

Azflyers Weather Forecasting

MOS - Model Output Statistics — Take the Weather Prediction Models..and apply Statistical corrections (based upon historical observations and model predictions)

NAM-MOS (North American Mesoscale)

- 1) High Resolution (few miles wide grid) - US only
- 2) Generated from 0000 UTC to 1200 UTC model output
(generated 2 times a day)
- 3) Valid for CONUS, Alaska, Hawaii, Puerto Rico, and US Virgin Islands
- 4) Valid from 6 to 72 hours in advance

LAMP - Localized Aviation MOS Program

- 1) Frequently update central MOS suite by incorporating the most recent observational data
- 2) 1600 stations in CONUS, Alaska, Hawaii, and Puerto Rico
- 3) Updated hourly
- 4) Valid for 25-hour period

Azflyers Weather Forecasting

72 Hour Forecast - 3 Hour Spacing

<https://tinyurl.com/azflyers-mos>

Abbreviation Key

- **DT** = The day of the month, denoted by the standard three or four letter abbreviation
- **HR** = Hour of the day in UTC time. This is the hour at which the forecast is valid, or if the forecast is valid for a period, the end of the forecast period.
- **N/X** = nighttime minimum/daytime maximum surface temperatures.
- **TMP** = surface temperature valid at that hour.
- **DPT** = surface dewpoint valid at that hour.
- **CLD** = forecast categories of total sky cover valid at that hour.
- **WDR** = forecasts of the 10-meter wind direction at the hour, given in tens of degrees.
- **WSP** = forecasts of the 10-meter wind speed at the hour, given in knots.
- **P06** = probability of precipitation (PoP) during a 6-h period ending at that time.
- **P12** = PoP during a 12-h period ending at that time.
- **Q06** = quantitative precipitation forecast (QPF) category for liquid equivalent precipitation amount during a 6-h period ending at that time.
- **Q12** = QPF category for liquid equivalent precipitation amount during a 12-h period ending at the indicated time.
- **T06** = probability of thunderstorms/conditional probability of severe thunderstorms during the 6-hr period ending at the indicated time.
- **T12** = probability of thunderstorms/conditional probability of severe thunderstorms during the 12-hr period ending at the indicated time.
- **SNW** = snow fall categorical forecasts during a 24-h period ending at the indicated time.
- **CIG** = ceiling height categorical forecasts at the hour.
- **VIS** = visibility categorical forecasts at the hour.
- **OBV** = obstruction to vision categorical forecasts at the hour.

Ceiling Height (CIG) Categories

1	< 200 feet
2	200 - 400 feet
3	500 - 900 feet
4	1000 - 1900 feet
5	2000 - 3000 feet
6	3100 - 6500 feet
7	6600 - 12,000 feet
8	> 12,000 feet

Visibility (VIS) Categories

1	< 1/2 miles
2	1/2 - < 1 miles
3	1 - < 2 miles
4	2 - < 3 miles
5	3 - 5 miles
6	6 miles
7	> 6 miles

Cloud (CLD) Categories

CL	Clear
FW	> 0 to 2 octas of total sky cover
SC	> 2 to 4 octas of total sky cover
BK	> 4 to < 8 octas of total sky cover
OV	8 octas of total sky cover or totally obscured

MAV Obstruction to Vision (OBV) Categories

N	none of the following
HZ	haze, smoke, dust
BR	mist (fog with visibility \geq 5/8 mile)
FG	fog or ground fog (visibility < 5/8 mile)
BL	blowing dust, sand, snow

Snow Fall Amount Categories

0	no snow or a trace expected
1	> a trace to < 2 inches
2	2 to < 4 inches
3	4 to < 6 inches
4	6 to < 8 inches
5	8 \geq inches

Azflyers Weather Forecasting

25 hour Forecast - 1 Hour Spacing (GFS LAMP)

<https://tinyurl.com/azflyers-lamp>

Abbreviation Key

- **UTC** = Hour of the day in UTC time. This is the hour at which the forecast is valid
- **TMP** = surface temperature valid at that hour.
- **DPT** = surface dewpoint valid at that hour.
- **WDR** = forecasts of the 10-meter wind direction at the hour, given in tens of degrees.
- **WSP** = forecasts of the 10-meter wind speed at the hour, given in knots.
- **WGS** = forecasts of the 10-meter wind gust at the hour, given in knots. NG=No Gust
- **PPO** = probability of precipitation occurring on the hour
- **P06** = probability of precipitation (PoP) during a 6-h period ending at that time.
- **PCO** = categorical forecast of yes or no, if precipitation will occur
- **LP2** = probability of lightning (≥ 1 cloud-to-ground strike) occurring in the 2 hour ending at the indicated time
- **LC2** = categorical forecast of no(N), low(L), medium(M), or high(H) potential for lightning (≥ 1 cloud-to-ground strike) occurring during the 2hr period ending at the indicated time
- **CP2** probability of convection (at least one cloud-to-ground lightning strike and/or radar reflectivity of 40dBZ or higher) occurring during the 2-hr period ending at the indicated time.
- **CC2** = categorical forecast of no (N), low (L), medium (M), or high (H) potential for convection (at least one cloud-to-ground lightning strike and/or radar reflectivity of 40dBZ or higher) occurring during the 2-hr period ending at the indicated time.
- **POZ*** = conditional probability of freezing pcp occurring at the hour. This probability is conditional on precipitation occurring.
- **POS*** = conditional probability of snow occurring at the hour. This probability is conditional on precipitation occurring.
- **TYP*** = conditional precipitation type at the hour. This category forecast is conditional on precipitation occurring.
- **CLD** = forecast categories of total sky cover valid at that hour.
- **CIG** = ceiling height categorical forecasts at the hour.
- **CCG** = conditional ceiling height categorical forecasts at the hour. This category forecast is conditional on precipitation occurring.
- **VIS** = visibility categorical forecasts at the hour.
- **CVS** = conditional visibility categorical forecasts at the hour. This category forecast is conditional on precipitation occurring.
- **OBV** = obstruction to vision categorical forecasts at the hour.

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Visibility (VIS) Categories

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MAV Obstruction to Vision (OBV) Categories

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Precipitation Type Categories

S	pure snow or snow grains
Z	freezing rain/drizzle, ice pellets, or anything mixed with freezing precipitation
R	pure rain/drizzle or rain mixed with snow
X	forecast is missing for this hour

