Restricted Auroral Oscillation Implies Conductive (Salty) Ocean Deep in Ganymede’s Icy Shell

Innovative use of archival HST data

Ganymede Auroral Band Oscillation

No ocean

With ocean

1) Ocean suspected on theoretical grounds
2) Consistent with Galileo magnetometer data
3) Can be confirmed by JUICE (and maybe librations)

J. Saur et al., JGR Space Physics, 2015