## How to interpret the AFM/PFM Product:



## FORECAST PARAMETERS :

Taken line by line ... the upper matrix ...

1) MIN/MAX - The forecast maximum or minimum temperature. MIN/MAX is located near the ending time of each 12 hour period for which it is forecast out to 48 hours. The maximum temperatures are forecast from 7:00 a.m. to 7:00 p.m. Local Time. Minimum temperatures are forecast from 7:00 p.m. to 7:00 a.m. Local Time, but on occasion the low temperature for the night may occur after 7:00 a.m. In the example, a minimum (or "low") temperature of 32 degrees is forecast between 7:00 p.m. and 7:00 a.m. CST ending Sunday February 9 , to be followed by a maximum (or "high") temperature of 50 degrees between 7:00 a.m. and 7:00 p.m. CST.
2) TEMP - The expected temperature at a specified time, in degrees Farenheit. The temperature is forecast in 3 hour intervals.
3) DEWPT - The expected dewpoint temperature at a specified time, in degrees Farenheit. The dewpoint temperature is forecast in 3 hour intervals.
4) RH - The relative humidity based on the expected temperature and dewpoint.
5) WIND DIR - The expected direction from which wind should blow at 3 hour intervals. The 8 point compass is used (e.g., W, NW, N. . . etc.) Dashes (--) represent no wind direction forecast due to a calm wind.
6) WIND SPD - The expected average wind speed in miles per hour, during each three hour time period.
7) WIND GUST - The expected wind gust speed in miles per hour, during each three hour time period.
8) CLOUDS - The expected cloud cover during each 3-hour time period. The contractions used and their meanings are as follows:
CL = CLEAR SKIES (0-5\% CLOUD COVER)
FW = SUNNY or MOSTLY CLEAR SKIES (6-25\% CLOUD COVER)
SC = MOSTLY SUNNY (day) or PARTLY CLOUDY (night) SKIES (26-50\% CLOUD COVER)
B1 = PARTLY SUNNY (day) or MOSTLY CLOUDY (night) SKIES (50-69\% CLOUD COVER)
B2 = MOSTLY CLOUDY SKIES (70-87\% CLOUD COVER)
OV = CLOUDY SKIES (87-100\% CLOUD COVER)
9) POP 12HR - The probability of precipitation is for a 12 -hour "daytime" period, or a 12-hour "nighttime" period. This percentage probability is listed toward the ending time of each period for which it applies. In the example, there is a $20 \%$ probability of precipitation during the day Sunday. There is an $80 \%$ probability of precipitation overnight Sunday night.
10) QPF 12HR - The amount of rainfall expected in each 12-hour period ("daytime"/"nighttime"). The values given are in inches, and may be in ranges. For example: ".01-.10" means between a hundredth and a tenth of an inch during the 12 -hour period.
11) SNOW 12HR - The amount of snowfall expected in each 12-hour period ("daytime"/"nighttime"). The values given are in inches.

Additional lines, such as "RAIN", "WIND CHILL", and "MIN CHILL" in the example above, are included in the upper matrix if any of the following are in the forecast for that 48 -hour period:

WIND CHILL = "How it feels" based on temperature and wind each 3 hours
MIN CHILL = Lowest wind chill over last 6 hour period
HEAT INDEX = "How it feels" based on temperature and relative humidity each 3 hours
MAX HEAT $=$ Highest heat index over last 6 hour period
RAIN = Precipitation type for each 3 hour period is RAIN
RAIN SHWRS = Precipitation type for each 3 hour period is RAIN SHOWERS
SPRINKLES = Precipitation type for each 3 hour period is SPRINKLES
TSTMS = Precipitation type for each 3 hour period is THUNDERSTORMS
DRIZZLE $=$ Precipitation type for each 3 hour period is DRIZZLE
SNOW = Precipitation type for each 3 hour period is SNOW
SNOW SHWRS = Precipitation type for each 3 hour period is SNOW SHOWERS
FLURRIES = Precipitation type for each 3 hour period is SNOW FLURRIES
SLEET = Precipitation type for each 3 hour period is ICE PELLETS
FRZNG RAIN = Precipitation type for each 3 hour period is FREEZING RAIN
FRZNG DRZL = Precipitation type for each 3 hour period is FREEZING DRIZZLE
EACH PRECIPITATION PARAMETER IS CLASSIFIED AS FOLLOWS...
IS = ISOLATED (10-20\% COVERAGE)
S = SLIGHT ( $10-20 \%$ PROBABILITY)
SC = SCATTERED (30-50\% COVERAGE)
C = CHANCE (30-50\% PROBABILITY)
NM = NUMEROUS (60-70\% COVERAGE)
L = LIKELY (60-70\% PROBABILITY)
O = OCCASIONAL (80-100\% PROBABILITY)
D = DEFINITE (80-100\% PROBABILITY)
AR=AREAS
OBSTRUCTIONS TO VISIBILITY ARE CLASSIFIED AS FOLLOWS...
$\mathrm{F}=\mathrm{FOG}$
PF = PATCHY FOG
F+ = DENSE FOG
PF+ = PATCHY DENSE FOG

Taken line by line ... the lower matrix or "Extended" Forecast ... (after the time lines)

1) MIN/MAX - The forecast maximum or minimum temperature. MN/MX is located near the ending time of each 12 hour period for which it is forecast. The maximum temperatures are forecast from 7:00 a.m. to 7:00 p.m. Local Time. Minimum temperatures are forecasted from 7:00 p.m. to 7:00 a.m. Local Time, but on occasion the low temperature for the night may occur after 7:00 a.m. In the example, a minimum (or "low") temperature of 32 degrees is forecast between 7:00 p.m. and 7:00 a.m. CST ending Wednesday February 12 (the morning low for Wednesday, which is the same thing as the "overnight" low for Tuesday Night). That minimum will be followed by a maximum (or "high") temperature of 54 degrees between 7:00 a.m. and 7:00 p.m. CST Wednesday.
2) TEMP - The expected temperature at the specified time, in degrees Farenheit. The temperature is forecast in 6 hour intervals.
3) DEWPT - The expected dewpoint temperature at the specified time, in degrees Farenheit. The dewpoint temperature is forecast in 6 hour intervals.
4) PWIND DIR - Primary wind direction for each 12 hour period
5) WIND CHAR - Wind characteristic for each 12 hour period, where

LT = LIGHT (< 8 MPH )
GN = GENTLE (8-14 MPH)
BZ = BREEZY (15-22 MPH)
WY = WINDY (23-30 MPH)
VW = VERY WINDY (31-39 MPH)
SD = STRONG (>40 MPH)
HF = HURRICANE (>=74 MPH)
6) AVG CLOUDS - Average cloud cover for each 12 hour period, where

CL = CLEAR SKIES (0-5\% CLOUD COVER)
FW = SUNNY or MOSTLY CLEAR SKIES (6-25\% CLOUD COVER)
SC = MOSTLY SUNNY (day) or PARTLY CLOUDY (night) SKIES (26-50\% CLOUD COVER)
B1 = PARTLY SUNNY (day) or MOSTLY CLOUDY (night) SKIES (50-69\% CLOUD COVER)
B2 = MOSTLY CLOUDY SKIES (70-87\% CLOUD COVER)
OV = CLOUDY SKIES (87-100\% CLOUD COVER)
7) POP 12HR - The probability of precipitation is for a 12-hour "daytime" period, or a 12-hour "nighttime" period. This percentage probability is listed toward the ending time of each period for which it applies. In the example, there is a $10 \%$ probability of precipitation during the day Friday. There is a $30 \%$ probability of precipitation Friday Night (overnight).

Additional lines, such as "RAIN", in the example above, are included in the lower matrix if any of the following are in the forecast in the extended period:
WIND CHILL = "How it feels" based on temperature and wind each 3 hours
MIN CHILL = Lowest wind chill over last 6 hour period
HEAT INDEX = "How it feels" based on temperature and relative humidity each 3 hours
MAX HEAT = Highest heat index over last 6 hour period
RAIN = Precipitation type for each 6 hour period is RAIN
RAIN SHWRS = Precipitation type for each 6 hour period is RAIN SHOWERS
SPRINKLES = Precipitation type for each 6 hour period is SPRINKLES
TSTMS = Precipitation type for each 6 hour period is THUNDERSTORMS
DRIZZLE = Precipitation type for each 6 hour period is DRIZZLE
SNOW = Precipitation type for each 6 hour period is SNOW
SNOW SHWRS = Precipitation type for each 6 hour period is SNOW SHOWERS
FLURRIES = Precipitation type for each 6 hour period is SNOW FLURRIES
SLEET = Precipitation type for each 6 hour period is ICE PELLETS
FRZNG RAIN = Precipitation type for each 6 hour period is FREEZING RAIN
FRZNG DRZL = Precipitation type for each 6 hour period is FREEZING DRIZZLE
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D = DEFINITE (80-100\% PROBABILITY)
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