QUATERLY REPORT OF THE REGIONAL SUBPROJECT

PERIOD: September to November 2007(SON)

DEPARTMENT OF METEOROLOGICAL SERVICES (BOTSWANA)

1. HIGHLIGHTS OF THE PERIOD

The dry spell that had characterized the better part of the previous period (3rd quarter) continued into the first month of this period, September.However, a welcome break in the spell occurred towards the end of the month when scattered showers with significant falls occurred between 25th and 26th over the south-eastern quadrant of the country where rainfall amounts in excess of 60mm (heavy precipitation) were recorded in at least two places. These rains over the South East quadrant marked the onset of the rainfall season for Botswana.

October and November were relatively active months with at least three distinct episodes of heavy precipitation occurring across the country during each month.

Reports of strong winds, which often accompanied the heavy downpours, were received from various places but could not be documented as they didn't occur at or in the vicinity of the synoptic stations where they could be measured.

2. OVERVIEW OF PRODUCTS

a. Usefulness of RSMC-Pretoria guidance

The value and usefulness of the RSMC - Pretoria guidance together with products from other centres could not be overemphasized as they have now become useful and helpful tools for forecasters in their daily and routine endeavours. In conformity with the seasonal forecast that had been issued for Botswana, it became imperative that

NWP products were routinely accessed and utilized as severe weather events were expected to occur across the country with varied regularity during this period

b. Usefulness of SWFDP NWP/EPS Products received from each global centre and RSMC UM-SA12

As this period marked the start of the summer season, the importance of SWFDP products, which are routinely sourced from the global centres, becomes even more opportune for the forecasters.

3. PROJECT EVALUATION AGAINST SWFDP GOALS

SWFDP GOAL	PROGRESS AGAINST GOALS
To improve the ability of NMCs to forecast severe weather events	Significant progress in achieving this goal has been achieved.
To improve the lead time of alerting these events	Still poses a major challenge but some measure of progress has been achieved
To improve the interaction of NMCs with Disaster Management and Civil Protection authorities before, during and after severe weather events	Significant progress was made in this Endeavour but more work still needs to be done by all parties concerned.

To identify gaps and areas for improvements	The achievement of this goal is within reach as our assessment as identified gaps and areas which need to be improved.
To improve the skill of products from Global Centres through feedback from NMCs	Significant progress has been realized, testimony in the notable improvement of the accuracy of the forecasts issued using the products. The one outstanding challenge that remains for NWP products is the prediction or handling of strong winds and convection.

4. EVALUATION OF WEATHER WARNINGS:

A) feedback from the public

Feed back has been positive and encouraging so far as the public now takes our warnings and forecasts seriously .This is unlike in the past when our warnings elicited mostly negative responses from the public as they were deemed unreliable, misleading and at worst causing unnecessary alarm to the public.

B) feedback from the DMCPA to include comments of the timeliness and usefulness of the warnings

Since the interaction between the NMC and the Disaster Management Office (DMO) has continued to improve, we have obtained a lot of useful feedback from the DMO, more especially on the usefulness of the warnings we issue. However, they still remains some reservations with regard to the timeliness of the warning .The NMC and DMO ,have since last year, been jointly working together to intensify public awareness on severe weather and other disasters.

C) W**arning verification by the NMCs**

Though some warning verification was undertaken by the NMC, it wasn't done regularly for every case of severe storm predicted to occur. The preliminary results indicated that for the majority of warnings issued, severe weather did in fact occur were they were predicted to occur or just in nearby areas.

5. SUMMARY (general comments, challenges, etc, details in Annex 1)

The SWFDP project has proven to be tremendous assistance to all the participating NMCs as it has now almost achieved most objectives it set out to accomplish when it was implemented in November 2006.Botswana,without exception, has benefited handsomely by taking part in this pilot project.

6. ANNEX 1 – Quarterly Evaluation Table (to be fulfilled according to the Severe Weather Evaluation Form)

Starting date of the event	**SWFDP Evaluation Form Event Number**	**Type of event** **Heavy Precipitation or Strong Wind**	**Region affected**	**Highest observed value**	**RSMC Guidance**		**Which NWP/EPS forecast product(s) used by NMC**		**Local warnings issued?**	**Impact of the event**	**Impact of the warning**
dd/mm/yy		Indicate if extreme phenomena are the consequence of severe convection		(mm/period or kts, according to the phenomenon)	Amount predicted (same unit as in the preceding column)	Usefulness from 1 to 4 1- Misleading 2- Not useful 3 - Useful 4 - Very useful	(RSMC UM-SA12 ECMWF, Met-Office, NCEP)	Usefulness from 1 to 4 1- Misleading 2- Not useful 3 - Useful 4 - Very useful			
27/09/207	1	Heavy precipitation	South east	58mm / 24 hours	Over 25mm/24 hours	3	NCEP,ECMWF	4	NO	No damage or flooding reported.	nil
10/10/2007	2	Heavy precipitation	North east	61mm/24 hours	Over 50mm/24hours	3	Met-Office,NCEP,UM-SA12	3	YES	FLASH FLOODS OCCURED	USEFUL