Development of seismic data-logger for observation at isolated island and preliminary experiment

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To grasp the Earthquake activities islands and coastline between Kagoshima Pref. and Okinawa Pref. Seismometry the Manned/Uninhabited island becomes very important issue. At those places power source and communication tools are limited and has very small choices especially in the uninhabited island. Therefore achieving continuous long-term observation is very difficult and most of observing has done by Trigger method. For that, because a change in the noise level was big in the small islands, observation efficiency was very low. To solve the above problem, here is a report on the newly developed earthquake data-recording device for the long-term observation. This device contains a large memory capacity and satellite portable telephone (Wide Star: NTT Docomo) and this device allows observation center to transmit necessary wave shape data from the buffering memory.

At the same time functional confirmation of cutting out necessary wave shape data, a communication examination by the satellite portable telephone are done on a prototype (Test machine) at University of Kagoshima observation center and Yamakawa observing point (South part of Satsuma peninsula).