

DRAFT SUMMARY MAESTRO

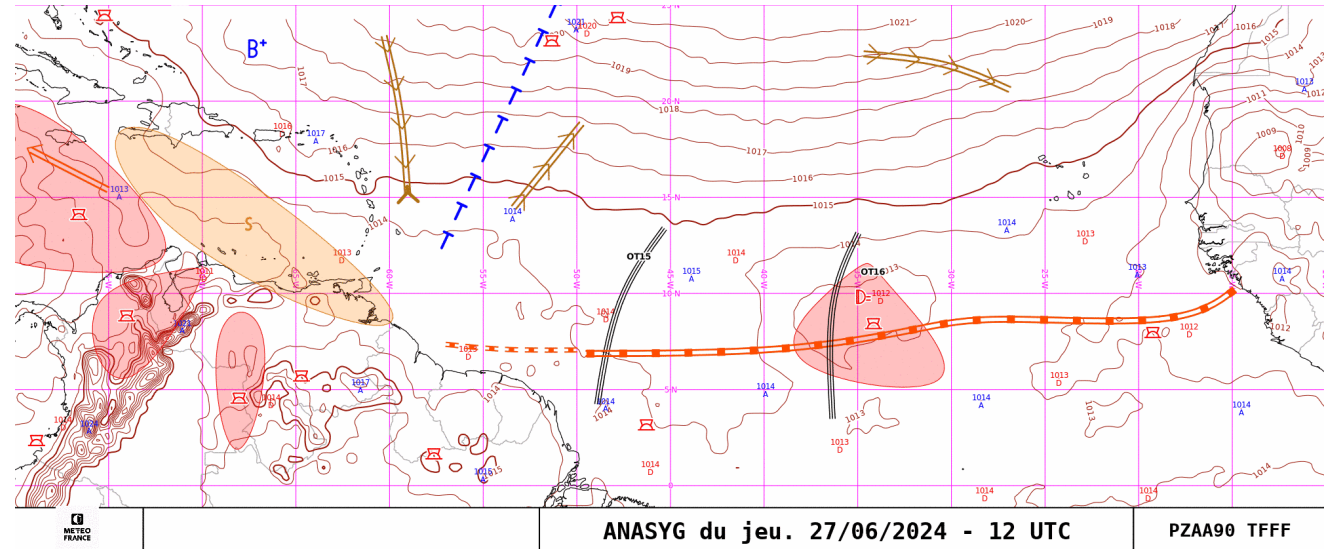
Four parts :

- 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

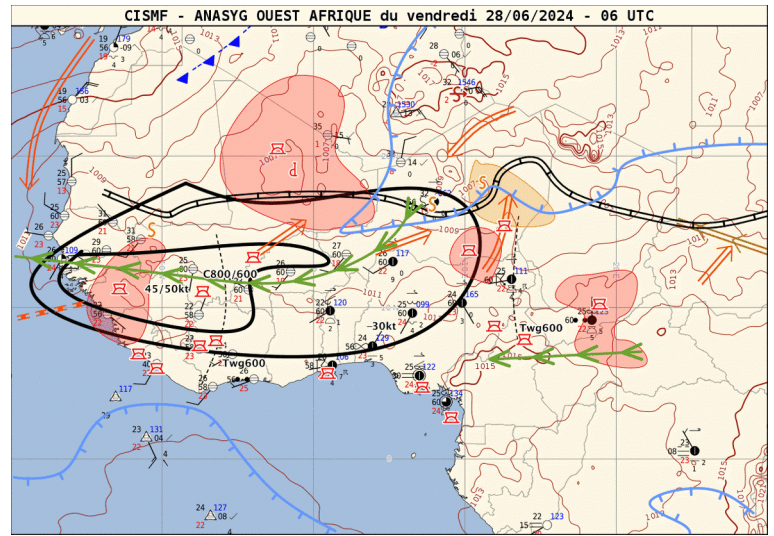
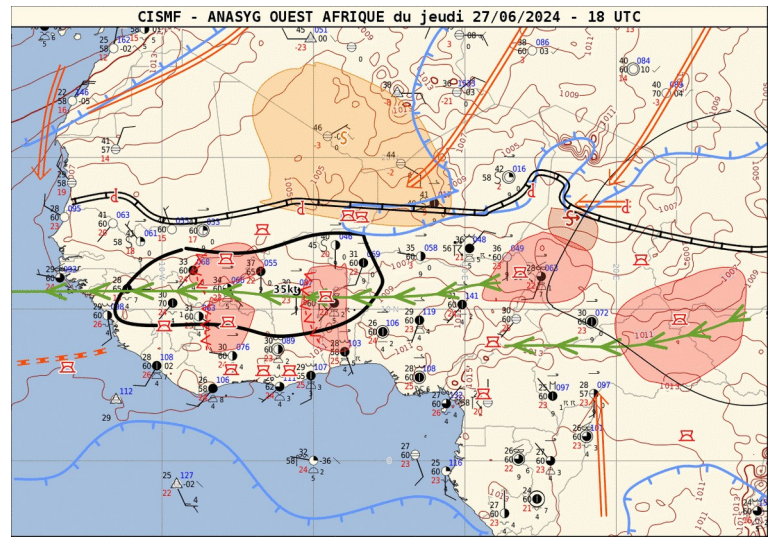
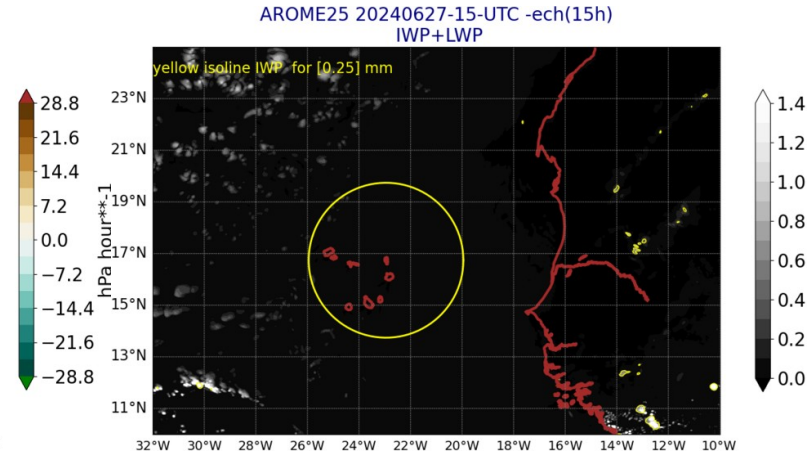
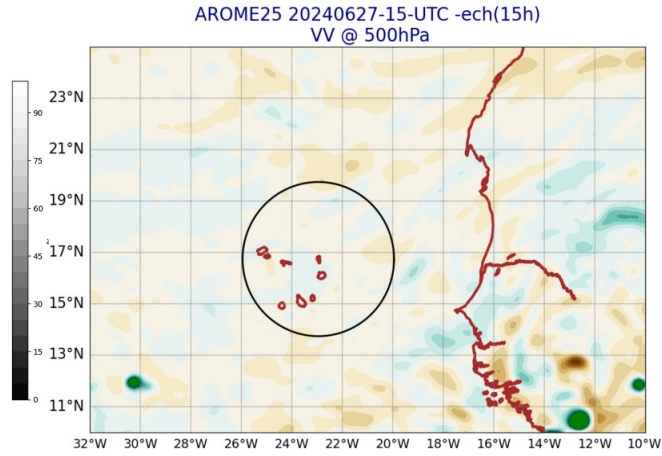
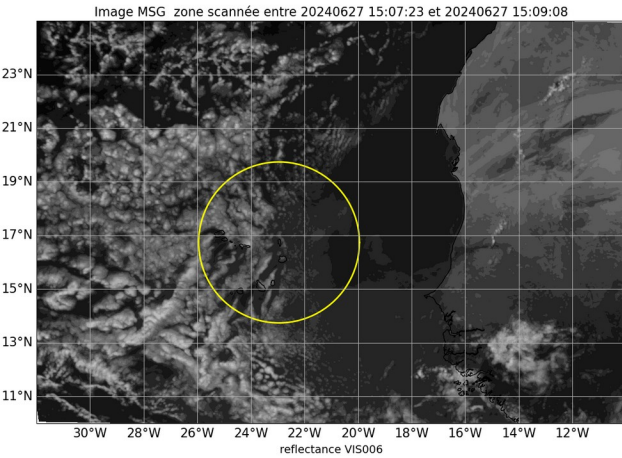
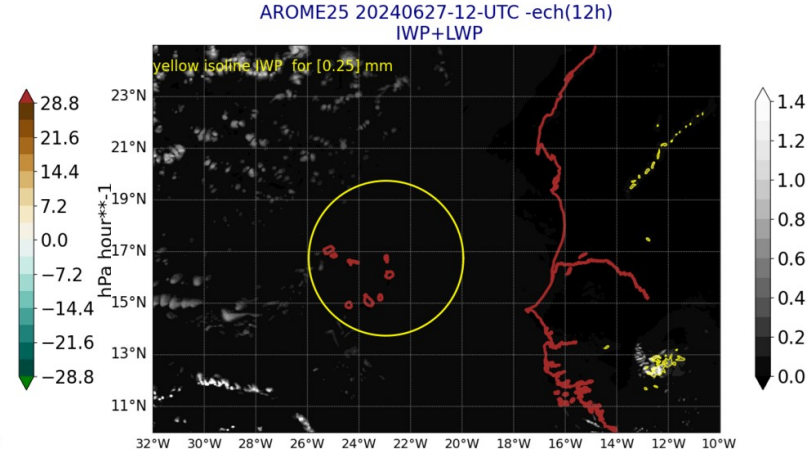
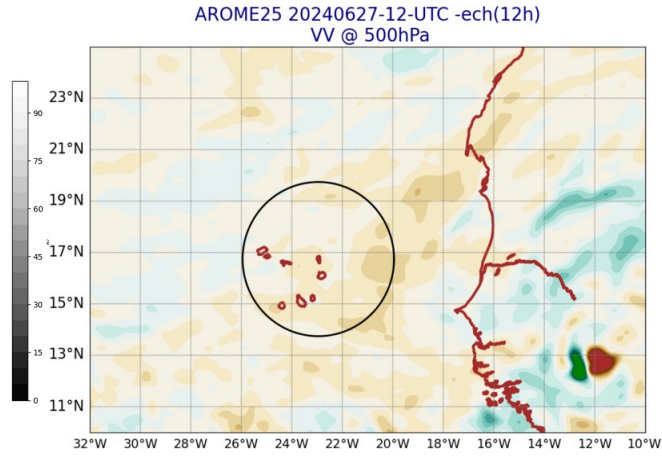
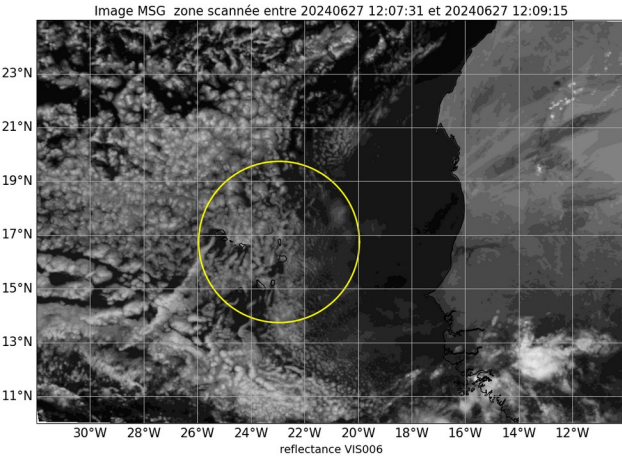


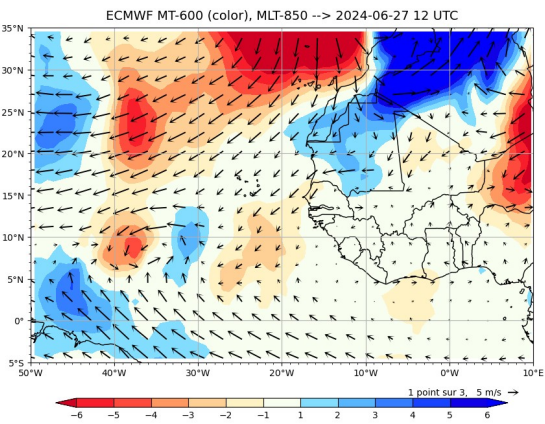
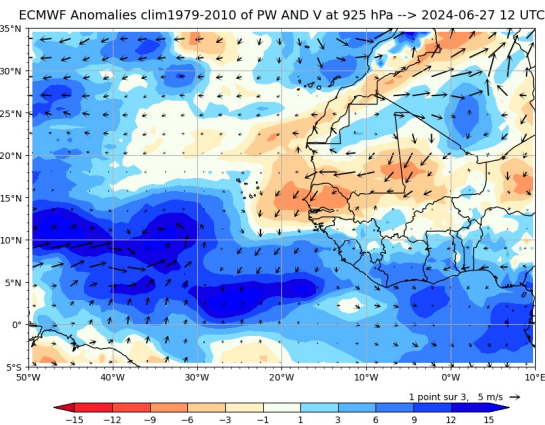
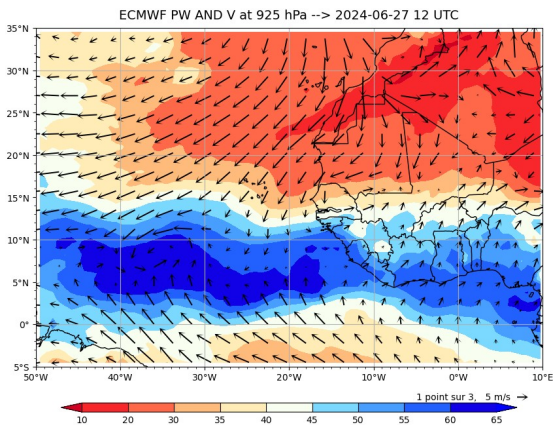
Image MSG Visible J-1 12 and 15 UTC

Arome J-1 12 and 15 UTC

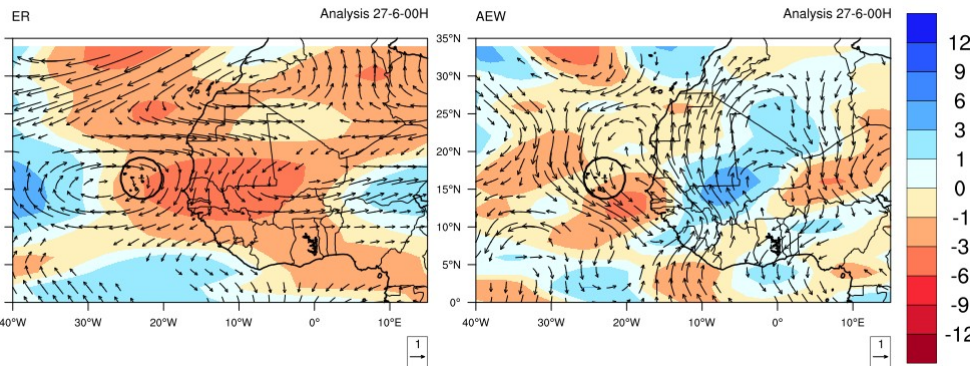


Precipitable Water - Merid. Transport J-1 12UTC

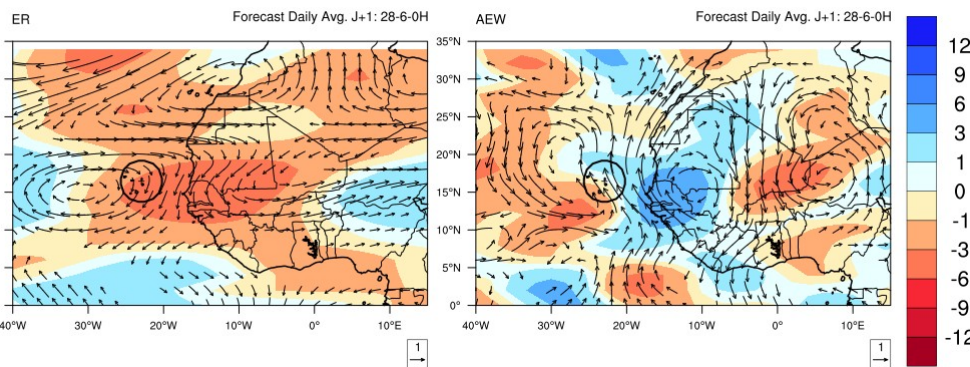
Waves J-1 00 UTC and J 00UTC



PW and 850hPa wind anomalies



PW and 850hPa wind anomalies

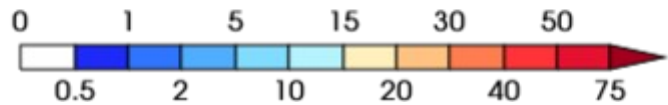
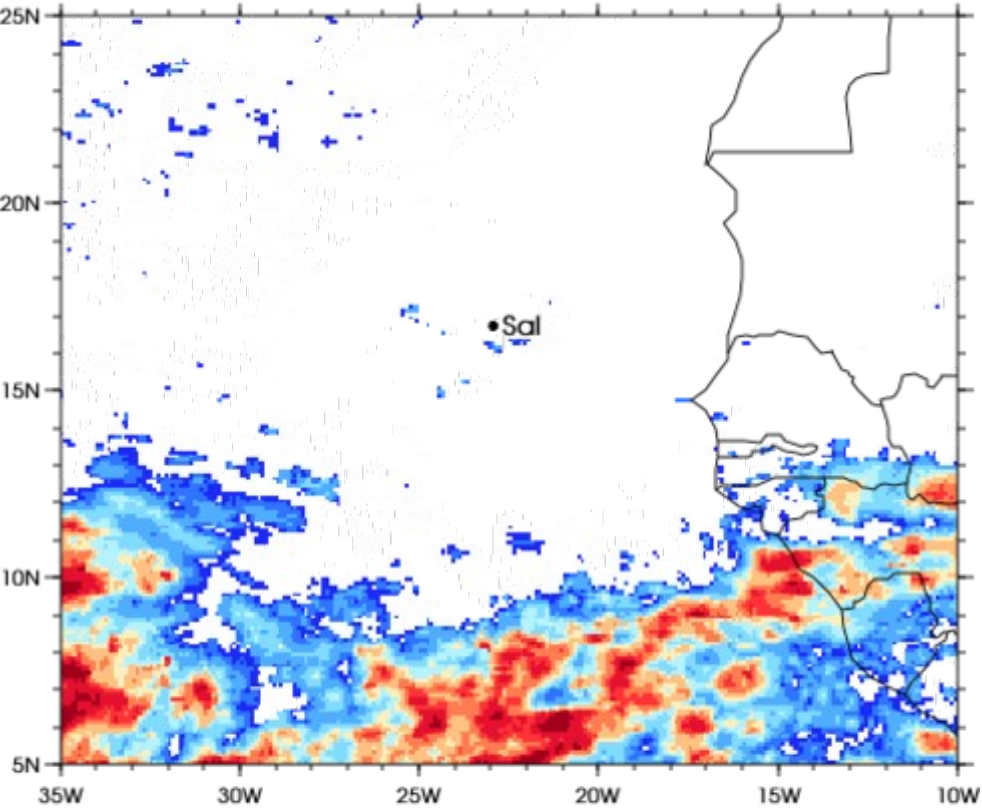


Precipitation IMERG and AROME J-1

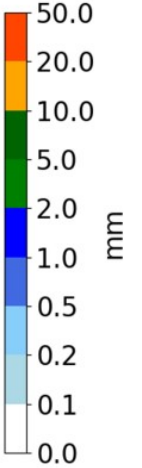
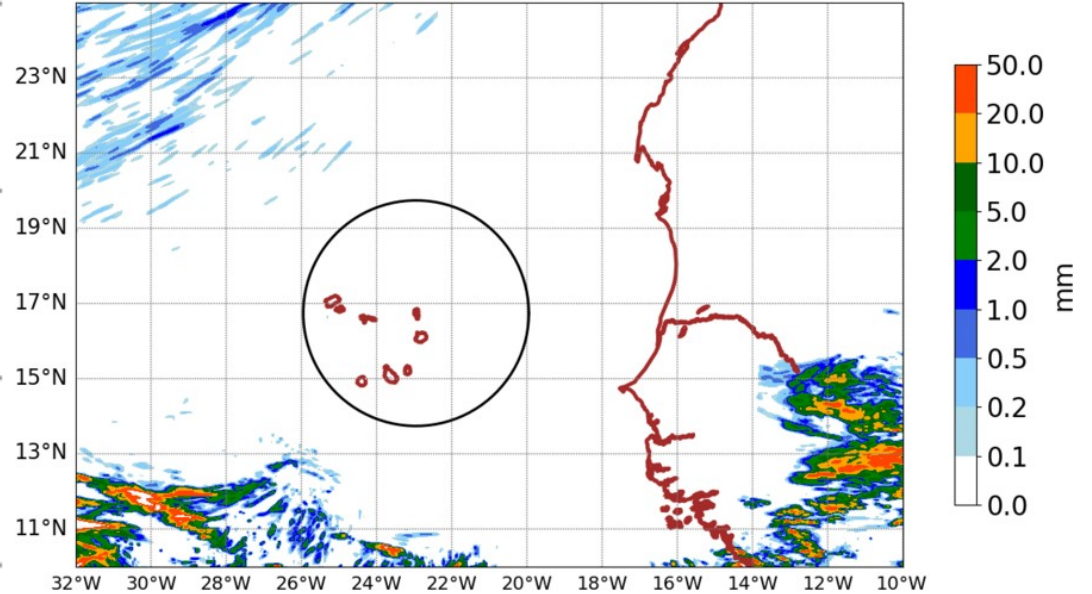
3IMERGHHE GPM IMERG Early Precipitation

Daily accumulated: 2024-06-27

Units: mm/day

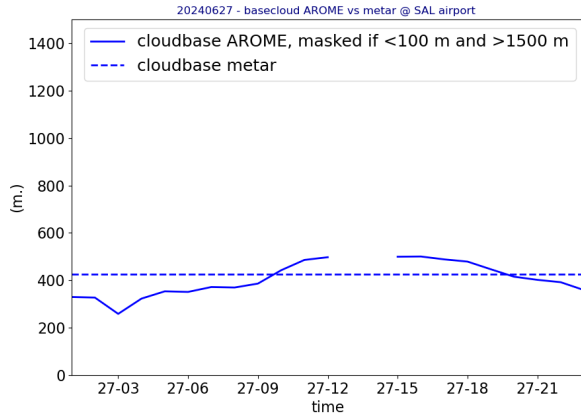
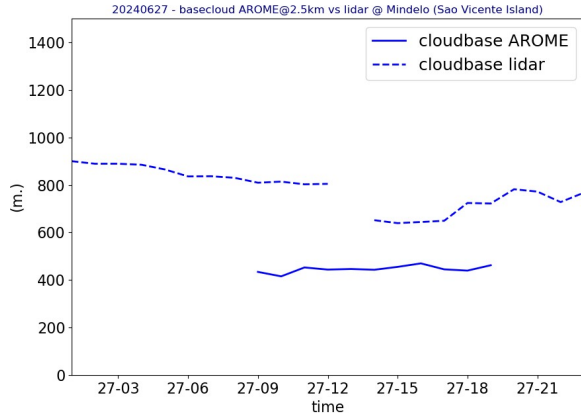


AROME25 20240628-00-UTC -ech(24h)
RR cumulated over 24h

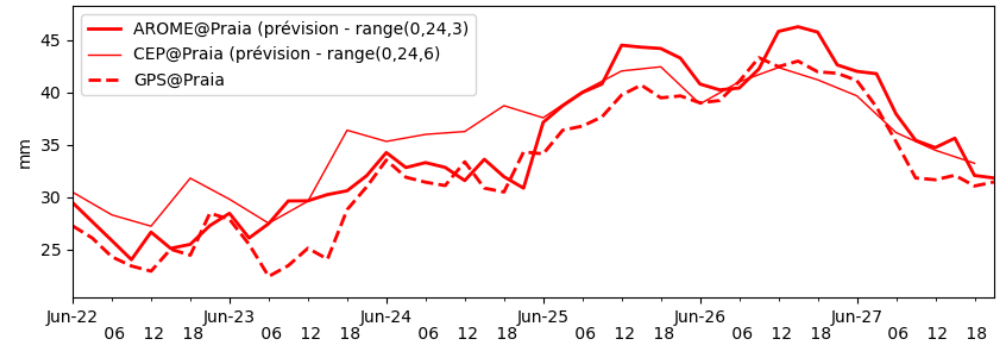
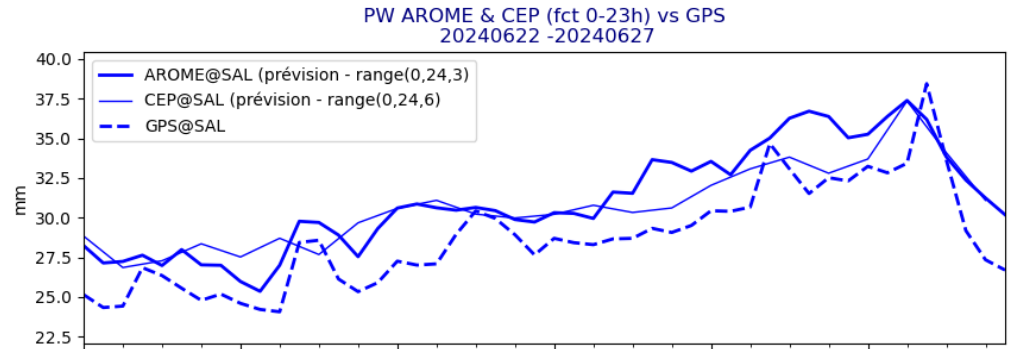


OBSERVATIONS J-1

Lidar@ mindelo
metar@sal

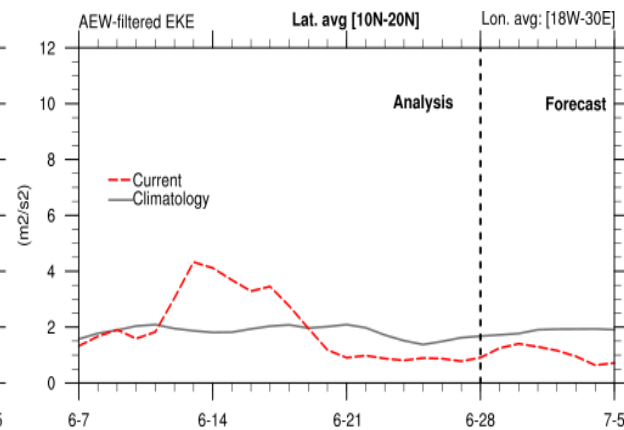
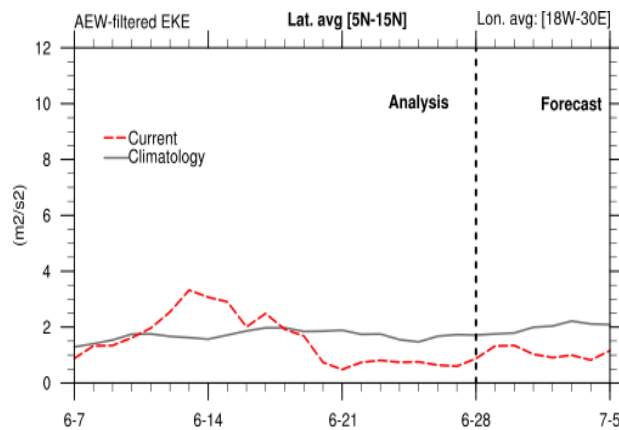
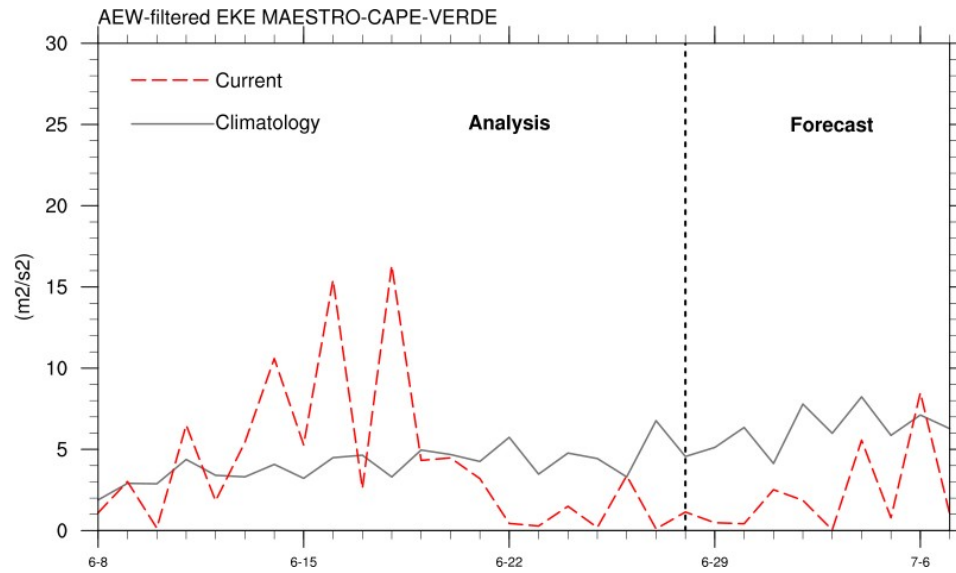
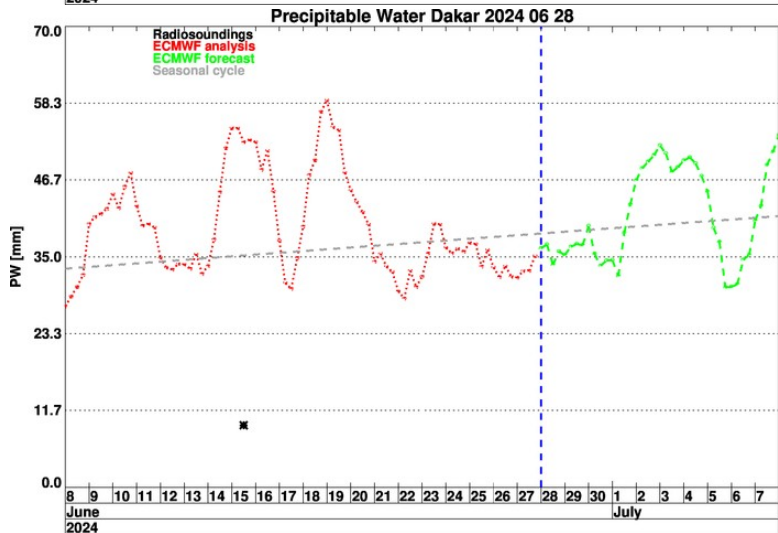
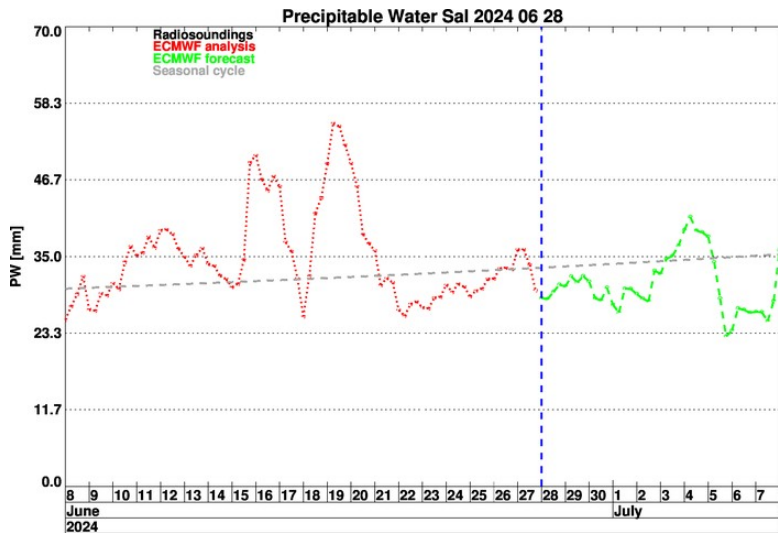


GPS @ Sal
GPS @ Praia



Short term forecast J - J+36h

Temporal evolution PW Sal et Dakar + EKE



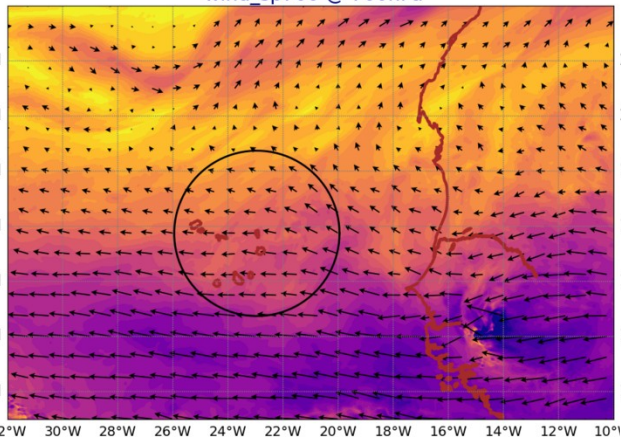
Forecast AROME

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

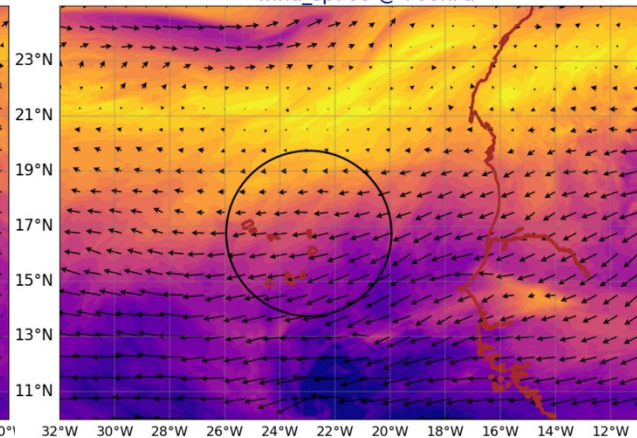
AROME Wind @ 700 hPa

AROME Wind @ 920 hPa

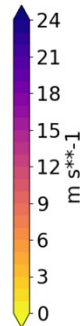
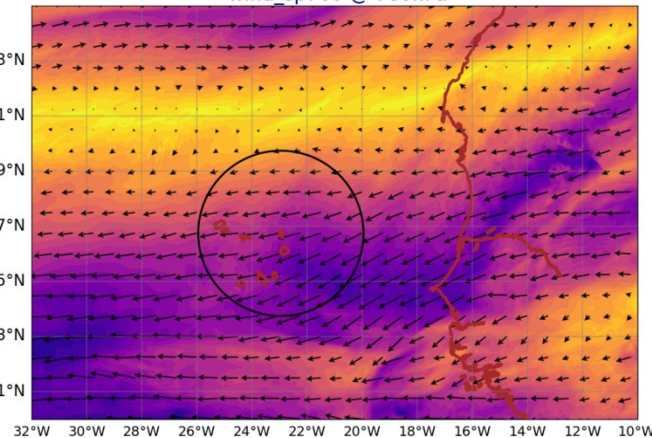
AROME25 20240628-12-UTC -ech(12h)
wind_sp700 @ 700hPa



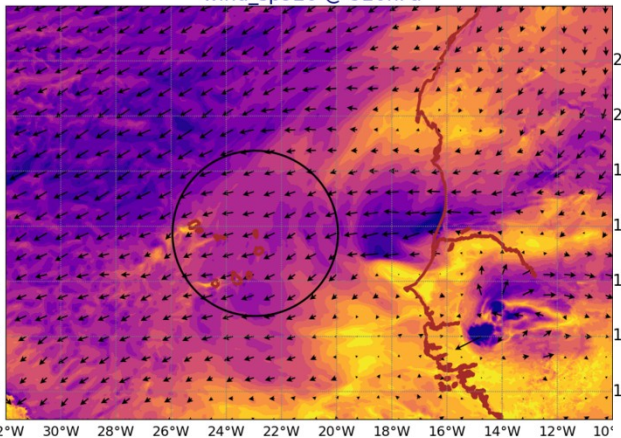
AROME25 20240629-12-UTC -ech(36h)
wind_sp700 @ 700hPa



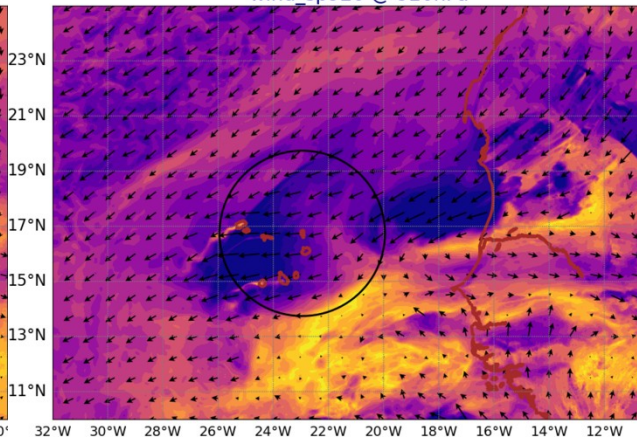
AROME25 20240630-12-UTC -ech(60h)
wind_sp700 @ 700hPa



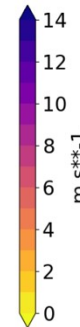
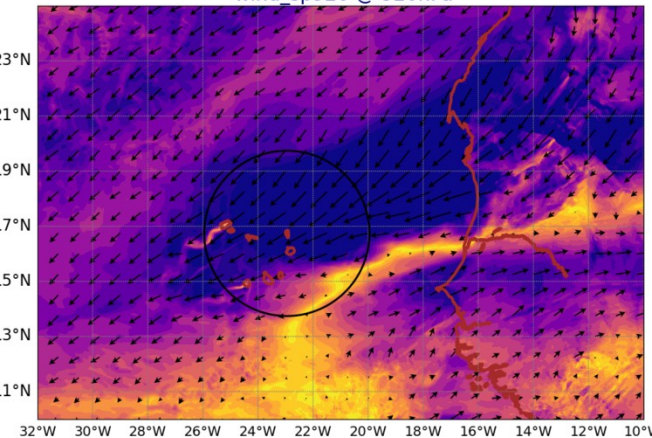
AROME25 20240628-12-UTC -ech(12h)
wind_sp920 @ 920hPa



AROME25 20240629-12-UTC -ech(36h)
wind_sp920 @ 920hPa



AROME25 20240630-12-UTC -ech(60h)
wind_sp920 @ 920hPa



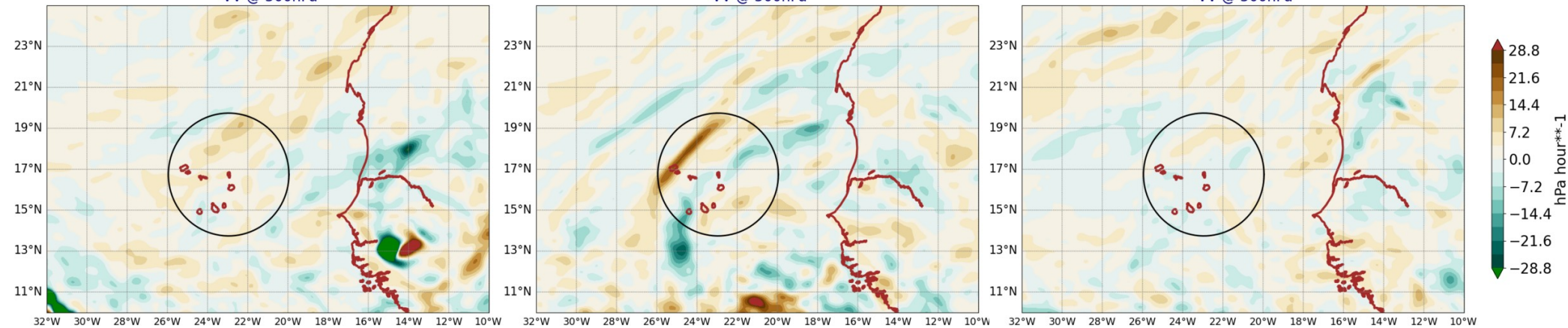
AROME VV @ 500hPa

AROME LWP+IWP

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

AROME25 20240629-12-UTC -ech(36h)
VV @ 500hPa

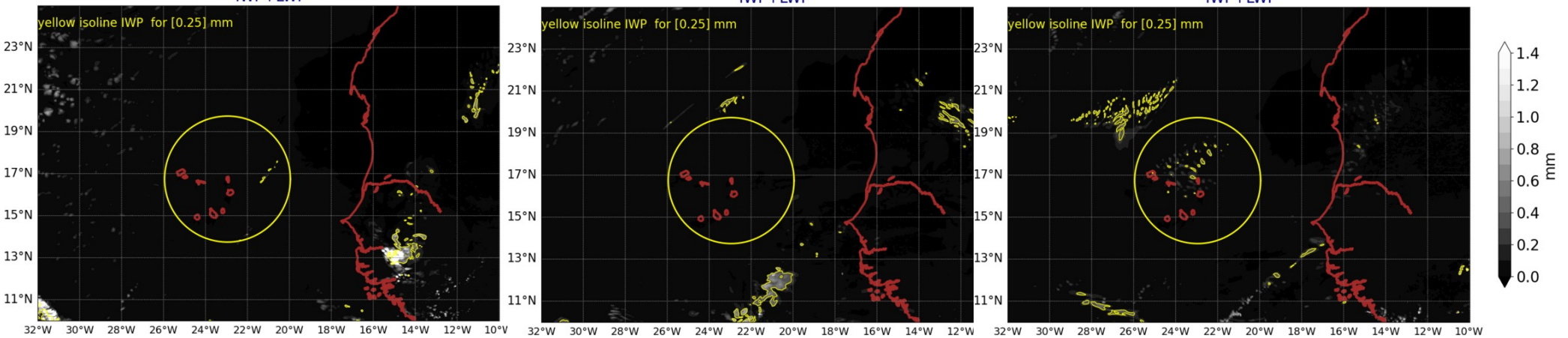
AROME25 20240630-12-UTC -ech(60h)
VV @ 500hPa



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

AROME25 20240629-12-UTC -ech(36h)
IWP+LWP

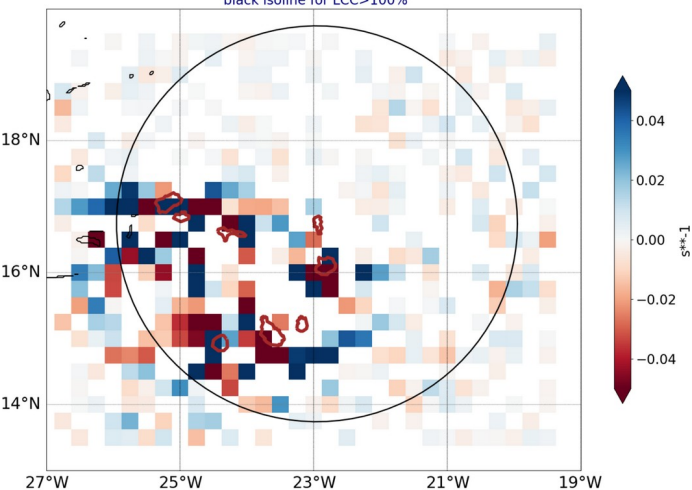
AROME25 20240630-12-UTC -ech(60h)
IWP+LWP



Smoc

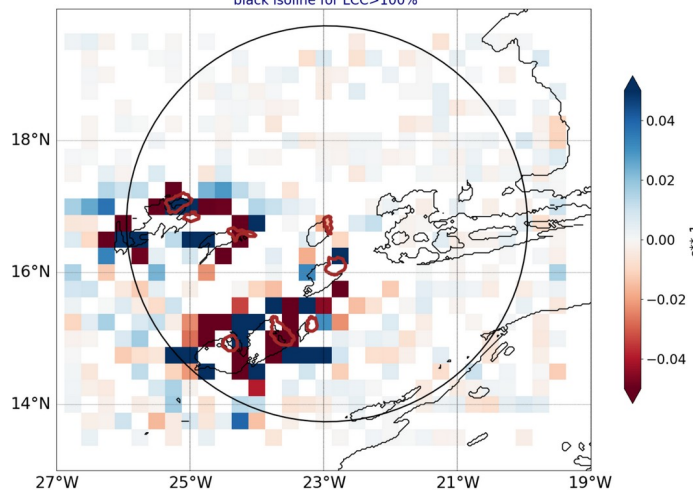
-blue for conv in subcloud layer-
dark isoline for low cloud cover

AROME25 regrid 0.25
20240628-12-UTC -ech(12h)
blue for conv in subcloud layer
black isoline for LCC>100%



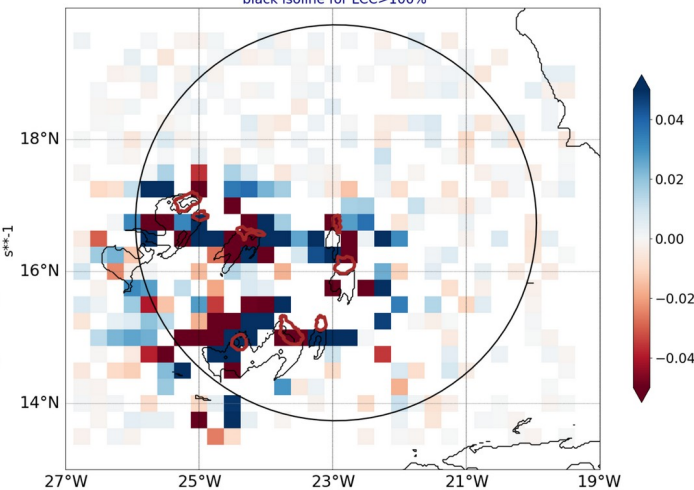
white box where subcloud and cloud layer have same sign of div

AROME25 regrid 0.25
20240629-12-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
20240630-12-UTC -ech(60h)
blue for conv in subcloud layer
black isoline for LCC>100%



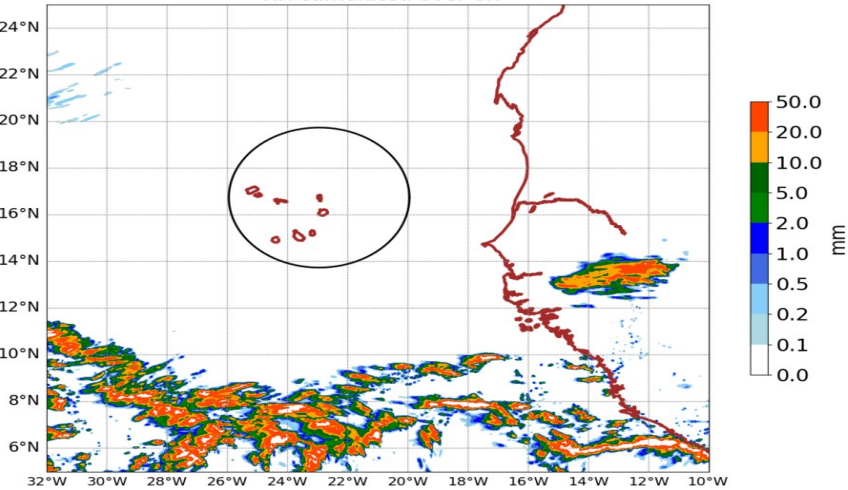
white box where subcloud and cloud layer have same sign of div

over 6h ech 12h and 15h

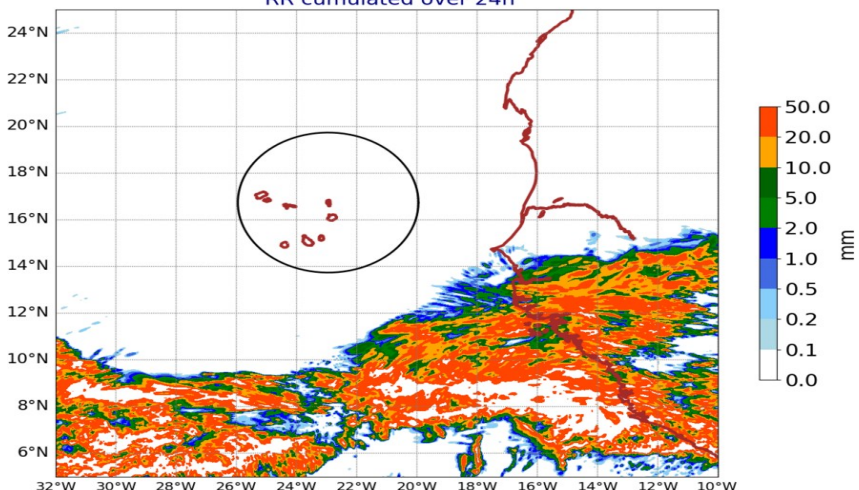
AROME precipitation

over 24h ech 36h and 60h

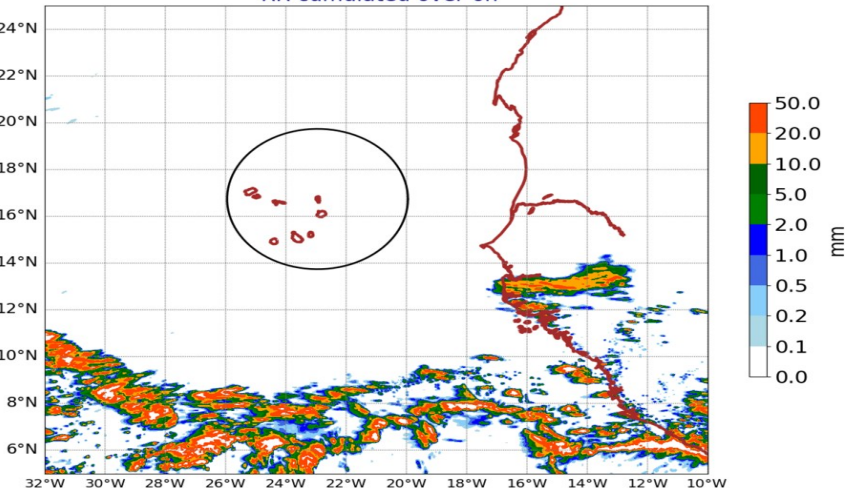
AROME25 20240628-12-UTC -ech(12h)
RR cumulated over 6h



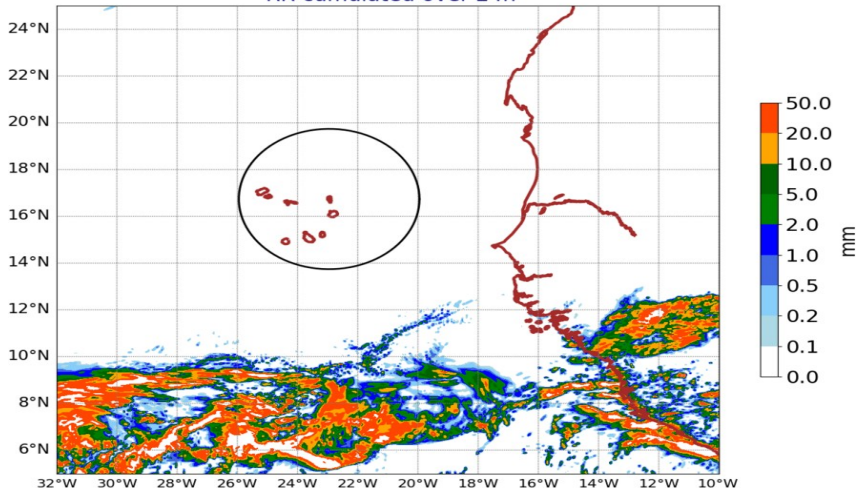
AROME25 20240629-12-UTC -ech(36h)
RR cumulated over 24h



AROME25 20240628-15-UTC -ech(15h)
RR cumulated over 6h

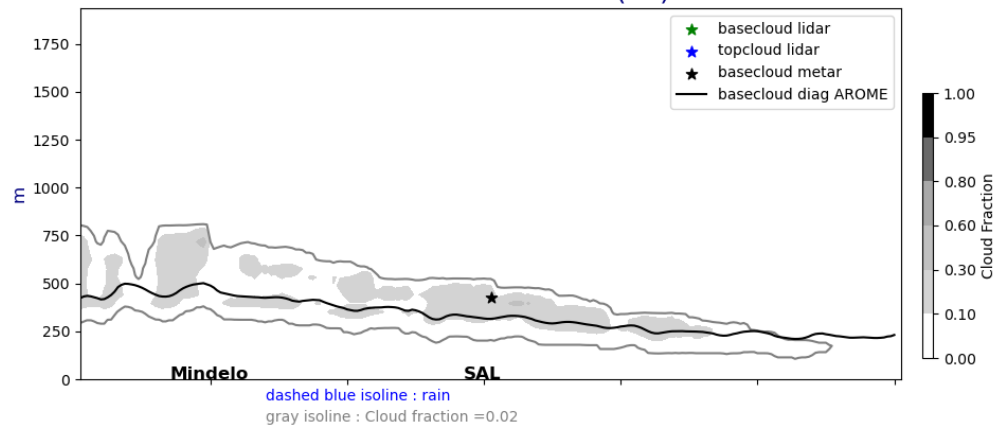


AROME25 20240630-12-UTC -ech(60h)
RR cumulated over 24h

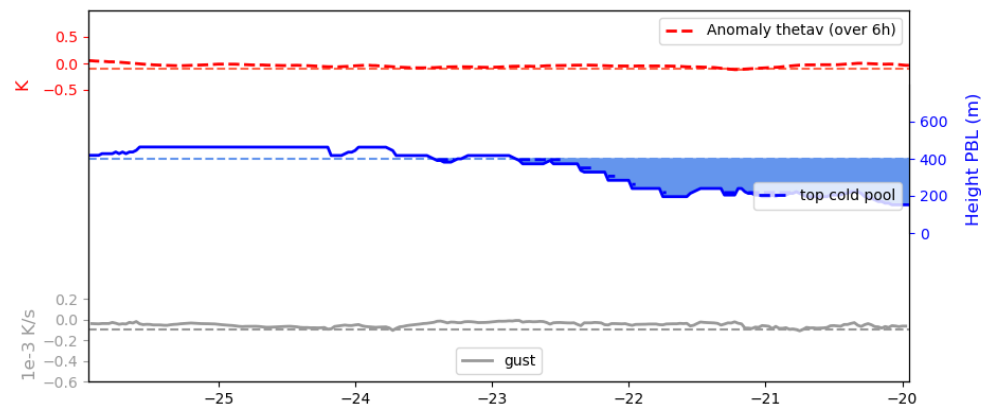
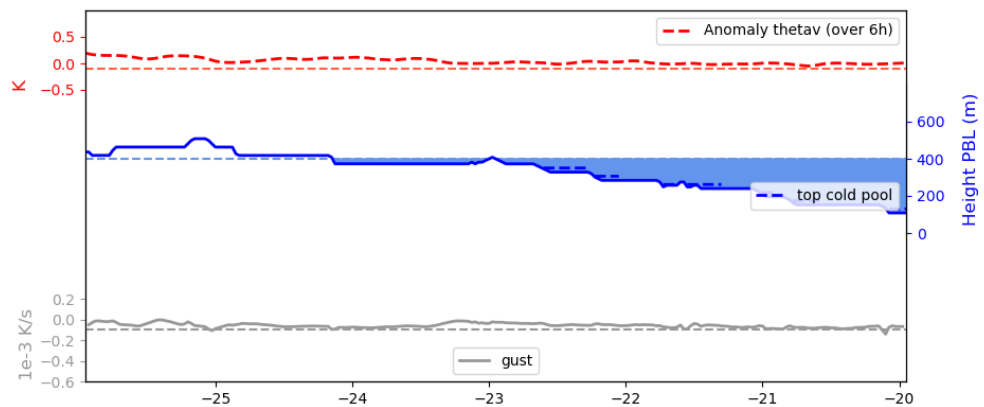
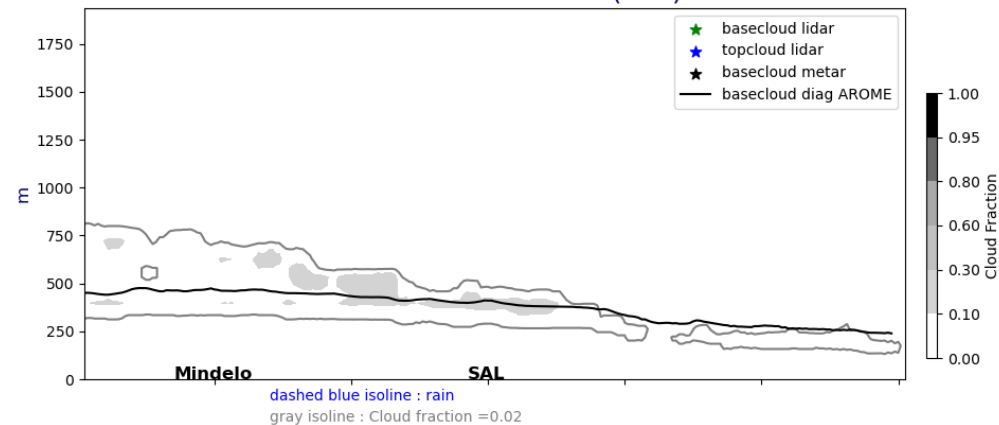


Lat. cross section @17°5N fct : 01UTC, 12UTC

Cross section E/W @ 17.5N
20240628-01-UTC ech(1h)

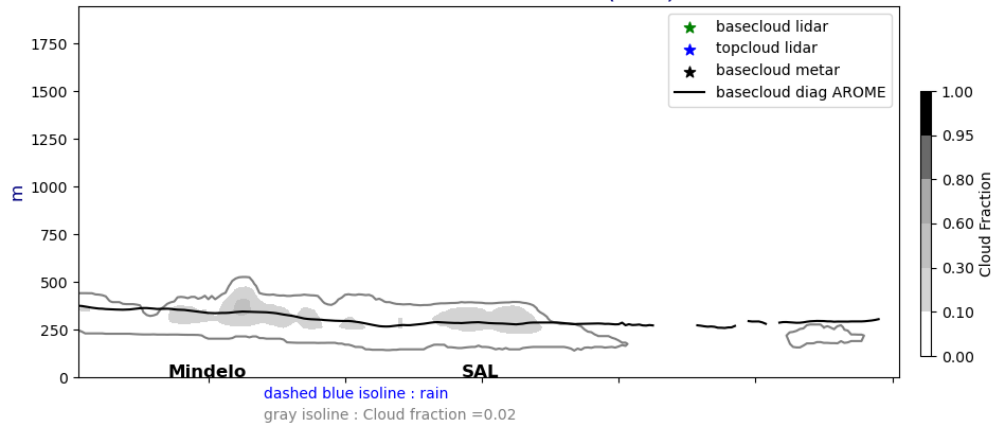


Cross section E/W @ 17.5N
20240628-12-UTC ech(12h)

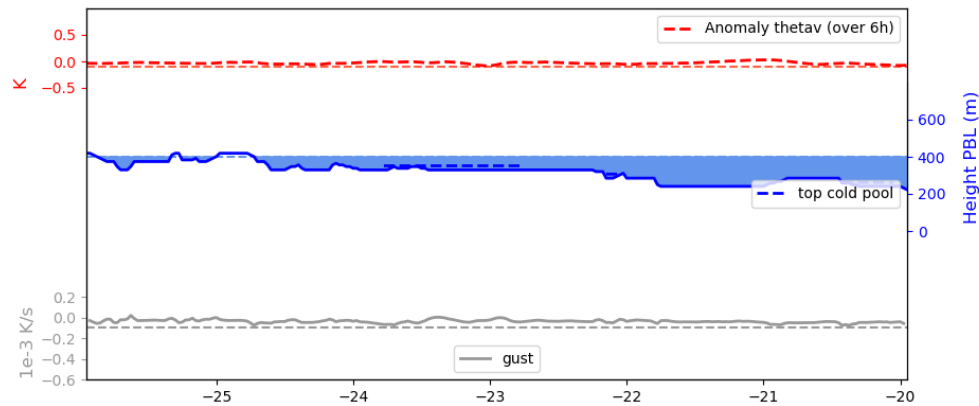
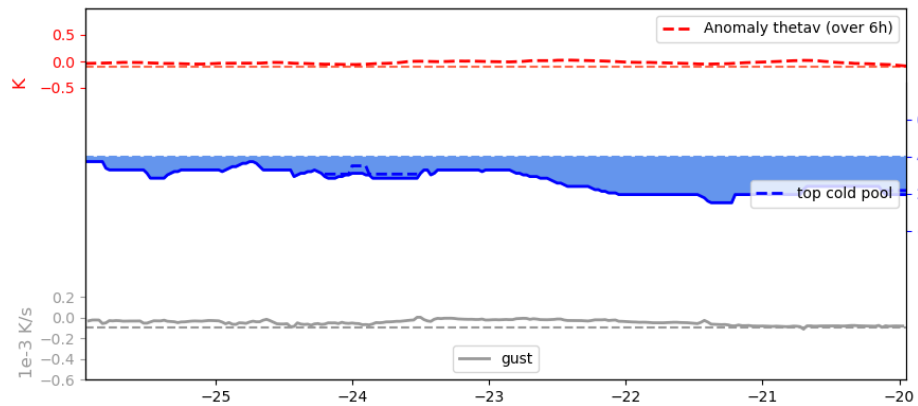
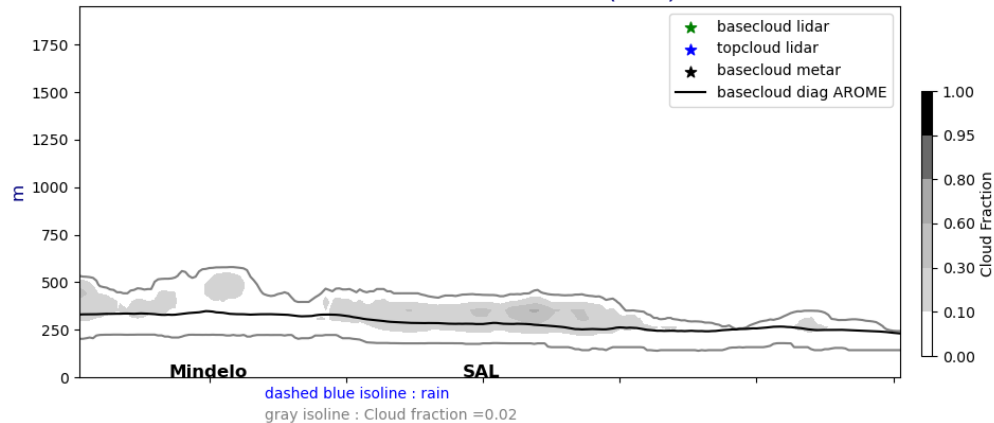


Lat. cross section @17°5N fct : J+1 and J+2 @ 12UTC

Cross section E/W @ 17.5N
20240629-12-UTC ech(36h)

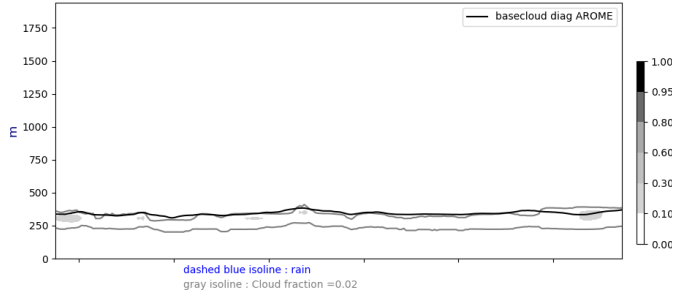


Cross section E/W @ 17.5N
20240630-12-UTC ech(60h)

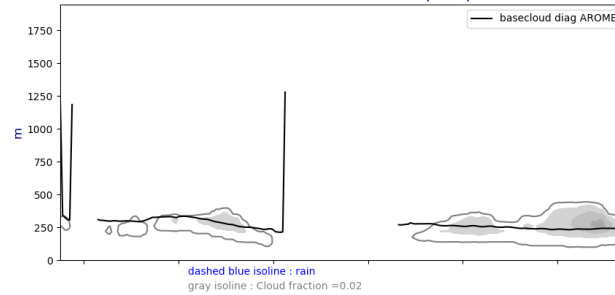


Lon. cross section @22W fct : J,J+1, J+2 @ 12 UTC

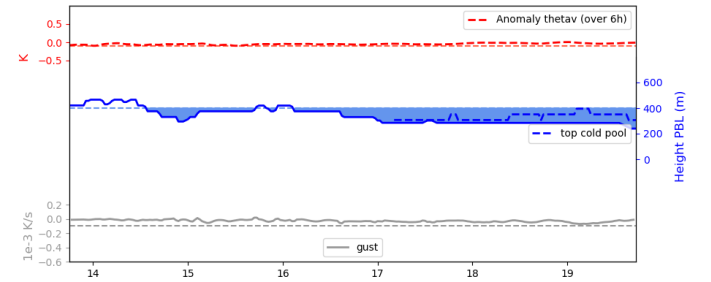
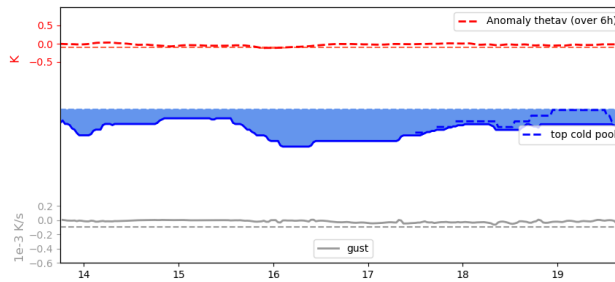
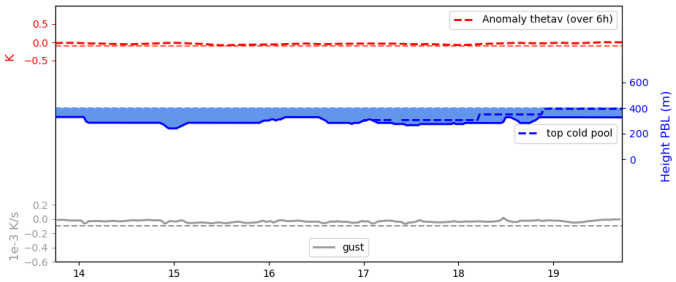
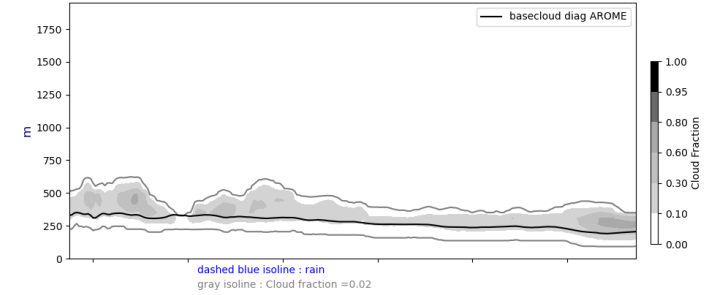
Cross section S/N @ -22W
20240628-12-UTC ech(12h)



Cross section S/N @ -22W
20240629-12-UTC ech(36h)

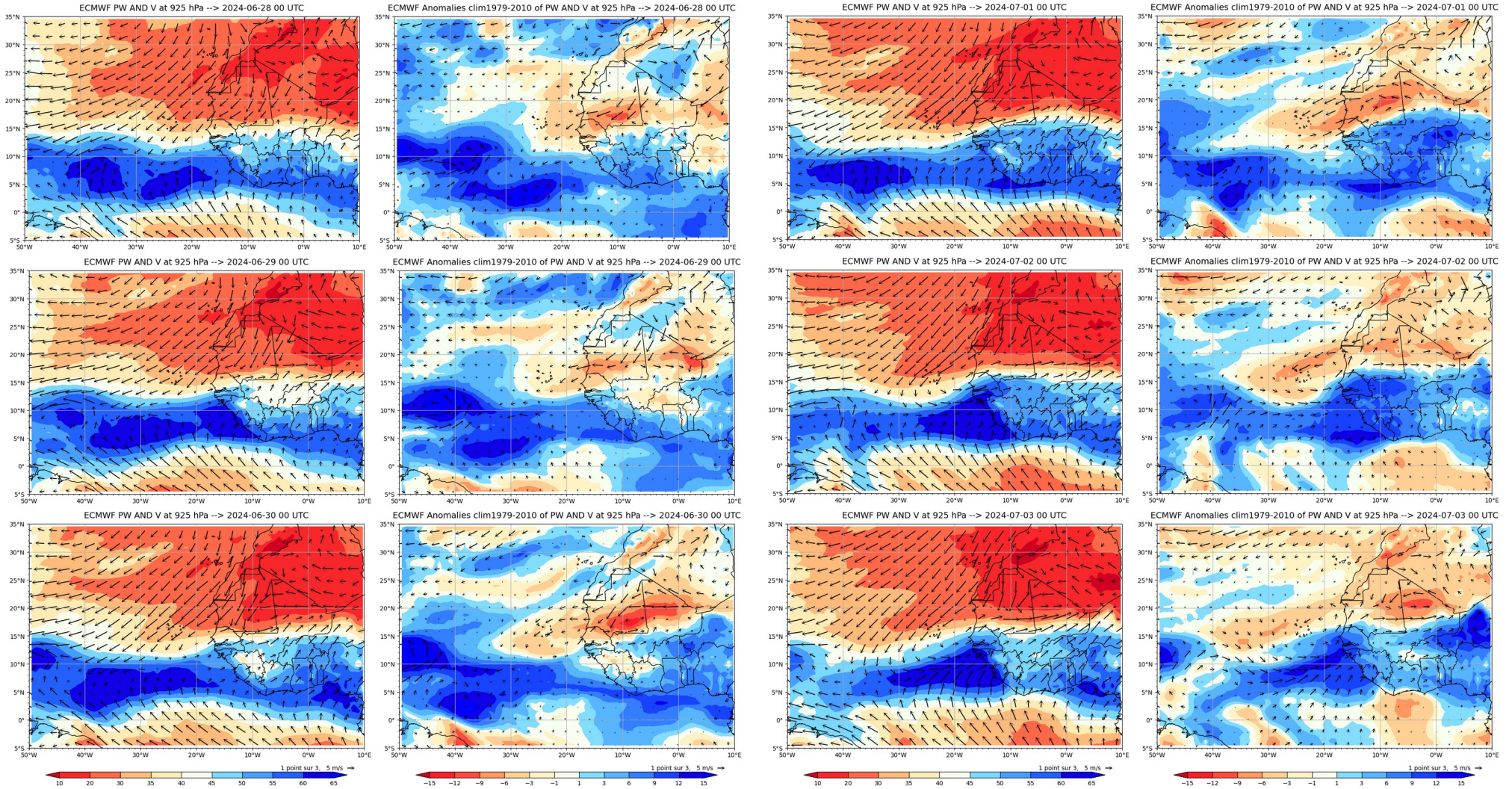


Cross section S/N @ -22W
20240630-12-UTC ech(60h)

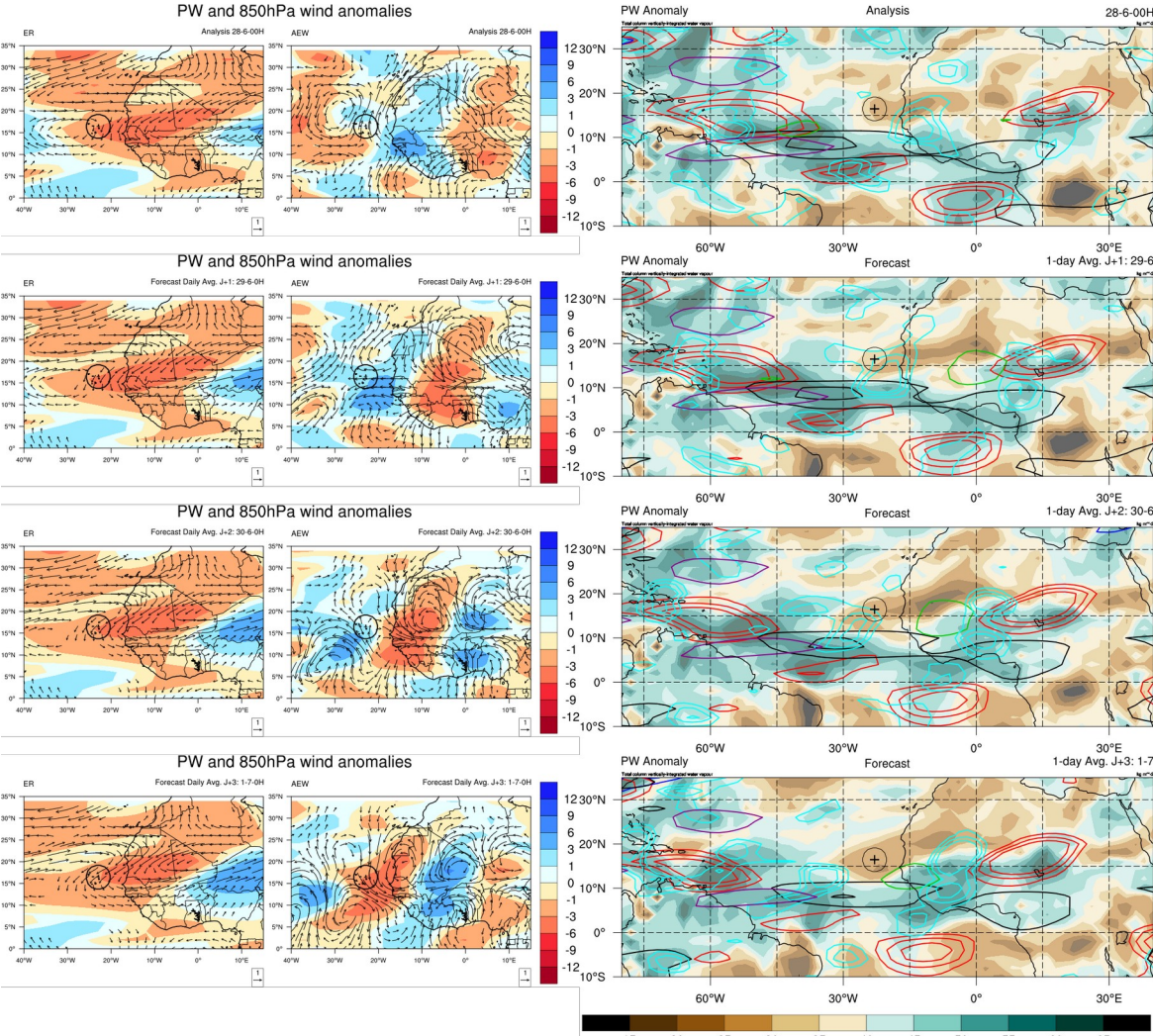


Week forecast J - J+7

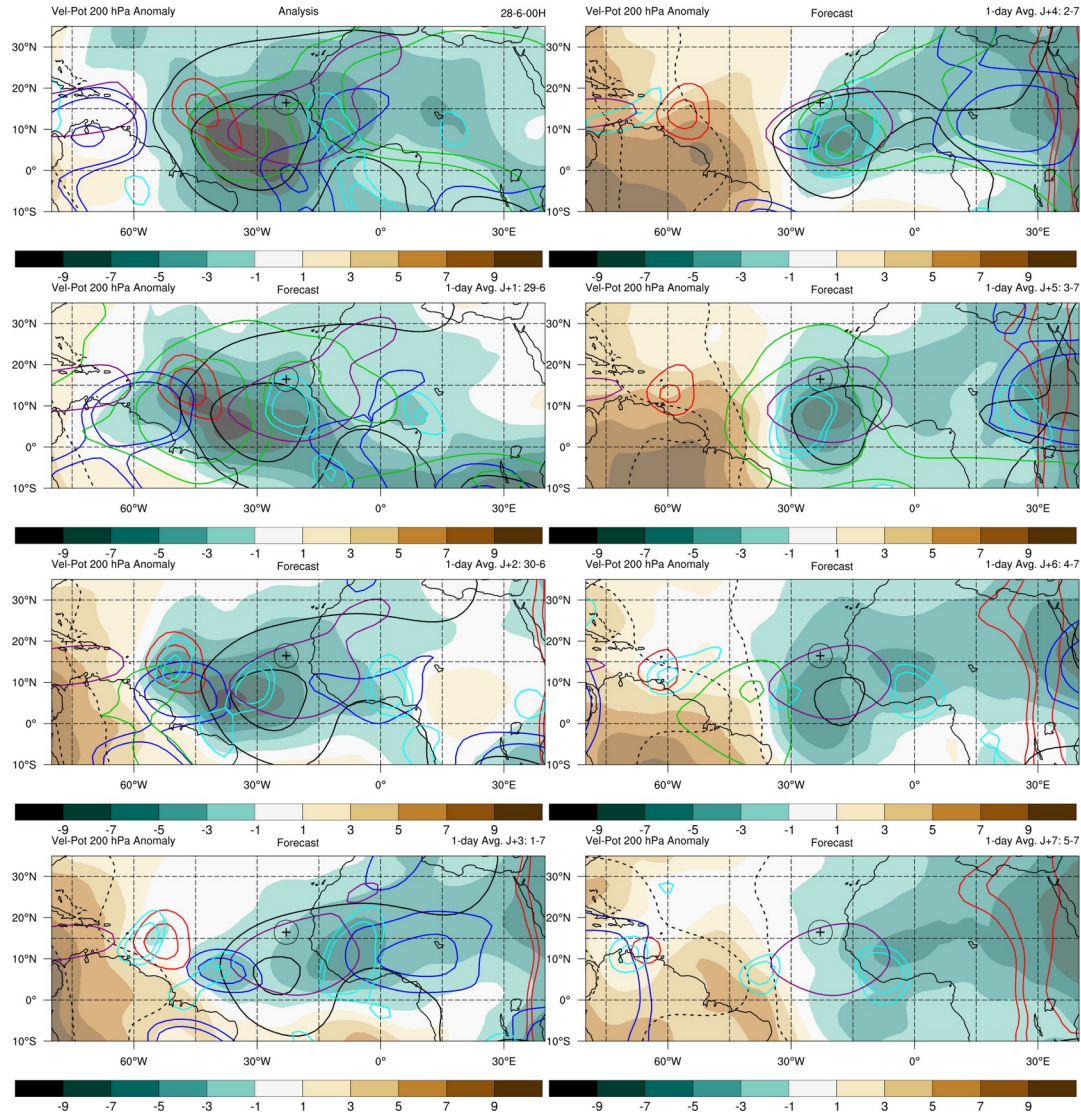
Daily PW and wind @ 925 hPa – total and anomalies



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



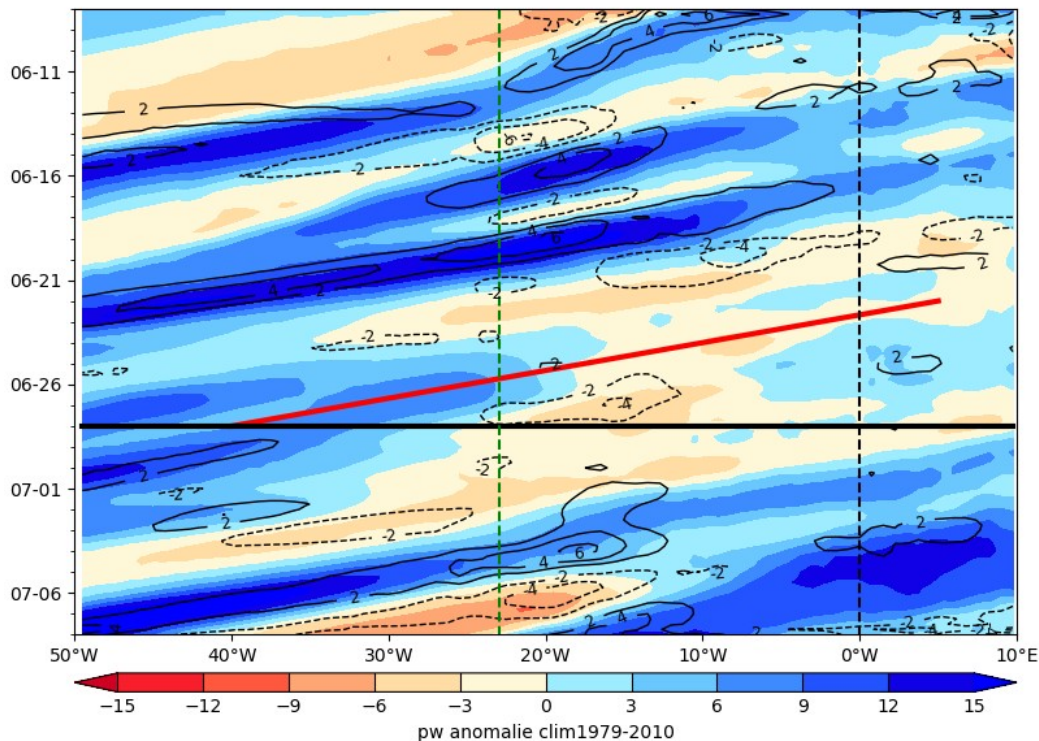
Waves : Velocity potential @ 200 hPa, day J to J+7



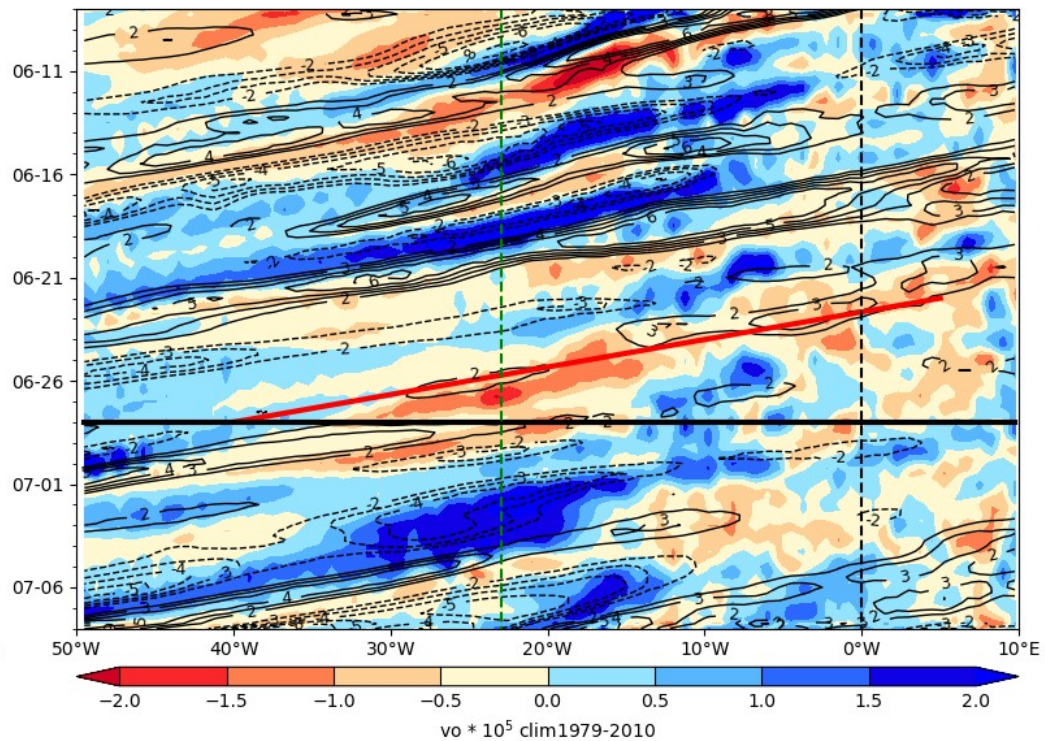
Equatorial Waves filtering hovmollers

Hovmoller anomaly

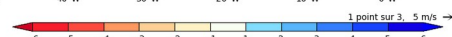
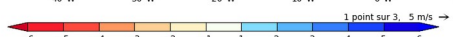
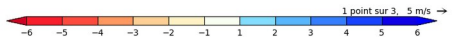
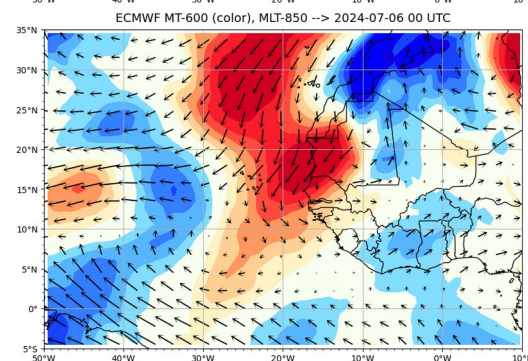
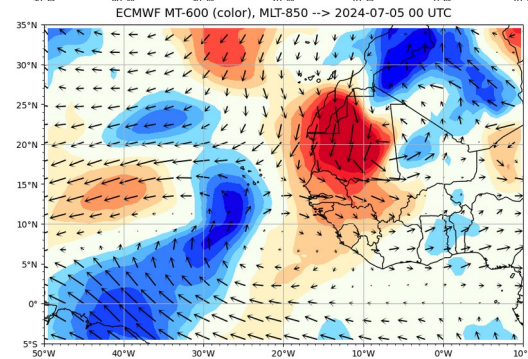
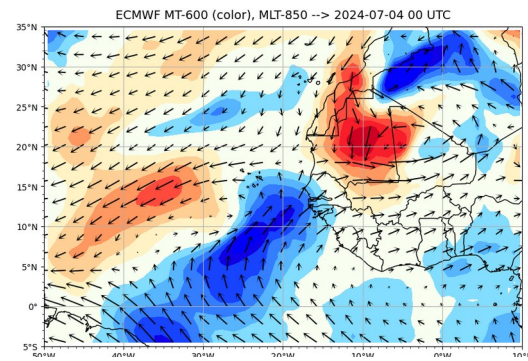
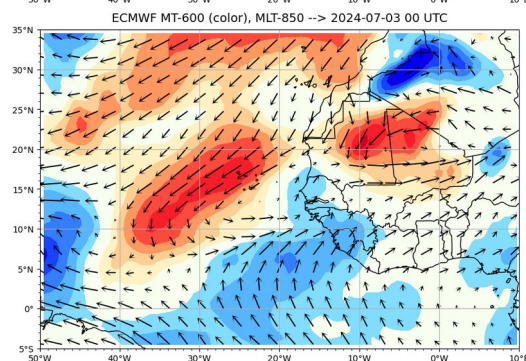
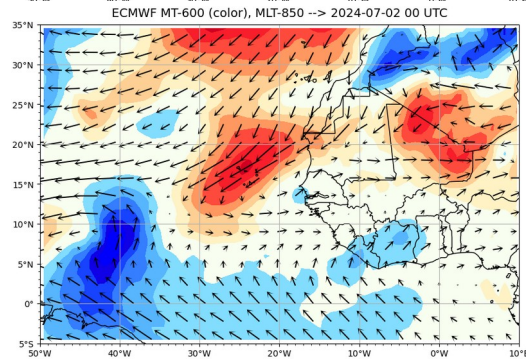
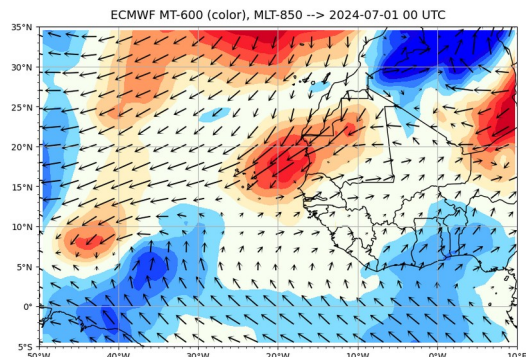
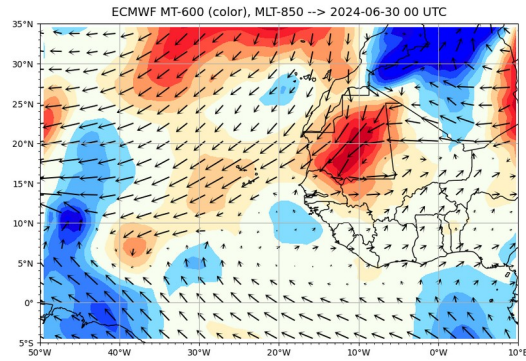
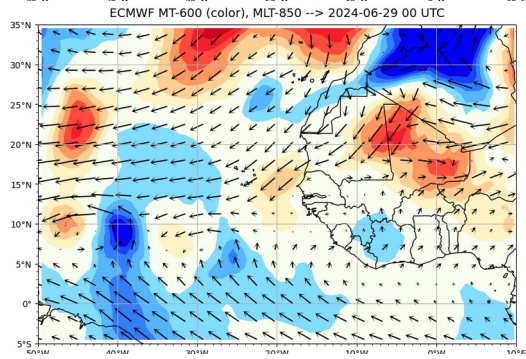
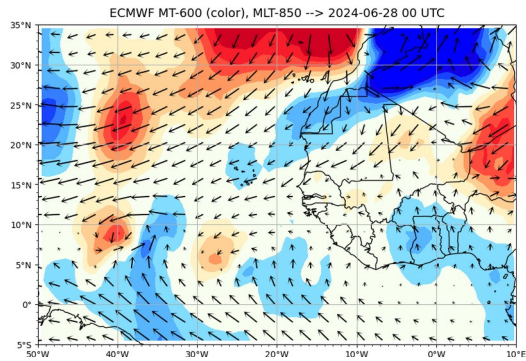
ECMWF PW (color) AND V at 925 hPa 2024-06-28

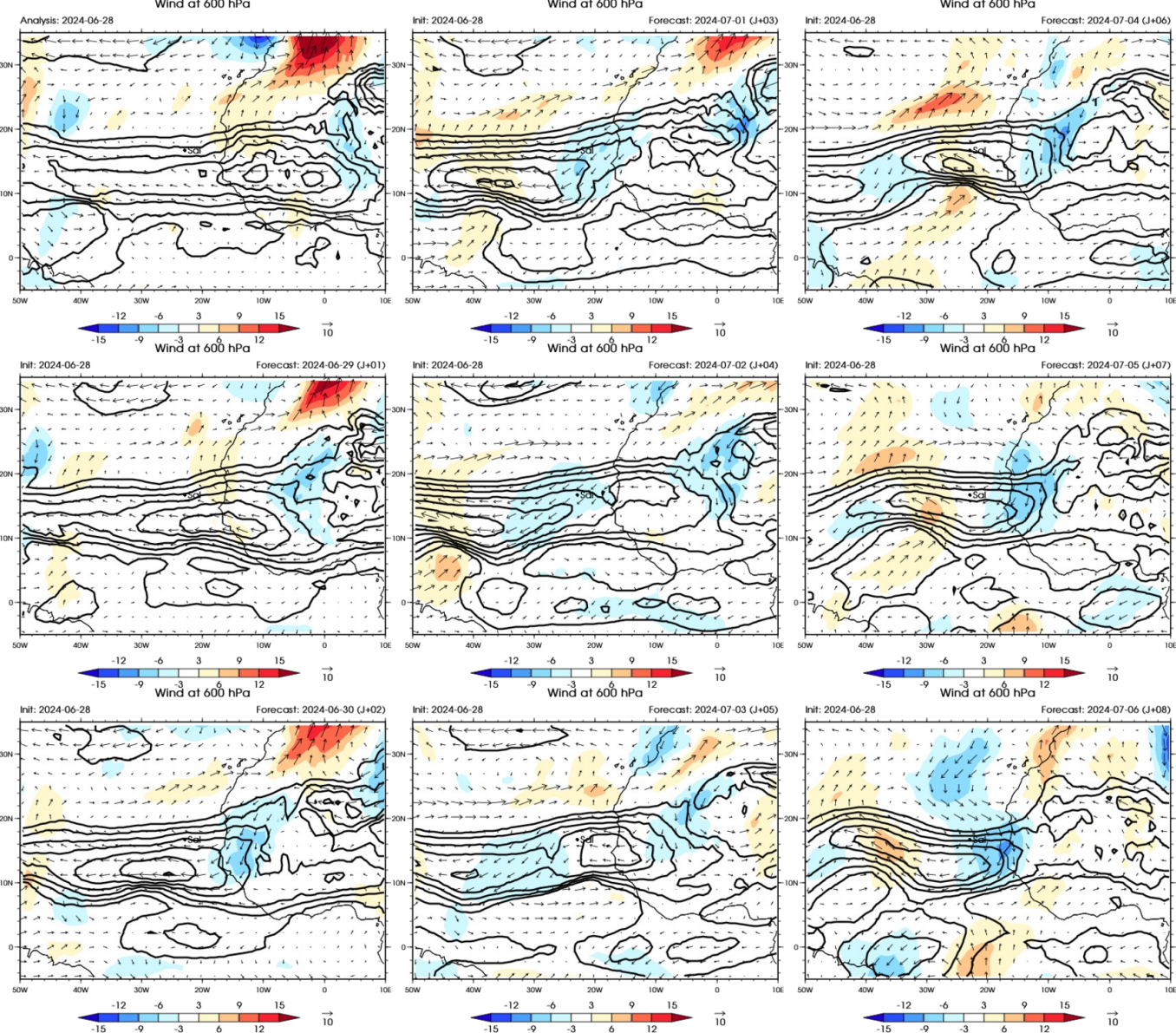


ECMWF Vorticity 850 hPa (color), V-700 hPa 2024-06-28



Monsoon Flow

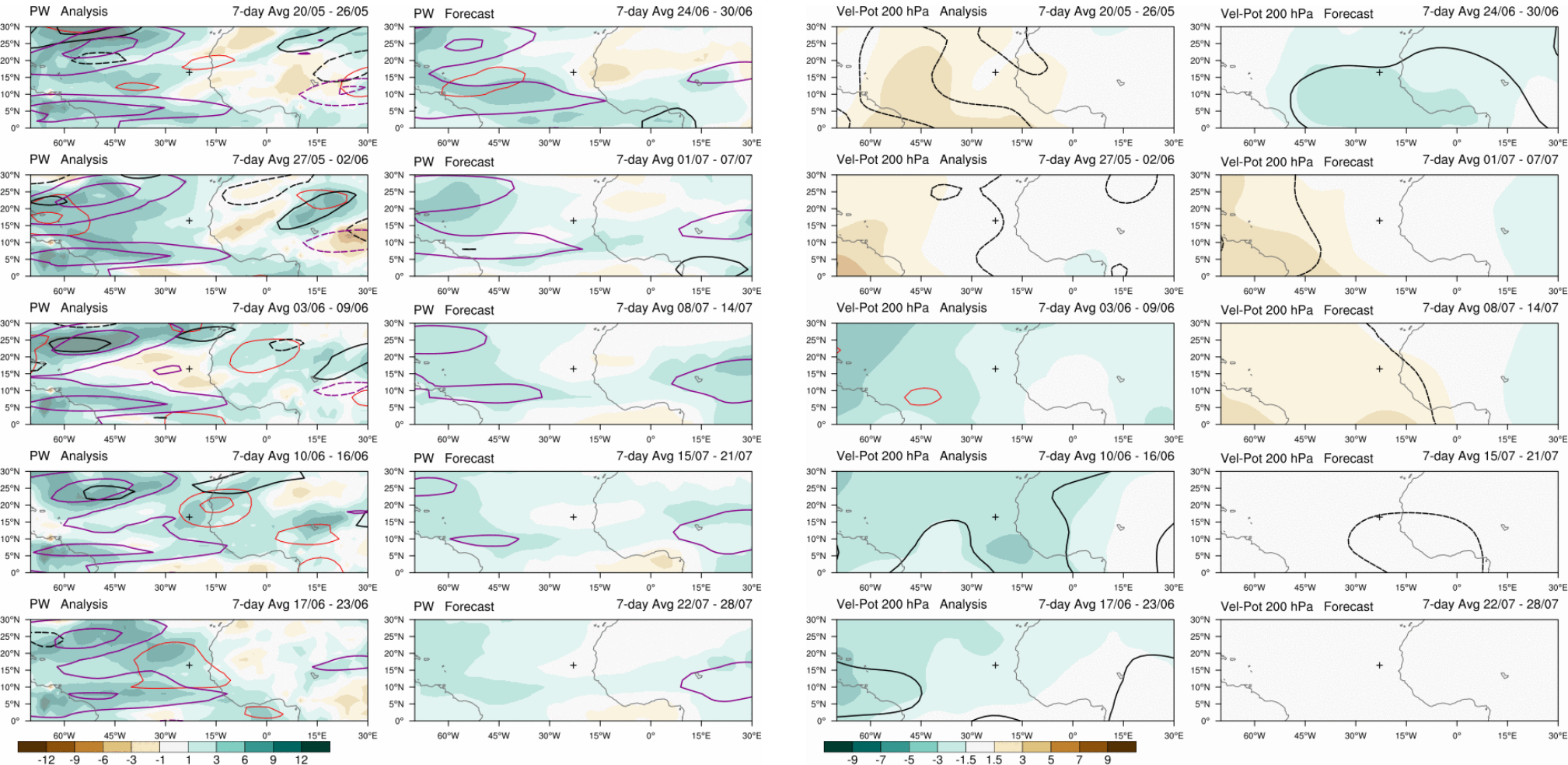




African Easterly Jet wind 600 hPa

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

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							

