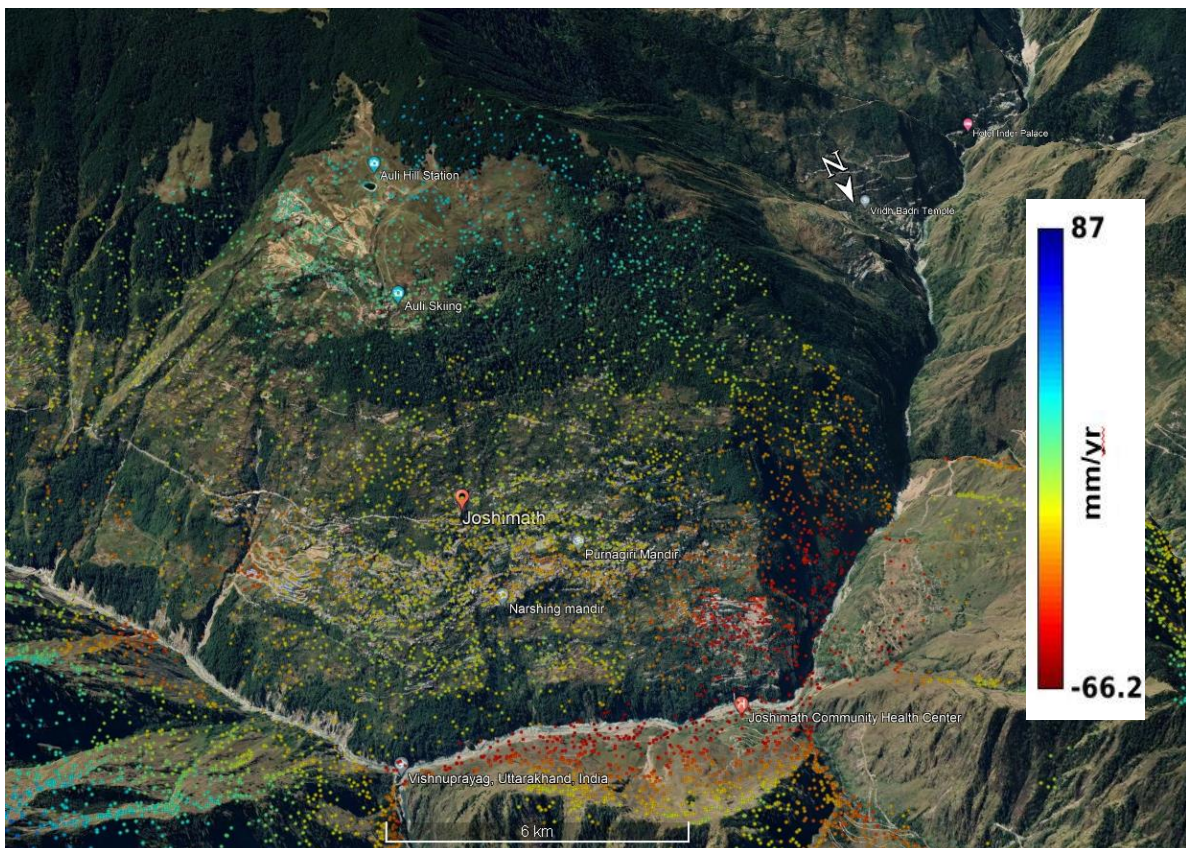


Surface Deformation of Joshimath, Chamoli District, Uttarakhand Observed through Space based Radar Interferometry

Persistent Scatterer Interferometry (PSI) technique was used to estimate land surface movement of Joshimath town for a period of July 2020 – March 2022. PSI is used to derive the deformation phase after optimal removal of unwanted phase components due to topography, atmosphere, orbital inaccuracies, and decorrelation noises from a series of interferometric phase (interferogram stack). The results showed a significant subsidence rate in the Joshimath.



Radar Mean Line of Sight Deformation (mm/year)