



Forecast guidance for Severe Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 30th May 2007

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

FORECAST DISCUSSION 14H00 EST 30th May 2007

Valid: 00Z 31st May 2007- 00Z 02nd June 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 shallow trough lying above the northeastern parts of Mozambique, weakening. There is a trough above the southwestern parts of the sub continent, causing convergence over these areas. Two high pressure system cells, centered to the northwest of the coast of Angola (10°S 8°E) and at 9°S 70°E, are causing divergence over the rest of the sub continent.

At T+48 hrs, the trough which was lying above the southwestern parts of the sub continent has slightly shifted eastward stretching into western Zambia, with its southeast axis lying at 58°S 70°E and its northeast axis lying at 10°S 28°E . Subsidence over the rest of the sub continent prevails.

At T+72 hrs, the two axis of the trough which was lying above the southwestern parts of the sub continent has detached, due to a ridge near 49°S 39°E, the northeast axis has shifted eastward, causing convergence over eastern South Africa, southeastern Botswana, over Zimbabwe and Zambia. Over the rest of the sub continent, there is no significant change in the general flow pattern.

FLOW AT 500MB

At T+24 hrs, the models show a trough to the southeast of the southern coast of South Africa, linking to a trough over southwestern parts of the sub continent, causing convergence over these areas. There is a deep low further east of the coast of Kenya. A sub tropical high is lying to the southwest of the southern coast of South Africa. The Mascarene high cell centered at 12°S 71°E and the St Helene high pressure cell with its center located at 11°S 8°W are ridging the rest of the sub continent.

At T+48 hrs, the trough which was to the southeast of the southern coast of South Africa has shifted eastward, due to the ridge of the sub tropical High. The trough which was lying over the southwestern coast of the sub continent (quasi-stationary) has increased in

amplitude, developing a upper level low with a cold-core. The St Helene high is hardly ridging the northwestern coast of the sub continent. Subsidence of the Mascarene high prevails over the rest of the sub continent.

At T+72 hrs, the trough associated with a upper level low is shifting northeastward, stretching into central Angola, causing convergence over Botswana, southwestern South Africa and over southern Angola. The rest of the sub continent is under divergence.

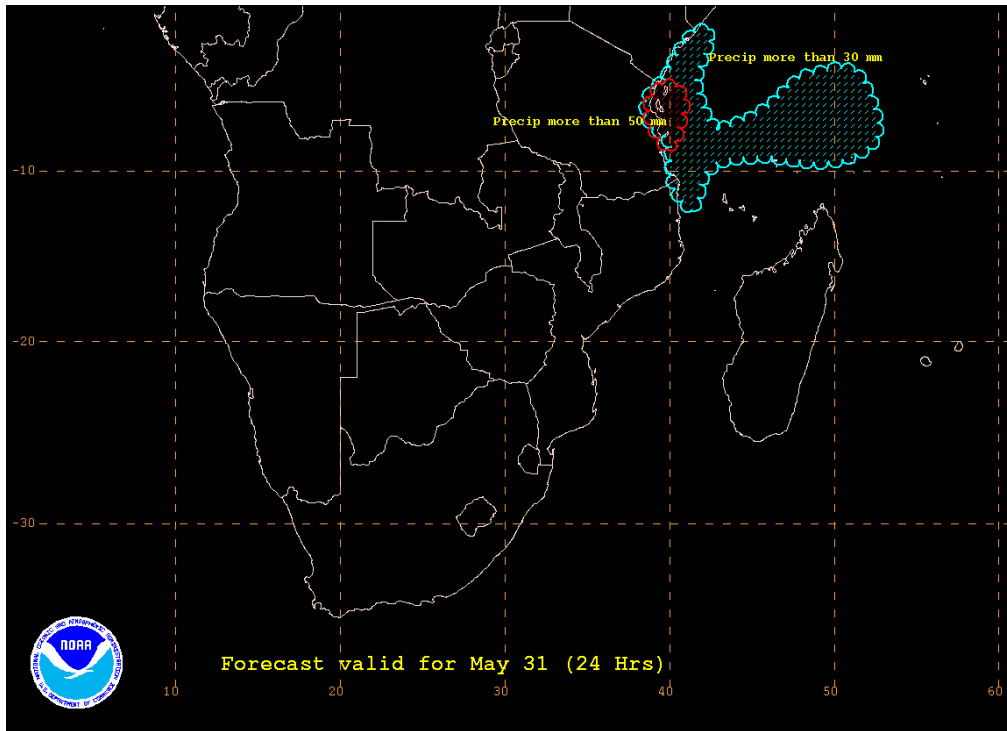
FLOW AT 850MB

At T+24 hrs, there is a trough to the southeastern coast of the sub continent, causing convergence over these areas. Areas of convergence can also be seen over central South Africa and over the Namibian/Botswana border. The Mascarene high pressure cell centered at 25°S 59°E is ridging the most of the sub continent, causing onshore flow along the coast of Kenya, Tanzania and also along the northeastern extreme of the coast of Mozambique. The St Helene high centered at 21°S 9°W, and the sub tropical high pressure cell centered at 44°S 20°E, are ridging the western coast of the sub continent.

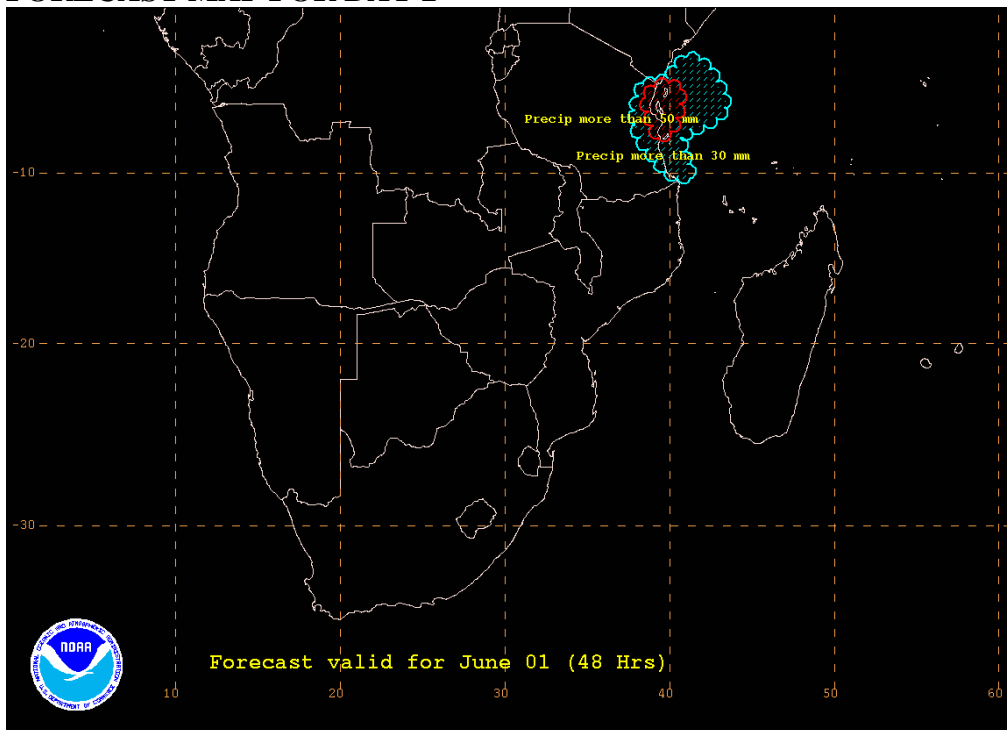
At T+48 hrs, the trough which was to the southeastern coast of the sub continent has shifted further east has the sub tropical high has also shifted eastward ridging in from the southeast and causing onshore flow along the coast of Mozambique. Convergence over Namibia and Botswana prevails. Onshore flow along the coast of Tanzania and Kenya, sustained by a upper level trough, is maintained. Over rest of the sub continent there is no significant change in the general flow pattern.

At T+72 hrs, there is no significant change in the general flow pattern except that, there is a cut-off low to the northwest of the coast of Namibia.

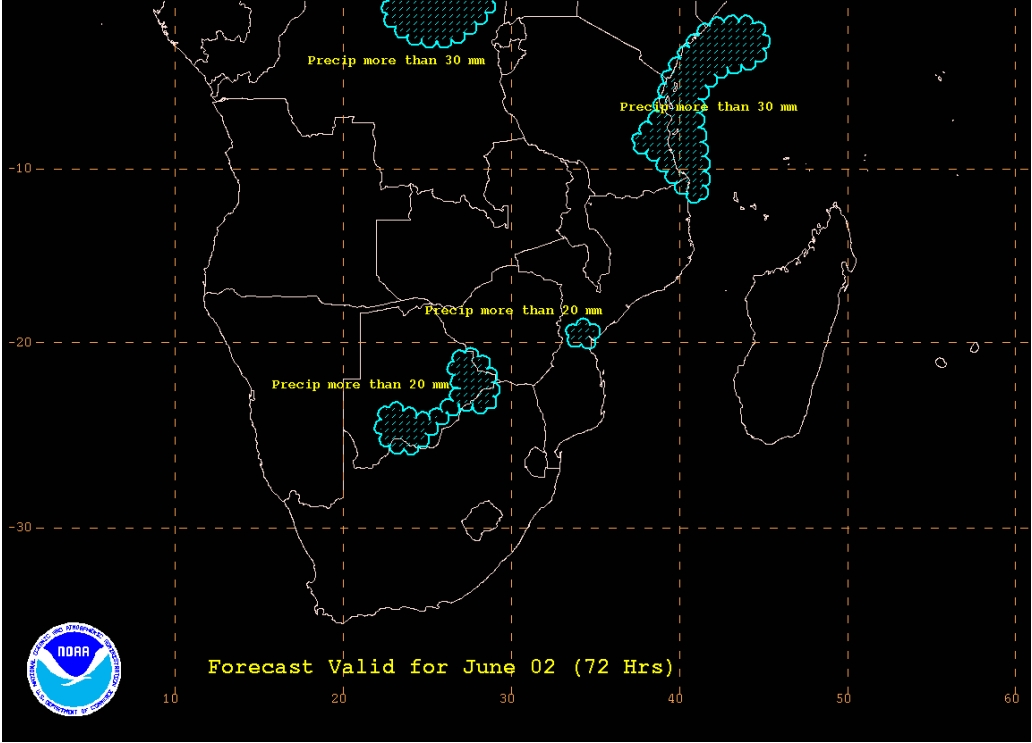
FORECAST MAP FOR DAY 1



FORECAST MAP FOR DAY 2



FORECAST MAP FOR DAY 3



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