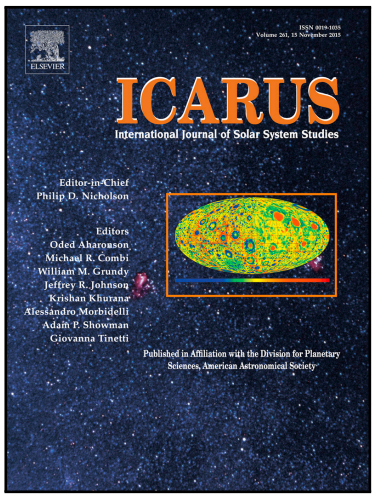

Plume and Surface Feature Structure and Compositional Effects on Europa's Global Exosphere: Preliminary Europa Mission Predictions

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Highlights

- Europa plumes may feed a global exosphere with complex structure and dynamics
- Water and organics may be enhanced on the dayside during polar plume activity
- Prior plumes or chemically enriched terrain may yield detectable exospheric signs
- Model gives species density criteria for plume or enriched terrain detection