



Forecast guidance for Severe Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 09th February, 2007

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

FORECAST DISCUSSION 14H00 EST 09th, February, 2007

Valid: 00Z 10th, February, 2007- 00Z 12th, February 2007.

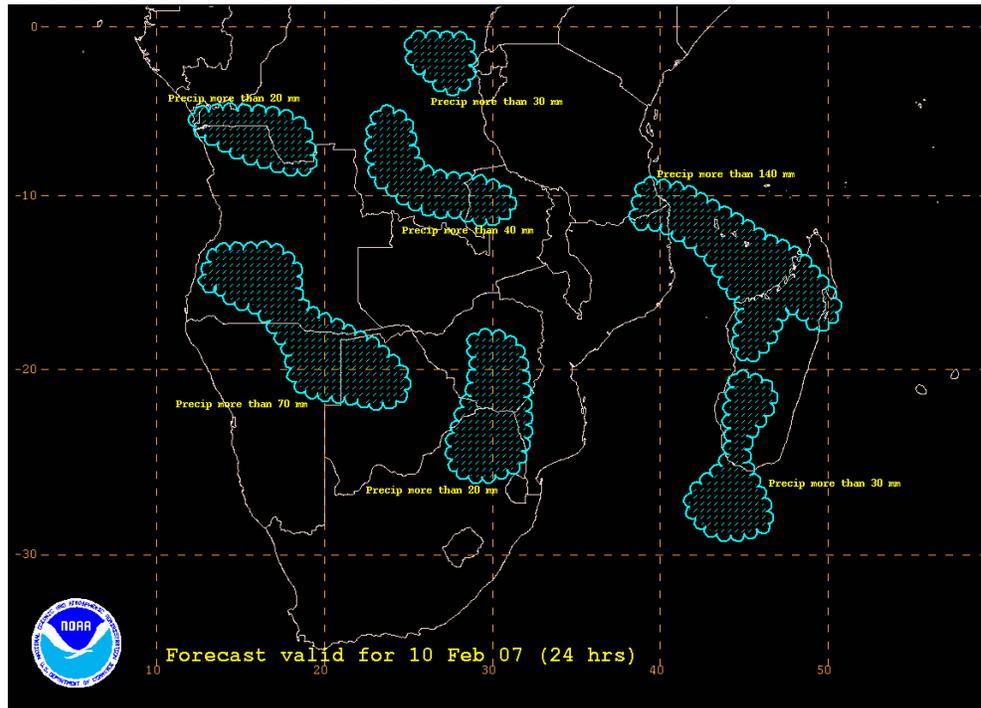
At T+24 hrs, the general flow pattern at 200hpa over Southern Africa (South of the Equator) indicates a sharp upper air trough causing convergence over the southwestern parts of South Africa. This trough is associated with a cold front at the surface. A short wave trough is causing convergence over southern Mozambique. A high pressure system centered at 24°S 30°E is causing divergence over the rest of the sub continent, implying that convergence prevails at the surface over most parts of the sub continent. At T+48 hrs the general flow pattern is maintained. At T+72 hrs the trough shifts from southwestern South Africa to extreme southern South Africa. Otherwise the general flow pattern has not changed significantly over the rest of the sub continent.

At 500hpa, a sharp trough is making its way to the SW part of S.A. in association with the cold front at the surface which is also moving through. The Mascarene high is to the southeast of Madagascar with its center located at 40°S 61°E, so it does not have any significant influence over the sub continent. The extreme northwestern parts of the sub continent are under convergence caused by a back hanging westerly trough with its northwest axis lying at 14°S 20°E and its southeast axis lying at 50°S 30°E. Northern Angola is under convergence due to a low centered at 09°S 22°E, and Madagascar also, which is under the influence of a trough. The St Helena high has split into two cells centered at 32°S 12°W and at 09°S 03°W. At T+48 hrs the only significant change is that the trough over S.A. has drifted eastwards and intensifies in the process forming a cut-off low along the south coast. At T+72 hrs the cut-off low has significantly shifted eastwards such that it is causing convergence over South Africa, southern Botswana and southern Mozambique. Over the rest of the sub continent the general flow pattern is similar to that at T+48 hrs.

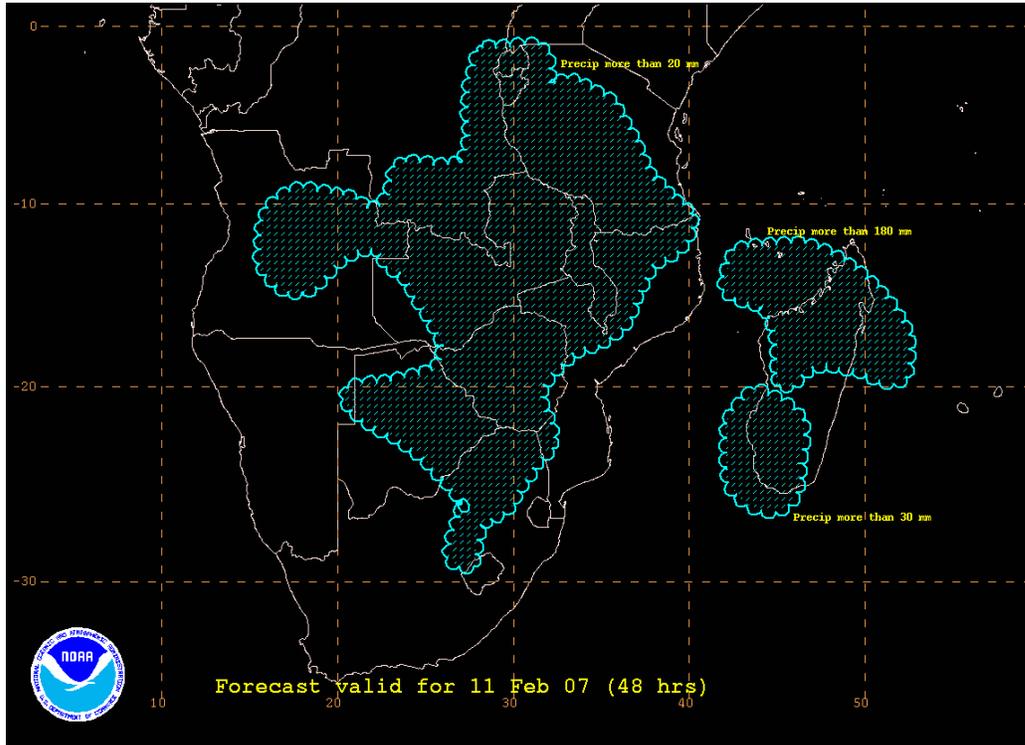
At 850hPa, the T + 24 Hrs prognosis shows the St Helena high with its centre located at 34°S 06°W, and it is ridging into the extreme southwestern parts of the sub continent.

The Meridional arm of the ITCZ is lying to the north of the sub continent. Area of convergence can be seen over Uganda due to the influence of Lake Victoria which modifies the weather of areas surrounding the lake. The Mascarene has its center at 40°S 60°E ridging into the extreme southeastern parts of the sub continent including southern Madagascar, while the cell lying at 5°S 70°E is ridging into the extreme northeastern parts. A deep trough is causing convergence over South Africa stretching into Angola, and further stretching into northern Madagascar. This trough has a series of lows with centers over South Africa, southern Angola and to the southeast of Madagascar. This trough is in line with a back hanging westerly trough which is to the south of the sub continent, with its northwest axis lying 34°S 10°E and its southeast axis lying at 60°S 29°E. At T + 48 Hrs and at T+72 hrs, the general flow pattern is maintained, implying that convergence prevails over most parts of the sub continent during the forecast period. The UK- Met and ECMWF models are generally in agreement with the GFS in terms of the positions of the systems.

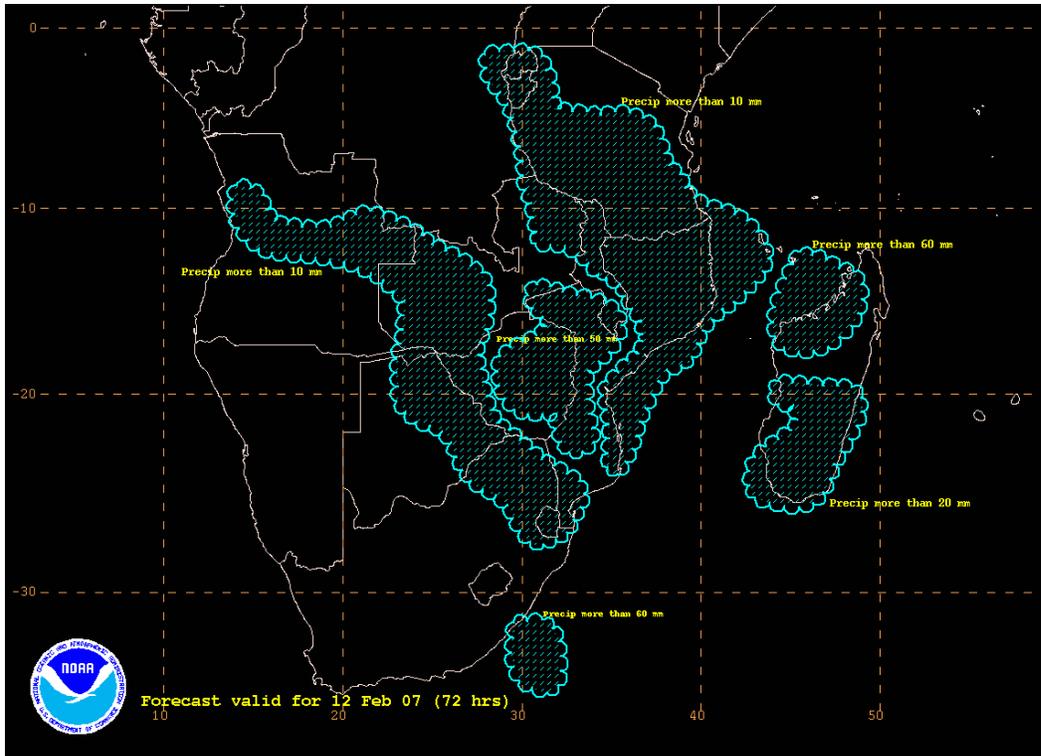
FORECAST MAP FOR DAY1



FORECAST MAP FOR DAY2



FORECAST FOR DAY 3



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