

Feature	Satellite	Resolution	North Slope Coverage	Remarks
Surface wind speeds (2m/s)	Windscat (quickscat)	12km grid	2-4 times daily	Historical data back to approx. 2000
Wave height (.5m)	Geosat, Envisat, etc.	2km nadir	Strip of coverage	Historical coverage back to 1990s
Ocean currents dynamic height method	Geosat, Envisat, etc.	2km nadir	Full coverage over 36 Hr period	Data assimilated into GLMS
Wavelength and direction	RADARSAT (SAR) Envisat (SAR) Palsar (SAR)	25m - 100m	100km swath	Alaska SAR (Satellite) Facility archive back to 1991
Ocean frontal boundaries	RADARSAT (SAR) Envisat (SAR) Palsar (SAR)	25m - 100m	100km swath	Alaska SAR (Satellite) Facility back to 1991
Ocean temperature	NOAA AVHRR	1 km	2-4 times	Coverage back to 1970s
Color Chl, doc, sm	Aqua MODIS	1km	2 times daily	Ten years with SeaWiFS
Oil spills and surfactants	RADARSAT (SAR) Envisat (SAR) Palsar (SAR)	25m - 100m	100km swath	Dynamic tasking needed; integration into models