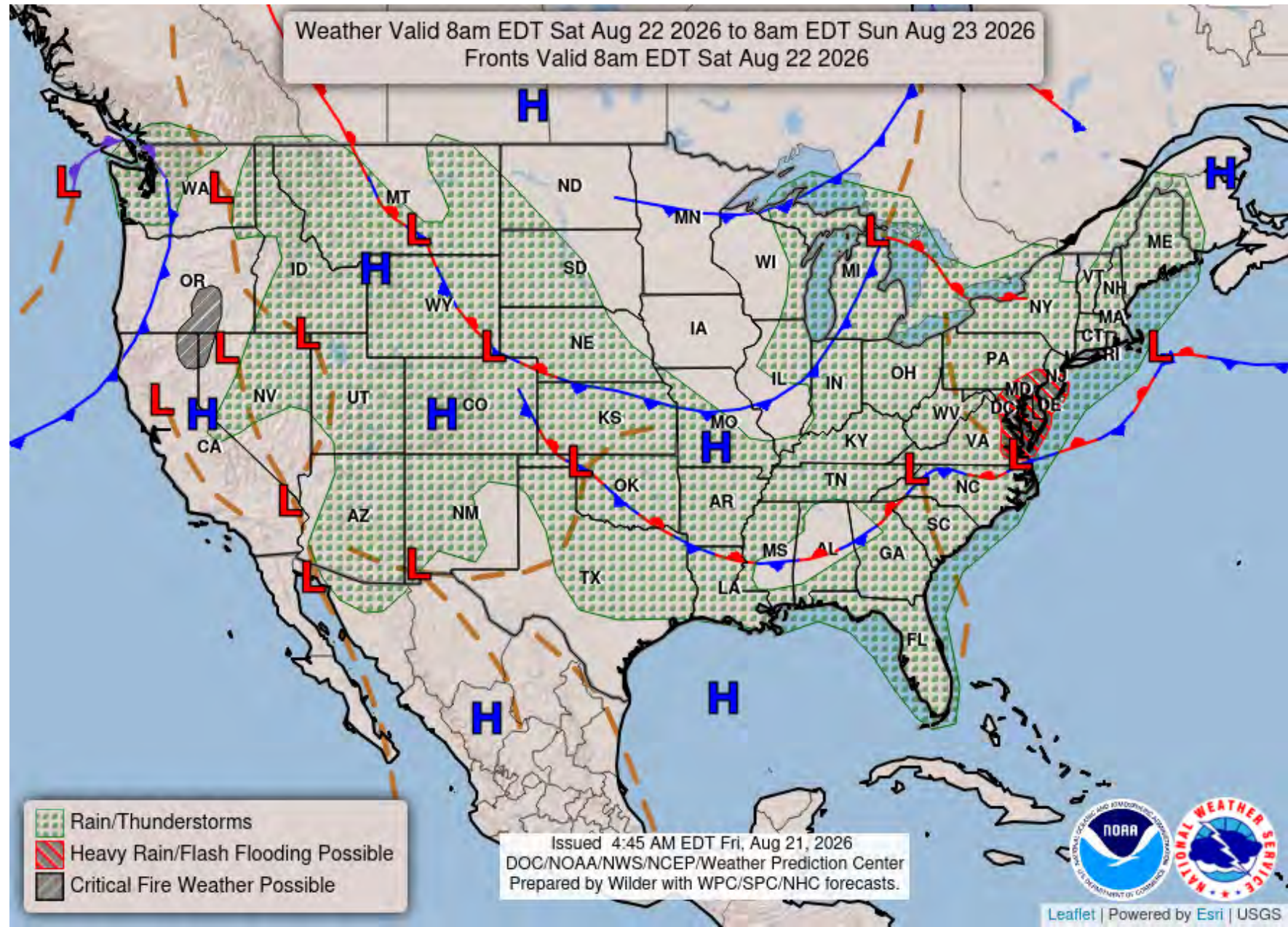


SABRE Forecast Discussion 08/21/2026

Surface Chart for US Saturday, 8/22

Region of thunderstorms will
extend down over Houston by
tomorrow afternoon.

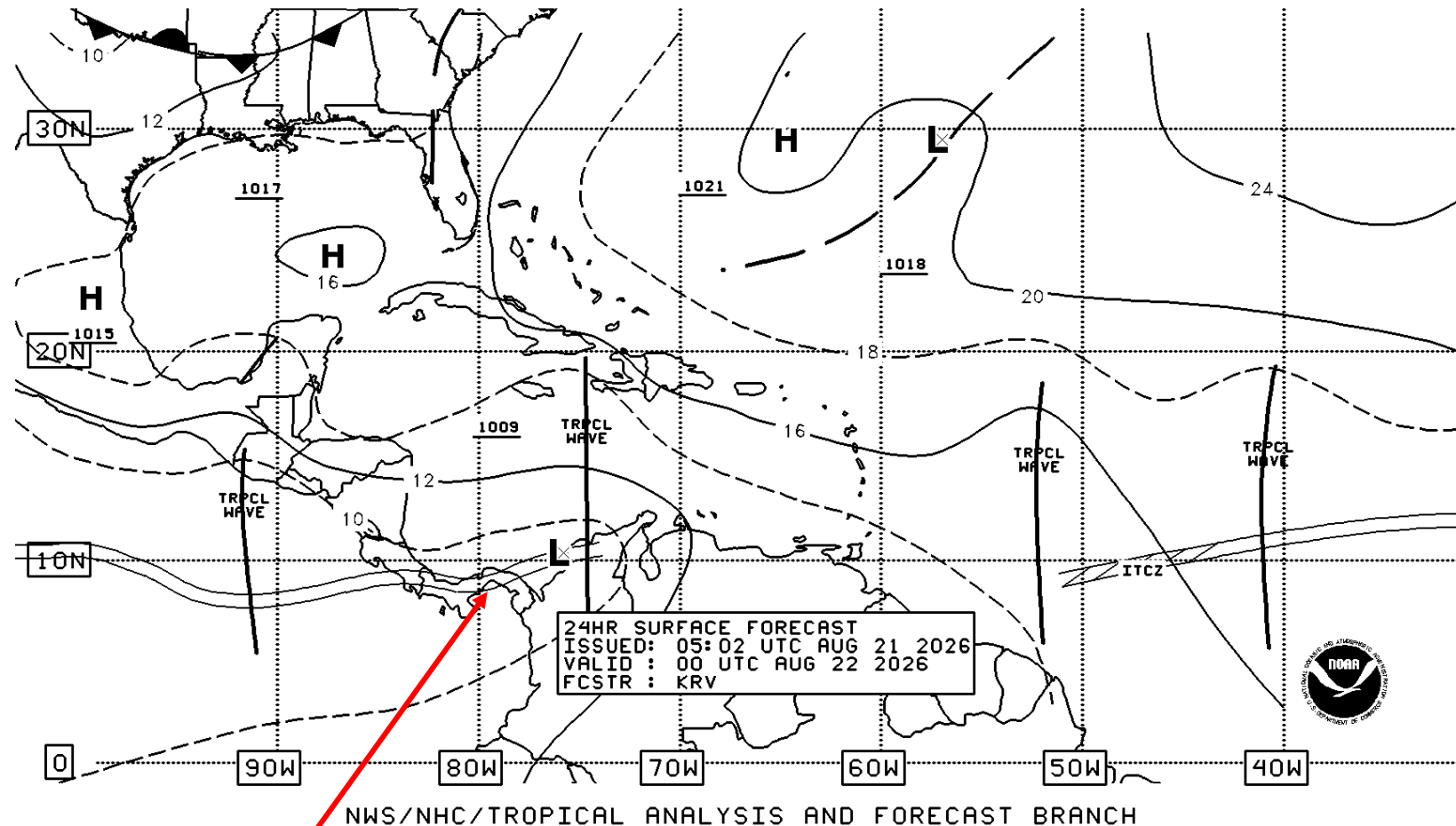


SABRE Forecast Discussion 08/21/2026

Surface Chart for Panama

Tropical waves moving east to west.

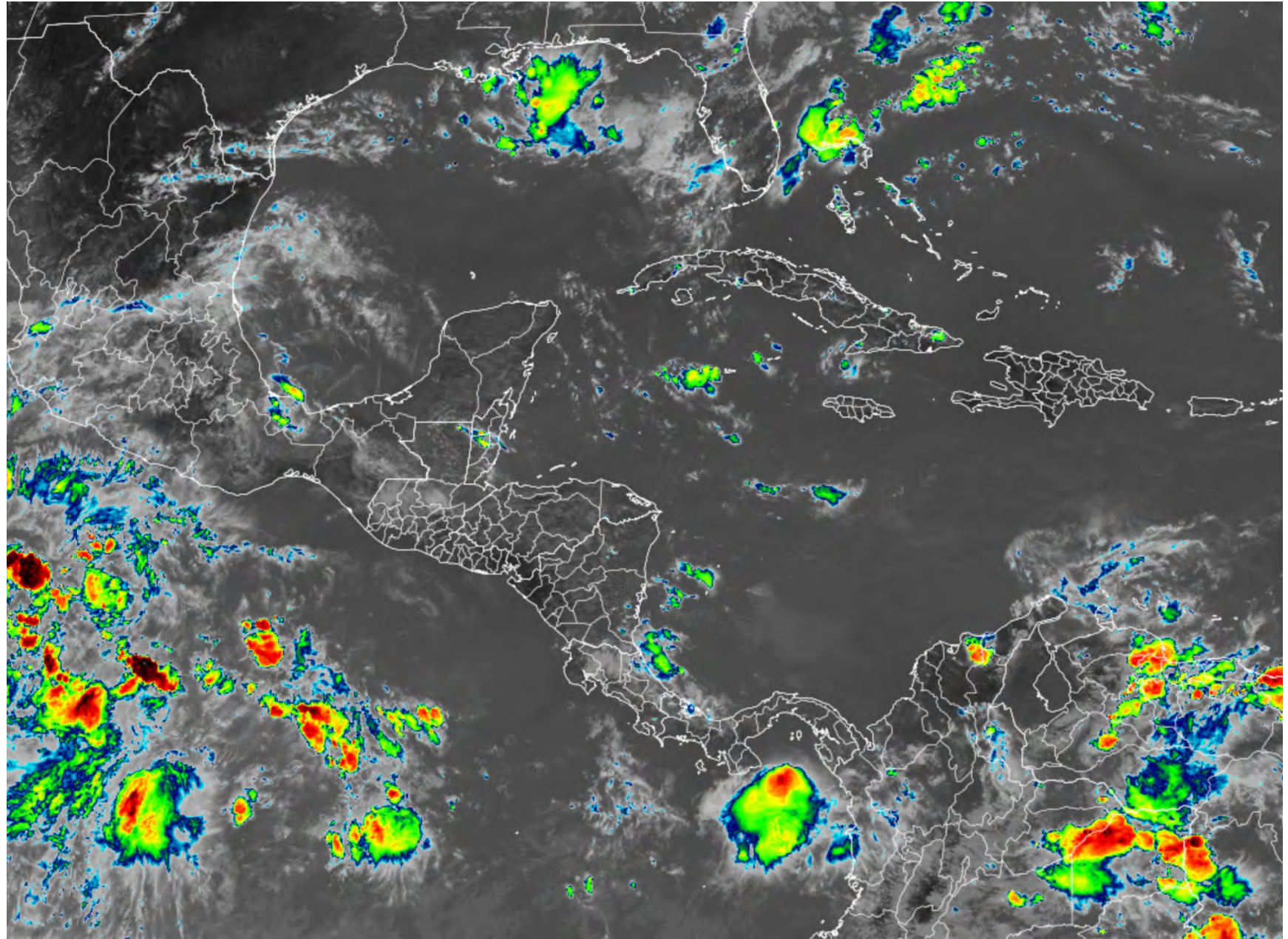
The **monsoon trough** is a convergence zone between the wind patterns of the southern and northern hemispheres. It is a portion of the ITCZ in the Western Pacific.



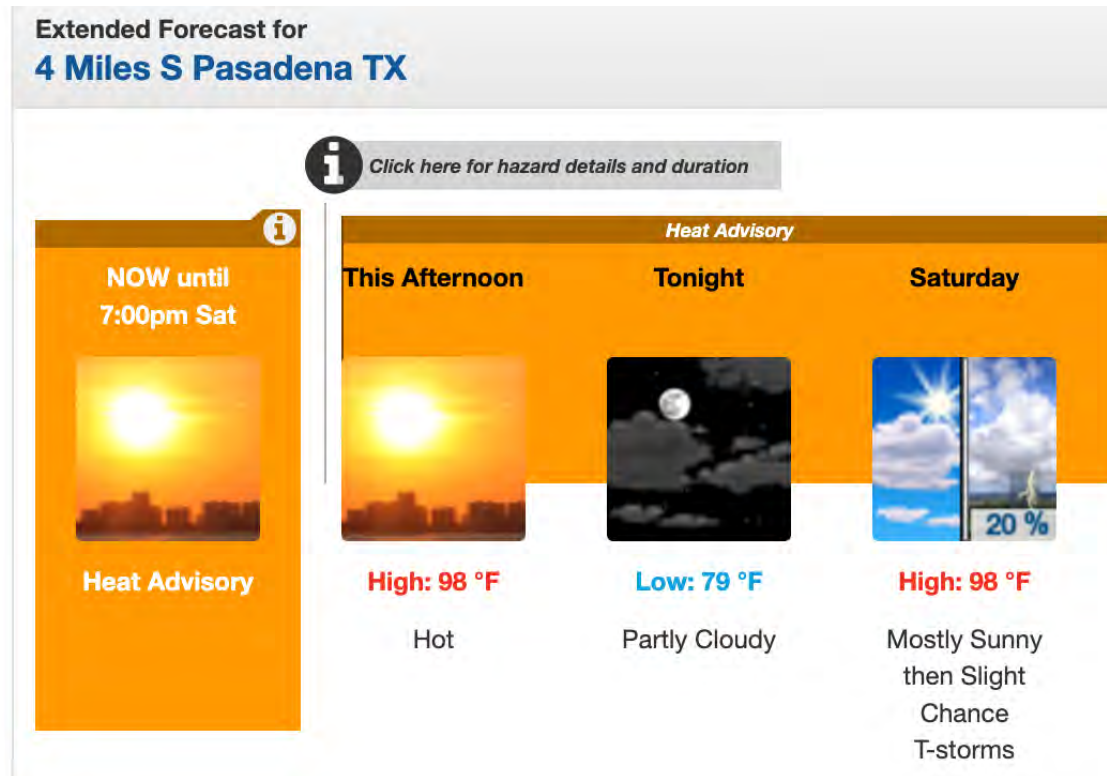
Monsoon trough currently over Panama, but in between tropical waves.

Today's Recent (1820Z) Satellite Image

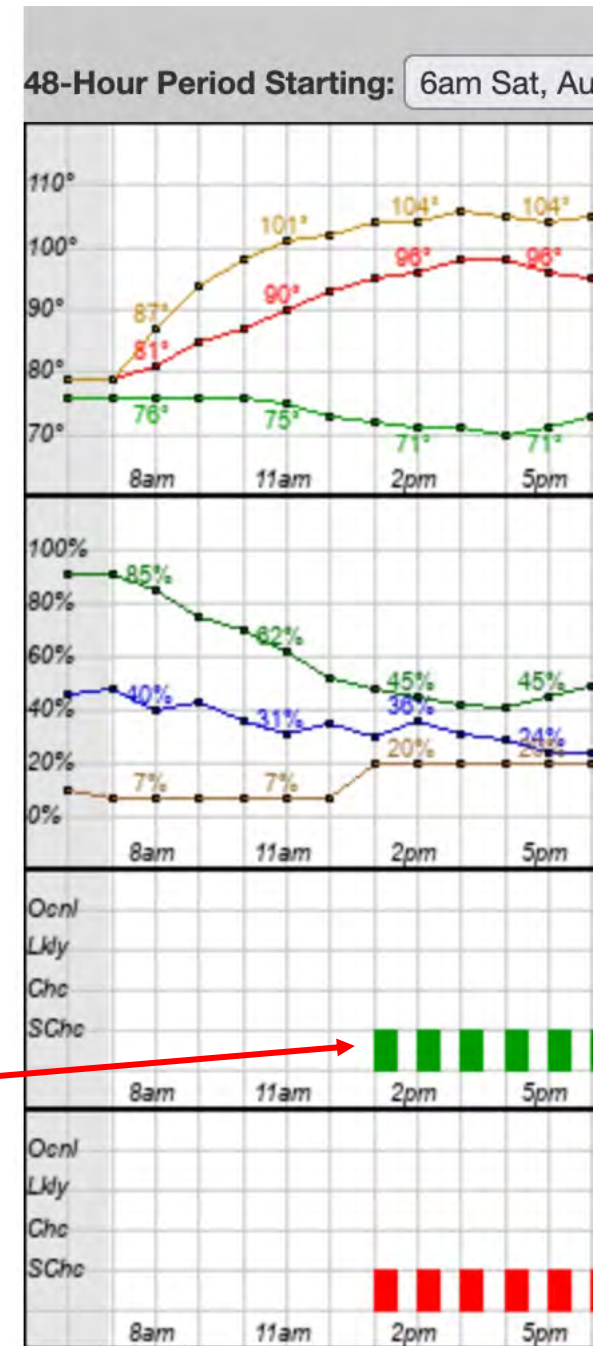
Nice weather for a transit flight, clear so far in Panama this afternoon.



Houston Forecast

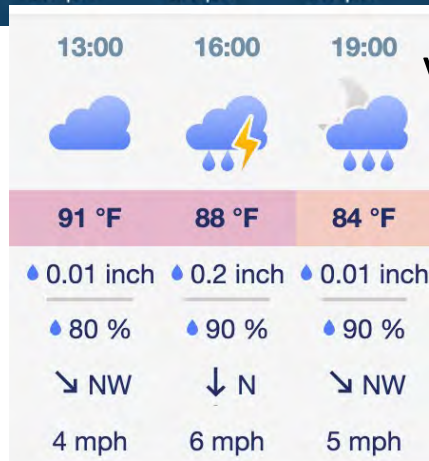
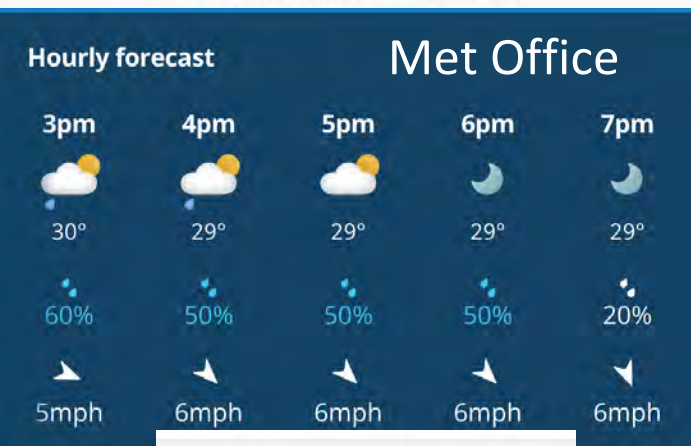
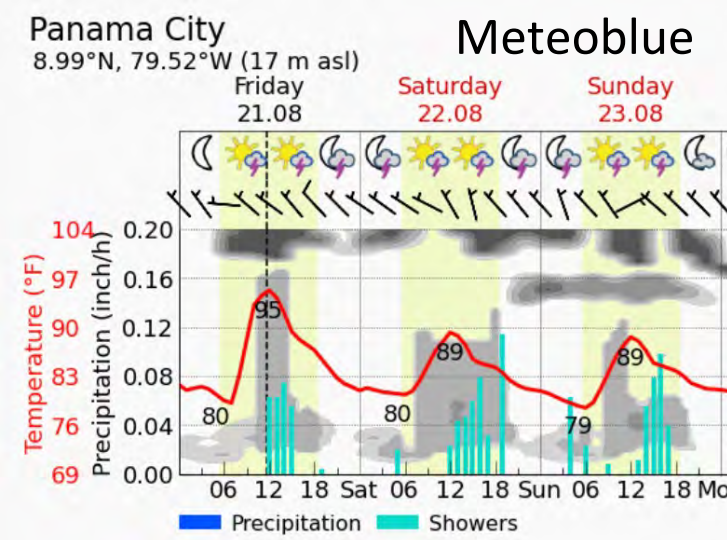


Some clouds and slight chance of thunderstorms moves into Houston tomorrow afternoon.



KEFD TAF
doesn't extend
far enough yet

Panama Forecasts for Saturday afternoon



TAF MPPA · Panamá Pacífico International Airport

Valid from August 21, 2026 13:00 to August 22, 2026 19:00

ay	saturday 06:00	saturday 07:00	saturday 08:00	saturday 09:00	saturday 10:00	saturday 11:00	saturday 12:00	saturday 13:00	saturday 14:00	saturday 15:00	saturday 16:00	saturday 17:00	saturday 18:00
%	>40%	30%	30%	30%	30%			30%	30%	30%	30%		
ed	VFR	MVFR	MVFR	MVFR	MVFR	VFR	VFR	MVFR	MVFR	MVFR	MVFR	VFR	VFR
ls	Scattered clouds	Thunderstorms rain	Thunderstorms rain	Thunderstorms rain	Thunderstorms rain	Scattered clouds	Scattered clouds	Rain	Rain	Rain	Rain	Scattered clouds	Scattered clouds
1+	10 km+	6 km	6 km	6 km	6 km	10 km+	10 km+	6 km	6 km	6 km	6 km	10 km+	10 km+

Commercial forecast sites have Saturday afternoon t-storm chance from 50-90%.

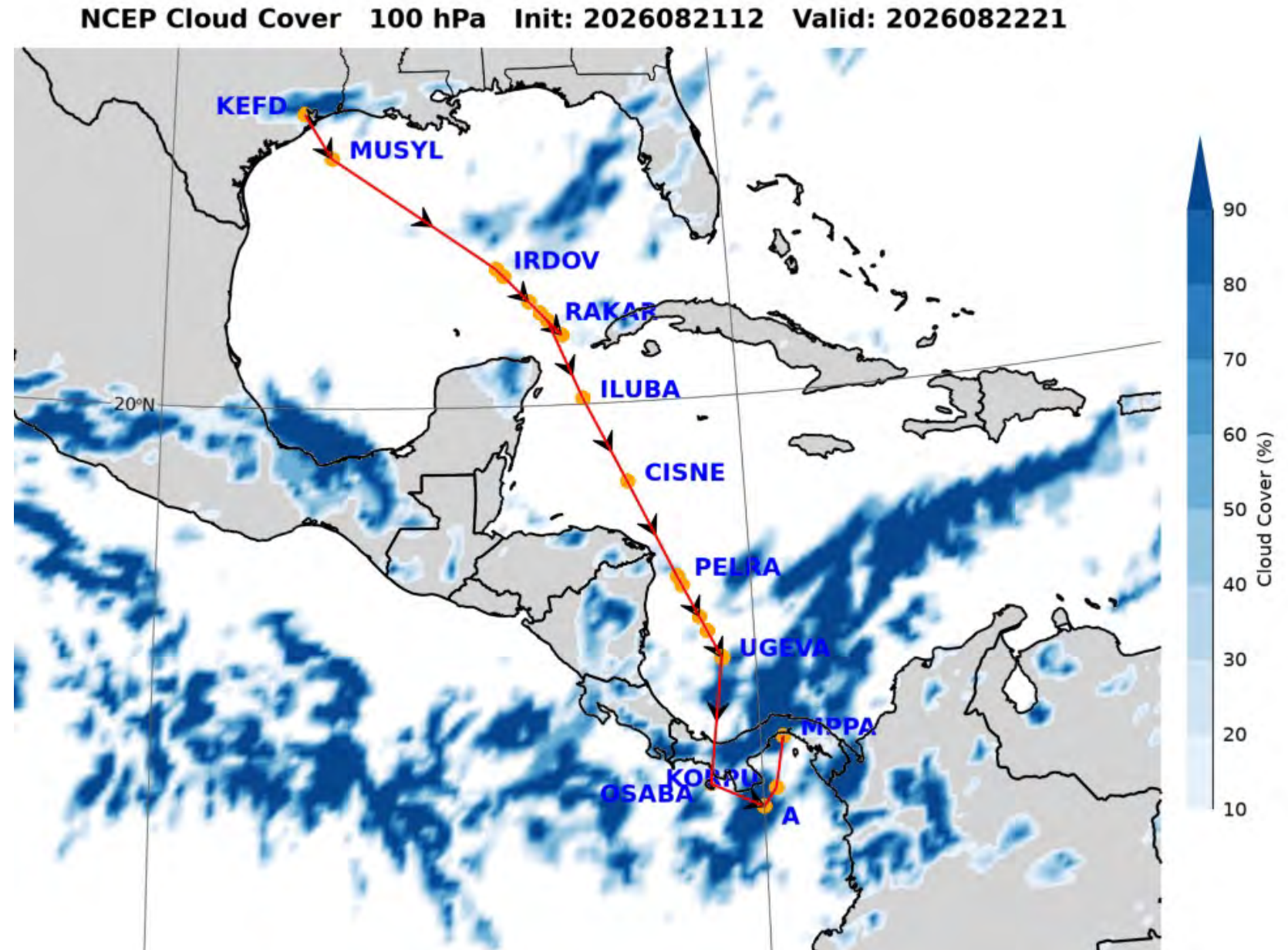
MPPA TAF has 30% chance of rain at 4pm clearing out by 5pm.

Upper Level Forecasts for Saturday 8/22/2026

Flight Plan A for transit flight 08/22/2026

Goals:

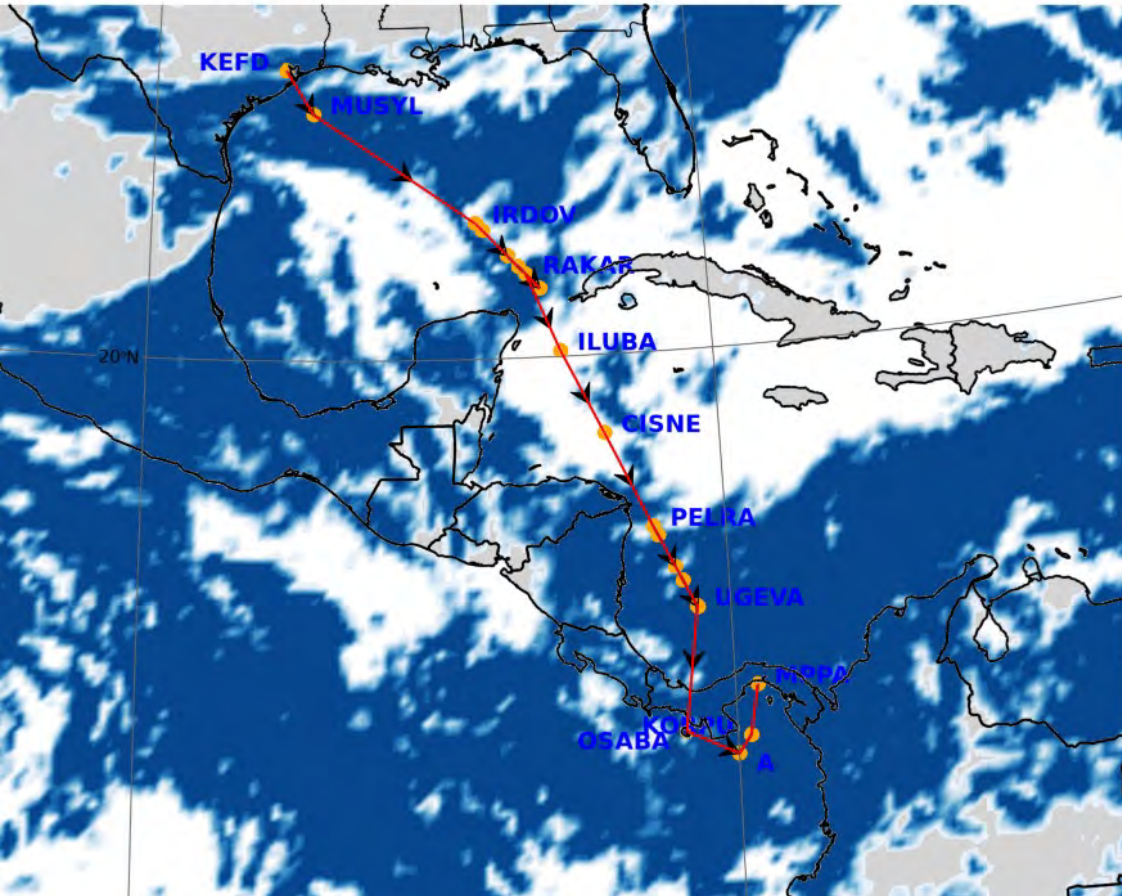
- Transit to Panama
- 2 vertical profiles
- If weather/timing allows for it, overpass Panama to sample South American air (final decision to be made by waypoint PELRA)



Cloud Cover 21Z (4pm local)

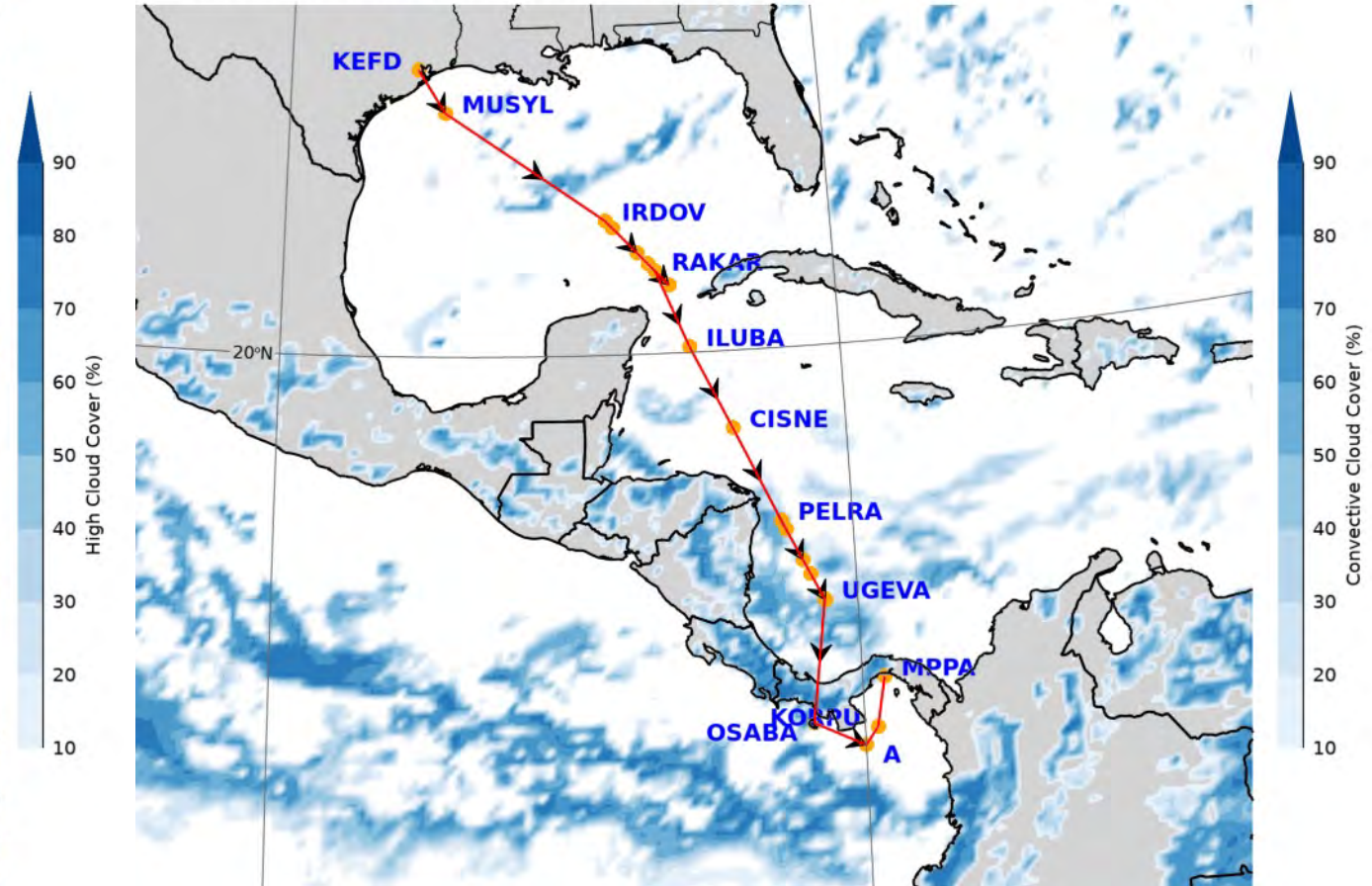
High Clouds

NCEP High Cloud Cover Init: 2026082112 Valid: 2026082221



Convective

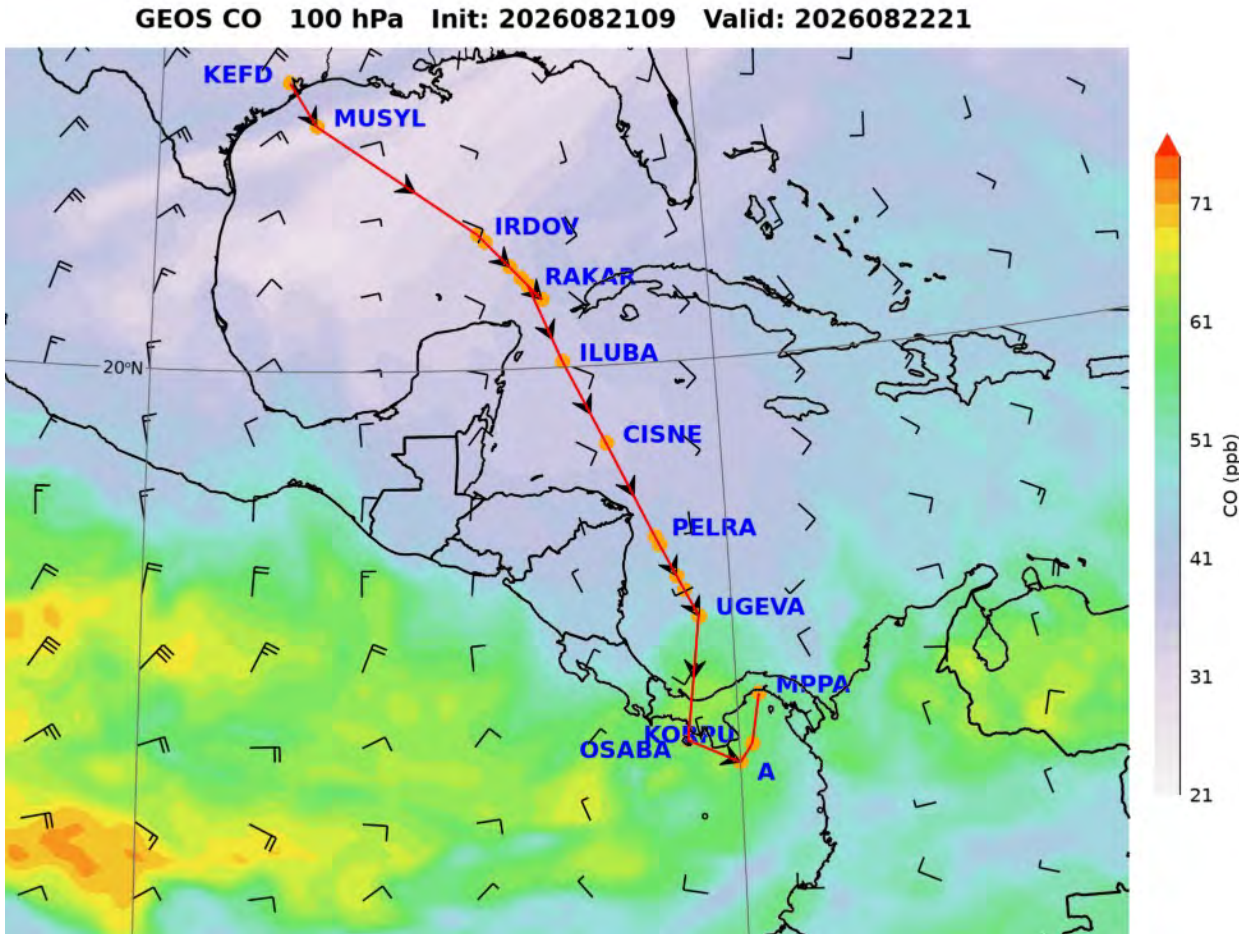
NCEP Convective Cloud Cover Init: 2026082112 Valid: 2026082221



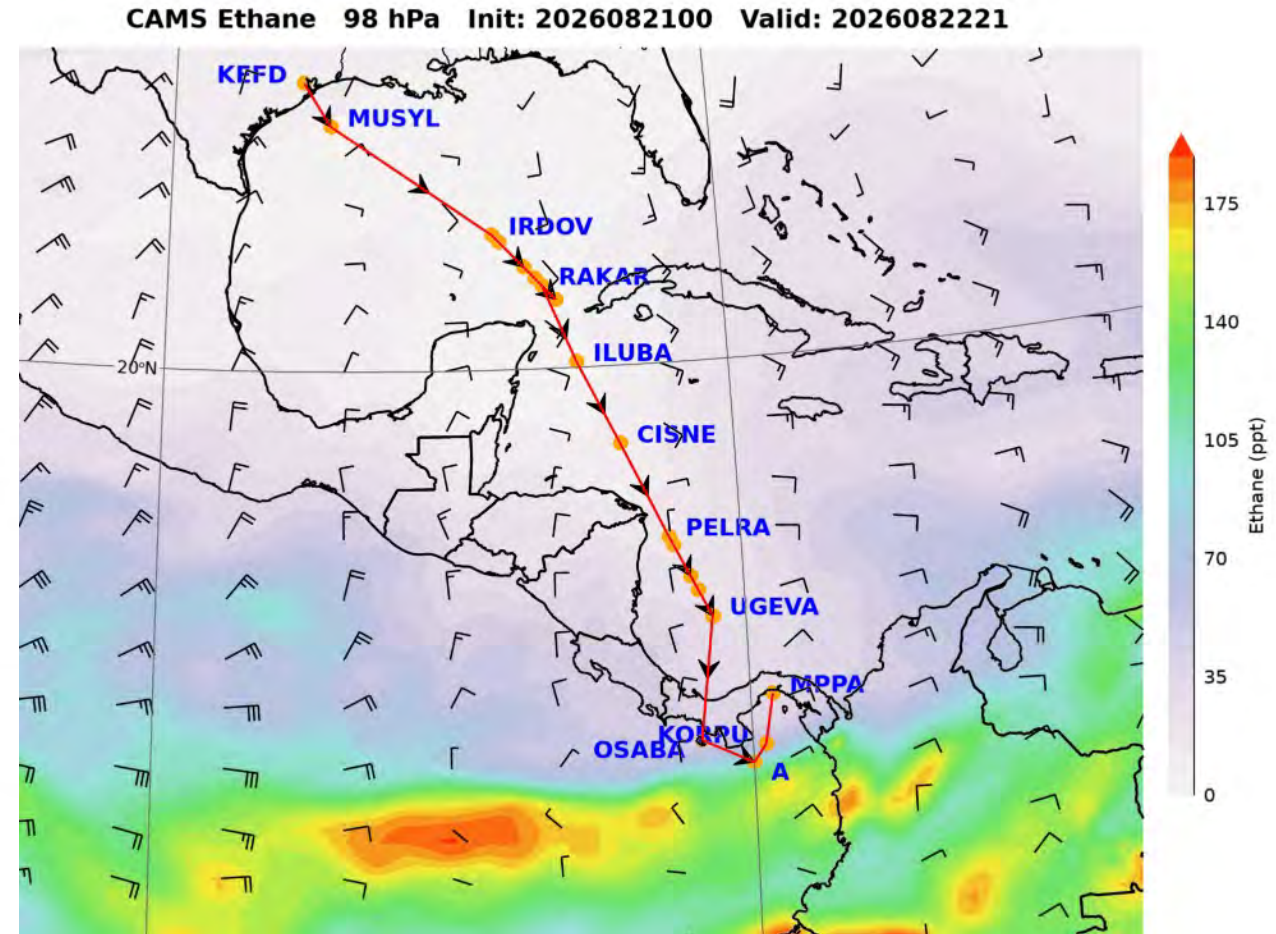
Lots of high clouds over Gulf. Convective activity to the north of Panama remains throughout the day. Over MPPA, small localized convection pops up from 18-21Z

Short-lived tracers (21Z, 4pm local)

GEOS CO 100 hPa



CAMS ethane 98 hPa

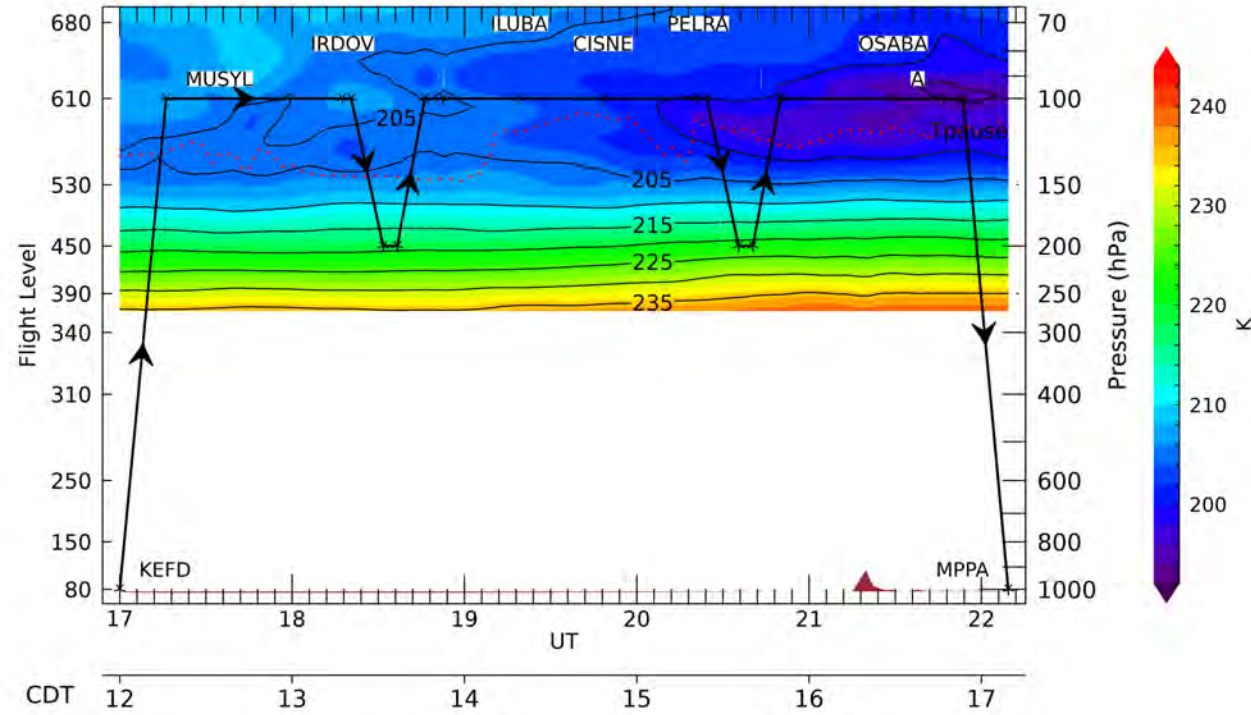


These trace gases can be an indicator of convective transport aloft, strong latitudinal gradients near Panama.

Flight Plan A Curtains 08/21

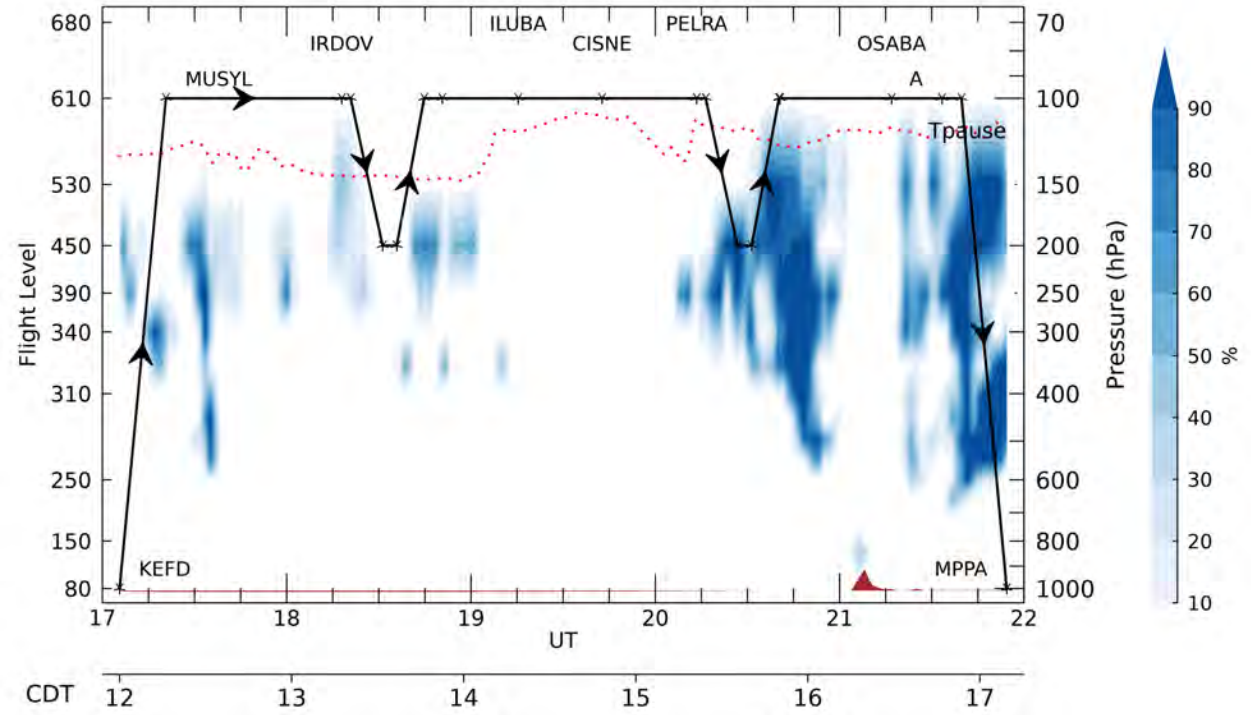
Temperature

CAMS Temperature Init:2026082000 Valid Day:20260822



Cloud Cover

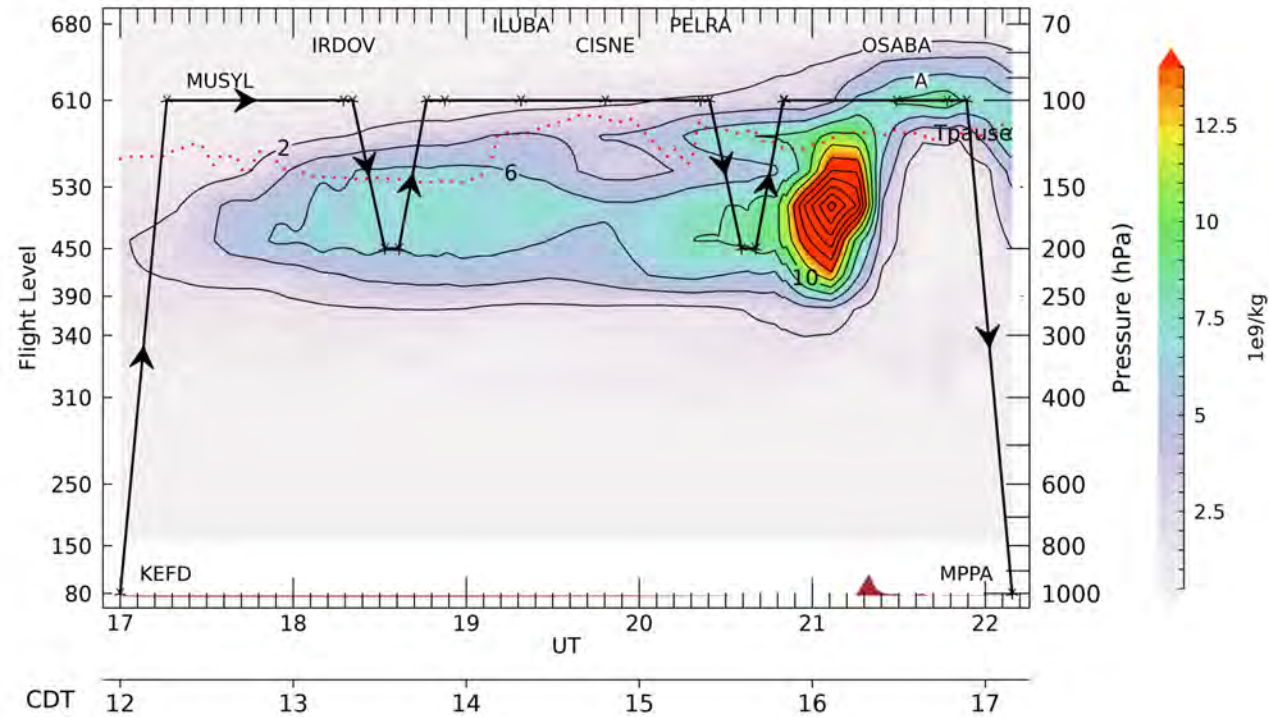
NCEP Cloud Cover Init:2026082112 Valid Day:20260822



Flight Plan A Curtains for NPF and BC

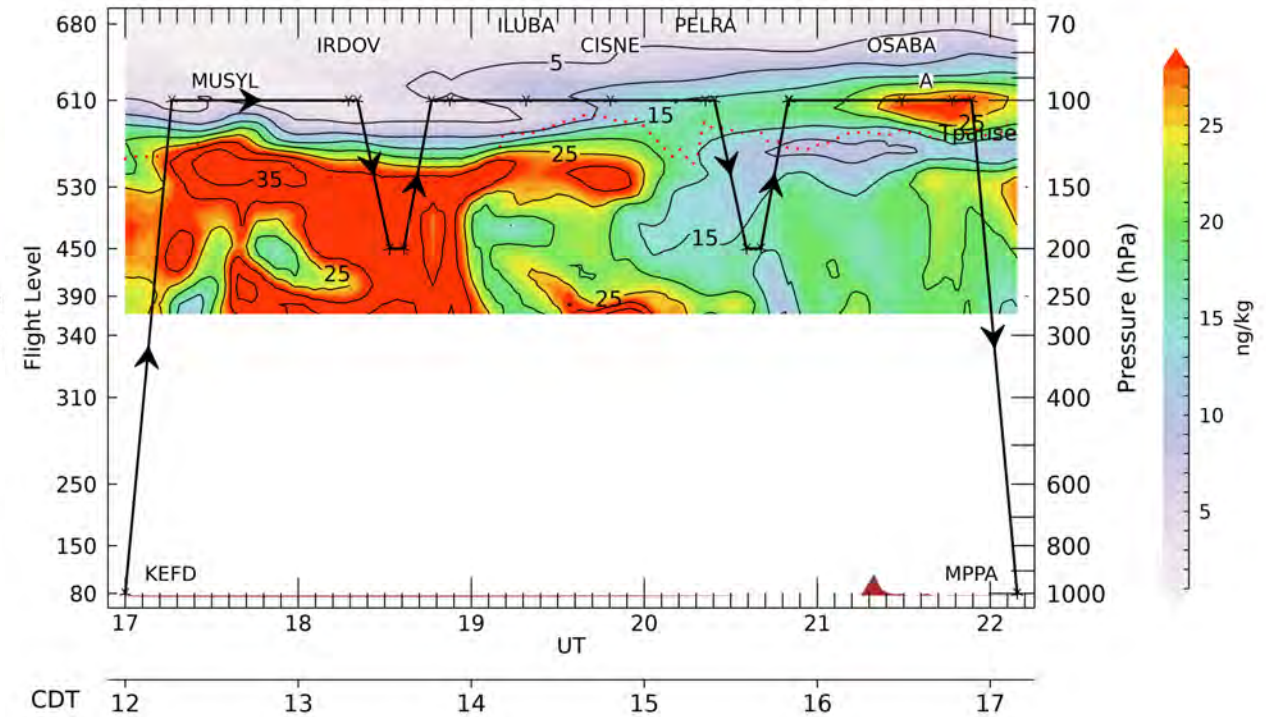
WACCM NPF

WACCM Aerosol Num Conc Init:2026081800 Valid Day:20260822



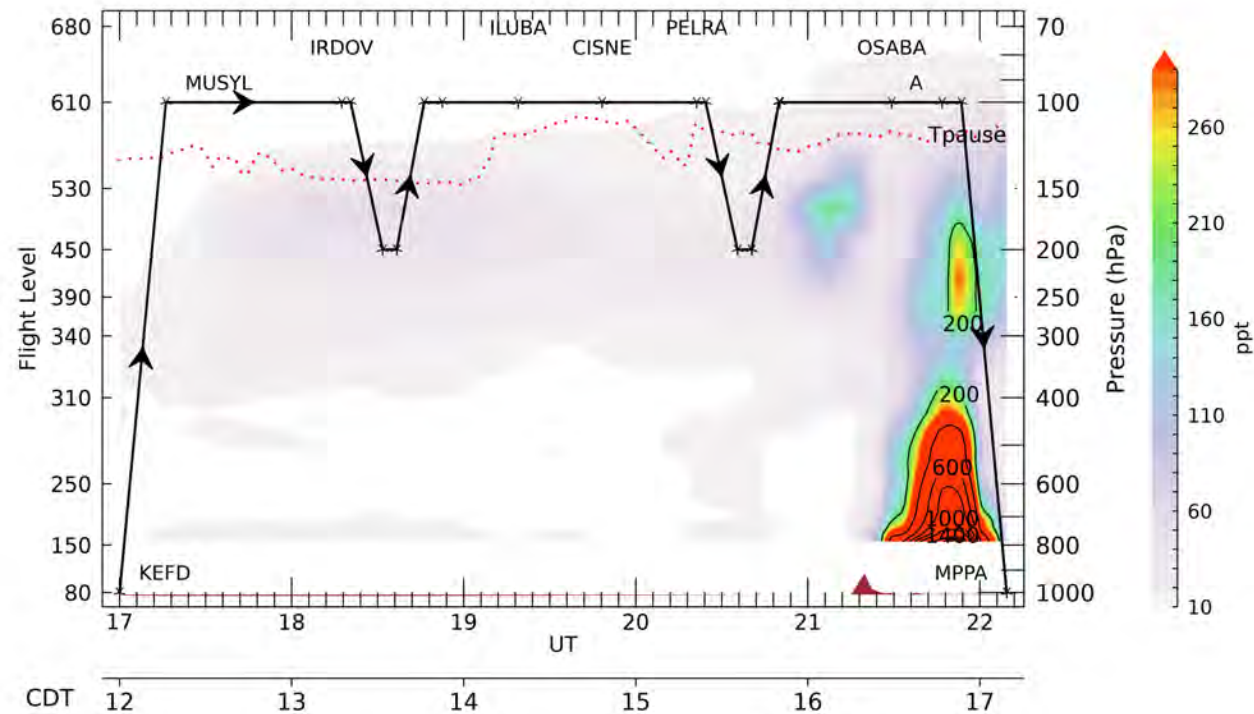
CAMS BC

CAMS BC Init:2026082000 Valid Day:20260822

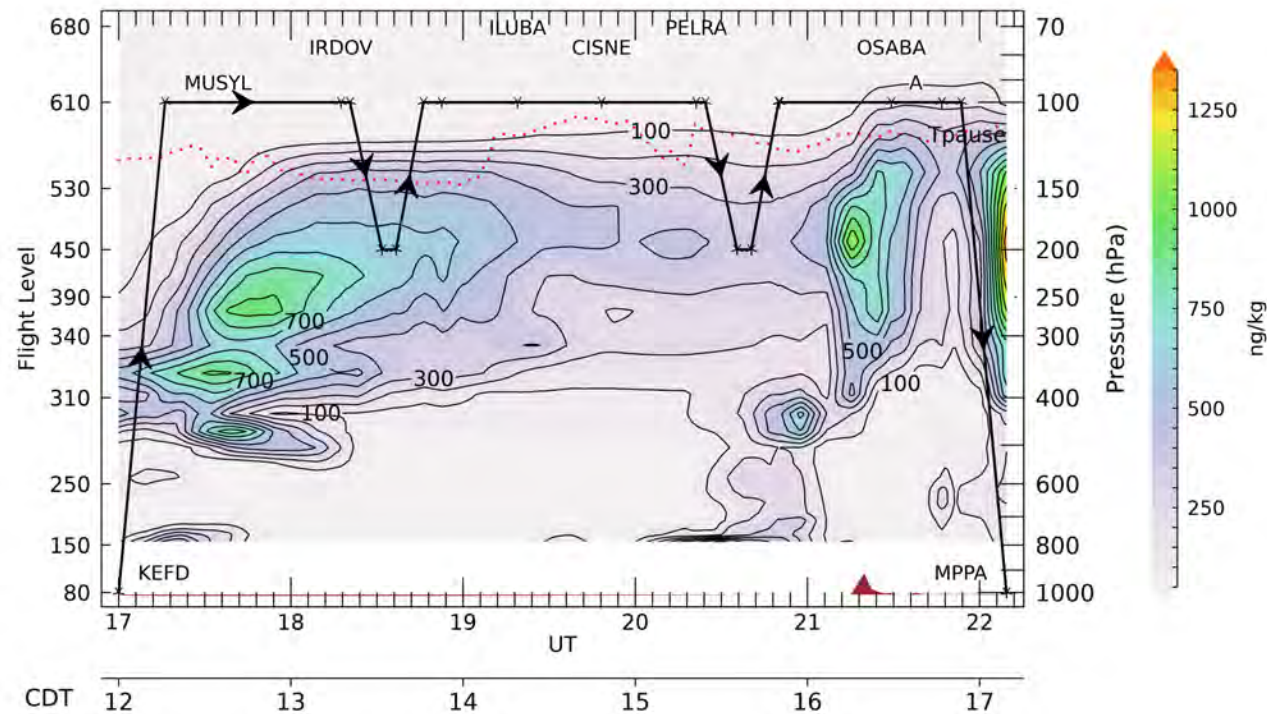


Flight Plan A Curtains for SO2 and SOA (WACCM)

WACCM SO2 Init:2026081800 Valid Day:20260822

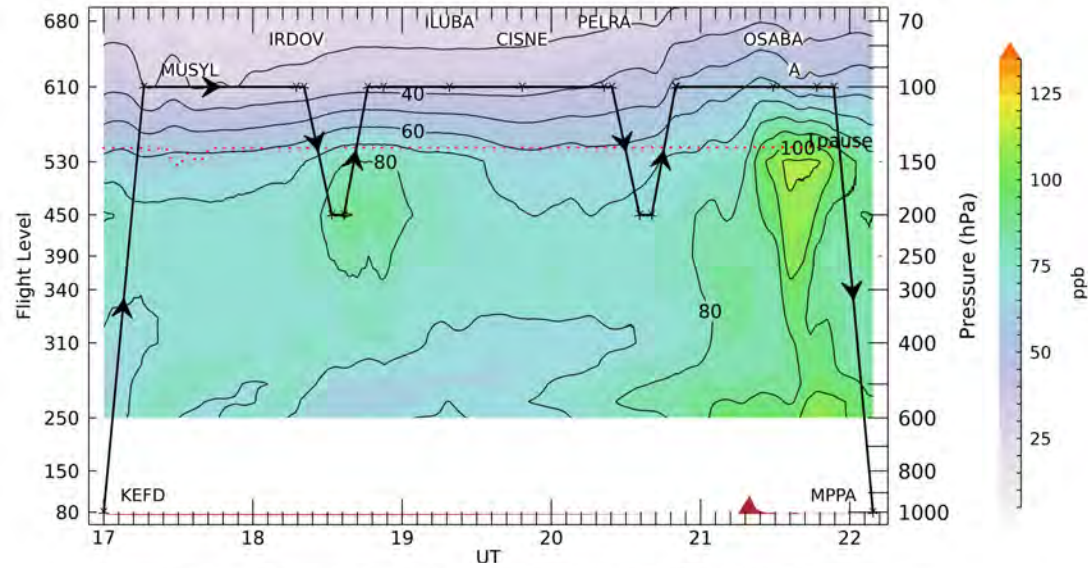


WACCM SOA Init:2026081800 Valid Day:20260822

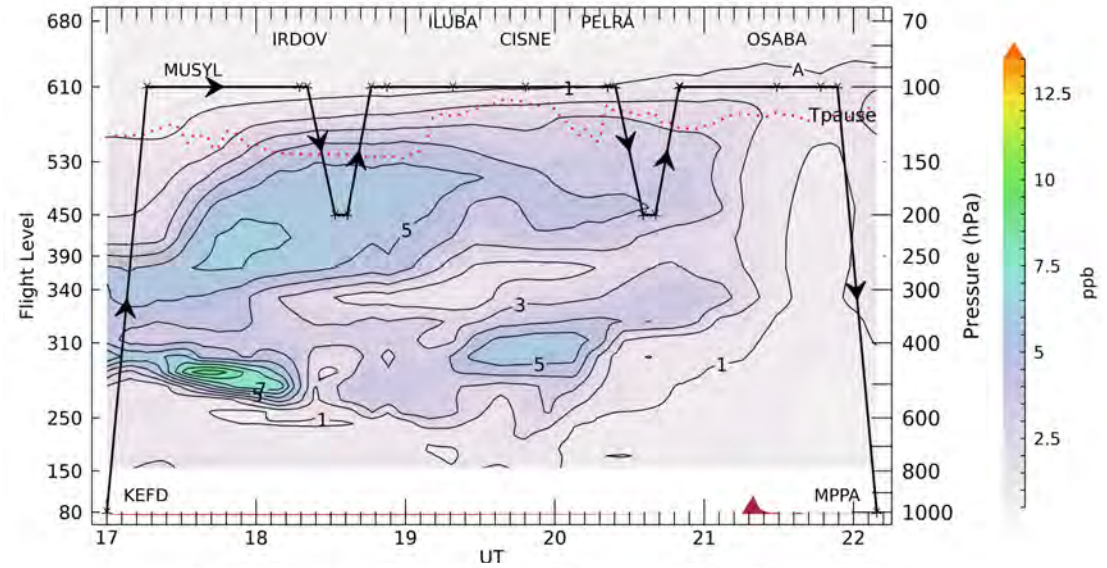


Flight Plan A Curtains for CO (long-range transport)

GEOS CO Init:2026082009 Valid Day:20260822

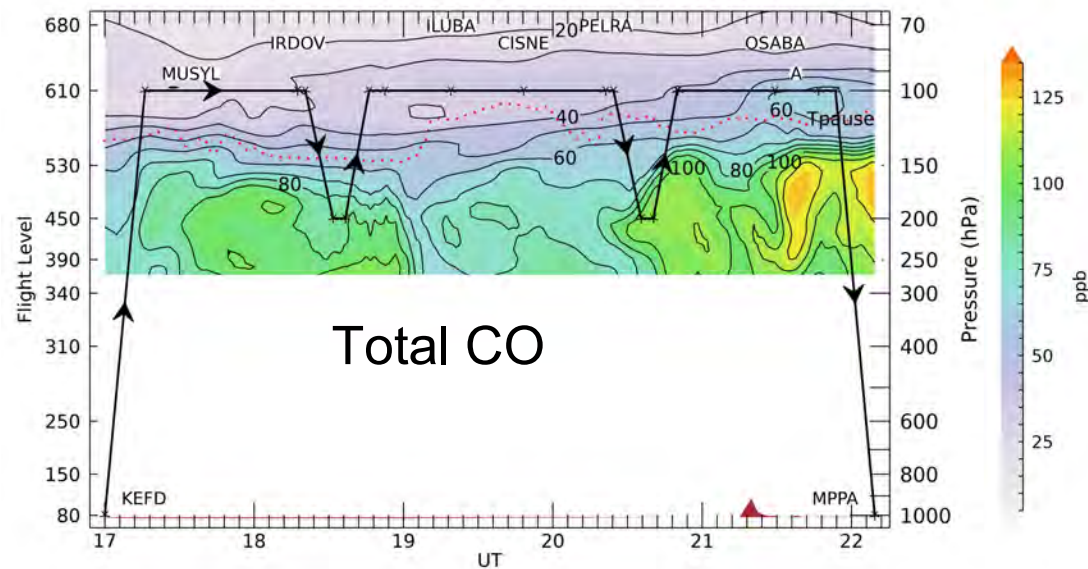


WACCM CO N. America Init:2026081800 Valid Day:20260822



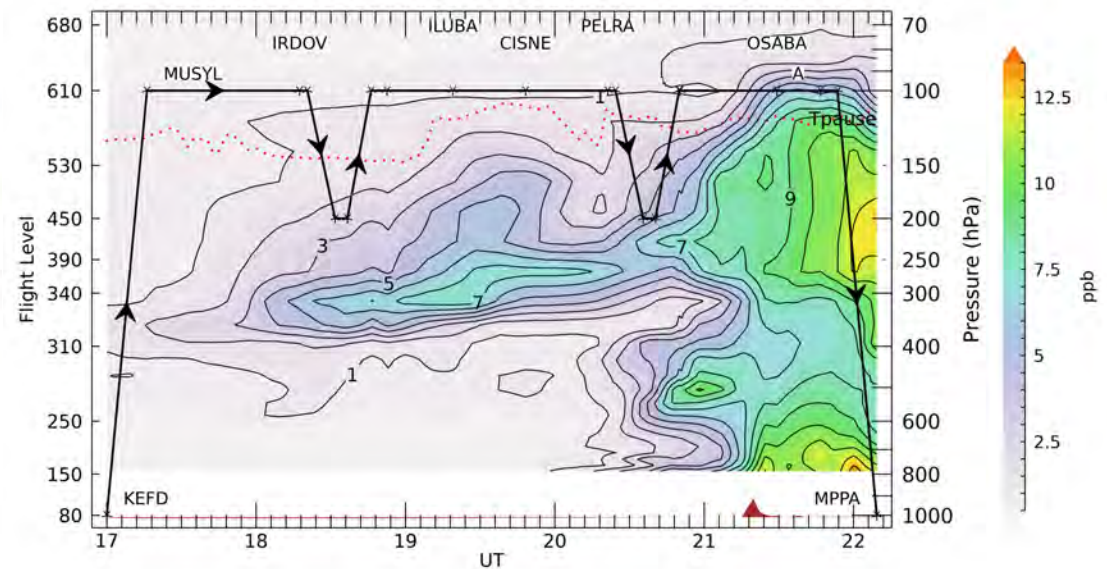
CO (N.
America)

CAMS CO Init:2026082000 Valid Day:20260822



Total CO

WACCM CO S. America Init:2026081800 Valid Day:20260822



CO (S.
America)