



**Forecast guidance for Severe Weather Forecasting Demonstration Project (SWFDP)**

**SHORT RANGE FORECAST DISCUSSION 14H00 EST 20<sup>th</sup>, February, 2007**

**AFRICA DESK  
CLIMATE PREDICTION CENTER  
National Centers for Environmental predictions  
National Weather Service  
NOAA  
Camp Springs MD 20746**

**FORECAST DISCUSSION 14H00 EST 20<sup>th</sup>, February, 2007**

**Valid: 00Z 21<sup>st</sup>, February, 2007- 00Z 23<sup>rd</sup>, February 2007.**

At T+24 hrs, the general flow pattern at 200hpa over Southern Africa (South of the Equator) shows that there is an anticyclone or high pressure that has two centers located at 26°S 33°E over southern Mozambique and 34°S 10°E over east of South Africa in the Atlantic ocean, and is causing divergence motion over the the sub continent mainly where the centers are located. At T+ 48 hrs the flow pattern is still anticyclone with centers located at 26°S 37°E and 23°S 53°E. At T+72 Hrs the anticyclone or high pressure has divided into two high pressure cells with centers located at 21°S 16°E over Namibia and 24°S 49°E southeast of Madagascar, the divergence at this level shows that there is vertical motion over the northeastern parts of the sub continent.

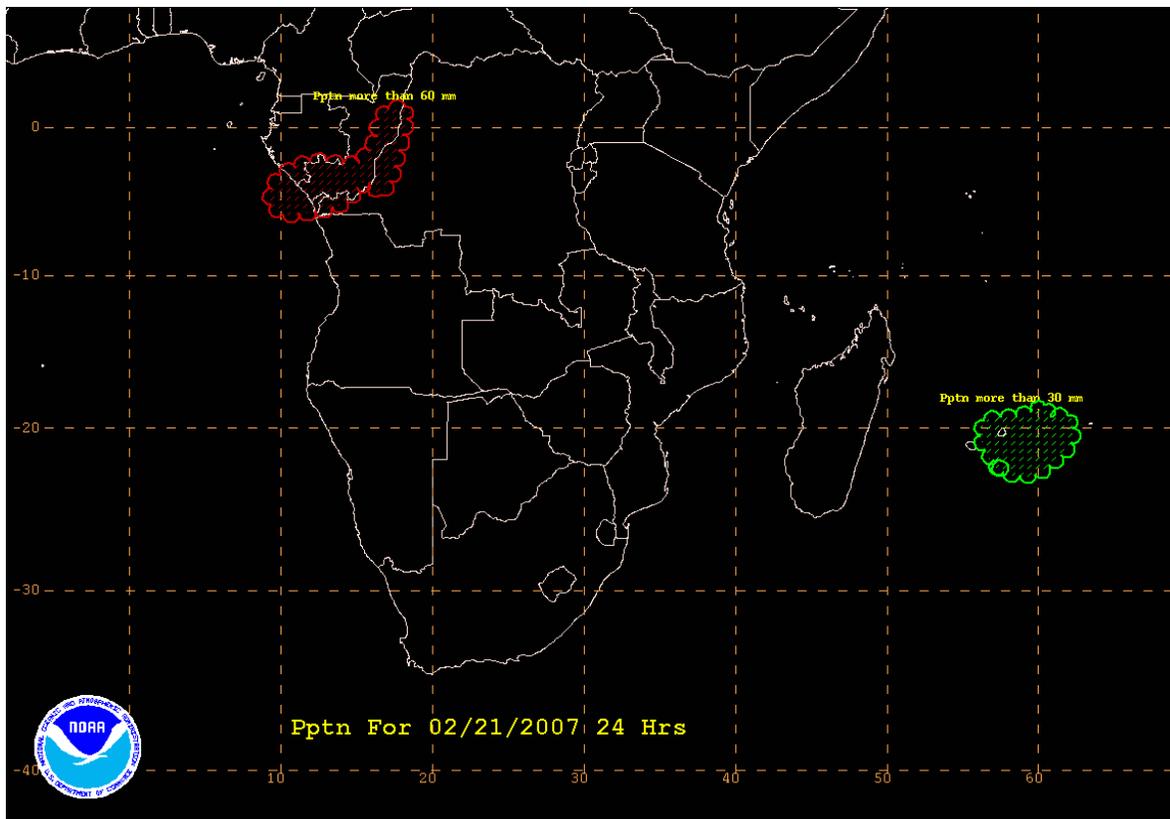
At 500hpa, the T+24 hrs prognostic chart is depicting a belt of high pressure system over the sub-Saharan Africa with cells centered at about 24°S 12°E and 27°S 32°E. A weak low pressure system can be seen over northern Malawi and another one sitting along the east coast of Madagascar hence a convergence line is observed stretching from northern Angola to northern Mozambique thro' to the northern parts of Madagascar. At T+48 the high is centered at 24°S 25°E and will dominate the flow over most of sub-Saharan Africa whilst the line of convergence or trough line will move southwards as the low over Madagascar move southwestwards and another low developing over northern Angola. At T+72 the high shifts northwards slightly and will be centered at 23°S 22°E as a weak westerly trough over southwestern South Africa is approaching. Two weak lows can be observed one over SW Angola and another one over northern Zimbabwe which causes a line of convergence to continue moving southwards and stretching from southern Angola to central Mozambique. An interesting developing low situated 11°S 52°E which has a potential to become a cyclone or at least a tropical storm/disturbance.

At 850 hPa, T + 24 Hrs St. Helena high has its centre is located at 32°S 22°W with a ridge extending to the western part of South Africa and the Mascarine high has its centre

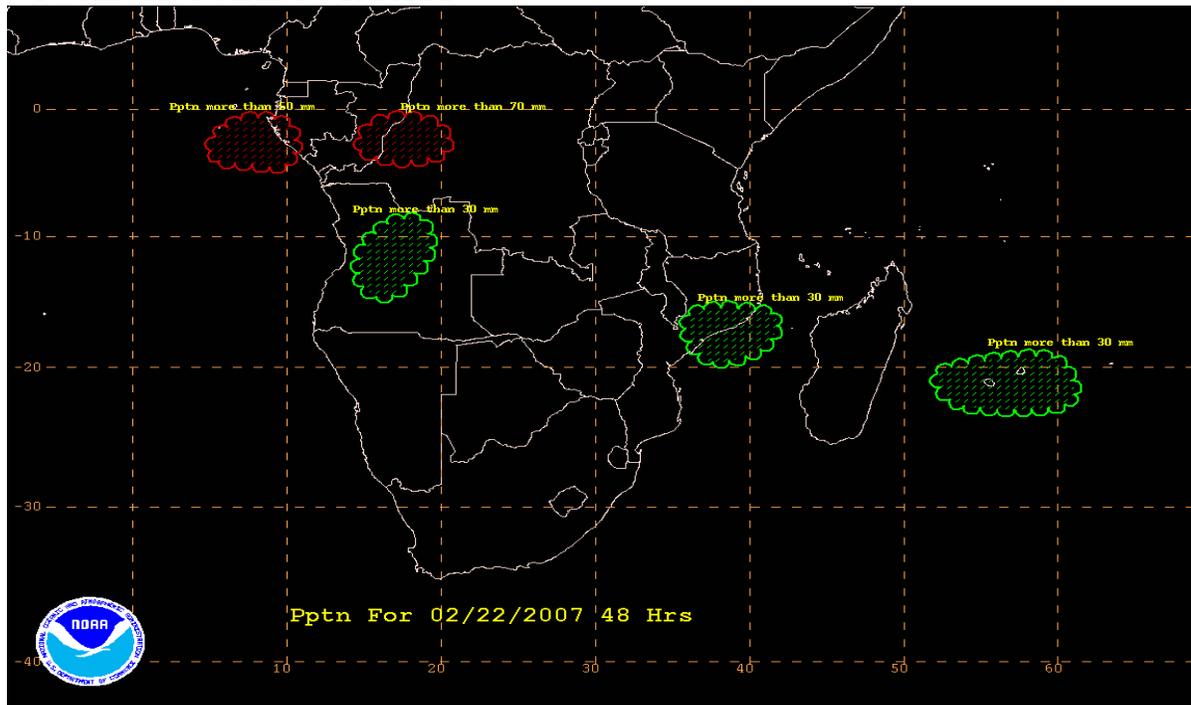
located at 30°S 68°E with a ridge extending to the eastern part of South Africa, between these two cells is a weak trough from the south in phase with the meridional arm of the ITCZ, also there is a high over north of Madagascar and off the coast of Tanzania, cyclonic circulations can be seen over Mozambique channel and northeast of Madagascar in the Indian ocean. Areas of convergence can be seen over central Congo and lake Victoria basin over Tanzania. At T + 48 Hrs there is a slight eastward shift of the system, St. Helena high has its centre is located at 32°S 15°W with a ridge extending to the eastern coast of South Africa and the Mascarine high is stationary with its ridge extending to the east of South Africa, between these two cells is a weak trough from the south which has also slightly shifted to the east and in phase with the meridional arm of the ITCZ, the high over north of Madagascar and off the coast of Tanzania is still persisting, cyclonic circulations can be seen over Angola and northeast of Madagascar in the Indian ocean. Area of convergence can be seen over central Uganda. At T + 72 Hrs there is no significant change.

Generally there is a resemblance in the patterns of UK- Met, ECMWF and GFS models because for the consecutive three days, the 200hPa shows anticyclonic circulation while at lower levels the general flow is cyclonic which means there is a vertical motion in the area and the three models mentioned above show similarity meaning that the season has not changed over most countries.

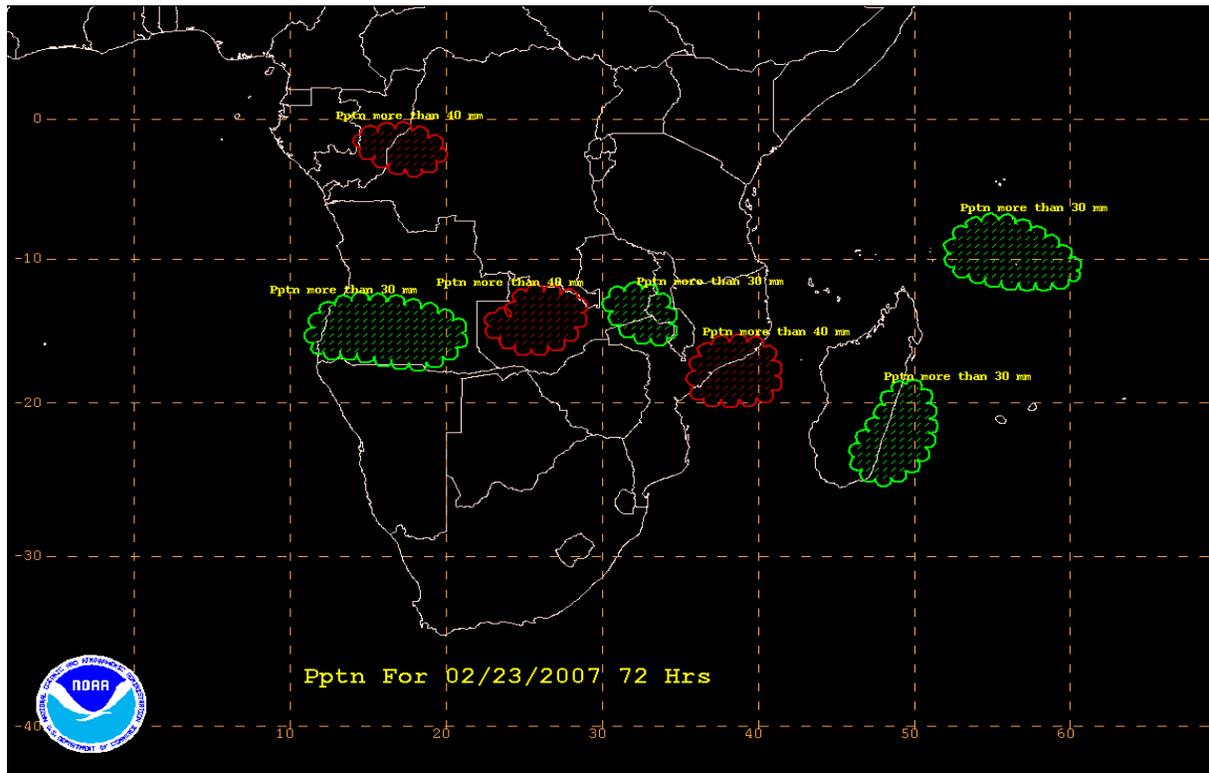
## FORECASTMAPFORDAY1



## FORECAST MAP FOR DAY2



## FORECAST FOR DAY 3



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