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Summary Information Sheet

MERCURY

Mercury, named after the swift messenger of the ancient gods, is the innermost planet in the solar system.

Photo: Mariner 10 (NASA)



One rotation lasts
58.65 Earth days

Thin rocky mantle

Caloris basin
with a diameter of 1300 km, the largest
of 15 ancient basins. It is surrounded by
concentric rings of mountains

Large metallic core

Crater
Mercurian craters look like
lunar craters

One revolution
around the Sun
lasts 87,97
Earth days

Craters with light-colored
rays resulting from the
violent impacts during
Mercury's stormy past

Freezing cold
surface on the
side opposite the
Sun ($\sim -200^{\circ}\text{C}$)

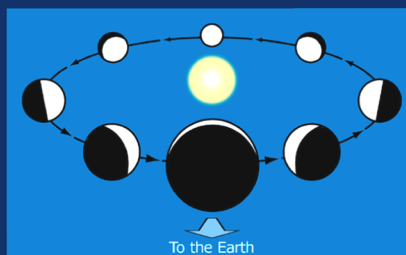
Intercrater Plains
are level to gently rolling
terrain between and
around large craters

Cliffs or Scarps

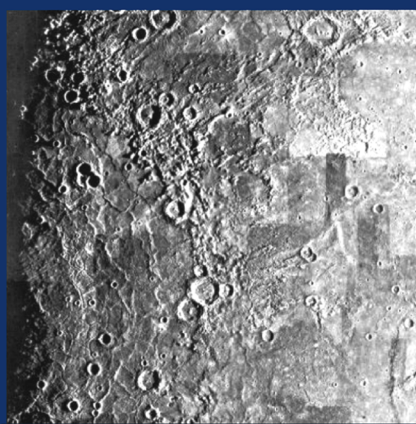
Burning hot surface on the
side that faces the Sun
($\sim 400^{\circ}\text{C}$)

Weird terrain (opposite side)

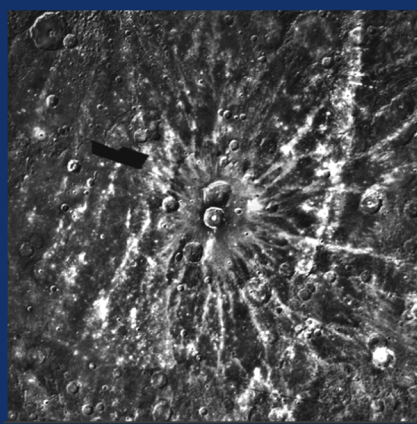
Rotational axis is inclined 83°
to the plane of the Ecliptic



Mercury's phases



Caloris Basin



Crater Degas with light
coloured rays



Discovery Rupes



Intercrater Plains

Physical Data

Property
Distance from the Sun
Rotation period
Equatorial radius
Mass
Density

Mercury

58 million km
59 days
2240 km
 $3.30 \times 10^{23}\text{ kg}$
 5430 kg/m^3

For comparison

Earth

150 million km
23 hrs 56 min
6378 km
 $5.97 \times 10^{24}\text{ kg}$
 5520 kg/m^3

Moon

150 million km
27 days 8 hrs
1738 km
 $7.35 \times 10^{22}\text{ kg}$
 3340 kg/m^3

Images: ESO, ESA, NASA, except otherwise stated

Concept: B. Mackowiak