

DAILY SUMMARY MAESTRO

Four parts :

- 1. Evaluation J-1
- 2. Short term forecast J-J+36h
- 3. Week forecast J-J+7
- 4. Subseasonal forecast

Anasyg J-1 12 UTC et J 00 UTC

Anasyg J-1 18 UTC et J 06 UTC

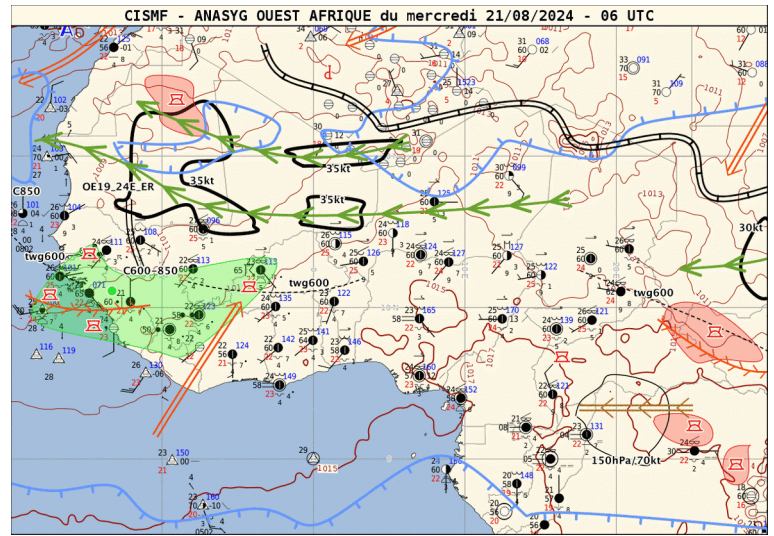
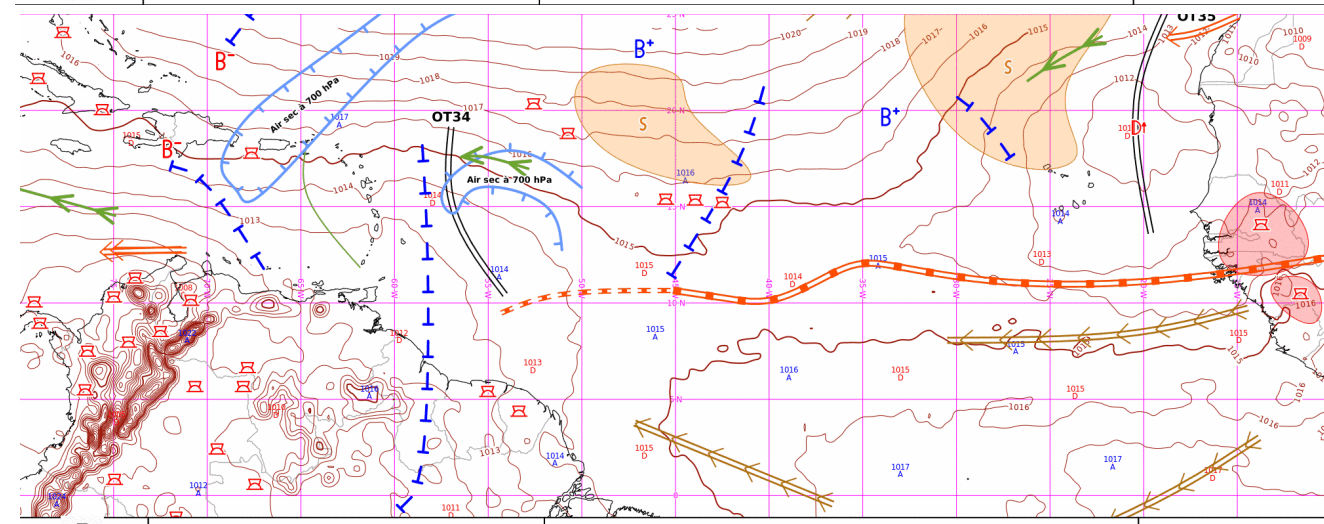
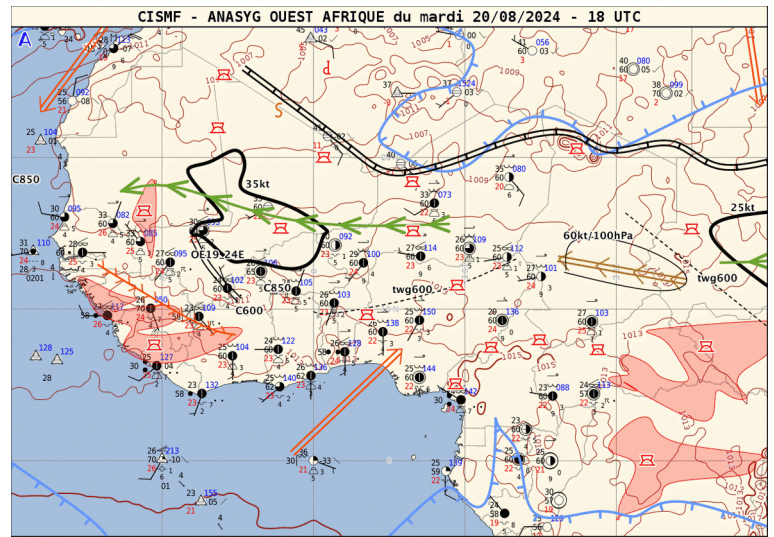
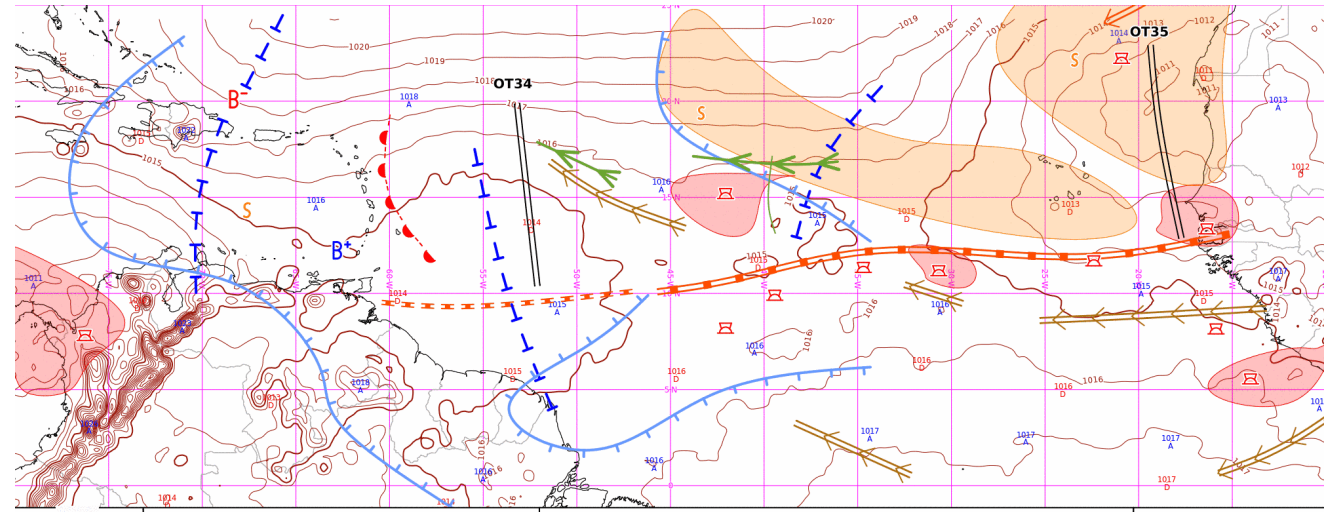
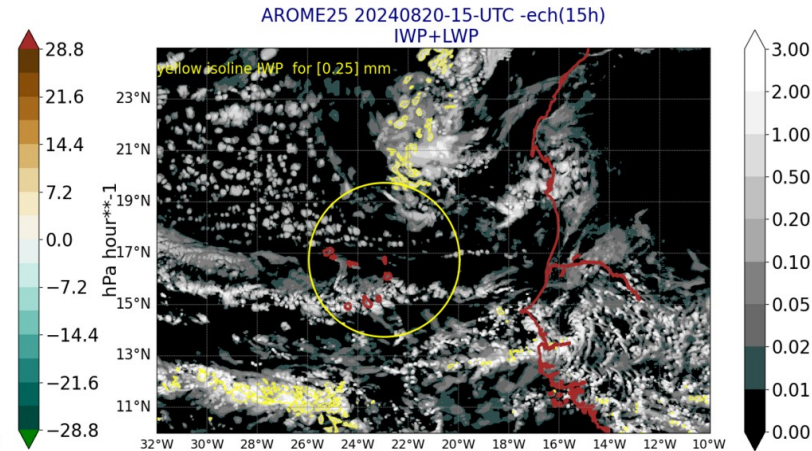
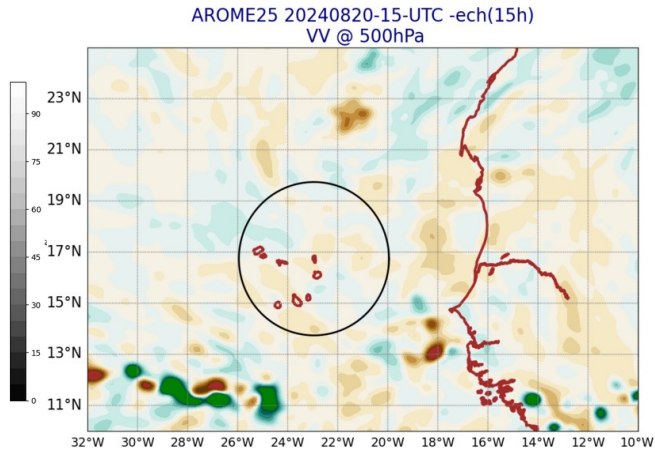
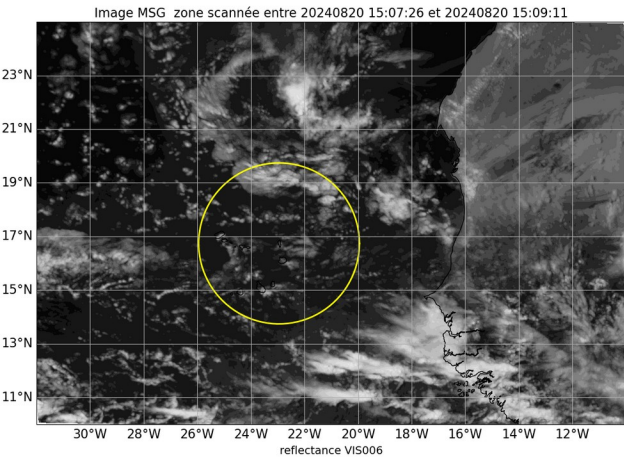
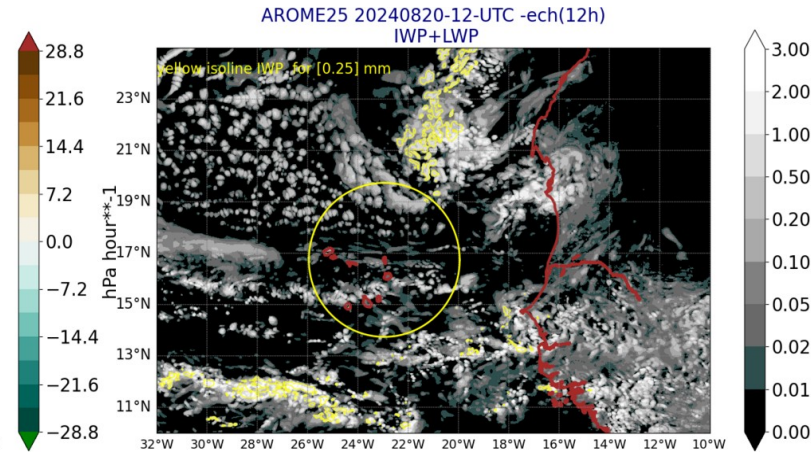
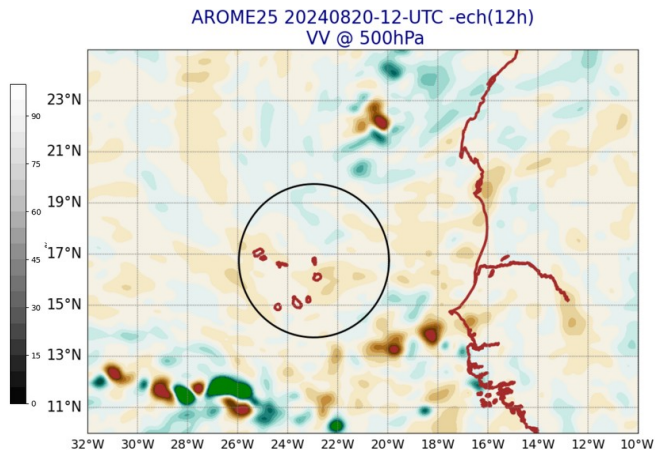
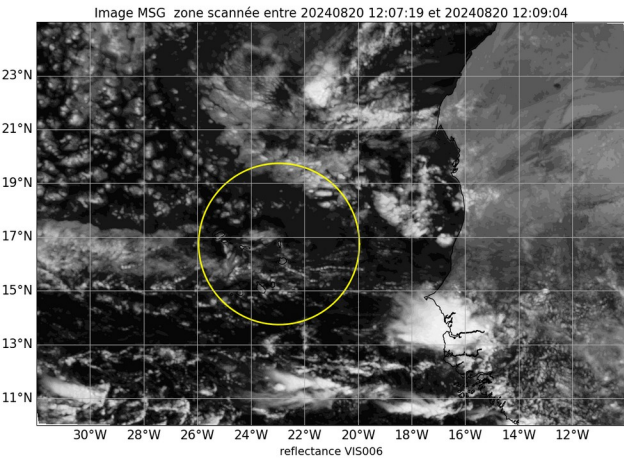
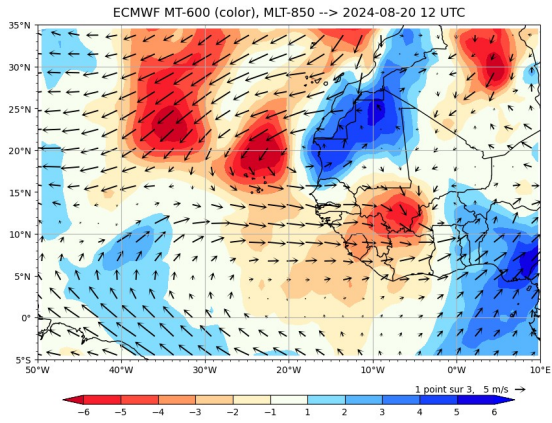
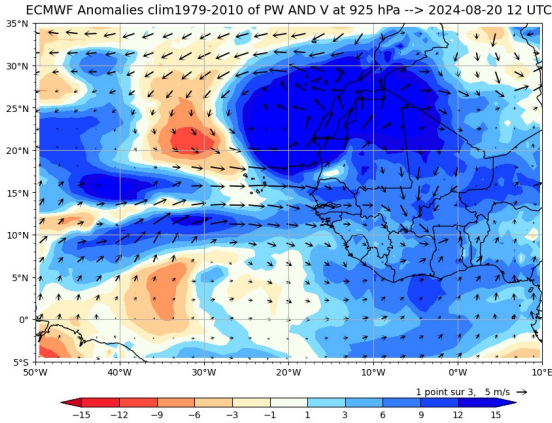
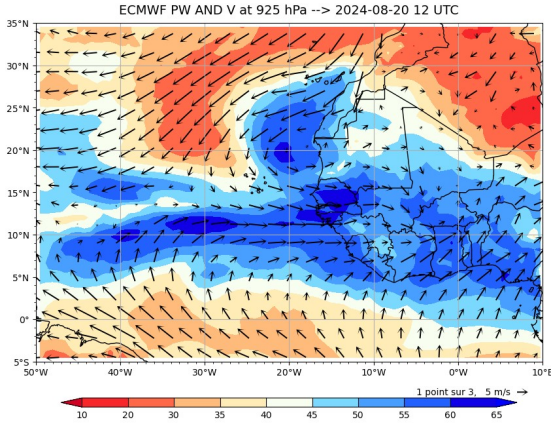


Image MSG Visible J-1 12 and 15 UTC

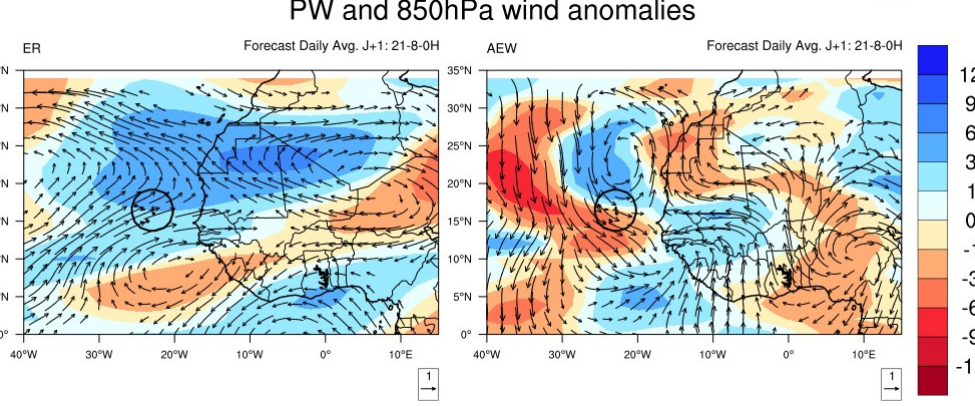
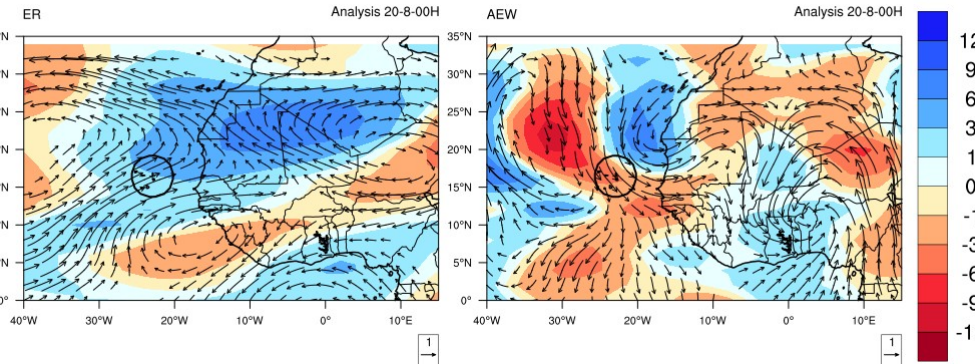
Arome J-1 12 and 15 UTC



Precipitable Water – PW anomaly J-1 12UTC



Waves J-1 00 UTC and J 00UTC Equatorial Rossby - African Easterly Waves PW and 850hPa wind anomalies

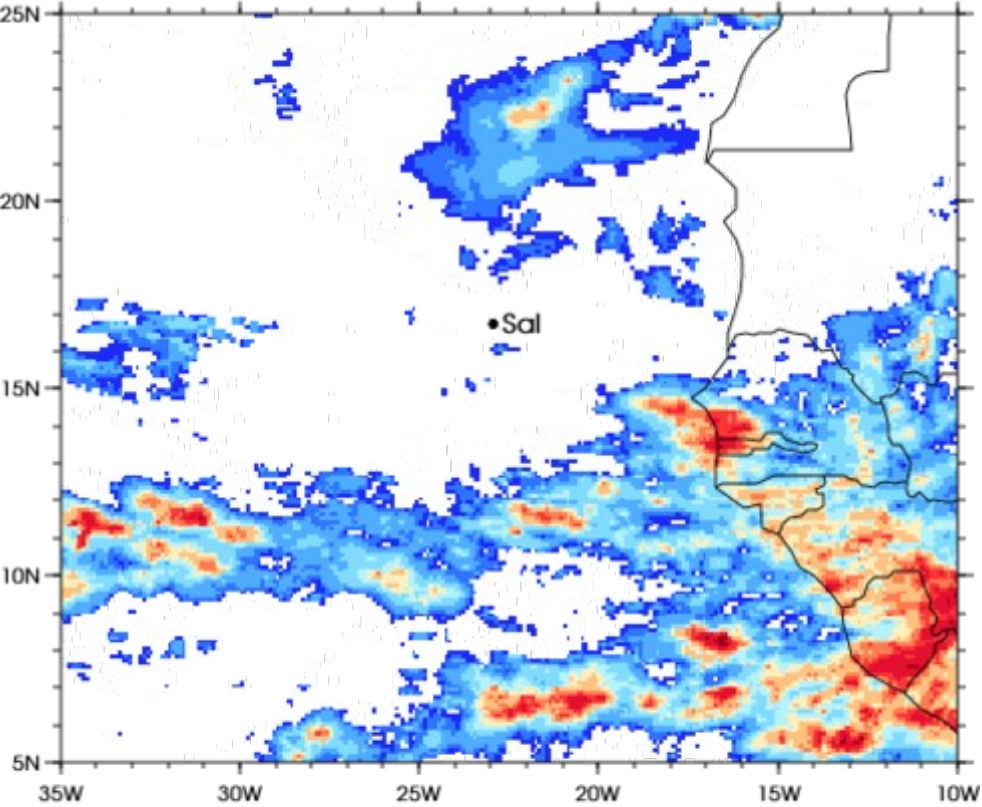


Precipitation IMERG and AROME J-1

3IMERGHHE GPM IMERG Early Precipitation

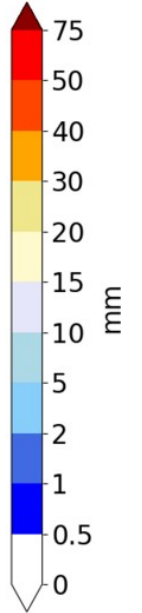
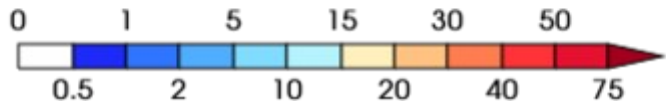
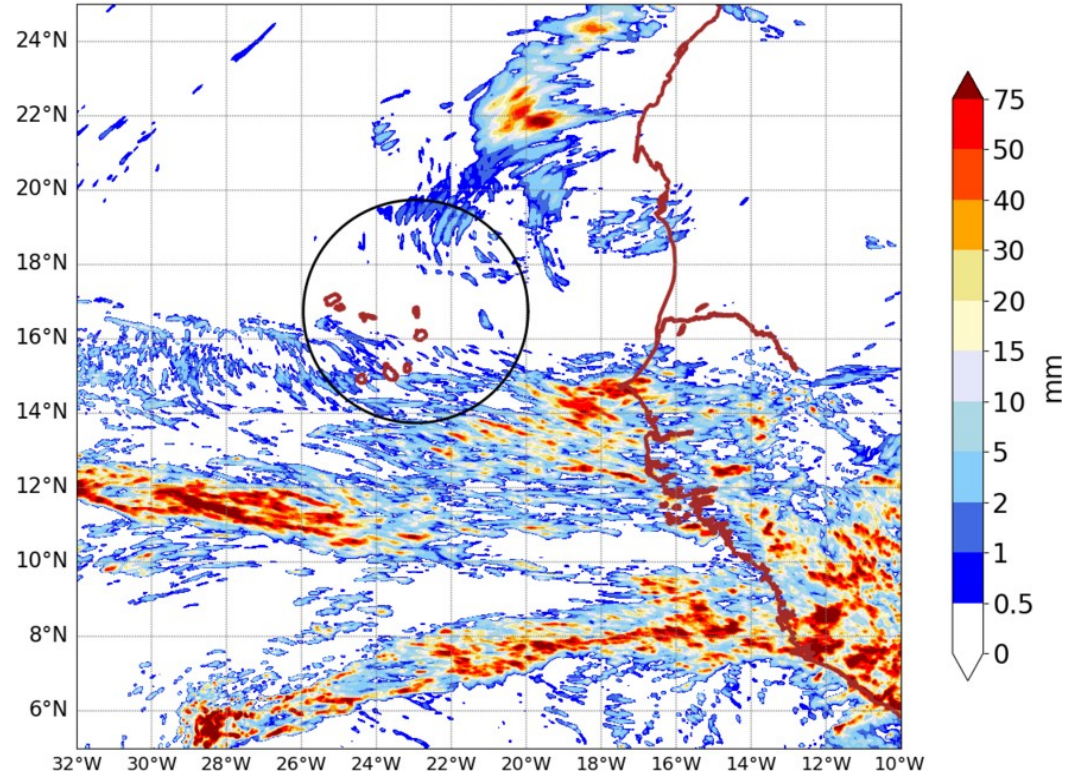
Daily accumulated: 2024-08-20

Units: mm/day



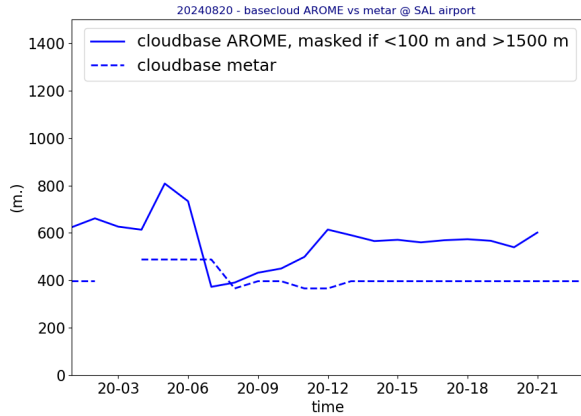
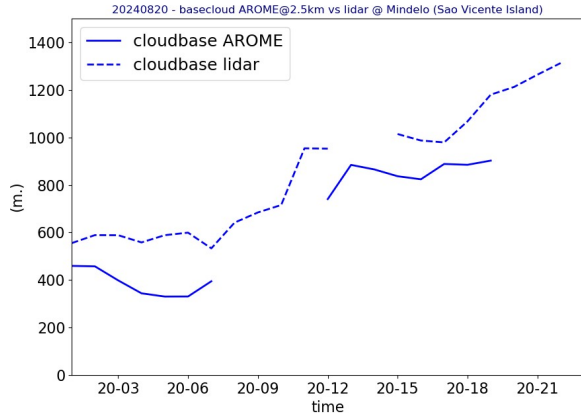
AROME25 20240821-00-UTC -ech(24h)

RR cumulated over 24h

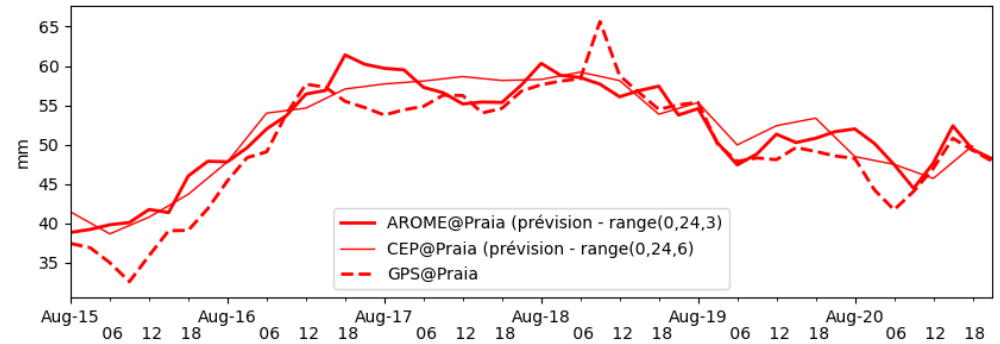
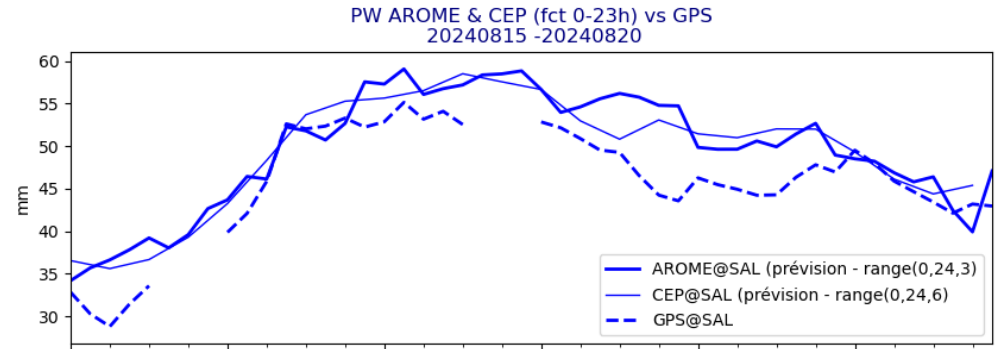


OBSERVATIONS J-1

Lidar@ mindelo
metar@sal

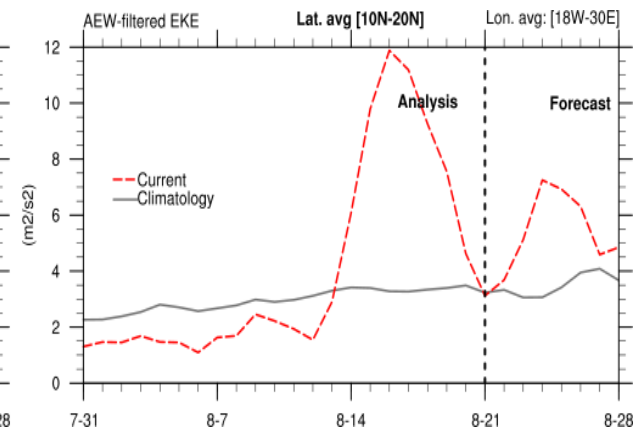
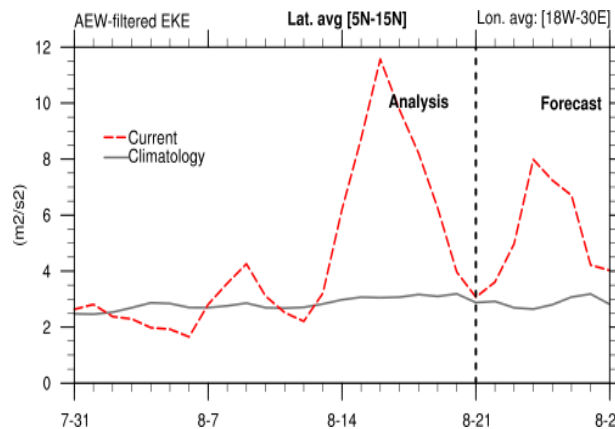
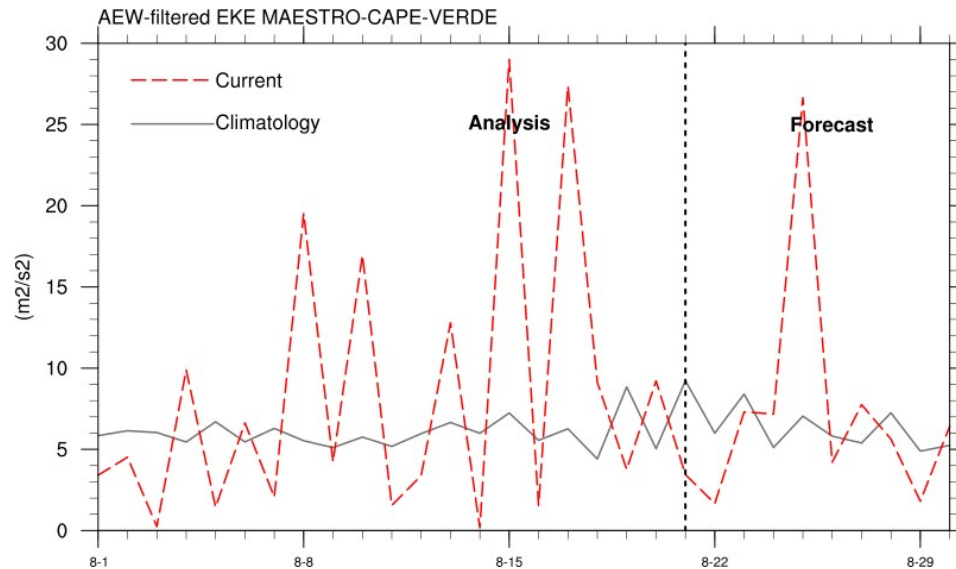
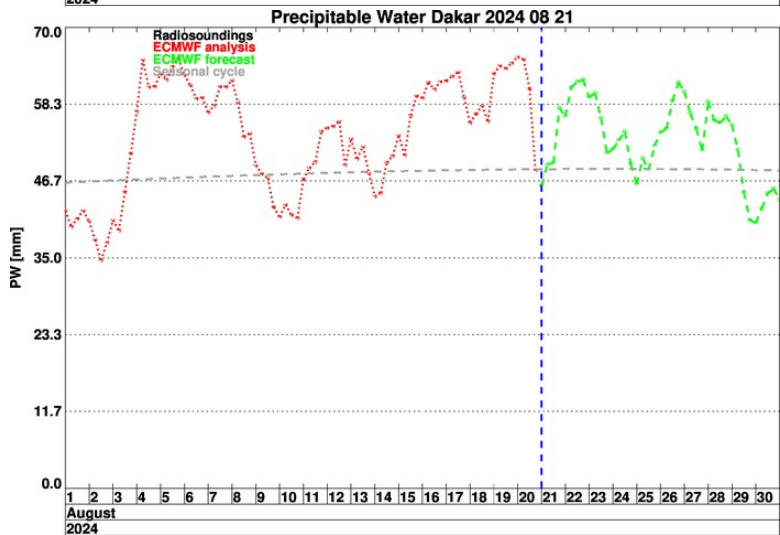
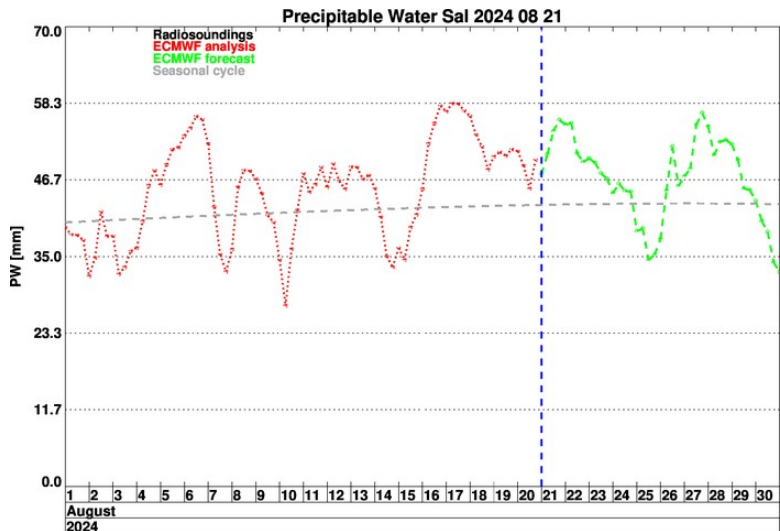


GPS @ Sal
GPS @ Praia



Short term forecast J - J+36h

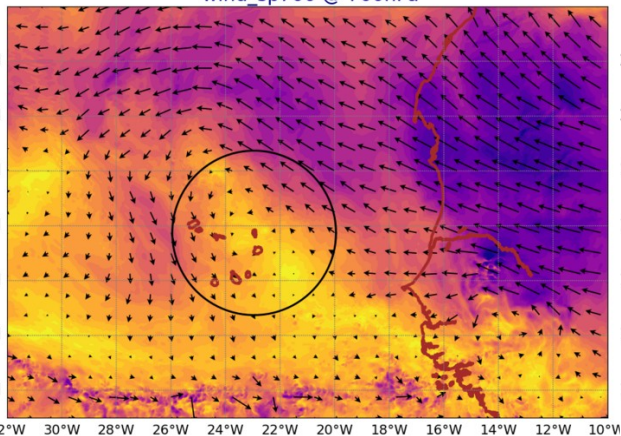
Temporal evolution PW Sal et Dakar + EKE



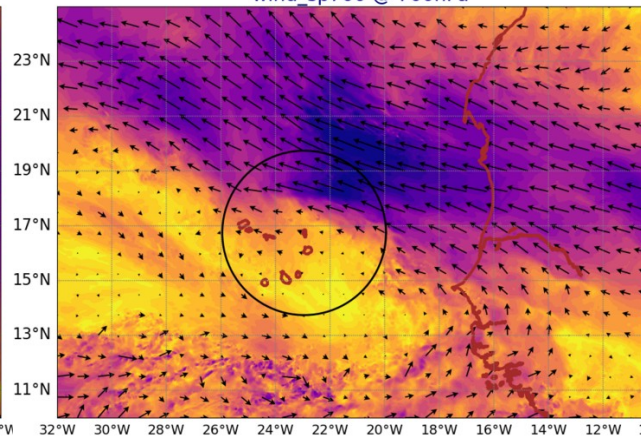
AROME Wind @ 700 hPa

AROME Wind @ 920 hPa

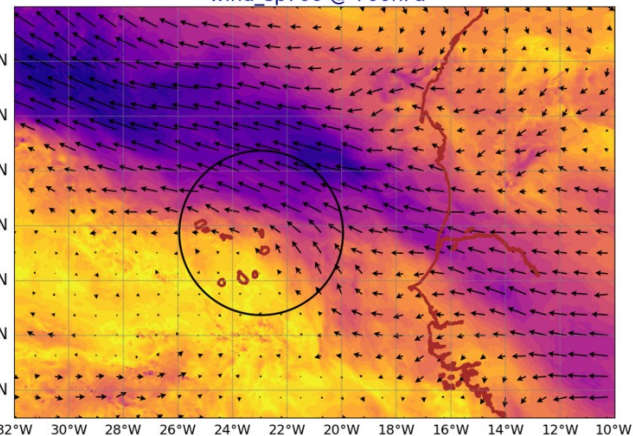
AROME25 20240821-12-UTC -ech(12h)
wind_sp700 @ 700hPa



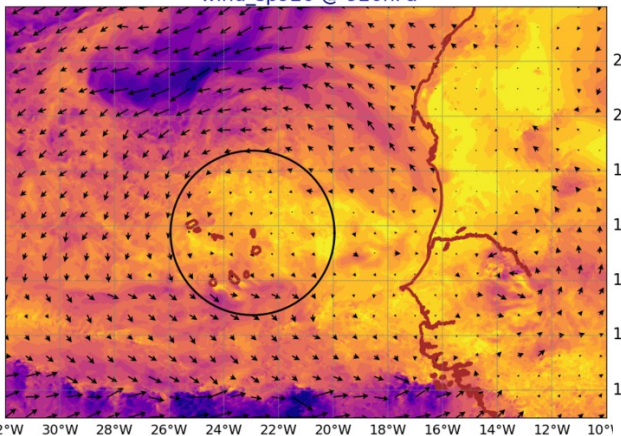
AROME25 20240822-12-UTC -ech(36h)
wind_sp700 @ 700hPa



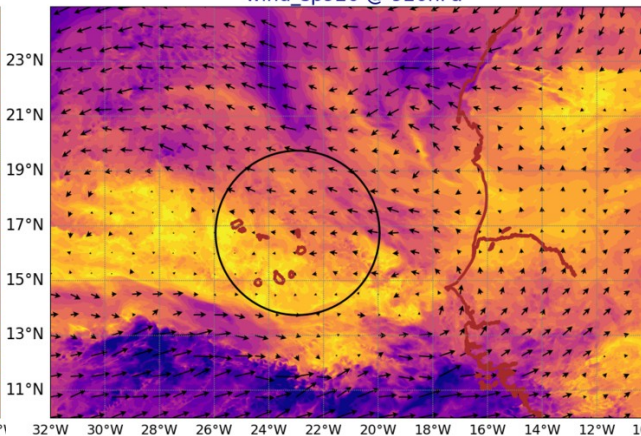
AROME25 20240823-12-UTC -ech(60h)
wind_sp700 @ 700hPa



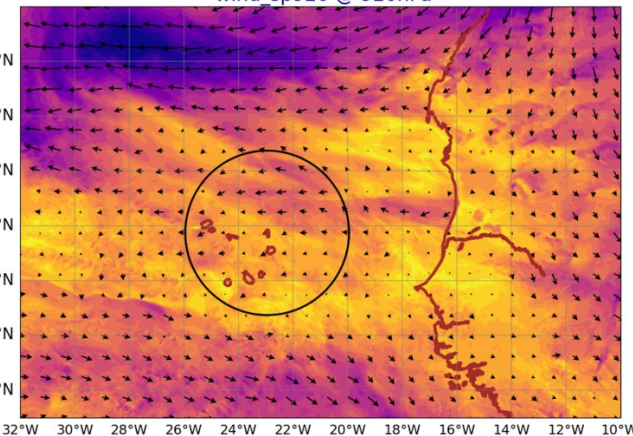
AROME25 20240821-12-UTC -ech(12h)
wind_sp920 @ 920hPa



AROME25 20240822-12-UTC -ech(36h)
wind_sp920 @ 920hPa



AROME25 20240823-12-UTC -ech(60h)
wind_sp920 @ 920hPa



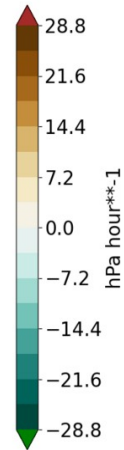
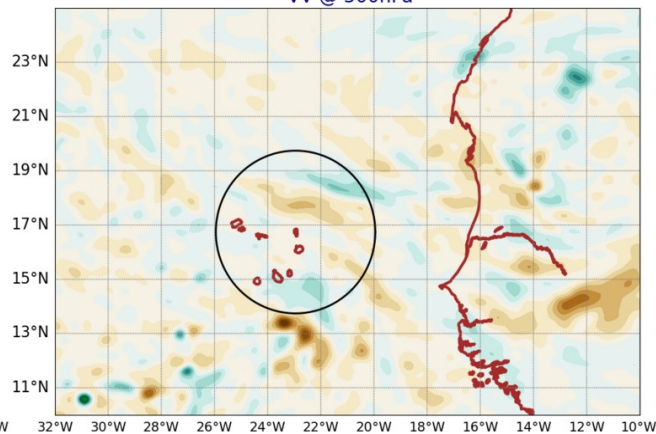
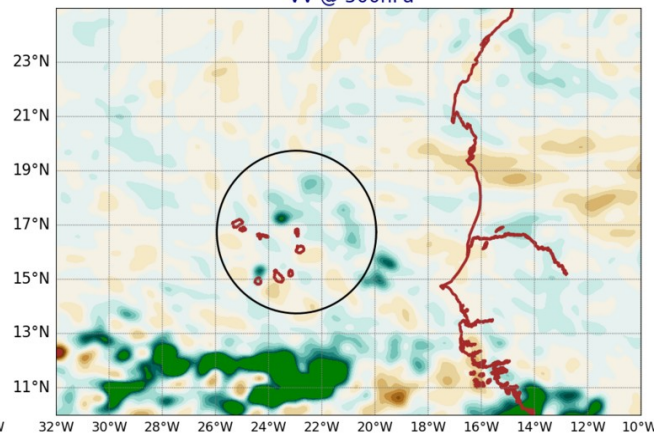
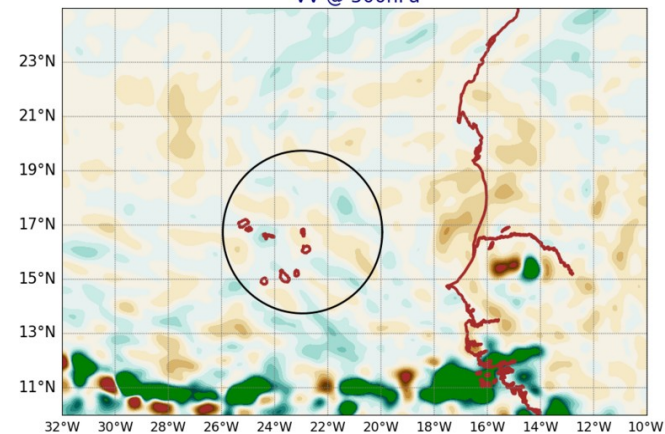
AROME VV @ 500hPa

AROME LWP+IWP

AROME25 20240821-12-UTC -ech(12h)
VV @ 500hPa

AROME25 20240822-12-UTC -ech(36h)
VV @ 500hPa

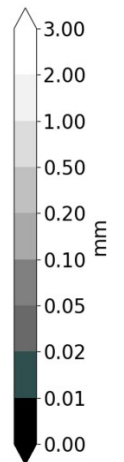
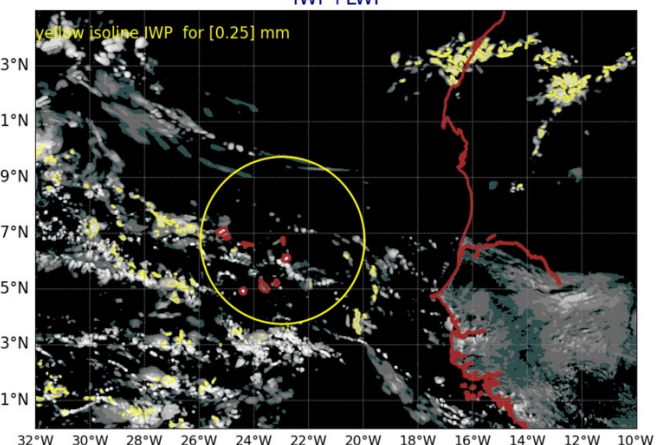
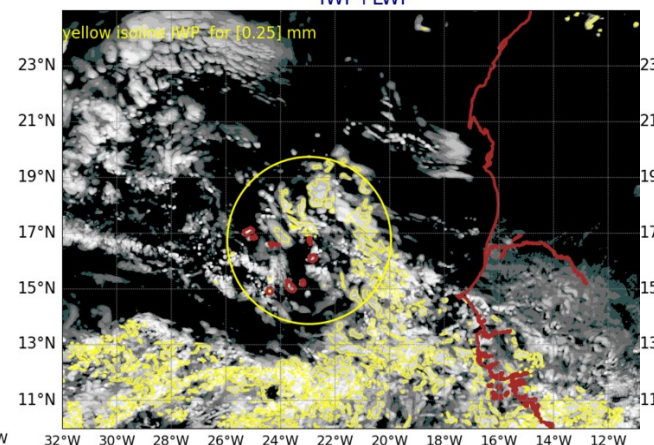
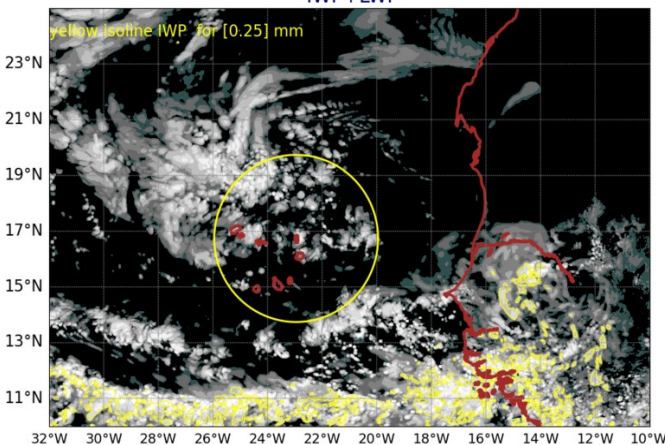
AROME25 20240823-12-UTC -ech(60h)
VV @ 500hPa



AROME25 20240821-12-UTC -ech(12h)
IWP+LWP

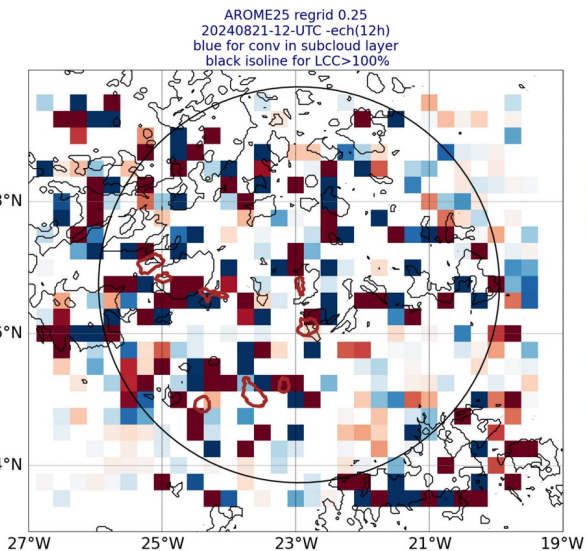
AROME25 20240822-12-UTC -ech(36h)
IWP+LWP

AROME25 20240823-12-UTC -ech(60h)
IWP+LWP

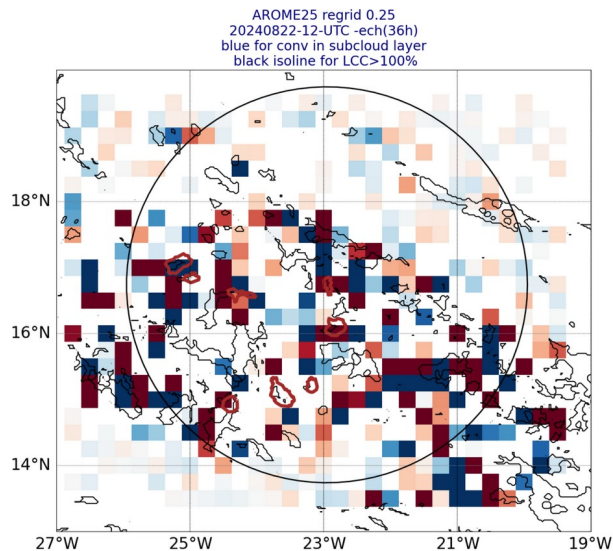


Smoc

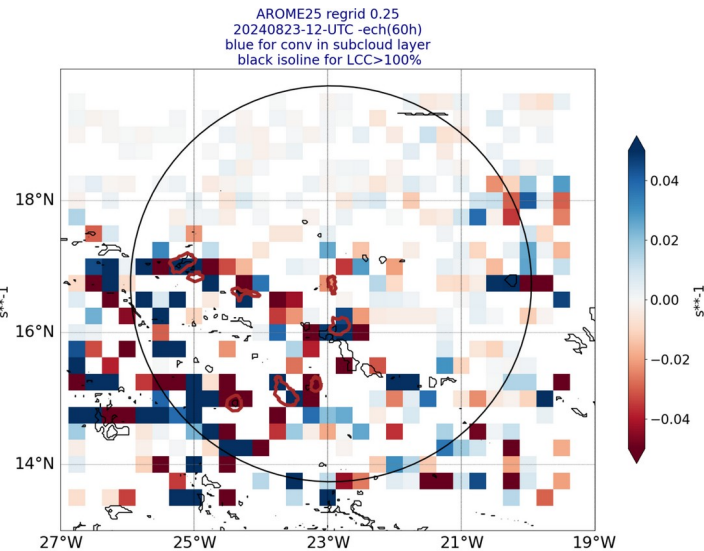
-blue for conv in subcloud layer-
dark isoline for low cloud cover



white box where subcloud and cloud layer have same sign of div



white box where subcloud and cloud layer have same sign of div



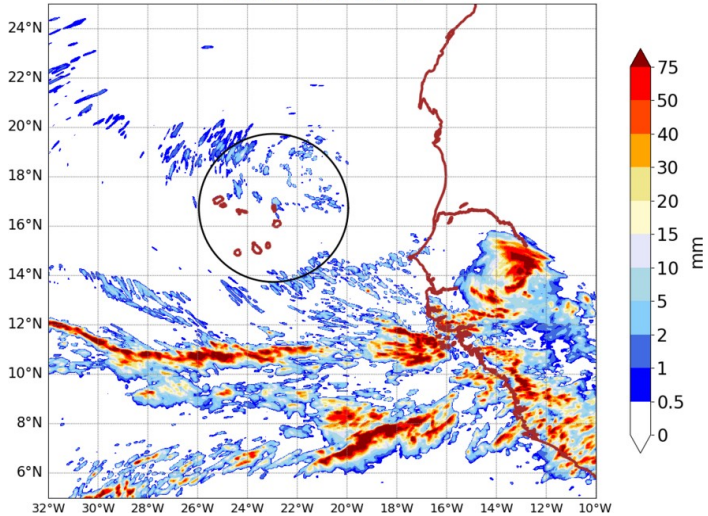
white box where subcloud and cloud layer have same sign of div

over 6h ech 12h and 15h

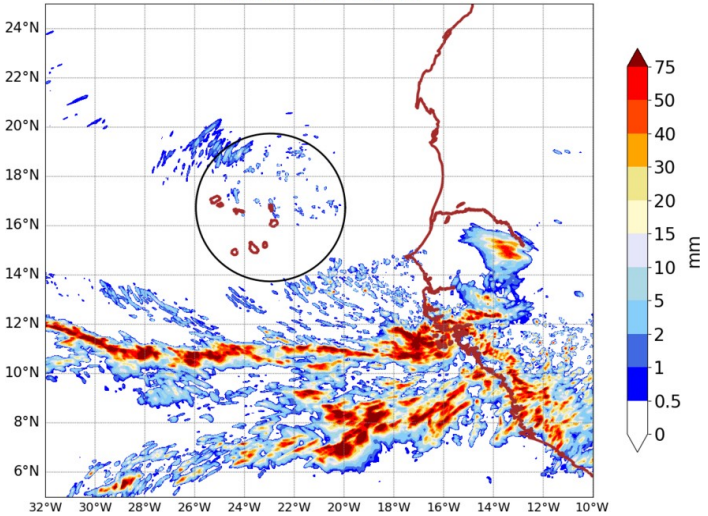
AROME precipitation

over 24h ech 36h and 60h

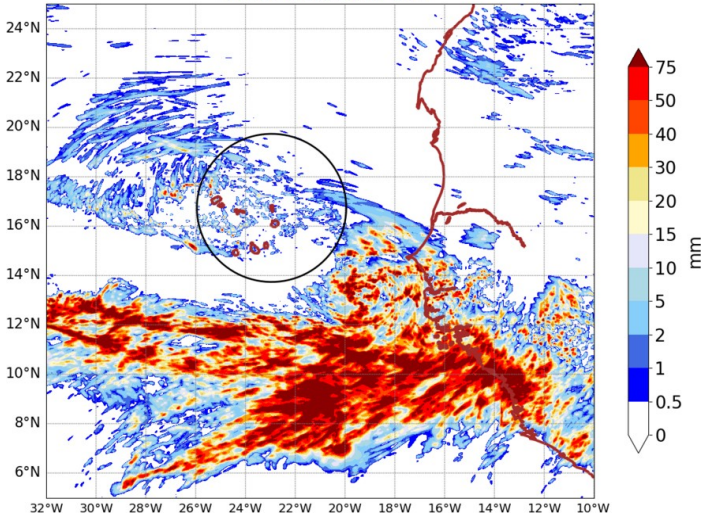
AROME25 20240821-12-UTC -ech(12h)
RR cumulated over 6h



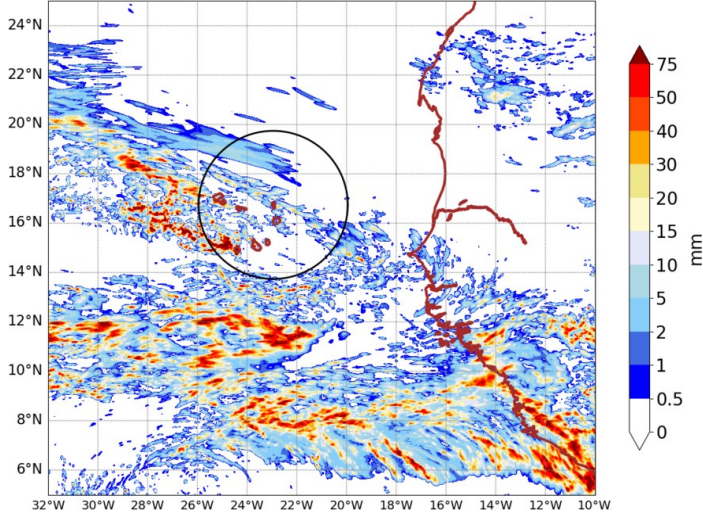
AROME25 20240821-15-UTC -ech(15h)
RR cumulated over 6h



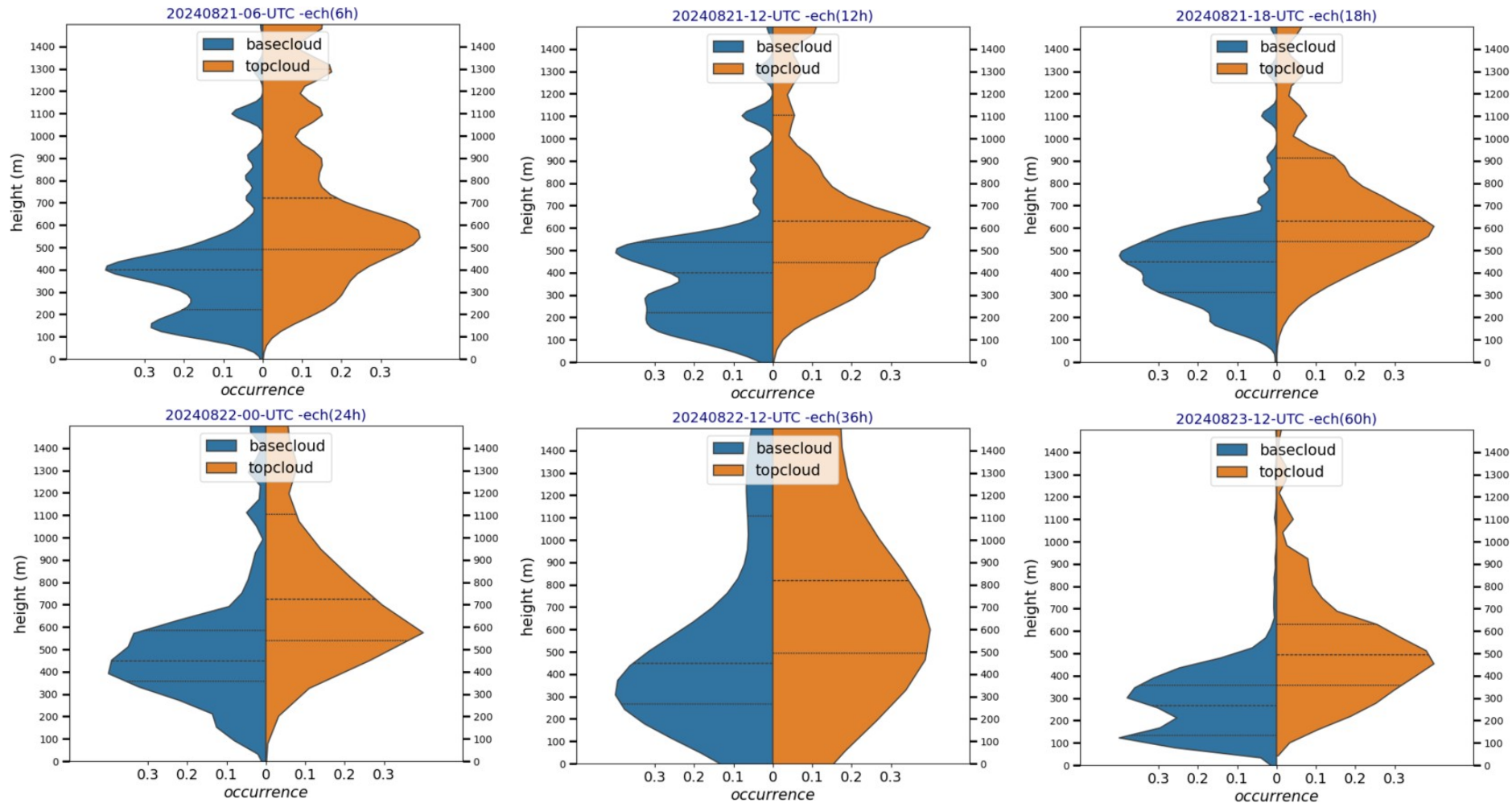
AROME25 20240822-12-UTC -ech(36h)
RR cumulated over 24h



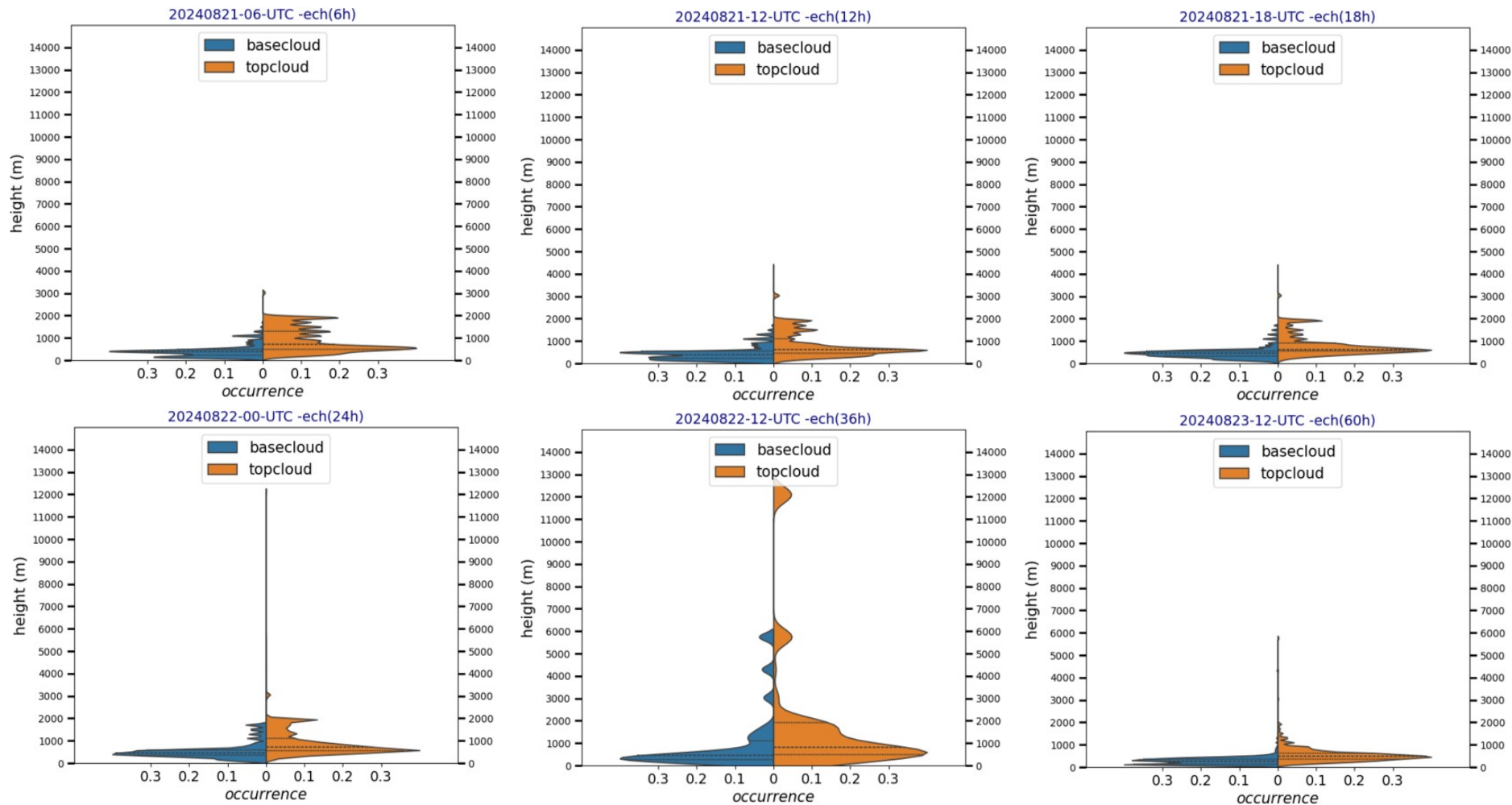
AROME25 20240823-12-UTC -ech(60h)
RR cumulated over 24h



AROME base and top cloud (mean in the 3° circle)

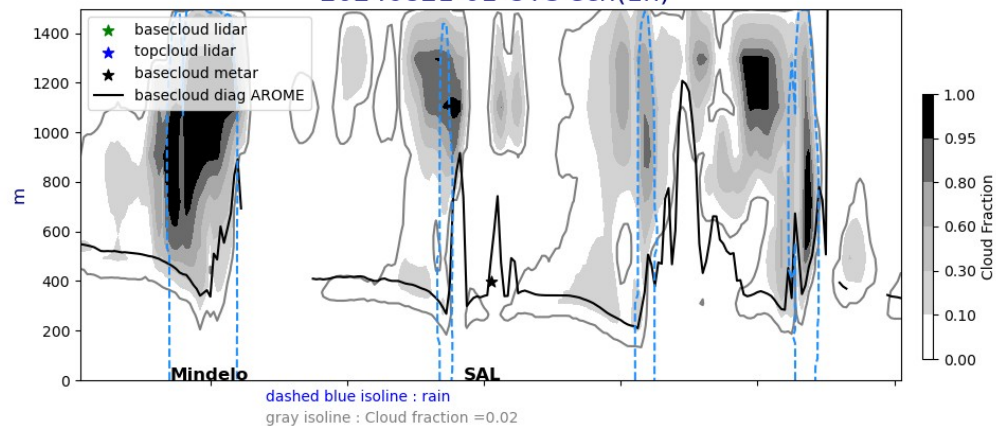


AROME base and top cloud (mean in the 3° circle)

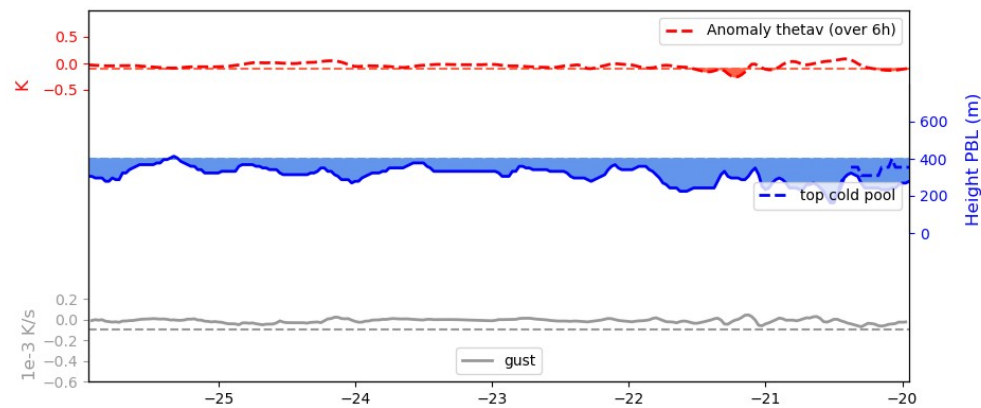
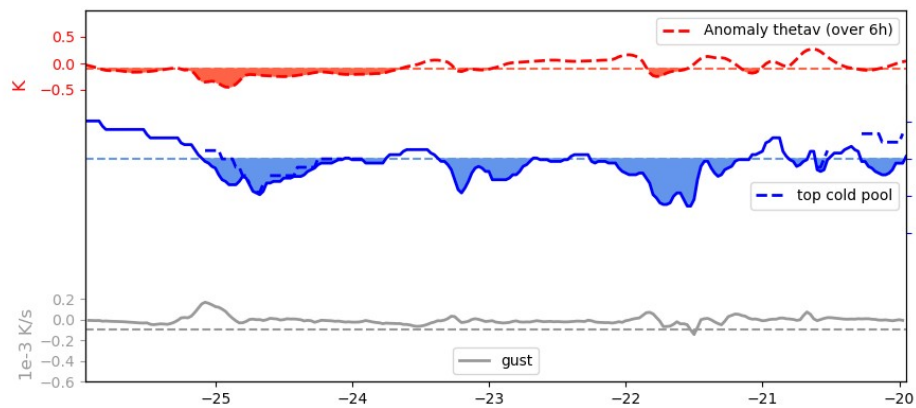
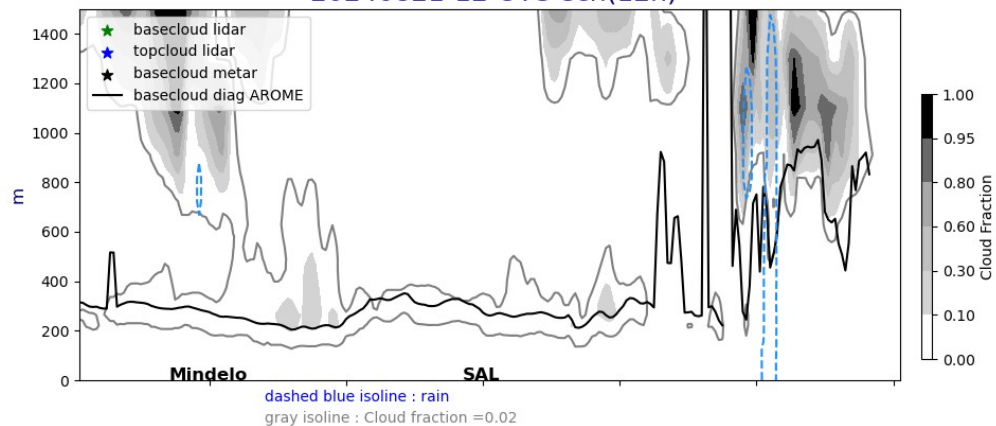


Lat. cross section @17°5N fct : 01UTC, 12UTC

Cross section E/W @ 17.5N
20240821-01-UTC ech(1h)

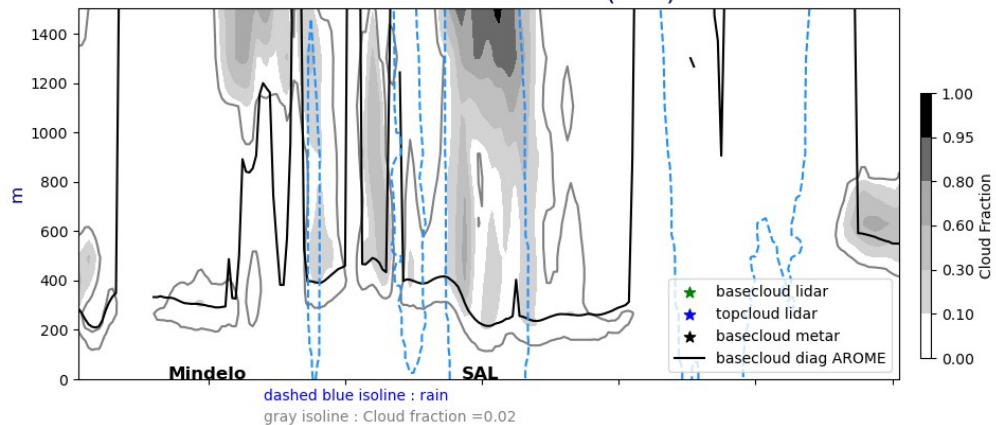


Cross section E/W @ 17.5N
20240821-12-UTC ech(12h)

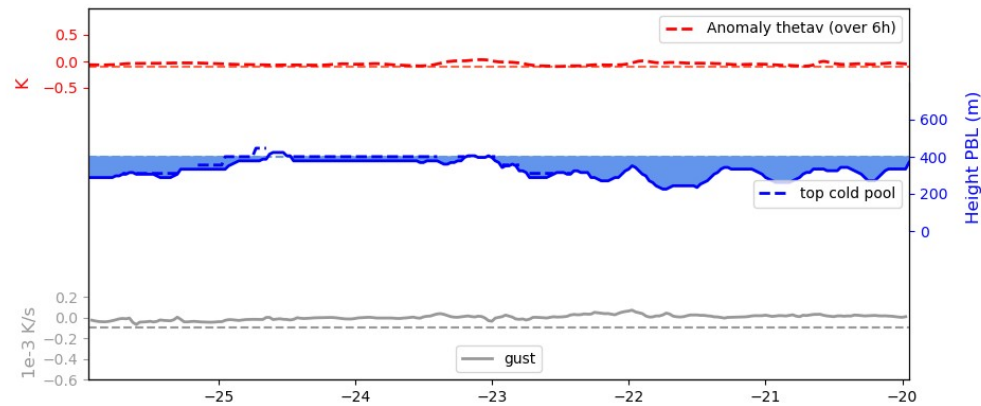
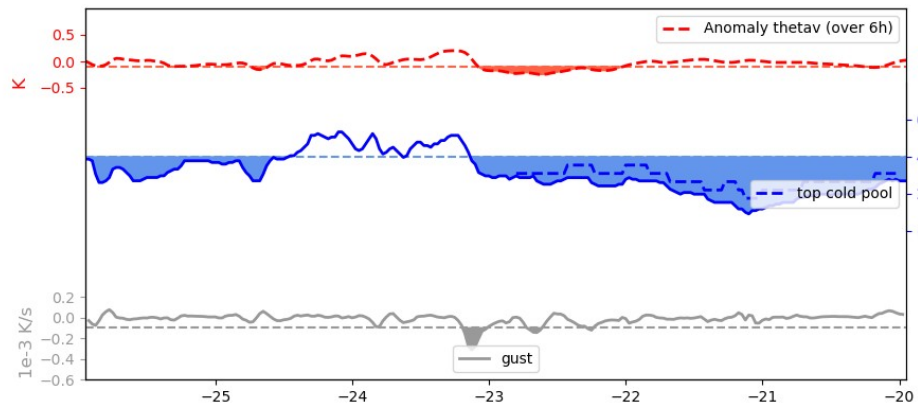
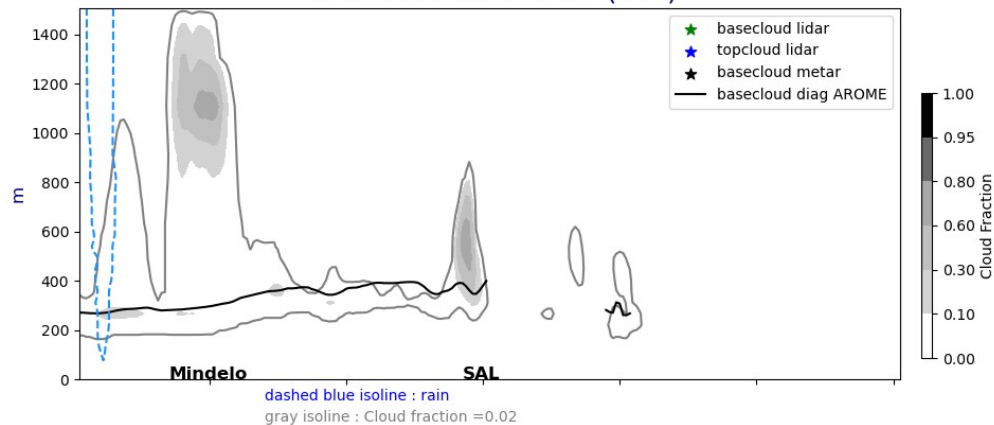


Lat. cross section @17°5N fct : J+1 and J+2 @ 12UTC

Cross section E/W @ 17.5N
20240822-12-UTC ech(36h)

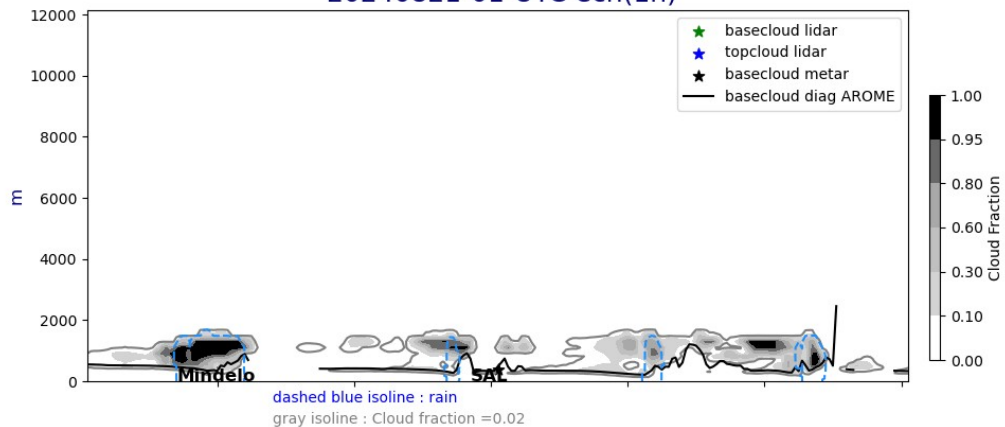


Cross section E/W @ 17.5N
20240823-12-UTC ech(60h)

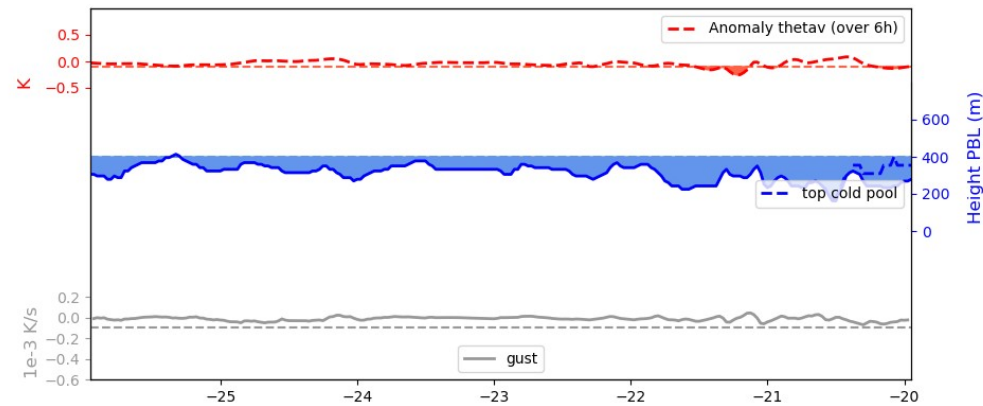
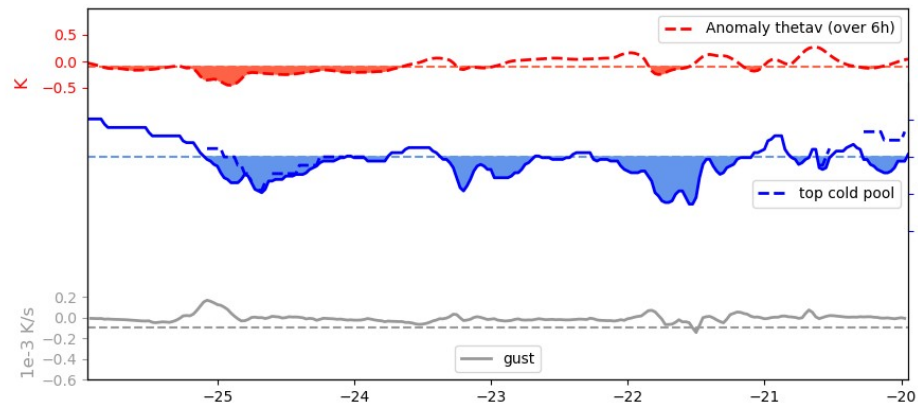
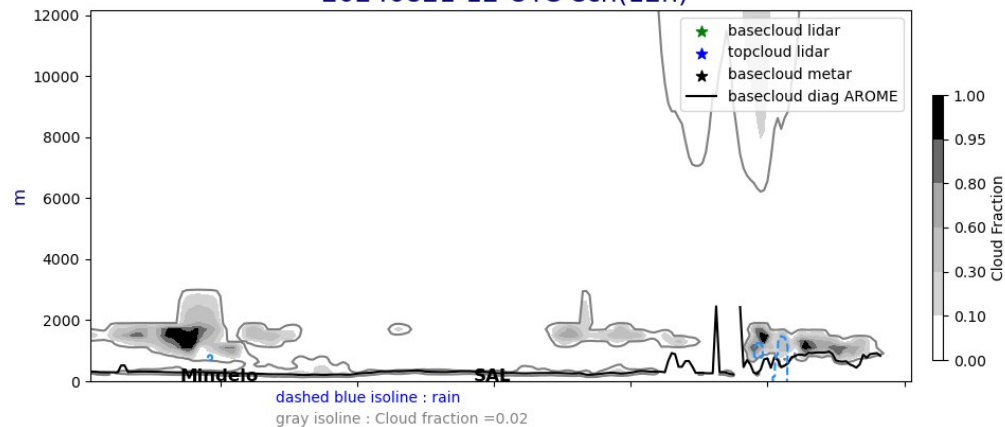


Lat. cross section @17°5N fct : 01UTC, 12UTC

Cross section E/W @ 17.5N
20240821-01-UTC ech(1h)

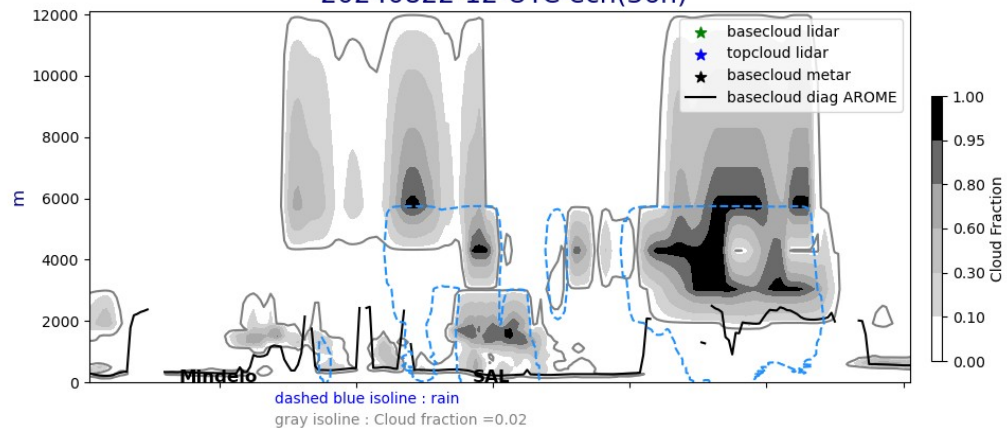


Cross section E/W @ 17.5N
20240821-12-UTC ech(12h)

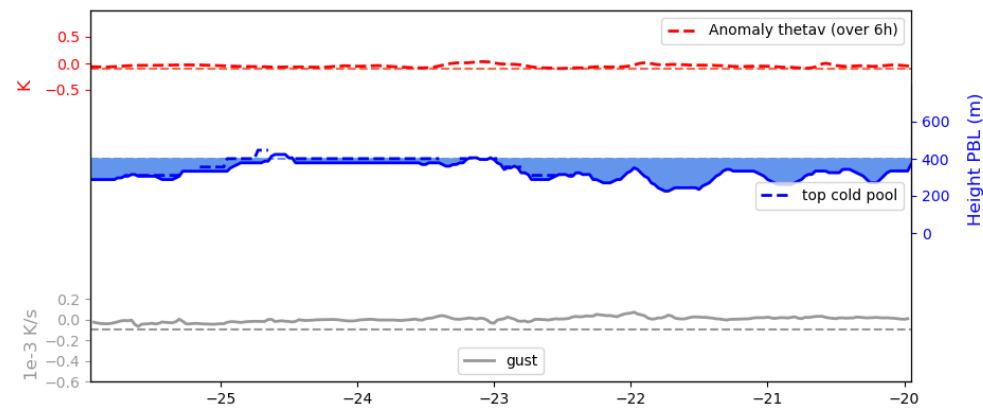
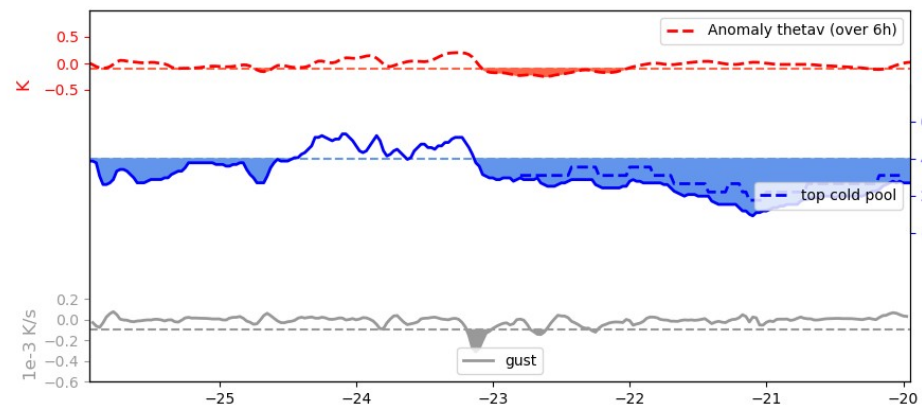
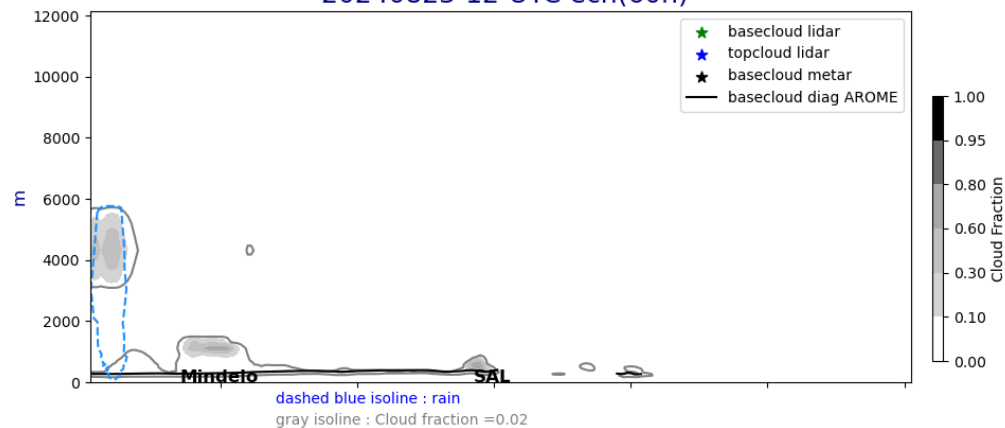


Lat. cross section @17°5N fct : J+1 and J+2 @ 12UTC

Cross section E/W @ 17.5N
20240822-12-UTC ech(36h)

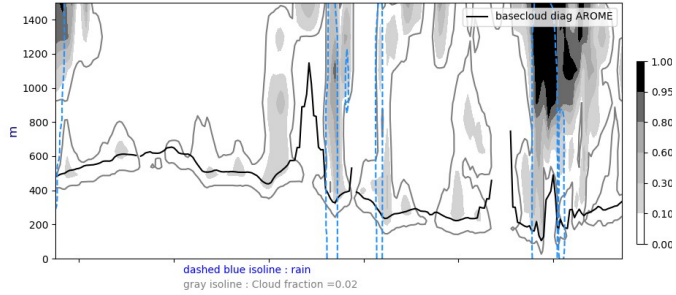


Cross section E/W @ 17.5N
20240823-12-UTC ech(60h)

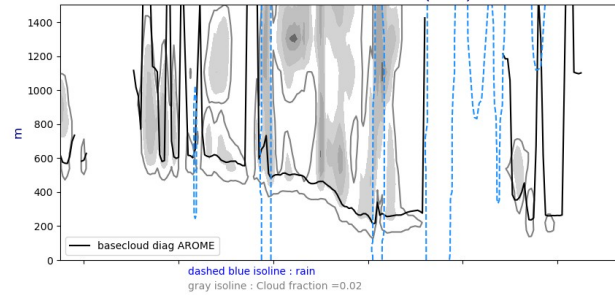


Lon. cross section @22W fct : J,J+1, J+2 @ 12 UTC

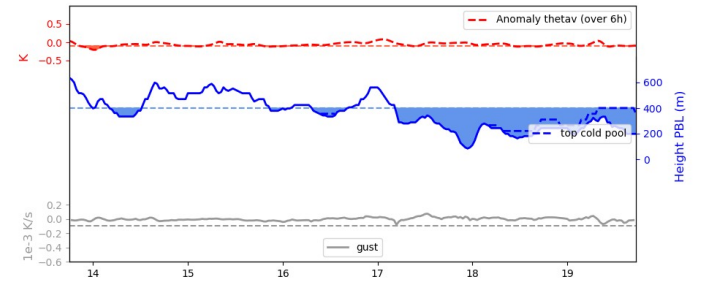
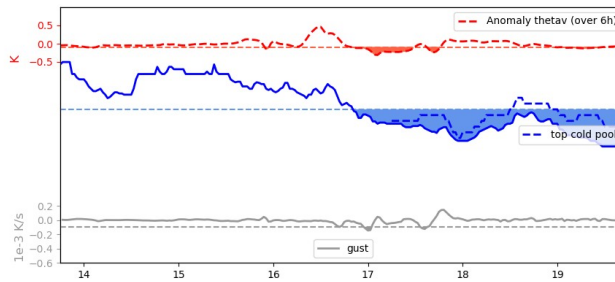
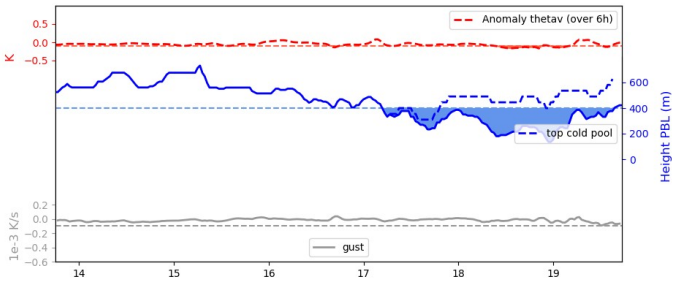
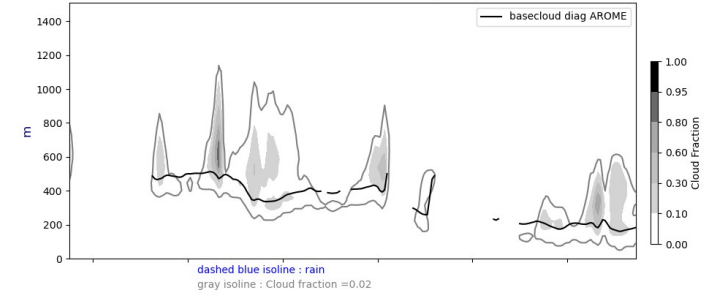
Cross section S/N @ -22W
20240821-12-UTC ech(12h)



Cross section S/N @ -22W
20240822-12-UTC ech(36h)

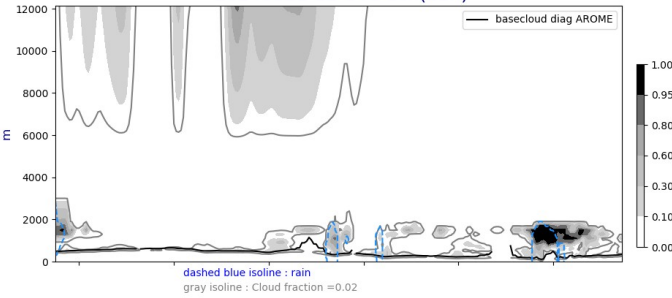


Cross section S/N @ -22W
20240823-12-UTC ech(60h)

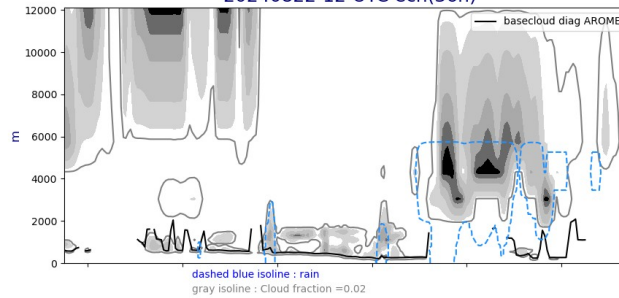


Lon. cross section @22W fct : J,J+1, J+2 @ 12 UTC

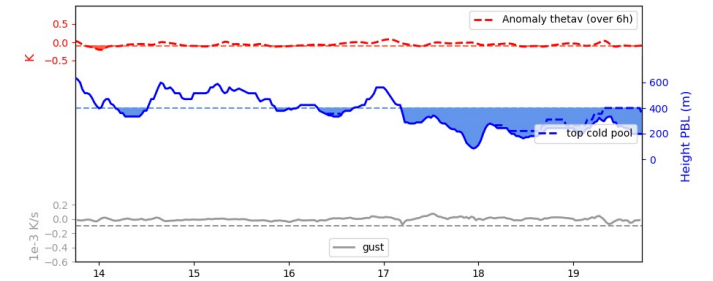
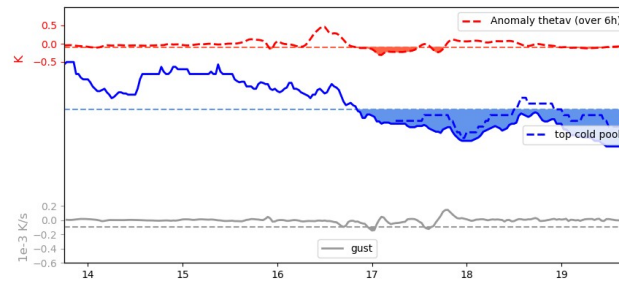
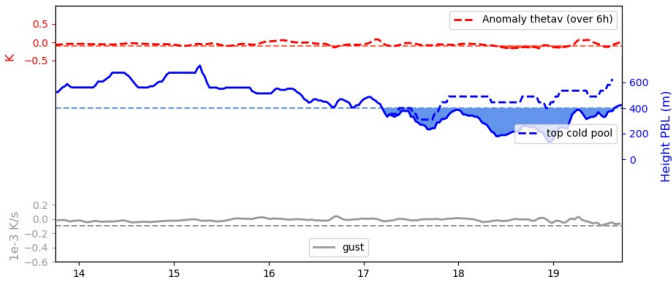
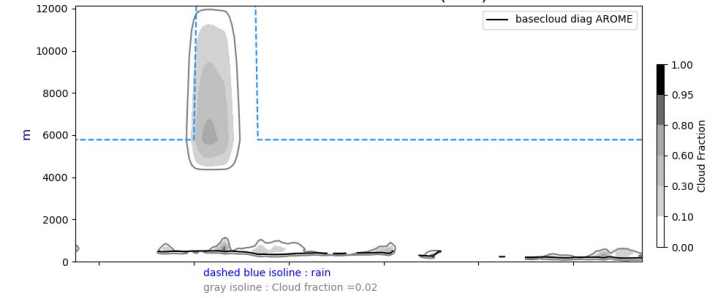
Cross section S/N @ -22W
20240821-12-UTC ech(12h)



Cross section S/N @ -22W
20240822-12-UTC ech(36h)

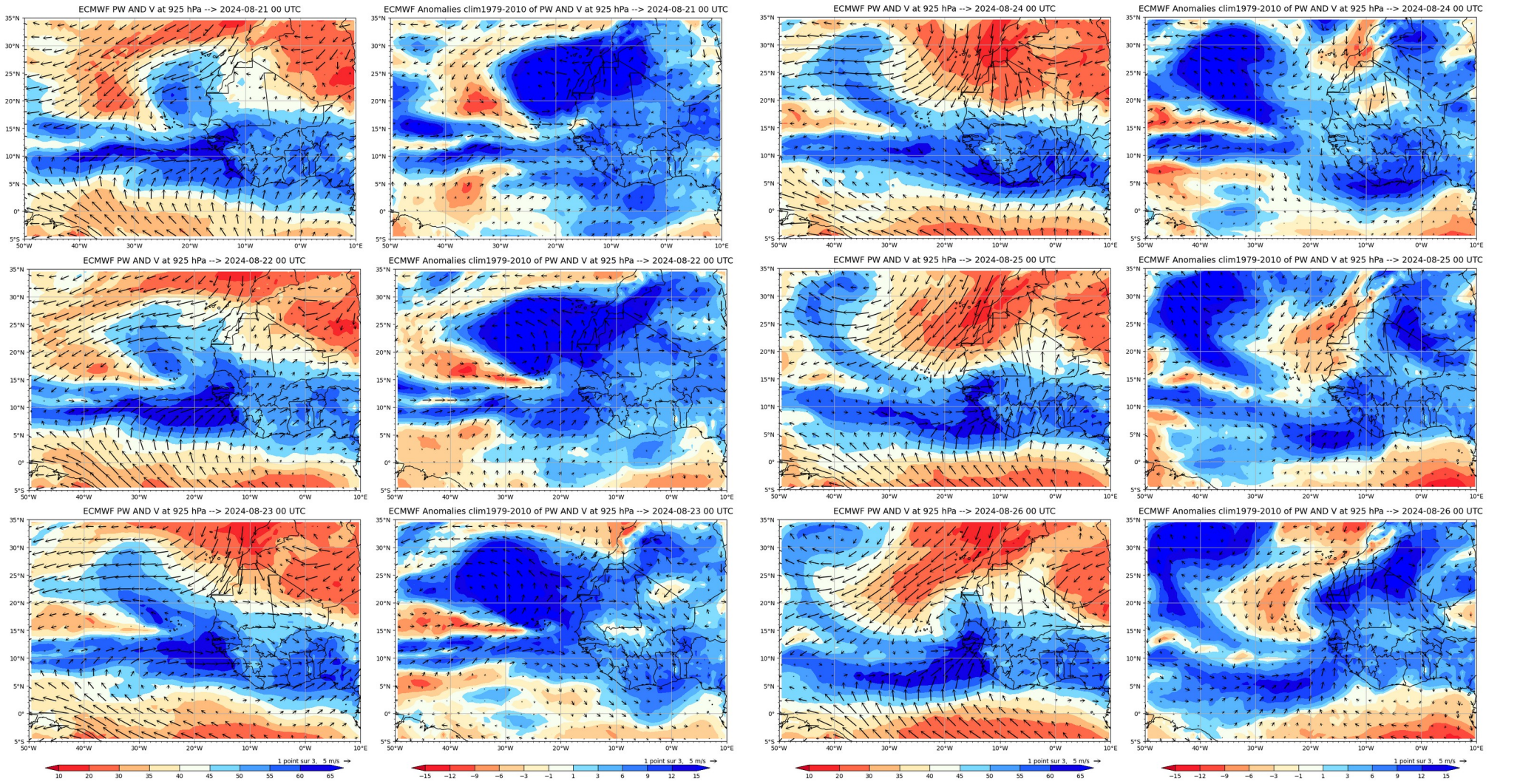


Cross section S/N @ -22W
20240823-12-UTC ech(60h)

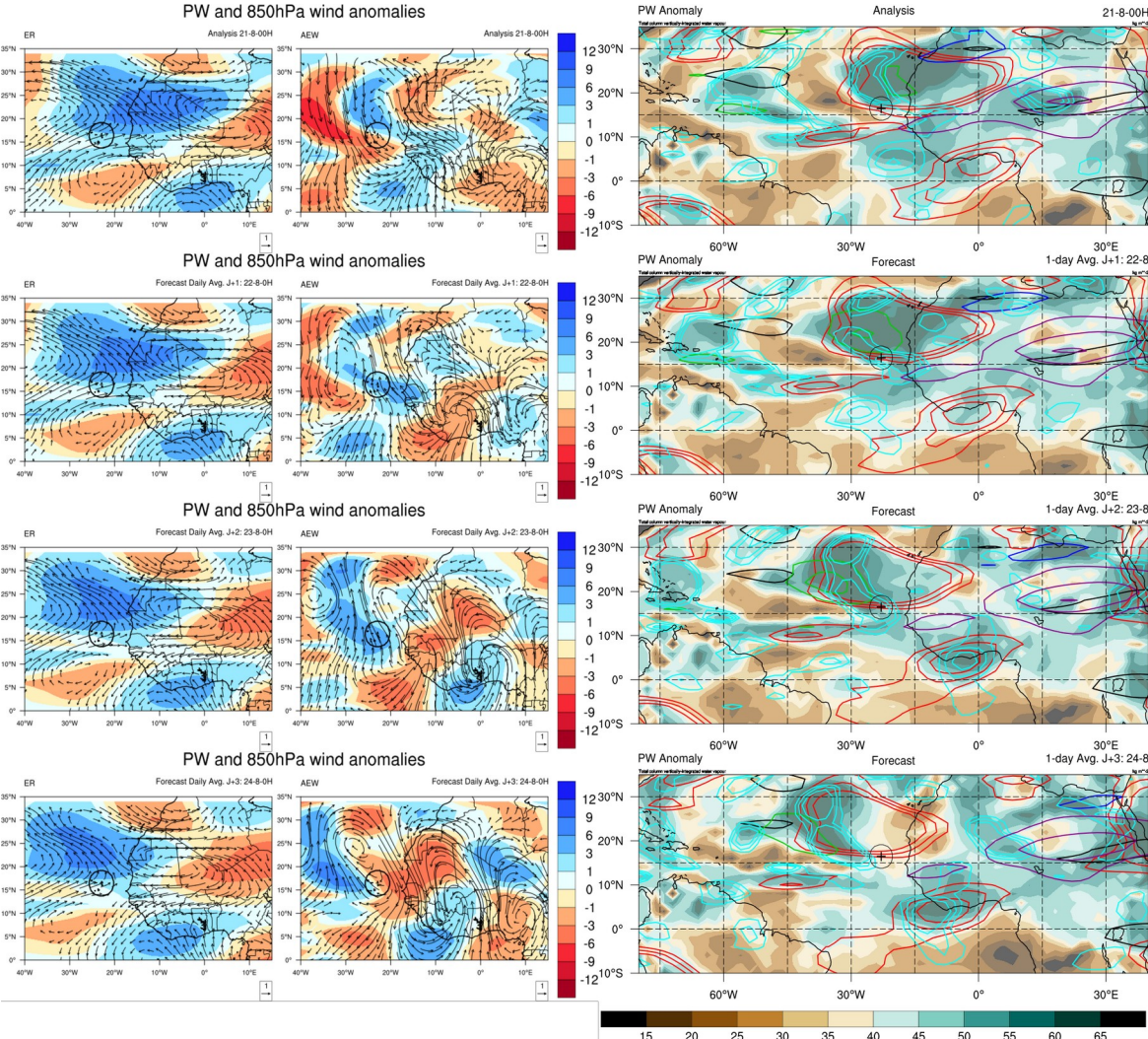


Week forecast J - J+7

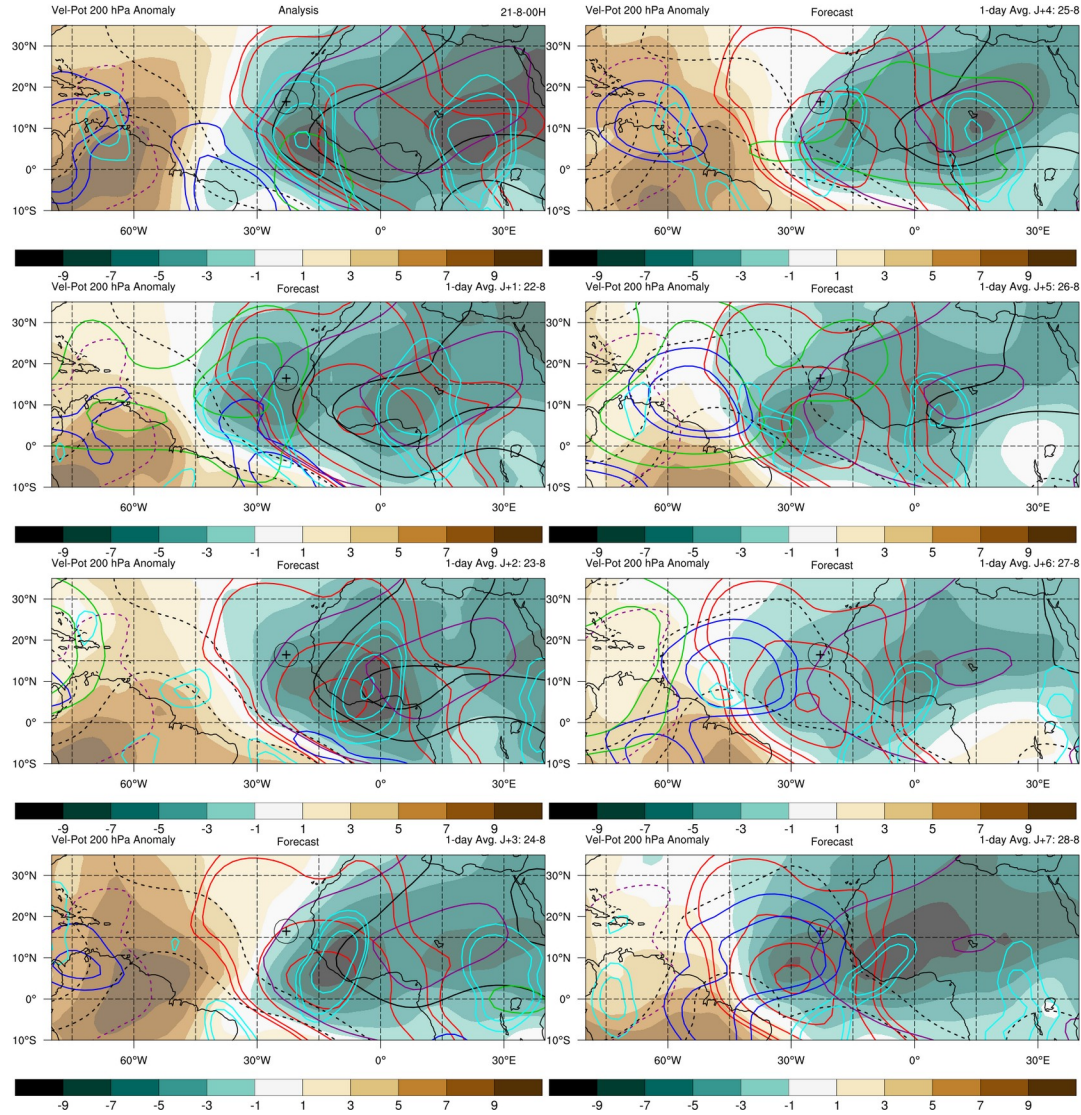
Daily PW and wind @ 925 hPa – total and anomalies



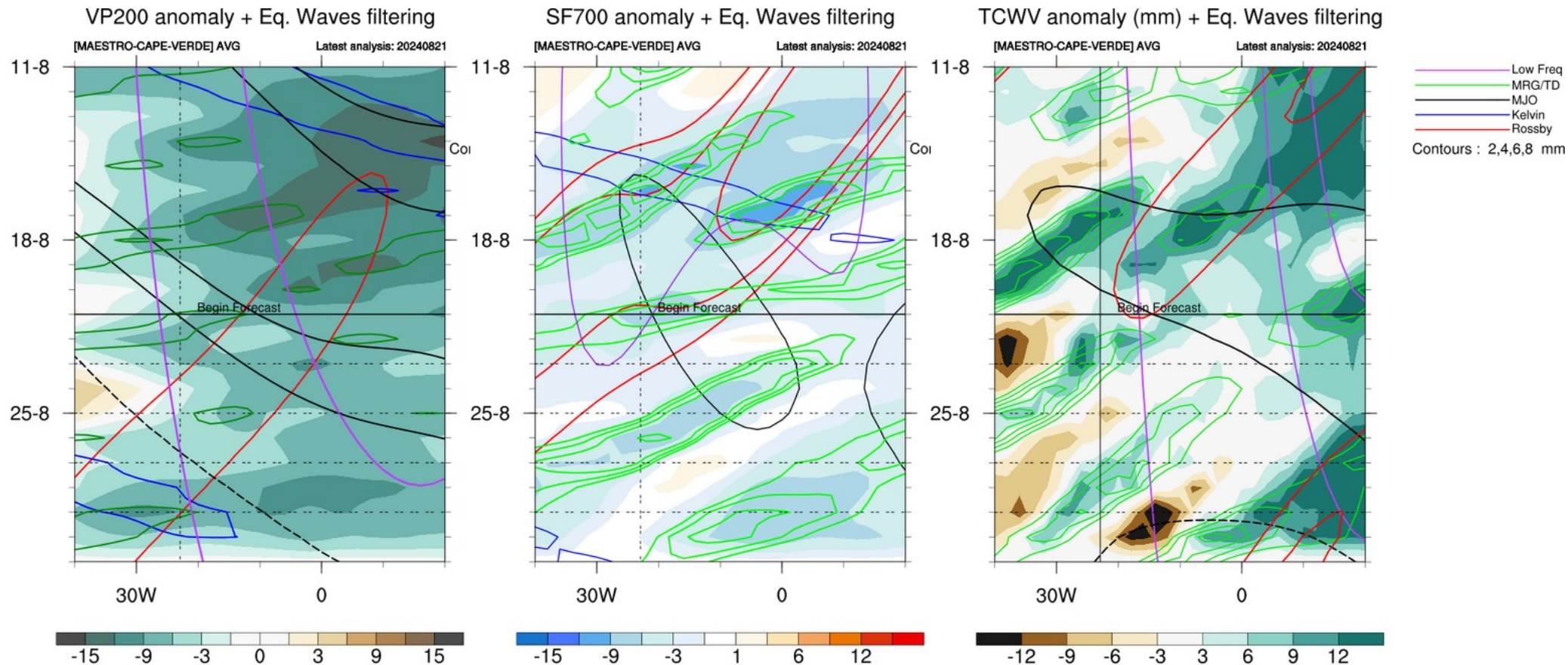
Decomposition PW/Wind and Waves contours J to J+3



Waves : Velocity potential @ 200 hPa, day J to J+7



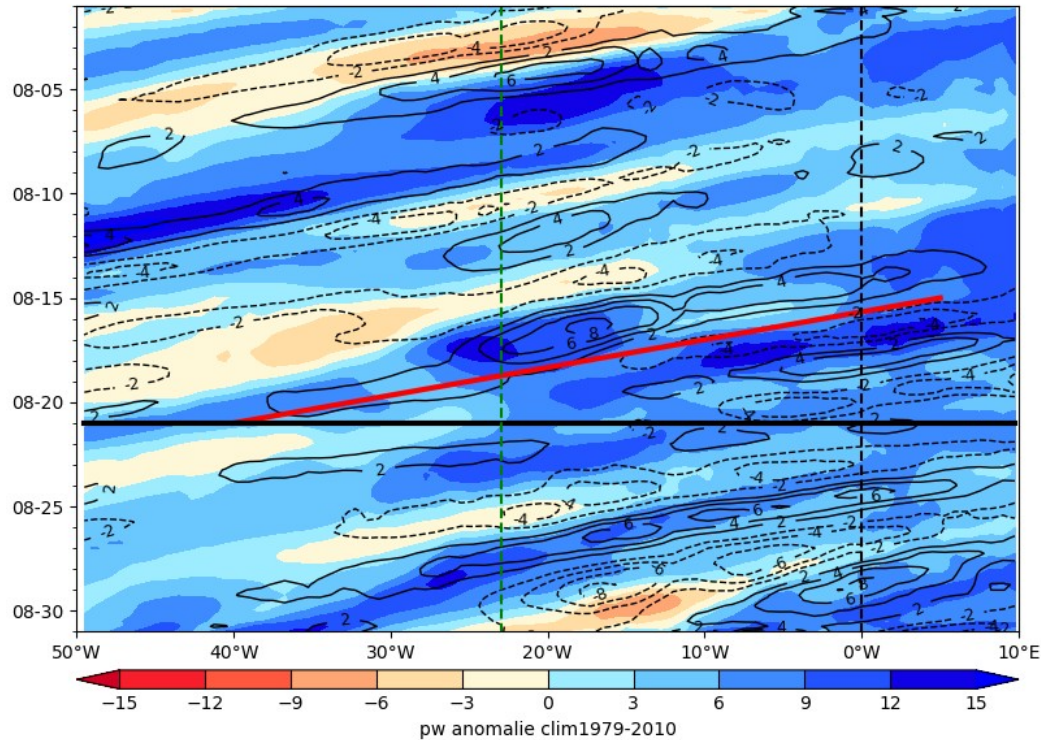
Equatorial Waves filtering hovmollers



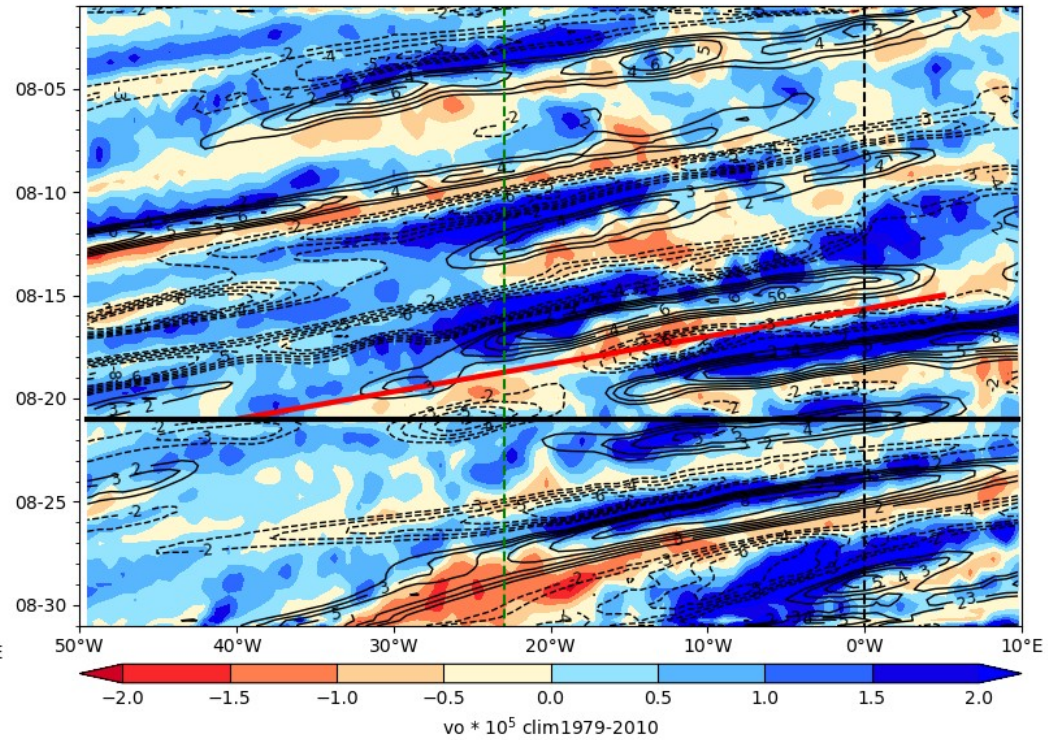
Hovmoller anomaly

Precipitable water – vorticity 850hPa

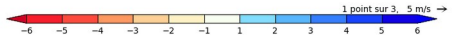
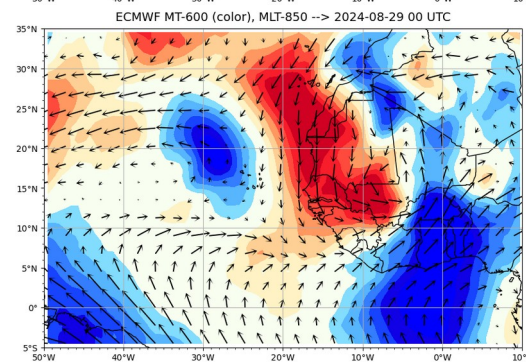
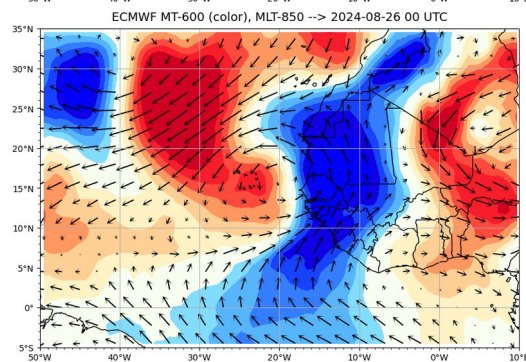
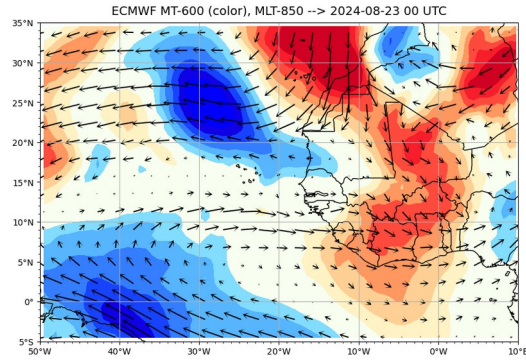
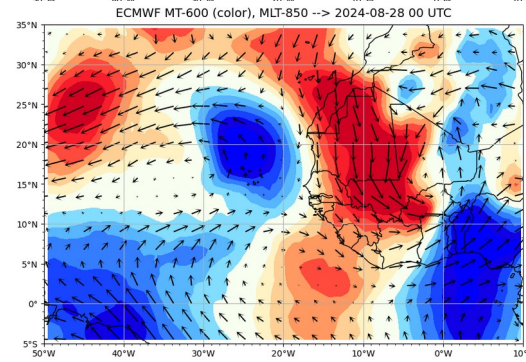
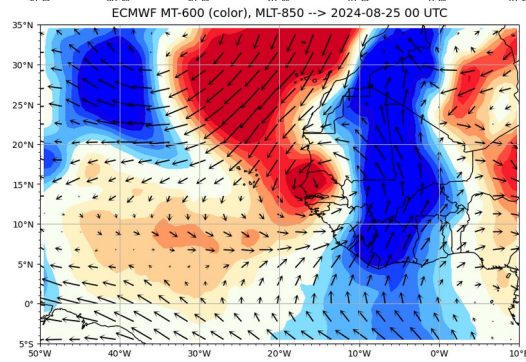
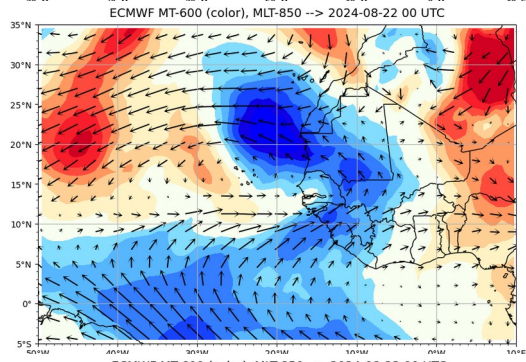
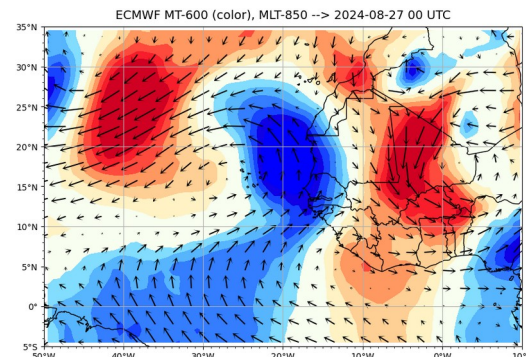
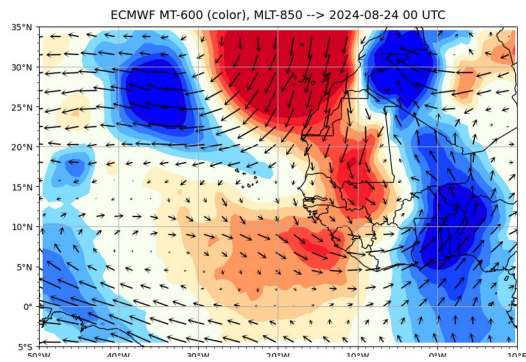
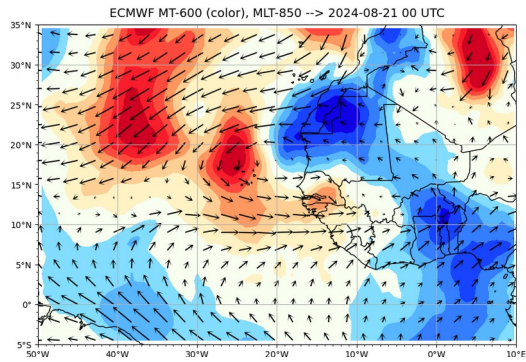
ECMWF PW (color) AND V at 925 hPa 2024-08-21



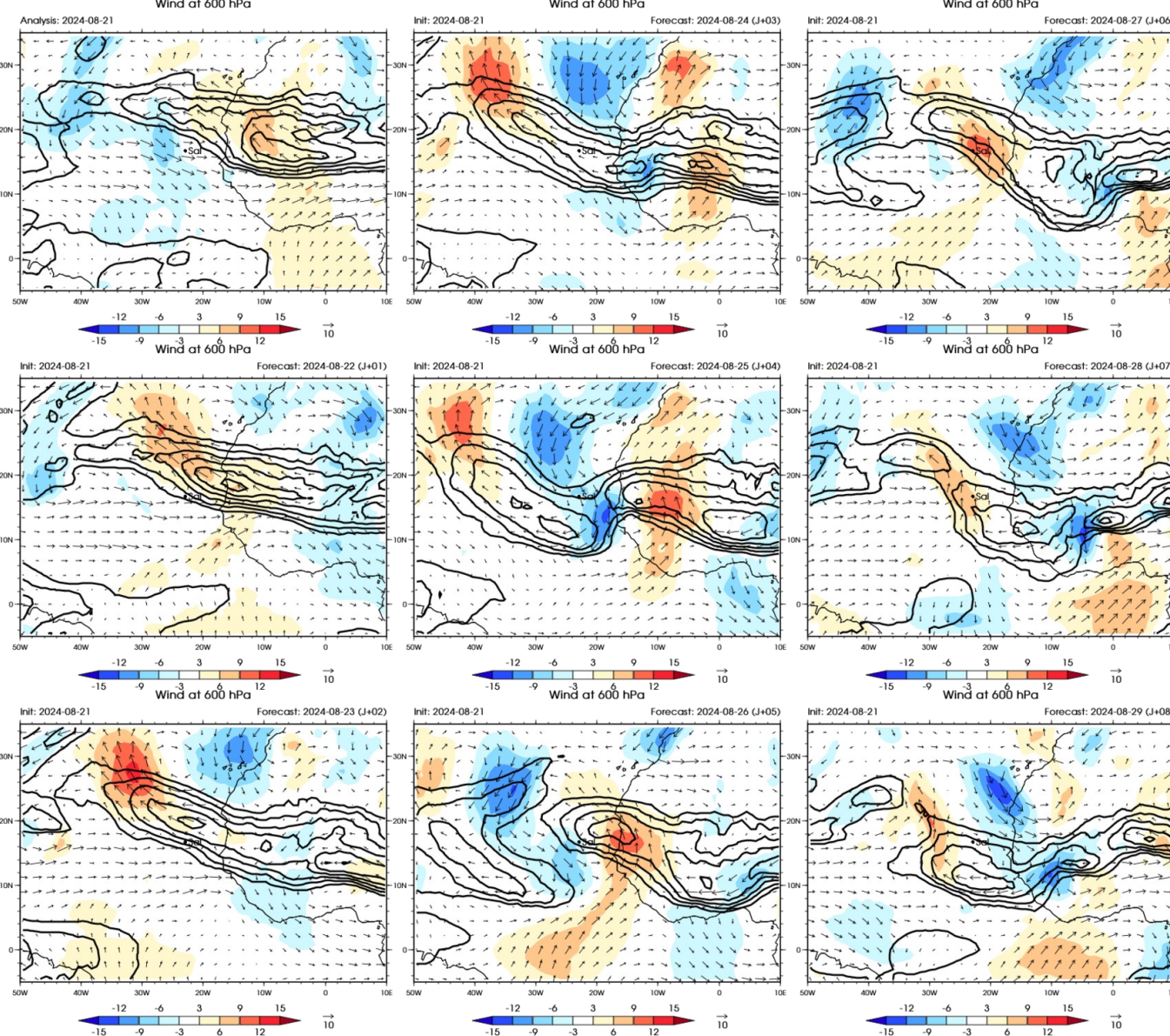
ECMWF Vorticity 850 hPa (color), V-700 hPa 2024-08-21



Monsoon Flow



African Easterly Jet wind 600 hPa



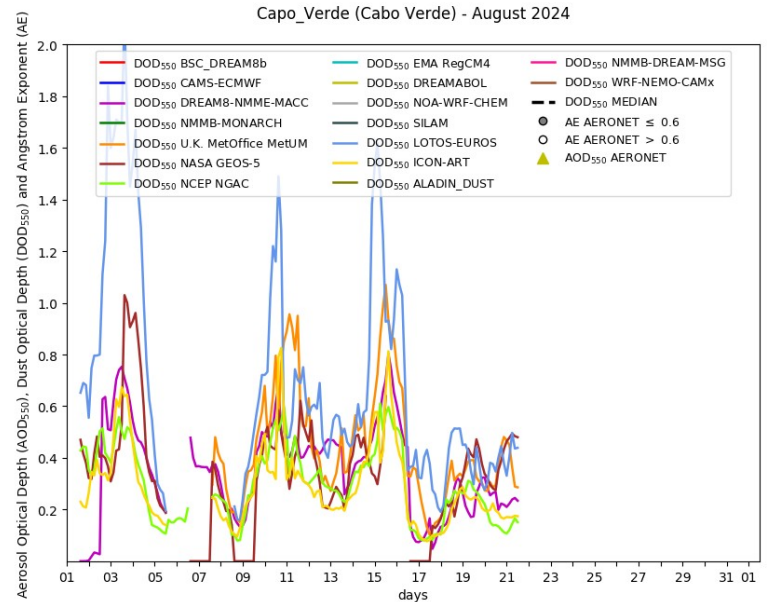
Dust Observations and Forecast

- Temporal evolution model/Obs at Sal :

https://sds-was.aemet.es/forecast-products/forecast-evaluation/Capo_Verde_v3

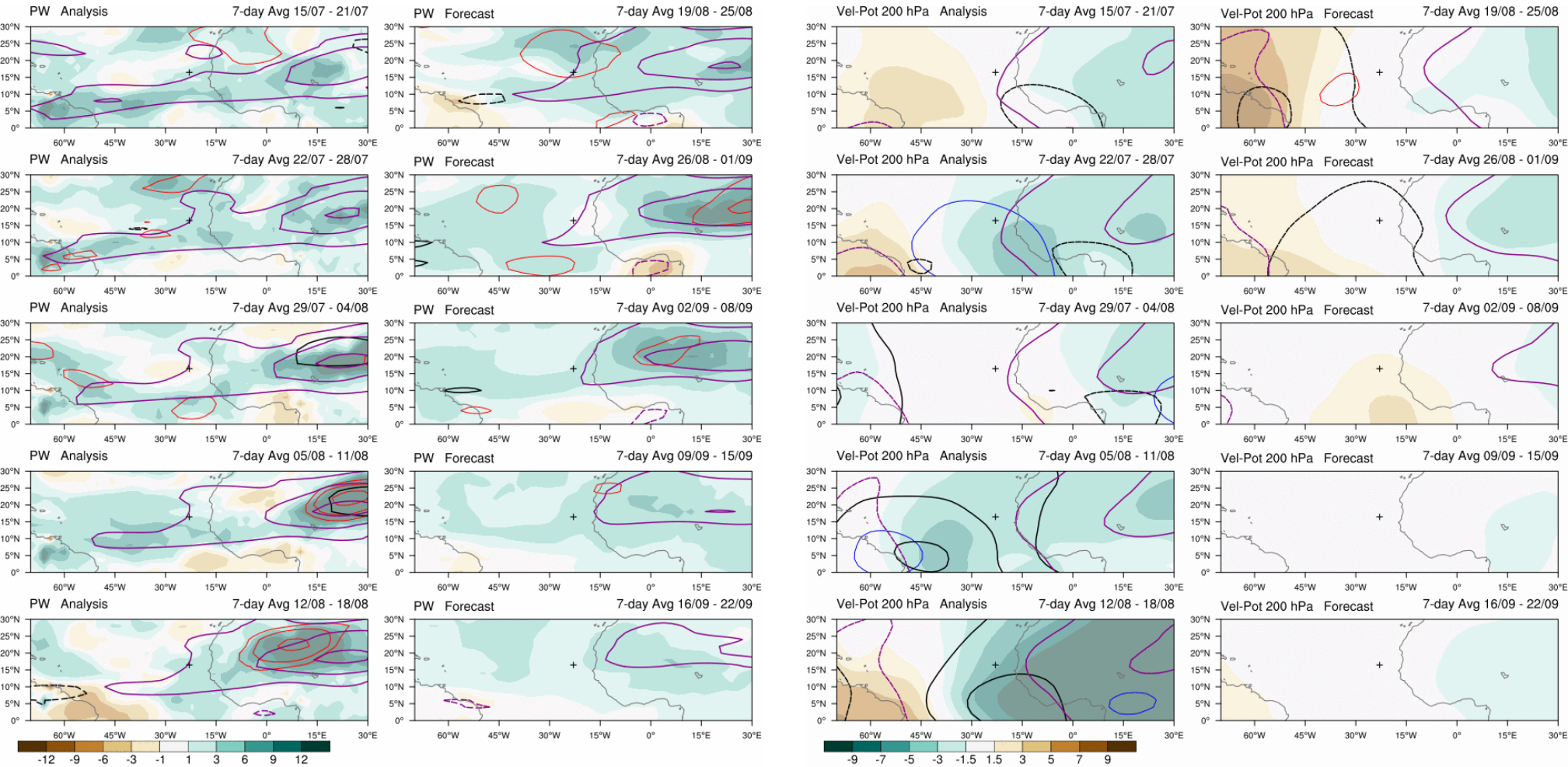
- Ensemble forecast Dust Optical Depth :

<https://sds-was.aemet.es/forecast-products/dust-forecasts/ensemble-forecast>



Subseasonal forecast
(updated once a week)

4 weeks forecast PW et VP200



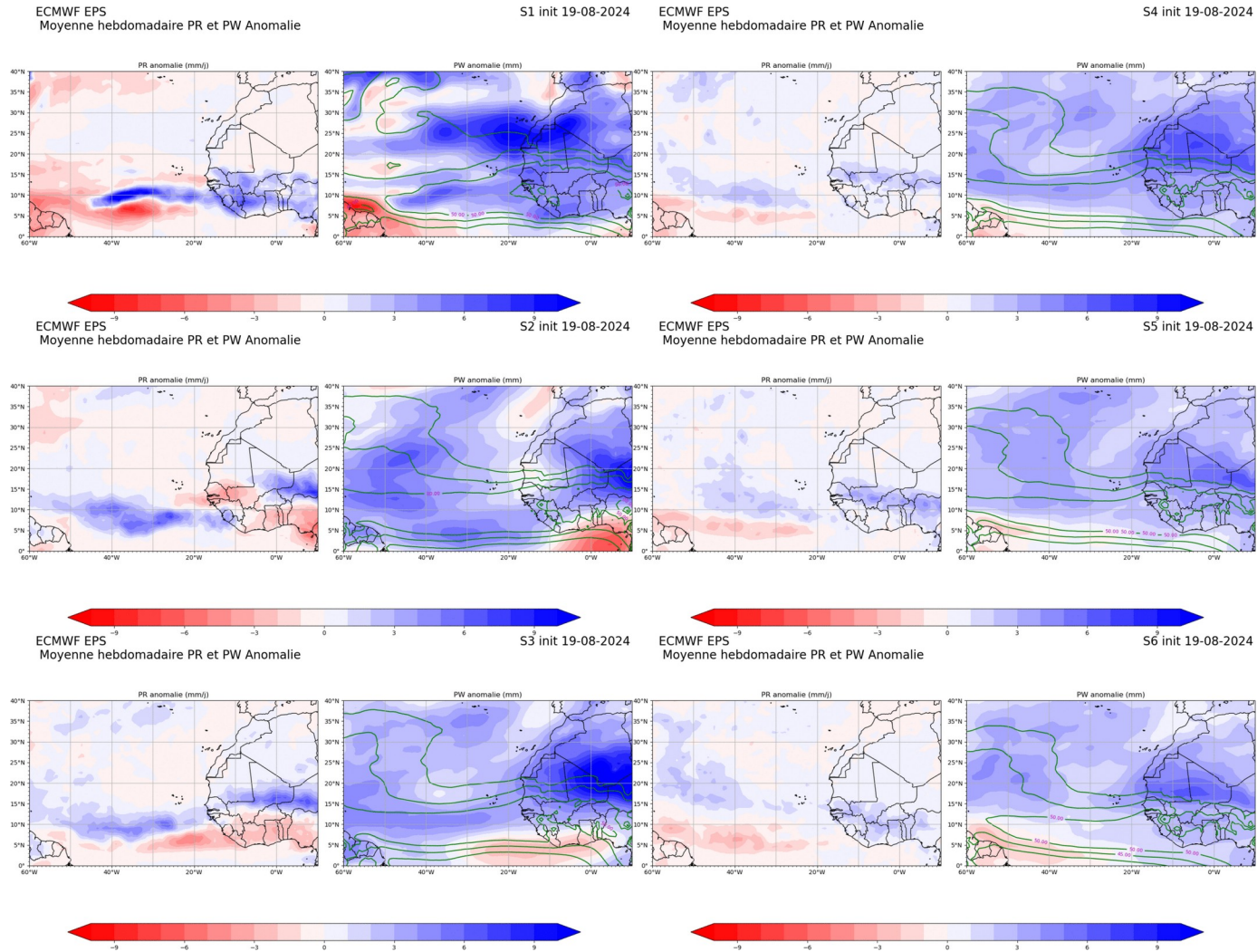
Contours: 2.5, 5, 10, mm
 — MRG/TD
 — Kelvin
 — Rossby
 — MJO
 — Low

contact: Philippe Peyrille
 philippe.peyrille@meteo.fr

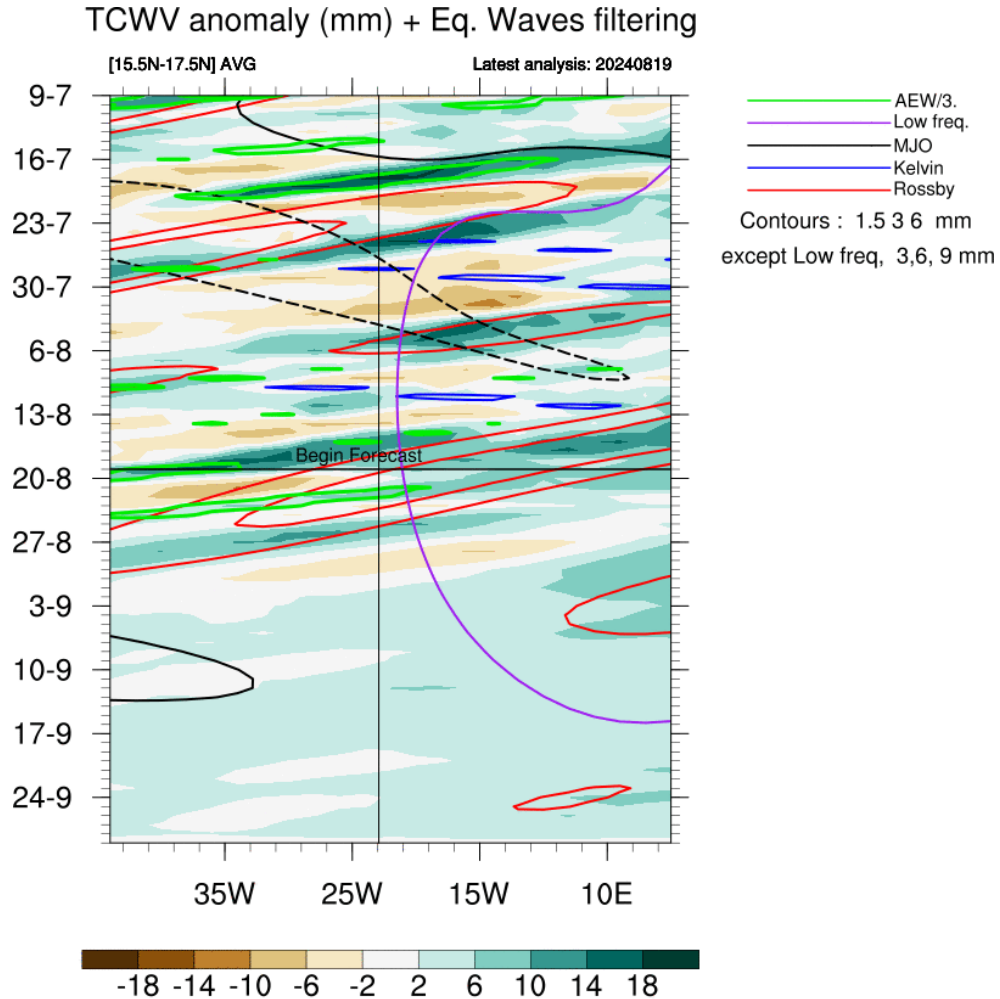
Contours: -6, -4, -2, m2s-1
 — MRG/TD
 — Kelvin
 — Rossby
 — MJO
 — Low

contact: Philippe Peyrille
 philippe.peyrille@meteo.fr

Precipitation and Precipitable Water weekly anomalies + PW contours (40 mm every 5 mm)



Hovmoller forecast PW over 4 weeks

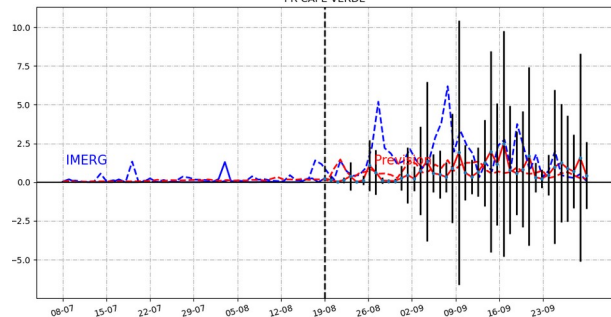


Temporal evolution PR, PW (+ EKE)

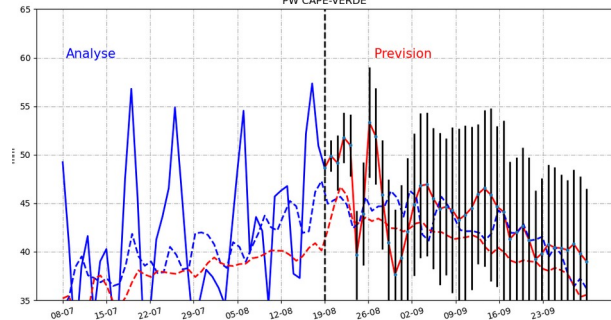
journalier

ECMWF EPS
init 19-08
Moyenne journaliere PR,PW Bruts

PR CAPE-VERDE



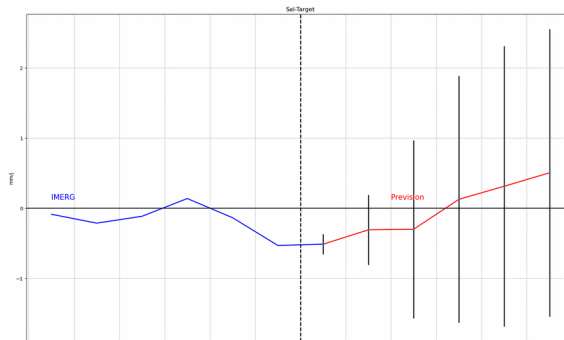
PW CAPE-VERDE



hebdomadaire

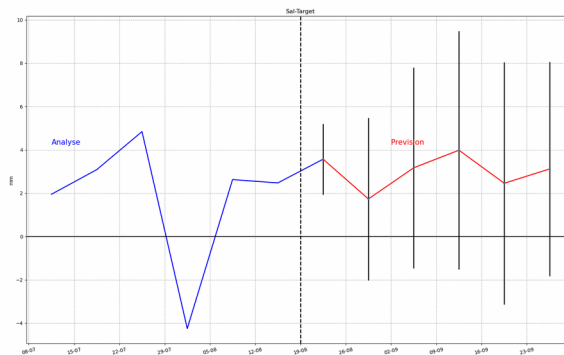
ECMWF EPS
Moyenne hebdomadaire PR Anomalie

init 19-08



ECMWF EPS
Moyenne hebdomadaire PW Anomalie

init 19-08



Summary

Param	J	J+1	J+2	J+3	J+4	J+5	Wave
PW/ PW*							
VP200							
VV 500							
vorticity							
Wind @ 700 hPa (m/s)							
PBL height (m)							
Base cloud (m)							
Orga cloud							

