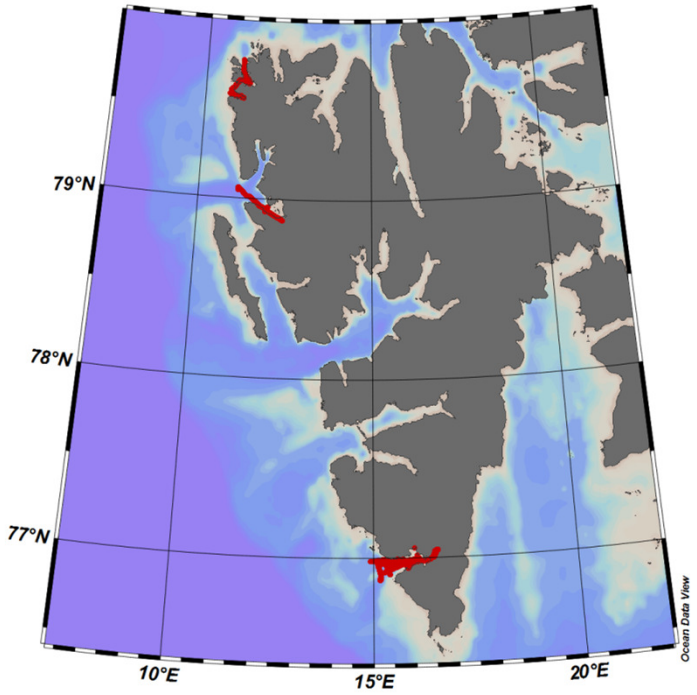
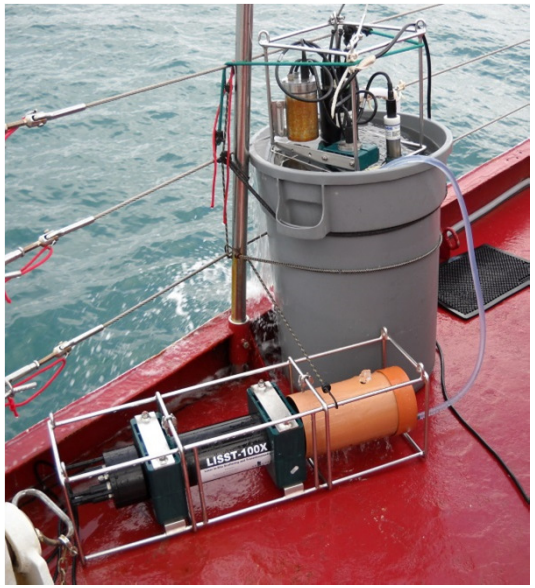
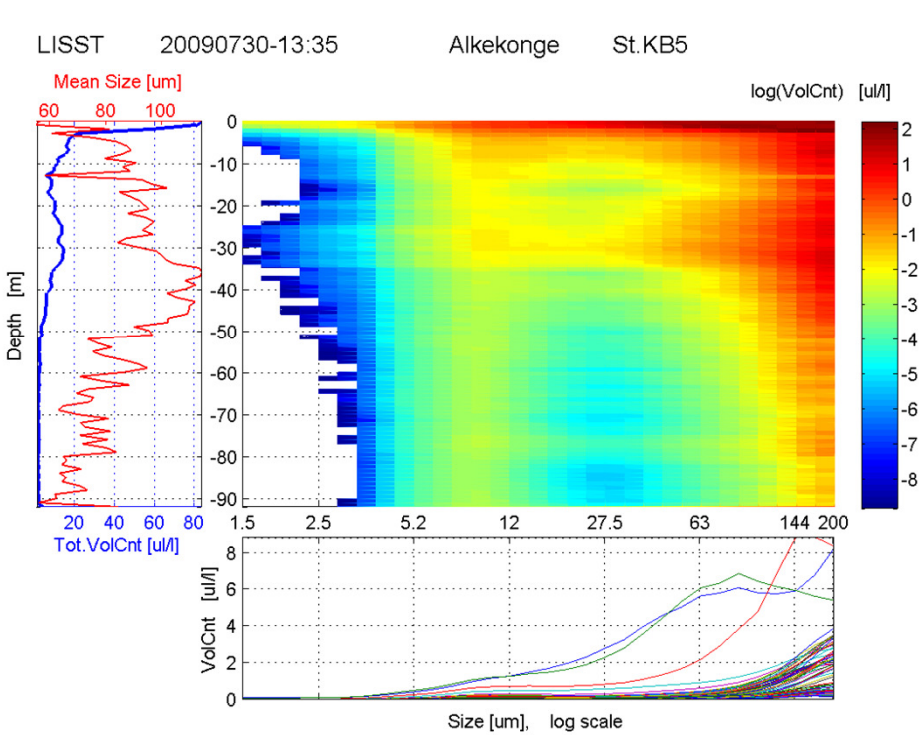
Optical properties of fjords waters and suspensions distribution

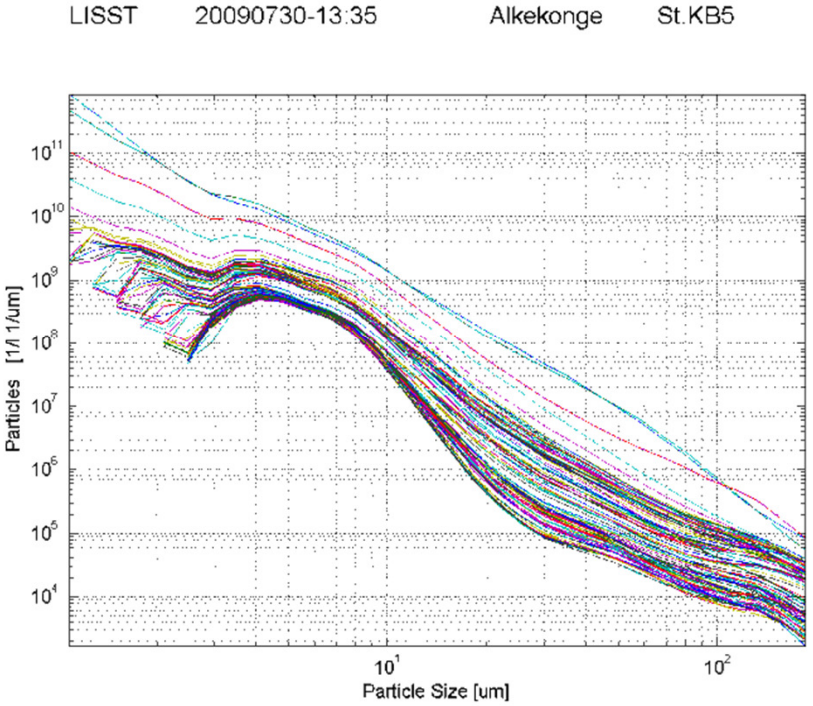
Sławomir Sagan, Mirosław Darecki





Cząstki w wodzie i ich rozkłady rozmiarów, miernik LISST

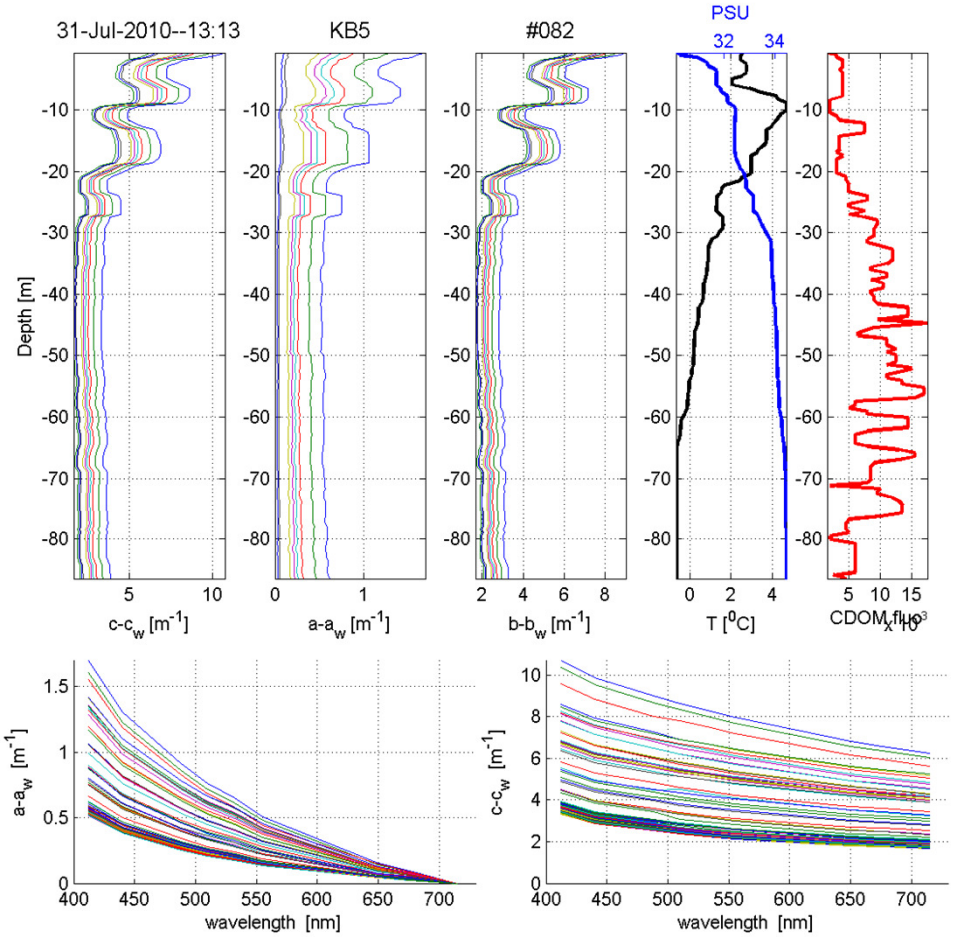




nanoPlankton, 2 – 20 µm

mikroPlankton, 20 – 200 µm

Właściwości optyczne wody, pomiary za pomocą ac9

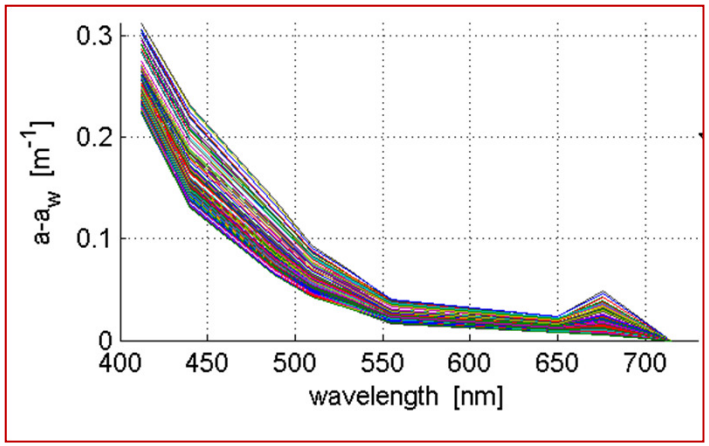


osłabianie = absorpcja + rozpraszanie

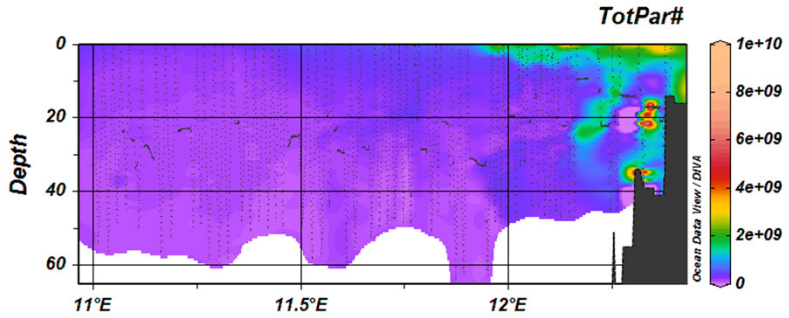
$$c = a + b$$

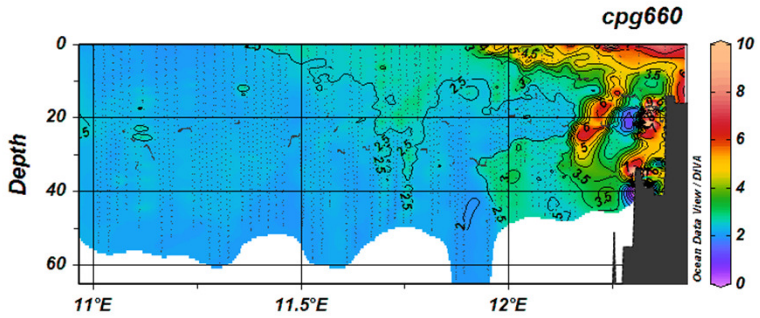
wskaźniki optyczne: ~ cząstki planktonowe

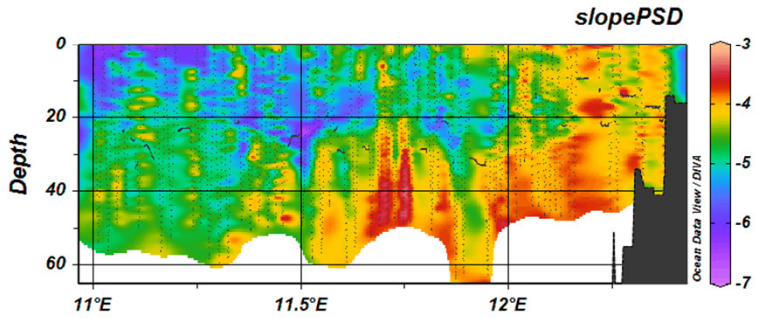
$$\frac{a_{gp}(676nm)}{c_{gp}(650nm)} \quad , \quad a_{gp}(676nm)$$

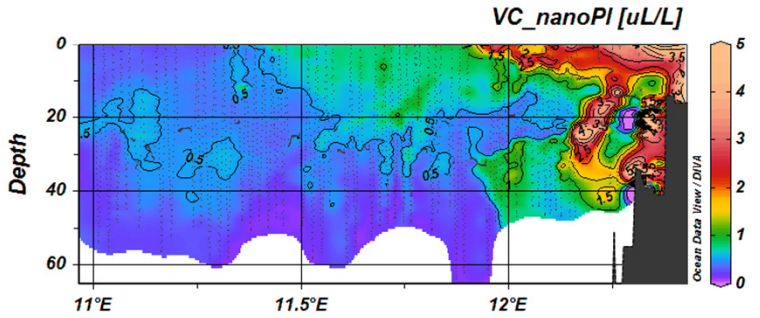


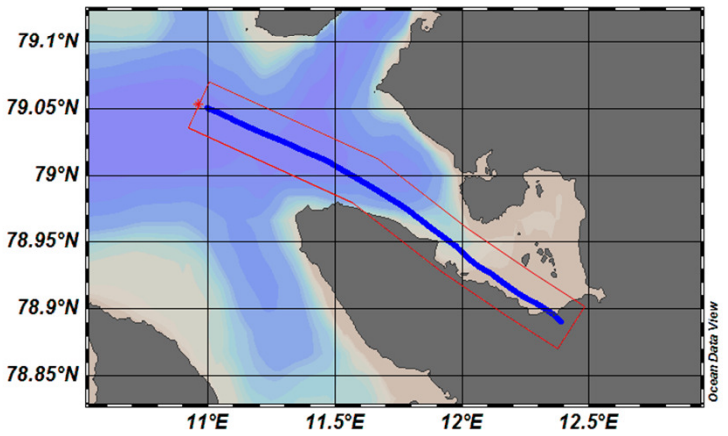
Zróżnicowanie przestrzenne właściwości optycznych oraz zawiesin

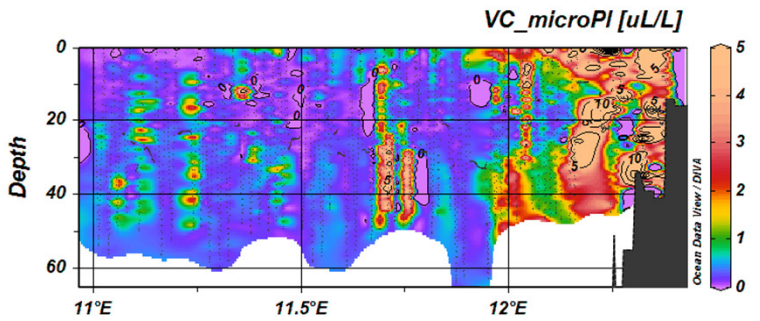




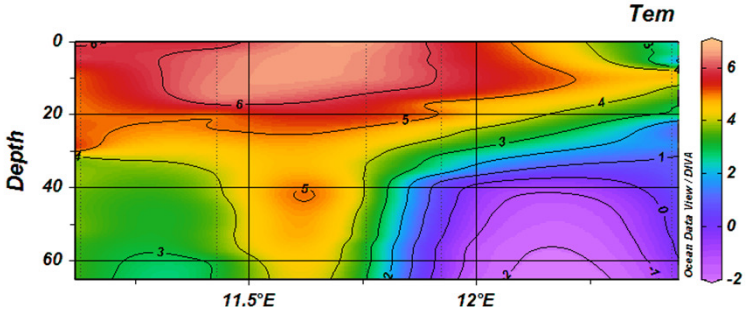


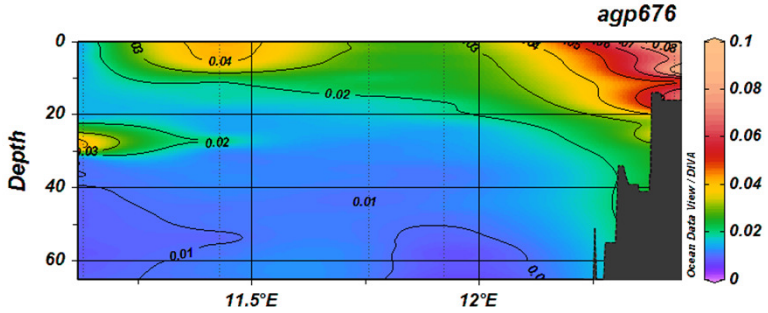


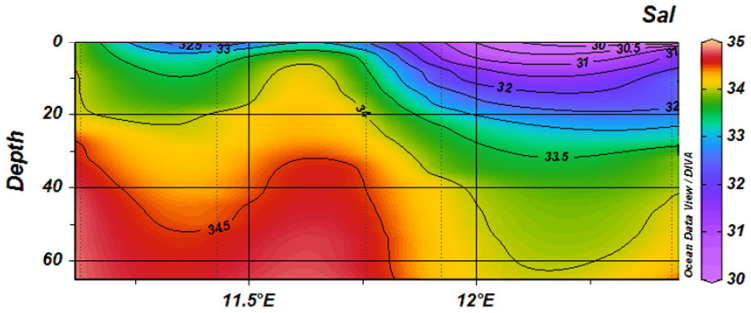


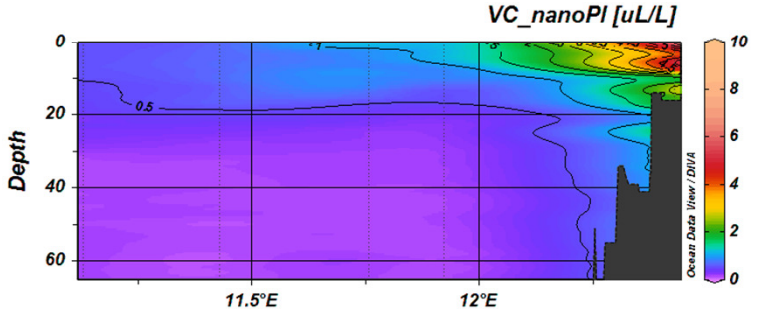


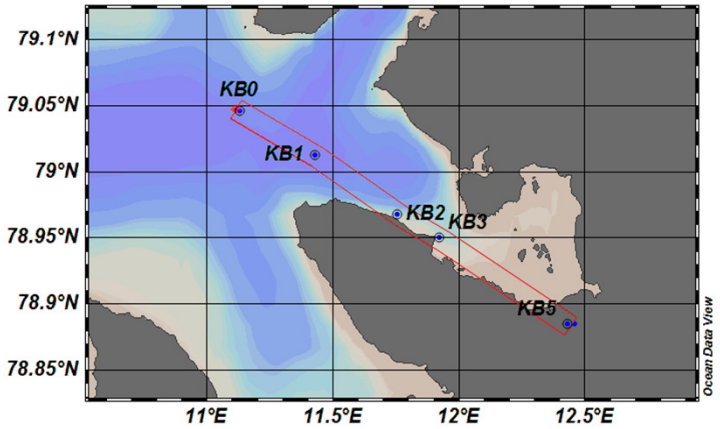
2015-08-04, V6-KB5 LISST

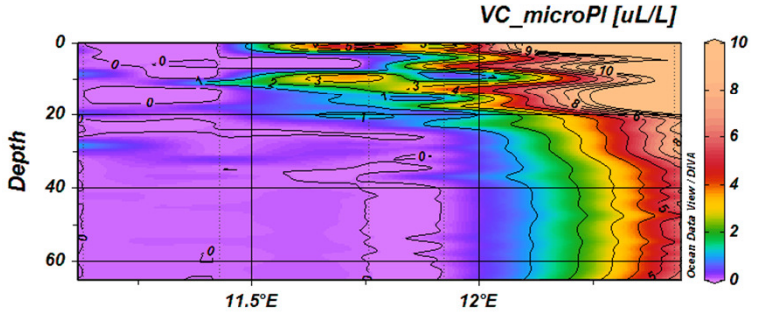








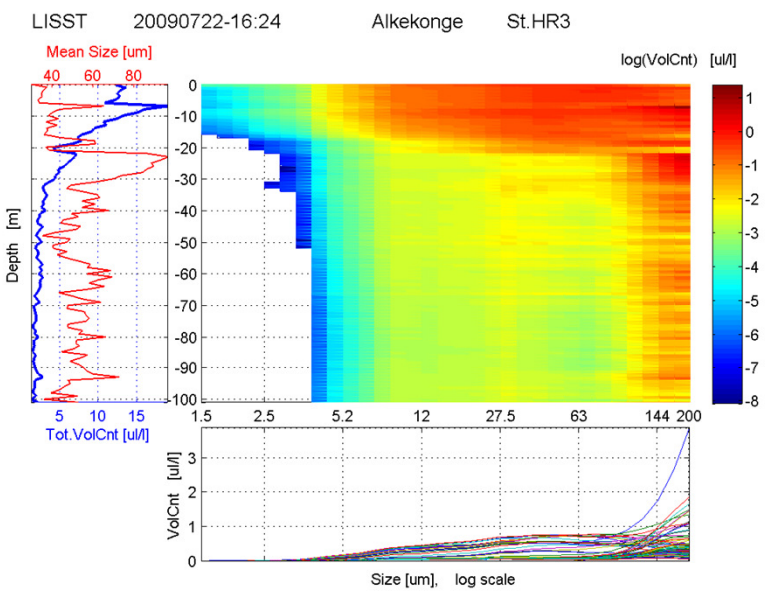


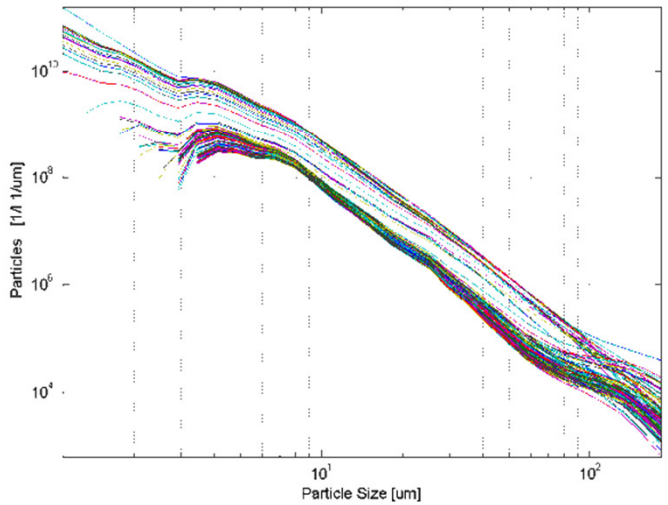


2010-07-31 Kongsfiord

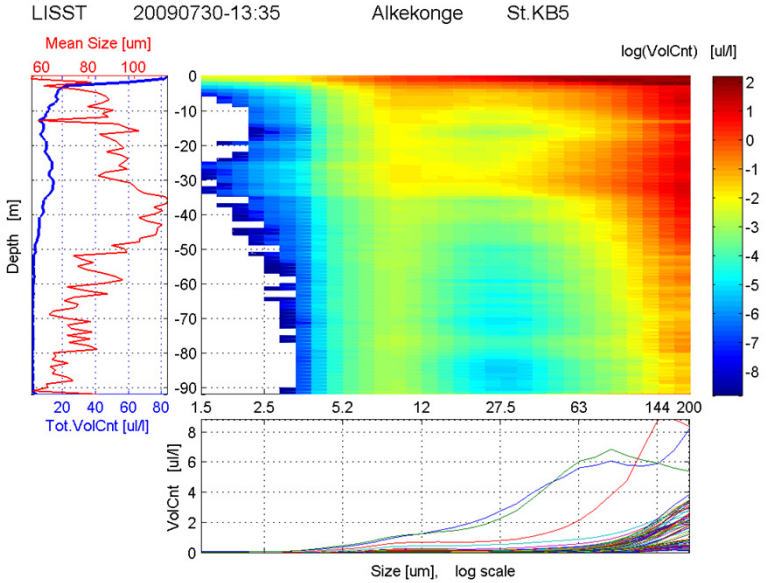
Cząstki w wodzie, stacje w pobliżu lodowca

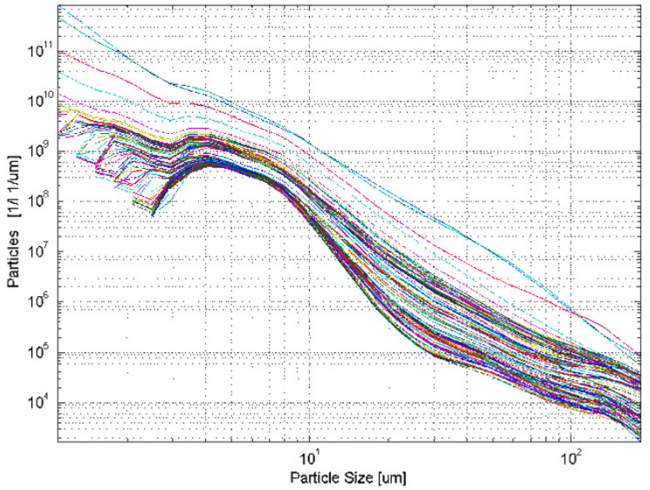
Hornsund





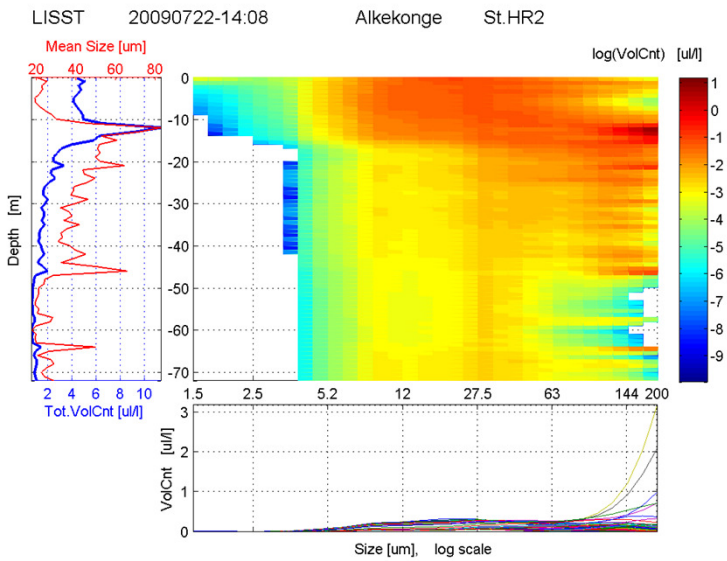
Kongsfiord

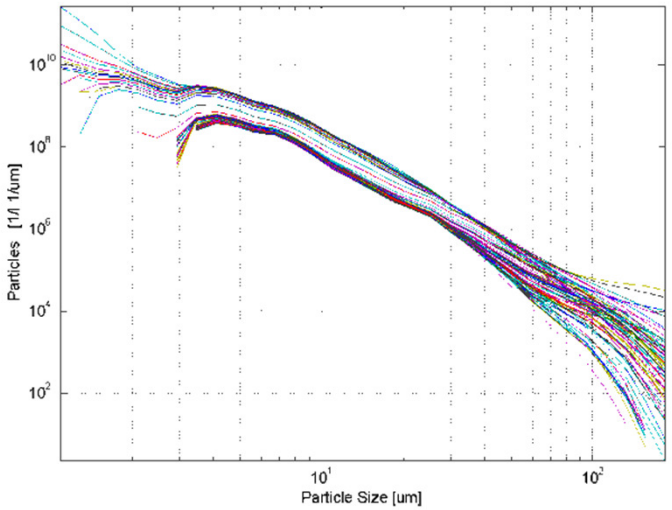




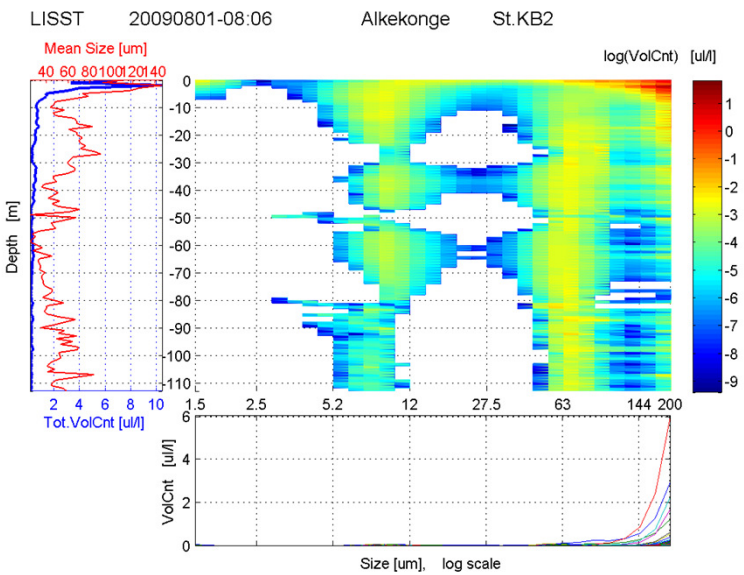
Cząstki w wodzie, część centralna fiordu

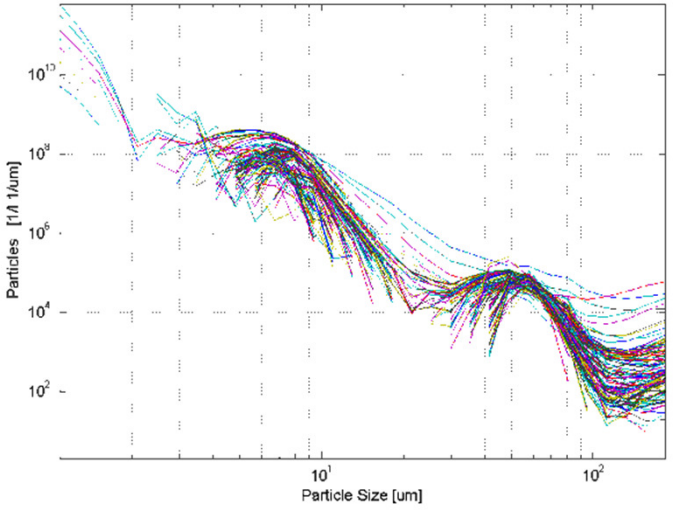
Hornsund



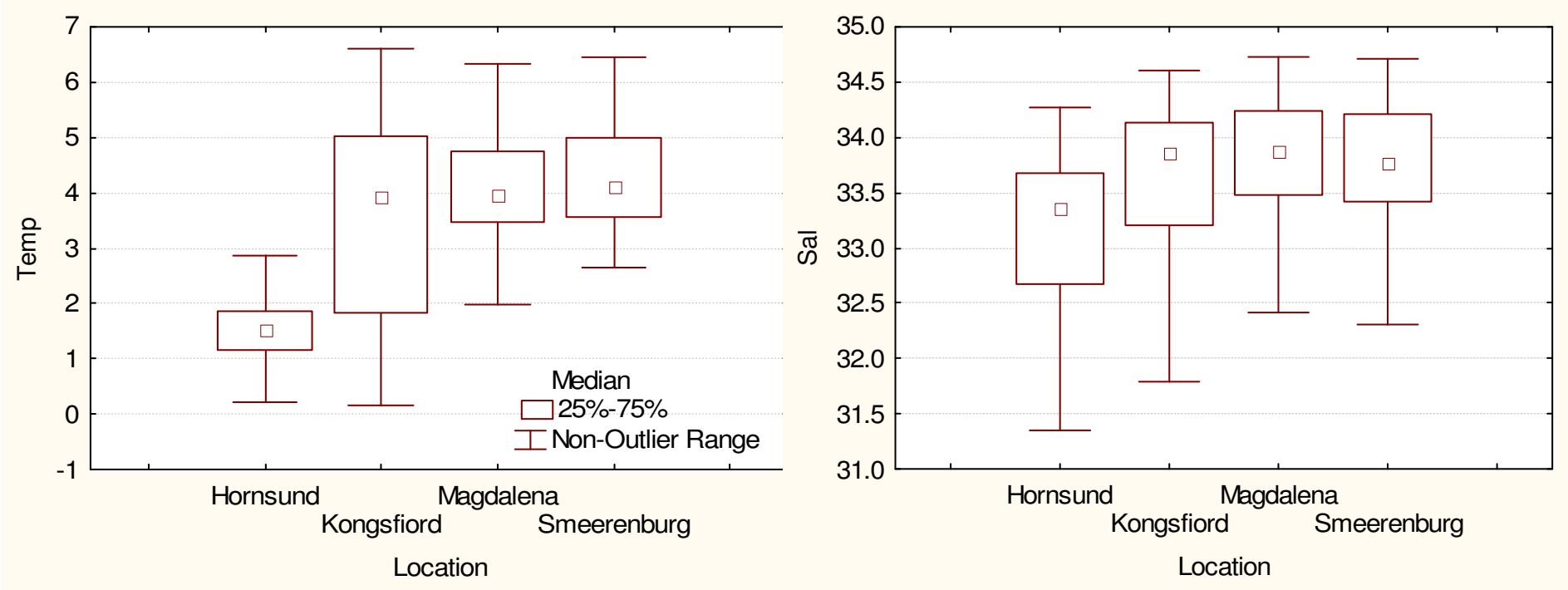


Kongsfiord

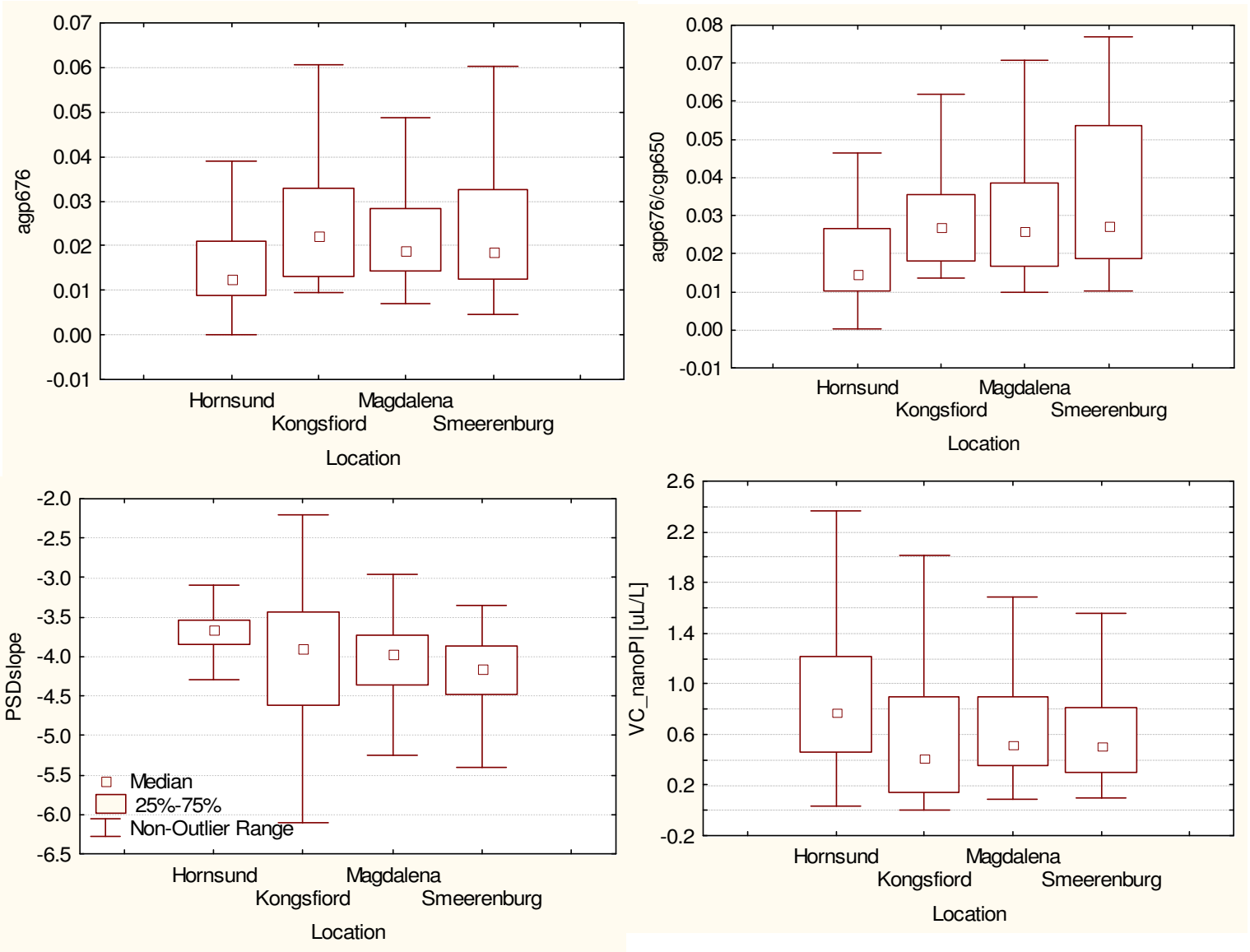




Temperatura i zasolenie, część centralna fiordów, gł. 0 – 50 m



Wskaźniki optyczne oraz zawiesinowe, część centralna fiordów, gł. 0 – 50 m



Wskaźnik r^2 dla relacji koncentracji objętościowej zawiesin z absorpcją światła w paśmie absorpcji chlorofilu, a_{gp}(676 nm)

gł. 0 – 50 m, bez wód przylodowcowych

	Hornsund N=924	Kongsfiord N=436	Magdalena N=574	Smeerenburg N=508
nPlankton, 2 – 20 um	0.409	0.699	0.187	0.445
uPlankton, 20 – 200 um	0.004	0.701	0.033	0.061