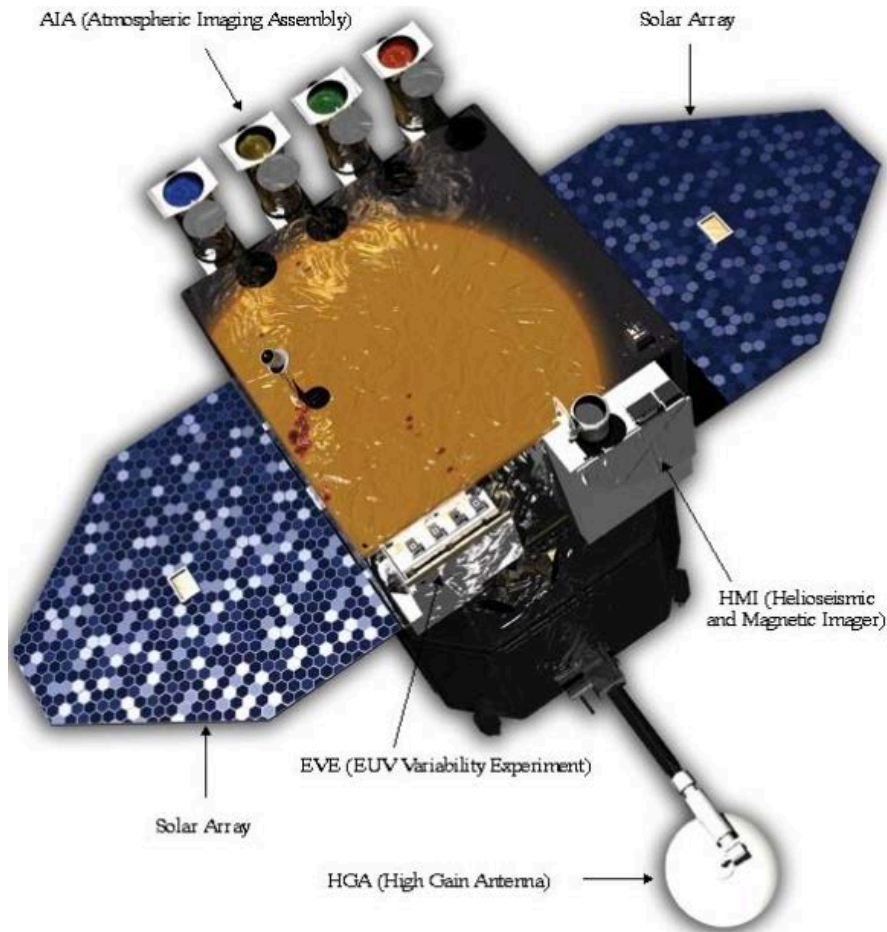


NASA's Solar Dynamics Observatory Spacecraft



SDO Spacecraft Details:

- The total mass of SDO at launch was 3000 kg (6620 lb.); instruments 300 kg (660 lb.), spacecraft 1300 kg (2870 lb.), and fuel 1400 kg (3090 lb.).
- SDO overall length along the sun-pointing axis is 4.5m, and each side is 2.2m.
- The span of the extended solar panels is 6.25m.
- Total available power is 1500 W from 6.6m² solar arrays operating at an efficiency of 16%.
- The high-gain antennas rotate once each orbit to follow the Earth.
- The SDO satellite maintains a geosynchronous orbit above Earth (a geostationary orbit that moves at the same speed as the Earth's rotation and does not move relative to the Earth's surface).

Title page & above images: NASA