Title Long-Term High Resolution Sediment and Sea Surface Temperature Spatial Patterns in Arctic Nearshore Waters retrieved using 30-year Landsat Archive Imagery

Authors Konstantin P. Klein, Hugues Lantuit, Birgit Heim, Anna M. Irrgang, Frank Fell, David Doxaran

Review

The paper „Long-Term High Resolution Sediment and Sea Surface Temperature Spatial Patterns in Arctic Nearshore Waters retrieved using 30-year Landsat Archive Imagery” by Konstantin P. Klein, Hugues Lantuit, Birgit Heim, Anna M. Irrgang, Frank Fell, David Doxaran is written in a transparent manner and well-organised.

The aim of this paper was to investigate the dynamics of water temperature and turbidity in the coastal and innershelf waters of the Canadian Beaufort Sea around Herschel Island Qikiqtaruk.

The paper is recommended for publication in Remote Sensing after minor revision.

The main comments:

- The abstract and the goal is clear.
- The interpretation and conclusions are sound and justified by the data.
- The Figure 2 is of bad quality and very fuzzy.
- The Figure 4 it is unreadable and incomprehensible.
- Shortcuts, for example, RS(red) should be RS (red).
- pp15, l453 ...and Figure 11... - should be ...and Figure 11...
- pp19 , l570 ...(Figure 5,Figure 6,Figure 7 and Figure 9) - should be ...(Figure 5, Figure 6, Figure 7 and Figure 9).