

Exercise PACIFEX18 Participant Handbook

A Pacific Tsunami Warning Exercise
March 26, 2018

US National Tsunami Hazard Mitigation Program
Warning Coordination Subcommittee



PACIFEX18 Exercise Handbook

NOTE: The contents of this handbook are patterned after the Exercise Pacific Wave 08 manual published by the Intergovernmental Oceanographic Commission. Citation: *Exercise Pacific Wave 08. A Pacific-wide Tsunami Warning and Communication Exercise, 28-30 October 2008*. IOC Technical Series No. 82. Paris, UNESCO, 2008, and the PACIFEX13 handbooks.

PACIFEX18 - Exercise

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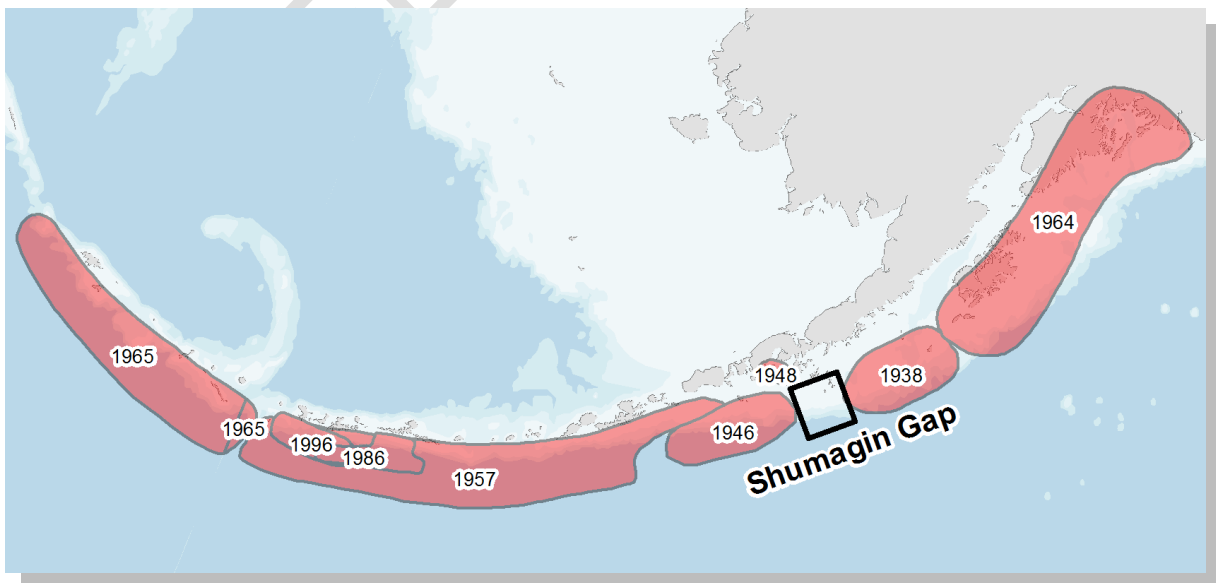
1. Background

This tsunami exercise is being conducted to assist tsunami preparedness efforts along the U.S. and Canadian Pacific coasts. Historical tsunami records from the National Oceanic and Atmospheric Administration's (NOAA) National Geophysical Data Center (NGDC) show that approximately 85% of the world's oceanic tsunamis occur in the Pacific Basin and surrounding seas. Tsunamis have impacted U.S. and Canadian Pacific coasts several times in the past century with devastating results. Preparing and exercising emergency response plans throughout this region is an important part of tsunami preparedness.

Scenario: The Aleutian Islands and associated trench are products of the Pacific "plate" to the south being gradually forced beneath the North American plate in the Bering Sea. Many earthquakes result as a consequence, including some of the largest that have ever been recorded.

Typically, great earthquakes of magnitude 8.0 or more occur on an average of about 70 years' interval within different segments of the arc. During each of these large earthquakes, the accumulated strain is released along a certain length of the arc system, generally on the order of a few hundred miles (the 1964 Prince William Sound earthquake of magnitude 9.2 released strain along a total distance of over 400 miles, from near Valdez to south of Kodiak Island). It is believed that, over the years, the pattern of strain should fill in more-or-less uniformly along the entire system.

One segment of the arc that has inspired much debate is the area of the Shumagin Islands, off the tip of the Alaska Peninsula. The last great earthquake known to have occurred there (according to Russian records) was in 1848. This nagging seismic silence along a 200-mile-long zone has for years caused scientists to predict a strong earthquake there "in the foreseeable future."



Survey data may prove that the future is not so foreseeable. Strain accumulation during the 1980- 85 interval has been measured by means of trilateration surveys in the Shumagin and Yakataga seismic gaps, which are the two regions identified as

the most likely sites for the next great thrust earthquakes along the Alaska-Aleutian arc. No significant strain accumulation was detected in the Shumagin gap, but experience at similar subduction zones and simple models of the subduction process suggest that a measureable amount of strain should have accumulated. The most likely explanation of the observation is that subduction there is either aseismic or episodic. The strain accumulation measured in the Yakataga gap is consistent with that expected for the plate convergence rate, although the direction of maximum compression may suggest a somewhat more oblique convergence than expected.

Because the Aleutians are so sparsely populated, the primary hazard to population centers would probably be from tsunamis that could be damaging as far away as Hawaii. In Alaska, the primary concern should probably be for the potential damage to the oil industry.

Contributing articles to this summary can be found at <http://www.gi.alaska.edu/ScienceForum/ASF6/628.html>.

Exercise: To help communities respond to tsunami hazards, NOAA operates a tsunami warning system for U.S. Pacific coasts and western Canada through its National Tsunami Warning Center (NTWC) in Palmer, Alaska and the Pacific Tsunami Warning Center (PTWC) on Ford Island, Hawaii. These Centers provide tsunami warning, advisory, watch, and information messages approximately five minutes after an earthquake's occurrence for earthquakes in the United States and Canada. Primary recipients of Tsunami Warning Center (TWC) messages include National Weather Service (NWS) coastal Weather Forecast Offices (WFOs), state/territory warning points, national Coast Guards, Canada's Provincial Emergency Program, national tsunami warning focal points, and military organizations. These agencies transmit the message to people potentially impacted by a tsunami.

NOAA and the National Tsunami Hazard Mitigation Program (NTHMP) are providing the framework for this exercise as a means for emergency responders along Pacific coasts to test and update tsunami response plans. High levels of vulnerability along the Pacific coast and the well-known tsunami threat in the Pacific should provide a strong incentive for local jurisdictions to prepare for a tsunami.

This exercise is driven by tsunami warning messages from the NTWC in response to a hypothetical earthquake located 100 miles SE of Sand Point, Alaska. Exercises like this will ensure that the U.S./Canadian Pacific coasts are ready to respond in case of a dangerous tsunami. Other recent tsunami exercises in the Pacific and Atlantic Basins have proven effective in strengthening preparedness levels of emergency management organizations.

2. Exercise Concept

2.1 Purpose

The purpose of this exercise is to improve the effectiveness of the tsunami warning system along the U.S. and Canadian Pacific coasts. The exercise provides an opportunity for emergency management organizations along these coasts to test their operational lines of communications, review their tsunami response procedures, and promote tsunami preparedness. Regular exercising of response plans is critical to maintain readiness for an emergency. This is particularly true for tsunamis which are infrequent, but high impact events. Every coastal U.S. and Canadian Pacific emergency management organization (EMO) is encouraged to participate.

2.2 Objectives

Each organization can develop their own objectives for the exercise depending on their level of involvement in the scenario. The following are the exercise's overarching objectives.

- Ensure message transmission from the TWCs to primary tsunami warning recipients.
- To improve operational readiness of the Tsunami Warning System by testing tsunami response plans for EMOs that have developed plans, and provide a catalyst for other EMOs that have not developed plans.
- Review communication alternatives for receiving tsunami messages, locally disseminating tsunami alerts, and evaluate potential response actions and challenges at EMOs and Tsunami Warning Focal Points (TWFP).
- Identify processes to issue local all-clear notices.

2.3 Type of Exercise

The exercise should be carried out such that communications and decision making at various organizational levels are exercised and conducted without disrupting or alarming the general public. Individual localities, however, may at their discretion elect to extend the exercise down to the level of testing local notification systems such as the Emergency Alert System (EAS), sirens, or loudspeakers.

Exercises stimulate the development, training, testing, and evaluation of Disaster Plans and Standard Operating Procedures. Exercise participants may use their own past multi-hazard drills (e.g. flood, hurricane, tsunami, earthquake, etc.) as a framework to conduct PACIFEX18.

Exercises can be conducted at various scales of magnitude and sophistication. The following are examples of types of exercises conducted by EMOs:

1. **Orientation Exercise (Seminar):** An Orientation Exercise lays the groundwork for a comprehensive exercise program. It is a planned event, developed to bring together individuals and officials with a role or interest in multi-hazard response planning, problem solving, development of standard operational procedures (SOPs), and resource integration and coordination. An Orientation Exercise will have a specific goal and written objectives and result in an agreed upon Plan of Action.

2. **Drill:** The Drill is a planned activity that tests, develops, and/or maintains skills in a single or limited emergency response procedure. Drills generally involve operational response of single departments or agencies. Drills can involve internal notifications and/or field activities.
3. **Tabletop Exercise:** The Tabletop Exercise is a planned activity in which local officials, key staff, and organizations with disaster management responsibilities are presented with simulated emergency situations. It is usually informal, in a conference room environment, and is designed to elicit constructive discussion from the participants. Participants will examine and attempt to resolve problems, based on plans and procedures, if they exist. Individuals are encouraged to discuss decisions in depth with emphasis on slow-paced problem solving, rather than rapid, real time decision-making. A Tabletop Exercise should have specific goals, objectives, and a scenario narrative (see Appendix A for a Sample Tabletop Exercise Outline).
4. **Functional Exercise:** A Functional Exercise is a planned activity designed to test and evaluate organizational capacities. It is also utilized to evaluate the capability of a community's emergency management system by testing the Emergency Operations Plan (EOP). It is based on a simulation of a realistic emergency situation that includes a description of the situation (narrative) with communications between players and simulators. The Functional Exercise gives the players (decision-makers) a fully simulated experience of being in a major disaster event. It should take place at the appropriate coordination location (i.e. emergency operations center, emergency command center, command post, master control center, etc.) and activate all the appropriate members designated by the plan. Both internal and external agencies (government, private sector, and volunteer agencies) should be involved. It requires players, controllers, simulators, and evaluators. Message traffic will be simulated and inserted by the control team for player response/actions, under real time constraints. It may or may not include public evacuations. A Functional Exercise should have specific goals, objectives, and a scenario narrative.
5. **Full-scale Exercise:** A Full-scale Exercise is the culmination of a progressive exercise program that has grown with the capacity of the community to conduct exercises. A Full-Scale exercise is a planned activity in a "challenging" environment that encompasses a majority of the emergency management functions. This type of exercise involves the actual mobilization and deployment of the appropriate personnel and resources needed to demonstrate operational capabilities. EOCs and other command centers are required to be activated. A Full-scale Exercise is the largest, costliest, and most complex exercise type. It may or may not include public evacuations.

Example Time Frames for Different Exercise Types

Style	Planning Period	Duration	Comments
Orientation Exercise	2 wks	1 day	Individual or mixed groups

Drill	2 days	1 day	Individual technical groups generally
Tabletop Exercise	2 weeks	1-3 days	Single or multiple agency
Functional Exercise	1-2 months	1-5 days	Multiple Agency participation
Full-scale Exercise	2-6 months	1 day/ week	Multiple Agency participation

3. Exercise Outline

3.1 General

Tsunami Warning, Advisory, and Watch messages for this exercise are issued by the NTWC based on a hypothetical earthquake with the following hypocenter parameters:

- Origin Time 16:00:00 UTC March 26, 2018
- Latitude 54.5°N
- Longitude 158.5°W
- Magnitude 8.2 – Mw
- Depth 17.6 km

Appendix B summarizes some of the project results.

Definitions of the products that will be issued by the TWC during this exercise are provided below.

National Tsunami Warning Center:

Tsunami Warning - A tsunami warning is issued when a tsunami with the potential to generate widespread inundation is imminent, expected, or occurring. Warnings alert the public that dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after initial arrival. Warnings alert emergency management officials to take action for the entire tsunami hazard zone. Appropriate actions to be taken by local officials may include the evacuation of low-lying coastal areas, and the repositioning of ships to deep waters when there is time to safely do so. Warnings may be updated, adjusted geographically, downgraded, or cancelled. To provide the earliest possible alert, initial warnings are normally based only on seismic information.

Tsunami Advisory - A tsunami advisory is issued due to the threat of a potential tsunami which may produce strong currents or waves dangerous to those in or near the water. Coastal regions historically prone to damage due to strong currents induced by tsunamis are at the greatest risk. The threat may continue for several hours after the arrival of the initial wave, but significant widespread inundation is not

expected for areas under an advisory. Appropriate actions to be taken by local officials may include closing beaches, evacuating harbors and marinas, and the repositioning of ships to deep waters when there is time to safely do so. Advisories are normally updated to continue the advisory, expand/contract affected areas, upgrade to a warning, or cancel the advisory.

Tsunami Watch - A tsunami watch is issued to alert emergency management officials and the public of an event which may later impact the watch area. The watch area may be upgraded to a warning or advisory - or canceled - based on updated information and analysis. Therefore, emergency management officials and the public should prepare to take action. Watches are normally issued based on seismic information without confirmation that a destructive tsunami is underway.

The TWC will not issue live messages over broadcast dissemination channels other than to issue an initial dummy message to start the exercise at 16:00 UTC on March 26, 2018. The content of the dummy message is given in Appendix C. The dummy message will indicate that exercise participants should refer to the first message provided in this handbook. From then on, participants should follow the schedule in Table 1 to look at new messages. Table 1 is the timeline for when messages would be issued by the TWC if this were a real event, and can be used by EMOs to drive the exercise timing. The warning messages (as shown in Appendix D) cover a 48-hour period. World Meteorological Organization (WMO) and Advanced Weather Interactive Processing System (AWIPS) headers used in the dummy message are listed in Table 2.

The NTWC issues two official products each time a message is issued. The ones provided in Appendix D are known as the public message and do not contain codes or text intended for automated systems. The public message format has been recently updated to a bulleted format. The other message not shown in Appendix D is the segmented message. This message includes encoded NWS zones, Valid Time Event Codes (VTEC), and level of threat. The segmentation is used for automated processing systems which parse NWS products.

Participants may elect to exercise using their own timelines in order to achieve their particular objectives. For example, a particular EMO's Exercise Controller may choose to feed the TWC bulletins into the exercise at times of their own choosing, or alternatively put them in envelopes with the time they must be opened written on each, with each key participant agency having their own set of envelopes. The messages, provided in Appendix D, will facilitate this approach.

EMOs are welcome to modify estimated arrival times and/or wave amplitudes to suit their exercise – for example, to have the tsunami arrive sooner and with larger amplitude. Other exercise injects, such as tsunami damage reports, are also encouraged.

3.2 Master Schedule (Exercise Script)

Table 1: Scenario Timeline

Tsunami generated by a magnitude 8.2 earthquake with epicenter at 54.5°N, 158.5°W occurring on March 26, 2018 at 16:00 UTC. The initial warning is being disseminated at 1604 UTC.

Date (UTC)	Time (UTC)	NTWC Message		
		#	Type	Dummy
03/26/2018	1600		***Earthquake Occurs***	
03/26/2018	1604	01	WarnAdv/Dummy	Yes
03/26/2018	1633	02	Warn/Adv	No
03/26/2018	1702	03	Warn/Adv	No
03/26/2018	1734	04	Warn/Adv	No
03/26/2018	1805	05	Warn/Adv	No
03/26/2018	1831	06	Warn/Adv	No
03/26/2018	1902	07	Warn/Adv	No
03/26/2018	1939	08	Warn/Adv	No
03/26/2018	2004	09	Warn/Adv	No
03/26/2018	2039	10	Warn/Adv	No
03/26/2018	2109	11	Warn/Adv	No
03/26/2018	2136	12	Warn/Adv	No
03/26/2018	2204	13	Warn/Adv	No
03/26/2018	2238	14	Adv	No
03/26/2018	2300	15	Adv	No
03/26/2018	2332	16	Adv	No
03/27/2018	0002	17	Adv	No
03/26/2018	0032	18	Adv	No
03/26/2018	0104	19	Adv	No
03/26/2018	0132	20	Adv	No
03/26/2018	0201	21	Can	No

The initial dummy message will be disseminated over all standard TWC broadcast channels as listed in Table 2. This is being issued to test communications with primary warning recipients, and to start the exercise. *Please note that the NTWC Dummy message is being issued with the WMO ID WEAK51 PAAQ and AWIPS ID TSUAK1.*

TWC Message Types:

- Warn Tsunami Warning
- Adv Tsunami Advisory
- Wat Tsunami Watch
- Can Cancellation

Dummy:

- Yes Dummy Issued
- No Dummy Not Issued

Table 2: Product Types

Product Types Issued for Dummy Message with Transmission Methods

Center	WMO ID	AWIPS ID	NWWS	GTS	EMWIN	AISR	Fax	Email
NTWC	WEAK51 PAAQ	TSUAK1	Yes	Yes	Yes	Yes	Yes	Yes

NWWS NOAA Weather Wire Service
 GTS Global Telecommunications System
 EMWIN Emergency Manager's Weather Information Network
 AISR Aeronautical Information System Replacement

3.3 Actions in Case of a Real Event

In the case of a real event occurring during the exercise, the TWC will issue their normal messages for the event. Such messages will be given full priority and a decision will be made by the TWC whether to issue the dummy message. Smaller earthquakes that only trigger a Tsunami Information Statement will not disrupt the exercise. All documentation and correspondence relating to this exercise is to be clearly identified as "PACIFEX18" and "Exercise."

3.4 Procedure for False Alarm

Any time disaster response exercises are conducted, the potential exists for the public or media to interpret the event as real. Procedures should be set up by all participating entities to address public or media concerns involving this exercise in case of misinterpretation by media or the public.

3.5 Resources

Although EMOs will have advance notice of the exercise and may elect to stand up a special dedicated shift to allow normal core business to continue uninterrupted, it is requested that realistic resource levels be deployed in order to reflect some of the issues that are likely to be faced in a real event.

Questions on the exercise can be addressed to:

<u>Person</u>	<u>Telephone #</u>	<u>Email</u>
Kevin Miller CA EMA, Tsunami PM	510-286-0817	kevin.miller@calema.ca.gov
Althea Turner OR OEM Tsunami PM	503-378-2911	Althea.Rizzo@state.or.us
Maximilian Dixon WA EMD Tsunami PM	253-512-7084	Maximilian.dixon@mil.wa.gov
Robert.White BC Tsunami PM	250-952-5834	Robert.White@gov.bc.ca
Kevin Richards HI CD Tsunami PM	808-733-4301	krichards@scd.hawaii.gov
Dan Bellanger AK DHS&EM Tsunami PM	907-428-7015	dan.belanger@alaska.gov
Paul Huang NTWC TWSO	907-745-4212	paul.huang@noaa.gov
James Waddell NTWC Rep.	907-745-4212	james.waddell@noaa.gov
Charles McCreery PTWC Director	808-725-6380	Charles.mccreery@noaa.gov

3.6 Media Arrangements

One advantage in conducting exercises is that it provides a venue to promote awareness of the exercise topic. Many residents along the Pacific coast may not realize that a tsunami warning system exists for their region, let alone the proper response. Communities may wish to invite their local media to the exercise to promote local awareness of the tsunami hazard. Appendix E contains a sample press release which can be adapted as necessary.

NOAA will issue a press release several days before the exercise describing the exercise and its purpose.

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Appendix A. Example Tabletop Exercise

Tabletop Exercise Development Steps

Source: California Office of Emergency Services

A Tabletop Exercise is a planned activity in which local officials, key staff, and organizations with disaster management responsibilities are presented with simulated emergency situations. It is usually informal and slow paced, in a conference room environment, and is designed to elicit constructive discussion from the participants to assess plans, policies, and procedures. Participants will examine and attempt to resolve problems, based on plans and procedures, if they exist. Individuals are encouraged to discuss decisions in depth based on their organization's Standard Operating Procedures (SOPs), with emphasis on slow-paced problem solving, rather than rapid, real time decision-making. An Exercise Controller (moderator) introduces a simulated tsunami scenario to participants via written message, simulated telephone or radio call, or by other means. Exercise problems and activities (injects) are further introduced. Participants conduct group discussions where resolution is generally agreed upon and then summarized by a group leader. A Tabletop Exercise should have specific goals, objectives, and a scenario narrative.

The following provides a Tabletop Exercise structure with sample text and example.

1. Vulnerability Analysis: Problem Statement

An example for a hurricane might be:

Due to the recent Hurricane incidents that the Southeast region of the United States, an awareness of the threat risk involved in these disasters has become more apparent, therefore the need for evacuation system is vital. The state of Louisiana continues its ongoing tasks of planning, preparing, and training for Hurricane preparedness.

2. Purpose (Mission): Intent, what you plan to accomplish (Policy Statement)

An example for a hurricane might be:

The State of Louisiana has realized and recognizes the need for a more efficient and effective evacuation system, and is responding with this Comprehensive Exercise Plan. These events will include seminars, workshops, a tabletop exercise, functional and full-scale exercises within an 18-month time frame, under the State Homeland Security grant program.

3. Scope: Exercise Activities Agencies Involved Hazard Type Geographic Impact Area

An example might be:

Emergency Services coordinators at local levels of government will identify representative jurisdictions from each of the six mutual aid regions located throughout the State to participate as host jurisdictions in a series of disaster preparedness exercises. These host jurisdictions will develop a progressive series of exercises each type building upon the previous type of exercise. The process will begin with a vulnerability analysis for each jurisdiction and continue through a progression of exercise activities including: orientation seminars, workshops, and tabletop and functional exercises. The eventual objective of these activities will be to reduce disaster impacts to their populations and city infrastructure. All events will be evaluated utilizing US Homeland Security Exercise Evaluation Program (HSEEP) after action reporting (AAR)

standards. Steps for corrective actions will be made a part of the after action process and report. Surrounding jurisdictions in the mutual aid area will act as exercise design team members, exercise evaluators, or exercise observers for the purpose of information transfer to increase their operational readiness. Jurisdictions will participate on a rotational basis every two years to provide the opportunity for multiple jurisdiction participation.

4. Goals and Objectives:

Criteria for good objectives: Think SMART

- Simple (concise)
- Measurable
- Achievable (can this be done during the exercise?)
- Realistic (and challenging)
- Task Oriented (oriented to functions)

An example might be:

Comprehensive Exercise Program (CEP) Objectives

- *To improve operational readiness*
- *To improve multi-agency coordination and response capabilities for effective disaster response*
- *To identify communication pathways and problem areas pre-event between local jurisdictions and operational area, regional and state emergency operations centers*
- *To establish uniform methods for resource ordering, tracking, and supply for agencies involved at all levels of government.*

5. Narrative:

The Narrative should describe the following:

- Triggering emergency/disaster event
- Describe the environment at the time the exercise begins
- Provide necessary background information
- Prepare participants for the exercise
- Discovery, report: how do you find out?
- Advance notice?
- Time, location, extent or level of damage

6. Evaluation:

The Evaluation should describe the following:

- Objectives Based
- Train Evaluation Teams
- Develop Evaluation Forms

7. After Action Report (AAR): The AAR should be compiled using the evaluation reports

8. Improvement Plan (IP): The IP should reduce vulnerabilities.

Appendix B. Scenario Description

Tsunami models were computed using the Alaska Tsunami Forecast Model (ATFM), to generate expected impacts throughout the region.

The earthquake hypocenter parameters used for this exercise are:

- Origin Time 16:00:00 UTC March 26, 2018
- Latitude 54.5°N
- Longitude 158.5°W
- Magnitude 8.2 – Mw
- Depth 17.6 km

The following graphics show some of the model output for a better understanding of the event. When using the forecast coastal amplitudes, note that the highest tsunami elevation reached on shore could be double that of the coastal forecast since these are determined at the coast.

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Tsunami Travel Times

Tsunami travel time contours in hours, beginning from the earthquake origin time.

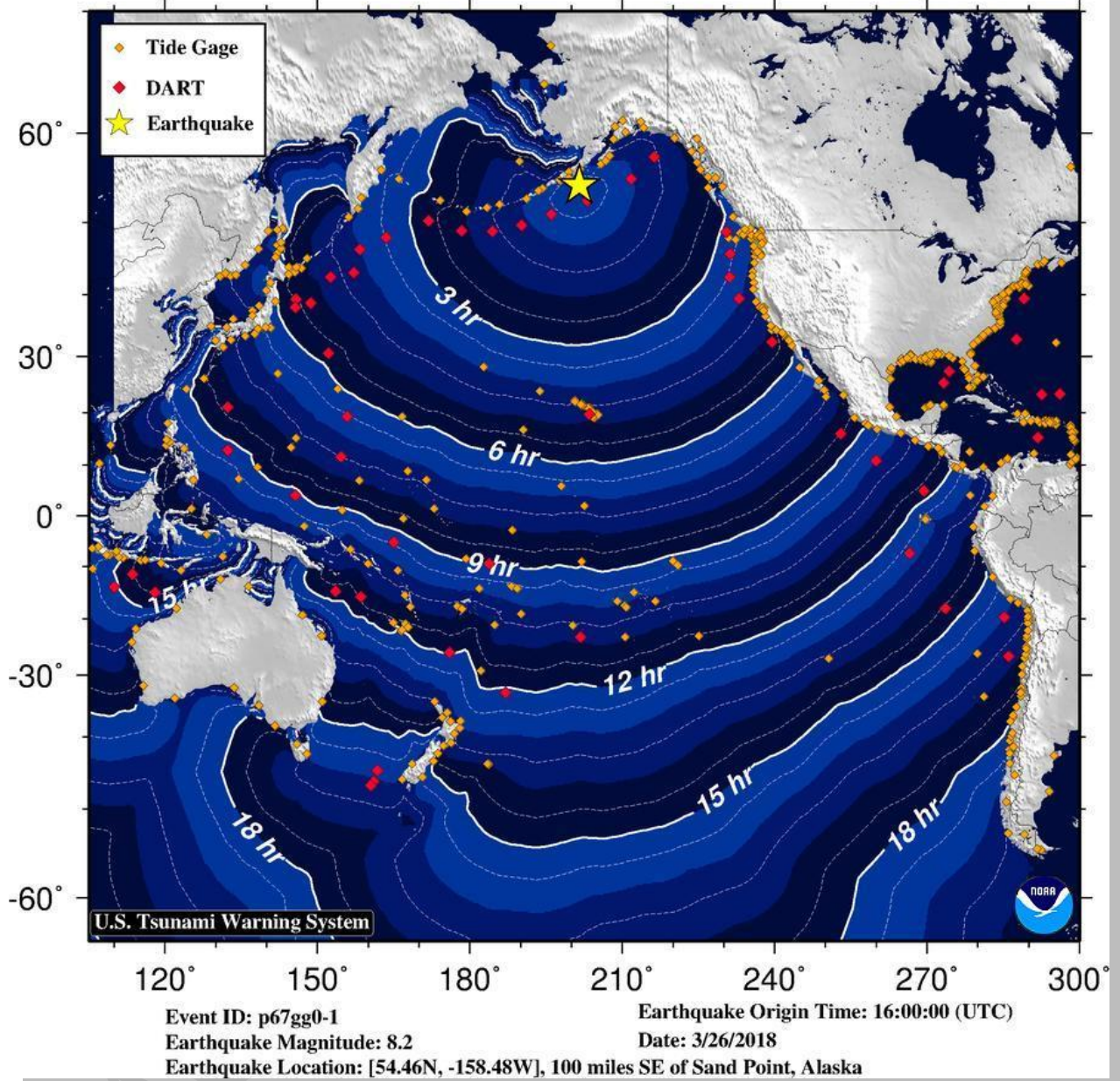


Figure B1: Tsunami travel time map for the PACIFEX18 exercise.

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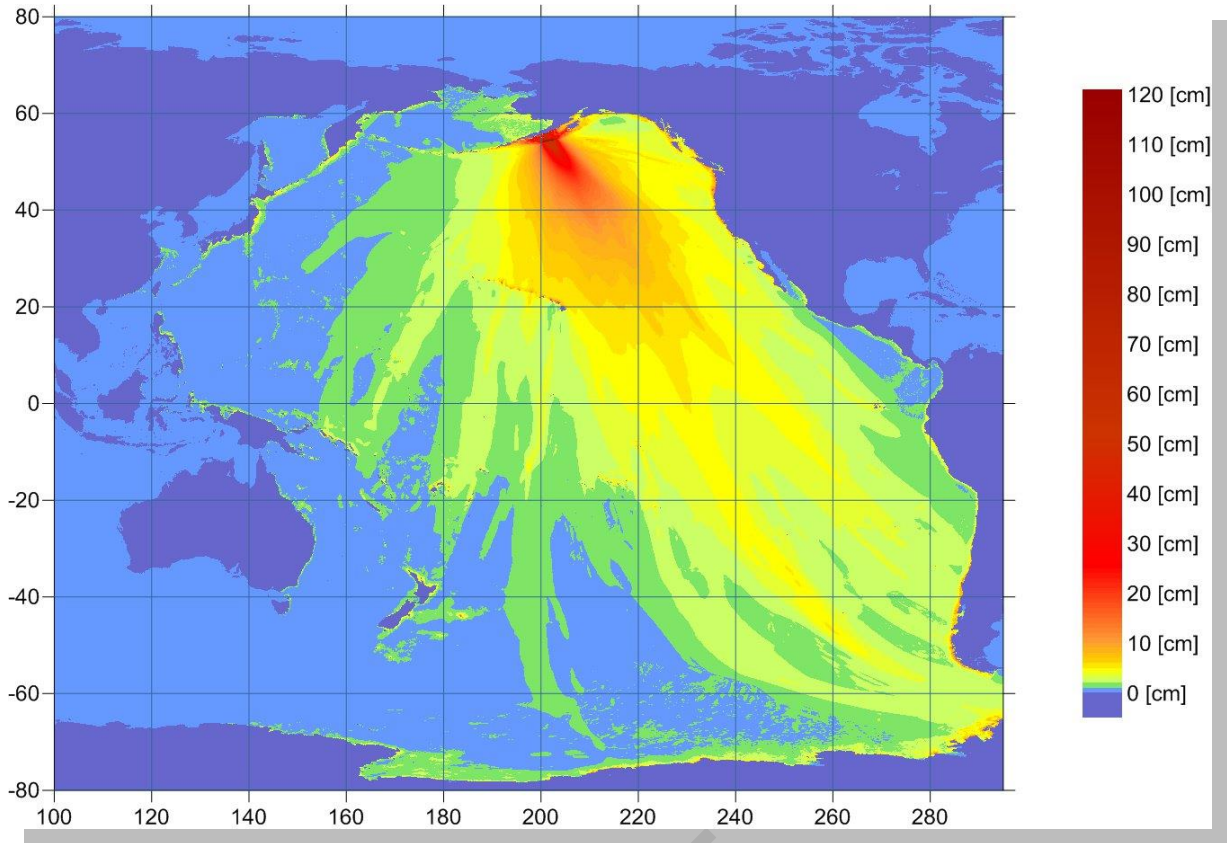
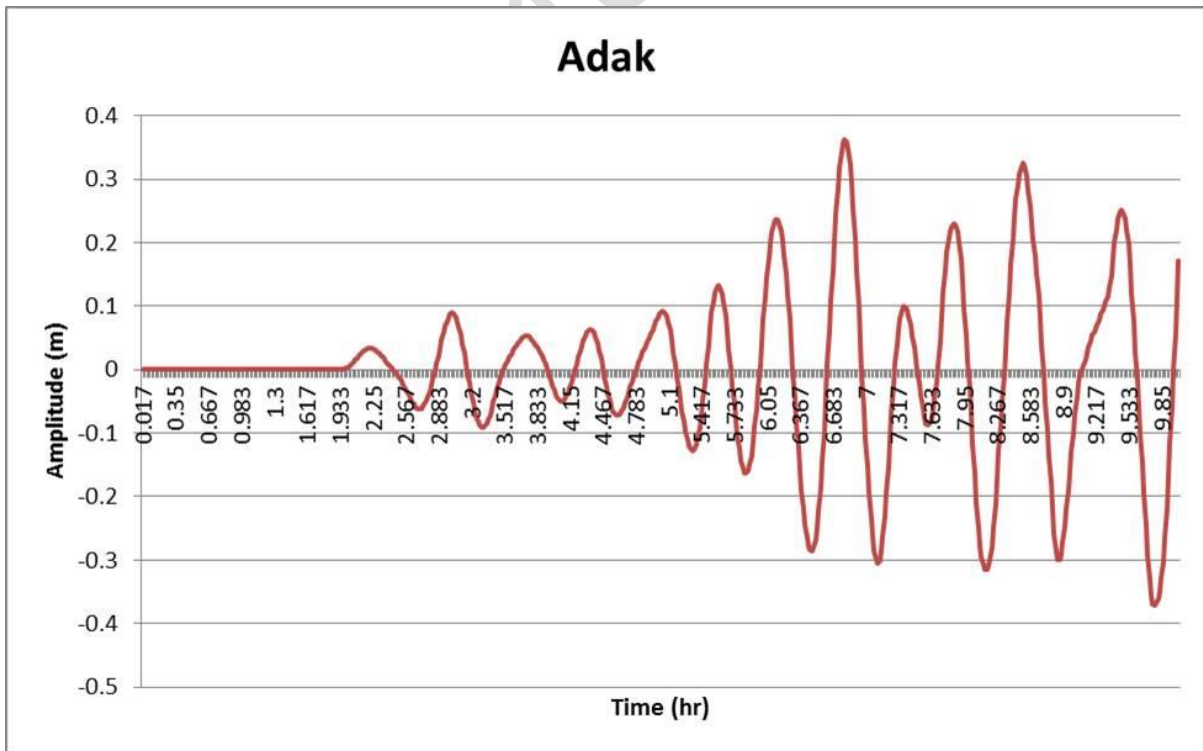
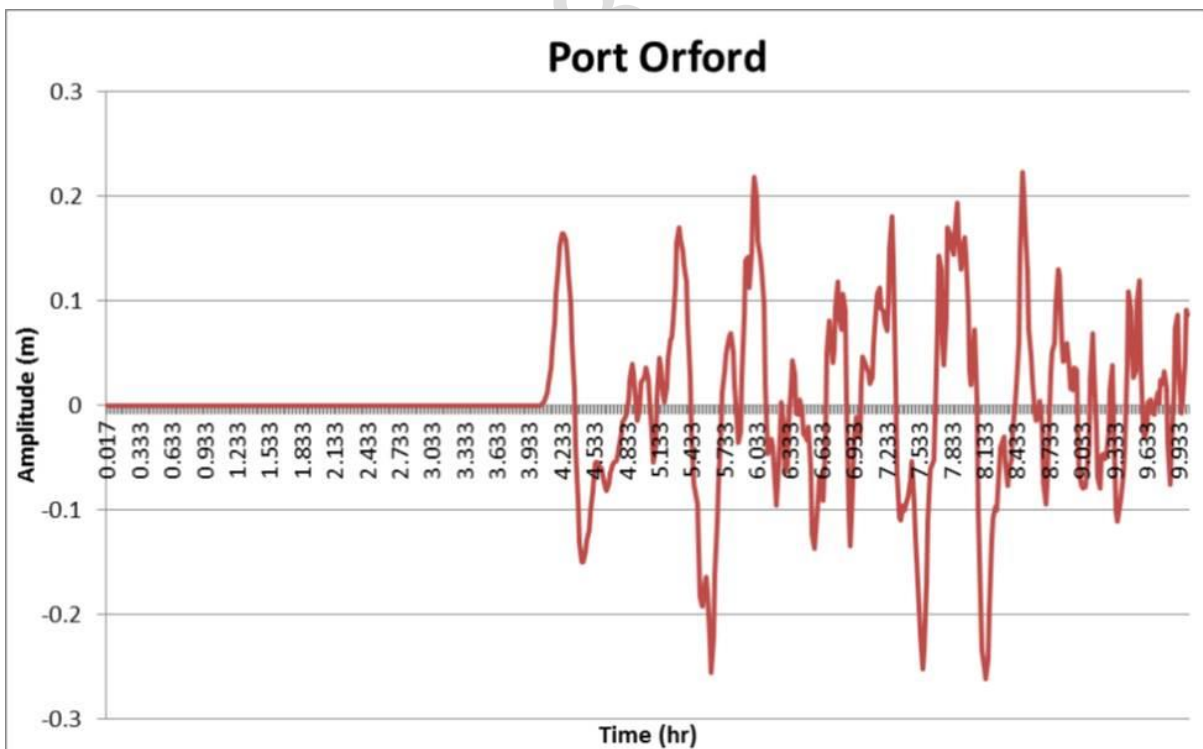
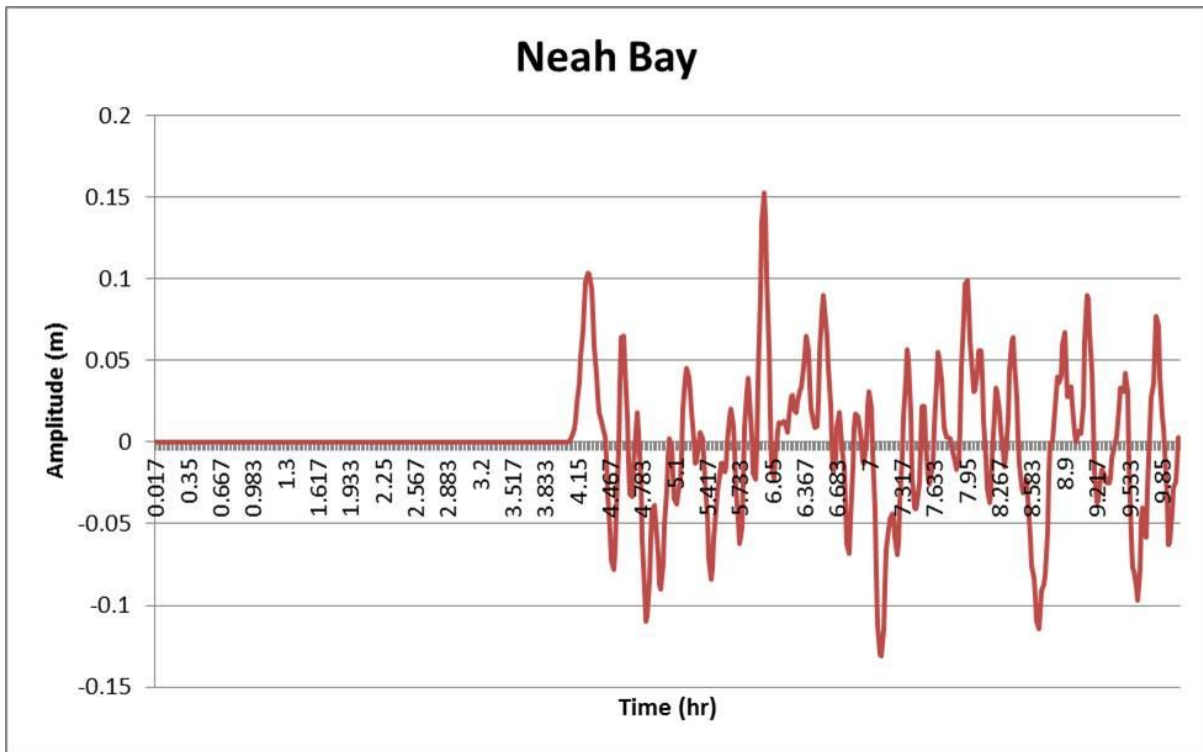
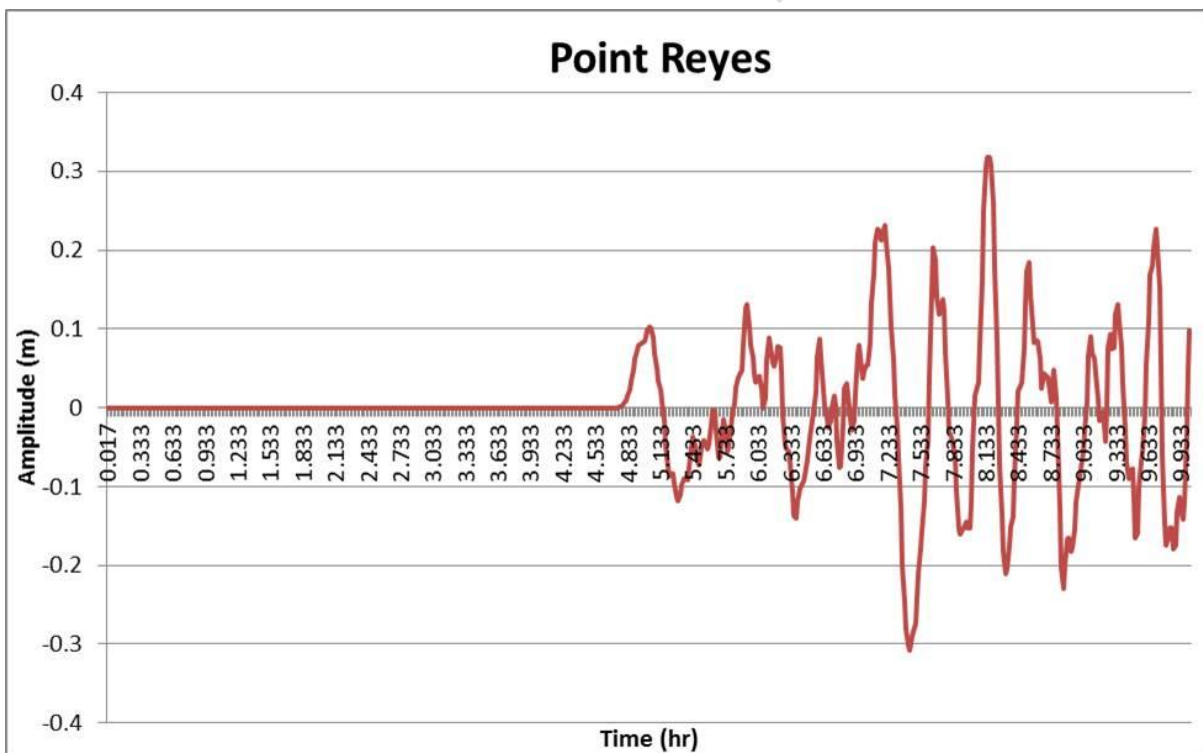
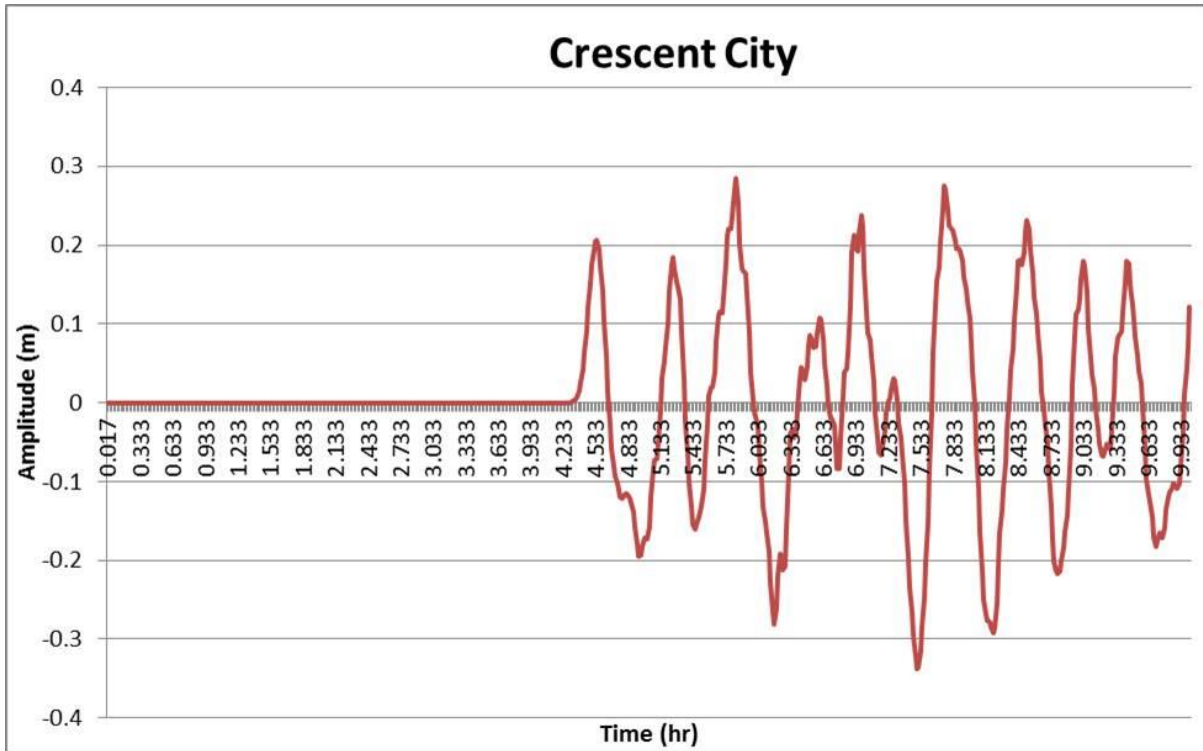


Figure B2. ATFM Maximum tsunami amplitude map for Pacifex17.







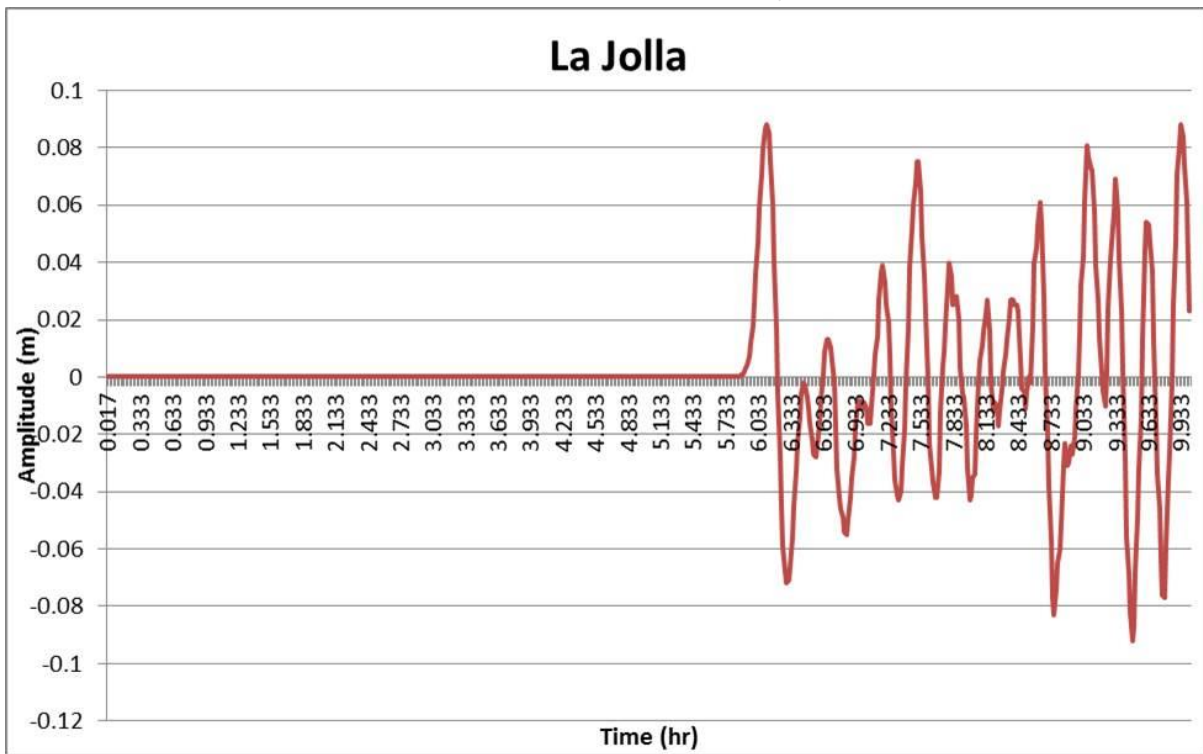
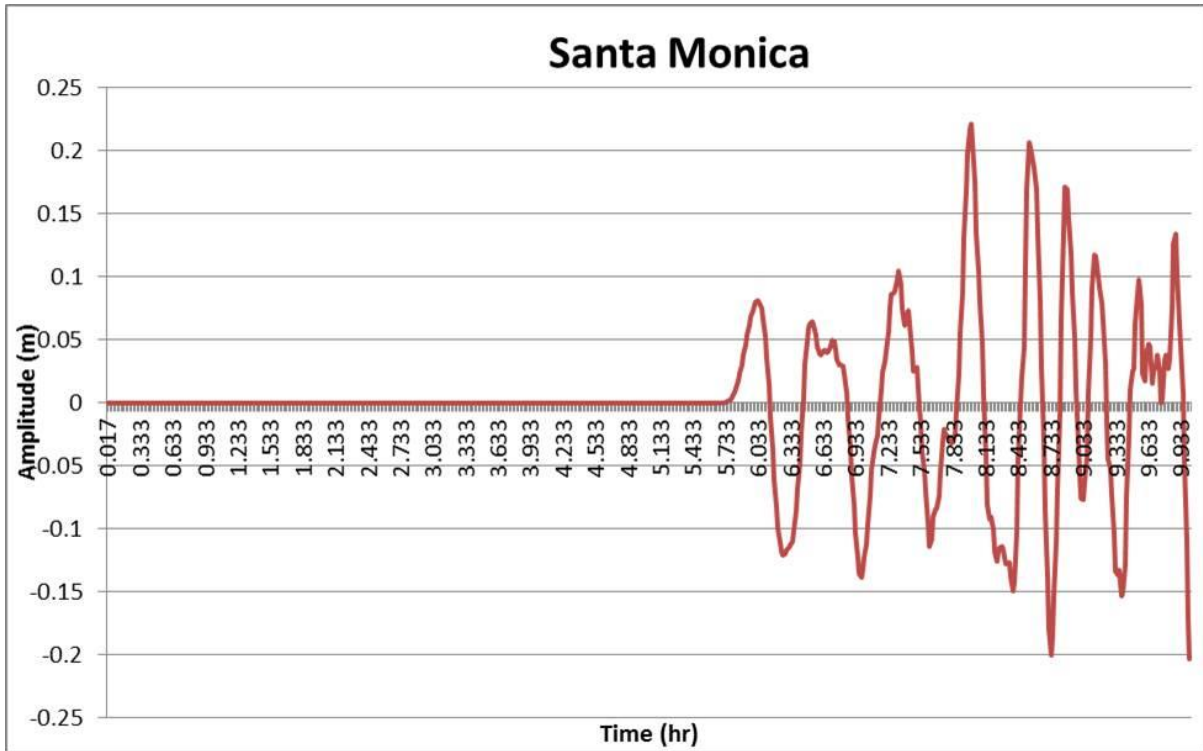


Figure B3. Tsunami time series for selected west coast sites.

Appendix C. TWC Dummy Message

NTWC

WEAK51 PAAQ 261604
TSUAK1

TEST...TSUNAMI EXERCISE MESSAGE NUMBER 1...TEST
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
0900 AM PDT MON MAR 26 2018

...PACIFEX18 TSUNAMI EXERCISE MESSAGE. REFER TO NTWC MESSAGE 1 IN THE EXERCISE
HANDBOOK. THIS IS AN EXERCISE ONLY...

THIS MESSAGE IS BEING USED TO START THE PACIFEX18 PACIFIC TSUNAMI EXERCISE.
THIS WILL BE THE ONLY EXERCISE MESSAGE BROADCAST FROM THE NATIONAL TSUNAMI
WARNING CENTER. THE EXERCISE HANDBOOK IS AVAILABLE AT THE WEB SITE TSUNAMI.GOV.
THE EXERCISE PURPOSE IS TO PROVIDE EMERGENCY MANAGEMENT A REALISTIC SCENARIO TO
TEST TSUNAMI RESPONSE PLANS.

THIS IS ONLY AN EXERCISE.

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Appendix D. TWC Exercise Messages

The following messages, created for the PACIFEX18 tsunami exercise, are representative of the official standard products issued by the NTWC during a large magnitude 8.2 earthquake and tsunami originating 100 miles southeast of Sand Point, Alaska at 54.4°N, 158.2°W. During a real event, the TWC would also issue graphical and html-based products to their web sites and via RSS.

NTWC Bulletin #1

WEAK51 PAAQ 261604
TSUAK1

BULLETIN

Public Tsunami Message Number 1
NWS National Tsunami Warning Center Palmer AK
804 AM AKDT Mon Mar 26 2018

...A TSUNAMI WARNING IS NOW IN EFFECT...

...A TSUNAMI ADVISORY IS NOW IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Hinchinbrook Entrance, Alaska (90 miles E of Seward) to Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

Tsunami Advisory in Effect for;

- * SOUTHEAST ALASKA, The inner and outer coast from Cape Decision, Alaska (85 miles SE of Sitka) to Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Cape Fairweather, Alaska (80 miles SE of Yakutat) to Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * ALEUTIAN ISLANDS, Samalga Pass, Alaska (30 miles SW of Nikolski) to Amchitka Pass, Alaska (125 miles W of Adak) including the Pribilof Islands

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

PRELIMINARY EARTHQUAKE PARAMETERS

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* The following parameters are based on a rapid preliminary assessment of the earthquake and changes may occur.

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018
 1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
 565 miles SW of Anchorage, Alaska

FORECASTS OF TSUNAMI ACTIVITY

* Tsunami activity is forecasted to start at the following locations at the specified times.

SITE	FORECAST START OF TSUNAMI
----	-----
* Alaska	
Sand Point	0855 AKDT Mar 26
Unalaska	0925 AKDT Mar 26
Kodiak	0940 AKDT Mar 26
Cold Bay	0945 AKDT Mar 26
Adak	0945 AKDT Mar 26
Elfin Cove	1005 AKDT Mar 26
Seward	1005 AKDT Mar 26
Yakutat	1015 AKDT Mar 26
Sitka	1015 AKDT Mar 26
Valdez	1025 AKDT Mar 26
Cordova	1035 AKDT Mar 26
Saint Paul	1045 AKDT Mar 26
Homer	1100 AKDT Mar 26

OBSERVATIONS OF TSUNAMI ACTIVITY

* No tsunami observations are available to report.

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas and within tsunami advisory areas.

If you are in a tsunami warning area;

* Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.

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If you are in a tsunami warning or advisory area;

- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

IMPACTS

Impacts will vary at different locations in the warning and in the advisory areas.

If you are in a tsunami warning area;

- * A tsunami with damaging waves and powerful currents is possible.
- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding can drown or injure people and weaken or destroy structures on land and in water.
- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.

If you are in a tsunami advisory area;

- * A tsunami with strong waves and currents is possible.
- * Waves and currents can drown or injure people who are in the water.

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- * Currents at beaches and in harbors, marinas, bays, and inlets may be especially dangerous.

If you are in a tsunami warning or advisory area;

- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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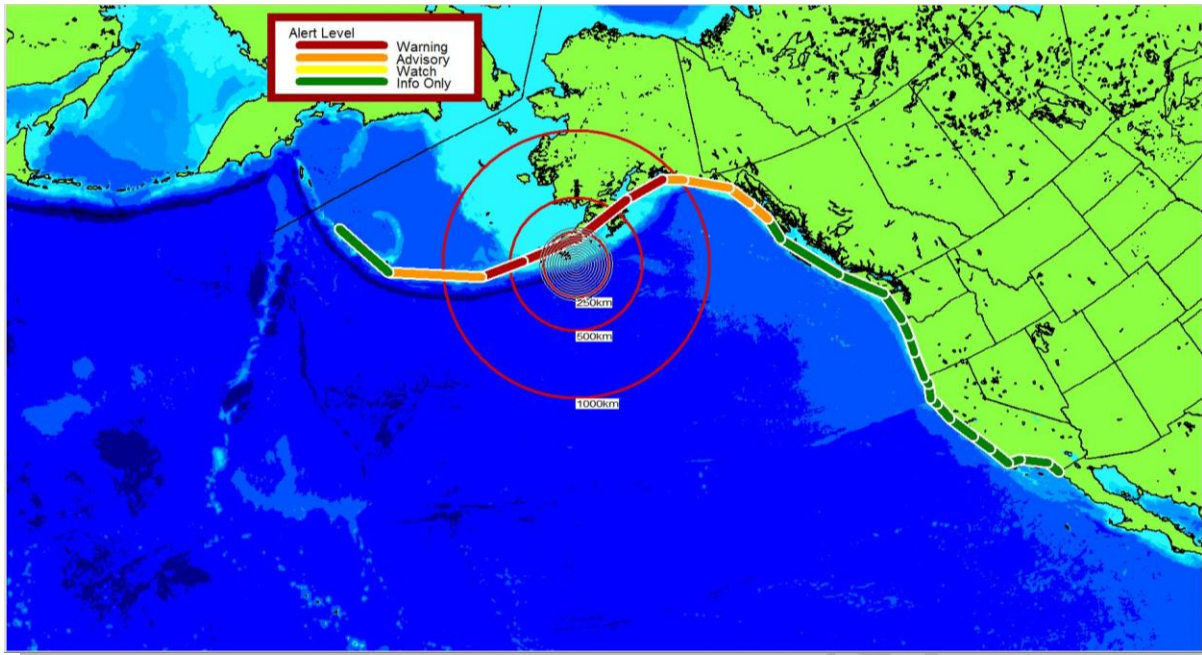


Figure D1: Watch/Warning areas after Bulletin 1.

NTWC Bulletin #2

WEAK51 PAAQ 261633
TSUAK1

BULLETIN

Public Tsunami Message Number 2
NWS National Tsunami Warning Center Palmer AK
833 AM AKDT Mon Mar 26 2018

UPDATES

* A tsunami has been confirmed and some impacts are expected

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Hinchinbrook Entrance, Alaska (90 miles E of Seward) to Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

Tsunami Advisory in Effect for;

- * SOUTHEAST ALASKA, The inner and outer coast from Cape

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Decision, Alaska (85 miles SE of Sitka) to Cape Fairweather, Alaska (80 miles SE of Yakutat)

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Cape Fairweather, Alaska (80 miles SE of Yakutat) to Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * ALEUTIAN ISLANDS, Samalga Pass, Alaska (30 miles SW of Nikolski) to Amchitka Pass, Alaska (125 miles W of Adak) including the Pribilof Islands

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

PRELIMINARY EARTHQUAKE PARAMETERS

- * The following parameters are based on a rapid preliminary assessment of the earthquake and changes may occur.
- * Magnitude 8.2
- * Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordinates 54.5 North 158.5 West
- * Depth 11 miles
- * Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

FORECASTS OF TSUNAMI ACTIVITY

- * Tsunami activity is forecasted to start at the following locations at the specified times.

SITE	FORECAST START OF TSUNAMI
----	-----
* Alaska	
Sand Point	0855 AKDT Mar 26
Unalaska	0925 AKDT Mar 26
Kodiak	0940 AKDT Mar 26
Cold Bay	0945 AKDT Mar 26
Adak	0945 AKDT Mar 26
Elfin Cove	1005 AKDT Mar 26
Seward	1005 AKDT Mar 26
Yakutat	1015 AKDT Mar 26
Sitka	1015 AKDT Mar 26
Valdez	1025 AKDT Mar 26
Cordova	1035 AKDT Mar 26
Saint Paul	1045 AKDT Mar 26
Homer	1100 AKDT Mar 26

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OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas and within tsunami advisory areas.

If you are in a tsunami warning area;

- * Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.

If you are in a tsunami warning or advisory area;

- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

IMPACTS

Impacts will vary at different locations in the warning and in the advisory areas.

If you are in a tsunami warning area;

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- * A tsunami with damaging waves and powerful currents is possible.
- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding can drown or injure people and weaken or destroy structures on land and in water.
- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.

If you are in a tsunami advisory area;

- * A tsunami with strong waves and currents is possible.
- * Waves and currents can drown or injure people who are in the water.
- * Currents at beaches and in harbors, marinas, bays, and inlets may be especially dangerous.

If you are in a tsunami warning or advisory area;

- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon,

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Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.

* This message will be updated within 30 minutes.

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NTWC Bulletin #3

WEAK51 PAAQ 261702
TSUAK1

BULLETIN

Public Tsunami Message Number 3
NWS National Tsunami Warning Center Palmer AK
902 AM AKDT Mon Mar 26 2018

UPDATES

- * A tsunami has been confirmed and some impacts are expected
- * Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Hinchinbrook Entrance, Alaska (90 miles E of Seward) to Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

Tsunami Advisory in Effect for;

- * SOUTHEAST ALASKA, The inner and outer coast from Cape Decision, Alaska (85 miles SE of Sitka) to Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Cape Fairweather, Alaska (80 miles SE of Yakutat) to Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * ALEUTIAN ISLANDS, Samalga Pass, Alaska (30 miles SW of Nikolski) to Amchitka Pass, Alaska (125 miles W of Adak) including the Pribilof Islands

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

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FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----
* Alaska			
Sand Point	0855 AKDT Mar 26	20 hrs	1.6- 2.9 ft
Unalaska	0925 AKDT Mar 26		less than 1ft
Kodiak	0940 AKDT Mar 26		less than 1ft
Cold Bay	0945 AKDT Mar 26		less than 1ft
Adak	0945 AKDT Mar 26		less than 1ft
Elfin Cove	1005 AKDT Mar 26		less than 1ft
Seward	1005 AKDT Mar 26		less than 1ft
Yakutat	1015 AKDT Mar 26		less than 1ft
Sitka	1015 AKDT Mar 26		less than 1ft
Valdez	1025 AKDT Mar 26		less than 1ft
Cordova	1035 AKDT Mar 26		less than 1ft
Saint Paul	1045 AKDT Mar 26		less than 1ft
Homer	1100 AKDT Mar 26		less than 1ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft

PRELIMINARY EARTHQUAKE PARAMETERS

- * Magnitude 8.2
- * Origin Time 0800 AKDT Mar 26 2018
- 0900 PDT Mar 26 2018
- 1600 UTC Mar 26 2018
- * Coordinates 54.5 North 158.5 West

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- * Depth 11 miles
- * Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas and within tsunami advisory areas.

If you are in a tsunami warning area;

- * Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.

If you are in a tsunami warning or advisory area;

- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

IMPACTS

Impacts will vary at different locations in the warning and in the advisory areas.

If you are in a tsunami warning area;

- * A tsunami with damaging waves and powerful currents is possible.
- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding

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can drown or injure people and weaken or destroy structures on land and in water.

- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.

If you are in a tsunami advisory area;

- * A tsunami with strong waves and currents is possible.
- * Waves and currents can drown or injure people who are in the water.
- * Currents at beaches and in harbors, marinas, bays, and inlets may be especially dangerous.

If you are in a tsunami warning or advisory area;

- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #4

WEAK51 PAAQ 261734
TSUAK1

BULLETIN

Public Tsunami Message Number 4
NWS National Tsunami Warning Center Palmer AK
934 AM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations
- * Revised alert areas

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

Alerts in the following areas have been canceled because additional information and analysis have better defined the threat.

- * The Tsunami Advisory is canceled for the coastal areas of Southeast Alaska and South Alaska and the Alaska Peninsula from Cape Decision, Alaska (85 miles SE of Sitka) to Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * The Tsunami Advisory is canceled for the coastal areas of Aleutian Islands from Samalga Pass, Alaska (30 miles SW of

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Nikolski) to Amchitka Pass, Alaska (125 miles W of Adak)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----
* Alaska			
Sand Point	0855 AKDT Mar 26	20 hrs	1.6- 3.0 ft
Kodiak	0940 AKDT Mar 26		less than 1ft
Cold Bay	0945 AKDT Mar 26		less than 1ft
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	15 hrs	1.2- 2.1 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft

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PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018
 1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
 565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

Actions to protect human life and property will vary within tsunami warning areas and within tsunami advisory areas.

If you are in a tsunami warning area;

- * Evacuate inland or to higher ground above and beyond designated tsunami hazard zones or move to an upper floor of a multi-story building depending on your situation.

If you are in a tsunami warning or advisory area;

- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland and/or uphill preferably by foot.
- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

IMPACTS

Impacts will vary at different locations in the warning and in the advisory areas.

If you are in a tsunami warning area;

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- * A tsunami with damaging waves and powerful currents is possible.
- * Repeated coastal flooding is possible as waves arrive onshore, move inland, and drain back into the ocean.
- * Strong and unusual waves, currents and inland flooding can drown or injure people and weaken or destroy structures on land and in water.
- * Water filled with floating or submerged debris that can injure or kill people and weaken or destroy buildings and bridges is possible.
- * Strong and unusual currents and waves in harbors, marinas, bays, and inlets may be especially destructive.

If you are in a tsunami advisory area;

- * A tsunami with strong waves and currents is possible.
- * Waves and currents can drown or injure people who are in the water.
- * Currents at beaches and in harbors, marinas, bays, and inlets may be especially dangerous.

If you are in a tsunami warning or advisory area;

- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

-
- * Refer to the internet site tsunami.gov for more information.

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Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
* Alaska			
Kodiak	0940 AKDT Mar 26		less than 1ft
Cold Bay	0945 AKDT Mar 26		less than 1ft
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	15 hrs	1.1- 2.1 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

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* Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1040 PDT Mar 26	0.1ft
DART 46413 US	1040 PDT Mar 26	0.1ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

* Refer to the internet site tsunami.gov for more information.

* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.

* This message will be updated within 30 minutes.

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NTWC Bulletin #6

WEAK51 PAAQ 261831
TSUAK1

BULLETIN

PACIFEX18 Exercise Handbook

Public Tsunami Message Number 6
NWS National Tsunami Warning Center Palmer AK
1031 AM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

FORECAST

FORECAST FORECAST

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SITE ----	START OF TSUNAMI -----	TSUNAMI DURATION -----	MAX TSUNAMI HEIGHT -----
* Alaska			
Kodiak	0940 AKDT Mar 26		less than 1ft
Cold Bay	0945 AKDT Mar 26		less than 1ft
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	9 hrs	0.9- 1.6 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

* Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE -----	TIME OF MEASUREMENT -----	OBSERVED MAX TSUNAMI HEIGHT -----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1040 PDT Mar 26	0.1ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1112 PDT Mar 26	0.1ft
DART 21414 US	1116 PDT Mar 26	0.1ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
 * Origin Time 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018
 1600 UTC Mar 26 2018
 * Coordinates 54.5 North 158.5 West
 * Depth 11 miles
 * Location 100 miles SE of Sand Point, Alaska
 565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

PACIFEX18 Exercise Handbook

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #7

WEAK51 PAAQ 261902
TSUAK1

BULLETIN

Public Tsunami Message Number 7
NWS National Tsunami Warning Center Palmer AK
1102 AM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

PACIFEX18 Exercise Handbook

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		

* California			
Crescent City	1315 PDT Mar 26	9 hrs	0.9- 1.6 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1148 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1112 PDT Mar 26	0.1ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft

PACIFEX18 Exercise Handbook

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018
 1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
 565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #8

WEAK51 PAAQ 261939
TSUAK1

BULLETIN

Public Tsunami Message Number 8
NWS National Tsunami Warning Center Palmer AK
1139 AM AKDT Mon Mar 26 2018

UPDATES

* Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

PACIFEX18 Exercise Handbook

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	9 hrs	0.9- 1.7 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

PACIFEX18 Exercise Handbook

* Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1148 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1227 PDT Mar 26	0.1ft
Saint Paul Alaska	1218 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1215 PDT Mar 26	0.1ft
Winter Harbour BC	1228 PDT Mar 26	0.6ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

* Refer to the internet site tsunami.gov for more information.

* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.

PACIFEX18 Exercise Handbook

* This message will be updated within 30 minutes.

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NTWC Bulletin #9

WEAK51 PAAQ 262004
TSUAK1

BULLETIN

Public Tsunami Message Number 9
NWS National Tsunami Warning Center Palmer AK
1204 PM AKDT Mon Mar 26 2018

UPDATES

* Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

* SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

* CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border

* OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border

* SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska

* ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

* A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.

PACIFEX18 Exercise Handbook

- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	15 hrs	1.0- 1.8 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1258 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1227 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1215 PDT Mar 26	0.1ft
Winter Harbour BC	1228 PDT Mar 26	0.6ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Alameda California	1247 PDT Mar 26	0.8ft

PRELIMINARY EARTHQUAKE PARAMETERS

PACIFEX18 Exercise Handbook

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

* Refer to the internet site tsunami.gov for more information.

* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.

* This message will be updated within 30 minutes.

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NTWC Bulletin #10

WEAK51 PAAQ 262039
TSUAK1

BULLETIN

Public Tsunami Message Number 10
NWS National Tsunami Warning Center Palmer AK
1239 PM AKDT Mon Mar 26 2018

UPDATES

* Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

* SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from

PACIFEX18 Exercise Handbook

Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	9 hrs	0.9- 1.7 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level

PACIFEX18 Exercise Handbook

above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1307 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1258 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1227 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1327 PDT Mar 26	0.2ft
Winter Harbour BC	1228 PDT Mar 26	0.6ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1315 PDT Mar 26	0.3ft
Port Orford Oregon	1314 PDT Mar 26	0.5ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Alameda California	1247 PDT Mar 26	0.8ft
Midway Island UM	1304 PDT Mar 26	0.1ft
DART 21419	1325 PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

PACIFEX18 Exercise Handbook

* Refer to the internet site tsunami.gov for more information.

* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.

* This message will be updated within 30 minutes.

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NTWC Bulletin #11

WEAK51 PAAQ 262109
TSUAK1

BULLETIN

Public Tsunami Message Number 11
NWS National Tsunami Warning Center Palmer AK
109 PM AKDT Mon Mar 26 2018

UPDATES

* Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

* SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

* CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border

* OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border

* SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska

* ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

PACIFEX18 Exercise Handbook

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
----	-----	-----	-----
* Oregon			
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26		less than 1ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1307 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1227 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1327 PDT Mar 26	0.2ft
Winter Harbour BC	1228 PDT Mar 26	0.6ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft

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Tofino British Columbia	1303	PDT Mar 26	0.5ft
DART 46411 US	1258	PDT Mar 26	0.1ft
Neah Bay Washington	1315	PDT Mar 26	0.3ft
Port Orford Oregon	1314	PDT Mar 26	0.5ft
Charleston Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay California	1333	PDT Mar 26	0.4ft
Westport Washington	1333	PDT Mar 26	0.4ft
Crescent City CA	1333	PDT Mar 26	0.7ft
Alameda California	1247	PDT Mar 26	0.8ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1358	PDT Mar 26	0.6ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #12

WEAK51 PAAQ 262136
TSUAK1

PACIFEX18 Exercise Handbook

BULLETIN

Public Tsunami Message Number 12
NWS National Tsunami Warning Center Palmer AK
136 PM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft

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DART 46410	US	1024	PDT Mar 26	0.1ft
Nikolski	Alaska	1358	PDT Mar 26	0.2ft
DART 46413	US	1040	PDT Mar 26	0.1ft
Adak	Alaska	1201	PDT Mar 26	0.3ft
DART 21414	US	1116	PDT Mar 26	0.1ft
DART 21415	US	1152	PDT Mar 26	0.0ft
Attu	Alaska	1223	PDT Mar 26	0.1ft
Cordova	Alaska	1427	PDT Mar 26	0.1ft
Saint Paul	Alaska	1258	PDT Mar 26	0.2ft
DART 46419	US	1200	PDT Mar 26	0.2ft
Seldovia	Alaska	1327	PDT Mar 26	0.2ft
Winter Harbour	BC	1400	PDT Mar 26	0.9ft
DART 46404	US	1218	PDT Mar 26	0.2ft
DART 46407	US	1228	PDT Mar 26	0.1ft
Tofino	British Columbia	1303	PDT Mar 26	0.5ft
DART 46411	US	1258	PDT Mar 26	0.1ft
Neah Bay	Washington	1315	PDT Mar 26	0.3ft
Port Orford	Oregon	1314	PDT Mar 26	0.5ft
Charleston	Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay	California	1418	PDT Mar 26	0.5ft
Westport	Washington	1333	PDT Mar 26	0.4ft
Crescent City	CA	1333	PDT Mar 26	0.7ft
Port Angeles	Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach	CA	1402	PDT Mar 26	0.3ft
Bolinas	California	1413	PDT Mar 26	0.5ft
DART 46412	US	1413	PDT Mar 26	0.1ft
San Francisco	CA	1425	PDT Mar 26	0.4ft
Alameda	California	1247	PDT Mar 26	0.8ft
Midway Island	UM	1304	PDT Mar 26	0.1ft
DART 21419		1325	PDT Mar 26	0.0ft
DART 21401		1351	PDT Mar 26	0.0ft
Nawiliwili	Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa	Hawaii	1358	PDT Mar 26	1.0ft
Honolulu	Hawaii	1349	PDT Mar 26	0.4ft
Kahului	Hawaii	1349	PDT Mar 26	0.8ft
Hilo	Hawaii	1358	PDT Mar 26	0.6ft
DART 51407		1400	PDT Mar 26	0.1ft
DART 21418		1422	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2

* Origin Time 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018
 1600 UTC Mar 26 2018

* Coordinates 54.5 North 158.5 West

* Depth 11 miles

* Location 100 miles SE of Sand Point, Alaska
 565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

PACIFEX18 Exercise Handbook

IMPACTS

- * See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #13

WEAK51 PAAQ 262204
TSUAK1

BULLETIN

Public Tsunami Message Number 13
NWS National Tsunami Warning Center Palmer AK
204 PM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of

PACIFEX18 Exercise Handbook

Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

* Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1434 PDT Mar 26	0.4ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1431 PDT Mar 26	0.3ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1314 PDT Mar 26	0.5ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1455 PDT Mar 26	0.6ft
Westport Washington	1333 PDT Mar 26	0.4ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1455 PDT Mar 26	0.4ft
Bolinas California	1413 PDT Mar 26	0.5ft
DART 46412 US	1413 PDT Mar 26	0.1ft
San Francisco CA	1425 PDT Mar 26	0.4ft
Alameda California	1247 PDT Mar 26	0.8ft
Midway Island UM	1304 PDT Mar 26	0.1ft
DART 21419	1325 PDT Mar 26	0.0ft
DART 21401	1351 PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333 PDT Mar 26	0.2ft
Haleiwa Hawaii	1358 PDT Mar 26	1.0ft
Honolulu Hawaii	1349 PDT Mar 26	0.4ft
Kahului Hawaii	1349 PDT Mar 26	0.8ft
Hilo Hawaii	1430 PDT Mar 26	0.8ft
DART 51407	1400 PDT Mar 26	0.1ft

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DART 21418		1422	PDT Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

* Refer to the internet site tsunami.gov for more information.
* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
* This message will be updated within 30 minutes.

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NTWC Bulletin #14

WEAK51 PAAQ 262238
TSUAK1

BULLETIN

Public Tsunami Message Number 14
NWS National Tsunami Warning Center Palmer AK
238 PM AKDT Mon Mar 26 2018

UPDATES

* Updated observations

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

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Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Alerts in the following areas have been canceled because additional information and analysis have better defined the threat.

- * The Tsunami Advisory is canceled for the coastal areas of Oregon from The Oregon/Cal. Border to The Oregon/Wash. Border
- * The Tsunami Advisory is canceled for the coastal areas of Aleutian Islands from Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1508 PDT Mar 26	0.8ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft

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Port Orford Oregon	1501	PDT Mar 26	0.7ft
Charleston Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay California	1455	PDT Mar 26	0.6ft
Westport Washington	1333	PDT Mar 26	0.4ft
Crescent City CA	1449	PDT Mar 26	0.9ft
Arena Cove California	1519	PDT Mar 26	0.8ft
Port Angeles Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach CA	1455	PDT Mar 26	0.4ft
Bolinas California	1514	PDT Mar 26	0.8ft
DART 46412 US	1413	PDT Mar 26	0.1ft
San Francisco CA	1425	PDT Mar 26	0.4ft
Alameda California	1247	PDT Mar 26	0.8ft
Seattle Washington	1519	PDT Mar 26	0.1ft
Santa Monica California	1501	PDT Mar 26	0.3ft
Laguna Beach California	1505	PDT Mar 26	0.2ft
La Jolla California	1507	PDT Mar 26	0.3ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

- * Magnitude 8.2
- * Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordinates 54.5 North 158.5 West
- * Depth 11 miles
- * Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS - UPDATED

Actions to protect human life and property will vary within tsunami advisory areas.

If you are in a tsunami advisory area;

- * Move out of the water, off the beach, and away from harbors, marinas, breakwaters, bays and inlets.
- * Be alert to and follow instructions from your local emergency officials because they may have more detailed or specific information for your location.
- * If you feel a strong earthquake or extended ground rolling take immediate protective actions such as moving inland

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and/or uphill preferably by foot.

- * Boat operators,
 - * Where time and conditions permit, move your boat out to sea to a depth of at least 180 feet.
 - * If at sea avoid entering shallow water, harbors, marinas, bays, and inlets to avoid floating and submerged debris and strong currents.
- * Do not go to the shore to observe the tsunami.
- * Do not return to the coast until local emergency officials indicate it is safe to do so.

IMPACTS

Impacts will vary at different locations in the advisory areas.

If you are in a tsunami advisory area;

- * A tsunami with strong waves and currents is possible.
- * Waves and currents can drown or injure people who are in the water.
- * Currents at beaches and in harbors, marinas, bays, and inlets may be especially dangerous.
- * Some impacts may continue for many hours to days after arrival of the first wave.
- * The first wave may not be the largest so later waves may be larger.
- * Each wave may last 5 to 45 minutes as a wave encroaches and recedes.
- * Coasts facing all directions are threatened because the waves can wrap around islands and headlands and into bays.
- * Strong shaking or rolling of the ground indicates an earthquake has occurred and a tsunami may be imminent.
- * A rapidly receding or receded shoreline, unusual waves and sounds, and strong currents are signs of a tsunami.
- * The tsunami may appear as water moving rapidly out to sea, a gentle rising tide like flood with no breaking wave, as a series of breaking waves, or a frothy wall of water.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.

PACIFEX18 Exercise Handbook

* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.

* This message will be updated within 30 minutes.

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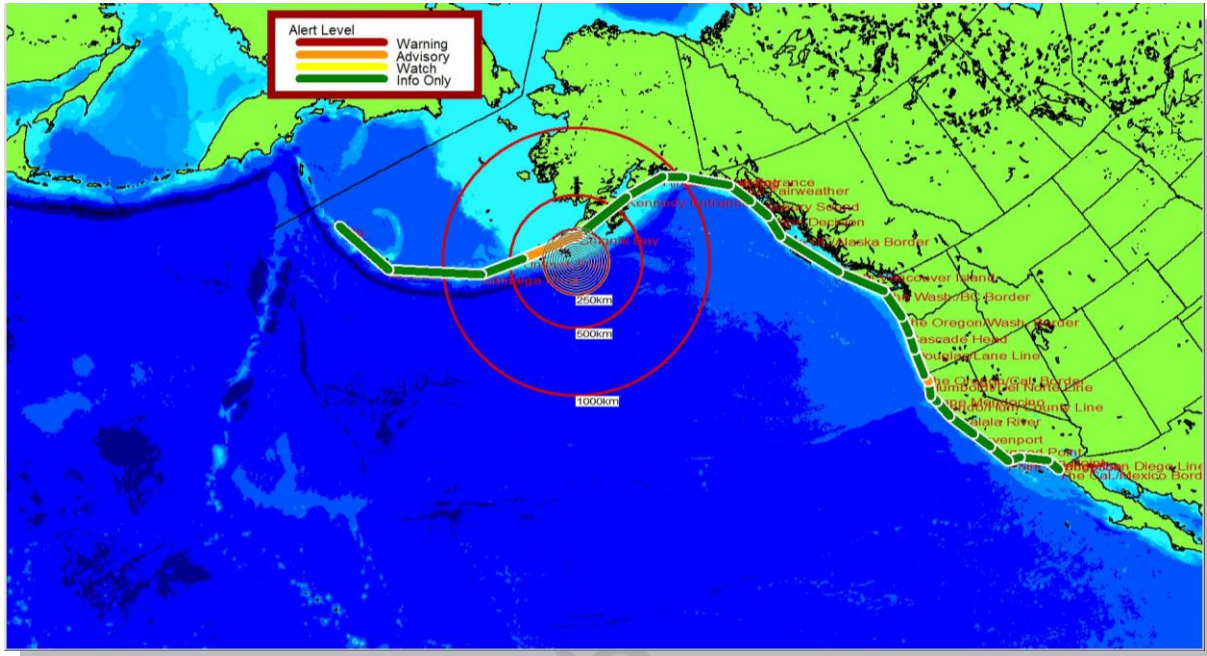


Figure D3: Watch/Warning areas after Bulletin 14.

NTWC Bulletin #15

WEAK51 PAAQ 262300
TSUAK1

BULLETIN

Public Tsunami Message Number 15
NWS National Tsunami Warning Center Palmer AK
300 PM AKDT Tue Mar 26 2018

UPDATES

* Updated observations

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of

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Unalaska)

For other US and Canadian Pacific coasts in North America,
there is no tsunami threat.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

* Observed max tsunami height is the highest recorded water level
above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1455 PDT Mar 26	0.6ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1455 PDT Mar 26	0.4ft
Bolinas California	1514 PDT Mar 26	0.8ft
DART 46412 US	1413 PDT Mar 26	0.1ft
San Francisco CA	1534 PDT Mar 26	0.7ft
Alameda California	1247 PDT Mar 26	0.8ft
Seattle Washington	1519 PDT Mar 26	0.1ft
Santa Monica California	1501 PDT Mar 26	0.3ft
Laguna Beach California	1505 PDT Mar 26	0.2ft
La Jolla California	1507 PDT Mar 26	0.3ft
San Diego California	1555 PDT Mar 26	0.1ft
Midway Island UM	1304 PDT Mar 26	0.1ft
DART 21419	1325 PDT Mar 26	0.0ft
DART 21401	1351 PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333 PDT Mar 26	0.2ft

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Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft
DART 52401 West Pacific	1546	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 14 for recommended actions.

IMPACTS

* See message number 14 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

* Refer to the internet site tsunami.gov for more information.
* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
* This message will be updated within 30 minutes.

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NTWC Bulletin #16

WEAK51 PAAQ 262332
TSUAK1

BULLETIN

Public Tsunami Message Number 16
NWS National Tsunami Warning Center Palmer AK
332 PM AKDT Tue Mar 26 2018

UPDATES

* Updated observations

PACIFEX18 Exercise Handbook

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

For other US and Canadian Pacific coasts in North America, there is no tsunami threat.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1455 PDT Mar 26	0.6ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1612 PDT Mar 26	0.8ft

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Bolinas California	1514	PDT Mar 26	0.8ft
DART 46412 US	1413	PDT Mar 26	0.1ft
San Francisco CA	1534	PDT Mar 26	0.7ft
Alameda California	1247	PDT Mar 26	0.8ft
Seattle Washington	1519	PDT Mar 26	0.1ft
Santa Monica California	1620	PDT Mar 26	0.3ft
Laguna Beach California	1505	PDT Mar 26	0.2ft
La Jolla California	1507	PDT Mar 26	0.3ft
San Diego California	1555	PDT Mar 26	0.1ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft
DART 52401 West Pacific	1546	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 14 for recommended actions.

IMPACTS

* See message number 14 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #17

WEAK51 PAAQ 270002
TSUAK1

BULLETIN

Public Tsunami Message Number 17
NWS National Tsunami Warning Center Palmer AK
402 PM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

For other US and Canadian Pacific coasts in North America, there is no tsunami threat.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
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DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft

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DART 46404	US	1218	PDT Mar 26	0.2ft
DART 46407	US	1228	PDT Mar 26	0.1ft
Tofino	British Columbia	1303	PDT Mar 26	0.5ft
DART 46411	US	1258	PDT Mar 26	0.1ft
Neah Bay	Washington	1458	PDT Mar 26	0.5ft
Port Orford	Oregon	1501	PDT Mar 26	0.7ft
Charleston	Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay	California	1455	PDT Mar 26	0.6ft
Westport	Washington	1554	PDT Mar 26	0.5ft
Crescent City	CA	1449	PDT Mar 26	0.9ft
Arena Cove	California	1519	PDT Mar 26	0.8ft
Port Angeles	Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach	CA	1612	PDT Mar 26	0.8ft
Bolinas	California	1514	PDT Mar 26	0.8ft
DART 46412	US	1413	PDT Mar 26	0.1ft
San Francisco	CA	1654	PDT Mar 26	0.8ft
Alameda	California	1247	PDT Mar 26	0.8ft
Seattle	Washington	1519	PDT Mar 26	0.1ft
Santa Monica	California	1620	PDT Mar 26	0.3ft
Laguna Beach	California	1505	PDT Mar 26	0.2ft
La Jolla	California	1507	PDT Mar 26	0.3ft
San Diego	California	1555	PDT Mar 26	0.1ft
Midway Island	UM	1304	PDT Mar 26	0.1ft
DART 21419		1325	PDT Mar 26	0.0ft
DART 21401		1351	PDT Mar 26	0.0ft
Nawiliwili	Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa	Hawaii	1358	PDT Mar 26	1.0ft
Honolulu	Hawaii	1349	PDT Mar 26	0.4ft
Kahului	Hawaii	1349	PDT Mar 26	0.8ft
Hilo	Hawaii	1430	PDT Mar 26	0.8ft
DART 51407		1400	PDT Mar 26	0.1ft
DART 21418		1422	PDT Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT Mar 26	0.0ft
DART 52401	West Pacific	1546	PDT Mar 26	0.0ft
DART 52402	West Pacific	1642	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 14 for recommended actions.

IMPACTS

* See message number 14 for possible impacts.

PACIFEX18 Exercise Handbook

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #18

WEAK51 PAAQ 270032
TSUAK1

BULLETIN

Public Tsunami Message Number 18
NWS National Tsunami Warning Center Palmer AK
432 PM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

For other US and Canadian Pacific coasts in North America, there is no tsunami threat.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft

PACIFEX18 Exercise Handbook

DART 46408	US	1015	PDT Mar 26	0.1ft
Akutan	Alaska	1419	PDT Mar 26	0.2ft
DART 46410	US	1024	PDT Mar 26	0.1ft
Nikolski	Alaska	1627	PDT Mar 26	0.3ft
DART 46413	US	1040	PDT Mar 26	0.1ft
Adak	Alaska	1548	PDT Mar 26	1.2ft
DART 21414	US	1116	PDT Mar 26	0.1ft
DART 21415	US	1152	PDT Mar 26	0.0ft
Attu	Alaska	1449	PDT Mar 26	0.5ft
Cordova	Alaska	1701	PDT Mar 26	0.2ft
Saint Paul	Alaska	1258	PDT Mar 26	0.2ft
DART 46419	US	1200	PDT Mar 26	0.2ft
Seldovia	Alaska	1508	PDT Mar 26	0.5ft
Winter Harbour	BC	1400	PDT Mar 26	0.9ft
DART 46404	US	1218	PDT Mar 26	0.2ft
DART 46407	US	1228	PDT Mar 26	0.1ft
Tofino	British Columbia	1303	PDT Mar 26	0.5ft
DART 46411	US	1258	PDT Mar 26	0.1ft
Neah Bay	Washington	1458	PDT Mar 26	0.5ft
Port Orford	Oregon	1501	PDT Mar 26	0.7ft
Charleston	Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay	California	1708	PDT Mar 26	0.7ft
Westport	Washington	1554	PDT Mar 26	0.5ft
Crescent City	CA	1449	PDT Mar 26	0.9ft
Arena Cove	California	1519	PDT Mar 26	0.8ft
Port Angeles	Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach	CA	1709	PDT Mar 26	1.0ft
Bolinas	California	1712	PDT Mar 26	0.9ft
DART 46412	US	1413	PDT Mar 26	0.1ft
San Francisco	CA	1654	PDT Mar 26	0.8ft
Alameda	California	1247	PDT Mar 26	0.8ft
Seattle	Washington	1519	PDT Mar 26	0.1ft
Santa Monica	California	1620	PDT Mar 26	0.3ft
Laguna Beach	California	1505	PDT Mar 26	0.2ft
La Jolla	California	1507	PDT Mar 26	0.3ft
San Diego	California	1555	PDT Mar 26	0.1ft
Midway Island	UM	1304	PDT Mar 26	0.1ft
DART 21419		1325	PDT Mar 26	0.0ft
DART 21401		1351	PDT Mar 26	0.0ft
Nawiliwili	Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa	Hawaii	1358	PDT Mar 26	1.0ft
Honolulu	Hawaii	1349	PDT Mar 26	0.4ft
Kahului	Hawaii	1349	PDT Mar 26	0.8ft
Hilo	Hawaii	1430	PDT Mar 26	0.8ft
DART 51407		1400	PDT Mar 26	0.1ft
DART 21418		1422	PDT Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT Mar 26	0.0ft
DART 52401	West Pacific	1546	PDT Mar 26	0.0ft
DART 52402	West Pacific	1642	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
 * Origin Time 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018
 1600 UTC Mar 26 2018

PACIFEX18 Exercise Handbook

* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
 565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 14 for recommended actions.

IMPACTS

* See message number 14 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #19

WEAK51 PAAQ 270104
TSUAK1

BULLETIN

Public Tsunami Message Number 19
NWS National Tsunami Warning Center Palmer AK
504 PM AKDT Mon Mar 26 2018

UPDATES

* Updated observations

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

For other US and Canadian Pacific coasts in North America,

PACIFEX18 Exercise Handbook

there is no tsunami threat.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

* Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1701 PDT Mar 26	0.2ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1708 PDT Mar 26	0.7ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1709 PDT Mar 26	1.0ft
Bolinas California	1712 PDT Mar 26	0.9ft
DART 46412 US	1413 PDT Mar 26	0.1ft
San Francisco CA	1654 PDT Mar 26	0.8ft
Alameda California	1247 PDT Mar 26	0.8ft
Seattle Washington	1737 PDT Mar 26	0.1ft
Santa Monica California	1620 PDT Mar 26	0.3ft
Laguna Beach California	1505 PDT Mar 26	0.2ft
La Jolla California	1507 PDT Mar 26	0.3ft
San Diego California	1555 PDT Mar 26	0.1ft
Midway Island UM	1304 PDT Mar 26	0.1ft
DART 21419	1325 PDT Mar 26	0.0ft
DART 21401	1351 PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333 PDT Mar 26	0.2ft
Haleiwa Hawaii	1358 PDT Mar 26	1.0ft
Honolulu Hawaii	1349 PDT Mar 26	0.4ft
Kahului Hawaii	1349 PDT Mar 26	0.8ft
Hilo Hawaii	1430 PDT Mar 26	0.8ft

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DART 51407		1400	PDT Mar 26	0.1ft
DART 21418		1422	PDT Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT Mar 26	0.0ft
DART 52401	West Pacific	1546	PDT Mar 26	0.0ft
DART 52402	West Pacific	1642	PDT Mar 26	0.0ft
DART 52404	West Pacific	1749	PDT Mar 26	0.0ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 14 for recommended actions.

IMPACTS

* See message number 14 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This message will be updated within 30 minutes.

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NTWC Bulletin #20

WEAK51 PAAQ 270132
TSUAK1

BULLETIN

Public Tsunami Message Number 20
NWS National Tsunami Warning Center Palmer AK
532 PM AKDT Mon Mar 26 2018

UPDATES

* Updated observations

PACIFEX18 Exercise Handbook

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

For other US and Canadian Pacific coasts in North America, there is no tsunami threat.

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1821 PDT Mar 26	0.4ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1701 PDT Mar 26	0.2ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1804 PDT Mar 26	0.6ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1708 PDT Mar 26	0.7ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1709 PDT Mar 26	1.0ft
Bolinas California	1712 PDT Mar 26	0.9ft
DART 46412 US	1413 PDT Mar 26	0.1ft

PACIFEX18 Exercise Handbook

San Francisco CA	1654	PDT Mar 26	0.8ft
Alameda California	1247	PDT Mar 26	0.8ft
Seattle Washington	1737	PDT Mar 26	0.1ft
Santa Monica California	1620	PDT Mar 26	0.3ft
Laguna Beach California	1505	PDT Mar 26	0.2ft
La Jolla California	1507	PDT Mar 26	0.3ft
San Diego California	1555	PDT Mar 26	0.1ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft
DART 52401 West Pacific	1546	PDT Mar 26	0.0ft
DART 52402 West Pacific	1642	PDT Mar 26	0.0ft
DART 52404 West Pacific	1749	PDT Mar 26	0.0ft
DART 51425 SW Pacific	1807	PDT Mar 26	0.1ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 14 for recommended actions.

IMPACTS

* See message number 14 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

* Refer to the internet site tsunami.gov for more information.

* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.

* This message will be updated within 30 minutes.

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PACIFEX18 Exercise Handbook

NTWC Bulletin #21

WEAK51 PAAQ 270201
TSUAK1

BULLETIN

Public Tsunami Message Number 21
NWS National Tsunami Warning Center Palmer AK
601 PM AKDT Mon Mar 26 2018

...THE TSUNAMI ADVISORY IS CANCELLED...

- * The Tsunami Advisory is canceled for the coastal areas of California
- * The Tsunami Advisory is canceled for the coastal areas of South Alaska and the Alaska Peninsula

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1821 PDT Mar 26	0.4ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1701 PDT Mar 26	0.2ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1804 PDT Mar 26	0.6ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1708 PDT Mar 26	0.7ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1709 PDT Mar 26	1.0ft

PACIFEX18 Exercise Handbook

Bolinas California	1712	PDT Mar 26	0.9ft
DART 46412 US	1413	PDT Mar 26	0.1ft
San Francisco CA	1654	PDT Mar 26	0.8ft
Alameda California	1247	PDT Mar 26	0.8ft
Seattle Washington	1737	PDT Mar 26	0.1ft
Santa Monica California	1620	PDT Mar 26	0.3ft
Laguna Beach California	1505	PDT Mar 26	0.2ft
La Jolla California	1507	PDT Mar 26	0.3ft
San Diego California	1555	PDT Mar 26	0.1ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft
DART 52401 West Pacific	1546	PDT Mar 26	0.0ft
DART 52402 West Pacific	1642	PDT Mar 26	0.0ft
DART 52404 West Pacific	1749	PDT Mar 26	0.0ft
DART 51425 SW Pacific	1807	PDT Mar 26	0.1ft

RECOMMENDED ACTIONS - UPDATED

- * Do not re-occupy hazard zones until local emergency officials indicate it is safe to do so.

IMPACTS - UPDATED

- * A tsunami was generated by this event, but no longer poses a threat.
- * Some areas may continue to see small sea level changes.
- * The determination to re-occupy hazard zones must be made by local officials.

ADDITIONAL INFORMATION AND NEXT UPDATE

- * Refer to the internet site tsunami.gov for more information.
- * Pacific coastal regions outside California, Oregon, Washington, British Columbia, and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
- * This will be the final U.S. National Tsunami Warning Center message issued for this event.

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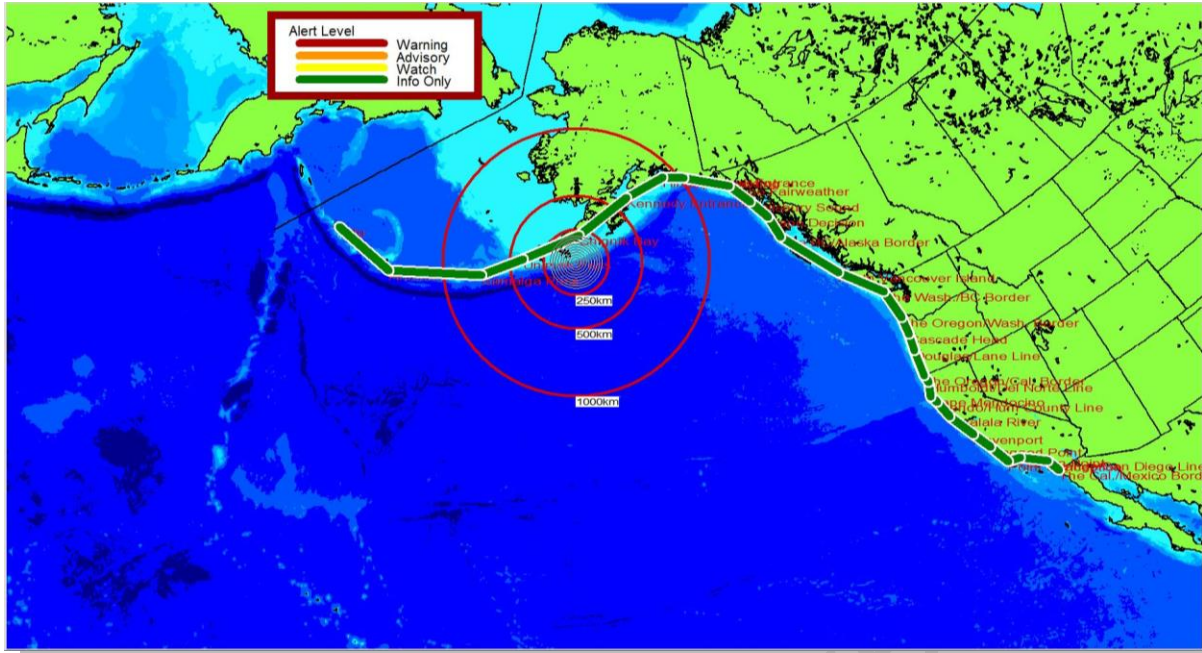


Figure D4: Watch/Warning areas after cancellation.

NTWC Spanish Bulletin #1

WEAK61 PAAQ 261604
TSUSPN

BULLETIN

Mensaje de Tsunami numero 1
NWS Centro Nacional de Alerta de Tsunami Palmer AK
804 AM AKDT Mon Mar 26 2018

...UN AVISO DE TSUNAMI ESTA AHORA EN EFECTO...

...UNA ADVERTENCIA DE TSUNAMI ESTA AHORA EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Hinchinbrook Entrance, Alaska (90 miles E of Seward) hasta Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Advertencia de Tsunami en Efecto para;

- * SOUTHEAST ALASKA, La costa interior y exterior desde Cape Decision, Alaska (85 miles SE of Sitka) hasta Cape Fairweather, Alaska (80 miles SE of Yakutat)

PACIFEX18 Exercise Handbook

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Cape Fairweather, Alaska (80 miles SE of Yakutat) hasta Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * ALEUTIAN ISLANDS, Samalga Pass, Alaska (30 miles SW of Nikolski) hasta Amchitka Pass, Alaska (125 miles W of Adak) incluso las Islas Pribilof

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PARAMETROS PRELIMINARES DEL TERREMOTO

- * LOS SIGUIENTES PARAMETROS ESTAN BASADOS EN UNA EVALUACION PRELIMINAR RAPIDA Y PUEDEN VARIAR.

- * Magnitud 8.2
- * Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordenadas 54.5 Norte 158.5 Oeste
- * Profundidad 11 millas
- * Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

PRONOSTICOS DEL TSUNAMI

- * Se pronostica que la actividad del tsunami comience en los siguientes puntos a loas horas indicadas.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI
-----	-----

* Alaska	
Sand Point	0855 AKDT Mar 26
Unalaska	0925 AKDT Mar 26
Kodiak	0940 AKDT Mar 26
Cold Bay	0945 AKDT Mar 26
Adak	0945 AKDT Mar 26
Elfin Cove	1005 AKDT Mar 26
Seward	1005 AKDT Mar 26
Yakutat	1015 AKDT Mar 26
Sitka	1015 AKDT Mar 26
Valdez	1025 AKDT Mar 26
Cordova	1035 AKDT Mar 26
Saint Paul	1045 AKDT Mar 26
Homer	1100 AKDT Mar 26

OBSERVACIONES DEL TSUNAMI

PACIFEX18 Exercise Handbook

-
- * No hay observaciones del tsunami disponibles para reportar.

ACCIONES RECOMENDADAS

Las acciones para proteger la vida y propiedad pueden variar dentro de las áreas de aviso y las áreas de advertencia de tsunami.

Si usted esta en un area de aviso;

- * Desaloje tierra adentro o a un lugar alto fuera de la zona de inundacion por tsunami o muevase a un piso alto de un edificio multipiso segun sea su situacion.

Si usted esta en un area de aviso o advertencia;

- * Salgase del agua, de la playa y alejese de puertos, marinas, bahias, ensenadas y rompeolas.
- * Este alerta y siga las instrucciones de los oficiales locales de manejo de emergencia ya que ellos pueden tener informacion mas detallada o especifica para su ubicacion.
- * Si siente un terremoto fuerte y/o prolongado tome inmediatamente acciones de seguridad como moverse tierra adentro y/o hacia un lugar alto preferiblemente a pie.
- * Operadores de botes,
 - * Cuando el tiempo y las condiciones lo permitan mueva su bote mar adentro a una profundidad de al menos 180 pies.
 - * Si esta navegando evite entrar a aguas someras/llanas, puertos, marinas, bahias, y ensenadas para evitar corrientes fuertes y objetos flotantes o sumergidos.
- * No vaya a la costa para observar el tsunami.
- * No regrese a la costa hasta que los oficiales locales de manejo de emergencia local indiquen que es seguro hacerlo.

IMPACTOS

Los impactos pueden variar en diferentes lugares dentro de las areas de aviso y las areas de advertencia.

Si usted esta en un area de aviso;

- * Es posible un tsunami con olas destructivas y corrientes fuertes.
- * Posibles inundaciones costeras repetidas cuando las olas lleguen a la costa, se mueven tierra adentro, y retroceden al oceano.

PACIFEX18 Exercise Handbook

- * Olas fuertes e inusuales, corrientes e inundaciones pueden ahogar o herir personas y debilitar o destruir estructuras en tierra y dentro del agua.
- * Agua con objetos flotantes o sumergidos pueden herir o causar la muerte a personas o destruir edificios y puentes.
- * Corrientes y olas fuertes e inusuales en puertos, marinas, bahías, y ensenadas pueden ser especialmente destructivas.

Si usted esta en un area de advertencia;

- * Un tsunami con olas y corrientes fuertes puede ser posible.
- * Olas y corrientes pueden ahogar o herir personas que se encuentran en el agua.
- * Corrientes en playas y puertos, marinas, bahías, y ensenadas pueden ser especialmente peligrosas.

Si usted esta en un area de aviso o advertencia;

- * Algunos impactos pueden continuar por muchas horas hasta días luego de la llegada de la primera ola.
- * La primera ola puede no ser la mas grande las olas posteriores si.
- * Cada ola puede durar de 5 a 45 minutos entre su embate y retroceso.
- * Costas con frente en todas las direcciones pueden estar en peligro porque las olas pueden dar la vuelta a islas y entrar a bahías.
- * Movimiento fuerte y/o prolongado del suelo indica que un terremoto ha ocurrido un tsunami puede haber sido generado y su llegada inminente.
- * Un rapido retroceso de la linea de costa, olas y sonidos inusuales, y fuertes corrientes son senales de un tsunami.
- * El tsunami puede aparecer como agua moviendose rapidamente hacia mar adentro, una marea suave que se eleva rapidamente sin olas rompientes, como una serie de olas rompientes, o una pared de agua espumosa.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.

PACIFEX18 Exercise Handbook

* Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #2

WEAK61 PAAQ 261633
TSUSPN

BULLETIN

Mensaje de Tsunami numero 2
NWS Centro Nacional de Alerta de Tsunami Palmer AK
833 AM AKDT Mon Mar 26 2018

ACTUALIZACIONES

* Un tsunami ha sido confirmado y se esperan algunas impactos

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Hinchinbrook Entrance, Alaska (90 miles E of Seward) hasta Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Advertencia de Tsunami en Efecto para;

- * SOUTHEAST ALASKA, La costa interior y exterior desde Cape Decision, Alaska (85 miles SE of Sitka) hasta Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Cape Fairweather, Alaska (80 miles SE of Yakutat) hasta Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * ALEUTIAN ISLANDS, Samalga Pass, Alaska (30 miles SW of Nikolski) hasta Amchitka Pass, Alaska (125 miles W of Adak) incluso las Islas Pribilof

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PACIFEX18 Exercise Handbook

PARAMETROS PRELIMINARES DEL TERREMOTO

* LOS SIGUIENTES PARAMETROS ESTAN BASADOS EN UNA EVALUACION PRELIMINAR RAPIDA Y PUEDEN VARIAR.

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

PRONOSTICOS DEL TSUNAMI

* Se pronostica que la actividad del tsunami comience en los siguientes puntos a las horas indicadas.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI
-----	-----
* Alaska	
Sand Point	0855 AKDT Mar 26
Unalaska	0925 AKDT Mar 26
Kodiak	0940 AKDT Mar 26
Cold Bay	0945 AKDT Mar 26
Adak	0945 AKDT Mar 26
Elfin Cove	1005 AKDT Mar 26
Seward	1005 AKDT Mar 26
Yakutat	1015 AKDT Mar 26
Sitka	1015 AKDT Mar 26
Valdez	1025 AKDT Mar 26
Cordova	1035 AKDT Mar 26
Saint Paul	1045 AKDT Mar 26
Homer	1100 AKDT Mar 26

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

* La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft

ACCIONES RECOMENDADAS

Las acciones para proteger la vida y propiedad pueden

PACIFEX18 Exercise Handbook

variar dentro de las areas de aviso y las areas de advertencia de tsunami.

Si usted esta en un area de aviso;

- * Desaloje tierra adentro o a un lugar alto fuera de la zona de inundacion por tsunami o muevase a un piso alto de un edificio multipiso segun sea su situacion.

Si usted esta en un area de aviso o advertencia;

- * Salgase del agua, de la playa y alejese de puertos, marinas, bahias, ensenadas y rompeolas.
- * Este alerta y siga las instrucciones de los oficiales locales de manejo de emergencia ya que ellos pueden tener informacion mas detallada o especifica para su ubicacion.
- * Si siente un terremoto fuerte y/o prolongado tome inmediatamente acciones de seguridad como moverse tierra adentro y/o hacia un lugar alto preferiblemente a pie.
- * Operadores de botes,
 - * Cuando el tiempo y las condiciones lo permitan mueva su bote mar adentro a una profundidad de al menos 180 pies.
 - * Si esta navegando evite entrar a aguas someras/llanas, puertos, marinas, bahias, y ensenadas para evitar corrientes fuertes y objetos flotantes o sumergidos.
- * No vaya a la costa para observar el tsunami.
- * No regrese a la costa hasta que los oficiales locales de manejo de emergencia local indiquen que es seguro hacerlo.

IMPACTOS

Los impactos pueden variar en diferentes lugares dentro de las areas de aviso y las areas de advertencia.

Si usted esta en un area de aviso;

- * Es posible un tsunami con olas destructivas y corrientes fuertes.
- * Posibles inundaciones costeras repetidas cuando las olas lleguen a la costa, se mueven tierra adentro, y retroceden al oceano.
- * Olas fuertes e inusuales, corrientes e inundaciones pueden ahogar o herir personas y debilitar o destruir estructuras en tierra y dentro del agua.
- * Agua con objetos flotantes o sumergidos pueden herir o causar la muerte a personas o destruir edificios y puentes.

PACIFEX18 Exercise Handbook

- * Corrientes y olas fuertes e inusuales en puertos, marinas, bahias, y ensenadas pueden ser especialmente destructivas.

Si usted esta en un area de advertencia;

- * Un tsunami con olas y corrientes fuertes puede ser posible.
- * Olas y corrientes pueden ahogar o herir personas que se encuentran en el agua.
- * Corrientes en playas y puertos, marinas, bahias, y ensenadas pueden ser especialmente peligrosas.

Si usted esta en un area de aviso o advertencia;

- * Algunos impactos pueden continuar por muchas horas hasta dias luego de la llegada de la primera ola.
- * La primera ola puede no ser la mas grande las olas posteriores si.
- * Cada ola puede durar de 5 a 45 minutos entre su embate y retroceso.
- * Costas con frente en todas las direcciones pueden estar en peligro porque las olas pueden dar la vuelta a islas y entrar a bahias.
- * Movimiento fuerte y/o prolongado del suelo indica que un terremoto ha ocurrido un tsunami puede haber sido generado y su llegada inminente.
- * Un rapido retroceso de la linea de costa, olas y sonidos inusuales, y fuertes corrientes son senales de un tsunami.
- * El tsunami puede aparecer como agua moviendose rapidamente hacia mar adentro, una marea suave que se eleva rapidamente sin olas rompientes, como una serie de olas rompientes, o una pared de agua espumosa.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #3

PACIFEX18 Exercise Handbook

WEAK61 PAAQ 261702
TSUSPN

BULLETIN

Mensaje de Tsunami numero 3
NWS Centro Nacional de Alerta de Tsunami Palmer AK
902 AM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Un tsunami ha sido confirmado y se esperan algunas impactos
- * Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Hinchinbrook Entrance, Alaska (90 miles E of Seward) hasta Unimak Pass, Alaska (80 miles NE of Unalaska)
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Advertencia de Tsunami en Efecto para;

- * SOUTHEAST ALASKA, La costa interior y exterior desde Cape Decision, Alaska (85 miles SE of Sitka) hasta Cape Fairweather, Alaska (80 miles SE of Yakutat)
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Cape Fairweather, Alaska (80 miles SE of Yakutat) hasta Hinchinbrook Entrance, Alaska (90 miles E of Seward)
- * ALEUTIAN ISLANDS, Samalga Pass, Alaska (30 miles SW of Nikolski) hasta Amchitka Pass, Alaska (125 miles W of Adak) incluso las Islas Pribilof

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.

PACIFEX18 Exercise Handbook

- * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
- * La altura maxima de ola pronosticada es el nivel de agua mas alto esperado sobre el nivel de la marea.
- * No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
-----	-----	-----	-----
* Alaska			
Sand Point	0855 AKDT Mar 26	20 hrs	1.6- 2.9 pie
Unalaska	0925 AKDT Mar 26		menos de 1pie
Kodiak	0940 AKDT Mar 26		menos de 1pie
Cold Bay	0945 AKDT Mar 26		menos de 1pie
Adak	0945 AKDT Mar 26		menos de 1pie
Elfin Cove	1005 AKDT Mar 26		menos de 1pie
Seward	1005 AKDT Mar 26		menos de 1pie
Yakutat	1015 AKDT Mar 26		menos de 1pie
Sitka	1015 AKDT Mar 26		menos de 1pie
Valdez	1025 AKDT Mar 26		menos de 1pie
Cordova	1035 AKDT Mar 26		menos de 1pie
Saint Paul	1045 AKDT Mar 26		menos de 1pie
Homer	1100 AKDT Mar 26		menos de 1pie

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft

PARAMETROS PRELIMINARES DEL TERREMOTO

- * Magnitud 8.2
- * Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordenadas 54.5 Norte 158.5 Oeste
- * Profundidad 11 millas
- * Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

PACIFEX18 Exercise Handbook

ACCIONES RECOMENDADAS

Las acciones para proteger la vida y propiedad pueden variar dentro de las áreas de aviso y las áreas de advertencia de tsunami.

Si usted esta en un area de aviso;

- * Desaloje tierra adentro o a un lugar alto fuera de la zona de inundacion por tsunami o muevase a un piso alto de un edificio multipiso segun sea su situacion.

Si usted esta en un area de aviso o advertencia;

- * Salgase del agua, de la playa y alejese de puertos, marinas, bahias, ensenadas y rompeolas.
- * Este alerta y siga las instrucciones de los oficiales locales de manejo de emergencia ya que ellos pueden tener informacion mas detallada o especifica para su ubicacion.
- * Si siente un terremoto fuerte y/o prolongado tome inmediatamente acciones de seguridad como moverse tierra adentro y/o hacia un lugar alto preferiblemente a pie.
- * Operadores de botes,
 - * Cuando el tiempo y las condiciones lo permitan mueva su bote mar adentro a una profundidad de al menos 180 pies.
 - * Si esta navegando evite entrar a aguas someras/llanas, puertos, marinas, bahias, y ensenadas para evitar corrientes fuertes y objetos flotantes o sumergidos.
- * No vaya a la costa para observar el tsunami.
- * No regrese a la costa hasta que los oficiales locales de manejo de emergencia local indiquen que es seguro hacerlo.

IMPACTOS

Los impactos pueden variar en diferentes lugares dentro de las areas de aviso y las areas de advertencia.

Si usted esta en un area de aviso;

- * Es posible un tsunami con olas destructivas y corrientes fuertes.
- * Posibles inundaciones costeras repetidas cuando las olas lleguen a la costa, se mueven tierra adentro, y retroceden al oceano.
- * Olas fuertes e inusuales, corrientes e inundaciones pueden ahogar o herir personas y debilitar o destruir estructuras en tierra y dentro del agua.

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- * Agua con objetos flotantes o sumergidos pueden herir o causar la muerte a personas o destruir edificios y puentes.
- * Corrientes y olas fuertes e inusuales en puertos, marinas, bahías, y ensenadas pueden ser especialmente destructivas.

Si usted esta en un area de advertencia;

- * Un tsunami con olas y corrientes fuertes puede ser posible.
- * Olas y corrientes pueden ahogar o herir personas que se encuentran en el agua.
- * Corrientes en playas y puertos, marinas, bahías, y ensenadas pueden ser especialmente peligrosas.

Si usted esta en un area de aviso o advertencia;

- * Algunos impactos pueden continuar por muchas horas hasta dias luego de la llegada de la primera ola.
- * La primera ola puede no ser la mas grande las olas posteriores si.
- * Cada ola puede durar de 5 a 45 minutos entre su embate y retroceso.
- * Costas con frente en todas las direcciones pueden estar en peligro porque las olas pueden dar la vuelta a islas y entrar a bahías.
- * Movimiento fuerte y/o prolongado del suelo indica que un terremoto ha ocurrido un tsunami puede haber sido generado y su llegada inminente.
- * Un rapido retroceso de la linea de costa, olas y sonidos inusuales, y fuertes corrientes son senales de un tsunami.
- * El tsunami puede aparecer como agua moviendose rapidamente hacia mar adentro, una marea suave que se eleva rapidamente sin olas rompientes, como una serie de olas rompientes, o una pared de agua espumosa.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #4

WEAK61 PAAQ 261734
TSUSPN

BULLETIN

Mensaje de Tsunami numero 4
NWS Centro Nacional de Alerta de Tsunami Palmer AK
934 AM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones
- * Modifica las regiones bajo alerta

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Alertas en las siguientes areas han sido canceladas porque se ha definido mejor la amenaza en base a informacion y analisis adicional.

- * Advisory de Tsunami ha sido Cancelado para areas costeras de Southeast Alaska y South Alaska and the Alaska Peninsula desde Cape Decision, Alaska (85 miles SE of Sitka) hasta Hinchinbrook Entrance, Alaska (90 miles E of Seward)

PACIFEX18 Exercise Handbook

- * Advisory de Tsunami ha sido Cancelado para areas costeras de Aleutian Islands desde Samalga Pass, Alaska (30 miles SW of Nikolski) hasta Amchitka Pass, Alaska (125 miles W of Adak)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.
- * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
- * La altura maxima de ola pronosticada es el nivel de agua mas alto esperado sobre el nivel de la marea.
- * No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
* Alaska			
Sand Point	0855 AKDT Mar 26	20 hrs	1.6- 3.0 pie
Kodiak	0940 AKDT Mar 26		menos de 1pie
Cold Bay	0945 AKDT Mar 26		menos de 1pie
* Oregon			
Port Orford	1300 PDT Mar 26		menos de 1pie
Charleston	1310 PDT Mar 26		menos de 1pie
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		menos de 1pie
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	15 hrs	1.2- 2.1 pie

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----

PACIFEX18 Exercise Handbook

DART 46403	US	0919	PDT Mar 26	1.2ft
DART 46402	US	0937	PDT Mar 26	0.2ft
DART 46409	US	0952	PDT Mar 26	0.2ft
DART 46408	US	1015	PDT Mar 26	0.1ft
DART 46410	US	1024	PDT Mar 26	0.1ft

PARAMETROS PRELIMINARES DEL TERREMOTO

- * Magnitud 8.2
- * Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordenadas 54.5 Norte 158.5 Oeste
- * Profundidad 11 millas
- * Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

Las acciones para proteger la vida y propiedad pueden variar dentro de las areas de aviso y las areas de advertencia de tsunami.

Si usted esta en un area de aviso;

- * Desaloje tierra adentro o a un lugar alto fuera de la zona de inundacion por tsunami o muevase a un piso alto de un edificio multipiso segun sea su situacion.

Si usted esta en un area de aviso o advertencia;

- * Salgase del agua, de la playa y alejese de puertos, marinas, bahias, ensenadas y rompeolas.
- * Este alerta y siga las instrucciones de los oficiales locales de manejo de emergencia ya que ellos pueden tener informacion mas detallada o especifica para su ubicacion.
- * Si siente un terremoto fuerte y/o prolongado tome inmediatamente acciones de seguridad como moverse tierra adentro y/o hacia un lugar alto preferiblemente a pie.
- * Operadores de botes,
 - * Cuando el tiempo y las condiciones lo permitan mueva su bote mar adentro a una profundidad de al menos 180 pies.
 - * Si esta navegando evite entrar a aguas someras/llanas, puertos, marinas, bahias, y ensenadas para evitar corrientes fuertes y objetos flotantes o sumergidos.

* No vaya a la costa para observar el tsunami.

* No regrese a la costa hasta que los oficiales locales de manejo de emergencia local indiquen que es seguro hacerlo.

PACIFEX18 Exercise Handbook

IMPACTOS

Los impactos pueden variar en diferentes lugares dentro de las áreas de aviso y las áreas de advertencia.

Si usted esta en un area de aviso;

- * Es posible un tsunami con olas destructivas y corrientes fuertes.
- * Posibles inundaciones costeras repetidas cuando las olas lleguen a la costa, se mueven tierra adentro, y retroceden al oceano.
- * Olas fuertes e inusuales, corrientes e inundaciones pueden ahogar o herir personas y debilitar o destruir estructuras en tierra y dentro del agua.
- * Agua con objetos flotantes o sumergidos pueden herir o causar la muerte a personas o destruir edificios y puentes.
- * Corrientes y olas fuertes e inusuales en puertos, marinas, bahias, y ensenadas pueden ser especialmente destructivas.

Si usted esta en un area de advertencia;

- * Un tsunami con olas y corrientes fuertes puede ser posible.
- * Olas y corrientes pueden ahogar o herir personas que se encuentran en el agua.
- * Corrientes en playas y puertos, marinas, bahias, y ensenadas pueden ser especialmente peligrosas.

Si usted esta en un area de aviso o advertencia;

- * Algunos impactos pueden continuar por muchas horas hasta dias luego de la llegada de la primera ola.
- * La primera ola puede no ser la mas grande las olas posteriores si.
- * Cada ola puede durar de 5 a 45 minutos entre su embate y retroceso.
- * Costas con frente en todas las direcciones pueden estar en peligro porque las olas pueden dar la vuelta a islas y entrar a bahias.
- * Movimiento fuerte y/o prolongado del suelo indica que un terremoto ha ocurrido un tsunami puede haber sido generado y su llegada inminente.
- * Un rapido retroceso de la linea de costa, olas y sonidos inusuales, y fuertes corrientes son senales de un tsunami.

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- * El tsunami puede aparecer como agua moviendose rapidamente hacia mar adentro, una marea suave que se eleva rapidamente sin olas rompientes, como una serie de olas rompientes, o una pared de agua espumosa.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #5

WEAK51 PAAQ 261805
TSUAK1

BULLETIN
Public Tsunami Message Number 5
NWS National Tsunami Warning Center Palmer AK
1005 AM AKDT Mon Mar 26 2018

UPDATES

- * Updated observations

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

Tsunami Warning in Effect for;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Chignik Bay, Alaska to Unimak Pass, Alaska (80 miles NE of Unalaska)

Tsunami Advisory in Effect for;

- * CALIFORNIA, The coast from Humboldt/Del Norte Line, California to The Oregon/Cal. Border
- * OREGON, The coast from The Oregon/Cal. Border to The Oregon/Wash. Border

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- * SOUTH ALASKA AND THE ALASKA PENINSULA, Pacific coasts from Kennedy Entrance, Alaska (40 miles SW of Homer) to Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) to Samalga Pass, Alaska (30 miles SW of Nikolski)

For other US and Canadian Pacific coasts in North America, the level of tsunami danger is being evaluated. Further information will be provided in supplementary messages.

FORECASTS OF TSUNAMI ACTIVITY

- * A tsunami has been generated. The first waves are forecasted to arrive at the following locations and specified times.
- * Forecast tsunami duration is the approximate length of time which the tsunami may produce dangerous currents and waves.
- * Forecast max tsunami height is the highest expected water level above the tide.
- * Forecasts are not provided for sites which have been impacted more than an hour prior to the time of this message.

SITE	FORECAST START OF TSUNAMI	FORECAST TSUNAMI DURATION	FORECAST MAX TSUNAMI HEIGHT
* Alaska			
Kodiak	0940 AKDT Mar 26		less than 1ft
Cold Bay	0945 AKDT Mar 26		less than 1ft
* Oregon			
Port Orford	1300 PDT Mar 26		less than 1ft
Charleston	1310 PDT Mar 26		less than 1ft
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		less than 1ft
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	15 hrs	1.1- 2.1 ft

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

- * Observed max tsunami height is the highest recorded water level above the tide level up to the time of this message.

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft

PACIFEX18 Exercise Handbook

DART 46408	US	1015	PDT Mar 26	0.1ft
DART 46410	US	1024	PDT Mar 26	0.1ft
Nikolski	Alaska	1040	PDT Mar 26	0.1ft
DART 46413	US	1040	PDT Mar 26	0.1ft

PRELIMINARY EARTHQUAKE PARAMETERS

* Magnitude 8.2
* Origin Time 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordinates 54.5 North 158.5 West
* Depth 11 miles
* Location 100 miles SE of Sand Point, Alaska
565 miles SW of Anchorage, Alaska

RECOMMENDED ACTIONS

* See message number 4 for recommended actions.

IMPACTS

* See message number 4 for possible impacts.

ADDITIONAL INFORMATION AND NEXT UPDATE

* Refer to the internet site tsunami.gov for more information.
* Pacific coastal residents outside California, Oregon, Washington, British Columbia and Alaska should refer to the Pacific Tsunami Warning Center messages at tsunami.gov.
* This message will be updated within 30 minutes.

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NTWC Spanish Bulletin #6

WEAK61 PAAQ 261831
TSUSPN

BULLETIN

Mensaje de Tsunami numero 6
NWS Centro Nacional de Alerta de Tsunami Palmer AK
1031 AM AKDT Mon Mar 26 2018

ACTUALIZACIONES

* Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

PACIFEX18 Exercise Handbook

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.
- * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
- * La altura maxima de ola pronosticada es el nivel de agua mas alto esperado sobre el nivel de la marea.
- * No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
* Alaska			
Kodiak	0940 AKDT	Mar 26	menos de 1pie
Cold Bay	0945 AKDT	Mar 26	menos de 1pie

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* Oregon

Port Orford	1300	PDT Mar 26		menos de 1pie
Charleston	1310	PDT Mar 26		menos de 1pie
Seaside	1315	PDT Mar 26		
Brookings	1315	PDT Mar 26		menos de 1pie
Newport	1315	PDT Mar 26		

* California

Crescent City	1315	PDT Mar 26	9 hrs	0.9- 1.6 pie
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OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

* La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1040 PDT Mar 26	0.1ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1112 PDT Mar 26	0.1ft
DART 21414 US	1116 PDT Mar 26	0.1ft

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2

* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018

* Coordenadas 54.5 Norte 158.5 Oeste

* Profundidad 11 millas

* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 4 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

PACIFEX18 Exercise Handbook

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensanjes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #7

WEAK61 PAAQ 261902
TSUSPN

BULLETIN

Mensaje de Tsunami numero 7
NWS Centro Nacional de Alerta de Tsunami Palmer AK
1102 AM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

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Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.
- * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
- * La altura maxima de ola pronosticada es el nivel de agua mas alto esperado sobre el nivel de la marea.
- * No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
* Oregon			
Port Orford	1300 PDT Mar 26		menos de 1pie
Charleston	1310 PDT Mar 26		menos de 1pie
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		menos de 1pie
Newport	1315 PDT Mar 26		
* California			
Crescent City	1315 PDT Mar 26	9 hrs	0.9- 1.6 pie

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1148 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1112 PDT Mar 26	0.1ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft

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PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 4 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

* Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
* Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensanjes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
* Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #8

WEAK61 PAAQ 261939
TSUSPN

BULLETIN

Mensaje de Tsunami numero 8
NWS Centro Nacional de Alerta de Tsunami Palmer AK
1139 AM AKDT Mon Mar 26 2018

ACTUALIZACIONES

* Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

PACIFEX18 Exercise Handbook

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.
- * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
- * La altura maxima de ola pronosticada es el nivel de agua mas alto esperado sobre el nivel de la marea.
- * No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
-----	-----	-----	-----
* Oregon			
Port Orford	1300 PDT Mar 26		menos de 1pie
Charleston	1310 PDT Mar 26		menos de 1pie
Seaside	1315 PDT Mar 26		

PACIFEX18 Exercise Handbook

Brookings 1315 PDT Mar 26 menos de 1pie
Newport 1315 PDT Mar 26

* California
Crescent City 1315 PDT Mar 26 9 hrs 0.9- 1.7 pie

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

* La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1148 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1227 PDT Mar 26	0.1ft
Saint Paul Alaska	1218 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1215 PDT Mar 26	0.1ft
Winter Harbour BC	1228 PDT Mar 26	0.6ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018
 1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
 565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 4 para posibles impactos.

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INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #9

WEAK61 PAAQ 262004
TSUSPN

BULLETIN
Mensaje de Tsunami numero 9
NWS Centro Nacional de Alerta de Tsunami Palmer AK
1204 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of

PACIFEX18 Exercise Handbook

Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.
- * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
- * La altura maxima de ola pronosticada es el nivel de agua mas alto esperado sobre el nivel de la marea.
- * No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
* Oregon			
Port Orford	1300 PDT Mar 26		menos de 1pie
Charleston	1310 PDT Mar 26		menos de 1pie
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		menos de 1pie
Newport	1315 PDT Mar 26		

* California			
Crescent City	1315 PDT Mar 26	15 hrs	1.0- 1.8 pie

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1114 PDT Mar 26	0.1ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1258 PDT Mar 26	0.2ft

PACIFEX18 Exercise Handbook

DART 46413 US	1040	PDT Mar 26	0.1ft
Adak Alaska	1201	PDT Mar 26	0.3ft
DART 21414 US	1116	PDT Mar 26	0.1ft
DART 21415 US	1152	PDT Mar 26	0.0ft
Attu Alaska	1223	PDT Mar 26	0.1ft
Cordova Alaska	1227	PDT Mar 26	0.1ft
Saint Paul Alaska	1258	PDT Mar 26	0.2ft
DART 46419 US	1200	PDT Mar 26	0.2ft
Seldovia Alaska	1215	PDT Mar 26	0.1ft
Winter Harbour BC	1228	PDT Mar 26	0.6ft
DART 46404 US	1218	PDT Mar 26	0.2ft
DART 46407 US	1228	PDT Mar 26	0.1ft
DART 46411 US	1258	PDT Mar 26	0.1ft
Alameda California	1247	PDT Mar 26	0.8ft

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 4 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #10

WEAK61 PAAQ 262039

TSUSPN

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BULLETIN

Mensaje de Tsunami numero 10
NWS Centro Nacional de Alerta de Tsunami Palmer AK
1239 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

-
- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.
 - * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
 - * La altura maxima de ola pronosticada es el nivel de agua mas

PACIFEX18 Exercise Handbook

alto esperado sobre el nivel de la marea.

* No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
-----	-----	-----	-----

* Oregon			
Port Orford	1300	PDT Mar 26	menos de 1pie
Charleston	1310	PDT Mar 26	menos de 1pie
Seaside	1315	PDT Mar 26	
Brookings	1315	PDT Mar 26	menos de 1pie
Newport	1315	PDT Mar 26	

* California			
Crescent City	1315	PDT Mar 26	9 hrs 0.9- 1.7 pie

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

* La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1307 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1258 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1227 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1327 PDT Mar 26	0.2ft
Winter Harbour BC	1228 PDT Mar 26	0.6ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1315 PDT Mar 26	0.3ft
Port Orford Oregon	1314 PDT Mar 26	0.5ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Alameda California	1247 PDT Mar 26	0.8ft
Midway Island UM	1304 PDT Mar 26	0.1ft
DART 21419	1325 PDT Mar 26	0.0ft

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PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 4 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensanjes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #11

WEAK61 PAAQ 262109
TSUSPN

BULLETIN

Mensaje de Tsunami numero 11
NWS Centro Nacional de Alerta de Tsunami Palmer AK
109 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

* Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

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Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

PRONOSTICOS DEL TSUNAMI

- * Se ha generado un tsunami. las primeras olas del tsunami estan pronosticadas para llegar a los siguientes puntos a las horas indicadas.
- * La duracion pronosticada del tsunami es el periodo aproximado de tiempo que se espera que el tsunami puede producir corrientes y olas peligrosas.
- * La altura maxima de ola pronosticada es el nivel de agua mas alto esperado sobre el nivel de la marea.
- * No se dan pronosticos para puntos que han sido impactados a mas de una hora antes de la emision de este mensaje.

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	PRONOSTICO DE DURACION DEL TSUNAMI	ALTURA MAX PRONOSTICADA DEL TSUNAMI
-----	-----	-----	-----
* Oregon			
Charleston	1310 PDT Mar 26		menos de 1pie
Seaside	1315 PDT Mar 26		
Brookings	1315 PDT Mar 26		menos de 1pie
Newport	1315 PDT Mar 26		

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* California
 Crescent City 1315 PDT Mar 26 menos de 1pie

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

* La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1307 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1227 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1327 PDT Mar 26	0.2ft
Winter Harbour BC	1228 PDT Mar 26	0.6ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1315 PDT Mar 26	0.3ft
Port Orford Oregon	1314 PDT Mar 26	0.5ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1333 PDT Mar 26	0.4ft
Westport Washington	1333 PDT Mar 26	0.4ft
Crescent City CA	1333 PDT Mar 26	0.7ft
Alameda California	1247 PDT Mar 26	0.8ft
Midway Island UM	1304 PDT Mar 26	0.1ft
DART 21419	1325 PDT Mar 26	0.0ft
DART 21401	1351 PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333 PDT Mar 26	0.2ft
Haleiwa Hawaii	1358 PDT Mar 26	1.0ft
Honolulu Hawaii	1349 PDT Mar 26	0.4ft
Kahului Hawaii	1349 PDT Mar 26	0.8ft
Hilo Hawaii	1358 PDT Mar 26	0.6ft

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
 * Tiempo de Origen 0800 AKDT Mar 26 2018
 0900 PDT Mar 26 2018

PACIFEX18 Exercise Handbook

1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 4 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #12

WEAK61 PAAQ 262136
TSUSPN

BULLETIN

Mensaje de Tsunami numero 12
NWS Centro Nacional de Alerta de Tsunami Palmer AK
136 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

* Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

PACIFEX18 Exercise Handbook

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1201 PDT Mar 26	0.3ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1223 PDT Mar 26	0.1ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1327 PDT Mar 26	0.2ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1315 PDT Mar 26	0.3ft
Port Orford Oregon	1314 PDT Mar 26	0.5ft
Charleston Oregon	1328 PDT Mar 26	0.3ft

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Humboldt Bay California	1418	PDT Mar 26	0.5ft
Westport Washington	1333	PDT Mar 26	0.4ft
Crescent City CA	1333	PDT Mar 26	0.7ft
Port Angeles Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach CA	1402	PDT Mar 26	0.3ft
Bolinas California	1413	PDT Mar 26	0.5ft
DART 46412 US	1413	PDT Mar 26	0.1ft
San Francisco CA	1425	PDT Mar 26	0.4ft
Alameda California	1247	PDT Mar 26	0.8ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1358	PDT Mar 26	0.6ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 4 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensanjes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #13

WEAK61 PAAQ 262204
TSUSPN

BULLETIN

Mensaje de Tsunami numero 13
NWS Centro Nacional de Alerta de Tsunami Palmer AK
204 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Aviso de Tsunami en Efecto para;

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * OREGON, Areas costeras desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Kennedy Entrance, Alaska (40 miles SW of Homer) hasta Chignik Bay, Alaska
- * ALEUTIAN ISLANDS, Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
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PACIFEX18 Exercise Handbook

DART 46403	US	0919	PDT Mar 26	1.2ft
DART 46402	US	0937	PDT Mar 26	0.2ft
DART 46409	US	0952	PDT Mar 26	0.2ft
DART 46408	US	1015	PDT Mar 26	0.1ft
Akutan	Alaska	1419	PDT Mar 26	0.2ft
DART 46410	US	1024	PDT Mar 26	0.1ft
Nikolski	Alaska	1358	PDT Mar 26	0.2ft
DART 46413	US	1040	PDT Mar 26	0.1ft
Adak	Alaska	1434	PDT Mar 26	0.4ft
DART 21414	US	1116	PDT Mar 26	0.1ft
DART 21415	US	1152	PDT Mar 26	0.0ft
Attu	Alaska	1449	PDT Mar 26	0.5ft
Cordova	Alaska	1427	PDT Mar 26	0.1ft
Saint Paul	Alaska	1258	PDT Mar 26	0.2ft
DART 46419	US	1200	PDT Mar 26	0.2ft
Seldovia	Alaska	1431	PDT Mar 26	0.3ft
Winter Harbour	BC	1400	PDT Mar 26	0.9ft
DART 46404	US	1218	PDT Mar 26	0.2ft
DART 46407	US	1228	PDT Mar 26	0.1ft
Tofino	British Columbia	1303	PDT Mar 26	0.5ft
DART 46411	US	1258	PDT Mar 26	0.1ft
Neah Bay	Washington	1458	PDT Mar 26	0.5ft
Port Orford	Oregon	1314	PDT Mar 26	0.5ft
Charleston	Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay	California	1455	PDT Mar 26	0.6ft
Westport	Washington	1333	PDT Mar 26	0.4ft
Crescent City	CA	1449	PDT Mar 26	0.9ft
Port Angeles	Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach	CA	1455	PDT Mar 26	0.4ft
Bolinas	California	1413	PDT Mar 26	0.5ft
DART 46412	US	1413	PDT Mar 26	0.1ft
San Francisco	CA	1425	PDT Mar 26	0.4ft
Alameda	California	1247	PDT Mar 26	0.8ft
Midway Island	UM	1304	PDT Mar 26	0.1ft
DART 21419		1325	PDT Mar 26	0.0ft
DART 21401		1351	PDT Mar 26	0.0ft
Nawiliwili	Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa	Hawaii	1358	PDT Mar 26	1.0ft
Honolulu	Hawaii	1349	PDT Mar 26	0.4ft
Kahului	Hawaii	1349	PDT Mar 26	0.8ft
Hilo	Hawaii	1430	PDT Mar 26	0.8ft
DART 51407		1400	PDT Mar 26	0.1ft
DART 21418		1422	PDT Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT Mar 26	0.0ft

PARAMETROS PRELIMINARES DEL TERREMOTO

- * Magnitud 8.2
- * Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordenadas 54.5 Norte 158.5 Oeste
- * Profundidad 11 millas
- * Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

PACIFEX18 Exercise Handbook

ACCIONES RECOMENDADAS

- * Ver mensaje numero 4 para acciones recomendadas.

IMPACTOS

- * Ver mensaje numero 4 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #14

WEAK61 PAAQ 262238
TSUSPN

BULLETIN

Mensaje de Tsunami numero 14
NWS Centro Nacional de Alerta de Tsunami Palmer AK
238 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Alertas en las siguientes areas han sido canceladas porque se ha definido mejor la amenaza en base a informacion y

PACIFEX18 Exercise Handbook

analisis adicional.

- * Advisory de Tsunami ha sido Cancelado para areas costeras de Oregon desde The Oregon/Cal. Border hasta The Oregon/Wash. Border
- * Advisory de Tsunami ha sido Cancelado para areas costeras de Aleutian Islands desde Unimak Pass, Alaska (80 miles NE of Unalaska) hasta Samalga Pass, Alaska (30 miles SW of Nikolski)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, el nivel de amenaza de tsunami esta siendo evaluado. Se proveera informacion adicional en mensajes suplementarios.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1508 PDT Mar 26	0.8ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1455 PDT Mar 26	0.6ft
Westport Washington	1333 PDT Mar 26	0.4ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1455 PDT Mar 26	0.4ft
Bolinas California	1514 PDT Mar 26	0.8ft

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DART 46412 US	1413	PDT Mar 26	0.1ft
San Francisco CA	1425	PDT Mar 26	0.4ft
Alameda California	1247	PDT Mar 26	0.8ft
Seattle Washington	1519	PDT Mar 26	0.1ft
Santa Monica California	1501	PDT Mar 26	0.3ft
Laguna Beach California	1505	PDT Mar 26	0.2ft
La Jolla California	1507	PDT Mar 26	0.3ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft

PARAMETROS PRELIMINARES DEL TERREMOTO

- * Magnitud 8.2
- * Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordenadas 54.5 Norte 158.5 Oeste
- * Profundidad 11 millas
- * Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS - ACTUALIZADAS

Las acciones para proteger la vida y propiedad pueden variar dentro de las areas de advertencia de tsunami.

Si usted esta en un area de advertencia;

- * Salgase del agua, de la playa y alejese de puertos, marinas, bahias, ensenadas y rompeolas.
- * Este alerta y siga las instrucciones de los oficiales locales de manejo de emergencia ya que ellos pueden tener informacion mas detallada o especifica para su ubicacion.
- * Si siente un terremoto fuerte y/o prolongado tome inmediatamente acciones de seguridad como moverse tierra adentro y/o hacia un lugar alto preferiblemente a pie.
- * Operadores de botes,
 - * Cuando el tiempo y las condiciones lo permitan mueva su bote mar adentro a una profundidad de al menos 180 pies.
 - * Si esta navegando evite entrar a aguas someras/llanas, puertos, marinas, bahias, y ensenadas para evitar

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corrientes fuertes y objetos flotantes o sumergidos.

- * No vaya a la costa para observar el tsunami.
- * No regrese a la costa hasta que los oficiales locales de manejo de emergencia local indiquen que es seguro hacerlo.

IMPACTOS

Los impactos pueden variar en diferentes lugares dentro de las áreas de advertencia.

Si usted está en un área de advertencia;

- * Un tsunami con olas y corrientes fuertes puede ser posible.
- * Olas y corrientes pueden ahogar o herir personas que se encuentran en el agua.
- * Corrientes en playas y puertos, marinas, bahías, y ensenadas pueden ser especialmente peligrosas.
- * Algunos impactos pueden continuar por muchas horas hasta días luego de la llegada de la primera ola.
- * La primera ola puede no ser la más grande las olas posteriores si.
- * Cada ola puede durar de 5 a 45 minutos entre su embate y retroceso.
- * Costas con frente en todas las direcciones pueden estar en peligro porque las olas pueden dar la vuelta a islas y entrar a bahías.
- * Movimiento fuerte y/o prolongado del suelo indica que un terremoto ha ocurrido un tsunami puede haber sido generado y su llegada inminente.
- * Un rápido retroceso de la línea de costa, olas y sonidos inusuales, y fuertes corrientes son señales de un tsunami.
- * El tsunami puede aparecer como agua moviéndose rápidamente hacia mar adentro, una marea suave que se eleva rápidamente sin olas rompientes, como una serie de olas rompientes, o una pared de agua espumosa.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a información adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacífico fuera de California, Oregon, Washington, Columbia Británica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacífico en tsunami.gov.

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* Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #15

WEAK61 PAAQ 272300
TSUSPN

BULLETIN

Mensaje de Tsunami numero 15
NWS Centro Nacional de Alerta de Tsunami Palmer AK
300 PM AKDT Tue Mar 27 2018

ACTUALIZACIONES

* Nuevas observaciones

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, no existe amenaza de tsunami.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

* La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1358 PDT Mar 26	0.2ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft

PACIFEX18 Exercise Handbook

DART 21415	US	1152	PDT Mar 26	0.0ft
Attu	Alaska	1449	PDT Mar 26	0.5ft
Cordova	Alaska	1427	PDT Mar 26	0.1ft
Saint Paul	Alaska	1258	PDT Mar 26	0.2ft
DART 46419	US	1200	PDT Mar 26	0.2ft
Seldovia	Alaska	1508	PDT Mar 26	0.5ft
Winter Harbour	BC	1400	PDT Mar 26	0.9ft
DART 46404	US	1218	PDT Mar 26	0.2ft
DART 46407	US	1228	PDT Mar 26	0.1ft
Tofino	British Columbia	1303	PDT Mar 26	0.5ft
DART 46411	US	1258	PDT Mar 26	0.1ft
Neah Bay	Washington	1458	PDT Mar 26	0.5ft
Port Orford	Oregon	1501	PDT Mar 26	0.7ft
Charleston	Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay	California	1455	PDT Mar 26	0.6ft
Westport	Washington	1554	PDT Mar 26	0.5ft
Crescent City	CA	1449	PDT Mar 26	0.9ft
Arena Cove	California	1519	PDT Mar 26	0.8ft
Port Angeles	Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach	CA	1455	PDT Mar 26	0.4ft
Bolinas	California	1514	PDT Mar 26	0.8ft
DART 46412	US	1413	PDT Mar 26	0.1ft
San Francisco	CA	1534	PDT Mar 26	0.7ft
Alameda	California	1247	PDT Mar 26	0.8ft
Seattle	Washington	1519	PDT Mar 26	0.1ft
Santa Monica	California	1501	PDT Mar 26	0.3ft
Laguna Beach	California	1505	PDT Mar 26	0.2ft
La Jolla	California	1507	PDT Mar 26	0.3ft
San Diego	California	1555	PDT Mar 26	0.1ft
Midway Island	UM	1304	PDT Mar 26	0.1ft
DART 21419		1325	PDT Mar 26	0.0ft
DART 21401		1351	PDT Mar 26	0.0ft
Nawiliwili	Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa	Hawaii	1358	PDT Mar 26	1.0ft
Honolulu	Hawaii	1349	PDT Mar 26	0.4ft
Kahului	Hawaii	1349	PDT Mar 26	0.8ft
Hilo	Hawaii	1430	PDT Mar 26	0.8ft
DART 51407		1400	PDT Mar 26	0.1ft
DART 21418		1422	PDT Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT Mar 26	0.0ft
DART 52401	West Pacific	1546	PDT Mar 26	0.0ft

PARAMETROS PRELIMINARES DEL TERREMOTO

- * Magnitud 8.2
- * Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordenadas 54.5 Norte 158.5 Oeste
- * Profundidad 11 millas
- * Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

PACIFEX18 Exercise Handbook

* Ver mensaje numero 14 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 14 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

* Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.

* Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensanjes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.

* Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #16

WEAK61 PAAQ 272332
TSUSPN

BULLETIN

Mensaje de Tsunami numero 16
NWS Centro Nacional de Alerta de Tsunami Palmer AK
332 PM AKDT Tue Mar 27 2018

ACTUALIZACIONES

* Nuevas observaciones

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Advertencia de Tsunami en Efecto para;

* CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border

* SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, no existe amenaza de tsunami.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

PACIFEX18 Exercise Handbook

* La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI

DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1455 PDT Mar 26	0.6ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1612 PDT Mar 26	0.8ft
Bolinas California	1514 PDT Mar 26	0.8ft
DART 46412 US	1413 PDT Mar 26	0.1ft
San Francisco CA	1534 PDT Mar 26	0.7ft
Alameda California	1247 PDT Mar 26	0.8ft
Seattle Washington	1519 PDT Mar 26	0.1ft
Santa Monica California	1620 PDT Mar 26	0.3ft
Laguna Beach California	1505 PDT Mar 26	0.2ft
La Jolla California	1507 PDT Mar 26	0.3ft
San Diego California	1555 PDT Mar 26	0.1ft
Midway Island UM	1304 PDT Mar 26	0.1ft
DART 21419	1325 PDT Mar 26	0.0ft
DART 21401	1351 PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333 PDT Mar 26	0.2ft
Haleiwa Hawaii	1358 PDT Mar 26	1.0ft
Honolulu Hawaii	1349 PDT Mar 26	0.4ft
Kahului Hawaii	1349 PDT Mar 26	0.8ft
Hilo Hawaii	1430 PDT Mar 26	0.8ft
DART 51407	1400 PDT Mar 26	0.1ft
DART 21418	1422 PDT Mar 26	0.0ft
DART 21413 West Pacific	1455 PDT Mar 26	0.0ft
DART 52401 West Pacific	1546 PDT Mar 26	0.0ft

PACIFEX18 Exercise Handbook

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 14 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 14 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

* Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
* Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensanjes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
* Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #17

WEAK61 PAAQ 270002
TSUSPN

BULLETIN

Mensaje de Tsunami numero 17
NWS Centro Nacional de Alerta de Tsunami Palmer AK
402 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

* Nuevas observaciones

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

PACIFEX18 Exercise Handbook

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, no existe amenaza de tsunami.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1427 PDT Mar 26	0.1ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1303 PDT Mar 26	0.5ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1455 PDT Mar 26	0.6ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1612 PDT Mar 26	0.8ft
Bolinas California	1514 PDT Mar 26	0.8ft
DART 46412 US	1413 PDT Mar 26	0.1ft
San Francisco CA	1654 PDT Mar 26	0.8ft
Alameda California	1247 PDT Mar 26	0.8ft

PACIFEX18 Exercise Handbook

Seattle Washington	1519	PDT Mar 26	0.1ft
Santa Monica California	1620	PDT Mar 26	0.3ft
Laguna Beach California	1505	PDT Mar 26	0.2ft
La Jolla California	1507	PDT Mar 26	0.3ft
San Diego California	1555	PDT Mar 26	0.1ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft
DART 52401 West Pacific	1546	PDT Mar 26	0.0ft
DART 52402 West Pacific	1642	PDT Mar 26	0.0ft

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 14 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 14 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #18

PACIFEX18 Exercise Handbook

WEAK61 PAAQ 270032
TSUSPN

BULLETIN

Mensaje de Tsunami numero 18
NWS Centro Nacional de Alerta de Tsunami Palmer AK
432 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, no existe amenaza de tsunami.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1419 PDT Mar 26	0.2ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1701 PDT Mar 26	0.2ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft

PACIFEX18 Exercise Handbook

DART 46404	US	1218	PDT Mar 26	0.2ft
DART 46407	US	1228	PDT Mar 26	0.1ft
Tofino	British Columbia	1303	PDT Mar 26	0.5ft
DART 46411	US	1258	PDT Mar 26	0.1ft
Neah Bay	Washington	1458	PDT Mar 26	0.5ft
Port Orford	Oregon	1501	PDT Mar 26	0.7ft
Charleston	Oregon	1328	PDT Mar 26	0.3ft
Humboldt Bay	California	1708	PDT Mar 26	0.7ft
Westport	Washington	1554	PDT Mar 26	0.5ft
Crescent City	CA	1449	PDT Mar 26	0.9ft
Arena Cove	California	1519	PDT Mar 26	0.8ft
Port Angeles	Washington	1400	PDT Mar 26	0.2ft
Point Reyes Beach	CA	1709	PDT Mar 26	1.0ft
Bolinas	California	1712	PDT Mar 26	0.9ft
DART 46412	US	1413	PDT Mar 26	0.1ft
San Francisco	CA	1654	PDT Mar 26	0.8ft
Alameda	California	1247	PDT Mar 26	0.8ft
Seattle	Washington	1519	PDT Mar 26	0.1ft
Santa Monica	California	1620	PDT Mar 26	0.3ft
Laguna Beach	California	1505	PDT Mar 26	0.2ft
La Jolla	California	1507	PDT Mar 26	0.3ft
San Diego	California	1555	PDT Mar 26	0.1ft
Midway Island	UM	1304	PDT Mar 26	0.1ft
DART 21419		1325	PDT Mar 26	0.0ft
DART 21401		1351	PDT Mar 26	0.0ft
Nawiliwili	Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa	Hawaii	1358	PDT Mar 26	1.0ft
Honolulu	Hawaii	1349	PDT Mar 26	0.4ft
Kahului	Hawaii	1349	PDT Mar 26	0.8ft
Hilo	Hawaii	1430	PDT Mar 26	0.8ft
DART 51407		1400	PDT Mar 26	0.1ft
DART 21418		1422	PDT Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT Mar 26	0.0ft
DART 52401	West Pacific	1546	PDT Mar 26	0.0ft
DART 52402	West Pacific	1642	PDT Mar 26	0.0ft

PARAMETROS PRELIMINARES DEL TERREMOTO

- * Magnitud 8.2
- * Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
- * Coordenadas 54.5 Norte 158.5 Oeste
- * Profundidad 11 millas
- * Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

- * Ver mensaje numero 14 para acciones recomendadas.

IMPACTOS

- * Ver mensaje numero 14 para posibles impactos.

PACIFEX18 Exercise Handbook

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #19

WEAK61 PAAQ 270104
TSUSPN

BULLETIN

Mensaje de Tsunami numero 19
NWS Centro Nacional de Alerta de Tsunami Palmer AK
504 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

- * Nuevas observaciones

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Advertencia de Tsunami en Efecto para;

- * CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line, California hasta The Oregon/Cal. Border
- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, no existe amenaza de tsunami.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
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PACIFEX18 Exercise Handbook

DART 46403	US	0919	PDT	Mar 26	1.2ft
DART 46402	US	0937	PDT	Mar 26	0.2ft
DART 46409	US	0952	PDT	Mar 26	0.2ft
DART 46408	US	1015	PDT	Mar 26	0.1ft
Akutan	Alaska	1419	PDT	Mar 26	0.2ft
DART 46410	US	1024	PDT	Mar 26	0.1ft
Nikolski	Alaska	1627	PDT	Mar 26	0.3ft
DART 46413	US	1040	PDT	Mar 26	0.1ft
Adak	Alaska	1548	PDT	Mar 26	1.2ft
DART 21414	US	1116	PDT	Mar 26	0.1ft
DART 21415	US	1152	PDT	Mar 26	0.0ft
Attu	Alaska	1449	PDT	Mar 26	0.5ft
Cordova	Alaska	1701	PDT	Mar 26	0.2ft
Saint Paul	Alaska	1258	PDT	Mar 26	0.2ft
DART 46419	US	1200	PDT	Mar 26	0.2ft
Seldovia	Alaska	1508	PDT	Mar 26	0.5ft
Winter Harbour	BC	1400	PDT	Mar 26	0.9ft
DART 46404	US	1218	PDT	Mar 26	0.2ft
DART 46407	US	1228	PDT	Mar 26	0.1ft
Tofino	British Columbia	1303	PDT	Mar 26	0.5ft
DART 46411	US	1258	PDT	Mar 26	0.1ft
Neah Bay	Washington	1458	PDT	Mar 26	0.5ft
Port Orford	Oregon	1501	PDT	Mar 26	0.7ft
Charleston	Oregon	1328	PDT	Mar 26	0.3ft
Humboldt Bay	California	1708	PDT	Mar 26	0.7ft
Westport	Washington	1554	PDT	Mar 26	0.5ft
Crescent City	CA	1449	PDT	Mar 26	0.9ft
Arena Cove	California	1519	PDT	Mar 26	0.8ft
Port Angeles	Washington	1400	PDT	Mar 26	0.2ft
Point Reyes Beach	CA	1709	PDT	Mar 26	1.0ft
Bolinas	California	1712	PDT	Mar 26	0.9ft
DART 46412	US	1413	PDT	Mar 26	0.1ft
San Francisco	CA	1654	PDT	Mar 26	0.8ft
Alameda	California	1247	PDT	Mar 26	0.8ft
Seattle	Washington	1737	PDT	Mar 26	0.1ft
Santa Monica	California	1620	PDT	Mar 26	0.3ft
Laguna Beach	California	1505	PDT	Mar 26	0.2ft
La Jolla	California	1507	PDT	Mar 26	0.3ft
San Diego	California	1555	PDT	Mar 26	0.1ft
Midway Island	UM	1304	PDT	Mar 26	0.1ft
DART 21419		1325	PDT	Mar 26	0.0ft
DART 21401		1351	PDT	Mar 26	0.0ft
Nawiliwili	Hawaii	1333	PDT	Mar 26	0.2ft
Haleiwa	Hawaii	1358	PDT	Mar 26	1.0ft
Honolulu	Hawaii	1349	PDT	Mar 26	0.4ft
Kahului	Hawaii	1349	PDT	Mar 26	0.8ft
Hilo	Hawaii	1430	PDT	Mar 26	0.8ft
DART 51407		1400	PDT	Mar 26	0.1ft
DART 21418		1422	PDT	Mar 26	0.0ft
DART 21413	West Pacific	1455	PDT	Mar 26	0.0ft
DART 52401	West Pacific	1546	PDT	Mar 26	0.0ft
DART 52402	West Pacific	1642	PDT	Mar 26	0.0ft
DART 52404	West Pacific	1749	PDT	Mar 26	0.0ft

PARAMETROS PRELIMINARES DEL TERREMOTO

PACIFEX18 Exercise Handbook

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 14 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 14 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

* Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.

* Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.

* Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #20

WEAK61 PAAQ 270132
TSUSPN

BULLETIN

Mensaje de Tsunami numero 20
NWS Centro Nacional de Alerta de Tsunami Palmer AK
532 PM AKDT Mon Mar 26 2018

ACTUALIZACIONES

* Nuevas observaciones

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

Advertencia de Tsunami en Efecto para;

* CALIFORNIA, Areas costeras desde Humboldt/Del Norte Line,

PACIFEX18 Exercise Handbook

California hasta The Oregon/Cal. Border

- * SOUTH ALASKA AND THE ALASKA PENINSULA, Costas Pacificas desde Chignik Bay, Alaska hasta Unimak Pass, Alaska (80 miles NE of Unalaska)

Para otras costas del Pacifico de los Estados Unidos y Canada en Norte America, no existe amenaza de tsunami.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1821 PDT Mar 26	0.4ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1701 PDT Mar 26	0.2ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1804 PDT Mar 26	0.6ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1708 PDT Mar 26	0.7ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1709 PDT Mar 26	1.0ft
Bolinas California	1712 PDT Mar 26	0.9ft
DART 46412 US	1413 PDT Mar 26	0.1ft
San Francisco CA	1654 PDT Mar 26	0.8ft
Alameda California	1247 PDT Mar 26	0.8ft
Seattle Washington	1737 PDT Mar 26	0.1ft
Santa Monica California	1620 PDT Mar 26	0.3ft
Laguna Beach California	1505 PDT Mar 26	0.2ft
La Jolla California	1507 PDT Mar 26	0.3ft

PACIFEX18 Exercise Handbook

San Diego California	1555	PDT Mar 26	0.1ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft
DART 52401 West Pacific	1546	PDT Mar 26	0.0ft
DART 52402 West Pacific	1642	PDT Mar 26	0.0ft
DART 52404 West Pacific	1749	PDT Mar 26	0.0ft
DART 51425 SW Pacific	1807	PDT Mar 26	0.1ft

PARAMETROS PRELIMINARES DEL TERREMOTO

* Magnitud 8.2
* Tiempo de Origen 0800 AKDT Mar 26 2018
0900 PDT Mar 26 2018
1600 UTC Mar 26 2018
* Coordenadas 54.5 Norte 158.5 Oeste
* Profundidad 11 millas
* Localizacion 100 millas SE de Sand Point, Alaska
565 millas SW de Anchorage, Alaska

ACCIONES RECOMENDADAS

* Ver mensaje numero 14 para acciones recomendadas.

IMPACTOS

* Ver mensaje numero 14 para posibles impactos.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse a los mensajes del Centro de Alerta de Tsunami del Pacifico en tsunami.gov.
- * Este mensaje sera actualizado en 30 minutos.

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NTWC Spanish Bulletin #21

PACIFEX18 Exercise Handbook

WEAK61 PAAQ 270201
TSUSPN

BULLETIN

Mensaje de Tsunami numero 21
NWS Centro Nacional de Alerta de Tsunami Palmer AK
601 PM AKDT Mon Mar 26 2018

...LA ADVERTENCIA DE TSUNAMI HA SIDO CANCELADA...

- * Advisory de Tsunami ha sido Cancelado para areas costeras de California
- * Advisory de Tsunami ha sido Cancelado para areas costeras de South Alaska and the Alaska Peninsula

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

-
- * La altura maxima observada del tsunami es el nivel de agua mas alto registrado sobre el nivel de la marea hasta la emision de este mensaje.

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
-----	-----	-----
DART 46403 US	0919 PDT Mar 26	1.2ft
DART 46402 US	0937 PDT Mar 26	0.2ft
DART 46409 US	0952 PDT Mar 26	0.2ft
DART 46408 US	1015 PDT Mar 26	0.1ft
Akutan Alaska	1821 PDT Mar 26	0.4ft
DART 46410 US	1024 PDT Mar 26	0.1ft
Nikolski Alaska	1627 PDT Mar 26	0.3ft
DART 46413 US	1040 PDT Mar 26	0.1ft
Adak Alaska	1548 PDT Mar 26	1.2ft
DART 21414 US	1116 PDT Mar 26	0.1ft
DART 21415 US	1152 PDT Mar 26	0.0ft
Attu Alaska	1449 PDT Mar 26	0.5ft
Cordova Alaska	1701 PDT Mar 26	0.2ft
Saint Paul Alaska	1258 PDT Mar 26	0.2ft
DART 46419 US	1200 PDT Mar 26	0.2ft
Seldovia Alaska	1508 PDT Mar 26	0.5ft
Winter Harbour BC	1400 PDT Mar 26	0.9ft
DART 46404 US	1218 PDT Mar 26	0.2ft
DART 46407 US	1228 PDT Mar 26	0.1ft
Tofino British Columbia	1804 PDT Mar 26	0.6ft
DART 46411 US	1258 PDT Mar 26	0.1ft
Neah Bay Washington	1458 PDT Mar 26	0.5ft
Port Orford Oregon	1501 PDT Mar 26	0.7ft
Charleston Oregon	1328 PDT Mar 26	0.3ft
Humboldt Bay California	1708 PDT Mar 26	0.7ft
Westport Washington	1554 PDT Mar 26	0.5ft
Crescent City CA	1449 PDT Mar 26	0.9ft
Arena Cove California	1519 PDT Mar 26	0.8ft
Port Angeles Washington	1400 PDT Mar 26	0.2ft
Point Reyes Beach CA	1709 PDT Mar 26	1.0ft
Bolinas California	1712 PDT Mar 26	0.9ft
DART 46412 US	1413 PDT Mar 26	0.1ft

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San Francisco CA	1654	PDT Mar 26	0.8ft
Alameda California	1247	PDT Mar 26	0.8ft
Seattle Washington	1737	PDT Mar 26	0.1ft
Santa Monica California	1620	PDT Mar 26	0.3ft
Laguna Beach California	1505	PDT Mar 26	0.2ft
La Jolla California	1507	PDT Mar 26	0.3ft
San Diego California	1555	PDT Mar 26	0.1ft
Midway Island UM	1304	PDT Mar 26	0.1ft
DART 21419	1325	PDT Mar 26	0.0ft
DART 21401	1351	PDT Mar 26	0.0ft
Nawiliwili Hawaii	1333	PDT Mar 26	0.2ft
Haleiwa Hawaii	1358	PDT Mar 26	1.0ft
Honolulu Hawaii	1349	PDT Mar 26	0.4ft
Kahului Hawaii	1349	PDT Mar 26	0.8ft
Hilo Hawaii	1430	PDT Mar 26	0.8ft
DART 51407	1400	PDT Mar 26	0.1ft
DART 21418	1422	PDT Mar 26	0.0ft
DART 21413 West Pacific	1455	PDT Mar 26	0.0ft
DART 52401 West Pacific	1546	PDT Mar 26	0.0ft
DART 52402 West Pacific	1642	PDT Mar 26	0.0ft
DART 52404 West Pacific	1749	PDT Mar 26	0.0ft
DART 51425 SW Pacific	1807	PDT Mar 26	0.1ft

ACCIONES RECOMENDADAS - ACTUALIZADAS

- * No regresen a zonas desalojadas hasta que las autoridades locales de manejo de emergencia indiquen que es seguro hacerlo.

IMPACTOS - ACTUALIZADOS

- * Un tsunami fue generado durante este evento pero ya no representa un peligro.
- * Algunas areas podran seguir viendo pequenos cambios del nivel del mar.
- * La determinacion para volver a ocupar zonas de peligro debe ser hecha por autoridades locales.

INFORMACION ADICIONAL Y PROXIMA ACTUALIZACION

- * Para acceder a informacion adicional consulte el sitio de internet tsunami.gov.
- * Regiones costeras del Pacifico fuera de California, Oregon, Washington, Columbia Britanica y Alaska deben referirse A los mensajes del Centro de Alerta de Tsunami del Pacifico eb.tsunami.gov.
- * Este sera el ultimo boletin proveniente del Centro Nacional de Alerta de Tsunami de los Estados Unidos para este evento.

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Appendix E. Sample Press Release for Local Media

TEMPLATE FOR NEWS RELEASE

USE AGENCY MASTHEAD

Contact: (insert name)
(insert phone number)
(insert email address)

FOR IMMEDIATE RELEASE
(insert date)

NORTH PACIFIC TSUNAMI EXERCISE TO BE CONDUCTED MARCH 26, 2018

(insert community/county/state name) will join other localities in the north Pacific as a participant in a tsunami response exercise on March 26, 2018. The purpose of this exercise is to evaluate local tsunami response plans, increase tsunami preparedness, and improve coordination throughout the region.

(insert a promotional comment from a local official, such as “The 2011 Japan earthquake and tsunami reminded the world again of the urgent need to be more prepared for such events,” said (insert name of appropriate official). “This important exercise will test the current procedures of the Tsunami Warning System and help identify operational strengths and weaknesses in each community.” (Please modify for uniqueness.)

The exercise, titled PACIFEX18, will simulate a widespread Tsunami Warning, Watch, and Advisory situation along U.S. and Canadian west coasts requiring implementation of local tsunami response plans. It is the fifth such exercise including all Pacific states, provinces, territories, and commonwealths. The exercise will *(insert “include” or “not include”)* public notification.

The exercise will simulate a major earthquake and tsunami generated 100 miles southeast of Sand Point, Alaska at 09:00 am Pacific Daylight Time *(or appropriate local time)* on March 26, 2018. Exercise participants will be provided with a handbook which describes the scenario and contains tsunami messages from the National Tsunami Warning Center (NTWC)

Insert paragraph tailored for specific community. Could identify participating agencies and specific plans. Could describe current early warning program, past tsunami exercises (if any), ongoing mitigation and public education programs, etc. Could describe tsunami threat, history of tsunami hazards, if any.

If any real tsunami threat occurs during the time period of the exercise, the exercise will be terminated.

The exercise is sponsored by the U.S. National Oceanic and Atmospheric Administration (NOAA) and by the U.S. National Tsunami Hazard Mitigation Program (NTHMP – a partnership of 28 states and territories and three federal agencies). For

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more information on the U.S. tsunami warning system, see www.tsunami.gov. For more information on the NTHMP, see nthmp.tsunami.gov.

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On the Web:

National Tsunami Warning Center

<http://ntwc.arh.noaa.gov>

NOAA Tsunami Program

<http://www.tsunami.gov>

NTHMP:

<http://nthmp.tsunami.gov>

Insert state/local emergency response URLs

PACIFEX18 - Exercise