Pacific Region Satellite Ground Stations

Satellite Reception & Applications within Pacific Region

Current state and Future Plans

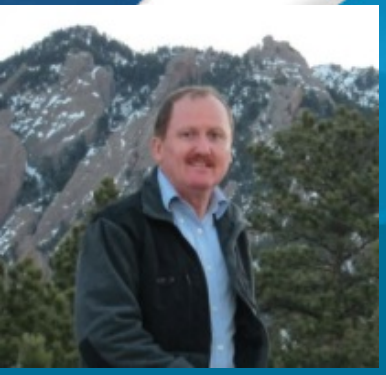
Bill Ward

ESSD Chief

Pacific Region HQ

National Weather Service

Bill Ward



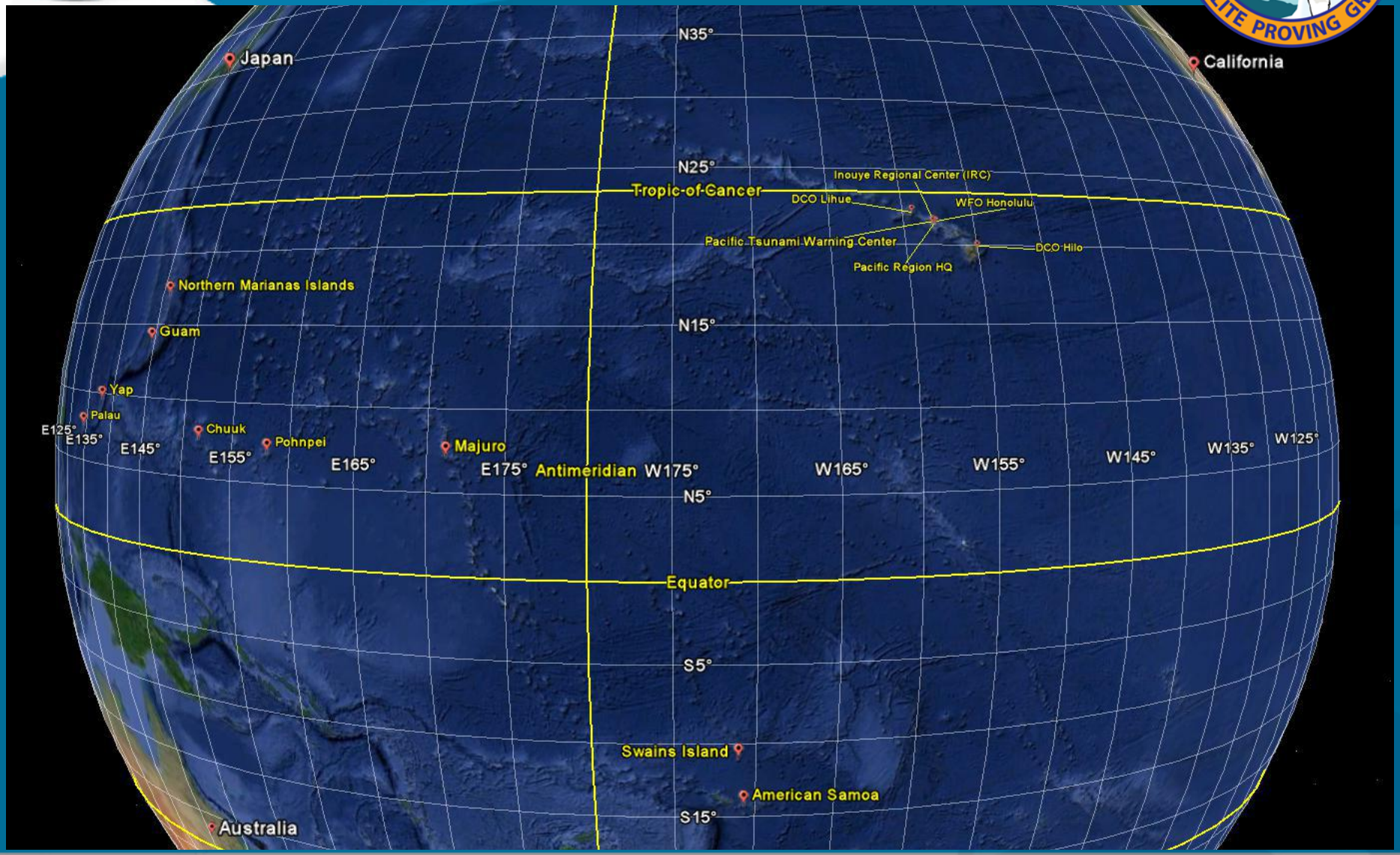
Bill Ward is currently the Environmental Scientific and Services Division (ESSD) Chief at the National Weather Service, Pacific Region Headquarters in Honolulu, Hawaii. Bill is responsible for overseeing all of the scientific and services programs across the Pacific Region to include tropical and seismic.

Mr. Ward has worked within the tropical pacific area for 25 years initially as a contractor at the Kwajalein Missile Range (1989-1996) and has been working within the National Weather Service since 1996. Bill began his career in the NWS at Tiyan, Guam as a lead forecaster (1996 – 2004). He then moved to the National Weather Service, Pacific Region Headquarters in 2004 as the first Regional Scientific Services Meteorologist until 2007 when he was selected to be the Environmental Scientific and Services Division Chief.

Daniel K. Inouye Regional Center (IRC)

- NWS Integrated Dissemination Program – Ground Readiness Project
- Working with NWS IDP-GRP on the future of satellite reception and capabilities.
- HimawariCast and GOES-R GRB will be installed on the roof of IRC and at NWS Weather Forecast Office (WFO) Guam.
- L/X Band Polar Orbiting receive station will also be installed a top IRC and eventually at WFO Guam.

Pacific Region NWS



Satellite Farm at Pacific Tsunami Warning Cen
(PTWC)

Satellite Dish	- Diameter
NOAA Weather Wire Service	– 14 feet
OPSnet VSAT	– 4 feet
EMWIN	– 5 feet
MTSAT/SPARE	– 15 feet
GOES	– 12 feet
IRIS VSAT	– 15 feet
NOAAPORT SBN	– 24 feet
HRPT – Polar Tracking	– 5 feet in Radome

Honolulu Community College

Orbital Systems
2.4 meter X/L band Polar Tracking

Suomi NPP VIIRS
Aqua
Terra
NOAA POES
METOP
Feng Yun

TPPG Demonstrated Product task list

- Lightning Detection
  - Ground systems to simulate GOES-R GLM
  - GOES-R requirement (not on Himawari – 8)
- Volcanic Ash Detection and Height (not demonstrated as of yet)
  - Infrared wavelengths (7.3, 8.5, 11, 12 and 13.3)
  - Respectively Himawari channels (10, 11, 14, 15 & 16)
- Rainfall Rate/QPE
  - Work continues with Bob Kuligowski and SPoRT
  - Initial results were not very promising
  - Looking to use Himawari – 8 data
- Total Precipitable Water
- Statistical Tropical Cyclone Intensity Models
- Orographic Rain Index
  - Work to produce short term rainfall rates (0 to 3 hrs)

TPPG VSP Program

- Tropical Pacific Proving Ground
- Visiting Science Program
- Aimed at forecasters within the PR WFOs
- Presenters are SMEs on proposed and accepted VSP projects
  - Can be GOES-R or JPSS data sets
  - Himawari – 8

QUESTIONS:

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