Mw 6.3 Lesvos EQ Tsunami Analysis

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Table of Content

• Initial Conditions
• Bathymetry
• Results of calculations
• Conclusions
Earthquake Epicentre

- Event (6.3 M, 6.6 M)
- GDACS Green Alert (Moderate Event)
- Major Faults

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• Wave arrived in Plomari in 1.5 min (neg wave) or 4 min (pos. wave); max wave about 40 cm.

• Advisory Message after about 10 min for Greece and Turkey. Watch for Greece and Turkey (NOA).

• Small wave identified in Bozcaada sea level signal at about 1 hour.

• Cancellation after 1:40 min, with “No Tsunami occurred” statement.

• People felt the earthquake, saw the water receding in the coasts, particularly in Plomari port (videos), no special measure taken.
Only 4 tide gauges in the area
Samotraki and Gokceada

Samotraki
40.4746/25.46797 (100114)

Gokceada
40.233/25.894 (2031)
All codes used the same bathymetry and initial condition: FFM by NOA.

Bathymetry was obtained by several high resolution patches assembled together to have a 20 m bathymetry for the whole domain.
Out of Plomari Port

<table>
<thead>
<tr>
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<th>Out of Plomari</th>
<th>Plomari Port</th>
<th>Amplif Factor</th>
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<tr>
<td>NAMIDANCE</td>
<td>0.088</td>
<td>0.29</td>
<td>3.4</td>
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<td>HYSEA</td>
<td>0.076</td>
<td>0.19</td>
<td>2.6</td>
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<td>SWAN</td>
<td>0.083</td>
<td>0.17</td>
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</table>

*Depth*

$$35.5 \div 2.5 = 2.02$$
Out of Karaburun

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<td>SWAN</td>
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</tbody>
</table>

Depth

\[(4.9/3)^{0.25} = 1.13\]
Marmoro Bay, Chios Island
12th June Mw 6.3 Lesvos Tsunami

- International Analysis Team composed of JRC, Greece and Turkey to analyse the event
- NOA determined Finite Fault Model, used by USGS to refine the shake maps
- Preliminary comparison of modelling results
- Scientific publication under way

Analysis of the Tsunami Event caused by the Mw 6.3 Lesvos Island (East Aegean Sea) Earthquake of 12th June 2017

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