We re-analyzed the explosion seismic data acquired in 1983 and 1987 at southern part of Itoigawa-Shizuoka Tectonic Line, and show 2-D P-wave velocity structure model. There is about 3km/s-4km/s P-wave velocity layer with thickness from several hundred meters to 2 km under the eastern survey line. On the other hand, there are no velocity layer corresponds to it under the western survey line. Since there is about 4.6km/s P-wave layer under this layer which seems to be a basement, depth of basement under the western survey line is shallower than that under the eastern line.