Japan National Group

1) Investigation Team for Disaster Prevention

JSEG has organized the investigation teams both for West Japan downfall disaster and Hokkaido earthquake, 2018. JSEG organized the investigation teams for Hiroshima downfall disaster, Kumamoto earthquake, and Northern Kyushu downfall disaster since 2014. JSEG had meetings with local people in the disaster regions after investigation and discussed the topographical and geological features in those areas in disaster prevention view point. Moreover, JSEG had forums targeted to people in provincial cities for understanding the geological features, history of the disasters, disaster risks, and the relationship between culture and natural features mainly in their living area.

West Japan downfall disaster

Recently, we experience increasing number of extremely heavy hourly rain in Japan. The West Japan downfall disaster in July, 2018, was induced by maximum rainfall of 1,800mm in only four days in various areas of mainly western Japan. This extreme heavy rain in wide area was caused by many linear rainfall belts along the energetic seasonal rain front after a typhoon attack. Many debris flows and landslides, rapid floods occurred in many areas in a short period. Over 200 lives were lost.

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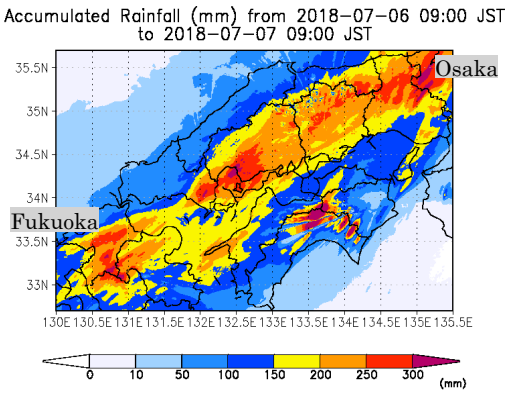
<tr><td>  </td><td> 
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<tr><td>Aerial photo of West Japan downfall disaster area
(Aerial Photo by Kokusai Kogyo and Pasco)</td><td>Distribution of rainfall in 24 hours in western Japan; National research Institute for Earth Science and Disaster Resilience</td></tr>
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<tr><td>Photo of JSEG investing team</td><td></td></tr>
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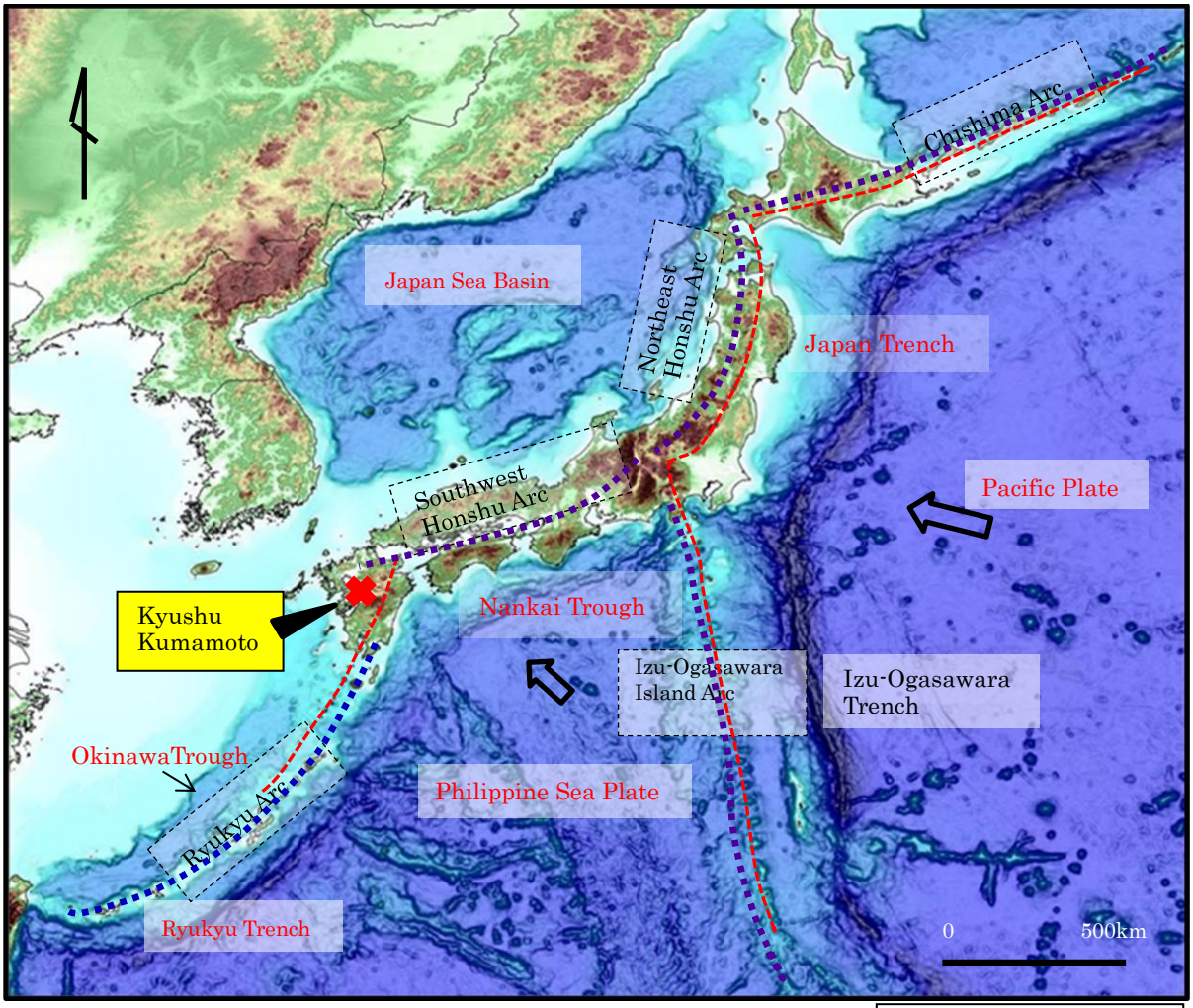
Hokkaido, East Iburi Earthquake

The 2018 Hokkaido, East Iburi Earthquake occurred on September 6th in the middle area of Hokkaido Island. Maximum magnitude and depth of the epicenter were reported as 6.7 Mj and 35 km respectively. The Japanese Archipelago is comprised of five island arcs. The Pacific Plate has been moving to WNW direction 9 cm/yr. on average and subducting in the Japan Trench and Chishima Trench. On the other hand, the Philippine Sea Plate has been moving to NW direction 4 cm/yr. on average. These continuing movements on the subduction zones at the boundary of the plates are the main causes of large earthquakes and tsunamis. The Chishima arc has collided with Honshu arc in the middle area of Hokkaido. East Iburi earthquake would have occurred in the front area of this colliding fore arc sliver.



General topographic view around Japan

	
Aerial photo of East Iburi Earthquake area (Aerial Photo by Kokusai Kogyo and Pasco)	Investigating in earthquake-stricken area

	
Volcanic layers section in the landslide	Landslide block in earthquake-stricken area

Extremely many surface landslides occurred by the earthquake. Volcanic layers of pumice and ash erupted from nearby western active volcanos accumulated on mountain slopes and completely slid down. Coal fire power plants were shut down by this shock and the electric power system in Hokkaido was consequently lost, causing about 3 million houses blackout.

2) 2018 JSEG Annual Meeting

JSEG held the 2018 Annual Meeting in Sapporo, Hokkaido on Oct. 16-17, 40 days after the earthquake. About 270 members participated, and 72 oral and 75 poster presentations were performed. A special lecture “research of the Tsunami sediments and historical records of previous disasters” was presented by Prof. Yuichiro Tanioka, Hokkaido University. After the meeting, 25 members participated in one day field trip to Mikasa Geo-park.

Group photo of field trip in Mikasa Geo-park area

3) Meeting of the Japan National Group

A New Year meeting of the Japan National Group committee was held on January 7th at Kyoto University. Prof. Masahiro Chigira, chairman of the committee, and 10 committee persons participated in this meeting. The 13th IAEG congress and minutes of the council meeting in San Francisco were reported. Annual action plans of Japan National Group were discussed.

New Year meeting of the Japan National Group committee