RA V TRAINING COURSE ON TROPICAL CYCLONE

9th – 13th September 2019
Nadi, Fiji.

Tuvalu Meteorological Service
Mr Limoni.Mativa.
CONTENTS

• Background (Brief History)
• Use of Models.
• Strong Wind Warning.
• Tropical Cyclone SOPs.
• Impact.
• Challenges.
BACKGROUND

- Tuvalu separated from the Gilbert Islands in 1975 and became an independent Realm within the Commonwealth on 1 Oct 1978.
- Location: South Pacific between 176°E - 180°E and 5°S - 11°S
- Land Area: 26 sq. km (26 sq. mile)
- Population: 10,000 people
- Seasons: - Wet Season: November to April - Dry Season: May to October
• Consist of 9 Islands.
• Three outer station.
• Main Officer was located at the capital.
• Capital City: Funafuti.
TMS-PWS

• Daily Weather Forecast bulletin
  -Twice a day: Morning and Evening
  (Including 3 days outlook)
• Forecast for Mariners.
• Warnings: Strong winds & Tropical Cyclone
• Monitor Severe weather: For our own region (Tuvalu)
USES OF MODELS

Preparing daily weather forecast using models and observations, also forecasting severe weather such as,

-swell, large waves, strong wind, heavy rain, TDs, TCs.

Using

• The use of SWFDDP
• Streamline Analysis- Compare Fiji, Samoa, Honolulu.
• ARL
• Windy
• Himawari 8
• Earth wind
• Etc.
• RSMC through FMS website for more information on TDs and TCs
• Comparing with the observations from all the stations
STRONG WIND WARNING

- Open Waters – wind average sustain at 18 – 20 knots
- Over land areas – wind average sustain at 20 knots but less than 34 knots.
- Gale/Storm/Hurricane warning:
  - Live broadcast on AM Radio
  - Other mode of dissemination activate under Disaster Response Plan
- Prepared by duty Forecast and Scientific Officer.
- Dissemination – Hardcopies to Tuvalu Media Service for broadcasting, upload on website; softcopies send via email to all govt’ staffs (civil servants) and other respective organizations.
STRONG WIND WARNING DISSEMINATION

1. National Disaster Management Office
   - Relay warning to our offshore vessel or mariners within our waters via HF

2. Secretary to Government

3. Media Department

4. Police Department & NCC

5. Marine Department

6. Taiwan Embassy

Met Out-Station & Funafala Islet & Amatuku
TROPICAL CYCLONE DISSEMINATION

From gale warning develop until it becomes TCs, some organizations to be added to the current dispatch list as follows:

1. Public Works Department (PWD)
2. Telecommunication Corporation (TTC)
3. Electricity Corporation (TEC)
4. Tuvalu Red Cross Society
5. Health Department (PMH)
6. Foreign Affairs Department
7. Aviation
8. All the island Councils.
9. TANGO
10. Fisheries Department
11. Primary & Secondary Schools
CHALLENGES

- Capability to maintain high standards of observations and data – data backup systems.
- Poor internet connectivity
- Improved communication early warning systems
- Capacity to maintain high standards of observations and data
- Capability to prepare and deliver high quality early warnings and forecast of weather related hazards.
- More reach out programs to communities, schools, Fusi Alofa, etc.
- Training opportunities - MET staffs
Thank You, Vinaka