Seasonal active landsliding and hillslope activity in the southern Central Andes of NW Argentina

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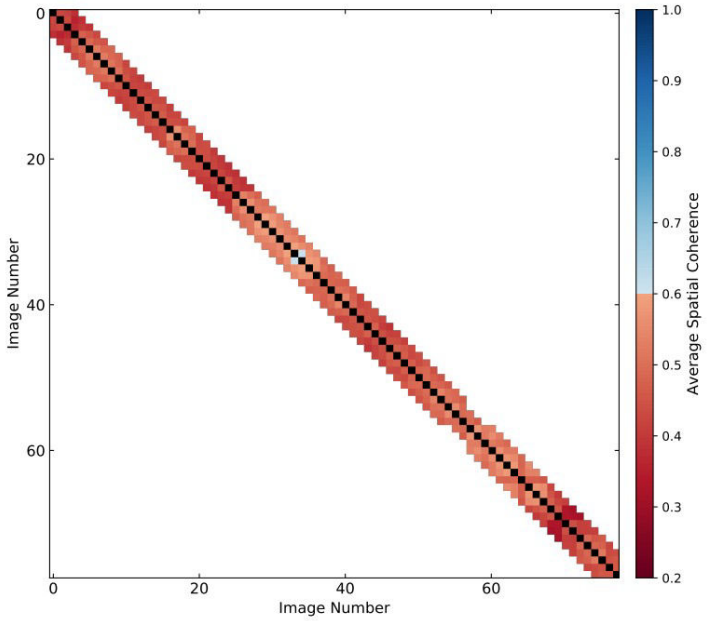
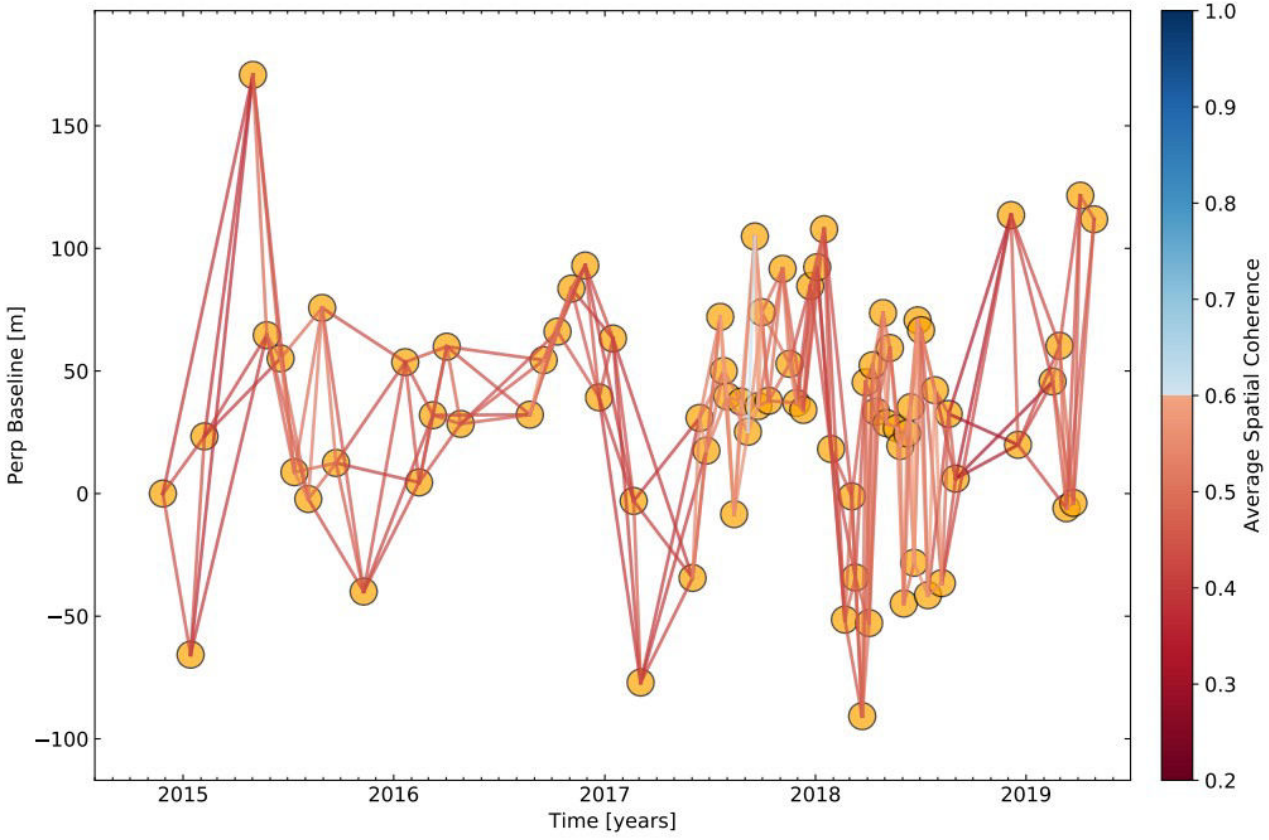
8 May 2020

Sentinel-1 ascending (track 76)

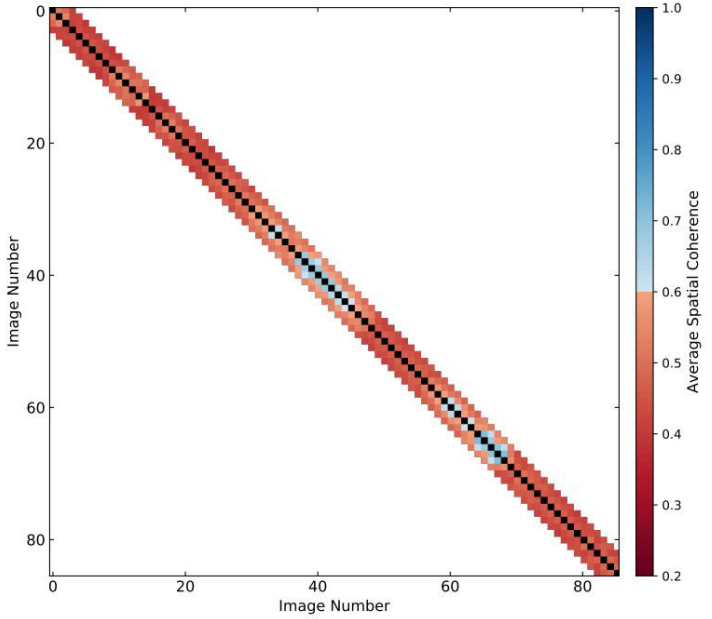
- Oct 2014 to May 2019
- 225 interferograms
- azimuth looks: 3 (~45m)
- range looks: 9 (~30m)

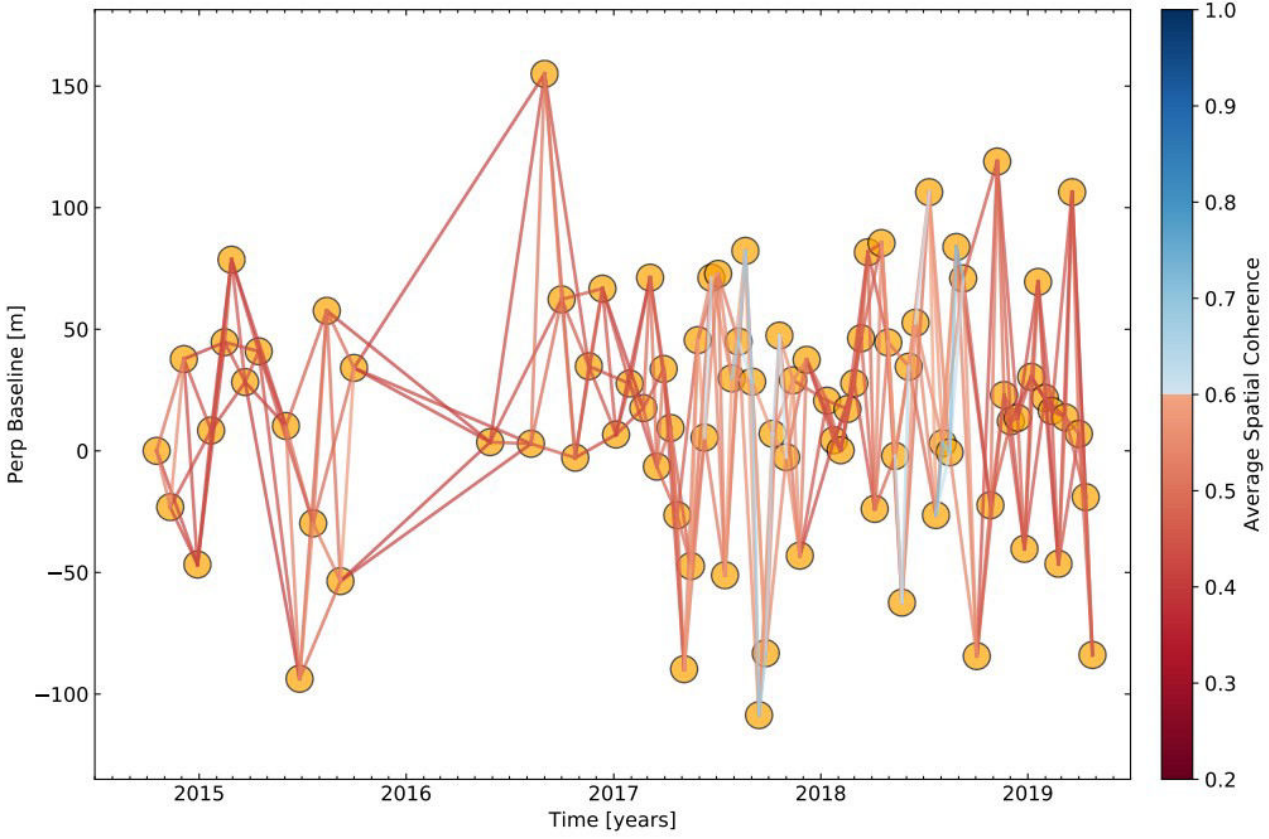




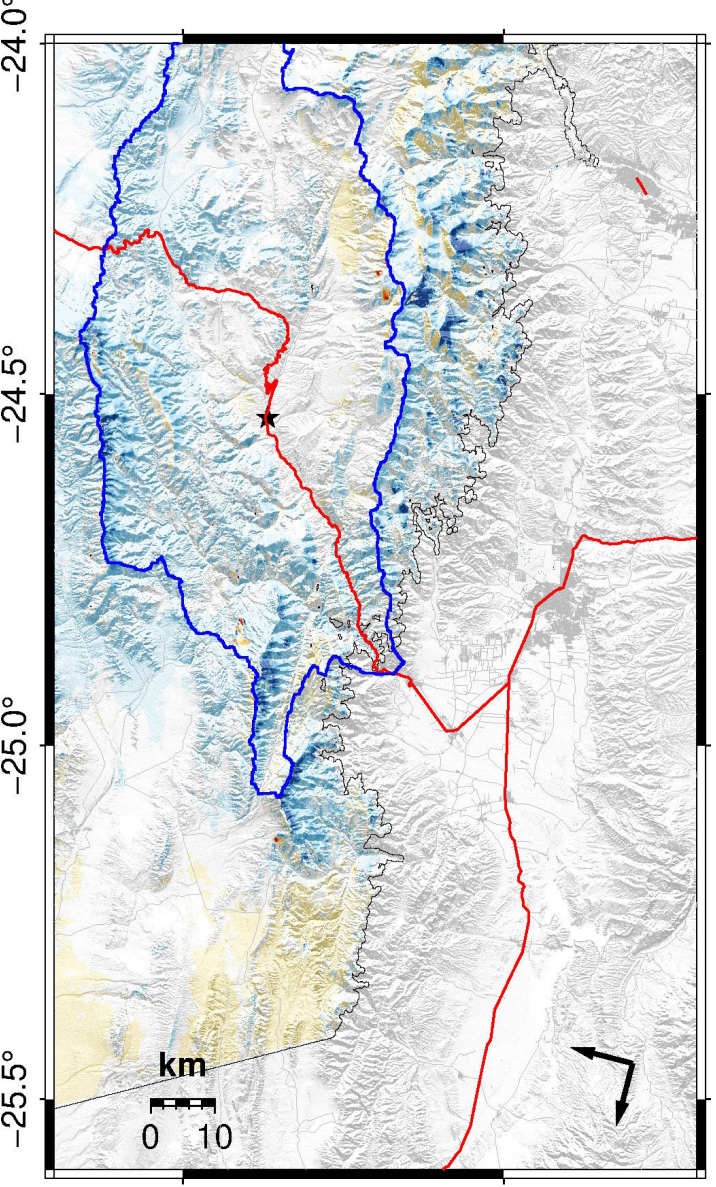
Sentinel-1 descending (track 10)

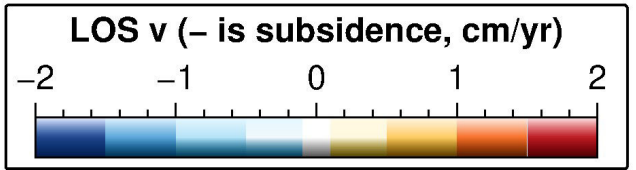
- Oct 2014 to May 2019
- 252 interferograms
- azimuth looks: 3 (~45m)
- range looks: 9 (~30m)



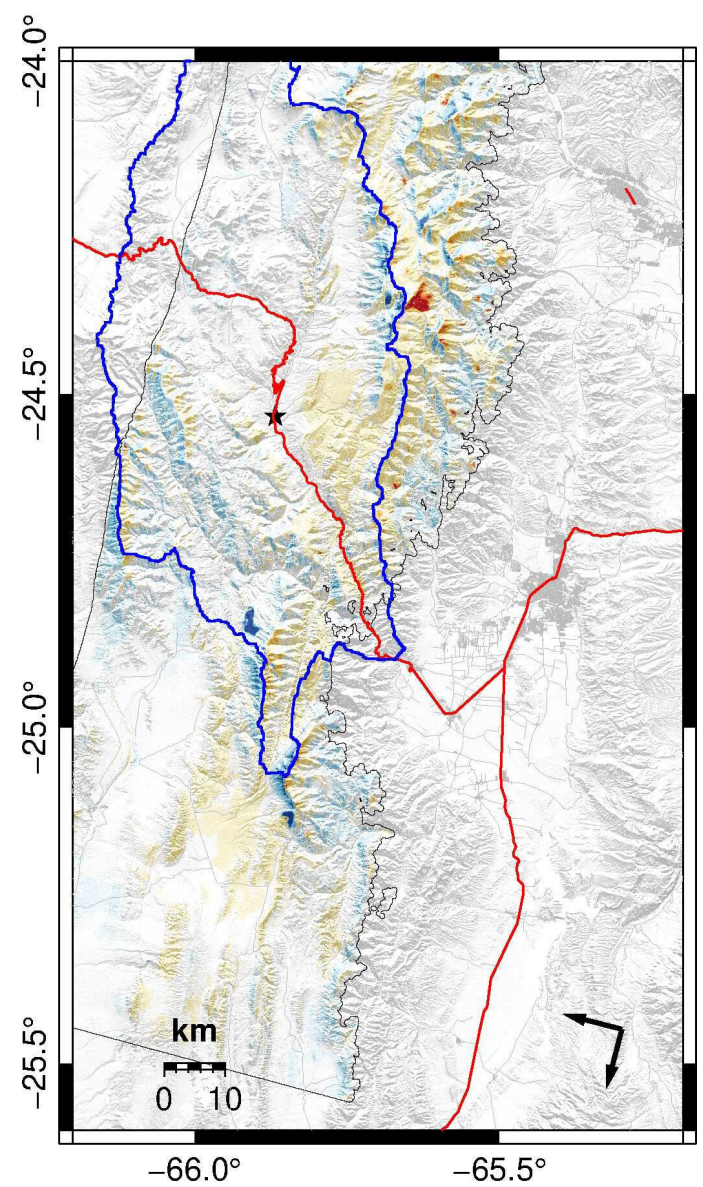


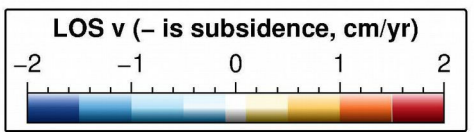
Sentinel-1 ascending (track 76) – mean LOS velocity



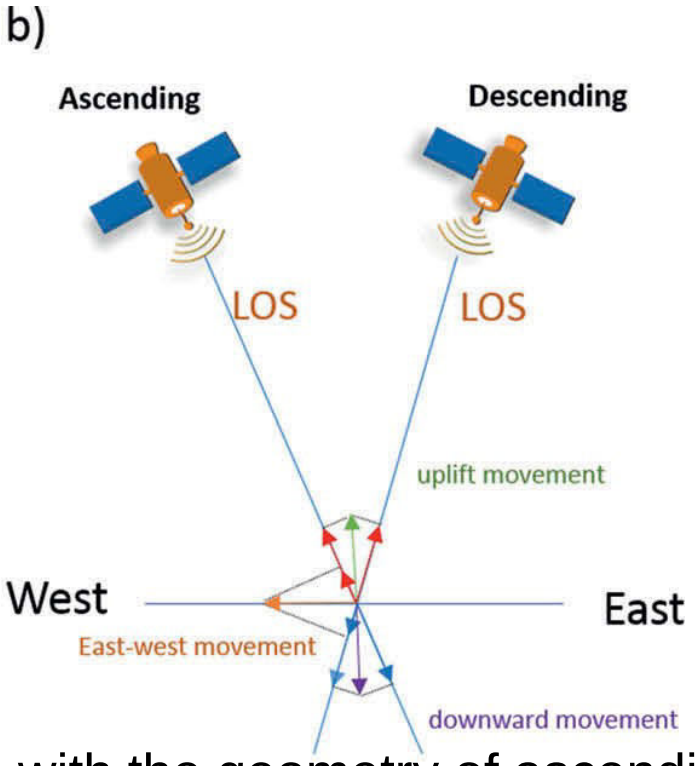


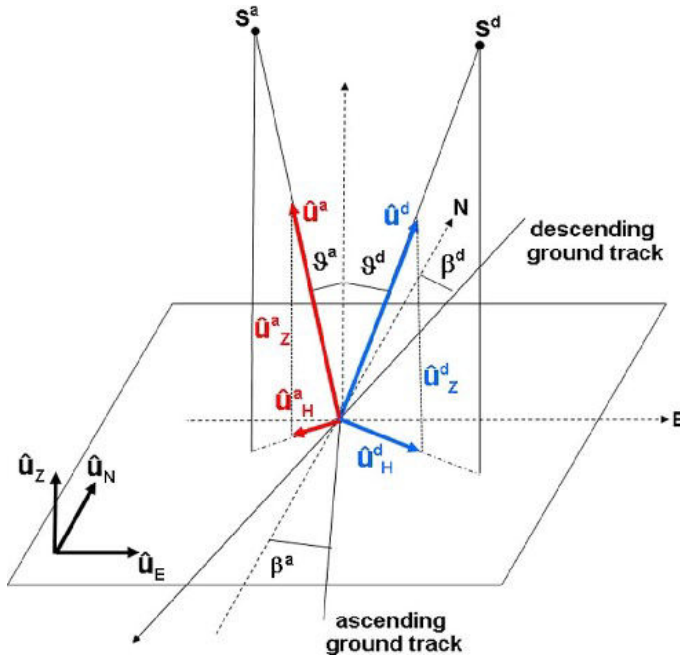
Sentinel-1 descending (track 10) -mean LOS velocity





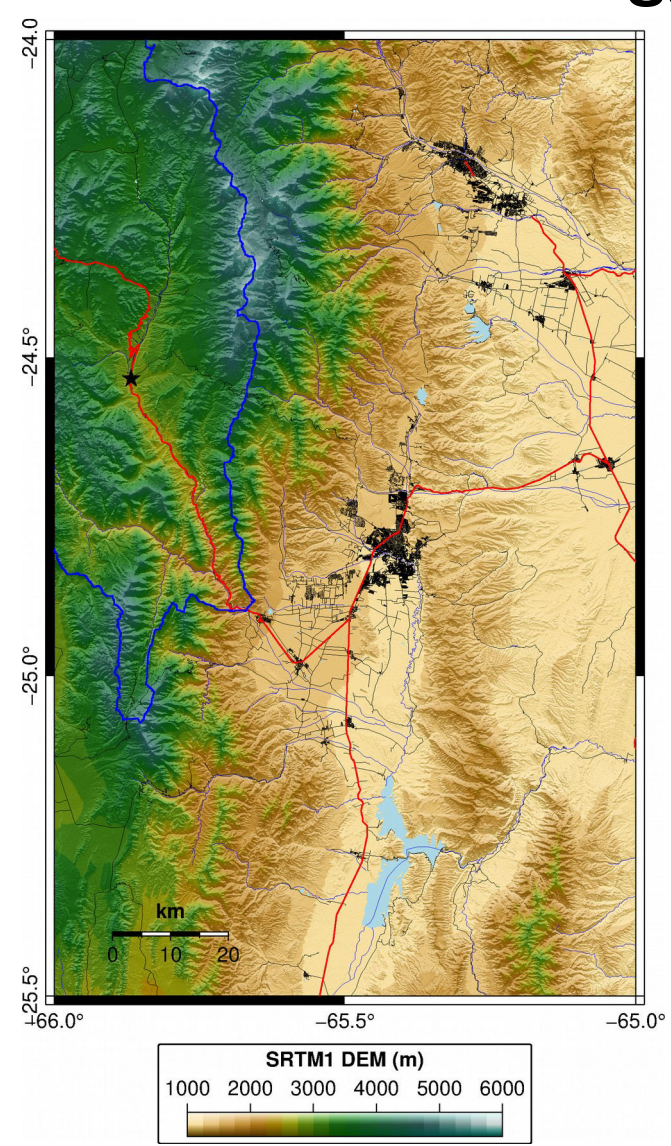
Sentinel-1 3D deformation field

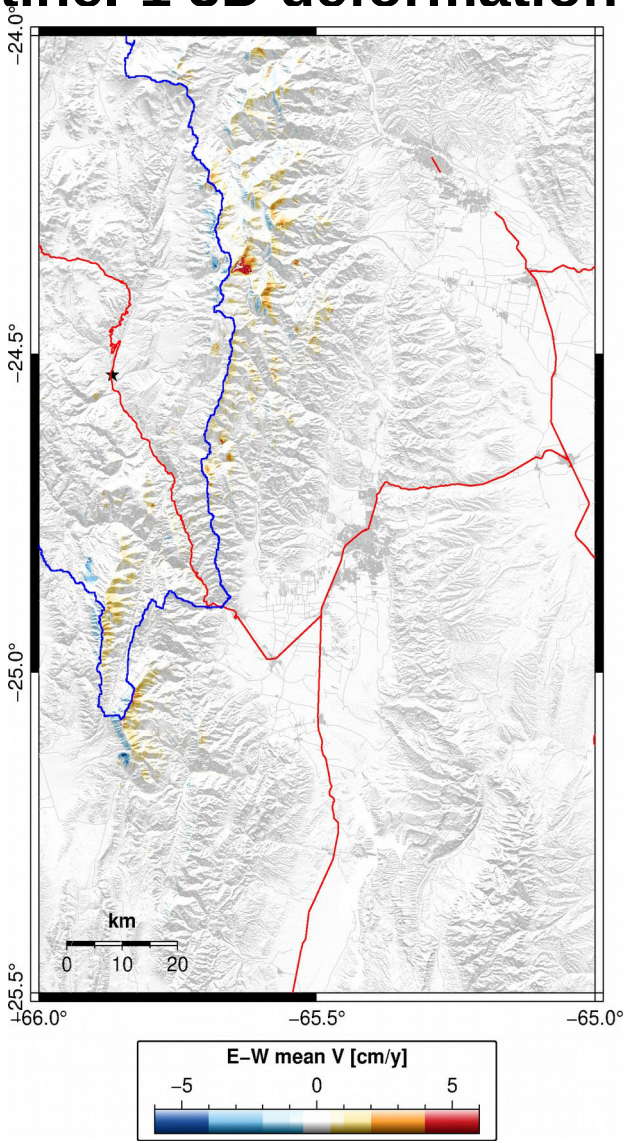


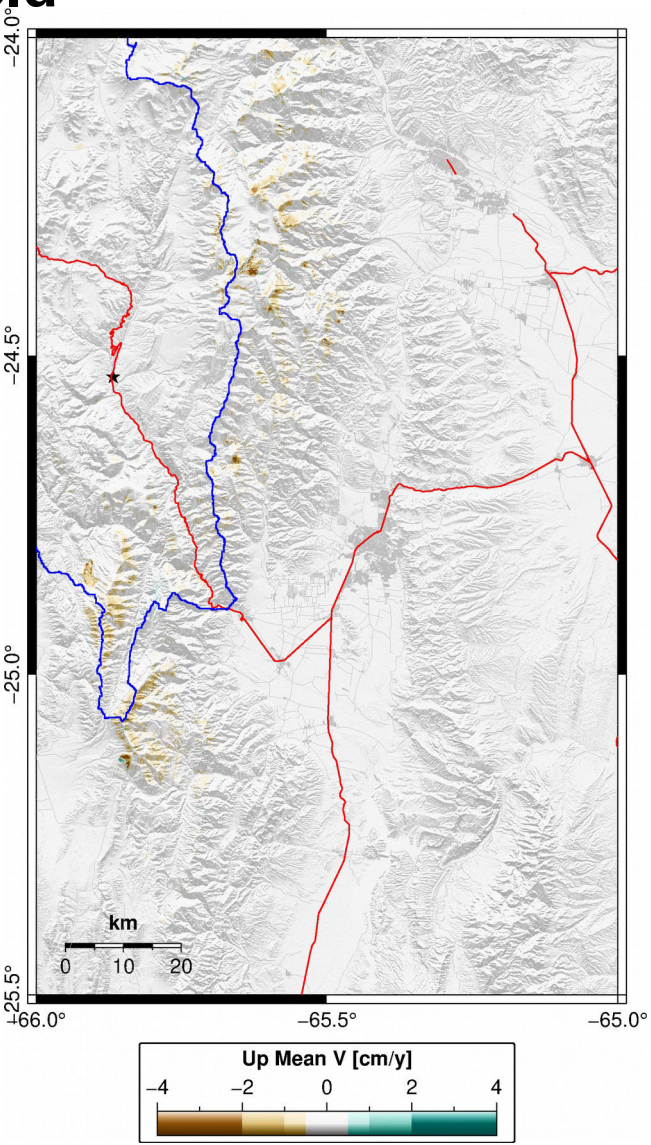


Sketch with the geometry of ascending and descending InSAR geometries with unit vectors (red) u^a and (blue) u^d , radar incidence angles ϑ^a and ϑ^d , and angles β^a and β^d related to ground-track azimuthal angles. The horizontal components of unit vectors u^a and u^d are also depicted (after Catalao et al., 2011 and Vassileva et al., 2017)

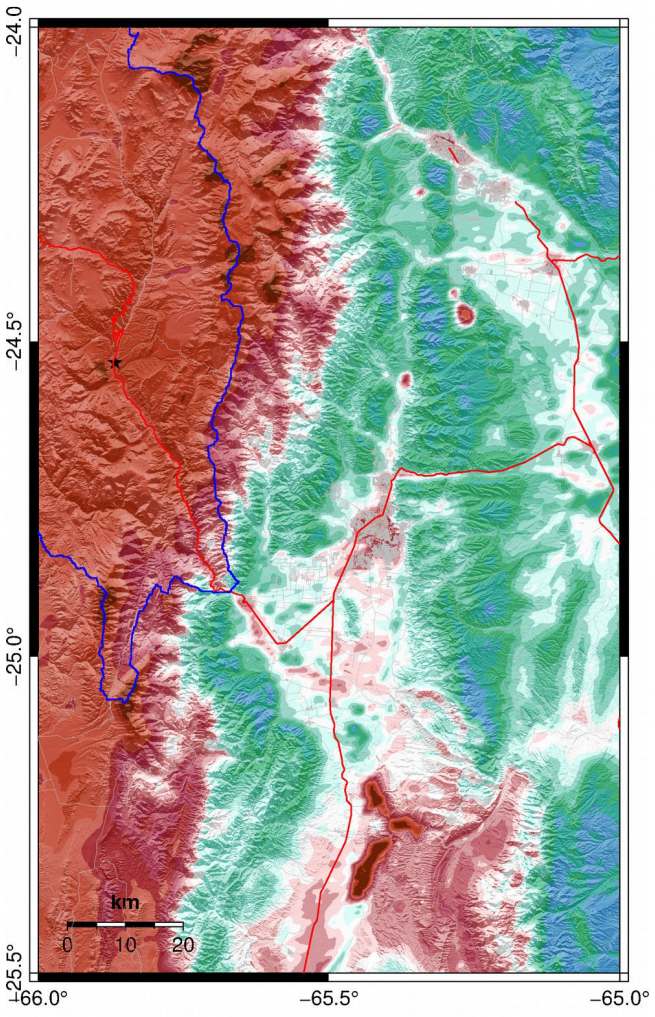
Sentinel-1 3D deformation field

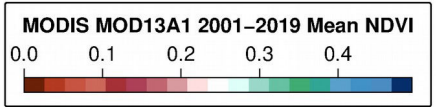


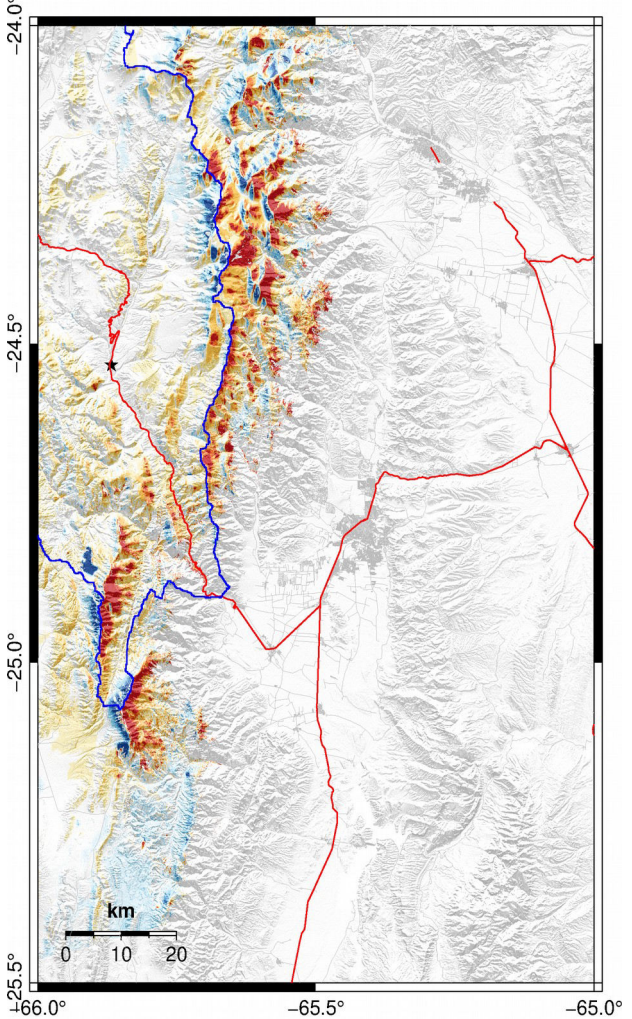


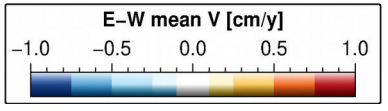


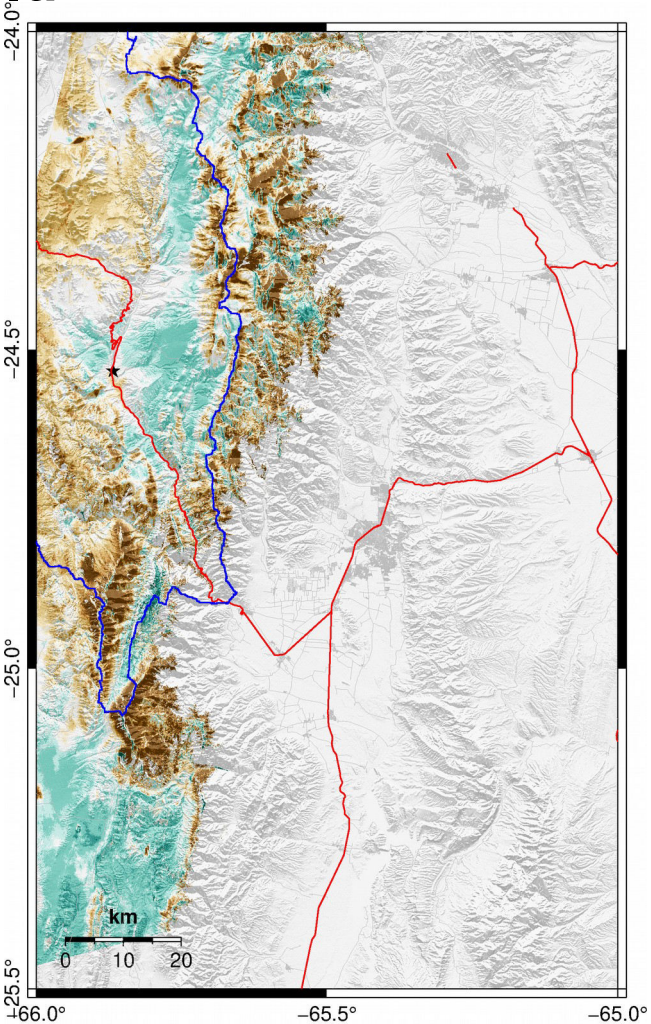
Sentinel-1 3D deformation field

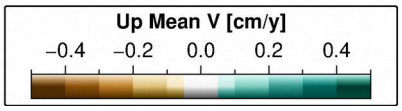




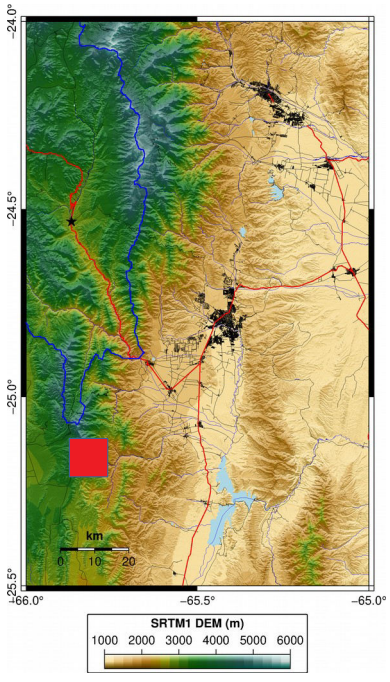


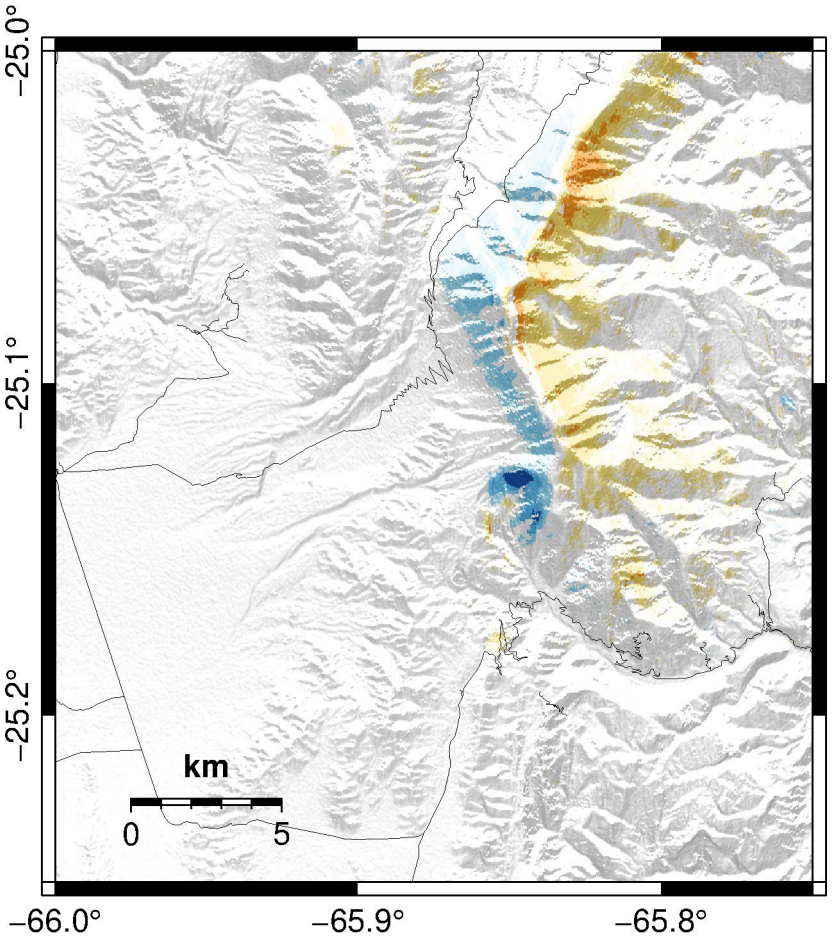


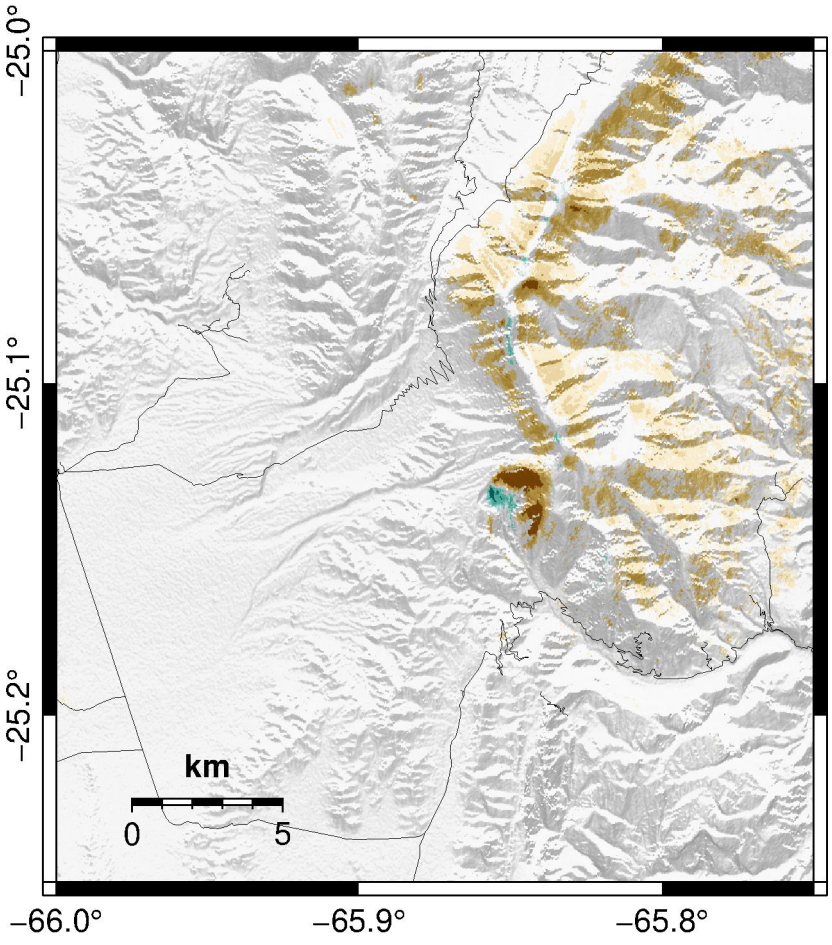


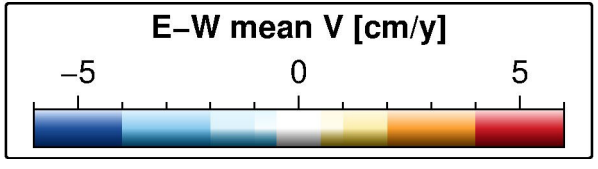


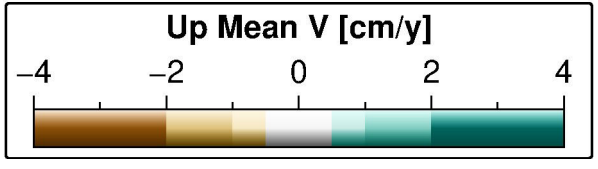
Sentinel-1 3D deformation field – Quebrada de Escoipe



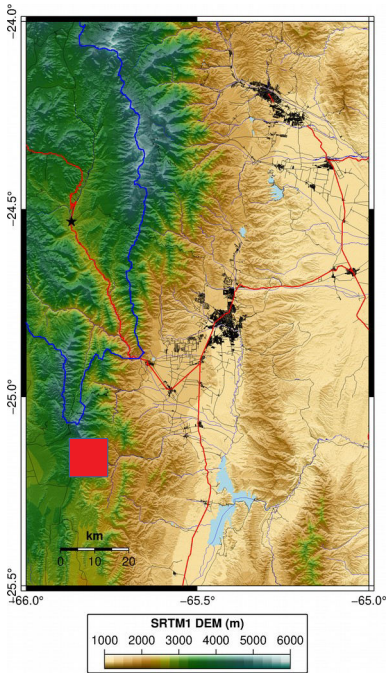


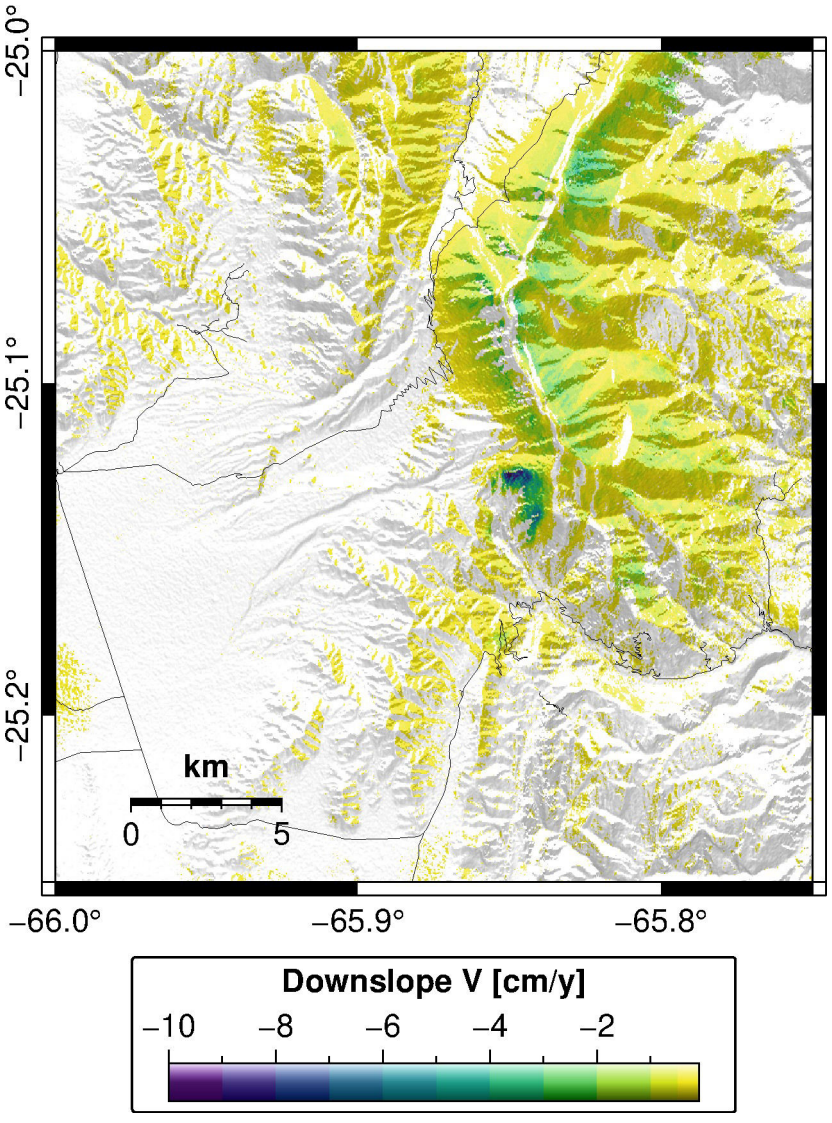




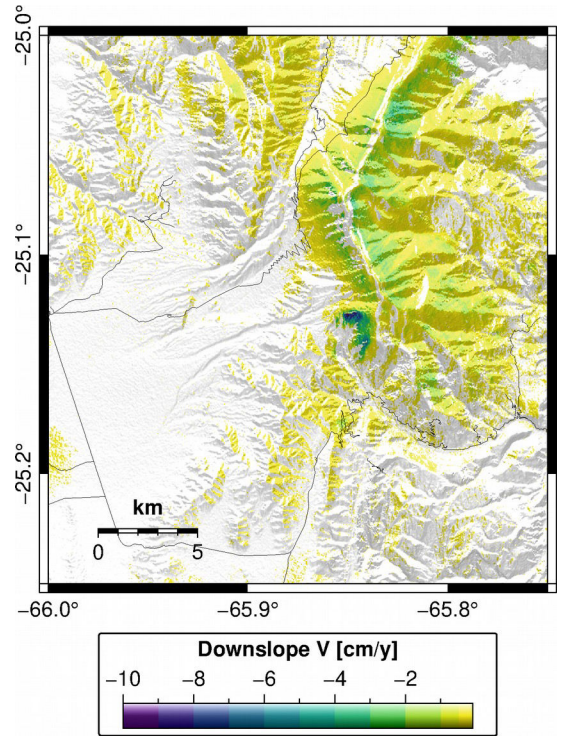


Sentinel-1 3D deformation field – Quebrada de Escoipe





Sentinel-1 3D deformation field – Quebrada de Escoipe



Sentinel-1 3D deformation field from Persistent Scatterer