



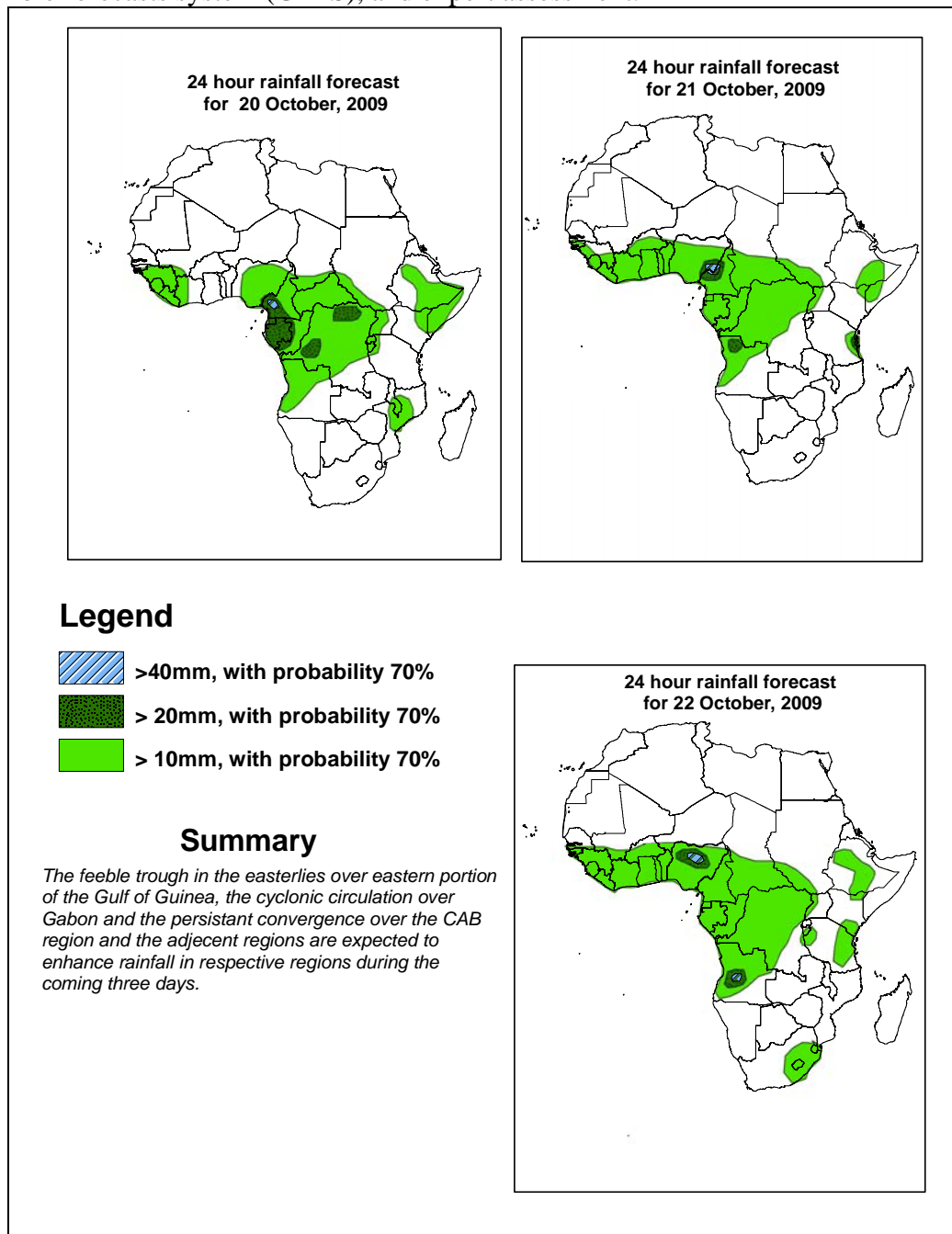
NCEP Contributions to the WMO Severe Weather Forecasting Demonstration Project (SWFDP) and to the African Monsoon Multidisciplinary Analysis (AMMA) Initiative.

FORECAST DISCUSSION 14H00 EST, 19 OCTOBER, 2009

Valid: 00Z 19 October – 22 October, 2009

1. Twenty Four Hour Cumulative Rainfall Forecasts

The forecasts are expressed in terms of probability of precipitation (POP) exceedence based on the NCEP, UK Met Office and the ECMWF NWP outputs, the NCEP global ensemble forecasts system (GEFS), and expert assessment.



2. Model discussion

Model comparison (Valid from 00Z; 18, OCTOBER, 2009): all the three models are in general agreement especially with respect to the positioning of large scale features, however, the UK model tends to give lower values than both the GFS and ECMWF models especially in the Equatorial region (10°S and 10°N).

2.1. Weather assessment for the previous day (18 October 2009): During the previous day, moderate to heavy rainfall events were observed over parts of Gambia, southwest Niger, Nigeria, Gabon, southwestern Sudan, southwestern Ethiopia, Central DR Congo, Uganda, Rwanda, northern Tanzania, western Kenya, southwest Angola, central Botswana and southeastern cost of South Africa.

2.2. Weather assessment for the current day (19 October 2009): Intense clouds are observed over Western Gabon, Congo, south western DR Congo, central Angola, Lake Victoria region and the border between DR Congo, Sudan and Uganda.

2.3. Flow at 850hPa

T+24h: A feeble trough in the easterlies is expected to have its axis extended over Liberia. Besides, the localized cyclonic circulation over Gabon is expected to persist. The convergence associated with the Congo Air mass is expected persist over CAB region, aligning itself with another convergence line over Angola.

T+48h: The cyclonic circulation over Gabon is expected to persist in its previous day position, while, the convergence over Congo air boundary region is expected to continue enhancing rainfall over the regions. A mid-latitude westerly trough is expected to move eastwards with its axis extending towards the southern tip of South Africa

T+72h: The cyclonic flow over Gabon is expected to move westwards reaching the coastal area, while the convergence over Congo air boundary region and the adjacent areas of East Africa is expected to persist, enhancing precipitation over the regions.

2.4. Flow at 500hPa

T+24h: Mid tropospheric easterlies are expected to dominate the flow over tropical Africa.

T+48h: The easterly flow expected to persist over the tropical Africa.

T+72h: No significant change is expected in the main flow pattern.

2.5. Flow at 200hPa

T+24h: A trough in the westerlies is expected to dominate the flow over the Horn of Africa.

T+48h: The westerly trough is expected to persist dominating the flow over the Horn of Africa.

T+72h: The upper tropospheric trough is expected to deepen over the Horn of Africa.

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