About the turbidity current considered that it occurred in the northern Suruga Bay, Central Japan by the typhoon No.24. -The traces of the accidents and the phenomenon at the sea floor detected the OBSs Array-

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In August 2018, Structural exploration based on "The integrated research project for the Fujikawa fault zone" began in the northern Suruga Bay. We installed 18 pop-up type Ocean Bottom Seismographs (OBSs) in this survey line (from Shimizu to Heda). In addition, we installed 4 OBSs in other survey lines for the observation of seismic activities around the Suruga Bay.

The typhoon No.24 passed off in the vicinity of the Suruga Bay from September 30th to October 1st 2018. After passing off that, various accidents of OBS occurred. Those accidents of OBS are as follows:

1. 4 OBSs drifted on the coast.

2. The movement of the installation position of the 2 OBSs was confirmed.

3. 1 OBS did not have a transponder response and it was missing.

4. The two OBSs have a transponder response, but they do not pop-up.

From this and the above, in this study, we considered OBS to have an accidentally due to a phenomenon occurred at the seafloor in the northern part of Suruga Bay by typhoon 24.

We analyzed using seismic wave, submarine topography and mud and considered them.

・According to the waveform record obtained by OBS, the accidenty spread from the central part of Suruga Bay of the extension of the Fujikawa estuary.

・It was a tilt that caused turbidity flow to occur by hanging from the Fujikawa estuary to the survey line.

・When the bottom sampling was done at the installation point and recovery point, the same particle size was present.

From the above,the cause of the accidenty in the OBS in the northern Suruga Bay is presumed to have flowed into the Suruga bay, where the sediments originating from the Fujikawa streamed OBSs.

From this, there is a high possibility that a turbid flow has occurred in northern Suruga Bay.

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