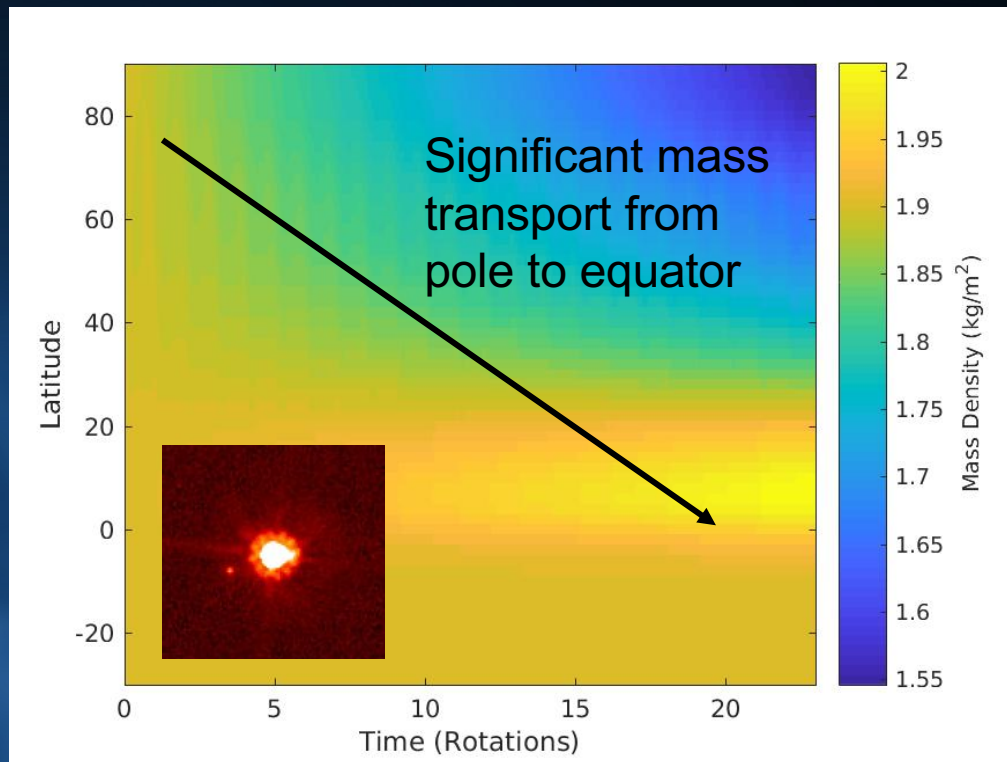


# Eris: The Brightest KBO (but Why?)

**Kuiper belt object (KBO) and dwarf planet Eris is exceptionally bright, indicating an active surface environment.**

- Eris has a greater geometric albedo than any other KBO, but its spectrum is dominated by methane, which should form tholins that darken the surface. Thus, one or more ongoing processes probably maintain its brightness.
- The presence of a local atmosphere was explored with a numerical model that coupled thermal evolution and volatile transport.



**Modeled nitrogen-ice on Eris's surface as a function of time and latitude. Inset is image of Eris taken by Hubble Space Telescope.**

- The model results predicted significant volatile transport on Eris and indicated that it may be among the most geologically active bodies in the solar system.
- Comparative planetology between Eris and other active worlds can help interpret observations as new bodies are discovered.