Briefing hebdomadaire

Suivi MJO et ondes équatoriales pour le bassin SOOI

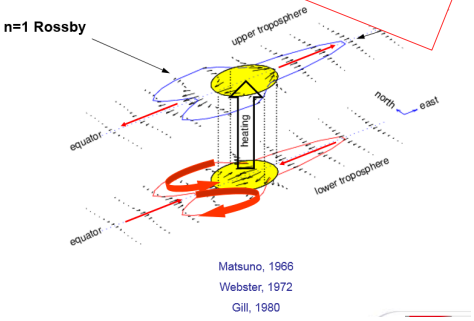
ATTENTION : Changement de formalisme des semaines !!!! S0 est devenu S1 mais correspond toujours à la semaine en cours.

DATE : 21/03/2023

H. Vérèmes

support produit le 21/03/2023 sur bulletin ECMWF du 20/03 et figures du 20/03

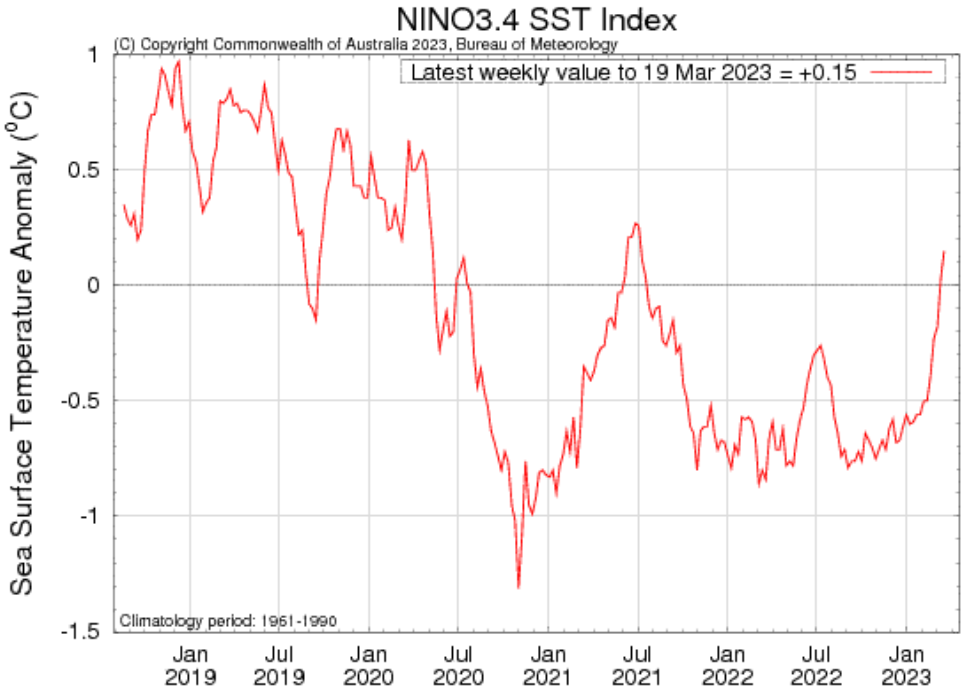
S0 : 20 mars-26 mars
S1 : 27 mars-02 avril
S2 : 03 avril-09 avril
S3 : 10 avril-16 avril
S4 : 17 avril-23 avril

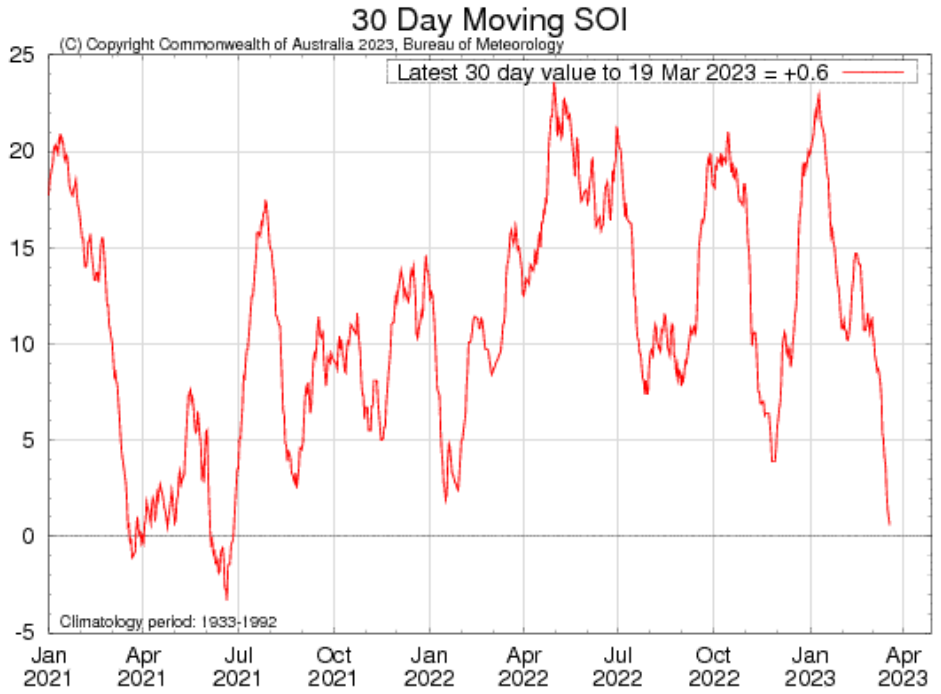


1. Prévision - Basse fréquence

Signal Basse Fréquence

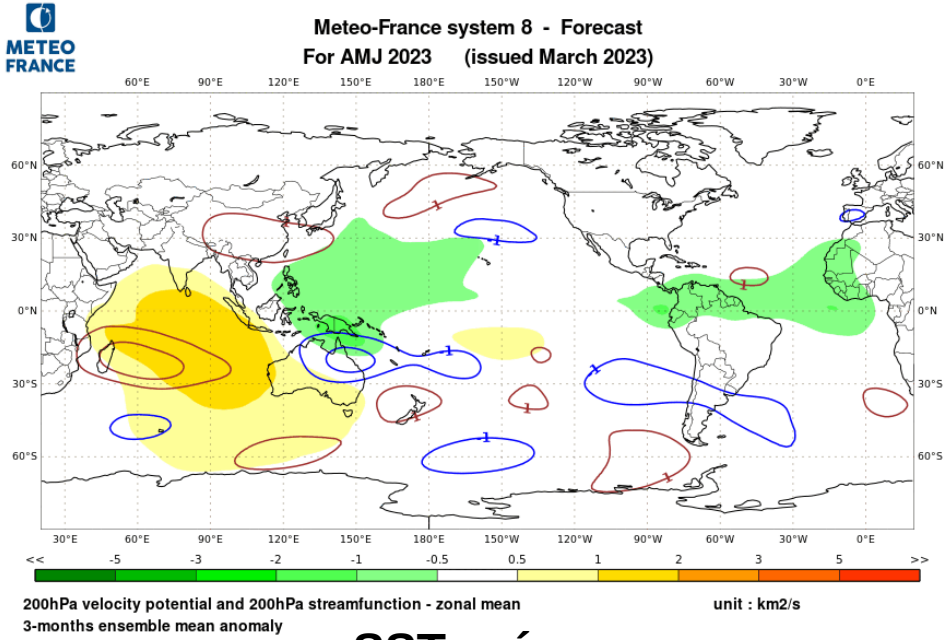
Contexte ENSO



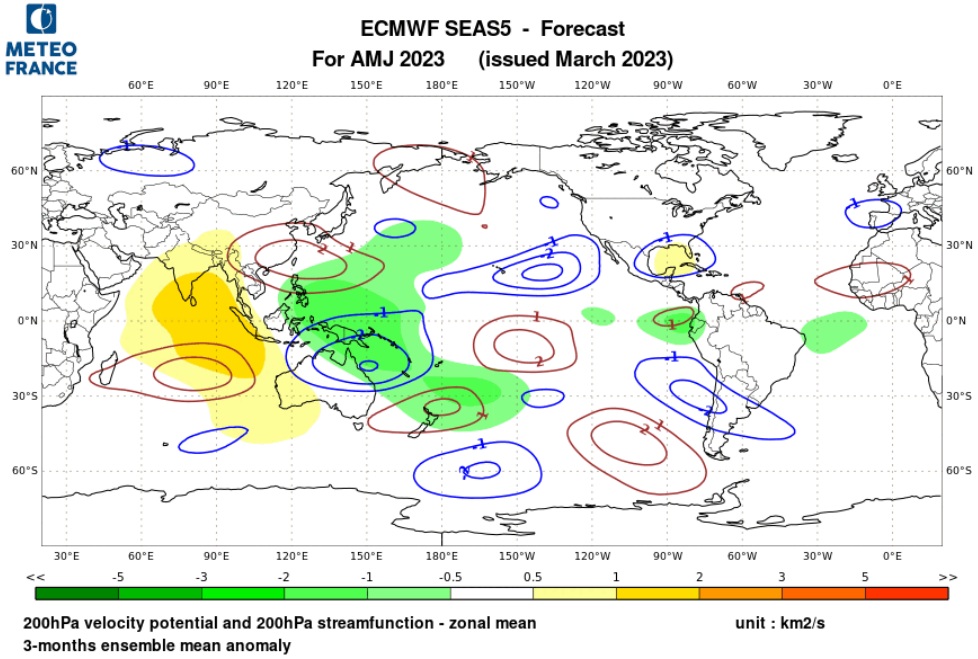


Signal Basse Fréquence

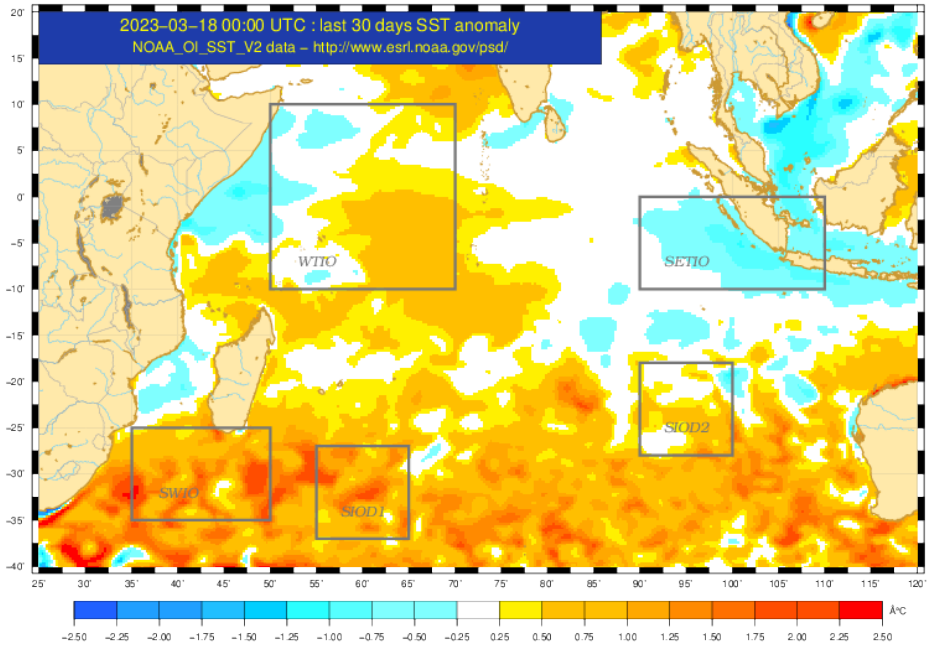
VP 200 prévu

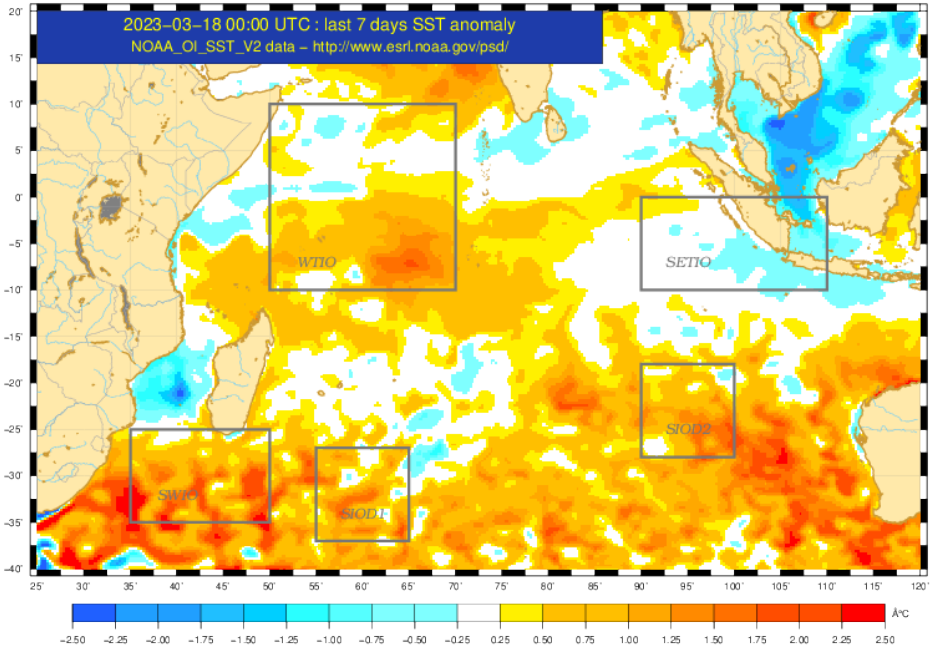


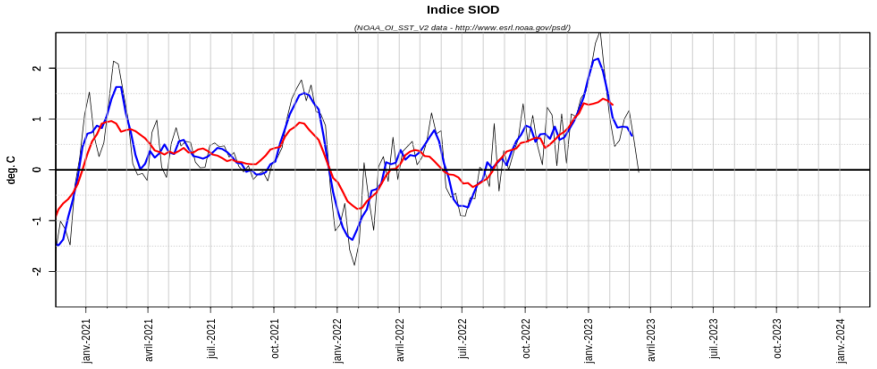
SST prévue

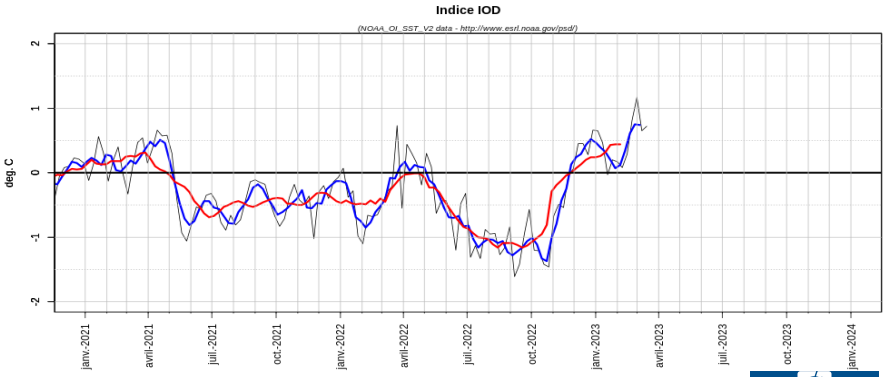


Signal Basse Fréquence - Zoom sur l'OI







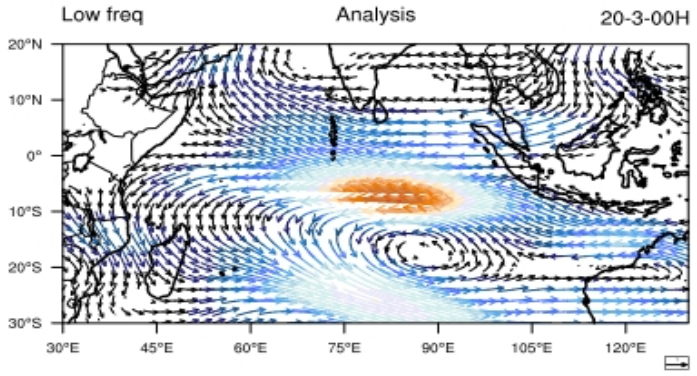


METEO FRANCE

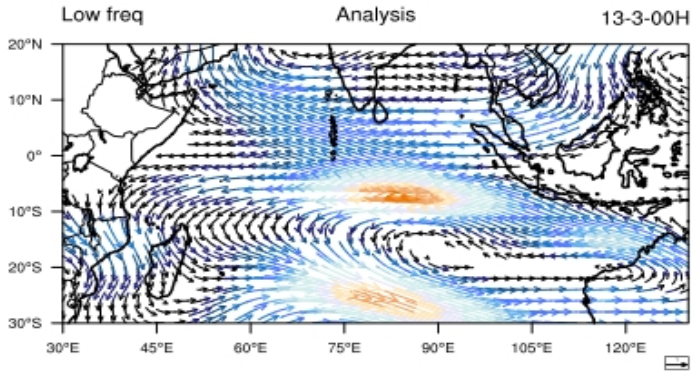
Signal Basse Fréquence - Zoom sur l'OI

U 850

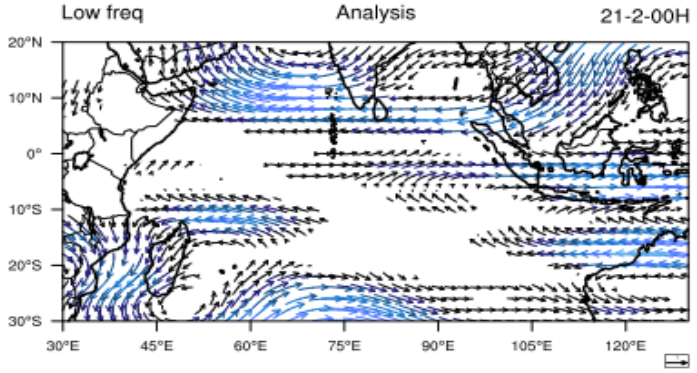
J0



J-8

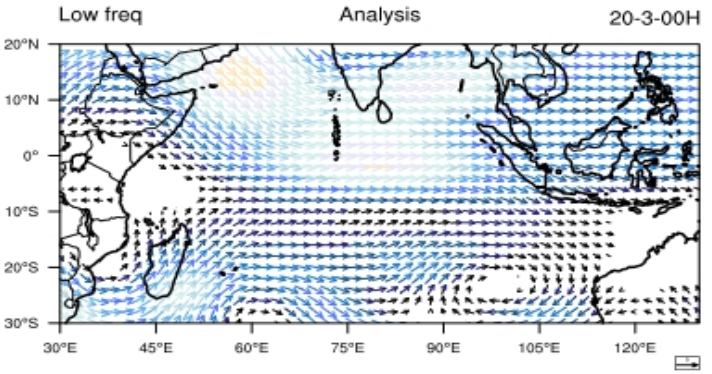


J-29

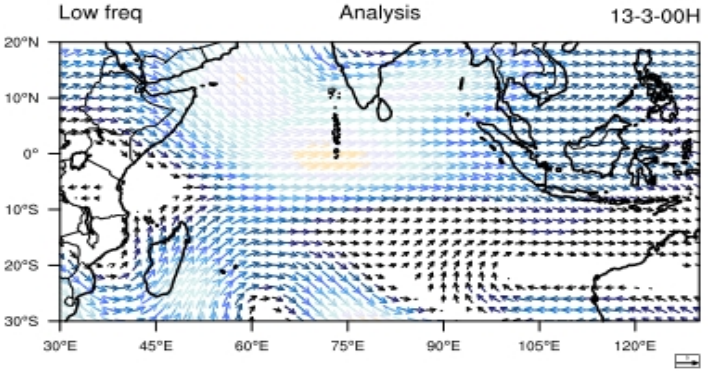


U 200

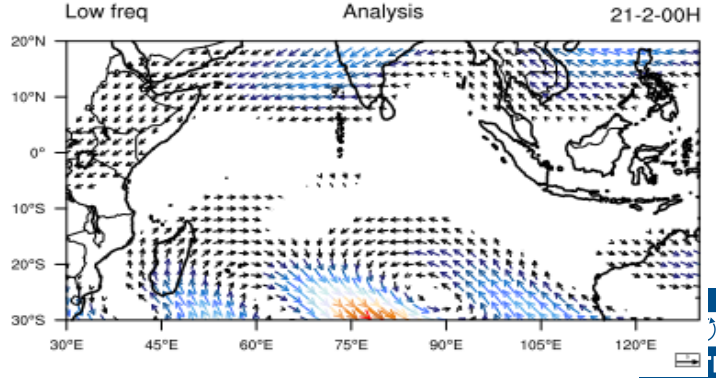
J0



J-8

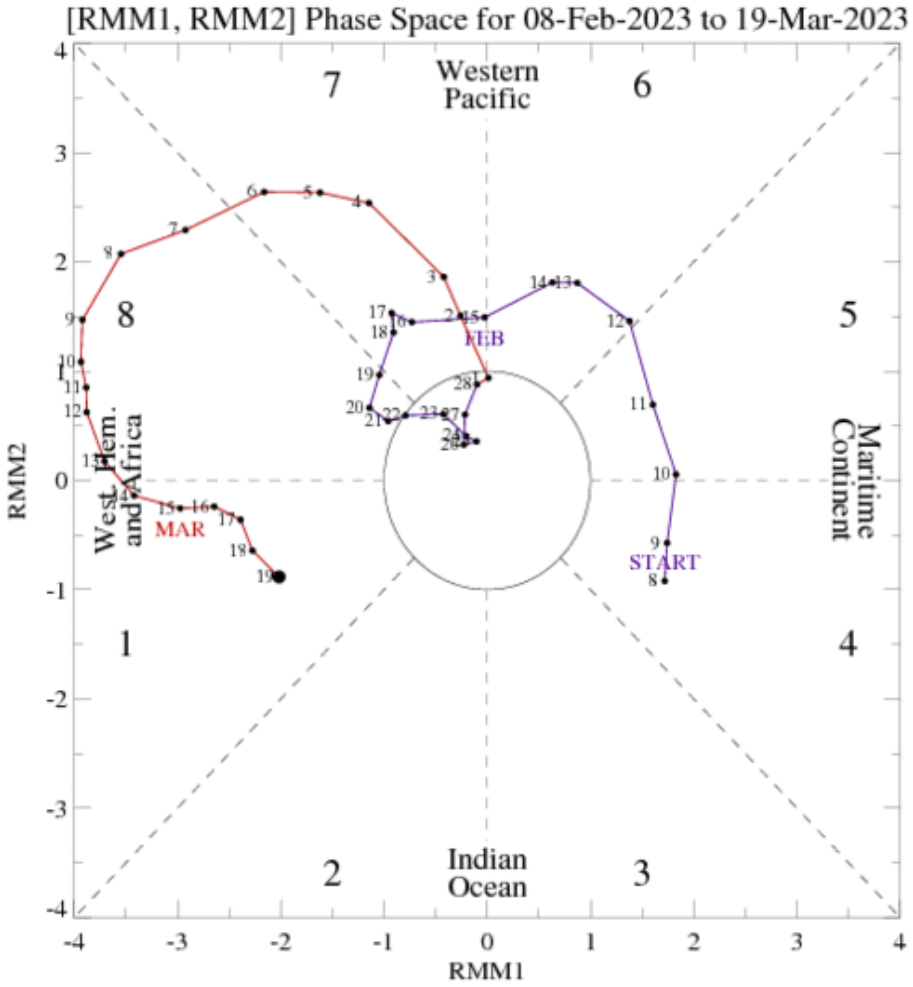


J-29

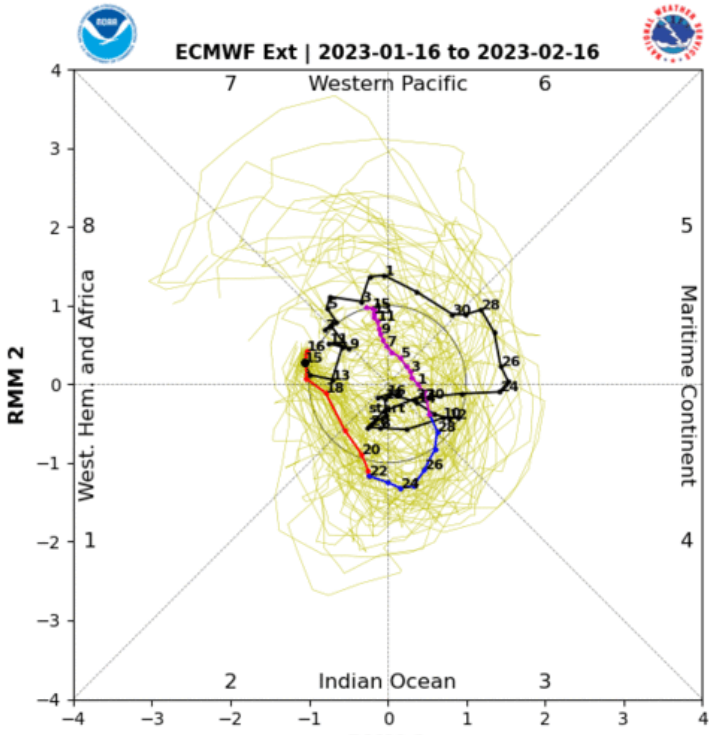


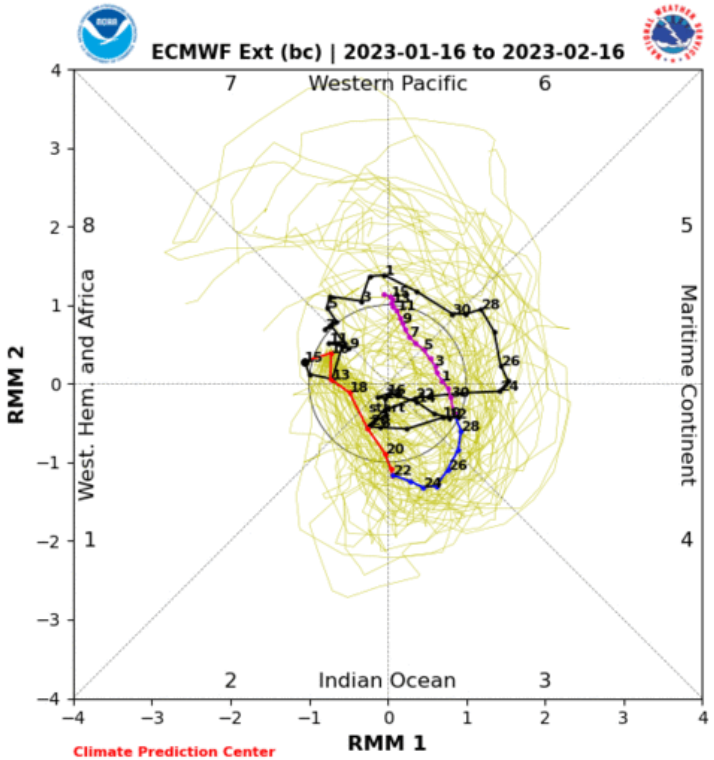
2. Prévision - MJO

2. MJO observée, indice RMM

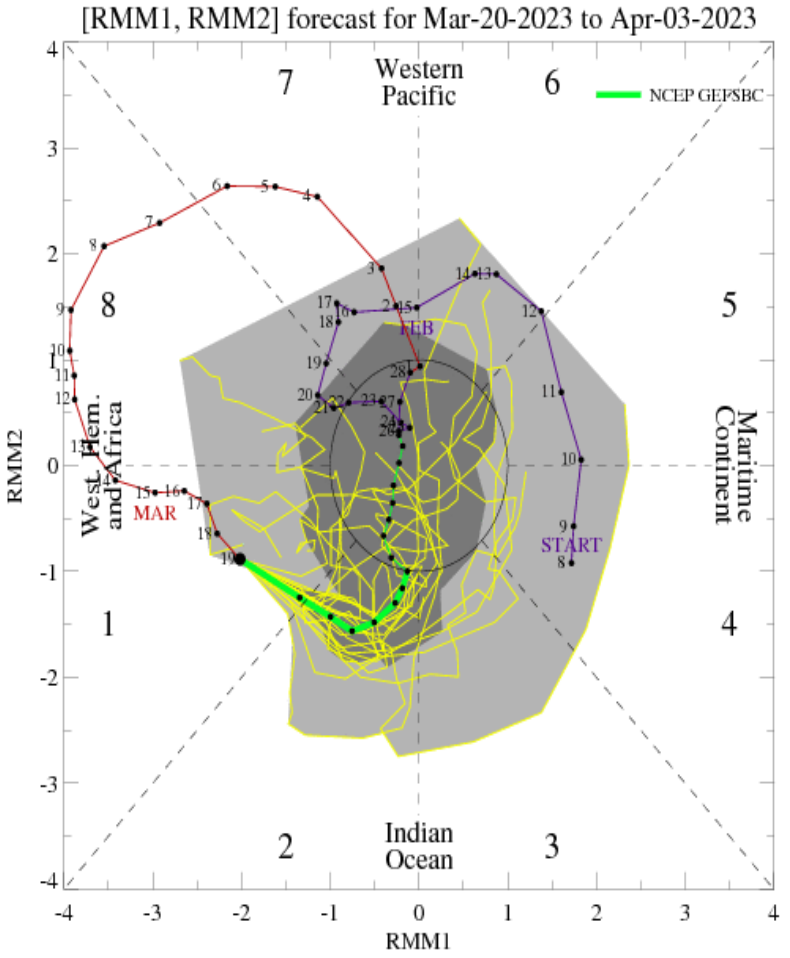


MJO prévue
indice RMM multi modèles

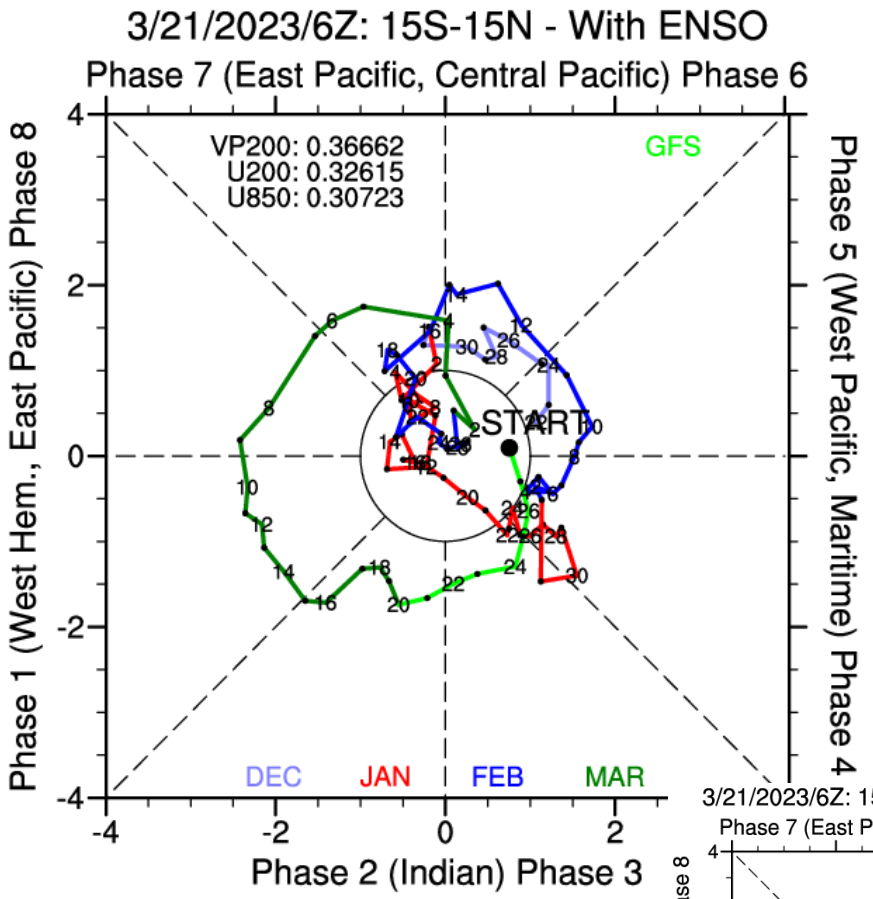


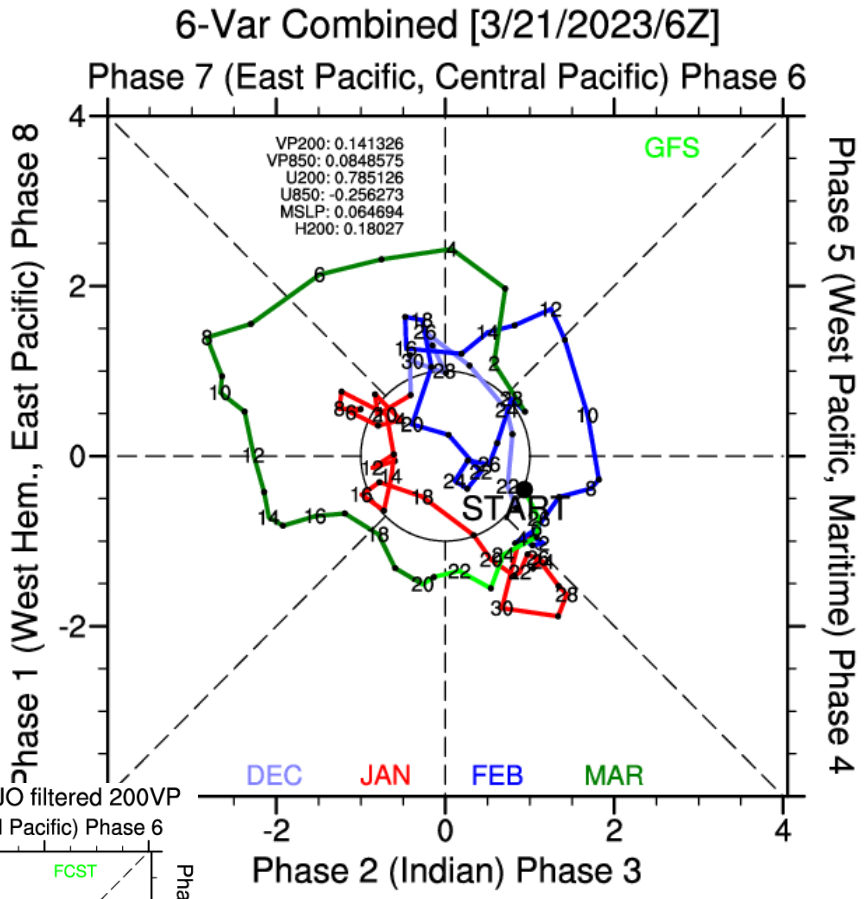


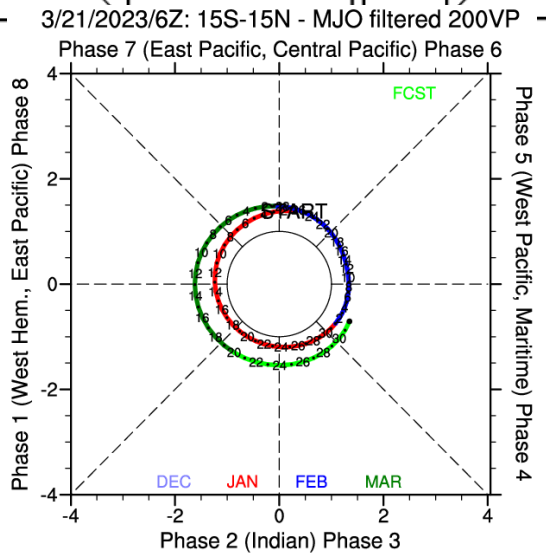
GEFS



MJO prévue – indices VPM

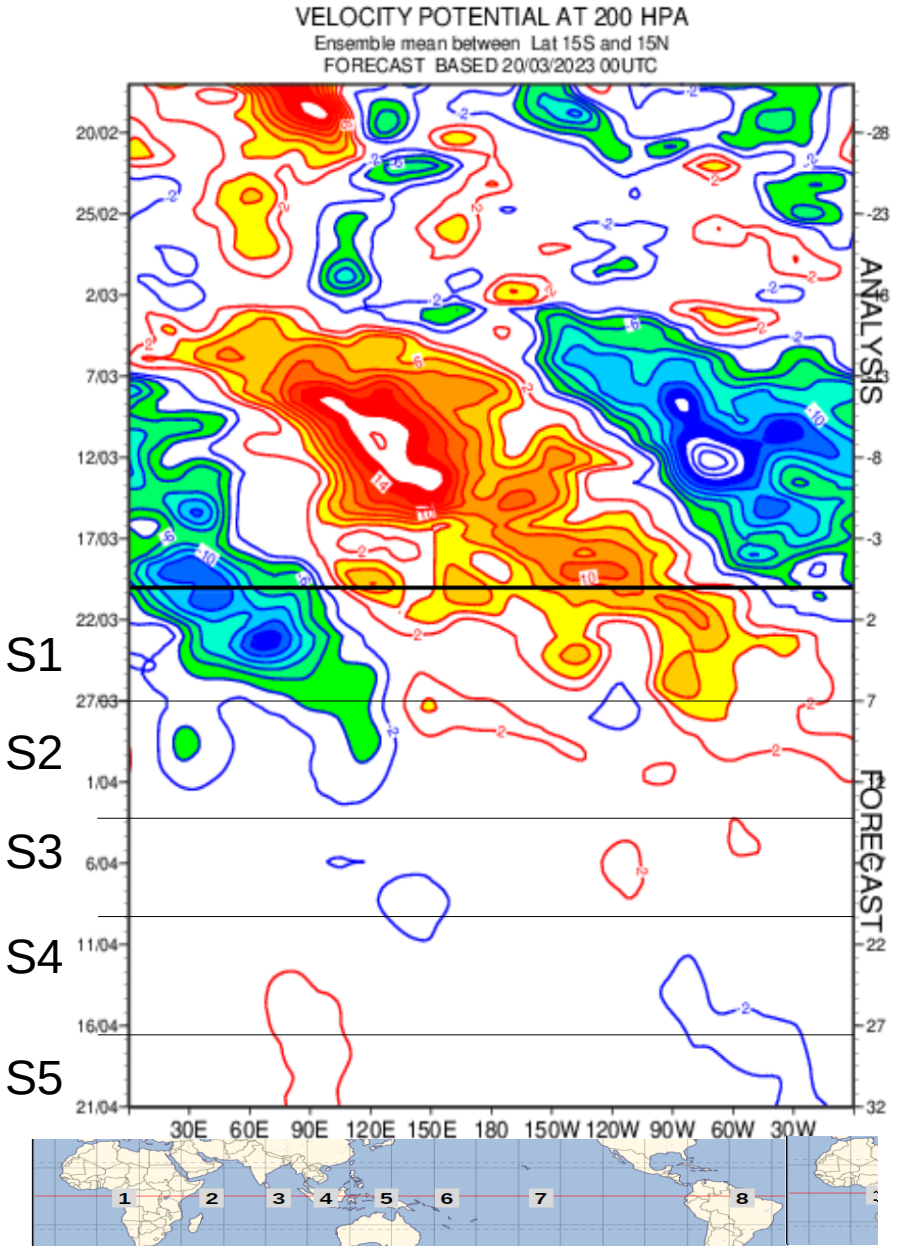






VP200 – EPS mensuel

Moyenne EPS



S1

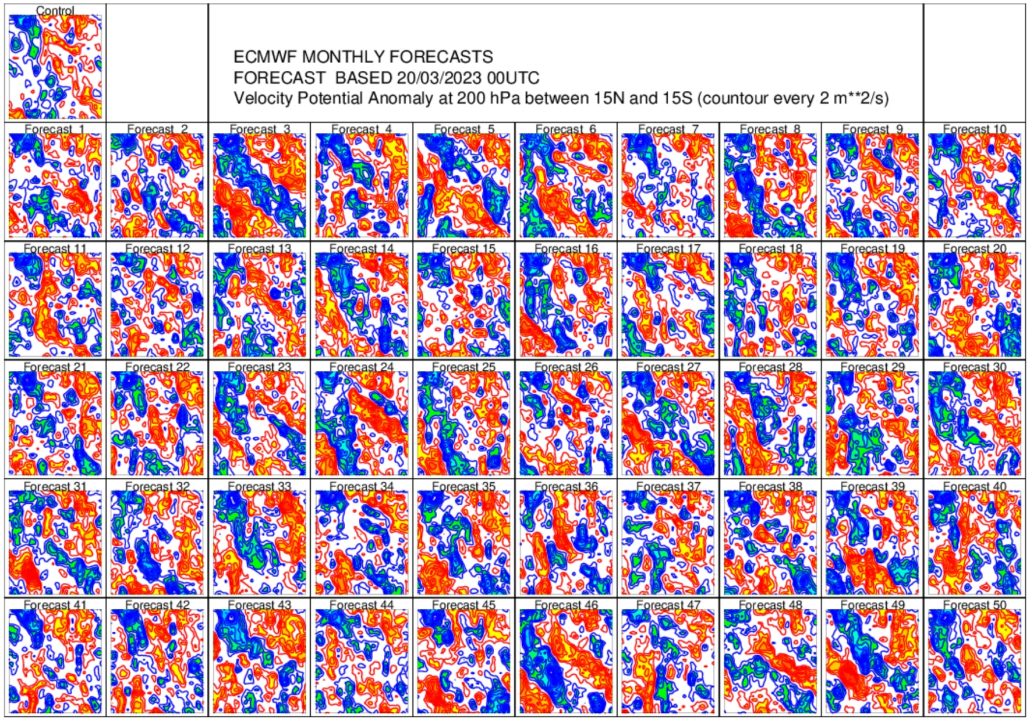
S2

S3

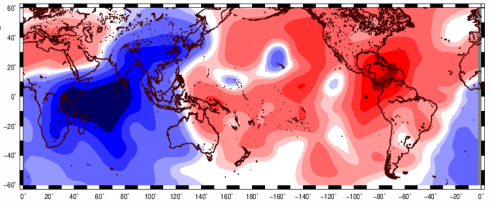
S4

S5

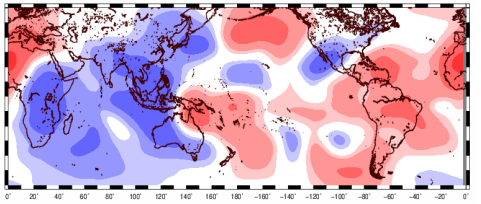
Prévisions 51 membres



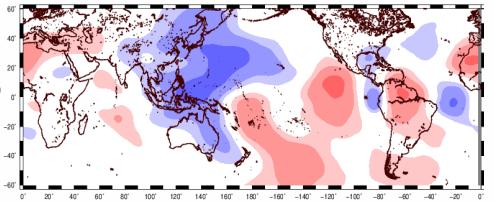
S1



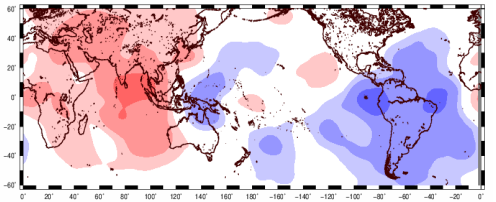
S2



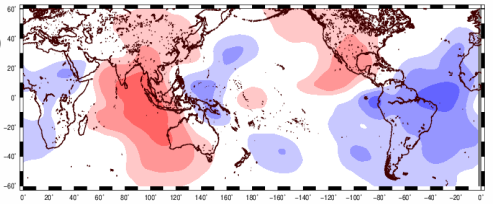
S3



S4



S5

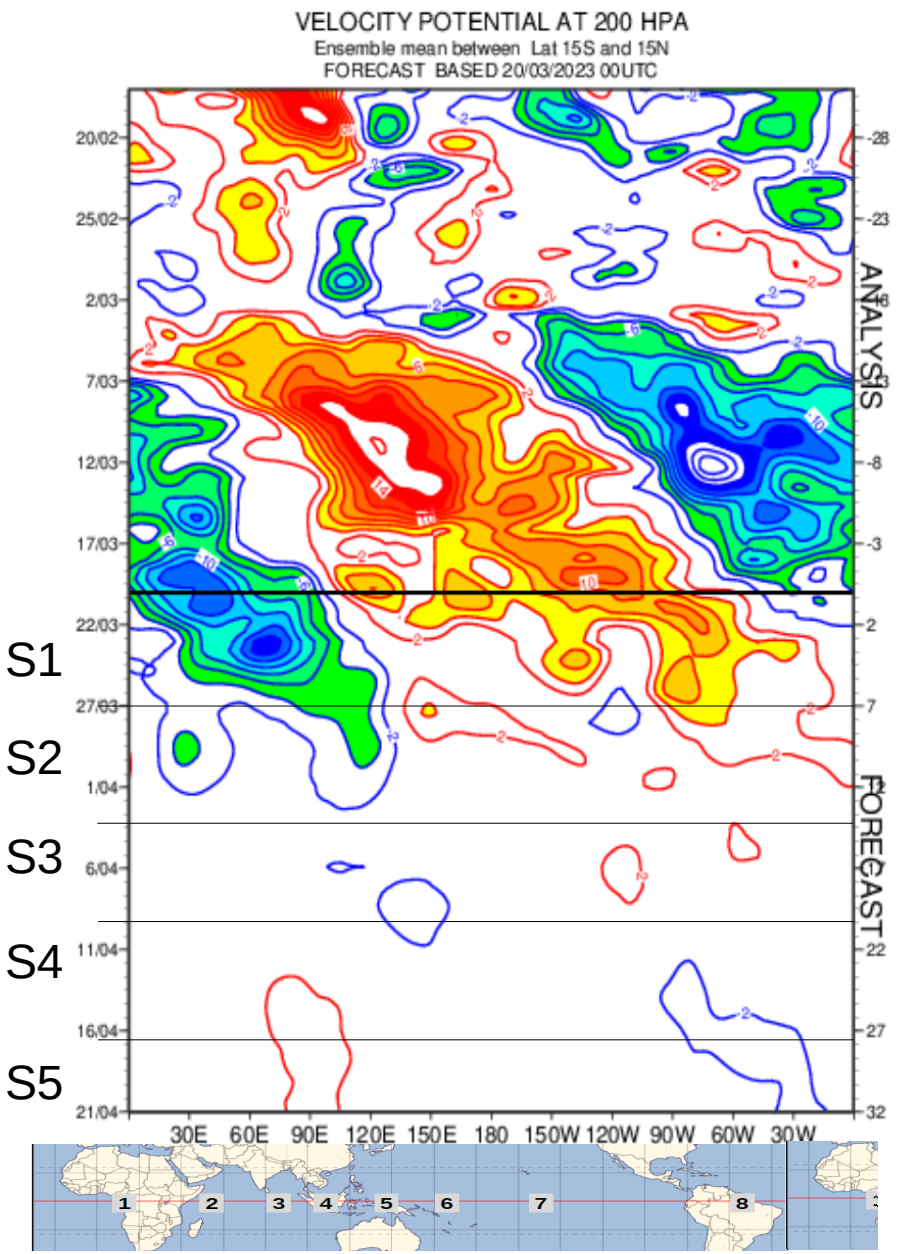


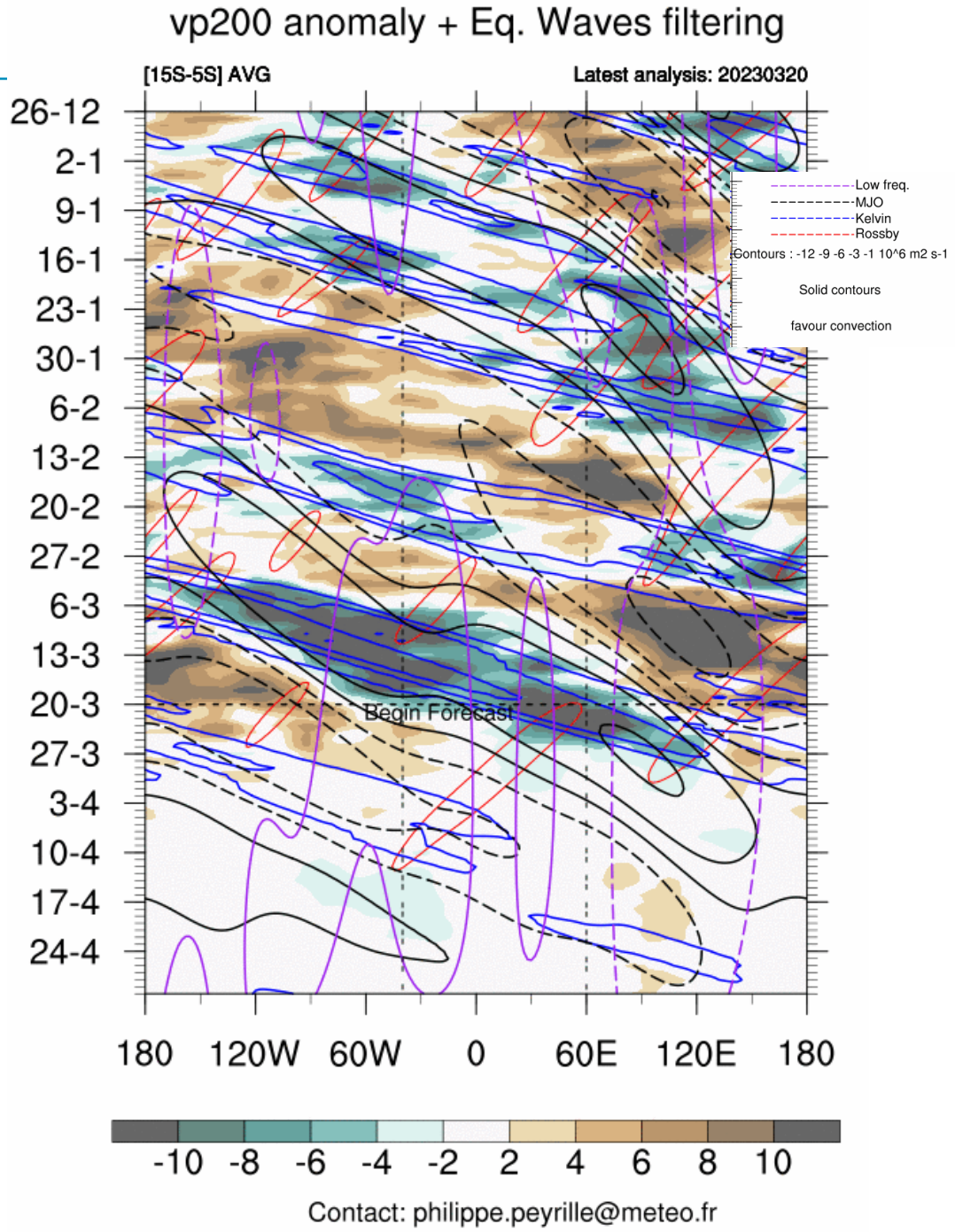
S0 : 20 mars-26 mars
S1 : 27 mars-02 avril
S2 : 03 avril-09 avril
S3 : 10 avril-16 avril
S4 : 17 avril-23 avril

METEO FRANCE

VP200 – EPS mensuel

Moyenne EPS

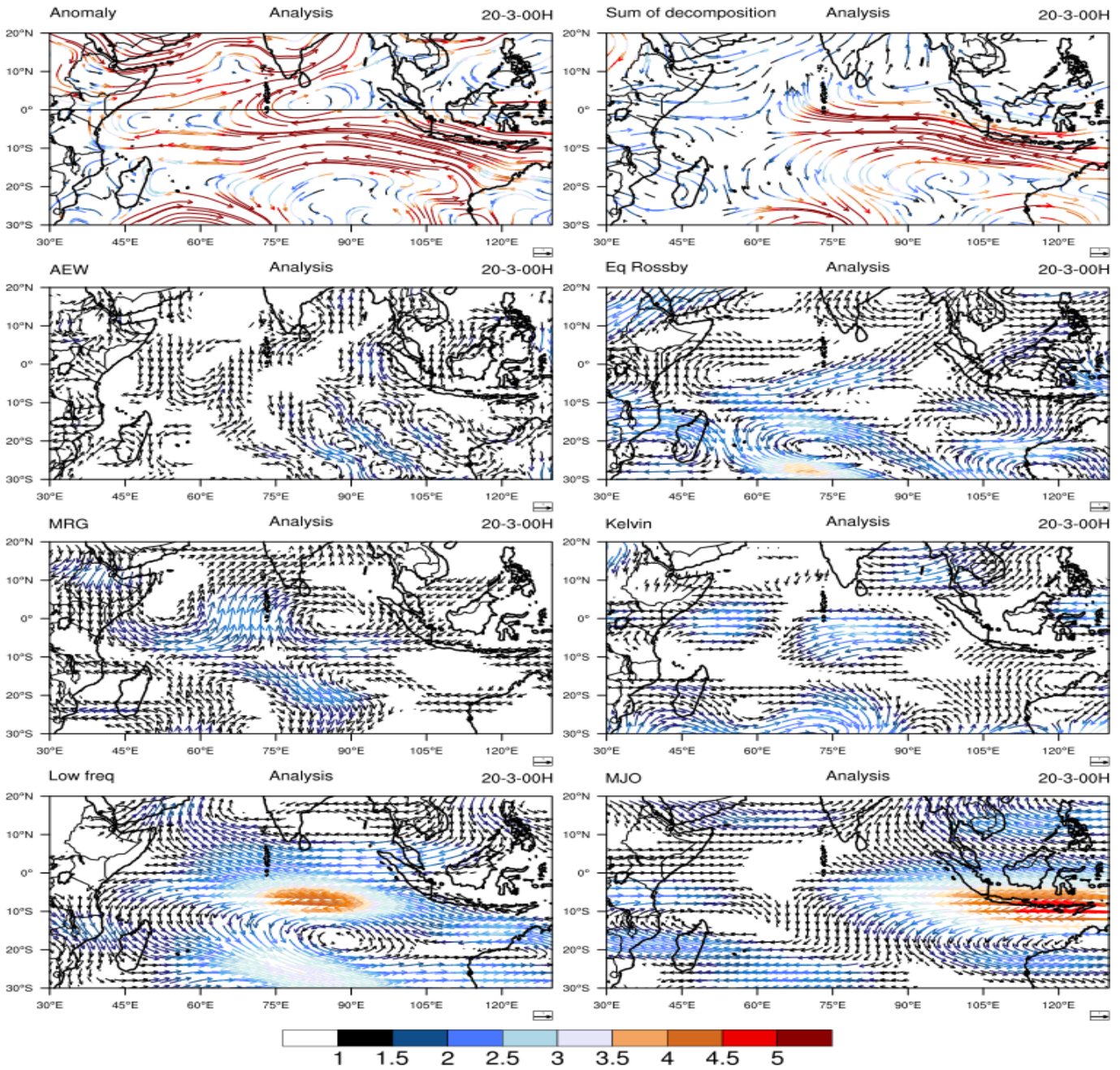




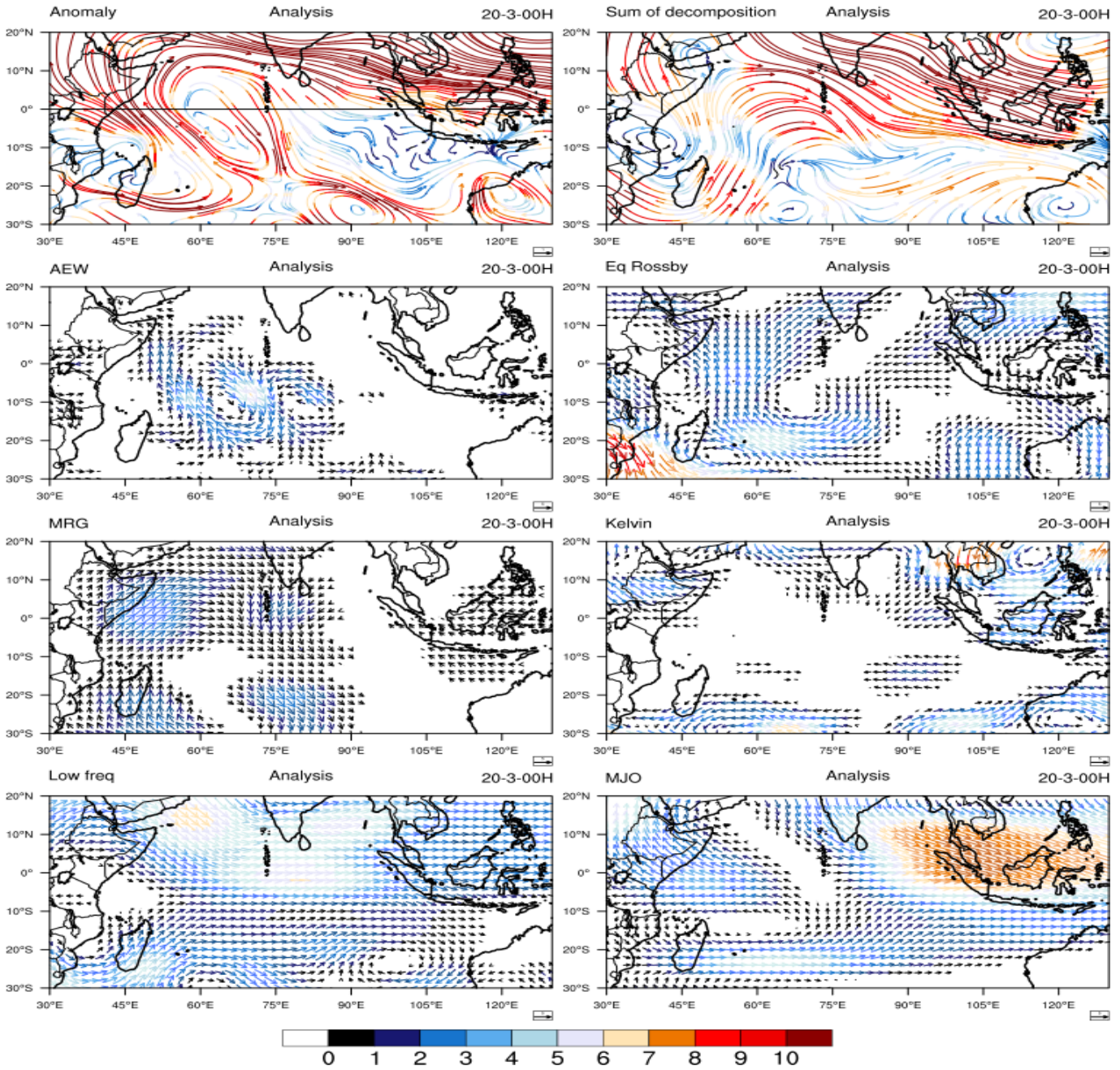
Contact: philippe.peyrille@meteo.fr

3. Prévision – Ondes équatoriales

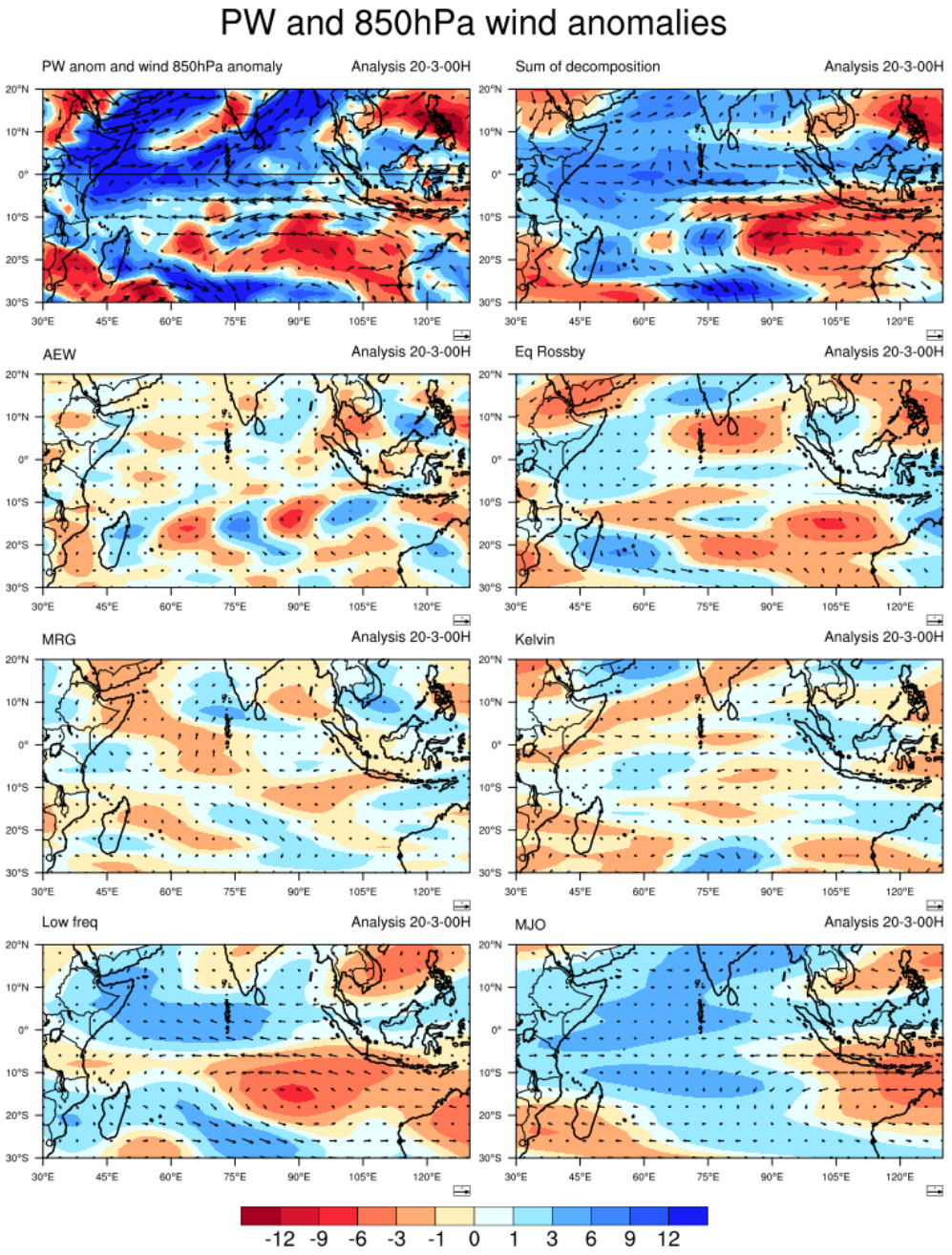
3. Ondes équatoriales



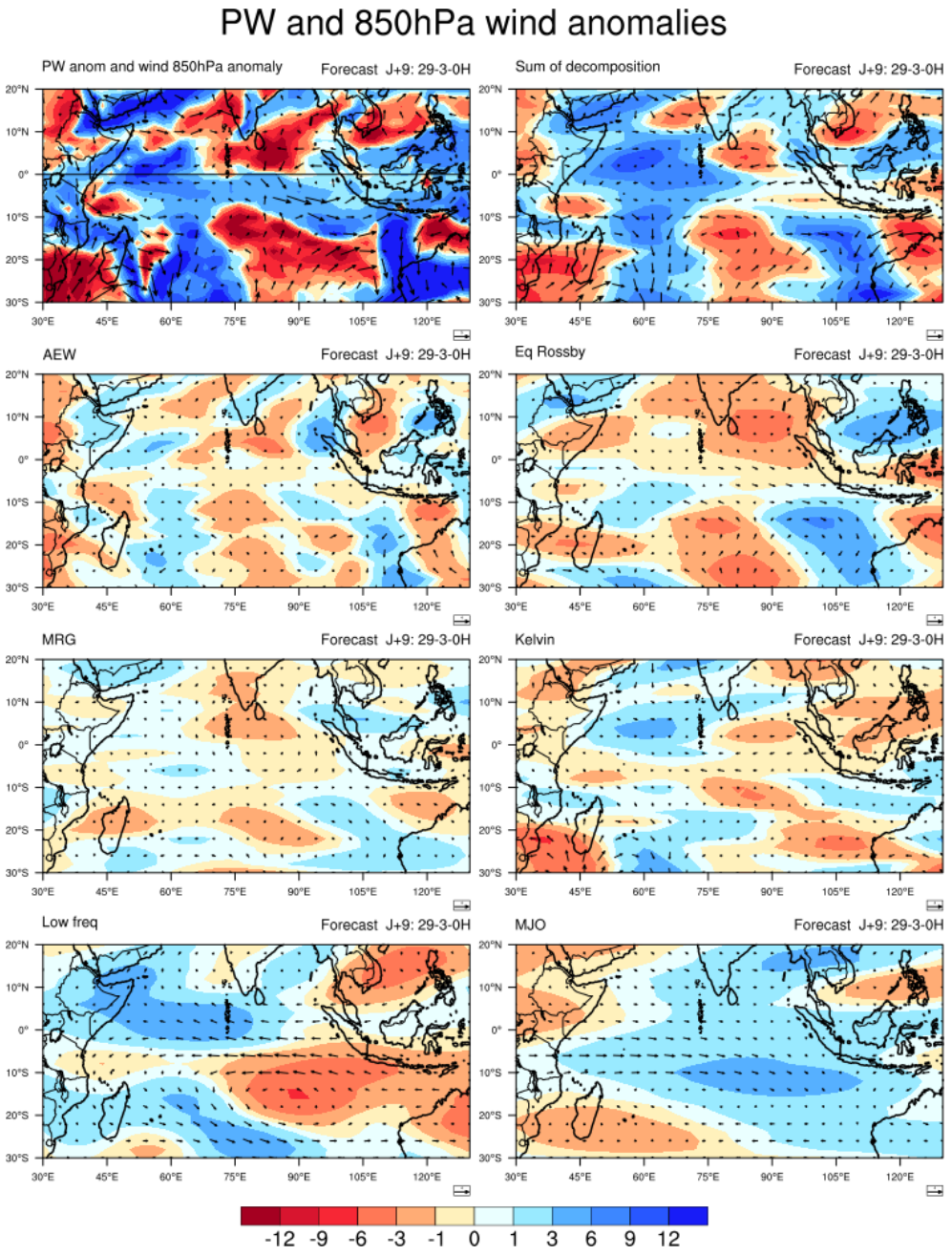
3. Ondes équatoriales



3. Ondes équatoriales



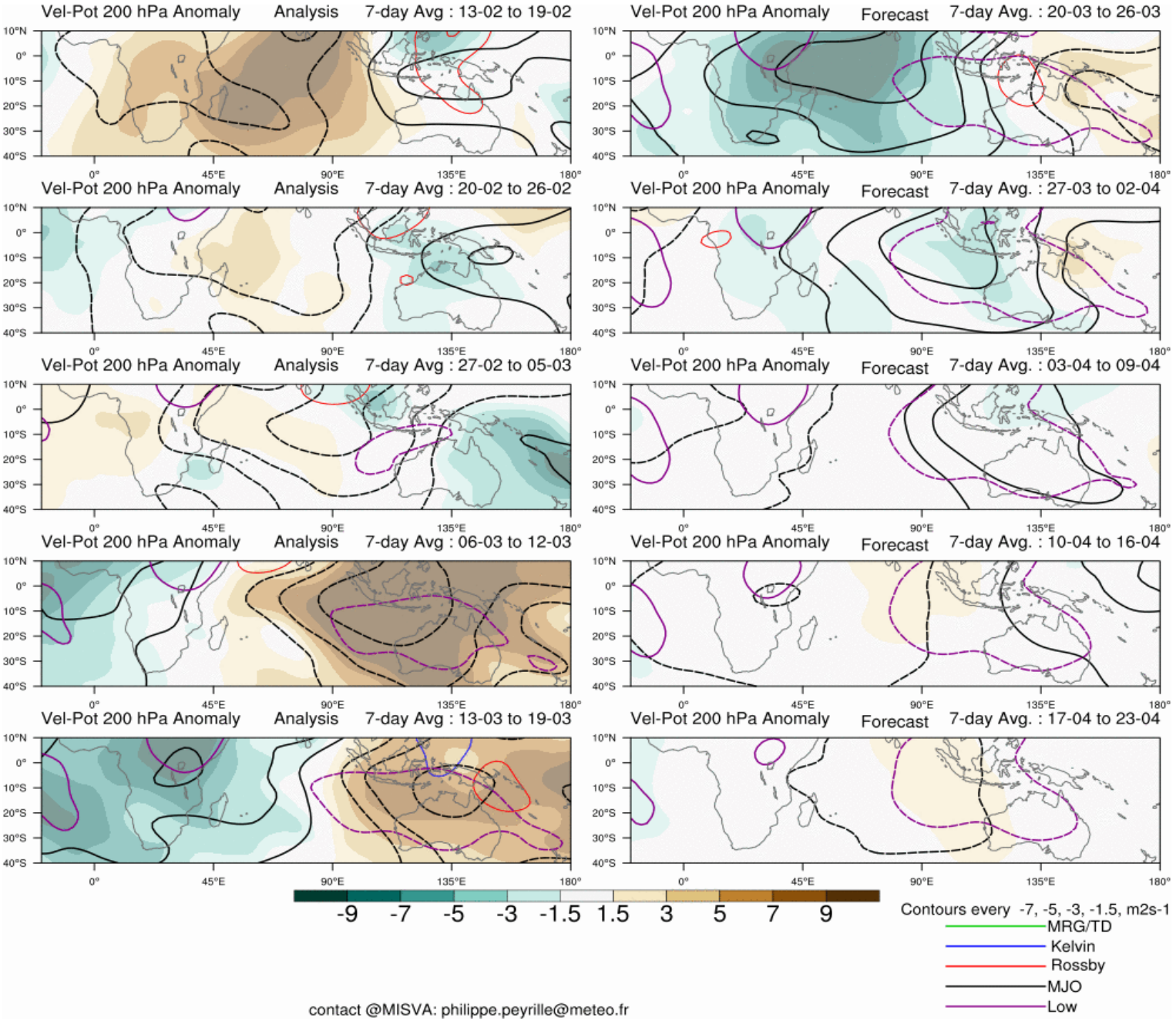
3. Ondes équatoriales



VP200 – MJO, ER dans l'Indien

Analyse

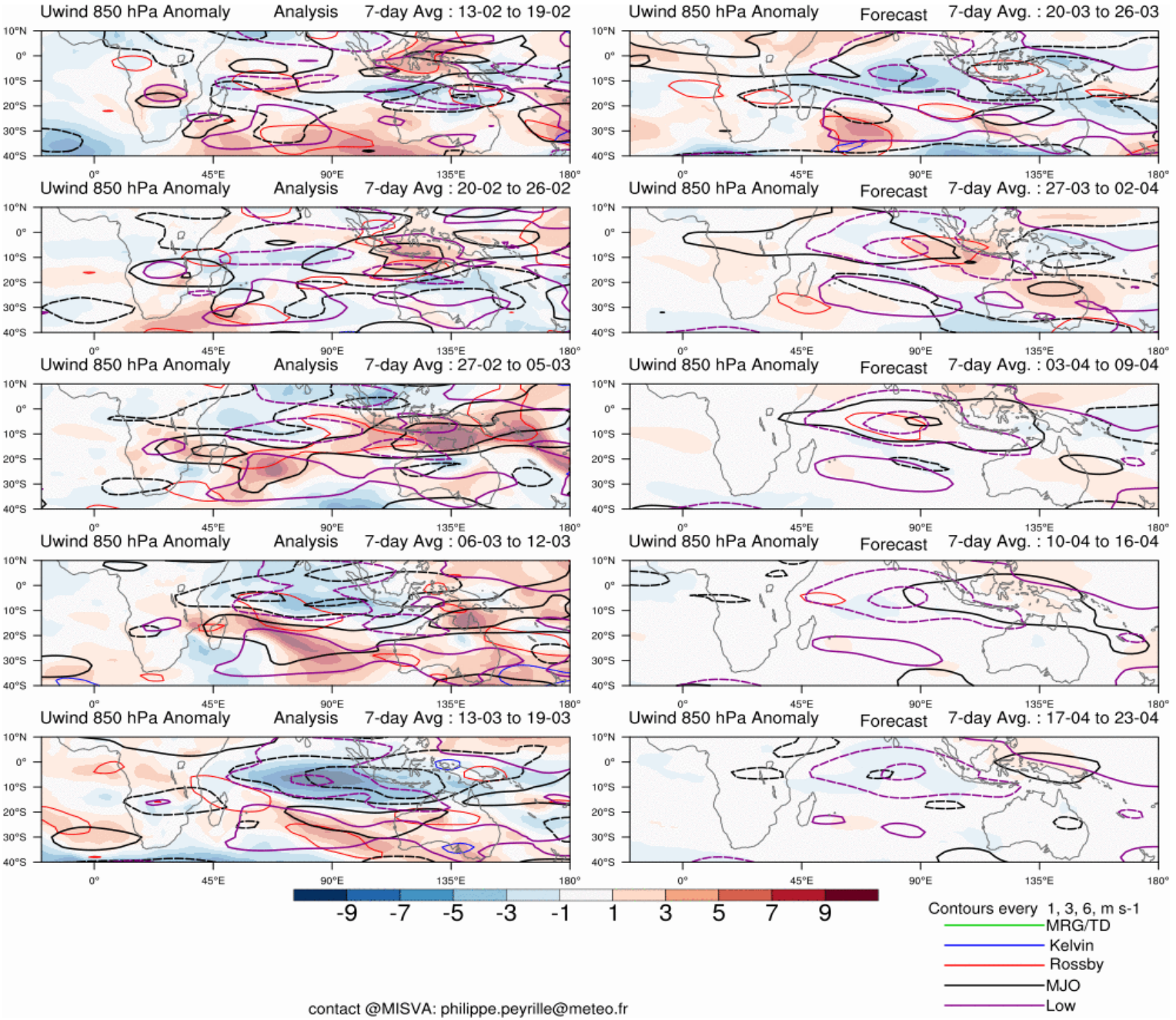
S1 à S4



U850 – MJO, ER dans l'Indien

Analyse

S1 à S4

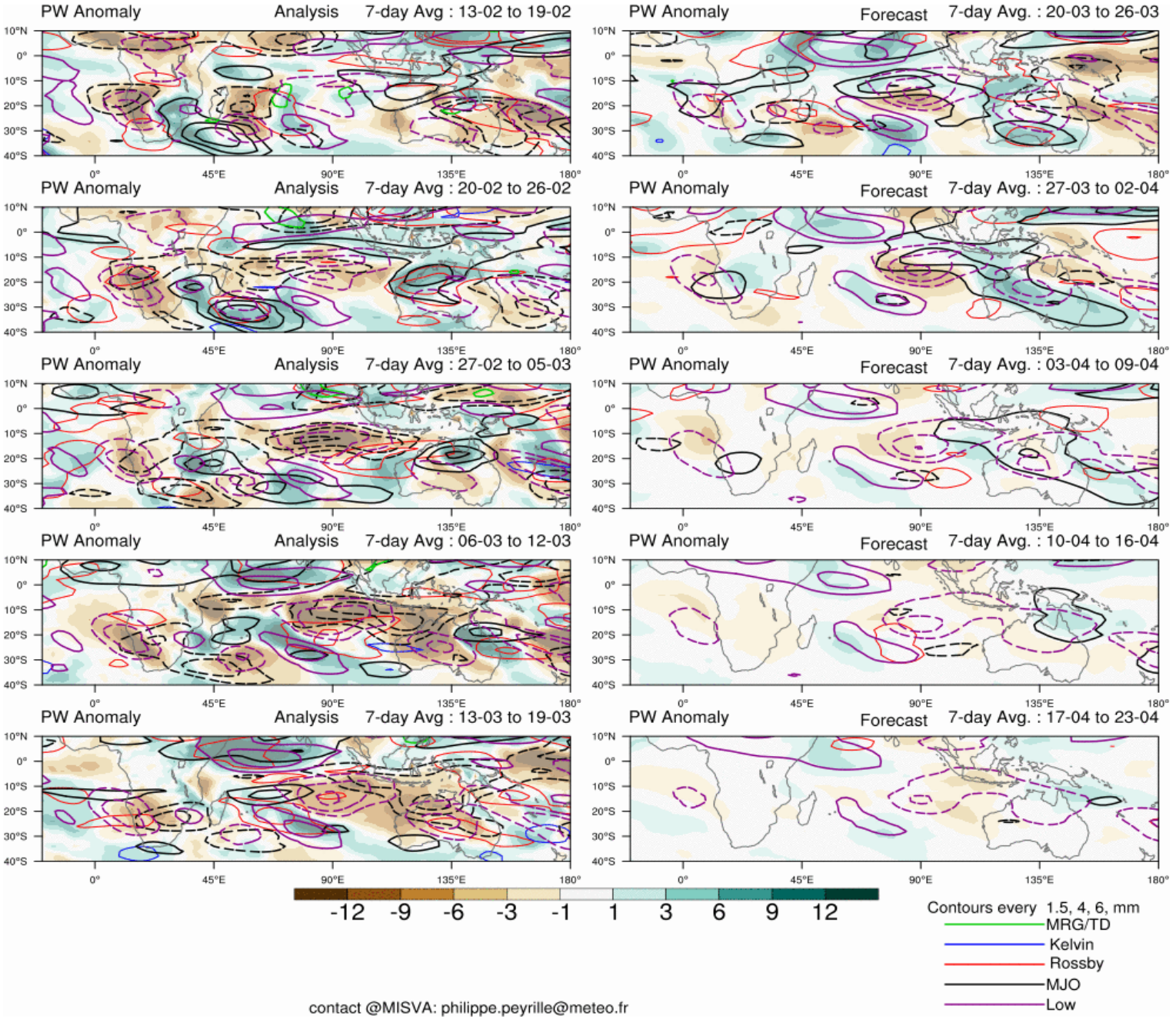


contact @MISVA: philippe.peyrille@meteo.fr

PW – MJO, ER dans l'Indien

Analyse

S1 à S4

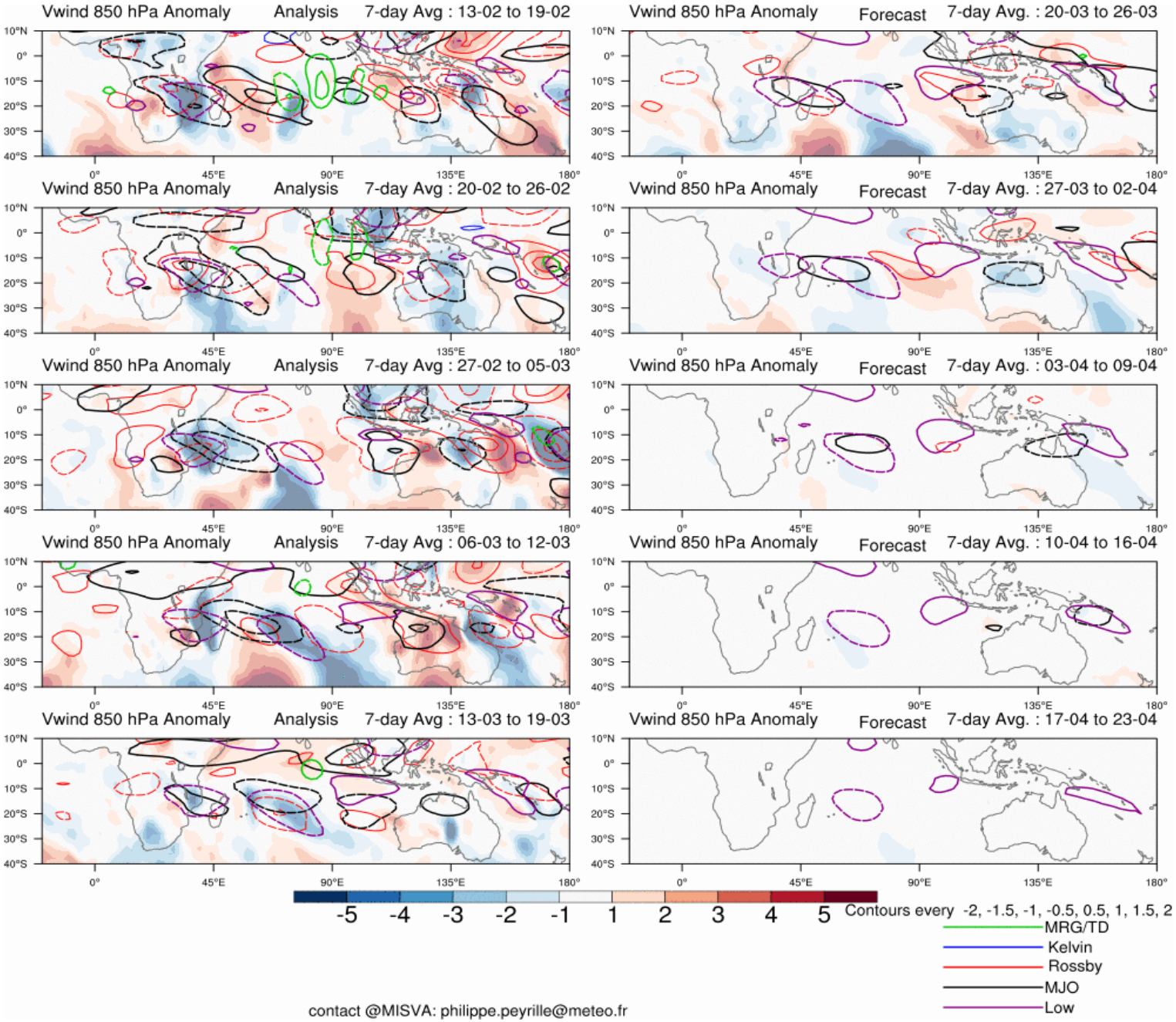


contact @MISVA: philippe.peyrille@meteo.fr

V850 – MJO, ER dans l'Indien

Analyse

S1 à S4

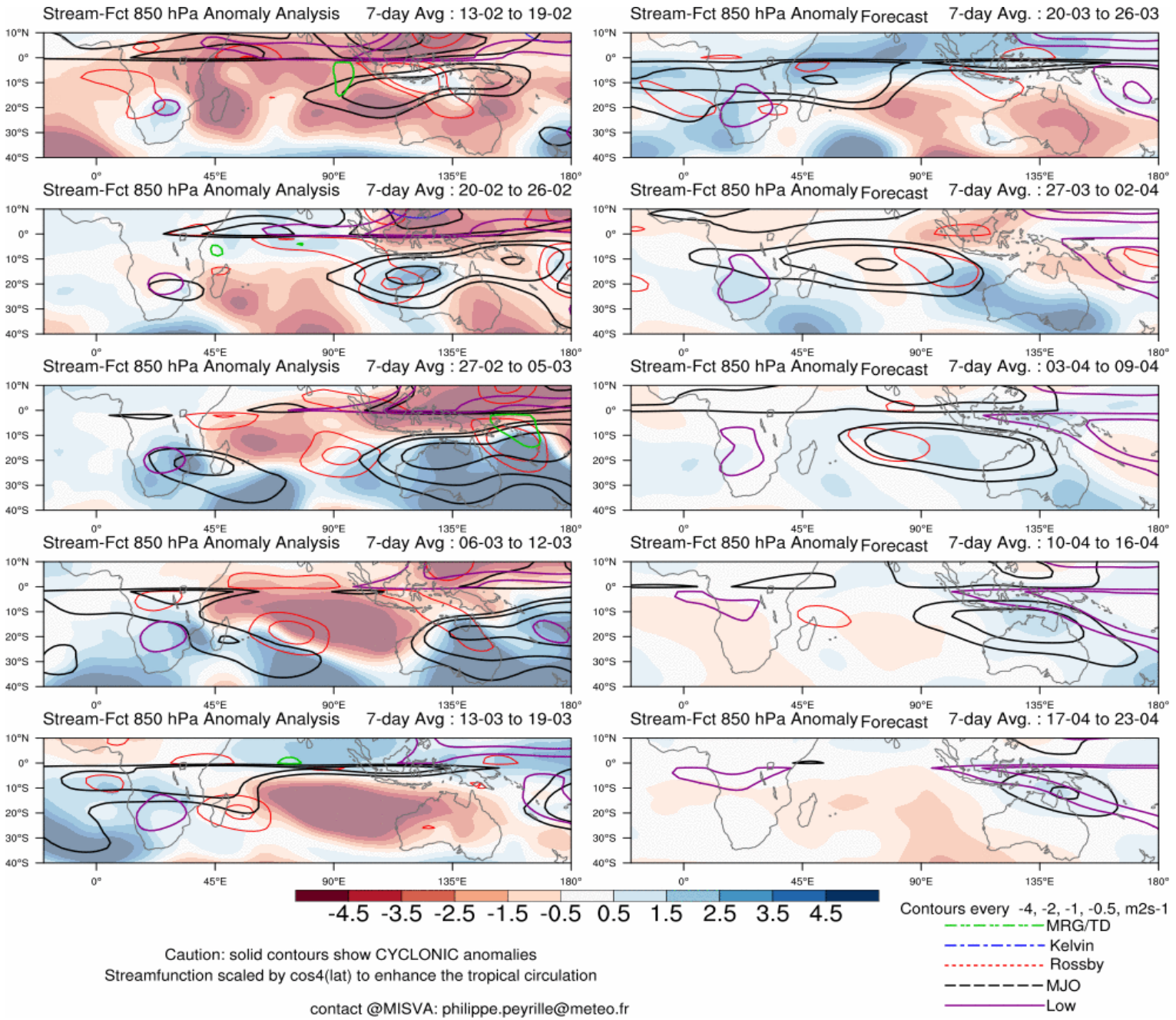


contact @MISVA: philippe.peyrille@meteo.fr

SF850 – MJO, ER dans l'Indien

Analyse

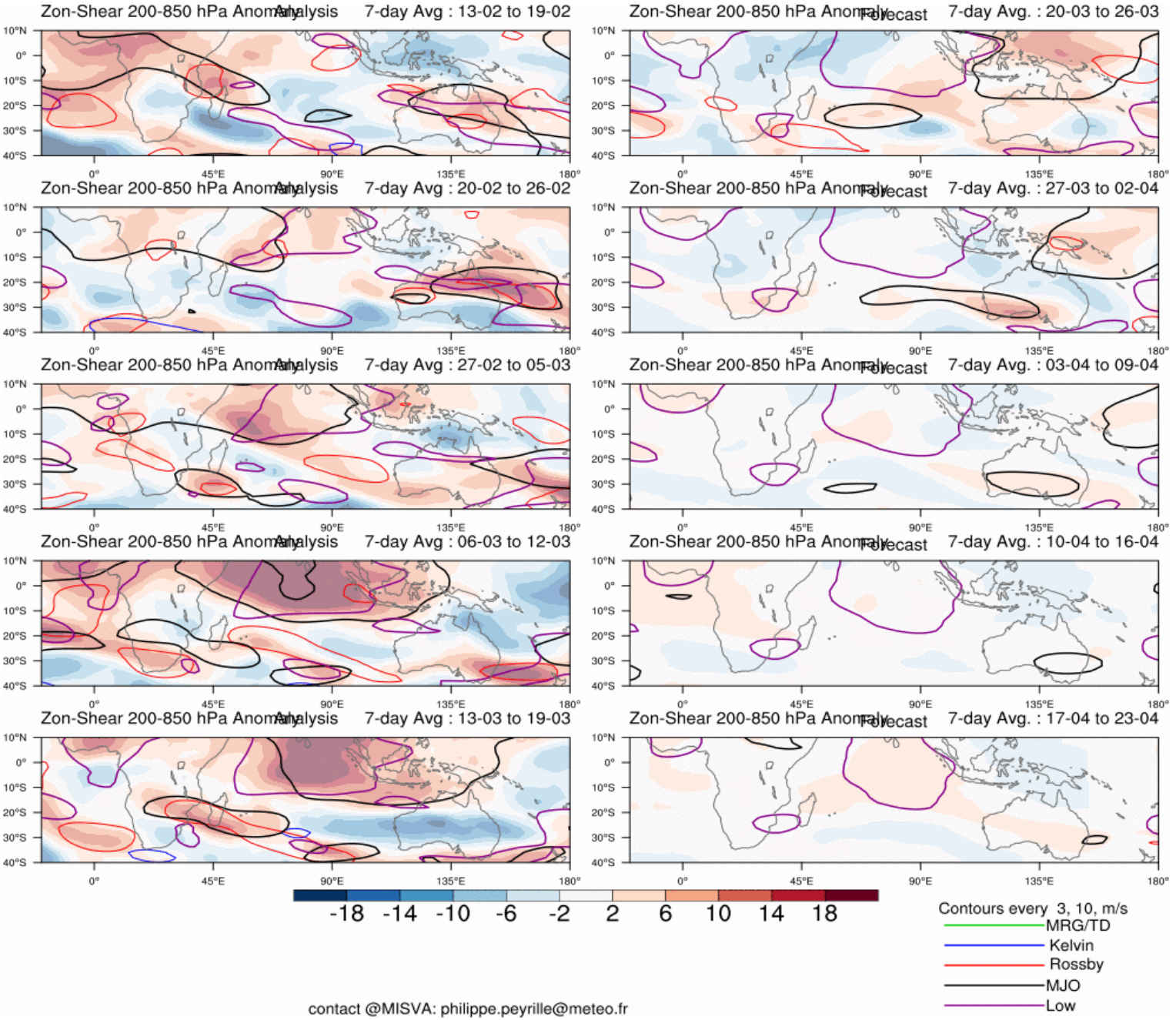
S1 à S4



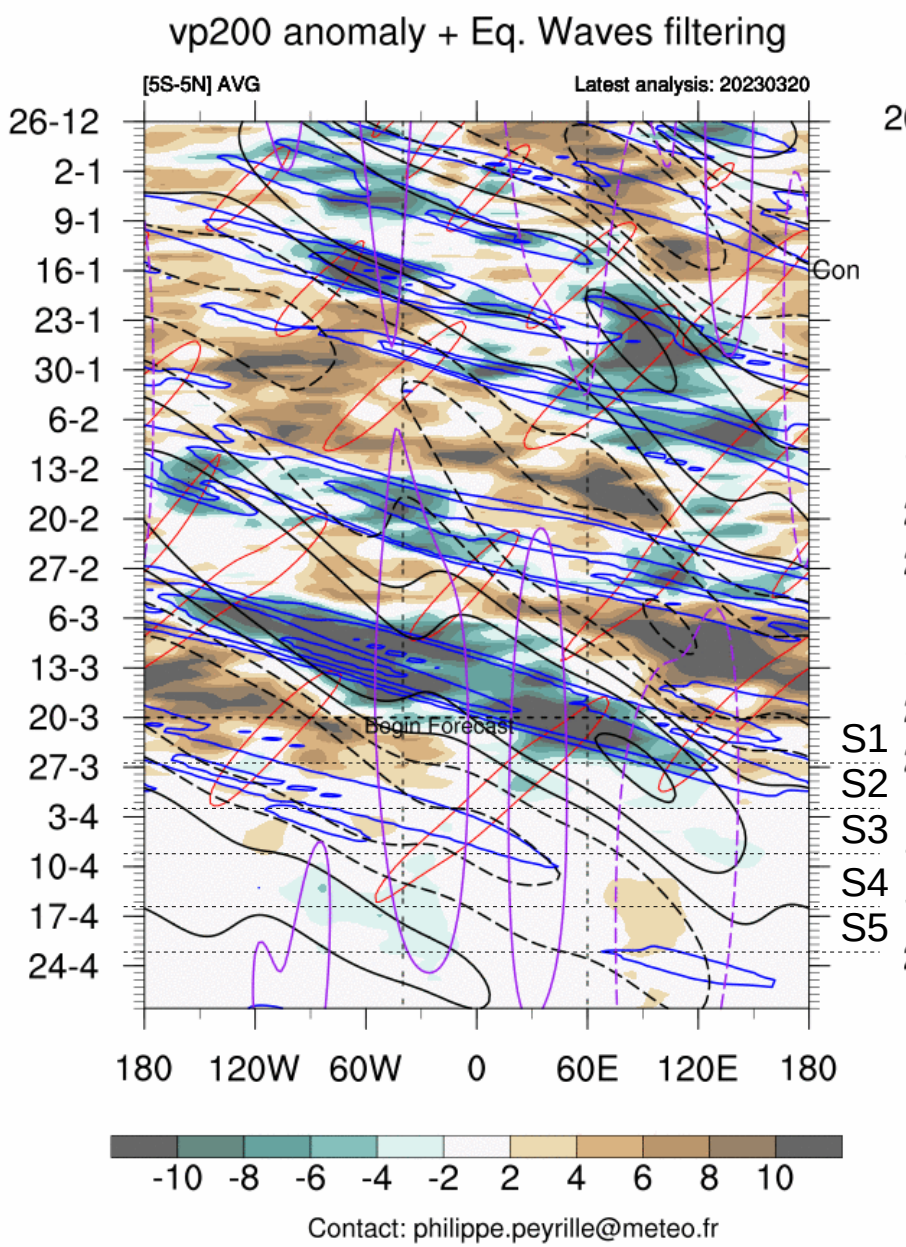
U_{shear} – MJO, ER dans l'Indien

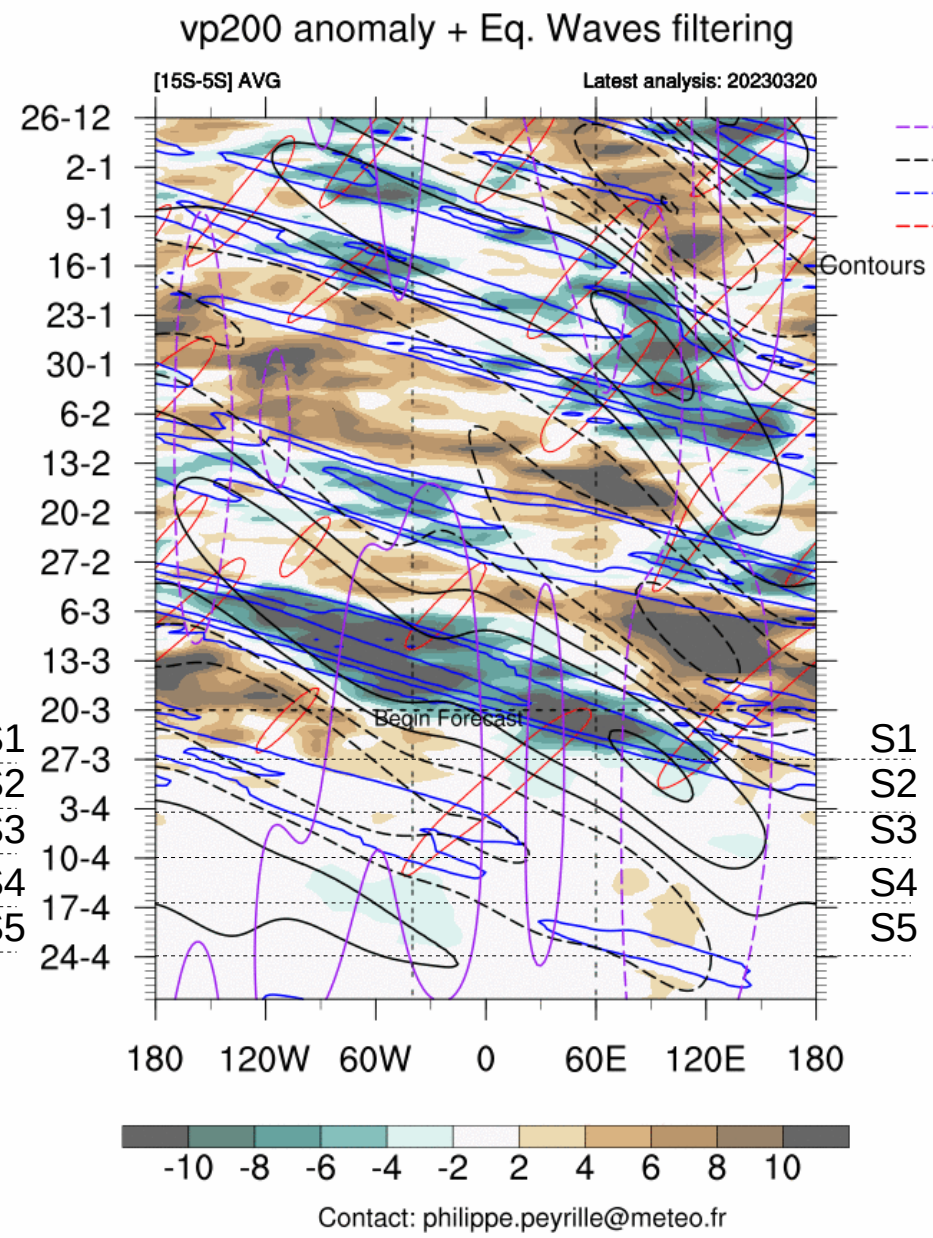
Analyse

S1 à S4

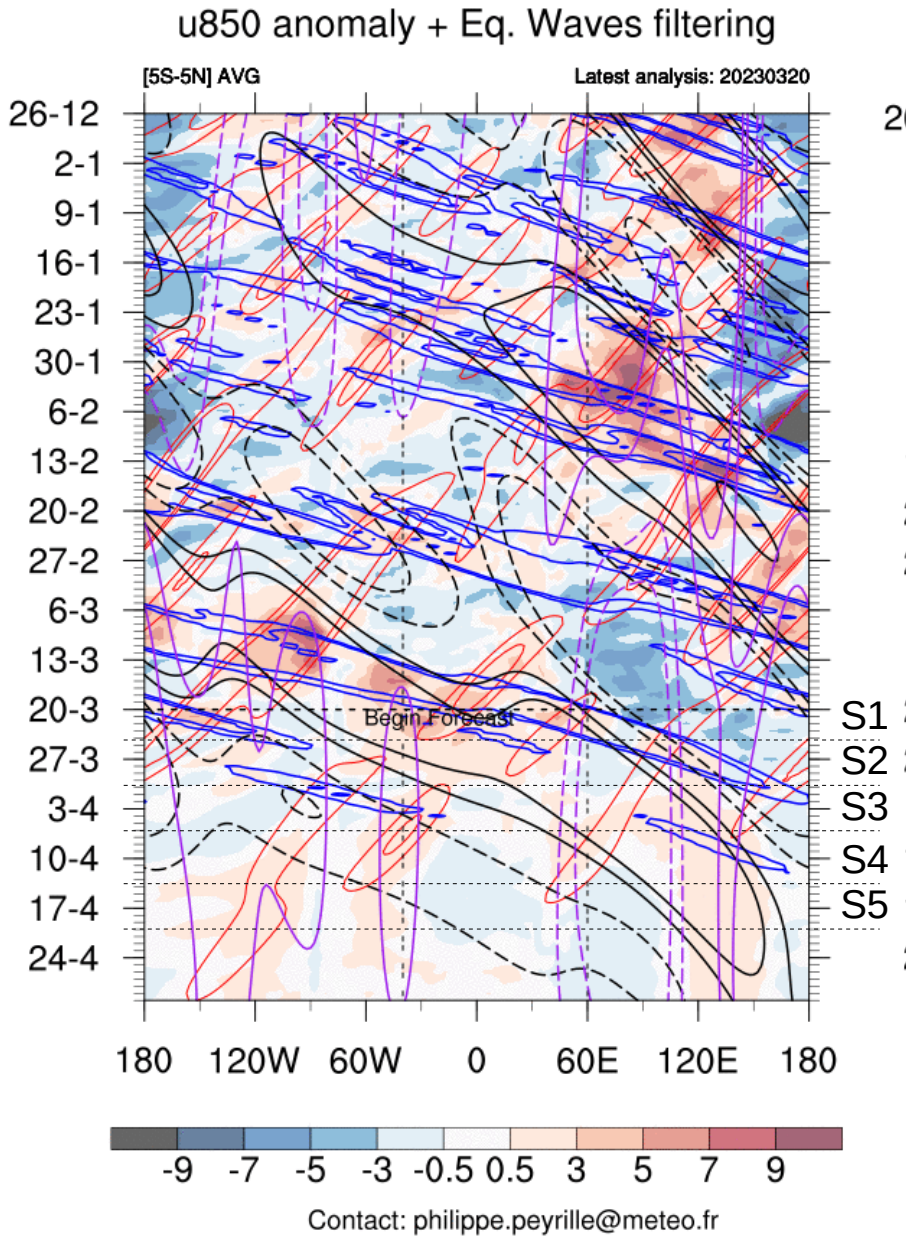


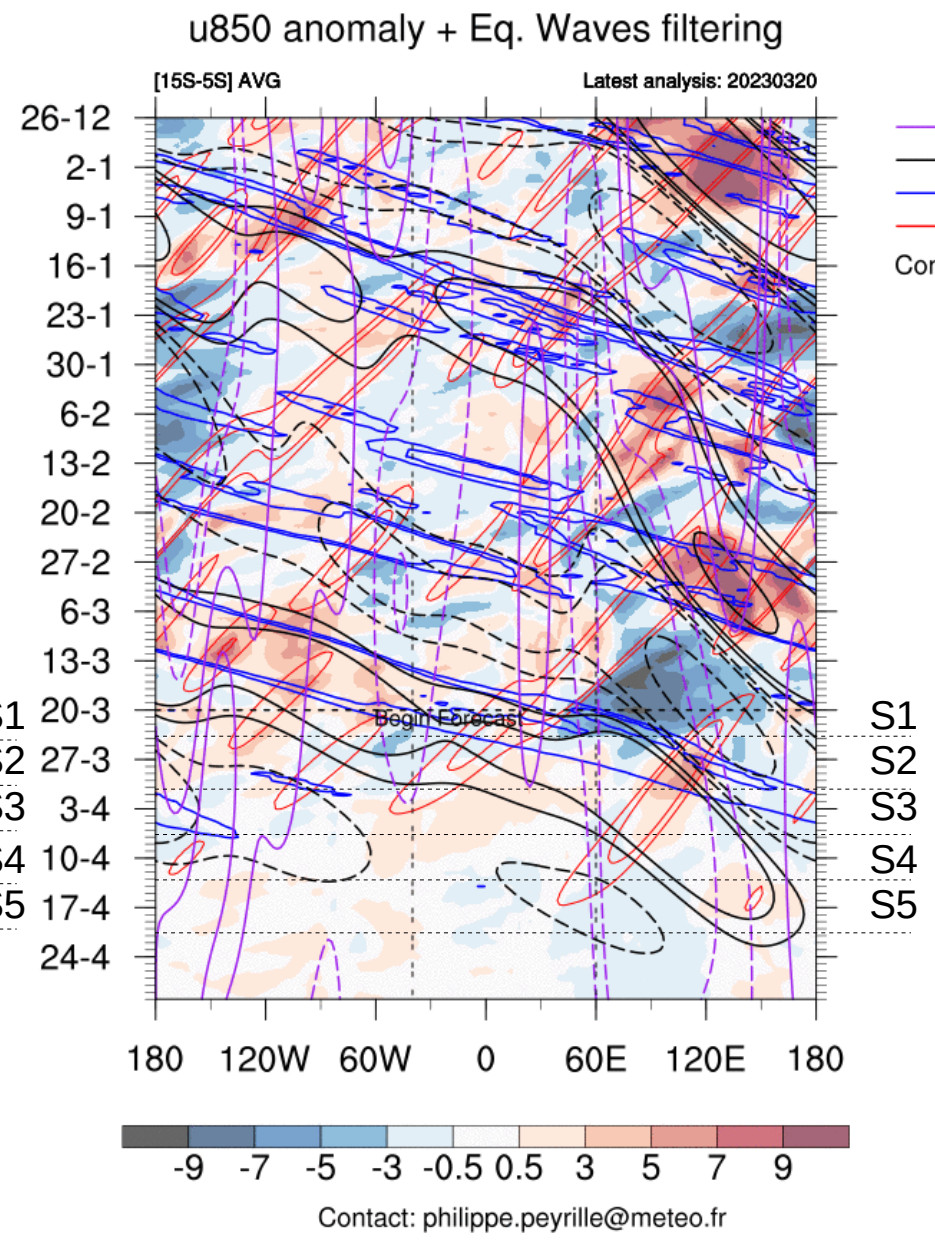
3. Ondes équatoriales

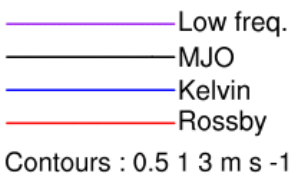




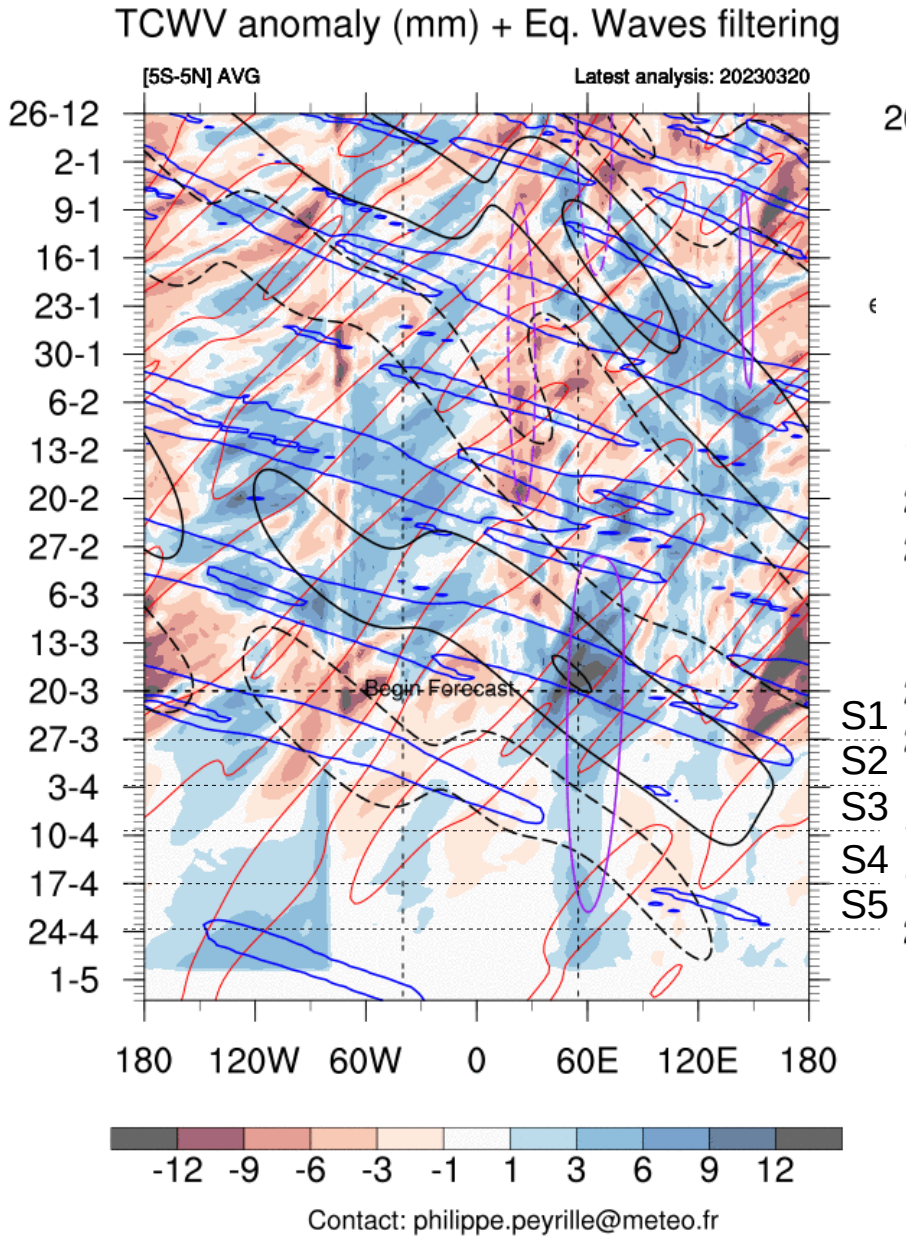
3. Ondes équatoriales

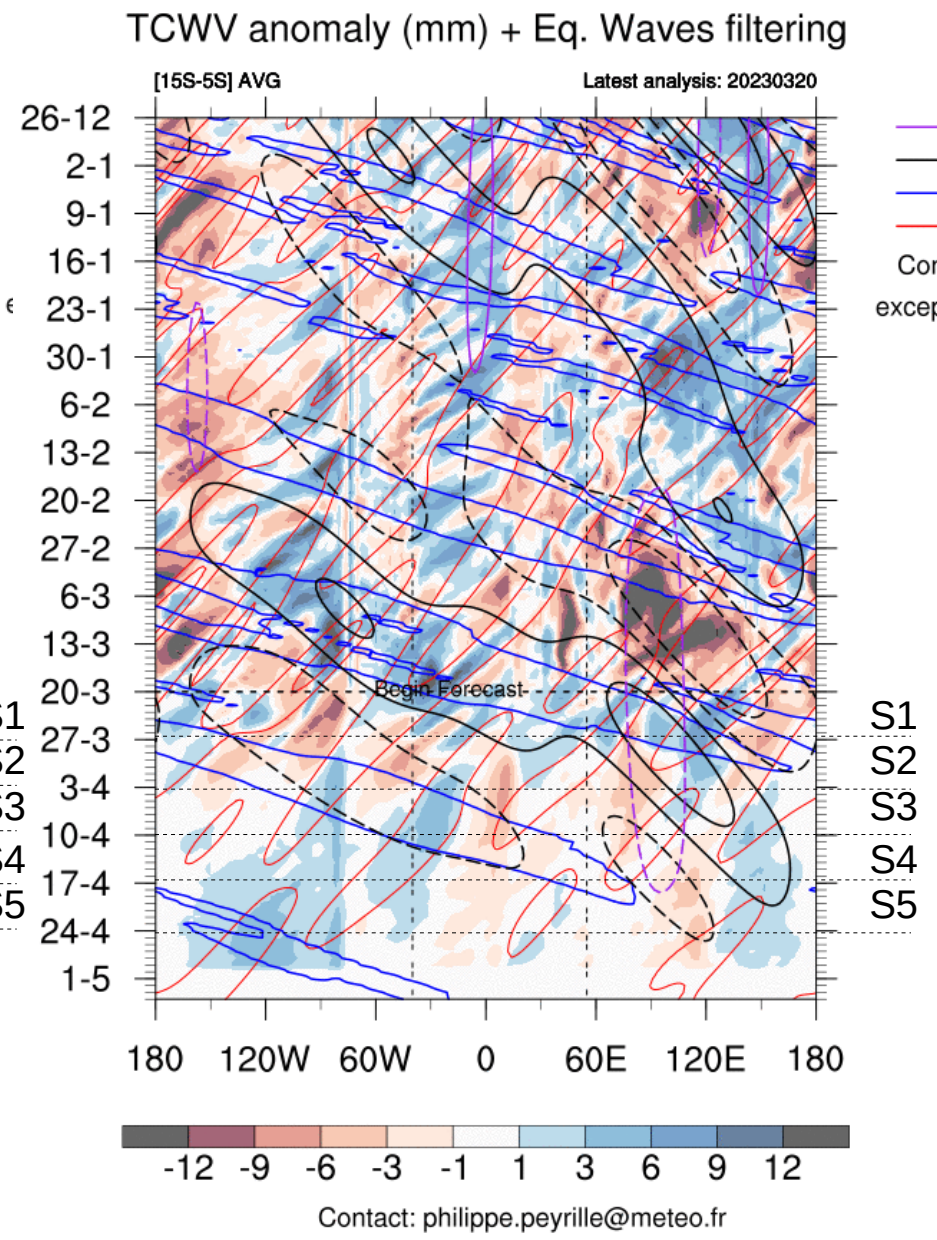






3. Ondes équatoriales

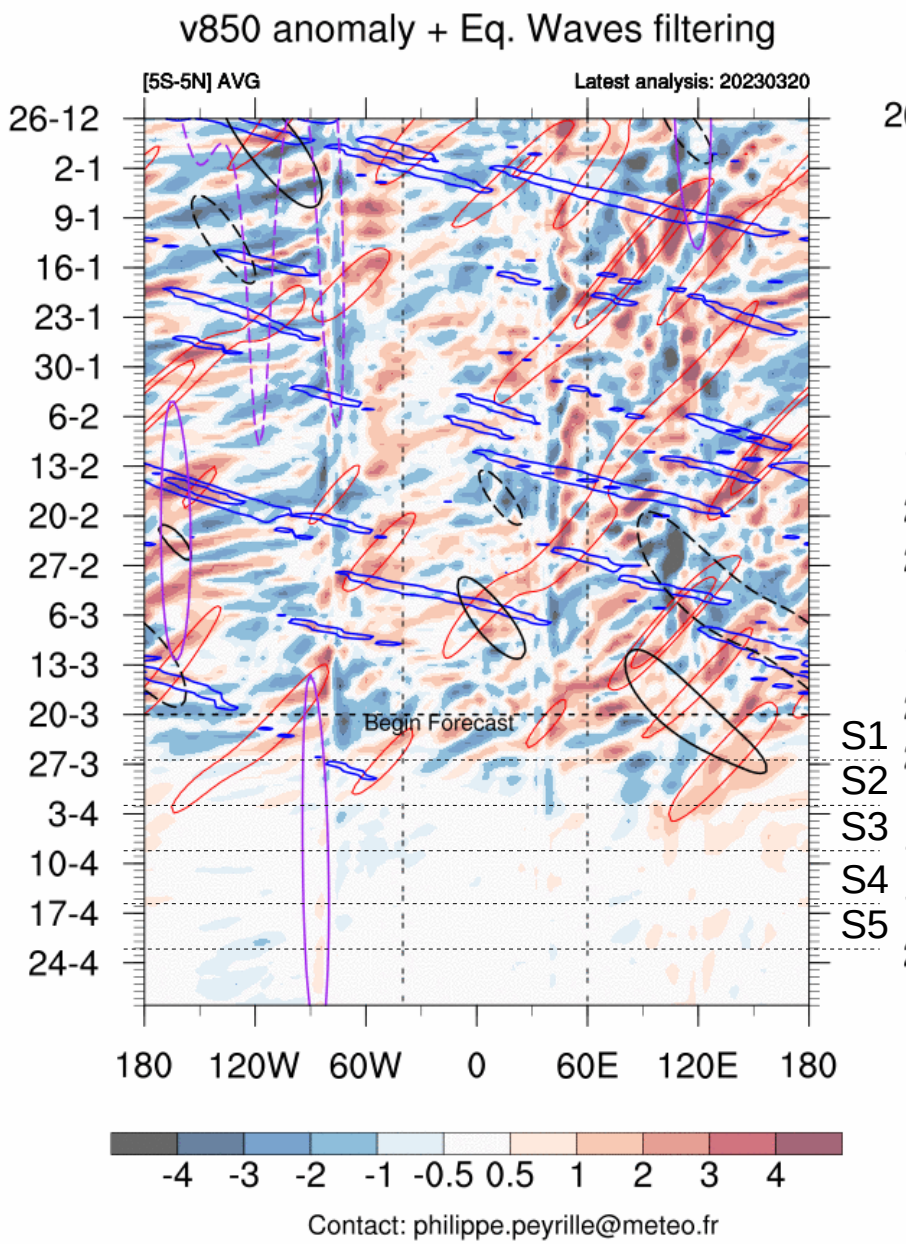


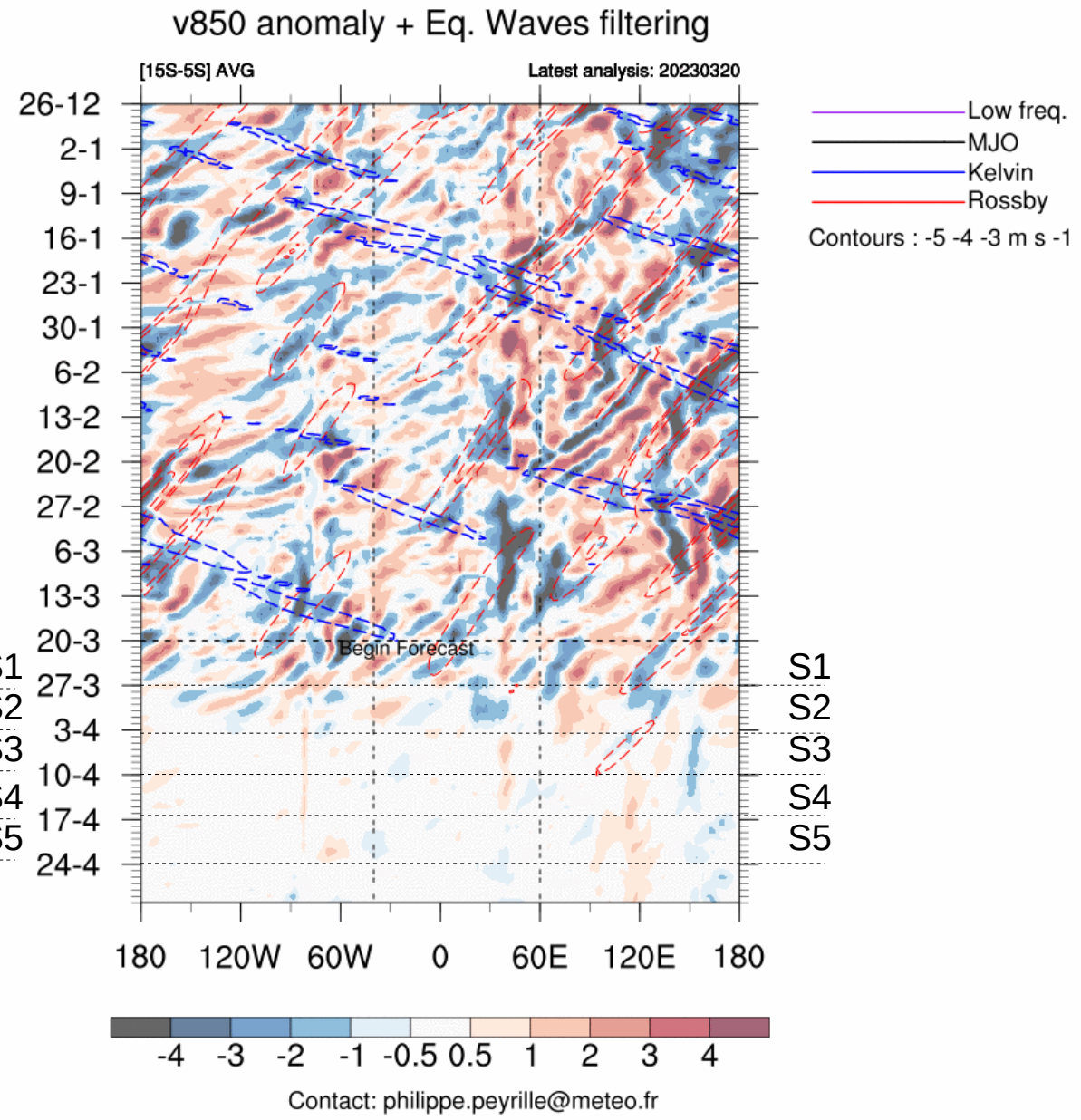


Low freq.
MJO
Kelvin
Rossby

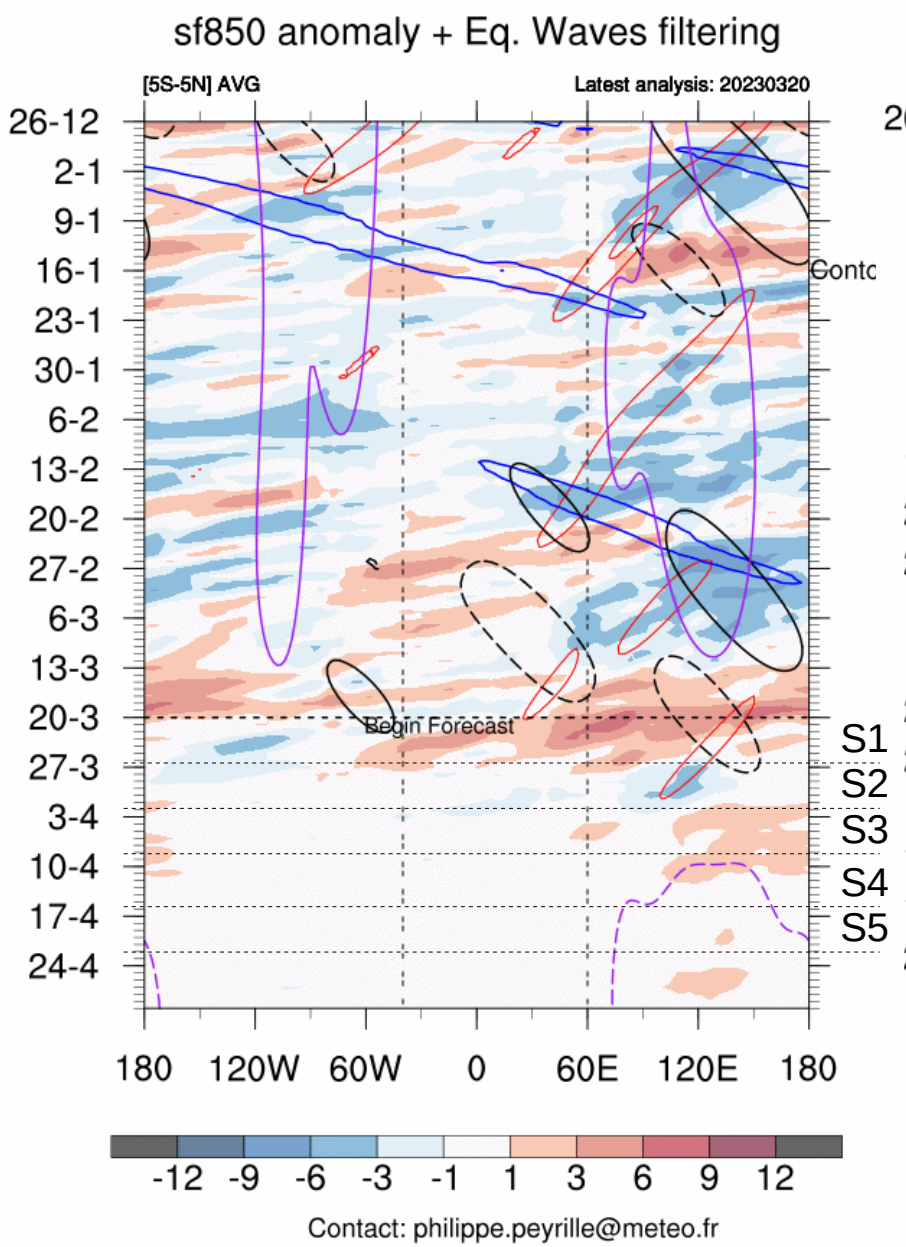
Contours : 0.5 3 6 mm
except Low freq, 3,6, 9 mm

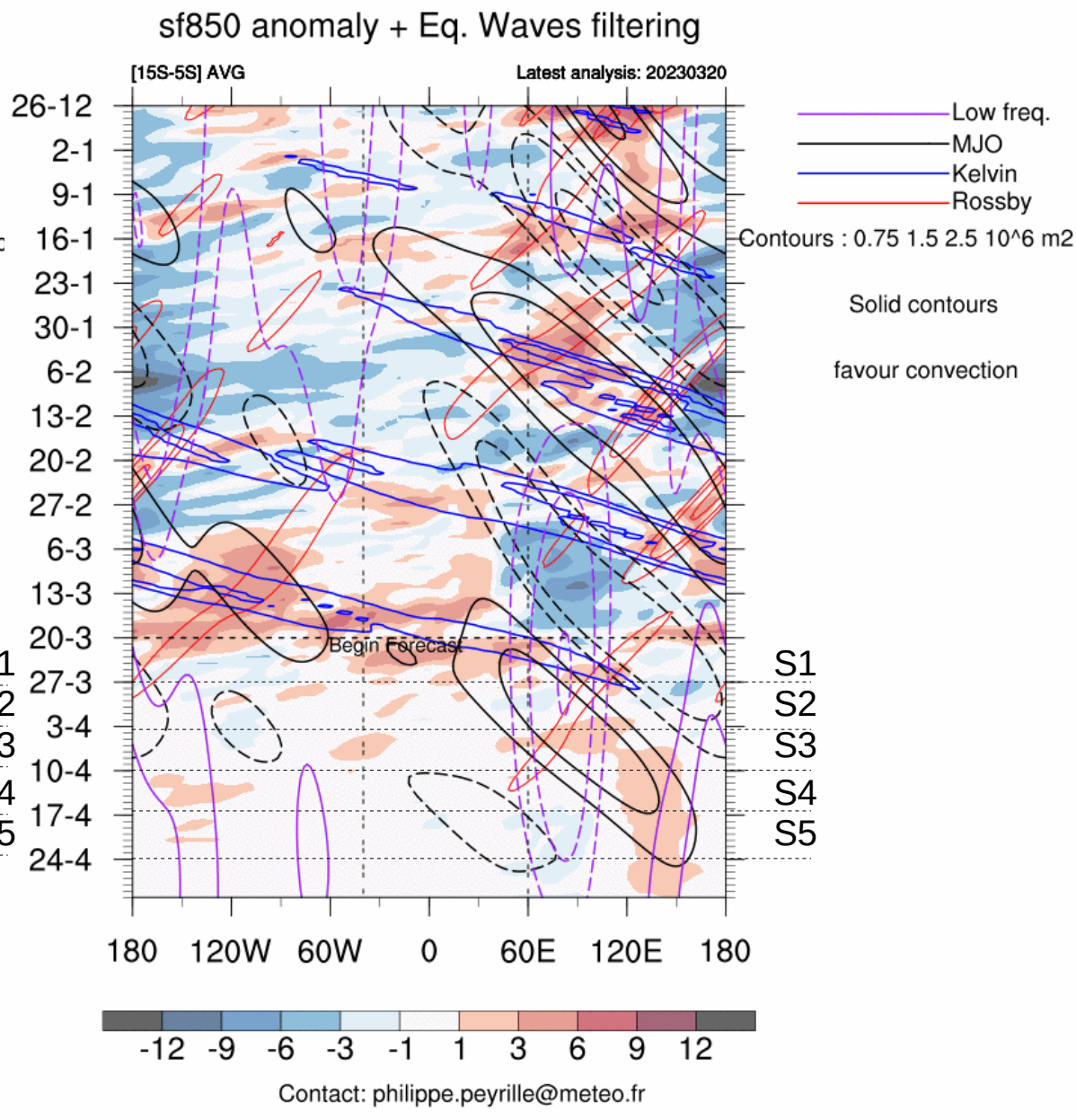
3. Ondes équatoriales



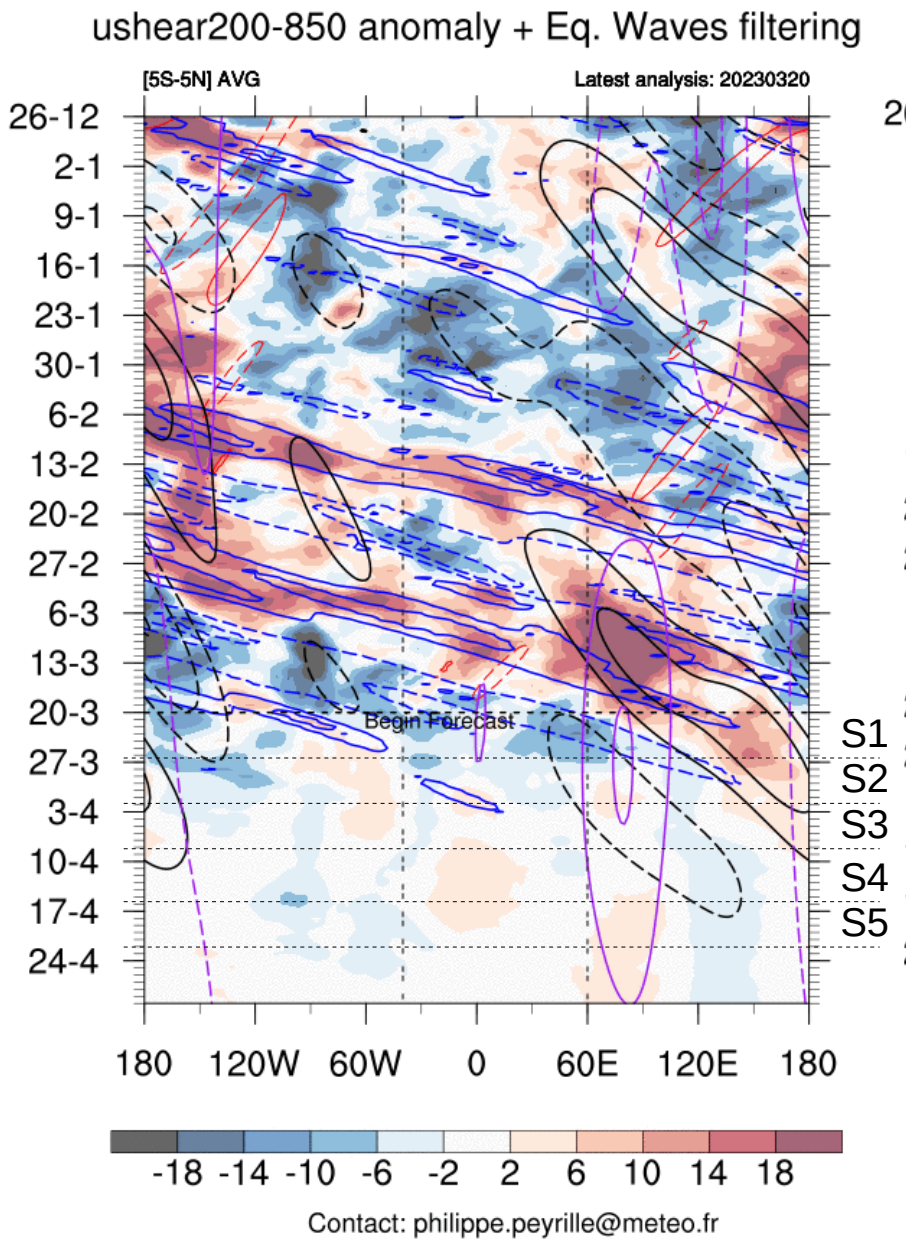


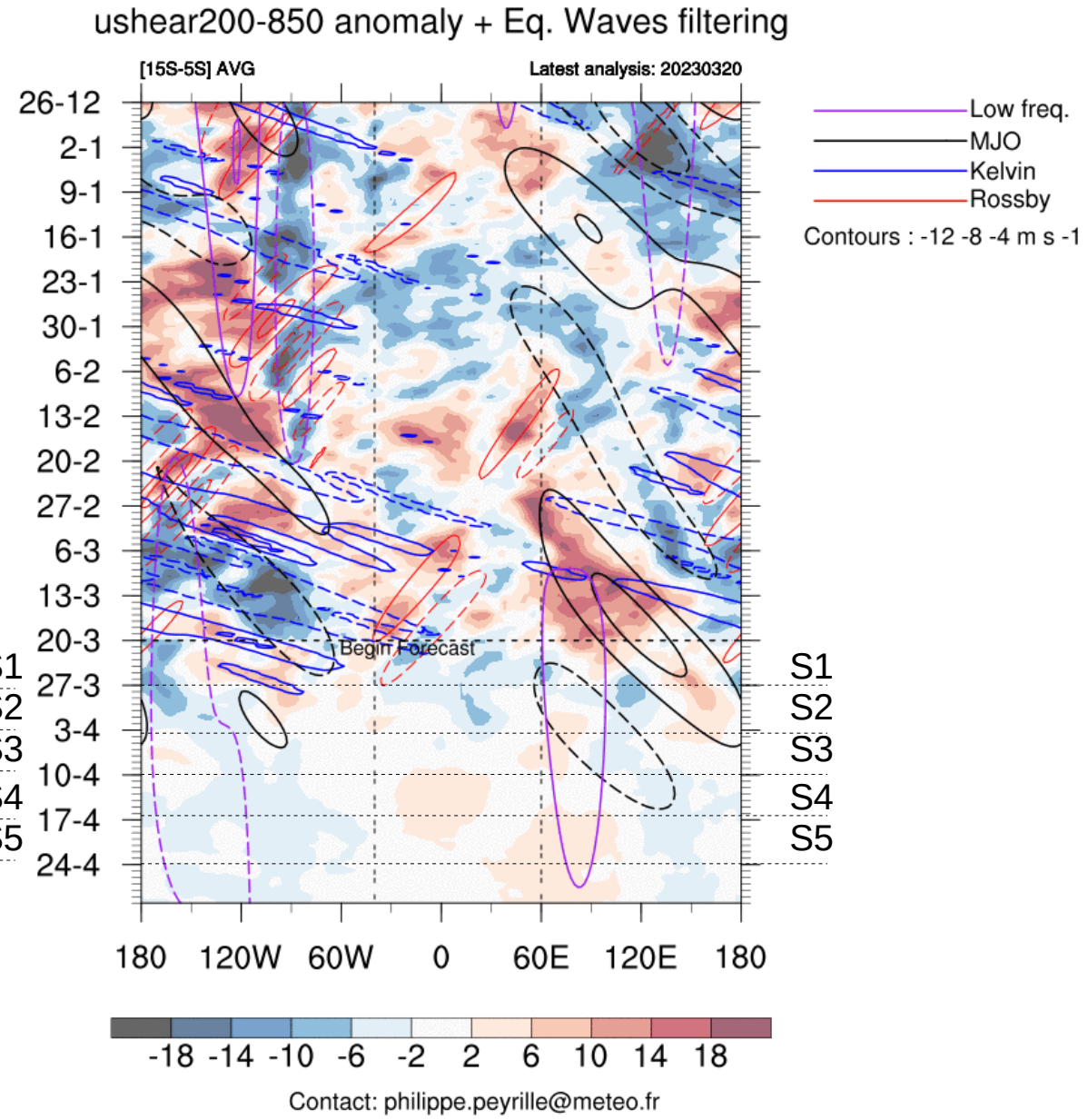
3. Ondes équatoriales



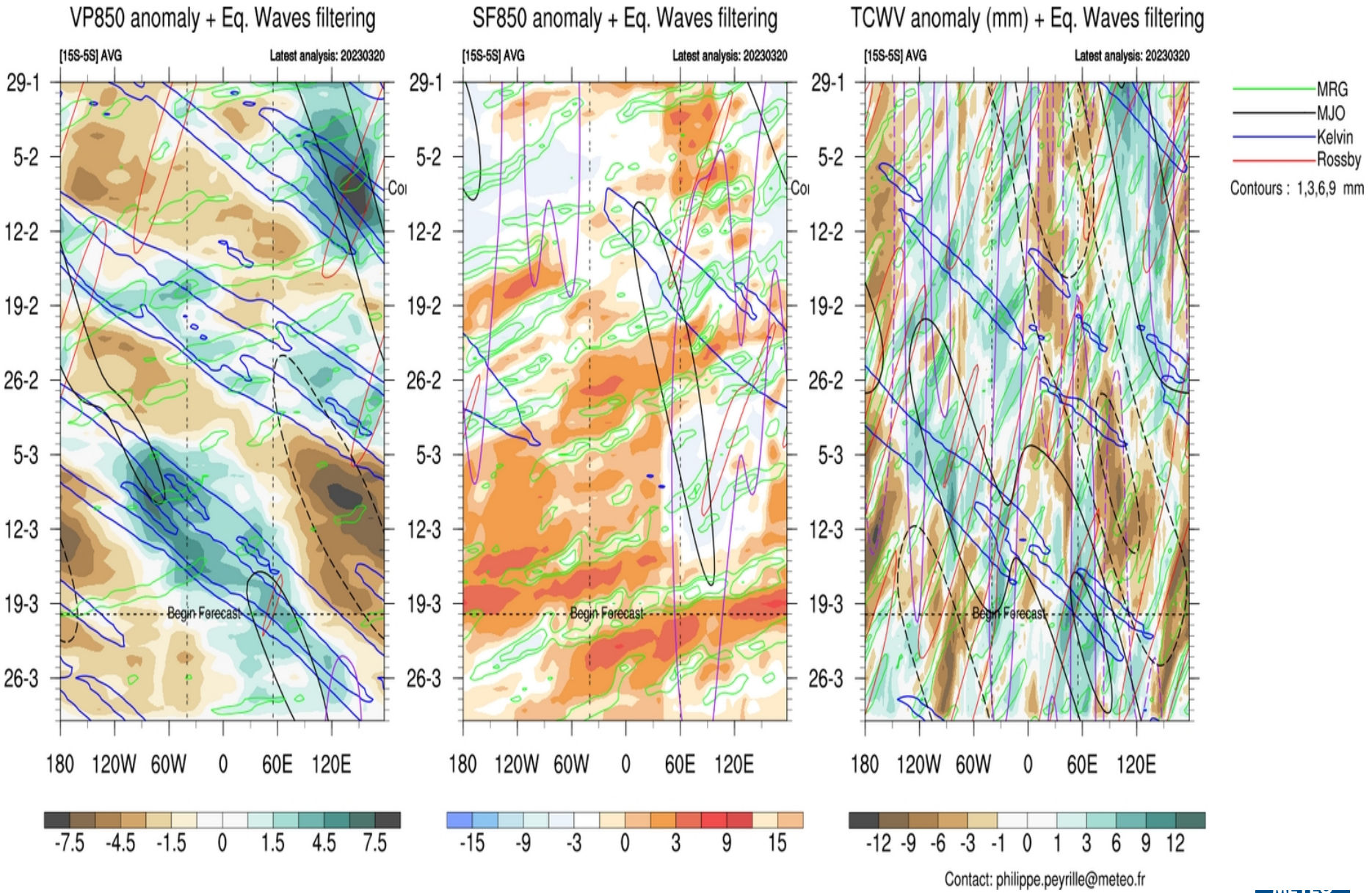


3. Ondes équatoriales



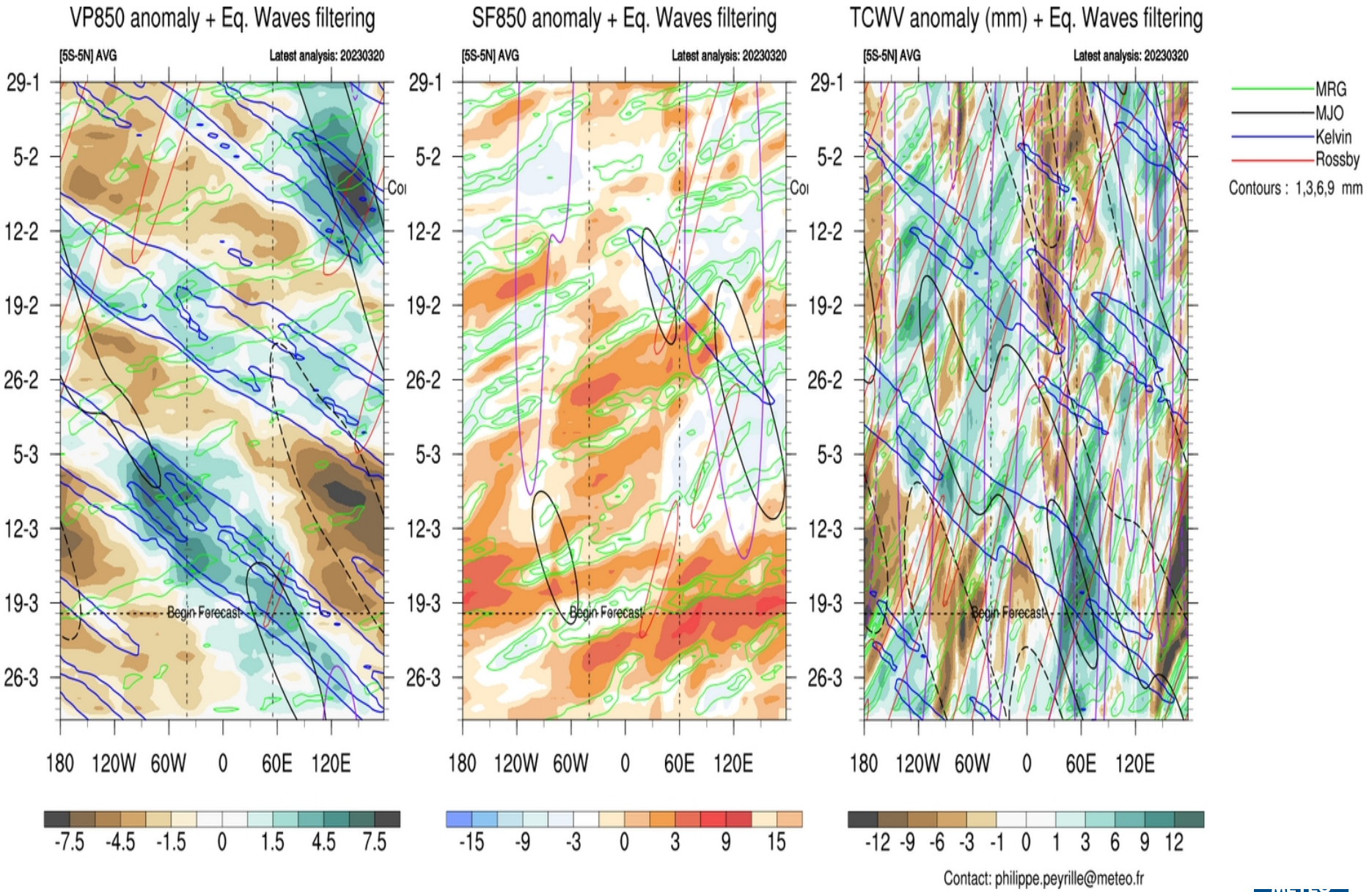


3. Ondes équatoriales



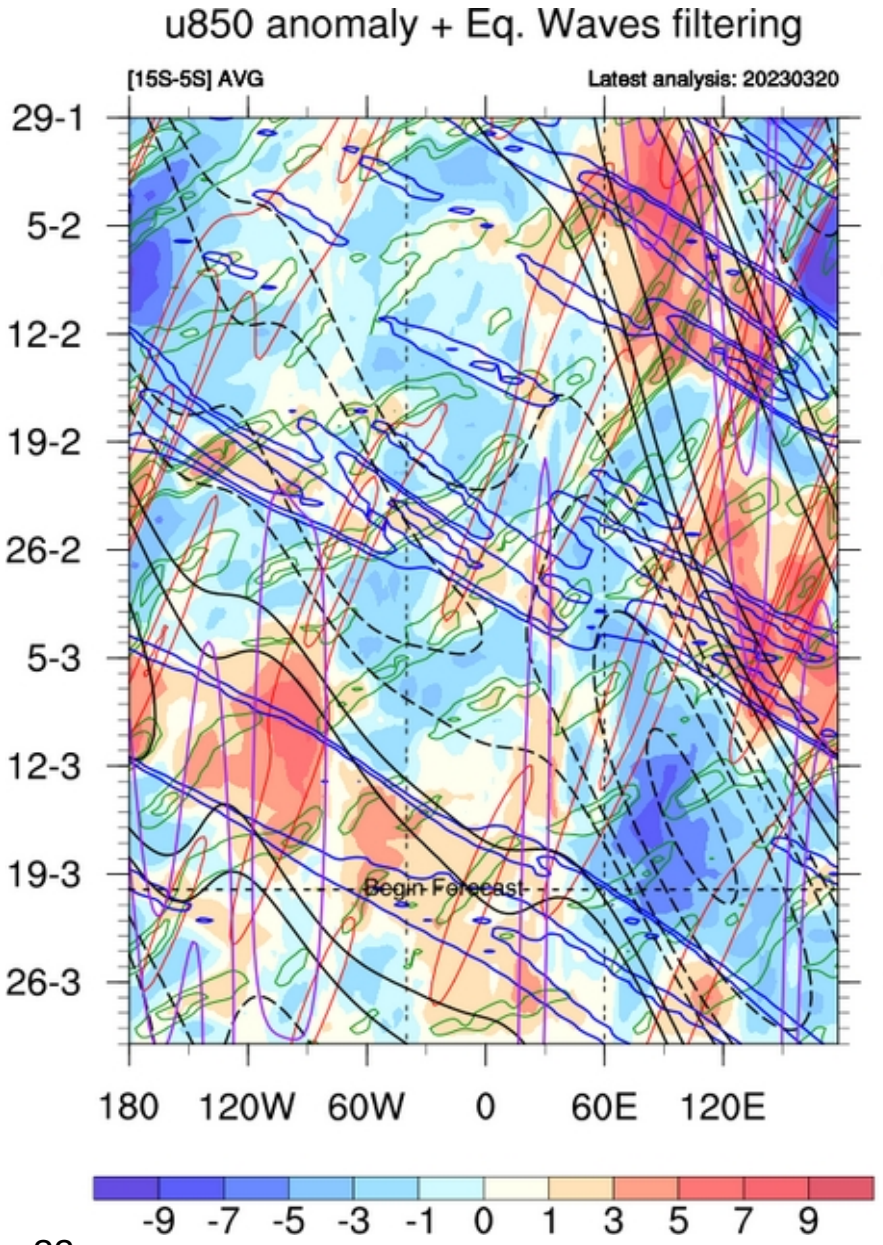
Contact: philippe.peyrille@meteo.fr

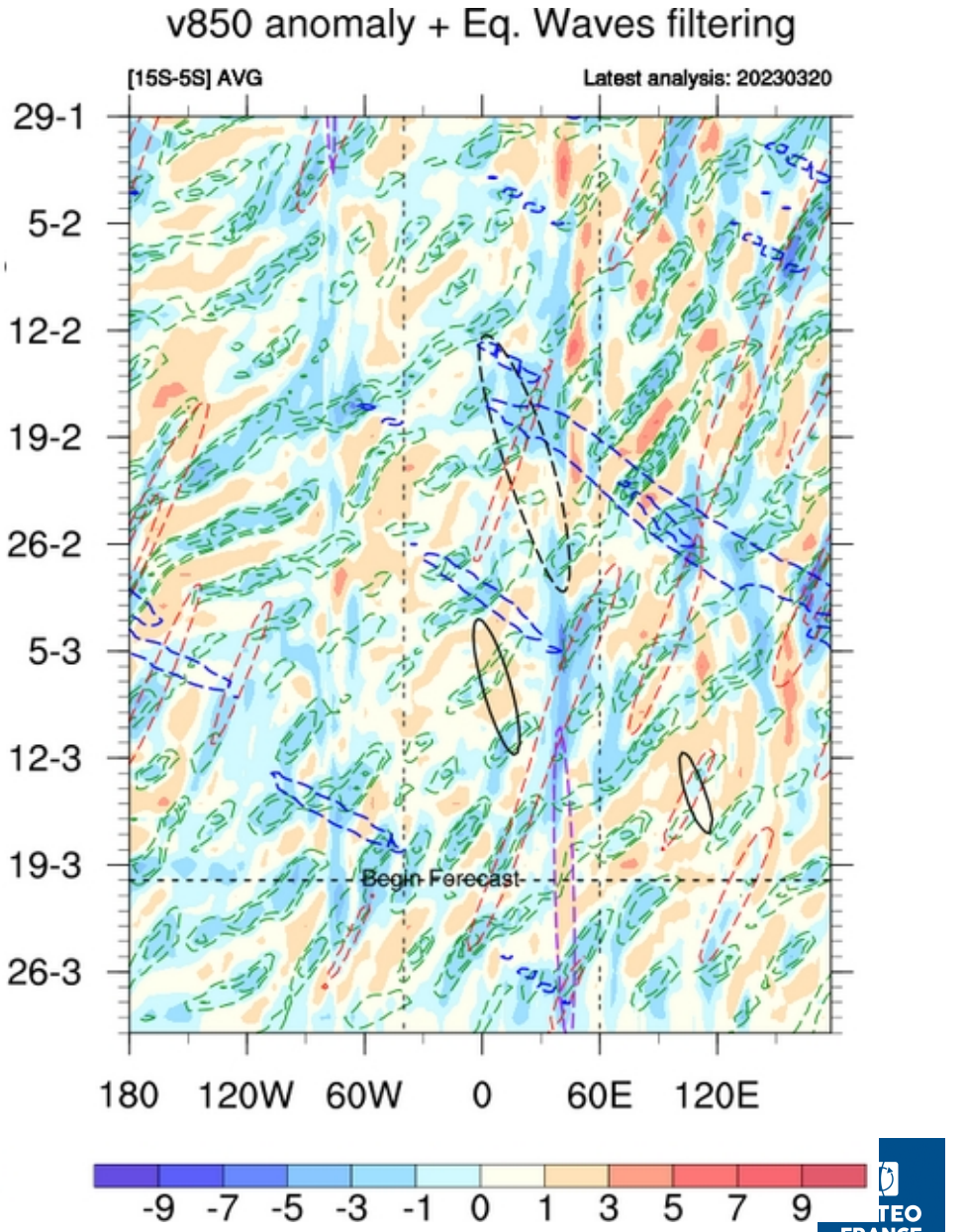
3. Ondes équatoriales



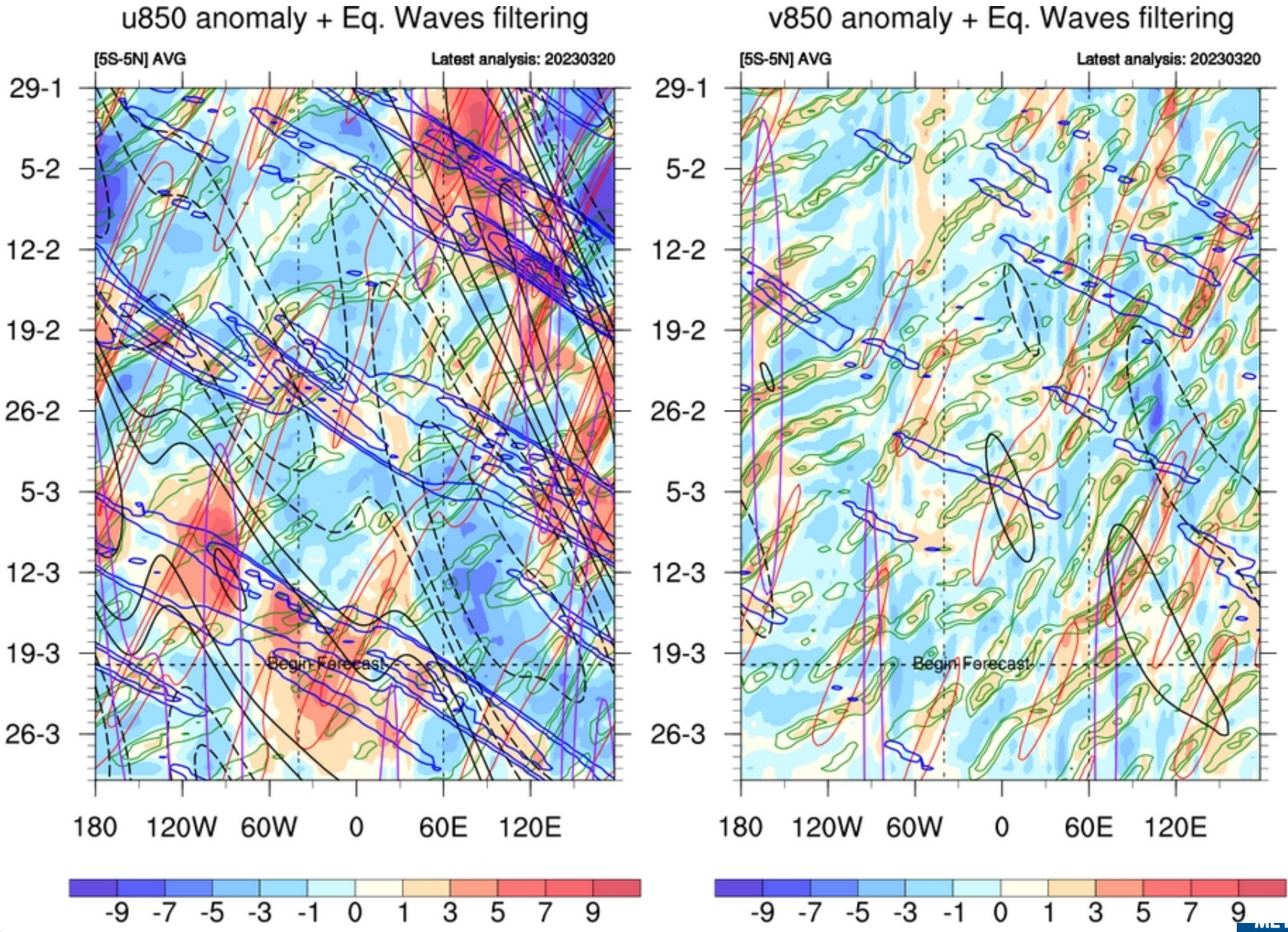
Contact: philippe.peyrille@meteo.fr

3. Ondes équatoriales

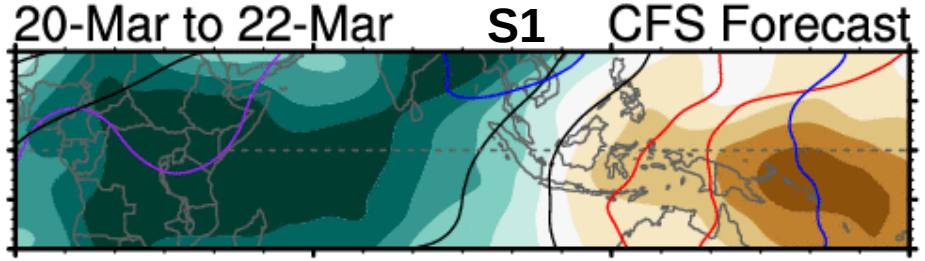


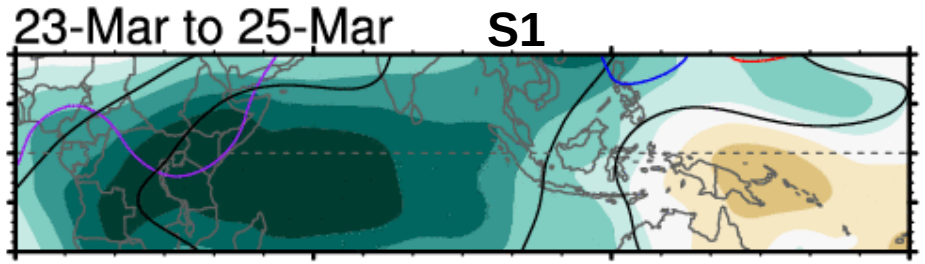


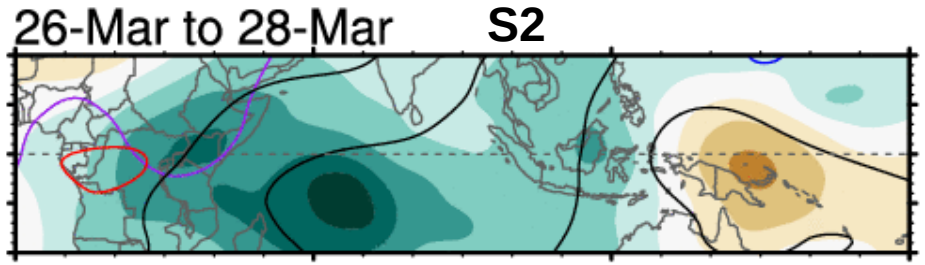
3. Ondes équatoriales

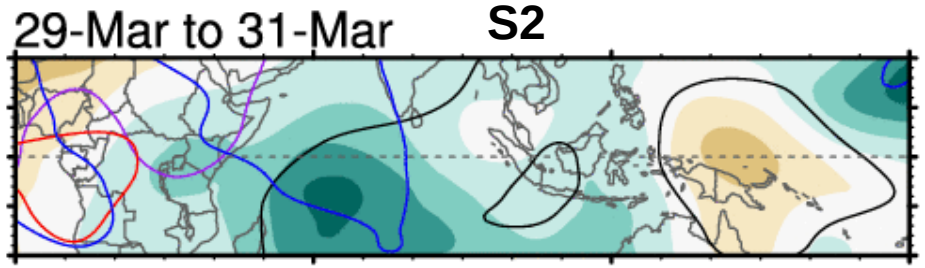


S1 / S2 – VP 200 – MJO, ER et Kelvin dans l'Indien



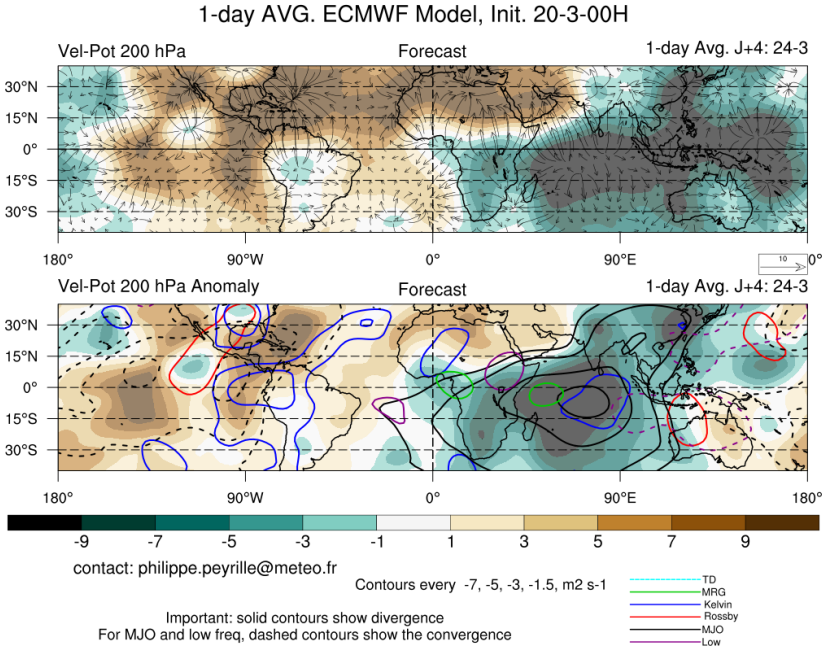




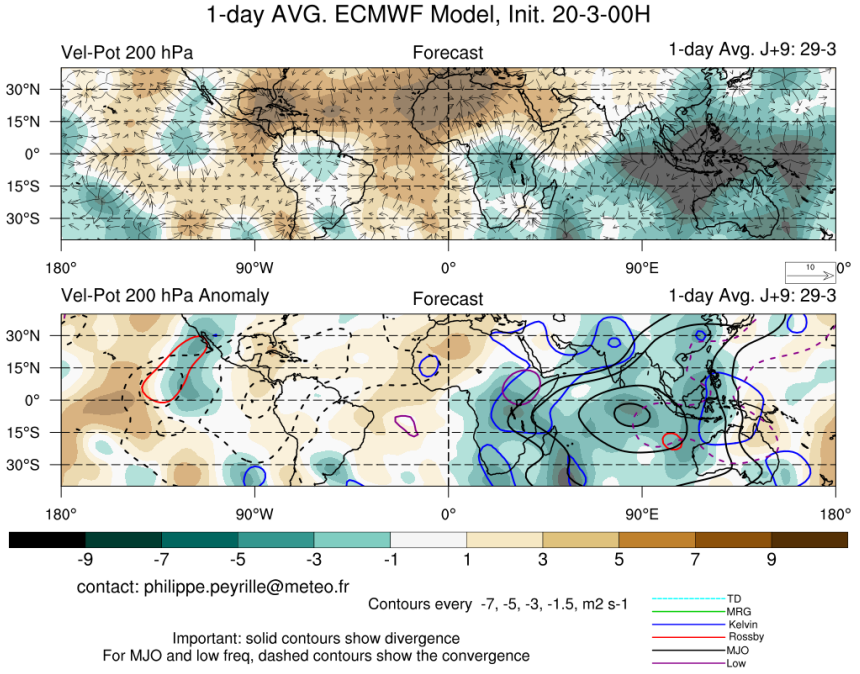


0 60E 120E 180

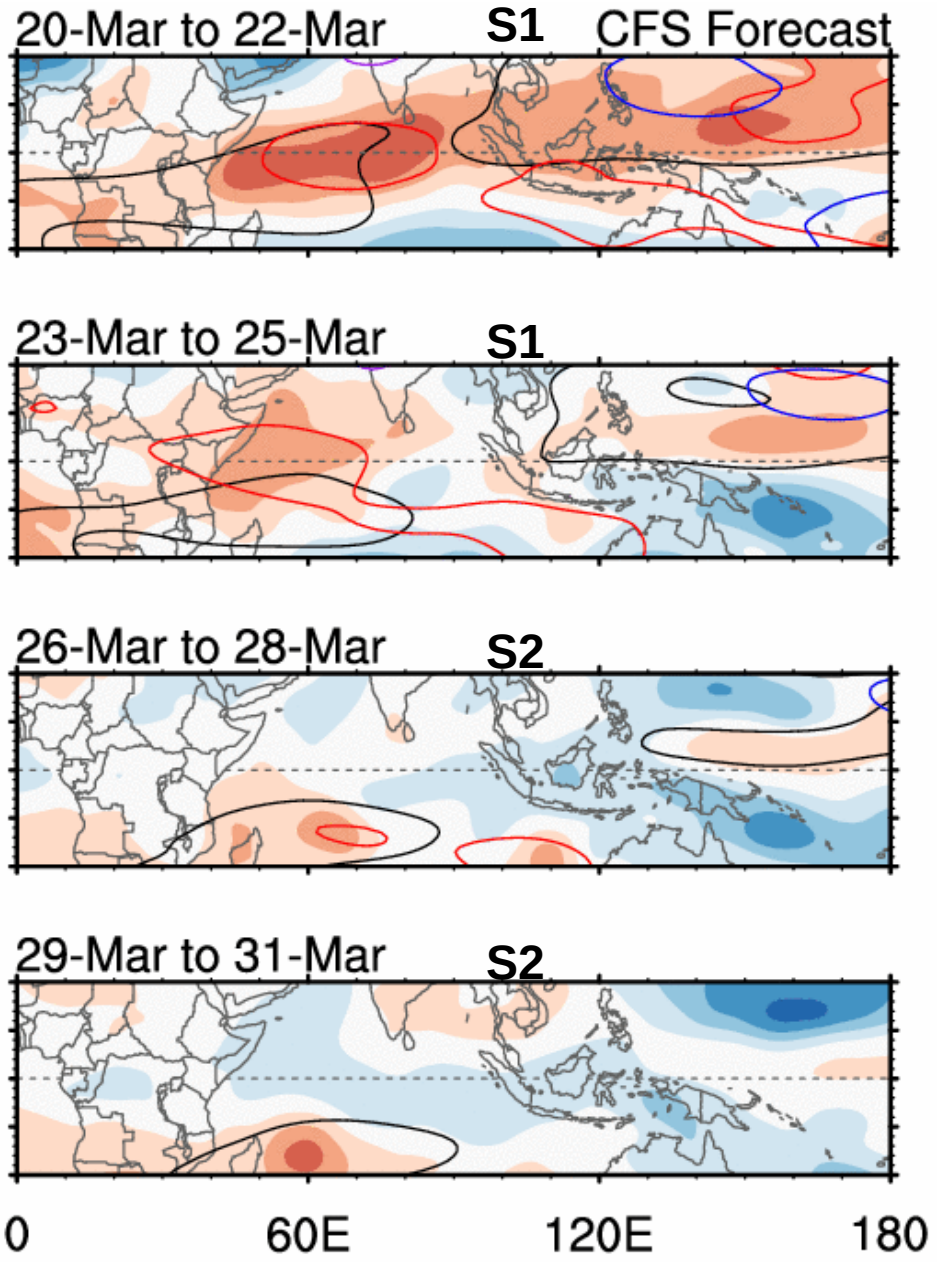
S1



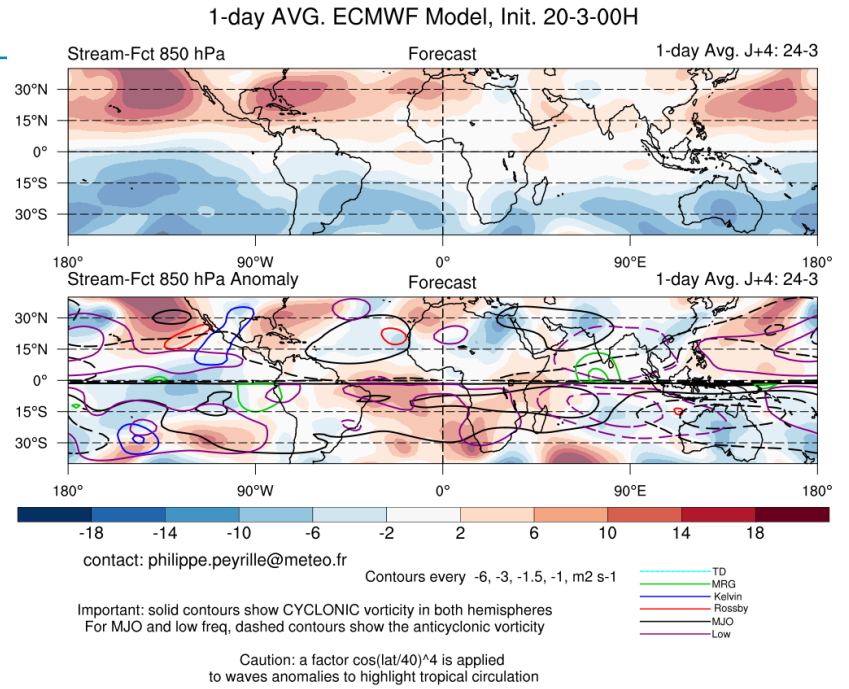
S2



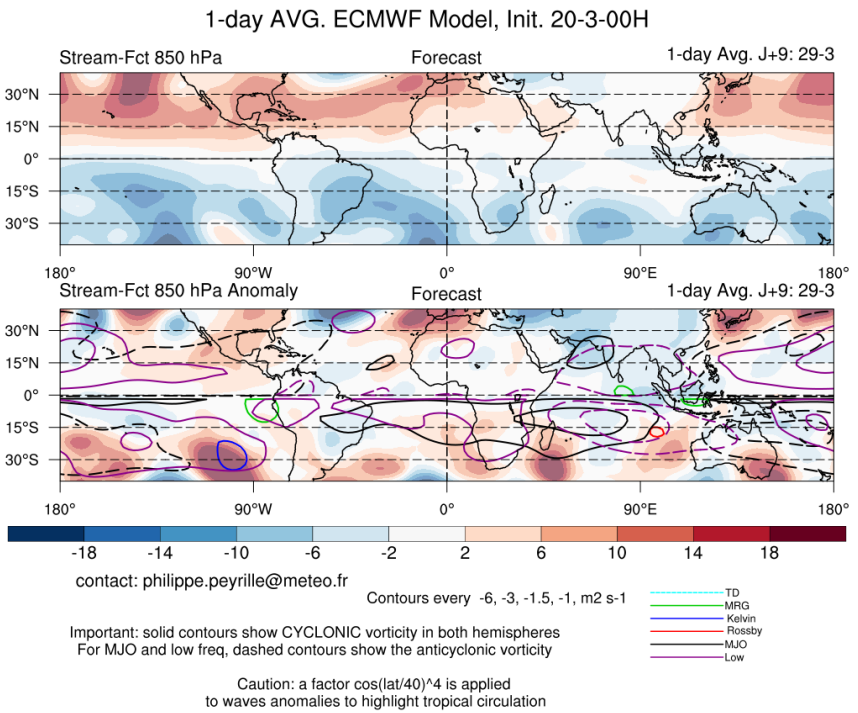
S1 / S2 – SF 850 – MJO, ER et Kelvin dans l'Indien



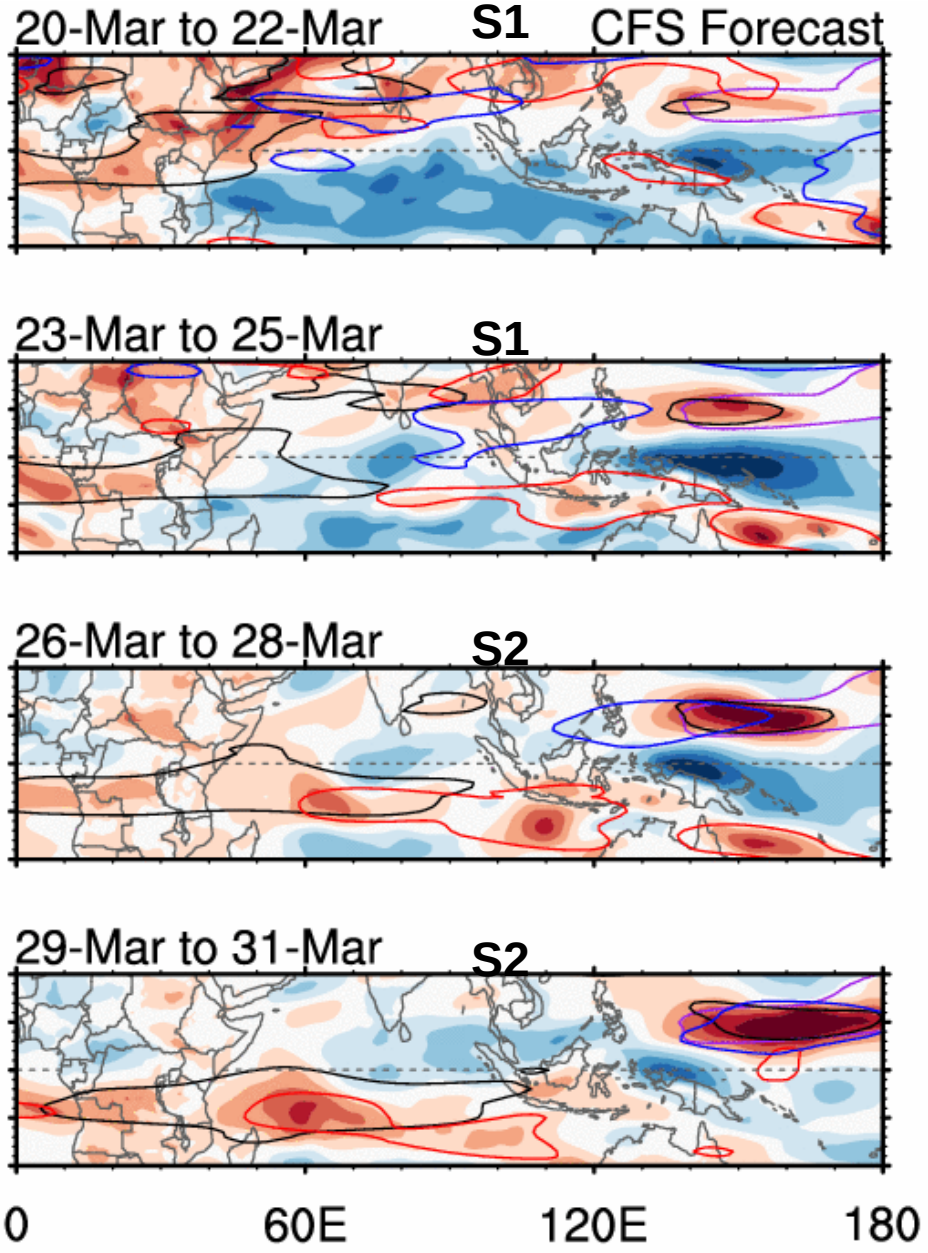
S1



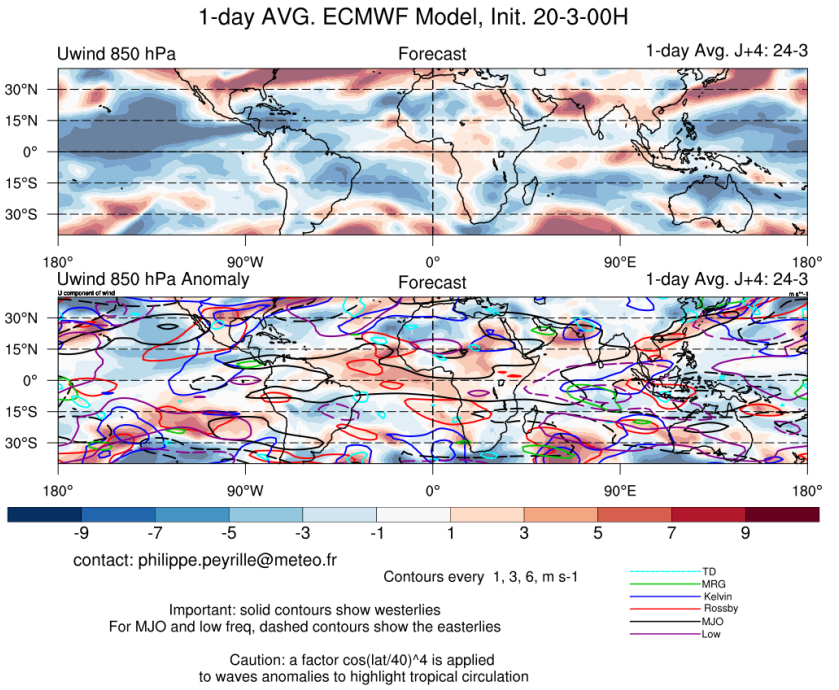
S2



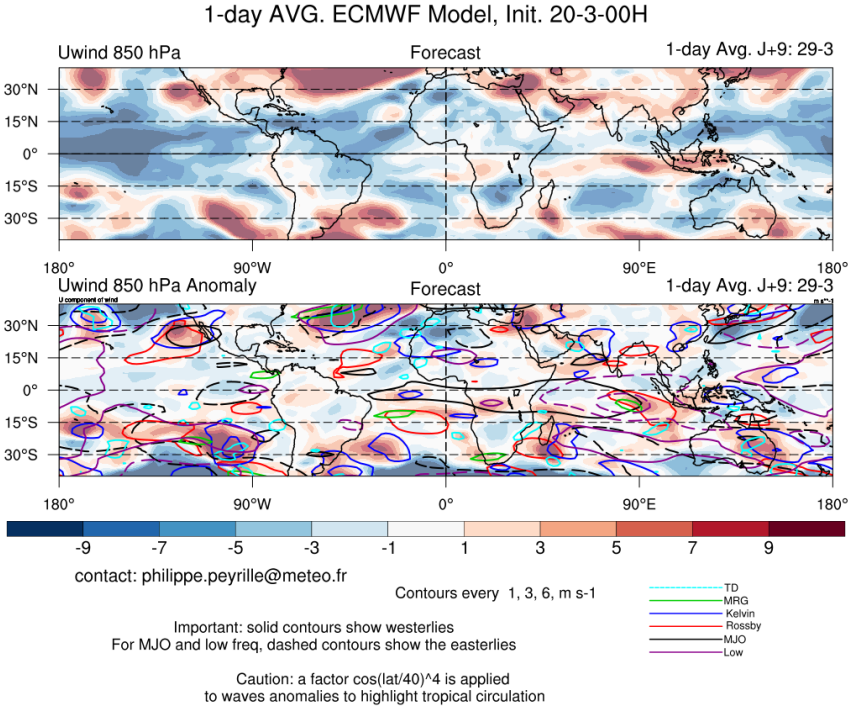
S1 / S2 – U850 - MJO, ER, Kelvin dans l'Indien



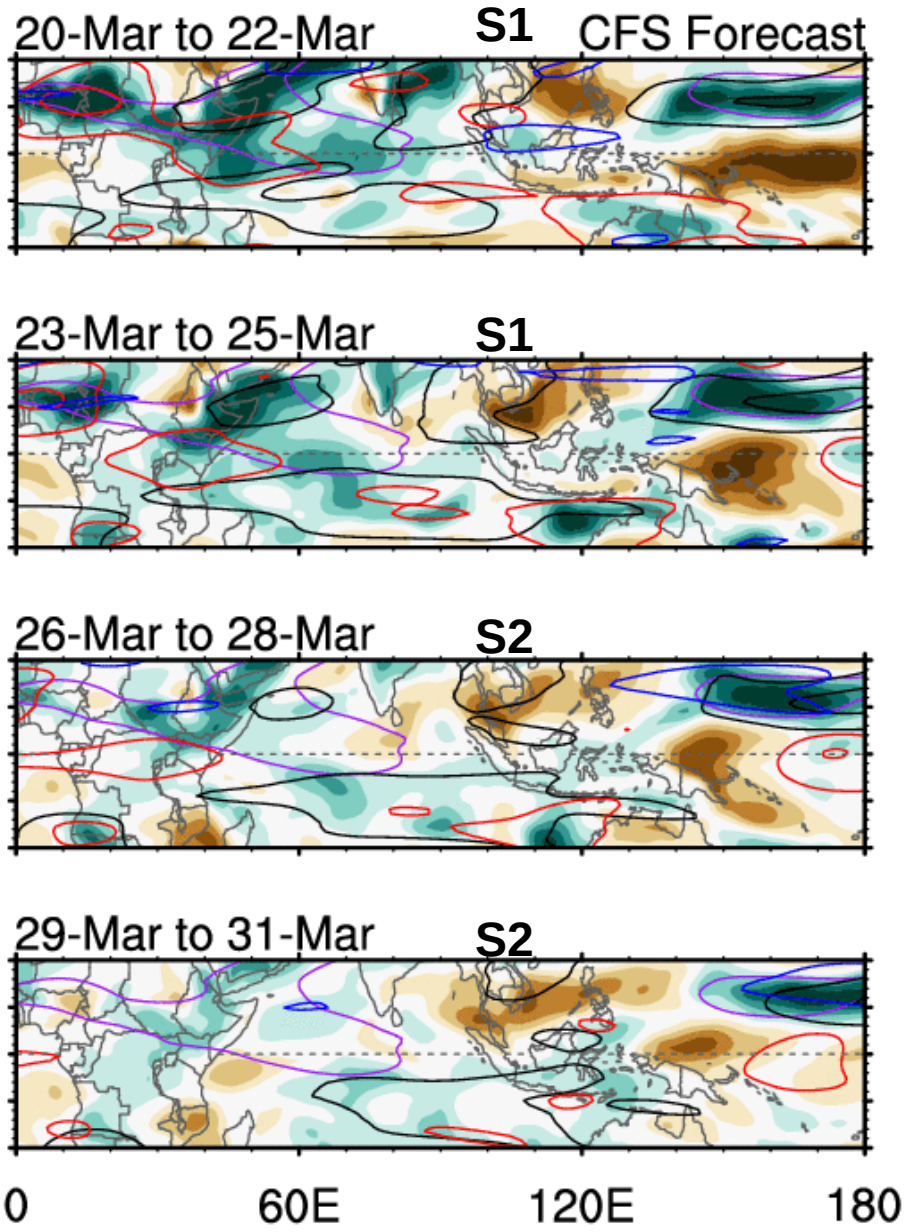
S1



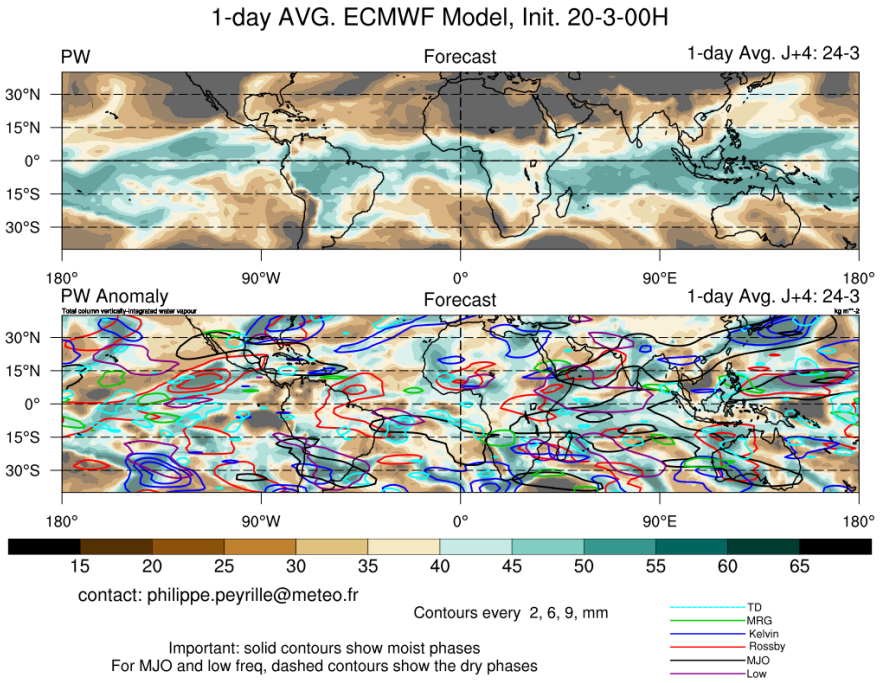
S2



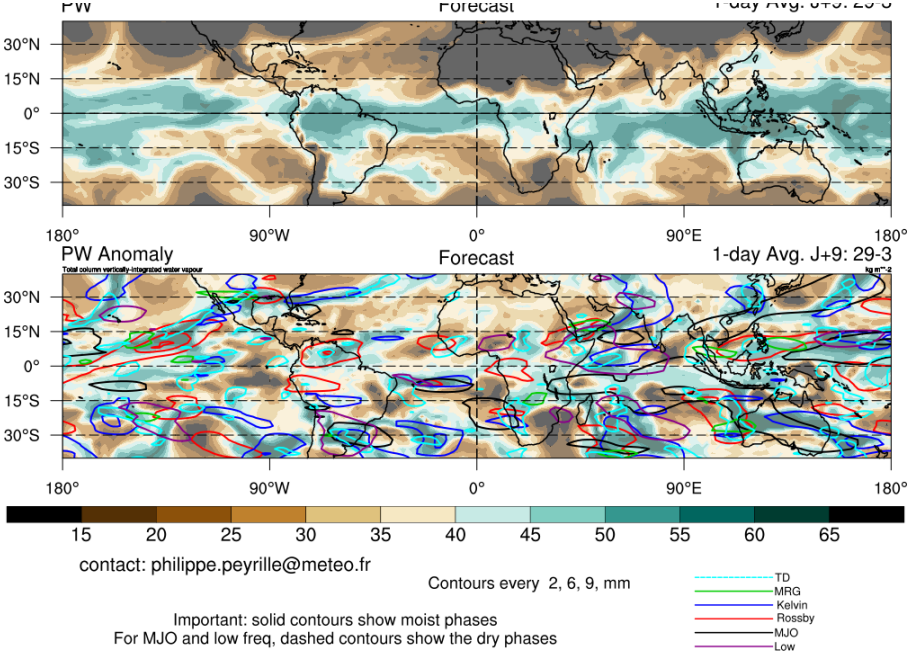
S1 / S2 – PW - MJO, ER, Kelvin dans l'Indien



S1

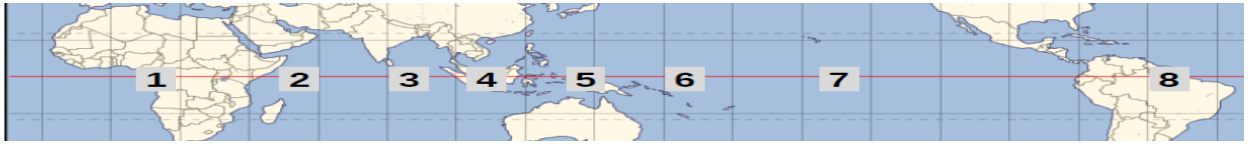


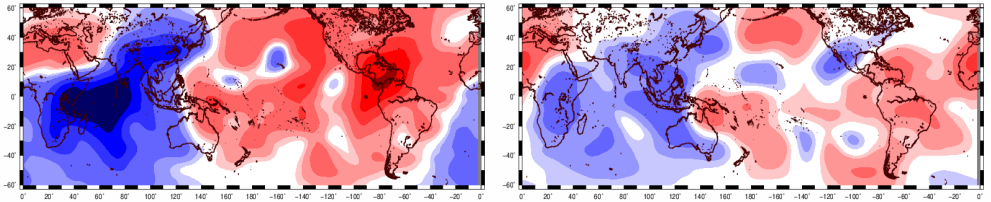
S2

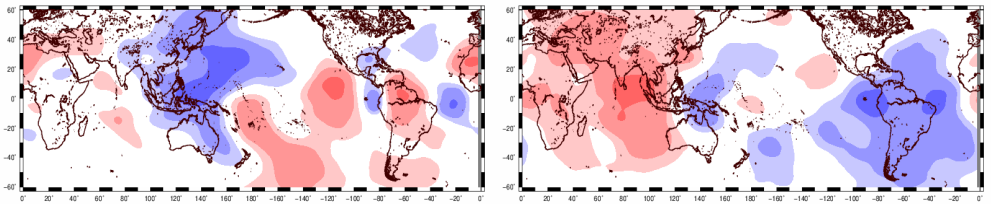


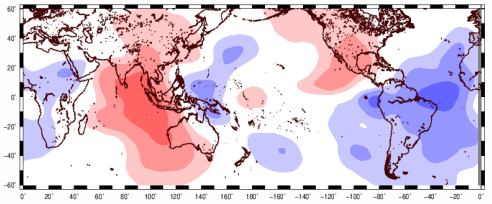
Synthèse MJO

	S1	S2	S3	S4	S5
Phase MJO prévue	X	X	X	X	X
Intensité	x	x	x	x	x
Confiance	x	x	x	x	x

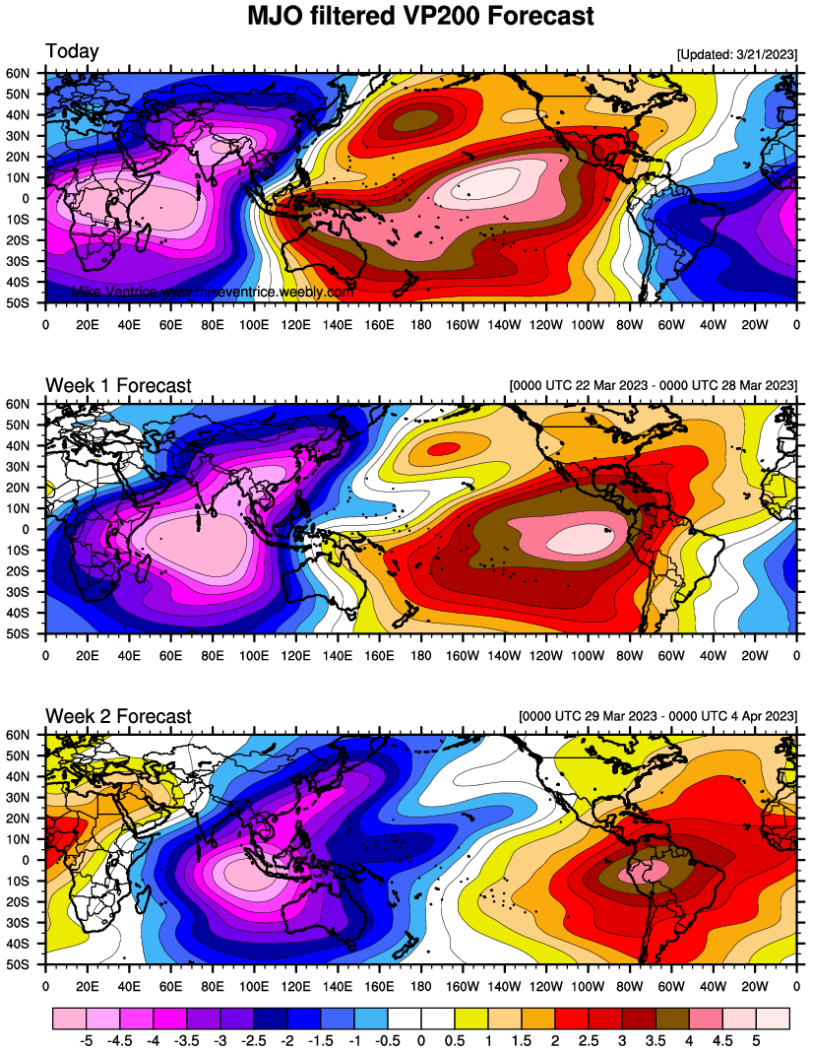








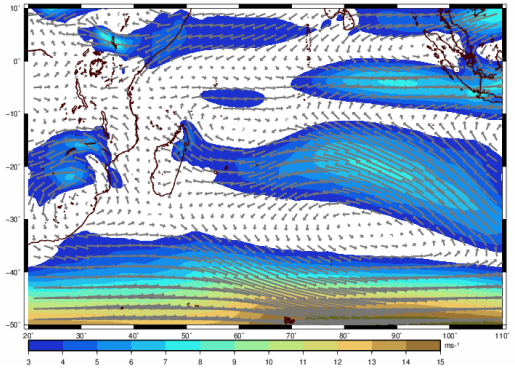
S0 : 20 mars-26 mars
S1 : 27 mars-02 avril
S2 : 03 avril-09 avril
S3 : 10 avril-16 avril
S4 : 17 avril-23 avril

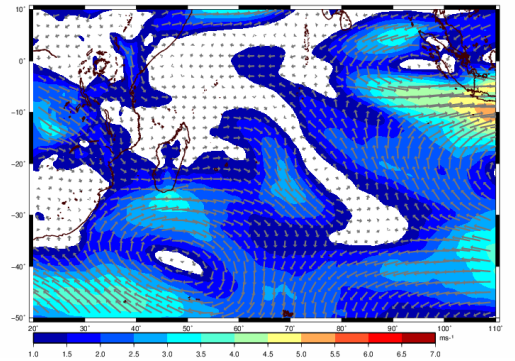


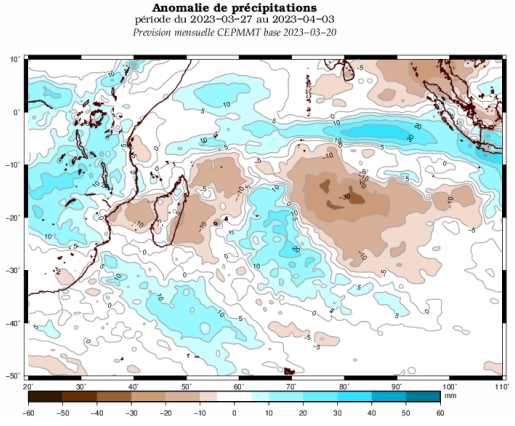
4. Impacts en temps sensible, temps sévère

Configuration du bassin

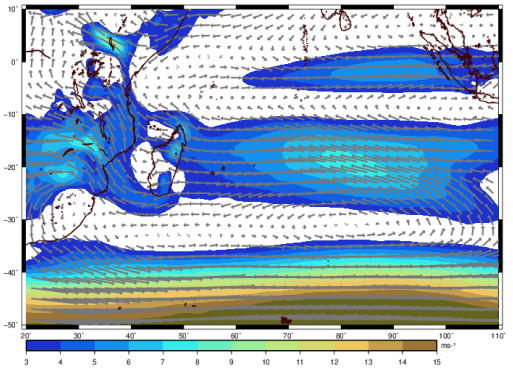
S2

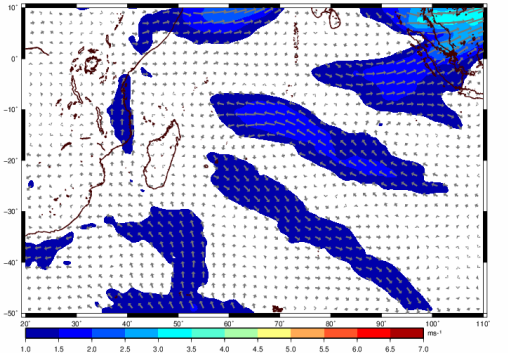


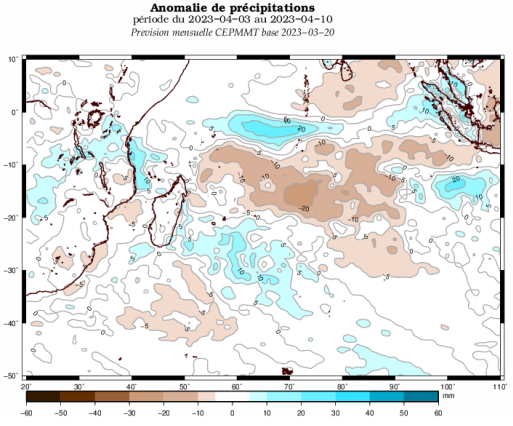




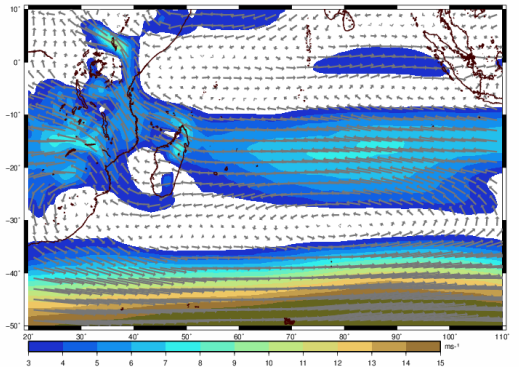
S3

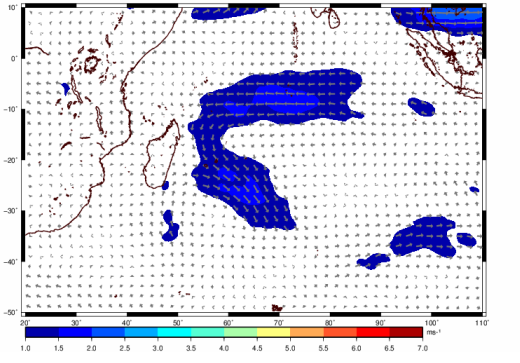


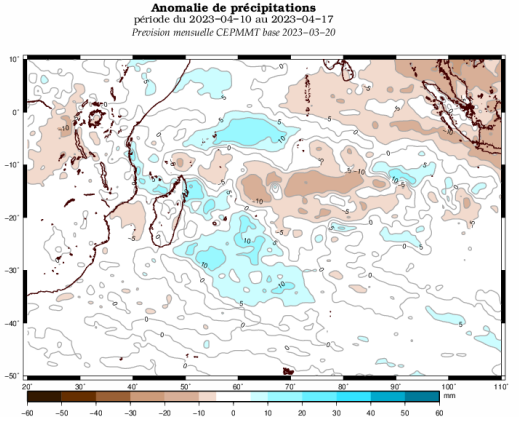




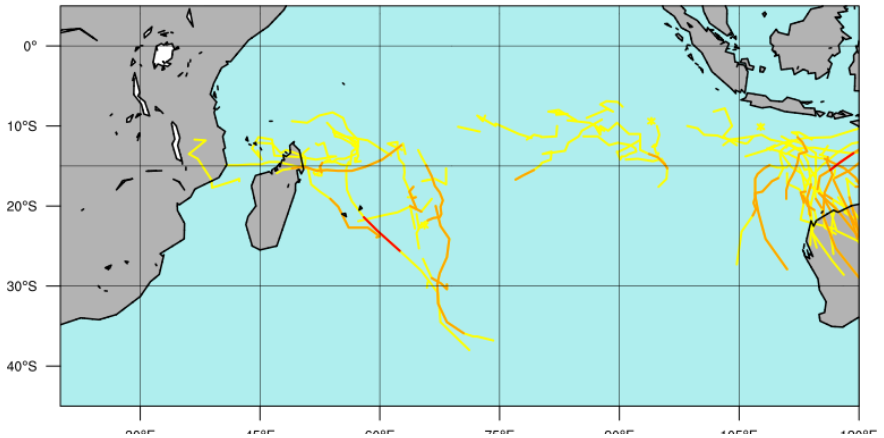
S4

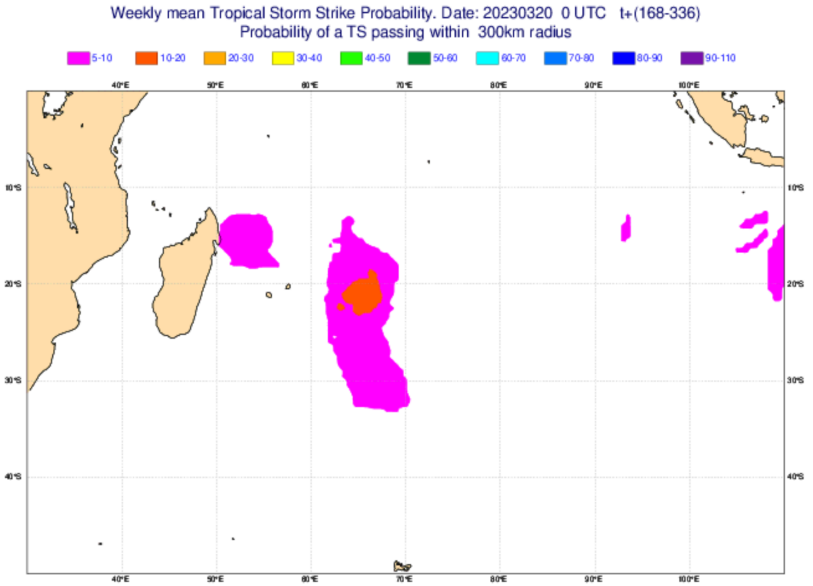


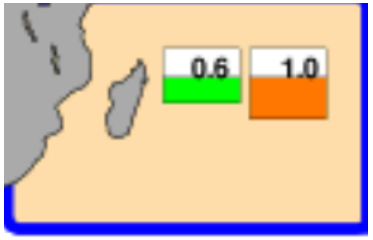




S2



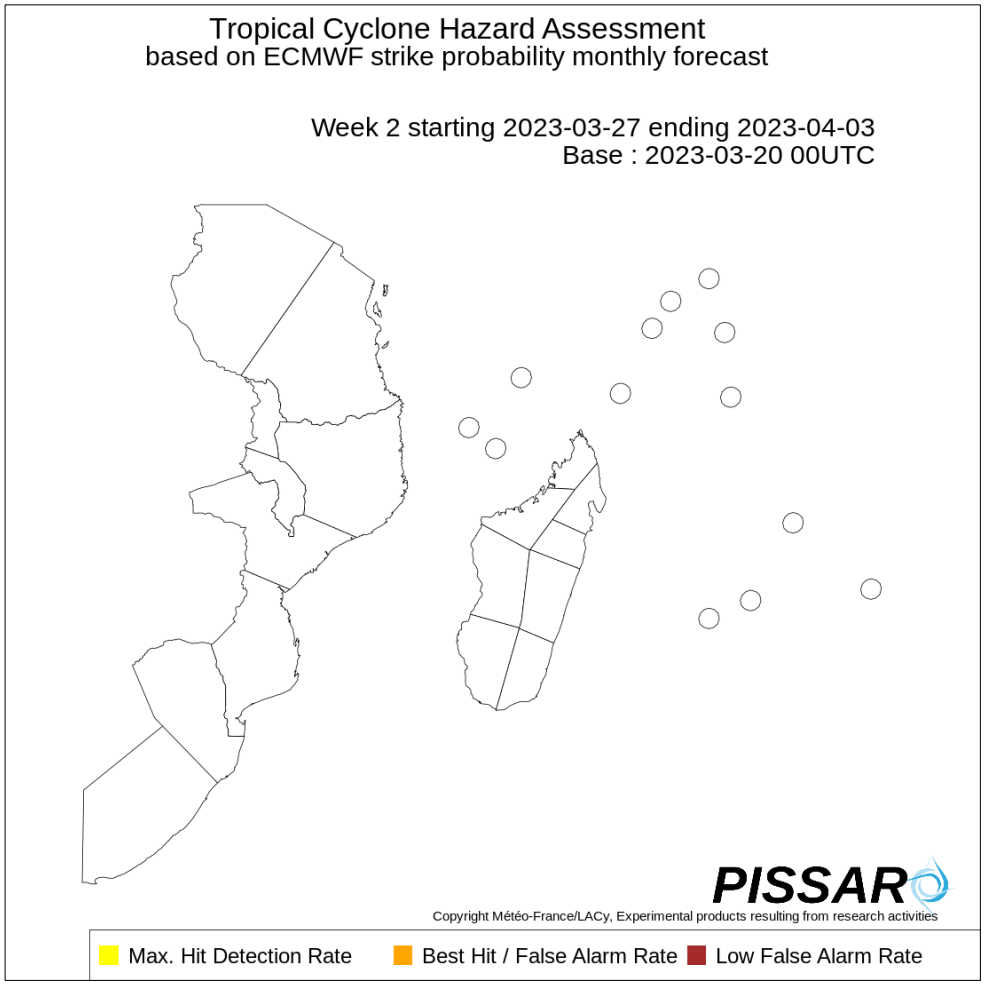




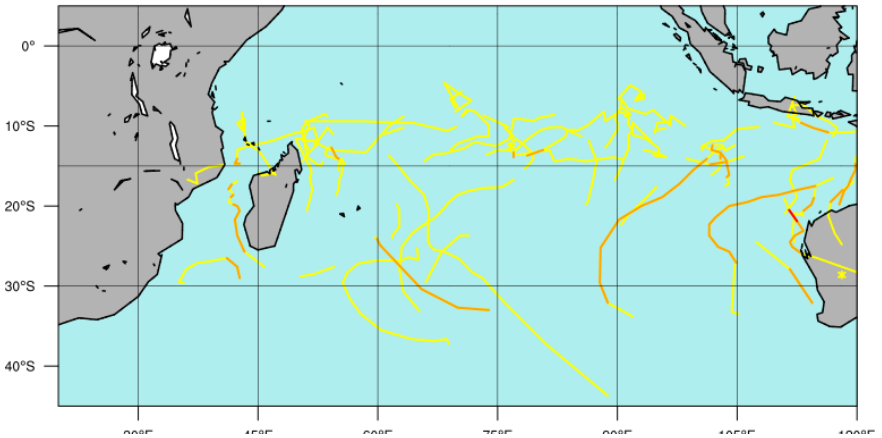
ECMWF Monthly Forecast
Accumulated Cyclone Energy

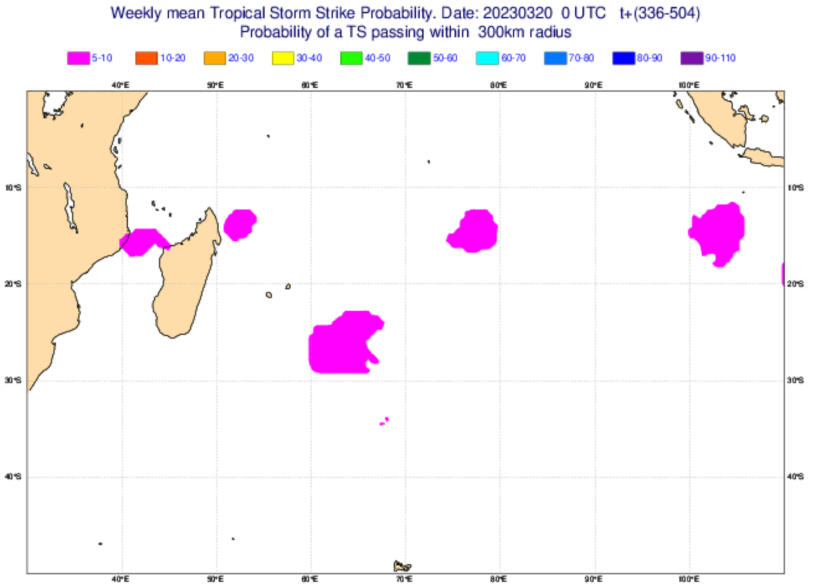
Forecast Mean | Climate Mean

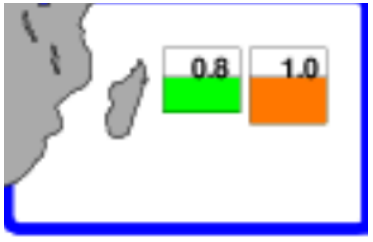
No Significant | Significant at 5%



S3



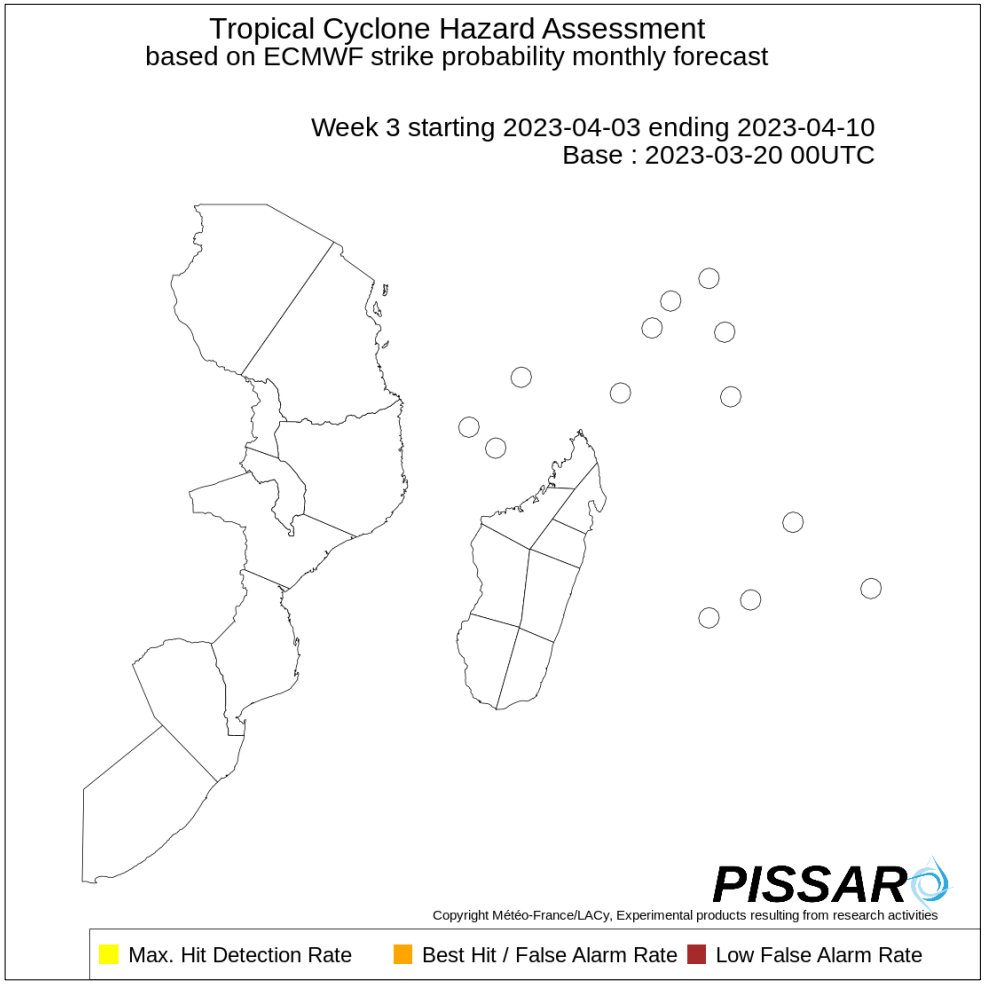




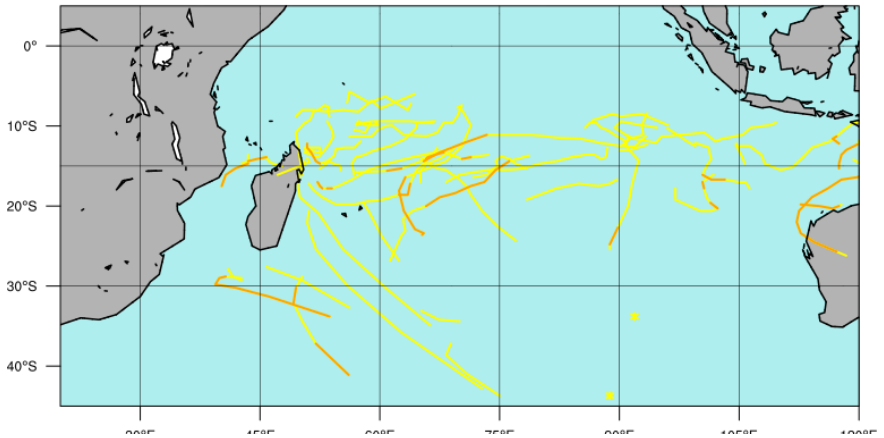
ECMWF Monthly Forecast
Accumulated Cyclone Energy

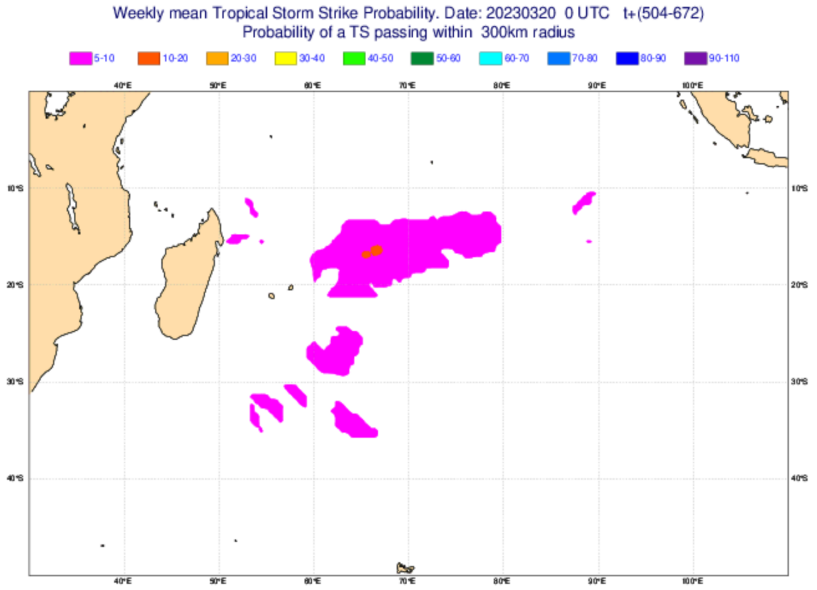
Forecast Mean Climate Mean

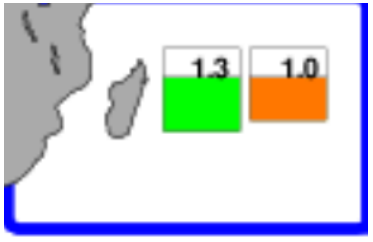
No Significant Significant at 5%



S4



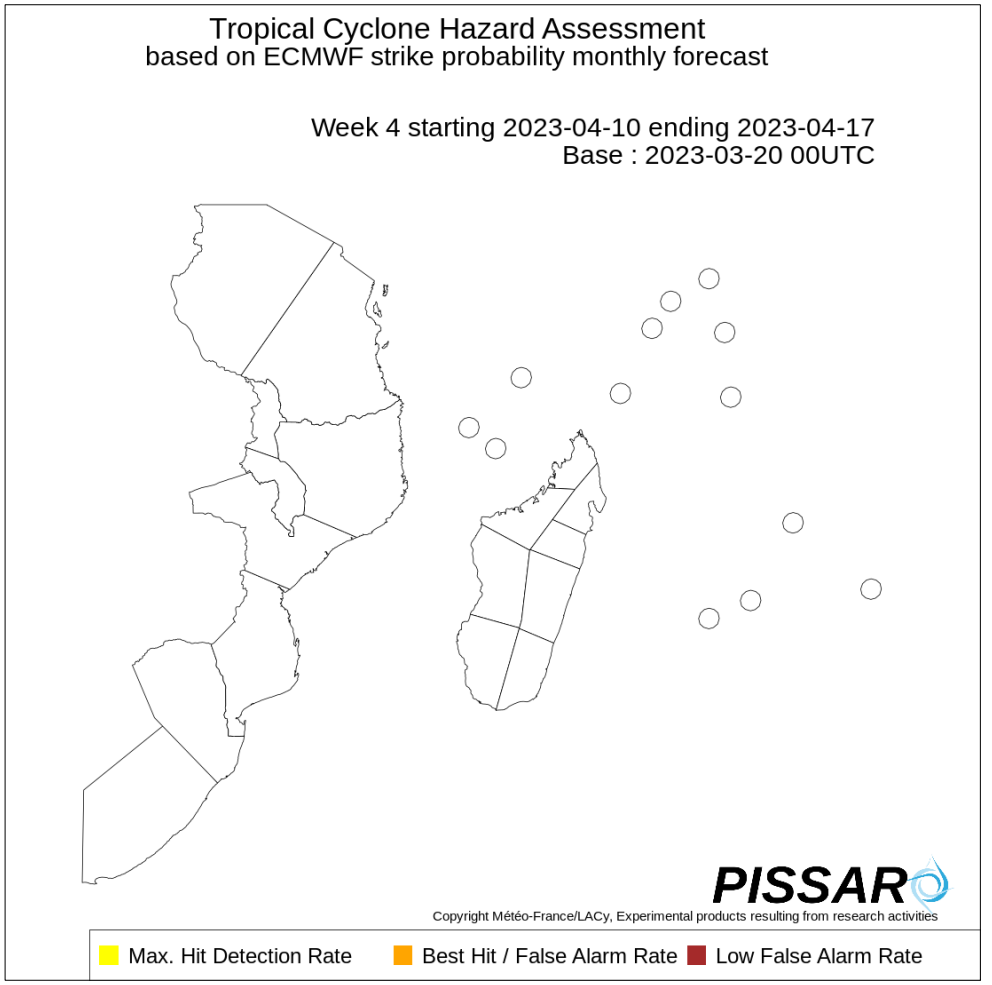




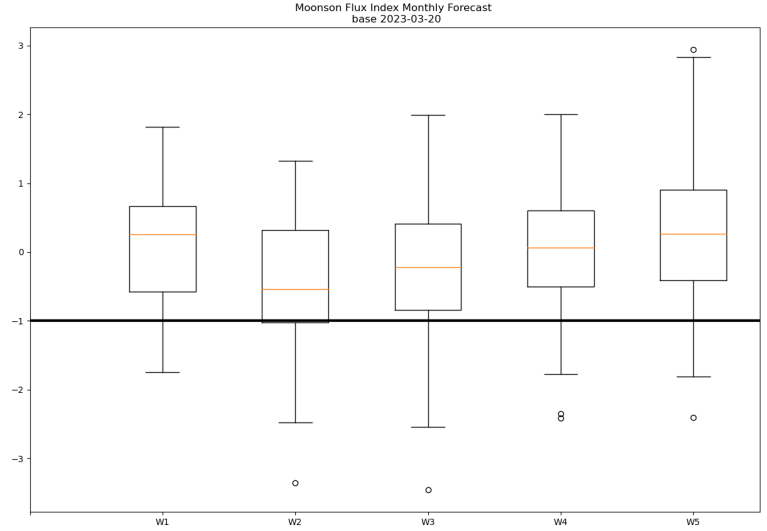
ECMWF Monthly Forecast
Accumulated Cyclone Energy

Forecast Mean Climate Mean

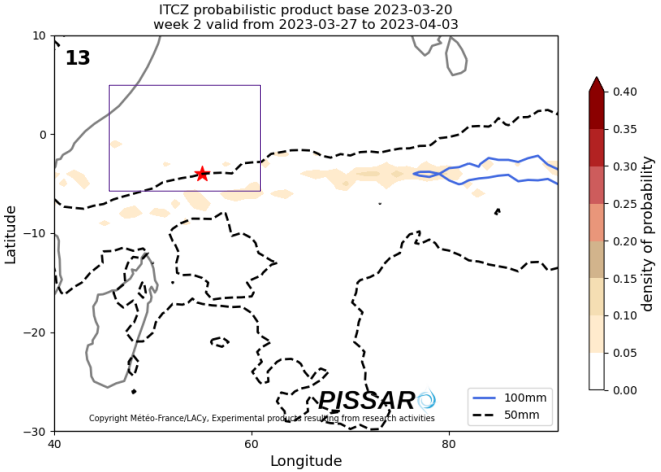
No Significant Significant at 5%



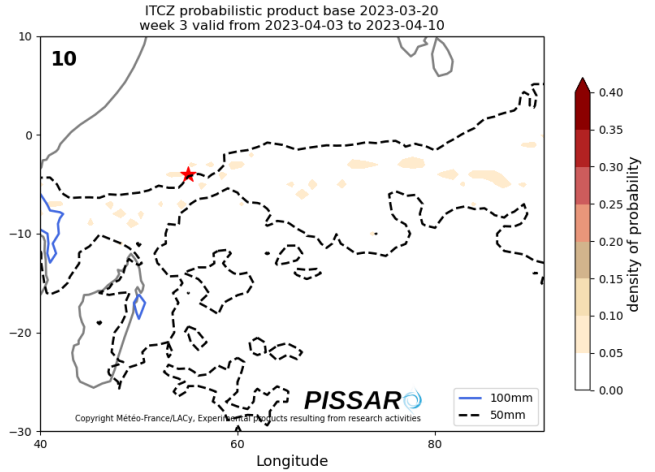
Configuration du bassin et prévision ZCIT



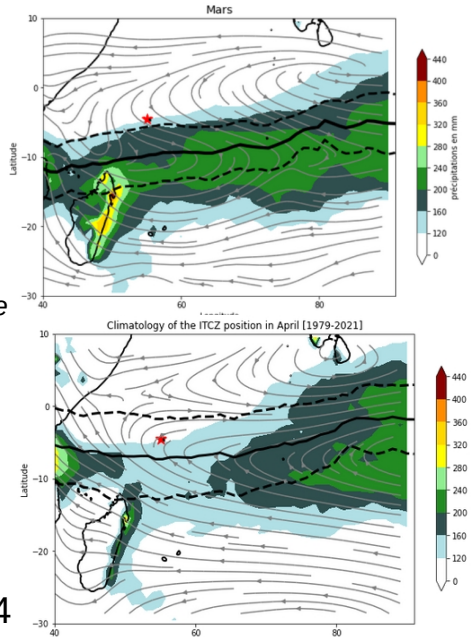
S2



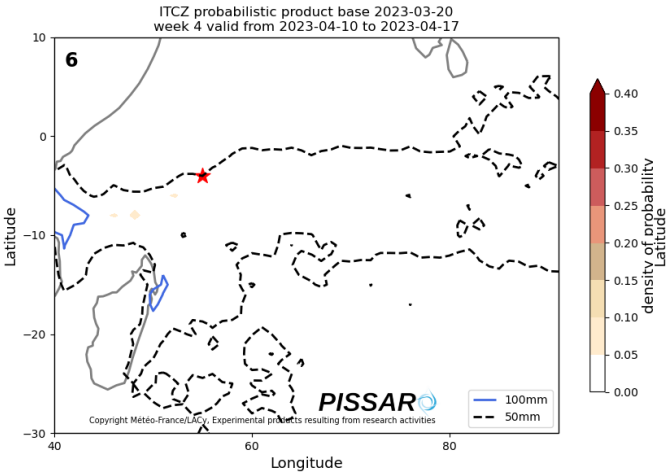
S3



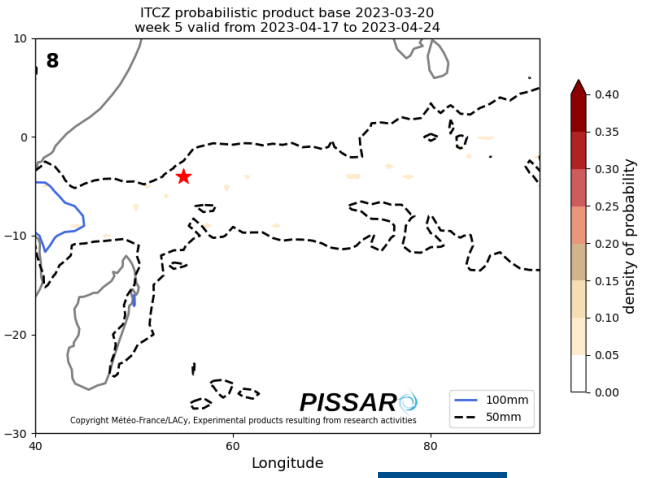
Climatologie mensuelle



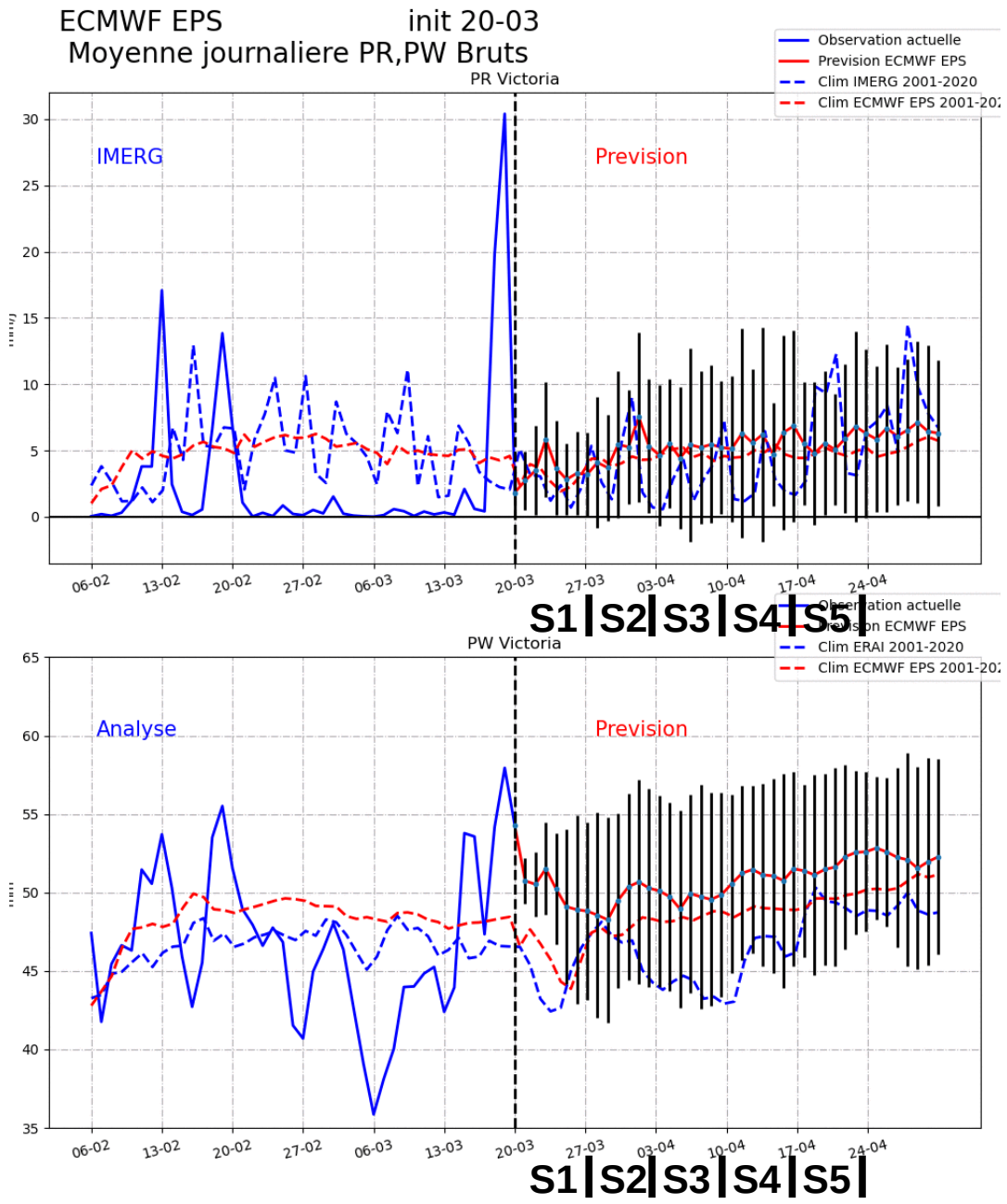
S4



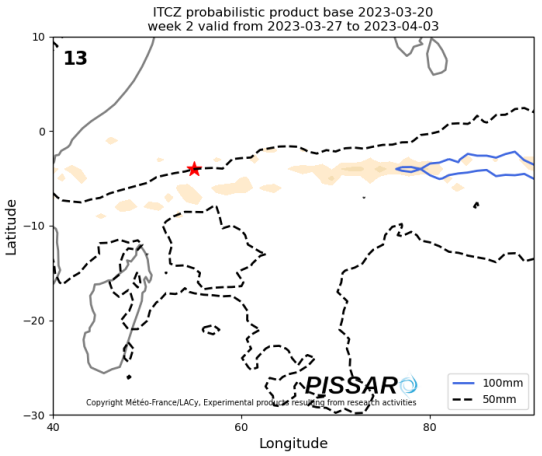
S5

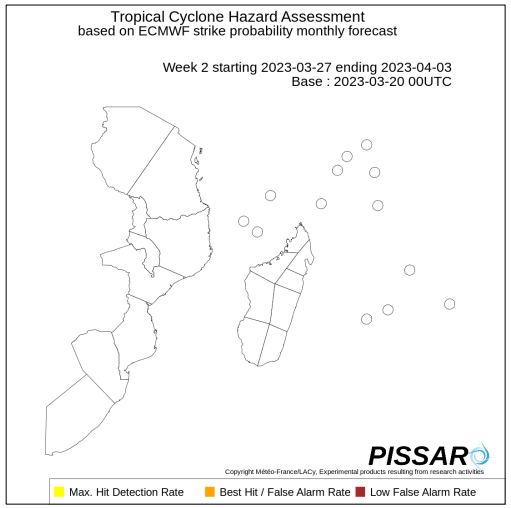


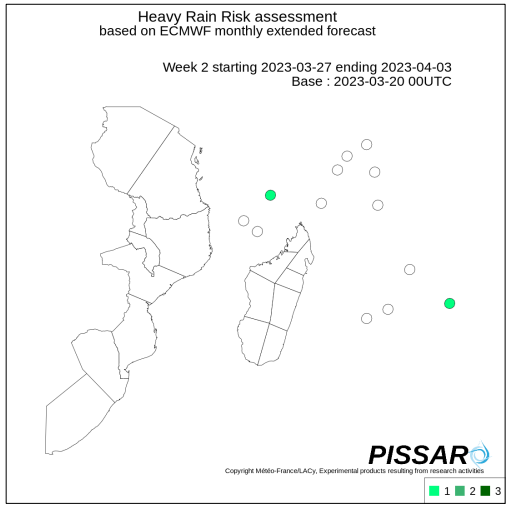
Synthèse temps sensible S2 – S4 [SEYCHELLES]



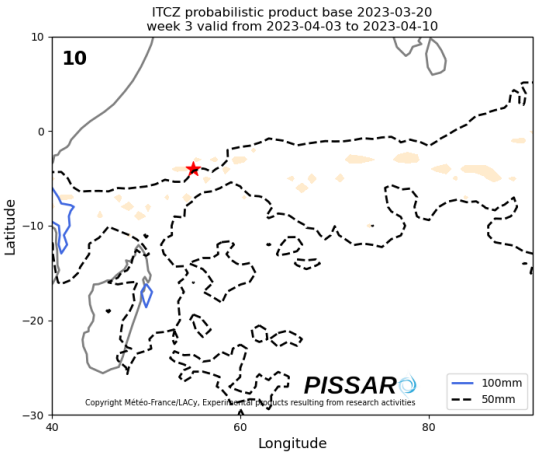
S2

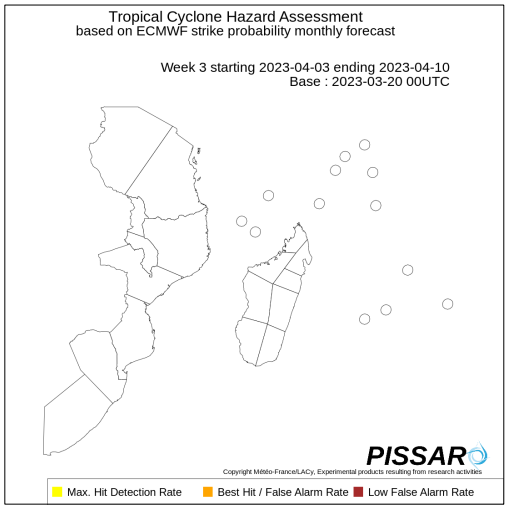

ITCZ probabilistic product base 2023-03-20
week 2 valid from 2023-03-27 to 2023-04-03
13
Latitude
Longitude
100mm
50mm
PISSAR

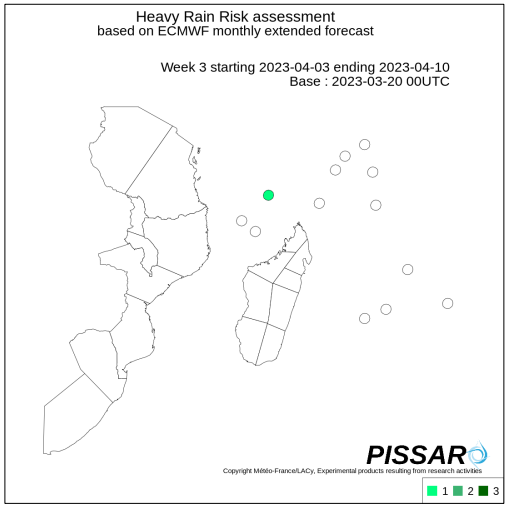

Tropical Cyclone Hazard Assessment
based on ECMWF strike probability monthly forecast
Week 2 starting 2023-03-27 ending 2023-04-03
Base : 2023-03-20 00UTC
PISSAR
Max. Hit Detection Rate
Best Hit / False Alarm Rate
Low False Alarm Rate


Heavy Rain Risk assessment
based on ECMWF monthly extended forecast
Week 2 starting 2023-03-27 ending 2023-04-03
Base : 2023-03-20 00UTC
PISSAR
1 2 3

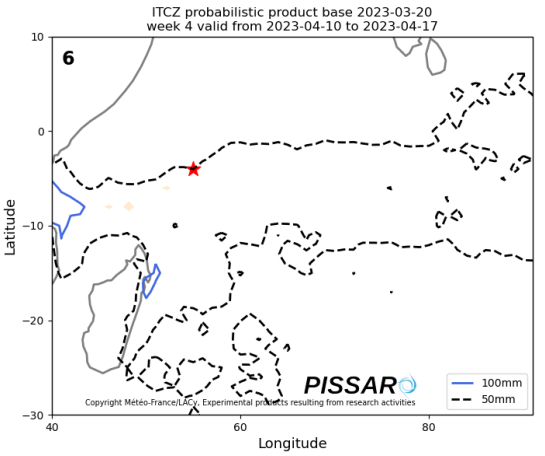
S3

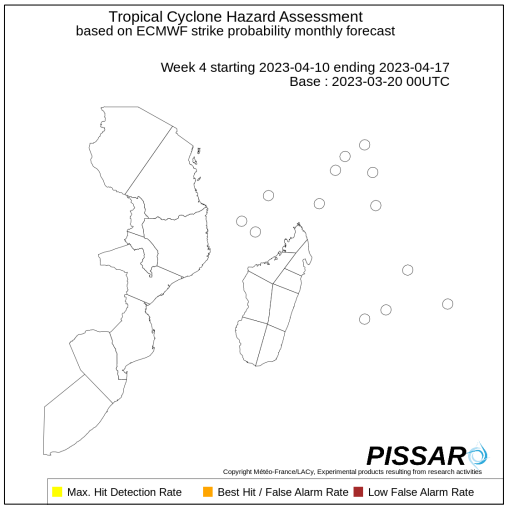

ITCZ probabilistic product base 2023-03-20
week 3 valid from 2023-04-03 to 2023-04-10
10
Latitude
Longitude
100mm
50mm
PISSAR

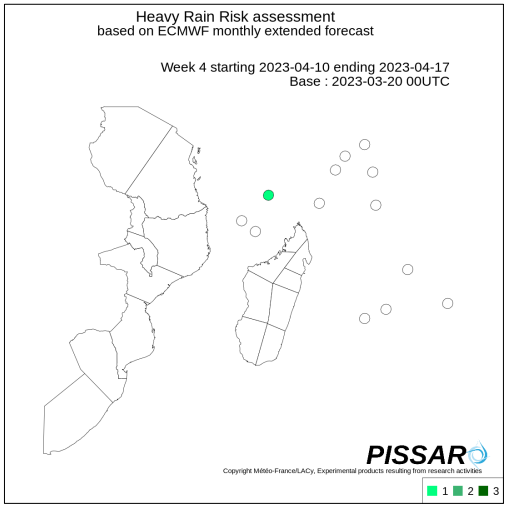

Tropical Cyclone Hazard Assessment
based on ECMWF strike probability monthly forecast
Week 3 starting 2023-04-03 ending 2023-04-10
Base : 2023-03-20 00UTC
PISSAR
Max. Hit Detection Rate
Best Hit / False Alarm Rate
Low False Alarm Rate


Heavy Rain Risk assessment
based on ECMWF monthly extended forecast
Week 3 starting 2023-04-03 ending 2023-04-10
Base : 2023-03-20 00UTC
PISSAR
1 2 3

S4


ITCZ probabilistic product base 2023-03-20
week 4 valid from 2023-04-10 to 2023-04-17
6
Latitude
Longitude
100mm
50mm
PISSAR
density of probability


Tropical Cyclone Hazard Assessment
based on ECMWF strike probability monthly forecast
Week 4 starting 2023-04-10 ending 2023-04-17
Base : 2023-03-20 00UTC
PISSAR
Max. Hit Detection Rate
Best Hit / False Alarm Rate
Low False Alarm Rate


Heavy Rain Risk assessment
based on ECMWF monthly extended forecast
Week 4 starting 2023-04-10 ending 2023-04-17
Base : 2023-03-20 00UTC
PISSAR
1 2 3

Briefing hebdomadaire

Suivi MJO et ondes équatoriales pour le bassin SOOI

Sources :

http://www.bom.gov.au/climate/enso/
http://seasonal.meteo.fr/sites/data/Modeles/
https://cds.climate.copernicus.eu/#!/home
http://regionalclimate-change.sc/swiocof/SST/
http://intra.cnrm.meteo.fr/moana/tropiques/images/
https://www.cpc.ncep.noaa.gov/products/
https://ncics.org/pub/mjo/v2/map/
http://rewebvirt.dirre.meteo.fr/clim/PreviMens/
https://apps.ecmwf.int/plots/product-download/mofc_multi/mofc_multi_tcyc_family_forecast/
http://mikeventrice.weebly.com/mjo.html
http://www.atmos.albany.edu/student/ventrice/real_time/
https://misva.aeris-data.fr/products/