

Indonesia widens danger zone around island volcano

December 27 2018, by Syawalludin Zain And Niniek Karmini



An official looks a seismograph at an observation post near a recent volcanic eruption in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)

Indonesia raised the danger level for an island volcano that triggered a tsunami on the weekend, killing at least 430 people in Sumatra and Java, and widened its no-go zone.

The country's volcanology agency said Thursday that the Anak Krakatau volcano's alert status had been raised to the second-highest level and the exclusion zone more than doubled to a 5-kilometer (3-mile) radius.

The eruption on Saturday evening caused part of the island in the Sunda Strait to collapse into the sea, apparently generating tsunami waves of more than 2 meters (6 1/2 feet). Most tsunamis are caused by earthquakes.

The government has warned communities in the strait to stay a kilometer (6/10 of a mile) away from the coastline because of the risk of another tsunami triggered by Krakatau's eruptions. A navy vessel is expected to pass by the island later Thursday, which could give scientists more information about the risks of a second collapse.

"There's still a chance of a landslide, even under the sea level or on the sea level," said Rudy Sunendar, head of the energy ministry's geology department.

"We don't know exactly because we are not yet gone to the field" due to bad weather, he told The Associated Press at the volcano's monitoring post. "Based on the satellite imagery interpretation, there is collapse of some area of Mount Anak Krakatau."



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Saturday's disaster struck without warning, surprising people in a country that regularly suffers landslides, earthquakes and volcanic eruptions. No big earthquake shook the ground beforehand, and the waves surged inland at night on a holiday weekend while people were enjoying concerts and other beachside activities.

Indonesia's tsunami warning system relies on land seismometers and buoys connected to tidal gauges and is not equipped to detect underwater landslides. The system, in any case, has not operated for years because the buoys have been vandalized or not maintained because of low funding.

Heavy rains and high seas have hampered the search for victims. Some

bodies were found at sea and at least 159 people are missing.

On Thursday, residents of badly affected Banten province on Java island were searching through the debris of destroyed or damaged homes for anything salvageable.



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"I've lost everything I have, my house and all belongings inside it," said farmer Muhamad Sarta.

"I just hope for some help from the government," he said. "Hopefully there will be some repairs. I have nowhere to go. I have no money. Whatever I had was lost in the water."

Radar data from satellites, converted into images, shows Anak Krakatau shrunk dramatically following Saturday's eruption.

Satellite photos aren't available because of cloud cover but radar images from a Japan Aerospace Exploration Agency satellite taken before and after the eruption show the volcano's southwestern flank has disappeared.



A woman holds her baby inside a destroyed house at a tsunami-area in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)

JAXA's post-eruption image shows concentric waves radiating from the island, which experts say is caused by its ongoing eruptions.

Dave Petley, head of research and innovation at Sheffield University who analyzed similar images from a European Space Agency satellite, said they support the theory that a landslide, most of it undersea, caused the tsunami.

"The challenge now is to interpret what might be happening on the volcano, and what might happen next," he wrote in a blog.

Anak Krakatau, which means Child of Krakatau, is the offspring of the infamous Krakatau volcano that affected the global climate with a massive eruption in 1883.

Anak Krakatau first rose above sea level in 1929, according to Indonesia's volcanology agency, and has been increasing its land mass since then.



A girl sits with a baby inside her house at a tsunami-hit village of Carita,

Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)



Local residents clean the debris from his house at a tsunami-hit area in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)



A man cleans the debris from a house at a tsunami-hit area in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)



Indonesian police prepare to clean the debris at a tsunami-ravaged area in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)



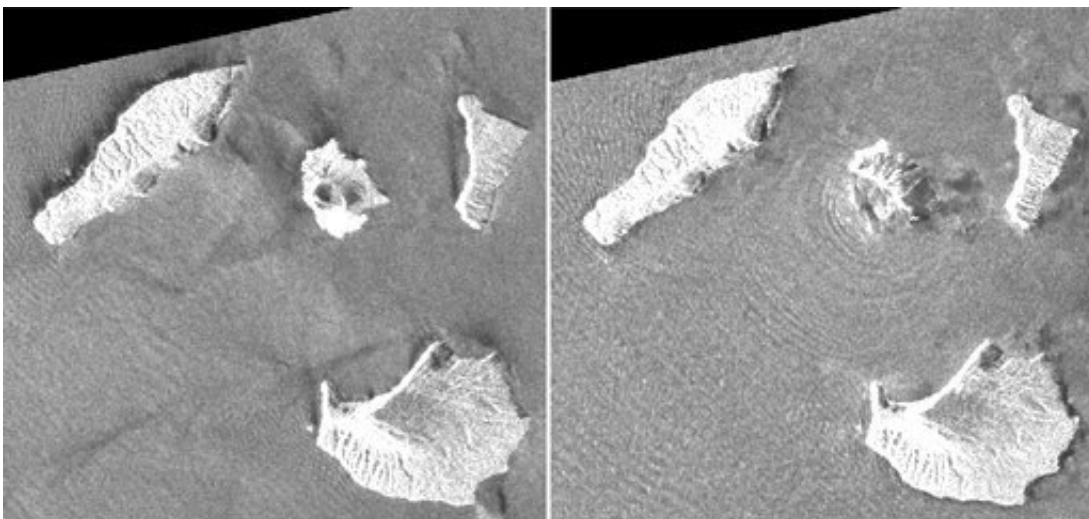
People look at the debris at a tsunami-ravaged area in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)



A woman and her child walk past debris at a tsunami-ravaged area in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)



A man walks near the debris at a tsunami-ravaged area in Carita, Indonesia, Thursday, Dec. 27, 2018. Indonesia has widened the no-go zone around an island volcano that triggered a tsunami on the weekend, killing hundreds of people in Sumatra and Java. (AP Photo/Achmad Ibrahim)



This combination of synthetic aperture radar images taken by JAXA's ALOS-2

satellite and analyzed by Geospatial Information Authority of Japan shows Indonesia's Anak Krakatau volcano, center in images, before and after the Dec. 22, 2018, eruption. The images were taken on Aug. 20, 2018, left, and on Dec. 24, 2018, right, respectively. The satellite imagery showed a deformation on the volcano's southwest side.(Geospatial Information Authority of Japan via AP)

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