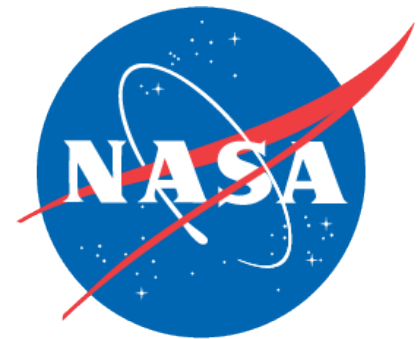


Weather and Air Quality: Reflection and Outlook During Smoke Conditions

Presenter: Megan Christiansen
Date: August 24, 2026

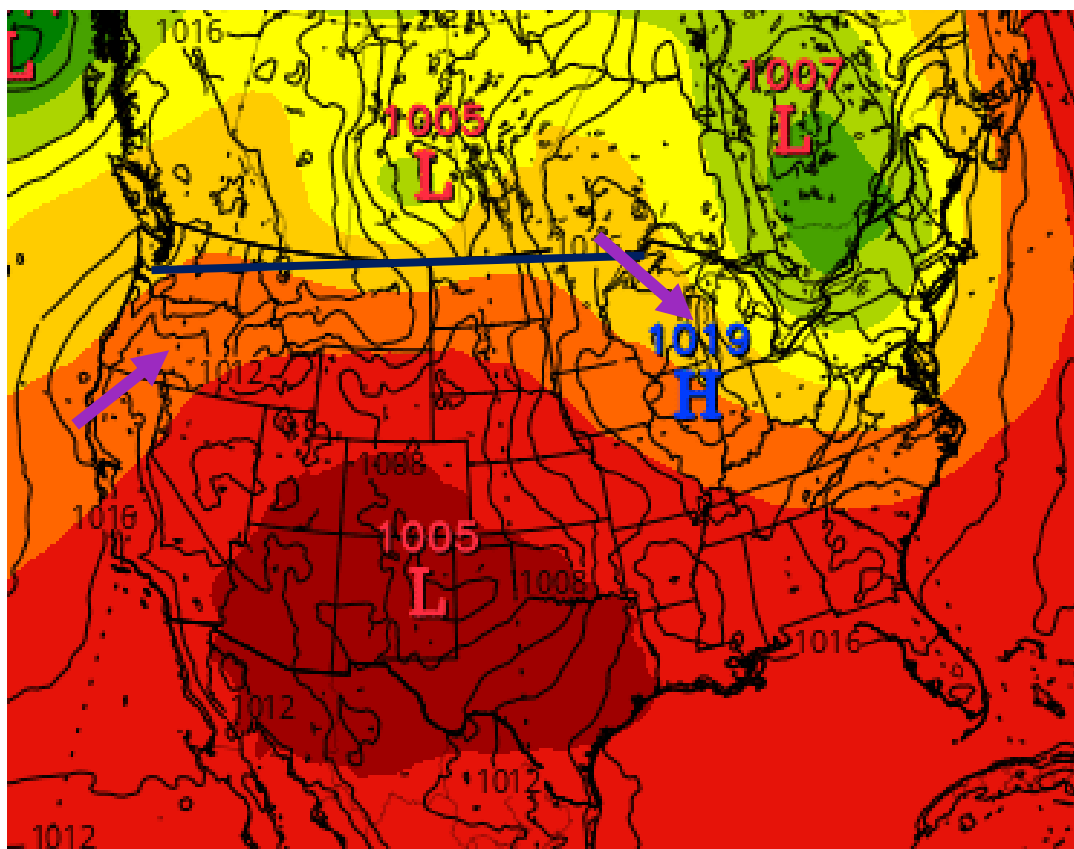


FireAQ is funded by NASA HAQ. We thank NASA GMAO and ECMWF for the model data products.

**EARTH SCIENCE
APPLIED SCIENCES**

Current Status: August 24, 2026

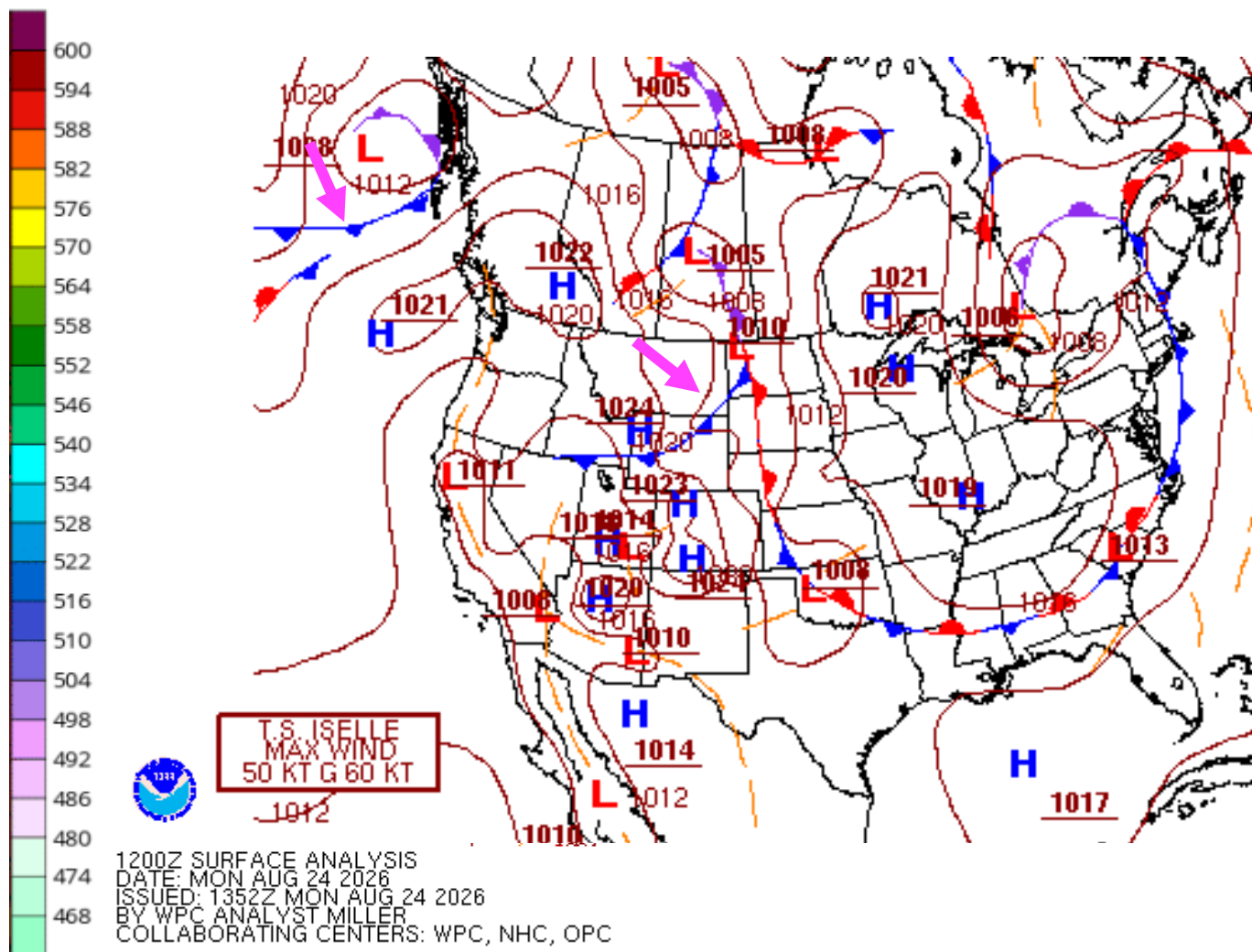
500 mb Contours



GFS 500mb Geopotential Height (dam) & MSLP (mb)

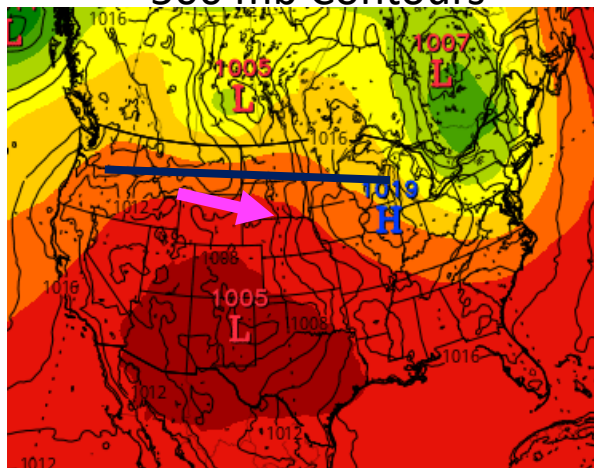
Init: 06z Aug 24 2026 Forecast Hour: [12] valid at 18z Mon, Aug 24 2026

Surface Analysis

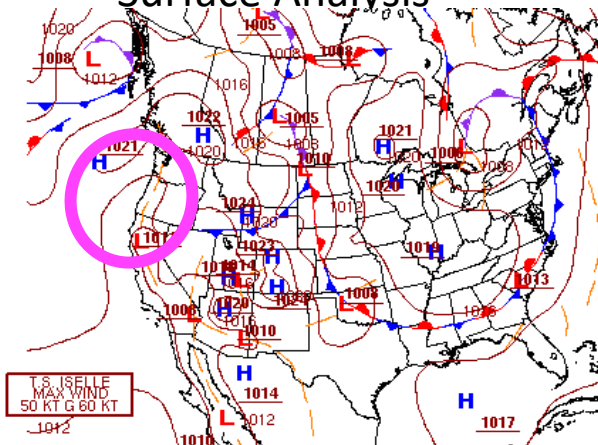


Current Status: August 24, 2026

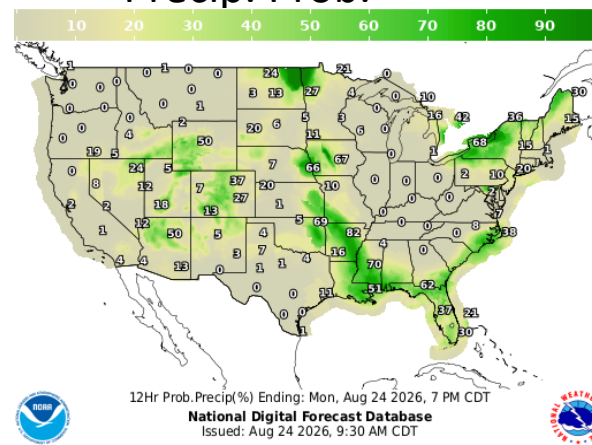
500 mb Contours



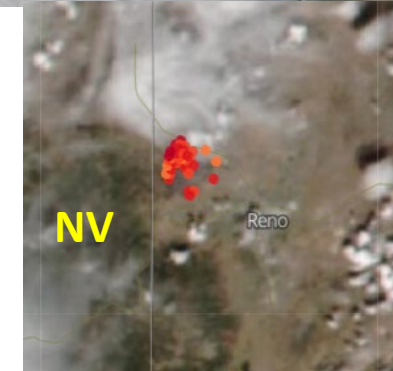
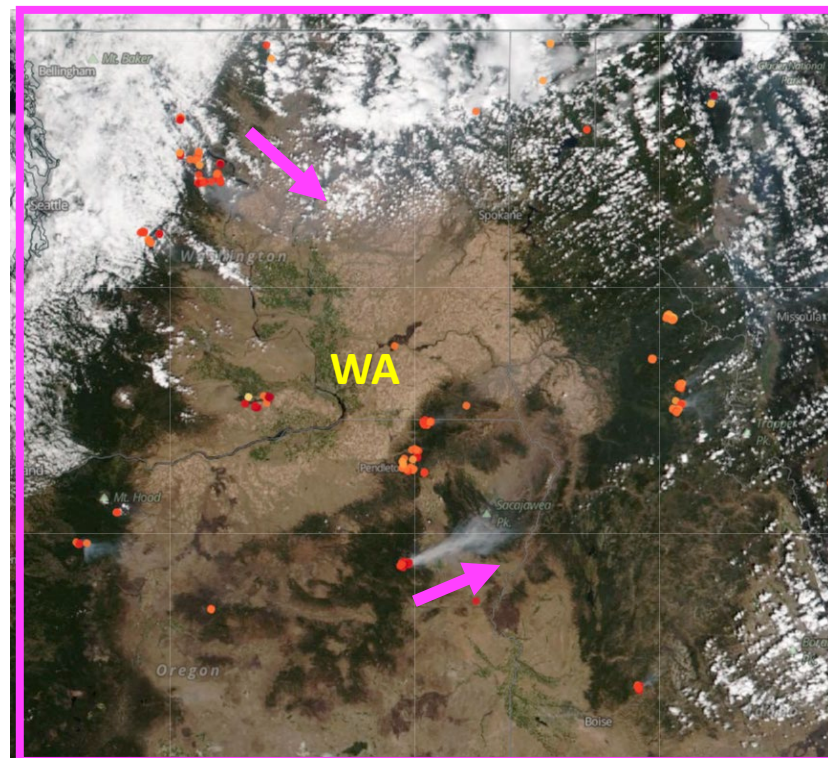
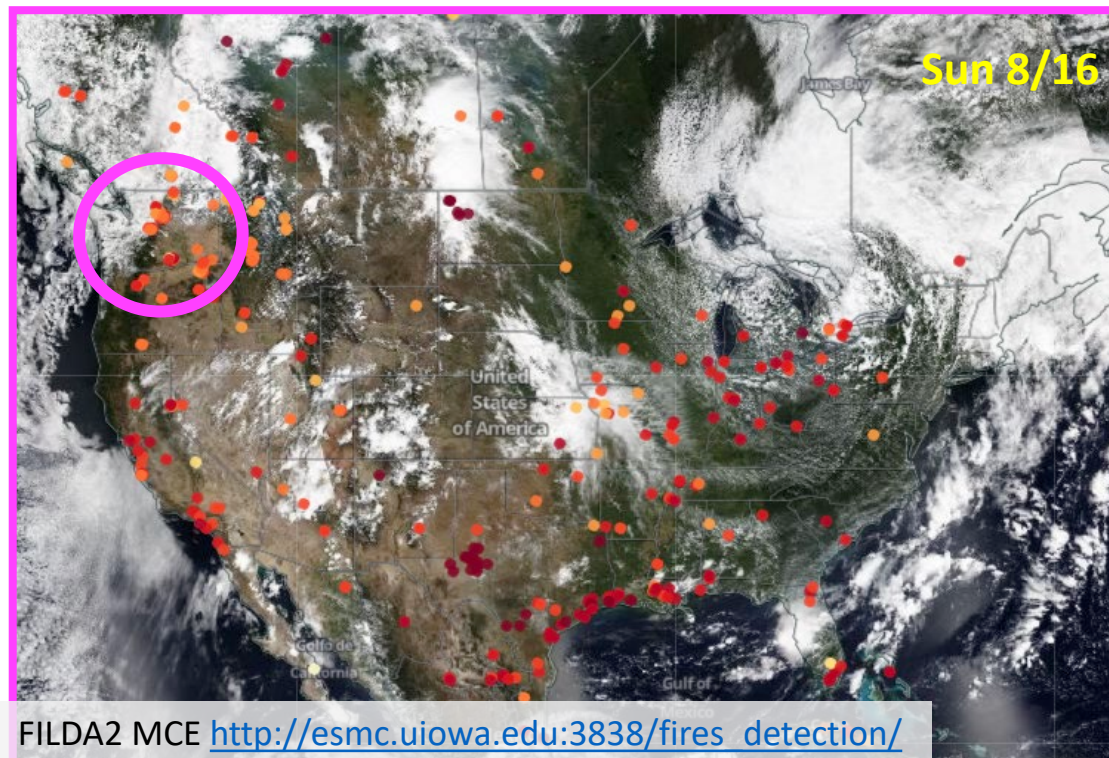
Surface Analysis



Precip. Prob.

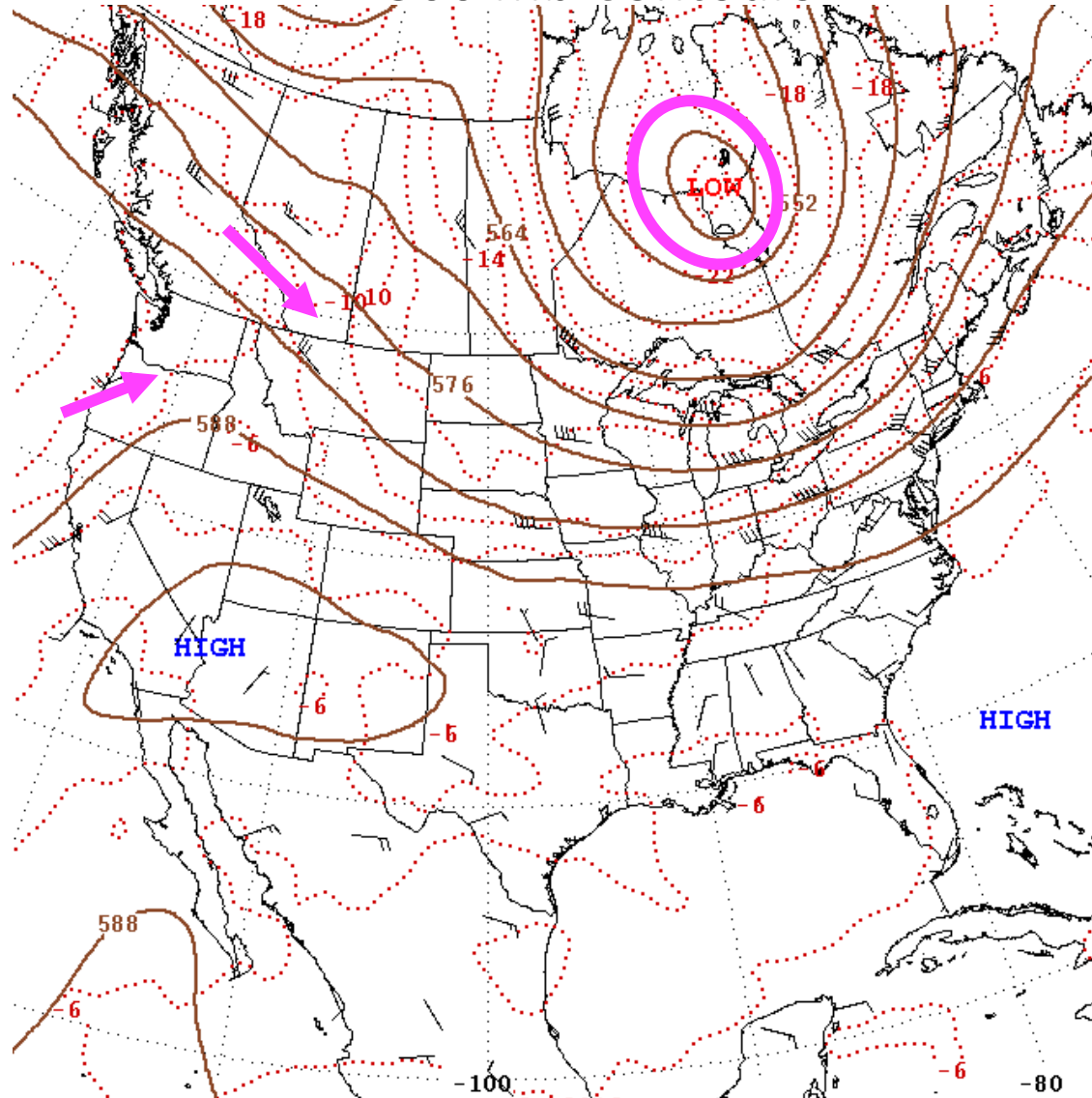


AirNow PM_{2.5} AQI



Air Quality Reflection: Wed Aug 19, 2026

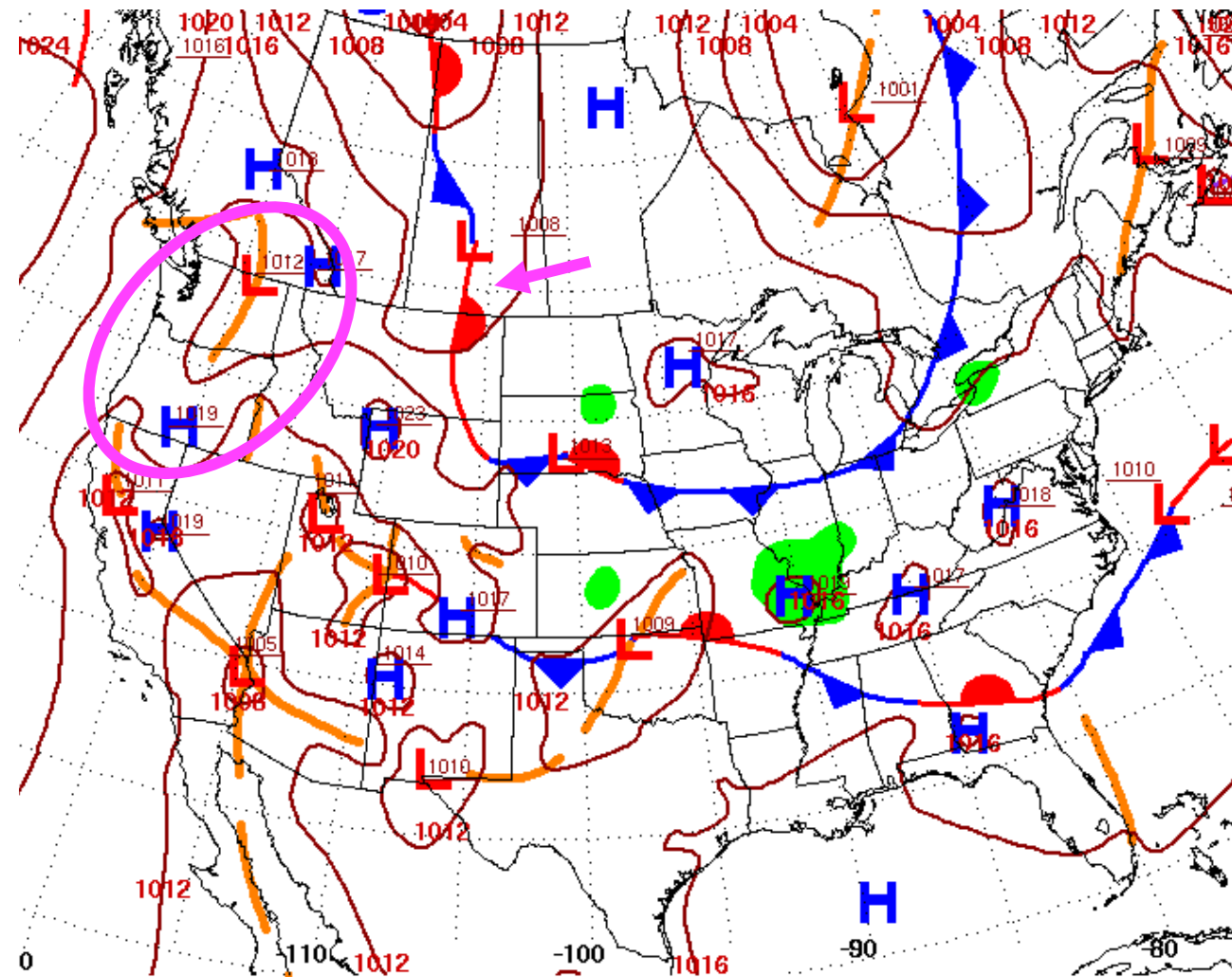
500 mb Contours



WED, AUG 19, 2026

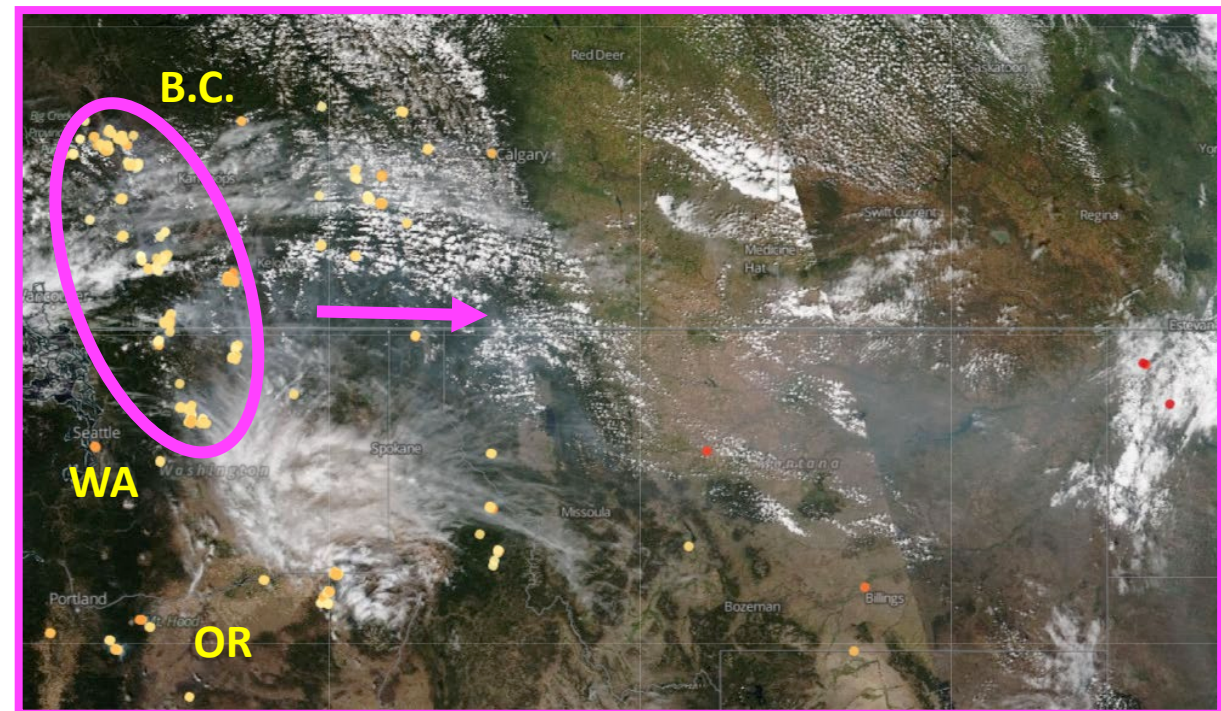
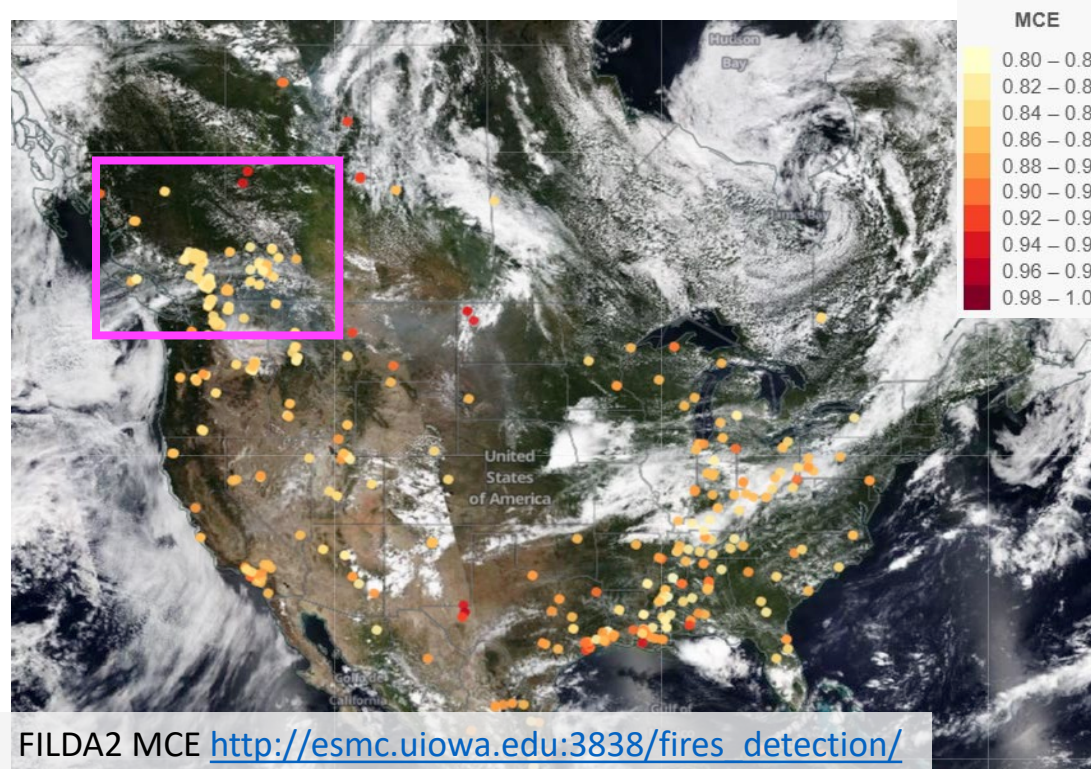
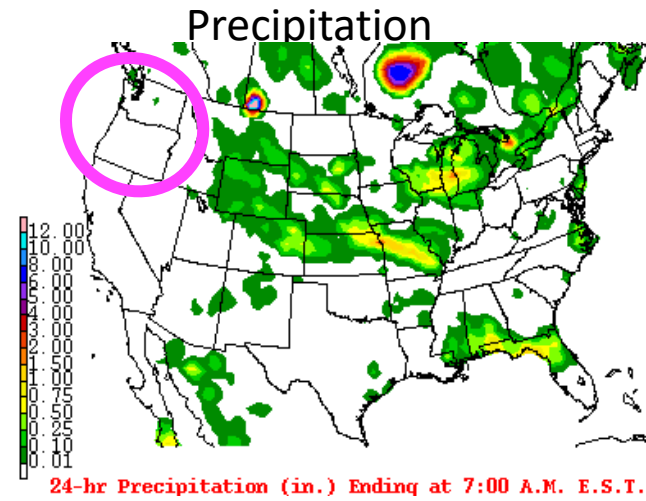
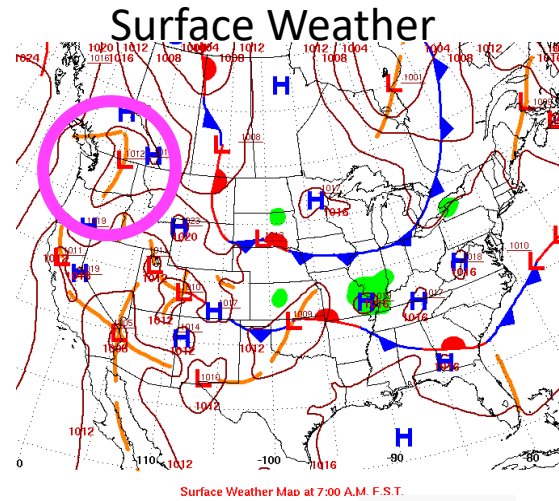
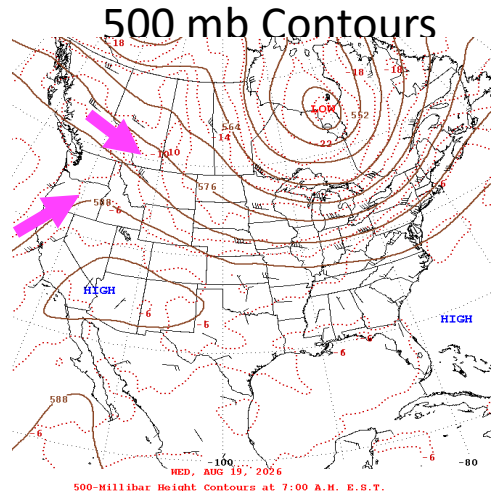
500-Millibar Height Contours at 7:00 A.M. E.S.T.

Surface Weather

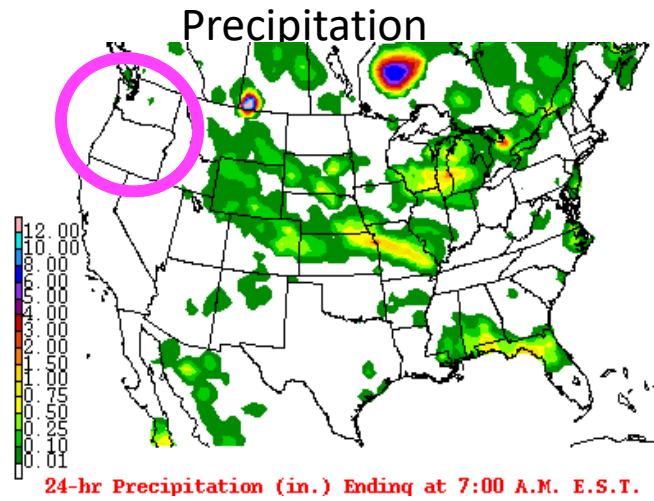
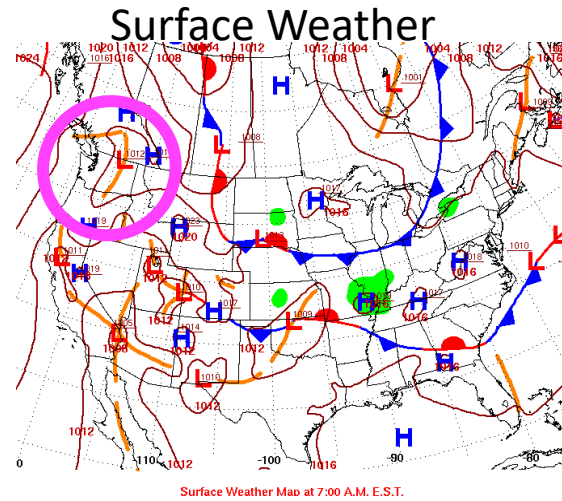
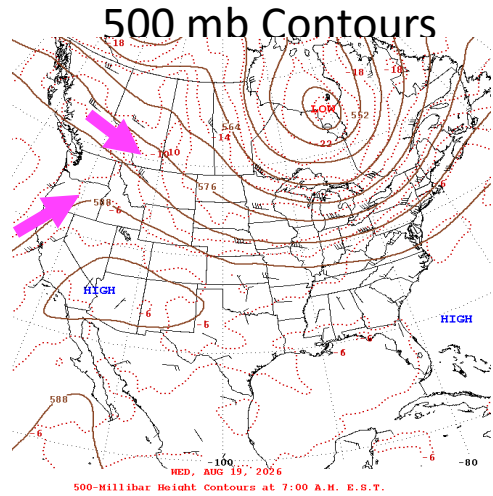


Surface Weather Map at 7:00 A.M. E.S.T.

Air Quality Reflection: Wed Aug 19, 2026



Air Quality Reflection: Wed Aug 19, 2026

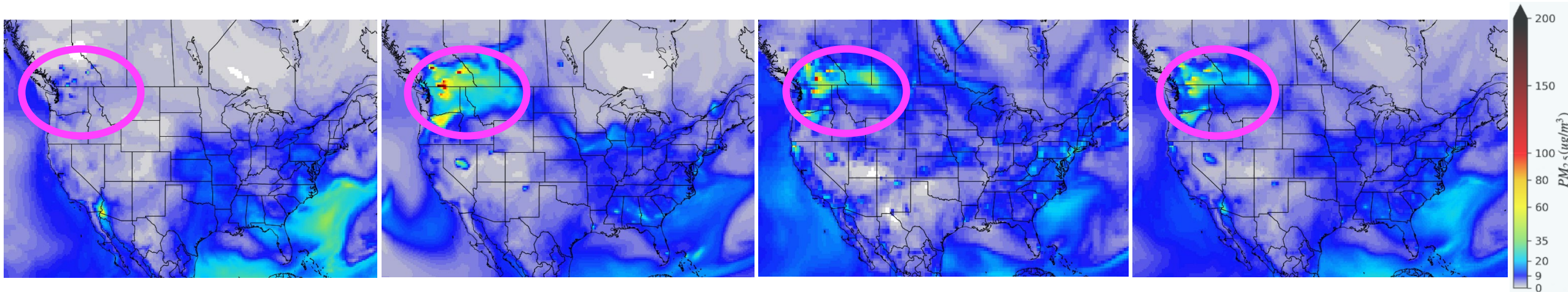


GEOS-FP

GEOS-CF

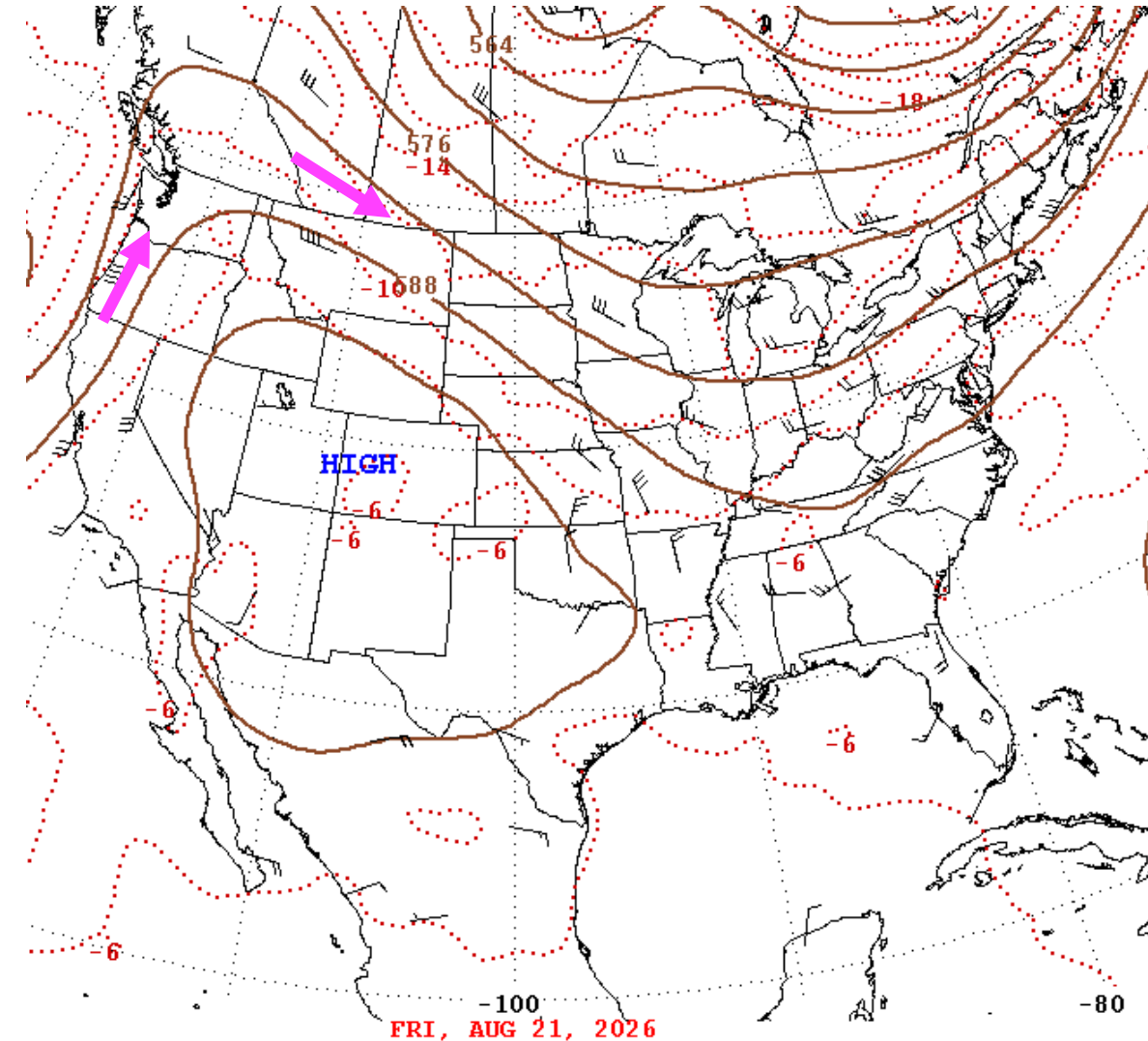
CAMS

Ensemble



Air Quality Reflection: Friday Aug 21, 2026

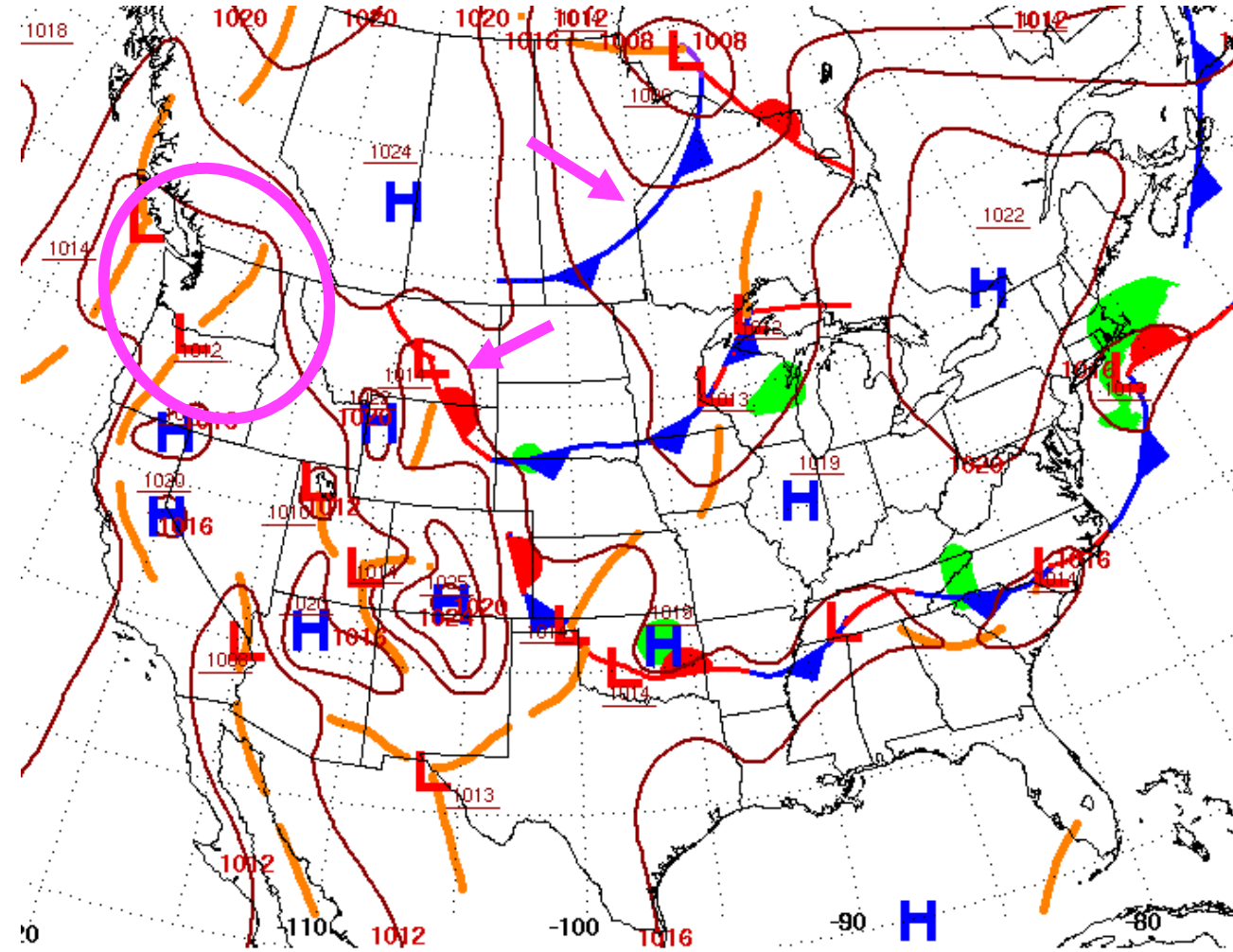
500 mb Contours



FRI, AUG 21, 2026

500-Millibar Height Contours at 7:00 A.M. E.S.T.

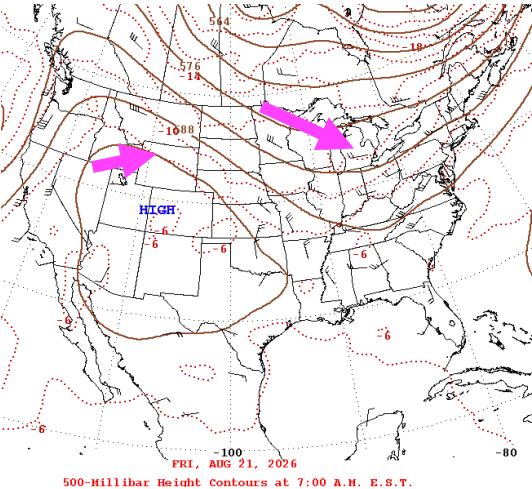
Surface Weather



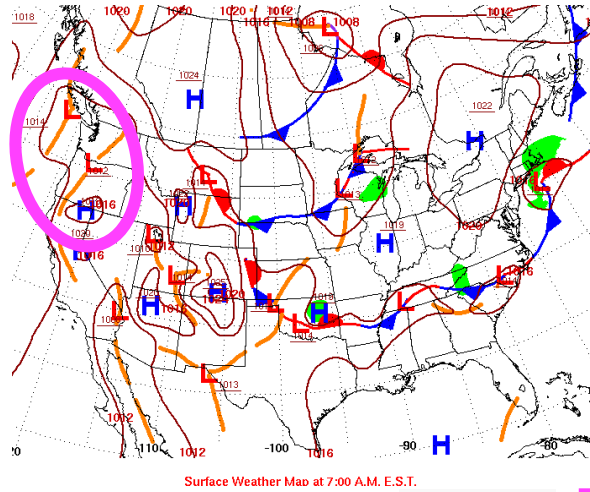
Surface Weather Map at 7:00 A.M. E.S.T.

Air Quality Reflection: Friday Aug 21, 2026

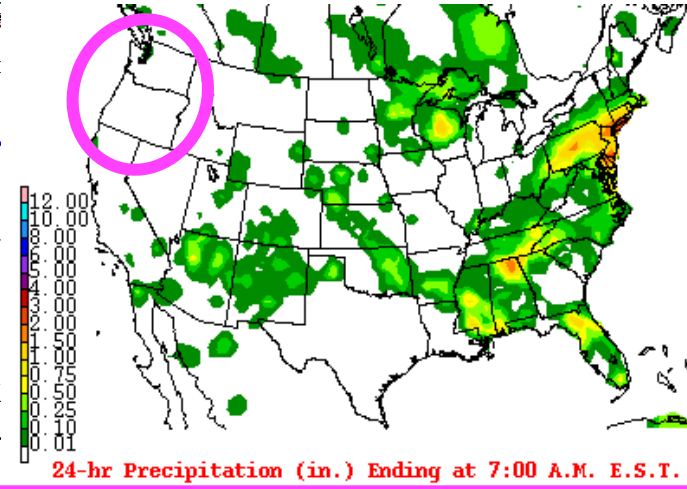
500 mb Contours



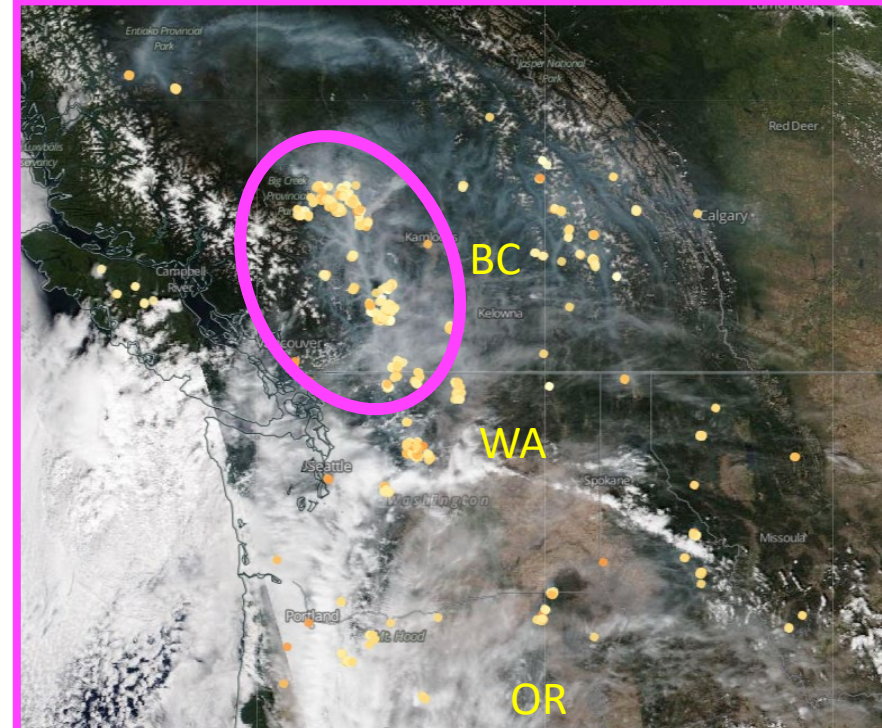
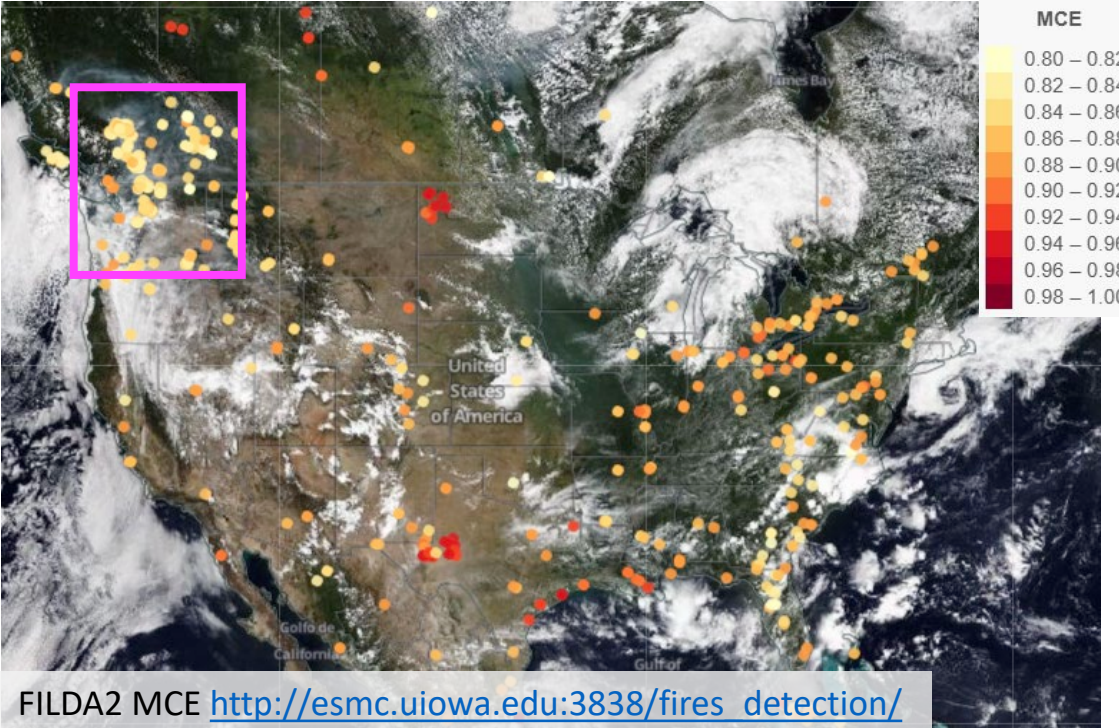
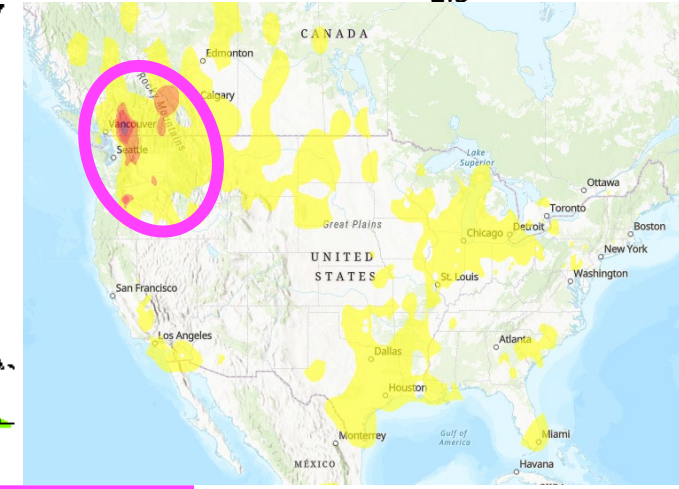
Surface Weather



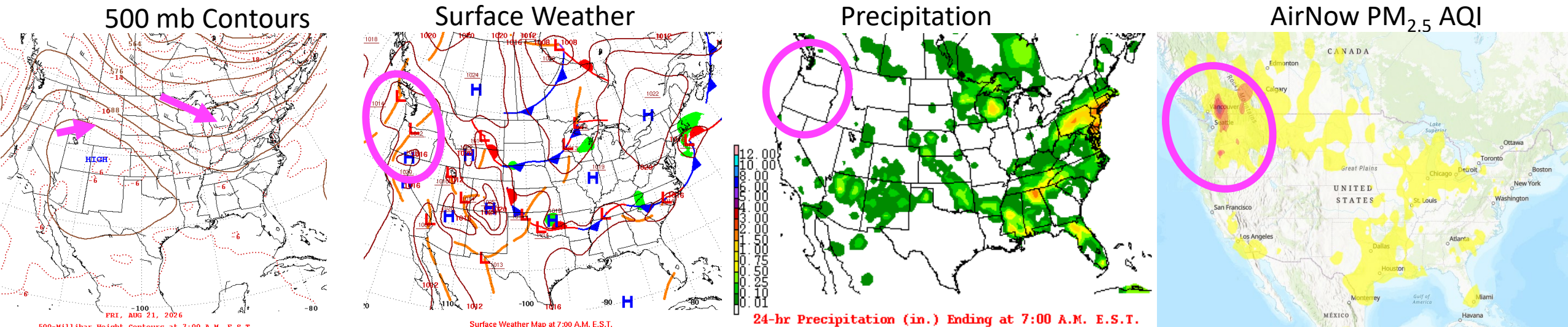
Precipitation



AirNow PM_{2.5} AQI



Air Quality Reflection: Friday Aug 21, 2026

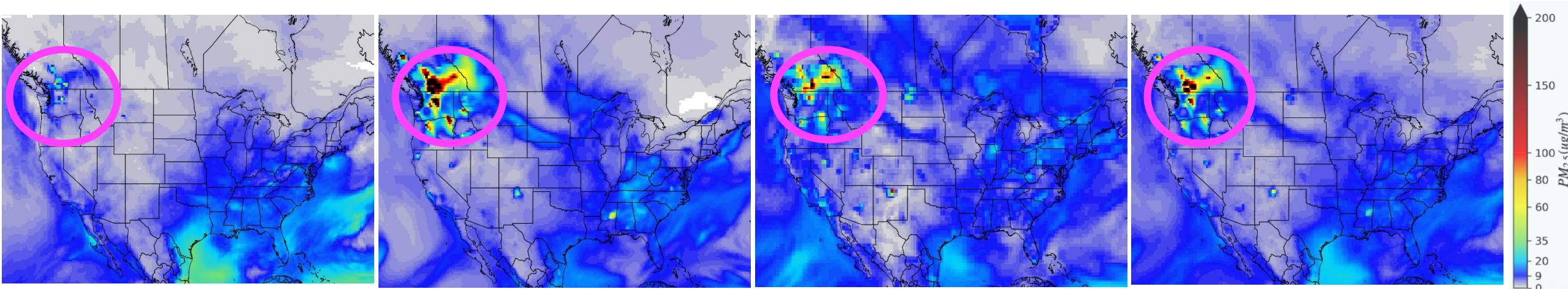


GEOS-FP

GEOS-CF

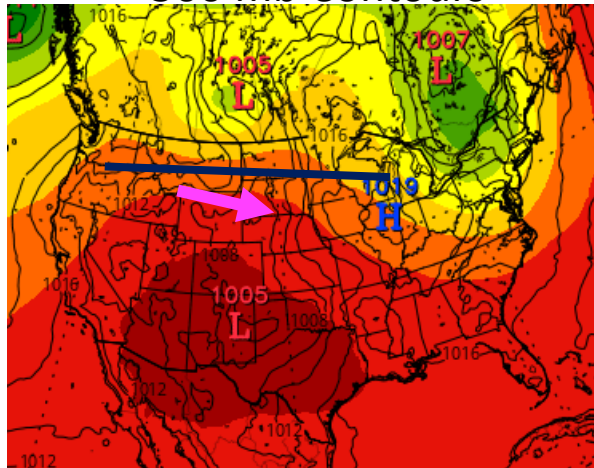
CAMS

Ensemble

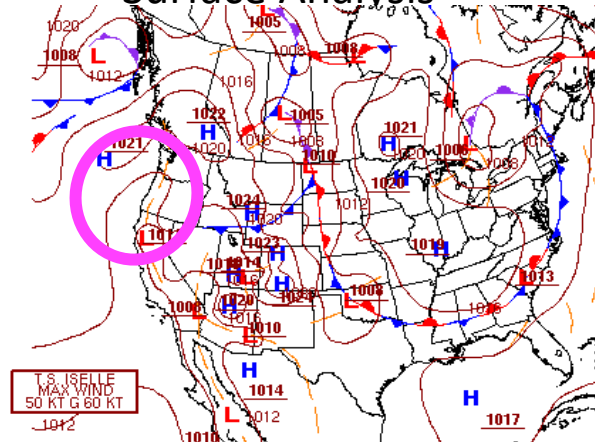


Current Status: August 24, 2026

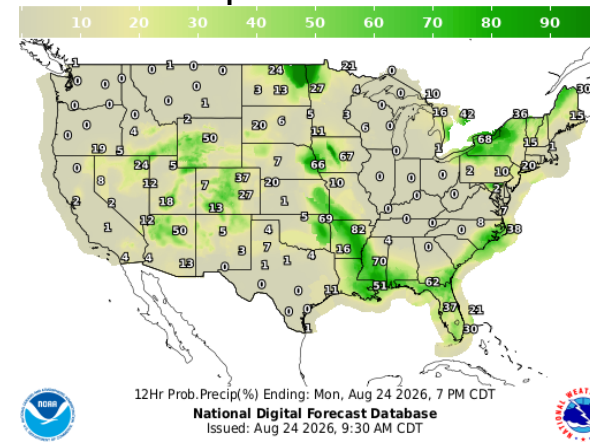
500 mb Contours



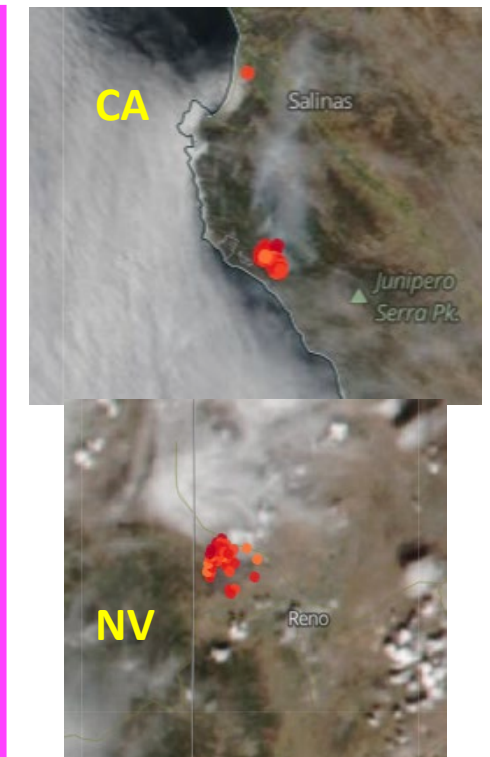
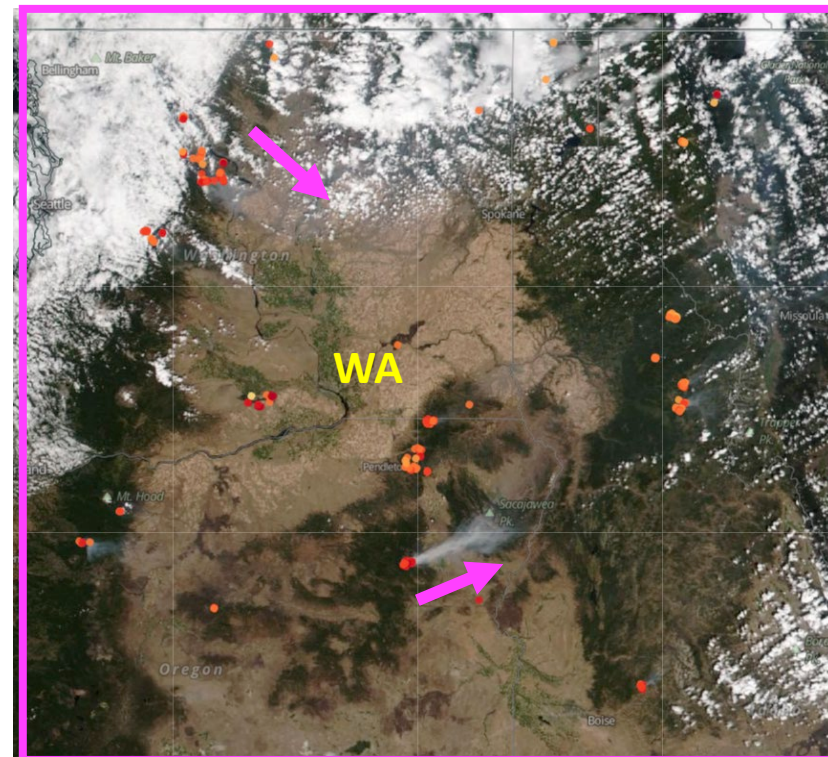
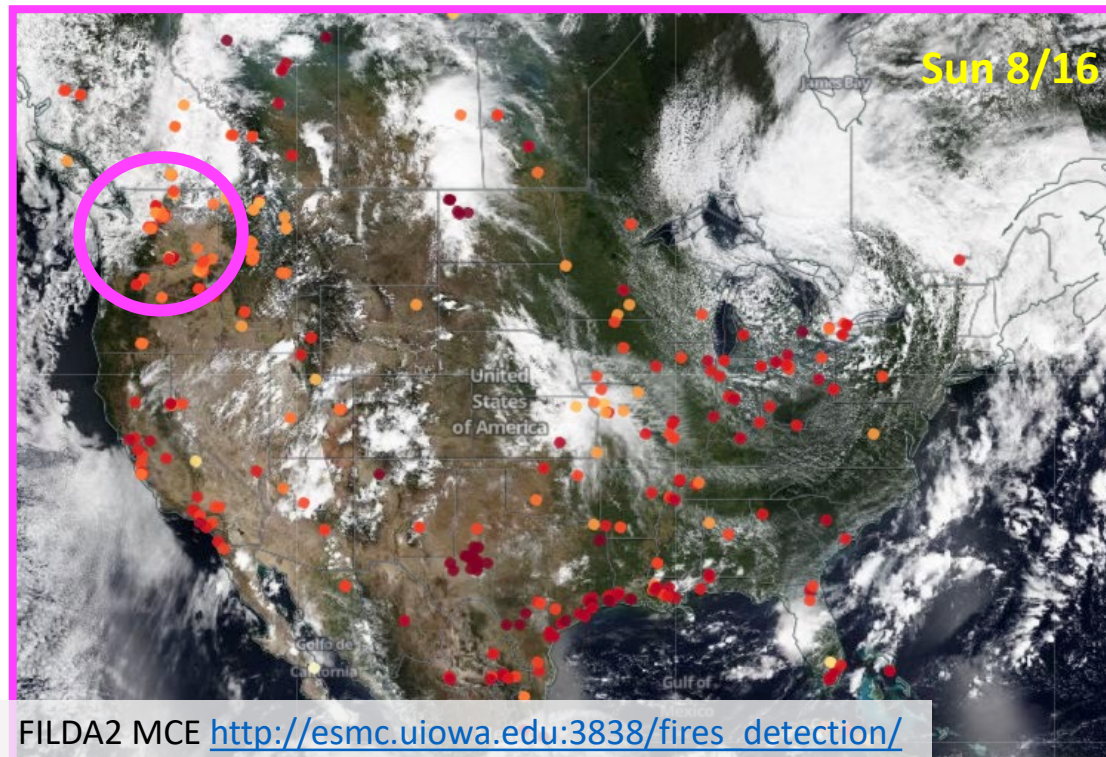
Surface Analysis



Precip. Prob.



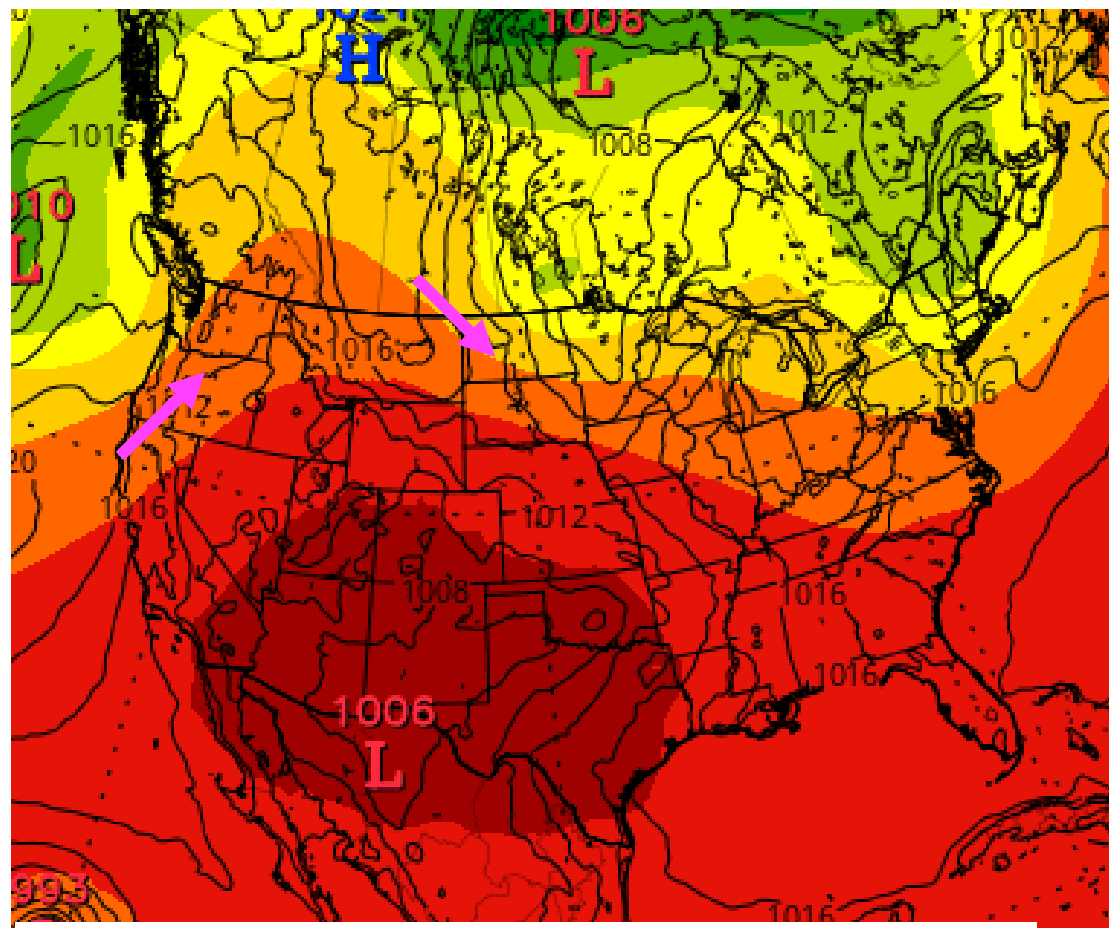
AirNow PM_{2.5} AQI



Outlook: Short Range (1-3 days)

(Forecast **Tuesday 8/25**)

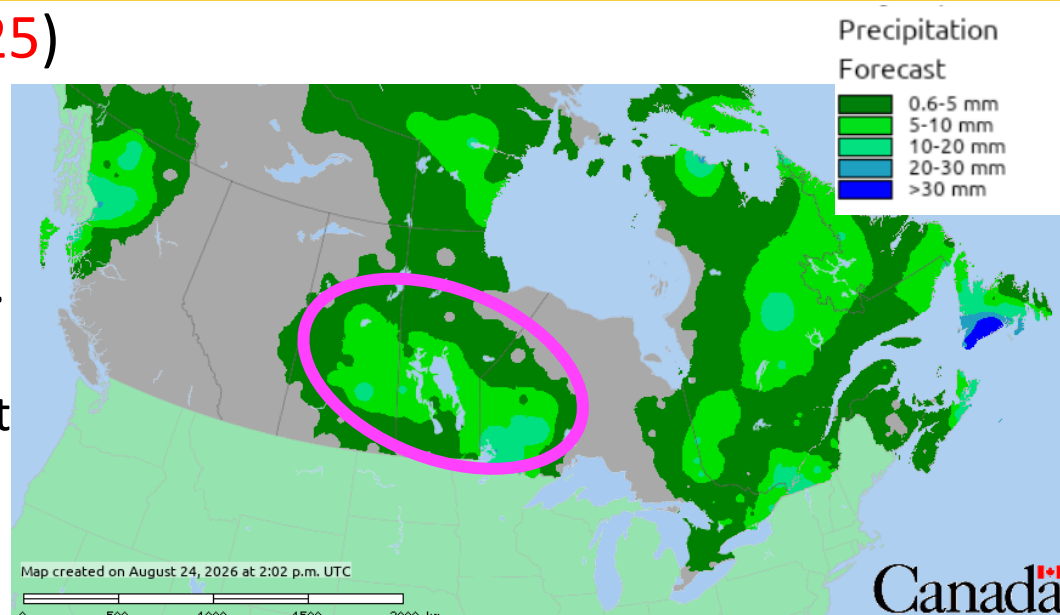
GFS 500 mb



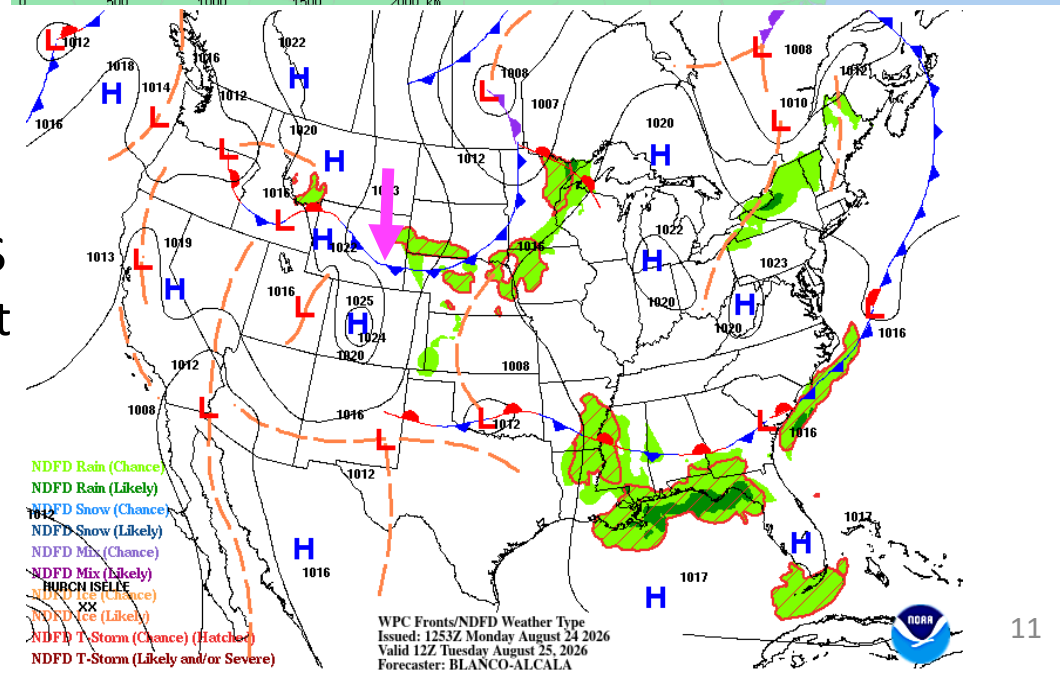
GFS 500mb Geopotential Height (dam) & MSLP (mb)

Init: 06z Aug 24 2026 Forecast Hour: [36] valid at 18z Tue, Aug 25 2026

Environ.
Canada
Forecast

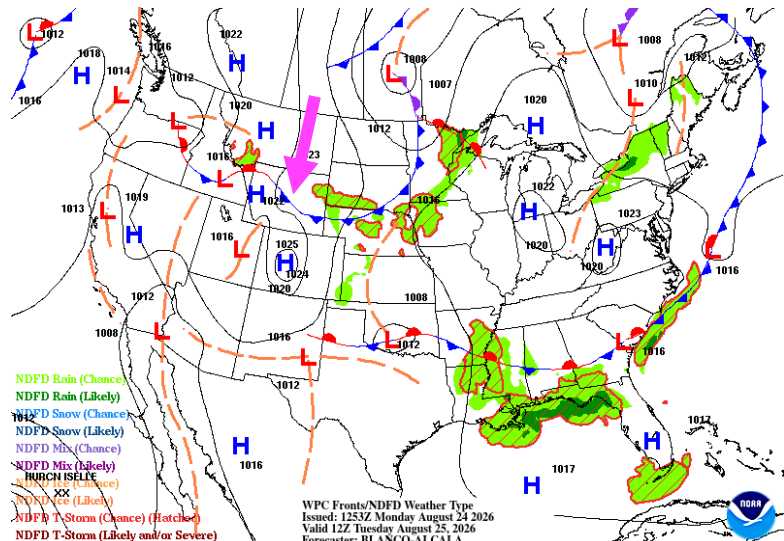


US NWS
Forecast

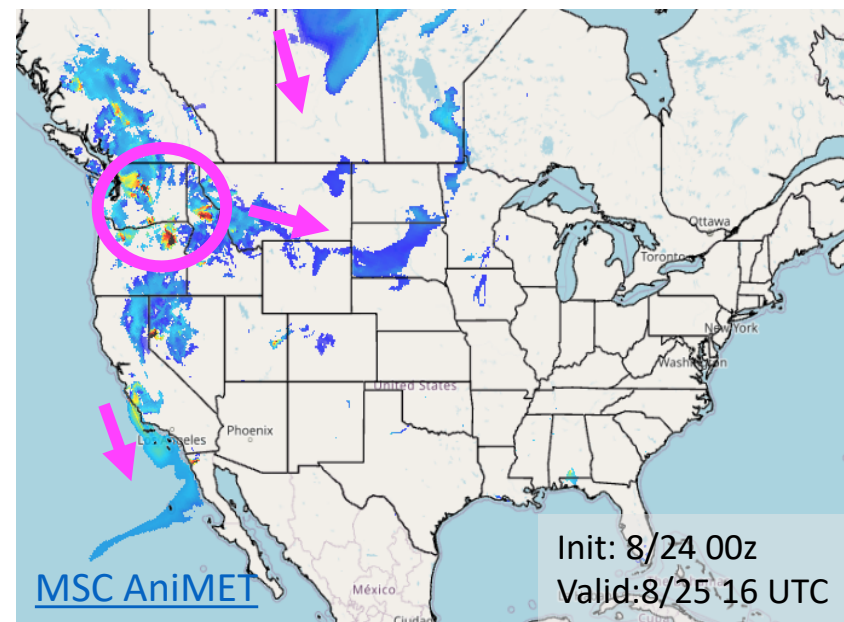


Outlook: Short Range (1–3 days)

Surface Forecast



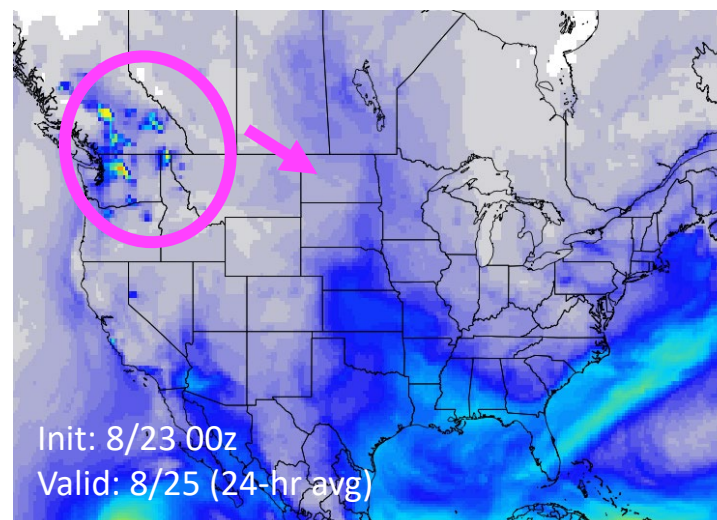
Canada MSC AniMET



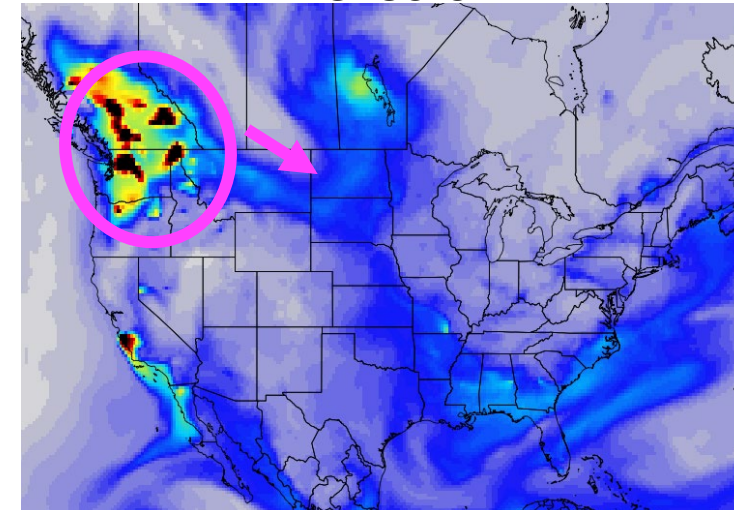
(Tuesday 8/25)

Model Means PM_{2.5}

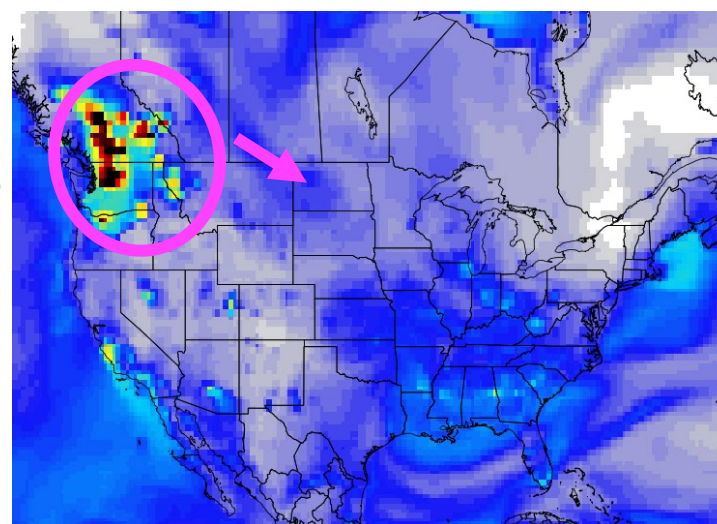
GEOS-FP



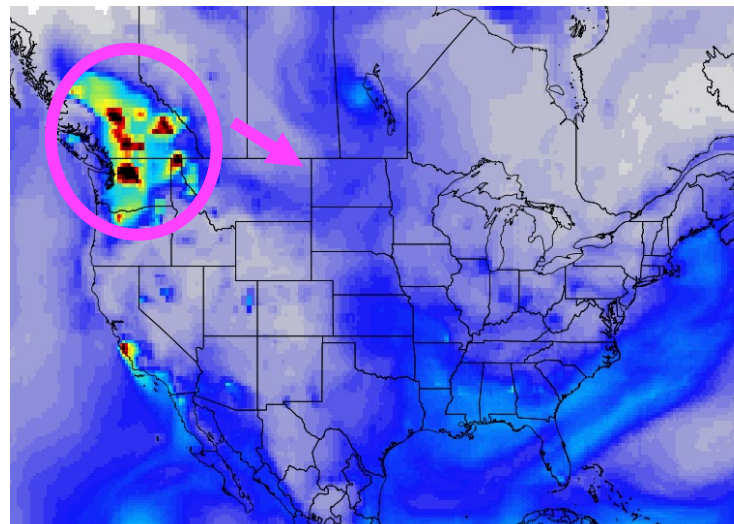
GEOS-CF



CAMS



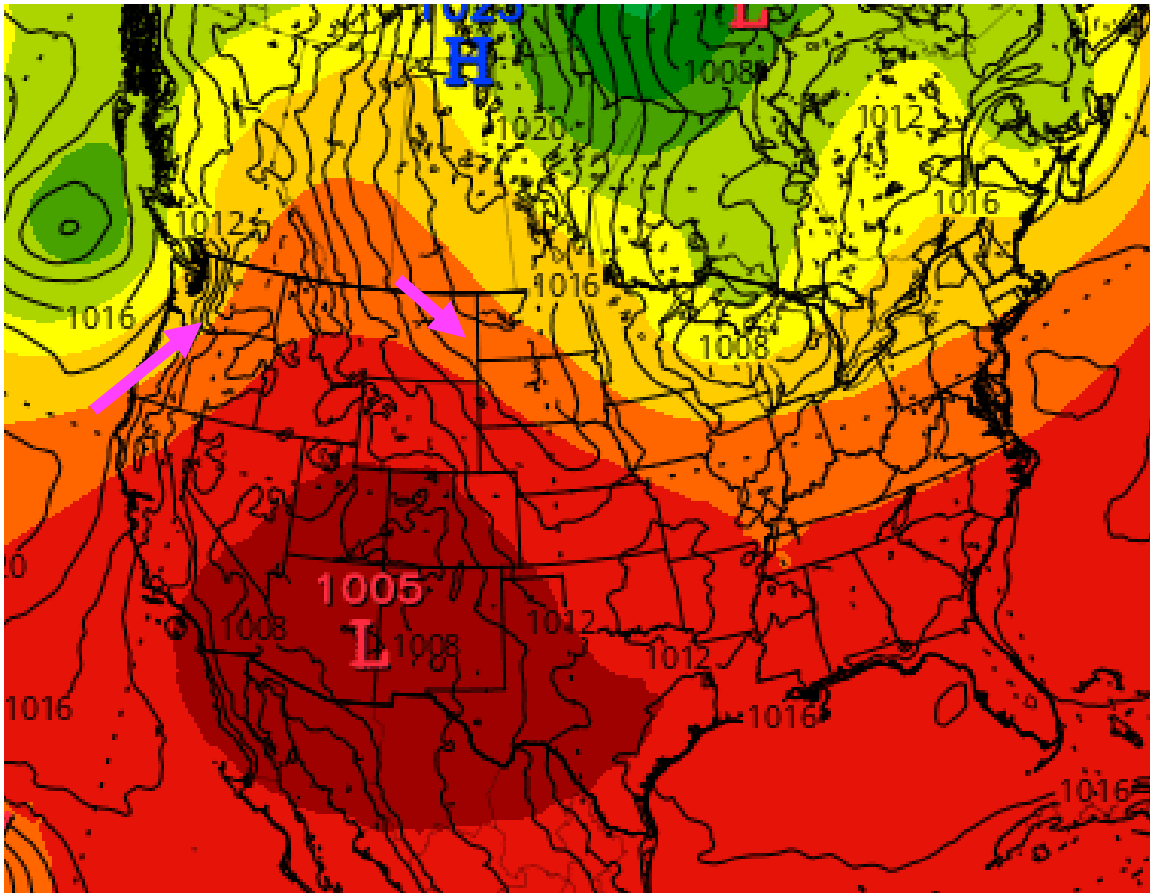
Ensemble



Outlook: Short Range (1–3 days)

(Forecast **Wednesday 8/26**)

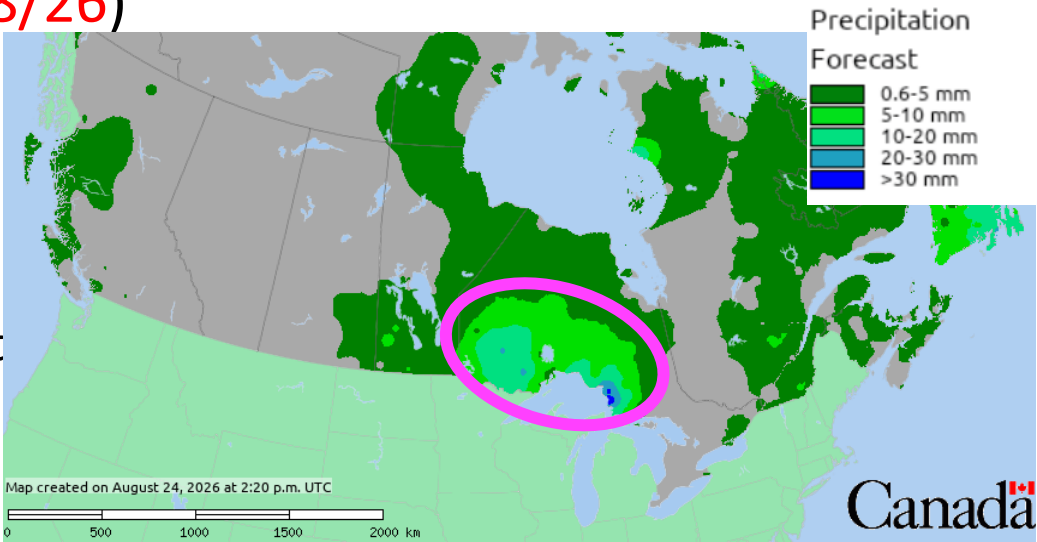
GFS 500 mb



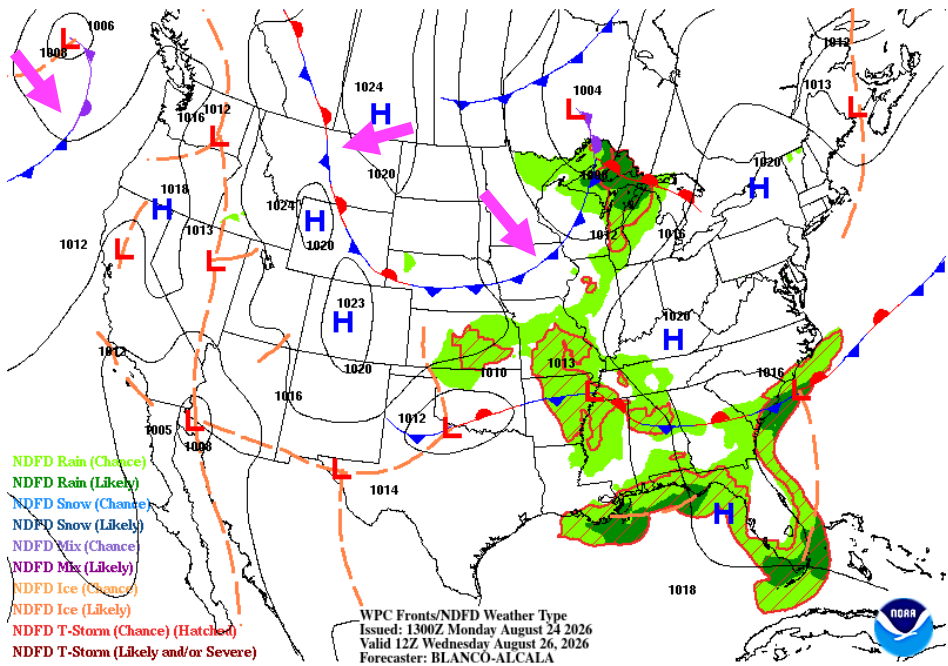
GFS 500mb Geopotential Height (dam) & MSLP (mb)

Init: 06z Aug 24 2026 Forecast Hour: [60] valid at 18z Wed, Aug 26 2026

Environ.
Canada
Forecast

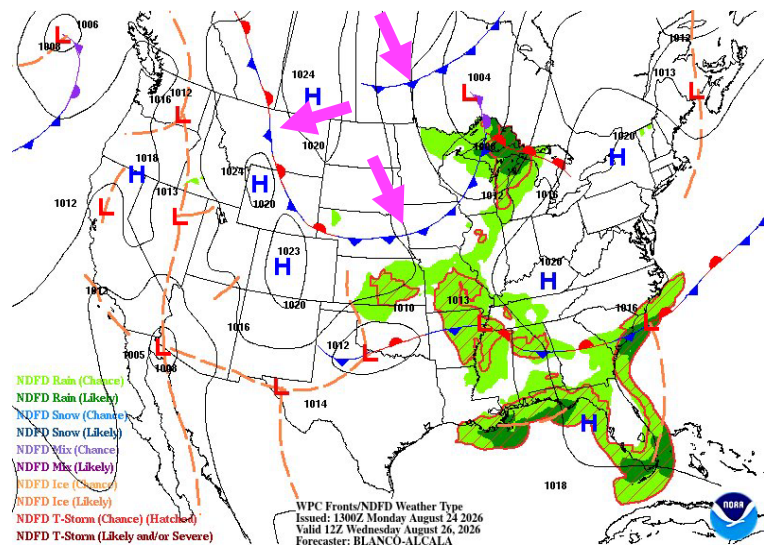


US NWS
Forecast



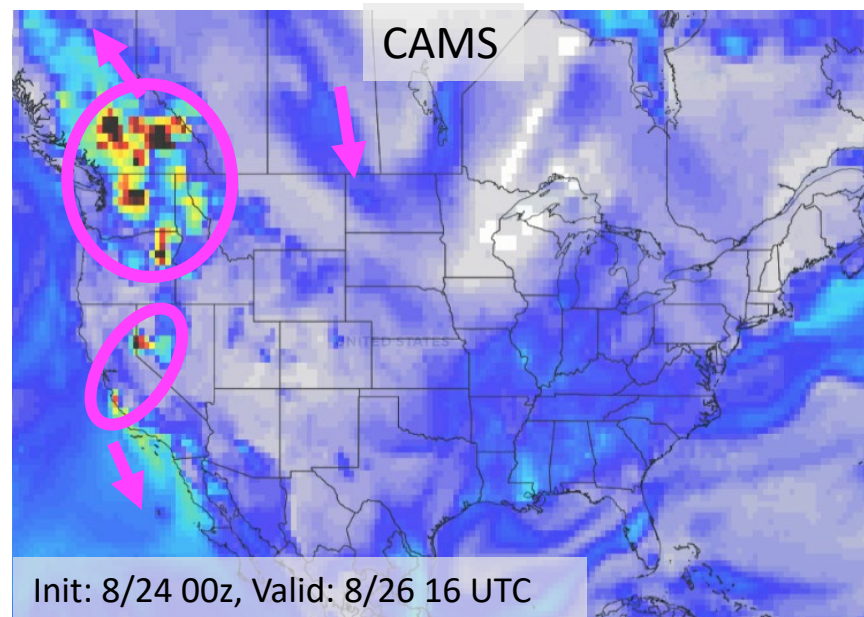
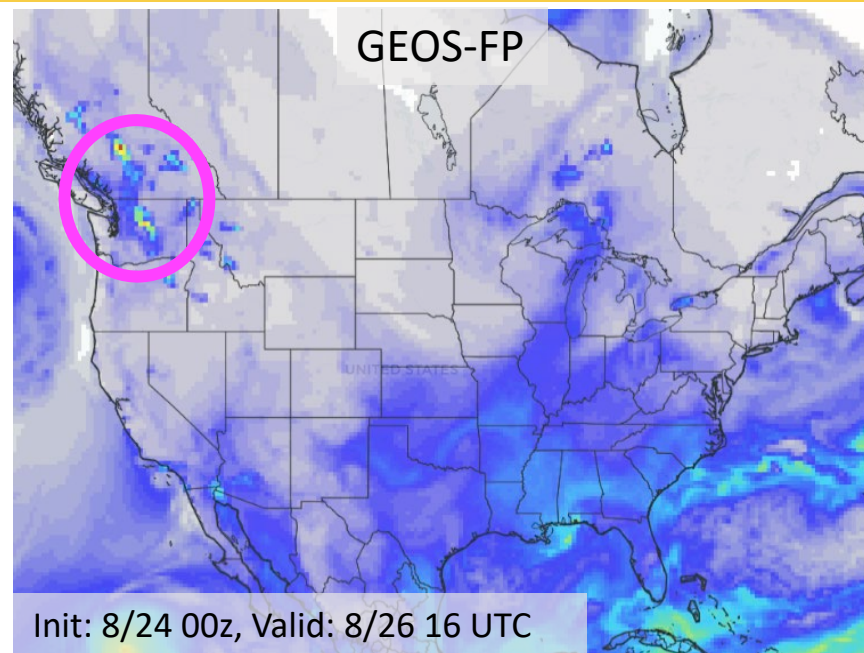
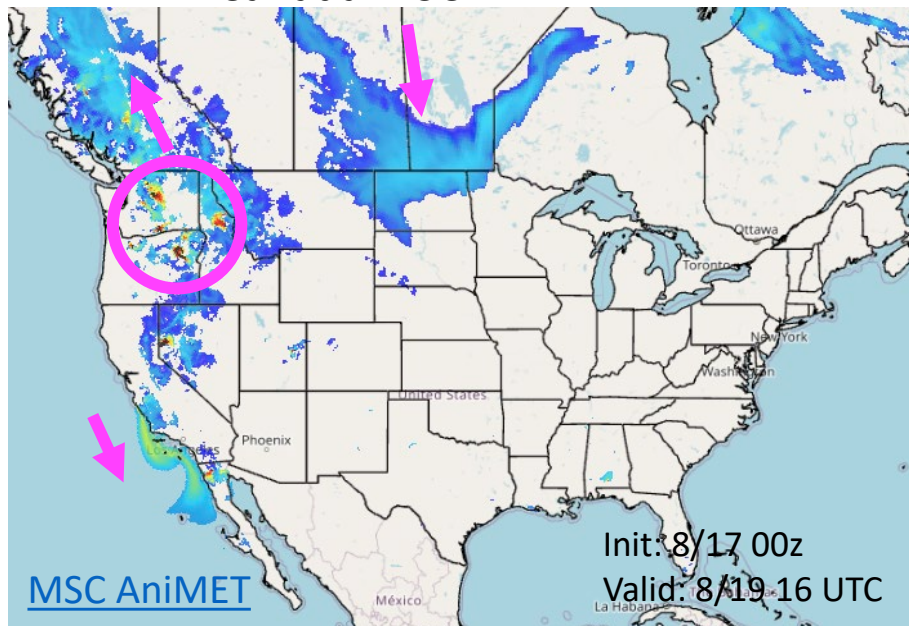
Outlook: Short Range (1–3 days)

Surface Forecast



(Wednesday 8/26)

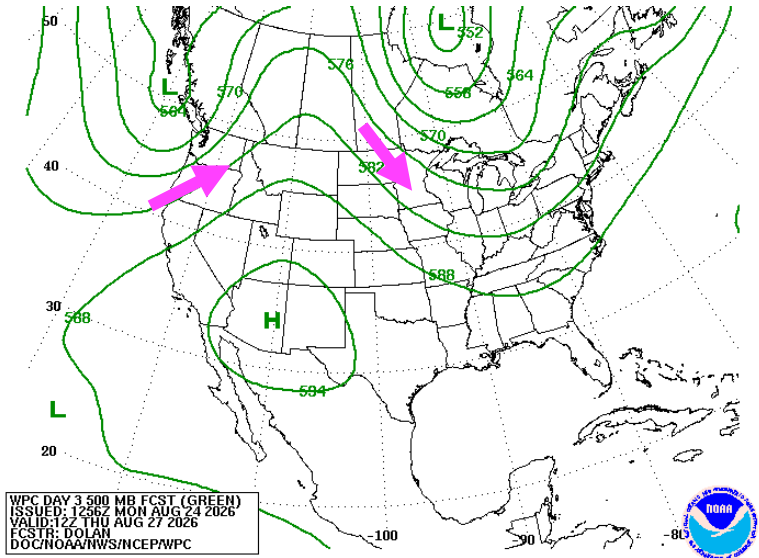
Canada MSC AniMET



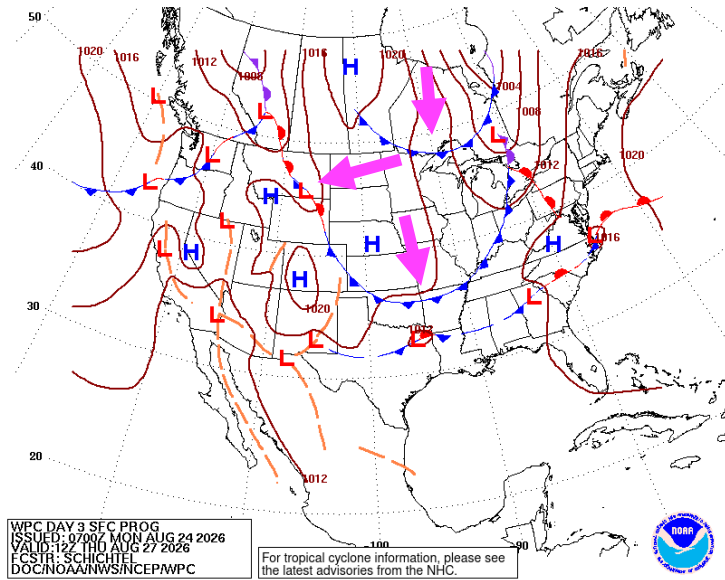
Outlook: Medium Range

Thurs
8/27

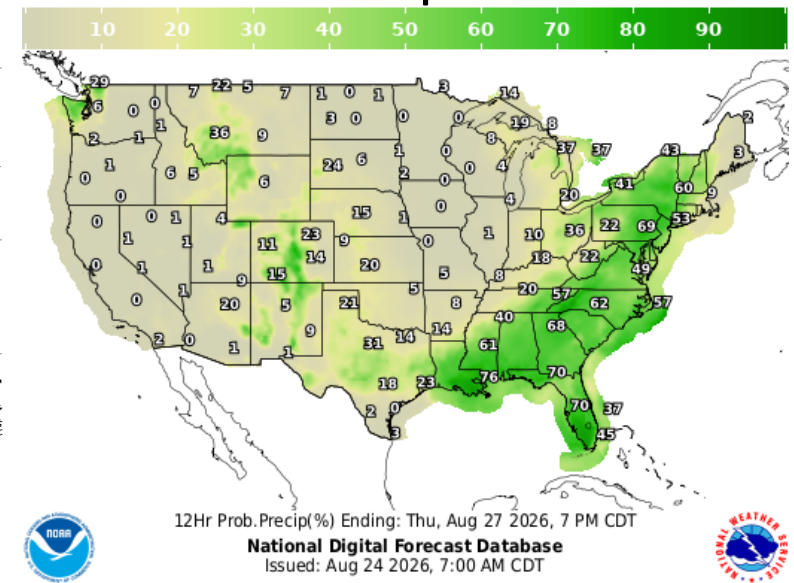
500 mb Contours



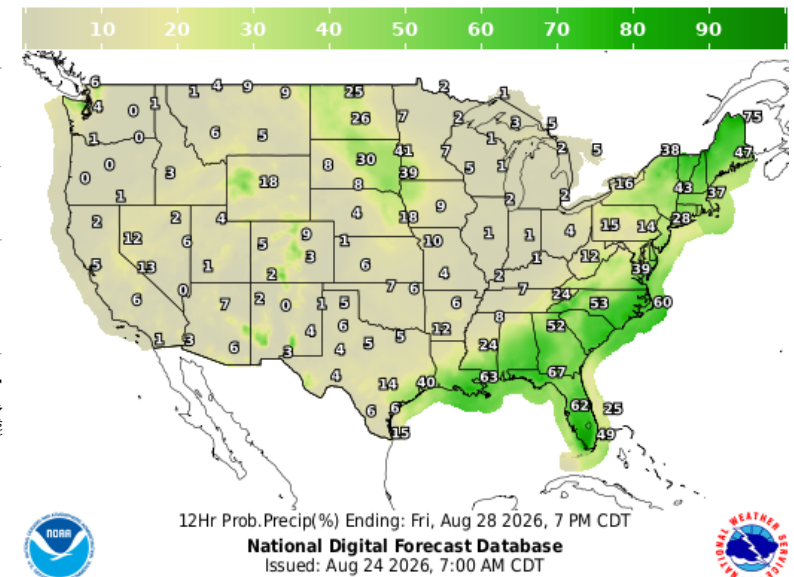
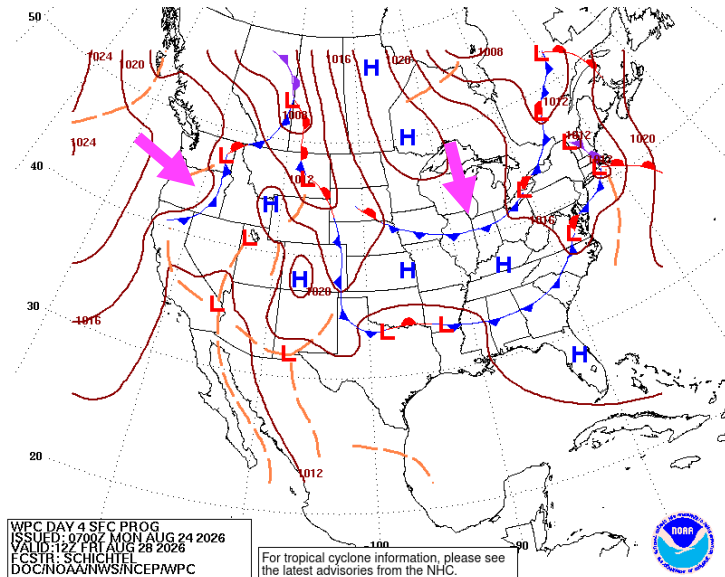
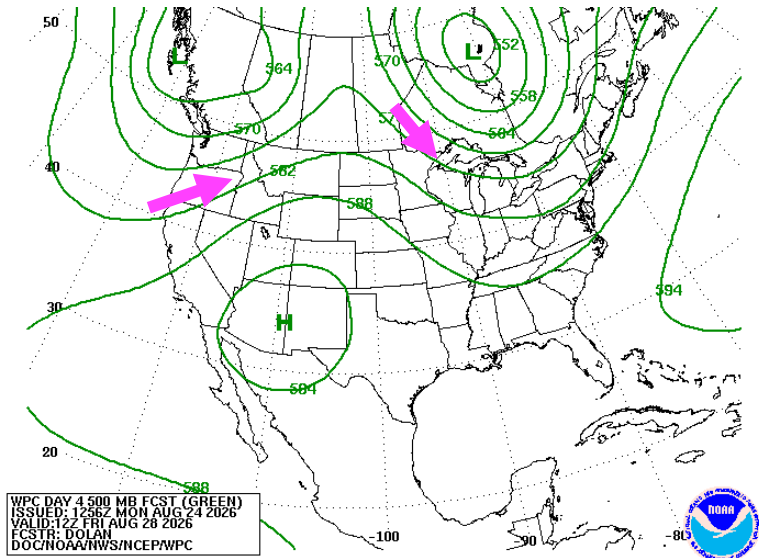
Sea Level



Precip Prob.



Friday
8/28



Summary

Monday: WA and ID wildfires remain active and continue to contribute to USG to moderate AQI in the region. Wildfire activity in Southern CA and NV detected.

T → W: WA/NV and ID wildfire smoke have northerly and easterly transport respectively. Southern CA smoke is forecasted to transport south along the coast. Keep a watch on smoke from the NT Canadian fires.

Th → F: Smoke transport patterns are likely to continue from earlier in the week. Surface cold fronts and high-pressure system over the Upper Midwest would promote smoke from NT fires towards the surface from the upper atmosphere.

