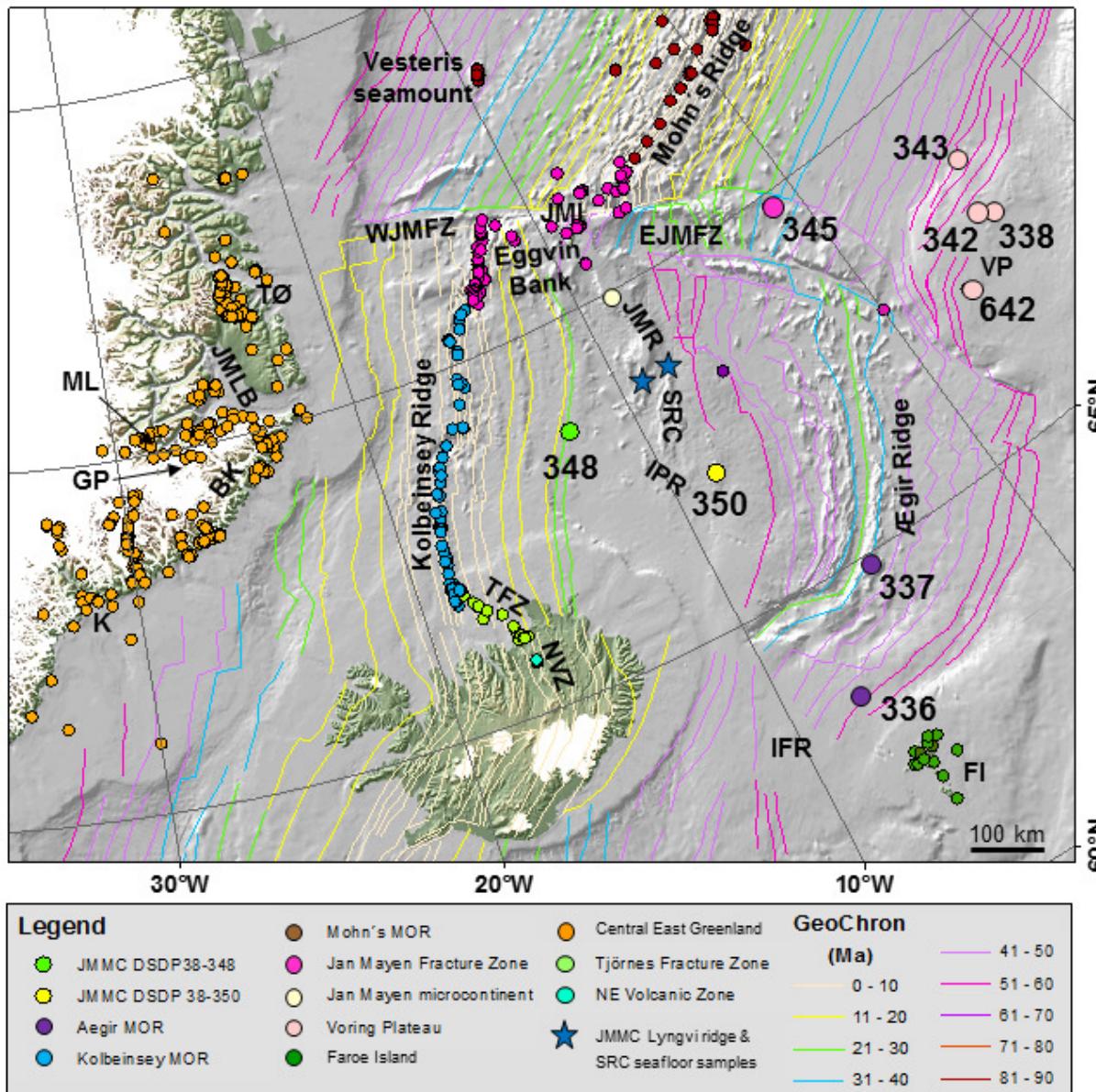


## Supplement 5

*Geochemical database location map*



(a) Borehole and seafloor sample location map.

The sites are labelled by sub-region or igneous provinces in comparison with geochronologic time zones and age dating model by *Gaina et al. [2014]*. Geochemistry data reference: PETDB [*Lamont Doherty Earth Observatory, Columbia University, New York*, <http://www.earthchem.org/petdb>], and GEOROC [*Max Planck Institute for Chemistry, Mainz*, <http://georo~mpch-mainz.gwdg.de/georoc/>]. Abbreviations: borehole numbers of DSDP Leg 38 sites 336 – 350, and Leg 104 site 642; BK – Blosseville Kyst; EJMFZ – East Jan Mayen Fracture Zone; FI – Faroe Islands; GP – Geiko plateau; IFR – Iceland-Faroe Ridge; IPR – Iceland Plateau Rift; JMI – Jan Mayen Island complex; JMLB – Jameson Land Basin; JMR – Jan Mayen Ridge; K – Kangerlussuaq (central East Greenland); ML – Milne Land; NVZ – Northern Volcanic Zone; SRC – Southern Ridge Complex; TFZ – Tjörnes Fracture Zone; TØ – Trail Ø; VP – Vøring Plateau and Margin; and WJMFZ – West Jan Mayen Fracture Zone.

**(b)** Geochemical ICP-OES analysis data for DSDP Leg 38 sites 348 and 350.

*Sample abbreviations: ISOR-HI – Iceland GeoSurvey and University of Iceland and UoAH – University of Aarhus.*

Sample name	SiO <sub>2</sub> (wt%)	Al <sub>2</sub> O <sub>3</sub> (wt%)	FeO <sup>T</sup> (wt%)	MnO (wt%)	MgO (wt%)	CaO (wt%)	Na <sub>2</sub> O (wt%)	K <sub>2</sub> O (wt%)	TiO <sub>2</sub> (wt%)	P <sub>2</sub> O <sub>5</sub> (wt%)	Volatile (wt%)	SUM-N	SUM-RUN
ISOR-HÍ A: 348/88-91	48.722792	15.104225	13.091569	0.297533	6.391251	12.169669	2.482730	0.063742	1.542046	0.134444		100	93.79
ISOR-HÍ B: 348/91-92	49.254061	14.718920	12.972664	0.264768	6.765535	12.099232	2.299322	0.020619	1.478914	0.125964		100	98.30
ISOR-HÍ C: 348/120-120,5	50.480138	13.738551	12.394330	0.229850	7.819404	11.579404	2.185286	0.070964	1.388443	0.113630		100	100.22
ISOR-HÍ E: 350/98-99	49.988566	14.062397	12.914342	0.212523	5.950520	10.973171	2.866783	0.301250	2.439078	0.291370		100	98.54
ISOR-HÍ F: 350/128-129	50.228720	14.493527	12.009672	0.207002	5.737811	11.539787	2.870753	0.298592	2.340048	0.274087		100	97.66
ISOR-HÍ G: 350/135-136	49.932078	13.943849	12.836850	0.216653	6.180112	11.111150	2.841404	0.269351	2.383590	0.284963		100	100.89
ISOR-HÍ D: 350/142-143	45.799751	17.471490	16.043261	0.087811	6.519558	6.724145	3.371976	0.494068	3.096946	0.390994		100	94.44
UoAH: 348-32-4-142-150	50.382388	13.501386	13.304613	0.234238	7.393090	11.553085	2.132274	0.064340	1.315958	0.118627	1.056135	100	100.47
UoAH: 348-33-2-10-17	50.452039	13.611593	13.490045	0.247062	6.971177	11.635099	2.105572	0.033278	1.337159	0.116976	1.076220	100	100.21
UoAH: 348-34-1-127-135	50.494339	13.578633	13.441022	0.239837	7.087848	11.552666	2.127164	0.049587	1.314551	0.114353	1.096169	100	99.83
UoAH: 348-34-2-117-125	49.301145	13.693535	13.573870	0.233983	8.071915	11.483248	2.147021	0.080338	1.301468	0.113477	1.650298	100	100.41
UoAH: 348-34-2-48-58	49.405109	14.429559	13.431676	0.213749	7.016585	11.669890	2.249883	0.070246	1.393884	0.119418	1.375880	100	100.50
UoAH: 348-CORE-123-128	50.186893	13.742426	13.376666	0.232769	7.280064	11.574259	2.128034	0.047156	1.314345	0.117388	1.058446	100	100.72
UoAH: 350-14-2-140-148	44.660567	17.828688	16.574444	0.098038	6.334709	7.672525	3.128037	0.445258	2.899281	0.358453	5.160179	100	98.77
UoAH: 350-14-2-44-50	56.308835	14.728908	16.241094	0.032713	6.171461	0.902667	1.736842	1.407670	2.092593	0.377219	9.685523	100	98.65
UoAH: 350-16-1-142-148	49.956508	13.848121	13.798954	0.212800	5.705252	10.823540	2.735132	0.298525	2.341806	0.279363	1.118531	100	100.25
UoAH: 350-16-2-117-126	49.841035	13.839960	13.619249	0.210202	5.999842	10.902189	2.747780	0.259720	2.308176	0.271847	1.141853	100	100.04
UoAH: 350-16-3-139-144	49.821711	13.747815	13.573924	0.222878	6.177037	10.863517	2.731007	0.282379	2.306430	0.273302	0.950859	100	100.32
UoAH: 350-16-3-20-29	49.752051	13.981862	13.497908	0.208307	6.130906	10.888601	2.758554	0.247744	2.265088	0.268979	1.151836	100	99.98

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