WEATHER CHARTS

CHART NAME	SURFACE ANALYSIS	WEATHER DEPICTION	RADAR SUMMARY	CONSTANT PRESSURE ANALYSIS	COMPOSITE MOISTURE STABILITY	WINDS AND TEMPS ALOFT	LLVL SIG WX PROG	HLVL SIG WX PROG	CONVECTIVE OUTLOOK
OBSERVED OR FORECAST	OBSERVED	OBSERVED	OBSERVED	OBSERVED	OBSERVED	FORECAST	FORECAST	FORECAST	FORECAST
ISSUED	EVERY 3 HRS	EVERY 3 HRS FROM 0100Z	EVERY HOUR FROM 0035Z	EVERY 12 HRS	EVERY 12 HRS	EVERY 12 HRS	EVERY 6 HRS	EVERY 6 HRS	SEE "NOTES"
PURPOSE (USE)	Primarily to locate SFC fronts & pressure systems	Primarily to locate SFC IFR conditions	Identify areas of precipitation & TSTMS. Check intensity coverage and movement	Locate upper level pressure systems, winds, and fronts. Can check moisture and TURBC possibility.	4 panel chart used to locate areas of possible TSTM activity. To check for TSTM severity potential.	Wind direction & wind speed at planned flight level gives idea of avg enroute WCP. Temp. useful for effect on TAS & fuel flow.	Locate IFR areas, precip. Areas, turbc area, fronts, pressure systems, inversions, and FRZLVLS. SFC-400mb ~(24000')	Locate: Jets, CBs, CAT, TROP LVLS, Hurricanes, SVR Squall LNS, Sand/Duststorms, fronts. ~FL250 - ~FL600	Areas which may expect general TSTMS and areas which may expect SVR TSTMS. Includes: SVRTS RISK notations. (LEVELS)
DEPICTS	FRONTS - TIC] PRESSURE - 12 1010 L 10 1014 H	-IFR (Shaded) -MVFR (Contoured with shading) -VFR (Everything else) -[Know definitions!] -Fronts/Trofs IFR MVFR VFR	PRECIPITATION INTENSITIES: KNOW: LGT - MDT STG - V.S. int. - XTRM SLD ≥ 80% COV. SLD	CONTOURS: 900 912 WINDS PARALLEL and increase when? ISOTACHS: 10k 30k WHAT IS ALSO REQUIRED TO DETERMINE HOW? ISOTHERM -35	ISOPLETHS: -4 Lines of an equal value. In this case ○ LI > O ● LI < O PLOTS: -10 → LI →BAD 45 → KI →DAY 10 → GOOD -2 → DAY	30k °C - 50 or 50 * 3 _3_° = DIRECTION	12 - hr SFC - 400mb 24 - hr SFC - 400mb 12 - hr SFC 24 - hr SFC Upper panels have a Legend: ○ IFR MVFR TBC FRZLVL(s)	100 FL35 100 80k 80k CAT 360 300 -V - V - V - V SVR SQUALLN CBs: ISOL (< 1/8) OCNL (1/8-4/8) FRQ (5/8-8/8)	(To the right of line is general TSTM activity forecasted. SEVERE TSTM areas are: Shaded or with a RISK notation in the circle or near.
NOTES	1/2 VIS. CIG / CLD base WX / obs to vision AUTO 25 145 13 .03 22 DECODE THE STATION MODEL. [KNOW THE UNITS!] ☐ AUTO	>5sm COLD WK MDT STG Frontal intensity given TEST will exclude ' human frontal analysis'.	SVR TSTM* WATCH WS 500 500 / YT WS 500 TORNADO WATCH 501 / YT 400 Precipitation tops 40000' MSL R S T NE RW SW NA OM 15 cell movement LM=? 15K to NE	ISOTACHS: Shading: 70 - 110K 150 - 190K etc. CLR within shading: 110 - 150K 190 - 230K etc. STATION MODELS: TT HGT T-D Hc(LV,M) Shaded black when T-D spread is 5 degrees or less (moist).	Negative LIs = unstable Positive LIs = stable Positive (& high) KI = moist & unstable Low (or negative) KI = dry & stable L - severity potential K - TSTM probability -8 is possible! 12	notes:	MDT SVR TBC don't expect these on NWS Charts. (others - yes) MDT SVR ICG 100 MDT TBC within the lines from SFC - 10000' shading - Precip. Cov. ≥ 50%.	T.S. HURRICANE TROP LEVEL: 450 = 45000' TROP HIGH: H 500 TROP LOW: 300 L VOLCANIC ERUPTION	DAY 1 5 X DAILY DAY 2 2 X DAILY COVERS (2 DAYS)