

TABLE 2

Sample				P*, kb	⟨P⟩†, kb	Min. σ‡, kb	Max. σ‡, kb	No. of Points‡		∂T _{α-β} /∂σ Slope, °C/kb			T° _{α-β} Intercept, °C		
Run No.	Core Axis	Type	Final Condition					β → α	α → β	β → α	α → β	Mean§	β → α	α → β	Mean§
580 ^a	⊥C	Solid		3.00	3.00	1.0	3.0	3	0	10.28		10.40	650.1		650.9
										±0.83		±0.87	±3.1		±3.2
				4.00	4.00	0.1	2.7	16	0	10.80		10.92	675.5		676.3
										±0.09		±0.27	±0.5		±1.0
				5.00	5.00	0.2	0.9	3	0	11.50		11.62	702.4		703.2
										±1.24		±1.27	±1.3		±1.6
602 ^b	⊥C	Solid ^c	Intact: A few fractures	3.01	3.01	1.5	10.0	16	16	10.21		10.31	646.8	648.6	647.7
										±0.03	±0.03	±0.14	±0.8	±0.7	±1.3
590 ^a	⊥C	Hollow	Intact: No fractures	1.01	1.04	0.4	3.8	5	3	9.18	9.71	9.44	600.9	601.6	601.2
										±0.10	±0.06	±0.37	±0.5	±0.3	±0.5
				2.01	2.07	0.3	3.8	7	4	8.93	9.53	9.23	627.3	628.5	627.9
										±0.10	±0.44	±0.43	±0.6	±2.1	±1.5
				3.02	3.11	0.7	5.3	14	8	9.60	9.48	9.54	654.2	657.3	655.7
										±0.04	±0.09	±0.09	±0.4	±0.8	±2.2
				4.01	4.13	0.4	5.3	7	0	9.23		9.35	682.1		682.9
						±0.06		±0.26	±0.5		±1.0				
				5.02	5.17	1.1	4.8	5	0	9.12		9.24	708.0		708.8
										±0.18		±0.31	±1.2		±1.3
601	⊥C	Hollow ^d	Intact: Fractures at both ends	3.01	3.01	2.2	6.1	7	7	10.31	10.51	10.45	648.6	650.3	649.4
										±0.12	±0.11	±0.14	±1.4	±1.3	±1.4
604- 605	⊥C	Hollow ^c	Intact, but densely filled with fractures throughout entire length	1.00	1.03	0.5	6.2	8	6	10.01	9.86	9.94	599.4	601.7	600.5
										±0.06	±0.11	±0.10	±0.6	±1.0	±1.6
				3.00	3.09	0.6	6.6	7	4	10.48	11.42	10.95	652.9	650.0	651.4
										±0.03	±0.06	±0.66	±0.3	±0.5	±2.0
				5.01	5.16	2.2	5.7	4	0	10.94		11.06	704.8		705.6
										±0.10		±0.27	±0.8		±1.2
610	⊥C	Hollow	Intact: No fractures	1.01	1.21	0.5	8.4	7	6	10.03	10.28	10.16	605.8	606.9	606.3
										±0.09	±0.06	±0.18	±1.2	±0.7	±1.0
				3.00	3.60	0.4	8.5	12	8	10.51	10.90	10.70	668.4	668.2	668.3
										±0.04	±0.08	±0.28	±0.7	±1.2	±1.0
				5.00	6.00	0.9	6.1	6	5	10.51	11.04	10.88	731.0	730.0	730.5
										±0.04	±0.09	±0.37	±0.4	±0.9	±0.7

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TABLE 2 (continued)

Sample				P^* , kb	$\langle P \rangle^\dagger$, kb	Min. σ^\ddagger , kb	Max. σ^\ddagger , kb	No. of Points §		$\partial T_{\alpha-\beta} / \partial \sigma$ Slope °C/kb			$T^{\circ}_{\alpha-\beta}$ Intercept, °C		
Run No.	Core Axis	Type	Final Condition					$\beta \rightarrow \alpha$	$\alpha \rightarrow \beta$	$\beta \rightarrow \alpha$	$\alpha \rightarrow \beta$	Mean §	$\beta \rightarrow \alpha$	$\alpha \rightarrow \beta$	Mean §
603 ^b	C	Solid ^c	Divided in two by horizontal break, fractures at top and bottom	3.00	3.00	0.3	11.0	11	9	4.72 ± 0.02	4.90 ± 0.02	4.81 ± 0.13	648.7 ± 0.4	650.8 ± 0.8	649.7 ± 1.5
595- 596 ^b	C	Hollow ^c	Intact: Fractures	2.00	2.08	0.6	9.2	14	12	4.68 ± 0.02	4.92 ± 0.02	4.80 ± 0.17	625.6 ± 0.4	627.0 ± 0.2	626.3 ± 1.0
				3.01	3.13	1.1	6.8	6	4	4.90 ± 0.07	5.49 ± 0.02	5.20 ± 0.42	651.5 ± 0.7	651.2 ± 0.2	651.3 ± 0.5
				4.00	4.16	0.3	1.6	4	0	5.07 ± 0.33		5.19 ± 0.41	678.9 ± 0.7		679.7 ± 1.1
607	o	Solid	Intact: No fractures	1.01	1.01	0.8	7.7	11	11	7.02 ± 0.04	7.37 ± 0.06	7.20 ± 0.25	599.8 ± 0.7	601.8 ± 0.8	600.8 ± 1.4
				3.00	3.00	0.4	8.9	10	9	7.30 ± 0.03	7.35 ± 0.04	7.32 ± 0.04	653.4 ± 0.5	655.9 ± 0.7	654.5 ± 1.8
606	o	Hollow	Intact: No fractures	1.00	1.04	0.5	7.1	8	8	7.30 ± 0.04	7.32 ± 0.02	7.31 ± 0.03	601.0 ± 0.4	602.4 ± 0.3	601.7 ± 1.0
				3.00	3.12	0.4	7.3	8	7	7.41 ± 0.04	7.33 ± 0.04	7.37 ± 0.06	655.0 ± 0.5	656.9 ± 0.4	655.9 ± 1.3
598 ^b	r'	Solid	Intact: Bottom densely fractured (initially one natural fracture)	3.01	3.01	0.7	6.5	14	7	8.73 ± 0.07	9.45 ± 0.21	9.09 ± 0.51	649.5 ± 1.0	646.2 ± 2.7	647.8 ± 2.8

Notes.

* Hydrostatic confining pressure exerted within bomb by compressed argon.

† Calculated mean pressure in sample. For solid samples $\langle P \rangle = P$, but for hollow samples $\langle P \rangle \approx P(b^2/b^2 - a^2)$, where $2b$ and $2a$ are the outer and inner diameters of the bounding cylinders (see Appendix A).

‡ The minimum and maximum compressive stresses applied above the hydrostatic pressure and the number of passages made through the transition in determining the line dividing the α - and β -quartz fields. In this table, $\sigma > 0$ for compression.

§ Mean slope and intercept are found by averaging the results obtained by passing from $\beta \rightarrow \alpha$ and from $\alpha \rightarrow \beta$. Uncertainty listed is either the standard deviation of the mean or the combined standard deviation of the individual determinations, whichever is larger. For those runs in which data were gathered only for the $\beta \rightarrow \alpha$ passage, the 'mean' slope and intercept were estimated by a method described in the text.

^a Earlier model of load cell.

^b Triplet of 0.05-cm thermocouples.

^c Better finished sample.

^d Same core as 590 but ground shorter to 1.6 cm.