



EUROPA

Europa—one of Jupiter’s moons—is one of the most intriguing bodies in our solar system. Sandwiched between its icy outer shell and rocky mantle flows a global salty ocean that is twice the volume of all Earth’s oceans combined. Why does this matter? On Earth, wherever we find water, we find life. While Europa’s surface is cold, the moon generates enough internal heat as it is tugged and flexed by Jupiter’s gravity to keep the ocean from freezing. This tidal flexing also generates stresses that can fracture and deform the surface, creating Europa’s ridges, bands, and disrupted iceberg-like areas. Europa’s astonishing geology and astrobiological potential make it a fascinating destination for exploration.

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