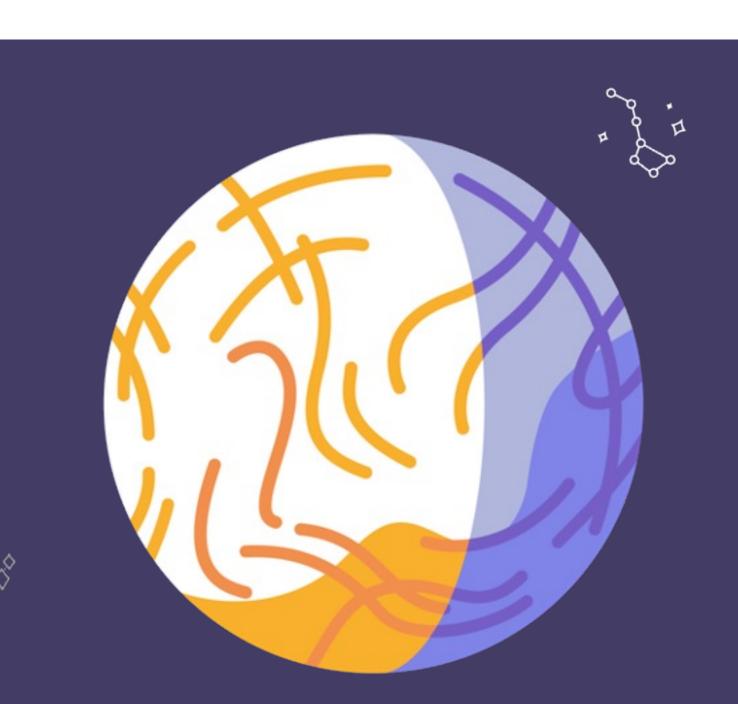
## Europa Icy Moon of Jupiter

eur

Europlanet 2024 RI has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871149.





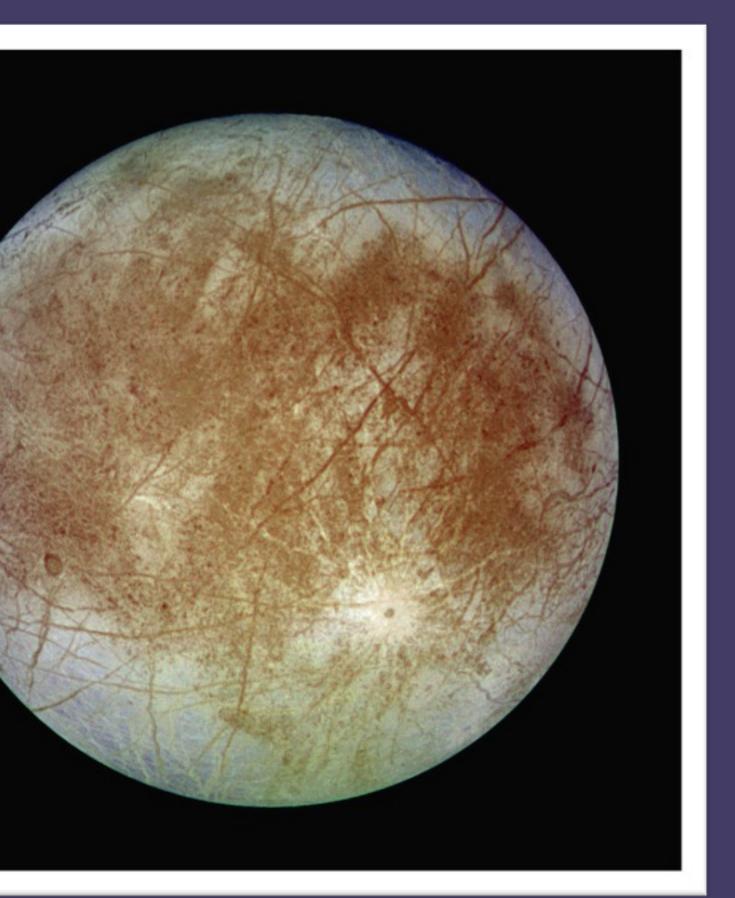


### Objectives

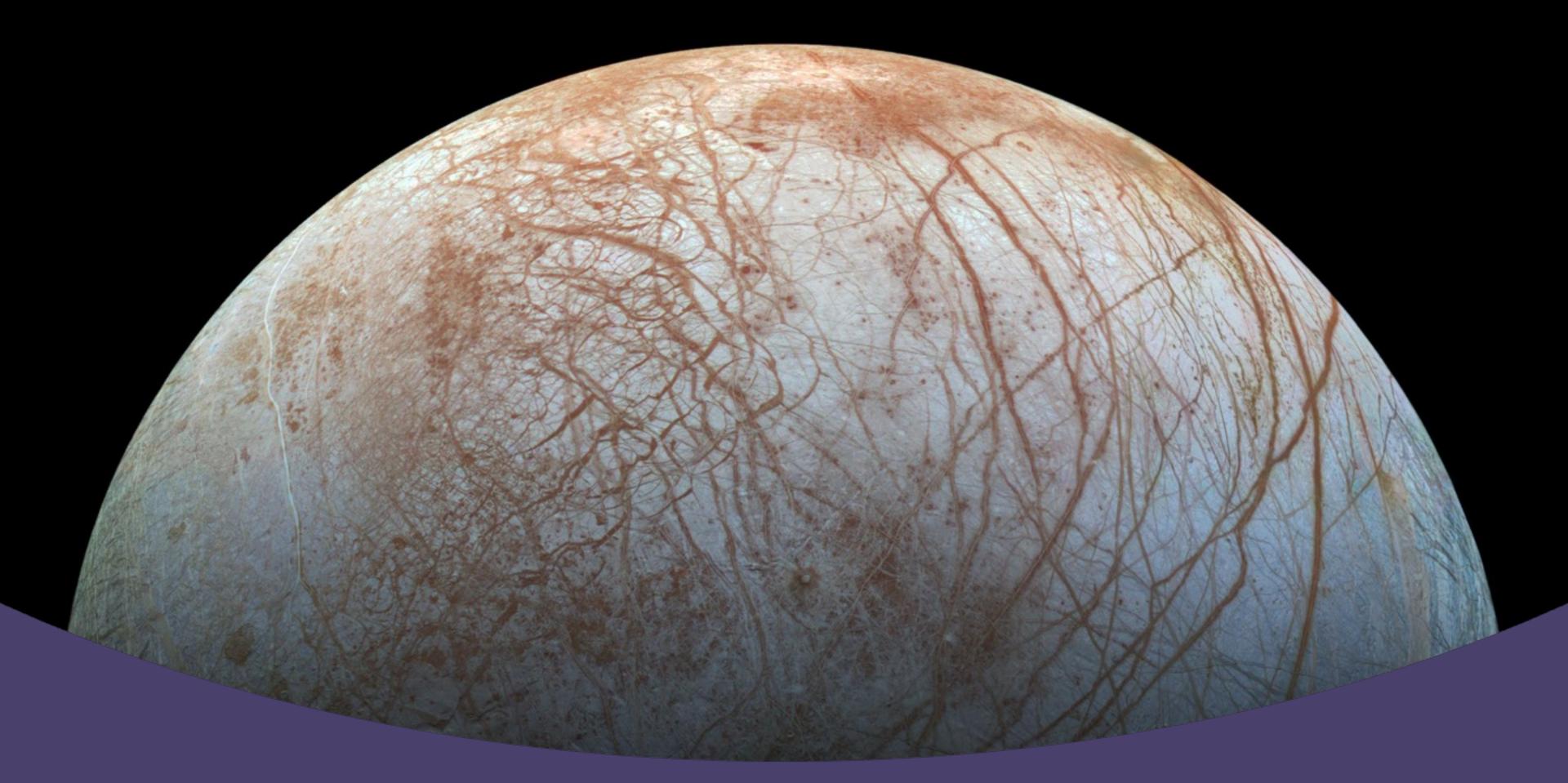
NET

By the end of this lesson you will be able to:

- Understand the composition of Europa
- Explain the formation of the cracks on Europa's surface
- Describe the nature of Europa's subsurface oceans
- Explore extremophiles and life in space







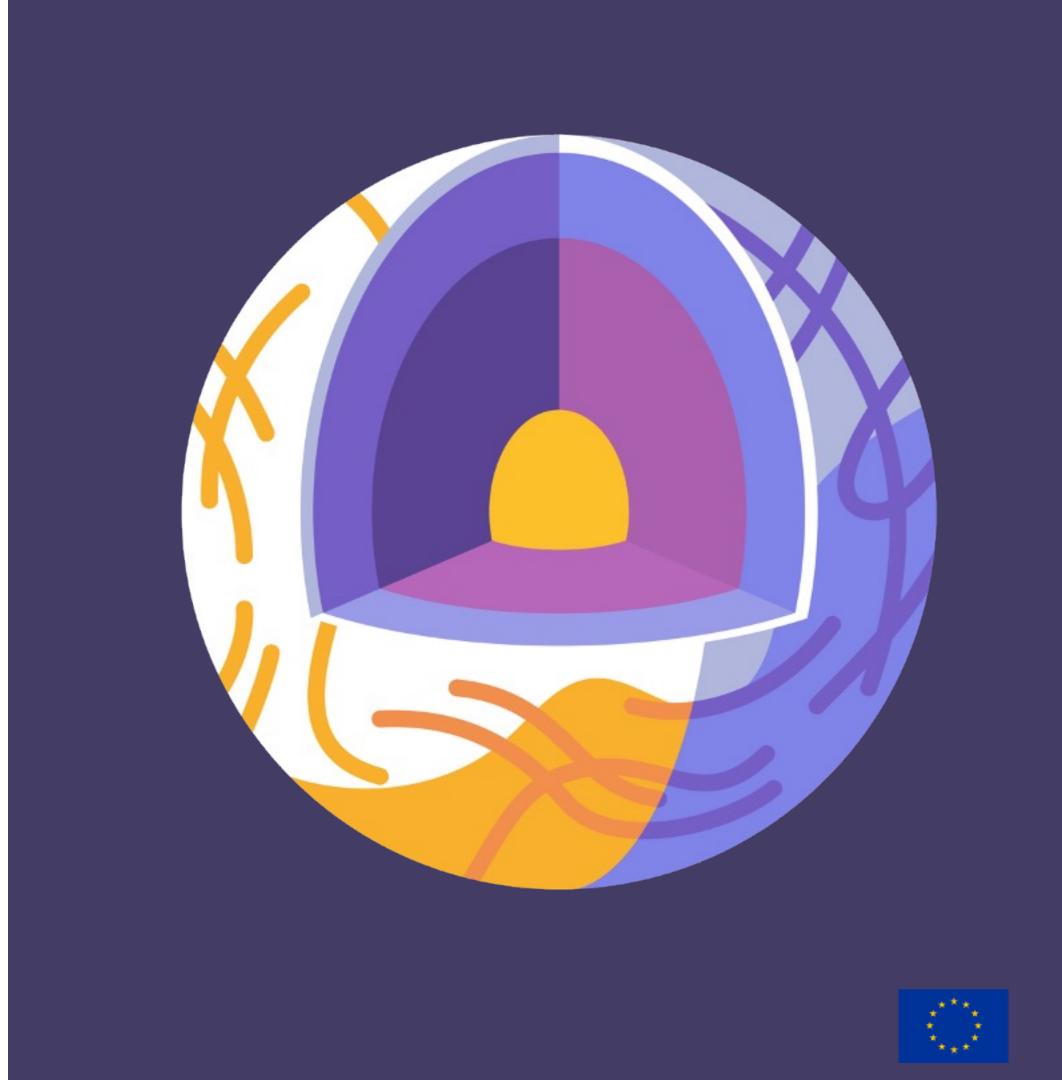


Europa captured by the Galileo mission (NASA/JPL-Caltech/Seti Institute, late 1990s)



# Geology of Europa



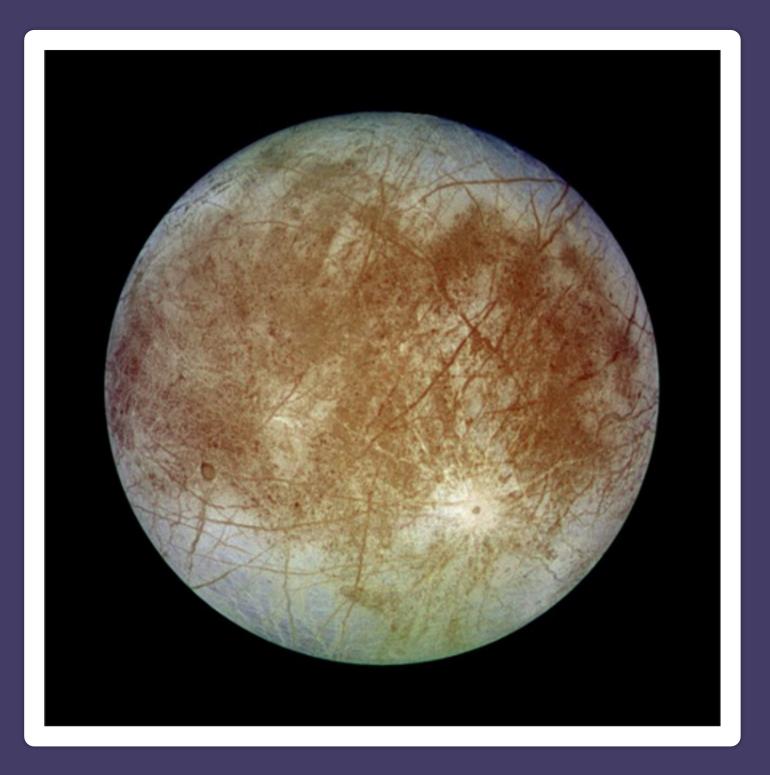


## Europa's surface









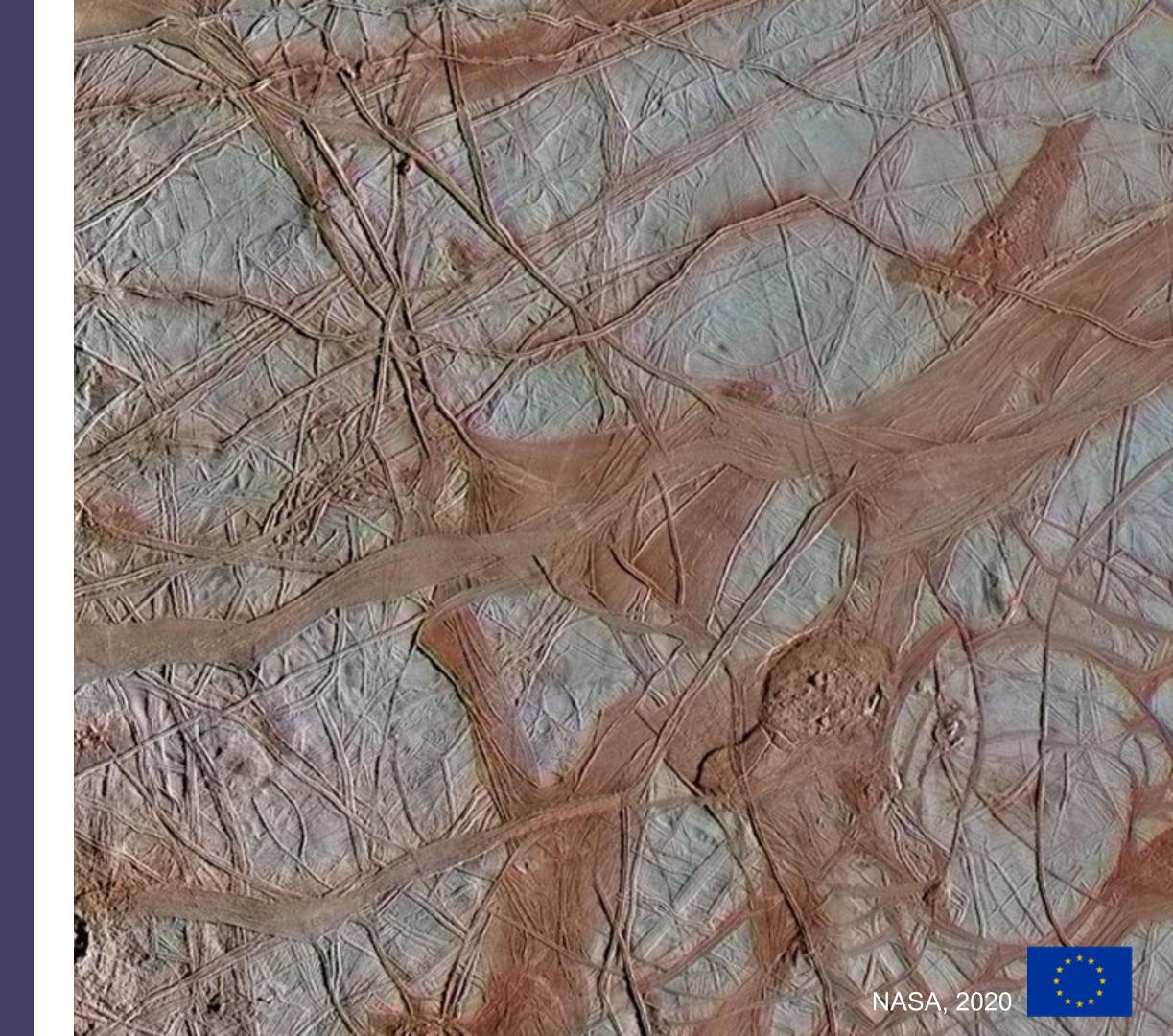






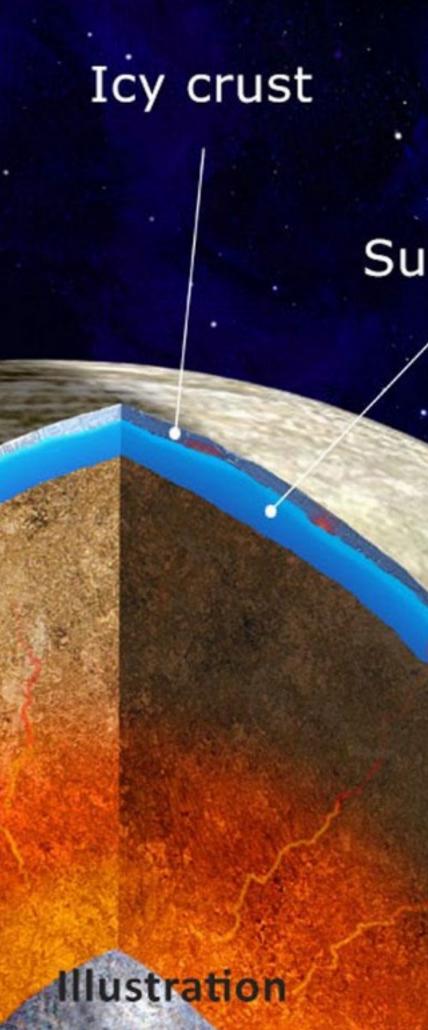
# Europa's Chaos Terrain





# Europa's Subsurface ocean





### Subsurface / ocean

### Volcanic seafloor



## How salt lowers the freezing point of water

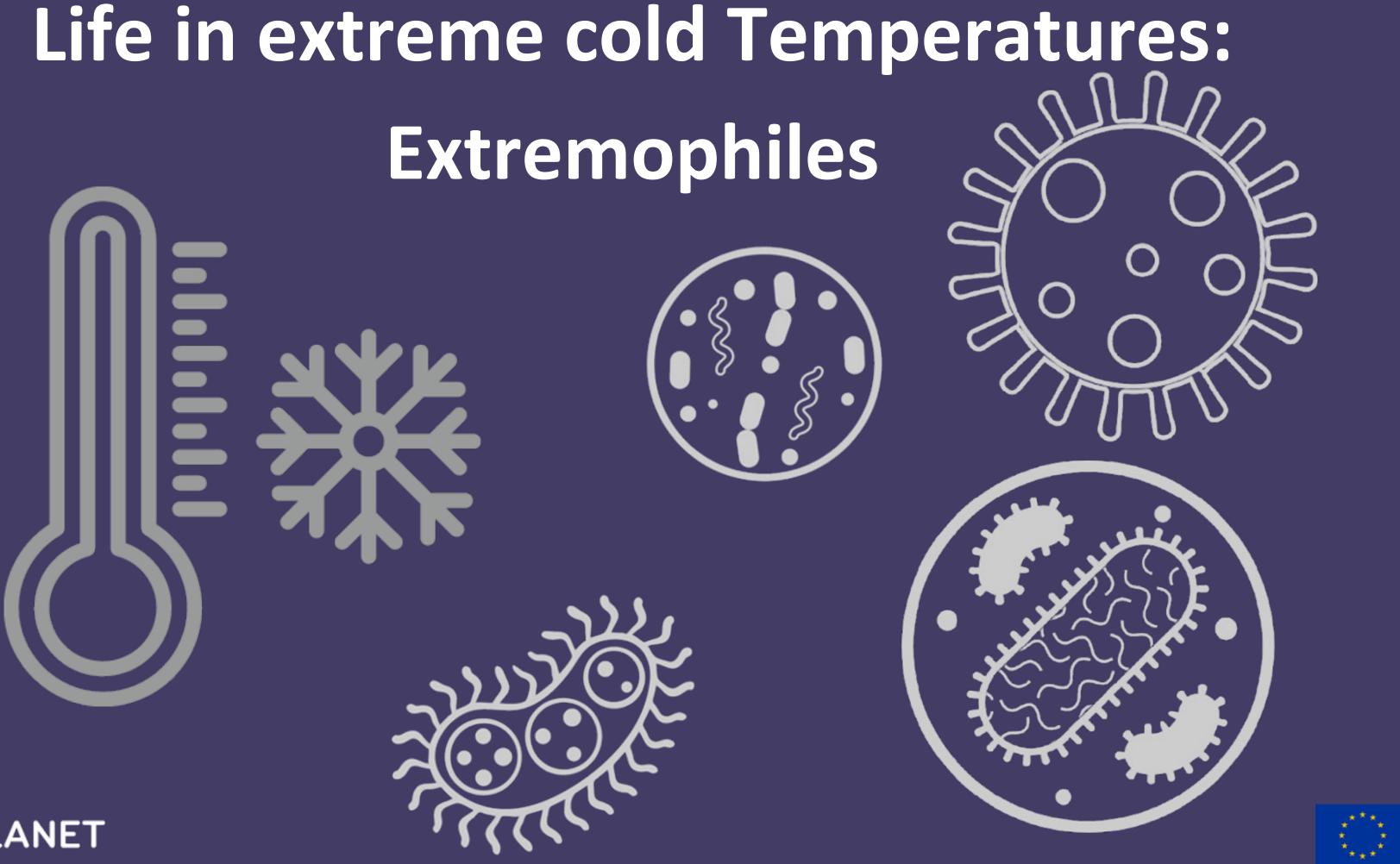






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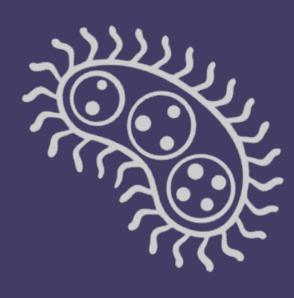




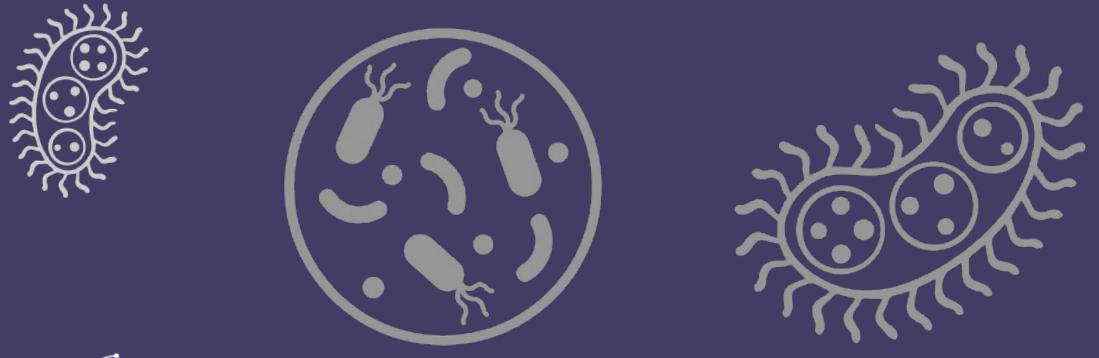




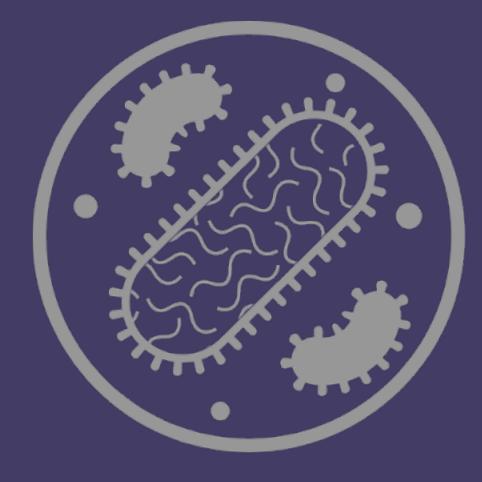




### Do you think there could be life on Europa?



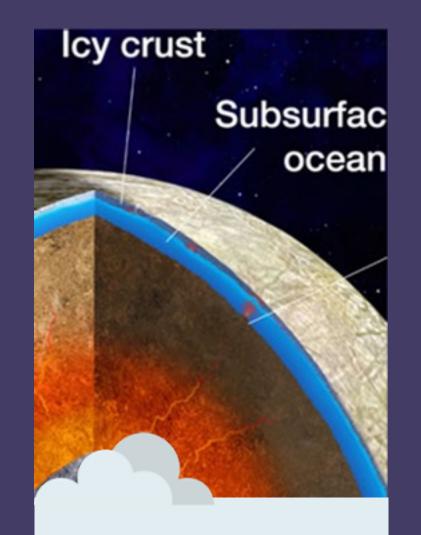






### Recap

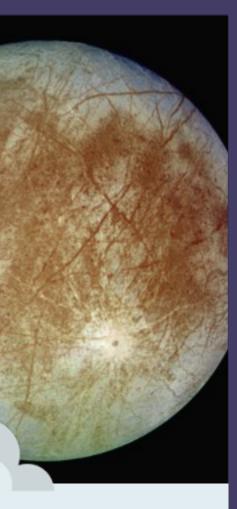
### Now we can...



1

Describe the geology and composition of Europa Understand interactions between the subsurface ocean and crust





2



3

Understand extremophiles and the potential for life on Europa

