JATWC Response to 29 July 2025 M8.8 Kamchatka earthquake and tsunami event

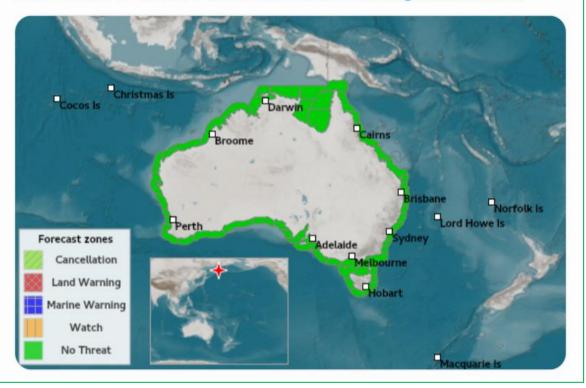
| Time Since Earthquake | Key Events |
|-----------------------|--|
| 00:00 | Earthquake occurs. |
| 00:16 | No Threat issued for initial assessment of M7.8. |
| 00:30 | Revised No Threat issued for M8.3. |
| 00:32 | GA Manual Solution for M8.6 received. No update issued. Specialist monitoring activated (tsunami on-call support). |
| 00:45 | GA Manual Solution for M8.7 received. No update issued. |
| 01:05 | M6.8 aftershock at 00:16 UTC meets the criteria for issuing a new No Threat. The new No Threat replaced the main event on the public website. |
| 01:20 | DART observation of 0.8m from DART 21416 indicated that the event was consistent with a M8.6-9.0. Identified that the event would need to be upgraded to M9.0 to result in Warnings for Australia. |
| 02:30 | Emergency services along the east coast were concerned about the conflicting advice from PTWC and the JATWC. Extra briefings were required to raise their confidence with the No Threat assessment. |
| 05:00 | Revised No Threat issued for M8.7 to have the public facing webpage display the main event rather than an aftershock. |
| 08:35 | Coral Sea DART buoy stations 1 and 2 were manually triggered. Unfortunately, only station 1 was successful. |
| 10:25 | Coral Sea 1 DART buoy recorded 0.02m. This was consistent with expected wave height for M8.8 and with No Threat assessment. |
| 13:30 | Tsunami duty officer stood down. |
| 14:00+ | Small tsunami waves, well below JATWC marine threat level (and also below PTWC threat level), were observed at Australian locations. |



Bureau of Meteorology, Australia @ @BOM_au · Jul 30



No #tsunami threat to Australia from magnitude 8.7 #earthquake near OFF EAST COAST OF KAMCHATKA. Latest advice at bom.gov.au/tsunami.



Key Considerations

- Australian No Threat issued but was actively monitored for approximately 13.5 hours.
- Conflicting public advice of Marine Threat from PTWC made communication of No Threat more difficult. As per previous recommendations we ask PTWC to consider changes to public facing products to minimise confusion during these rare events.
- JATWC to consider improving the decision support tool to include subsequent earthquake information for No Threat products.
- JATWC to consider further improvement to internal sea level visualisation tools.