. AS A RESULT...THINK THAT SUPERCELL THUNDERSTORMS CAPABLE OF PRODUCING TORNADOES WILL POSE A SIGNIFICANT THREAT TO THE REGION THROUGH THIS EVENING. THE ONLY MISSING INGREDIENT THAT WOULD SUPPORT A MORE WIDESPREAD SEVERE WEATHER OR TORNADO OUTBREAK IS STRONG LIFT OVER THE REGION. LIFT IS GENERALLY WEAK AND LACKS FOCUS...HOWEVER THE ENVIRONMENT IS UNCAPPED. EVEN WEAK LIFT MAY BE ENOUGH FOR SCATTERED SEVERE STORM/SUPERCELL DEVELOPMENT ACROSS THE REGION THROUGH THIS EVENING. A TORNADO WATCH REMAINS IN EFFECT THROUGH 8 PM FOR ALL OF NORTH AND CENTRAL TEXAS AS A RESULT. ASSUMING SUPERCELL THUNDERSTORMS CONTINUE TO DEVELOP IN THIS ENVIRONMENT...SIGNIFICANT TO VIOLENT TORNADOES ARE POSSIBLE. THE TORNADO THREAT MAY DIMINISH LATE THIS EVENING AFTER SEVERAL HOURS OF COOLING...THOUGH THE SEVERE WEATHER THREAT WILL LIKELY PERSIST ALONG AND SOUTHEAST OF THE COLD FRONT.

OVERNIGHT INTO SUNDAY: THE THREAT FOR SUPERCELLS WILL CONTINUE OVERNIGHT ALONG AND SOUTHEAST OF THE COLD FRONT. THE TORNADO THREAT MAY DIMINISH A BIT...BUT WILL NOT LIKELY BECOME ZERO AT ANY POINT SOUTHEAST OF THE FRONT WITH NEAR 70 DEW POINTS IN PLACE. THE SPEED OF THE FRONT WILL LARGELY DETERMINE THE SEVERE WEATHER THREAT FOR SUNDAY. IF THE FRONT STALLS OUT ACROSS THE CWA...THE THREAT FOR SUPERCELLS AND TORNADOES WILL LIKELY BE PRESENT AGAIN...ALONG AND SOUTHEAST OF WHEREVER THE FRONT STALLS. IF THE FRONT STALLS IN THE CWA...IT IS MOST LIKELY TO STALL OUT NEAR A PARIS TO DALLAS TO TEMPLE LINE.

FLASH FLOODING THREAT: THE FLASH FLOODING THREAT IS EXPECTED TO BE THE GREATEST ALONG AND BEHIND THE COLD FRONT...ESPECIALLY IF IT STALLS OUT SUNDAY AFTERNOON. FLASH FLOODING IS LIKELY THE MOST WIDESPREAD THREAT FOR THE REGION. WITH SOIL MOISTURE CONDITIONS AND THE TRINITY RIVER BASIN ALREADY STARTING OUT ABOVE NORMAL...THERE IS NOT MUCH STORAGE CAPACITY FOR SIGNIFICANT RAINFALL AND RUNOFF. WITH 3-6 INCHES (AND ISOLATED HIGHER AMOUNTS) EXPECTED ALONG AND EAST OF INTERSTATE 35...SIGNIFICANT FLASH FLOODING IS POSSIBLE. ADDITIONAL RIVER FLOODING ALL ALONG THE TRINITY IS LIKELY AS WELL. THE PRIMARY FLASH FLOODING THREAT IS LIKELY TONIGHT THROUGH SUNDAY...AGAIN...ALONG AND BEHIND THE FRONTAL BOUNDARY.

WINTRY PRECIPITATION: THE FORECAST REMAINS LARGELY UNCHANGED FROM THE OVERNIGHT FORECAST. RAIN IS LIKELY TO CHANGE OVER TO SNOW ON THE BACK SIDE OF THE UPPER LOW SUNDAY NIGHT THROUGH MONDAY MORNING. THIS UPPER LEVEL LOW IS AN INCREDIBLY DYNAMIC SYSTEM SPORTING OVER 120 KTS OF WIND AT THE 500 MB LEVEL AND WITH TEMPERATURES DOWN TO -36 DEG C AT THE 500 MB LEVEL. THE COLD AIR ALREADY WRAPPED UP IN THIS SYSTEM COMPARED TO THE INCREDIBLY ANOMALOUS SPRING TIME WARMTH AND MOISTURE CURRENTLY IN PLACE OVER THE REGION SUPPORTS A SYSTEM WITH HIGH END POTENTIAL TO DEEPEN AS IT MOVES OUT OVER THE SOUTHERN PLAINS. THE STRONG POTENTIAL FOR CYCLOGENESIS ASSOCIATED WITH THE INTENSE BAROCLINICITY PROGGED BY MODELS FOR SUNDAY AFTERNOON THROUGH MONDAY MEANS THAT THIS IS THE PORTION OF THE FORECAST MOST SUSCEPTIBLE TO CHANGE OVER THE NEXT 36 HOURS. AS IT STANDS NOW...LOCATIONS WITHIN THE WINTER STORM WATCH...ROUGHLY ALONG AND NORTHWEST OF A LINE FROM BOWIE TO MINERAL WELLS TO CISCO...ARE THE MOST LIKELY TO SEE ACCUMULATING SNOWFALL SUNDAY NIGHT THROUGH MONDAY MORNING. 1-3 INCHES OF SNOWFALL LOOKS LIKELY AT THIS TIME FOR THESE AREAS. EVEN THOUGH THIS IS TECHNICALLY BELOW WINTER STORM WARNING/WATCH CRITERIA... THERE IS THE POTENTIAL FOR ADDITIONAL SNOWFALL DEPENDING ON THE EXACT TRACK OF THE UPPER LOW...AND HOW MUCH IT DEEPENS ONCE OVER THE SOUTHERN PLAINS. EVEN IF 1-3 INCHES OF SNOWFALL IS ALL THAT FALLS...WINDS ARE EXPECTED TO BE SUSTAINED AT 25 KTS GUSTING TO 35 KTS...MEANING THERE WILL BE A GOOD POTENTIAL FOR BLOWING AND DRIFTING OF SNOW WHICH COULD SIGNIFICANTLY INHIBIT TRAVEL ACROSS THE WINTER STORM WATCH AREA. WILL NOT CHANGE THE AREAL OR TEMPORAL COVERAGE OF THE WATCH FOR NOW...BUT WILL BE WATCHING FOR THE POTENTIAL FOR ADDITIONAL WINTER WEATHER IMPACTS AND CHANGES IN THE WATCH COVERAGE AREA IN LATER FORECASTS.

AFTER MONDAY...MADE NO SIGNIFICANT CHANGES TO THE PREVIOUS FORECAST.

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