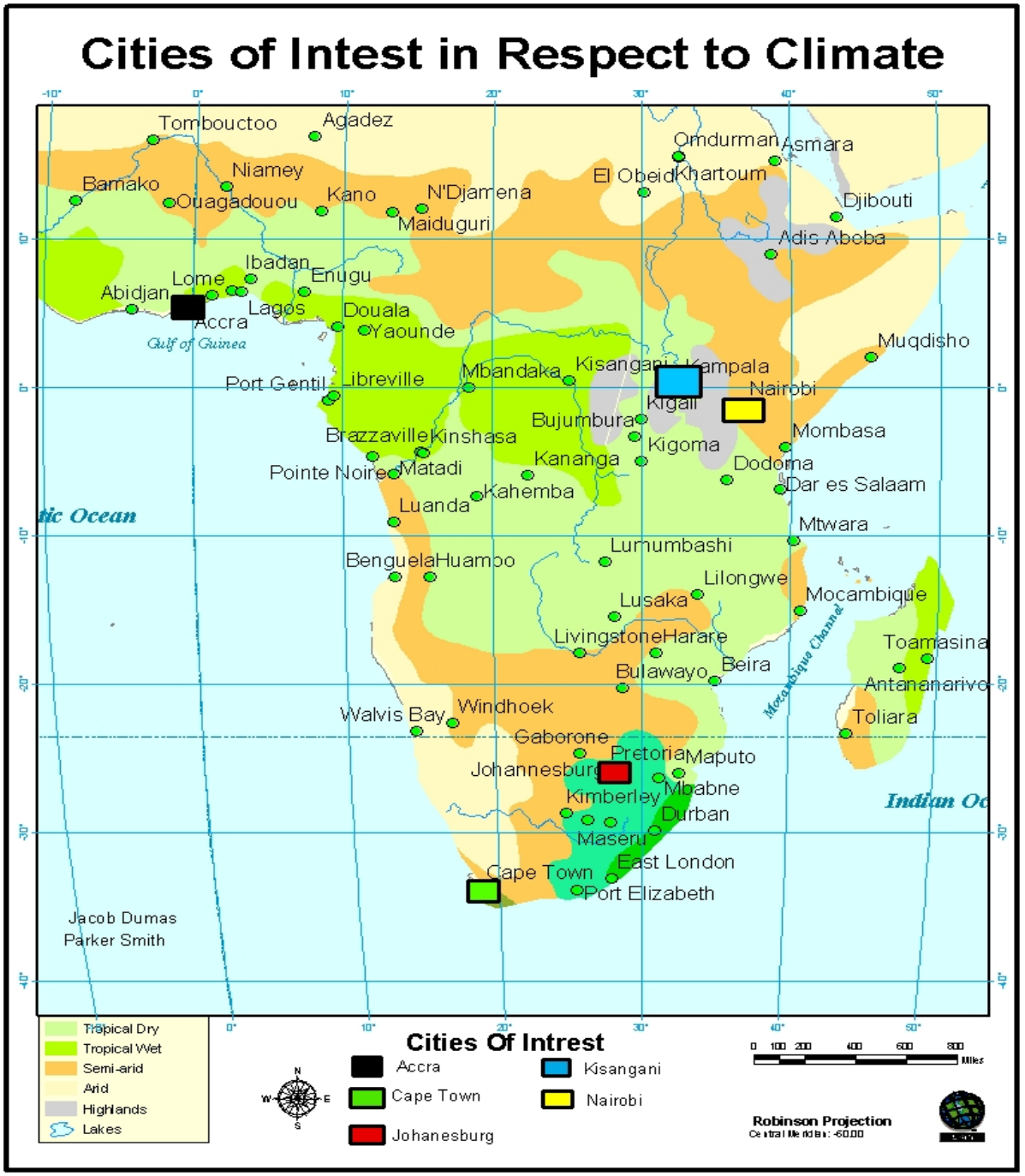
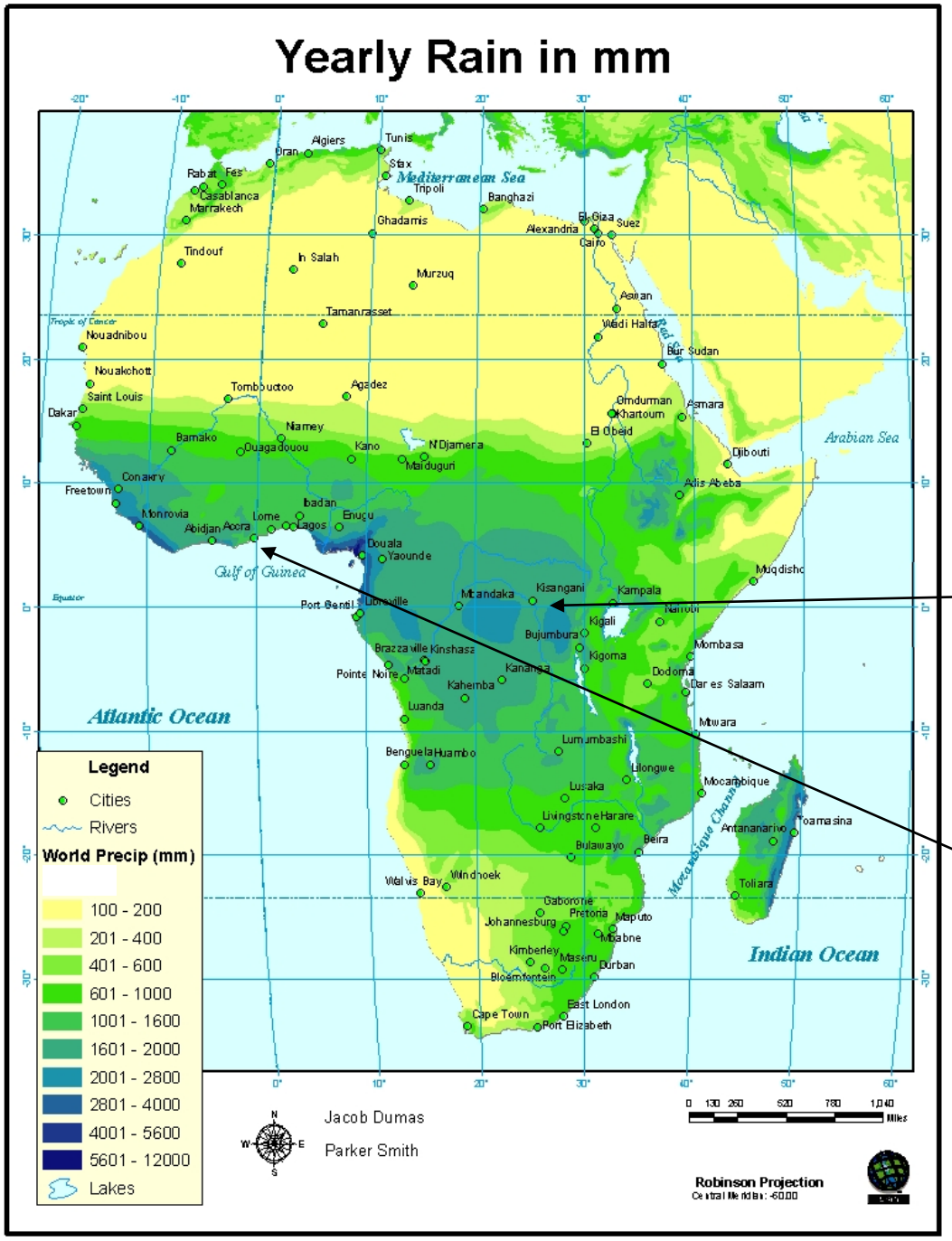
Source of Unknown Pathogen

Cities of Interest

- Johannesburg-South Africa
- Cape Town-South Africa
- Kisangani-Zaire
- Accra-Ghana
- Nairobi-Kenya



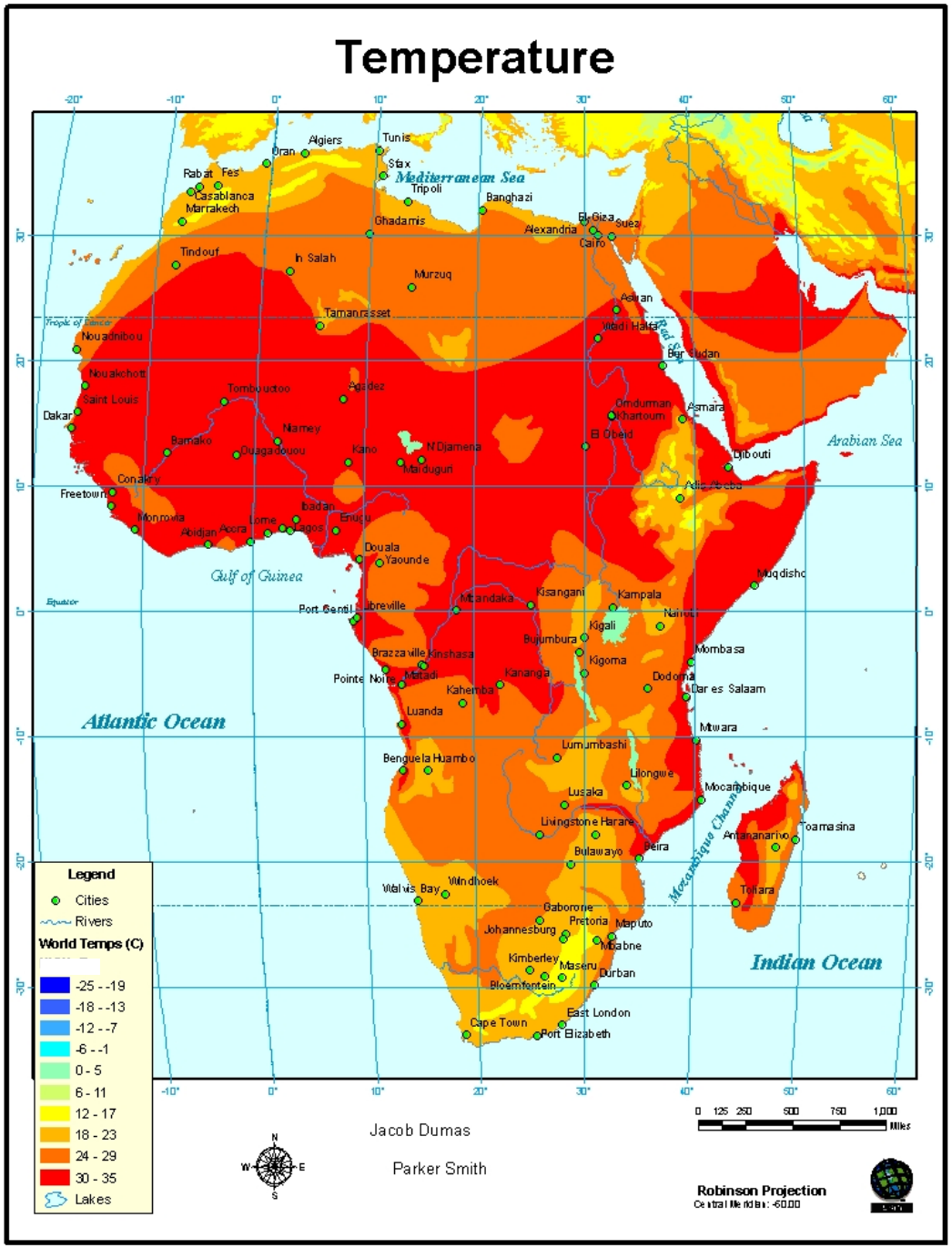
All of our cities of interest are either in tropical or coastal regions, besides Nairobi.



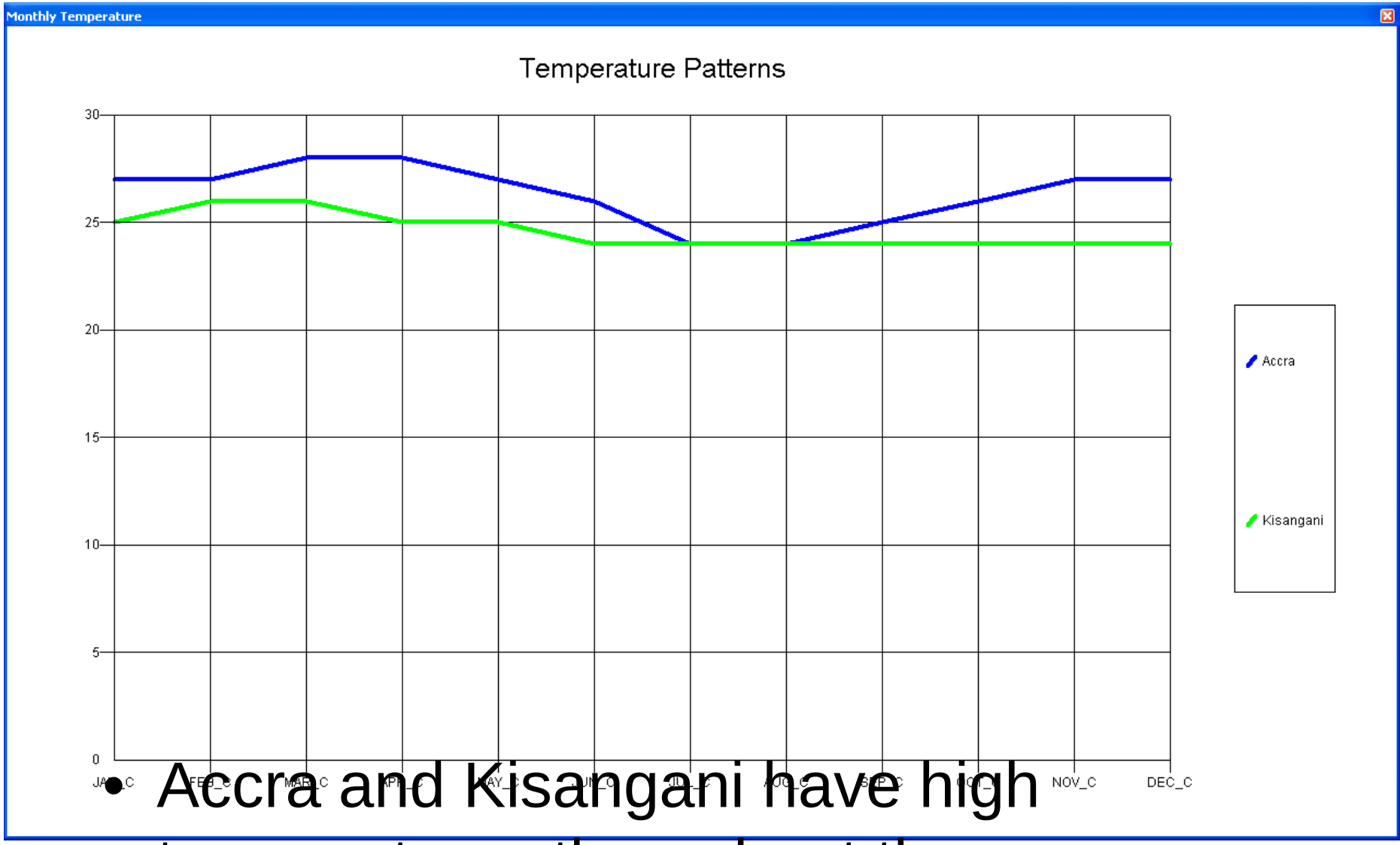
Accra and Kisangani are the two cities receive the most rainfall yearly, this is due to their climate and position in regards to the coast.

Kisangani

Accra



The temperature of all of our cities of interest are high. But the only cities that do not vary in temperature are Accra and Kisangani.



- Accra and Kisangani have high temperatures throughout the year, making them perfect breeding grounds for a deadly virus.

- Occasional storms might have an affect on Accra due to its coastal location but probably not Kisangani.
- El Nino and La Nina wouldn’t affect either of these cities; generally, the southern oscillation only affects south-eastern Africa.

Possible Pathogens

- Highly Pathogenic African Influenza H5N1, was first reported in Nigeria, which is close to both Accra and Kisangani and shares similar climate and precipitation.
- *Vibrio cholerae*, *Salmonella enteritidis*, *Escherichia coli* are all orally transmitted fecal based pathogens than are also very prevalent in African countries.

- Our conclusion is leading us to believe that Accra is the most fertile breeding ground for this virus, because it has ideal warm temperatures, low elevation, a high population, and high precipitation.
- The pathogen could be H5N1 because of its ability to spread easily and its prevalence in Africa