

# DRAFT SUMMARY MAESTRO

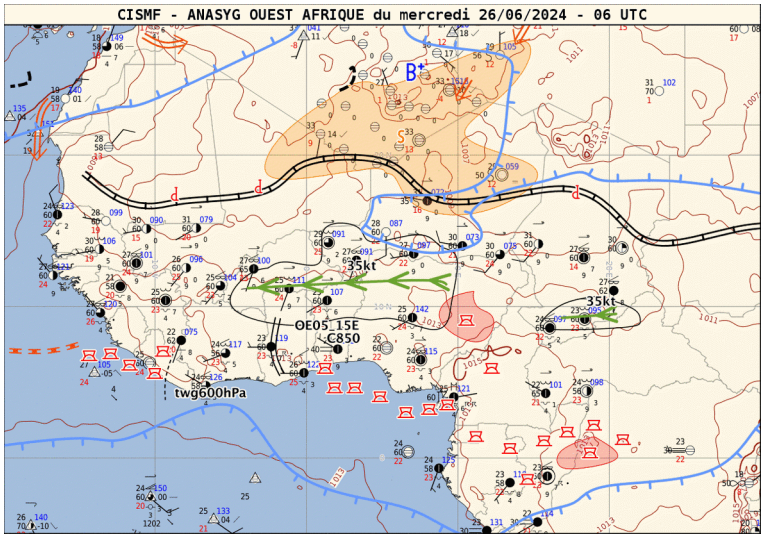
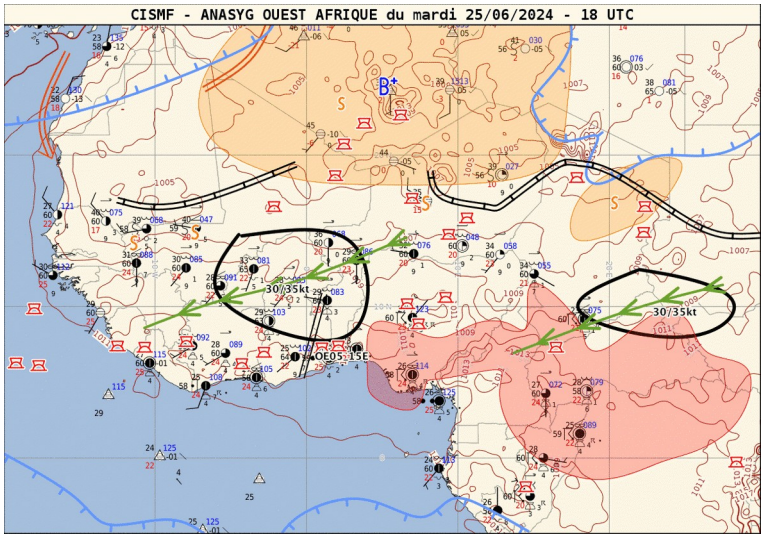
Four parts :

- 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

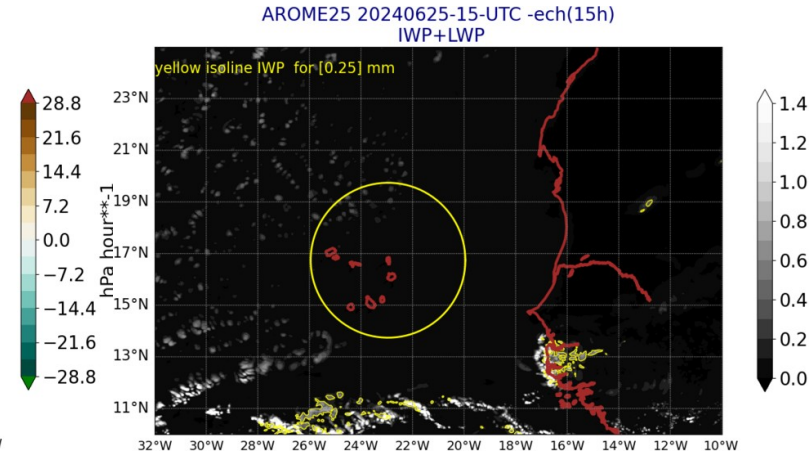
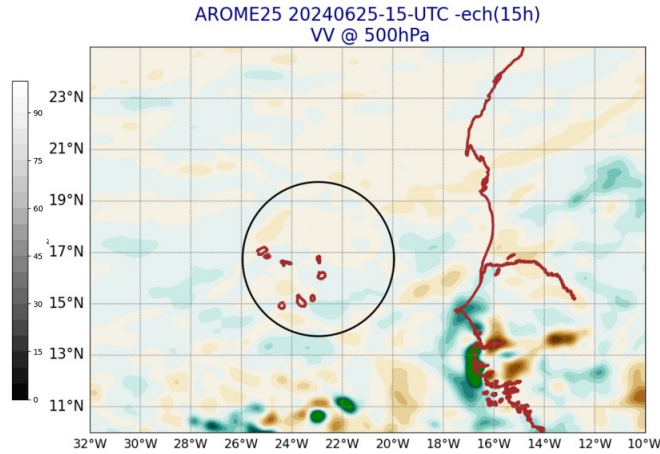
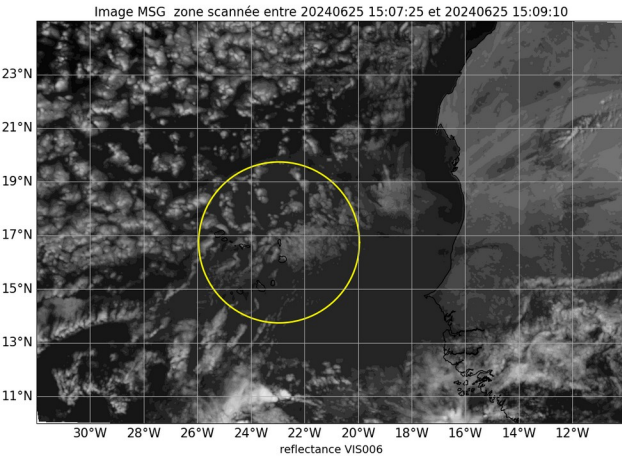
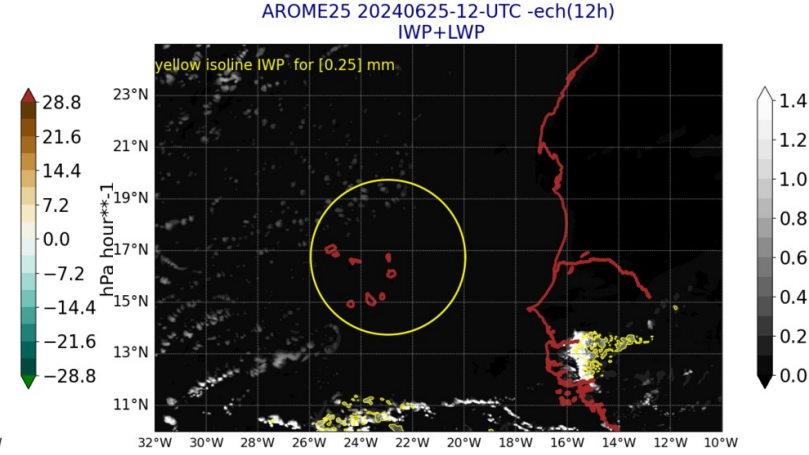
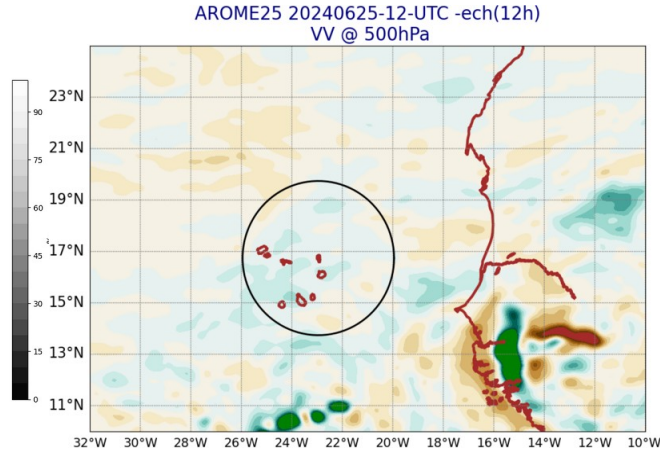
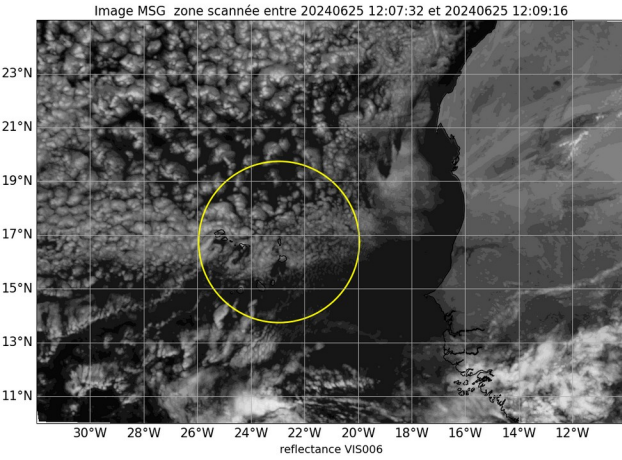
# Anasyg J-1 18UTC et J 06UTC



- + anasyg dirag

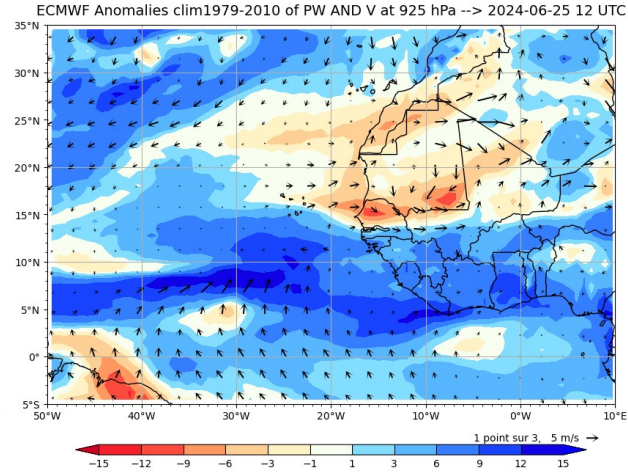
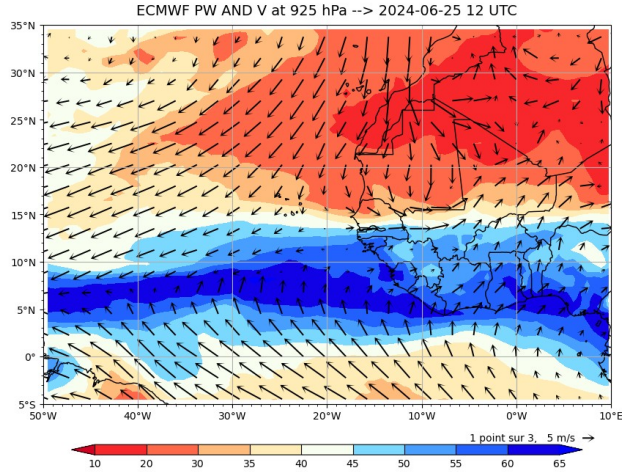
# Image MSG Visible J-1 12 and 15 UTC

# Arome J-1 12 and 15 UTC

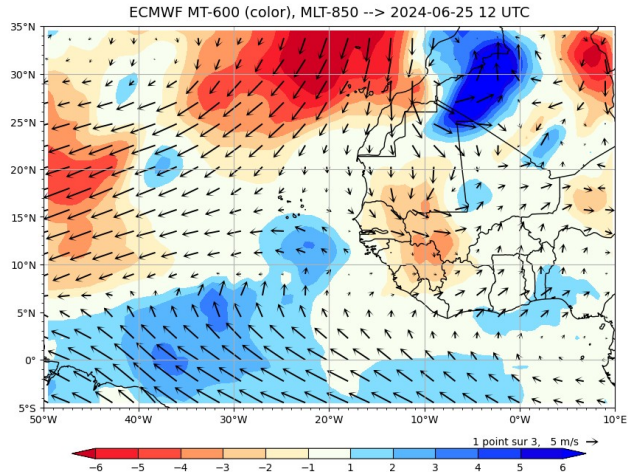




# Precipitable Water - Merid. Transport - Waves J-1



Ajouter ondes J-1

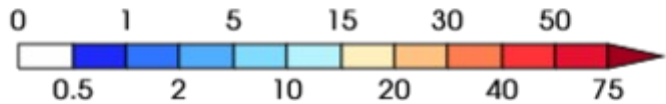
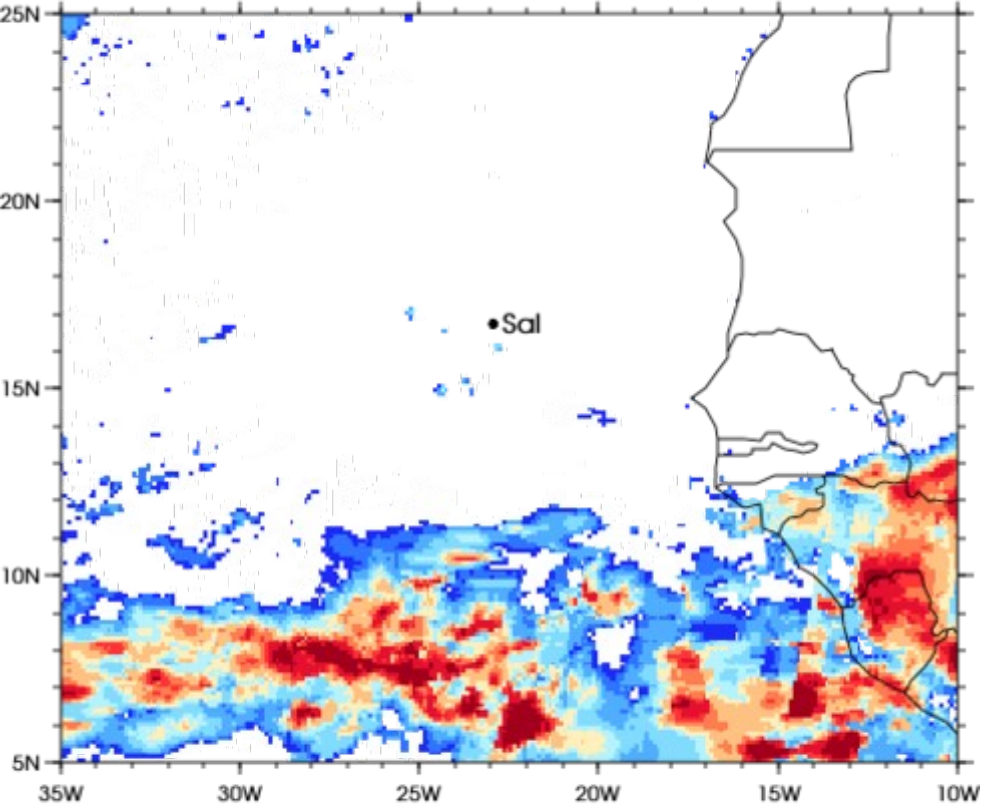


# Precipitation IMERG and AROME J-1

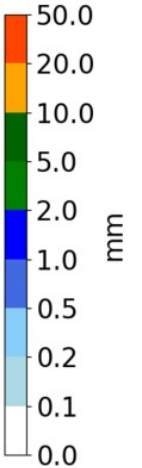
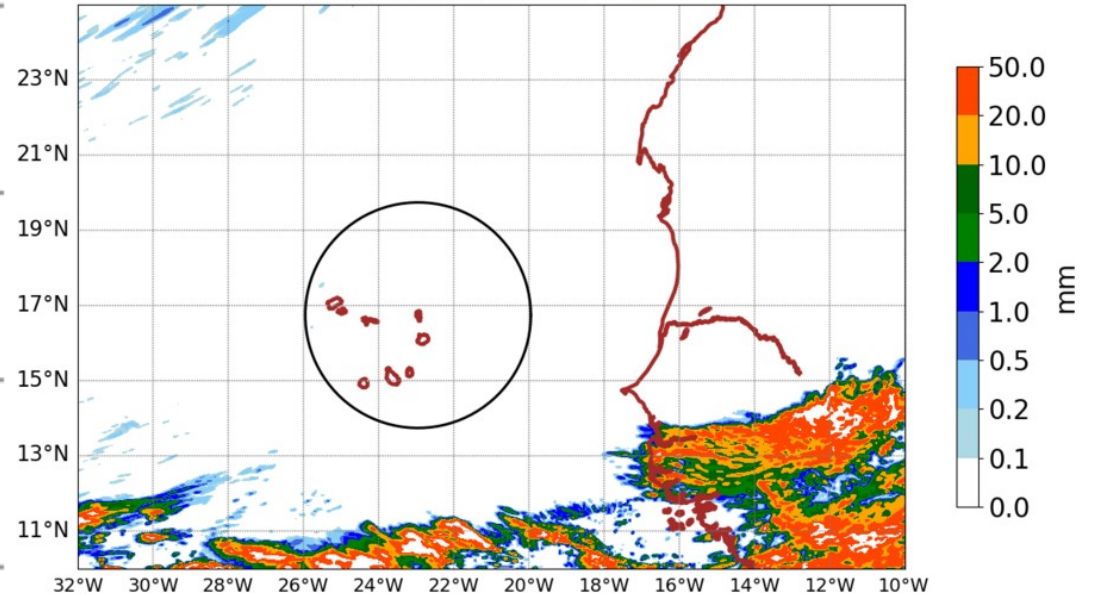
3IMERGHHE GPM IMERG Early Precipitation

Daily accumulated: 2024-06-25

Units: mm/day

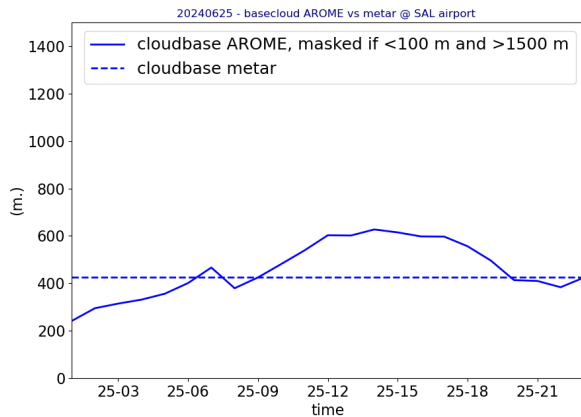
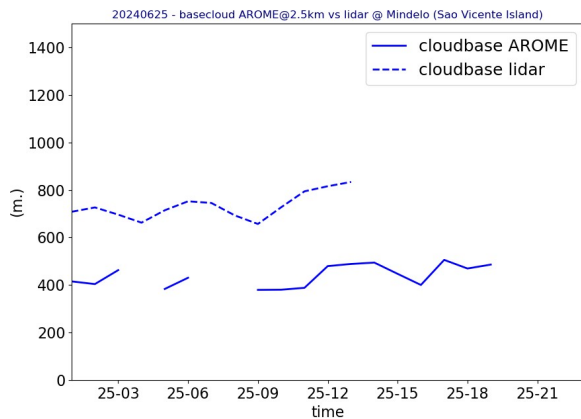


AROME25 20240626-00-UTC -ech(24h)  
RR cumulated over 24h

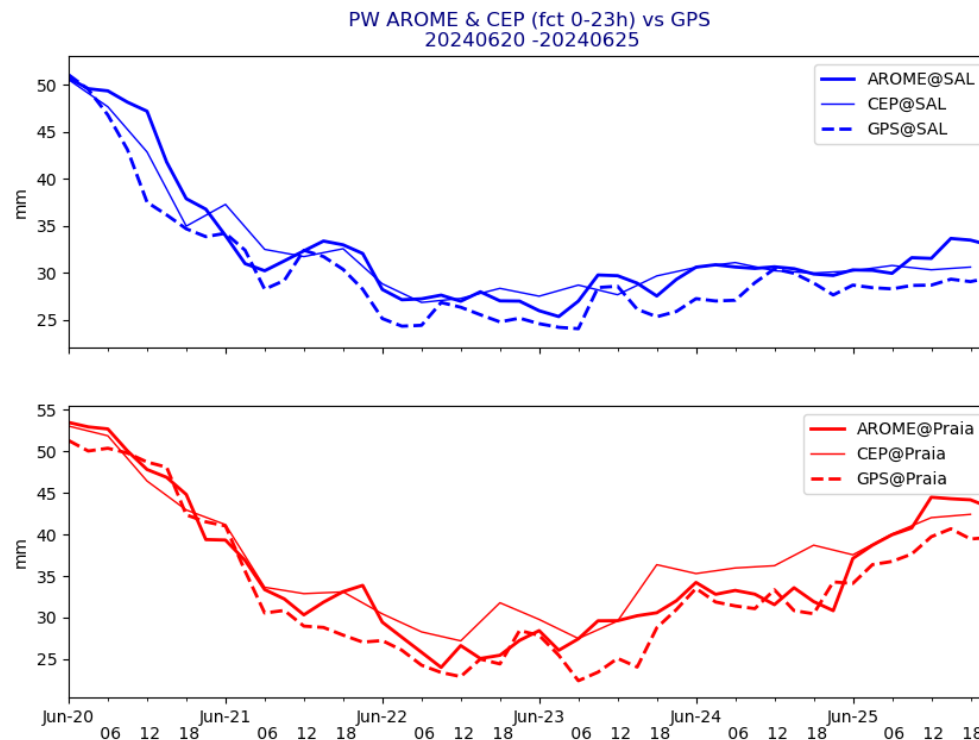


# OBSERVATIONS J-1

Lidar@ mindelo  
metar@sal



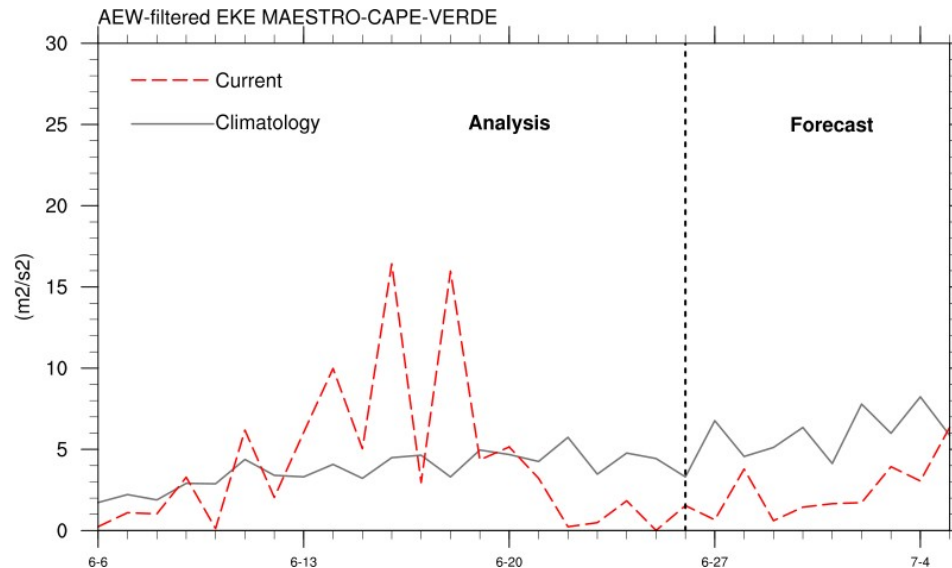
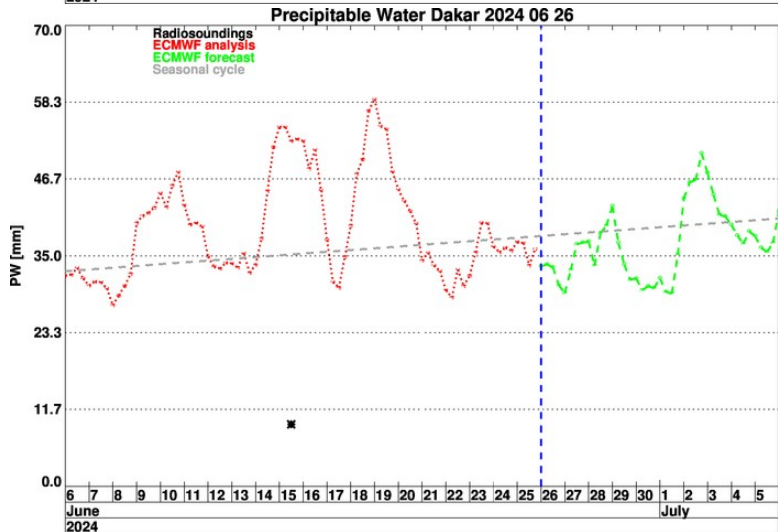
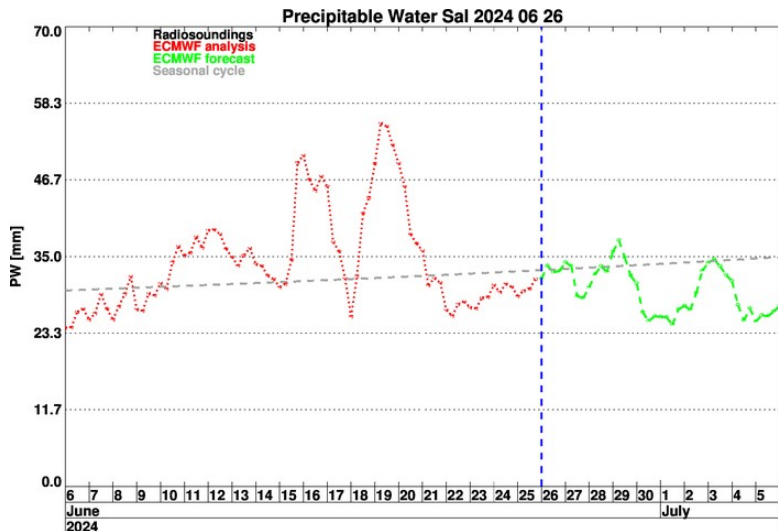
GPS @ Sal  
GPS @ Praia



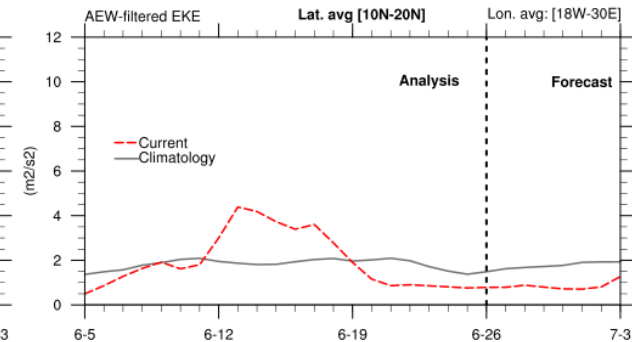
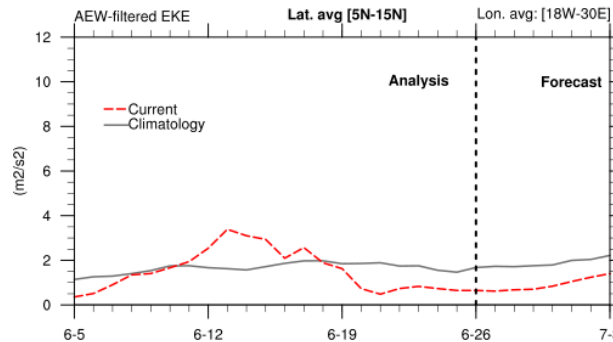
Short term forecast J- J+36h



# Temporal evolution PW Sal et Dakar + EKE



AEW wind index



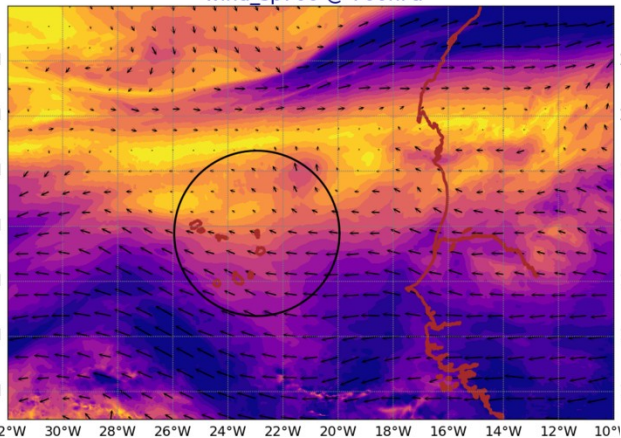
# FIGURES AROME

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

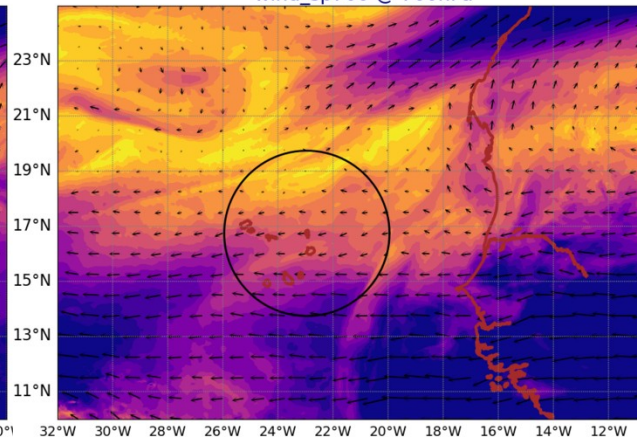
# AROME Wind @ 700 hPa

## AROME Wind @ 920 hPa

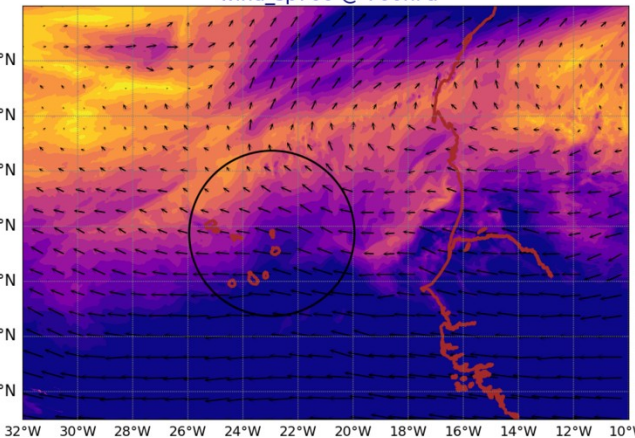
AROME25 20240626-12-UTC -ech(12h)  
wind\_sp700 @ 700hPa



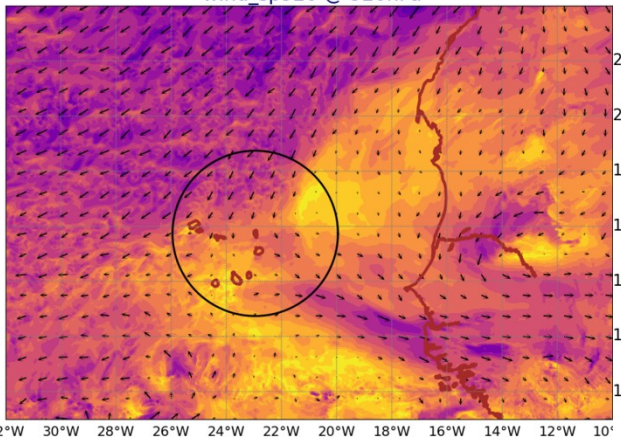
AROME25 20240627-12-UTC -ech(36h)  
wind\_sp700 @ 700hPa



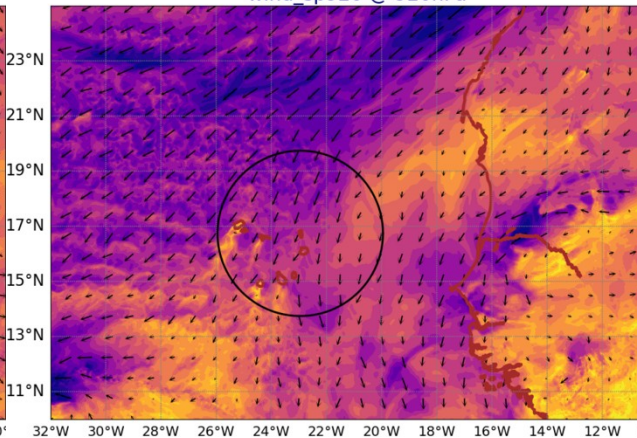
AROME25 20240628-12-UTC -ech(60h)  
wind\_sp700 @ 700hPa



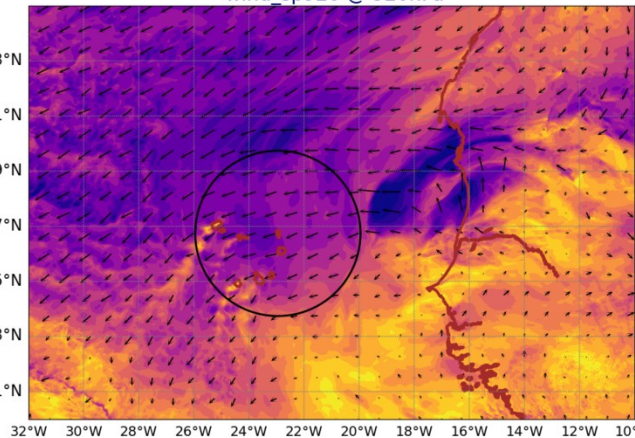
AROME25 20240626-12-UTC -ech(12h)  
wind\_sp920 @ 920hPa



AROME25 20240627-12-UTC -ech(36h)  
wind\_sp920 @ 920hPa



AROME25 20240628-12-UTC -ech(60h)  
wind\_sp920 @ 920hPa





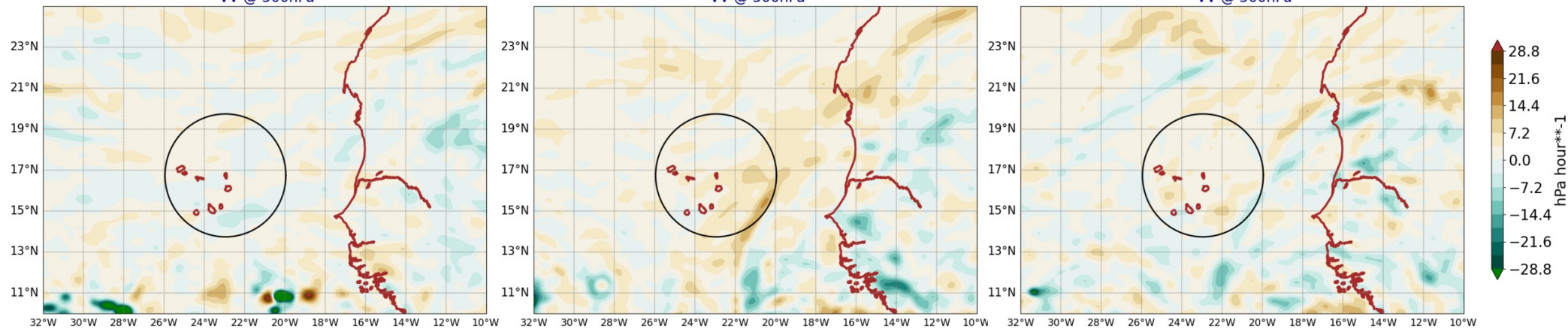
# AROME VV @ 500hPa

## AROME LWP+IWP

AROME25 20240626-12-UTC -ech(12h)  
VV @ 500hPa

AROME25 20240627-12-UTC -ech(36h)  
VV @ 500hPa

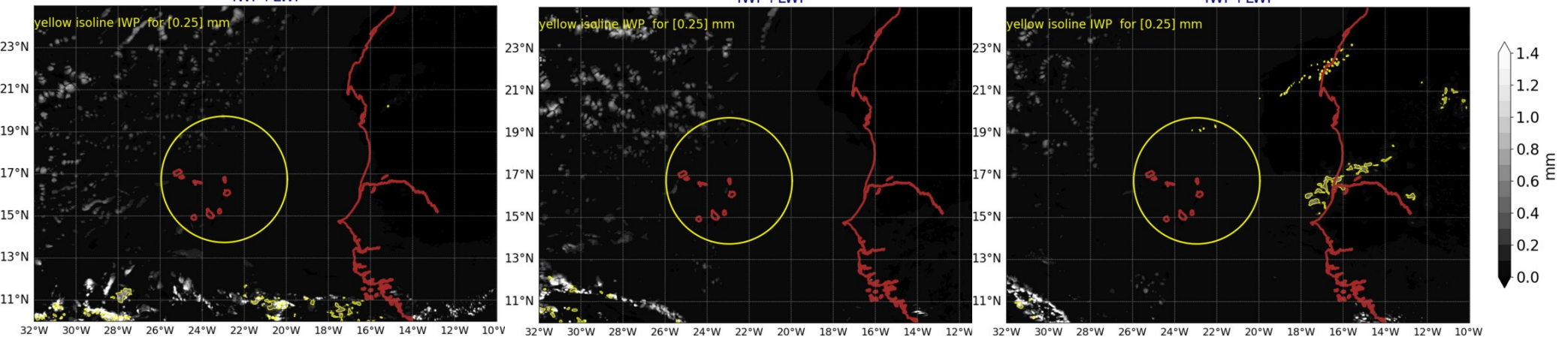
AROME25 20240628-12-UTC -ech(60h)  
VV @ 500hPa



AROME25 20240626-12-UTC -ech(12h)  
IWP+LWP

AROME25 20240627-12-UTC -ech(36h)  
IWP+LWP

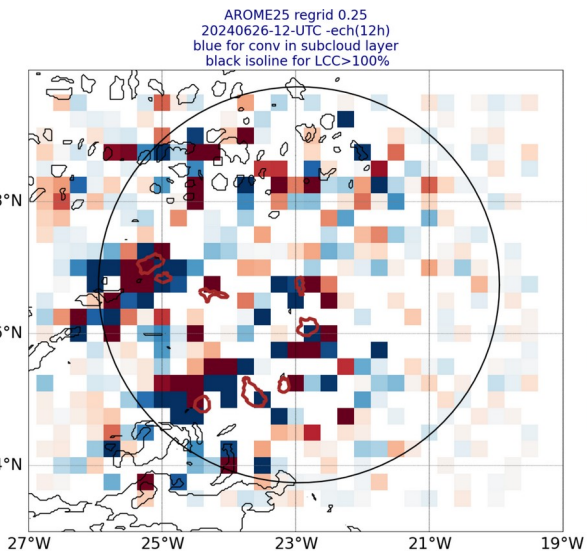
AROME25 20240628-12-UTC -ech(60h)  
IWP+LWP



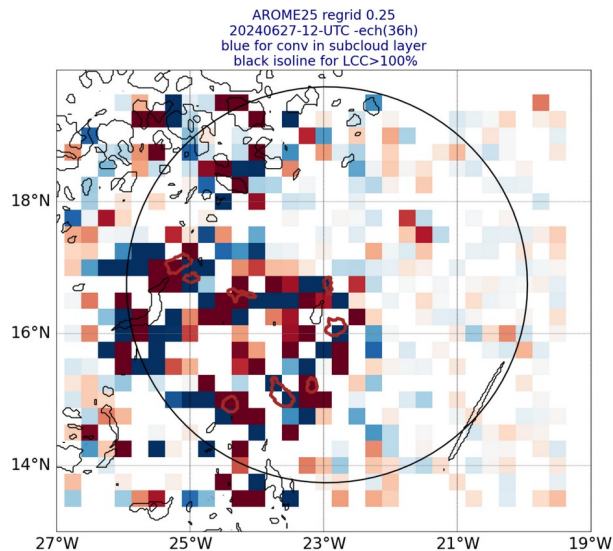


# Smoc

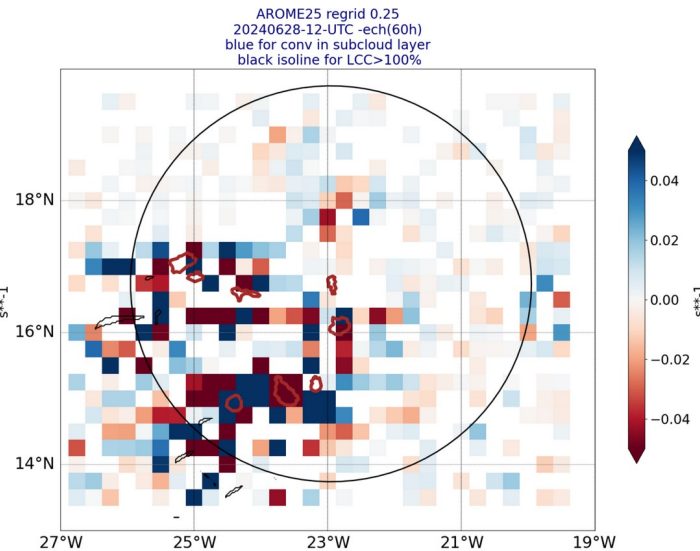
-blue for conv in subcloud layer-  
dark isoline for low cloud cover



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



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



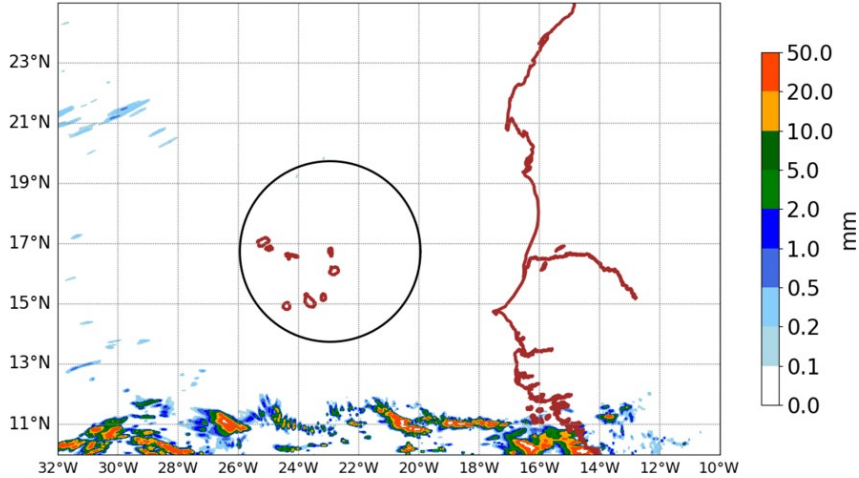
white box where subcloud and cloud layer have same sign of div

over 6h ech 12h and 15h

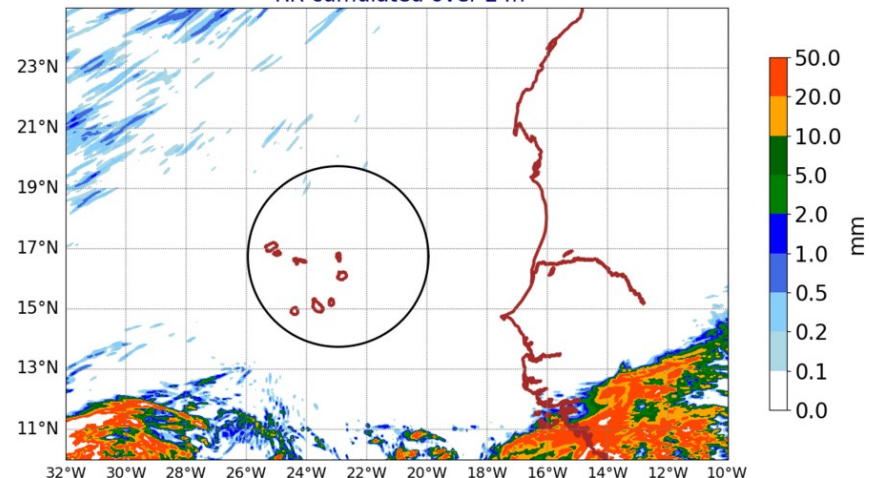
# AROME precipitation

over 24h ech 36h and 60h

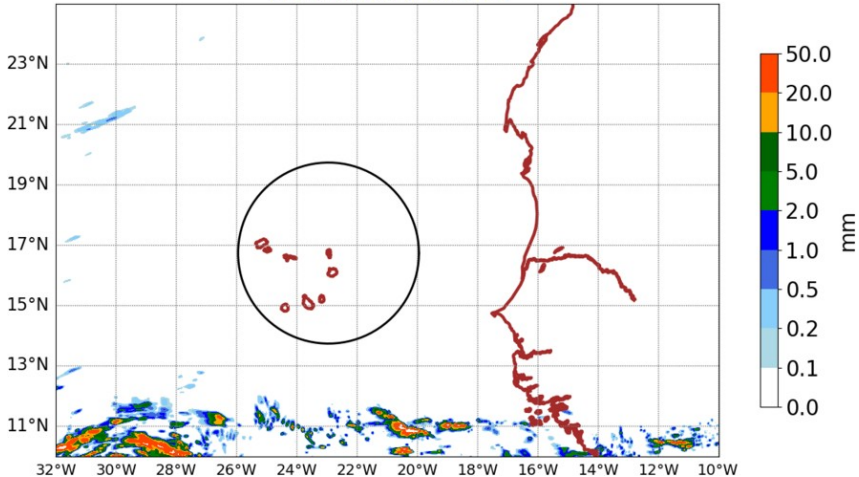
AROME25 20240626-12-UTC -ech(12h)  
RR cumulated over 6h



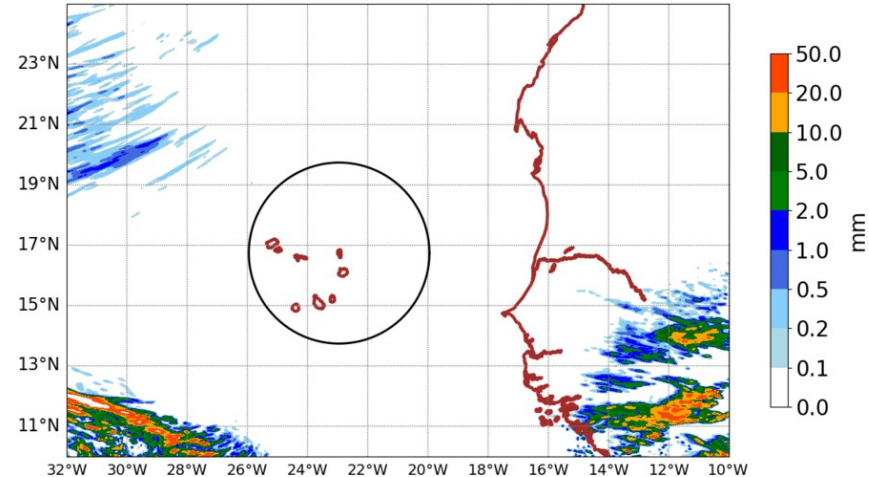
AROME25 20240627-12-UTC -ech(36h)  
RR cumulated over 24h



AROME25 20240626-15-UTC -ech(15h)  
RR cumulated over 6h

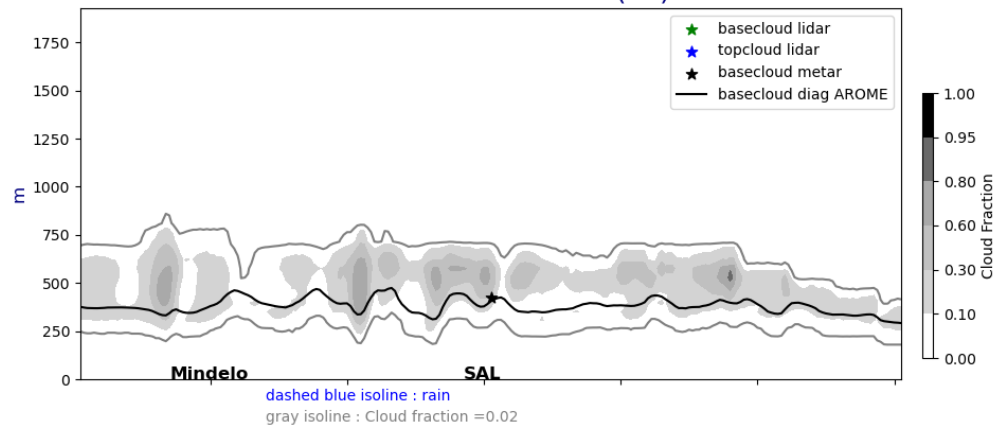


AROME25 20240628-12-UTC -ech(60h)  
RR cumulated over 24h

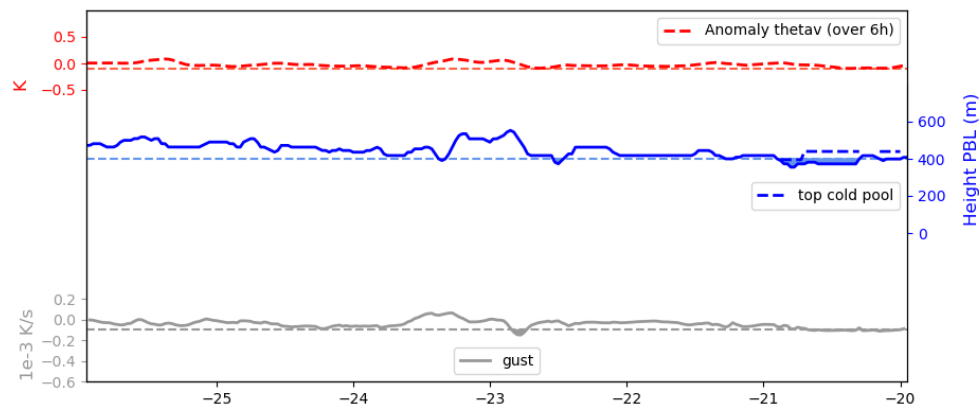
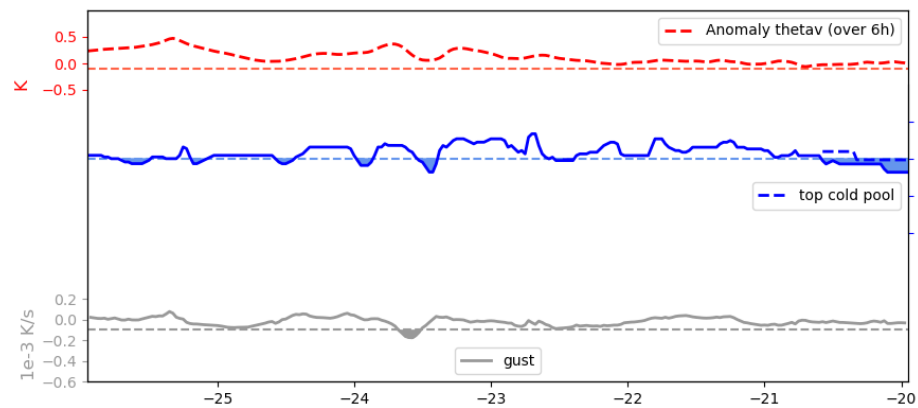
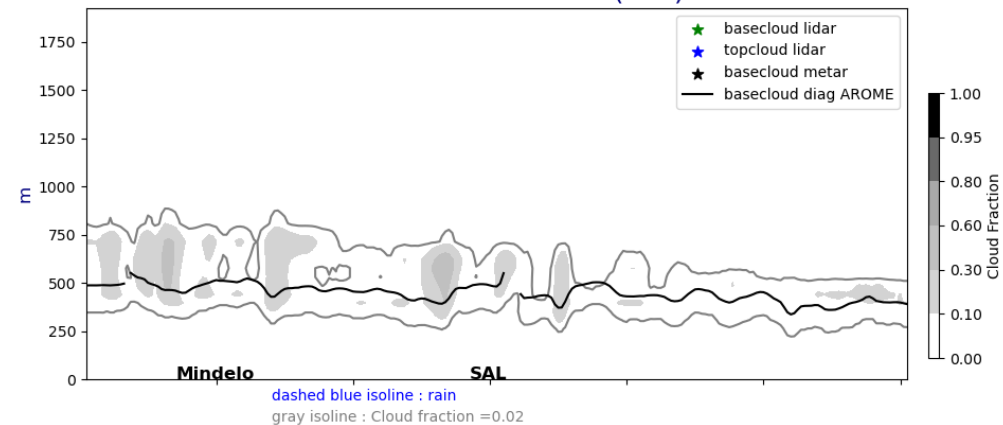


# Lat. cross section @17°5N fct : 01UTC, 12UTC

Cross section E/W @ 17.5N  
20240626-01-UTC ech(1h)

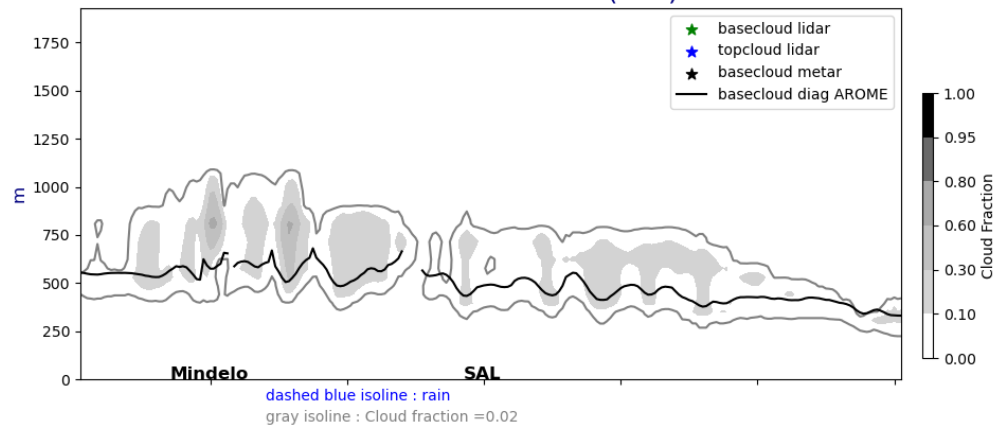


Cross section E/W @ 17.5N  
20240626-12-UTC ech(12h)

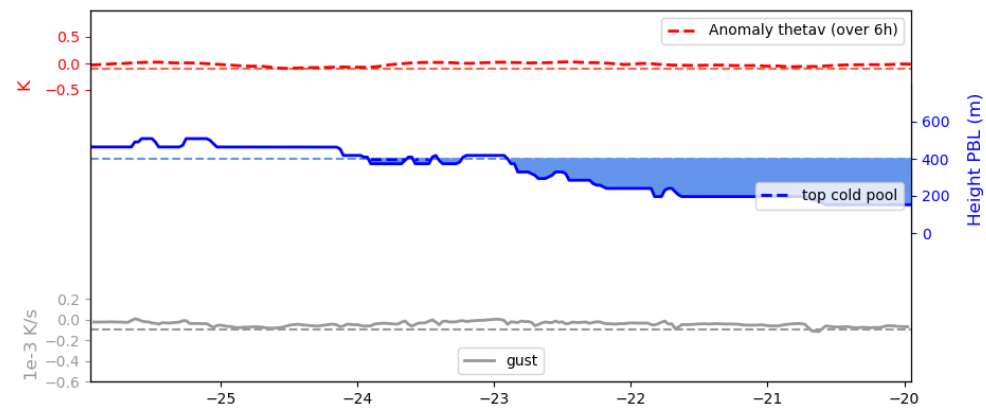
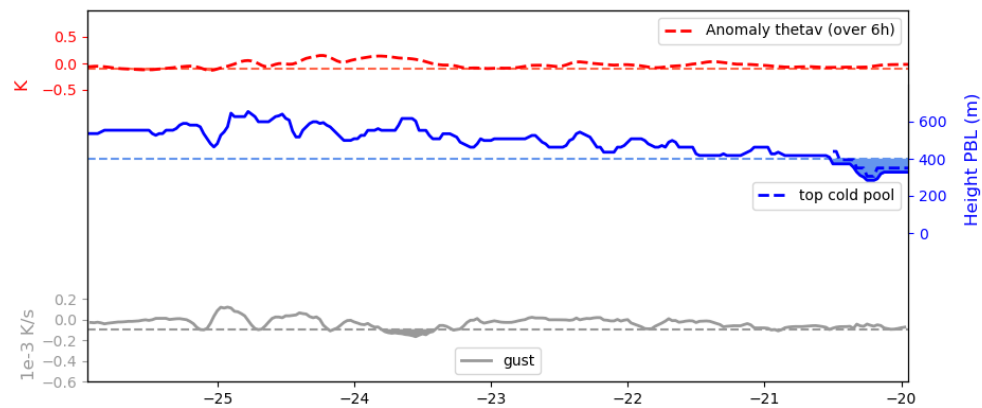
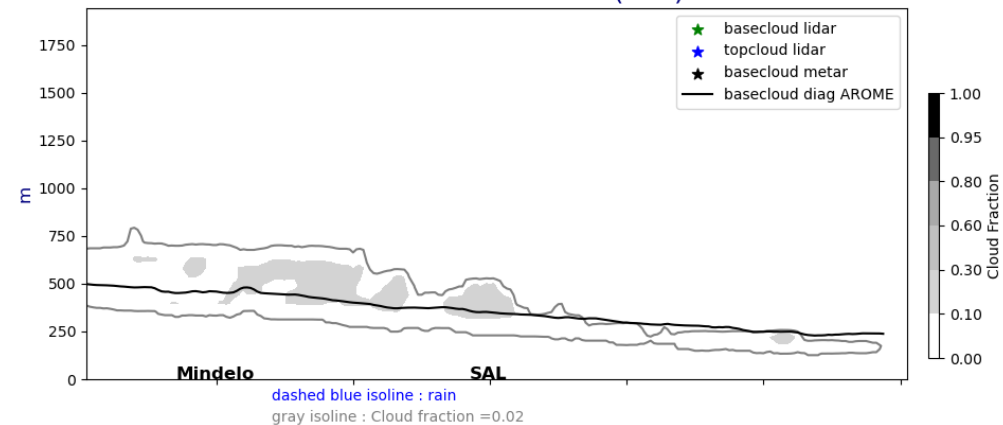


# Lat. cross section @17°5N fct : J+1 and J+2 @ 12UTC

Cross section E/W @ 17.5N  
20240627-12-UTC ech(36h)



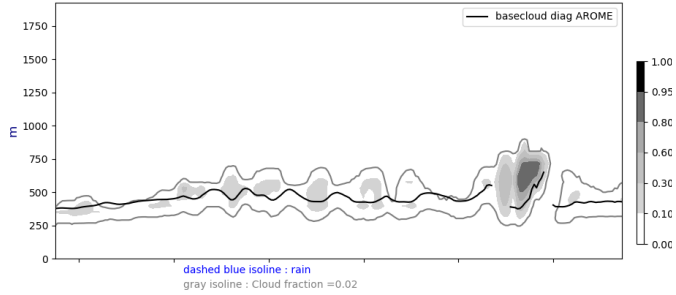
Cross section E/W @ 17.5N  
20240628-12-UTC ech(60h)



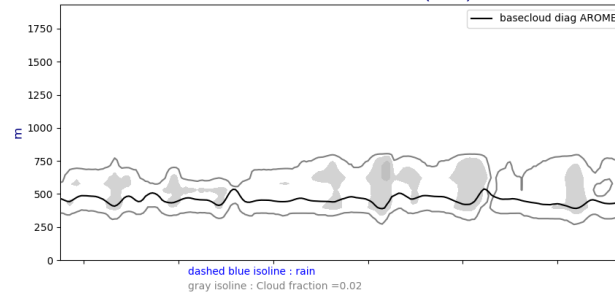


# Lon. cross section @22W fct : J,J+1, J+2 @ 12 UTC

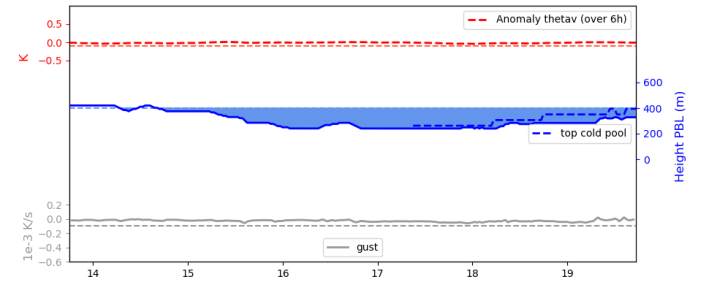
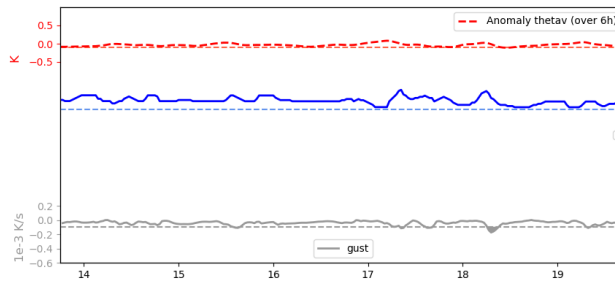
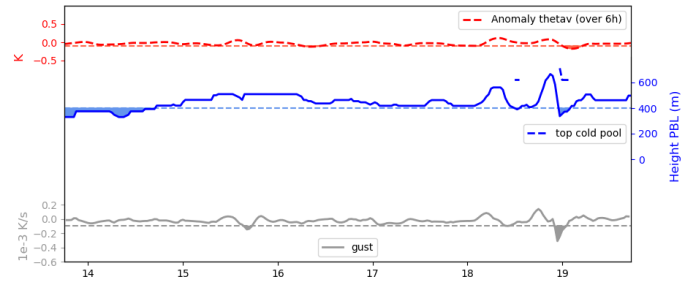
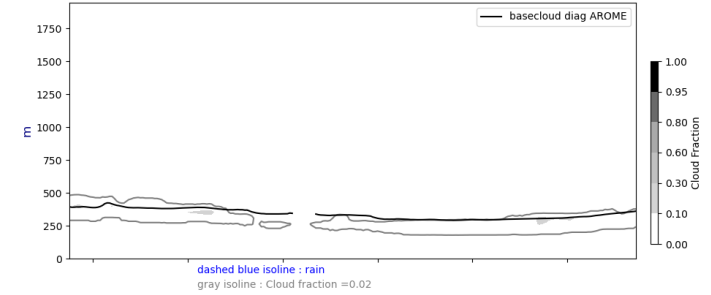
Cross section S/N @ -22W  
20240626-12-UTC ech(12h)



Cross section S/N @ -22W  
20240627-12-UTC ech(36h)

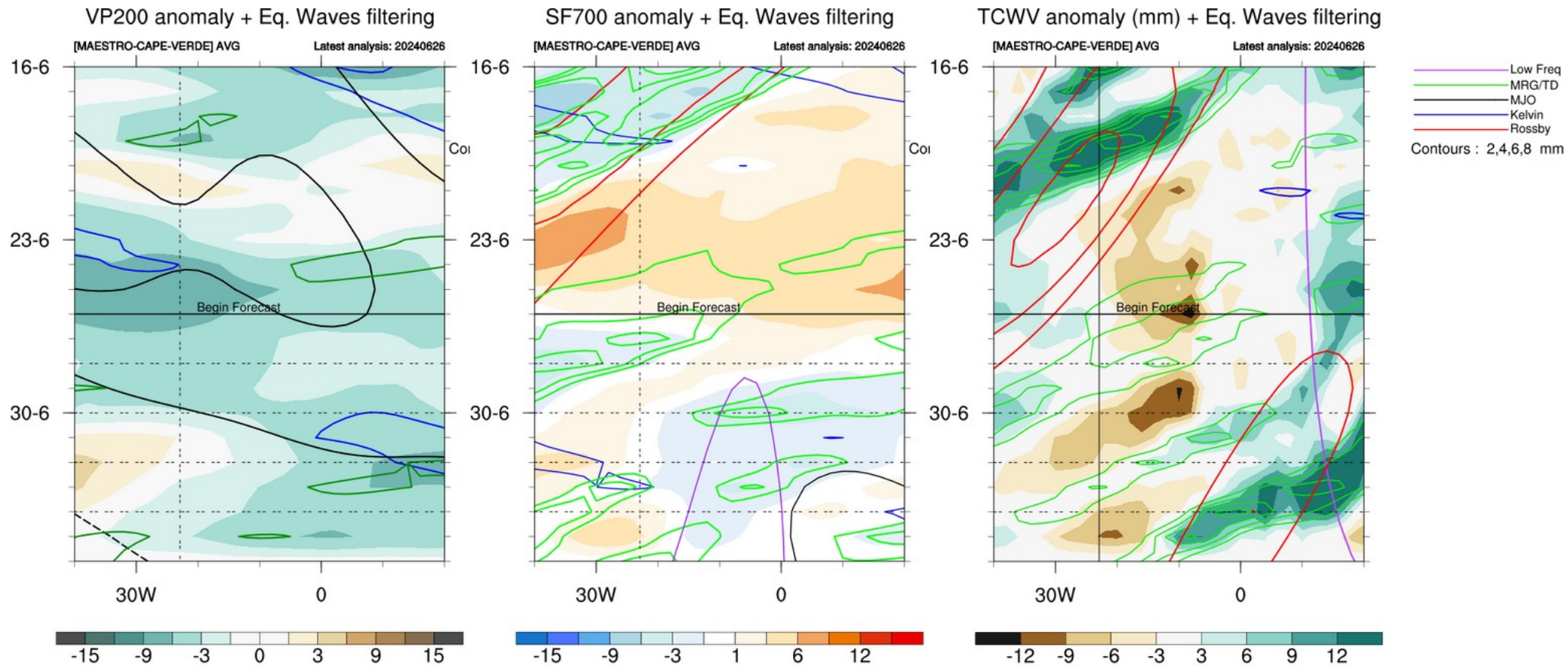


Cross section S/N @ -22W  
20240628-12-UTC ech(60h)

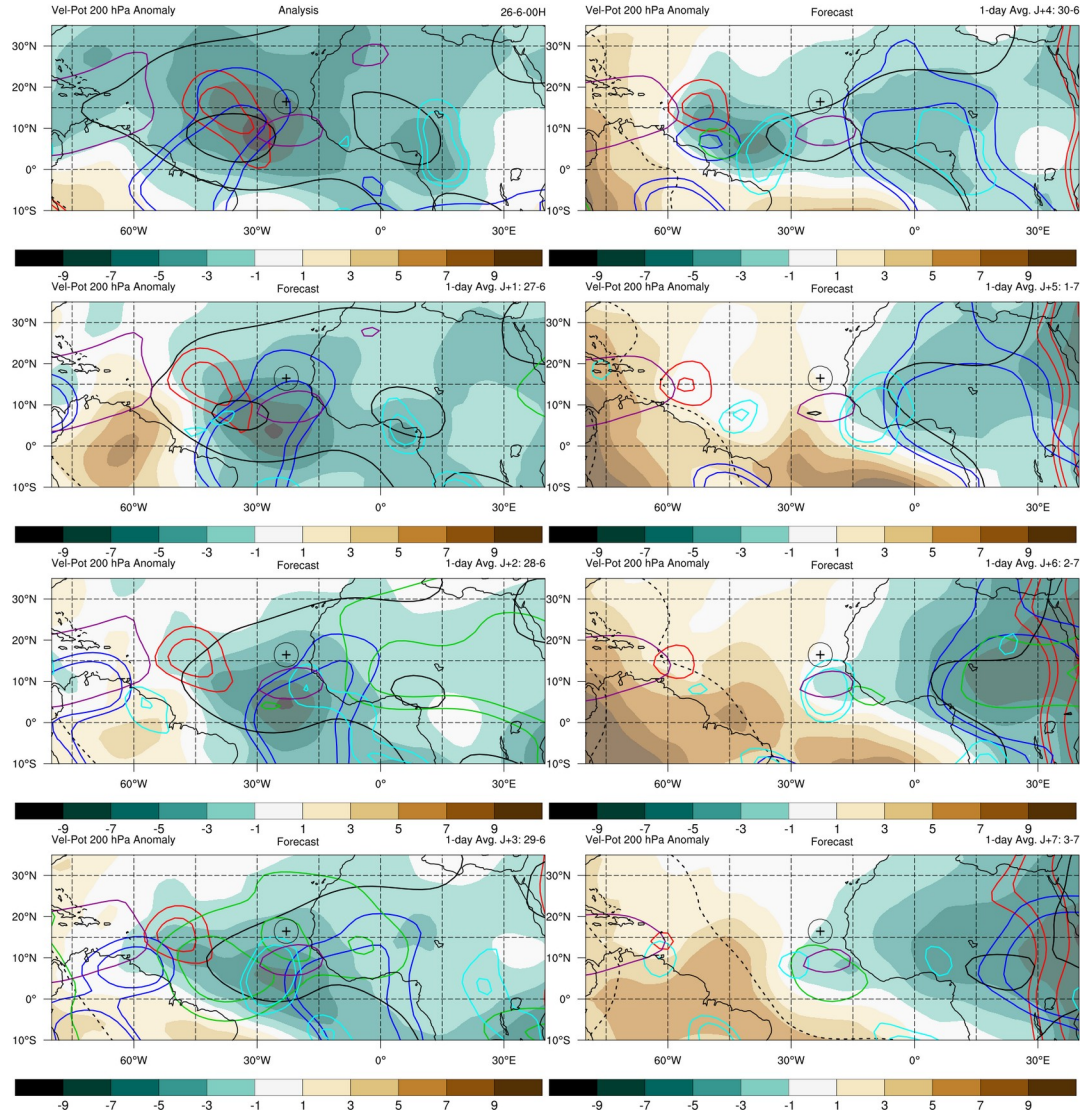


Week forecast J - J+7

# Equatorial Waves filtering hovmollers



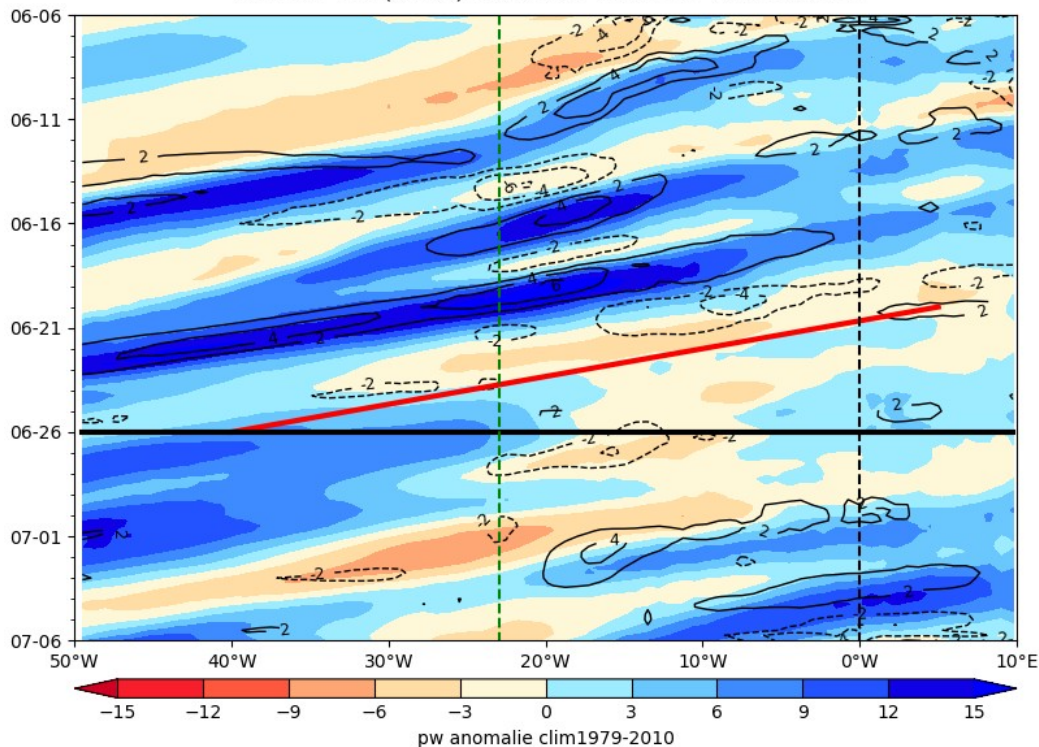
# Waves : Velocity potential @ 200 hPa, day J to J+7



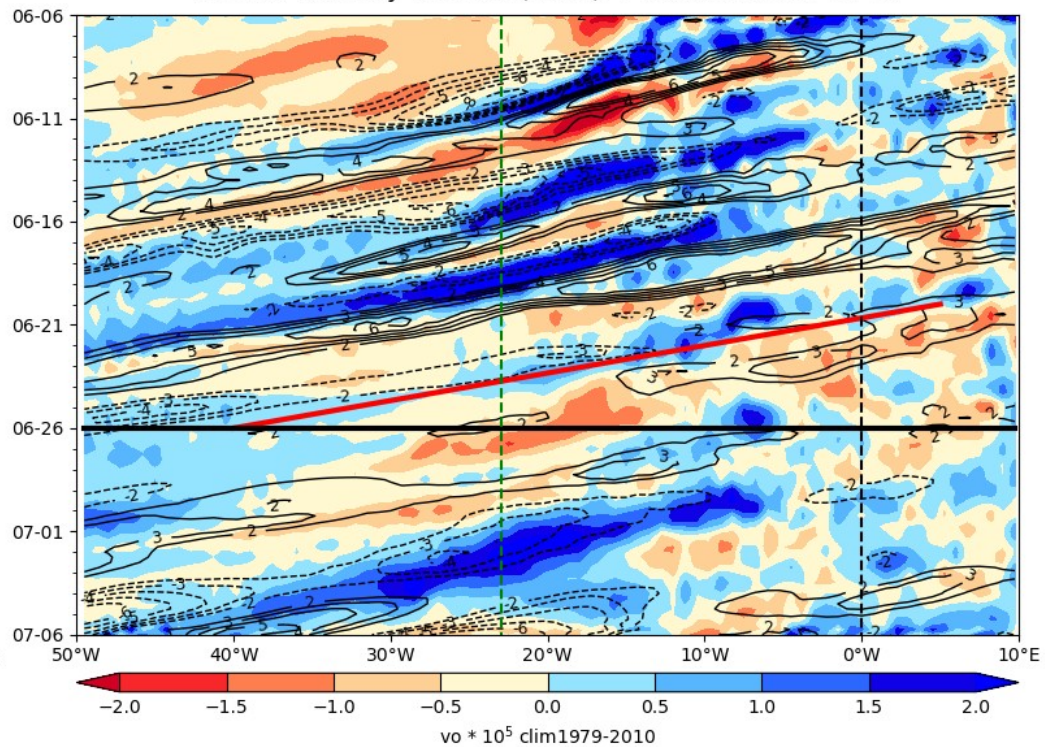


# Hovmoller anomaly

ECMWF PW (color) AND V at 925 hPa 2024-06-26

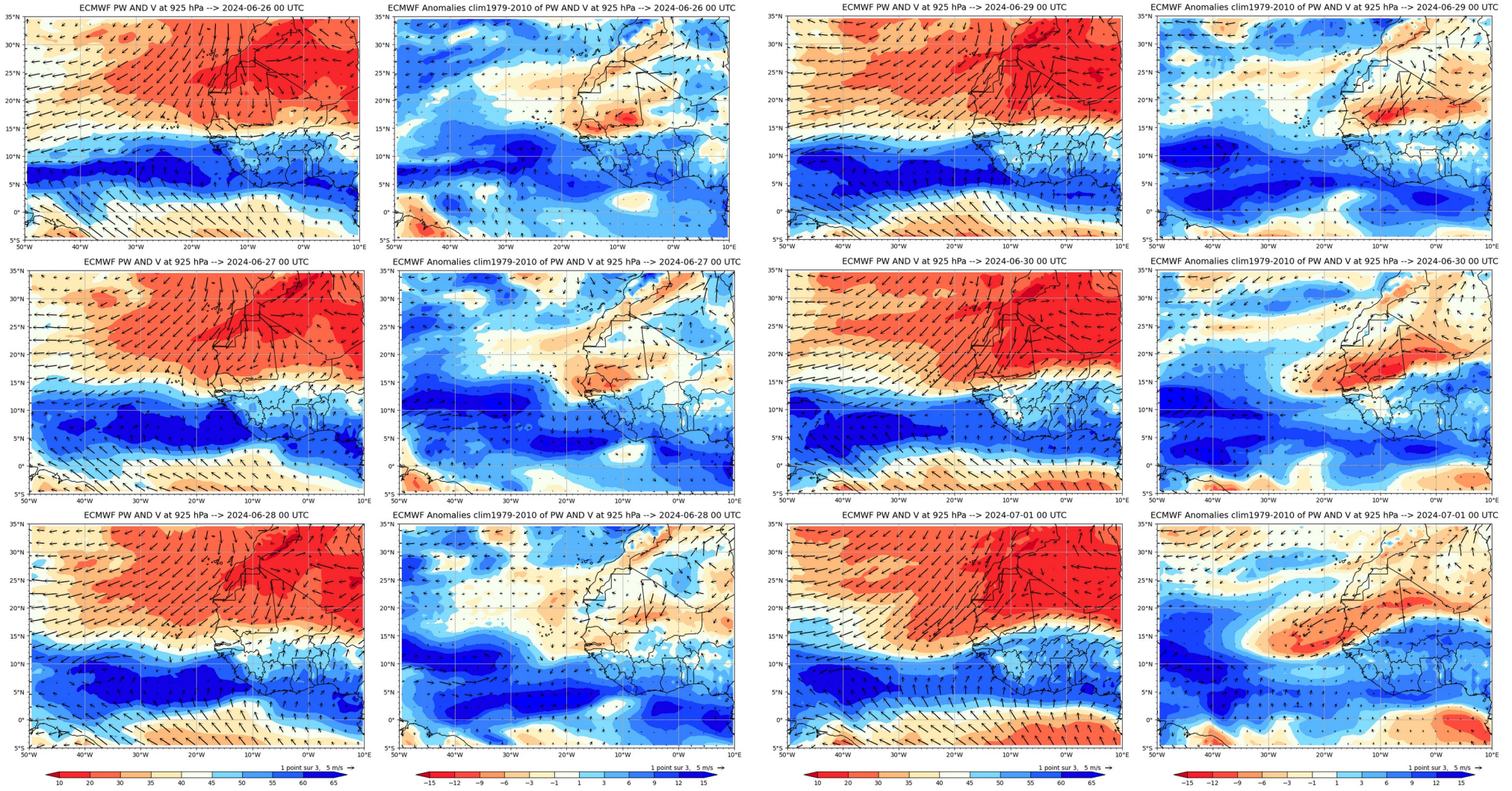


ECMWF Vorticity 850 hPa (color), V-700 hPa 2024-06-26



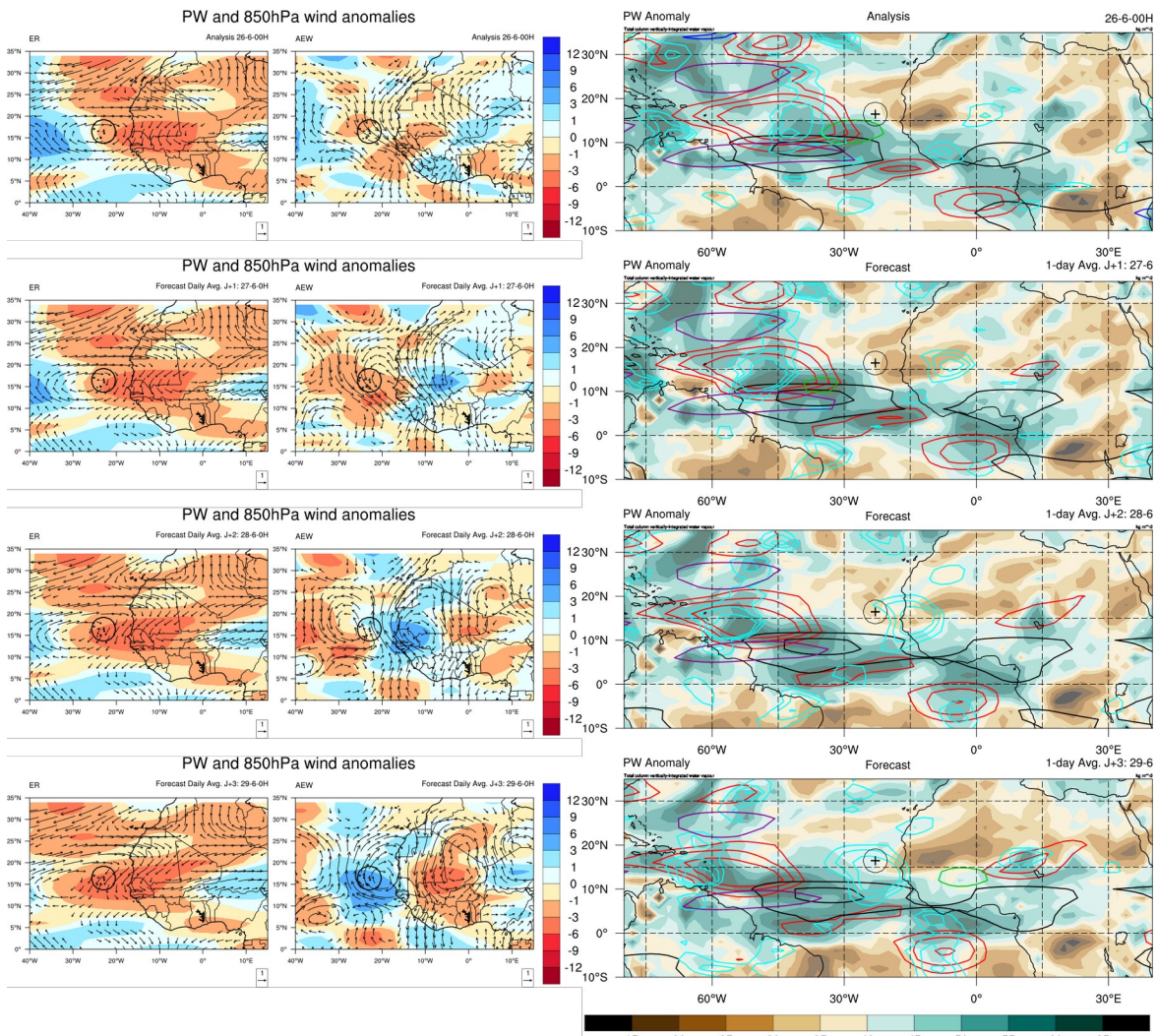


# Daily PW and wind @ 925 hPa – total and anomalies



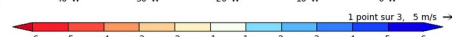
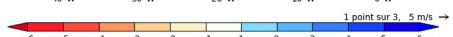
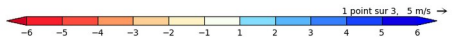
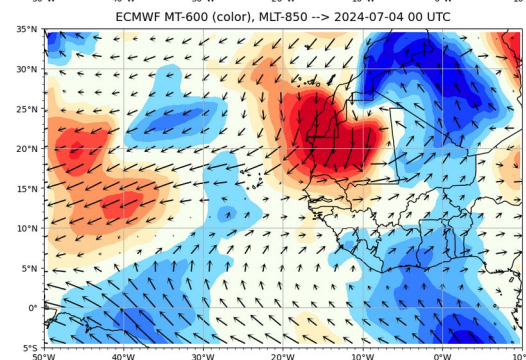
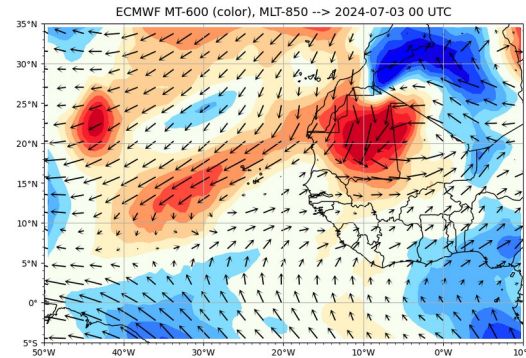
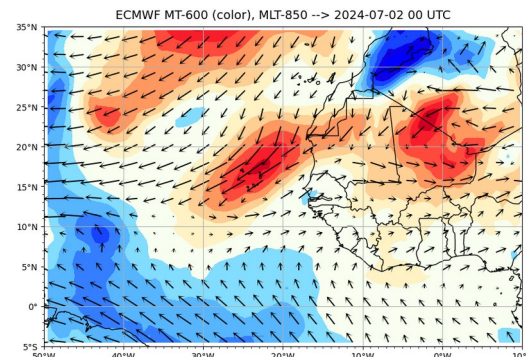
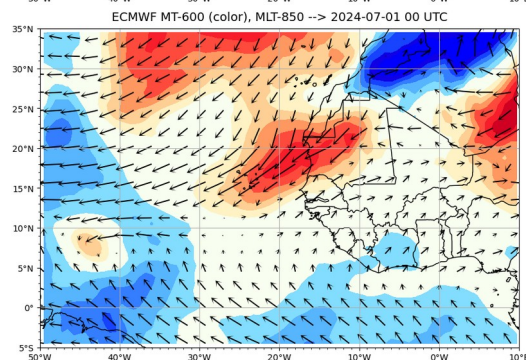
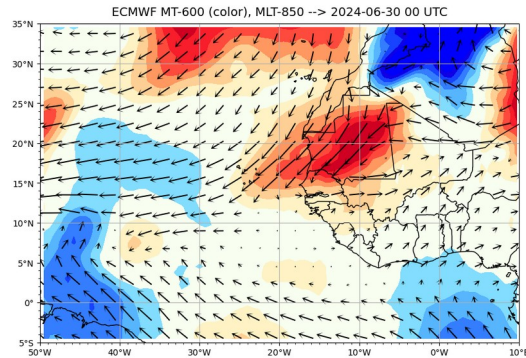
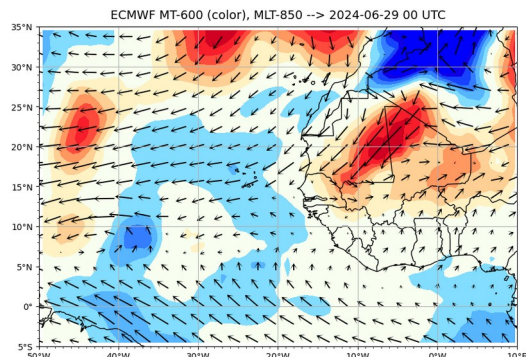
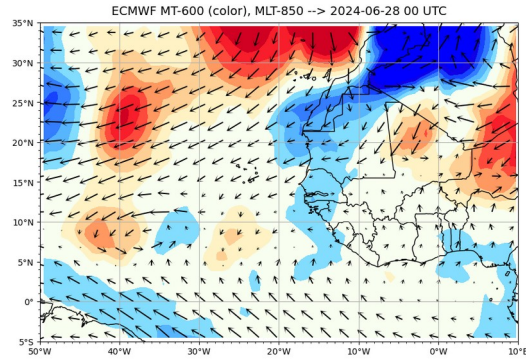
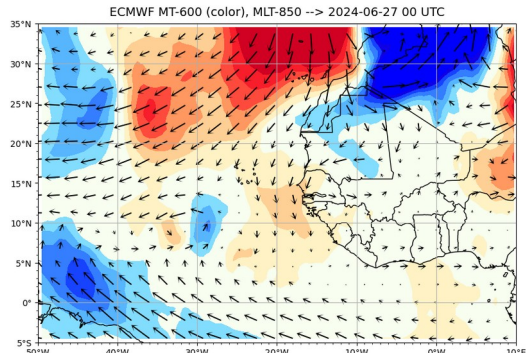
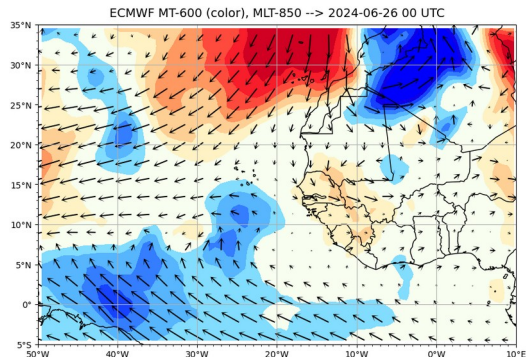


# Decomposition PW/Wind and Waves contours



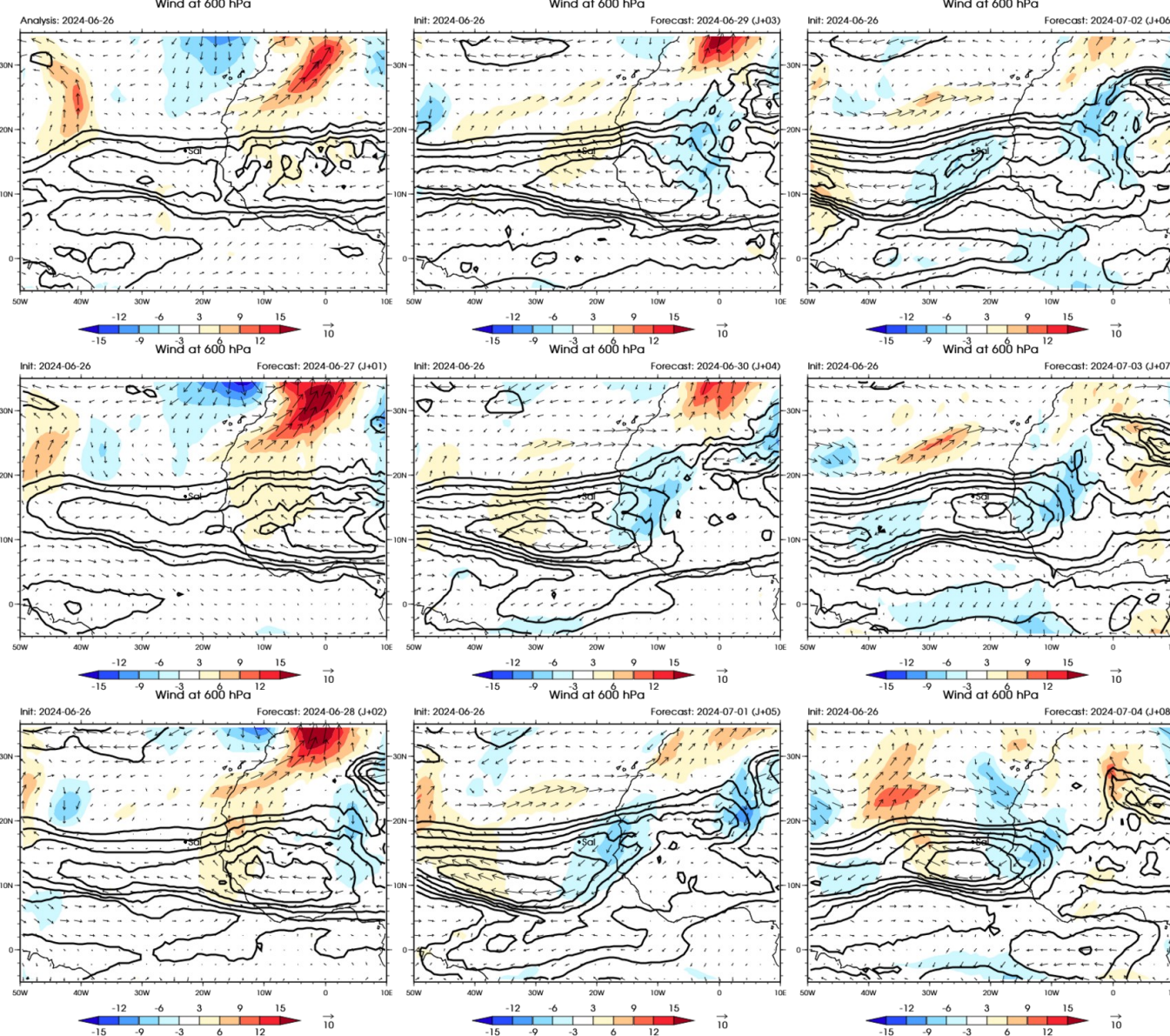


# Monsoon Flow





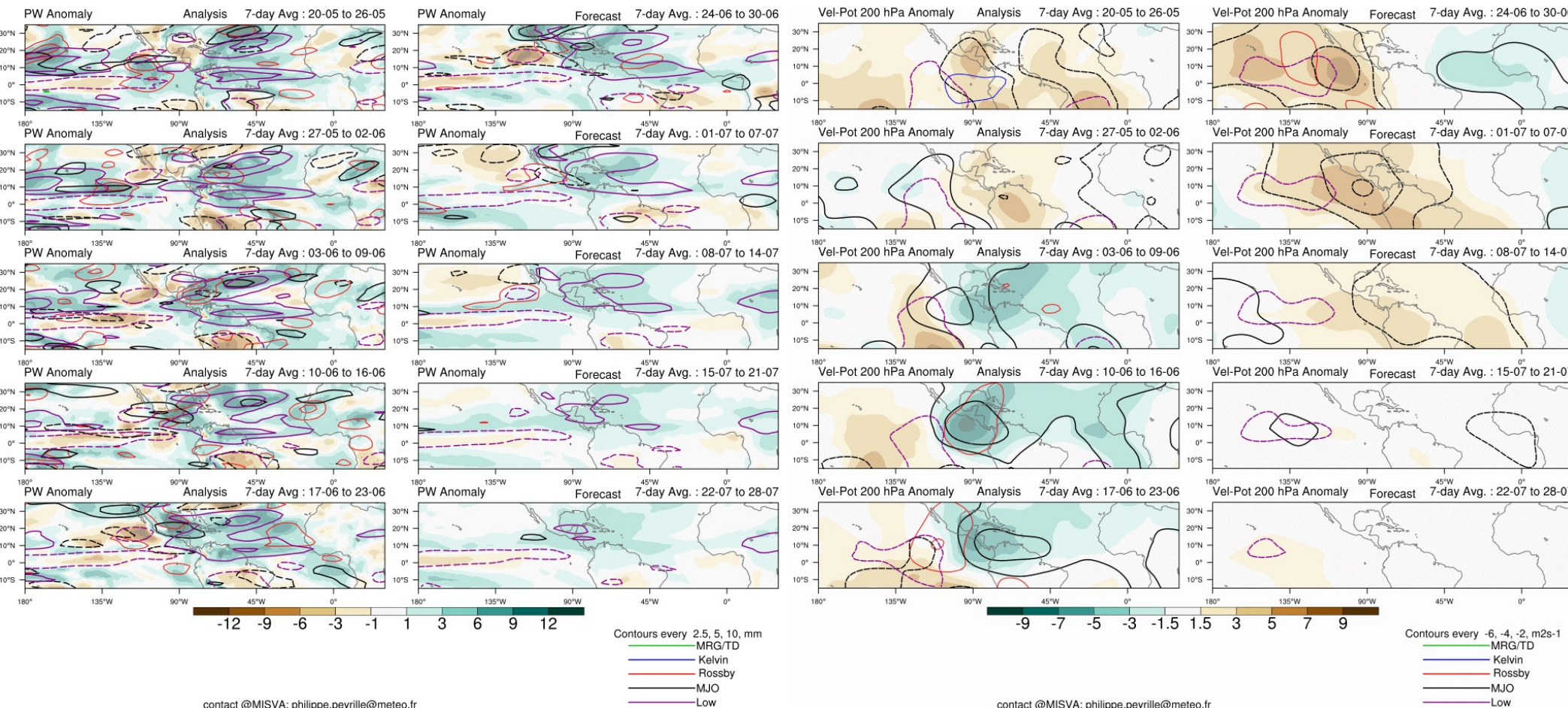
# African Easterly Jet wind 600 hPa



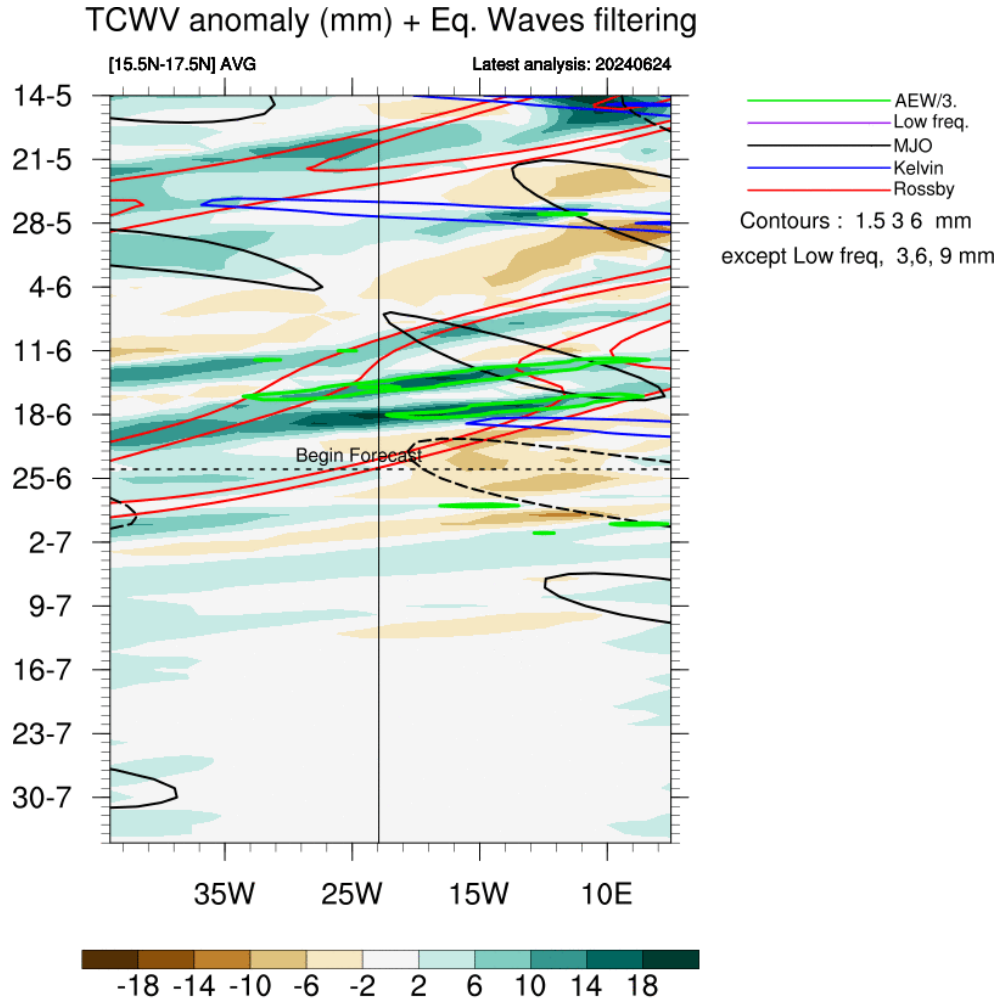
Subseasonal forecast  
(updated once a week)



# 4 weeks forecast PW et VP200 (à zoomer sur SAL)

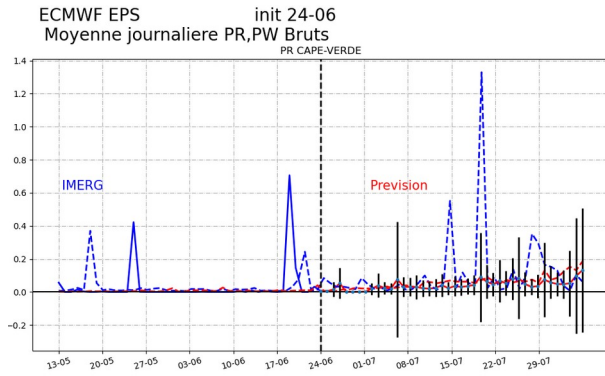


# Hovmoller forecast PW over 4 weeks

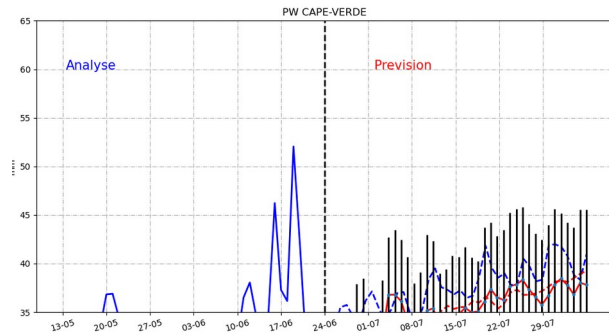




# Temporal evolution PW, PR (+ EKE)



journalier



hebdomadaire

## 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							

