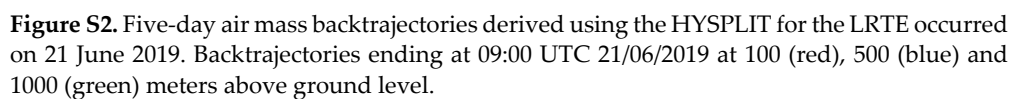
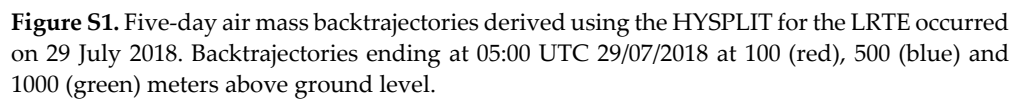
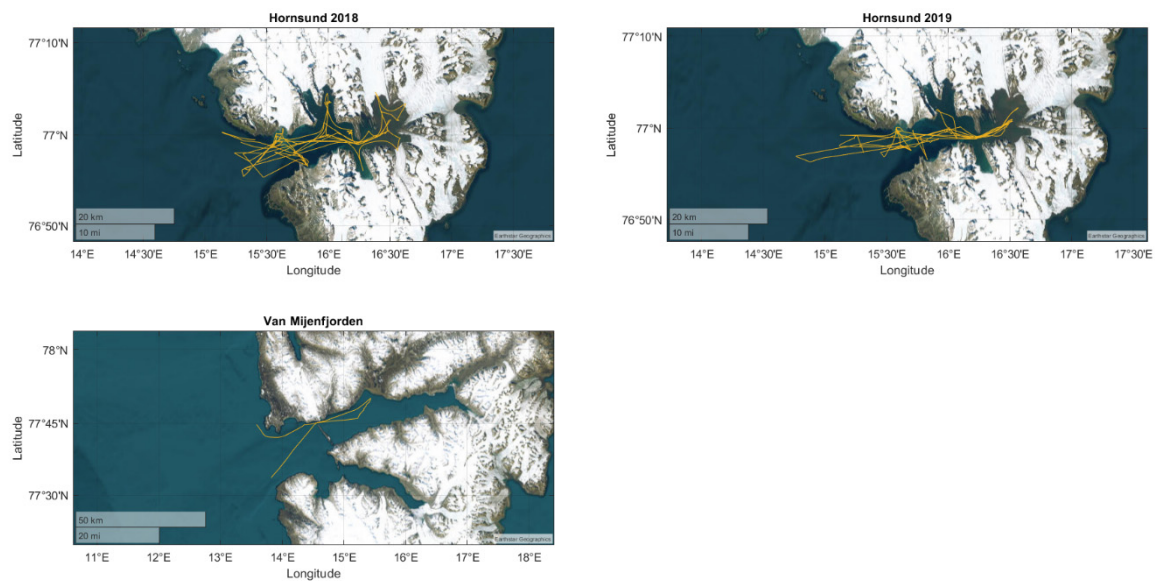


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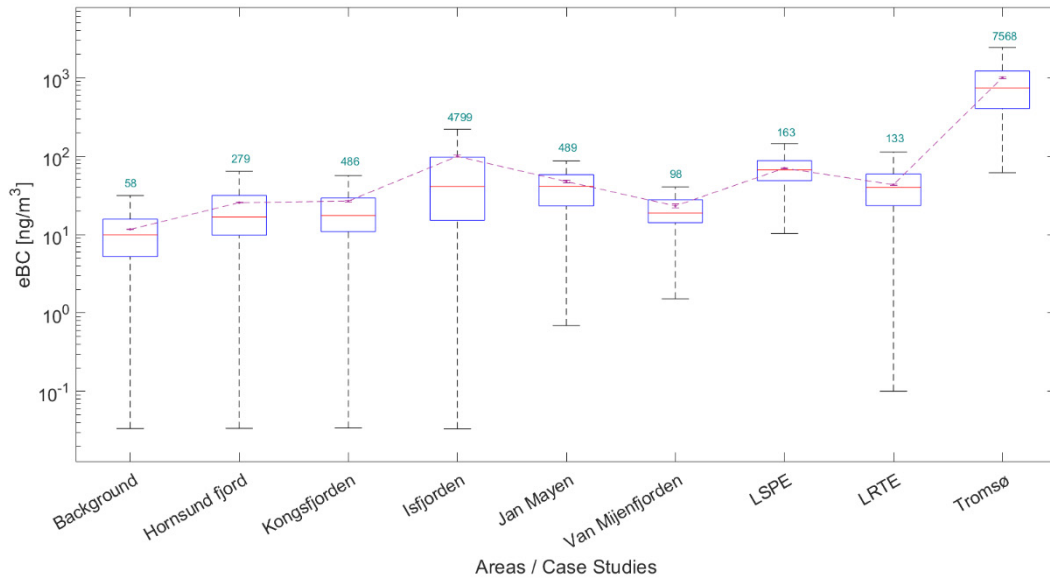




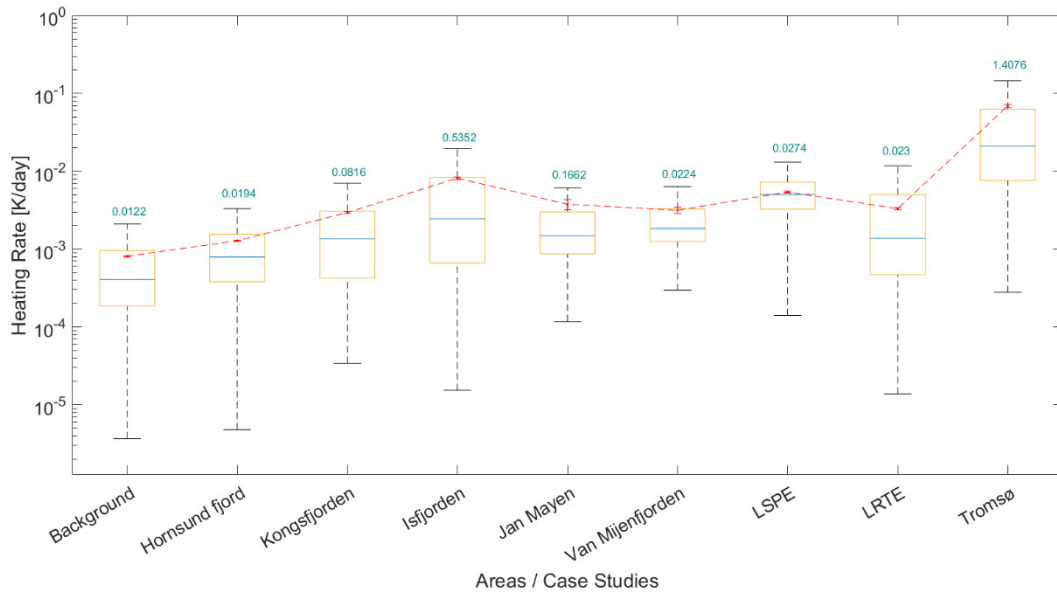
**Figure S5.** Comparison between Hornsund fjord (reached by s/y Oceania in both 2018 and 2019) and Van Mijenfjorden (reached by s/y Oceania only in 2019): Hornsund, like other fjords, was covered entirely; Van Mijenfjorden, instead, is the only fjord that has been covered for half of its length, without reaching the actual settlement, Sveagruva (it is also the fjord where the ship was present for the shortest time).

	'Back ground'	'Hornsund fjord'	'Kongs fjorden'	'Isfjorden'	'Jan Mayen'	'Van Mijen- fjorden'	'LSPE'	'LRTE'	'Tromsø'
<b>N° of real-time valid data</b>	47654	13386	12291	23710	2173	549	2548	4020	6061

**Table S1.** Number of real-time valid data (see section 2.3 – 2.5) at 1-minute time resolution for each areas/case studies. Classes containing less data are: LRTE and LSPE, because they are linked to episodic phenomena; Jan Mayen and Van Mijenfjorden, because they were reached by s/y Oceania only in 2018 and 2019 respectively. The value is particularly low for Van Mijenfjorden, which is a special case (as already explained in the main text, section 3): it is the fjord where the ship spent the least time and it has been covered only for half of its length (without reaching the actual settlement, Sveagruva).



**Figure S6.** eBC boxplots for the areas/case-studies considered. The y-axis is in logarithmic scale. The central mark indicates the median, while the bottom and top edges of the box indicate the 25th and 75th percentiles, respectively; the whiskers extend to the most extreme data points not considered outliers (outliers are not plotted). The mean (dashed line) and the related 95% confidence interval are also represented. The cyan numbers above the top edge of the box point out the maximum value (i.e. the maximum outlier) reached.



**Figure S7.** HR boxplots for the areas/case-studies considered. The y-axis is in logarithmic scale. The central mark indicates the median, while the bottom and top edges of the box indicate the 25th and 75th percentiles, respectively; the whiskers extend to the most extreme data points not considered outliers (outliers are not plotted). The mean (dashed line) and the related 95% confidence interval are also represented. The cyan numbers above the top edge of the box point out the maximum value (i.e. the maximum outlier) reached.