Data Repository item1: Experimental conditions and run products of 3VG amphibolite.

Run No.	P (kbar)	T (^{o}C)	Duration (hours)	Experimental Products
3VG-12	7	825	672	Hbl, Plag, (Cpx), Qtz, (Melt)
3VG-01	7	850	336	Hbl, Plag, Cpx, Opx, Qtz, Melt
3VG-27	7	875	336	Hbl, Plag, (Cpx),Opx, Melt, Mag
3VG-03	7	900	336	Hbl, Plag, Cpx, Opx, Melt,Mag
3VG-26	7	950	168	Hbl, Plag, Cpx, Opx, Melt, Mag
3VG-14	7	1000	72	Cpx, Opx, Plag, Melt, Mag
3VG-24*	7	900	192	
		825	144	Cpx, Hbl, Plag, Melt
3VG-32a*	7	900	288	
		850	624	Cpx, Hbl, Plag, Opx, Melt, Mag
3VG-32b*	7	900	288	
		850	624	Cpx, Hbl, Plag, Opx, Melt, Apat, Mag
3VG-11	10	775	720	Hbl, Plag, (Cpx), Qtz, Melt, Sph
3VG-10	10	800	504	Hbl, Plag, (Cpx), Qtz, Melt
3VG-06	10	850	504	Hbl, Plag, Cpx, Opx, (Grt), Qtz, Melt
3VG-05	10	900	504	Hbl, Plag, Cpx, Opx, Qtz, Melt
3VG-04	10	950	168	Hbl, Plag, Cpx, Opx, Melt
3VG-22	10	1000	48	(Hbl), Plag, Cpx, Opx, Melt
3VG-19	12.5	800	1056	Hbl, Plag, (Cpx), Qtz
3VG-16	12.5	850	336	Hbl,Plag, Cpx, Grt, Qtz, Melt
3VG-15	12.5	900	336	Hbl, Plag, Cpx, (Grt), Melt
3VG-20	12.5	950	192	Hbl, Plag, Cpx, Grt, Opx, Melt
3VG-18	12.5	1000	96	Cpx, Grt, Opx, Plag, Melt
3VG-25*	12.5	850	168	
		775	504	Cpx,Hbl, Plag, Melt?
3VG-21	15	775	552	Hbl, Plag, Cpx, Qtz, Sph, Melt
3VG-28	15	800	240	Hbl, Plag, Cpx, Qtz, Melt, Sph, Ap
3VG-29	15	825	720	Hbl, Plag, Cpx, Grt, Qtz, Melt
3VG-08	15	900	336	Hbl, Plag, Cpx, Grt, Qtz, Melt
3VG-07	15	950	240	Cpx, Plag, Grt, Qtz, Melt
3VG-09	15	1050	72	Cpx, (Plag), Grt, Melt
3VG-39	17.5	850	456	Cpx,Hbl, Grt, Plag, Qtz, Melt?
3VG-34	17.5	900	312	Cpx,Hbl, Grt, Plag, Melt, Rut
3VG-35	17.5	950	264	Cpx,Hbl, Grt, Plag, Melt, Rut
3VG-40	17.5	950	192	Cpx,Hbl, Grt, Plag, Melt, Rut
3VG-42	17.5	1050	48	Cpx, Hbl, Grt, Melt
3VG-36	20	850	480	Cpx, Hbl, Grt, Qtz, Plag, (Melt), Pyr
3VG-31	20	900	240	Cpx, Grt, Melt, Apat, Rut
3VG-44	20	900	48	Grt,Cpx, (Plag), (Qtz) Melt, Rut
3VG-41	20	950	168	Cpx, Grt, Hbl, Plag, Melt, Pyr
3VG-43	22.5	850	1008	Grt, Cpx,Qtz,Plag, Pheng,Melt
3VG-38	22.5	900	336	Cpx, Grt, Hbl, Qtz, Melt, Pyr
3VG-45	22.5	950	144	Grt, Cpx,Qtz,Melt,Rut
3VG-46	22.5	1000	72	Grt,Cpx,Melt, Pyr

* indicates two stage experiments. Abbreviations after Kretz (1983).

Data repository item 2:Mode (Wt. %) of residue

Pressure	7	7	7	10	10	10	12.5	12.5	12.5	12.5	15	15	17.5	17.5	17.5	17.5	20	20	20	22.5	22.5	22.5
Temperature	825	900	950	850	900	1000	850	900	950	1000	900	950	850	900	950	1050	850	900	950	900	950	1000
Garnet	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.3	4.7	8.4	21.2	25.1	8.5	31.3	33.2	28.3	14.3	33.8	34.1	30.1	33.6	36.1
Cpx	6.4	14.2	37.6	11.6	16.9	42.0	17.6	32.9	32.0	50.0	33.4	37.7	24.0	56.4	57.7	71.7	85.7	66.2	65.9	69.9	66.4	63.9
Plag	36.2	48.7	35.8	27.7	34.1	37.4	21.9	34.9	20.1	18.2	26.1	18.2	13.3	7.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hornblende	52.9	26.9	17.0	49.2	40.7	20.6	53.2	31.9	37.6	18.8	19.3	19.0	49.6	5.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Opx	0.0	10.3	9.6	6.2	8.3	0.0	0.0	0.0	5.6	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quartz	4.5	0.0	0.0	5.3	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Renormalized to 100% of major phases. Oxide abundances <1% or absent in many charges.