Status of GCOS in Uganda

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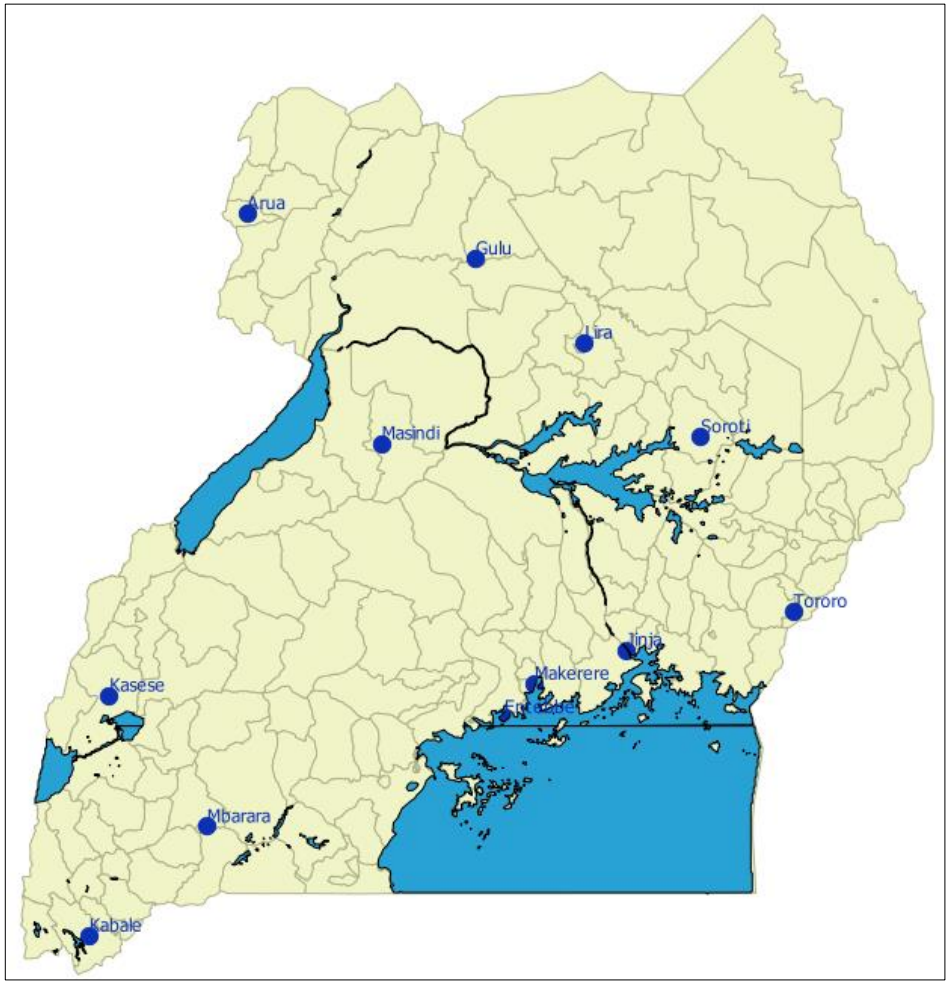
History of GCOS

As an outcome of the Second World Climate Conference, the Global Climate Observing System was established in 1992 to ensure that the observations and information needed to address climate-related issues are obtained and made available to all potential users

Uganda's Contribution to GCOS



Synoptic stations as part of the GCOS

1. Arua
2. Gulu
3. Lira
4. Soroti
5. Tororo
6. Jinja
7. Makerere
8. Mbarara
9. Kabale
10. Kasese
11. Masindi

Essential Climate Variables

Categories

1. Surface
2. Upper Atmosphere
3. Atmospheric Composition

Surface
Precipitation
Pressure
Surface Radiation
Surface Wind
Temperature
Water Vapour

Upper Atmosphere
Earth Radiation Budget
Lightning
Temperature
Water Vapour
Wind

Atmospheric Composition
Aerosols properties
Carbon Dioxide, Methane and other Greenhouse gases
Cloud Properties
Ozone
Precursors

Critical Challenges in Observations

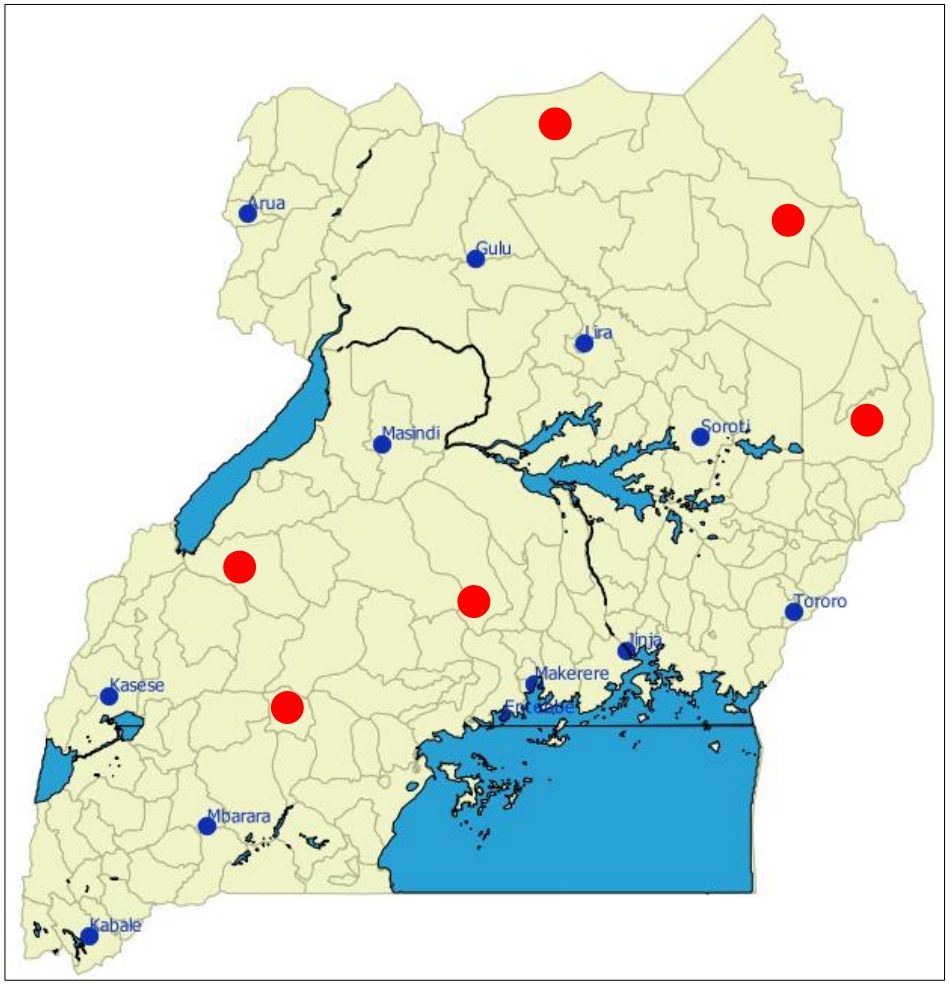
Shortage of Manpower

Uganda has 12 Synoptic Stations which should work 24 hours per day

1. Only one out of the 12 Synoptic stations operates 24 hours - Entebbe

2. Most of the stations have 2 Weather Observers instead of 6 Observers and thus operates 12 hours

Gaps in observational networks



The weather station network density is sparse

Additional six synoptic stations are needed.

Sustainability of long-term operations

Manual operations

1. The 30 minute observations is tedious.
2. Manual instruments no longer in production
3. Mercury based thermometers no longer in production.
4. Automation of Observations still in process.
5. Calibration of weather instruments.

Migration to TDCF

It is a requirement to exchange data globally in TDCF

UNMA is still in the process to fully migrate to TDCF

Uganda to use experience from Partner States to expedite it migration process

THE END
THANKS FOR LISTENING