

Table DR1.  $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$  and  $^{87}\text{Sr}/^{86}\text{Sr}$  values of dolomite from ODP Sites 685 and 1230, Peru Trench.

Core-section interval (cm)	Depth (mbsf)	$\delta^{13}\text{C}$ (‰ VPDB)	$\delta^{18}\text{O}$ (‰ VPDB)	Normalized $^{87}\text{Sr}/^{86}\text{Sr}$ Kr, Rb corrected	$2\sigma$ internal error (ppm)
<b>Dolomite</b>					
685A-2H-2, 45-60	6.5	-30.01	4.53		
		-32.79	4.06		
		-36.15	4.17		
		-25.47	4.40		
		-35.85	4.42		
1230A-30X-1, 0-5	226.3	8.57	6.45		
		9.07	6.41		
		11.49	6.36		
1230A-30X-CC, 22-24	228.0	10.73	6.58	0.711054	$\pm 46$ *
1230A-31X-1, 0-19	229.6	11.70	6.62	0.710439	$\pm 36$ *
		9.25	6.43		
		11.55	5.54		
		11.55	5.91		
		12.50	6.04		
		10.02	6.02		
		12.29	6.18		
		8.33	6.17		
		10.05	5.97		
		10.82	5.99		
	8.87	6.33			

\* Leached with Na-acetate buffer for Sr analysis

Table DR2.  $\delta^{18}\text{O}$  and  $^{87}\text{Sr}/^{86}\text{Sr}$  values of porewaters from ODP Sites 685 and 1230, Peru Trench.

Sample	Depth (mbsf)	$\delta^{18}\text{O}$ (in duplicates) (‰ VSMOW)	$^{87}\text{Sr}/^{86}\text{Sr}$	$2\sigma$ internal error (ppm)
201-1230A-10-1, 135-150	71.7	0.80		
1230A-11-3, 135-150	81.2	0.23		
1230A-12-2, 135-150	92.2	0.17	0.709064	$\pm 13$
1230A-13-1, 135-150	100.2	1.48		
1230A-15-5, 90-100	123.5	0.15		
1230A-18-1, 135-150	140.2	0.06		
1230A-22-1, 85-90	169.2	0.05	0.709215	$\pm 12$
1230A-24-2, no interval	188.8	-0.05	0.709296	$\pm 16$
1230A-35-1, 135-150	246.4	-0.49		
1230B-1-1, 0-15	0.0	0.32		
1230B-1-1, 80-95	0.8	0.03	0.709191	$\pm 14$
1230B-2-1, 0-5	3.0	0.04		
1230B-2-3, 40-55	6.4	-0.06		
1230B-2-6, 60-75	11.1	0.37		
1230B-3-3, 135-150	16.9	0.35		
1230B-5-3, 135-150	28.4	0.71	0.709135	$\pm 17$
1230B-7-3, 135-150	47.4	0.81		
1230B-8-3, 135-150	56.9	0.09		
1230B-12-4, no interval	83.7	-0.12		<sup>1</sup>
1230D-1-2, 80-95	2.3	2.53		

<sup>1</sup> acidified