



Forecasting guidance for Sever Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 08TH FEBRUARY 2008

**AFRICAN DESK
CLIMATE PREDICTION CENTRE
National Centers for Environmental Predictions
National Weather Service
NOAA
Camp Spring MD 20746**

**FORECAST DISCUSSION 14H00 EST, 08TH FEBRUARY 2008
Valid: 00Z 09TH FEBRUARY 2008-00Z 11TH FEBRUARY 2008**

1: 24HR RAINFALL FORECAST

DAY 1: 09TH FEB 2008

During this period, more than 30mm with a Probability Of Precipitation (POP) 50% is expected over southeastern Madagascar, 30% over northeastern Madagascar, northern Mozambique and central to western DRC; More than 20mm with POP 30% over southwestern to southern Tanzania, northern Malawi, northern Zambia and northern Namibia.

DAY 2: 10TH FEB 2008

During this period, more than 50mm with a POP 60% is expected over northern Madagascar; More than 40mm with POP 60% over northeastern Mozambique; More than 30mm with POP 40% over southwestern to southern Tanzania, northern Malawi and northern Mozambique; More than 20mm with POP 60% over central to northern Namibia, 50% over northern Zambia and southern DRC.

DAY 3: 11TH FEB 2008

During this period, more than 50mm with POP 70% is expected over northern Madagascar, More than 40mm with POP 60% over southwestern to southern Tanzania; More than 30mm with POP 60% over central to eastern Madagascar, 40% over central to northern Namibia, northern Zambia, southern DRC and northern Malawi; More than 20mm with POP 60% over eastern to southern Angola, 50% over central South Africa and 30% over northeastern Mozambique.

2: MODELS DISCUSSION:

Models comparison (Valid from 00Z; 08TH FEBRUARY 2008): There is an agreement of UK MET, ECMWF and GFS models. There are no major discrepancies between them.

FLOW AT 850MB

At T+24, a frontal system is expected to be situated southeast of Madagascar associated with a Low pressure system over the southeastern part of the country. A St Helena high pressure system is expected to be southwest of South Africa, centered at 38S 5E, ridging towards eastern South Africa and causing onshore flow on southern Mozambique. Strong convergence dominate central to western DRC, otherwise weak over northern Mozambique, western to southern Tanzania, Malawi, northern Zambia, eastern to southern Angola, northern Namibia and central South Africa.

At T+48, a frontal system has shifted further to the east and associated with strong convergence over northern Madagascar. A high pressure system which was located southwest of South Africa has shifted to the east, expected to be centered at 40S 30E, ridging towards northern South Africa and continues to cause onshore flow on southern Mozambique. Convergence prevails over eastern to southern Angola, northern Namibia, southern DRC, southern Tanzania otherwise a weak diffluent over Zambia, Botswana and Zimbabwe.

At T+72, a high pressure system has almost maintained the position, continuing ridging towards northern South Africa and causing onshore flow on southern Mozambique. A new frontal system is expected to be located to the southwest of South Africa where a St Helena high pressure system is expected to be ridging behind it. Convergence continues to dominate northern Madagascar, central to western DRC, Lake Victoria Basin, central to southern Angola, Namibia otherwise a weak convergence over northern Mozambique, Malawi, central to southern Tanzania and southern DRC.

FLOW AT 500MB

At T+24, a weak high pressure system sits southwest of South Africa and ridging towards Botswana. Westerlies to northwesterlies dominate DRC to Tanzania and associated with convergence over there. Convergence is expected to prevail over Namibia, Angola, northern Mozambique and northern Madagascar.

At T+48, a weak high pressure system is expected to sit over eastern South Africa and ridging towards Botswana. Weak confluence is expected to prevail over northern Mozambique, western to southern Tanzania, northern Madagascar, southern Tanzania and western Angola.

At T+72, a weak high pressure system is expected to shift to the east of South Africa and continues to ridge towards central part of the country. Confluence is expected to continue prevail over eastern DRC, southern Tanzania, northern Mozambique, northern Malawi, northern Zambia, southern Angola, northern Madagascar and Angola.

FLOW AT 200MB

At T+24, a strong divergence is expected to dominate over northern Madagascar. A weak high pressure system is expected sits over northern Botswana and causing divergence over there. A trough system is expected to be situated to the east of South Africa, together with a high pressure system over Botswana, they both contributes towards strong southwesterlies over northern South Africa.

At T+48, divergence dominates northern Mozambique, northern Madagascar and southern Tanzania. A high pressure over northern Botswana and a trough system east of South Africa are expected to maintain their positions and continue to contribute towards strong southwesterlies over northern South Africa.

At T+72, divergence is expected to dominate northern Madagascar, northern Mozambique, southern Tanzania, Malawi and northern Zambia. A trough system which was to the east of South Africa is expected to shift slightly to the east and a weak high pressure system which was over northern Botswana is expected to retrograde to the west, centered over northern Namibia. These two systems are expected to contribute toward strong southwesterlies over South Africa and Botswana but westerlies over southern Zimbabwe.

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