NATIONAL REPORT
CHILE

Twenty-sixth Session of the ICG/PTWS
April 2015
General Tsunami Standard Operating Procedures

✓ Hydrographic and Oceanographic Service of the Chilean Navy (SHOA) identifies and characterizes tsunamigenic events. The criteria depends if it is a local or distant tsunami emergency.

✓ The tsunami information is disseminated to NDMO (ONEMI), the Coast Guard (DIRECTEMAR) and the Chilean Navy using different communication systems, including alternative systems.

✓ NDMO (ONEMI) acts on the information provided by SHOA and disseminates to government authorities and the community.
Basic Information

National Seismological Center

National Tsunami Warning System (SNAM)

Earthquake parameters determination

Tsunami Threat evaluation

TSUNAMI!

SEISMIC INFORMATION

ADVISORY

WATCH

WARNING

NDMO disseminate Tsunami Warning
Basic Information

New Tide Gauges

GOES - BGAN
- Arica
- Pisagua
- Iquique
- Patache
- Tocopilla
- Mejillones
- Antofagasta
- Paposo
- Taltal
- Chañaral
- Caldera
- Huasco
- Coquimbo
- Is. San Félix

GOES - GPRS
- Arch. J. Fernández
- Pichidangu
- Quintero
- Valparaíso
- San Antonio
- Bucalemu
- Constitución
- I. Quiriquina
- Talcahuano
- Coronel
- Lebu
- Queule
- Corral
- Bahía Mansa
- Puerto Montt
- Ancud
- Castro
- Molínkara

BGAN - GPRS
- Pto Chacabuco
- Puerto Edén
- Bahía Gregorio
- Caleta Merra
- Pta Aranas
- Pto Williams
- Base Prat
Information on Tsunami Occurrences

Earthquake Iquique M 7.0
17/03/2014
Max amplitude: 19 cm
SNAM bulletin: Advisory

Earthquake Iquique M 8.2
01/04/2014
Max amplitude: 2.1 Mt
SNAM bulletin: Warning

Earthquake Easter Island M 7.0
09/10/2014
Max amplitude: 47 cm
SNAM bulletin: Advisory for EI
The April 1st earthquake occurred in the northern Chile "seismic gap". Historical records indicate a M 8.8 earthquake occurred within the seismic gap in 1877 in Iquique, which was preceded in the north by a M 8.8 earthquake in 1868 in Ilo, Peru.
### Information on Tsunami Occurrences

#### Tide Gauge Location

<table>
<thead>
<tr>
<th>Tide Gauge Location</th>
<th>Observed Maximum Amplitude [m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iquique</td>
<td>1.83</td>
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<tr>
<td>Pisagua</td>
<td>2.12</td>
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<tr>
<td>Arica</td>
<td>2.01</td>
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<tr>
<td>Patache</td>
<td>1.67</td>
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<tr>
<td>Mejillones</td>
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<td>Tocopilla</td>
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<td>Antofagasta</td>
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<tr>
<td>Cta. Paposo</td>
<td>0.33</td>
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<tr>
<td>Tal Tal</td>
<td>0.31</td>
</tr>
</tbody>
</table>

#### Tsunami Iquique 01-041-2014

![Tsunami wave graph and observed maximum amplitudes for various locations]
Information on Tsunami Occurrences
1. Video of the National Tsunami Warning.
   https://www.youtube.com/watch?v=yZgQ5eRWK4g

2. Workshop "Risk Management and Educational Establishments Tsunami", focused on educating threat of tsunamis for teachers.
4. SHOA/NTWC attended a training in Standard Operation Procedures (SOP), with NDMO (ONEMI) and National Seismological Center (CSN).

5. Participation in a project between Chile and Japan called "Improvement Technology Research Development of a community with Resilience to Tsunamis" (SATREPS).

7. SHOA attended a training in Japan, oriented to "Developing a tsunami forecasting database by numerical modeling".
Actively contributing to the development of the country