

Mariner II: 50 years since first planetary visit

On December 14, 1962, NASA's *Mariner II* passed within 35,000km of Venus, becoming the first spacecraft to successfully fly by another planet

MARINER LAUNCHES

✗ Mariner I

Jul 22, 1962

Destroyed after veering off course

✓ Mariner II

Aug 27, 1962

First successful planetary encounter

✗ Mariner III

Nov 5, 1964

Lost nine hours after launch to Mars

✓ Mariner IV

Nov 28, 1964

First successful Mars flyby

✓ Mariner V

Jun 14, 1967

Venus flyby

✓ Mariner VI

Feb 24, 1969

Mars flyby

✓ Mariner VII

Mar 27, 1969

Mars flyby

✗ Mariner VIII

May 9, 1971

Crashed into Atlantic Ocean shortly after launch to Mars

✓ Mariner IX

May 30, 1971

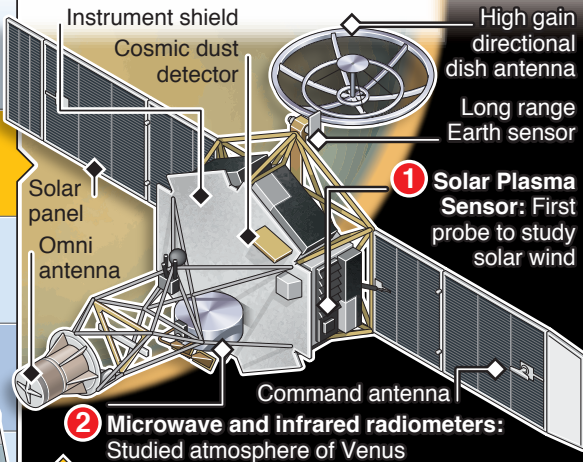
First craft to orbit another planet (Mars)

✓ Mariner X

Nov 3, 1973

First spacecraft to use gravity of one planet (Venus) to reach another (Mercury)

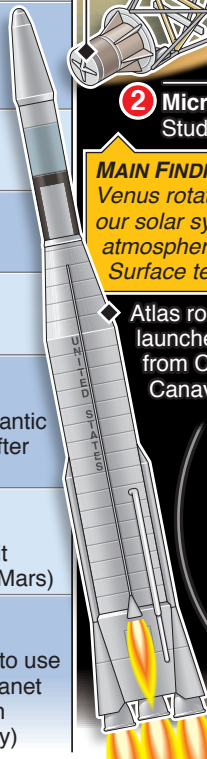
MARINER II – TWO SCIENTIFIC BREAKTHROUGHS



MAIN FINDINGS

Venus rotates in counter direction to most planets in our solar system, has high pressure carbon dioxide atmosphere and continuous cool cloud cover.

Surface temperature is at least 425°C



Atlas rocket launched from Cape Canaveral

