



ICPAC

Statement from the Fiftieth Greater Horn of Africa Climate Outlook Forum (GHACOF 50) for October to December 2018 season held at the Serena Hotel, Kigali, Rwanda from 27 to 28 August 2018

Consensus Climate Outlook

October to December (OND) constitutes an important rainfall season over the equatorial sector of the Greater Horn of Africa (GHA) region. The regional consensus climate outlook for the OND 2018 season indicates increased likelihood of above to near normal rainfall over much of the equatorial sector. Increased likelihood of near normal to above normal rainfall is indicated over the southern parts of the northern sector and over parts of Tanzania and south-central Kenya.

In the extreme south of the region the consensus indicates near to below normal rainfall. There is also increased likelihood of warmer than normal mean temperatures over much of the region. Increased likelihood for cooler than normal mean temperatures is indicated over north-eastern and south-western parts of GHA. Ensemble forecasts indicate an earlier than normal start of the rains over south-eastern Ethiopia, Somalia, central Kenya, and much of Tanzania. However, there is a high chance of earlier than normal withdrawal of the season from south-eastern Ethiopia, north-eastern Somalia, and northern Kenya. As a result, although above to near normal seasonal rainfall totals are indicated, a shorter than normal OND season is anticipated especially in the cluster connecting Ethiopia, Kenya and Somalia. A longer and wetter than normal rainy season is expected across much of the equatorial and southern sectors.

The outlook is relevant for seasonal time scales and relatively large areas. Local and month-to-month variations might occur as the October to December 2018 season progresses. It is likely that episodic rainfall events leading to flash floods might occur even in areas with increased likelihood of near to below normal rainfall. Also, dry spells may occur in areas with increased likelihood of above to near normal rainfall. WMO in collaboration with Global Climate Centres will continue to provide status of global climate including ENSO updates. ICPAC will also provide regular regional climate updates at 10-day and monthly timescales, while the National Meteorological and Hydrological Services (NMHSs) will provide downscaled and detailed national and sub-national forecast updates.

The Climate Outlook Forum

The Fiftieth Greater Horn of Africa Climate Outlook Forum (GHACOF50) was convened from 27-28 August 2018 by the IGAD Climate Prediction and Applications Centre (ICPAC) in collaboration with WISER, WMO, AfDB, UNDP, USAID, African SWIFT programme, and other partners to formulate a consensus regional climate outlook for the October to December 2018 rainfall season over the GHA region. The GHA region comprises of the 11 countries Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania, and Uganda. GHACOF50 was preceded by a capacity building training workshop (CBTW) for the national climate scientists that was held from 20 to 25 August 2018 in Nairobi, Kenya to develop national and regional climate outlooks for the season.

The Forum brought together climate information providers and users from key socio-economic sectors, governmental and non-governmental organisations, decision-makers, climate scientists, and civil society stakeholders among others. It reviewed the implications of the factors expected to influence the evolution of the regional climate during the OND 2018 rainfall season including Sea Surface Temperature (SST) anomalies over the tropical oceans.

Methodology

The forum examined the prevailing and expected ocean-atmosphere processes as well as evolving large scale and regional scale circulation systems that are anticipated to have significant implications on GHA climate during October to December 2018. Key among the factors considered were current and evolving Sea Surface Temperature (SST) anomalies over global oceans, specifically the increased (60%) probability for warm ENSO and neutral but slightly positive Indian Ocean Dipole (IOD) phases through the October to December 2018 period. Implications of these on regional rainfall were integrated during a Pre-COF 50 Capacity Building Training Workshop (CBTW). The Pre-COF 50 workshop also considered the global forecasts from World Meteorological Organization (WMO) Global Producing Centres (GPCs) as inputs to the consensus regional climate outlook for the October to December 2018 season.

Consensus Climate Outlook for October to December 2018: Graphical Details

The consensus rainfall and temperature outlooks for the GHA region are given in Figures 1 and 2 below.

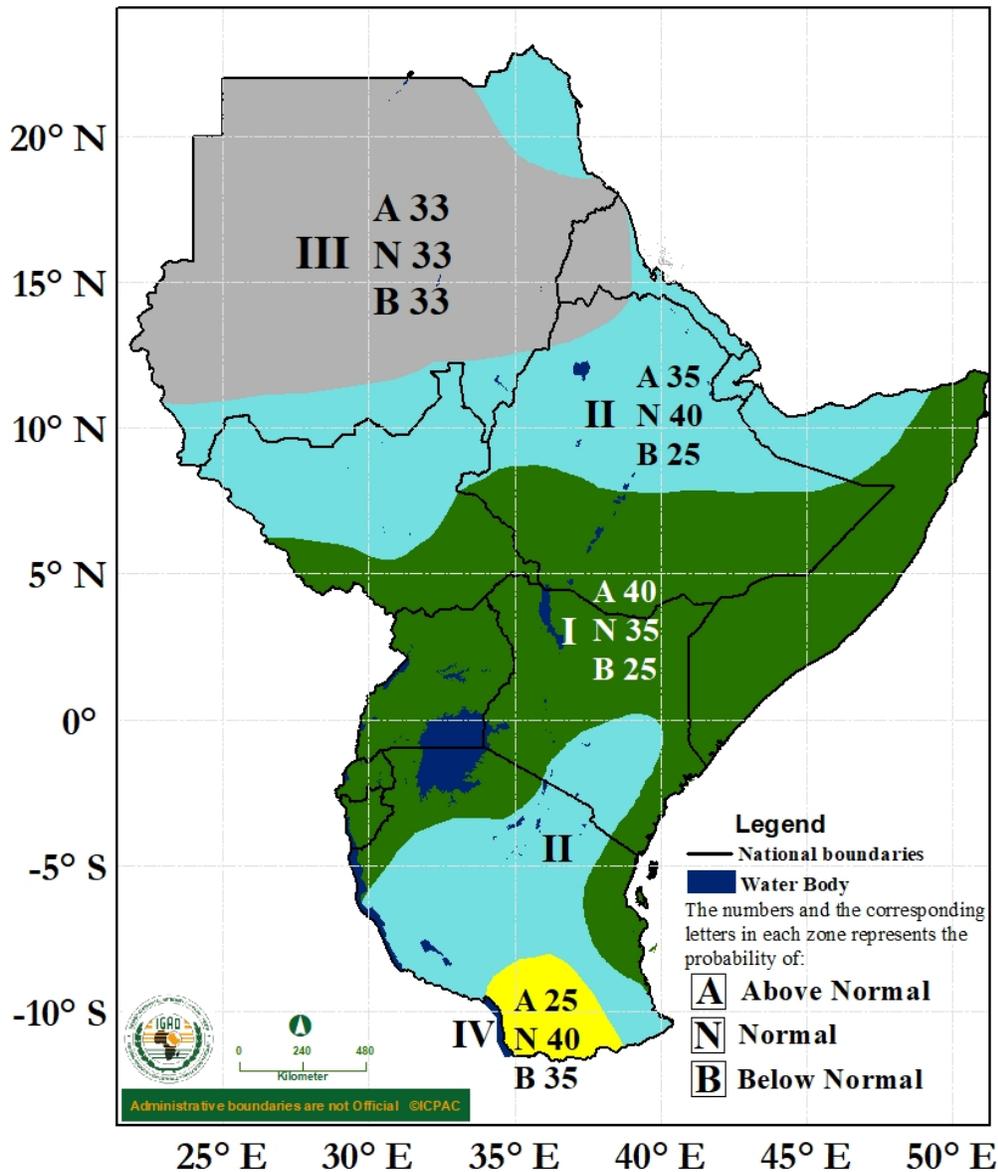


Figure 1: Greater Horn of Africa Consensus rainfall Outlook for the October to December 2018 rainfall season

- Zone I:** Increased likelihood of above to near normal rainfall
- Zone II:** Increased likelihood of near to above normal rainfall
- Zone III:** Usually dry
- Zone IV:** Increased likelihood of near to below normal rainfall

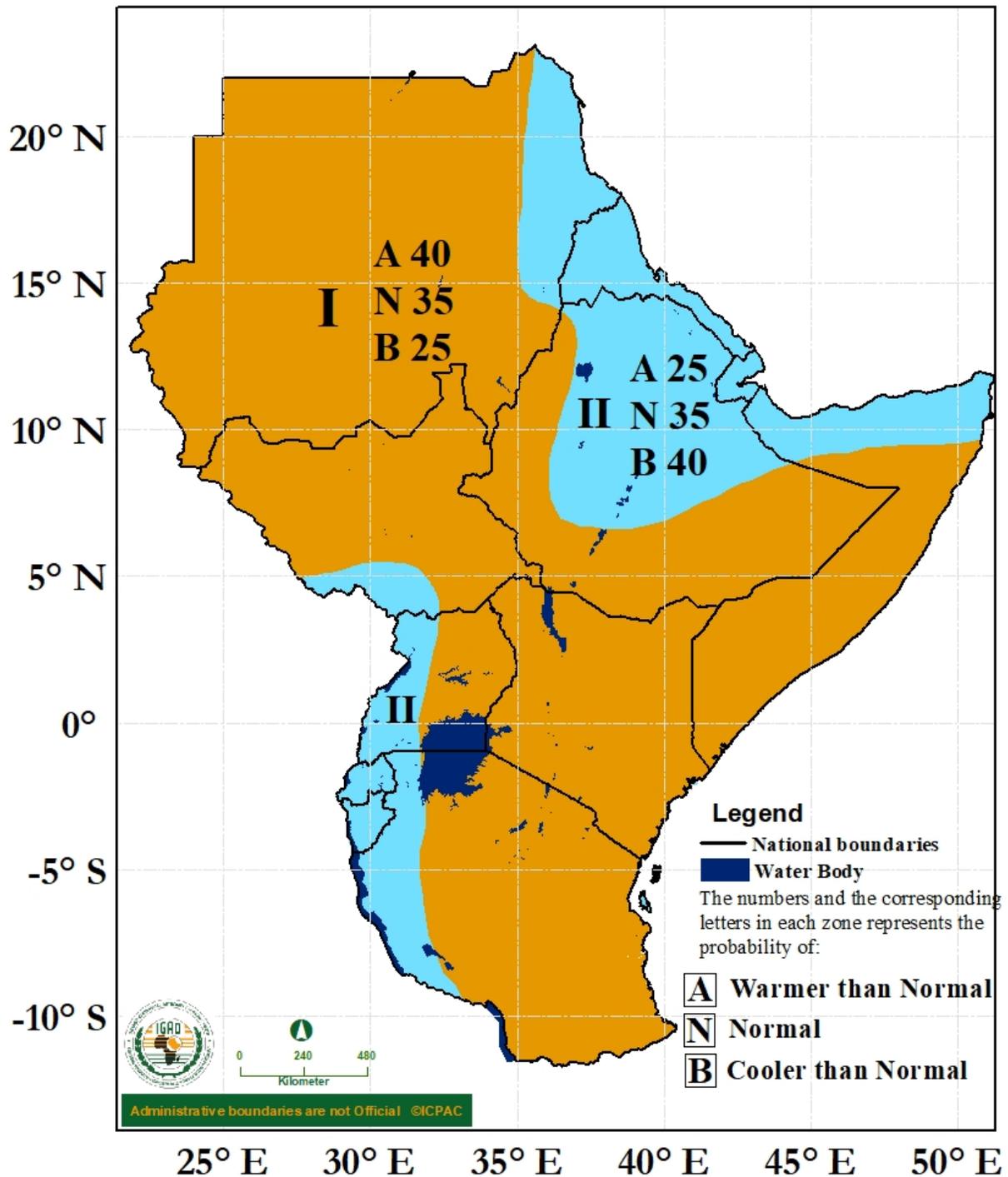


Figure 2: GHA Consensus Mean Surface Temperature Outlook for October to December 2018

Zone I: Increased likelihood of above (i.e. warmer) to near normal mean temperatures.

Zone II: Increased likelihood of below (i.e. cooler) to near normal mean temperatures.

Note:

The numbers for each zone indicate the probabilities of rainfall and mean temperature in each of the three categories, above-, near-, and below-normal. For example, in Zone II, Figure 1, there is a 35% probability of rainfall occurring in the above-normal category; a 40% probability of rainfall occurring in the near-normal category; and a 25% probability of rainfall occurring in the below-normal category. In Zone I, Figure 2, there is a 40% probability of mean temperature occurring in the above-normal (i.e. warmer) category; a 35% probability of mean temperature occurring in the near-normal category; and a 25% probability of mean temperature occurring in the below-normal (i.e. cooler) category. The boundaries between zones should be considered as transition areas.

Contributors

The Fiftieth Greater Horn of Africa Climate Outlook Forum (GHACOF 50) was supported by WISER, USAID, AfDB, African SWIFT Programme of University of Leeds and EU/World Bank. Contributors to the GHACOF 50 consensus regional climate outlook included representatives of the National Meteorological and Hydrological Services from the GHA countries (Insitut Geographique du Burundi; Meteorologie Nationale de Djibouti; National Meteorological Agency of Ethiopia; Kenya Meteorological Department; Rwanda Meteorological Agency; South Sudan Meteorological Service; Sudan Meteorological Authority; Somalia Meteorological Service, Tanzania Meteorological Agency and Uganda National Meteorological Authority) and climate scientists as well as other experts from national, regional and international institutions and organizations, including ICPAC, North Carolina State University, Met Office, and the WMO Global Producing Centres (GPCs).
