On 10 February 2017 at 10:03 PM Philippine Standard Time (PST), a magnitude (Mw) 6.7 earthquake struck the Province of Surigao del Norte in northeastern Mindanao. Using the data from the Philippine Seismic Network (PSN) of the Philippine Institute of Volcanology and Seismology – Department of Science and Technology (PHIVOLCS-DOST), the epicenter was located in Surigao Strait at 9.80° N and 125.39° E or 16 km offshore northwest of Surigao City at a shallow depth of 10 km. The earthquake was generated by the movement of the Philippine Fault – Surigao segment. The ground shaking was felt at PHIVOLCS Earthquake Intensity Scale (PEIS) VII in Surigao City and San Francisco. The rest of the municipalities in Surigao del Norte experienced PEIS VI to IV. Small magnitude earthquakes followed afterwards. As of 22 February 2017 8:00 AM, 230 aftershocks were recorded by the PSN, 106 of which were plotted and 26 were reportedly felt. The largest aftershock was recorded on 14 February 2017 at 4:03 AM with a magnitude of (Mw) 5.0 and was felt in Surigao City at PEIS V.

This earthquake generated a 4.3 km surface-rupture that was mapped in Brgy. Jampal in Surigao City and Brgy. Poblacion, Honrado and Macopa in the Municipality of San Francisco, Surigao del Norte. These barangays were estimated to experience strong ground shaking at PEIS VIII.

Liquefaction and earthquake-induced landslide were documented as well as the collapsed Anao-an Bridge, damages to buildings, ports, roads, other bridges.

### INFORMATION DISSEMINATION

**What should be done by the affected communities?**
- The best course of action is preparedness.
- Damage buildings and infrastructures should not be used and should be inspected by engineers.
- Slopes should be checked for tension cracks that may cause landslide due to strong earthquake and/or prolonged or heavy rainfall.
- Reconstruction or construction of houses should conform with National Building Code.
- In the case of another felt earthquake, do the “Duck/Drop, Cover and Hold”.

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**SURFACE RUPTURE OF THE PHILIPPINE FAULT – SURIGAO SEGMENT**

### LANDSLIDE

Shingle-rafted landslide along Surigao-Libiran Road, Dita, Loon, Rama Hills, Surigao City.

### LIQUEFACTION

View of a liquefied landscape in Brgy. Macopa, San Francisco.

### GROUND SHAKING

Sample not coinciding with the surface rupture in Brgy. Bahay, San Francisco.

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**10 FEBRUARY 2017 MAGNITUDE 6.7 SURIGAO DEL NORTE EARTHQUAKE**

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