



Forecast guidance for Severe Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 22nd February 2007

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

FORECAST DISCUSSION 14H00 EST 22nd February 2007

Valid: 00Z 23rd February 2007- 00Z 25th February 2007.

WARNING :

Tropical Cyclone 14S (Favio)

Position: 221200Z --- near 21.7S 35.1E

*12 hours forecast valid at 230000Z: Position--- 20.4S 34.0E
Max sustained winds: 065 KT, Gusts 080 KT, dissipating as a significant tropical cyclone
over land vector to 24 hr posit: 320 deg/ 08 KT*

*24 hours forecast valid at 231200Z: Position--- 19.1S 32.9E Max sustained winds - 030
KT, gusts 040 KT dissipated as a significant tropical cyclone over land*

*Remarks: 221500z position near 21.4S 34.8E, maximum significant wave height at
221200Z is 20 feet.*

Tropical Cyclone 15s (Gamede)

Position: 220600Z---near 14.3S 65.3E

*Forecast valid at 221800Z: Position--- 14.7S 62.6E; Max sustained winds - 070 KT,
Gusts 085 KT.*

*24 hours forecast valid at 230600Z: Position---15.0S 59.9E; Max sustained winds - 075
KT, Gusts 090 KT*

*36 hours forecast valid at 231800Z: Position---15.0S 57.7E
Max sustained winds - 080 KT, Gusts 100 KT.*

*Extended Outlook:- 48 hrs forecast valid at 240600z: Position---15.0S 55.8E; Max
sustained winds - 090 KT, Gusts 110 KT*

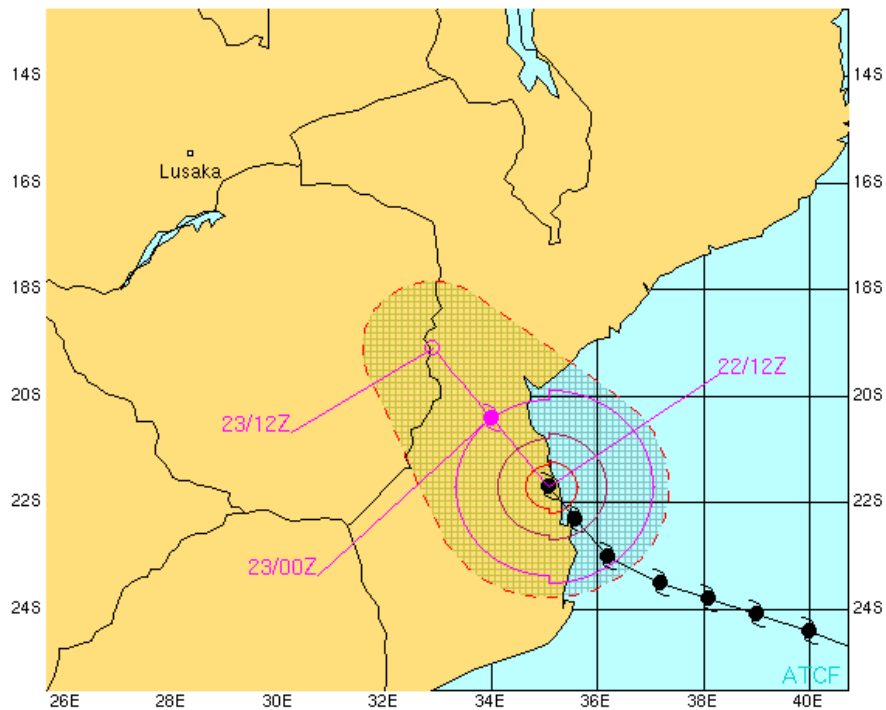
Remarks: 220900z position near 14.4S 64.6E, Maximum significant wave height at

At T+24 hrs, the general flow pattern at 200hpa over Southern Africa (South of the Equator) shows a weak westerly trough to the south of the sub continent lying over the 25°E longitude, in line with an easterly trough, causing some slight convergence over most of South Africa stretching into the western half of Zambia. A high pressure system with two cells centered at 20°S 16°E and at 24°S 52°E is causing divergence over the rest of the sub continent, implying that at the surface convergence prevails over most parts of the sub continent. At T+48 hrs the westerly trough shifts eastwards to the longitude 28°E, and causes convergence over southeastern South Africa. Otherwise anticyclonic flow prevails over the rest of the sub continent. At T+72 hrs the general flow pattern is similar to that at T+48 hrs.

At 500hpa, the T+24 hrs prognosis depicts the St Helena high pressure system with two cells. Only the cell located at 27°S 23°E has some influence over the sub continent since it is causing divergence over Namibia, Botswana and South Africa. The rest of the sub continent is under a trough with a series of lows lying over southwestern Angola, western Zambia, central Mozambique and northeastern Madagascar. At T+48 hrs the general flow pattern is maintained. At T+72 hrs the bud off high of the St Helena high pressure system extends its ridge to southern Angola also. The trough is pushed to central Zambia stretching into Madagascar. The extreme northeastern parts of the sub continent are under the ridge of the Mascarene high.

At 850hPa, the general flow pattern at T + 24 hrs shows the St. Helena high with its centre located at 30°S 10°W, but its ridge is not reaching the sub continent. The Mascarene high has its centre located at 32°S 55°E, and it is ridging into southeastern 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. A Tropical cyclone (Flavio) can be seen over Mozambique/Mozambique channel. 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.

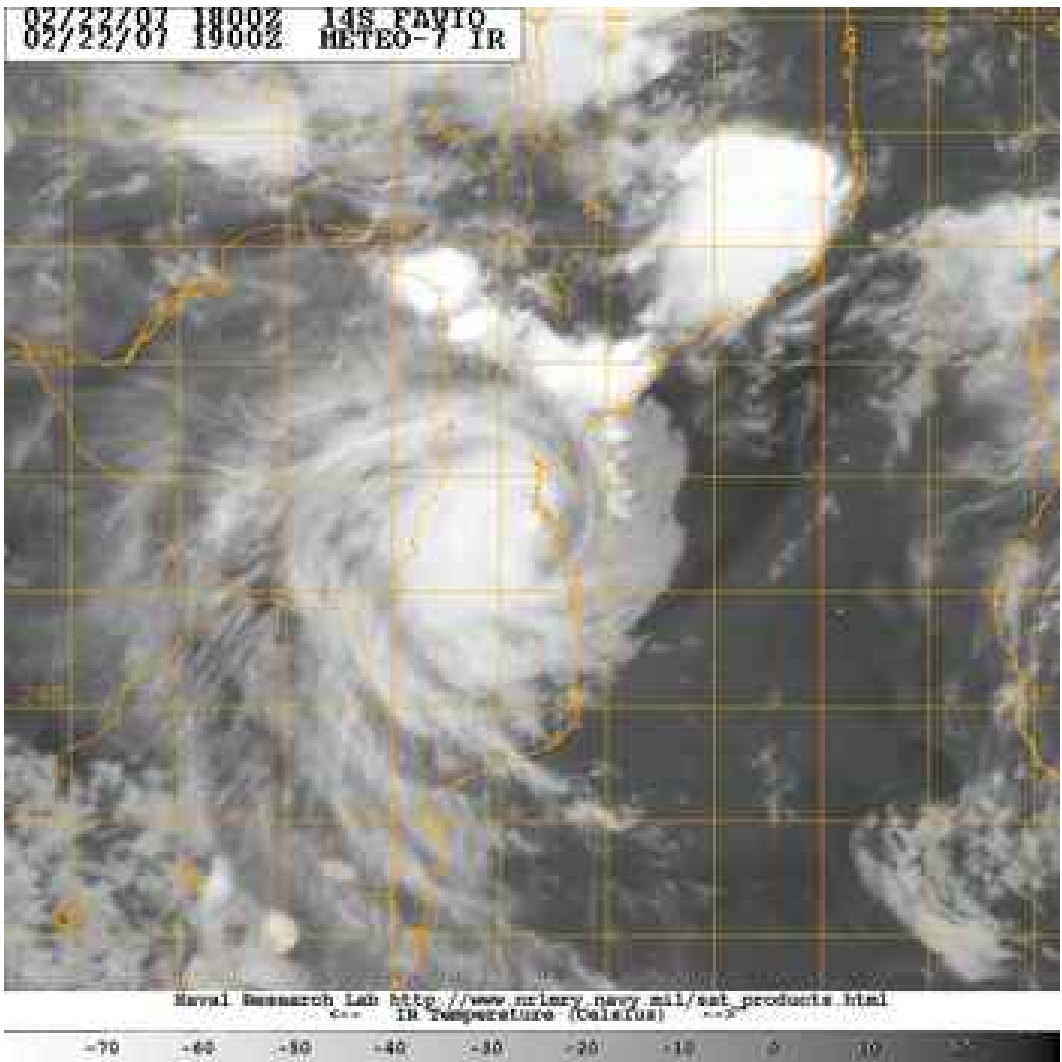


TROPICAL CYCLONE 14S (FLAVIO) WARNING #17
 221200Z POSIT: NEAR 21.7S 35.1E
 MOVING 320 DEGREES TRUE AT 08 KNOTS
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 20 FEET
 22/12Z, WINDS 090 KTS, GUSTS TO 110 KTS
 23/00Z, WINDS 065 KTS, GUSTS TO 080 KTS
 23/12Z, WINDS 030 KTS, GUSTS TO 040 KTS

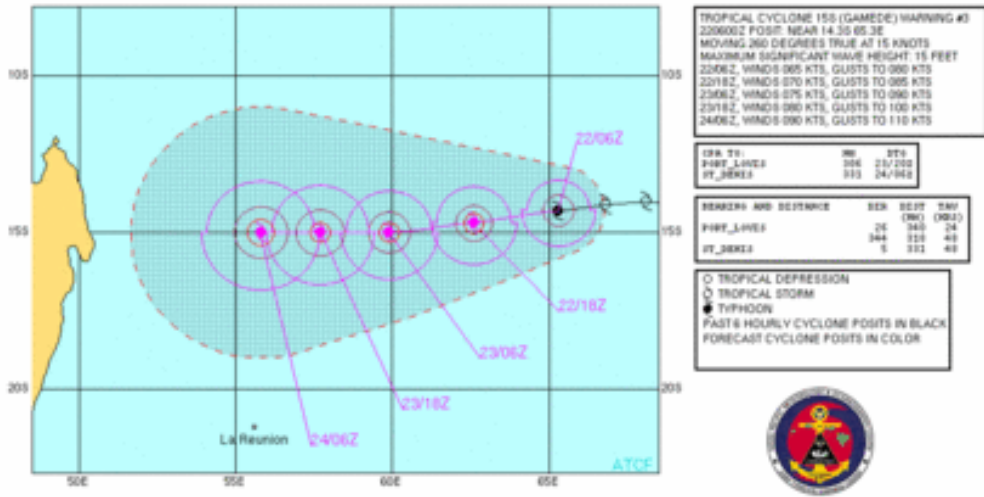
○ TROPICAL DEPRESSION
 ○ TROPICAL STORM
 ● TYPHOON
 PAST 6 HOURLY CYCLONE POSITS IN BLACK
 FORECAST CYCLONE POSITS IN COLOR



TROPICAL CYCLONE FLAVIO TRACK AS ISSUED BY JTWC

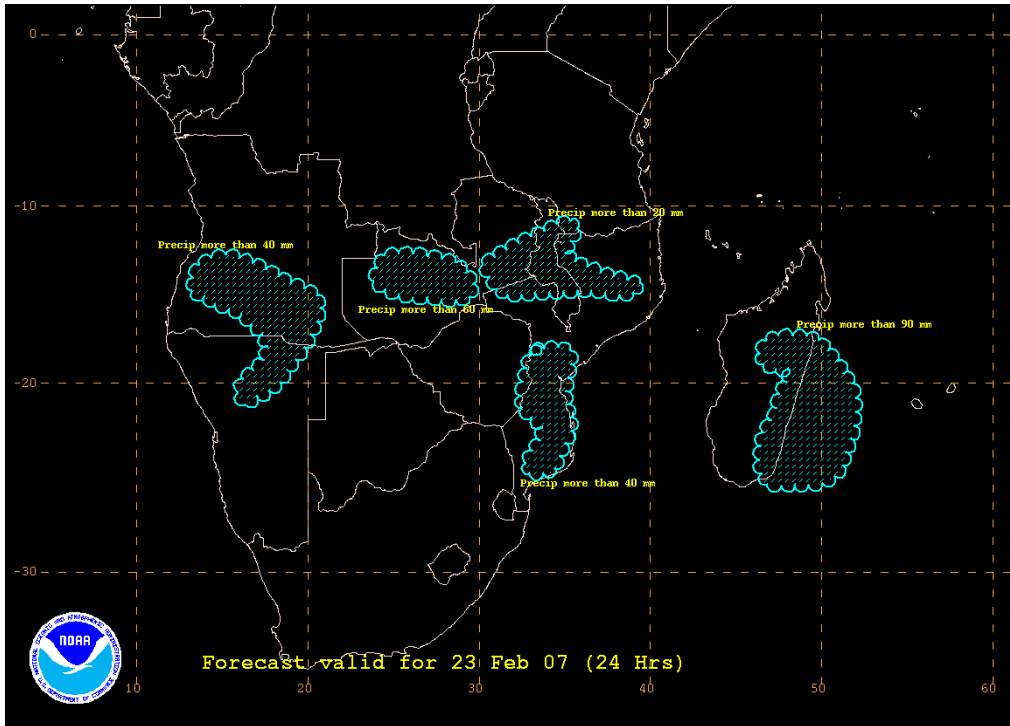


Satellite Picture depicting the Tropical Cyclone Favio

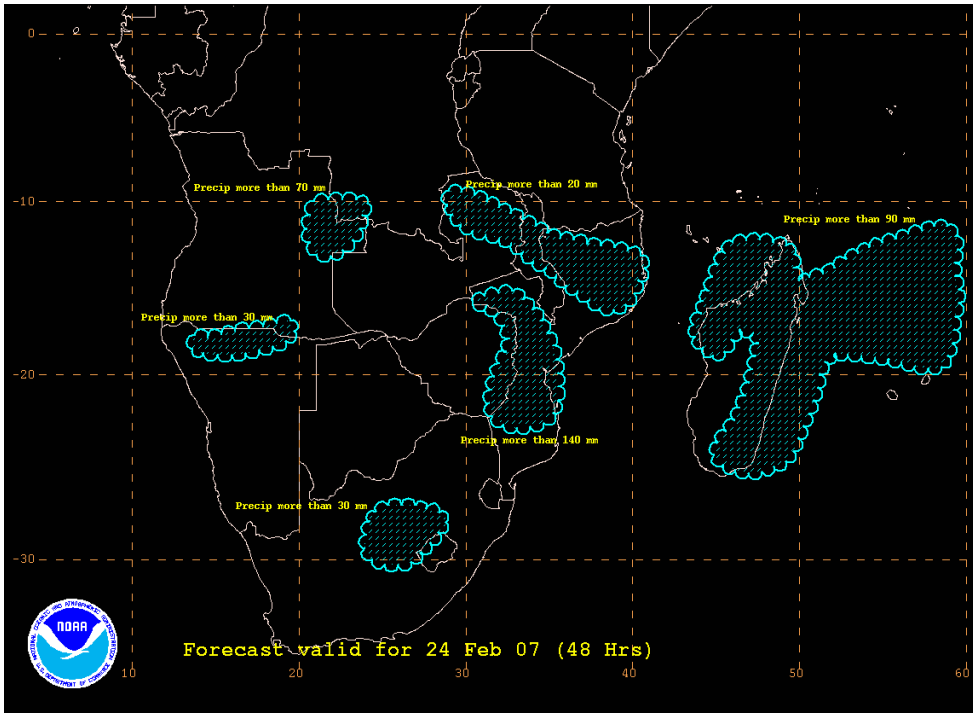


TROPICAL CYCLONE GAMEDE TRACK AS ISSUED BY JTWC

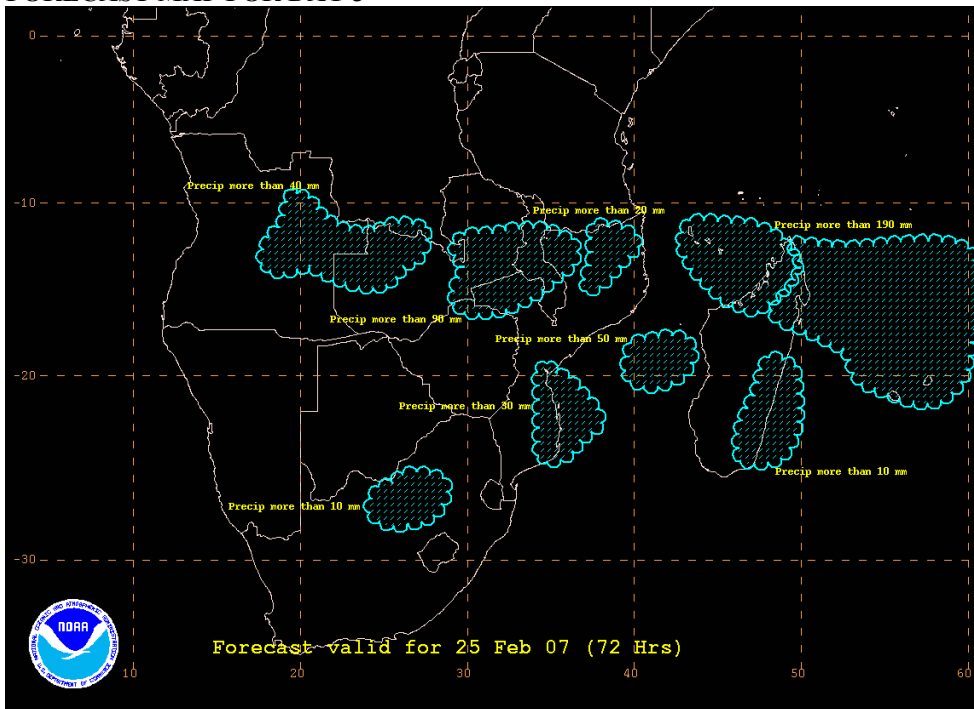
FORECAST MAP FOR DAY 1



FORECAST FOR DAY 2



FORECAST MAP FOR DAY 3



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