Supplement of Earth Syst. Sci. Data, 18, 8167–8189, 2026
https://doi.org/10.5194/essd-18-8167-2026-supplement
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Supplement of

Climatology of the sea temperature from long-term in situ observations: Northern Chilean Patagonia

Cécile Pujol et al.

Correspondence to: Cécile Pujol (cecile.pujol@uliege.be)

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Table S1: Total number of observations between 25 and 35 m depth and proportion of observation set aside for validation.

Month	Total observations	Observations for validation
Jan	80	4
Feb	4177	209
Mar	4189	209
Apr	152	8
May	33751	1688
Jun	43938	2197
Jul	49343	2467
Aug	48729	2436
Sep	30906	1545
Oct	2332	117
Nov	7646	382
Dec	1206	60

Table S2: Total number of observations between 90 and 110 m depth and proportion of observation set aside for validation.

Month	Total observations	Observations for validation
Jan	155	8
Feb	2686	135
Mar	2700	135
Apr	197	10
May	550	28
Jun	971	49
Jul	7704	385
Aug	6250	313
Sep	1190	60
Oct	3154	158
Nov	10898	545
Dec	1703	85

Table S3: Total number of observations between 180 and 220 m depth and proportion of observation set aside for validation. No observations were retained for validation in January and April.

Month	Total observations	Observations for validation
Jan	263	/
Feb	2329	37
Mar	2738	49
Apr	320	/
May	585	5
Jun	648	19
Jul	4399	58
Aug	4944	86
Sep	320	9
Oct	1909	44
Nov	7772	183
Dec	1250	19

Table S4: Statistic metrics for the validation of the monthly climatology at 30 m depth for every month: Correlation, Bias (°C), Root mean square error (RMSE, °C), Centred root mean square error (CRMSE, °C), the average Standard deviation (SD, °C) across the entire study area for the climatology, the average Standard deviation for the in situ data used for the climatology construction between 0 and 1 m depth.

Month	Correlation	Bias	RMSE (°C)	CRMSE (°C)	SD climatology	SD in situ data
Jan	0,782	0,046	0,124	0,115	0,665	1,244
Feb	0,628	0,254	0,441	0,361	0,709	0,537
Mar	0,863	0,113	0,275	0,251	0,590	0,537
Apr	0,937	0,141	0,209	0,154	0,914	1,054
May	0,876	0,096	0,289	0,272	0,924	0,214
Jun	0,876	-0,100	0,295	0,277	0,913	0,259
Jul	0,860	-0,071	0,320	0,312	0,439	0,358
Aug	0,812	-0,036	0,257	0,255	0,284	0,418
Sep	0,955	-0,032	0,153	0,150	0,250	0,177
Oct	0,850	0,025	0,201	0,200	0,871	0,409
Nov	0,855	0,019	0,321	0,320	0,783	0,639
Dec	0,945	-0,033	0,250	0,248	0,940	0,818

Table S5: Statistic metrics for the validation of the monthly climatology at 100 m depth for every month: Correlation, Bias (°C), Root mean square error (RMSE, °C), Centred root mean square error (CRMSE, °C), the average Standard deviation (SD, °C) across the entire study area for the climatology, the average Standard deviation for the in situ data used for the climatology construction between 25 and 35 m depth.

Month	Correlation	Bias	RMSE (°C)	CRMSE (°C)	SD climatology	SD in situ data
Jan	0,996	-0,055	0,089	0,070	0,578	0,470
Feb	0,972	-0,009	0,207	0,206	0,651	0,691
Mar	0,943	-0,023	0,284	0,284	0,621	0,689
Apr	0,537	0,016	0,235	0,234	0,534	0,779
May	0,952	-0,014	0,156	0,156	0,533	0,802
Jun	0,961	-0,001	0,112	0,112	0,490	0,550
Jul	0,909	-0,035	0,254	0,252	0,362	0,653
Aug	0,888	-0,046	0,263	0,259	0,323	0,660
Sep	0,993	-0,020	0,078	0,076	0,370	0,580
Oct	0,855	-0,015	0,206	0,205	0,374	0,497
Nov	0,895	-0,015	0,251	0,250	0,503	0,584
Dec	0,957	0,005	0,167	0,167	0,526	0,684

Table S6: Statistic metrics for the validation of the monthly climatology at 200 m depth for every month: Correlation, Bias (°C), Root mean square error (RMSE, °C), Centred root mean square error (CRMSE, °C), the average Standard deviation (SD, °C) across the entire study area for the climatology, the average Standard deviation for the in situ data used for the climatology construction between 180 and 220 m depth. Statistics were not calculated for January and April.

Month	Correlation	Bias	RMSE (°C)	CRMSE (°C)	SD climatology	SD in situ data
Jan	/	/	/	/	/	/
Feb	0,997	-0,036	0,095	0,088	0,856	0,805
Mar	0,974	0,123	0,177	0,128	0,796	1,083
Apr	/	/	/	/	/	/
May	1,000	0,012	0,014	0,007	0,658	1,192
Jun	0,996	0,032	0,048	0,035	0,594	0,866
Jul	0,961	-0,020	0,206	0,205	0,706	1,011
Aug	0,869	-0,001	0,323	0,323	0,618	0,884
Sep	0,998	-0,093	0,102	0,043	0,687	0,989
Oct	0,923	0,047	0,199	0,193	0,731	0,876
Nov	0,931	-0,046	0,237	0,232	0,854	0,785
Dec	0,962	-0,006	0,175	0,175	0,789	0,956

S1 Supplementary figures of the monthly temperature climatology

Here, we present the complete monthly temperature climatology corresponding to section 3.2 of the manuscript (only 0, 30 and 100m are shown in the manuscript).

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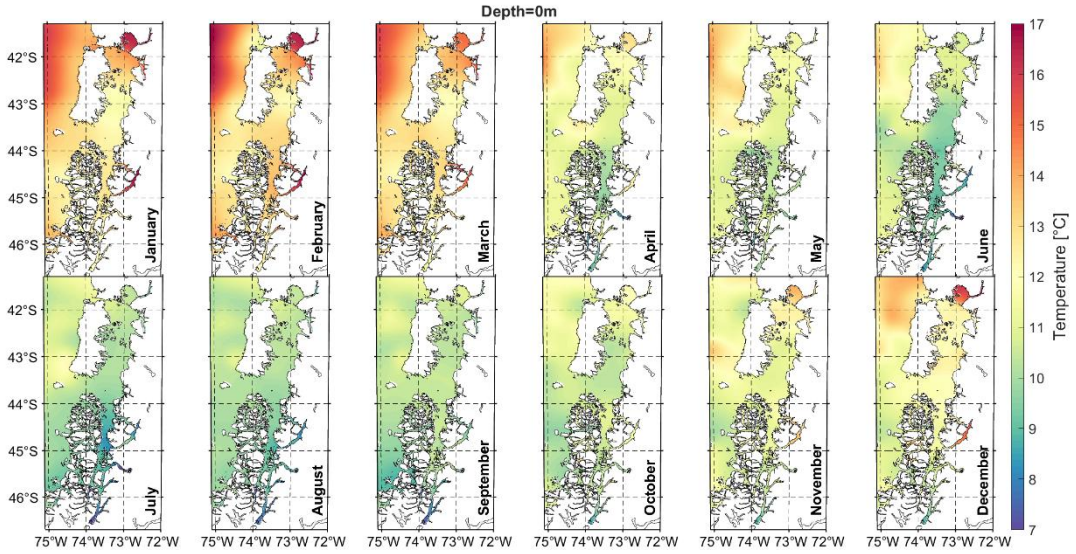


Fig. S 1: Monthly climatology of the sea temperature at 0m depth.

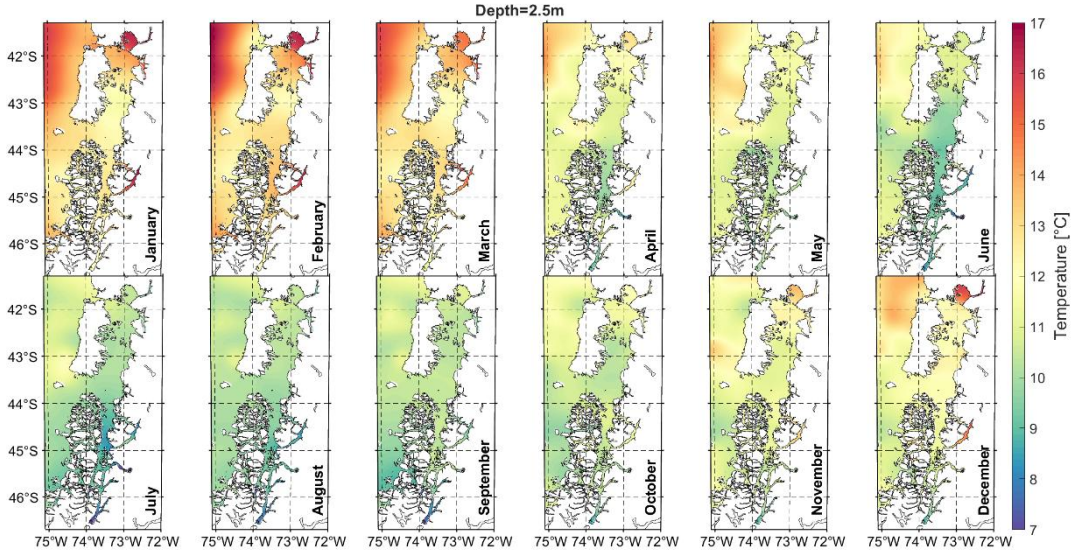


Fig. S 2: Monthly climatology of the sea temperature at 2.5m depth.

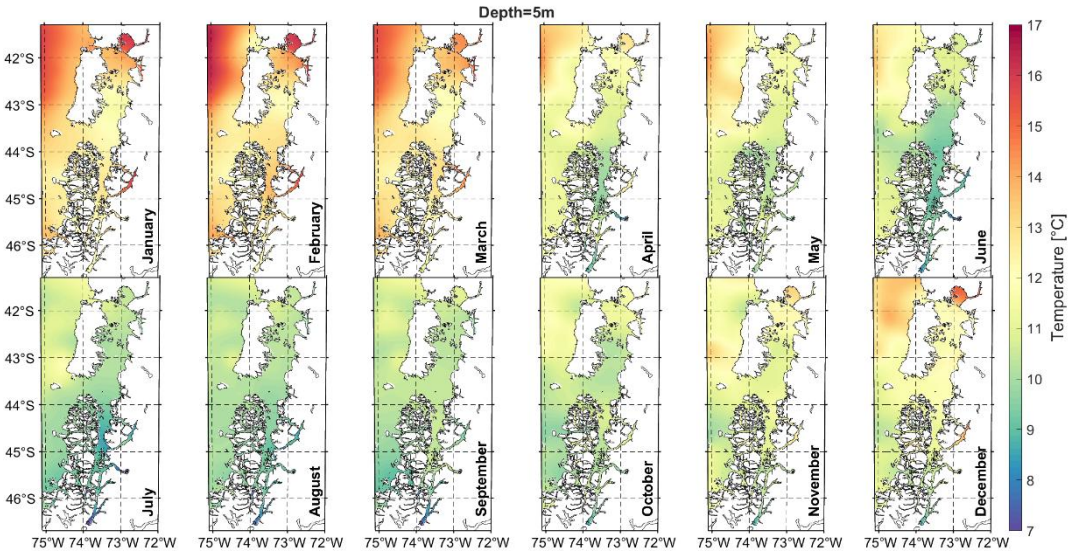


Fig. S 3: Monthly climatology of the sea temperature at 5m depth.

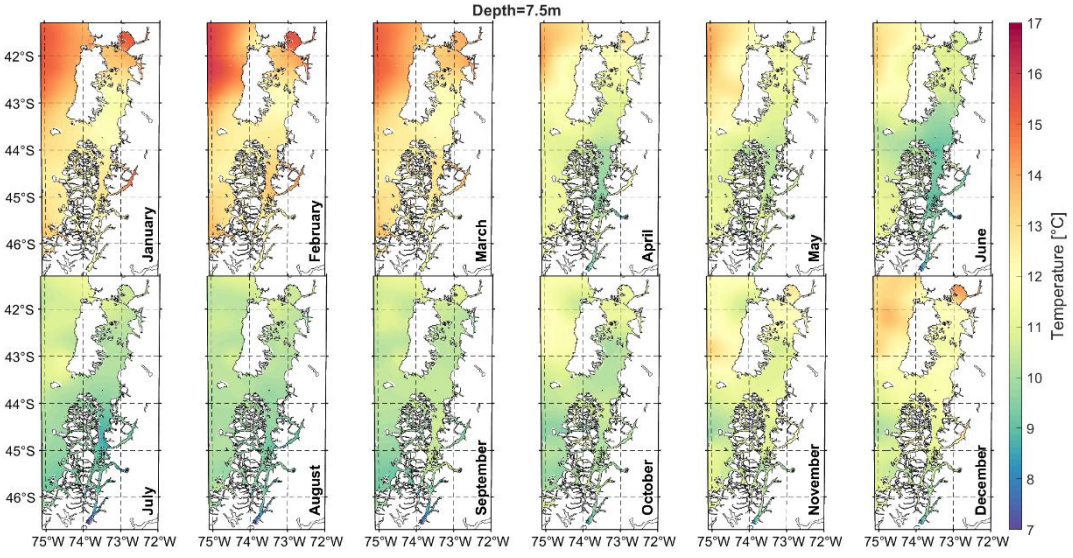


Fig. S 4: Monthly climatology of the sea temperature at 7.5m depth.

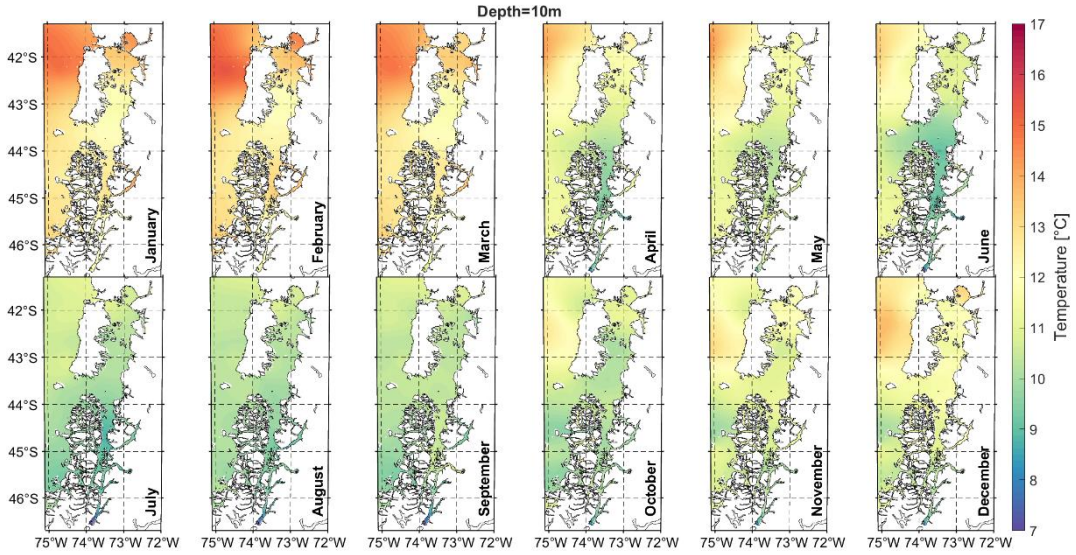


Fig. S 5: Monthly climatology of the sea temperature at 10m depth.

40

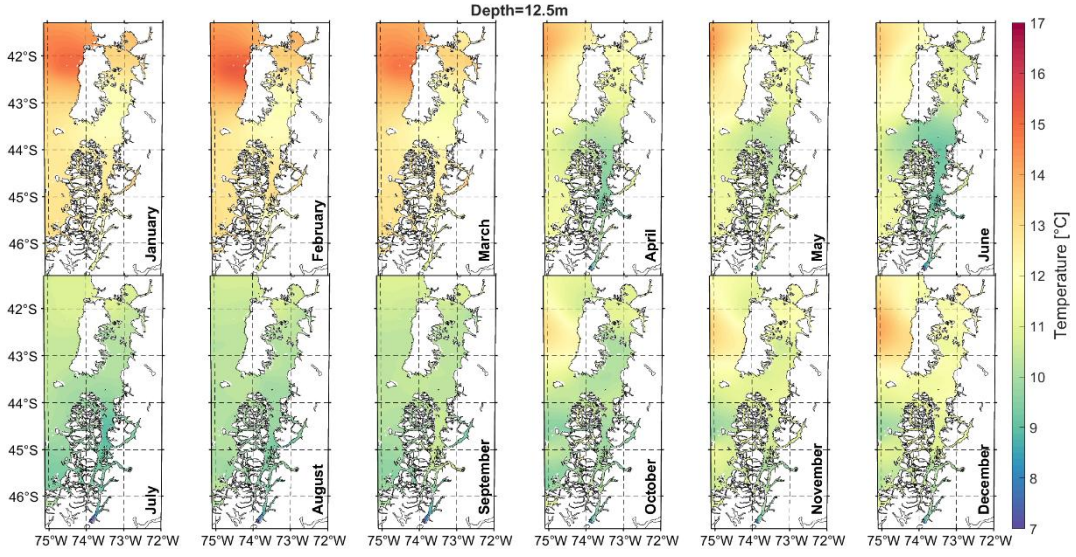


Fig. S 6: Monthly climatology of the sea temperature at 12.5m depth.

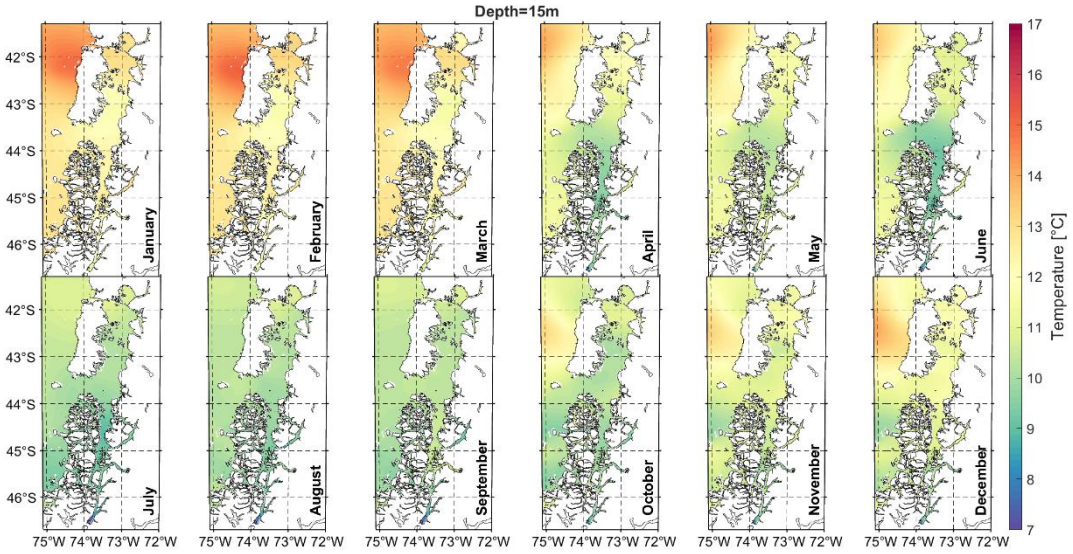


Fig. S 7: Monthly climatology of the sea temperature at 15m depth.

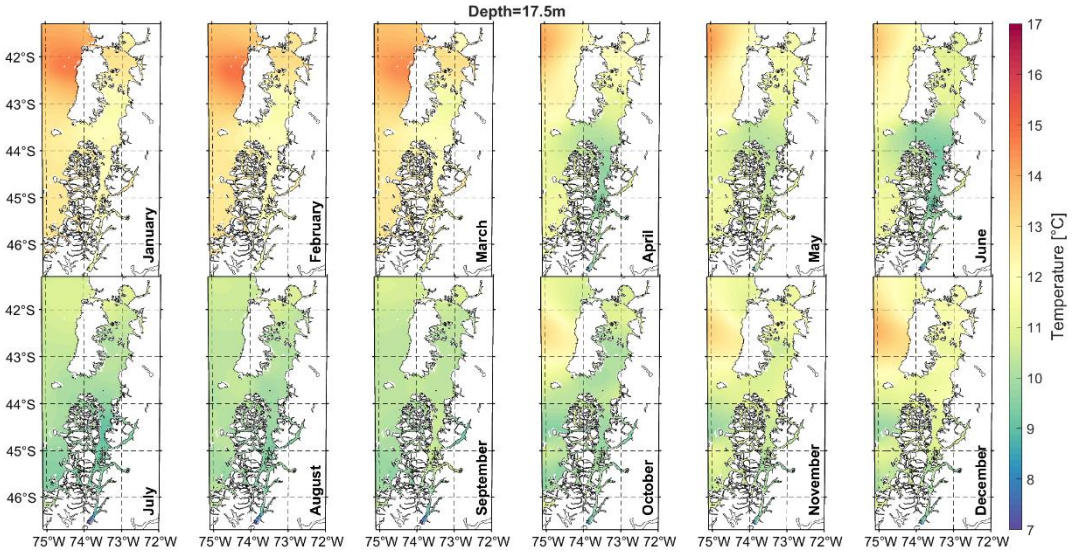


Fig. S 8: Monthly climatology of the sea temperature at 17.5m depth.

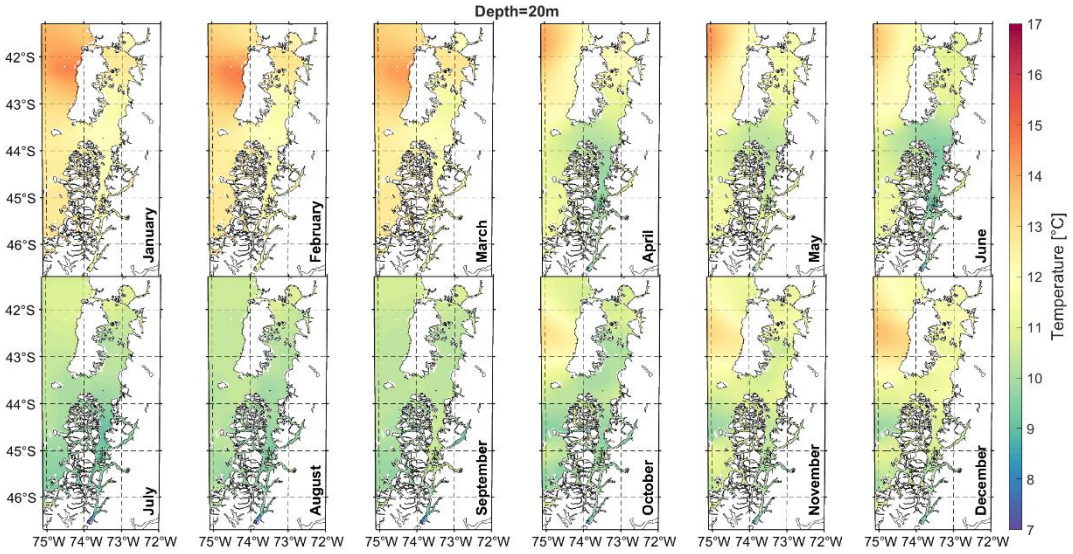


Fig. S 9: Monthly climatology of the sea temperature at 20m depth.

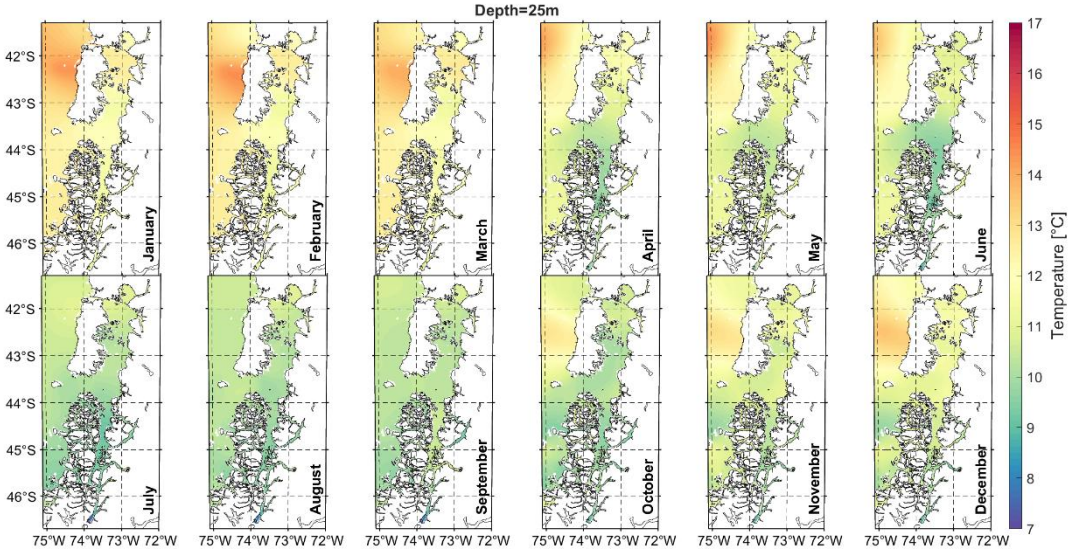


Fig. S 10: Monthly climatology of the sea temperature at 25m depth.

45

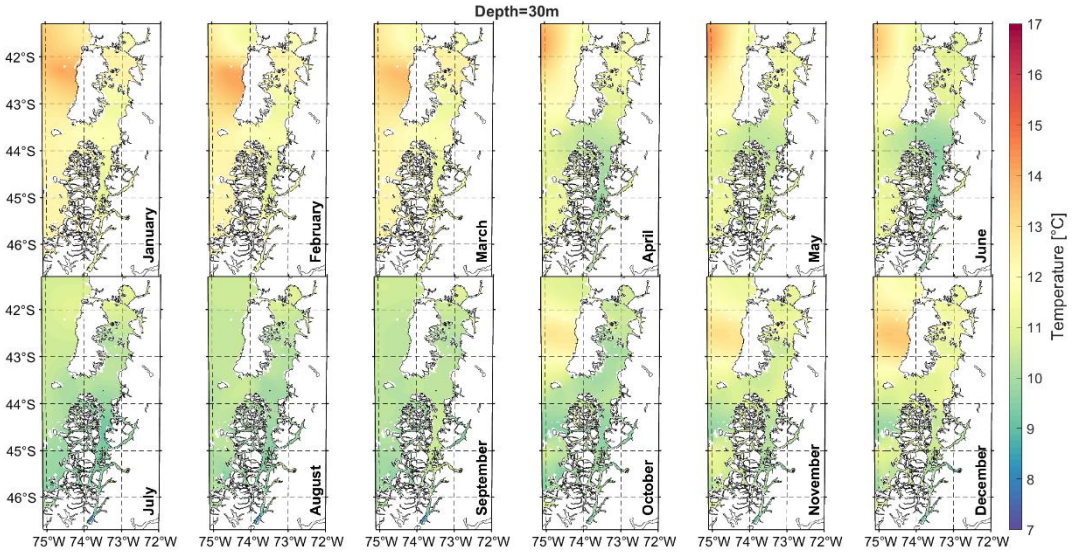


Fig. S 11: Monthly climatology of the sea temperature at 30m depth.

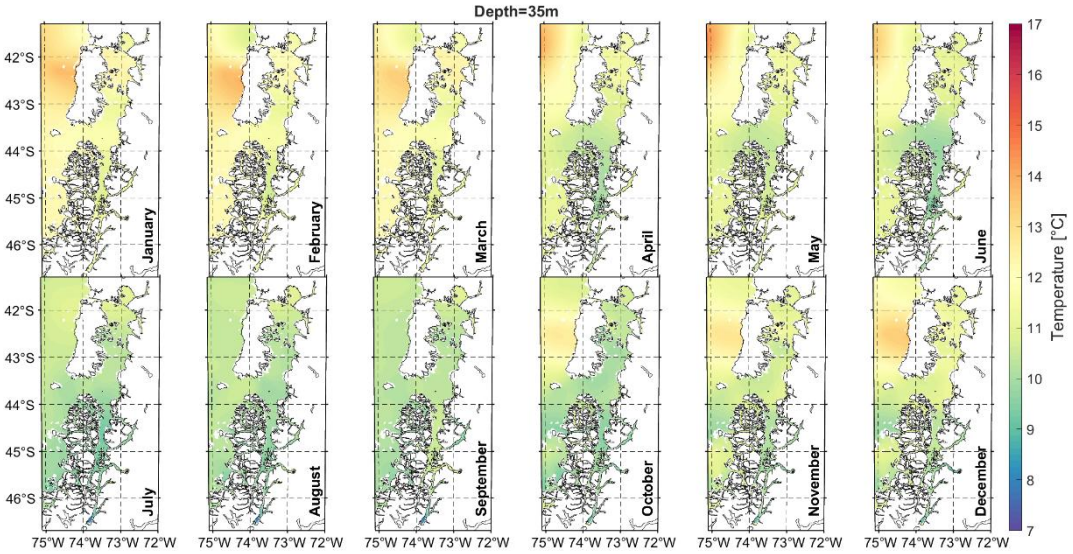


Fig. S 12: Monthly climatology of the sea temperature at 35m depth.

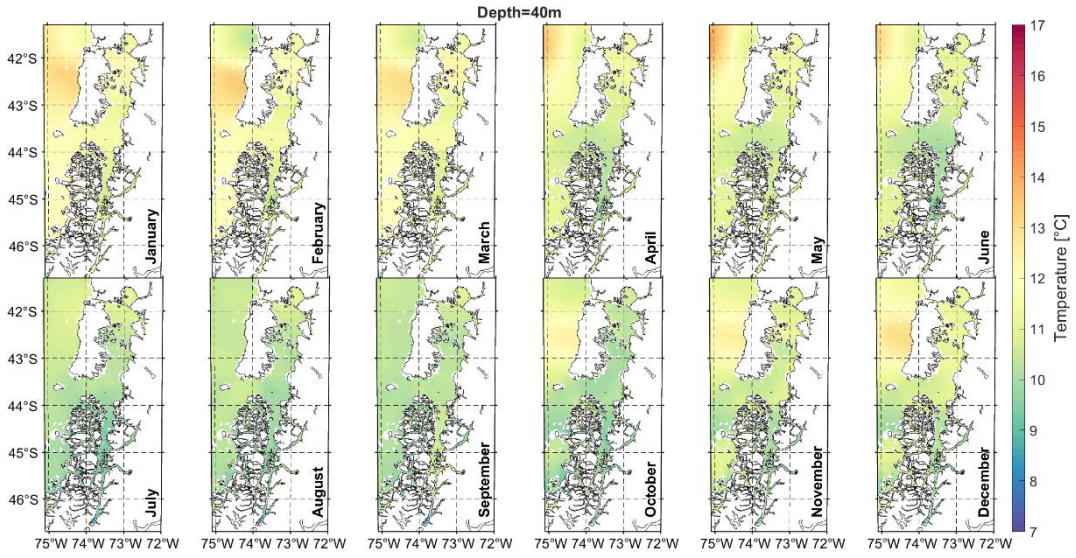


Fig. S 13: Monthly climatology of the sea temperature at 40m depth.

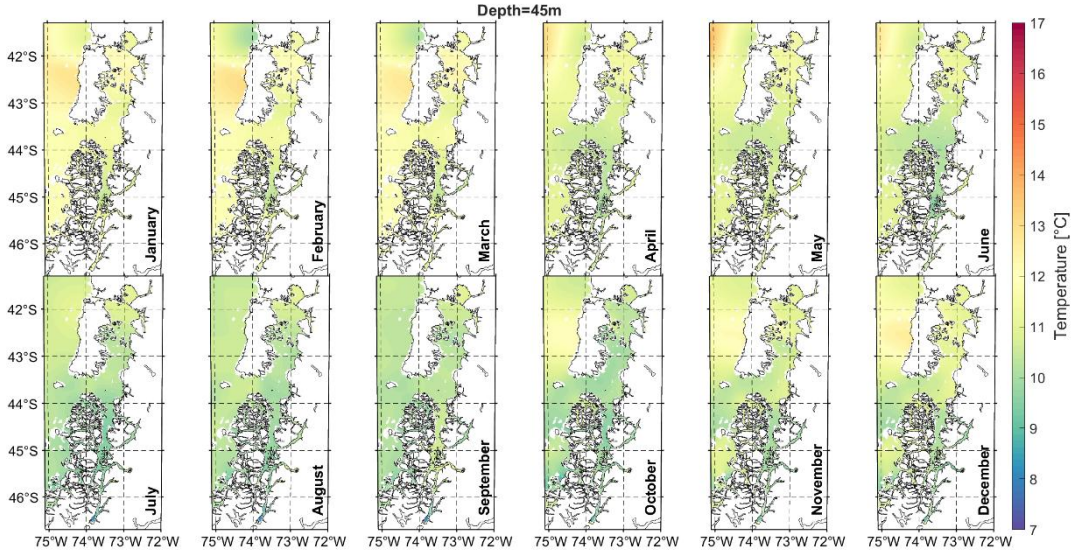


Fig. S 14: Monthly climatology of the sea temperature at 45m depth.

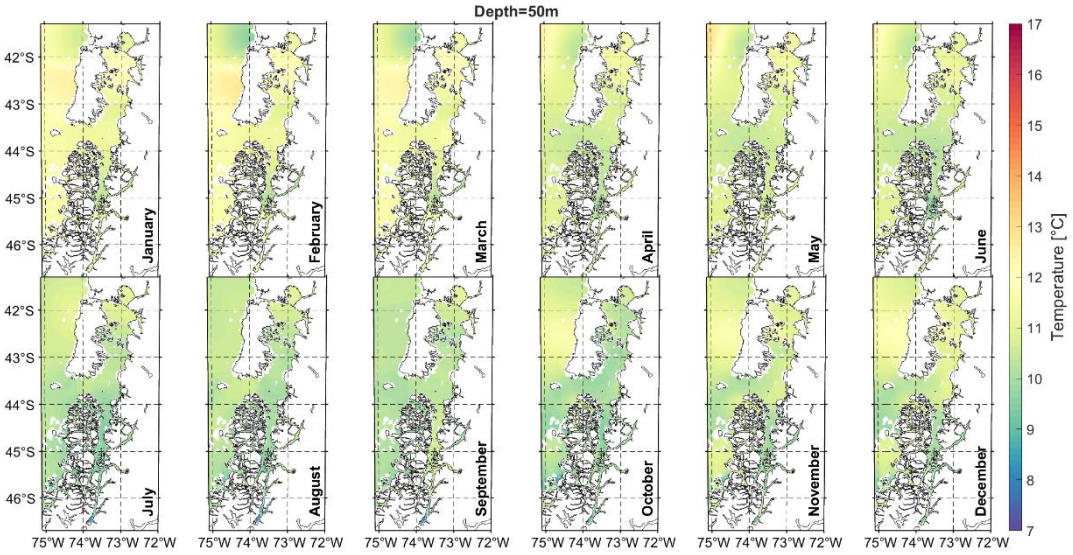


Fig. S 15: Monthly climatology of the sea temperature at 50m depth.

50

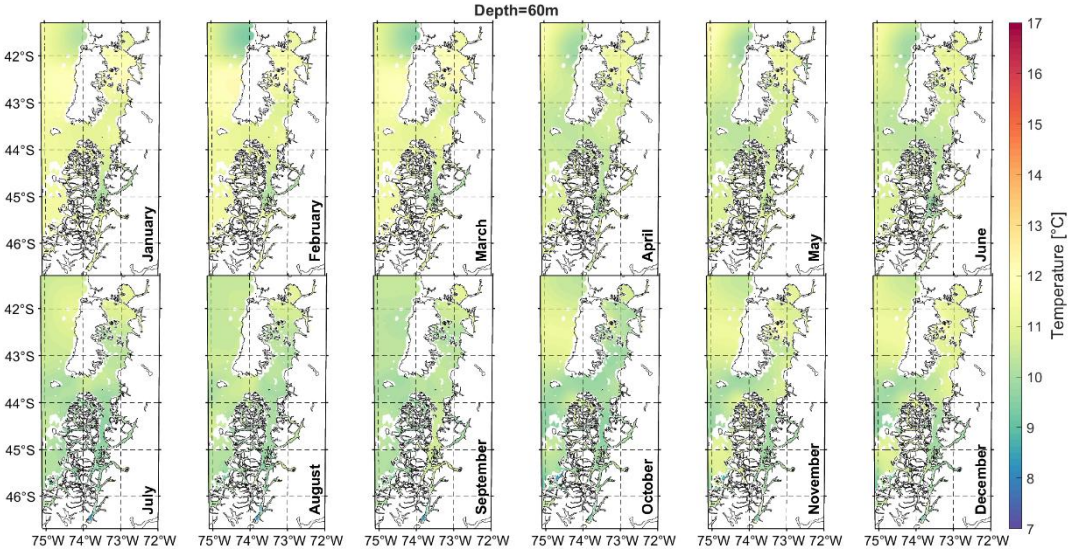


Fig. S 16: Monthly climatology of the sea temperature at 60m depth.

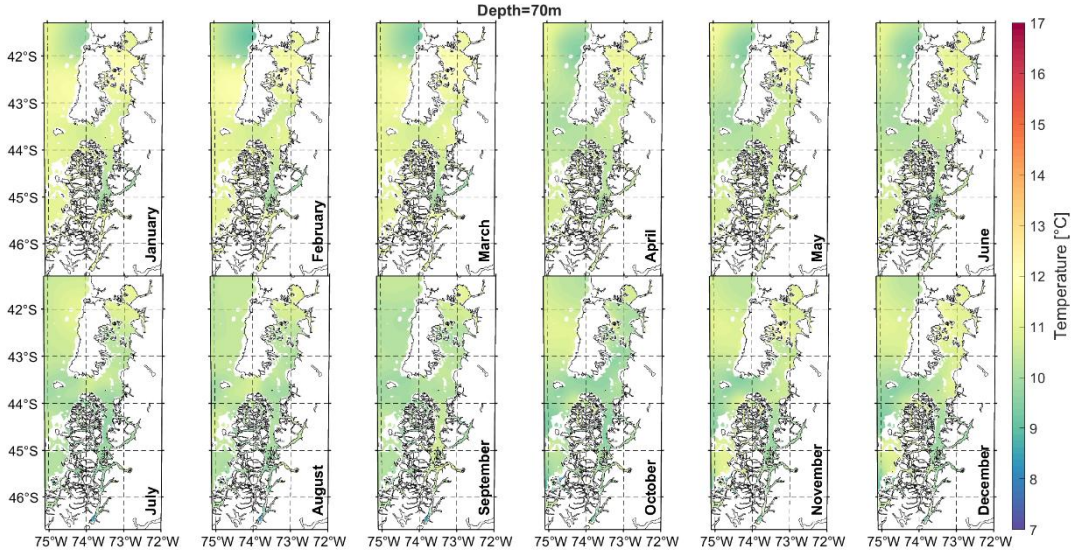


Fig. S 17: Monthly climatology of the sea temperature at 70m depth.

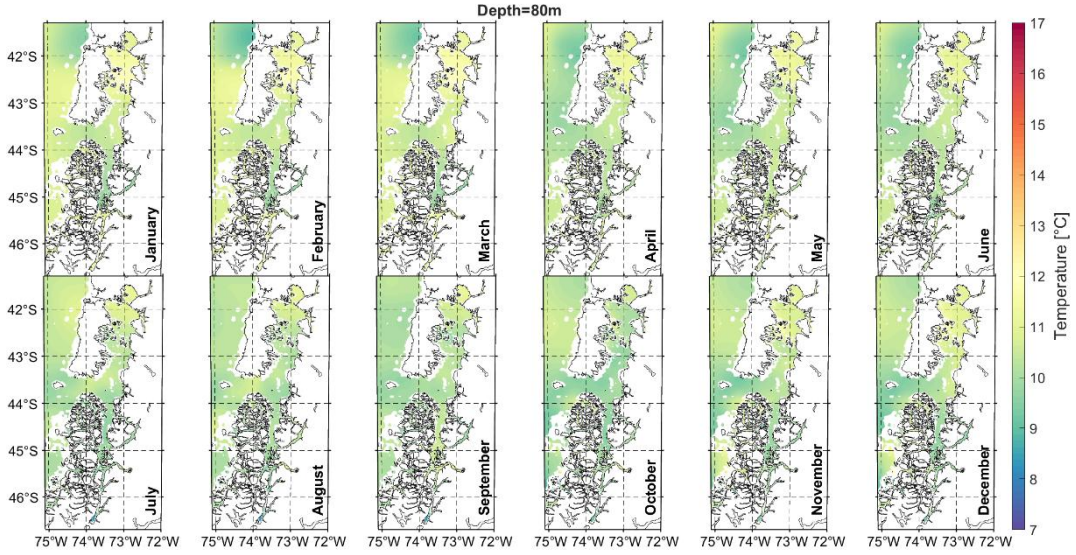


Fig. S 18: Monthly climatology of the sea temperature at 80m depth.

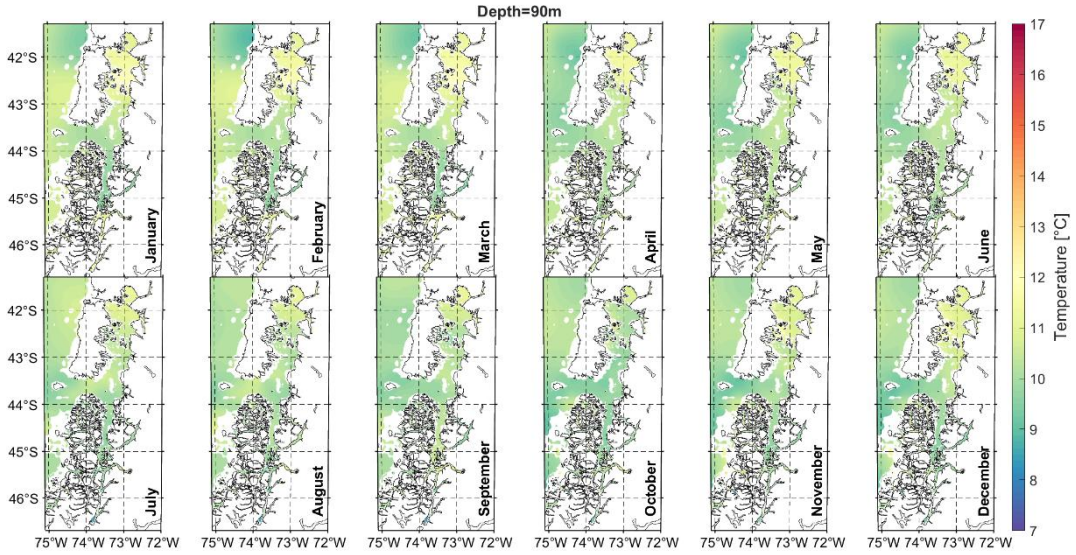


Fig. S 19: Monthly climatology of the sea temperature at 90m depth.

55

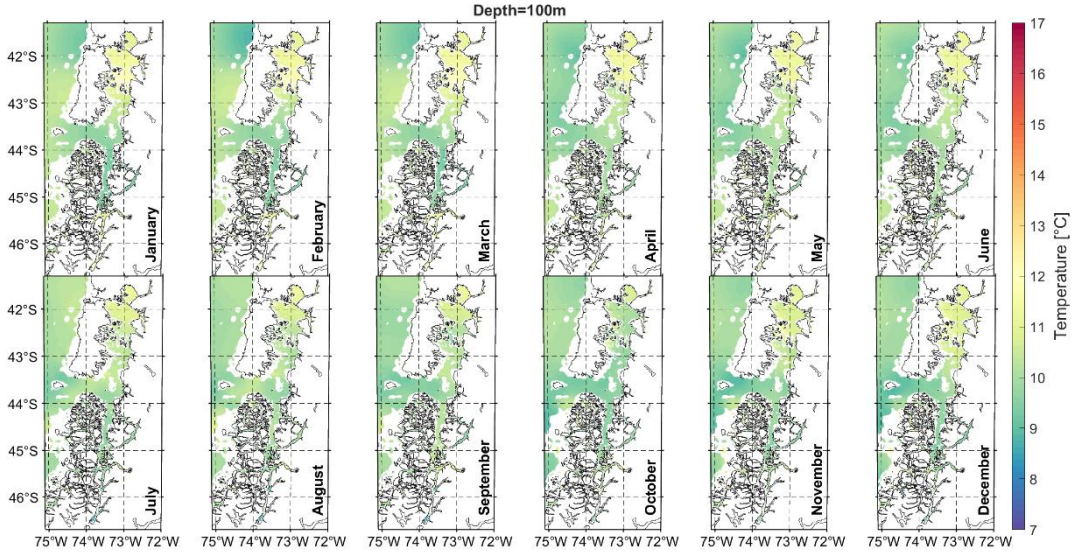


Fig. S 20: Monthly climatology of the sea temperature at 100m depth.

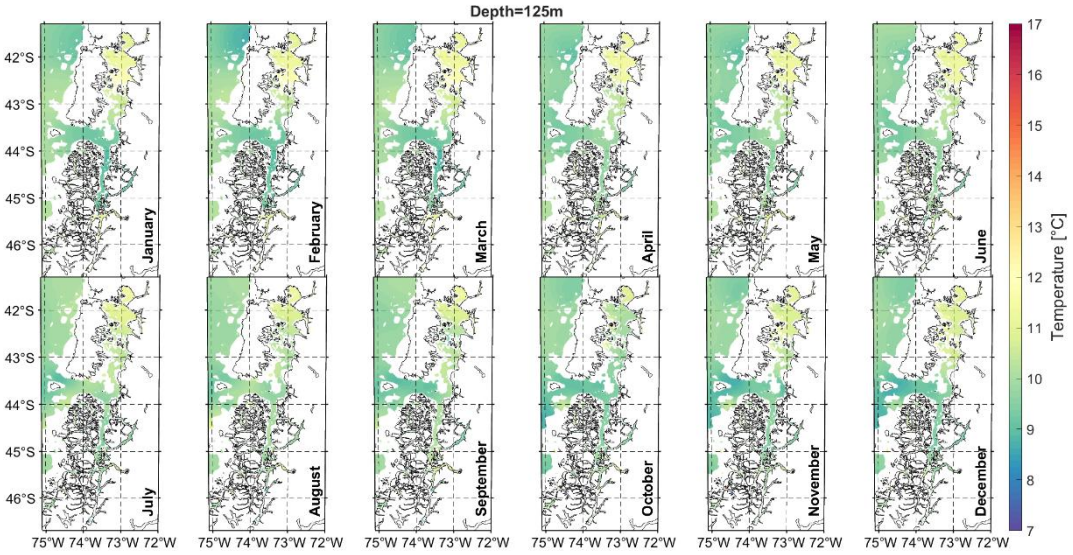


Fig. S 21: Monthly climatology of the sea temperature at 125m depth.

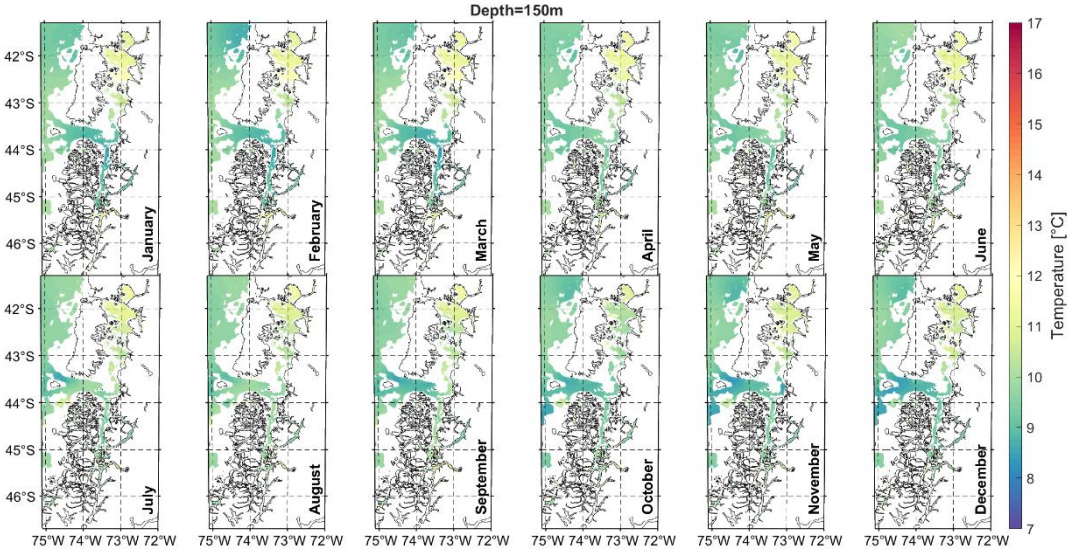


Fig. S 22: Monthly climatology of the sea temperature at 150m depth.

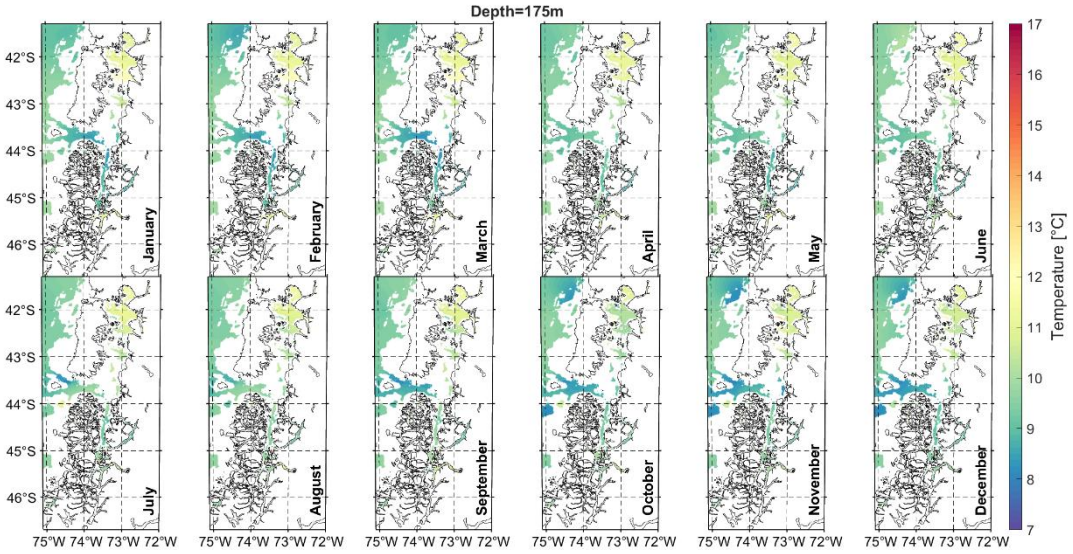


Fig. S 23: Monthly climatology of the sea temperature at 175m depth.

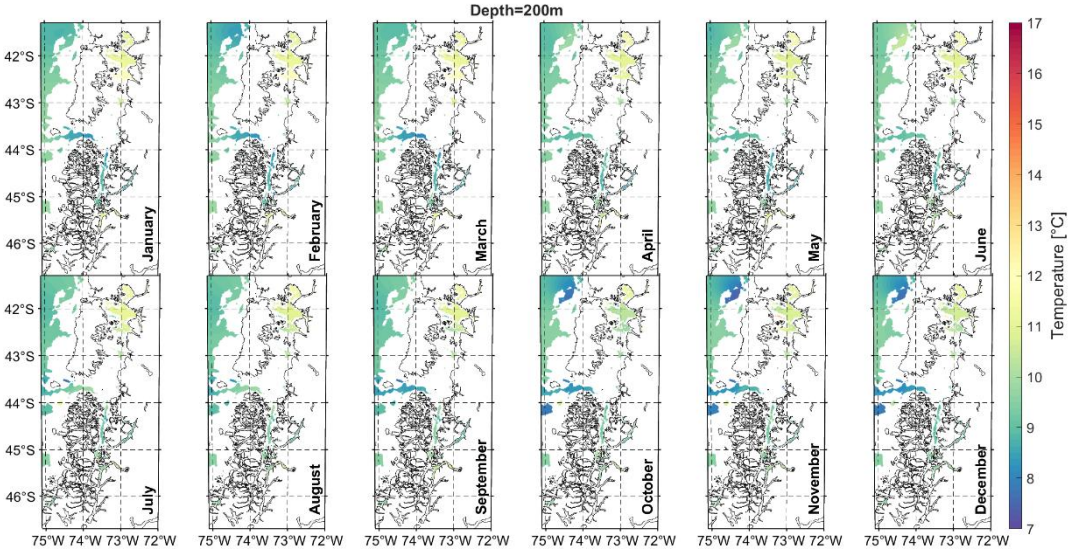


Fig. S 24: Monthly climatology of the sea temperature at 200m depth.

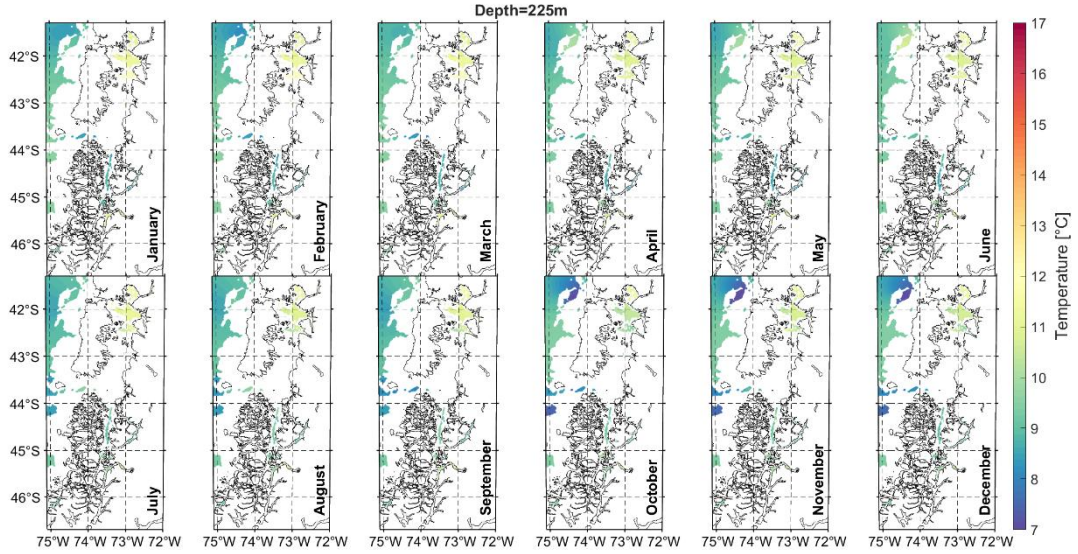


Fig. S 25: Monthly climatology of the sea temperature at 225m depth.

60

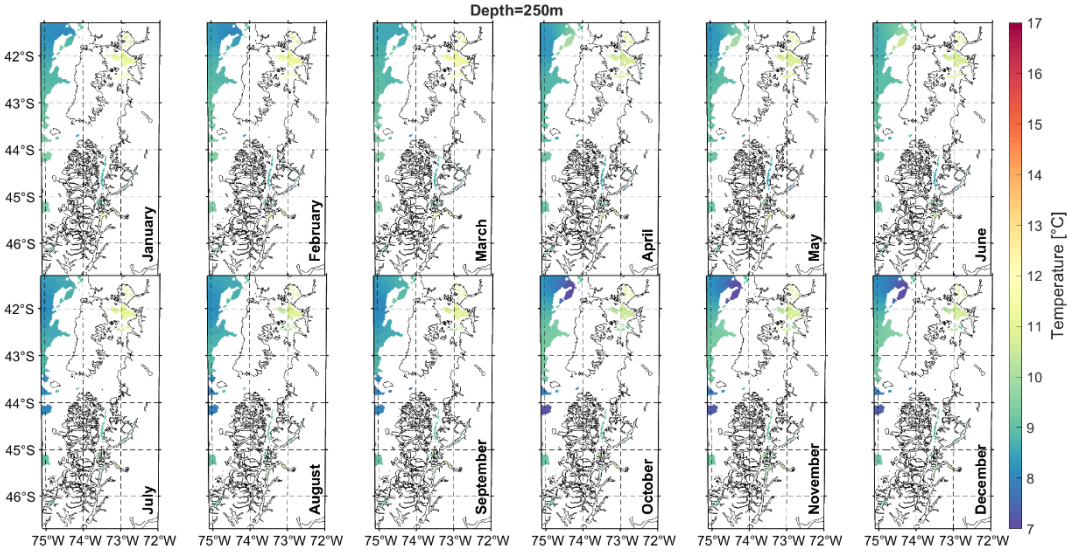


Fig. S 26: Monthly climatology of the sea temperature at 250m depth.

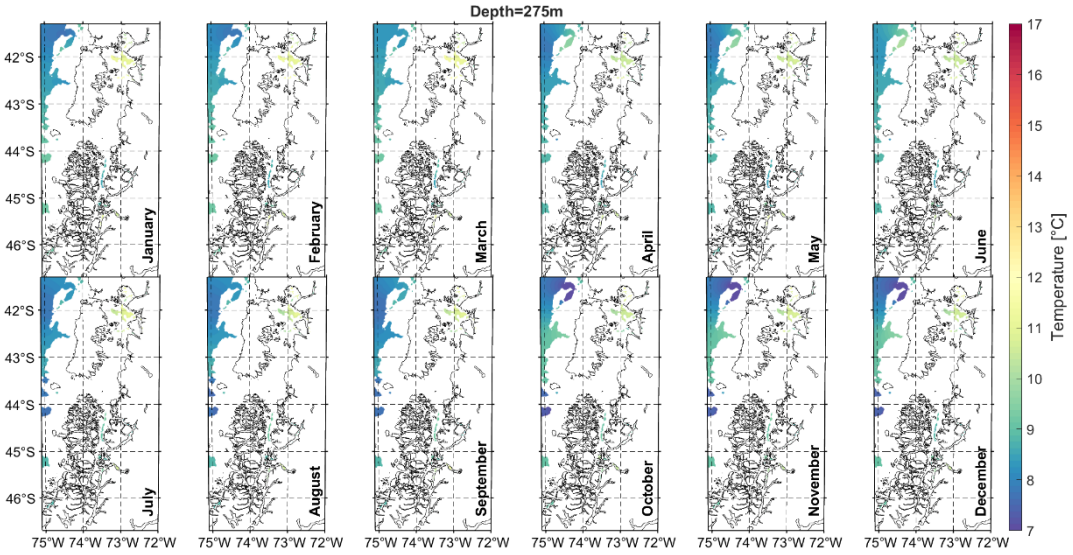


Fig. S 27: Monthly climatology of the sea temperature at 275m depth.

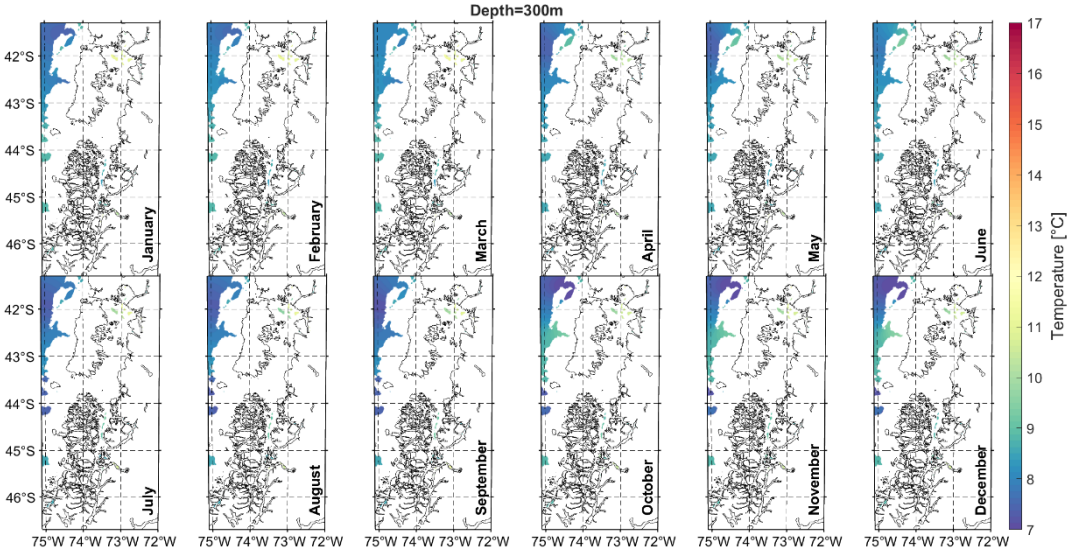


Fig. S 28: Monthly climatology of the sea temperature at 300m depth.

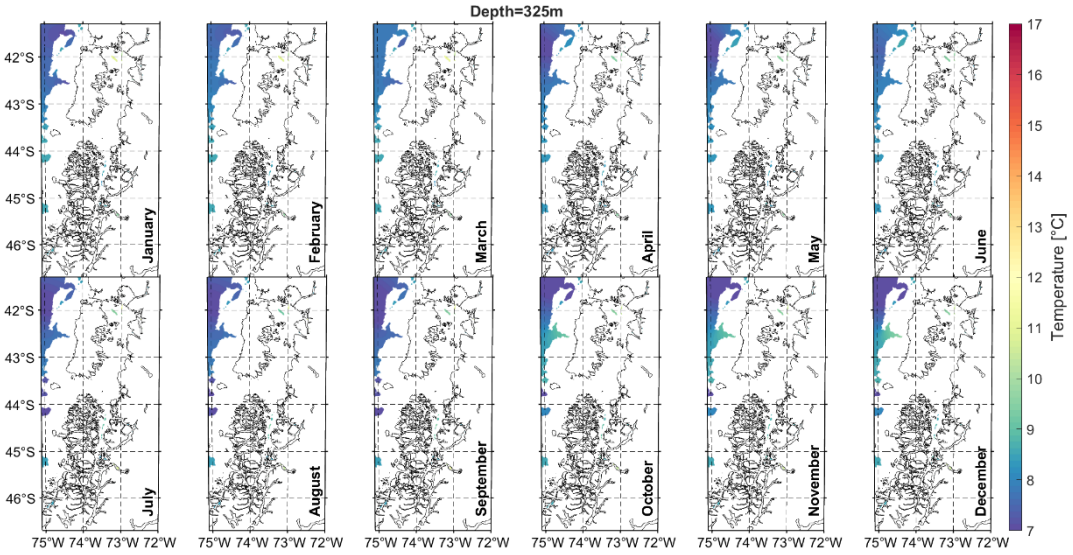


Fig. S 29: Monthly climatology of the sea temperature at 325m depth.

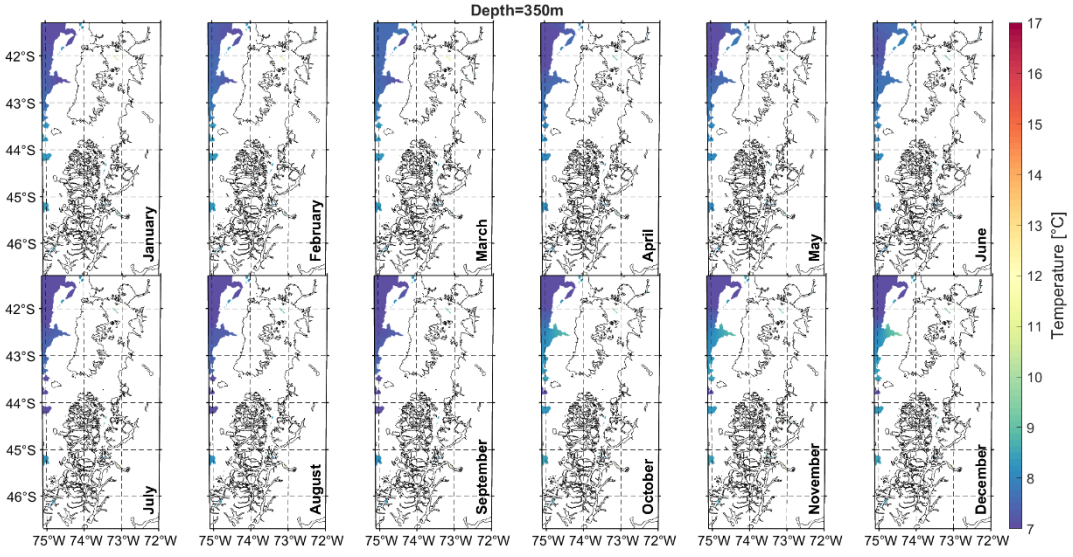


Fig. S 30: Monthly climatology of the sea temperature at 350m depth.

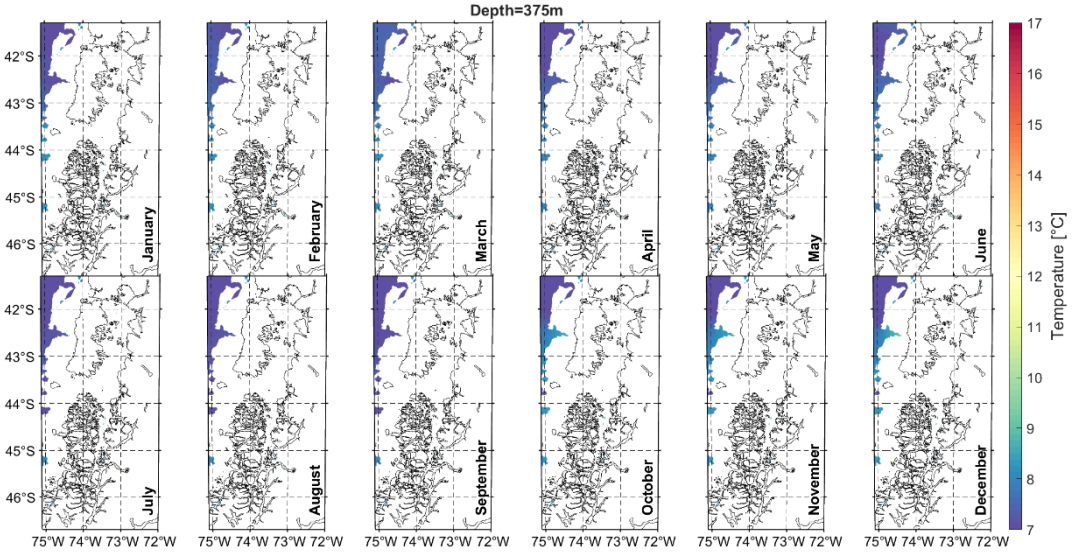


Fig. S 32: Monthly climatology of the sea temperature at 375m depth.

65

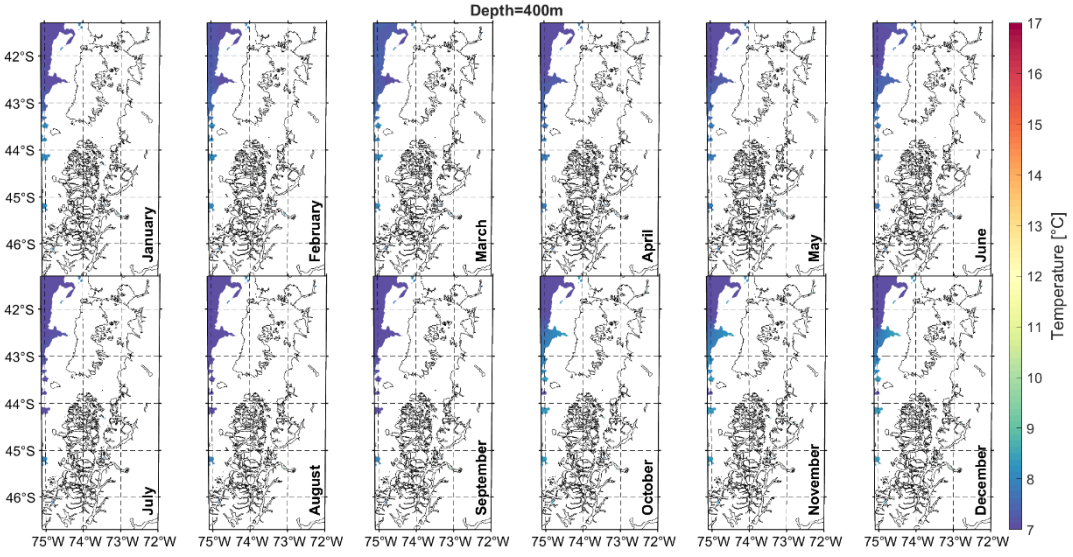


Fig. S 31: Monthly climatology of the sea temperature at 400m depth.

S2 Supplementary figures of the relative error of the monthly climatology

Here, we present the complete relative error of the monthly temperature climatology corresponding to section 3.3 of the paper. In the paper, only 3 figures are shown (0, 30 and 100m), whereas every depth for which the relative error has been calculated is shown here.

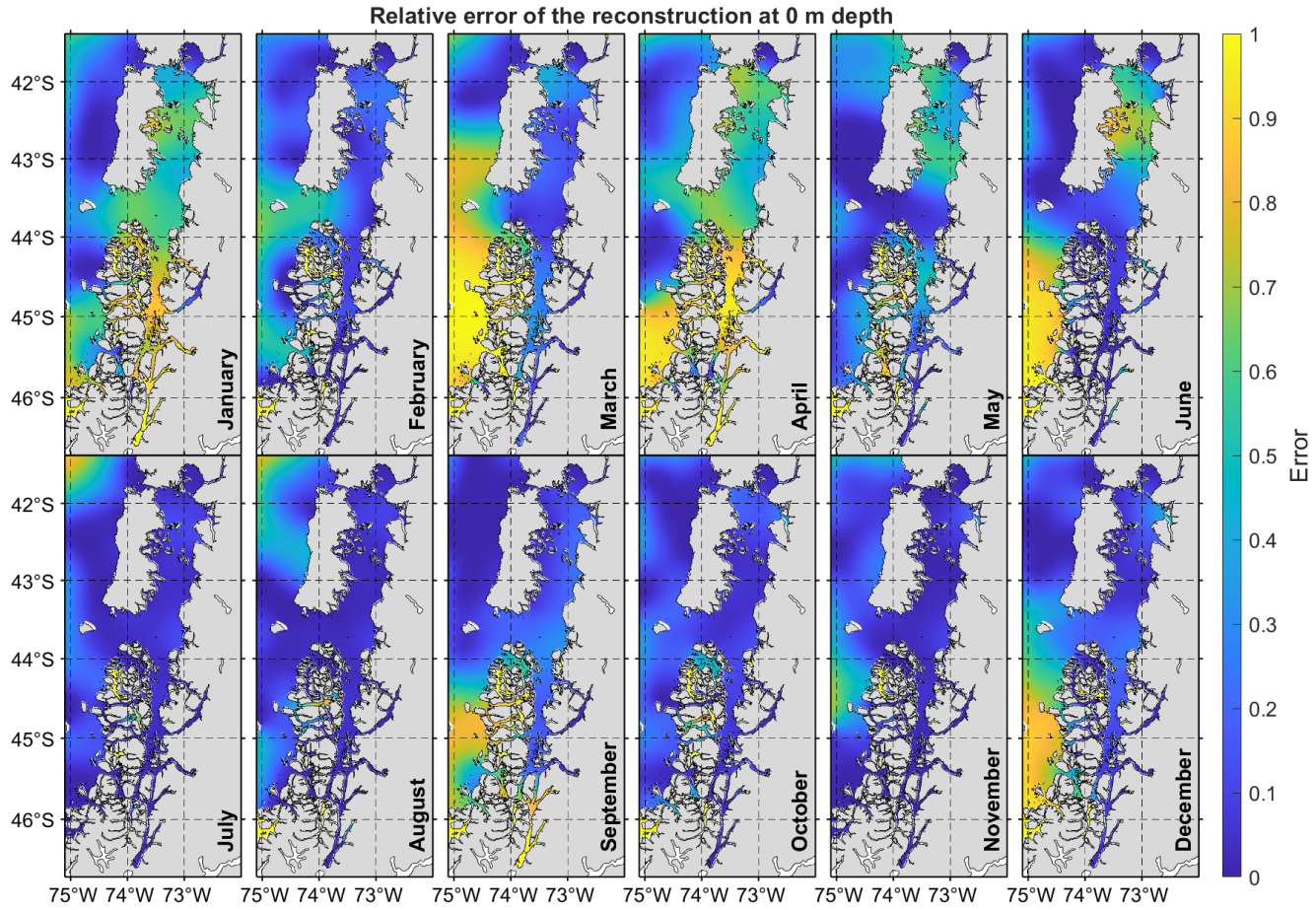


Fig. S 33: Relative error of the interpolation of the climaotlogy at surface.

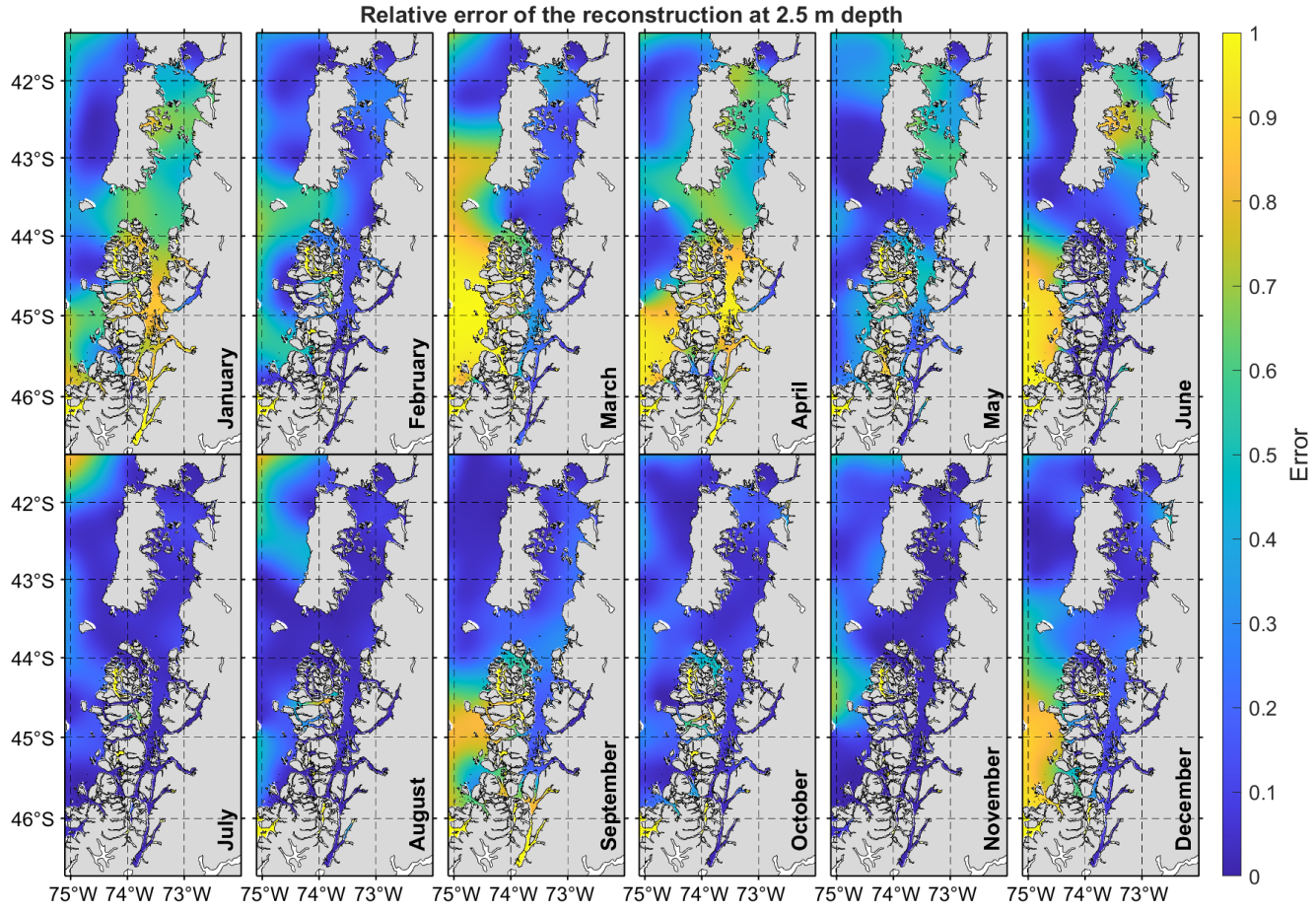


Fig. S 34: : Relative error maps of the climatology at 2.5 m depth.

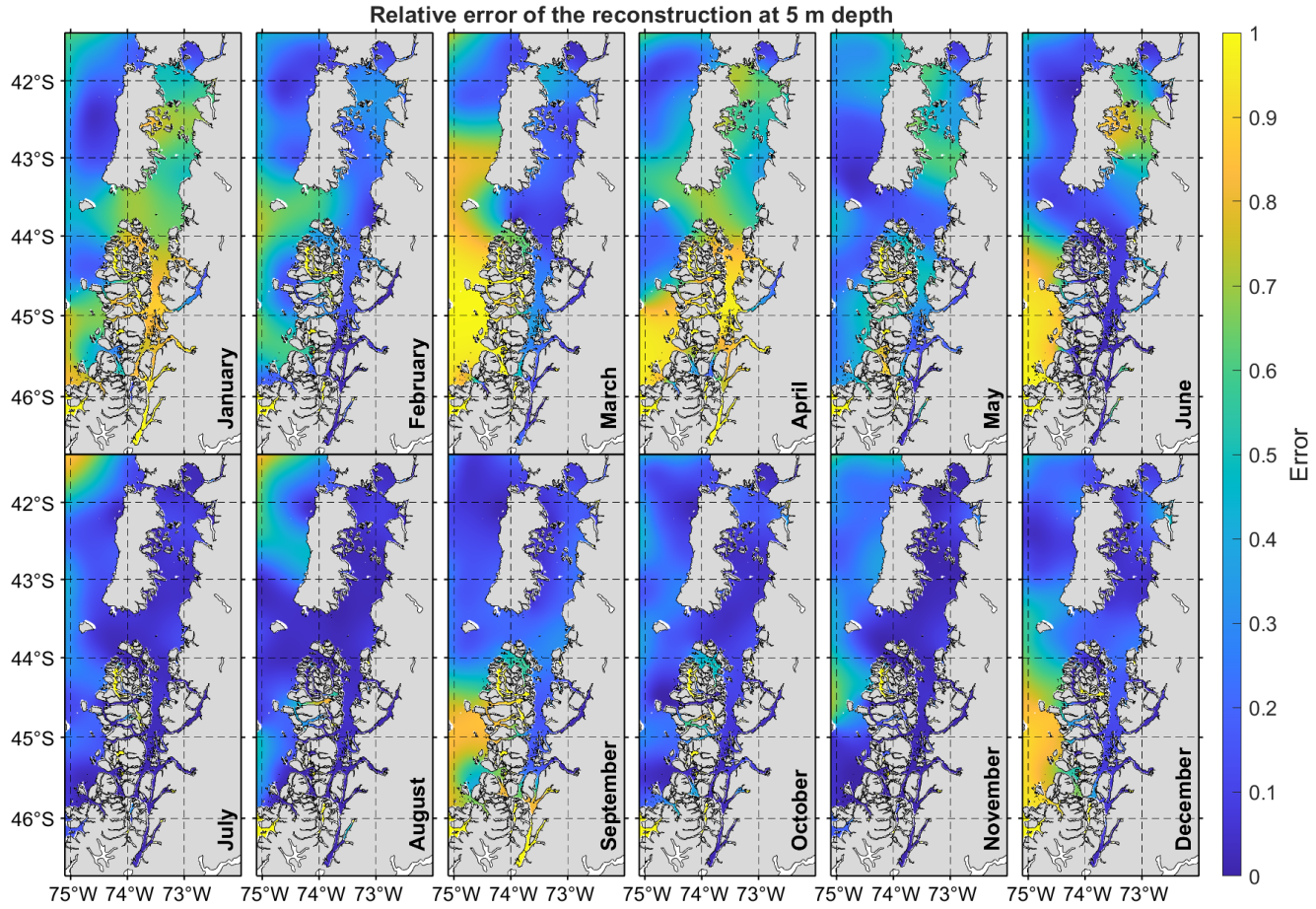


Fig. S 35: Relative error maps of the climatology at 5 m depth.

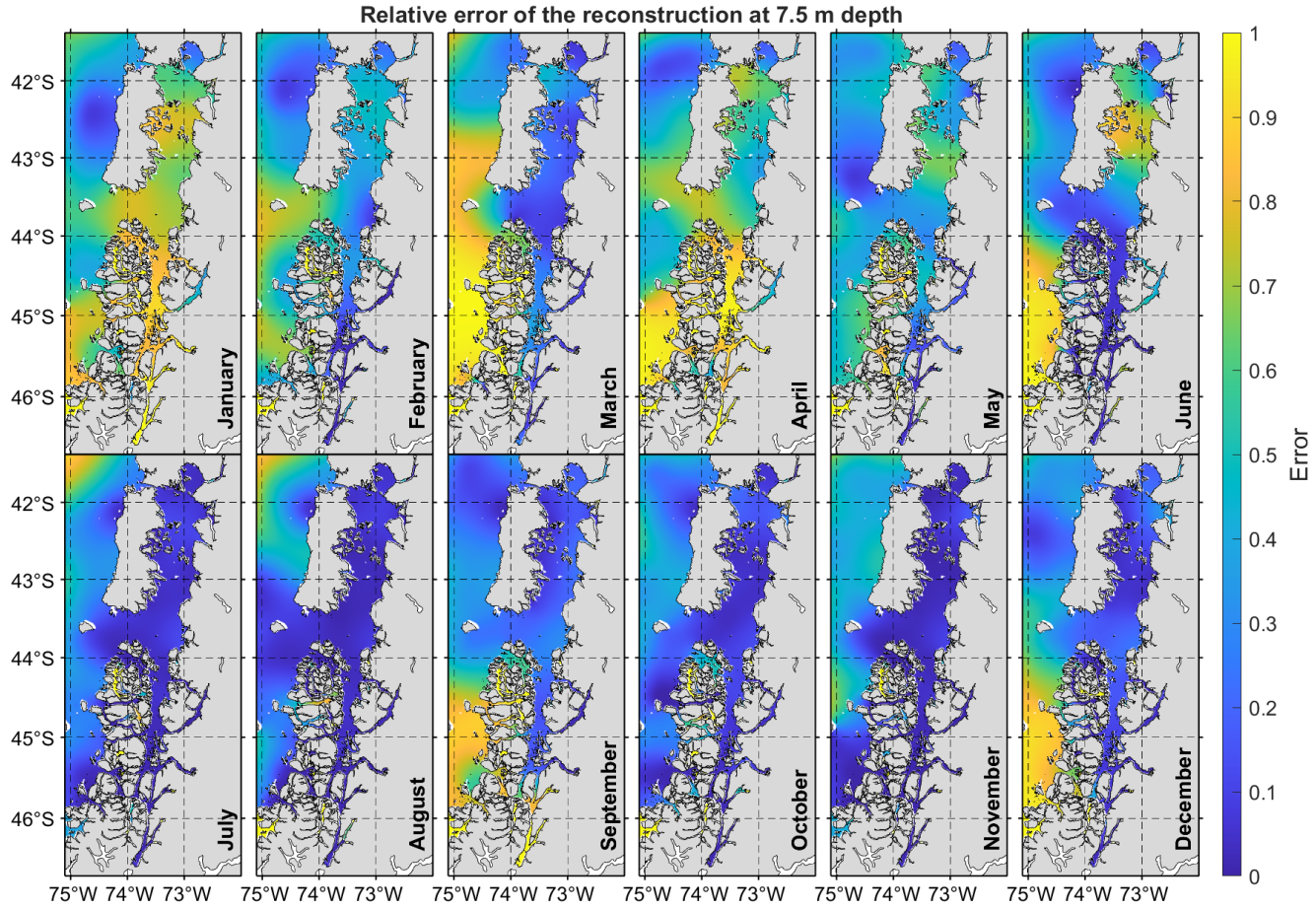


Fig. S 36: Relative error maps of the climatology at 7.5 m depth.

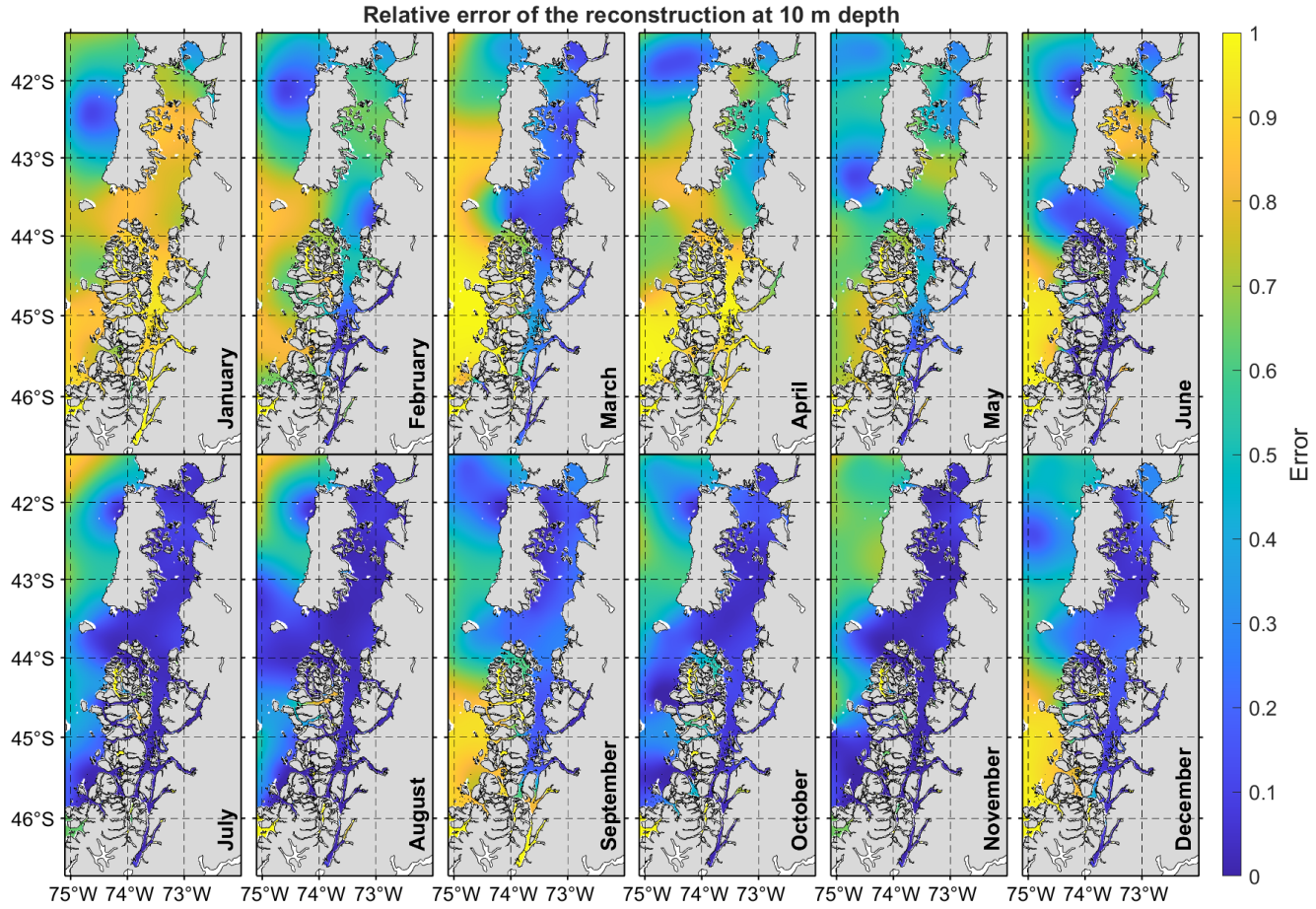


Fig. S 37: Relative error maps of the climatology at 10 m depth.

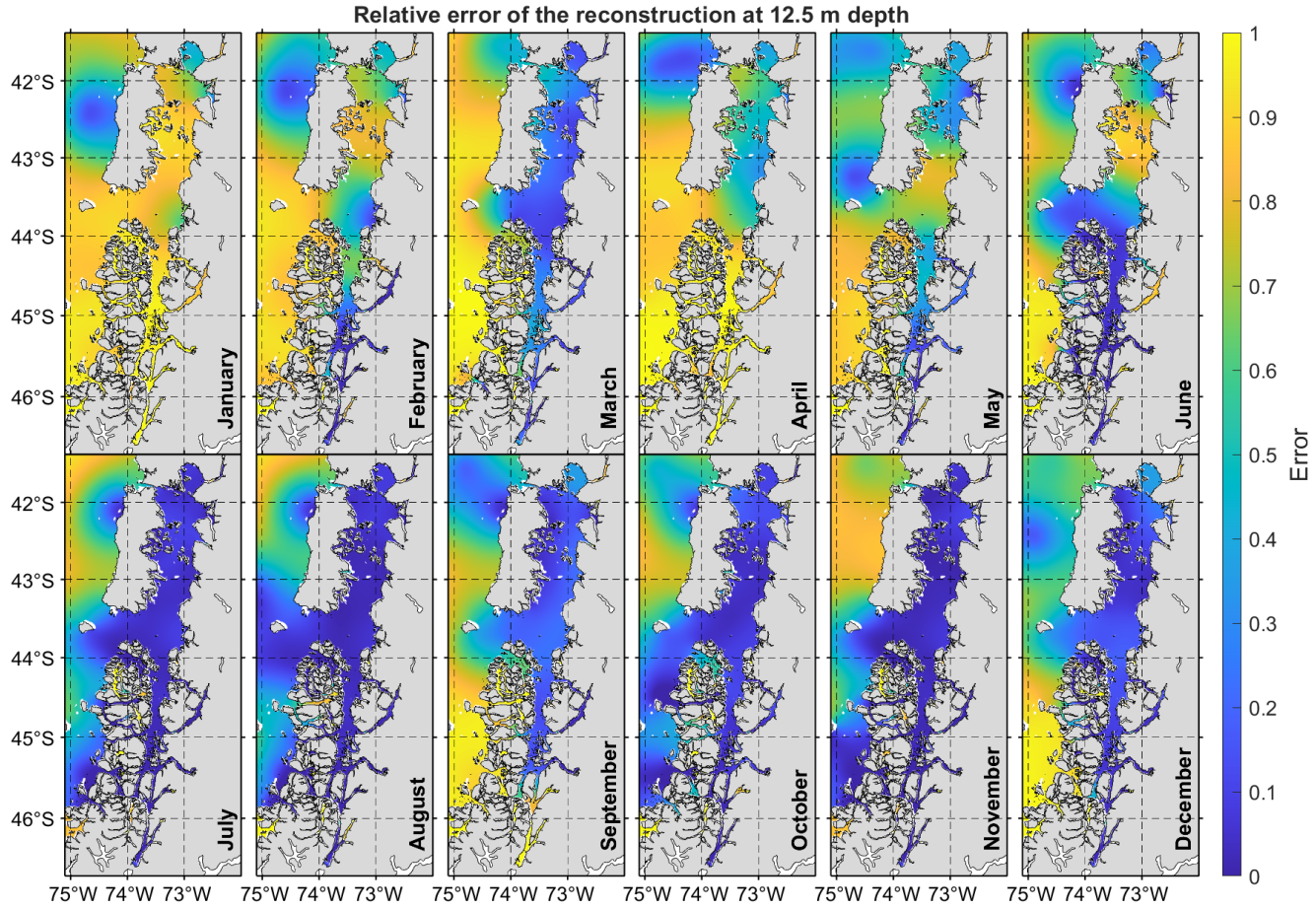


Fig. S 38: Relative error maps of the climatology at 12.5 m depth.

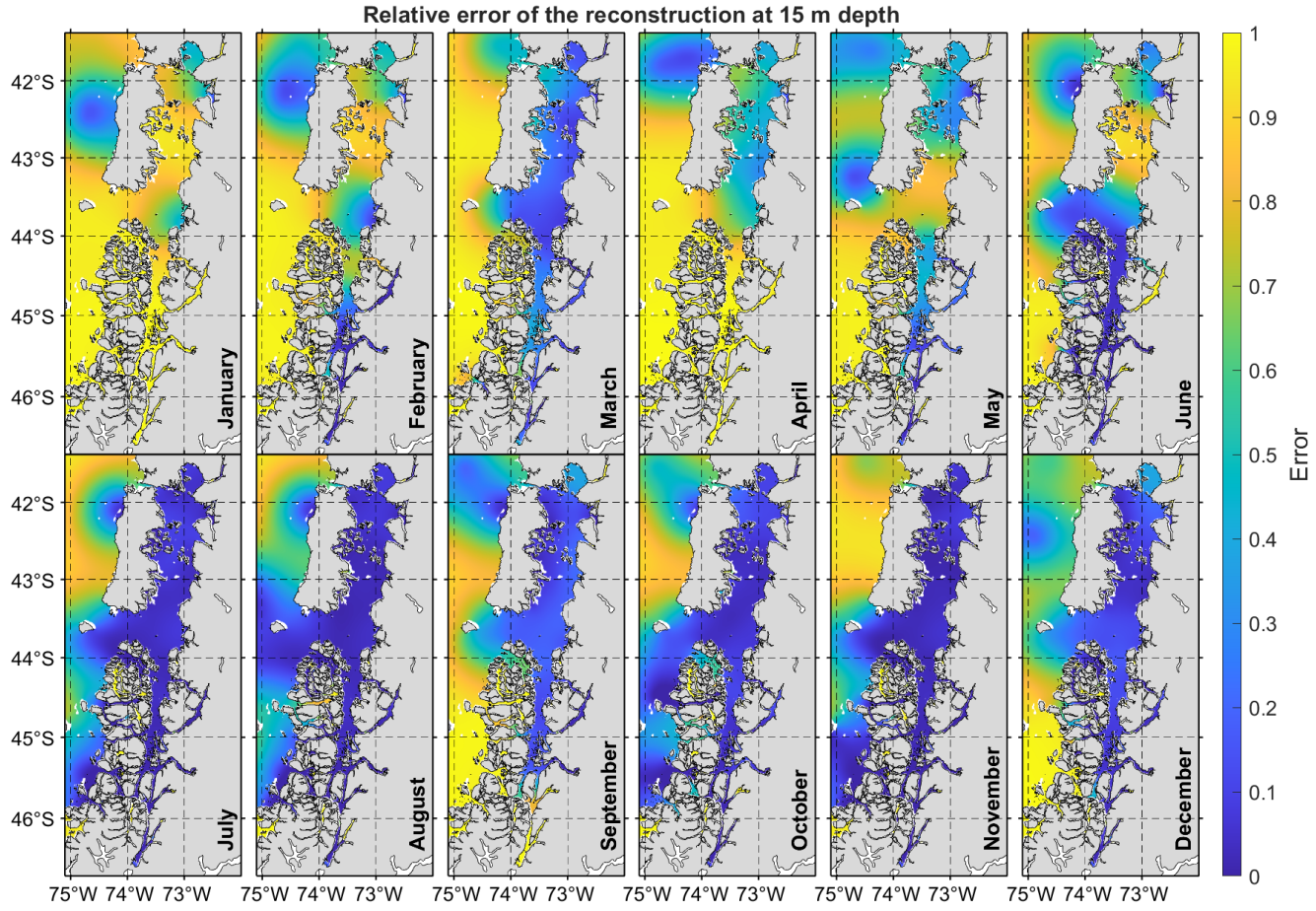


Fig. S 39: Relative error maps of the climatology at 15 m depth.

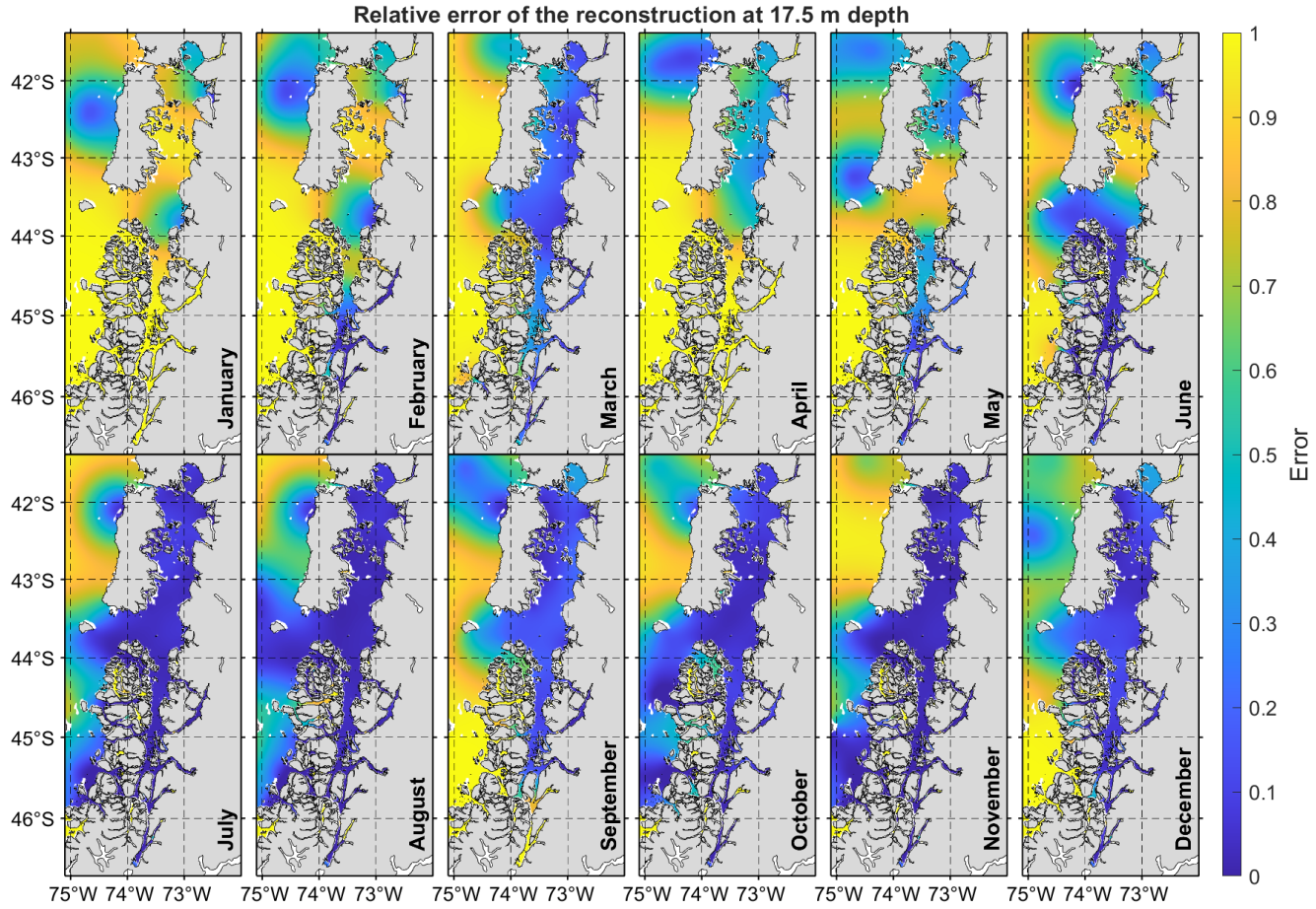


Fig. S 40: Relative error maps of the climatology at 17.5 m depth.

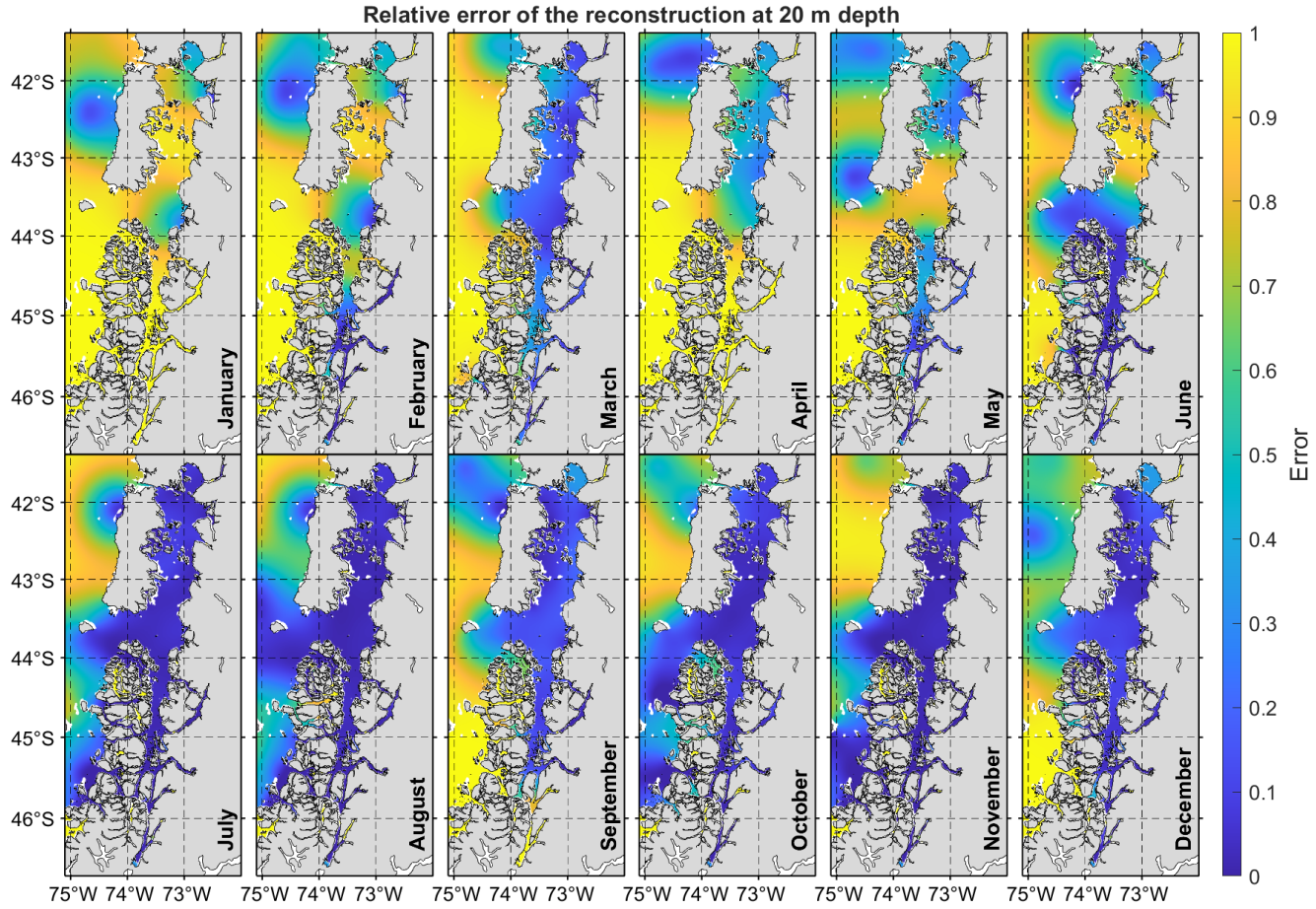


Fig. S 41: Relative error maps of the climatology at 20 m depth.

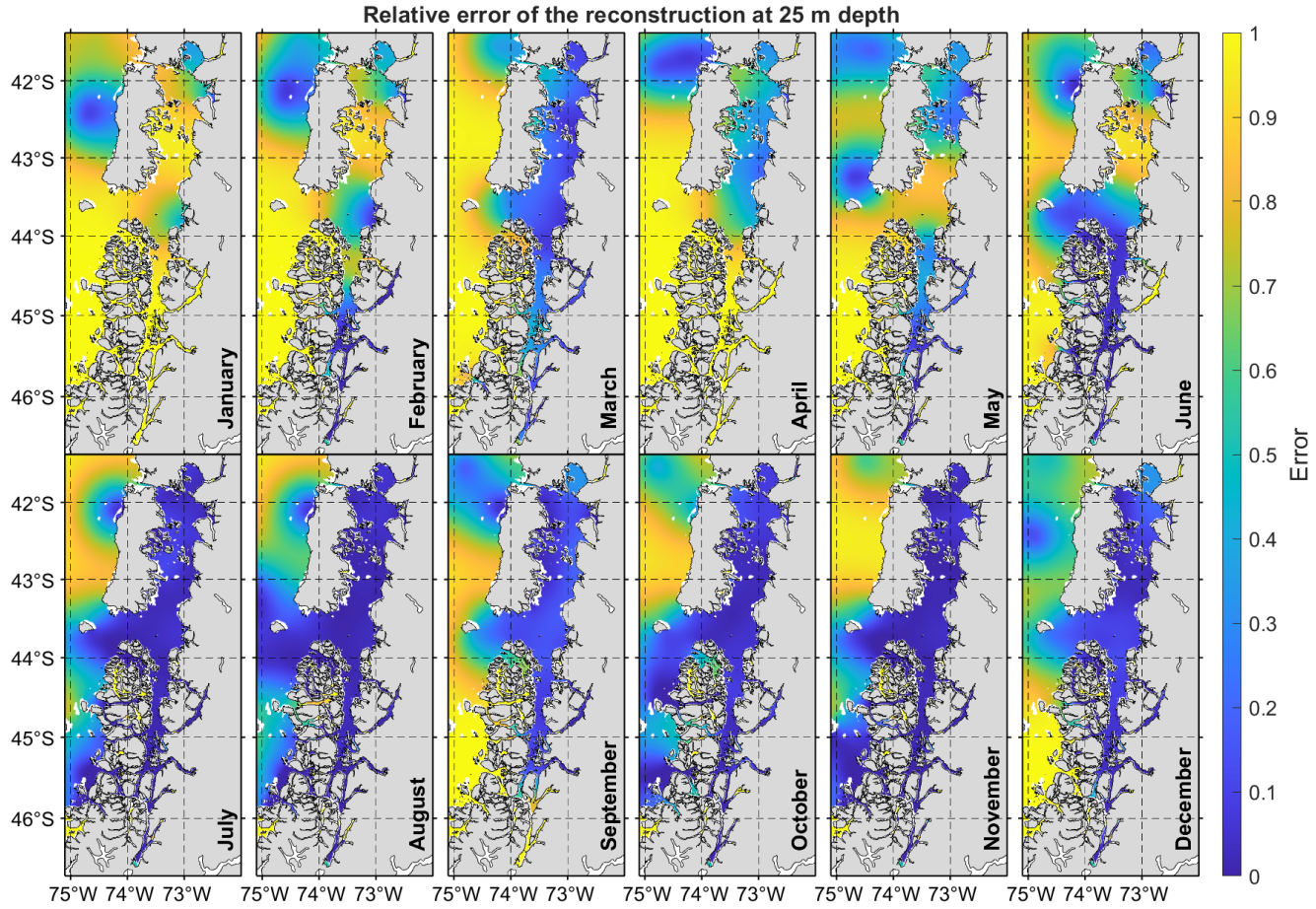


Fig. S 42: Relative error maps of the climatology at 25 m depth.

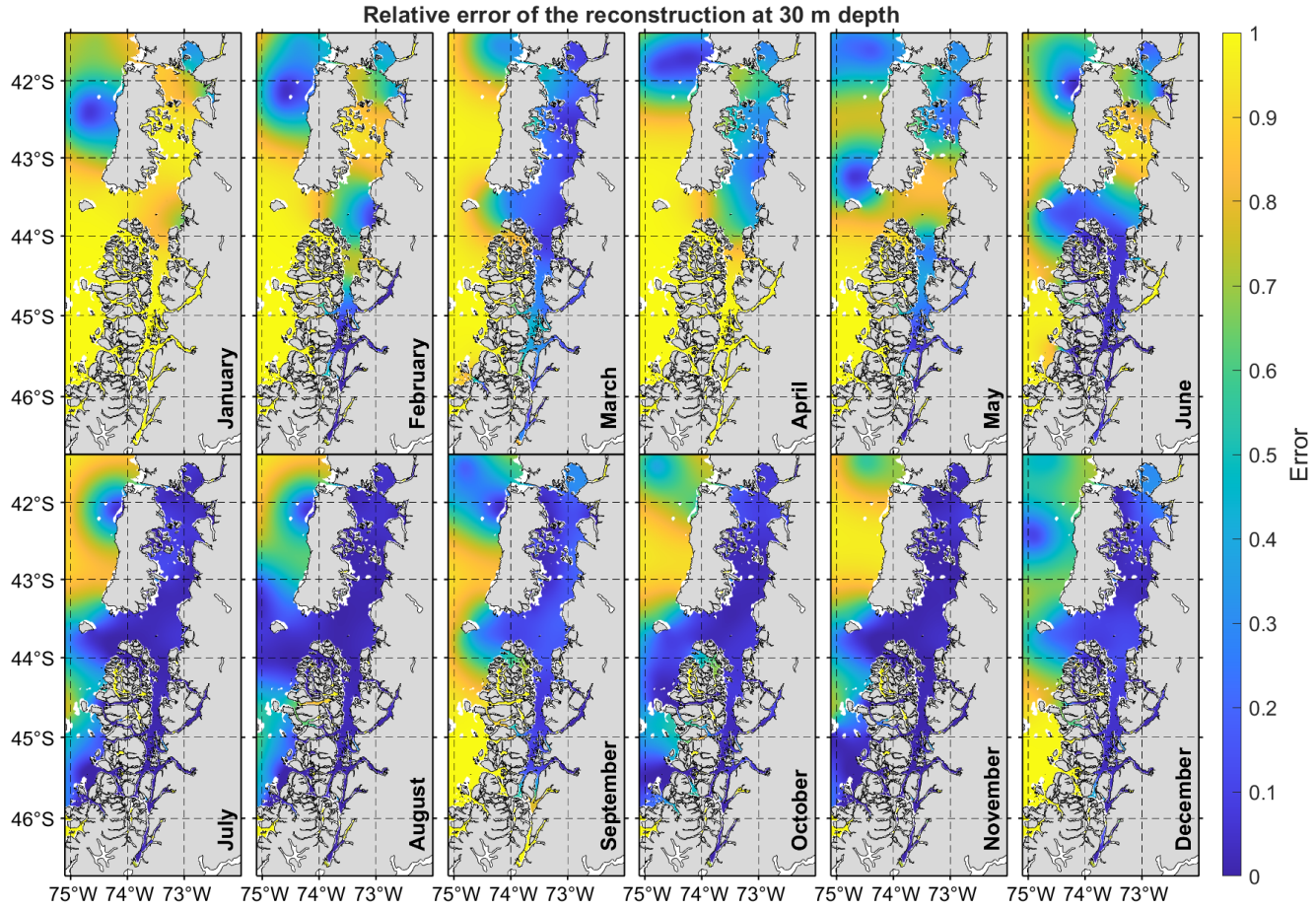


Fig. S 43: Relative error maps of the climatology at 30 m depth.

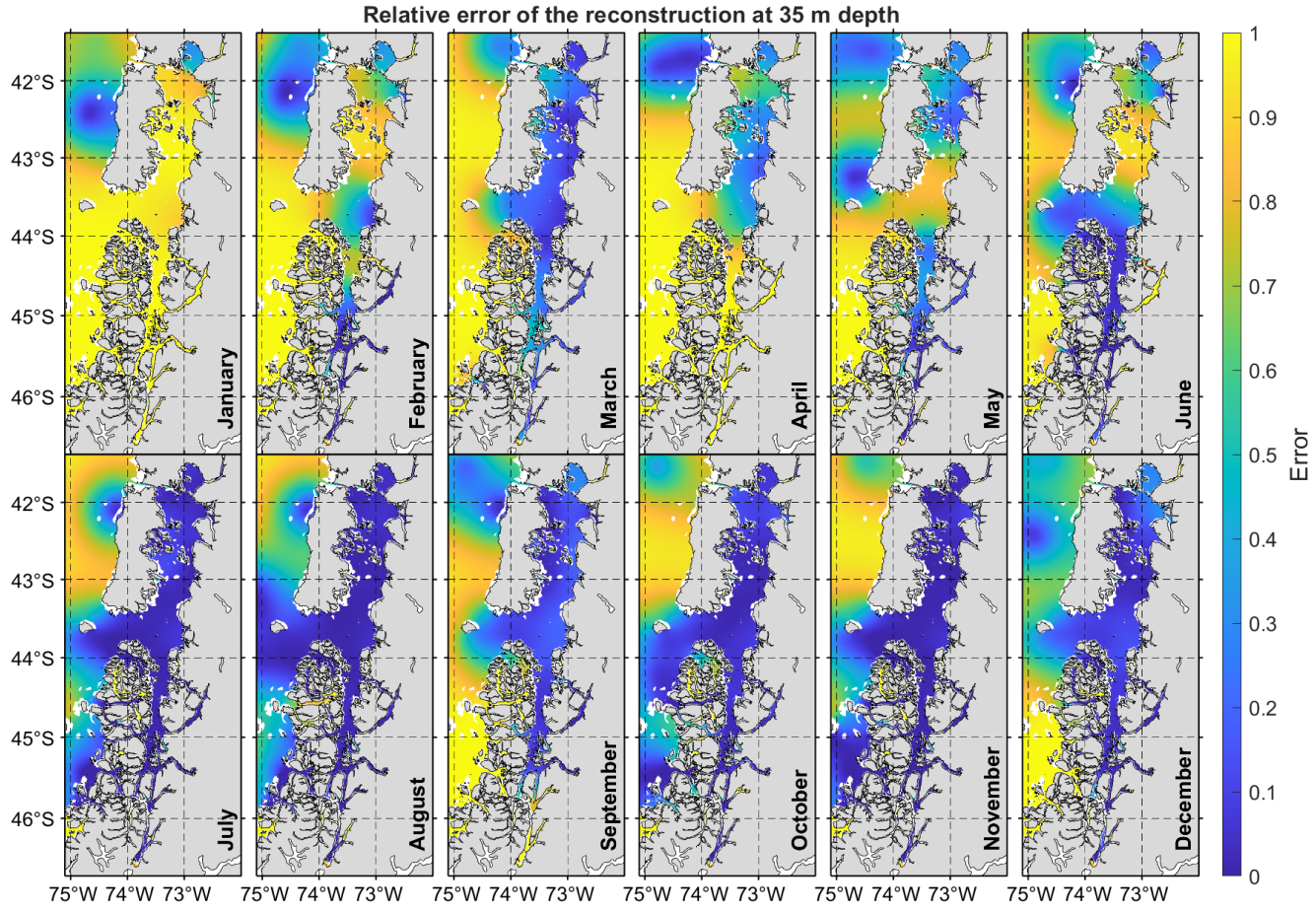


Fig. S 44: Relative error maps of the climatology at 35 m depth.

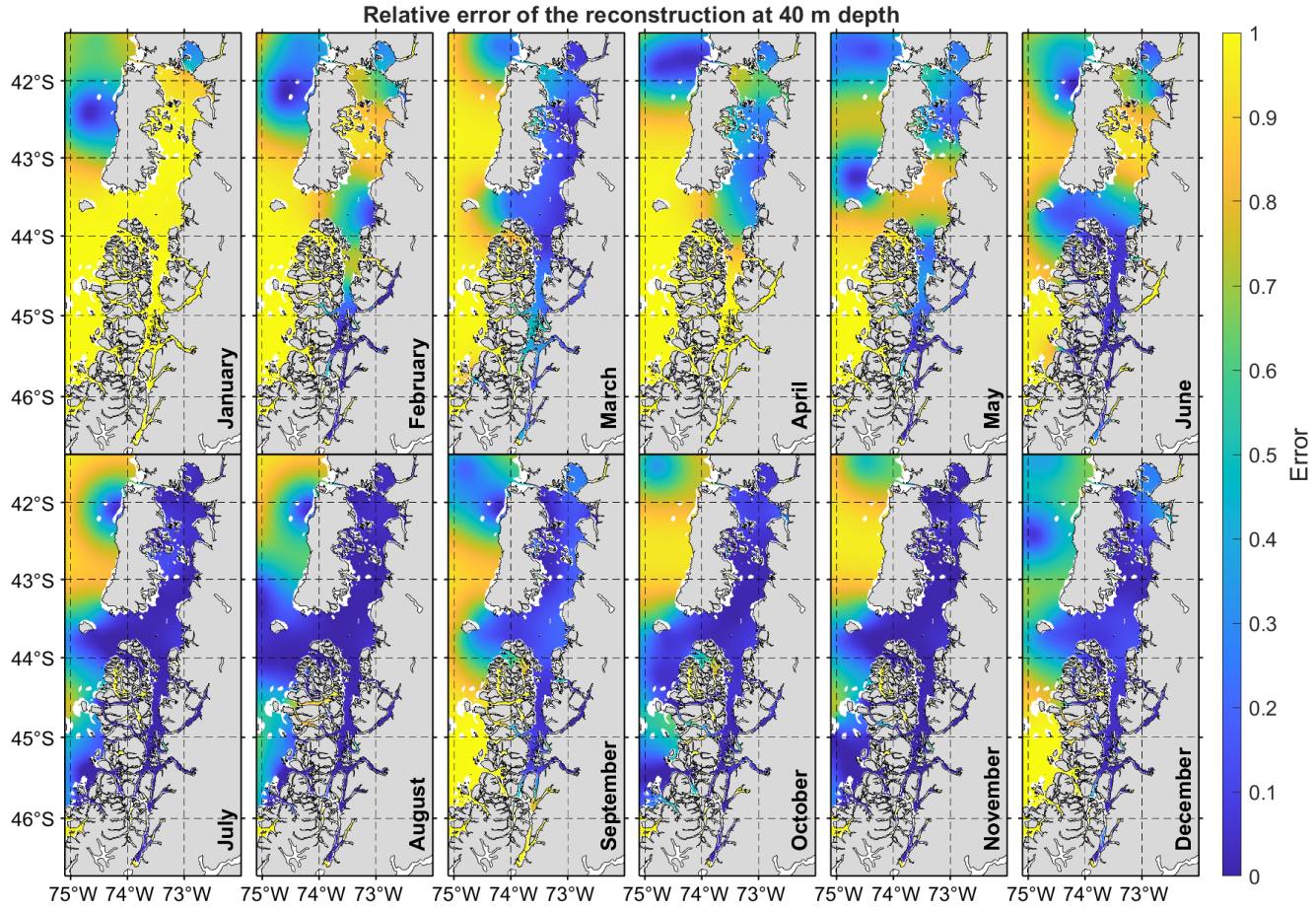


Fig. S 45: Relative error maps of the climatology at 40 m depth.

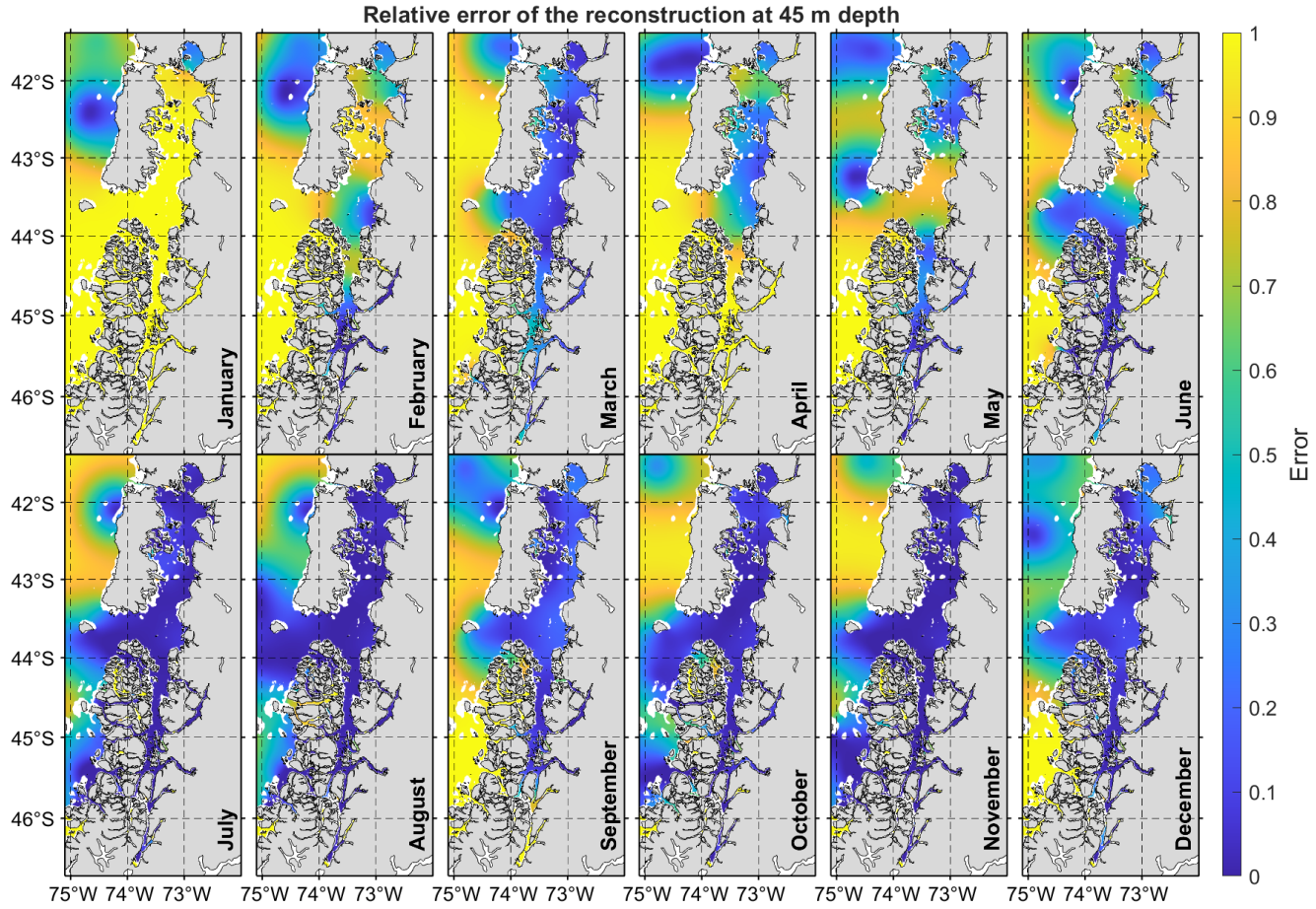


Fig. S 46: Relative error maps of the climatology at 45 m depth.

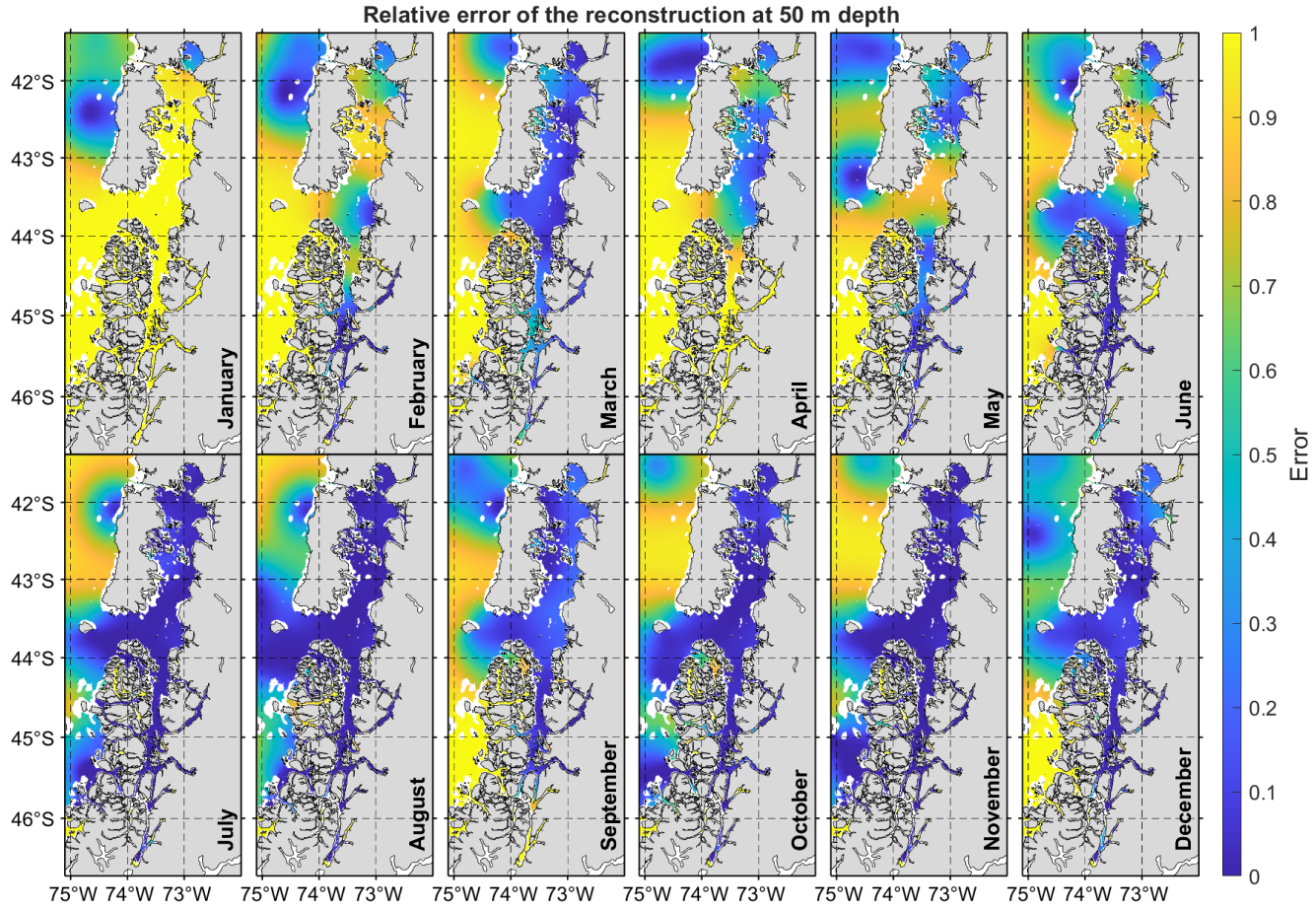


Fig. S 47: Relative error maps of the climatology at 50 m depth.

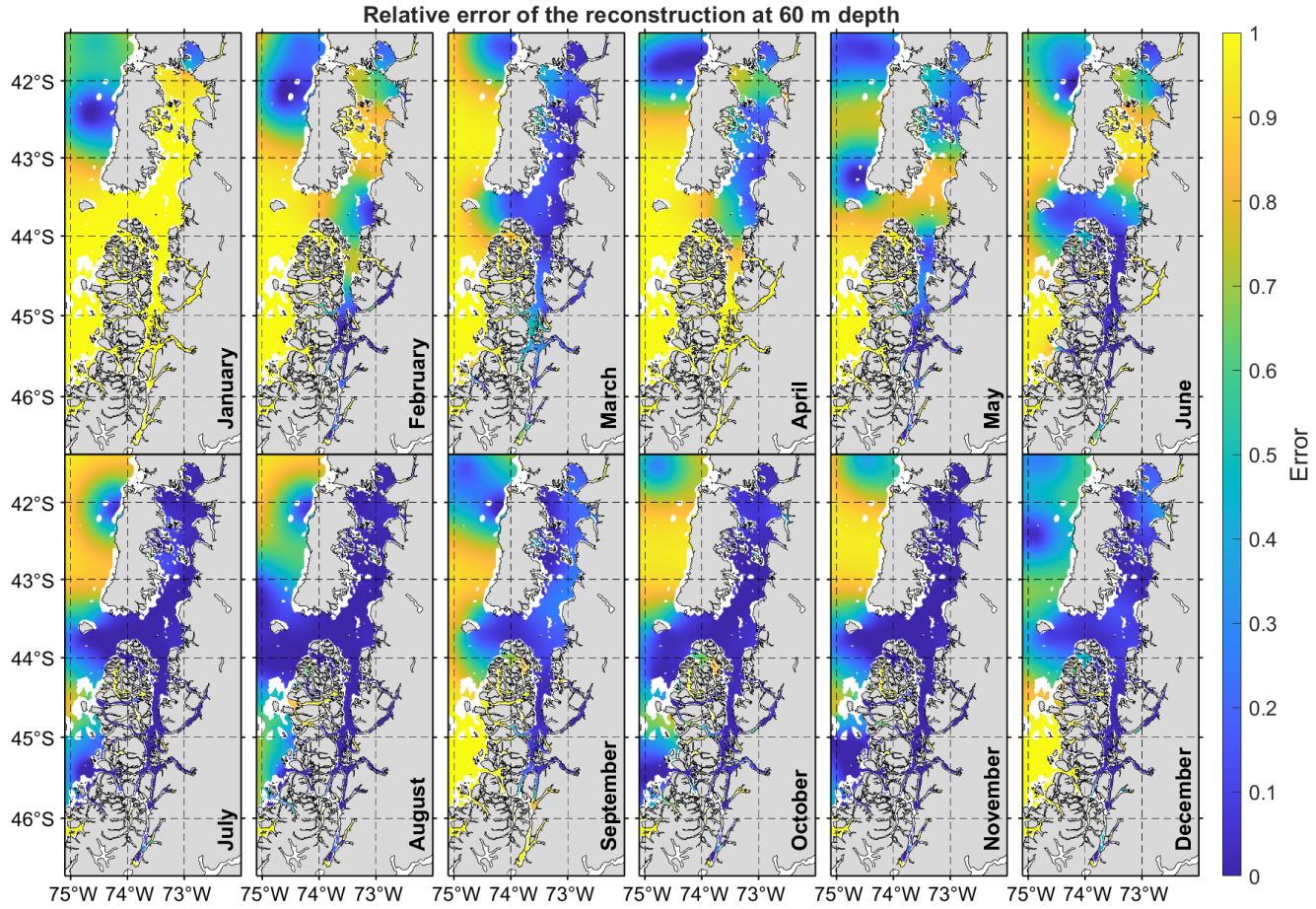
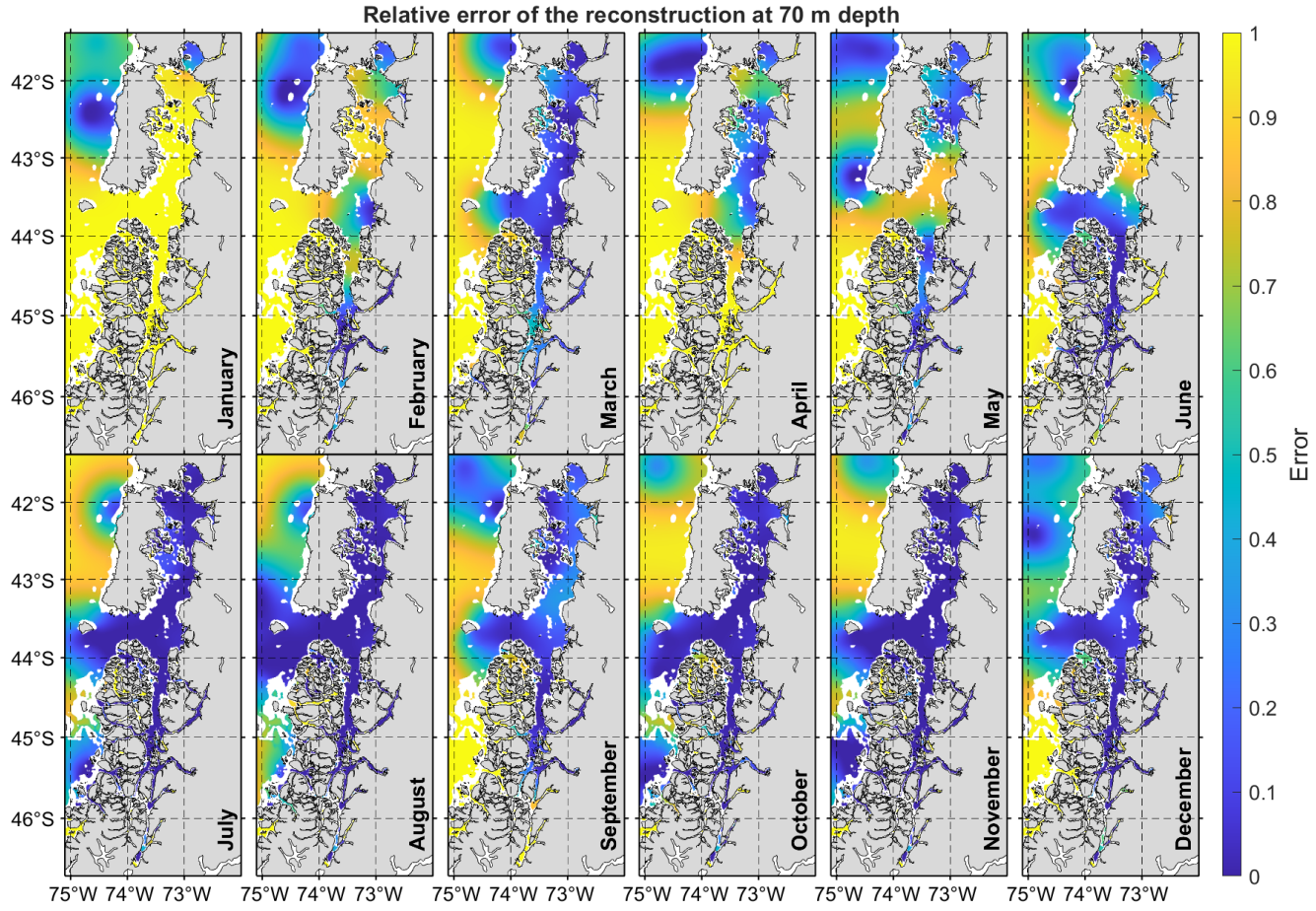


Fig. S 48: Relative error maps of the climatology at 60 m depth.



105 **Fig. S 49: Relative error maps of the climatology at 70 m depth.**

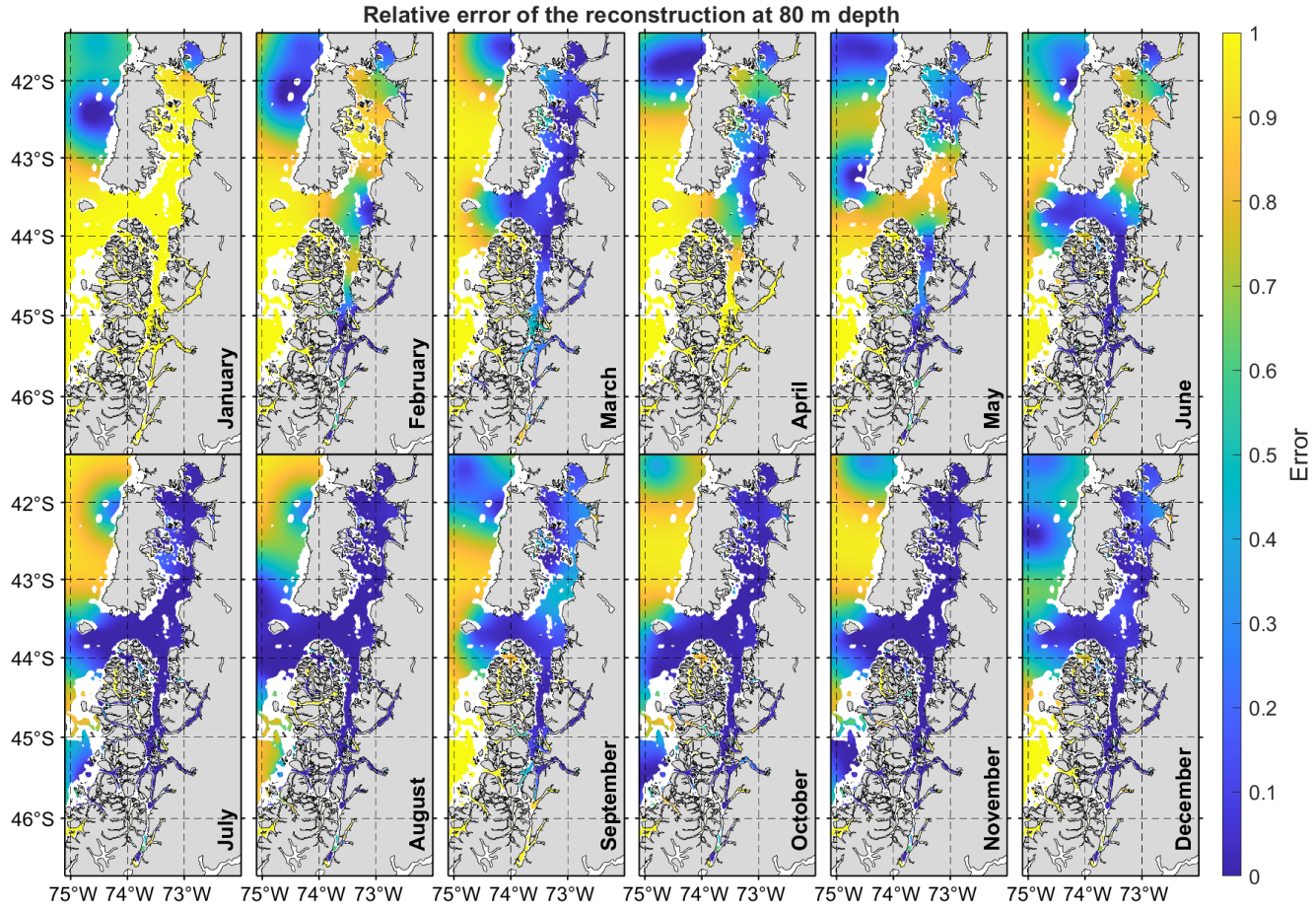


Fig. S 50: Relative error maps of the climatology at 80 m depth.

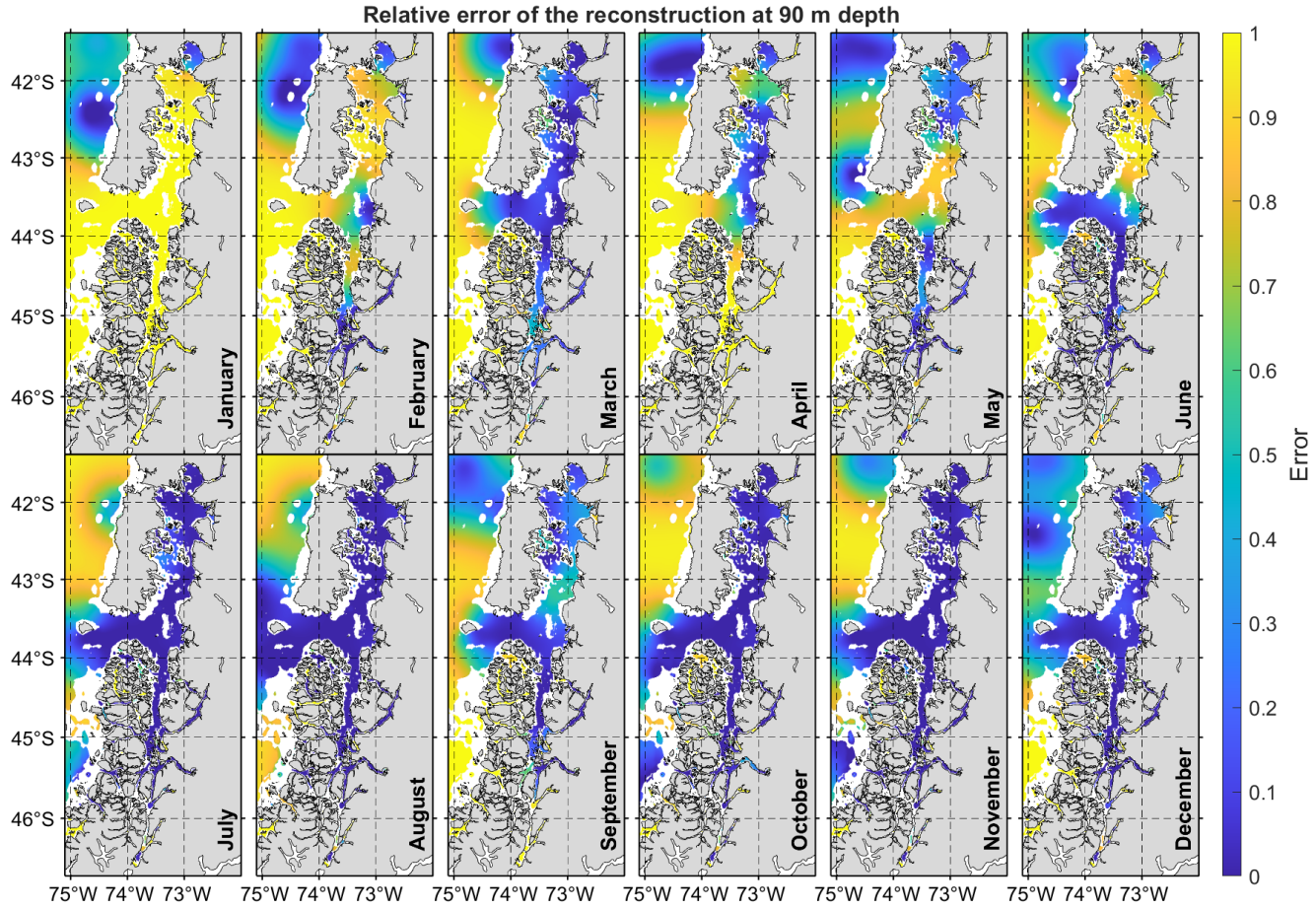


Fig. S 51: Relative error maps of the climatology at 90 m depth.

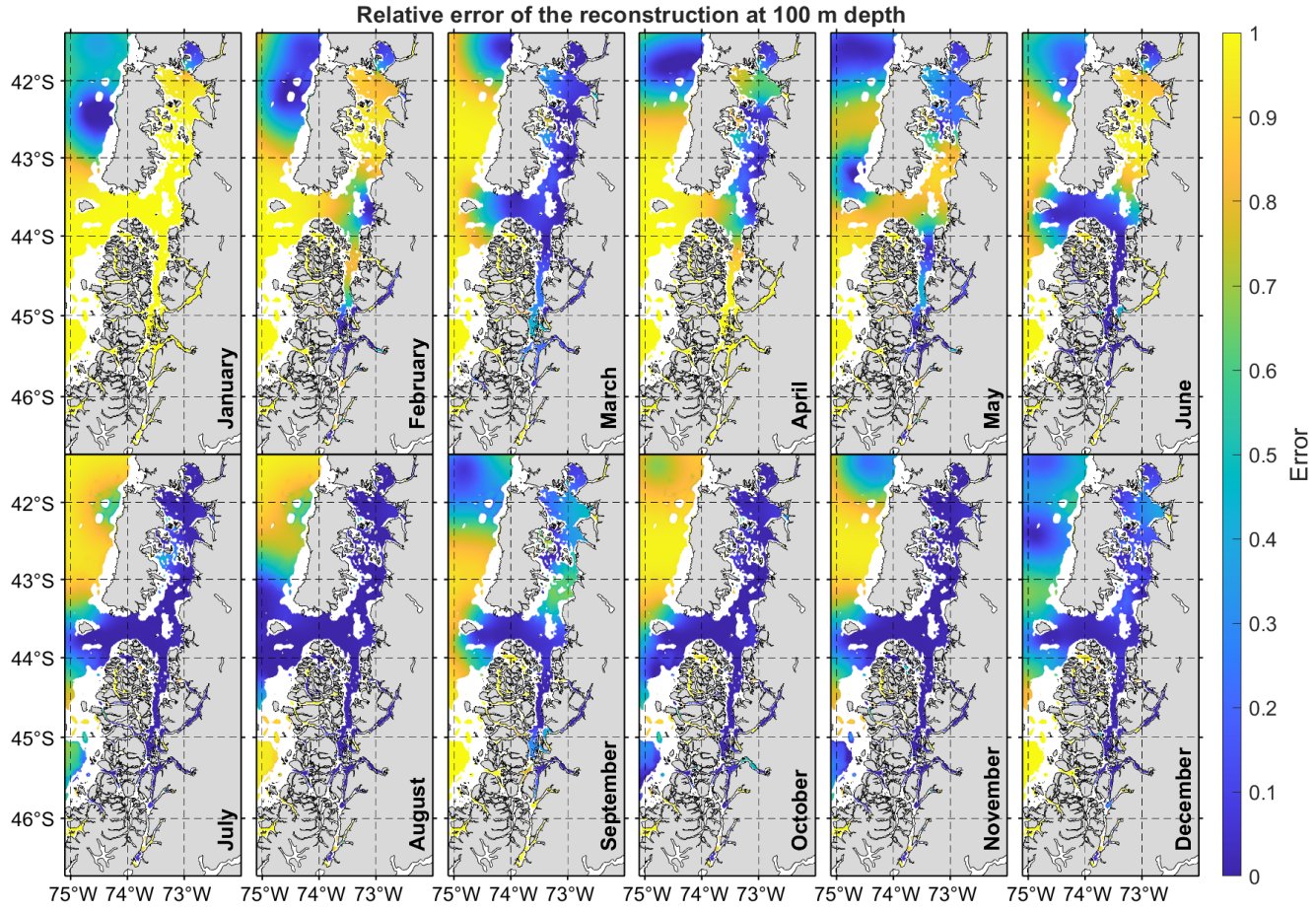


Fig. S 52: Relative error maps of the climatology at 100 m depth.

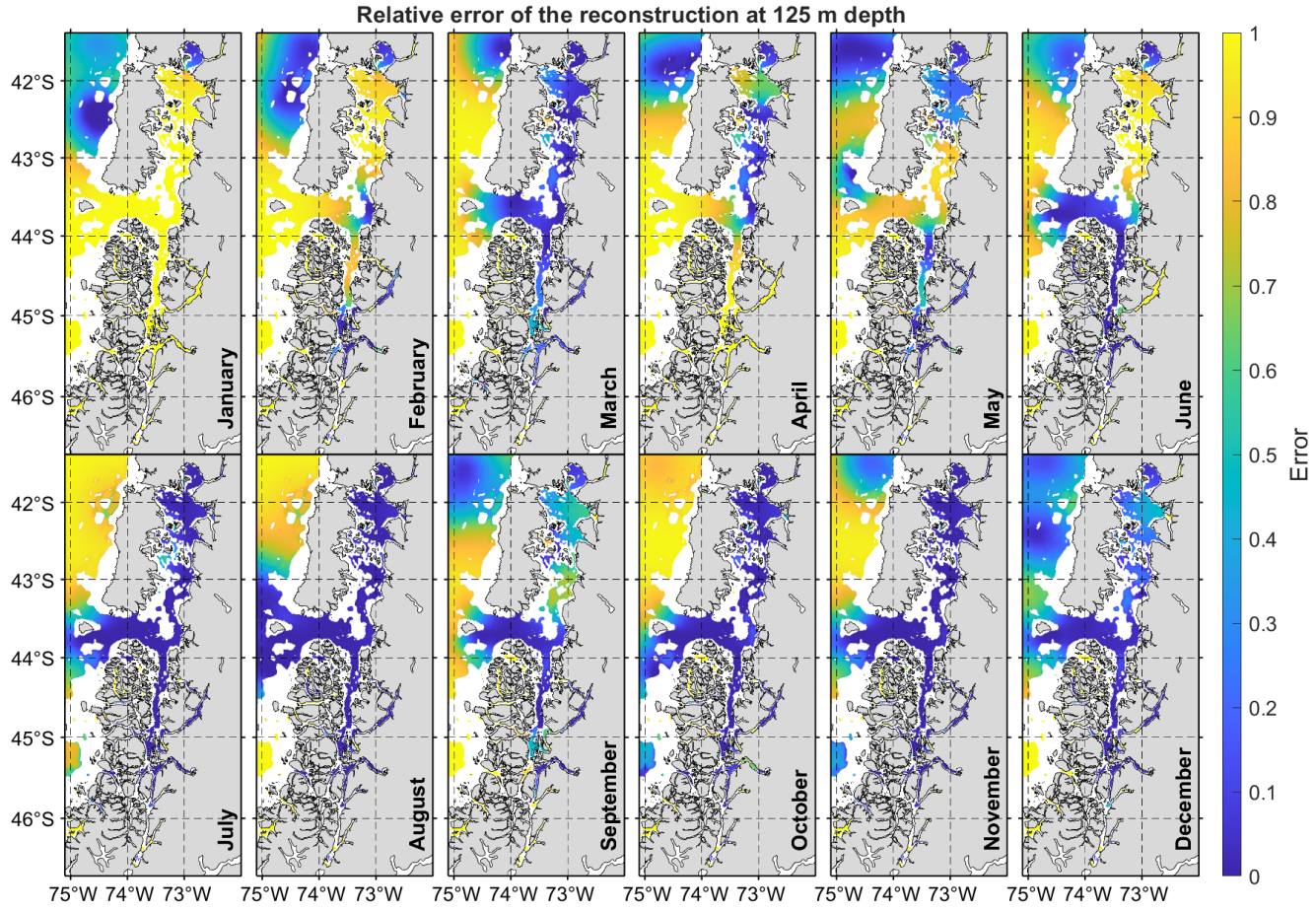


Fig. S 53: Relative error maps of the climatology at 125 m depth.

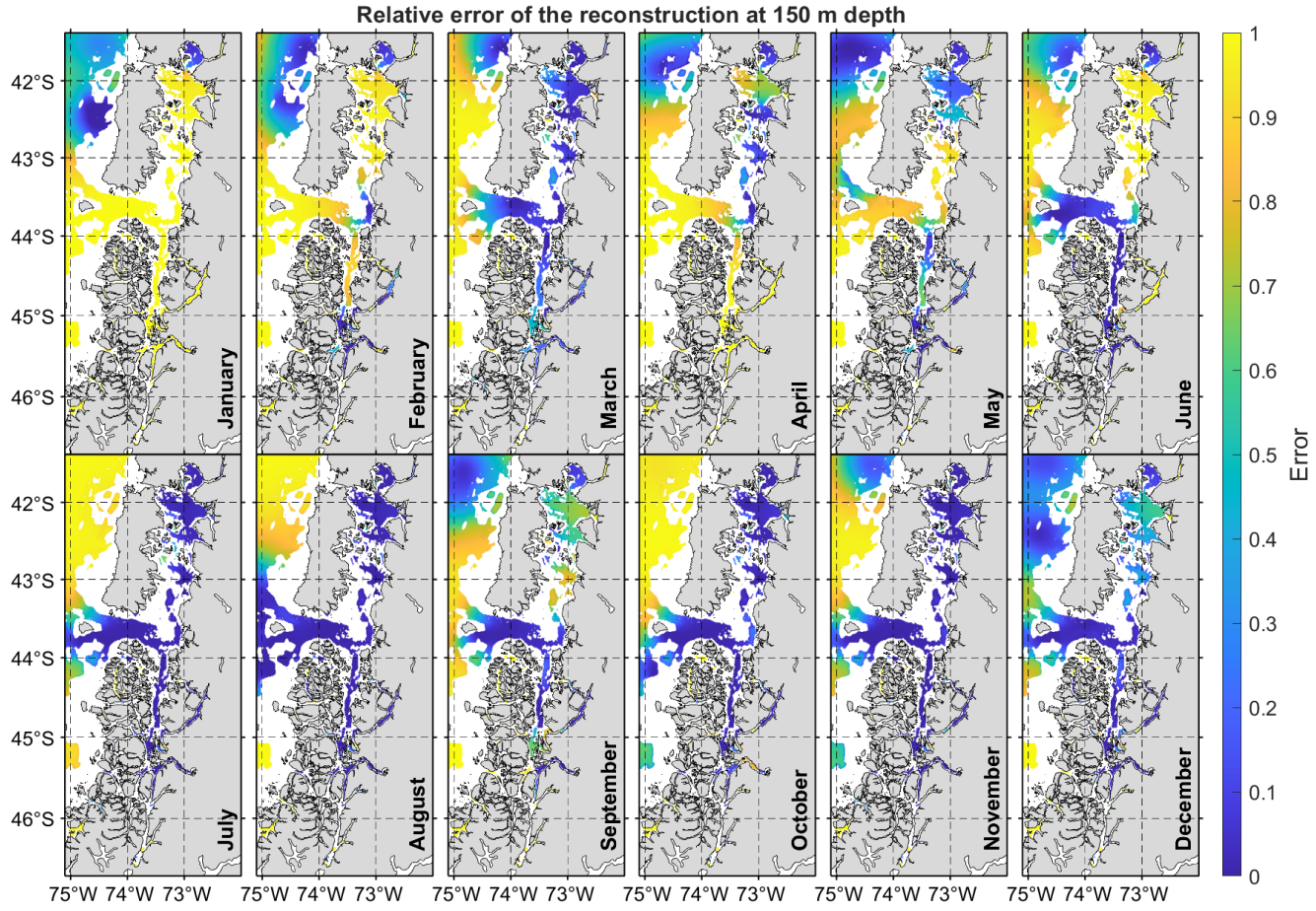


Fig. S 54: Relative error maps of the climatology at 150 m depth.

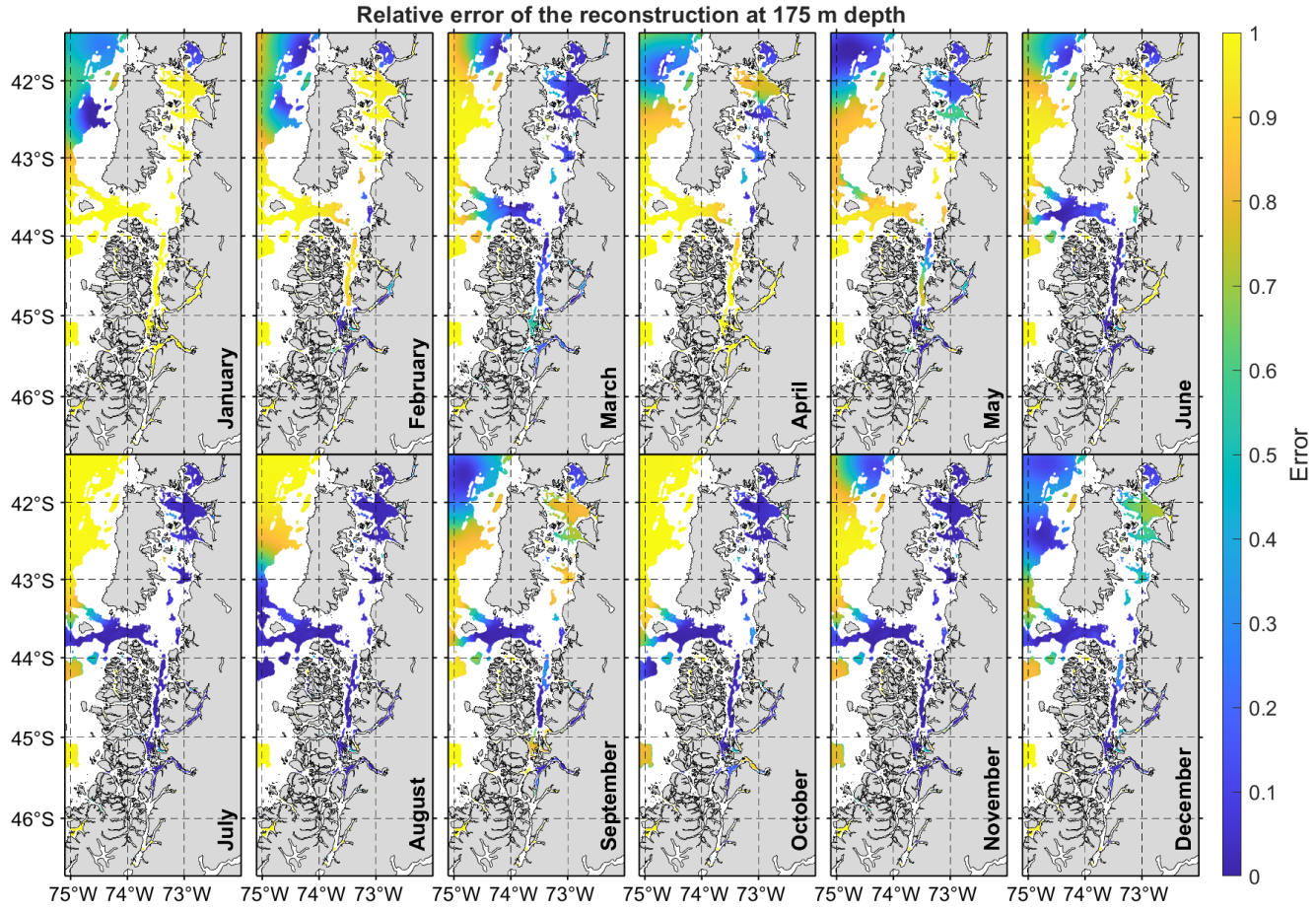


Fig. S 55: Relative error maps of the climatology at 175 m depth.

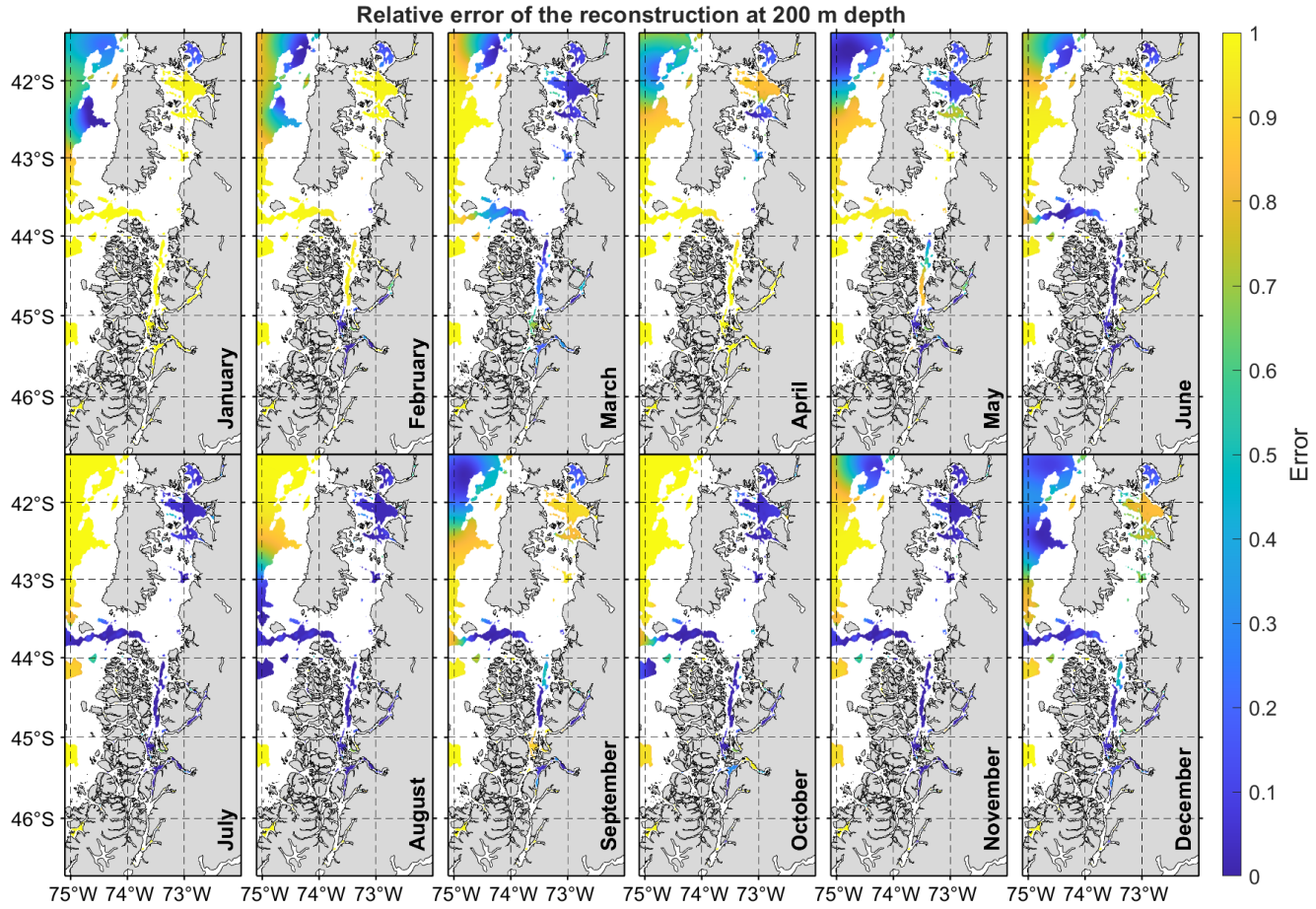


Fig. S 56: Relative error maps of the climatology at 200 m depth.

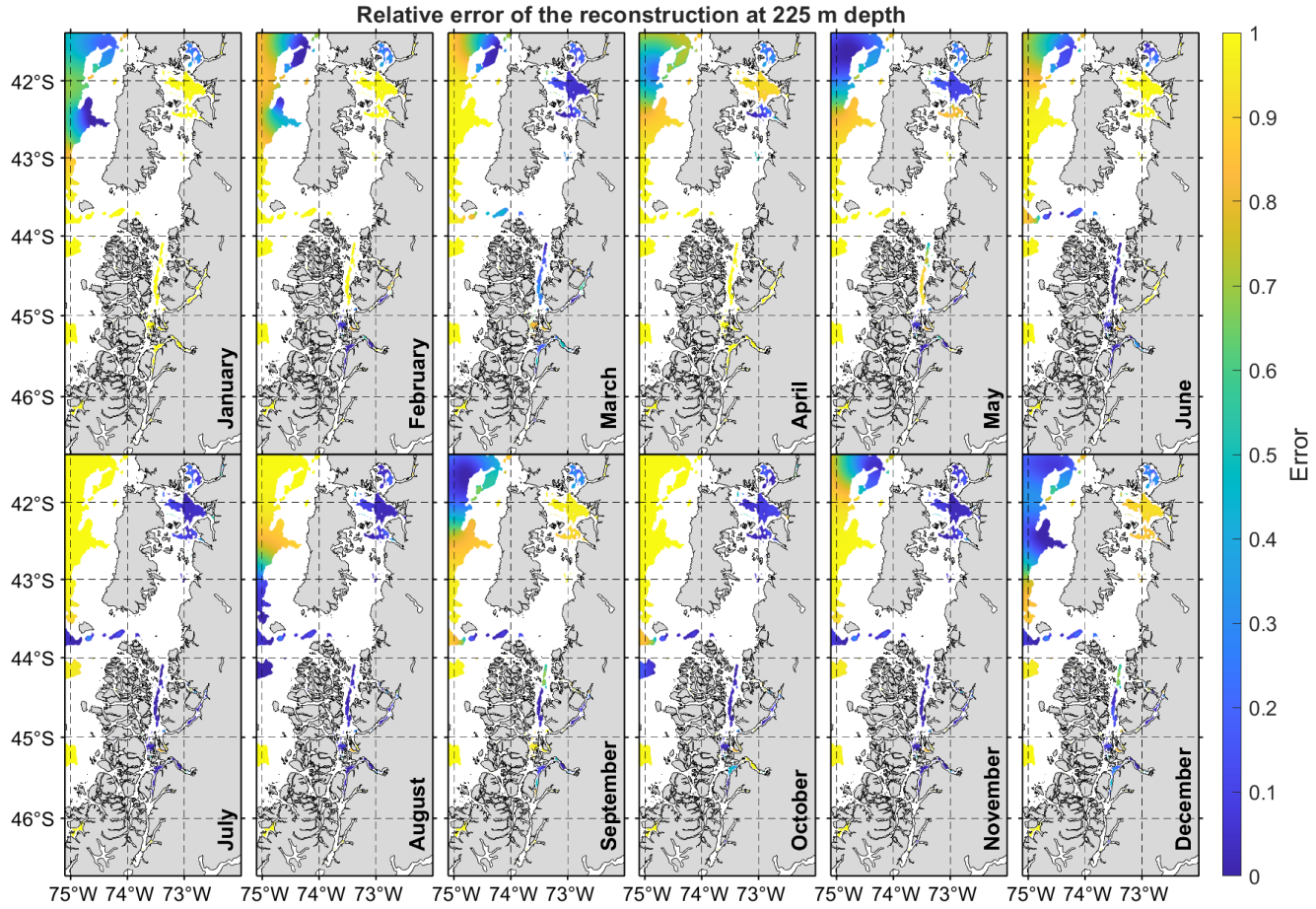


Fig. S 57: Relative error maps of the climatology at 225 m depth.

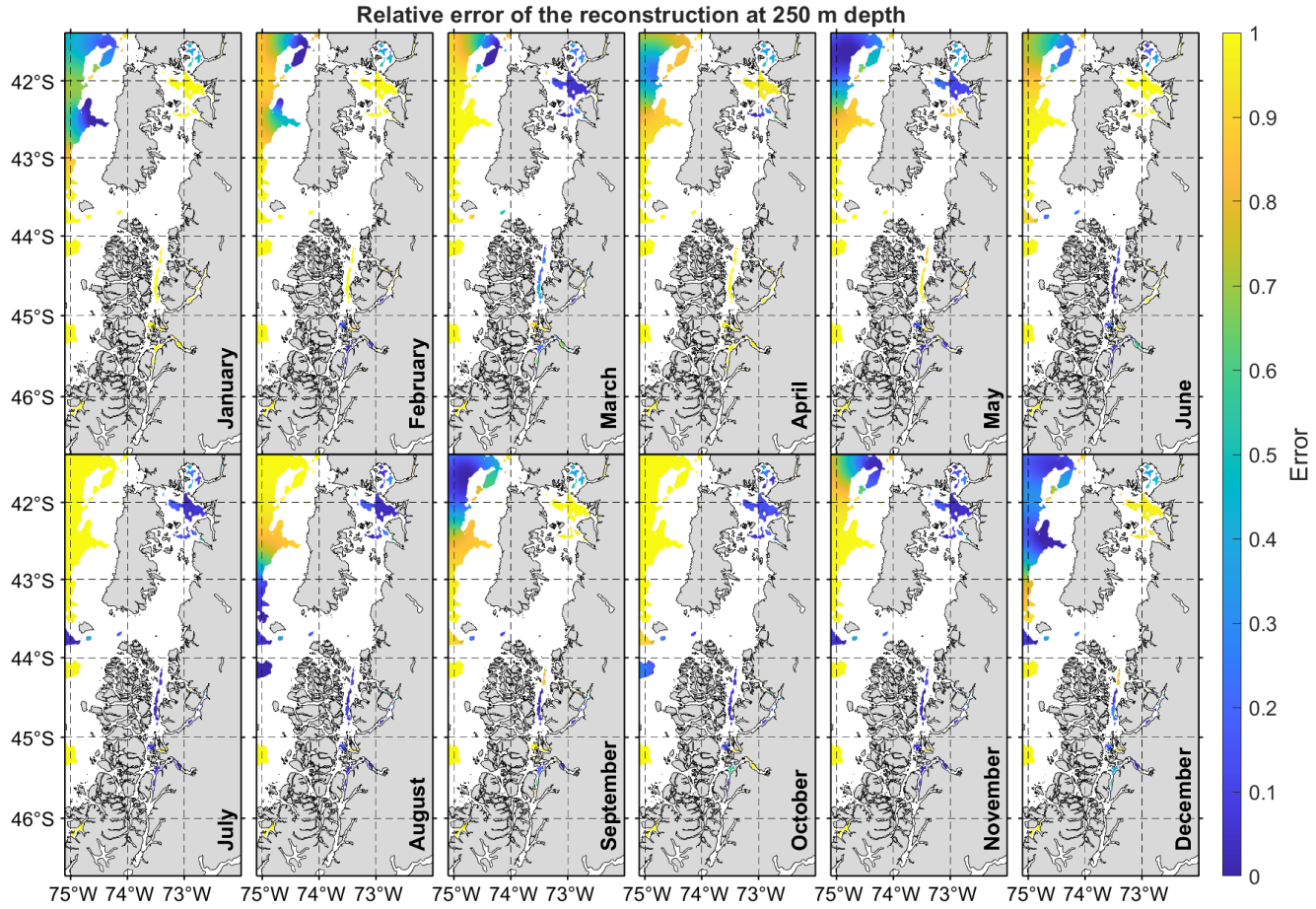


Fig. S 58: Relative error maps of the climatology at 250 m depth.

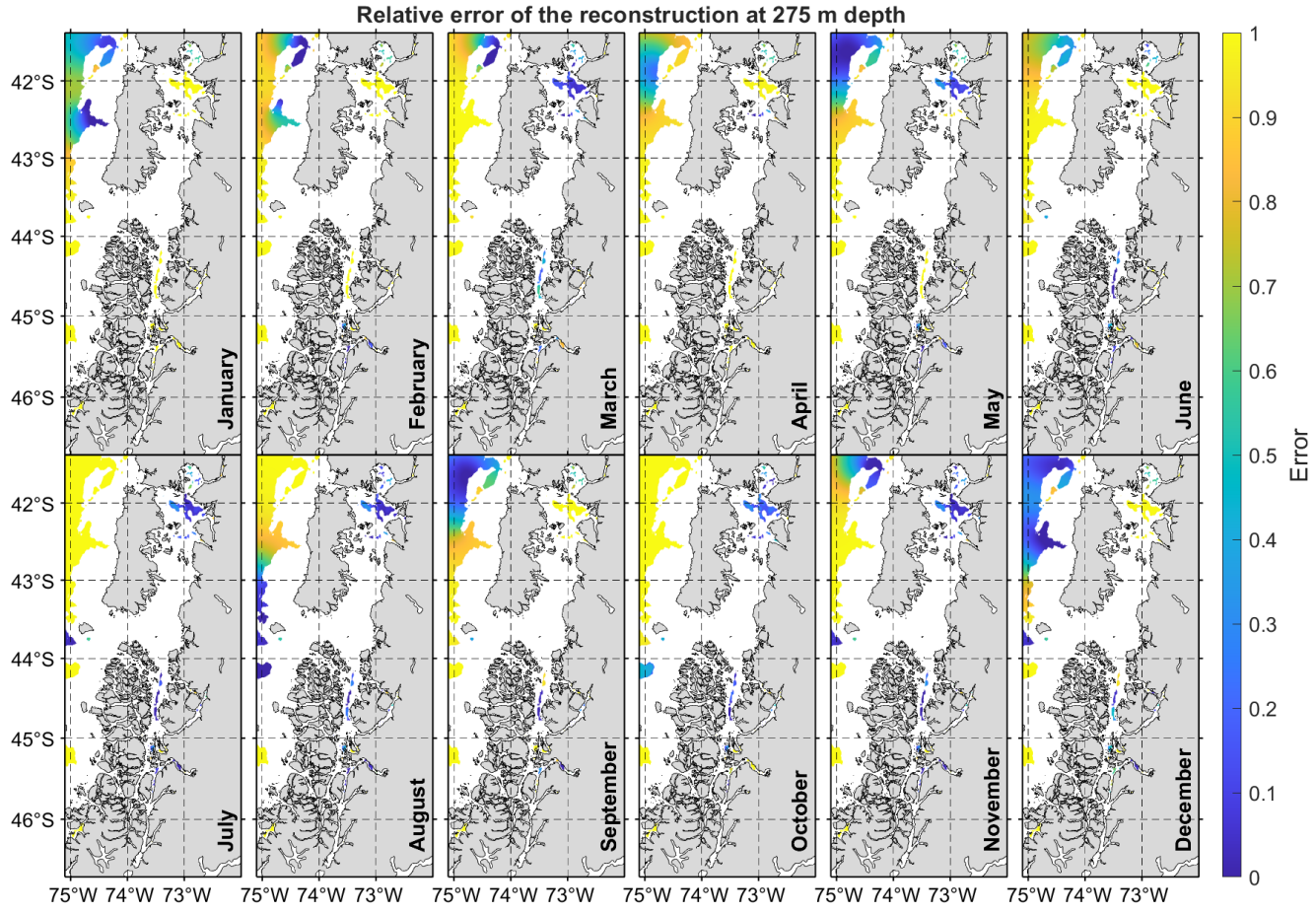


Fig. S 59: Relative error maps of the climatology at 275 m depth.

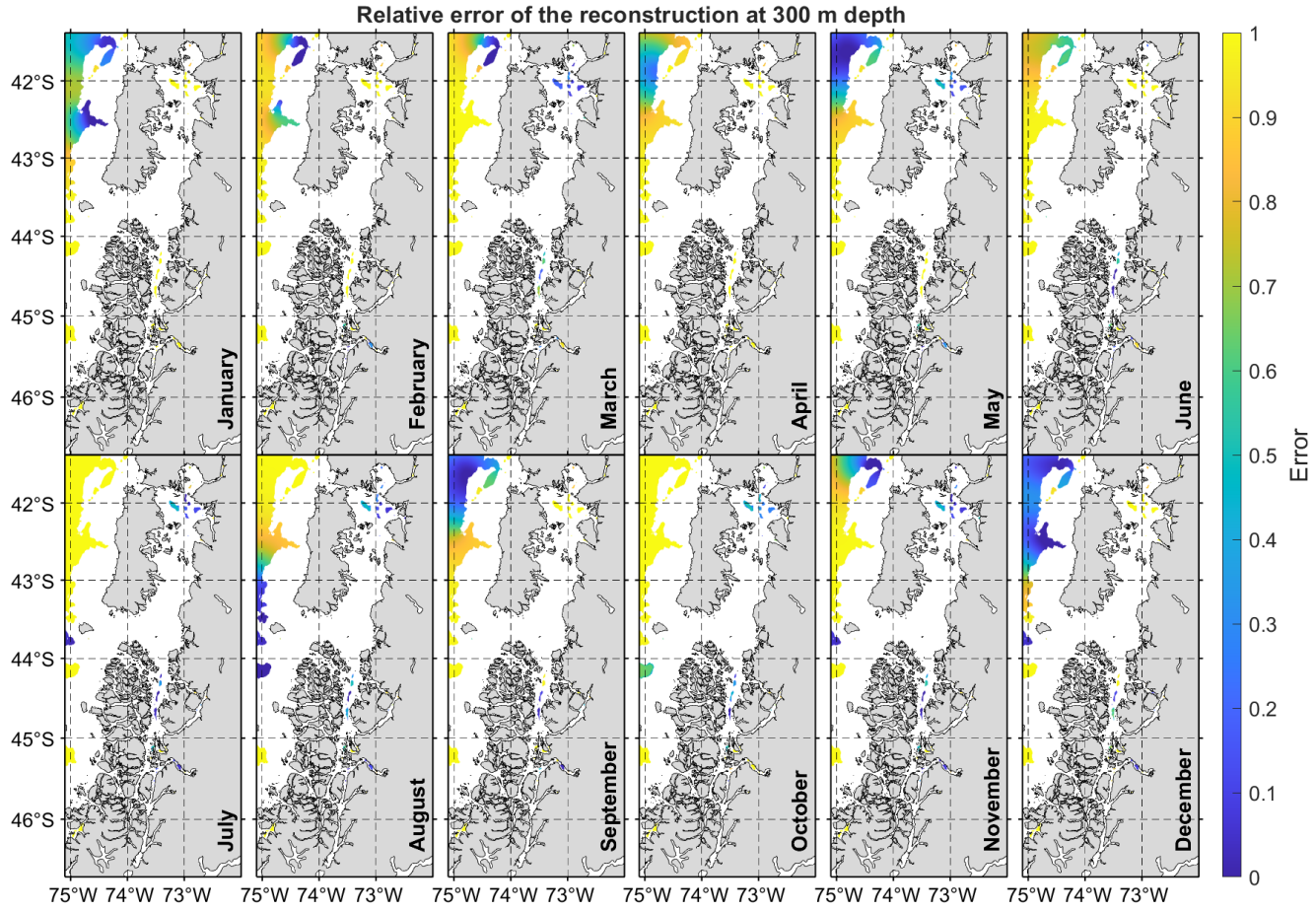


Fig. S 60: Relative error maps of the climatology at 300 m depth.

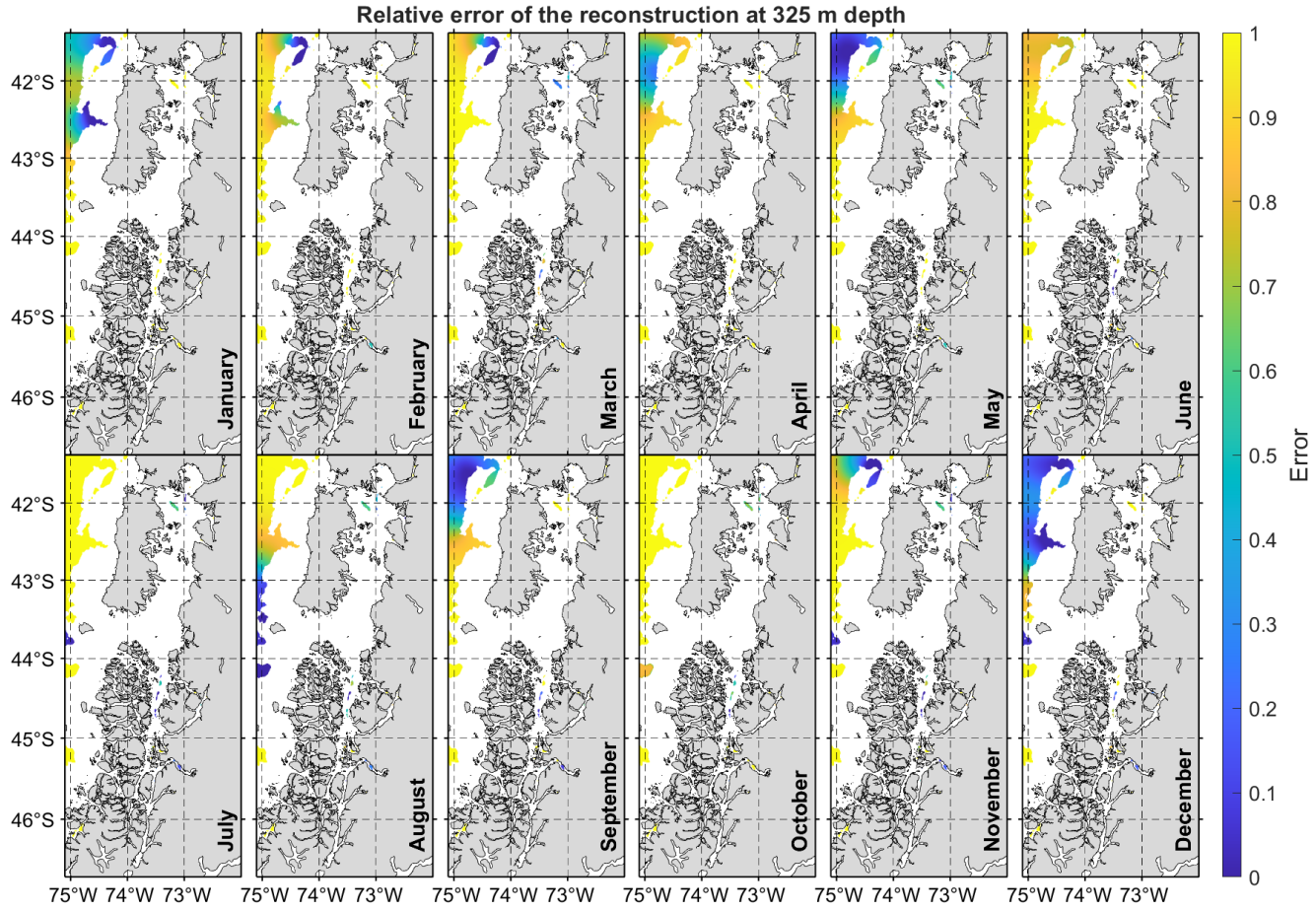


Fig. S 61: Relative error maps of the climatology at 325 m depth.

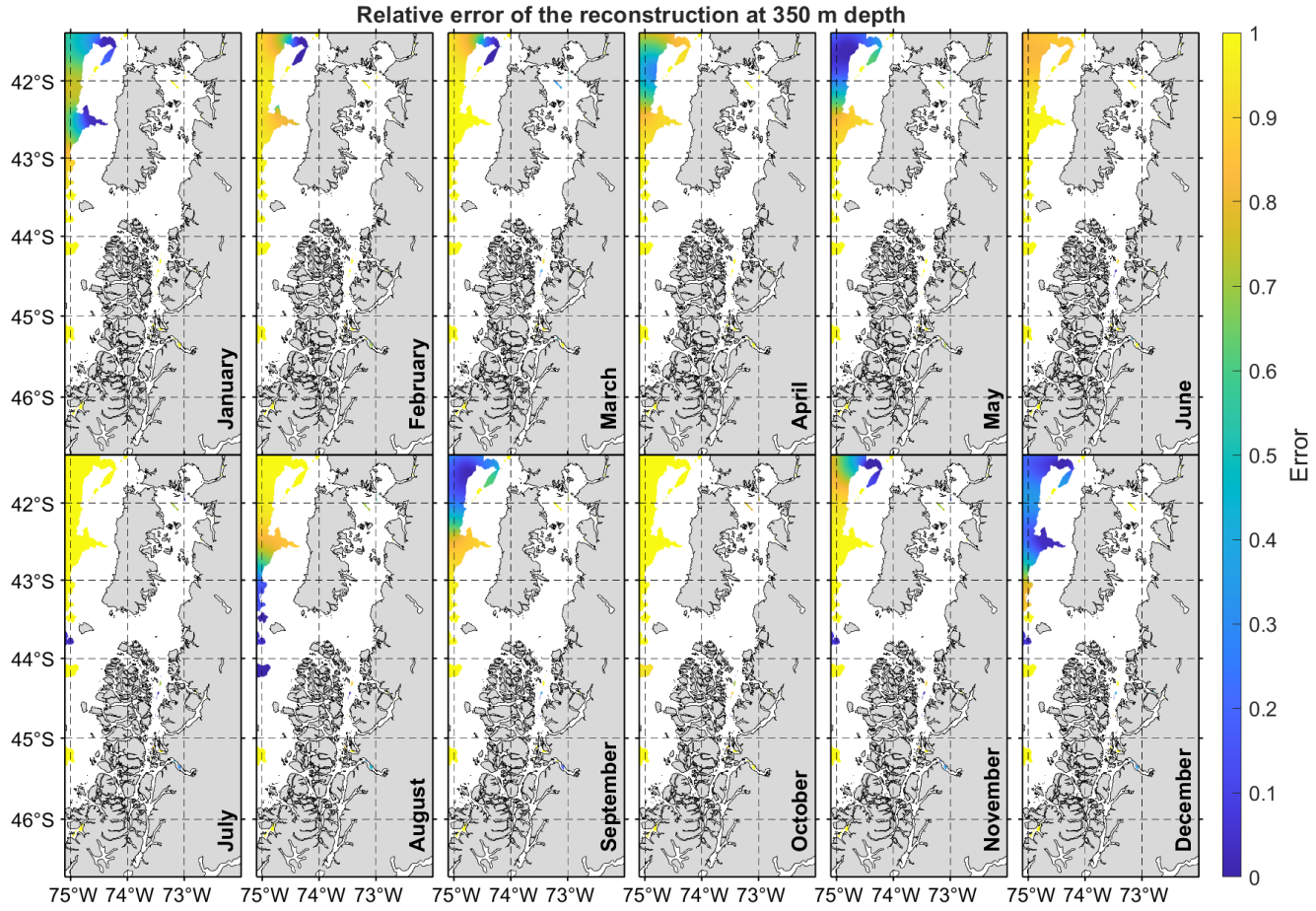


Fig. S 62: Relative error maps of the climatology at 350 m depth.

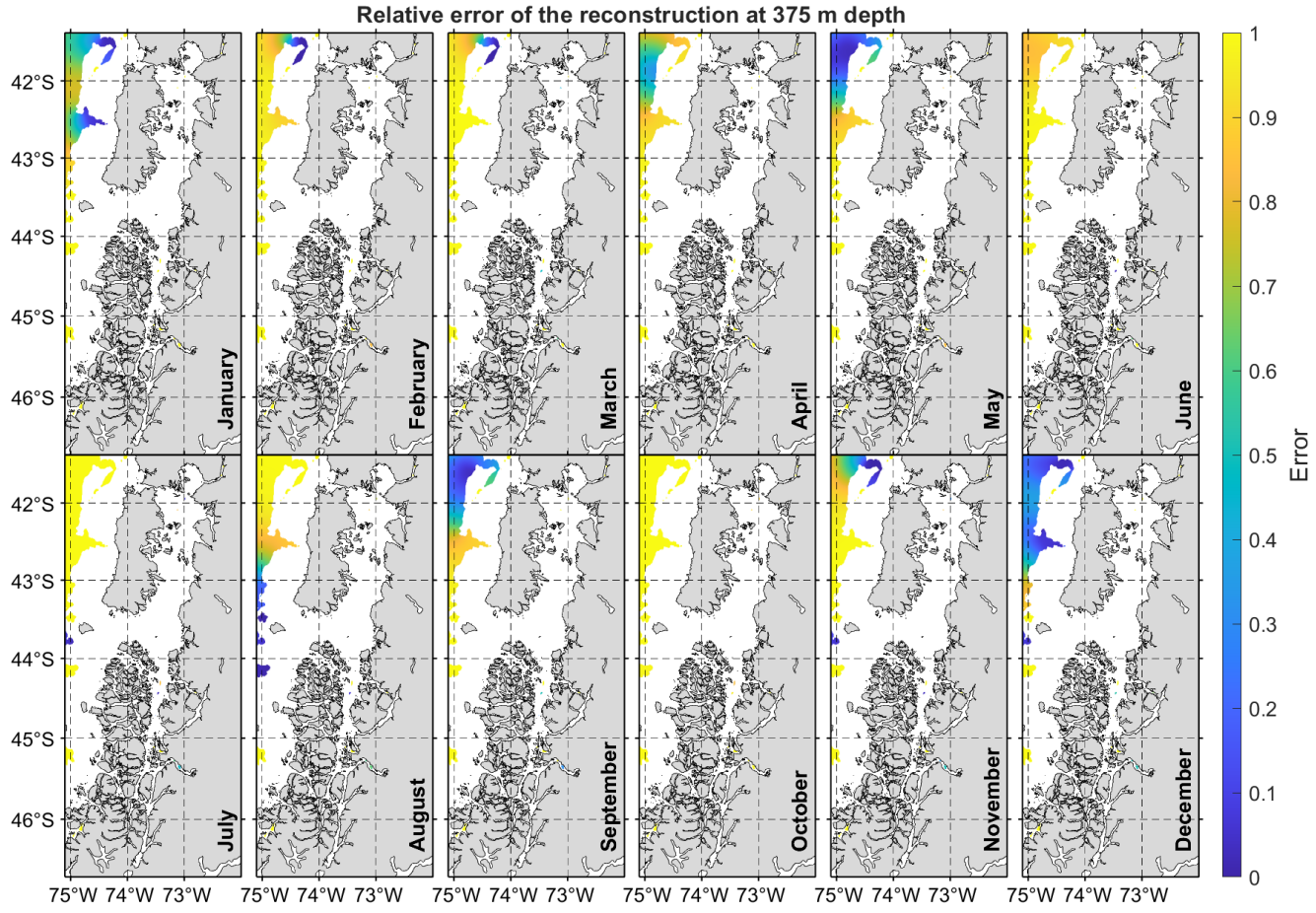


Fig. S 63: Relative error maps of the climatology at 375 m depth.

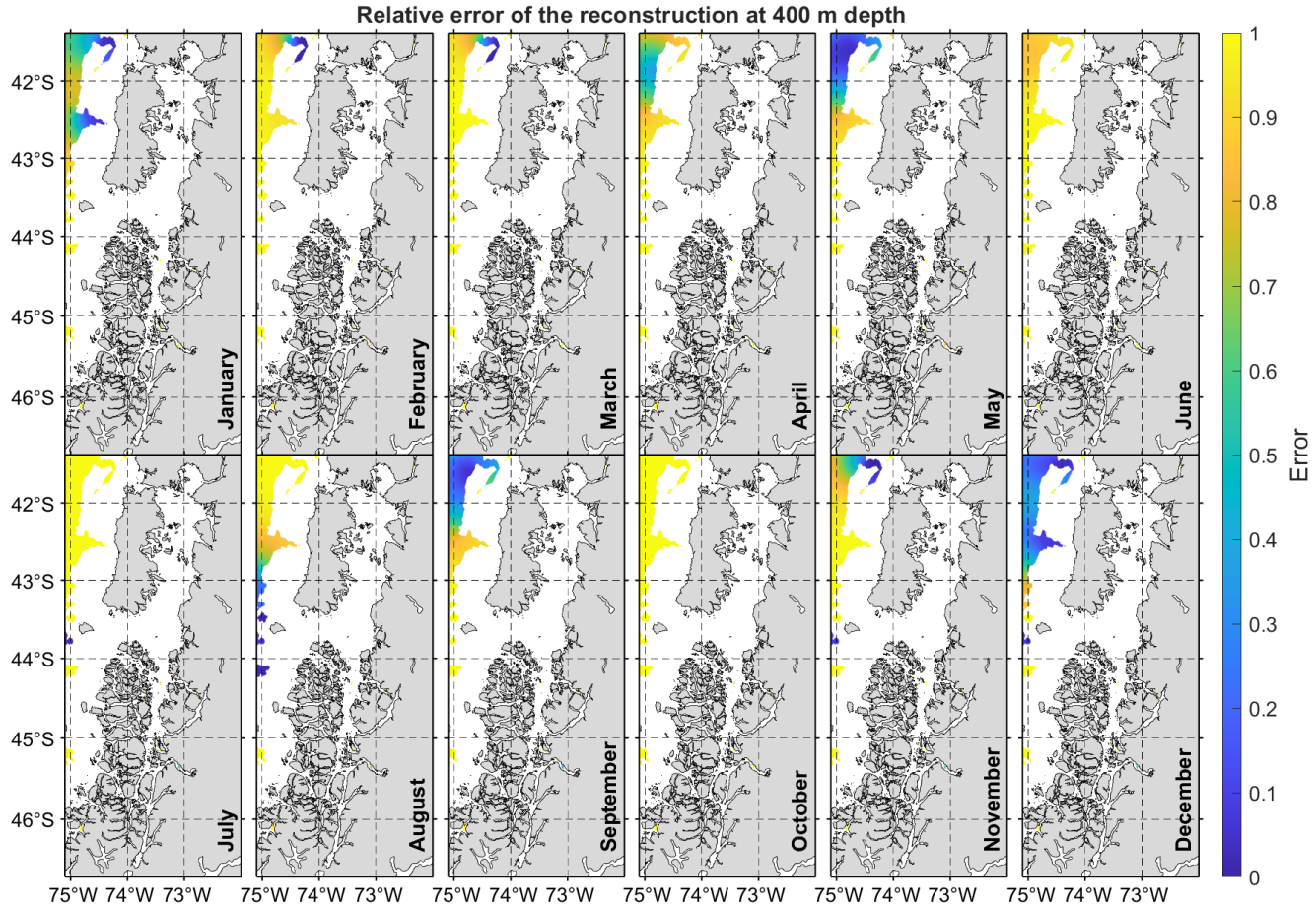


Fig. S 64: Relative error maps of the climatology at 400 m depth.

The following pages list the different sources and/or DOIs for the in situ data shown in Table 1 of the manuscript.

S3.1 CMEMS

[1]Szekely Tanguy, Gourrion Jerome, Pouliquen Sylvie, Reverdin Gilles (2023). CORA, Coriolis Ocean Dataset for Reanalysis. SEANOE. https://doi.org/10.17882/46219

These CMEMS dataset were extracted from the Ocean Browser EMODnet (European Marine Observation and Data Network, URL: https://emodnet.ec.europa.eu/en/physics/; last access in 2022)
[2]https://doi.org/10.13155/59938
[3]https://doi.org/10.13155/40846
[4]https://doi.org/10.13155/53381
[5]https://doi.org/10.13155/36230
[6]https://doi.org/10.13155/43494

S3.2 Pangaea

Coming from shallow depth monitoring stations in different fjords of the north of the Inner Sea of Chiloé. Listed by localisation.

Comau

[7]2009 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter; Funke, Tobias; Richter, Claudio (2018): Physical oceanographic profiles of CTD casts at X-Huinay and Punta Gruesa (Comau Fjord) in April 2009. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.894699

[8]2011 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter; Sswat, Michael; Baumgarten, Sebastian; Richter, Claudio (2017): Physical oceanographic profiles of seven CTD casts from Gulf of Ancud into Comau Fjord in 2011. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.884120

[9]2012 Fillinger, Laura; Richter, Claudio (2013): Physical oceanography during expedition Comau2012. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.811832

[10]2012 phys oce Fillinger, Laura; Richter, Claudio (2013): Physical oceanography during expedition Comau2012. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.811832

[11]2013 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter; Goehlich, Henry (2017): Physical oceanographic profiles of 14 CTD casts from Gulf of Ancud into Comau Fjord in 2013. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.874259

[12]2014 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter; Goehlich, Henry (2014): Physical oceanographic profiles of seven CTD casts from Gulf of Ancud into Comau Fjord in 2014. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.832187

Huinay

[13]2010 Laudien, Jürgen; Baumgarten, Sebastian; Jantzen, Carin; Richter, Claudio; Steinmetz, Richard; Häussermann, Verena; Försterra, Günter (2012): Water temperature at station Huinay, Comau Fjord, Patagonia, Chile in 2010. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.783633

[14]2012-13 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter (2013): Water temperature at time series station Huinay Jetty, Comau Fjord, Patagonia, Chile in 2012/2013. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.843752

[15]2013-14 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2014): Water temperature at time series station Huinay Jetty, Comau Fjord, Patagonia, Chile in 2013/2014. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.843753

[16]2014-15 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2015): Water temperature at time series station Huinay Jetty, Comau Fjord, Patagonia, Chile in 2014/2015. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.843770

[17]2015-16 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter; Richter, Claudio (2017): Water temperature at time series station Huinay Jetty, Comau Fjord, Patagonia, Chile in 2015/2016. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872935

Liliguapi

[18]2010 Laudien, Jürgen; Baumgarten, Sebastian; Jantzen, Carin; Richter, Claudio; Steinmetz, Richard; Häussermann, Verena; Försterra, Günter (2012): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2010. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.783296

[19]2011-12 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter (2012): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2011/2012. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.777752

[20]2012-13 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter (2013): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2012/2013. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.818388

[21]2013-14 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter (2014): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2013/2014. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.830086

[22]2014-15 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2015): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2014/2015. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.843773

[23]2015 02 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2015): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2015-02. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.845259

[24]2015-16 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2017): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2015/2016. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872161

[25]2016-17 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2017): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2016/2017. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872121

[26]2017-18 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2021): Water temperature at time series station Liliguapi, Paso Comau, Patagonia, Chile in 2017/2018. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.933275

Near Swall

[27]Laudien, Jürgen; Schmidt, Gertraud; González Estay, Humberto; Höfer, Juan; Häussermann, Verena; Försterra, Günter; Richter, Claudio (2017): Water temperature at time series station Near SWALL, Comau Fjord, Patagonia, Chile in 2016/2017. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872480

Pirate Cove

[28]2016-17 Laudien, Jürgen; Schmidt, Gertraud; González Estay, Humberto; Höfer, Juan; Häussermann, Verena; Försterra, Günter; Richter, Claudio (2017): Water temperature at time series station Pirate Cove, Comau Fjord, Patagonia, Chile in 2016/2017. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872482

Punta Gruesa

[29]2010 Laudien, Jürgen; Baumgarten, Sebastian; Jantzen, Carin; Richter, Claudio; Steinmetz, Richard; Häussermann, Verena; Försterra, Günter (2012): Water temperature at station Punta Gruesa, Comau Fjord, Patagonia, Chile in 2010. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.783293

Rio Tambor

[30]Laudien, Jürgen; Schmidt, Gertraud; González Estay, Humberto; Höfer, Juan; Häussermann, Verena; Försterra, Günter; Richter, Claudio (2017): Water temperature at time series station Rio Tambor, Comau Fjord, Patagonia, Chile in 2016/2017. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872483

Soledad

[31]2015-17 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2017): Water temperature at time series station Soledad, Paso Comau, Patagonia, Chile in 2015/2017. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872183

Swall

[32]2010 Laudien, Jürgen; Baumgarten, Sebastian; Jantzen, Carin; Richter, Claudio; Steinmetz, Richard; Häussermann, Verena; Försterra, Günter (2012): Water temperature at station SWALL, Comau Fjord, Patagonia, Chile in 2010. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.783302

X-Huinay North

[33]2014-15 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2015): Water temperature at time series station X-Huinay North, Comau Fjord, Patagonia, Chile in 2014/2015. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.845371

[34]2015-16 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter; Richter, Claudio (2017): Water temperature at time series station X-Huinay North, Comau Fjord, Patagonia, Chile in 2015/2016. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872936

[35]2016-17 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2017): Water temperature at time series station X-Huinay North, Comau Fjord, Patagonia, Chile in 2016/2017. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872157

X-Huinay

[36]2010 Laudien, Jürgen; Baumgarten, Sebastian; Jantzen, Carin; Richter, Claudio; Steinmetz, Richard; Häussermann, Verena; Försterra, Günter (2012): Water temperature at station X-Huinay, Comau Fjord, Patagonia, Chile in 2010. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.783284

[37]2011-12 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter (2012): Water temperature at station X-Huinay, Comau Fjord, Patagonia, Chile in 2011/2012. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.777693

[38]2012 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter (2013): Water temperature at time series station X-Huinay, Comau Fjord, Patagonia, Chile in 2012. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.818434

[39]2013-14 Laudien, Jürgen; Jantzen, Carin; Häussermann, Verena; Försterra, Günter (2014): Water temperature at station X-Huinay, Comau Fjord, Patagonia, Chile in 2013/2014. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.830087

[40]2014-15 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter (2015): Water temperature at time series station X-Huinay, Comau Fjord, Patagonia, Chile in 2014/2015. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.845260

[41]2015-16 Laudien, Jürgen; Häussermann, Verena; Försterra, Günter; Richter, Claudio (2017): Water temperature at time series station X-Huinay, Comau Fjord, Patagonia, Chile in 2015/2016. Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, PANGAEA, https://doi.org/10.1594/PANGAEA.872937

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