

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

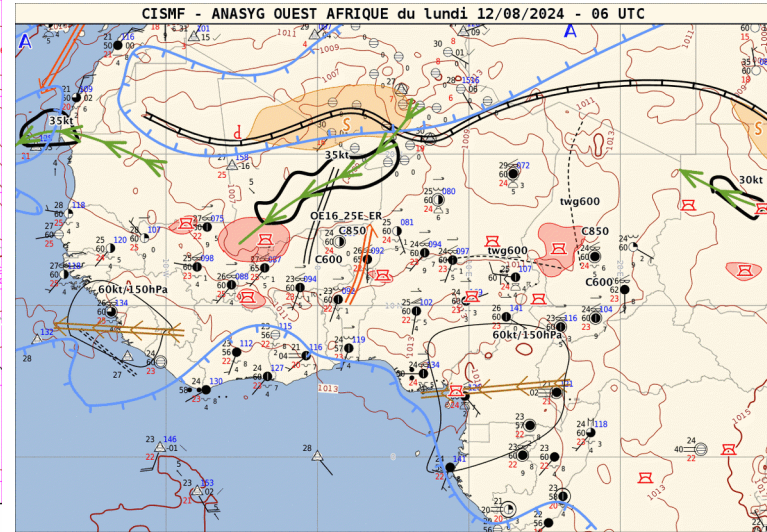
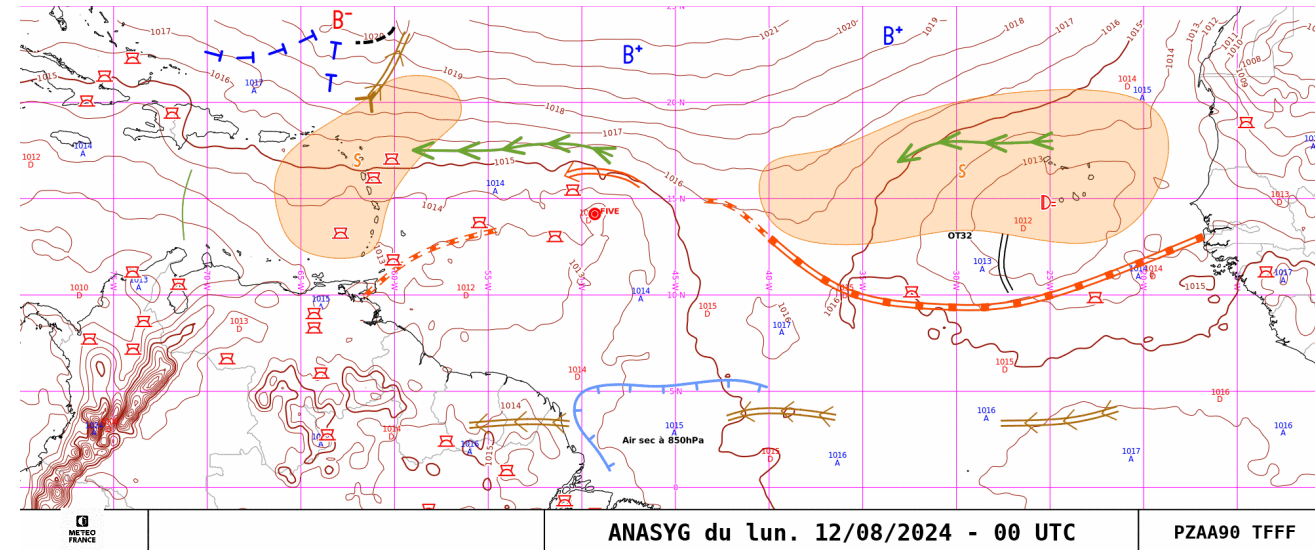
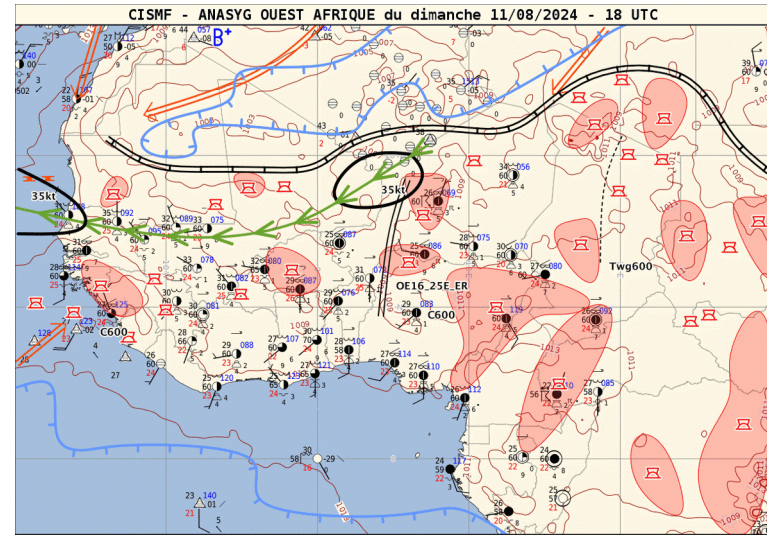
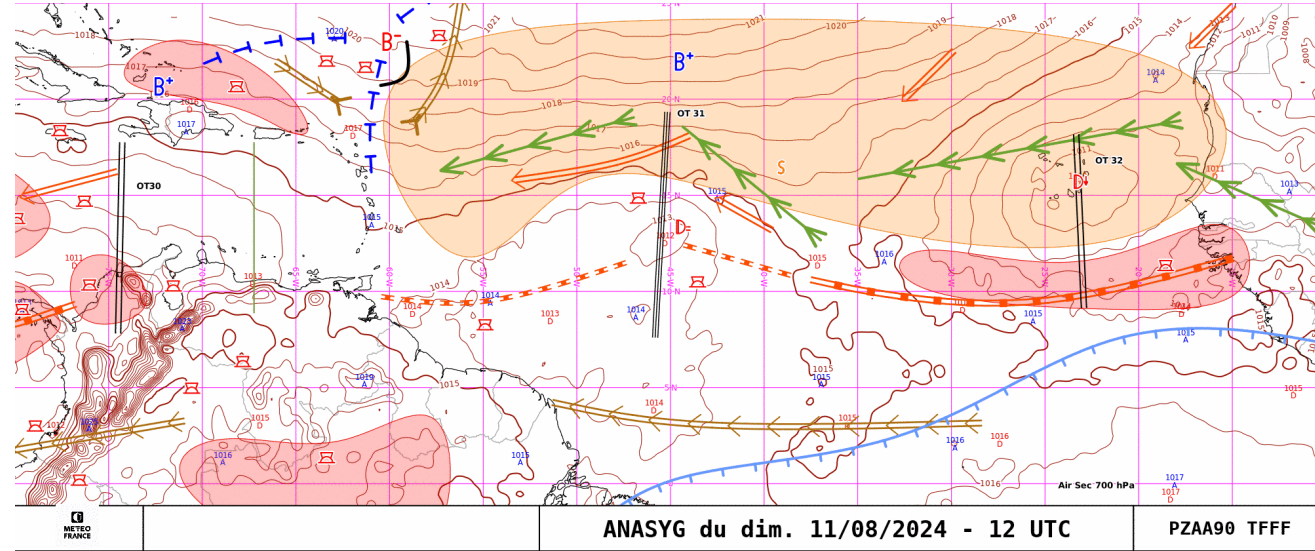
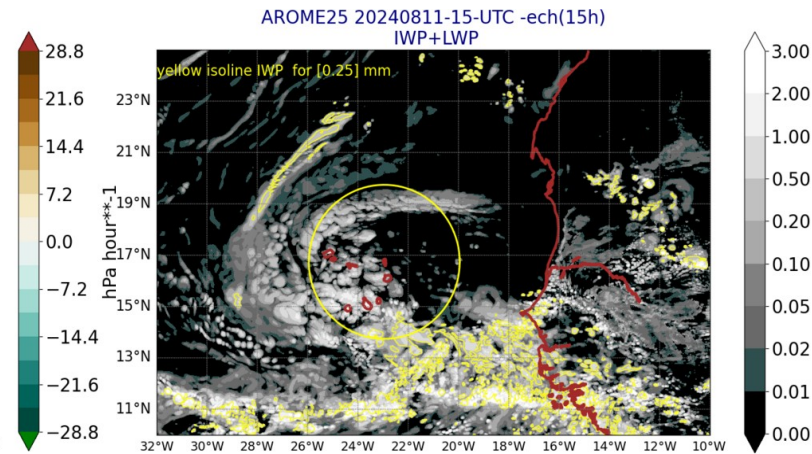
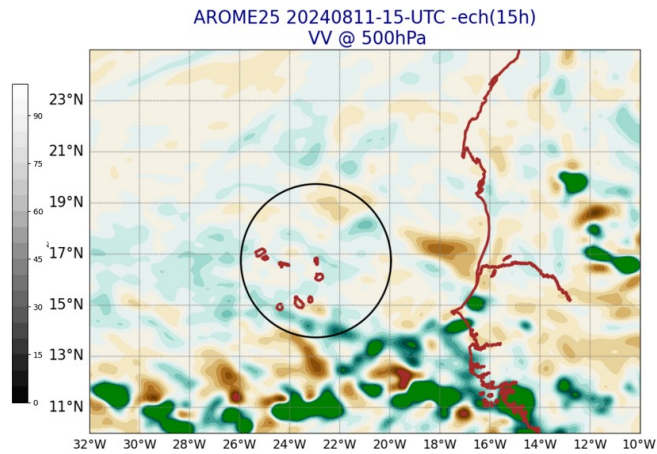
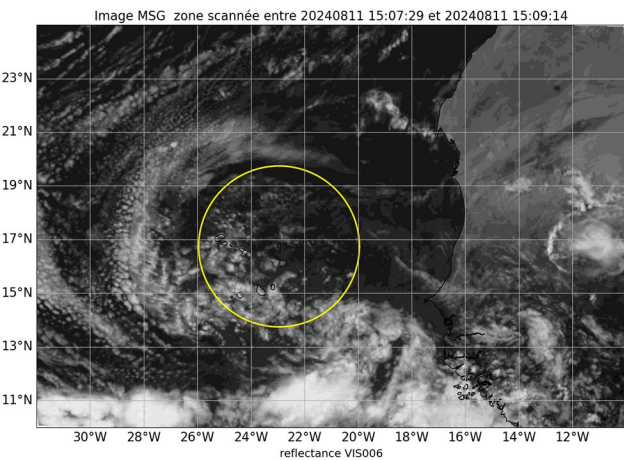
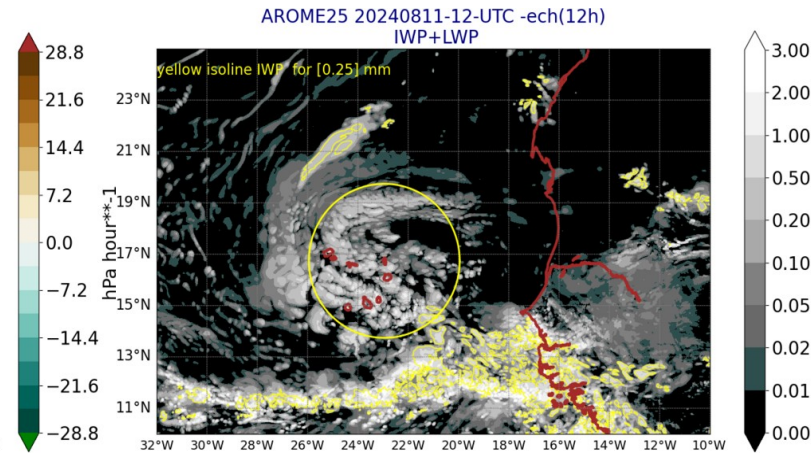
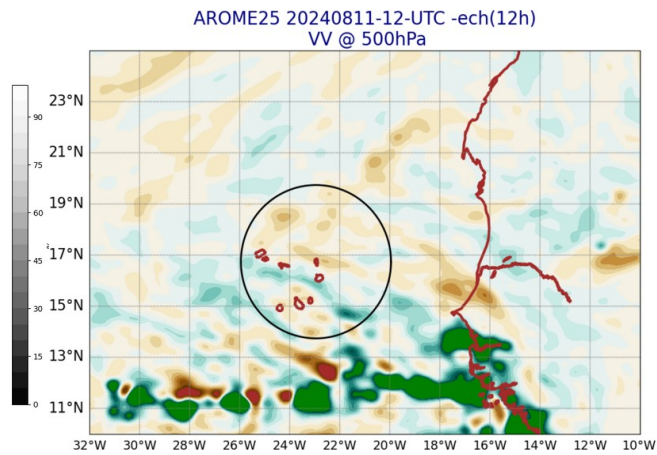
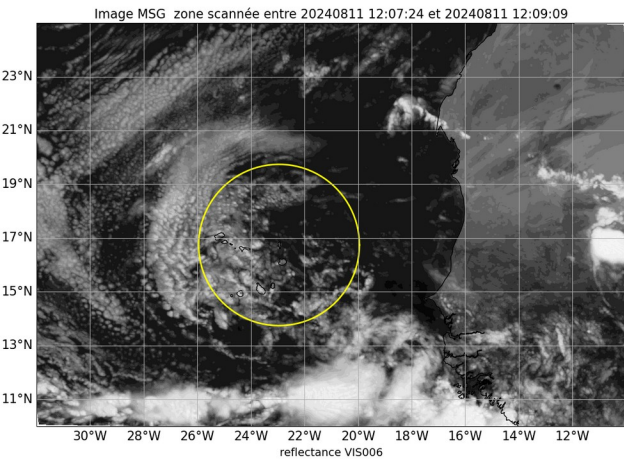
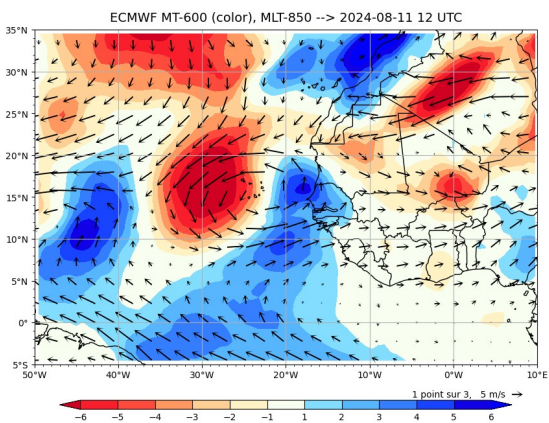
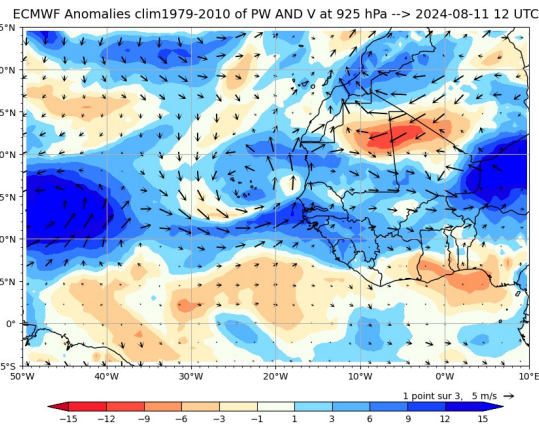
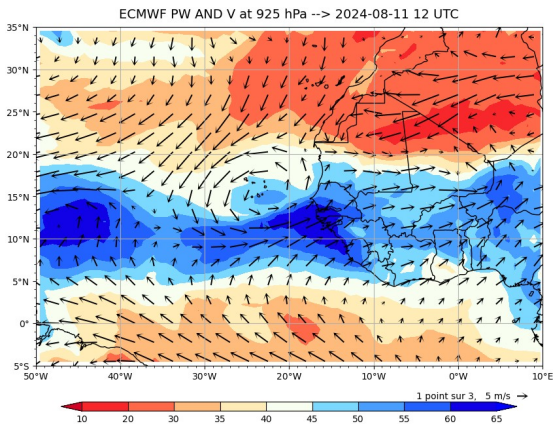


Image MSG Visible J-1 12 and 15 UTC

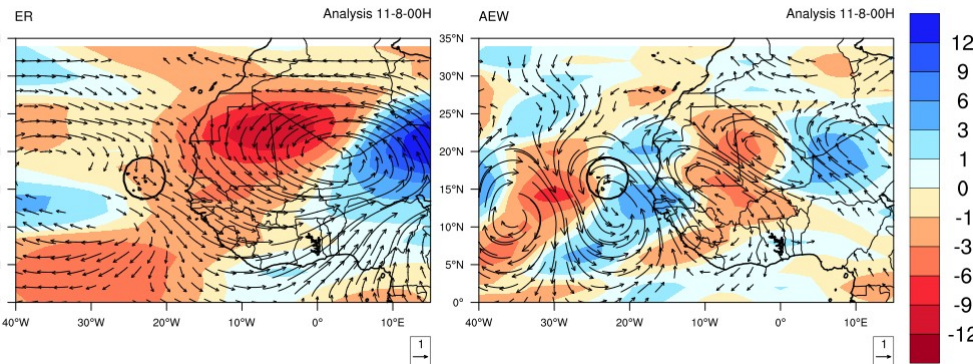
Arome J-1 12 and 15 UTC



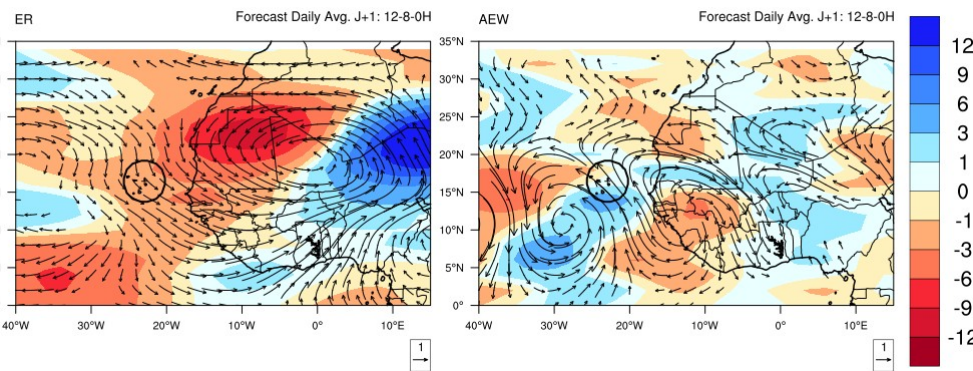
Precipitable Water – PW anomaly J-1 12UTC



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



PW and 850hPa wind anomalies

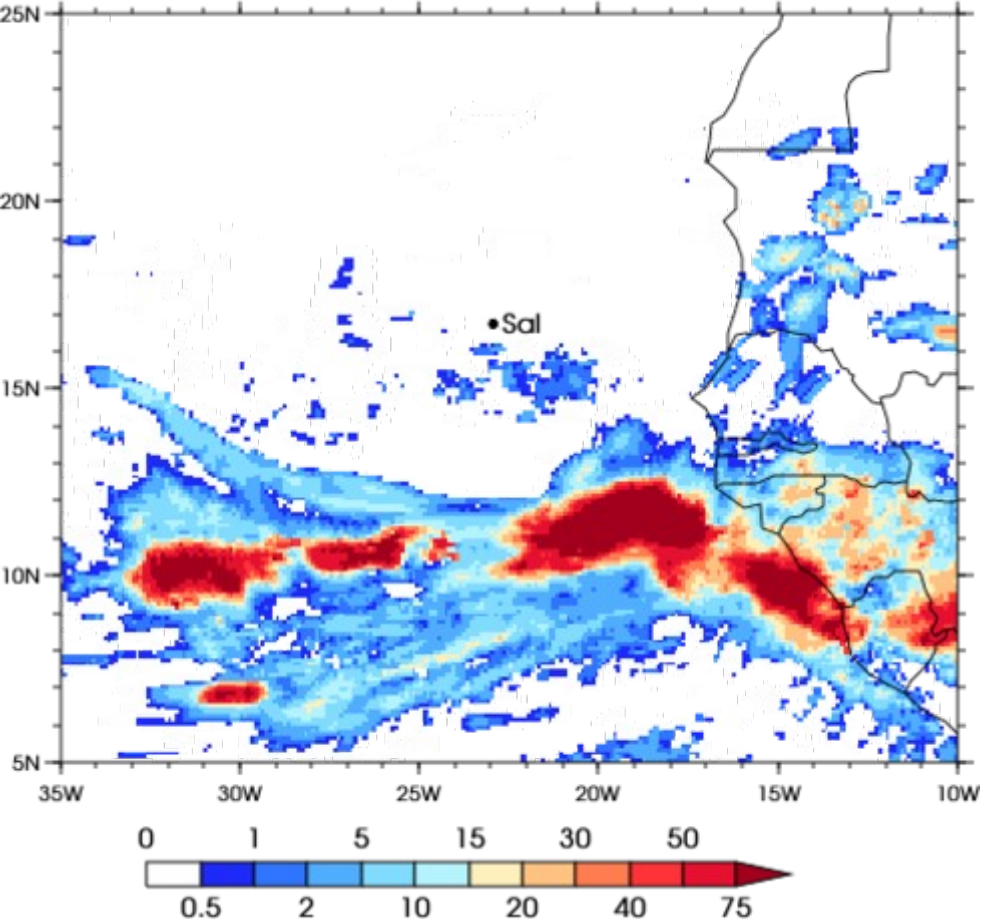


Precipitation IMERG and AROME J-1

3IMERGHHE GPM IMERG Early Precipitation

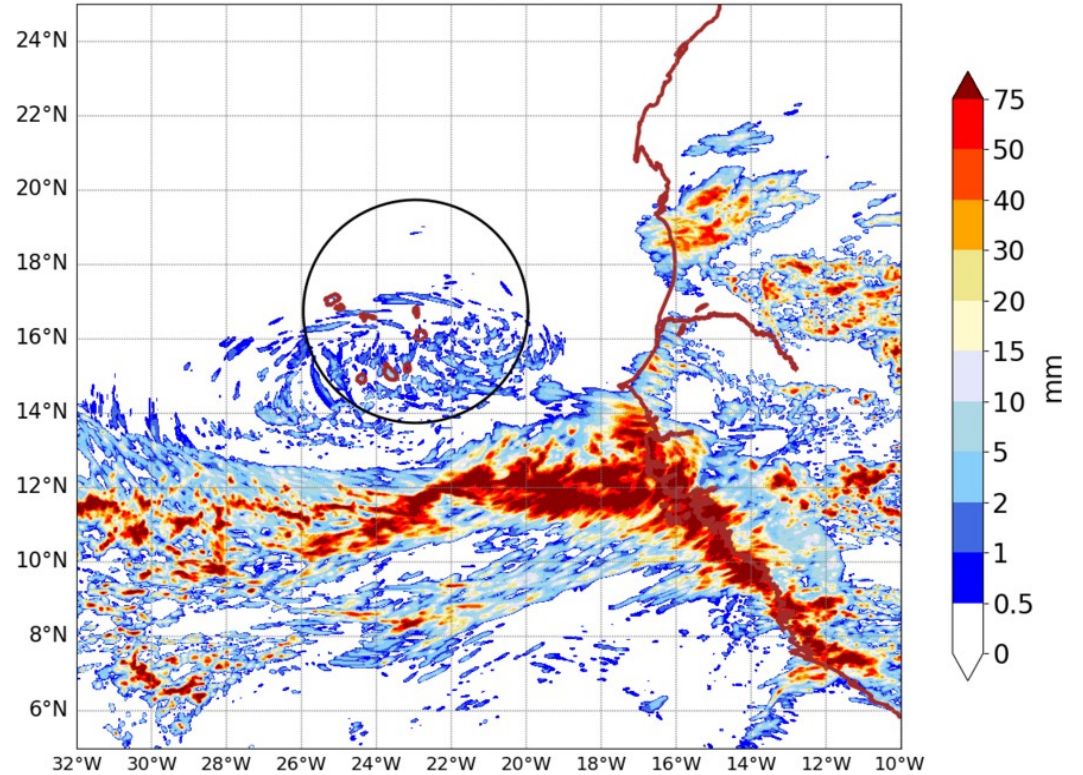
Daily accumulated: 2024-08-11

Units: mm/day



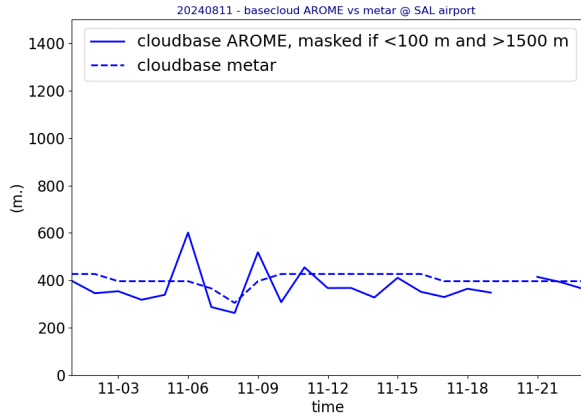
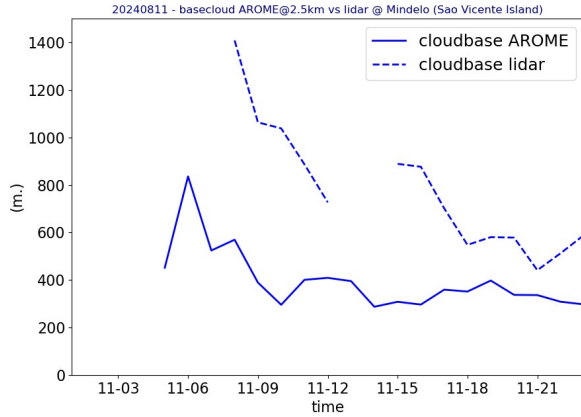
AROME25 20240812-00-UTC -ech(24h)

RR cumulated over 24h

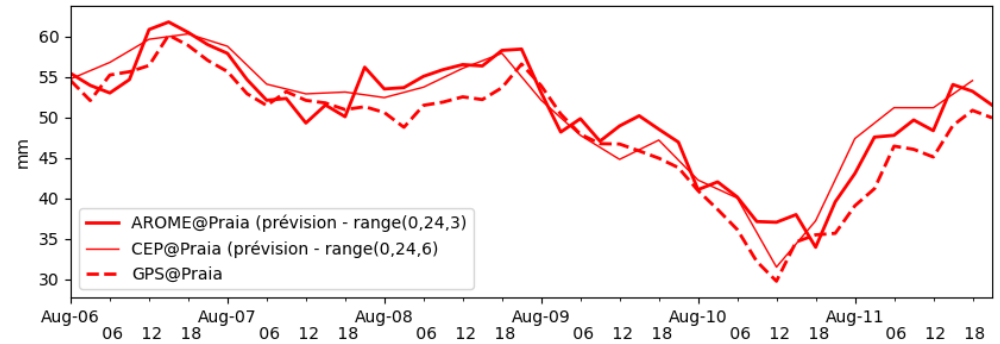
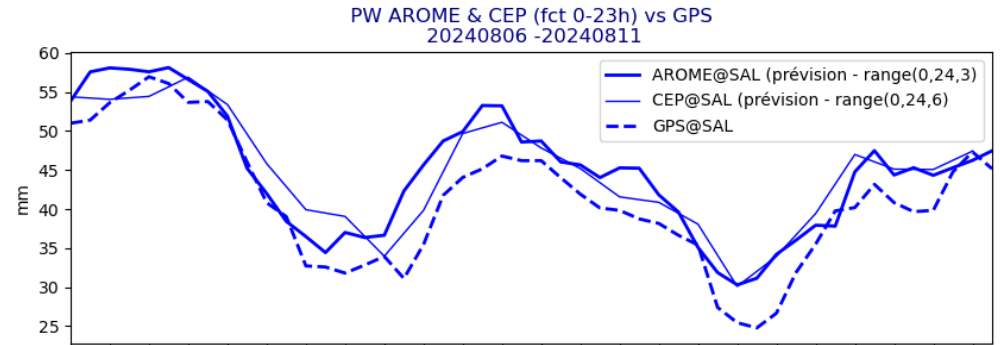


OBSERVATIONS J-1

Lidar@ mindelo
metar@sal

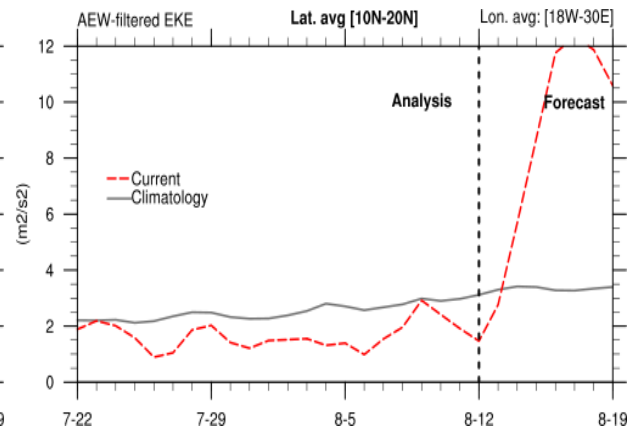
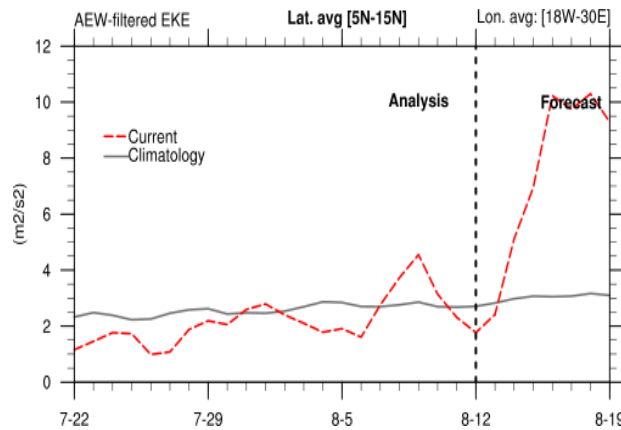
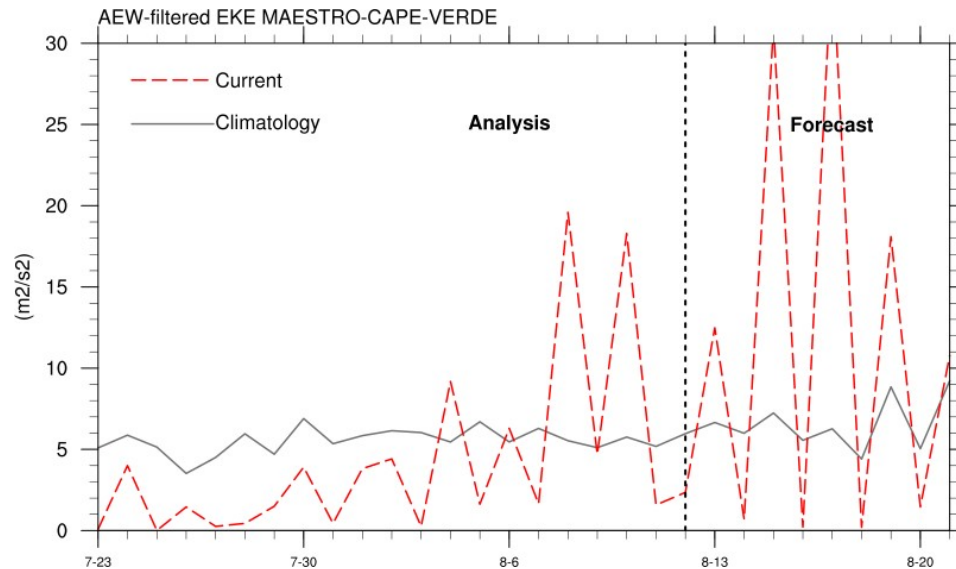
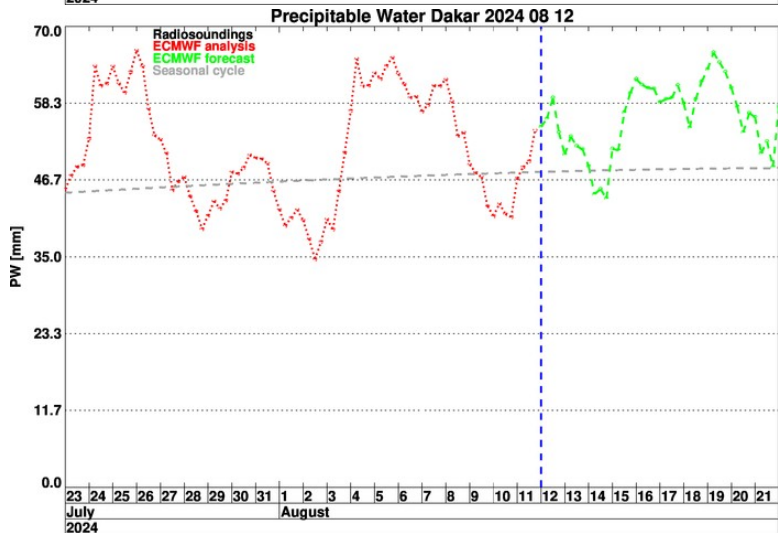
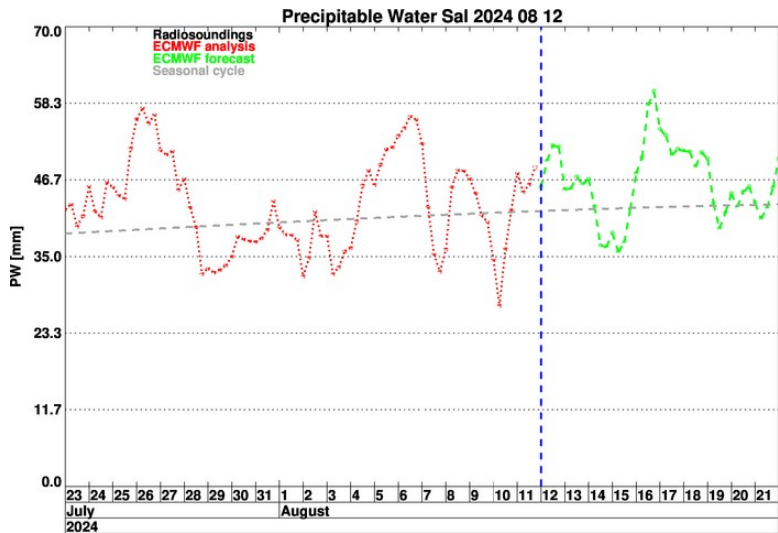


GPS @ Sal
GPS @ Praia



Short term forecast J - J+36h

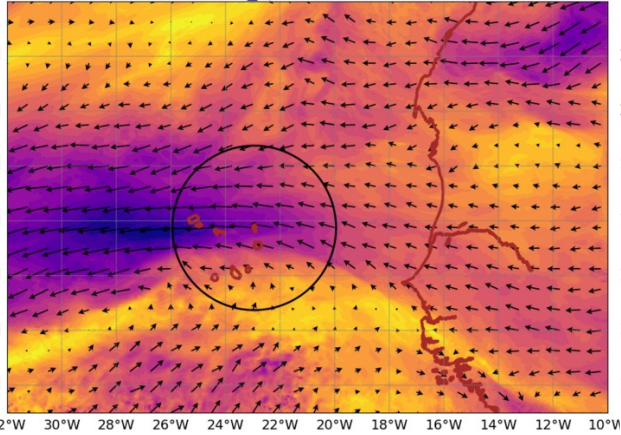
Temporal evolution PW Sal et Dakar + EKE



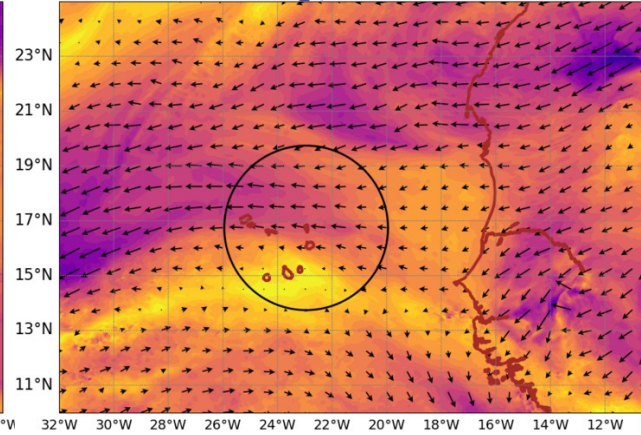
AROME Wind @ 700 hPa

AROME Wind @ 920 hPa

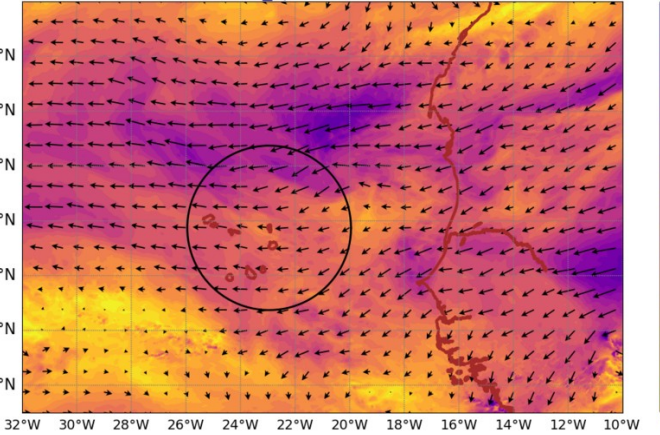
AROME25 20240812-12-UTC -ech(12h)
wind_sp700 @ 700hPa



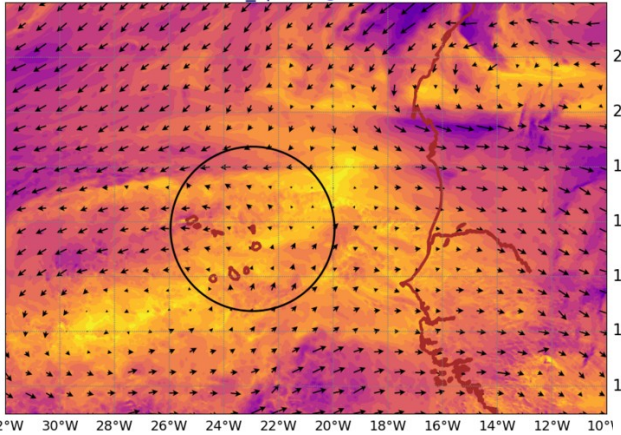
AROME25 20240813-12-UTC -ech(36h)
wind_sp700 @ 700hPa



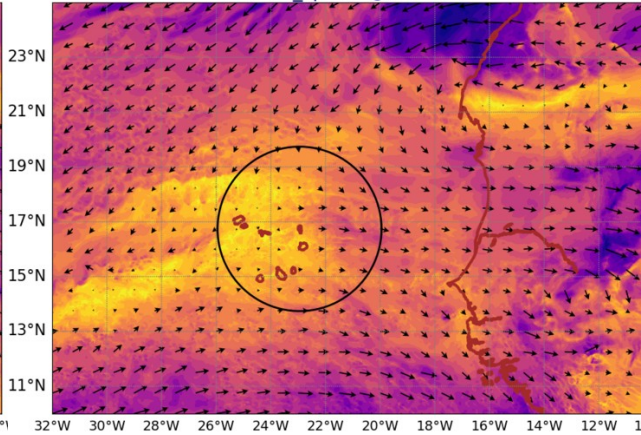
AROME25 20240814-12-UTC -ech(60h)
wind_sp700 @ 700hPa



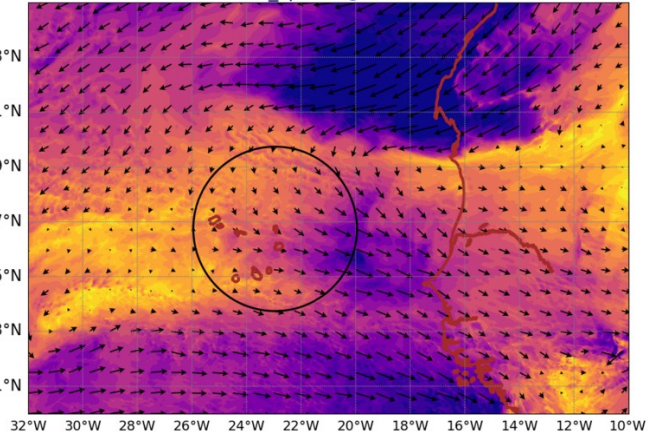
AROME25 20240812-12-UTC -ech(12h)
wind_sp920 @ 920hPa



AROME25 20240813-12-UTC -ech(36h)
wind_sp920 @ 920hPa



AROME25 20240814-12-UTC -ech(60h)
wind_sp920 @ 920hPa



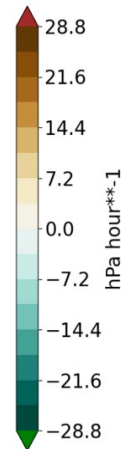
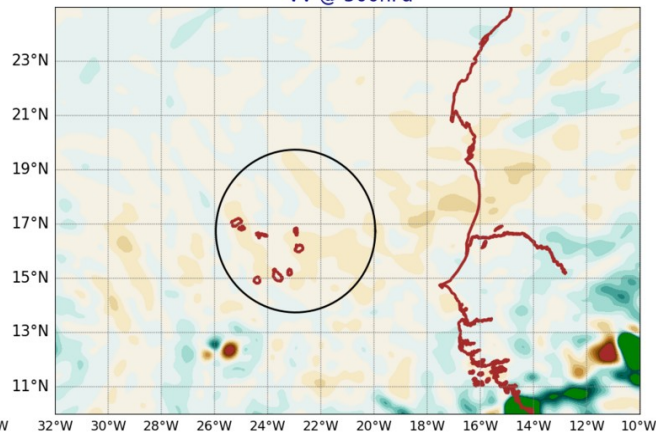
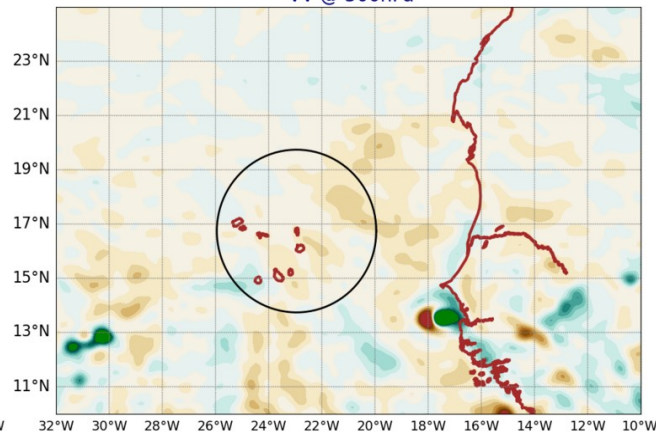
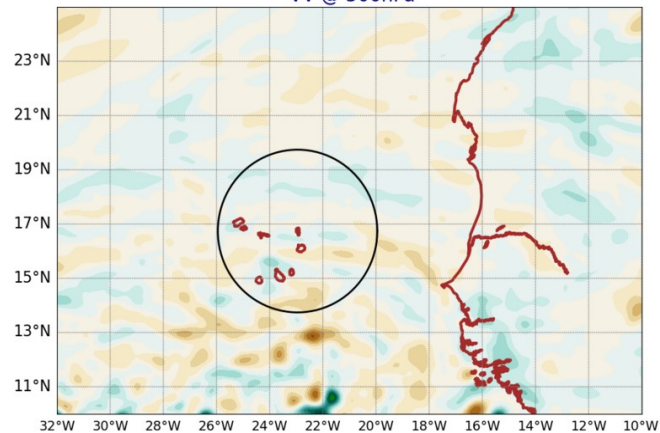
AROME VV @ 500hPa

AROME LWP+IWP

AROME25 20240812-12-UTC -ech(12h)
VV @ 500hPa

AROME25 20240813-12-UTC -ech(36h)
VV @ 500hPa

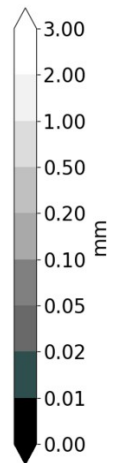
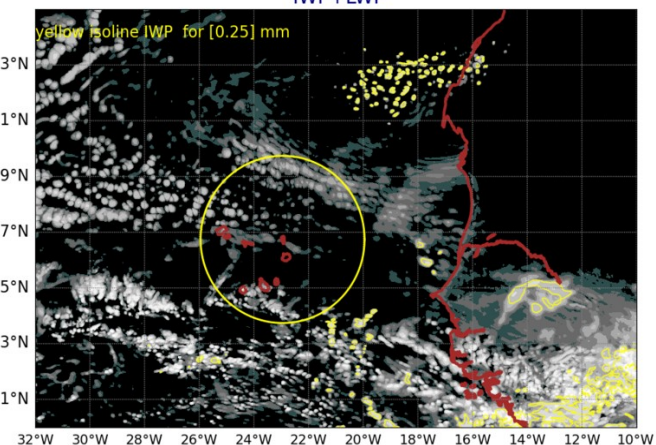
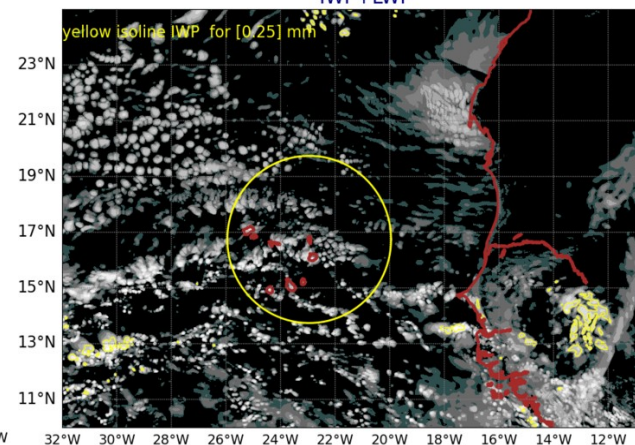
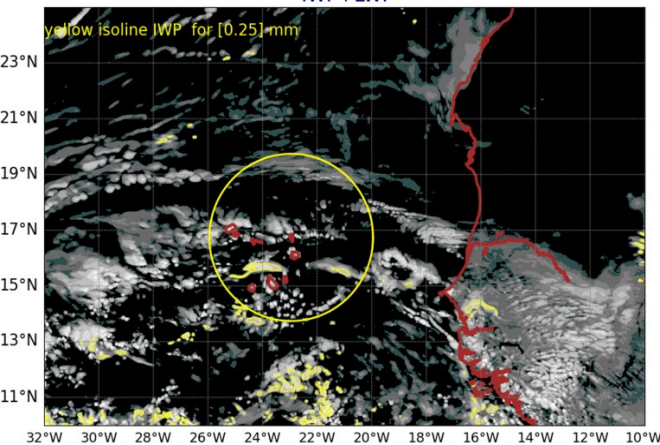
AROME25 20240814-12-UTC -ech(60h)
VV @ 500hPa



AROME25 20240812-12-UTC -ech(12h)
IWP+LWP

AROME25 20240813-12-UTC -ech(36h)
IWP+LWP

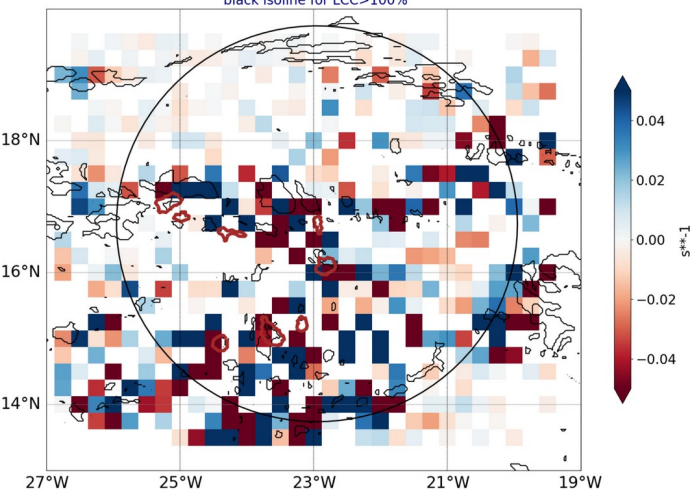
AROME25 20240814-12-UTC -ech(60h)
IWP+LWP



Smoc

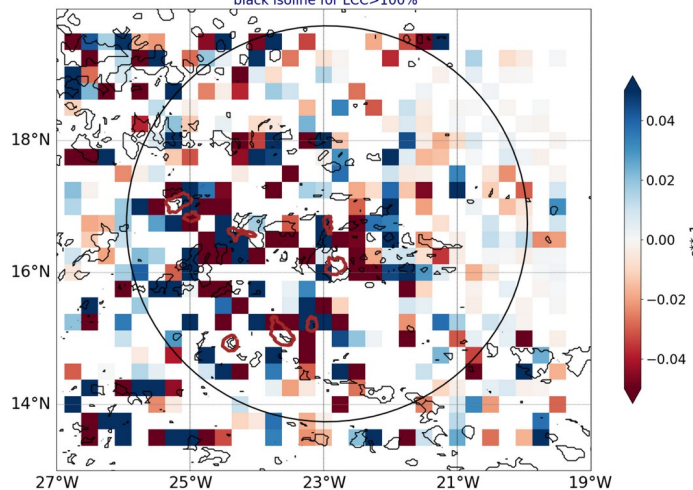
-blue for conv in subcloud layer-
dark isoline for low cloud cover

AROME25 regrid 0.25
20240812-12-UTC -ech(12h)
blue for conv in subcloud layer
black isoline for LCC>100%



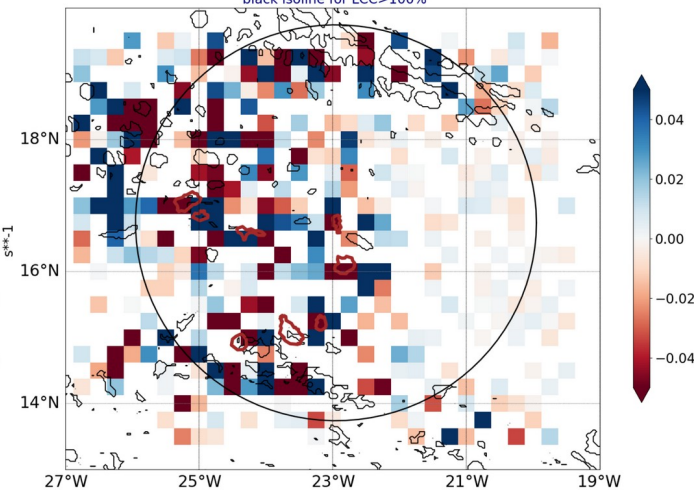
white box where subcloud and cloud layer have same sign of div

AROME25 regrid 0.25
20240813-12-UTC -ech(36h)
blue for conv in subcloud layer
black isoline for LCC>100%



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

AROME25 regrid 0.25
20240814-12-UTC -ech(60h)
blue for conv in subcloud layer
black isoline for LCC>100%



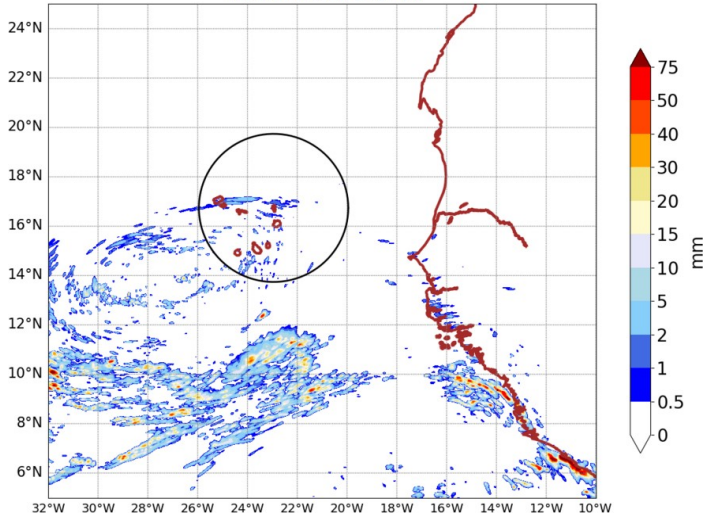
white box where subcloud and cloud layer have same sign of div

over 6h ech 12h and 15h

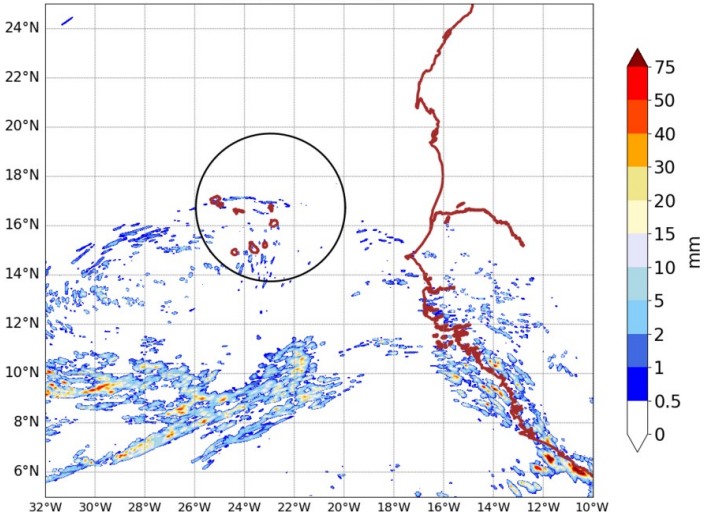
AROME precipitation

over 24h ech 36h and 60h

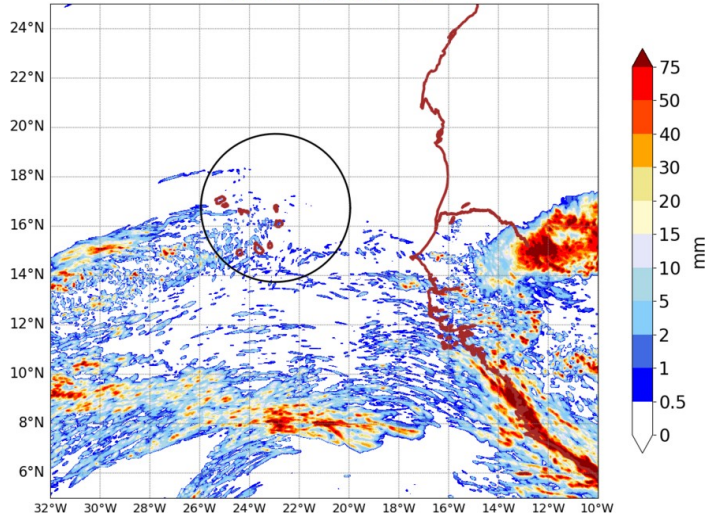
AROME25 20240812-12-UTC -ech(12h)
RR cumulated over 6h



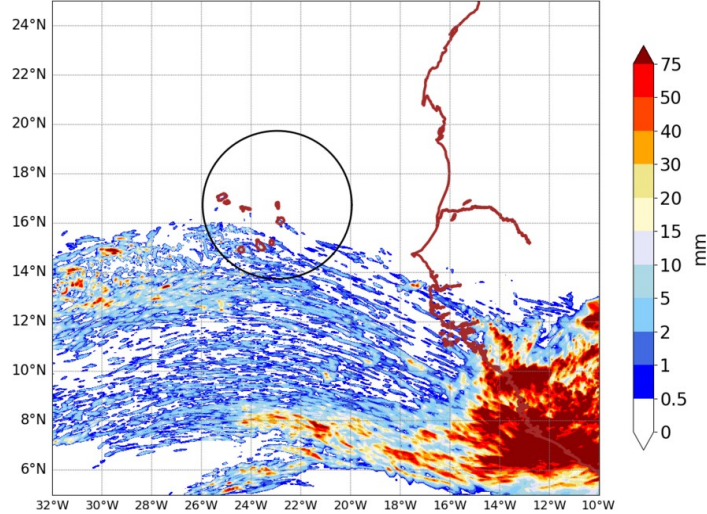
AROME25 20240812-15-UTC -ech(15h)
RR cumulated over 6h



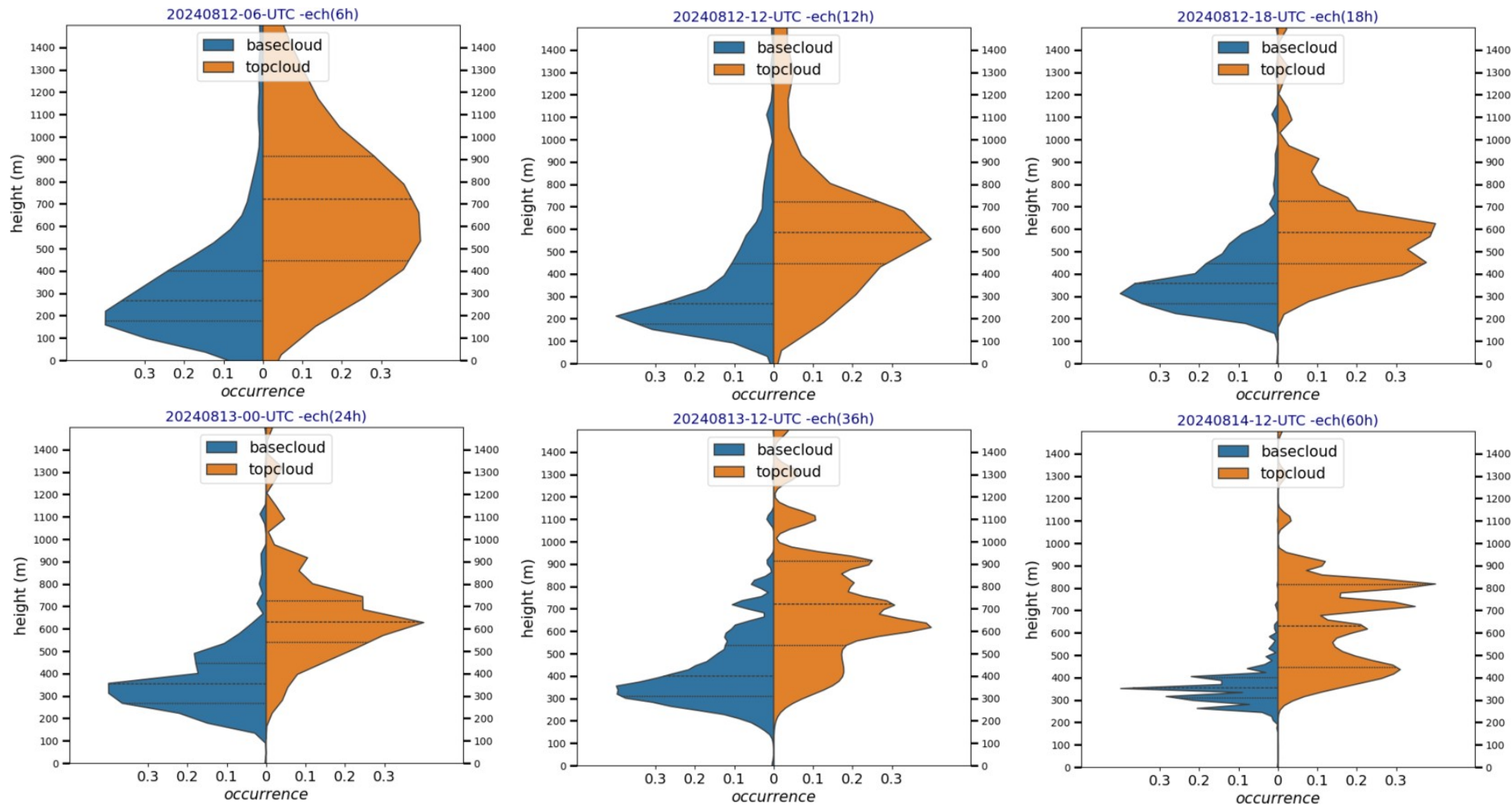
AROME25 20240813-12-UTC -ech(36h)
RR cumulated over 24h



AROME25 20240814-12-UTC -ech(60h)
RR cumulated over 24h

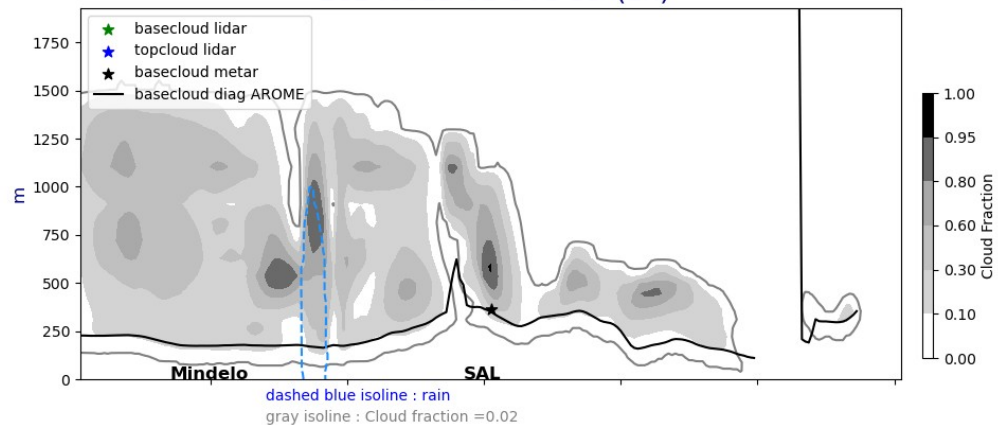


AROME base and top cloud (mean in the 3° circle)

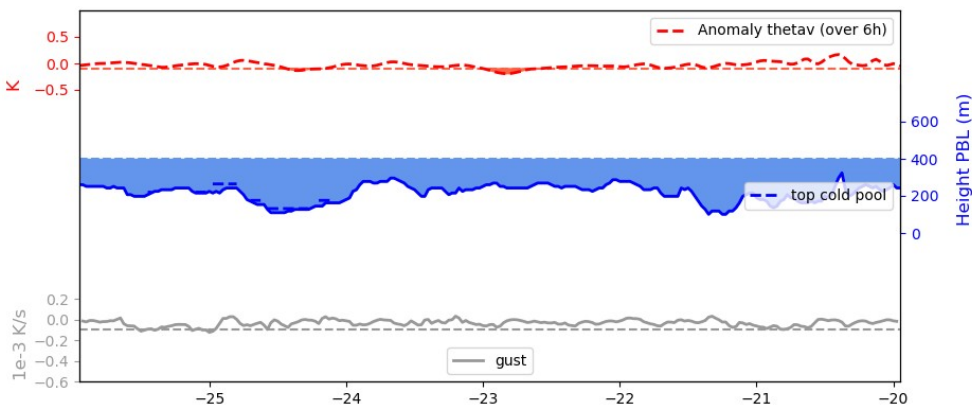
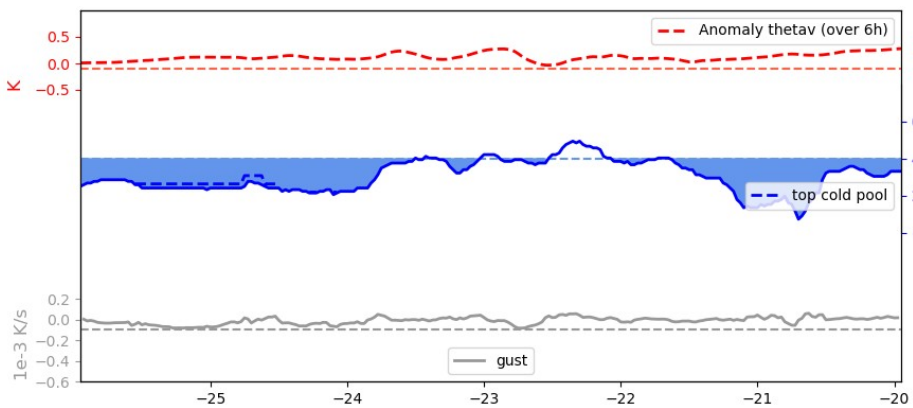
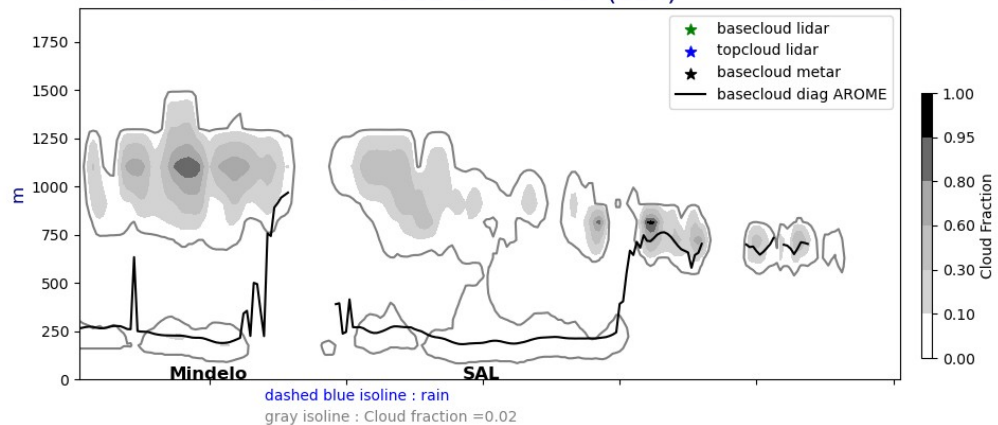


Lat. cross section @17°5N fct : 01UTC, 12UTC

Cross section E/W @ 17.5N
20240812-01-UTC ech(1h)

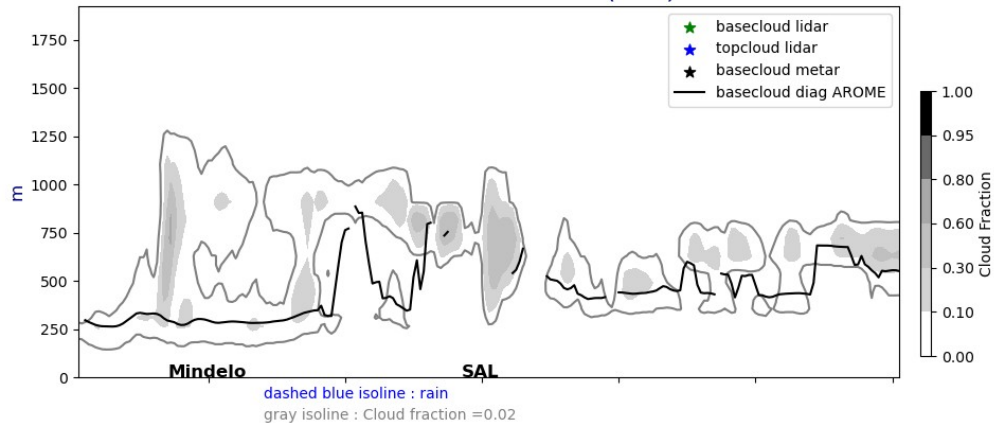


Cross section E/W @ 17.5N
20240812-12-UTC ech(12h)

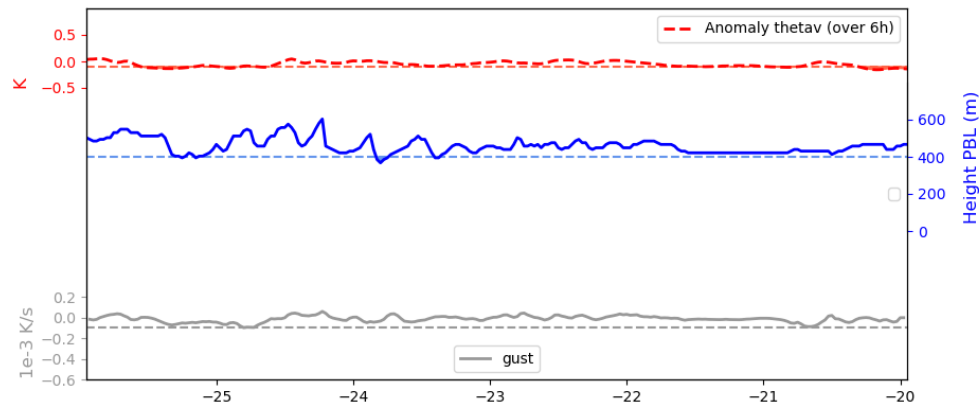
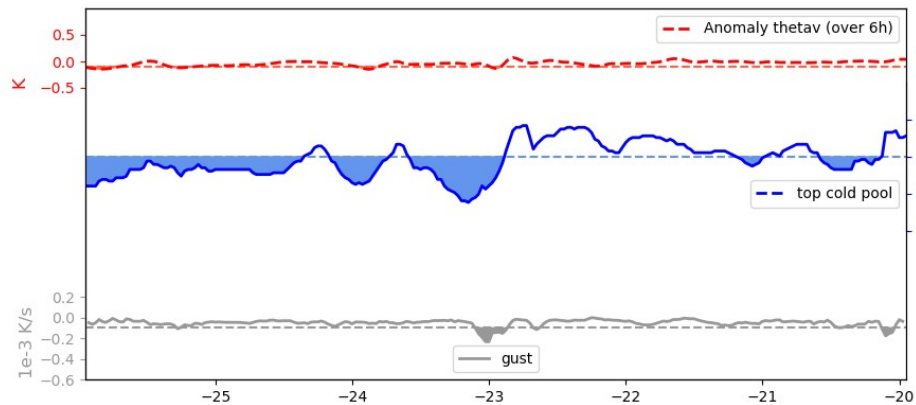
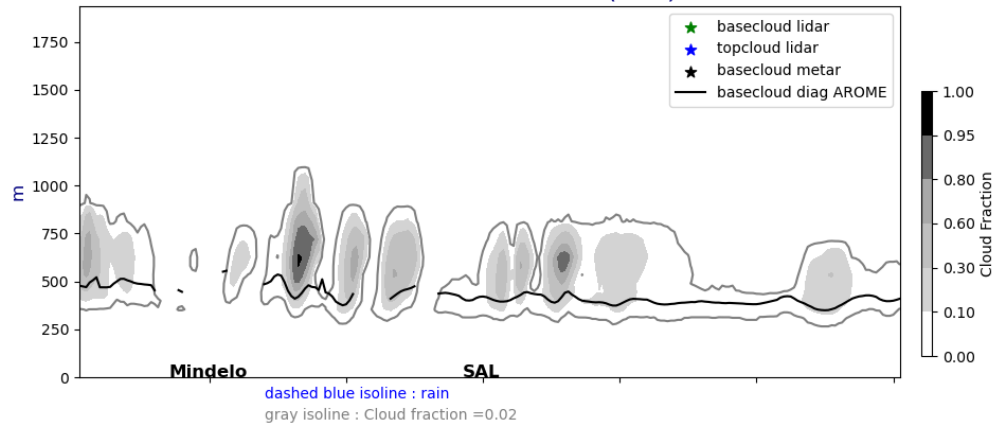


Lat. cross section @17°5N fct : J+1 and J+2 @ 12UTC

Cross section E/W @ 17.5N
20240813-12-UTC ech(36h)

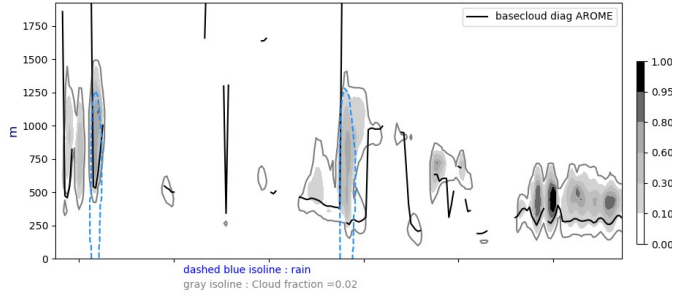


Cross section E/W @ 17.5N
20240814-12-UTC ech(60h)

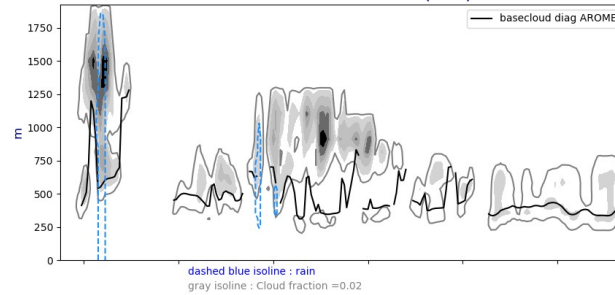


Lon. cross section @22W fct : J,J+1, J+2 @ 12 UTC

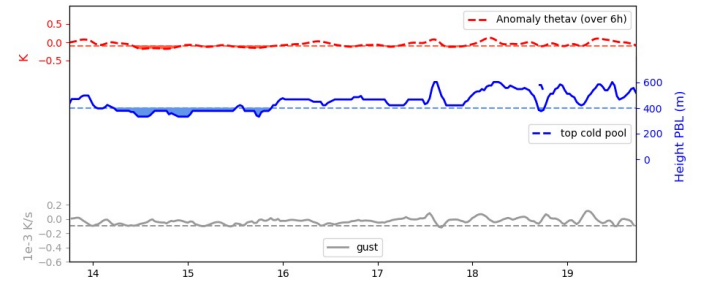
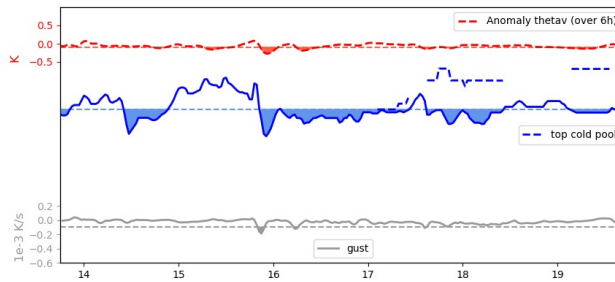
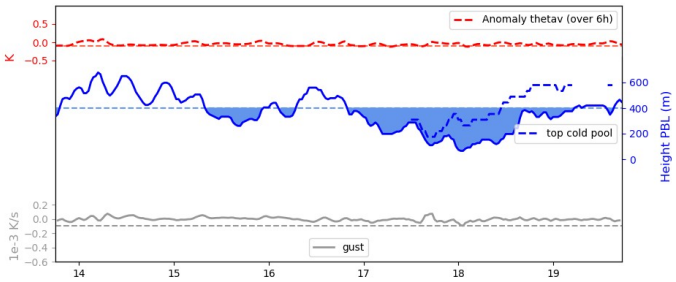
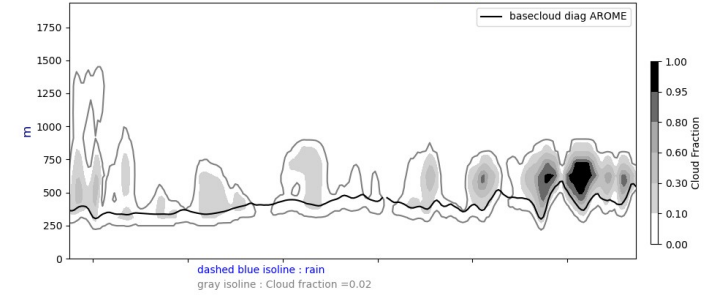
Cross section S/N @ -22W
20240812-12-UTC ech(12h)



Cross section S/N @ -22W
20240813-12-UTC ech(36h)

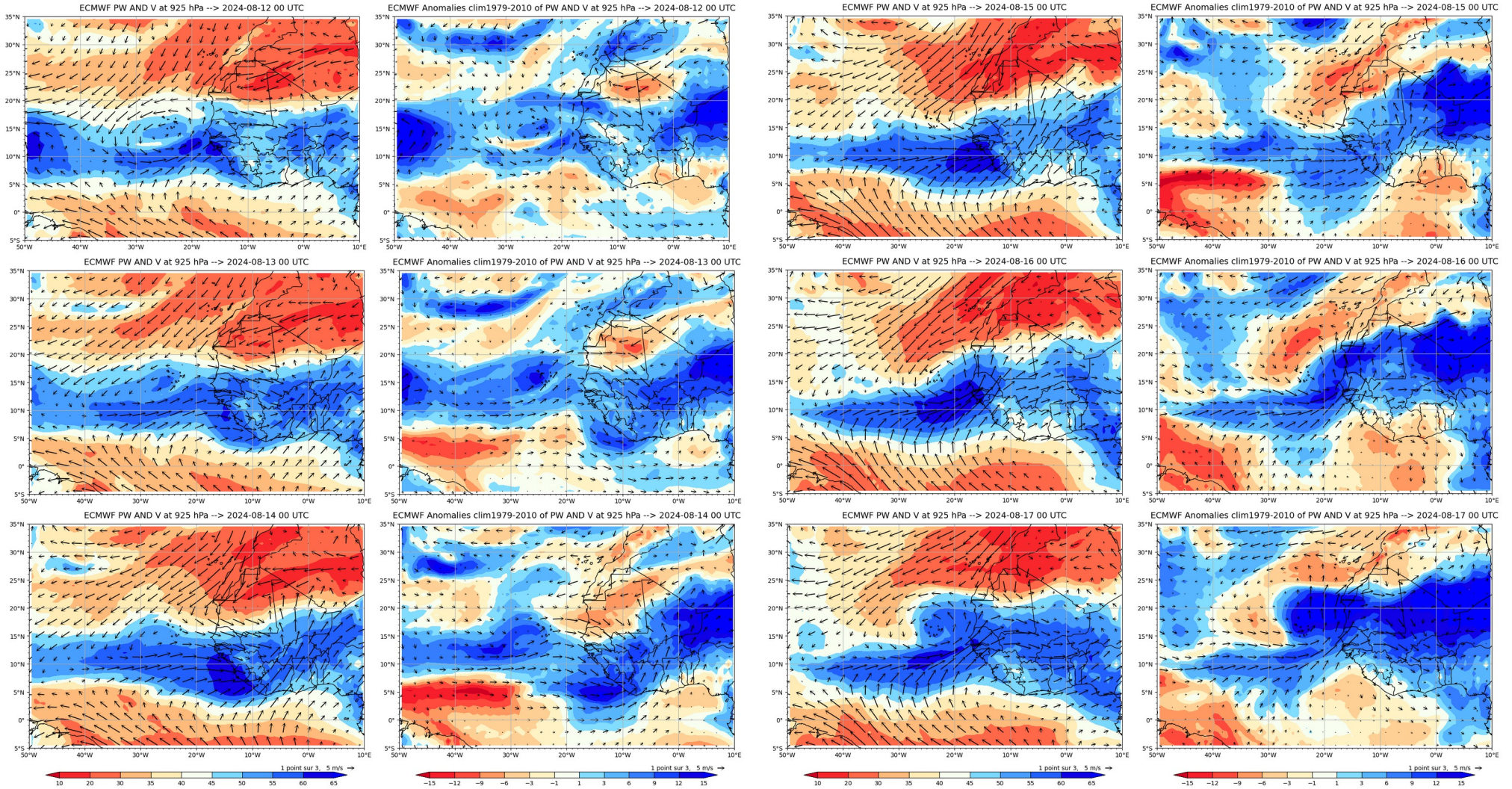


Cross section S/N @ -22W
20240814-12-UTC ech(60h)

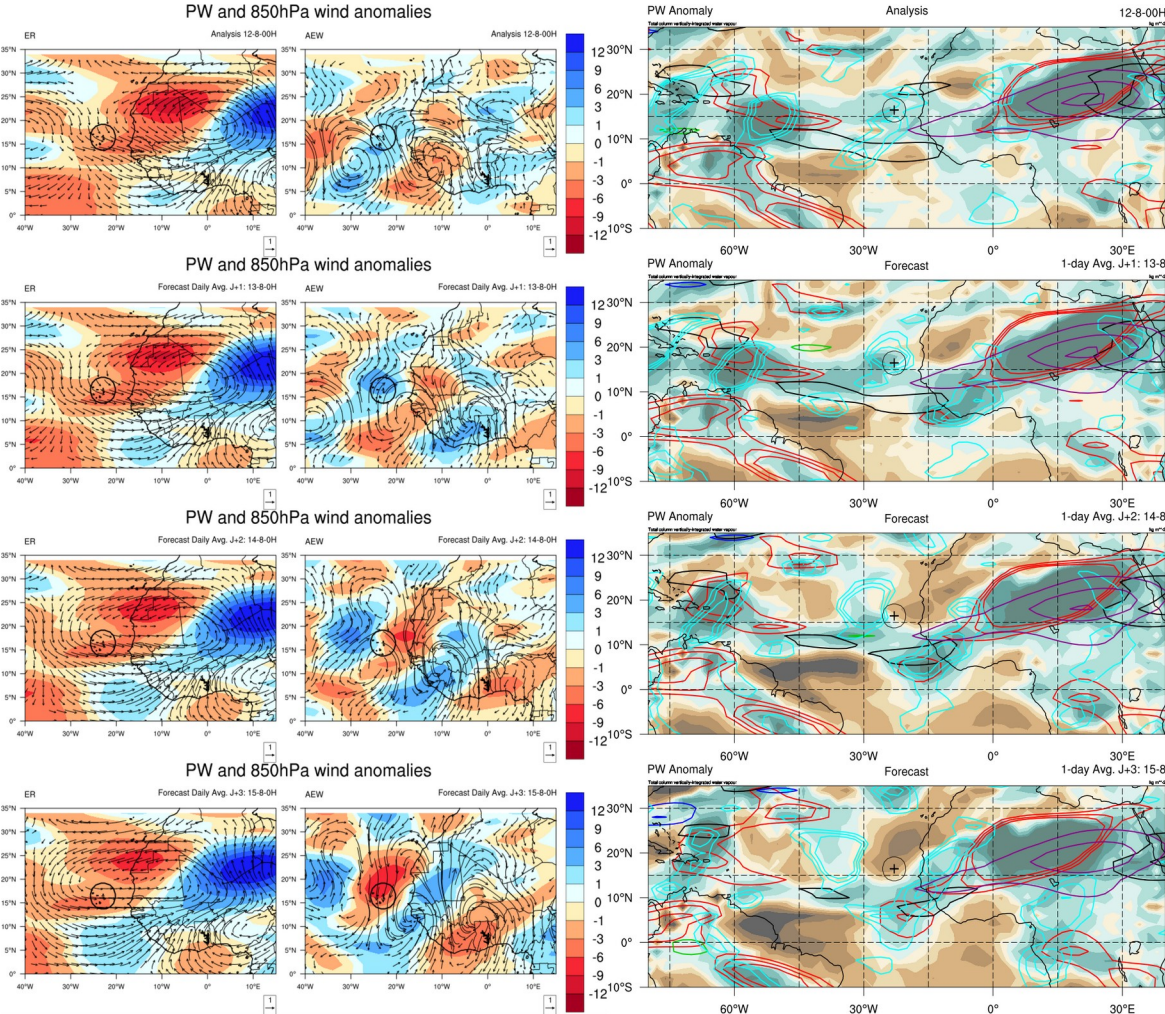


Week forecast J - J+7

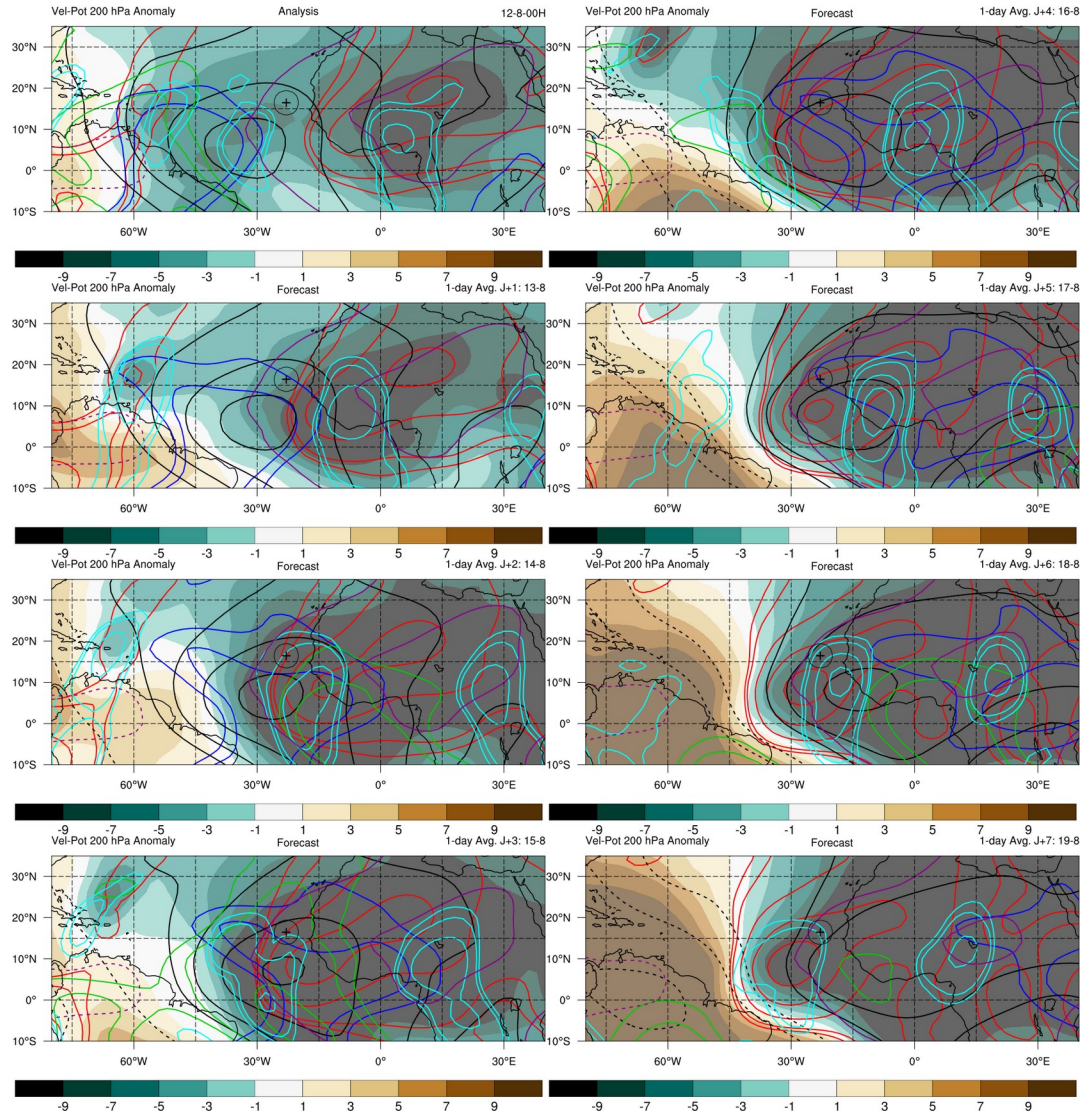
Daily PW and wind @ 925 hPa – total and anomalies



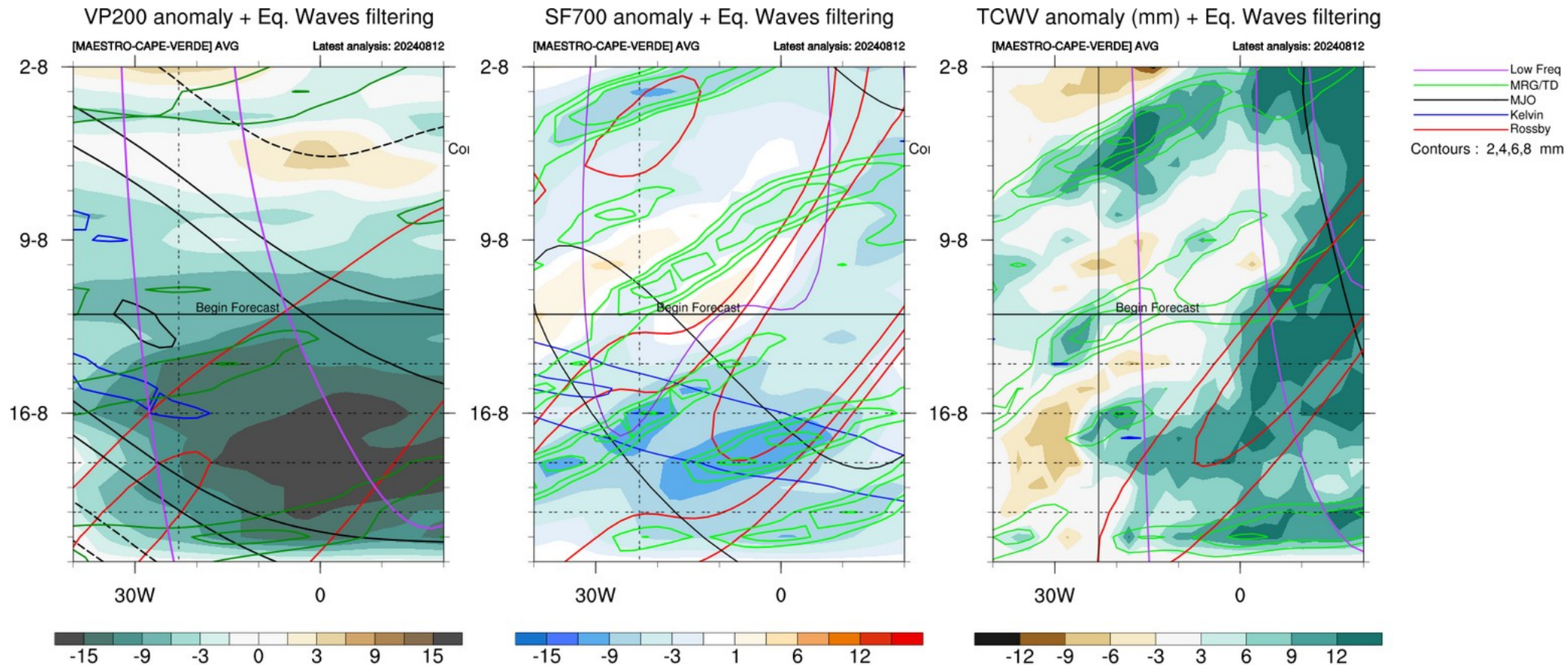
Decomposition PW/Wind and Waves contours J to J+3



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



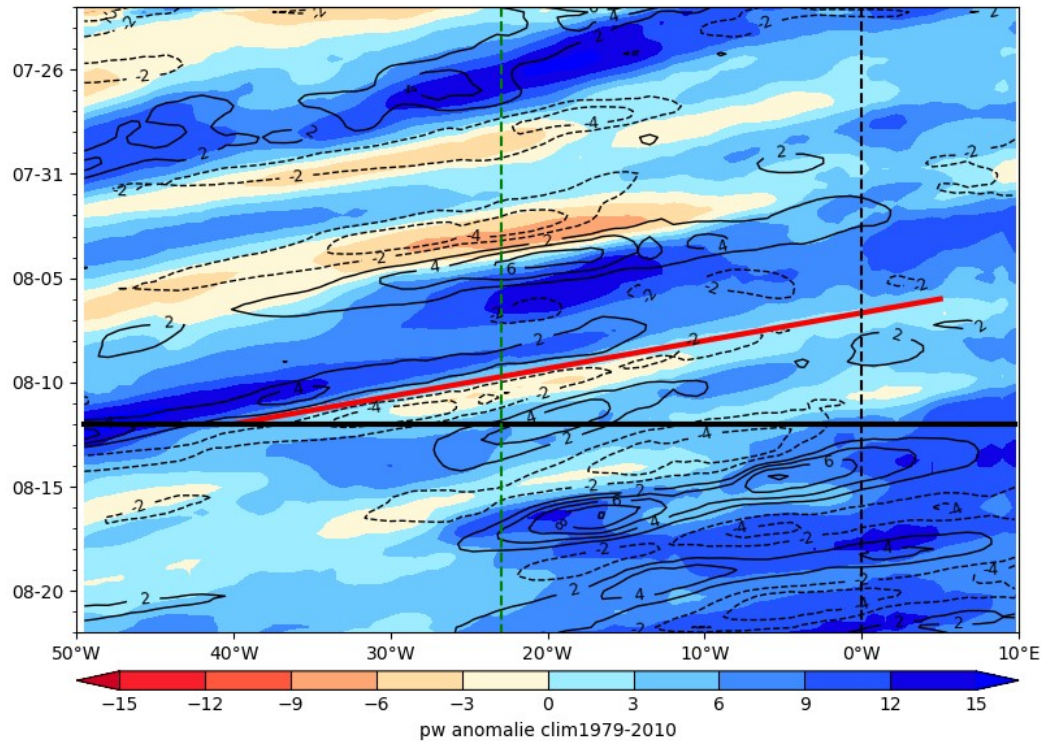
Equatorial Waves filtering hovmollers



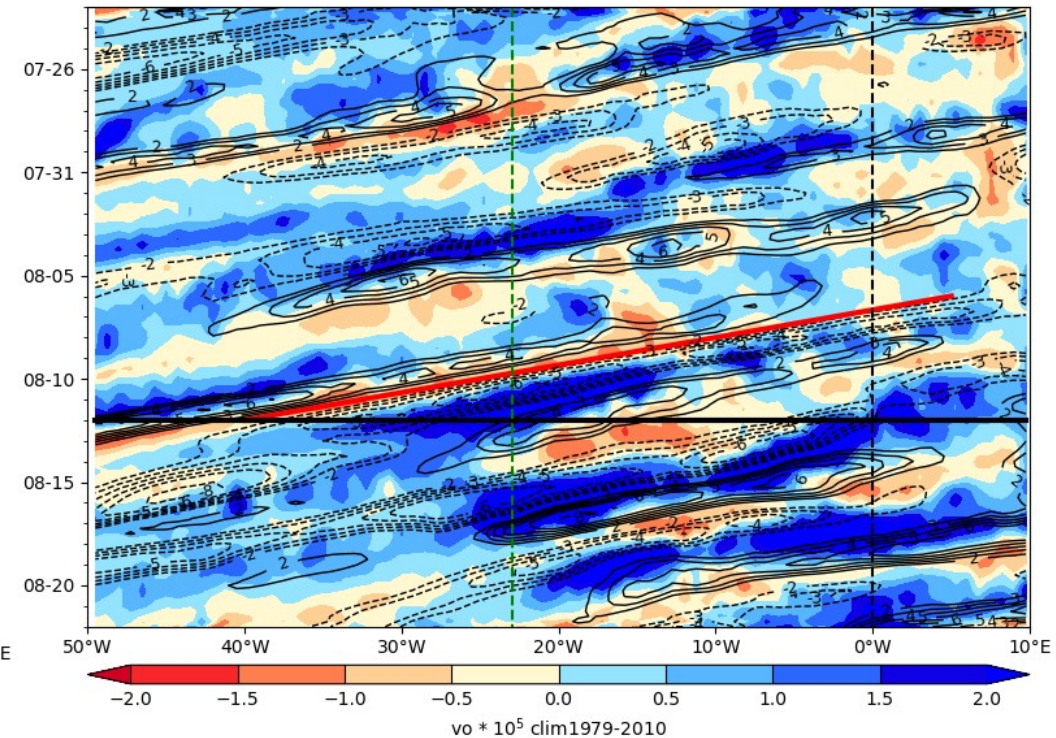
Hovmoller anomaly

Precipitable water – vorticity 850hPa

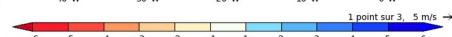
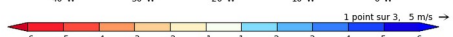
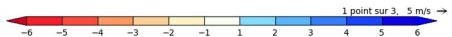
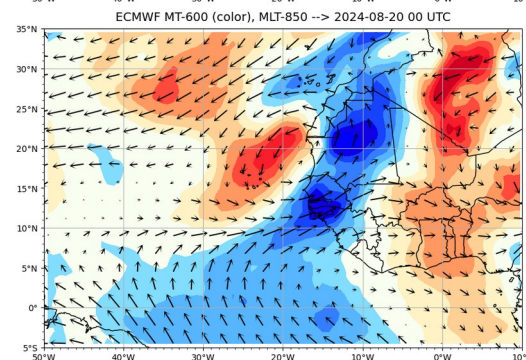
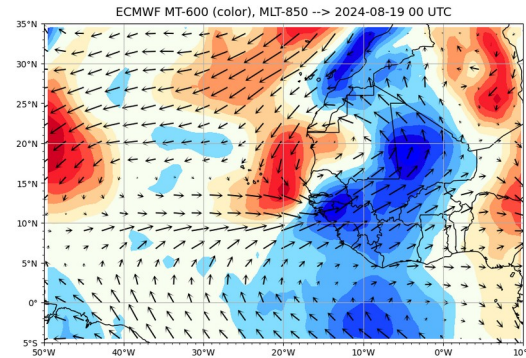
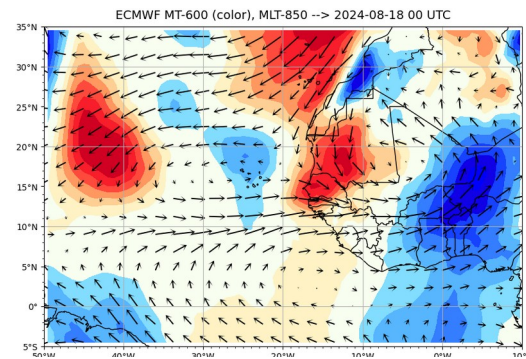
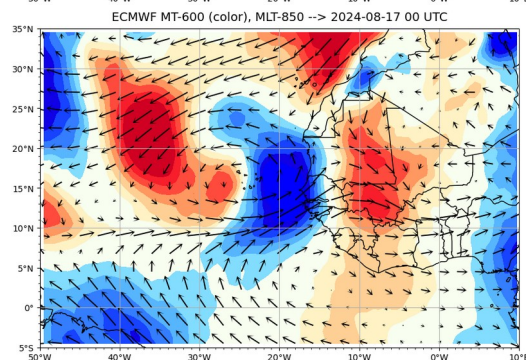
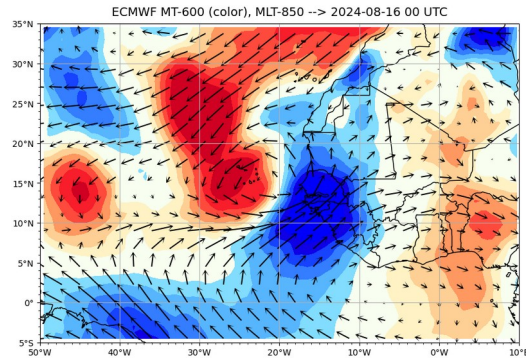
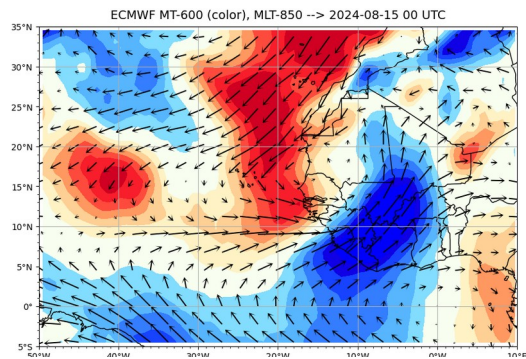
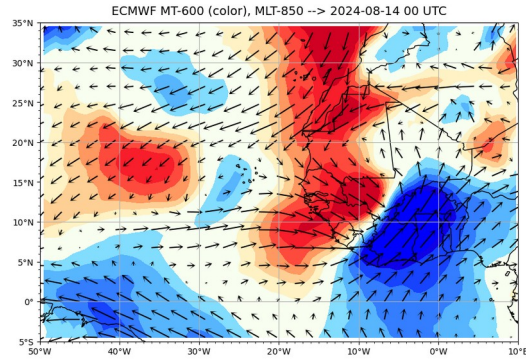
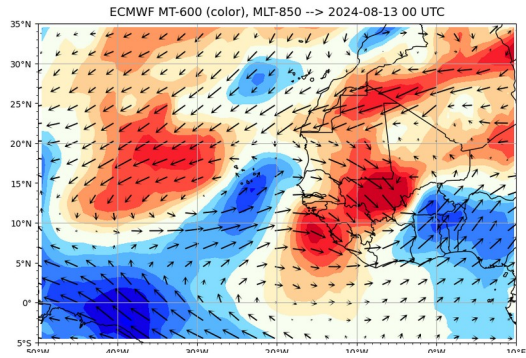
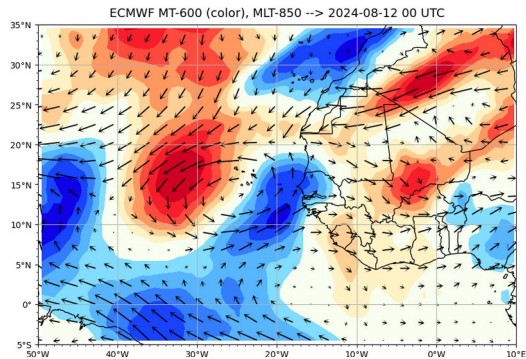
ECMWF PW (color) AND V at 925 hPa 2024-08-12

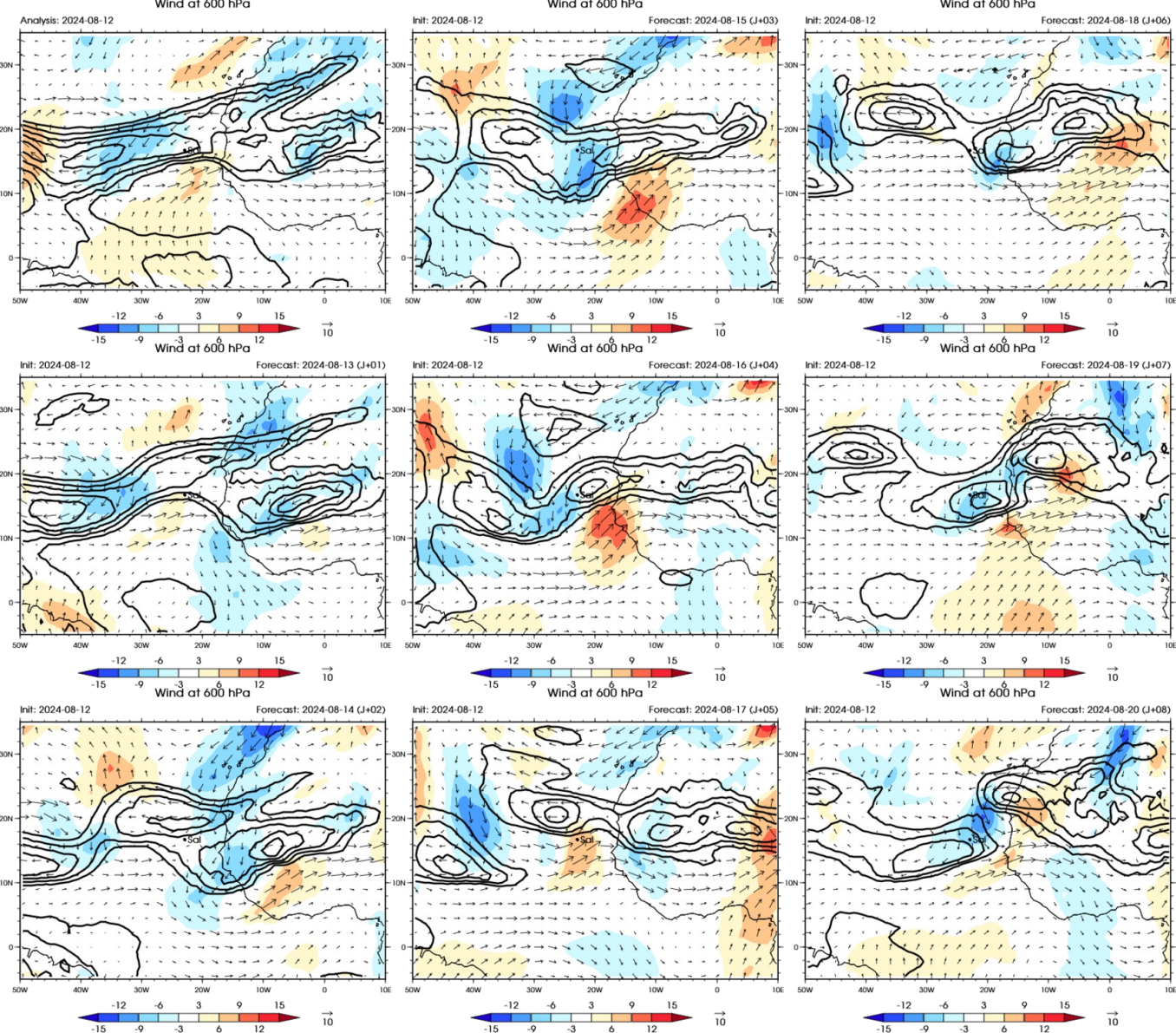


ECMWF Vorticity 850 hPa (color), V-700 hPa 2024-08-12



Monsoon Flow





African Easterly Jet wind 600 hPa

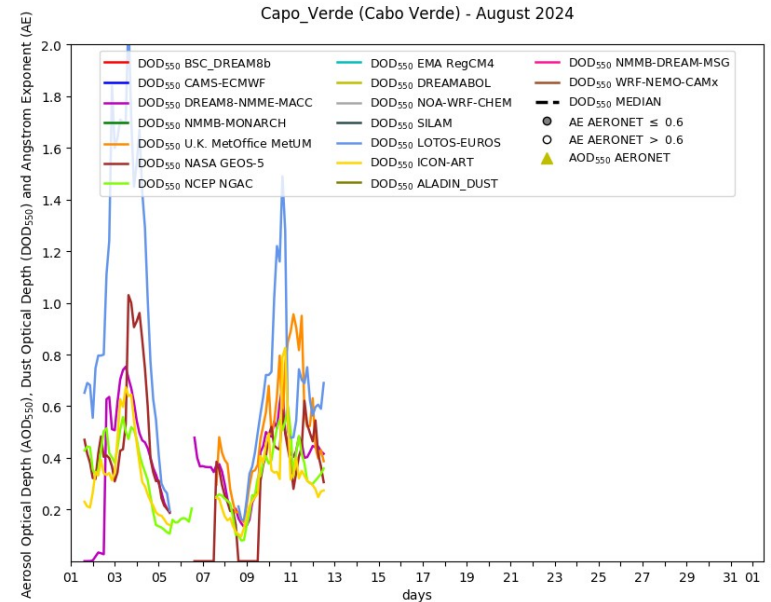
Dust Observations and Forecast

- Temporal evolution model/Obs at Sal :

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

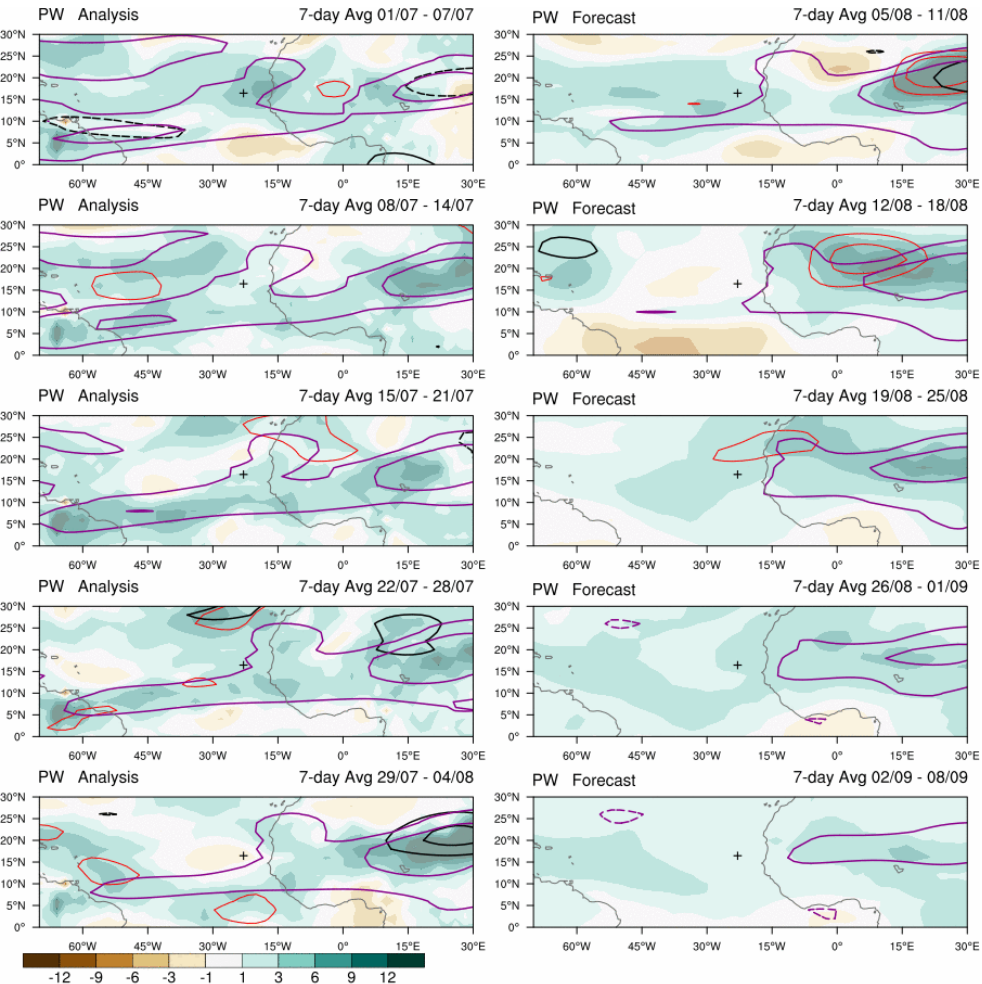
- Ensemble forecast Dust Optical Depth :

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



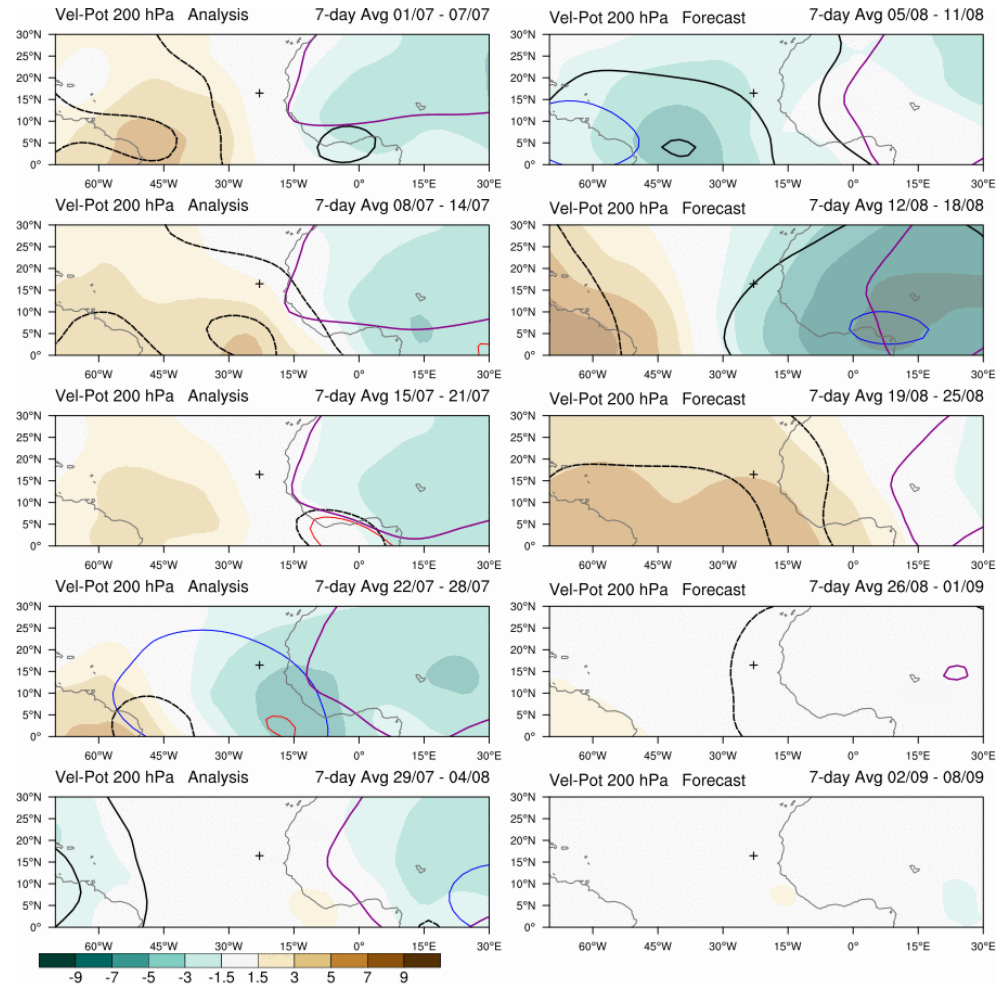
Subseasonal forecast
(updated once a week)

4 weeks forecast PW et VP200



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

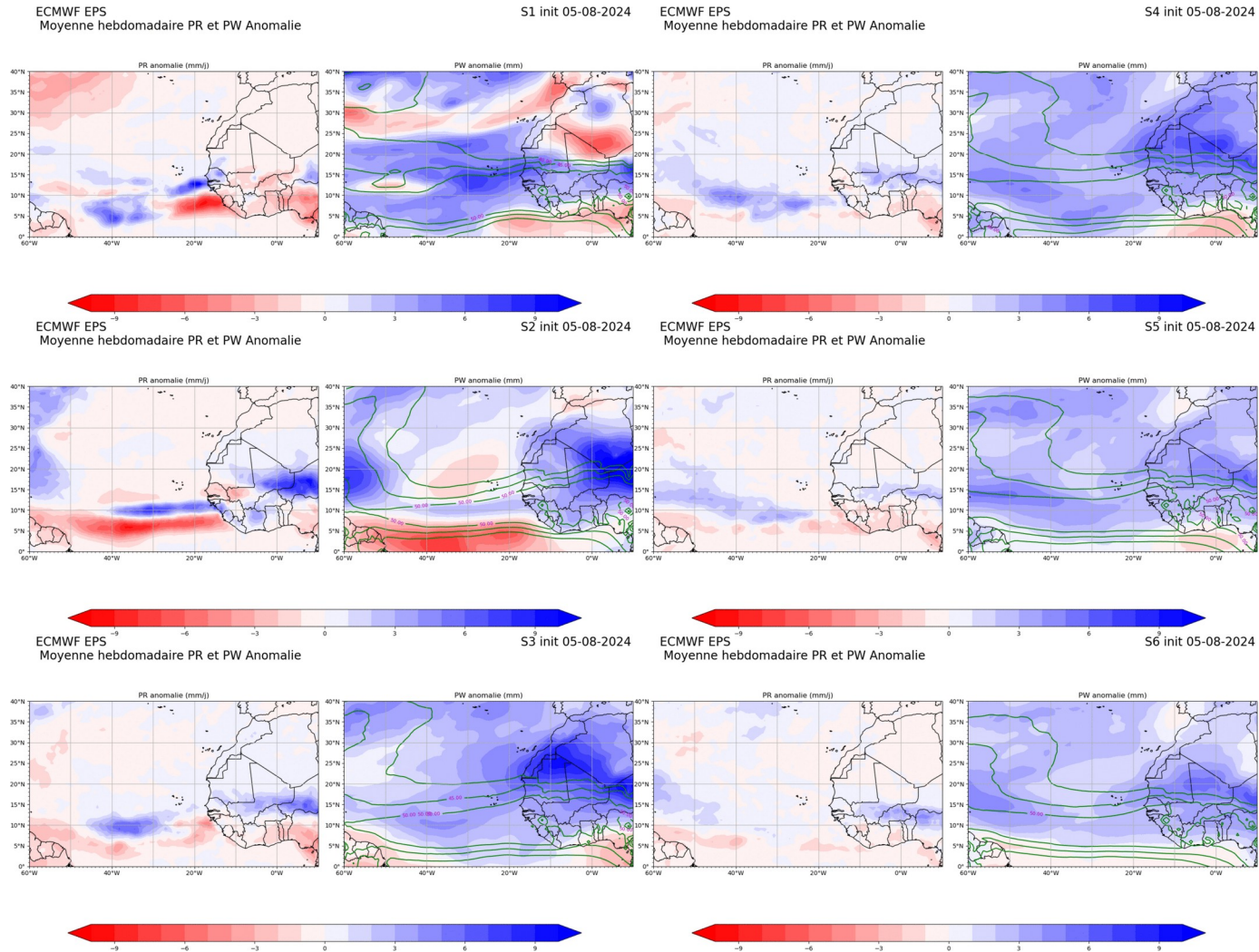
contact: Philippe Peyrille
 philippe.peyrille@meteo.fr



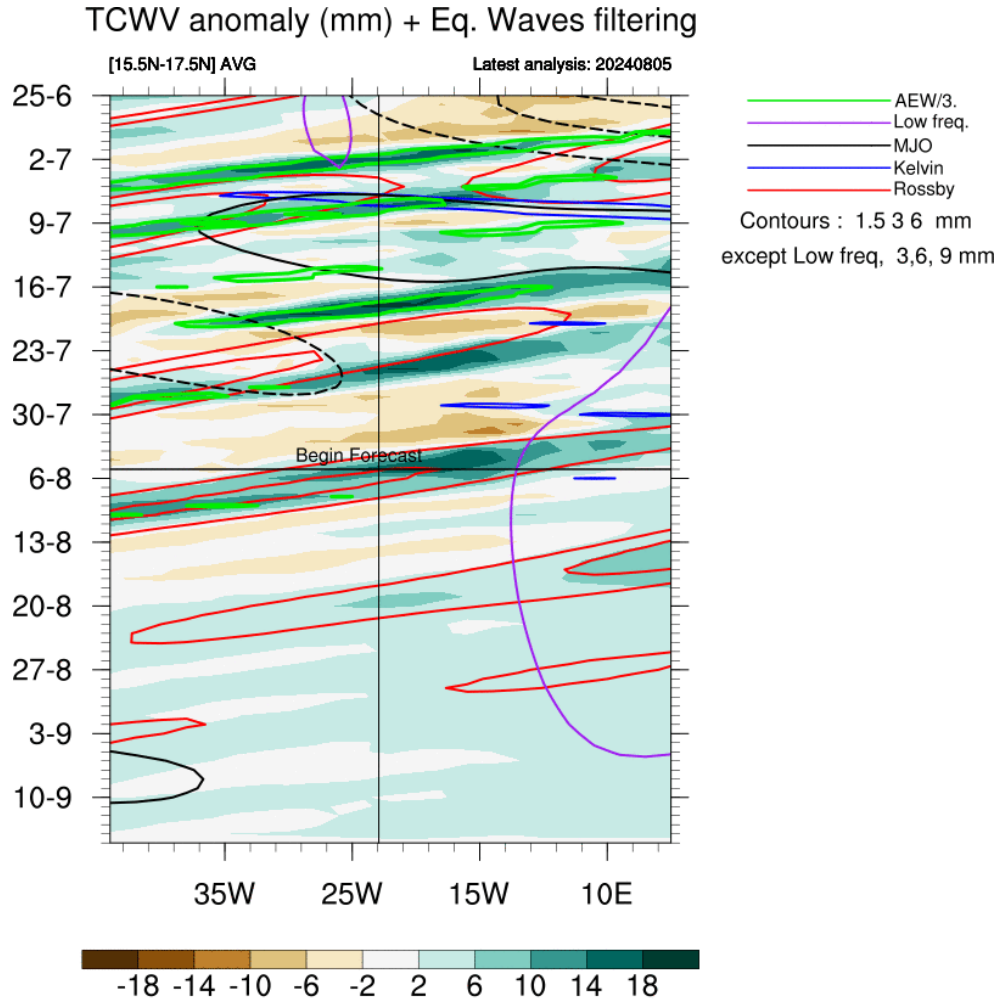
Contours: -6, -4, -2, m2s-1
 — MRG/TD
 — Kelvin
 — Rossby
 — MJO
 — Low

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

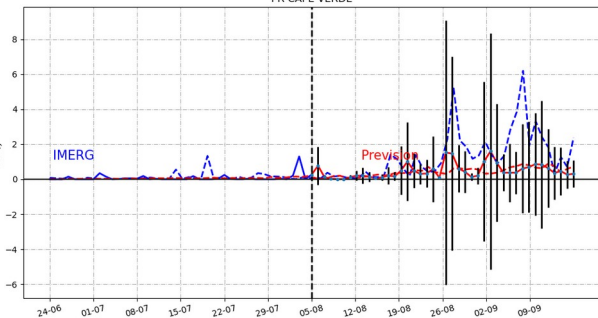


Temporal evolution PR, PW (+ EKE)

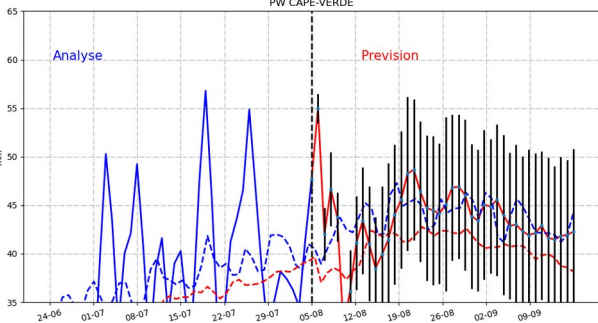
journalier

ECMWF EPS
init 05-08
Moyenne journaliere PR,PW Bruts

PR CAPE-VERDE



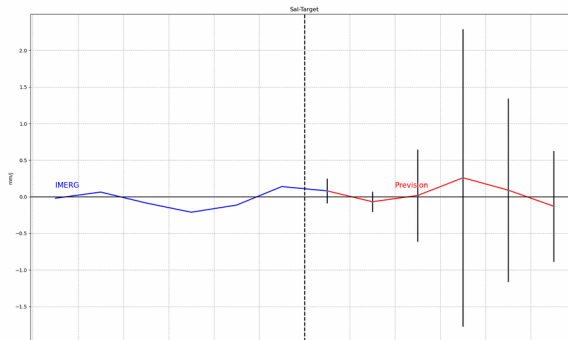
PW CAPE-VERDE



hebdomadaire

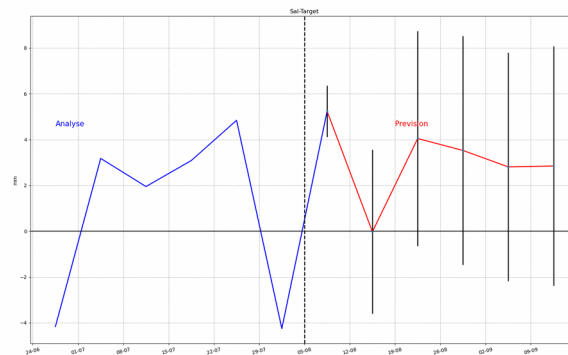
ECMWF EPS
Moyenne hebdomadaire PR Anomalie

init 05-08



ECMWF EPS
Moyenne hebdomadaire PW Anomalie

init 05-08



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							

