



TACKLING EXTREME PRECIPITATION EVENTS

**how to improve disaster preparedness capacity in
countries in the Indo-Pacific region using space-based
information and services.**

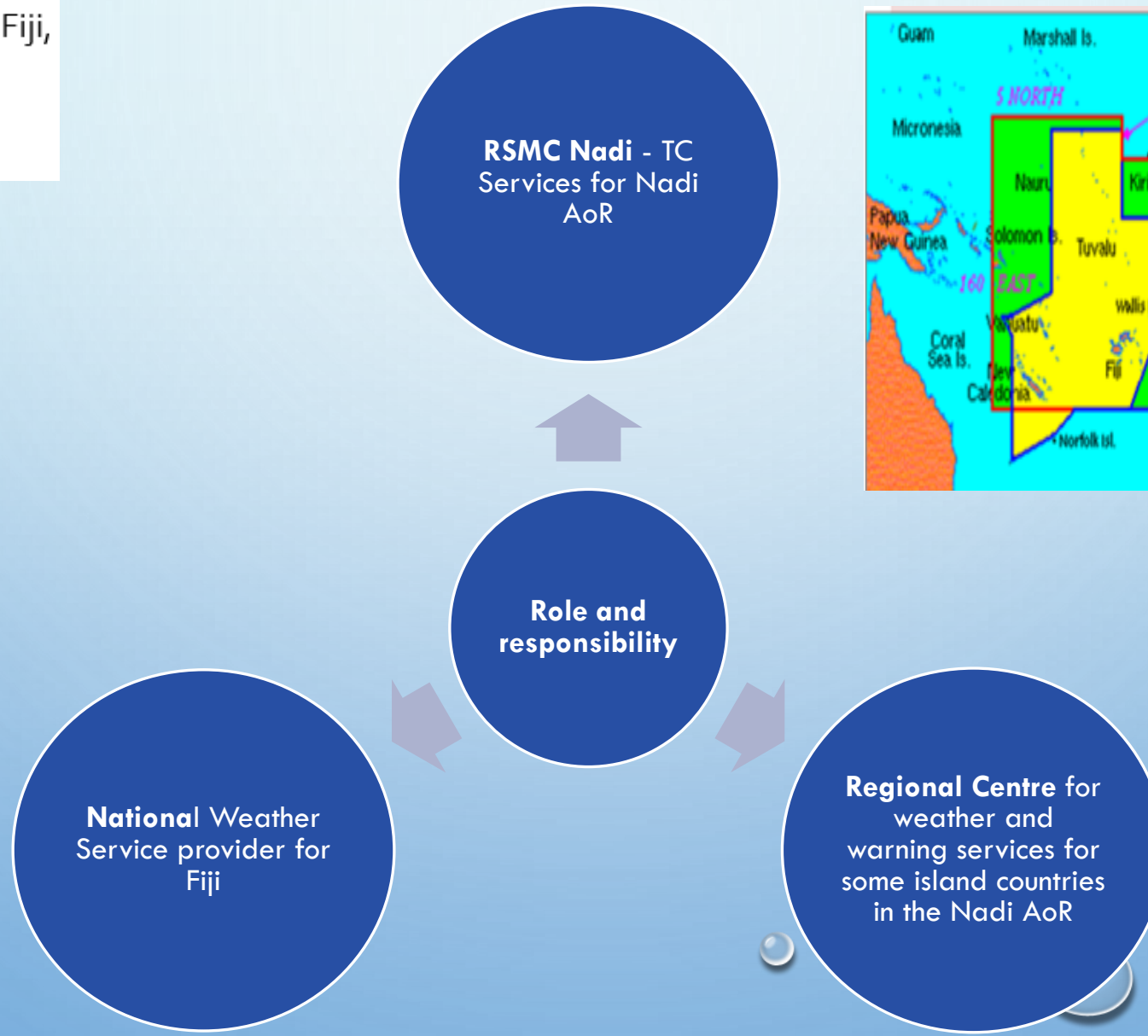
**Stephen Meke
Acting Principal Scientific Officer
Fiji Meteorological Service/RSMC Nadi**



FIJI METEOROLOGICAL SERVICE AND RSMC NADI ROLES AND RESPONSIBILITY

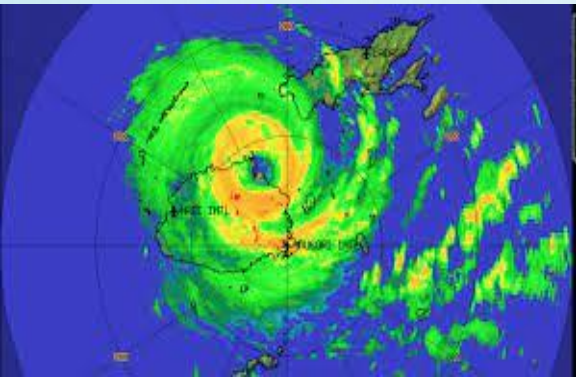
- ❑ Nadi FIR (SIGMETs)
- ❑ TAF and ARFOR services for Fiji, Tonga, Samoa, Tuvalu, Cook Islands, Niue and Kiribati.
- ❑ TCA upto 40s

- ❖ RSMC Nadi Area of Responsibility
- ❖ Tropical cyclone warning Services
- ❖ Southwest Marine Forecast
- ❖ International Marine Services
- ❖ Public Weather services for Fiji, Nauru, Kiribati, Tokelau, Tuvalu, Cook Islands and Niue
- ❖ Backup for TC services

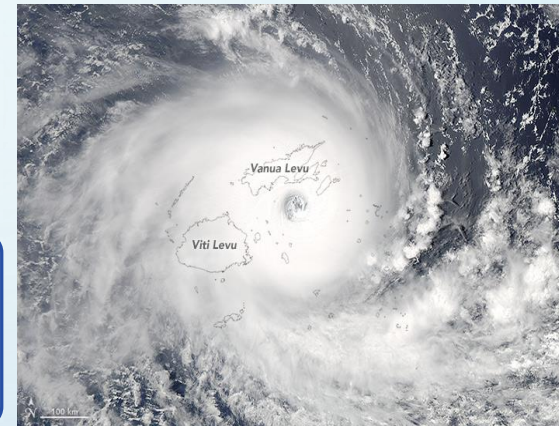




METEOROLOGICAL HAZARDS THAT AFFECTS FIJI AND THE REGION



Tropical Cyclones / Tropical Depressions



Damaging to
very Destructive
Winds

Heavy Rainfall

Storm Surges
and Damaging
Heavy Swells

High to
Phenomenal
Seas

Flash and
Severe Flooding

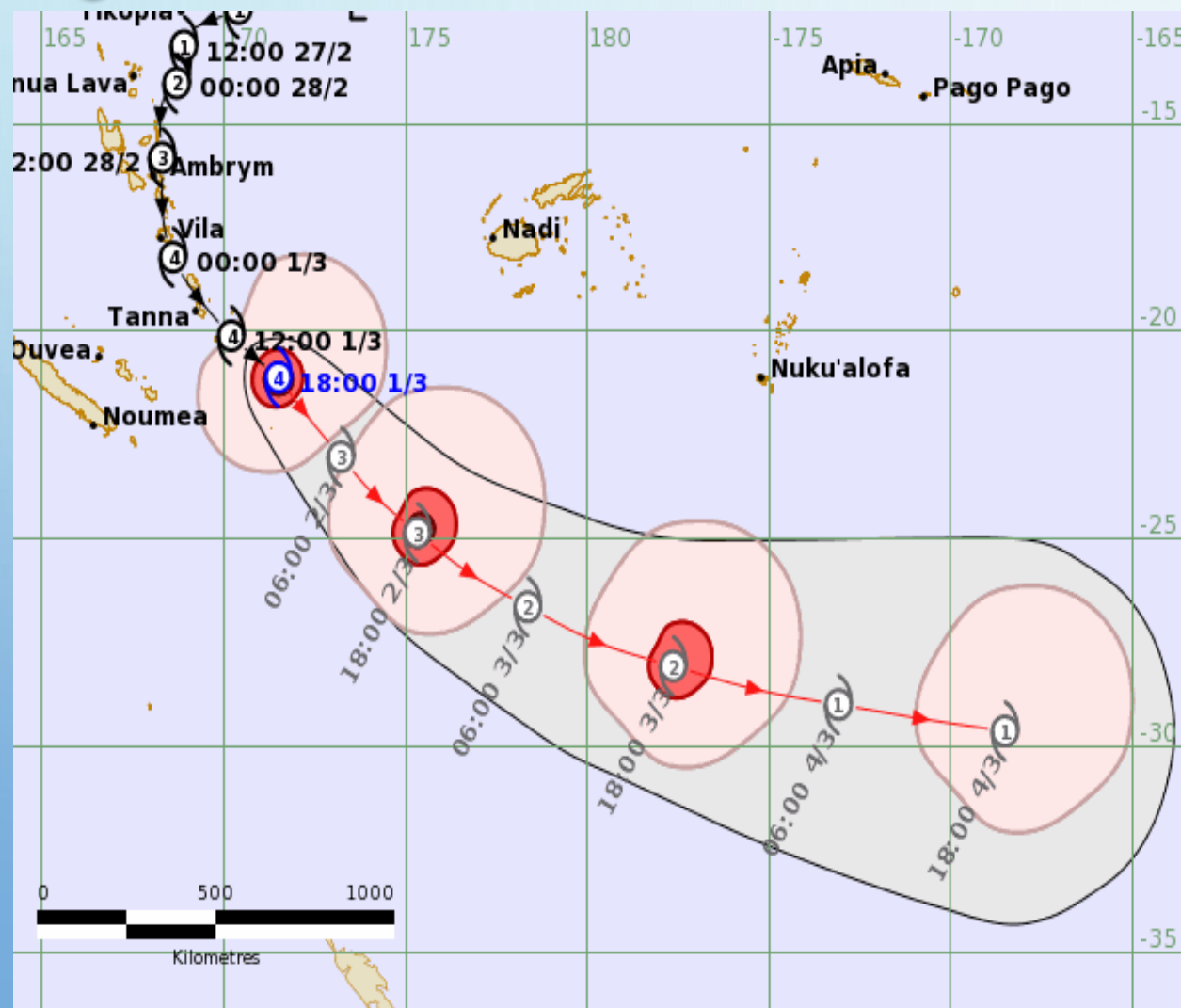
Coastal
Inundation



IMPORTANCE OF CAPACITY BUILDING



SEVERE TC JUDY



Select Area

South Pacific Islands

Band

Heavy rainfall potential areas

Time

23:10 UTC 01 March 2023

Animation

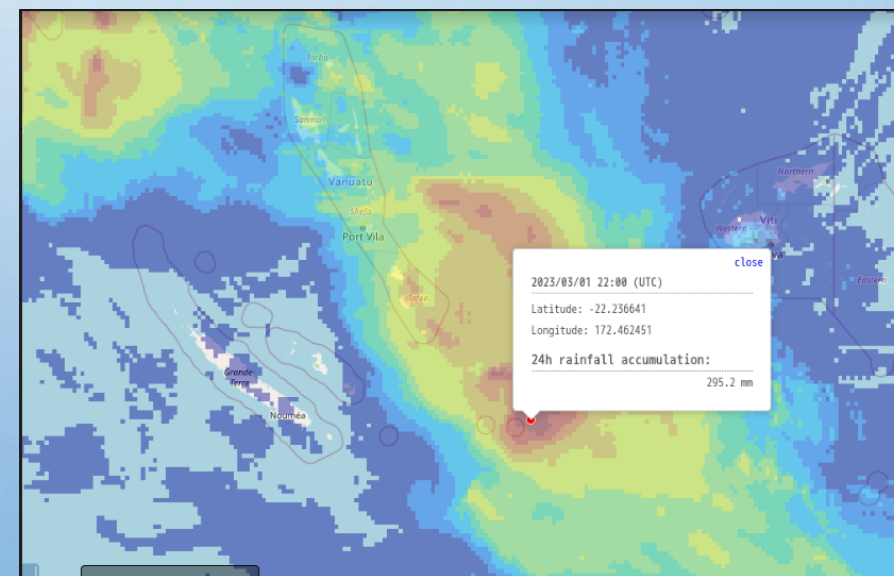
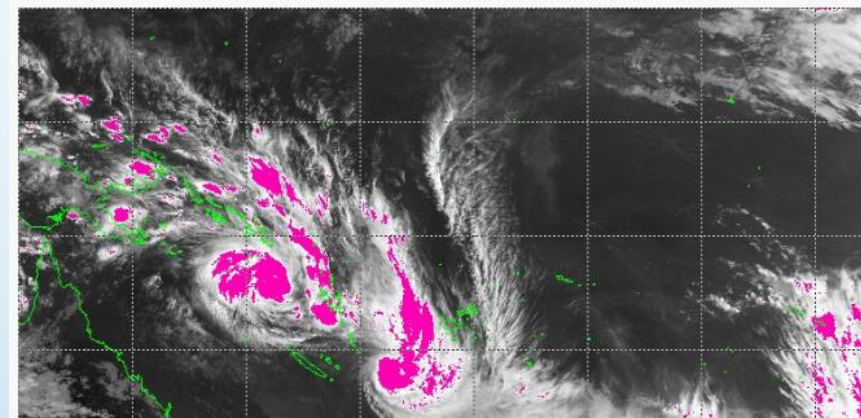
Last 1 Hours

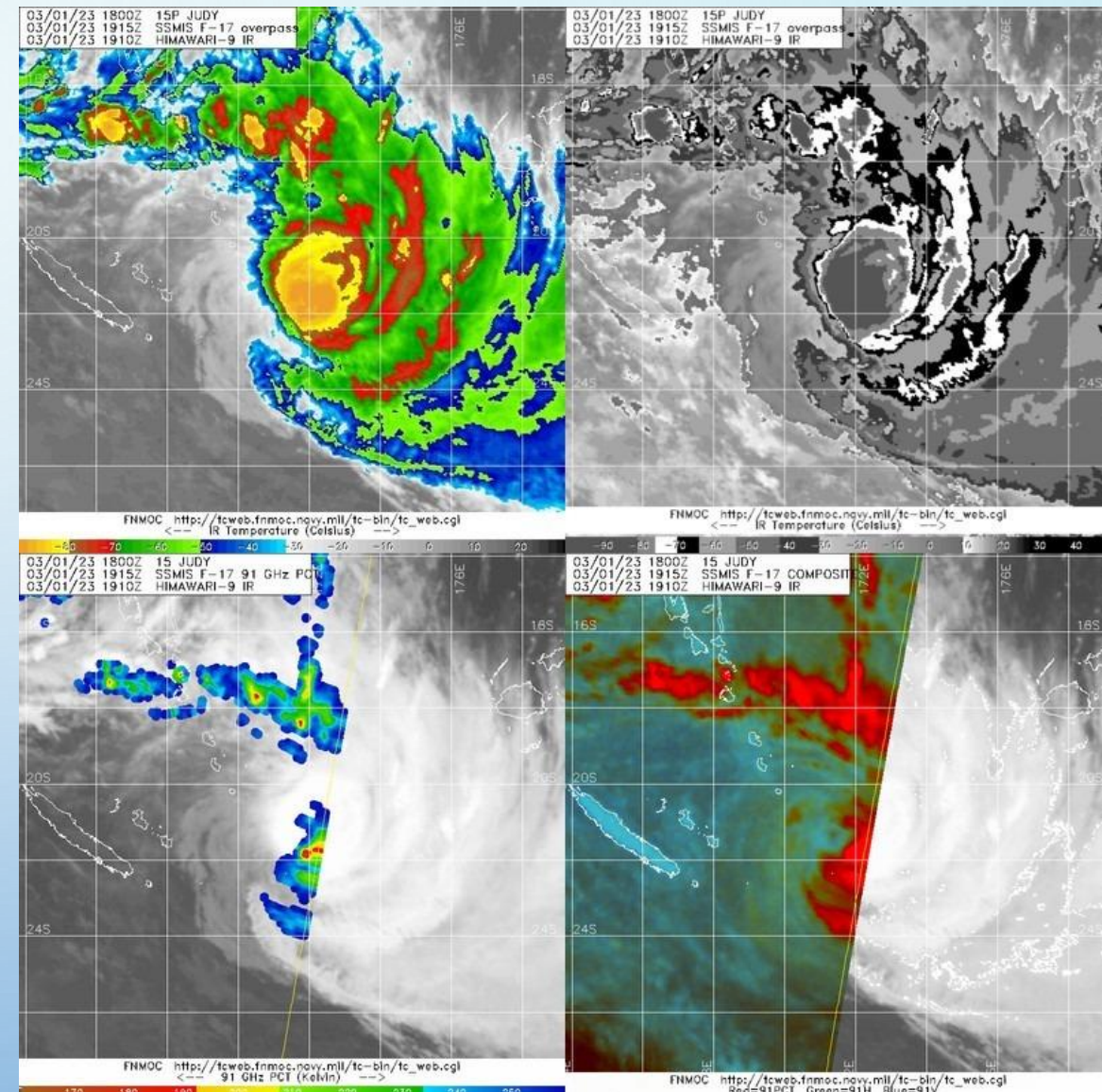
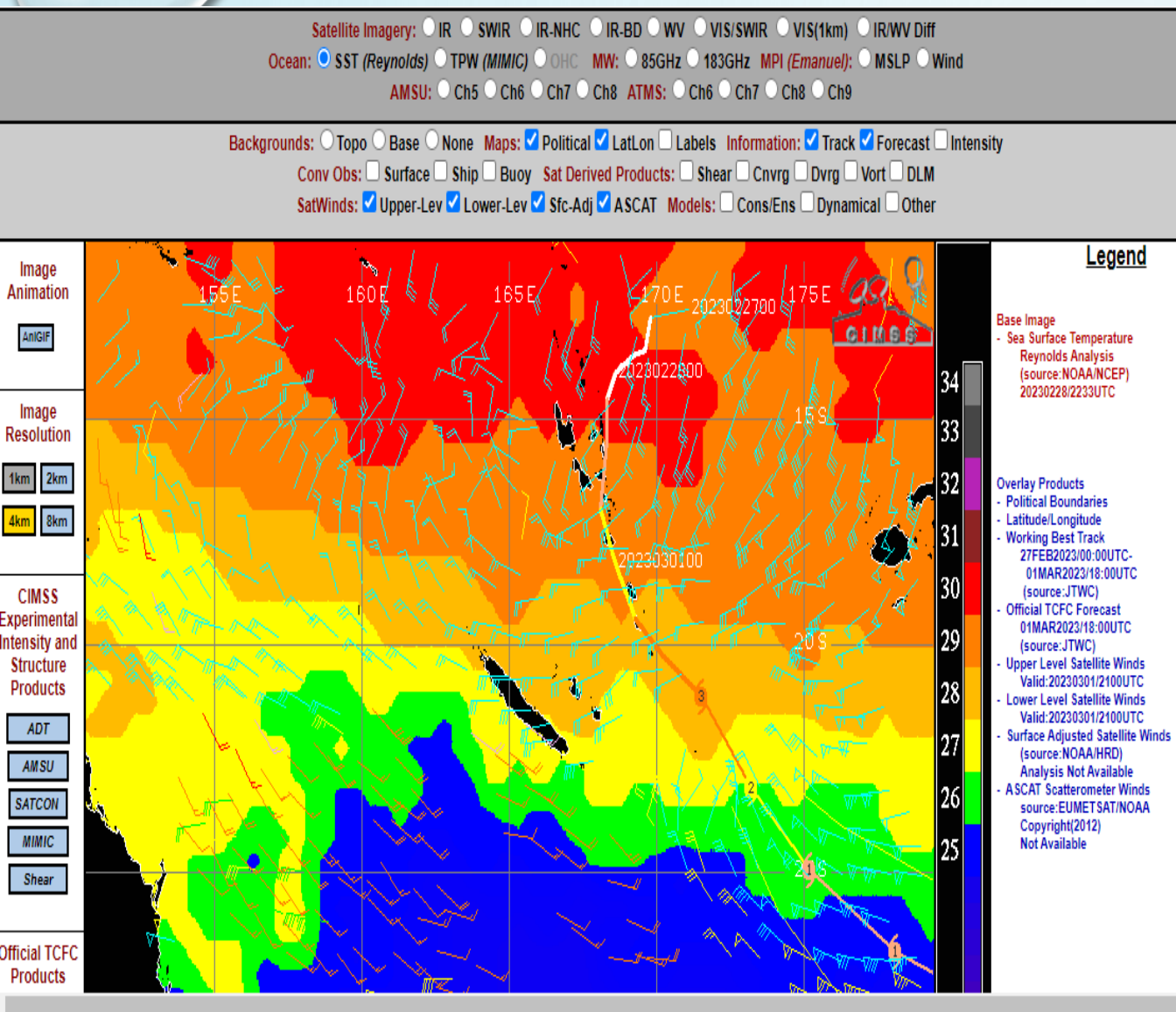
Play

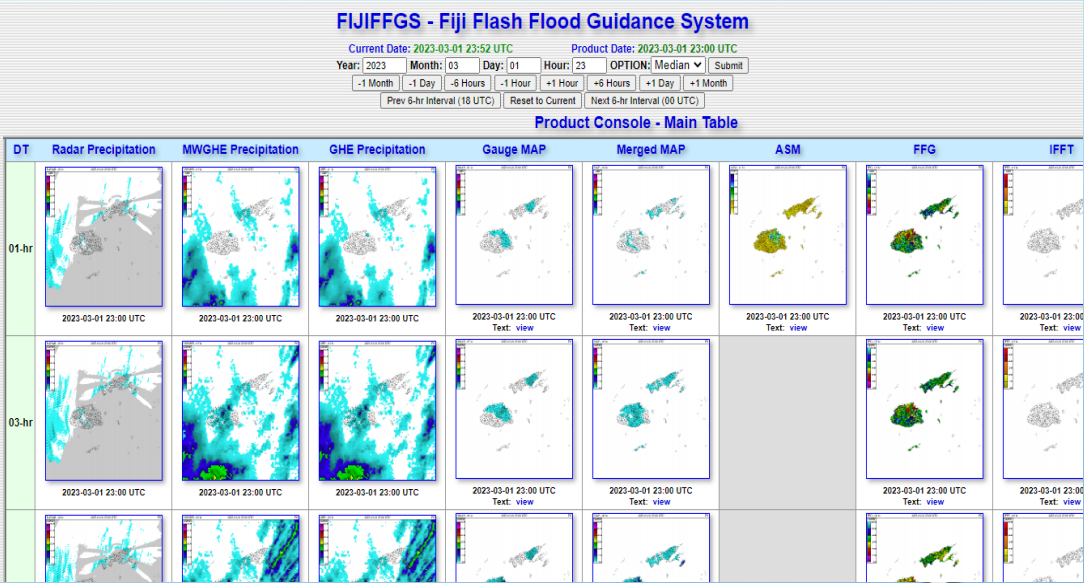
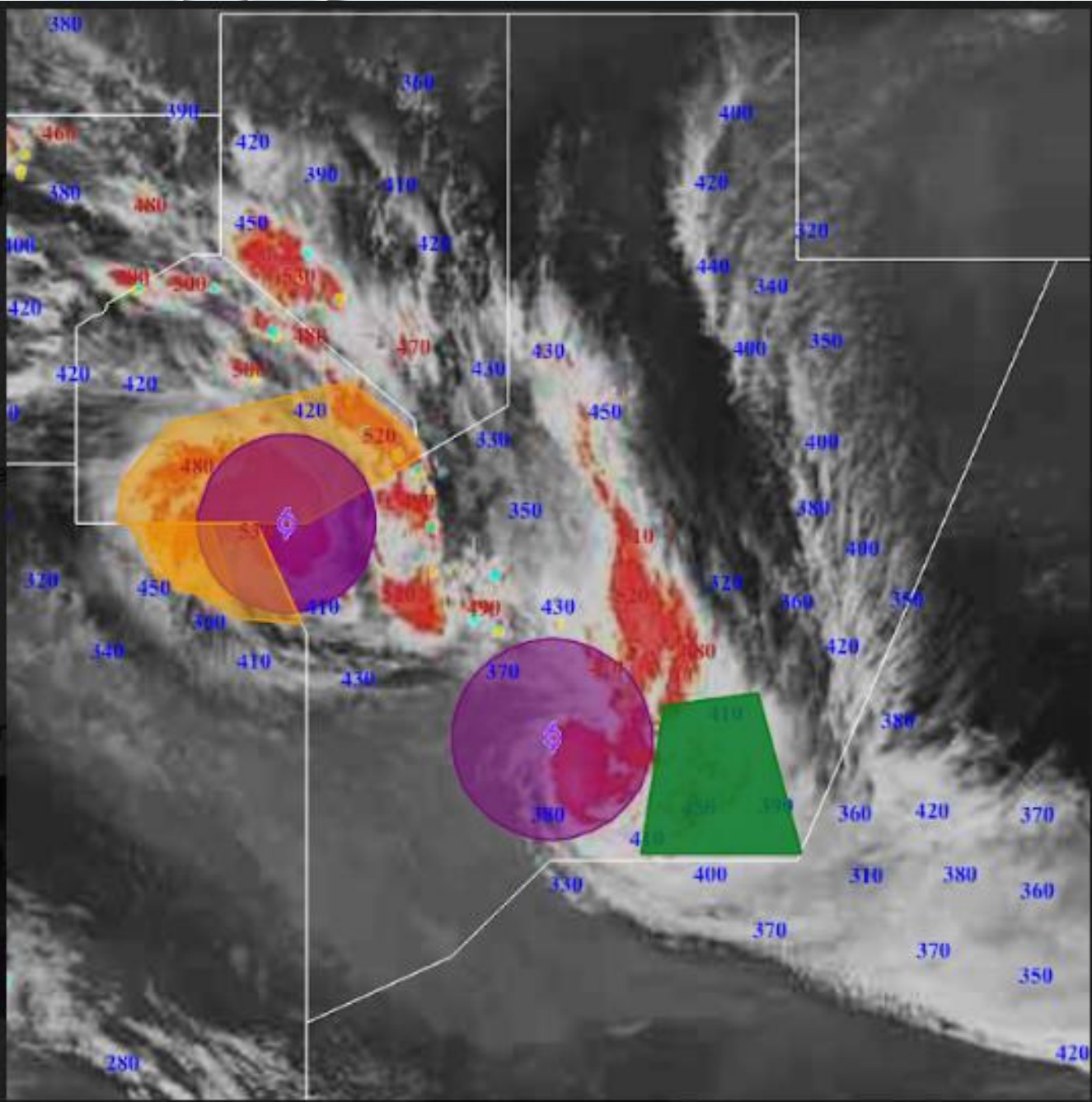
Prev

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Stop







SUMMARY

SATELLITE IS THE PRIMARY TOOL FOR MONITORING WEATHER AND SEVERE WEATHER EVENTS AT FMS.

USED FOR:

- 1) CLOUD TOP HEIGHT FOR SIGMET ISSUANCE
- 2) TC ANALYSIS
- 3) SST ESTIMATE
- 4) FFGS
- 5) MONITORING WEATHER SYSTEMS

IMPORTANCE OF TIMELY, ACCESSIBLE AND OPEN DATA

- HOW TO IMPROVE LINKAGES BETWEEN THE SATELLITE DATA PROVIDERS/SCIENTISTS AND USERS?



- SOFTWARE THAT IS ABLE CONVERT SATELLITE DATA TO USABLE OUTPUT IS CRITICAL FOR SMALL DEVELOPING STATES LIKE FIJI
- MORE CAPACITY BUILDING FROM SATELLITE DATA SCIENTIST IS NEEDED ON INTERPRETATION AND UNCERTAINTY IN THE ESTIMATION

THANKYOU