

**THE ROLE OF TIDES IN TECTONIC FORMATION AND ERUPTION
ACTIVITY ON SATELLITES IN THE OUTER SOLAR SYSTEM.** Terry Hurford,
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Tides play a major role in the evolution of satellites in the outer solar system. These small bodies should be cold dormant worlds yet many of these bodies exhibit relatively young surfaces. Tidal friction provides a source of internal heat that allows resurfacing. Where tidal heating is dominant active resurfacing can be currently observed. Tides also generate global stresses on these moons, which can crack and displace the surface crust, contributing to the resurfacing of these bodies. Evidence for tidally driven tectonic formation is visible in the tectonic record.