



Forecasting guidance for Severe Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 05TH MARCH 2008

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

FORECAST DISCUSSION 14H00 EST, 05TH MARCH 2008

Valid: 00Z 06TH MARCH 2008-00Z 08TH MARCH 2008

1: TROPICAL CYCLONE WARNING:

During the period, the Tropical cyclone JOKWE is expected to pass over the northern tip of Madagascar and progress southwestwards.

The path of the cyclone is expected to pass at the following positions:

46.2E 11.0S at 06th March 2008 00Z

43.7E 11.4S at 07th March 2008 00Z

41.4E 13.6S at 08th March 2008 00Z

2: 24 HR RAINFALL FORECAST

DAY 1: 06TH MARCH 2008

During this period, more than 50mm with a Probability Of Precipitation (POP) 60% is expected over northern Madagascar. More than 30mm with POP 50% over western Angola. More than 20mm with POP 40% over southern Tanzania, northern Mozambique, central to eastern Angola, western Zambia and South Africa.

DAY 2: 07TH MARCH 2008

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

DAY 3: 08TH MARCH 2008

More than 40mm with POP 50% is expected over northern Madagascar, 40% over western Angola. More than 30mm with POP 40% other central to northeastern Angola. More than 20mm with POP 50% over northern Mozambique and southeastern South

Africa, 40% over southern Tanzania, northern Malawi, northern Zambia, and southern DRC.

2: MODELS DISCUSSION:

Models comparison (Valid from 00Z; 05th March 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, Tropical cyclone Jokwe is expected to move westwards to 46.2E 11S. It will contribute to convergence over northern Madagascar, and southeasterly flow pattern over northern Mozambique. Diffluent flow pattern is expected over northeastern Tanzania and Zambia, while convergent flow is expected over northern DRC. A weak trough system with convergent flow is expected to prevail over western Angola and western Namibia. South Africa, Botswana and Zimbabwe are expected to be dominated by a ridge that is associated with the Mascarine high pressure system centered at 40E 35S.

At T+48, Tropical cyclone Jokwe is expected to fill up and to continue moving westward and maintaining an easterly flow pattern over northern Mozambique, Malawi and Zambia. Convergent flow is expected to continue prevailing over northern DRC. The trough which was over western Angola and Namibia is expected to shift slightly eastwards. The Mascarine high pressure system is expected to shift westward and to ridge over southeastern South Africa, Botswana, and Zimbabwe. A weak frontal system is expected to move in toward southwest of South Africa.

T+72hr, Tropical cyclone Jokwe is expected to continue filling up with a high pressure system centered east of Tanzania. These two systems are expected to contribute to diffluent flow pattern over southern Tanzania and Malawi, and weak convergence over northern Mozambique. A low pressure area is expected to prevail over central Angola associated with a weak trough over northwestern Namibia. The frontal system which was located southwest of South Africa is expected to move eastwards.

FLOW AT 500MB

At T+24, Wind shear is expected to prevail between 850hPa and 500hPa levels around 46.2E 11S, and it will weaken the Tropical Cyclone Jokwe. A middle level convergent flow is expected over western Zimbabwe and northern Botswana. A middle level Low pressure system is expected over western Angola while a high pressure will dominate the southern part of the subcontinent.

At T+48, a high pressure system is expected to dominate over central part of Madagascar causing convergence over the northern part of the country and an onshore flow pattern over northern Mozambique. A convergent flow area is expected over southern Zimbabwe and northern Botswana while a high pressure system is expected to continue prevailing over the southern part of the subcontinent.

At T+72, a high pressure system is expected to continue dominating over Madagascar and causing onshore flow pattern over northern Mozambique. An easterly flow pattern is

expected to prevail over Tanzania, Malawi, northern Zambia, DRC, while convergent flow is expected over western Angola, southern Zimbabwe, eastern Botswana and northeastern South Africa.

FLOW AT 200MB

At T+24, an upper level divergent area is expected to be centered at 50E 16S associated with a high level ridge over southeastern Tanzania and northern Mozambique causing the Tropical Cyclone Jokwe to track westwards. An upper level trough is expected to prevail over southeastern Angola, southern Zambia, western Zimbabwe, and southern Mozambique, and to contribute to upper level convergence over northern Zambia and central Mozambique. An upper level high pressure system is expected to be centered at 10E 20S ridging over Namibia, southern Botswana and northeastern South Africa. A divergent flow area is expected over central DRC.

At T+48, an upper level divergent flow area is expected to persist over northern Madagascar and to ridge over northern Mozambique and southern Tanzania and associated with a convergent flow pattern over Malawi and northern Mozambique and central part of Madagascar. An upper level divergent flow area is expected over central DRC and central Angola while an upper level trough will dominate over southern part of the subcontinent.

At T+72, the upper level divergence over Madagascar is expected to decrease. An upper level divergent flow is expected to prevail over eastern Zambia, central DRC and central Angola, while easterly flow pattern will dominate over Botswana, Zimbabwe and northern South Africa.

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