



## Experiences from Ny Ålesund based lab- and field work in 2010

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# AMASE

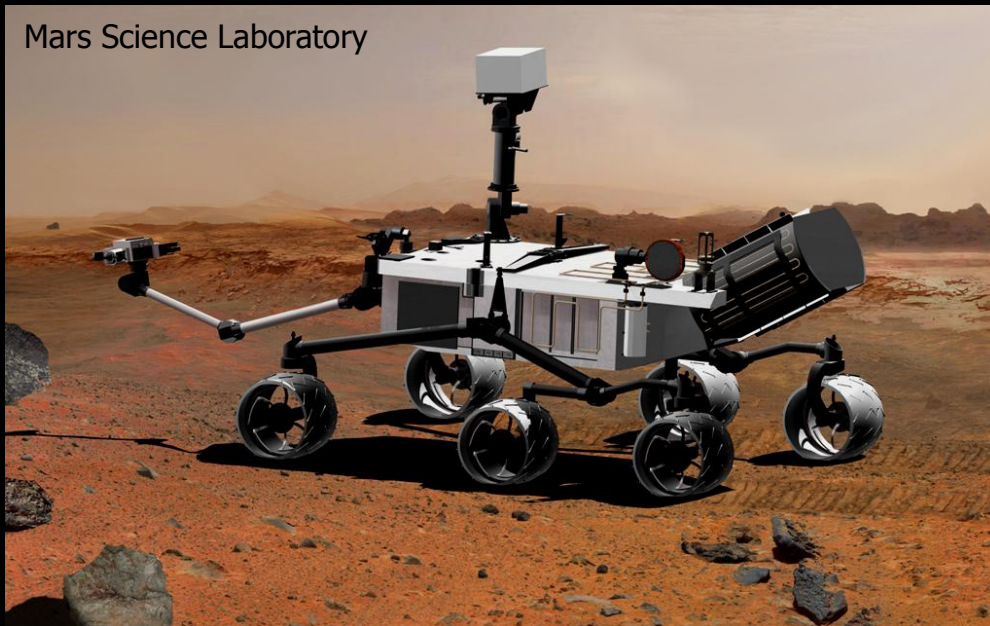


Basic research within astrobiology

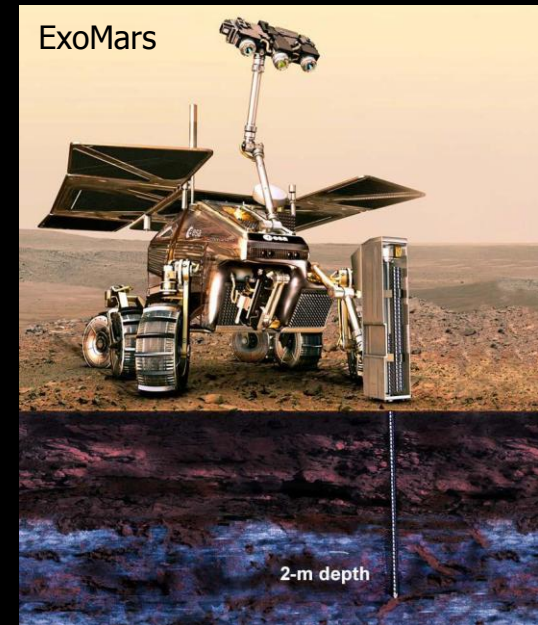
Instrument testing for Search for Life missions to Mars

- Mars Science Laboratory (NASA - 2011)
- ExoMars & MAX-C (NASA/ESA - 2018)
- Mars Sample Return (International mission - >2020)

Mars Science Laboratory



ExoMars



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## Testing of Mars rover instruments

- Panoramic camera, Microscopic imager, Rock Crusher, XRD/XRF, Raman spectrometer, GCMS (x2)
- Training of instrument teams (esp. NASA/ESA collaboration)

## Establish criteria for life detection on Mars

- How to differ between abiogenic and biogenic carbonate deposits?



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## Accommodation and labs in Ny Ålesund

- 32 crew members (8 staff, 12 NASA, 10 ESA, 2 Univ Leeds)
- 333 man-days
- Helicopter support (35 takeoffs/landings)

## Field sites

- Sigurdfjell (Bockfjord)
- Troll springs (Bockfjord)
- Friedrich Glacier (Bockfjord)
- Midtre Löwen Glacier (Ny Ålesund)
- Knorringfjellet (Isfjord)



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## Experiences

- Established powerful terrestrial lab (> 16 instruments)
- Ca 100 man-days in the field (weather limitations)
- Excellent support in Ny Ålesund



# AMASE beyond 2010



Similar volume of instruments and people in 2011?

- Combine Ny Ålesund with ship activities?
- Field activities at Collettfjellet and Bockfjord/Woodfjord?

# AMASE beyond 2010



Apply for NySMAC membership

Increase collaboration with other stations/projects in Ny Ålesund

- Science, instruments, field work
- AMASE instruments available for Ny Ålesund terrestrial lab



# AMASE beyond 2010



Ny Ålesund as regular base for NASA/ESA Mars analog activities

- Preparations for NASA/ESA "twin rover mission" in 2018



# AMASE 2010



Thank you!

