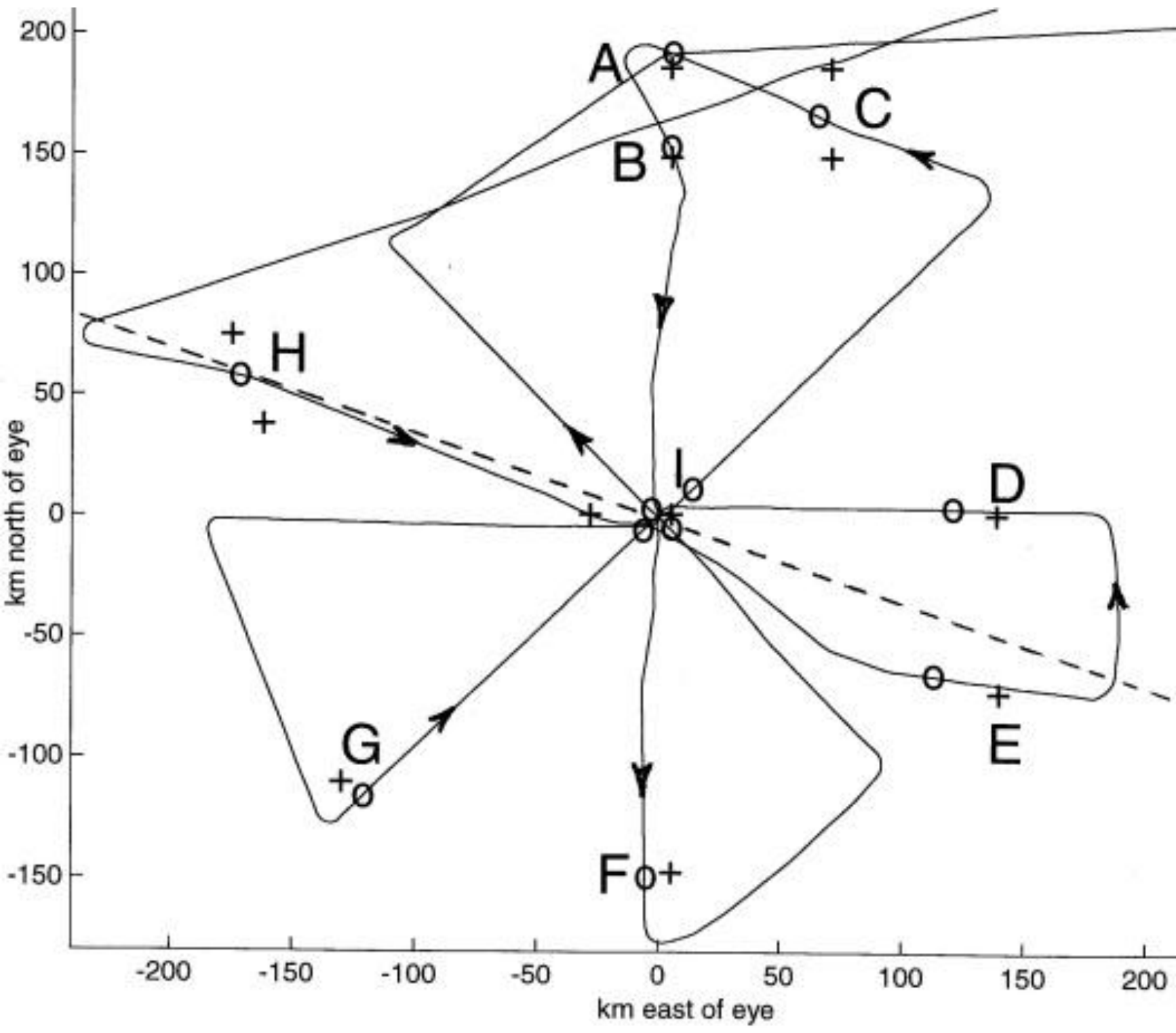
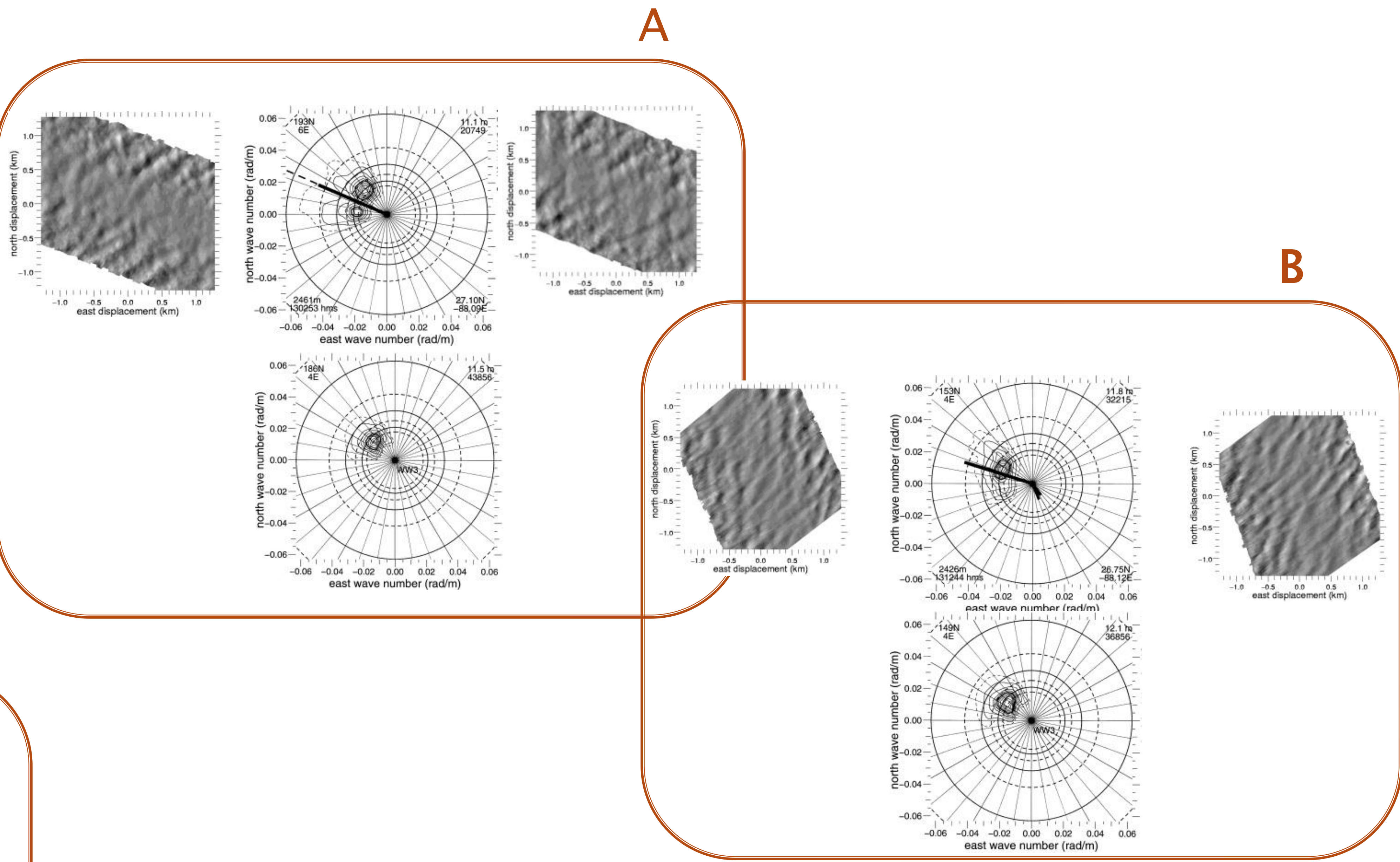


# NOAA Wide Swath Radar Altimeter (WSRA) Wave Spectra from Hurricane Ike compared with WaveWatch III

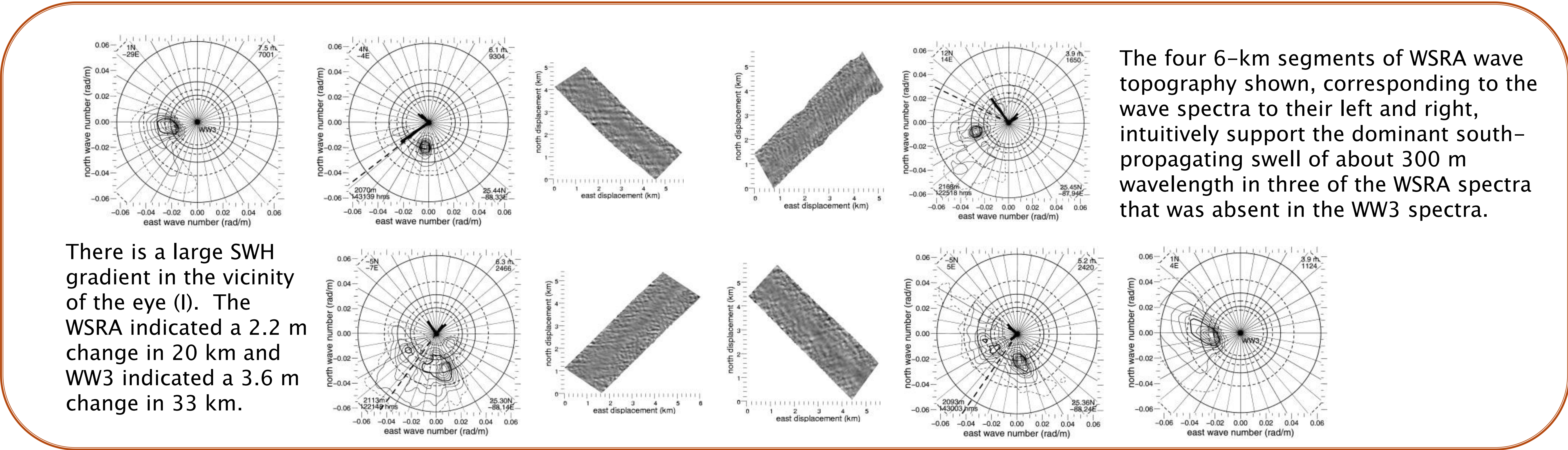
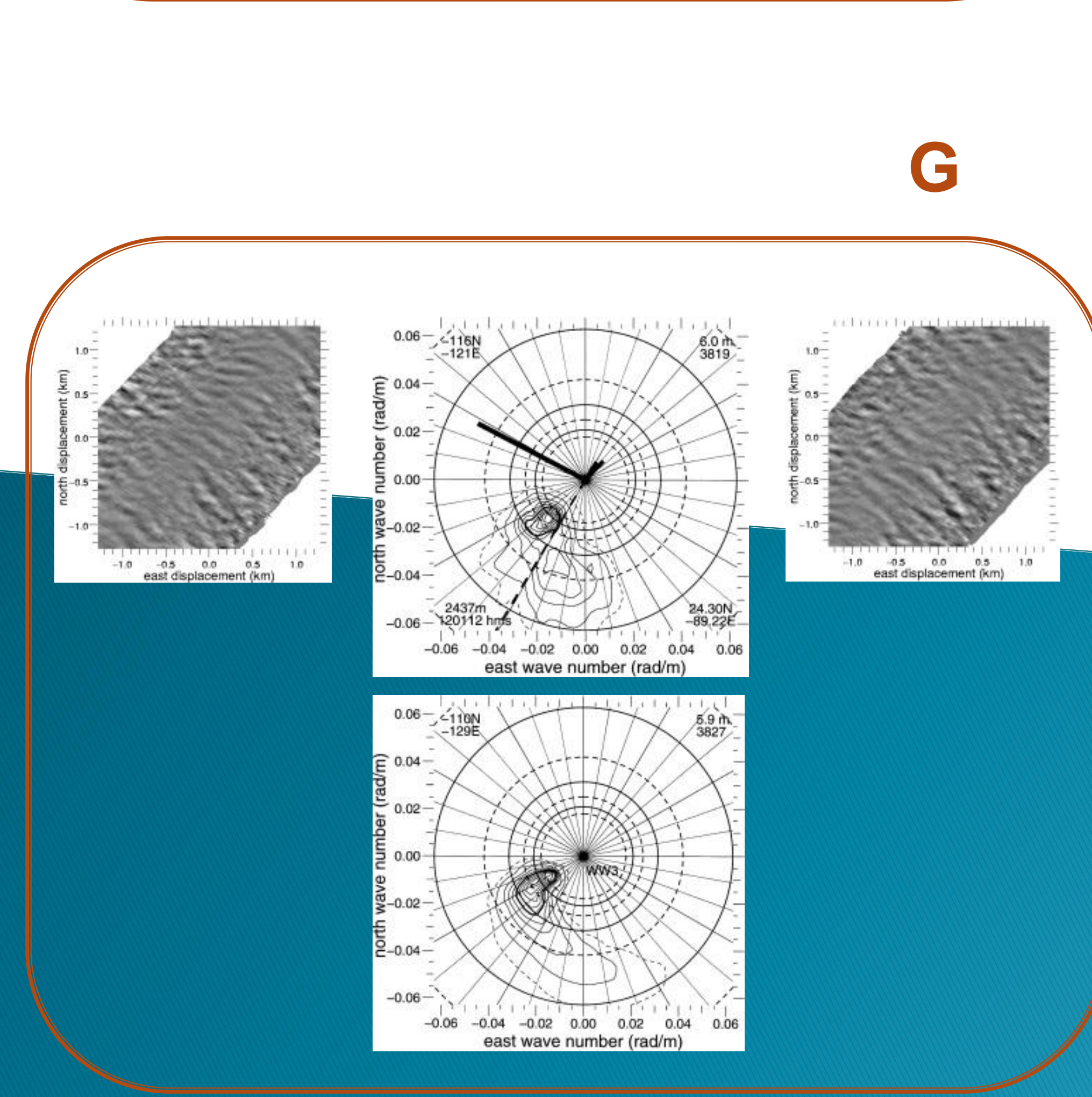
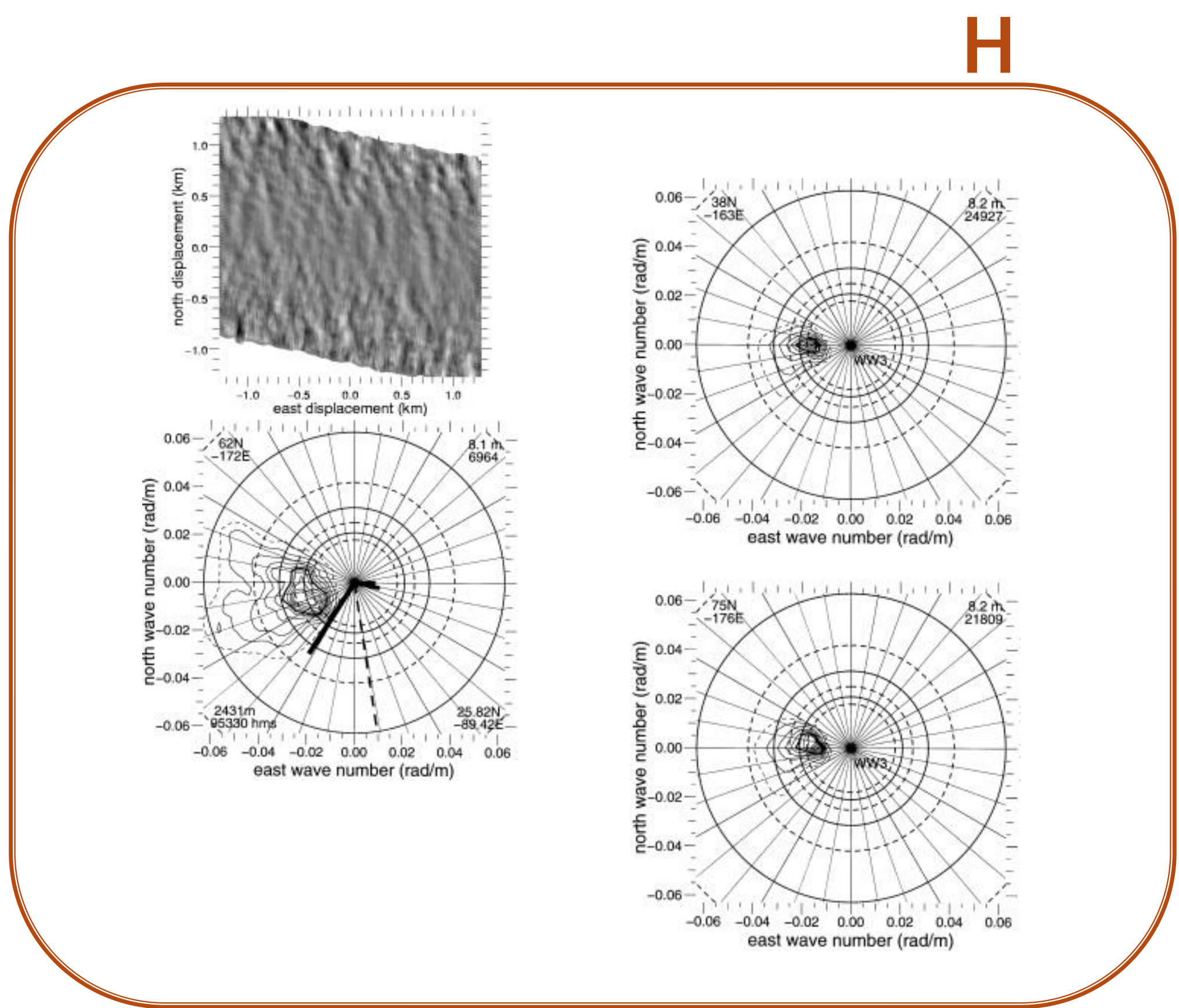
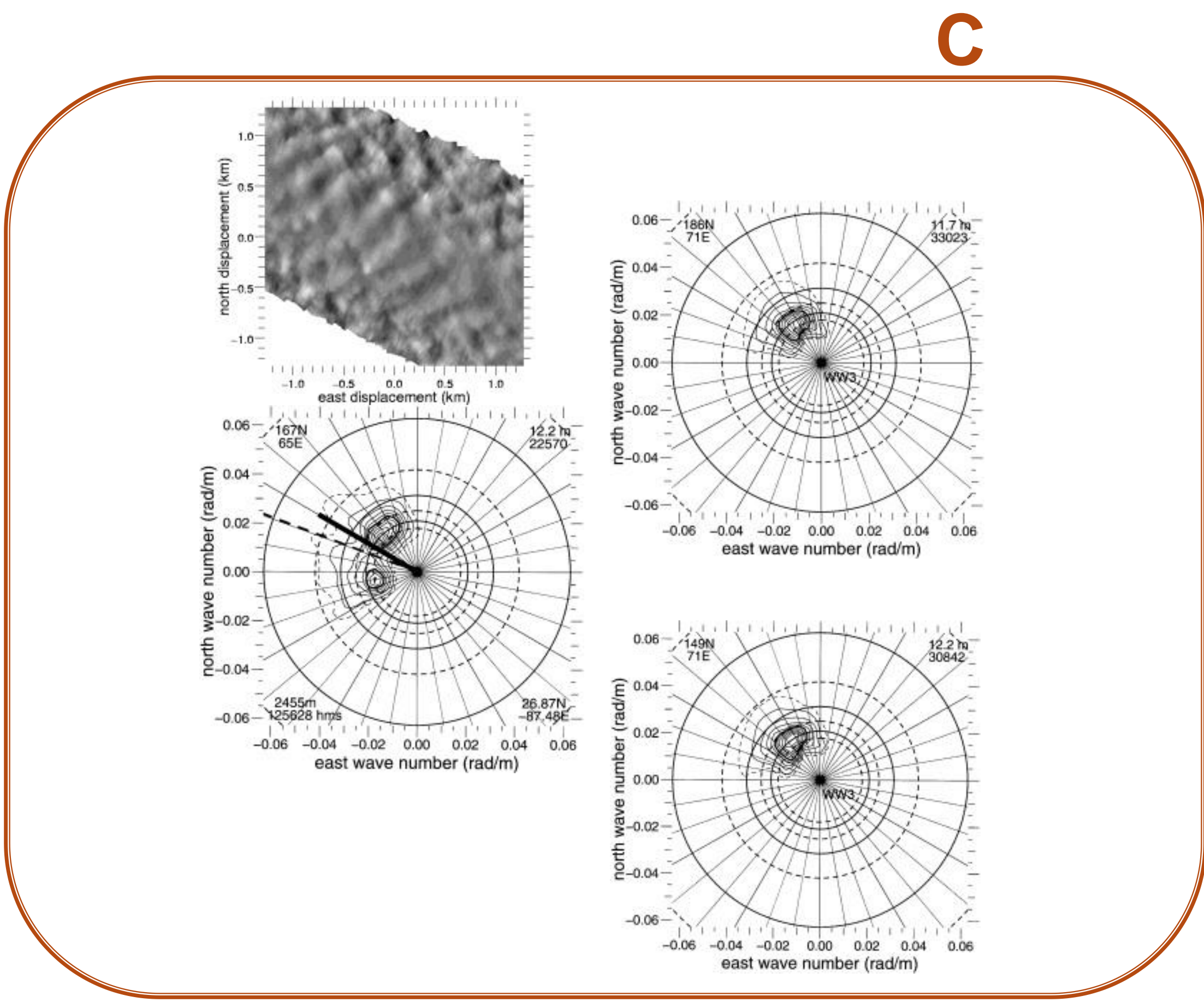
Ivan PopStefanija, ProSensing; Edward J. Walsh, NOAA/ESRL/PSD; Brandon Reichl and Isaac Ginis, URI/GSO

The square windows of grey-scale coded WSRA sea surface topography show what is transformed to obtain an individual wave spectrum. Five individual spectra were averaged to obtain the spectra displayed. The storm-relative position of the spectra in km is indicated in the upper left corner. SWH and peak spectral density are in the upper right corner.

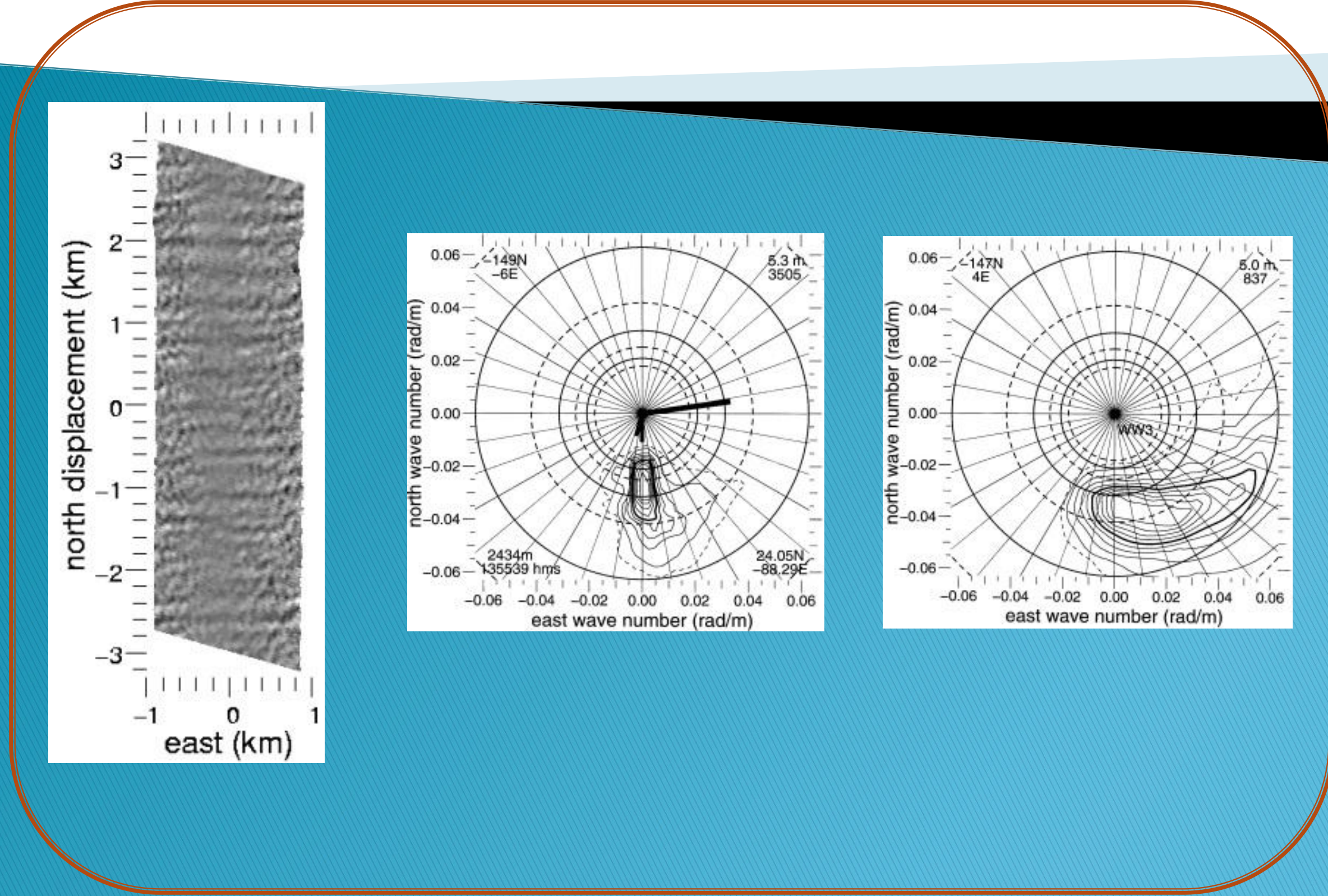
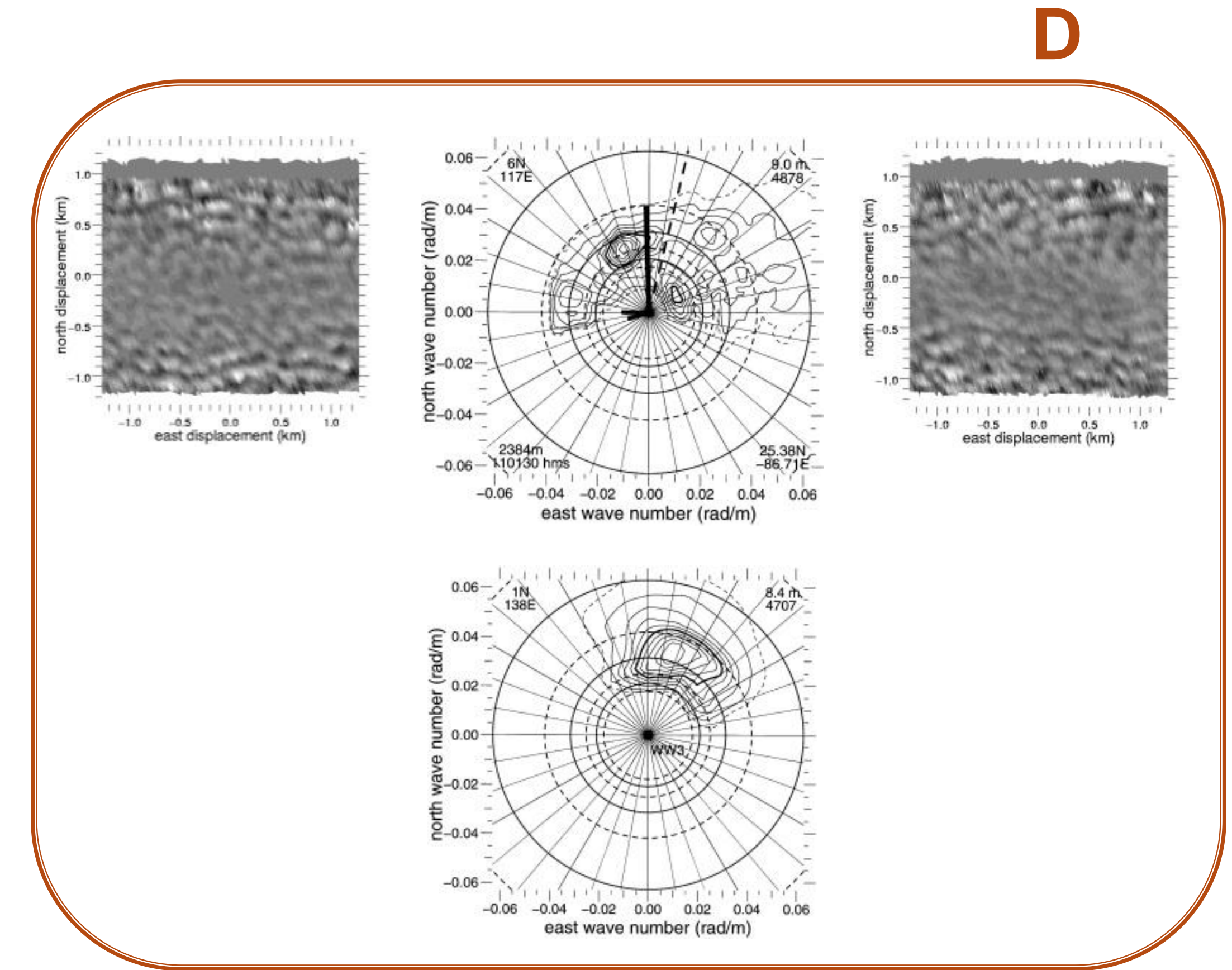
The WaveWatch III spectra are identified by the WW3 near the center.



The line shows the storm-relative track of the NOAA WP-3D carrying the WSRA through Hurricane Ike on 11 SEP 2008. The locations of WSRA spectra between 0953 and 1432 UTC are indicated by circles and the positions of the WW3 spectra corresponding to 1230 UTC are indicated by +. The dashed line indicates the average hurricane direction between 0300 and 1430 UTC.



There is a large SWH gradient in the vicinity of the eye (I). The WSRA indicated a 2.2 m change in 20 km and WW3 indicated a 3.6 m change in 33 km.



For most parts of Hurricane Ike (A, B, C, D, F, G, H) the WSRA and WW3 SWH values were nearly the same. WW3 averaged 1.2% lower with a standard deviation of 4%. WW3 SWH was 21% higher than the WSRA at E.

