

# Forecasting Lake Victoria Storms using NWCSAF Products: the case of 25 February 2022

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## Introduction

Overview of Lake Victoria.

## Forecasting Tools

What are forecasters using?

## Conclusion

Application of NWCSAF in forecasting.

## Two drown, six missing as boat capsizes in Lake Victoria

NYANZA

By James Omoro | Sep 21st 2021 | 2 min read

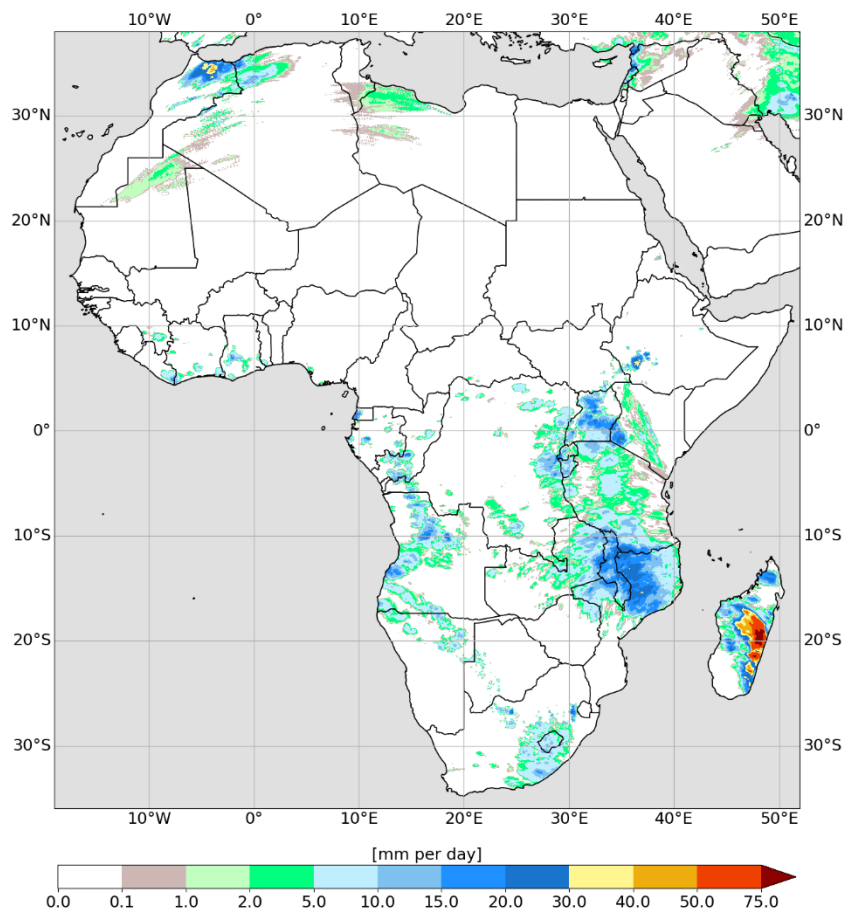


<https://www.standardmedia.co.ke/nyanza/article/2001424100/two-drown-six-missing-as-boat-capsizes-in-lake-victoria>

- Lake Victoria is Africa's largest lake.
- It is estimated that each year the lake provides in excess of \$650 million worth of fish (Njiru et al, 2018).
- Transporters often use small boats that are vulnerable to severe weather.



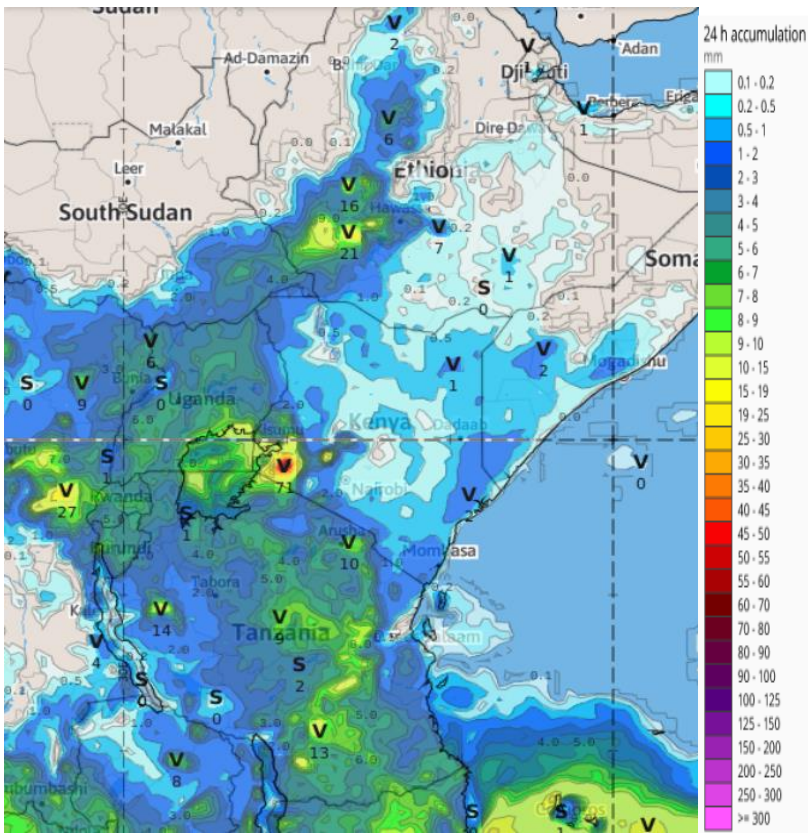
Period: Year 2022, Month 02, Day 25  
Theme: Rainfall Estimate (accumulated rainfall in period)  
Source: TAMSAT, derived from Meteosat TIR



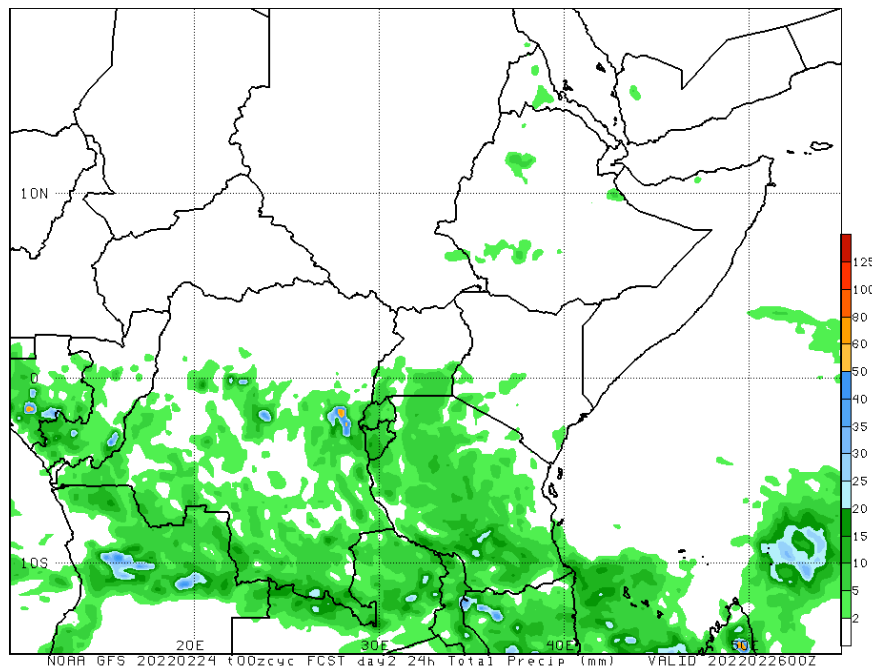
- On 25 February 2022, an intense storm occurred over the Kenyan side of Lake Victoria.
- Suba, a station on the southern shores of Lake Victoria recorded 49.5mm in 24hrs. Kisumu, on the eastern shores recorded 18.3mm.
- The rain started at about 1700UTC (8PM EAT) and stopped at about 2300UTC (2AM).



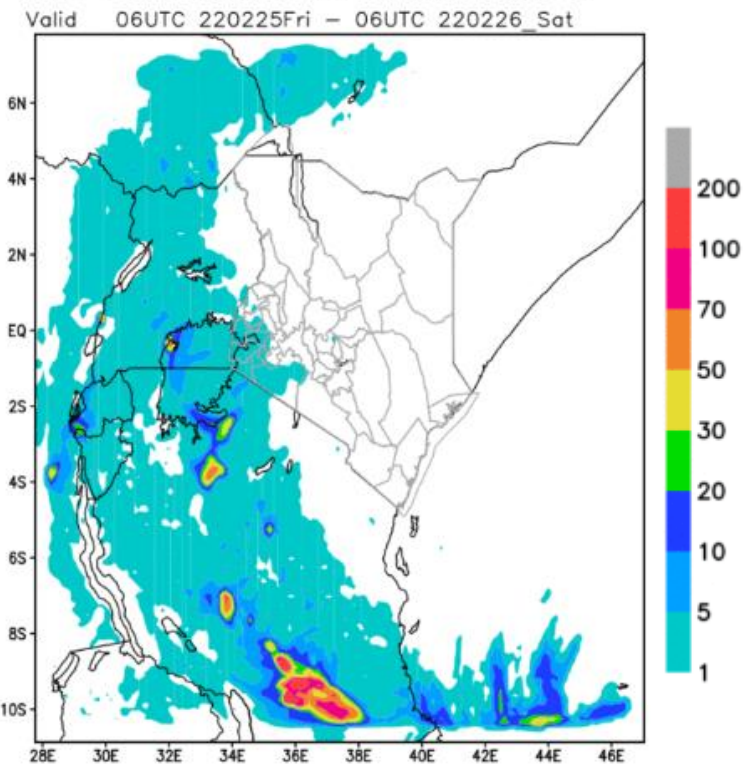
### UKMO (Global)



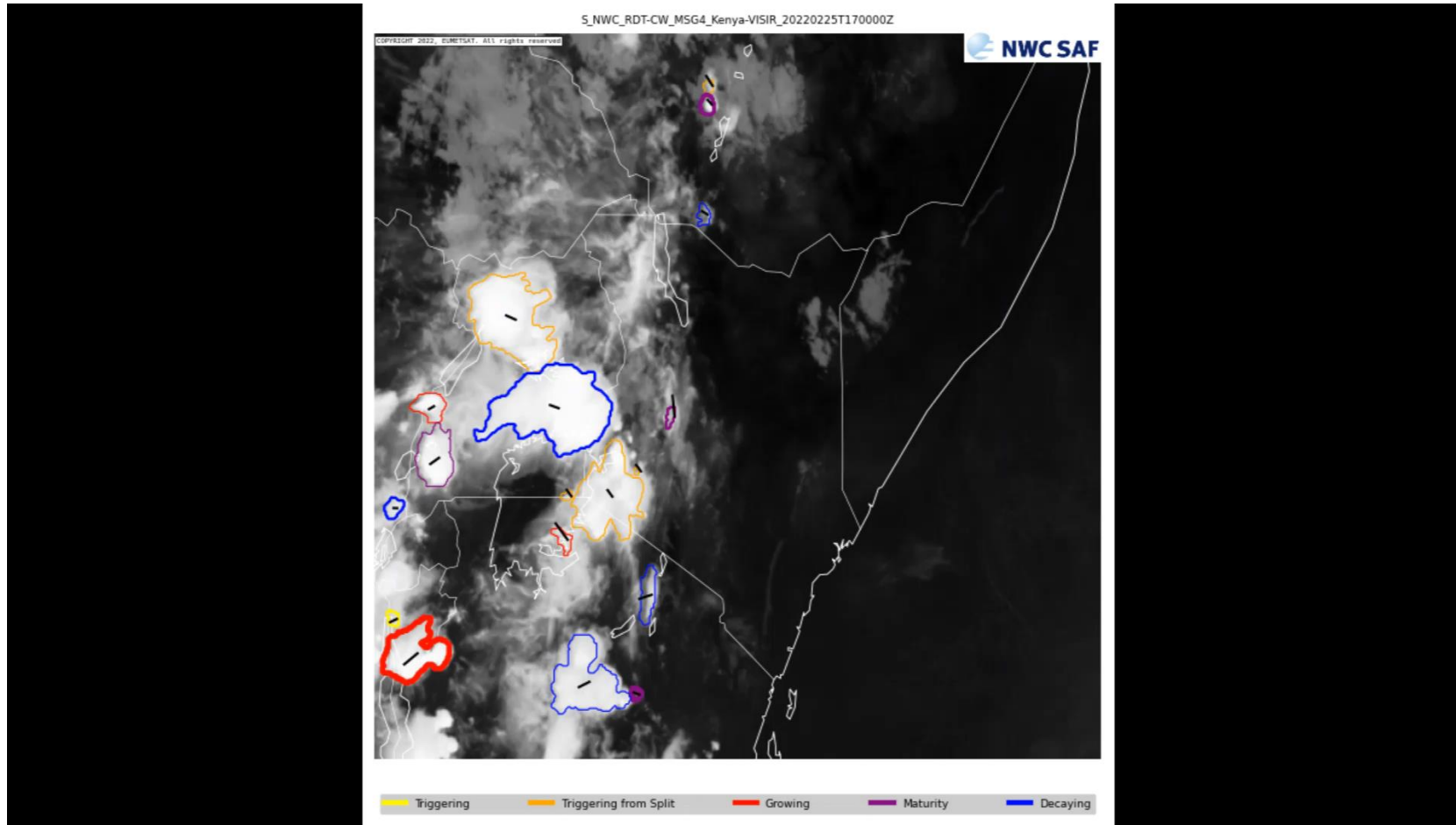
### NCEP



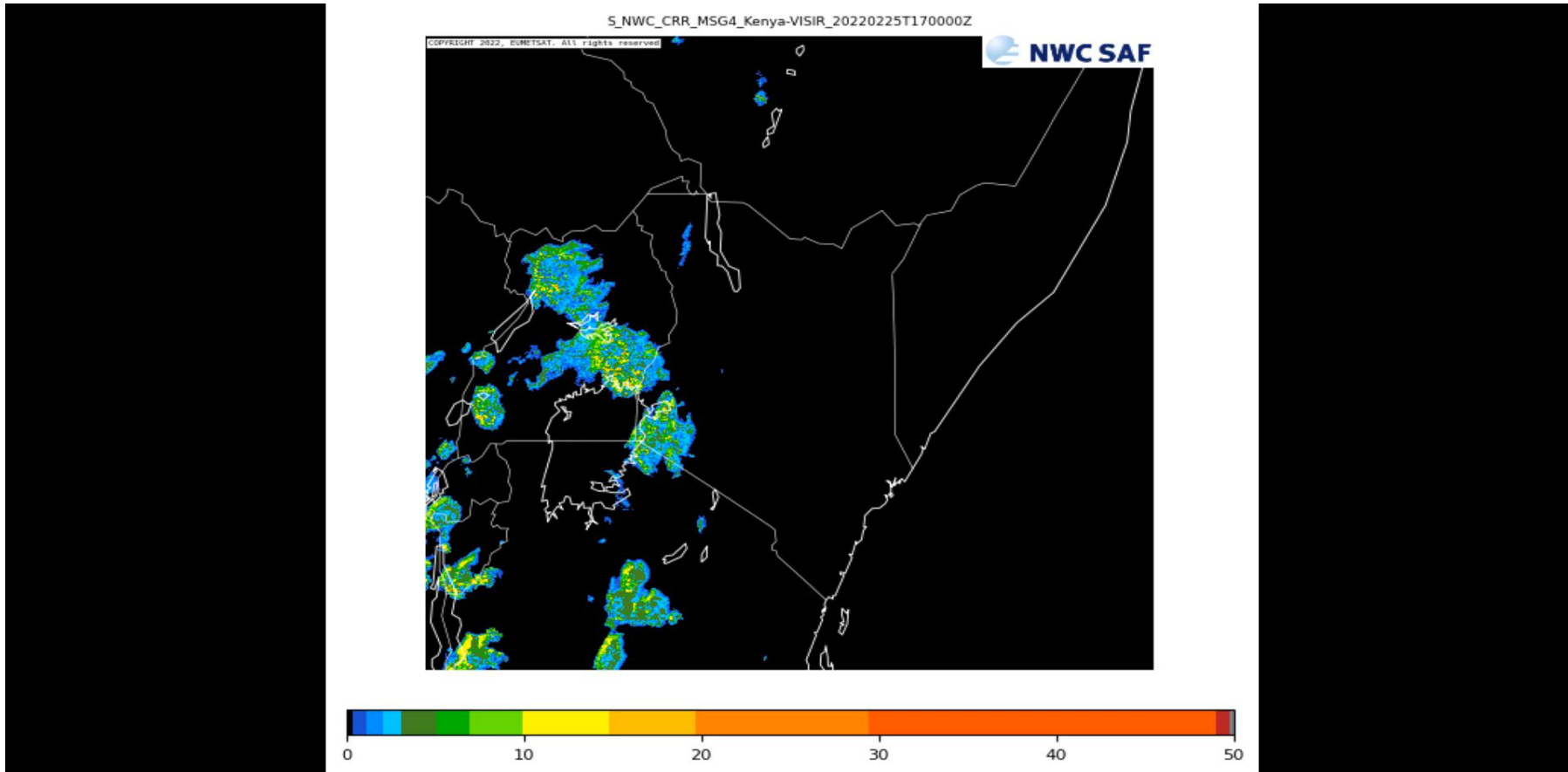
### 4km WRF KMD (EA) Total Rainfall (mm)



- None of the models forecasted heavy rainfall over Lake Victoria



- The genesis of the storm & its progression through the night is well represented.



- The forecast indicated rainfall of up to 10mm/hour.



- The use of RDT and CRR allows forecasters to detect and nowcast storms over Lake Victoria.
- Satellite-based nowcasting e.g. NWCSAF fills the gap left by “short-range” forecasts (6 hours to 5 days).
- Nowcasting products generated using NWCSAF can be disseminated to beach managers on Lake Victoria who can then advise fishers on life-threatening weather conditions.
- NWCSAF can also support the monitoring of severe weather at airports.





- There is urgent need for:
  - i. NWCSAF products to be available more forecasting centres.
  - ii. Operationalization of nowcasting at all East African forecasting centres.



**Thank you!**

Questions are welcome.