Sea ice drift derived from Sentinel-1 test image pair acquired over Fram Strait, using both HH and HV channel and tuned ORB (first column), SIFT (second column) and SURF (third column) algorithm. The drift vectors are shown in a), the number of vectors per grid cell and the RMSD in b) and c) respectively.

Validation of calculated sea ice drift vectors of the same Sentinel-1 test image pair. Manually drawn vectors are shown in green and the respective nearest neighbour ORB vectors in red. The resulting root mean square distance is 609.9m (equivalent to 7.5pixel).