ADDENDUM

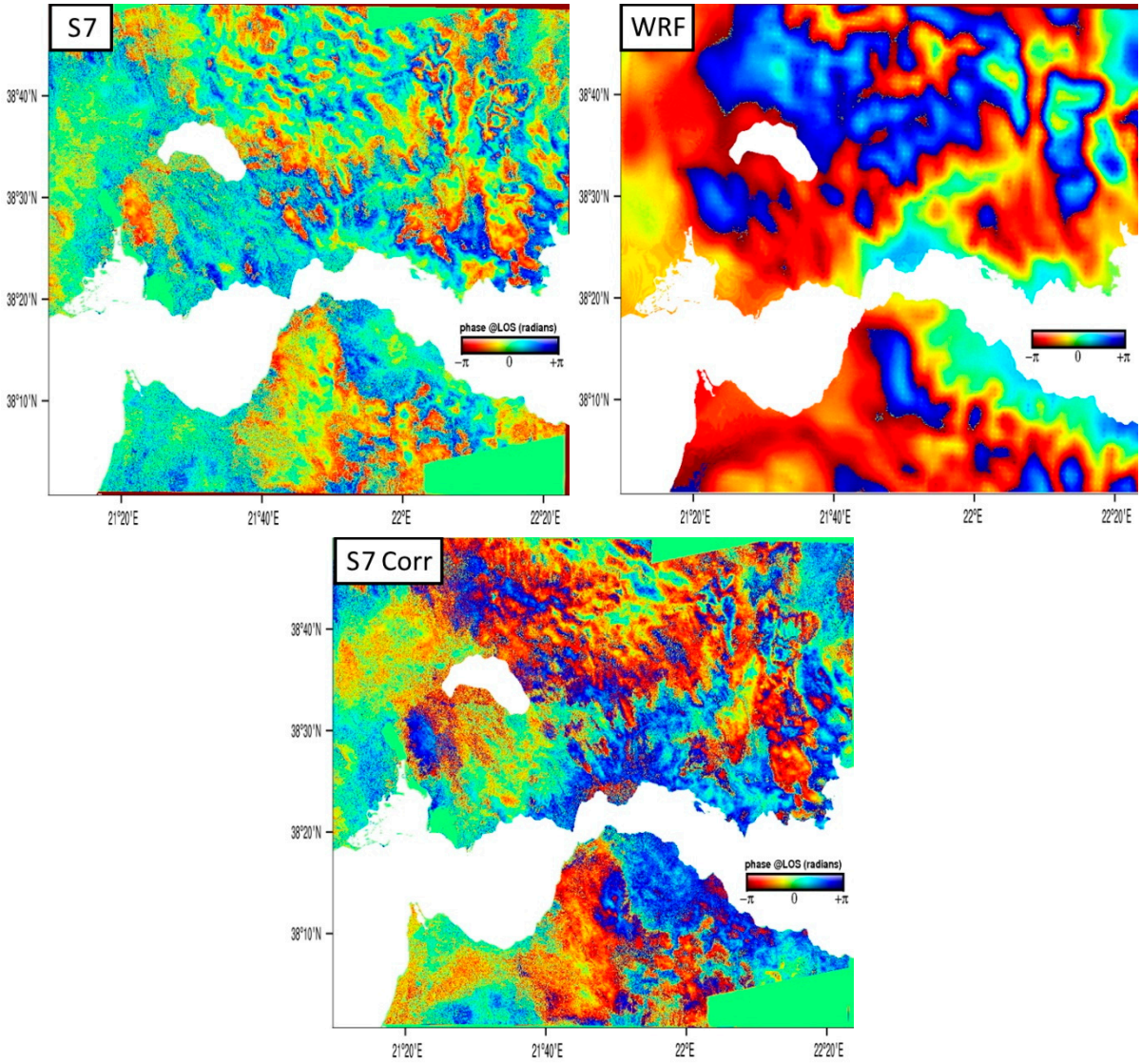

Figure S1. and 23/11/2016, track 175 in radar geometry (top left). Corresponding WRF-derived wrapped differential LOS delay map (top right). Many features of the differential troposphere are captured in the delay map, which is also reflected in the consistency between GNSS and WRF at the times of acquisitions. Significant corrections of the phase gradient are observed in the corresponding residual map (bottom), mainly in northern Peloponnese (southern part of the interferogram), the Mornos valley (north-eastern part of the interferogram), and the area east of lake Trichonis (central part of the interferogram).

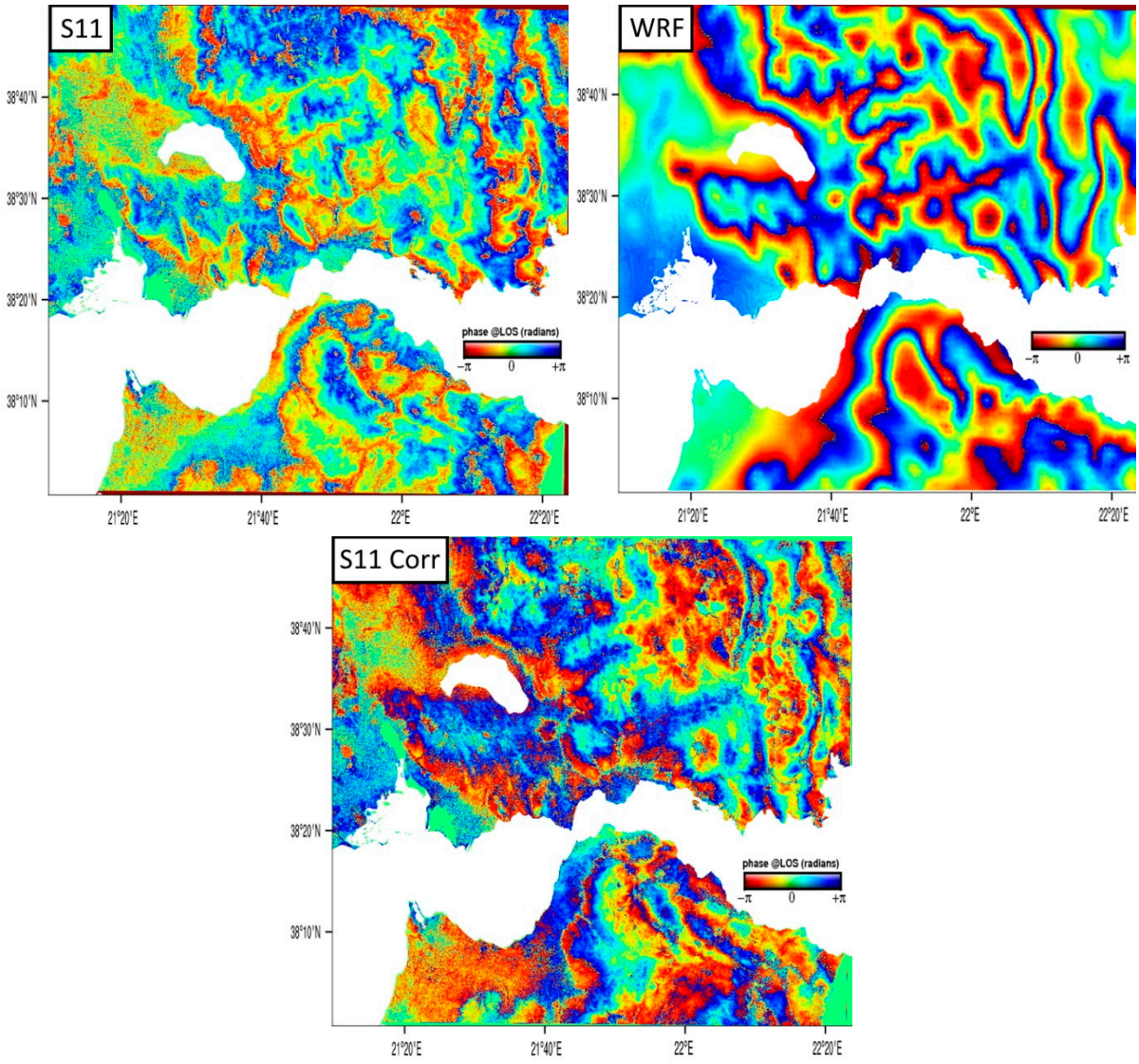

Figure S2. and 06/10/2016, track 80 in radar geometry (top left). Corresponding WRF-derived wrapped differential LOS delay map (top right). Although Δbias is high (23.8 mm), the differential troposphere is partly recreated in the corresponding delay map. The corresponding residual map after subtraction of WRF-derived wrapped differential LOS delay map from the interferogram (bottom) produces fair tropospheric corrections across certain areas of the interferogram.

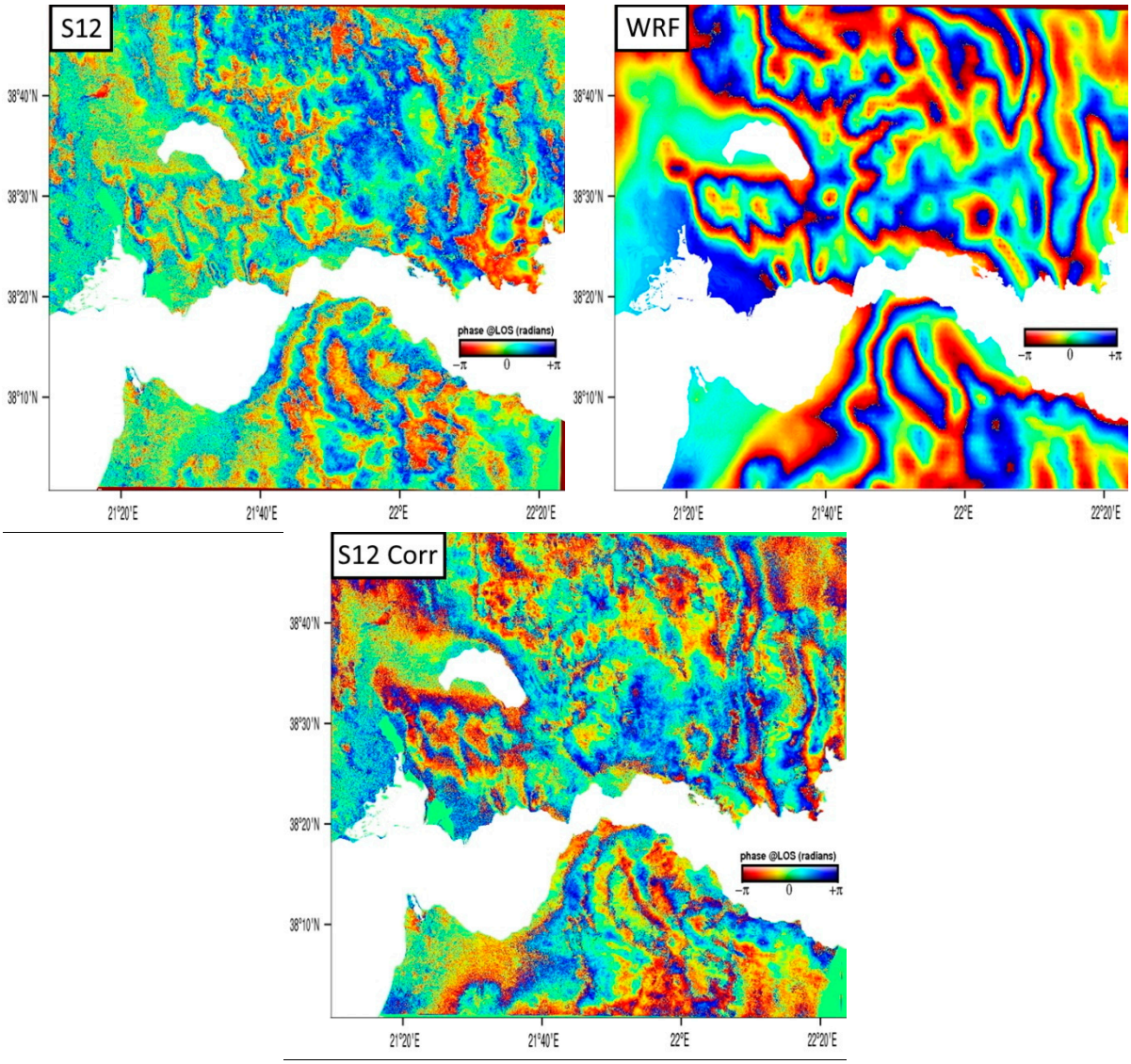

Figure S3. and 18/10/2016, track 80 in radar geometry (top left). Corresponding WRF-derived wrapped differential LOS delay map (top right). Interferogram and meteogram fit relatively well here visually, particularly in areas of good coherence. In the corresponding residual map after subtraction of WRF-derived wrapped differential LOS delay map from the interferogram (bottom), fringe continuity is improved, particularly in the mountains of northern Peloponnese (southern part of the interferogram) and Mornos valley (north-eastern part of the interferogram). Aliasing effects are noticed in areas of low coherence (i.e. south of lake Trichonis), where the differential troposphere is not accurately reproduced by the interferogram.

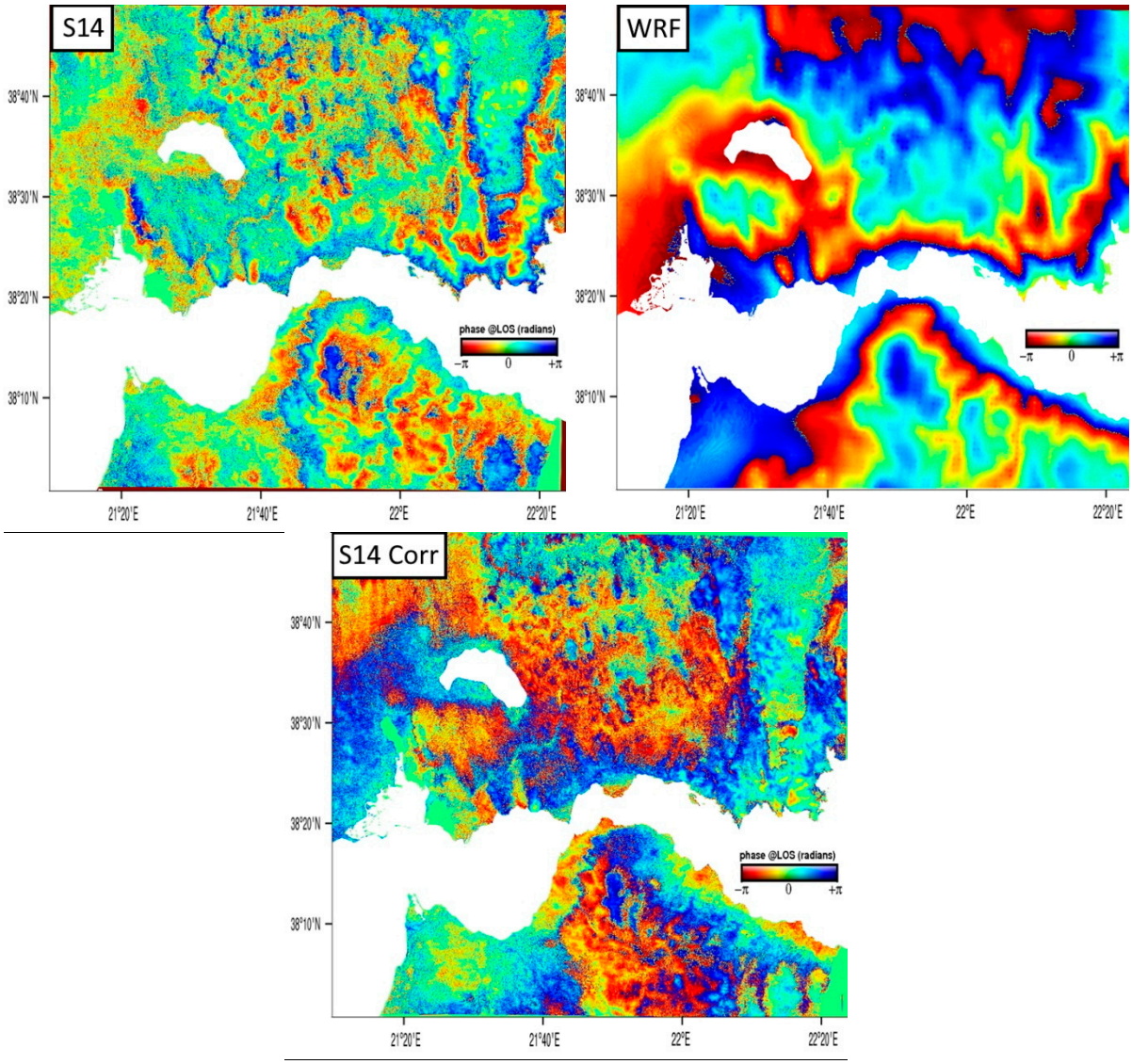

Figure S4. and 24/10/2016, track 80 in radar geometry (top left). Corresponding WRF-derived wrapped differential LOS delay map (top right). Example of good consistency between WRF and GNSS, is also reflected in the comparison between the interferogram and the delay map, with short and long wavelengths being observed. In the corresponding residual map after subtraction of WRF-derived wrapped differential LOS delay map from the interferogram (bottom). The resulting residual map in this case shows a smoothing of the phase continuity in the whole extent.