



Forecasting guidance for Sever Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 31ST JANUARY 2008

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

**FORECAST DISCUSSION 14H00 EST, 31ST JANUARY 2008
Valid: 00Z 01ST FEBRUARY 2008-00Z 03RD FEBRUARY 2008**

1: Tropical Cyclone Warning:

During the period, Tropical Strom Gula is expected to continue filling up but the Ex Tropical Cyclone Fame continues to deepen and move further southwards.

On 01st Feb 2008, 00Z, the position is expected to be 22.6S 54.9E and central pressure 997hPa.

02nd Feb 2008, 00Z at 29.7S 56.4E and 993hPa.

03rd Feb 2008, 00Z at 36.7S 62.8E and 988hPa.

2: 24HR RAINFALL FORECAST

DAY 1: 01ST FEB 2008

During this period, more than 50mm with a Probability Of Precipitation (POP) 70% is expected over central Zambia and extreme southern DRC, more than 30mm with POP 75% over western and northern Zambia and southern DRC; 40% over southeastern Angola, 30% over northwestern Madagascar, northern Mozambique, southwestern to southern Tanzania, and Malawi; More than 20mm with POP 50% over central to northeastern Madagascar, 25% over southeastern Madagascar.

DAY 2: 02ND FEB 2008

During this period, more than 40mm with a POP 30% is expected over Zambia, extreme northern Madagascar; More than 20mm with POP 60% over southern DRC, central to eastern Angola, northern Botswana, northern Zimbabwe, southern Malawi and central Mozambique, 40% over southwestern to southern Tanzania; More than 10mm with POP 30% over northern and southeastern Madagascar.

DAY 3: 03RD FEB 2008

During this period, more than 30mm with POP 70% is expected over eastern Angola, 50% over central to western Zambia, 30% over eastern Zambia and northern Madagascar; More than 15mm with POP of 70% over central to eastern Angola, 60% over central Madagascar, southwestern to southern Tanzania, 50% over central South Africa, 30% over southern DRC, southern Zambia, northern Zimbabwe, southern Malawi and northern Mozambique.

2: MODELS DISCUSSION:

Models comparison (Valid from 00Z; 31ST JANUARY 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 located southeast of South Africa ridging towards northern South Africa. A St Helana high pressure system is centered at 33S 5E ridging towards southern South Africa. A Moderate Tropical Storm Gula is expected to fill up but the convergence associated with Ex Tropical Cyclone Fame is expected to be southeast of Madagascar. The convergence associated with Low pressure systems dominates on the northern Madagascar, northern Mozambique, southern Tanzania, Malawi, northern and western Zambia, western DRC and eastern Angola otherwise a weak diffluence of southern DRC and western Tanzania.

At T+48, the Ex Tropical Cyclone Fame continues to shift further southwards. The Mascarine high pressure system has slightly shifted to the east and continues to ridge towards northern South Africa. A St Helana high pressure system has retrograded to the west and centered at 03S 2E causing a weak onshore flow on the eastern Angolan coast. Convergence continues to prevail on northern Mozambique, northern Madagascar, western to southern Tanzania, Malawi, eastern Angola and Central to southern DRC. A high pressure sits over the Indian Ocean contributing to a diffluent pattern on eastern Tanzania.

At T+72, an Ex Tropical Cyclone Fame continues to retrograde further to the south. A Mascarine high pressure system has also shifted to the east. A St Helana high pressure system has continued to retrograde to the east and causing a weak onshore flow on Angola coast. Convergence continues to prevail on northern Madagascar, northern Mozambique, Malawi, Zambia, central to eastern Angola, western Tanzania, Lake Victoria Basin, central DRC and western South Africa. High pressure over Indian Ocean persisted and continues to cause a diffluent pattern on eastern to southern Tanzania.

FLOW AT 500MB

At T+24, a high pressure cell sits on the western South Africa. A Low pressure system associated with Ex Tropical Cyclone Fame is situated southeast of Madagascar, it is causing convergence over there. Convergence dominates northern Mozambique, Malawi, Zambia, southern Tanzania and western DRC otherwise a weak divergence over western to eastern Tanzania, and western Angola.

At T+48, a high pressure over South Africa continues to dominate over there. An Ex Tropical Cyclone Fame continues to weaken and extends a trough towards northern Mozambique. Convergence continues to dominate Zambia, southern Tanzania, Malawi, southern DRC, southern Mozambique and Zimbabwe otherwise diffluent over central Tanzania, western DRC and western Angola.

At T+72, a high pressure system which sits over South Africa has now shifted to southern Botswana causing convergence over there. A trough system associated with an EX Tropical Cyclone Fame has filled up. Convergence dominates northern Mozambique, Zimbabwe, northern Botswana and northern Namibia but diffluent over northern Madagascar.

FLOW AT 200MB

At T+24, a trough system sits south of Madagascar extending towards central Botswana and associated with a Low pressure over there. Divergence pattern dominates northern Zambia otherwise strong southeasterlies to easterlies over northern part of the sub continent.

At T+48, a trough system which was south of Madagascar has filled up but the associated Low pressure system which was situated over central Botswana has shifted towards eastern Namibia. There is divergence over northern Madagascar and northern Mozambique while the diffluent pattern which was over northern Zambia has shifted towards southern DRC.

At T+72, divergence pattern which was situated over northern Mozambique has shifted towards southern Tanzania. There is a trough system over western Namibia together with divergence pattern, they both contributes towards strong northwesterlies over northern South Africa, Botswana and southern Mozambique.

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