

Comparison of calculated and measured paleo-sea level using several Earth models and two configurations of PaleoMIST 1.0

As a supplement to “*A new global ice sheet reconstruction for the past 80 000 years*” by Evan J. Gowan, Xu Zhang, Sara Khosravi, Alessio Rovere, Paolo Stocchi, Anna L. C. Hughes, Richard Gyllencreutz, Jan Mangerud, John-Inge Svendsen & Gerrit Lohmann

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1 Purpose of this document

In this report there is a detailed summary, including plots, of a worldwide compilation of paleo-sea level data, and six ice sheet-Earth models. In this particular report, we compare the standard version of PaleoMIST 1.0 (with 2500 year time steps and using a lower mantle viscosity of 4×10^{22} Pa s), a 500 year interpolated version of it, the alternative version of PaleoMIST 1.0, with an ice covered Hudson Bay during MIS 3, plus the standard version of PaleoMIST 1.0 calculated using Earth models proposed by James et al. (2009) (*i.e.* for tectonically active areas), Peltier et al. (2015) and Lambeck et al. (2017). The purpose of the interpolated version is to show that using a more gradual change in the load (since SELEN uses a heaviside function to compute the loading) will reduce the sea level in previously glaciated areas. Which of the two different scenarios for MIS 3 is more likely cannot be discriminated with the available data. Comparing the standard version of PaleoMIST 1.0 with other Earth models utilized in other studies show that our chosen Earth model provides a better fit to the data in formerly glaciated areas. This is unsurprising, since the ice model was tuned to our chosen Earth model.

2 Summary of ice and Earth models

In order to make the figures compact, I have made shorthand codes for the ice and Earth models. I calculate each ice sheet separately, and the numbers refer to the “run number”, which is a sequential number that I used to distinguish git commits (see <https://github.com/evangowan/icesheet>). The ice model numbering scheme is as follows:

“North America”_“Europe”_“Antarctica”_“Patagonia”

For PaleoMIST 1.0, the minimal MIS 3 configuration reconstruction is 72_73_74_75, while the maximal configuration is 82_83_85_85

For the Earth models, I created a shorthand scheme during my PHD, which I have continued to use. A full explanation can be found on the github page:

https://github.com/evangowan/icesheet/blob/prelim/global/earth_model_format_codes.txt

The full description of each model compared in this document is in this section.

2.1 Ice models

72_73_74_75 - PaleoMIST 1.0 - reduced MIS 3 Laurentide Ice Sheet scenario, with Hudson Bay fully deglaciated

72_73_74_75_h - PaleoMIST 1.0 - reduced MIS 3 Laurentide Ice Sheet scenario, with Hudson Bay fully deglaciated. This version uses 500 year time steps, where the ice load has been linearly interpolated between the 2500 year time steps.

82_83_84_85 - PaleoMIST 1.0 - full MIS 3 Laurentide Ice Sheet scenario, with Hudson Bay fully covered, and ice extent much larger.

2.2 Earth models

eb0ggr - 60 km thick lithosphere, 140 km thick low viscosity (1×10^{19} Pa s) asthenosphere, 4×10^{20} Pa s upper mantle, 4×10^{22} Pa s lower mantle

efhC - 100 km thick lithosphere, 5×10^{20} Pa s upper mantle, 1.58×10^{21} Pa s lower mantle – Three layer approximation of VM5 Earth model by Peltier et al. (2015)

efhC - 100 km thick lithosphere, 5×10^{20} Pa s upper mantle, 1.26×10^{22} Pa s lower mantle – best fitting model by Lambeck et al. (2017) for North America

ehgr - 120 km thick lithosphere, 4×10^{20} Pa s upper mantle, 4×10^{22} Pa s lower mantle

3 Paleo-sea level compilations

This is a list of paleo-sea level compilations, which served as the basis for this report. We acknowledge the hard work of the people compiling the data, as well as acknowledging those who collected the original data.

3.1 North America

- Canada and Greenland - A.S. Dyke and T.S. James (unpublished, though some of it was summarized in Dyke and Peltier (2000b))
- Eastern Canada - Vacchi et al. (2018)
- Hudson Bay - Simon et al. (2016)
- Hudson Bay and northern mainland Canada - Gowan et al. (2016)

I have made some changes and corrections from the compilations above.

At Churchill, there is a site, denoted with the radiocarbon date S-738, which was originally assigned to be a marine limiting indicator. It was described in Morlan et al. (2000) as "shells enclosed in gravel in a quartzite ridge". It was originally interpreted as being a sea level indicator, with sea level at around 35 m. Using IMCalc (Lorscheid and Rovere, 2019), and a tidal amplitude of 1.6 m based on the tide gauge at Churchill (Ray, 2016), assuming the landform represents a beach ridge, and including a 20% uncertainty on the original 35 m elevation (to account for the lack of information on elevation measurement), the sea level indicator is 32.8 ± 7 m.

There were many data that referred just to compilations rather than the original sources. I have tried to track down the original sources as much as possible, but in some cases it was not possible, as they were neither listed in the Vacchi compilation nor the Dyke and James compilation.

The compilation of sea level indicators in the eastern United States was done by Engelhart and Horton (2012). Thanks to Simon Engelhart for sending me a copy of the dataset with the reservoir corrections used for marine organisms.

The MIS 3-5 data from the east coast of the United States was compiled by Pico et al. (2017).

3.2 Europe

The Baltic Sea sea level indicators are from (Rosentau et al., 2021). The version that is currently included here was based on an earlier version of the compilation provided by Holger Steffen, and has yet to be updated, and is likely to have differences from the final published version. This will be updated in the future, as I will also need to add all the references.

Scandinavia sea level indicators are from and unpublished compilation by Jan Mangerud, Kristian Vasskog and Øystein Lohne. Some parts of the compilation can be found in:

- Svalbard - Bondevik et al. (1995)

- Northern Europe - Forman et al. (2004)
- Norway - Lohne et al. (2007); Romundset et al. (2010, 2011, 2015, 2018); Vasskog et al. (2019)

The compilation of sea level indicators for Rotterdam in the Netherlands is from Hijma and Cohen (2019).

3.3 Eurasian Arctic

The sea level indicators for northern Norway and Svalbard are from an unpublished compilation by Jan Mangerud, Kristian Vasskog and Øystein Lohne (see details in Section 3.2).

The compilation of sea level indicators for northern Russia comes from Baranskaya et al. (2018a). Thank you to Alisa V. Baranskaya for sending the references (including translations from Russian) that were missing from the published compilation.

3.4 Southeastern Asia

The sea level indicators from southeastern Asia were compiled by Mann et al. (2019).

3.5 Tropical Corals

Corals from tropical regions were compiled by Hibbert et al. (2016). In this report, we have taken indicators for Huon Peninsula, Vanuatu and French Polynesia from this database.

4 Summary of results

This is a summary of the results of the modelling. There are a total of six models with which are compared. In addition, these tables give how many sea level indicators, number of marine limiting, number of terrestrial limiting, and number of sea level index points.

The sea level is calculated at the location of each data point. To evaluate how well the calculated curve fits the data point, a score is assigned. This metric was originally used by Gowan et al. (2016). The score is the discrepancy, in number of meters, the calculated sea level falls outside of the constraint plus the error bars. A score is zero if the calculated sea level is consistent with the data point. As an example, if the calculated sea level curve is below a terrestrial limiting point, it is given a score of zero. The sum of the scores for each location for each model are shown in the tables. A warning about the scores is that a lower score does not necessarily mean a better fit, as it will depend on the age distribution of the indicators, and the number of indicators of a specific kind. For example, if there are a lot of marine limiting data points, a calculated curve that is over a hundred meters above those indicators may provide a good score, but it is not necessarily a good fit. As a result, it is a good idea to also look at the plotted curves for visual inspection.

4.1 Australia

Table 1: Number of data points and model scores for Northeastern Australia

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	556	54	0	502	1639	1663	1638	2065	2206	1913
Cairns	253	11	0	242	681	682	685	882	998	792
Mackay	303	43	0	260	958	981	953	1183	1208	1121

Table 2: Number of data points and model scores for Northwestern Australia

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	201	106	0	95	624	594	628	593	669	601
Bonaparte Gulf	90	84	0	6	106	84	109	86	94	88
Bonaparte Gulf SLI Yokoyama2000	21	0	0	21	270	295	267	296	339	289
Bonaparte Gulf SLI Ishiwa2019	90	22	0	68	248	215	252	211	236	224

4.2 Caribbean

Table 3: Number of data points and model scores for Lesser Antilles

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	197	0	0	197	1182	1197	1165	1669	831	837
Barbados	197	0	0	197	1182	1197	1165	1669	831	837

4.3 East Asia

Table 4: Number of data points and model scores for Ryukyu Islands

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	7	6	1	0	0	0	0	2	0	0
Miyakojima	7	6	1	0	0	0	0	2	0	0

Table 5: Number of data points and model scores for Sea of Japan - East Sea

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	11	5	0	6	260	257	260	273	268	265
Tsushima-Korea Strait	11	5	0	6	260	257	260	273	268	265

4.4 Eurasian Arctic

Table 6: Number of data points and model scores for Franz Josef Land

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	171	22	0	149	1714	807	1708	1828	1263	2313
Zemlya Georga	44	4	0	40	486	211	484	387	302	639
Zemlya Zichy	4	3	0	1	30	42	30	51	52	28
Proliv Markama	123	15	0	108	1198	554	1194	1390	909	1646

Table 7: Number of data points and model scores for Kara Sea - Novaya Zemlya

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	90	8	19	63	362	340	362	445	406	343
Pechora Sea	5	4	1	0	98	81	98	64	60	83
Yuzhny Island	4	1	3	0	0	0	0	37	48	0
Severny Island	19	1	0	18	22	5	21	3	0	23
West										
Severny Island	36	0	0	36	10	13	10	96	90	18
North										
Vaygach Island	3	0	0	3	0	0	0	0	0	0
Baydaratskaya	2	0	2	0	0	0	0	0	0	0
Bay										
Gulf of Ob	11	0	9	2	0	3	0	0	0	0
Khalmyer Bay	5	0	1	4	232	238	233	245	208	219
Kara Sea shelf	2	2	0	0	0	0	0	0	0	0
Ostrov	3	0	3	0	0	0	0	0	0	0
Sibiryakova										

Table 8: Number of data points and model scores for Southern Barents Sea

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	54	17	3	34	484	338	484	1759	1111	557
Rolfsoya	5	0	1	4	81	83	81	131	140	68
Norkinn	6	1	1	4	101	84	101	184	185	101
Pechengsky	17	7	0	10	146	79	146	486	245	185
Murmansk	21	8	1	12	142	76	142	750	376	191
Voronya River	5	1	0	4	14	16	14	208	165	12

Table 9: Number of data points and model scores for Svalbard

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	179	26	10	143	1903	1176	1903	5522	2529	3135
Bockfjorden	11	8	0	3	174	177	175	112	146	140
Broggerhalvoya	11	2	1	8	383	356	385	372	229	330
Ytterdalen	11	3	2	6	149	170	150	85	104	100
Sorkapp Land	13	3	2	8	106	119	107	91	49	89
Agardbukta	9	2	0	7	14	30	14	145	40	45
Southern Edgeoya	17	1	1	15	191	56	191	636	341	358
Diskobukta	20	4	1	15	118	66	118	600	252	327
Humla	28	1	1	26	374	48	372	1478	662	758
Kapp Ziehen	25	2	2	21	154	76	152	1058	355	445
Svartknausflya	20	0	0	20	77	49	76	576	125	232
Kongsoya	14	0	0	14	163	29	163	369	226	311

Table 10: Number of data points and model scores for Western Siberia

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	125	90	23	12	742	795	743	1035	864	846
Severnaya Zemlya	16	5	11	0	275	296	276	354	328	285
West Laptev Sea	10	7	1	2	84	84	84	96	99	91
Olenyok Gulf	29	18	11	0	32	38	32	59	33	41
Lena Delta	60	60	0	0	302	326	302	451	334	373
New Siberian Is- lands	8	0	0	8	10	13	10	7	2	6
Zhokhov Island	2	0	0	2	39	38	39	68	68	50

Table 11: Number of data points and model scores for White Sea

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	177	16	41	120	951	550	948	6601	3238	1245
Kandalaksha	8	1	0	7	94	38	93	611	263	133
Lesozavodskiy	13	5	0	8	161	77	161	1077	539	212
Rugozerskiy Peninsula	15	1	8	6	22	11	22	498	188	40
Chupa Bay	15	0	3	12	264	167	263	1825	987	327
Umba	11	2	0	9	180	134	179	964	560	232
Engozero	8	0	1	7	86	42	85	746	434	114
Belomorsk	8	0	7	1	0	0	0	304	134	0
Eastern Kola Peninsula	5	0	5	0	0	0	0	37	0	0
Onega Peninsula	9	3	2	4	14	9	14	24	20	22
Dvina Gulf	82	4	12	66	130	72	131	515	113	165
Kholmogorsky	3	0	3	0	0	0	0	0	0	0

4.5 Europe

Table 12: Number of data points and model scores for Baltic Sea

Location	number	marine	terrestrial	index	72_73_74_75	72_73_74_75_h	82_83_84_85	72_73_74_75	72_73_74_75	72_73_74_75
	data	limiting	limiting	point	ehgr	ehgr	ehgr	eb0ggr	efhC	efhl
Total	467	64	169	234	7443	3981	7438	17469	12938	8601
Norrbotnen	16	0	0	16	875	306	875	3151	1684	1127
Angermanland	14	0	0	14	309	30	308	1373	766	452
Gastrikland	16	0	0	16	533	133	535	1504	996	745
Stockholm	16	0	0	16	472	173	476	1275	955	692
Aland	3	0	0	3	97	43	97	154	134	119
Oulu	2	0	0	2	142	61	142	398	236	152
Ostrobothnia	5	0	0	5	260	124	259	610	412	276
Turku	35	0	0	35	1356	784	1354	2307	1794	1440
Gulf Of Finland	121	11	45	65	2161	1485	2153	5047	3562	2081
Gulf Of Riga	39	11	27	1	453	350	452	828	1073	563
Kaliningrad	110	29	81	0	198	142	198	594	654	295
Bornholm	90	13	16	61	587	350	589	228	672	659

Table 13: Number of data points and model scores for Danish straits - Kattegat - Skagerrak

Location	number	marine	terrestrial	index	72_73_74_75	72_73_74_75_h	82_83_84_85	72_73_74_75	72_73_74_75	72_73_74_75
	data	limiting	limiting	point	ehgr	ehgr	ehgr	eb0ggr	efhC	efhl
Total	655	339	198	118	2315	1675	2322	2877	2695	2957
Mecklenburg	177	66	52	59	1239	961	1242	950	722	1305
Kiel	48	16	31	1	99	62	100	85	102	138
Great Belt	155	85	56	14	300	161	301	421	468	586
Copenhagen	78	28	49	1	71	45	72	59	185	113
Kattegat	33	32	0	1	5	1	5	6	22	19
Northern Jylland	56	51	1	4	20	16	20	69	33	10
Limfjord	56	52	4	0	44	35	44	22	211	123
Halland	13	0	0	13	265	163	266	451	584	316
Halden	9	4	2	3	33	39	33	61	27	44
Ski	12	5	2	5	76	111	75	363	140	92
Kragerod Porsgrunn	18	0	1	17	163	81	164	390	201	211

Table 14: Number of data points and model scores for North Sea

Location	number	marine	terrestrial	index	72_73_74_75	72_73_74_75_h	82_83_84_85	72_73_74_75	72_73_74_75	72_73_74_75
	data	limiting	limiting	point	ehgr	ehgr	ehgr	eb0ggr	efhC	efhl
Total	102	0	52	50	301	198	303	49	414	407
Rotterdam	102	0	52	50	301	198	303	49	414	407

Table 15: Number of data points and model scores for Western Norway

Location	number	marine	terrestrial	index	72_73_74_75	72_73_74_75_h	82_83_84_85	72_73_74_75	72_73_74_75	72_73_74_75
	data	limiting	limiting	point	ehgr	ehgr	ehgr	eb0ggr	efhC	efhl
Total	103	9	8	86	965	770	966	2192	2390	1095
Stavanger	17	8	3	6	38	28	38	134	250	67
Sotra	41	1	2	38	308	321	306	362	477	196
Torvikbygd	8	0	1	7	118	98	118	217	64	104
Sula	9	0	2	7	117	88	119	240	335	175
Bjugn	17	0	0	17	236	159	237	627	765	346
Frosta	11	0	0	11	148	76	148	612	499	207

4.6 French Polynesia

Table 16: Number of data points and model scores for French Polynesia

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	191	0	0	191	190	191	188	249	227	204
Mururoa	12	0	0	12	146	149	145	160	164	149
Tahiti	179	0	0	179	44	42	43	89	63	55

4.7 Melanesia

Table 17: Number of data points and model scores for Melansia

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	82	11	0	71	22	20	22	25	22	22
Vanuatu	82	11	0	71	22	20	22	25	22	22

4.8 MIS 3 - MIS 4

Table 18: Number of data points and model scores for Eastern United States (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	27	8	15	4	90	93	104	308	159	81
US Mid Atlantic	27	8	15	4	90	93	104	308	159	81

Table 19: Number of data points and model scores for French Polynesia (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	19	0	0	19	283	285	279	296	301	288
Mururoa	2	0	0	2	50	50	50	50	53	51
Tahiti	17	0	0	17	233	235	229	246	248	237

Table 20: Number of data points and model scores for Melanesia (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	6	0	0	6	50	50	33	51	49	51
Vanuatu	6	0	0	6	50	50	33	51	49	51

Table 21: Number of data points and model scores for Northeastern Australia (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	25	13	0	12	395	399	331	402	429	411
Cairns	19	7	0	12	395	399	331	402	429	411
Mackay	6	6	0	0	0	0	0	0	0	0

Table 22: Number of data points and model scores for Papua New Guinea (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	52	0	0	52	188	186	128	196	195	193
Huon Peninsula	40	0	0	40	90	88	56	91	90	91
Huon Peninsula de Gelder	12	0	0	12	98	98	72	105	105	102

Table 23: Number of data points and model scores for Sea of Japan - East Sea (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	6	2	1	3	104	106	87	108	119	107
Tsushima-Korea Strait	6	2	1	3	104	106	87	108	119	107

Table 24: Number of data points and model scores for Sundaland (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	29	14	13	2	216	227	235	205	221	214
Sunda Shelf	11	7	3	1	95	104	87	90	117	100
Vietnam Shelf	1	1	0	0	0	0	0	0	0	0
Strait Of Malacca	11	2	9	0	28	32	29	42	39	30
Mekong Delta	1	1	0	0	16	15	20	12	10	14
Chao Phraya	3	3	0	0	61	60	80	51	43	55
Berhala Strait	2	0	1	1	16	16	19	10	12	15

Table 25: Number of data points and model scores for Yellow Sea (MIS3 - MIS4)

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	11	11	0	0	3	2	17	0	0	2
South Bohai Sea	4	4	0	0	3	2	10	0	0	2
Yellow Sea	7	7	0	0	0	0	7	0	0	0

4.9 North America

Table 26: Number of data points and model scores for Eastern United States

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	357	138	38	181	1194	1121	1275	2223	1684	1059
Outer Delaware	60	5	5	50	272	246	286	374	378	247
Inner Delaware	38	2	8	28	136	130	144	170	202	120
Inner Chesapeake	106	99	0	7	278	205	296	401	452	249
Eastern Shore	28	7	6	15	78	82	82	124	89	67
Northern North Carolina	60	23	6	31	254	244	274	596	347	204
Southern North Carolina	24	2	3	19	41	54	45	115	39	35
Northern South Carolina	18	0	8	10	55	62	60	165	71	54
Southern South Carolina	23	0	2	21	80	98	88	278	106	83

Table 27: Number of data points and model scores for Gulf of St Lawrence

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	108	38	32	38	571	376	558	385	1207	890
Cape Breton	16	4	7	5	3	13	1	17	18	67
Magdalen Islands	22	2	11	9	62	16	57	26	153	127
Prince Edward Island	31	9	6	16	113	44	117	271	233	166
Chaleur Bay	15	10	5	0	5	5	5	9	32	27
Anticosti Island	24	13	3	8	388	298	378	62	771	503

Table 28: Number of data points and model scores for Hudson Bay

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	243	113	68	62	5682	3199	6105	16155	10413	7438
Kivalliq	31	21	5	5	329	238	345	763	451	389
Churchill	23	9	7	7	321	175	375	1256	838	592
West James Bay	17	4	10	3	281	118	352	1414	844	474
East James Bay	36	20	9	7	1209	629	1294	2655	1964	1485
Umiujaq	94	34	33	27	3304	1868	3501	9371	5782	4172
Inukjuak	21	11	2	8	219	135	234	529	328	296
Ivujivik	21	14	2	5	19	36	4	167	206	30

Table 29: Number of data points and model scores for Hudson Strait

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	86	65	18	3	1120	1029	1034	2211	990	628
Sugluk	40	30	10	0	533	595	452	433	141	67
Kangiqtujuaq	14	13	1	0	159	149	139	246	6	28
Western Ungava Bay	21	17	4	0	182	143	185	542	268	178
Southern Ungava Bay	11	5	3	3	246	142	258	990	575	355

Table 30: Number of data points and model scores for Labrador

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	61	16	45	0	358	256	350	948	633	448
Tornat	18	7	11	0	250	220	248	473	22	77
Nain	16	2	14	0	80	28	76	287	393	212
Hamilton Inlet	15	3	12	0	0	0	0	0	79	48
Lake Melville	12	4	8	0	28	8	26	188	139	111

Table 31: Number of data points and model scores for Maritimes

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	207	30	40	137	321	175	352	1165	1228	441
Sable Island	10	1	6	3	17	9	20	49	48	14
Halifax	48	15	4	29	42	29	53	40	84	42
Shelburne	9	0	4	5	7	8	8	3	16	3
Cumberland	112	6	15	91	141	95	162	631	678	209
Passamaquoddy Bay	28	8	11	9	114	34	109	442	402	173

Table 32: Number of data points and model scores for Newfoundland

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	160	53	61	46	721	498	701	1182	1433	1068
Great Northern Peninsula	56	16	23	17	107	196	128	539	132	39
Notre Dame Bay	29	12	13	4	66	33	61	170	172	101
Avalon Peninsula	13	3	5	5	2	8	3	25	3	5
Bay Of Islands	16	5	3	8	174	61	159	121	426	318
Port Aux Basques	46	17	17	12	372	200	350	327	700	605

Table 33: Number of data points and model scores for Northeastern United States

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	479	51	117	311	1966	1635	2057	1894	2990	1439
Eastern Maine	49	0	4	45	172	137	184	63	354	72
Southern Maine	86	24	6	56	443	374	471	525	565	198
Northern Mas- sachusetts	43	3	16	24	93	81	96	64	153	66
Southern Mas- sachusetts	43	12	14	17	203	155	212	234	269	170
Connecticut	95	0	41	54	126	115	131	106	211	107
Long Island	25	0	6	19	211	160	218	213	293	193
New York	76	6	19	51	431	365	445	341	726	368
New Jersey	62	6	11	45	287	248	300	348	419	265

Table 34: Number of data points and model scores for St Lawrence Lowlands

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	218	53	50	115	2320	1575	2346	2409	6922	4435
Rimouski	90	17	15	58	1434	1044	1436	1084	3556	2121
Forestville	59	18	7	34	485	360	494	443	925	703
Quebec City	69	18	28	23	401	171	416	882	2441	1611

4.10 South Asia

Table 35: Number of data points and model scores for Bay of Bengal

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	7	5	0	2	67	69	66	58	82	70
Ganges Delta	7	5	0	2	67	69	66	58	82	70

4.11 Southeast Asia

Table 36: Number of data points and model scores for Java Sea

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	47	18	2	27	186	209	186	161	176	164
Central Java	6	0	0	6	30	32	30	24	28	26
South Sulawesi	41	18	2	21	156	177	156	137	148	138

Table 37: Number of data points and model scores for Papua New Guinea

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	51	29	0	22	24	25	25	1	9	14
Huon Peninsula	51	29	0	22	24	25	25	1	9	14

Table 38: Number of data points and model scores for Sundaland

Location	number data	marine limiting	terrestrial limiting	index point	72_73_74_75 ehgr	72_73_74_75_h ehgr	82_83_84_85 ehgr	72_73_74_75 eb0ggr	72_73_74_75 efhC	72_73_74_75 efhl
Total	404	88	108	208	818	879	822	816	887	751
Chao Phraya	33	5	9	19	124	145	126	72	79	91
Mekong Delta	71	2	24	45	49	50	49	130	100	77
Strait Of Malacca	137	29	45	63	180	209	181	128	147	140
Sunda Shelf	53	7	7	39	211	199	212	255	313	221
Vietnam Shelf	5	1	0	4	9	10	9	22	28	14
Phuket	40	20	13	7	45	51	45	34	37	35
Thale Noi	3	0	1	2	12	11	12	8	8	10
West Malay Peninsula	2	2	0	0	1	3	1	1	0	0
East Malay Peninsula	4	3	1	0	7	8	7	3	5	5
Southeast Malay Peninsula	13	12	0	1	31	40	31	25	31	26
Belitung Island	25	0	0	25	116	115	116	116	114	107
Ca Na	18	7	8	3	33	38	33	22	25	25

5 Australia

5.1 Northeastern Australia

References for the data used in each location.

Cairns: Yokoyama et al. (2018)

Mackay: Yokoyama et al. (2018)

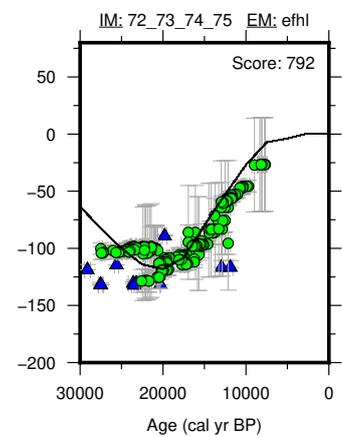
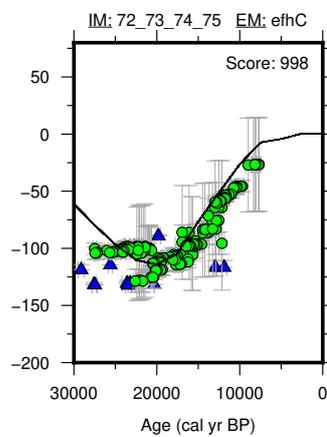
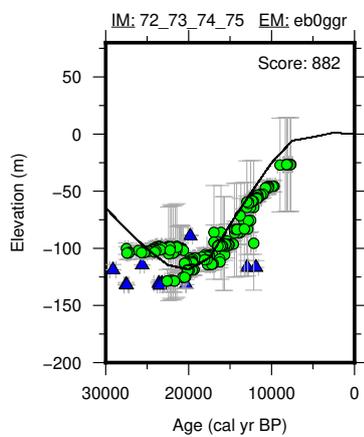
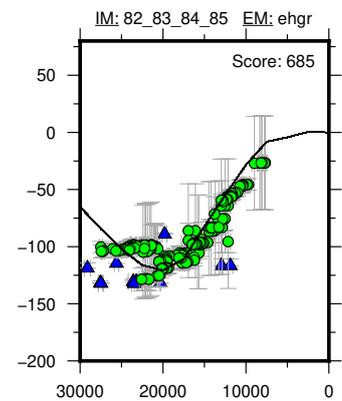
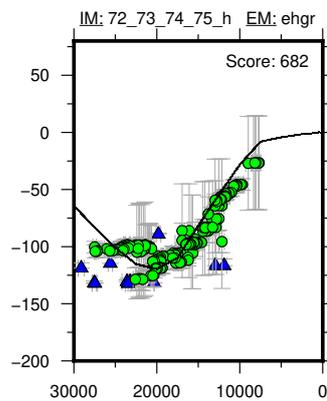
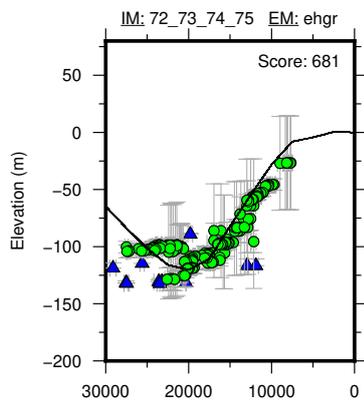
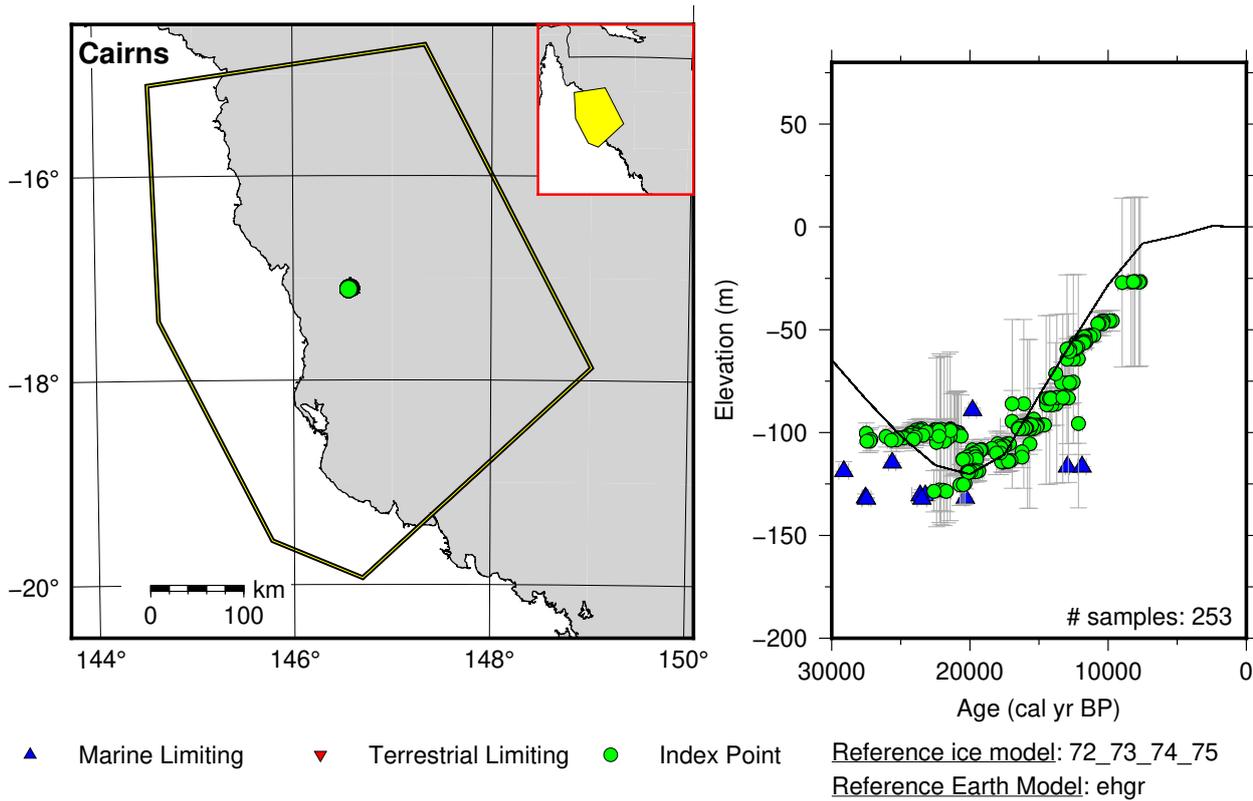


Figure 1: Paleo-sea level and comparison of six models for subregion Northeastern Australia, location Cairns.

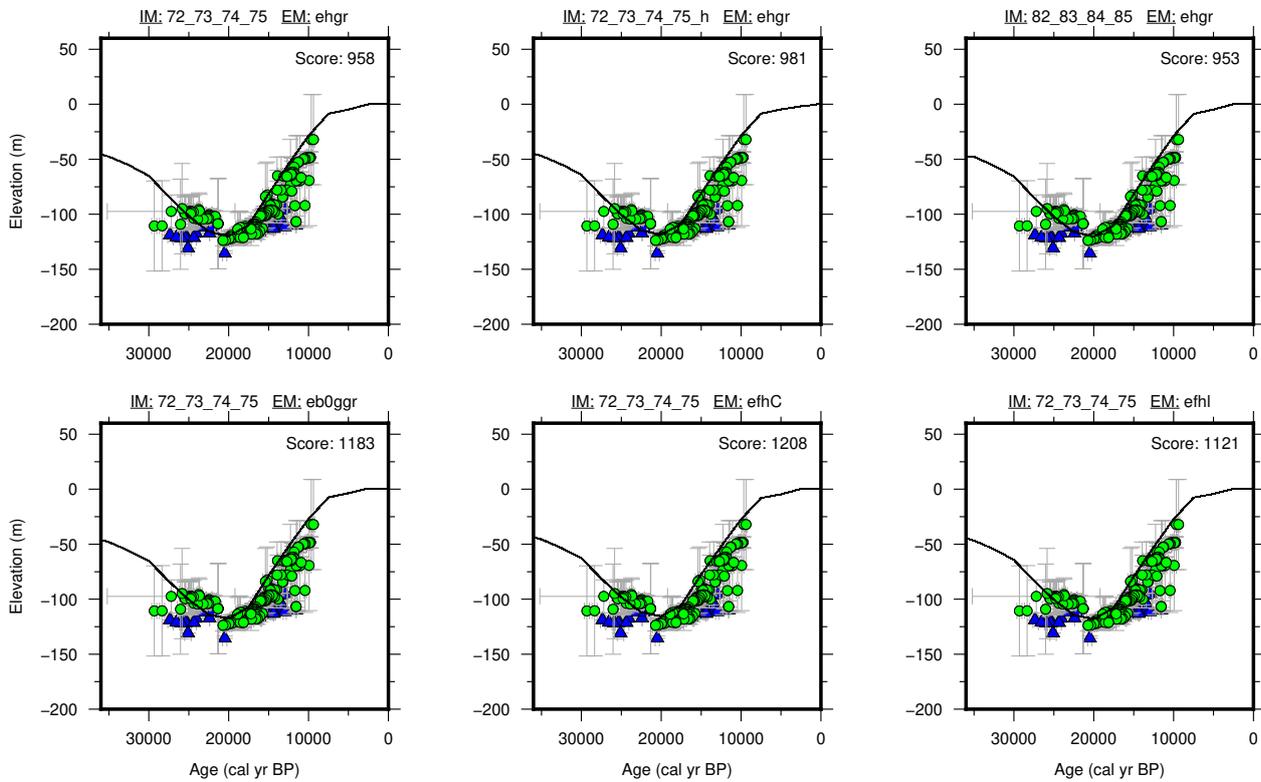
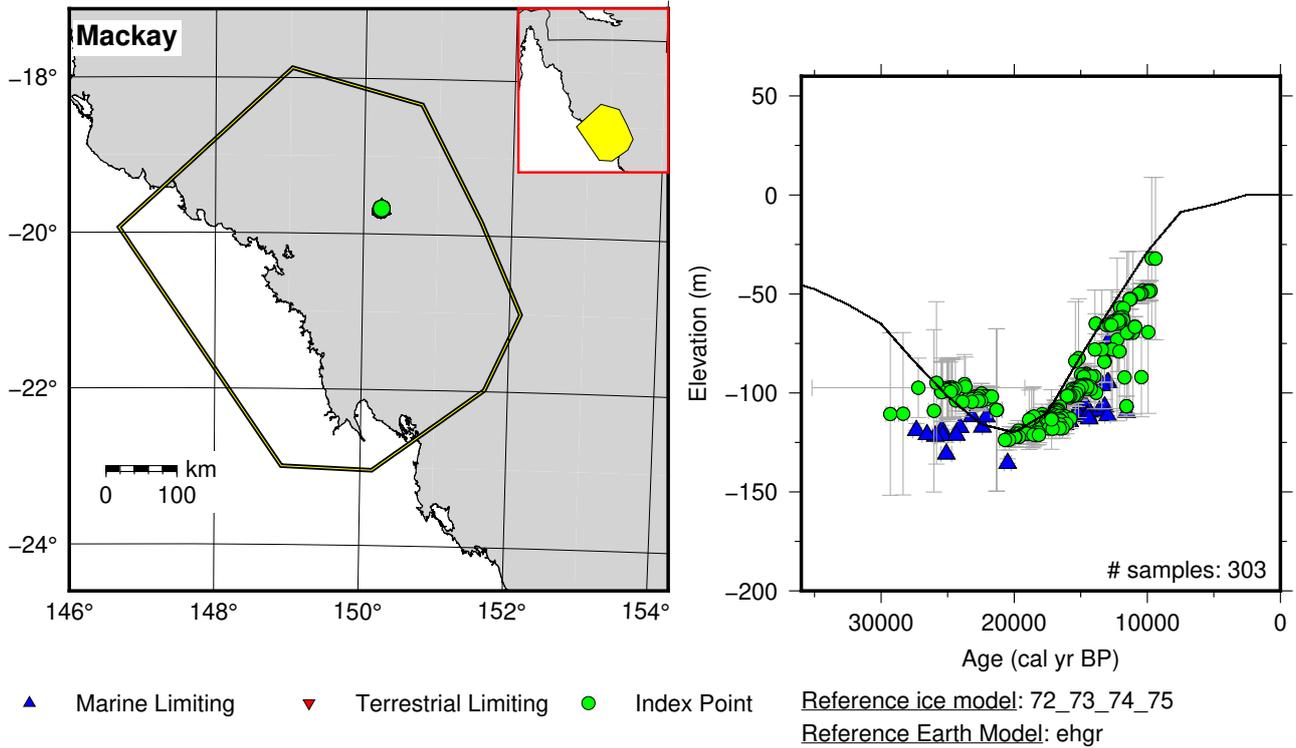


Figure 2: Paleo-sea level and comparison of six models for subregion Northeastern Australia, location Mackay.

5.2 Northwestern Australia

References for the data used in each location.

Bonaparte Gulf: Ishiwa et al. (2019); Yokoyama et al. (2000)

Bonaparte Gulf SLI Yokoyama2000: Yokoyama et al. (2000)

Bonaparte Gulf SLI Ishiwa2019: Ishiwa et al. (2019); Yokoyama et al. (2000)

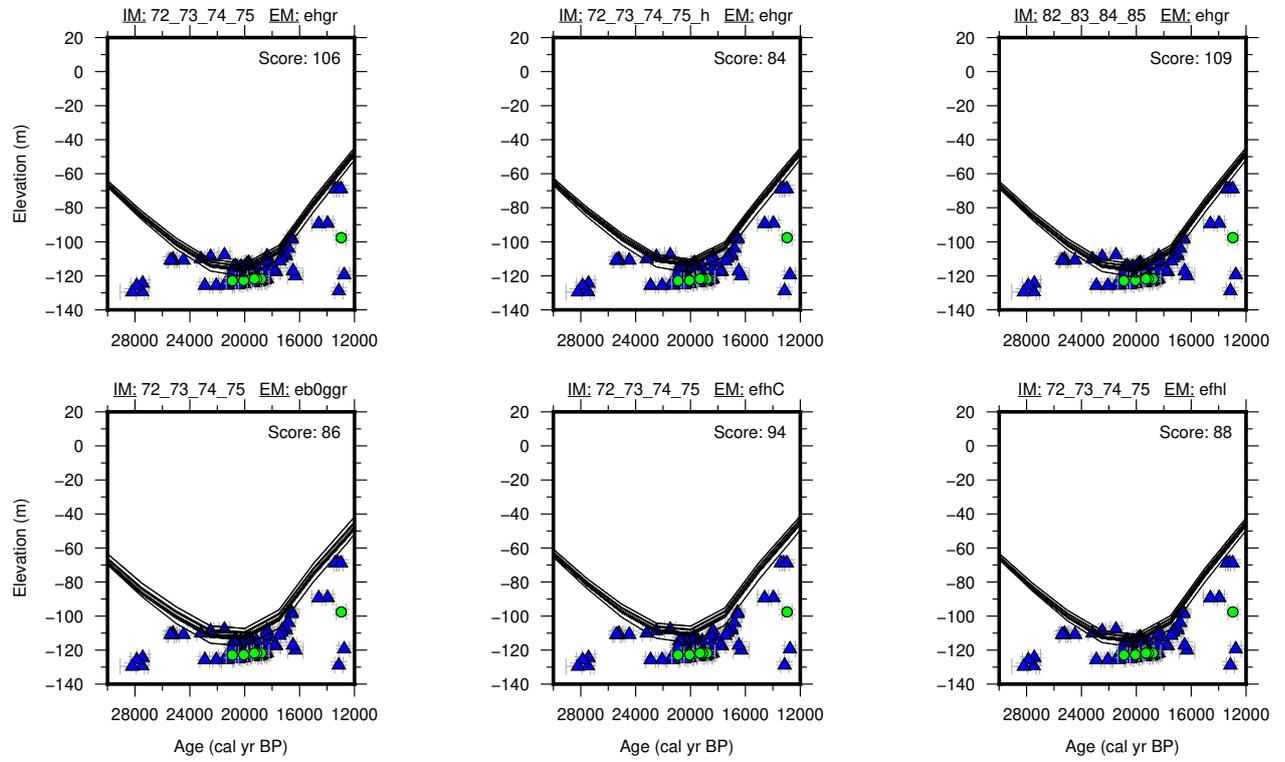
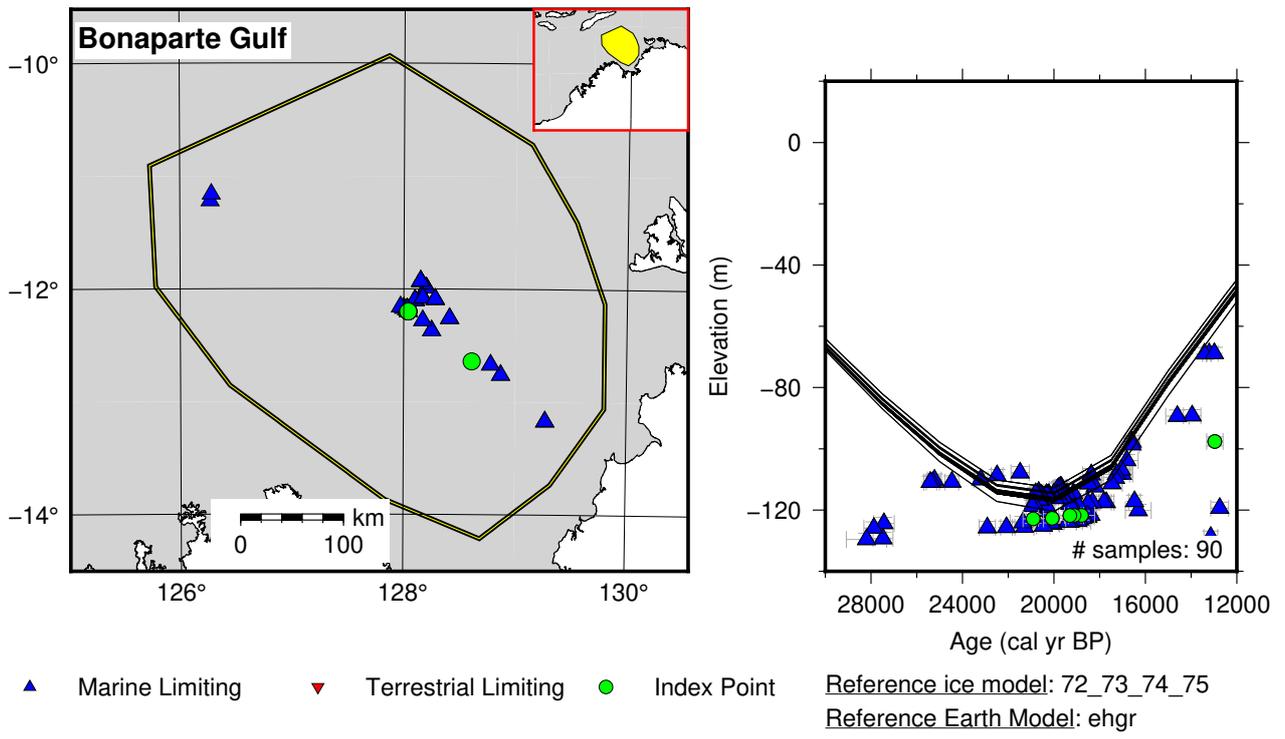


Figure 3: Paleo-sea level and comparison of six models for subregion Northwestern Australia, location Bonaparte Gulf.

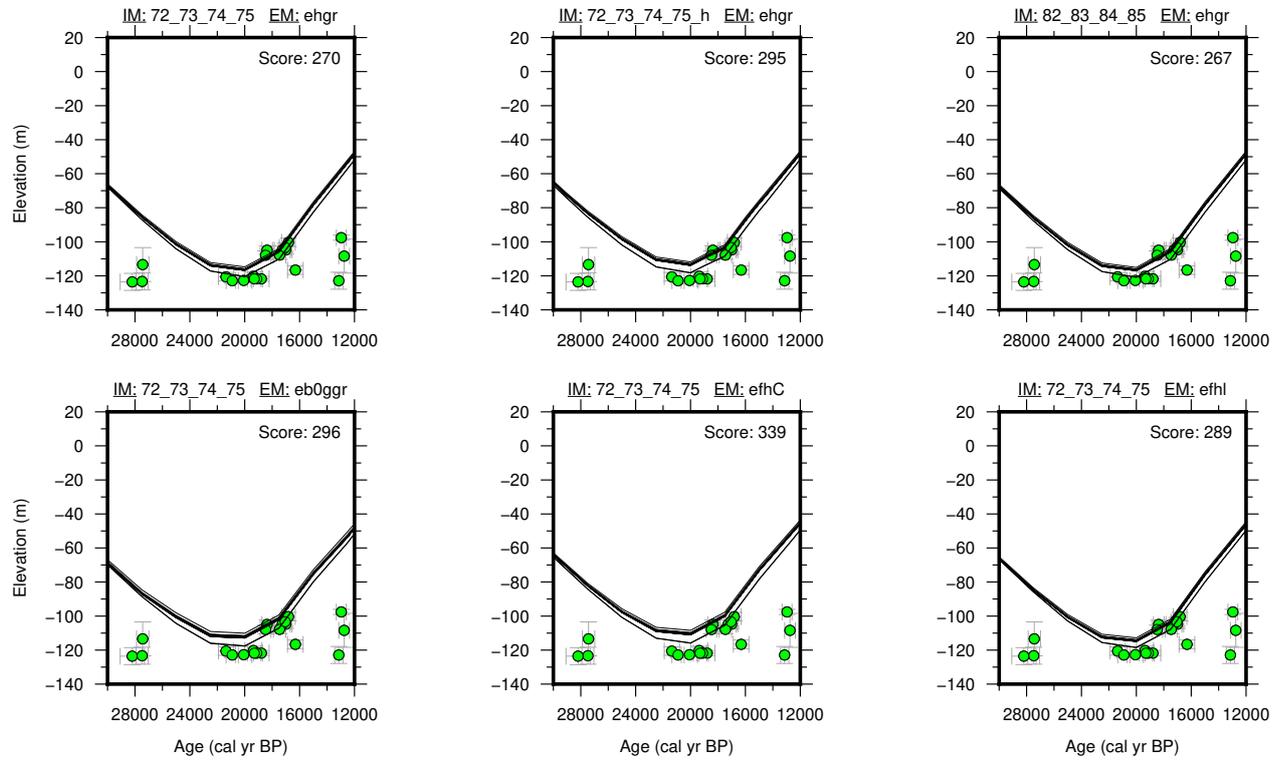
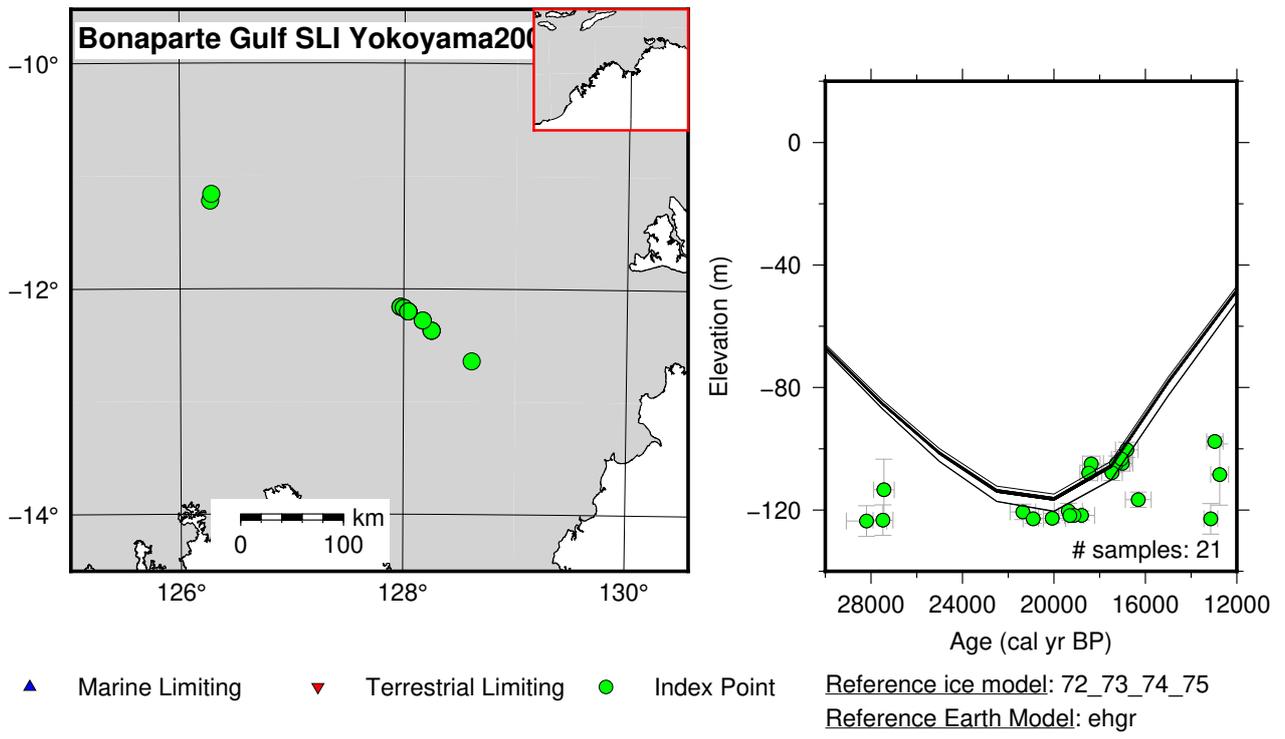


Figure 4: Paleo-sea level and comparison of six models for subregion Northwestern Australia, location Bonaparte Gulf SLI Yokoyama2000.

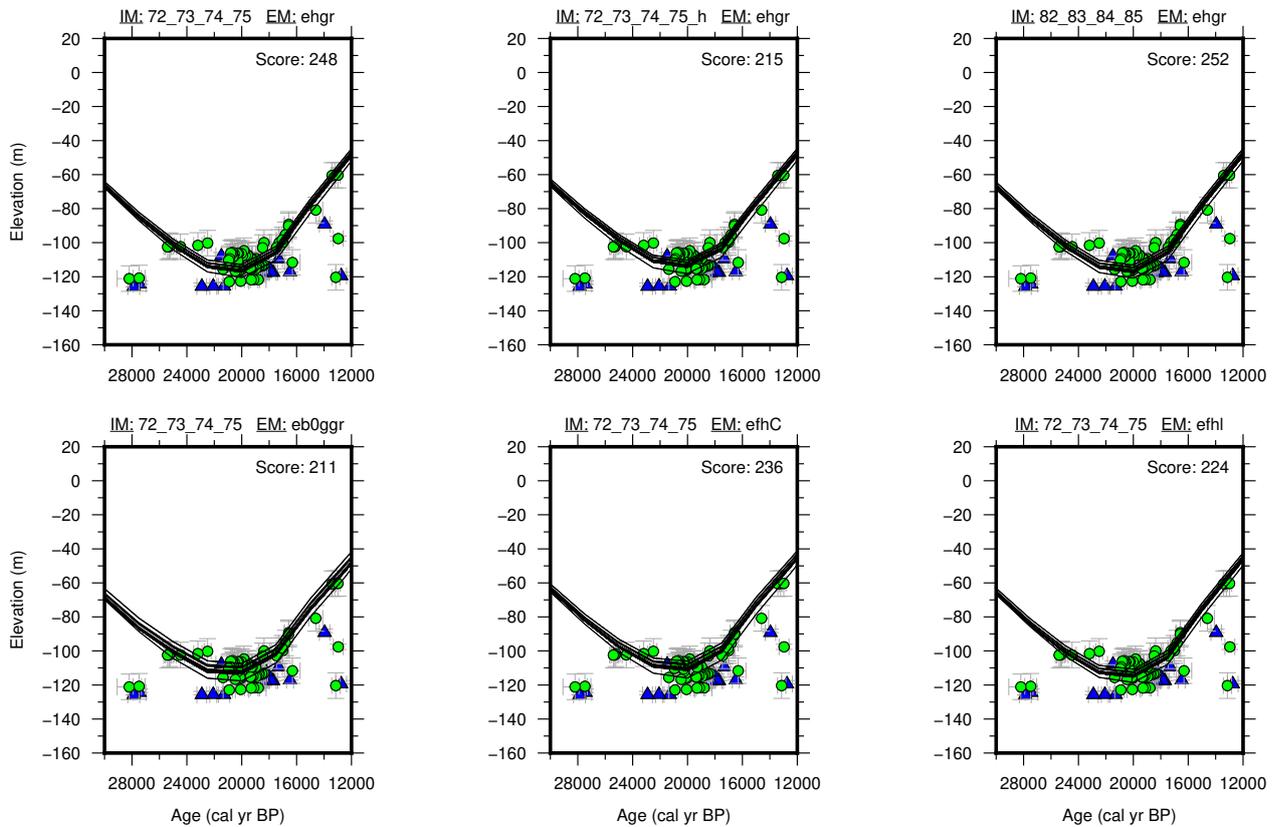
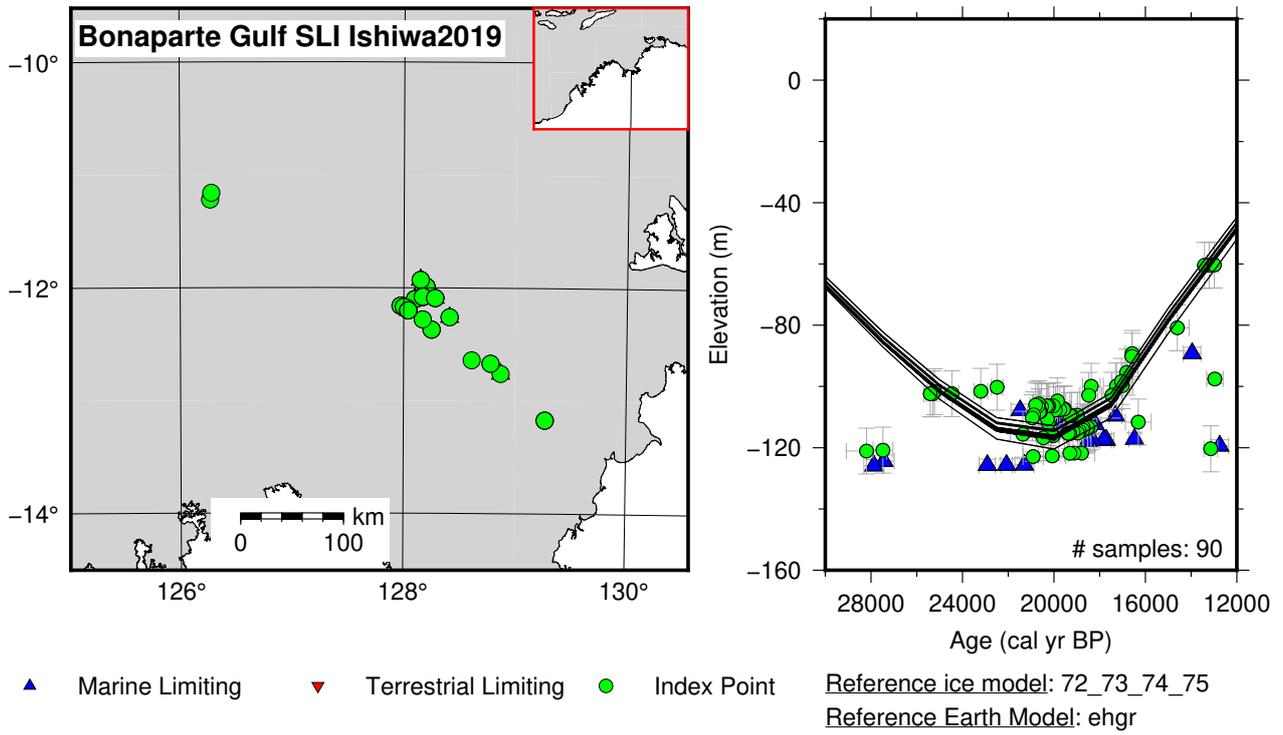


Figure 5: Paleo-sea level and comparison of six models for subregion Northwestern Australia, location Bonaparte Gulf SLI Ishiwa2019.

6 Caribbean

6.1 Lesser Antilles

References for the data used in each location.

Barbados: Abdul et al. (2016); Fairbanks (1988); Peltier and Fairbanks (2006)

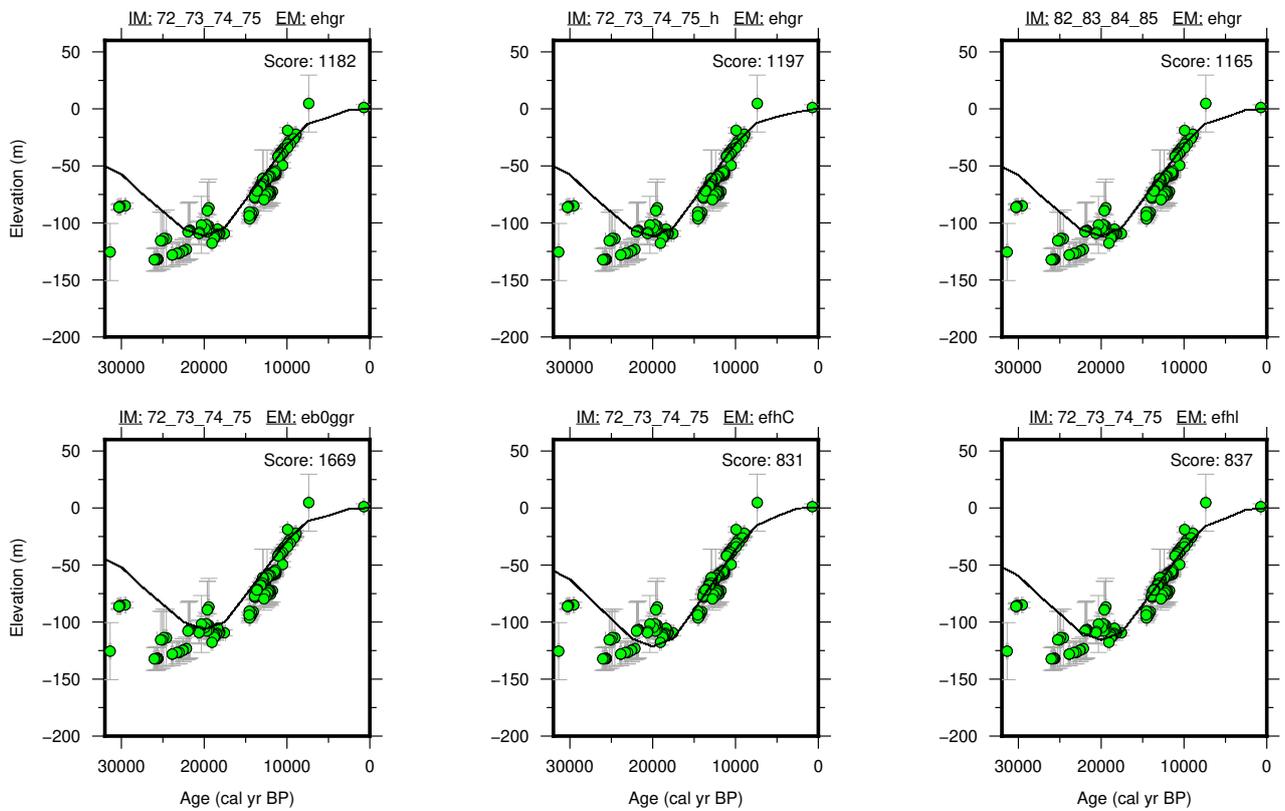
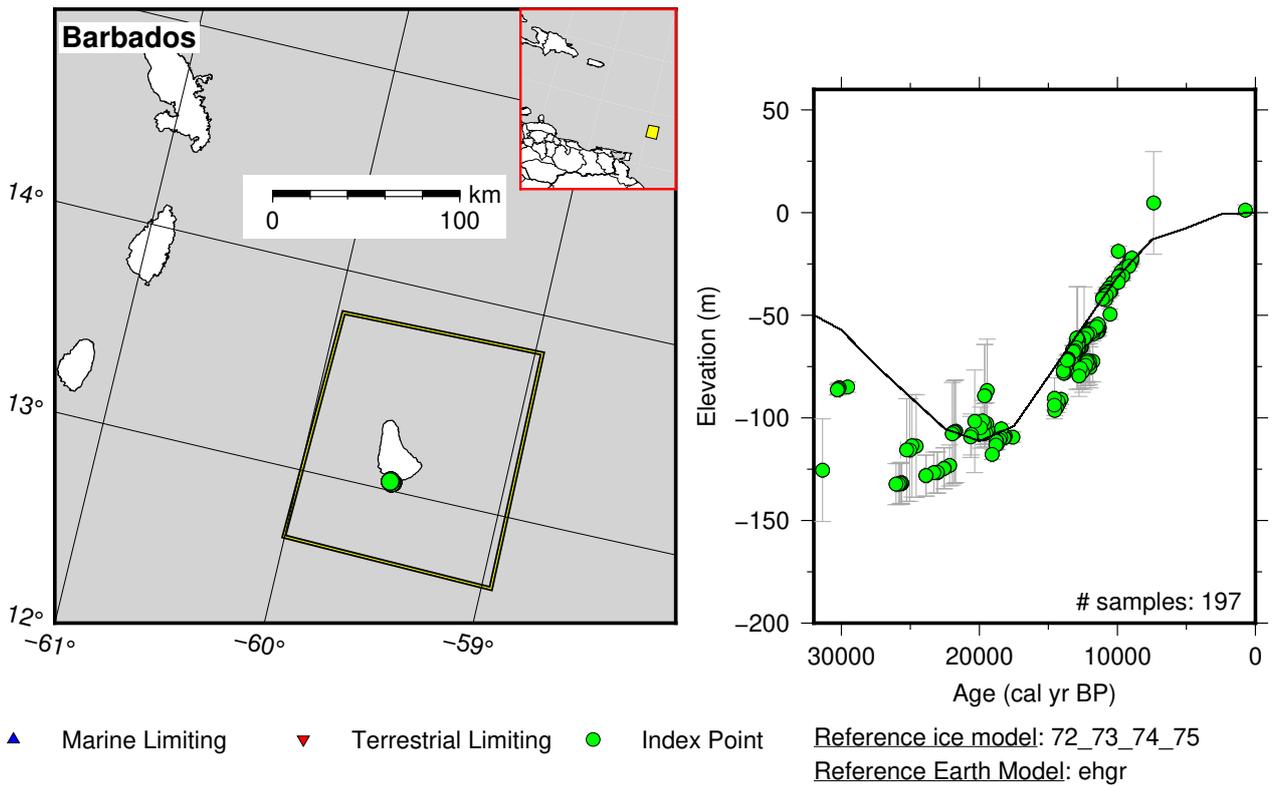


Figure 6: Paleo-sea level and comparison of six models for subregion Lesser Antilles, location Barbados.

7 East Asia

7.1 Ryukyu Islands

References for the data used in each location.

Miyakojima: Sasaki et al. (2006)

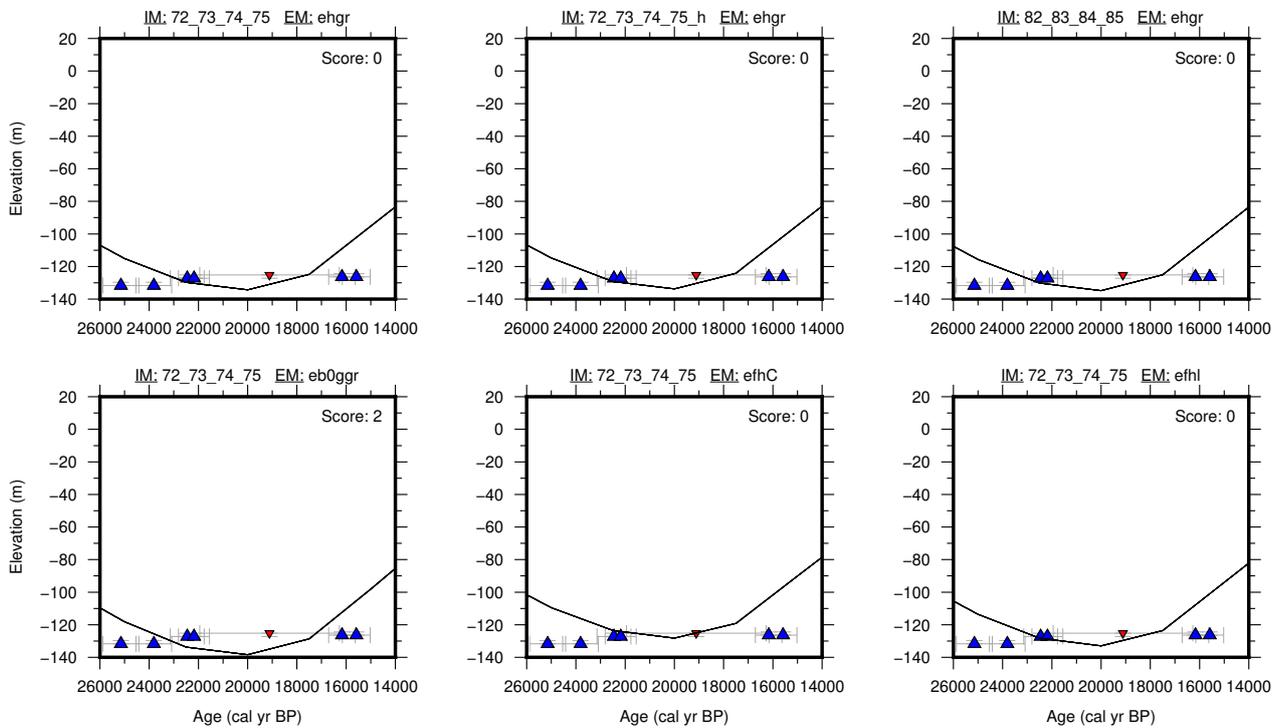
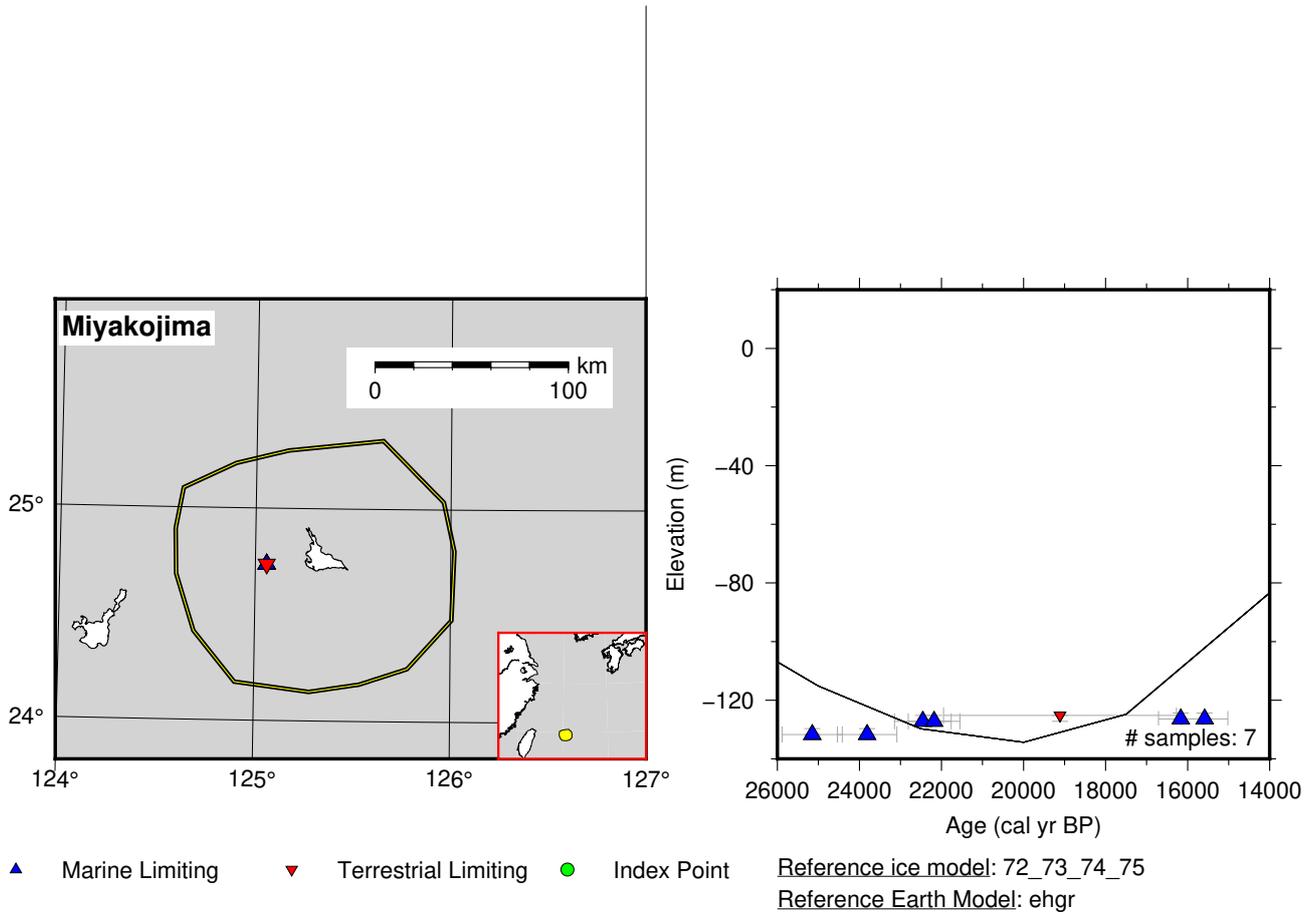


Figure 7: Paleo-sea level and comparison of six models for subregion Ryukyu Islands, location Miyakojima.

7.2 Sea of Japan - East Sea

References for the data used in each location.

Tsushima-Korea Strait: Park et al. (2000)

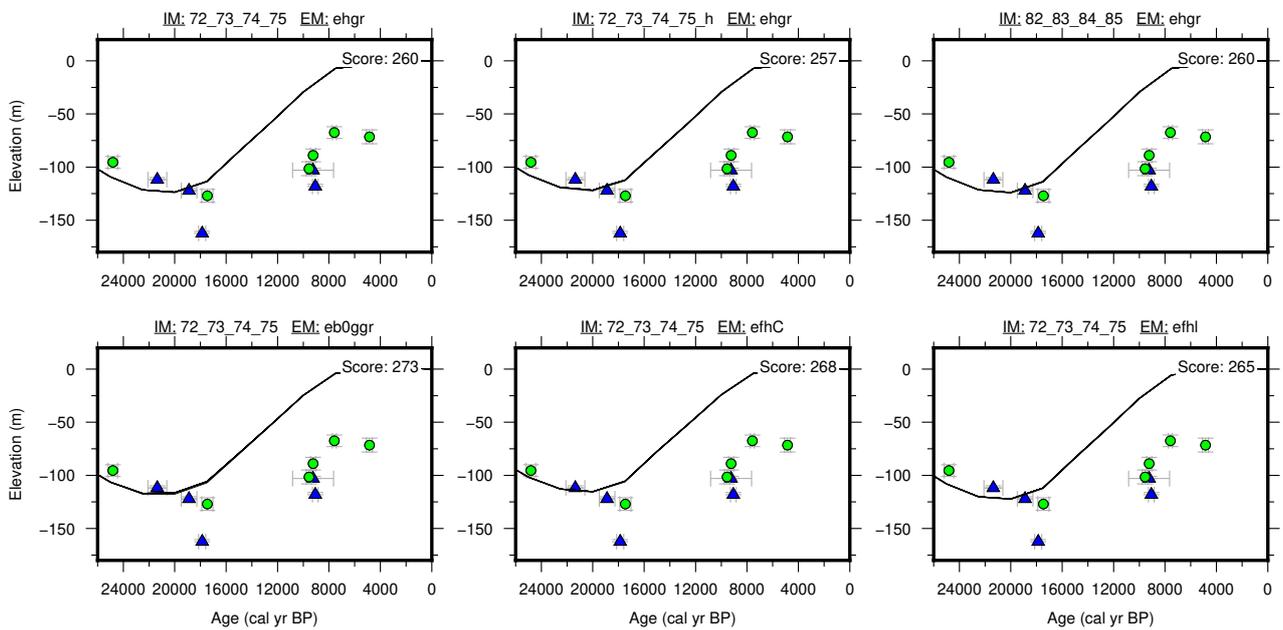
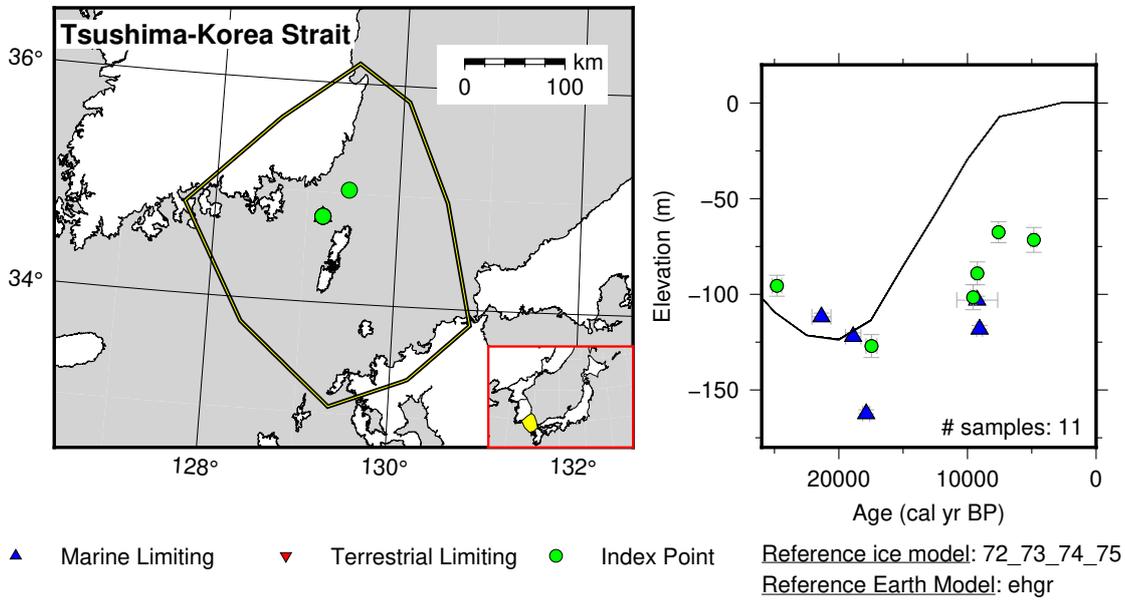


Figure 8: Paleo-sea level and comparison of six models for subregion Sea of Japan - East Sea, location Tsushima-Korea Strait.

8 Eurasian Arctic

8.1 Franz Josef Land

References for the data used in each location.

Zemlya Georga: Bolshiyarov et al. (2009); Dibner (1965); Forman et al. (1996, 2004); Glazovskiy et al. (1992); Grosswald (1973); Kovaleva (1974)

Zemlya Zichy: Bolshiyarov et al. (2009); Gusev et al. (2013b)

Proliy Markama: Bolshiyarov et al. (2009); Forman and Polyak (1997); Forman et al. (1996, 2004); Grosswald (1963, 1973); Gusev et al. (2013b); Kovaleva (1974); Lubinski (1998); Weihe (1996)

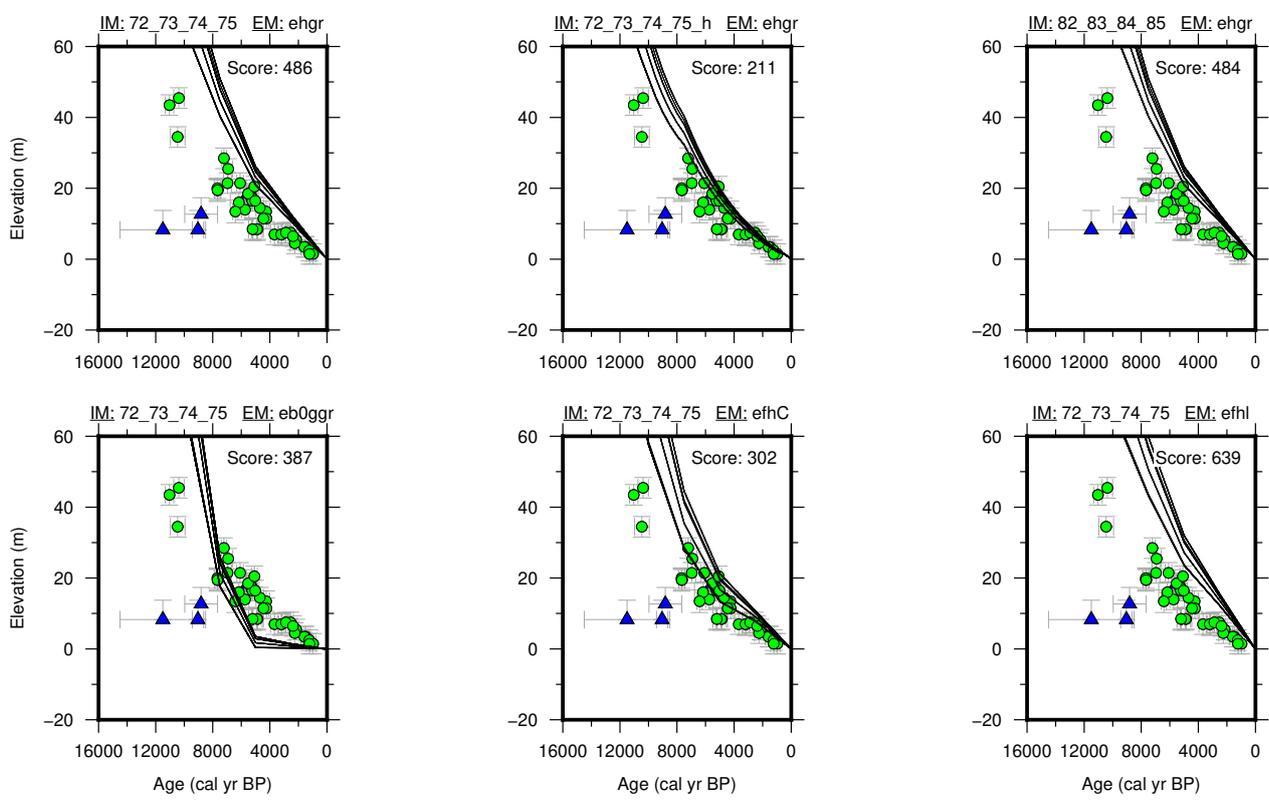
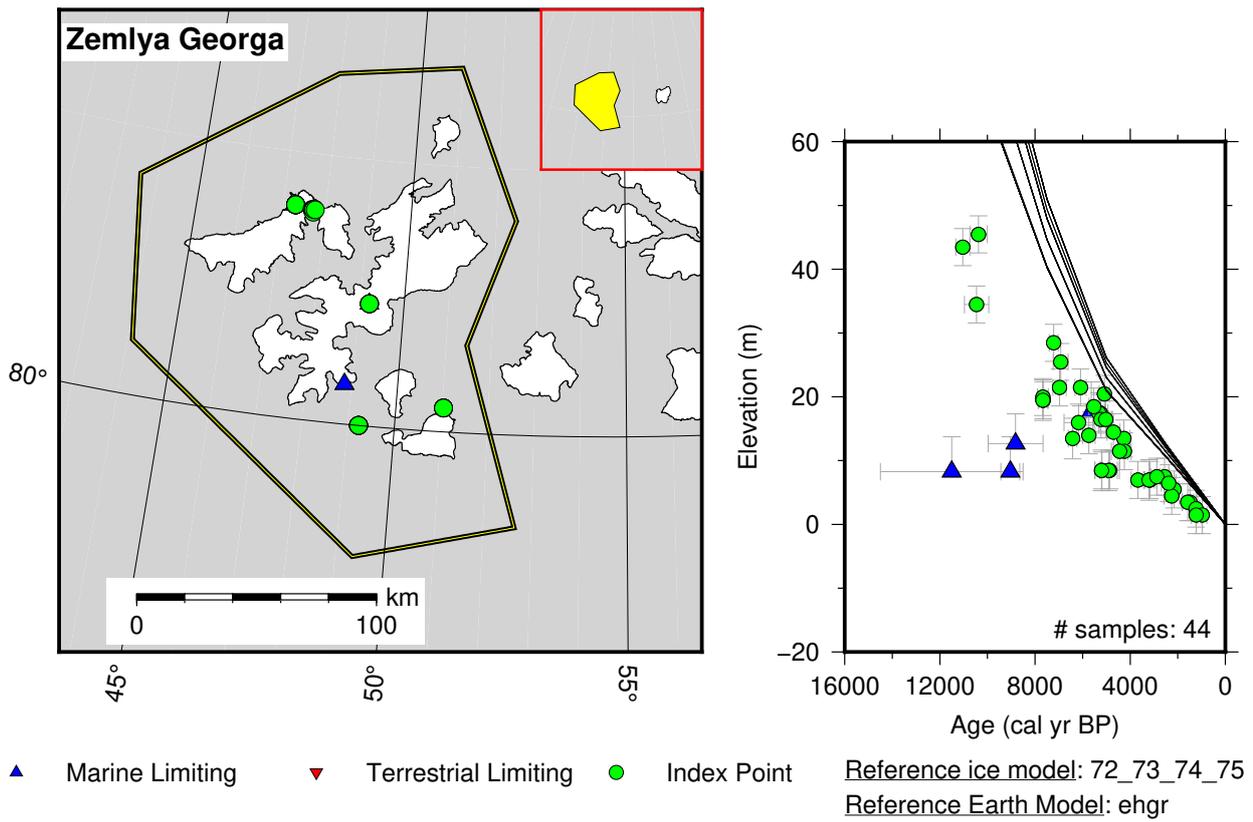
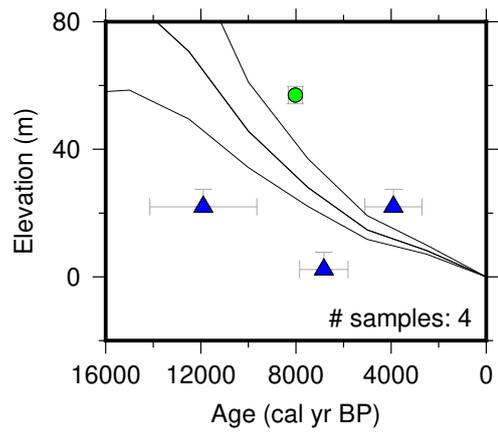
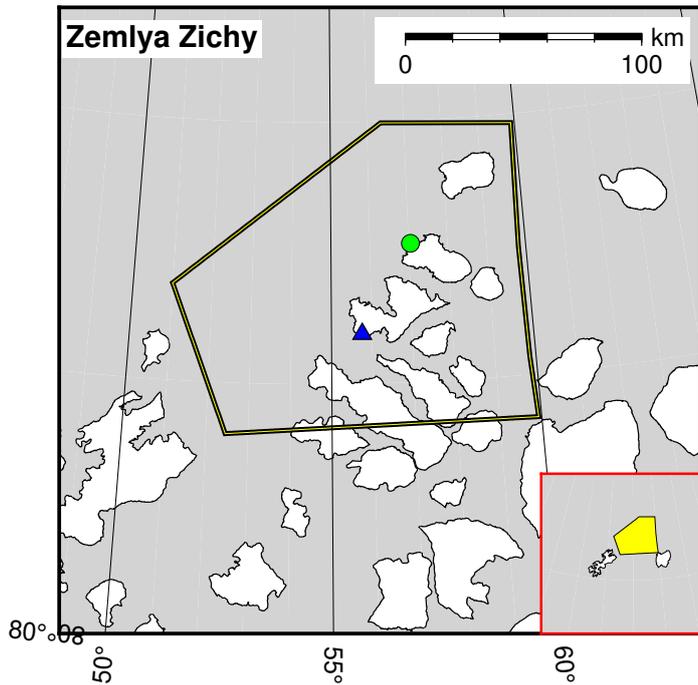


Figure 9: Paleo-sea level and comparison of six models for subregion Franz Josef Land, location Zemlya Georga.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

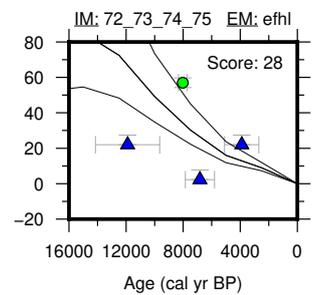
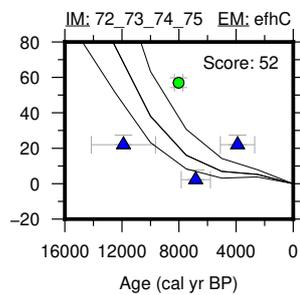
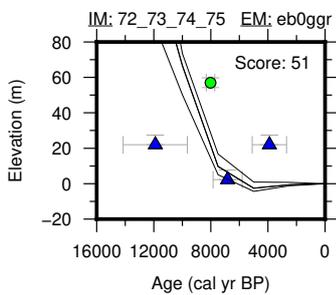
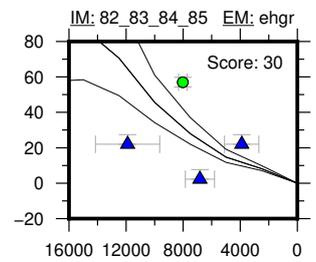
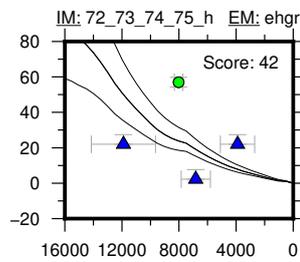
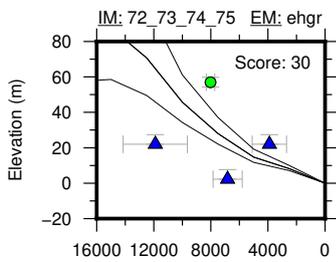
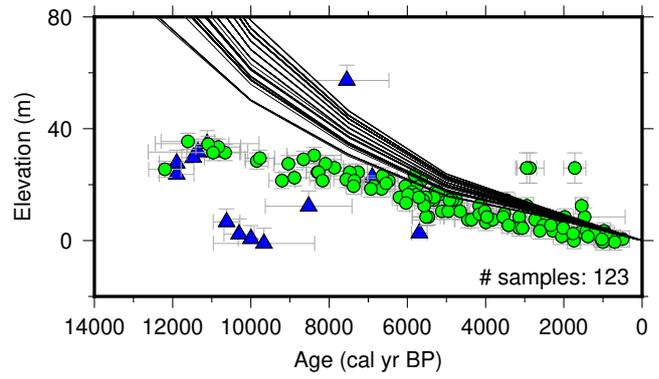
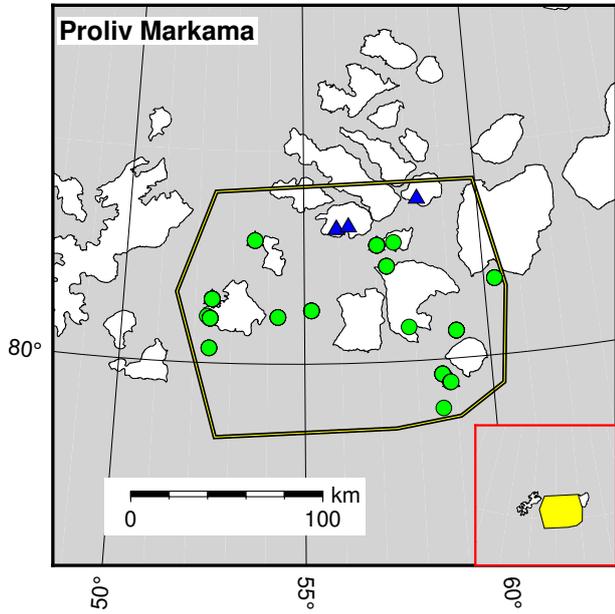


Figure 10: Paleo-sea level and comparison of six models for subregion Franz Josef Land, location Zemlya Zichy.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75

Reference Earth Model: ehgr

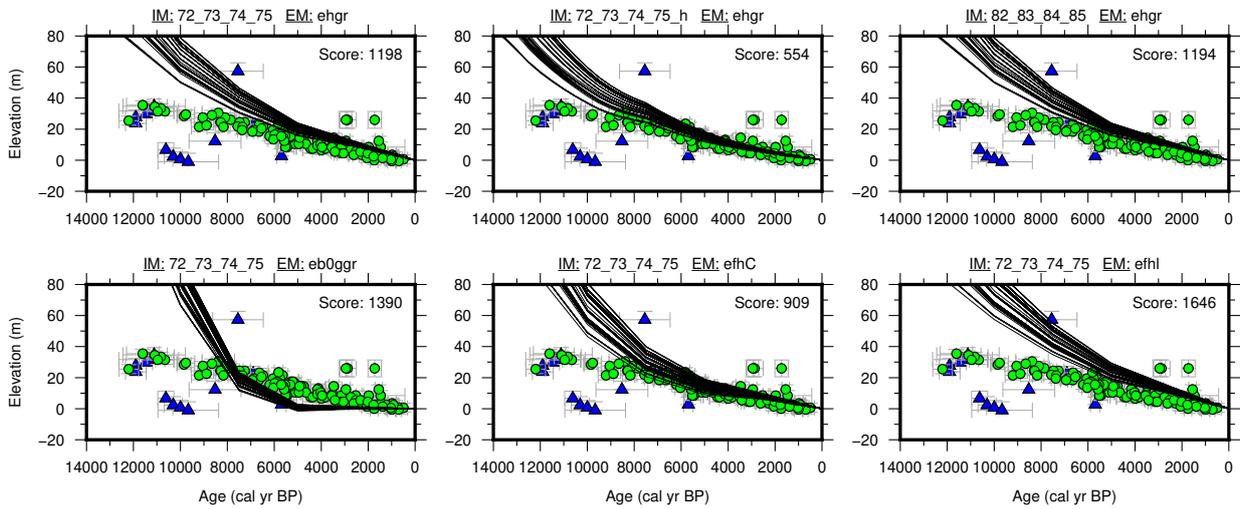


Figure 11: Paleo-sea level and comparison of six models for subregion Franz Josef Land, location Proliv Markama.

8.2 Kara Sea - Novaya Zemlya

References for the data used in each location.

Pechora Sea: Astakhov et al. (2007); Krapivner (2006); Polyak et al. (2000); Zhuravlev et al. (2013)

Yuzhny Island: Bolshiyarov et al. (2006); Mangerud et al. (2008); Zhuravlev et al. (2013)

Severny Island West: Bolshiyarov et al. (2009); Forman et al. (1999, 2004); Zeeberg et al. (2001)

Severny Island North: Forman et al. (1999, 2004); Gawronski and Zeeberg (1997); Zeeberg et al. (2001)

Vaygach Island: Forman et al. (2004); Zeeberg et al. (2001)

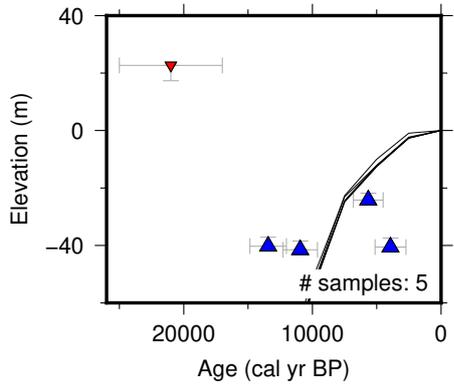
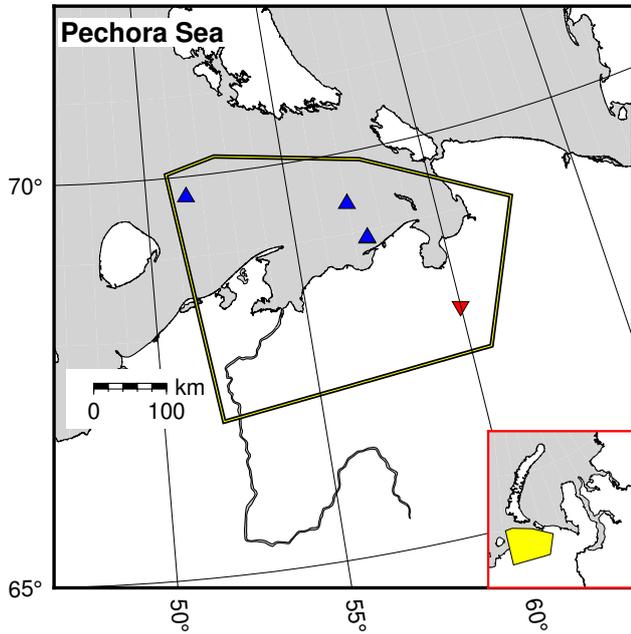
Baydaratskaya Bay: Belova (2012); Grigorieva (1987)

Gulf of Ob: Astakhov and Nazarov (2010); Grigorieva (1987); Makeev (1988); Makeev et al. (1988)

Khalmyer Bay: Baranskaya et al. (2018b); Grigorieva (1987); Makeev (1988); Romanenko et al. (2007)

Kara Sea shelf: Levitan et al. (2007); Polyakova and Stein (2004)

Ostrov Sibiryakova: Gusev et al. (2013a)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

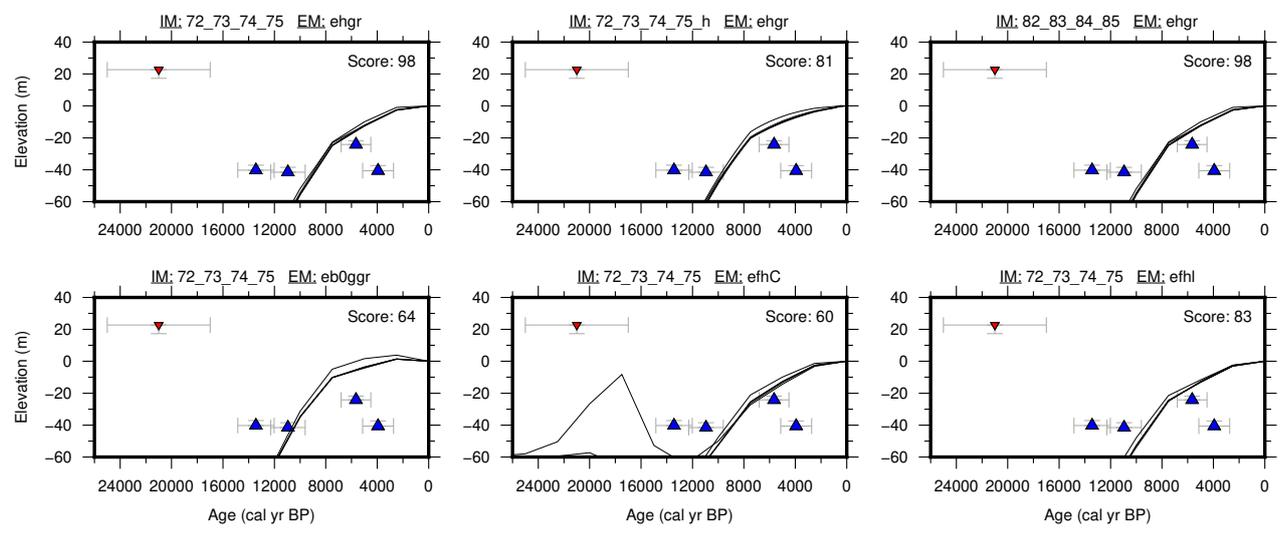


Figure 12: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Pechora Sea.

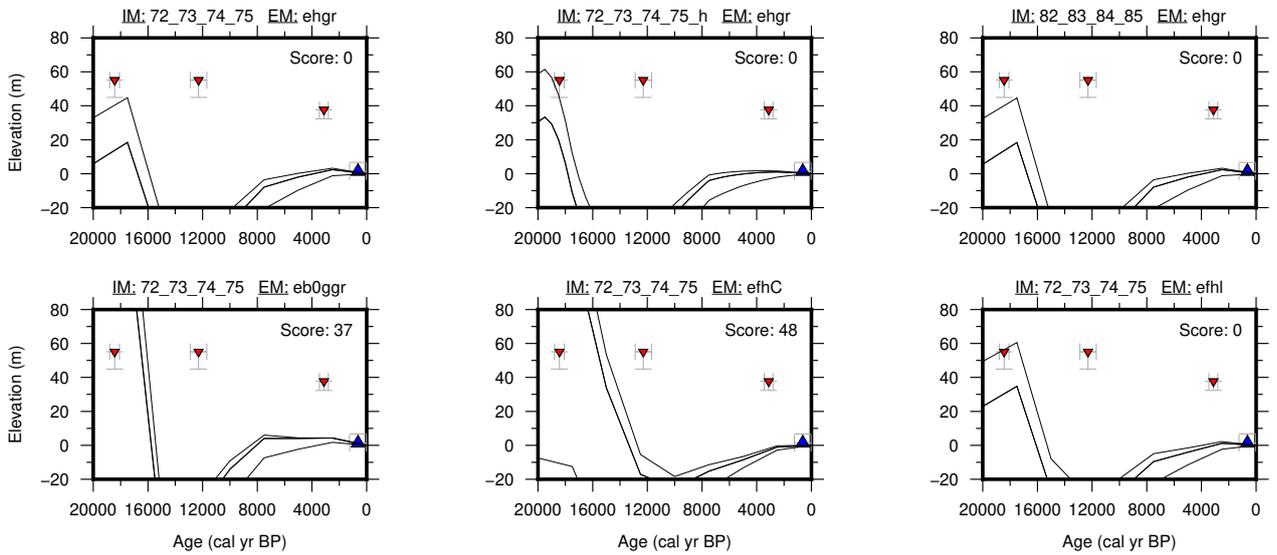
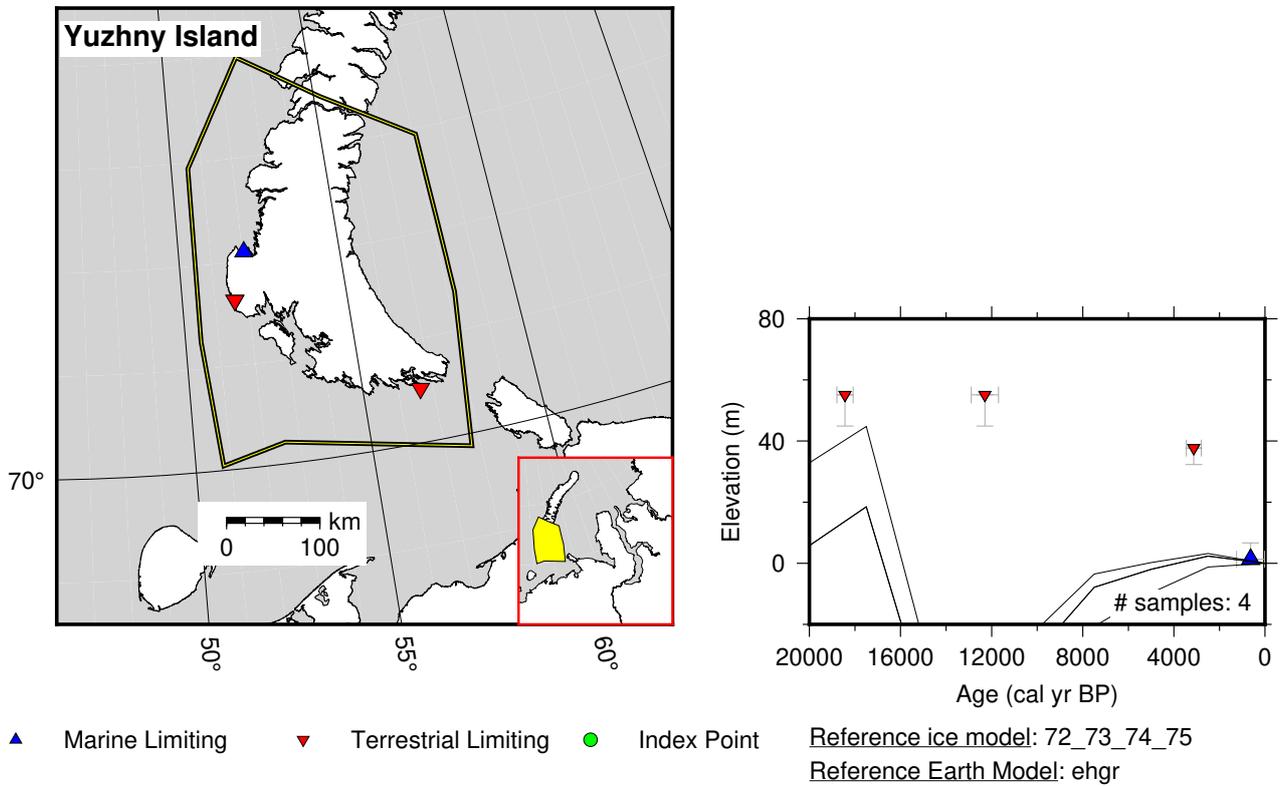
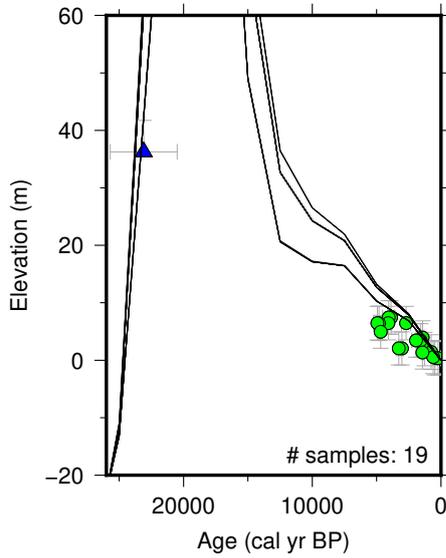
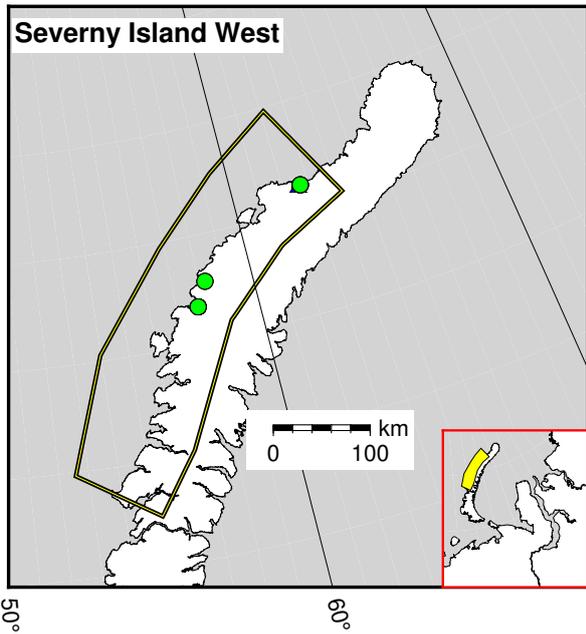


Figure 13: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Yuzhny Island.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

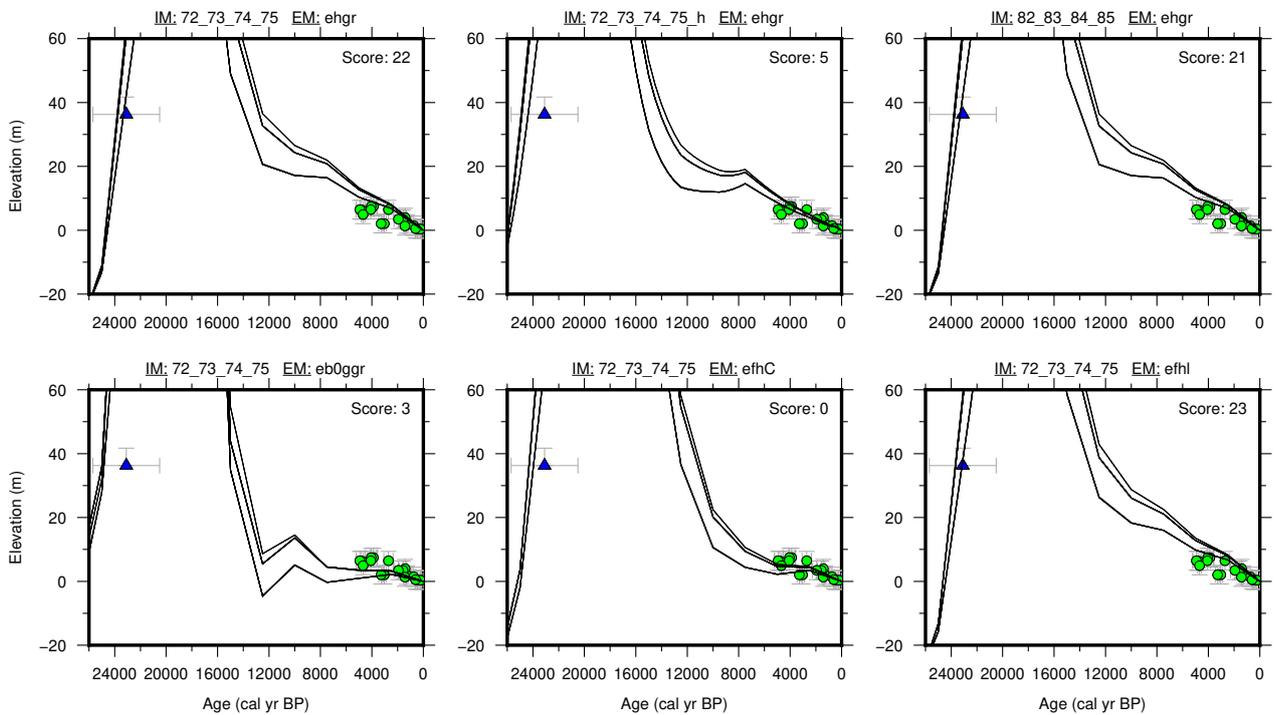


Figure 14: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Severny Island West.

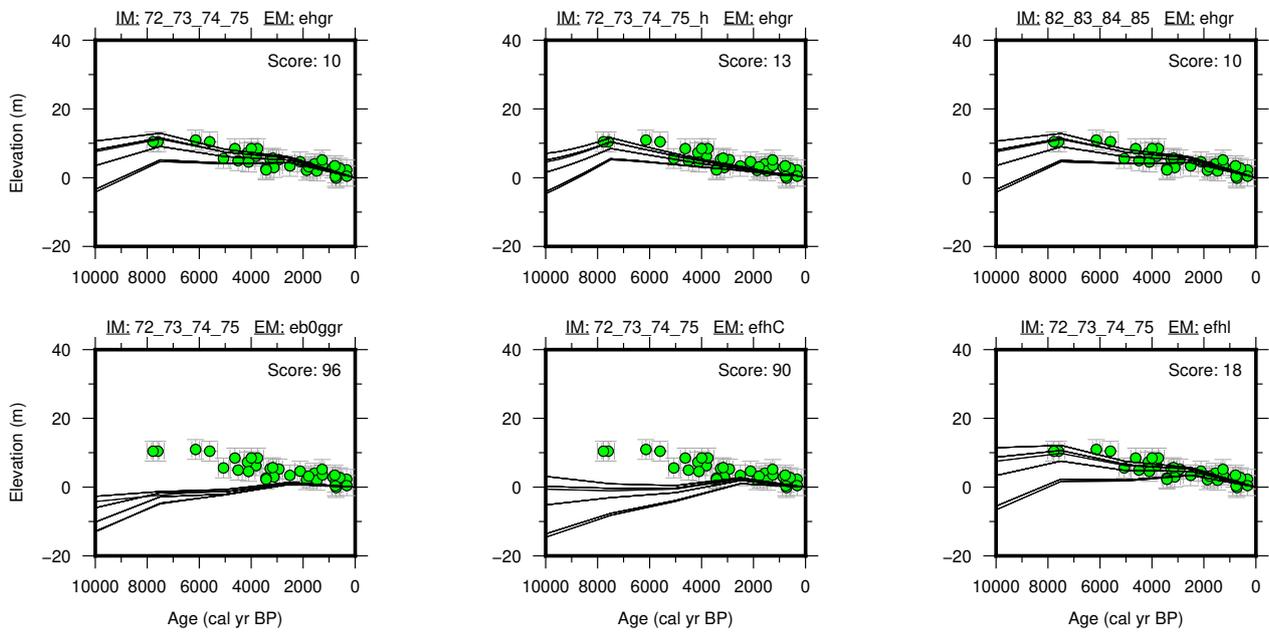
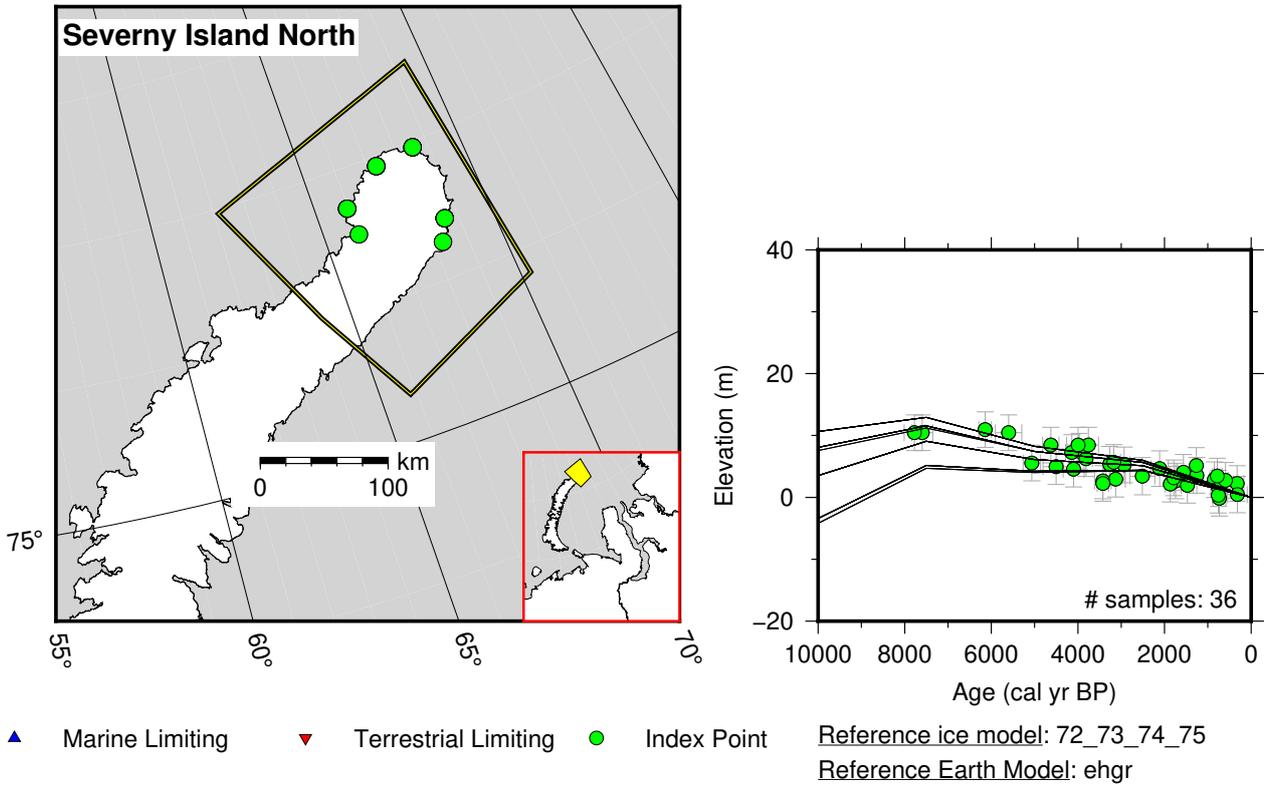
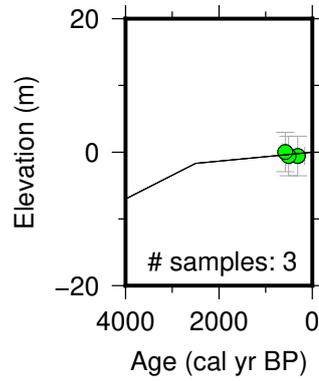
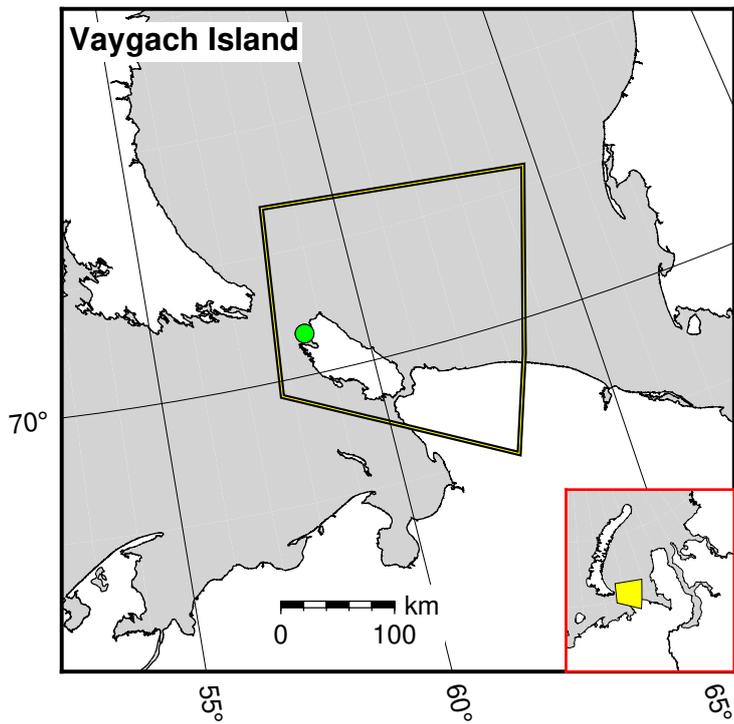


Figure 15: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Severny Island North.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

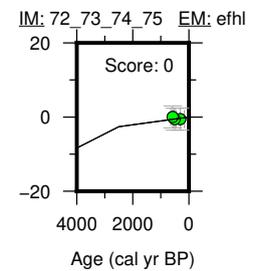
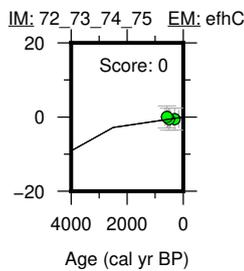
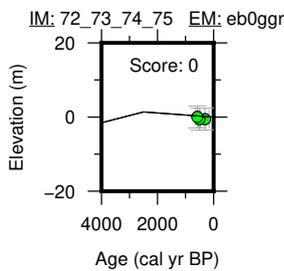
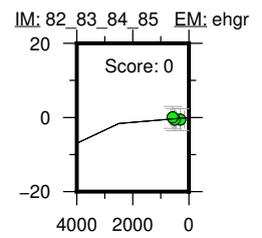
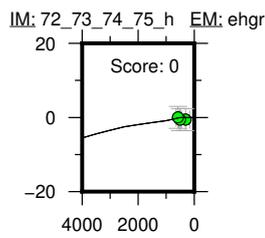
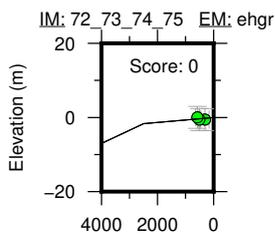


Figure 16: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Vaygach Island.

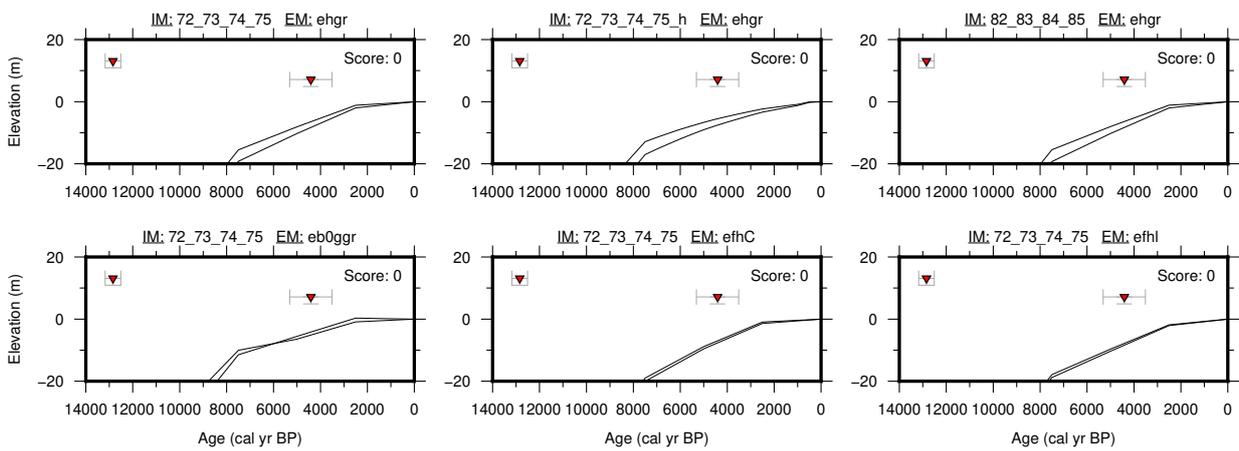
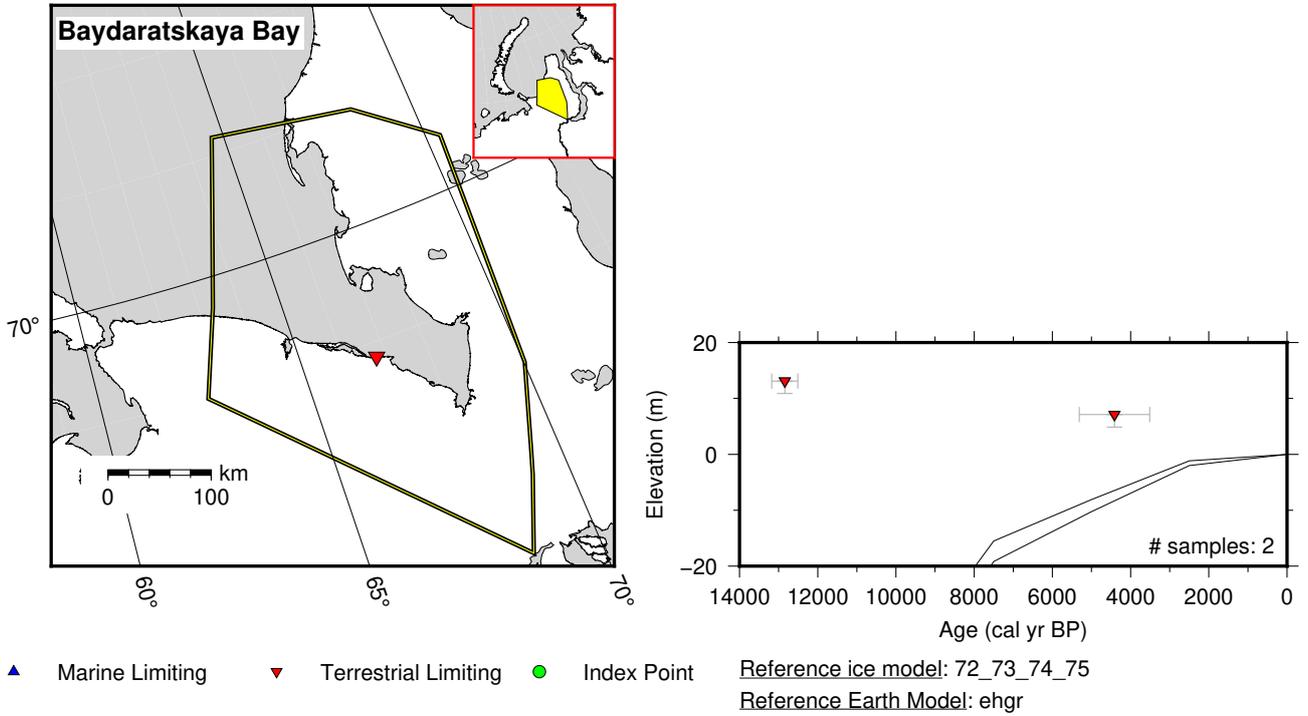
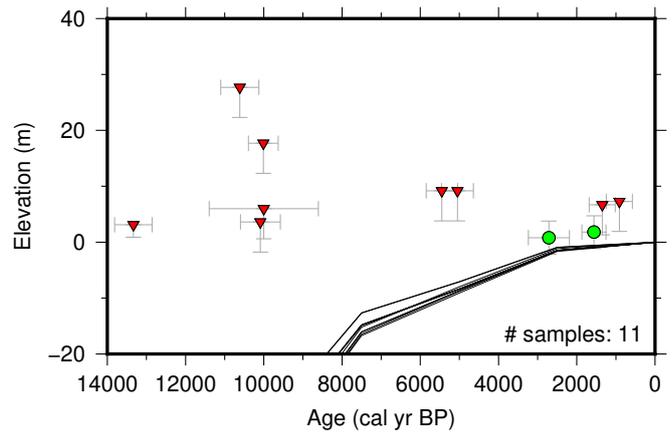
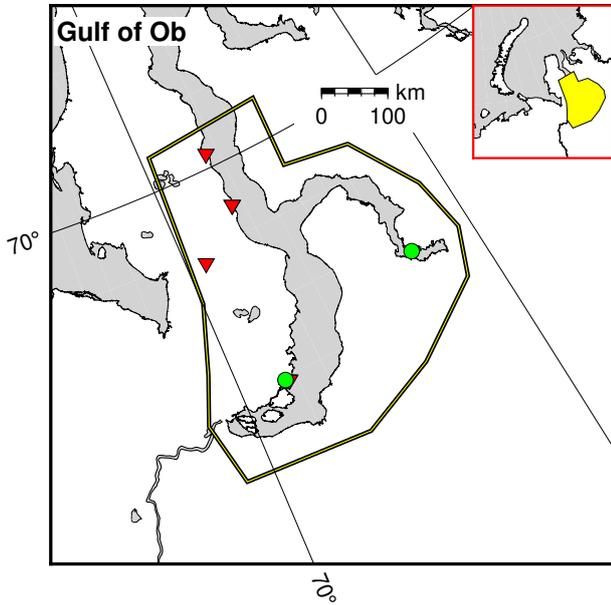


Figure 17: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Baydaratskaya Bay.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

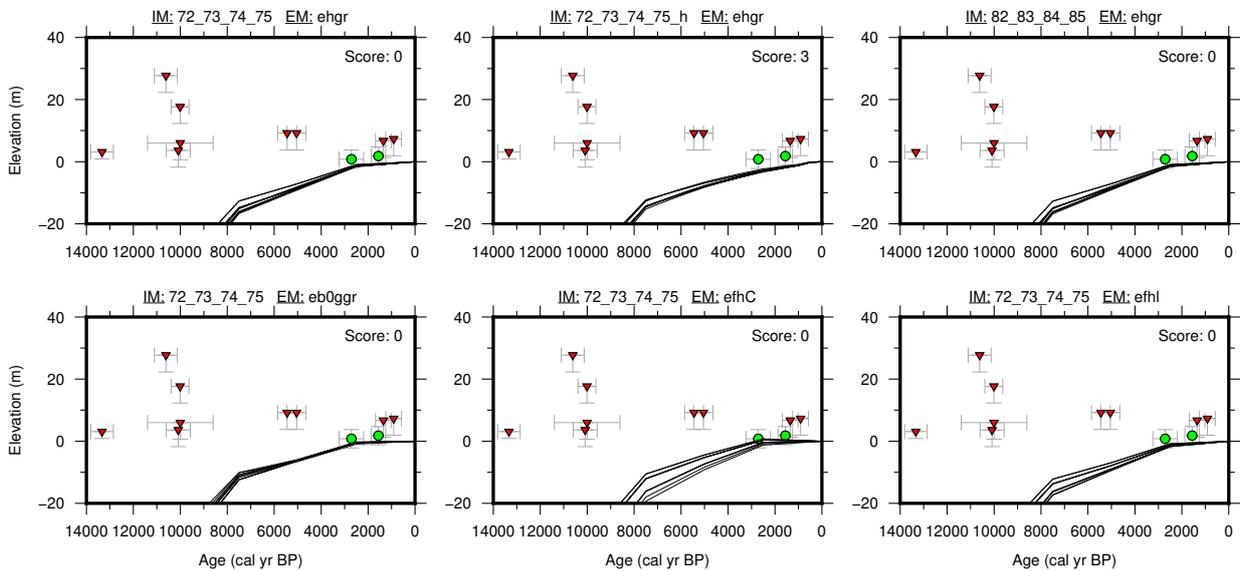
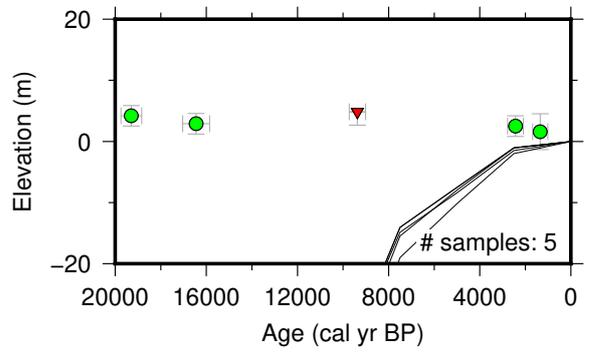
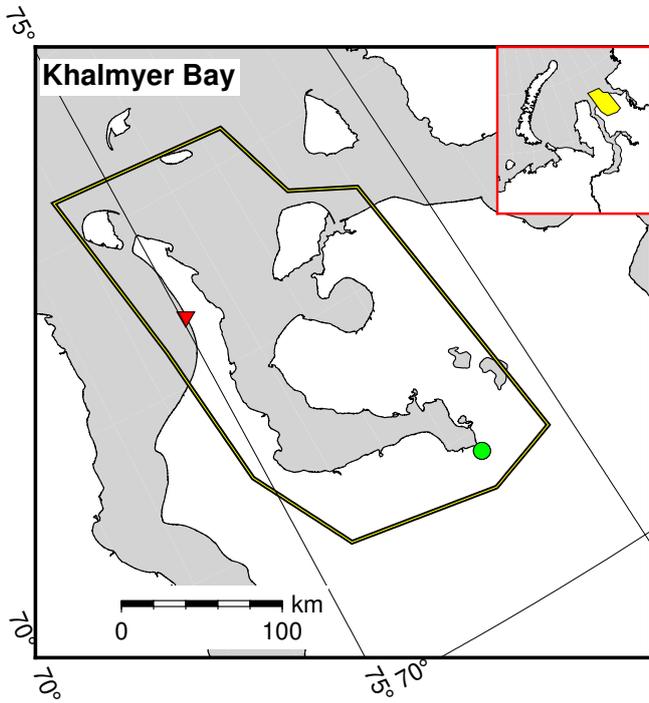


Figure 18: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Gulf of Ob.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

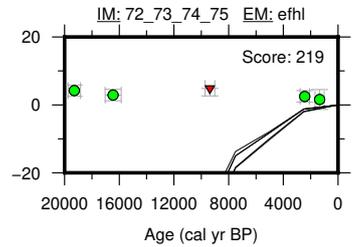
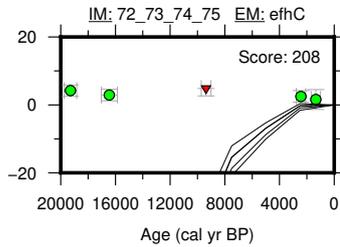
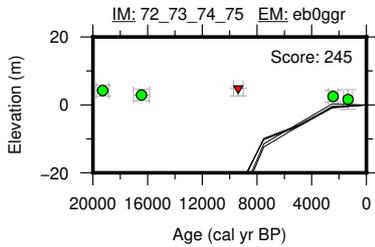
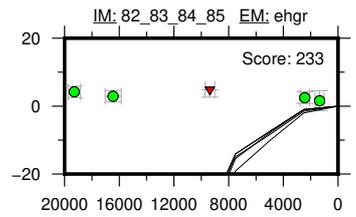
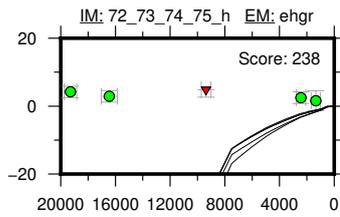
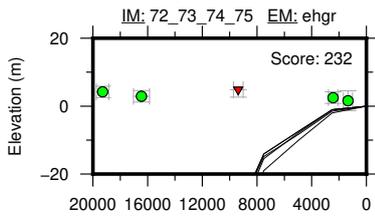


Figure 19: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Khalmyer Bay.

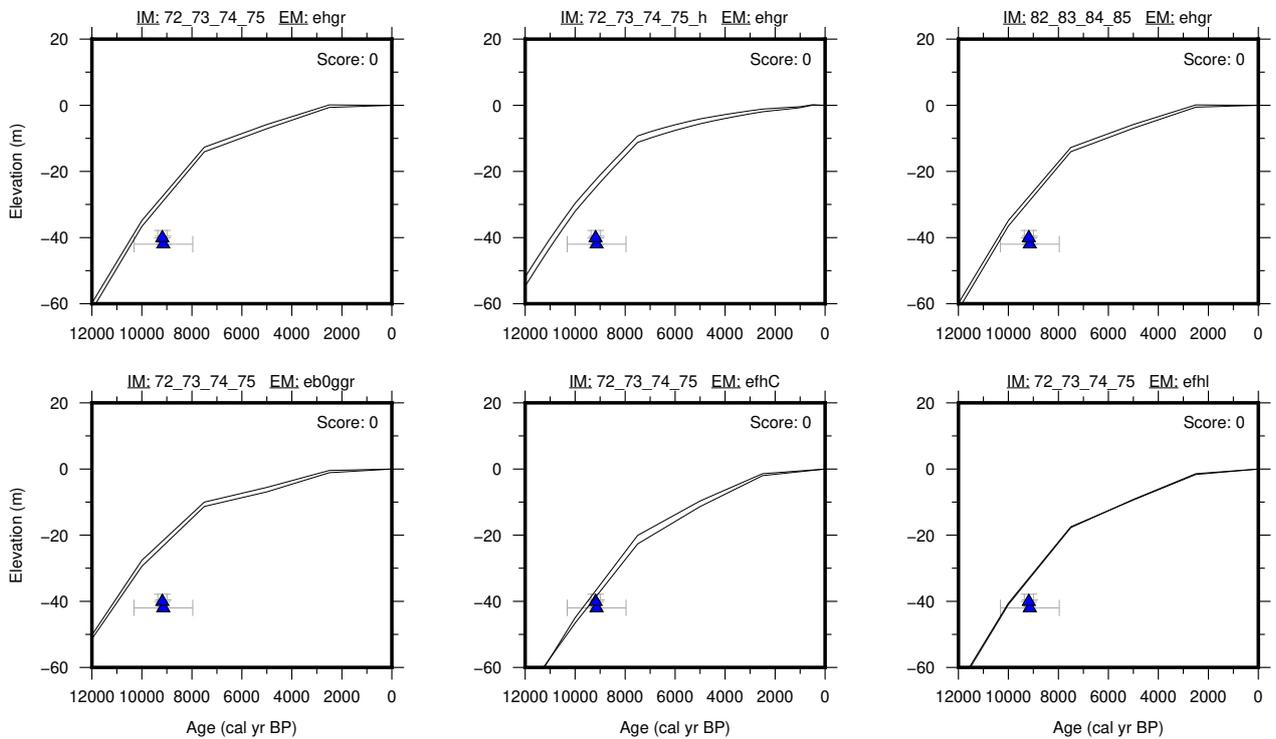
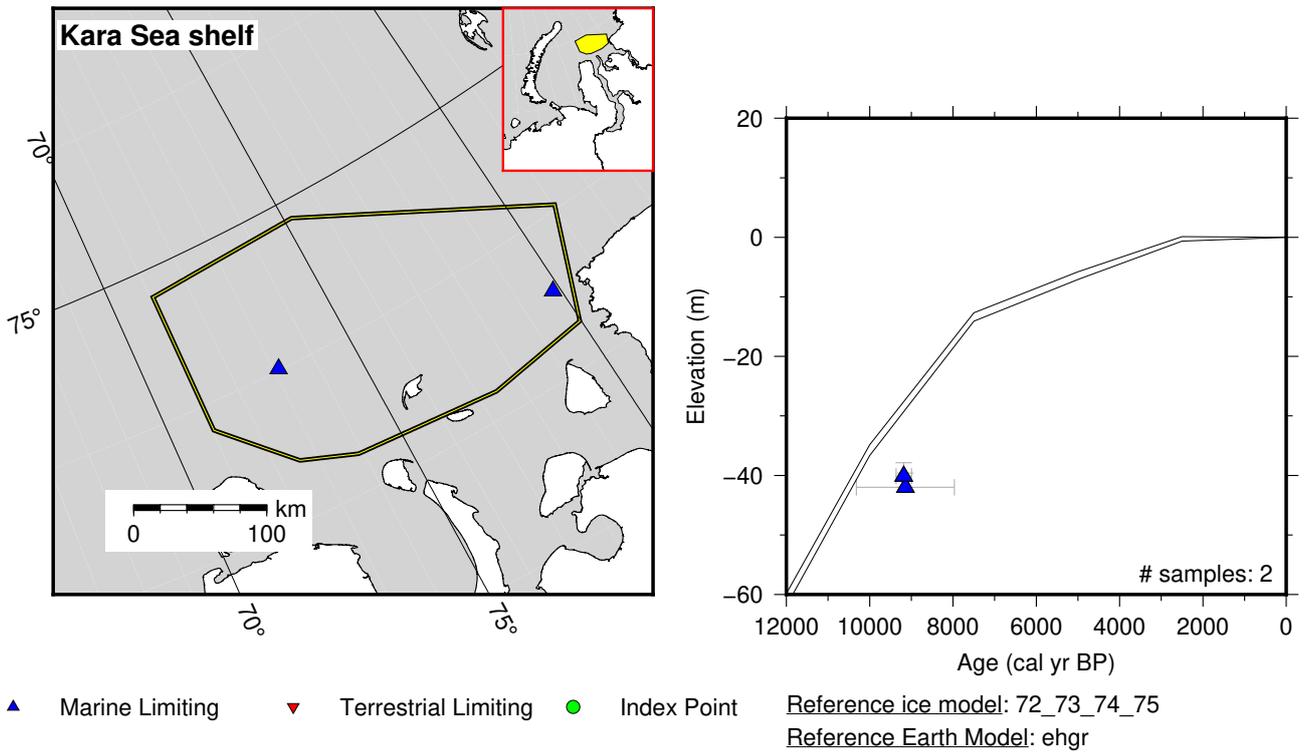
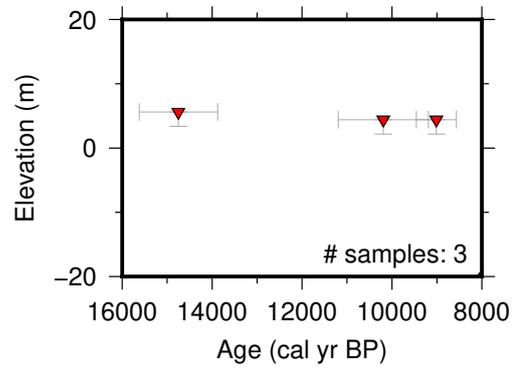
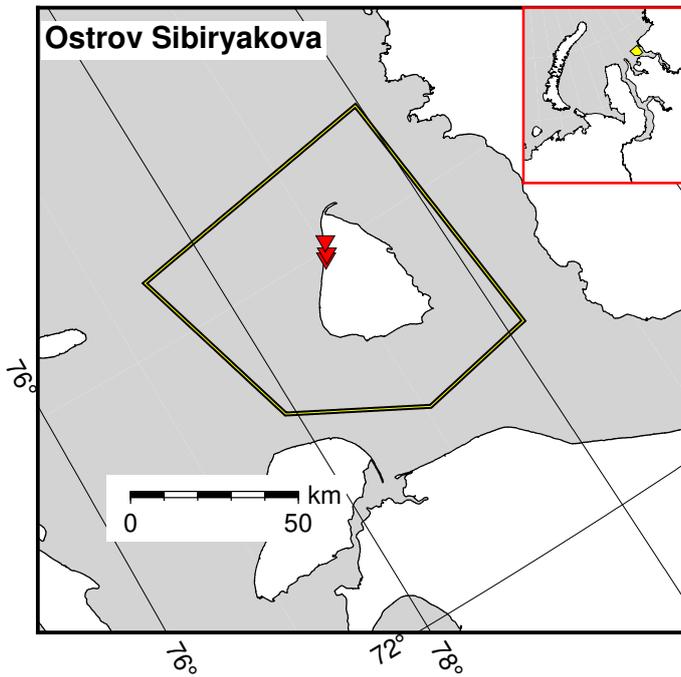


Figure 20: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Kara Sea shelf.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

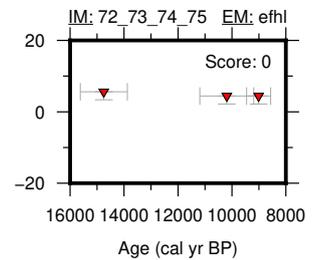
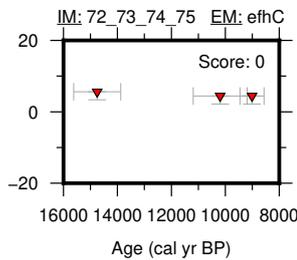
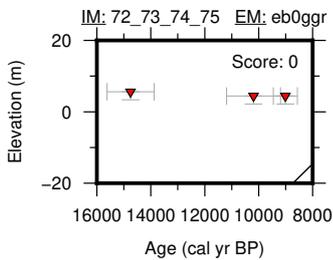
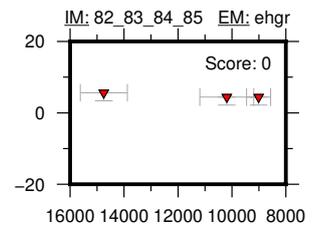
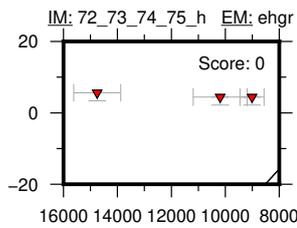
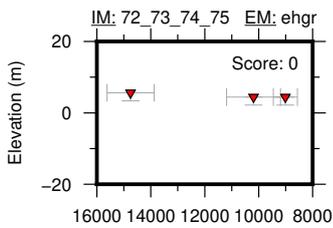


Figure 21: Paleo-sea level and comparison of six models for subregion Kara Sea - Novaya Zemlya, location Ostrov Sibiryakova.

8.3 Southern Barents Sea

References for the data used in each location.

Rolfsoya: Romundset et al. (2011)

Norkinn: Romundset et al. (2011)

Pechengsky: Arslanov et al. (1974); Corner et al. (1999); Koshechkin (1979)

Murmansk: Arslanov et al. (1974); Corner et al. (2001); Gurevich and Liyva (1975); Gurina (1971); Mityaev M. V. (2008); Tanner (1907)

Voronya River: Arslanov et al. (1974); Snyder et al. (1997)

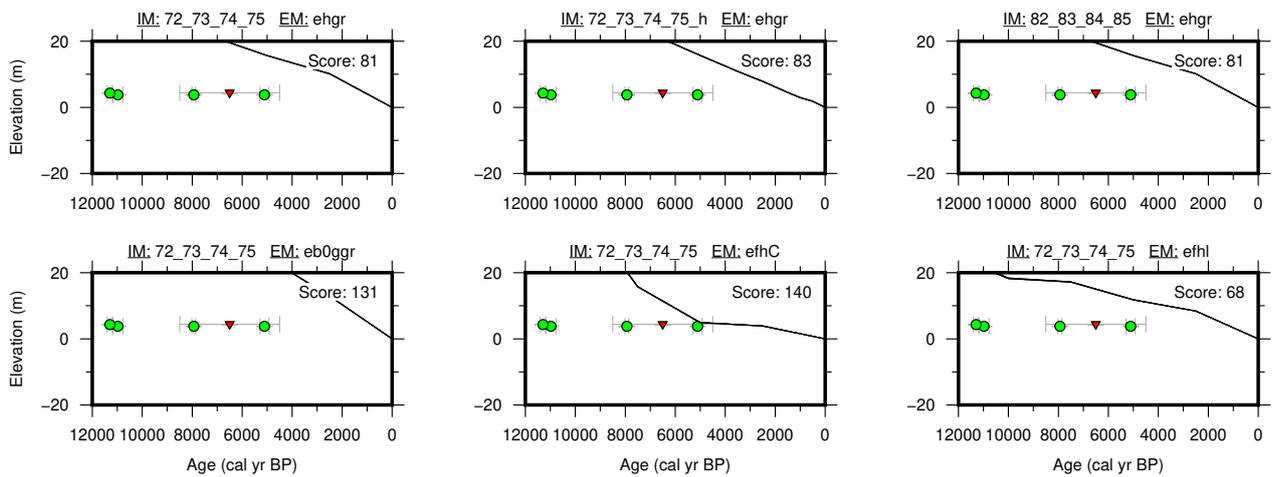
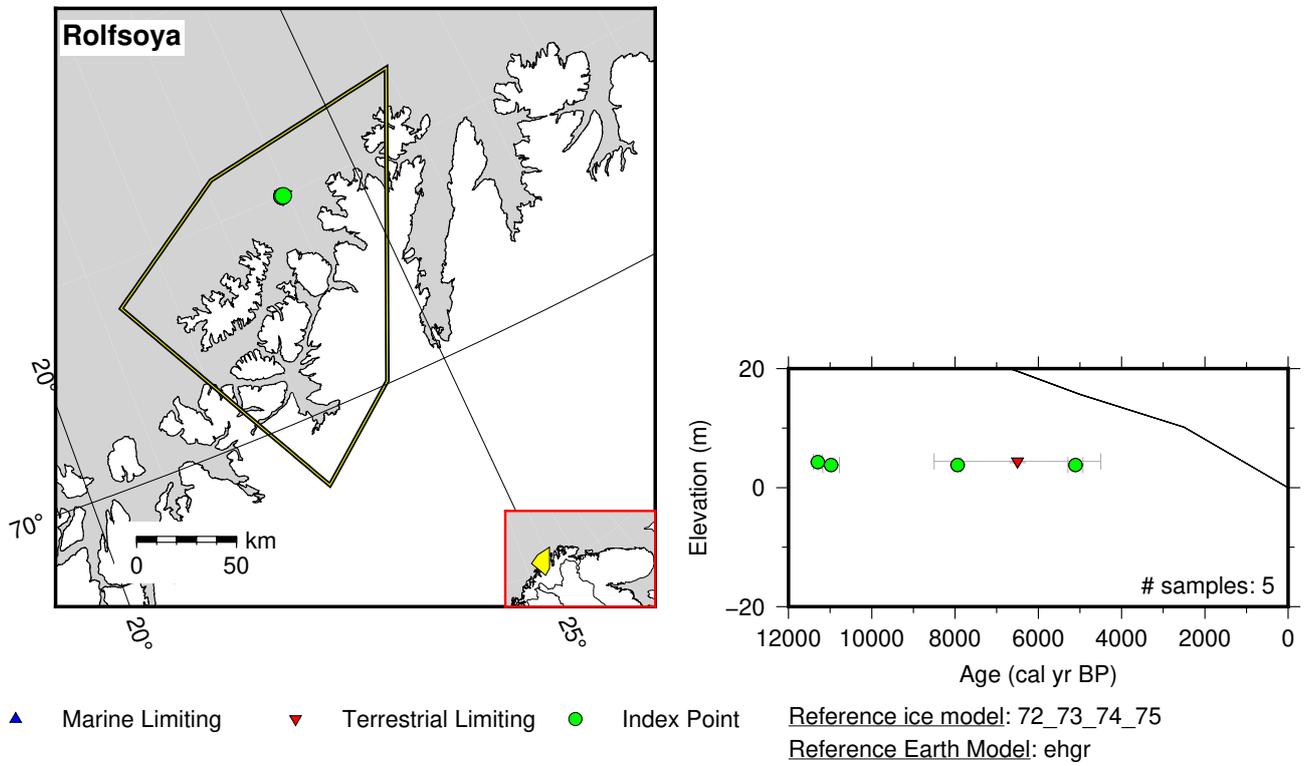
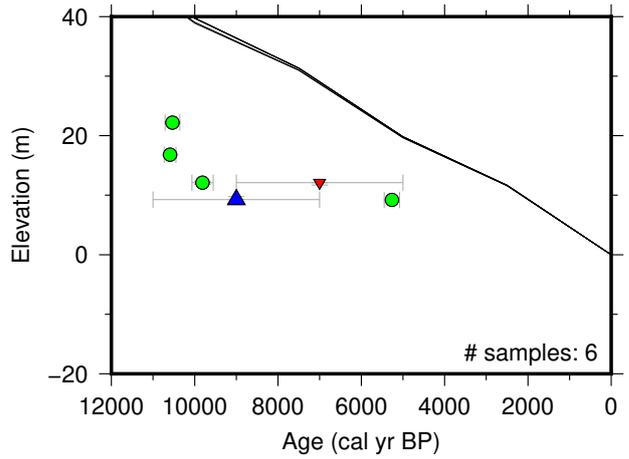
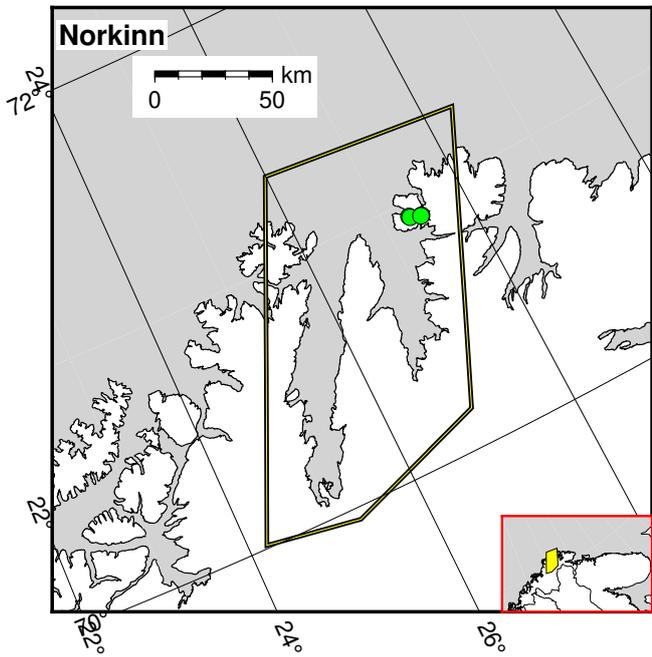


Figure 22: Paleo-sea level and comparison of six models for subregion Southern Barents Sea, location Rolfsoya.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

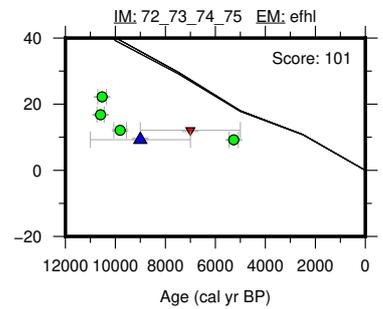
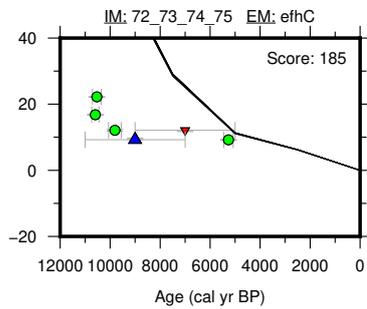
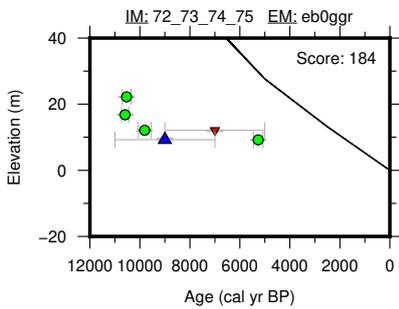
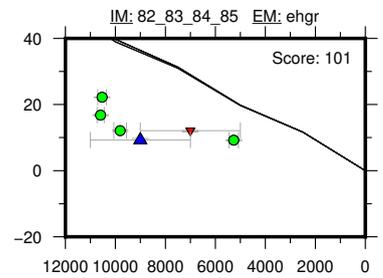
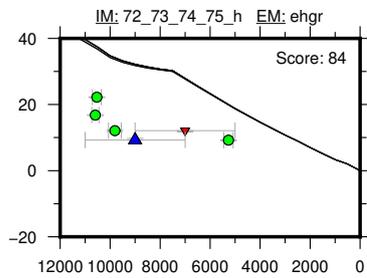
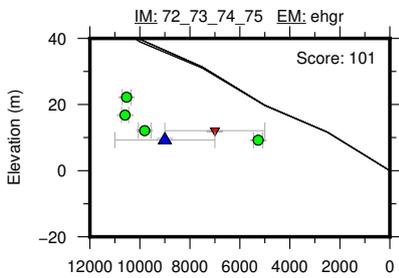


Figure 23: Paleo-sea level and comparison of six models for subregion Southern Barents Sea, location Norkinn.

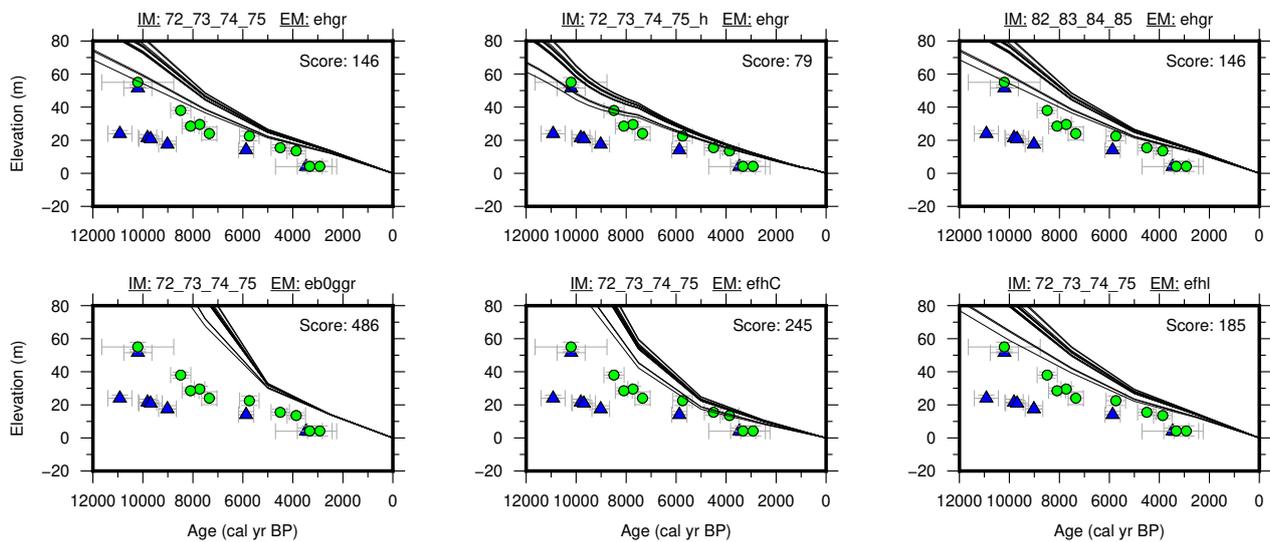
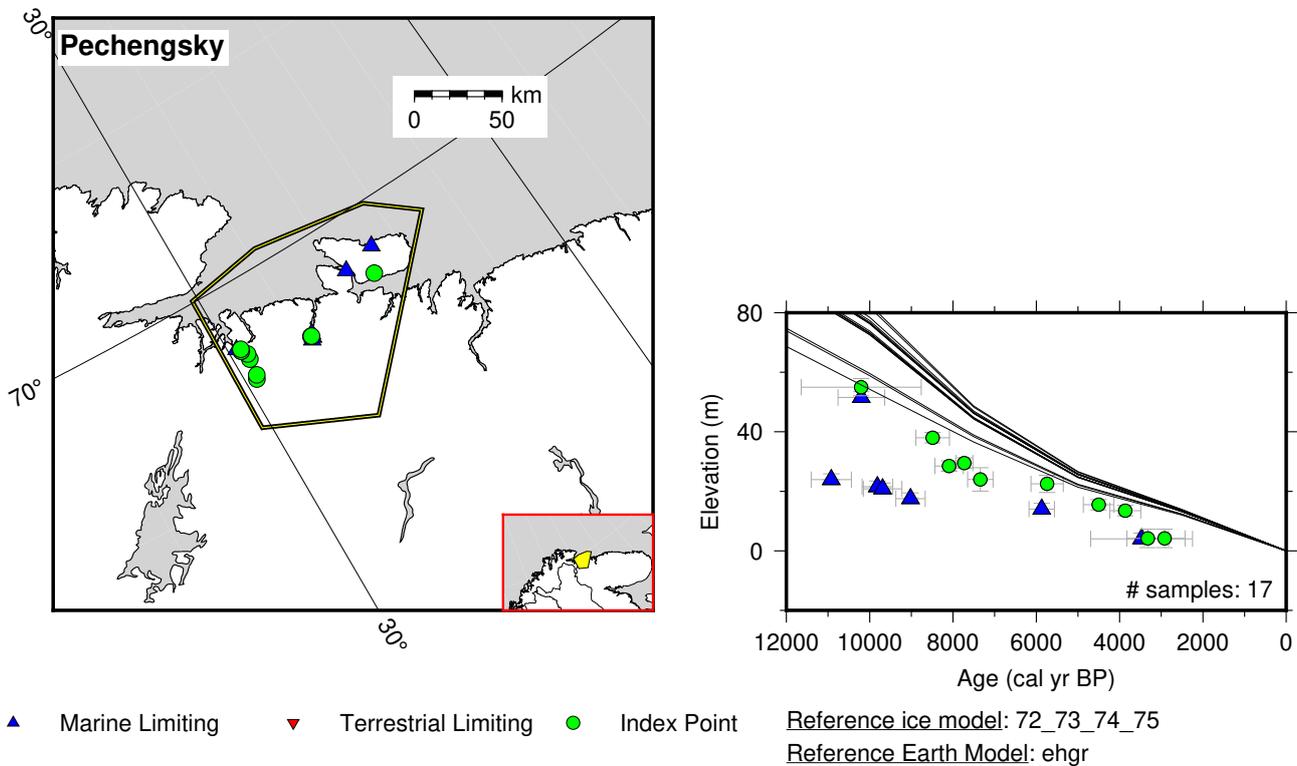


Figure 24: Paleo-sea level and comparison of six models for subregion Southern Barents Sea, location Pechengsky.

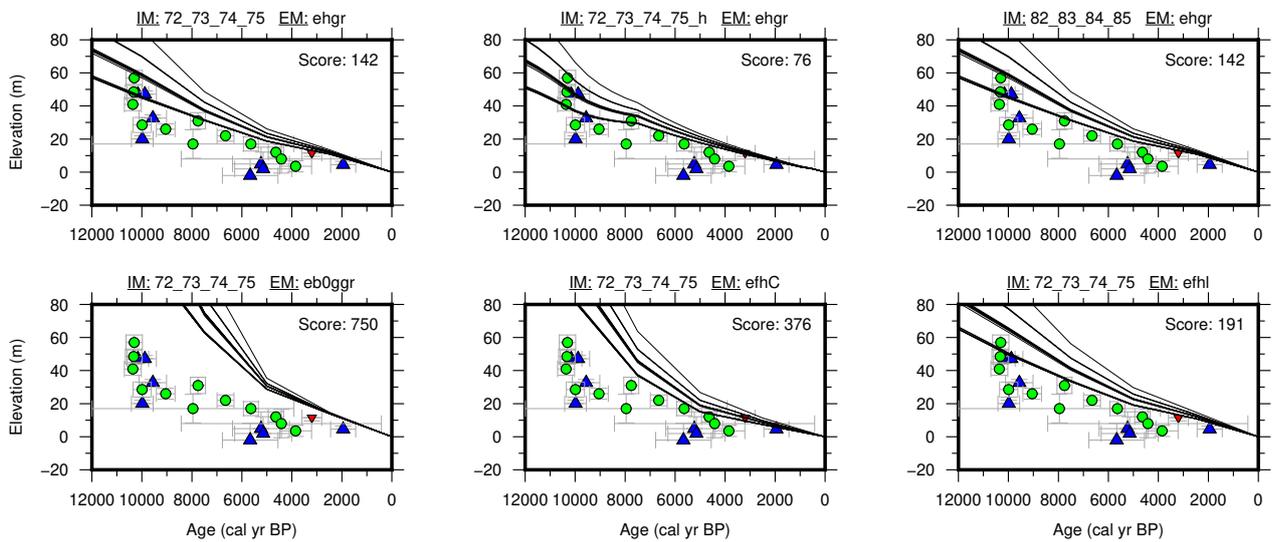
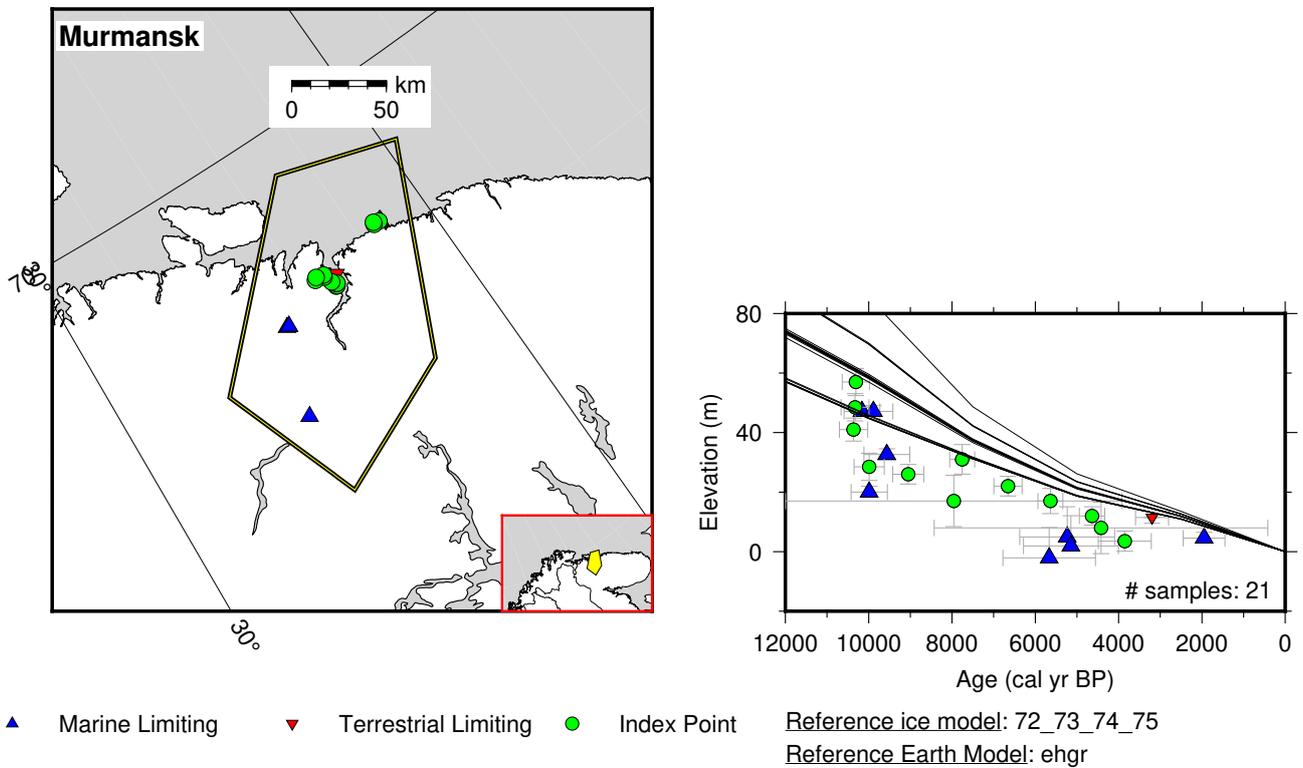
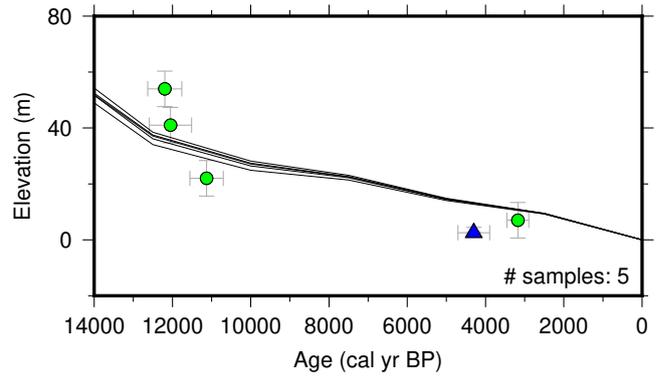
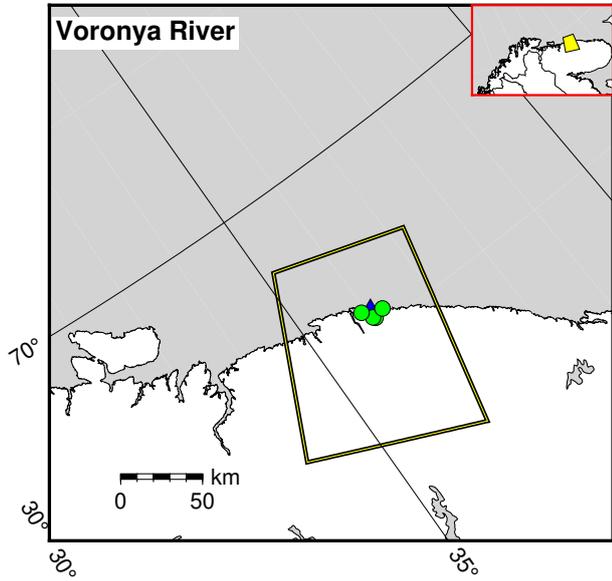


Figure 25: Paleo-sea level and comparison of six models for subregion Southern Barents Sea, location Murmansk.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75

Reference Earth Model: ehgr

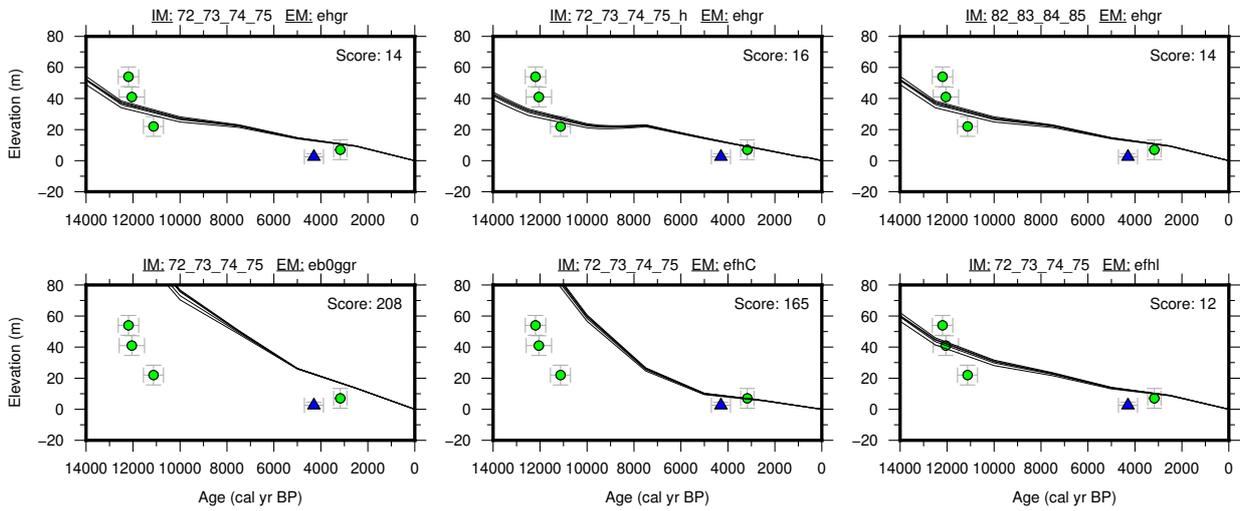


Figure 26: Paleo-sea level and comparison of six models for subregion Southern Barents Sea, location Voronya River.

8.4 Svalbard

References for the data used in each location.

Bockfjorden: Salvigsen and Høgvard (2006)

Broggerhalvoya: Forman et al. (1987, 2004)

Ytterdalen: Landvik et al. (1987)

Sorkapp Land: Salvigsen and Elgersma (1993)

Agardbukta: Salvigsen and Mangerud (1991)

Southern Edgeoya: Bondevik et al. (1995)

Diskobukta: Bondevik et al. (1995)

Humla: Bondevik et al. (1995)

Kapp Ziehen: Bondevik et al. (1995)

Svartknausflya: Salvigsen (1978)

Kongsoya: Salvigsen (1981)

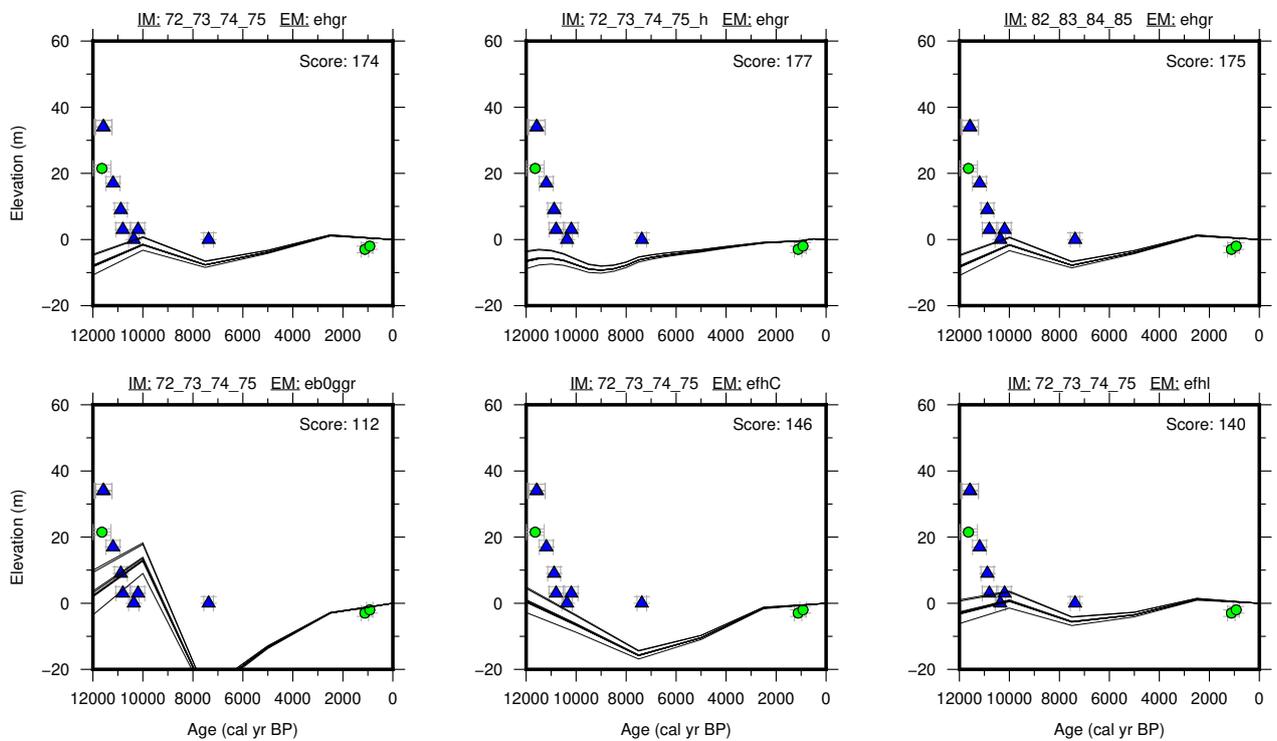
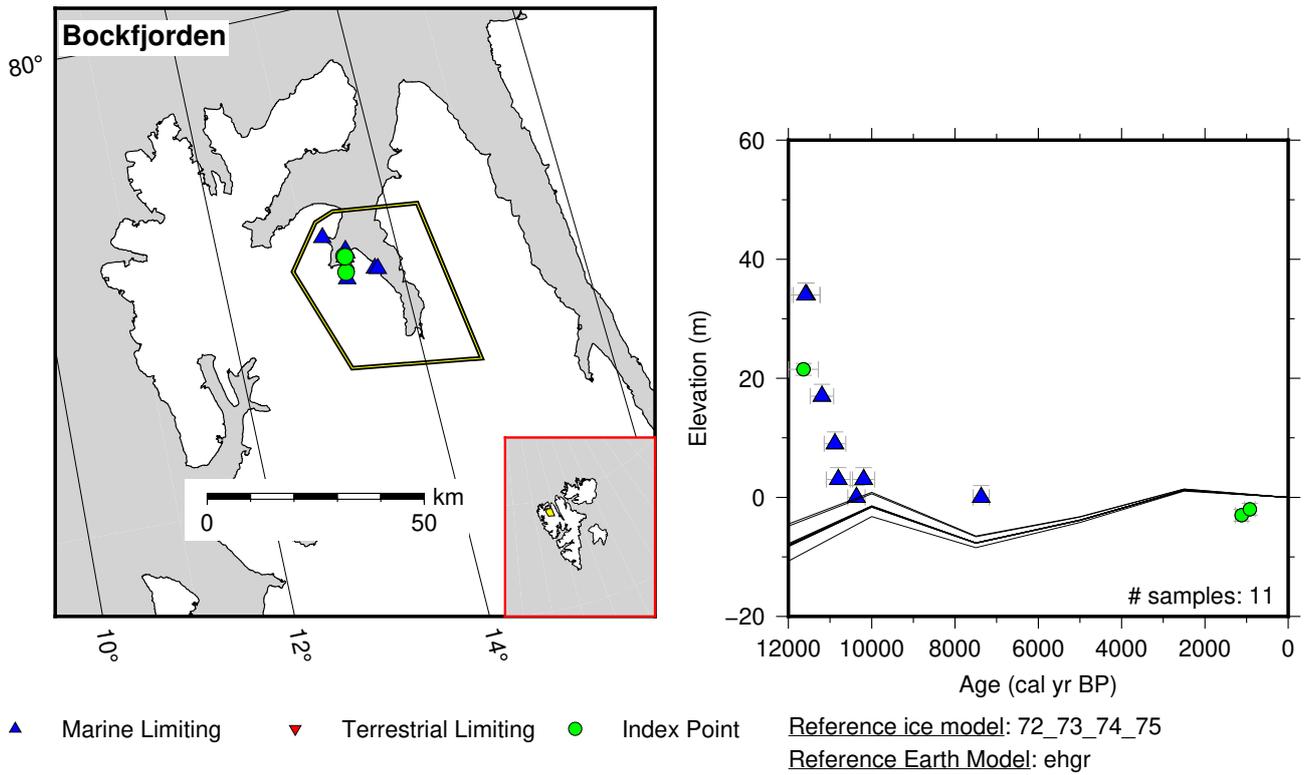
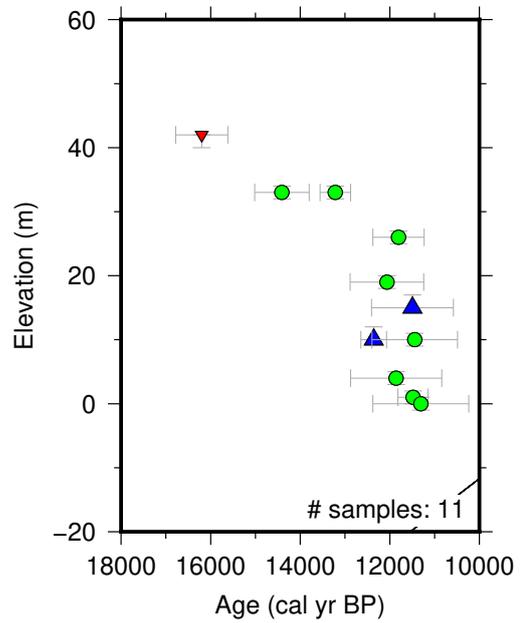
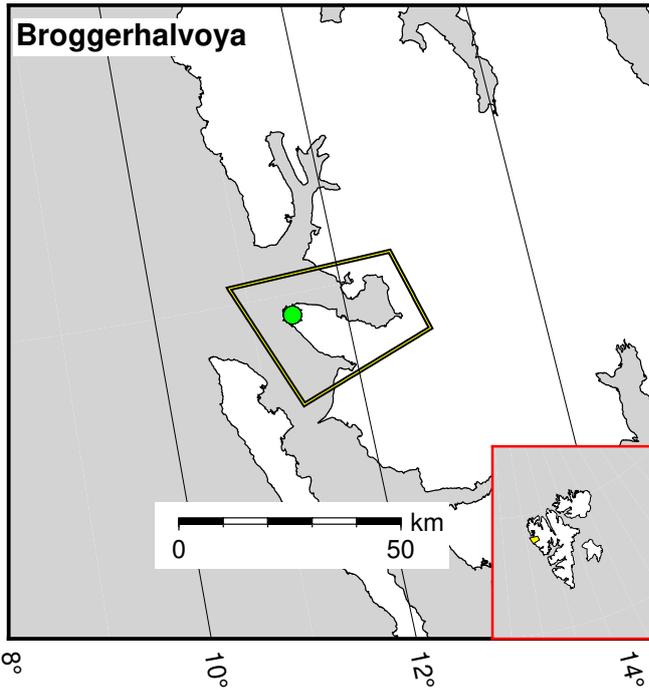


Figure 27: Paleo-sea level and comparison of six models for subregion Svalbard, location Bockfjorden.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

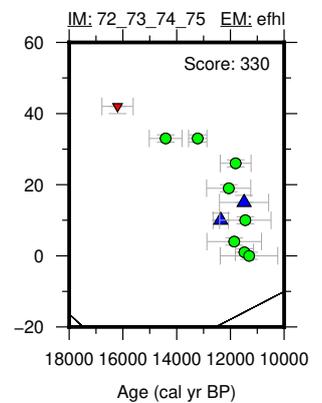
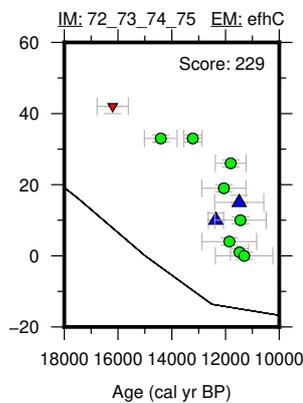
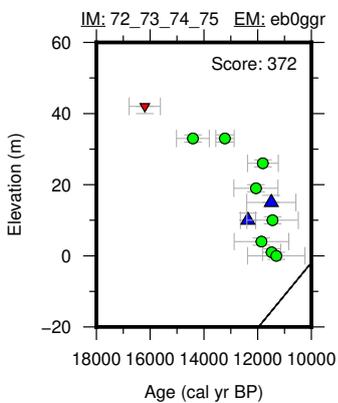
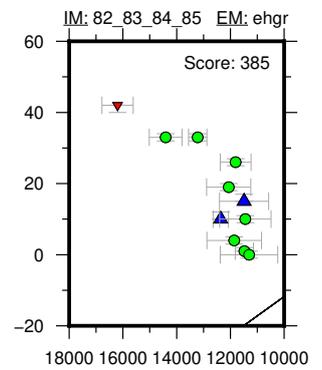
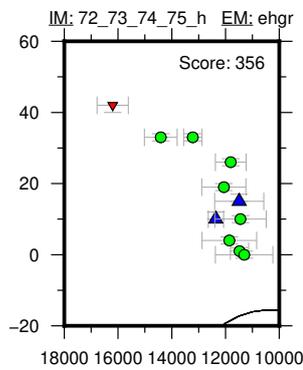
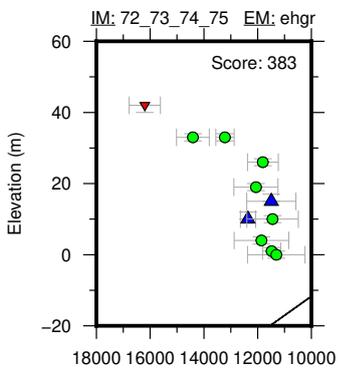
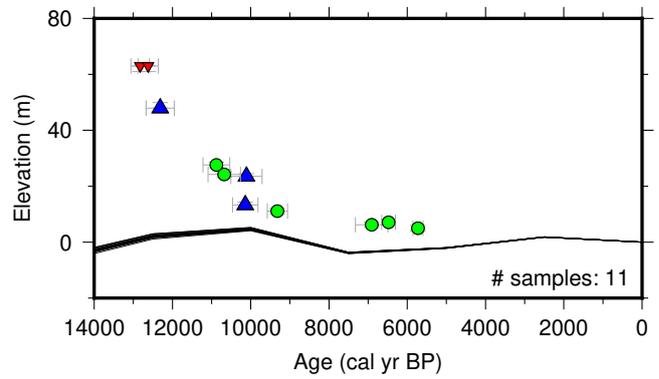
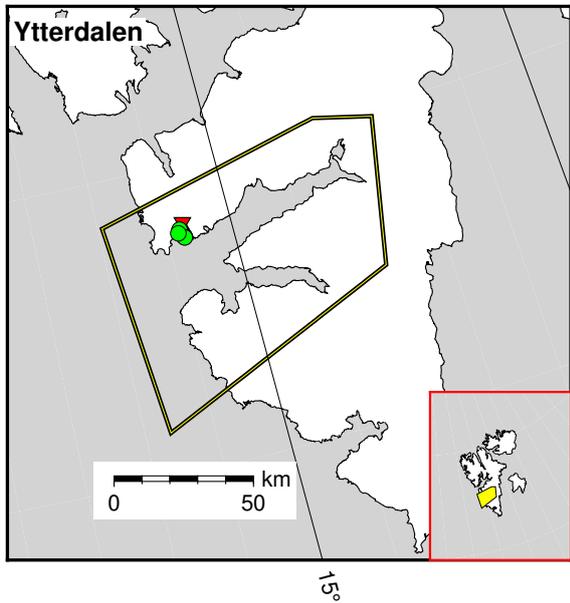


Figure 28: Paleo-sea level and comparison of six models for subregion Svalbard, location Broggerhalvoya.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

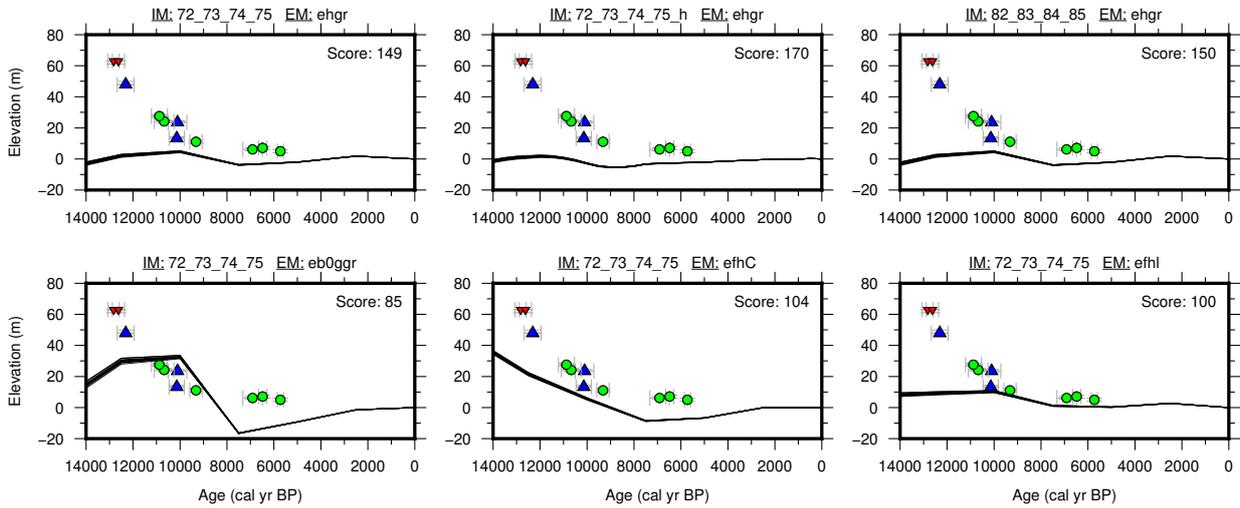
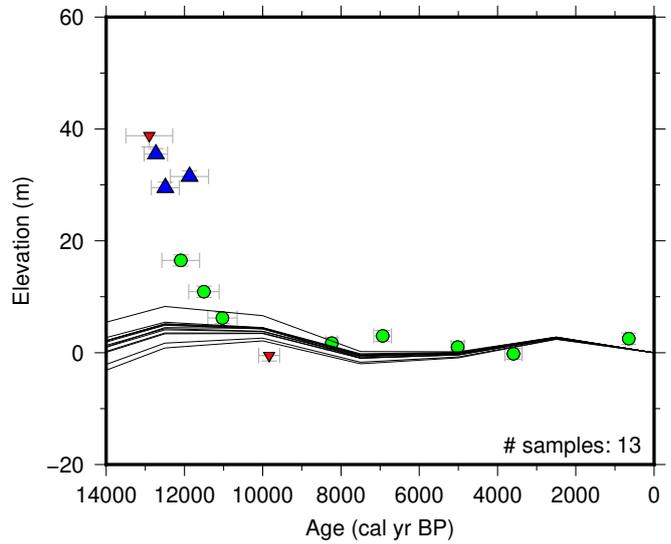
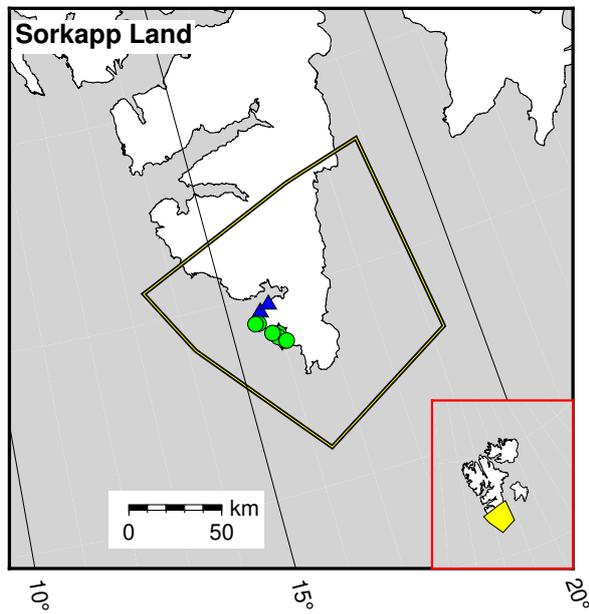


Figure 29: Paleo-sea level and comparison of six models for subregion Svalbard, location Ytterdalen.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

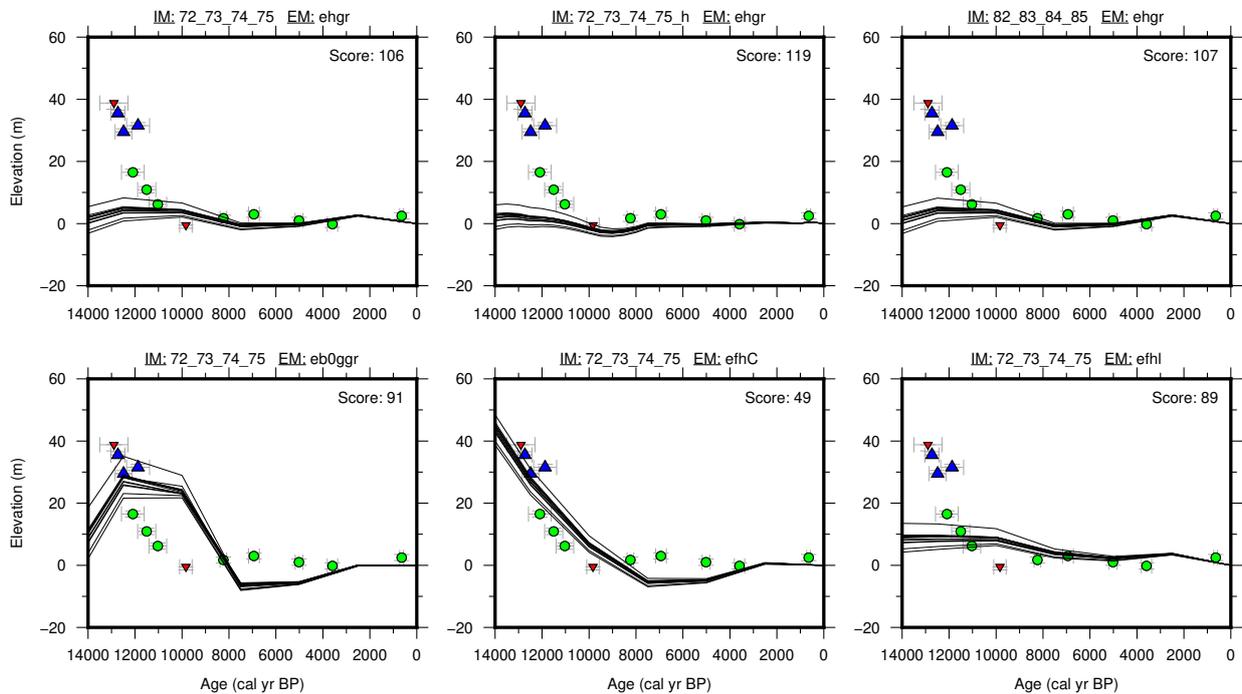
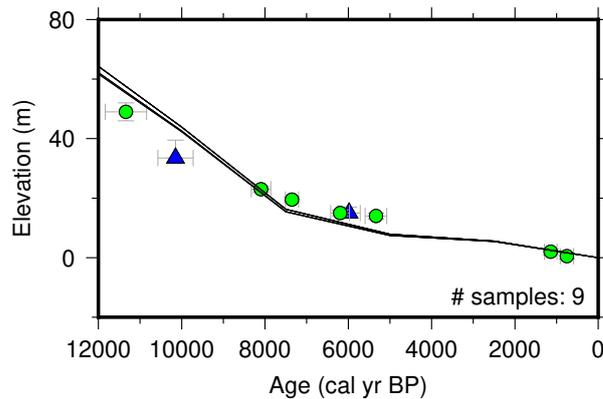
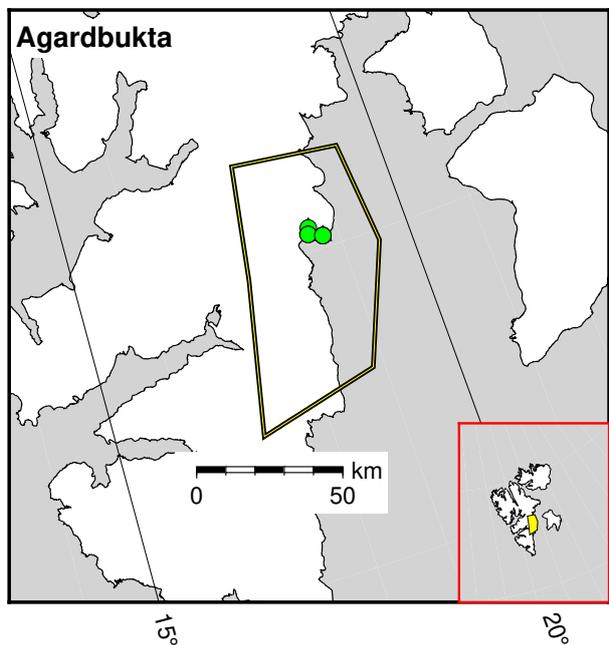


Figure 30: Paleo-sea level and comparison of six models for subregion Svalbard, location Sorkapp Land.



▲ Marine Limiting
 ▼ Terrestrial Limiting
 ● Index Point
 Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

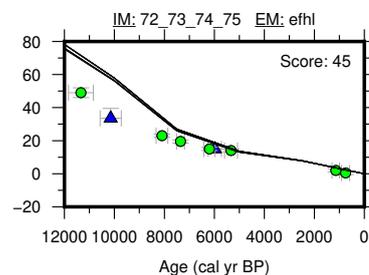
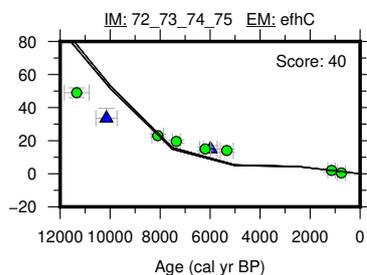
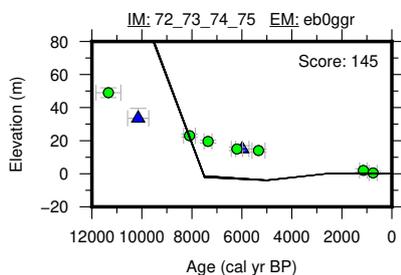
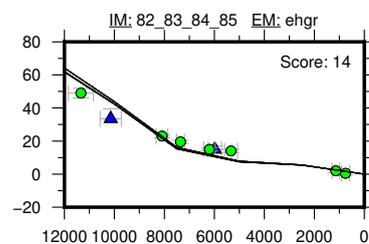
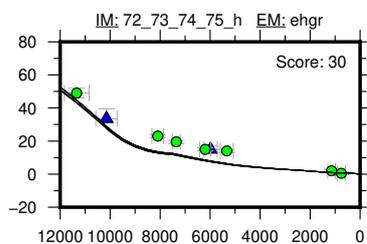
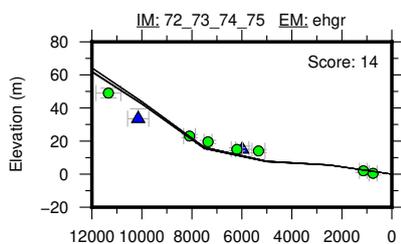
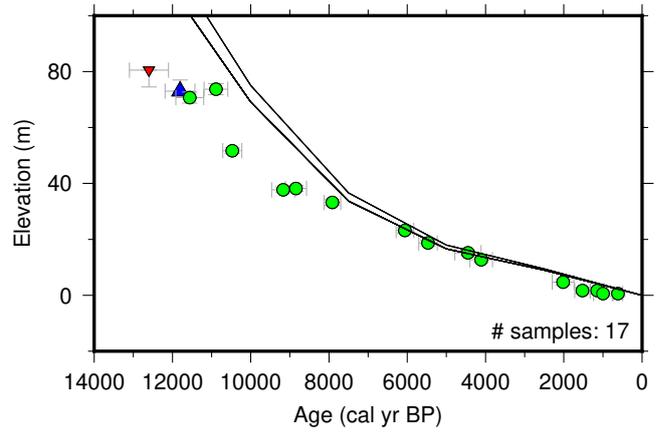
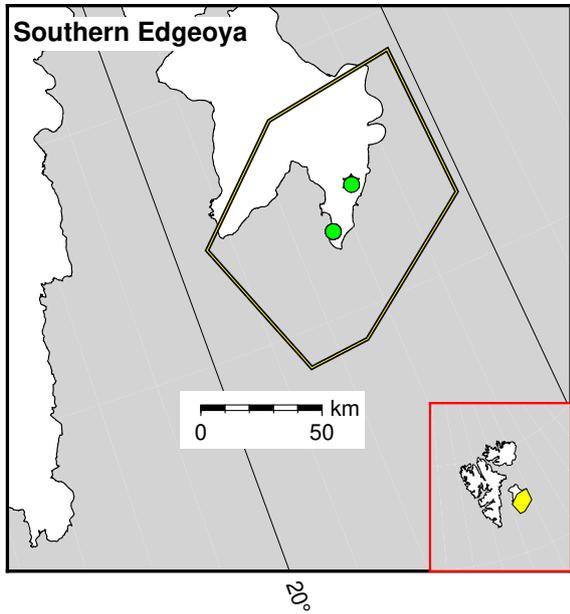


Figure 31: Paleo-sea level and comparison of six models for subregion Svalbard, location Agardbukta.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75

Reference Earth Model: ehgr

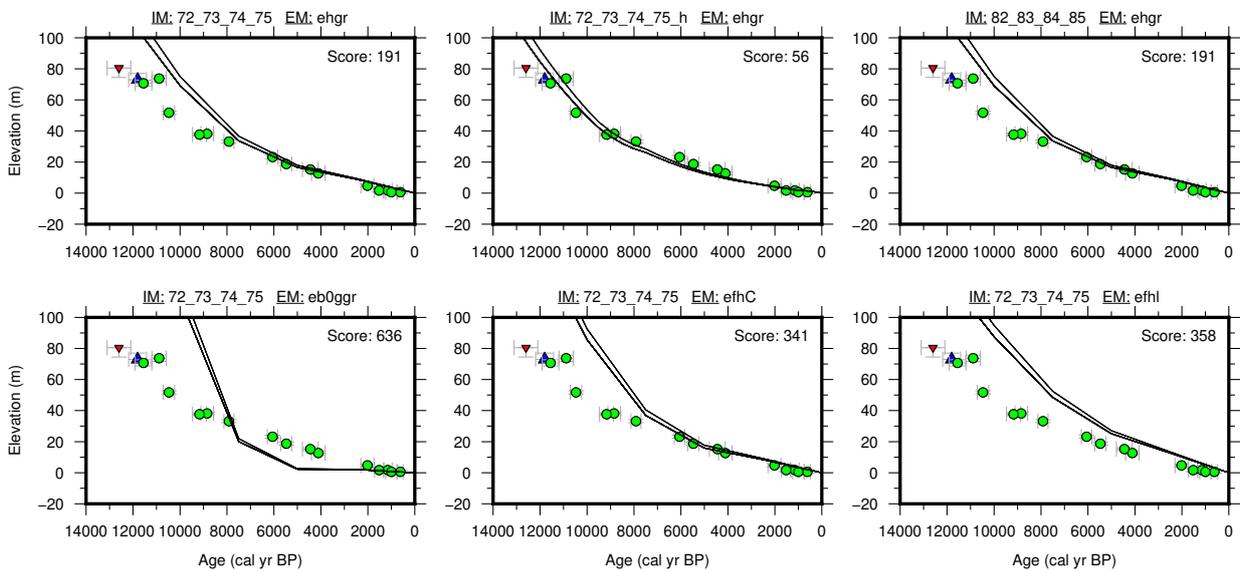
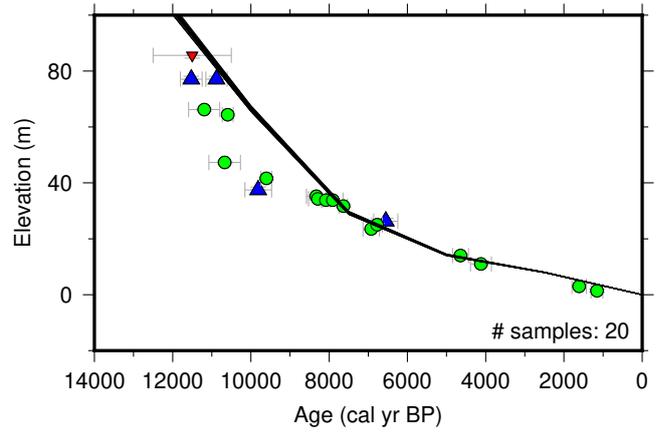
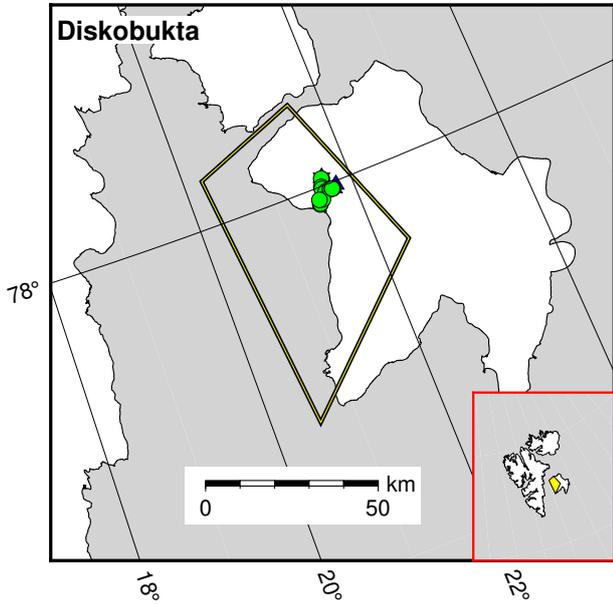


Figure 32: Paleo-sea level and comparison of six models for subregion Svalbard, location Southern Edgeoya.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

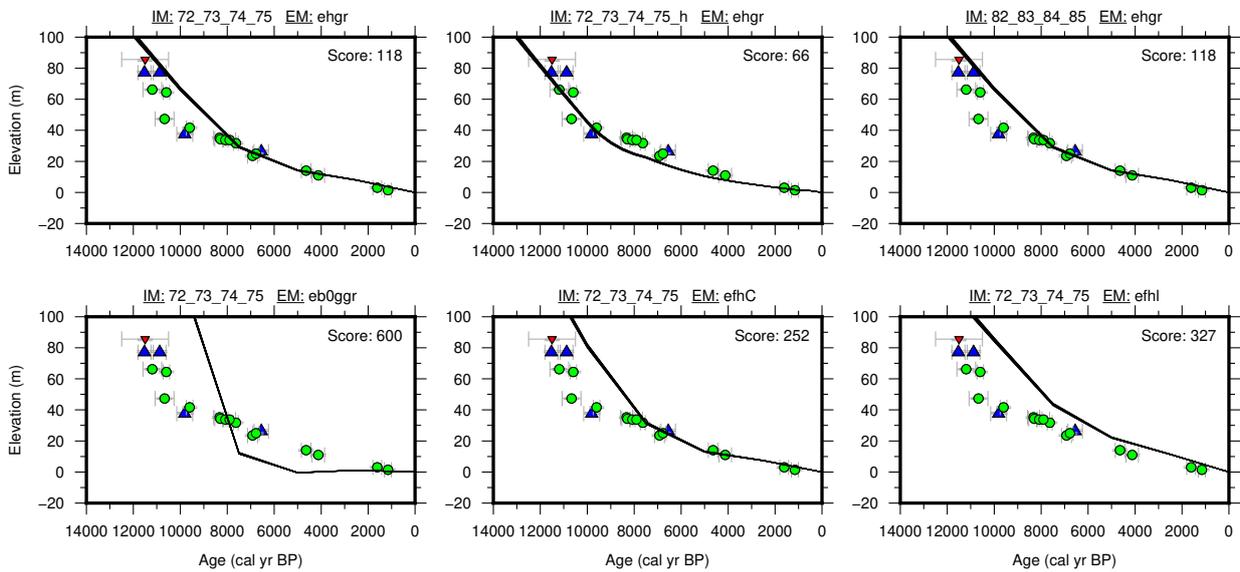


Figure 33: Paleo-sea level and comparison of six models for subregion Svalbard, location Diskobukta.

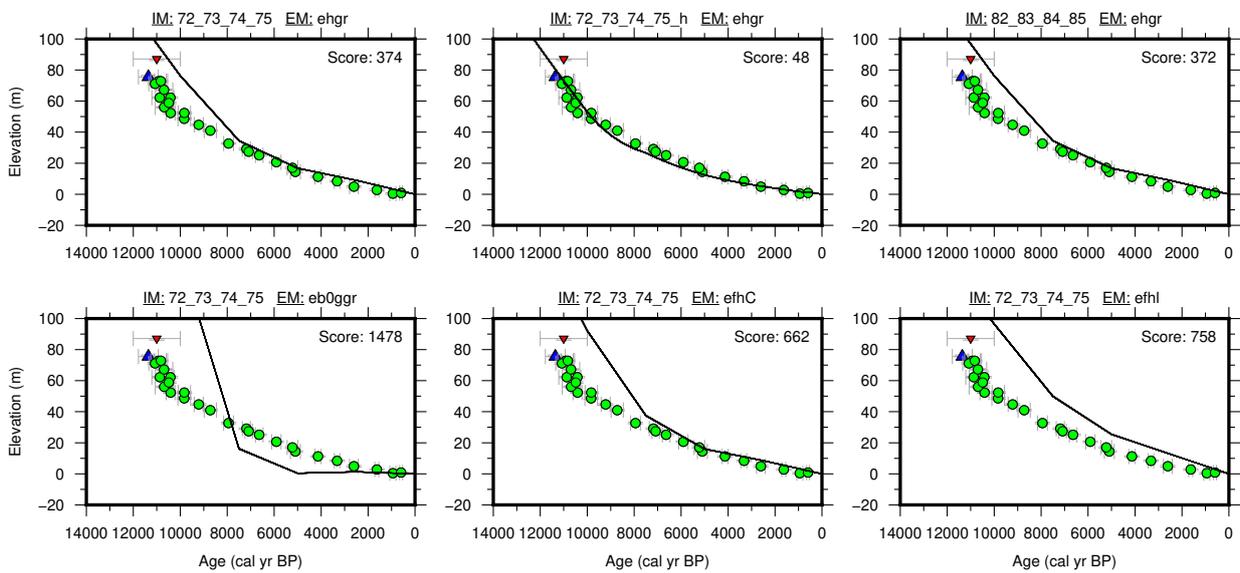
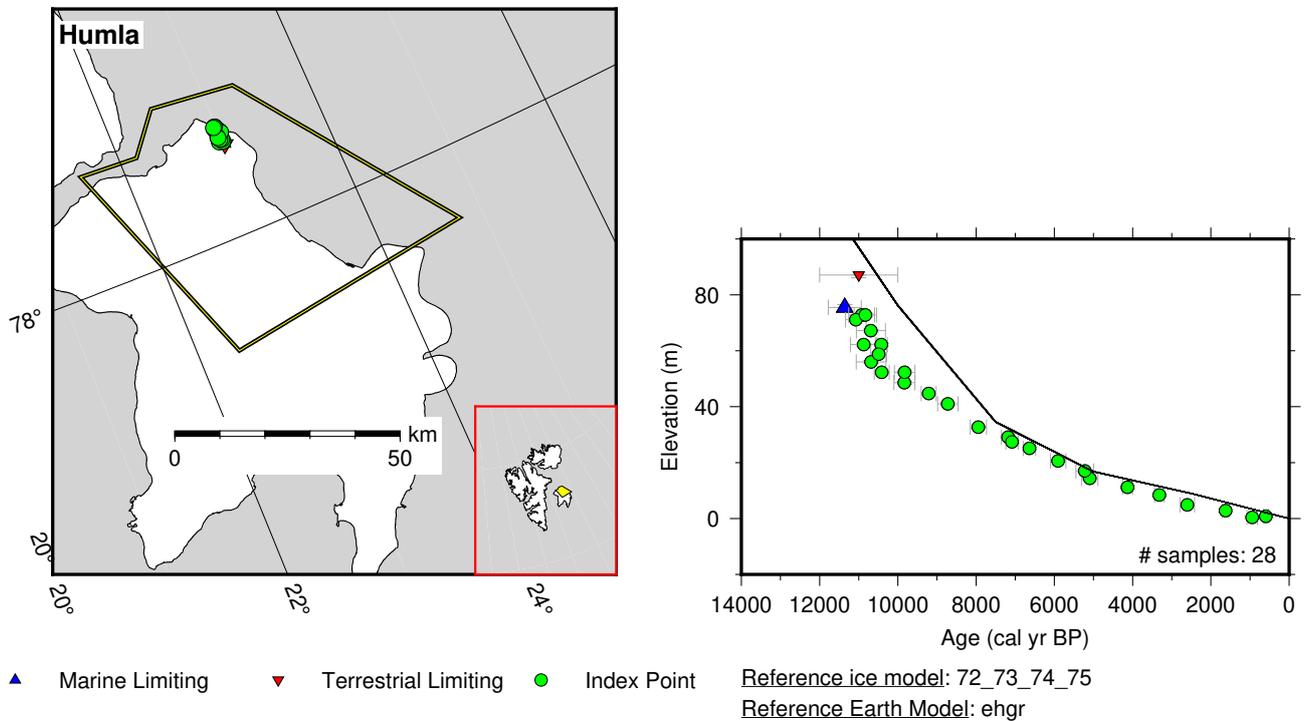


Figure 34: Paleo-sea level and comparison of six models for subregion Svalbard, location Humla.

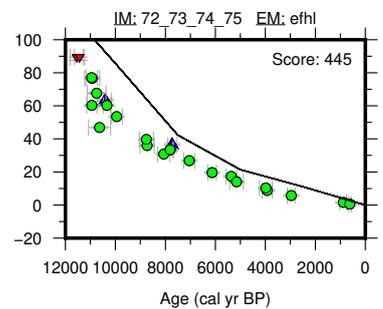
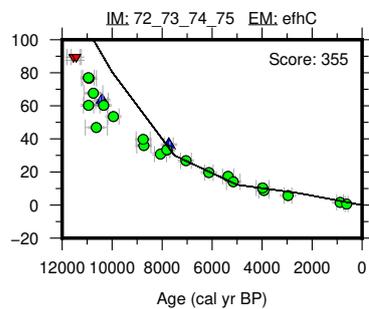
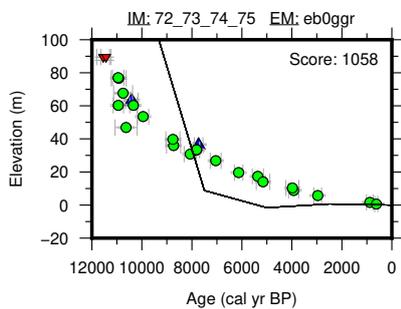
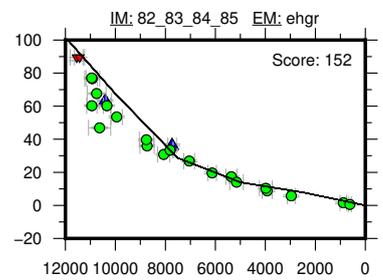
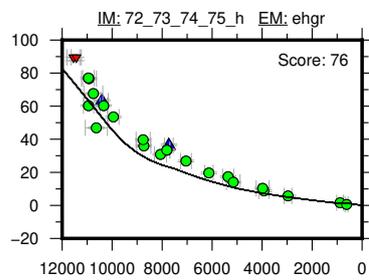
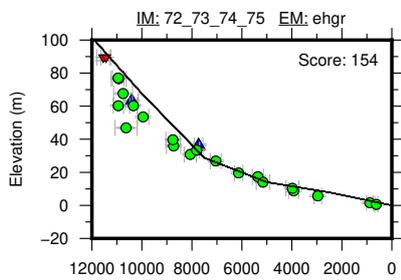
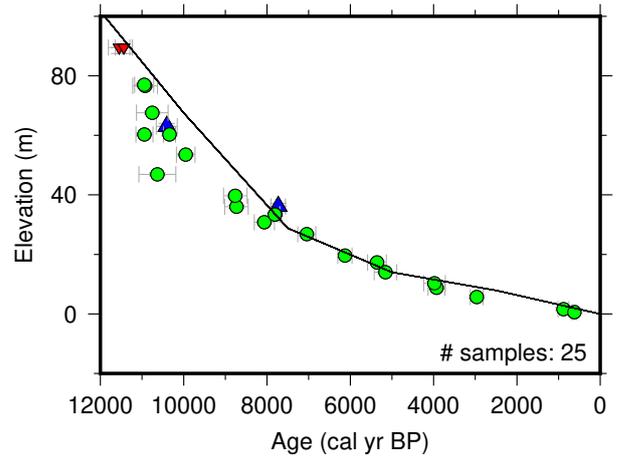
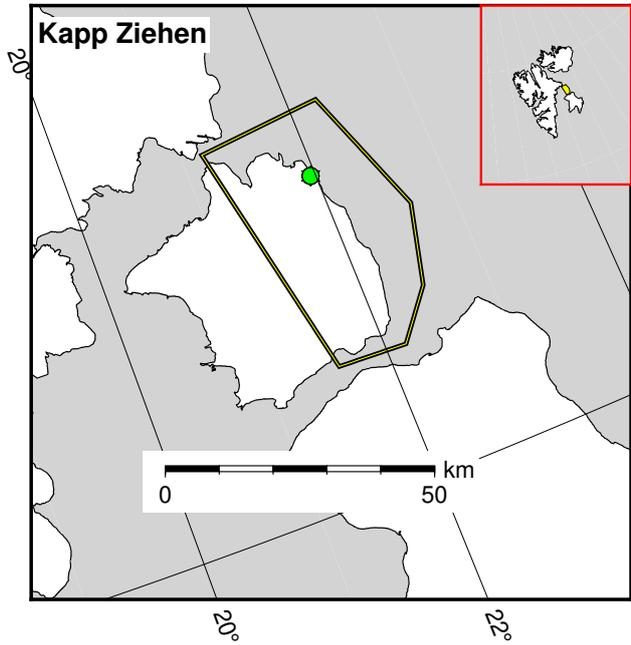


Figure 35: Paleo-sea level and comparison of six models for subregion Svalbard, location Kapp Ziehen.

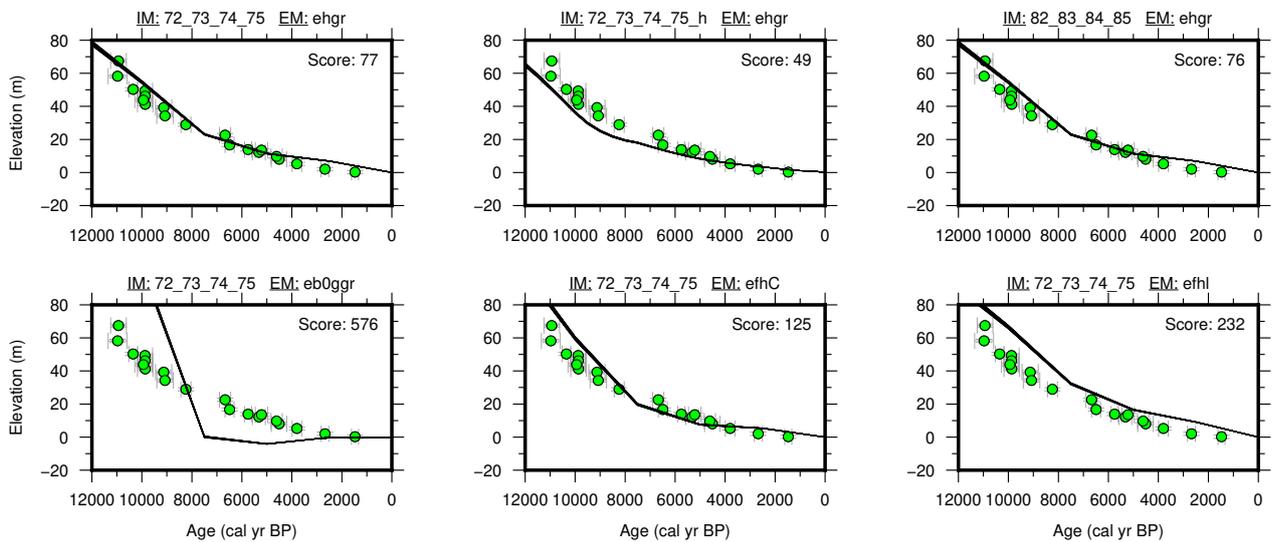
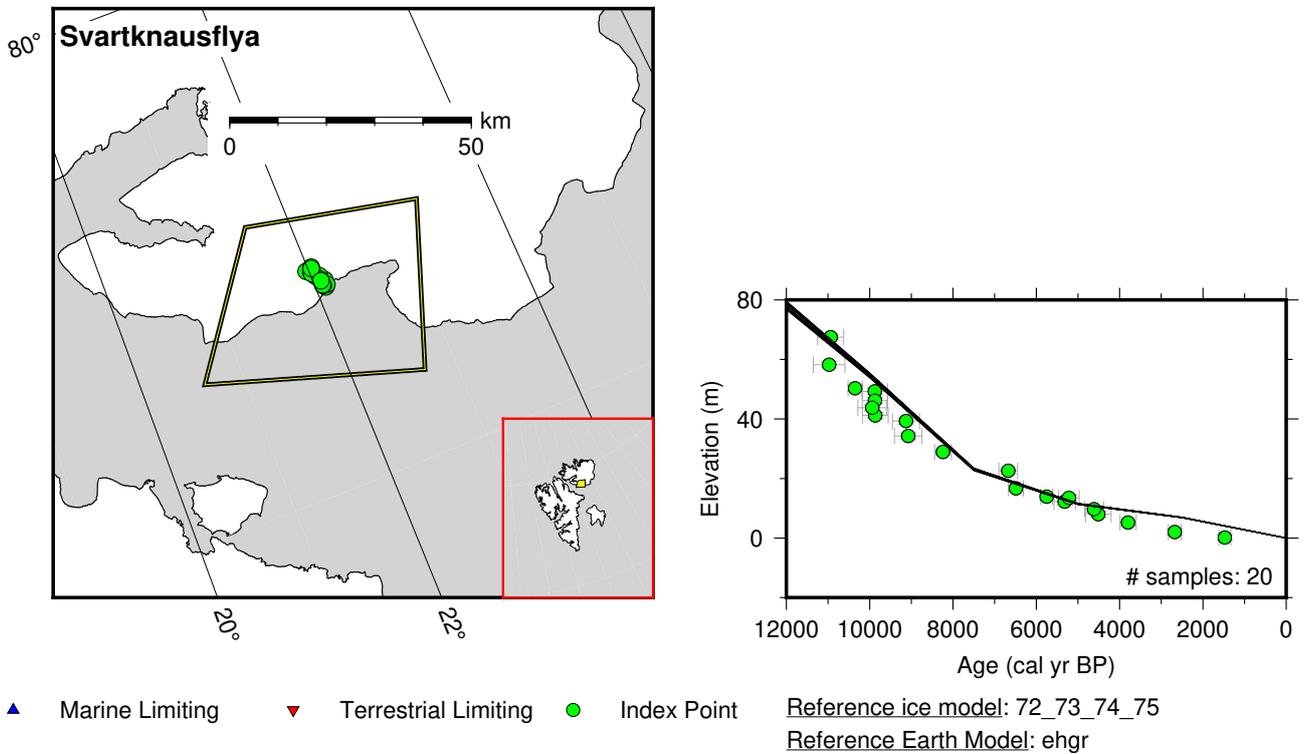


Figure 36: Paleo-sea level and comparison of six models for subregion Svalbard, location Svartknausflya.

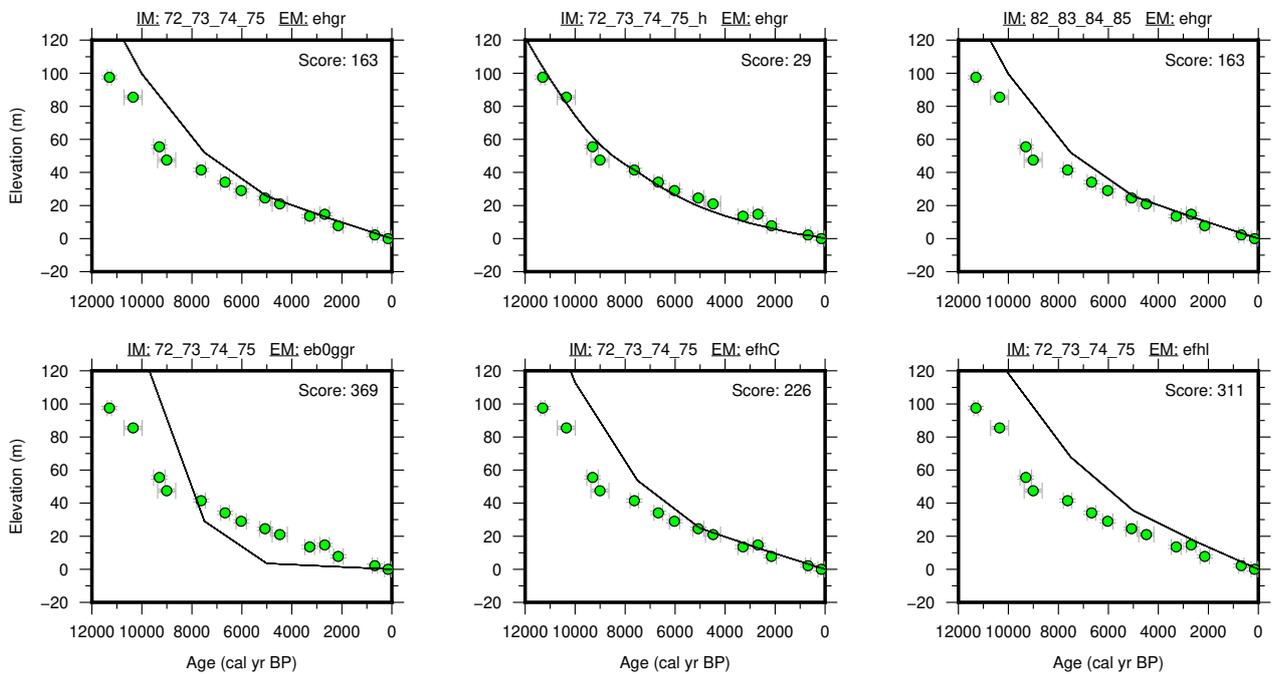
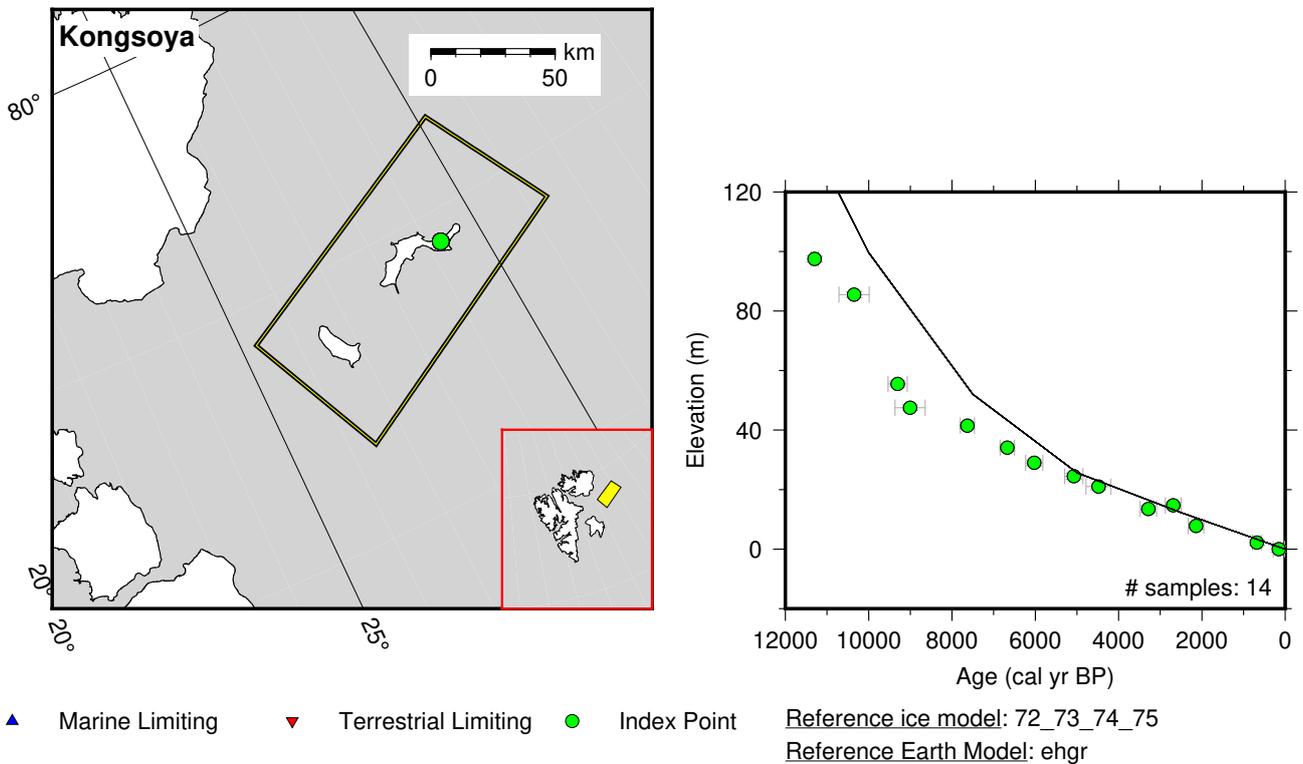


Figure 37: Paleo-sea level and comparison of six models for subregion Svalbard, location Kongsøya.

8.5 Western Siberia

References for the data used in each location.

Severnaya Zemlya: Bolshiyarov and Makeev (1995); Raab et al. (2003)

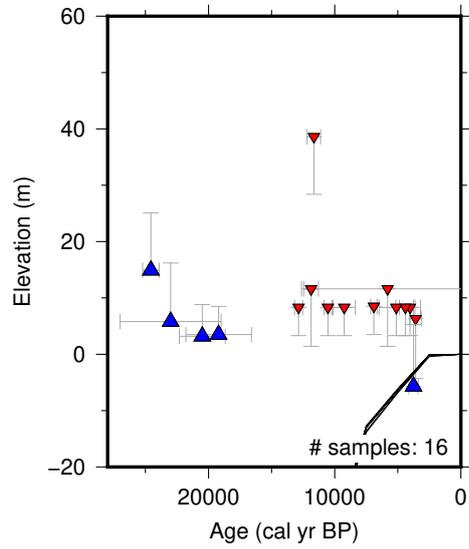
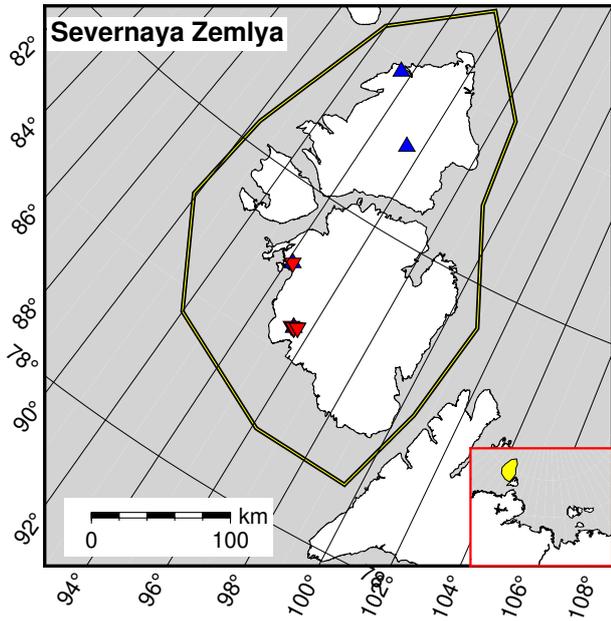
West Laptev Sea: Bauch et al. (1999); Bolshiyarov et al. (2013); Winterfeld et al. (2011)

Olenyok Gulf: Andreev et al. (2004); Bolshiyarov et al. (2013); Makarov (2009)

Lena Delta: Makarov (2009)

New Siberian Islands: Anisimov et al. (2009a); Bolshiyarov et al. (2013); Polyakova et al. (2005)

Zhokhov Island: Anisimov et al. (2009b)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

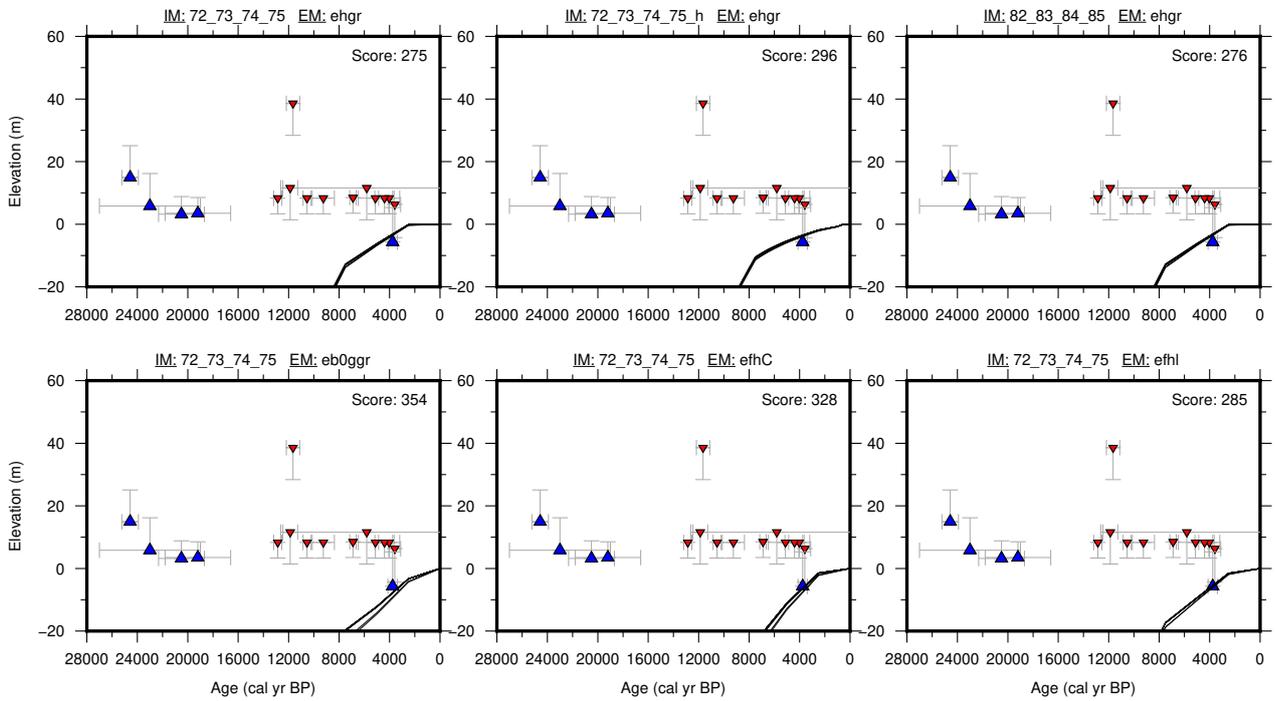


Figure 38: Paleo-sea level and comparison of six models for subregion Western Siberia, location Severnaya Zemlya.

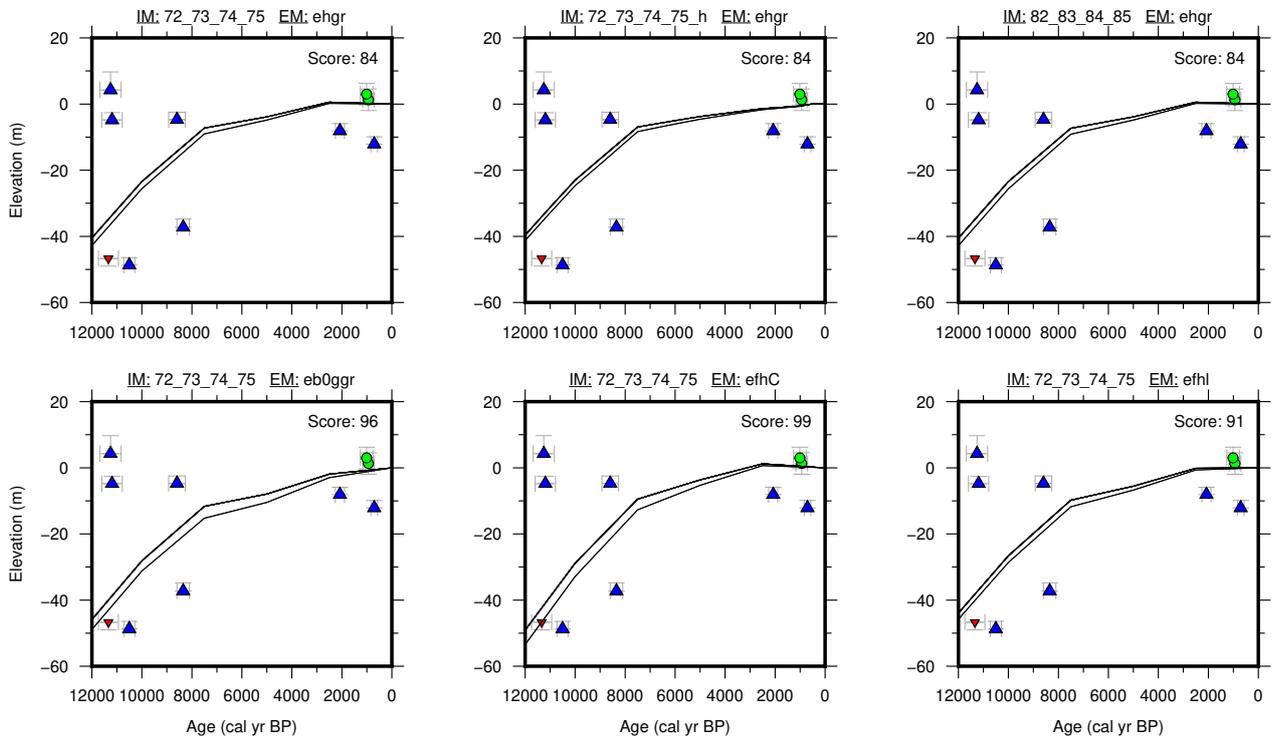
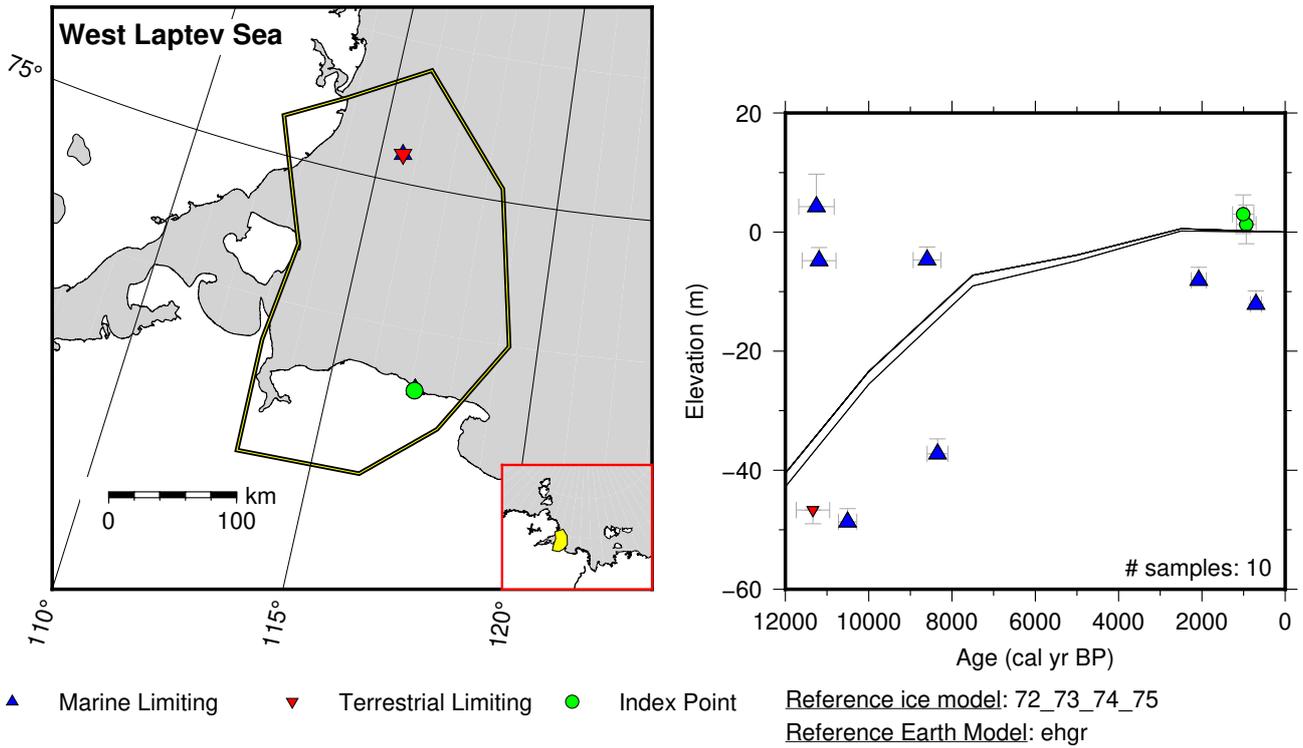
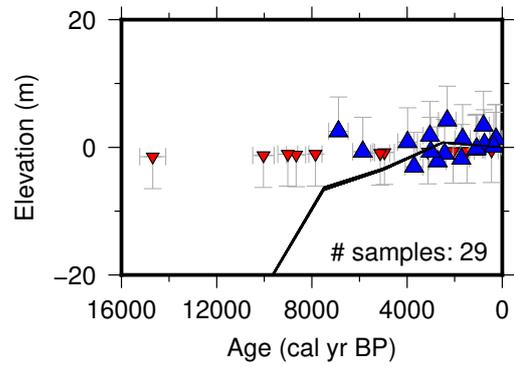
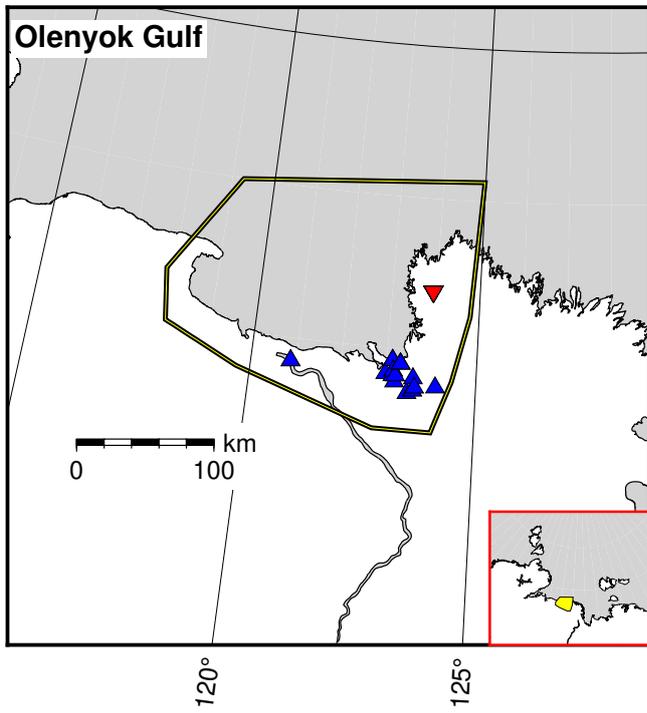


Figure 39: Paleo-sea level and comparison of six models for subregion Western Siberia, location West Laptev Sea.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

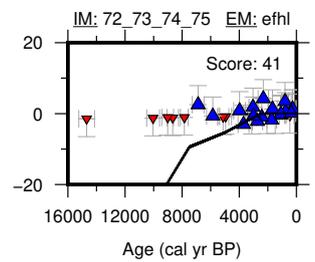
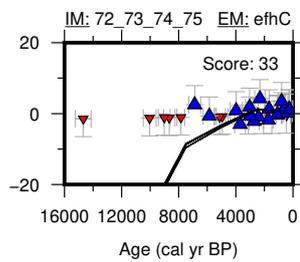
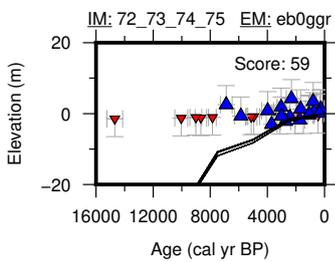
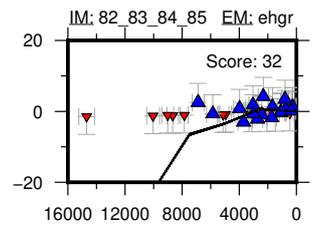
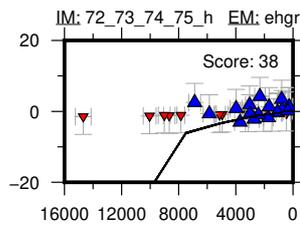
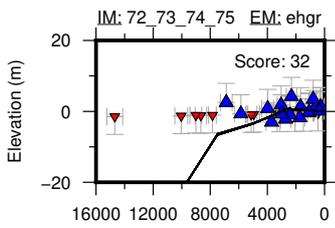
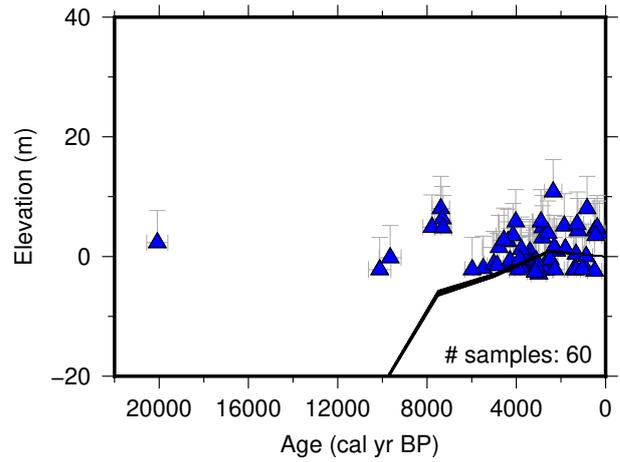
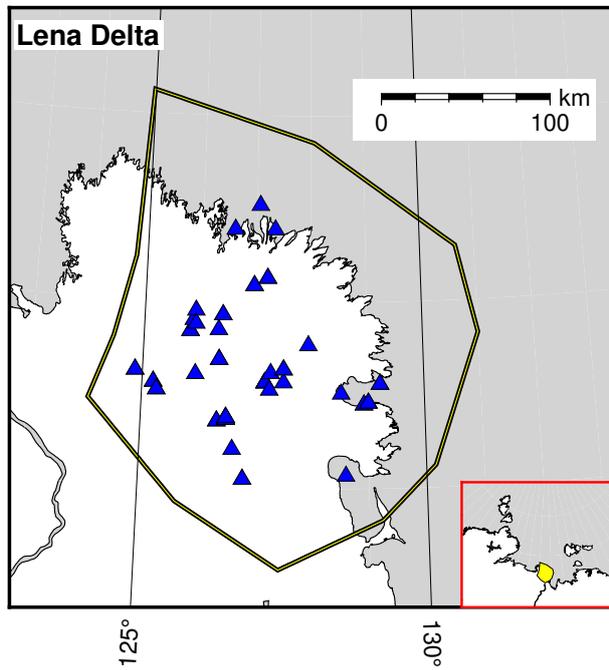


Figure 40: Paleo-sea level and comparison of six models for subregion Western Siberia, location Olenyok Gulf.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

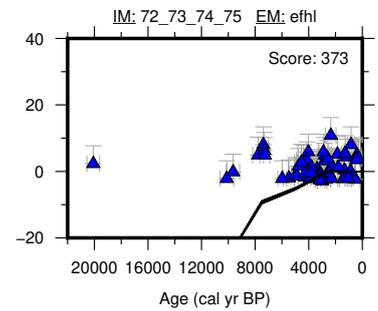
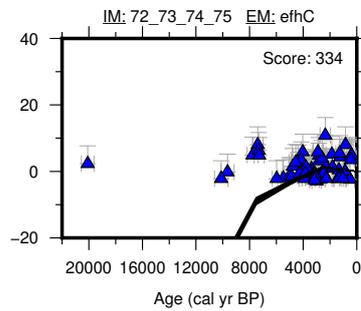
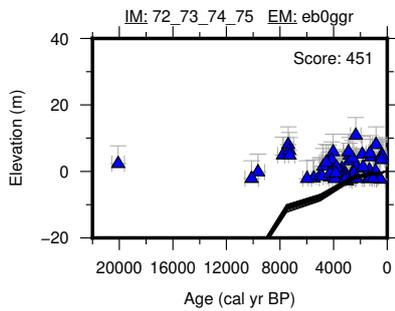
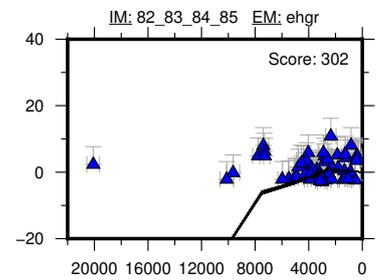
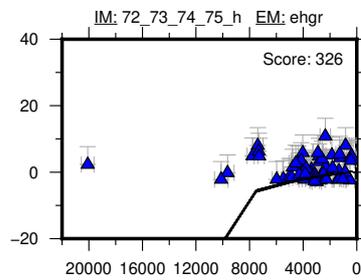
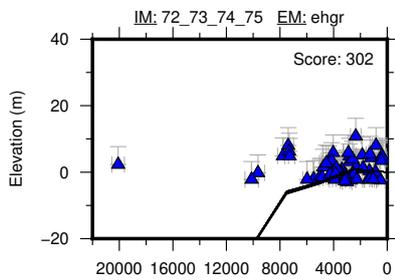


Figure 41: Paleo-sea level and comparison of six models for subregion Western Siberia, location Lena Delta.

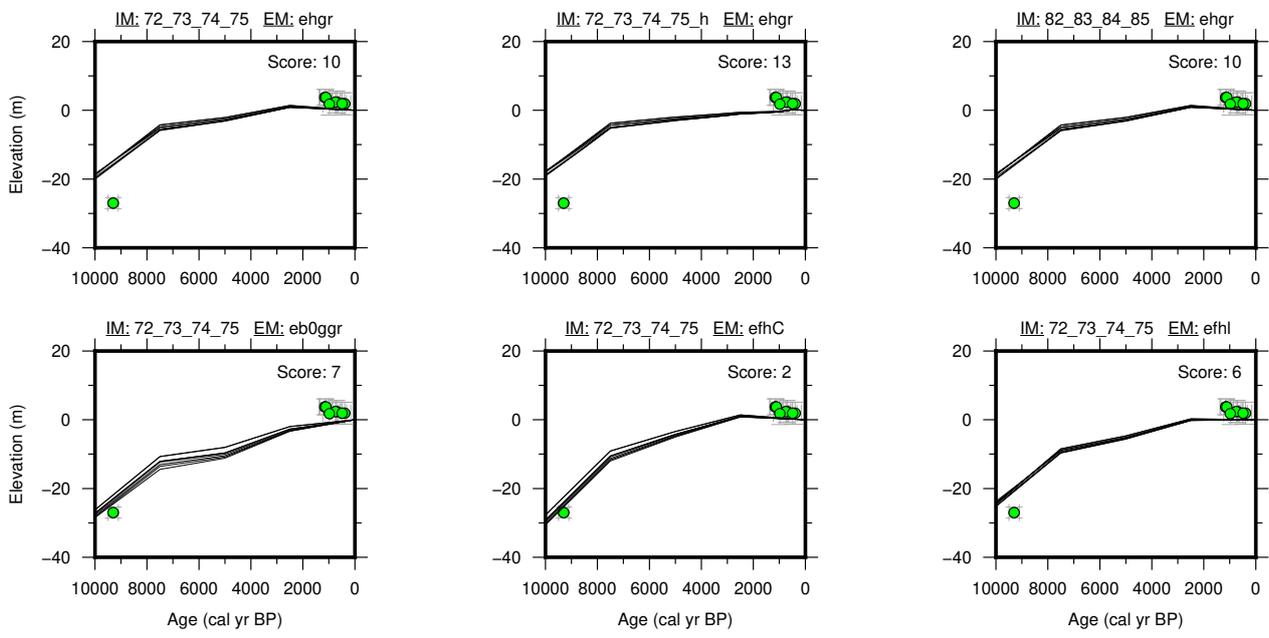
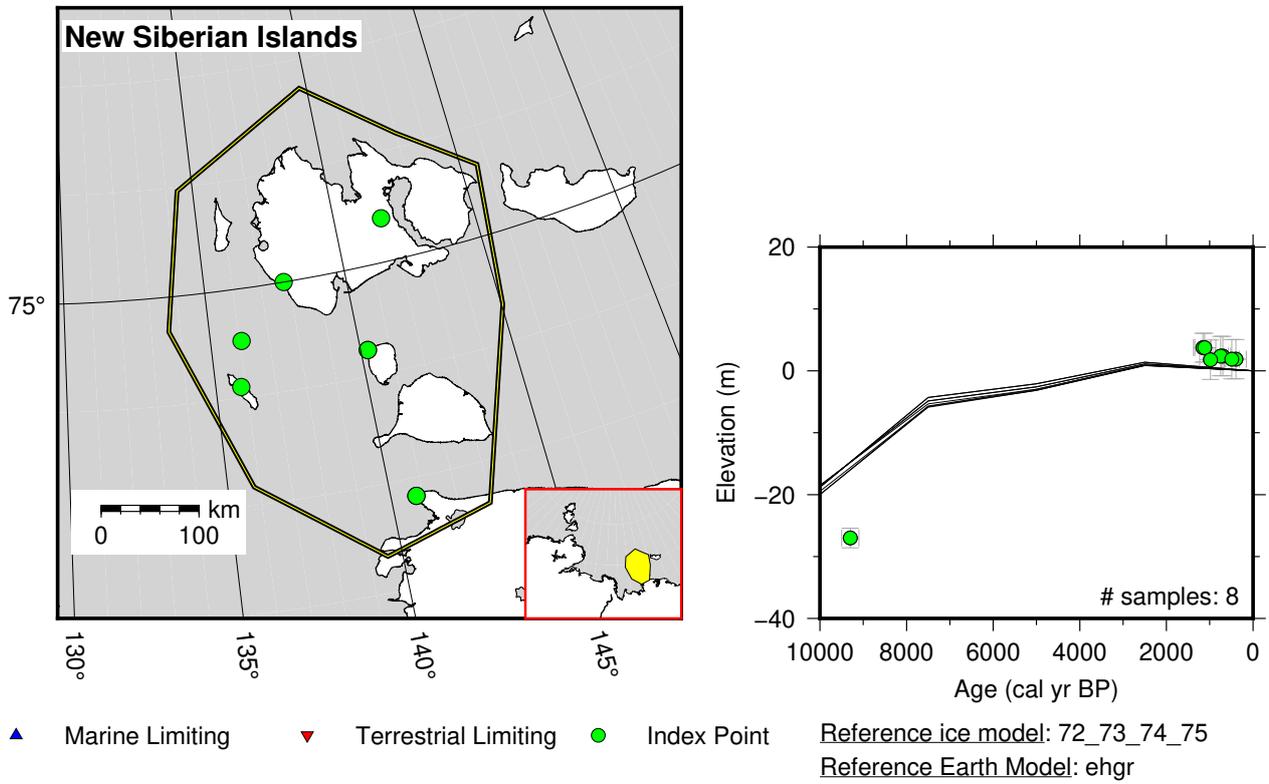
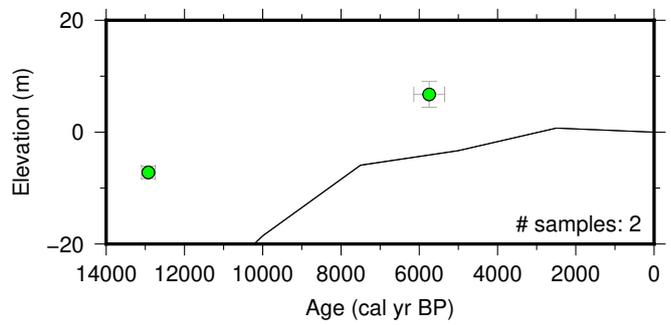
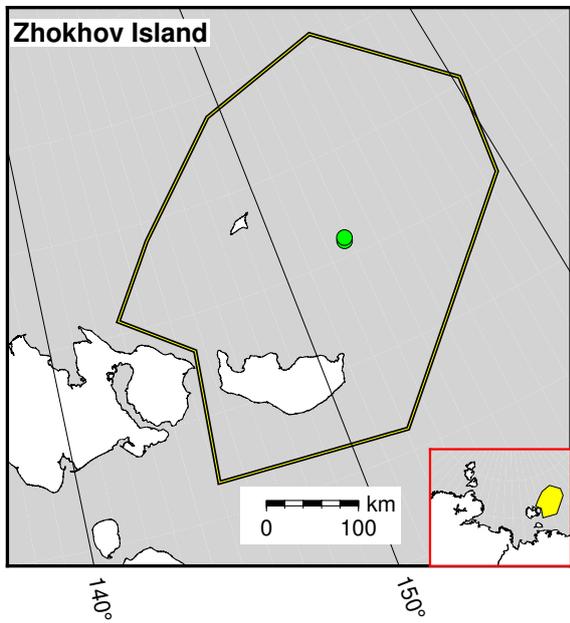


Figure 42: Paleo-sea level and comparison of six models for subregion Western Siberia, location New Siberian Islands.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

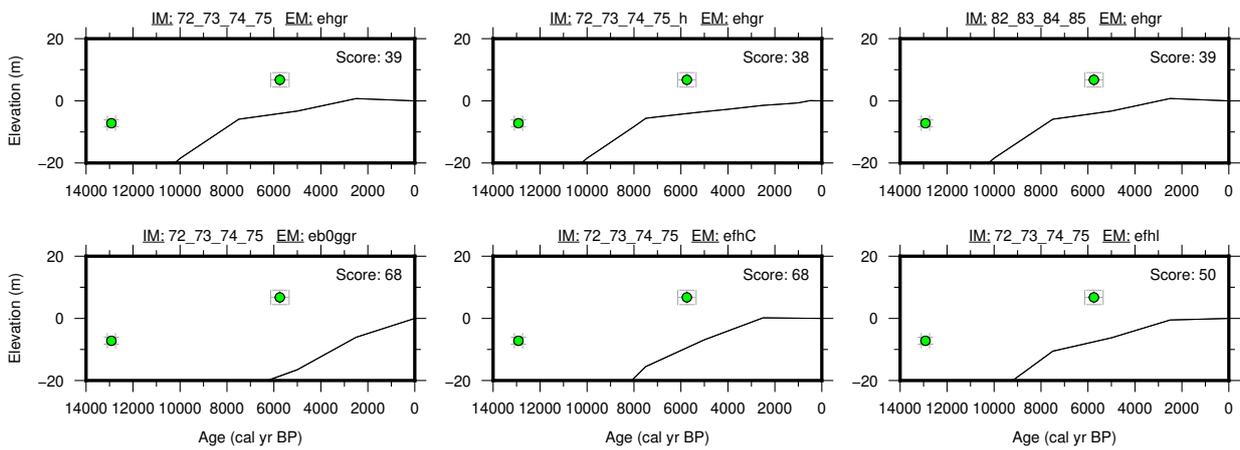


Figure 43: Paleo-sea level and comparison of six models for subregion Western Siberia, location Zhokhov Island.

8.6 White Sea

References for the data used in each location.

Kandalaksha: Arslanov et al. (1974); Kolka and Korsakova (2010); Koshechkin (1979)

Lesozavodskiy: Arslanov et al. (1974); Kolka et al. (2005); Koshechkin et al. (1973)

Rugozerskiy Peninsula: Baranskaya (2015); Repkina and Romanenko (2016); Romanenko and Shilova (2012); Zaretskaya et al. (2013)

Chupa Bay: Baranskaya and Romanenko (2015); Kolka et al. (2015)

Umba: Arslanov et al. (1974); Kolka et al. (2013a); Koshechkin (1979)

Engozero: Kolka et al. (2013b)

Belomorsk: Devyatova and Liyva (1971); Koshechkin (1979); Lunkka et al. (2012)

Eastern Kola Peninsula: Arslanov et al. (1974); Koshechkin (1979)

Onega Peninsula: Boyarskaya et al. (1986); Koshechkin et al. (1973); Repkina et al. (in review)

Dvina Gulf: Koshechkin (1979); Zaretskaya et al. (2011)

Kholmogorsky: Larsen et al. (2006)

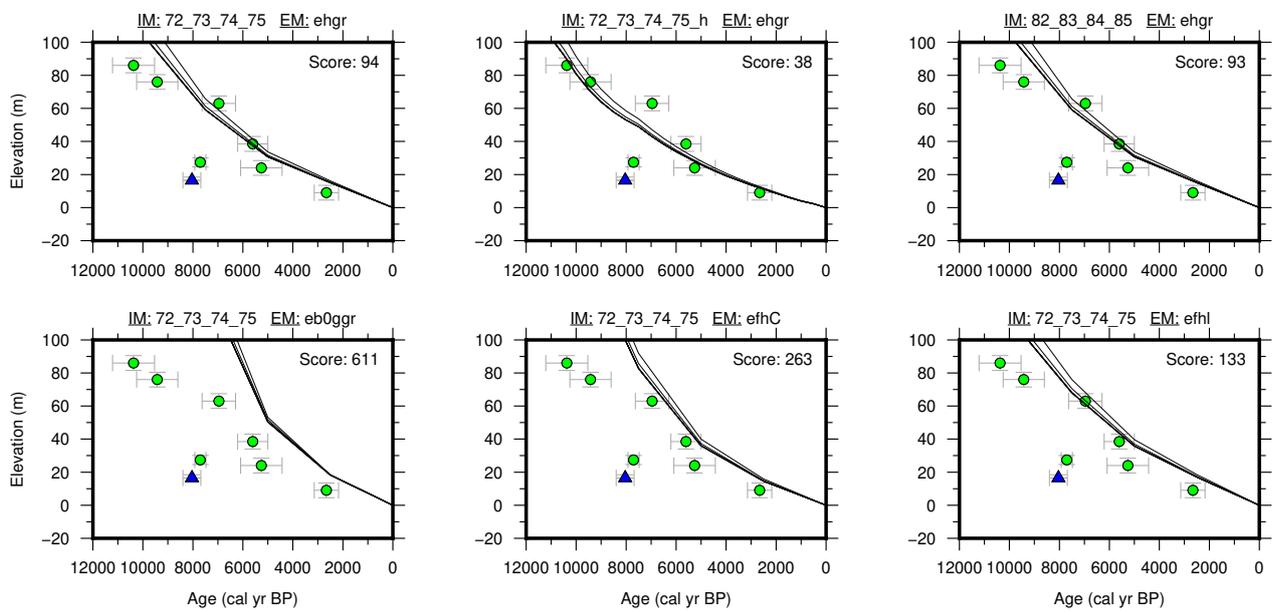
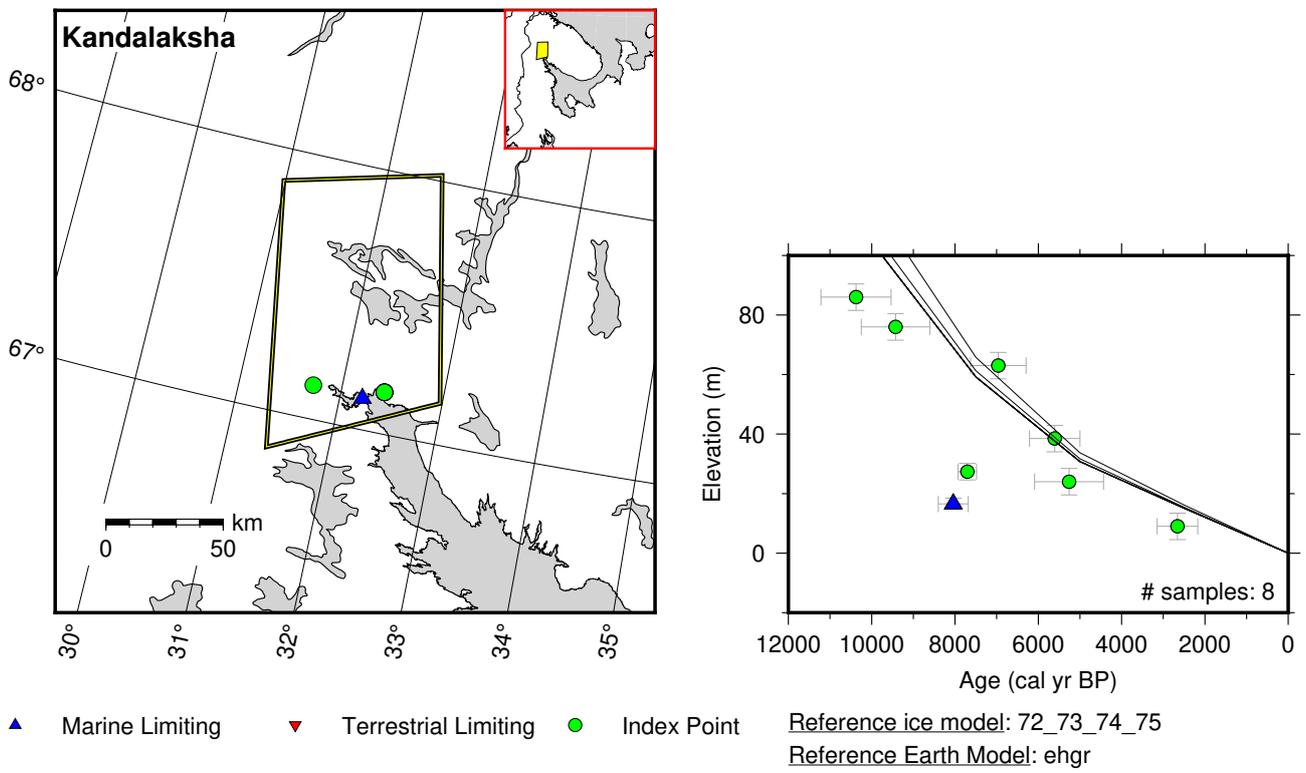


Figure 44: Paleo-sea level and comparison of six models for subregion White Sea, location Kandalaksha.

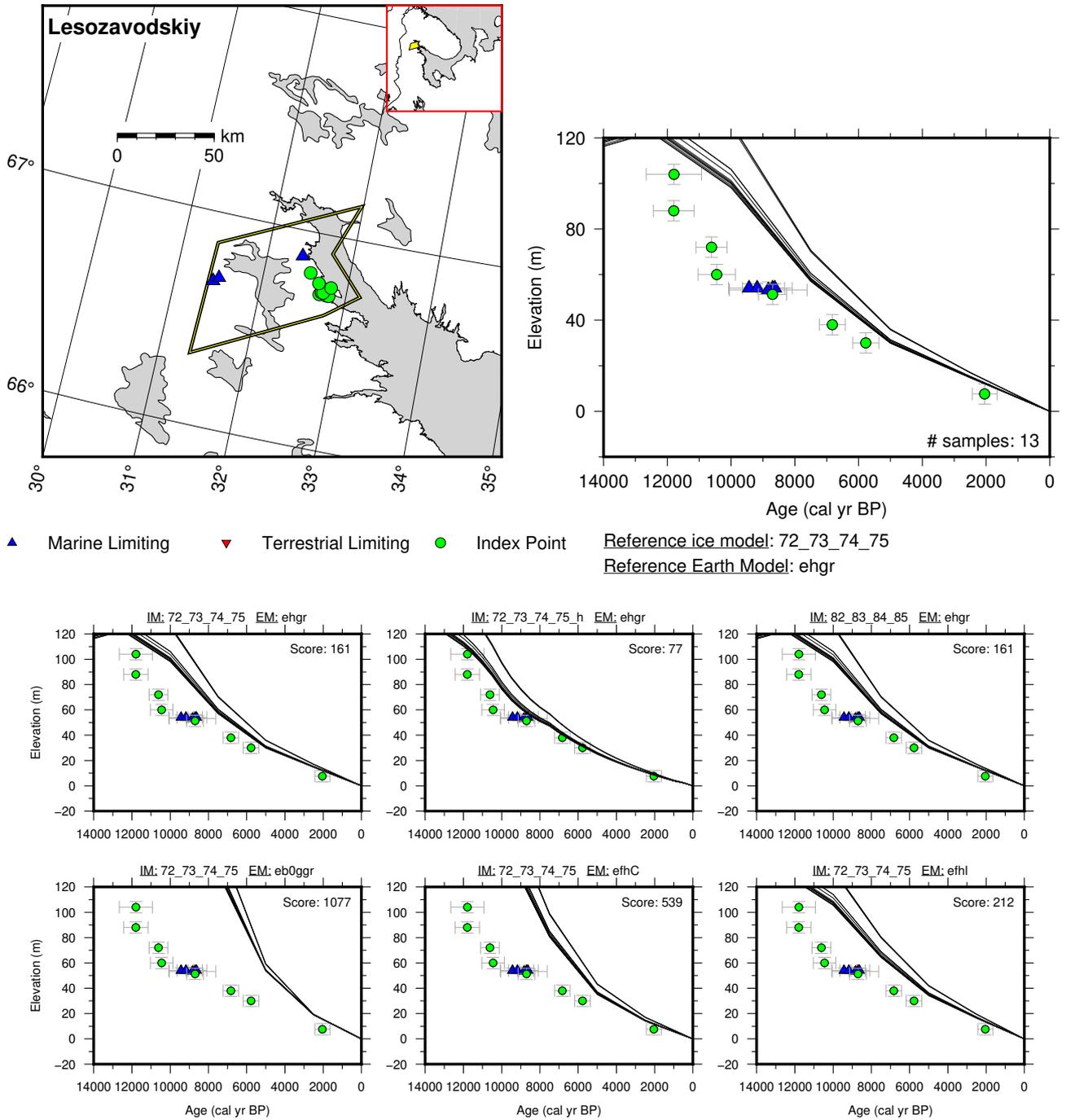


Figure 45: Paleo-sea level and comparison of six models for subregion White Sea, location Lesozavodskiy.

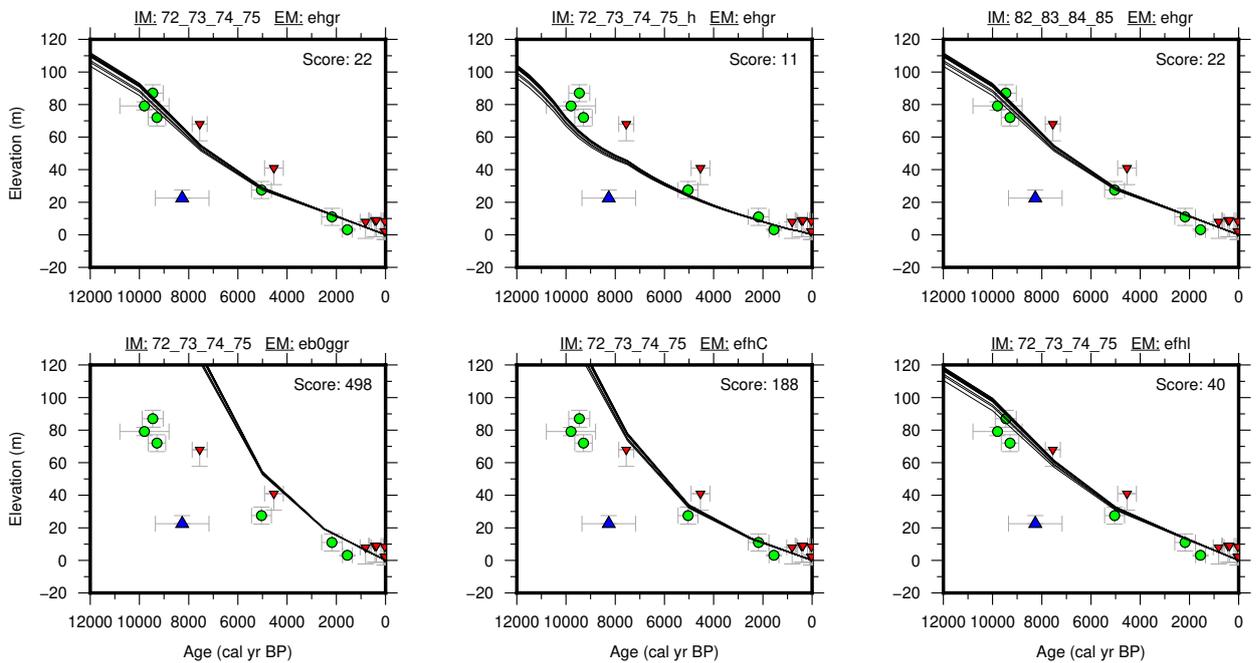
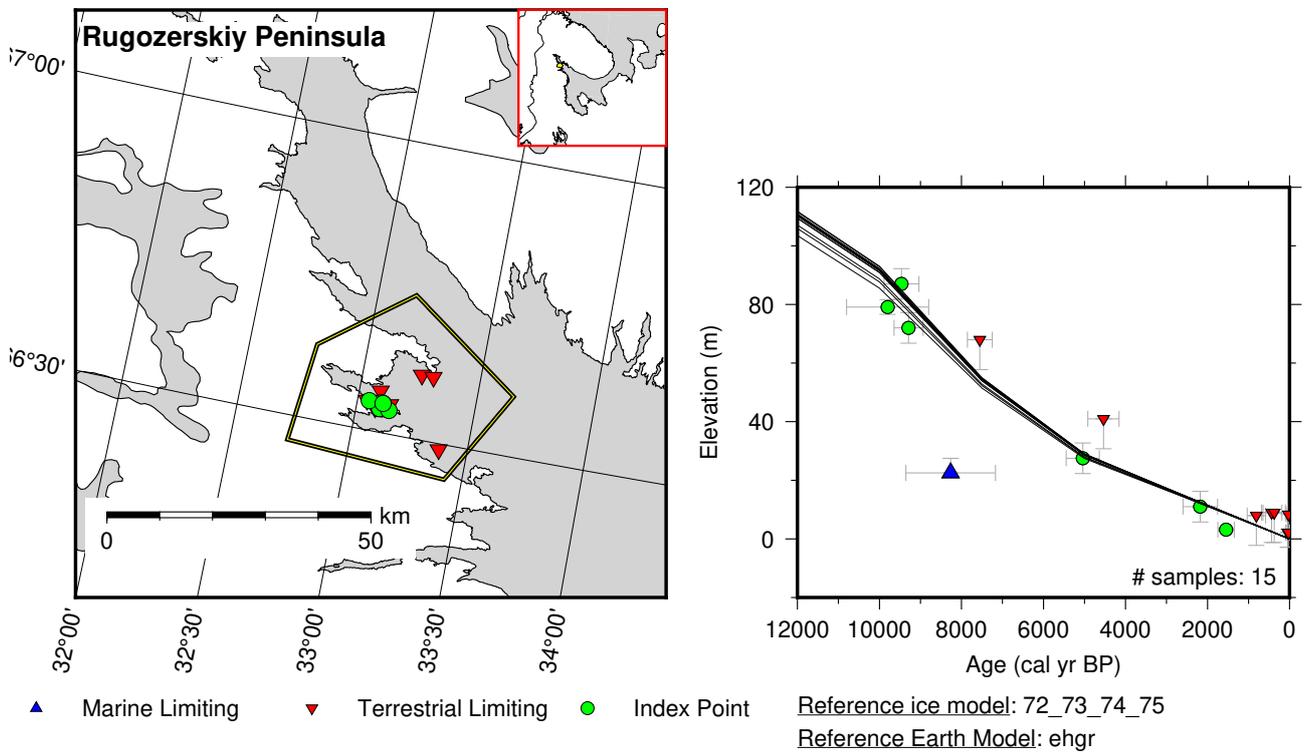


Figure 46: Paleo-sea level and comparison of six models for subregion White Sea, location Rugozerskiy Peninsula.

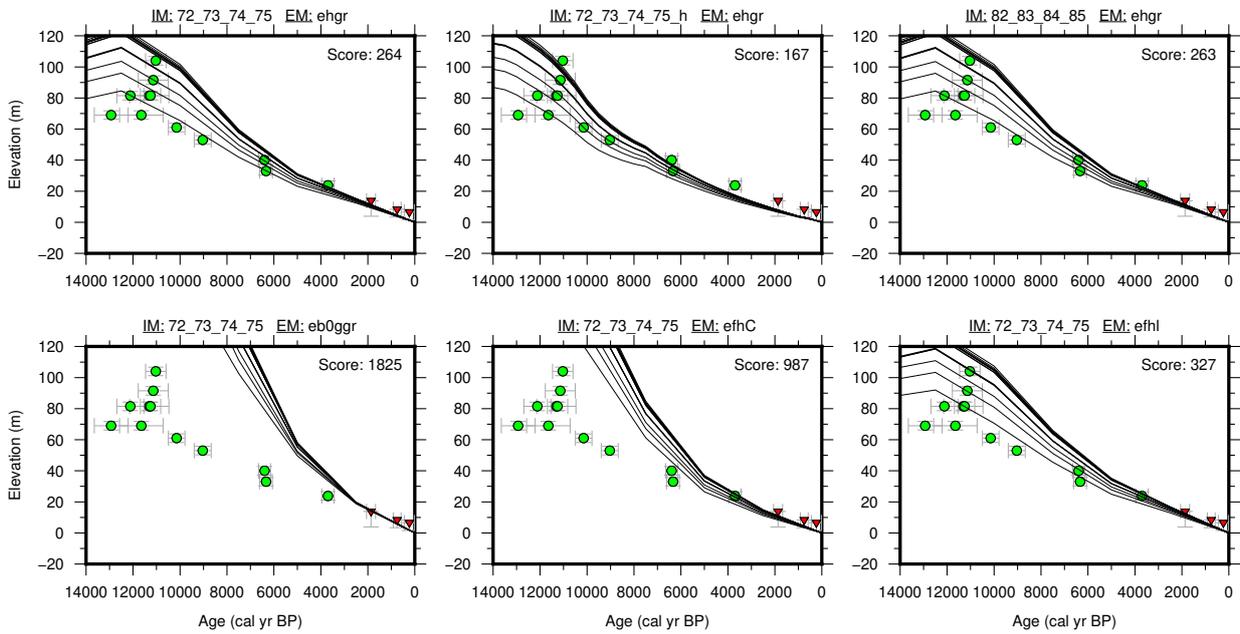
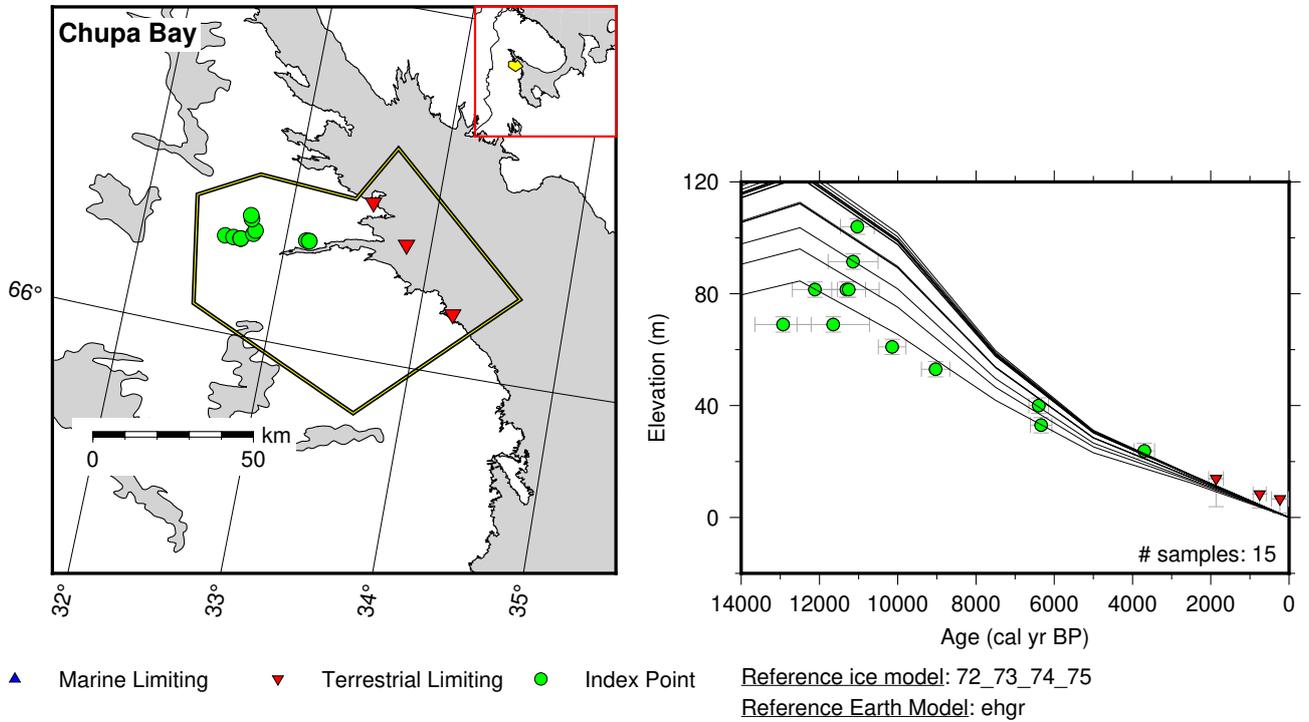
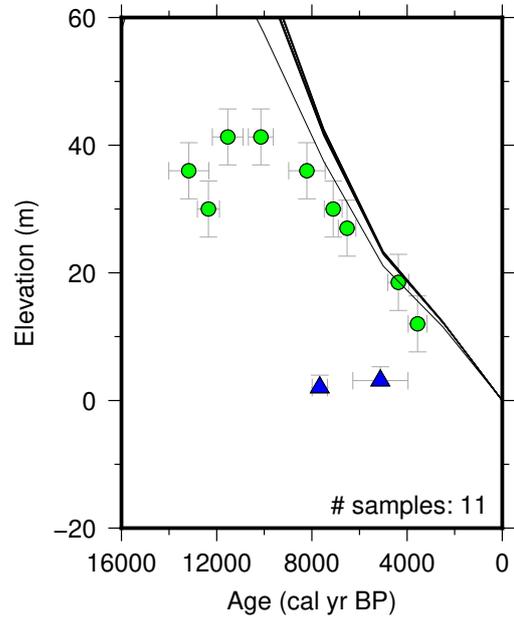
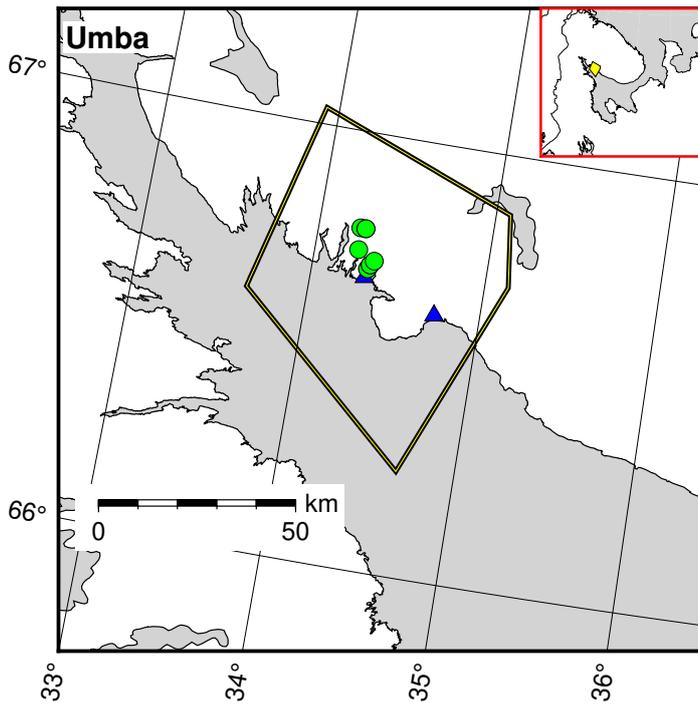


Figure 47: Paleo-sea level and comparison of six models for subregion White Sea, location Chupa Bay.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

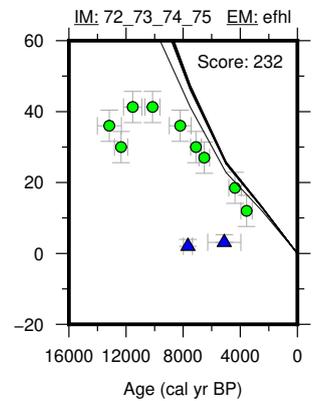
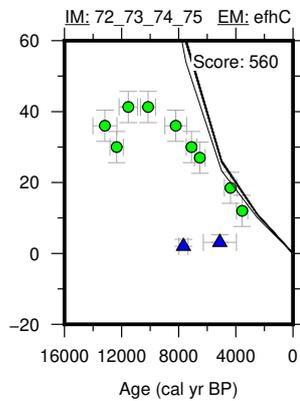
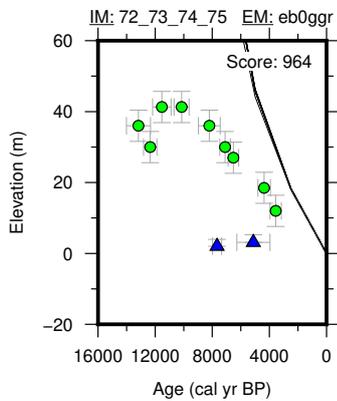
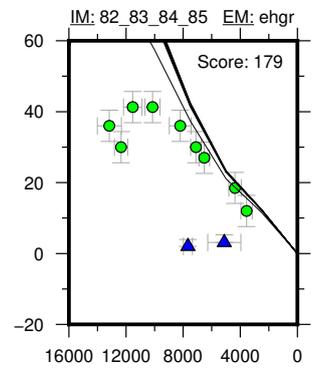
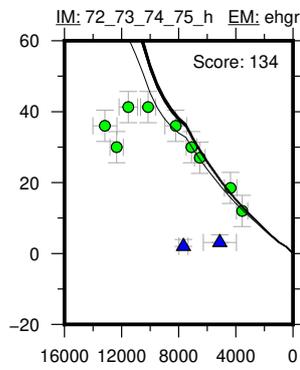
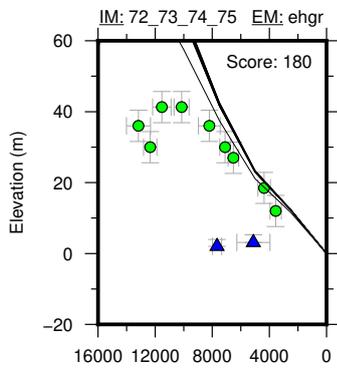


Figure 48: Paleo-sea level and comparison of six models for subregion White Sea, location Umba.

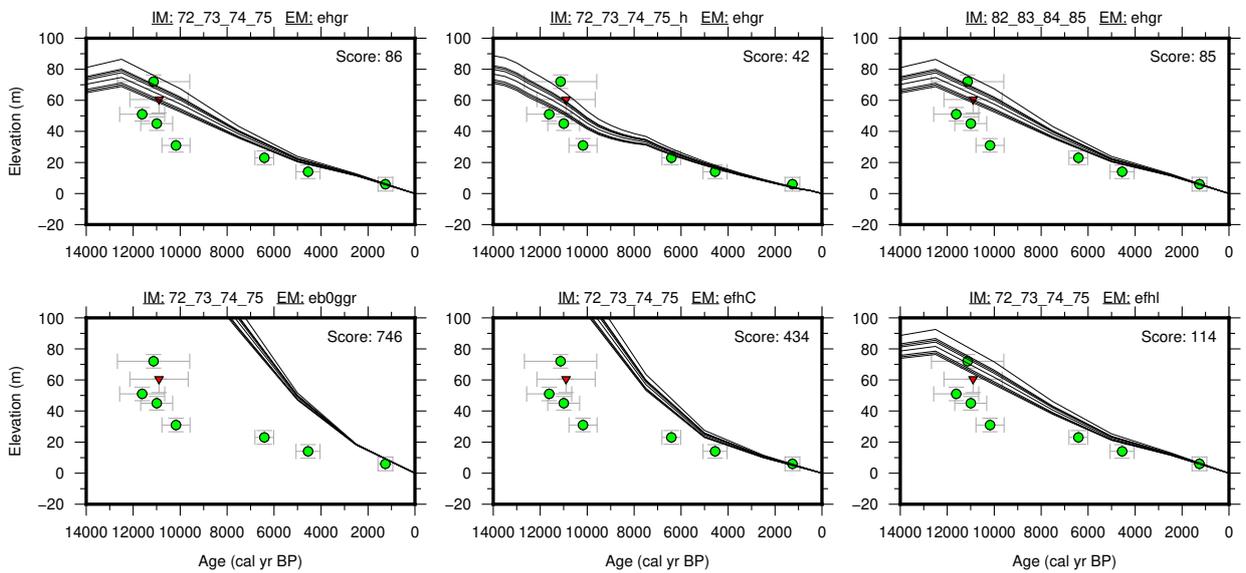
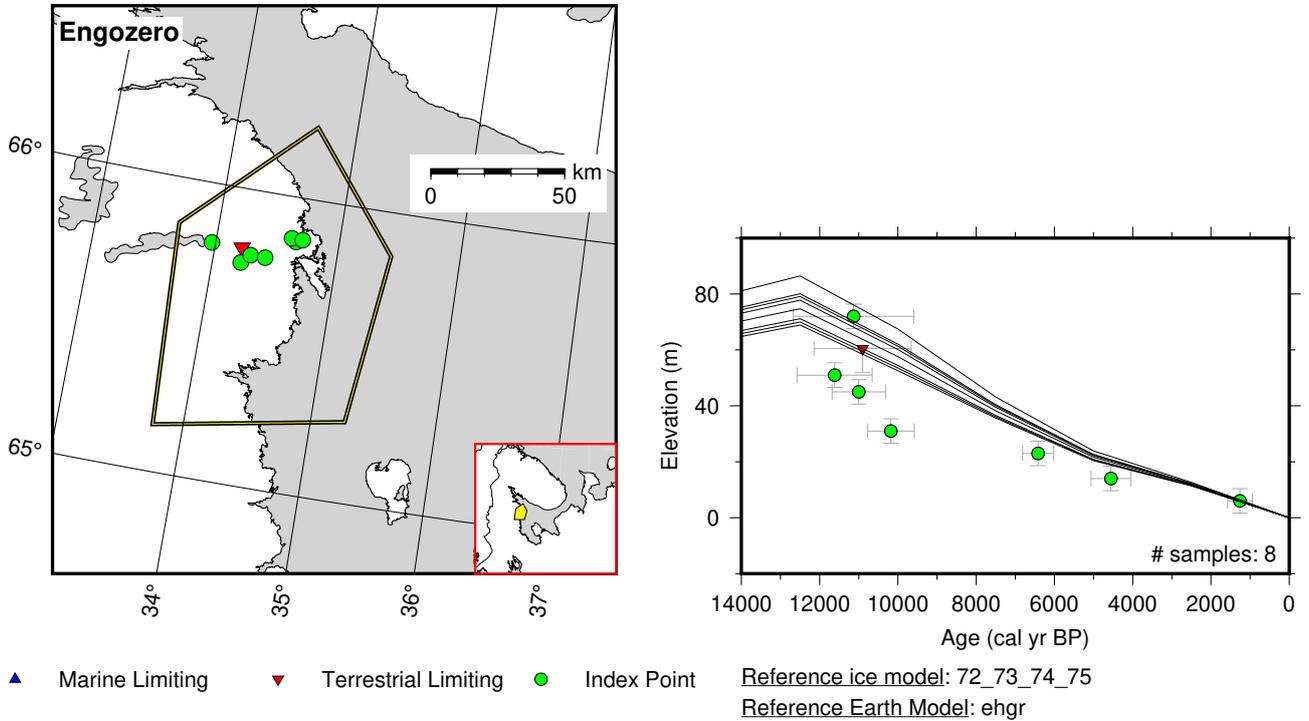


Figure 49: Paleo-sea level and comparison of six models for subregion White Sea, location Engozero.

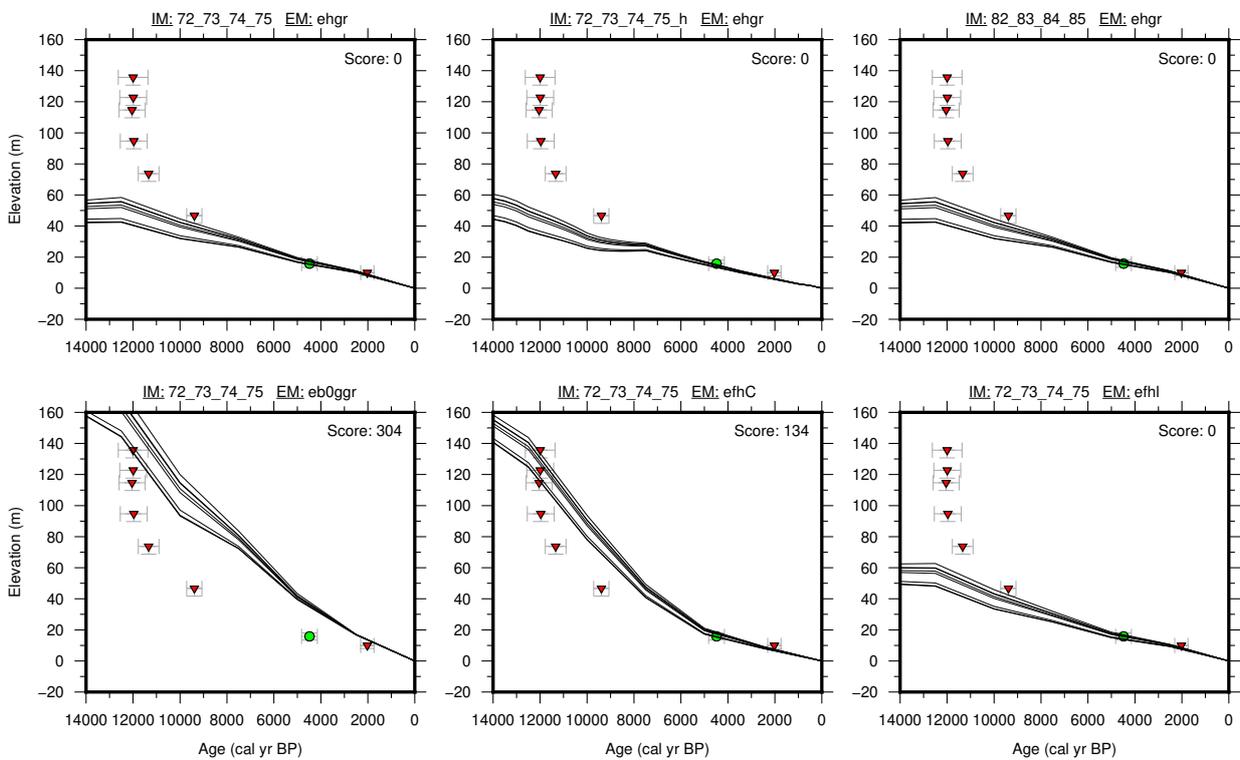
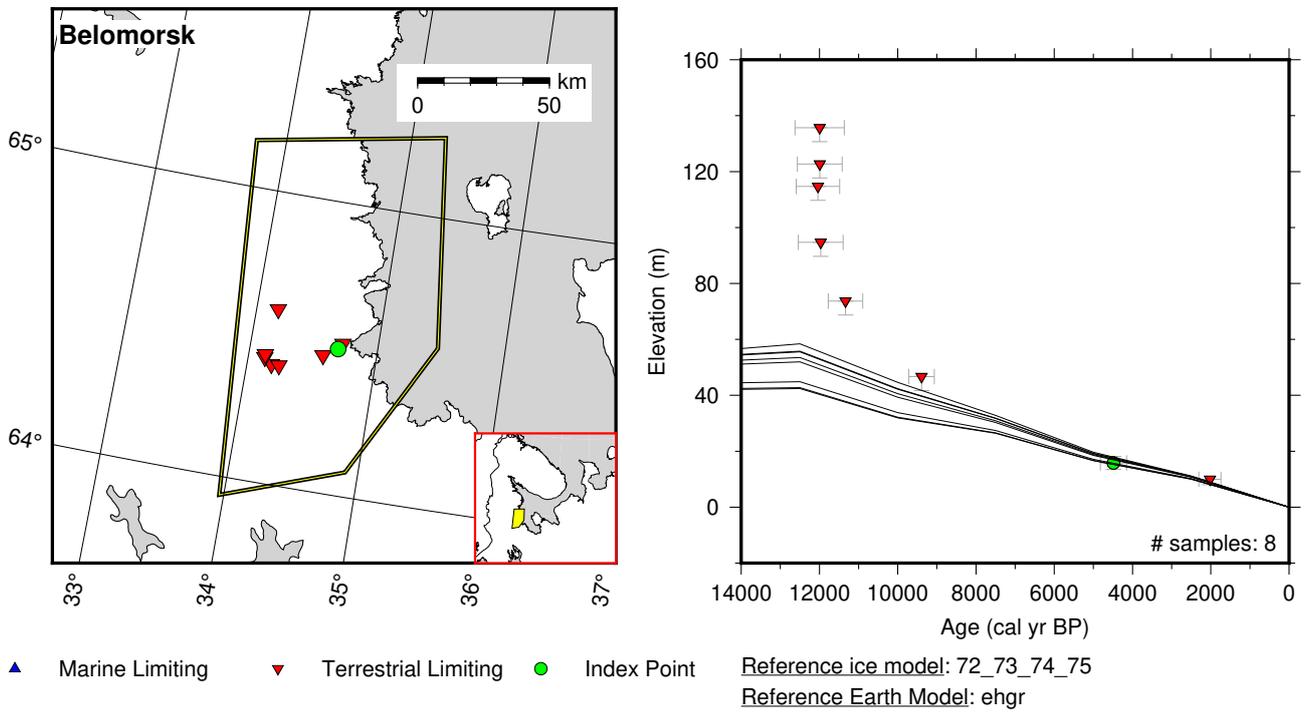
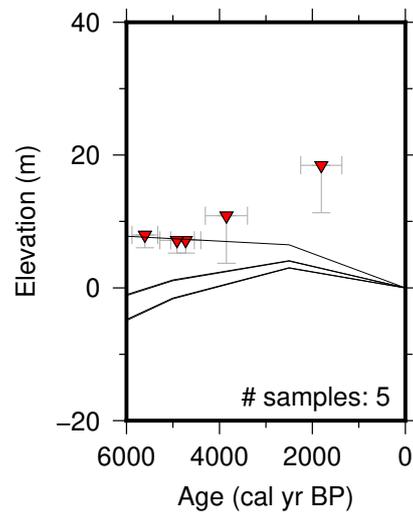
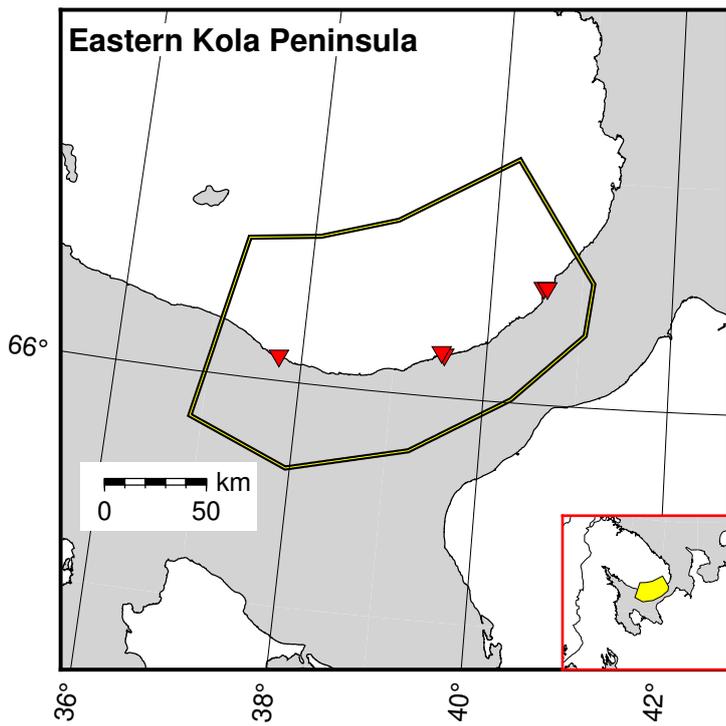


Figure 50: Paleo-sea level and comparison of six models for subregion White Sea, location Belomorsk.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

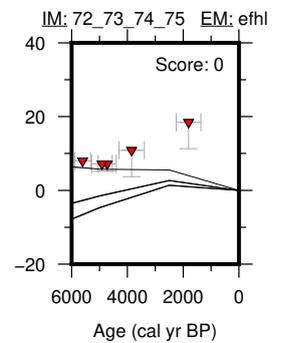
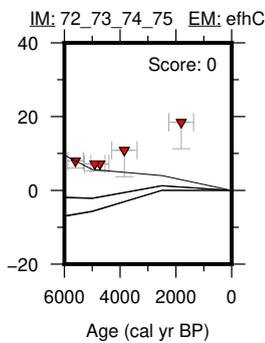
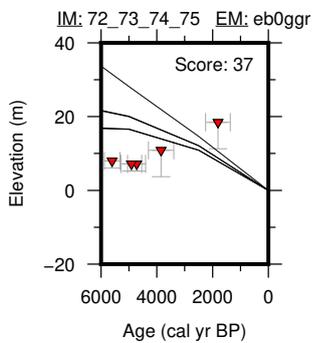
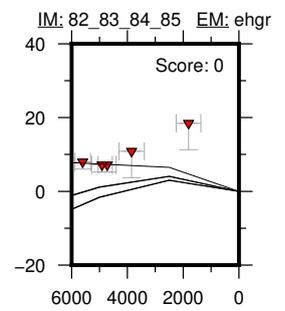
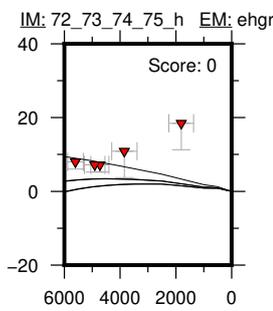
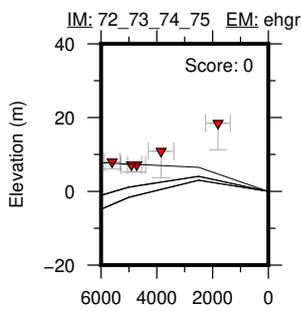


Figure 51: Paleo-sea level and comparison of six models for subregion White Sea, location Eastern Kola Peninsula.

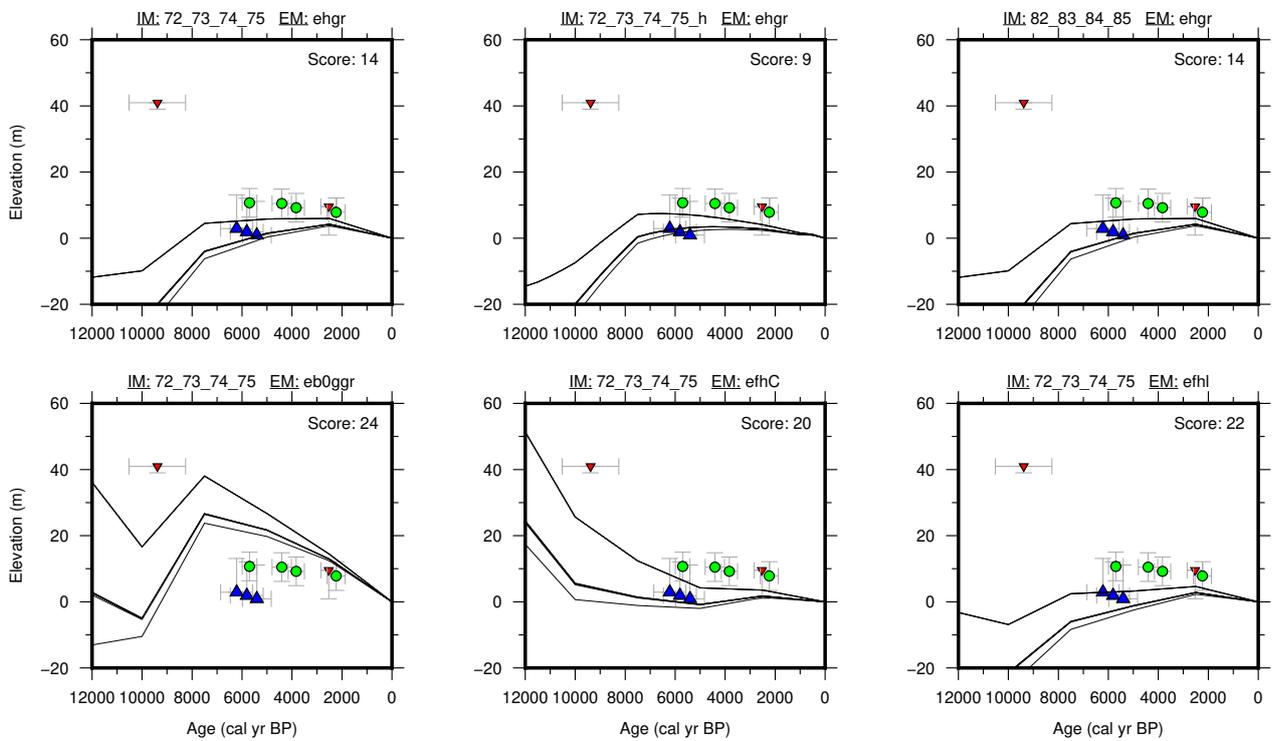
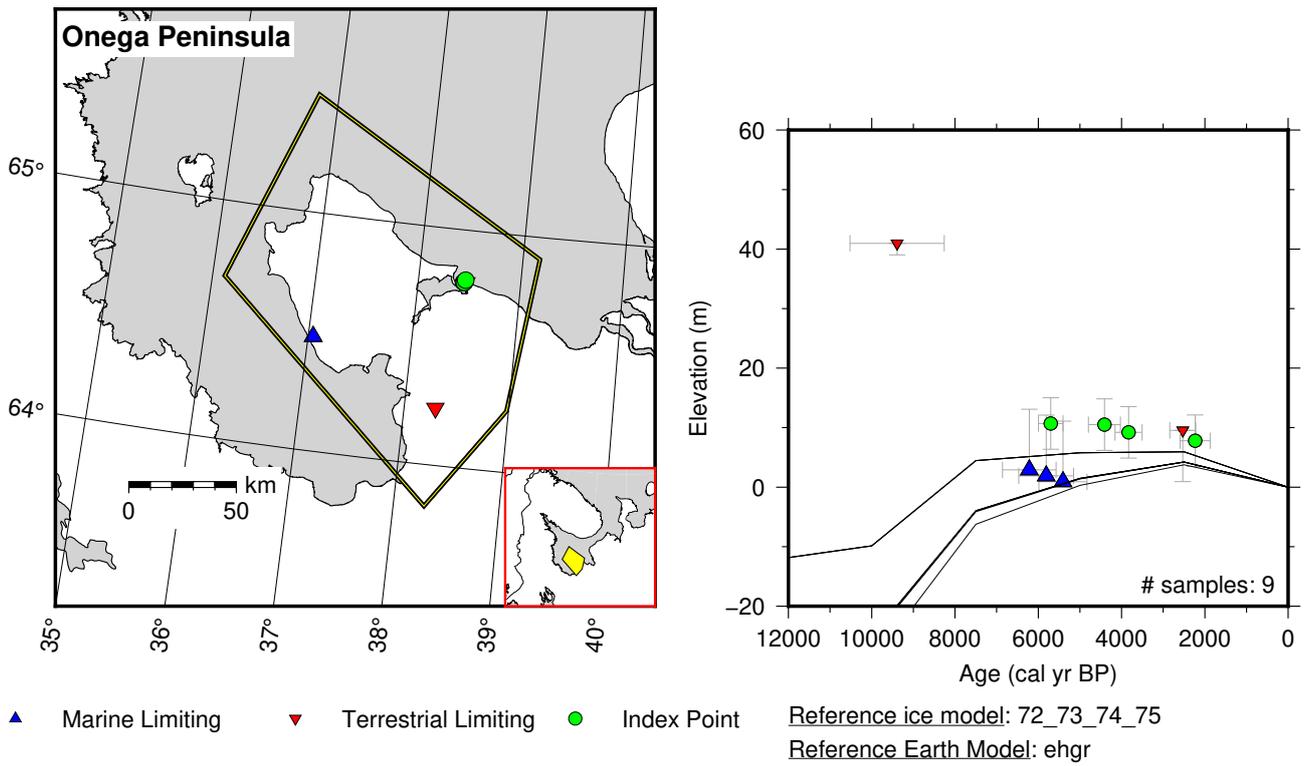


Figure 52: Paleo-sea level and comparison of six models for subregion White Sea, location Onega Peninsula.

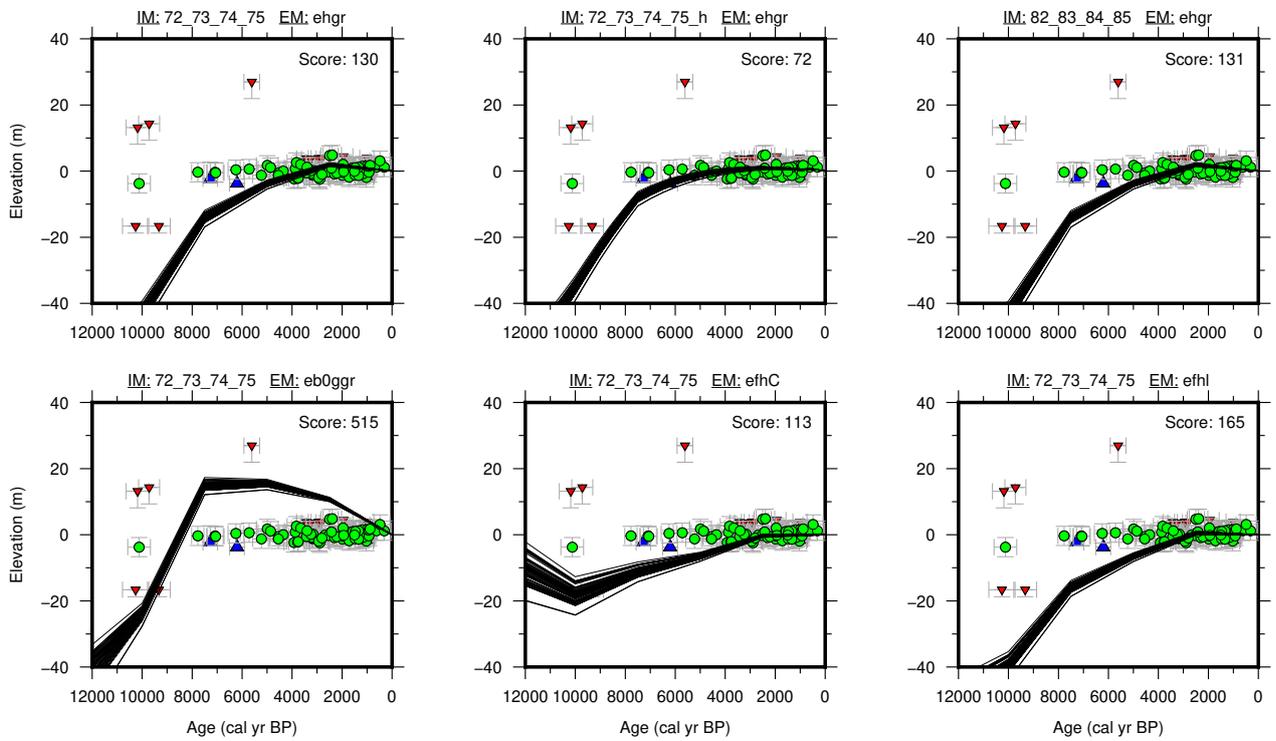
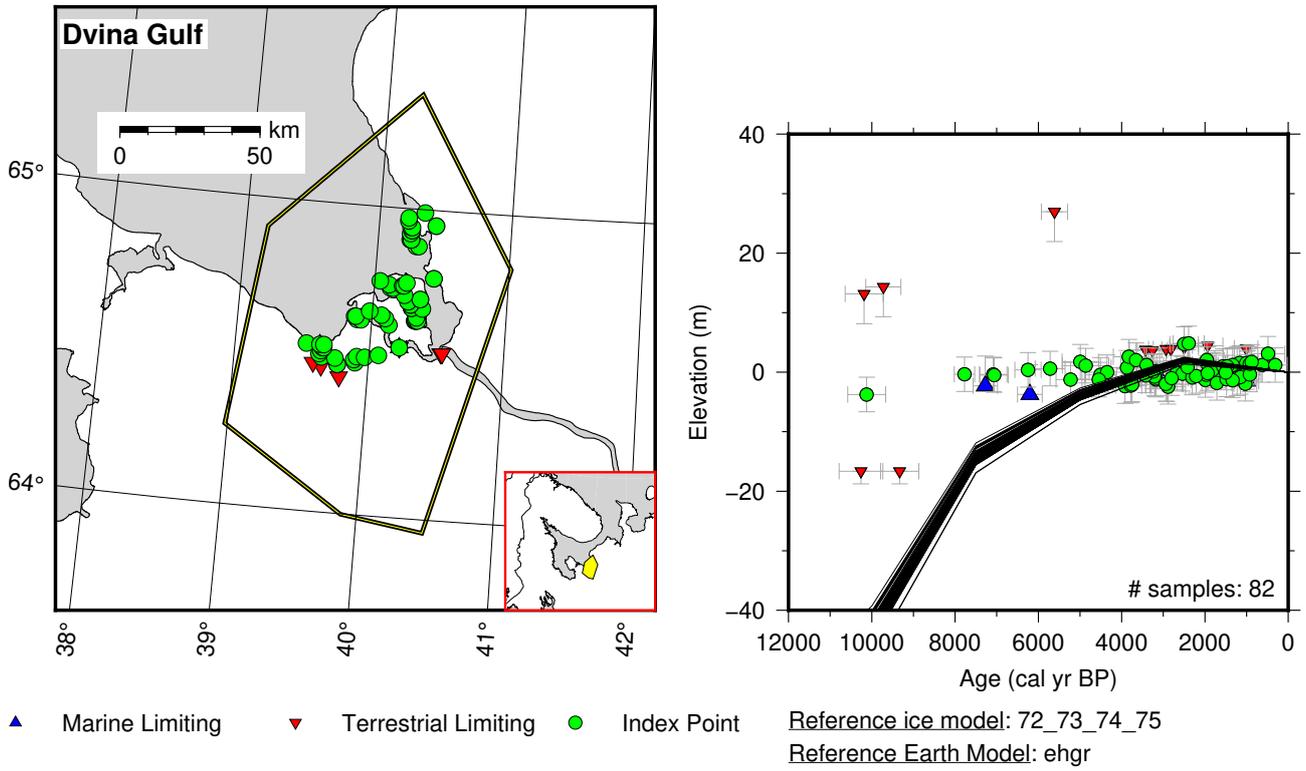
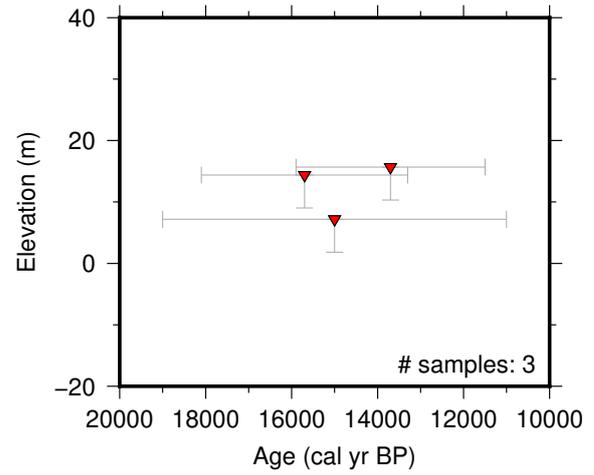
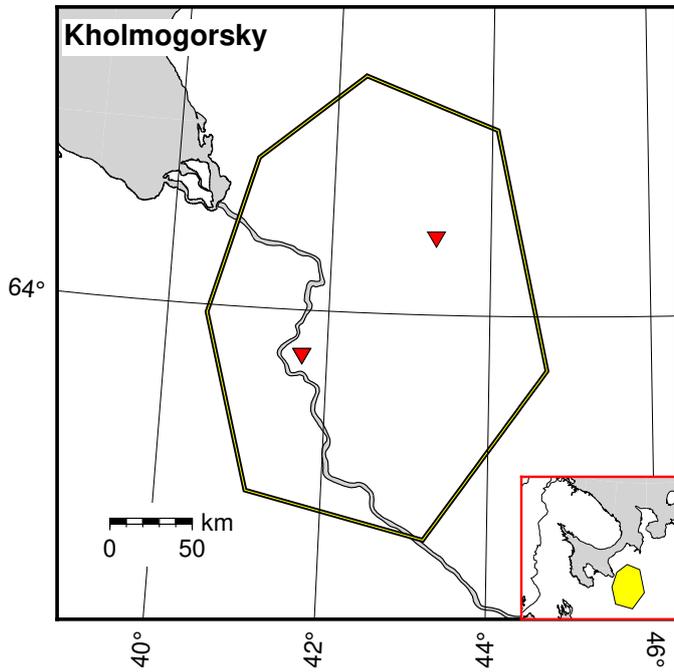


Figure 53: Paleo-sea level and comparison of six models for subregion White Sea, location Dvina Gulf.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

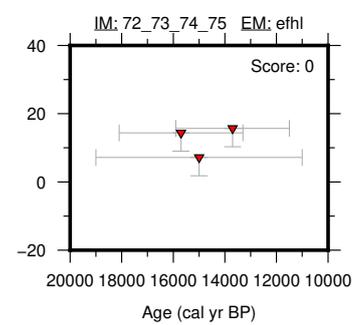
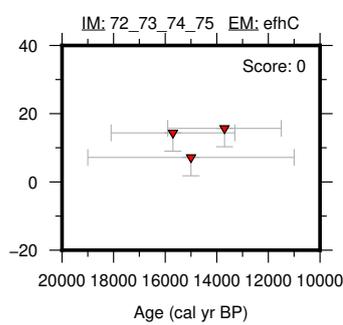
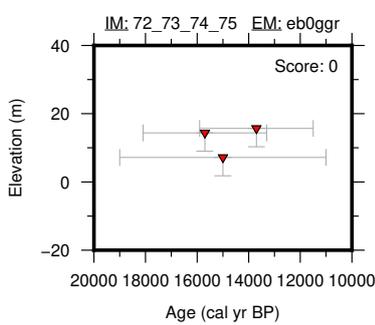
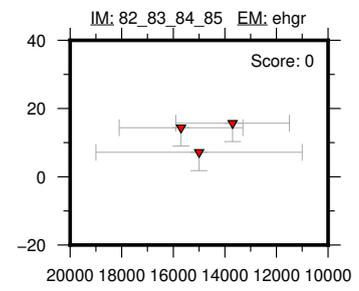
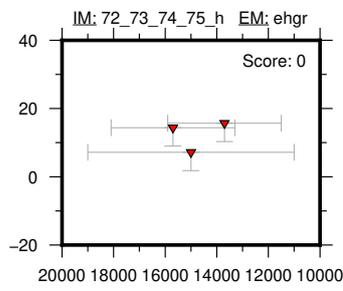
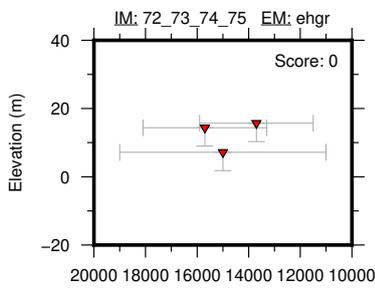


Figure 54: Paleo-sea level and comparison of six models for subregion White Sea, location Kholmogorsky.

9 Europe

9.1 Baltic Sea

References for the data used in each location.

Norrbottnen:

Angermanland:

Gastrikland:

Stockholm:

Aland:

Oulu:

Ostrobothnia:

Turku:

Gulf Of Finland:

Gulf Of Riga:

Kaliningrad:

Bornholm:

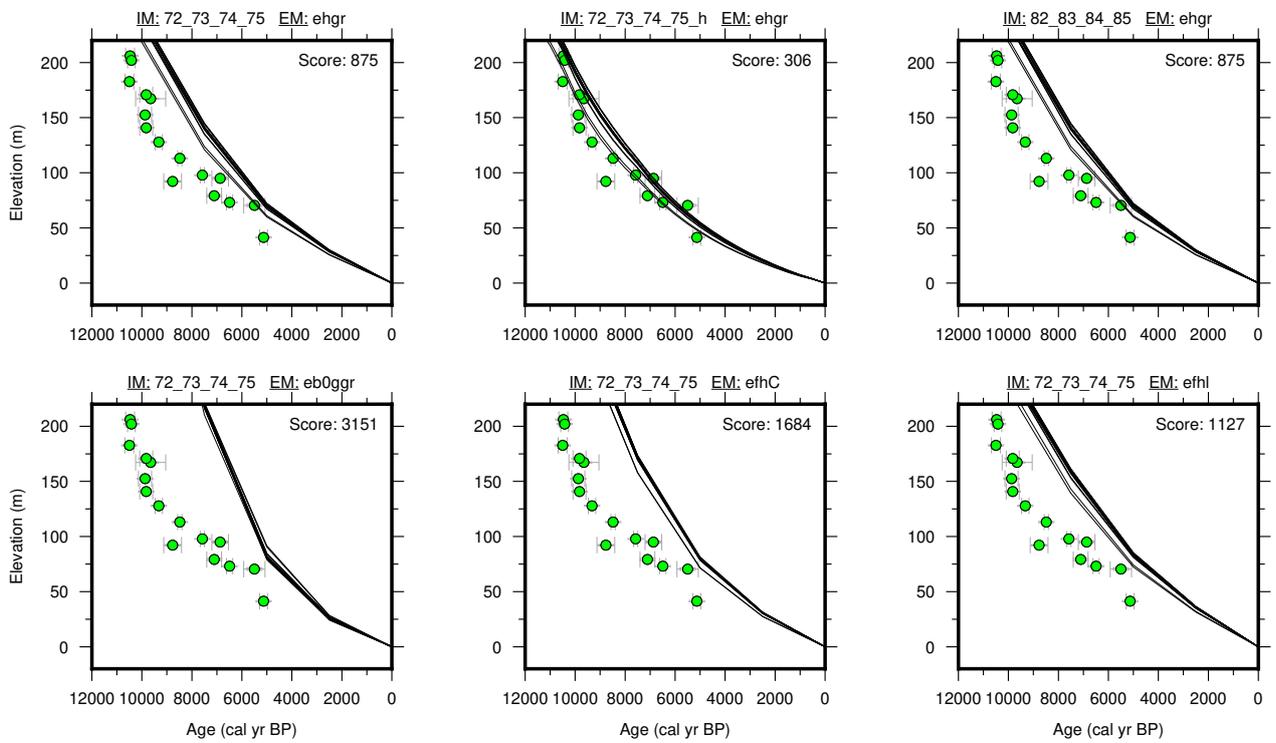
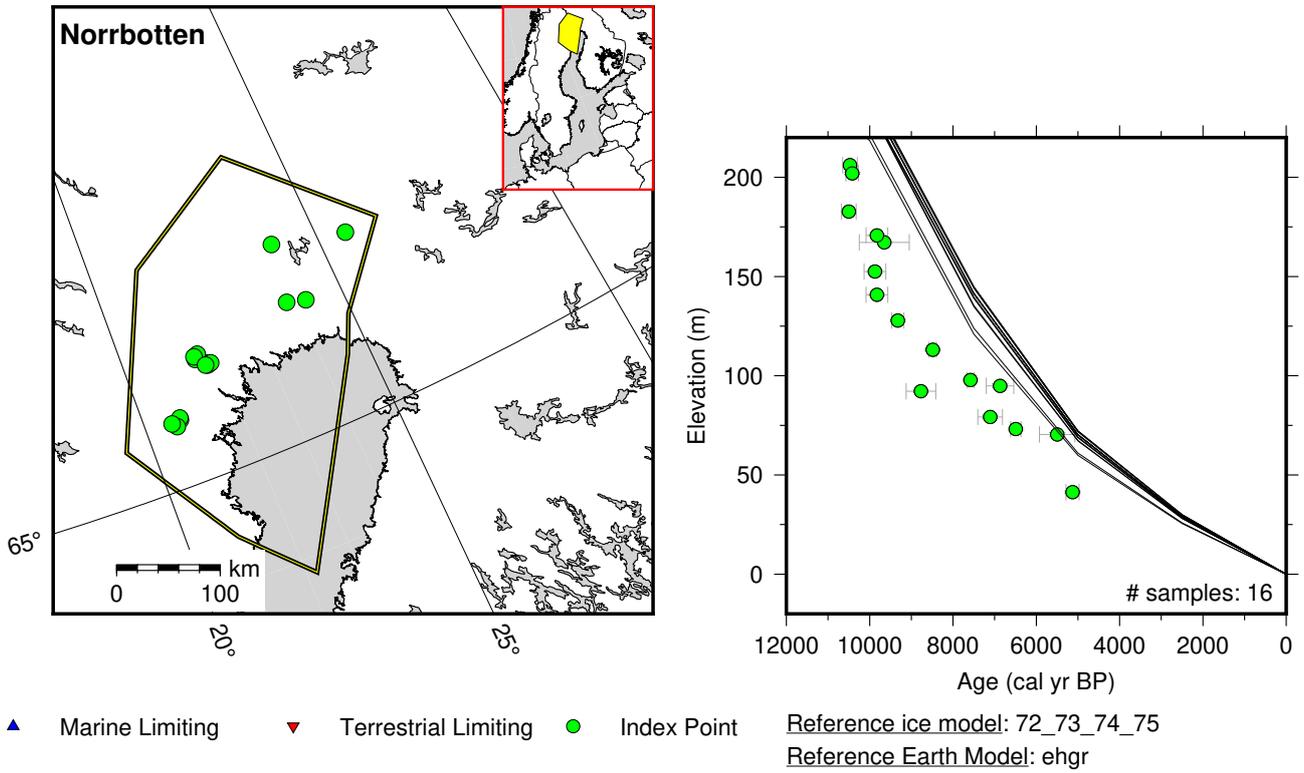
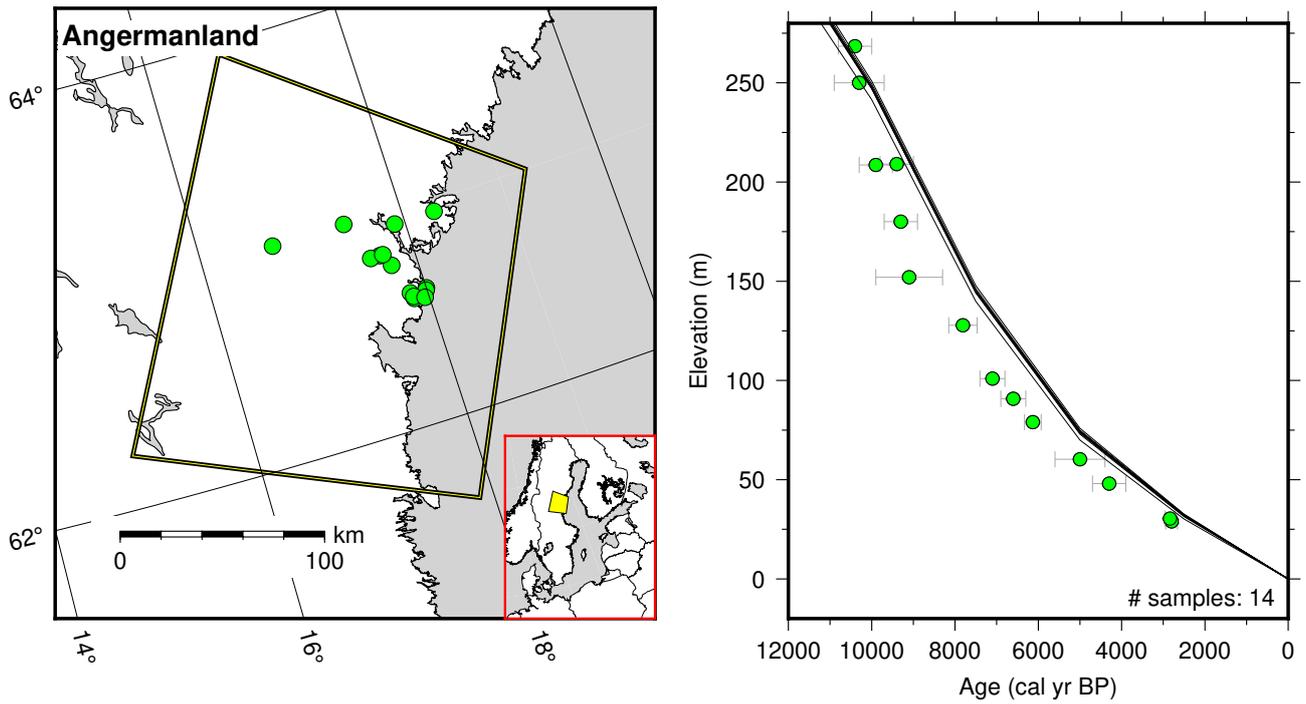


Figure 55: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Norrbotten.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

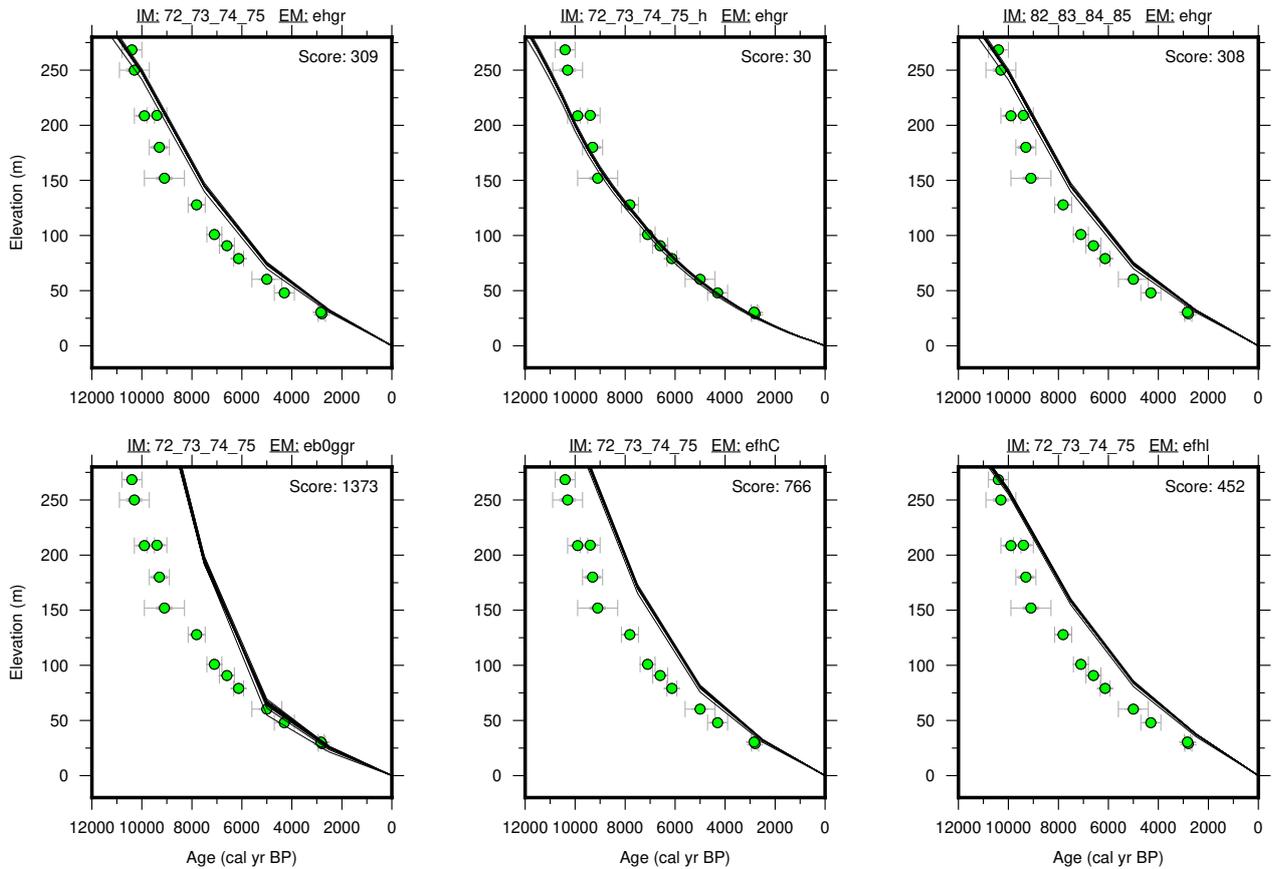


Figure 56: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Angermanland.

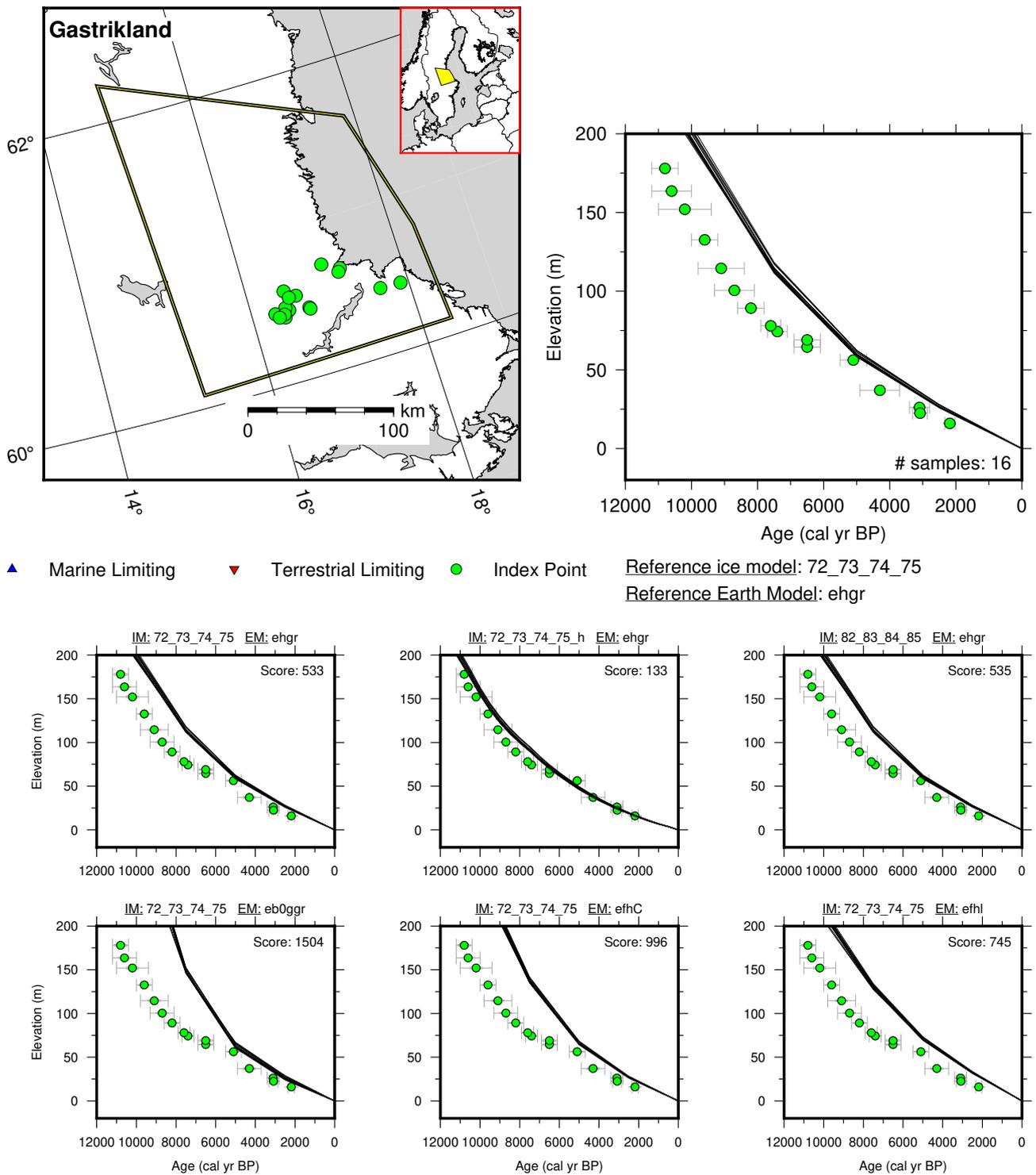
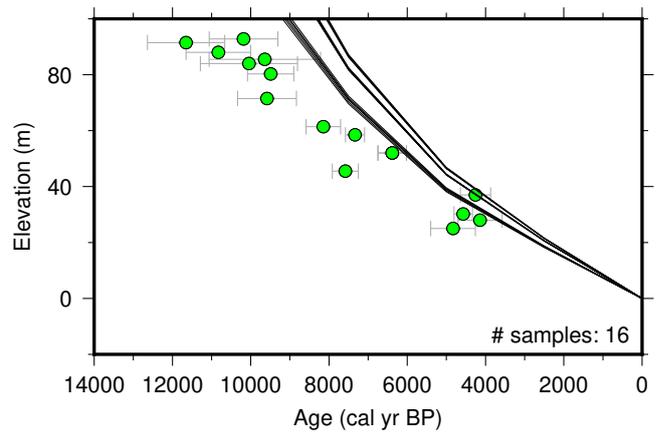
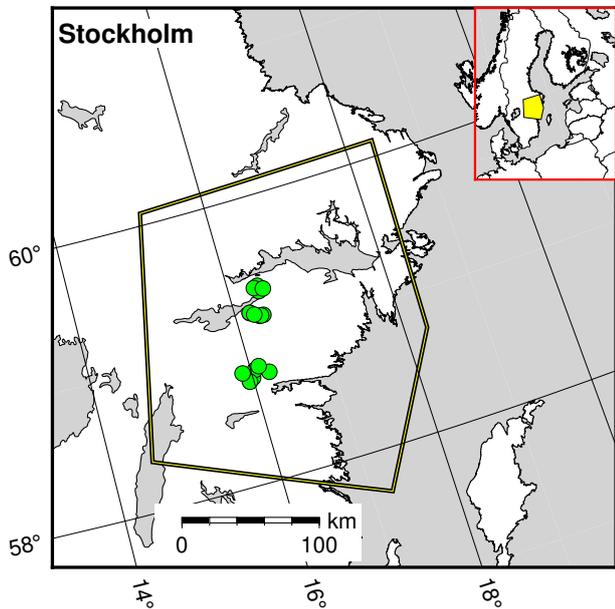


Figure 57: Paleosea level and comparison of six models for subregion Baltic Sea, location Gastrikland.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

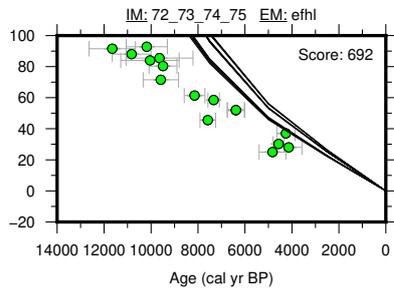
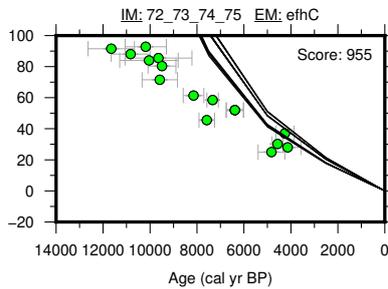
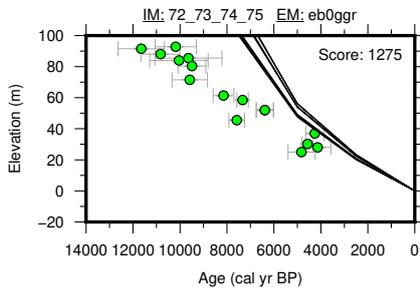
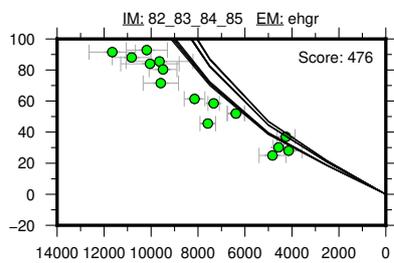
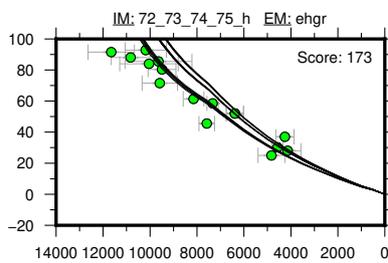
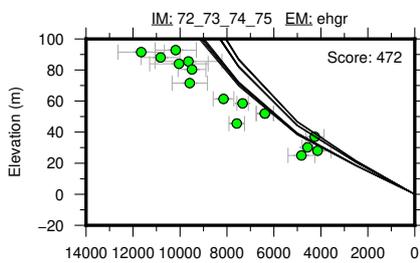
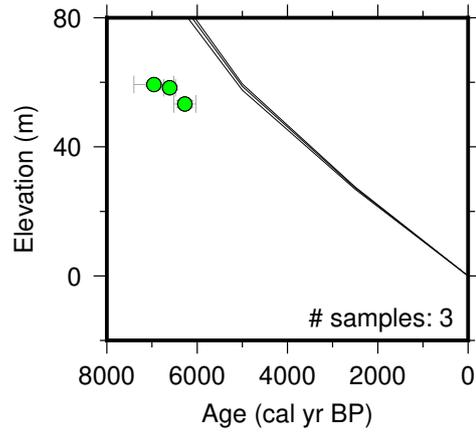
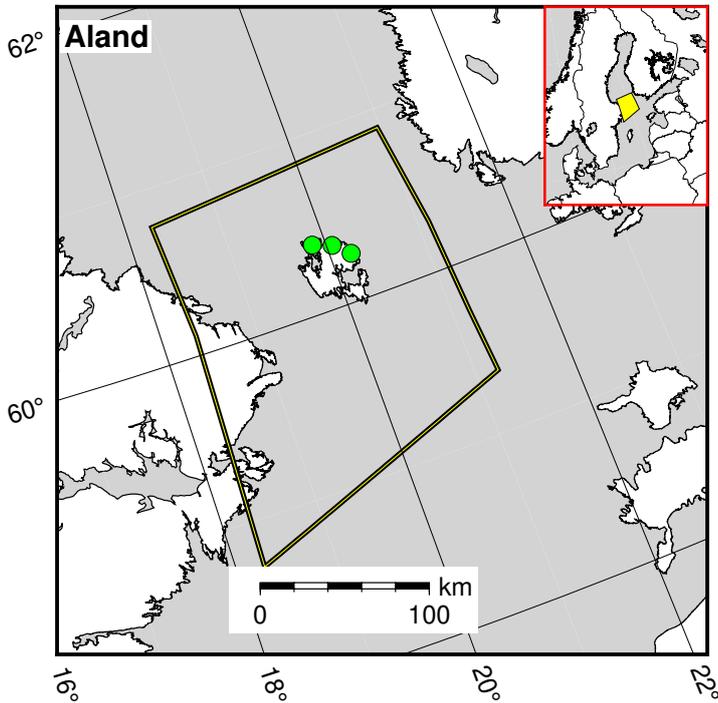


Figure 58: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Stockholm.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

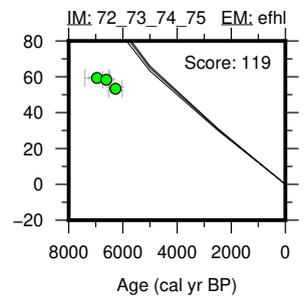
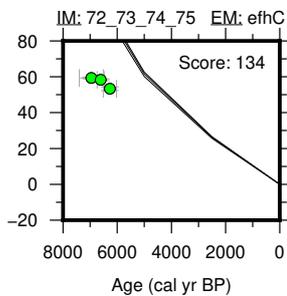
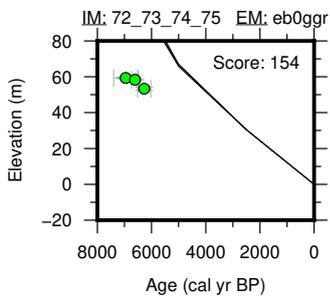
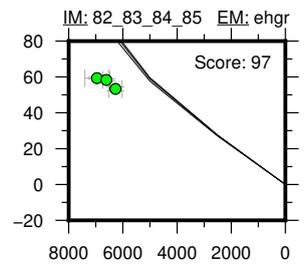
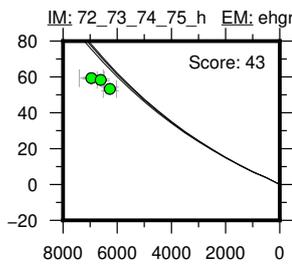
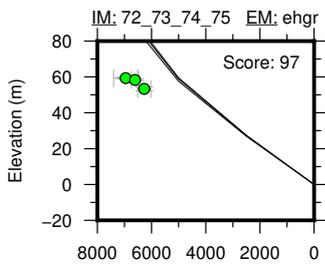
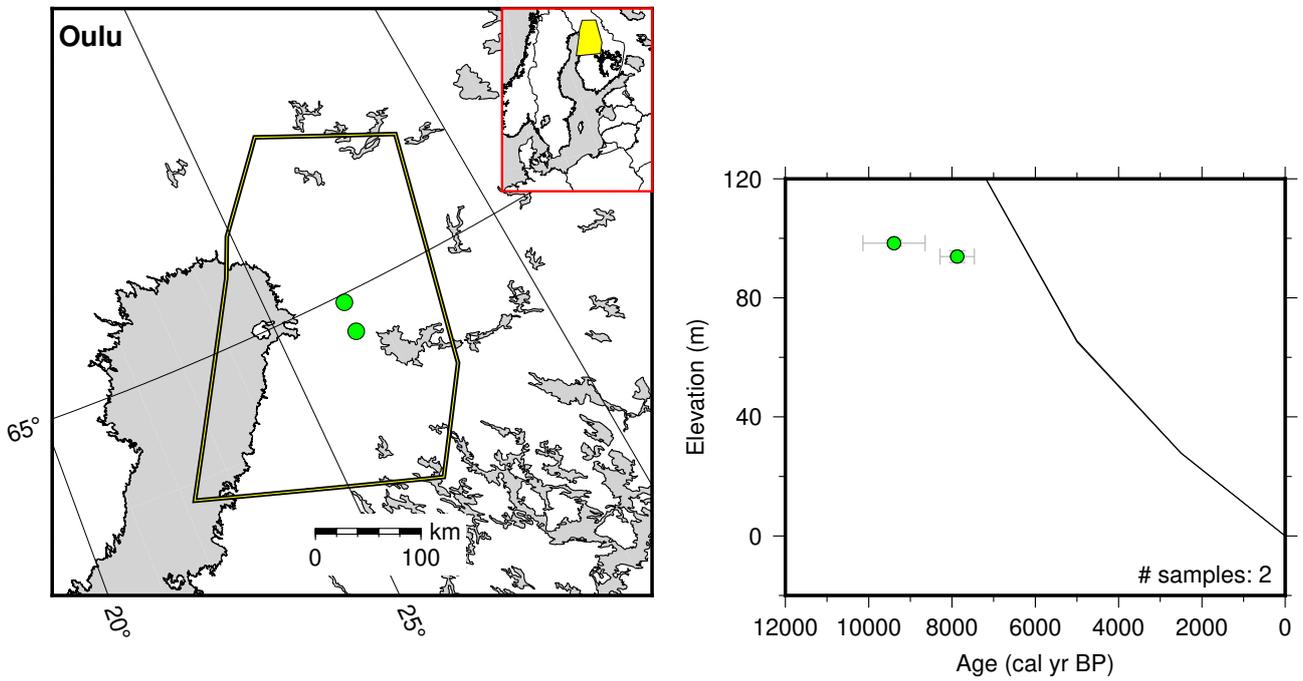


Figure 59: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Aland.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

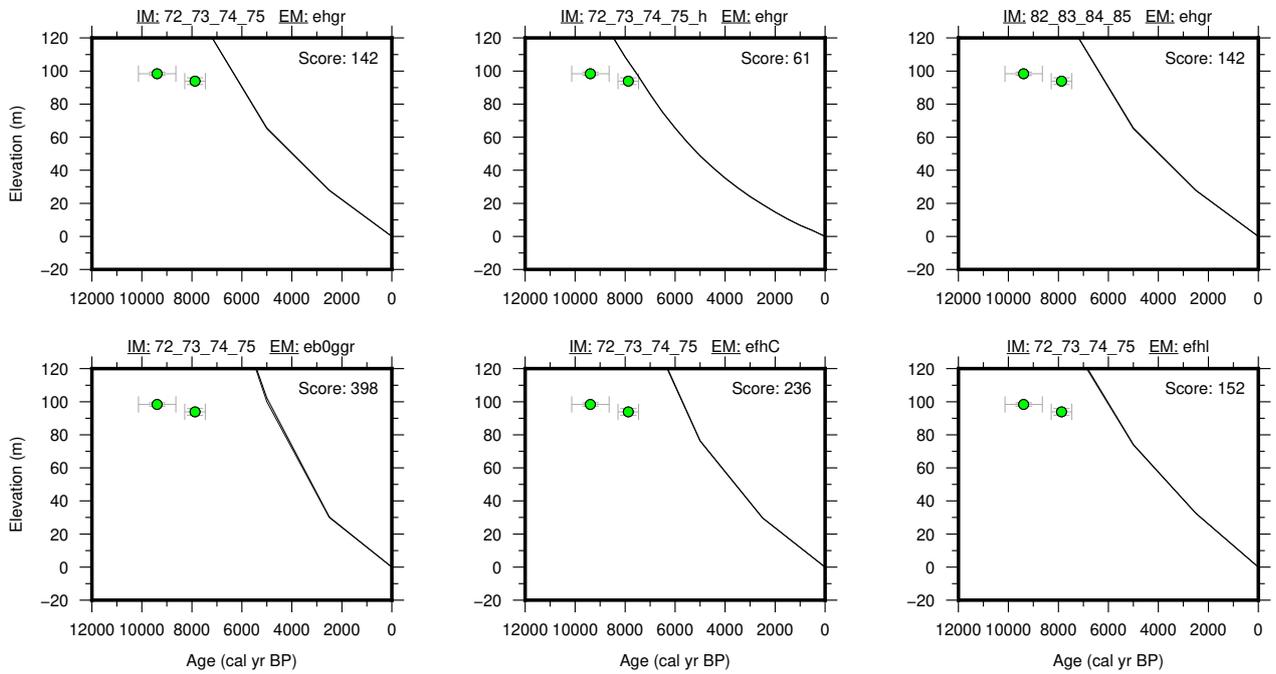
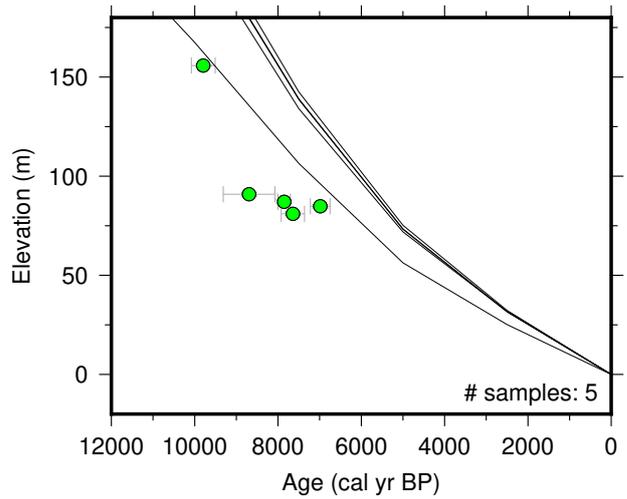
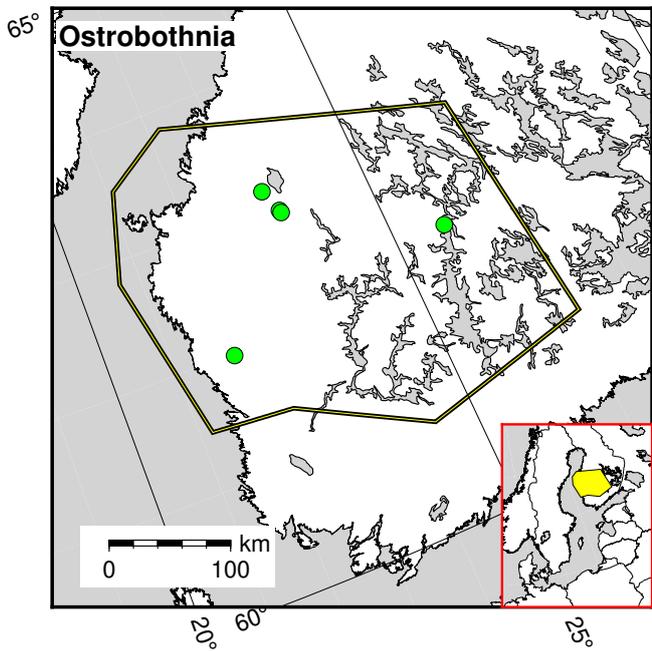


Figure 60: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Oulu.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

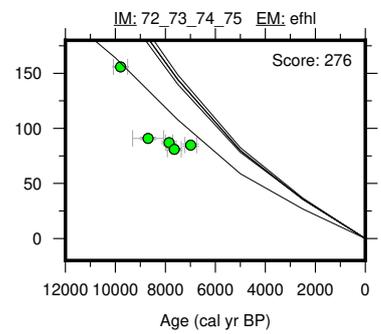
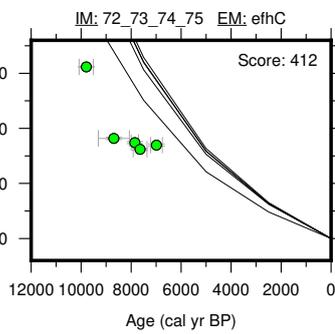
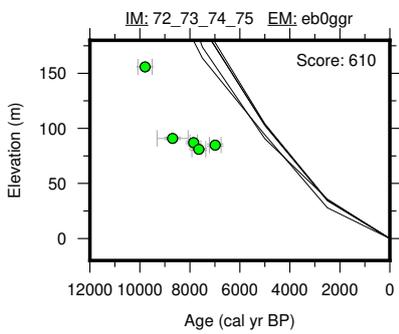
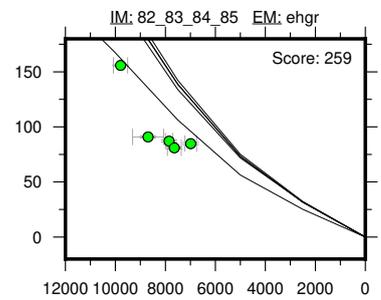
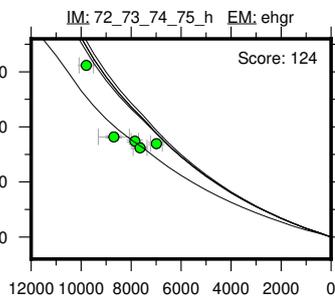
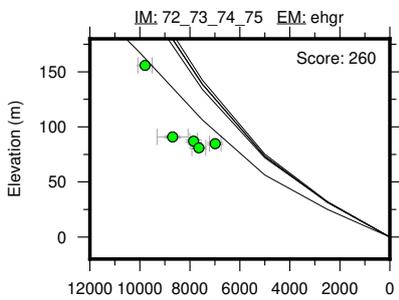


Figure 61: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Ostrobothnia.

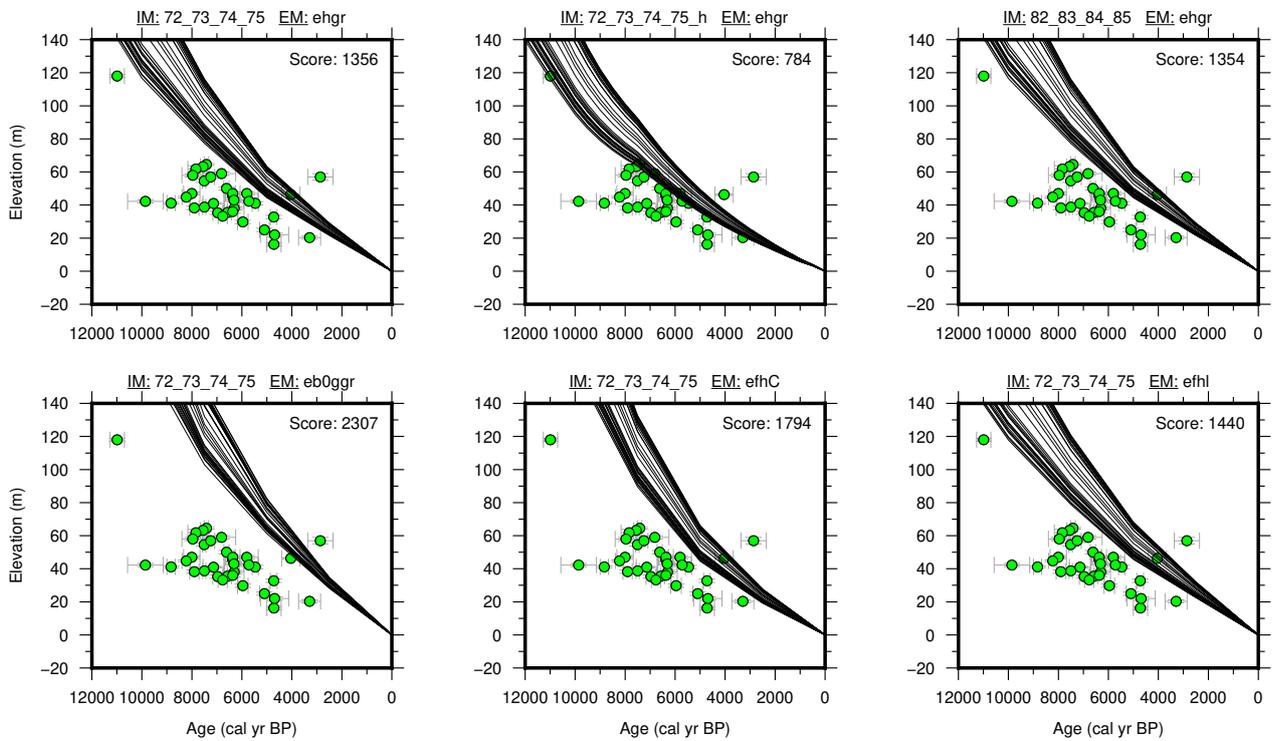
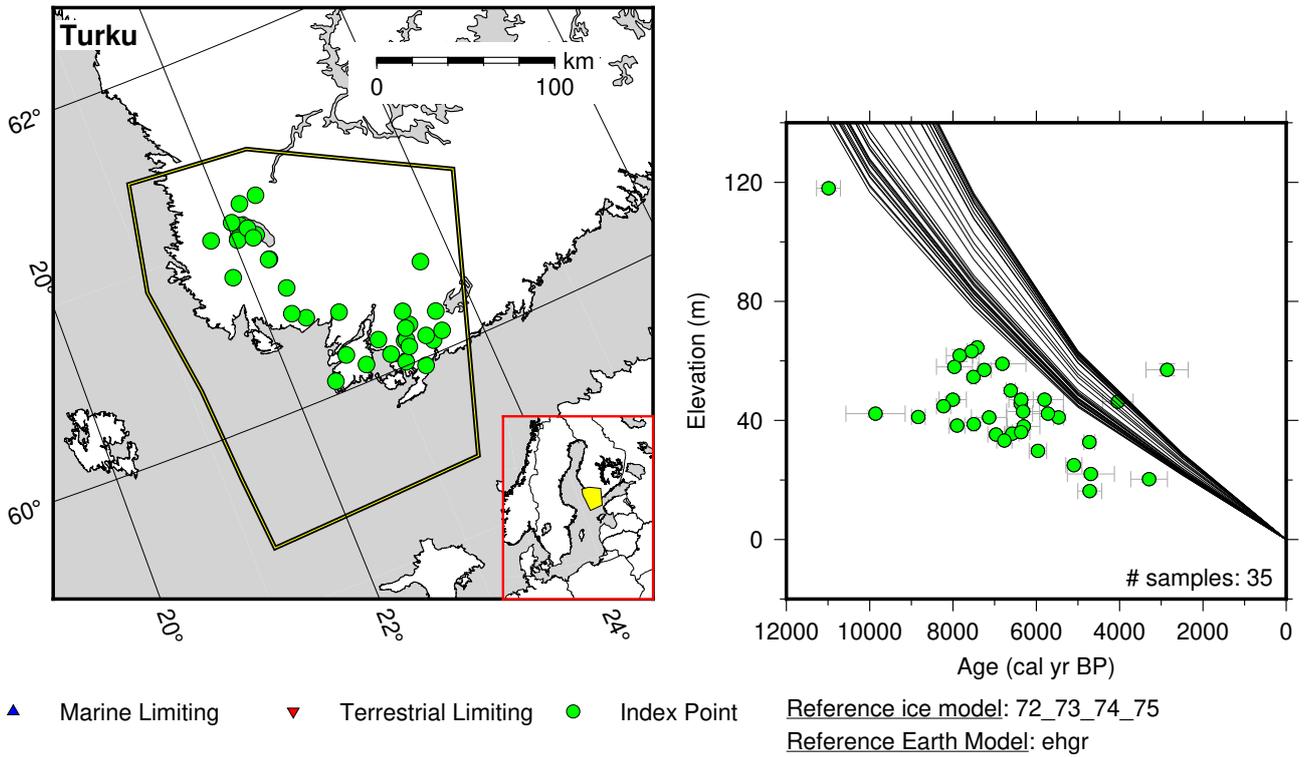


Figure 62: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Turku.

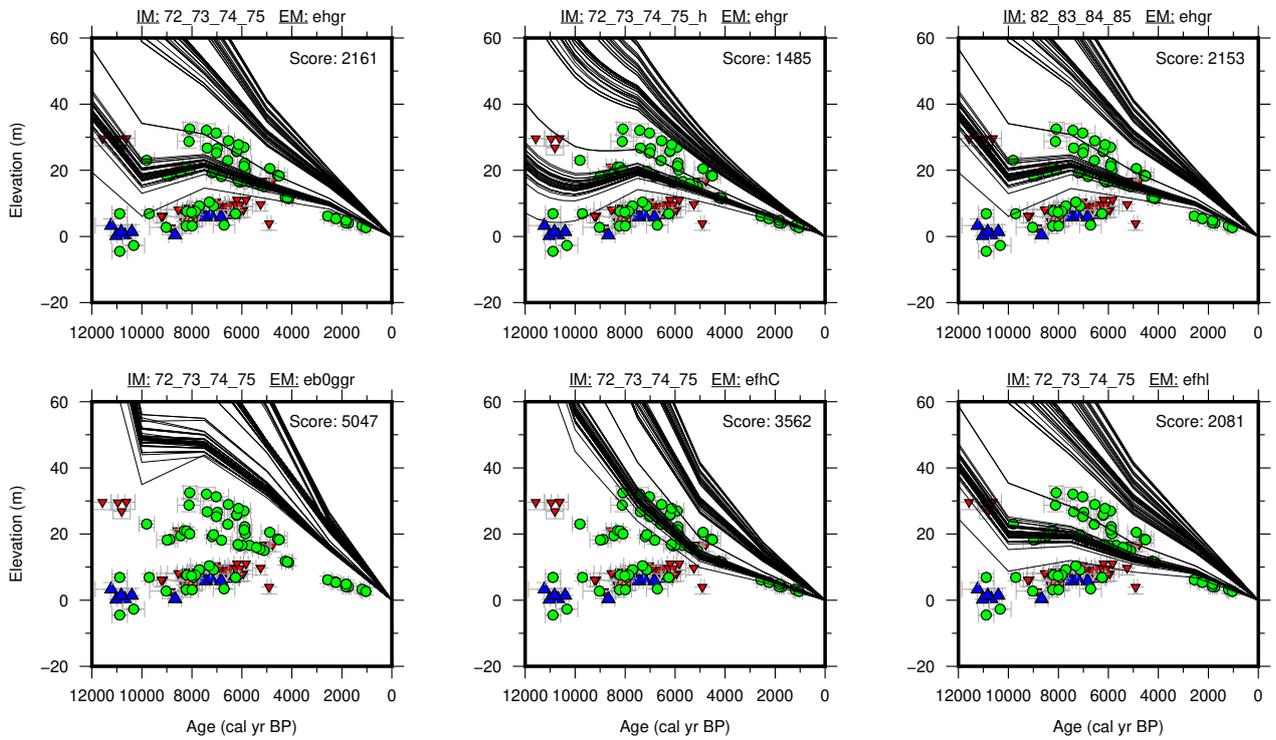
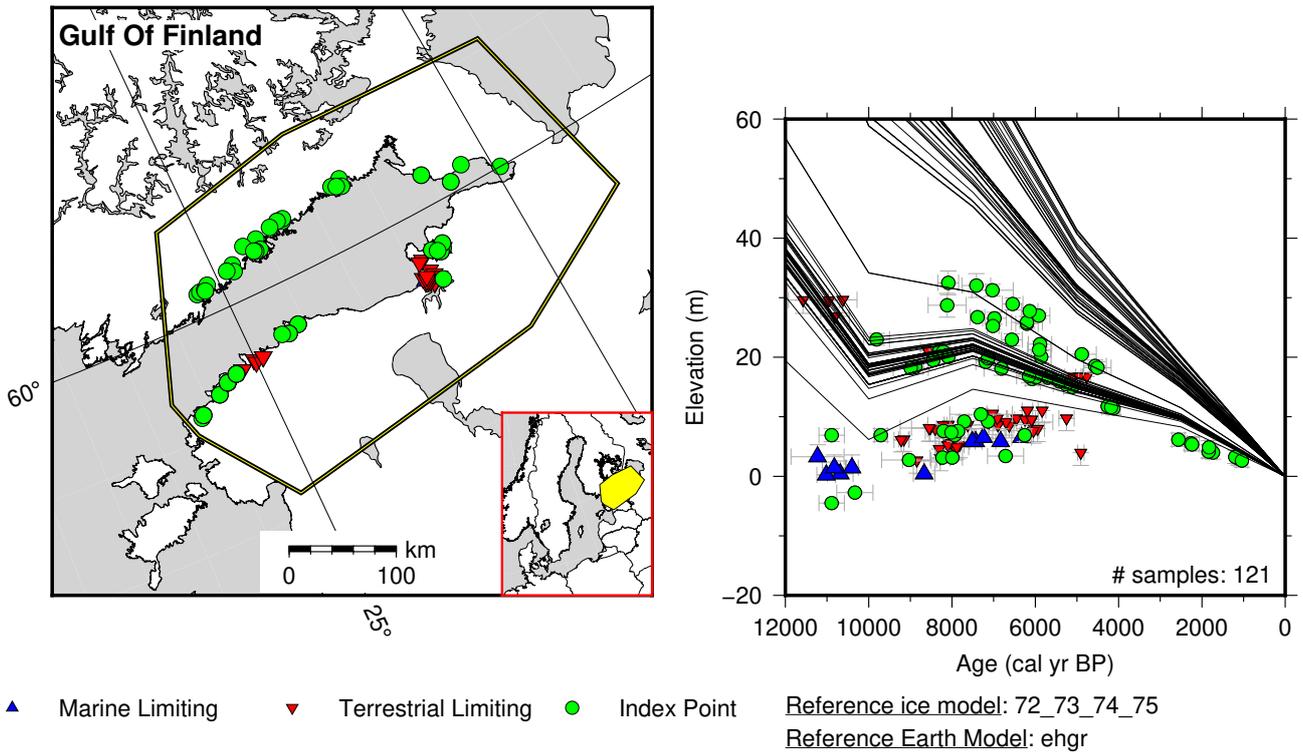


Figure 63: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Gulf Of Finland.

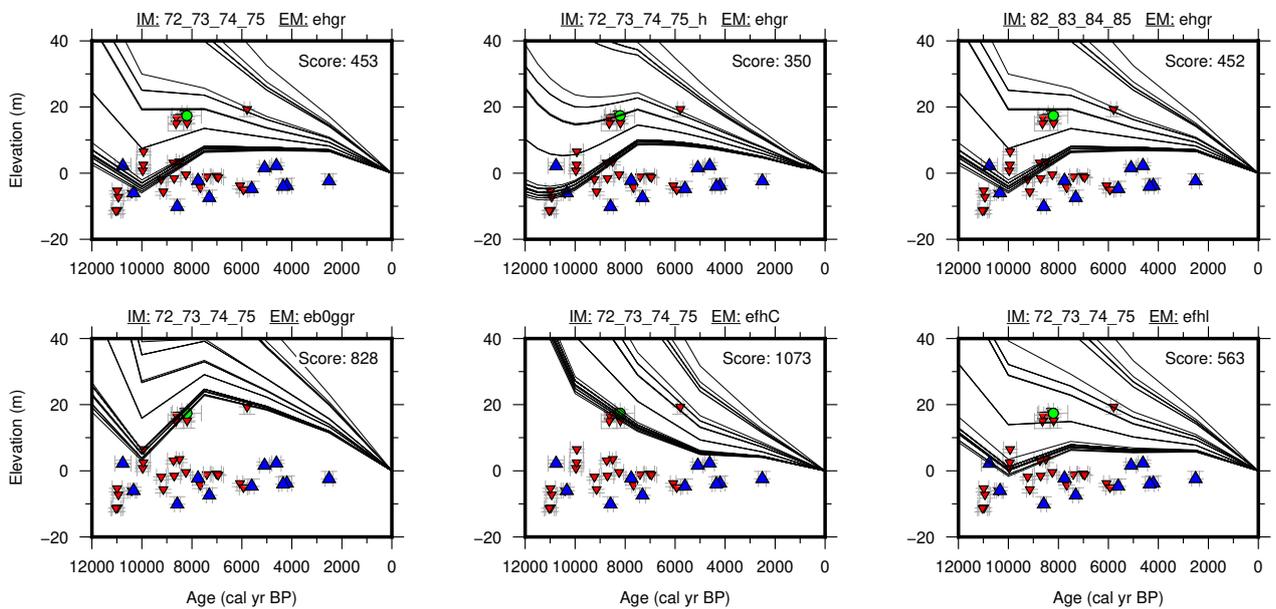
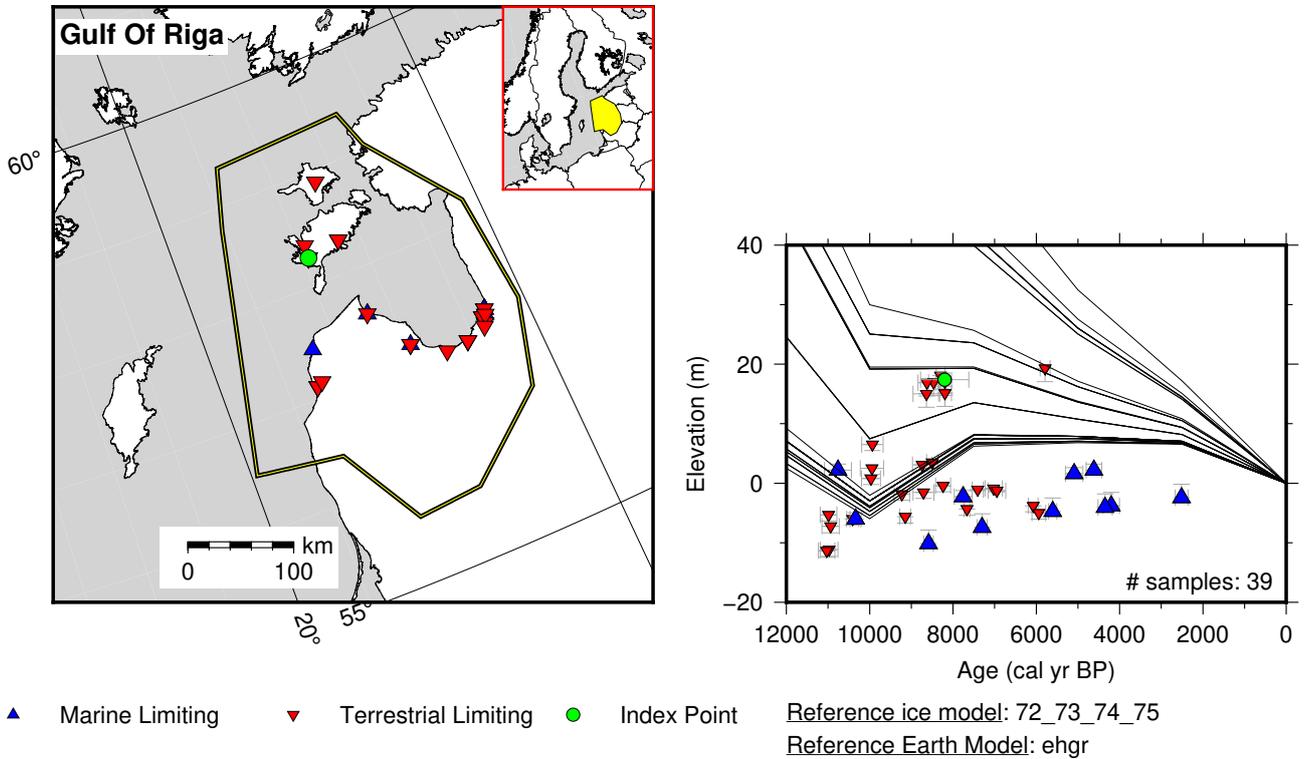


Figure 64: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Gulf Of Riga.

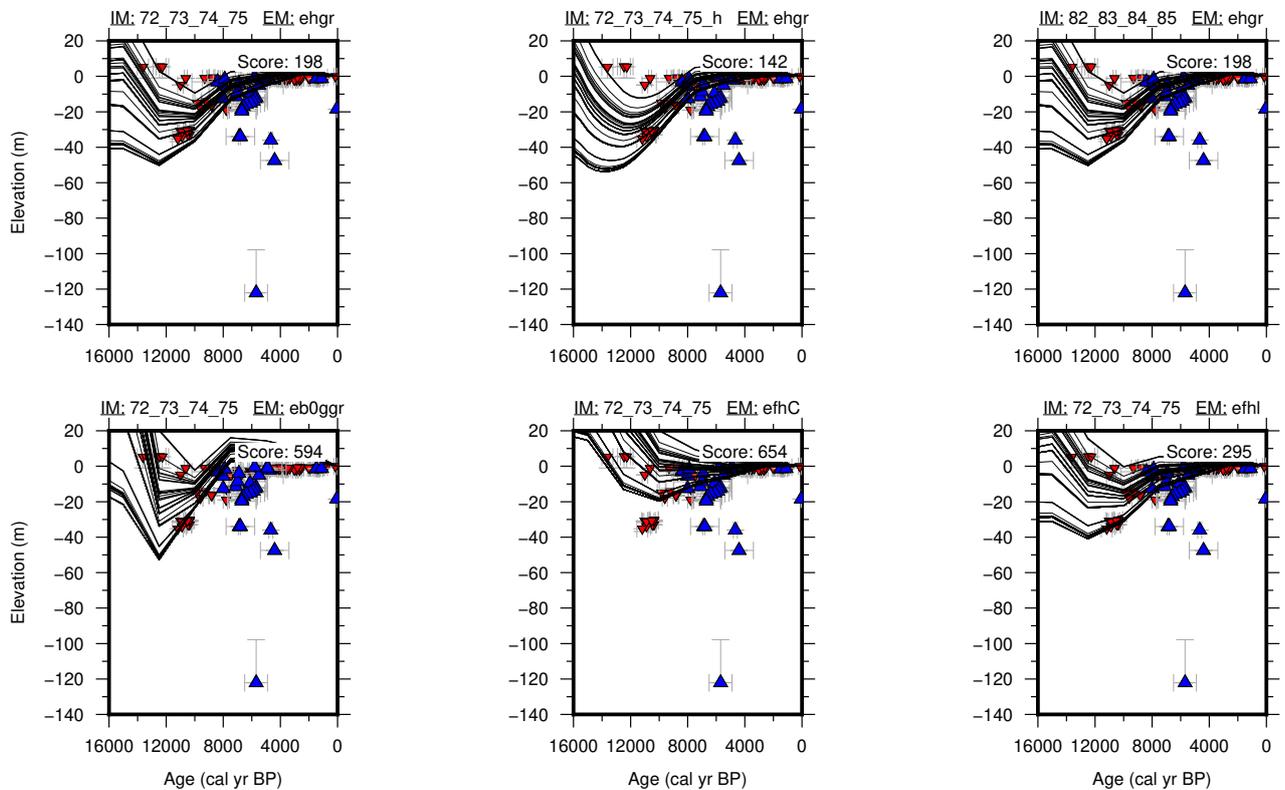
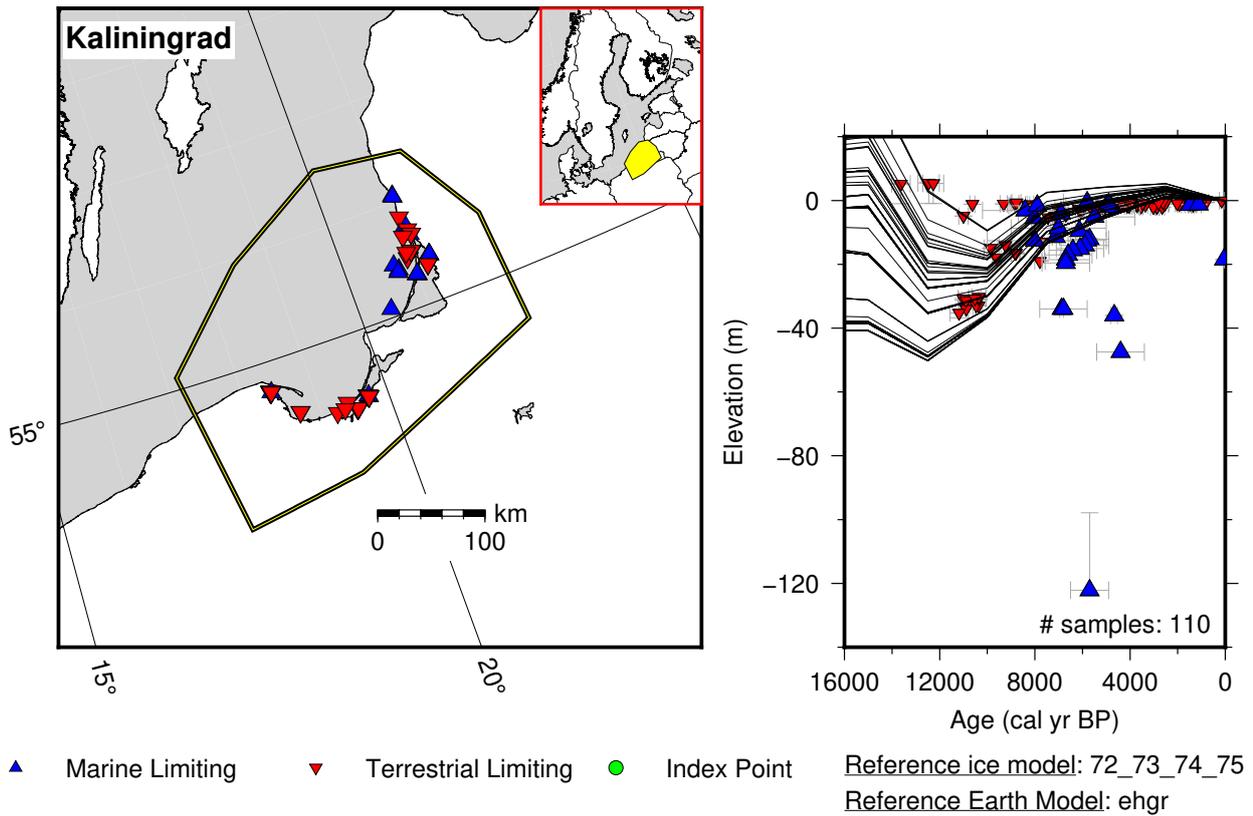
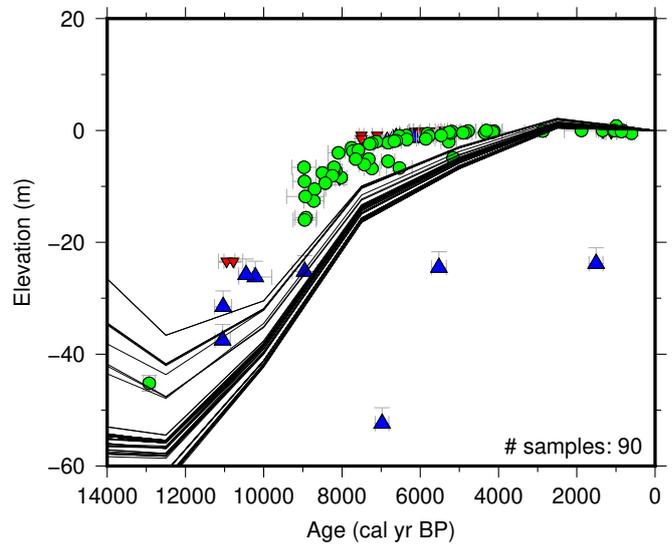
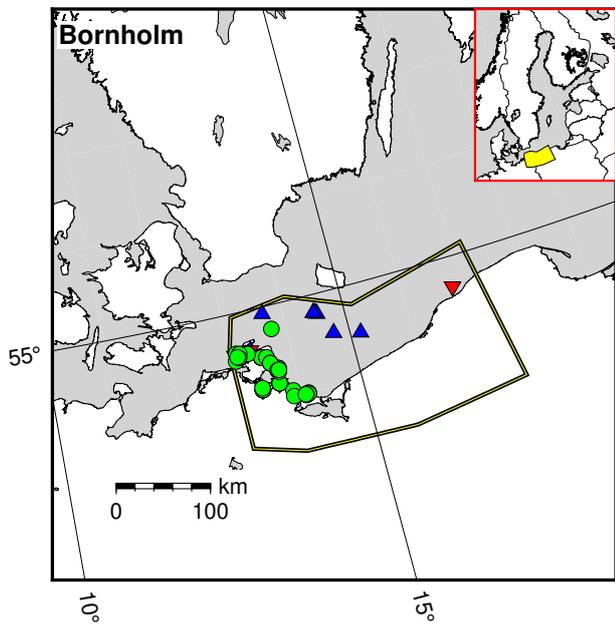


Figure 65: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Kaliningrad.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

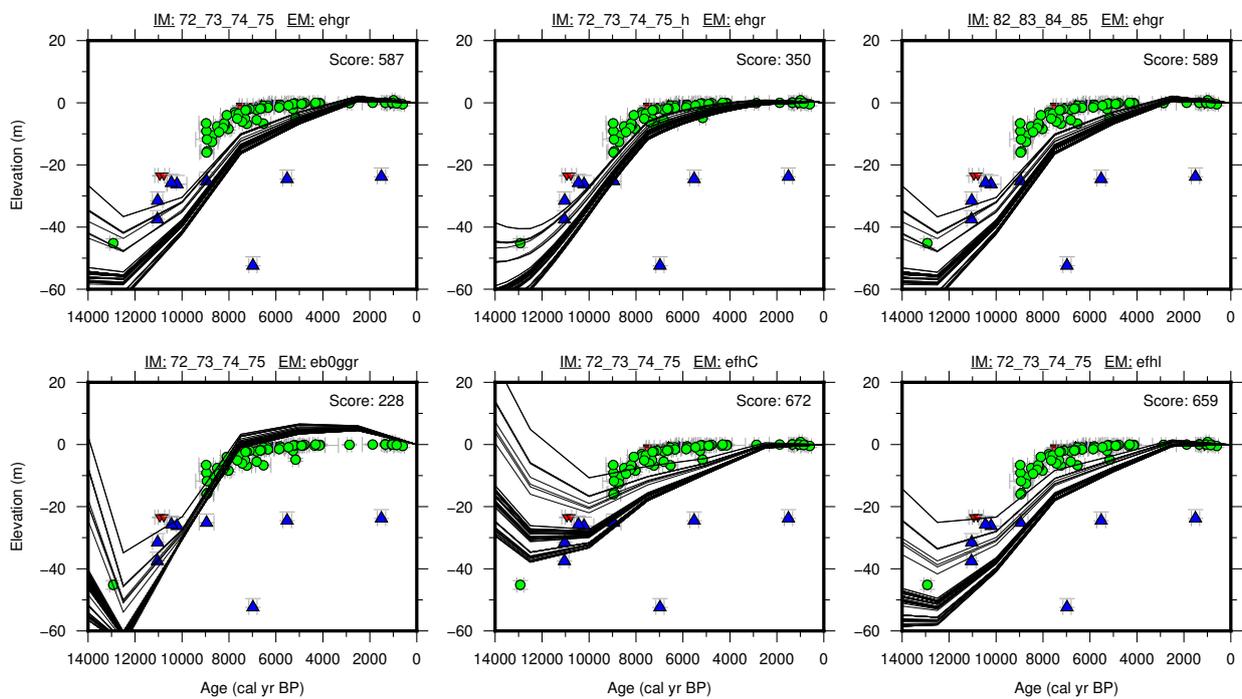


Figure 66: Paleo-sea level and comparison of six models for subregion Baltic Sea, location Bornholm.

9.2 Danish straits - Kattegat - Skagerrak

References for the data used in each location.

Mecklenburg:

Kiel:

Great Belt:

Copenhagen:

Kattegat:

Northern Jylland:

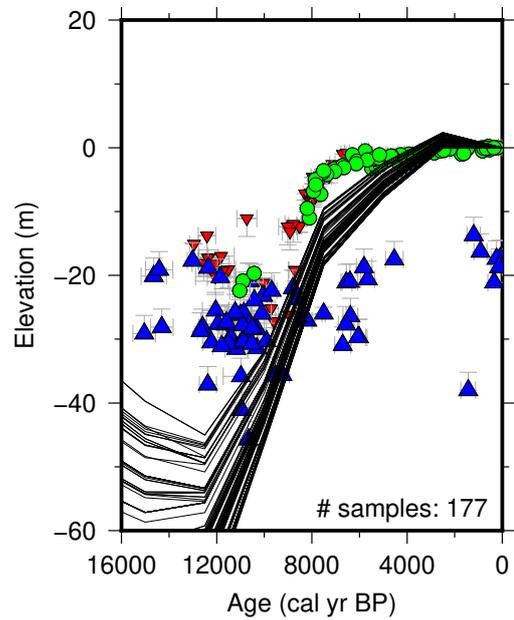
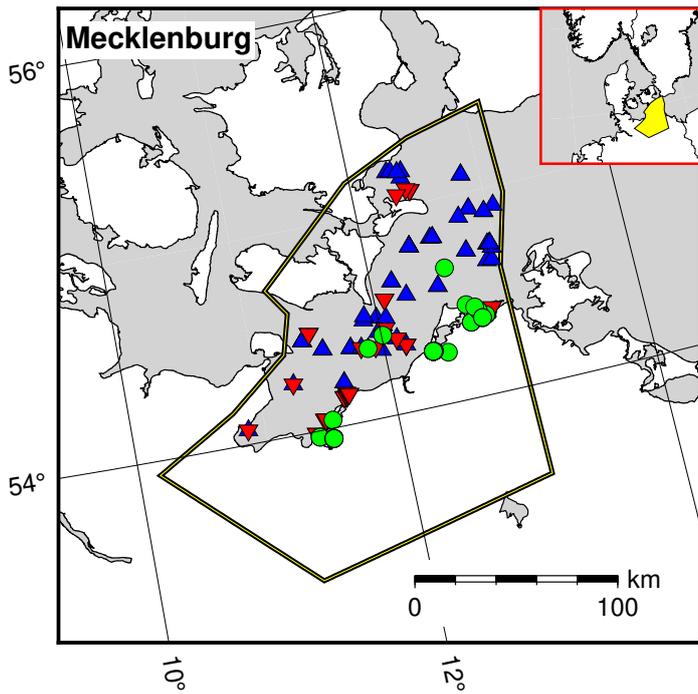
Limfjord:

Halland:

Halden: Sørensen (1999)

Ski: Gulliksen et al. (1975); Sørensen (1979)

Kragerod Porsgrunn: Henningsmoen (1979); Stabell (1980)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

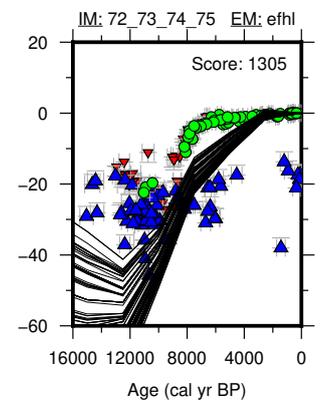
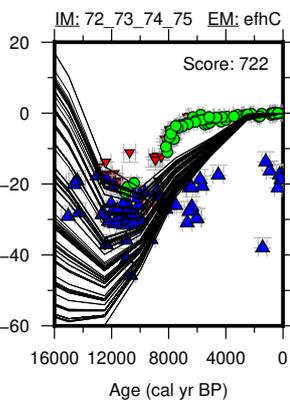
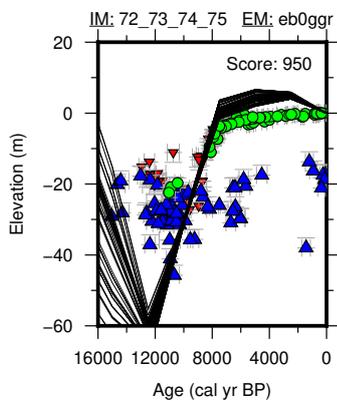
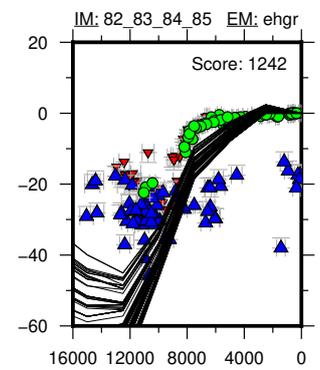
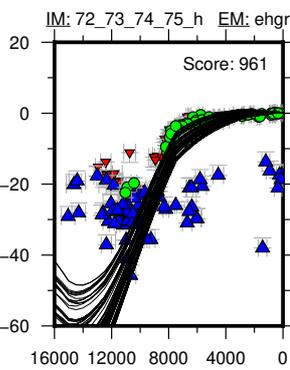
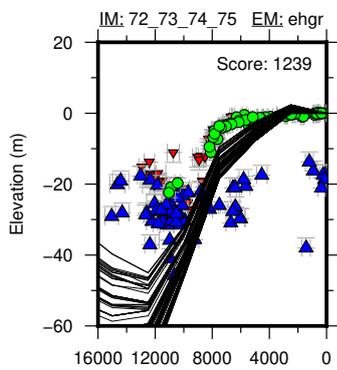
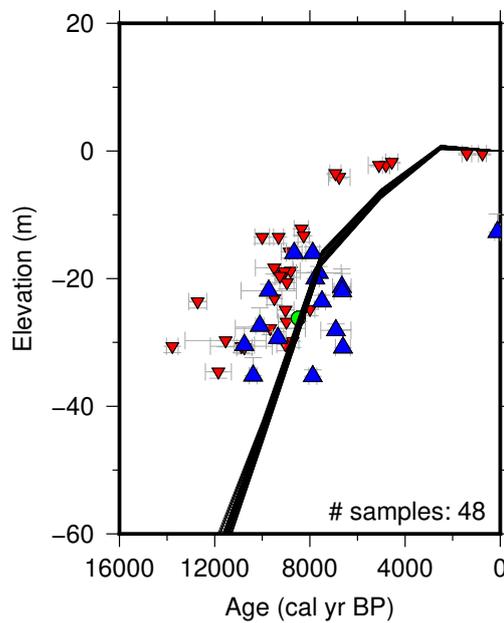
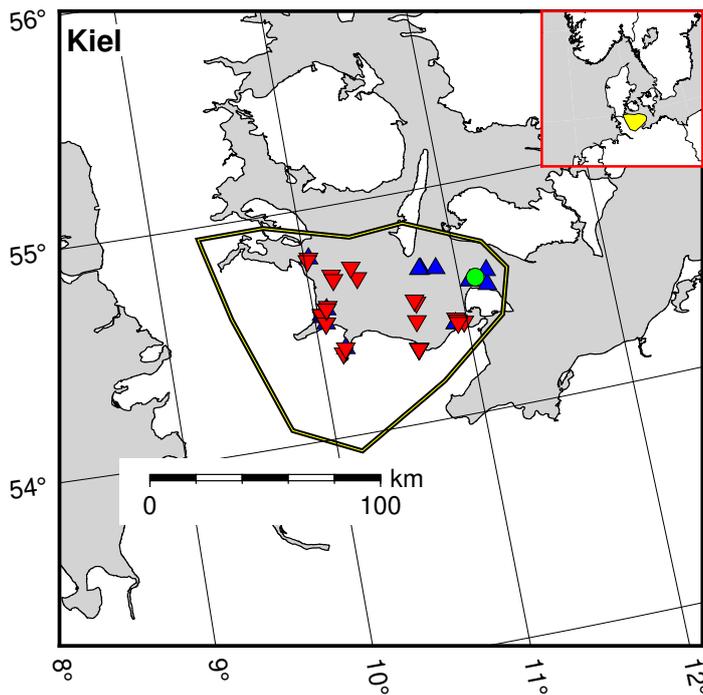


Figure 67: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Mecklenburg.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

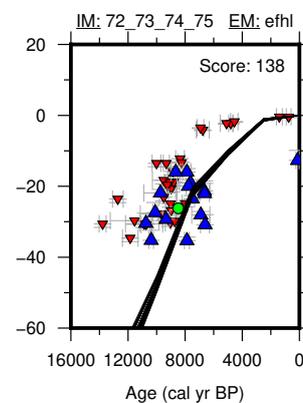
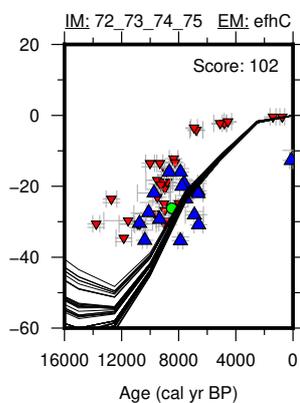
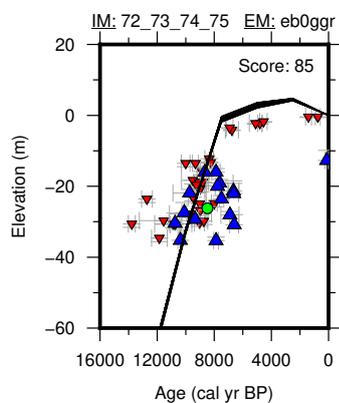
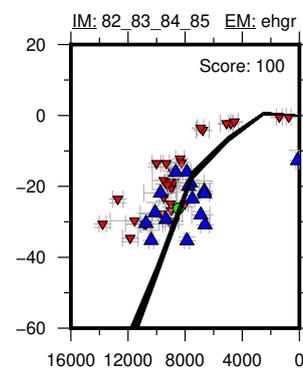
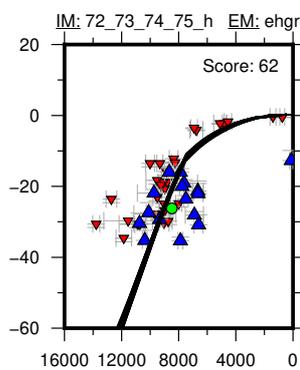
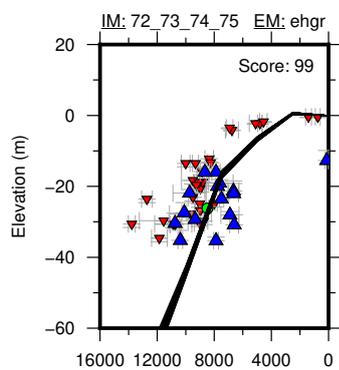


Figure 68: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Kiel.

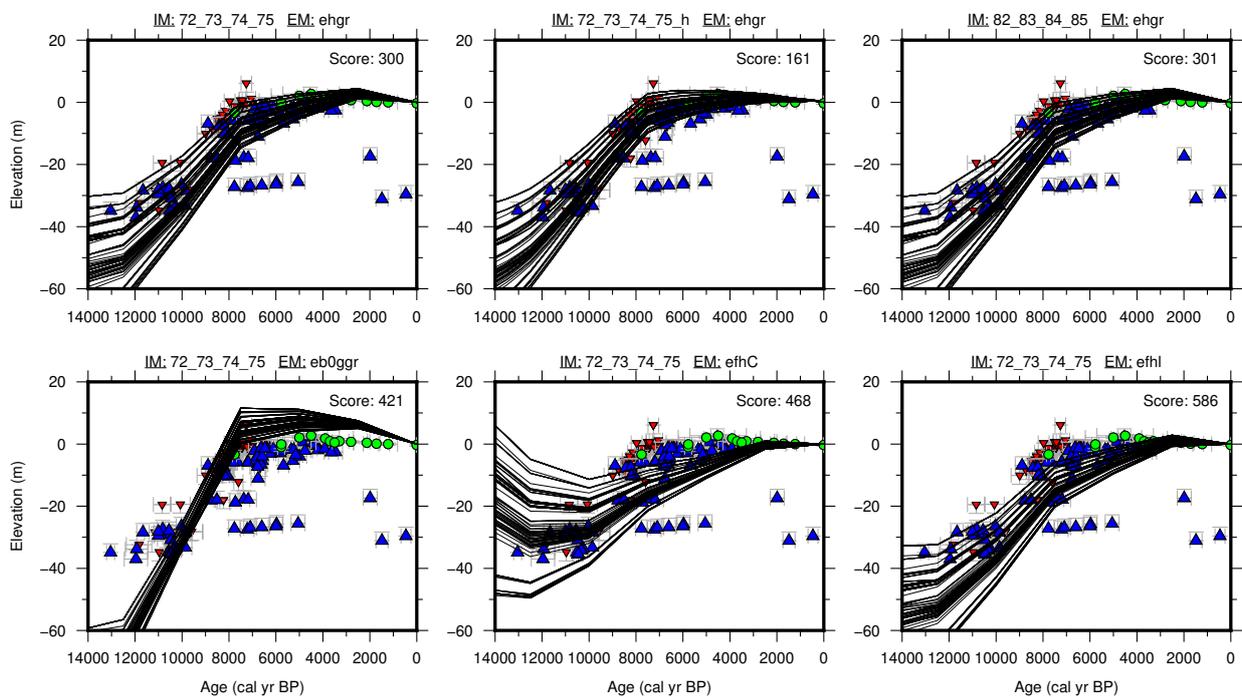
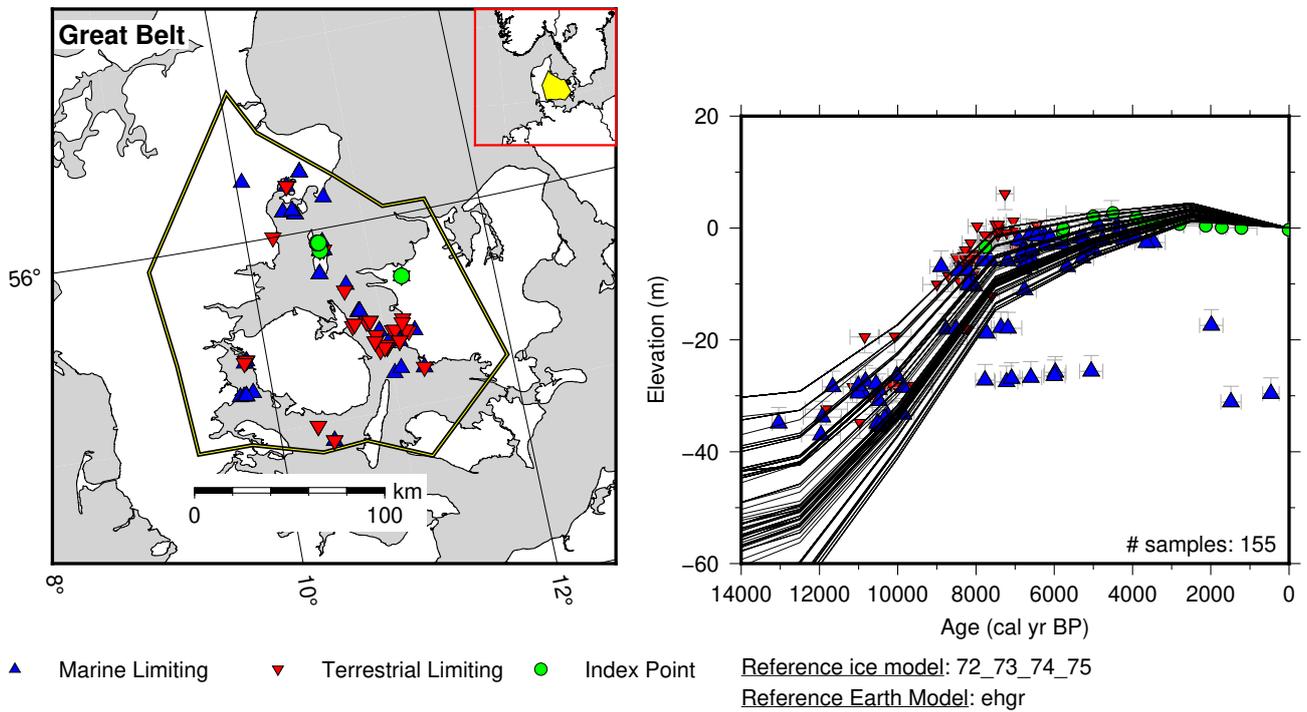


Figure 69: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Great Belt.

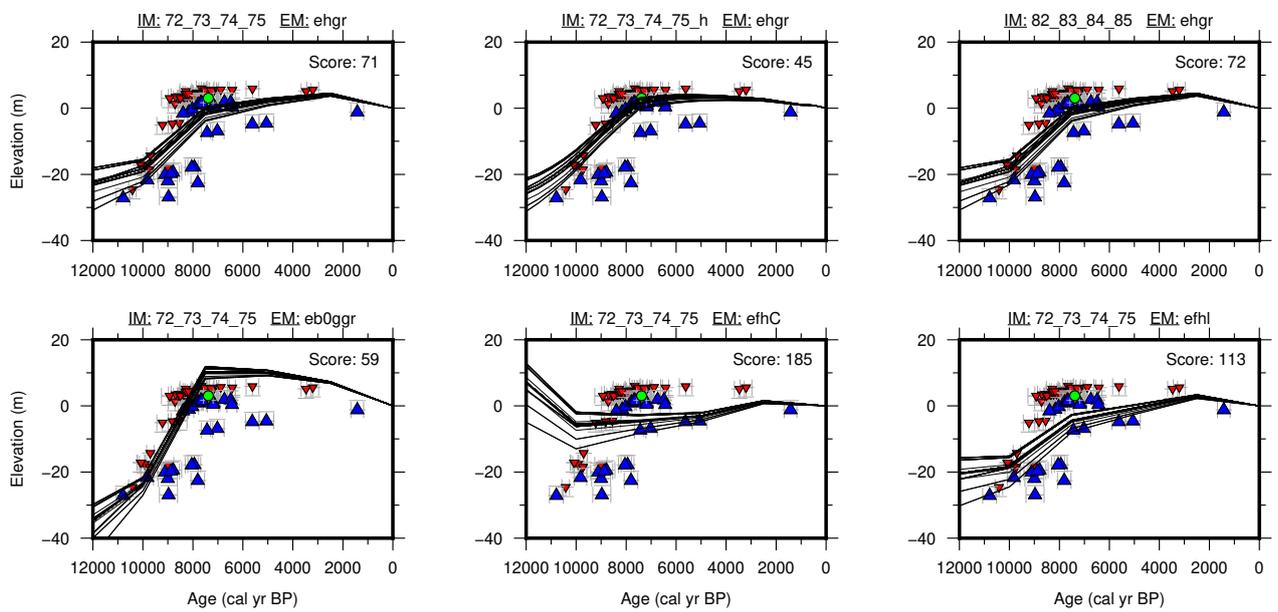
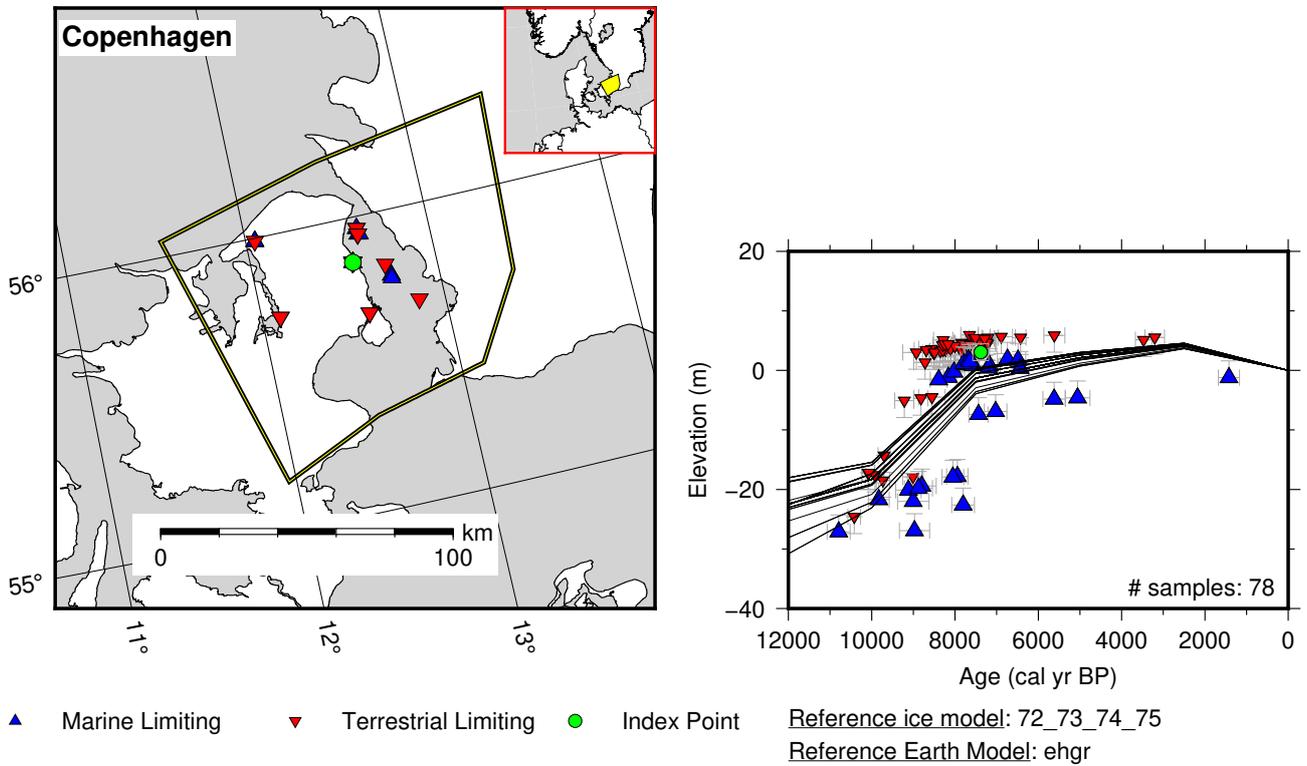


Figure 70: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Copenhagen.

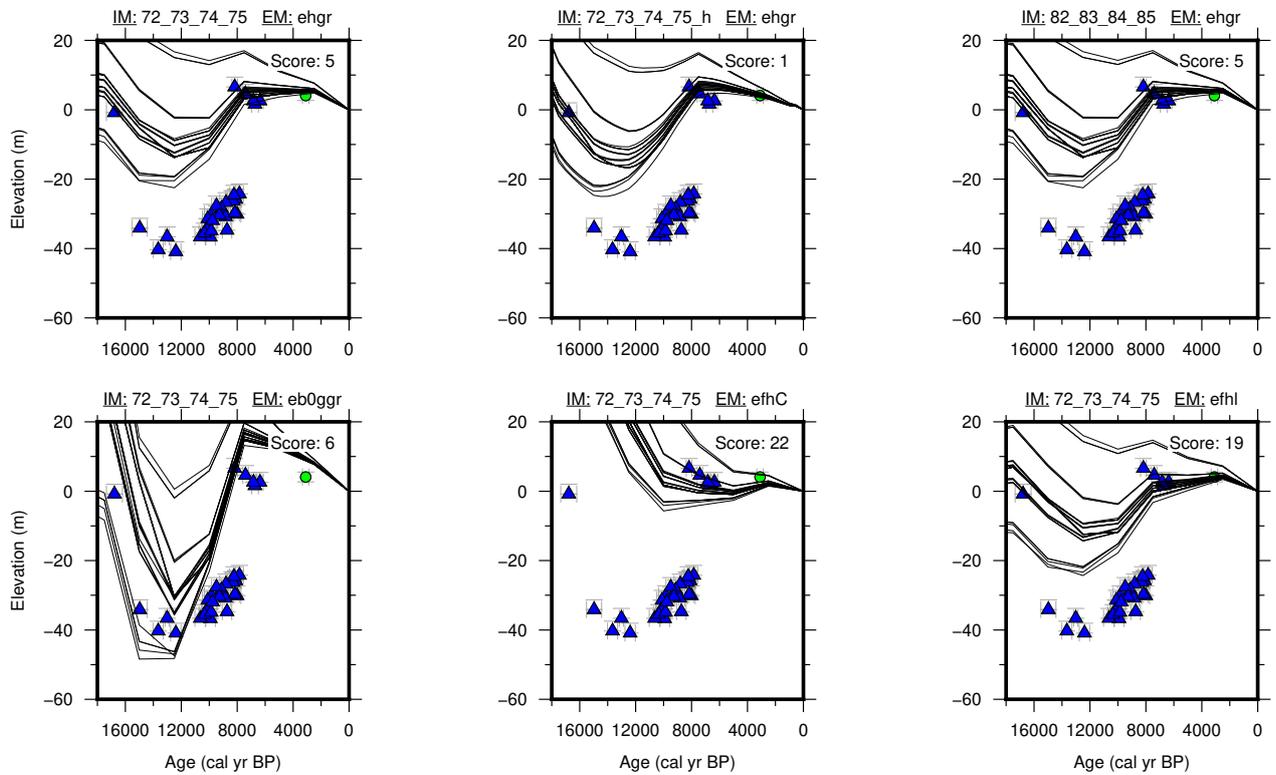
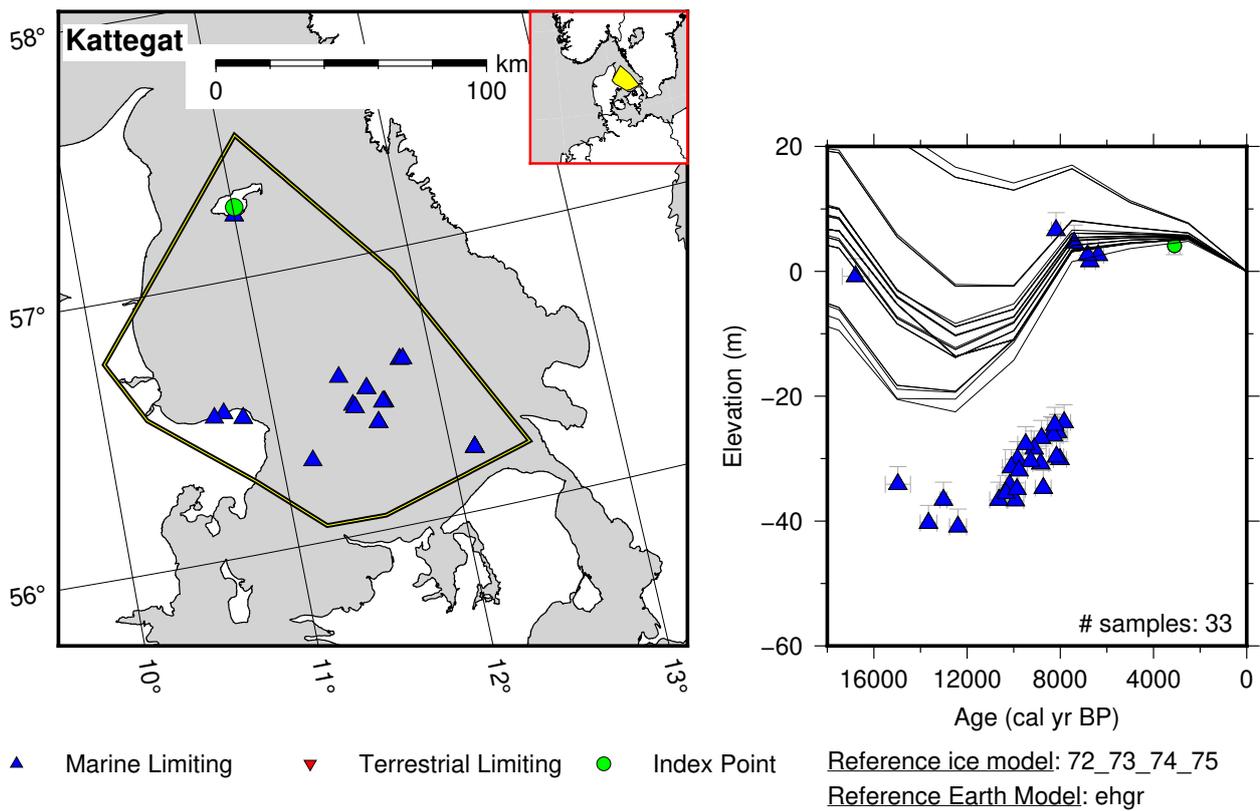
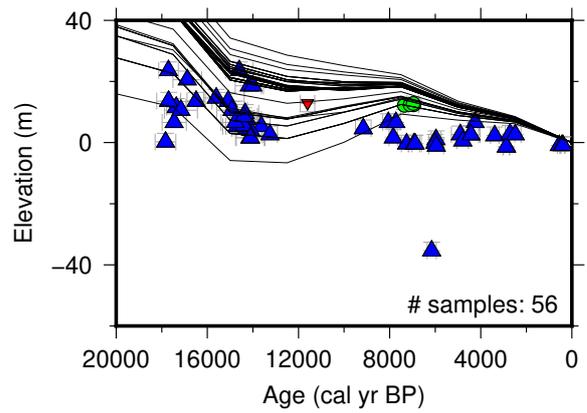
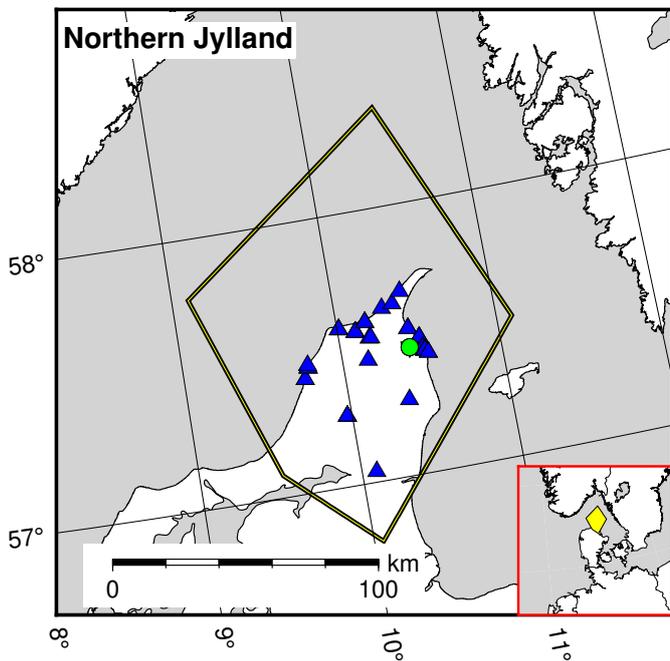


Figure 71: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Kattegat.



▲ Marine Limiting
 ▼ Terrestrial Limiting
 ● Index Point
 Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

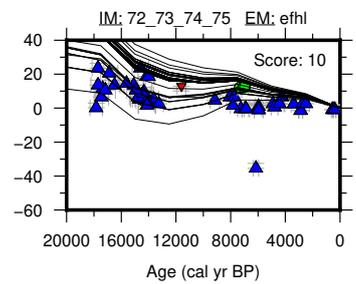
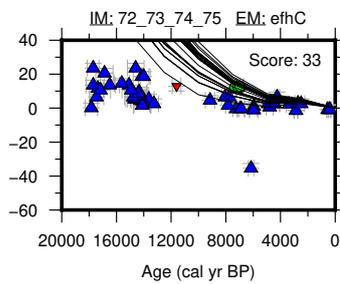
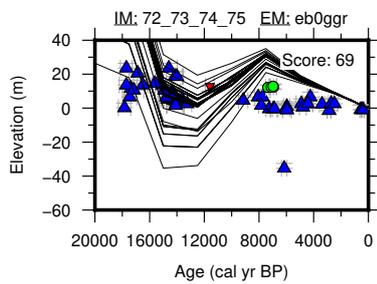
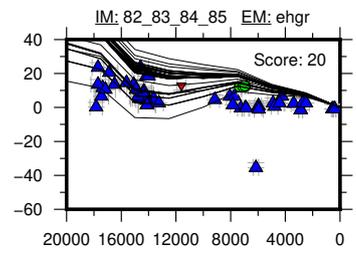
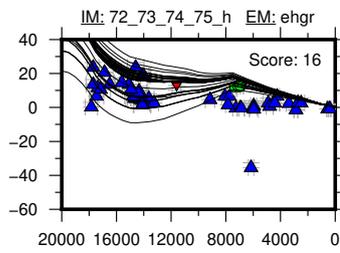
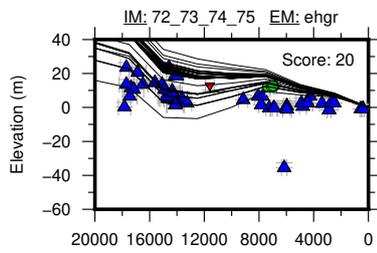
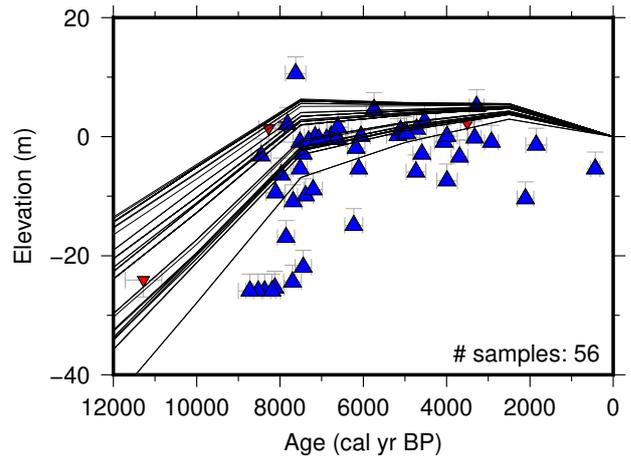
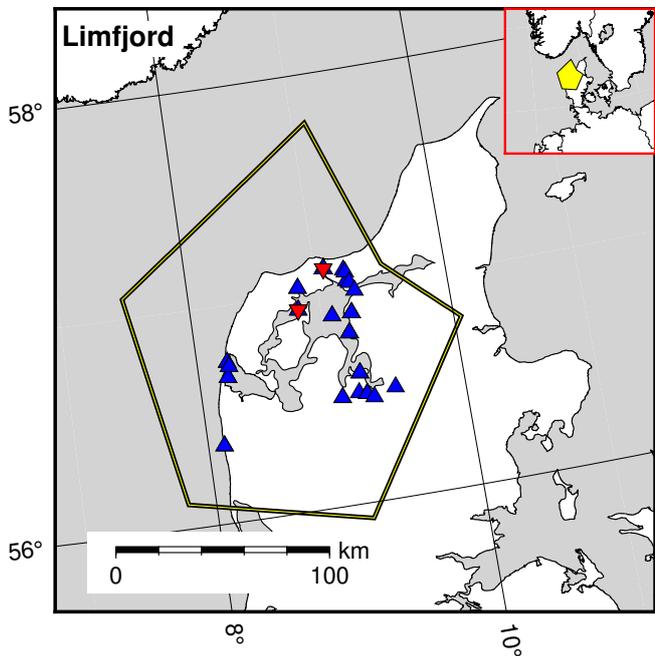


Figure 72: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Northern Jylland.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

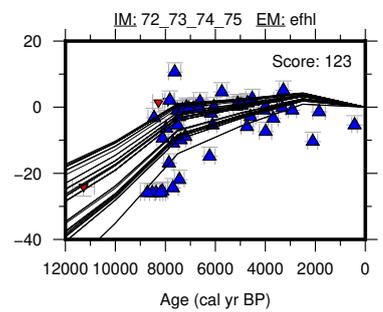
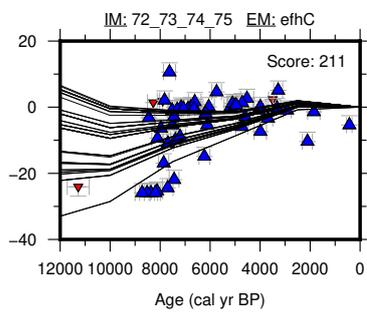
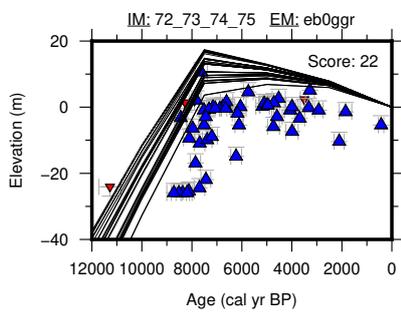
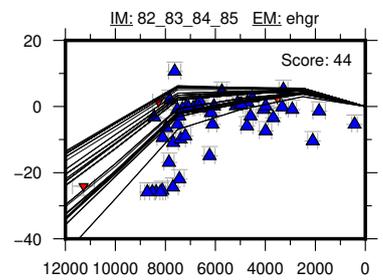
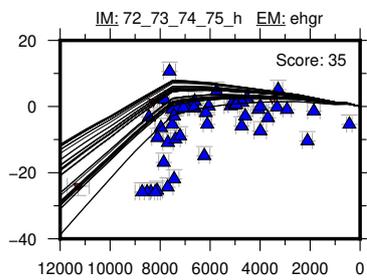
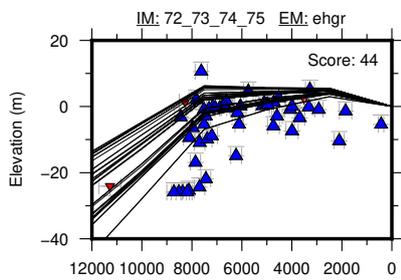


Figure 73: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Limfjord.

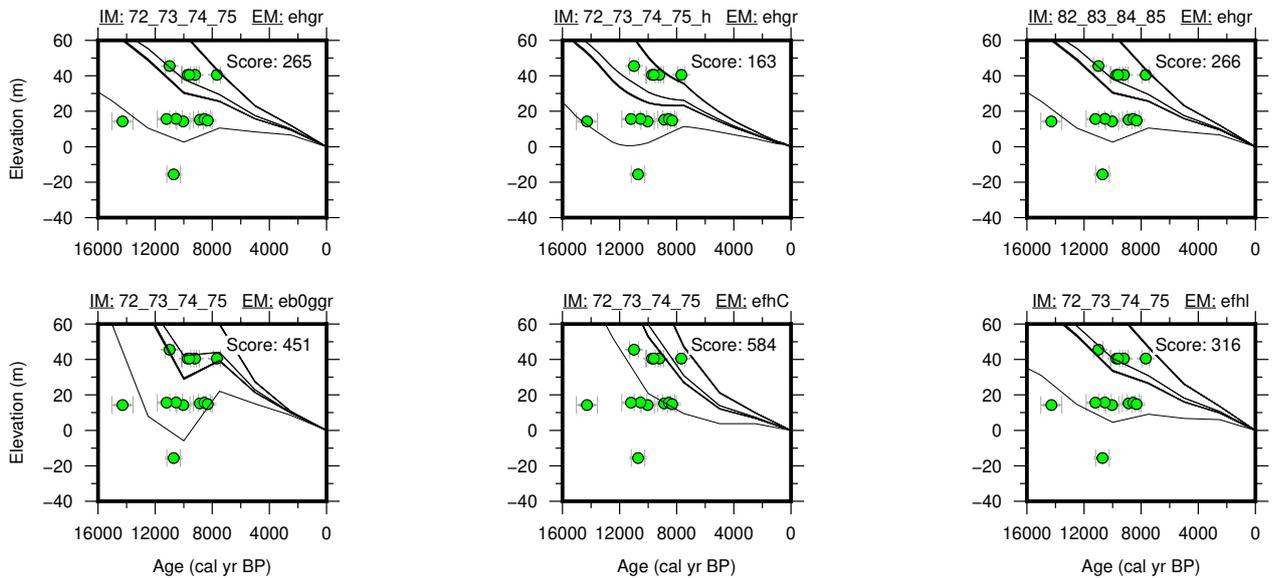
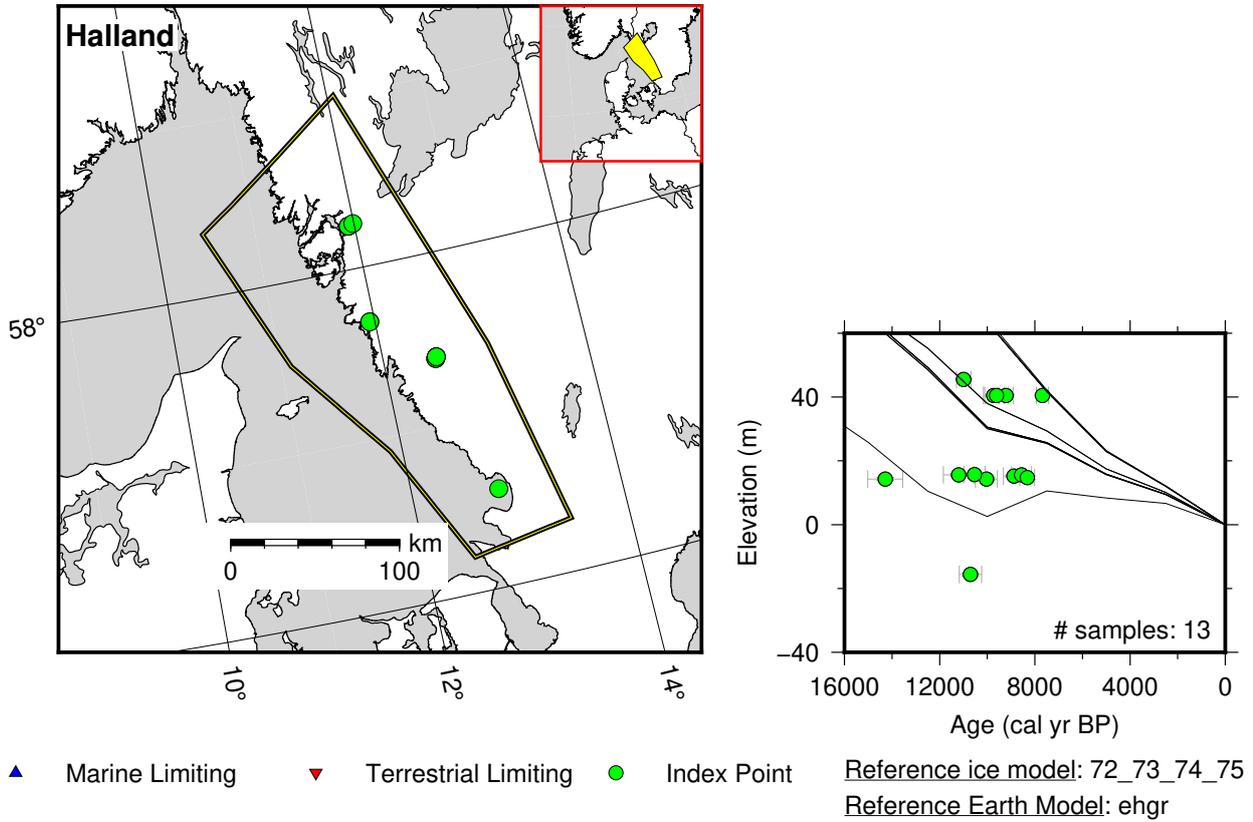
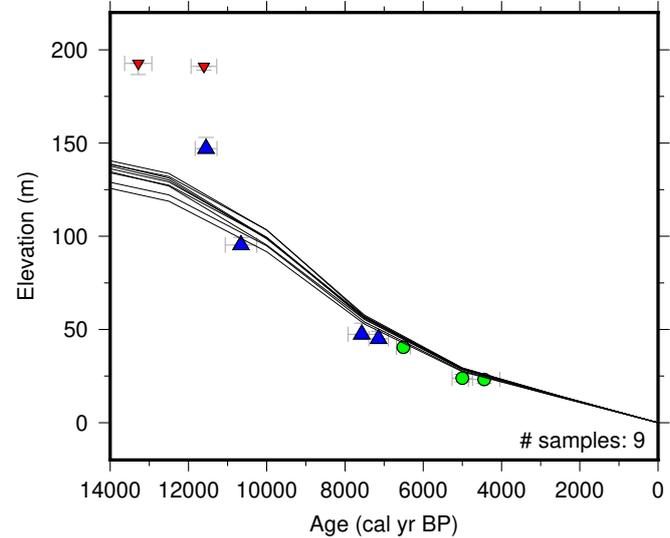
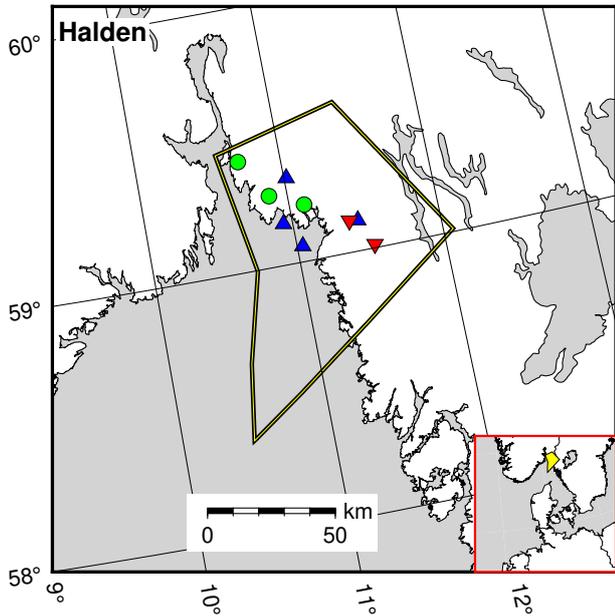


Figure 74: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Halland.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

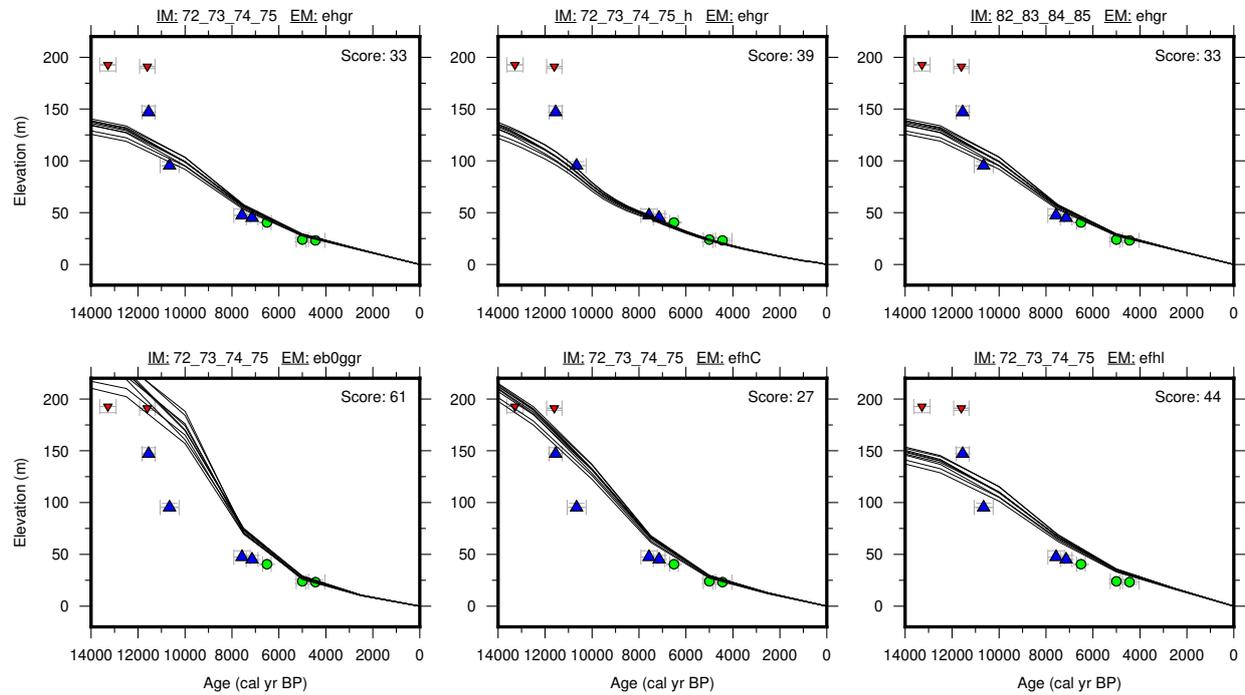


Figure 75: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Halden.

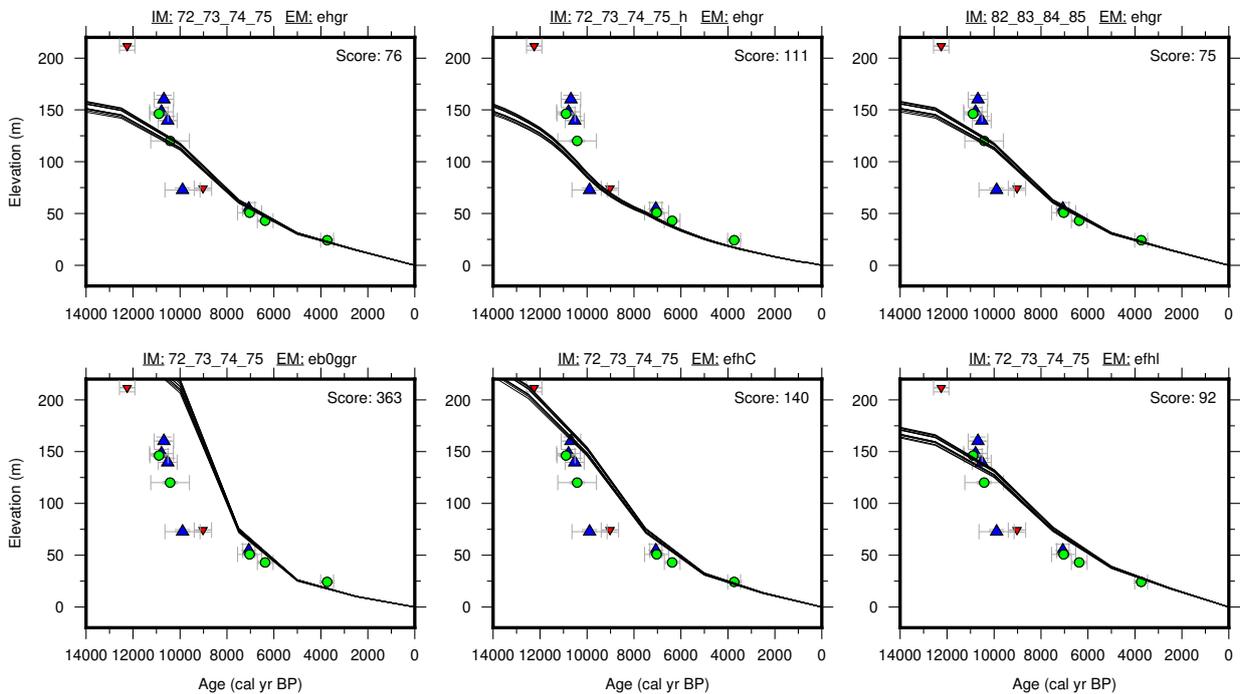
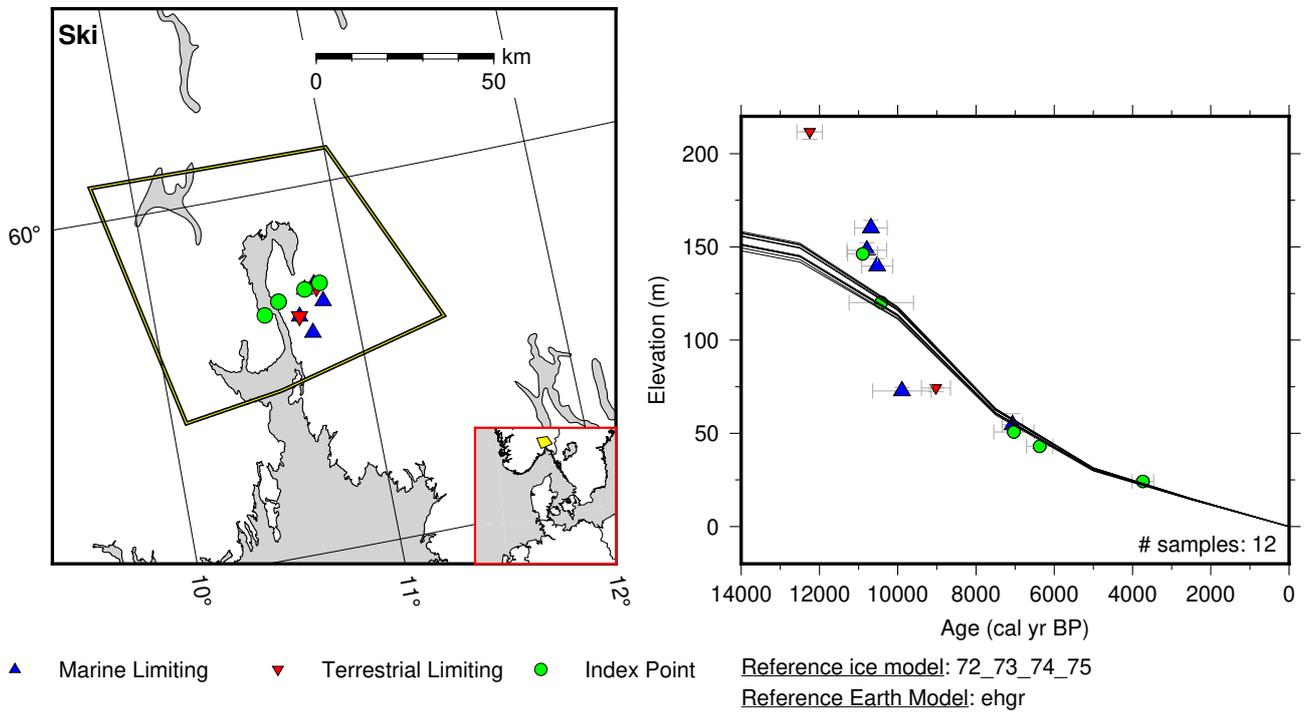
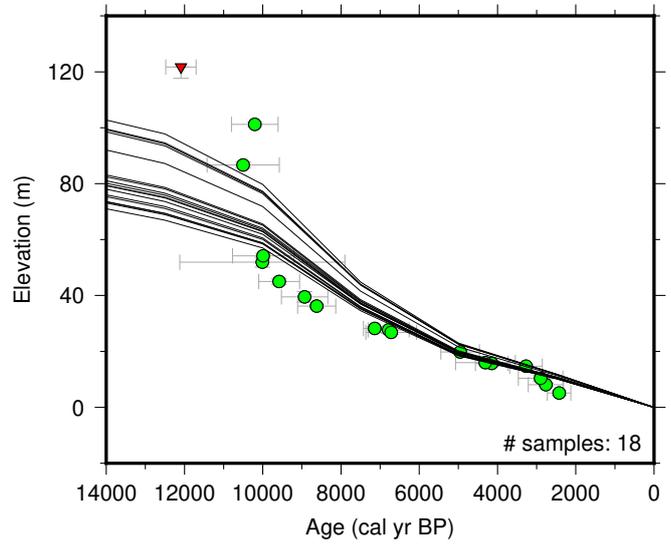
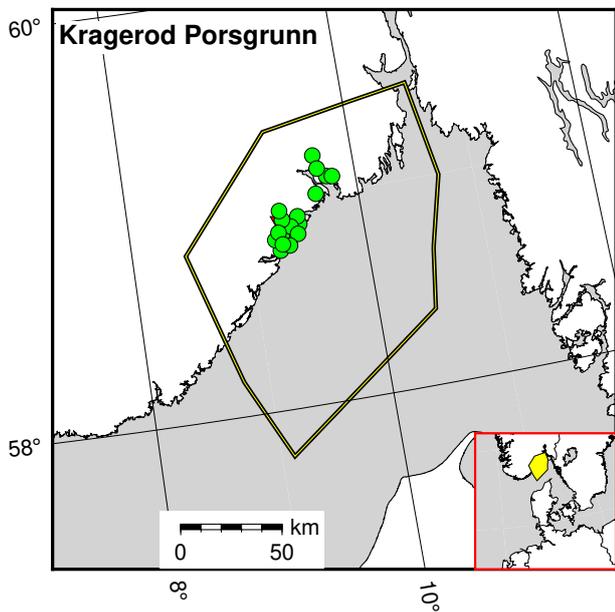


Figure 76: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Ski.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

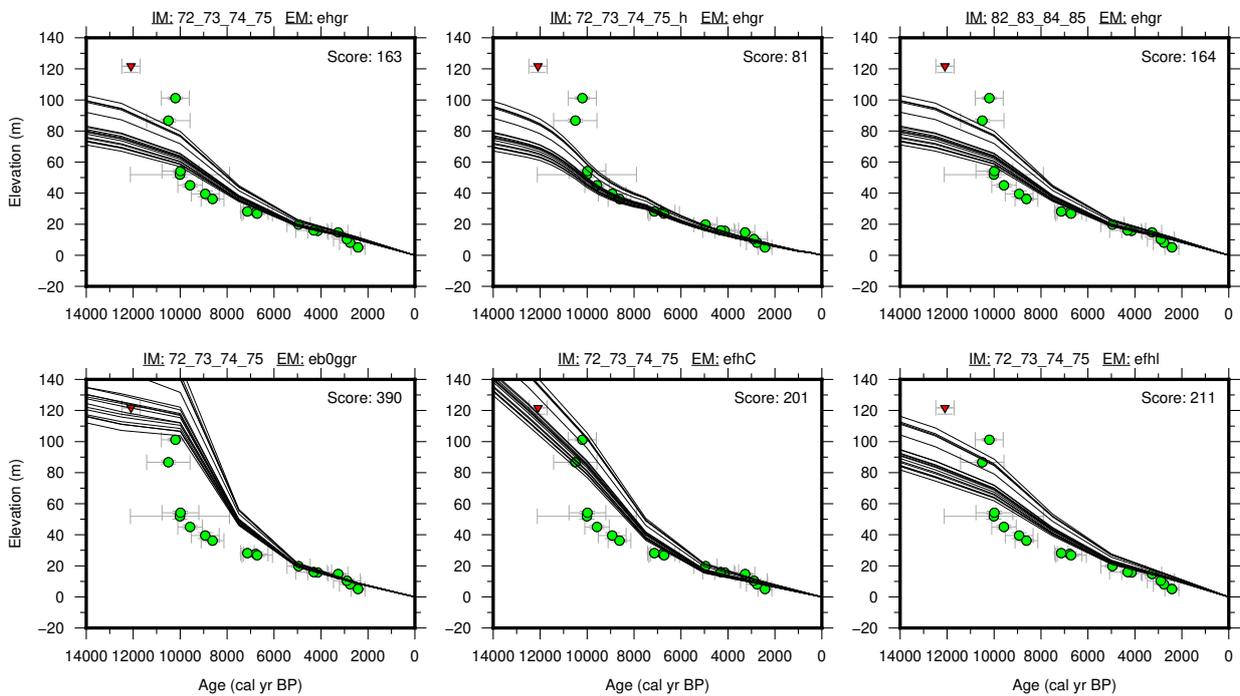


Figure 77: Paleo-sea level and comparison of six models for subregion Danish straits - Kattegat - Skagerrak, location Kragerod Porsgrunn.

9.3 North Sea

References for the data used in each location.

Rotterdam: Berendsen et al. (2007); Hijma and Cohen (2010, 2019); Hijma et al. (2009); Jelgersma (1961); Kiden (1995); Slupik et al. (2013); van de Plassche (1982, 1995); van de Plassche et al. (2010); van Heteren et al. (2002); Vos (1992, 2013); Vos and Cohen (2014); Vos et al. (2010, 2011, 2015)

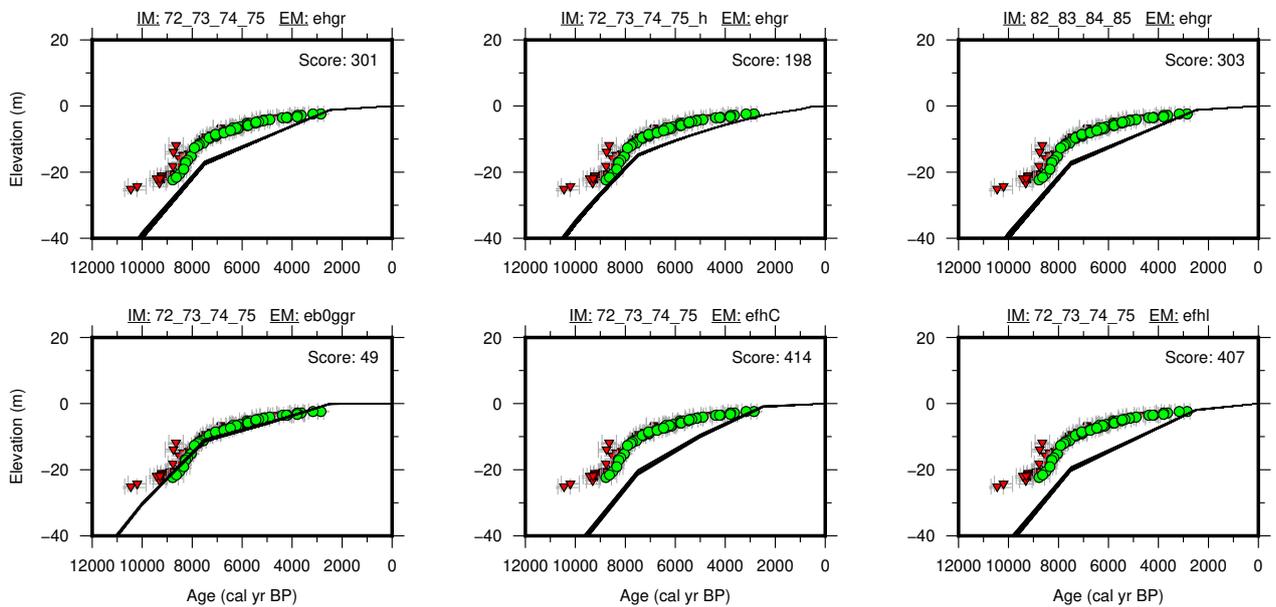
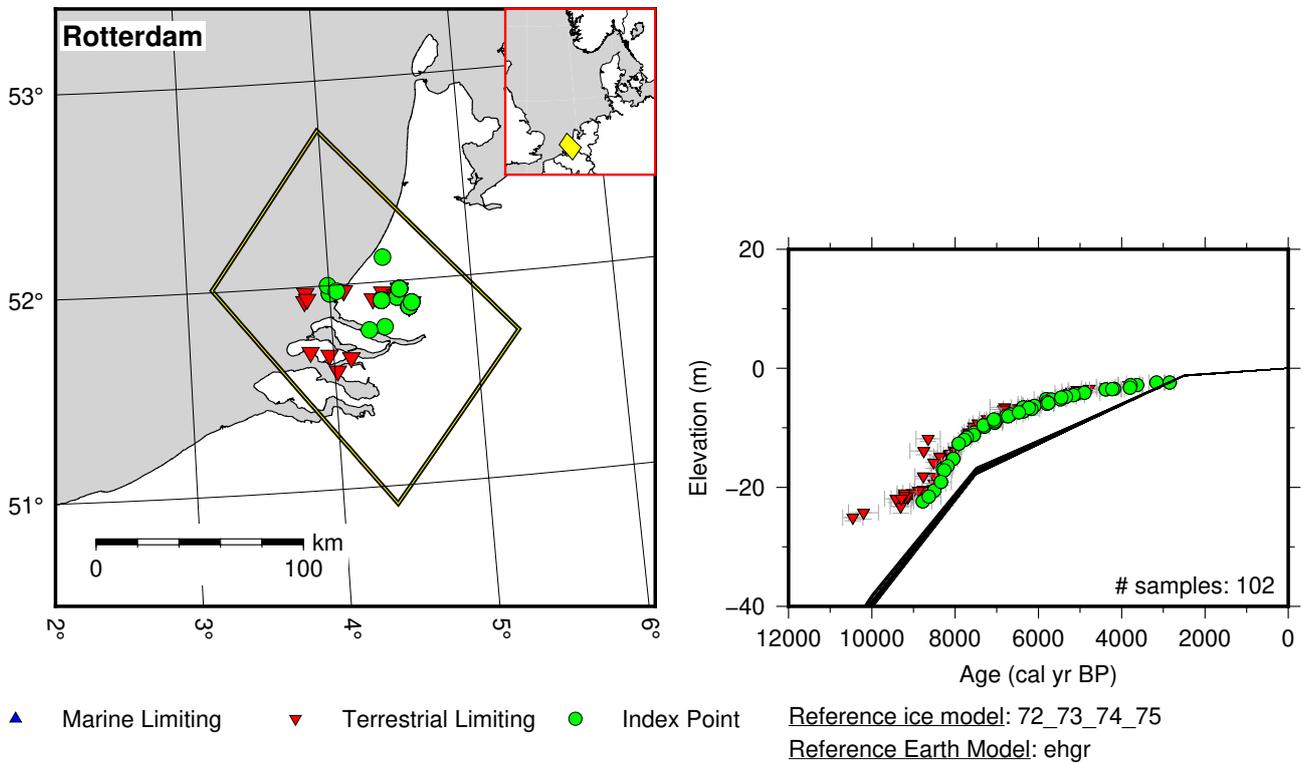


Figure 78: Paleo-sea level and comparison of six models for subregion North Sea, location Rotterdam.

9.4 Western Norway

References for the data used in each location.

Stavanger: Helle (2008); Prøsch-Danielsen (2006); Thomsen (1982)

Sotra: Bondevik et al. (2006); Håkansson (1980); Kaland et al. (1984); Krzywinski and Stabell (1984); Lohne et al. (2007); Stabell and Krzywinski (1978, 1979)

Torvikbygd: Helle (2008); Romundset et al. (2010)

Sula: Bondevik et al. (1997a); Hafsten (1979); Lie et al. (1983); Svendsen and Mangerud (1987)

Bjugn: Bondevik et al. (1997a,b); Kjemperud (1982, 1986)

Frosta: Kjemperud (1981a,b, 1986)

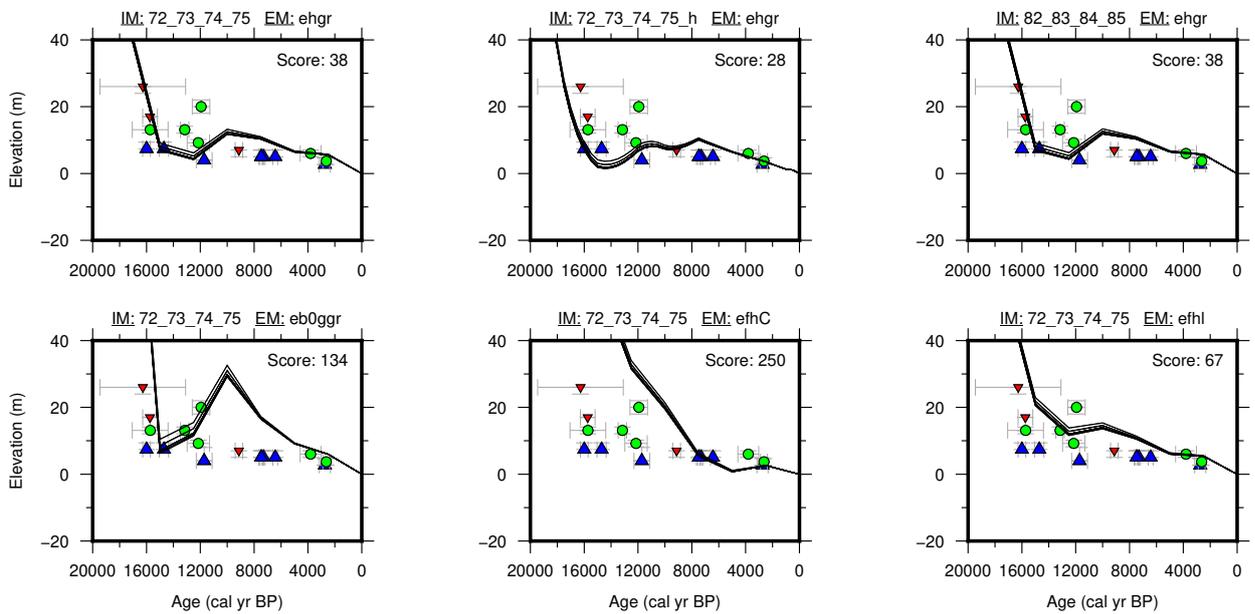
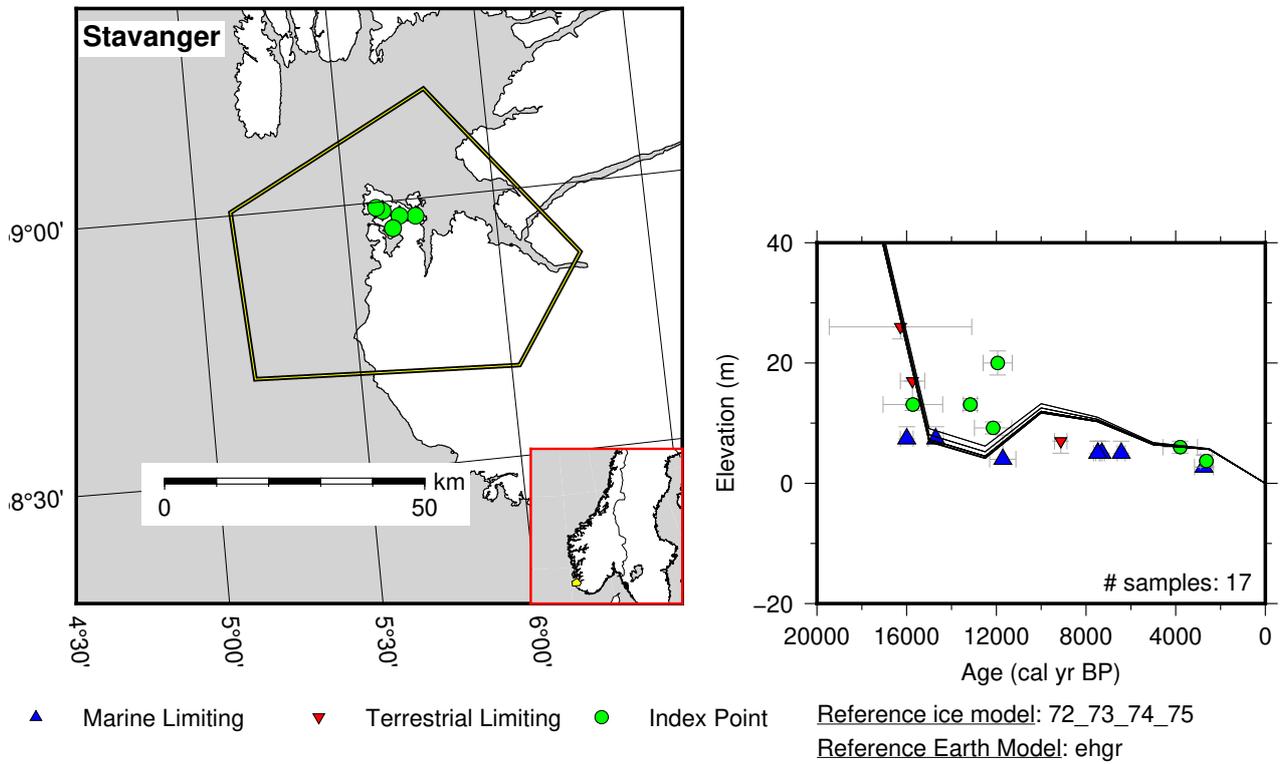


Figure 79: Paleo-sea level and comparison of six models for subregion Western Norway, location Stavanger.

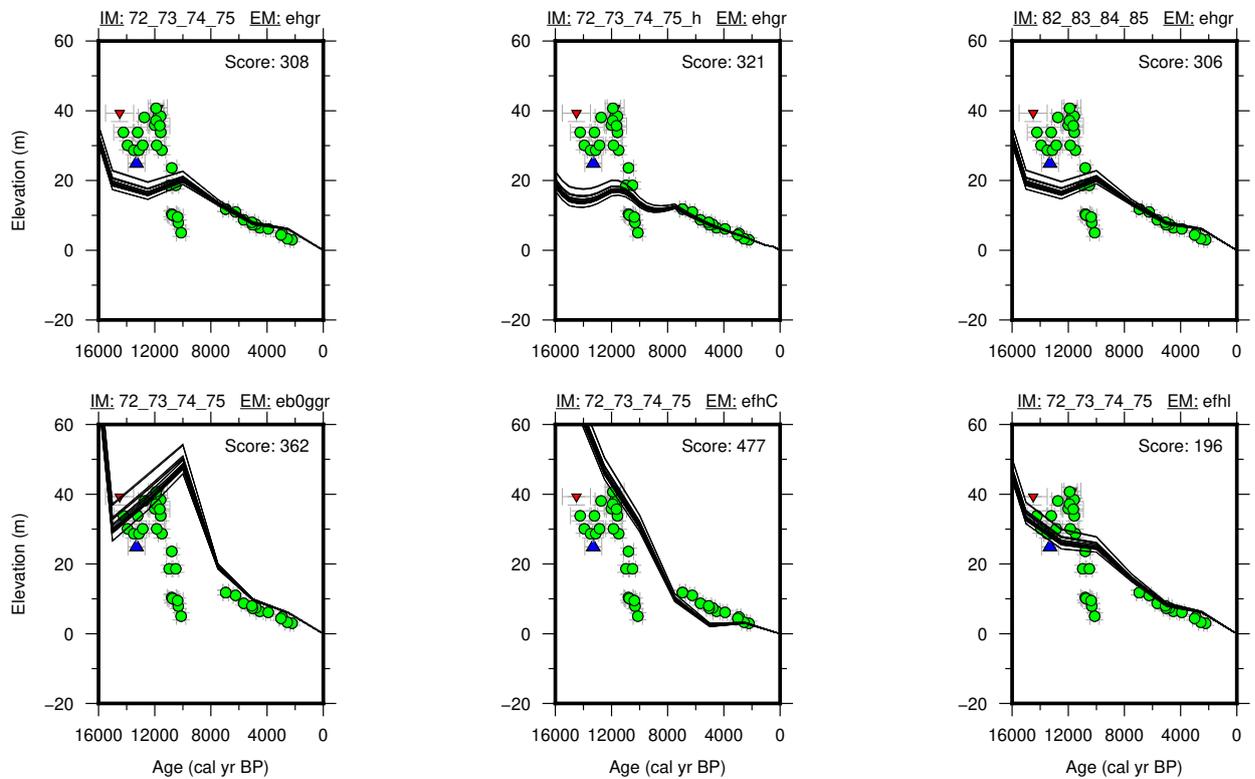
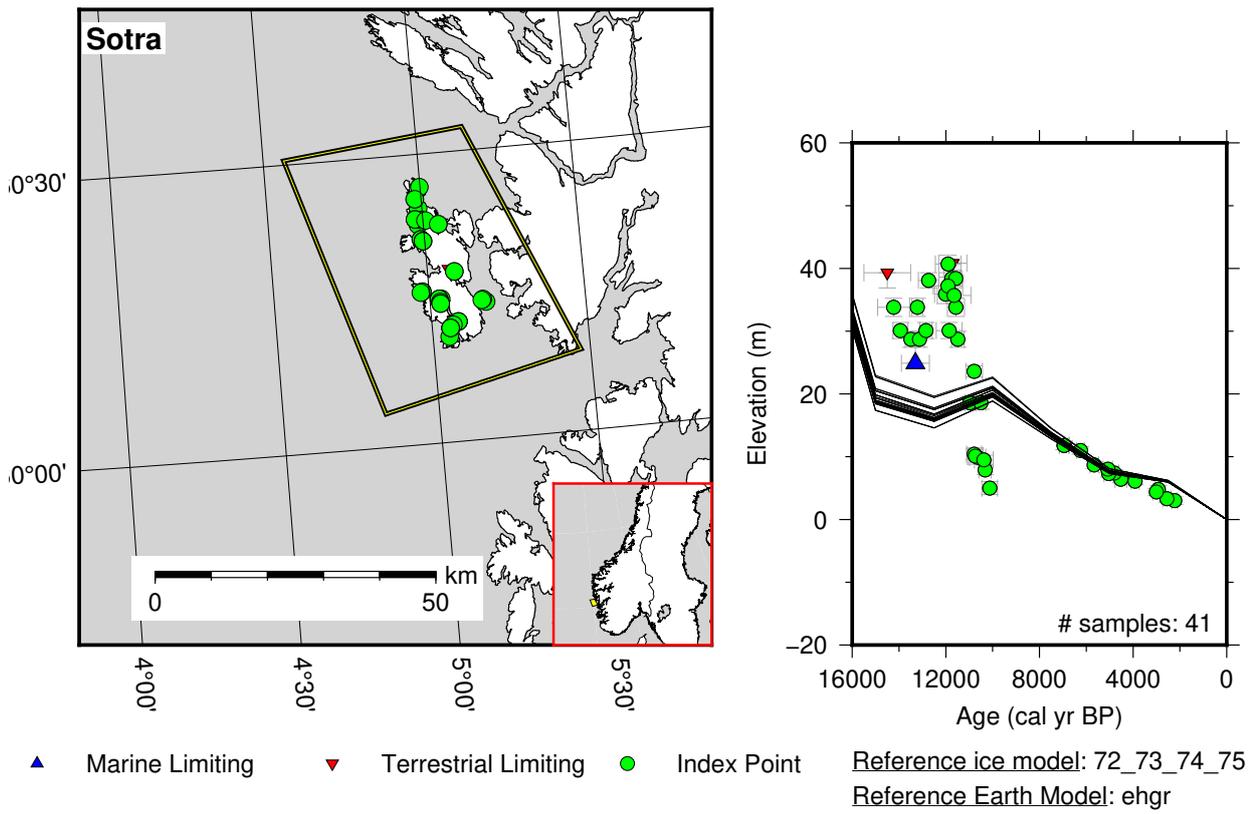
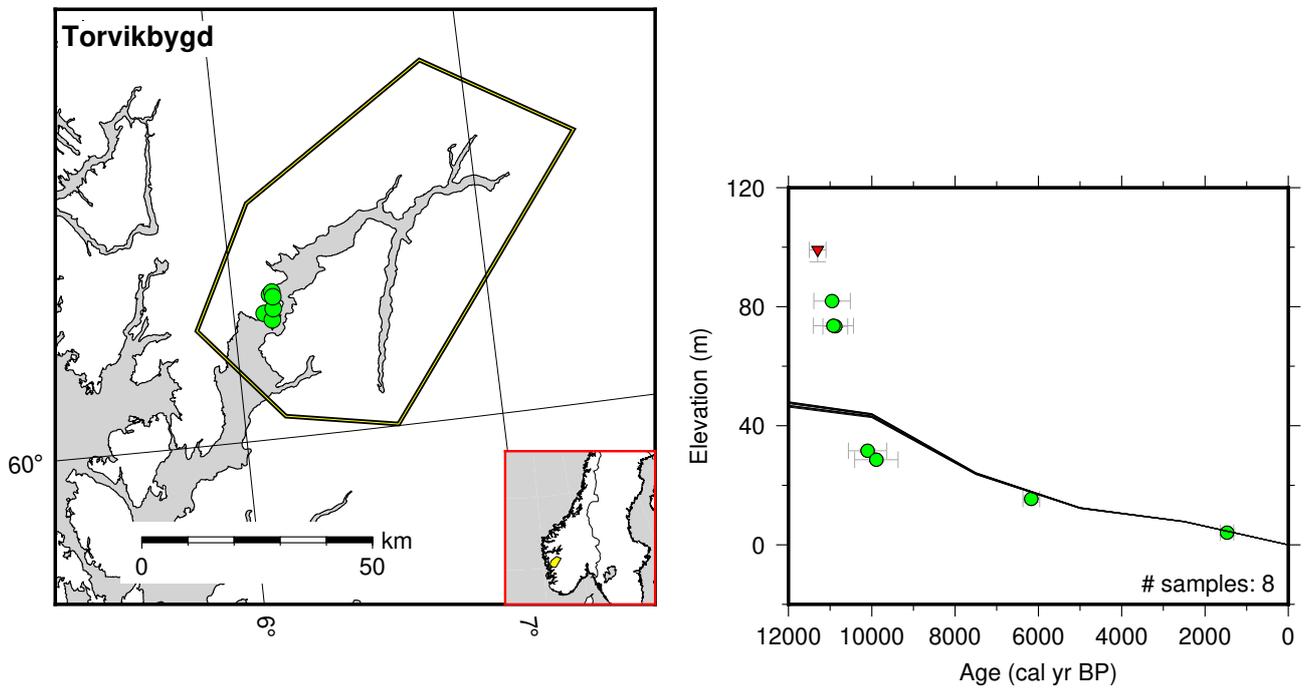


Figure 80: Paleo-sea level and comparison of six models for subregion Western Norway, location Sotra.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

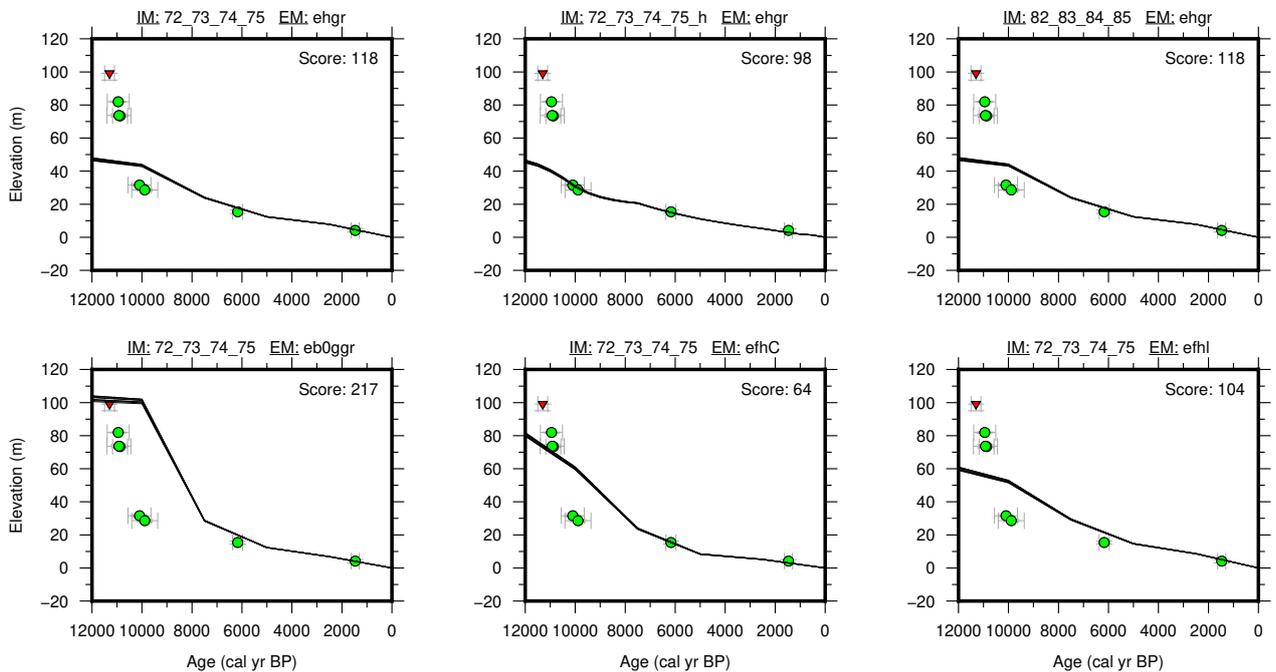


Figure 81: Paleo-sea level and comparison of six models for subregion Western Norway, location Torvikbygd.

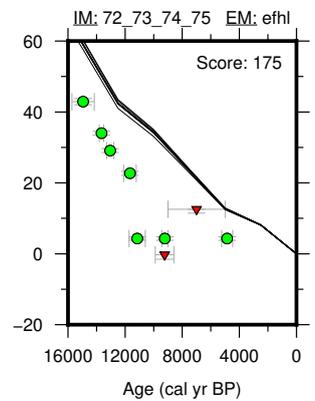
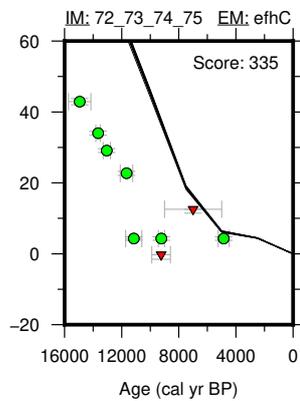
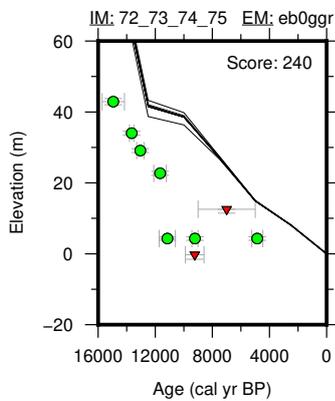
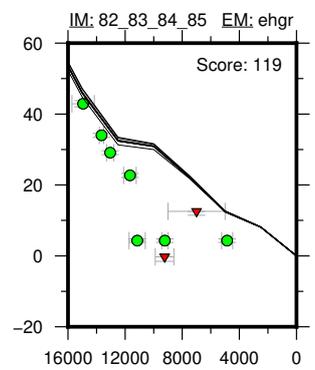
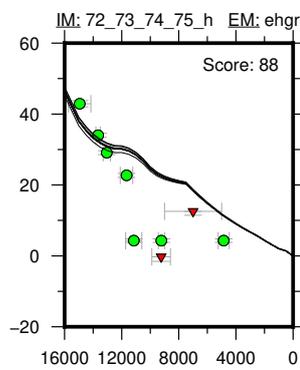
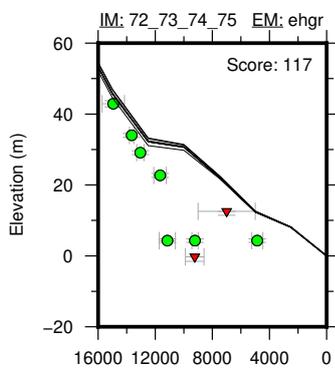
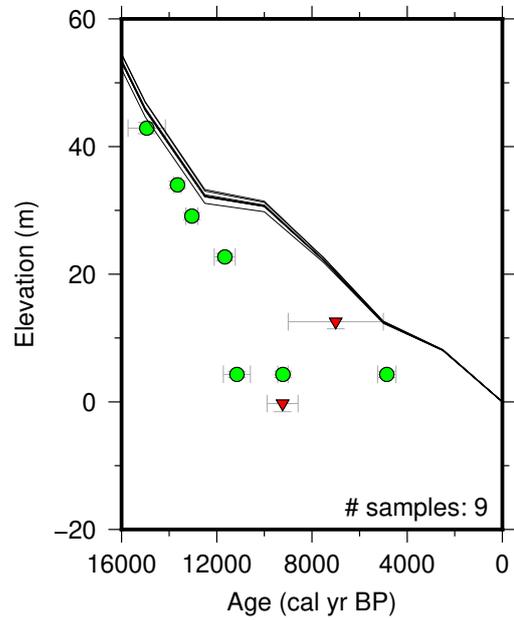
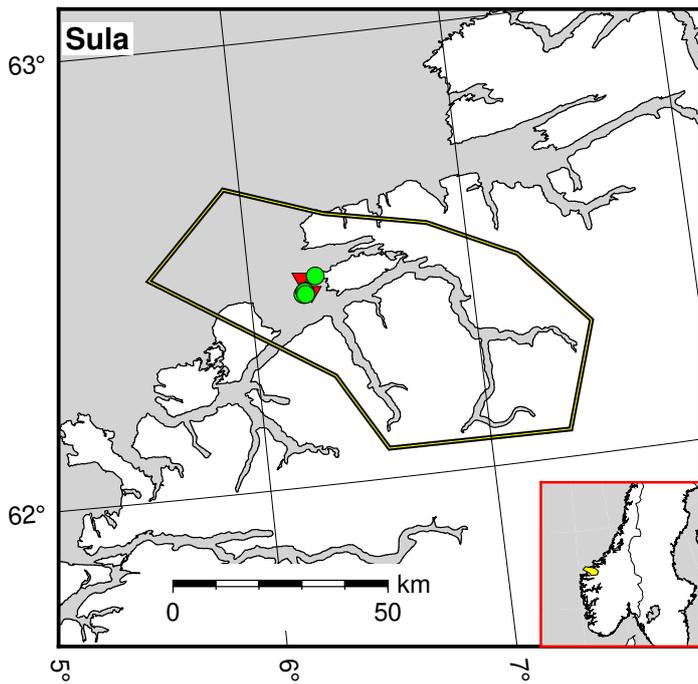
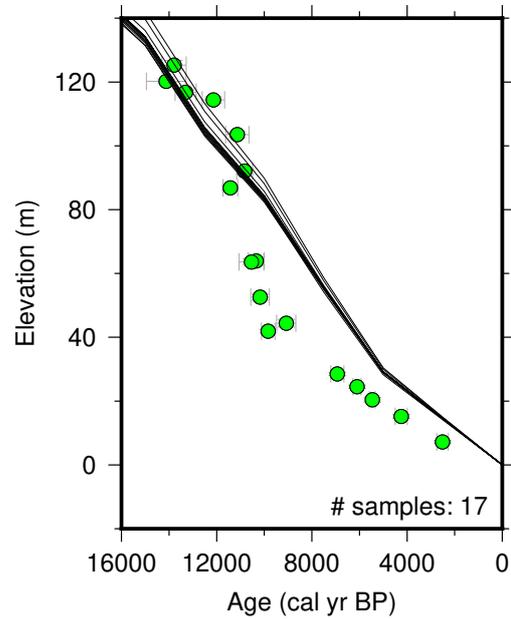
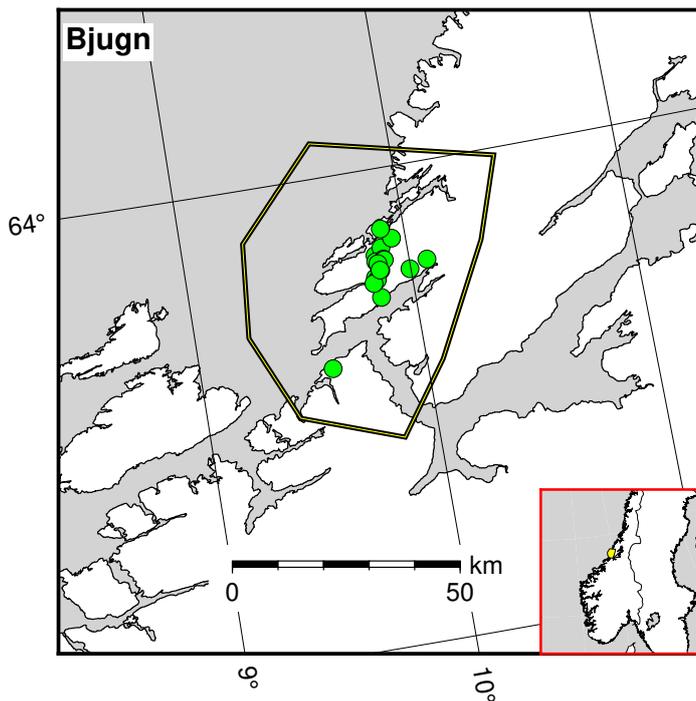


Figure 82: Paleo-sea level and comparison of six models for subregion Western Norway, location Sula.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

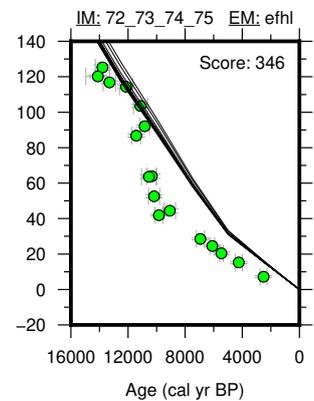
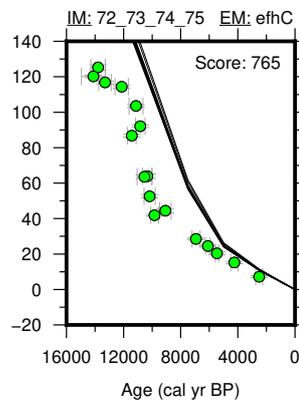
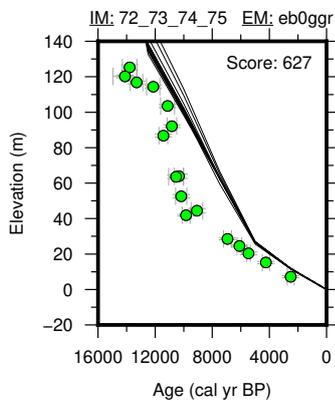
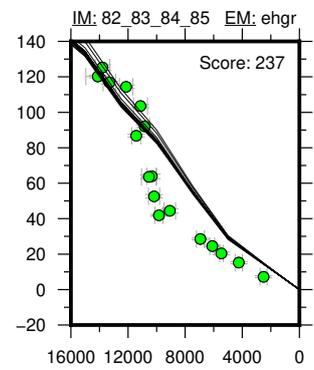
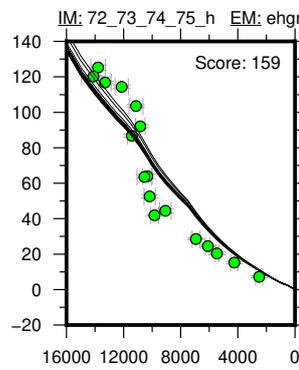
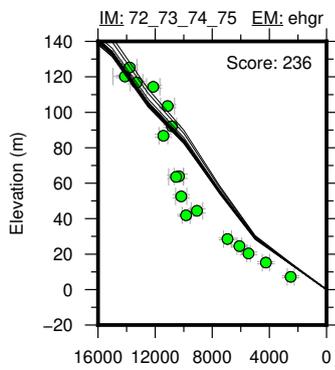


Figure 83: Paleo-sea level and comparison of six models for subregion Western Norway, location Bjugn.

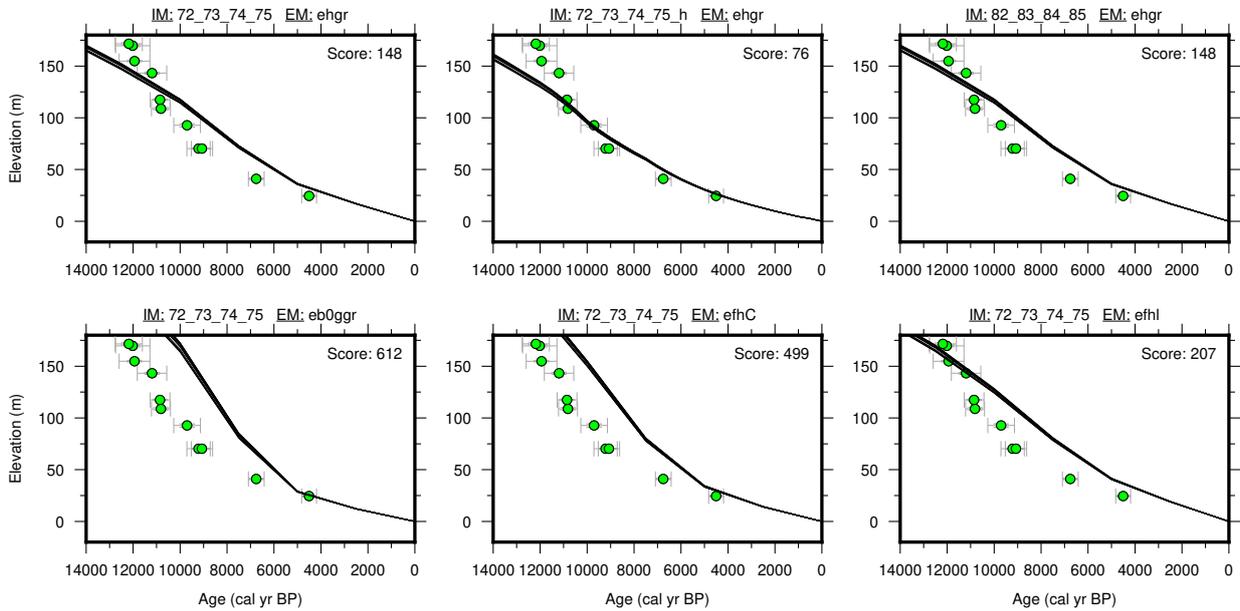
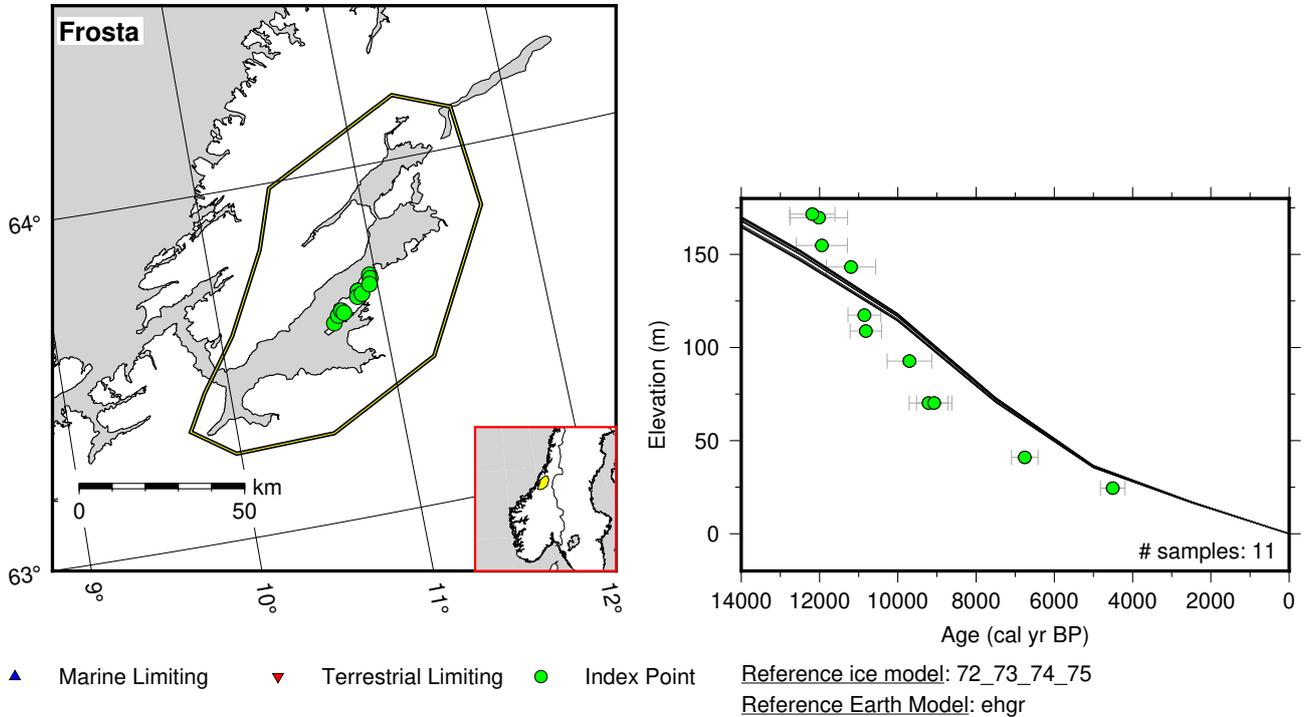


Figure 84: Paleo-sea level and comparison of six models for subregion Western Norway, location Frosta.

10 French Polynesia

10.1 French Polynesia

References for the data used in each location.

Mururoa: Camoin et al. (2001); Hibbert et al. (2016)

Tahiti: Bard et al. (1996, 2010); Deschamps et al. (2012); Hibbert et al. (2016)

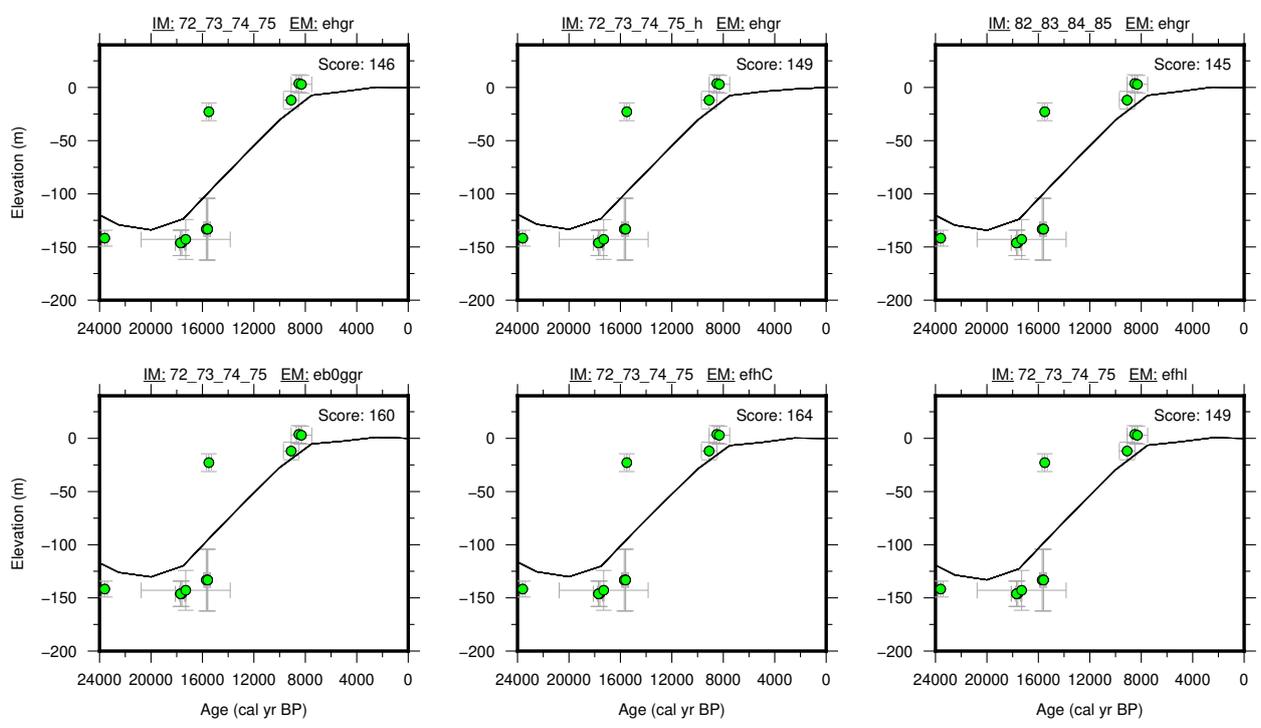
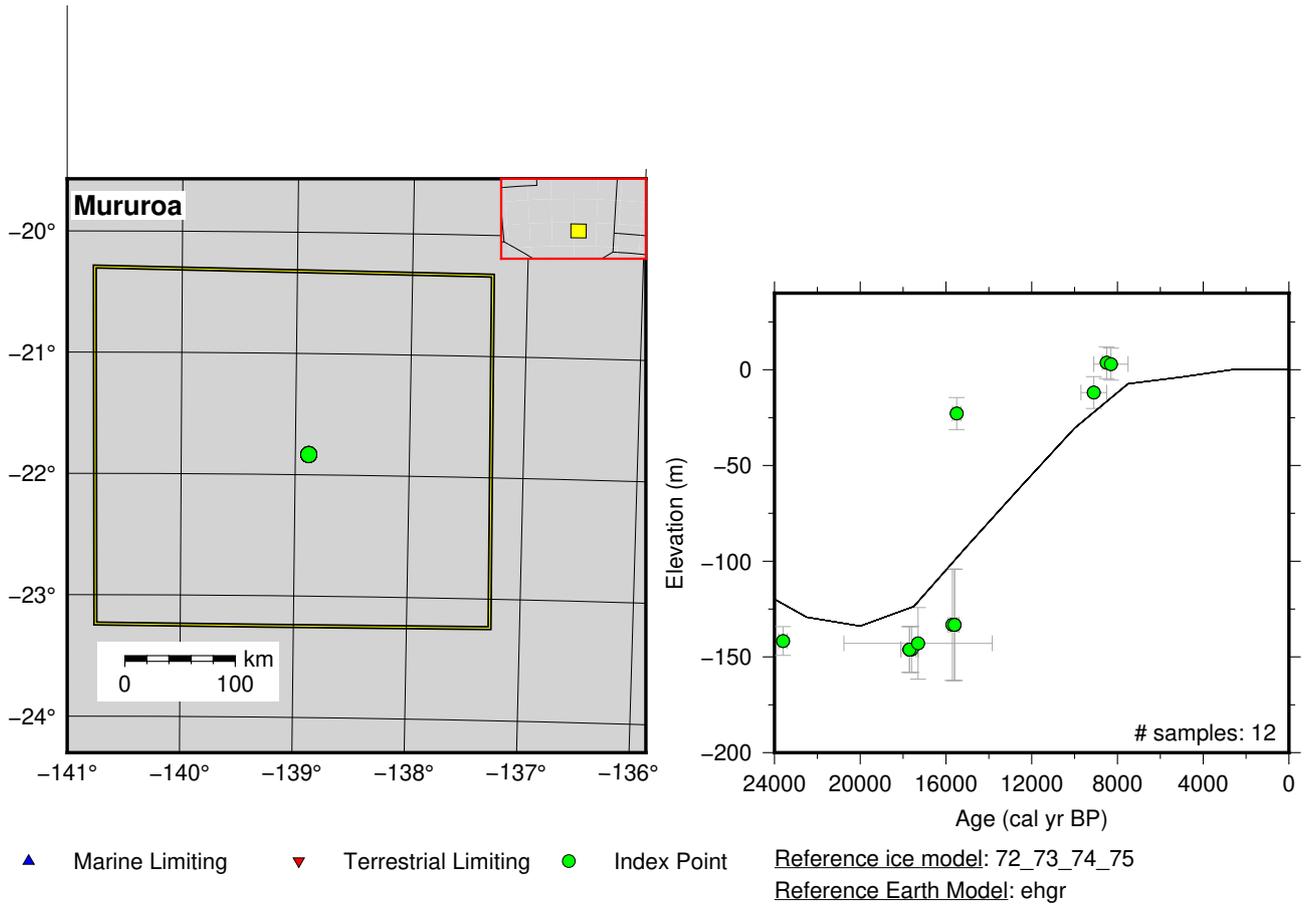
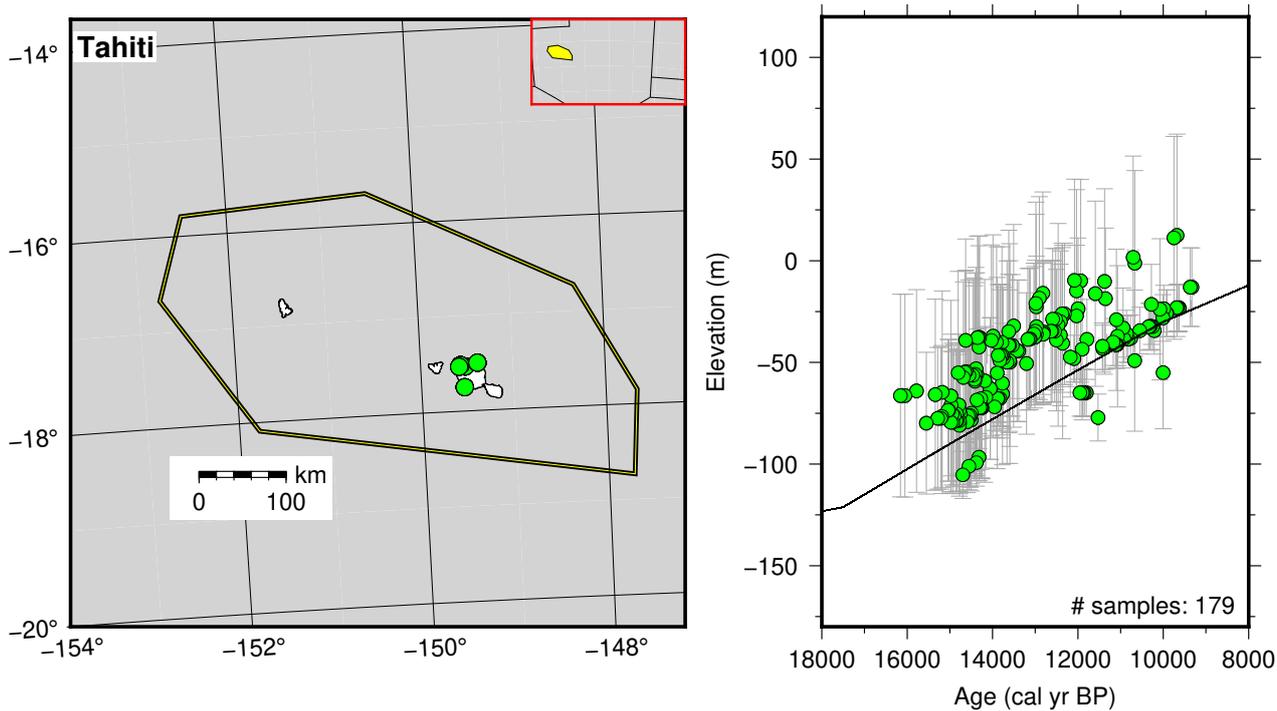


Figure 85: Paleo-sea level and comparison of six models for subregion French Polynesia, location Mururoa.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

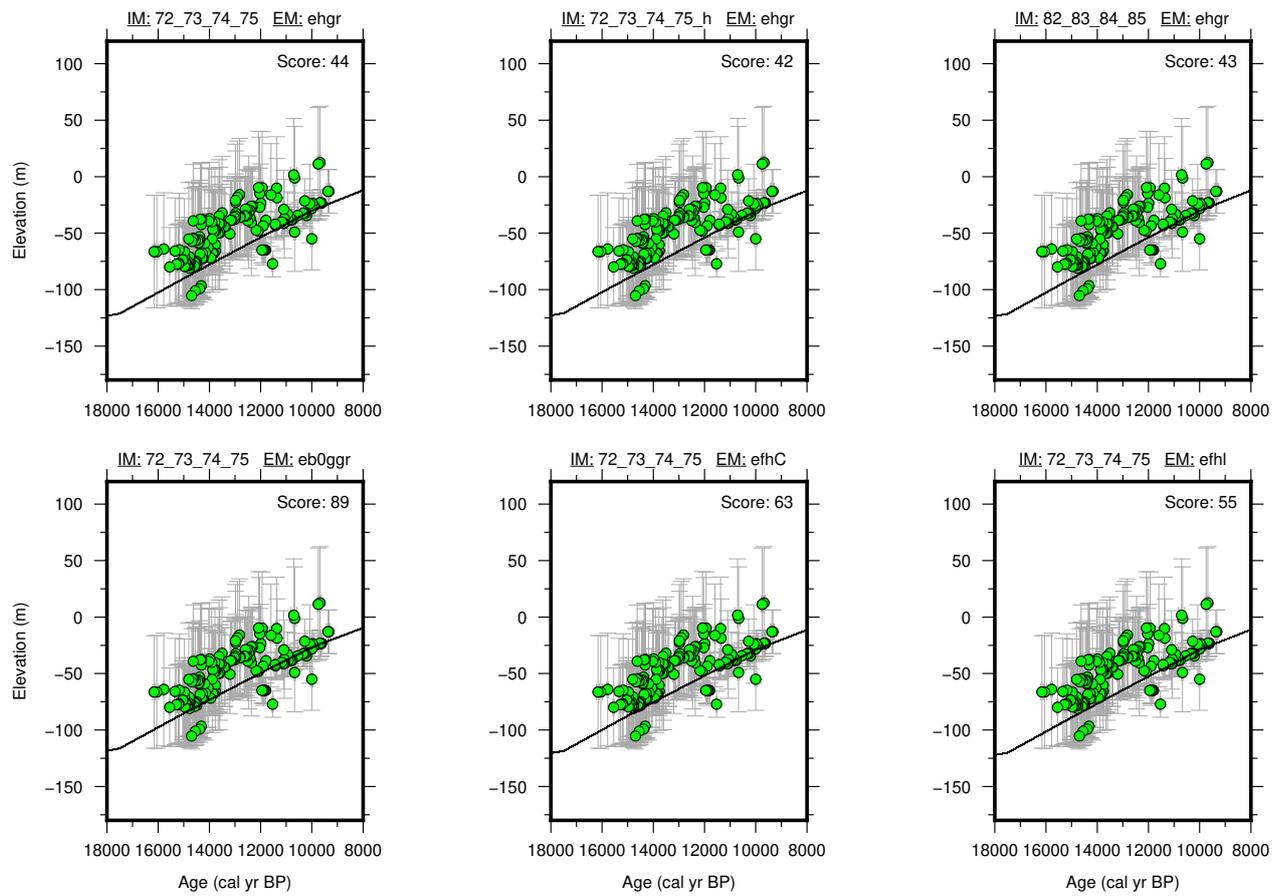


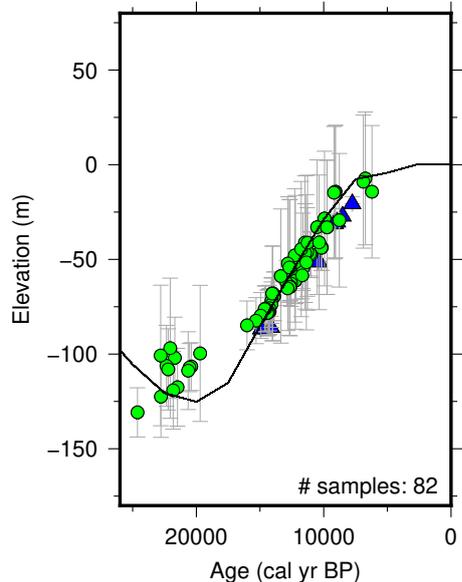
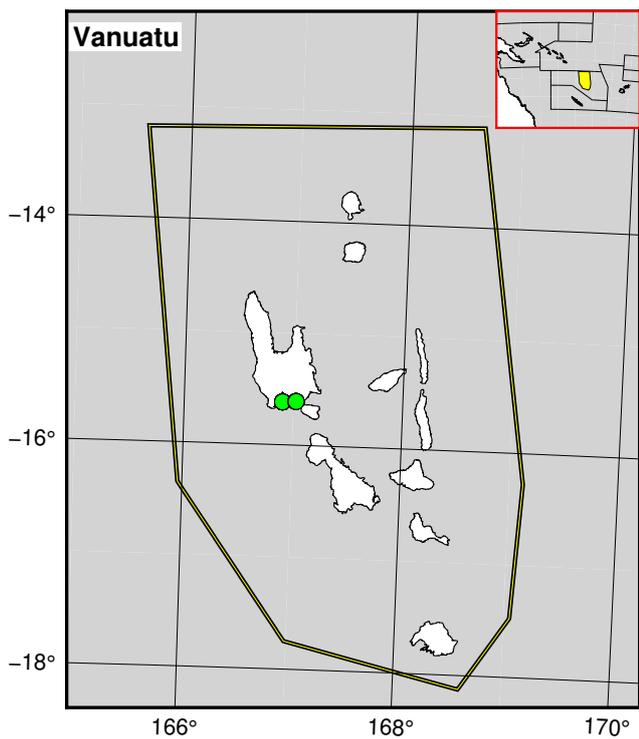
Figure 86: Paleo-sea level and comparison of six models for subregion French Polynesia, location Tahiti.

11 Melanesia

11.1 Melansia

References for the data used in each location.

Vanuatu: Cabioch et al. (2003); Cutler et al. (2004); Hibbert et al. (2016)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

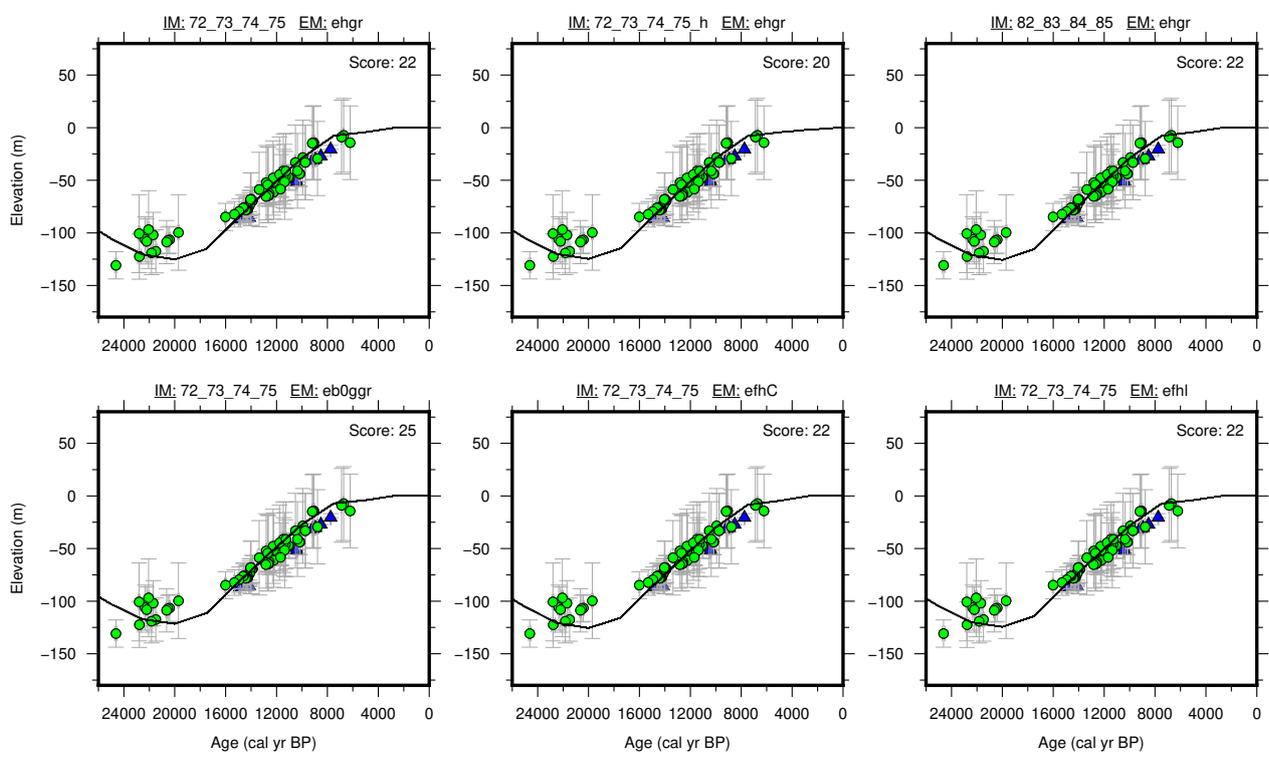


Figure 87: Paleo-sea level and comparison of six models for subregion Melansia, location Vanuatu.

12 MIS 3 - MIS 4

12.1 Eastern United States (MIS3 - MIS4)

References for the data used in each location.

US Mid Atlantic: Best (2010); Cronin et al. (1981); Culver et al. (2011); Mallinson et al. (2008); Mixon et al. (1982); Moore (2009); Parham et al. (2013); Scott (2006)

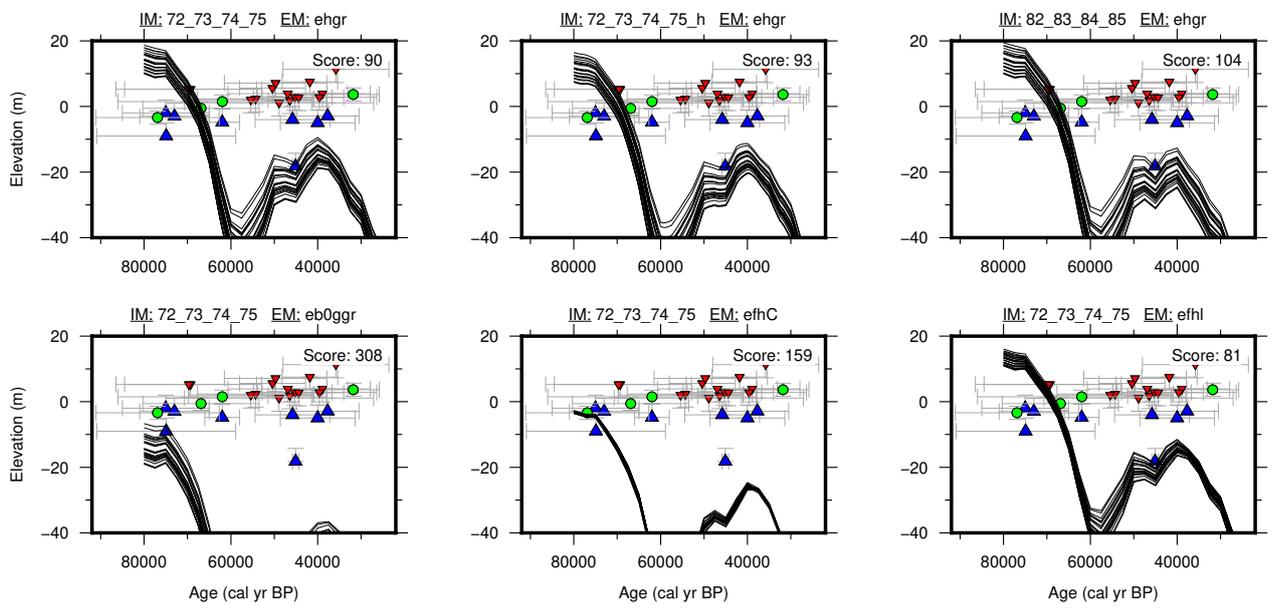
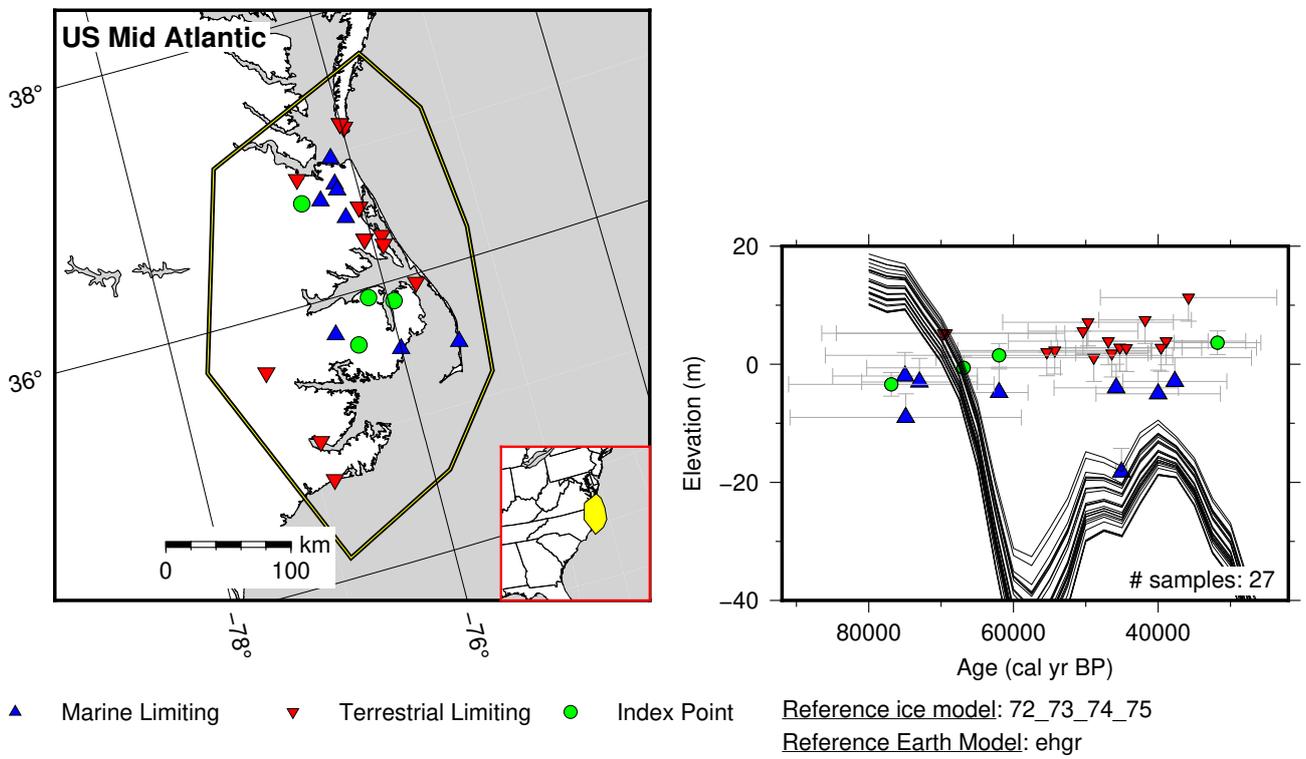


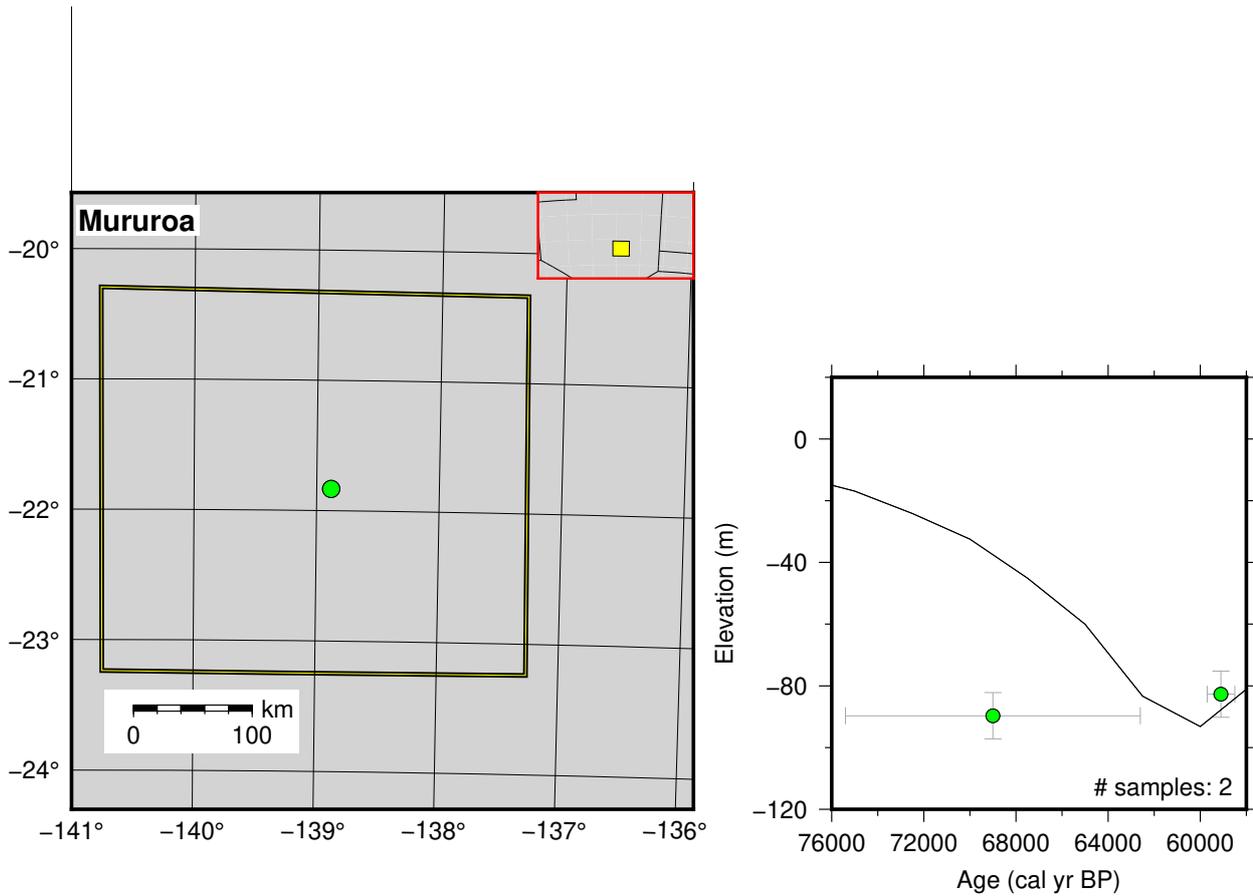
Figure 88: Paleo-sea level and comparison of six models for subregion Eastern United States (MIS3 - MIS4), location US Mid Atlantic.

12.2 French Polynesia (MIS3 - MIS4)

References for the data used in each location.

Mururoa: Camoin et al. (2001); Hibbert et al. (2016)

Tahiti: Hibbert et al. (2016); Thomas et al. (2009)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

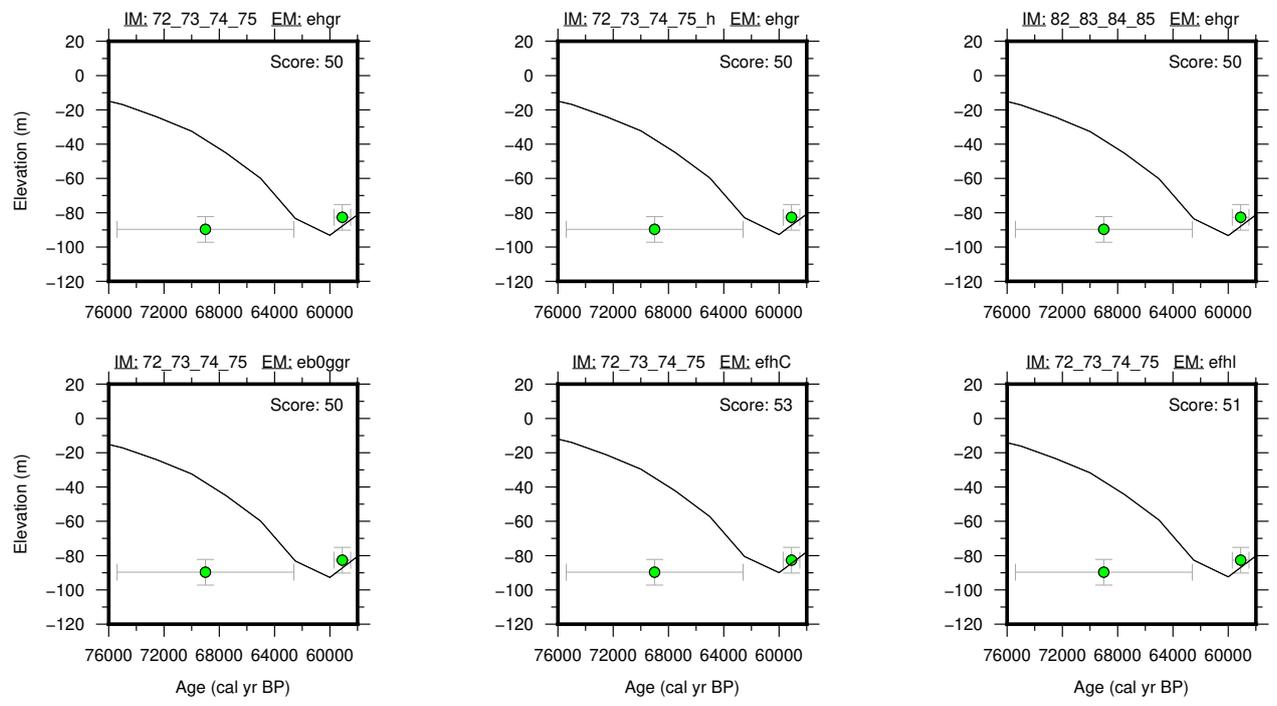


Figure 89: Paleo-sea level and comparison of six models for subregion French Polynesia (MIS3 - MIS4), location Mururoa.

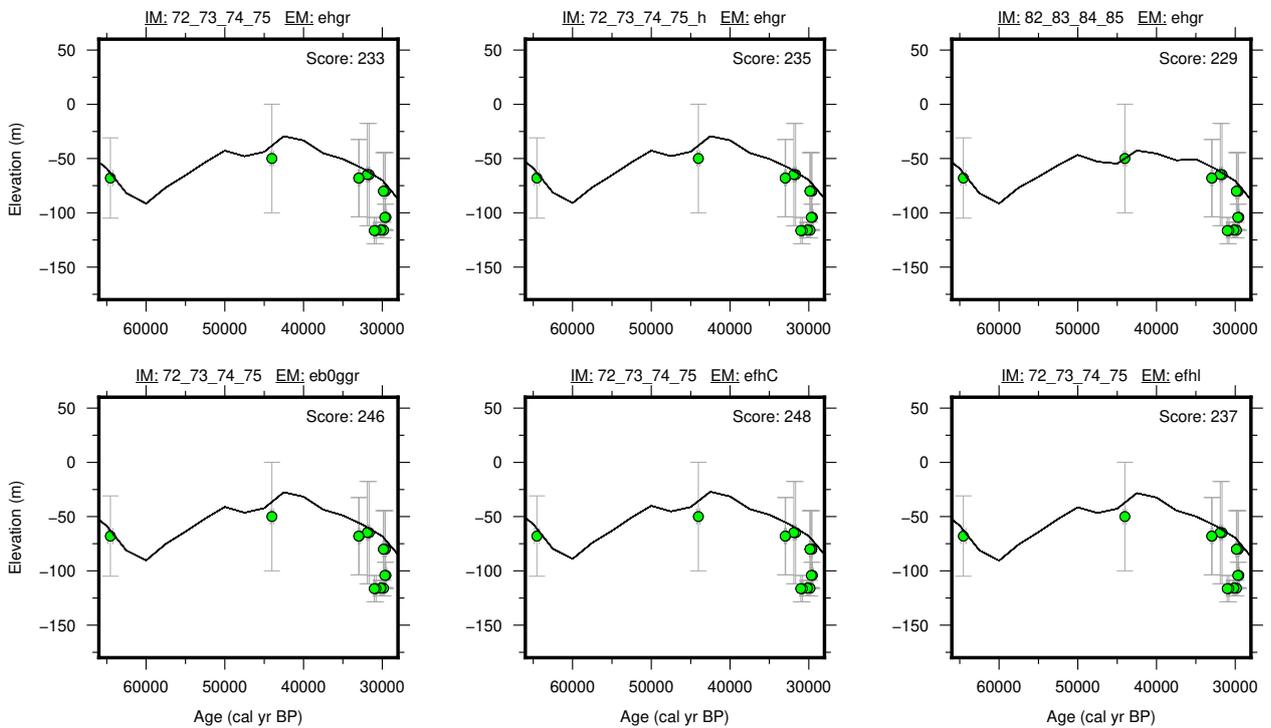
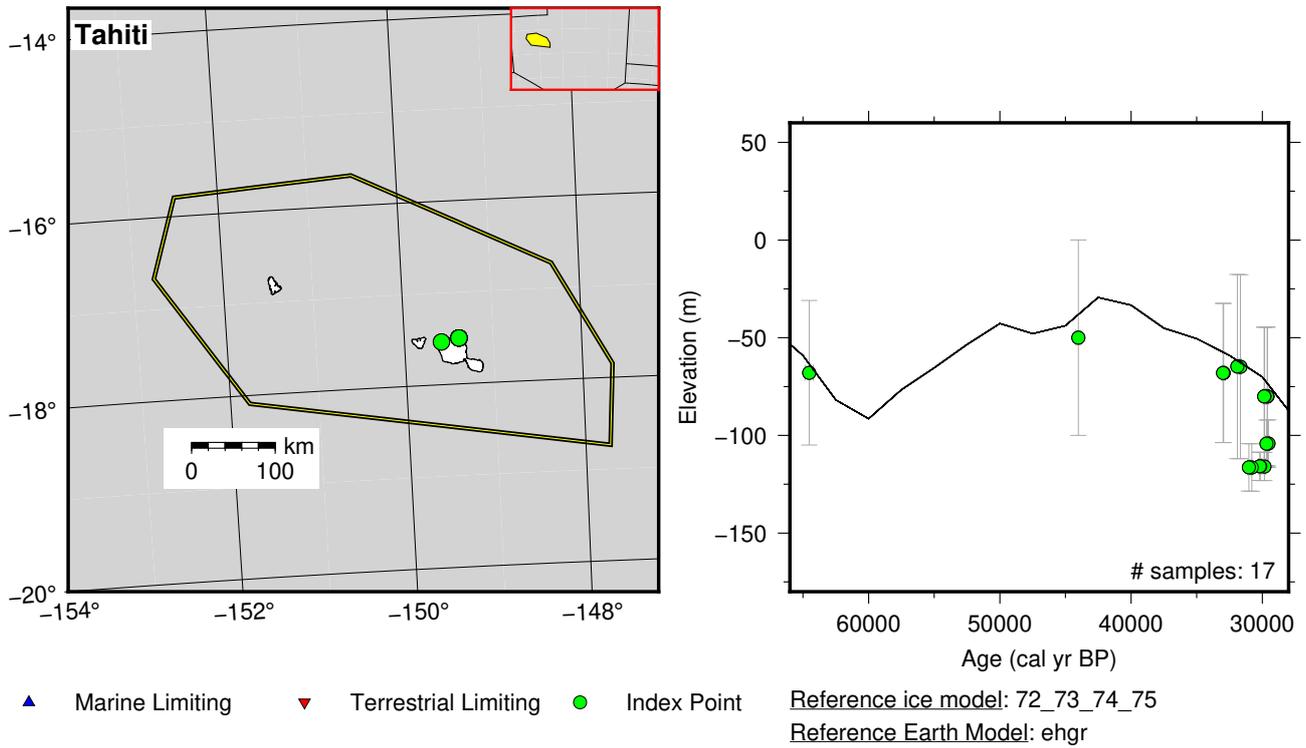


Figure 90: Paleo-sea level and comparison of six models for subregion French Polynesia (MIS3 - MIS4), location Tahiti.

12.3 Melanesia (MIS3 - MIS4)

References for the data used in each location.

Vanuatu: Cabioch and Ayliffe (2001)

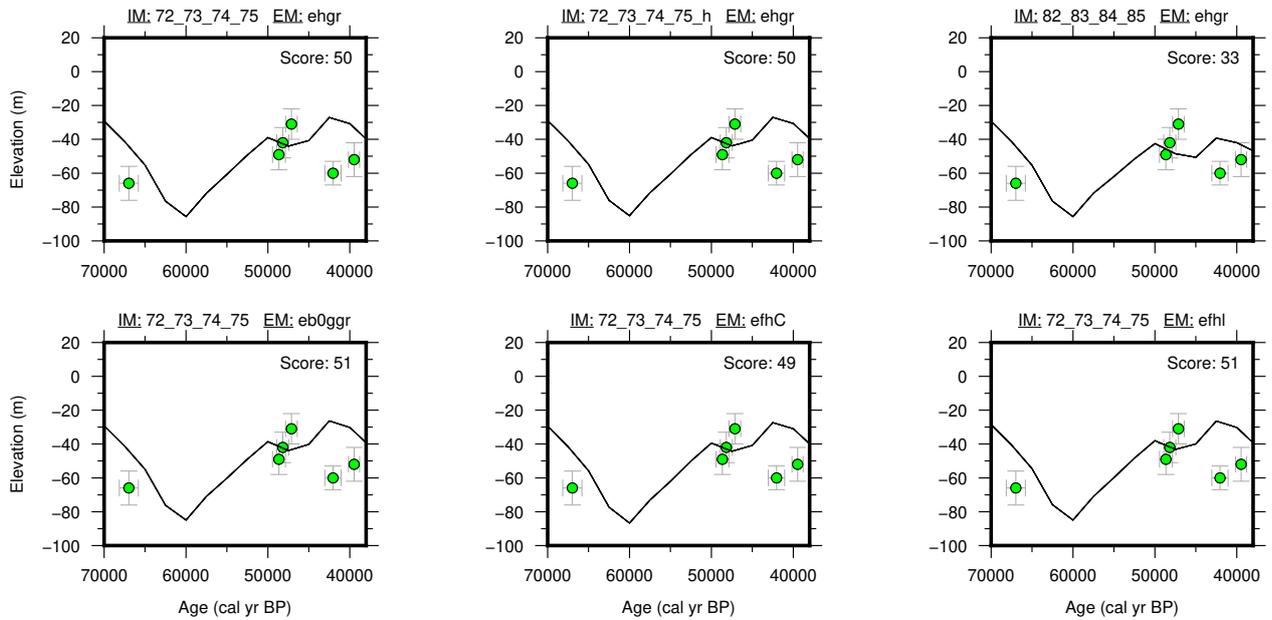
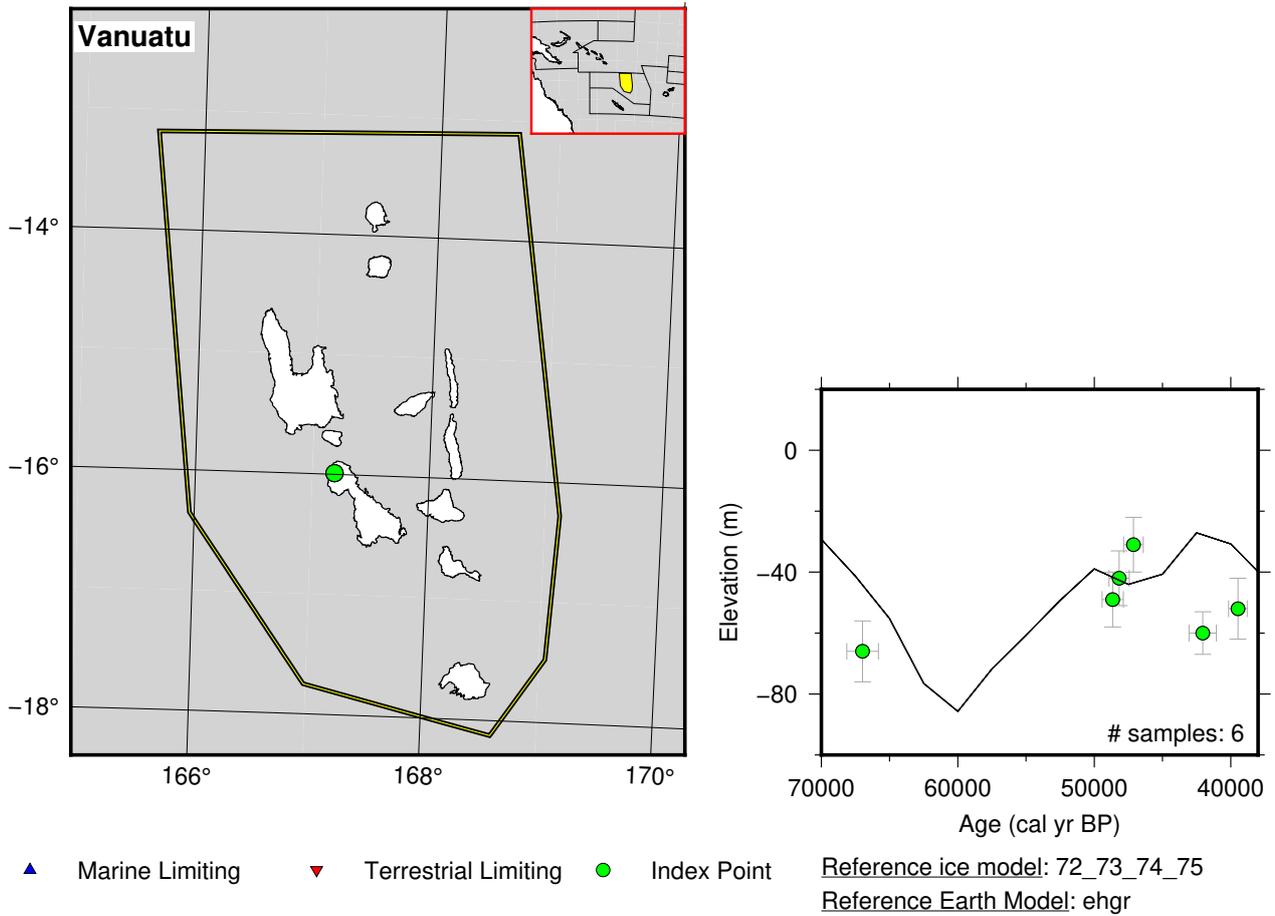


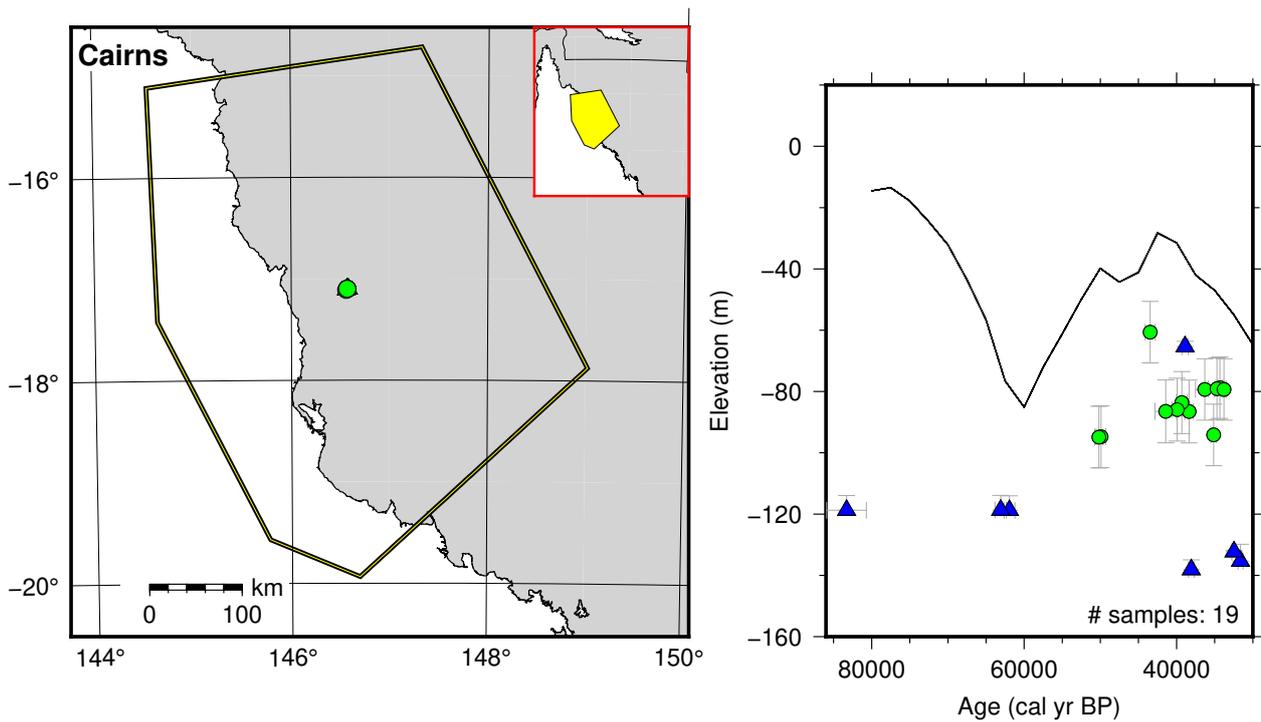
Figure 91: Paleo-sea level and comparison of six models for subregion Melanesia (MIS3 - MIS4), location Vanuatu.

12.4 Northeastern Australia (MIS3 - MIS4)

References for the data used in each location.

Cairns: Yokoyama et al. (2018)

Mackay: Yokoyama et al. (2018)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

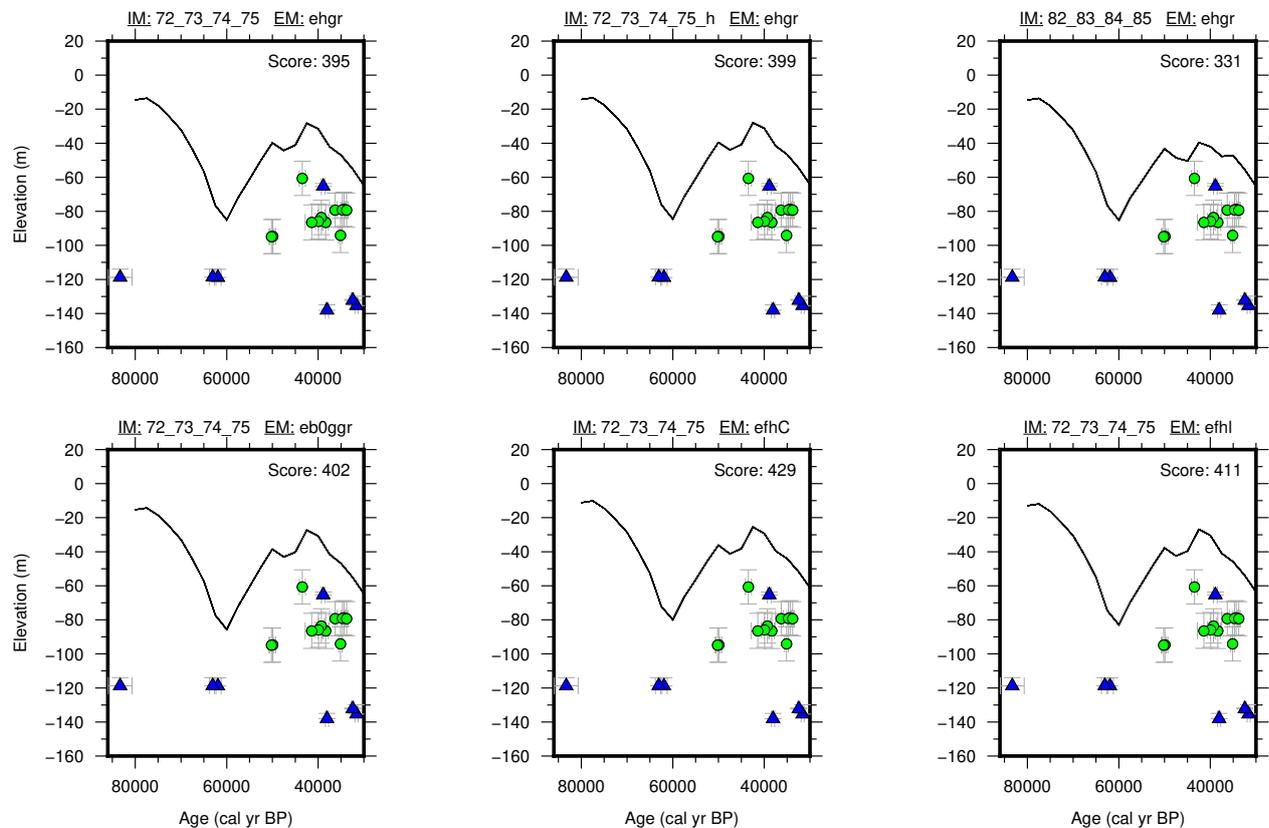


Figure 92: Paleo-sea level and comparison of six models for subregion Northeastern Australia (MIS3 - MIS4), location Cairns.

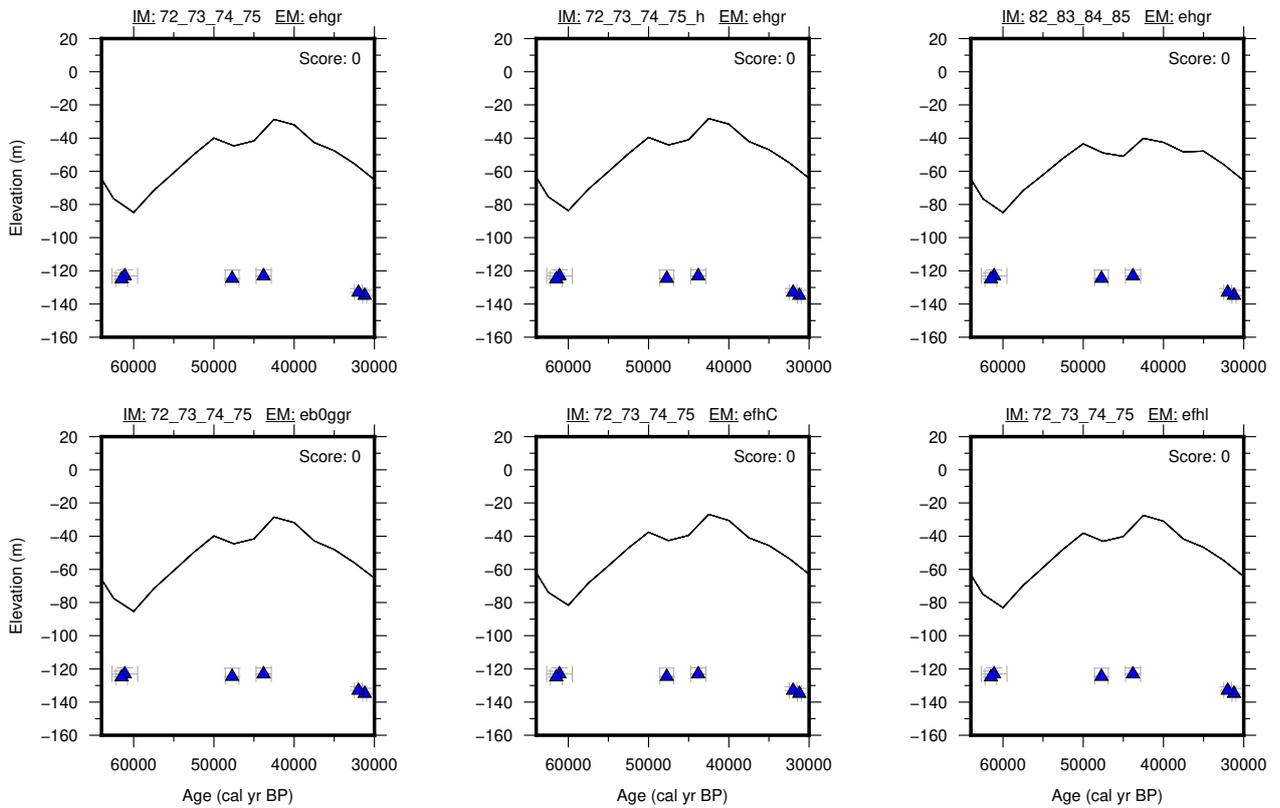
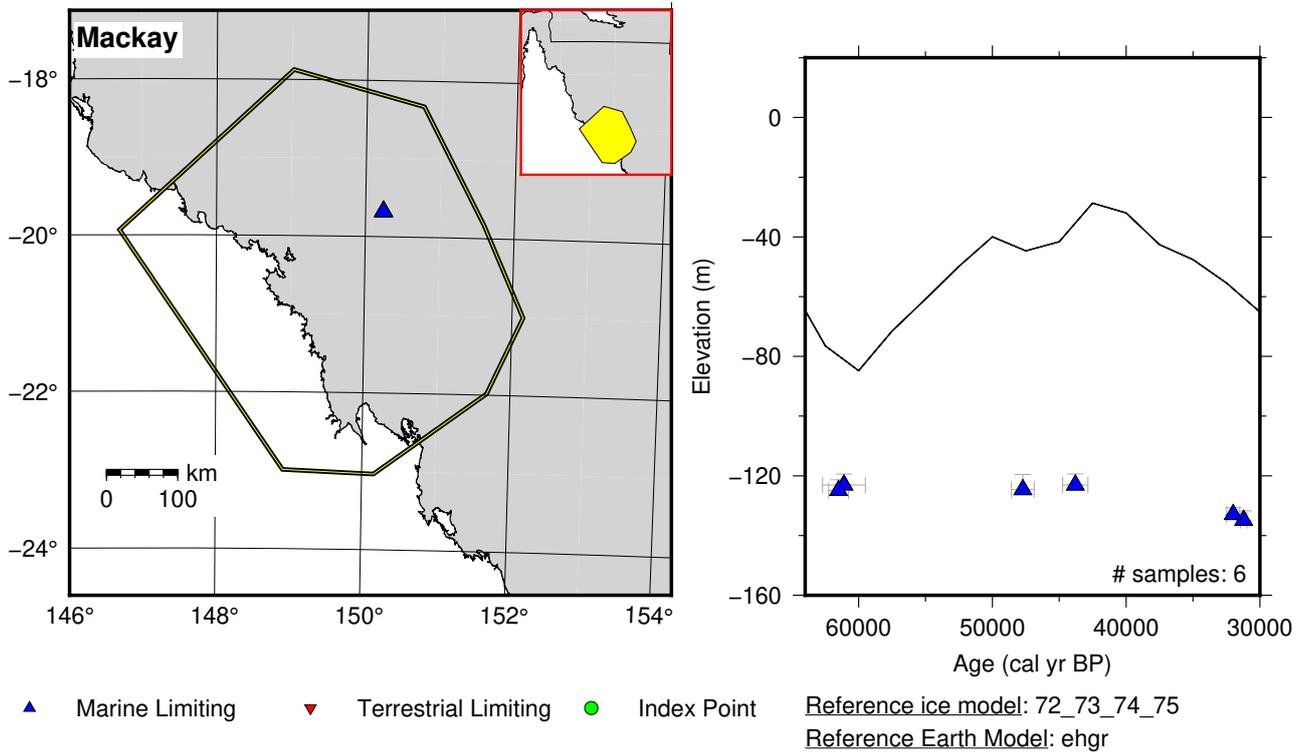


Figure 93: Paleo-sea level and comparison of six models for subregion Northeastern Australia (MIS3 - MIS4), location Mackay.

12.5 Papua New Guinea (MIS3 - MIS4)

References for the data used in each location.

Huon Peninsula: Chappell et al. (1996); Cutler et al. (2003); Hibbert et al. (2016); Yokoyama et al. (2001)

Huon Peninsula de Gelder: Chappell (2002); Chappell et al. (1996); de Gelder et al. (2021)

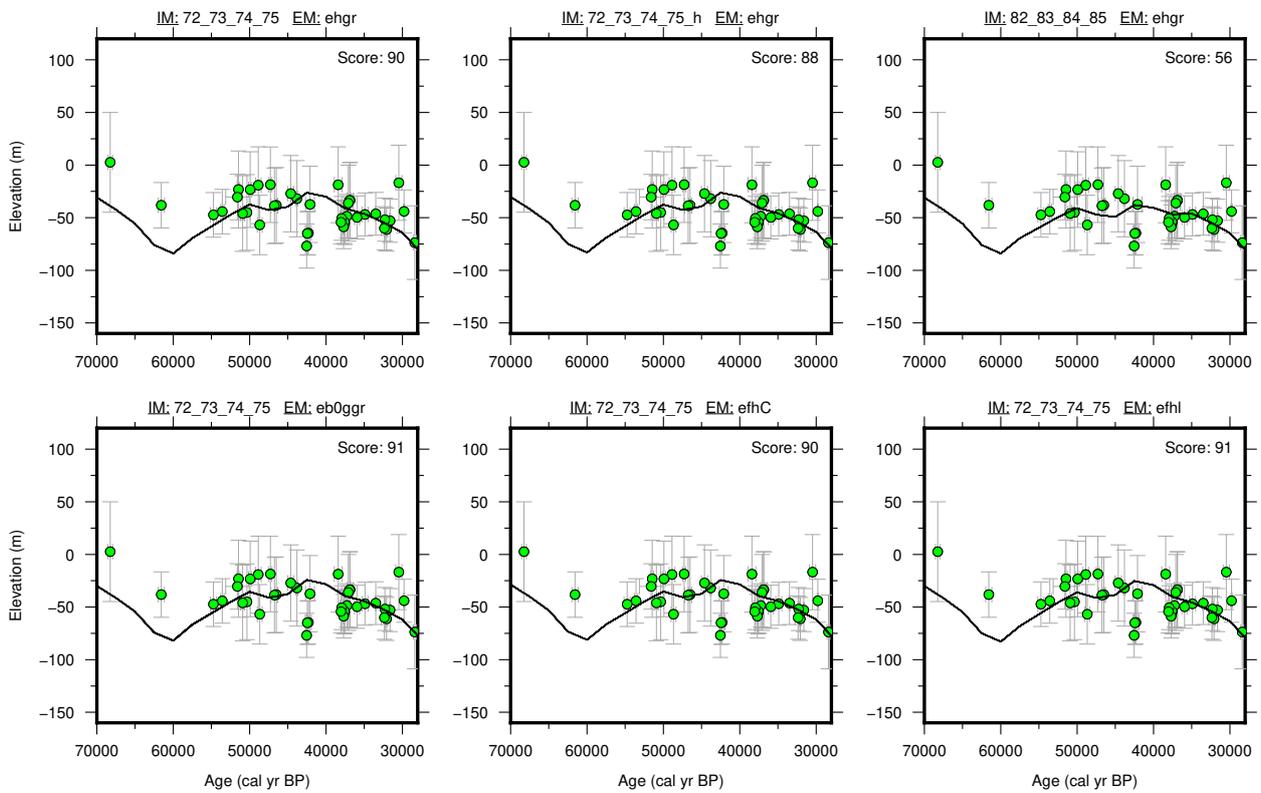
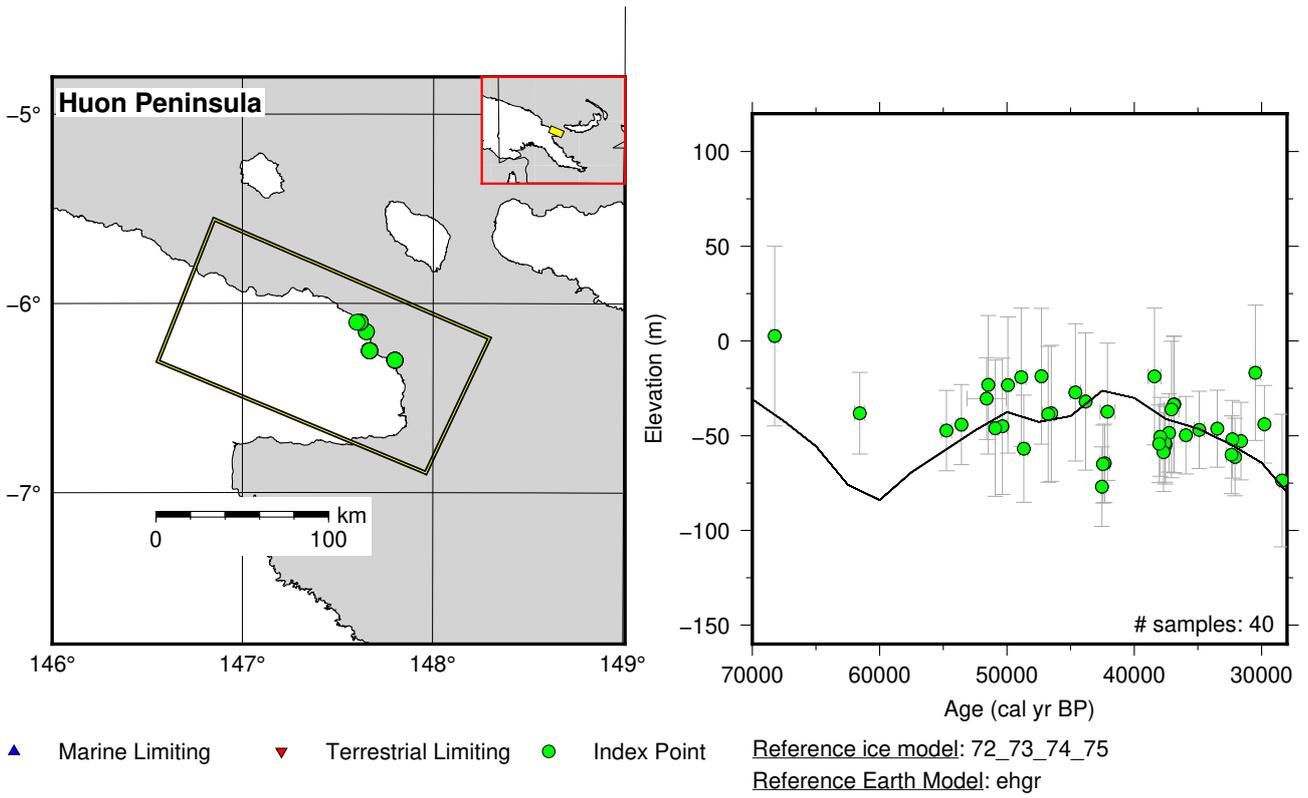
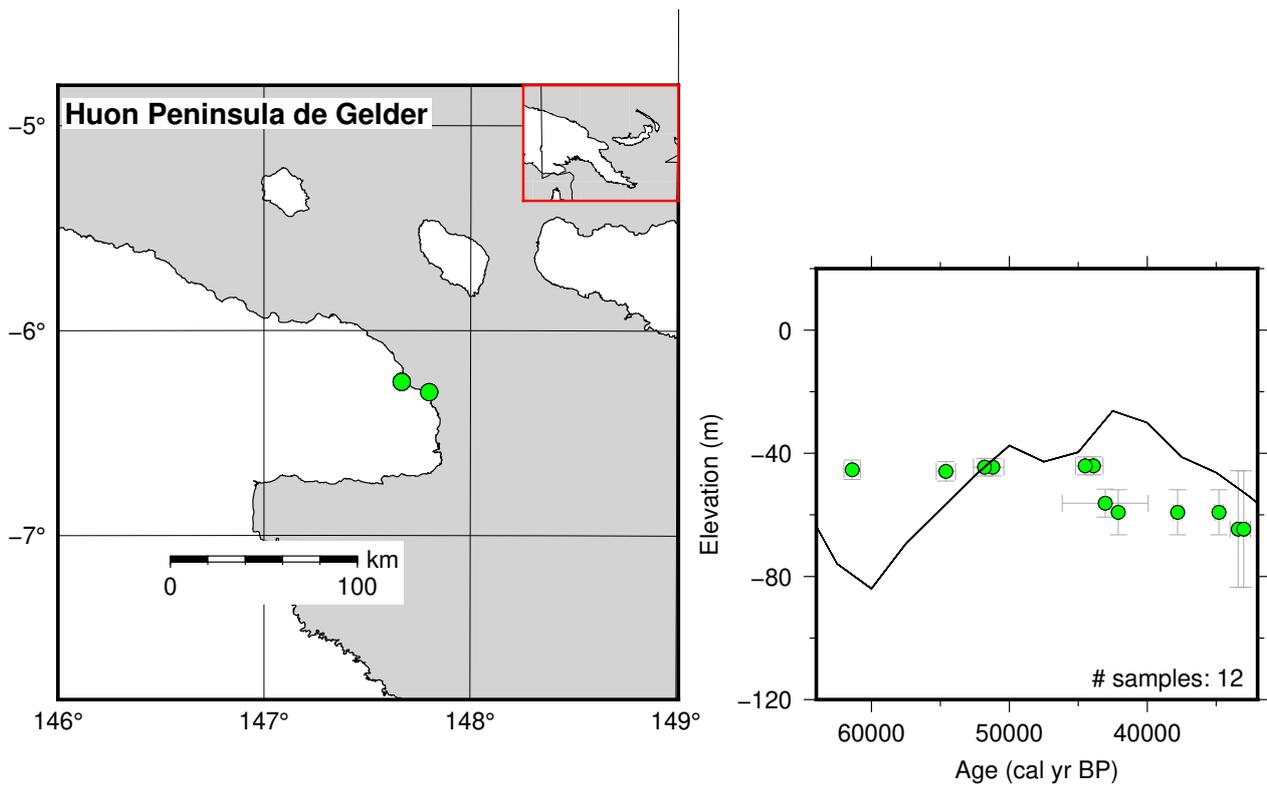


Figure 94: Paleo-sea level and comparison of six models for subregion Papua New Guinea (MIS3 - MIS4), location Huon Peninsula.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

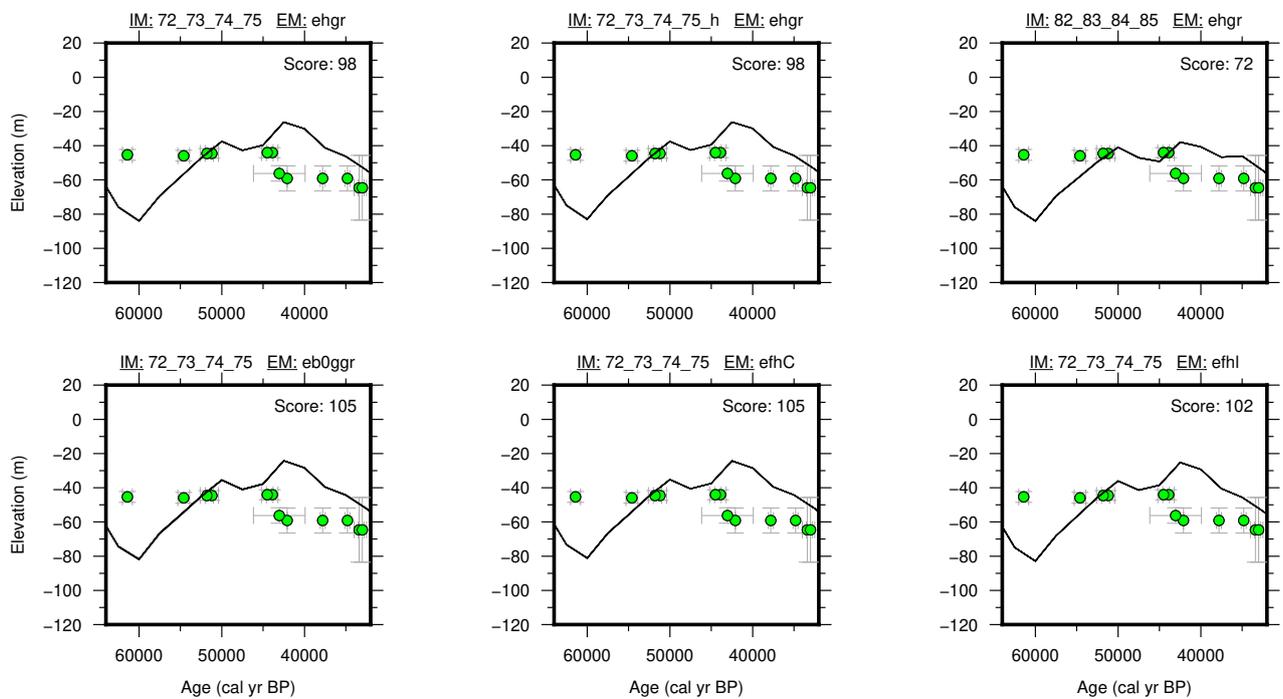


Figure 95: Paleo-sea level and comparison of six models for subregion Papua New Guinea (MIS3 - MIS4), location Huon Peninsula de Gelder.

12.6 Sea of Japan - East Sea (MIS3 - MIS4)

References for the data used in each location.

Tsushima-Korea Strait: Park et al. (2000)

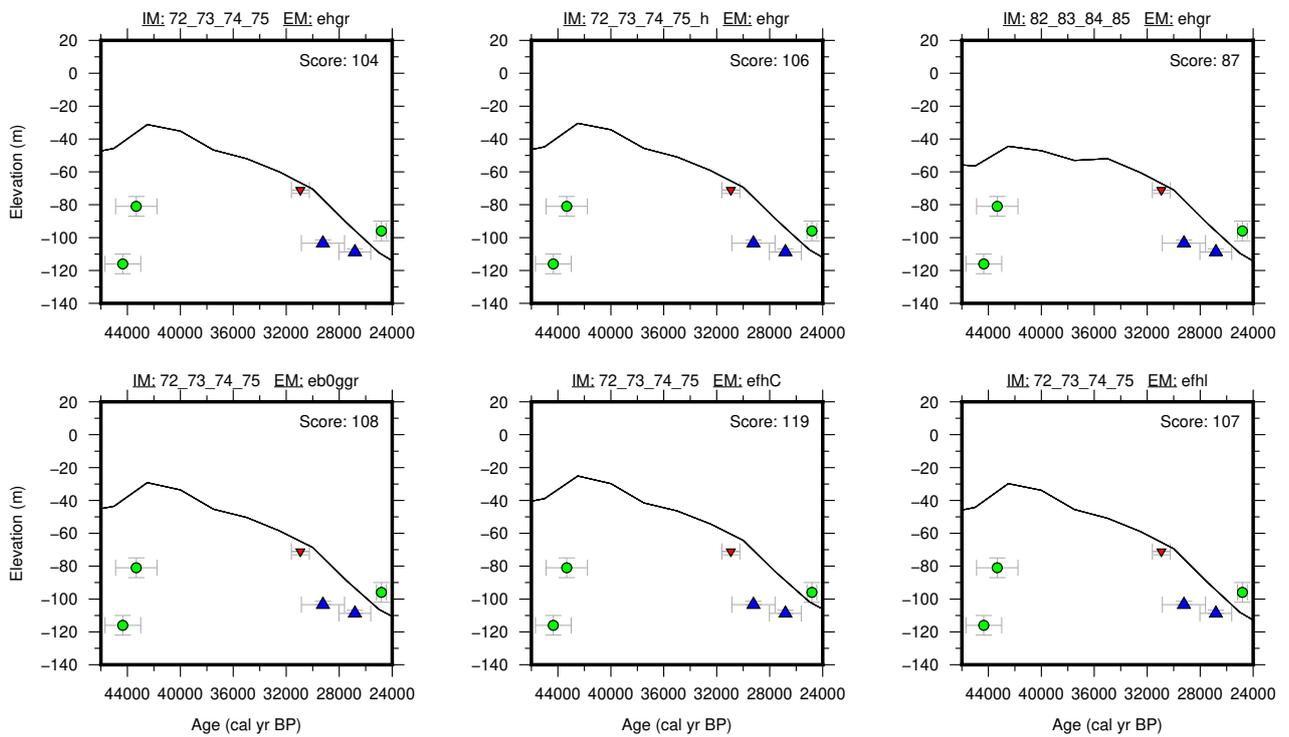
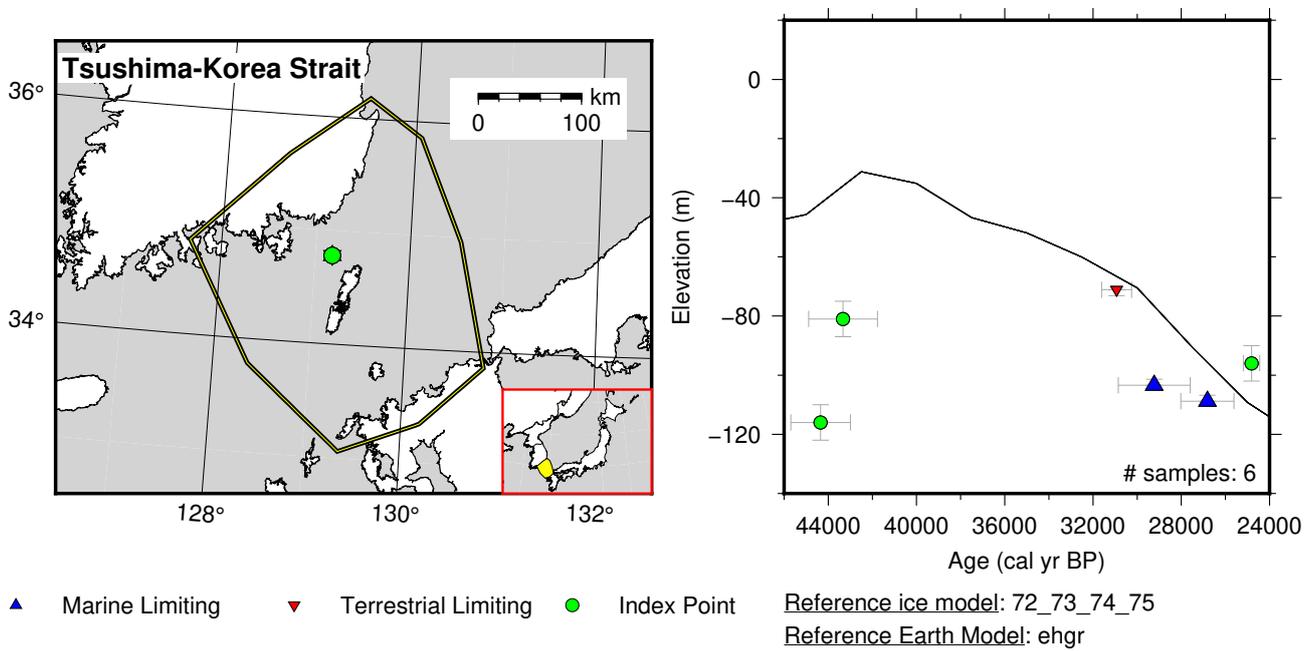


Figure 96: Paleo-sea level and comparison of six models for subregion Sea of Japan - East Sea (MIS3 - MIS4), location Tsushima-Korea Strait.

12.7 Sundaland (MIS3 - MIS4)

References for the data used in each location.

Sunda Shelf: Hanebuth et al. (2003); Steinke et al. (2003)

Vietnam Shelf: Schimanski and Stattegger (2005)

Strait Of Malacca: Geyh et al. (1979)

Mekong Delta: Ta et al. (2002)

Chao Phraya: Tanabe et al. (2003)

Berhala Strait: Geyh et al. (1979)

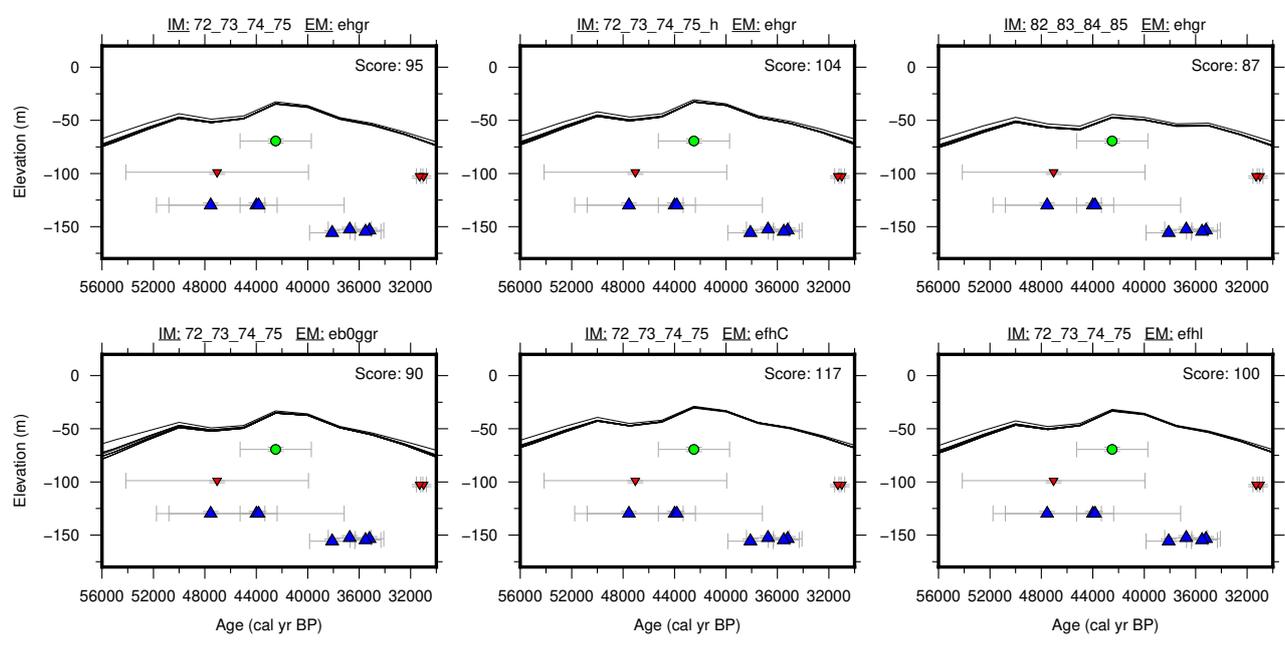
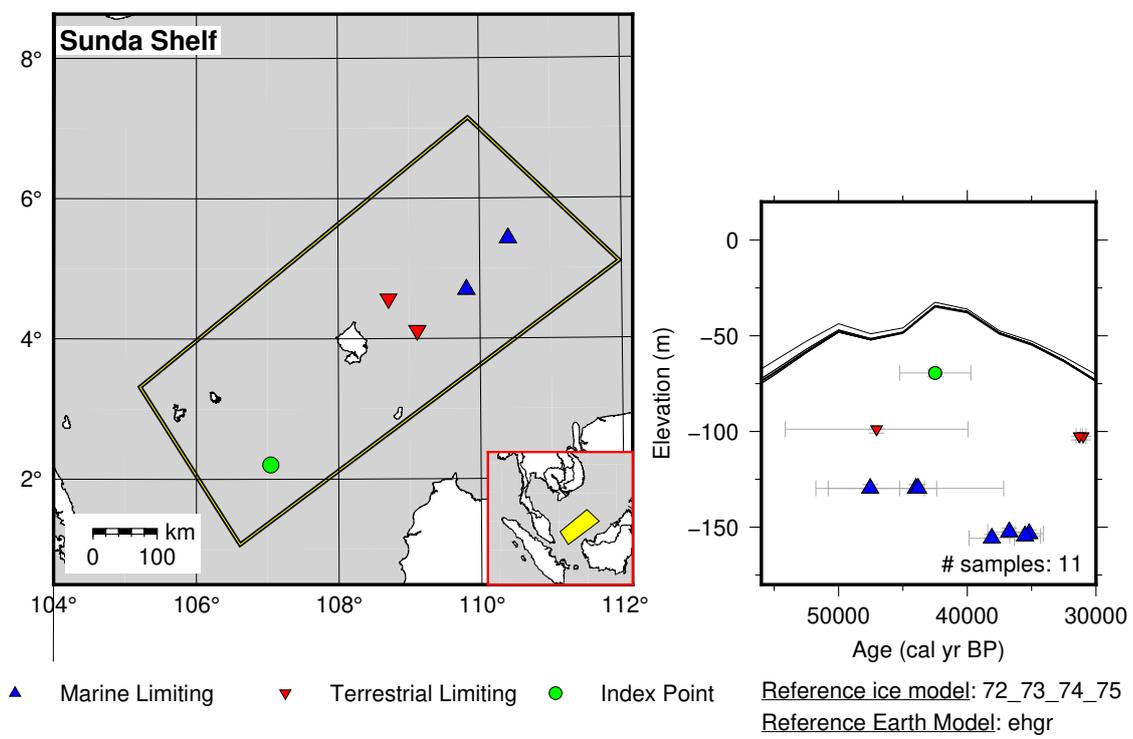
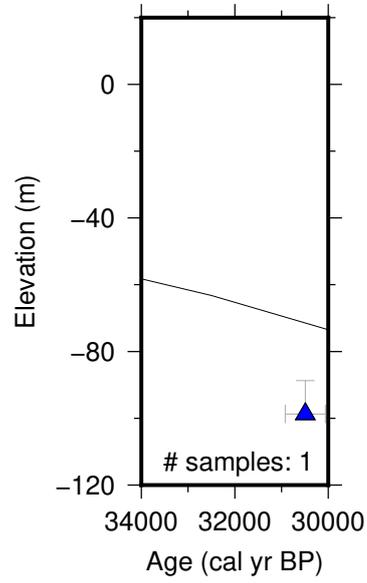
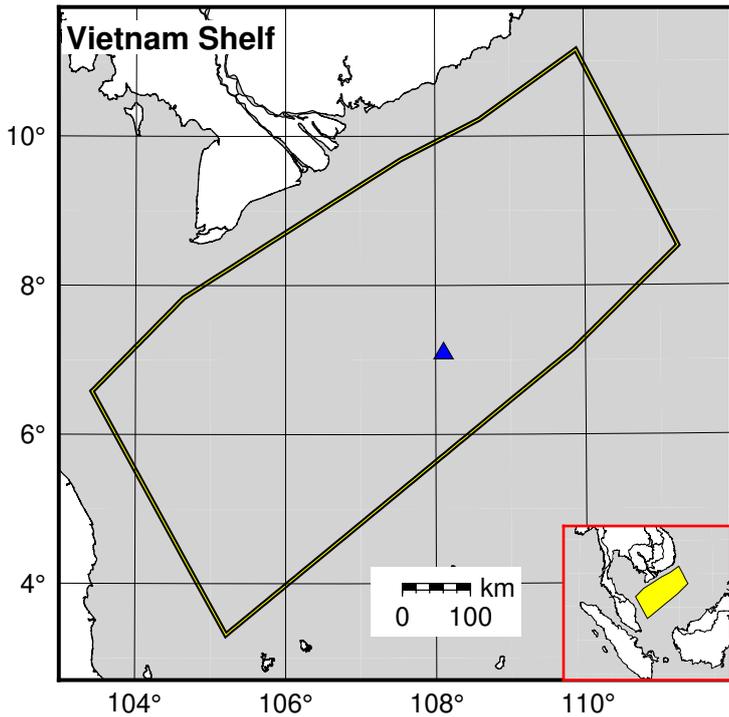


Figure 97: Paleo-sea level and comparison of six models for subregion Sundaland (MIS3 - MIS4), location Sunda Shelf.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

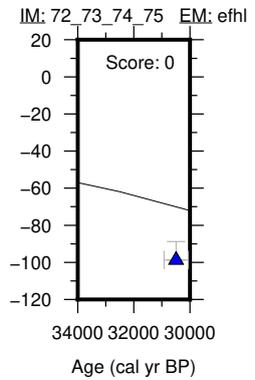
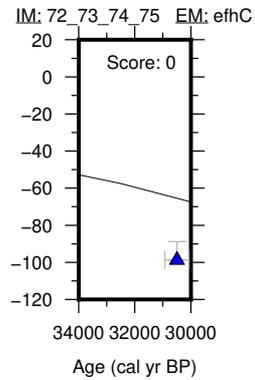
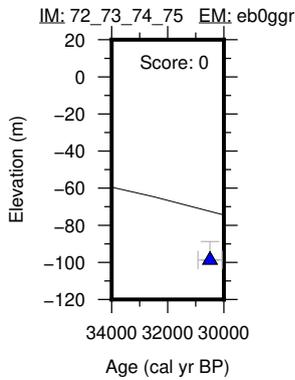
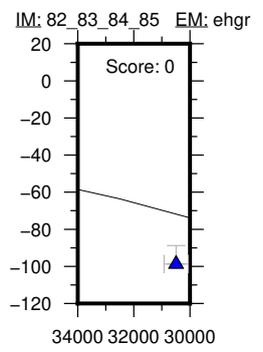
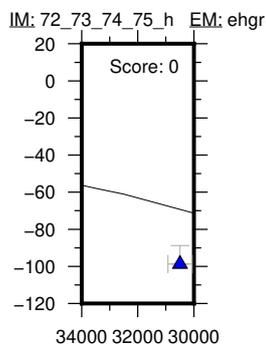
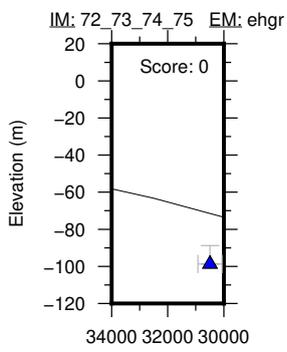


Figure 98: Paleo-sea level and comparison of six models for subregion Sundaland (MIS3 - MIS4), location Vietnam Shelf.

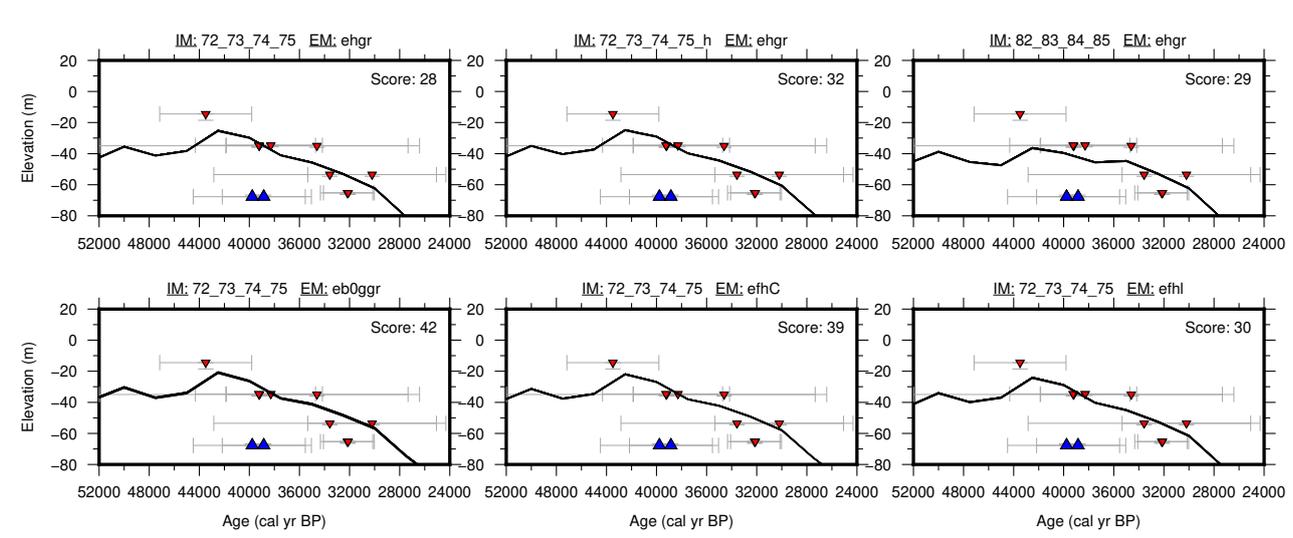
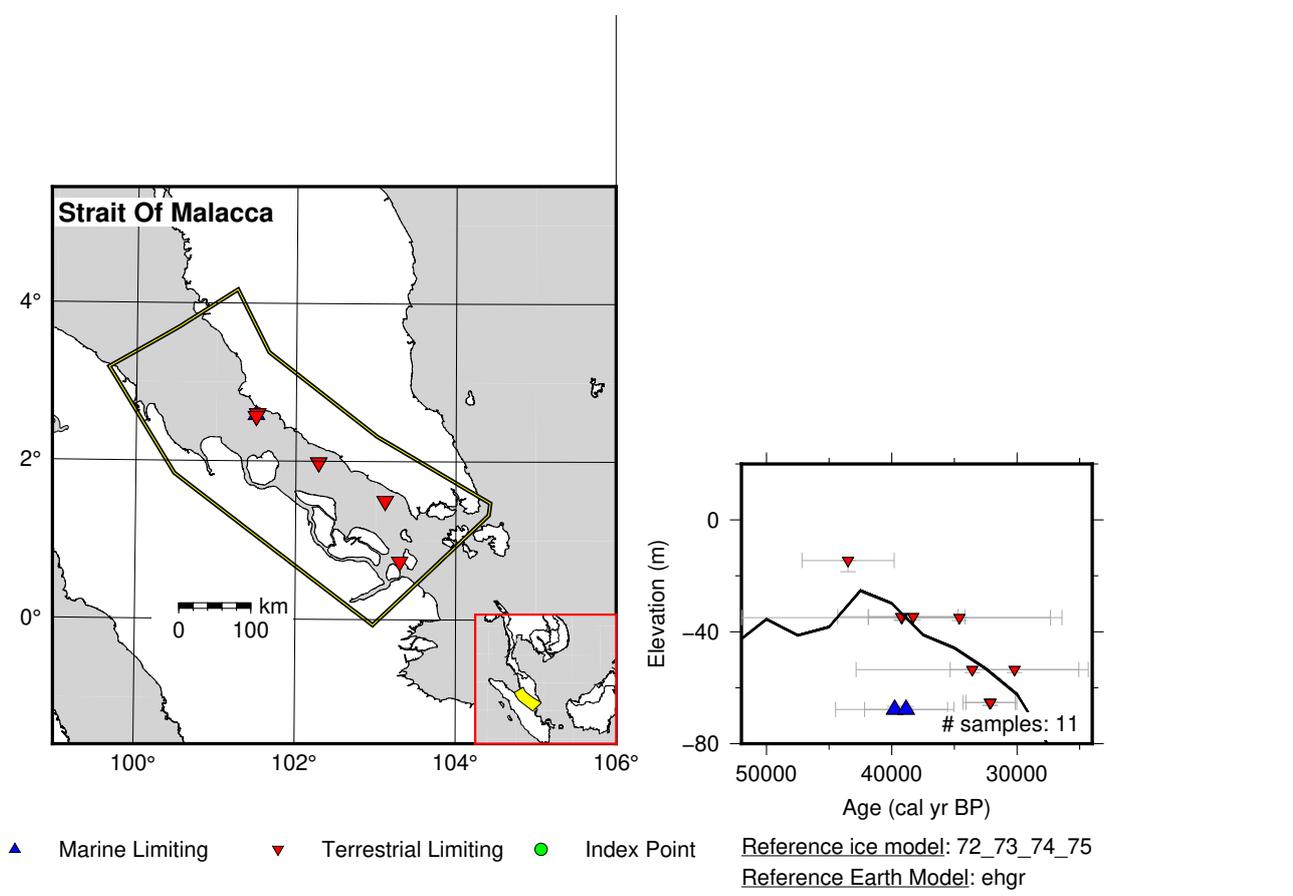
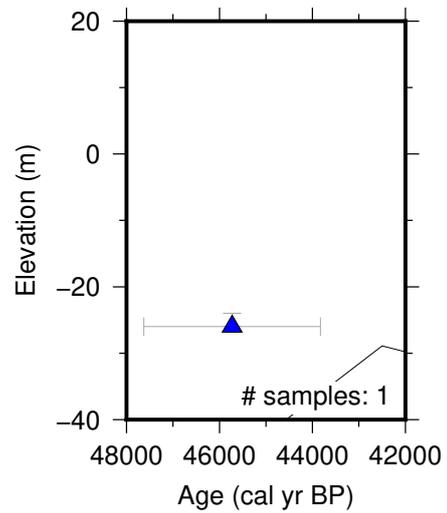
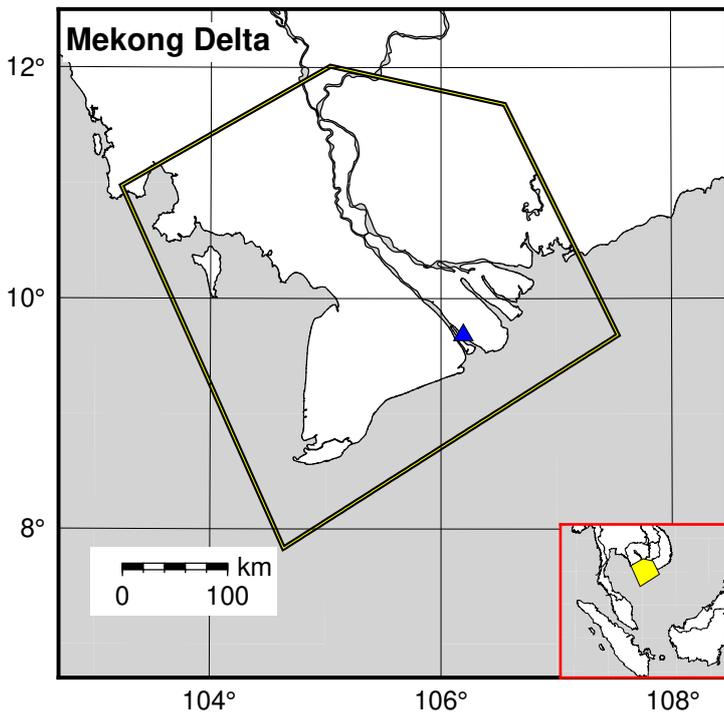


Figure 99: Paleo-sea level and comparison of six models for subregion Sundaland (MIS3 - MIS4), location Strait Of Malacca.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

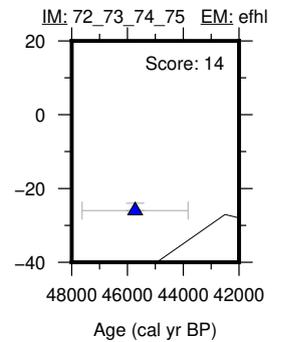
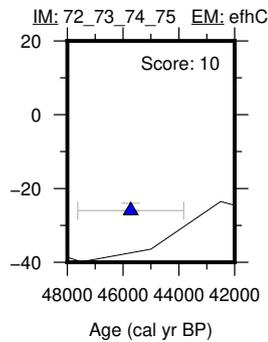
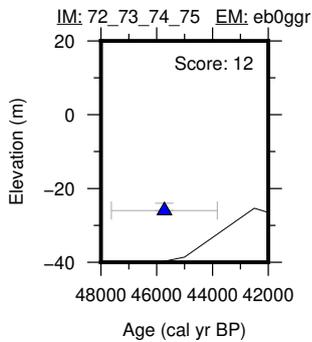
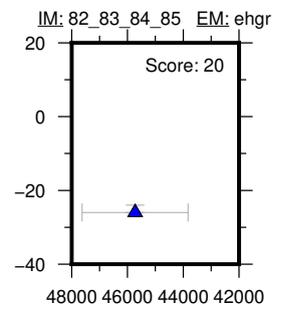
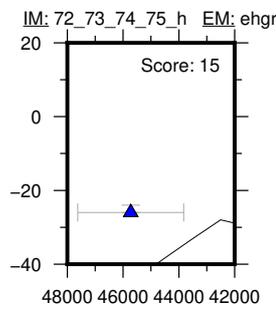
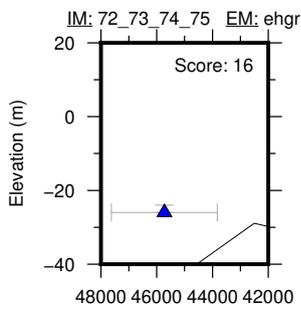


Figure 100: Paleo-sea level and comparison of six models for subregion Sundaland (MIS3 - MIS4), location Mekong Delta.

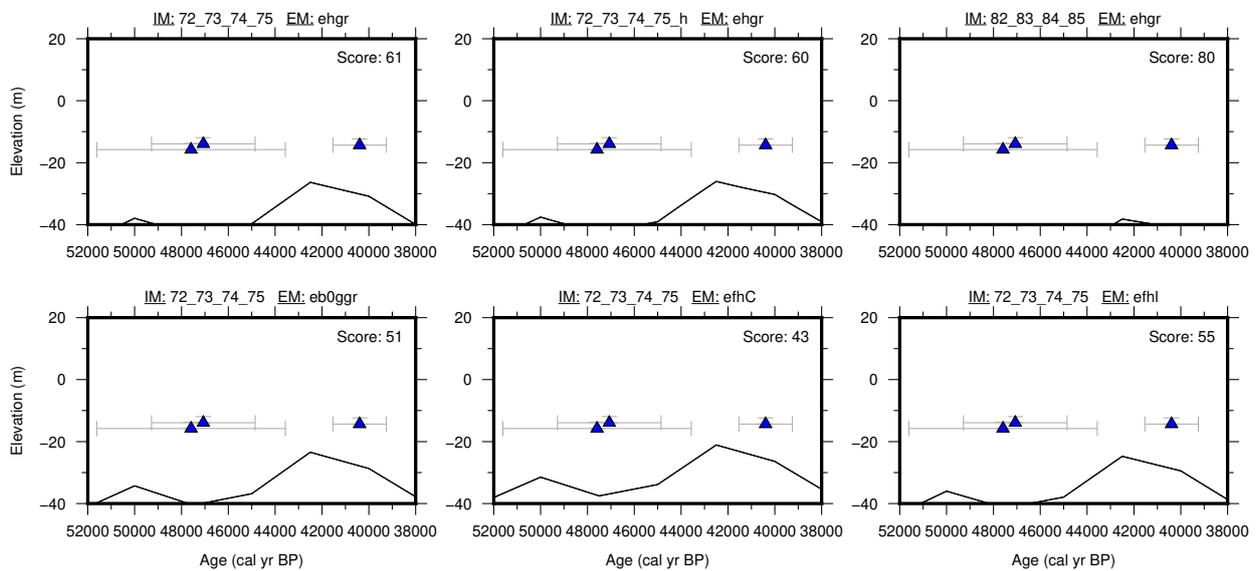
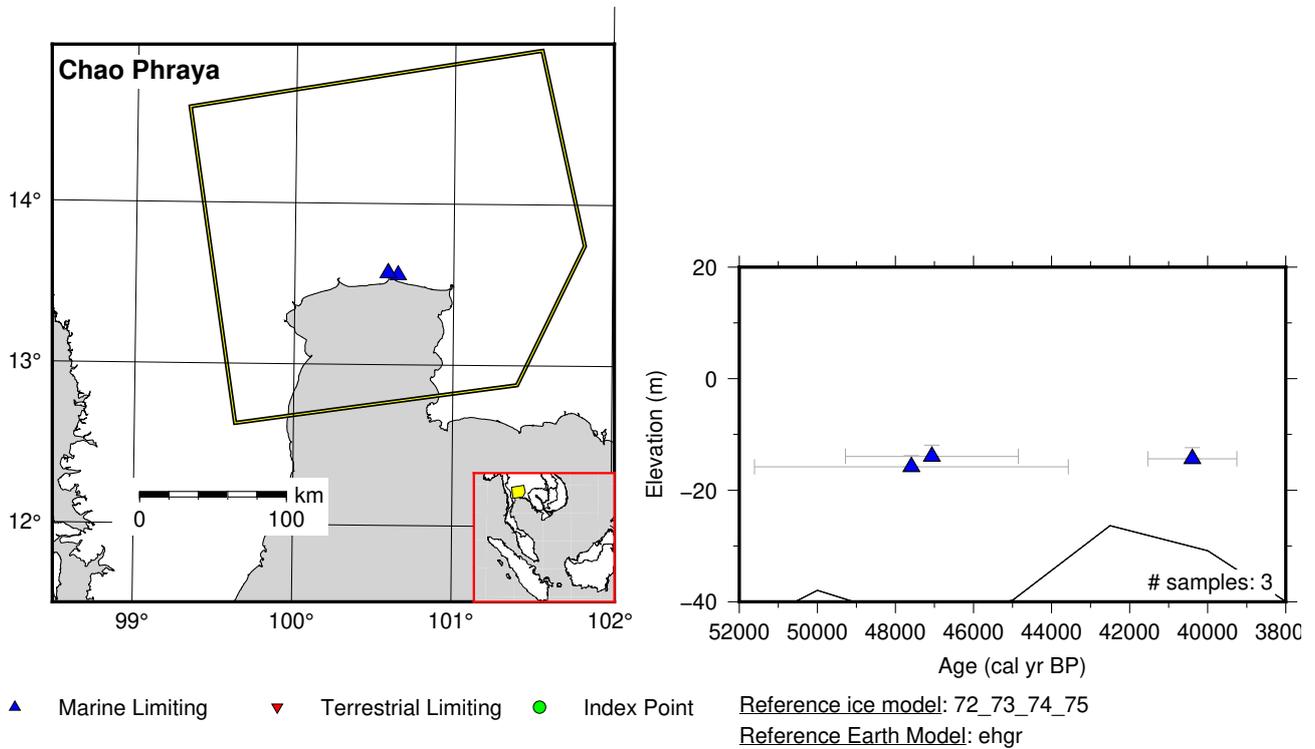


Figure 101: Paleo-sea level and comparison of six models for subregion Sundaland (MIS3 - MIS4), location Chao Phraya.

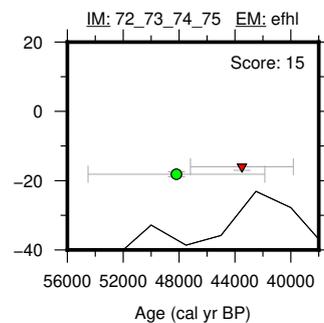
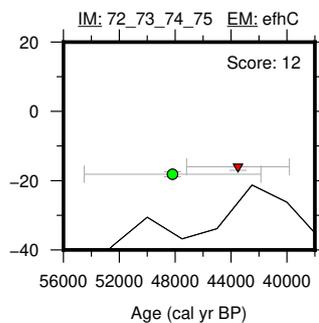
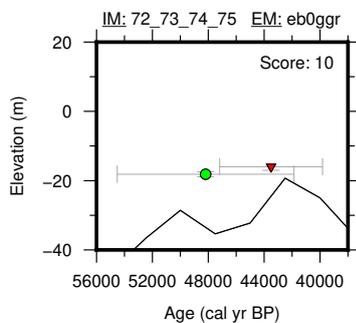
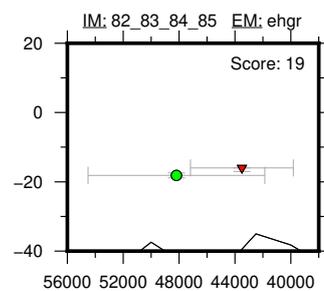
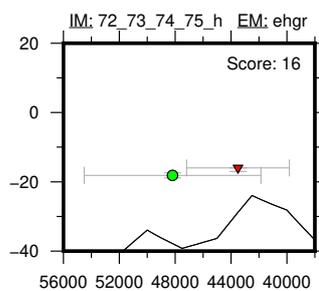
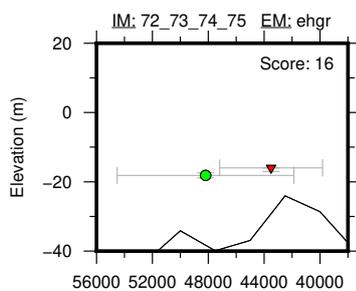
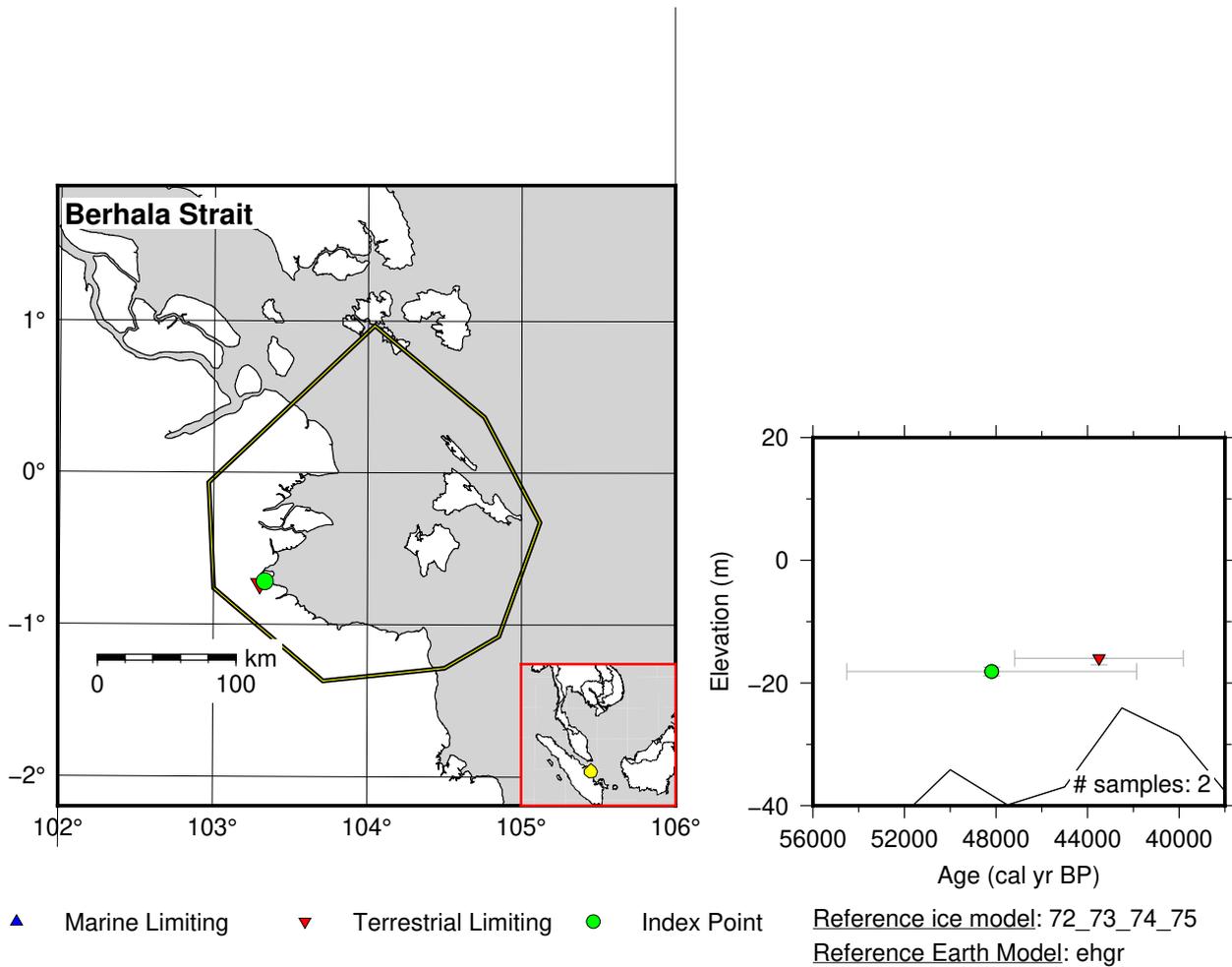


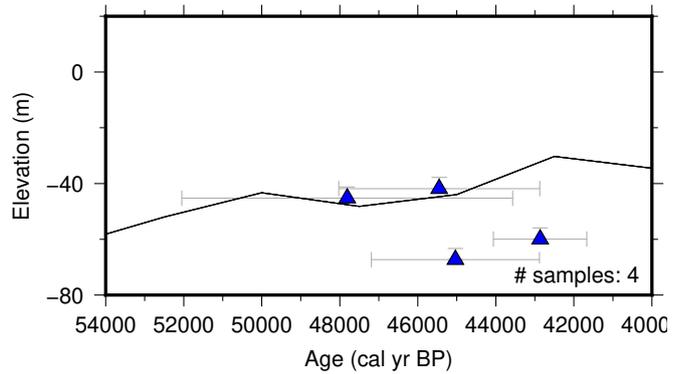
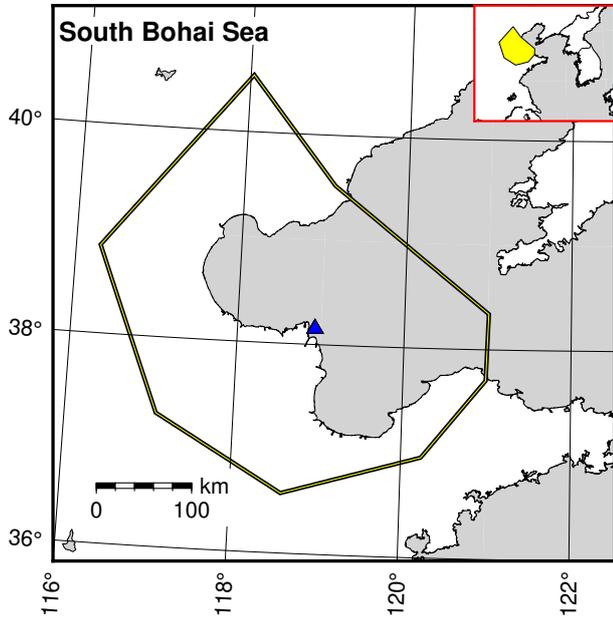
Figure 102: Paleo-sea level and comparison of six models for subregion Sundaland (MIS3 - MIS4), location Berhala Strait.

12.8 Yellow Sea (MIS3 - MIS4)

References for the data used in each location.

South Bohai Sea: Liu et al. (2009); Pico et al. (2016)

Yellow Sea: Liu et al. (2010); Pico et al. (2016); Wang et al. (2014)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

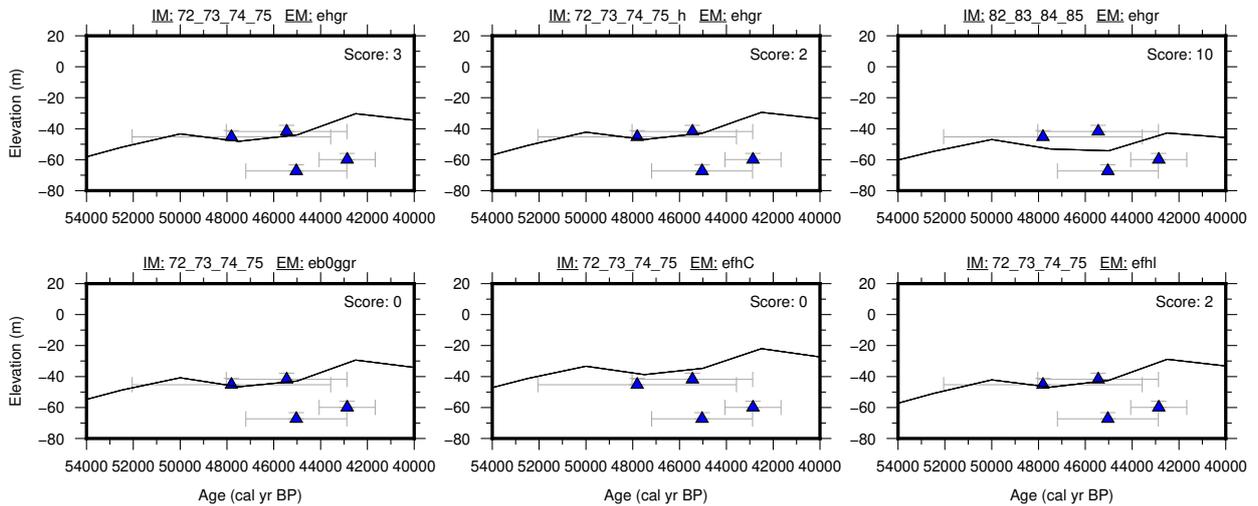
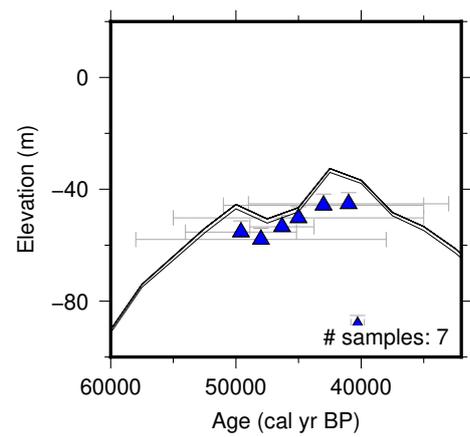
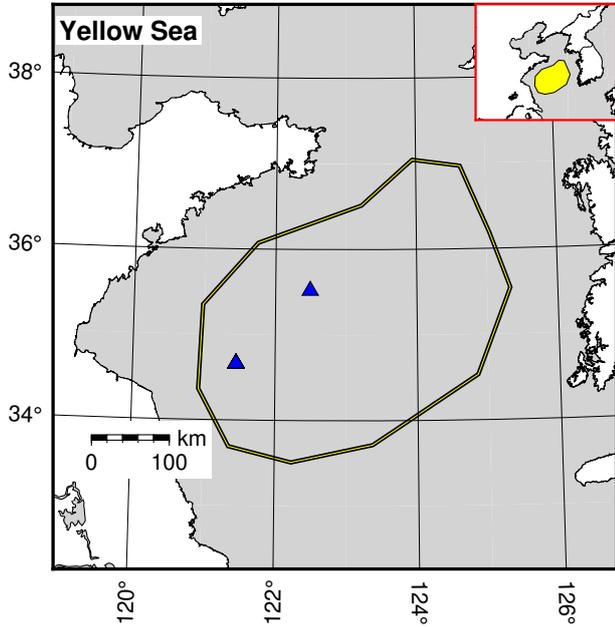


Figure 103: Paleo-sea level and comparison of six models for subregion Yellow Sea (MIS3 - MIS4), location South Bohai Sea.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

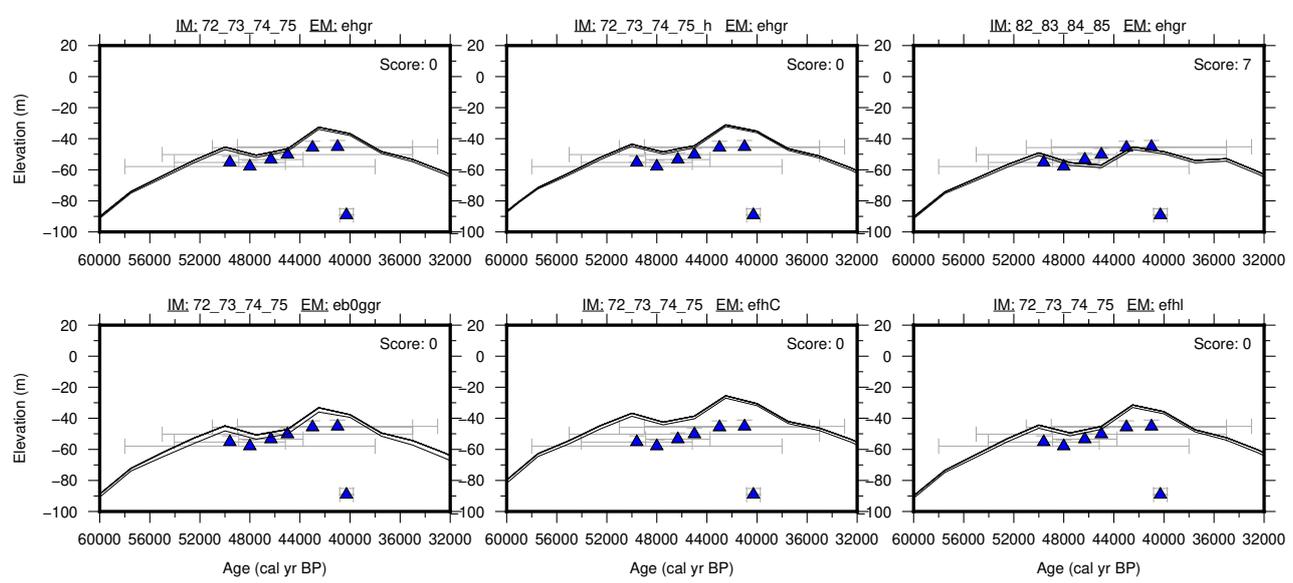


Figure 104: Paleo-sea level and comparison of six models for subregion Yellow Sea (MIS3 - MIS4), location Yellow Sea.

13 North America

13.1 Eastern United States

References for the data used in each location.

Outer Delaware: Belknap (1975); Fletcher et al. (1993); Nikitina et al. (2000); Ramsey and Baxter (1996)

Inner Delaware: Belknap (1975); Kraft (1976); Leorri et al. (2006); Marx (1981); Nikitina et al. (2000); Ramsey and Baxter (1996); Rogers and Pizzuto (1994)

Inner Chesapeake: Cinquemani et al. (1982); Colman et al. (2002)

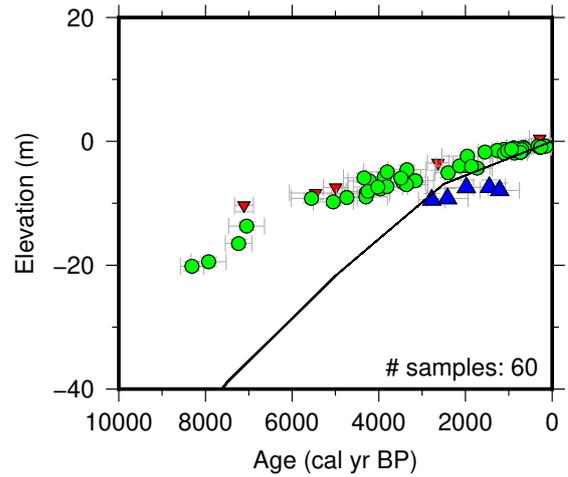
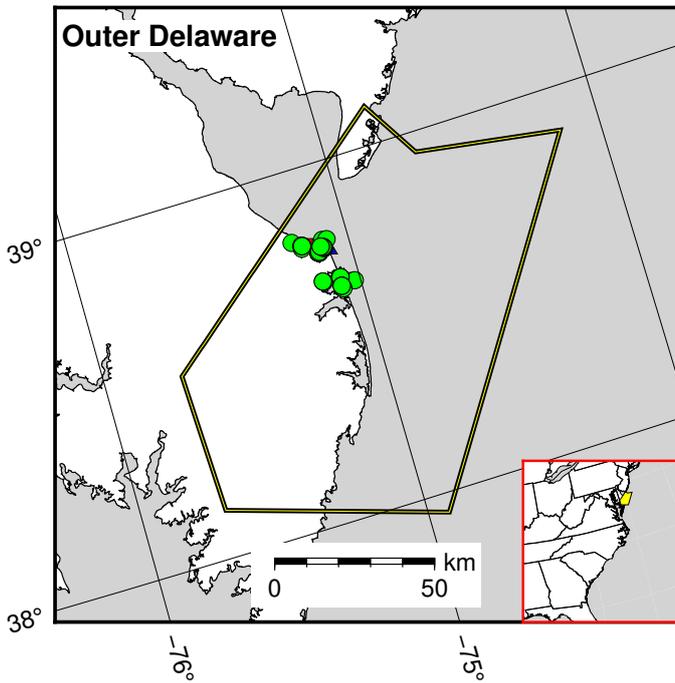
Eastern Shore: Engelhart et al. (2009); Finkelstein and Ferland (1987); Newman and Rusnak (1965); van de Plassche (1990)

Northern North Carolina: Emery et al. (1967); Horton et al. (2009); Kemp (2009); Mallinson et al. (2005); Sears (1973); Stanton (2008)

Southern North Carolina: Cinquemani et al. (1982); Culver et al. (2007); Field et al. (1979); Horton et al. (2009); Kemp (2009); Spaur and Snyder (1999)

Northern South Carolina: Cinquemani et al. (1982); Gayes et al. (1992)

Southern South Carolina: Cinquemani et al. (1982)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

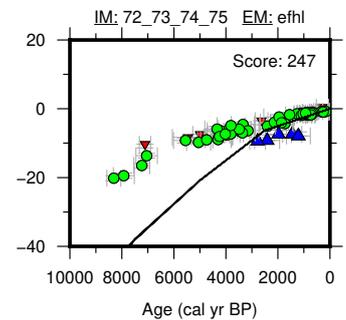
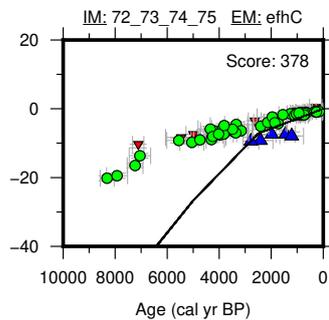
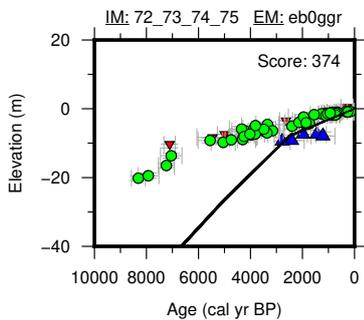
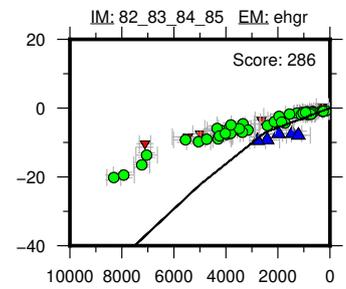
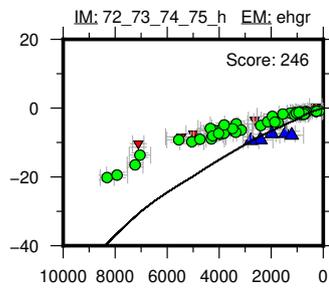
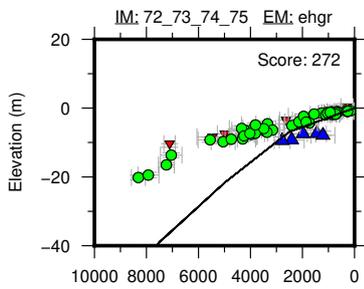


Figure 105: Paleo-sea level and comparison of six models for subregion Eastern United States, location Outer Delaware.

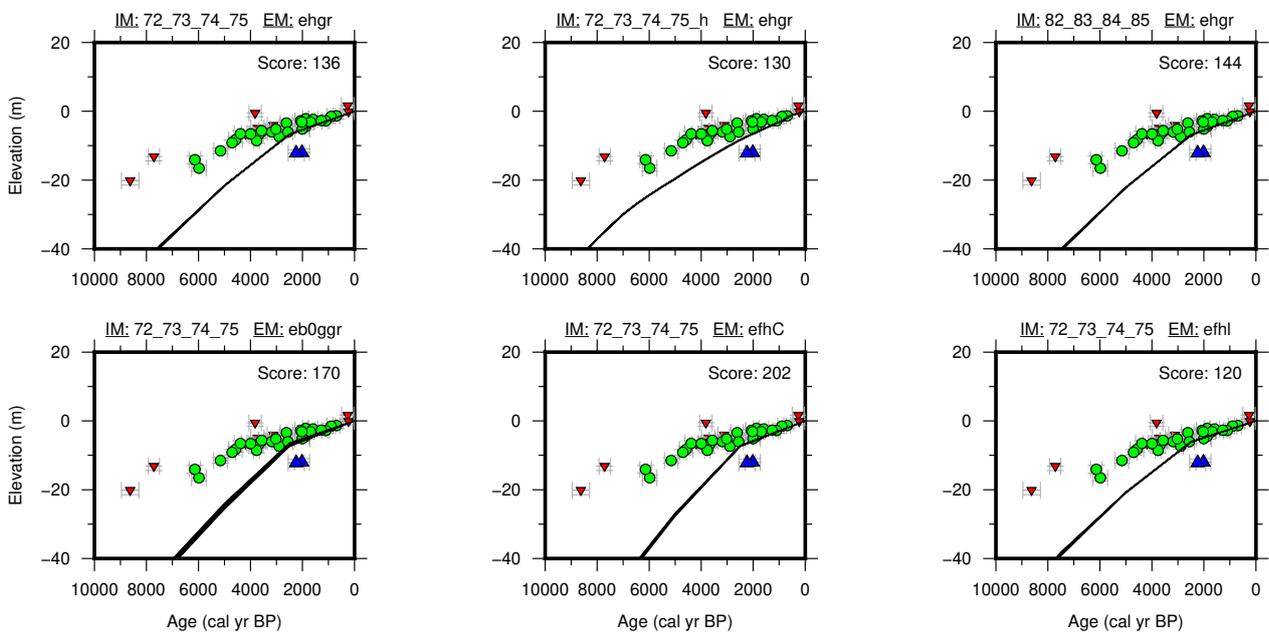
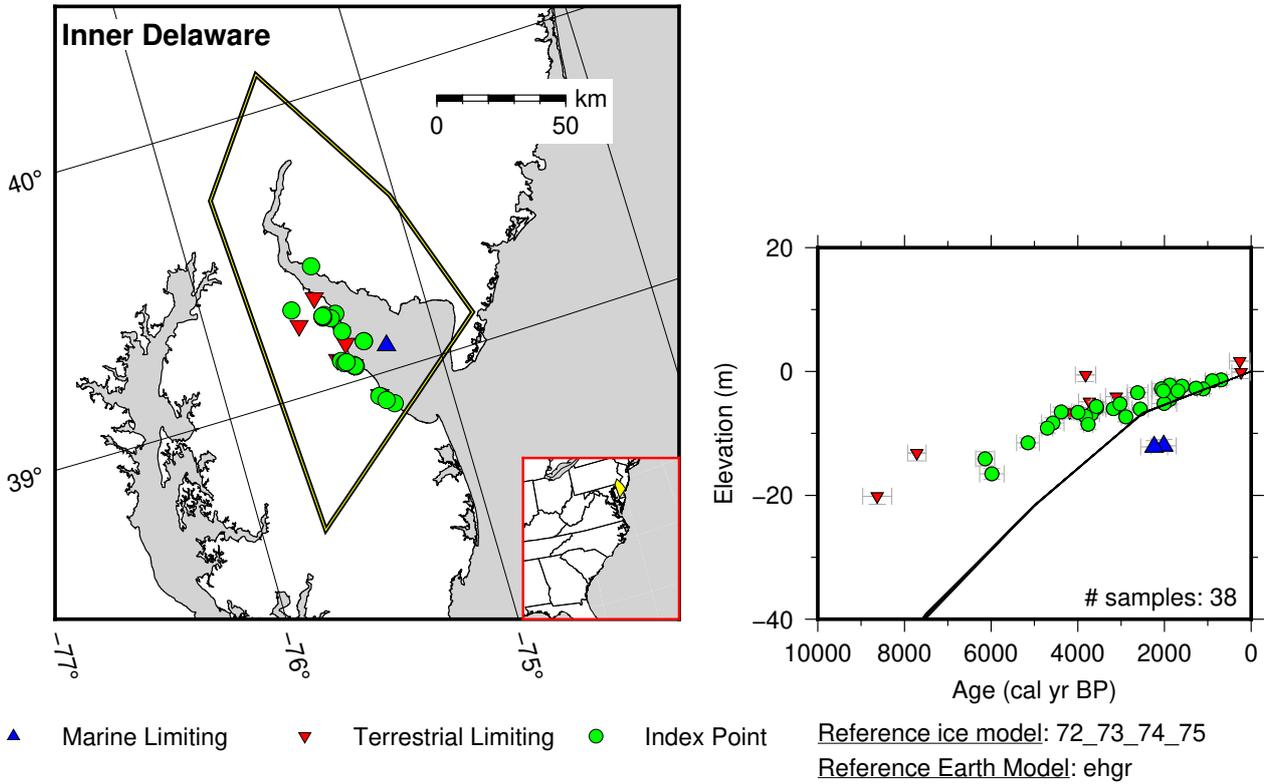


Figure 106: Paleo-sea level and comparison of six models for subregion Eastern United States, location Inner Delaware.

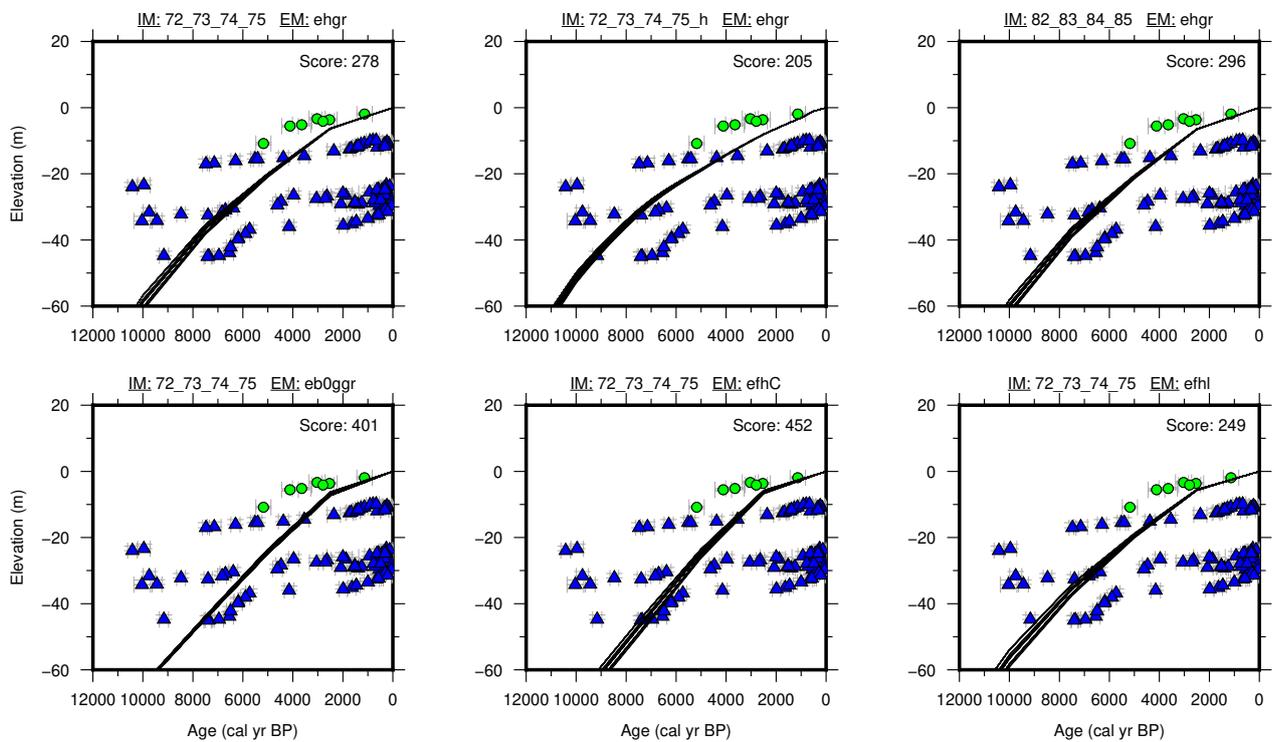
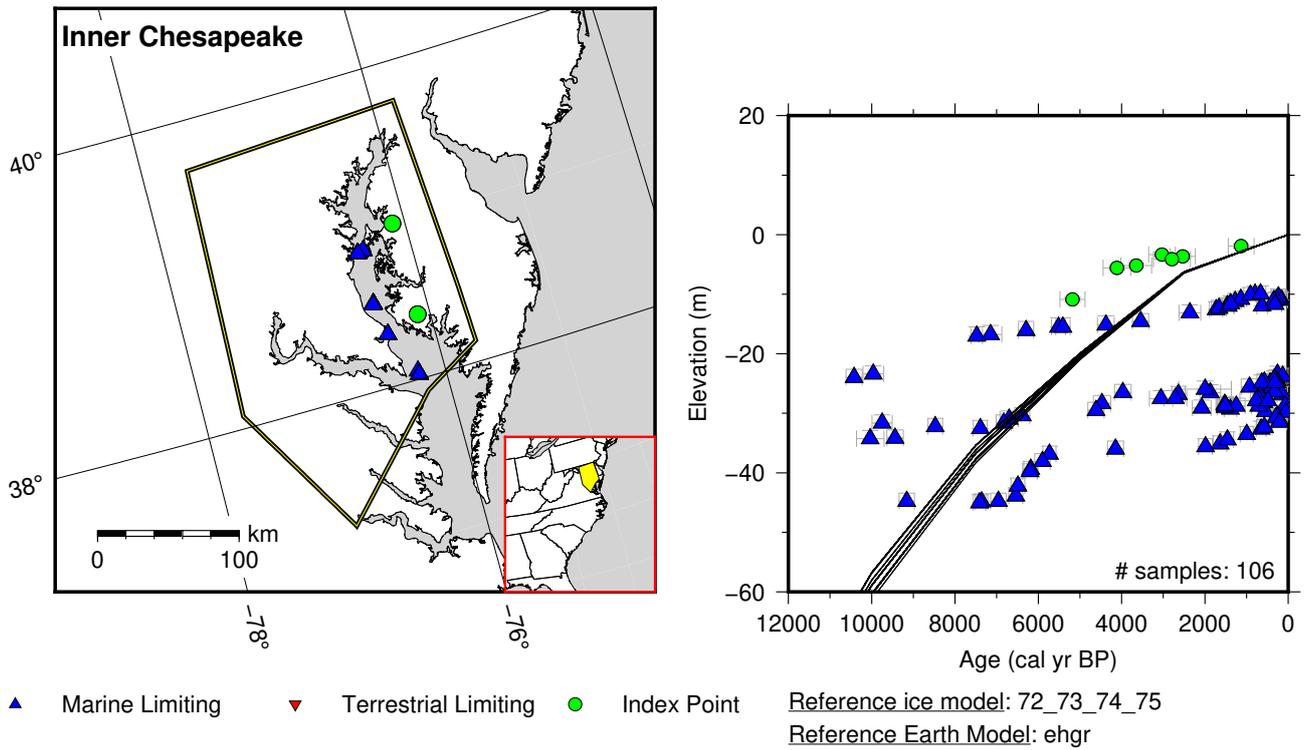
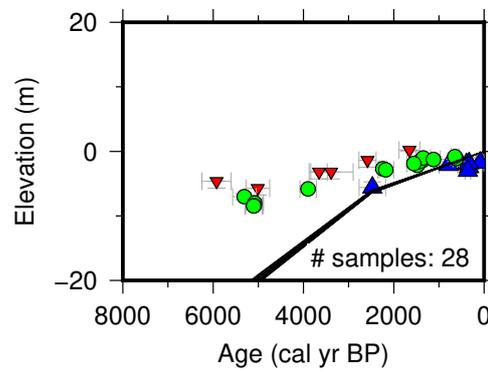
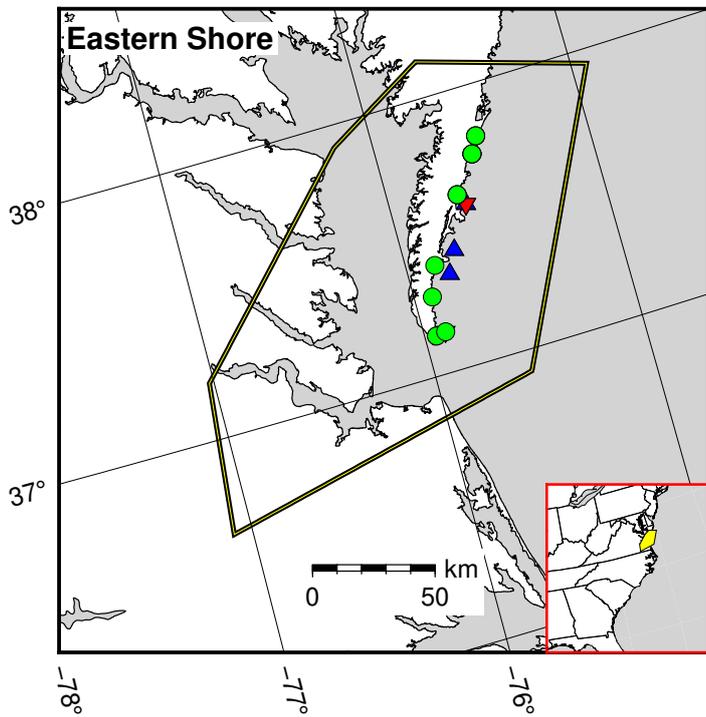


Figure 107: Paleo-sea level and comparison of six models for subregion Eastern United States, location Inner Chesapeake.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

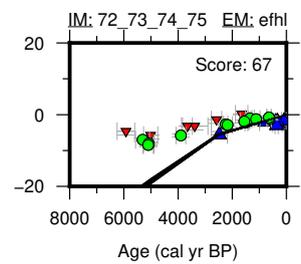
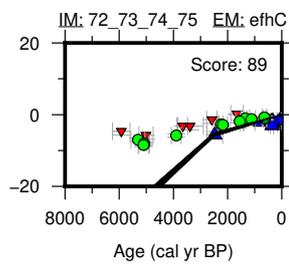
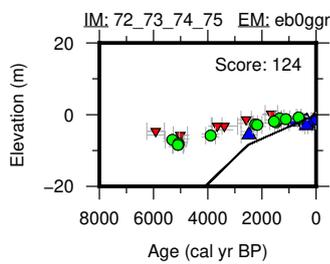
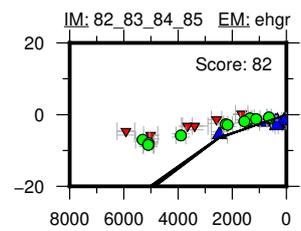
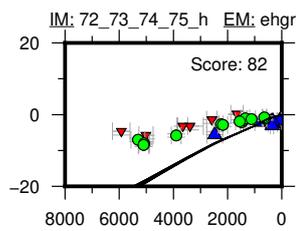
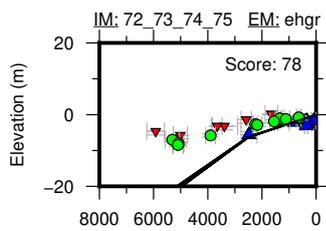


Figure 108: Paleo-sea level and comparison of six models for subregion Eastern United States, location Eastern Shore.

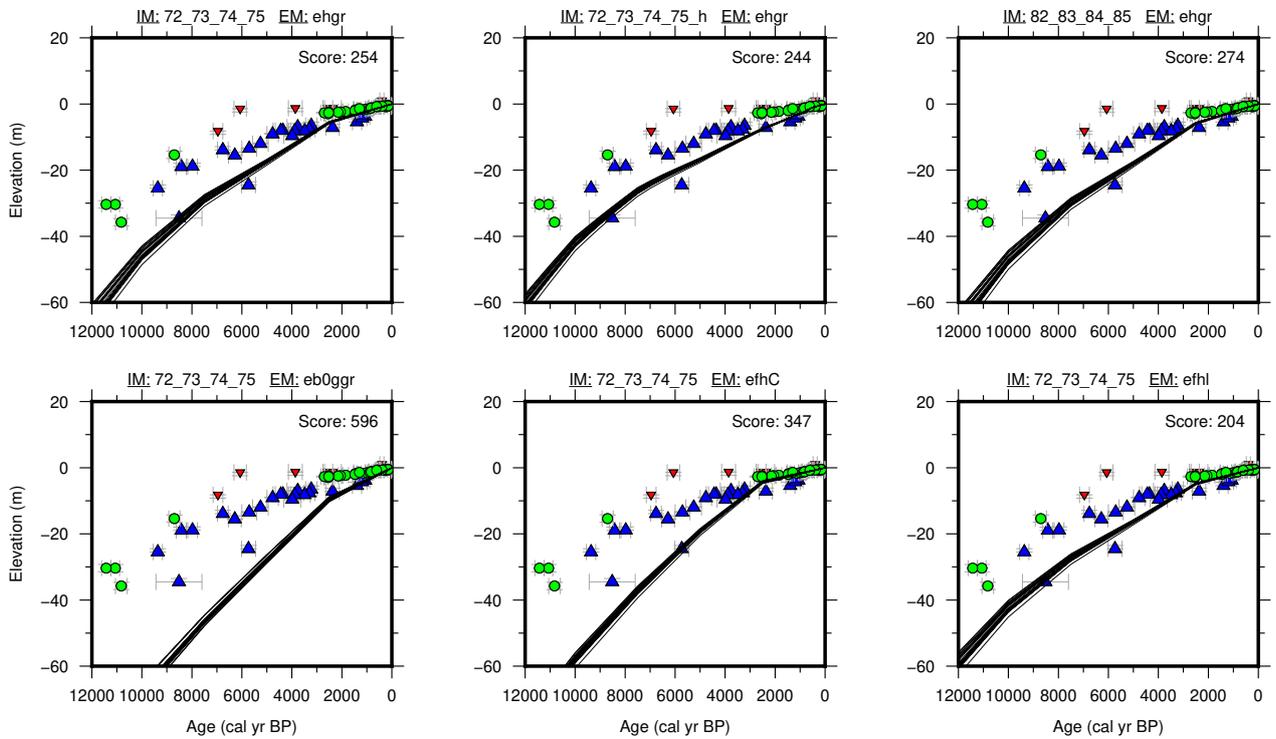
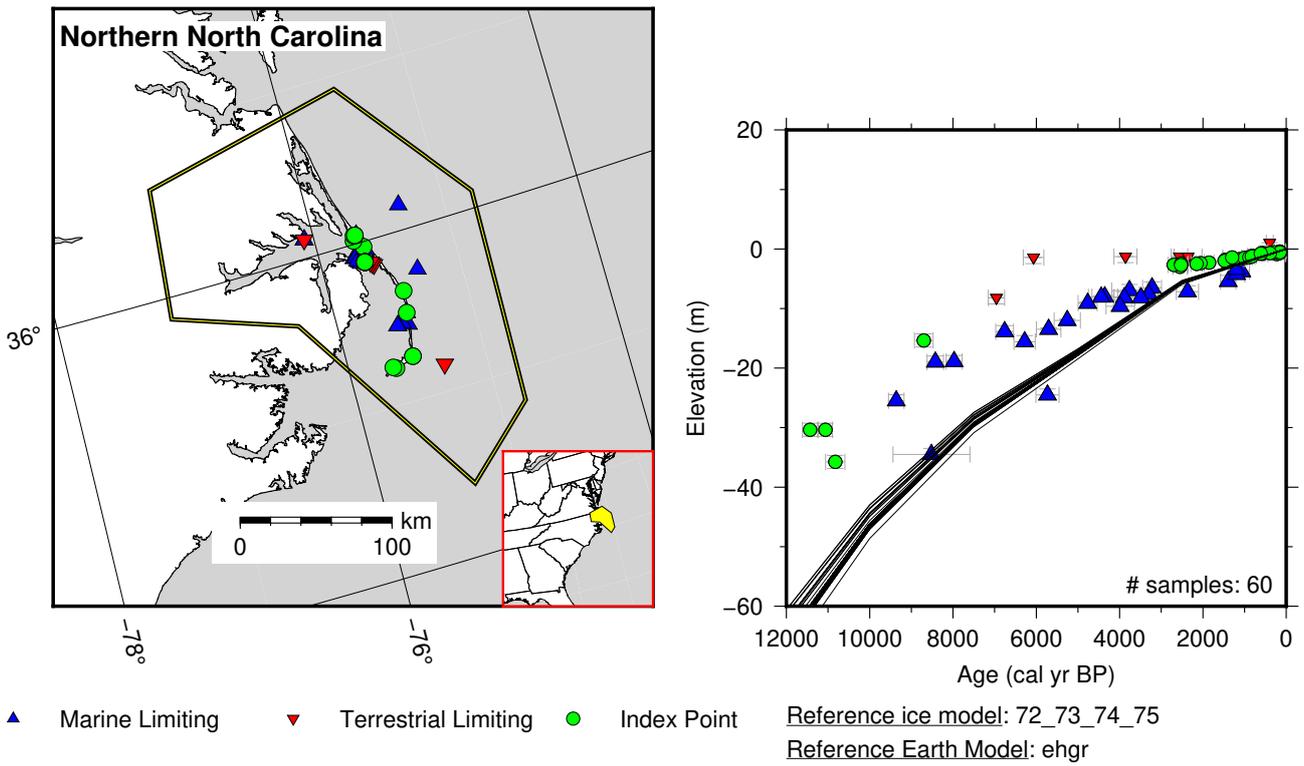
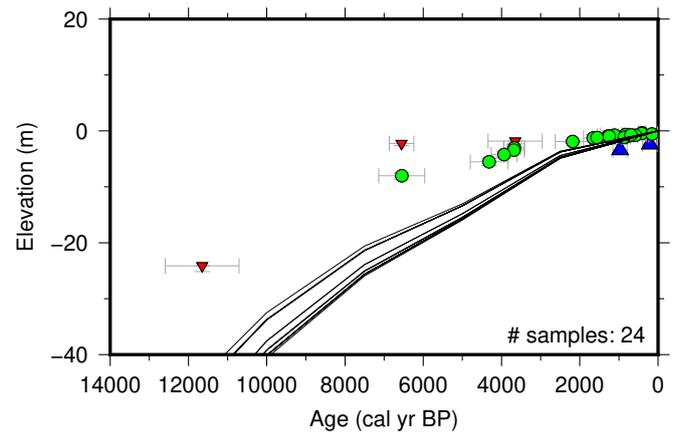
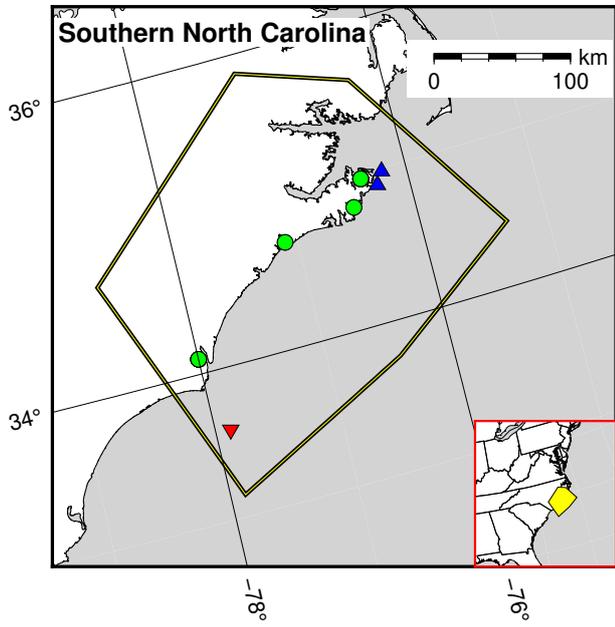


Figure 109: Paleo-sea level and comparison of six models for subregion Eastern United States, location Northern North Carolina.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

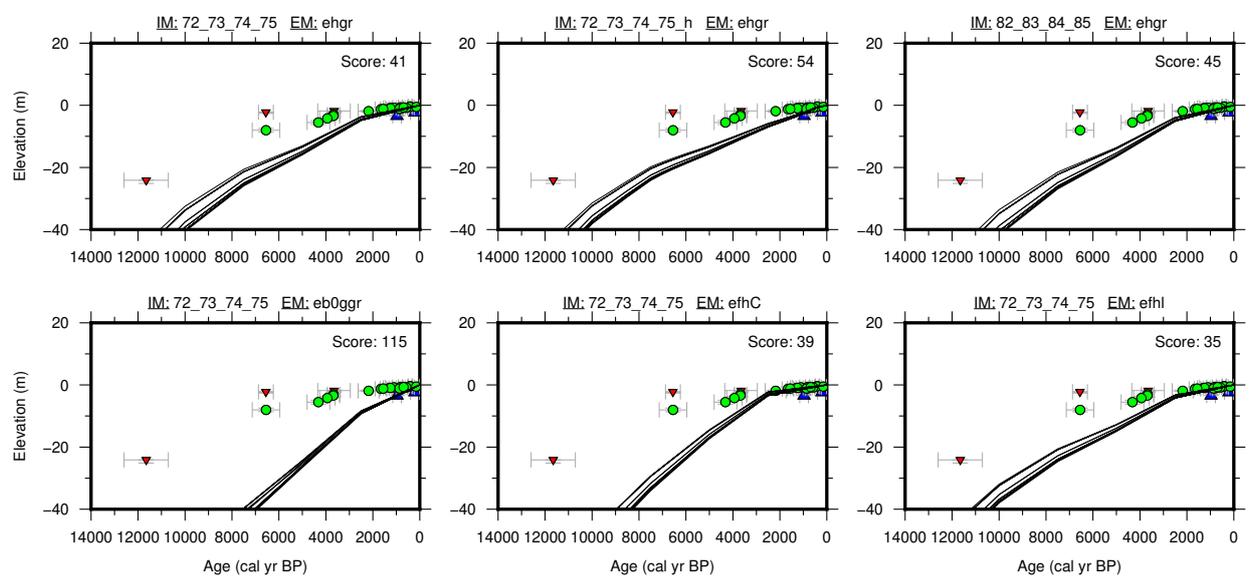
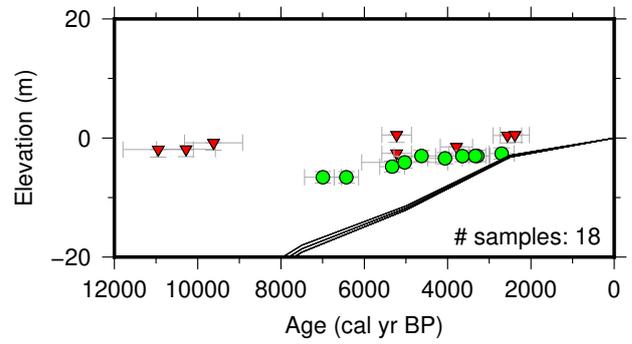
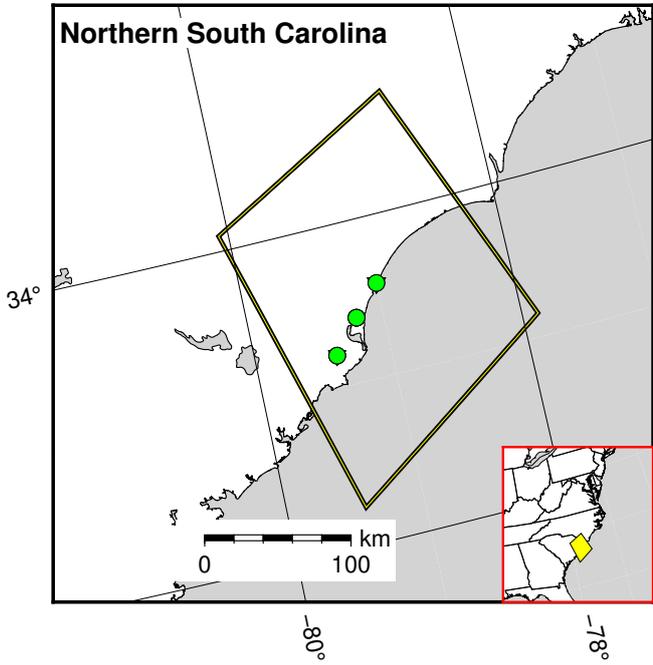


Figure 110: Paleo-sea level and comparison of six models for subregion Eastern United States, location Southern North Carolina.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

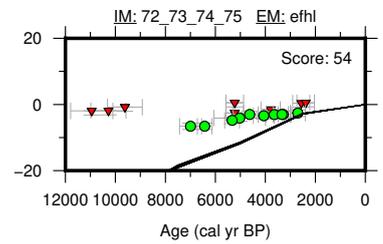
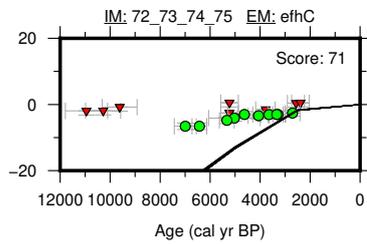
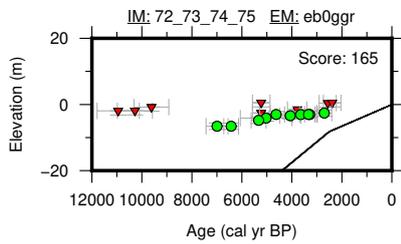
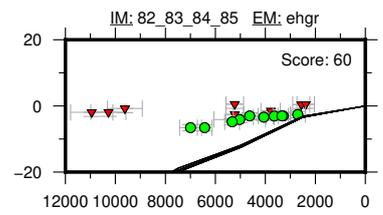
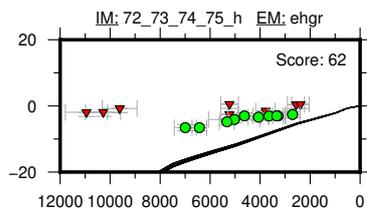
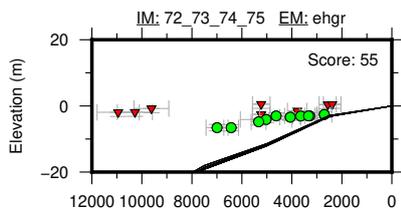
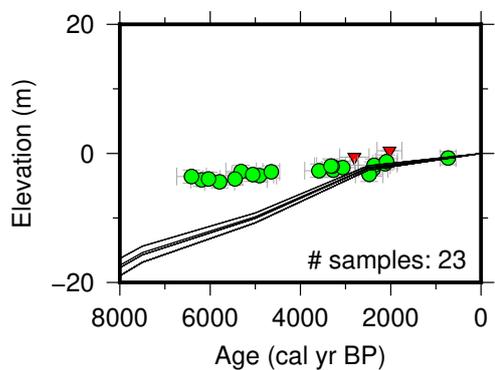
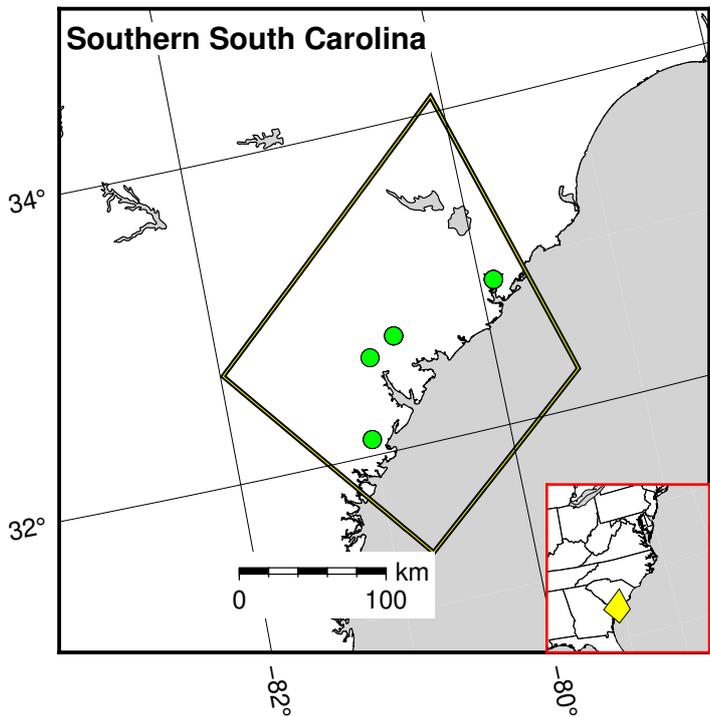


Figure 111: Paleo-sea level and comparison of six models for subregion Eastern United States, location Northern South Carolina.



▲ Marine Limiting
 ▼ Terrestrial Limiting
 ● Index Point
 Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

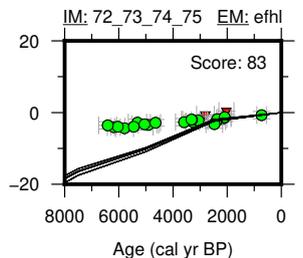
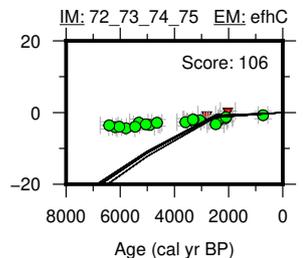
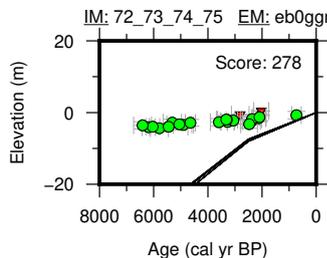
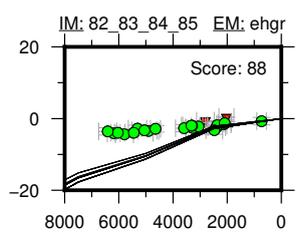
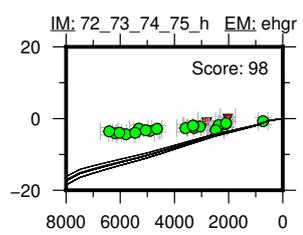
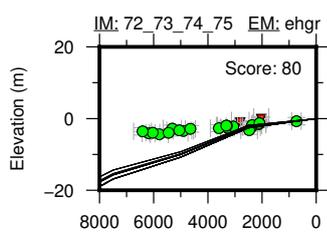


Figure 112: Paleo-sea level and comparison of six models for subregion Eastern United States, location Southern South Carolina.

13.2 Gulf of St Lawrence

References for the data used in each location.

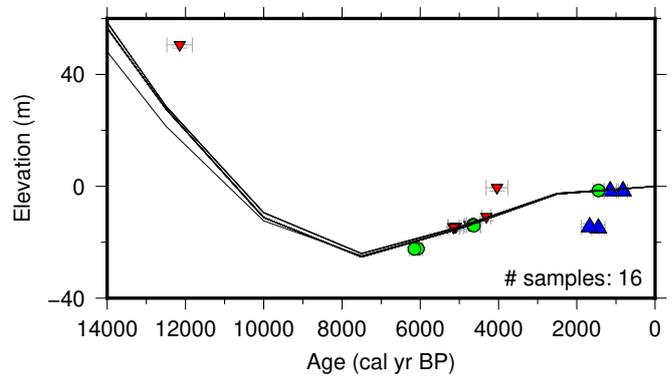
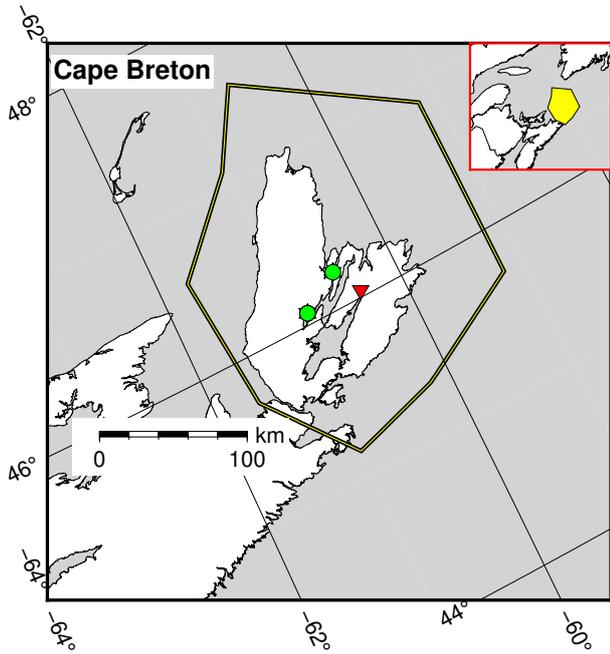
Cape Breton: Blake and Lowdon (1976); Miller and Livingstone (1993); Shaw et al. (2009)

Magdalen Islands: Barnett et al. (2017); Dredge et al. (1992); Rémillard et al. (2016, 2017)

Prince Edward Island: Kranck (1972); McCallum and Wittenberg (1965); McNeely and Brennan (2005); Ogden and Hart (1976); Scott et al. (1981, 1987); Stea and Mott (1989); Walton et al. (1961)

Chaleur Bay: McNeely and Brennan (2005); Rampton et al. (1984)

Anticosti Island: Dubois et al. (1988); Lavoie and Filion (2001); Painchaud et al. (1984)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

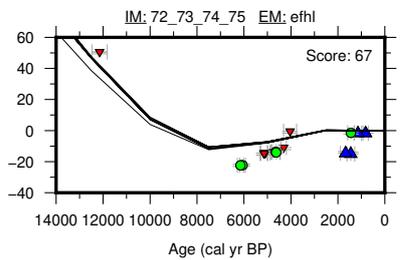
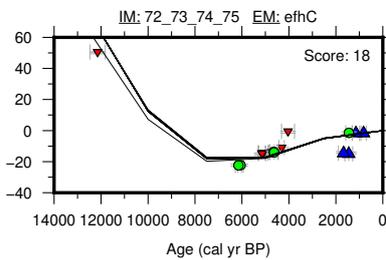
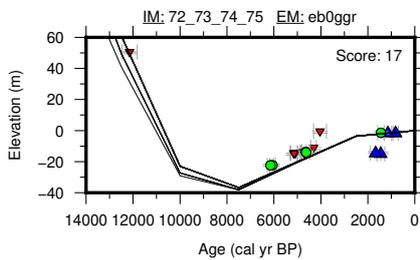
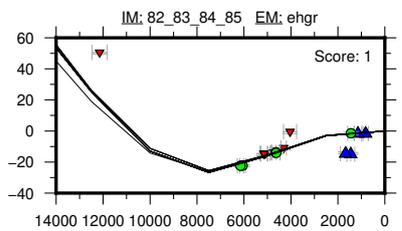
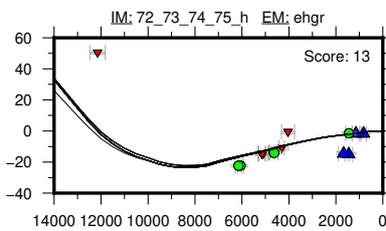
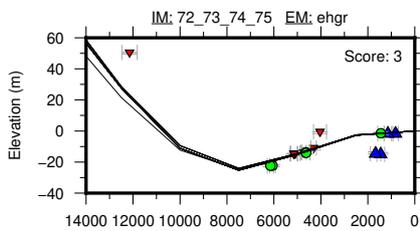


Figure 113: Paleo-sea level and comparison of six models for subregion Gulf of St Lawrence, location Cape Breton.

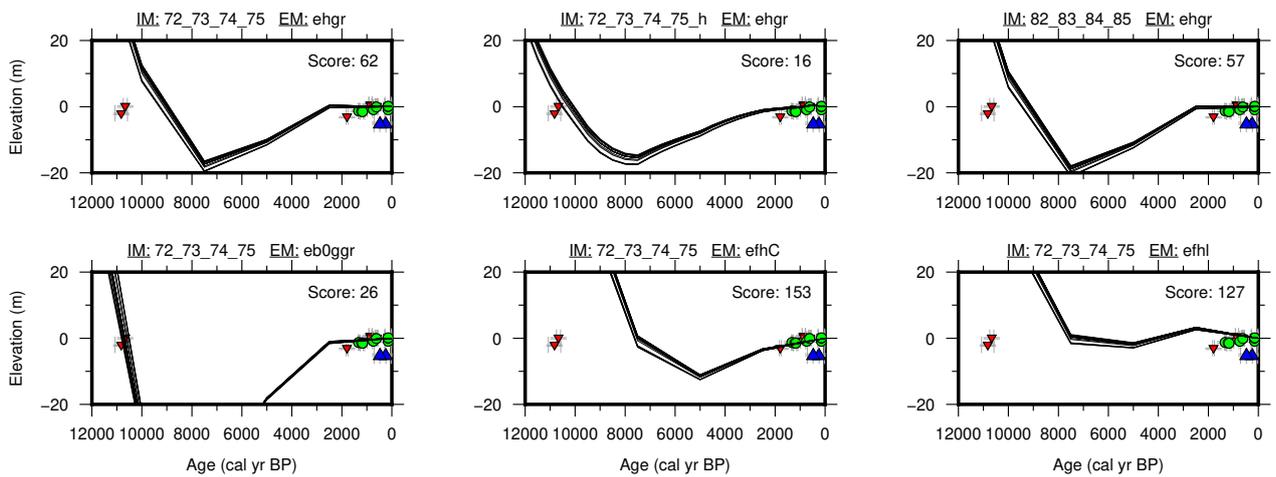
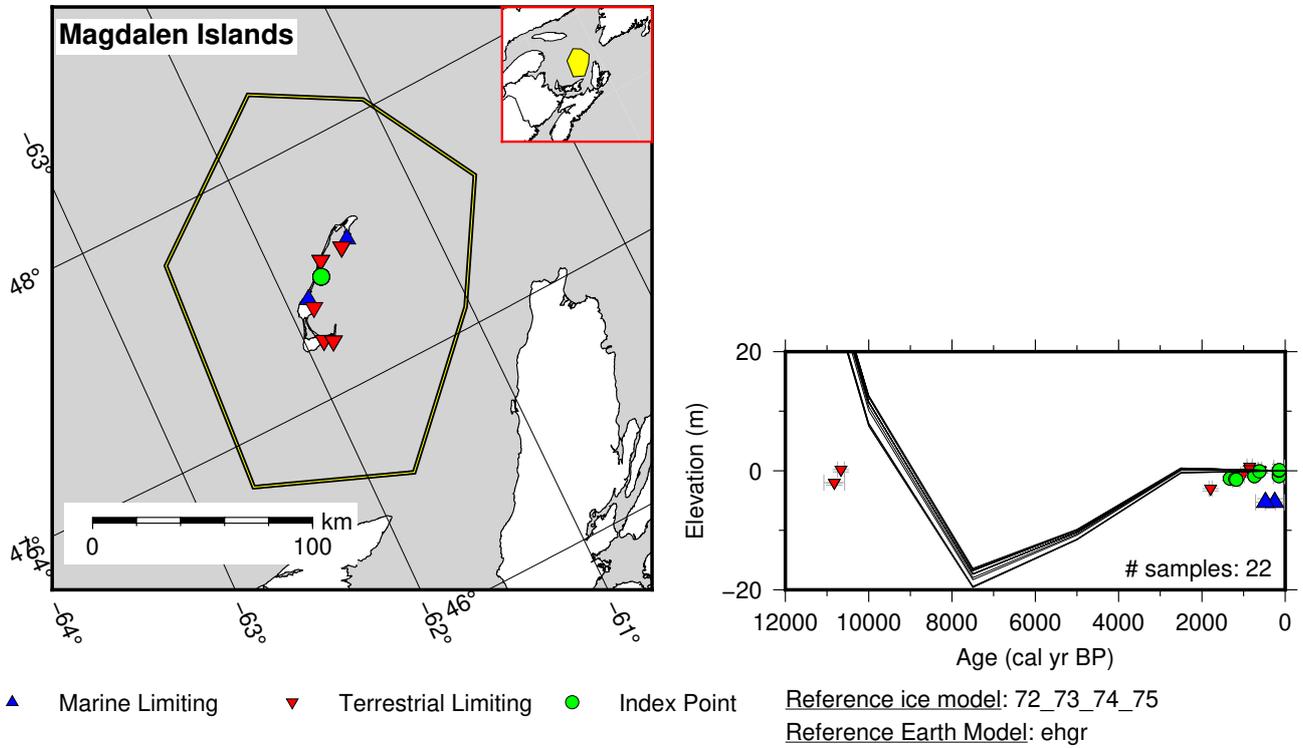


Figure 114: Paleo-sea level and comparison of six models for subregion Gulf of St Lawrence, location Magdalen Islands.

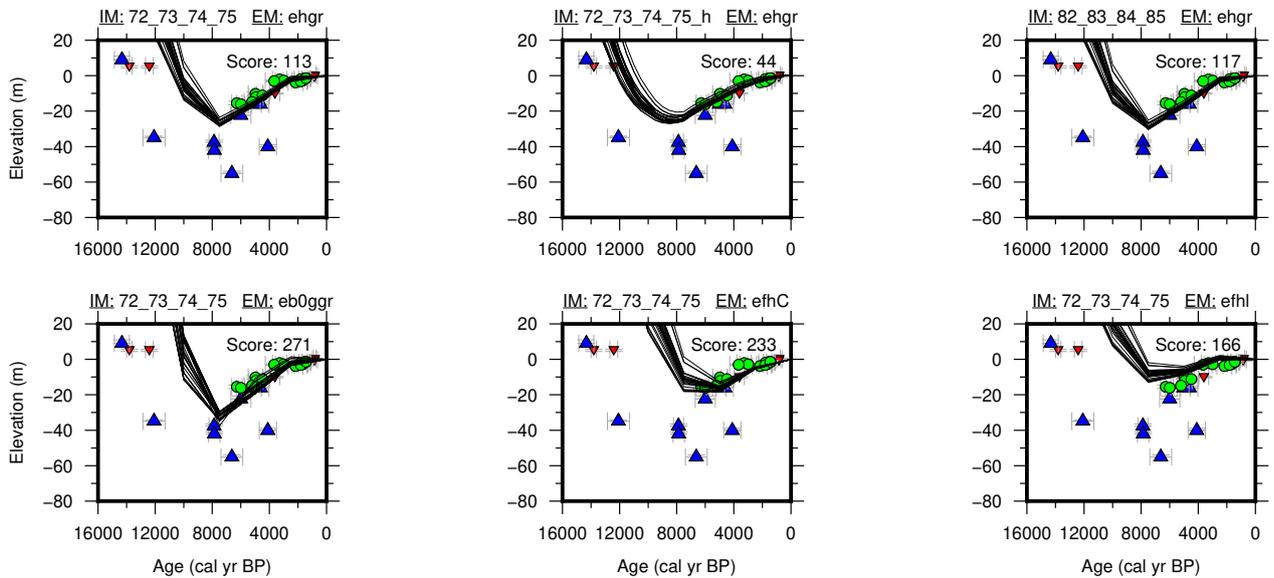
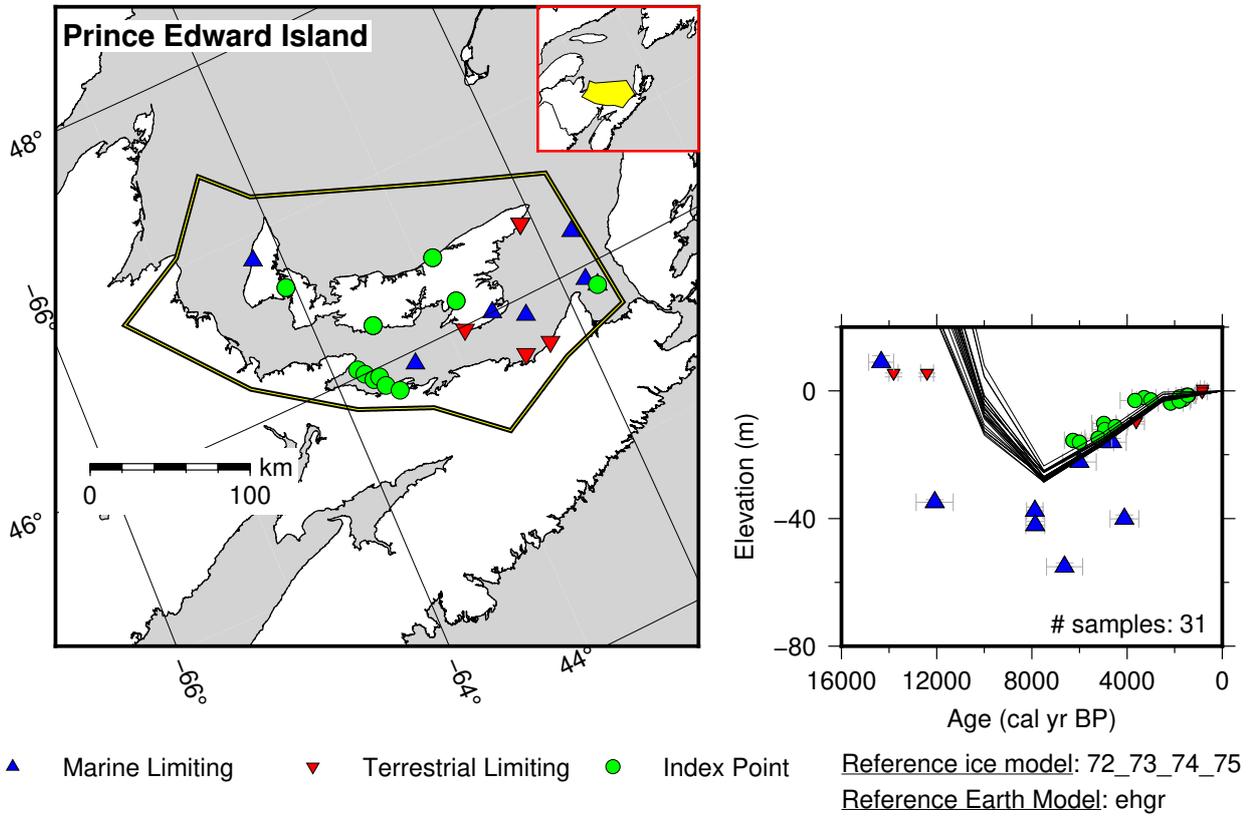


Figure 115: Paleo-sea level and comparison of six models for subregion Gulf of St Lawrence, location Prince Edward Island.

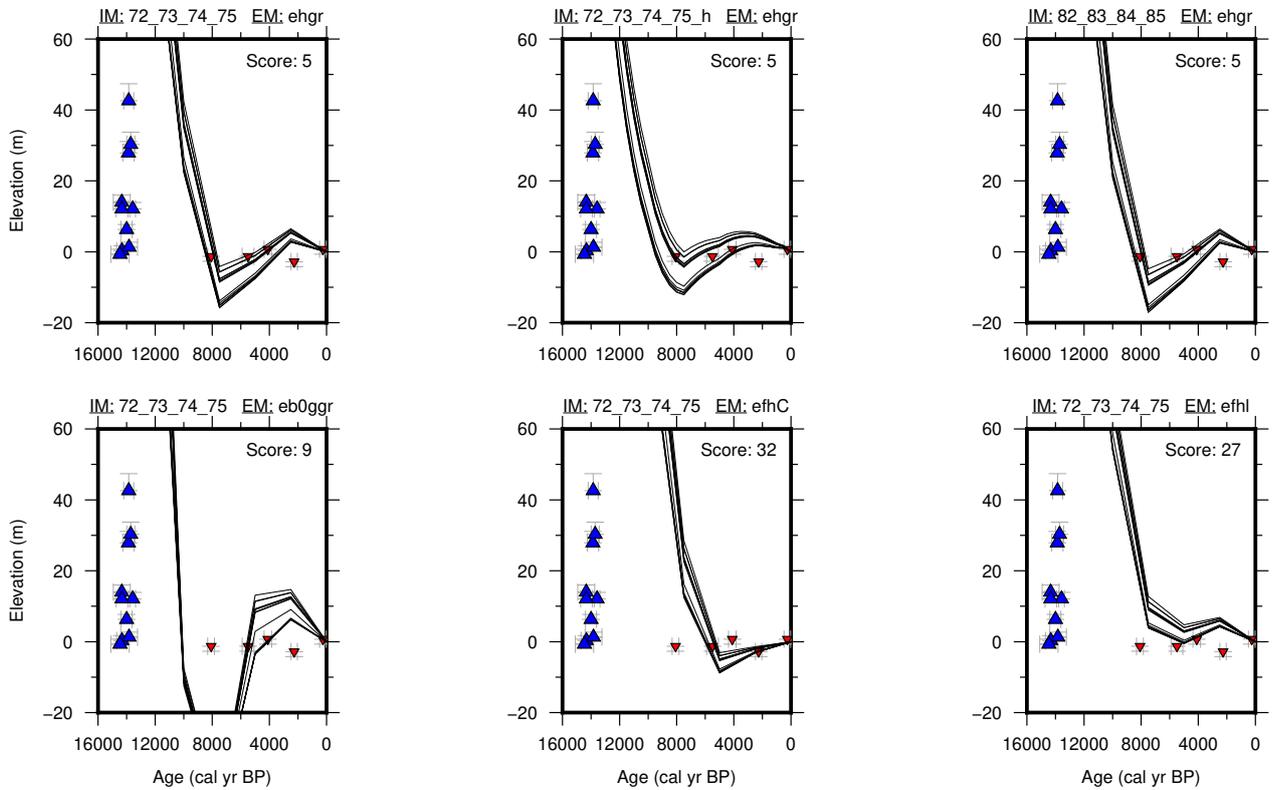
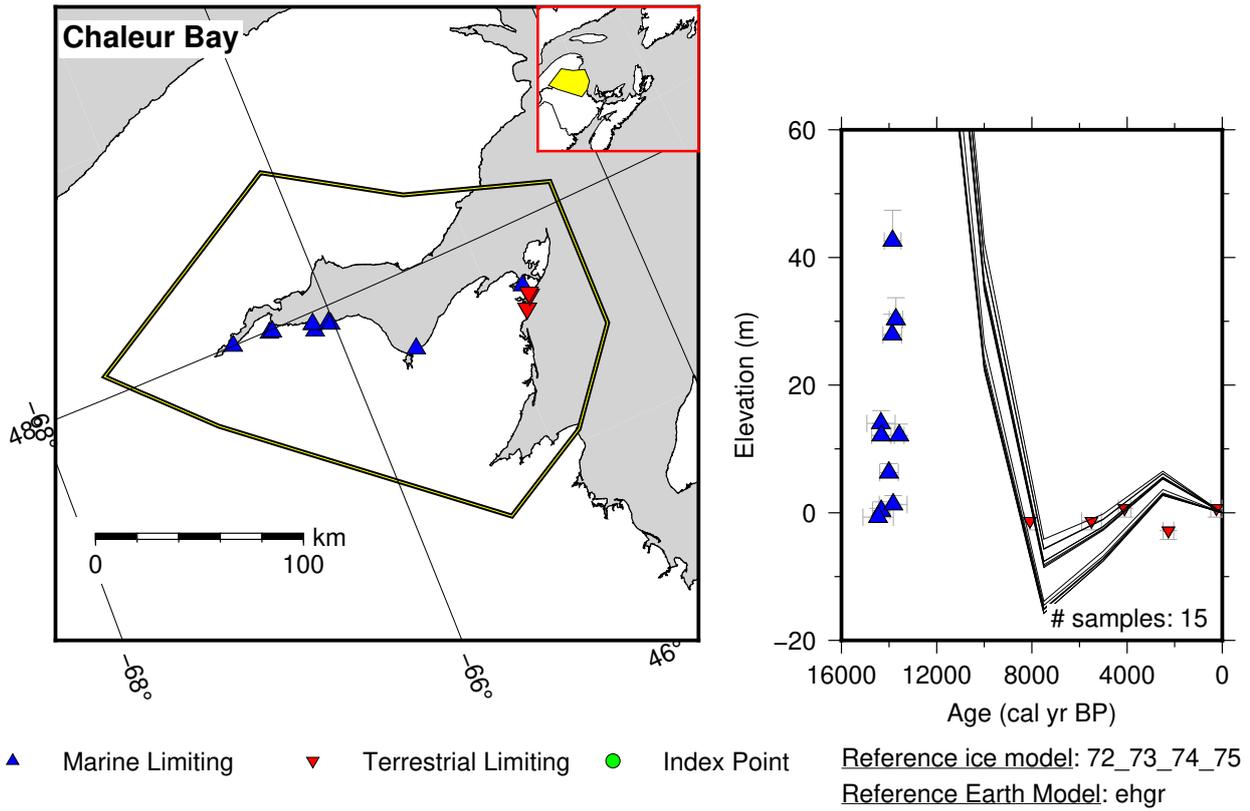
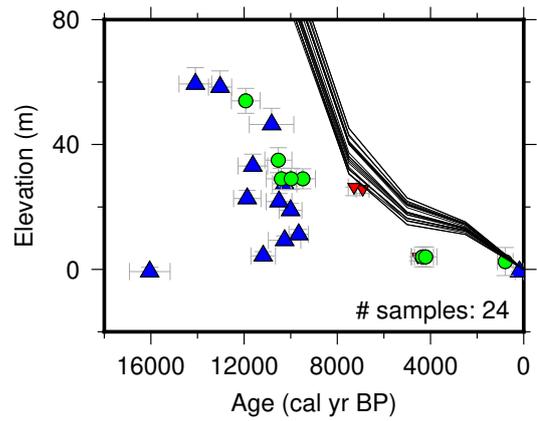
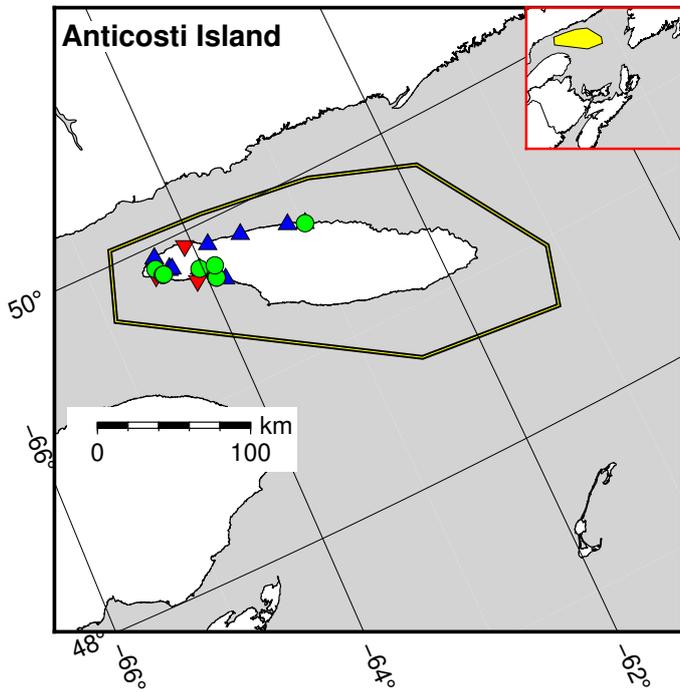


Figure 116: Paleo-sea level and comparison of six models for subregion Gulf of St Lawrence, location Chaleur Bay.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75

Reference Earth Model: ehgr

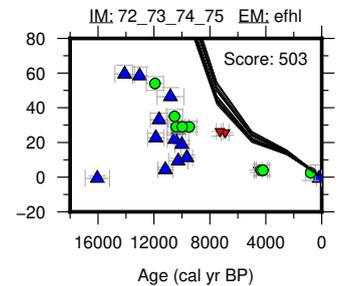
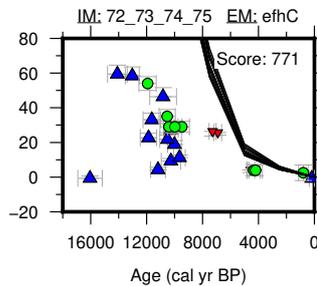
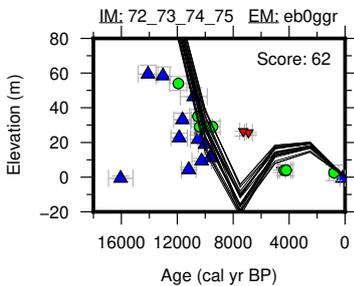
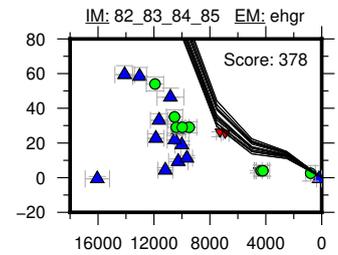
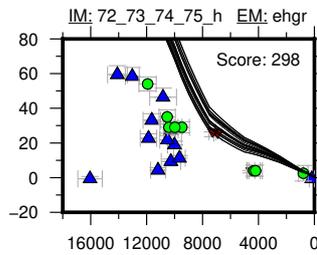
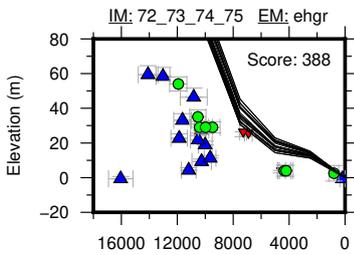


Figure 117: Paleo-sea level and comparison of six models for subregion Gulf of St Lawrence, location Anticosti Island.

13.3 Hudson Bay

References for the data used in each location.

Kivalliq: Aylsworth et al. (1981); Blake (1983, 1986, 1988); Dyck and Fyles (1962); Dyck et al. (1966); Lowdon and Blake (1970); Lowdon and Blake (1979); McNeely and Atkinson (1995); Morrison (1989); Ridler (1974); Rutherford et al. (1973, 1979); Simon et al. (2014); Walton et al. (1961)

Churchill: Anderson and Hodgetts (2007); Andrews and Falconer (1969); Blake (1982, 1988); Dyck and Fyles (1964); Hodgetts (2007); Kuhry (2008); Lowdon and Blake (1973); Lowdon et al. (1971); Meyer (1970); Morlan et al. (2000); Nash (1972); Wagner (1967)

West James Bay: Bunbury et al. (2012); Dyck et al. (1965); Dyke and Peltier (2000a); Glaser et al. (2004); McAndrews et al. (1982); McNeely and Brennan (2005); Vogel and Waterbolk (1972); Webber et al. (1970)

East James Bay: Beaulieu-Audy et al. (2009); Farrand (1962); Hardy (1976); Pendea et al. (2010)

Umiujaq: Allard and Seguin (1985); Allard and Tremblay (1983a,b); Cayer (2003); Filion et al. (1991); Gajewski and Garralla (1992); Hillaire-Marcel (1976); Lajeunesse and Allard (2003); Lamarre et al. (2012); Lavoie et al. (2012); Lowdon and Blake (1980); Lowdon et al. (1967); McNeely (2006); Plumet (1974); Saulnier-Talbot and Pienitz (2001); Walcott and Craig (1975)

Inukjuak: Andrews and Falconer (1969); Andrews and Short (1983); Buckley and Willis (1970); Harington (2003); Lauriol and Gray (1997); Lemieux et al. (2011); Lowdon and Blake (1968); Saint-Laurent and Filion (1992); Wagner (1967)

Ivujivik: Daigneault (2008); Harington (2003); Martindale et al. (2020); Matthews (1966, 1967); McNeely and Brennan (2005); Wagner (1967)

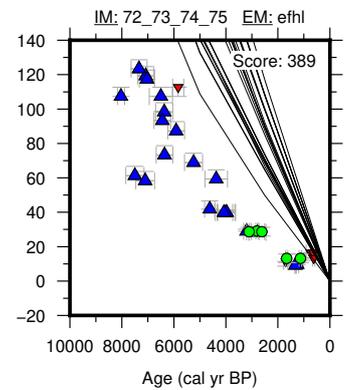
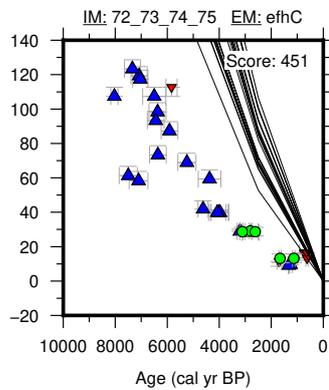
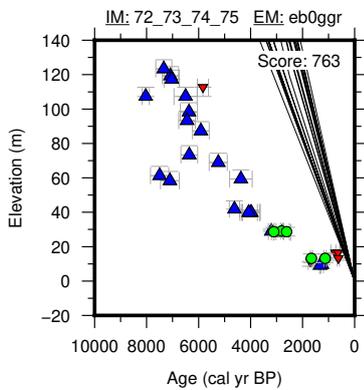
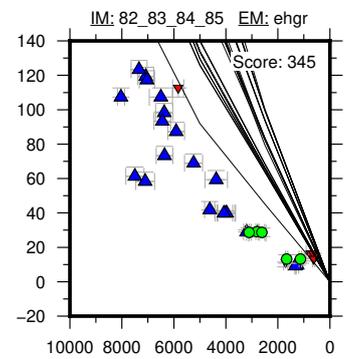
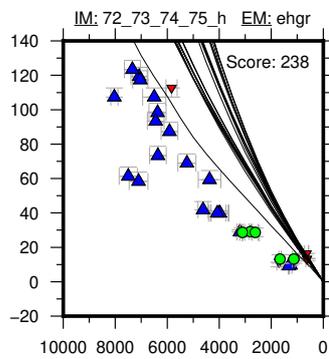
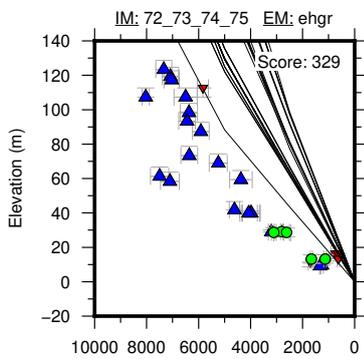
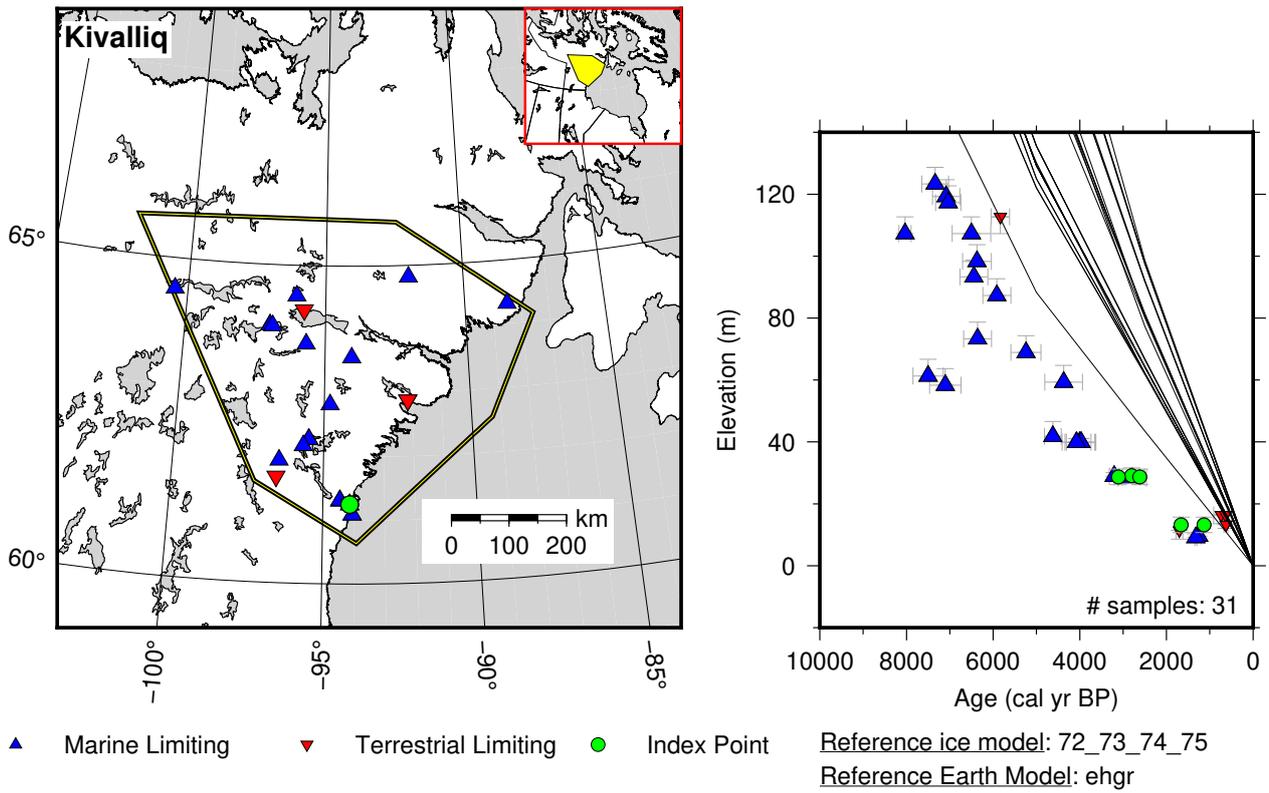


Figure 118: Paleo-sea level and comparison of six models for subregion Hudson Bay, location Kivalliq.

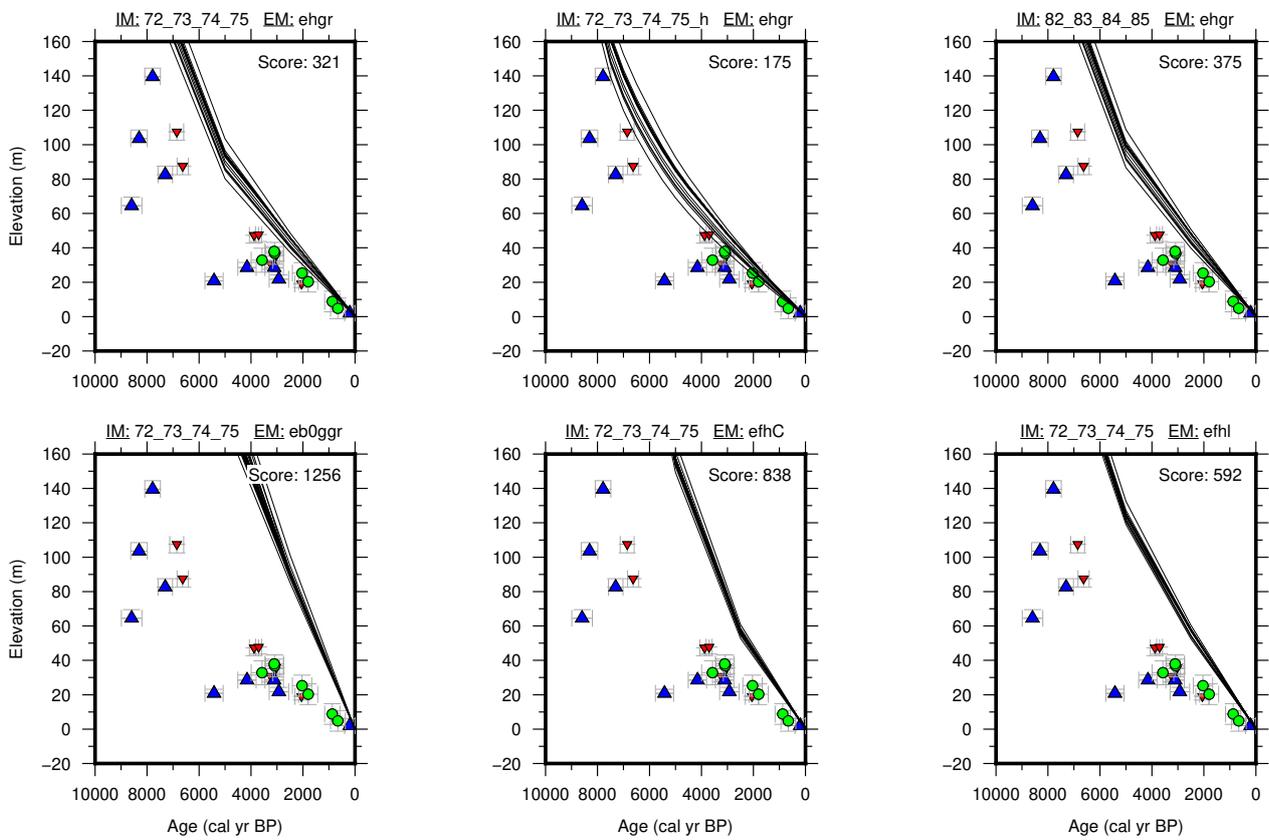
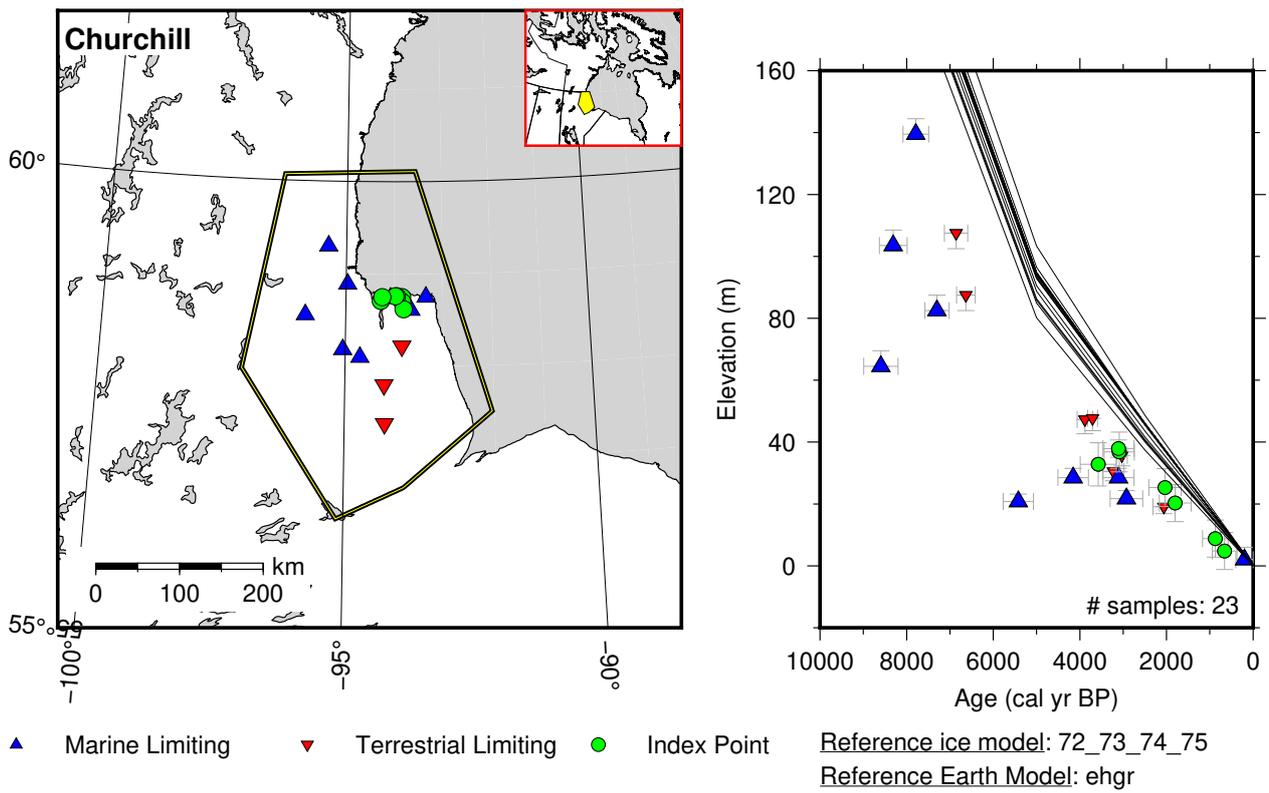
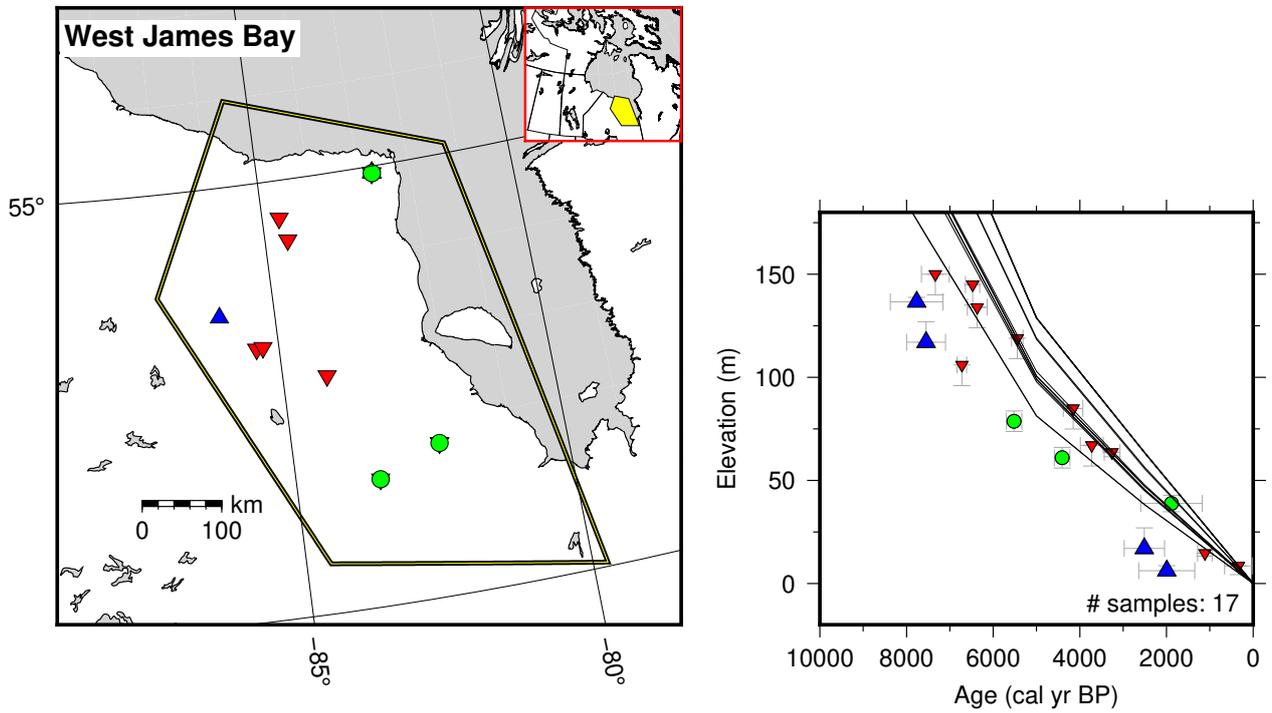


Figure 119: Paleo-sea level and comparison of six models for subregion Hudson Bay, location Churchill.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

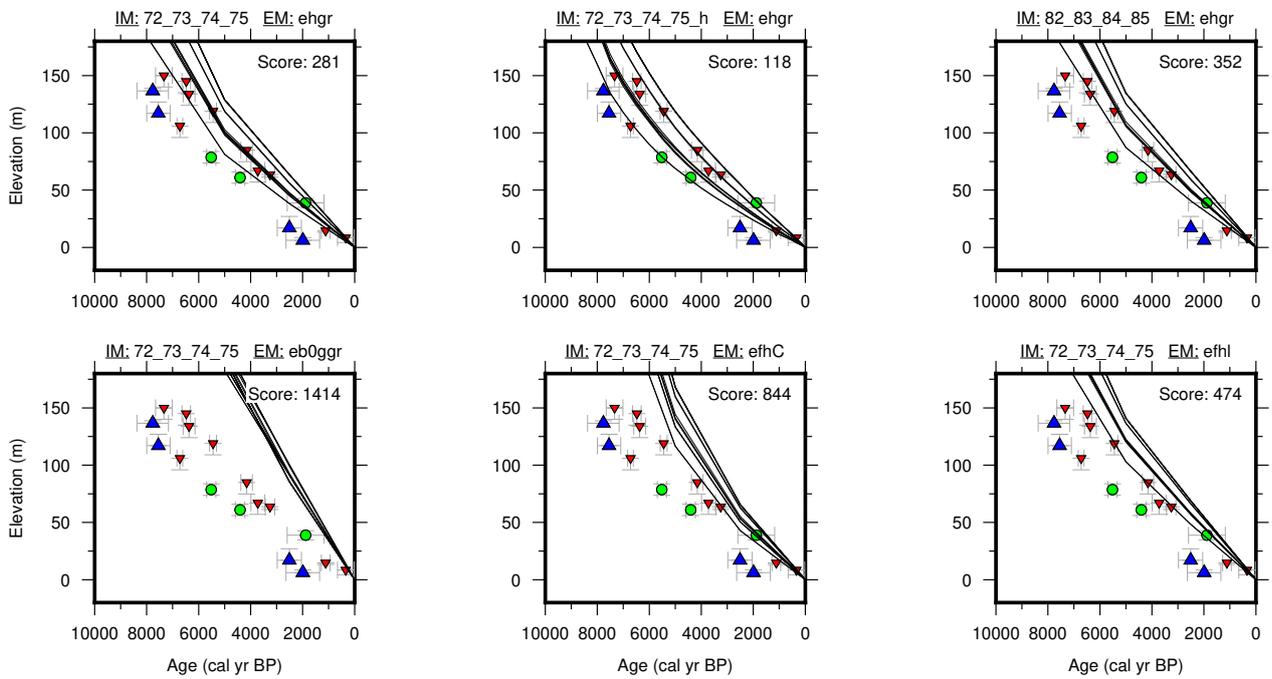
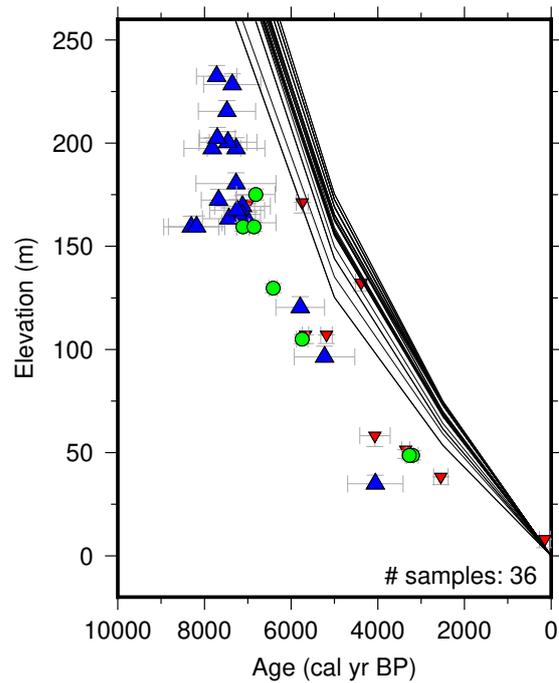
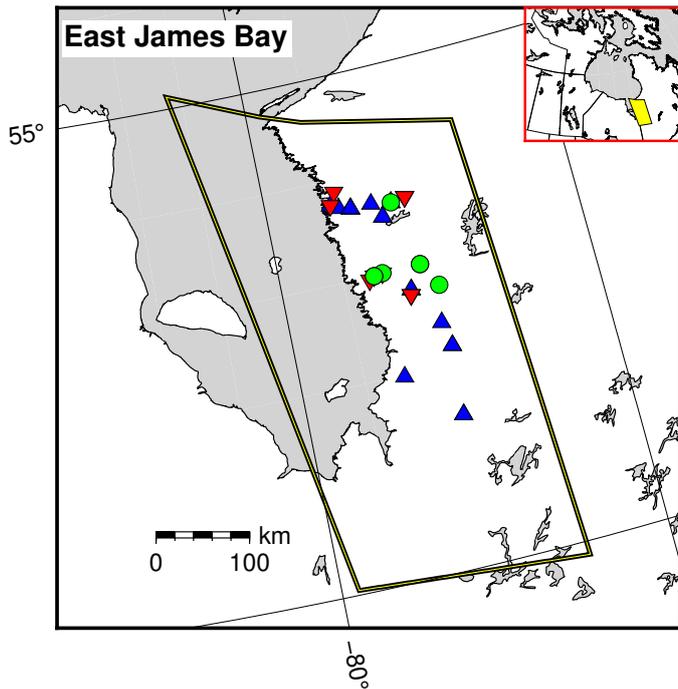


Figure 120: Paleo-sea level and comparison of six models for subregion Hudson Bay, location West James Bay.



▲ Marine Limiting
 ▼ Terrestrial Limiting
 ● Index Point
 Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

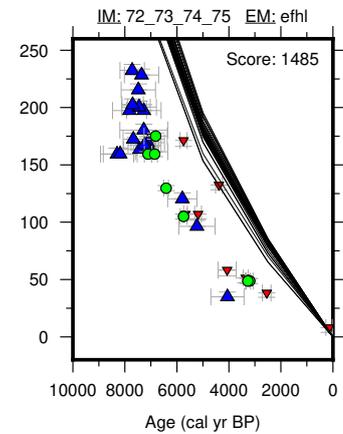
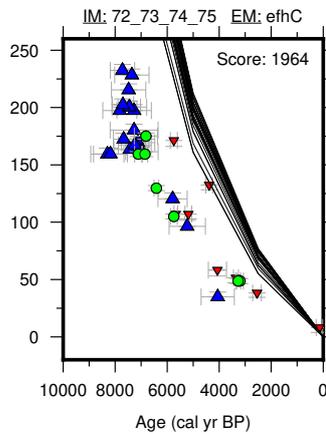
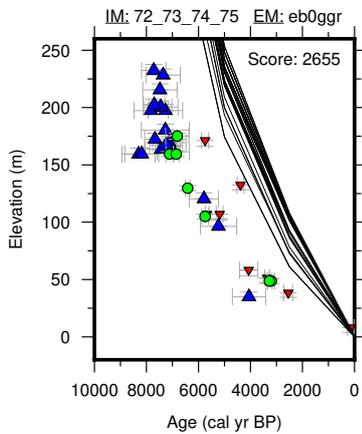
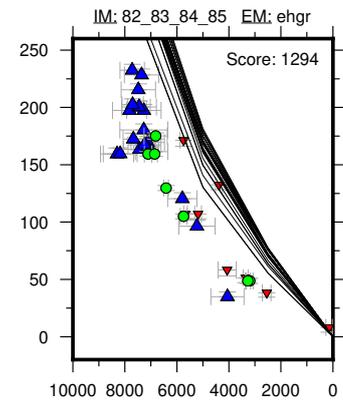
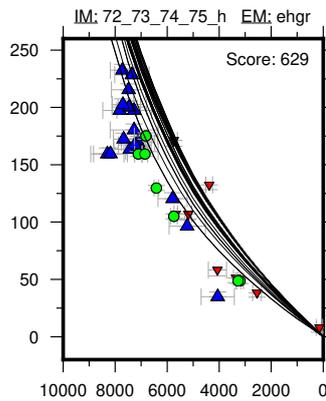
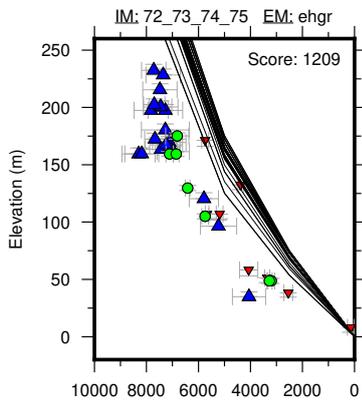


Figure 121: Paleo-sea level and comparison of six models for subregion Hudson Bay, location East James Bay.

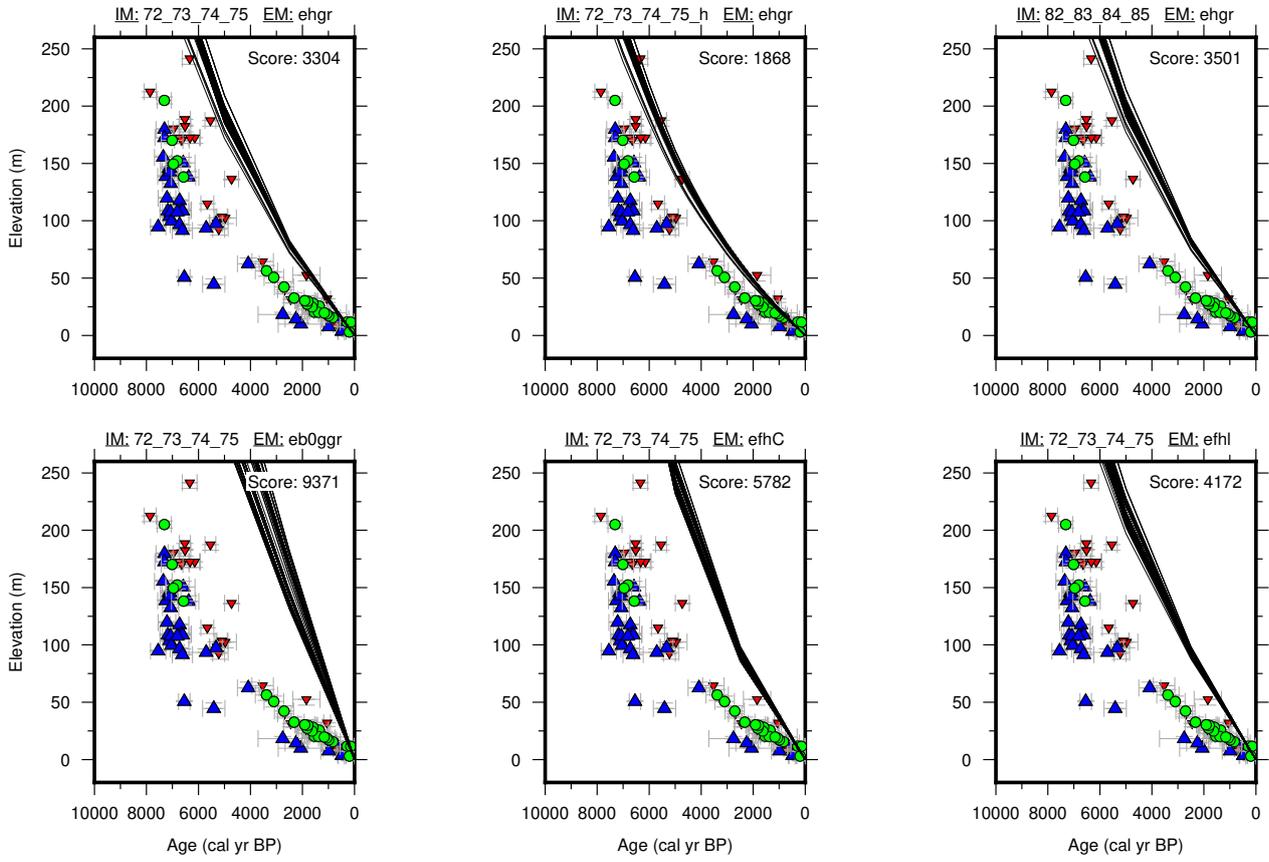
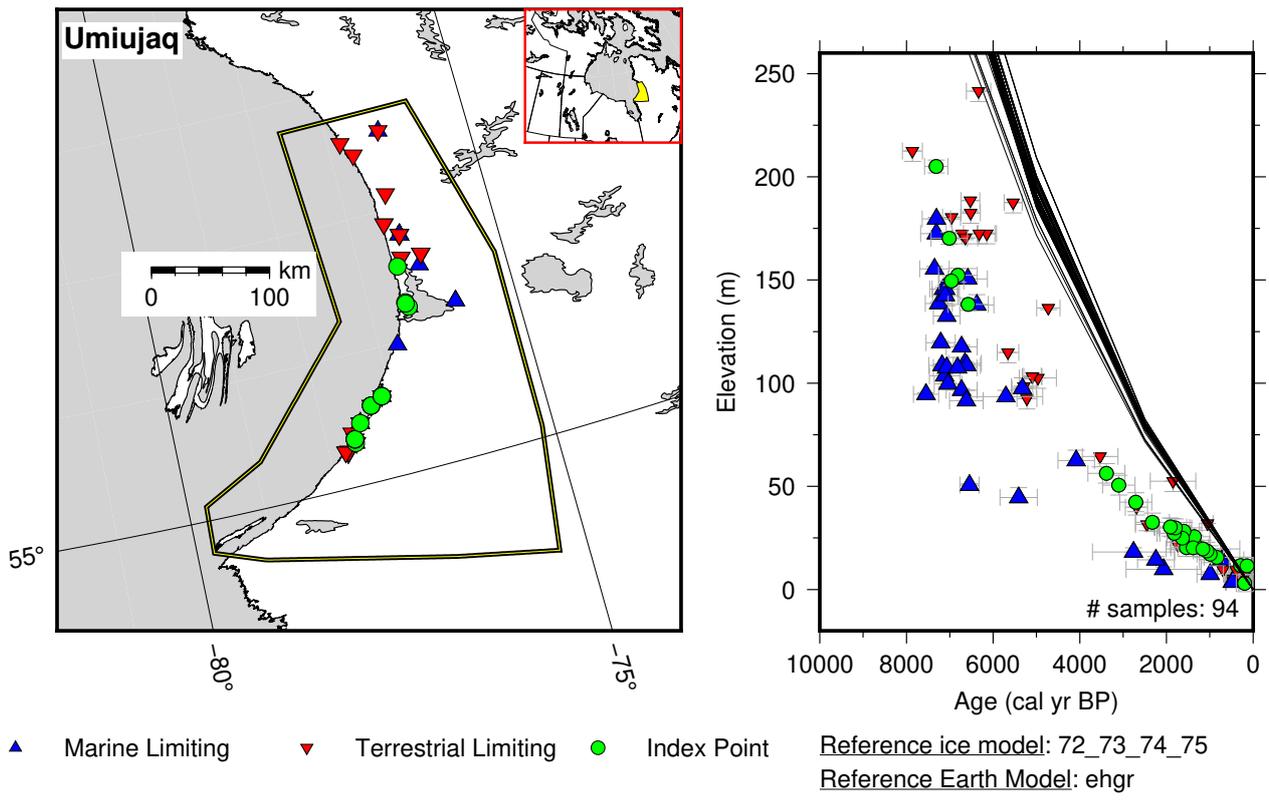


Figure 122: Paleo-sea level and comparison of six models for subregion Hudson Bay, location Umiujaq.

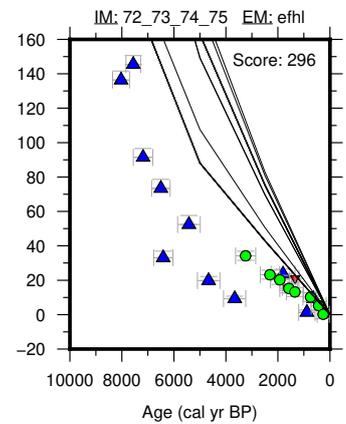
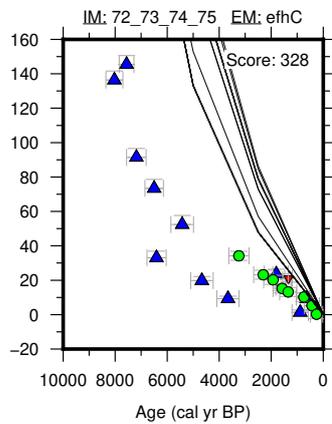
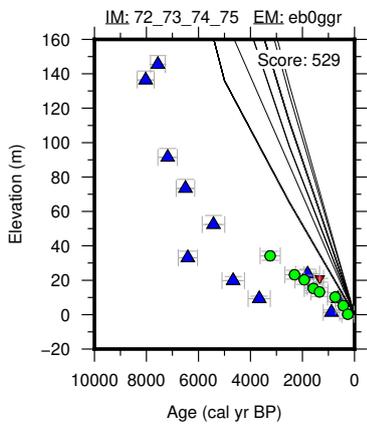
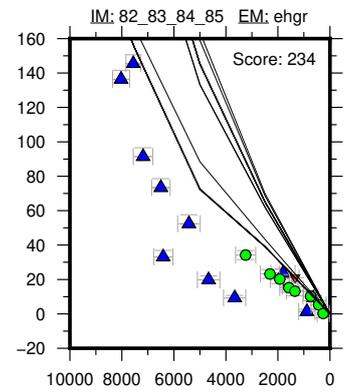
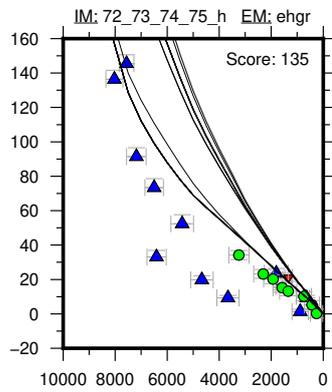
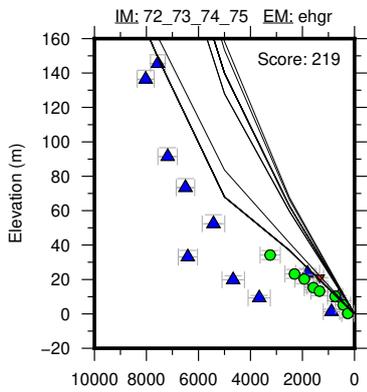
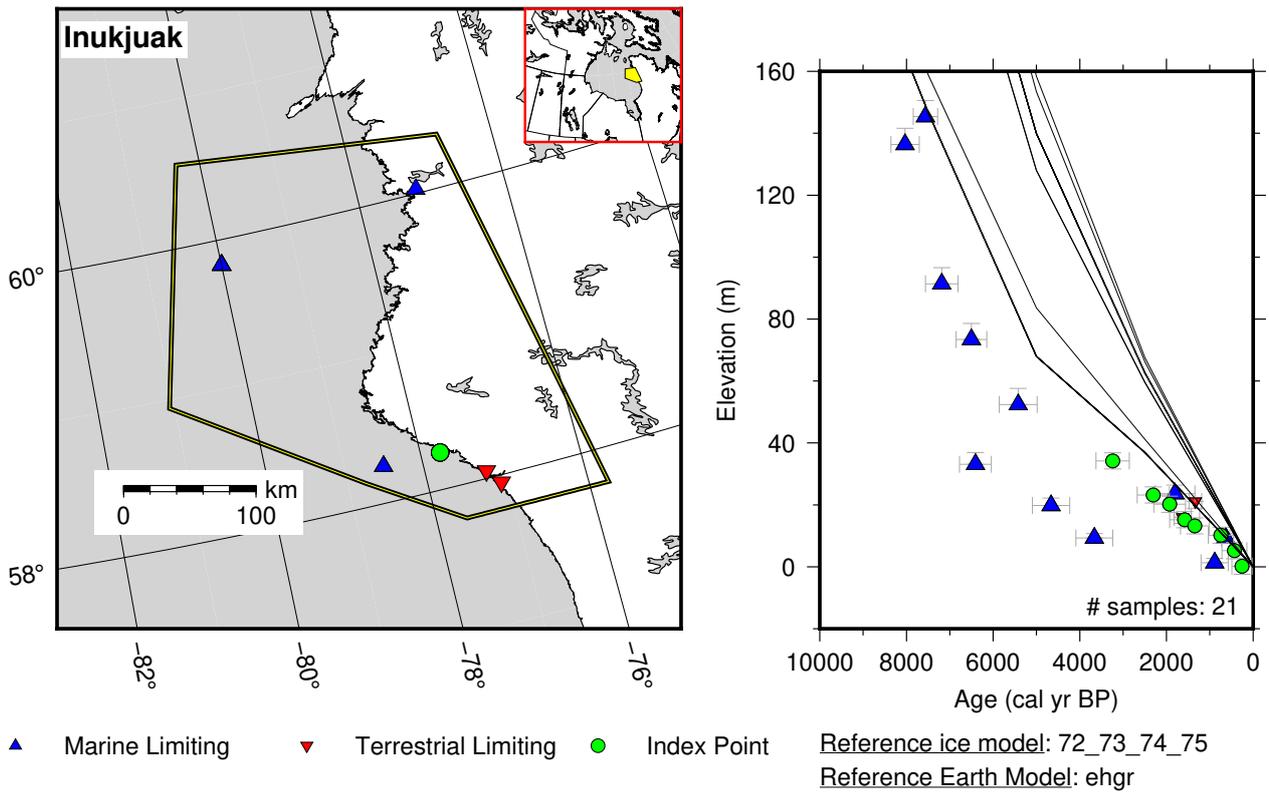


Figure 123: Paleo-sea level and comparison of six models for subregion Hudson Bay, location Inukjuak.

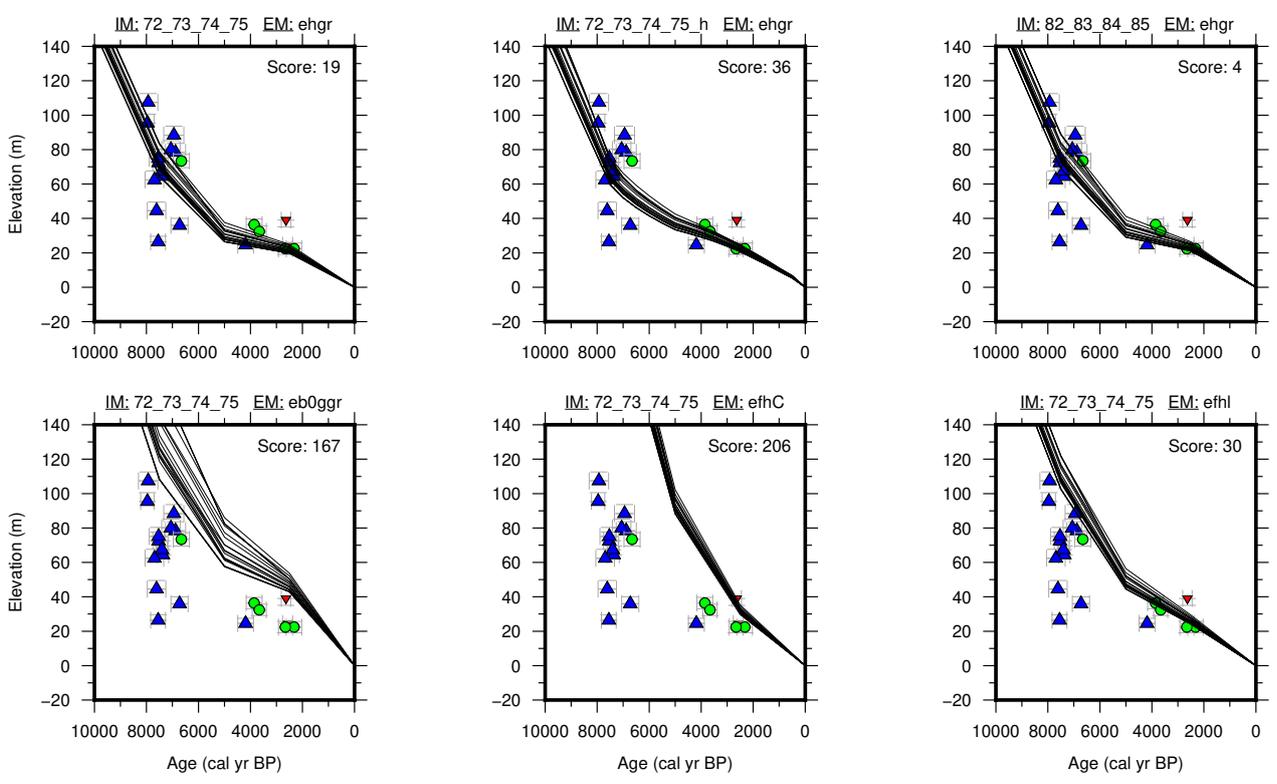
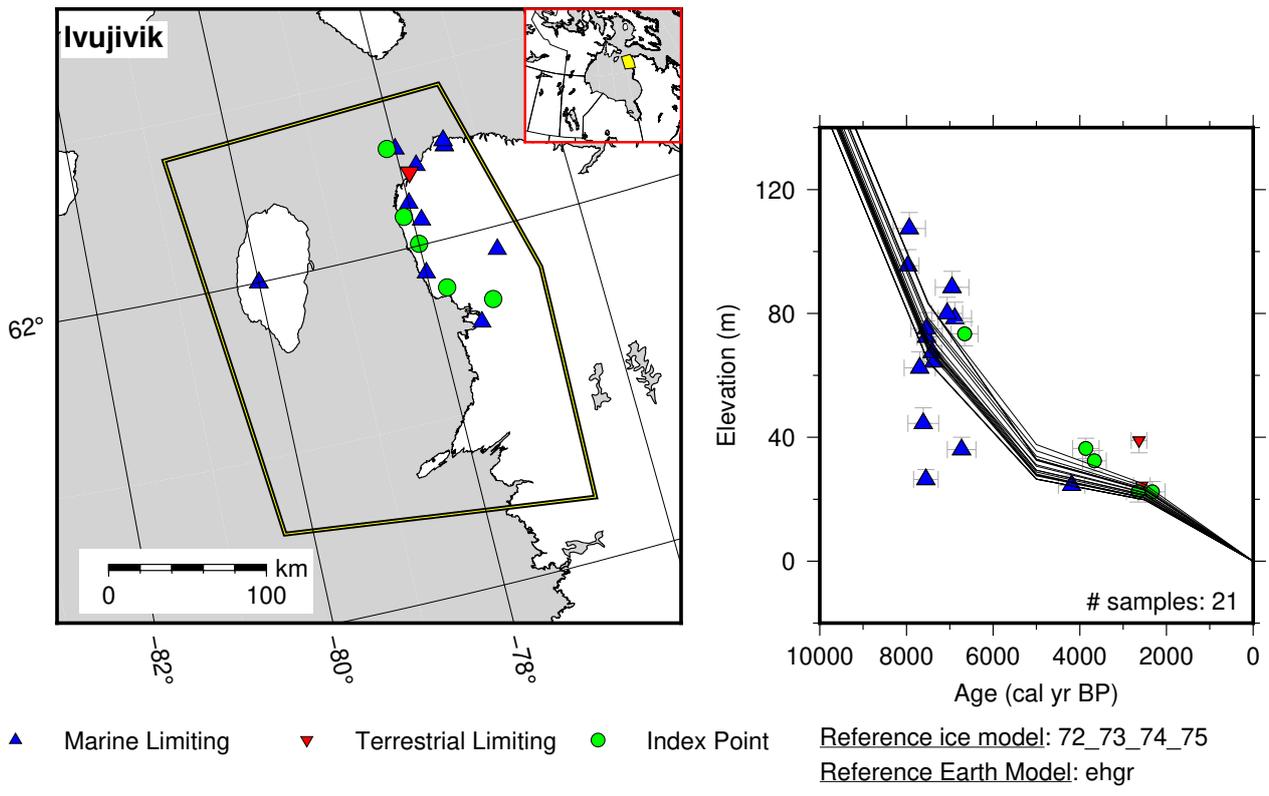


Figure 124: Paleo-sea level and comparison of six models for subregion Hudson Bay, location Ivujuvik.

13.4 Hudson Strait

References for the data used in each location.

Sugluk: Bartley and Matthews (1969); Daigneault (2008); Gray et al. (1993); Gray (2001); Gray and Lauriol (1985); Kasper and Allard (2001); Lauriol and Gray (1997); Lowdon and Blake (1968); Matthews (1966); McNeely and Brennan (2005); McNeely and McCuaig (1991); Ricard (1989); Simon et al. (2016)

Kangijsujaq: Gray et al. (1993); Gray (2001); Lauriol and Gray (1987); McNeely (2002, 2005); McNeely and Atkinson (1995); Vacchi et al. (2018)

Western Ungava Bay: Gray et al. (1980); Lauriol and Gray (1987); Lauriol et al. (1979); Løken (1978); Simon et al. (2016)

Southern Ungava Bay: Gray et al. (1993); Gray (2001); Pienitz et al. (1991); Simon et al. (2016)

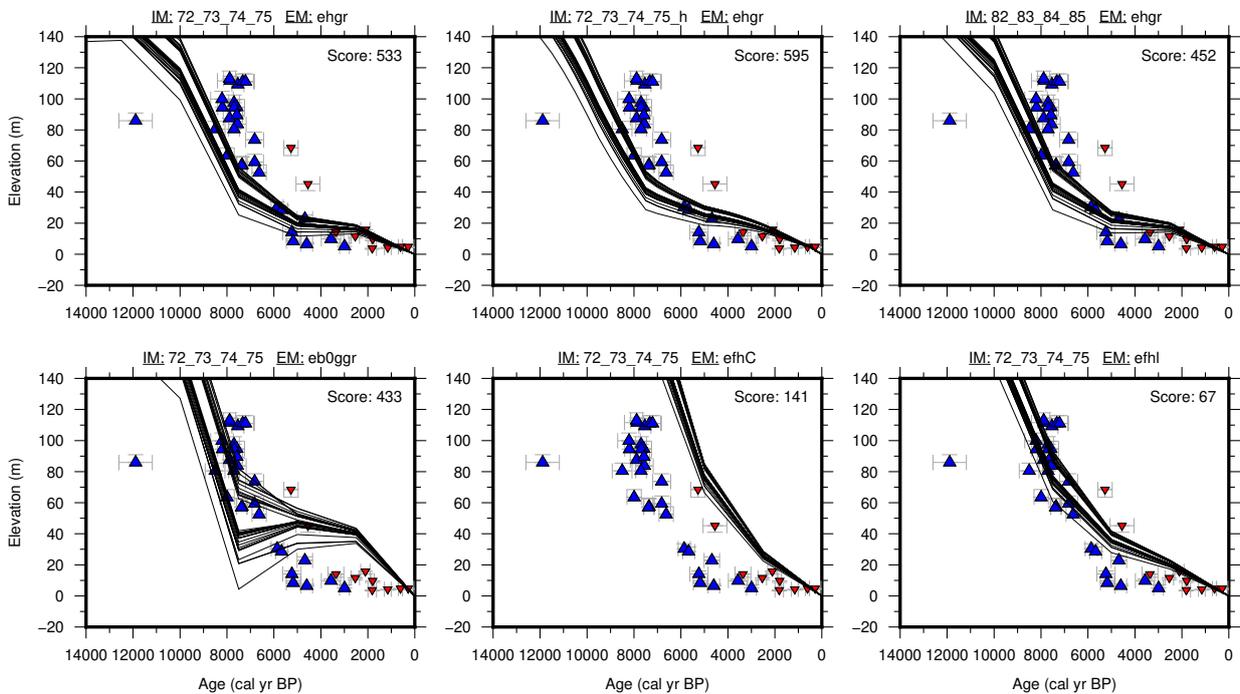
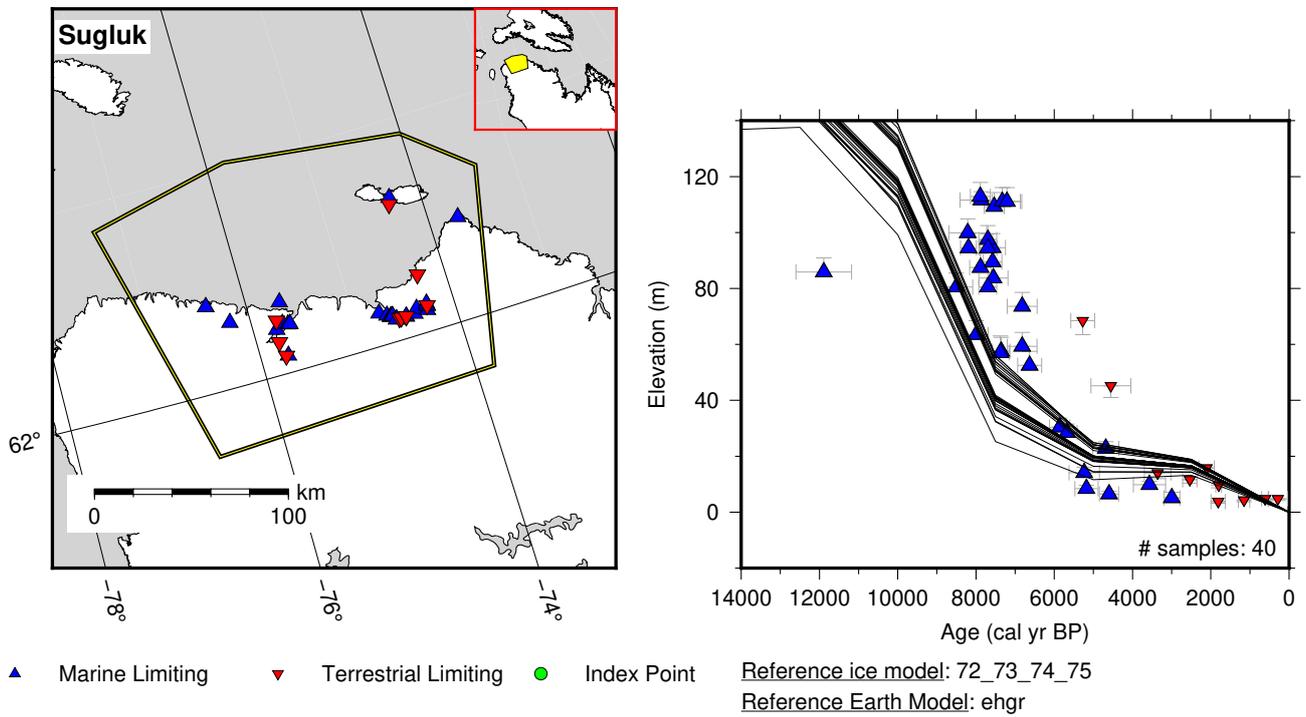
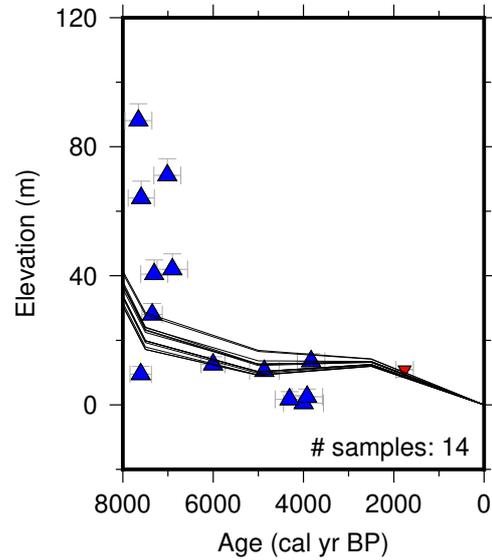
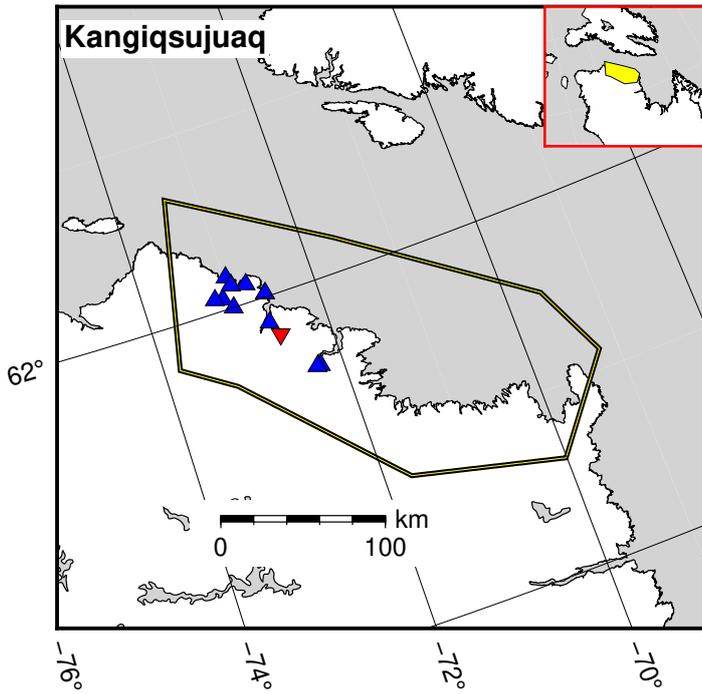


Figure 125: Paleo-sea level and comparison of six models for subregion Hudson Strait, location Sugluk.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

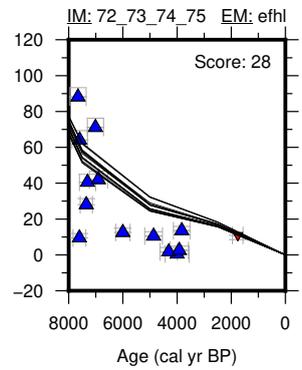
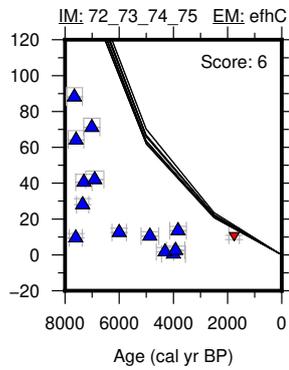
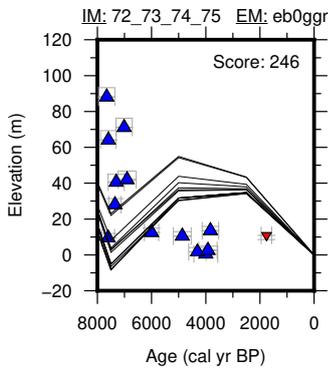
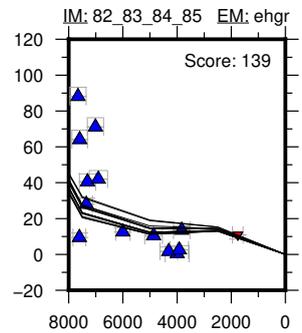
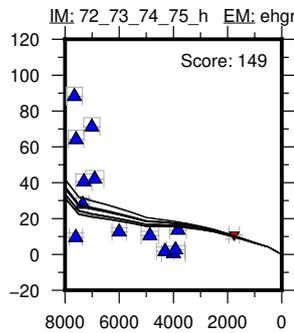
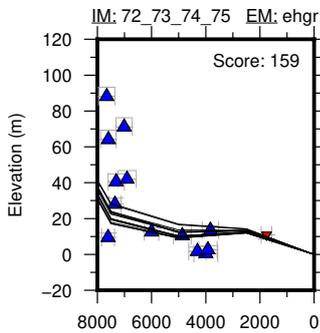


Figure 126: Paleo-sea level and comparison of six models for subregion Hudson Strait, location Kangiqsujaq.

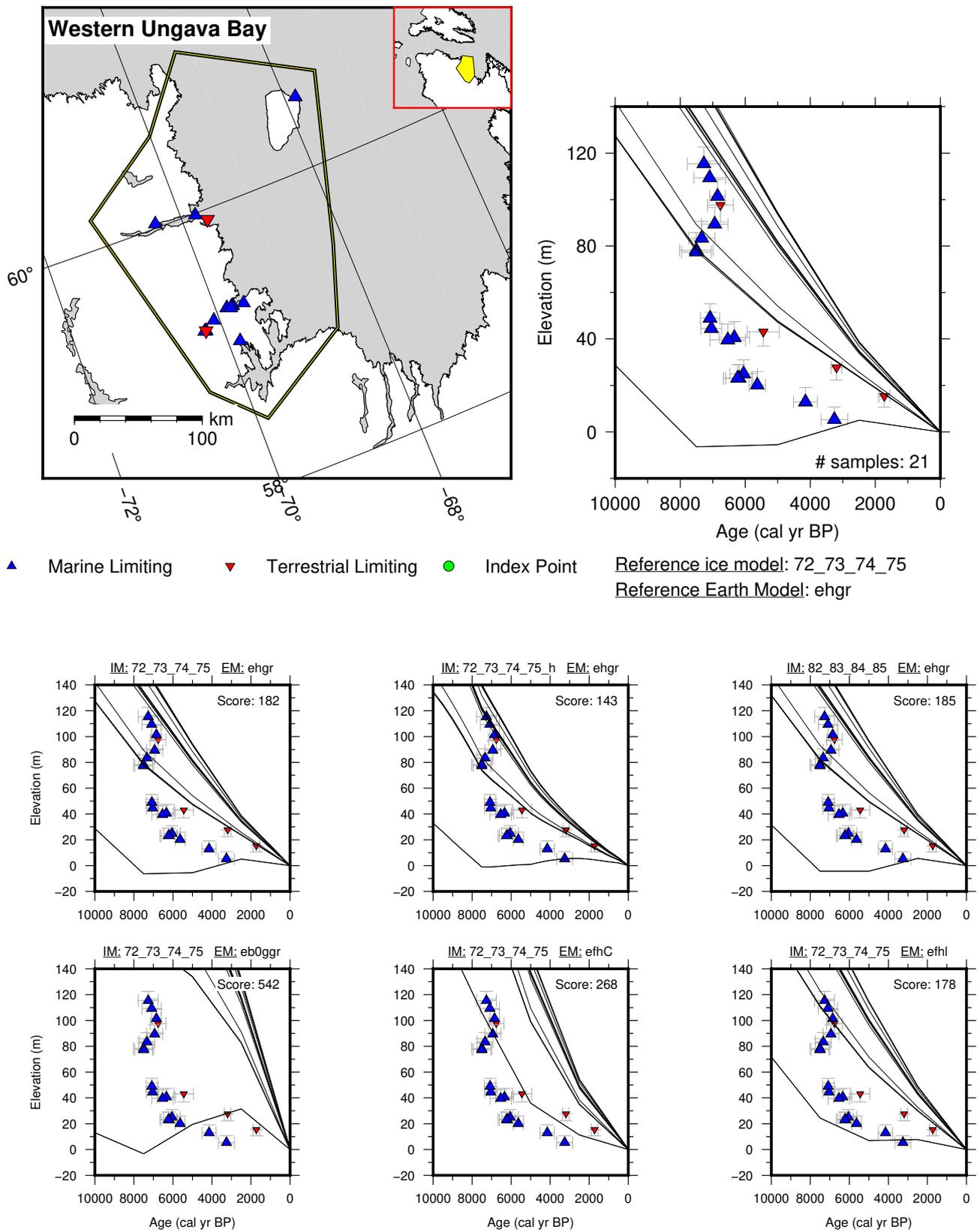
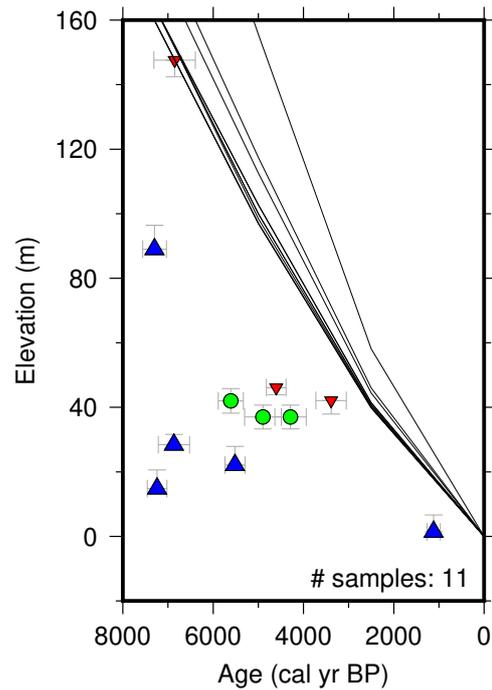
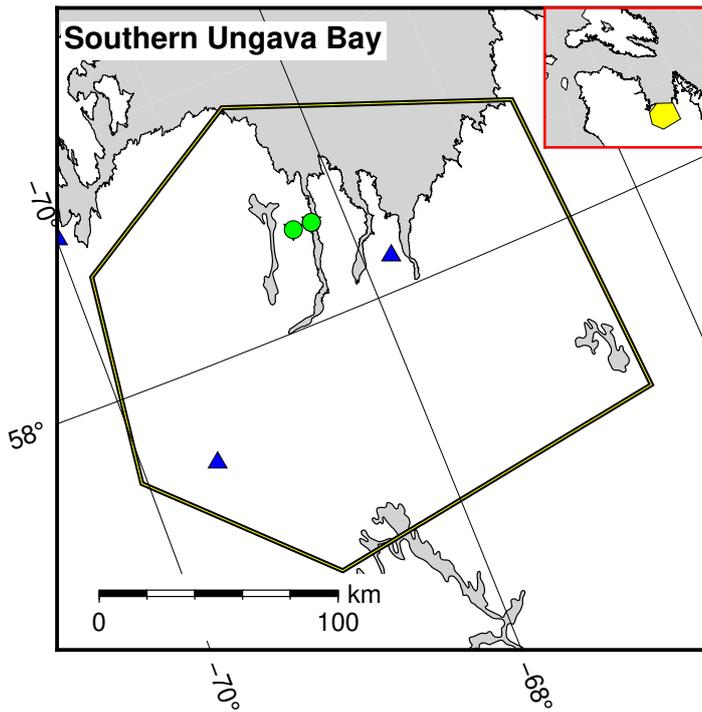


Figure 127: Paleo-sea level and comparison of six models for subregion Hudson Strait, location Western Ungava Bay.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

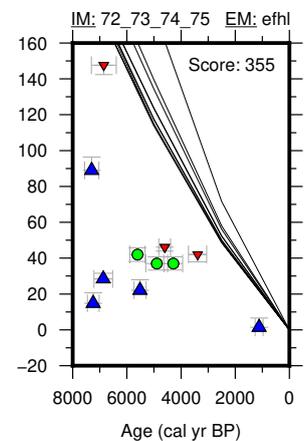
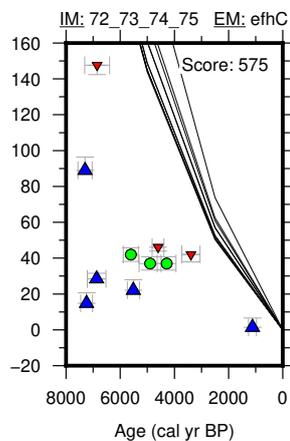
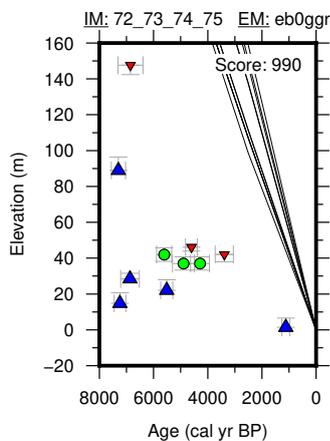
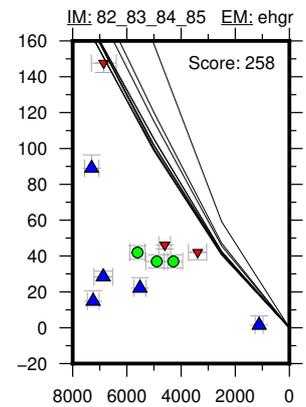
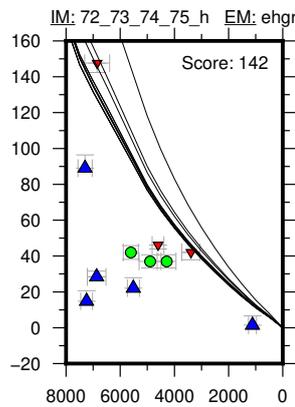
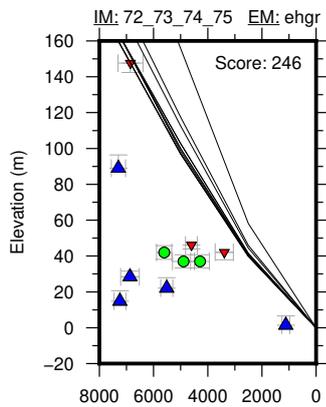


Figure 128: Paleo-sea level and comparison of six models for subregion Hudson Strait, location Southern Ungava Bay.

13.5 Labrador

References for the data used in each location.

Torngat: Dyke et al. (2003); Evans and Rogerson (1988); Lowdon and Blake (1975); Martindale et al. (2020); McNeely and Brennan (2005); Savoie and Gangloff (1980); Vacchi et al. (2018)

Nain: Clark and Fitzhugh (1990); Martindale et al. (2020)

Hamilton Inlet: Fitzhugh (1972, 1975); Lowdon and Blake (1975); Martindale et al. (2020); McNeely and Brennan (2005)

Lake Melville: Awadallah and Batterson (1990); Batterson (1996); Jordan (1975); King (1985); Liverman (1997); Lowdon and Blake (1975); Martindale et al. (2020); McNeely and Brennan (2005)

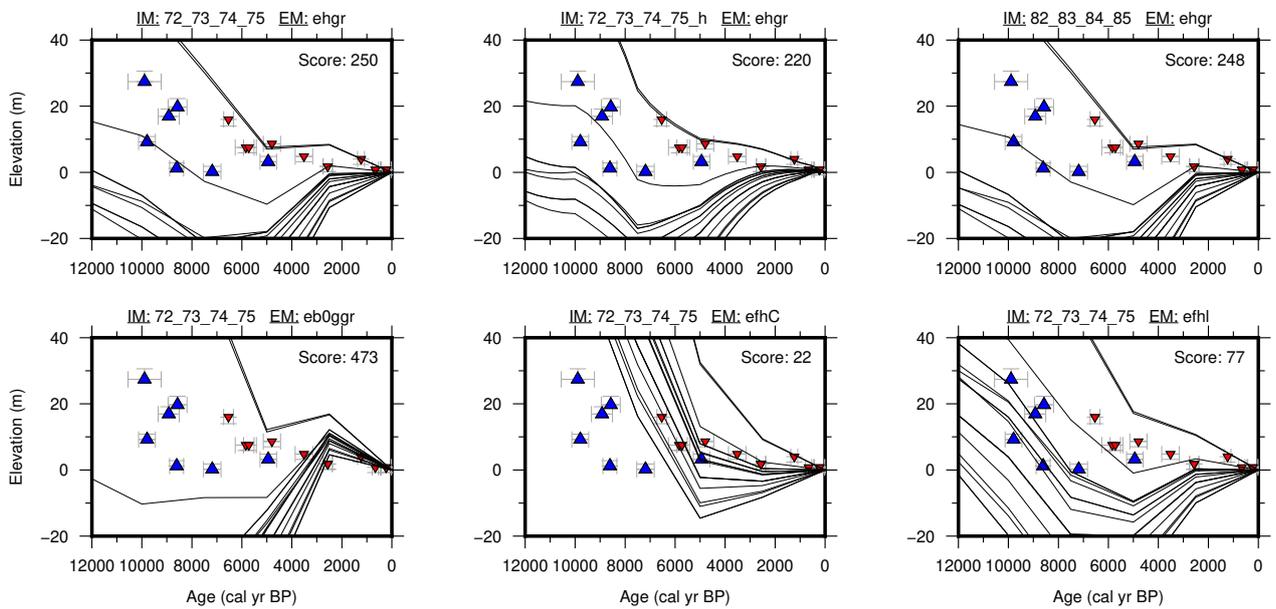
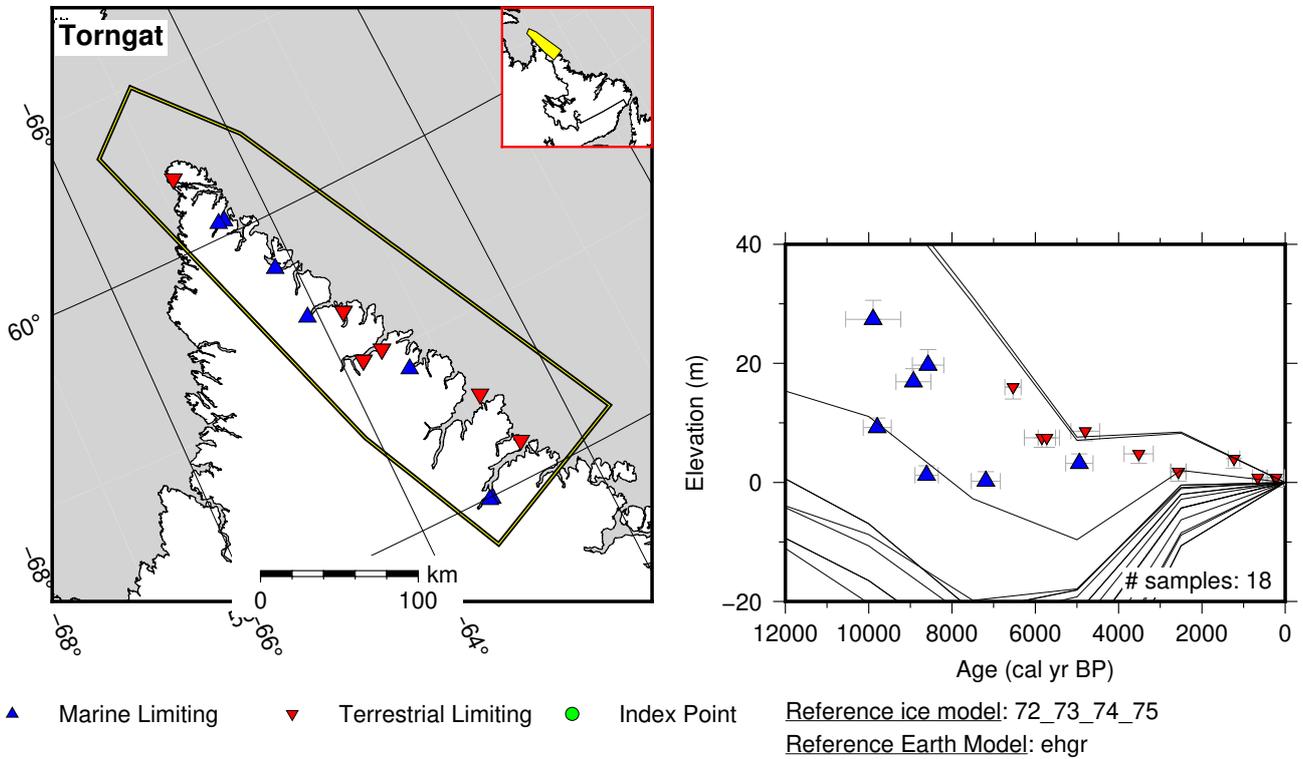


Figure 129: Paleo-sea level and comparison of six models for subregion Labrador, location Torngat.

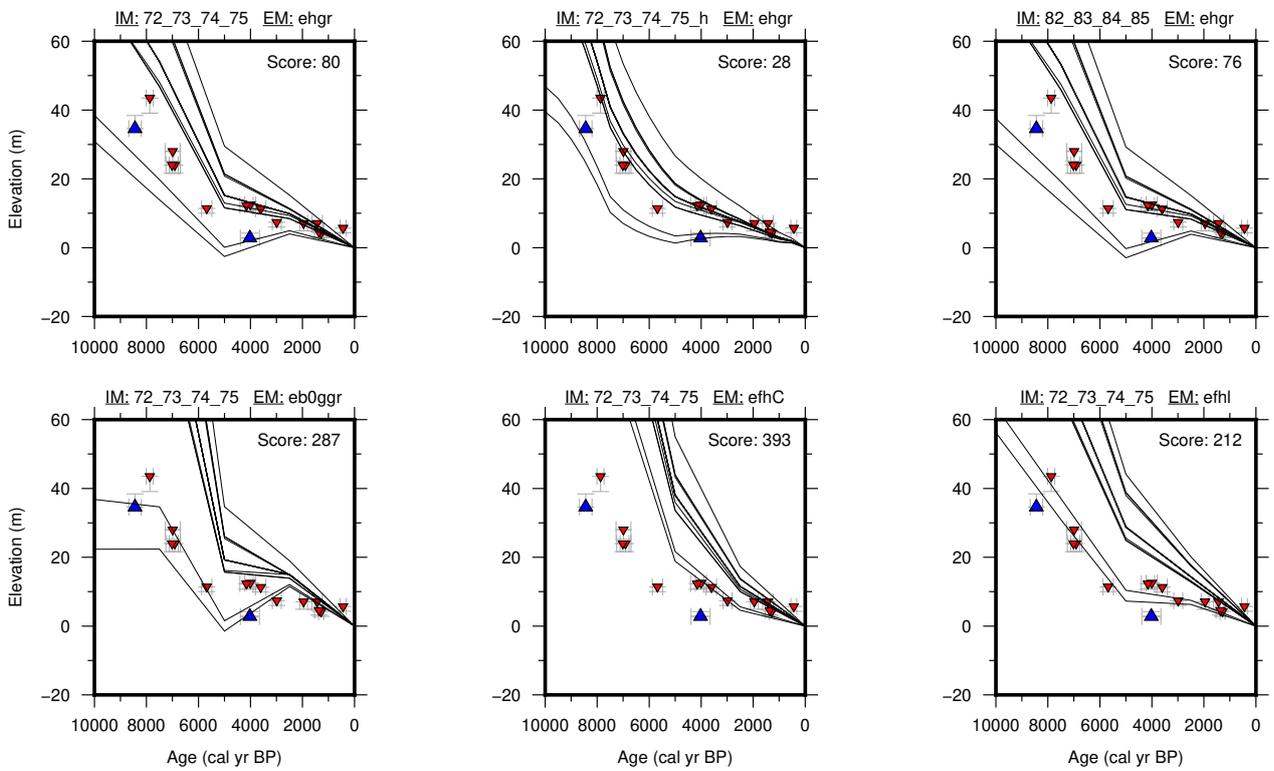
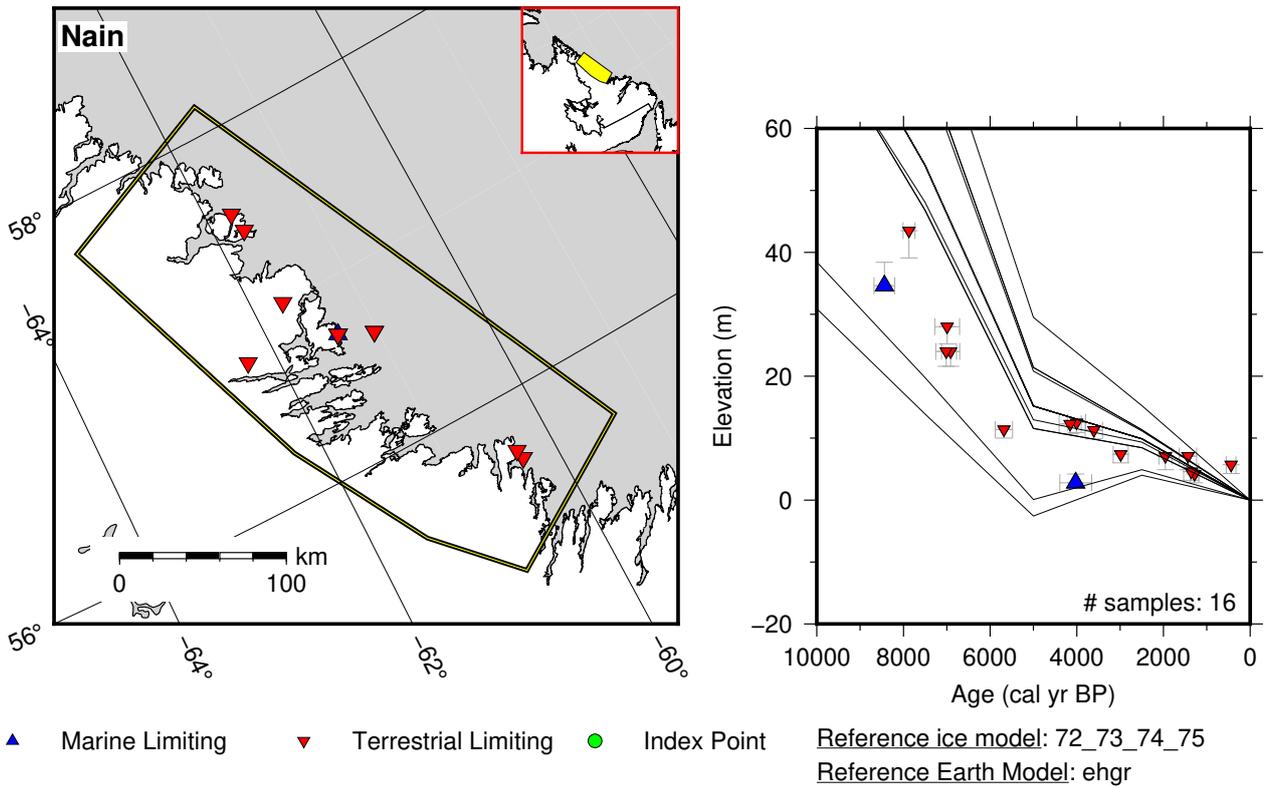


Figure 130: Paleo-sea level and comparison of six models for subregion Labrador, location Nain.

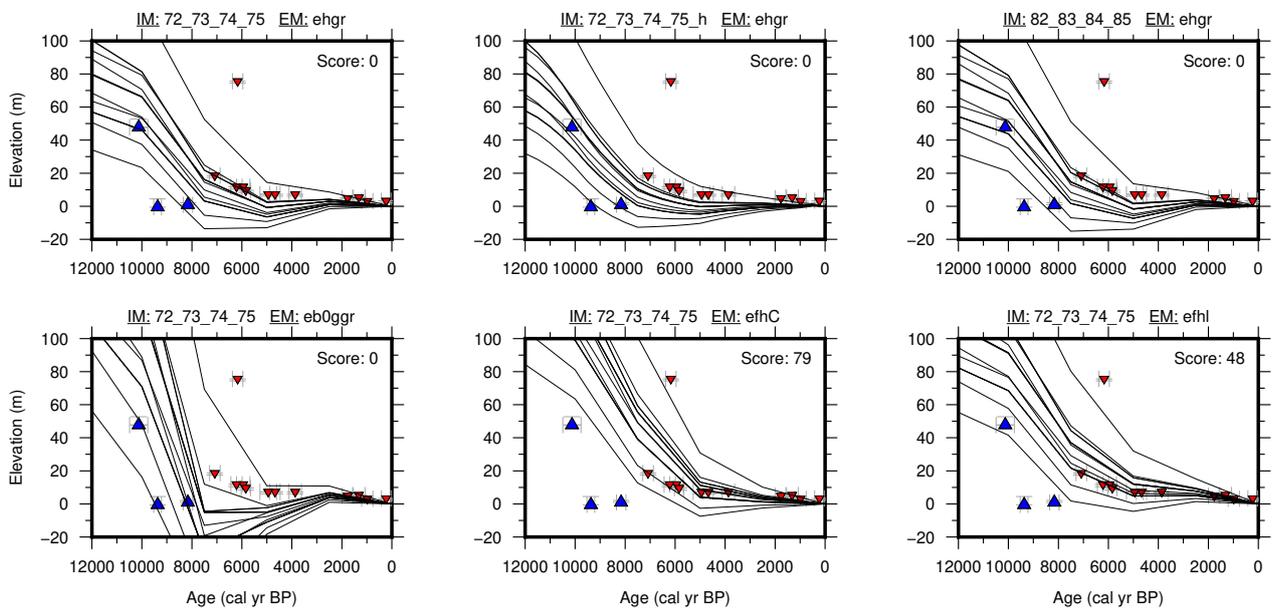
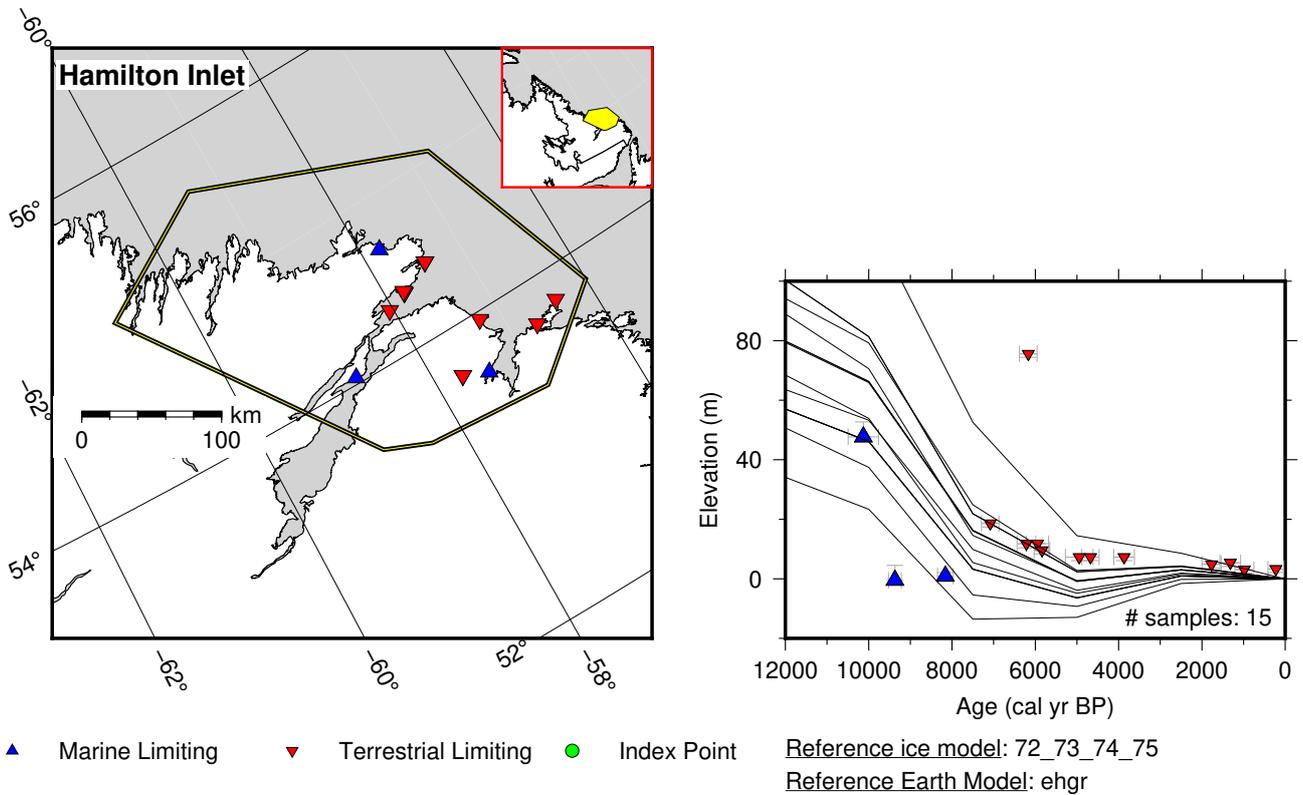
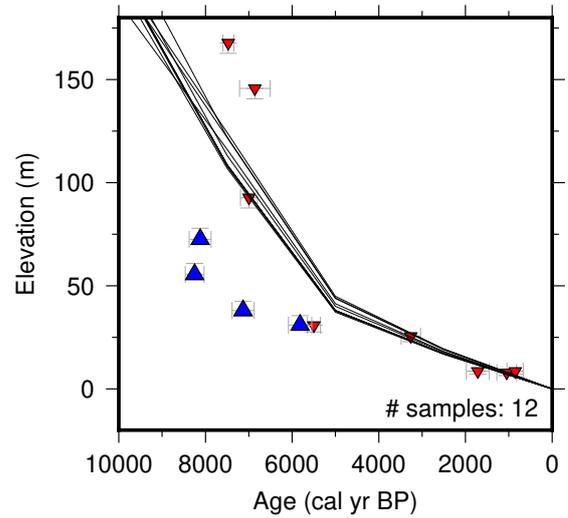
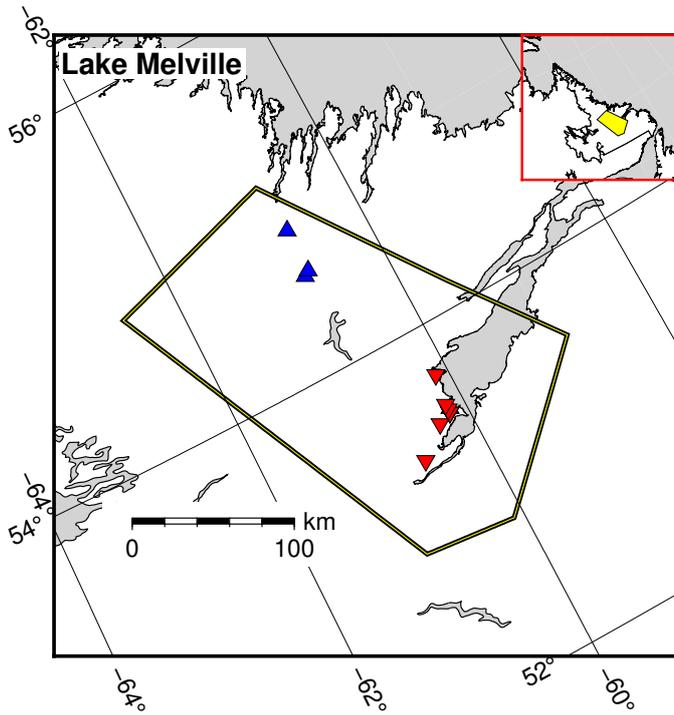


Figure 131: Paleo-sea level and comparison of six models for subregion Labrador, location Hamilton Inlet.



▲ Marine Limiting
 ▼ Terrestrial Limiting
 ● Index Point
 Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

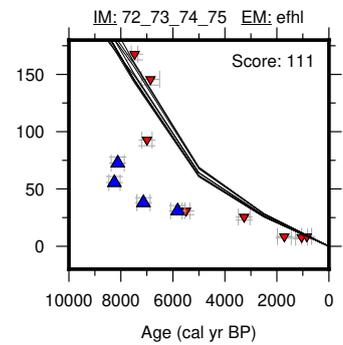
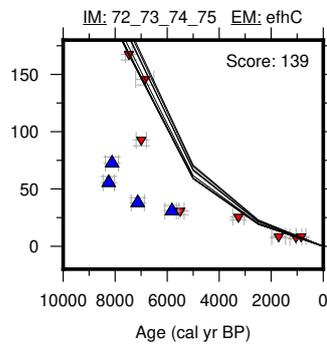
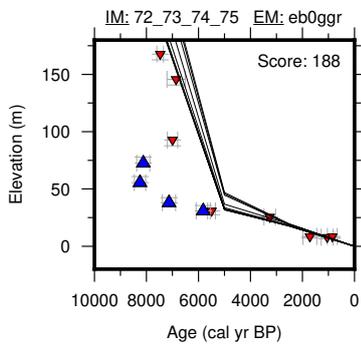
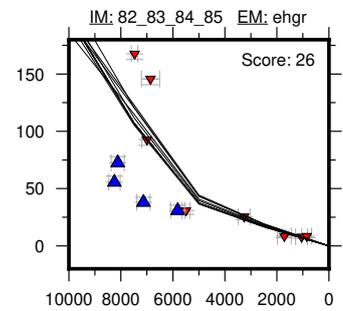
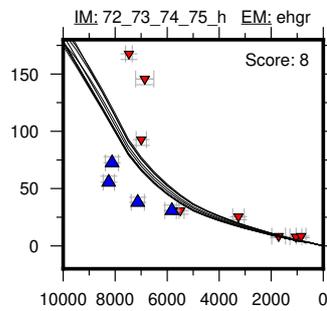
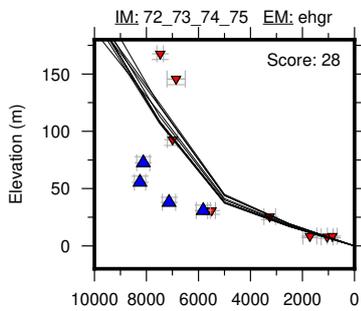


Figure 132: Paleo-sea level and comparison of six models for subregion Labrador, location Lake Melville.

13.6 Maritimes

References for the data used in each location.

Sable Island: Amos and Miller (1990); Scott et al. (1984, 1989); Vacchi et al. (2018)

Halifax: Blake (1988); Edgecombe et al. (1999); Gehrels et al. (2004, 2005); Miller et al. (1982); Scott and Medioli (1982); Scott et al. (1995); Shaw et al. (1993)

Shelburne: Blake (1983); Lowdon and Blake (1970); Scott and Greenberg (1983)

Cumberland: Dalrymple and Zaitlin (1994); Scott and Greenberg (1983); Shaw et al. (2010); Stea and Wightman (1987); Stuckenrath et al. (1966)

Passamaquoddy Bay: Blake (1984); Gehrels et al. (2004); Martindale et al. (2020); McNeely (2005); Miller (1990); Nicks (1991); Rampton et al. (1984); Seaman (2004); Stea and Mott (1998)

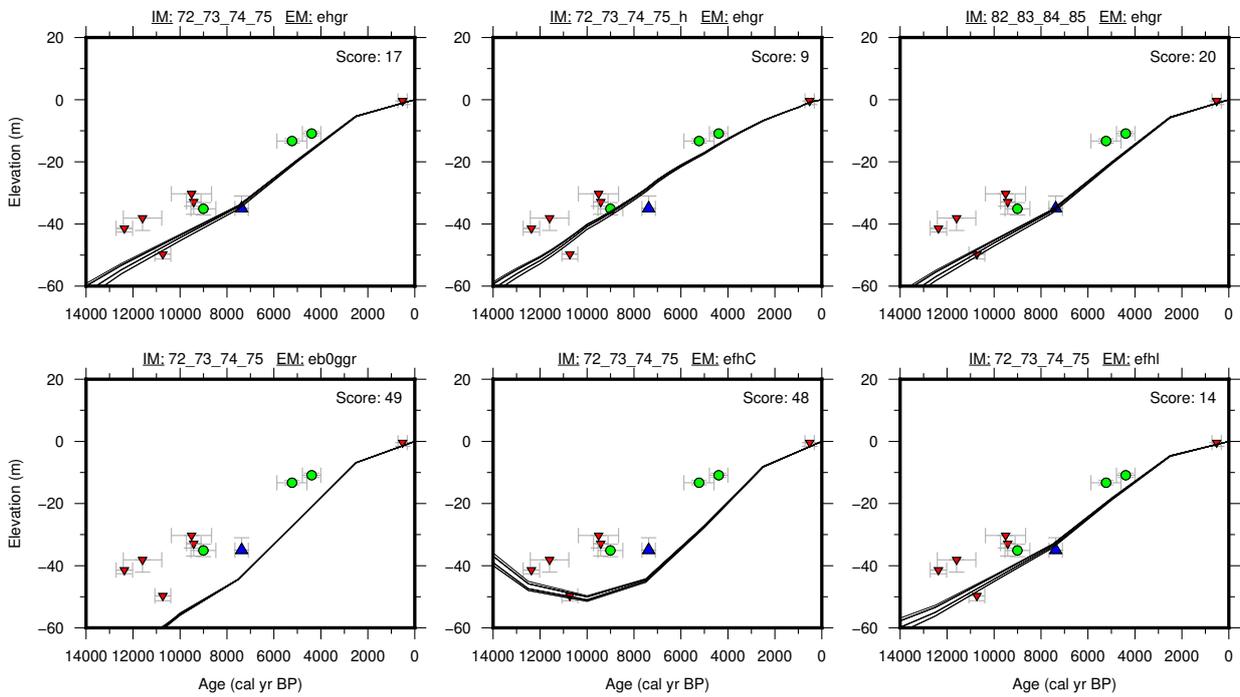
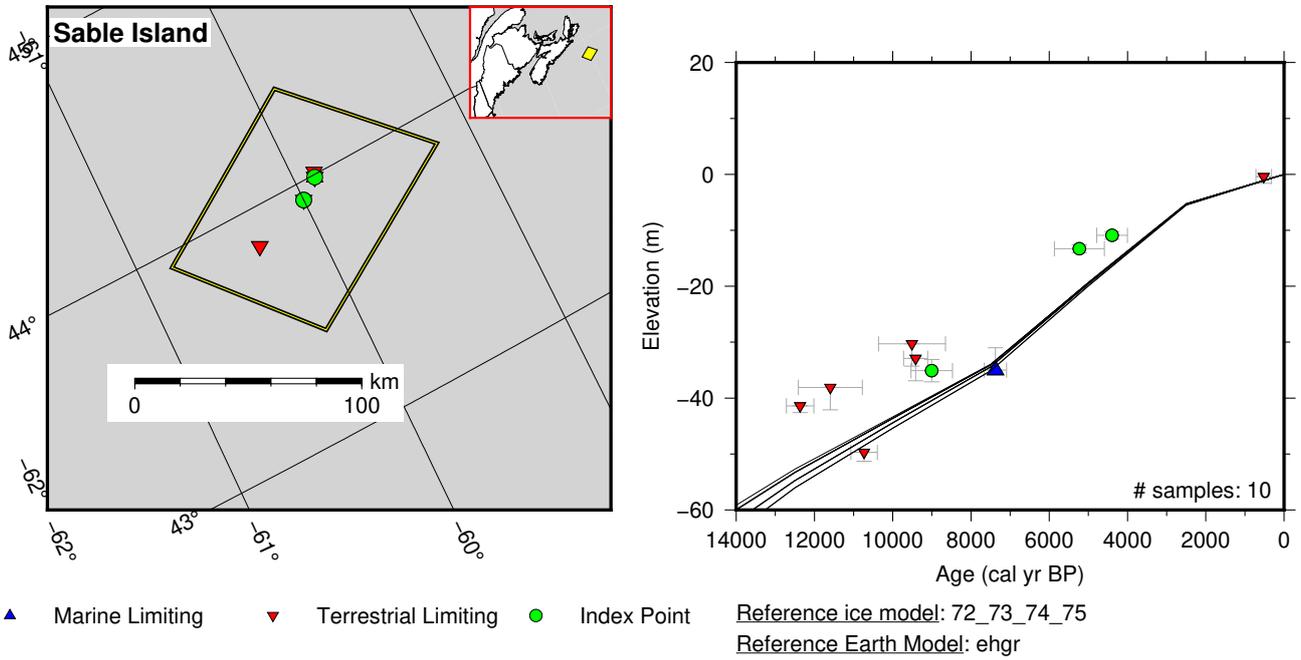


Figure 133: Paleo-sea level and comparison of six models for subregion Maritimes, location Sable Island.

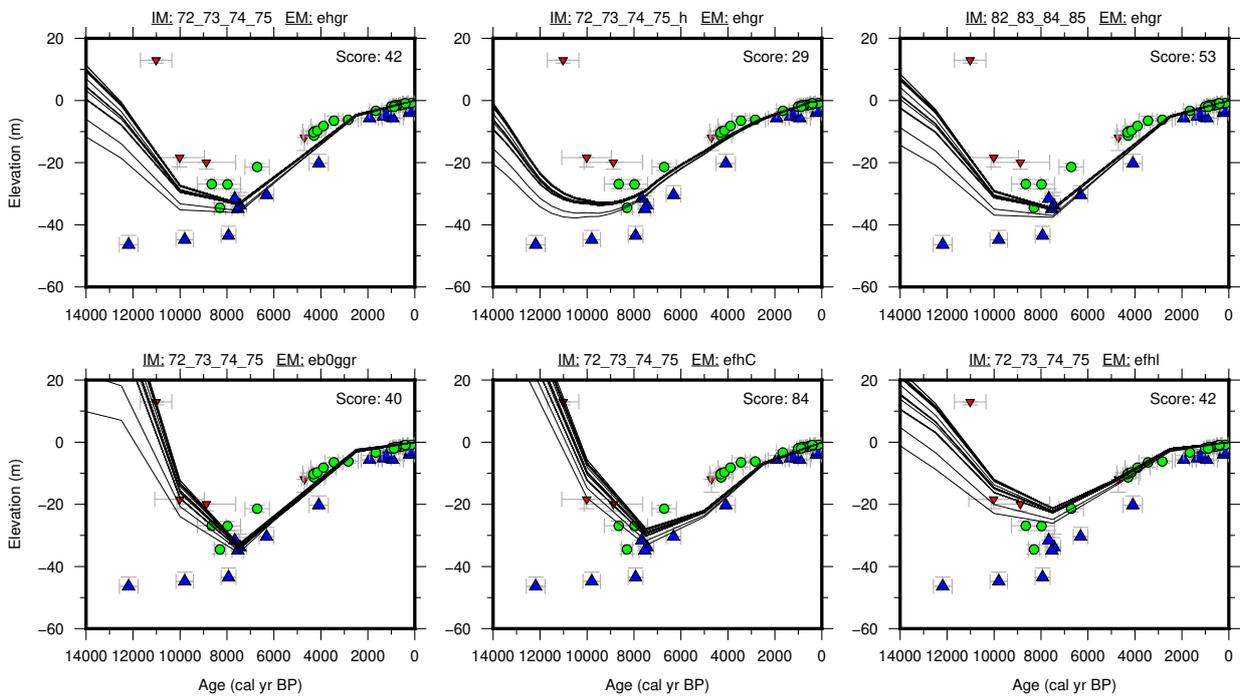
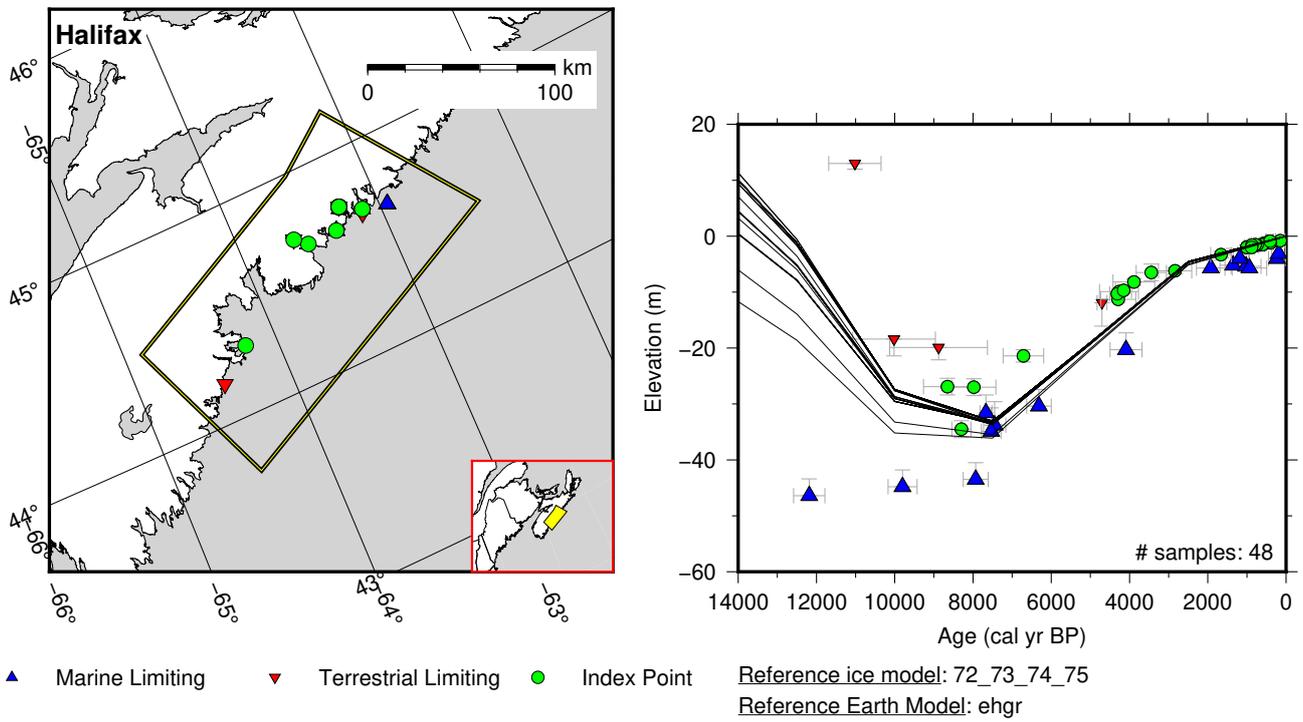
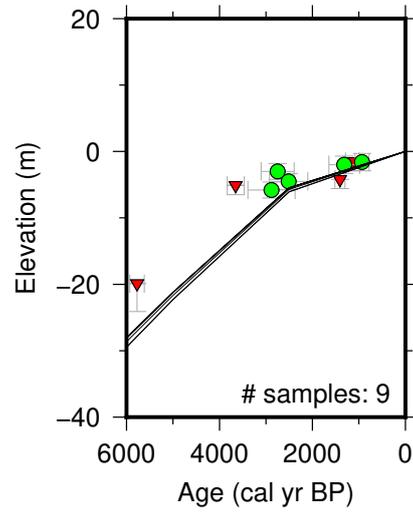
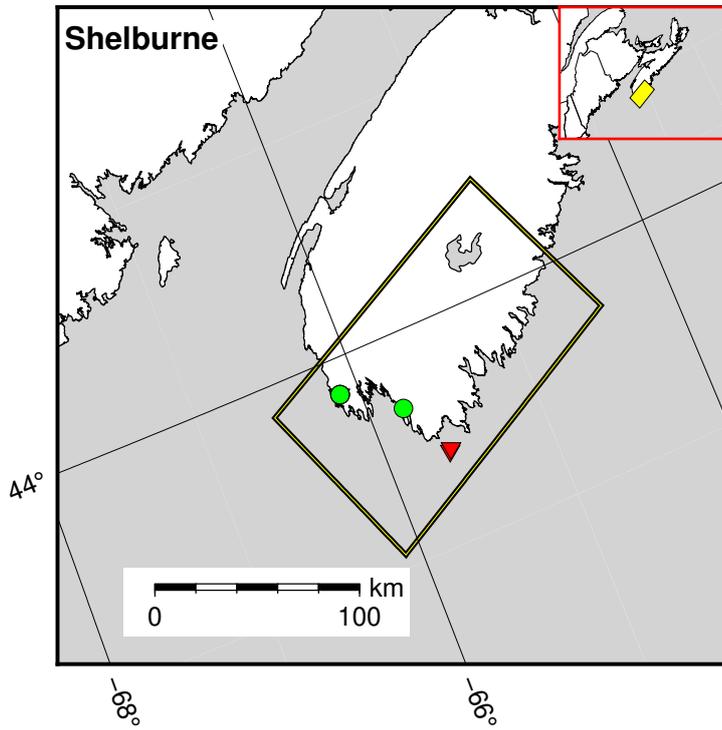


Figure 134: Paleo-sea level and comparison of six models for subregion Maritimes, location Halifax.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

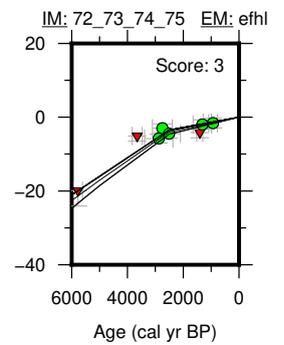
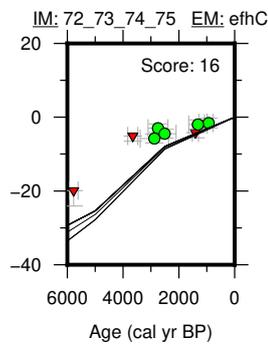
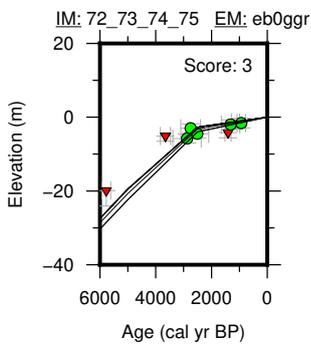
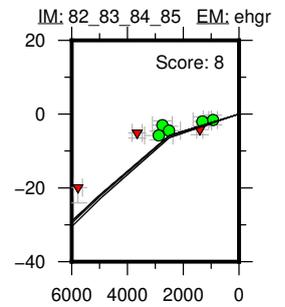
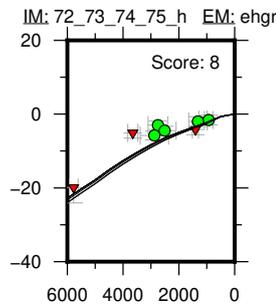
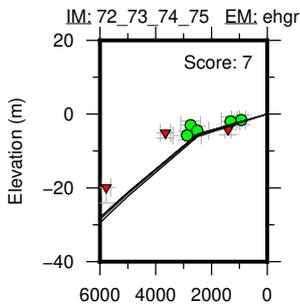
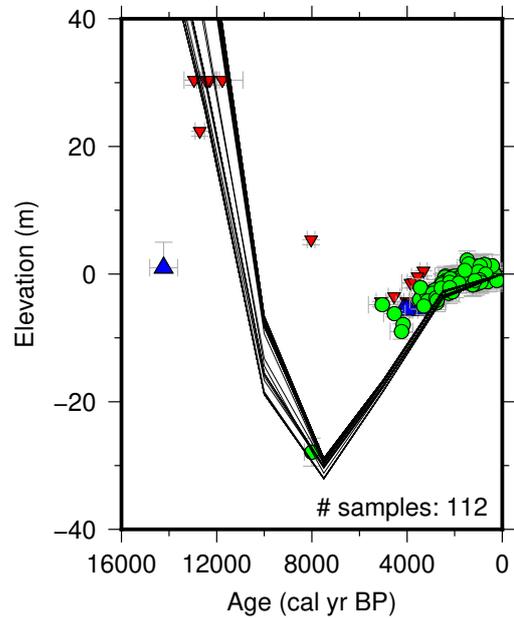
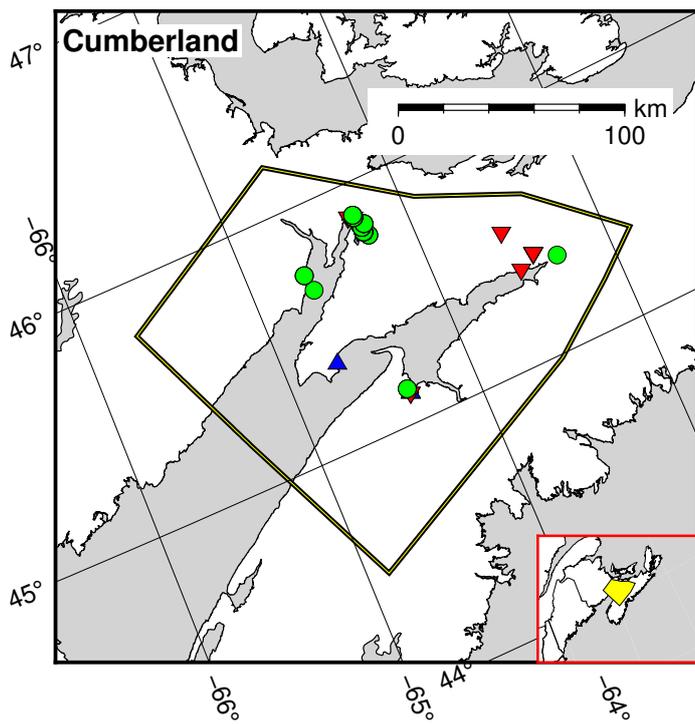


Figure 135: Paleo-sea level and comparison of six models for subregion Maritimes, location Shelburne.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

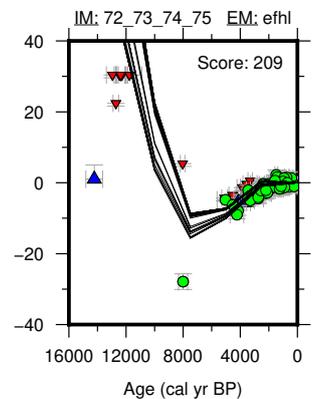
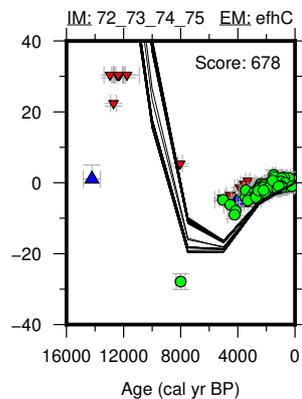
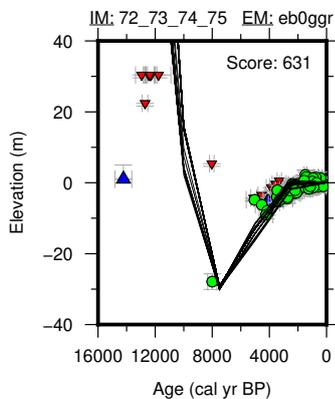
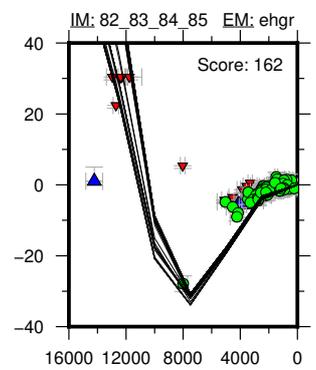
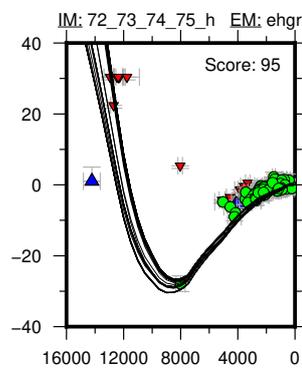
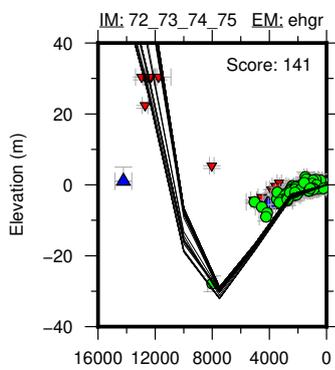
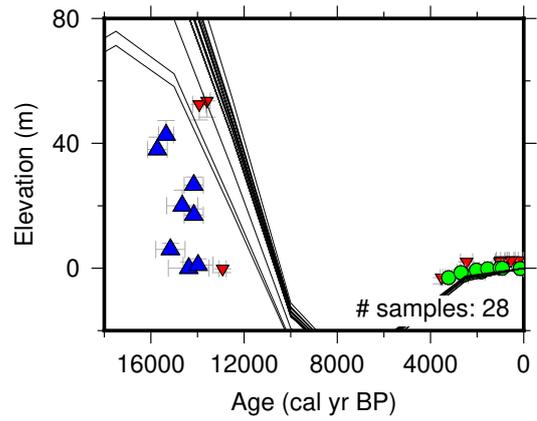
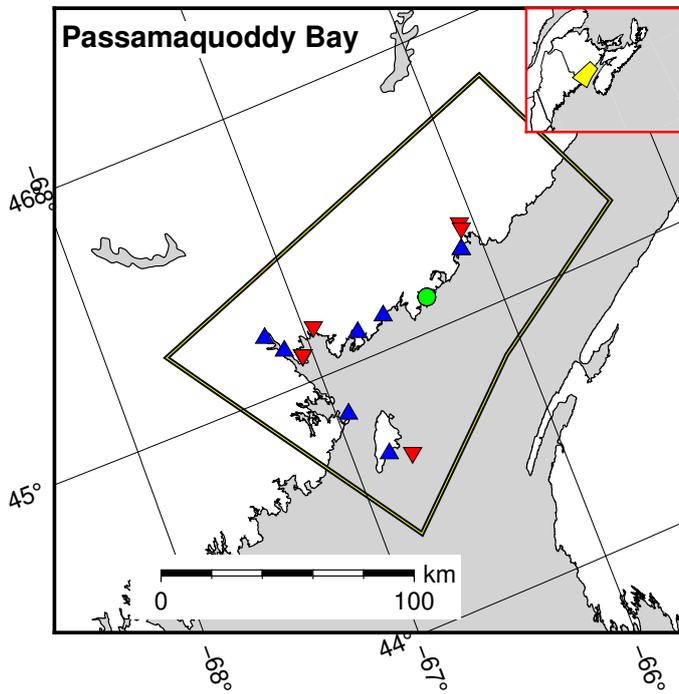


Figure 136: Paleo-sea level and comparison of six models for subregion Maritimes, location Cumberland.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

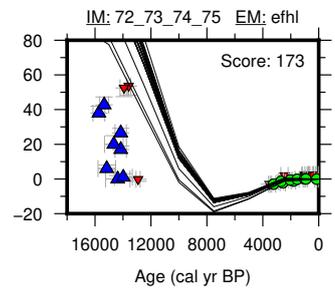
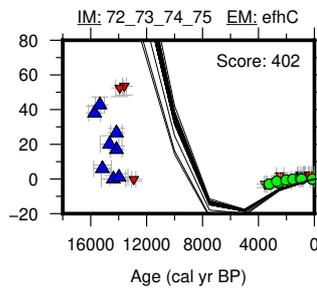
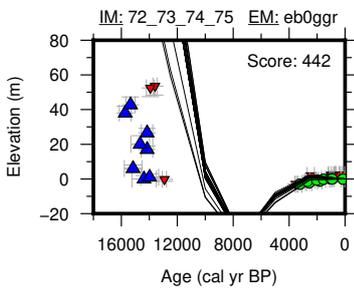
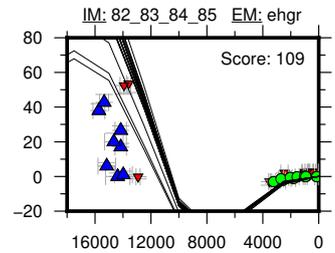
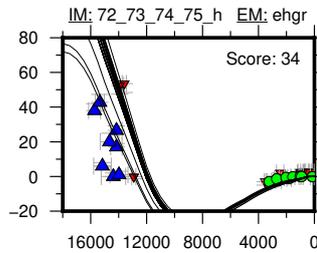
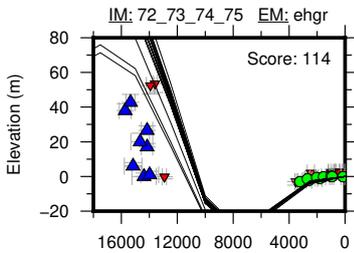


Figure 137: Paleo-sea level and comparison of six models for subregion Maritimes, location Passamaquoddy Bay.

13.7 Newfoundland

References for the data used in each location.

Great Northern Peninsula: Bell et al. (2005); Grant (1992, 1994); Martindale et al. (2020); McNeely and Jorgensen (1993); McNeely and McCuaig (1991); Nydal (1989); Tuck (1971)

Notre Dame Bay: Blake (1983); Daly et al. (2007); Dyck and Fyles (1963); McNeely and Brennan (2005); McNeely and McCuaig (1991); Scott et al. (1991); Shaw and Edwardson (1994)

Avalon Peninsula: Catto et al. (1997); Daly et al. (2007); MacPherson (1996); McNeely (2006); Shaw and Forbes (1995)

Bay Of Islands: Brookes et al. (1985); Brookes and Stevens (1985); Daly et al. (2007); Grant (1994); McNeely and Brennan (2005); McNeely and McCuaig (1991)

Port Aux Basques: Bell et al. (2003); Blake (1988); Brookes et al. (1985); Daly et al. (2007); Dyke et al. (2003); Forbes et al. (1993); Kemp et al. (2017); Lowdon and Blake (1980); Lowdon et al. (1971); McNeely (2002); McNeely and Atkinson (1995); McNeely and Brennan (2005); McNeely and Jorgensen (1992, 1993); McNeely and McCuaig (1991); Shaw and Forbes (1987, 1995); Shaw and Potter (2015)

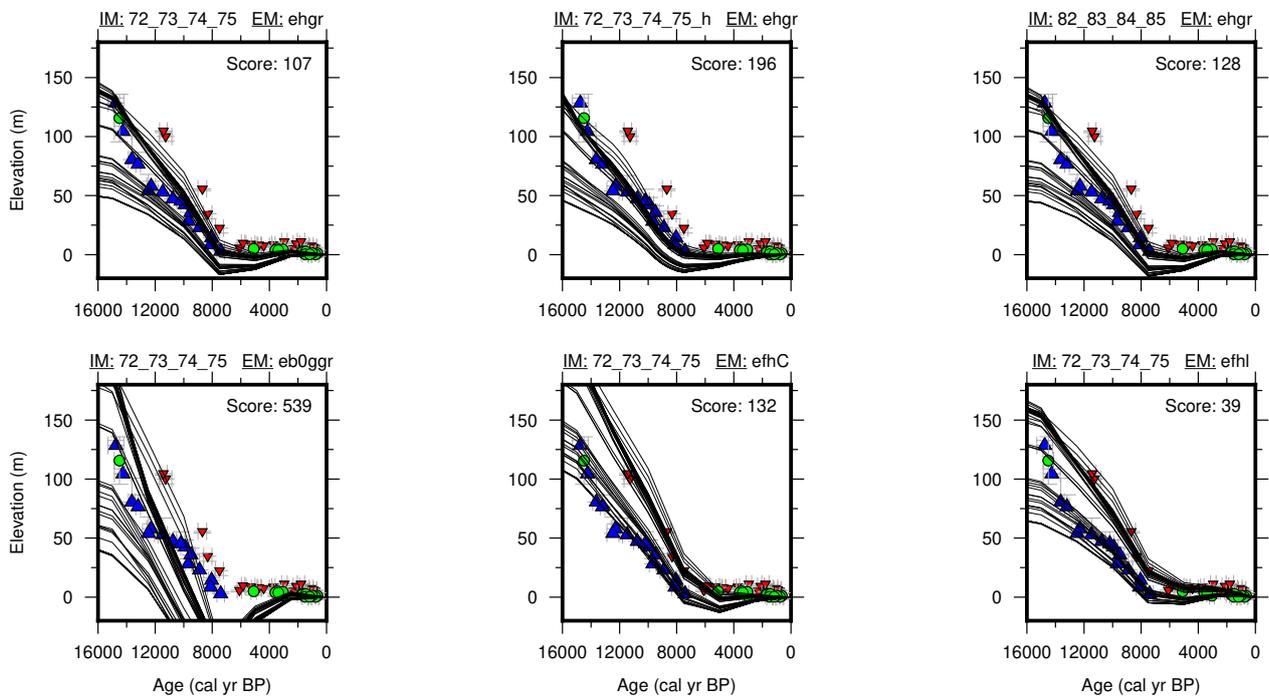
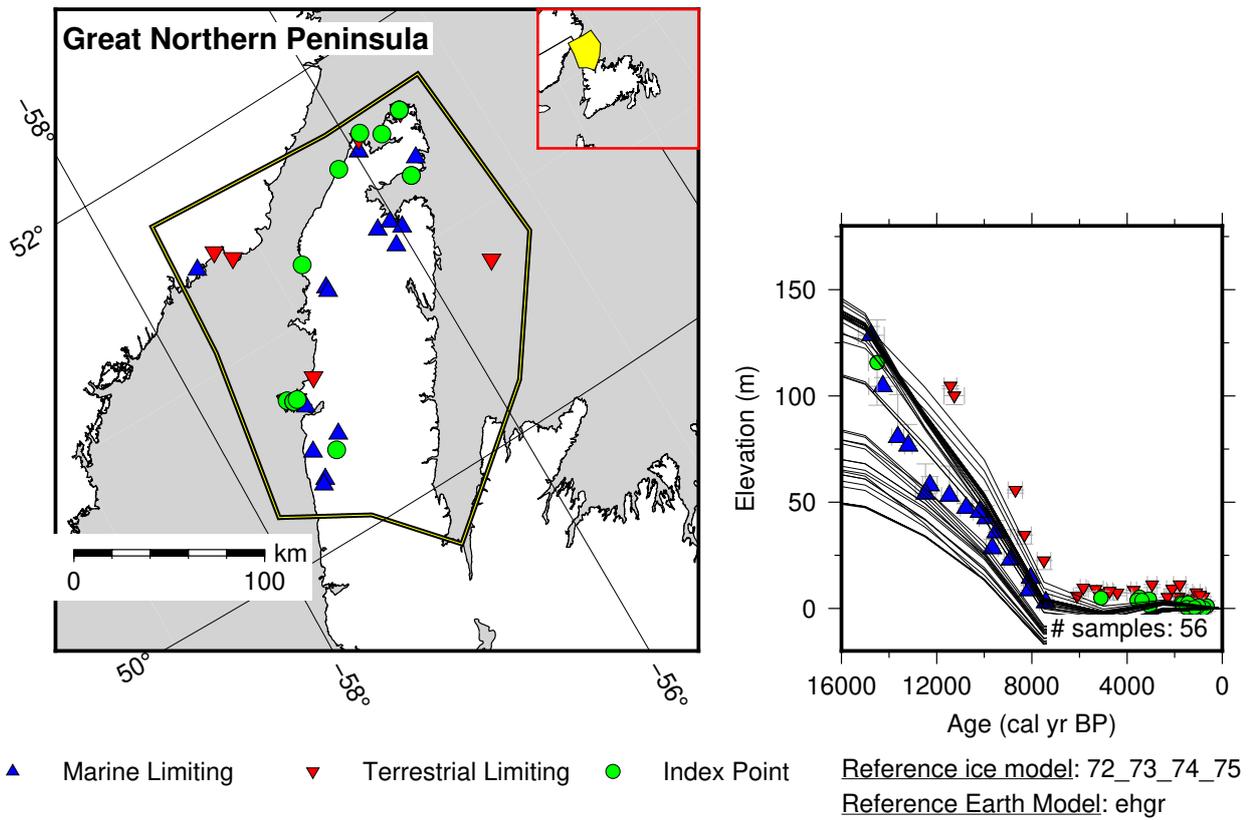
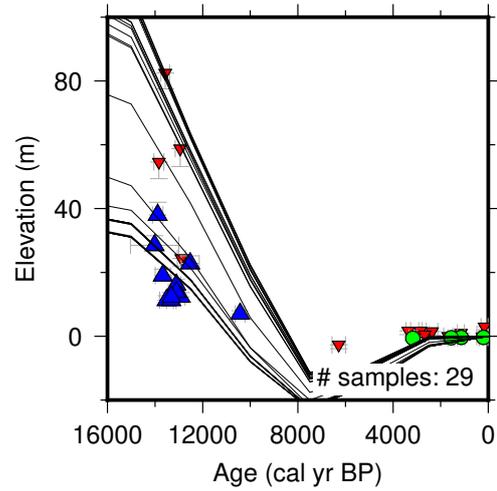
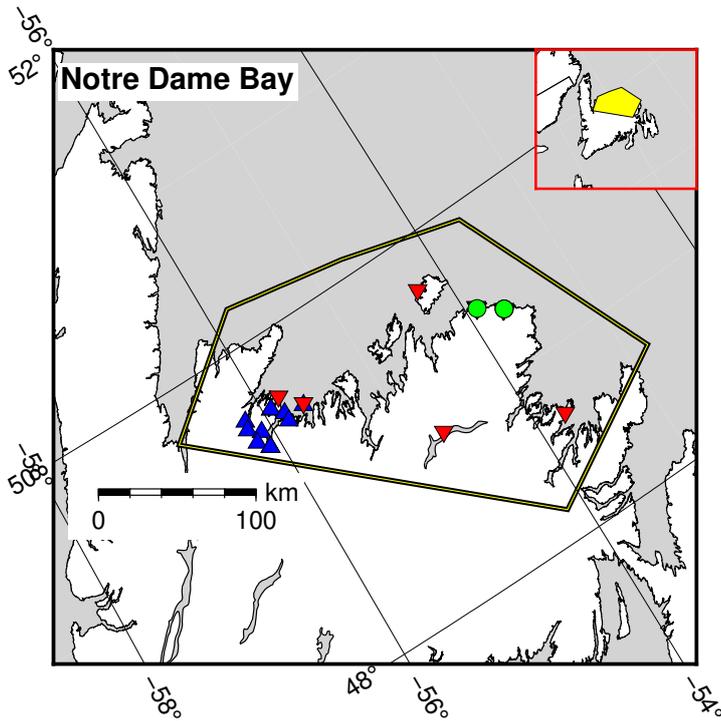


Figure 138: Paleo-sea level and comparison of six models for subregion Newfoundland, location Great Northern Peninsula.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75

Reference Earth Model: ehgr

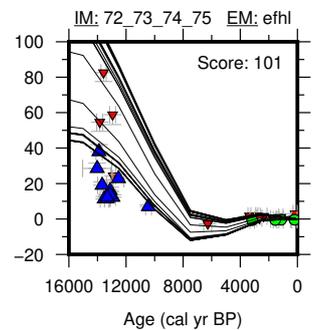
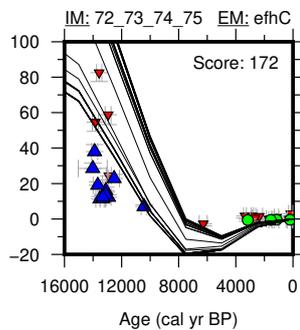
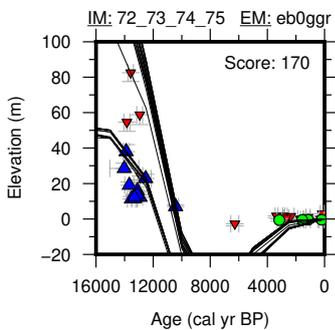
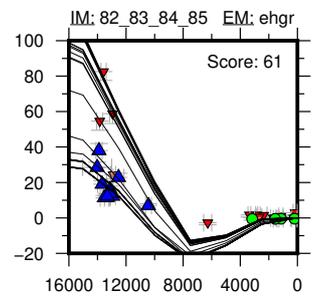
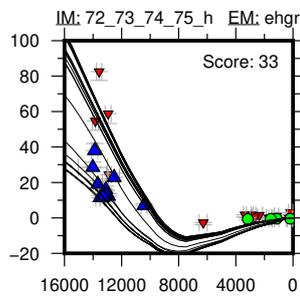
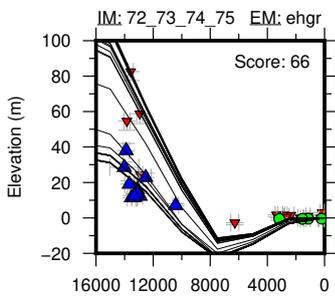
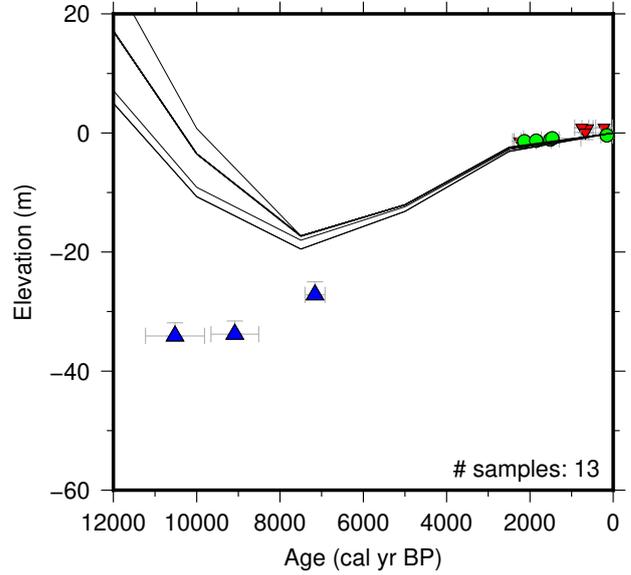
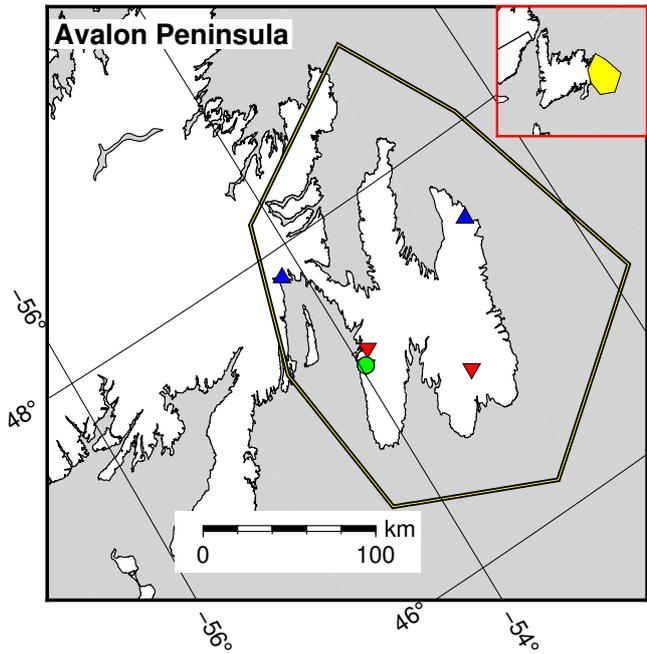


Figure 139: Paleo-sea level and comparison of six models for subregion Newfoundland, location Notre Dame Bay.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

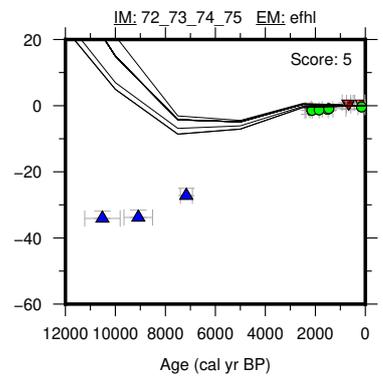
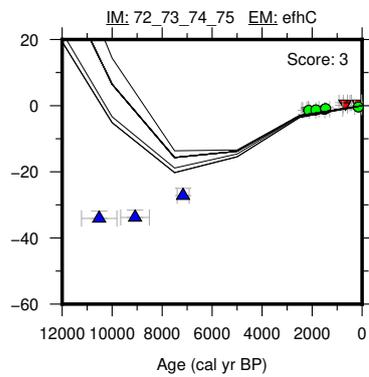
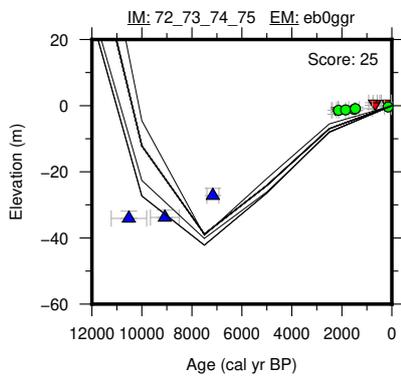
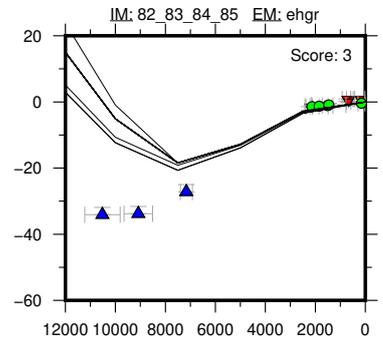
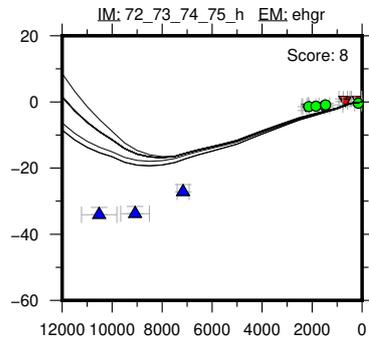
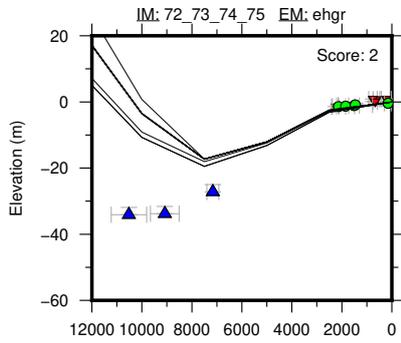
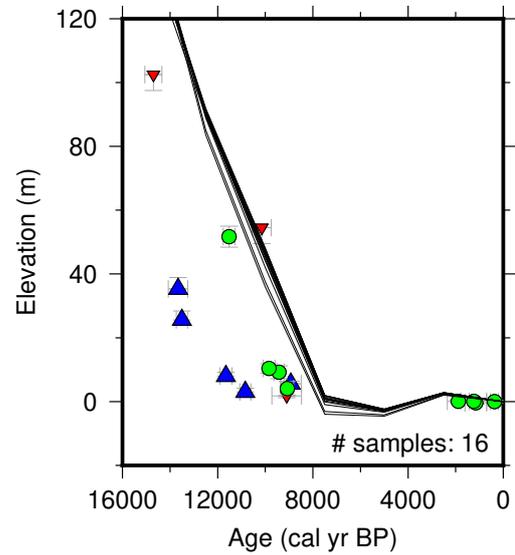
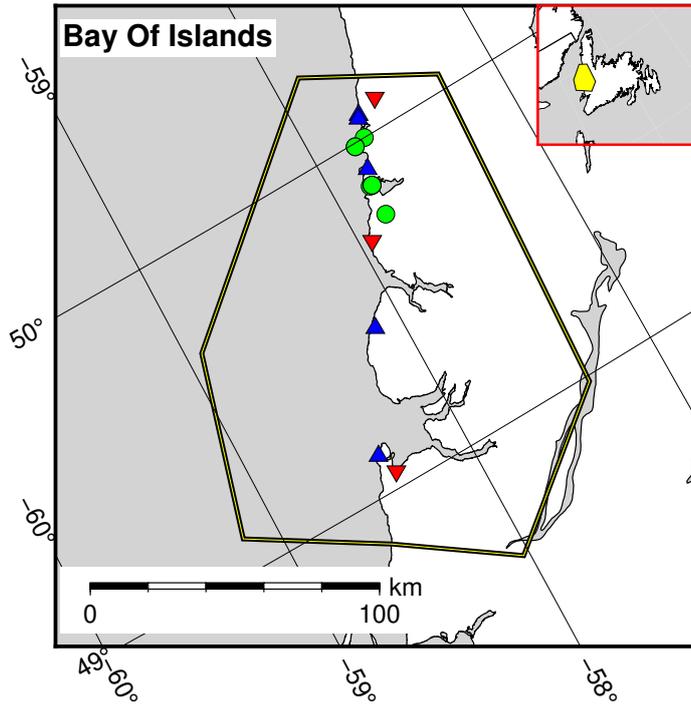


Figure 140: Paleo-sea level and comparison of six models for subregion Newfoundland, location Avalon Peninsula.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

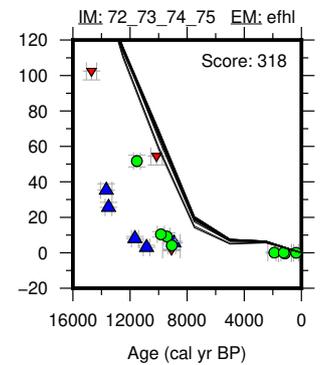
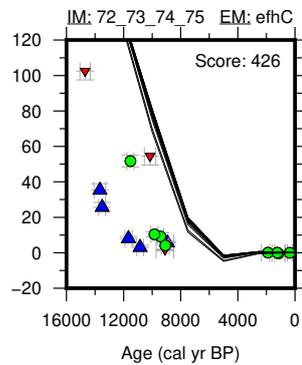
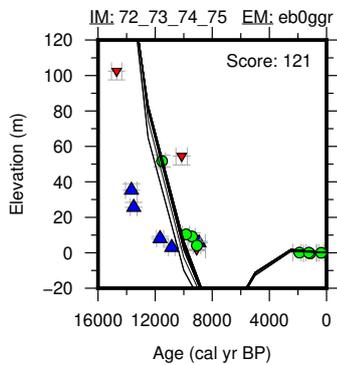
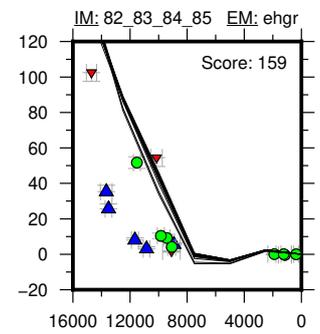
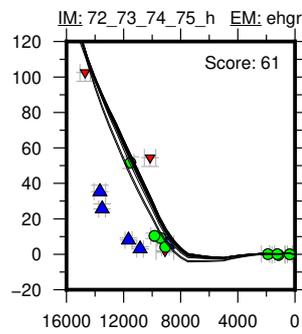
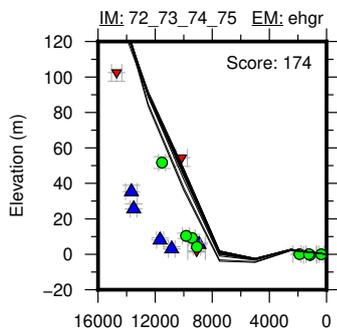
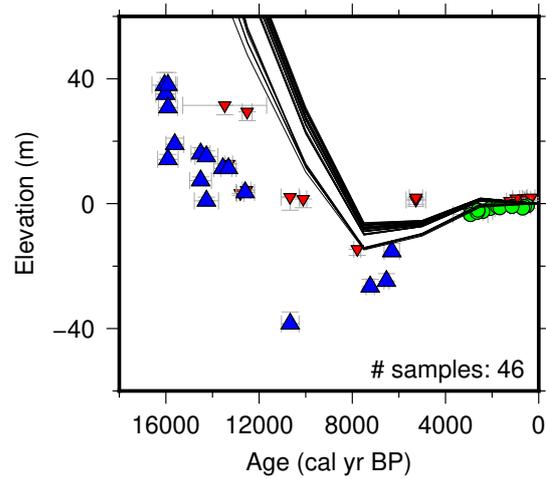
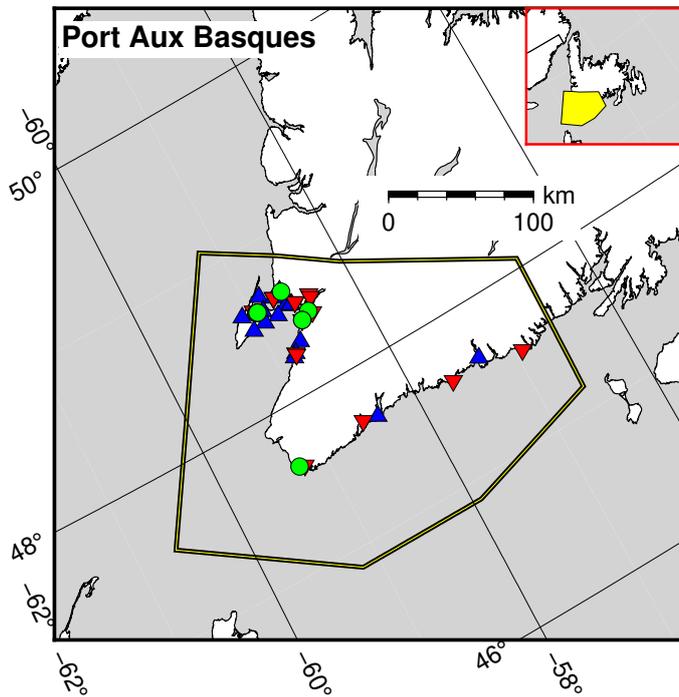


Figure 141: Paleo-sea level and comparison of six models for subregion Newfoundland, location Bay Of Islands.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

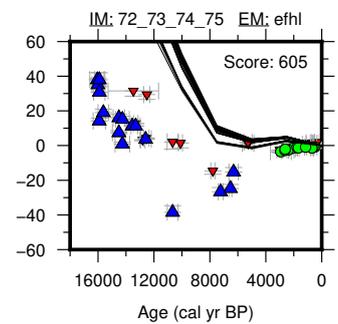
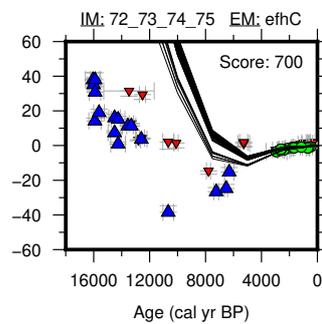
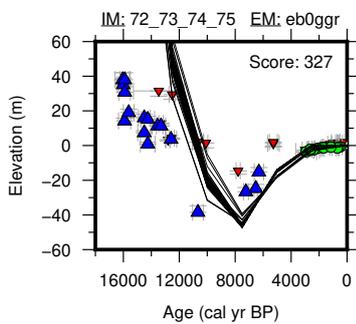
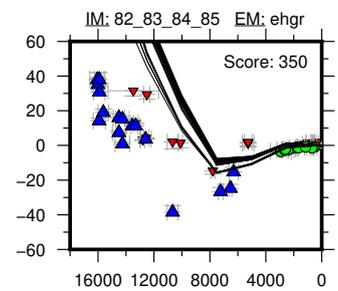
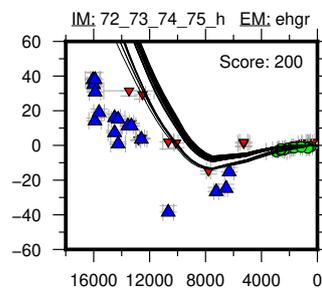
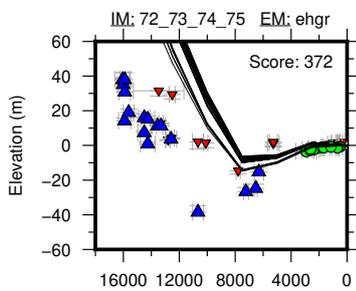


Figure 142: Paleo-sea level and comparison of six models for subregion Newfoundland, location Port Aux Basques.

13.8 Northeastern United States

References for the data used in each location.

Eastern Maine: Belknap et al. (1989); Gehrels (1999); Gehrels and Belknap (1993); Gehrels et al. (1996)

Southern Maine: Barnhardt et al. (1995); Belknap et al. (1989); Bloom (1963); Gehrels et al. (1996, 2002); Kelley et al. (1992, 1995)

Northern Massachusetts: Donnelly (2006); Kaye and Barghoorn (1964); Kirwan et al. (2011); Newman et al. (1980); Oldale et al. (1993); Redfield (1967); Redfield and Rubin (1962)

Southern Massachusetts: Emery et al. (1967); Field et al. (1979); Gutierrez et al. (2003); Oldale and O'Hara (1980); Redfield (1967); Redfield and Rubin (1962); Stuiver et al. (1963)

Connecticut: Bloom (1963); Cinquemani et al. (1982); Donnelly et al. (2004); Nydick et al. (1995); Redfield and Rubin (1962); van de Plassche (1991); van de Plassche et al. (1989, 1998, 2002)

Long Island: Bloom (1963); Cinquemani et al. (1982); Field et al. (1979); Pardi and Newman (1980); Pardi et al. (1984); Redfield (1967); Redfield and Rubin (1962)

New York: Olson and Broecker (1961); Pardi et al. (1984); Slagle et al. (2006)

New Jersey: Cinquemani et al. (1982); Donnelly et al. (2001); Engelhart and Horton (2012); Field et al. (1979); Miller et al. (2009); Pardi et al. (1984); Psuty (1986); Stuiver and Daddario (1963)

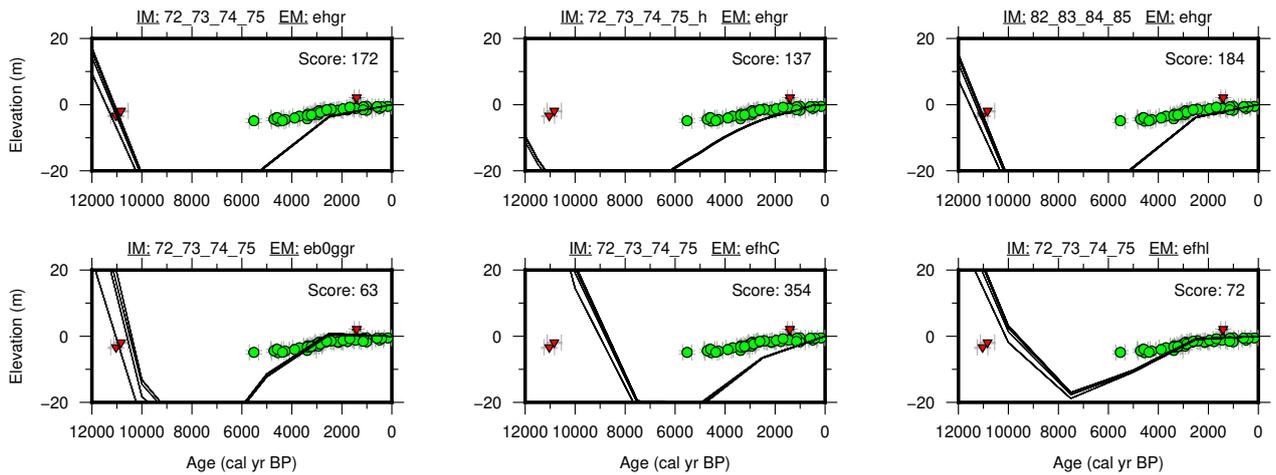
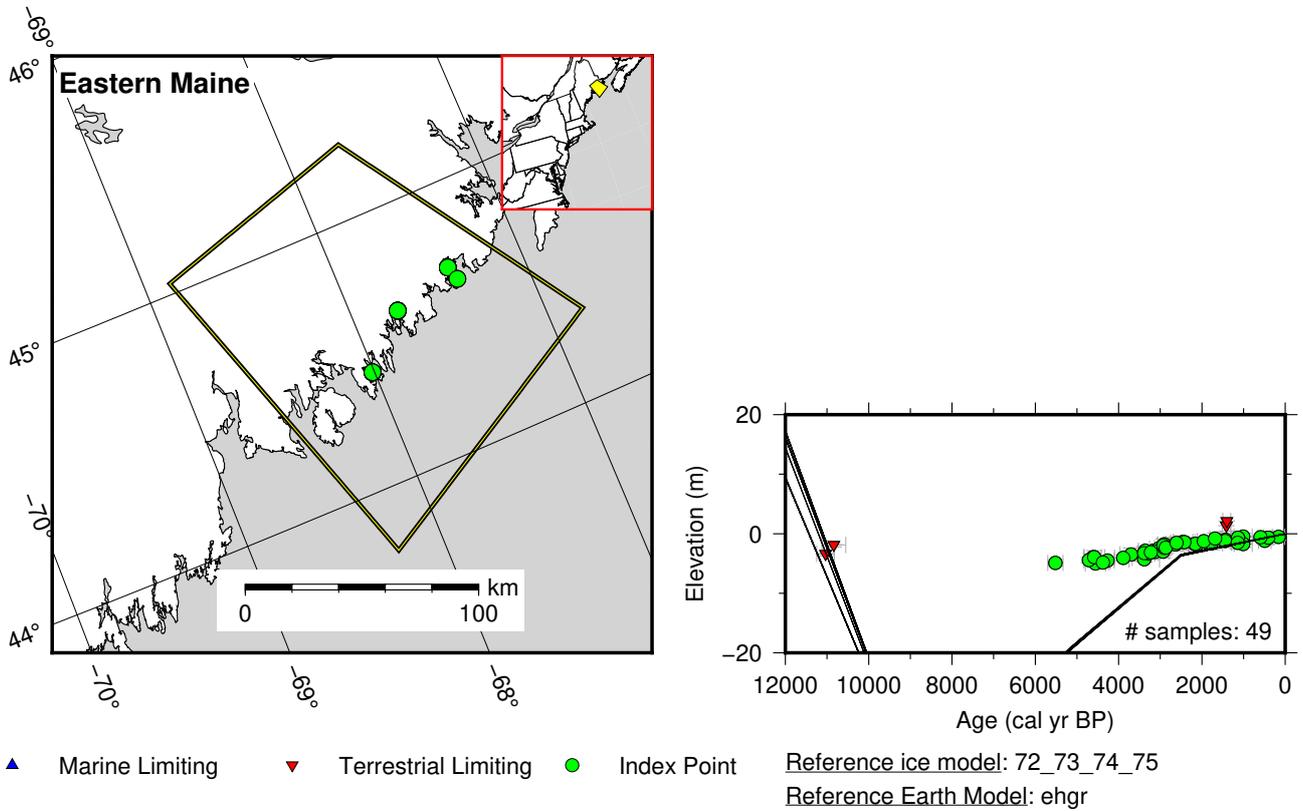


Figure 143: Paleo-sea level and comparison of six models for subregion Northeastern United States, location Eastern Maine.

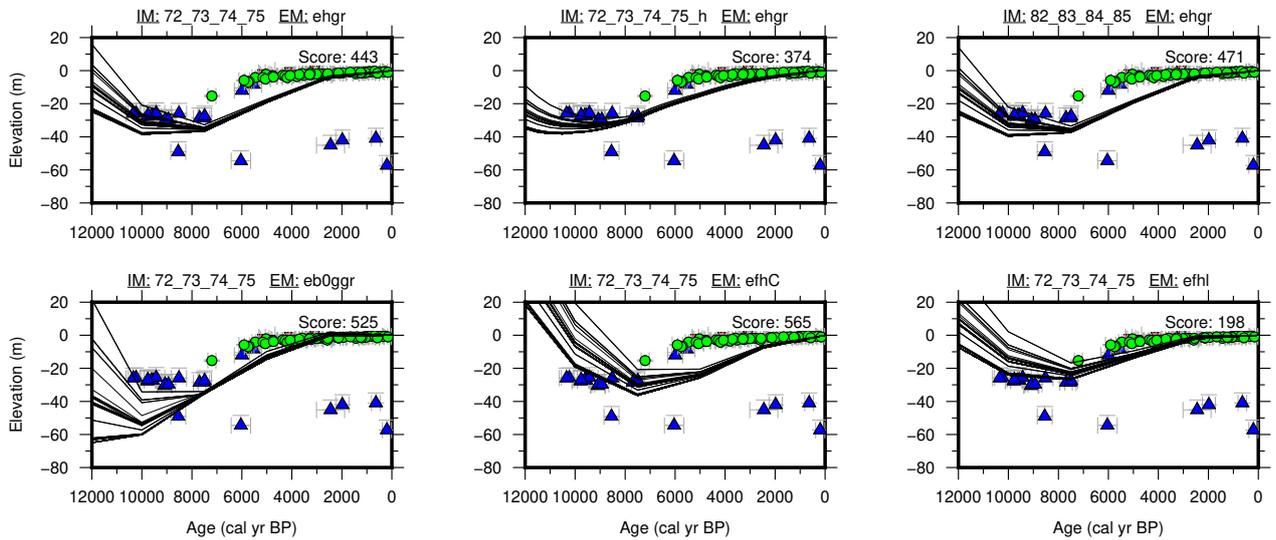
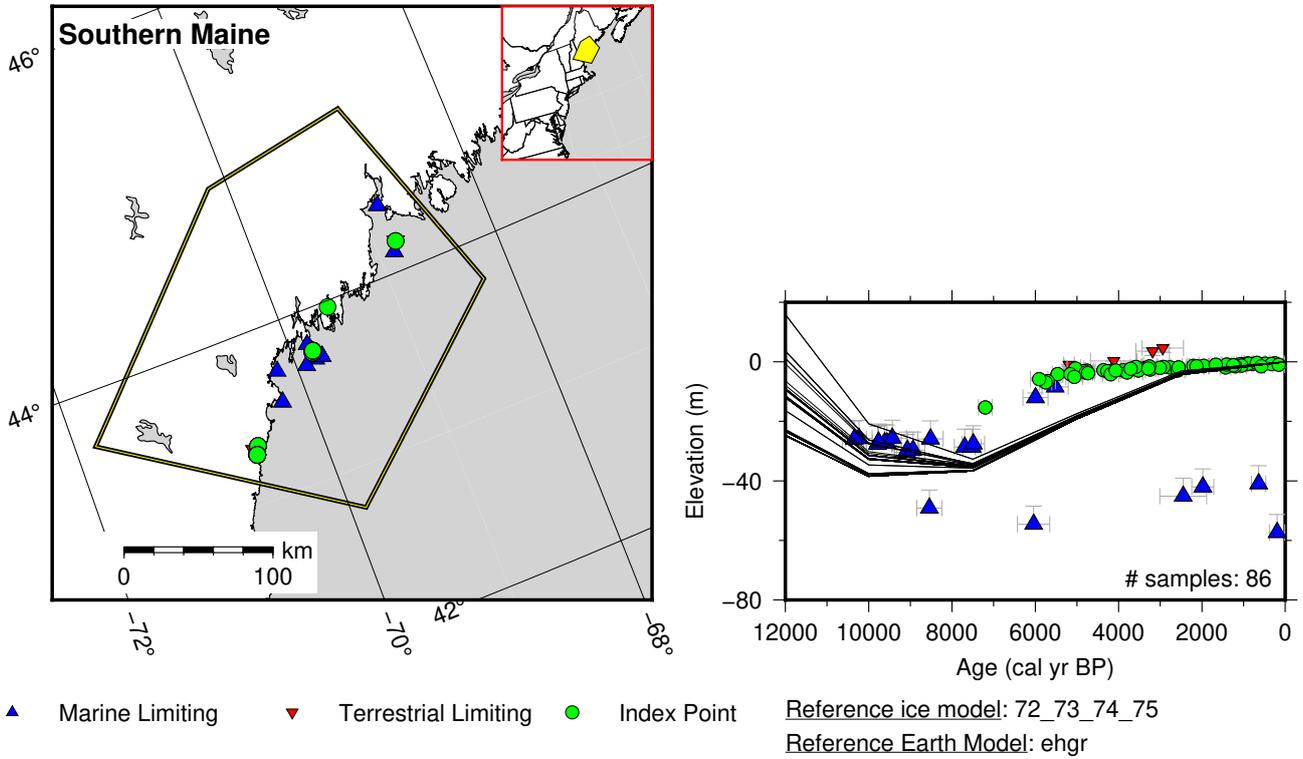


Figure 144: Paleo-sea level and comparison of six models for subregion Northeastern United States, location Southern Maine.

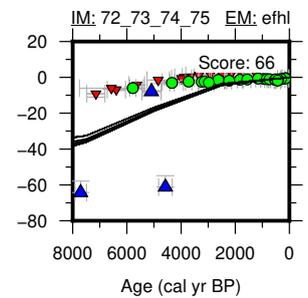
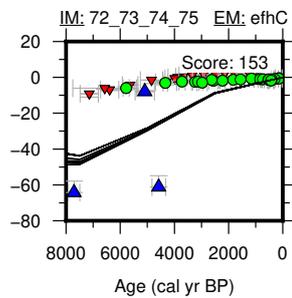
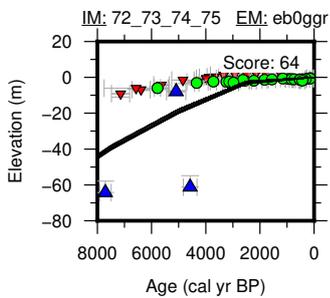
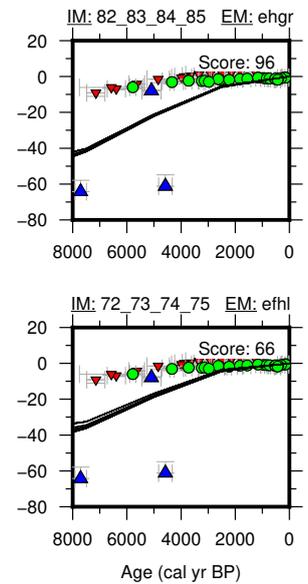
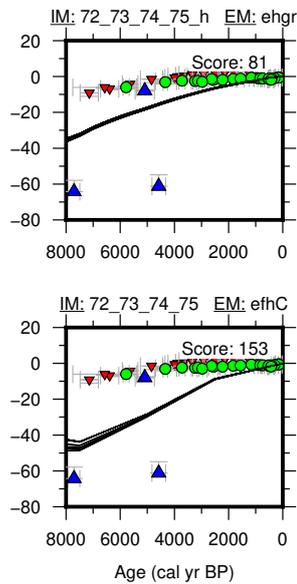
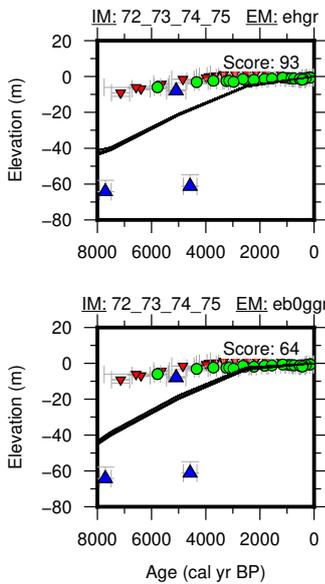
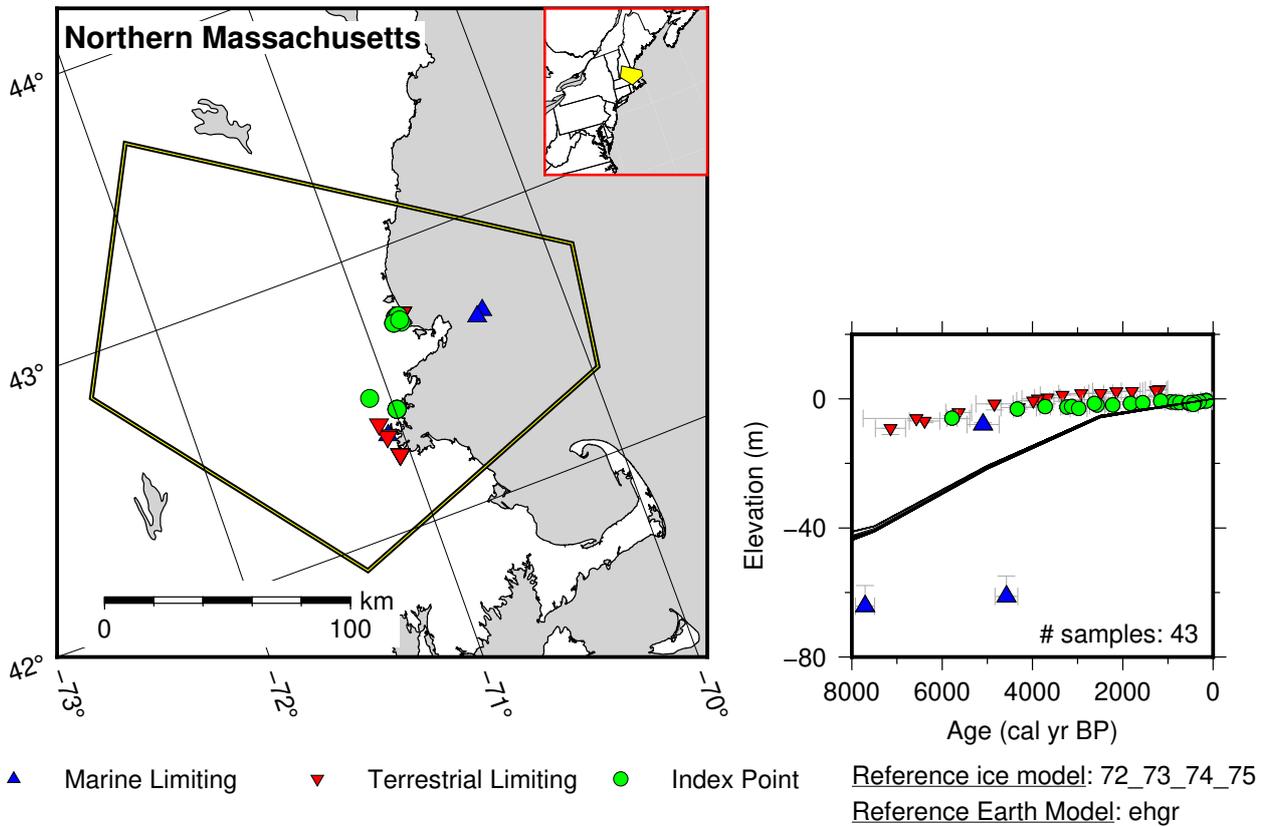


Figure 145: Paleo-sea level and comparison of six models for subregion Northeastern United States, location Northern Massachusetts.

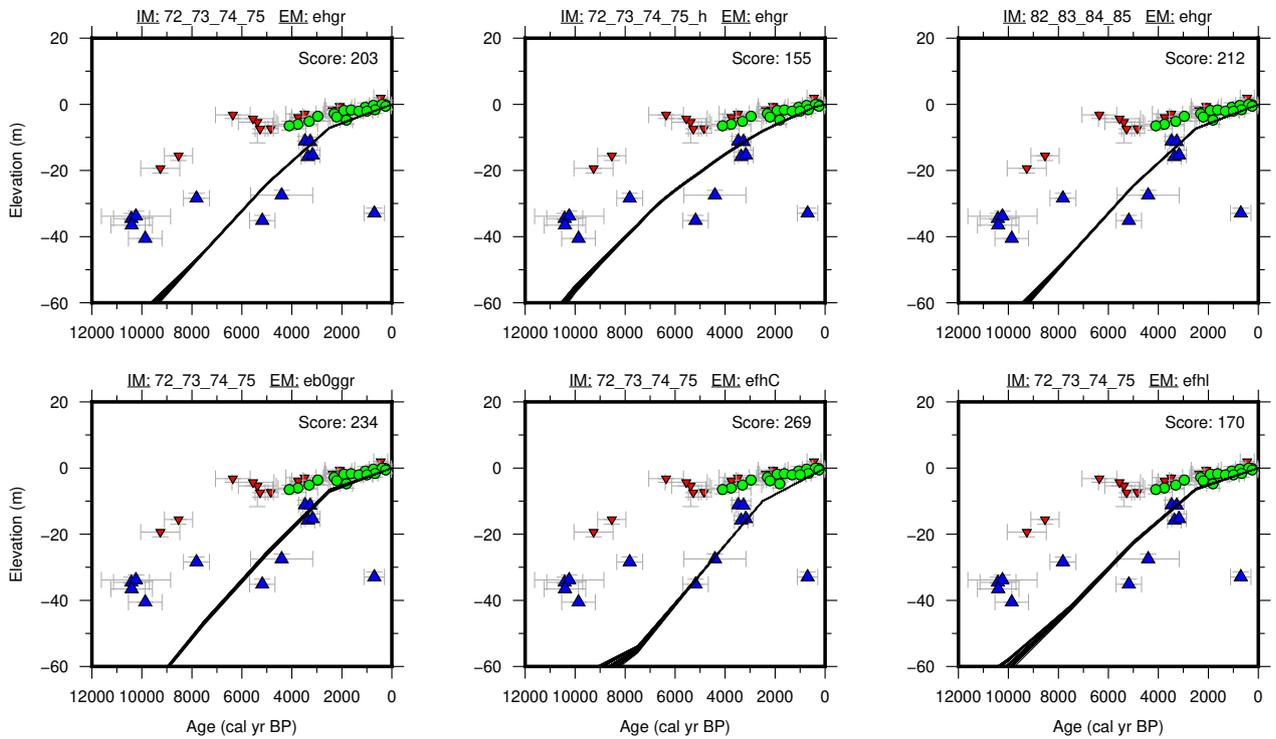
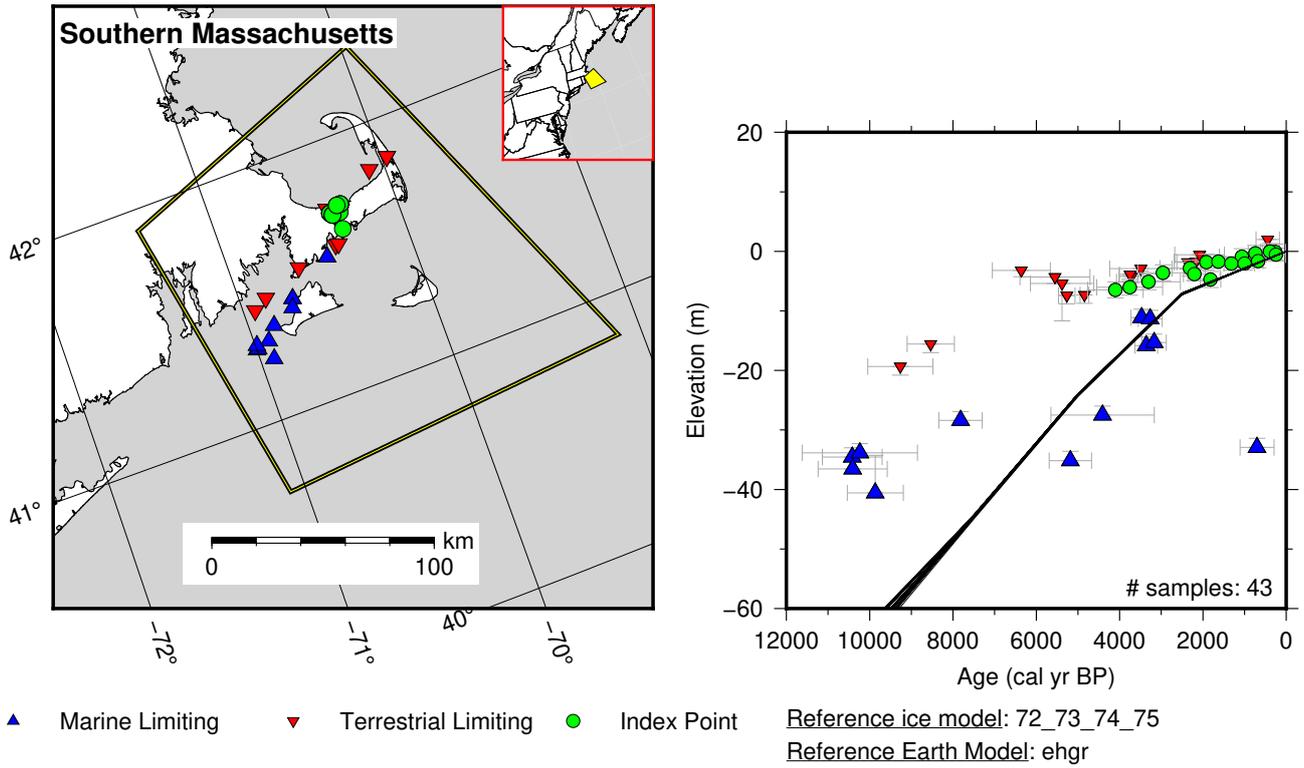
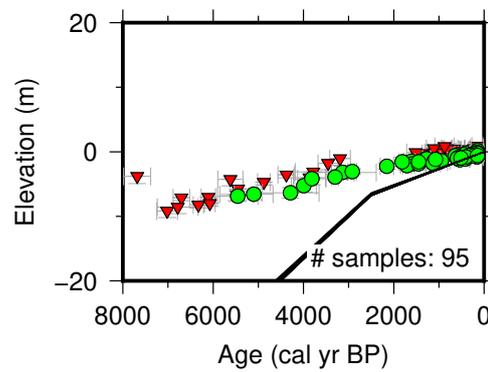
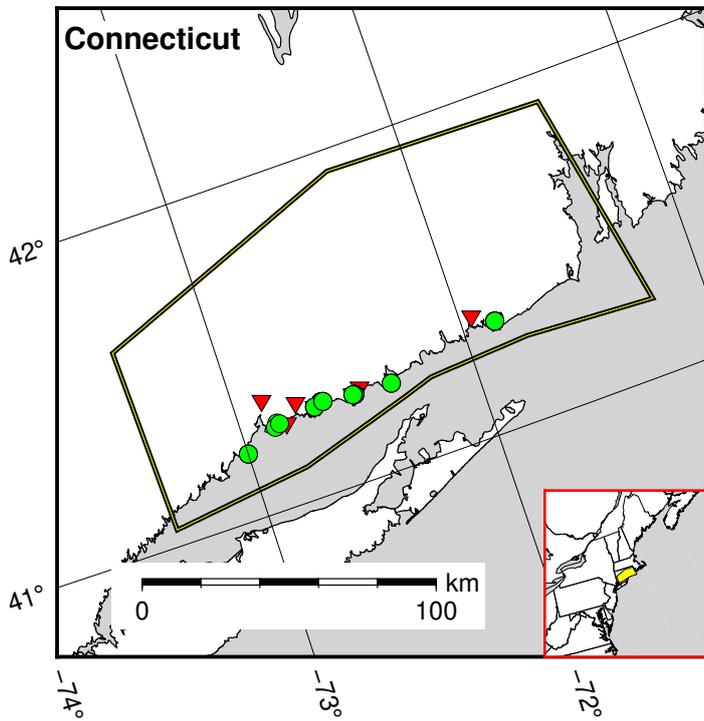


Figure 146: Paleo-sea level and comparison of six models for subregion Northeastern United States, location Southern Massachusetts.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

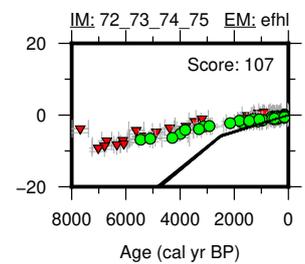
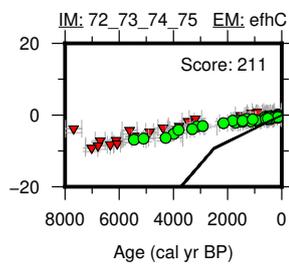
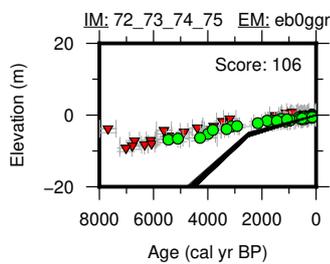
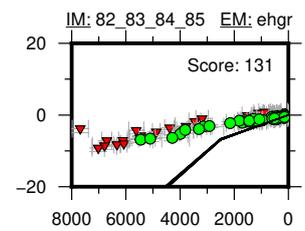
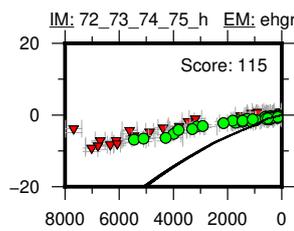
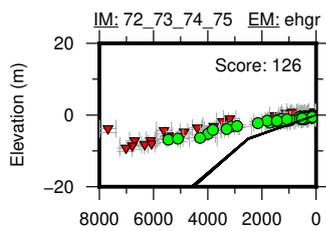
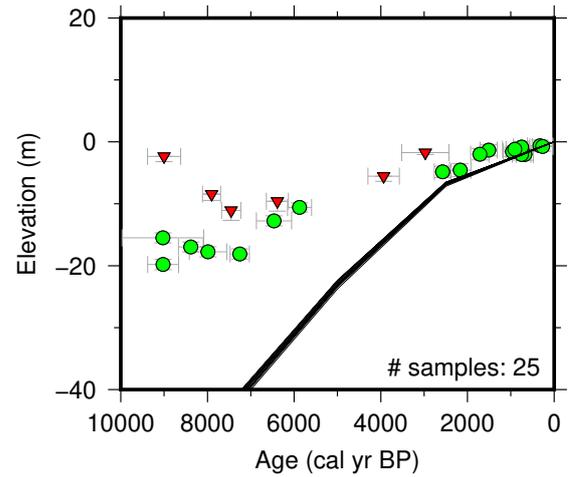
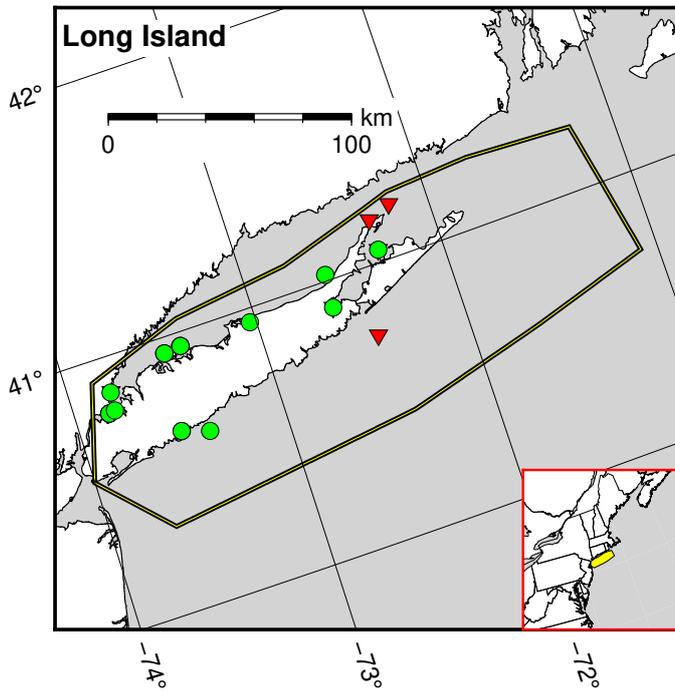


Figure 147: Paleo-sea level and comparison of six models for subregion Northeastern United States, location Connecticut.



▲ Marine Limiting
 ▼ Terrestrial Limiting
 ● Index Point
 Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

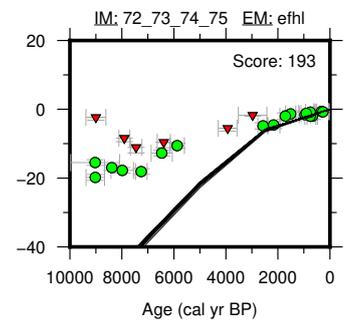
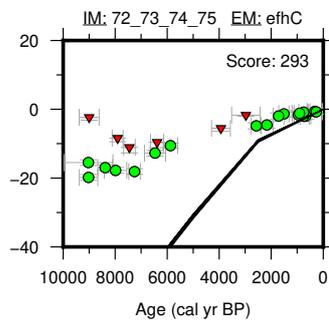
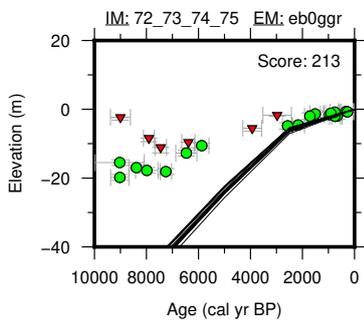
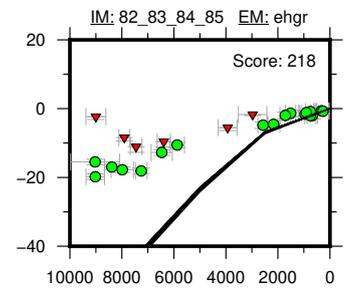
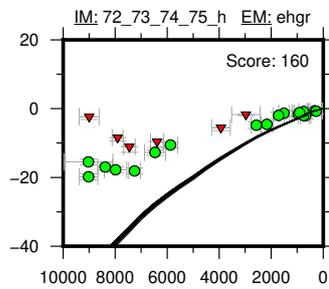
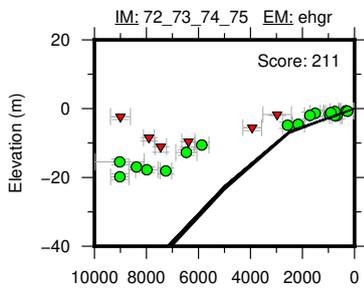


Figure 148: Paleo-sea level and comparison of six models for subregion Northeastern United States, location Long Island.

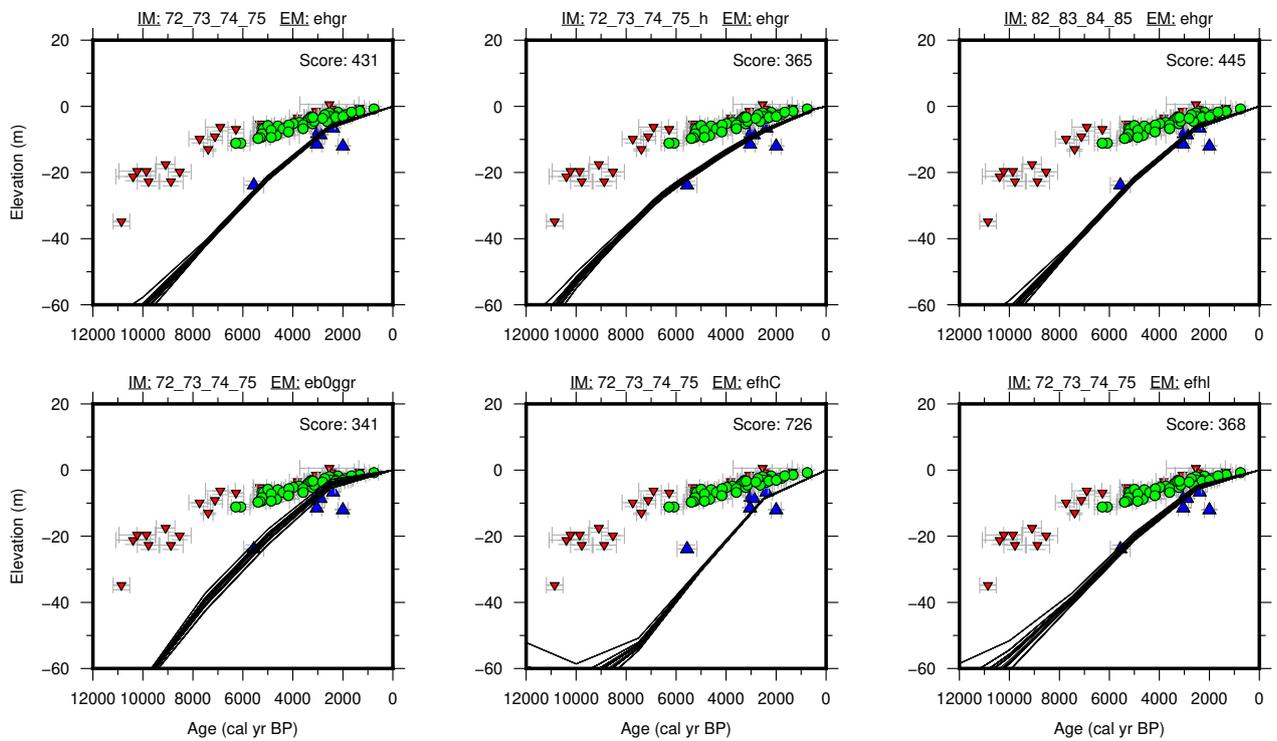
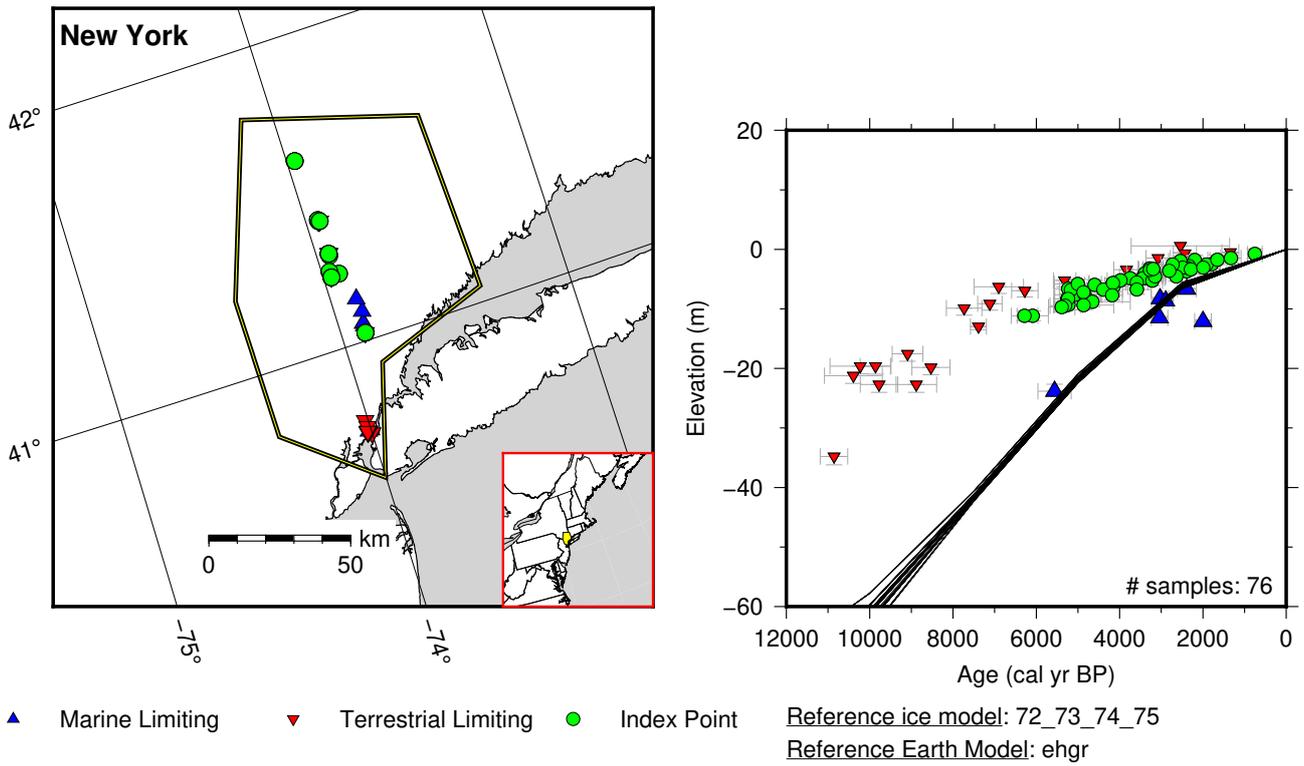


Figure 149: Paleo-sea level and comparison of six models for subregion Northeastern United States, location New York.

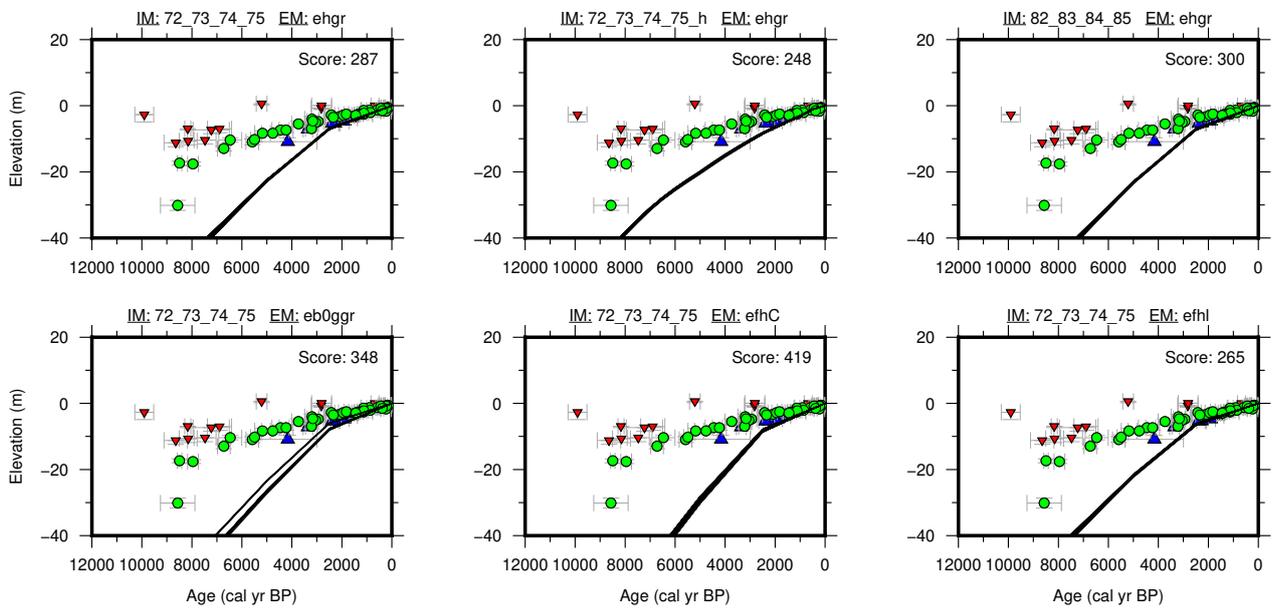
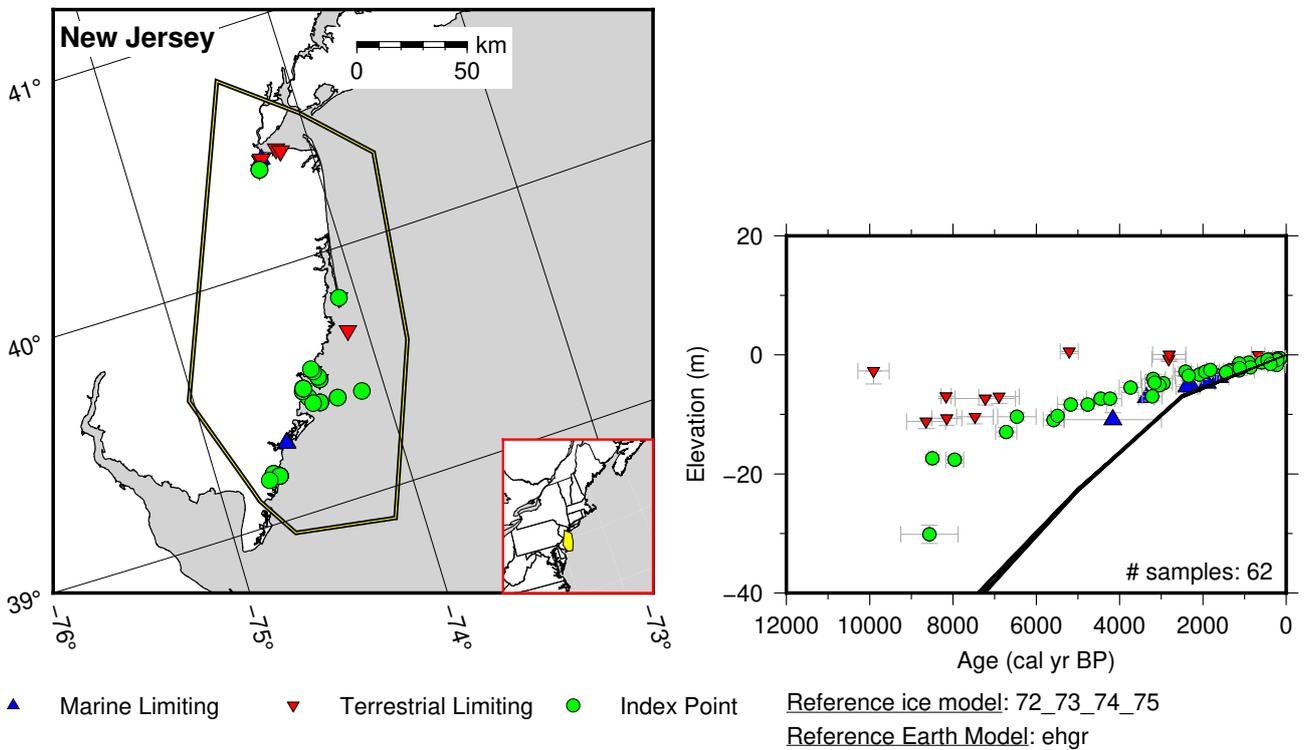


Figure 150: Paleo-sea level and comparison of six models for subregion Northeastern United States, location New Jersey.

13.9 St Laurence Lowlands

References for the data used in each location.

Rimouski: Blake and Lowdon (1976); Dionne (1990, 1999, 2001a, 2005); Dionne and Coll (1995); Dyck and Fyles (1963); Harington (2003); Héту (1994, 1998); Héту and Bail (1996); Locat (1977); Vacchi et al. (2018)

Forestville: Dietrich et al. (2017); Dionne (1996, 2001b); Dionne and Occhietti (1996); Dionne et al. (2004); Dubois et al. (1988); Martindale et al. (2020)

Quebec City: Bhiry et al. (2000); Brodeur and Allard (1985); Dionne (1988, 1997, 1998); Filion (1987); Govare and Gangloff (1989); McNeely (2006); McNeely and Brennan (2005); Occhietti et al. (2001); Parent and Occhietti (1988); Samson et al. (1977)

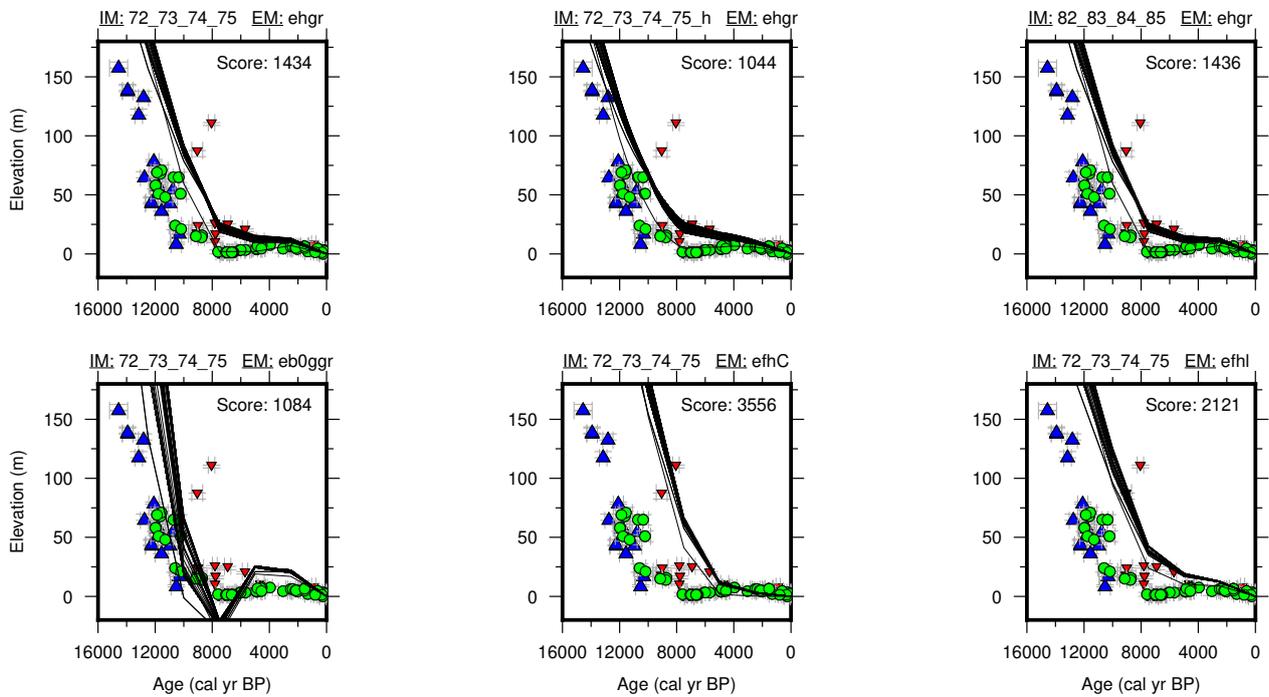
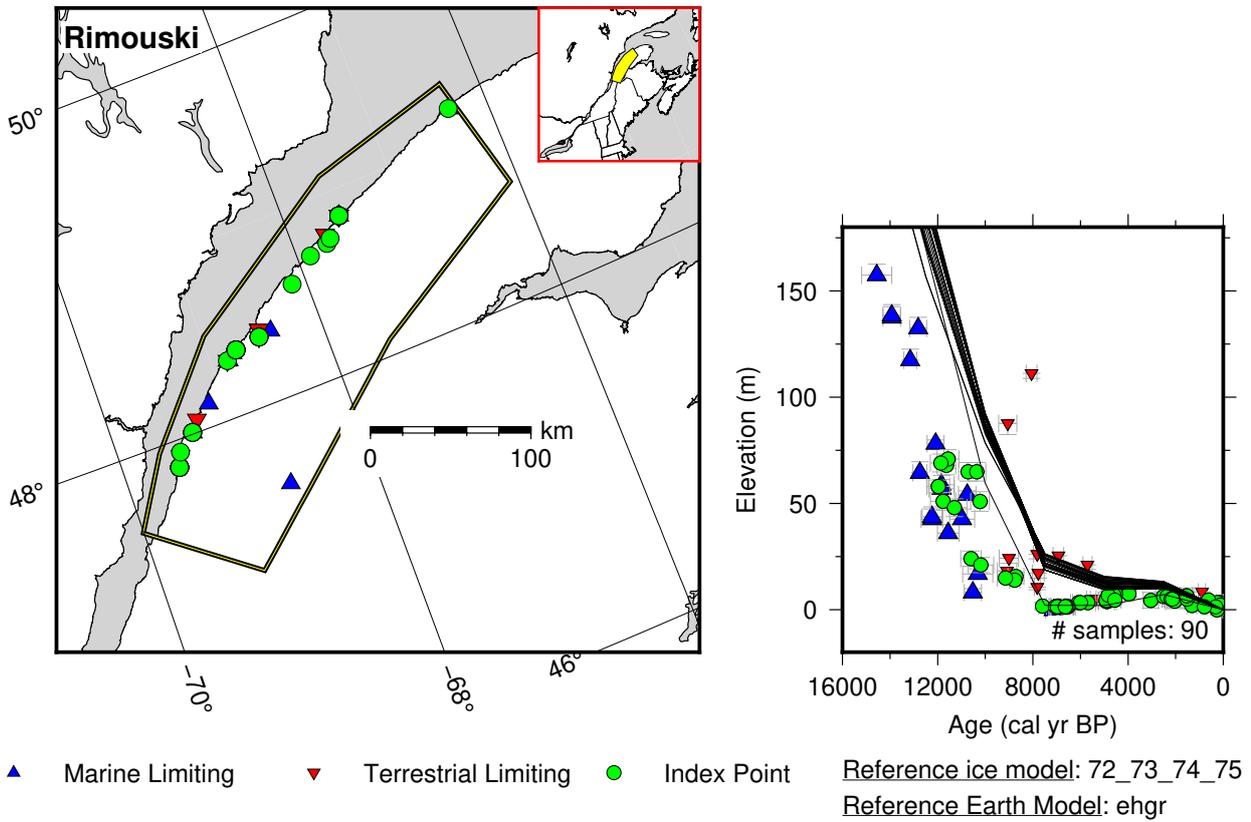


Figure 151: Paleo-sea level and comparison of six models for subregion St Laurent Lowlands, location Rimouski.

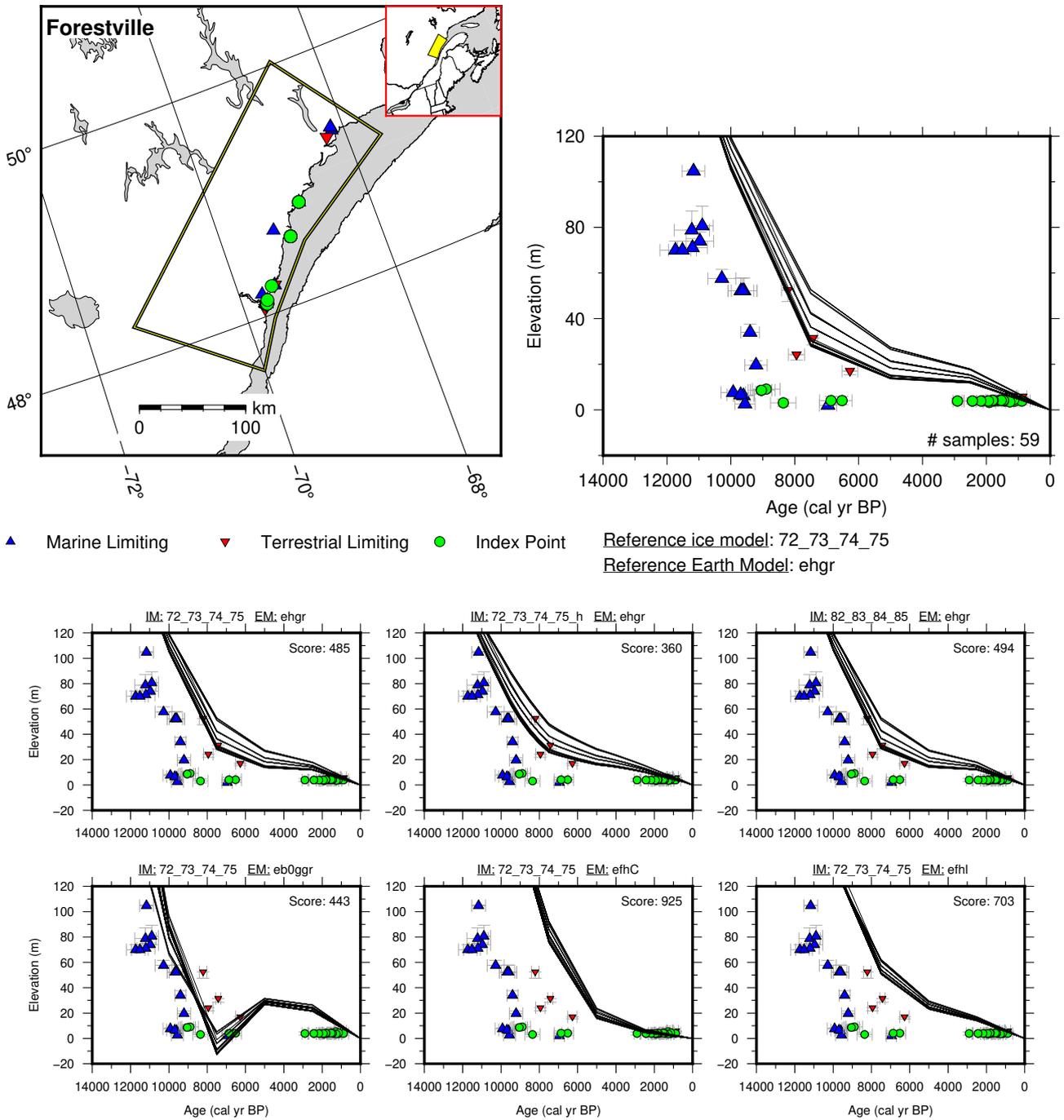


Figure 152: Paleo-sea level and comparison of six models for subregion St Laurent Lowlands, location Forestville.

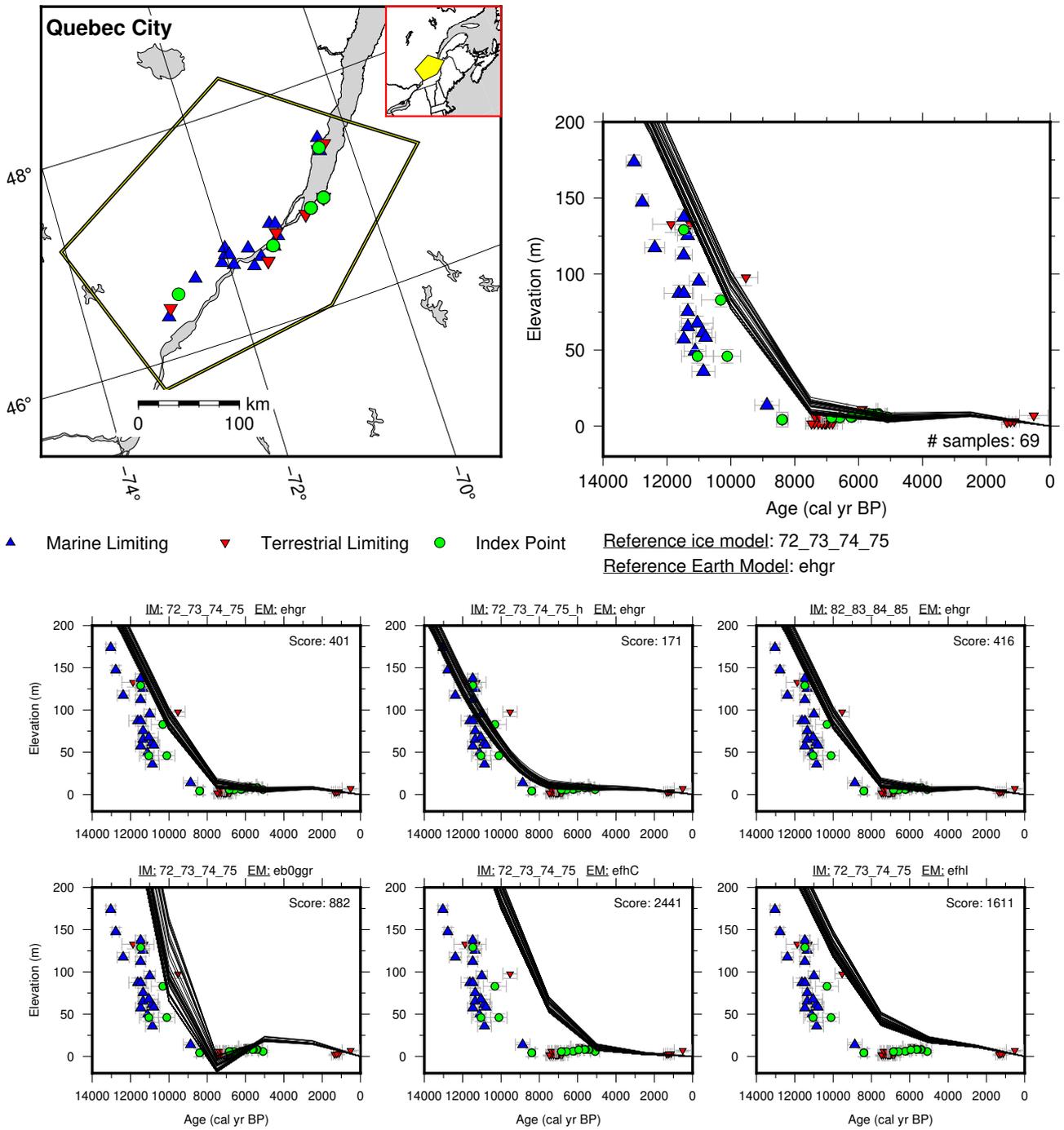


Figure 153: Paleo-sea level and comparison of six models for subregion St Lawrence Lowlands, location Quebec City.

14 South Asia

14.1 Bay of Bengal

References for the data used in each location.

Ganges Delta: Wiedicke et al. (1999)

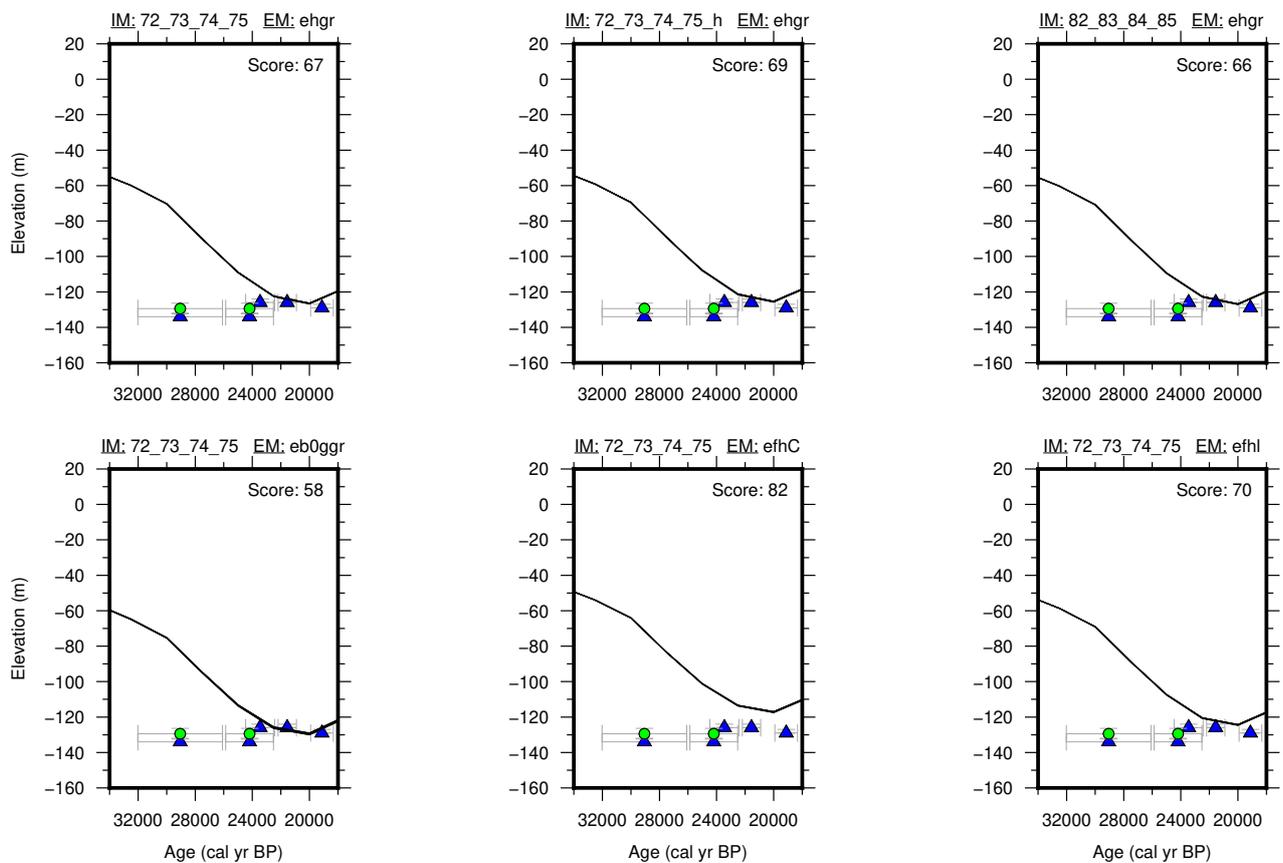
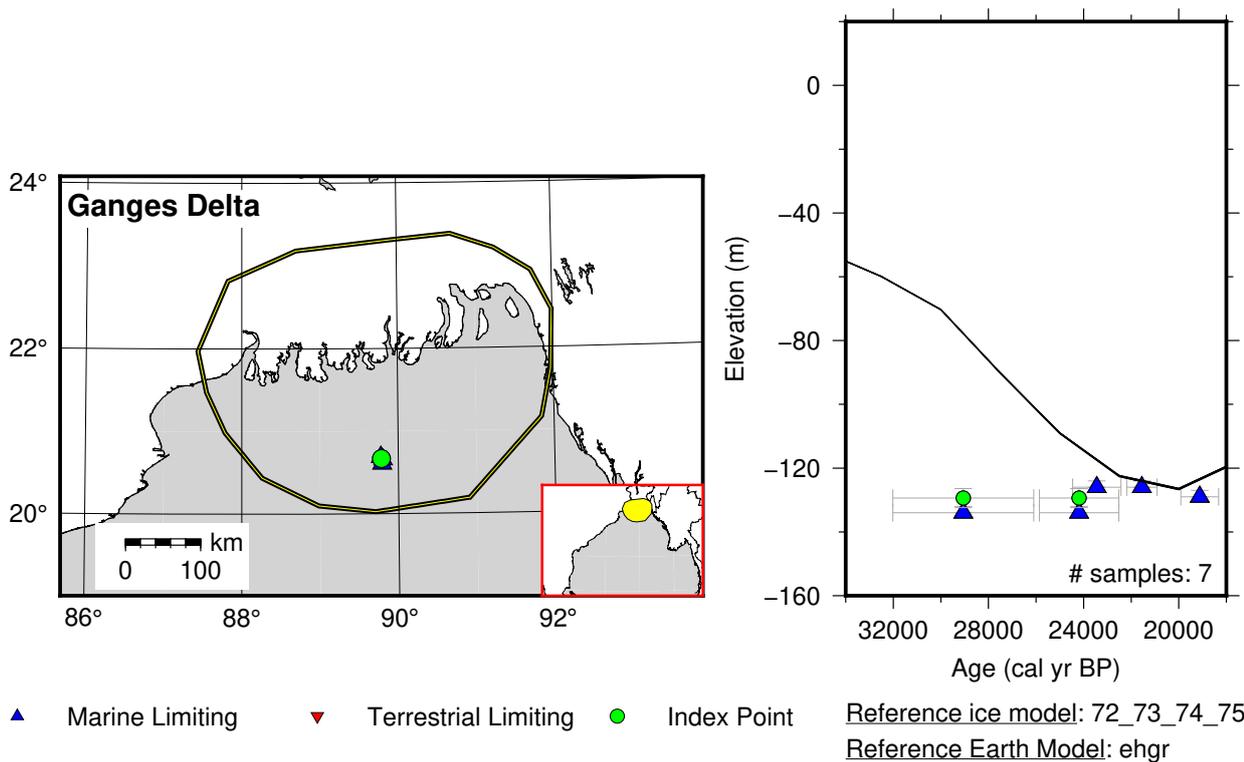


Figure 154: Paleo-sea level and comparison of six models for subregion Bay of Bengal, location Ganges Delta.

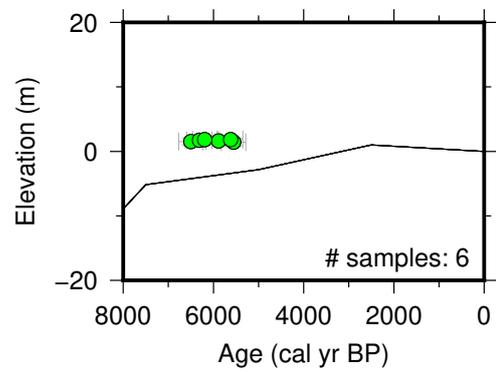
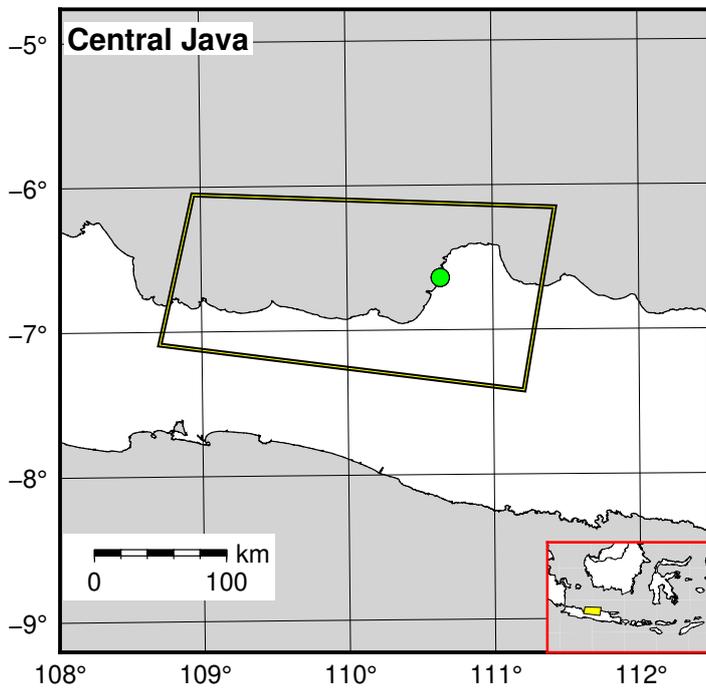
15 Southeast Asia

15.1 Java Sea

References for the data used in each location.

Central Java: Azmy et al. (2010)

South Sulawesi: de Klerk (1982); Mann et al. (2016); Tjia et al. (1972)



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75

Reference Earth Model: ehgr

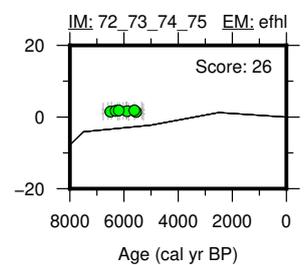
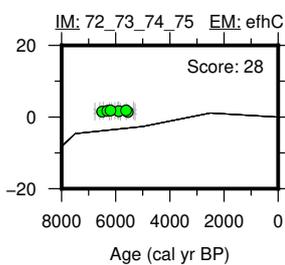
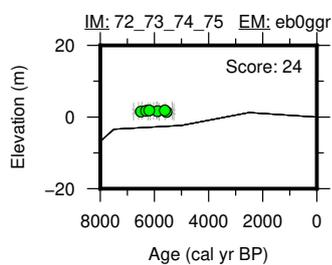
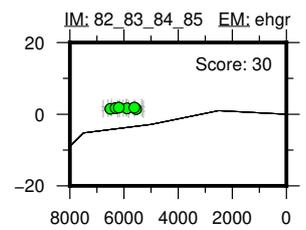
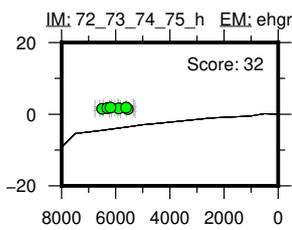
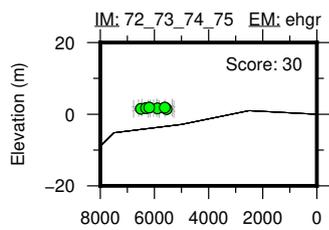


Figure 155: Paleo-sea level and comparison of six models for subregion Java Sea, location Central Java.

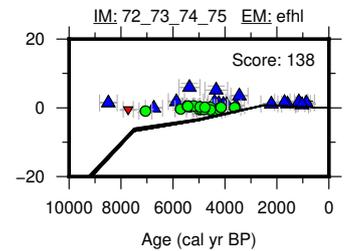
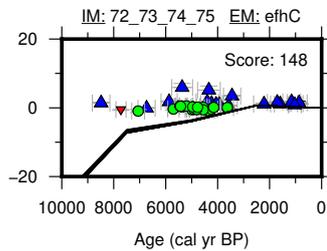
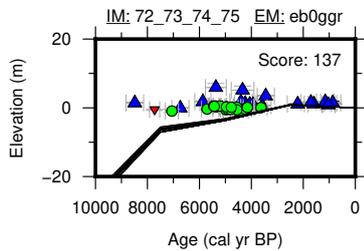
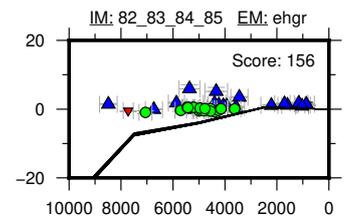
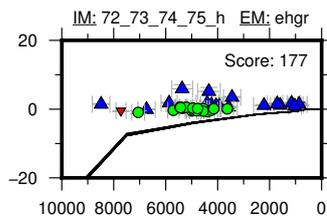
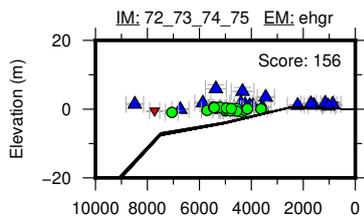
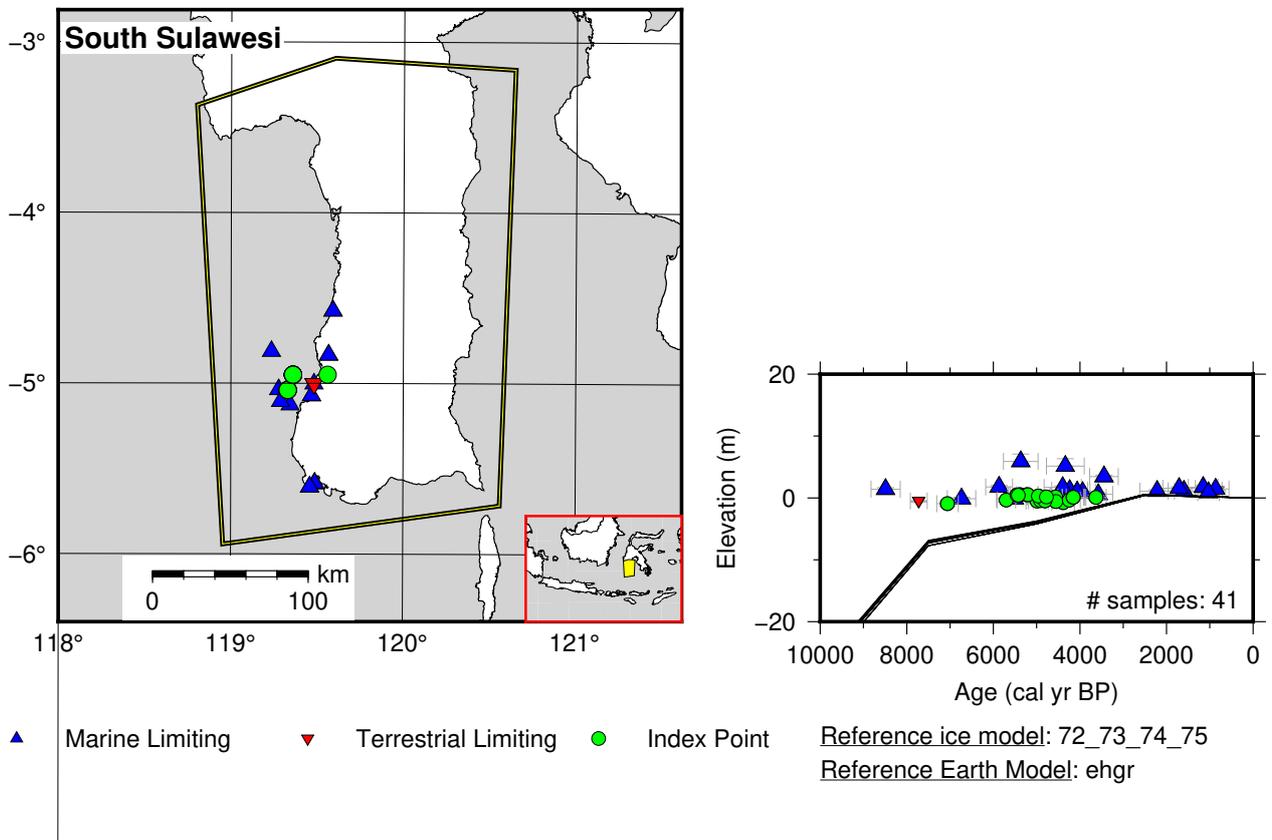


Figure 156: Paleo-sea level and comparison of six models for subregion Java Sea, location South Sulawesi.

15.2 Papua New Guinea

References for the data used in each location.

Huon Peninsula: Chappell and Polach (1991); Cutler et al. (2003); Edwards et al. (1993); Hibbert et al. (2016)

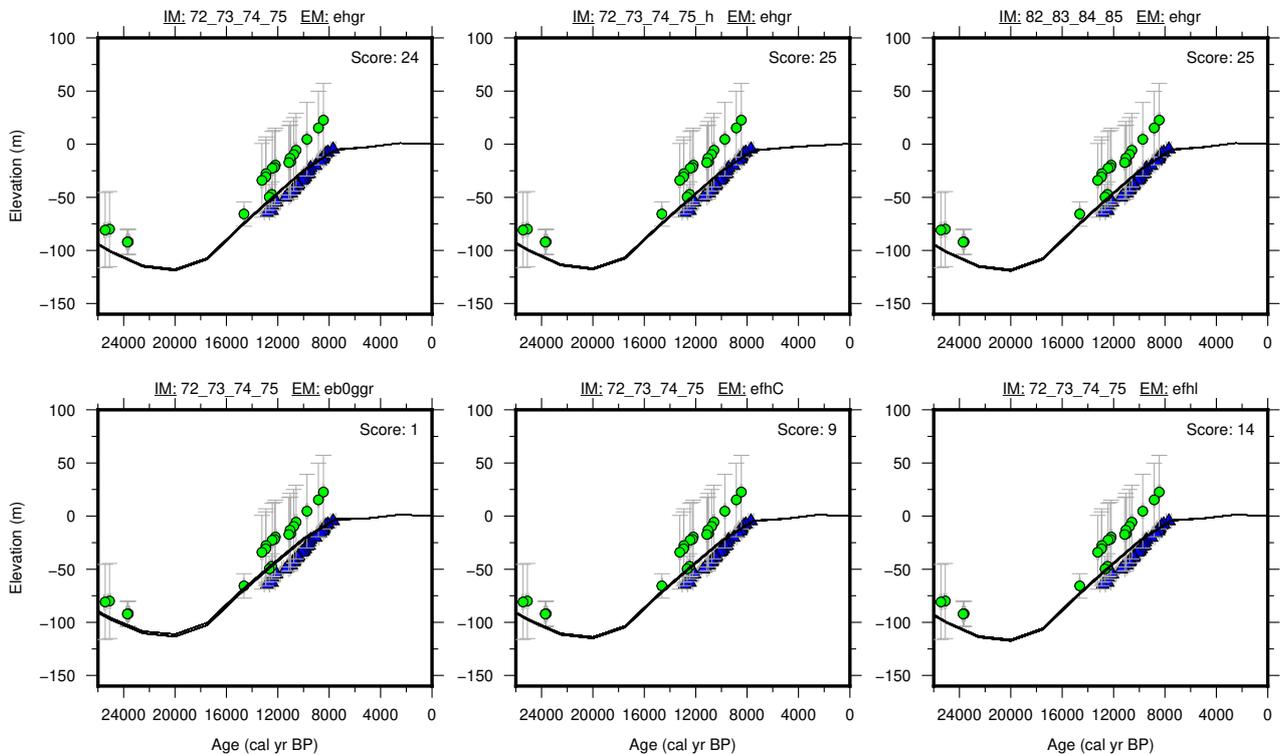
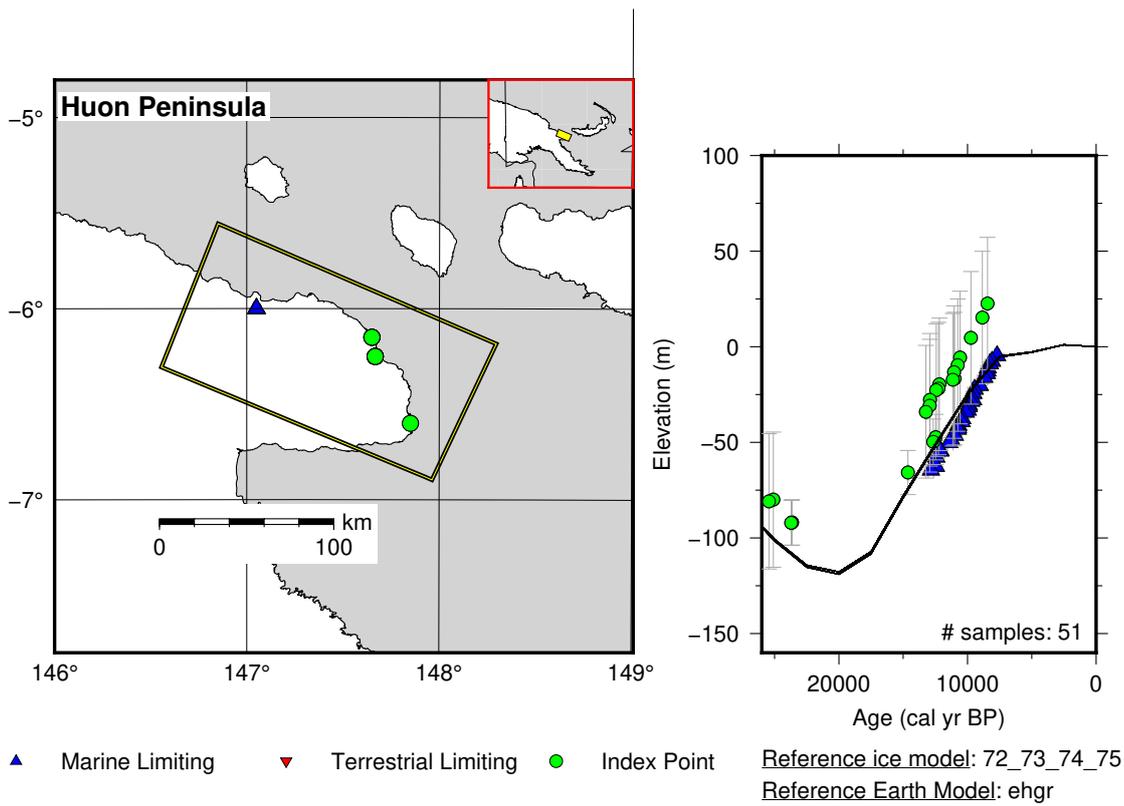


Figure 157: Paleo-sea level and comparison of six models for subregion Papua New Guinea, location Huon Peninsula.

15.3 Sundaland

References for the data used in each location.

Chao Phraya: Horton et al. (2005); Sinsakul (1992); Somboon (1988); Somboon and Thiramongkol (1992)

Mekong Delta: Hanebuth et al. (2012); Stattegger et al. (2013); Tamura et al. (2007, 2009)

Strait Of Malacca: Bird et al. (2007, 2010); Geyh et al. (1979); Hassan (2001); Hesp et al. (1998); Horton et al. (2005); Tjia and Fujii (1992)

Sunda Shelf: Hanebuth et al. (2000, 2003, 2009)

Vietnam Shelf: Hanebuth et al. (2000)

Phuket: Scheffers et al. (2012); Scoffin and Le Tissier (1998)

Thale Noi: Horton et al. (2005)

West Malay Peninsula: Tjia and Fujii (1992); Tjia et al. (1972)

East Malay Peninsula: Parham et al. (2014); Tjia and Fujii (1992)

Southeast Malay Peninsula: Hassan (2001); Horton et al. (2005); Tjia and Fujii (1992); Tjia et al. (1983)

Belitung Island: Meltzner et al. (2017)

Ca Na: Stattegger et al. (2013)

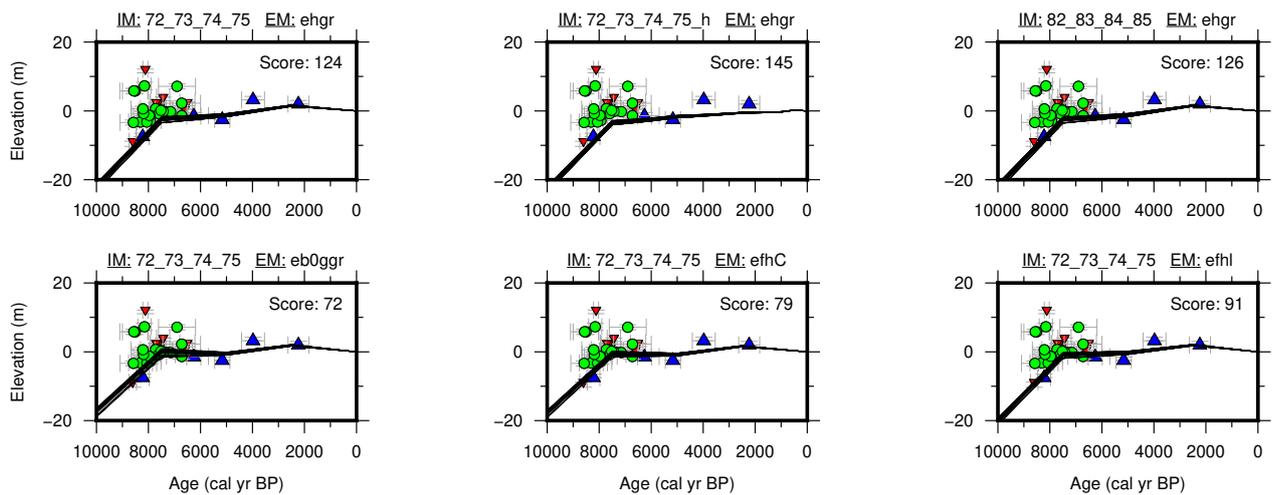
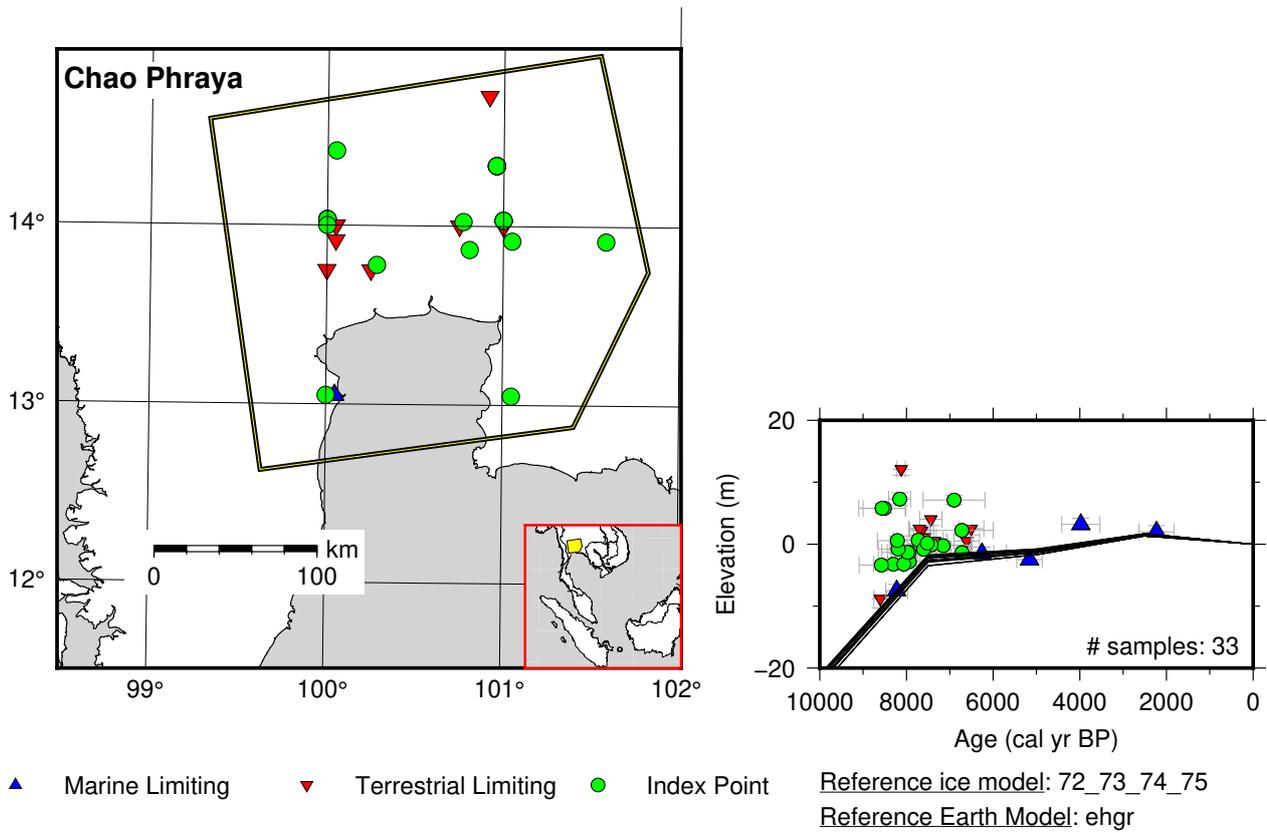
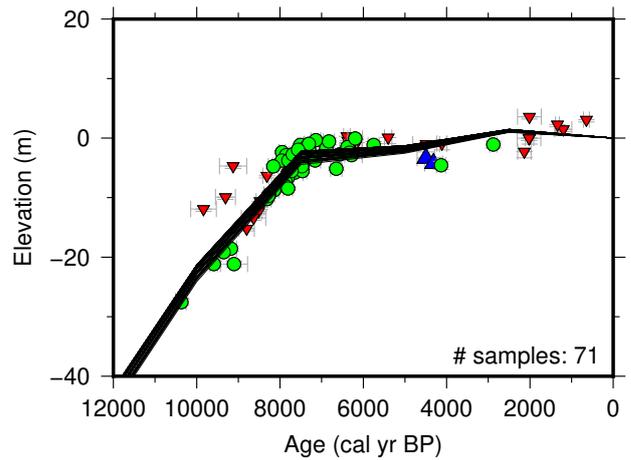
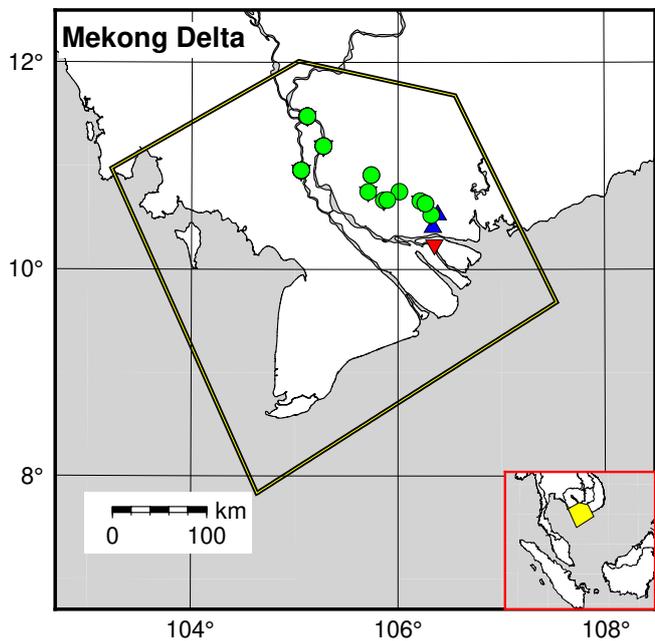


Figure 158: Paleo-sea level and comparison of six models for subregion Sundaland, location Chao Phraya.



▲ Marine Limiting
 ▼ Terrestrial Limiting
 ● Index Point
 Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

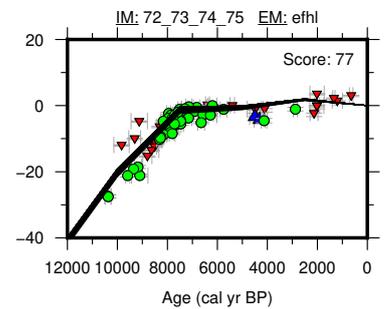
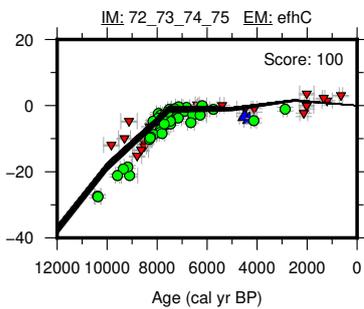
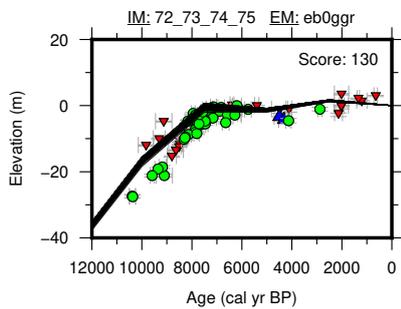
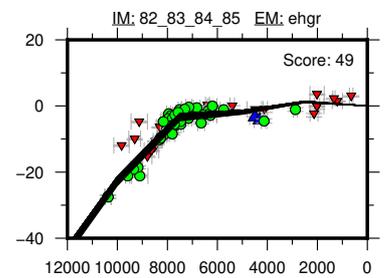
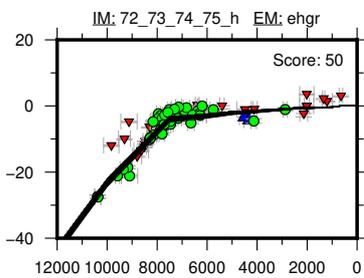
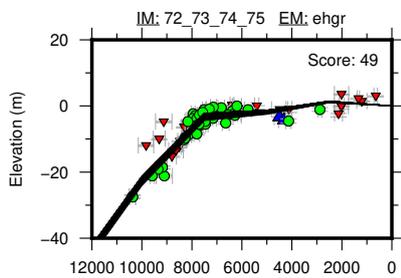


Figure 159: Paleo-sea level and comparison of six models for subregion Sundaland, location Mekong Delta.

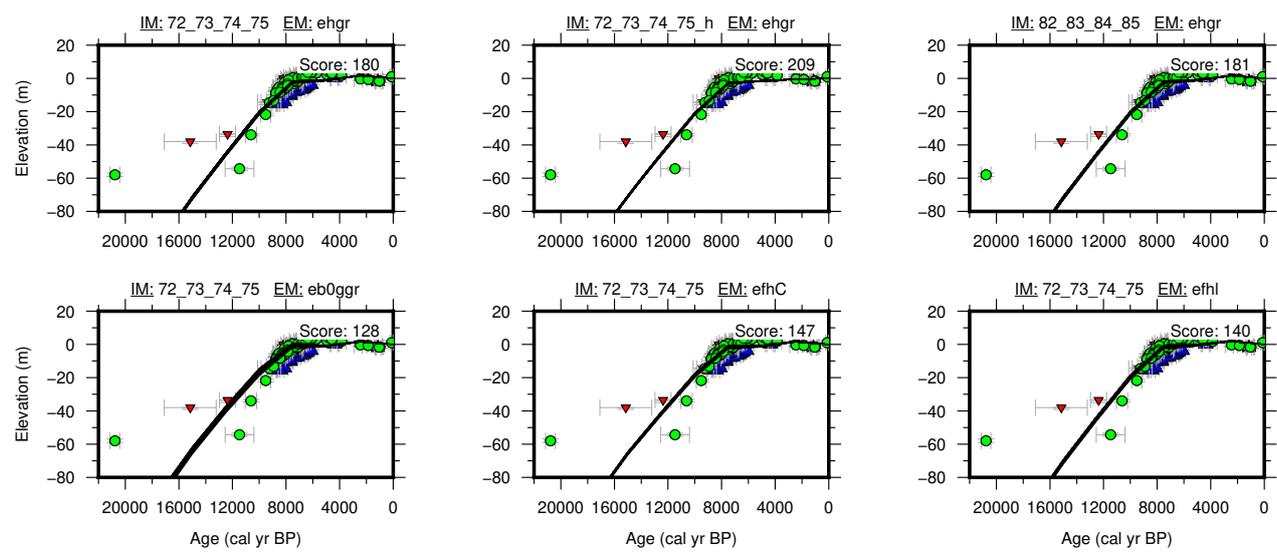
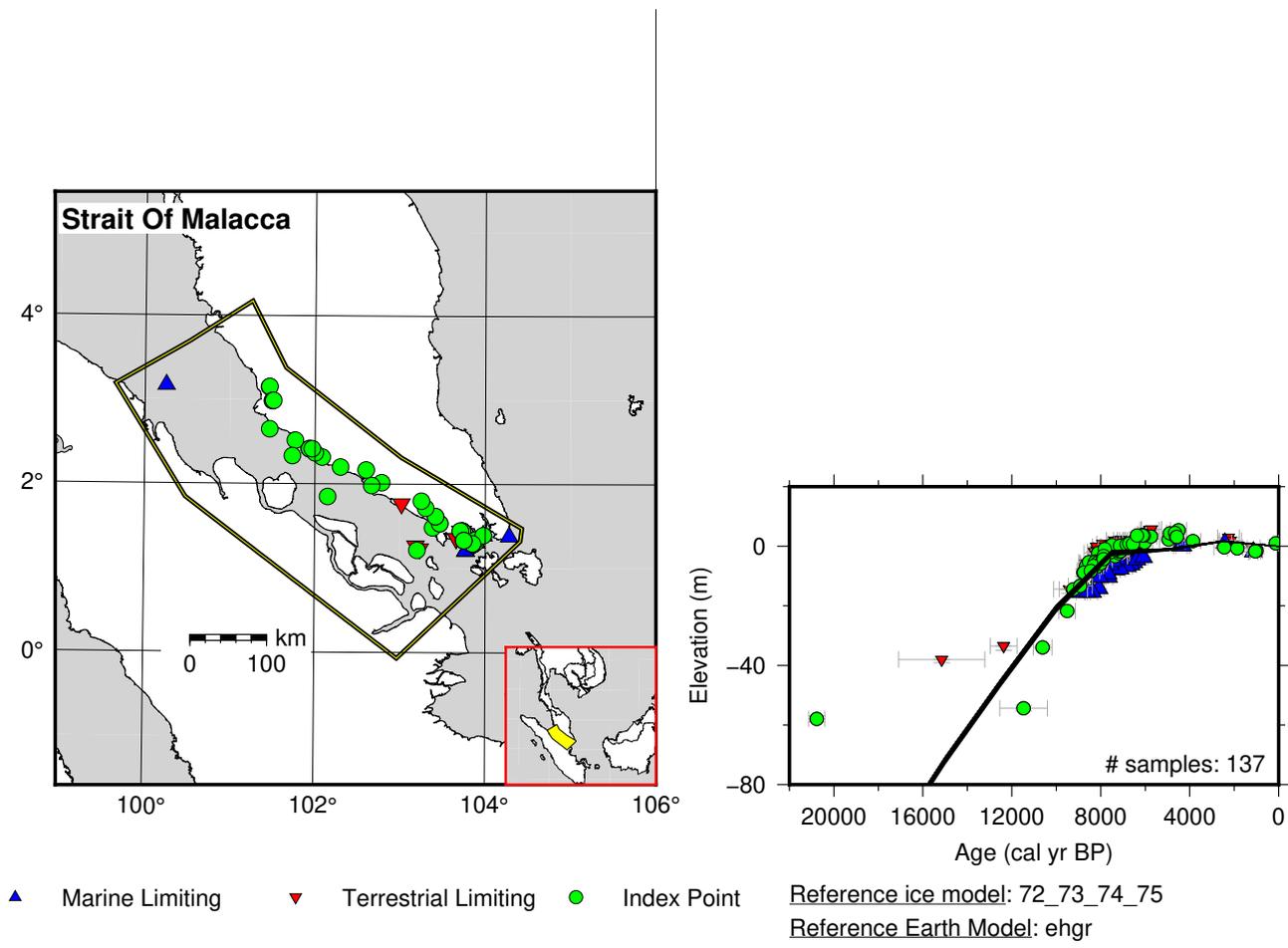


Figure 160: Paleo-sea level and comparison of six models for subregion Sundaland, location Strait Of Malacca.

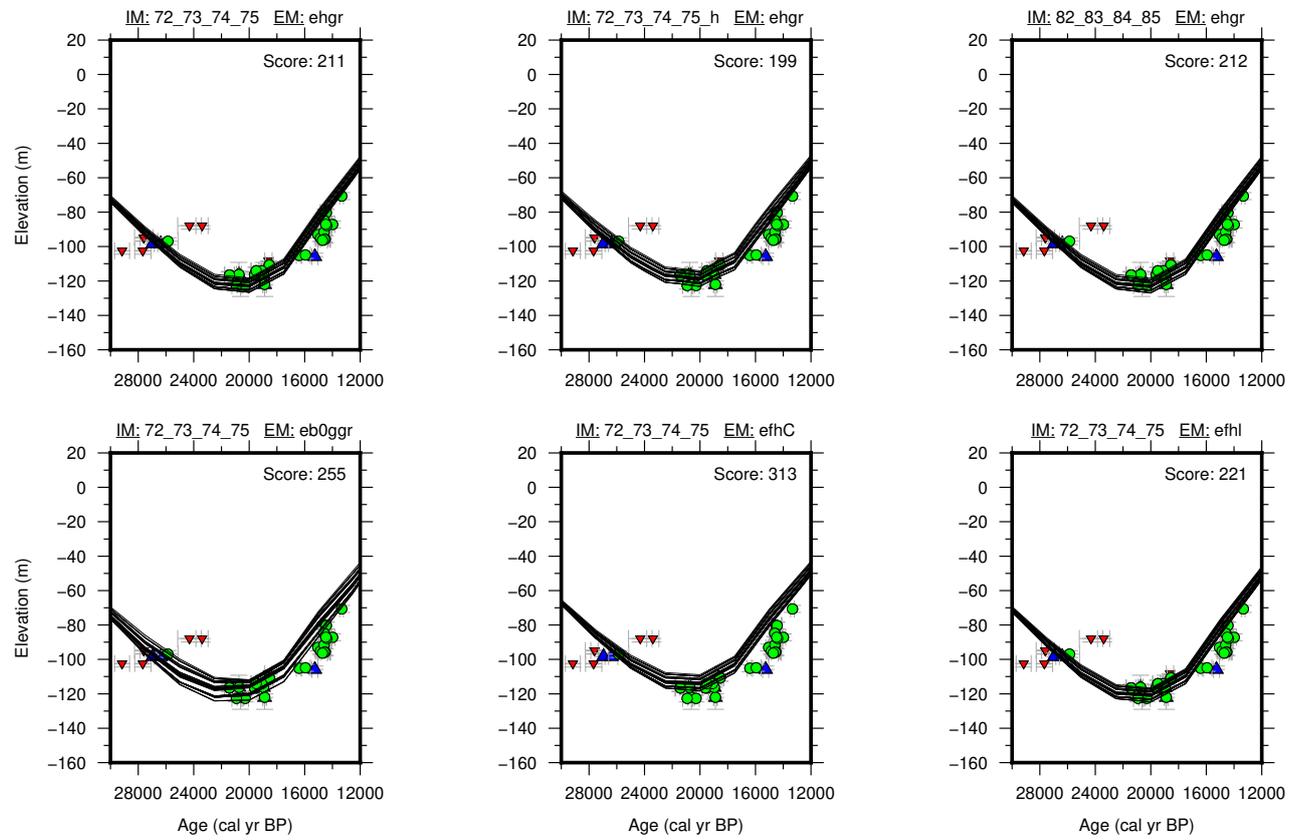
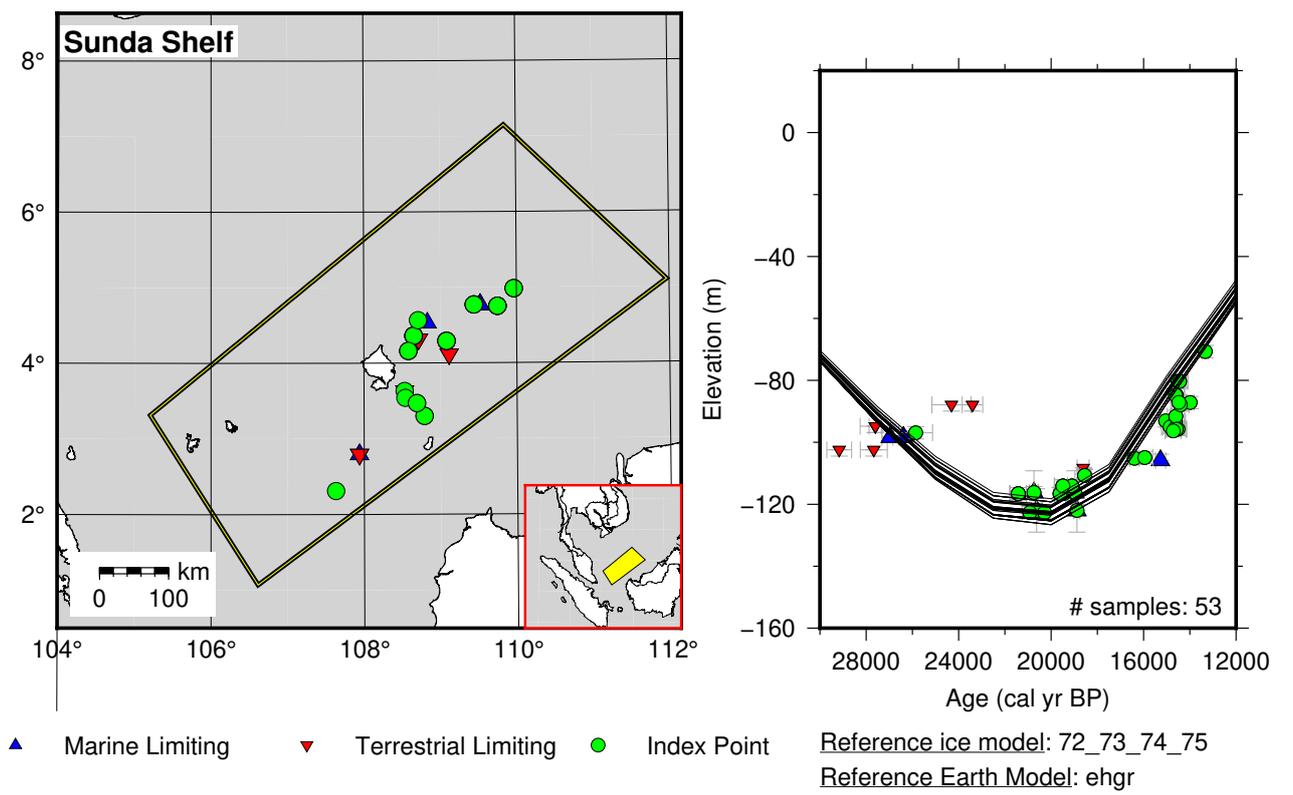
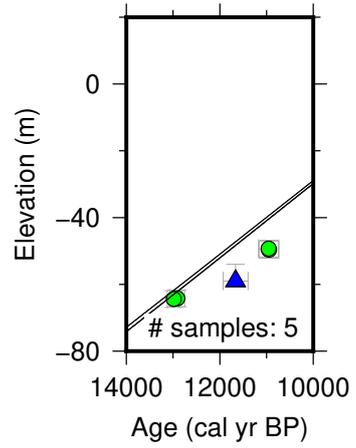
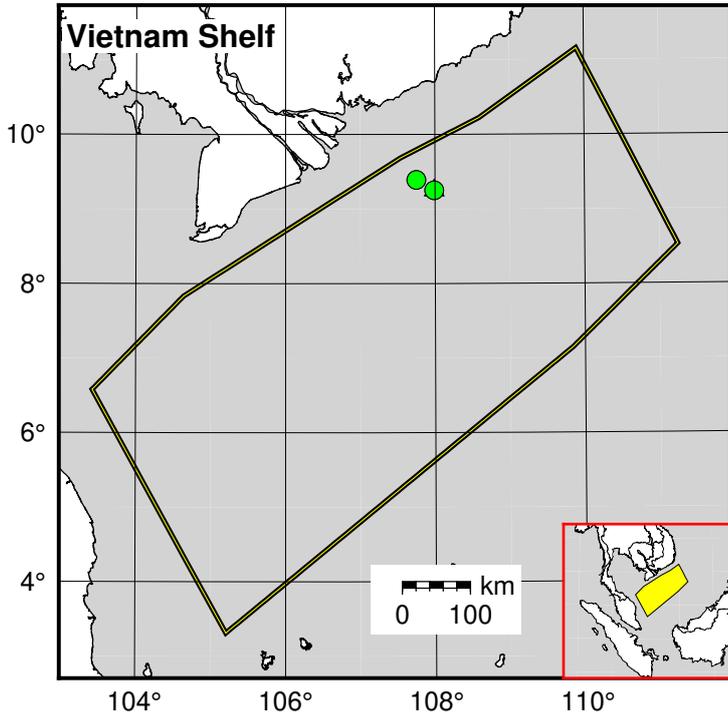


Figure 161: Paleo-sea level and comparison of six models for subregion Sundaland, location Sunda Shelf.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

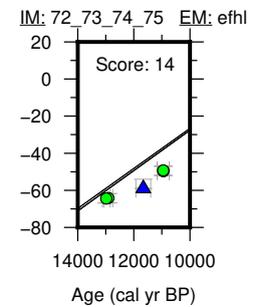
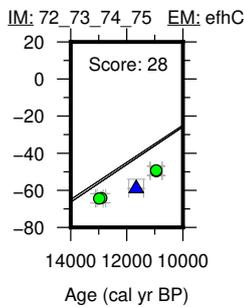
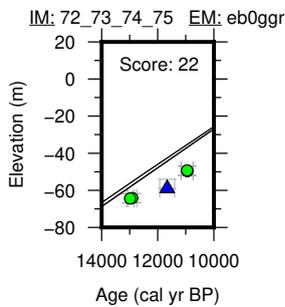
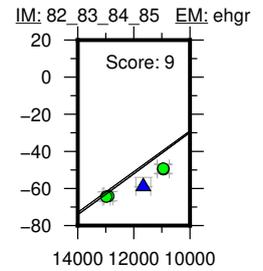
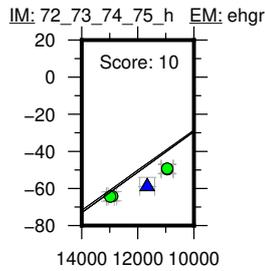
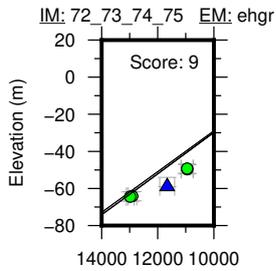


Figure 162: Paleo-sea level and comparison of six models for subregion Sundaland, location Vietnam Shelf.

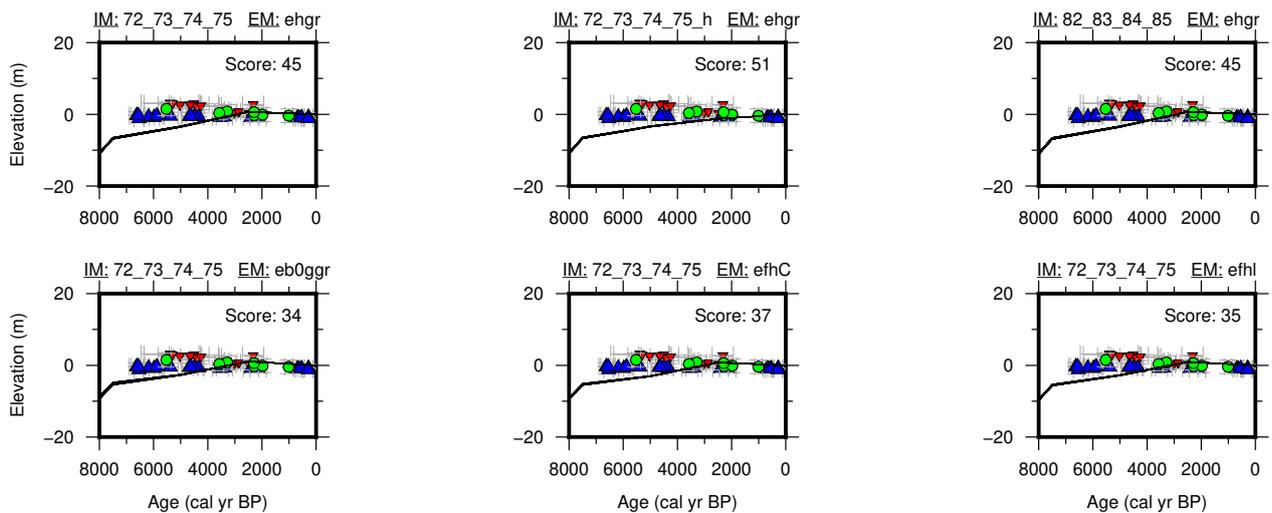
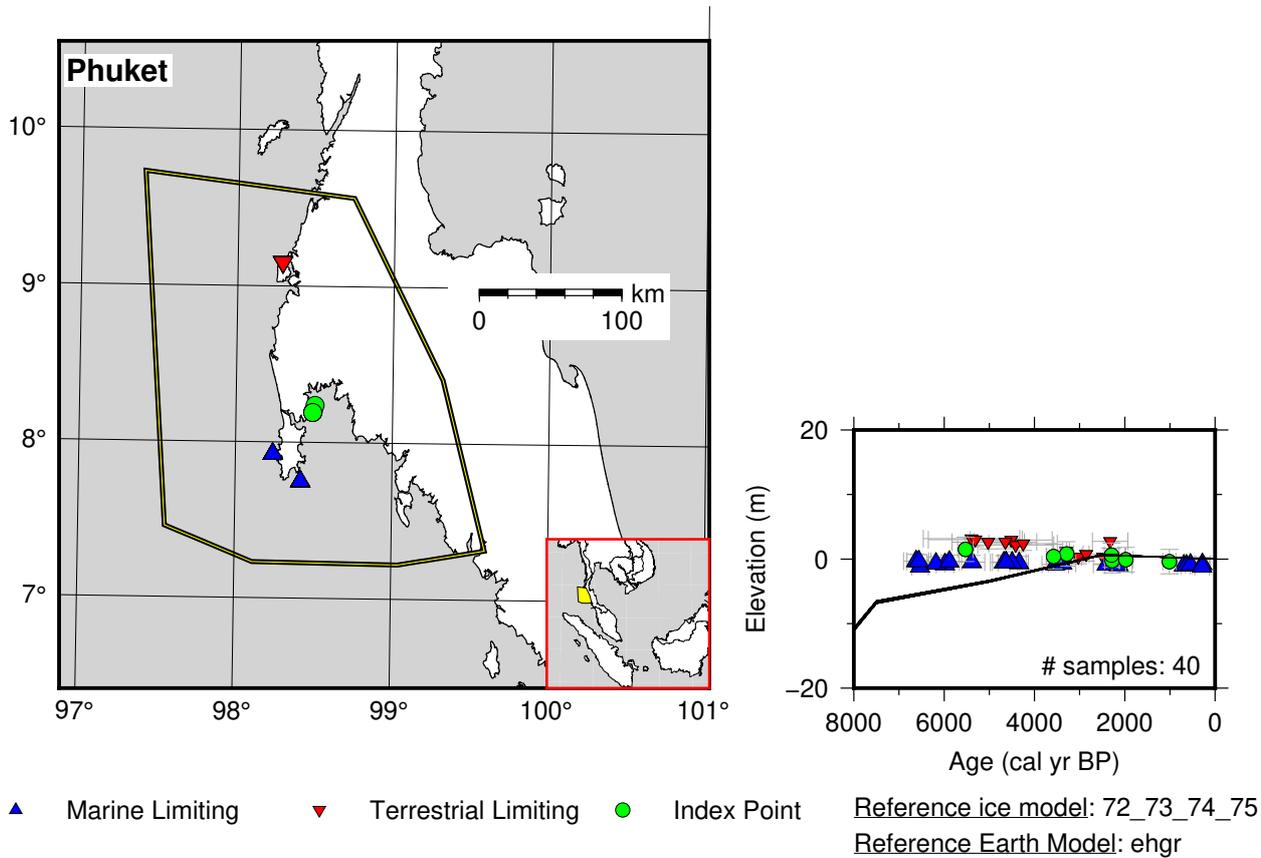
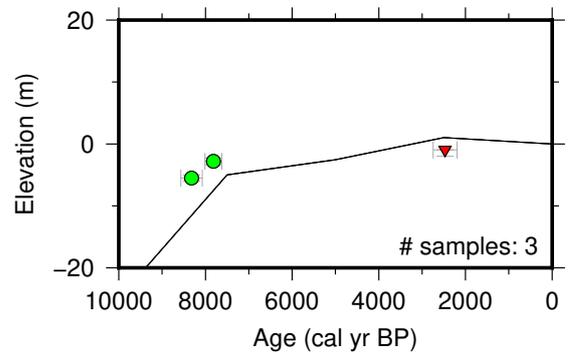
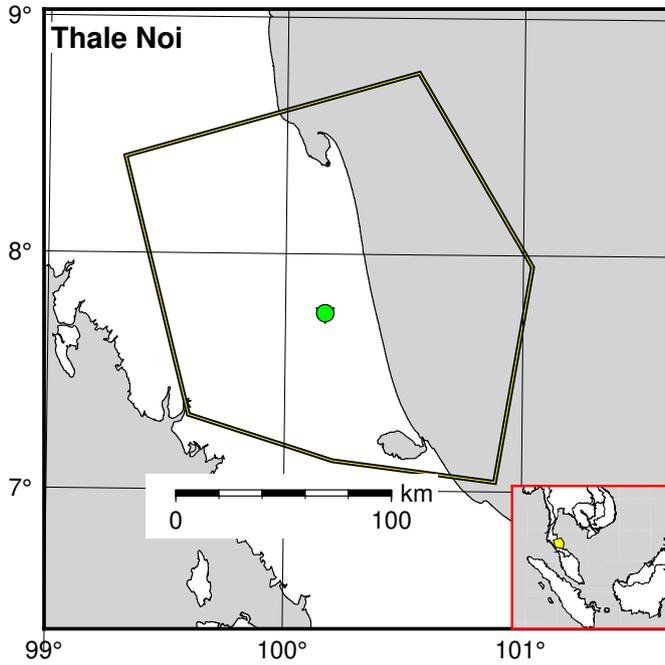


Figure 163: Paleo-sea level and comparison of six models for subregion Sundaland, location Phuket.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
 Reference Earth Model: ehgr

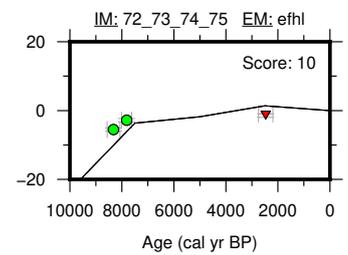
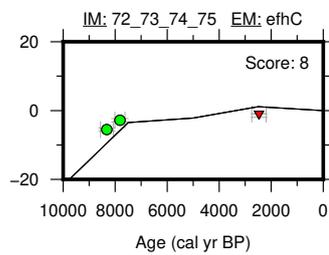
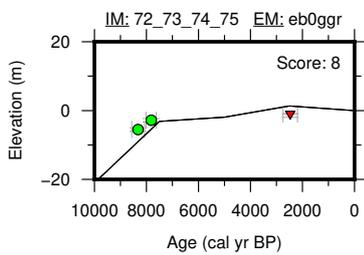
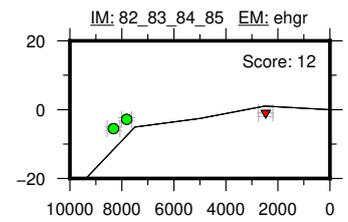
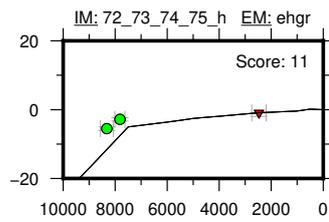
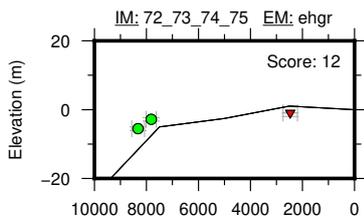


Figure 164: Paleo-sea level and comparison of six models for subregion Sundaland, location Thale Noi.

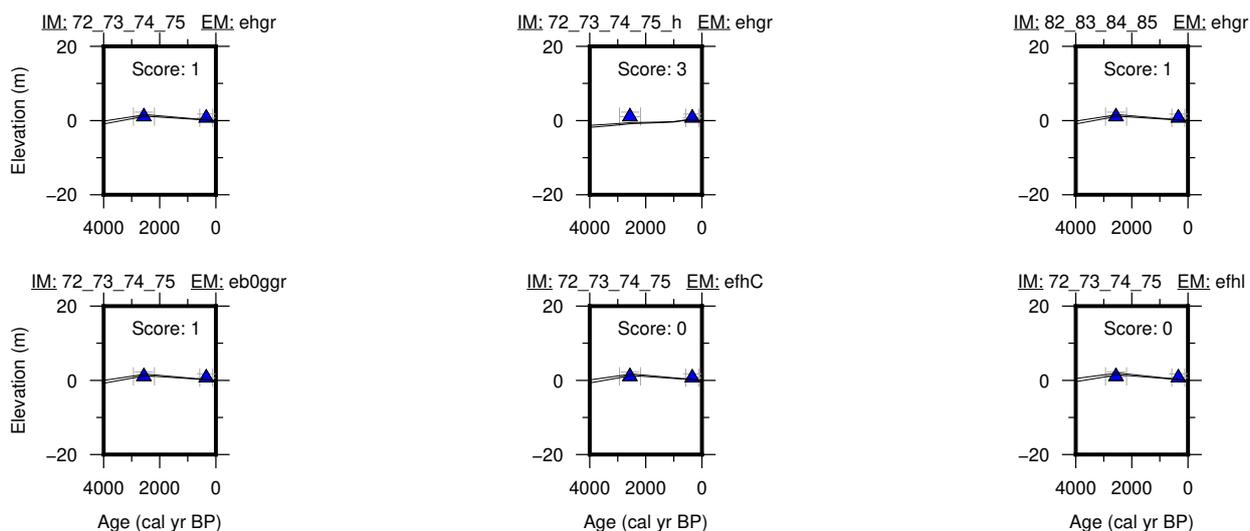
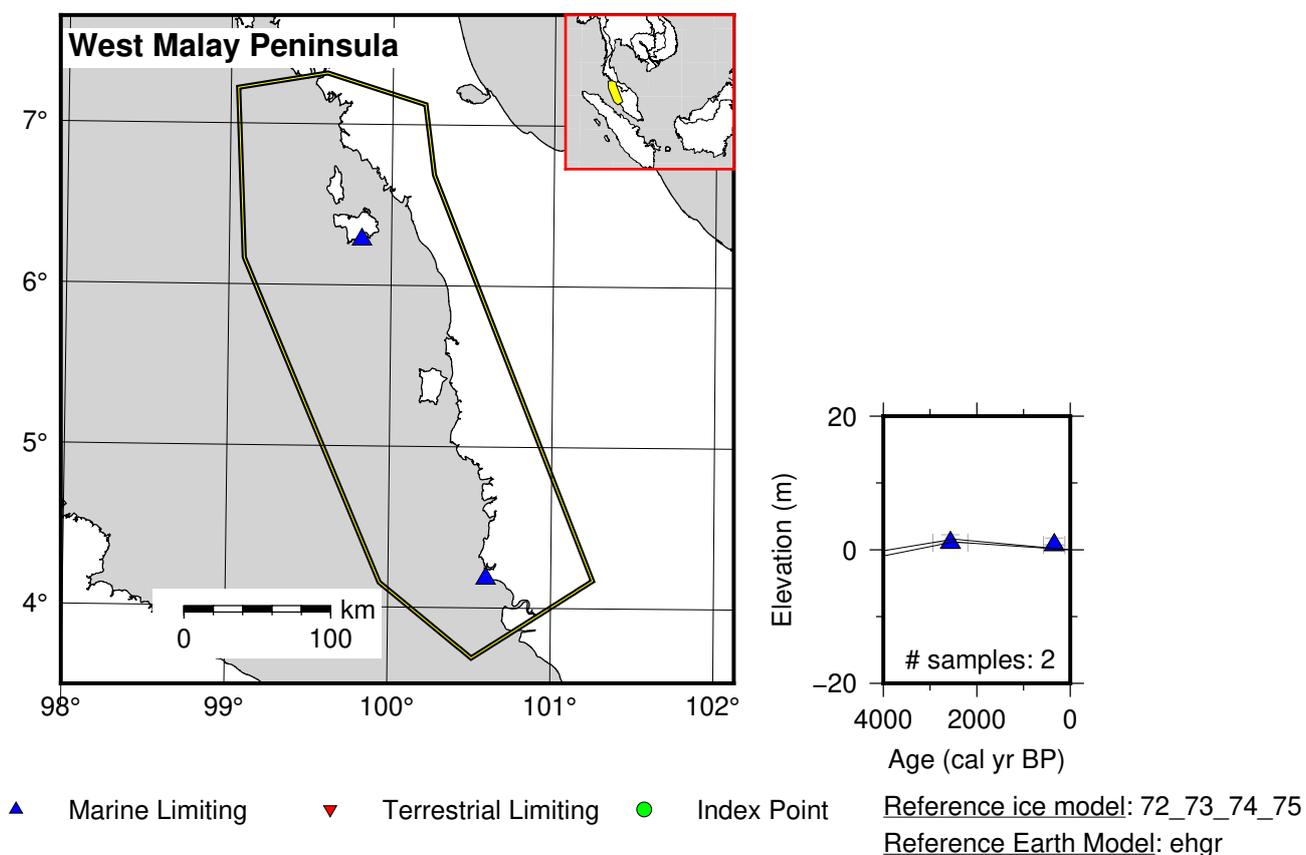


Figure 165: Paleo-sea level and comparison of six models for subregion Sundaland, location West Malay Peninsula.

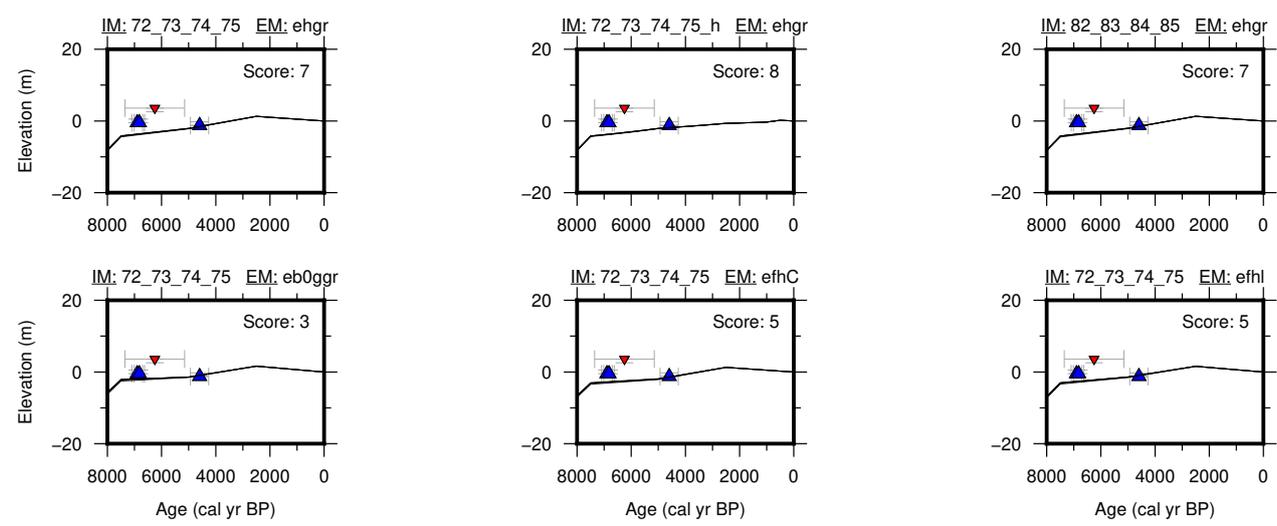
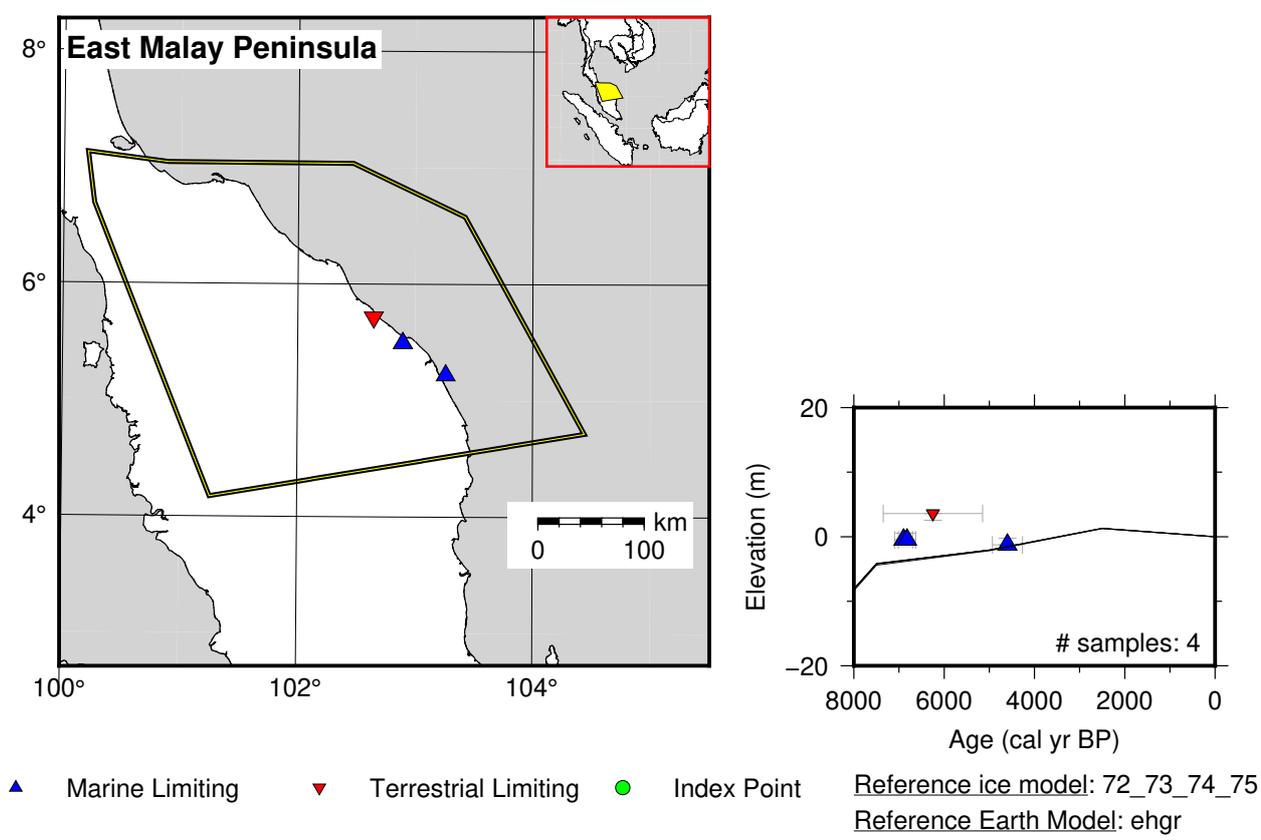


Figure 166: Paleo-sea level and comparison of six models for subregion Sundaland, location East Malay Peninsula.

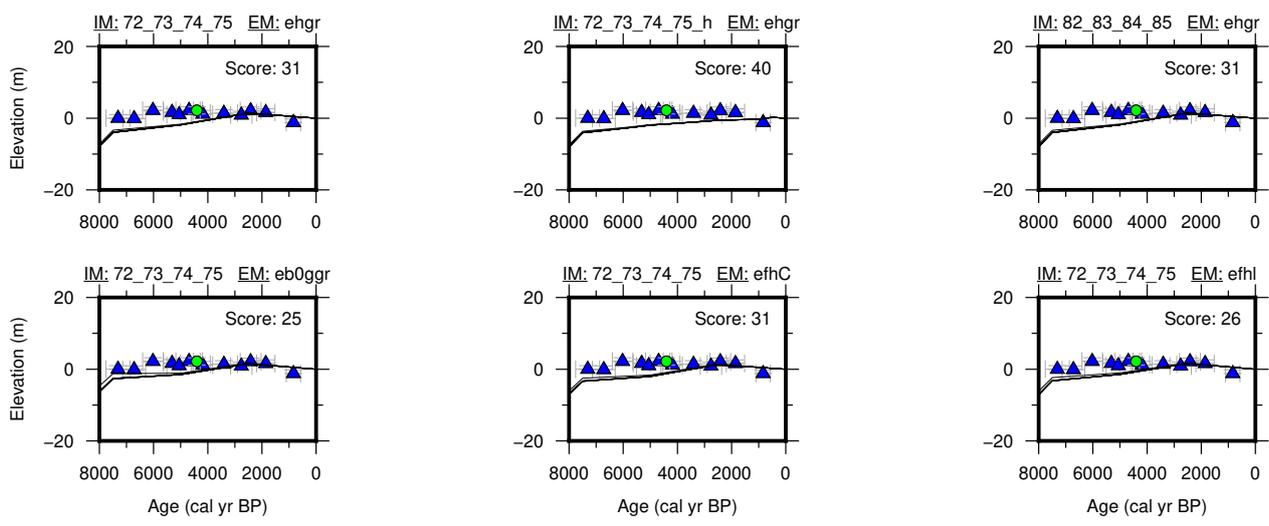
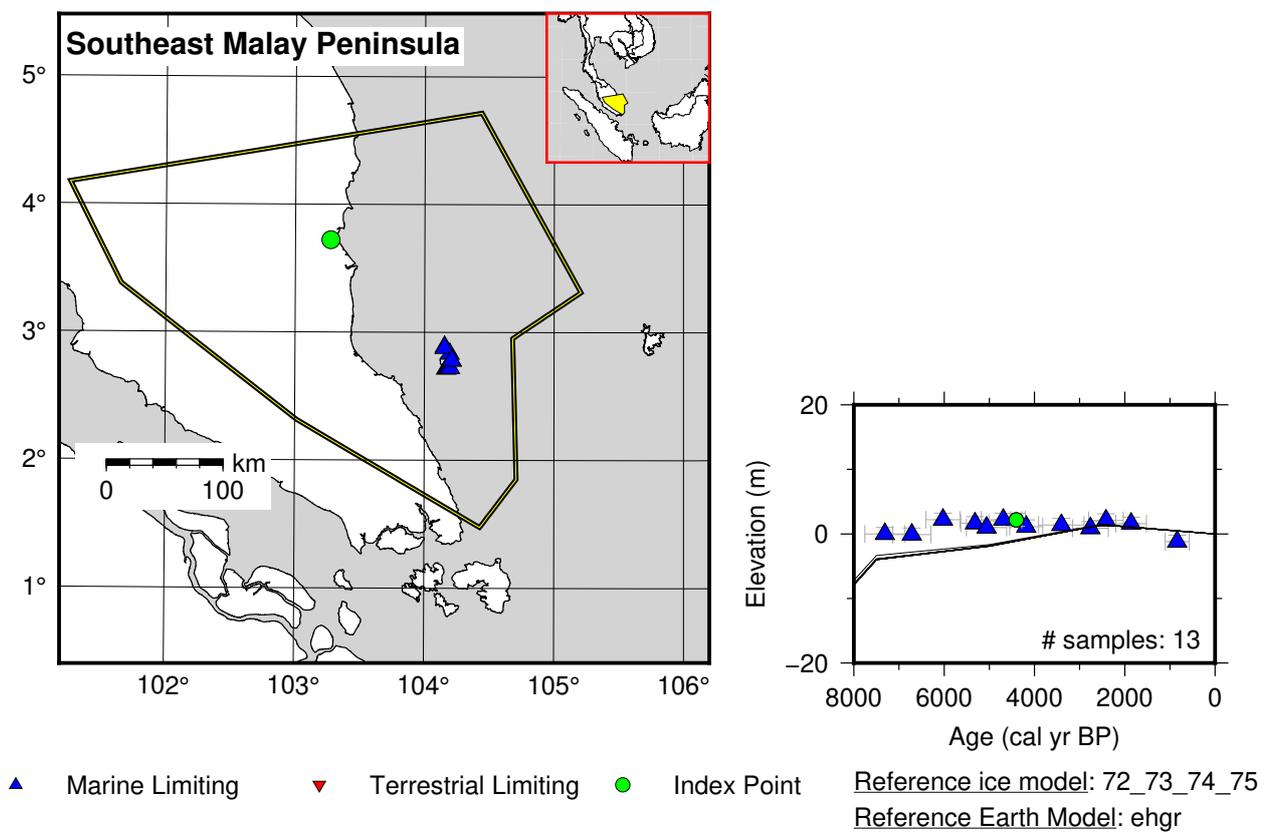
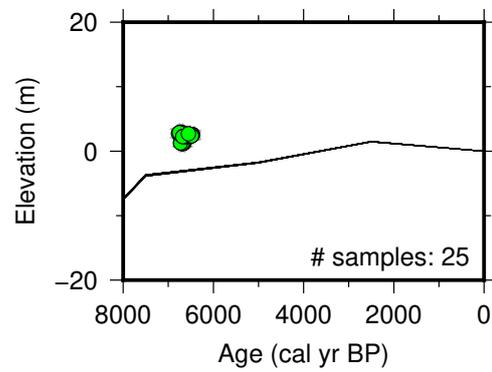
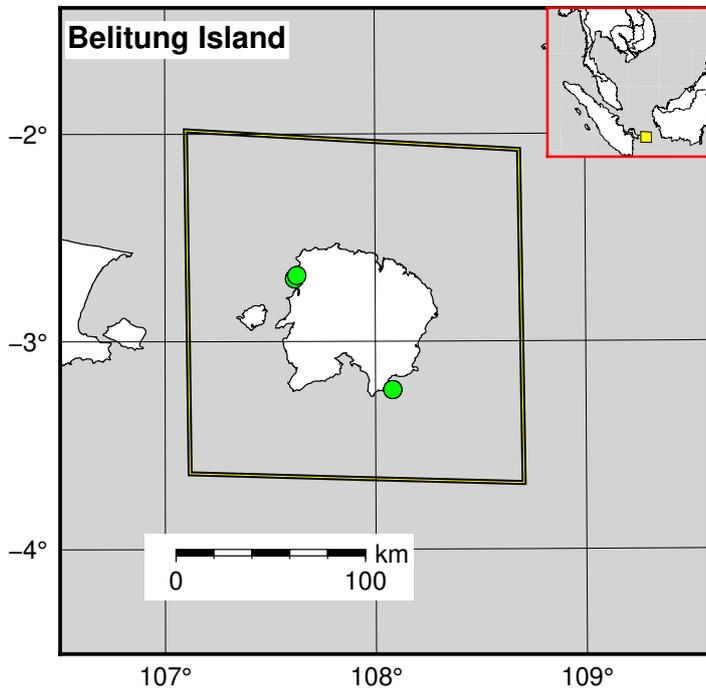


Figure 167: Paleo-sea level and comparison of six models for subregion Sundaland, location Southeast Malay Peninsula.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

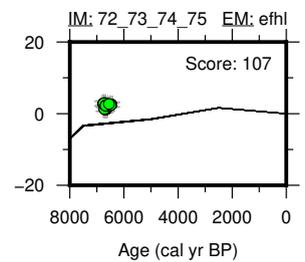
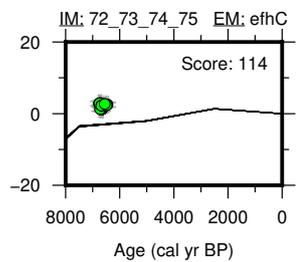
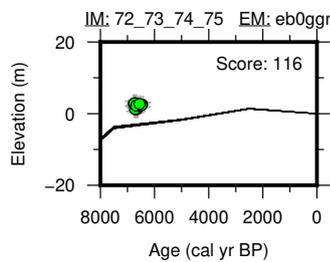
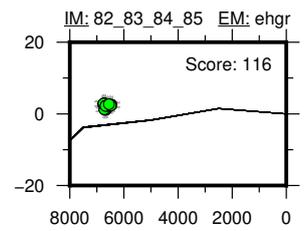
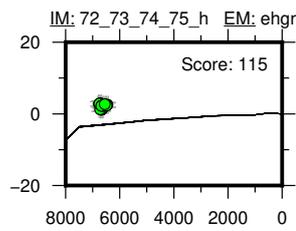
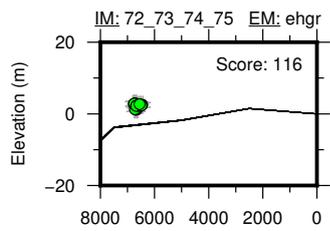
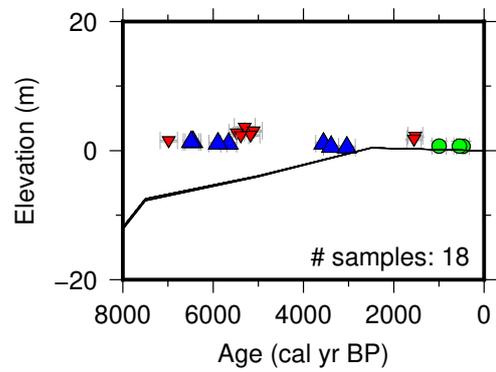
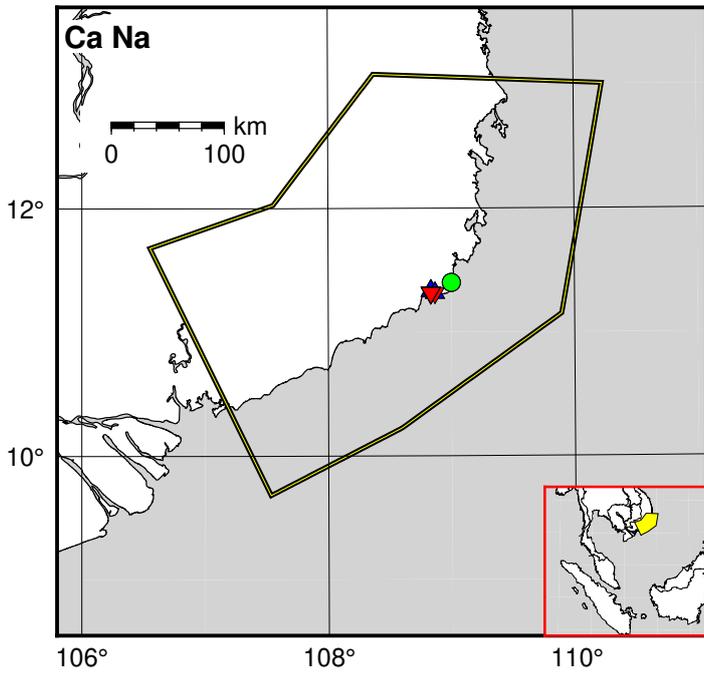


Figure 168: Paleo-sea level and comparison of six models for subregion Sundaland, location Belitung Island.



▲ Marine Limiting ▼ Terrestrial Limiting ● Index Point

Reference ice model: 72_73_74_75
Reference Earth Model: ehgr

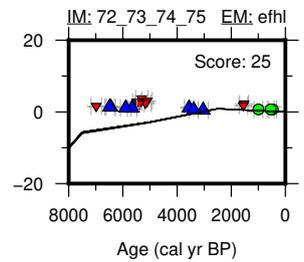
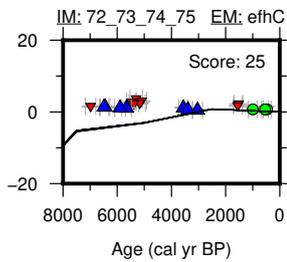
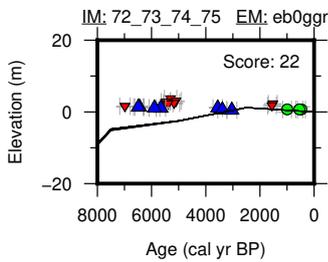
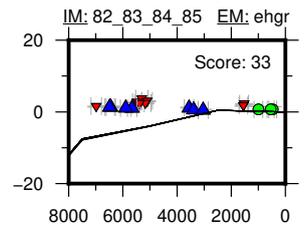
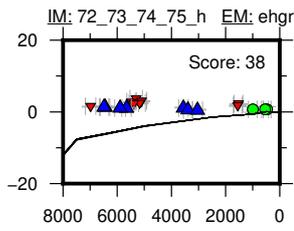
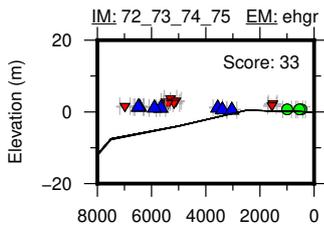


Figure 169: Paleo-sea level and comparison of six models for subregion Sundaland, location Ca Na.

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