iMars - Analysis of Mars multi-resolution images using auto-coregistration, data mining and crowd source techniques

iMars webGIS for visualisation of new global products from iMars

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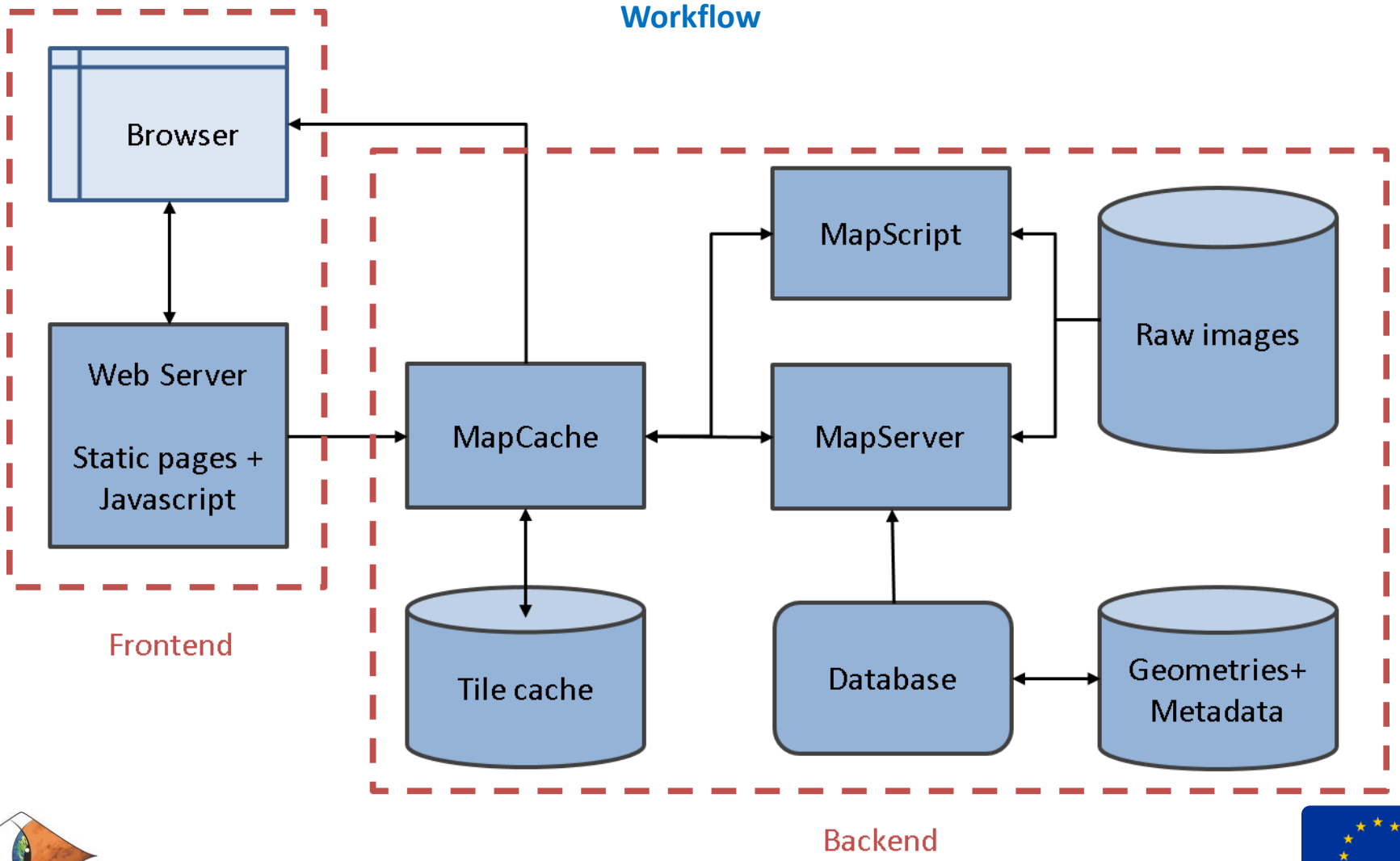
iMars webGIS – System Design



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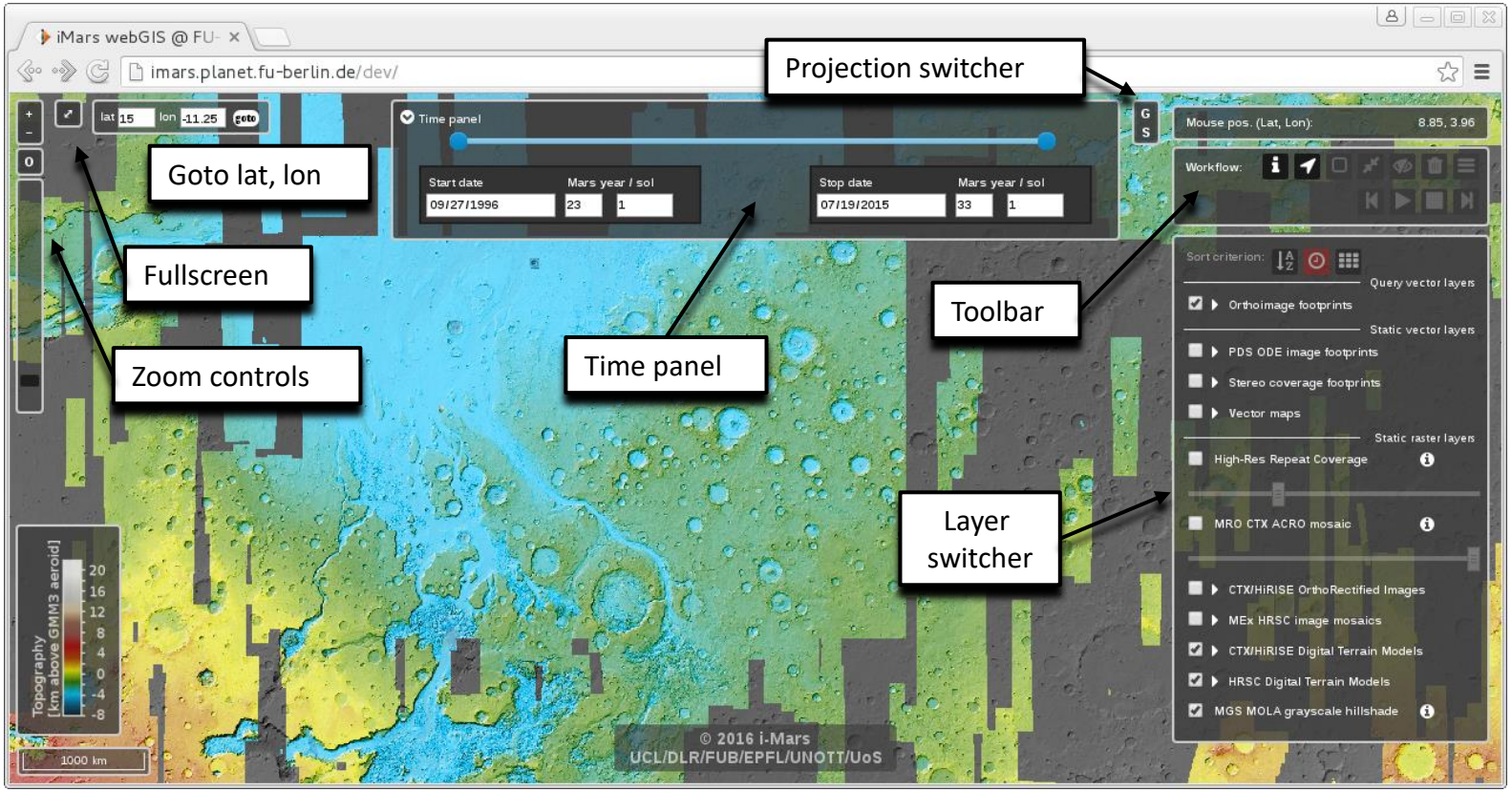
iMars webGIS – System Design

User interface (frontend)



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iMars webGIS - Layers

Overview

- Topographic base layers – group of DTM layers
  - MOLA, HRSC single, HRSC mosaic, CTX, HiRISE
- HRSC image mosaics
  - Panchromatic and colour with transparency slider
- CTX/HiRISE Orthorectified images
  - Orthoimages from UCL & UoS
- High-Res Repeat Coverage
- Vector Maps (Landing site markers, quadrangle scheme, nomenclature)
- Coverage maps (from NASA and iMars)
- Queryable image footprints (ACRO + HRSC)

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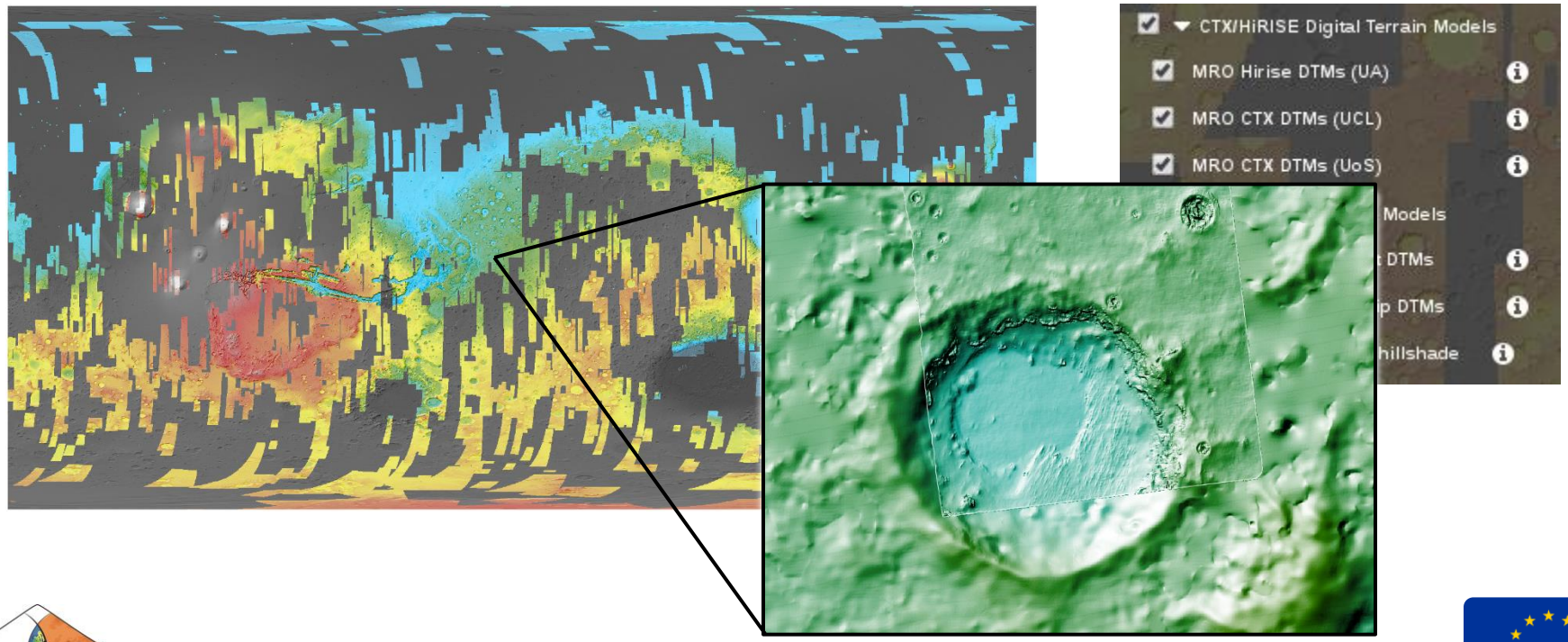
iMars webGIS - Layers

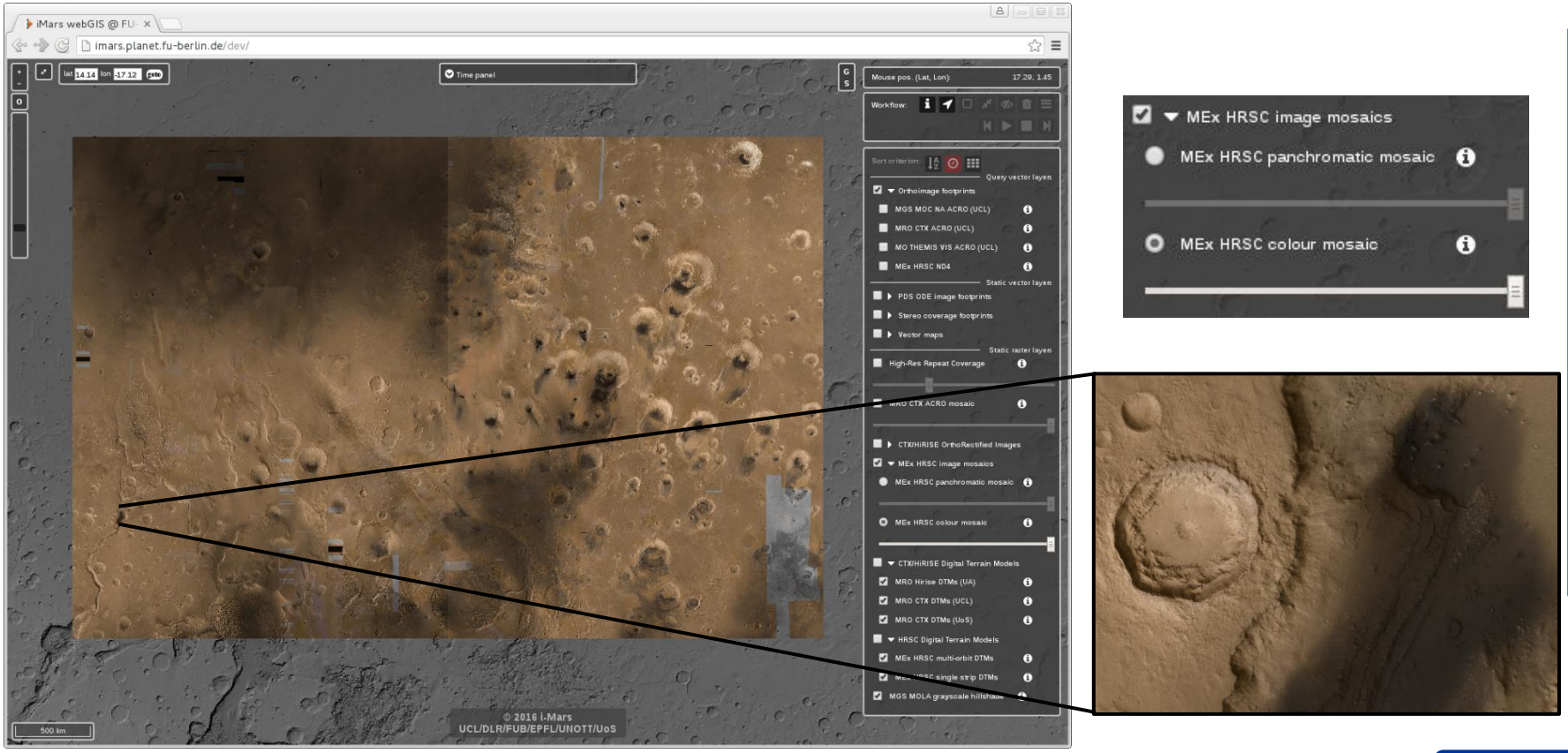
Topographic base map layer

- Stack of colour-coded shaded relief maps of available DTM data
- HRSC mosaics, HRSC single-strips, CTX, HiRISE



iMars webGIS - Layers

Mex HRSC MC11 image mosaics (panchromatic + colour)



12.5 m/pixel

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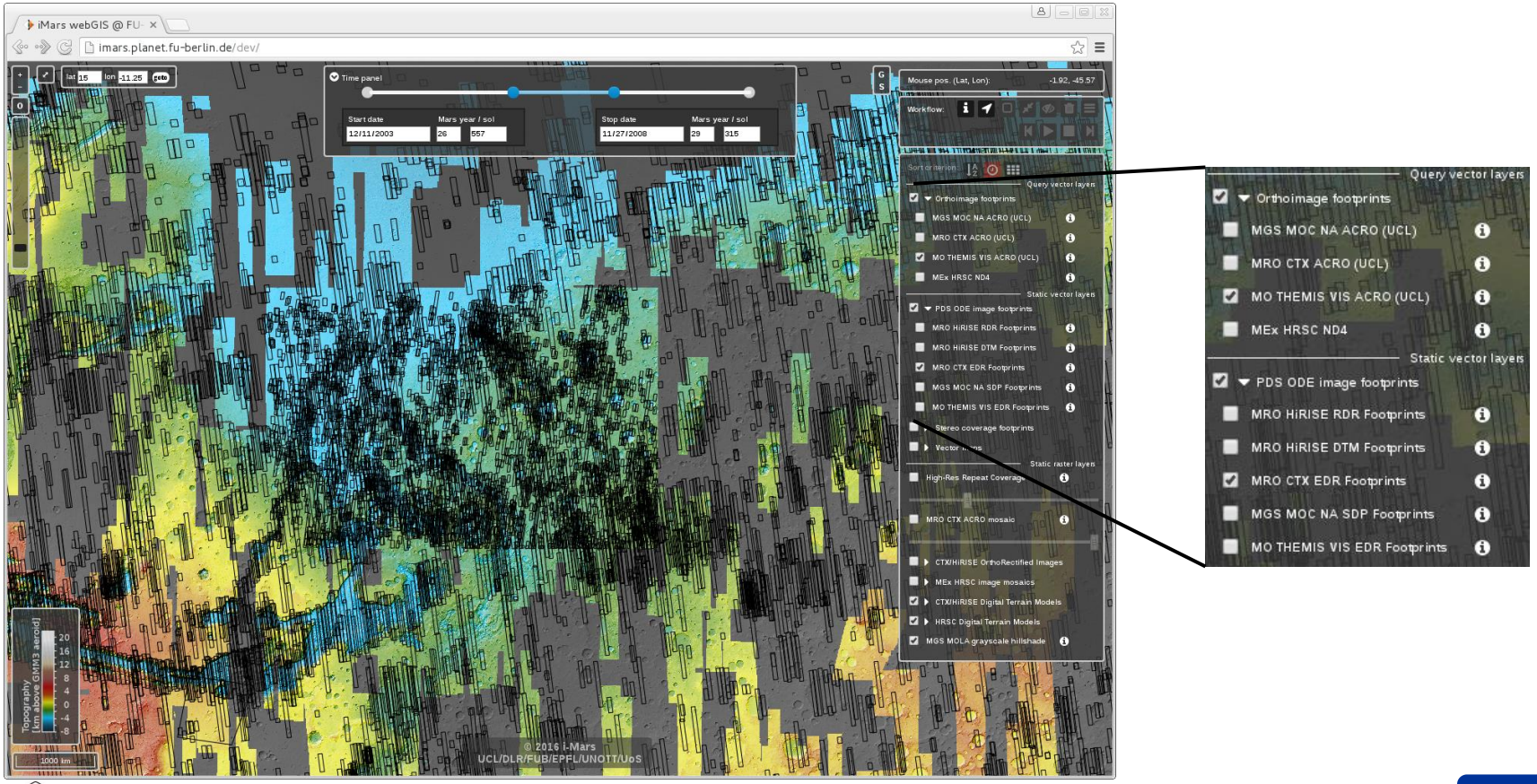
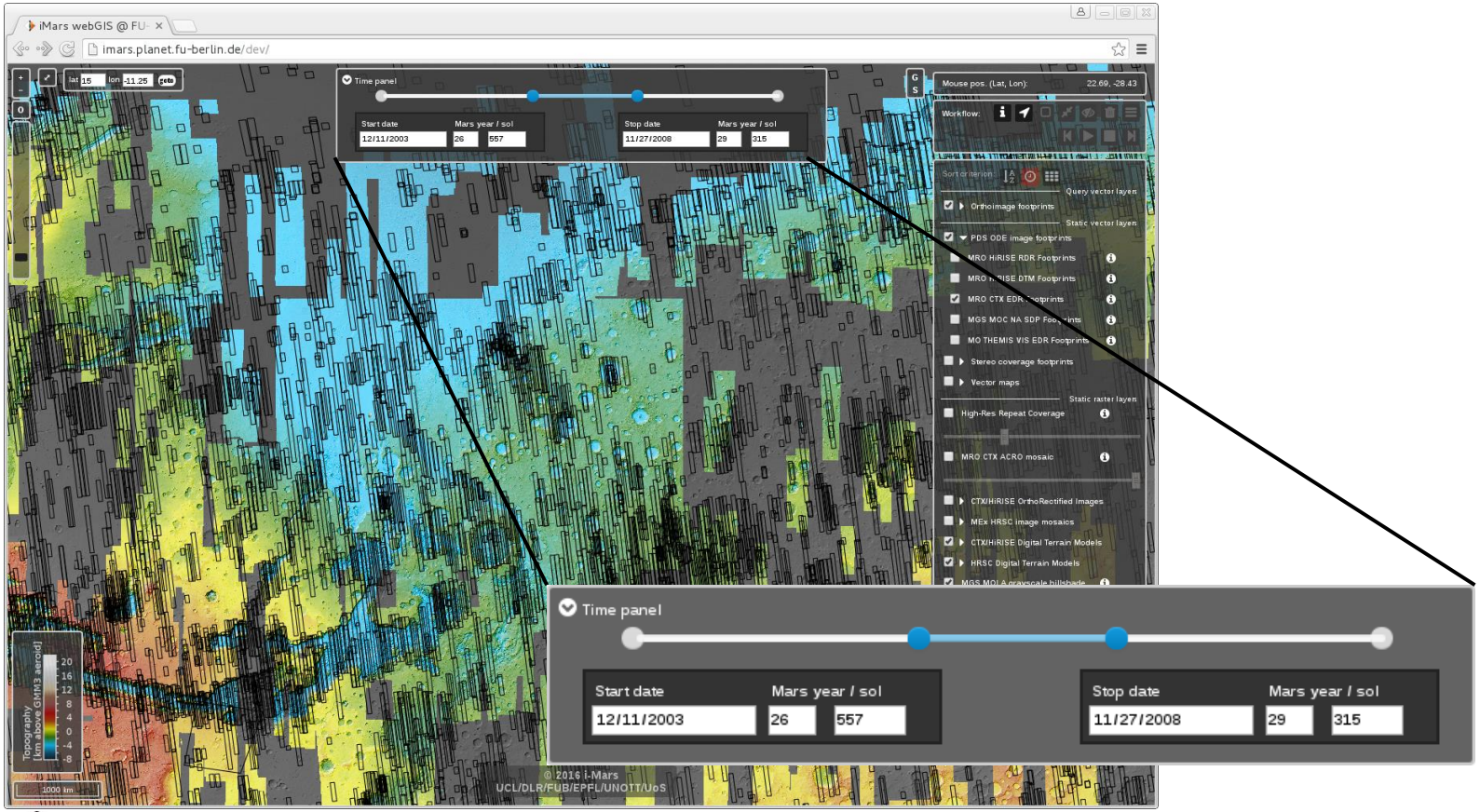
iMars webGIS - Layers

Footprint coverage layers (NASA + iMars)



iMars webGIS - Layers

Time Slider



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iMars webGIS – Single Images

Dynamic single image layers – workflow example

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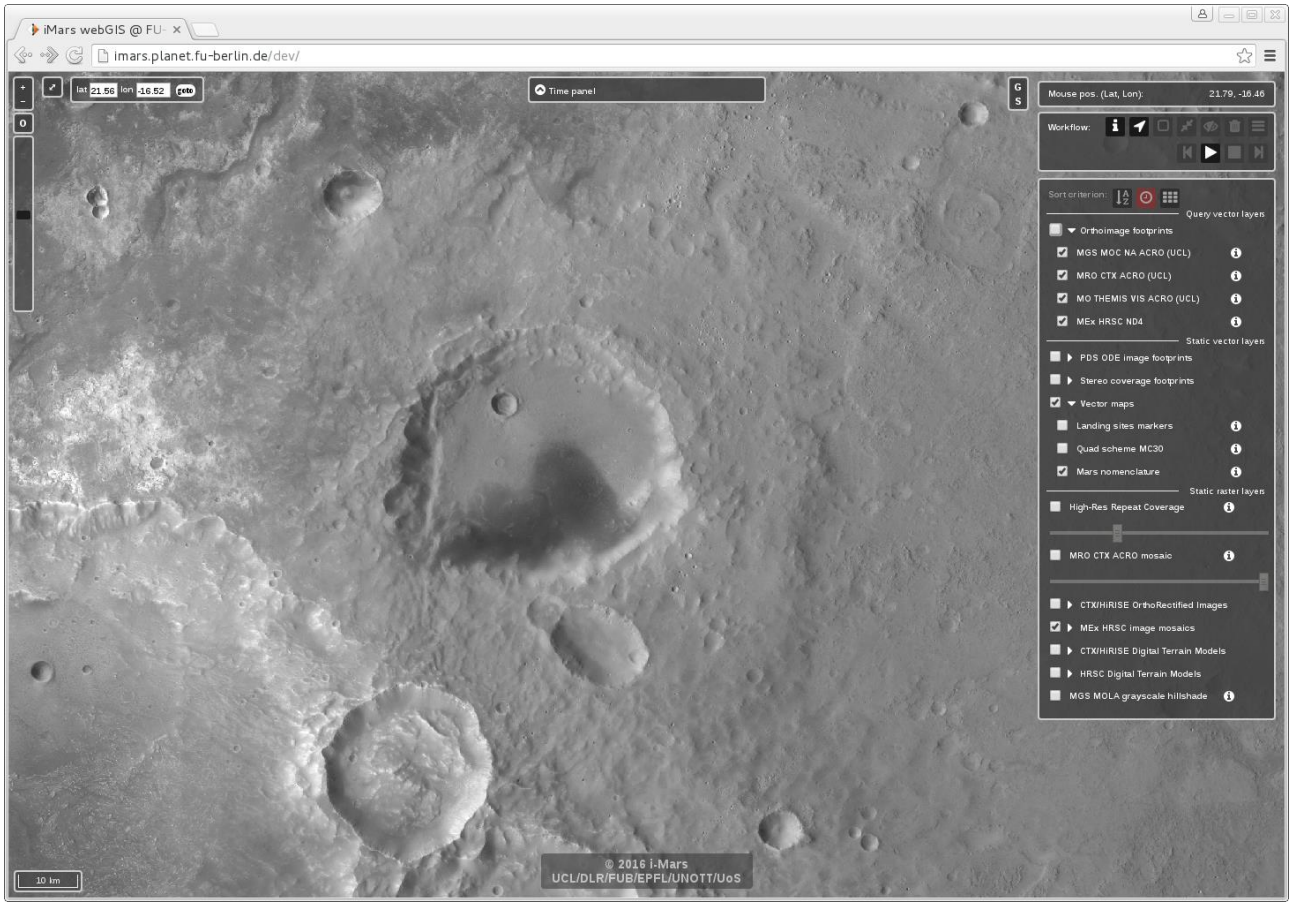

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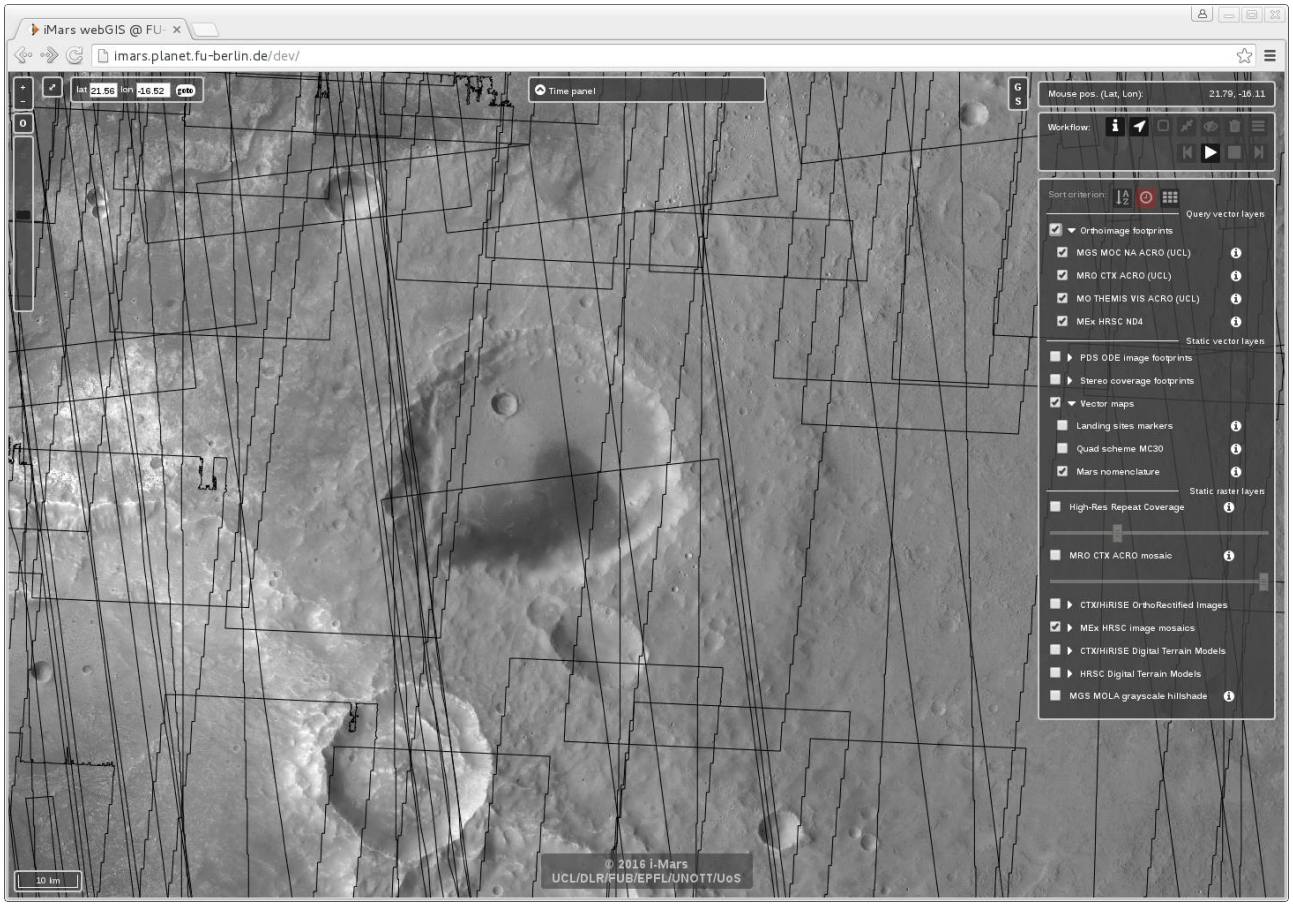

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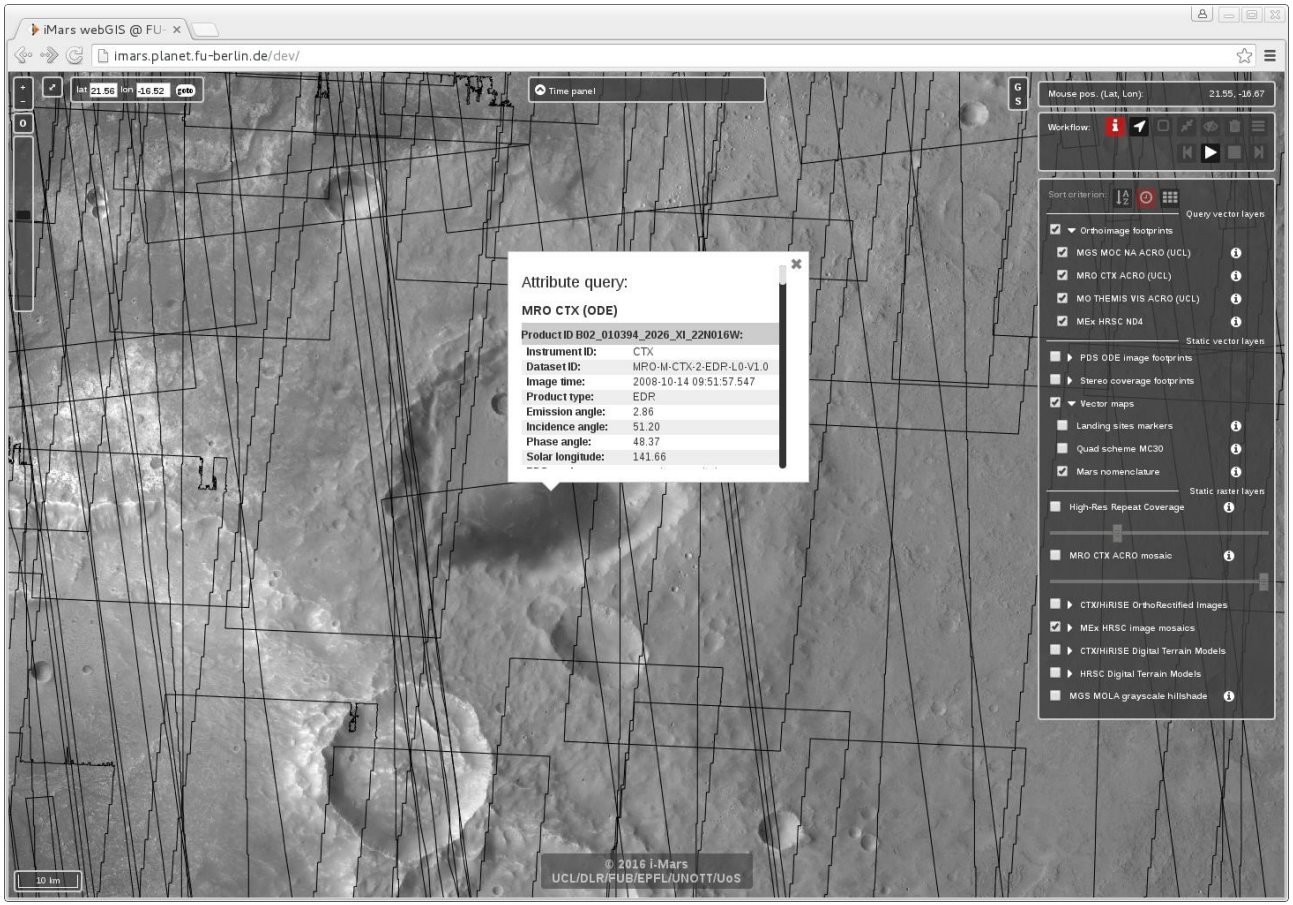

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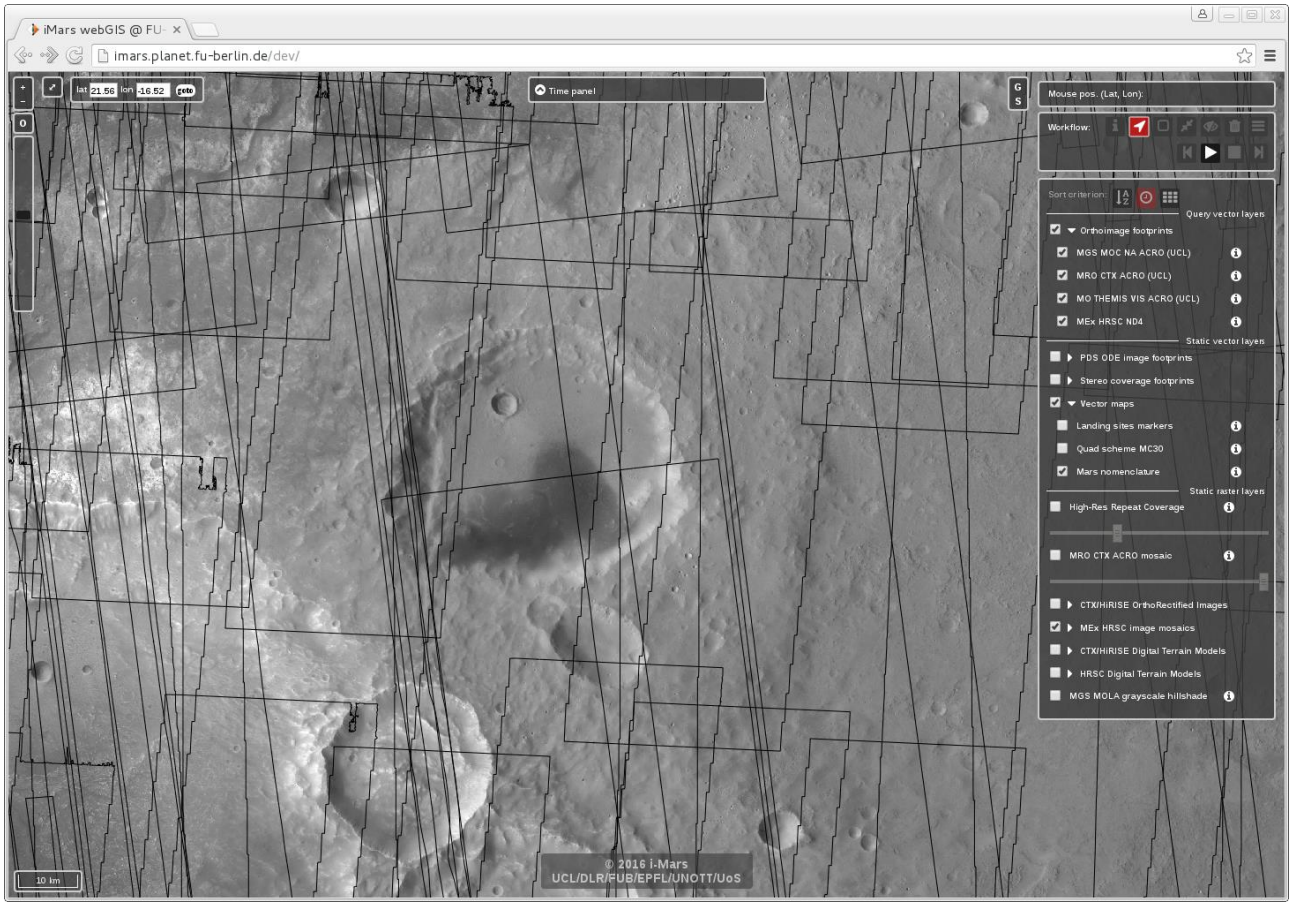

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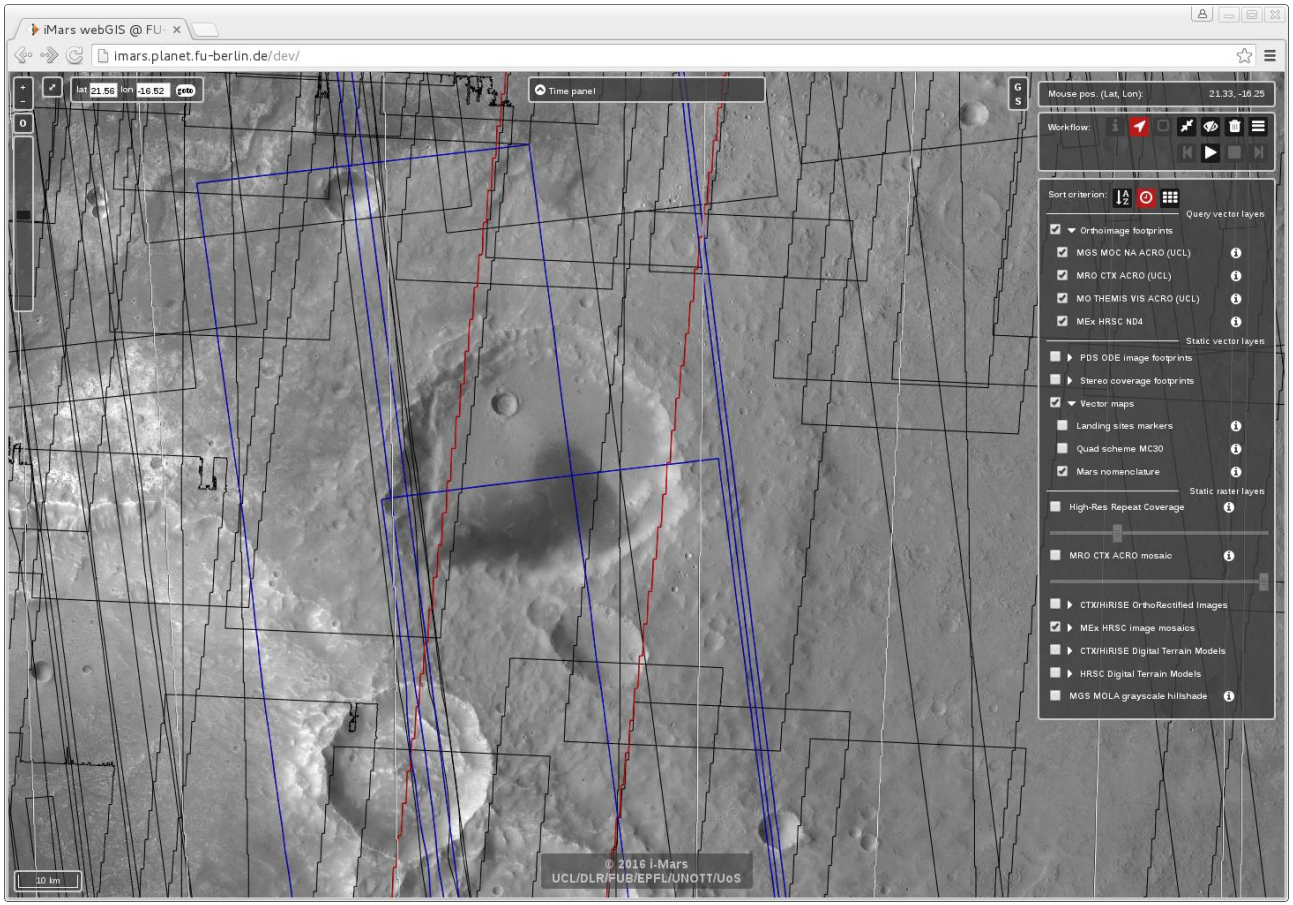

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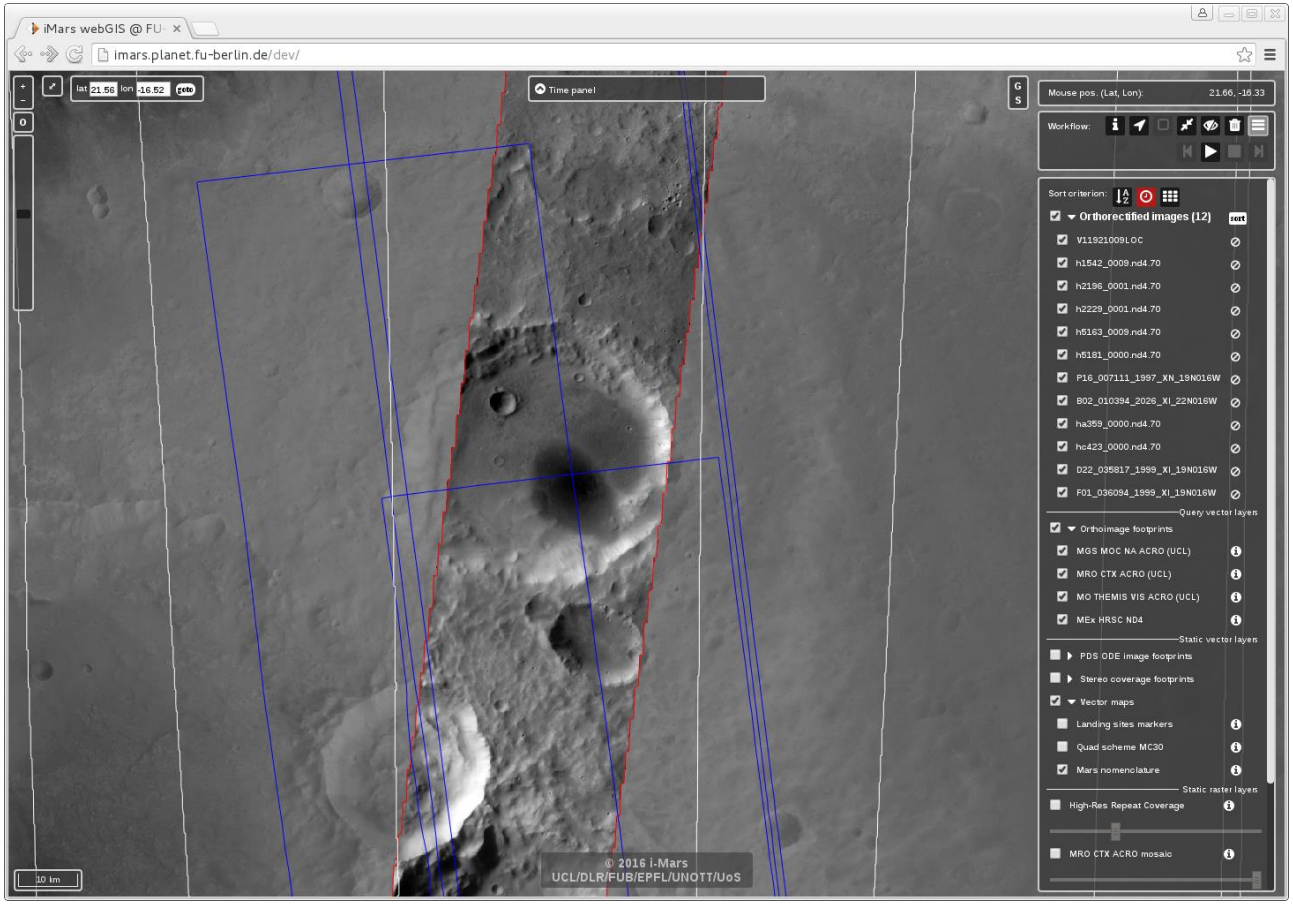

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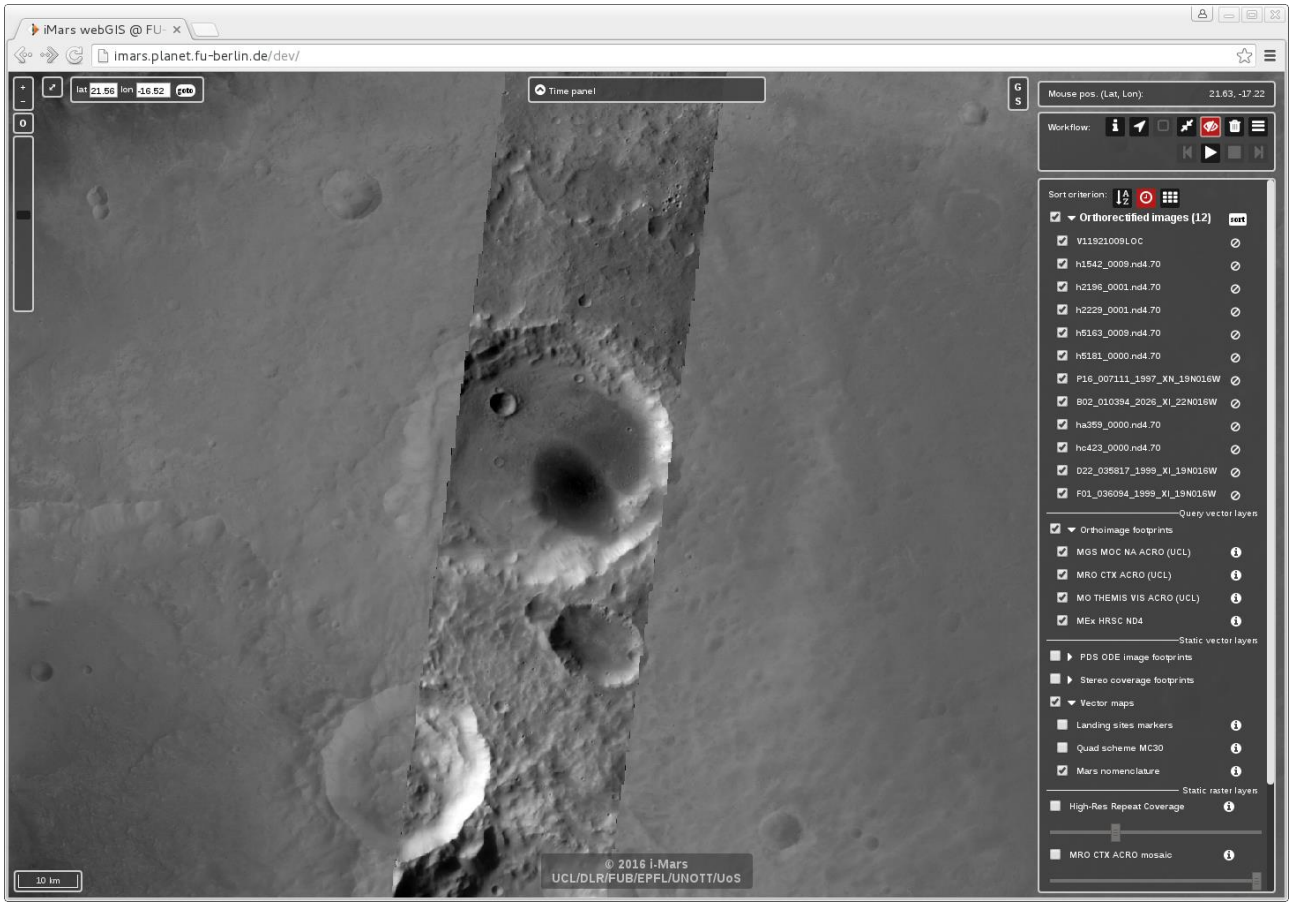

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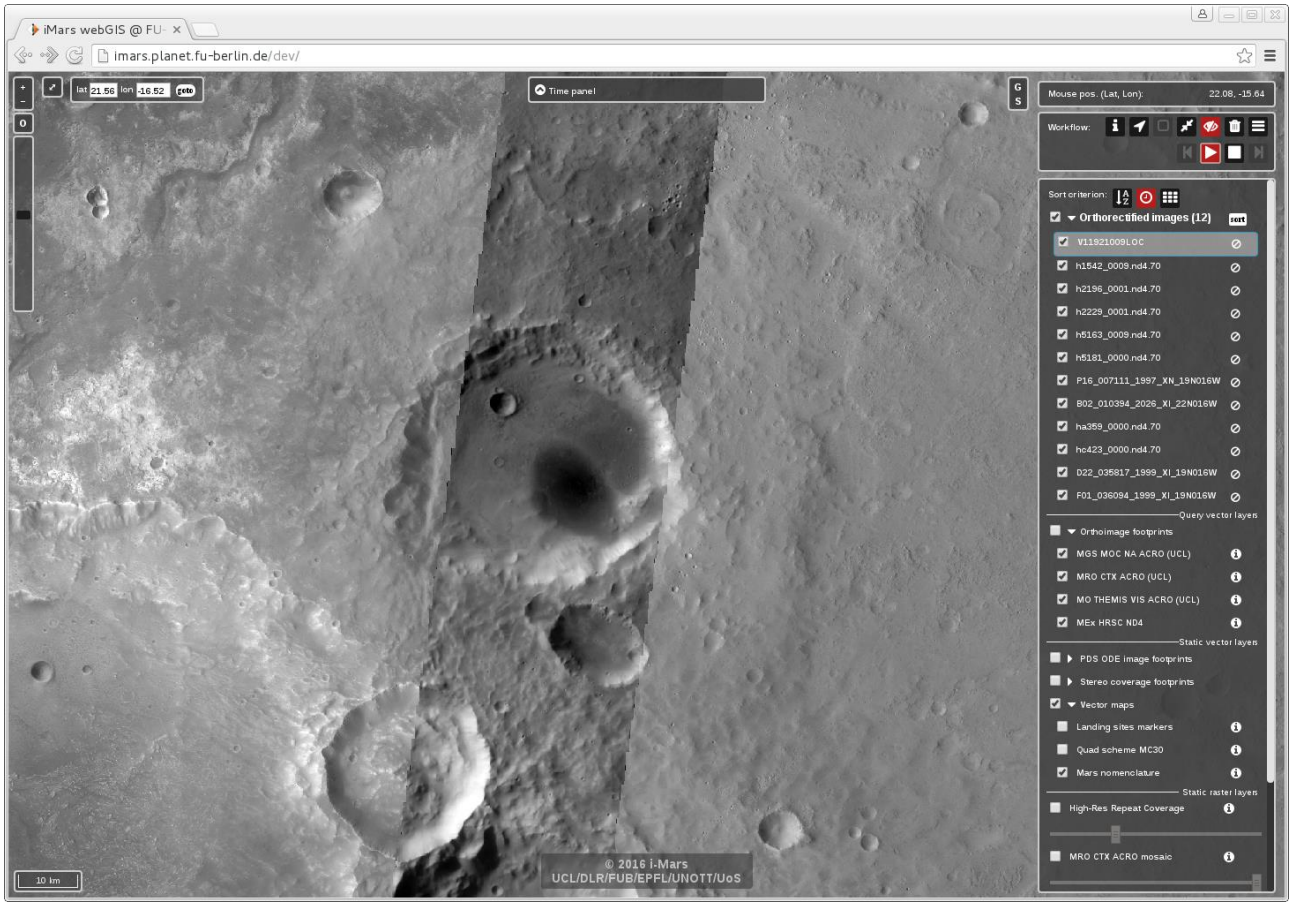

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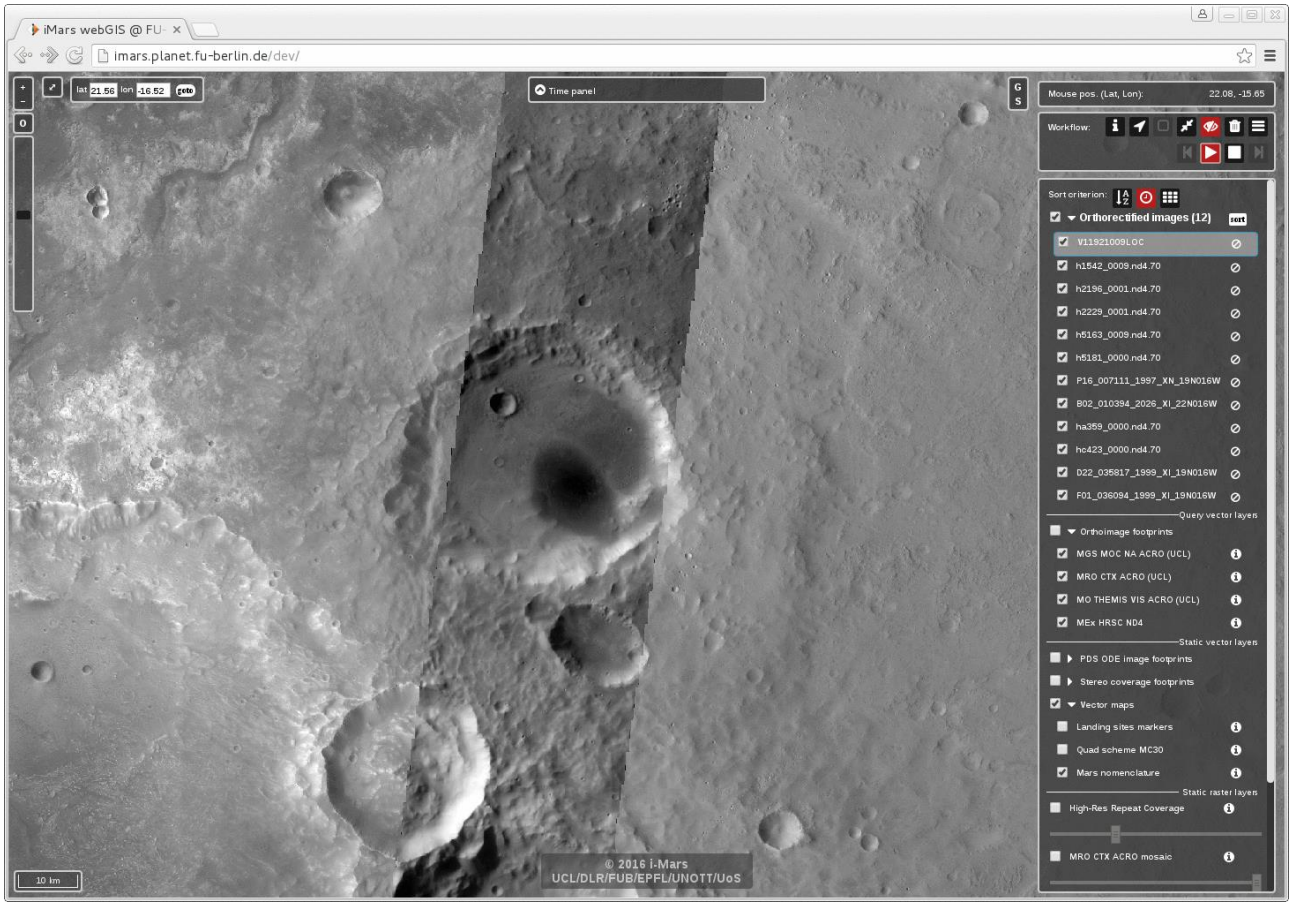

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iMars webGIS – Conclusions

http://www.i-mars.eu/web-gis

- Achieved the main goal of interactive display of the topographic datasets and the time series of images provided by the consortium
- Ready for use in production - stable and good performance even for large datasets
- Forms the core component for dissemination of iMars products and serves as a window for the project's achievements
- Continuing updates of data at UCL
- Developments at FUB will continue with HRSC Map Server

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