## Supplementary Material

Manuscript "Two-dimensional impurity imaging in deep Antarctic ice cores: Snapshots of three climatic periods and implications for high-resolution signal interpretation" submitted to *The Cryosphere* 

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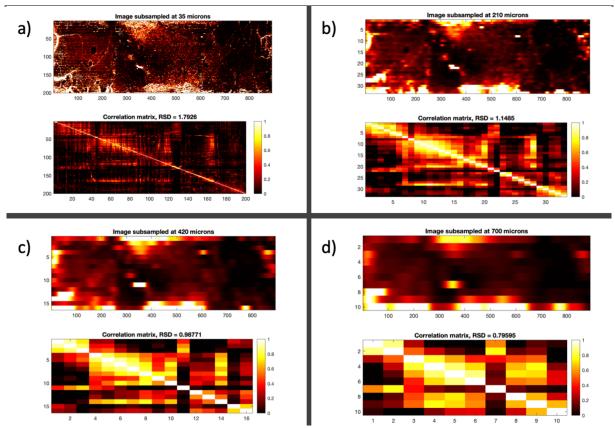


Figure S1: Talos Dome Holocene Mg images obtained from decreasing the spatial resolution of the Mg images in 35  $\mu$ m increments. The correlation matrix is calculated from all lines in the subsampled images, together with its relative standard deviation (RSD). Tile a) shows the original image. Steps of 210, 420 and 700  $\mu$ m are displayed in tile (b), (c), (d), respectively.

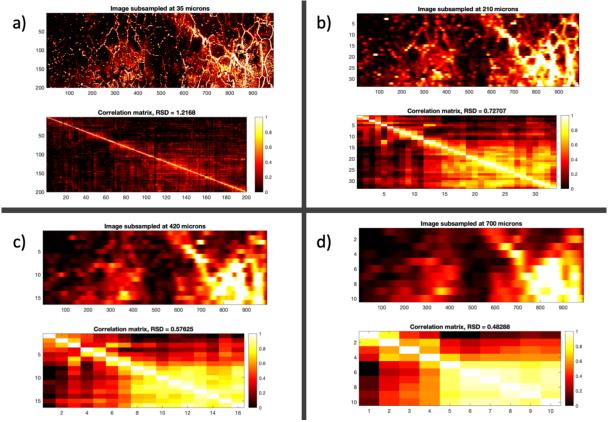


Figure S2: Same as Figure S1 but for the EDC MIS 2 image.

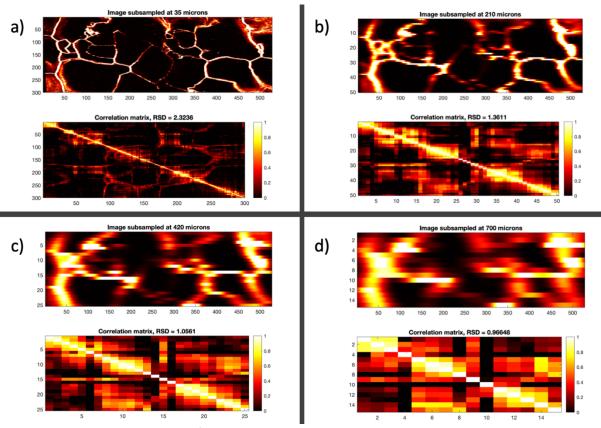


Figure S3: Same as Figure S1 but for the EDC MIS 5.5 image.