

InsarViz

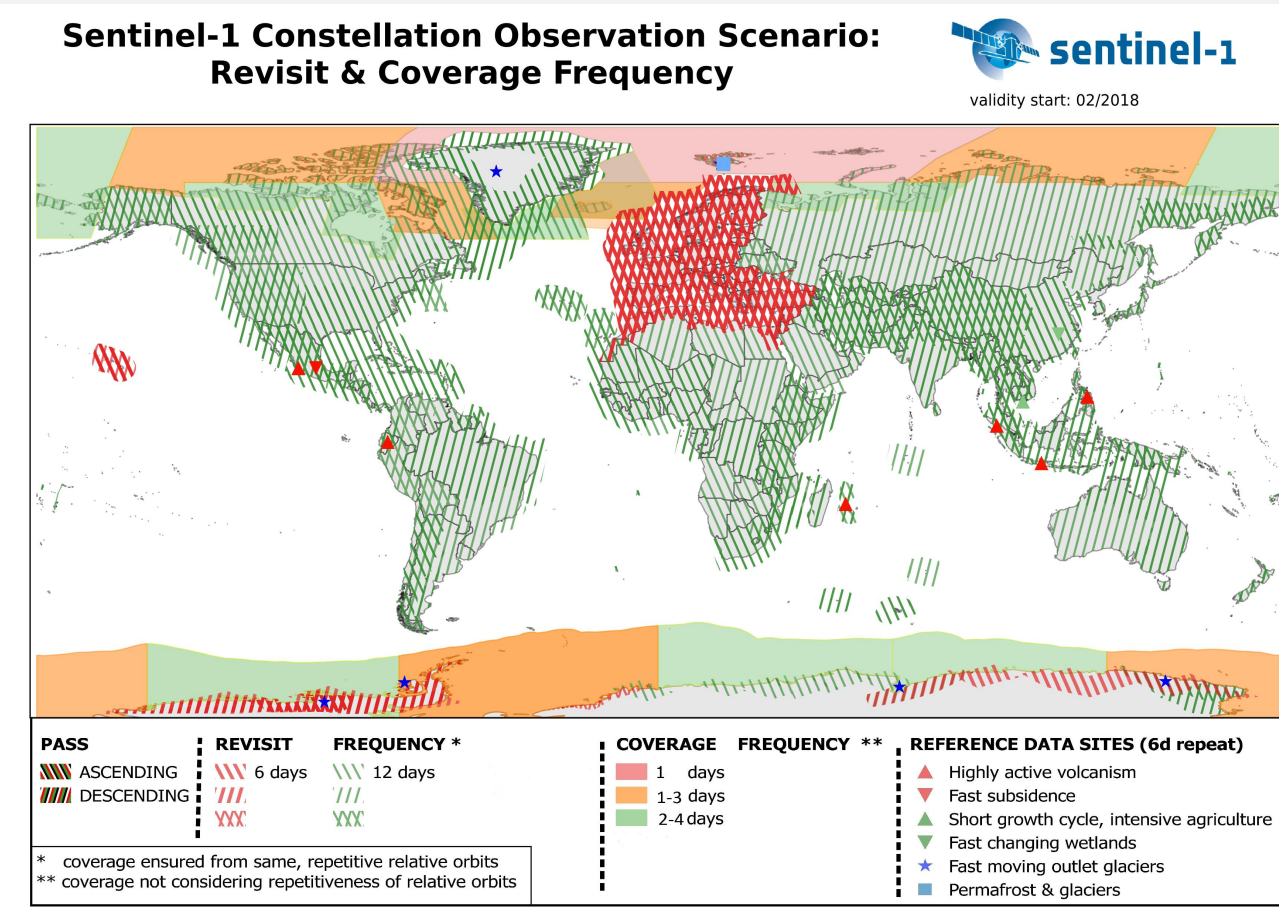
an open-source, interactive visualization tool for satellite SAR interferometry



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Context



COPERNICUS SENTINEL-1



NSBAS processing chain

InsarViz specs

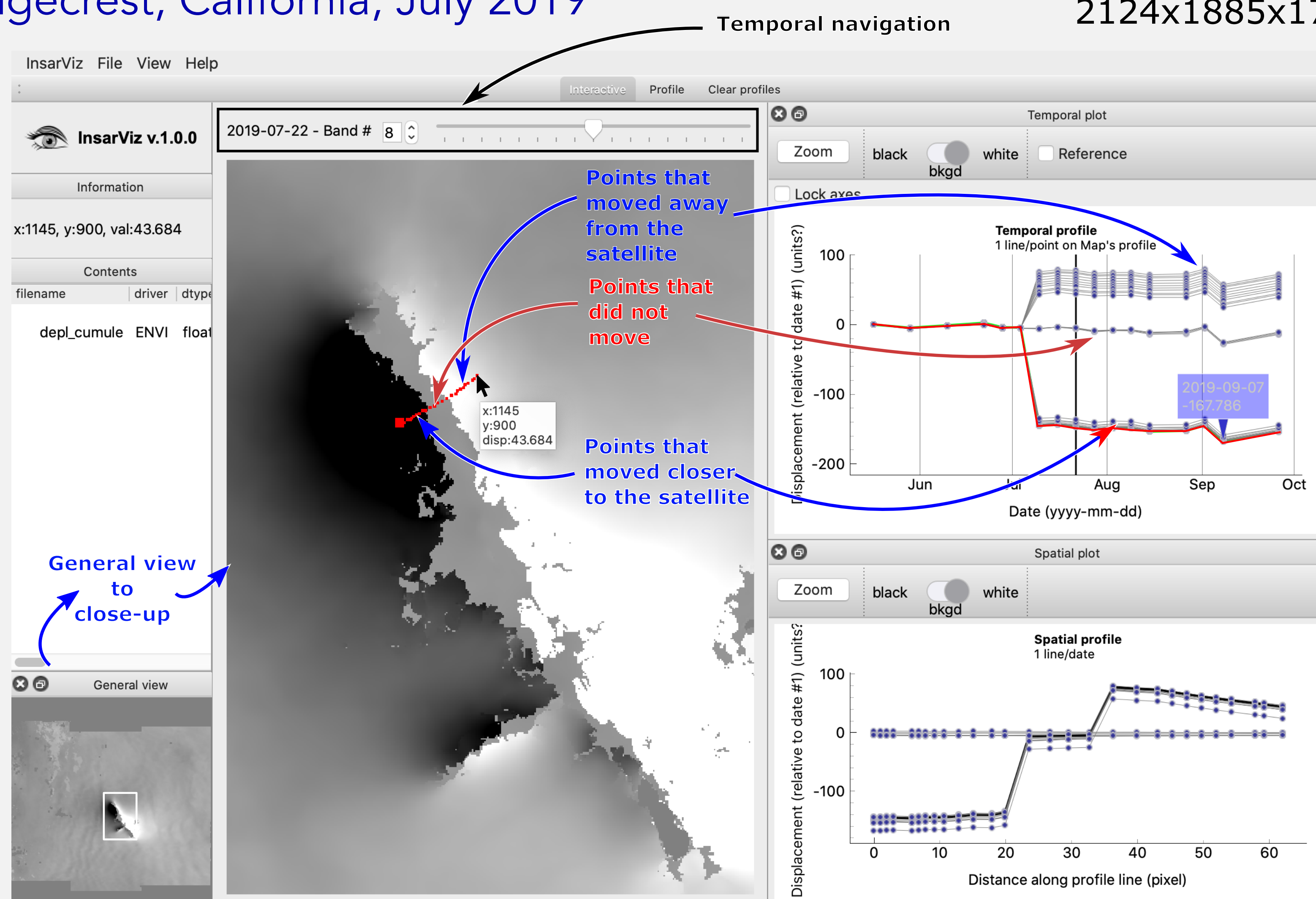


- free and open source
- easy to install / deployable on cluster
- documentation / user help
- efficient with large datasets
- multiple windows, sync. navigation
- interactive data access and rendering
- flexible (plug-in)
- no aggregation (true to data)

InsarViz screenshots: case studies

Ridgecrest, California, July 2019

Datacube dim: 2124x1885x17



Features

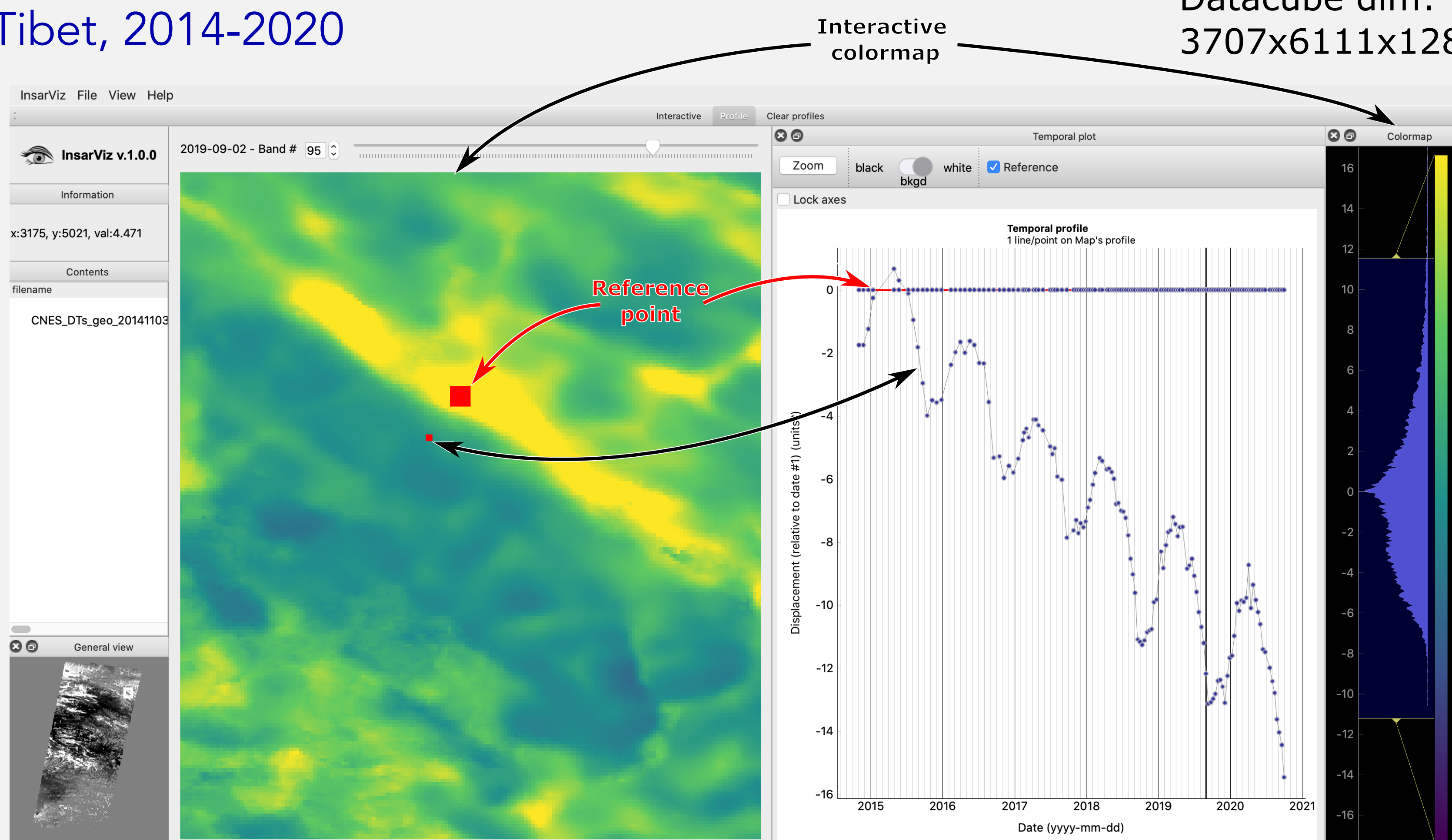
- time series analysis
- local to global visualization
- interactive or selection-based plotting
- multi-dimensional (space and time) slicing
- change of reference
- export publication-ready figures

Get InsarViz here:



Tibet, 2014-2020

Datacube dim: 3707x6111x128



Future dev

- upgrade perf to manage larger datasets
- broaden input types (mean velocity map, amp/phase, optical data...)
- geolocalisation, synced radar/geographic views
- profile of selected area
- interferogram network visualization
- your needs? Tell me!

Demo video



Acknowledgments

The InsarViz project was supported by CNES, focused on SENTINEL-1, and CNRS.

The authors want to thank the OSUG for hosting the demo video.

The example datasets were produced by the FLATSIM service.

formater.osug.fr/demos/insarviz/insarviz-2022-04.mp4

References

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