A 7.0 magnitude earthquake struck offshore in the Solomon Islands. The earthquake occurred northwest of Lata, Nendō at a depth of 10 kilometers, according to the US Geological Survey.

No injuries or damage have been reported.
Nendō, the island closest to this earthquake experienced very strong shaking.

Lata, located in the northwestern part of the island, is its chief town and the provincial capital.
The USGS PAGER map shows the population exposed to different Modified Mercalli Intensity (MMI) levels.

5,000 people experienced very strong ground shaking during this earthquake.

<table>
<thead>
<tr>
<th>MMI</th>
<th>Shaking</th>
<th>Pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Not Felt</td>
<td>--*</td>
</tr>
<tr>
<td>II-III</td>
<td>Weak</td>
<td>4k*</td>
</tr>
<tr>
<td>IV</td>
<td>Light</td>
<td>16k</td>
</tr>
<tr>
<td>V</td>
<td>Moderate</td>
<td>7k</td>
</tr>
<tr>
<td>VI</td>
<td>Strong</td>
<td>5k</td>
</tr>
<tr>
<td>VII</td>
<td>Very Strong</td>
<td>5k</td>
</tr>
<tr>
<td>VIII</td>
<td>Severe</td>
<td>0k</td>
</tr>
</tbody>
</table>

The color coded contour lines outline regions of MMI intensity. The total population exposure to a given MMI value is obtained by summing the population between the contour lines. The estimated population exposure to each MMI Intensity is shown in the table.

Image courtesy of the US Geological Survey
This regional map shows the complexity of major tectonic plates and microplates due to the convergence between the Australian and Pacific plates.
Regional tectonic complexities involving the convergence of the Australian and Pacific Plates.
This earthquake occurred as a result of shallow extensional faulting in the Pacific Plate. In the region of this earthquake, the Australian Plate converges with and subducts beneath the Pacific Plate, moving towards the east-northeast at a rate of approximately 94 mm/yr.

Shaded areas show quadrants of the focal sphere in which the P-wave first-motions are away from the source, and unshaded areas show quadrants in which the P-wave first-motions are toward the source. The letters represent the axis of maximum compressional strain (P) and the axis of maximum extensional strain (T) resulting from the earthquake.
Following the earthquake, it took 12 minutes and 38 seconds for the compressional P waves to travel a curved path through the mantle from the earthquake to Portland, Oregon.

S waves are shear waves that follow the same path through the mantle as P waves and took 23 minutes and 11 seconds to arrive.

Surface waves, both Love and Rayleigh, traveled the 9468 km (5883 miles) along the perimeter of the Earth from the earthquake to the recording station.
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