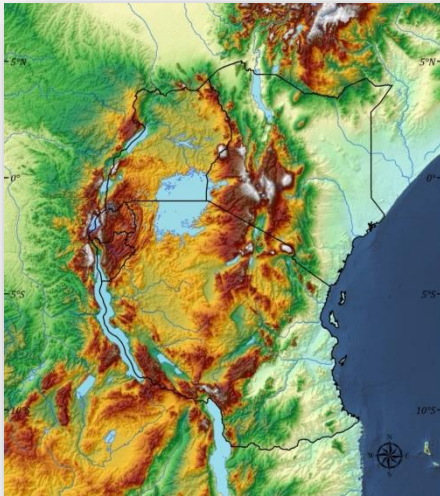


# EL NIÑO-SOUTHERN OSCILLATION AND ITS EFFECTS ON MALARIA SUITABILITY

## Ost-Äquatorialafrika



## Modeling Teleconnections of an El Niño-Southern Oscillation Event in the Years of 2030-2031 on East Equatorial Africa's Climate and Evaluating the Resulting Spatial and Temporal Malaria Suitability

### 5 Klimavariablen:

- Minimum Temperatur
- Ø Temperatur
- Maximum Temperatur
- Niederschlag
- Relative Luftfeuchtigkeit

### Methode:

ArcMap 10.2.2  
 Normalisierung  
 → *Fuzzy Membership*:  
 Stärke der Zugehörigkeit  
 zu einer Menge

0: kein Element der Menge  
 1: vollständig zugehörig

## Monatliche MS Ostafrikas in '30-'31

### Legend

Country borders

### Water bodies

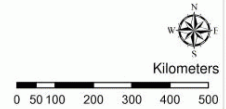
Lakes

Rivers

### Malaria Suitability

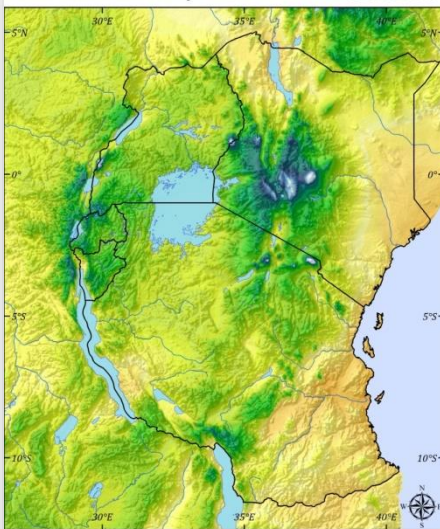
High : 1

Low : 0



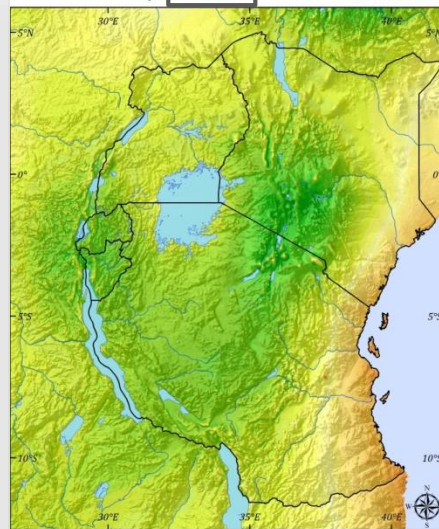
Legend: Malaria Suitability Maps. East African Community.  
 Coordinate System: WGS84 (EPSG: 4326).  
 SRTM: Jarvis, et al. 2008.  
 Rivers & Lakes, Countries: Natural Earth 2015. By Pinzner 2015.

Mean Minimum Temperature JANUARY



Average Monthly Minimum Temperature 1950-2010 (°C). East African Community.  
 Coordinate System: WGS84 (EPSG: 4326).  
 Source: TMIN: Hijmans, et al. 2005, ESR NOAA 2015, Kriticos, et al. 2012.  
 SRTM: Jarvis, et al. 2008.  
 Rivers & Lakes, Countries: Natural Earth 2015. By Pinzner 2015.

Mean Min. Temp. EL NINO 2030 JANUARY



Average Monthly Minimum Temperature 2030 (°C). East African Community.  
 Coordinate System: WGS84 (EPSG: 4326).  
 Source: TMIN: Hijmans, et al. 2005, ESR NOAA 2015, Kriticos, et al. 2012.  
 SRTM: Jarvis, et al. 2008.  
 Rivers & Lakes, Countries: Natural Earth 2015. By Pinzner 2015.

## Malaria Modell

