Data manipulation with QGIS

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Data manipulation with QGIS

Plan:

Pixel coordinates

PlotTS.sh from QGIS

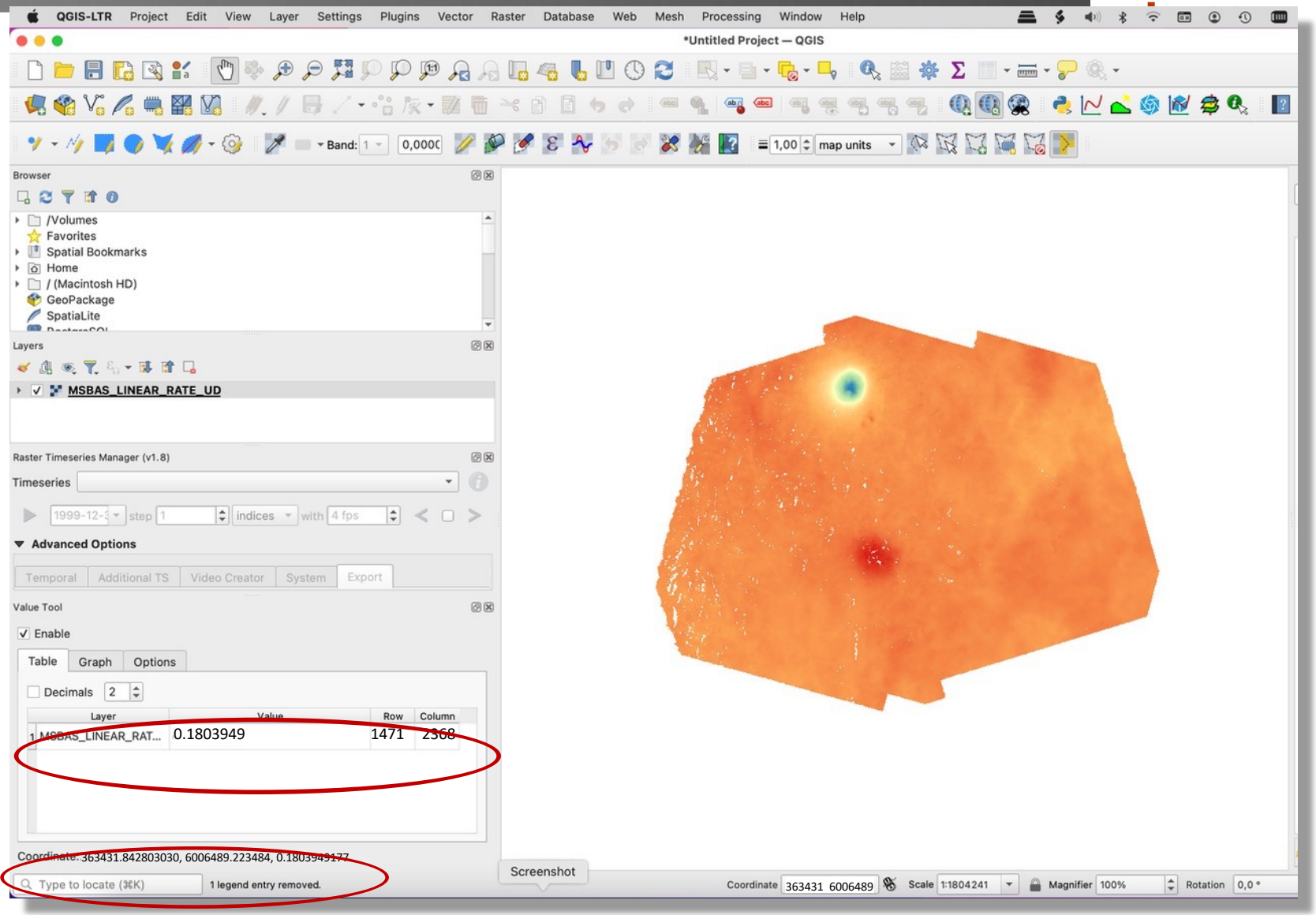
Rasters manipulation

Create a map of deformation masked by coherence on a Google Earth background

Data manipulation with QGIS

Pixel coordinates

- Drag & drop e.g. the MSBAS_LINEAR_RATE_UD.bin In QGIS
- [Double click on layer
  ➔ change Render type; transparency etc…]
- Value Tool plugin: watch
  - “Value”
  - “Row” & “column”
  - “UTM values”



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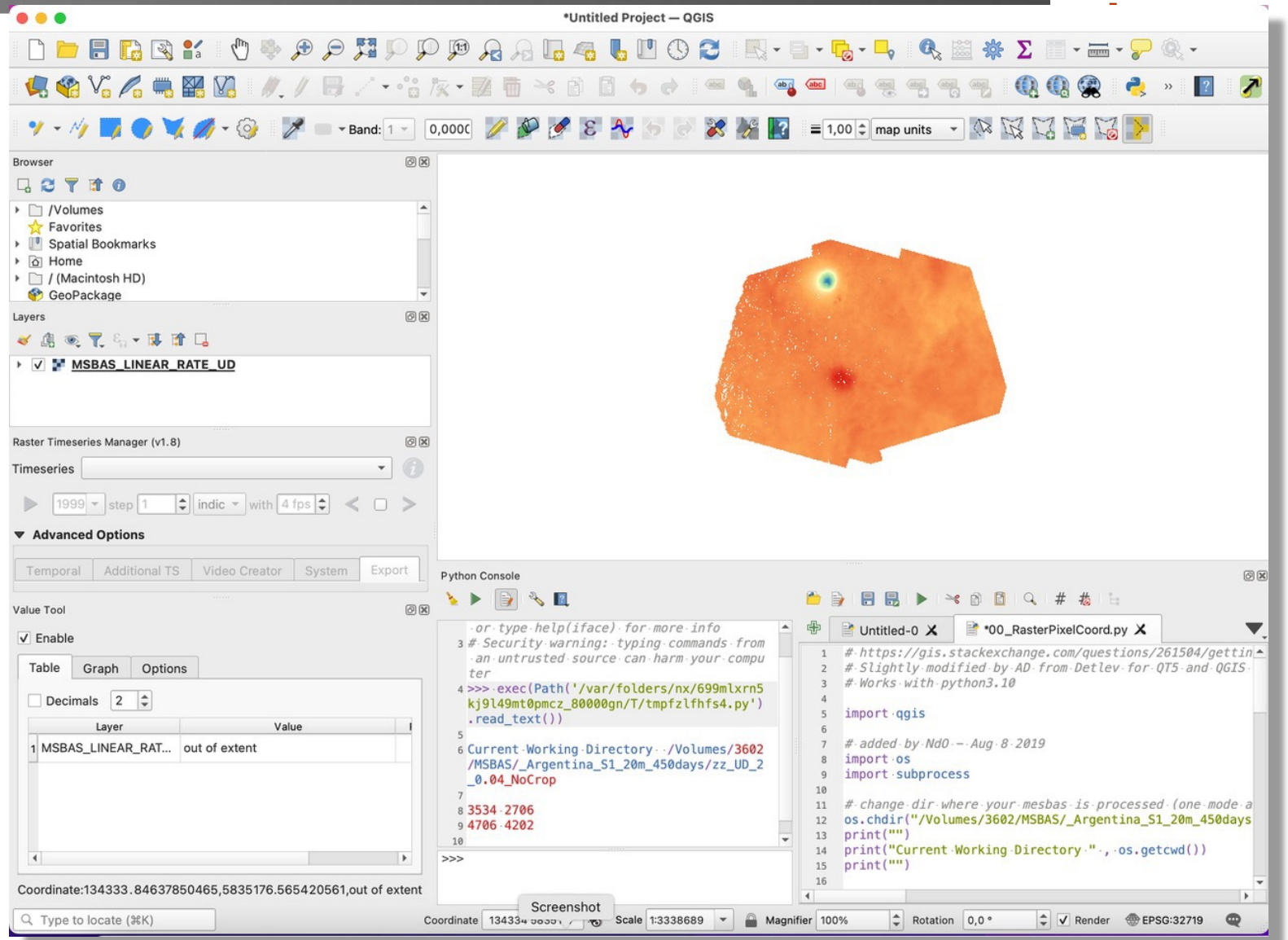
- Click on
  Plugins > Python Console
- Open 00_RasterPixelCoord.py
  (in …/SAR/MasTerToolbox/SCRIPTS_MT/)
- In line 12 of 00_RasterPixelCoord.py, change path to dir where msbas defo maps are stored, e.g. …/MSBAS/*YourRegion*/zz_Comp_...
- Run it (click on ▶)
- Click on the defo map on the pixel where you want to plot the time series.
- The coordinates of the pixel appear in the Console in red, and the plot is computed in …/MSBAS/*YourRegion*/zz_Comp_...



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- Click on
  Raster > Raster Calculator
- Perform the computation you want, e.g.
  - Create mask based on a coherence threshold
  - Multiply a defo by a mask (1 everywhere, 0 where to mask)
  - Create a differential deformation map by substracting the deformation between two dates
    (= create a deformation map even between different satellites or acquisition mode !)
  - Etc…

Plus several other classical features from GIS software: create profiles etc…

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Try it – have fun !

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- DONE !