



Forecast guidance for Severe Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 23rd February 2007

**AFRICA DESK
CLIMATE PREDICTION CENTER
National Centers for Environmental predictions
National Weather Service
NOAA
Camp Springs MD 20746**

FORECAST DISCUSSION 14H00 EST 23rd February 2007

Valid: 00Z 24th February 2007- 00Z 26th February 2007.

WARNING:

Tropical Cyclone 14S (Favio)

TROPICAL CYCLONE (TC) 14S (FAVIO), LOCATED APPROXIMATELY 355 NM NORTH-NORTHEAST OF MAPUTO, MOZAMBIQUE, HAS TRACKED NORTHWESTWARD AT 10 KNOTS OVER THE PAST SIX HOURS. GIVEN THE LOCATION OF THE STEERING RIDGE OVER SOUTH AFRICA, TC 14S WILL CONTINUE ITS NORTH-WESTWARD TRACK INLAND. THE SYSTEM IS DISSIPATING DUE TO INTER-ACTION WITH LAND, AND WINDS WILL WEAKEN BELOW TROPICAL CYCLONE STRENGTH BY TAU 12. THIS IS THE FINAL WARNING ON THIS SYSTEM BY THE JOINT TYPHOON WARNING CENTER (NAVPACMETOCCEN). THE SYSTEM WILL BE CLOSELY MONITORED FOR SIGNS OF REGENERATION.

Tropical Cyclone 15s (Gamede)

TROPICAL CYCLONE (TC) 15S (GAMEDE), LOCATED APPROXIMATELY 420 NM NORTHEAST OF LA REUNION, HAS TRACKED WEST-SOUTHWESTWARD AT 11 KNOTS OVER THE PAST SIX HOURS. TC 15S HAS INTENSIFIED AT A CLIMATOLOGICAL RATE OVER THE PAST 24 HOURS DUE TO GOOD POLEWARD AND EQUATORWARD OUTFLOW. TC 15S IS TRACKING GENERALLY WESTWARD ALONG THE NORTHERN PERIPHERY OF A MID-LEVEL SUBTROPICAL RIDGE CENTERED SOUTHEAST OF MADAGASCAR. THIS WESTWARD TRACK WILL CONTINUE THROUGH TAU 48. TC 15S WILL INTENSIFY AT A CLIMATOLOGICAL RATE THROUGH TAU 12, WHEN DECREASED POLEWARD OUTFLOW WILL SLOW INTENSIFICATION TO A LESS THAN CLIMATOLOGICAL RATE. MAXIMUM SIGNIFICANT WAVE HEIGHT AT 230600Z IS 20 FEET.

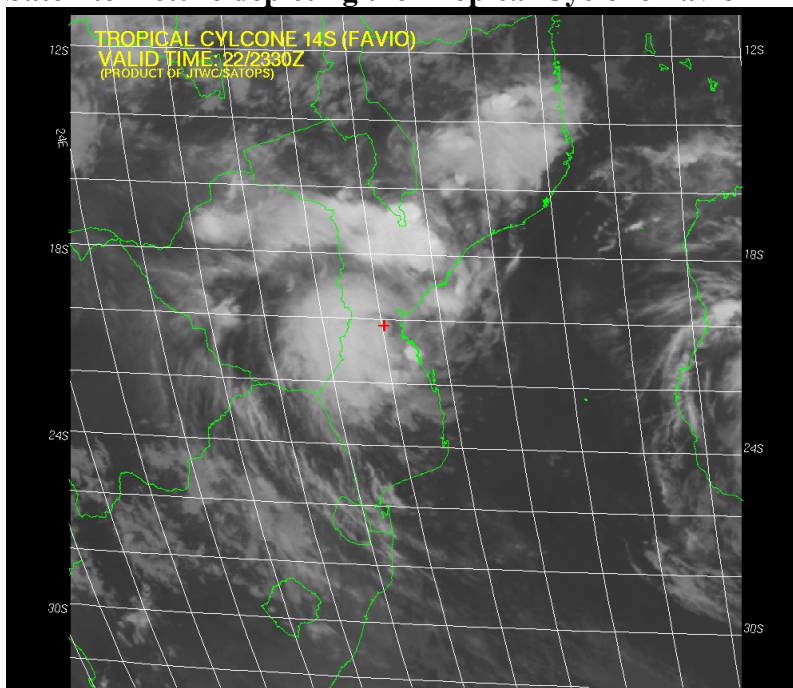
At T+24 hrs, the general flow pattern at 200hpa over Southern Africa (South of the Equator) shows a high pressure system centered at 26°S 49°E, hence divergence. At T+48 hrs the general flow pattern is maintained. At T+72 hrs the high pressure system

splits into two cells with centers located at 25°S 30°E and at 21°S 43°E, but generally anticyclonic flow is maintained over the sub continent.

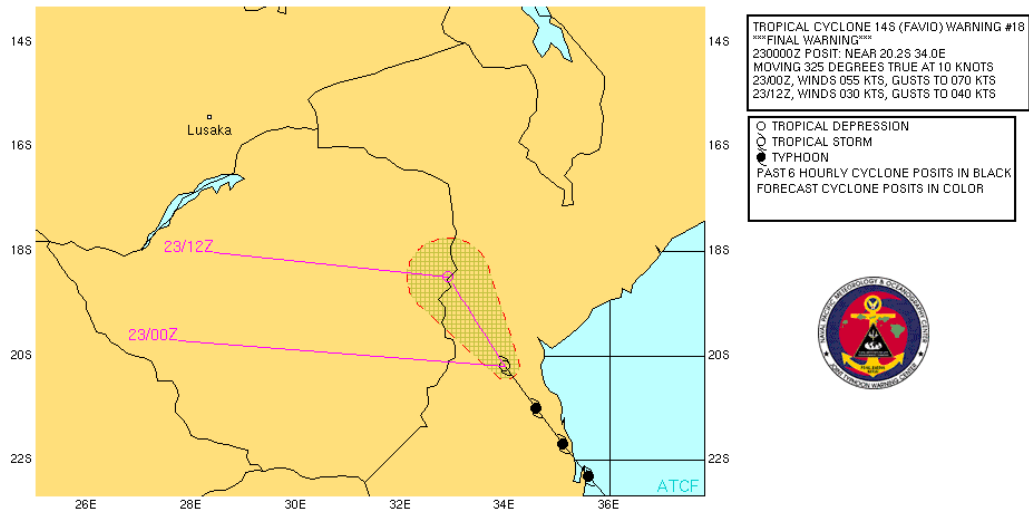
At 500hpa, the T+24 hrs prognosis shows the St Helena high pressure system centered at 26°S 26°W, and has a bud-off high over Angola/D.R. Congo coast, causing divergence over these areas. The Mascarene high has its center located at 31°S 52°E and has bud-off highs over South Africa/Botswana and over the extreme northeastern coast of the sub continent, hence divergence over these areas. The rest of the sub continent, which are the areas northern Namibia/southern Angola, Zambia/D.R. Congo stretching into Madagascar are under a trough. A low is located to the northeast of Madagascar (18°S 58°E). At T+48 hrs the general flow pattern is maintained over the sub continent, even though there is a westerly trough lying over the 10°E longitude, approaching the southwestern coast. At T+72 hrs, the top part of the westerly trough has flattens, and therefore has no influence over the sub continent. Generally the flow pattern has not changed significantly.

At 850hPa, the general flow pattern at T + 24 hrs shows the St. Helena high with its centre located at 30°S 23°W, but its ridge is not reaching the sub continent. The Mascarene high has its centre located at 37°S 59°E, and it is ridging into north-eastern South Africa. Generally, convergence prevails over the sub continent due to a trough which is prevalent over the sub continent, with the meridional arm of the ITCZ lying over the northwestern parts of the sub continent. The Tropical cyclone (Flavio) has dissipated as it moved over the terrain and for a full description check warning above. Another low can be seen to the northeast of Madagascar, which can develop into a deep low. At T + 48 Hrs and at T+72 hrs, the general flow pattern is maintained. Generally there is a resemblance in the patterns of UK- Met, ECMWF and GFS models.

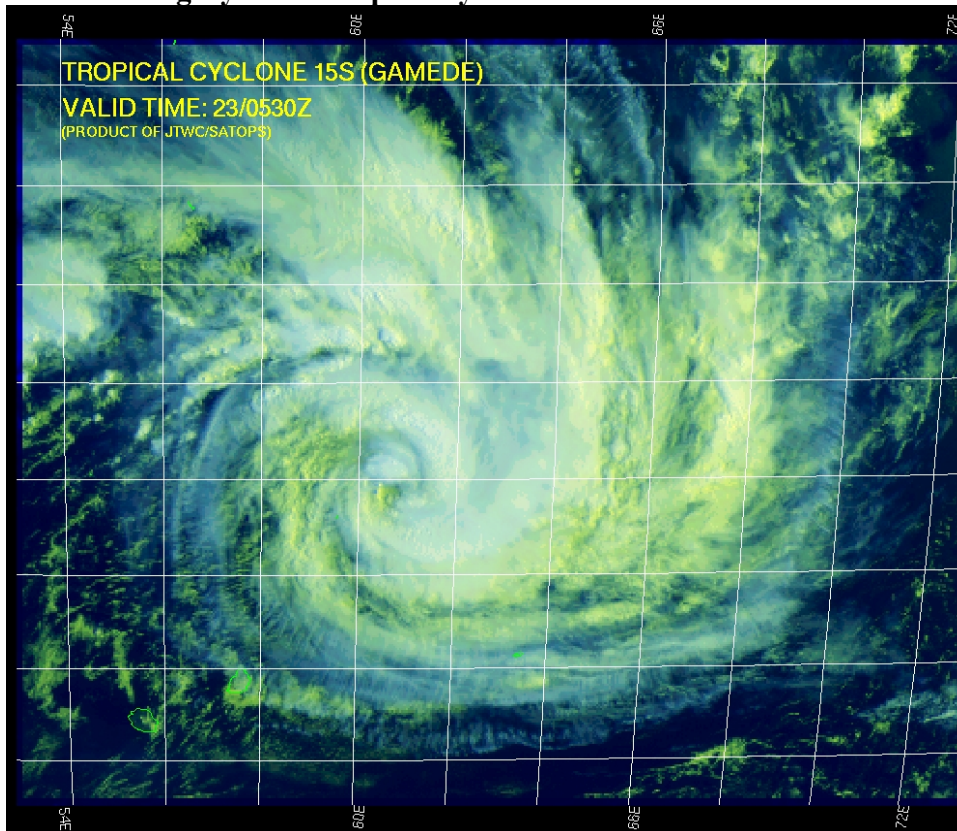
Satellite Picture depicting the Tropical Cyclone Flavio



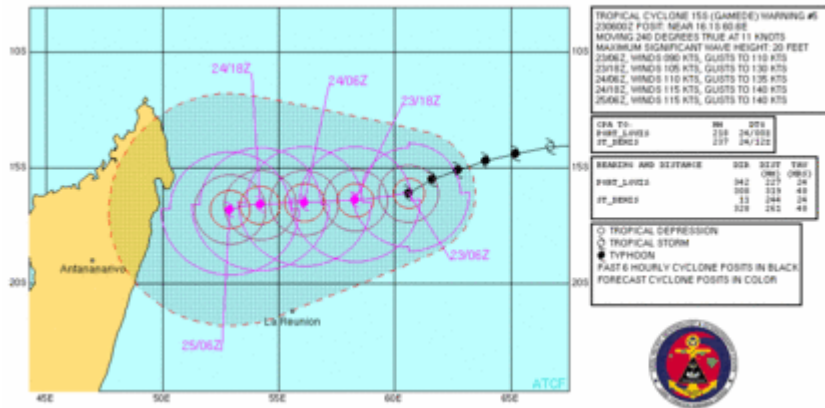
TROPICAL CYCLONE FLAVIO TRACK AS ISSUED BY JTWC



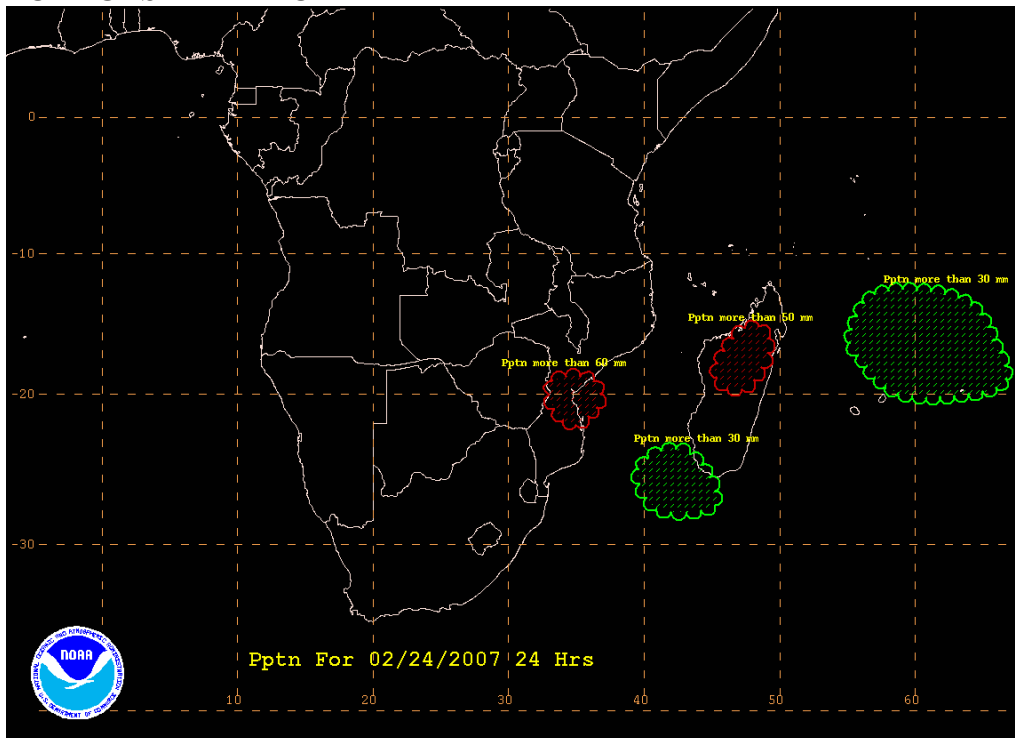
Satellite imagery of the tropical cyclone Gamede



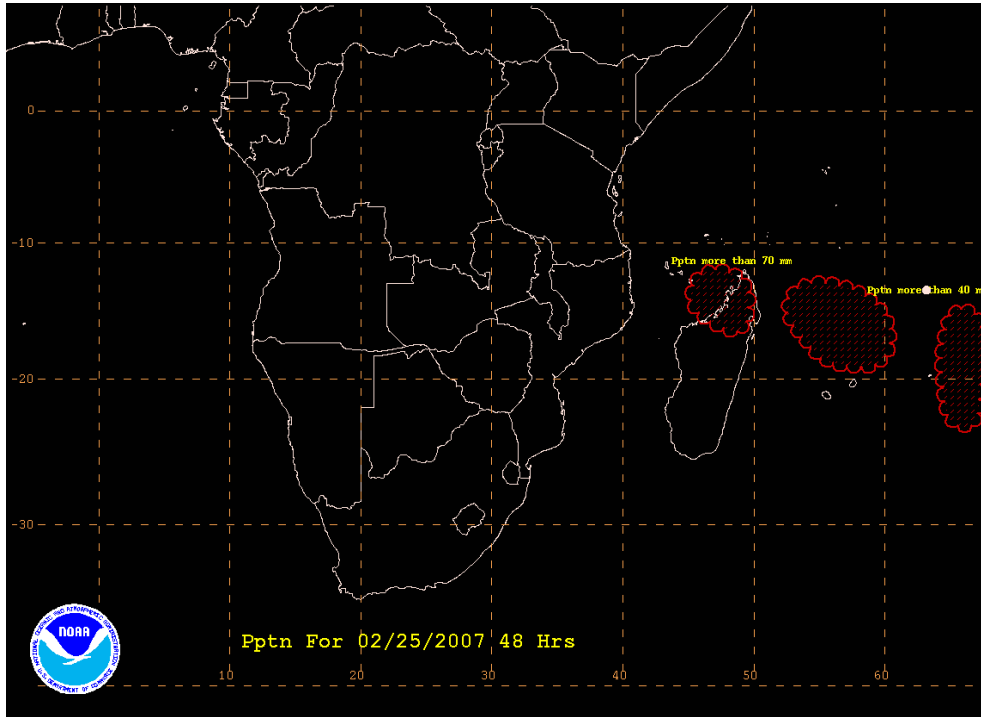
TROPICAL CYCLONE GAMEDE TRACK AS ISSUED BY JTWC



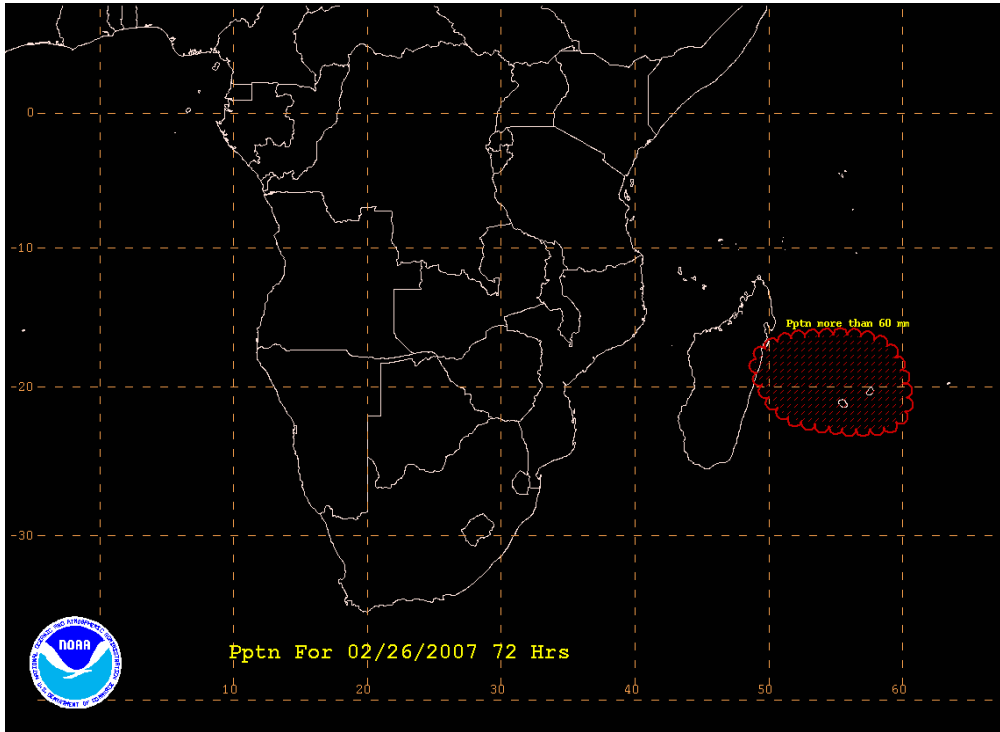
FORECAST MAP FOR DAY 1



FORECAST FOR DAY 2



FORECAST MAP FOR DAY 3



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