

Yokoo et al. (2023) *American Mineralogist*SUPPORTING TABLE 1. Experimental *P-T* conditions and measured volumes of samples for which a single B2/DO3 phase was observed.

Composition	Pressure (GPa)	Error (GPa)	Temperature (K)	Error (K)	Volume (cm ³ /mol)	Error (cm ³ /mol)
Fe16Si (DO3)	27.4	1.6	1520	60	6.25989	0.00066
Fe16Si (DO3)	27.5	1.6	1590	60	6.28725	0.00086
Fe16Si	27.5	1.7	1650	70	6.28588	0.00100
Fe16Si	27.5	1.7	1730	70	6.30919	0.00278
Fe16Si	27.6	1.8	1790	70	6.36842	0.00175
Fe16Si	27.9	1.9	1910	80	6.40511	0.00155
Fe16Si	28.1	1.9	1950	80	6.36566	0.00156
Fe16Si (DO3)	36.0	1.7	1510	60	6.06993	0.00056
Fe16Si	36.0	1.9	1660	70	6.09049	0.00139
Fe16Si	36.1	2.0	1780	70	6.08151	0.00617
Fe16Si	36.2	2.0	1870	80	6.11872	0.00834
Fe16Si	36.3	2.1	1940	80	6.19120	0.00317
Fe16Si	36.2	2.0	1890	80	6.07488	0.00096
Fe16Si	36.4	2.1	1980	80	6.06711	0.00803
Fe16Si	41.3	1.9	1580	60	5.94171	0.00027
Fe16Si	41.3	2.0	1680	70	5.96813	0.00038
Fe16Si	41.4	2.0	1770	70	5.97806	0.00117
Fe16Si	41.4	2.1	1850	80	5.98933	0.00109
Fe16Si	41.6	2.2	1930	80	6.07394	0.00098
Fe22Si	39.9	1.8	1550	60	5.92655	0.00035
Fe22Si	56.2	2.1	1530	60	5.62997	0.00013
Fe22Si	57.6	2.2	1500	60	5.59685	0.00011
Fe22Si	69.8	2.4	1540	60	5.42492	0.00014
Fe22Si	70.5	2.4	1520	60	5.41257	0.00014
Fe22Si	71.1	2.4	1510	60	5.40505	0.00015
Fe22Si	86.2	2.8	1540	60	5.25600	0.00013
Fe22Si	86.8	2.7	1510	60	5.24456	0.00013
Fe22Si	89.4	2.9	1580	60	5.22258	0.00012
Fe22Si	89.8	2.9	1600	60	5.21927	0.00012
Fe22Si	90.1	2.9	1580	60	5.21565	0.00012
Fe22Si	90.5	2.9	1570	60	5.21054	0.00012
Fe22Si	91.1	2.9	1570	60	5.20331	0.00012
Fe22Si	91.6	2.9	1580	60	5.19879	0.00012
Fe22Si	92.2	2.9	1530	60	5.19157	0.00012
Fe22Si	105.4	3.6	2050	90	5.10726	0.00010
Fe22Si	106.4	3.8	2300	100	5.12984	0.00009
Fe22Si	107.2	3.8	2350	100	5.14761	0.00009
Fe22Si	108.3	4.0	2450	110	5.15694	0.00007
Fe22Si	114.8	3.5	1770	70	5.02837	0.00012
Fe22Si	113.7	3.6	1870	80	5.02717	0.00010
Fe22Si	114.4	3.7	1950	80	5.02355	0.00012
Fe22Si	114.9	3.7	2000	90	5.02897	0.00012
Fe22Si	115.6	3.8	2030	90	5.02536	0.00010
Fe22Si	115.8	3.8	2070	90	5.02988	0.00014
Fe22Si	115.4	3.7	1970	80	5.03319	0.00009
Fe22Si	116.0	3.9	2250	100	5.01934	0.00008
Fe22Si	115.5	3.9	2200	100	5.02024	0.00007
Fe22Si	115.6	3.9	2170	90	5.01753	0.00007
Fe22Si	116.1	4.0	2270	100	5.01512	0.00007
Fe22Si	116.4	3.9	2240	100	5.01030	0.00006
Fe22Si	111.3	3.4	1740	70	5.03108	0.00012
Fe22Si	112.1	3.5	1850	80	5.03349	0.00012
Fe22Si	112.1	3.4	1750	70	5.03379	0.00013
Fe22Si	112.6	3.4	1740	70	5.03770	0.00011
Fe22Si	112.8	3.5	1840	80	5.04674	0.00011
Fe22Si	112.9	3.5	1810	80	5.04764	0.00011
Fe22Si	112.8	3.5	1780	70	5.05005	0.00011
Fe22Si	112.8	3.5	1770	70	5.04734	0.00011
Fe22Si	112.7	3.4	1730	70	5.04794	0.00011
Fe22Si	112.8	3.5	1780	70	5.04644	0.00011
Fe22Si	113.0	3.7	2070	90	5.05968	0.00010
Fe22Si	112.8	3.7	2000	90	5.06179	0.00010
Fe22Si	112.8	3.6	1970	80	5.06330	0.00010
Fe22Si	112.6	3.6	1960	80	5.06631	0.00010
Fe22Si	112.7	3.6	1960	80	5.06179	0.00011
Fe22Si	112.8	3.6	1950	80	5.05938	0.00011
Fe22Si	112.6	3.6	1940	80	5.06270	0.00012
Fe22Si	112.7	3.6	1970	80	5.06119	0.00008
Fe22Si	112.6	3.6	1940	80	5.06360	0.00007
Fe22Si	112.6	3.6	1930	80	5.05818	0.00007

Fe22Si	112.5	3.6	1910	80	5.06149	0.00008
Fe22Si	111.3	3.6	1950	80	5.06239	0.00009
Fe22Si	113.2	3.6	1930	80	5.05908	0.00008
Fe22Si	113.2	3.6	1930	80	5.05788	0.00008
Fe22Si	112.6	3.6	1930	80	5.05637	0.00007
Fe22Si	113.2	3.6	1940	80	5.05667	0.00007
Fe22Si	111.7	3.6	1950	80	5.05607	0.00008
Fe22Si	111.5	3.6	1920	80	5.05667	0.00008
Fe22Si	111.6	3.6	1960	80	5.05637	0.00008
Fe22Si	111.5	3.6	1920	80	5.05246	0.00007
Fe22Si	111.6	3.6	1930	80	5.05125	0.00007
Fe22Si	23.3	1.5	1510	60	6.28576	0.00013
Fe22Si	23.2	1.5	1580	60	6.32159	0.00014
Fe22Si	23.2	1.6	1670	70	6.35441	0.00031
Fe22Si	22.8	1.7	1810	80	6.41554	0.00082
Fe22Si	28.5	1.6	1560	60	6.15900	0.00018
Fe22Si	28.5	1.7	1640	70	6.18610	0.00017
Fe22Si	28.6	1.8	1740	70	6.19453	0.00022
Fe22Si	28.6	1.8	1810	80	6.23307	0.00065
Fe22Si	36.6	1.8	1530	60	5.97924	0.00019
Fe22Si	36.3	1.8	1600	60	5.99189	0.00033
Fe22Si	36.6	1.9	1660	70	6.00454	0.00050
Fe22Si	36.7	2.0	1800	80	6.03073	0.00071
Fe22Si	36.9	2.0	1870	80	6.05934	0.00050
Fe22Si	37.7	2.1	1950	80	6.10360	0.00017
Fe22Si	37.8	2.2	2010	90	6.10902	0.00021
Fe22Si	57.7	2.2	1520	60	5.62937	0.00012
Fe22Si	57.9	2.3	1670	70	5.64231	0.00012
Fe22Si	58.1	2.4	1780	70	5.66399	0.00013
Fe22Si	58.3	2.5	1870	80	5.68085	0.00014
Fe30Si	40.3	1.9	1570	60	5.77540	0.00027
Fe30Si	39.8	1.9	1650	70	5.80039	0.00022
Fe30Si	39.8	2.0	1770	70	5.83983	0.00023
Fe30Si	39.3	2.1	1880	80	5.86332	0.00035
Fe30Si	39.5	2.2	1980	80	5.90367	0.00030
Fe30Si	40.6	2.3	2100	90	5.93257	0.00090
Fe30Si	28.3	1.6	1540	60	6.07138	0.00012
Fe30Si	27.0	1.6	1550	60	6.10239	0.00018
Fe30Si	26.2	1.6	1570	60	6.11293	0.00032
Fe30Si	105.6	3.2	1620	70	4.98050	0.00012
Fe30Si	105.8	3.4	1830	80	4.99796	0.00009
Fe30Si	106.2	3.4	1890	80	5.00880	0.00010
Fe30Si	106.8	3.6	2080	90	5.02114	0.00010
Fe30Si	107.4	3.8	2260	100	5.03801	0.00012
Fe30Si	108.8	3.9	2380	100	5.04222	0.00013
Fe30Si	109.4	4.0	2430	110	5.06781	0.00013
Fe30Si	109.6	4.1	2590	110	5.06541	0.00020
Fe30Si	110.3	4.1	2610	120	5.07895	0.00009
Fe30Si	110.7	4.2	2680	120	5.10846	0.00013
Fe30Si	110.8	4.3	2760	120	5.09130	0.00032
Fe30Si	111.0	4.5	3060	140	5.11388	0.00010