

Type	Medium-coarse hornblende-biotite granodiorite (Daito granodiorite)																		Medium hornblende-bearing biotite granodiorite (Daito granodiorite)									
Sample No.	D-01	D-02	D-03	D-04	D-05	D-06	D-07	D-08	D-09	D-10	D-11	D-12	D-13	D-14	D-15	D-16	D-17	D-18	Dp-01	Dp-02	Dp-03	Dp-04	Dp-05	Dp-06	Dp-07	Dp-08	Dp-09	
Lat (35.)	350608	287228	296231	265226	265647	346443	347633	356187	300342	280415	234631	227593	297316	287929	300749	292903	293078	259444	240204	242377	248949	244094	238916	230591	226402	223299	221029	
Lon (132.)	974439	930579	954097	868352	895947	959847	918348	929571	943218	869339	838655	806060	927876	956800	942939	939463	970319	922125	832217	848396	841122	859340	802241	809558	824364	829471	774196	
<i>XRF</i>																												
SiO ₂ (wt.%)	64.54	66.23	65.63	68.30	67.86	66.31	67.01	67.00	66.69	66.40	68.26	68.37	66.71	65.66	65.20	65.00	64.28	63.70	68.77	69.46	71.28	71.89	75.03	74.11	71.29	75.83	70.90	
TiO ₂	0.49	0.49	0.51	0.44	0.44	0.47	0.41	0.49	0.48	0.51	0.47	0.50	0.52	0.51	0.48	0.47	0.54	0.56	0.36	0.39	0.32	0.34	0.28	0.25	0.32	0.22	0.31	
Al ₂ O ₃	15.92	15.07	15.11	14.28	14.92	15.02	15.60	15.43	16.09	15.86	15.82	15.60	14.64	15.46	16.05	16.04	15.79	15.85	14.82	15.31	15.14	14.51	14.08	14.21	15.17	13.70	15.43	
Fe ₂ O ₃ *	3.84	3.89	4.29	3.51	3.44	3.69	3.41	3.89	4.03	4.14	3.52	3.66	4.54	4.40	4.30	4.03	4.63	4.69	2.93	3.26	2.55	2.60	1.55	1.80	2.36	1.49	2.32	
MnO	0.07	0.07	0.08	0.06	0.06	0.05	0.06	0.08	0.07	0.07	0.07	0.09	0.07	0.07	0.07	0.06	0.08	0.08	0.06	0.06	0.06	0.05	0.03	0.03	0.05	0.08	0.05	
MgO	1.82	1.75	1.92	1.42	1.42	1.54	1.45	1.91	1.79	1.87	1.46	1.53	1.89	1.85	1.80	1.73	2.00	2.28	1.14	1.35	0.84	0.94	0.47	0.46	0.87	0.37	0.83	
CaO	3.84	3.68	3.93	3.03	3.13	3.29	3.73	3.52	4.12	3.96	3.49	3.22	3.67	3.83	4.15	4.05	4.17	4.13	2.98	2.81	2.24	2.07	1.21	1.23	2.40	0.93	2.34	
Na ₂ O	4.04	3.77	3.87	3.76	4.03	3.78	3.97	3.88	4.01	3.99	4.12	4.18	3.65	3.94	4.12	4.01	4.14	3.96	4.15	4.01	4.32	4.01	3.93	4.13	4.27	4.39	4.27	
K ₂ O	2.50	2.77	2.68	2.88	2.79	2.69	2.78	2.79	2.55	2.73	2.54	2.74	2.74	2.52	2.40	2.55	2.39	2.37	2.92	2.80	3.35	3.22	3.38	3.66	3.02	3.52	3.30	
P ₂ O ₅	0.12	0.12	0.13	0.11	0.11	0.12	0.10	0.12	0.12	0.13	0.13	0.14	0.13	0.12	0.12	0.12	0.14	0.14	0.09	0.10	0.08	0.09	0.06	0.06	0.08	0.05	0.07	
LOI	1.41	0.61	0.40	0.59	0.59	1.13	0.45	0.79	0.36	0.52	0.52	0.93	0.44	0.44	0.54	0.77	0.55	0.94	0.50	0.83	0.51	0.83	0.92	0.83	0.63	0.36	0.53	
Total	98.58	98.44	98.54	98.38	98.78	98.09	98.98	99.90	100.31	100.18	100.39	100.97	99.01	98.80	99.22	98.84	98.72	98.71	98.73	100.37	100.70	100.54	100.94	100.76	100.46	100.93	100.34	
Ba (ppm)	436	479	439	440	443	465	463	446	398	438	470	504	440	431	430	438	420	387	414	444	505	482	532	538	461	574	499	
Ce	32	42	45	37	32	42	29	44	31	45	39	42	39	48	34	32	37	41	45	33	33	32	58	43	45	42	51	
Cr	22	16	23	10	17	17	15	21	20	17	11	10	24	14	23	16	26	28	6	8	5	2	0	2	1	0	0	
Ga	17	16	17	17	16	16	16	17	17	16	16	16	16	16	17	17	17	18	16	16	16	15	14	15	15	15	15	
Nb	6	6	6	6	7	6	5	6	6	6	6	7	6	7	5	5	7	6	6	8	7	7	7	7	7	9	8	
Ni	15	15	16	11	10	13	12	16	14	15	7	6	15	15	13	13	16	19	7	6	3	4	3	2	4	2	4	
Pb	7	10	10	12	11	9	10	12	10	10	12	14	9	10	10	9	12	11	11	13	11	11	15	13	12	32	12	
Rb	65	67	63	71	72	60	62	73	62	71	65	72	68	69	64	60	65	62	75	74	89	88	90	102	82	120	87	
Sr	420	363	367	324	336	370	384	364	403	381	415	391	339	372	404	415	406	397	319	325	273	271	204	196	298	138	284	
Th	7	9	9	8	9	8	8	10	9	12	12	11	11	9	10	8	7	8	10	12	11	11	13	13	14	12	14	
V	75	69	78	65	61	66	58	68	75	73	62	80	85	72	85	73	81	80	52	55	36	38	17	14	34	13	36	
Y	16	17	19	17	16	14	14	18	16	19	13	20	16	18	14	14	18	16	16	19	18	17	21	21	18	18	22	
Zr	129	139	145	129	120	145	109	137	139	154	142	164	152	142	127	137	156	131	115	136	126	133	140	144	128	126	138	
<i>Modal</i>																												
Plagioclase (%)		47.1	52.3	57.3	58.4	52.4		43.1	57.3	57.0	61.4	50.3							55.9	44.3	50.7	41.3	33.3		36.3	42.7		
Quartz		25.0	28.4	19.3	21.1	27.0		29.3	23.7	25.3	16.8	21.5							24.1	33.2	33.2	32.2	39.7		36.7	37.8		
Alkali feldspar		11.6	4.3	12.5	10.8	9.8		11.6	9.4	7.2	16.4	13.5							12.8	11.0	11.4	22.2	22.8		25.3	17.5		
Biotite		10.8	8.9	7.1	3.7	7.8		11.8	4.1	6.7	2.9	6.0							5.7	7.8	1.7	3.5	4.1		1.6	0.8		
Hornblende		4.9	5.3	2.7	5.7	3.0		3.4	5.3	3.5	1.5	7.3							1.2	2.6	2.3	0.2	-		-	0.8		
Sphene		-	-	0.1	-	-		-	-	0.1	0.1	0.1							-	-	-	-	-		-	-		
Opaque mineral		0.7	0.9	1.1	0.5	0.2		1.0	0.3	0.4	0.9	1.4							0.5	1.3	0.7	0.8	0.2		0.2	0.6		
<i>Magnetic susceptibility data</i>																												
SI unit ($\times 10^{-3}$)	9.35	12.00	13.50	12.50	14.50	12.50	11.45	10.35	12.90	12.07	18.45	9.71	11.85	14.15	12.50	13.65	25.05	12.30	5.80	6.52	6.58	2.24	2.05	11.05	2.98	7.50		

Lat: latitude; Lon: longitude; *: total iron as Fe₂O₃; LOI: loss on ignition; -: not observed.

Appendix.2-1 野口ほか
Webオープンファイル希望

Type Sample No.	Medium hornblende-bearing biotite granodiorite (Daito granodiorite)														Fine-medium biotite granite (Hiyodori granite)				Medium-coarse hornblende-bearing biotite granite (Muc granite)								
	Dp-10	Dp-11	Dp-12	Dg-01	Dg-02	Dg-03	Dg-04	Dg-05	Dg-06	Dg-07	Dg-08	Dg-09	Dg-10	Dg-11	Dg-12	H-01	H-02	H-03	H-04	M-01	M-02	M-03	M-04	M-05	M-06	M-07	M-08
Lat (35.)	249282	246898	260776	318137	373020	357307	338055	343463	349055	256153	319178	260881	280835	245391	277586	368475	368699	357289	368734	238451	232002	216156	219381	235428	220407	231765	217093
Lon (132.)	816038	818570	838140	905302	920011	877160	994255	995896	999426	867140	895947	851980	852087	874596	824128	987442	903457	983032	955449	877600	877836	873437	875626	897643	894487	902448	857366
<i>XRF</i>																											
SiO ₂ (wt.%)	71.07	76.79	73.70	72.13	73.19	73.54	75.97	70.33	68.77	72.31	72.80	69.95	70.56	73.03	74.78	77.61	78.01	77.67	76.96	77.76	78.03	72.13	71.22	75.54	72.38	74.83	73.03
TiO ₂	0.37	0.19	0.29	0.36	0.27	0.28	0.21	0.39	0.46	0.31	0.32	0.39	0.35	0.30	0.25	0.12	0.13	0.13	0.18	0.16	0.02	0.35	0.34	0.22	0.36	0.26	0.31
Al ₂ O ₃	14.77	13.48	14.03	14.82	14.31	14.82	13.90	15.57	15.97	15.00	14.42	15.50	15.22	14.56	14.33	12.15	12.26	12.36	13.00	13.17	13.01	15.02	15.38	13.43	14.48	13.82	14.52
Fe ₂ O ₃ *	2.85	1.15	2.28	2.45	1.71	1.77	1.28	2.82	3.33	2.26	2.07	2.58	2.68	2.04	1.74	0.76	1.05	1.02	1.49	1.05	1.00	2.80	2.94	1.38	2.85	1.65	2.40
MnO	0.06	0.05	0.10	0.05	0.06	0.06	0.04	0.06	0.06	0.05	0.04	0.06	0.06	0.06	0.03	0.00	0.01	0.01	0.01	0.03	0.02	0.07	0.07	0.04	0.09	0.04	0.09
MgO	1.05	0.33	0.72	0.83	0.52	0.52	0.34	1.06	1.31	0.76	0.63	0.91	1.04	0.70	0.57	0.11	0.21	0.33	0.55	0.21	0.22	0.71	0.76	0.38	0.79	0.42	0.54
CaO	2.33	0.80	1.55	2.13	1.60	1.68	0.88	2.67	3.21	2.00	1.64	2.54	2.52	1.87	1.71	0.19	0.35	0.61	0.94	0.78	0.86	2.18	2.02	1.15	2.09	1.36	1.45
Na ₂ O	4.04	4.05	3.80	4.19	4.29	4.45	4.31	4.32	4.22	4.23	4.01	4.10	3.83	3.96	4.14	2.57	3.00	2.86	3.52	3.70	3.44	4.04	4.17	3.15	3.58	3.35	3.87
K ₂ O	3.24	3.73	3.39	3.06	3.35	3.21	3.61	2.81	2.73	2.96	3.36	3.38	3.34	3.41	3.12	5.09	5.32	5.05	3.51	4.30	4.51	3.14	3.23	4.97	3.36	4.36	4.06
P ₂ O ₅	0.09	0.03	0.06	0.10	0.07	0.07	0.04	0.10	0.12	0.07	0.08	0.10	0.09	0.07	0.05	0.01	0.01	0.02	0.03	0.02	0.02	0.06	0.07	0.05	0.06	0.04	0.06
LOI	0.56	0.43	1.22	0.49	1.38	0.41	0.39	0.78	0.61	0.49	0.54	0.92	0.54	0.50	0.41	0.87	0.40	0.67	1.02	0.49	0.48	0.74	0.91	0.60	1.18	0.76	0.88
Total	100.43	101.02	101.14	100.61	100.74	100.81	100.96	100.92	100.80	100.43	99.91	100.43	100.21	100.51	101.13	99.48	100.76	100.74	101.19	101.66	101.60	101.23	101.11	100.90	101.22	100.91	101.21
Ba (ppm)	462	533	511	540	523	562	528	485	480	451	507	612	490	559	454	421	625	379	413	426	297	473	591	924	575	459	608
Ce	39	39	46	52	37	40	51	40	41	45	42	37	40	44	32	26	33	50	46	34	38	73	40	29	40	57	42
Cr	7	0	2	2	0	0	0	4	12	0	0	0	7	0	0	0	0	0	0	0	0	0	3	0	2	0	2
Ga	13	12	14	15	14	14	13	17	17	14	15	13	12	14	13	8	11	11	13	14	14	16	16	13	16	14	15
Nb	8	8	8	8	7	8	9	7	7	9	8	8	7	8	7	7	8	6	4	8	13	9	8	9	9	11	9
Ni	5	1	2	2	0	2	2	2	5	3	1	2	4	1	2	1	2	4	4	1	3	2	1	0	4	2	2
Pb	9	20	35	14	20	20	22	19	11	14	19	15	18	16	11	16	14	16	12	15	13	19	15	15	18	17	29
Rb	92	113	97	87	93	94	113	77	68	96	102	68	95	99	89	120	144	113	86	164	150	123	132	114	126	115	150
Sr	262	118	202	310	245	251	129	378	412	269	269	350	333	262	232	73	107	76	134	102	108	197	215	220	193	188	173
Th	16	18	15	13	12	15	18	12	12	18	11	16	23	17	13	22	17	20	19	15	15	18	14	8	16	36	10
V	36	8	19	34	20	24	11	40	61	36	25	41	41	29	24	11	2	3	18	9	15	42	41	9	49	24	25
Y	22	19	19	19	16	16	20	15	15	17	17	17	15	15	25	9	13	12	11	21	36	31	27	24	53	22	29
Zr	156	122	148	148	126	128	140	139	139	126	129	127	120	122	125	97	90	83	95	83	87	145	155	96	158	144	162
<i>Modal</i>																											
Plagioclase (%)	56.0	37.1		40.1	52.0	32.4	27.3	51.4	44.5	39.9	44.7								12.2	32.1	21.5	29.9	45.7	48.3	27.4		
Quartz	32.1	36.0		33.6	25.3	40.7	45.8	31.3	27.9	37.2	28.8								37.8	38.2	24.5	28.5	19.1	27.1	27.6		
Alkali feldspar	6.1	24.7		17.8	20.9	24.3	23.4	11.3	13.1	15.6	22.5								47.3	27.9	51.1	39.8	22.4	18.0	40.2		
Biotite	4.3	1.9		7.4	1.6	2.2	2.9	3.7	10.3	6.3	3.5								2.5	1.7	2.4	1.4	7.5	5.8	3.5		
Hornblende	1.2	-		-	-	-	-	1.6	3.6	-	-								-	-	-	0.1	3.4	-	-		
Sphene	0.3	-		0.1	-	-	-	-	-	-	-								-	-	-	-	-	0.2	0.3		
Opaque mineral	0.2	0.3		1.1	0.4	0.5	0.7	0.9	0.7	1.0	0.6								0.3	0.1	0.6	0.4	1.9	0.8	1.1		
<i>Magnetic susceptibility data</i>																											
SI unit ($\times 10^{-3}$)	3.95		10.77	10.96	9.64	6.59	16.25	18.10	12.70	11.75	16.20	10.46	5.47	4.89		0.01	0.44	1.24	1.44	5.69	5.69	15.60	18.45	3.28	14.65	4.11	10.28

Lat: latitude; Lon: longitude; *: total iron as Fe₂O₃; LOI: loss on ignition; -: not observed.

Appendix.2-2 野口ほか
Webオープンファイル希望

Type	Medium-coarse hornblende biotite granodiorite																							
Sample No.	D-18																							
Mineral	Plagioclase								Hornblende								Biotite							
Sp.No.	Pl-1_1	Pl-1_2	Pl-2_1	Pl-2_2	Pl-3_1	Pl-3_2	Pl-4_1	Pl-4_2	Hbl-2_1	Hbl-2_2	Hbl-3_1	Hbl-3_2	Hbl-4_1	Hbl-4_2	Hbl-5_1	Hbl-5_2	Bt-1_1	Bt-1_2	Bt-3_1	Bt-3_2	Bt-4_1	Bt-4_2	Bt-5_1	Bt-5_2
Location	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim
SiO ₂ (wt.%)	58.83	60.48	60.43	63.04	55.02	62.70	57.84	60.97	49.07	48.65	54.46	49.43	51.43	49.41	50.18	49.65	37.72	37.77	37.54	37.75	37.79	37.32	37.54	37.55
TiO ₂	0.04	0.01	0.00	0.01	0.00	0.01	0.00	0.01	1.53	1.41	0.27	0.91	0.71	1.01	0.79	0.95	4.96	4.65	4.92	4.91	4.36	4.18	4.72	4.47
Al ₂ O ₃	26.10	24.77	25.31	23.24	28.61	23.56	26.65	24.62	5.81	5.70	1.62	5.57	4.38	5.41	4.83	5.44	13.85	13.73	13.62	13.66	13.73	13.81	13.71	13.86
FeO*	0.14	0.16	0.15	0.25	0.27	0.13	0.16	0.16	13.96	14.71	12.29	15.19	13.94	14.71	14.51	15.24	16.77	16.06	15.88	15.89	15.93	16.19	16.29	16.18
MnO	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.62	0.65	0.57	0.64	0.59	0.57	0.64	0.27	0.32	0.30	0.26	0.30	0.33	0.29	0.33
MgO	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	14.45	13.89	16.57	13.73	14.92	14.20	14.51	13.96	13.80	14.43	14.45	14.25	14.68	15.13	14.59	14.70
CaO	8.45	7.09	7.19	4.80	11.42	5.32	8.56	6.31	11.68	11.15	12.02	11.71	11.72	11.78	11.90	11.42	0.03	0.00	0.05	0.03	0.00	0.07	0.00	0.00
Na ₂ O	6.85	7.65	7.57	8.78	5.31	8.56	6.77	7.81	1.19	1.23	0.30	1.02	0.78	1.06	0.74	1.08	0.17	0.16	0.15	0.17	0.21	0.18	0.20	0.13
K ₂ O	0.32	0.42	0.35	0.41	0.18	0.43	0.27	0.42	0.49	0.47	0.12	0.46	0.37	0.50	0.41	0.43	10.18	10.36	10.39	10.35	10.13	9.51	10.20	10.29
Cr ₂ O ₃	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.04	0.02	0.00	0.00	0.00	0.02	0.05	0.04	0.01	0.00	0.02	0.00
Total	100.77	100.59	101.00	100.53	100.80	100.71	100.27	100.31	98.71	97.85	98.29	98.59	98.93	98.68	98.44	98.80	97.74	97.50	97.35	97.30	97.14	96.72	97.56	97.51
Formula (O=)	8	8	8	8	8	8	8	8	23	23	23	23	23	23	23	23	22	22	22	22	22	22	22	22
Si	2.616	2.685	2.671	2.782	2.468	2.765	2.587	2.707	7.127	7.151	7.782	7.215	7.407	7.200	7.302	7.227	5.574	5.584	5.560	5.588	5.597	5.547	5.552	5.553
Ti	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.167	0.156	0.029	0.100	0.077	0.111	0.086	0.104	0.551	0.517	0.549	0.546	0.486	0.467	0.525	0.498
Al	1.368	1.296	1.318	1.208	1.513	1.224	1.405	1.288	0.995	0.987	0.273	0.958	0.744	0.929	0.828	0.933	2.411	2.392	2.377	2.382	2.396	2.419	2.390	2.416
Fe	0.005	0.006	0.005	0.009	0.010	0.005	0.006	0.006	1.695	1.808	1.469	1.854	1.679	1.792	1.766	1.855	2.072	1.985	1.967	1.967	1.972	2.011	2.014	2.000
Mn	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.066	0.078	0.079	0.071	0.078	0.072	0.070	0.078	0.034	0.040	0.038	0.033	0.037	0.041	0.036	0.041
Mg	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	3.128	3.044	3.529	2.988	3.203	3.083	3.148	3.030	3.041	3.181	3.192	3.145	3.242	3.353	3.216	3.242
Ca	0.402	0.337	0.341	0.227	0.549	0.251	0.410	0.300	1.817	1.756	1.840	1.832	1.808	1.839	1.854	1.781	0.004	0.000	0.008	0.004	0.000	0.011	0.000	0.000
Na	0.590	0.658	0.649	0.751	0.461	0.731	0.587	0.672	0.336	0.350	0.082	0.289	0.217	0.299	0.209	0.305	0.048	0.046	0.043	0.050	0.060	0.052	0.058	0.037
K	0.018	0.024	0.020	0.023	0.010	0.024	0.016	0.024	0.092	0.088	0.021	0.085	0.067	0.092	0.076	0.080	1.919	1.953	1.964	1.954	1.914	1.804	1.924	1.942
Cr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.005	0.003	0.000	0.000	0.000	0.002	0.006	0.004	0.001	0.000	0.003	0.000
Total	5.003	5.007	5.004	5.000	5.012	5.001	5.012	4.997	15.422	15.418	15.104	15.393	15.284	15.419	15.340	15.394	15.653	15.701	15.703	15.674	15.705	15.705	15.717	15.730
X _{Mg}	-	-	-	-	-	-	-	-	0.649	0.627	0.706	0.617	0.656	0.632	0.641	0.620	0.595	0.616	0.619	0.615	0.622	0.625	0.615	0.618
An (mol.%)	54.072	46.774	47.611	34.320	67.562	37.160	54.848	43.416	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ab	43.853	50.462	50.099	62.768	31.380	59.827	43.408	53.722	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Or	2.075	2.765	2.290	2.911	1.059	3.013	1.743	2.862	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*: total iron as FeO; X_{Mg}: {Mg/(Mg+Fe)}.

Appendix.3-1 野口ほか
Webオープンファイル希望

Type	Medium hornblende-bearing biotite granodiorite															
Sample No.	Dg-01															
Mineral	Plagioclase								Biotite							
Sp.No.	Pl-1_1	Pl-1_2	Pl-2_1	Pl-2_2	Pl-3_1	Pl-3_2	Pl-4_1	Pl-4_2	Bt-1_1	Bt-1_3	Bt-2_1	Bt-2_2	Bt-3_1	Bt-3_2	Bt-4_1	Bt-4_3
Location	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim	core	rim
SiO ₂ (wt.%)	60.98	65.50	59.76	64.39	60.55	65.67	61.16	64.77	37.21	36.97	37.10	37.23	37.12	37.11	37.33	36.83
TiO ₂	0.00	0.01	0.04	0.00	0.00	0.04	0.00	0.00	3.86	3.80	4.07	4.00	3.80	3.53	3.70	3.38
Al ₂ O ₃	23.98	21.25	24.62	22.18	24.31	21.42	24.38	21.65	13.19	13.21	13.18	13.17	13.19	13.44	13.15	13.48
FeO*	0.15	0.18	0.14	0.14	0.19	0.09	0.22	0.20	18.02	18.29	18.05	17.53	18.53	18.35	18.15	18.37
MnO	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.61	0.60	0.60	0.60	0.59	0.60	0.65
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	13.25	13.21	13.07	13.62	13.62	13.48	13.32	13.86
CaO	5.83	2.54	7.14	3.65	6.20	2.74	6.46	3.39	0.00	0.01	0.05	0.08	0.04	0.06	0.00	0.08
Na ₂ O	8.14	10.13	7.59	9.44	7.97	9.99	8.05	9.80	0.15	0.16	0.22	0.18	0.12	0.16	0.20	0.16
K ₂ O	0.38	0.40	0.37	0.43	0.34	0.25	0.31	0.33	10.16	9.67	9.84	9.21	9.54	9.43	9.83	8.71
Cr ₂ O ₃	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Total	99.44	100.01	99.65	100.22	99.57	100.21	100.60	100.16	96.39	95.94	96.17	95.61	96.57	96.15	96.27	95.51
Formula (O=)	8	8	8	8	8	8	8	8	22	22	22	22	22	22	22	22
Si	2.728	2.887	2.679	2.839	2.709	2.885	2.710	2.857	5.628	5.614	5.620	5.635	5.600	5.612	5.646	5.591
Ti	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.439	0.435	0.464	0.455	0.431	0.402	0.420	0.386
Al	1.264	1.104	1.301	1.153	1.282	1.109	1.273	1.125	2.351	2.364	2.353	2.348	2.345	2.396	2.344	2.411
Fe	0.005	0.007	0.005	0.005	0.007	0.003	0.008	0.007	2.279	2.323	2.286	2.218	2.338	2.320	2.296	2.331
Mn	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.071	0.078	0.077	0.077	0.077	0.076	0.076	0.084
Mg	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	2.987	2.991	2.951	3.073	3.062	3.039	3.003	3.135
Ca	0.280	0.120	0.343	0.172	0.297	0.129	0.307	0.160	0.000	0.001	0.007	0.013	0.007	0.010	0.000	0.013
Na	0.706	0.866	0.659	0.807	0.691	0.851	0.691	0.838	0.043	0.047	0.065	0.053	0.035	0.047	0.057	0.047
K	0.021	0.023	0.021	0.024	0.019	0.014	0.017	0.018	1.961	1.873	1.901	1.779	1.837	1.819	1.896	1.686
Cr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000
Total	5.004	5.006	5.010	5.000	5.006	4.992	5.008	5.008	15.759	15.728	15.723	15.651	15.732	15.721	15.739	15.684
X _{Mg}	-	-	-	-	-	-	-	-	0.567	0.563	0.563	0.581	0.567	0.567	0.567	0.574
An (mol%)	40.669	19.425	47.304	26.990	42.754	21.120	43.596	25.092	-	-	-	-	-	-	-	-
Ab	56.710	77.507	50.265	69.806	54.896	76.969	54.318	72.503	-	-	-	-	-	-	-	-
Or	2.621	3.068	2.431	3.204	2.350	1.911	2.086	2.404	-	-	-	-	-	-	-	-

*: total iron as FeO; X_{Mg}: {Mg/(Mg+Fe)}.

Appendix.3-2 野口ほか
Webオープンファイル希望

Type	Medium-coarse hornblende biotite granodiorite				Medium hornblende-bearing biotite graodiorite			
Sample No.	D-18				Dg-01			
Mineral	Magnetite				Magnetite			
Sp.No.	Mag-10_4	Mag-9_4	Mag-7_5	Mag-6_2	Mag-10_2	Mag-6_2	Mag-5_2	Mag-9_3
Location	core	core	core	core	core	core	core	core
SiO ₂ (wt%)	0.05	0.05	0.03	0.04	0.03	0.02	0.06	0.03
TiO ₂	0.08	0.13	0.30	0.16	0.21	0.19	0.10	0.26
Al ₂ O ₃	0.11	0.10	0.22	0.13	0.12	0.14	0.14	0.08
Fe ₂ O ₃	69.07	69.51	69.05	69.72	69.07	69.40	68.51	69.24
FeO	31.25	31.12	31.67	31.67	31.31	31.46	30.71	30.89
MnO	0.06	0.11	0.07	0.08	0.15	0.14	0.13	0.14
MgO	0.03	0.03	0.03	0.03	0.01	0.04	0.00	0.01
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Na ₂ O	0.03	0.08	0.02	0.02	0.02	0.00	0.07	0.12
K ₂ O	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00
Cr ₂ O ₃	0.19	0.11	0.24	0.33	0.01	0.05	0.06	0.05
Total	100.86	101.24	101.63	102.21	100.94	101.44	99.78	100.86
Formula (O=)	4	4	4	4	4	4	4	4
Si	0.002	0.002	0.001	0.002	0.001	0.001	0.002	0.001
Ti	0.002	0.004	0.008	0.005	0.006	0.005	0.003	0.007
Al	0.005	0.005	0.010	0.006	0.005	0.006	0.006	0.004
Fe ⁺³	1.983	1.987	1.966	1.975	1.982	1.981	1.987	1.986
Fe ⁺²	0.997	0.989	1.002	0.997	0.998	0.998	0.990	0.985
Mn	0.002	0.003	0.002	0.003	0.005	0.004	0.004	0.005
Mg	0.001	0.002	0.002	0.002	0.001	0.002	0.000	0.001
Ca	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
Na	0.002	0.006	0.002	0.001	0.002	0.000	0.005	0.008
K	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
Cr	0.006	0.003	0.007	0.010	0.000	0.001	0.002	0.001
Total	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000

Appendix.4 野口ほか
Webオープンファイル希望

Data for the Stage1					
	Plagioclase	Biotite	Hornblende	Magnetite	Starting compositions ¹ (D-18)
Rb	0.048 ^b	3.260 ^b	0.014 ^d	0.045 ^a	62 ppm
Ba	0.110 ^a	6.360 ^b	0.044 ^d	0.028 ^c	387 ppm
K	0.040 ^a	5.630 ^b	0.065 ^d	0.043 ^c	19675 ppm
Nb	0.260 ^e	4.600 ^e	1.500 ^e	2.500 ^h	6 ppm
Ce	0.190 ^c	0.377 ⁱ	1.380 ^d	1.020 ^g	41 ppm
Sr	2.410 ^c	0.120 ^b	0.022 ^d	0.093 ^a	397 ppm
Y	0.083 ^e	0.600 ^e	2.460 ^j	2.000 ^h	16 ppm
Data for the Stage2					
	Plagioclase	Biotite	Magnetite		Starting compositions ¹ (Dg-01)
Rb	0.041 ^f	2.240 ^f	0.045 ^a		87 ppm
Ba	0.308 ^f	5.600 ^g	0.028 ^c		540 ppm
K	0.100 ^f	1.010 ^b	0.043 ^c		25372 ppm
Nb	0.270 ^e	4.000 ^g	2.500 ^h		8 ppm
Ce	0.270 ^f	1.210 ^g	1.020 ^g		52 ppm
Sr	6.800 ^g	0.290 ^g	0.093 ^a		310 ppm
Y	0.190 ^g	2.400 ^e	2.000 ^h		19 ppm

Data sources are as follows: a: Ewart et al. (1973); b: Philpotts and Schnetzler (1970); c: Okamoto (1979); d: Nagasawa and Schnetzler (1971); e: Ewart and Griffin (1994); f: Arth (1976); g: Nash and Crecraft (1985); h: Pearce and Norry (1979); i: Matsui et al. (1977); j: Sisson (1994).

1: Starting compositions for the calculation of vectors based on the Rayleigh fractionation model.

Appendix.5 野口ほか
Webオープンファイル希望