

Table 1: Average Net Ocean Heat Transport (referenced to $T_{ref} = 0^{\circ}\text{C}$) via Arctic Gates [TW] for the C-GLORSv5 and ORAS5 reanalyses and for existing observational and model estimates¹

Source	Section/Gate	Period	Full depth	Mixed layer	0-300 m
C-GLORSv5	Fram Strait	1980-2000	20.7	9.1	12.2
	BSO	1980-2000	77.4	37	72.9
	Bering Strait	1980-2000	7.1	3.1	/
	Davis Strait	1980-2000	13.4	3	/
C-GLORSv5	Fram Strait	2001-2021	25.3	10.7	15.4
	BSO	2001-2021	83.2	39.1	78.2
	Bering Strait	2001-2021	8	3.5	/
	Davis Strait	2001-2021	10.9	2.6	/
ORAS5	Fram Strait	1980-2000	27.6	14.5	16
	BSO	1980-2000	70.1	34.5	65.4
	Bering Strait	1980-2000	8.5	3.9	/
	Davis Strait	1980-2000	17.1	3.7	/
ORAS5	Fram Strait	2001-2021	30	16.8	18.6
	BSO	2001-2021	83.1	35.7	78.2
	Bering Strait	2001-2021	9.4	4.2	/
	Davis Strait	2001-2021	15.1	3.2	/
Observations					
Tsubouchi et al. 2019	Fram Strait	2005-2009 ²	61.2	/	/
	BSO	2005-2009	64.5	/	/
	Bering Strait	2005-2009	2.14	/	/
	Davis Strait	2005-2009	23.67	/	/
Model Simulations					
Muilwijk et al. 2018	Fram Strait	1890-2009	10-30	/	/
	BSO	1890-2009	30-60	/	/
	Bering Strait	1890-2009	0-5	/	/
	Davis Strait	1890-2009	5-15	/	/

¹ Averages for C-GLORSv5 and ORAS5 are computed from monthly net heat transports. OHT for the 0-300 m layer is marked as '/' if the section depth is shallower than 300 m and values therefore correspond to the full depth OHT.

² Values refer to Jan 2005 - Dec 2009 averages based on mooring data (details in Tsubouchi et al. 2018).