



Forecast guidance for Severe Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 05th March 2007

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

FORECAST DISCUSSION 14H00 EST 05th March 2007

Valid: 00Z 06th March 2007- 00Z 8th March 2007.

At T+24 hrs, the general flow pattern at 200hpa over Southern Africa (South of the Equator) shows a high pressure system with two cells that are centered at 19°S 24°E and at 34°S 42°E, causing divergence over most parts of the sub continent, except over the southern parts of South Africa which are under convergence due to a trough. There is a trough lying to the southeast of Madagascar. At T+48 hrs a back hanging westerly trough with its southeast axis lying at 60°S 25°E and its northwest axis lying at 24°S 5°W is approaching the southwestern coast of the sub continent. The trough to the southeast of Madagascar has shifted westward such that it causing convergence over southern Madagascar. Over the rest of the sub continent, there is no significant change in the general flow pattern. At T+72 hrs, anticyclonic flow prevails over the sub continent, hence divergence.

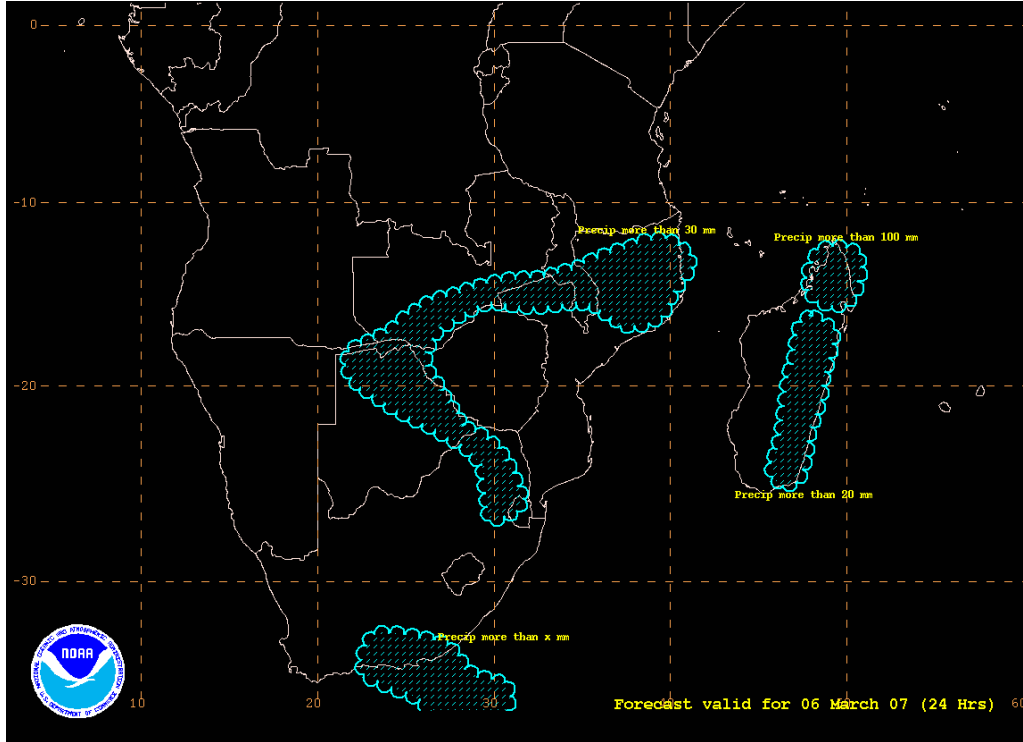
At 500hpa, the T+24 hrs model shows the St Helena high pressure system with two cells, with one cell centered at 30°S 11°E and another cell centered at 11°S 46°E, ridging into most parts of the sub continent. The exception is over southeastern South Africa which is under convergence due to a trough. At T+48 hrs, anticyclonic flow prevails over most parts of the sub continent, except over southern Madagascar where there is a trough. At T+72 hrs, another trough is causing some slight convergence over the extreme southwestern parts of the sub continent. Otherwise there is no significant change in the general flow pattern over the rest of the sub continent.

At 850hPa, the T+24 hrs prognostic chart shows the St Helena high with its centre located at 31°S 11°W, and is ridging into the west and the southeastern parts of the sub continent. The Mascarene high has its centre located at 36°S 61°E, and has a bud-off high lying to the east of the northeastern coast of the sub continent, causing divergence over the northeastern parts of the sub continent stretching into most parts of Madagascar. Between the high pressure systems there is trough which is inducing convergence over the rest of the sub continent. At T+48 hrs, the ridge of the St Helena high has pushed the trough eastwards such that it is lying over D.R. Congo/Uganda border, stretching into the southeastern parts of the sub continent. The position of the Mascarene high has not

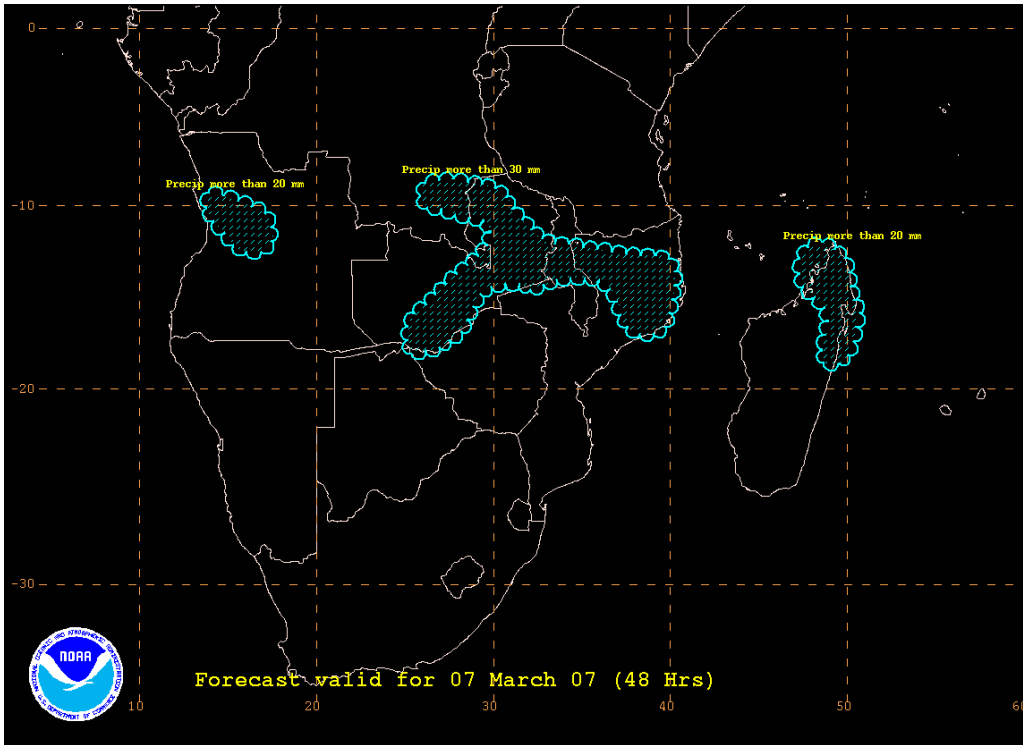
changed significantly. At T+72 hrs there is no significant change in the general flow pattern.

The patterns of the UK- Met, ECMWF and GFS models are in agreement.

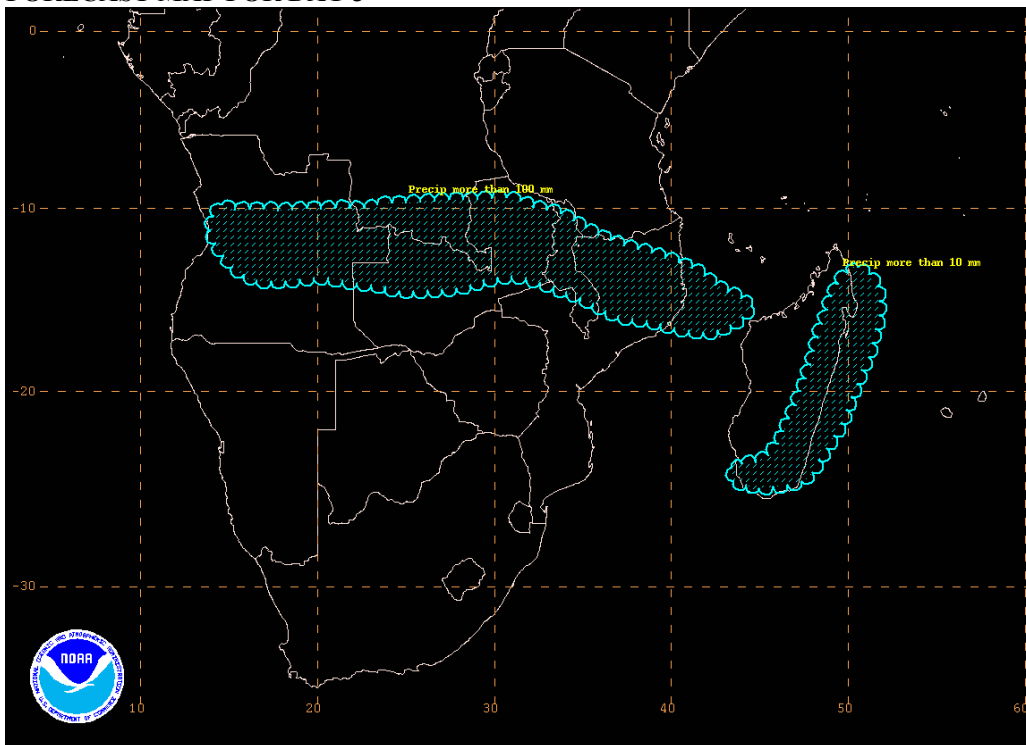
FORECAST MAP FOR DAY 1



FORECAST FOR DAY 2



FORECAST MAP FOR DAY 3



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