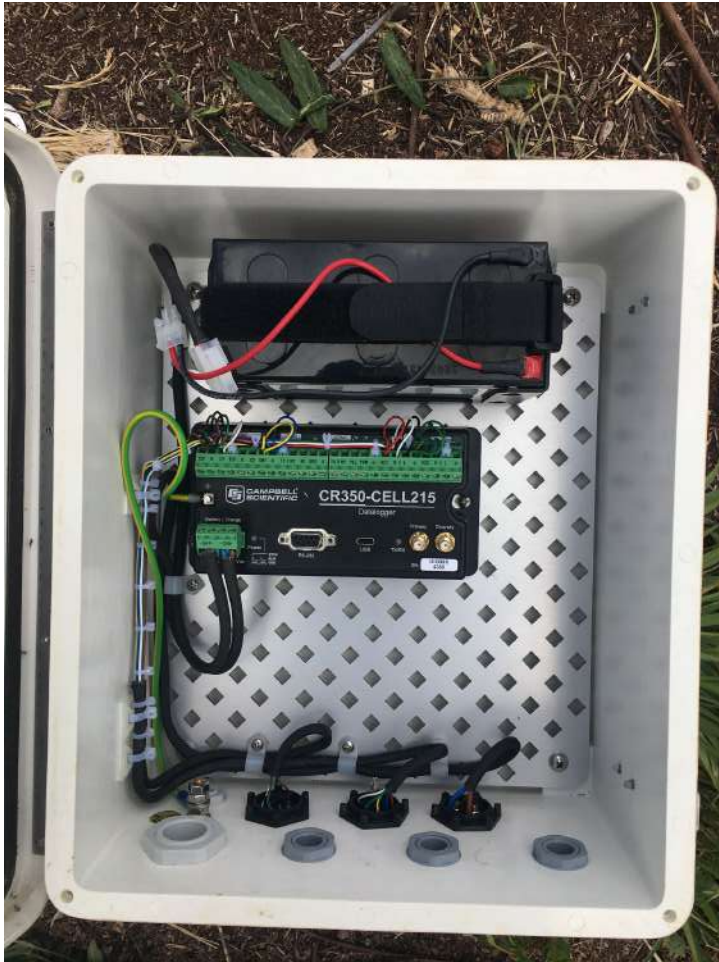


Weather Stations and expeditions

Instrument : Campbell Scientific CR350-CELL215

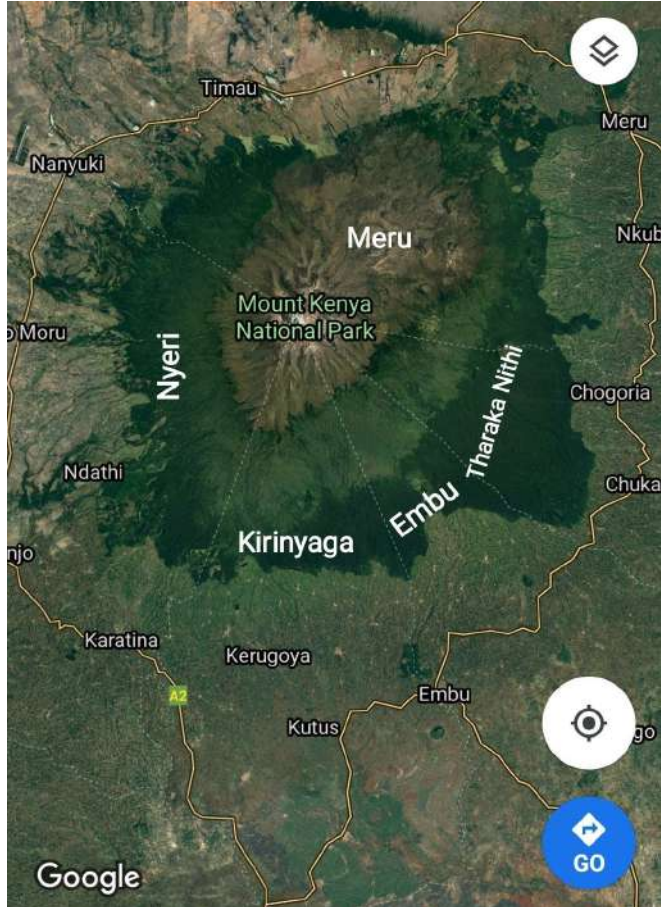
- Data logger, solar panels, sensors, masts
- The systems are equipped with 2 sensors: Climavue50 and SL515 Apogee Pyranometer. The Climavue sensor measures all main meteorological parameters, and the apogee sensor records solar groundwave radiation. The instrument also has a raingauge and a lightning detector. The sensors make recordings that are collected by the CR350 data loggers which store and transmit the data.





- Data loggers have options of **transmitting data** via mobile network (through built in sim option), via wifi(ethernet-RNDIS) and through USB connection. This specific model works with CELL only, and can be configured as a router which allows internet connection.

Mt. Kenya Expedition



Team: Robert Ngechu, Richard Vaughan, Chris.
4 hour drive from Nairobi to the ranger's station:
30 minute walk up to site which sits next to the fire
watch tower

Mt. Kenya Expedition



Mt. Kenya Expedition



Mt. Kenya Expedition



- Permission from Mt. Kenya forest trust, from Kenya wildlife service.
- Rangers helped with porting and clearing of vegetation



Mt. Kenya Expedition : Ensuring connectivity and security

- The site sits in the line of sight of a safaricom 4G booster - confirmed in the early stages of planning by safaricom consultant Joseph Kihurani.
- Wild animals are the biggest source of disruptions, especially elephants.
- An electric fence with a power source was commissioned to ensure safety.

Mt. Kenya Expedition

1. Securing the instrument with the masts.
2. Setting up solar panels.
3. Securing solar power pack
4. Ensuring connectivity
5. Configuring data logger
6. Monitoring data



Mt. Kenya Expedition



Mt. Kenya Expedition



Mt. Nyiro Expedition



Mt. Nyiro Expedition

Location : Samburu county, eastern side of the mountain.



Mt. Nyiro Expedition



Shirley Atieno (TUK) , Joash Kipkemetei(UoN), Isaac An'gina (TUK), Harold Safary(KSA), Dorcus Nthoki (TUK), Eddie Graham(Univ. of Highlands and Islands), Robert Ngechu (TBI), Jamie Robinson(Univ. of Edinburgh), Woto Huka(TBI), Losongo(TBI), Jacob Lekupe(Loongorin), Mike Anubi(TBI), Lekshmi Gopal(TBI), Chief Moses (Loongorin), Team of porters(Loongorin).

Mt. Nyiro Expedition

Loongorin Village



Mt. Nyiro Expedition



Pre-arrival

- Jacob Lekupe from Loongorin village reported the details of the team and the intended project to the community elders and the local chiefs. They discuss this in their town halls and determine whether they are happy to allow us to proceed.

Upon arrival

- Participation in the elders' town hall. The team leads share the intentions of the project again and ask for permission and blessings.
- Elders share their expectations, gave blessings and reminded us of our responsibilities and ethical duties to preserving the mountain environment and fully engaging with the community at all stages.

Mt. Nyiro Expedition



The team representative, Eddie Graham, hands over a gift as a token of thanks to the elders. This includes a promise to include the youth in the expedition as an offer of short term employment.

Mt. Nyiro Expedition

- 9-11 hour hike
- ~2800m
- 20-25 degrees cooler at peak
- Equipment started going up 2 days prior



The climb



The climb



Campsite



Campsite



Installation



Installation



Closing camp and descent



DAT

A

WRF Met. model

Community engagement : Planning a project - Ol Dono Mara, Samburu County

Given the information from today's session, and your own experiences and insights:

If the Mt. Mara site were to be selected for the optical telescope, what would be your approach with its installation regarding collaboration with the community? What types of community engagement would you prioritise for this region and this project - work in your groups to outline the implementation of these.

In your presentations, you should include:

1. The title and the main goal your initiative will achieve
2. Who will be involved in implementation, who are the target groups
3. Description of activities to be carried out
4. The time scale of the project, budget, potential stakeholders
5. Who/what the beneficiaries are, what are the expected impacts
6. How you will gauge success, which indicators will you use to measure the impact
7. How will you communicate your project with the general community and stakeholders

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