



Forecasting guidance for Sever Weather Forecasting Demonstration Project (SWFDP)

SHORT RANGE FORECAST DISCUSSION 14H00 EST 09TH JANUARY 2008

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

FORECAST DISCUSSION 14H00 EST, 09TH JANUARY 2008

Valid: 00Z 10TH JANUARY 2008-00Z 12TH JANUARY 2008

1: 24HR RAINFALL FORECAST

DAY 1: 10TH JAN 2008

During this period, 20-40mm is expected over southern Zambia, western Zimbabwe, eastern Botswana and extreme northern South Africa; 5-30mm over eastern Zimbabwe, southern and northern Mozambique, southern Malawi, southwestern to southern Tanzania, northern, central and western Zambia, northeastern Angola and northern South Africa; 5-20mm over northern Madagascar.

DAY 2: 11TH JAN 2008

During this period, 20-40mm is expected over western Zimbabwe, eastern Botswana and southern Zambia; 5-30mm over Zambia, northern Mozambique, southern to southwestern Tanzania, central to eastern Angola, central to northern Botswana, central to northern Zimbabwe, central to northern Madagascar and Malawi.

DAY 3: 12TH JAN 2008

During this period, 20-40mm is expected over western Zambia and northern Botswana; 5-30mm over northern Mozambique, southern Malawi, central to northern Malawi, central to eastern Angola, central to southern Botswana, northern South Africa, western to northern Zimbabwe and central to northern Madagascar.

2: MODELS DISCUSSION:

Models comparison (Valid from 00Z; 09TH 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 high pressure cell has situated to the northeastern South Africa at 27S 32E causing divergence over there but onshore flow associated with convergence over southern Mozambique. A St Helena high pressure has situated at 30S 15W ridging south of South Africa headed by a frontal system. Convergence dominates Zimbabwe, southern DRC, northern Botswana, Zambia, Namibia and eastern Angola but weak convergence over the southwestern to southern Tanzania and northern Madagascar. Divergence pattern dominates eastern Tanzania.

At T+48, a new Mascarine high pressure system has developed, centered at 30S 41E and ridging towards northern South Africa and southern Zimbabwe. A St Helena high pressure has retrograded to the west headed by a frontal system, touching the tip of South Africa. Convergence continues to dominate central to northern Mozambique, Malawi, northern Zimbabwe, Zambia, Namibia, Angola, western Madagascar and southern DRC, weak convergence over southern to southwestern Tanzania otherwise divergence continues to dominate eastern Tanzania.

At T+72, a Mascarine high pressure system has shifted to the east, centered at 36S 52E ridging towards northern South Africa, southern Mozambique and southern Zimbabwe. A St Helena high pressure system has almost maintained the position to the west. A frontal system has slightly shifted to the east, now touching southern part of South Africa. Convergence continues to dominate western Madagascar, northern Mozambique, Zambia, Malawi, Namibia, Angola and western DRC. Divergence dominates great part of Tanzania.

FLOW AT 500MB

At T+24, there is a weak trough system situated southeast of South Africa contributing to southwesterlies south of South Africa. Convergence dominates Angola, Zambia, Zimbabwe, Mozambique northern Botswana and southern DRC. Great part of Tanzania and northern DRC are dominated by divergence pattern.

At T+48, a Weak high pressure system dominates Madagascar, extends towards central Mozambique. Convergence continues to dominate Malawi, Zambia, northern Zimbabwe and Angola otherwise weak divergence over Tanzania and DRC.

At T+72, a weak high pressure system continues to dominate Madagascar extending towards central Mozambique. A new trough system has situated to the west of South Africa contributing towards very strong northwesterlies over southern South Africa. A weak divergence continues to prevail over Tanzania and DRC.

FLOW AT 200MB

At T+24, a high pressure cell sits over Zimbabwe causing divergence over there. Very strong westerlies dominate South Africa otherwise strong westerlies over the northern part of the sub continent.

At T+48, a high pressure cell causing divergence continues to dominate Zimbabwe and Zambia. Very strong wind continues to dominate South Africa but strong southeasterlies on the northern part of the sub continent.

At T+72, there is no significant change on the flow pattern with exception of convergence on the eastern Tanzania.

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