

# Lead Detections from Envisat & MODIS

The detection of leads to estimate local sea surface height is one crucial step for remote sensing of sea ice thickness with radar altimetry. Algorithms that classify individual radar echoes into the category sea ice, lead, or mixed must return reliable results in all sea ice conditions. To verify the surface type classification algorithms, we use other observational sources as the [Sea-ice lead detection in the Arctic from MODIS satellite imagery, 2013-2016](#) from the University of Trier.

Below one example of sea ice lead density in the Arctic from Envisat altimetry (left) and Modis (right) indicating a good regional agreement of lead detection with the two independent methods.

