

level	object	why	what to measure	how	who	where	frequency	interval	remarks
landscape	tidal glacier bays	disappearance	spatial extent km2	aerial and satellite imagery	NPI, IOPAN,....	West Coast	once in Aug.	5 years	georeferenced spatial extension
	glacial lagoons	expansion ?	spatial extent km2	aerial and satellite imagery	NPI, IOPAN,....	West Coast	once in Aug.	5 years	georeferenced spatial extension
	watt shores	expansion ?	spatial extent km2	aerial and satellite imagery	NPI, IOPAN,....	West Coast	once in Aug.	5 years	georeferenced spatial extension
habitat	ornithogenic tundra	expansion ?	spatial extent km2	aerial and satellite imagery	NPI, IOPAN,....	all region	once in July	2 years	georeferenced biomass and cover
	winter ice	disappearance	spatial extent km2 , thickness, duration of occurrence	aerial and satellite imagery	NPI, IOPAN,....	all region	monthly mei	2 years	georeferenced cover and thickness
	pack ice	disappearance	spatial extent km2 , thickness, duration of occurrence	aerial and satellite imagery	NPI, IOPAN,....	all region	monthly mei	2 years	georeferenced cover and thickness
	kelp forest	expansion ?	spatial extent km2	hydroacoustical survey	NPI, IOPAN, AWI, UNIS, UIT,....	Kongsfjord, Hornsund, Isfjord, Rijpfjord	once in Aug.	2 years	georeferenced biomass and cover
	cold & saline water pockets	disappearance	volume km3	CTD profiling	NPI, IOPAN,....	Kongsfjord, Hornsund, Isfjord, Rijpfjord	once in Aug.	2 years	georeferenced volume and parameters
	watt shore community	enrichment, permanent residents appearance	macrofauna to species, meio to higher taxa level , density,	direct sampling	UNIS, IOPAN	West Coast	once in Aug.	2 years	georeferenced species list with abundance per m2
	bird cliffs	change in species structure	macrofauna to species, meio to higher taxa level , density,	direct observation	NPI	all region	once in June	2 years	georeferenced species list with abundance per m2
	sublittoral rocky walls	change in species structure	macrofauna to species, meio to higher taxa level , density,	underwater photography	NPI, UIT	fixed "Gulliksen" stations	once in Aug.	2 years	georeferenced species list with abundance per m2
	intertidal zone	change in species structure	macrofauna to species, meio to higher taxa level , density,	direct sampling & photography	IOPAN	Kongsfjord, Hornsund, Isfjord, Rijpfjord	once in Aug.	annual	georeferenced species list with abundance per m2
	soft bottom sublittoral	change in species structure	macrofauna to species, meio to higher taxa level , density,	direct sampling & photography	IOPAN, AKVAPLAN	Kongsfjord, Hornsund, Isfjord, Rijpfjord	once in Aug.	annual	georeferenced species list with abundance per m2
species	water column in fjords	change in species structure	all to species level, density, biomass	direct sampling & photography	NPI, IOPAN, UNIS....	Kongsfjord, Hornsund, Isfjord, Rijpfjord	once in Aug.	annual	georeferenced species list with abundance per m2
	cold water, Arctic species	diminishing presence, density, frequency	presence/absence,	direct sampling & photography	NPI, IOPAN, UNIS....	West Coast, selected profiles	once in Aug.	annual	<i>Gammaracanthus loricatus</i> , <i>Lepidepcreum umbo</i> , <i>Yoldia hyperborea</i> , <i>Sclerocrangon ferox</i> ,
	boreal, thermophilic species (neonatives)	increasing presence, density, frequency	presence/absence,	direct sampling & photography	NPI, IOPAN, UNIS....	West Coast, selected profiles	once in Aug.	annual	<i>Mytilus edulis</i> , <i>Ascophyllum nodosum</i> , <i>Gammarus oceanicus</i>
	alien, imported species	increasing presence, density, frequency	presence/absence,	direct sampling & photography	NPI, IOPAN, UNIS, UIT, AKVAPLAN....	all region, anywhere	once in Aug.	annual	pink salmon, pipefish
genes	local charismatic species	status & protection	presence/absence,	direct sampling & photography	NPI,	all region, anywhere	once in Aug.	annual	selected birds & mammals
	twin species	possibility of hybridisation, formation of new species		direct sampling, genetic analyses	UNIS, UIT, IOPAN	West coast	no matter	5 years	<i>Calanus spp</i> , <i>Gammarus spp</i> , <i>Mytilus spp</i> , <i>Pseudocalanus spp</i> ,