



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

**SHORT RANGE FORECAST DISCUSSION 14H00 EST 3<sup>rd</sup> January, 2007**

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

Valid 00:00z 4<sup>th</sup> January 2007 - 00z 5<sup>th</sup> January 2007

**TROPICAL CYCLONE 06S (CLOVIS) WARNING: ACTIVE TROPICAL CYCLONE IN  
SOUTHIO POSITION NEAR 20.6S 48.7E.  
FORECAST: 24 HRS, VALID AT: 040600Z --- 21.2S 47.8E  
MAX SUSTAINED WINDS - 025 KT, GUSTS 035 KT  
DISSIPATED AS A SIGNIFICANT TROPICAL CYCLONE OVER LAND  
--- JTWC.**

The general pattern at 200hpa over the Southern Africa (South of the Equator) indicates an upper level near-equatorial ridge dominating the flow overland with areas north of 20S experiencing E to SE winds 15 to 40 knots and south of 22S the flow is NW to SW 25 to 95 knots. A weak trough is moving through over the southern part of South Africa but no significant cold front at the surface to warrant any severe weather occurrence. Strong divergence is indicated over the Eastern part of Madagascar as the Tropical Cyclone moves overland. At T+48 the trough moves out to the sea in South Africa and the flow becomes westerly 15 to 55 knots. At T+72 the high moves slightly northwards as a short wave trough passes over southern Madagascar. Strong divergence associated with the Tropical cyclone moves out of the terrain of Madagascar and will be over the sea. The UK- Met and ECMWF models are similar to GFS in terms of positioning the systems at this level and there are no major discrepancies.

At 500hpa a tropical low is situated over central Zambia and is responsible for the tropical storms over the low latitude areas. A weak trough or perturbation is moving over the southern part of South Africa with a high pressure system following closely behind this trough. At T+48 the high becomes dominant over Southern Africa which makes it difficult for thunderstorms to develop and the flow will be mainly W-NW south of 22S. The tropical low will move to the northern part of Angola as the continuation of tropical thunderstorms is anticipated. A trough moving over the central part of Madagascar is associated with the tropical cyclone and is expected to remain there at T+72 but weakening in the process. At T+72 the high over southern Africa is expected to intensify extending a ridge as far north as northern DRC whilst the tropical low over Angola weakens quite considerably. Another sharp trough approaches S.A. at T+72 which will be

accompanied by a cold front at the surface hence showers can be expected along the south and southwest coast. The UK-MET and ECMWF models handle the situation similar and no major discrepancies between these models and GFS.

At 850hpa a cold front is moving over the central parts of S.A. with a high pressure system ridging closely behind it. A closed low pressure system is sitting over the central Mozambique coast and extends to a trough which stretches as far as northern Angola. This low is expected to cause copious amounts rainfall over central Mozambique and by contrast cause much drier conditions in the south as it sucks all the moisture to itself. The tropical cyclone Clovis is expected to move overland briefly today and the cold front which is approaching will cause the cyclone to move off to the sea, east of Madagascar. At T+48 the low over central Mozambique is expected remain quasi-stationary causing continued rainfall over this area whilst the cyclone is expected to move off to the sea. An Indian ocean high situated to the east of S.A. will extend a ridge over the N.E. part as another weak cold front will pass over the extreme southern part of S.A. A low will develop over Angola which could cause tropical thunderstorms to develop drifting SE'wards towards the coast of Mozambique. Strong vorticity advection as well indicated around the vicinity of the cyclone throughout the period of this forecast. All the models are in agreement especially with the cyclone movement which indicates it moving off to sea by T+72.

**Note: All maps or pictures are attached below including forecast maps for the next three days.**

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### SUMMARY TABLES FOR RISK AREAS

**DAY 1: Thursday 4<sup>th</sup> January 2007**

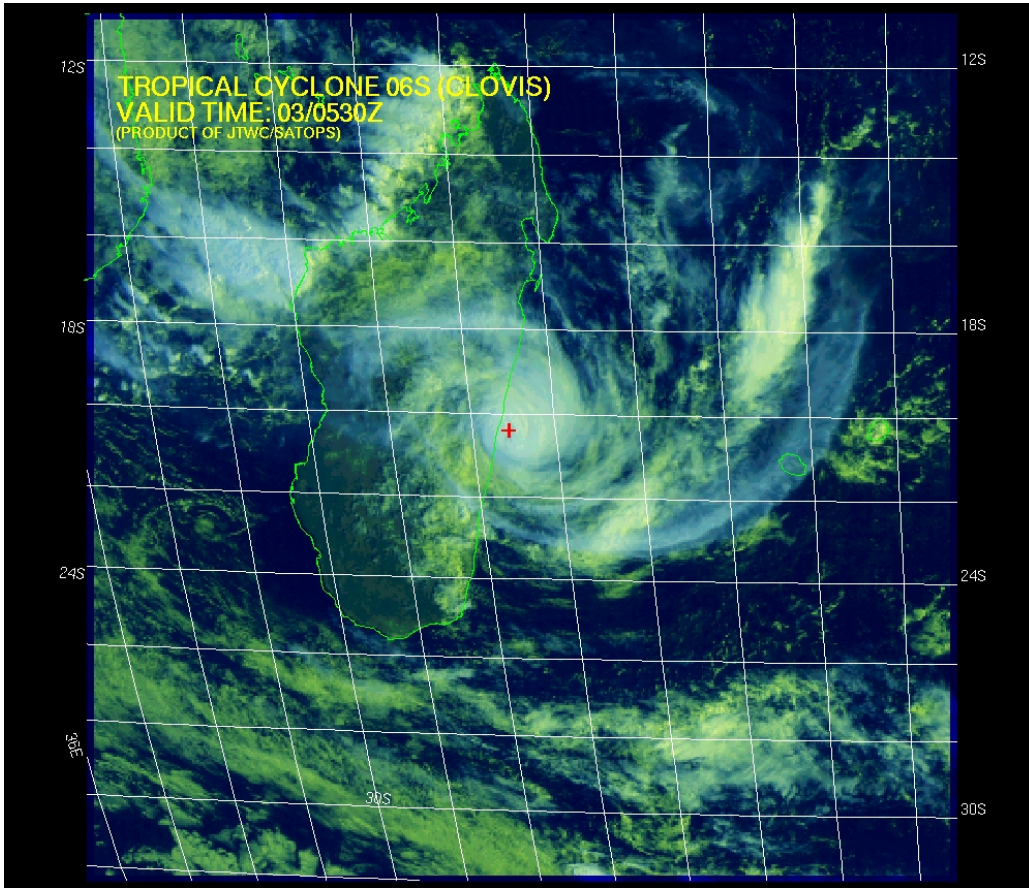
RISK	HEAVY PRECIPITATION				STRONG WINDS			
	No risk	Low risk	Medium risk	High risk	No risk	Low risk	Medium risk	High risk
Botswana	X				X			
Madagascar				West & South				South & central Coastal areas
Mozambique				Central & Southern				
Tanzania	X				X			
Zimbabwe	X				X			

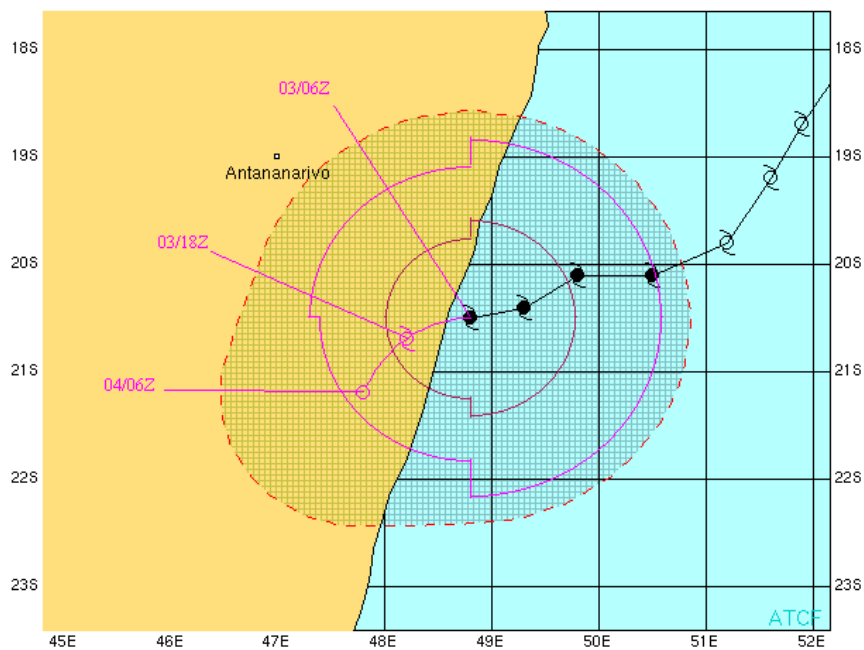
**DAY 2: Friday 5<sup>th</sup> January 2007**

RISK	HEAVY PRECIPITATION				STRONG WINDS			
	No risk	Low risk	Medium risk	High risk	No risk	Low risk	Medium risk	High risk
Botswana	X				X			
Madagascar				NW & SE				SE
Mozambique	X				X			
Tanzania	X				X			
Zimbabwe	X				X			

**DAY 3: Saturday 6<sup>th</sup> January 2007**

RISK	HEAVY PRECIPITATION				STRONG WINDS			
	No risk	Low risk	Medium risk	High risk	No risk	Low risk	Medium risk	High risk
Botswana	X				X			
Madagascar				In the NW & SE				Southeast
Mozambique				Central	X			
Tanzania	X				X			
Zimbabwe	X				X			



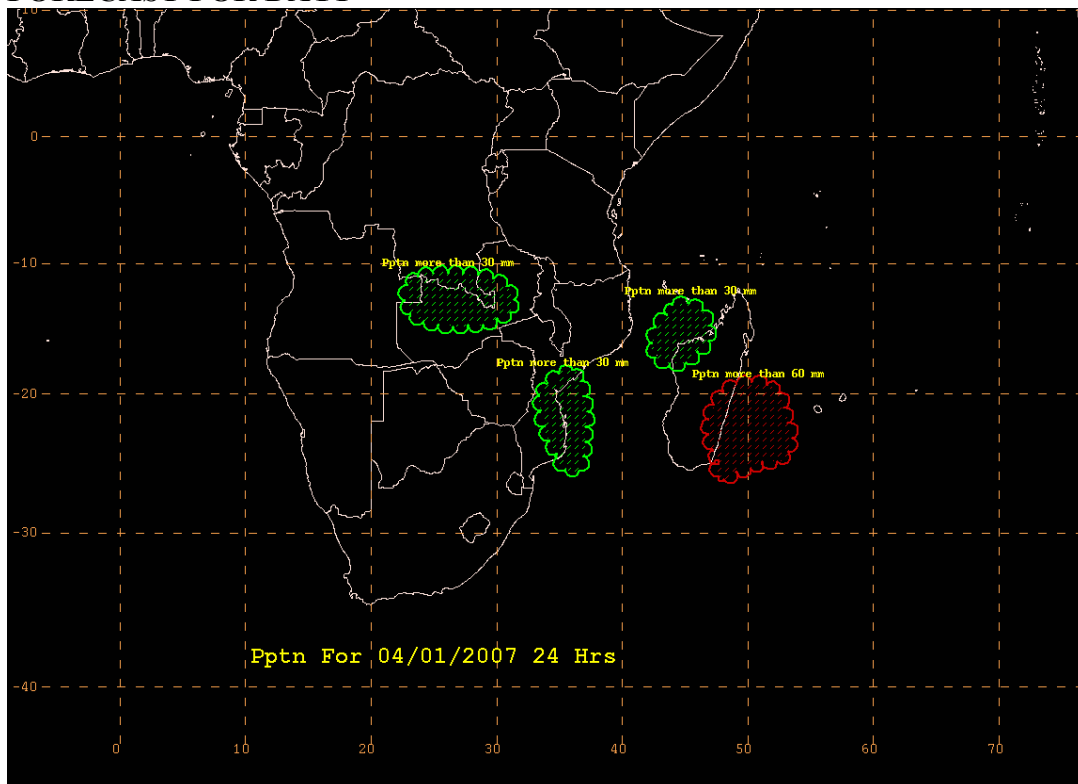


TROPICAL CYCLONE 06S (CLOVIS) WARNING #7  
 030600Z POSIT: NEAR 20.5S 48.8E  
 MOVING 260 DEGREES TRUE AT 05 KNOTS  
 MAXIMUM SIGNIFICANT WAVE HEIGHT: 15 FEET  
 03/06Z, WINDS 065 KTS, GUSTS TO 080 KTS  
 03/18Z, WINDS 045 KTS, GUSTS TO 055 KTS  
 04/06Z, WINDS 025 KTS, GUSTS TO 035 KTS

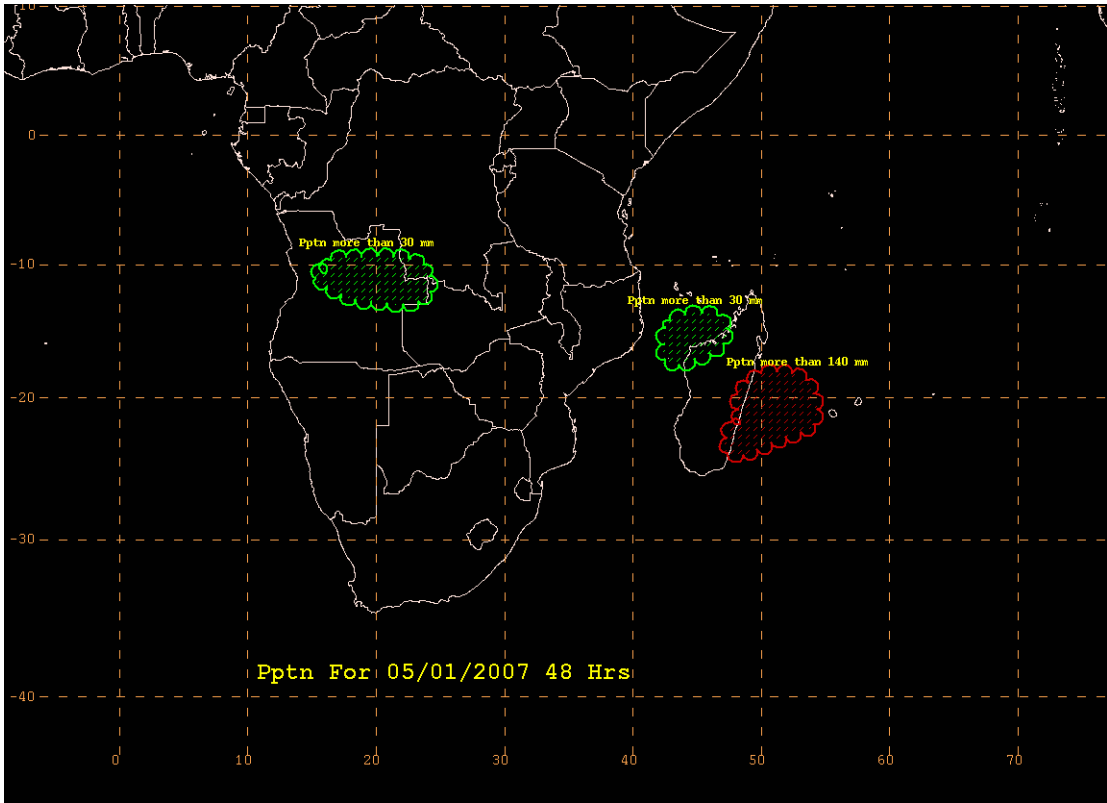
○ TROPICAL DEPRESSION  
 ○ TROPICAL STORM  
 ● TYPHOON  
 PAST 6 HOURLY CYCLONE POSITS IN BLACK  
 FORECAST CYCLONE POSITS IN COLOR



### FORECAST FOR DAY1



### FORECAST FOR DAY 2



### FORECAST FOR DAY 3

