

A light gray world map is centered in the background of the slide. The title 'FSM COUNTRY REPORT' is overlaid on the map in a large, bold, blue serif font.

FSM COUNTRY REPORT

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OUTLINE

- Introduction
- Short Description of NMHS activity
- Current observational system overview
- Collection, processing and utilization of satellite data and products
- Satellite data to address regional challenges

INTRODUCTION

A. COUNTRY OVERVIEW

1. Geography: FSM lies between 5 - 25 degrees North, from 130 - 180 degrees East.
2. Population: More than 100.00 (Jan 2016)

B. CLIMATE: 2 MAIN SEASONS

- Wet season (Nov -April) known as typhoon season
- Dry season (May - Oct)

C. MAJOR HISTORICAL HYDROMETEOROLOGICAL DISASTERS

1. Disaster type and distribution:

- Typhoon and landslide are the major historical hydrometeorological disasters

2. Life and economic loss:

- More than 100 life loss during those major historical hydrometeorological disasters and it exceed 35 million for property and residential damaged.

D. MAJOR NATIONAL ECONOMIC SECTORS RELYING ON NMHSS

- Agriculture
- Transportation
- Fishing
- Construction Private/Government Agencies

SHORT DESCRIPTION OF NMHS ACTIVITY

- There are 23 operational observation meteorological stations in the FSM. Multiple observations within a 24hrs period are taken at five stations in Chuuk State, six in Pohnpei State (including Kosrae State) and three in Yap State. In addition, there are two single-observation-a-day rainfall stations in Yap. All those observation were shared with all meteorological stations.

CURRENT OBSERVATIONAL SYSTEM OVERVIEW

- I. SURFACE OBSERVATIONS: The surface observations, all the FSM Weather stations are taking on an hourly basis.
- II. UPPER-AIR OBSERVATIONS: There are two Upper-air observations one during the day @ 00z and one during the night @ 10z.
- III. MARINE OBSERVATIONS: The Marine observations will give to any individual or private/Government firm such as diving/fishing vessel on request.
- IV. AIRCRAFT-BASED OBSERVATIONS: FSM Weather Stations are not using Aircraft-based observations.
- V. SATELLITE OBSERVATIONS: Satellite observations more useful during day/night time especially during severe weather. And it could use to let the general public to see what going on in our area of responsibility.
- VI. WEATHER RADAR OBSERVATIONS: FSM Weather stations are relaying on WFO, Guam for Weather Radar observations.
- VII. OTHER OBSERVATION PLATFORMS. Each FSM Weather Stations have their own Synoptic and Surf observations.

COLLECTION, PROCESSING AND UTILIZATION OF SATELLITE DATA AND PRODUCTS

1. LIST OF SATELLITES/INSTRUMENTS CURRENTLY USED OPERATIONALLY FOR NWP, NOWCASTING AND OTHER APPLICATIONS.

- GOES SATELLITE
GOES FULL DISK (Disk images are updated every (3) hours.)
A. GOES WEST INFRARED

2. HIMAWARI 8

- A. INDIVIDUAL SECTORS (VISIBLE/DAYTIME, INFRARED/NIGHT)
- B. LARGE AREA REGIONAL SECTOR (WFO GUAM SECTORS)

1. INFRARED/VISIBLE

2. WATER VAPOR/ENHANCED INFRARED

- Earth (produce by GFS, RTGSST, WAVEWATCHIII, GEOS, CAMS)
- 1. A visualization of global weather conditions forecast updated every 3 hrs.
- 2. Ocean surface current estimated, updated every five days,
- 3. Ocean surface temp. and anomaly from daily average, updated daily.
- 4. Ocean waves, updated every 3 hrs.

3. CURRENT CAPABILITIES OF COLLECTION, PROCESSING AND ARCHIVING OF SATELLITE DATA AND PRODUCTS:

- All the FSM Weather Service Stations are no longer collect, process and archive of satellite data and products.

4. CURRENT SATELLITE DATA APPLICATIONS.

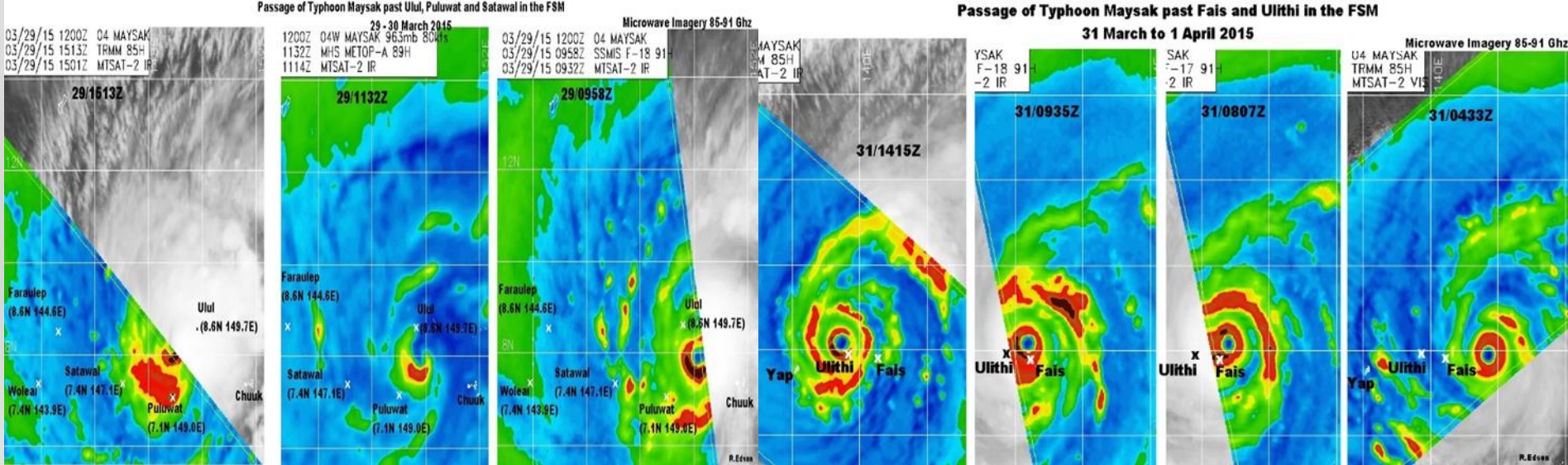
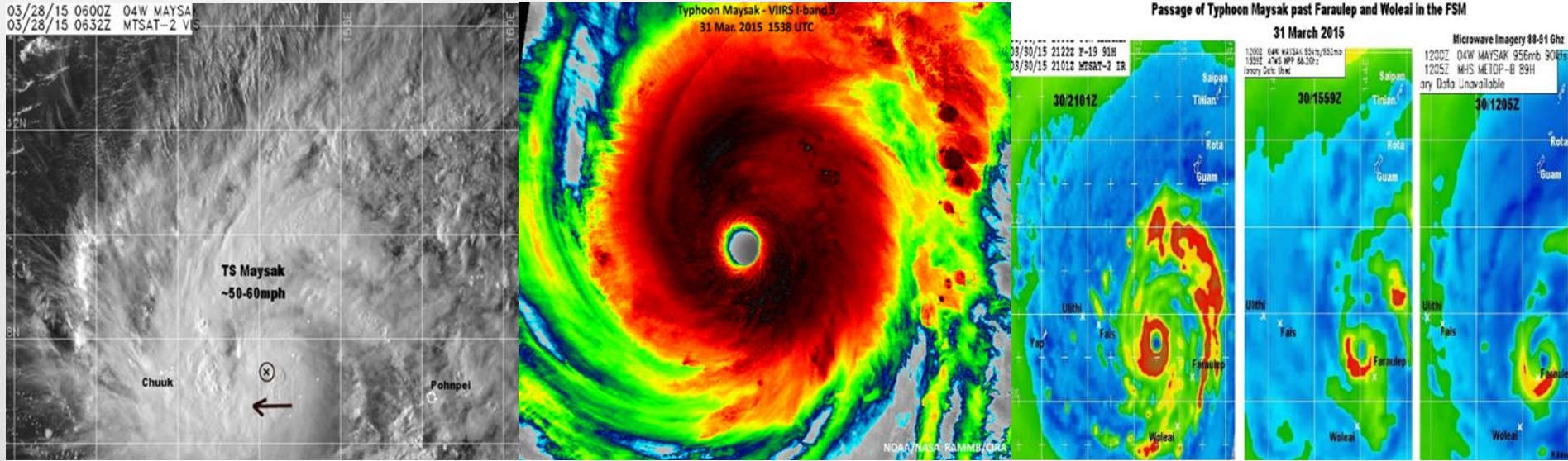
- KEY APPLICATION AREAS: HIMAWARI 8 WOULD UTILIZE DATA FOR RAPIDLY DEVELOPING CONVECTIVE CLOUDY OVER THE WESTERN PACIFIC ISLAND AND OBSERVATION DATA FOR TYPHOON MONITORING.

5. SATELLITE-BASED PRODUCTS

- 1. What we have here in Weather Service Office, Chuuk, we usually used the following satellite datasets, such as JAXA Real-time Rainfall Watch (Global Satellite Mapping of Precipitation). Himawari 8. A Global Mapping from GFS/NCEP/US National Weather Service.

6. SATELLITE DATA AND PRODUCT NEEDS AND GAPS. Satellite data and product needs and gaps for FSM WSO Offices on how to monitor typhoon, low pressure and high-resolution cloud analysis information. And the gap that Weather Service Office Chuuk face right now, the optic fiber cable no yet install, the Internet here is Chuuk is very slow.

SATELLITE DATA TO ADDRESS REGIONAL CHALLENGES



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THANK YOU VERY MUCH