

# DRAFT SUMMARY MAESTRO

Four parts :

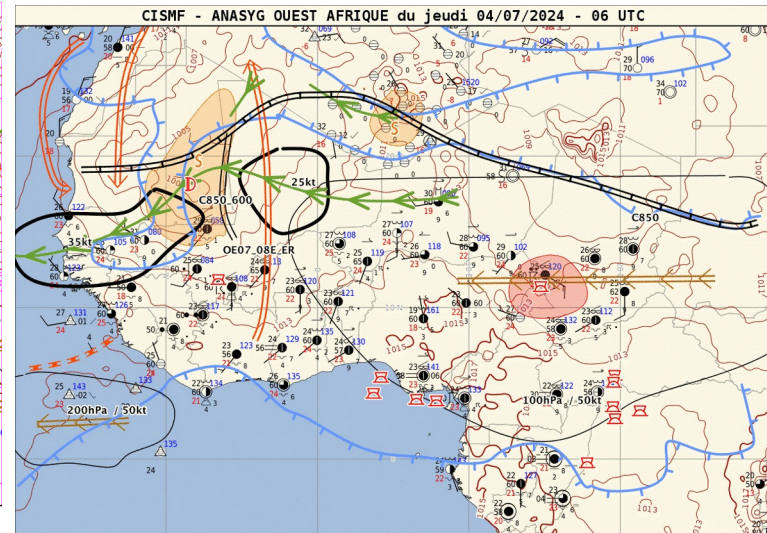
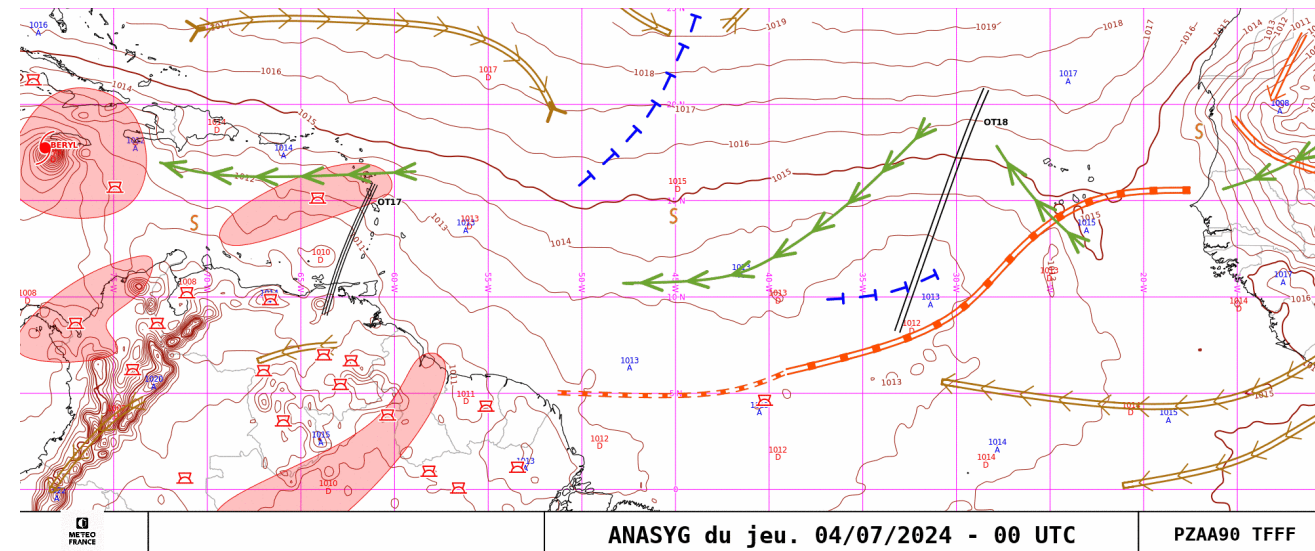
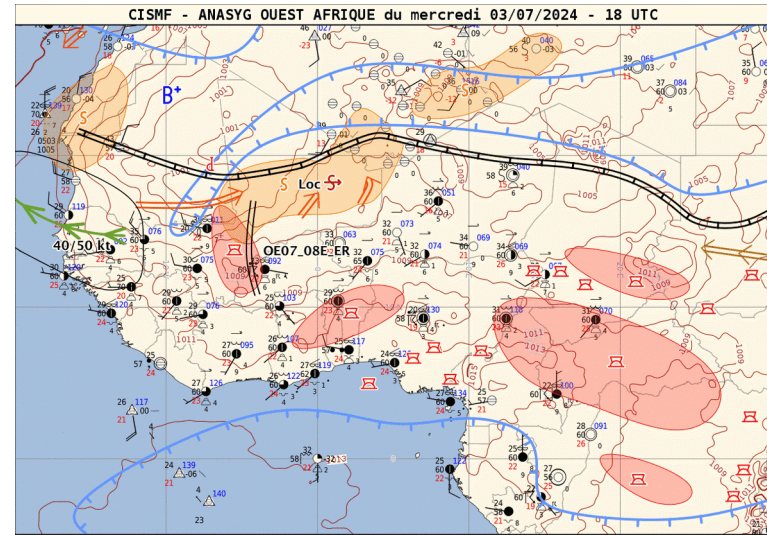
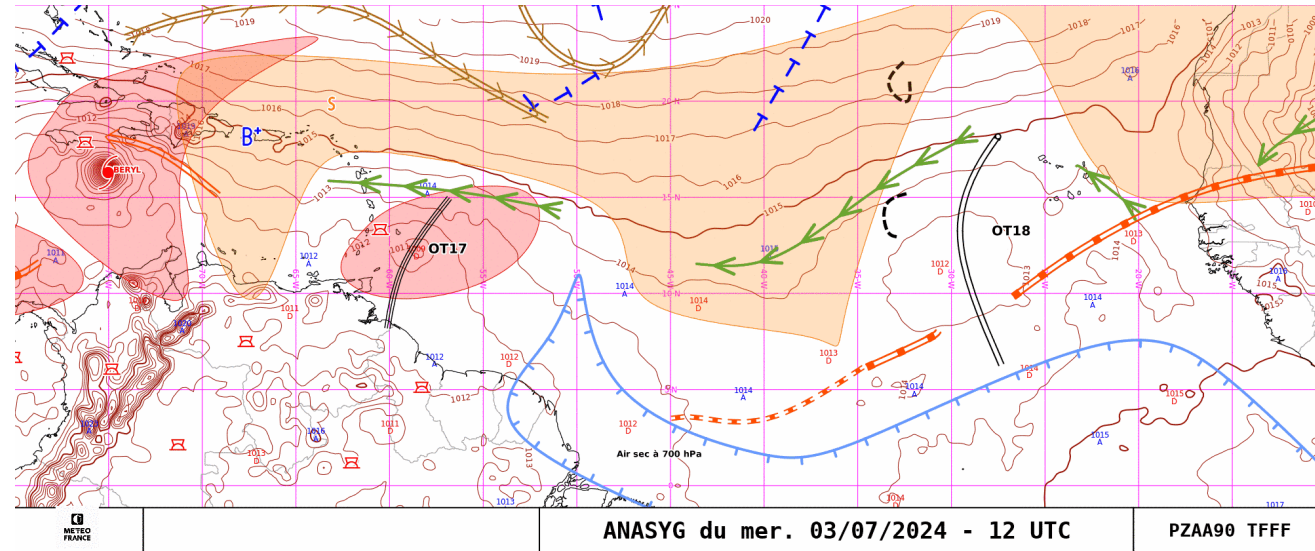
- evaluation J-1
- short term forecast J-J+36h
- week forecast J-J+7
- subseasonal forecast (a few weeks) : updated once a week

# Evaluation Day-1

- West Africa ANASYG + satellite image (feedback to improve our experience)
- DIRAG ANASYG
- Precipitable Water, Meridional Transport J-1
- Carte PW + FFT waves J-1

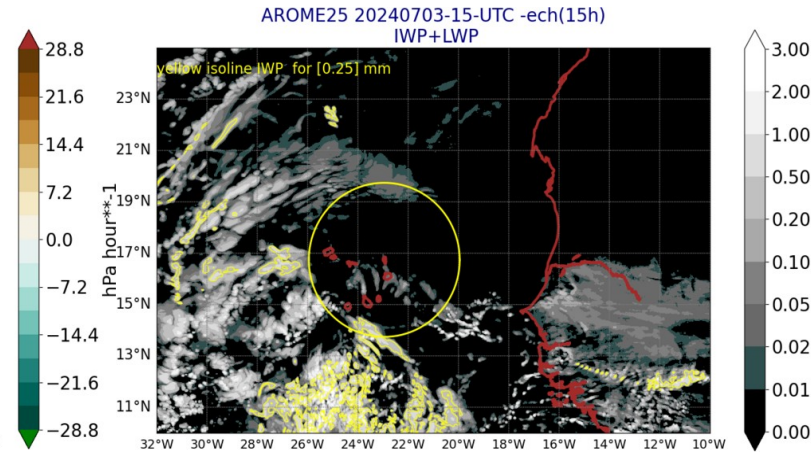
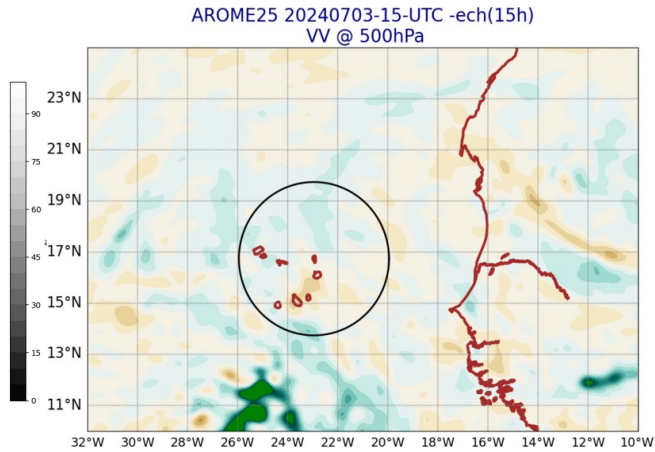
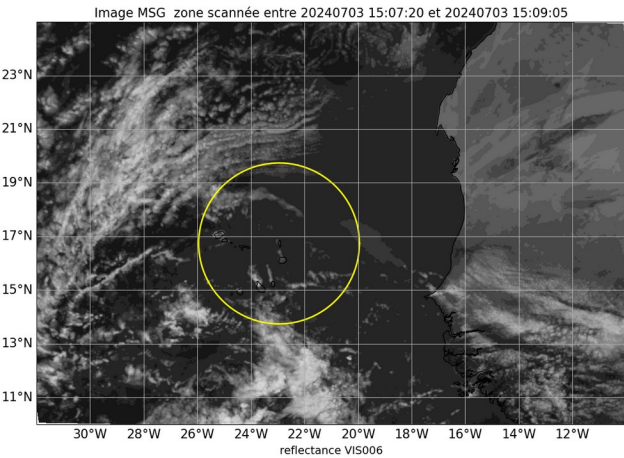
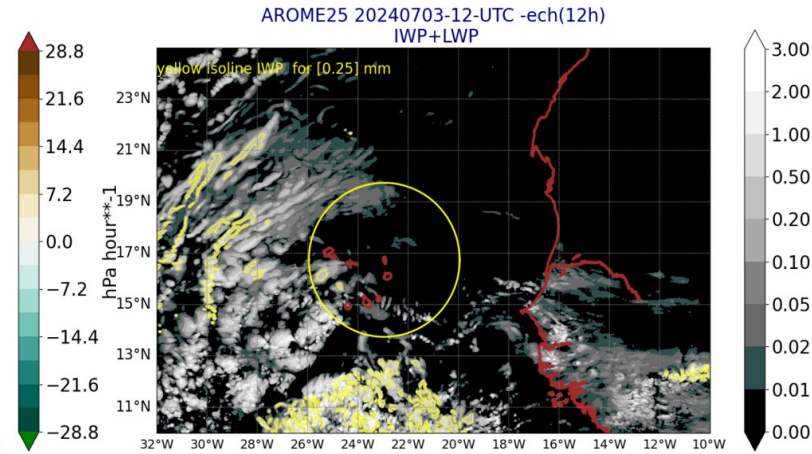
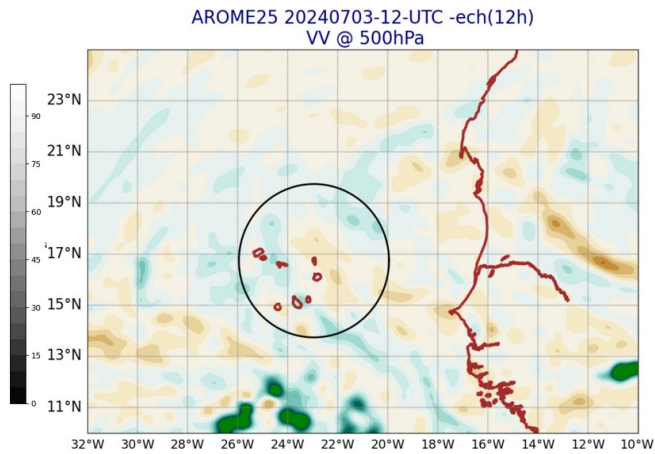
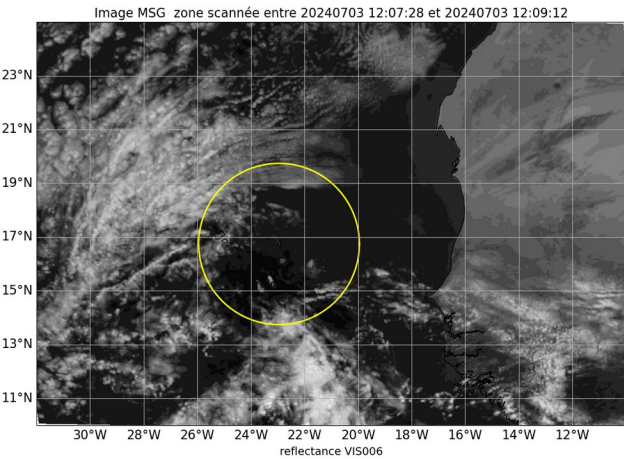
# Anasyg J-1 12 UTC et J 00 UTC

# Anasyg J-1 18 UTC et J 06 UTC



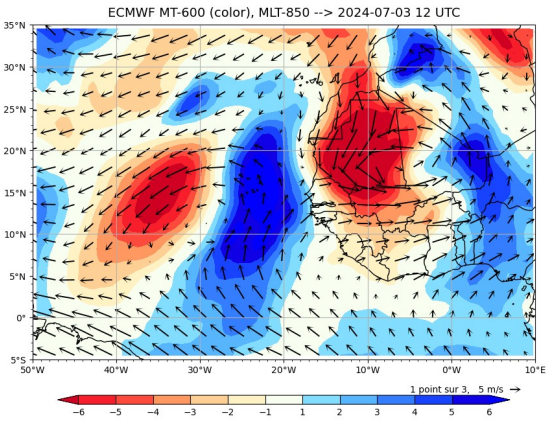
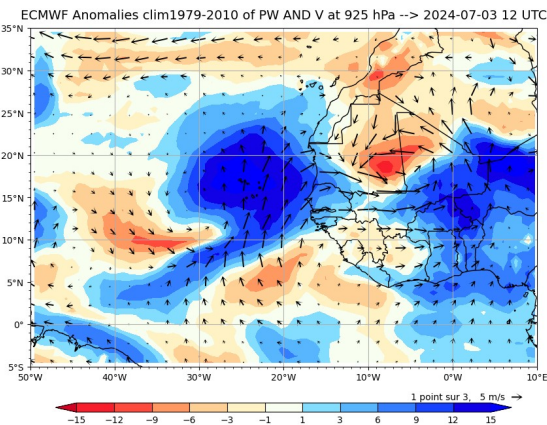
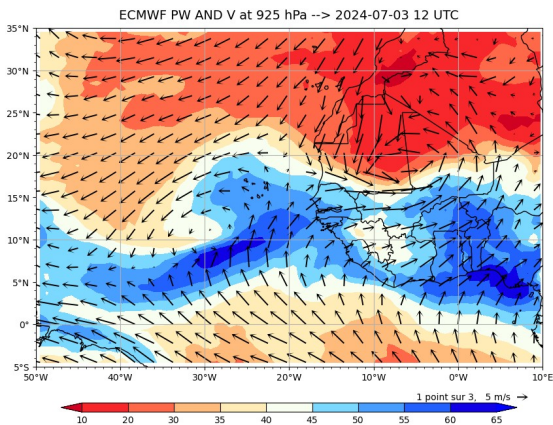
# Image MSG Visible J-1 12 and 15 UTC

# Arome J-1 12 and 15 UTC

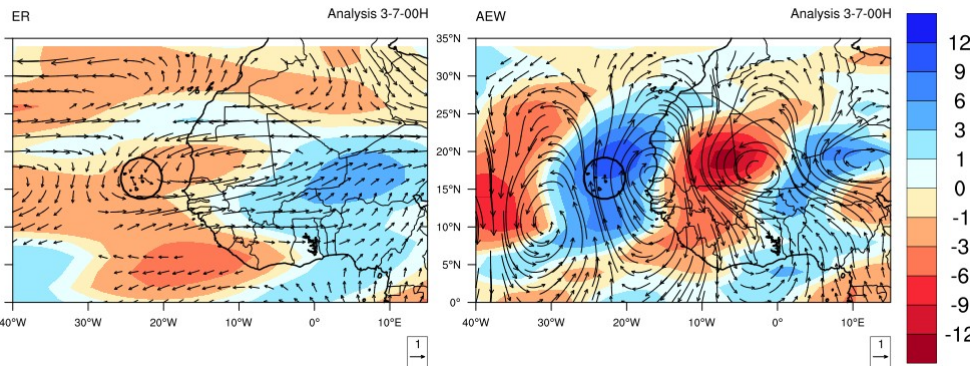


# Precipitable Water - Merid. Transport J-1 12UTC

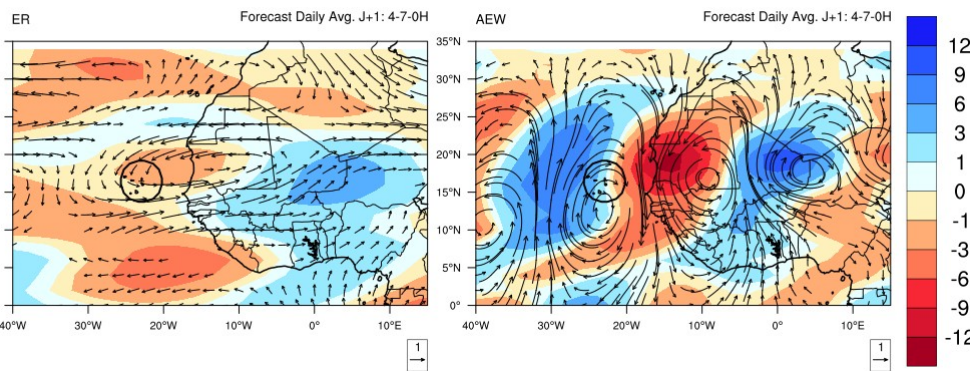
# Waves J-1 00 UTC and J 00UTC



## PW and 850hPa wind anomalies



## PW and 850hPa wind anomalies

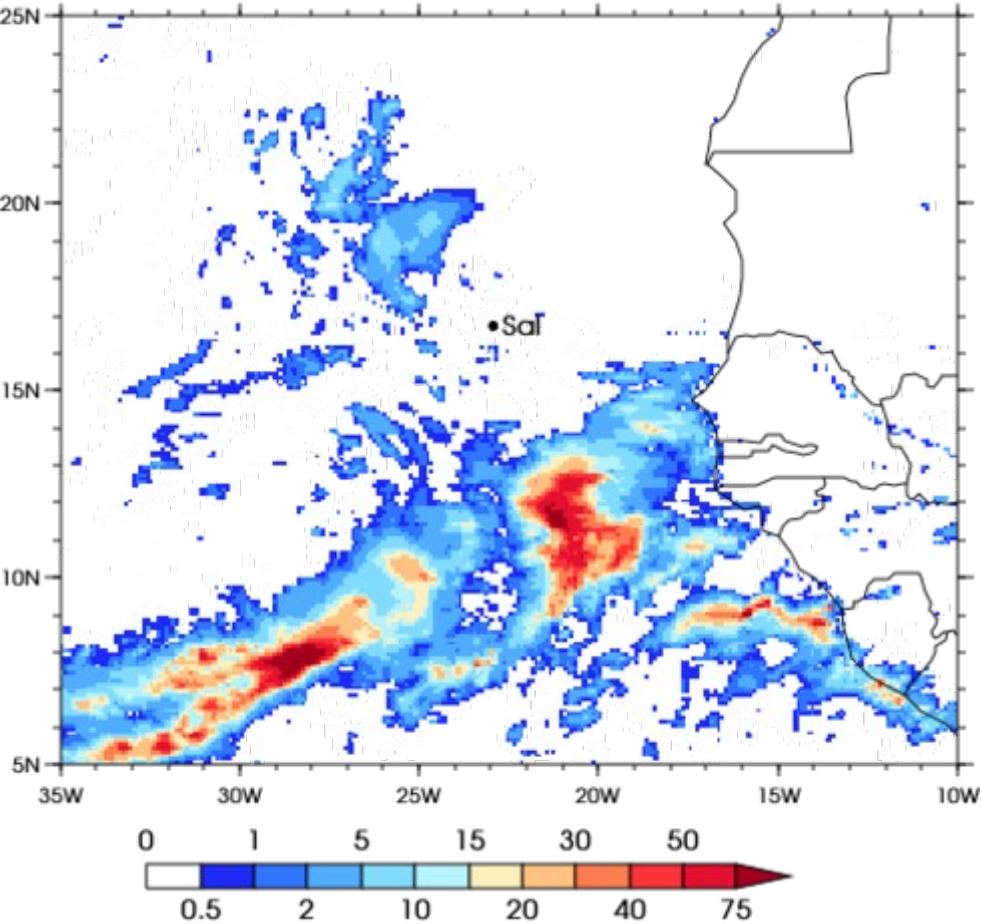


# Precipitation IMERG and AROME J-1

3IMERGHHE GPM IMERG Early Precipitation

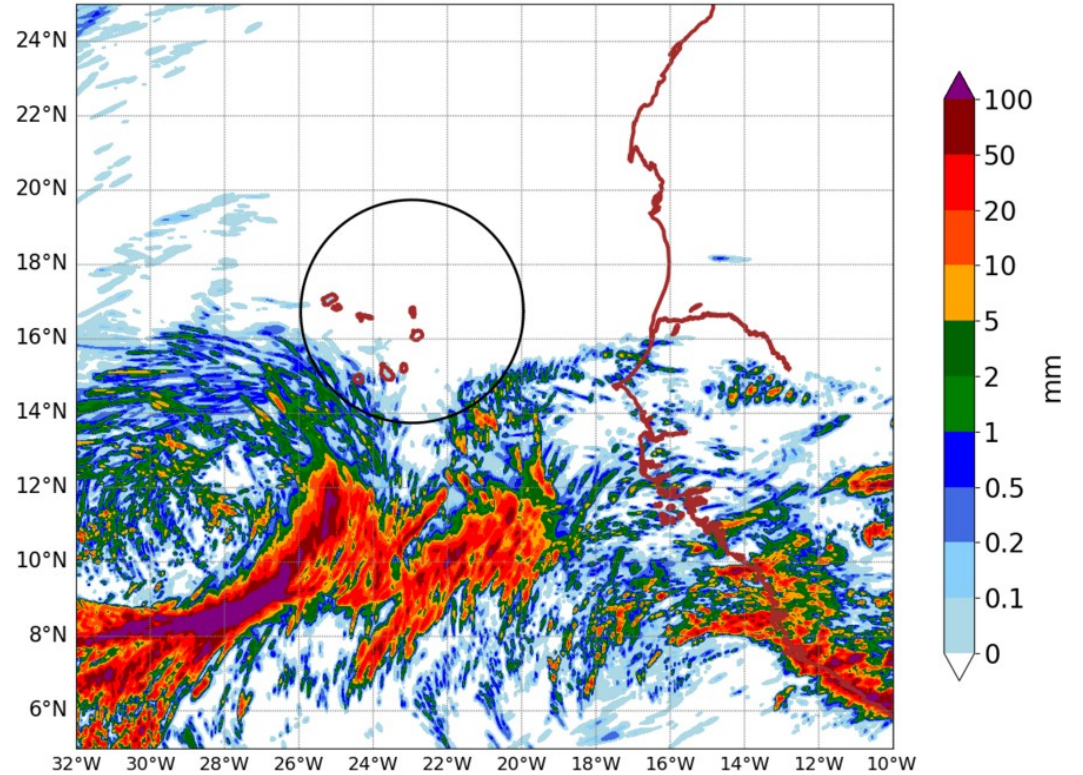
Daily accumulated: 2024-07-03

Units: mm/day



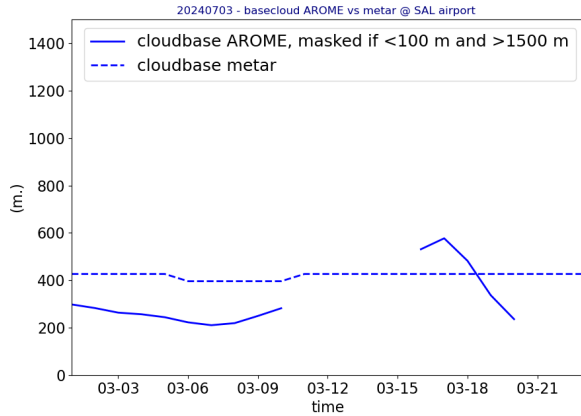
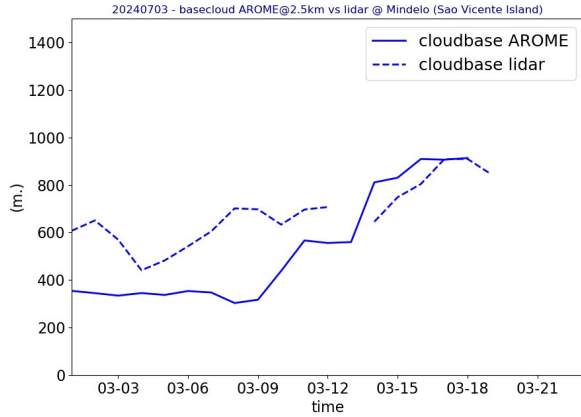
AROME25 20240704-00-UTC -ech(24h)

RR cumulated over 24h

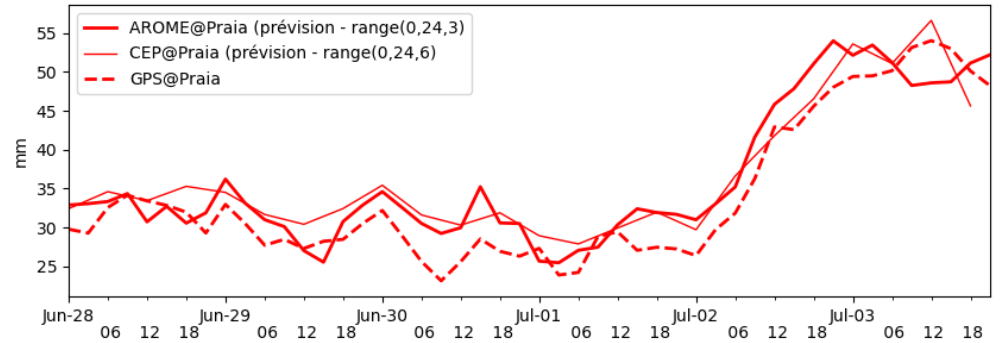
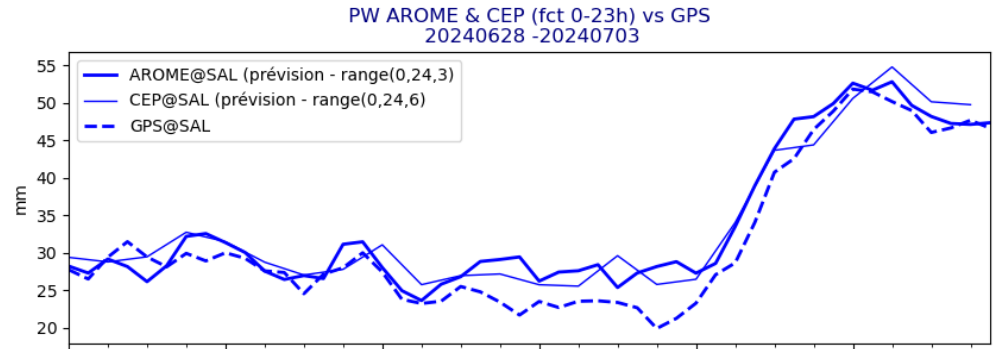


# OBSERVATIONS J-1

Lidar@ mindelo  
metar@sal



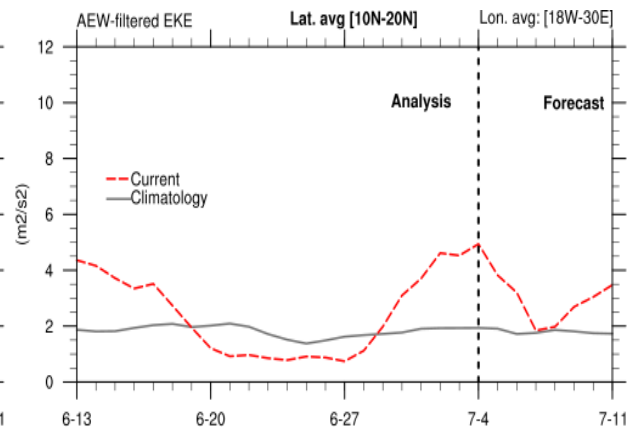
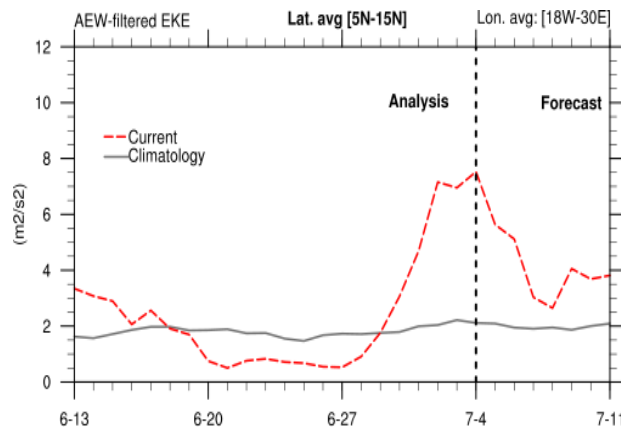
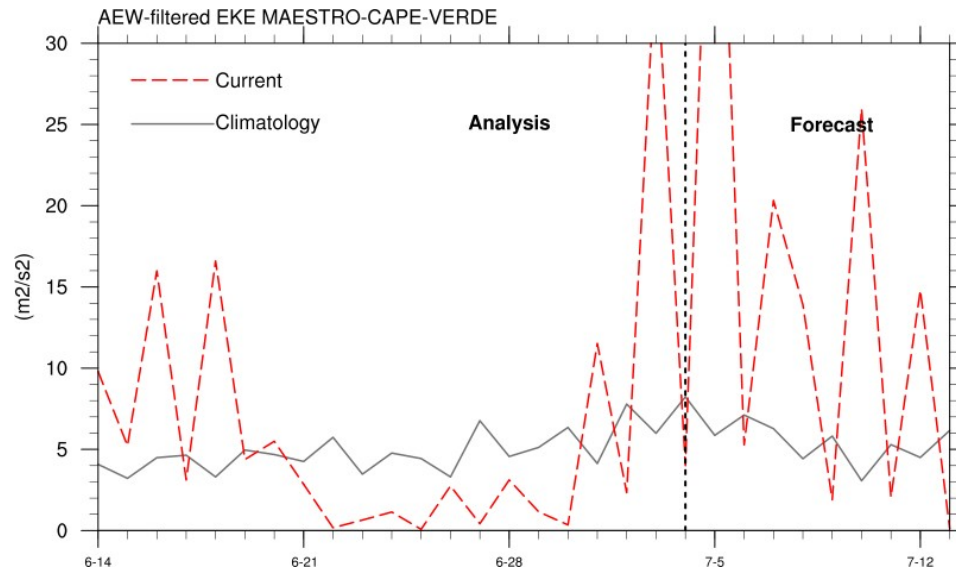
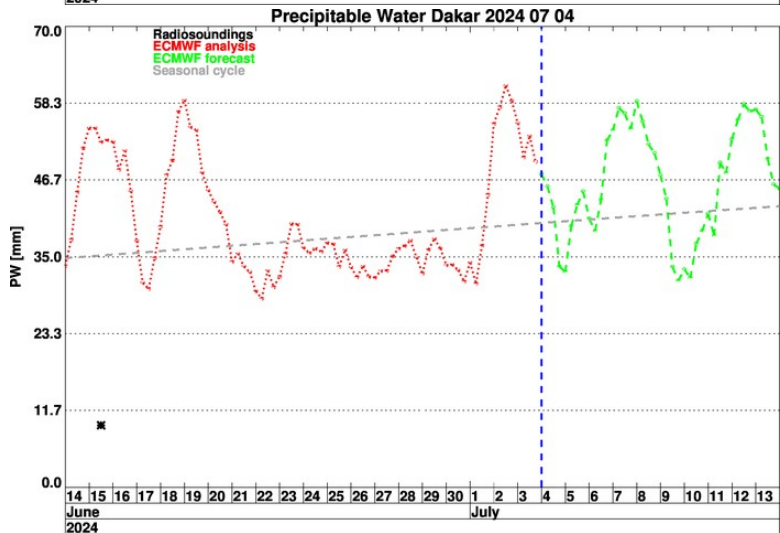
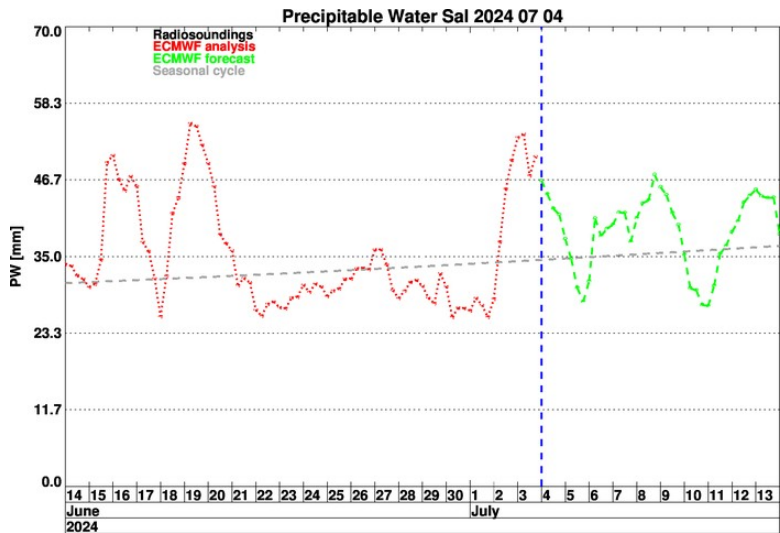
GPS @ Sal  
GPS @ Praia



Short term forecast J - J+36h



# Temporal evolution PW Sal et Dakar + EKE



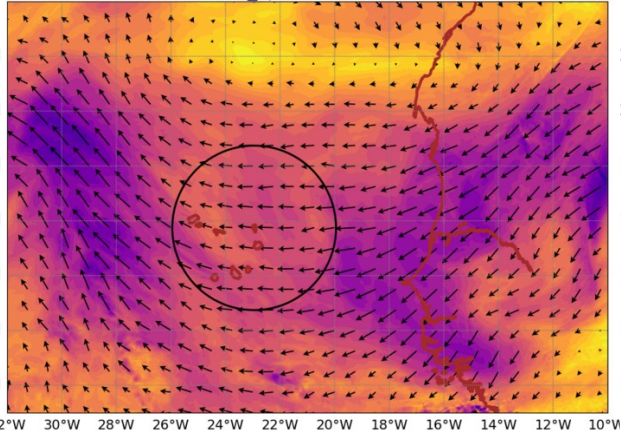
# Forecast AROME

- PW J-J+36h 850 hPa ?
- Pbl height
- Avoir une coupe zonale / meridienne de qv ?

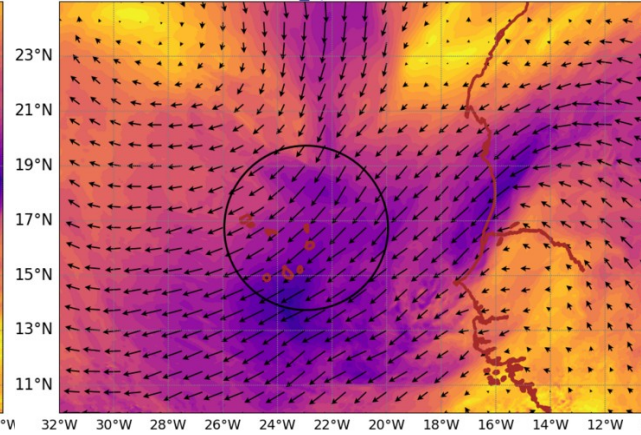
# AROME Wind @ 700 hPa

## AROME Wind @ 920 hPa

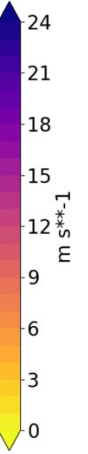
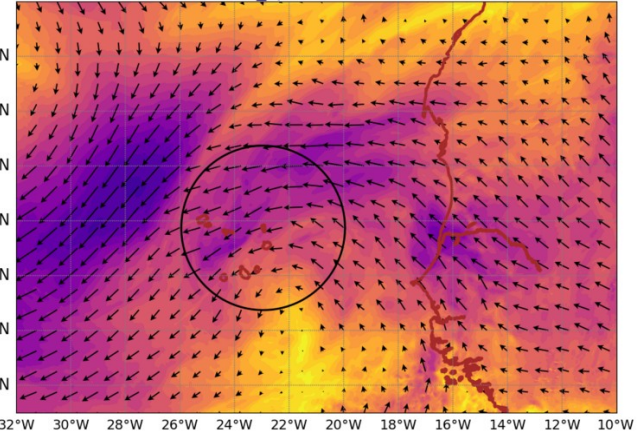
AROME25 20240704-12-UTC -ech(12h)  
wind\_sp700 @ 700hPa



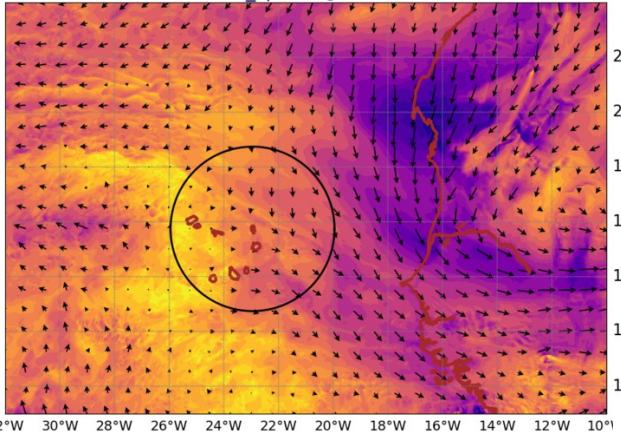
AROME25 20240705-12-UTC -ech(36h)  
wind\_sp700 @ 700hPa



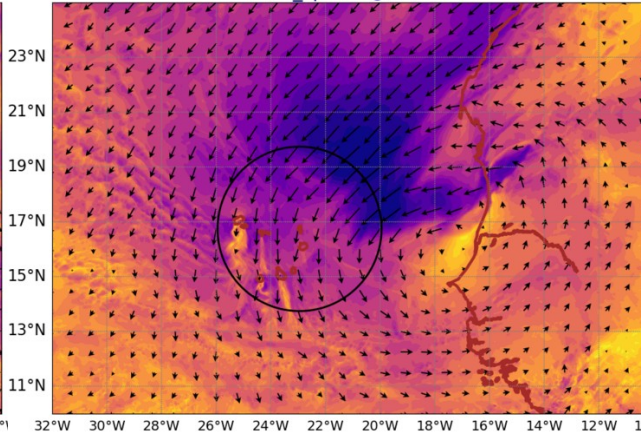
AROME25 20240706-12-UTC -ech(60h)  
wind\_sp700 @ 700hPa



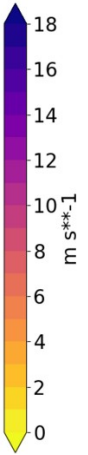
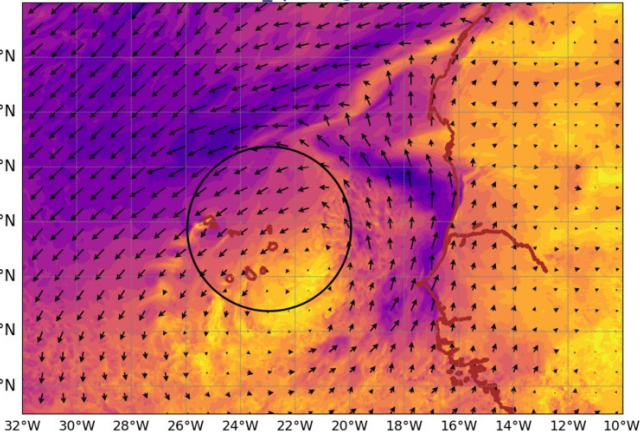
AROME25 20240704-12-UTC -ech(12h)  
wind\_sp920 @ 920hPa



AROME25 20240705-12-UTC -ech(36h)  
wind\_sp920 @ 920hPa



AROME25 20240706-12-UTC -ech(60h)  
wind\_sp920 @ 920hPa



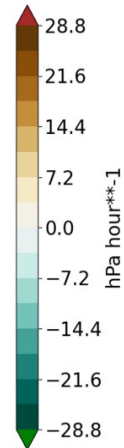
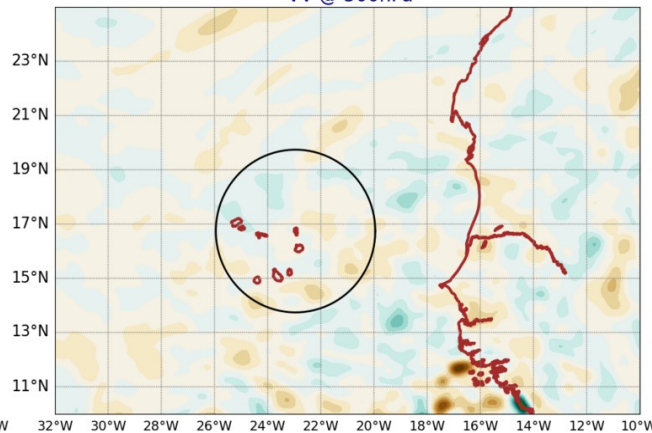
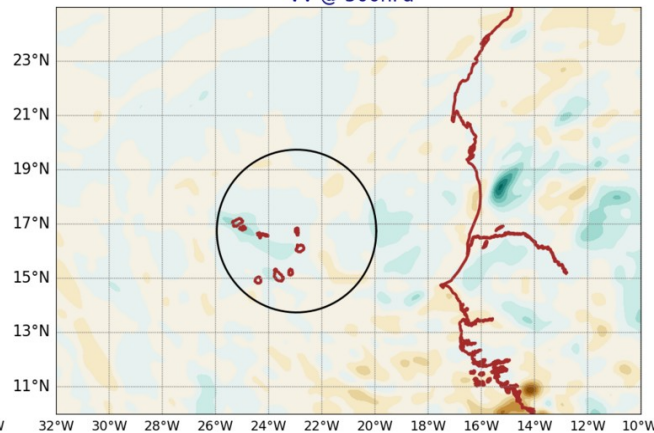
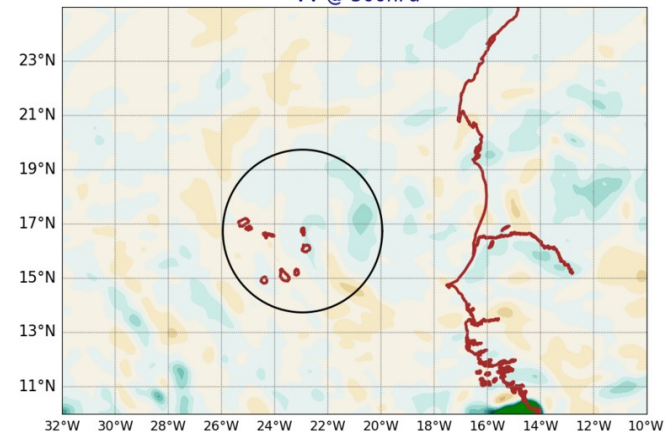
# AROME VV @ 500hPa

## AROME LWP+IWP

AROME25 20240704-12-UTC -ech(12h)  
VV @ 500hPa

AROME25 20240705-12-UTC -ech(36h)  
VV @ 500hPa

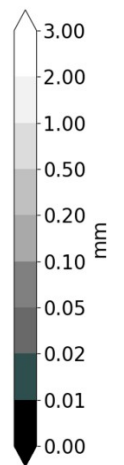
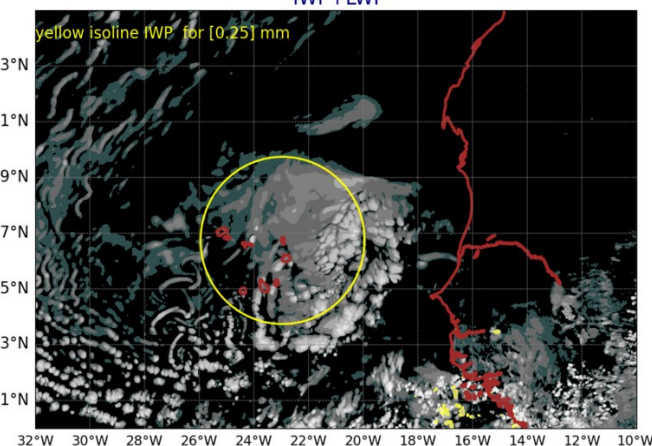
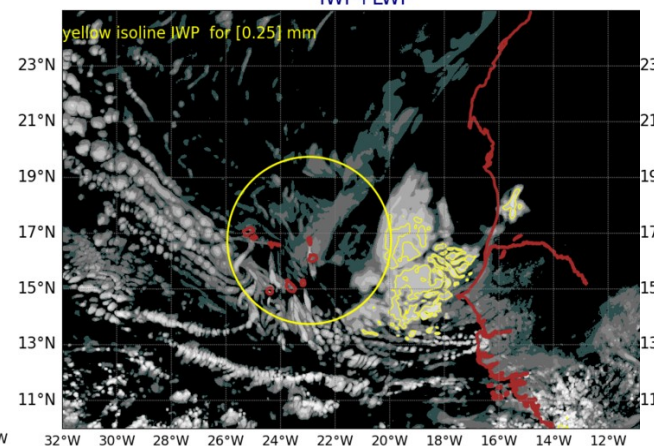
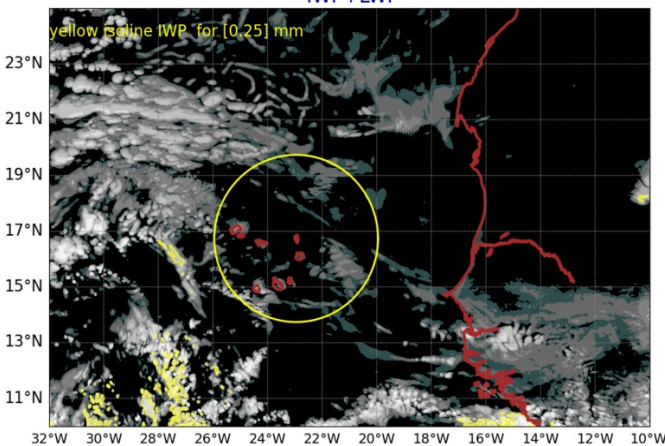
AROME25 20240706-12-UTC -ech(60h)  
VV @ 500hPa



AROME25 20240704-12-UTC -ech(12h)  
IWP+LWP

AROME25 20240705-12-UTC -ech(36h)  
IWP+LWP

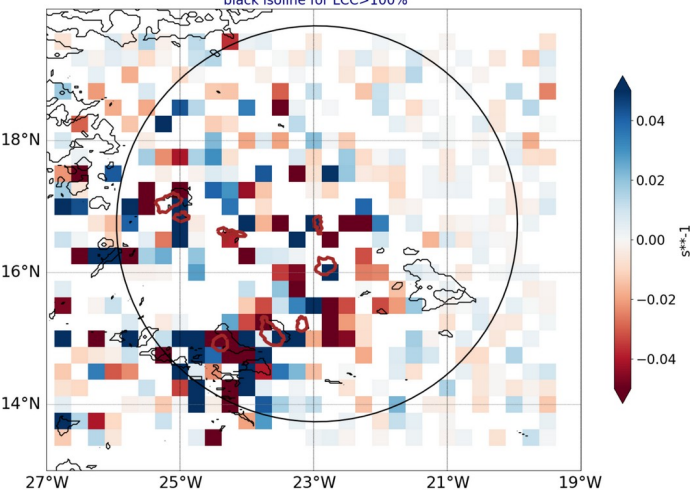
AROME25 20240706-12-UTC -ech(60h)  
IWP+LWP



# Smoc

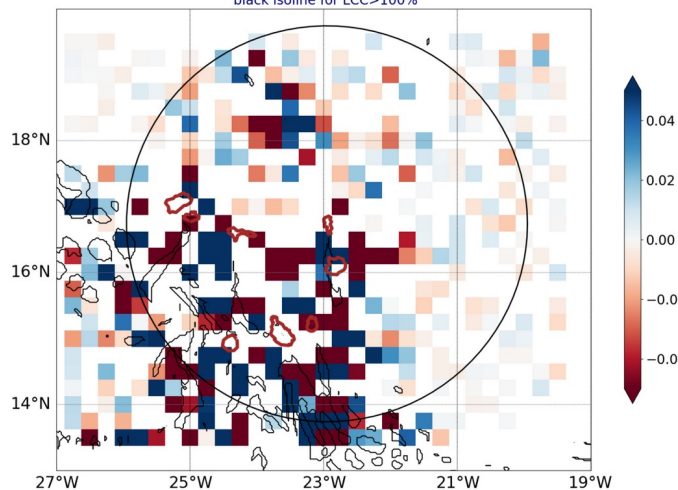
-blue for conv in subcloud layer-  
dark isoline for low cloud cover

AROME25 regrid 0.25  
20240704-12-UTC -ech(12h)  
blue for conv in subcloud layer  
black isoline for LCC>100%



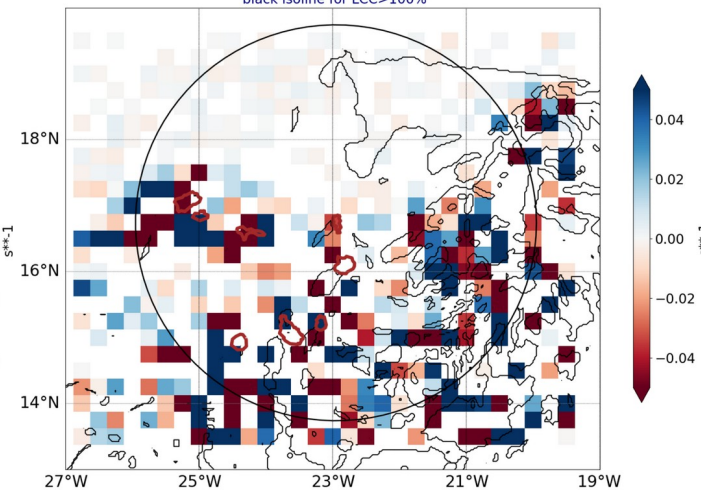
white box where subcloud and cloud layer have same sign of div

AROME25 regrid 0.25  
20240705-12-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  
20240706-12-UTC -ech(60h)  
blue for conv in subcloud layer  
black isoline for LCC>100%



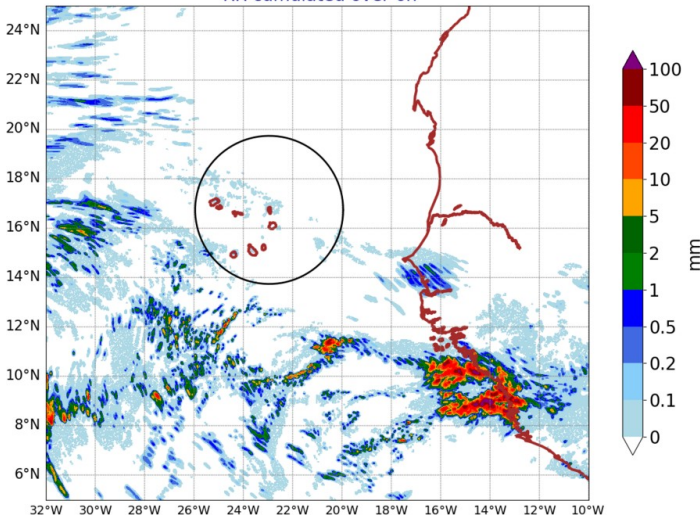
white box where subcloud and cloud layer have same sign of div

over 6h ech 12h and 15h

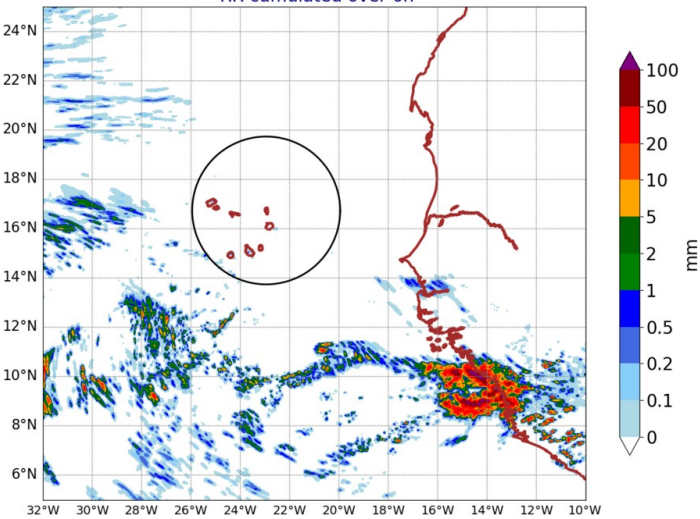
# AROME precipitation

over 24h ech 36h and 60h

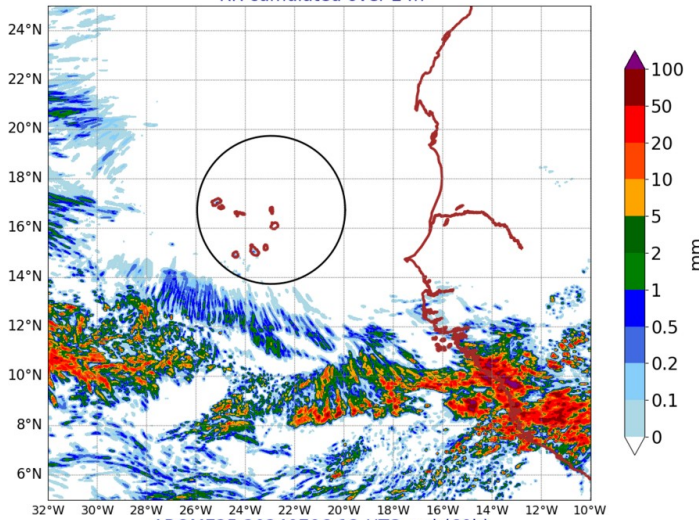
AROME25 20240704-12-UTC -ech(12h)  
RR cumulated over 6h



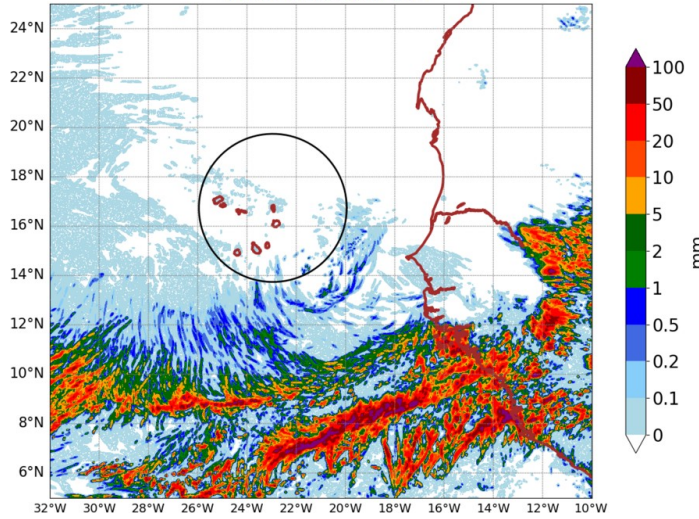
AROME25 20240704-15-UTC -ech(15h)  
RR cumulated over 6h



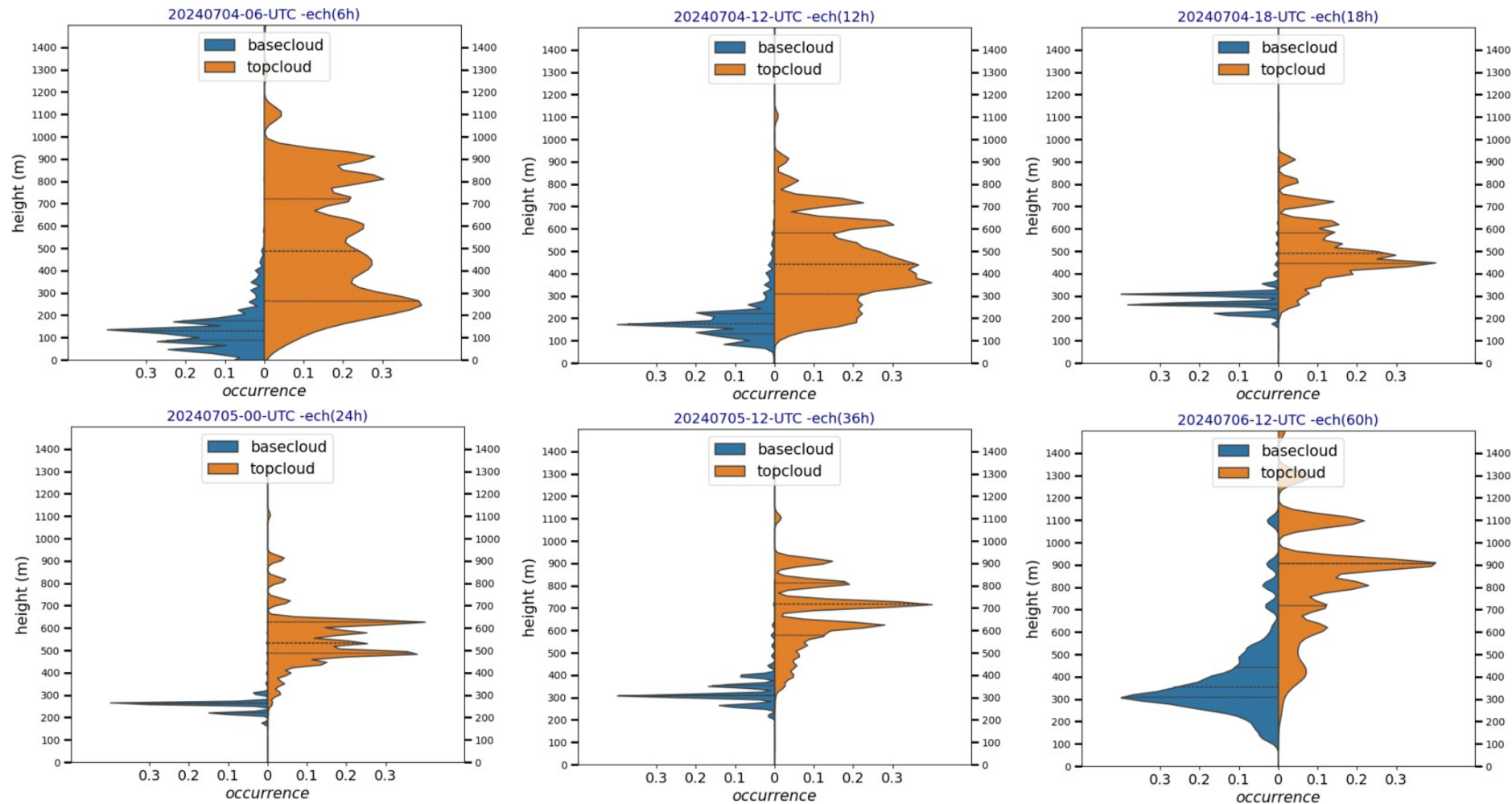
AROME25 20240705-12-UTC -ech(36h)  
RR cumulated over 24h



AROME25 20240706-12-UTC -ech(60h)  
RR cumulated over 24h

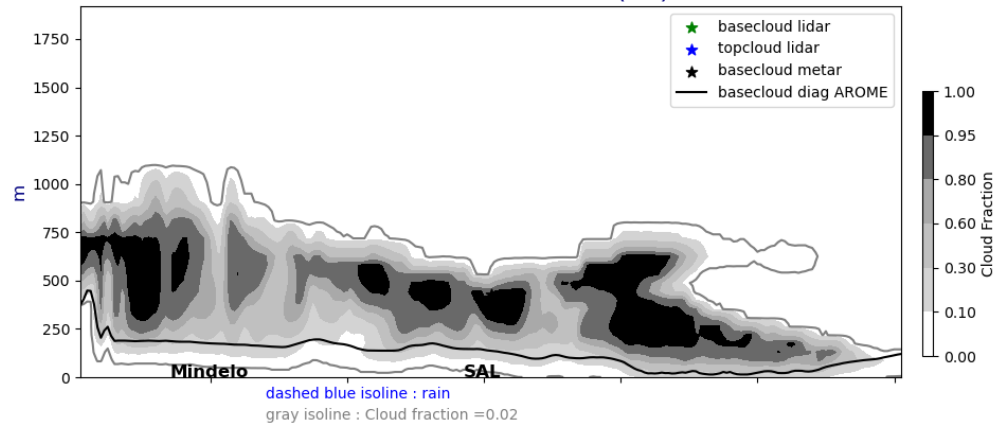


# AROME base and top cloud (mean in the 3° circle)

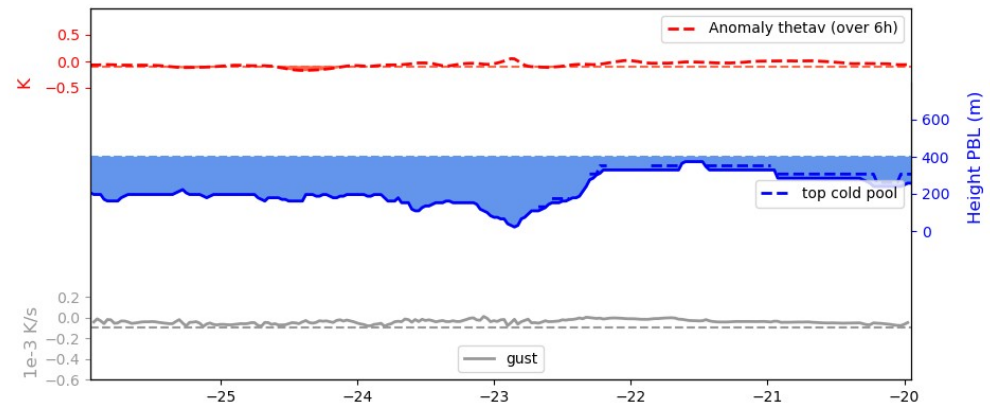
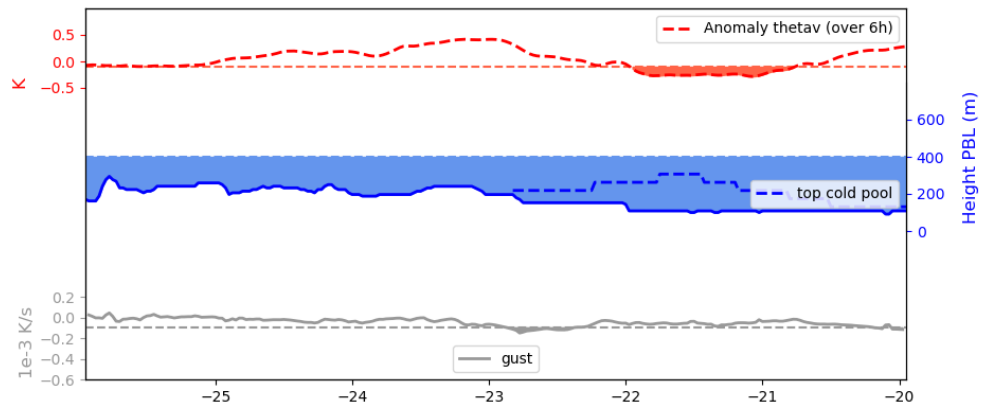
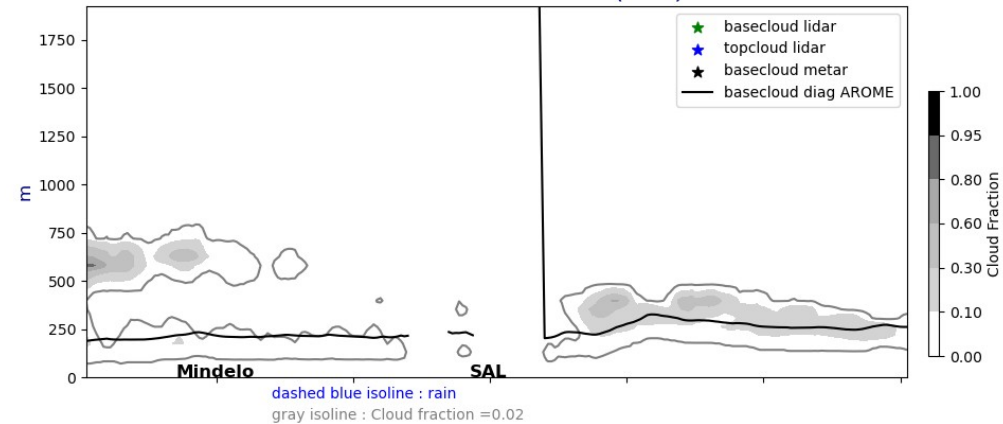


# Lat. cross section @17°5N fct : 01UTC, 12UTC

Cross section E/W @ 17.5N  
20240704-01-UTC ech(1h)



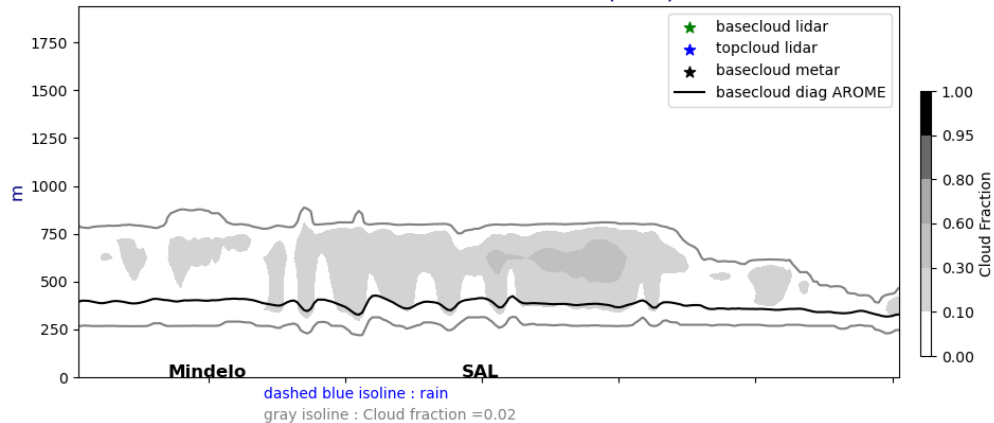
Cross section E/W @ 17.5N  
20240704-12-UTC ech(12h)



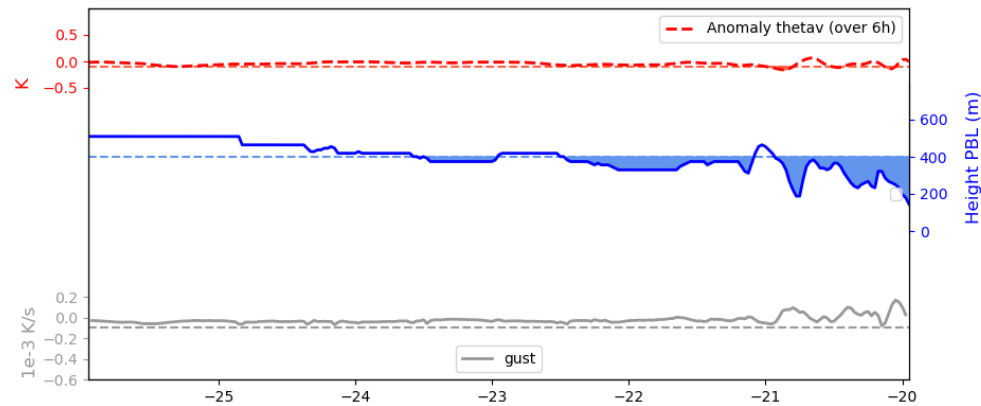
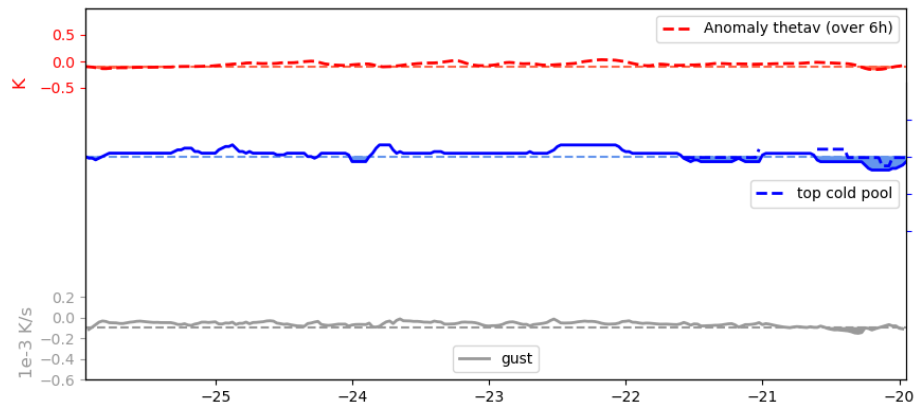
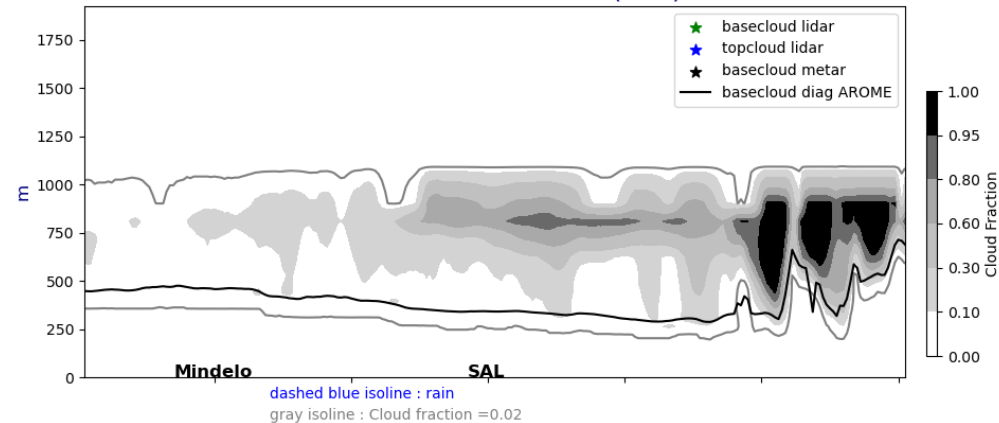


# Lat. cross section @17°5N fct : J+1 and J+2 @ 12UTC

Cross section E/W @ 17.5N  
20240705-12-UTC ech(36h)

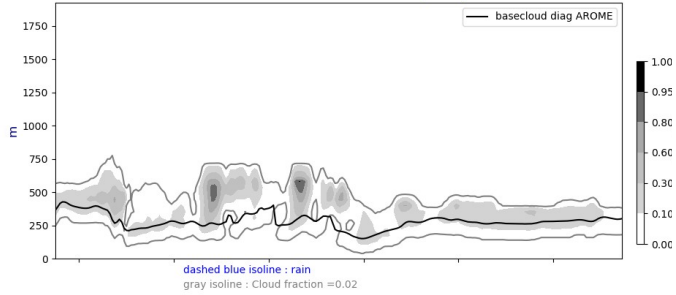


Cross section E/W @ 17.5N  
20240706-12-UTC ech(60h)

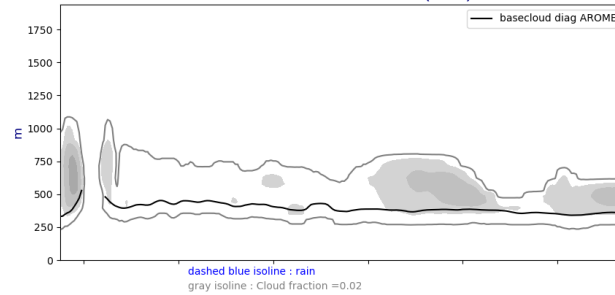


# Lon. cross section @22W fct : J,J+1, J+2 @ 12 UTC

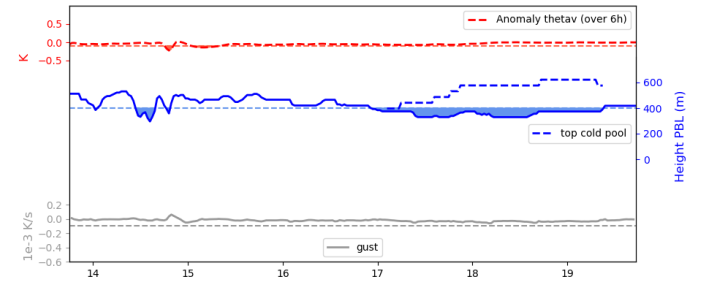
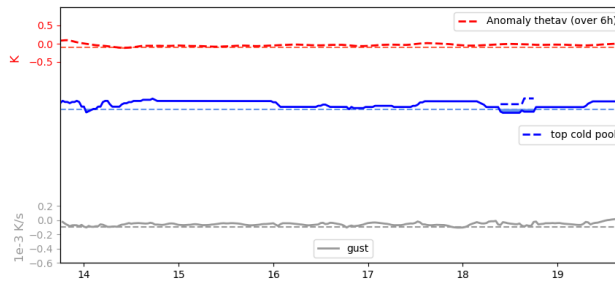
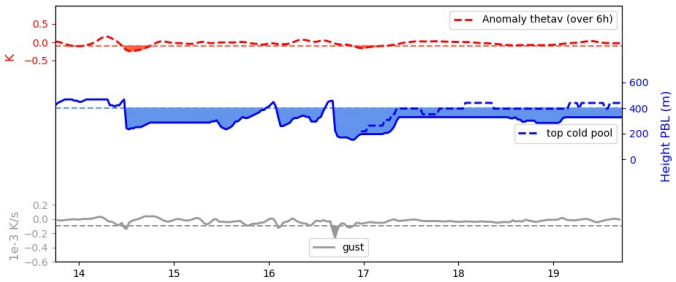
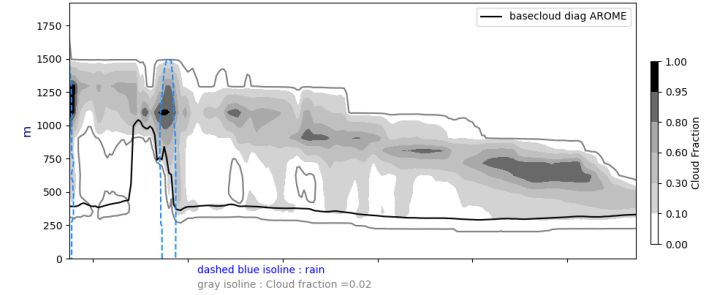
Cross section S/N @ -22W  
20240704-12-UTC ech(12h)



Cross section S/N @ -22W  
20240705-12-UTC ech(36h)

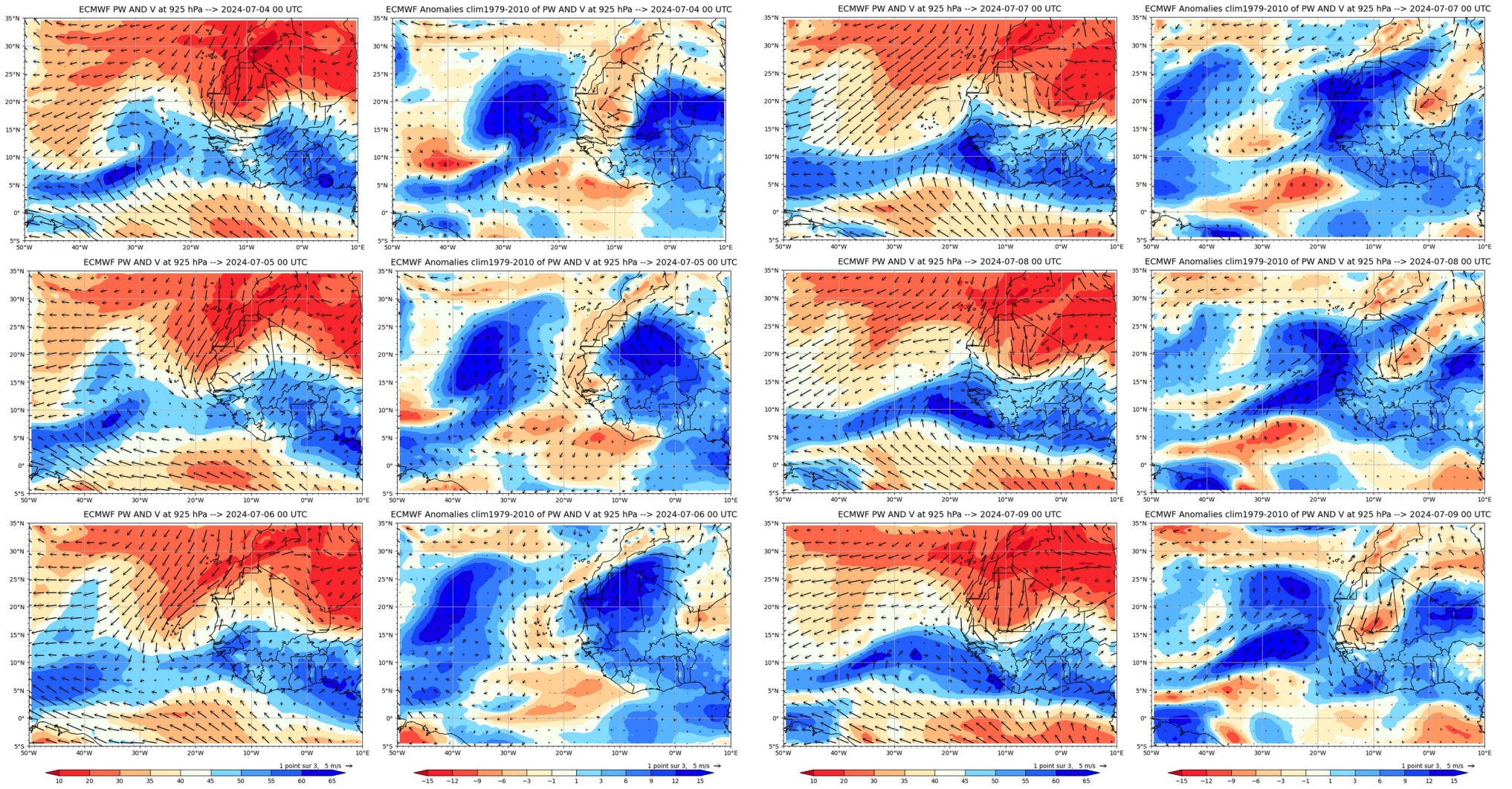


Cross section S/N @ -22W  
20240706-12-UTC ech(60h)

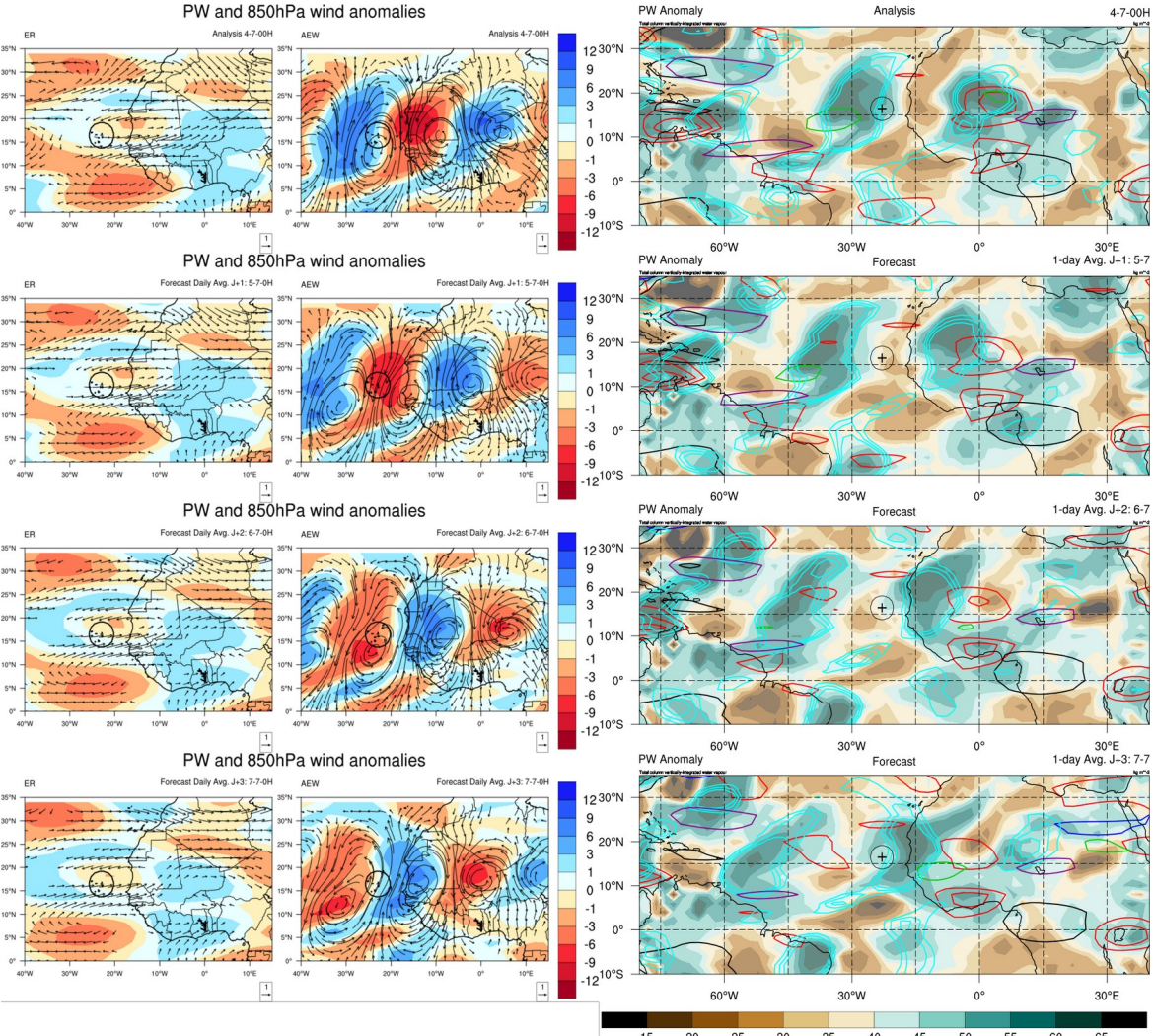


Week forecast J - J+7

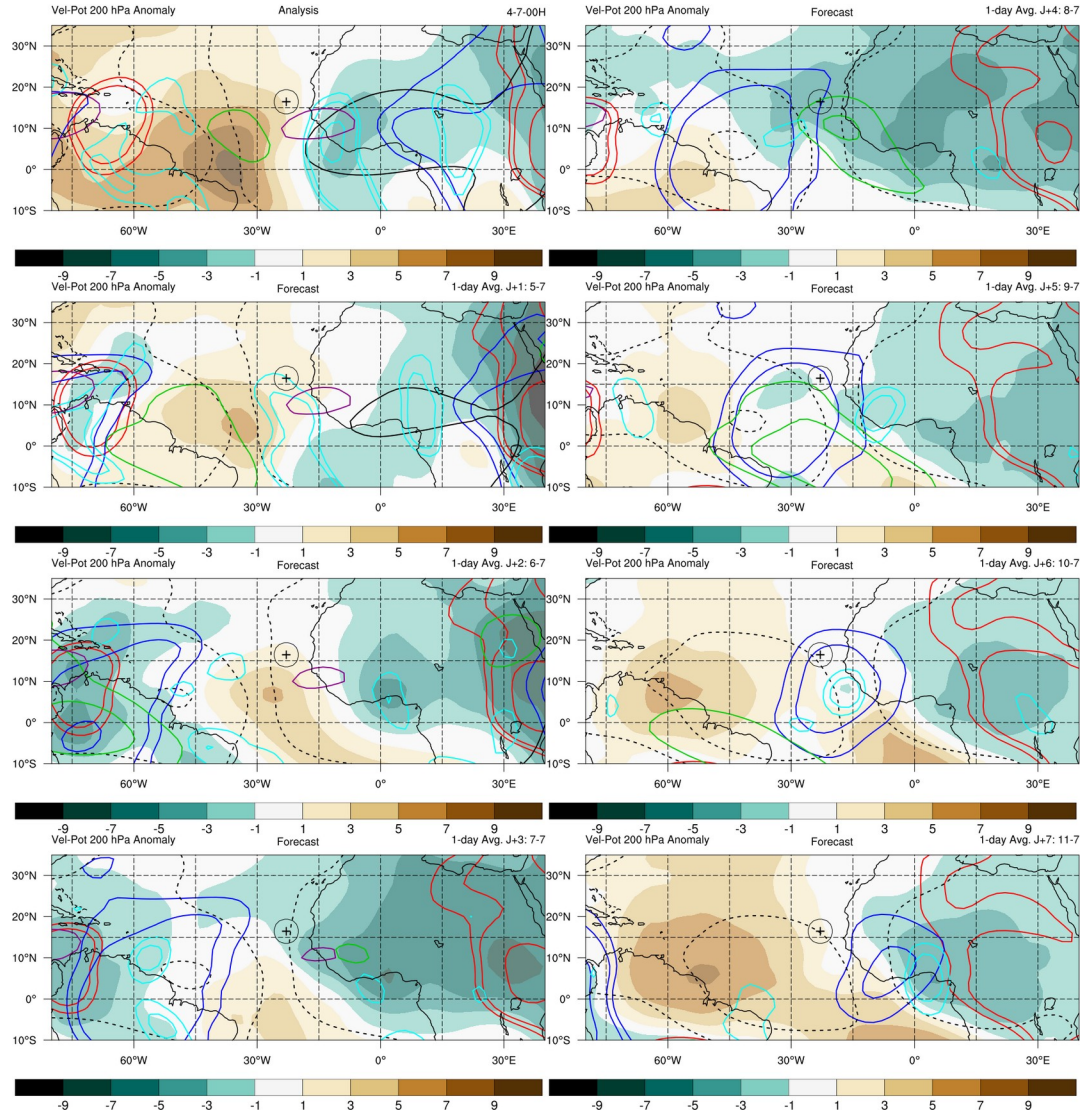
# Daily PW and wind @ 925 hPa – total and anomalies



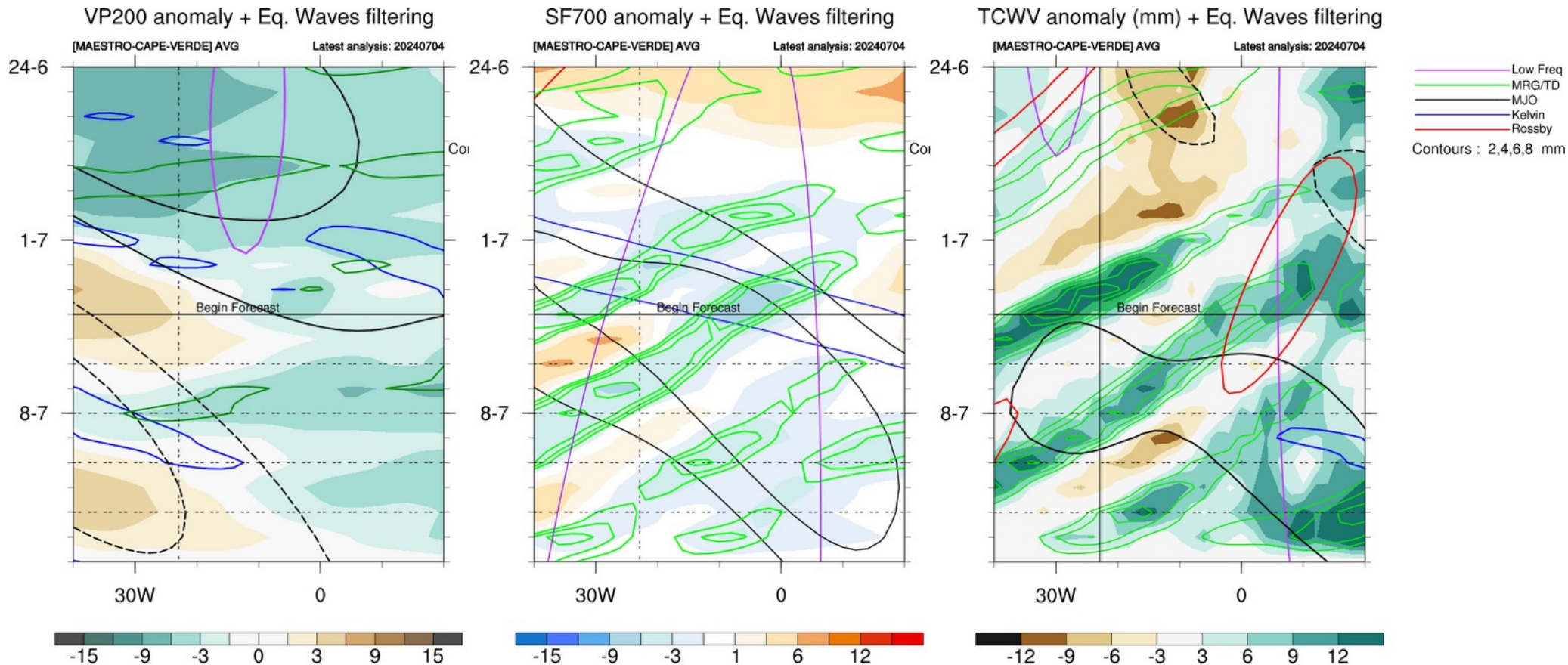
# Decomposition PW/Wind and Waves contours J to J+3



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

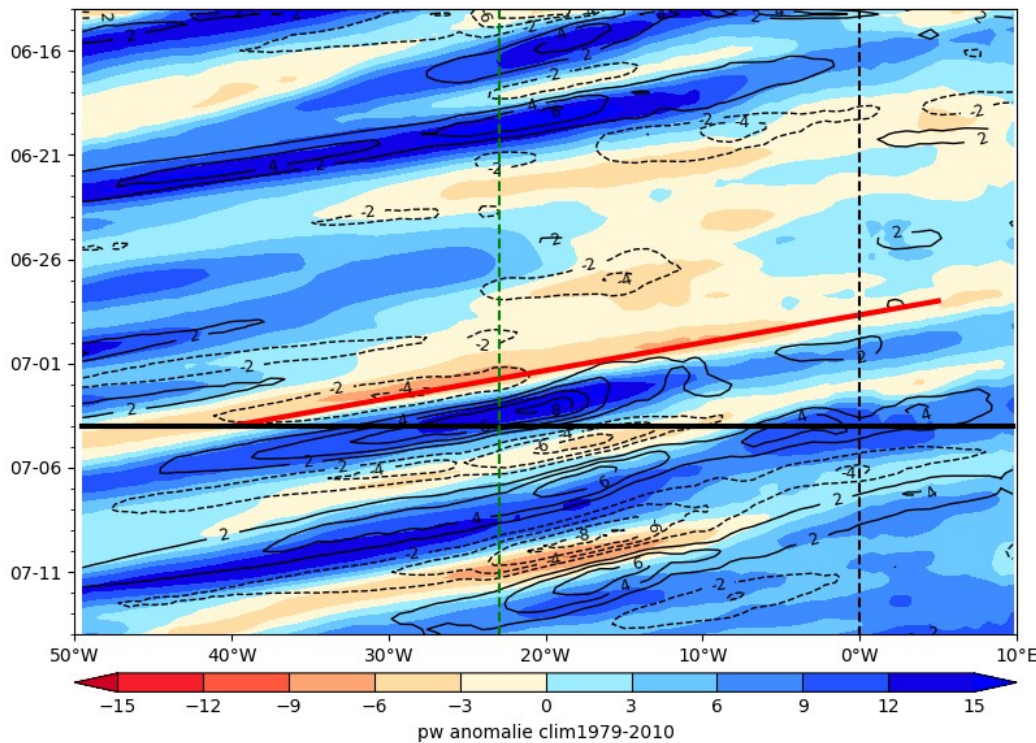


# Equatorial Waves filtering hovmollers

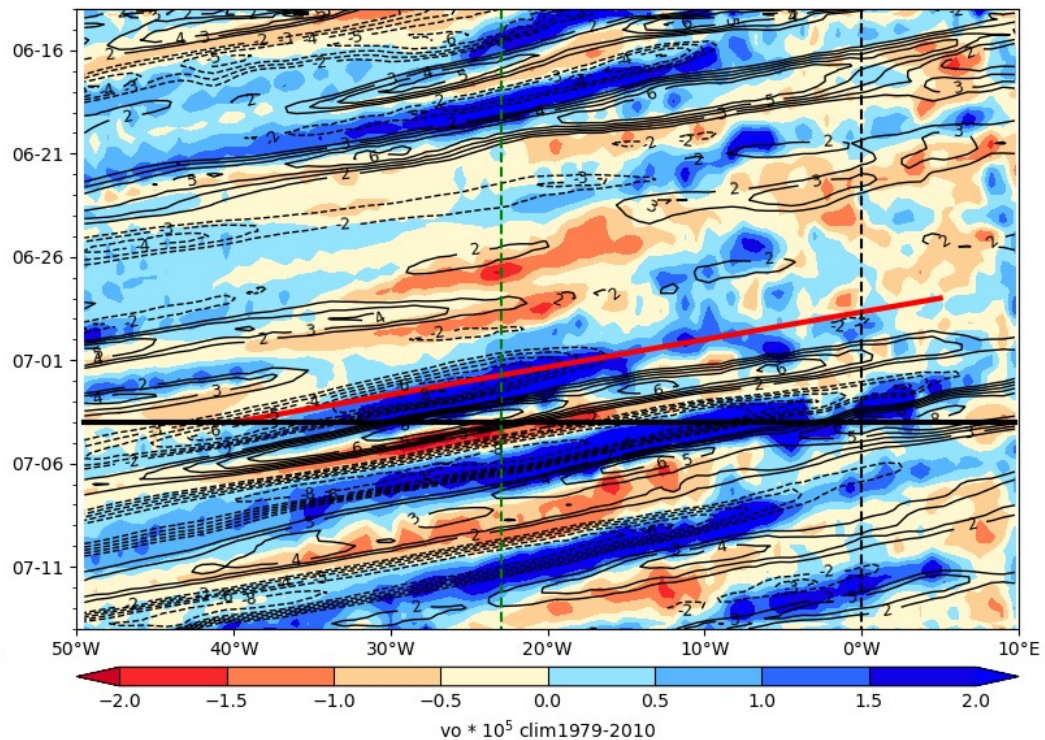


# Hovmoller anomaly

ECMWF PW (color) AND V at 925 hPa 2024-07-04

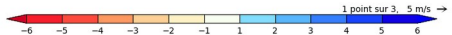
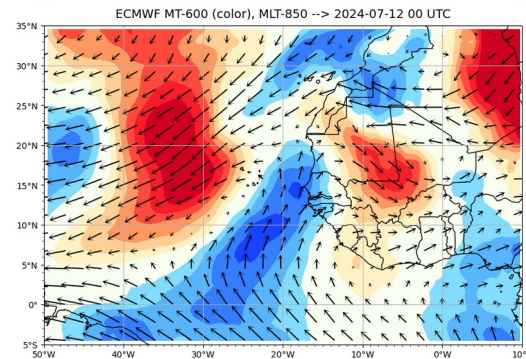
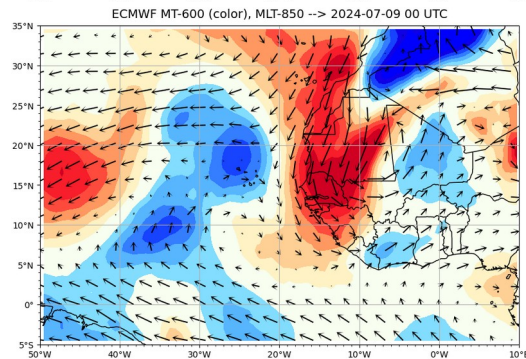
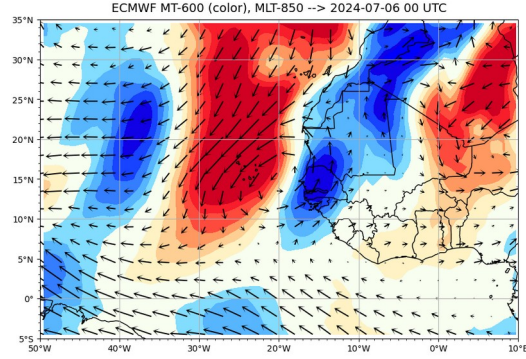
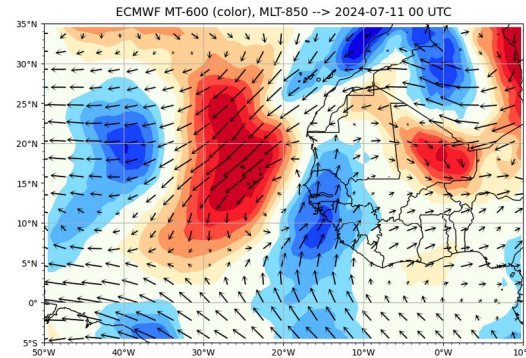
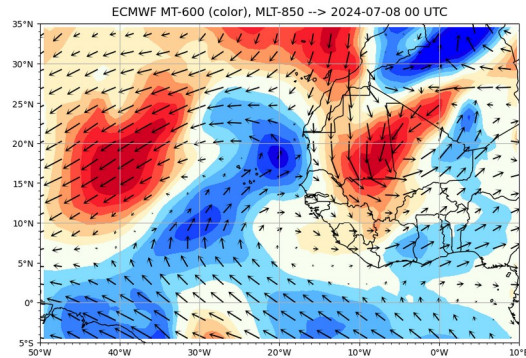
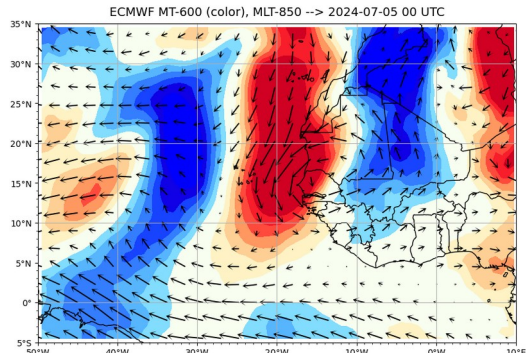
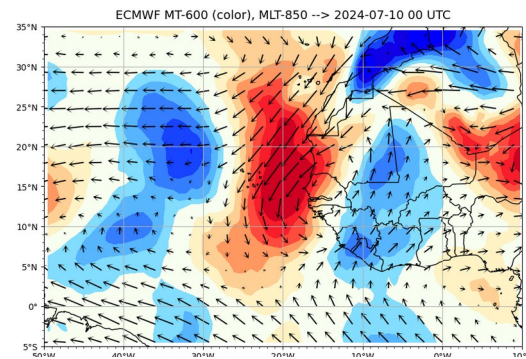
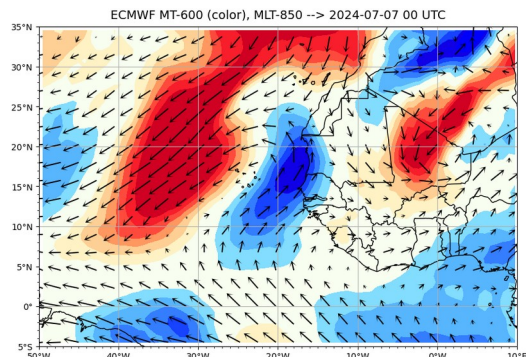
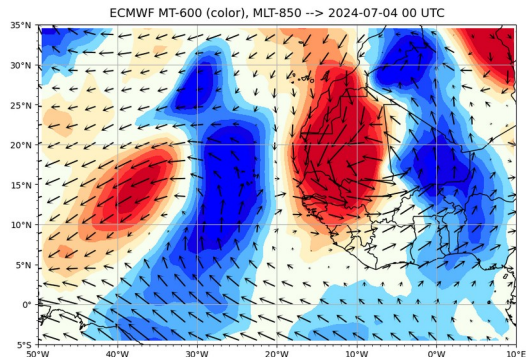


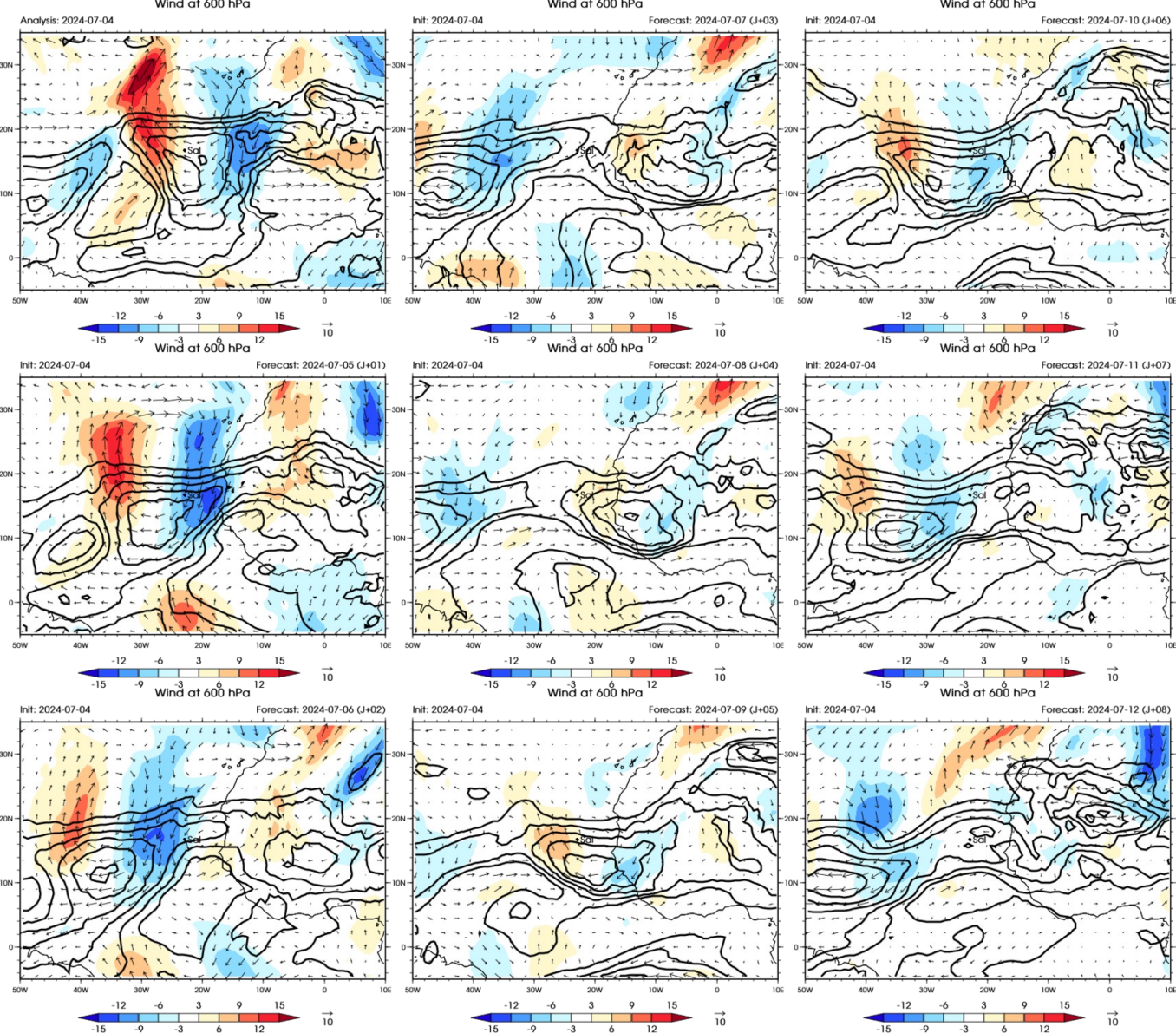
ECMWF Vorticity 850 hPa (color), V-700 hPa 2024-07-04





# Monsoon Flow

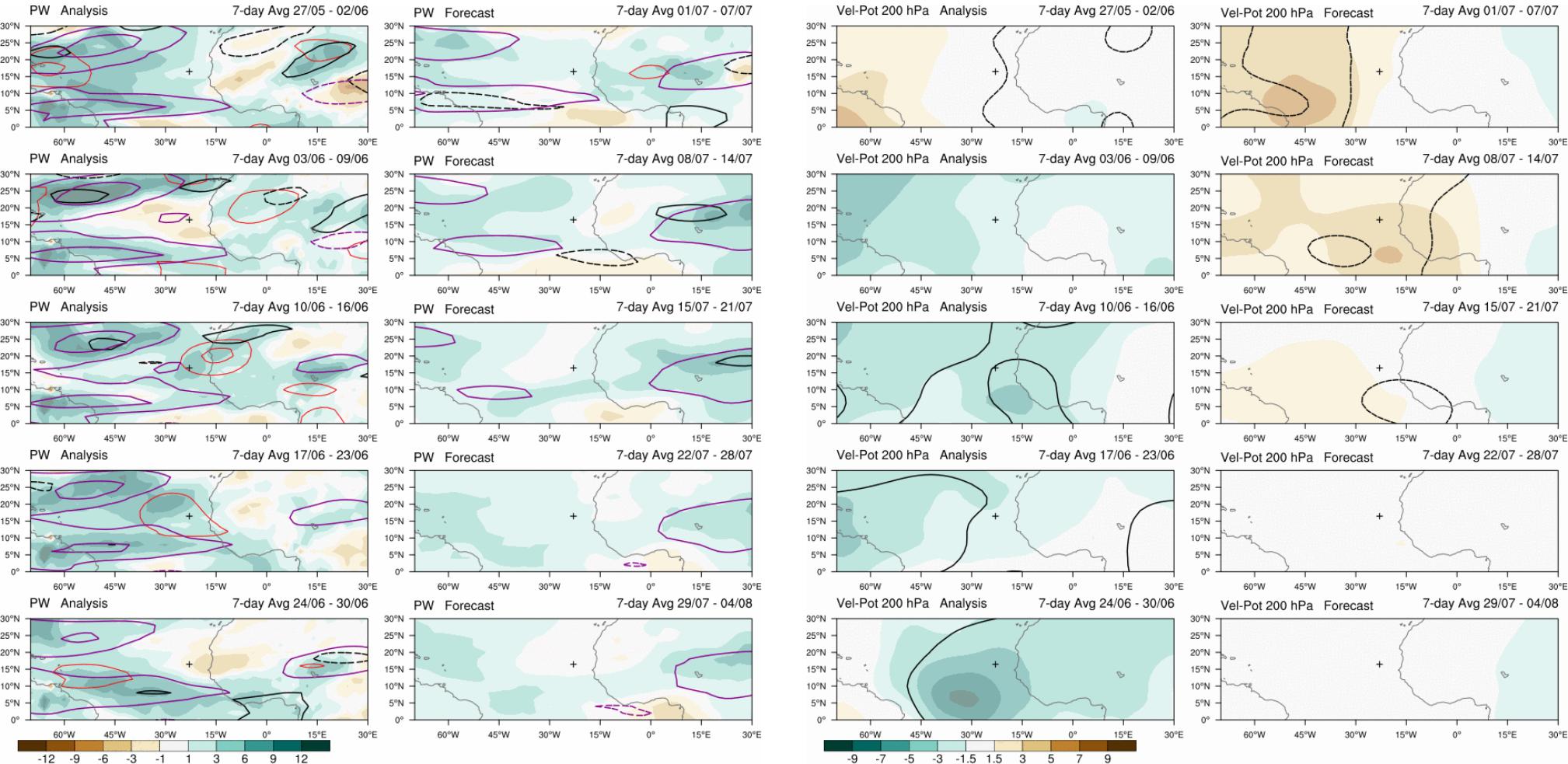




# African Easterly Jet wind 600 hPa

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

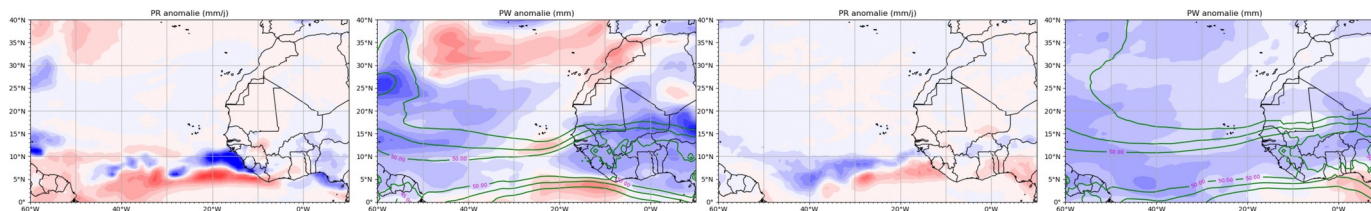
# PR PW Weekly anomaly

ECMWF EPS  
Moyenne hebdomadaire PR et PW Anomalie

S1 init 01-07-2024

ECMWF EPS  
Moyenne hebdomadaire PR et PW Anomalie

S4 init 01-07-2024

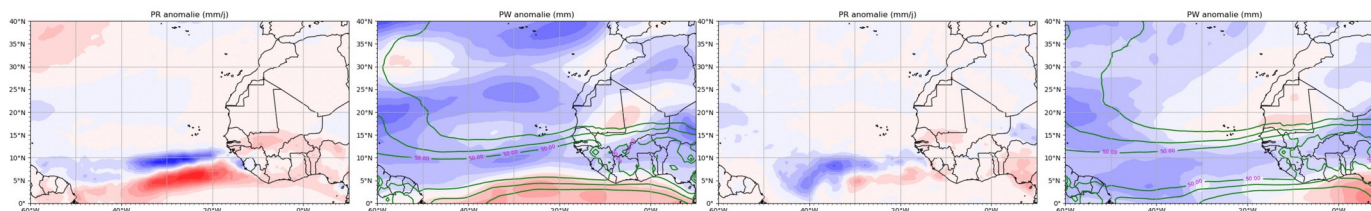


ECMWF EPS  
Moyenne hebdomadaire PR et PW Anomalie

S2 init 01-07-2024

ECMWF EPS  
Moyenne hebdomadaire PR et PW Anomalie

S5 init 01-07-2024

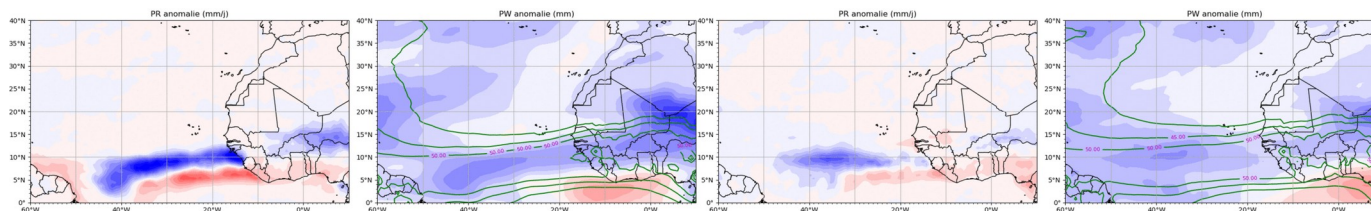


ECMWF EPS  
Moyenne hebdomadaire PR et PW Anomalie

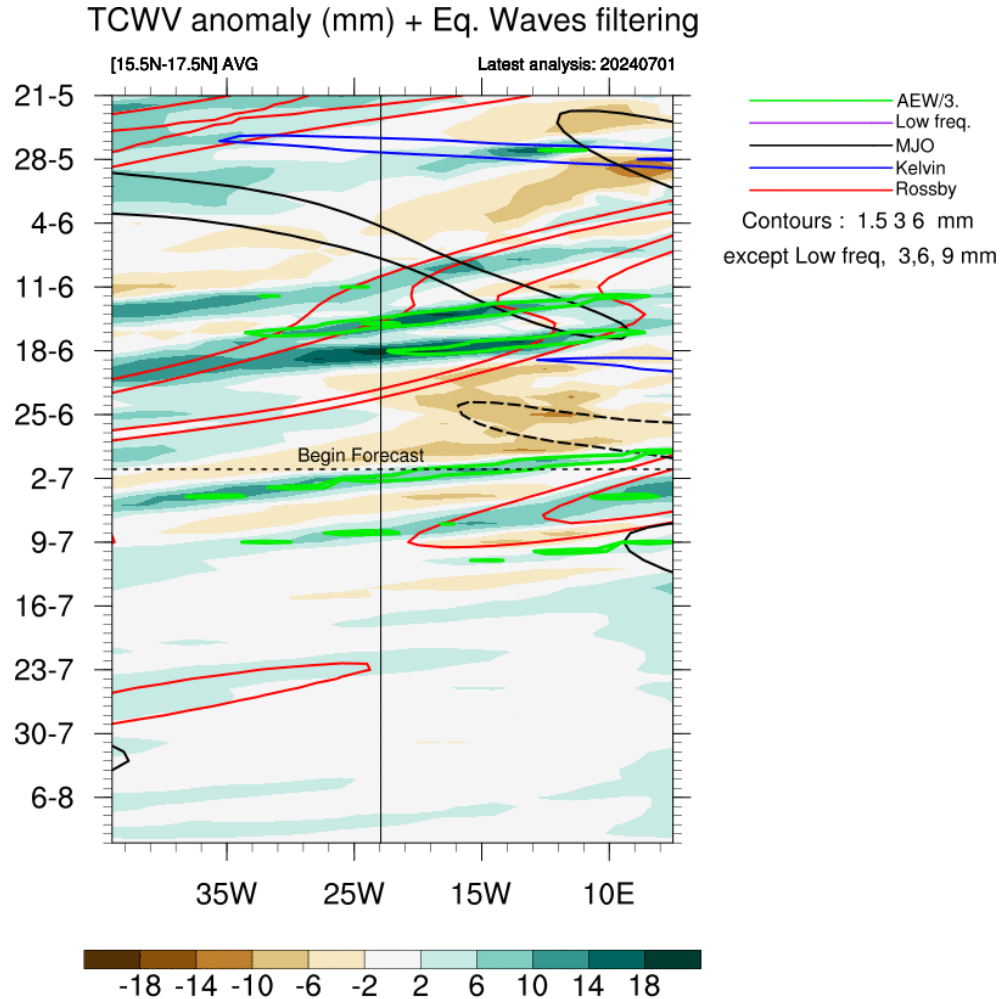
S3 init 01-07-2024

ECMWF EPS  
Moyenne hebdomadaire PR et PW Anomalie

S6 init 01-07-2024



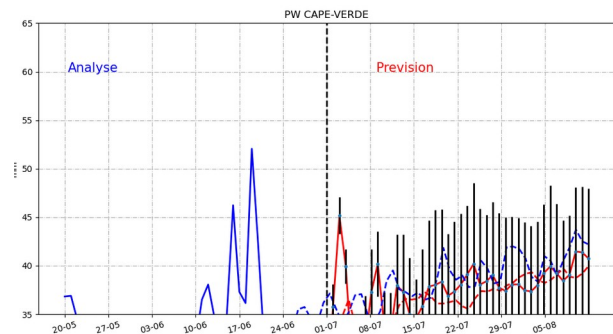
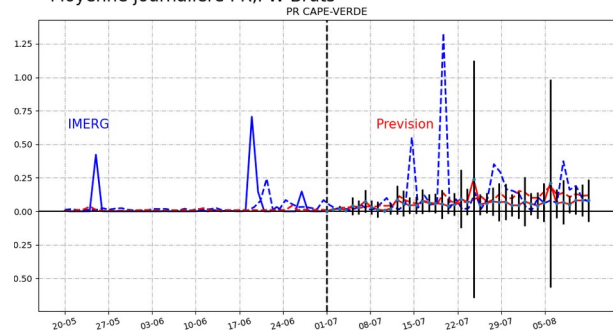
# Hovmoller forecast PW over 4 weeks



# Temporal evolution PR, PW (+ EKE)

## journalier

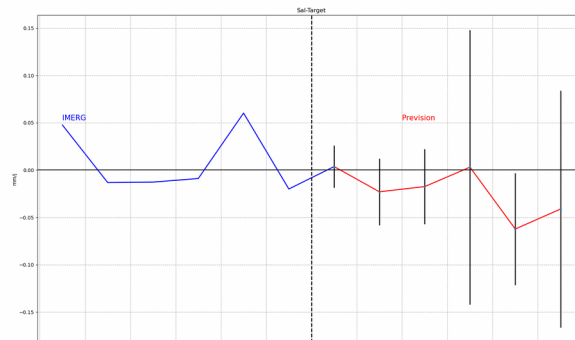
ECMWF EPS  
init 01-07  
Moyenne journaliere PR,PW Bruts



## hebdomadaire

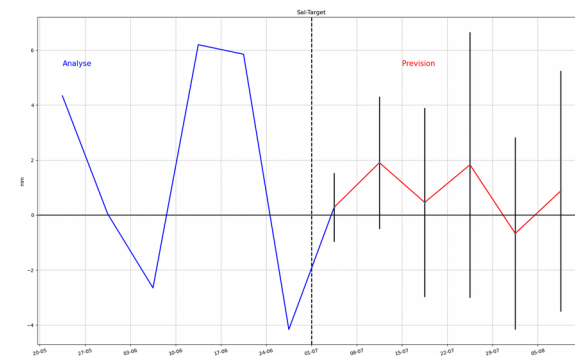
ECMWF EPS  
Moyenne hebdomadaire PR Anomalie

init 01-07



ECMWF EPS  
Moyenne hebdomadaire PW Anomalie

init 01-07



## 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							



