

Supplementary Material:

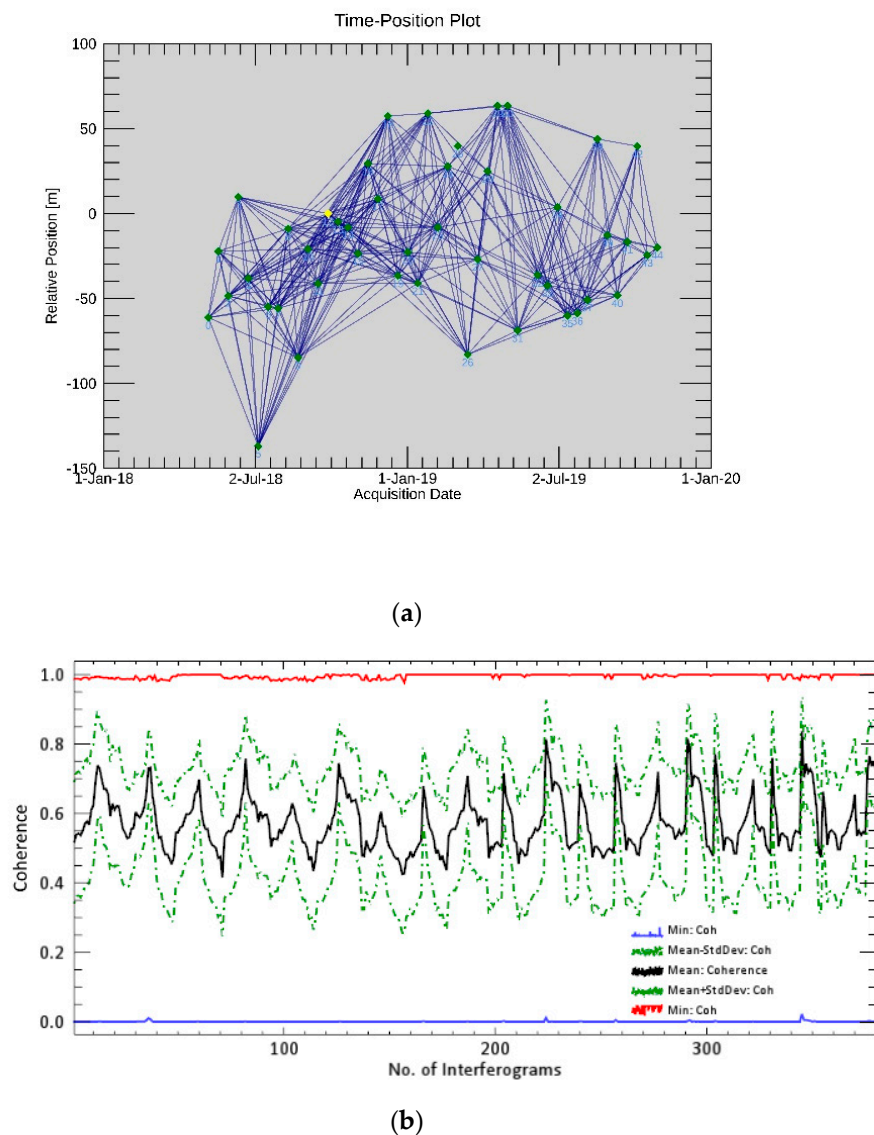


Figure S1. SAR interferograms spatial-temporal baseline distributions, where each acquisition is represented by a diamond associated to an ID number; the yellow diamond represent master acquisition (2018-10-01) and green diamond represent slave (a) final connection graph after discarding 82 bad interferograms with poor coherence and unwrapping (b) statistical plots of the 380 interferograms after edit connection graph showing min/max/mean coherence.

Table S1. Sentinel-1A data specification. The product type is L1 single look complex (SLC) with ascending geometry and interferometric wide swath beam mode (IW). The following acronyms were used in the table: polarization (Pol), incident (Inc), azimuth (Az), range (Rg), wavelength (WL), maximum perpendicular baseline (Bp) and maximum temporal baseline (Bt).

| Product type | Mode | Pass | Pol. | Inc/Az. angle | Rg x Az spacing (m) | WL (cm) | Path | Frame no. | Max B _p (%) | Max B _t (days) |
|--------------|------|-----------|------|---------------|------------------------------|------------|------|-----------|---------------------------|------------------------------|
| S1-A | IW | Ascending | VH | 38/81 | 3.8 x 13.8 | 5.6 | 71 | 104/99 | 45 | 150 |

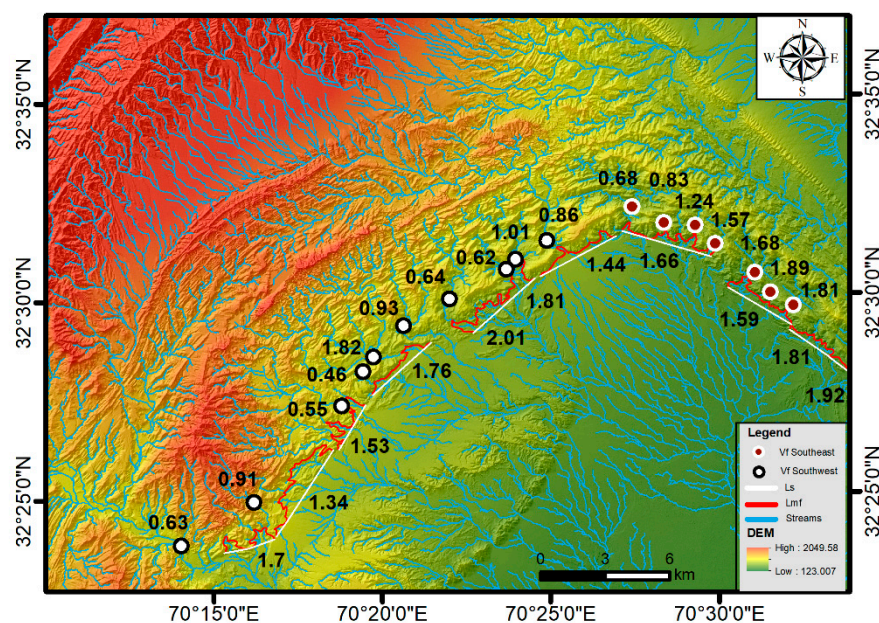


Figure S2. Digital elevation model of the Manzai Ranges showing the mountain front sinuosity (Smf) and the valley floor index (Vf) calculated values.