GB-SAR PSI Data Description

Edited by WANG Peng 2021.7.23

**1 Part\_01 Average image sequence**

“AVESUBSET\_SXX.mat” is the average image data file containing four sub files as shown in Figure 1.

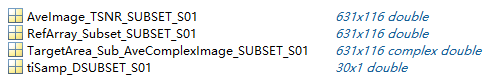


Fig.1 File structure of “AVESUBSET\_SXX.mat”

(1) The AveImage\_TSNR\_SUBSET\_SXX is the TSNR matrix.

(2) The RefArray\_Subset\_SUBSET\_SXX is the reference matrix, which is used to mark whether it is a PS point in this image subset.

(3) The TargetArea\_Sub\_AveComplexImage\_SUBSET\_SXX is complex image data.

(4) The tiSamp\_DSUBSET\_SXX is image acquisition time array.

**2 Part\_02 Atmospheric correction of interferograms**

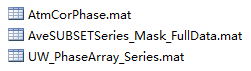


Fig.2 Atmospheric correction result files

(1) The AtmCorPhase.mat is the atmospheric model phase of interferograms.

(2) The AveSUBSETSeries\_Mask\_FullData.mat file consists of mask matrix, row and column number and coordinate matrix, as shown in Figure 3.

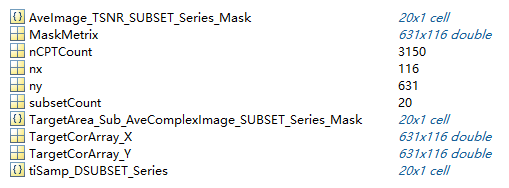


Fig.3 File structure of AveSUBSETSeries\_Mask\_FullData.mat

(3) The UW\_PhaseArray\_Series is the atmospheric correction results of the unwrapped interfero-grams.

**3 Part\_03 Linear deformation rate estimation**

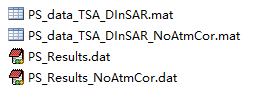


Fig.4 Result files of linear deformation rate estimation

(1) The PS\_Results.dat is the estimated deformation rate after atmospheric correction.

(2) The PS\_Results.dat is the estimated deformation rate without atmospheric correction.

(3) The PS\_data\_TSA\_DInSAR.mat stores PS point phase data and coordinate information with atmospheric correction.

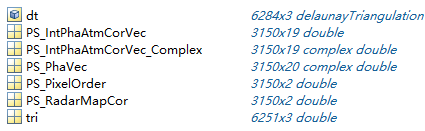


Fig.5 File structure of PS\_data\_TSA\_DInSAR.mat

(4) The PS\_data\_TSA\_DInSAR\_NoAtmCor.mat stores PS point phase data and coordinate information without atmospheric correction.

**4 Part\_04 Deformation series results**

The DisPhaseSeries.mat is the deformation sequence image data, without time-domain low-pass filtering.