

#### Meeting of ICG/PTWS Steering Committee during the COVID-19 Pandemic 21–23 September 2021 by Teleconference

# Tsunami Service Provider Report Pacific Tsunami Warning Center

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## **PTWC Status**

#### **Staffing**

- Added an Oceanographer in January
- Added a Geophysicist (GNSS-specialist) in July
- Lost a Geophysicist in June
- One Duty Scientist position left to fill

#### **COVID-19 Status**

- No one at PTWC has been infected
- PTWC manning center in isolated teams with masks and regular cleaning
- No significant impact to operations so far, but
- Some NOAA/NWS institutional support reduced due to stay home orders
- In-person outreach activities on hold

#### **Supporting Seismic and Sea Level Data**

No significant changes

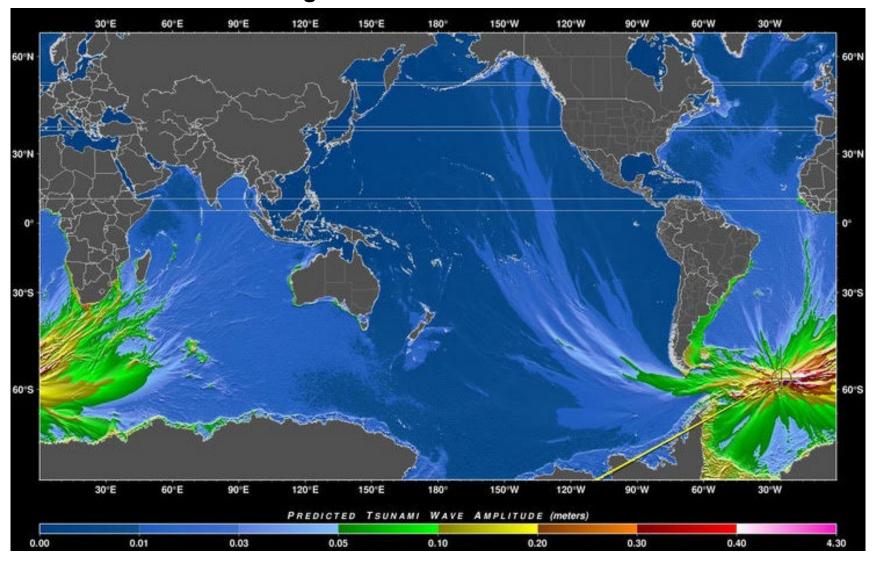
# Message Events – June 1, 2020 – Sept 15, 2021

- 26 Information Statements
- 14 Threat Message Sequences

Date	Location	Initial Mw	WCMT Mw	USGS Mw	Min to Initial
06/18/20	Kermadec Islands	7.4	7.4	7.4	7
06/23/20	Oaxaca, Mexico	7.7	7.3	7.4	10
07/17/20	Papua New Guinea	7.3	7.0	7.0	7
07/22/21	Alaska Peninsula	7.5	7.9	7.8	12*
10/19/20	South of Alaska	7.4	7.6	7.6	10*
02/10/21	Loyalty Islands	7.7	7.7	7.7	9
03/04/21	New Zealand	7.3	7.2	7.3	7
03/04/21	Kermadec Islands	7.5	7.4	7.4	8
03/04/21	Kermadec Islands	8.0	8.0	8.1	9
03/20/21	Honshu, Japan	7.2	7.2	7.0	13*
07/29/21	Alaska Peninsula	8.1	-	8.2	10*
08/11/21	Mindinao, Philippines	7.2	7.1	7.1	12
08/18/21	Vanuatu	7.1	6.9	6.9	6
09/08/21	Guerrero, Mexico	7.4	6.9	7.0	10

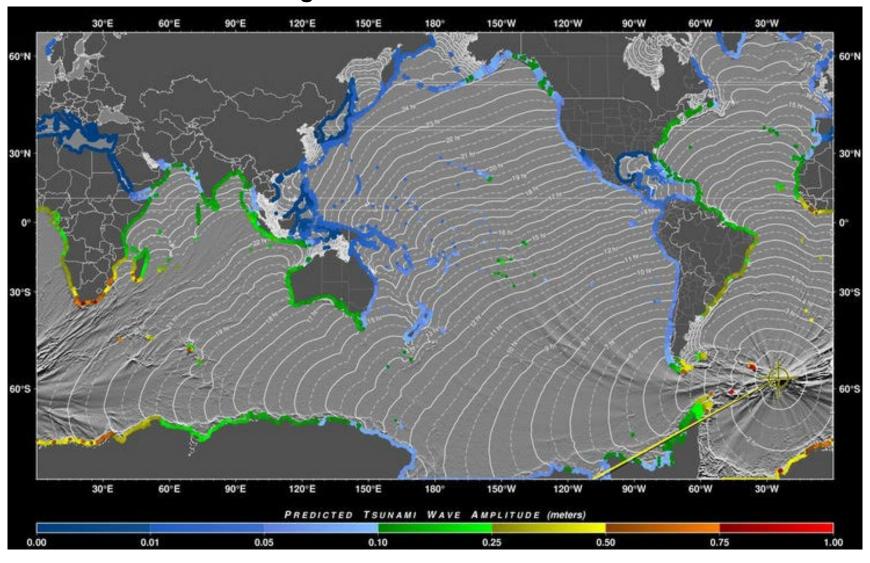
# 8/12/21 Mw = 8.1 South Sandwich Islands

## **No PTWS Threat Message or Information Statement**



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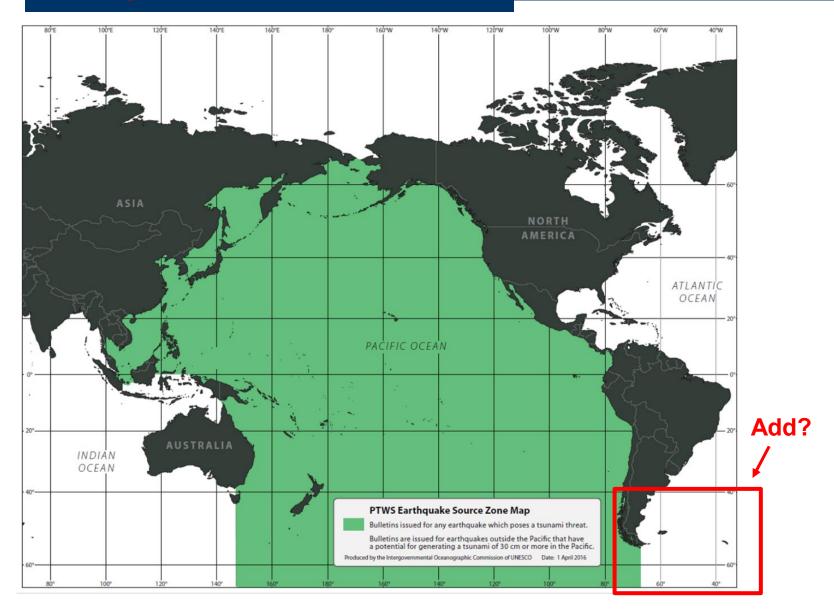
## **Issues With This Event**

- Complex Source 2 earthquakes about 2.5 minutes apart?
- Preliminary Mw was a significant underestimate
- Only one nearby coastal station no deep-ocean stations
- PTWC issued an Information Statement for the CARIBE-EWS, but the only covered potential tsunami threat was Chile and Antarctica in the PTWS
- No TWS for the southern Atlantic
- If a similar event occurred near a vulnerable coast the resulting no warning or under-warning could have dire consequences

## Recommendations

- Identify and implement techniques to more quickly recognize and properly characterize the earthquake and tsunami threat (there will be a special session at Fall 2021 AGU Meeting)
- Include the South Sandwich Islands seismic zone in the PTWS source region, not the CARIBE-EWS source region.

# **Modify PTWS Earthquake Source Map**





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# **Thank You**

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