

Ocean tides

Tides are the regular rise and fall of sea levels caused mainly by the gravitational pull of the moon, with a smaller contribution from the sun. As the moon orbits Earth, its gravity pulls ocean water toward it, creating a bulge on the near side and, due to inertia, a corresponding bulge on the far side. Most coastlines experience two high tides and two low tides roughly every 24 hours as the Earth rotates through these bulges.