

Targets and methods of planetodesy

Hiroshi Araki[1], Kosuke Heki[2], Hideo Hanada[3]

[1] NAO, Mizusawa, [2] Div.Earth Rotation, National Astron. Obs., [3] Div. Earth Rotation, Nat. Astr. Obs.

The precession, nutation, and polar motion on planets and satellites are reviewed after Hilton(1992) to discuss their observation ability. Jupiter and Neptune are the only other candidates for which precession and nutation might be significant except for Moon and Mars. The advantage of in-situ astrometry on other planets is great for planetodesy because it can determine their orientations in direct. Precession and nutation on the Moon and Mars are relatively more significant than other bodies. Thus new project for the measurement of lunar orientation which aims to surpass the scientific products of LLR (Lunar Laser Ranging) such as ILOM(In-situ Lunar Orientation Measurement) should be promoted to solve the problem of lunar internal structure.