

Linking the dynamical reference frame to the ICRF

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The JPL ephemerides are now aligned onto the International Celestial Reference Frame (ICRF). This has been made possible by adjusting the ephemerides to observations taken directly with respect to the ICRF. These include VLBI observations of the Magellan Spacecraft in orbit around Venus and the Phobos Spacecraft during its approach to Mars. There is also a determination of the ICRF w.r.t. the inner planetary system using LLR observations and Connecting stations through ground surveys. Analysis of the complete data set indicates that the ephemerides, and, consequently, the dynamical reference frame, are now located within the ICRF to an accuracy of about 2 milliarcseconds.

ABSTRACT
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