

Some results about MARS EXPRESS Data



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Minivicar Superhero: Angelo Pio Rossi

What we use?



High Resolution Stereo Camera (HRSC)

+

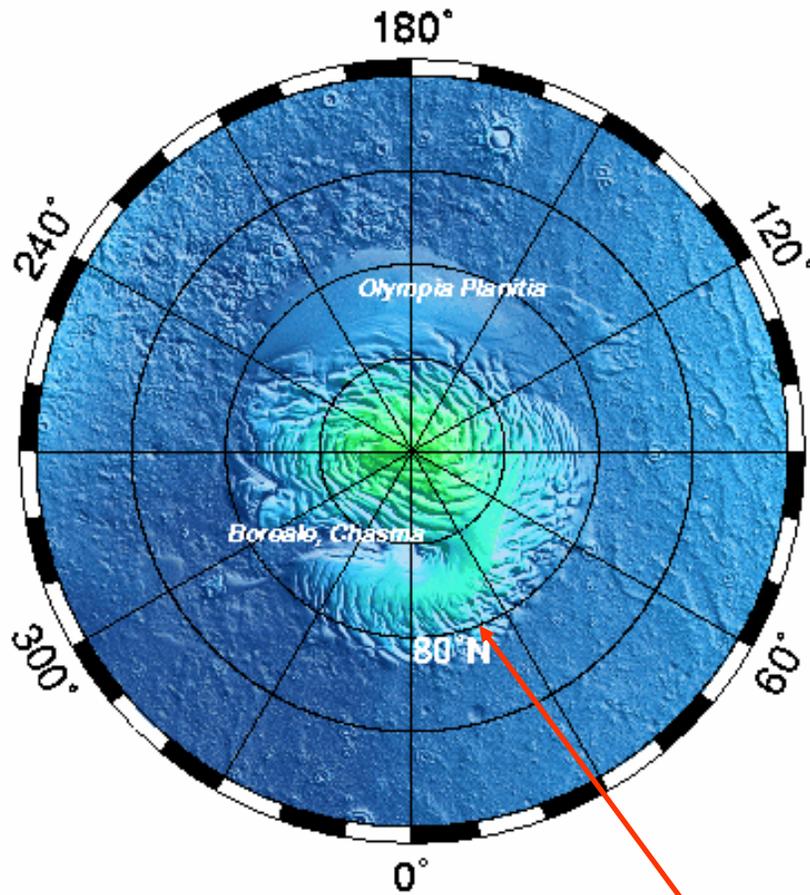
**Mars Orbiter Laser Altimeter (MOLA)
(Topography)**



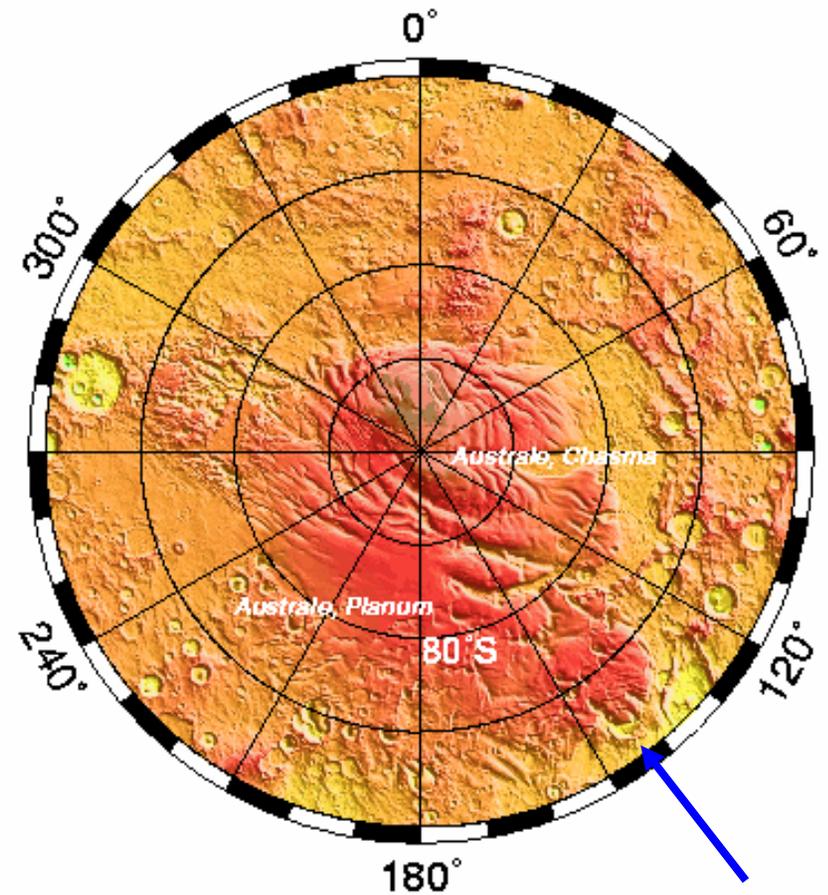
MARSIS Sub-Surface Sounding Radar Altimeter

**Data still not available, but soon.
It will be possible to calculate the deep of some
structures, e.g. glaciers.**

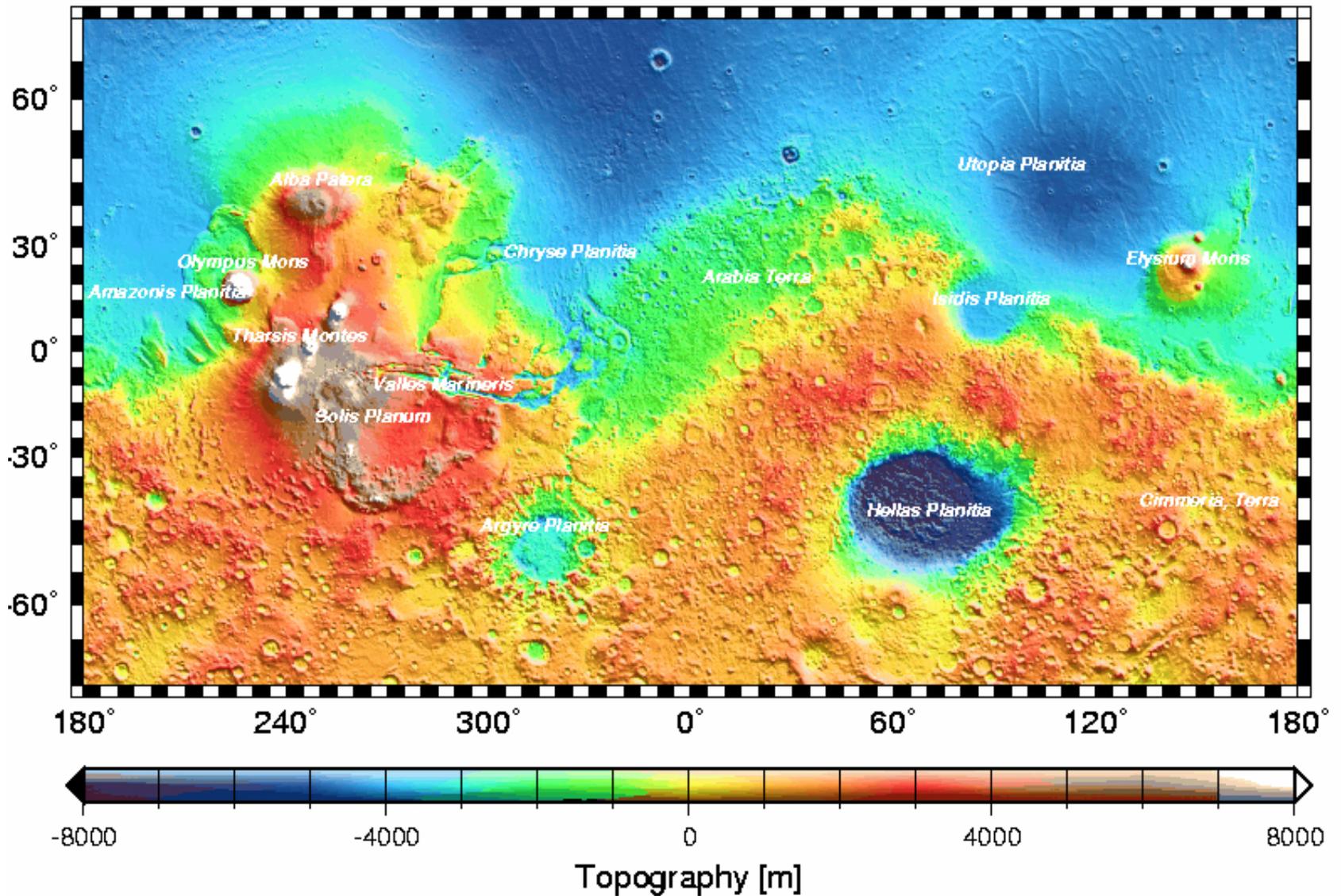
Why the South Pole?



North Pole 'restricted' at Lat 80 N



South Pole apparently spread



Note that South Hemisphere has more altitude

Line: 3446 Lat: -86.28516407 Lon: 117.0497792 E Planetocentric

amp: 3494

Key: -14196

Image Size (NSxNL):

6791

Zoom Factor

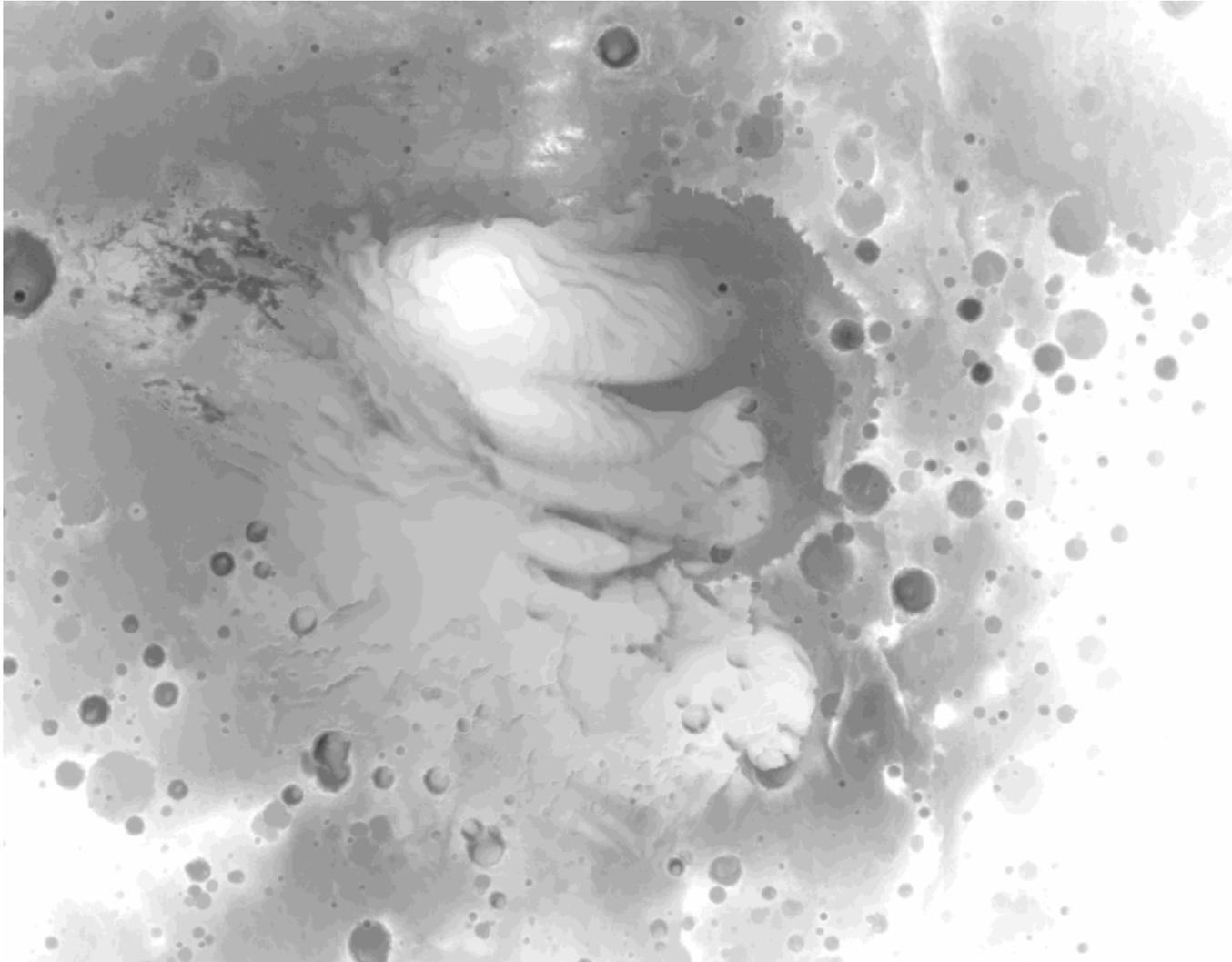
1/2



Not absolute depth !



Mola stretch



How to find your images ?

We insert the coordinates of our interest

Here we find a list of all images
available of our coordinates

Home » HRSCview

HRSCview data explorer

Download 2348_0000 ▾

Latitude, °N Longitude, °E

-82.000 144.000

Footprint map

All images

Archive DTMs

Footprint scale, km/pix 30 ▾

Image mode

Nadir DTM

Elevation Contours

Colour:

Mars-like Raw

Stretched Enhanced

Ratio Substitute IR

Image scale, m/pix 200 ▾

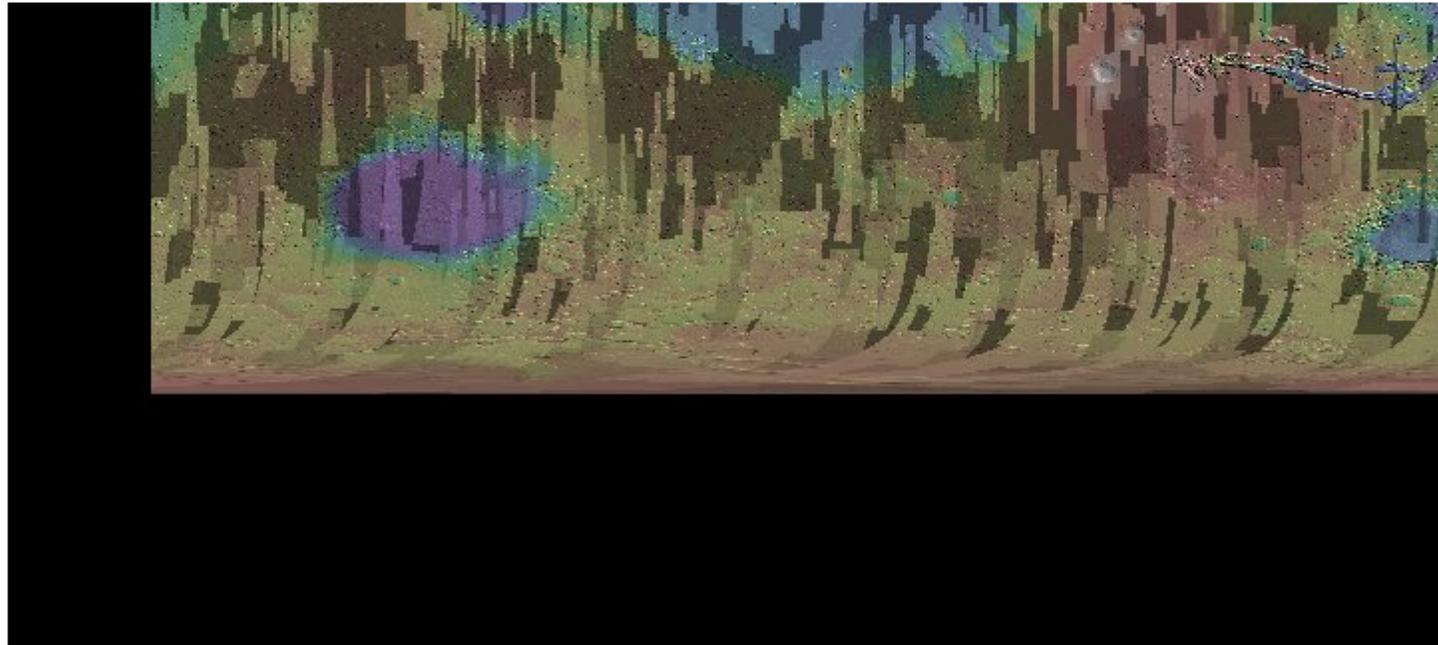
Perspective view

Direction Exaggeration

North ▾ 1.5 ▾

View size 720x360 ▾

Update view



Downloading what ?

- How to use HRSCview
- Frequently asked questions
- Data usage policy
- Mars Express and HRSC
- FUB Planetology and Remote Sensing
- DLR Institute for Planetary Research
- ESA Planetary Science Archive

[Home](#) » [HRSCview](#) » [HRSC science data product](#)

HRSC image 2348_0000

[View image footprint](#)

Product description

Please see the [data usage policy](#) for how to reference the data in publications.

Channel	Resolution, m/pix	Dimensions, pix	Download (level 2)	Download (level 3)	Download (level 4)
Nadir (panchromatic)	12.5	19152x30720	H2348_0000_ND2.IMG	H2348_0000_ND3.IMG	
Infra-red	50.0	4788x7680	H2348_0000_IR2.IMG	H2348_0000_IR3.IMG	
Red	50.0	4788x7680	H2348_0000_RE2.IMG	H2348_0000_RE3.IMG	
Green	50.0	4788x7680	H2348_0000_GR2.IMG	H2348_0000_GR3.IMG	
Blue	50.0	4788x7680	H2348_0000_BL2.IMG	H2348_0000_BL3.IMG	
Photometry 1				H2348_0000_P12.IMG	
Photometry 2				H2348_0000_P22.IMG	
Stereo 1				H2348_0000_S12.IMG	
Stereo 2				H2348_0000_S22.IMG	
Elevation	200.0	1197x1920			

1 night to download !
You're not able to do
Anaglyphs for stereo

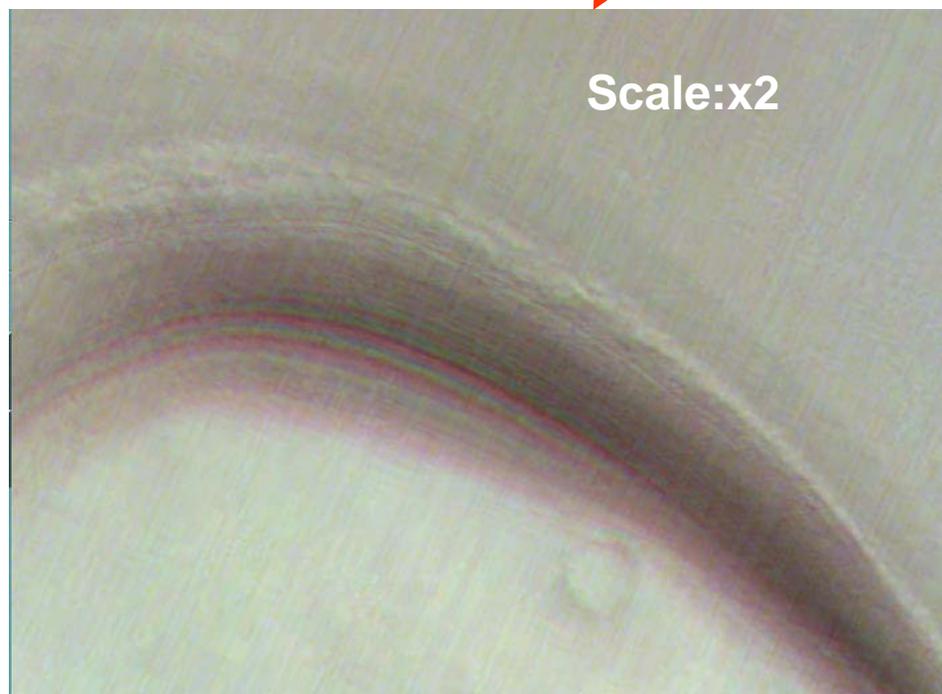
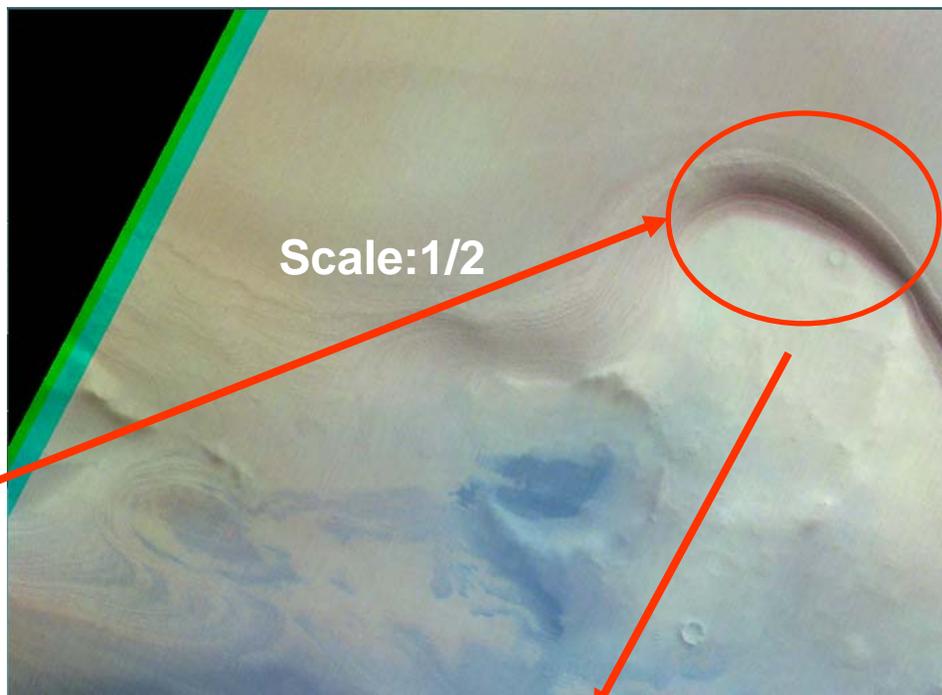


???

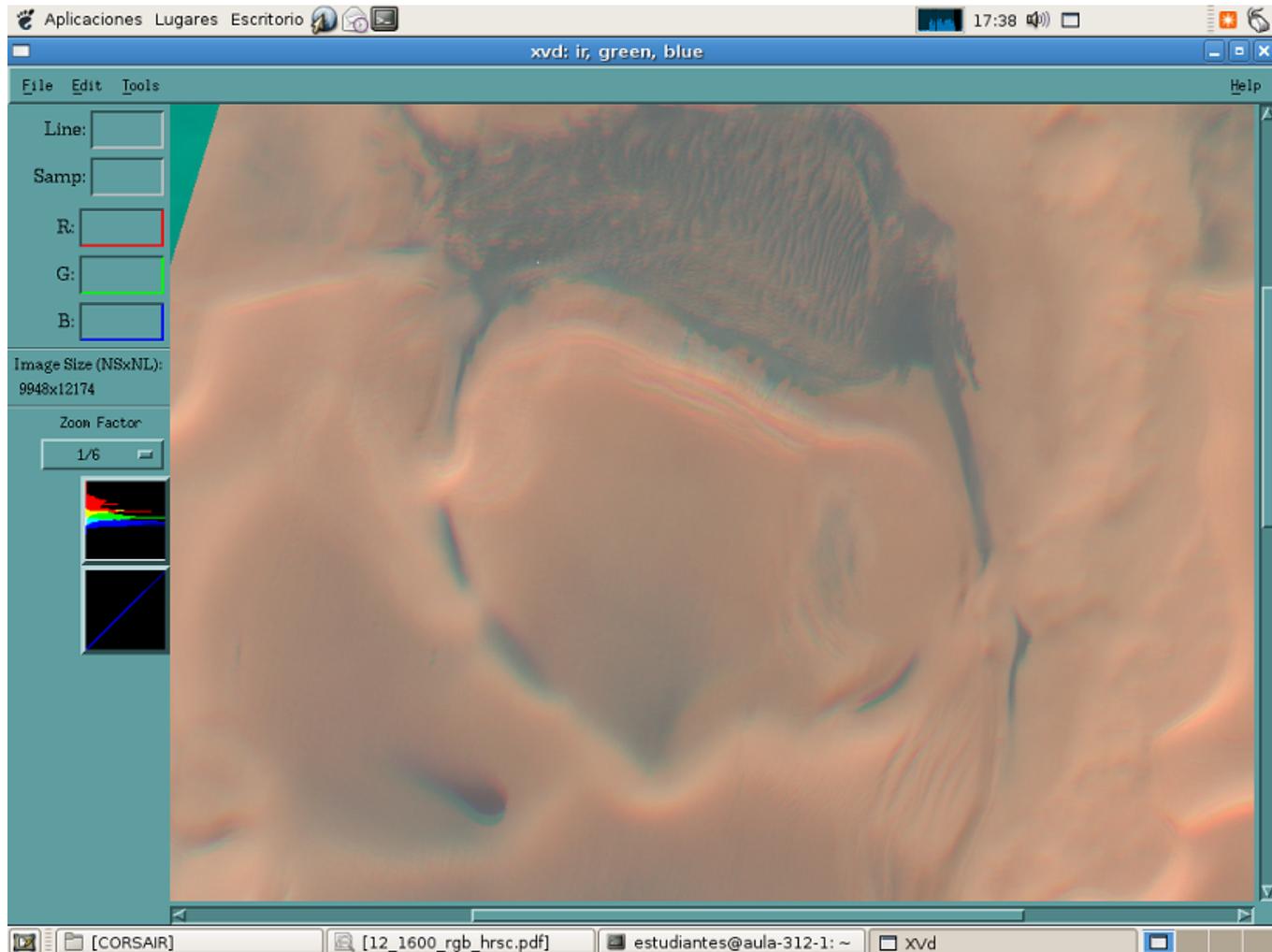
RGB from
HRSC2348 at different scales
(with xvd, Level 3)



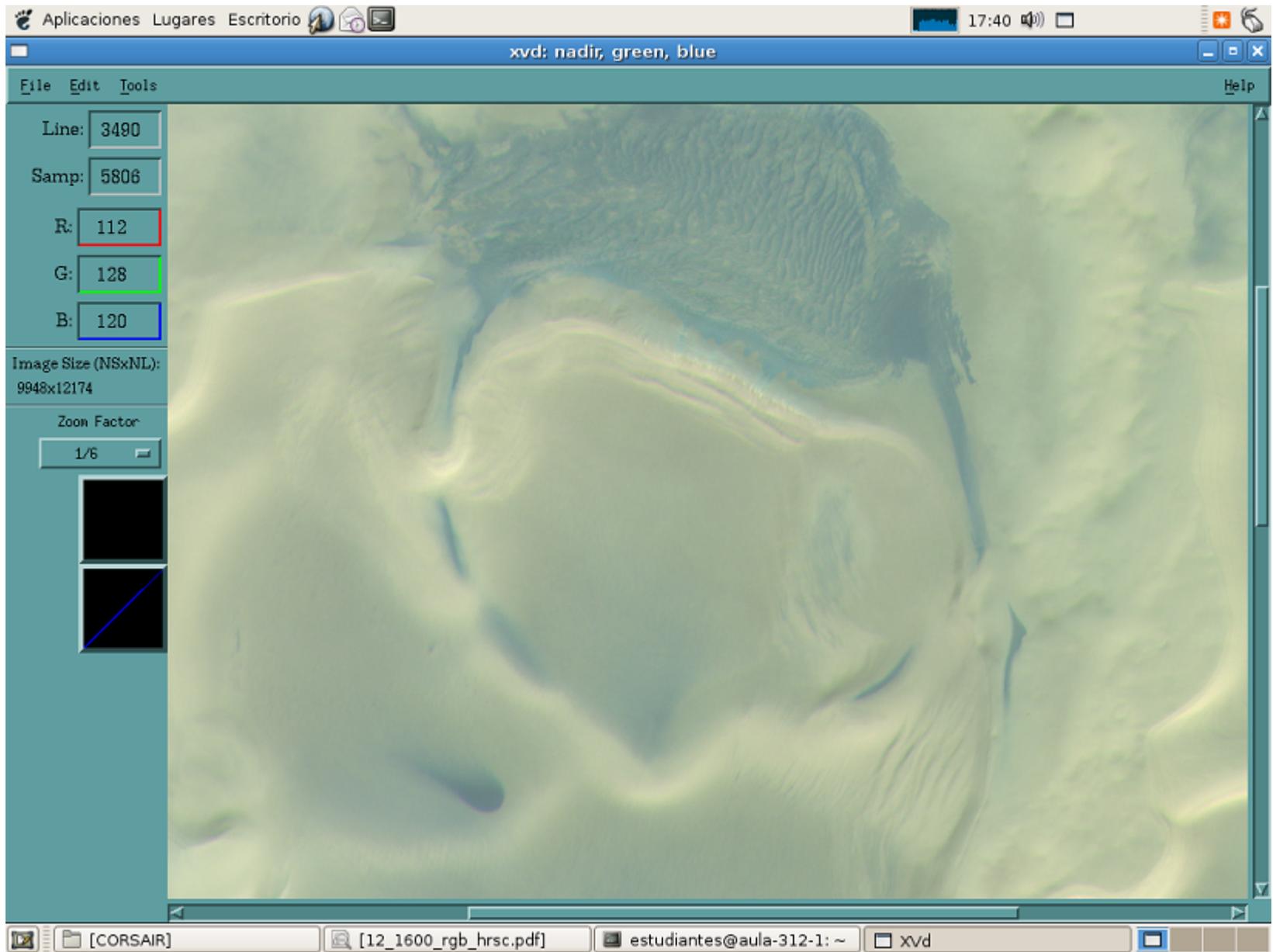
Maxlatitude=-78.2748
Minlatitude=-84.9491
Westernmost_Long=129.197



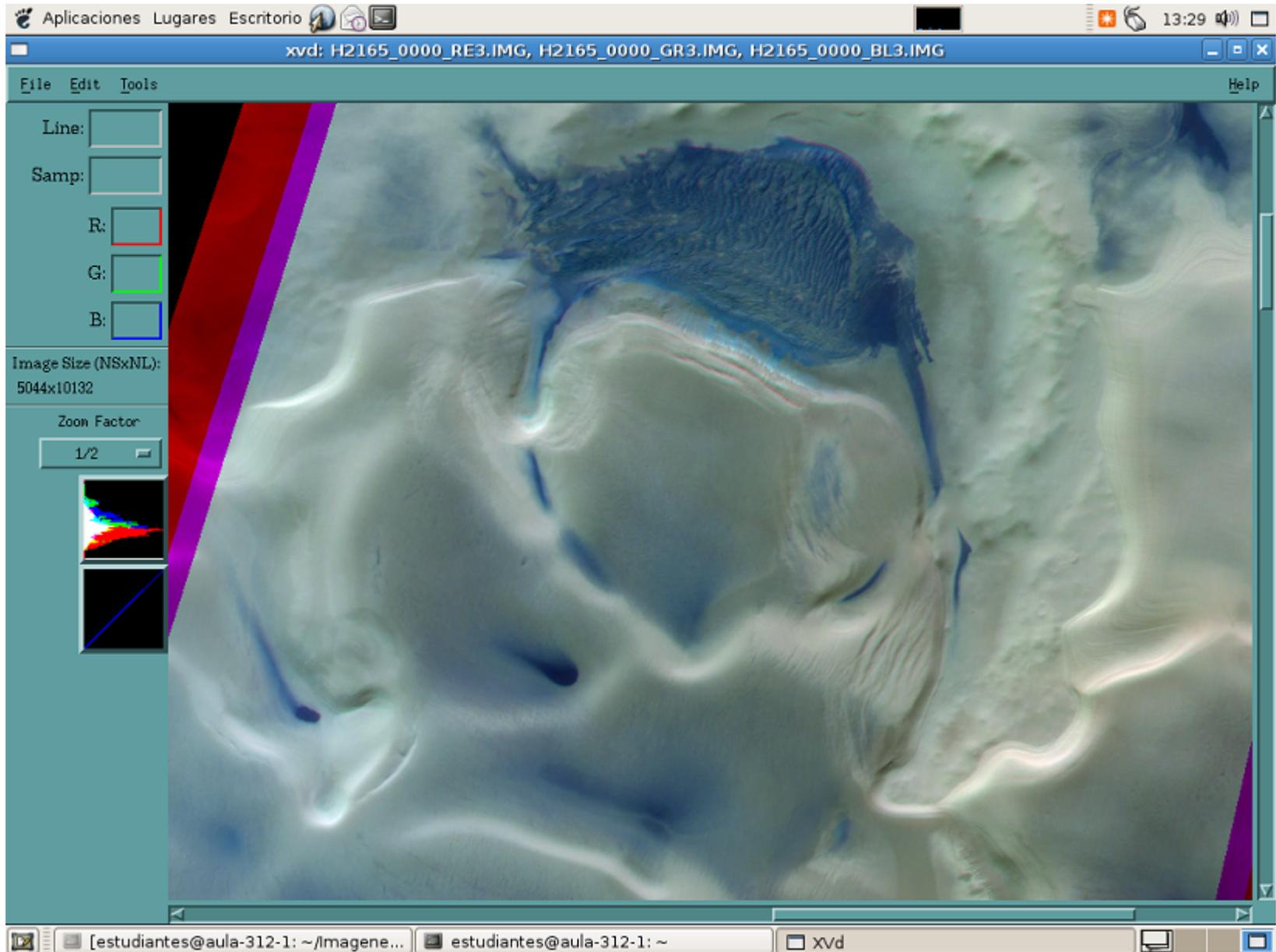
HRSC (with xvd, Level 2)



IR,G,B of 2165

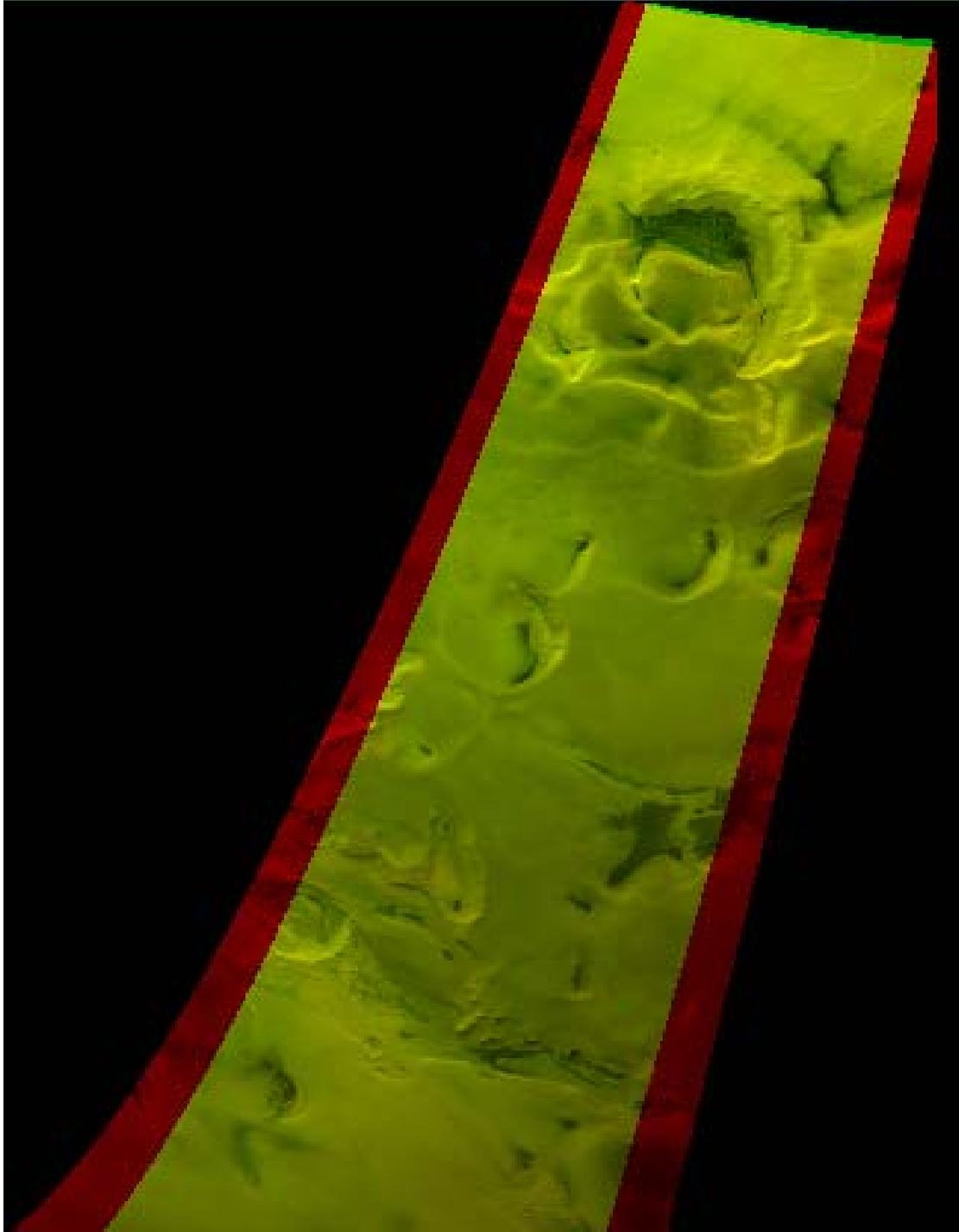


nadir,G,B of 2165 (higher resolution but 'cheating')



R,G,B of 2165, Level 3

R + G (Level 3)
No anaglyph





Further projects

- To continue handle Mars Express data (run software, make scripts and so on)
- So, send a lot of emails to Angelo ☺
- Use the available data for the different instruments of Mars Express to our particular research field interest:
 - **Andrea: Exobiology and paleoclimatology**
 - (e.g. Laskar et. Al, 2004)
 - **Esmeralda: Water in the Solar System**
- **GET A NEW PC !!!!**