

APPENDIX A. ERROR ASSOCIATED TO THE INSAR DATA

Figure A1. Noise energy of the interferometric phase (in radians) as a function of spatial wavelength (in km) for the track 368 interferogram (red line) and the track 96 interferogram (blue line). The noise of each interferogram is defined here using a function, $S(r)$, which measures the mean absolute phase difference between two pixels separated by the distance r (Puysségur *et al.* 2007, Cavalié *et al.* 2008):

$$S(r) = \sum_{i,j/d(i,j)=r} |\varphi_i - \varphi_j| / N_r$$

where φ_i and φ_j are the interferometric phases of pixels i and j , respectively, $d(i, j)$ is the distance separating i and j , and N_r is the number of pixel pairs such that $d(i, j) = r$. Dashed vertical line marks the characteristic distance chosen for both interferograms. Dashed horizontal lines indicate the corresponding energy value for each interferogram.