SWIOCOF - TC

Seasonal outlook for cyclone activity in SWIO region (2021-2022 season)

Météo France – Direction Interrégionale Océan Indien

RSMC La Réunion

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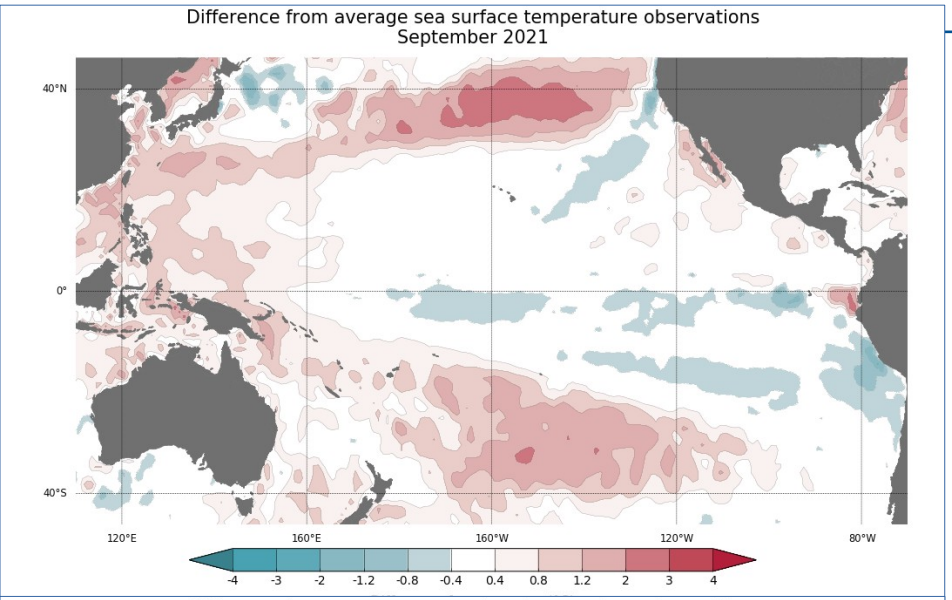
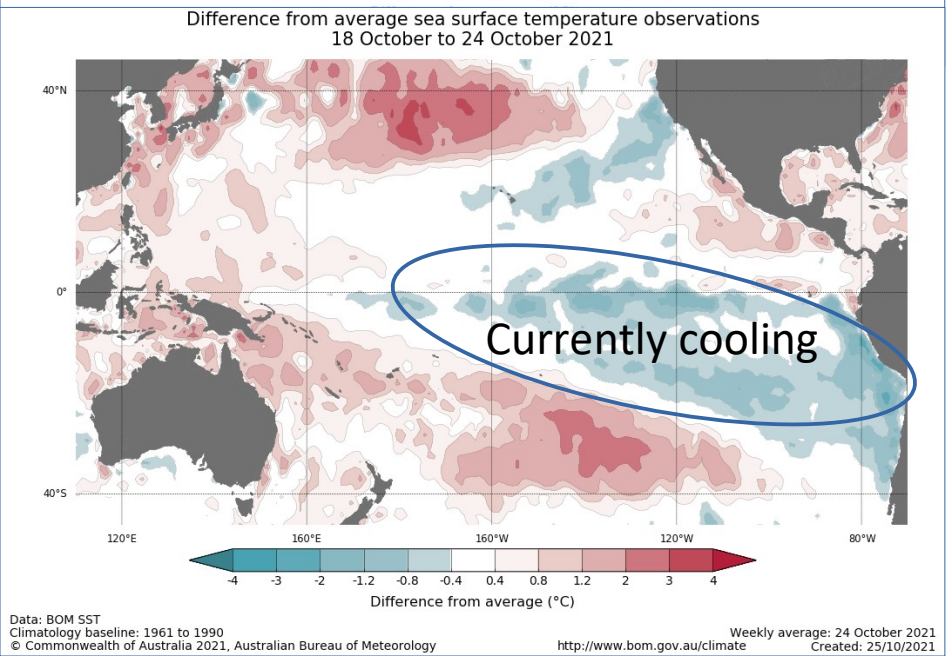
Regional Outlook Forum for South-West Indian Ocean countries

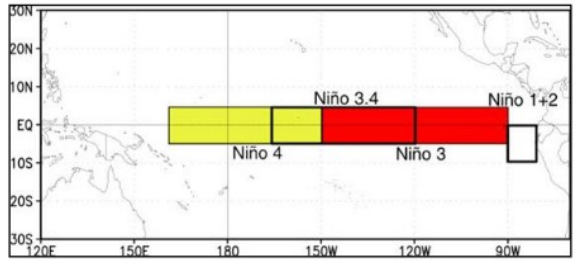
28 October 2021

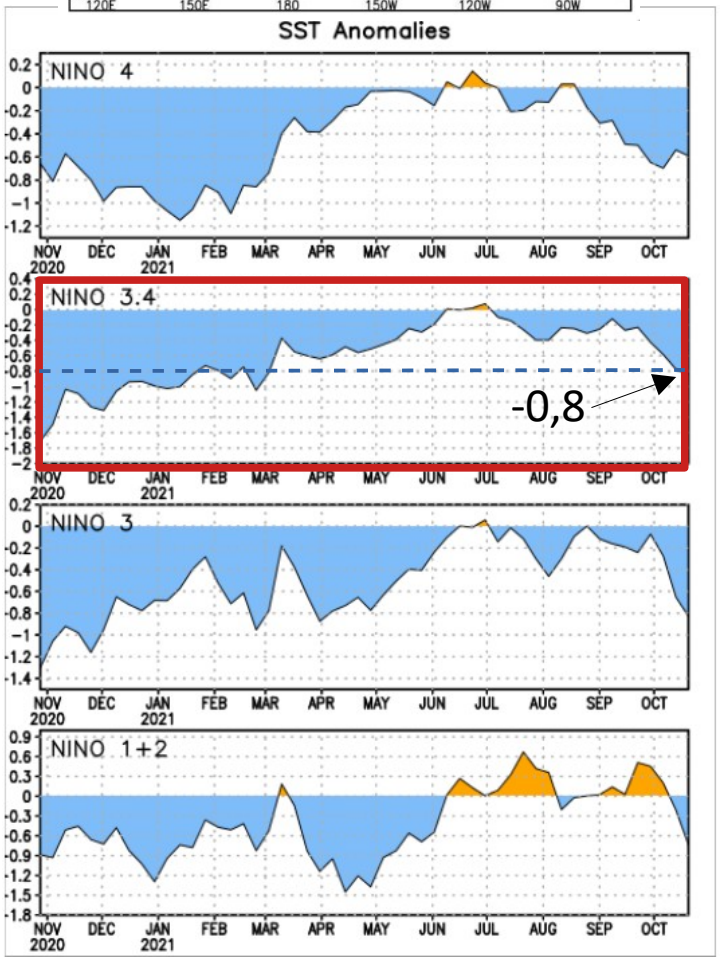
- WebConference -

Large scale background : ENSO

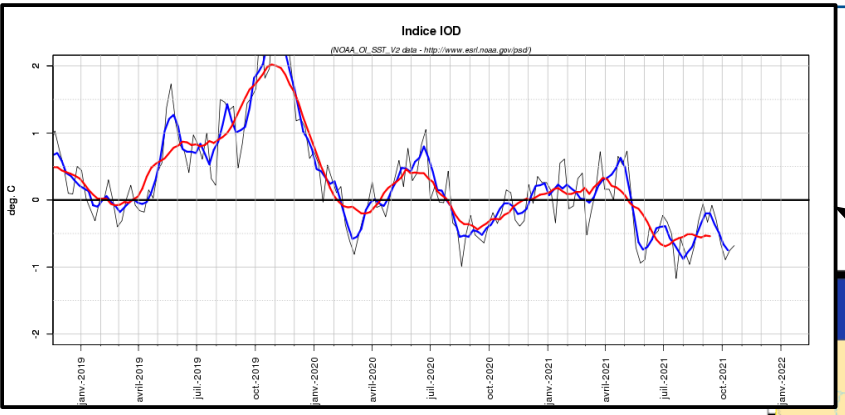


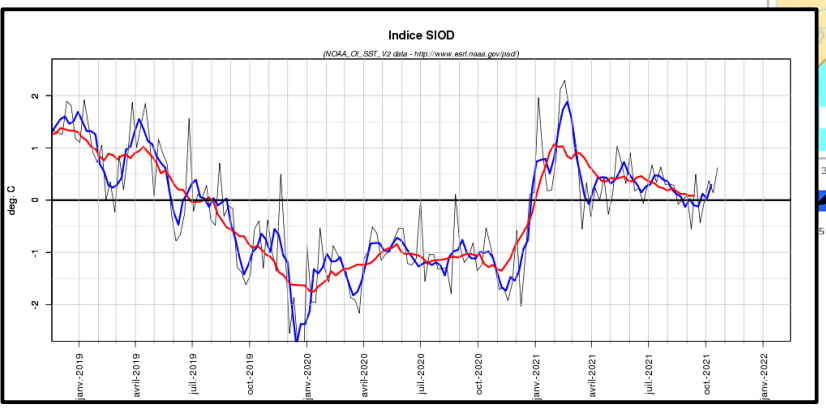


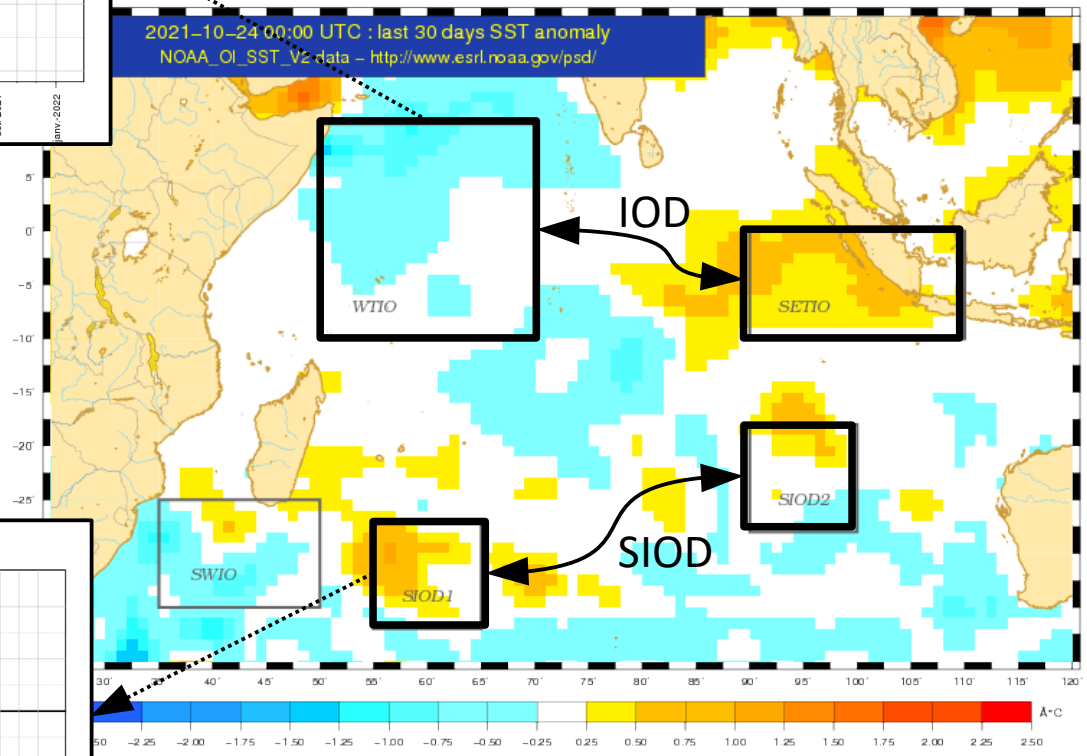




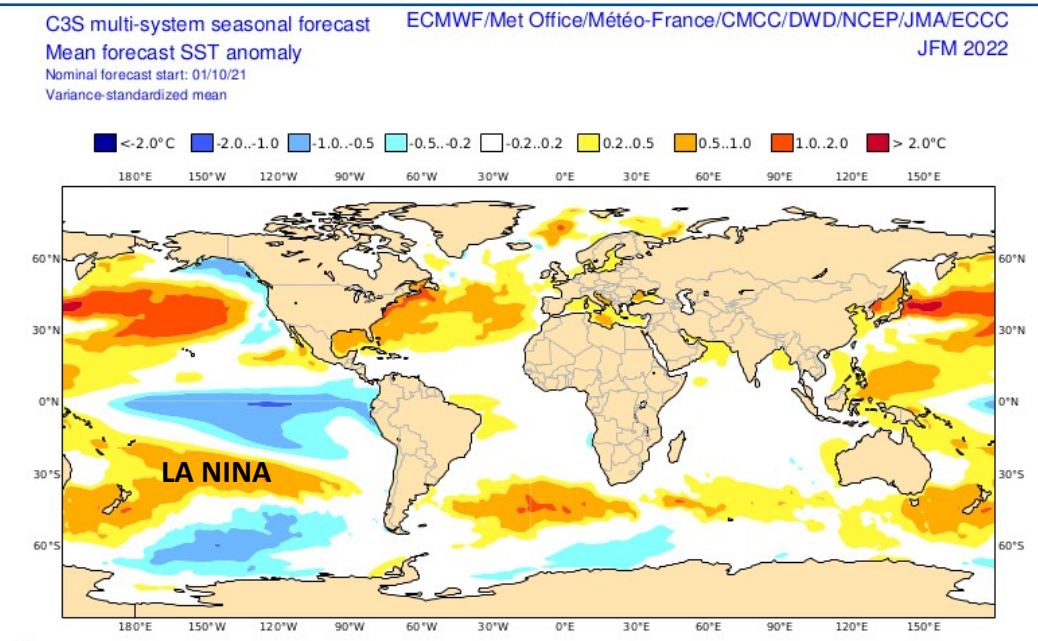
Large scale background : Indian Ocean drivers

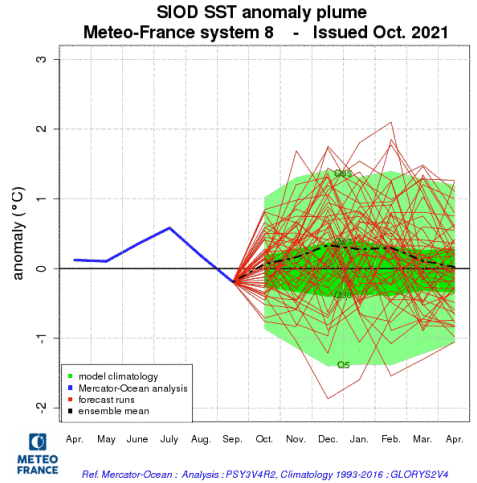


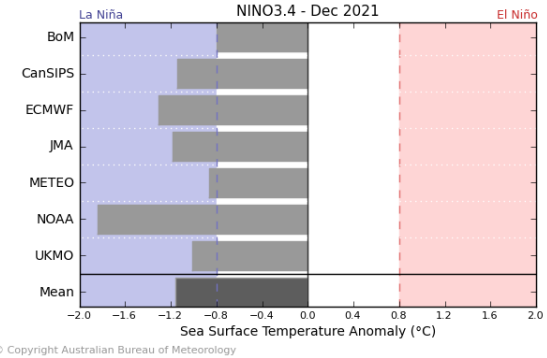


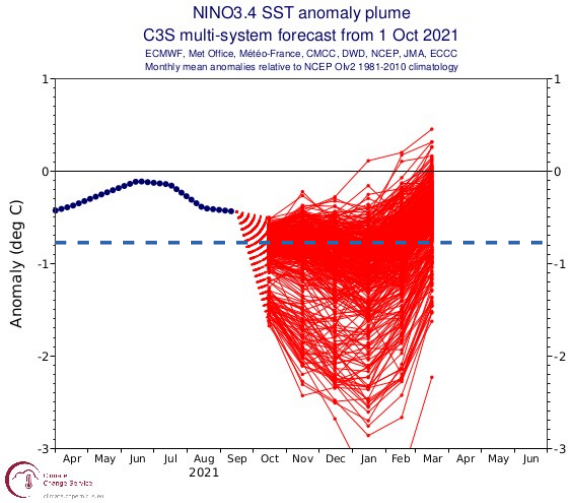


Large scale evolution of SST patterns





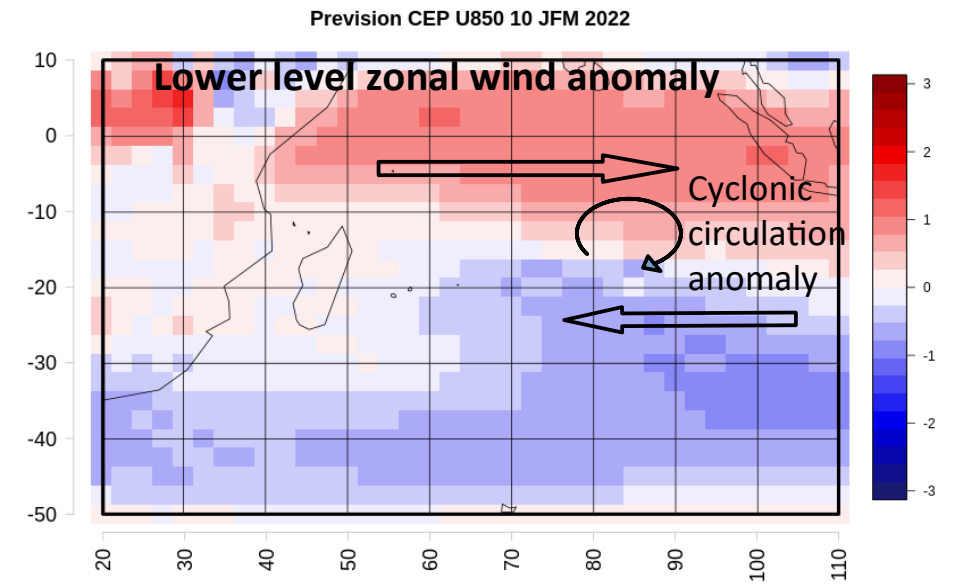


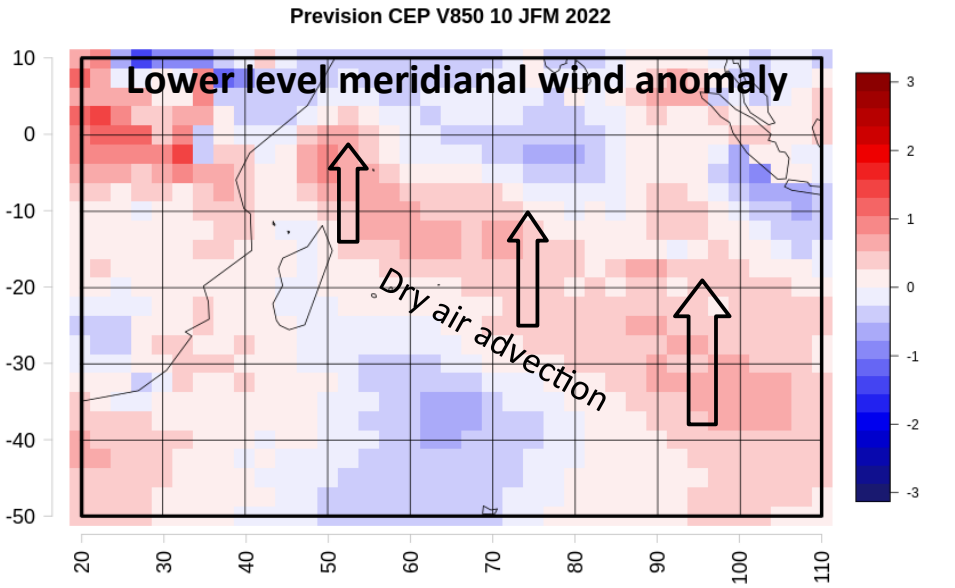


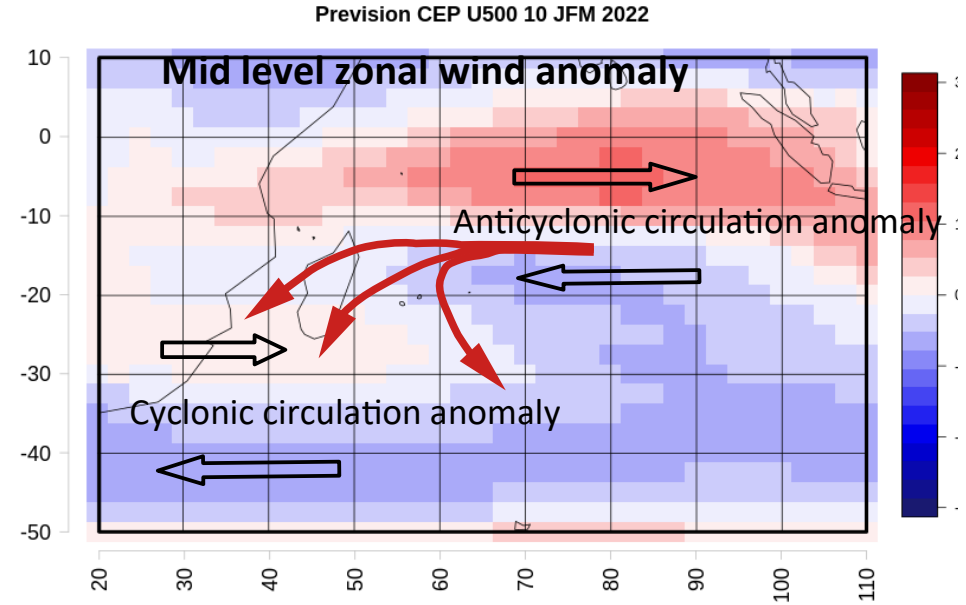
Consensus on ENSO : **moderate La Nina very likely** over the next TC season
Not so clear over the Indian Ocean : some uncertainty on the SIOD evolution → **likely positive or neutral** at that stage.

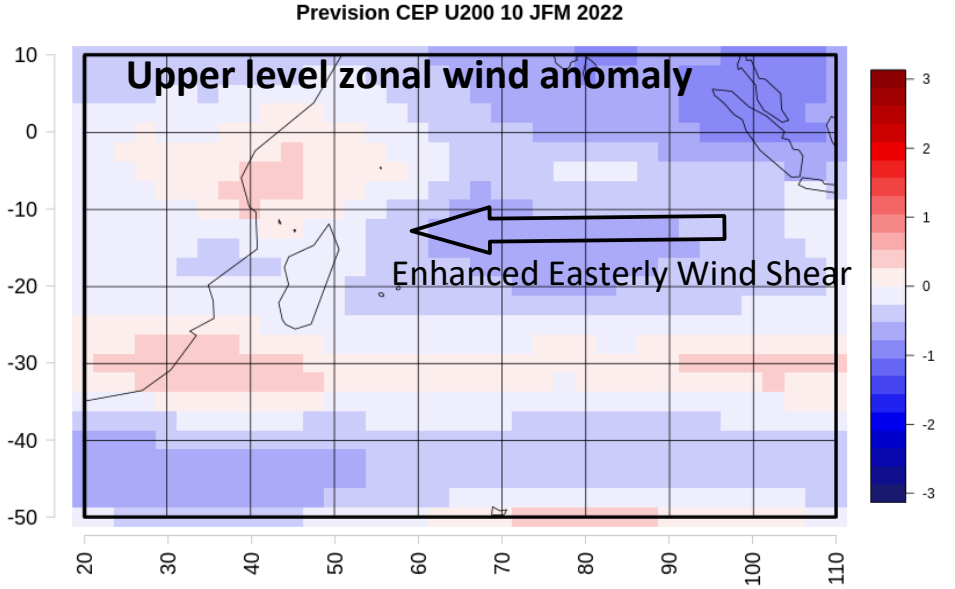
Seasonal forecast:

JFM 2022 Large scale forecast – base : oct. 2021





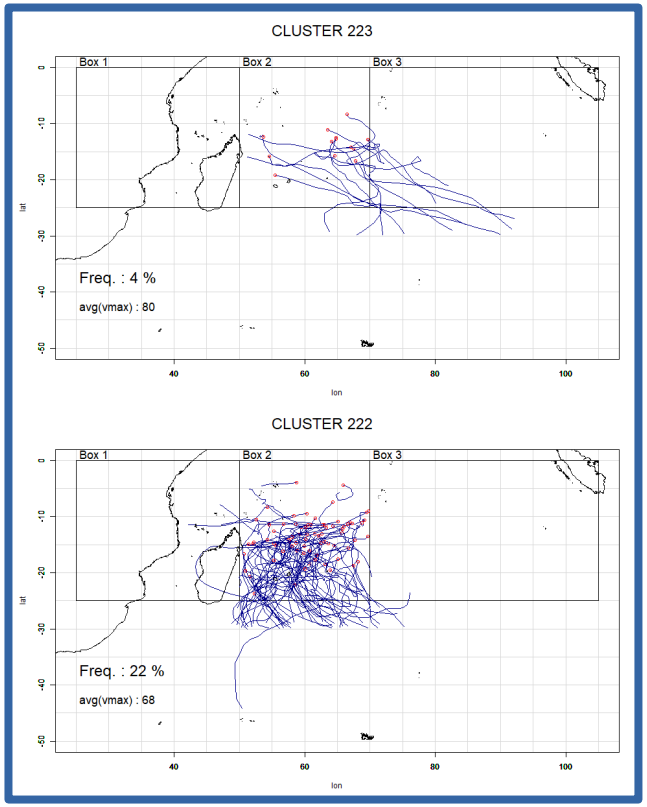




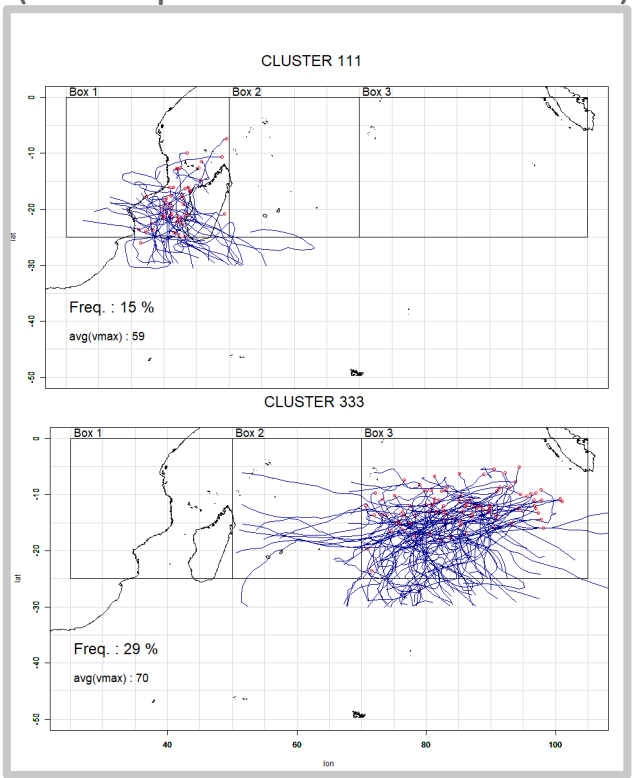
Track typologie

Considering historical tracks during La Nina events and most recent large scale predictions from several climate models

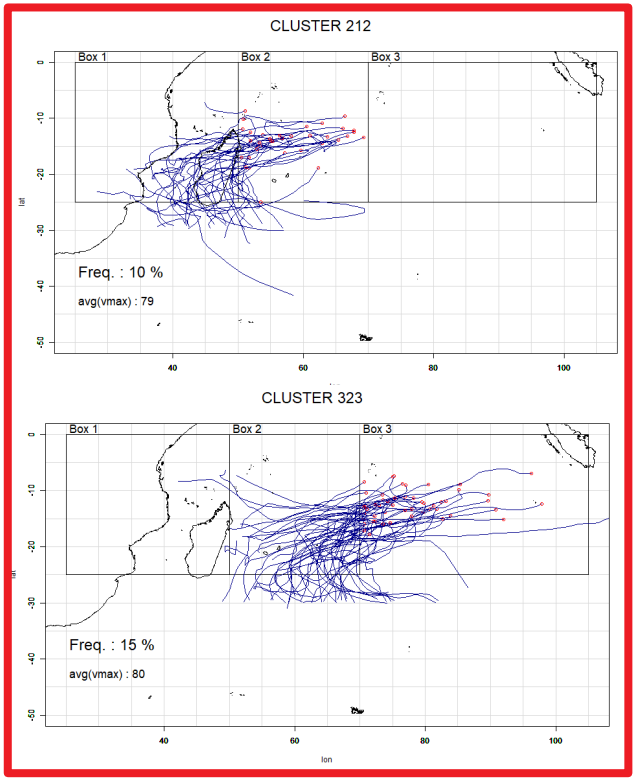
Below normal frequency



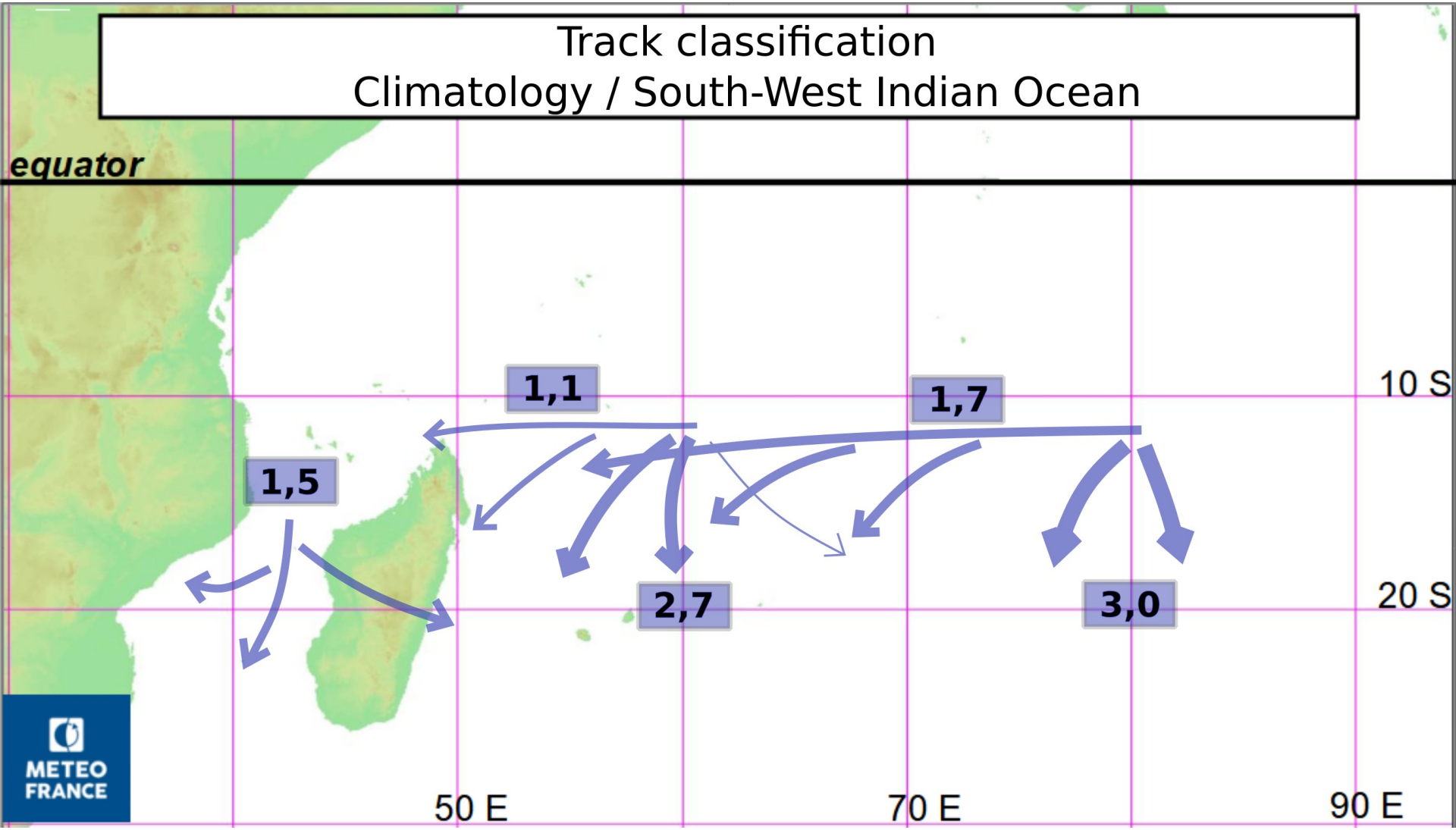
Normal frequency (will depend on SIOD evolution)



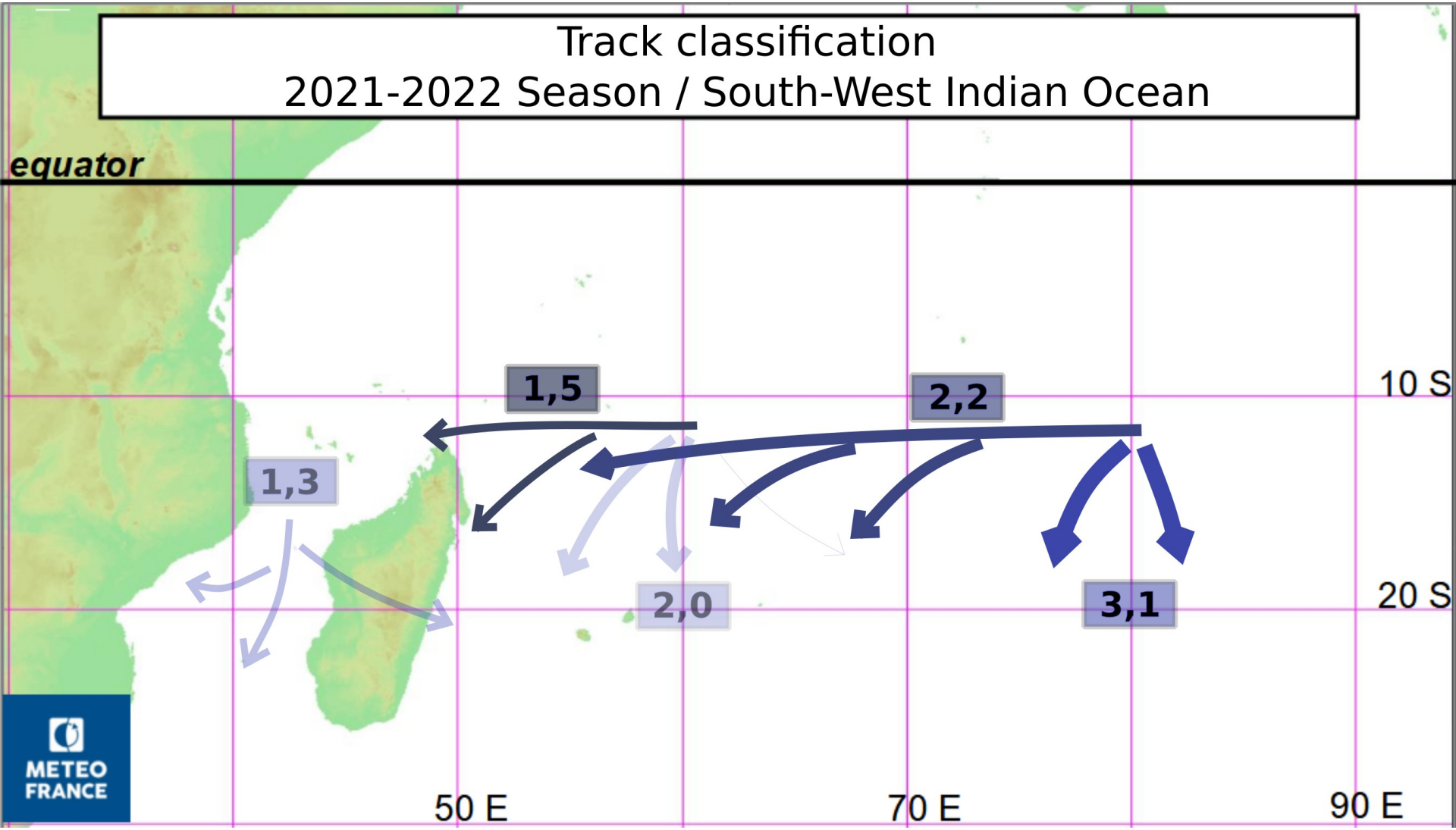
Above normal frequency



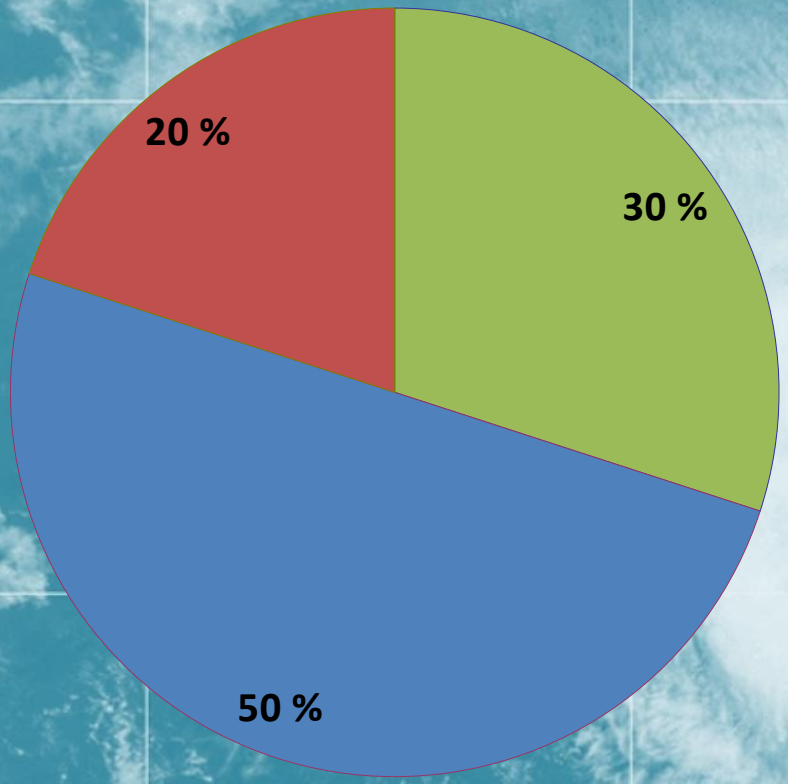
Synthesis activity map : climatology



Synthesis activity map : 2021-2022 season



Seasonal outlook for Tropical cyclones season 2021-2022



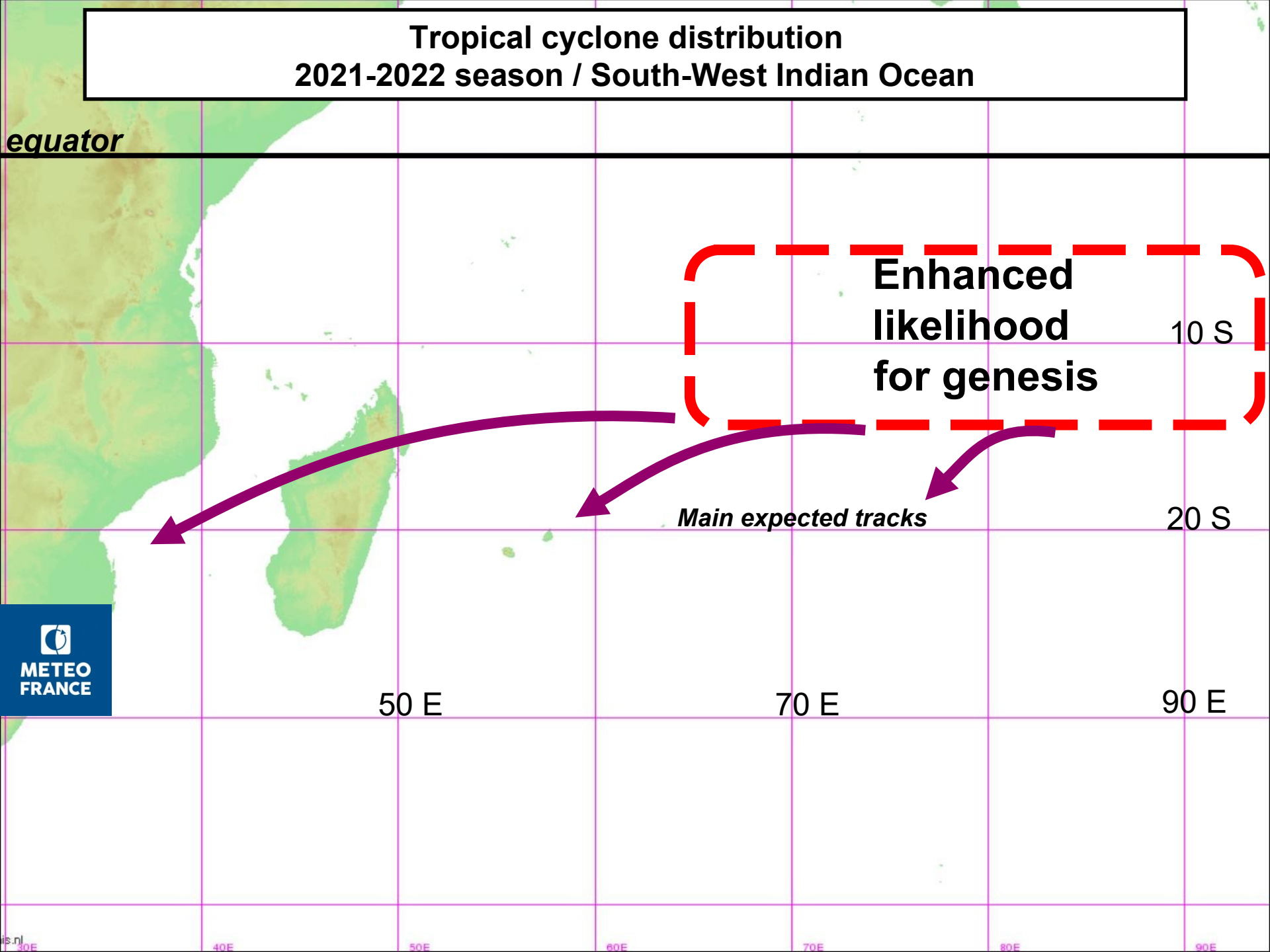
Outlook probabilities

Named storms
8-12 (average 10)

Tropical cyclones
4-6 (average 5)

METEO FRANCE

Be prepared:
Visit http://www.meteo.fr/temps/domtom/La_Reunion/webcmrs9.0/anglais/index.html


Tropical cyclone distribution
2021-2022 season / South-West Indian Ocean
equator
Enhanced
likelihood
for genesis
10 S
Main expected tracks
20 S
METEO
FRANCE
50 E
70 E
90 E

Summary

→ A season mainly influenced by coming La Nina conditions (some similarities with previous season)

→ Near average TC season (8 to 12 named systems), 4 to 6 reaching tropical cyclone intensity. Quite high uncertainty on this information due to La Nina context

→ Zonal or parabolic tracks favored during the coming season

→ Austral spring (Nov-Dec): TC activity expected mainly over the eastern part of the bassin, most of the systems should remain far from land

→ Core of the season (Jan and beyond) : activity may develop further west and closer to inhabited lands but will largely depend on how SIOD+/La Nina develop.

→ Areas with most risks of direct impact : east coast of Madagascar, Mascarene Islands and Mozambique (associated with systems coming from the Indian Ocean and crossing Madagascar).

→ If SIOD evolves in a clear positive phase, conditions may be more favorable for genesis in the Mozambic Chanel

THE END

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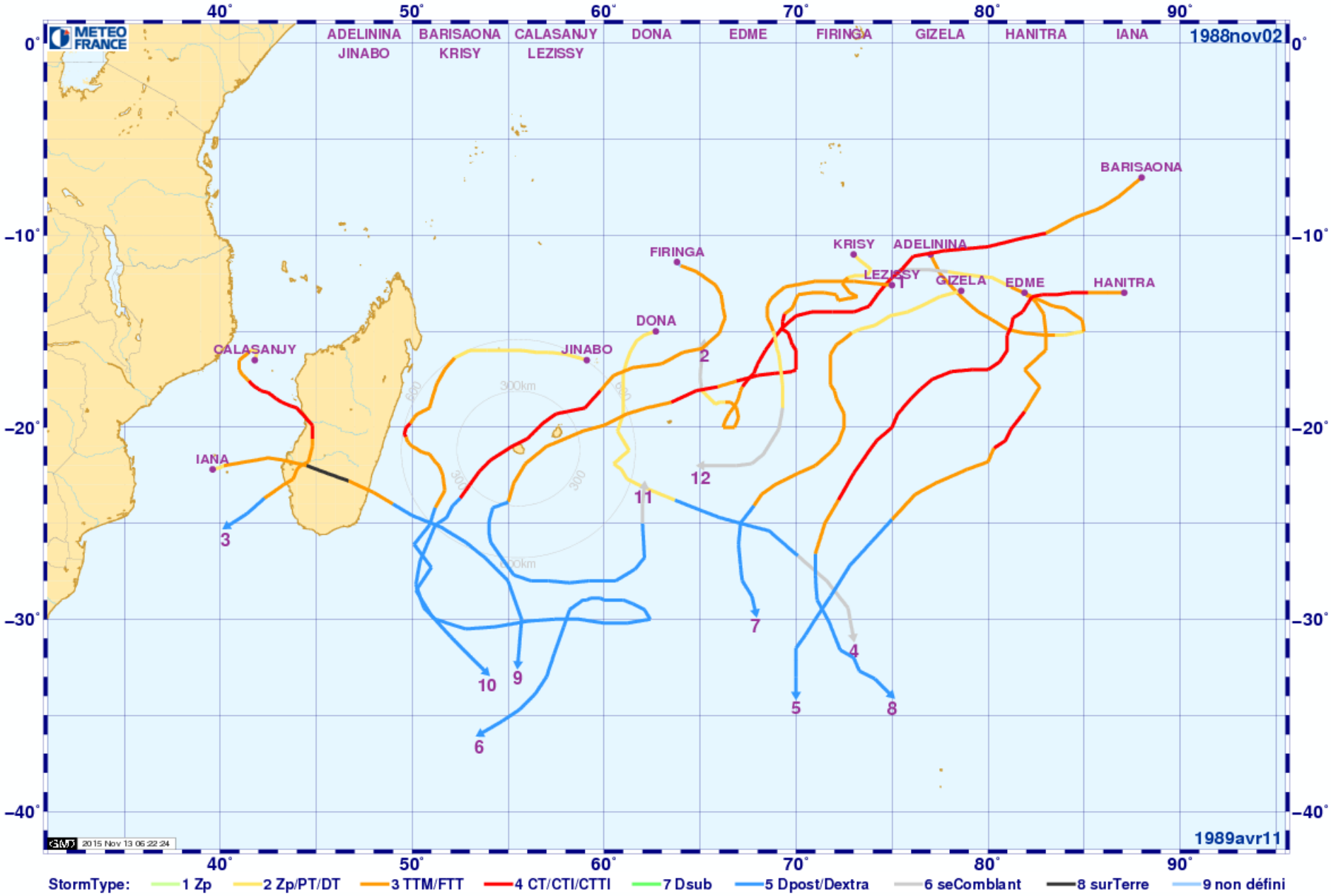
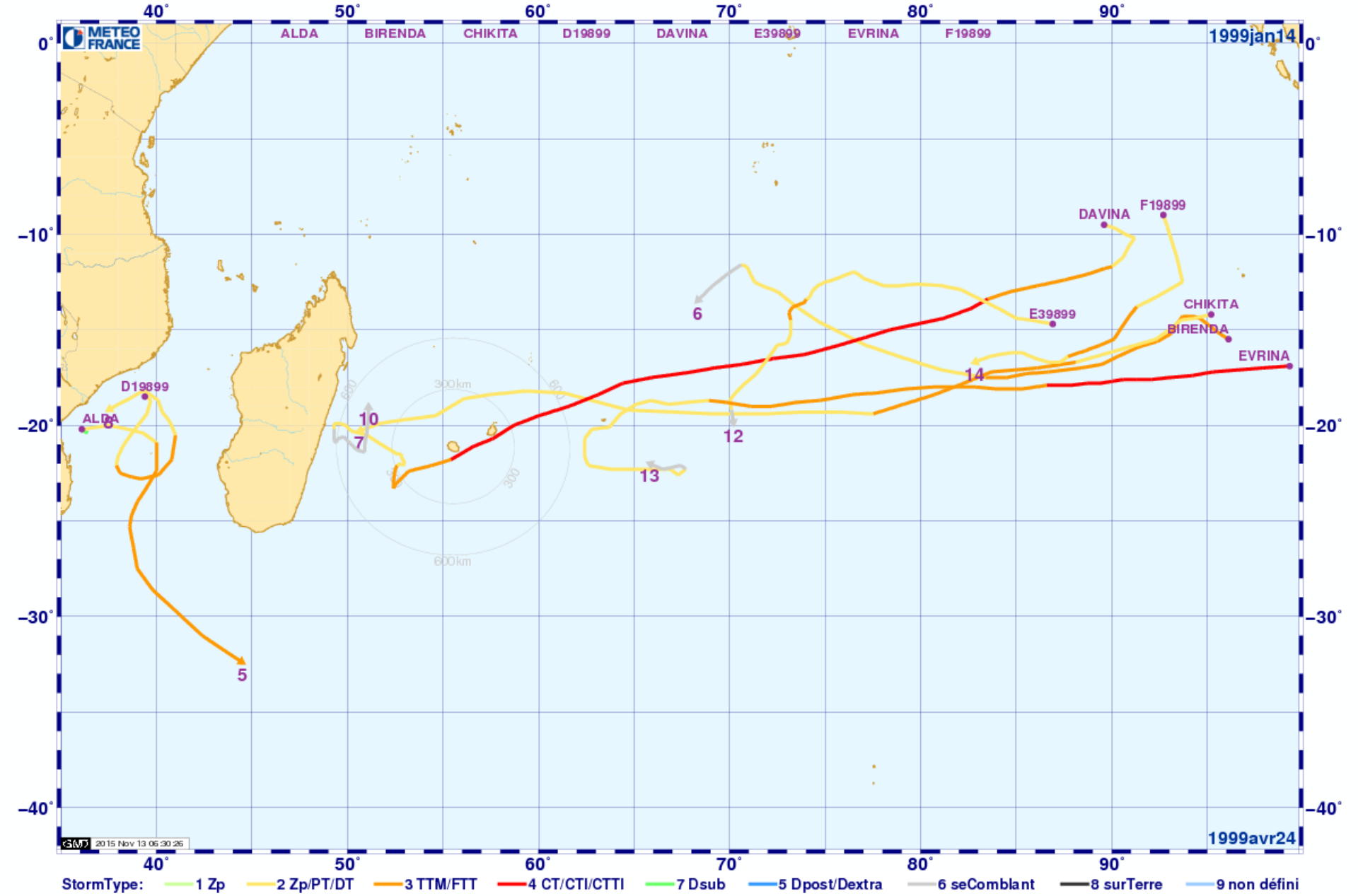
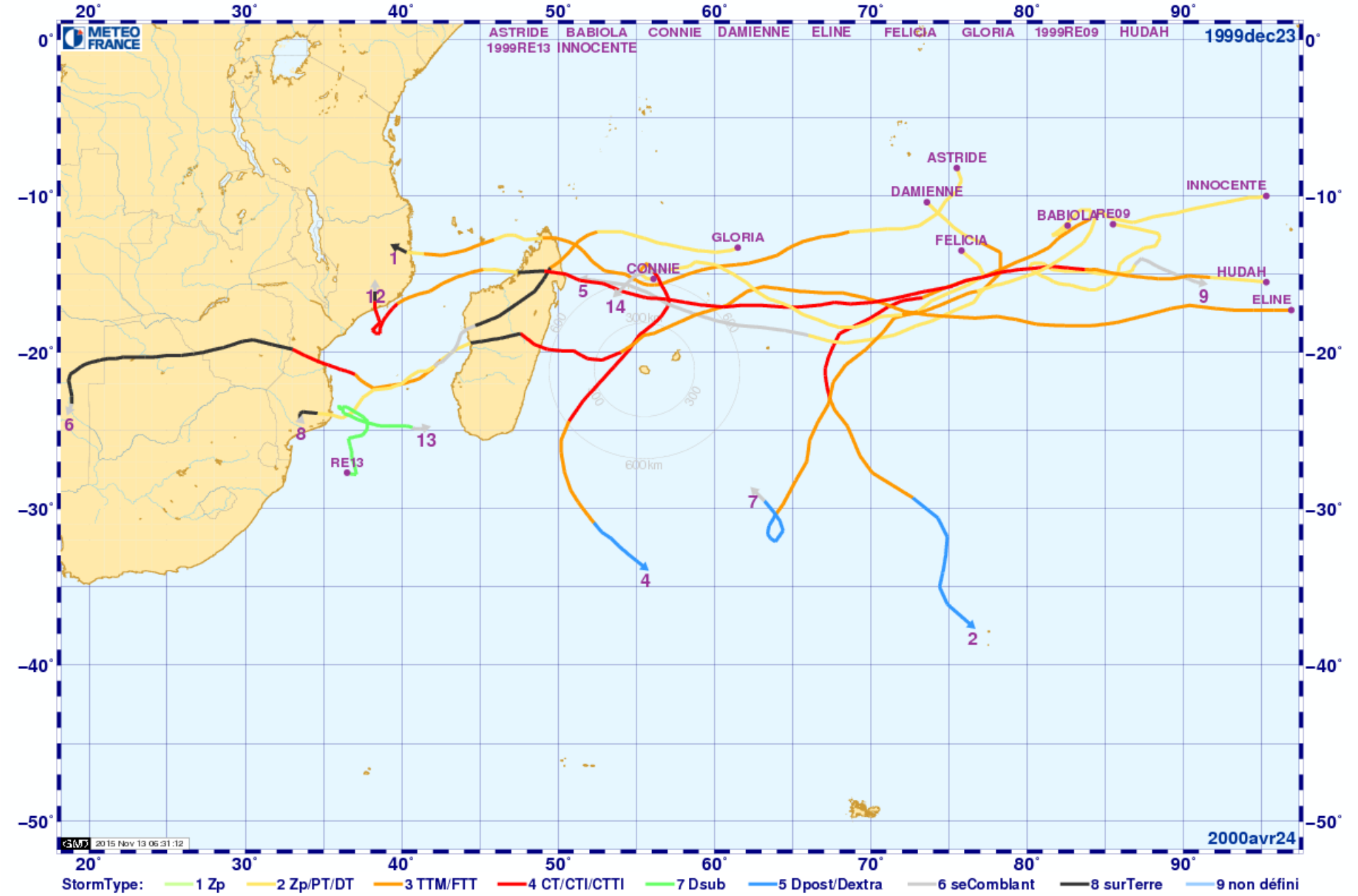
activité cyclonique de la saison 1988-1989



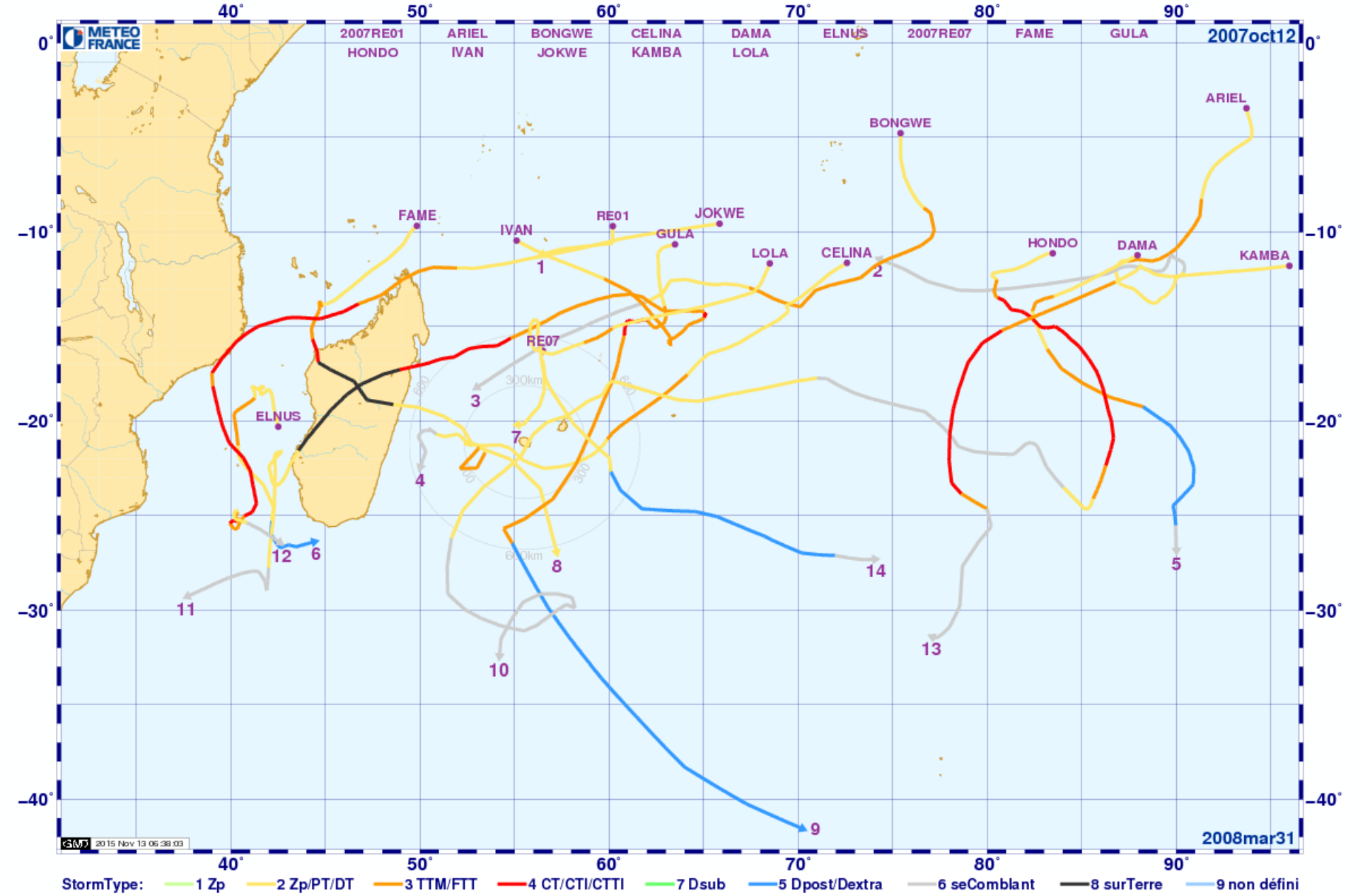
activité cyclonique de la saison 1998-1999



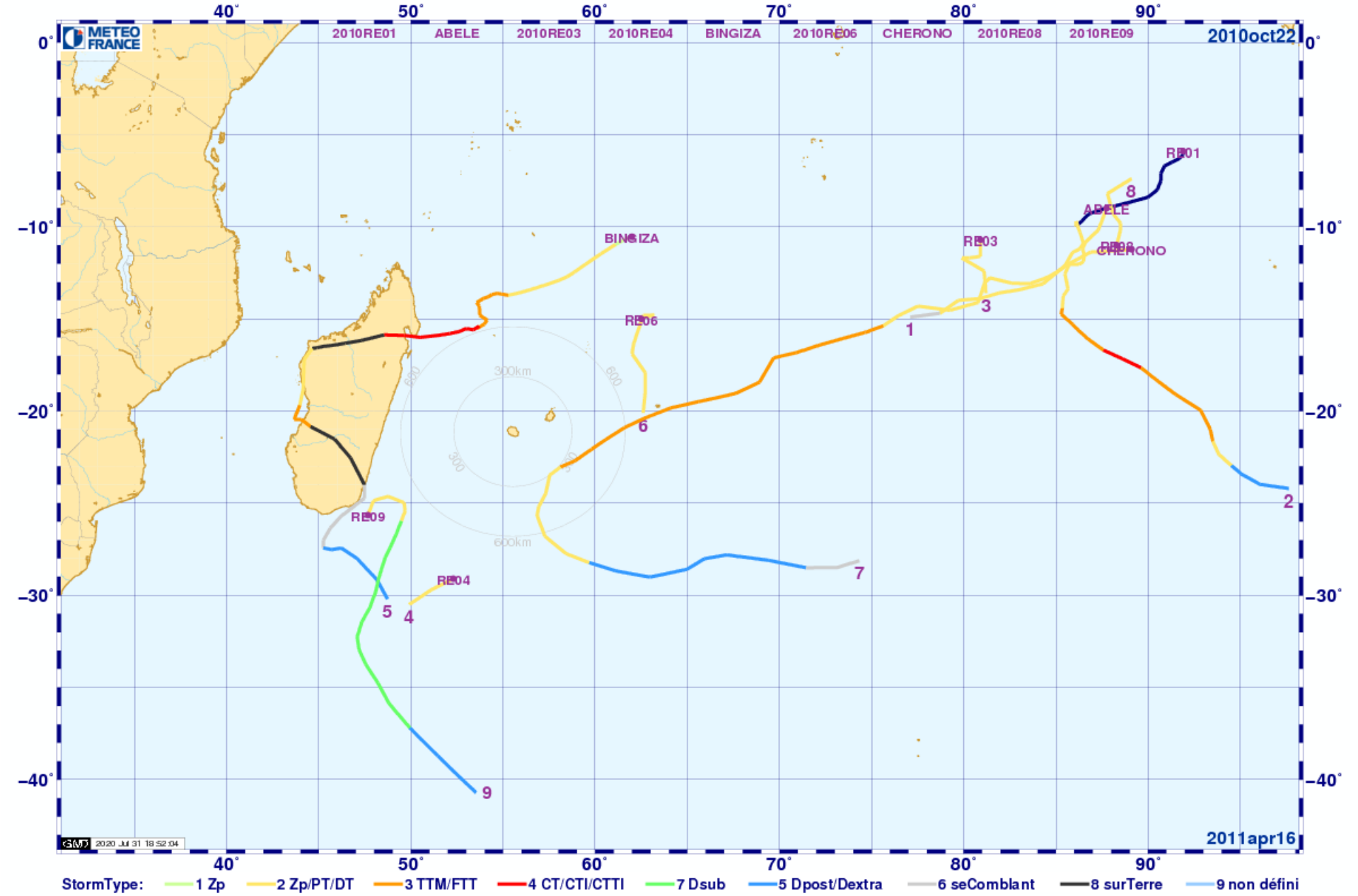
activité cyclonique de la saison 1999-2000



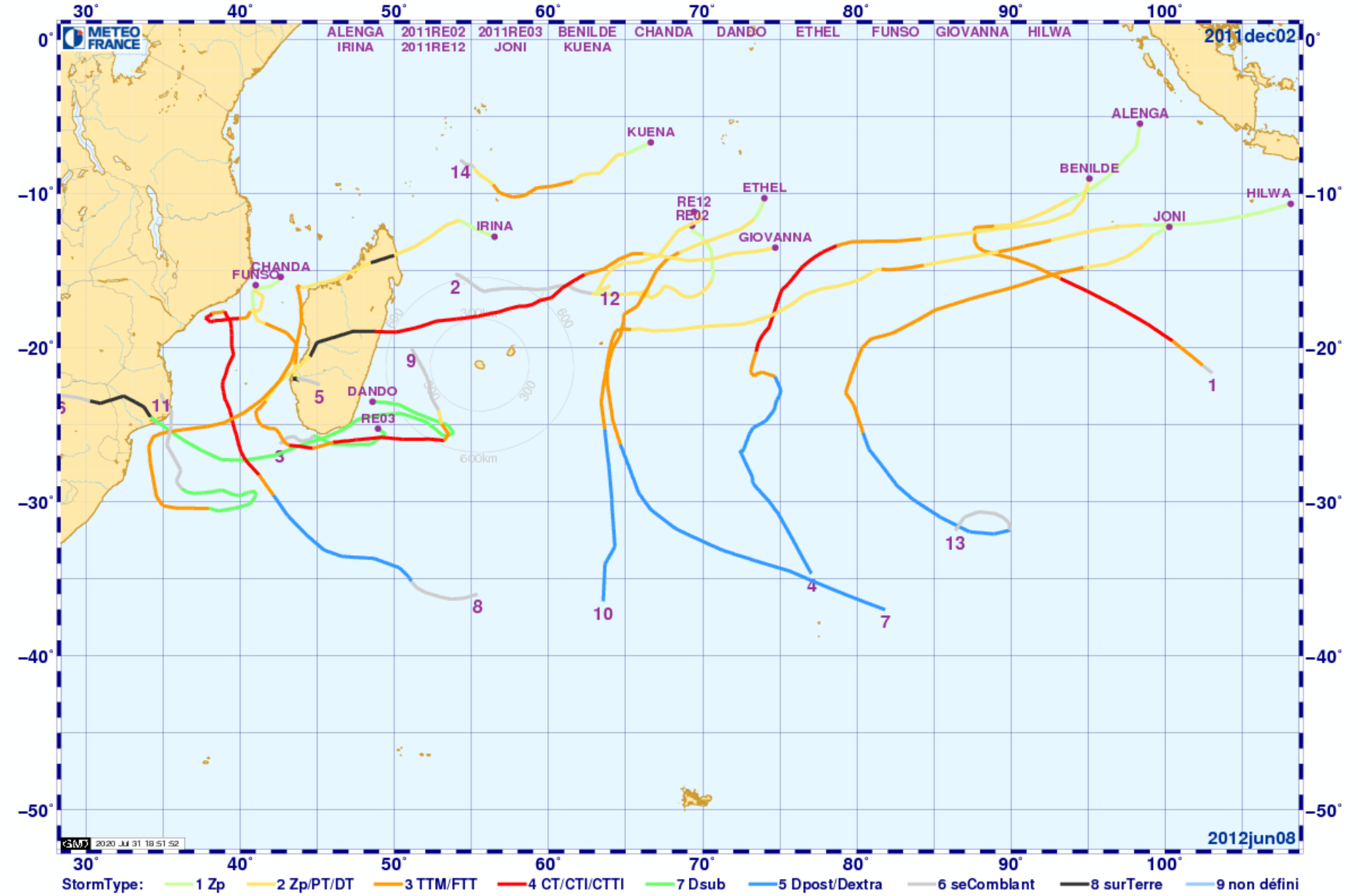
activité cyclonique de la saison 2007-2008



activité cyclonique de la saison 2010-2011



activité cyclonique de la saison 2011-2012



activité cyclonique de la saison 2020-2021