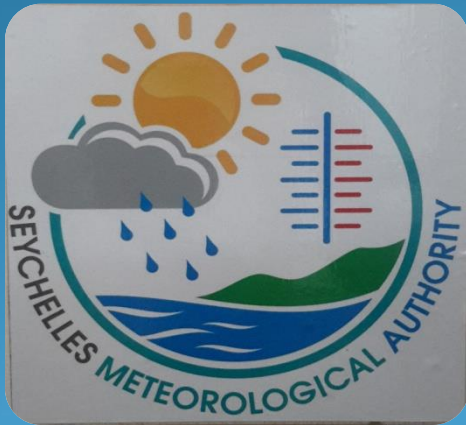


SEYCHELLES COUNTRY REPORT

By Chantale Bijoux

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Geographical Location

- Seychelles archipelago is a group of 115 granitic and coralline islands located in the South-west Indian Ocean
- It is positioned between 04° South and 10° South and between 44° East and 56° East



Functions of the Seychelles meteorological Authority

- Provides weather forecasts and warnings to the general public to ensure safety of lives and property
- Provide meteorological services to most socio-economic sectors: transportation(air, sea and land, fisheries, agriculture, tourism, construction and media
- Implement national climate programmes
- Carry out disaster prevention and mitigation activities

Brief summary of the climate of Seychelles

- Warm, Humid tropical type with maritime influence
- Wettest month on average –January 405mm
- Driest month on average –July 74mm
- Average Max Temp 30C
- Average Min Temp 24.7C
- Two main season
 1. Northwest monsoon
 2. Southeast monsoon

Northwest Monsoon- (November- March)

- This is the principal 'rainy season' over the Seychelles and gets extremely wet in December and January.

This period is also fairly warm. Winds are predominantly from the west to northwest but generally light except when there is a cyclone in the region.

- This is also the Cyclone Season over the Southwest Indian Ocean

Southeast Monsoon- (May-September)

- This is a relatively drier and cooler period. The wind flow over the Seychelles is dominated by the Southeast Trade winds which reaches its peak during the months of July and August. Precipitation during this period is sparse, normally light in nature and rather short-lived

Transition Period- (April & October)

- This is the period when the season is changing and it is normally characterized by light and variable winds depending on the onset and cessation of each season.

Importance of Weather Satellites

- Satellite imagery is a very powerful tool in weather forecasting as they give an accurate representation of how the clouds are developing and it enables the forecaster to have a better understanding of the atmosphere.
- With development in Satellites, forecasting are becoming more accurate
- Both Polar Orbital and Geo-stationary Satellites are used but as Geo-stationary tend to stay over the same place, it is more frequently used to monitor the weather conditions especially the development of storms over time

Satellites used

- Meteosat second generation (MSG) from Eumetsat are mostly used.
- When forecasting, different channels are used to compare the clouds and also features such as overshooting tops
- In daily forecasting the IR 10.8, the Vis 1.6, the WV6.2 and the HRV are mostly used.
- The RGB channels are also used, mainly the microphysics, dust and airmass channel
- The FY2G is also used though at the moment, its frequency is not so reliable

Satellites derived products used

- These products are used mainly for forecasting extreme weather events and some examples are:

Precipitation Estimates, Stability indices, Precipitable water content

- Scatterometer winds are also used from the polar satellites (NOAA) for detection of the centre of the low pressure

Introduction of FENGYUN satellites

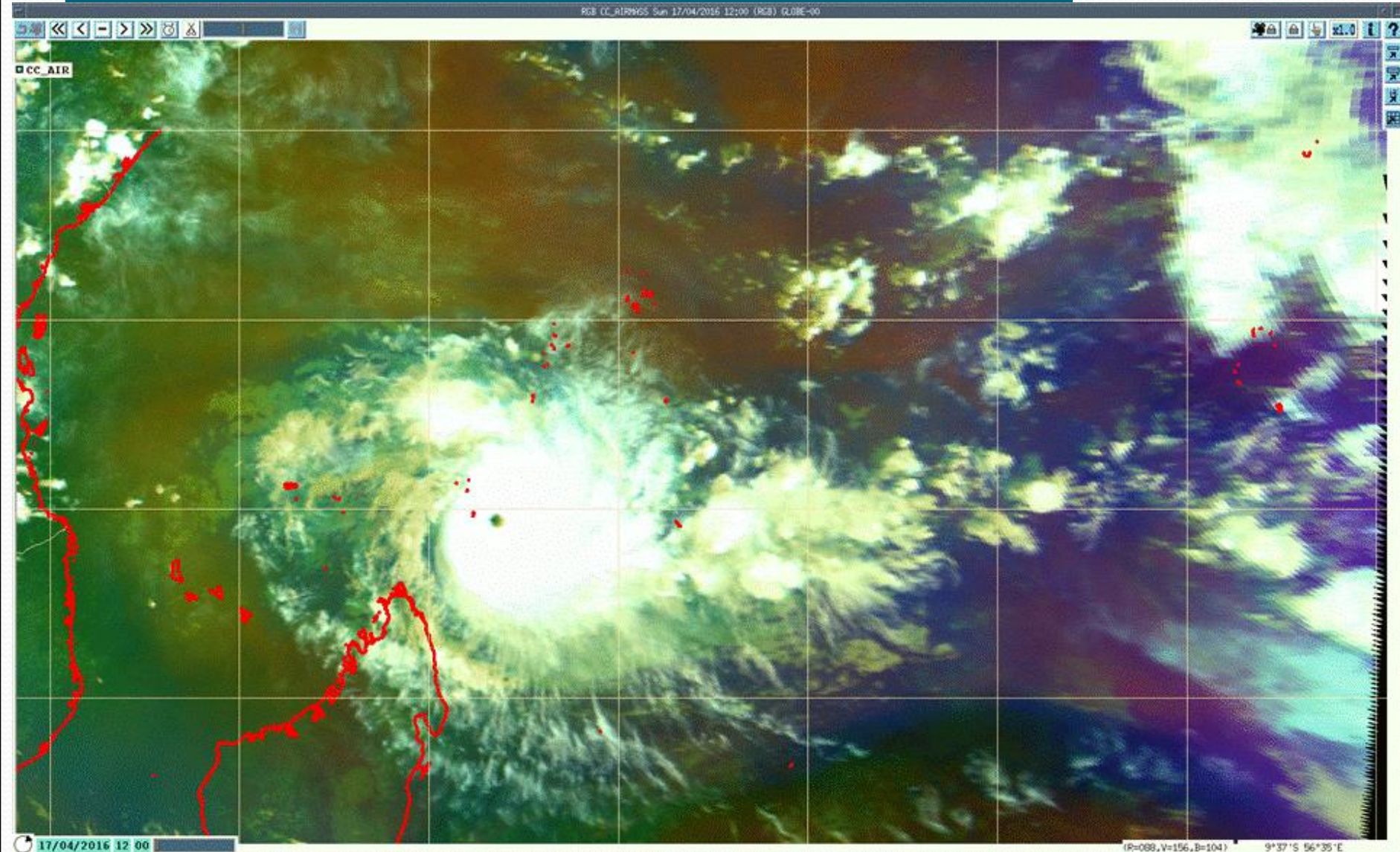
- Reception of the FENGYUN satellite is through the EUMETSAT platform via SYNERGIE workstation.
- At the moment only FY2G is available but the reception is not so reliable.
- We also receive satellite images via internet.
- In our daily forecasting we use FY2 as it's position is better for Seychelles compared to FY4 where we are on the edge.
- The FENGYUN satellite is very useful especially during the cyclone season as we can monitor the systems as it develops in the east.

Swap and Smart software

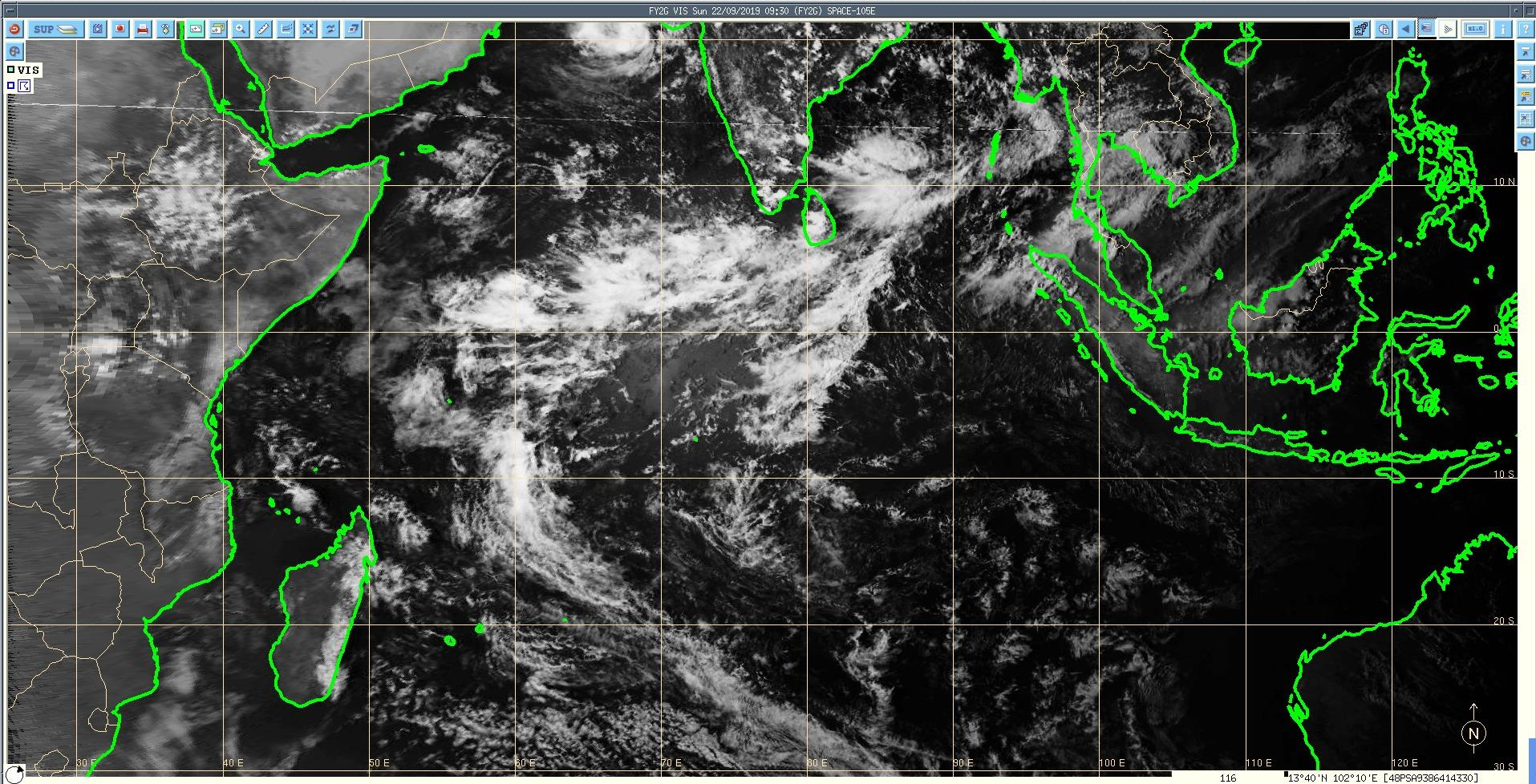
- The online version is used in the daily forecasting.
- The satellite derived products used are mainly , the cloud classification, cloud top temperatures, the precipitation estimates and sea surface temperature.
- As of yet we do not have any feedback on the different products used but from our own verification we have found that it is quite accurate especially the big convective cells.
- In future our institute would greatly appreciate the FENGYUN satellite products as we find that they are very useful.

Very Intense Tropical Cyclone Fantala

RGB CC_R1R99GS Sun 17/04/2016 12:00 (RGB) QLOBE-00



Example of FY2G Vis





THANK YOU

