Auxiliary material for Paper 2006GC001432

In situ measurements of Li isotopes in foraminifera

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Introduction
This auxiliary material contains a text file describing analysed samples and standards and three table files. Table S2 displays the data used in Figures 2 and 6. Table S3 displays data used in figure 6.

1. 2006GC001432-txts01.txt Description of analyzed samples and standards.

2. 2006gc001432-ts01.txt Table S1: Summary of the two different instrumental settings used for ion microprobe measurements.

3. 2006gc001432-ts02.txt Table S2: In situ Li isotope analyses for Nazca basaltic glass and recent foraminifera. Results shown for Serie A foraminifera reflect runs with low Li intensity. For comparison, some results are also shown for variable and high Li intensity runs (Serie B, Fig. 3).
   -uncertainties correspond to internal errors at the 2 sigma level.
   -d7Li values for Nazca glass have been corrected from instrumental mass fractionation using GB-4 glass (section 2.3.2).
   -d7Li for foraminifera have been corrected from instrumental mass fractionation using CAL-HTP calcite standard (section 2.3.2).
   -Analyses of Nazca with a 60nA primary beam were performed using an entrance slit of 100 micrometers.

4. 2006gc001432-ts03.txt Table S3. MC-ICP-MS measurements for Li and d7Li of recent mixed planktonic foraminifera from the West Pacific.
   -bulk is for non-precleaned foraminifera.
   -foraminifera have been pre-cleaned following the procedure discussed in Marriott et al., 2004.
   -Analyses were performed with the Neptune Finnigan MC-ICP-MS at the BRGM (Orleans, France), following the technique described in Millot et al., 2004.

	delta7Li (o/oo)	Li content
bulk forams	11.5+/-0.5	2.2ppm
pre-cleaned forams	29.5+/-0.5	0.5ppm

	Punctual analyses	Ion imaging
Primary beam current	30-60 nA	4.10-2 nA
Primary beam diameter	30 um	3 um
Energy offset	0 eV	0 eV
Field aperture	3 500 µm	1 500 um
Entrance slit	250 um	250 um
Exit slit	700 um	700 um
Mass resolution	3000	3000

Sample name	Primary beam intensity (nA)	Test#	Spot#	Species (Age)	Location	d7Li (o/oo)	err
Nazca glass							
	40		spot#A			6.5	0.4
	40		spot#B			5.0	0.4
	40		spot#C			5.4	4.0
	18		spot#D			4.4	0.5
	18		spot#E			5.5	0.5
	18		spot#F			5.1	0.4
	8		spot#G			5.4	0.7
	8		spot#H			3.2	1.0
	60		spot#I			4.0	1.0
	60		spot#J			5.0	1.6
Serie A foraminifera							
	60	Test #1		Mixed Globigerinoides (recent sediments)	West Pacific 161oE 22oS	30.0	1.1
	60	Test #2				29.5	1.2
	60	Test # 3				32.0	1.3
	60	Test #4	spot #A	Globorotalia truncatulinoides (recent sediments)	West Pacific 161oE 22oS	30.1	1.0
			spot #B			32.1	0.9
			spot #C			29.2	1.3
			spot #D			30.5	0.8
			spot #E			30.4	1.0
Serie B foraminifera							
	60	Test #5		Globigerinoides sacculifer (2 Ma)	1208A-12H-CC	27.4	7.4
	60	Test #6				28.8	6.2
	60	Test #7		Mixed Globigerinoides (recent sediments)	West Pacific 161E 22oS	26.4	2.1
	60	Test #8				29.4	3.6
	60	Test #9		Orbulina universa (Pleistocene sediments)	DSDP15 H149 core 2	32.6	6.5
	60	Test #10				27.1	3.2
	60	Test #11		Orbulina universa (recent sediments)	31o03N 77o45N North Bahamas	26.0	3.3

Sample name	Primary beam intensity (nA)	Test#	Spot#	Species (Age)	Location	δ^7Li (‰)	err
Nazca glass							
	40		spot#A			6.5	0.4
	40		spot#B			5.0	0.4
	40		spot#C			5.4	4.0
	18		spot#D			4.4	0.5
	18		spot#E			5.5	0.5
	18		spot#F			5.1	0.4
	8		spot#G			5.4	0.7
	8		spot#H			3.2	1.0
	60		spot#I			4.0	1.0
	60		spot#J			5.0	1.6
Serie A foraminifera							
	60	Test #1		Mixed *Globigerinoides* (recent sediments)	West Pacific 161°E 22°S	30.0	1.1
	60	Test #2				29.5	1.2
	60	Test # 3				32.0	1.3
	60	Test #4	spot #A	*Globorotalia truncatulinoides* (recent sediments)	West Pacific 161°E 22°S	30.1	1.0
			spot #B			32.1	0.9
			spot #C			29.2	1.3
			spot #D			30.5	0.8
			spot #E			30.4	1.0
Serie B foraminifera							
	60	Test #5		*Globigerinoides sacculifer* (2 Ma)	1208A-12H-CC	27.4	7.4
	60	Test #6				28.8	6.2
	60	Test #7		Mixed *Globigerinoides* (recent sediments)	West Pacific 161E 22°S	26.4	2.1
	60	Test #8				29.4	3.6

60	Test #9	*Orbulina universa* (Pleistocene sediments)	DSDP15 H149 core 2	32.6	6.5
60	Test #10			27.1	3.2
60	Test #11	*Orbulina universa* (recent sediments)	31°03N 77°45N North Bahamas	26.0	3.3