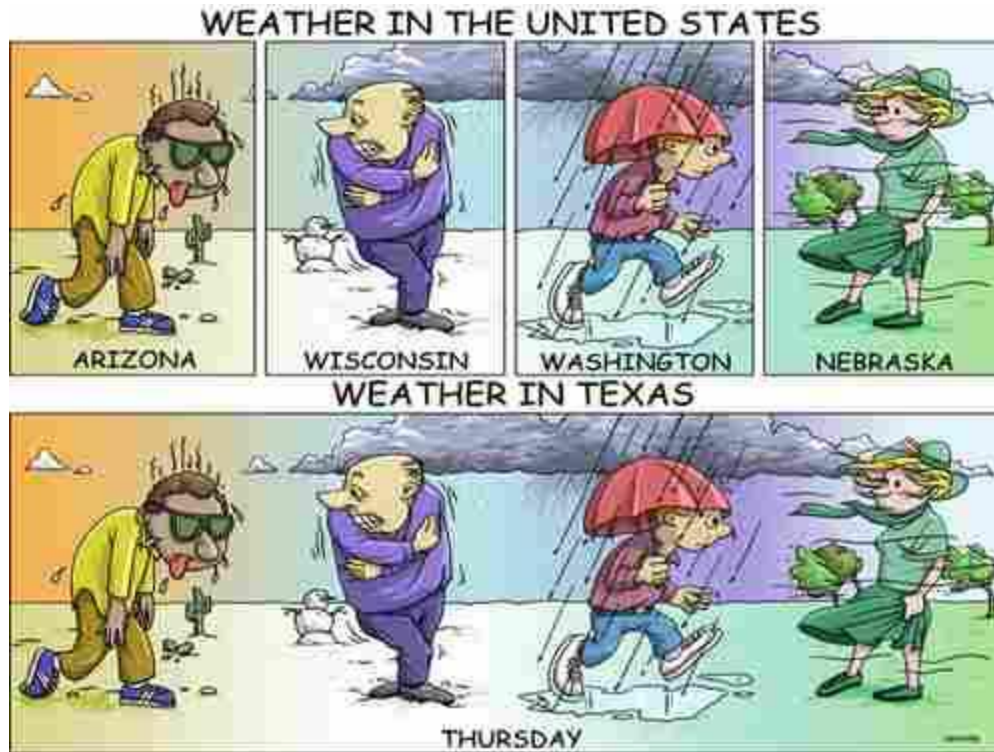


WX Reports – Part 2

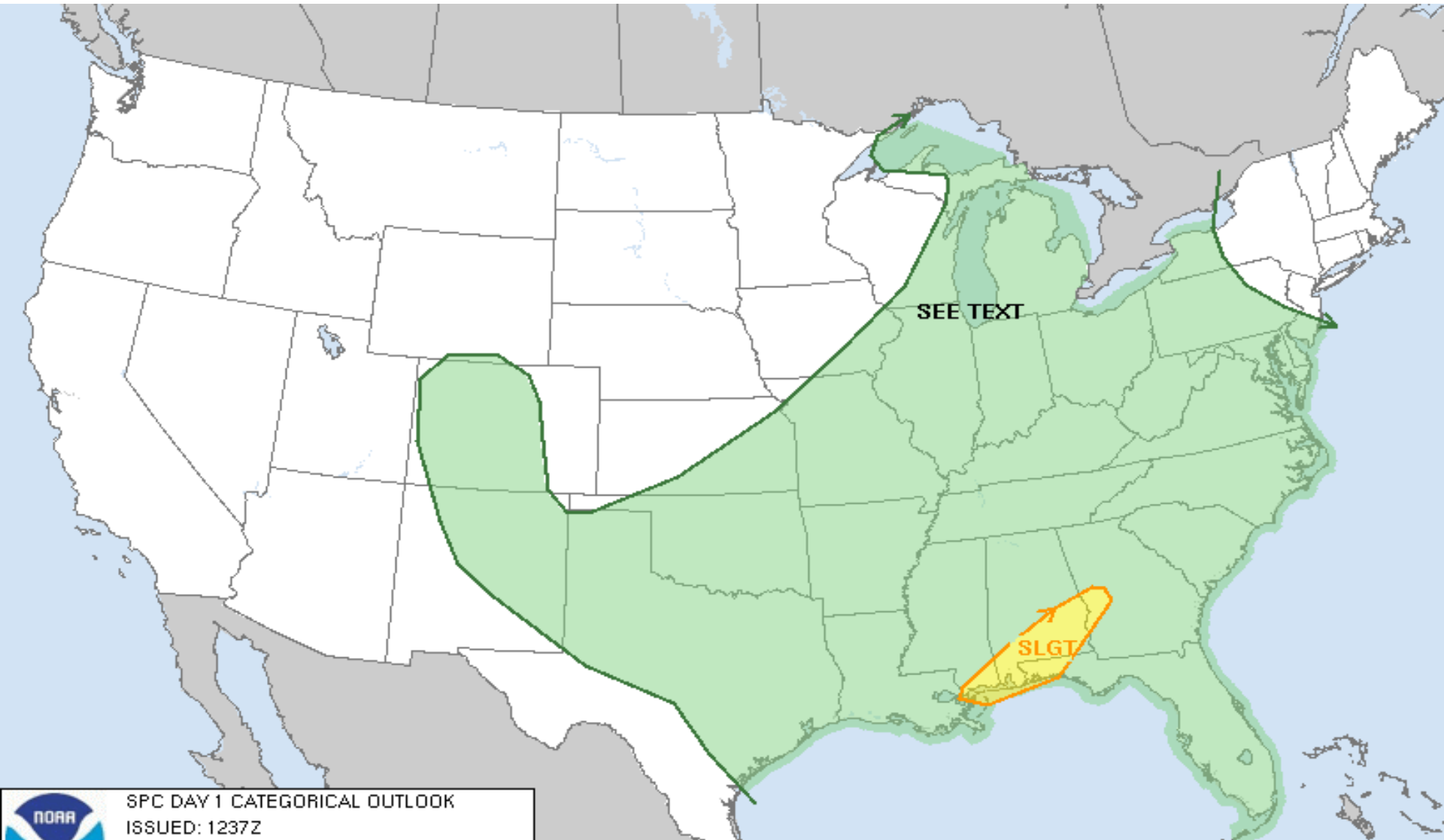



Gary White

Convective Outlooks (AC)

- Both Textual and Graphic
- Two Day Outlook
- Look for Severe Thunderstorms
 - SFC Winds > 50 knts and Hail > $\frac{3}{4}$ inch
- Three Probabilities
 - Slight
 - Moderate
 - High

Convective Outlook (AC)



 SPC DAY 1 CATEGORICAL OUTLOOK
ISSUED: 1237Z
VALID: 17/1300Z-18/1200Z
FORECASTER: HART/LEITMAN

Categorical Outlook Legend:
TSTM ■ SLGT ■ MDT ■ HIGH ■

Convective Outlook (AC)

- Best to Use Both Text and Graphic
- In Gulf Coast Region, When is Greatest Risk of Severe WX?
- Which Way is/are System(s) Moving in Gulf Coast Region?
- Can You Get This Information from Graphic Alone?

SPC AC 171237

DAY 1 CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
0737 AM CDT MON SEP 17 2012

VALID 171300Z - 181200Z

...THERE IS A SLGT RISK OF SVR TSTMS THIS AFTERNOON THROUGH TONIGHT ACROSS PARTS OF THE GULF COAST REGION...

...GULF COAST REGION...

WATER VAPOR LOOPS SHOW TWO UPPER TROUGHS AFFECTING THE CENTRAL/EASTERN UNITED STATES. THE FIRST SYSTEM IS OVER EAST TX...AND WILL TRACK EASTWARD INTO THE GULF COAST REGION THROUGH THE FORECAST PERIOD. MODEL GUIDANCE INDICATES THE ASSOCIATED SURFACE LOW /CURRENTLY OFF THE MIDDLE TX COAST/ WILL MOVE ACROSS THE LA DELTA AND INTO SOUTHERN MS/AL OVERNIGHT. STRENGTHENING LOW/MID LEVEL WIND FIELDS IN THE WARM SECTOR OF THIS LOW WILL RESULT IN INCREASINGLY FAVORABLE VERTICAL SHEAR FOR ORGANIZED/ROTATING CONVECTION. DESPITE NEAR MOIST-ADIABATIC LAPSE RATES...SURFACE DEWPOINTS IN THE 70S WILL YIELD MARGINAL INSTABILITY AND THE POTENTIAL FOR SURFACE-BASED STORMS. AT THIS TIME...THE GREATEST RISK OF SEVERE WEATHER WILL LIKELY OCCUR AFTER DARK. LOCALLY DAMAGING WINDS AND A TORNADO OR TWO ARE POSSIBLE ACROSS THE SLIGHT RISK AREA.

...UPPER MIDWEST...

THE SECOND UPPER TROUGH IS CURRENTLY OVER THE DAKOTAS...AND IS FORECAST TO ROTATE SOUTHEASTWARD INTO THE UPPER MS VALLEY BY TOMORROW MORNING. A RATHER STRONG COLD FRONT WILL SURGE SOUTHWARD ACROSS PARTS OF IA/WI/MO/IL/IND THIS AFTERNOON AND EVENING. RELATIVELY STRONG HEATING AHEAD OF THE FRONT...COUPLED WITH DEWPOINTS IN THE 50S AND SUBSTANTIAL FRONTAL CONVERGENCE IS LIKELY TO RESULT IN SCATTERED SHOWERS AND THUNDERSTORMS. THE STRONGEST OF THESE STORMS COULD PRODUCE HAIL AND GUSTY WINDS. ORGANIZED SEVERE STORMS ARE NOT EXPECTED AT THIS TIME.

..HART/LEITMAN.. 09/17/2012

AIRMETS (WAs)

- Particularly Hazardous to Small Aircraft
- Three Types
 - Sierra – Think **See** – IFR Conditions
 - Tango – Think **Turbulence**
 - Zulu – Think **FreeZing** – for Icing and Freezing Levels

AIRMETS (WAs) (cont.)

WAUS44 KPCI 171445
DFWZ WA 171445
AIRMET ZULU UPDT 2 FOR ICE AND FRZLVL VALID UNTIL 172100
AIRMET ICE...AR TN MS AL MO IL IN KY
FROM 20N IND TO CVG TO HNN TO HMV TO GQO TO 20SSW MSL TO 30SSE
IGB TO 30WSW ELD TO 20WSW ARG TO 60SE FAM TO 20N IND
MOD ICE BTN 150 AND FL250. CONDS CONTG BYD 21Z THRU 03Z.
FRZLVL...RANGING FROM 125-155 ACRS AREA

WAUS44 KPCI 171445
DFWT WA 171445
AIRMET TANGO UPDT 2 FOR TURB VALID UNTIL 172100
AIRMET TURB...OK TX AR TN LA MS KS IA MO WI LM MI LH IL IN KY
FROM 20ENE ECK TO 40S ECK TO FWA TO CVG TO 30S TTH TO 30SSE FAM
TO 60WNW ARG TO 50SW LIT TO AEX TO 50SSE LFK TO 50SE TTT TO
40ENE END TO 70SE OVR TO 20SW DLL TO 20ENE ECK
MOD TURB BTN FL240 AND FL390. CONDS CONTG BYD 21Z THRU 03Z.
OTLK VALID 2100-0300Z...TURB OK TX AR TN MS IA MO WI LM MI LH IL
IN KY
BOUNDED BY YVV-50SE ECK-FWA-CVG-30S TTH-DYR-20ESE ARG-30ESE ELD-
20NNE TXK-60SSE MLC-40ENE MCI-30ESE DBQ-50SE GRB-YVV
MOD TURB BTN FL240 AND FL390. CONDS CONTG THRU 03Z.

WAUS44 KPCI 171445
DFWS WA 171445
AIRMET SIERRA UPDT 4 FOR IFR AND MTN OBSCN VALID UNTIL 172100
AIRMET MTN OBSCN...TN KY
FROM HNN TO HMV TO GQO TO LOZ TO HNN
MTNS OBSC BY CLDS/PCPN/BR. CONDS CONTG BYD 21Z THRU 03Z.
OTLK VALID 2100-0300Z...IFR AR TN LA MS AL MO KY AND CSTL WTRS
BOUNDED BY 40NW DYR-HMV-GQO-LGC-40NE SJI-40ENE HRV-20W LCH-20SSW
ELD-40WSW LIT-40NW DYR
CIG BLW 010/VIS BLW 3SM PCPN/BR. CONDS CONTG THRU 03Z.

SIGMETS (WSs)

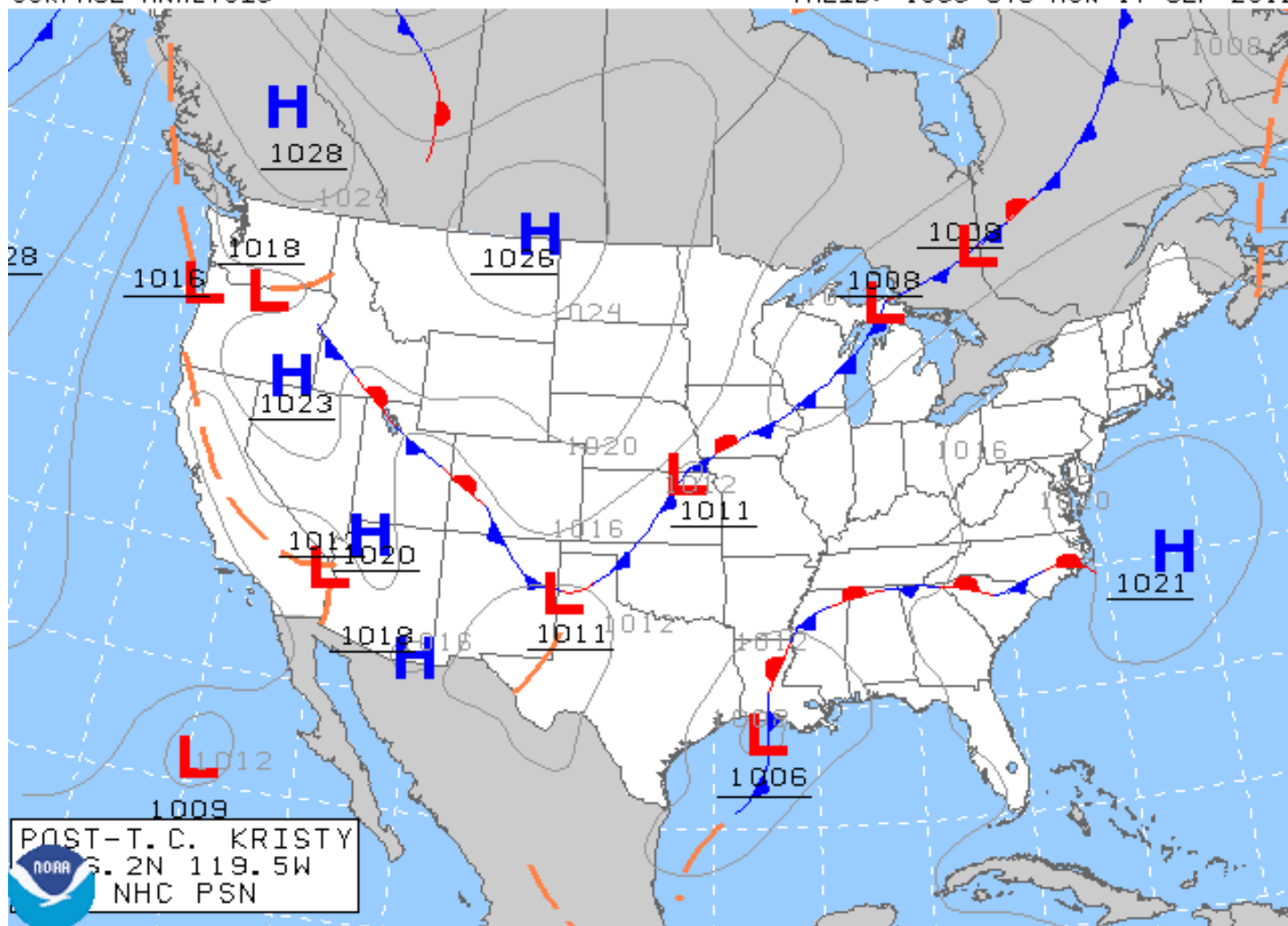
- Hazards for All Aircraft Include Convective Activity

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WSUS31 KKCI 171755  
SIGE  
CONVECTIVE SIGMET 7E  
VALID UNTIL 1955Z  
MI LH LM  
FROM 60SSE SSM-10ENE TVC-50N MKG  
LINE TS 30 NM WIDE MOV FROM 25040KT. TOPS TO FL400.  
  
OUTLOOK VALID 171955-172355  
AREA 1...FROM 30NW CEW-TLH-CRG-40SE VRB-60ENE PBI-150SE MIA-80SWW  
EYW-60SWW PIE-170S CEW-30NW CEW  
WST ISSUANCES EXPD. REFER TO MOST RECENT ACUS01 KWNS FROM STORM  
PREDICTION CENTER FOR SYNOPSIS AND METEOROLOGICAL DETAILS.
```

Surface Analysis Chart

SURFACE ANALYSIS

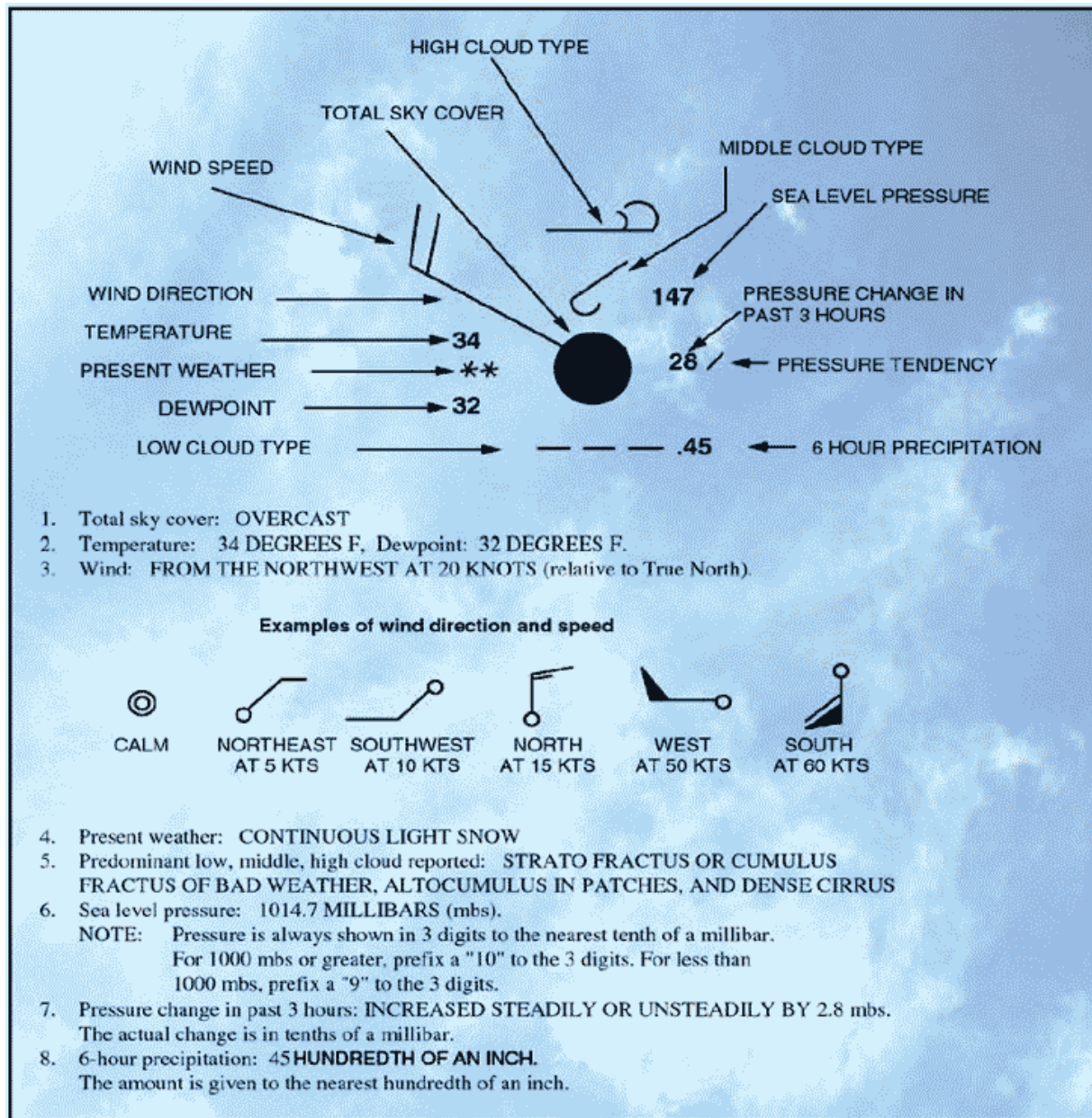
VALID: 1500 UTC MON 17 SEP 2012



DOC/NOAA/NWS/NCEP/HPC

ISSUED: 1629 UTC MON 17 SEP 2012

Station Model



Satellite

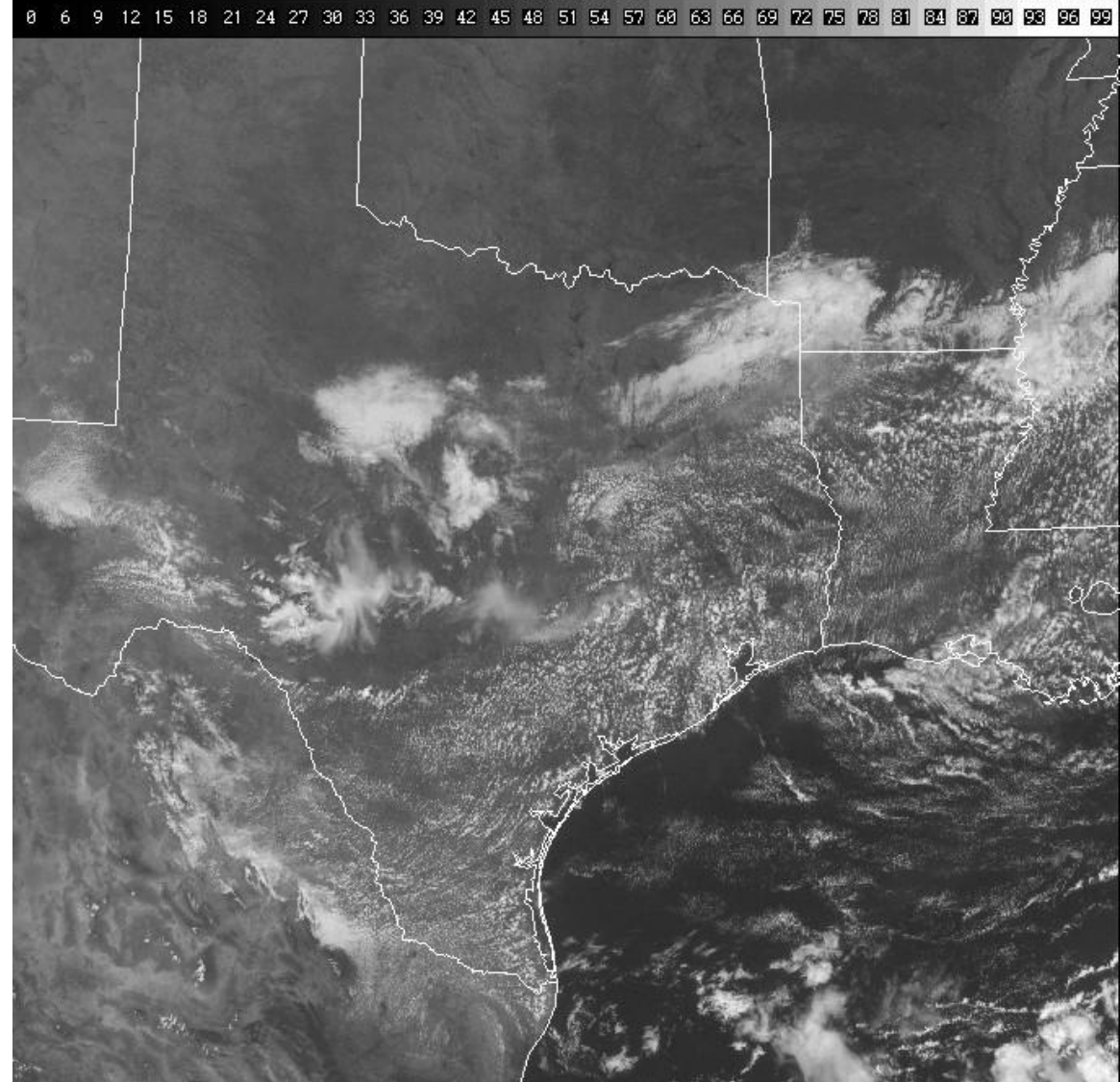
- Three General Types
 - Visual – What You Would See from Satellite
 - May be Color Enhanced
 - Only for Areas in Daytime
 - IR – Shows Temperature of Upper Atmosphere
 - Colder is Whiter – Indicates Potential In-Stability
 - 24 Hour Coverage
 - Moisture Content
 - Likely Color Enhanced
 - 24 Hour Coverage

Visual

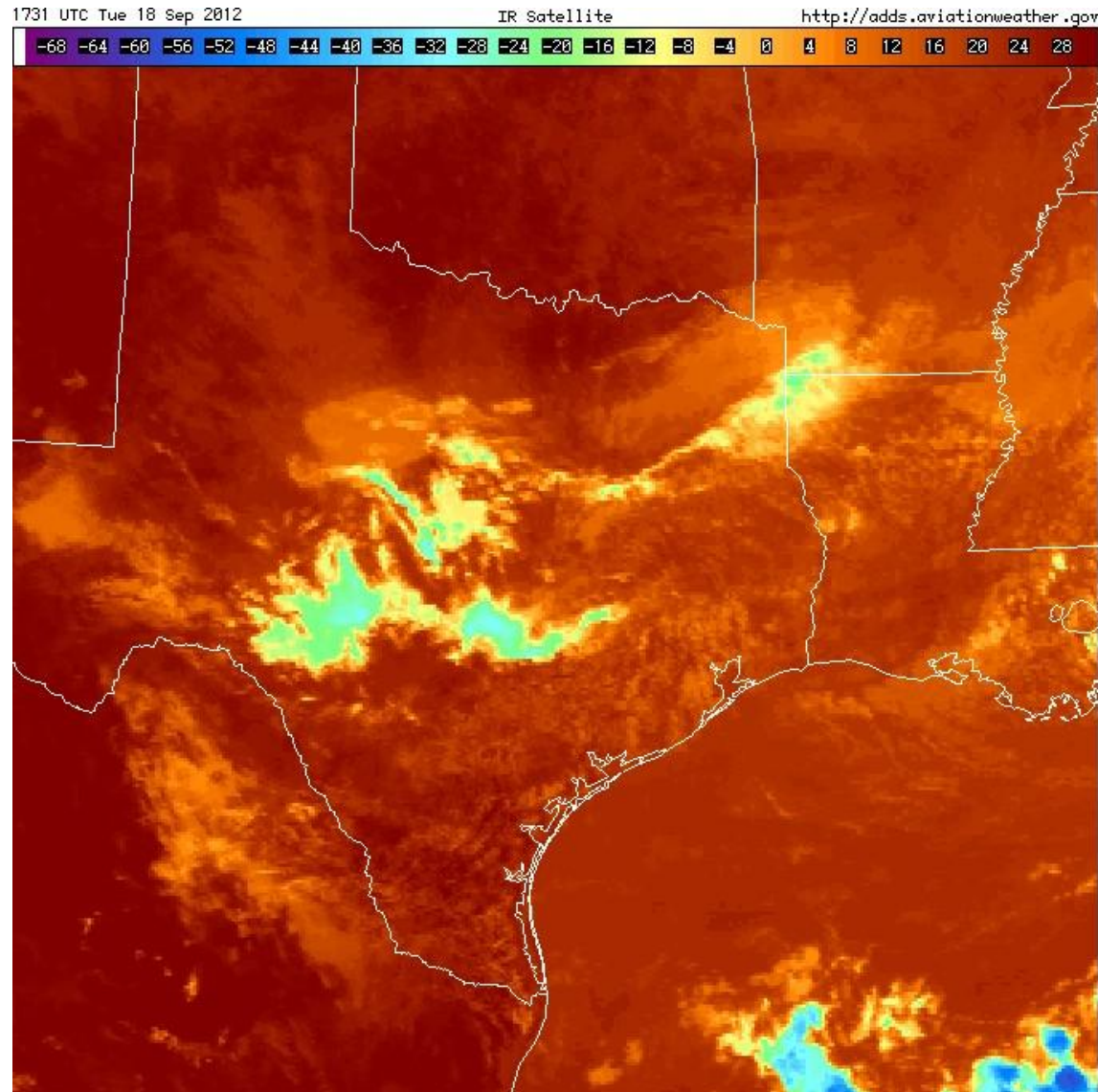
1731 UTC Tue 18 Sep 2012

Visible Satellite

<http://adds.aviationweather.gov>



IR (Color Enhanced)

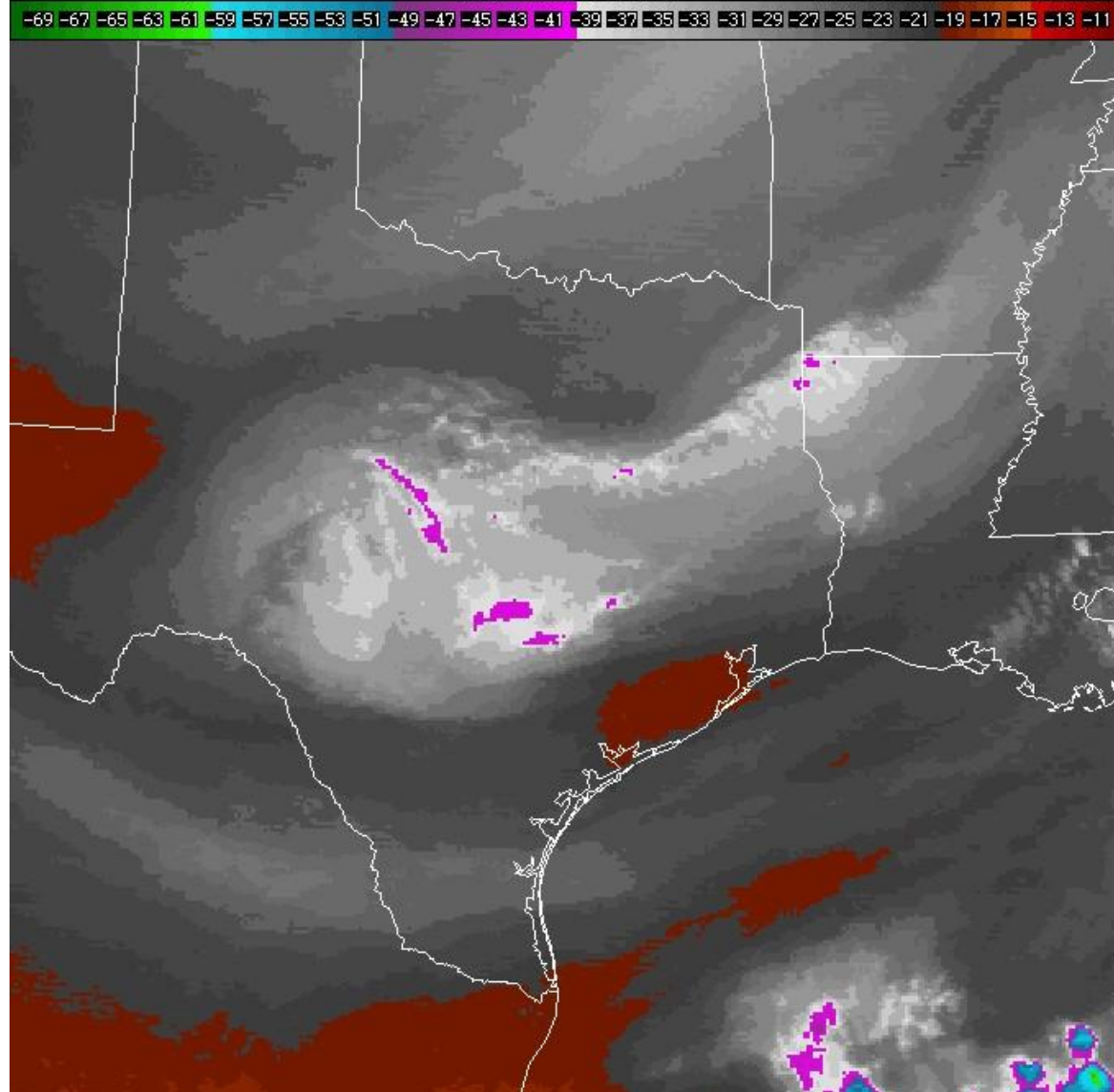


Moisture (Water Vapor)

1731 UTC Tue 18 Sep 2012

Water Vapor Satellite

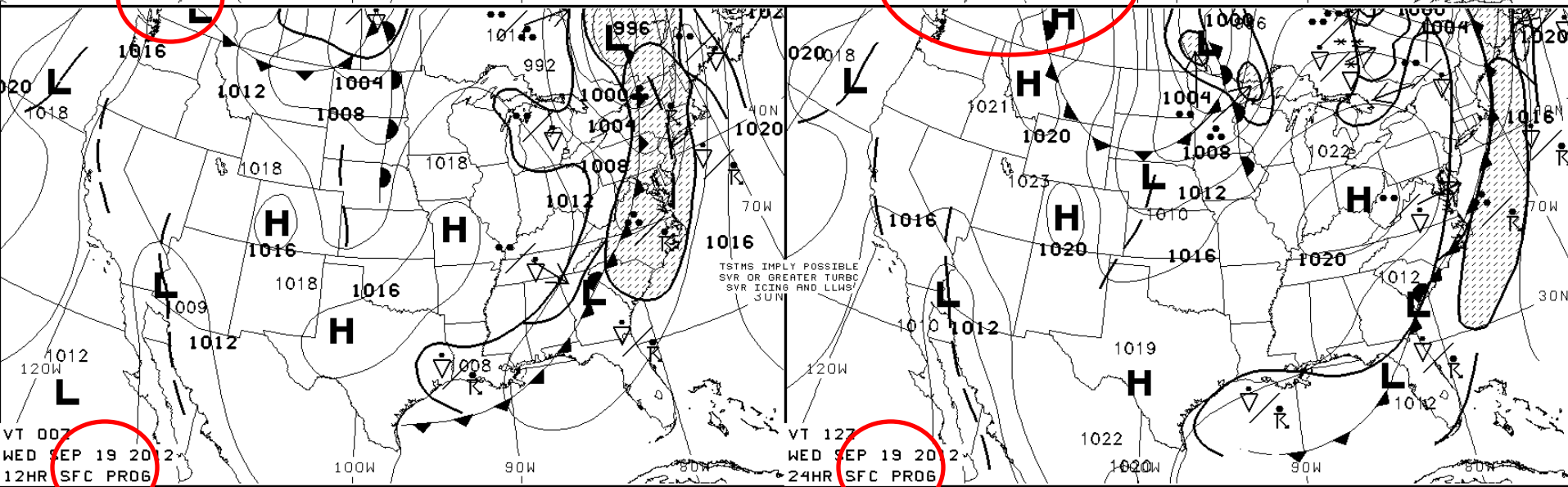
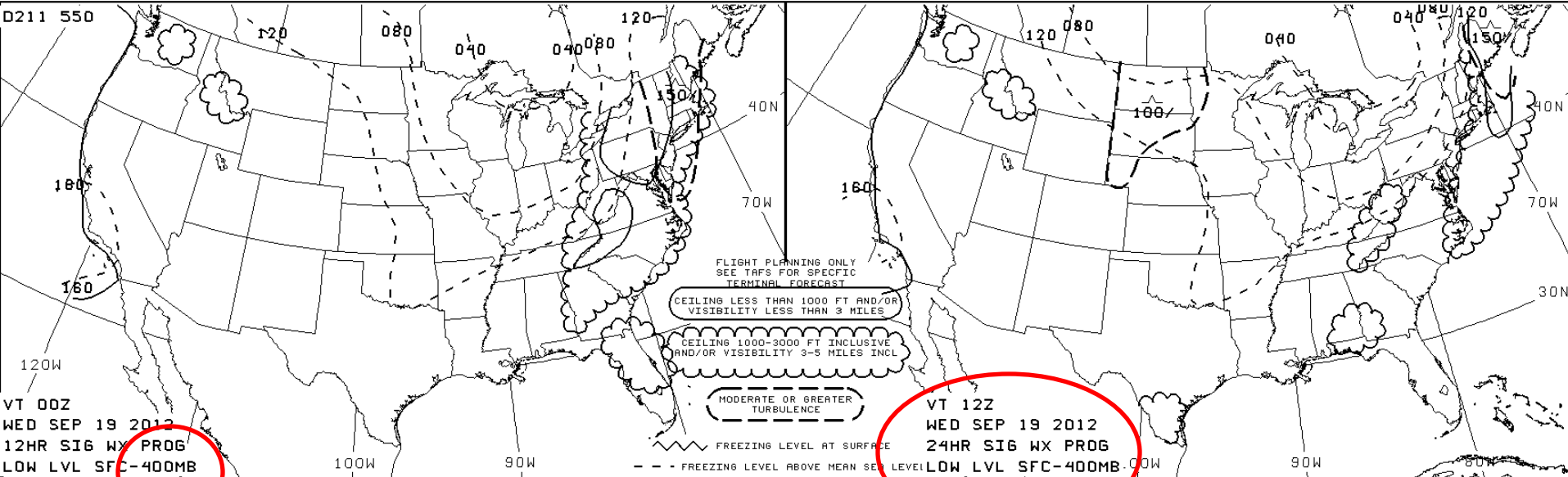
<http://adds.aviationweather.gov>



Low-Level Significant WX Prog Charts

- SFC and 24,000' (400 mb)
- Issue 4 Times a Day (00, 06, 12, 18Z)
- 12 and 24 Hr Forecast (Prognostication)

Low-Level Significant WX Prog Charts

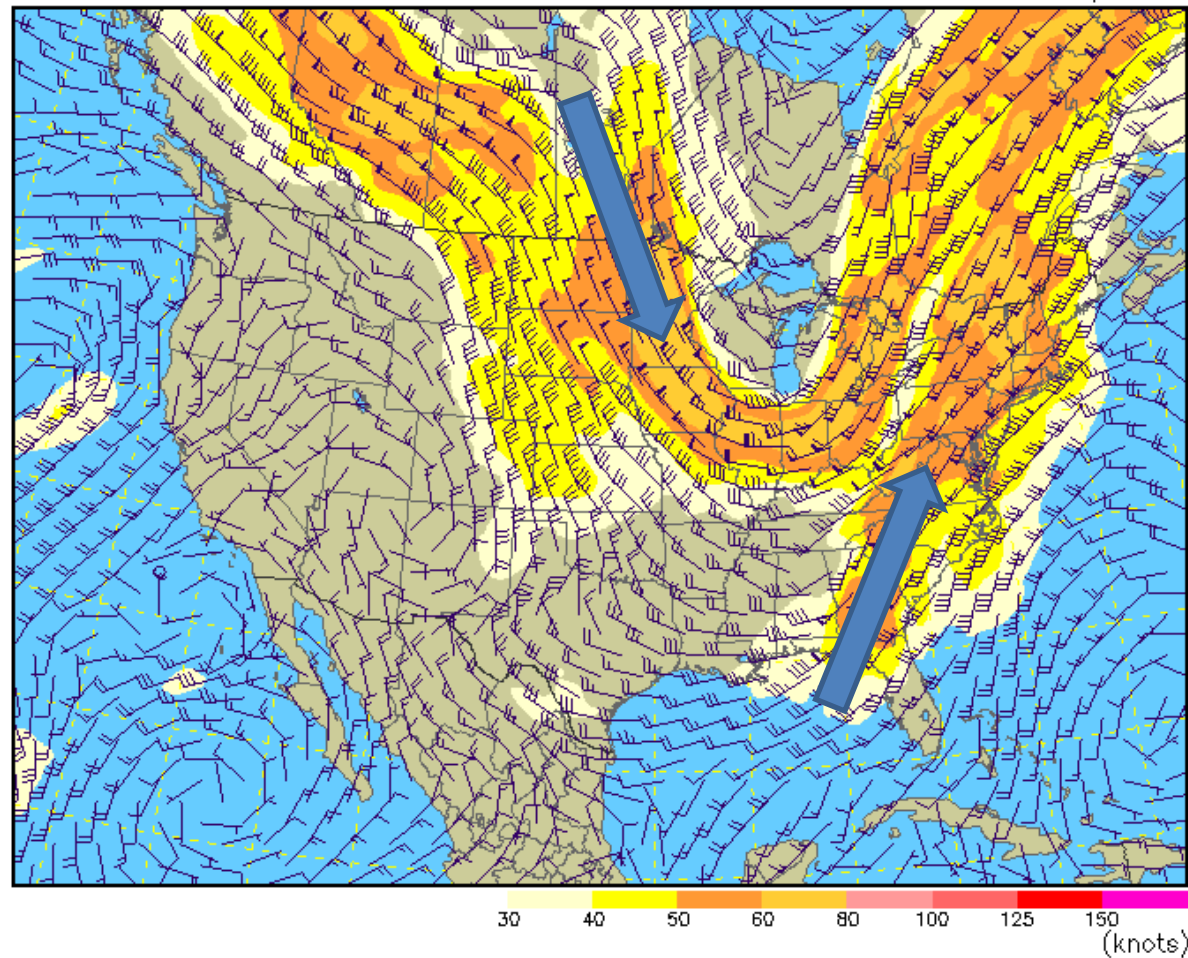


500 mb Chart

- Winds of 500 mb are Good Indicator of Direction of SFC WX
- Note Split Jetstream

Wind speed (kts) at 18,000 ft MSL (500 mb)

01-hour forecast valid 1800 UTC Tue 18 Sep 2012



ADDS temp/wind charts supplement, but do not substitute for, the official winds and temperatures aloft forecast contained in the FB product.