



Forecasting guidance for Sever Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 07th FEBRUARY 2008

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

**FORECAST DISCUSSION 14H00 EST, 07TH FEBRUARY 2008
Valid: 00Z 08TH FEBRUARY 2008-00Z 10TH FEBRUARY 2008**

1: 24HR RAINFALL FORECAST

DAY 1: 08TH FEB 2008

During this period, more than 40mm with a Probability Of Precipitation (POP) 30% is expected over southern Madagascar; More than 20mm with POP 70% over northern Madagascar, 60% over northern Mozambique, 30% over western to southern Tanzania, northwestern Madagascar, northern Malawi, northern and western Zambia, southern Angola and northern Namibia.

DAY 2: 09TH FEB 2008

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

DAY 3: 10TH FEB 2008

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

2: MODELS DISCUSSION:

Models comparison (Valid from 00Z; 07TH 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 Mascarine high pressure system has situated far to the east followed behind by a frontal system associated with a Low pressure system over southern Madagascar. A St Helena high pressure system is centered at 37S 4W ridging strongly on the southern South Africa and causing onshore flow over southern Mozambique. Strong convergence dominates southern Angola, northern Namibia, northern Botswana and Malawi, otherwise weak over southern Zambia, central to northern South Africa, southern and northern Zambia, northern Mozambique, southwestern to southern Tanzania and southern DRC.

At T+48, a frontal system has shifted to the east and associated with a Low pressure system causing convergence on the southeastern Madagascar. A St Helena high pressure system has shifted further to the east, now centered south of South Africa at 43S 18E and continues to enhance onshore flow on southern Mozambique. Strong convergence continues to prevail over southern Angola and northern Namibia but weak over northern Mozambique, southwestern to southern Tanzania, western DRC, Lake Victoria Basin and central to eastern South Africa. Diffluent pattern prevail over Botswana, northeastern Tanzania and eastern DRC.

At T+72, a frontal system has shifted further to the east and associated with convergence over northern Madagascar. A high pressure system which was situated south of South Africa has shifted slightly to the east, now centered at 40S 33E causing onshore flow on southern Mozambique. Convergence continues to dominate northern Namibia, eastern to southern Angola, Zambia, southern DRC, northern Mozambique, southwestern to southern Tanzania, Lake Victoria Basin and Malawi.

FLOW AT 500MB

At T+24, a weak high pressure system sits southwest of South Africa and ridging towards the country. There is a trough system to east of South Africa. Weak convergence prevails over southern Zambia, Botswana and Zimbabwe. There is a long track of westerlies from western DRC to Tanzania.

At T+48, a weak high pressure system has slightly shifted towards southern South Africa extending a ridge towards Botswana and Zimbabwe. Convergence dominates central Mozambique and Zambia. Westerlies to northwesterlies continue to prevail over DRC and Tanzania and associated with convergence over those areas. A trough system which was situated to the east of South Africa has shifted east.

At T+72, a weak high pressure system has shifted to the eastern South Africa and ridging towards Botswana. Convergence prevails over Zimbabwe, northern Mozambique, western Zambia and southern Angola. There is divergence over eastern DRC otherwise northerlies to northwesterlies dominate Tanzania. A trough system has shifted further to the east, where the northern tip is touching southern Madagascar.

FLOW AT 200MB

At T+24, a weak high pressure associated with divergence sits over northern Namibia, Zambia, northern Mozambique and western Madagascar. There is a Low pressure system causing convergence over southern Namibia otherwise northern part of the sub continent is dominated by strong southeasterlies.

At T+48, a weak high pressure system which was situated to the west of Madagascar has shifted further to the west, now centered over northern Mozambique, causing divergence over there and ridging southwestwards. A Low pressure system which was located over southern Namibia has slightly filled up, together with a high pressure over northern Mozambique, they both contributes towards strong northwesterlies over eastern Namibia and southern Botswana.

At T+72, a weak high pressure system which dominating northern Mozambique has relaxed but still weak divergence prevails over the area. A weak high pressure system has developed on the northern Namibia, it is causing divergence over there. There is a trough system developed to the east of South Africa associated with very strong westerlies over southern Madagascar.

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