

East Africa Session – AMSAF EUFA

Participants

- Kenya
- Tanzania
- Burundi
- Rwanda
- Somalia
- Sudan
- ACMAD

KMSA (Kenya) Presentation

- RSMC Nairobi have 10 member states
- Dissemination of warnings via CAP and on KMSA website
- Key challenges:
 - **Insufficient observation data**
 - Lack of local NWP, **optimum data processing computing capacity**
- Future:
 - Improve resolution of WRF model
 - Lead early warnings in East Africa
 - Moving to hourly data would be helpful
 - Historical data to develop probability maps
 - Polar Orbit Satellite data from RARS for use by KMSA would be well appreciated

Regional perspective on needs and priorities

Current Constraints

What are the main barriers to operational nowcasting?

- Possible challenges:
 - Limited satellite product access
 - Internet bandwidth issues
 - Lack of computing infrastructure
 - Limited radar coverage
 - Staffing constraints
 - Training gaps
 - Limited integration with warning systems

Specific Challenges

- **Burundi** mentioned staff and training challenges
- **Tanzania** mentioned various sources for warning generation
- Question about the Automatic Weather Station (AWS) data use for verification and validation: **KMSA** spatial distribution of the stations is not adequate, some AWS's is not maintained.
- **Rwanda** shared challenges with forecast model use.

How can SEWA-AMSAF best support your NMHS?

- Training programmes
- Operational demonstrations
- Pilot projects
- Satellite product development
- Regional collaboration
- Forecast verification support
- Nowcasting tool development

How to improve satellite nowcasting strengthen:

- Hazard detection
- Warning lead times
- Decision-making
- Community preparedness
- Aviation safety
- Disaster risk reduction

Priority hazards and services for satellite-based nowcasting

- **Kenya and Tanzania** (Saumu / Miriam / Shamim):
 - Severe thunderstorms (specially Mar – May, Oct – Dec)
 - Flash Floods
 - Tropical cyclones
 - Strong winds (June / July)
 - Dust storms
 - Aviation weather hazards
 - Ocean waves (June / July)
 - Frost
 - Heat waves
- **Rwanda**
 - Lightning
 - Strong winds forecast
- **Somalia**
 - Thunderstorms (Autumn)
 - Sand and Dust storms (Summer)