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Supplement of

**Syn-kinematic hydration reactions, grain size reduction, and
dissolution–precipitation creep in experimentally deformed
plagioclase–pyroxene mixtures**

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Table S1: Representative EDS measurements for mineral chemistry of amphiboles and plagioclase from experiments performed at Pc = 1.0 GPa on Maryland Diabase. Mineral chemistries are given as oxide wt%, calculated mineral formula, and mole-% of elements. "Newly grown" plagioclase denotes to fine-grained plagioclase grown in shear bands.

norm. to 98%					norm to 100%		
Sample nr:	Amphibole				Plagioclase		
	414	414	490	490	MD starting material	Newly grown	
wt.-%	Tschermak.	Mg Hornbl	Mg Hornbl	Tschermak.	wt.-%		
SiO2	45.18	45.72	47.76	47.31	SiO2	51.86	50.38
Al2O3	17.13	14.13	13.06	17.73	Al2O3	29.92	29.69
CaO	9.24	8.92	9.45	10.02	CaO	13.39	9.66
Na2O	1.63	1.74	2.12	1.84	Na2O	3.63	9.13
K2O	1.26	0.86	0.89	0.90	K2O	0.26	0.55
MgO	7.56	9.95	11.24	7.39	MgO	0.00	0.00
TiO2	0.00	1.78	0.00	0.00	TiO2	0.00	0.00
FeO	15.99	14.90	13.48	12.81	FeO	0.94	0.58
MnO	0.00	0.00	0.00	0.00	MnO	0.00	0.00
Cr2O3	0.00	0.00	0.00	0.00	Cr2O3	0.00	0.00
Total:	97.99	98.00	97.99	98.00	Total:	100.00	100.00
Formula per 23 oxygen					Formula per 23 oxygen		
Si	6.59	6.76	6.89	6.77	Si	2.36	2.51
Ti	0.00	0.00	0.00	0.00	Ti	0.00	0.00
Al	2.95	2.46	2.22	2.99	Al	1.61	1.48
Fe3+	0.00	0.00	0.00	0.00	Fe3+	0.00	0.00
Cr	0.00	0.00	0.00	0.00	Cr	0.00	0.00
Mg	1.65	2.19	2.42	1.58	Mg	0.00	0.00
Ca	1.45	1.41	1.46	1.54	Ca	0.65	0.48
Mn	0.00	0.00	0.00	0.00	Mn	0.00	0.00
Fe2+	1.95	1.84	1.63	1.53	Fe2+	0.04	0.03
Na	0.46	0.50	0.59	0.51	Na	0.32	0.46
K	0.23	0.16	0.16	0.16	K	0.02	0.03
Total	15.28	15.34	15.38	15.08	Total	5.00	4.99
mol-%					mol-%		
Si	43.16	44.09	44.82	44.89	Si	47.31	50.38
Ti	0.00	0.00	0.00	0.00	Ti	0.00	0.00
Al	19.29	16.06	14.45	19.83	Al	32.17	29.69
Fe3+	0.00	0.00	0.00	0.00	Fe3+	0.00	0.00
Cr	0.00	0.00	0.00	0.00	Cr	0.00	0.00
Mg	10.77	14.30	15.73	10.45	Mg	0.00	0.00
Ca	9.46	9.22	9.50	10.19	Ca	13.09	9.66
Mn	0.00	0.00	0.00	0.00	Mn	0.00	0.00
Fe2+	12.77	12.02	10.58	10.17	Fe2+	0.72	0.58
Na	3.02	3.25	3.86	3.39	Na	6.42	9.13
K	1.54	1.06	1.07	1.09	K	0.30	0.55
Total	100.00	100.00	100.00	100.00	Total	100.00	100.00