

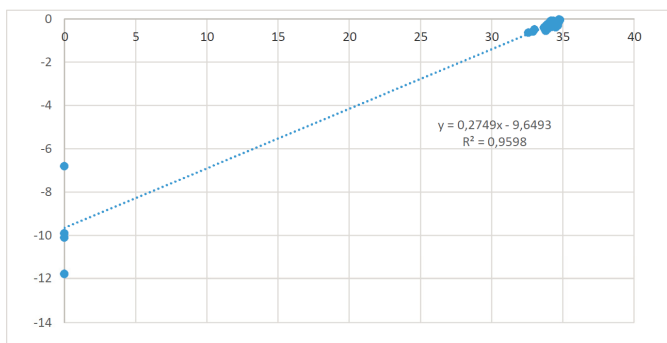
**OXYGEN STABLE ISOTOPE ANALYSES ON AMEGHINOMYA ANTIQUA SHELLS:  
A PROMISING TOOL FOR PALAEOENVIRONMENTAL RECONSTRUCTION  
ALONG THE QUATERNARY PATAGONIAN ARGENTINA COAST?**



## Supplementary Appendix

### $\delta^{18}\text{O}_w$ VALUES MEASURED FOR THE ATLANTIC SOUTH OCEAN REPORTED BY DIFFERENT AUTHORS

Locality	Lat	Lon	Date	Salinity (PSU)	$\delta^{18}\text{O}_w$ (‰)	Reference
Caleta Olivia	-46.489750°	-67.474614°	January 2012		-0,507055679	Rubo et al. 2018
Caleta Olivia	-46.407153°	-67.344567°	March 2012		-0,445451321	Rubo et al. 2019
Caleta Olivia	-46.489750°	-67.474614°	April 2013		-0,49	Rubo et al. 2020
Puerto Deseado	-47.756581°	-65.891097°	April 2013	32,6	-0,645571927	Rubo et al. 2021
Cañadón del Indio	-47.746406°	-65.969364°	April 2013	32,9	-0,59	Rubo et al. 2022
Malvinas Argentinas	-51.666667°	-57.750000°	September 2011	34,82	-0,06	Yan et al. 2012
Malvinas Argentinas	-51.666667°	-57.750000°	Monthly mean estimated (1999-2009)	33,68	-0,42	Yan et al. 2012
Bahía Bustamante	-45.127014°	-66.535190°	February 2011	33,76	-0,38	Consoloni, 2013
Bahía San Antonio	-40.727488°	-64.911204°	Mean value from GISSDATASET	34,5	-0,4	Bayer, 2016
Punta Arenas	-53.000000°	-70.500000°	1961-90	0	-6,8	Daley et al 2012
Punta Arenas	-53.000000°	-70.500000°	1961-90	0	-9,9	Daley et al 2012
Ushuaia	-54.766667°	-68.266667°	1961-90	0	-10,1	Daley et al 2012
Ushuaia	-54.766667°	-68.266667°	1961-90	0	-11,8	Daley et al 2012
SouthAtlantic datapoint	-59.93	-45.00	1993	34,19	-0,11	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-59.93	-45.00	1993	34,25	-0,1	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-58.35	-45.00	1993	34,24	-0,15	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-58.35	-45.00	1993	34,73	-0,08	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-58.35	-45.00	1993	34,73	-0,13	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-58.35	-45.00	1993	34,73	-0,03	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-57.00	-45.02	1993	34,09	-0,21	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-57.00	-45.02	1993	34,18	-0,17	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-57.00	-45.02	1993	34,2	-0,19	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-57.00	-45.02	1993	34,37	-0,11	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-57.00	-45.02	1993	34,72	-0,14	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-57.00	-45.02	1993	34,67	-0,29	WOCE A11 (Meredith et al 1999)
SouthAtlantic datapoint	-57.00	-45.02	1993	34,67	-0,31	WOCE A11 (Meredith et al 1999)
South H Datapoint	-61.050000°	-62.970000°	11/Oct/32	33,83	-0,32	GEOSECS Ostlund et al (1987)*
Drake's Passage	-58,25	-58,25	17/Aug/06	34,14	-0,16	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-55,07	-58,29	17/Aug/06	34,15	-0,12	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-60,8	-54,72	17/Aug/06	33,85	-0,38	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-58,36	-56,35	17/Aug/06	33,86	-0,41	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-60,83	-54,72	17/Aug/06	33,94	-0,35	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-56,13	-57,67	17/Aug/06	34,17	-0,17	(Meredith et al 1999; Rubo et al 2018 database)
South H Datapoint	-57,73	-66,13	11/Dec/33	33,94	-0,25	GEOSECS Ostlund et al (1987) Rubo et al 2018 database
Drake's Passage	-60,85	-54,71	17/Aug/06	34,1	-0,38	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-58,69	-56,16	17/Aug/06	33,86	-0,39	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-56,46	-57,49	17/Aug/06	34,1	-0,22	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-55,21	-58,23	17/Aug/06	34,15	-0,12	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-55,52	-58,01	17/Aug/06	34,16	-0,22	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-55,12	-58,26	17/Aug/06	34,15	-0,11	(Meredith et al 1999; Rubo et al 2018 database)
South H Datapoint	-45,02	-57	31/Oct/32	34,08	-0,19	WOCE A11 (Meredith et al 1999) Rubo et al 2018 database
Drake's Passage	-60,68	-54,81	17/Aug/06	33,84	-0,51	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-60	-55,33	17/Aug/06	33,93	-0,48	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-57,09	-57,12	17/Aug/06	33,85	-0,35	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-61,05	-54,6	17/Aug/06	34,21	-0,39	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-59,65	-55,52	17/Aug/06	33,79	-0,53	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-60,34	-55,08	17/Aug/06	33,81	-0,57	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-59,31	-55,7	17/Aug/06	33,86	-0,41	(Meredith et al 1999; Rubo et al 2018 database)
Drake's Passage	-57,73	-56,7	17/Aug/06	33,74	-0,39	(Meredith et al 1999; Rubo et al 2018 database)
South H Datapoint	-56,03	-61,03	11/Dec/33	34,15	-0,14	GEOSECS Ostlund et al (1987) Rubo et al 2018 database



Freshwater mixing line constructed from regional  $\delta^{18}\text{O}_w$  water and sea surface salinity (SSS) data

$$y = \delta^{18}\text{O}_w$$

$$9,2267436$$

Annual mean SSS = 33.564

$$-0,4225564$$

$$\delta^{18}\text{O}_w = -0.42$$

$\delta^{18}\text{O}_w$  estimated for the region