BepiColombo – Protection against infernal heat

Solar heat flux

10x

as intense as in orbits around the Earth

Sun

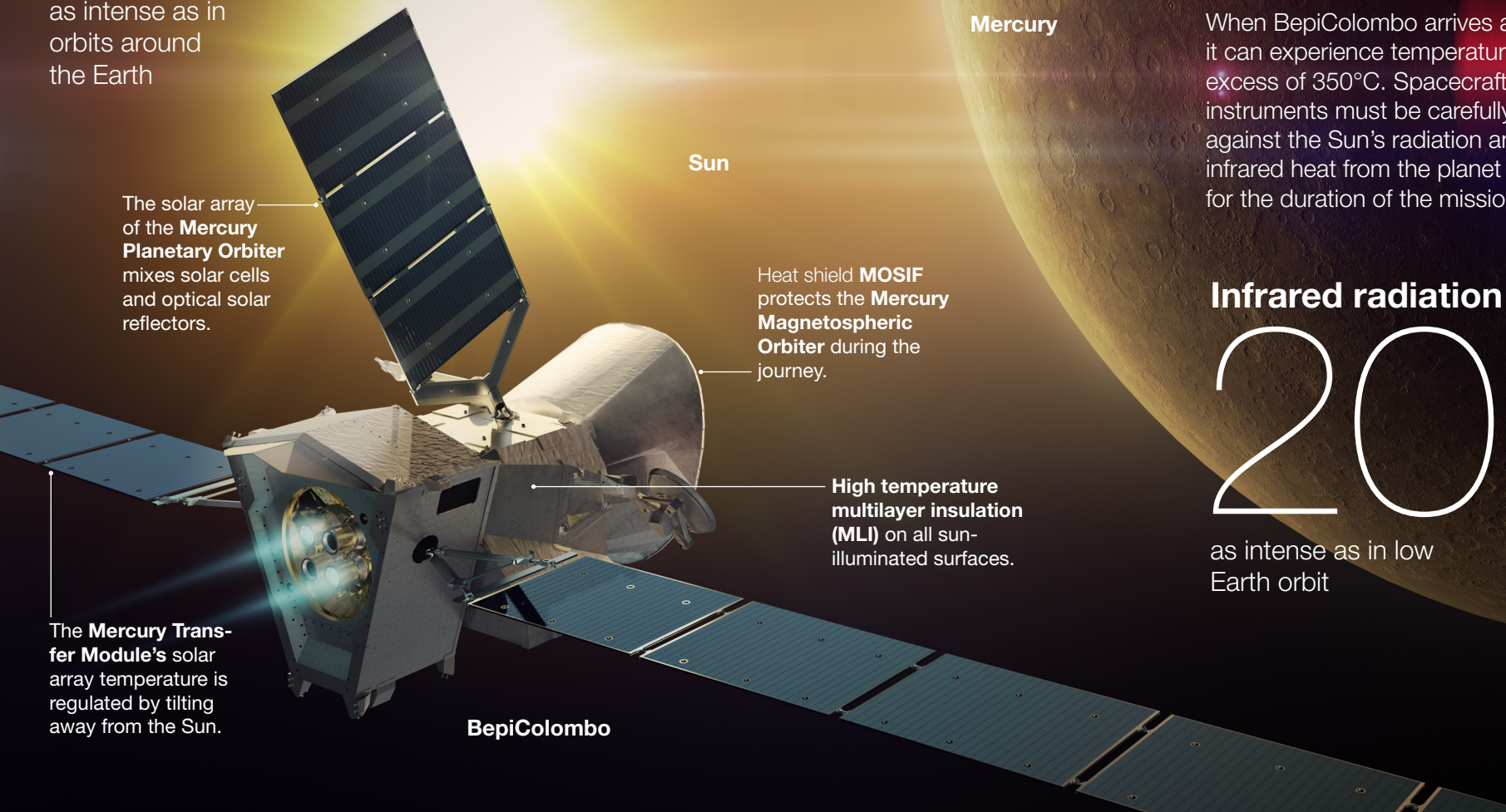
Mercury

When BepiColombo arrives at Mercury, it can experience temperatures in excess of 350°C. Spacecraft and instruments must be carefully shielded against the Sun's radiation and the infrared heat from the planet to survive for the duration of the mission.

Infrared radiation

20x

as intense as in low Earth orbit



The solar array of the **Mercury Planetary Orbiter** mixes solar cells and optical solar reflectors.

Heat shield **MOSIF** protects the **Mercury Magnetospheric Orbiter** during the journey.

High temperature multilayer insulation (MLI) on all sun-illuminated surfaces.

The **Mercury Transfer Module's** solar array temperature is regulated by tilting away from the Sun.

BepiColombo

AIRBUS