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# Microbial ecology from extreme environments

**María Ángeles Lezcano Vega**  
Postdoctoral researcher

Centro de Astrobiología (CSIC-INTA)

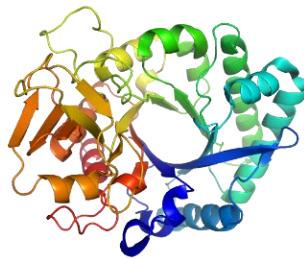
[mangeles.lezcano@cab.inta-csic.es](mailto:mangeles.lezcano@cab.inta-csic.es)

[mangeles.lezcano@gmail.com](mailto:mangeles.lezcano@gmail.com)

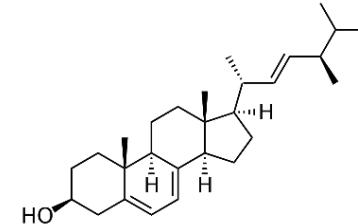
# Molecular tools



DNA



Proteins



Lipids

Taxonomic specificity

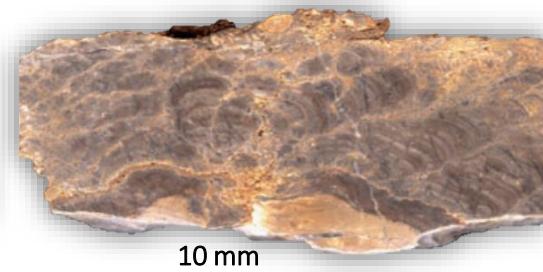
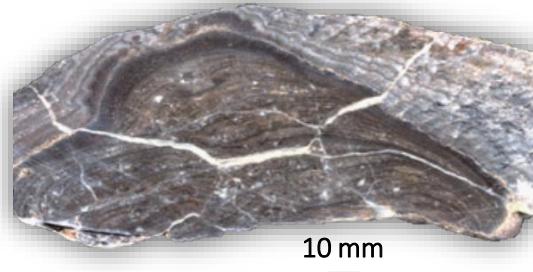
Preservation

Modern/fresh samples



Microbial mats (Prieto-Barajas, 2018)

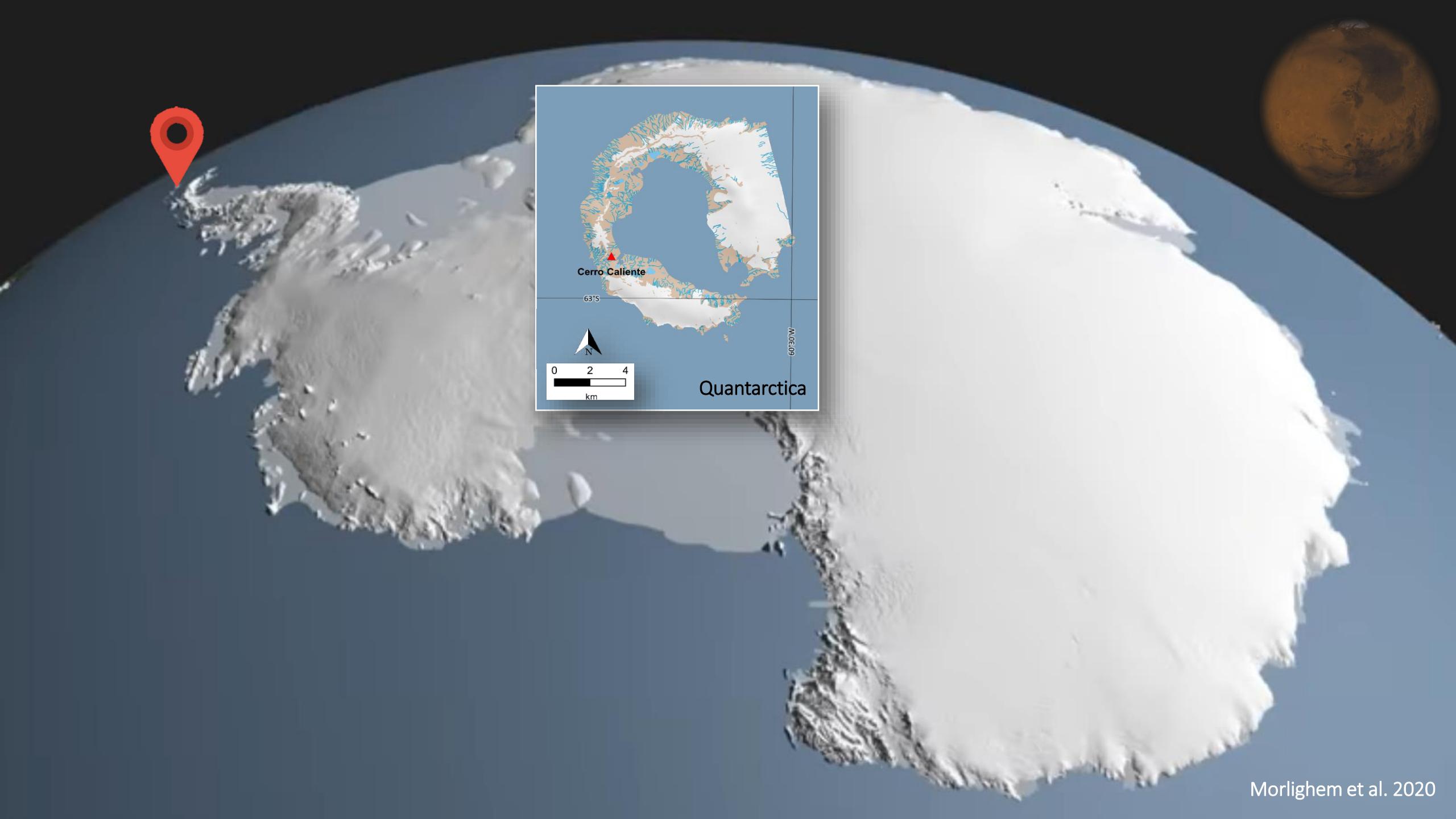
Ancient samples



Stromatolites from Cotici lacustrine deposits (Italy) (Tunis et al. 2011)

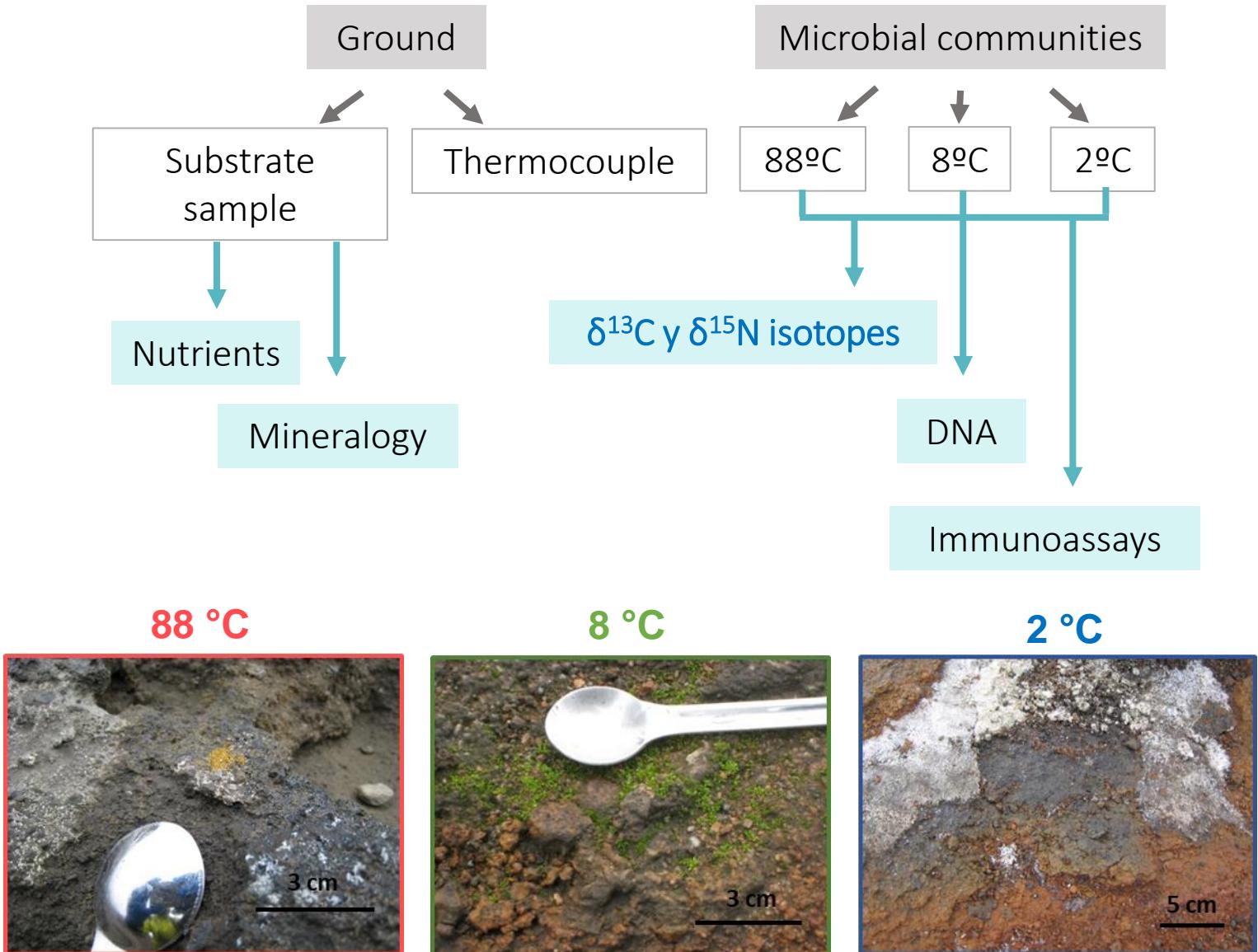
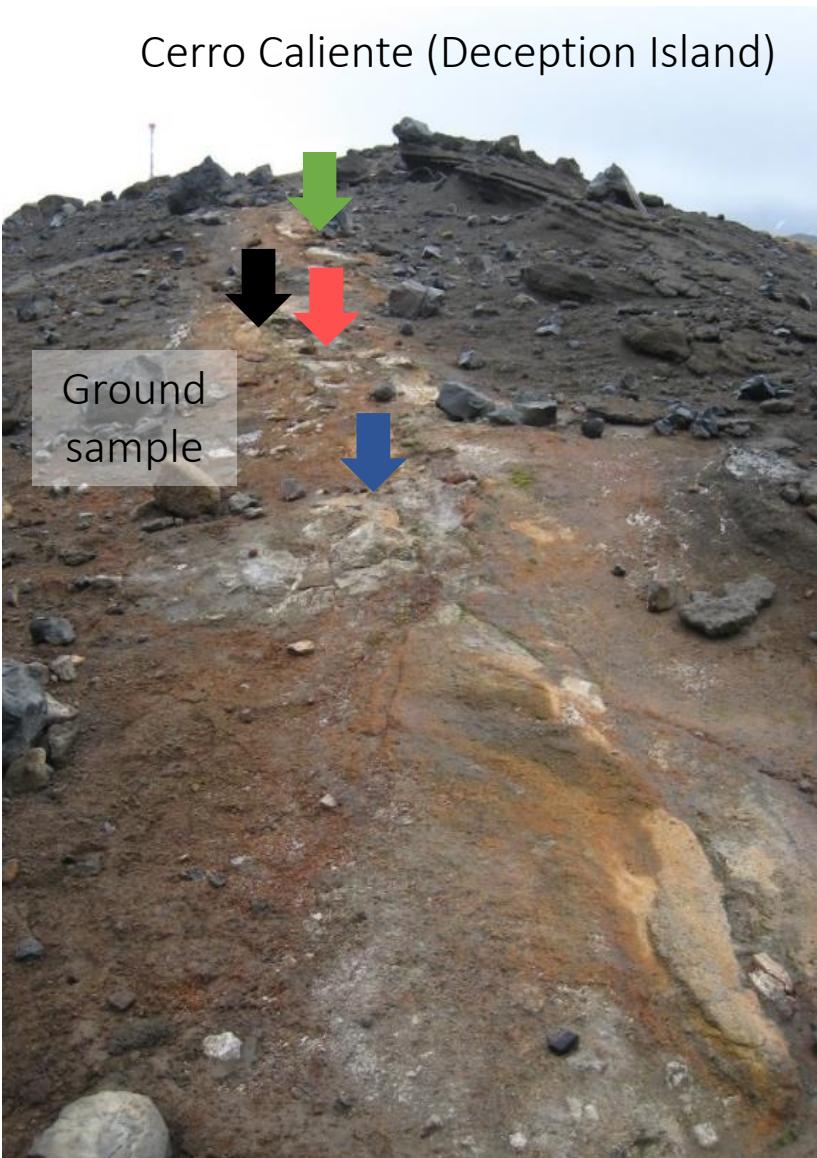


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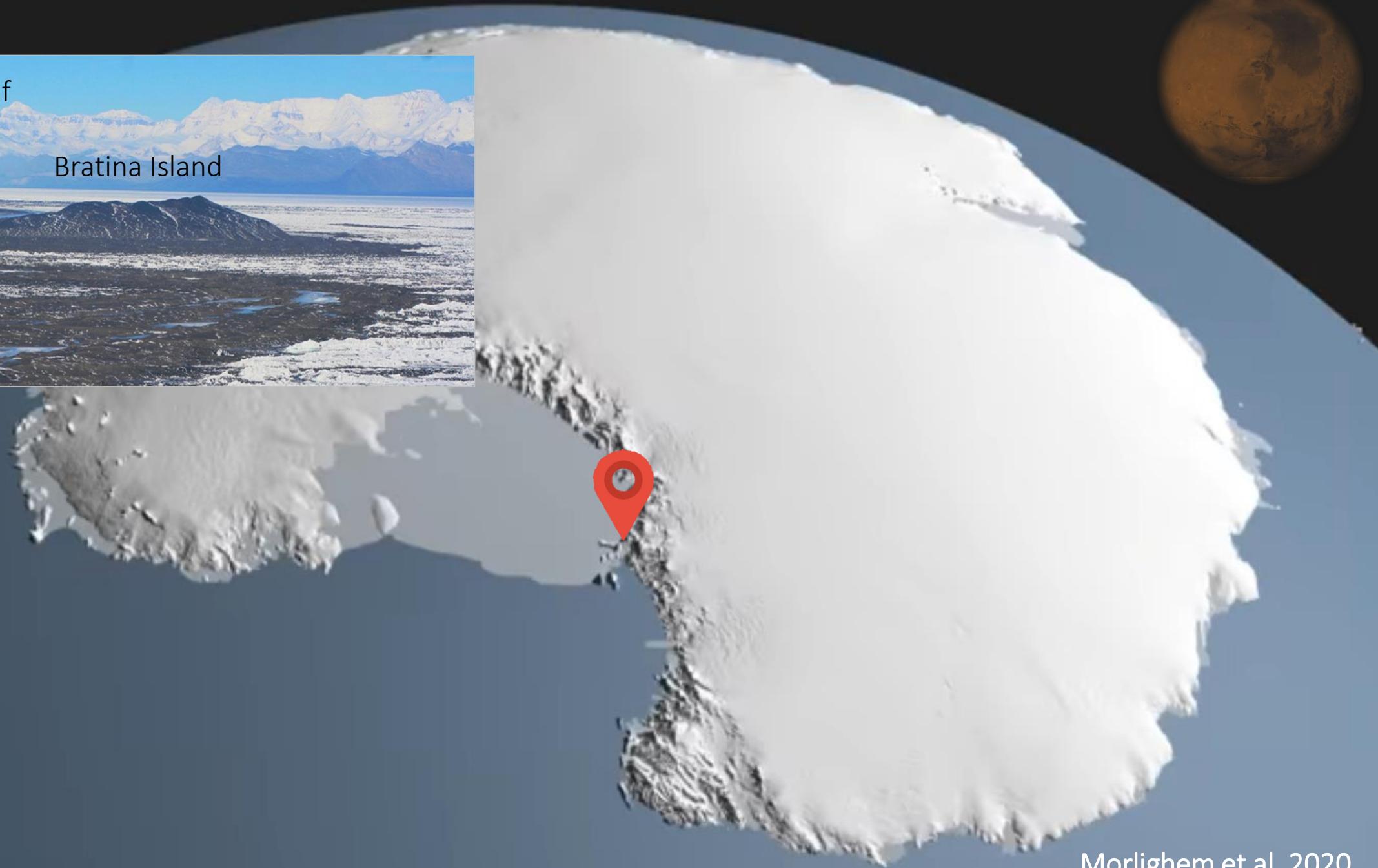
# Geothermal environment

Sampling: 2 February 2012





Hawes et al. 2018

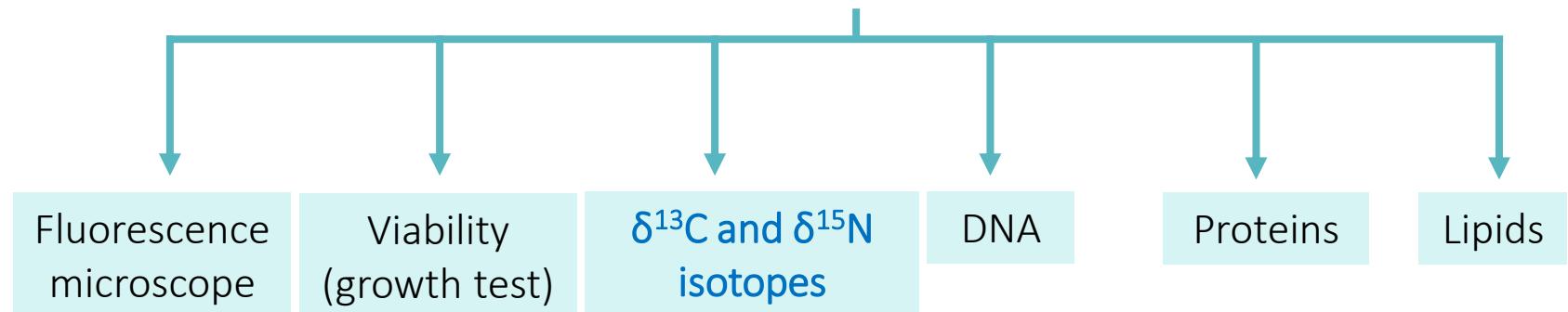


# Cold and dry environment



Quesada and Vincent, 2012

Microbial mat  
(~1,000 years BP)





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# Thanks for your attention!

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[mangeles.lezcano@cab.inta-csic.es](mailto:mangeles.lezcano@cab.inta-csic.es)

[mangeles.lezcano@gmail.com](mailto:mangeles.lezcano@gmail.com)