V. SUMMARY AND FURTHER WORKS

The Geological Survey of Japan has carried out two shipborne surveys in the continental shelf of the Goto-nada Sea and the Tsushima Strait in 1972 and 1973. The main object of the surveys was general investigation of the sea bottom, testing equipment and techniques and training personnel. As the research ships for the cruises, the Tokaidaigaku-maru II and the Wakashio were employed for 20 days in 1972 and for 17 days in 1973 respectively.

During the cruises seismic reflection surveys using a sparker and magnetic survey using a proton magnetometer were carried out mostly. Sampling works were mostly done with cylinder-type dredges and a Smith-McIntyre grab. The extension of the sparker traverse lines is about 2,720km and the number of sampling stations are 175 in total.

Preliminary results from the surveys are as follows:

1) Five submarine terraces were found at different depths below sea level, which seem to have been formed through eustatic movement in Quaternary.

2) Under-sea beds of the surveyed area consist of four acoustic layers.

3) Two large tectonic lines were found: one is the fault runing between Goto and Tsushima in a NNE-SSW trend and another is the Ainoshima Fault runing along the eastern coast of the Goto Islands in a NE-SW trend.

4) The sea bottom sediments are divided into four types, which are relict, palimpsest, residual and recent sediments.

5) The molluscan shells collected from bottom sediments are 199 specieds of

Pelecypoda, 116 species of Gastropoda and 6 species of Scaphopoda. The geographical distributions of different shell assemblages seem to be mostly controled by the bottom character, the depth of water and the temperature.

Sedimentrogical, geochemical and petrological studies of the samples obtained from the surveyed area are being done in the laboratories of the Geological Survey, and the analysis of the geophysical records is in progress. The final results from the studies will be represented as geological and sedimentological maps on scale of 1:200,000; the latter will be published in near future.