

Paleomagnetism of the Society Islands in French Polynesia

Koichiro Shimura [1], # Hideo Tsunakawa [2], Tetsu Kogiso [3], Hans Barsczus [4]

[1] Earth and Planetary Sci., TIT, [2] Earth and Planet. Sci., TITECH, [3] Computational Sci. Lab., RIKEN, [4] Univ. Montp2

Reliable paleomagnetic data from the southern hemisphere have not been enough. Paleomagnetic sampling in the Society Islands, the Southern Pacific, was carried out at about 130 sites in 1997 from 6 islands. The major objectives are to obtain a number of reliable paleomagnetic directions and to discuss paleosecular variation in the Society area.

Thermal demagnetization was applied and then primary components were extracted from most samples. As a result, 68 normal, 39 reversed, and 10 intermediate field directions were measured. The angular standard deviation is calculated to be 14.7 deg from the normal and reversed sites (N=107). This value is similar to that of Tahiti (13.9 deg) and the global trend calculated from DGRF 1965. As a result, ASD in this area is 14-15 deg about past 5Ma.