

Findings of Long-Term Space Flight Analog Studies

*Tamiyasu Shimamiya¹, Masanori Shinohara²

1. Japan Manned Space Systems Corporation, 2. Teikyo University of Science

With the advent of long-term space flight on space stations, ongoing studies of stress, group dynamics, and fatigue are being performed for simulated planetary missions. The first space flight analog study was conducted in the 1960s. A number of subsequent studies have been reported: i.e., the closed ecology life support system studies Mini-Earth and BIOSPHERE2; the confinement chamber studies MARS 500, SIRIUS, and HERA; and analog isolation studies performed at polar sites, on deep sea vessels, and in submarines, etc. This review discusses the findings of these previous studies.

Keywords: Human Space Flight, Stress, Confinement