

Geology and Planetary Mapping  
Winter School  
07-11 February 2022

# Map Layout Tutorial

In QGIS Free Open Source GIS Software

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# Outline

- Understanding the importance of layouts
- Creating a Map Layout in QGIS
- Exporting the Map for
  - Printing
  - Further work in DTP software Inkscape



<http://www.qgis.org>



<http://www.inkscape.org>



# The need for a layout for our maps

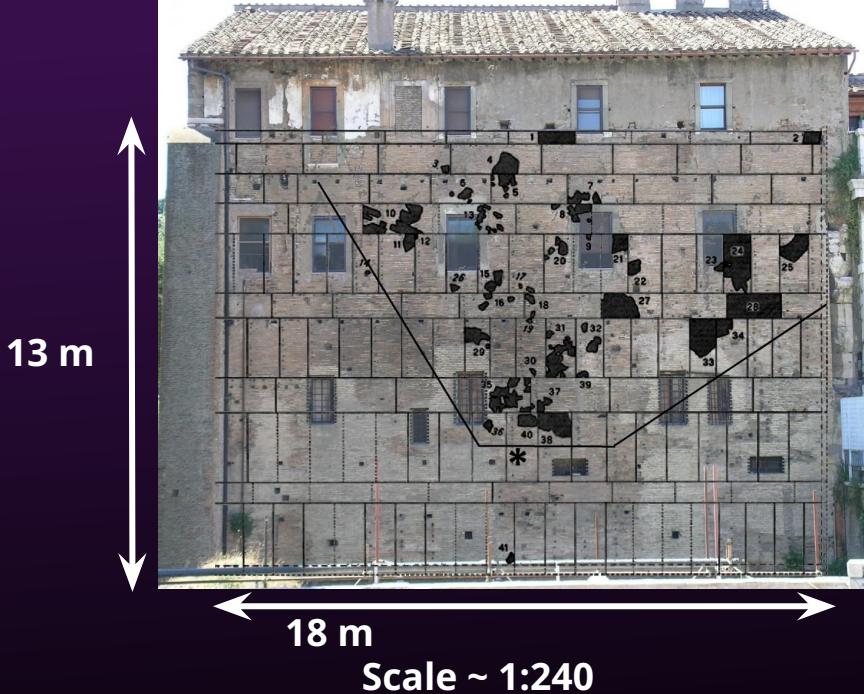
A map layout represents

- The symbolized map at a useful scale
- supporting graphical/textual elements

on various media ...



# Map Layout: *Forma Urbis Romae* (200 AC)



<https://commons.wikimedia.org/w/index.php?curid=31967784>

<https://osm.org/go/xcXpEjdDS?m=>

# Map Layout

Our GIS [geological] *digital maps* are the sum of:

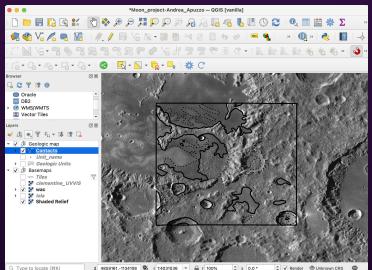
1. basemaps and interpretative data.
2. configuration, db tables, styles

With *Print Layouts* we can present our work outside of the GIS domain

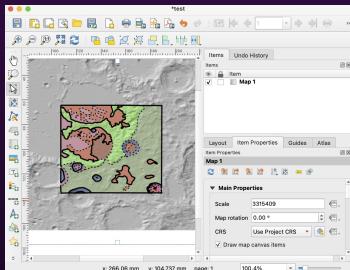




GIS Domain



Geospatial data



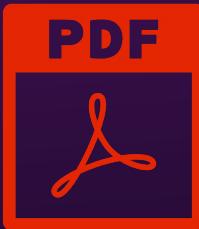
Cartographic setup



Geology & Planetary Mapping  
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euro<sup>•</sup>PLANET 2024  
Research Infrastructure

non-GIS  
Domain



Portable  
Document  
Format



Scalable  
Vector  
Graphics



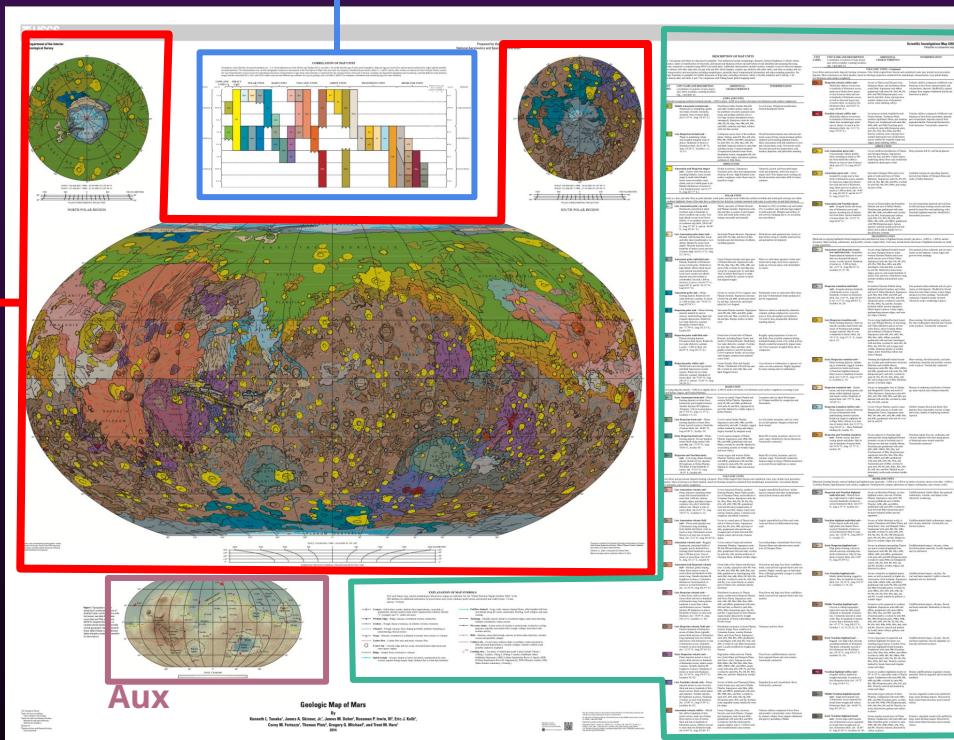
# Tutorial:

# Generate a layout for our maps

(example done in QGIS 3.16-LTR)



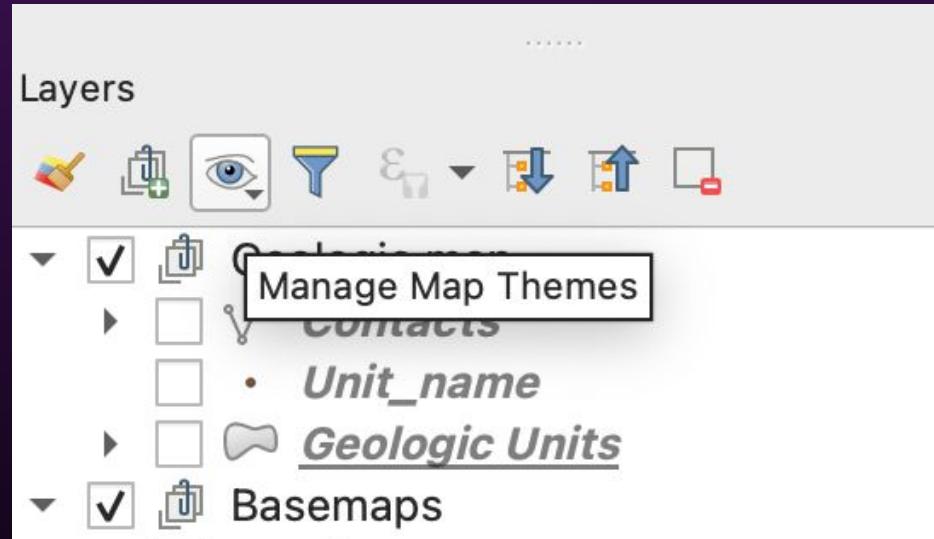
# Print Layout: elements of a geologic map



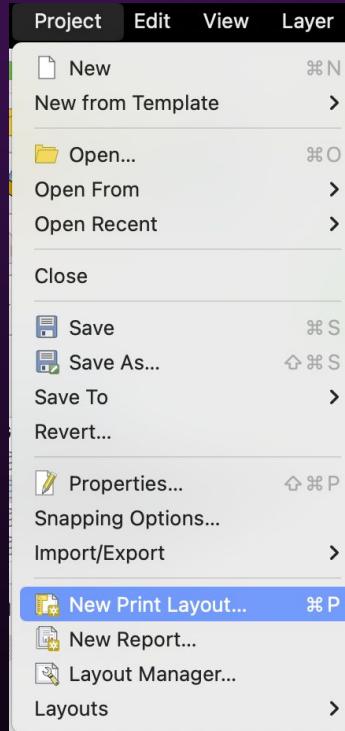
Tanaka et al., 2014



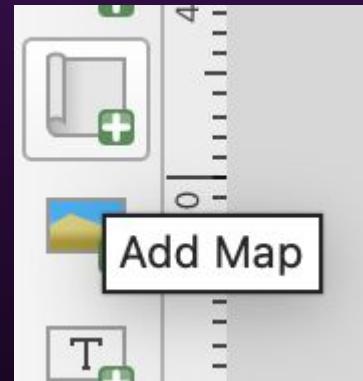
# 1 - prepare the map themes in QGIS



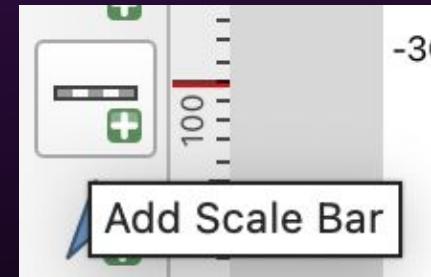
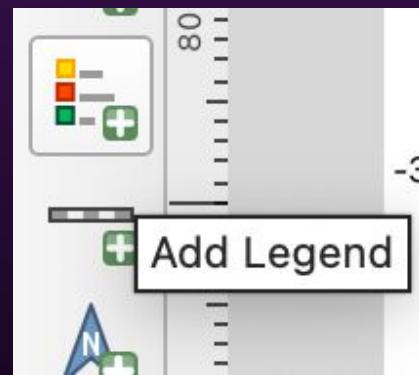
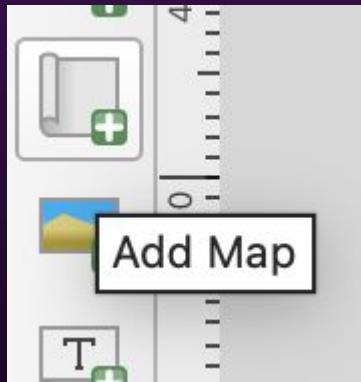
# 2 - fire up the Layout Manager



# 3 - add the context map



# 4 - add the geologic map with legend and scalebar



Beware about  
erroneous lengths  
(to be fixed in future  
QGIS versions)



# 5. Add graphical elements

- A meaningful title
- GMAP Logo from the net!
  - <https://www.europlanet-gmap.eu/wp-content/themes/epn2020/img/logo.svg>
- Placeholder for elements developed externally:
  - Correlation of Map Units
  - Cross-sections

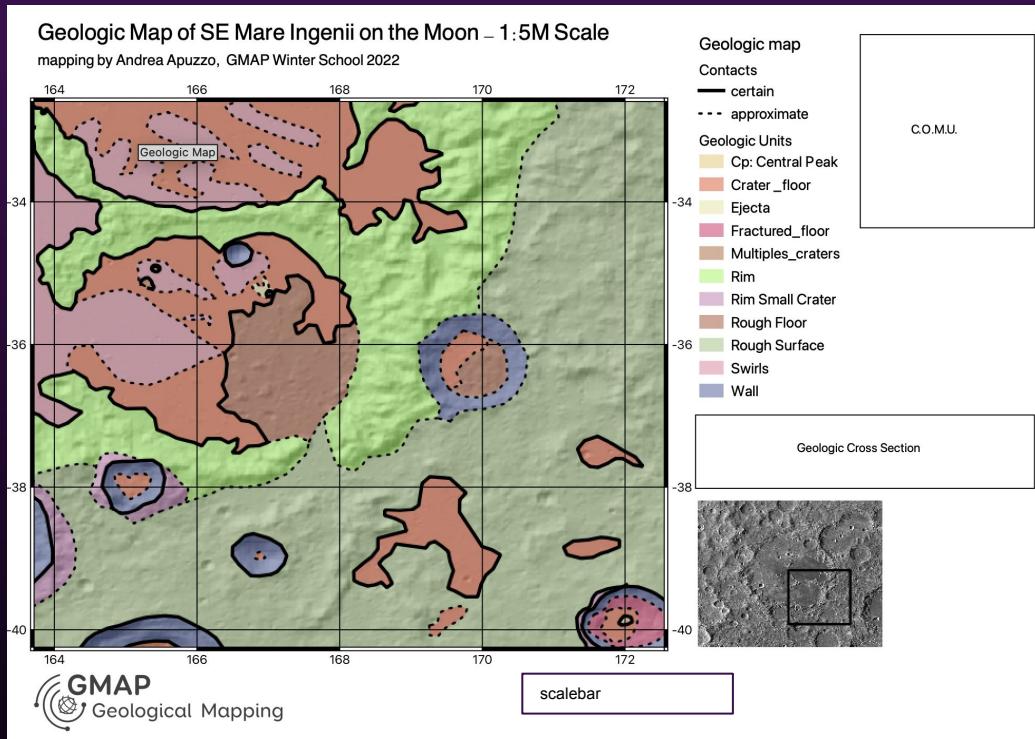


# 6. Add Placeholder for graphics

- Add a placeholder for graphics produced outside of the GIS domain:
  - Correlation of Map Units
  - Cross sections
  - Graphs



# Congratulations to all the students!



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