

EUROPA'S SURFACE COMPOSITION AND MORPHOLOGY – IMPLICATIONS FOR INSITU TARGET DEFINITIONS

- Poster 5 -

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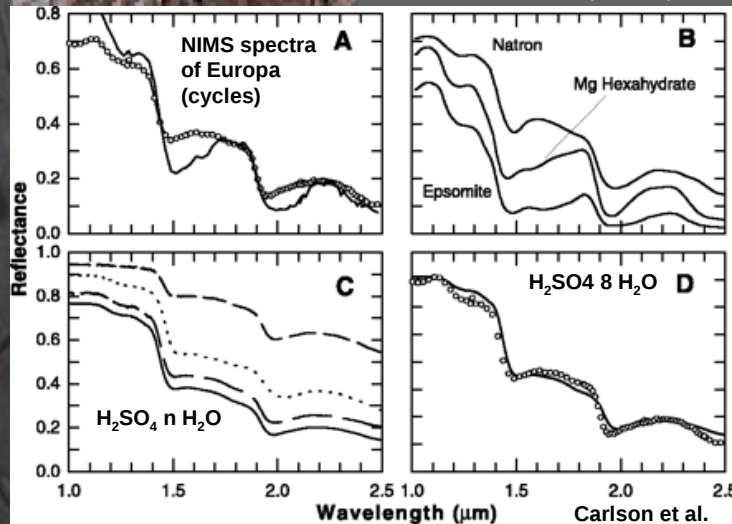
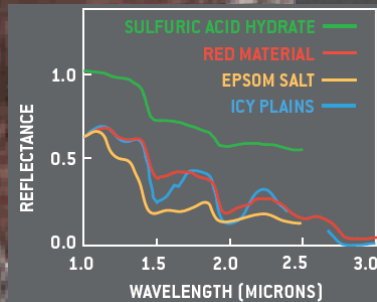
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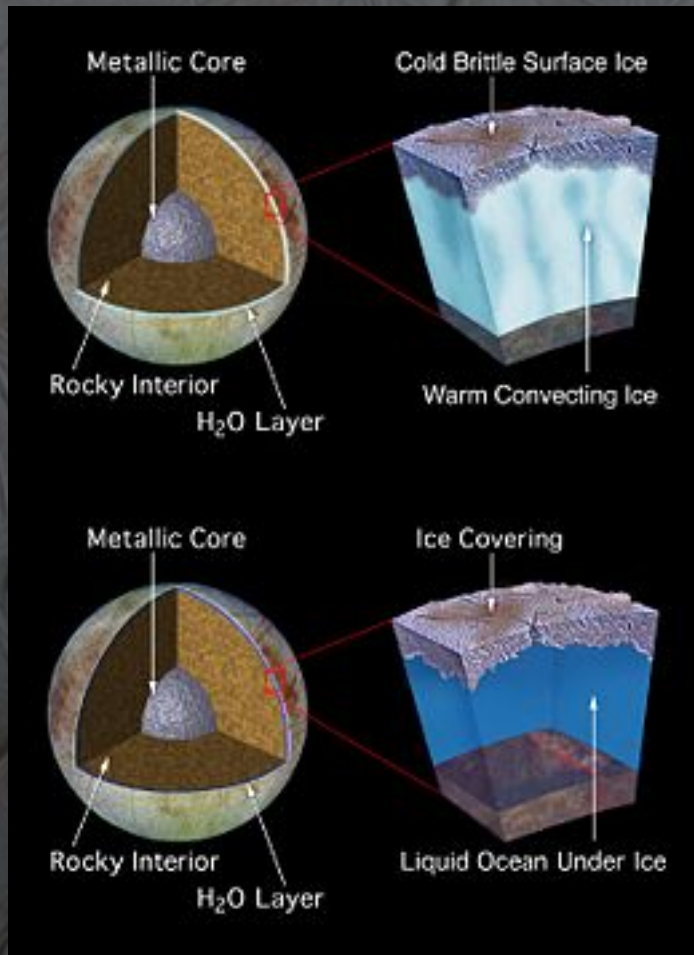
General goals for surface and near surface studies:

- Verification of the existence of a subsurface ocean
- Characterization of the ice crust, dynamics of the crust, estimation of thickness (globally and regionally), tidal forces
- Surface and near surface composition
- Habitability verification studies

Definition sources:

- Surface topography, morphology and composition (Galileo SSI, NIMS data)

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Requirements and motivation:

- Combination of global (orbital) and regional (in situ) studies
- Ground truth for surface composition analysis from orbit (ice, minerals, organics) and surface temperature (regionally, in-situ)
- Nature of the non-icy material of the surface cracks and the surface ice (globally, remotely)
- Pristine material and recently erupted

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Actual knowledge
+
General goals for
surface and near
surface studies
+
Their
requirements and
Motivation
=
Realistic
combinations of
remote sensing,
landing and
robotic!!!
strategies

