



Forecast guidance for Severe Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 08th May 2007

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

FORECAST DISCUSSION 14H00 EST 08th May 2007

Valid: 00Z 09th May 2007- 00Z 11th May 2007.

FLOW AT 200MB

At T+24 hrs, the general flow pattern over Southern Africa (South of the Equator) shown by the GFS, ECMWF and UK-MET models indicates a trough lying above the southern parts of the sub continent, associated with west-northwesterly wind up to 80 kt. A shallow trough is lying to the western coast of Madagascar, causing convergence over these areas. A high pressure system cell lying above western Tanzania (8°S 32°E) is causing divergence over the rest of the sub continent.

At T+48 hrs, the trough which was lying above the southern parts of the sub continent has slightly shifted eastward, causing convergence over northeastern South Africa, central and northern Botswana, northern Namibia and southern extreme of Mozambique. The northwesterly wind, associated to the trough has intensified, due to the deepening of the system. The shallow trough which was lying to the western coast of Madagascar has shifted to the northeast, weakening, due to the ridge. Divergence over the rest of the sub continent is maintained.

At T+72 hrs, there is no significant change in the general flow pattern except that the shallow trough which was lying above northeastern coast of Madagascar has weakened.

FLOW AT 500MB

At T+24 hrs, the GFS models show a shallow trough lying above southern coast of the sub continent, aligned with the upper level trough with a closed circulation over central Botswana (21°S 23°E), causing convergence over these areas. Slight convergence can be seen over southern Madagascar, due to a shallow trough. The St Helene high pressure system centered at 25°S 3°W is throwing a ridge into the southwestern coast of the sub continent. The Mascarene high has two cells, centered at 30°S 49°E and at 15°S 43°E ridging the rest of the sub continent.

At T+48 hrs, the shallow trough which was lying above southern coast of the sub continent has shifted eastward. The shallow trough which was lying over southern

Madagascar has also shifted eastward. The trough with a closed circulation over central Botswana has weakened in amplitude, due to the blocking of the high pressure cells. The three models show that the rest of the sub continent is under divergence of the St Helene and the Mascarene high.

At T+72 hrs, there is no significant change in the general flow pattern, except that the shallow trough which was to the east of the southern coast of the sub continent has linked the shallow trough to the southern Madagascar.

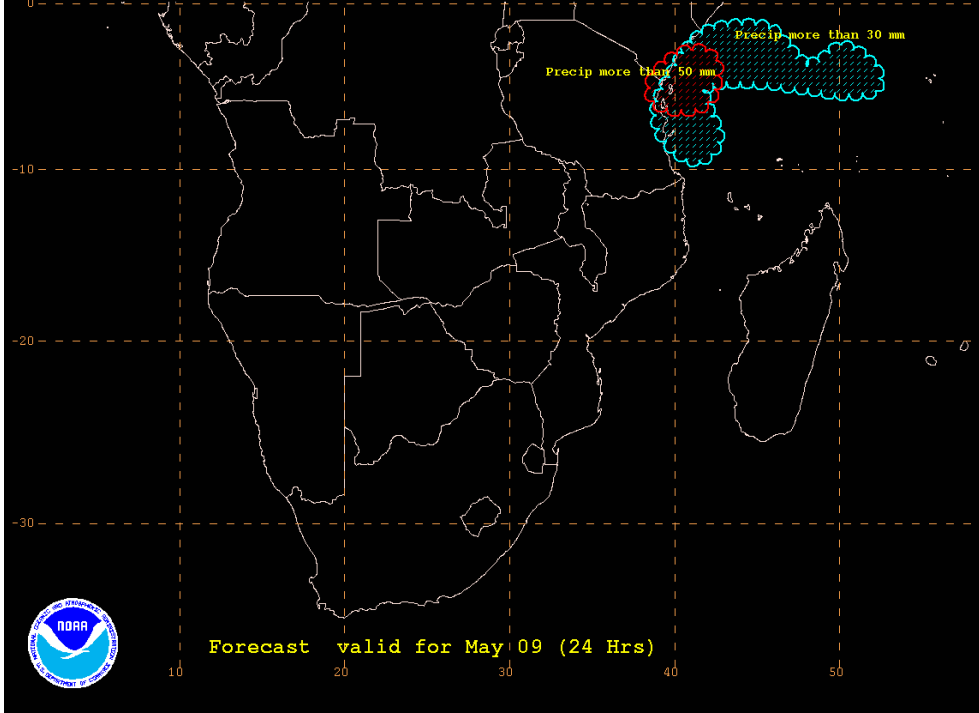
FLOW AT 850MB

At T+24 hrs, there is a shallow trough lying over southern coast of South Africa, causing convergence over these areas. Areas of convergence can also be seen over northeastern coast of Tanzania and over the southeastern coast of Kenya, due to a southeasterly trough. The St Helene high cell is centered at 29°S 1°W, ridging the southwestern coast of the sub continent. The Mascarene high centered at 31°S 51°E is throwing a ridge into the rest of the sub continent and causing onshore flow along the eastern coast of Madagascar, northeastern coast of Mozambique and also along the southeastern coast of Tanzania.

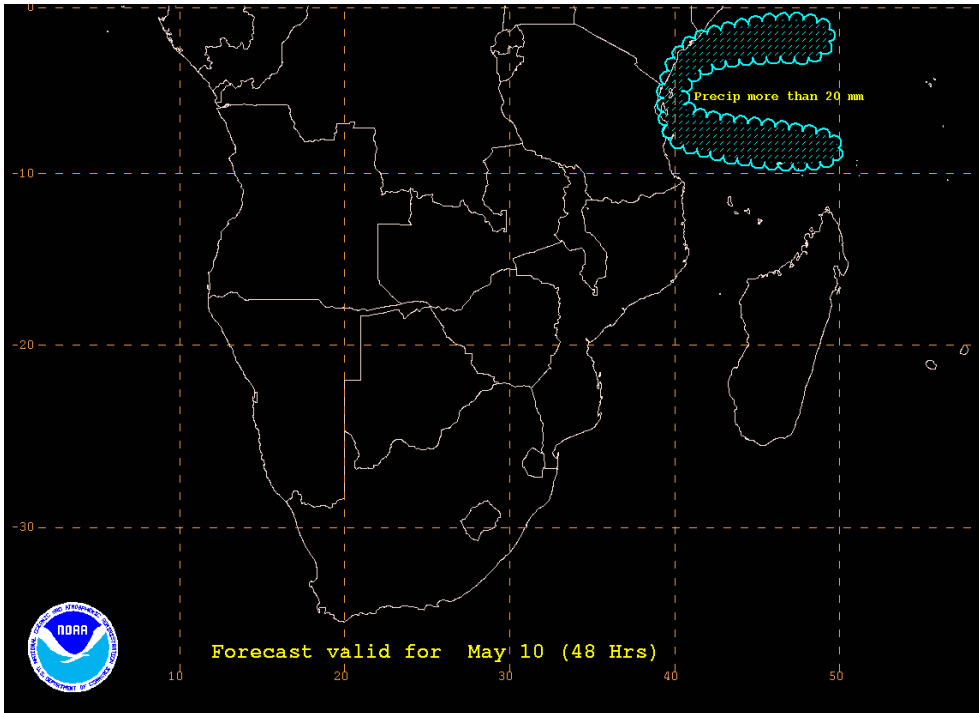
At T+48 hrs, there is no significant change in the general flow pattern, except that the shallow trough which was lying over southern coast of South Africa has slightly shifted eastward. Onshore flow along eastern Madagascar, southeastern coast of Tanzania and northern coast of Mozambique prevails.

At T+72 hrs, the shallow trough which was lying over southeastern coast of South Africa has shifted further east. Areas which are to the north of 10°S are under convergence due to the southeasterly trough. The St Helene high has shifted eastward, throwing a ridge over the rest of the sub continent, hence subsidence.

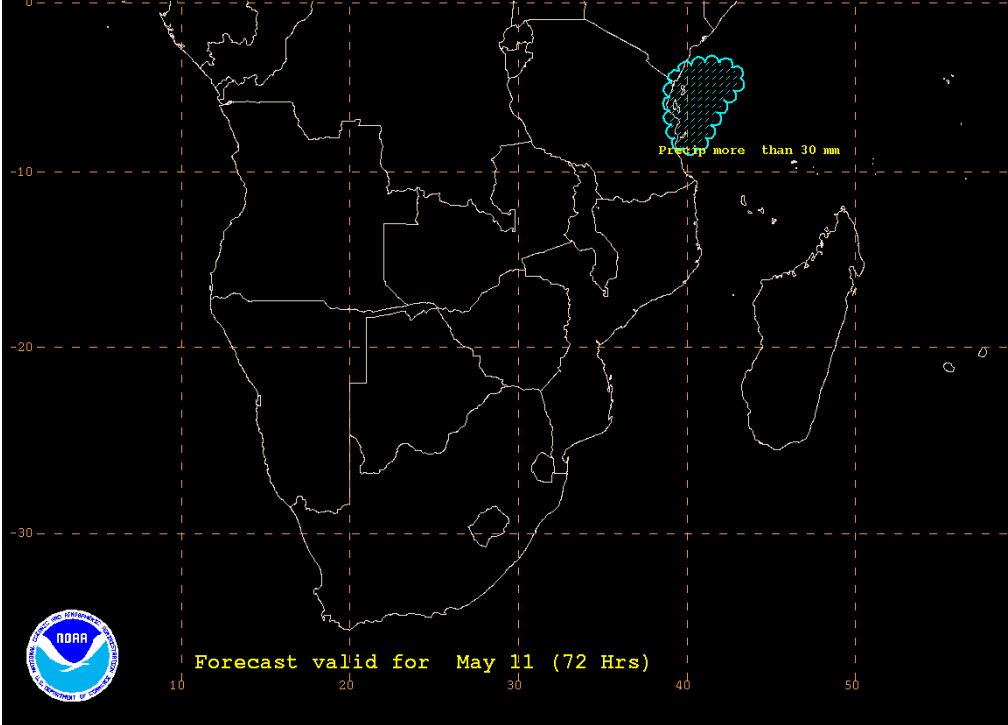
FORECAST MAP FOR DAY 1



FORECAST MAP FOR DAY 2



FORECAST MAP FOR DAY 3



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