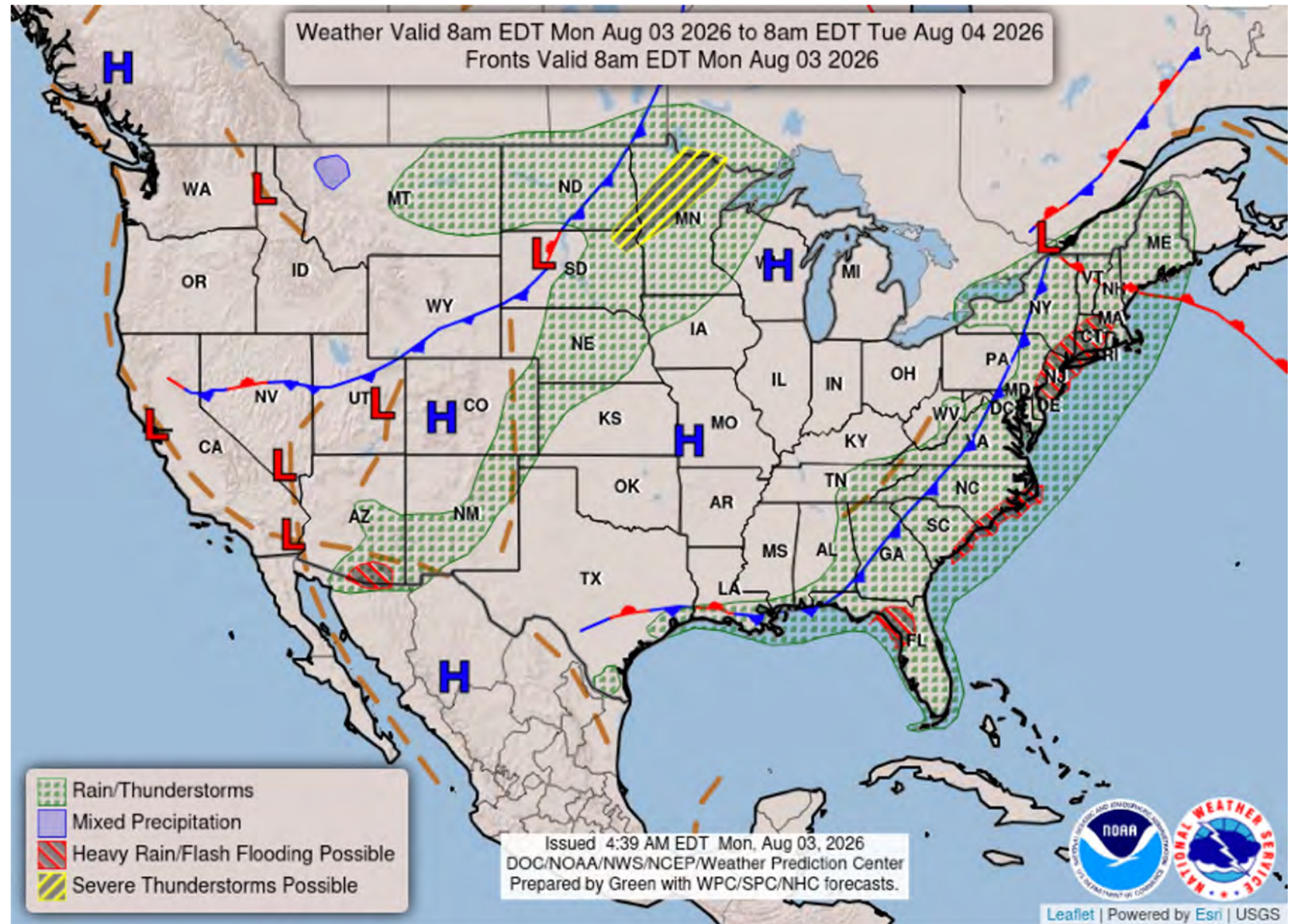


SABRE Forecast Discussion 08/03/2026

Surface Chart for Today

A chance of thunderstorm is going to happen this afternoon at our airport.

Sever Thunderstorm near Minnesota with rains in the midwest states.



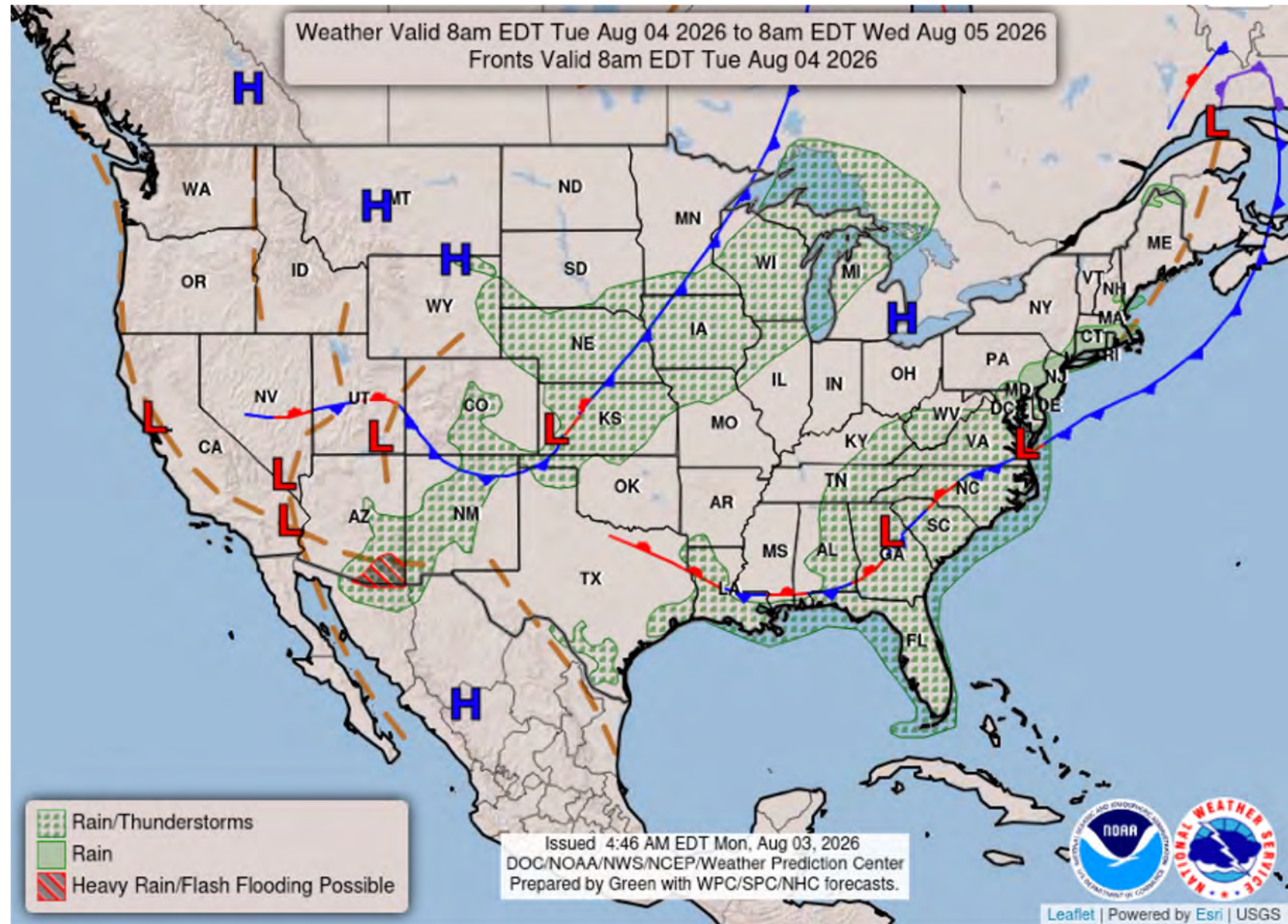
SABRE Forecast Discussion

Surface Chart for Tuesday 8/4

Similar pattern as today.

A chance of thunderstorm is going to happen tomorrow at our airport.

Rain and Thunderstorms in middle states.



Houston Forecast

Extended Forecast for Houston TX

Today



High: 99 °F

Sunny then
Slight Chance
T-storms

Tonight



Low: 79 °F

Clear

Tuesday



High: 97 °F

Sunny then
Slight Chance
T-storms

Tuesday Night

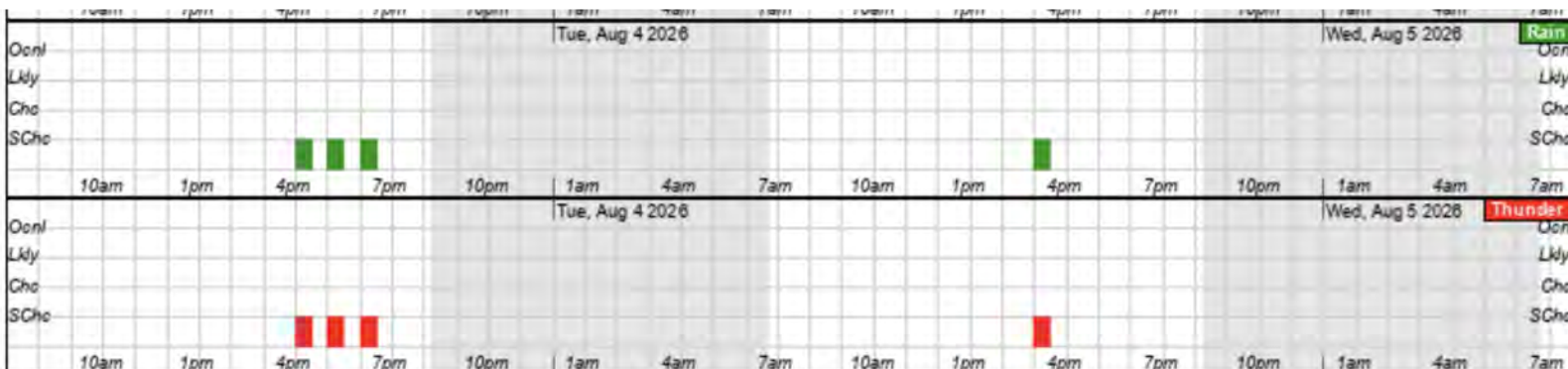


Low: 79 °F

Mostly Clear

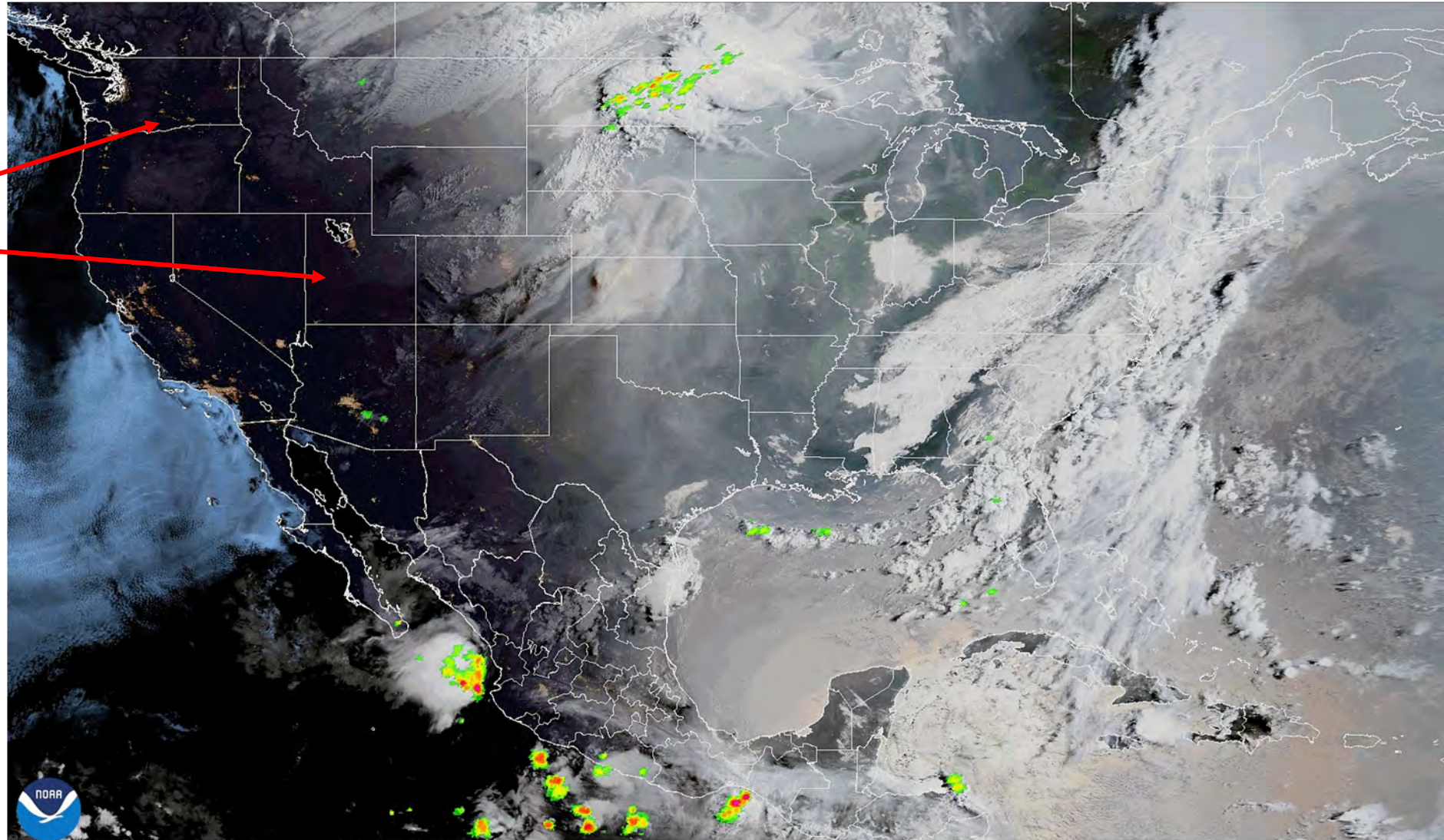
KEFD TAF

TAF KEFD 031200Z 0312/0418 VRB06KT 9999
SKC QNH2982INS
TEMPO 0320/0322 9000 -SHRA BKN065
BECMG 0323/0324 VRB06KT 9999 VCSH
SCT065 QNH2983INS
BECMG 0402/0403 VRB06KT 9999 NSW
FEW050 FEW065 QNH2988INS TX35/0319Z
TN26/0410Z



Today's Visible Satellite Images

Numerous fires continue in the Pacific NW and new fires in Utah that impact middle and southern states.



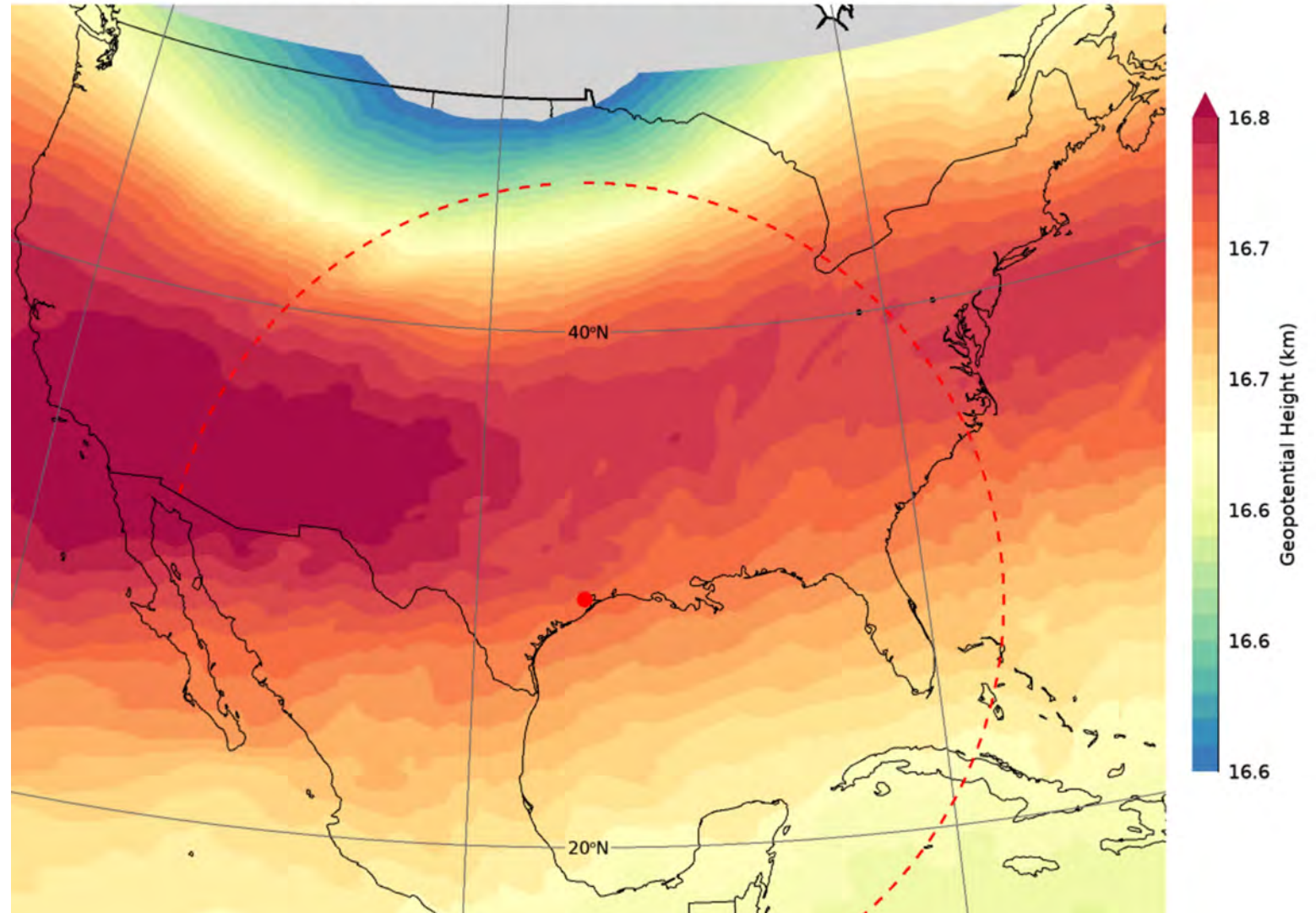
03 Aug 2026 13:16 - NOAA/NESDIS/STAR - GOES-West - GLM FED - GWAS

Upper Level Forecasts for Flight on Tuesday 08/04

North American Monsoon Circulation

The NAM circulation continue to shift to the west. The previous trough moved away and a new upper level trough appear to our reachable region from the west.

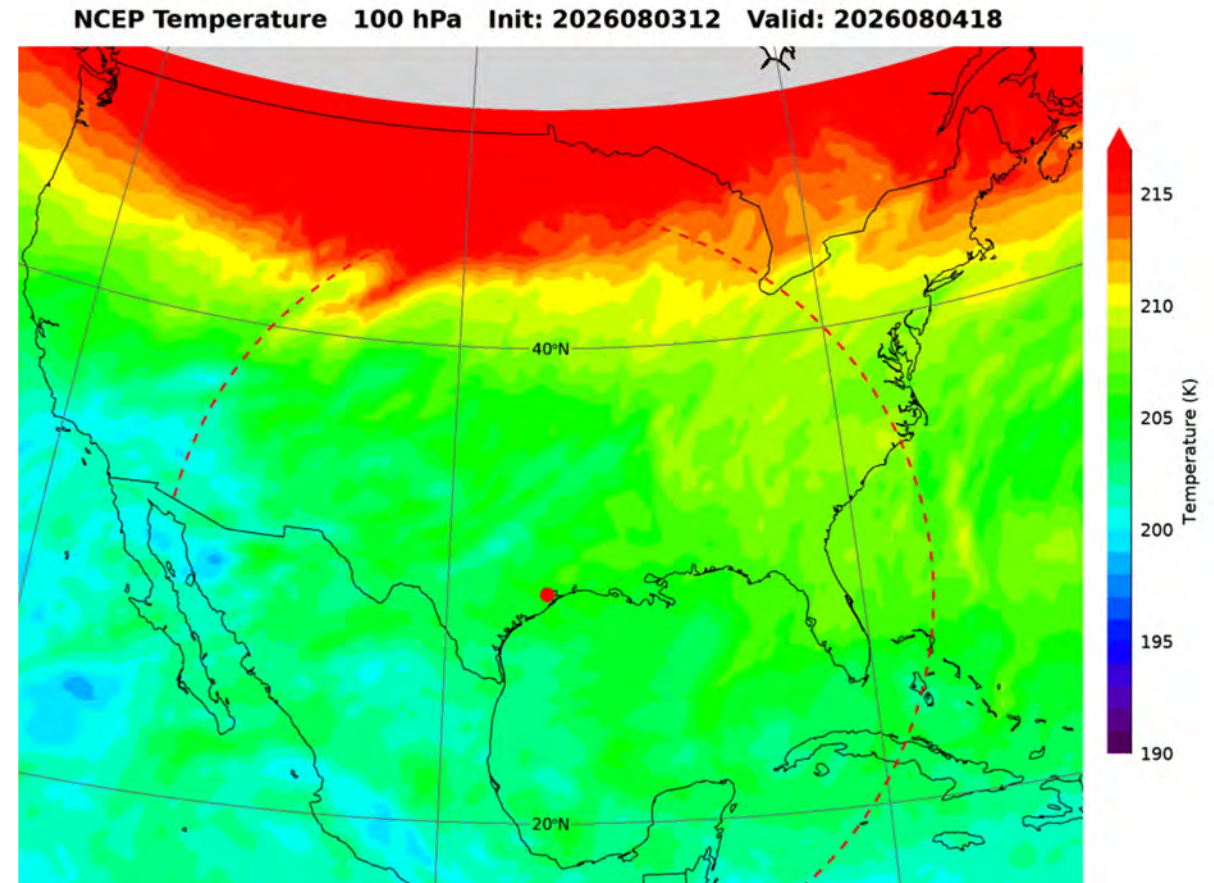
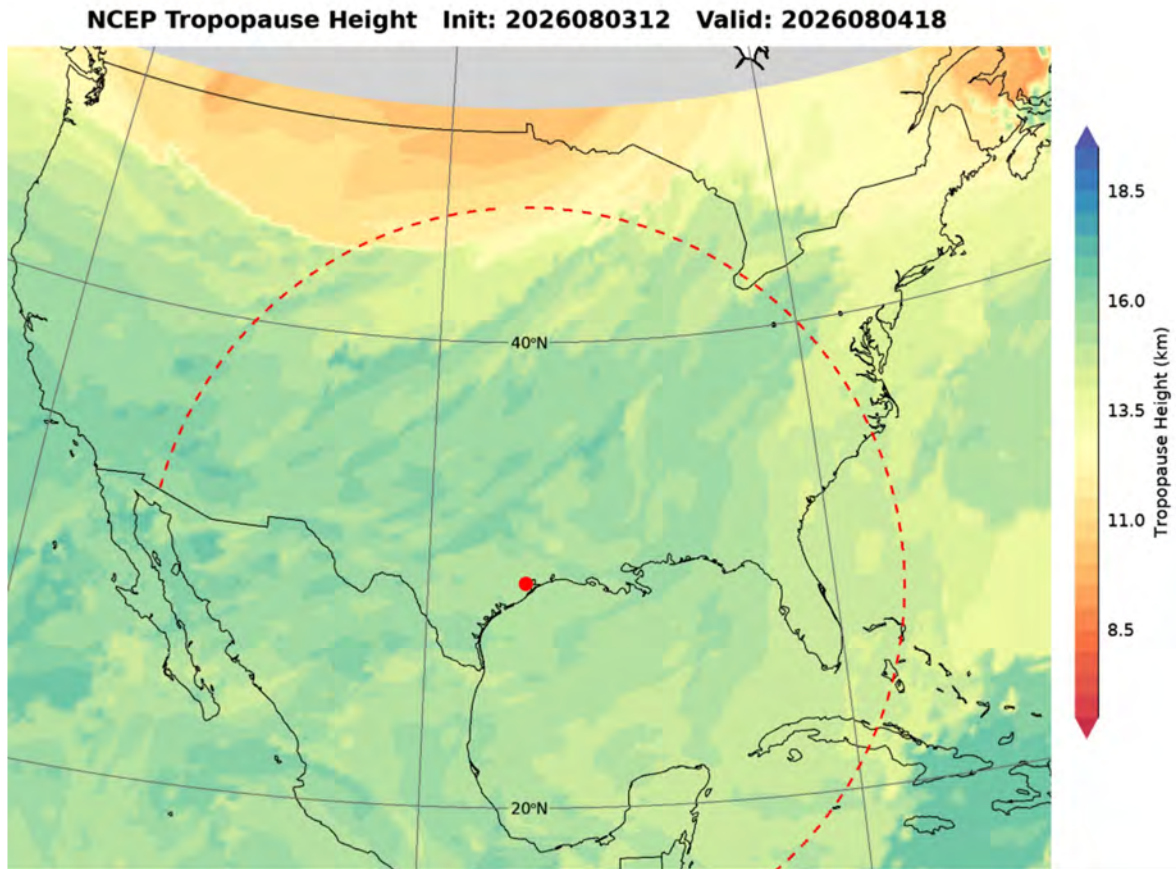
NCEP Geopotential Height 100 hPa Init: 2026080312 Valid: 2026080418



Tropopause

Pressure

Temperature



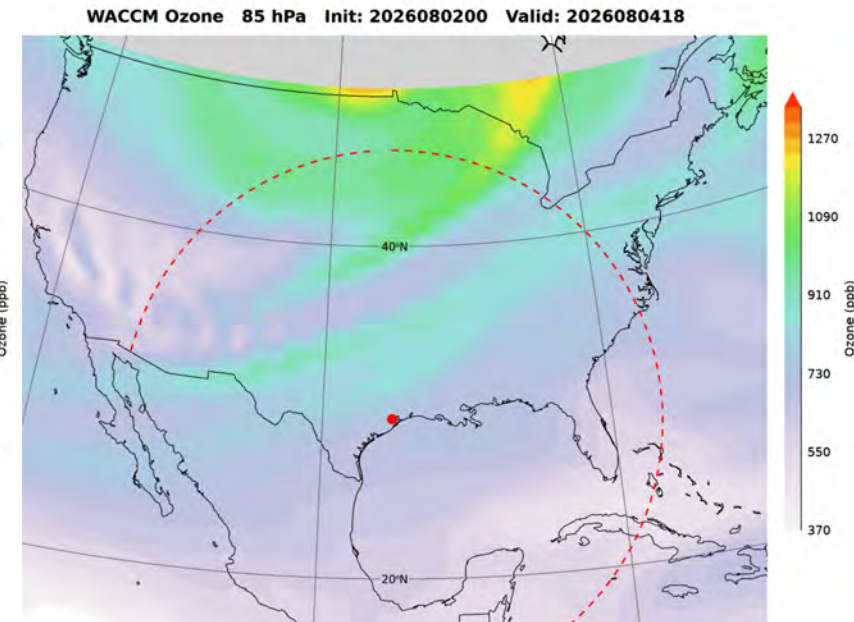
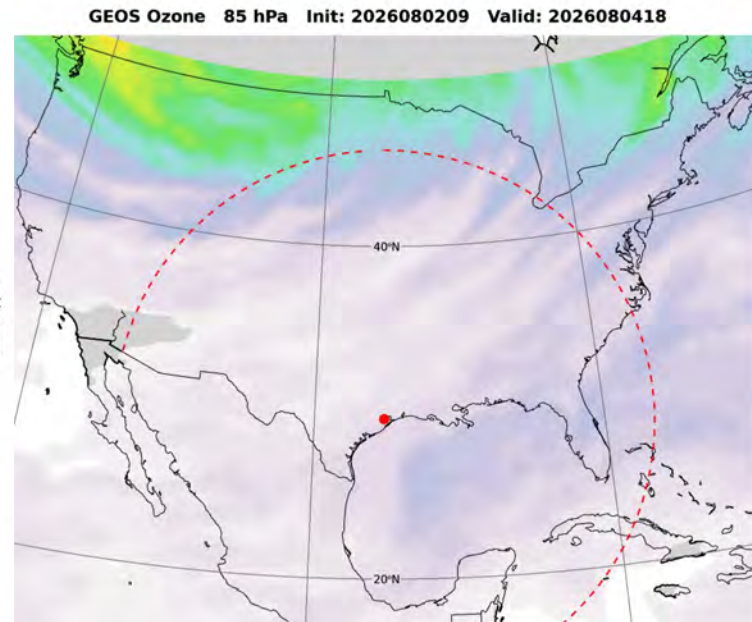
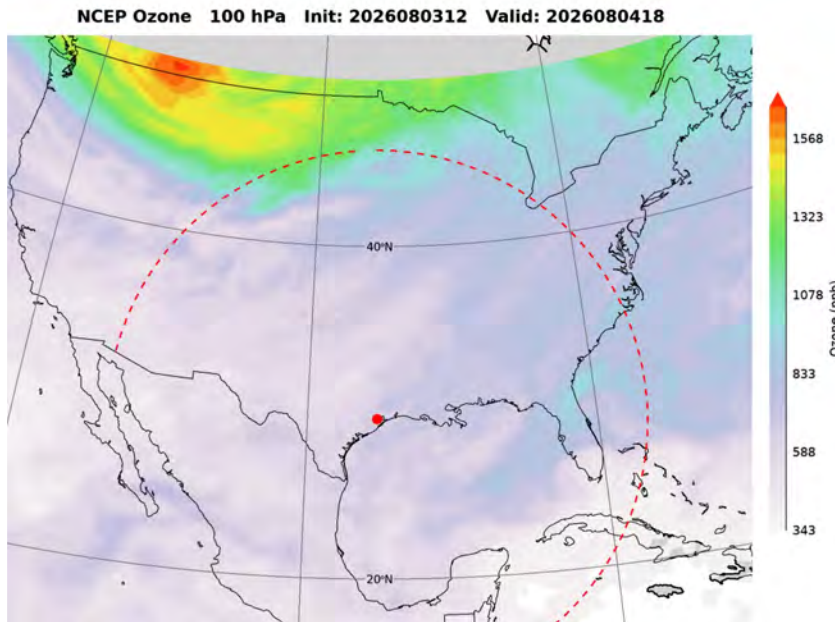
Upper level trough over the northeast US is within the reachable range.

Trace Gases

NCEP Ozone 100 hpa

GEOS Ozone 85 hpa

WACCM Ozone 85 hpa



Consistent trough feature with high ozone in NCEP and GEOS. NCEP has higher values than GEOS.

WACCM is the outlier showing the last trough left behind a long tail of high ozone, which seems to be wrong according to the ozone monitoring on Saturday flight.

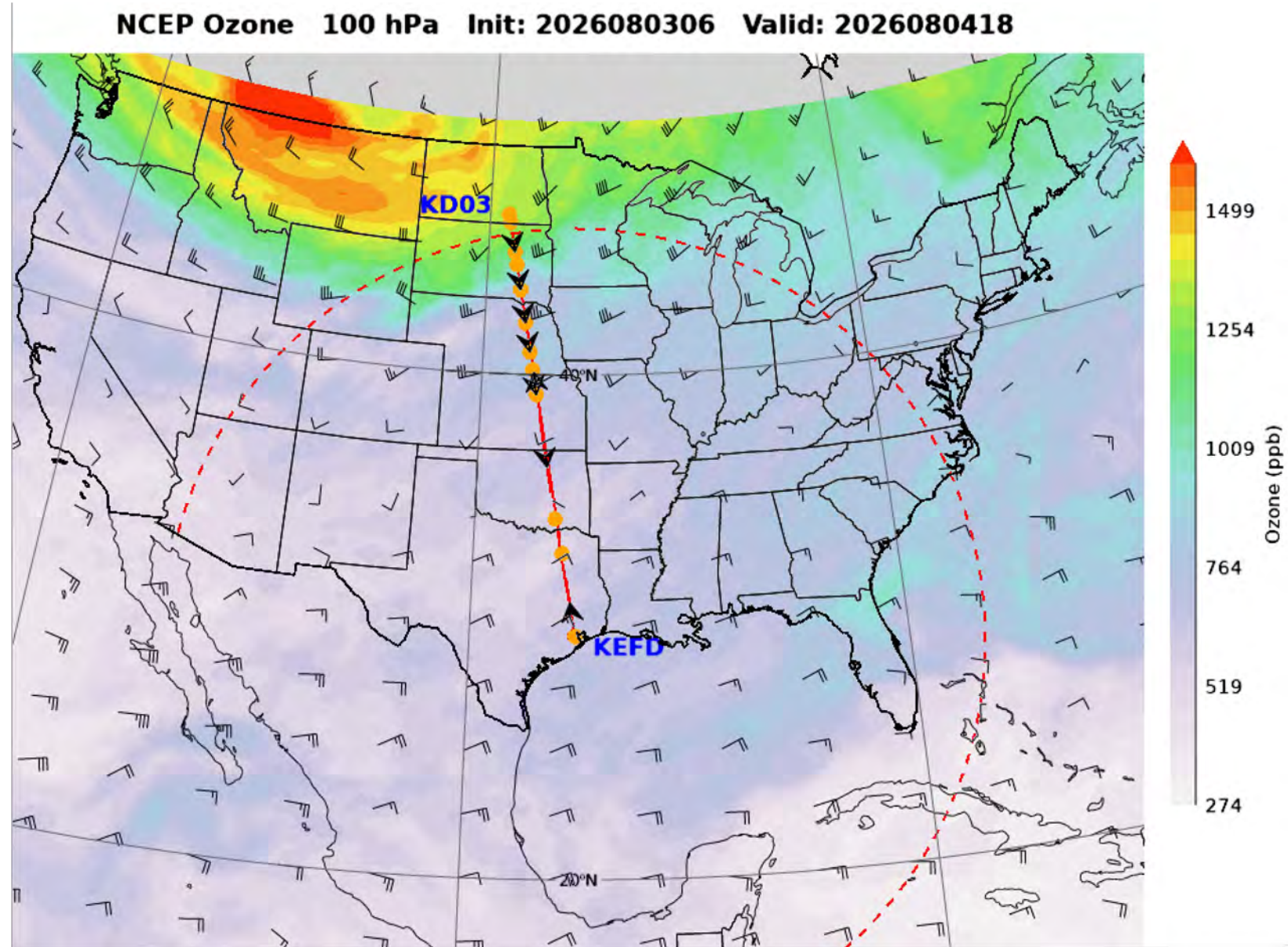
Flight Plan 08/04

Goals:

- Sample as deep into the stratosphere as possible by flying N towards forecast upper-level trough.
- Profile through lower stratosphere and upper troposphere to sample vertical gradients.

Plan:

1. Fly direct from KEFD to far North point, currently KD03. Cruise climb on route with a 2 min sustained zoom at North point.
2. On return leg from North point, perform 2 vertical profiles down to ~45 kft with descent rate of 1000 ft/min with 7 min leg at bottom and at least 10 minutes at max alt between profiles.
3. Just before final descent into KEFD perform 2 min sustained zoom (High flyer return).
4. Final descent rate less than 2000 ft/sec.

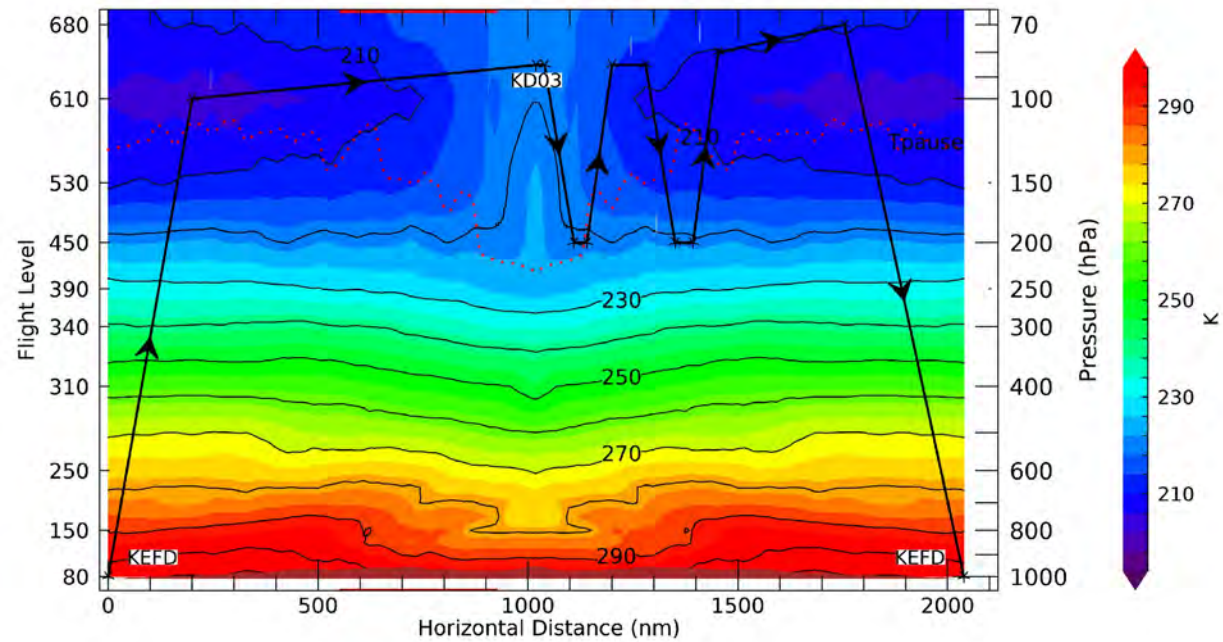


Flight Plan Curtains 08/04

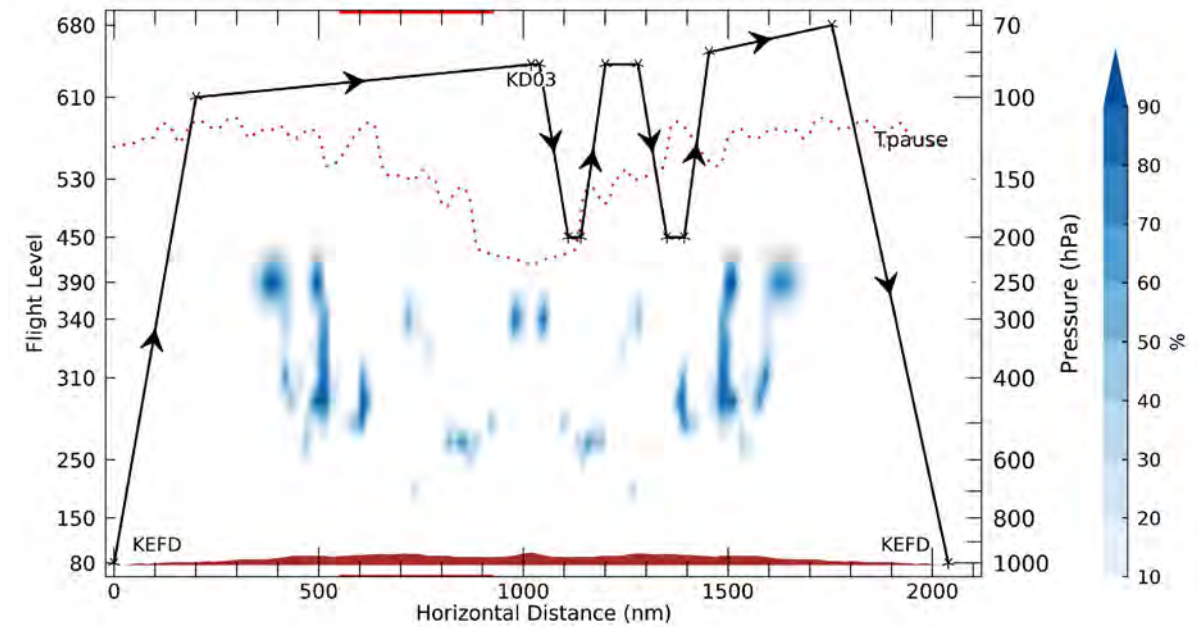
Temperatur
e

Clouds

NCEP Temperature Init:2026080312 Valid Time:2026080418

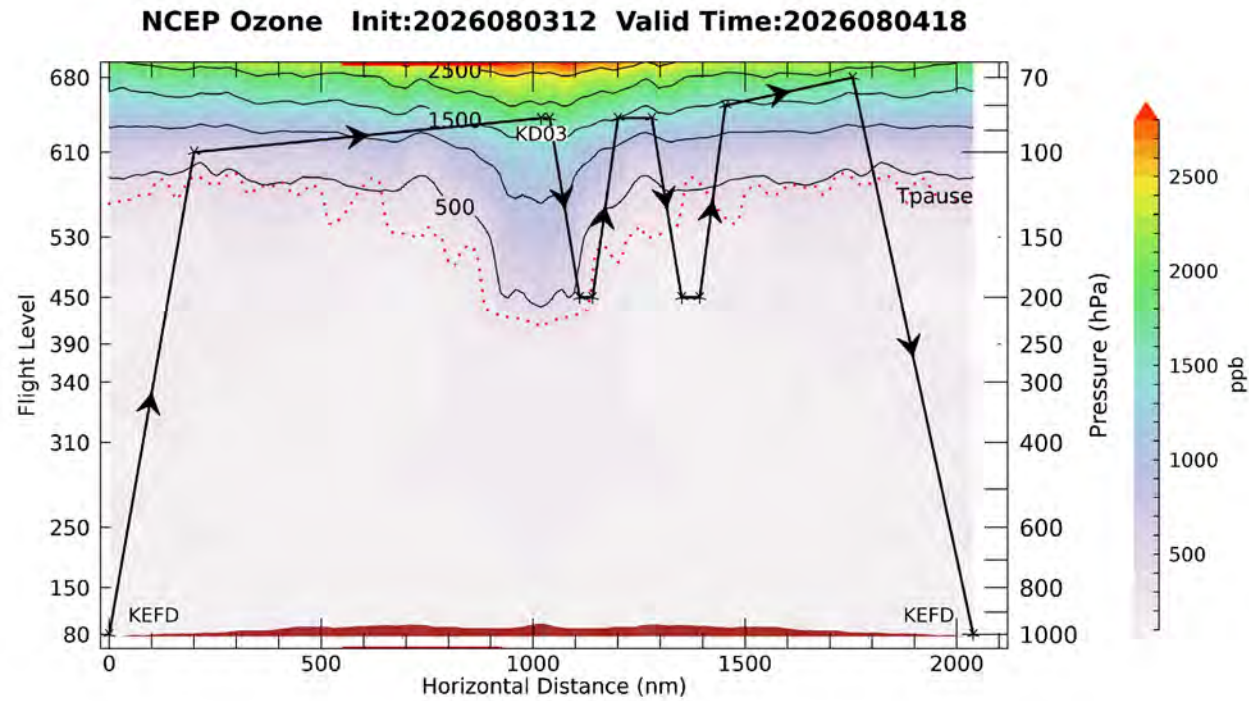


NCEP Cloud Cover Init:2026080312 Valid Time:2026080418

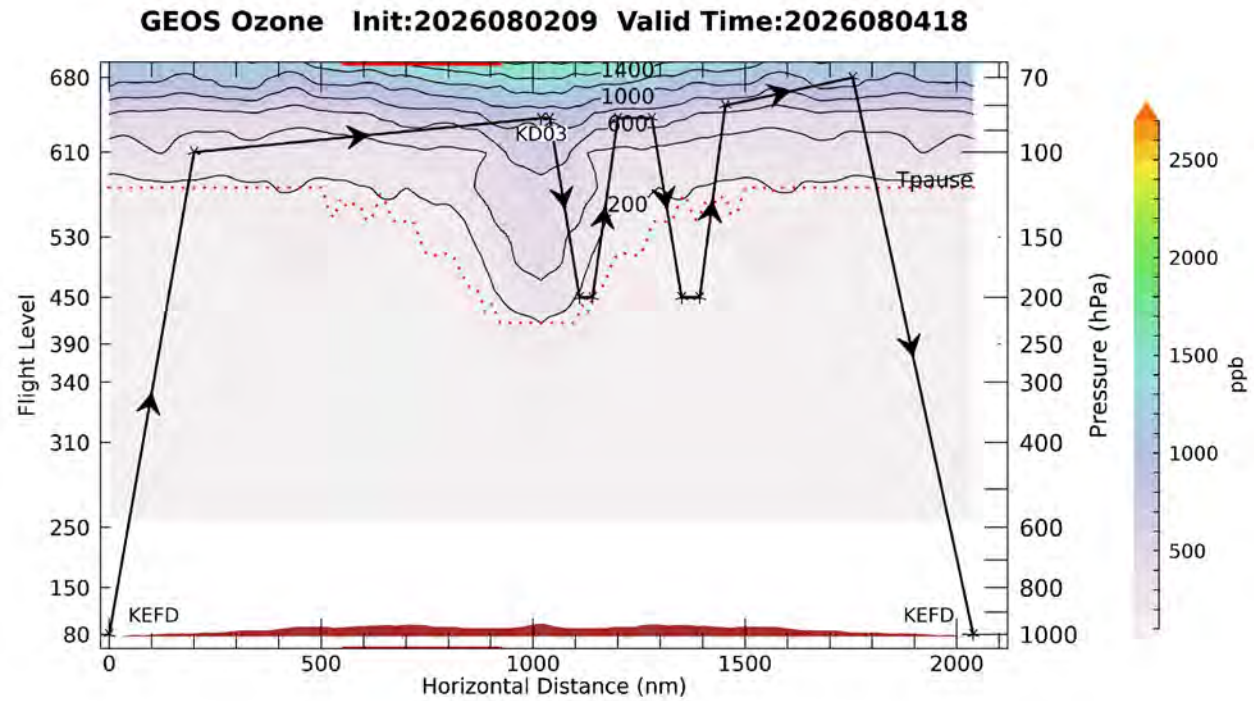


Flight Plan Curtains 08/04

NCEP ozone

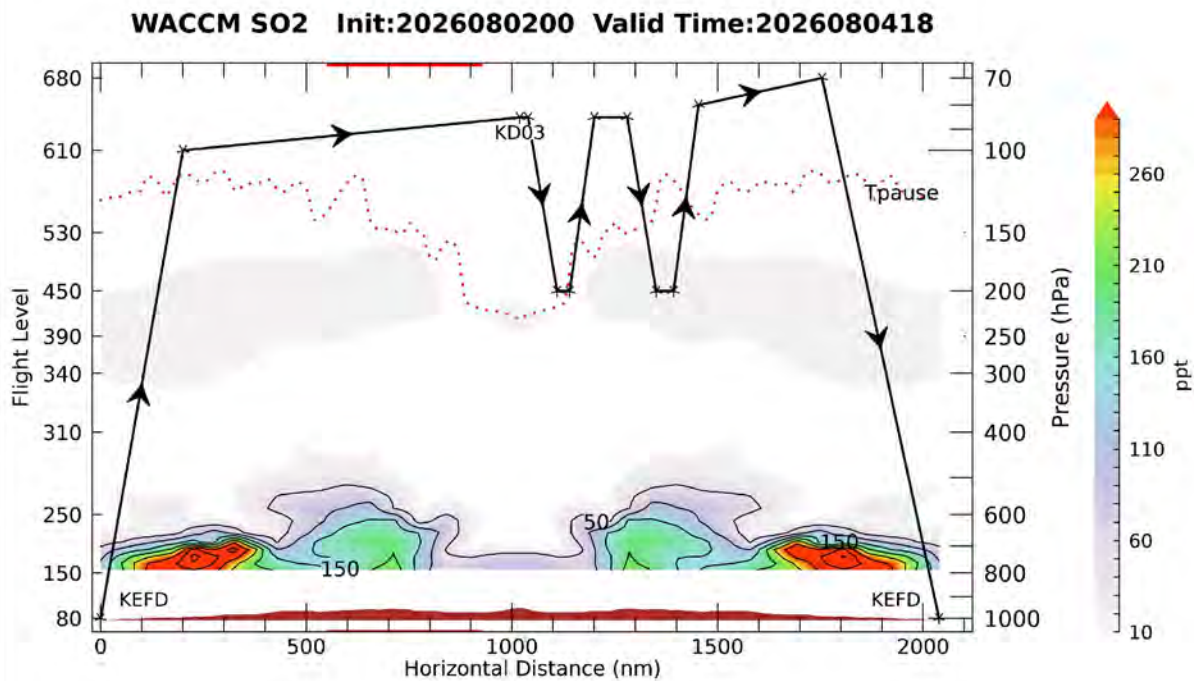


GEOS Ozone

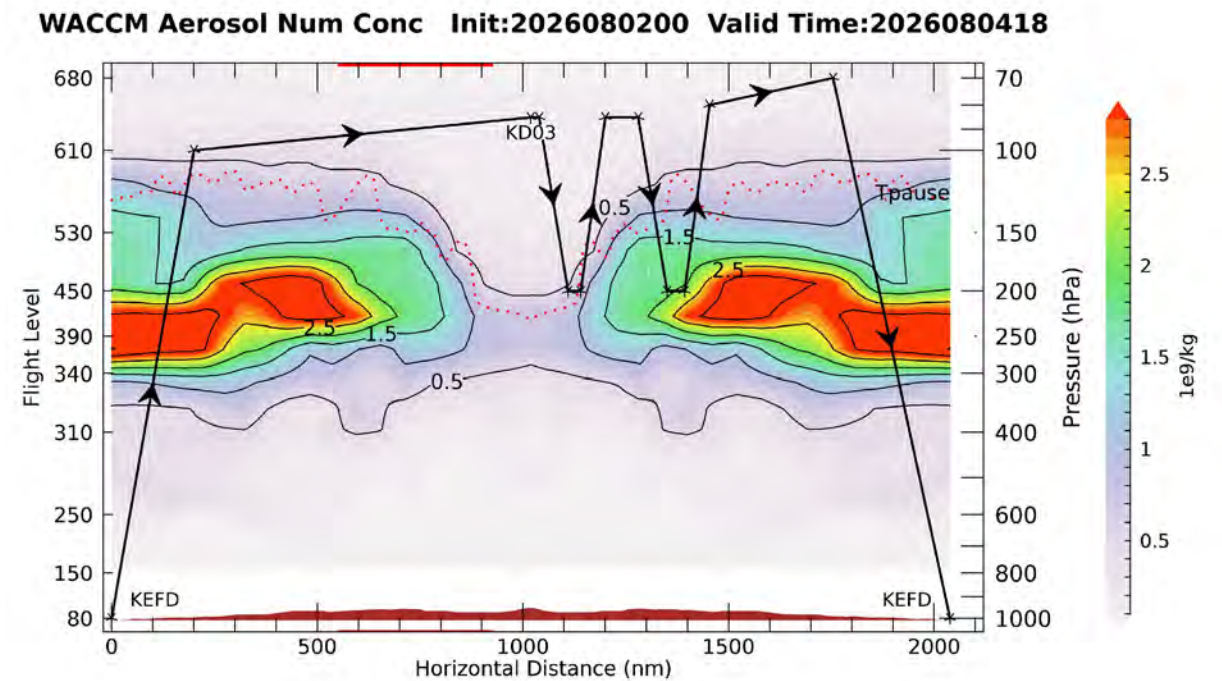


Flight Plan Curtains 08/04

WACCM SO2



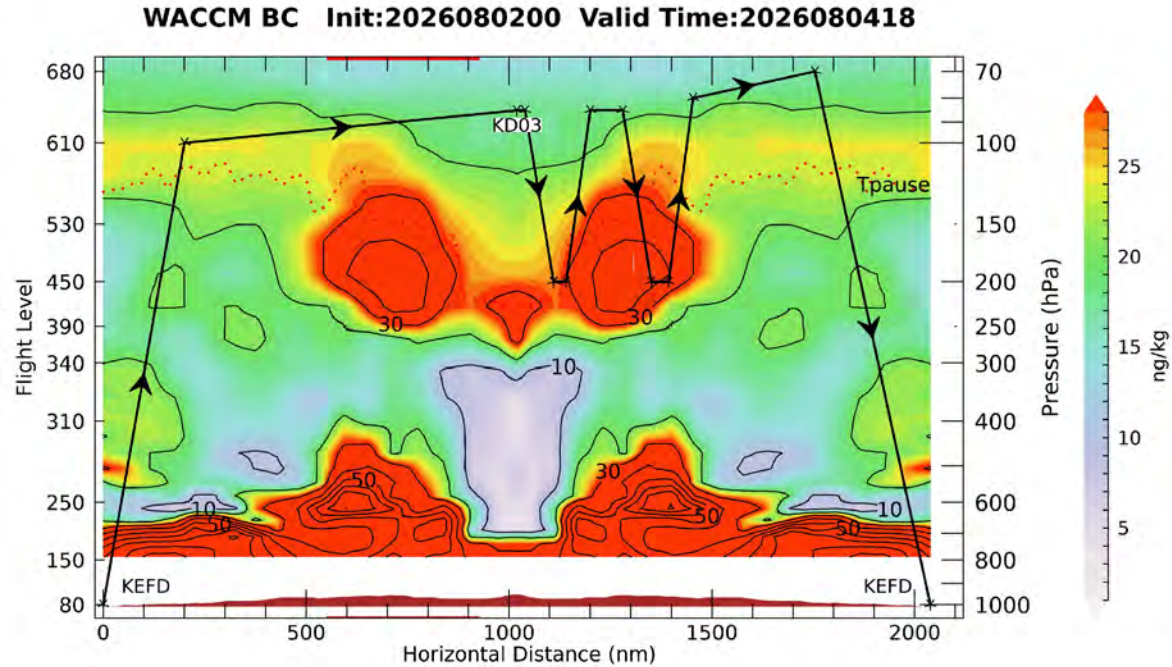
WACCM NPF



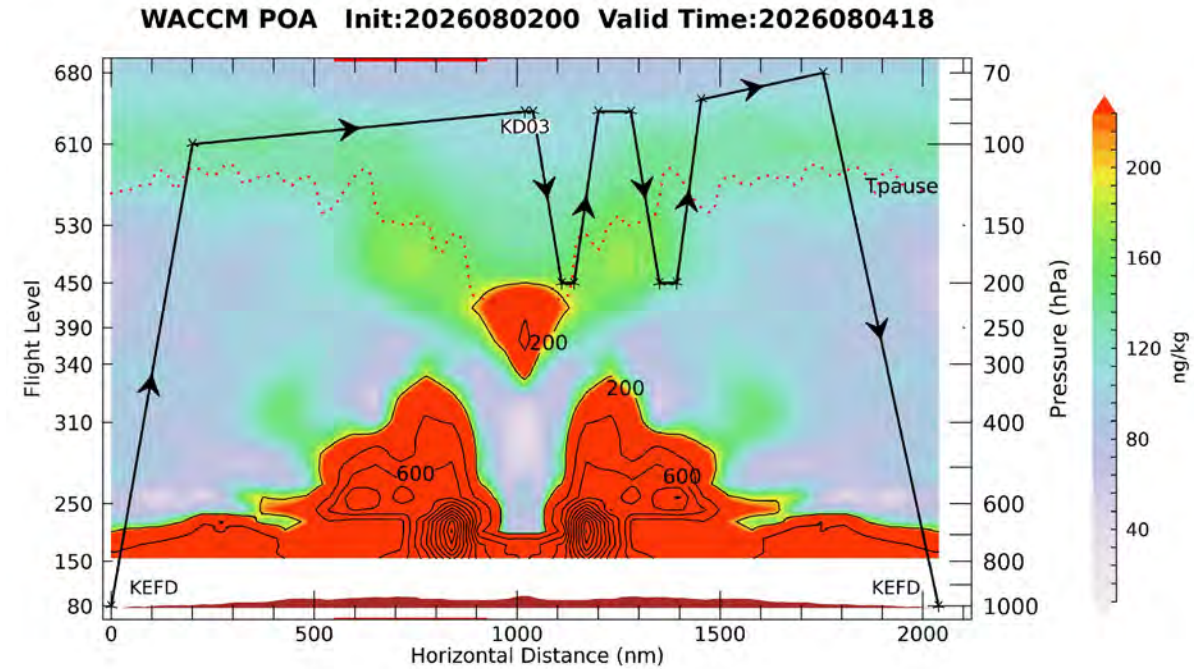
During the profile, we may encounter some SO2 layer and particle nucleation according to WACCM prediction

Flight Plan Curtains 08/04

WACCM BC



WACCM POA



WACCM continue to predict high primary aerosols in the stratosphere, which seem to be wrong, indicating the scavenging schemes needs attention.