



Automatically classified Sentinel-3 optical satellite images

The classification algorithm is subject to ongoing research within the <u>EisKlass2</u> project, i.e. the automatically determined ice classes are not yet validated and need to be used with care. The detected ice classes *do not* represent WMO ice classes but are given by the properties of different channels of the underlying Sentinel-3 optical satellite images. This data layer is kindly provided by <u>König und Partner Fernerkundung GbR (K&P)</u>.

	Open water
N.	Grey variations clouds
	Nearly freezing water or mixed ice / water pixel or very thin ice (e.g. frazil ice)
	Ice without snow cover, especially dark and light nilas (<10 cm)
	Young ice without snow cover, especially grey ice (10-15 cm)
	Young ice without snow cover, especially grey-white ice (15-30 cm)
	Ice of uncertain thickness with dry snow cover
	Ice of uncertain thickness with aged dry snow cover
	Ice of uncertain thickness with less aged snow cover
	Ice of uncertain thickness (most likely between 20 and 50 cm) covered by aged snow (increased grain size of snow)
	Ice of uncertain thickness (most likely between 20 and 50 cm) covered by further aged snow compared to dark pink
	Ice of uncertain thickness (most likely between 20 and 50 cm) covered by snow fallen more recently
	Ice of uncertain thickness (most likely between 20 and 50 cm) covered by aged snow but with increasing temperatures than with the color pink
	Ice of uncertain thickness (most likely between 20 and 50 cm) covered by aged snow but with increasing temperatures than with the color dark purple
	Thick ice covered by slightly wet snow (thickness not well defined)
	Ice covered by increasingly wet snow, partial pixel coverage by melt ponds possible
	Ice with standing water on the surface either flat or in the form of melt ponds or re-frozen water