

Africa Weather Hazards Assessment

for

November 30 – December 6, 2006

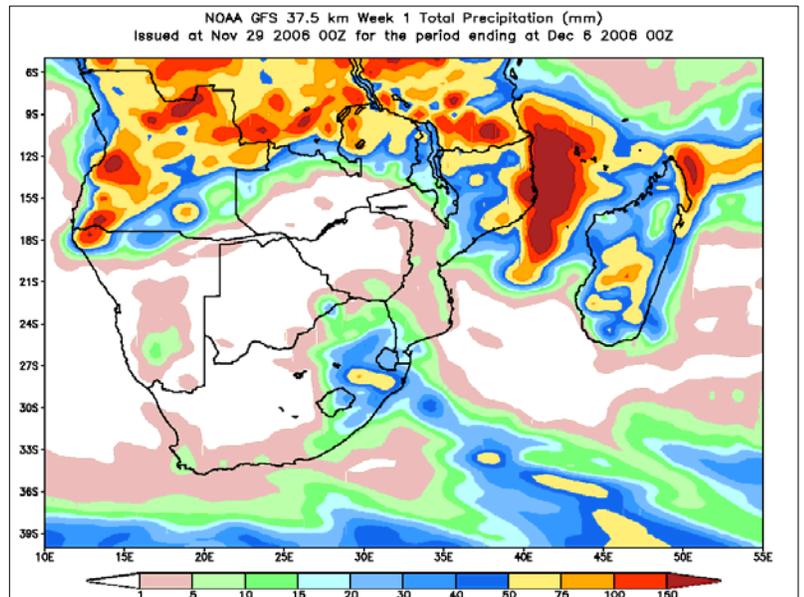
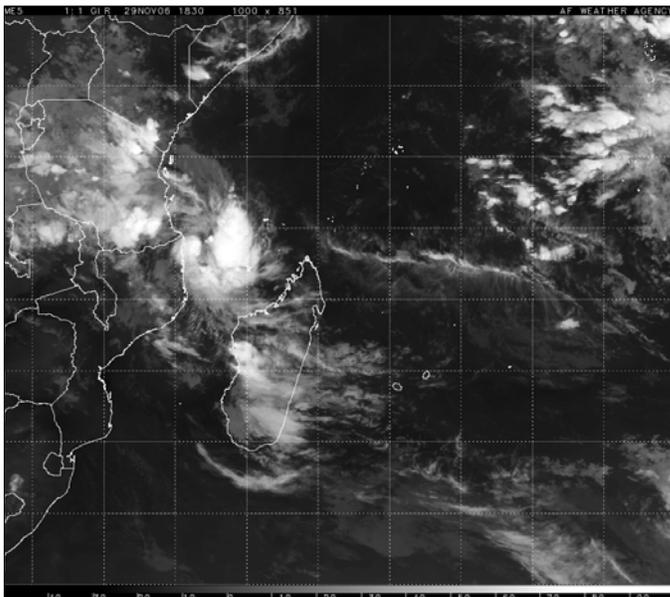
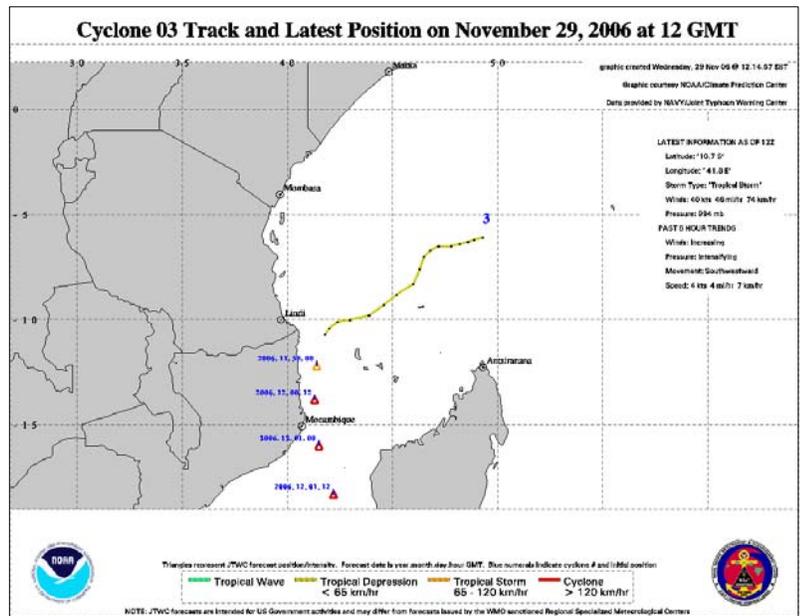
Weekly Introduction:

Cyclone 03S Forms in the Northern Mozambique Channel

Upper Right: Nov 29th 00Z current position and forecast track.

Lower Right: 7-Day rainfall forecast beginning Nov 29th 00Z.

Lower Left: Nov 29th 1830Z satellite image.



Africa Weather Hazards/Benefits Assessment

NOTE: Black hatched regions depict combined wheat, maize, sorghum, and millet crop zones which are active (sowing to harvest) during the current month. (from FAO)

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1) Rains eased in much of the Shebelle Basin last week, though heavy thunderstorms were observed in mid- and lower Jubba as well as much of eastern Kenya including the Tana Basin. Flooding will continue in the highlighted areas during the next week.

2) Localized flooding is possible throughout much of southern Somalia and eastern Kenya during the next week.

3) Abundant rains fell during the past season in much of Ethiopia, leading to favorable crops and moisture supplies. Some locations in west-central Ethiopia saw excessive rainfall however.

4) Rains have been late to start in parts of southeastern Mozambique, With El Nino-related negative impacts possible in 2007, these areas must be closely monitored. See #8.

5) Early season dryness continues throughout much of southwestern Madagascar. Heavy rain, associated with TC 3S, is possible during the next week.

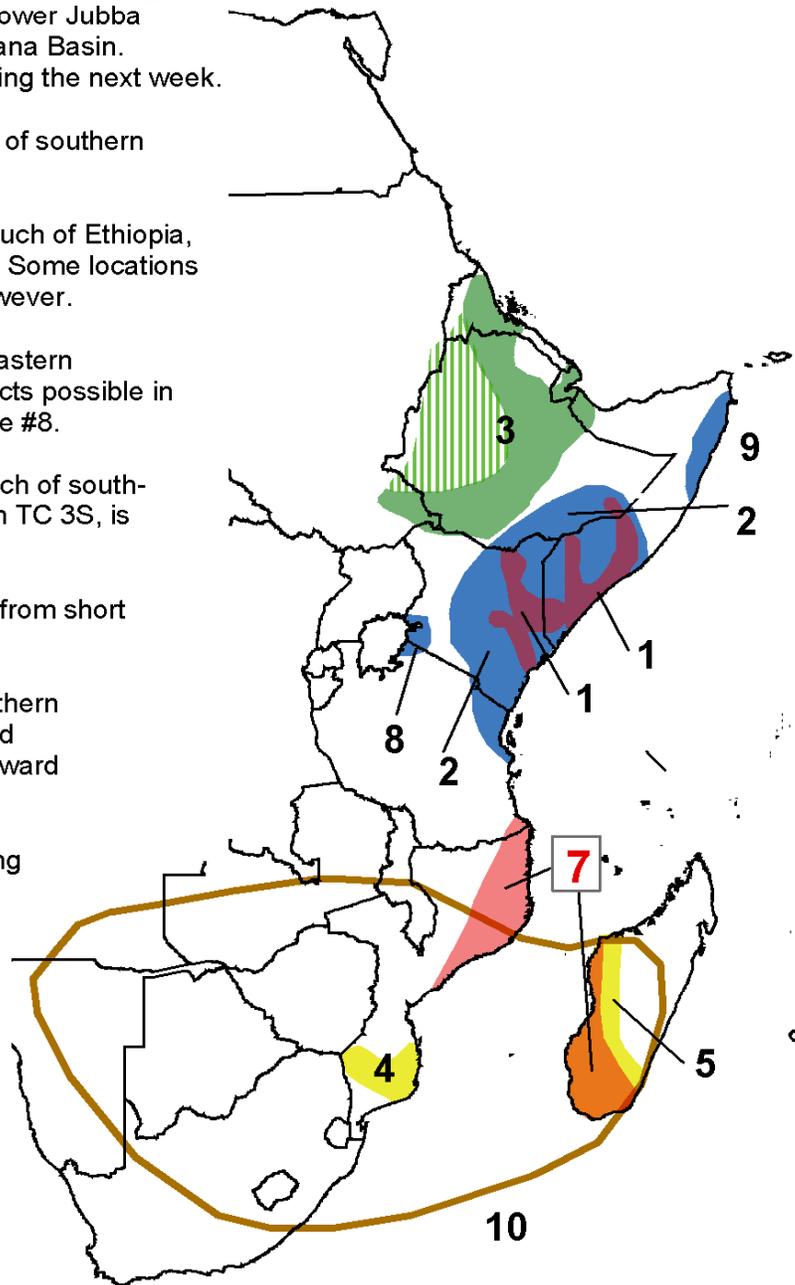
6) Winter crops are experiencing negative effects from short term dryness during the past weeks.

7) Tropical Cyclone 3 will bring heavy rains to northern coastal Mozambique during the next few days, and may bring heavy rains to southern Madagascar toward the end of the period.

8) Recent heavy rainfall has led to areas of flooding in the Nyando River Basin in Kenya. Additional rains are expected during the next week.

9) Onshore moisture is leading to heavy rains in parts of coastal northeastern Somalia. Localized flooding may result.

10) ENSO-positive (El Nino) conditions may lead to drier than normal conditions in early 2007.



Weather Hazards Text Explanation:

1. Rains have eased during the past week in much of southern Somalia, especially in the mid and headwater areas of the Jubba and Shabelle River Basins. Flooding remains a serious threat in areas toward the coast however, as flows continue downriver. There is a threat for heavy rains in headwater areas of the Shabelle River during the next week, as well as in the lower Jubba Basin. Therefore, flooding is likely in these areas.
2. Flooding remains a concern throughout much of southern Somalia, eastern and coastal Kenya, southeastern Ethiopia, and northeastern Tanzania, as heavy rainfall continues to fall throughout the region. However; rains have eased in much of southern Somalia during the past week, and heavy rains are not forecast in that area during the next week. Rains have increased in much of Kenya, leading to the continued threat of flooding in the region. On a seasonal note, there is little concern of water availability in the area, though concerns such as Rift Valley Fever, are rising due to the anomalous rainfall. The heavy rains have also caused problems with overland transportation, as roads have been washed out, cutting important supply routes particularly in northeastern Kenya.
3. Rainfall during the past season in much of central and western Ethiopia was sufficient to ensure adequate water resources for activities in the region. Generally, crops and pastures have benefited from the above normal precipitation, though some higher elevations in the west experienced periods of excessive rains and localized flooding. Dry conditions should prevail during the next week except in extreme southern locations.
4. Parts of southeastern Mozambique are experiencing short term dryness conditions due to late-starting and lighter than normal seasonal rains. Accumulated rainfall since October 1 are running from 0-25% of normal in these areas, with total anomalies of more than 100 mm less than normal for the period. Light rains are possible during the next week.
5. Much of southwestern Madagascar is experiencing late to start seasonal precipitation, with many areas having received no rainfall thusfar. On a positive note, TC 3S has the potential to move near the region during the next week and bring moderate rainfall throughout the region.
6. Conditions continue to be warm and dry across much of northern Algeria's winter cropped region. These conditions have remained for the past two months and crops are being negatively affected.
7. A cyclone has formed in the northern Mozambique Channel. Winds are currently relatively weak but are expected to intensify during the week as the system moves southward. Regardless, very heavy rains should fall during the next few days in northern coastal Mozambique. Depending on the further track, the system may either diminish or continue moving to the south, turn southeast, and impact southern Madagascar. Please see the Joint Typhoon Warning Center for the official forecast.
8. Heavy rains in the Nyando River Basin in western Kenya have led to flooding throughout the immediate area. Rains are forecast to continue to be heavy during the next week, and flooding will be likely.
9. Unusually heavy rainfall in northeastern coastal Somalia is currently falling in the area. Onshore winds are moving moisture into the region and rains will continue during the next few days. Localized flooding is therefore possible.
10. Positive ENSO conditions are occurring and are expected to continue through at least early 2007. Current sea surface temperatures in the Nino3.4 region are running around 1.5 degrees Celsius warmer than normal, and SST temperatures in the Pacific Ocean are greater than 2.0 degrees Celsius warmer than normal in some locations. The eastern Pacific Ocean region has continued to warm during the past two weeks. Therefore, a moderate El Nino is occurring. Based on climatological patterns relating ENSO conditions to precipitation trends in southern Africa, El Nino patterns are generally linked to negative rainfall totals in parts of Zambia, Zimbabwe, Botswana, Namibia, South Africa, Mozambique, and Madagascar during December through February. Furthermore, positive rainfall anomalies in regions of southern Africa during the month of October are usually followed by drier than normal conditions during January through March. So what does this all mean in terms of food security forecasts for southern Africa? Generally, agriculturalists must be careful that they are not fooled by favorable rainfall early in the season (October-early December), only to have the rainfall subside early in 2007. Of course there is no guarantee that this will be the case. For example, we are currently observing negative season-to-date rainfall accumulations in parts of eastern Zambia and in much of Mozambique. This certainly does not adhere to the wetter than normal early-season scenario. Furthermore, ENSO-southern Africa linkages do not fully take into account other phenomena such as Indian and Atlantic Ocean temperatures and their effect on rainfall throughout the area.

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