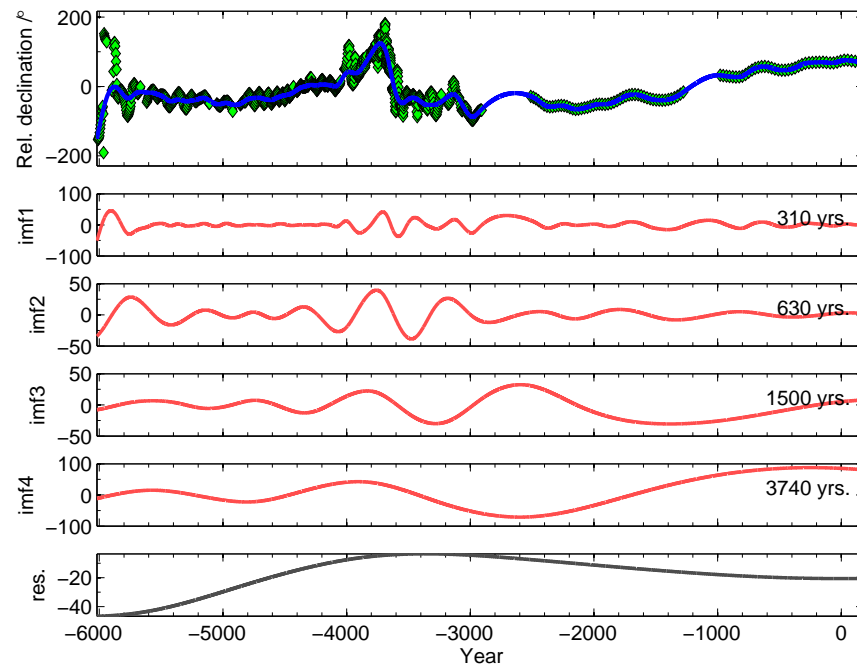


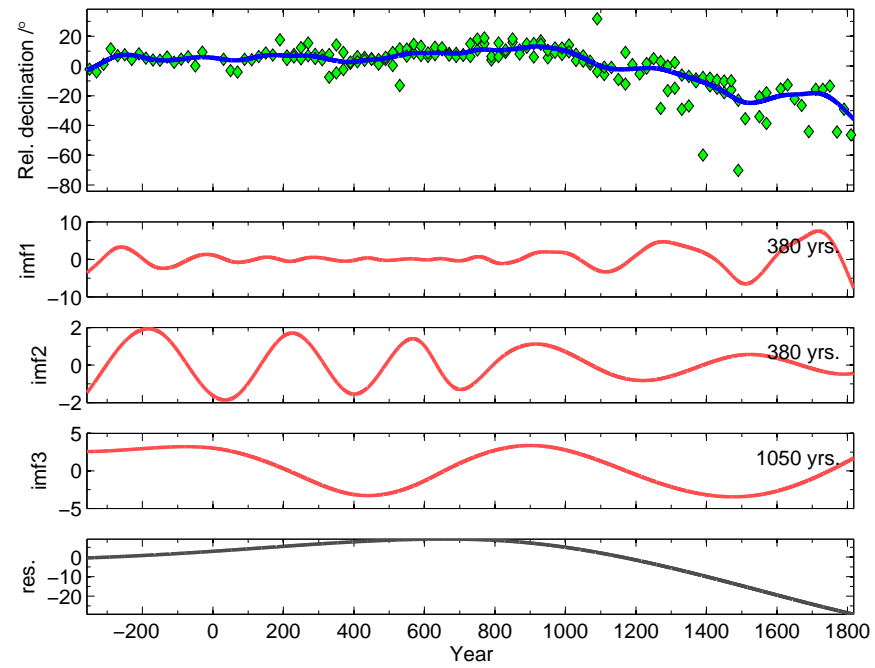
Table 1: Periodicities (in years) obtained by EMD analysis for the Holocene sediment magnetic records. Details of how the modes were selected are given in the paper.

Record	Declination	Inclination	RPI
AAM	1500	1100	1140, 1300, 3070
AD1	/	1010, 1680, 4160	1250, 2170, 2820, 5990
ANN	380, 1050	410, 720, 1380	/
ARA	250, 790	250, 630	/
ASL	800, 1280	1600	/
BAI	8090	3280	/
BAM	1120, 2350, 5050	2440	/
BAR	970, 1620	790, 1410, 6750	450, 1030, 1830
BEA	850, 2170	1020, 2000, 3500	1040, 2560
BEG	610, 1180, 1730	850, 1100, 2870	/
BI2	3010, 4350	2820, 4470	1490, 3720, 5200
BIR	200, 440, 1060	360, 650, 1190, 3320	730, 1350, 3700
BIW	1640, 2420, 5300	2100	/
BLM	1310, 1940, 3520	950, 1700, 2860	/
BOU	150, 330, 610	1000	/
CAM	560, 1530, 5080	880, 5790	/
CHU	1750, 5180	920, 6570	1820, 4870
DES	360, 540, 1060, 2230	380, 2320	/
EAC	690, 1580	510, 970, 3270	610, 1280
EIF	550, 710, 1810, 3860, 8760	600, 1050, 2450, 3650, 9940	/
ERH	460, 910, 3180	770, 1470, 2320	/
ERL	2490, 6940	1810, 3900, 8870	/
ESC	2200, 4800, 9030	1550, 2780	1070, 1820, 2630
FAN	1210, 2700, 4960	1080, 1730, 340, 6290	/
FIN	1110, 1840, 3450, 7510	1230, 2340, 4640	/
FIS	1380, 3190, 6550	1250, 1950, 4270, 8340	/
FRG	1860, 4010	2230, 4300	2310, 4920
FUR	1820, 1960, 3800	2520, 4370	/
GAR	1330, 2400, 3390	1410, 2950	2040
GEI	1780, 2960	3740	/
GHI	3060	1280, 2680	1420, 2210
GNO	1760, 2860, 5230	3140	/
GRE	1600, 4170	1300, 2590,	/
HUR	2210, 3220, 8580	980, 1960	/
ICE	1480, 2970	1170, 2330	/
KEI	3930, 7500	2410, 3780	/
KYL	550, 940, 1670	1430	/
LAM	1100, 1540, 2770	830, 1570, 5210	/
LEB	1150, 2060, 3300	1070, 1830, 2470	1630, 3600
LOM	1810	1050, 3920	/
LOU	1950, 3640, 5120	/	/
LSC	970, 1450, 3150	1260, 2100, 4570	/
MAR	590, 1200, 1730	830, 1390, 3510	/
MEE	760, 1620, 3410	450, 1380, 3260	/
MEZ	580, 1090, 2310	400, 990, 2530	690, 1360, 3140
MNT	4420, 9380	3320	/
MOR	530	830	/
MOT	1130, 3380	2580, 4630	/
NAR	1410, 3730, 6920	1870, 2600, 5530	/
NAU	2330, 2940, 5580	1620, 2280, 5100	1180, 2000, 3550
NEM	1030, 2000, 3580, 5170	970, 3770	/
PAD	1070, 3800	400, 1340, 2250, 5170	460, 1000, 1970
PEP	/	460, 1360, 2900, 4310	610, 1770, 3100
POH	960, 1810	1530	1030, 1570
SAG	1630, 4530	790, 2320, 5400	/
SAN	1560, 2660, 4640	810, 1630, 2640	/
SAR	1820, 3100, 7180	1680, 2560, 4560	/
SAV	2020, 3200, 7480	1320, 2560, 4140	/
SCL	640, 1470, 1930, 5480	520, 740, 1860	/
STL	1050, 1440, 3590	560, 1040, 1900, 3090	990, 1270, 2450
SUP	2100, 3120, 5060	1930, 2740, 5320	/
TRE	1410, 2110, 3390, 6190	1760, 3250	1730, 4580
TRI	790, 1190, 2050, 4190	740, 1510, 2290	/
TUR	/	630, 1200	/
VAT	790, 2310, 3100	1050, 2130, 3720	/
VIC	470, 770, 1700	790, 960, 1550	/
VOL	1100, 1680	620, 770, 1550	/
VUK	870, 1510	980, 1490, 2290, 4220	/
WAI	1190, 1960, 3340	1550, 4380, 9830	/
WAS	/	/	3920, 7280
WIN	2210, 3480	1910, 2780, 6700	/
WPA	/	1010, 1200, 3270, 5870	1630, 3000

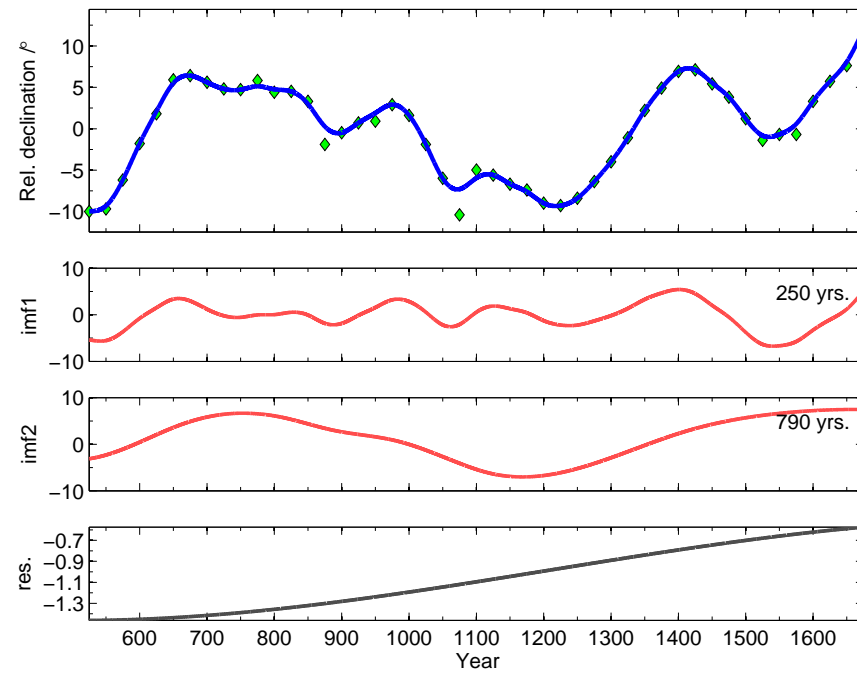
AAM – Alaskan Margin, Arctic Sea



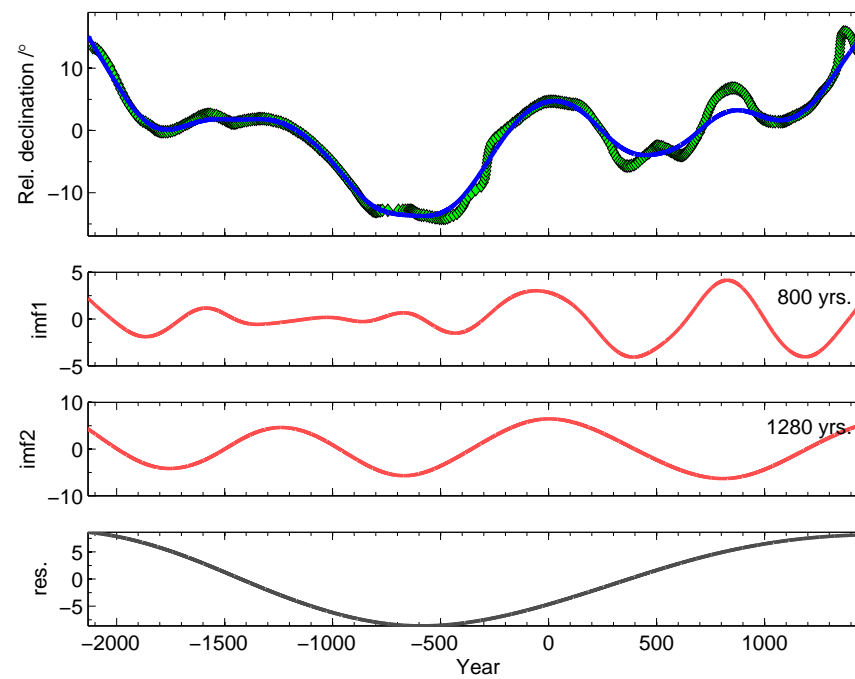
ANN – Lac d' Annecy, France



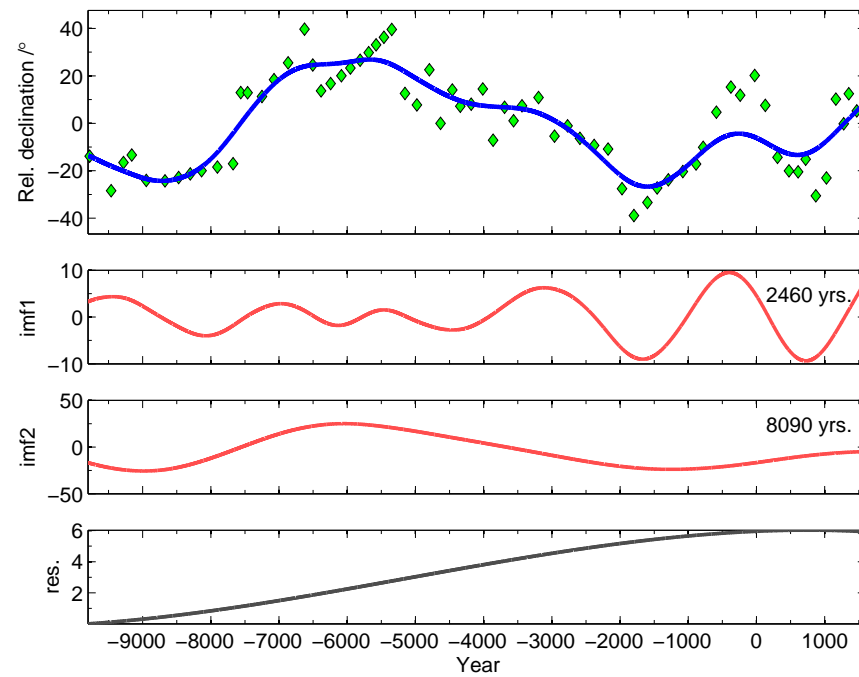
ARA – Lake Aral, Kazakhstan



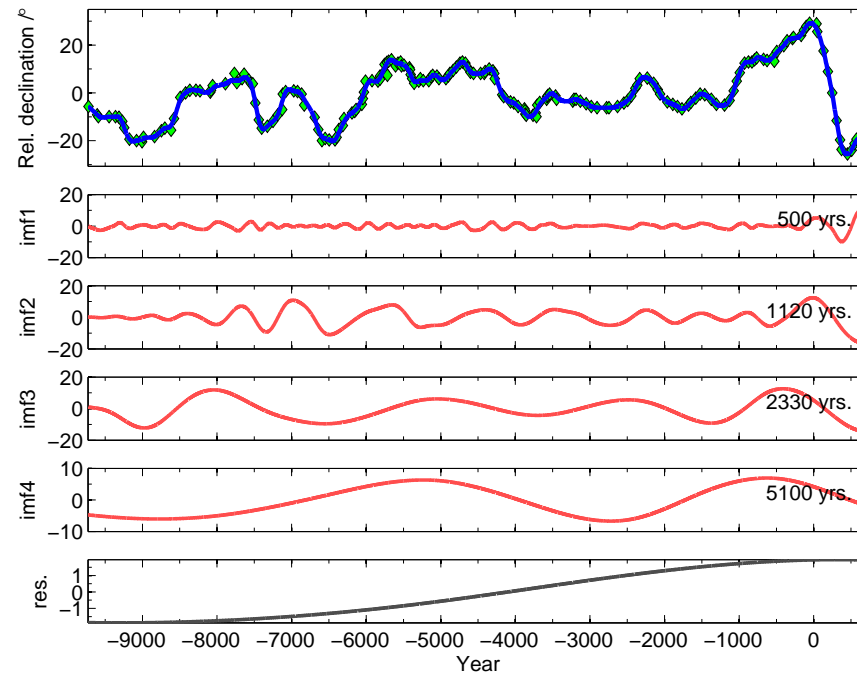
ASL – Lake Aslikul, Russia



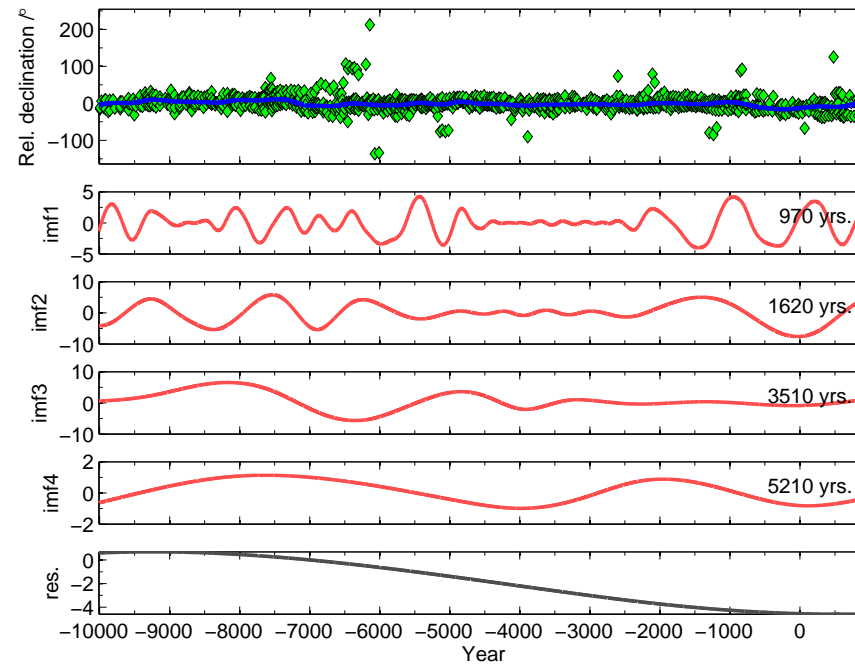
BAI – Lake Baikal, Russia



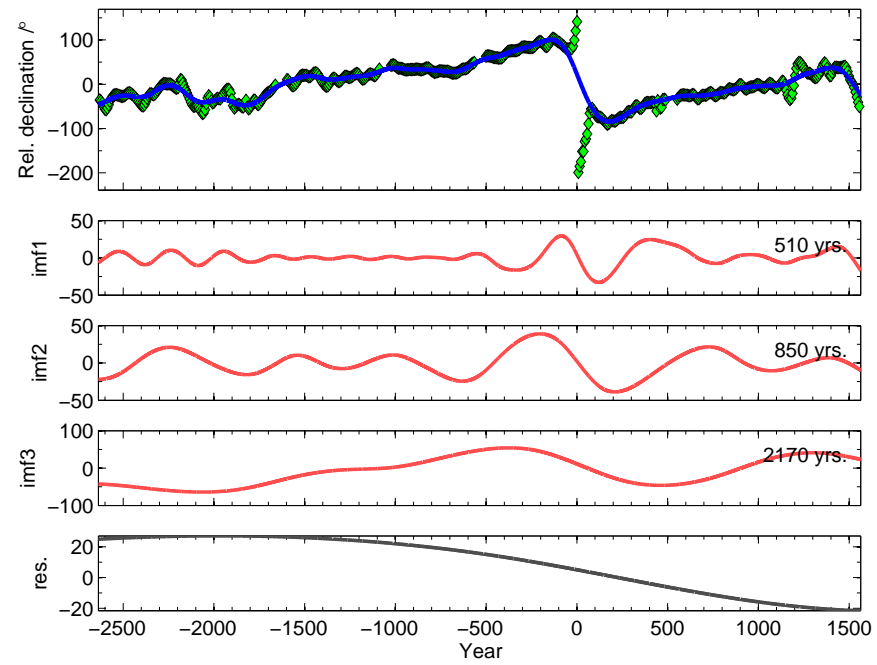
BAM – Lake Barombi Mbo, Cameroun



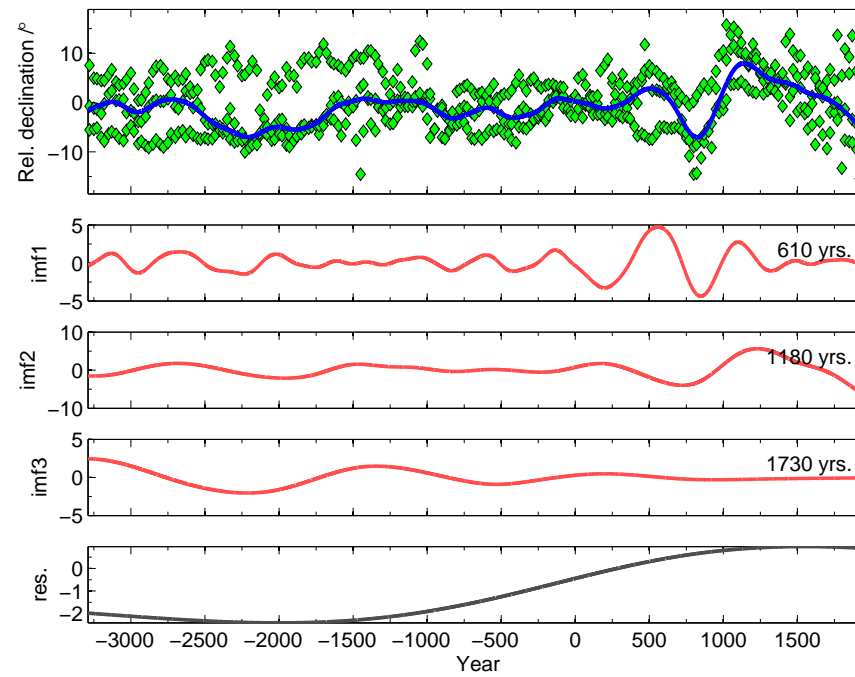
BAR – Lake Barrine, Australia



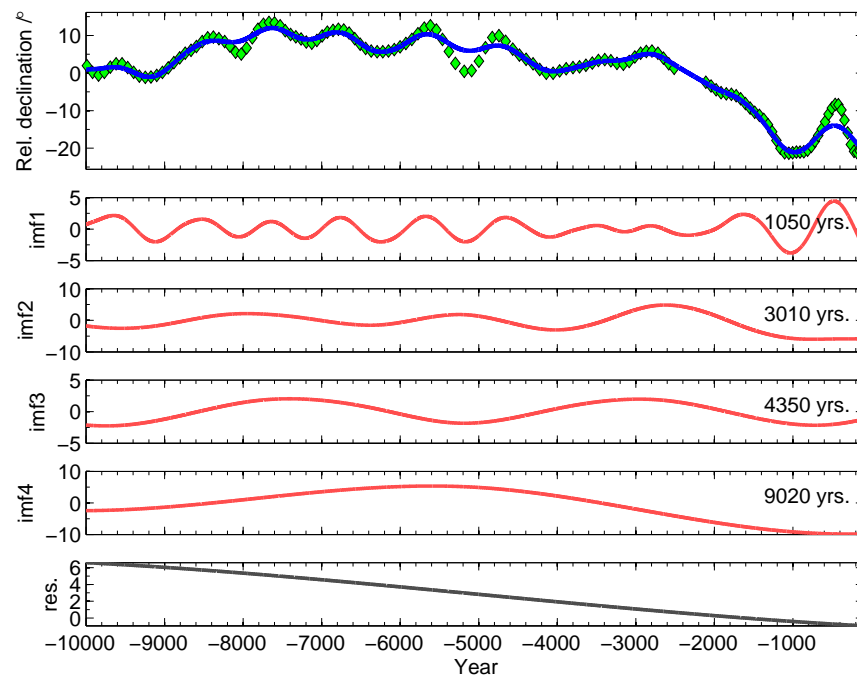
BEA – Beaufort Sea, Arctic Ocean



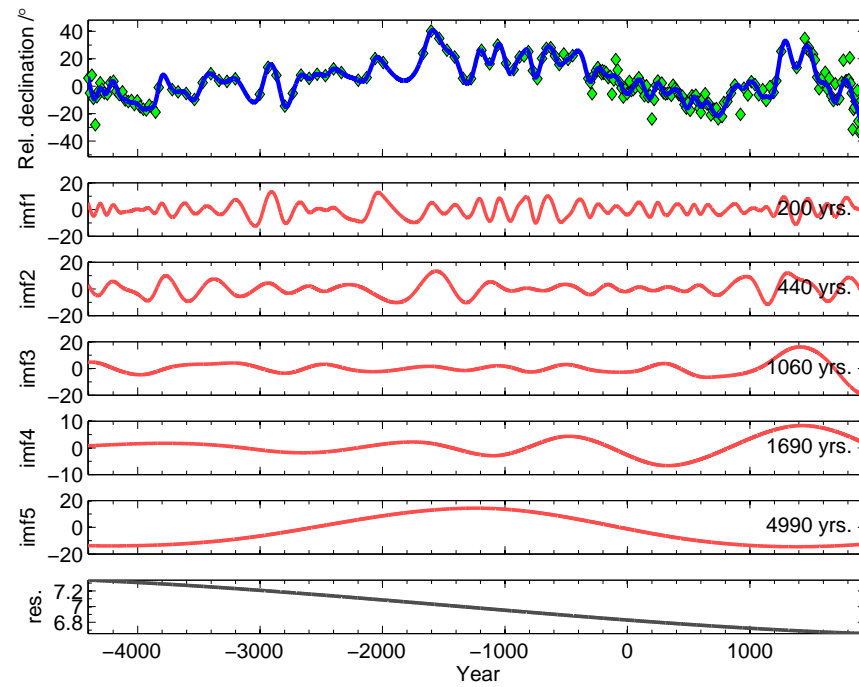
BEG – Lake Begoritis, Greece



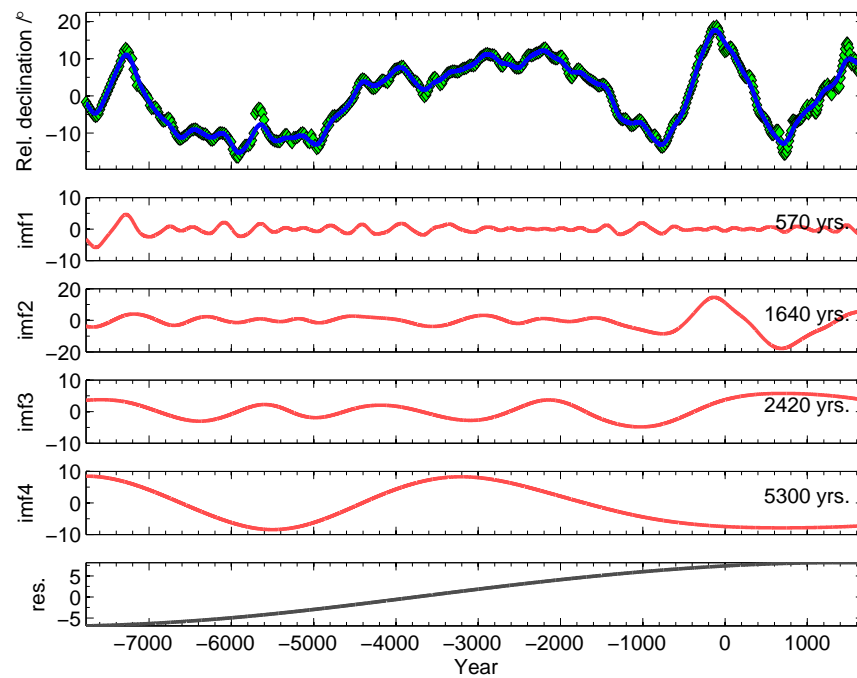
BI2 – Lake Biwa 2, Japan



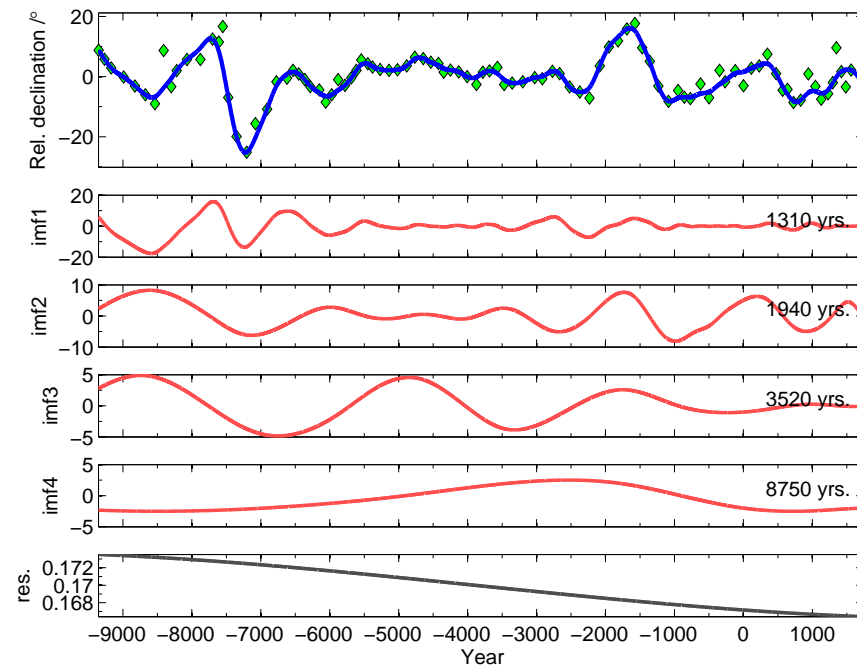
BIR – Birkat Ram, Israel



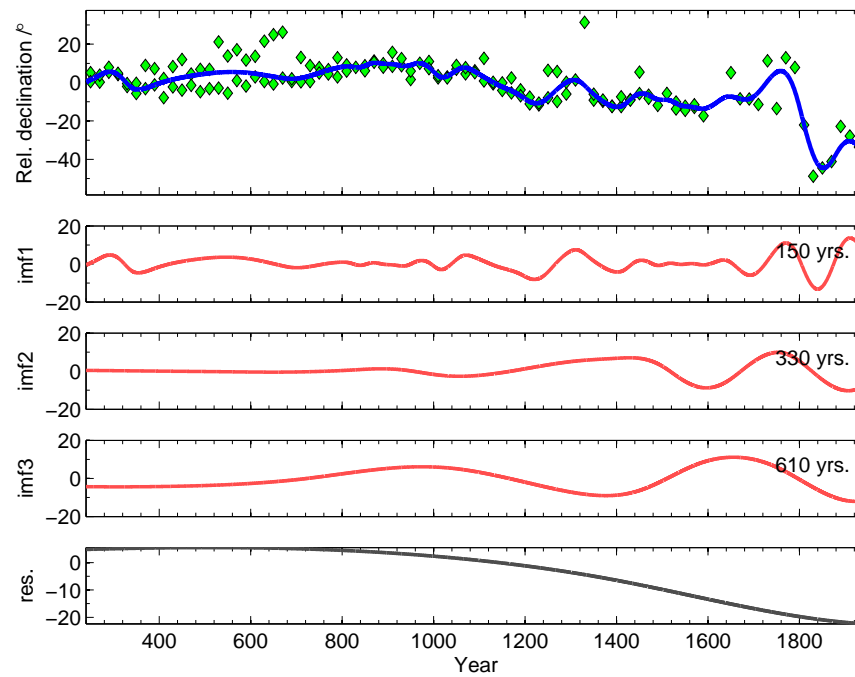
BIW – Lake Biwa, Japan



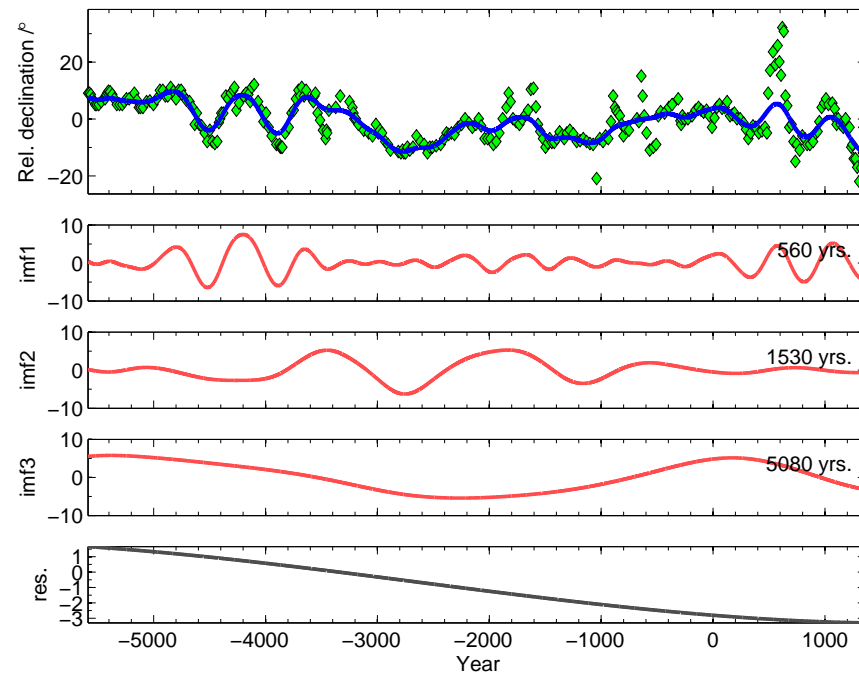
BLM – Lake Bullenmerri, Australia



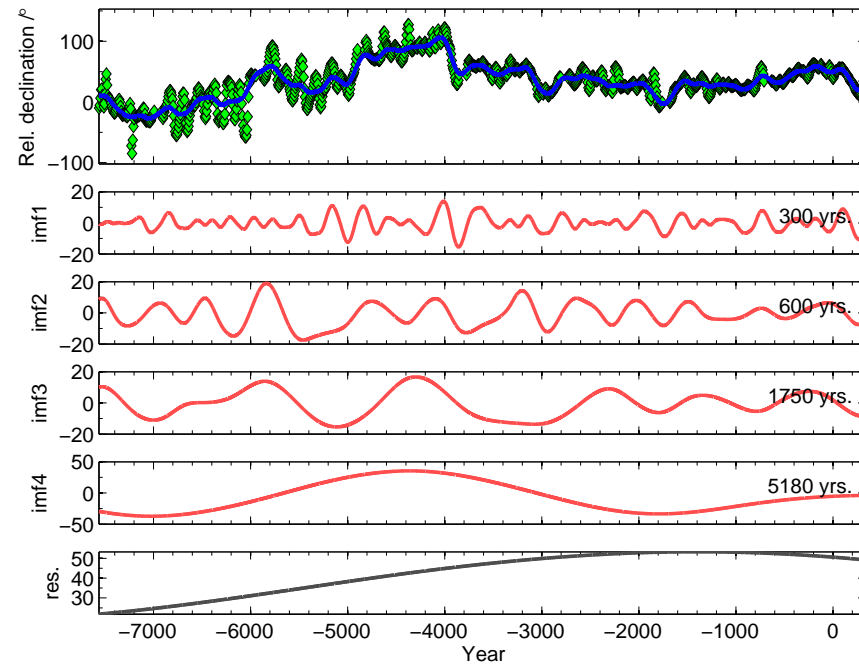
BOU - Lac du Bourget, France



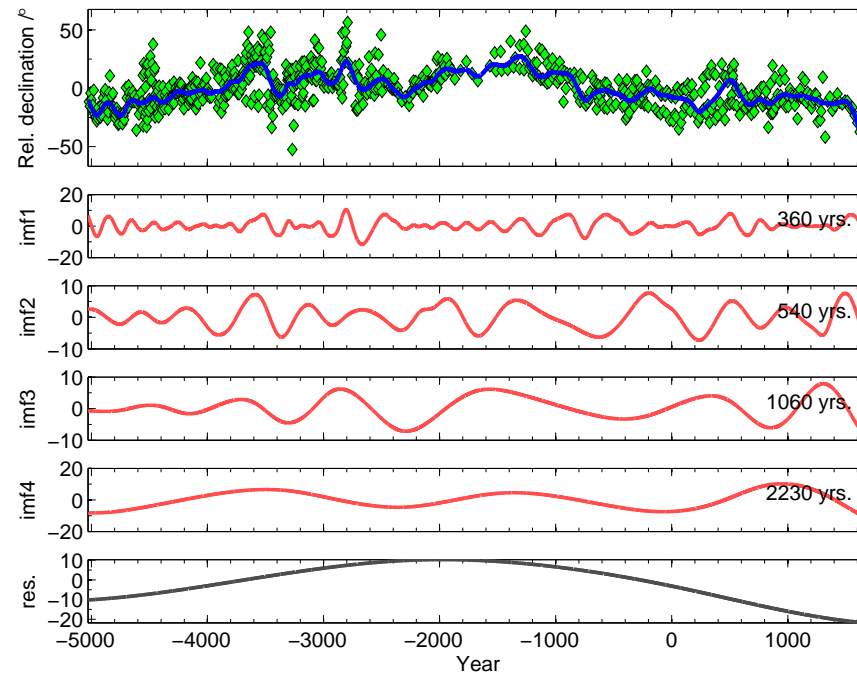
CAM - Brazo Campanario, Argentina



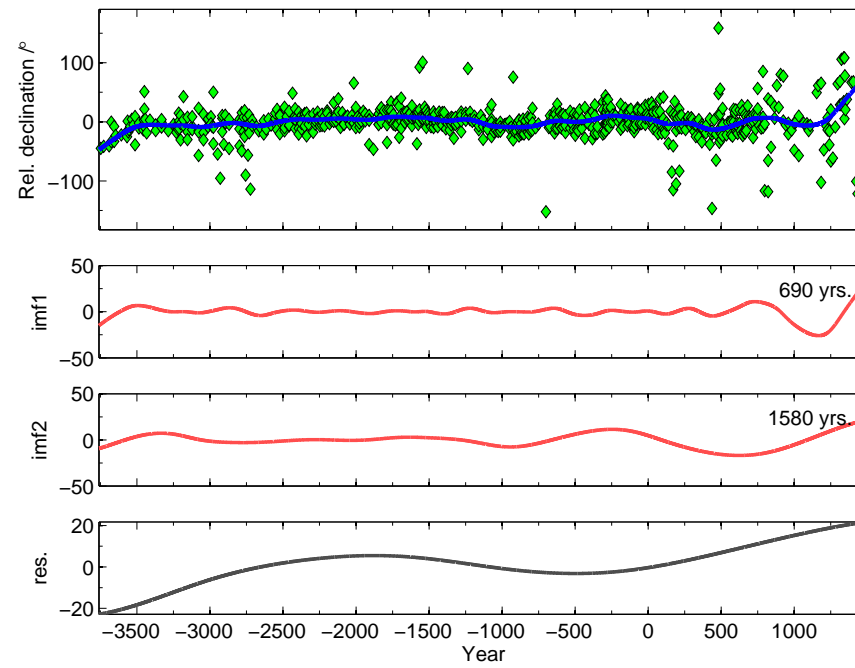
CHU – Chukchi Sea, Arctic Ocean



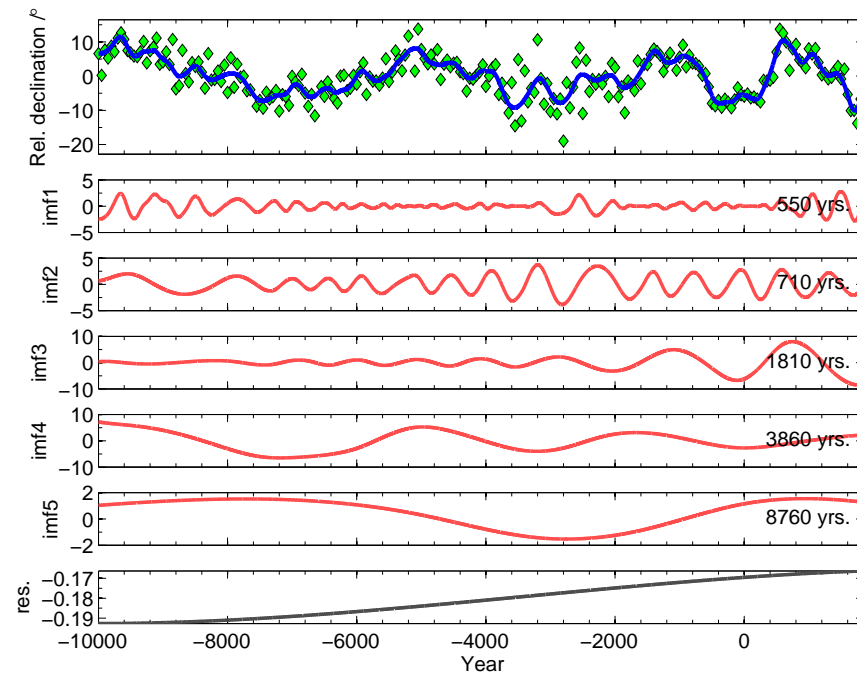
DES – Dead Sea, Israel



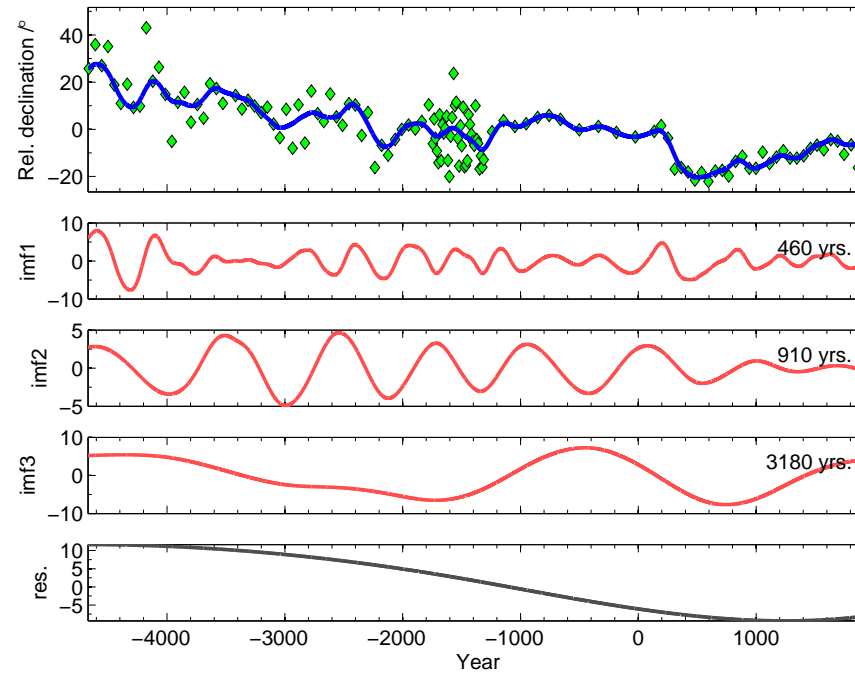
EAC – Lake Eacham, Australia



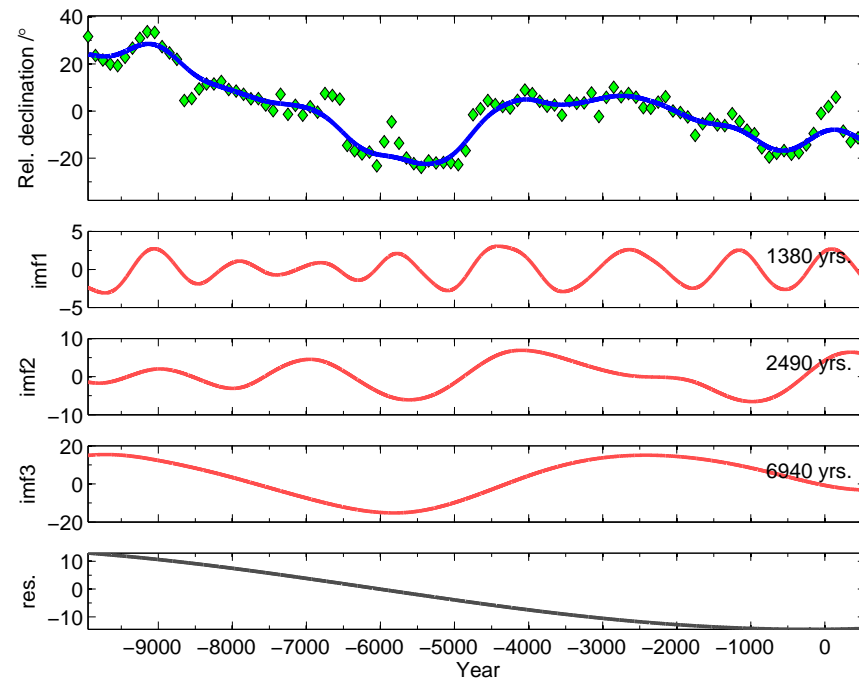
EIF – Eifel maars, Germany



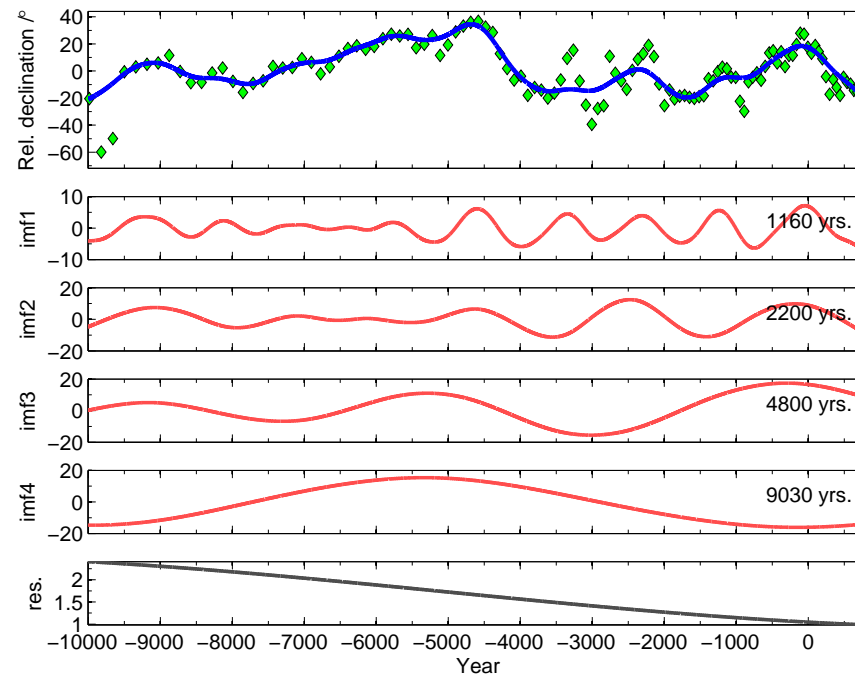
ERH – Erhai Lake, China



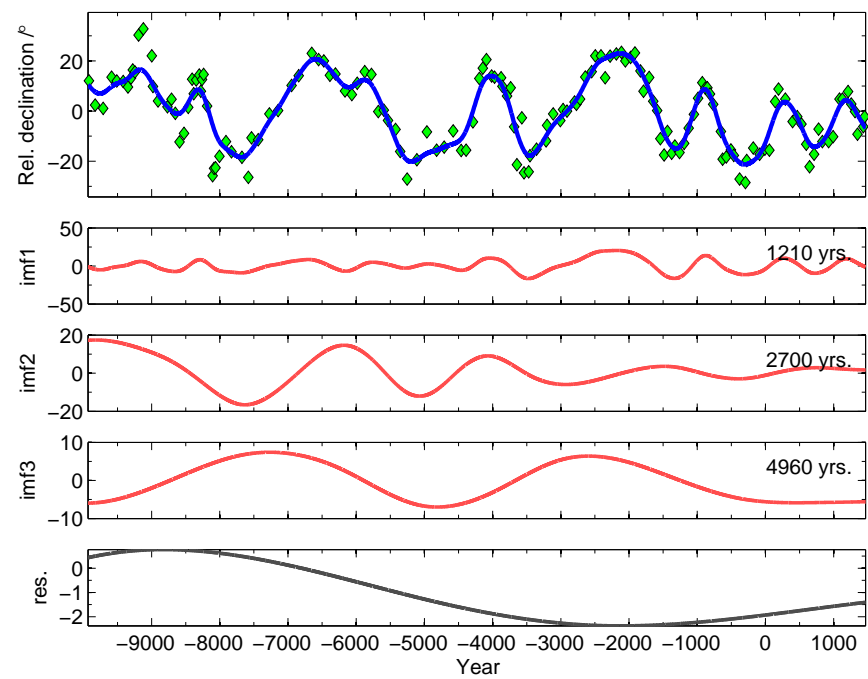
ERL – Erlongwan Lake, China



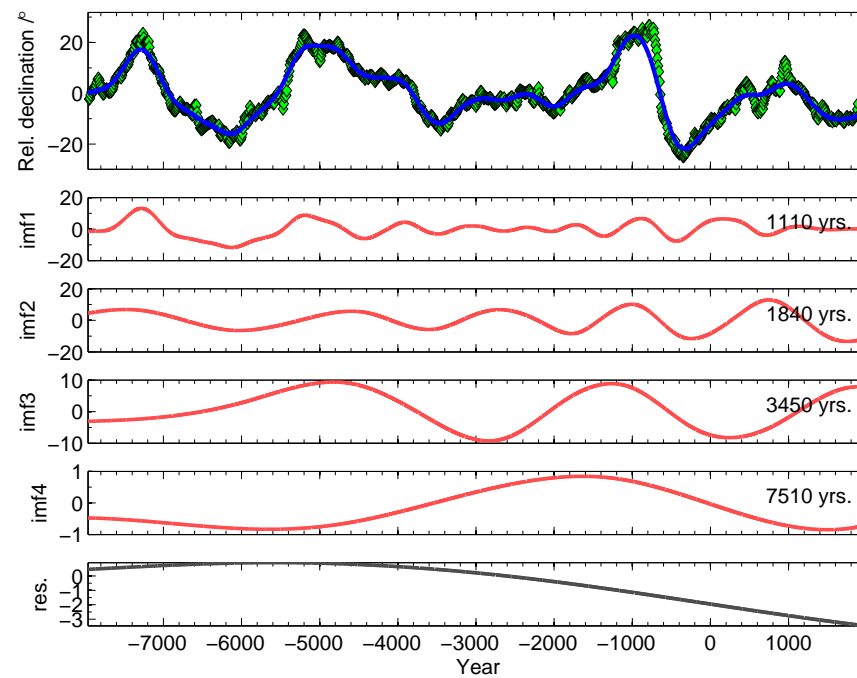
ESC – Lake Escondido, Argentina



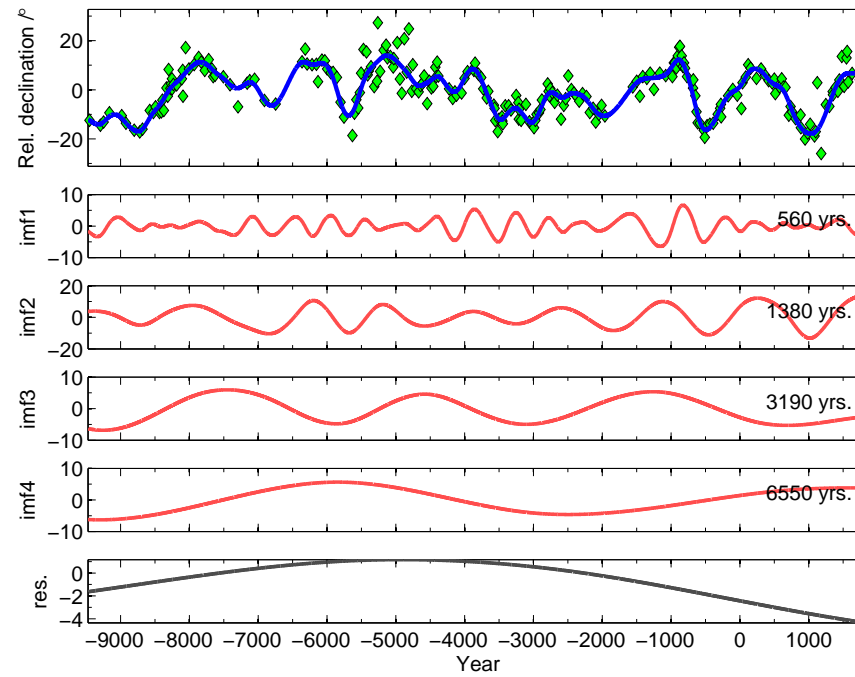
FAN – Lake Fangshan, China



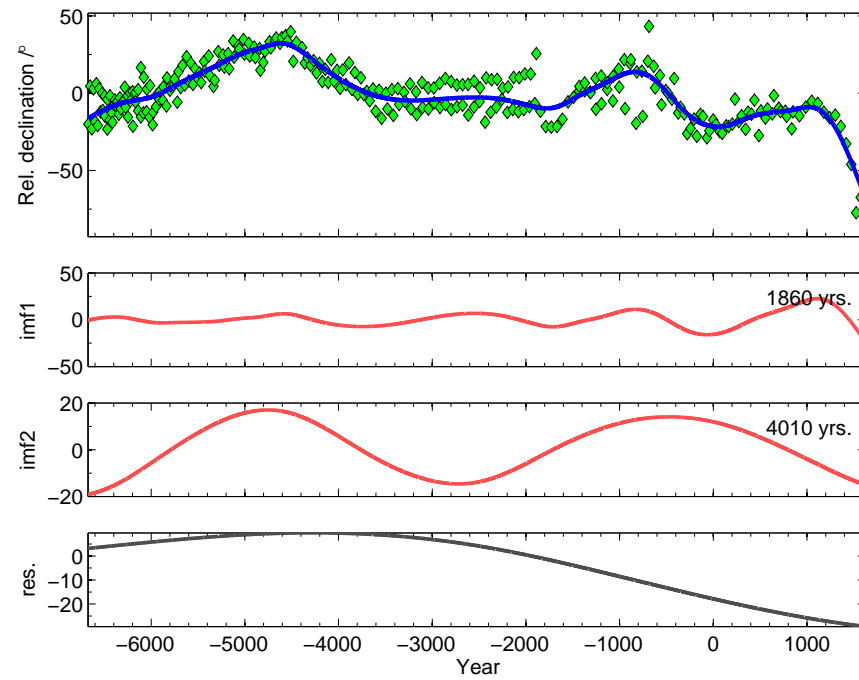
FIN – Finnish Lakes, Finland



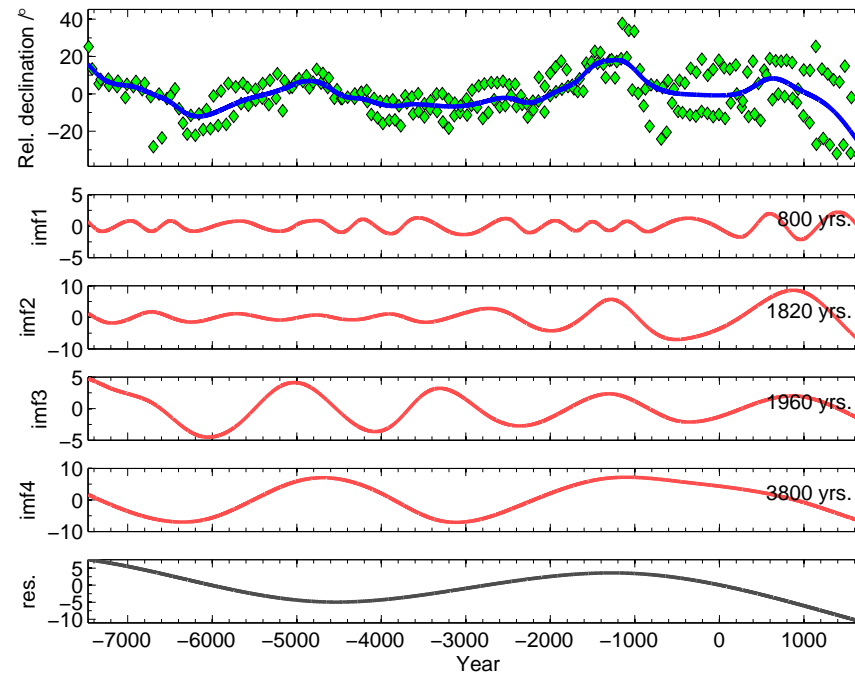
FIS – Fish Lake, USA



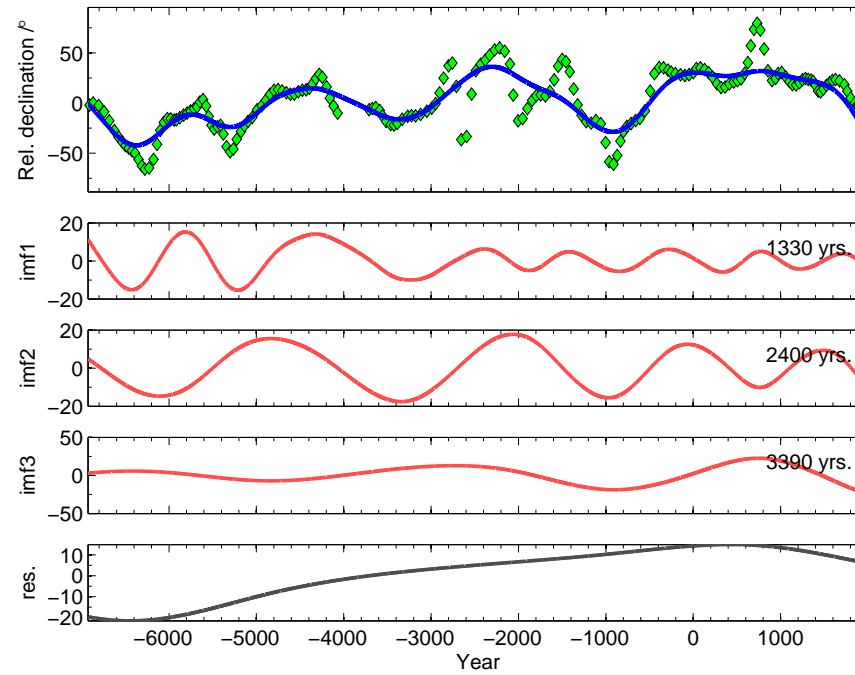
FRG – Frängsjön, Sweden



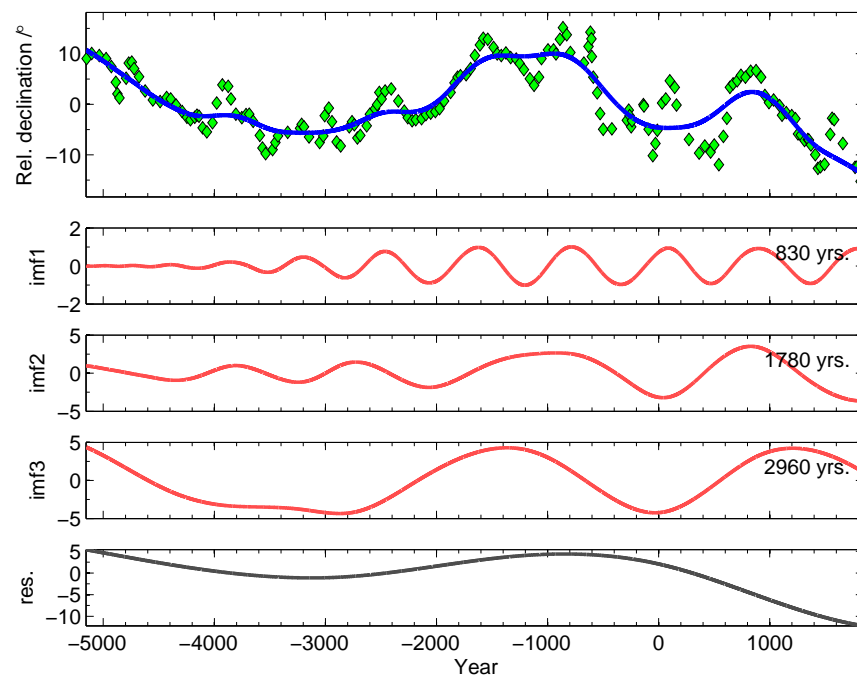
FUR – Furskogstjärnet, Sweden



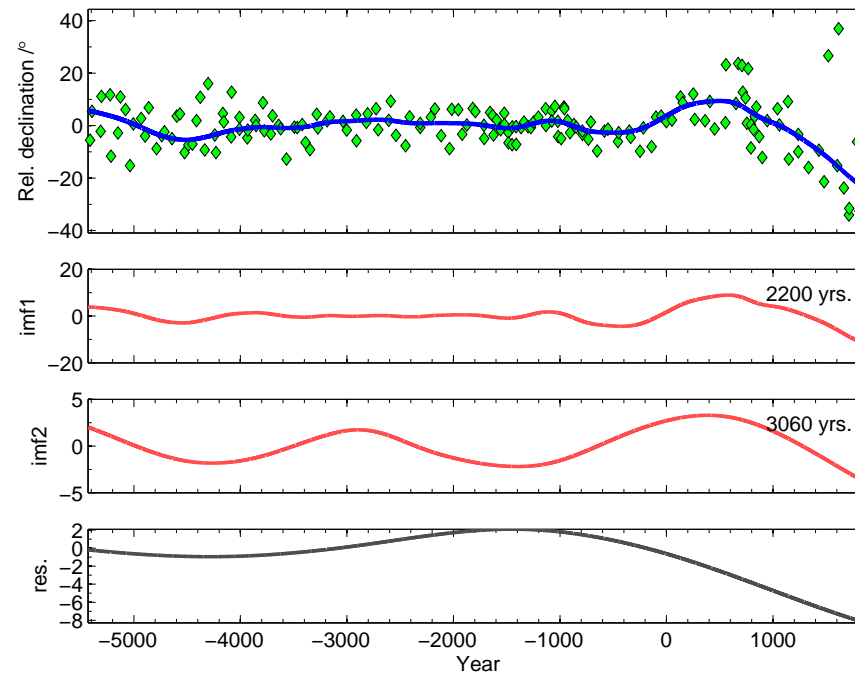
GAR – Gardar Drift, North Atlantic



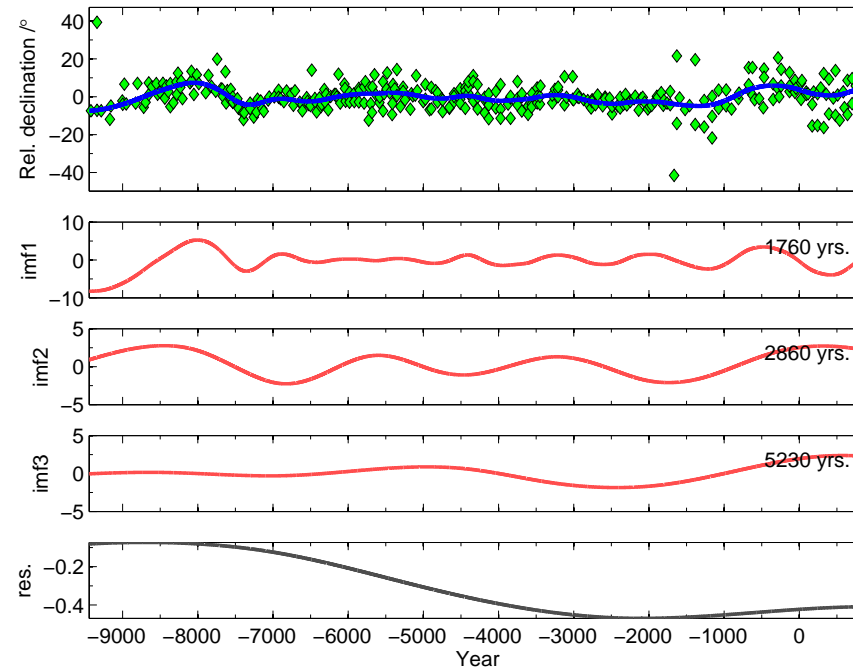
GEI – Llyn Geirionydd, UK



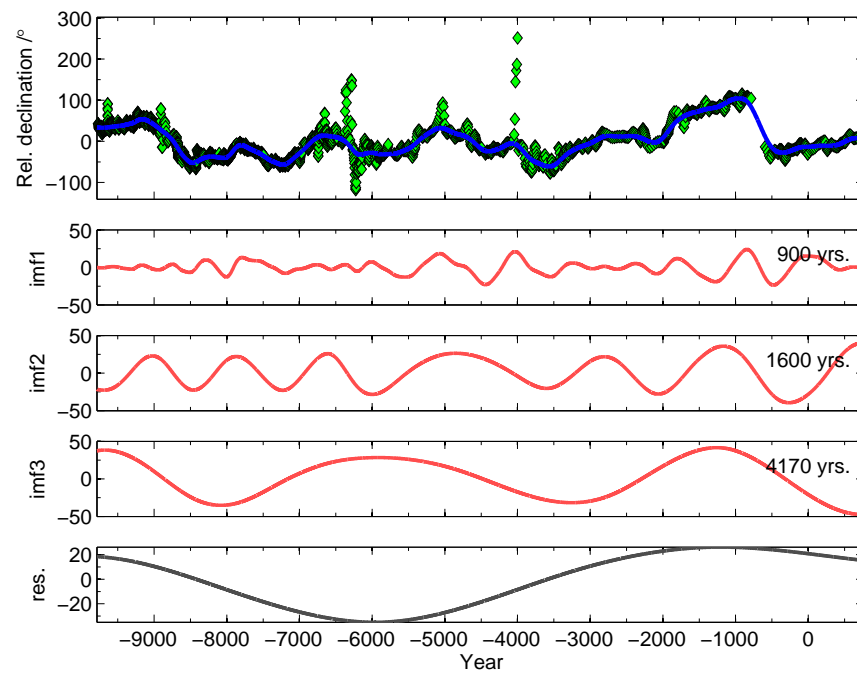
GHI – Cape Ghir, NW Afr. Margin



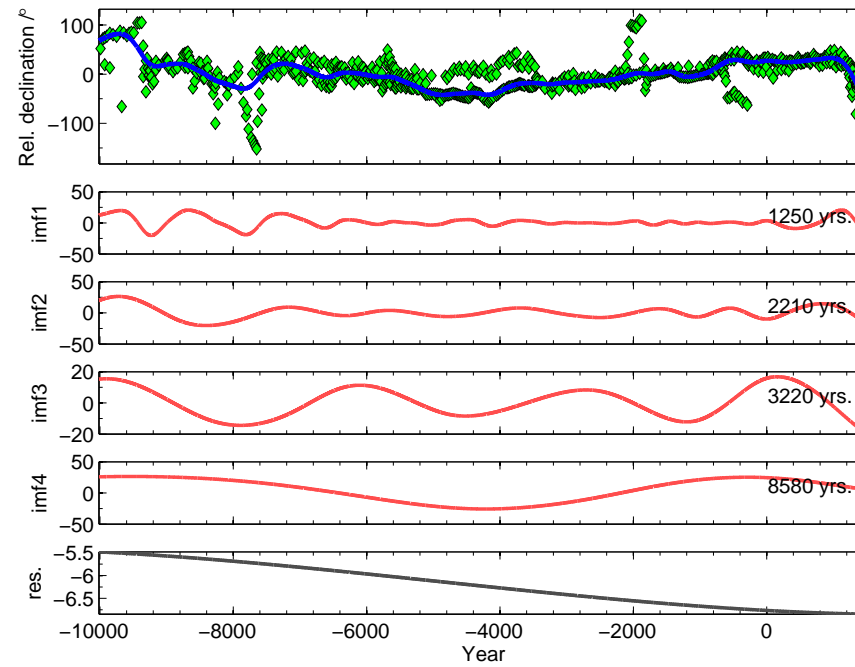
GNO – Lake Gnotuk, Australia



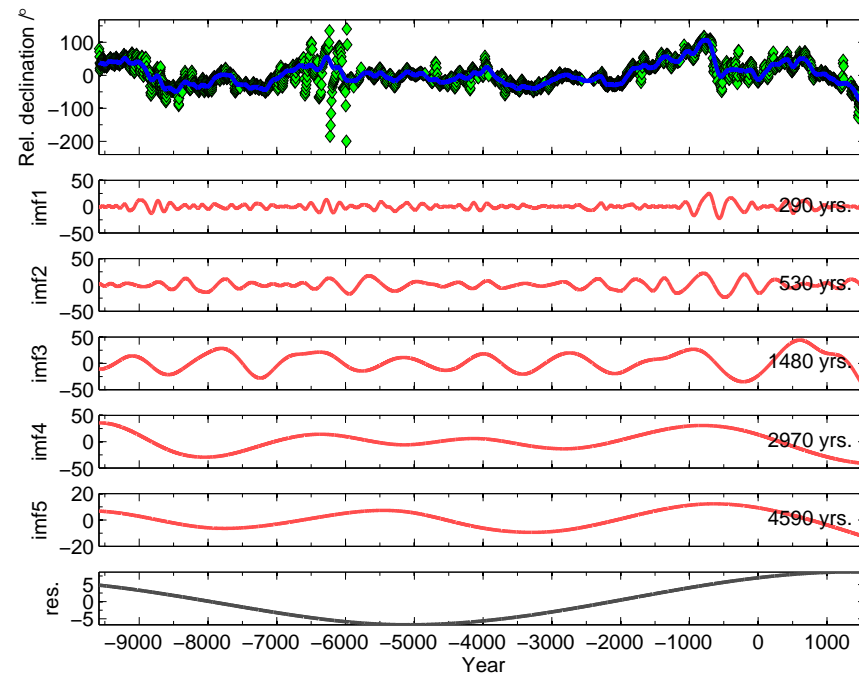
GRE – Greenland, North Atlantic



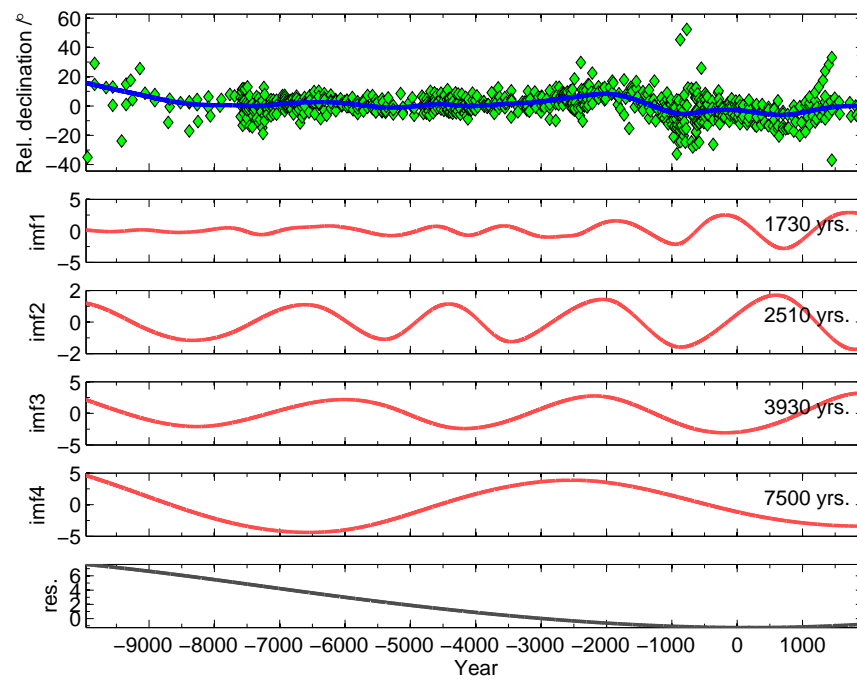
HUR – Lake Huron, USA



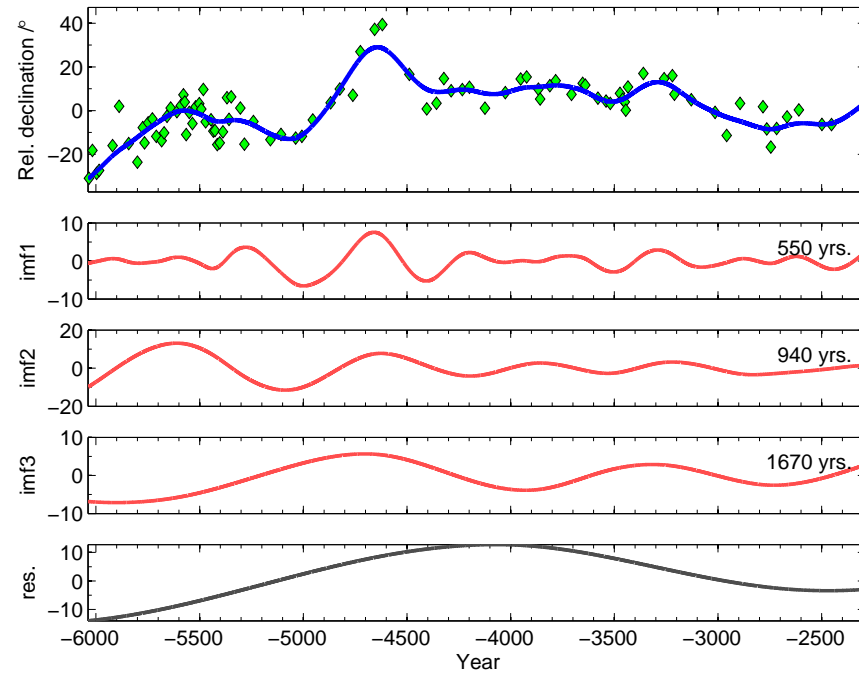
ICE – Iceland, North Atlantic



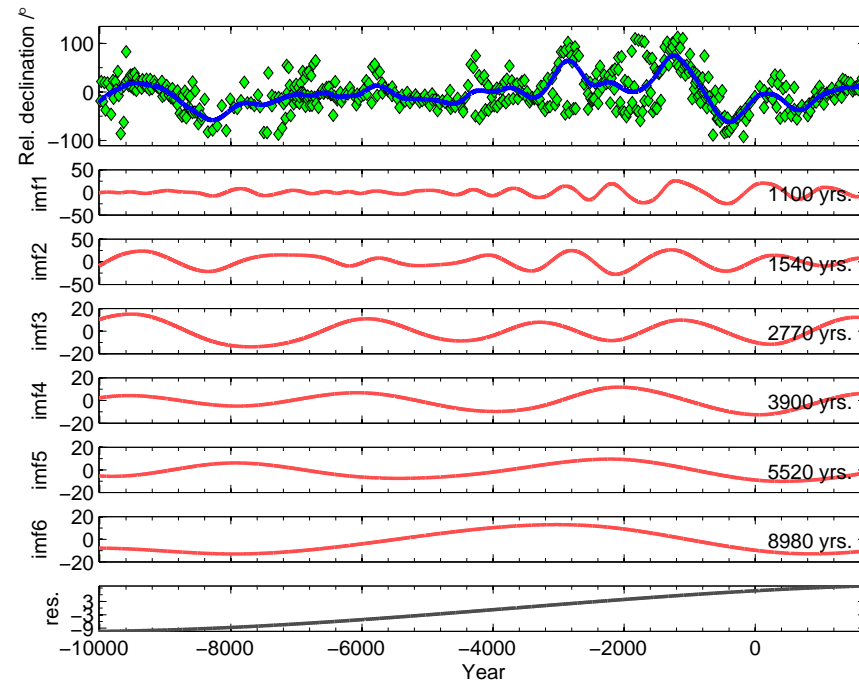
KEI – Lake Keilambete, Australia



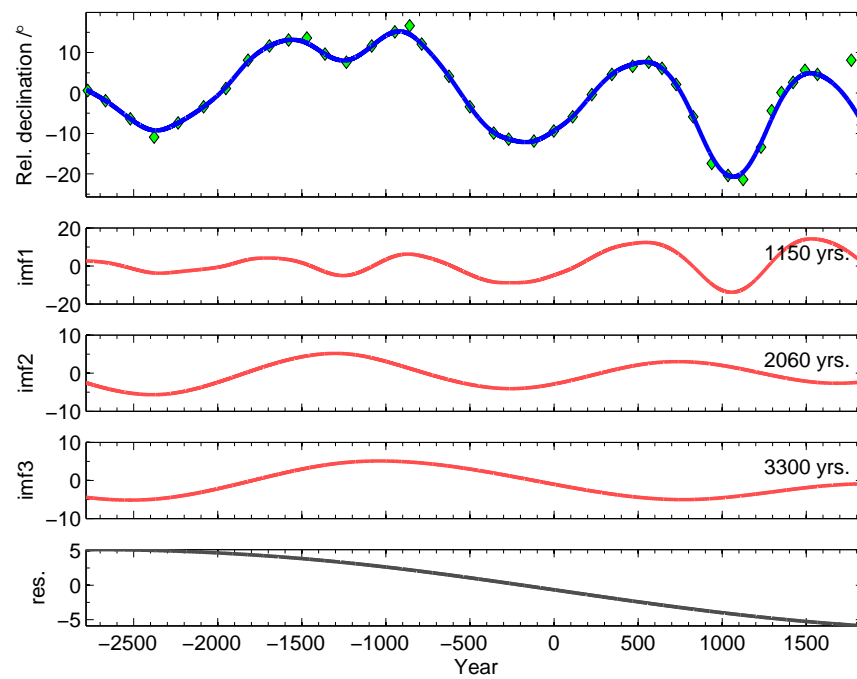
KYL – Kylen Lake, Minnesota



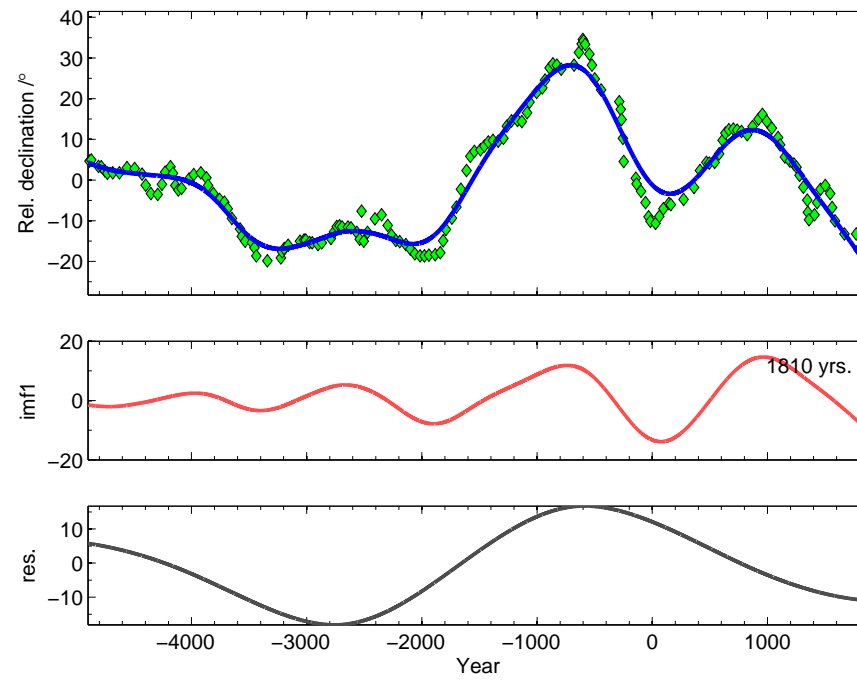
LAM – Lake Lama, Russia



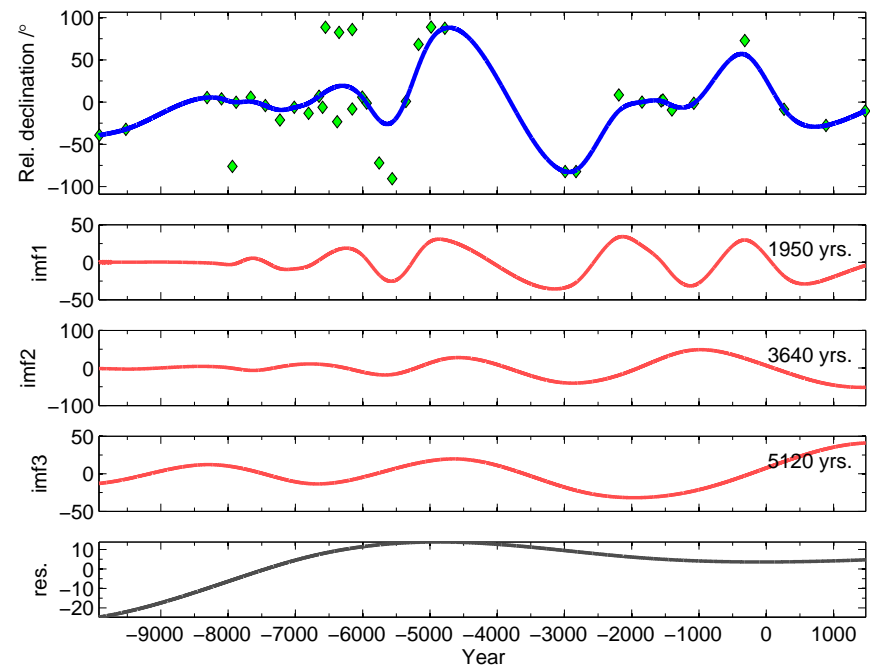
LEB – Lake LeBoeuf, USA



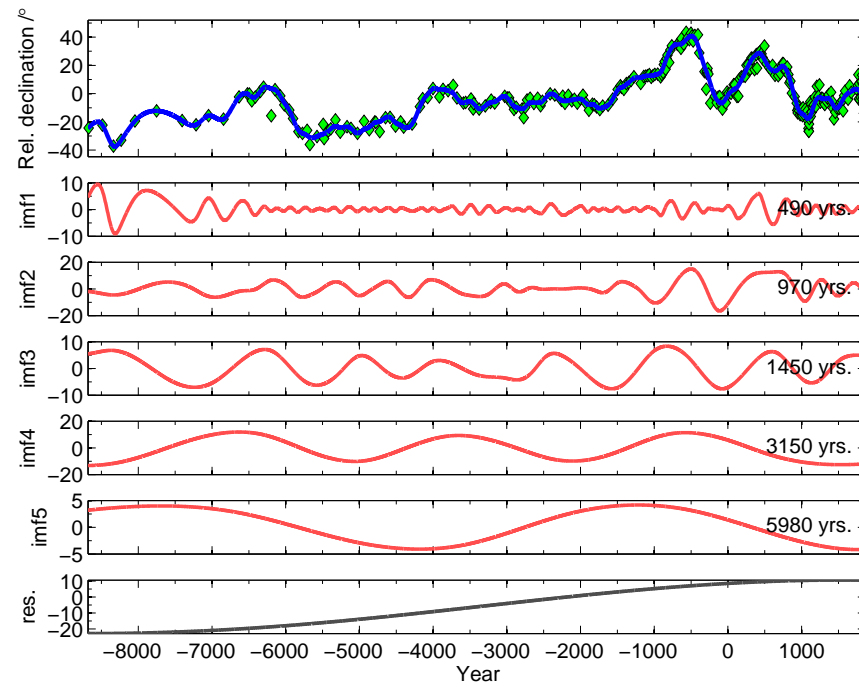
LOM – Loch Lomond, UK



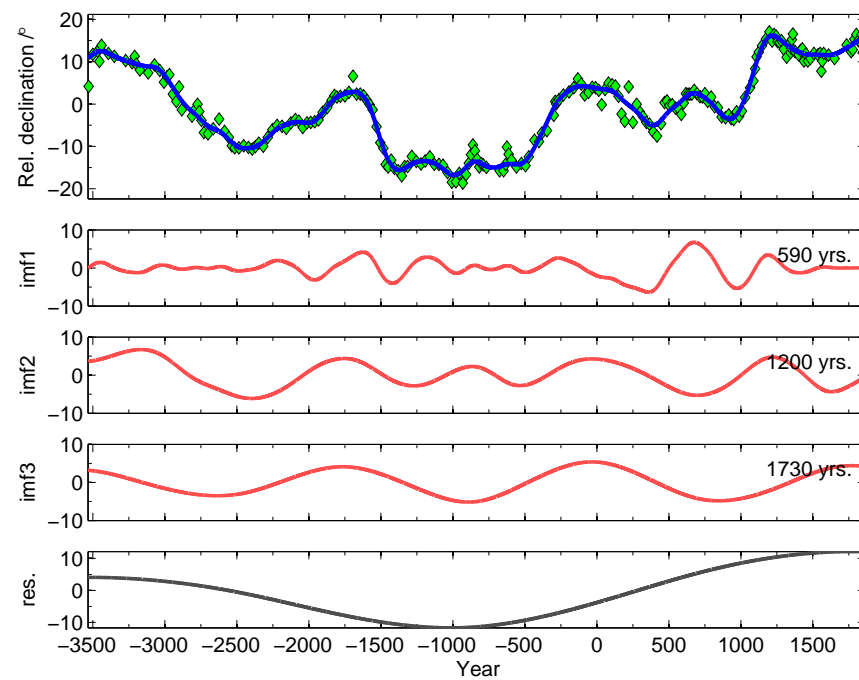
LOU – Louis Lake, USA



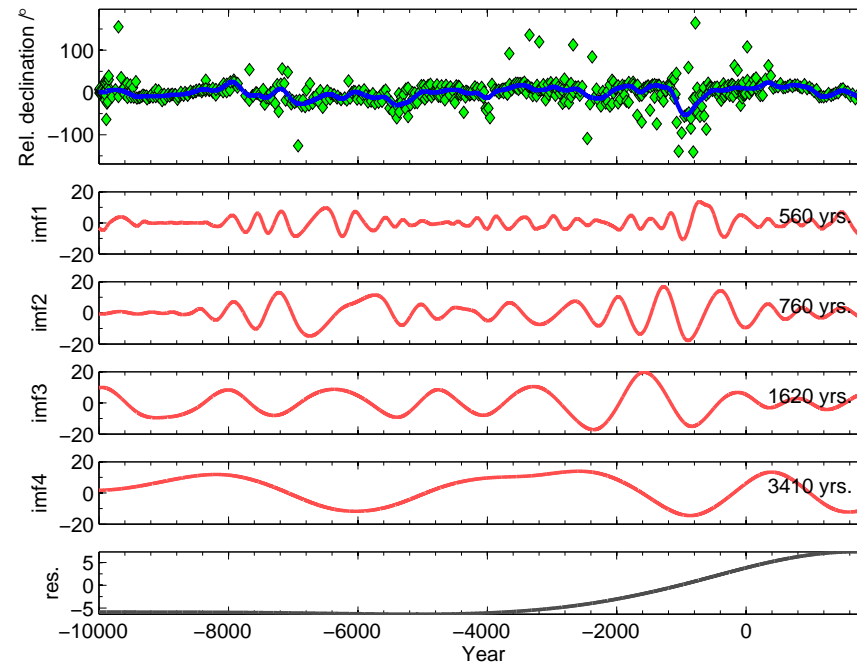
LSC – Lake St.Croix, USA



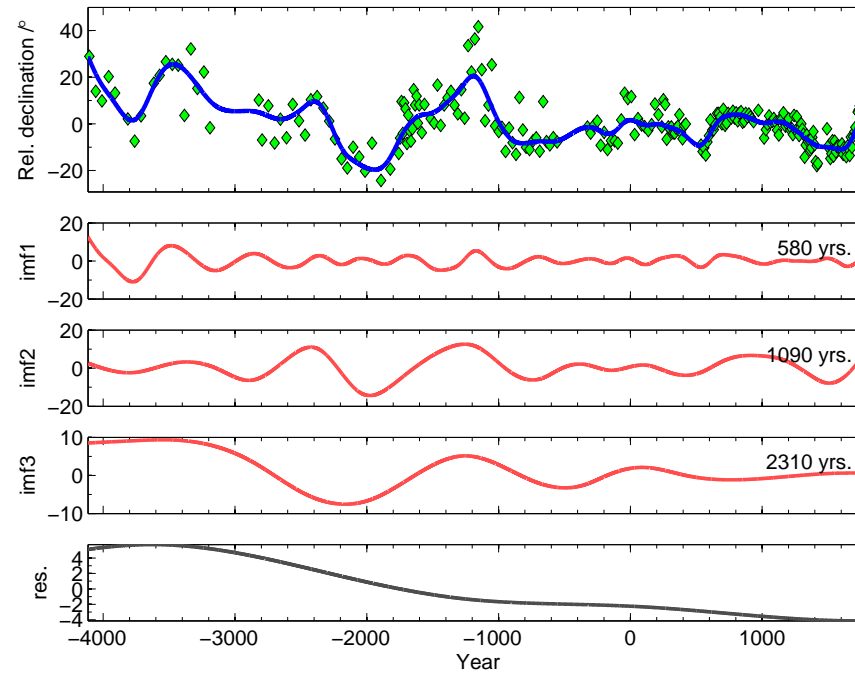
MAR – Mara Lake, Canada



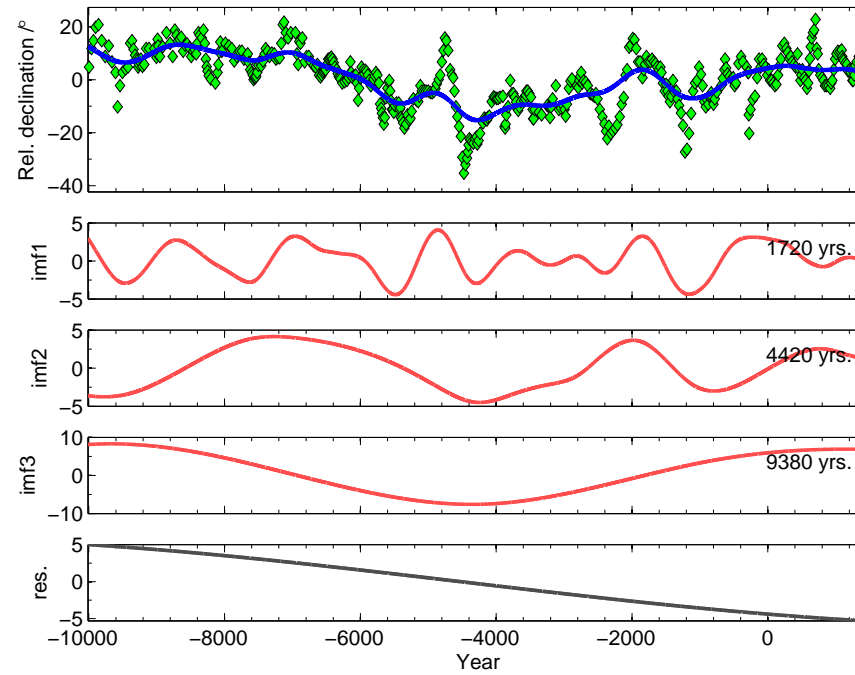
MEE – Meerfelder Maar, Germany



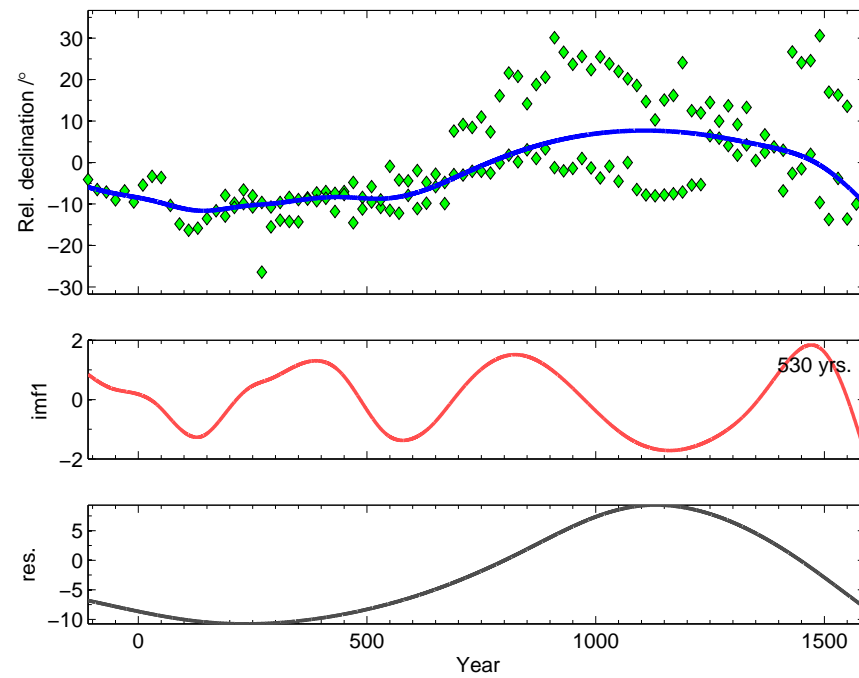
MEZ – Lago di Mezzano, Italy



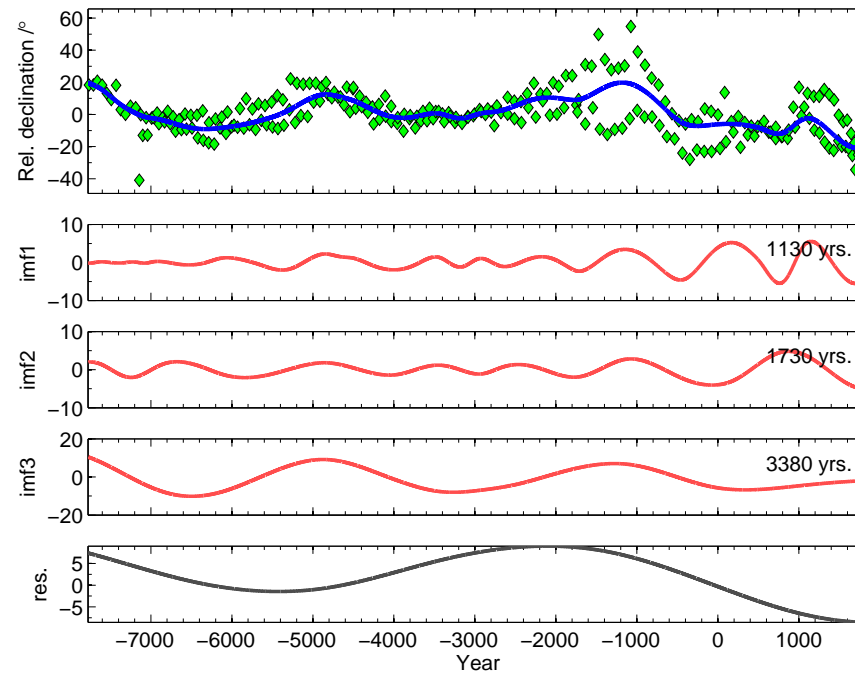
MNT – Lago Morenito, Argentina



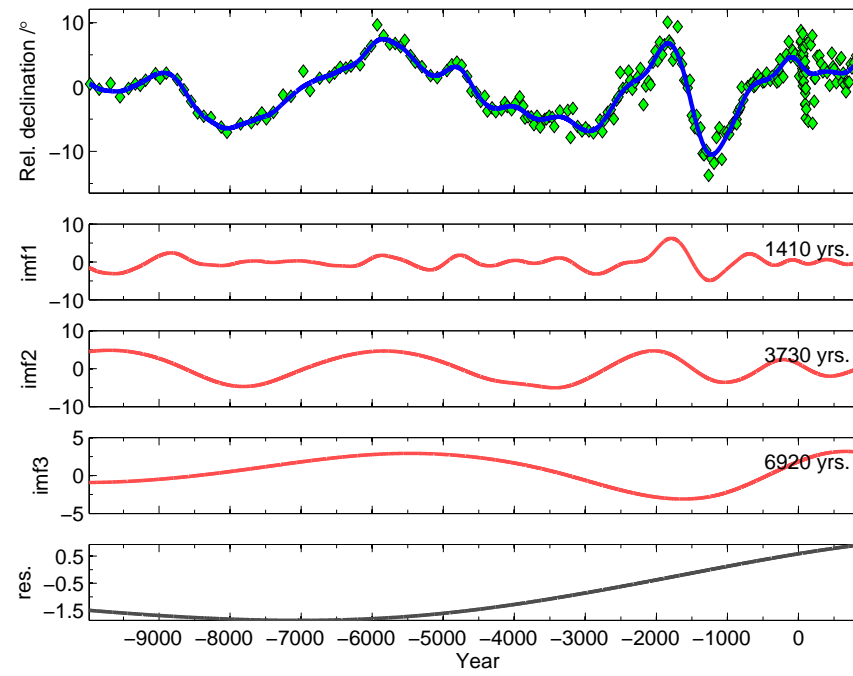
MOR – Lac Morat, Switzerland



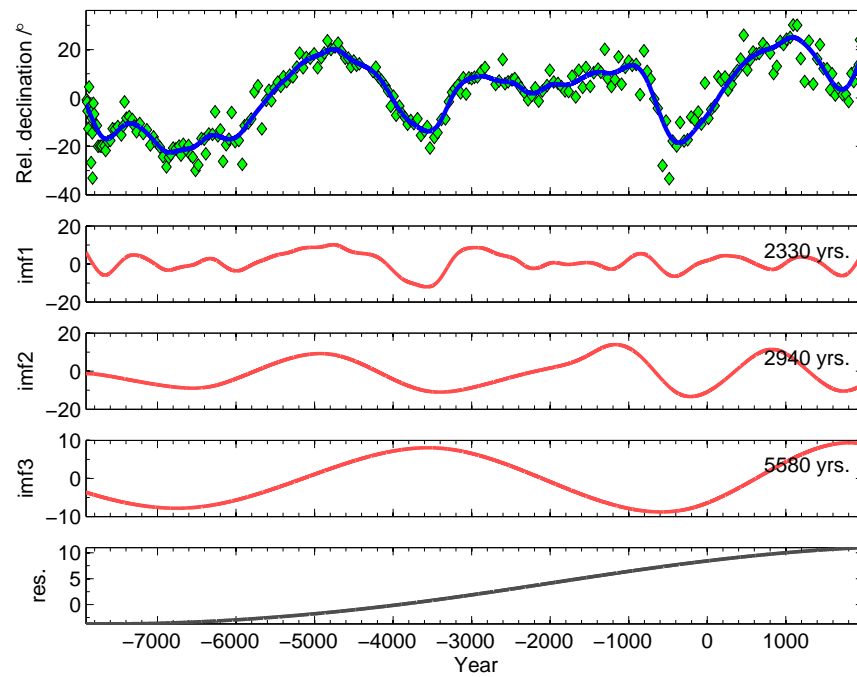
MOT – Mötterudstjärnet, Sweden



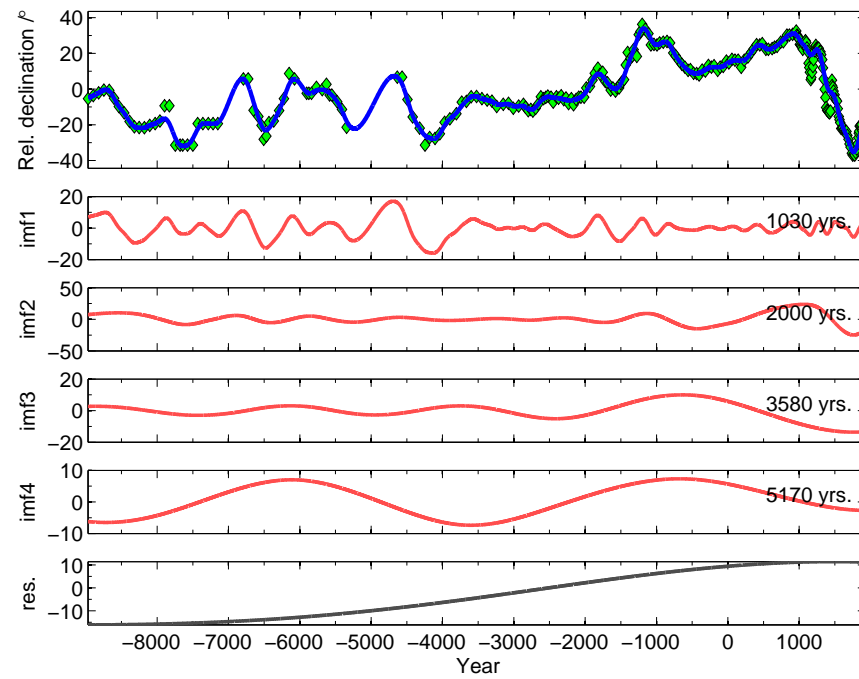
NAR – Lake Naroch, Belorussia



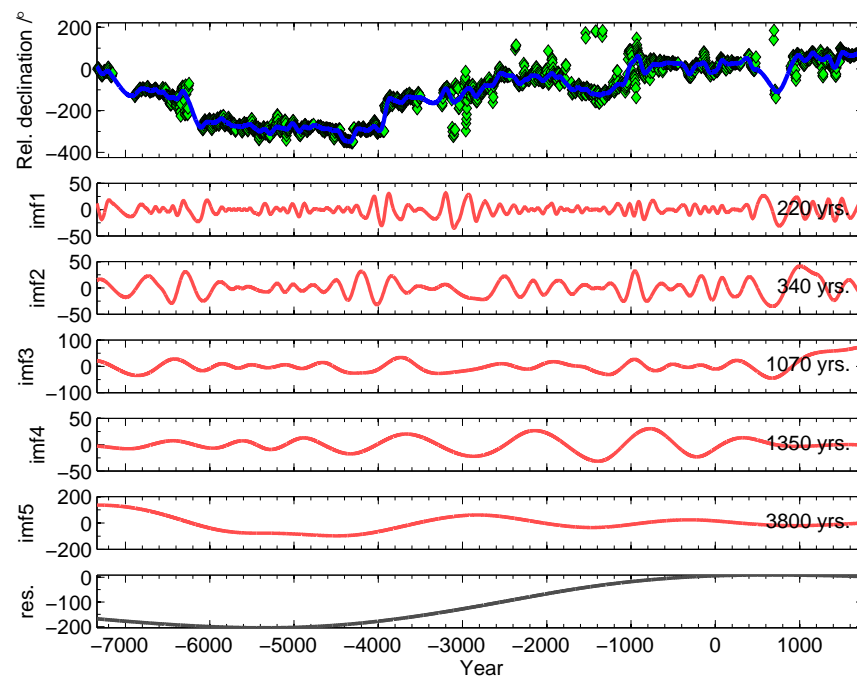
NAU – Nautajärvi, Finland



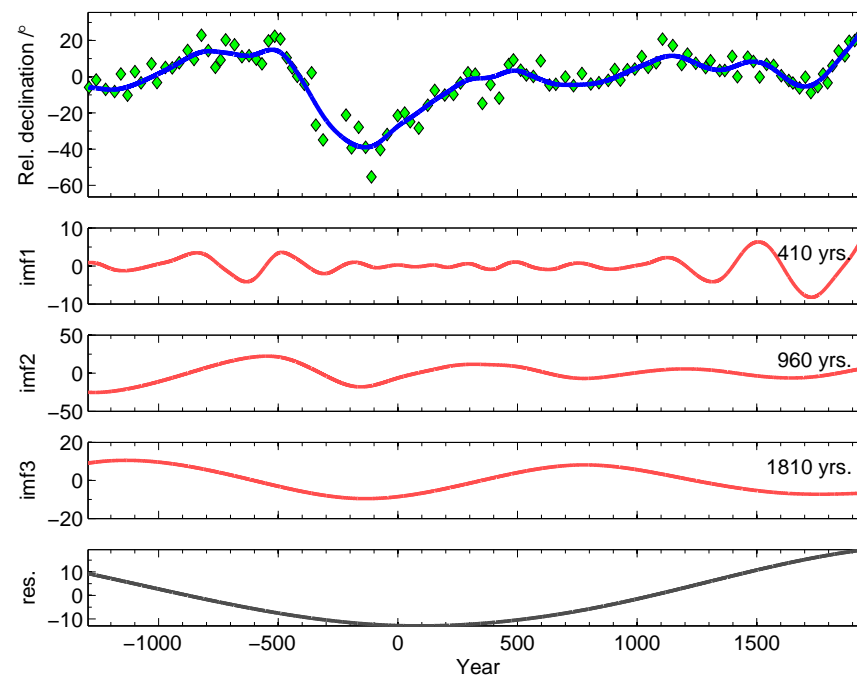
NEM – Lake Nemi, Italy



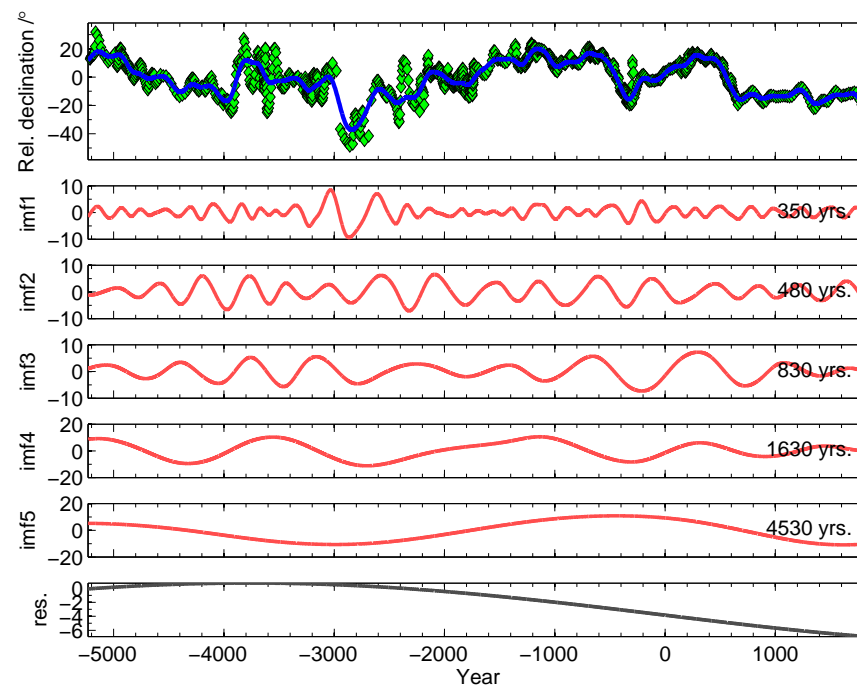
PAD – Palmer Deep, Antarctic Pen.



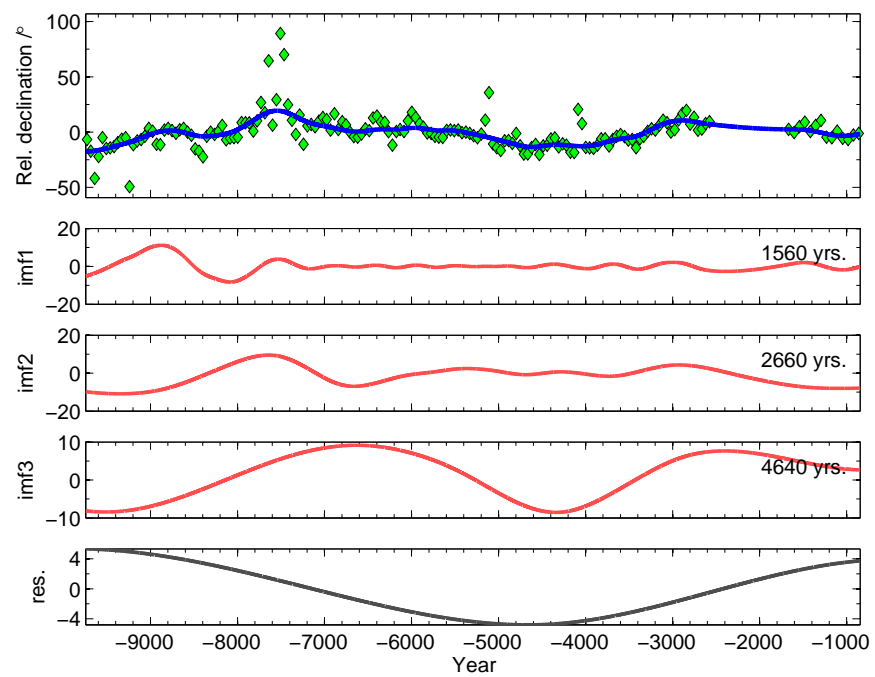
POH – Pohjajärvi, Finland



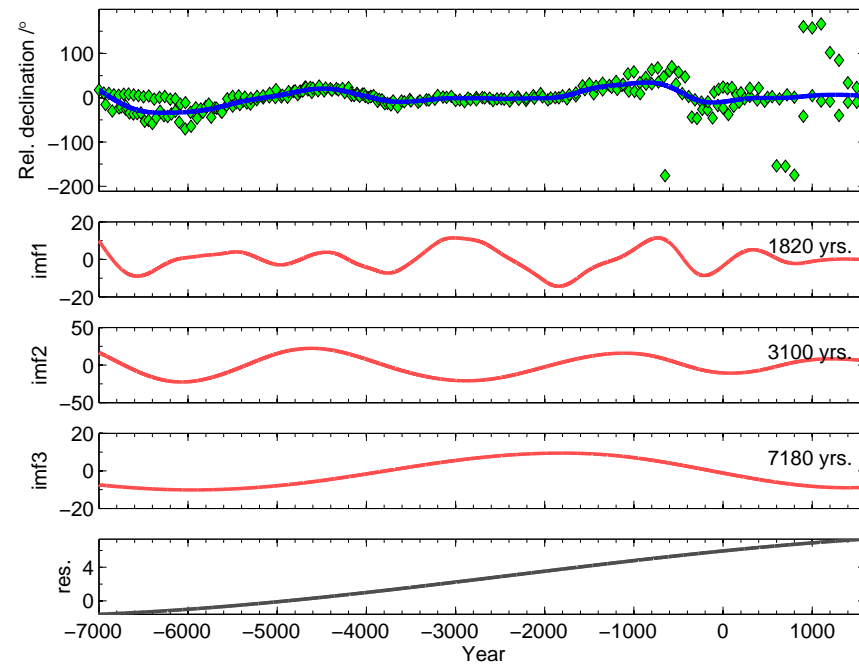
SAG – Saguenay Fjord, Canada



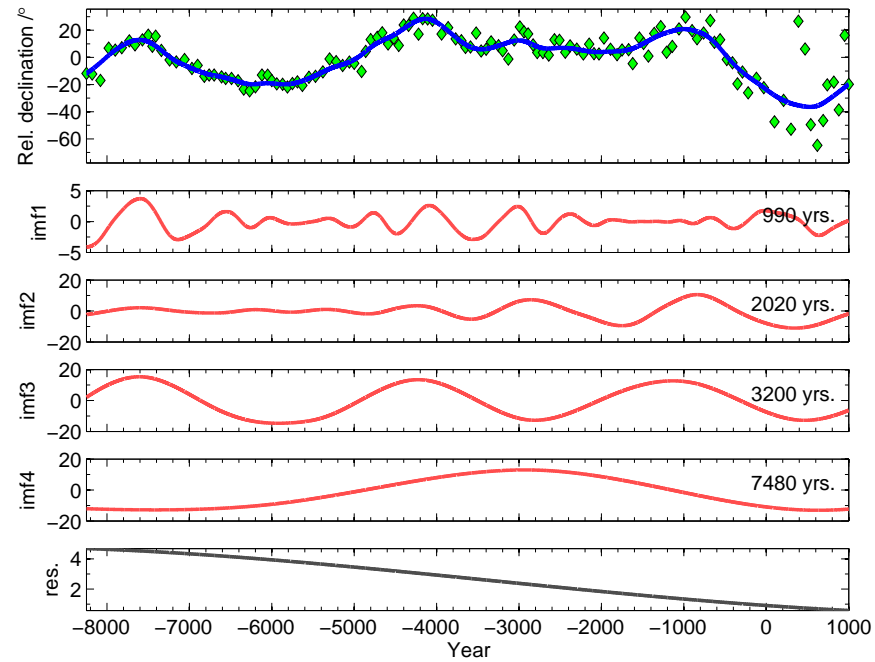
SAN – Hoya de San Nicolas, Mexico



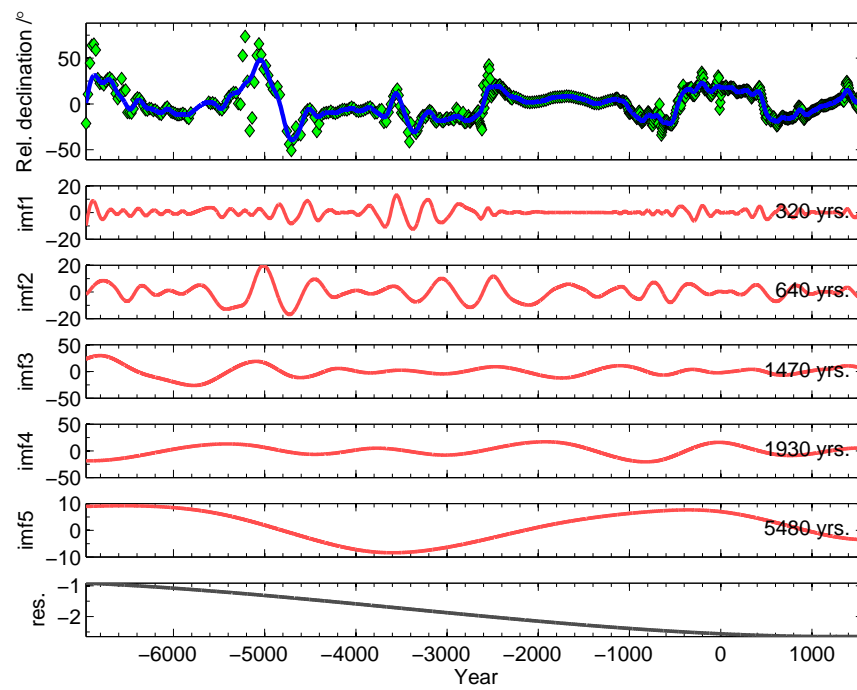
SAR – Sarsjön, Sweden



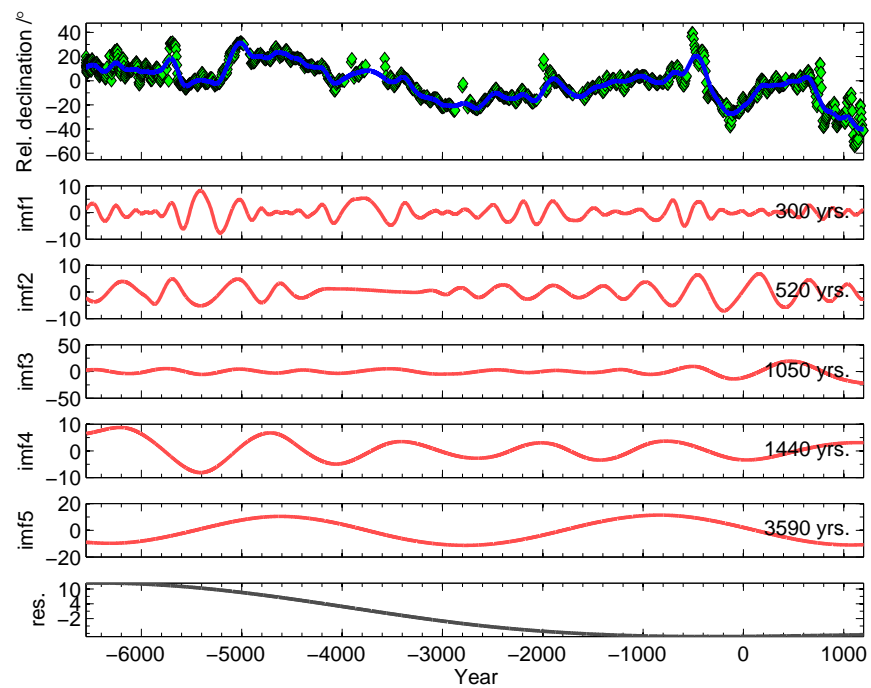
SAV – Savijärvi, Finland



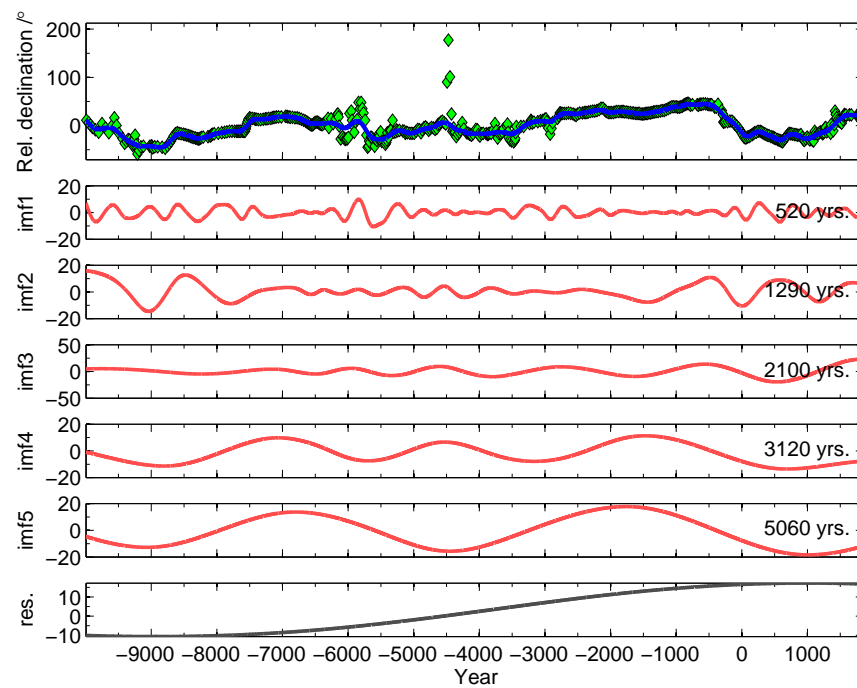
SCL – Lake Shuangchiling, China



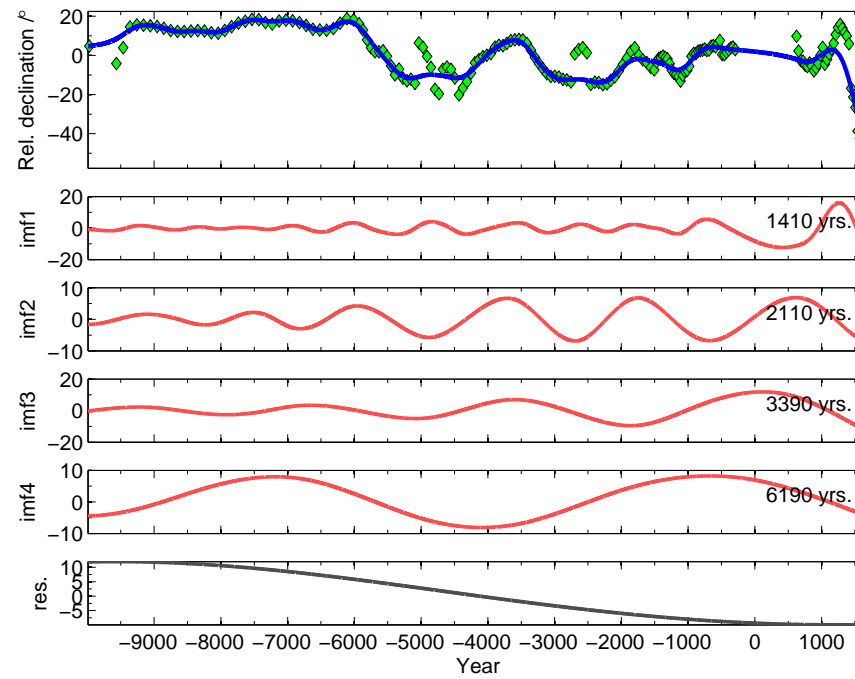
STL – St. Lawrence Est., Canada



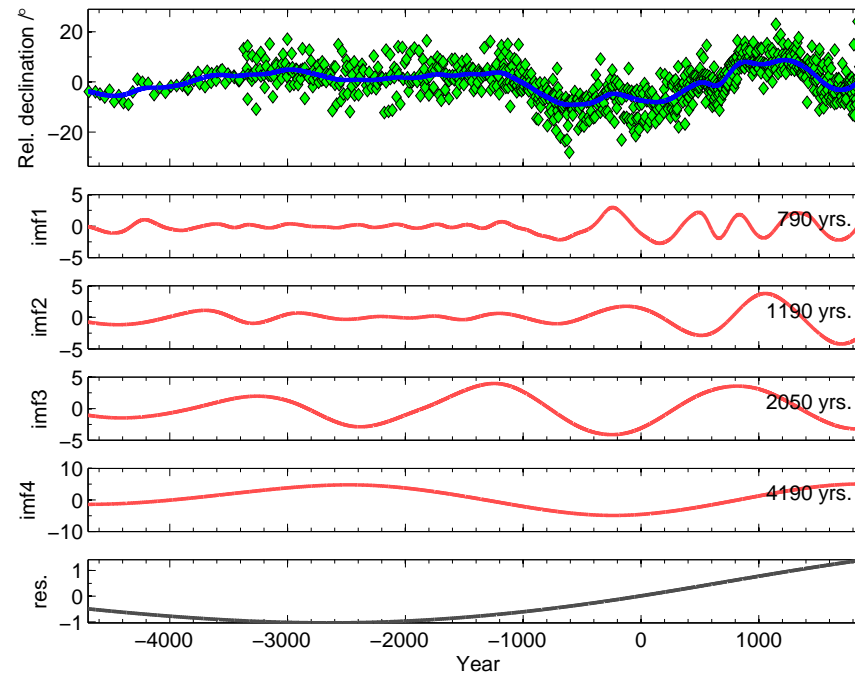
SUP – Lake Superior, USA



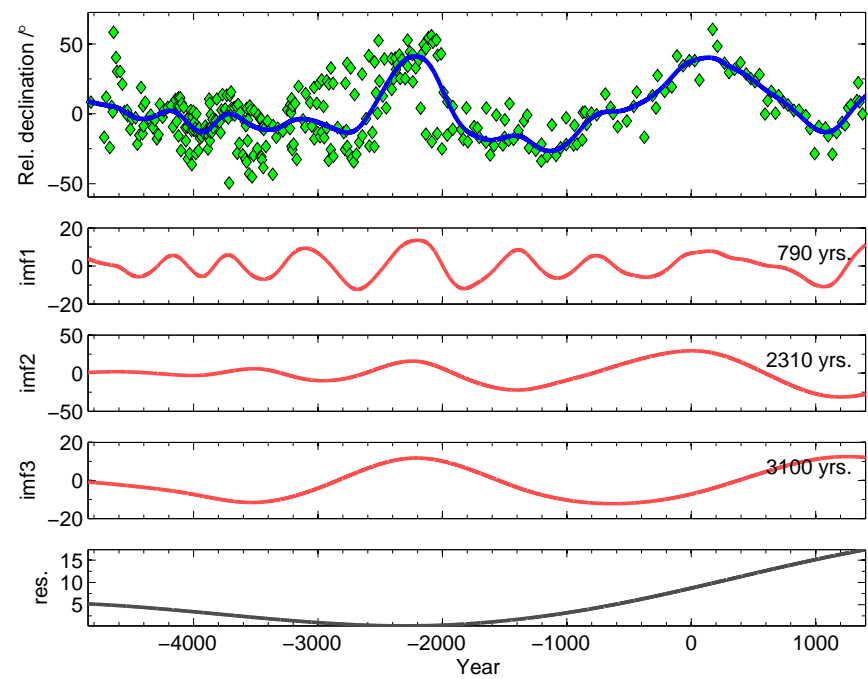
TRE – Laguna El Trébol, Argentina



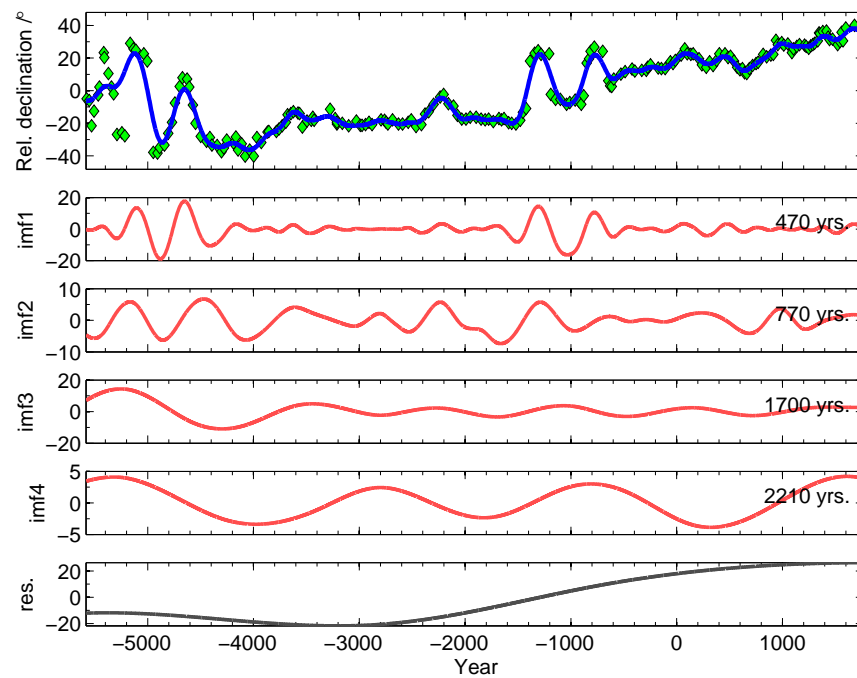
TRI – Lake Trikhonis, Greece



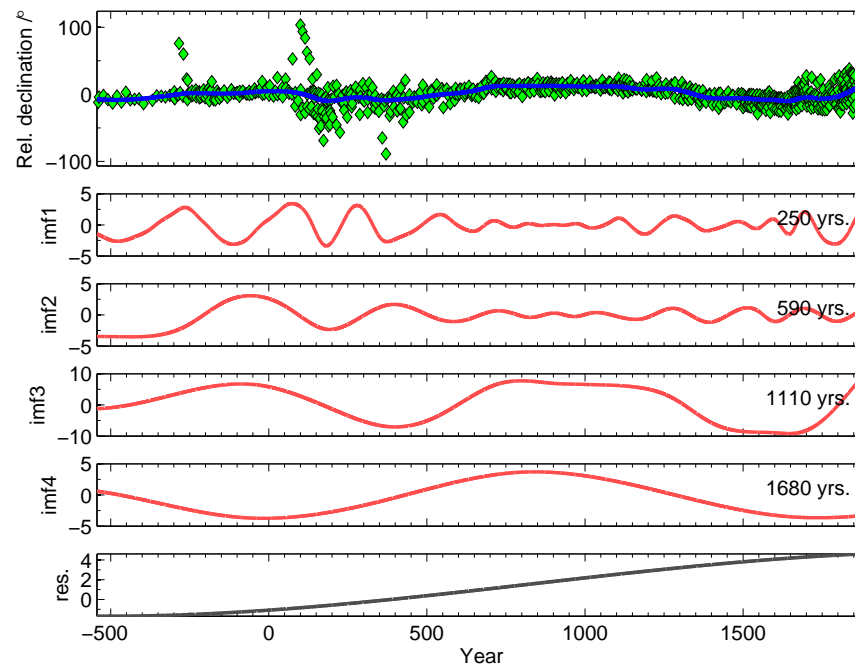
VAT – Vatndalsvatn, Iceland



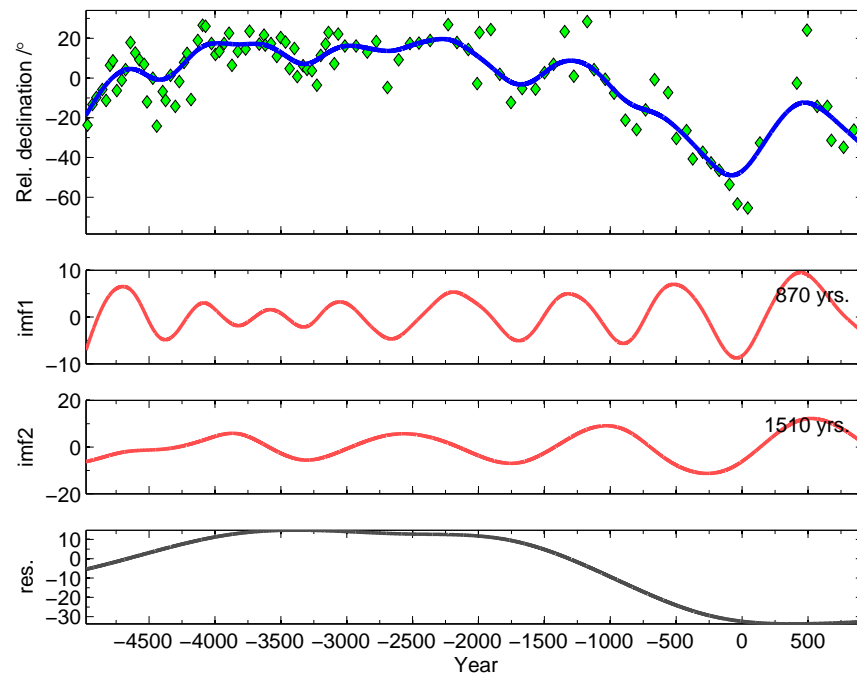
VIC – Lake Victoria, Uganda



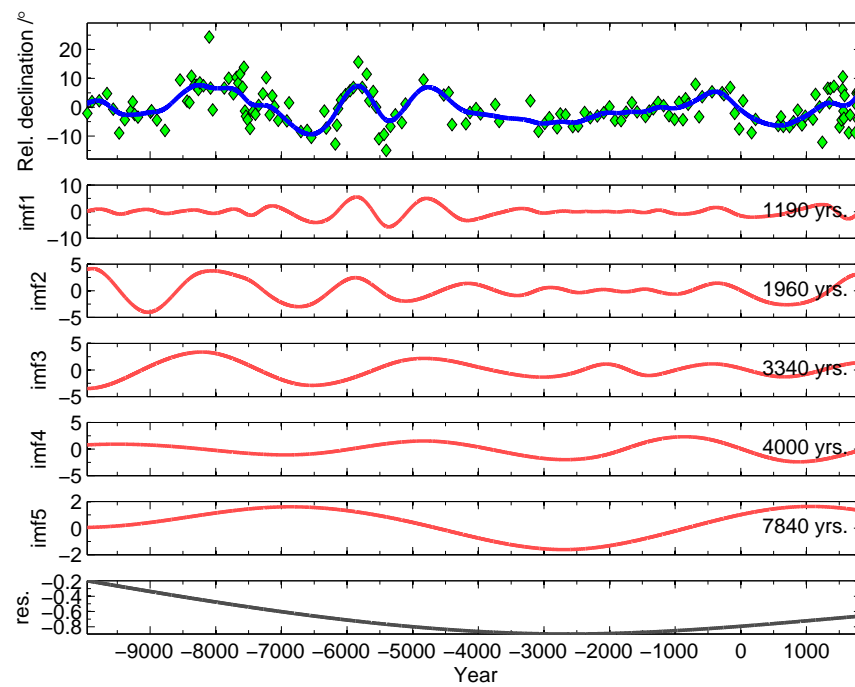
VOL – Lake Volvi, Greece



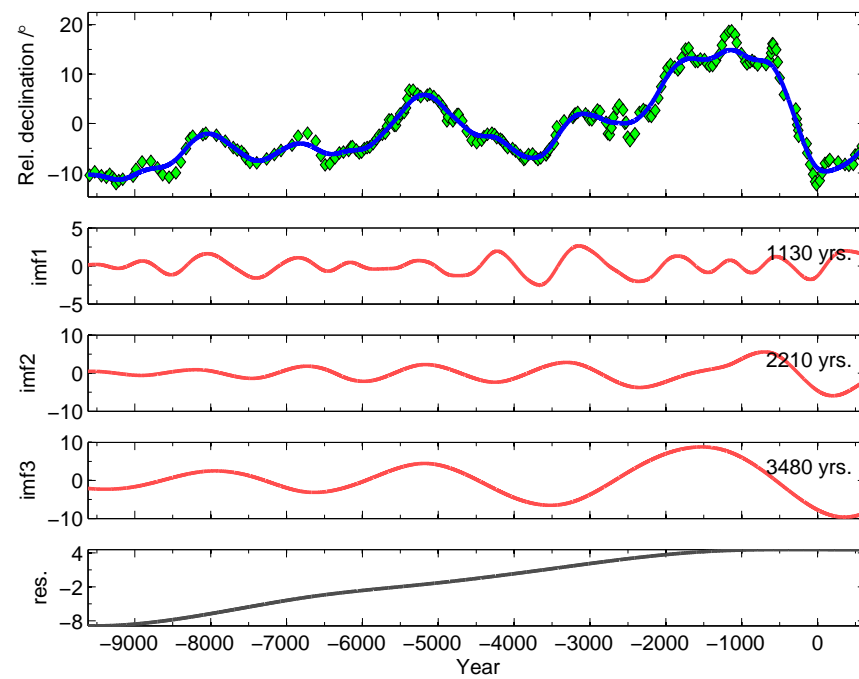
VUK – Vukonjärvi, Finland



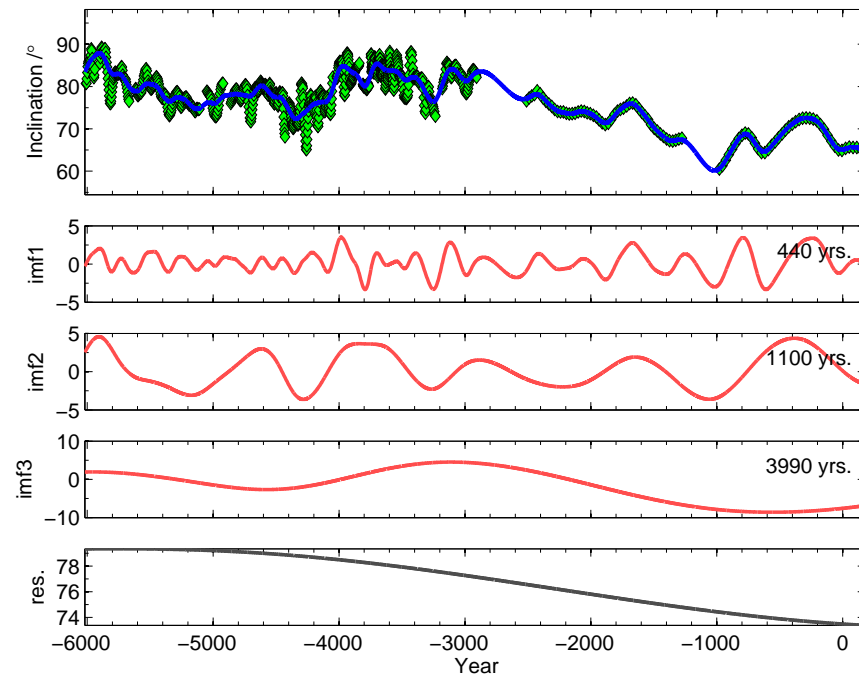
WAI – Lake Waiau, Hawaii



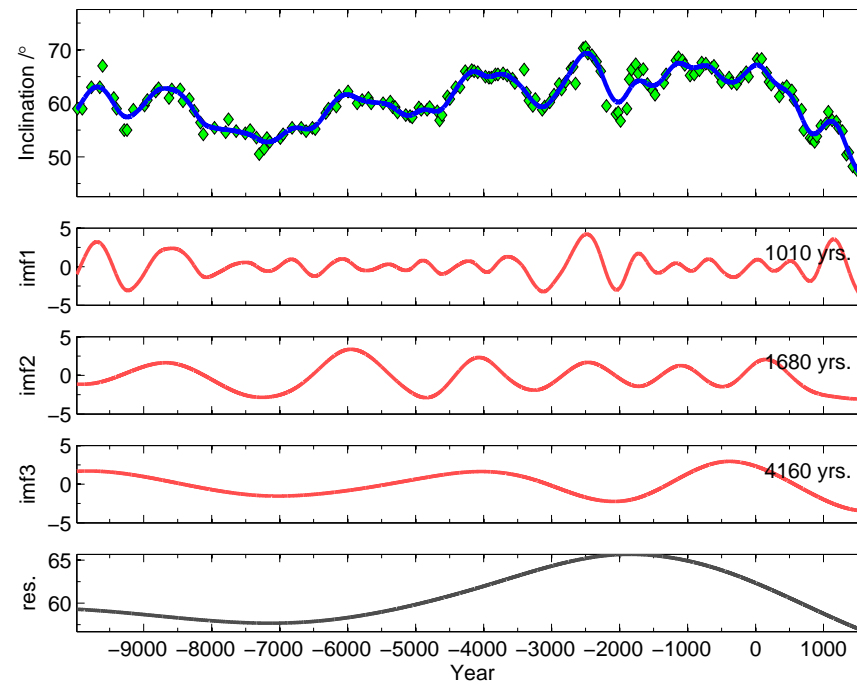
WIN – Lake Windermere, UK



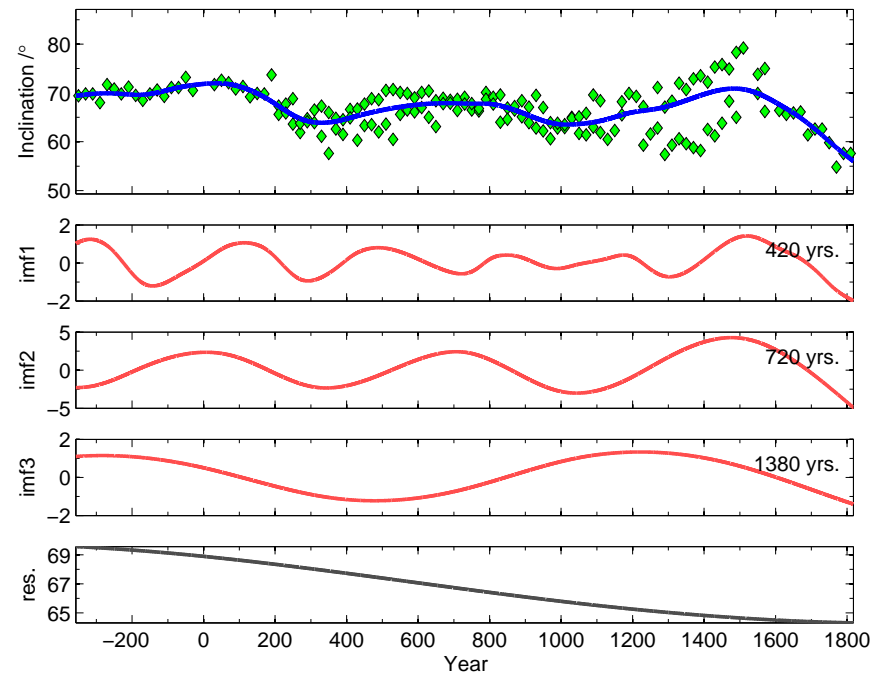
AAM – Alaskan Margin, Arctic Sea



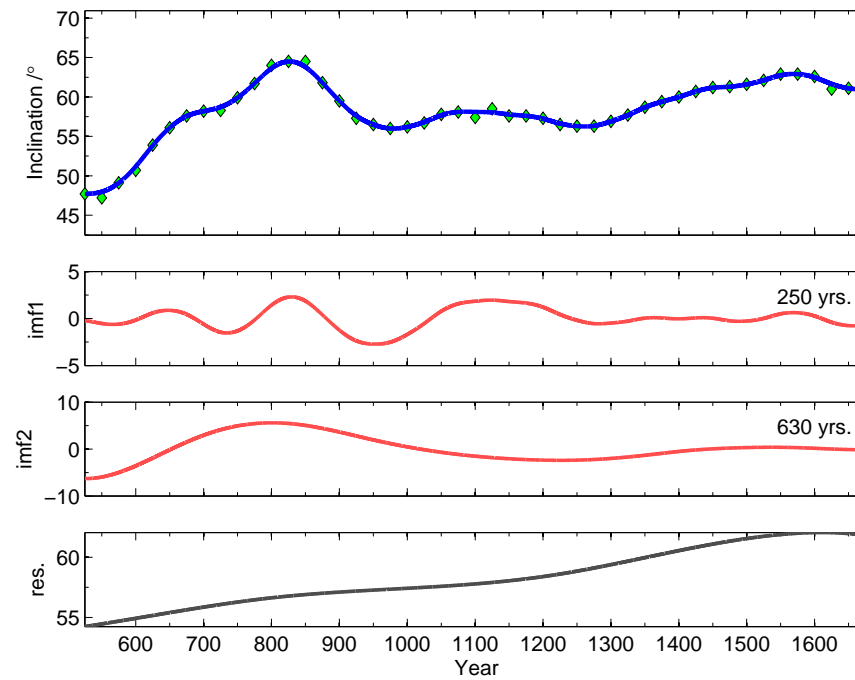
AD1 – Adriatic Sea, Italy



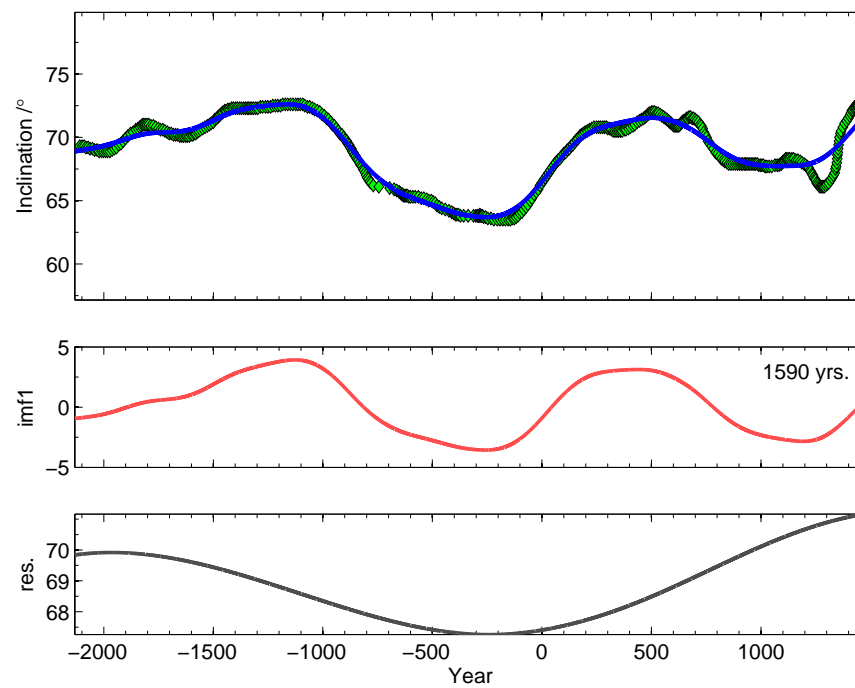
ANN – Lac d' Annecy, France



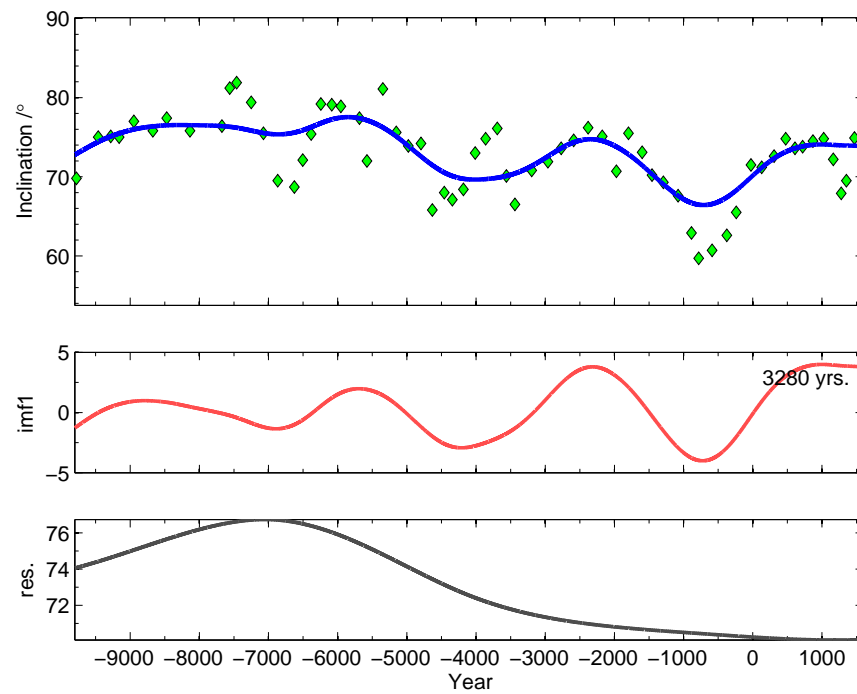
ARA – Lake Aral, Kazakhstan



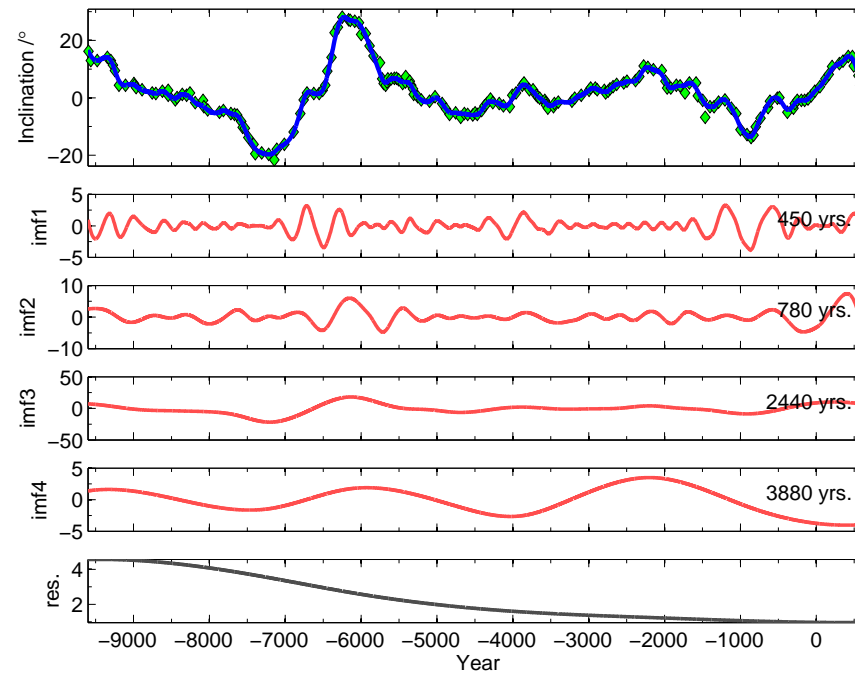
ASL – Lake Aslikul, Russia



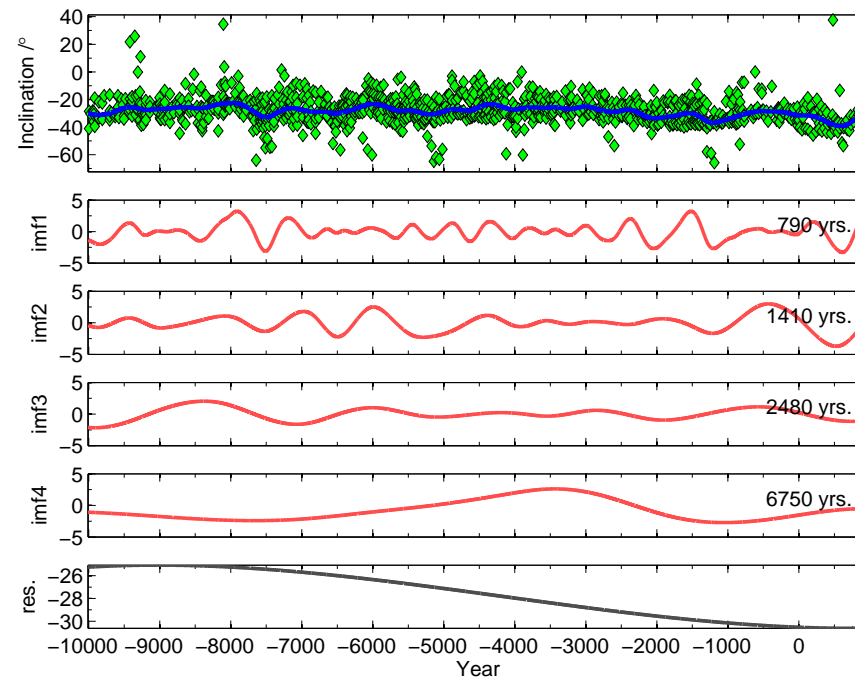
BAI – Lake Baikal, Russia



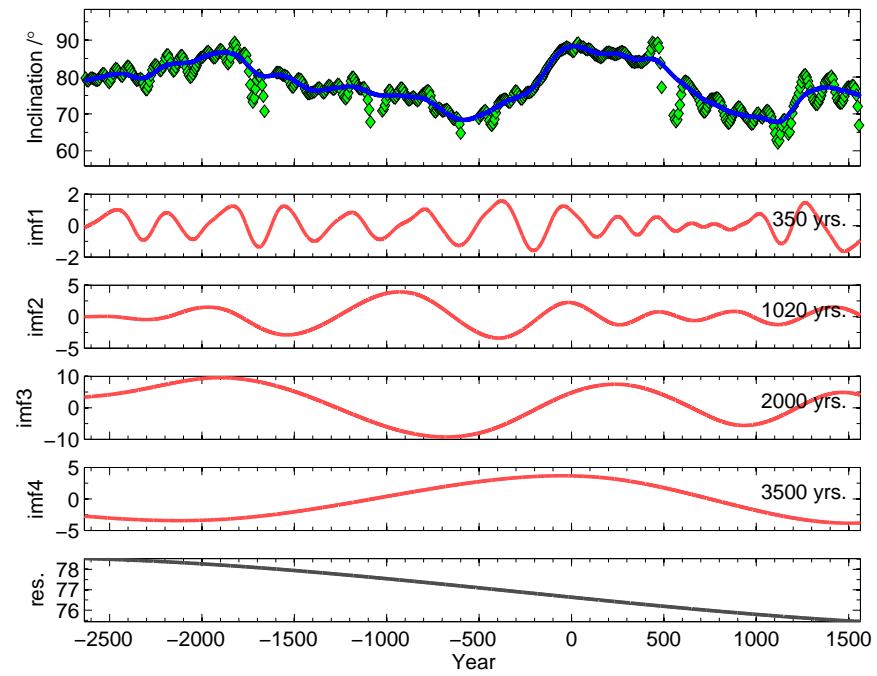
BAM – Lake Barombi Mbo, Cameroun



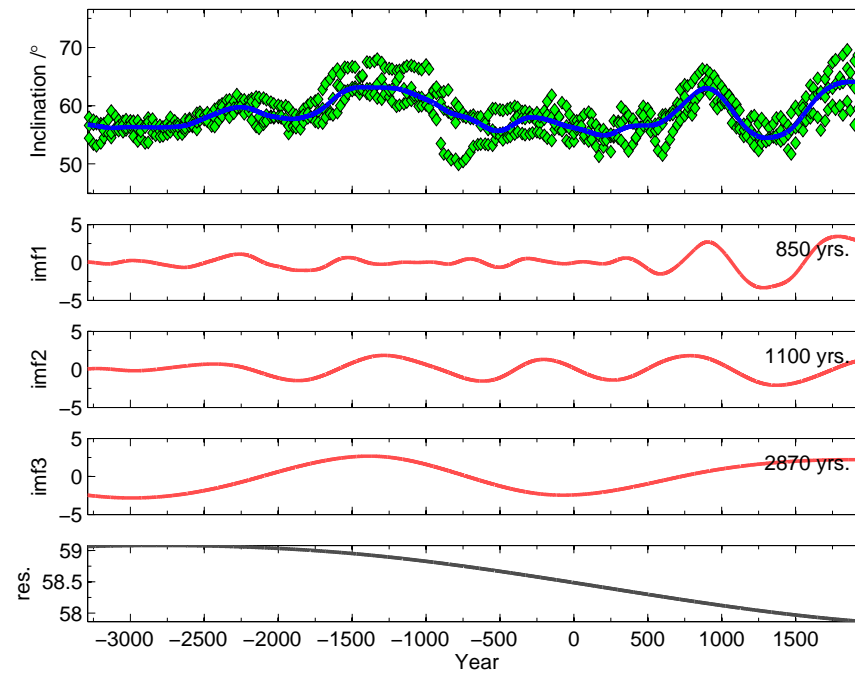
BAR – Lake Barrine, Australia



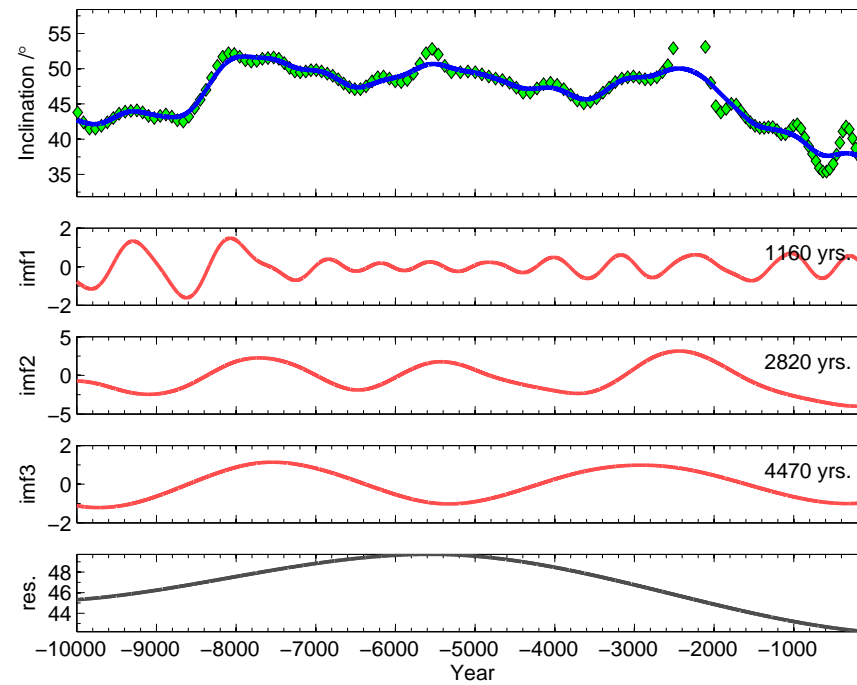
BEA – Beaufort Sea, Arctic Ocean



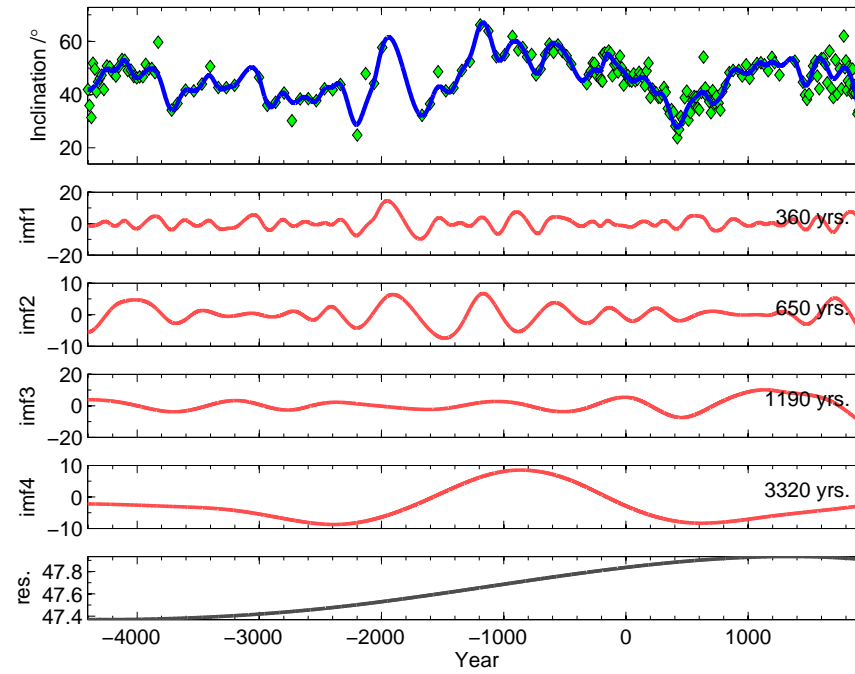
BEG – Lake Begoritis, Greece



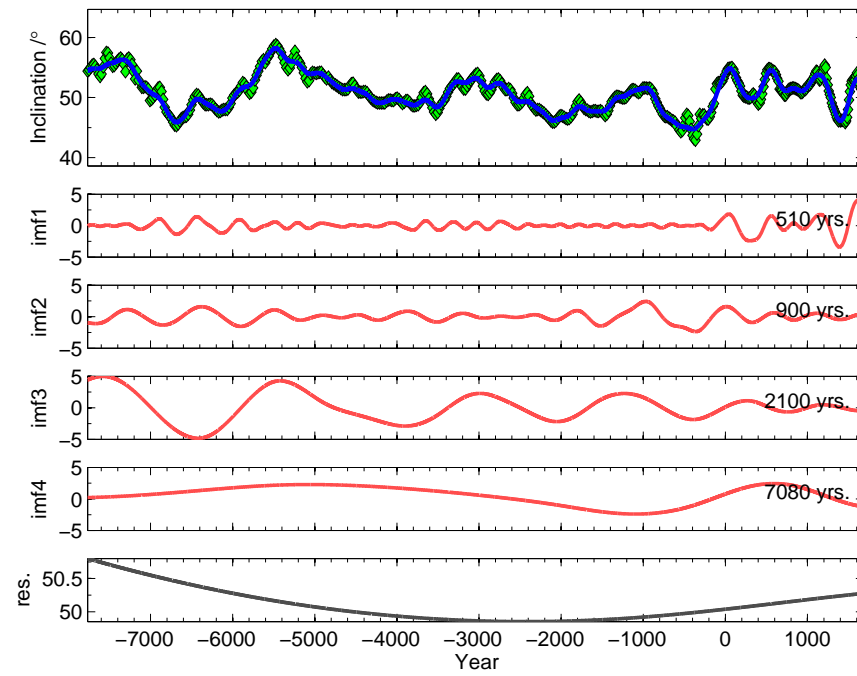
BI2 – Lake Biwa 2, Japan



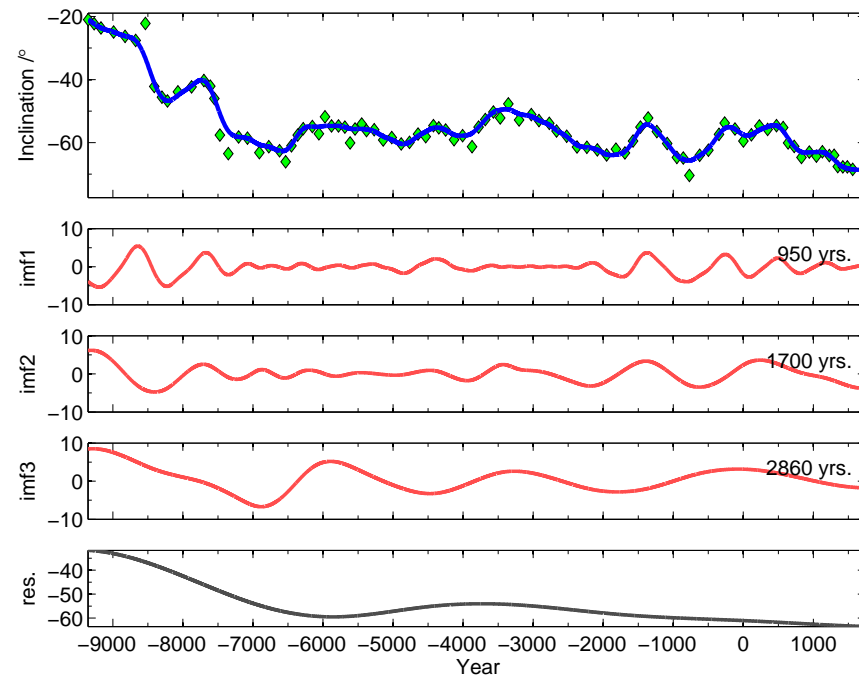
BIR – Birkat Ram, Israel



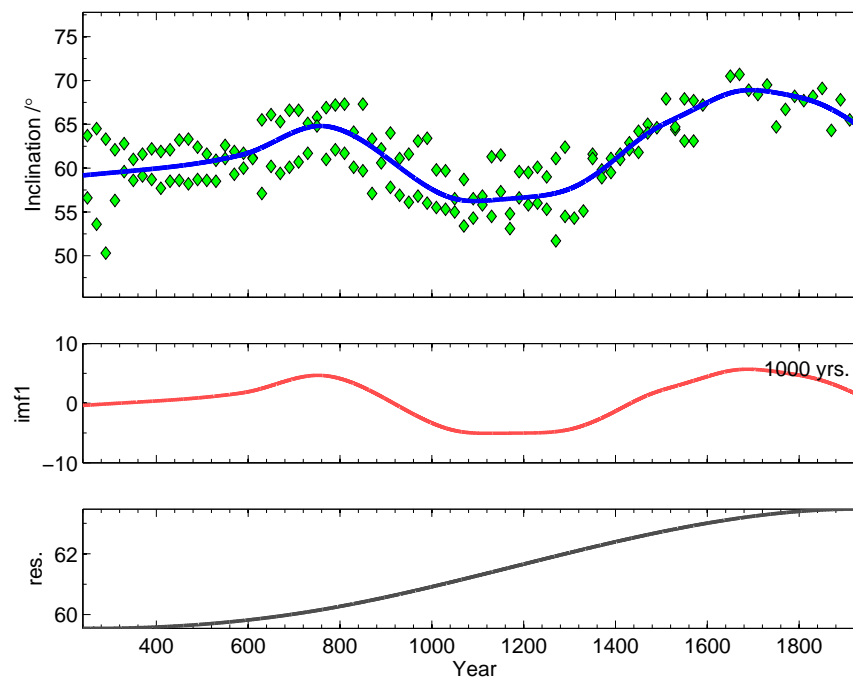
BIW – Lake Biwa, Japan



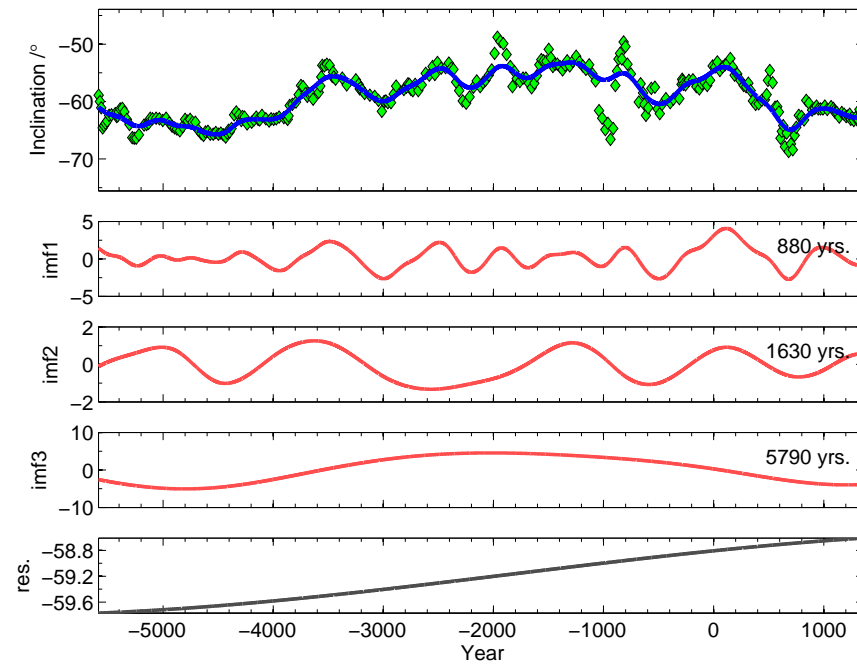
BLM – Lake Bullenmerri, Australia



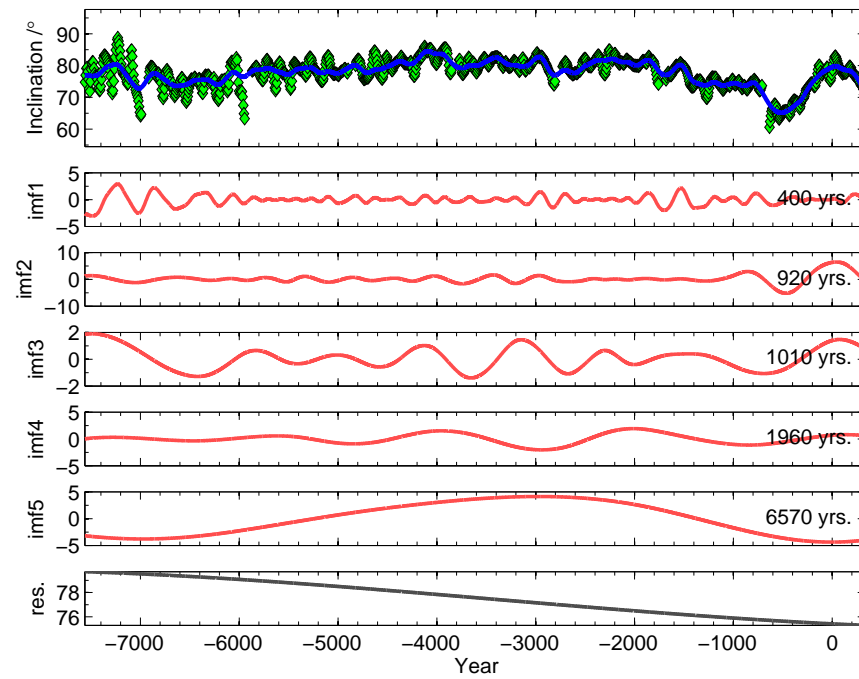
BOU - Lac du Bourget, France



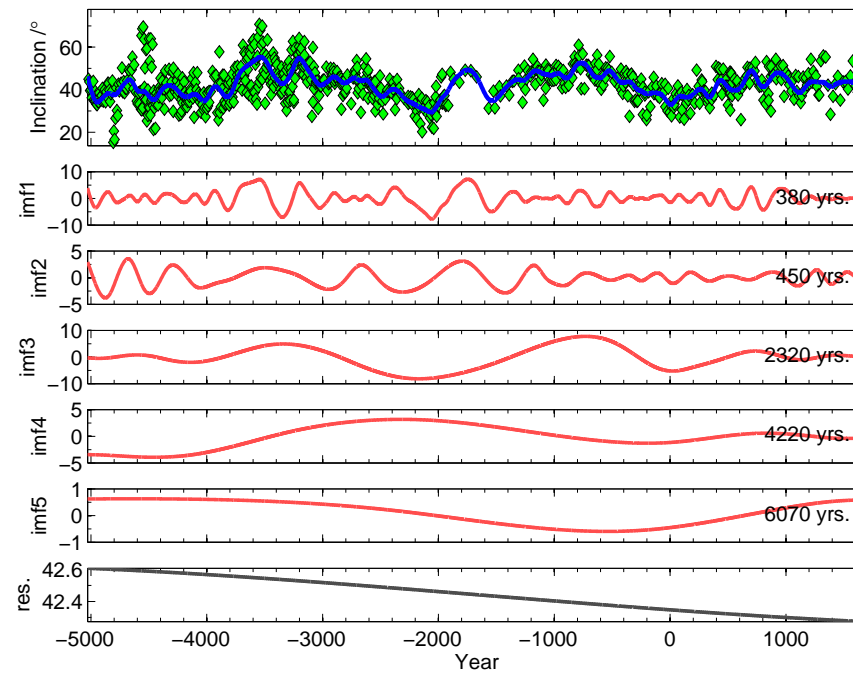
CAM - Brazo Campanario, Argentina



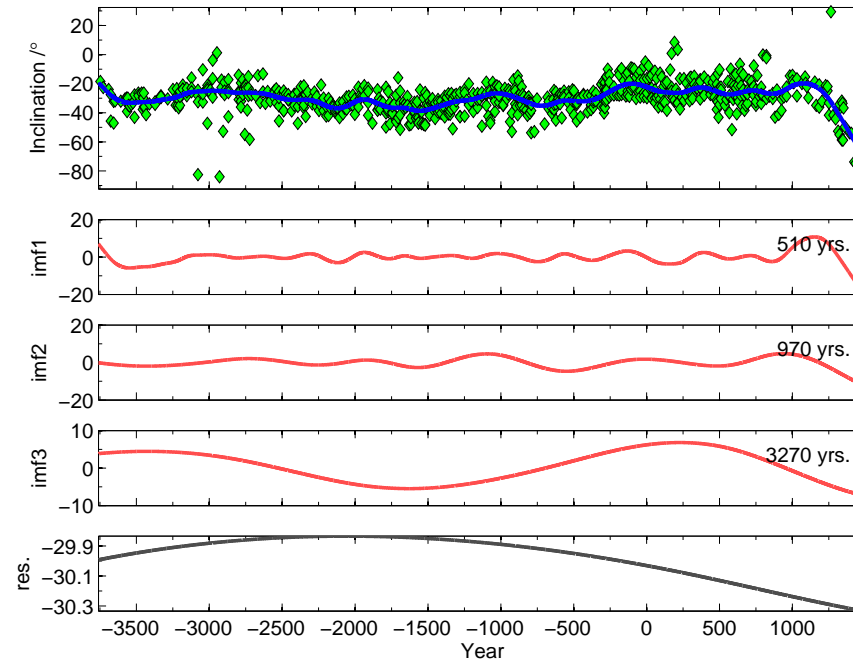
CHU – Chukchi Sea, Arctic Ocean



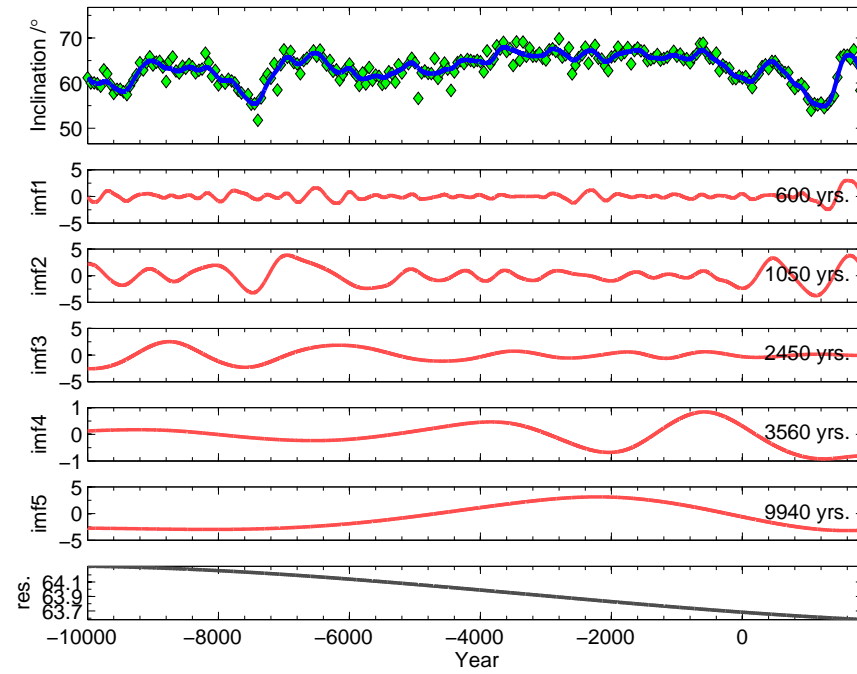
DES – Dead Sea, Israel



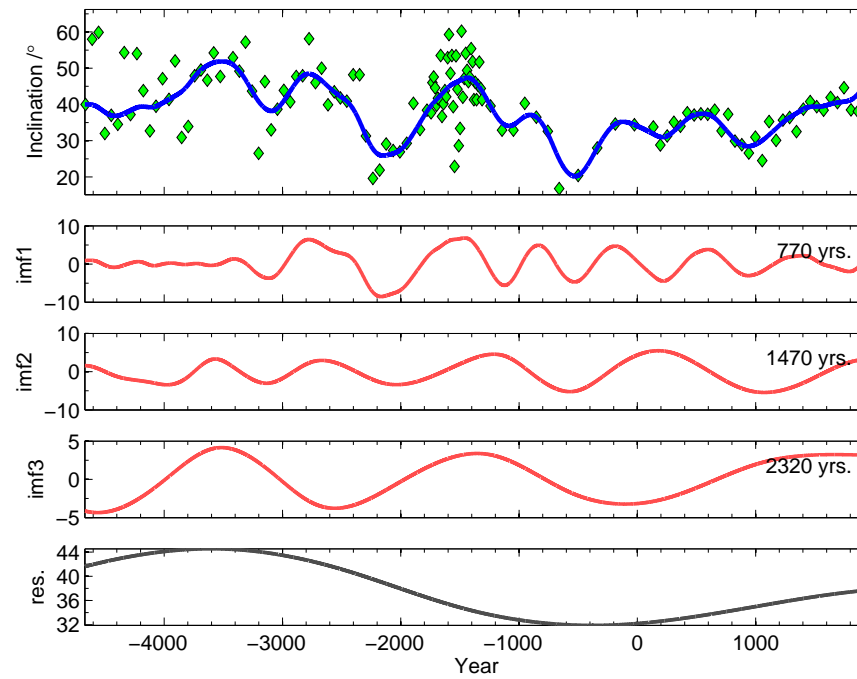
EAC – Lake Eacham, Australia



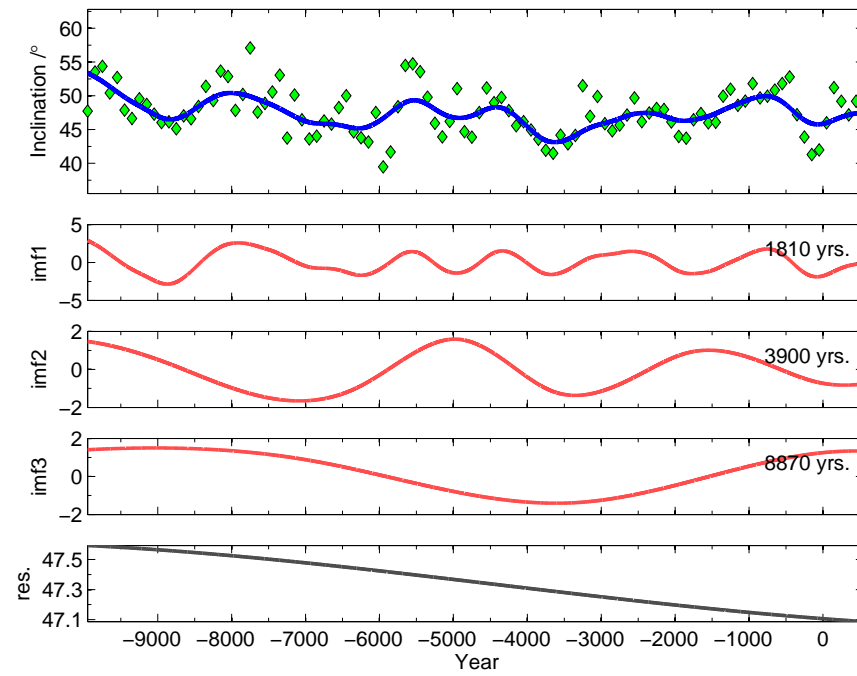
EIF – Eifel maars, Germany



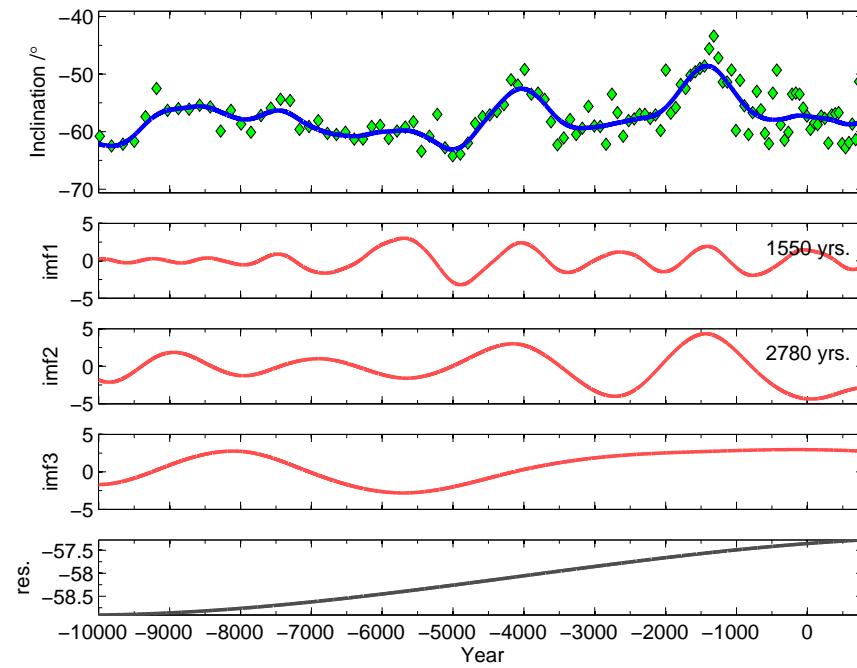
ERH – Erhai Lake, China



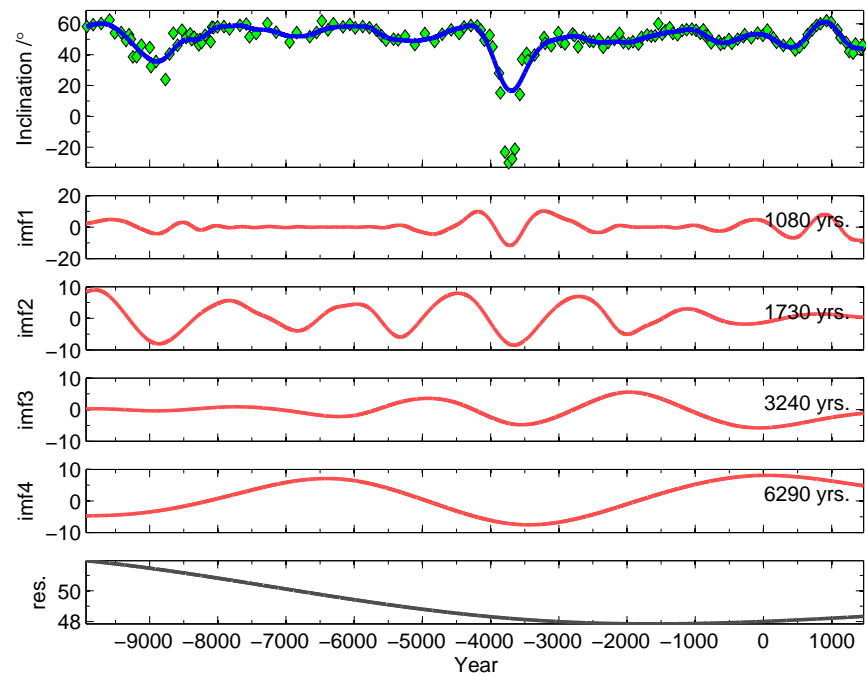
ERL – Erlongwan Lake, China



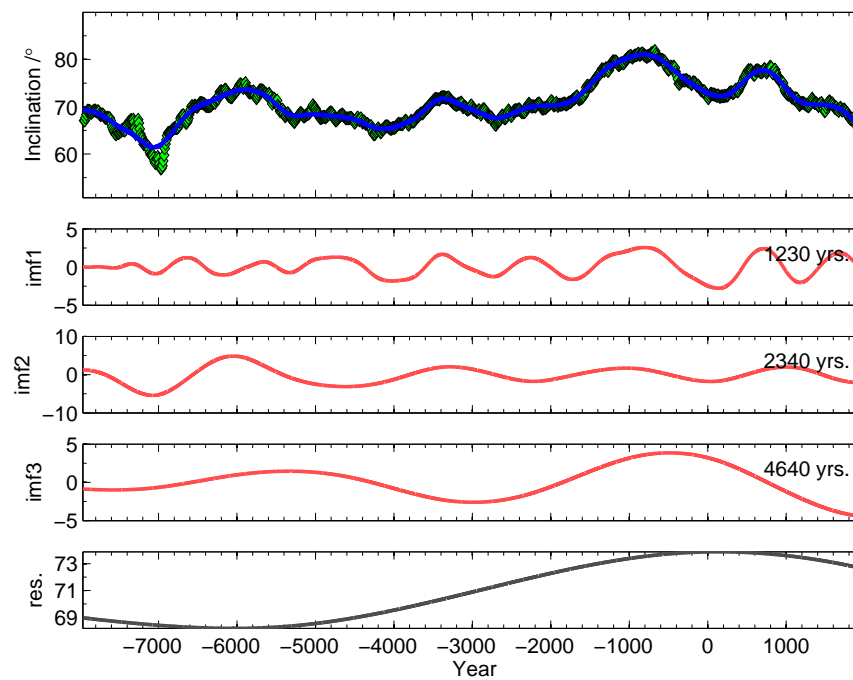
ESC – Lake Escondido, Argentina



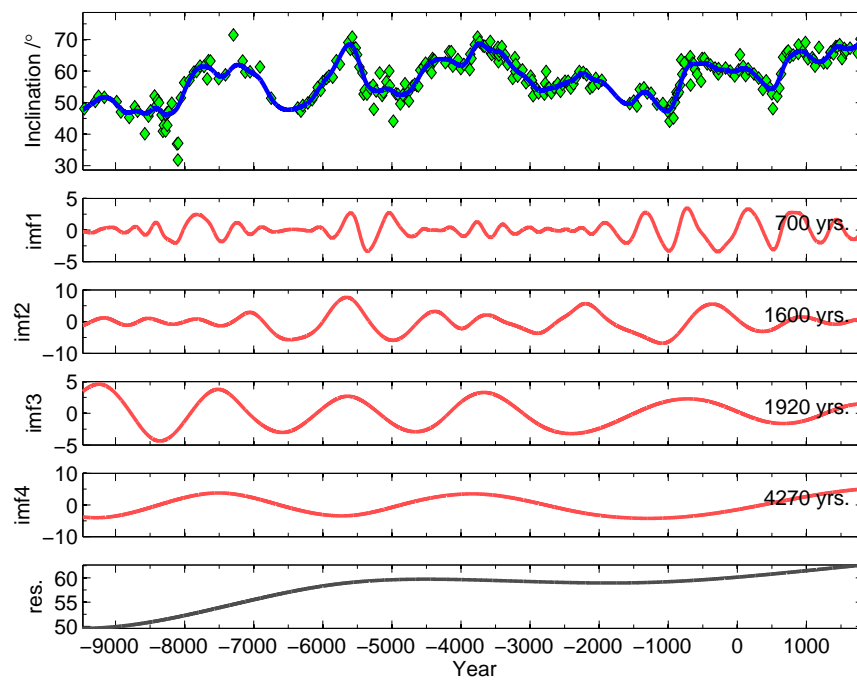
FAN – Lake Fangshan, China



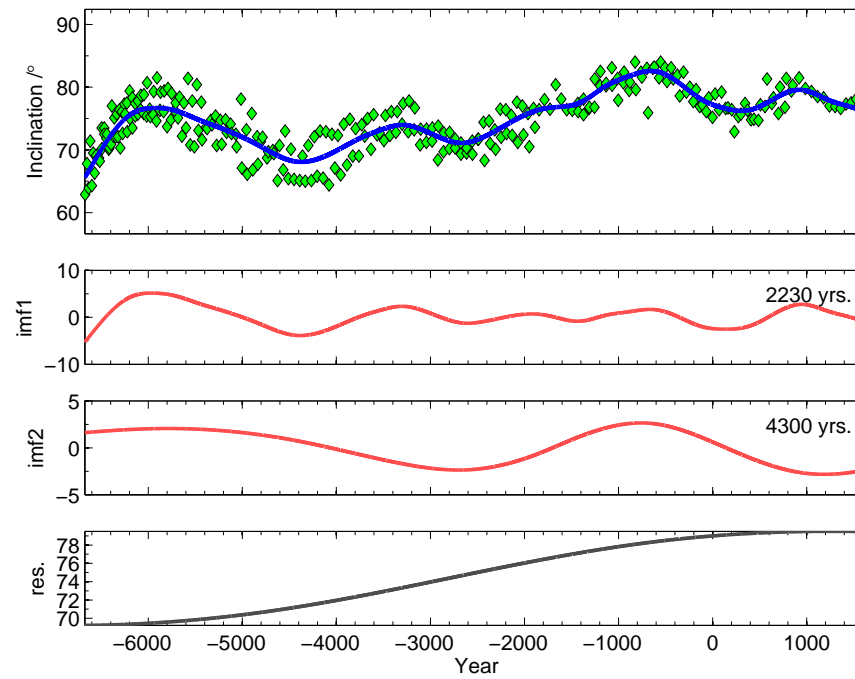
FIN – Finnish Lakes, Finland



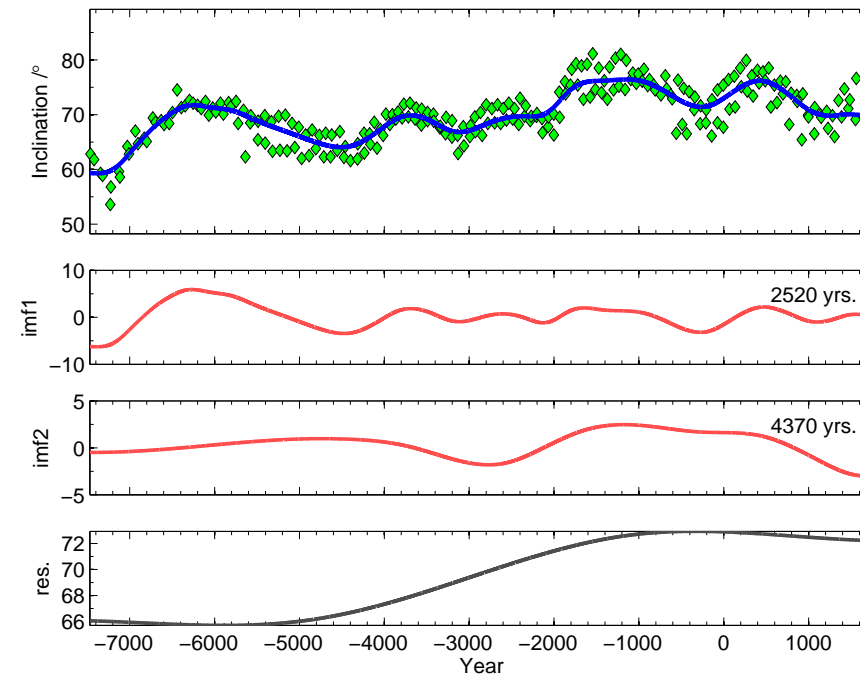
FIS – Fish Lake, USA



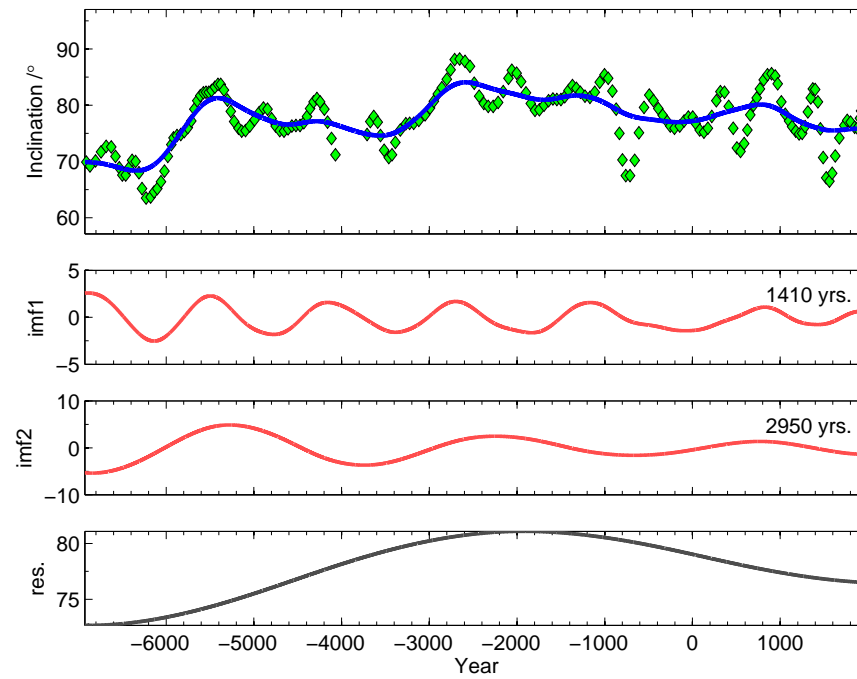
FRG – Frängsjön, Sweden



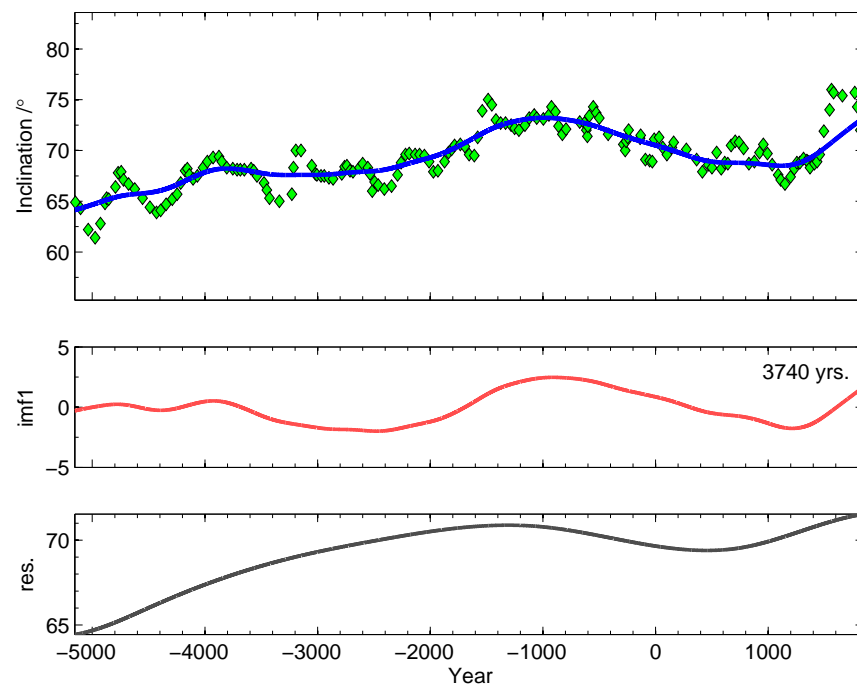
FUR – Furskogstjärnet, Sweden



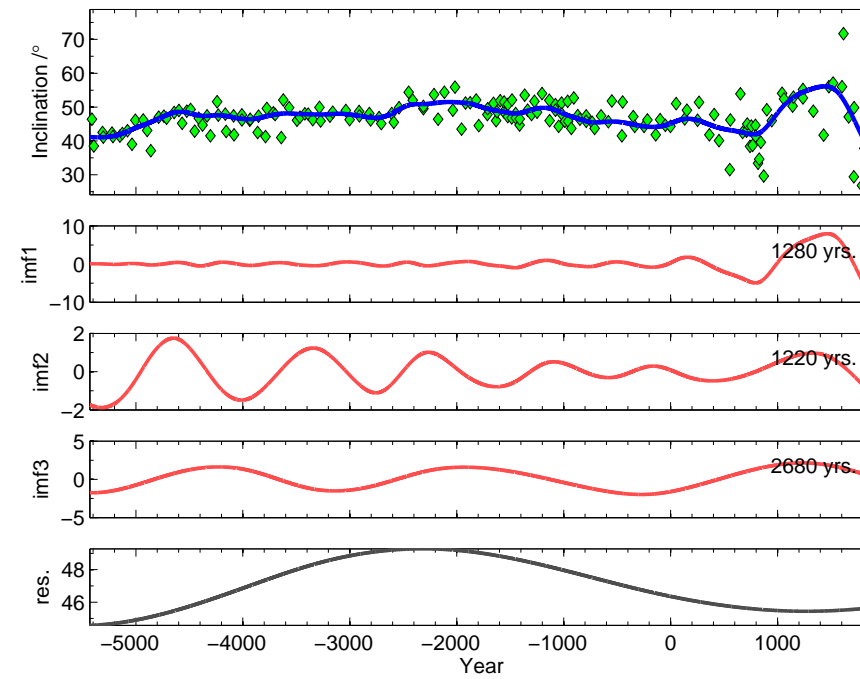
GAR – Gardar Drift, North Atlantic



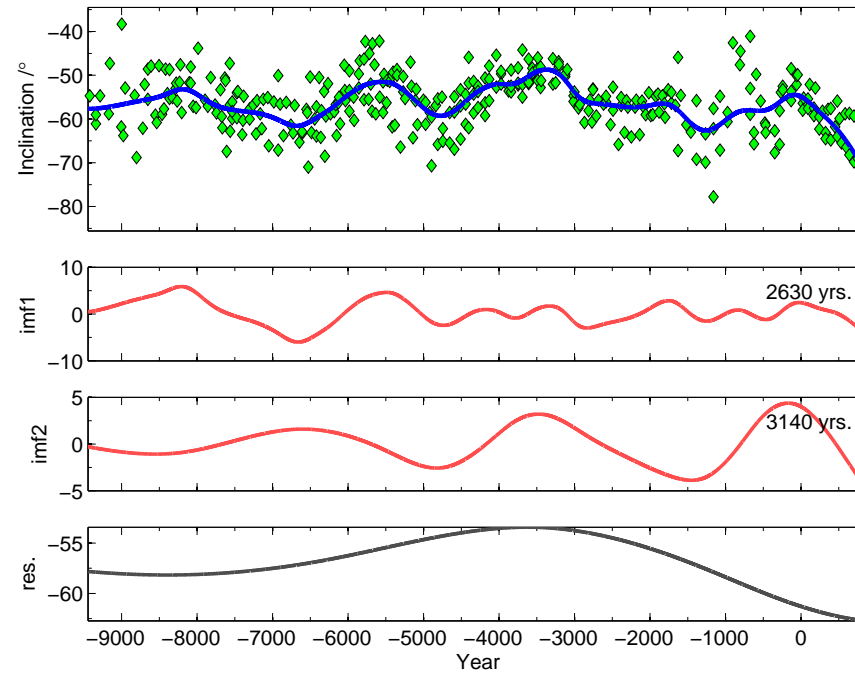
GEI – Llyn Geirionydd, UK



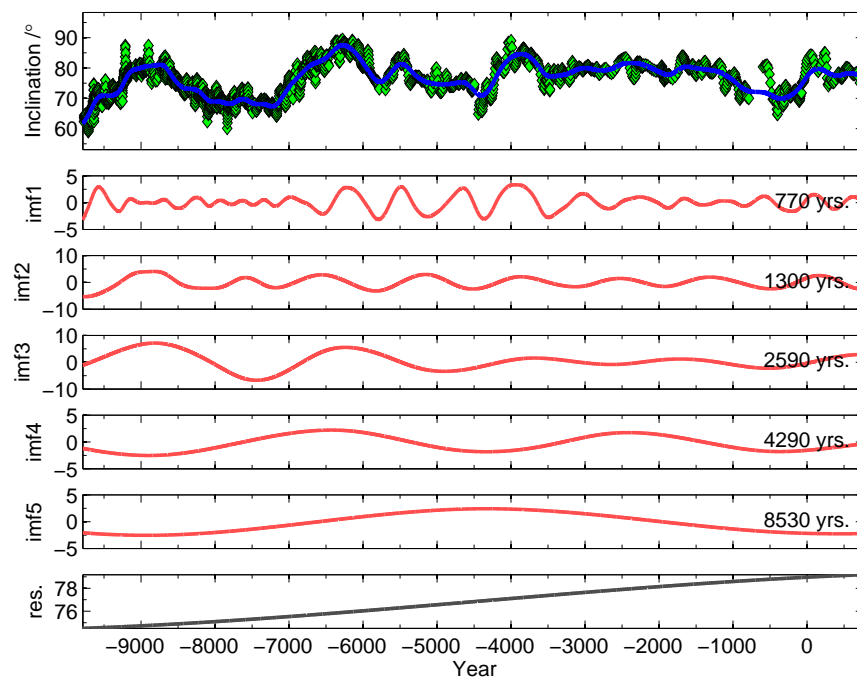
GHI – Cape Ghir, NW Afr. Margin



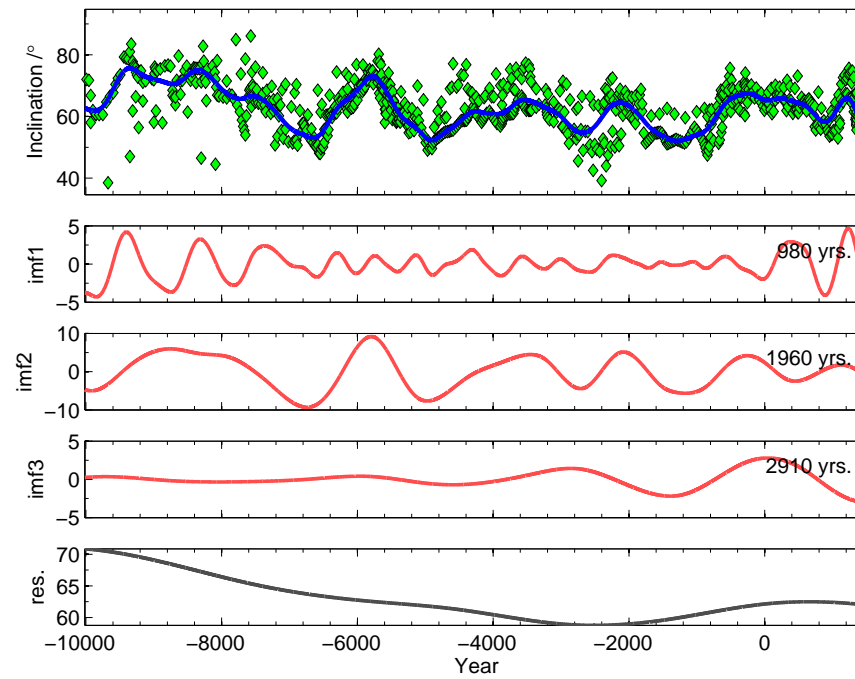
GNO – Lake Gnotuk, Australia



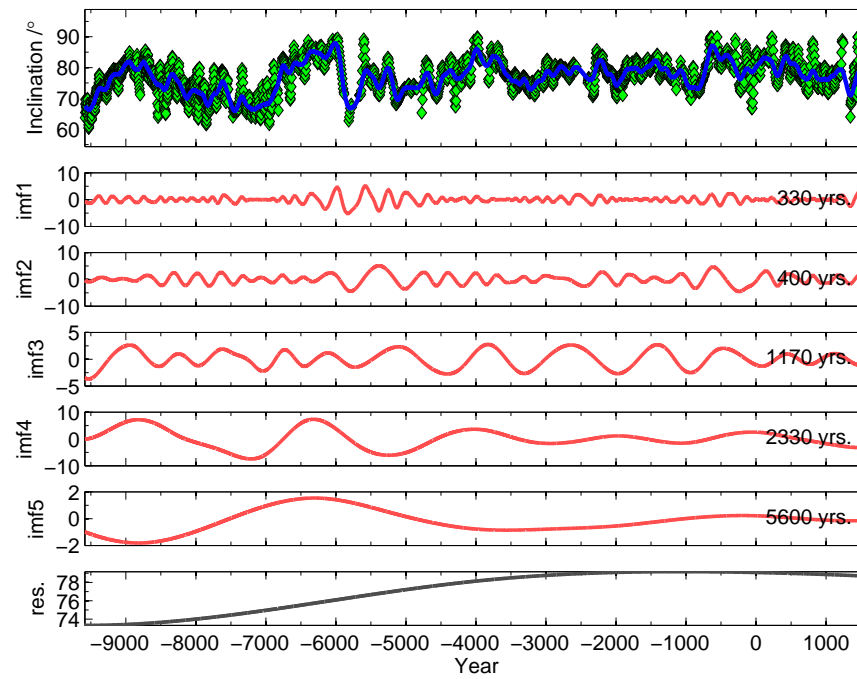
GRE – Greenland, North Atlantic



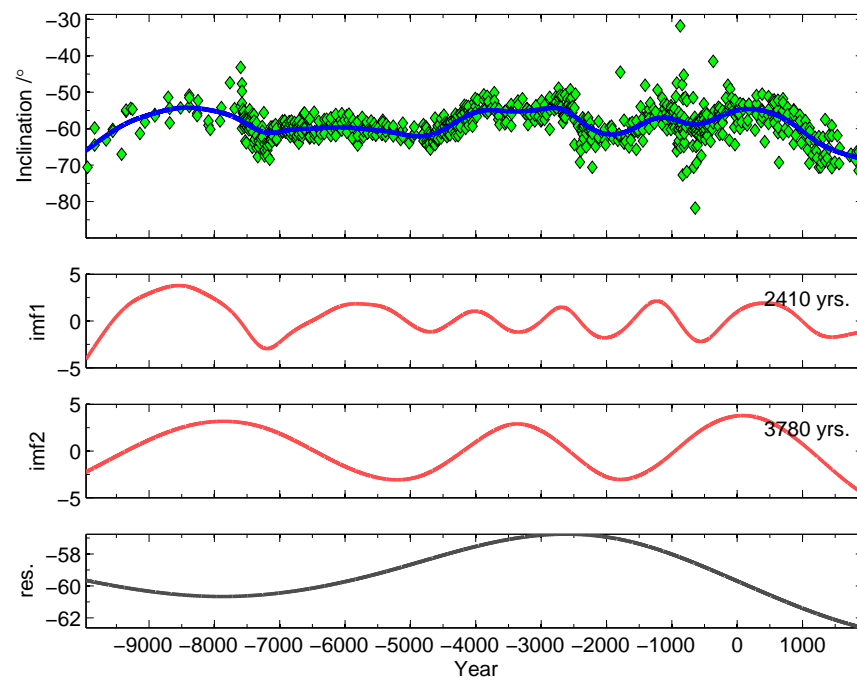
HUR – Lake Huron, USA



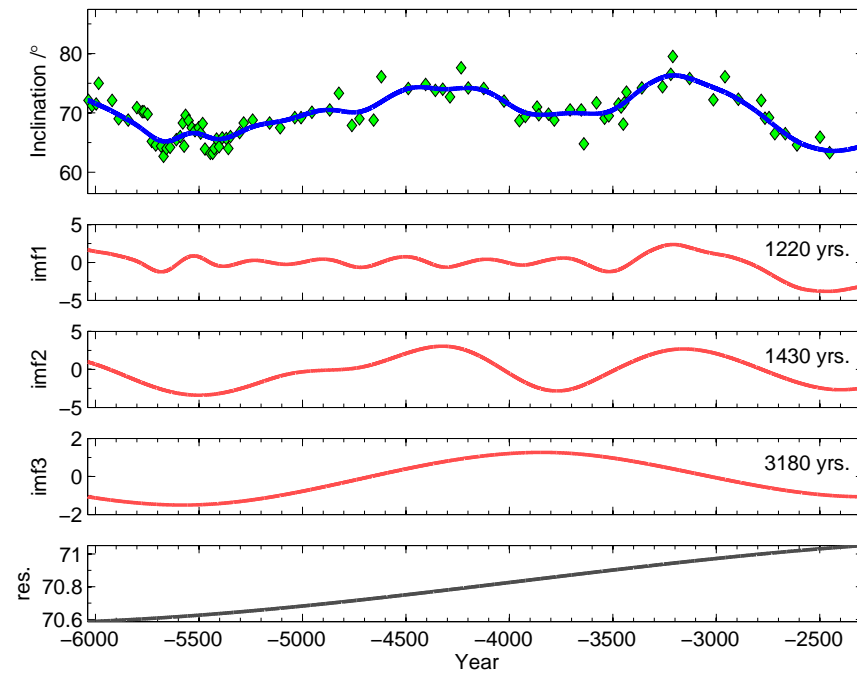
ICE – Iceland, North Atlantic



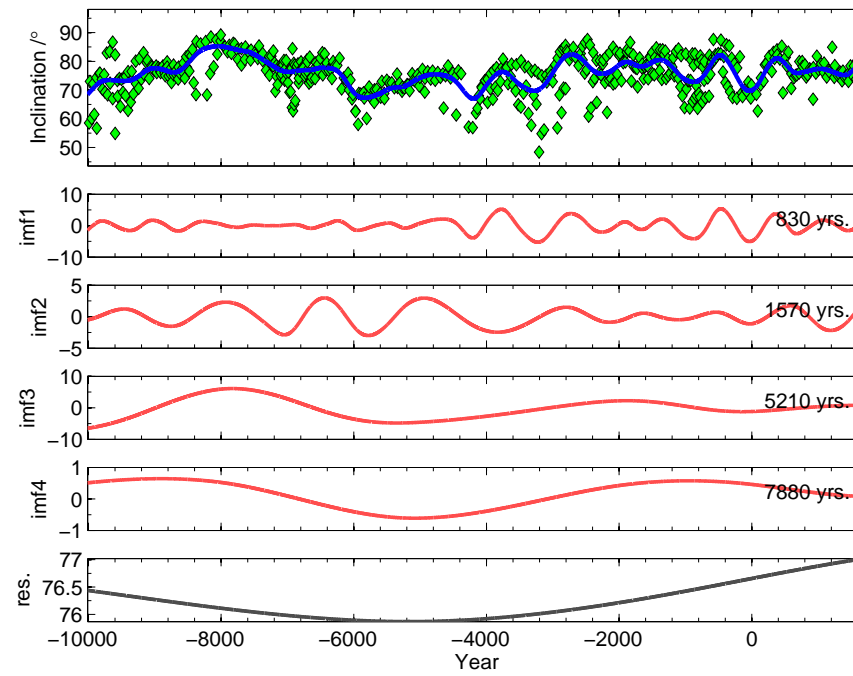
KEI – Lake Keilambete, Australia



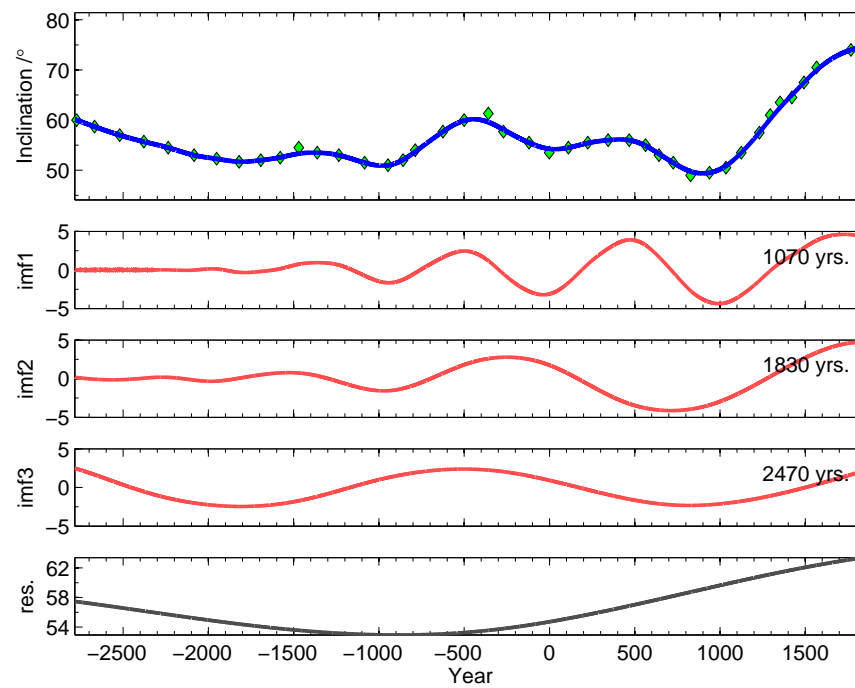
KYL – Kylan Lake, Minnesota



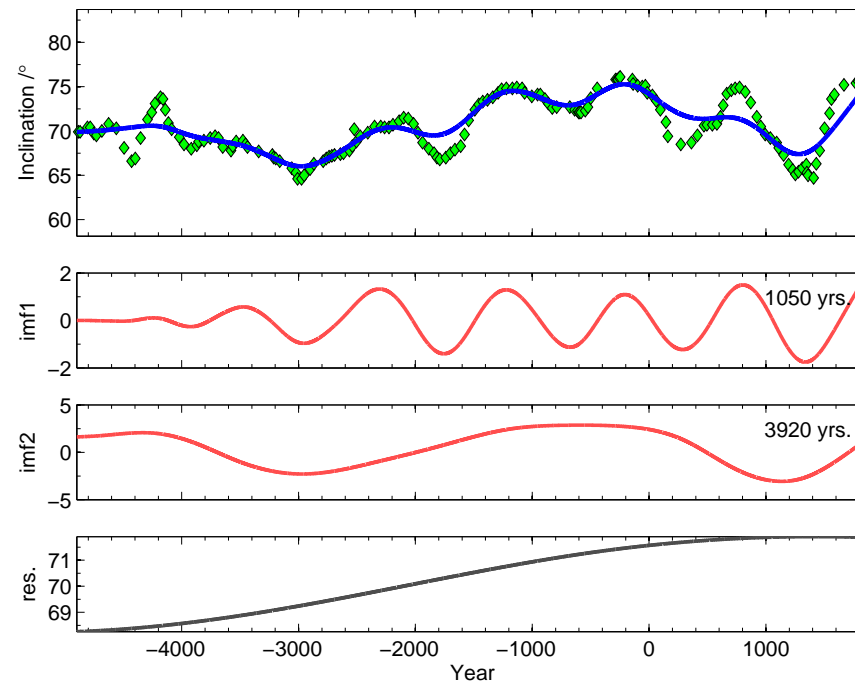
LAM – Lake Lama, Russia



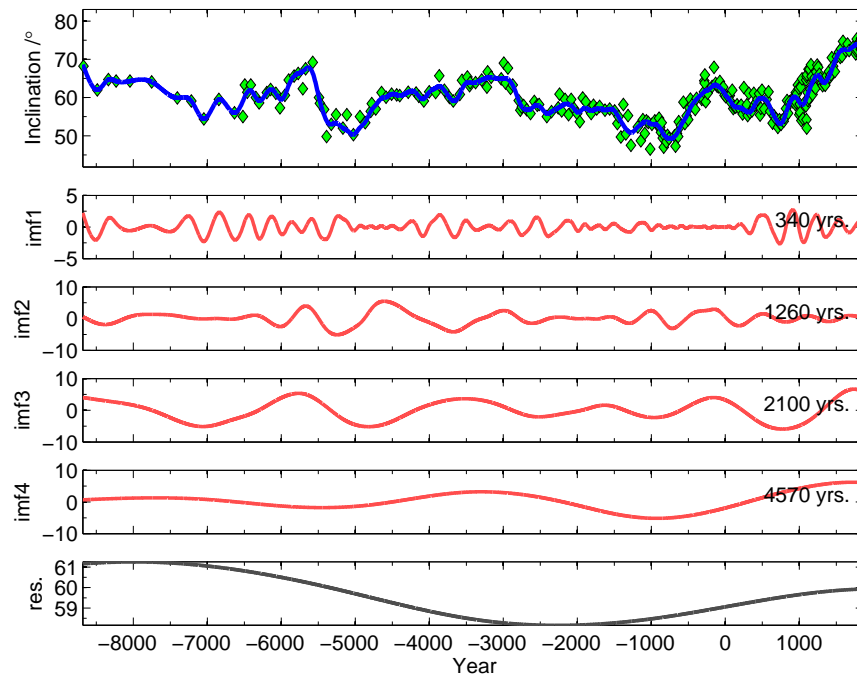
LEB – Lake LeBoeuf, USA



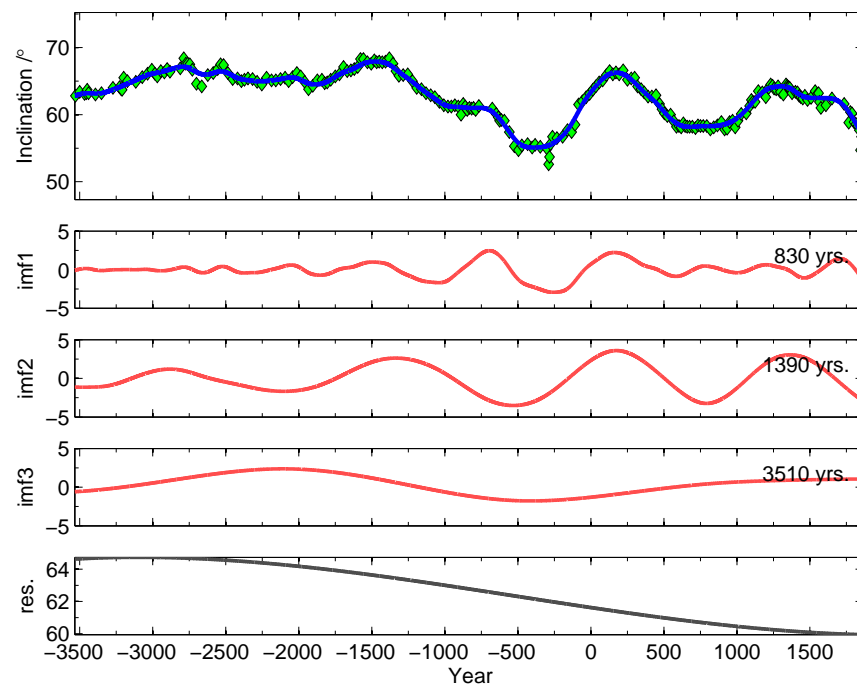
LOM – Loch Lomond, UK



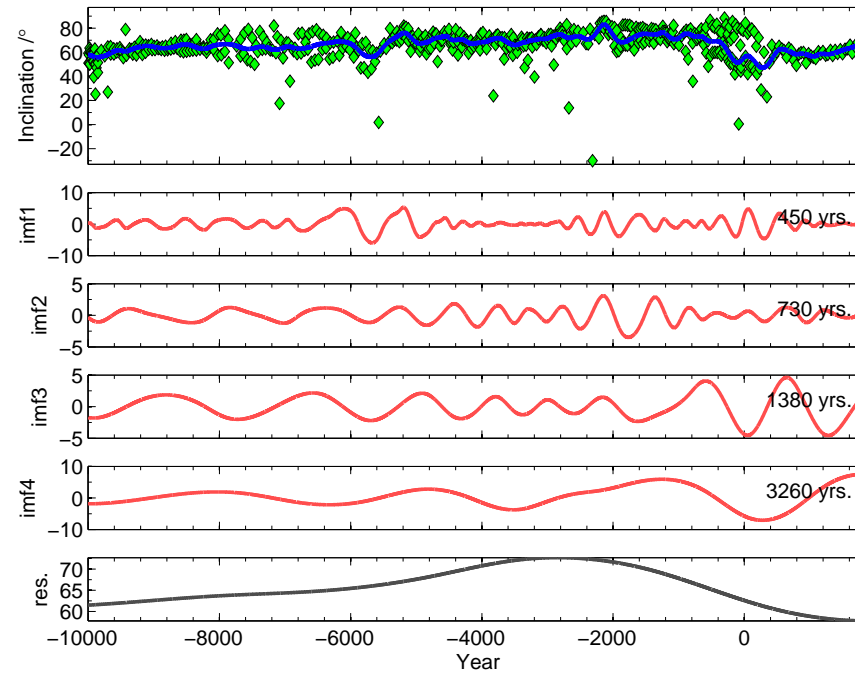
LSC – Lake St.Croix, USA



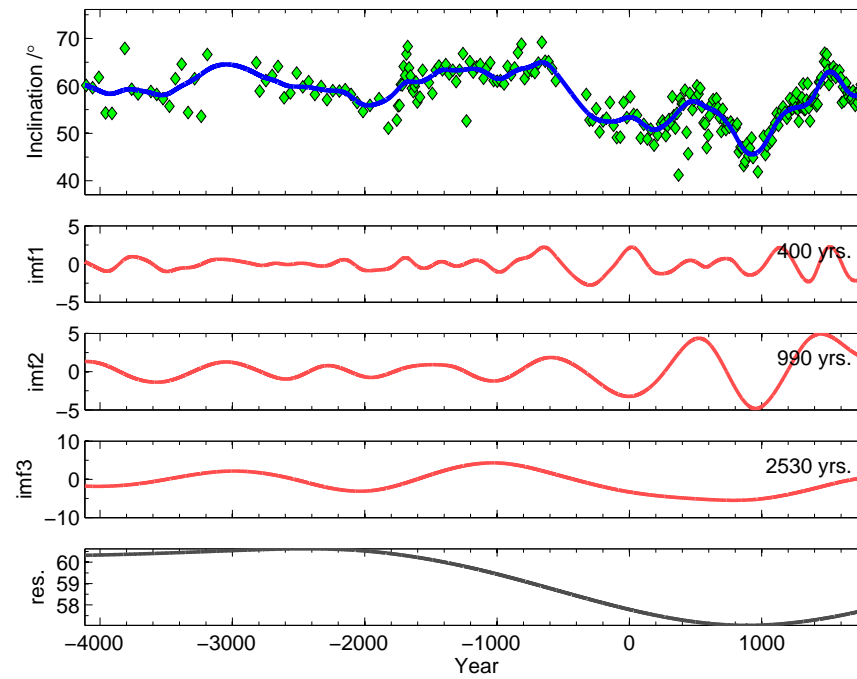
MAR – Mara Lake, Canada



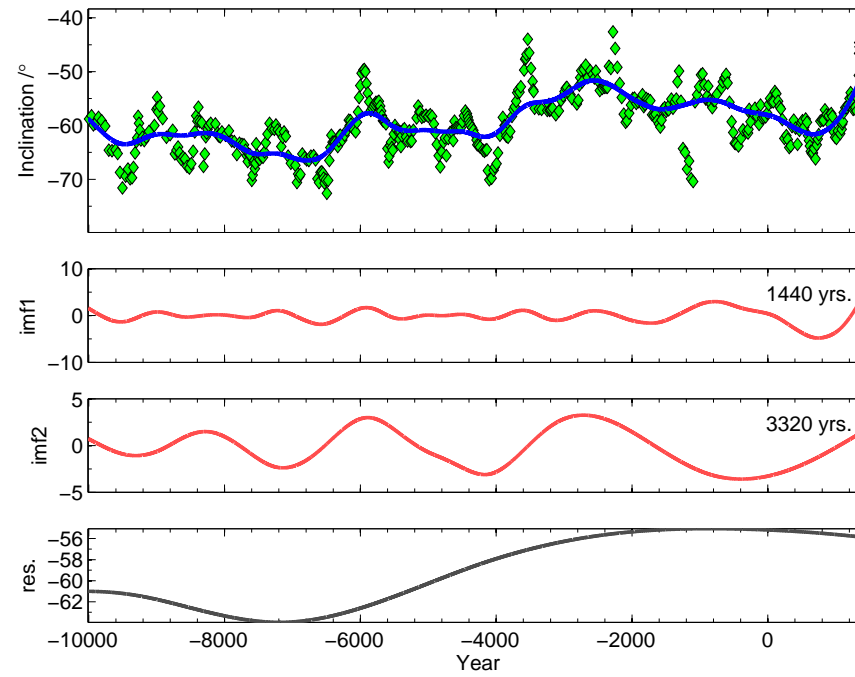
MEE – Meerfelder Maar, Germany



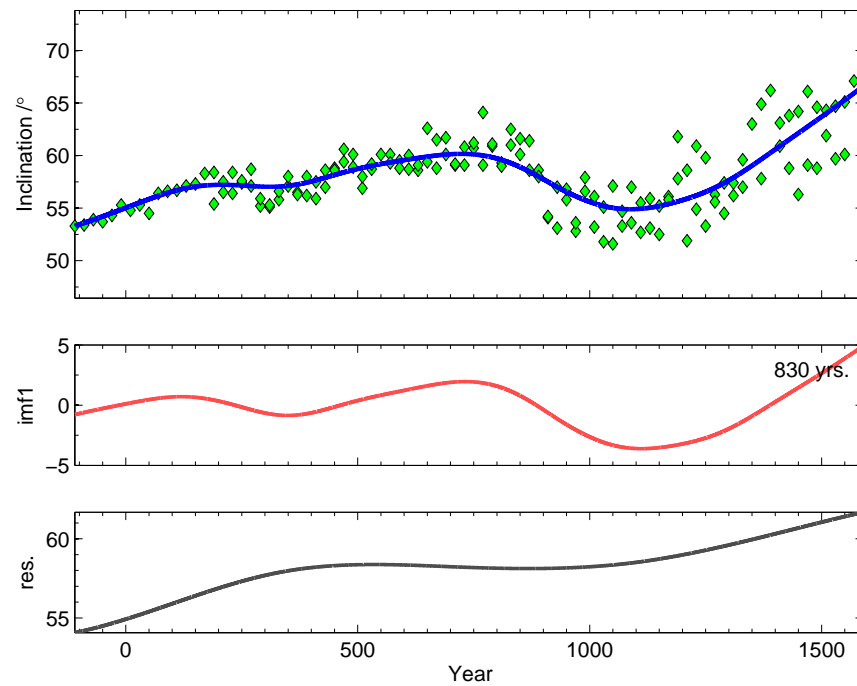
MEZ – Lago di Mezzano, Italy



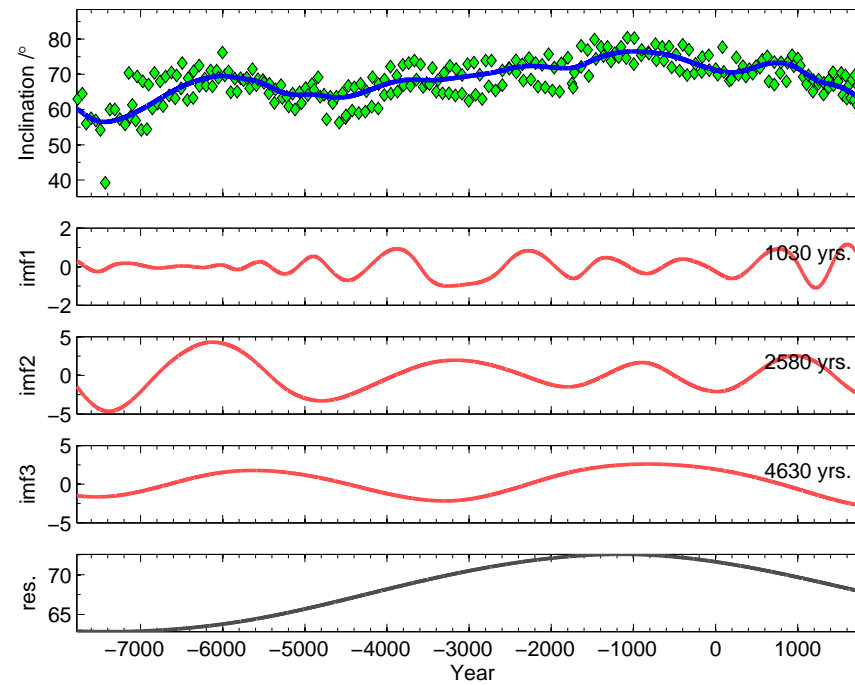
MNT – Lago Morenito, Argentina



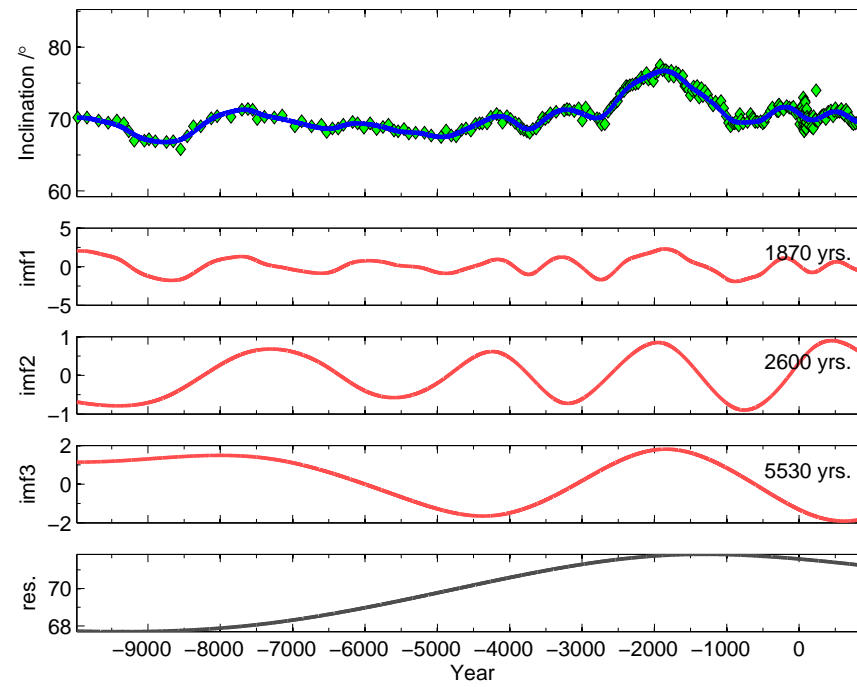
MOR – Lac Morat, Switzerland



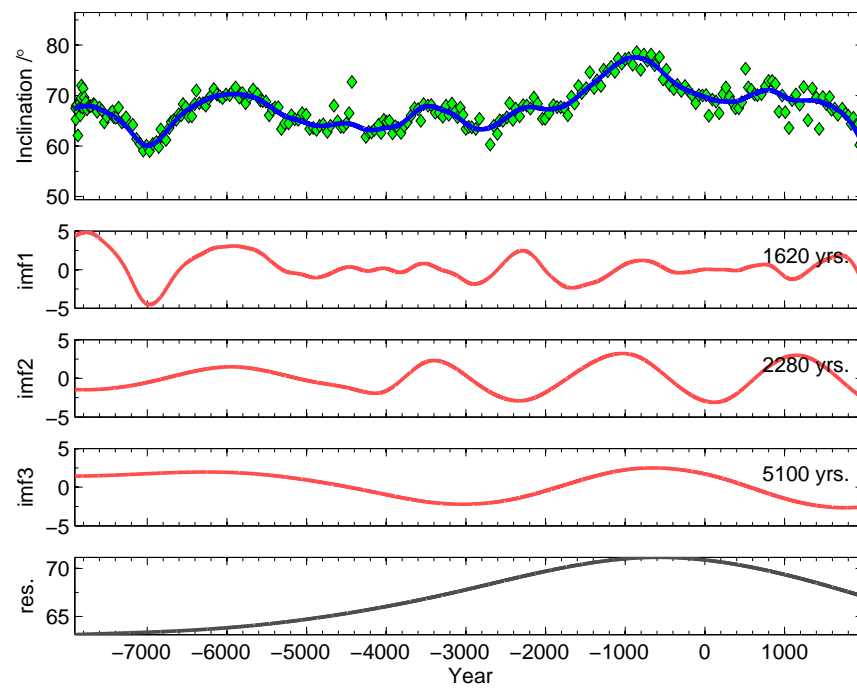
MOT – Mötterudstjärnet, Sweden



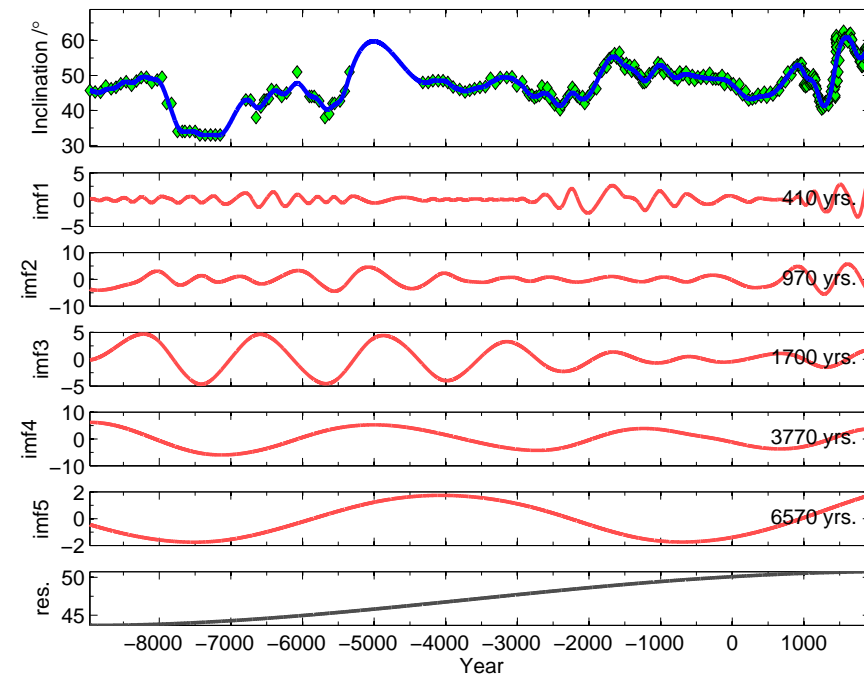
NAR – Lake Narocho, Belorussia



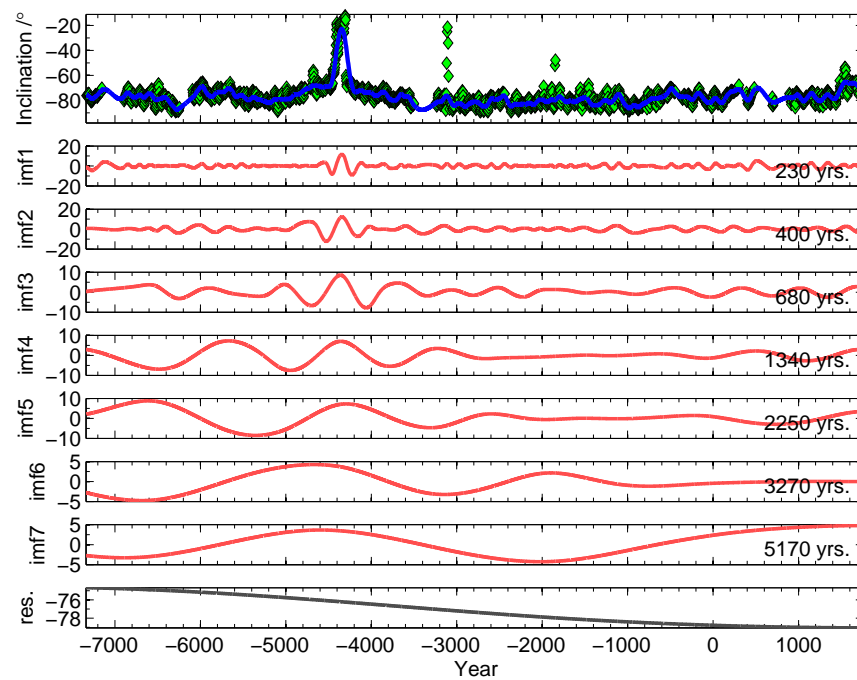
NAU – Nautajärvi, Finland



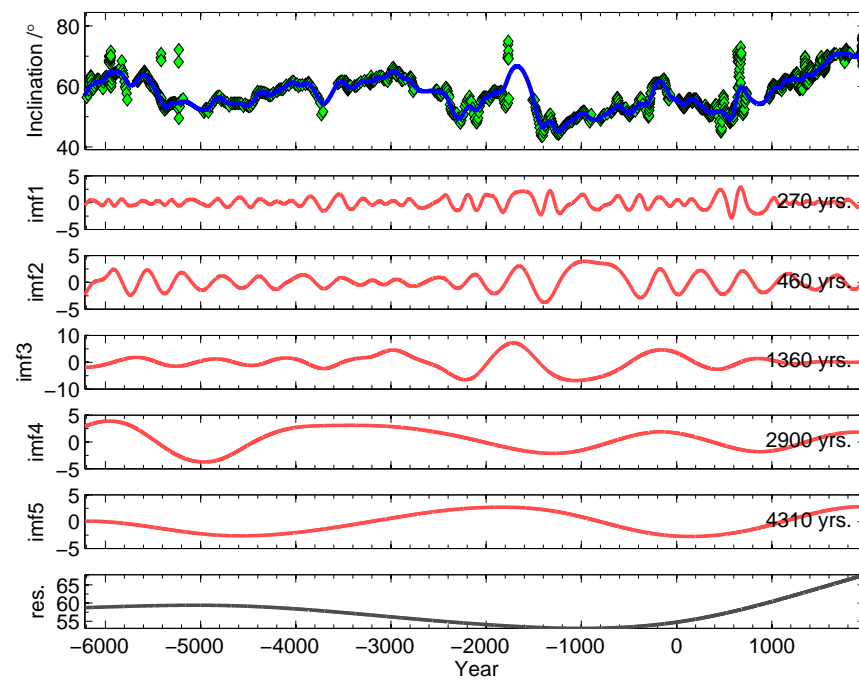
NEM – Lake Nemi, Italy



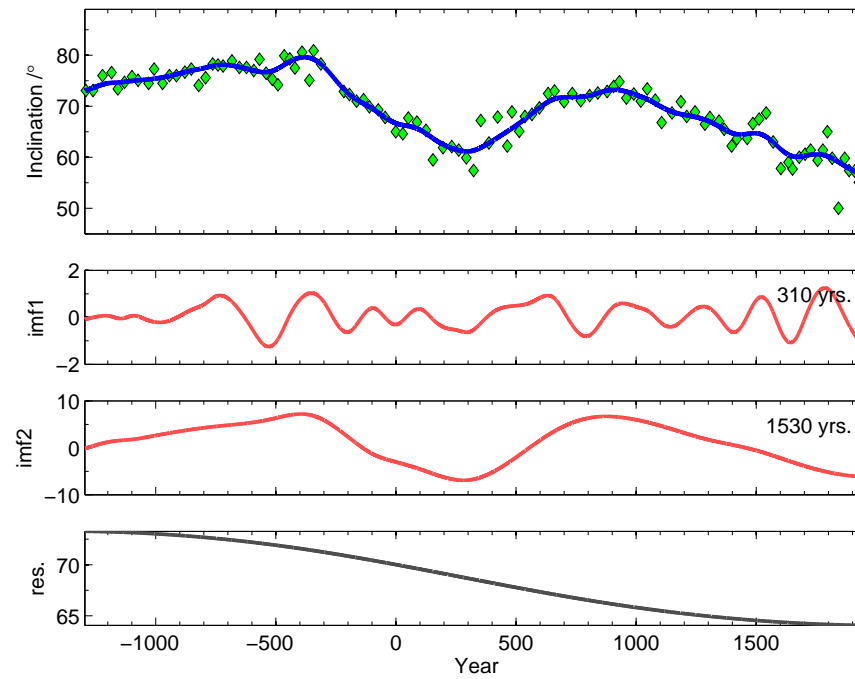
PAD – Palmer Deep, Antarctic Pen.



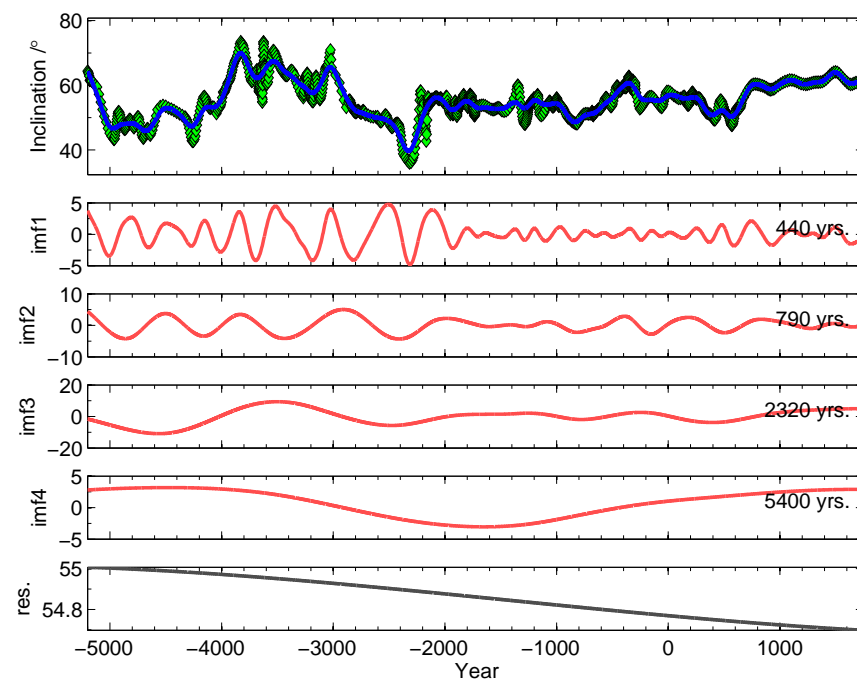
PEP – Lake Pepin, USA



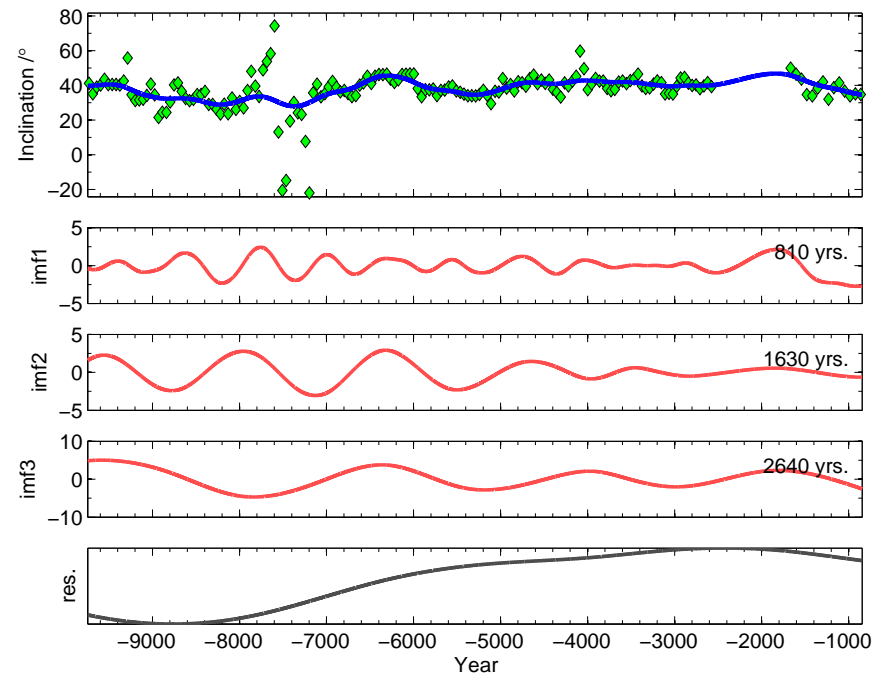
POH – Pohjajärvi, Finland



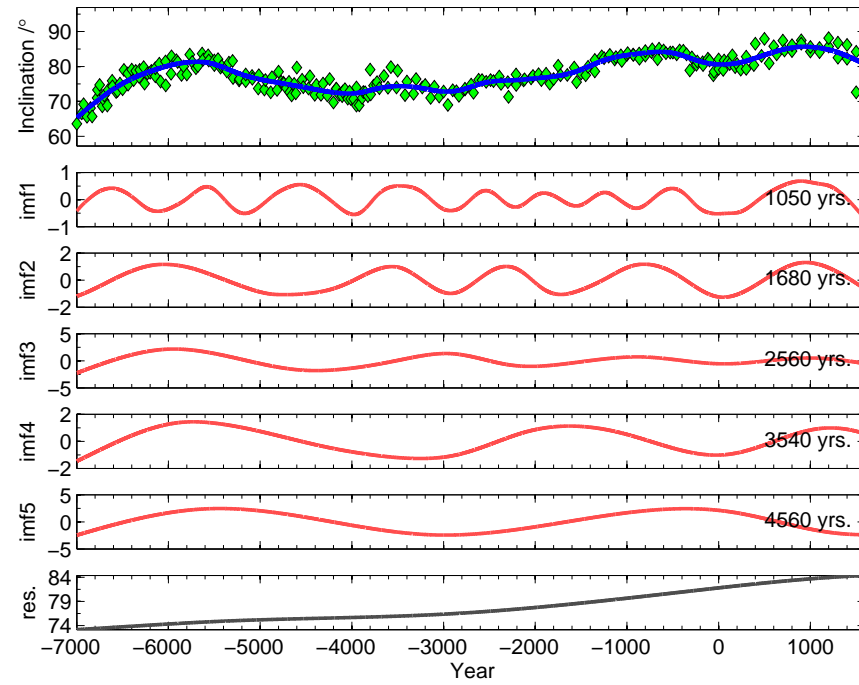
SAG – Saguenay Fjord, Canada



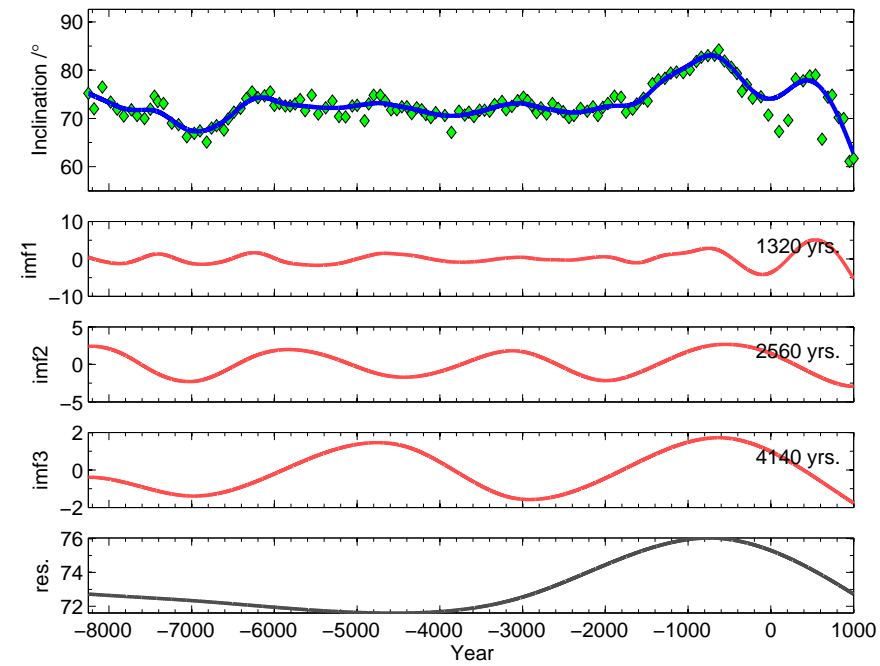
SAN – Hoya de San Nicolas, Mexico



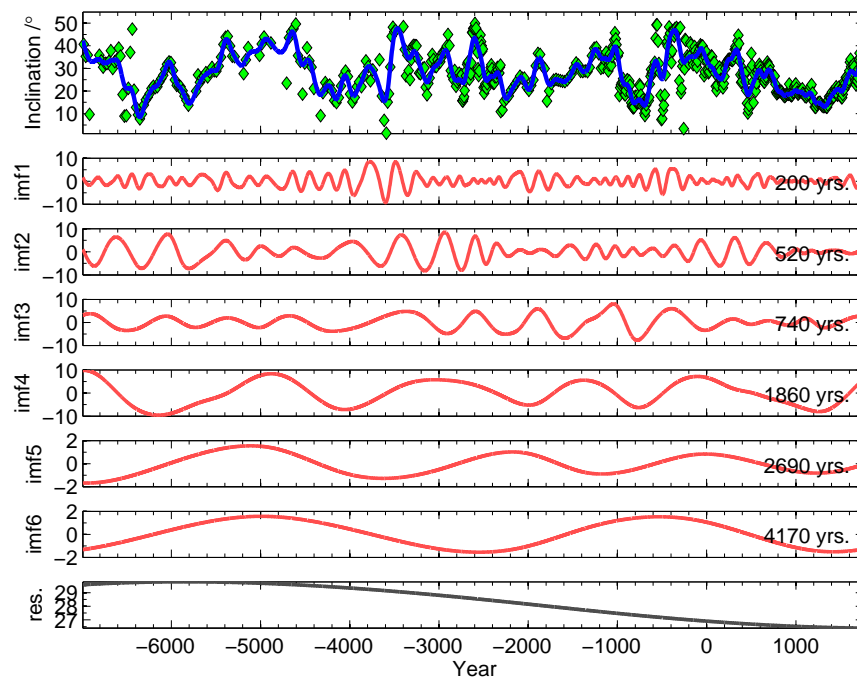
SAR – Sarsjön, Sweden



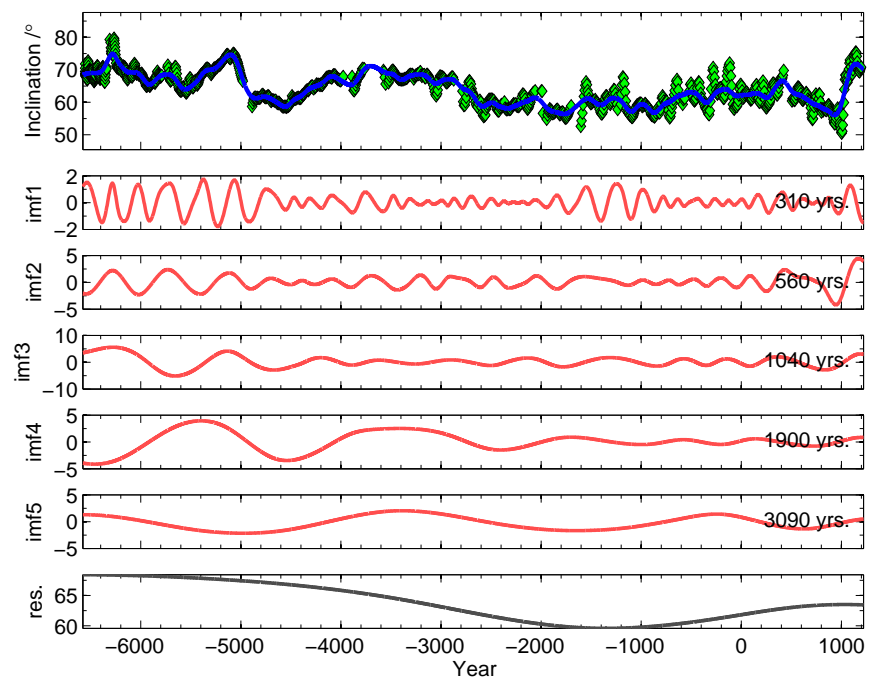
SAV – Savijärvi, Finland



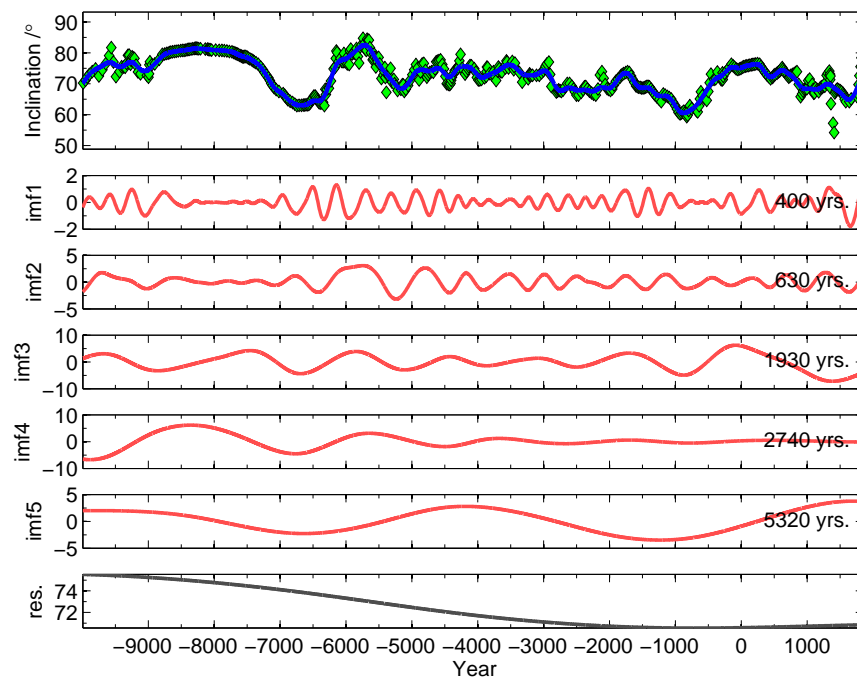
SCL – Lake Shuangchiling, China



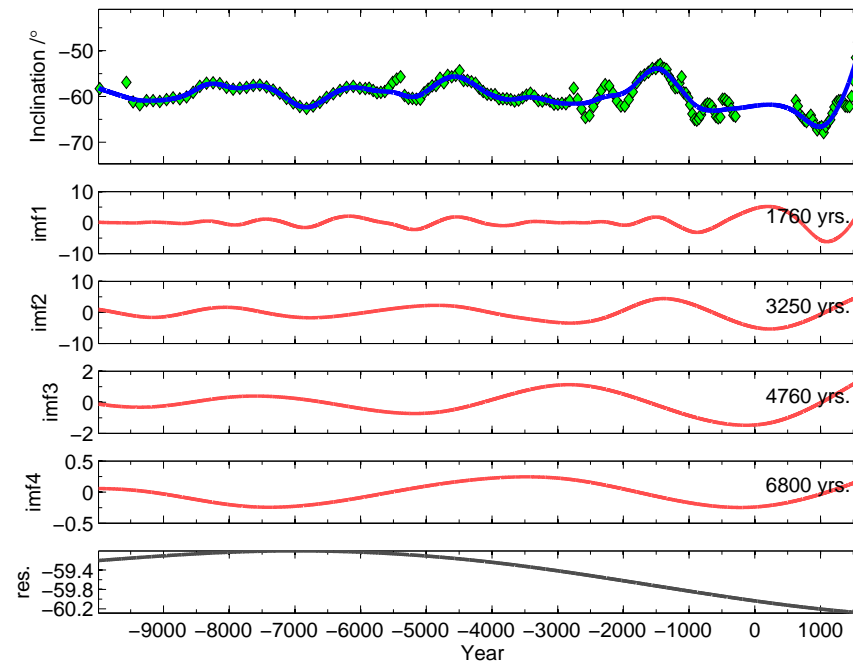
STL – St. Lawrence Est., Canada



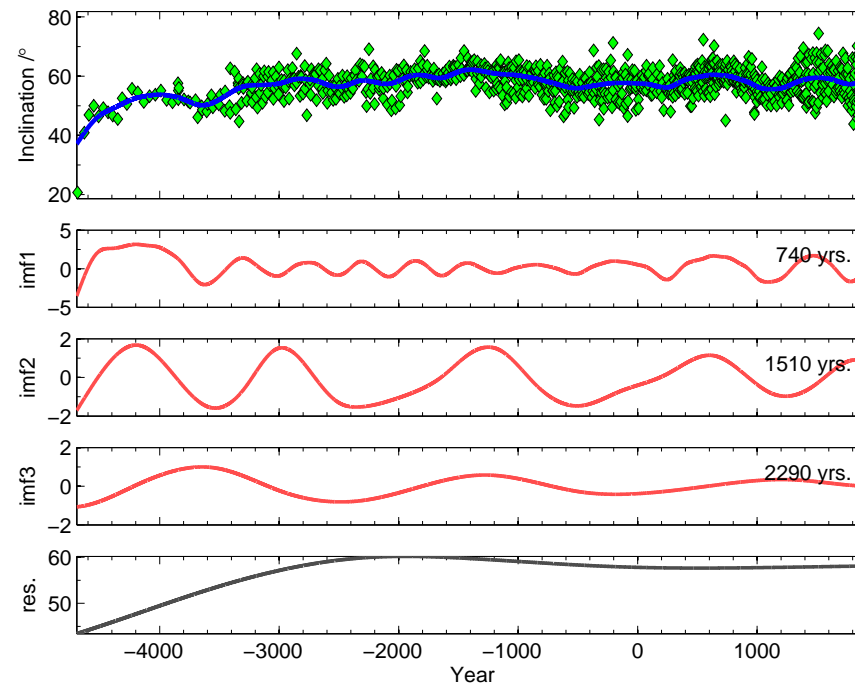
SUP – Lake Superior, USA



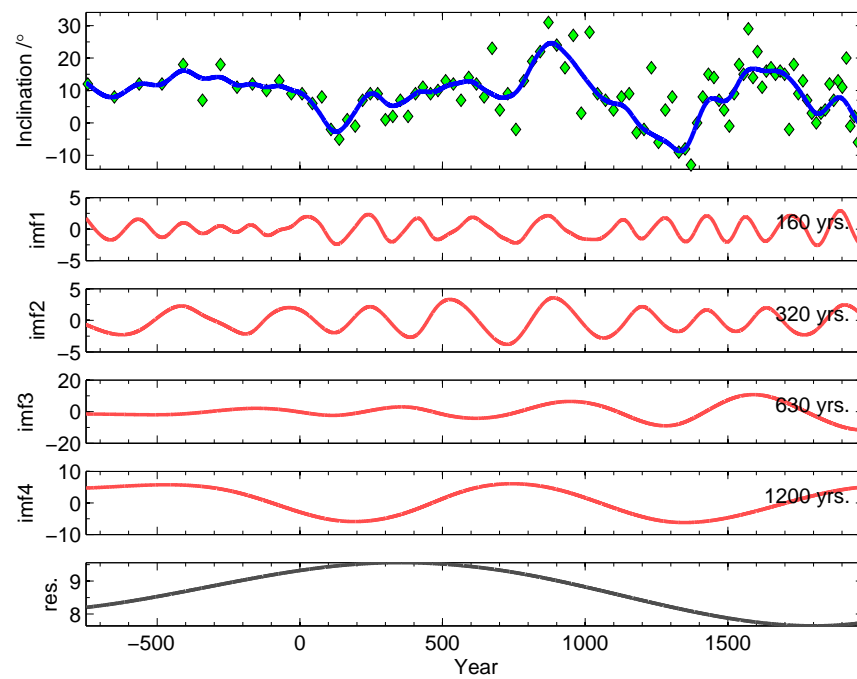
TRE – Laguna El Trébol, Argentina



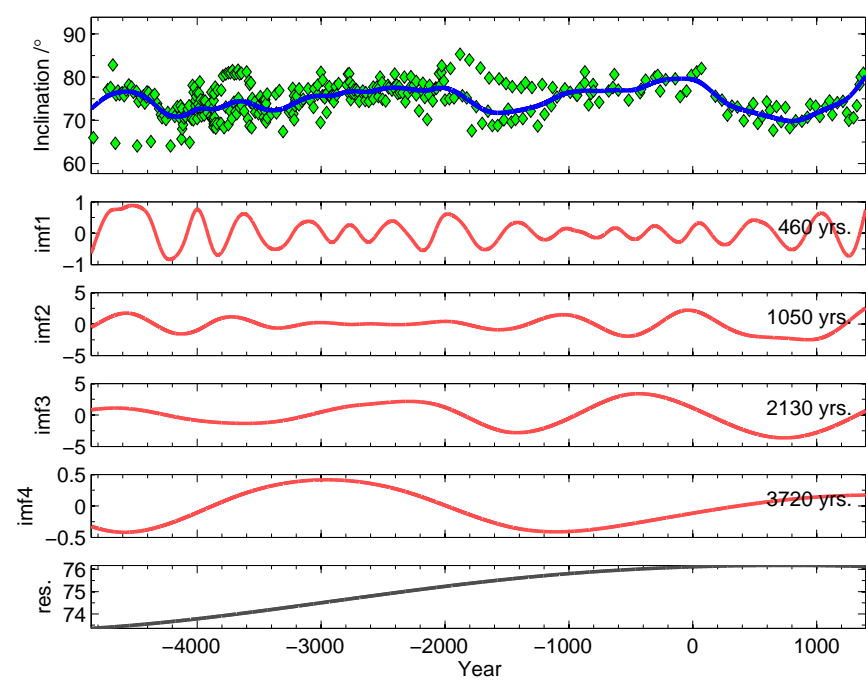
TRI – Lake Trikhonis, Greece



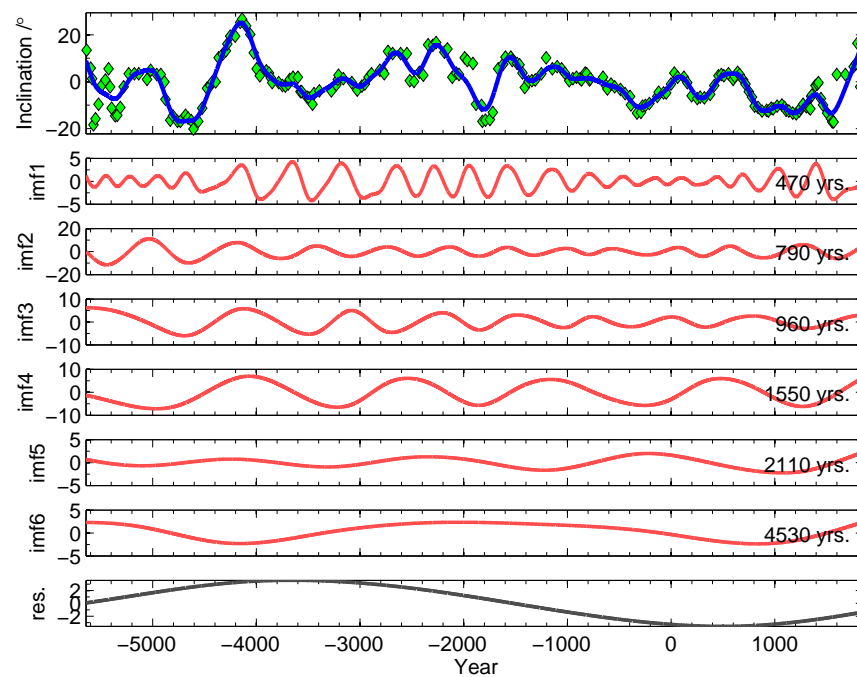
TUR – Lake Turkana, Kenya



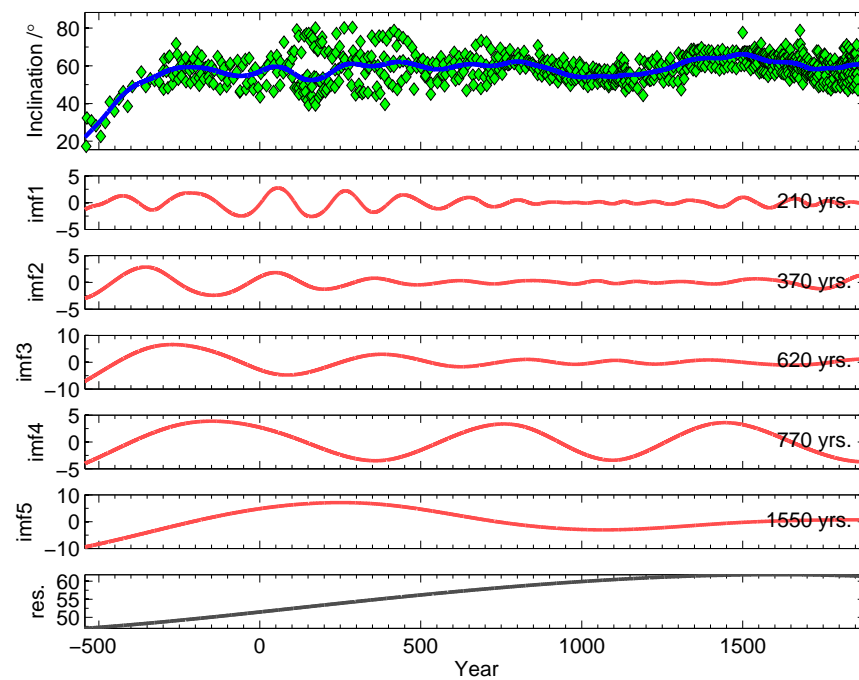
VAT – Vatndalsvatn, Iceland



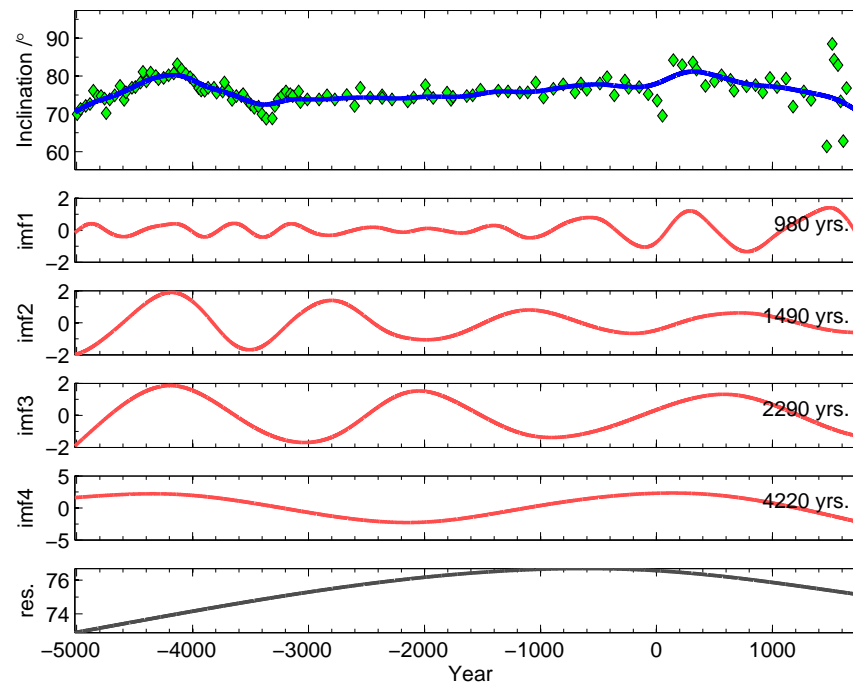
VIC – Lake Victoria, Uganda



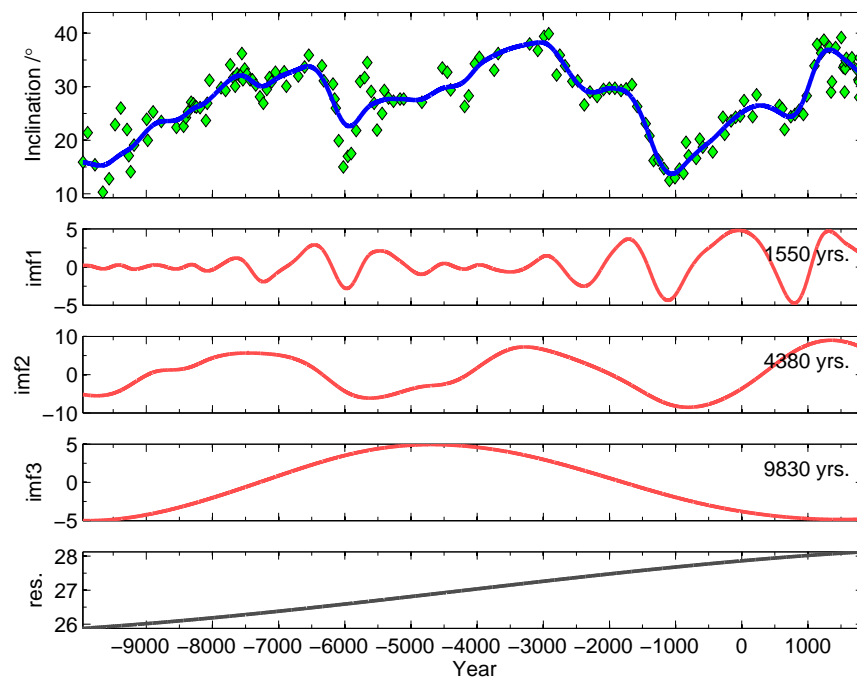
VOL – Lake Volvi, Greece



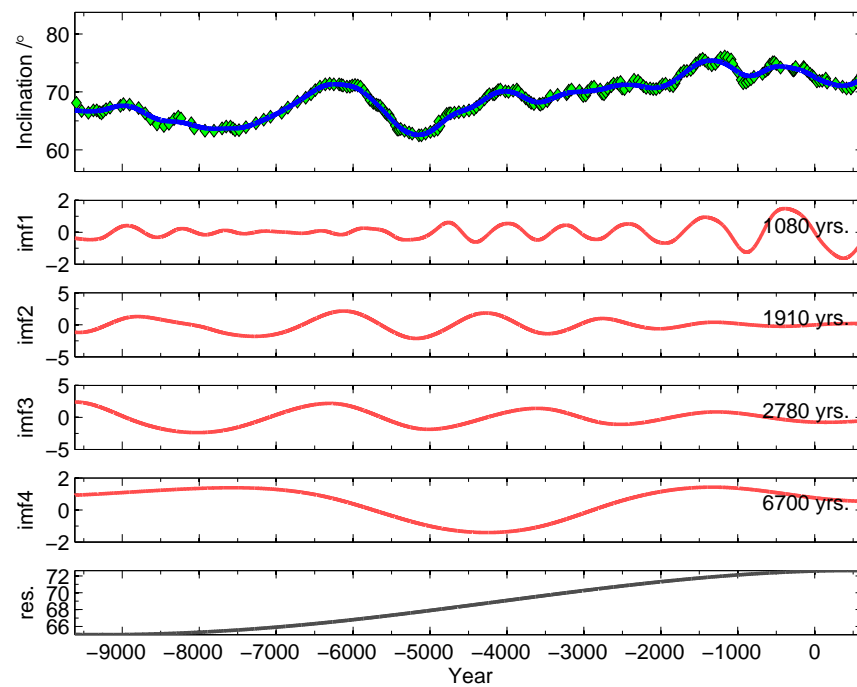
VUK – Vukonjärvi, Finland



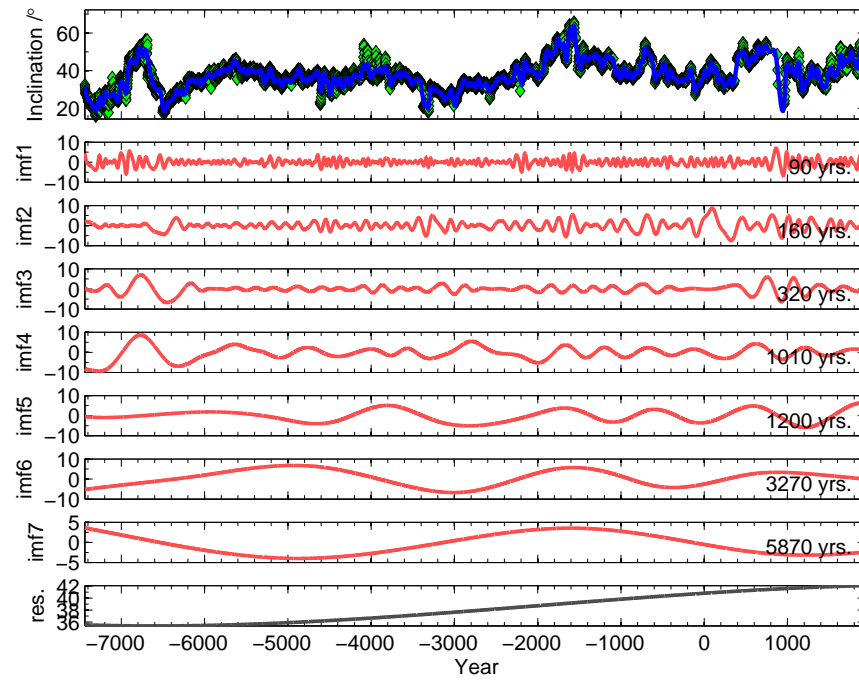
WAI – Lake Waiau, Hawaii



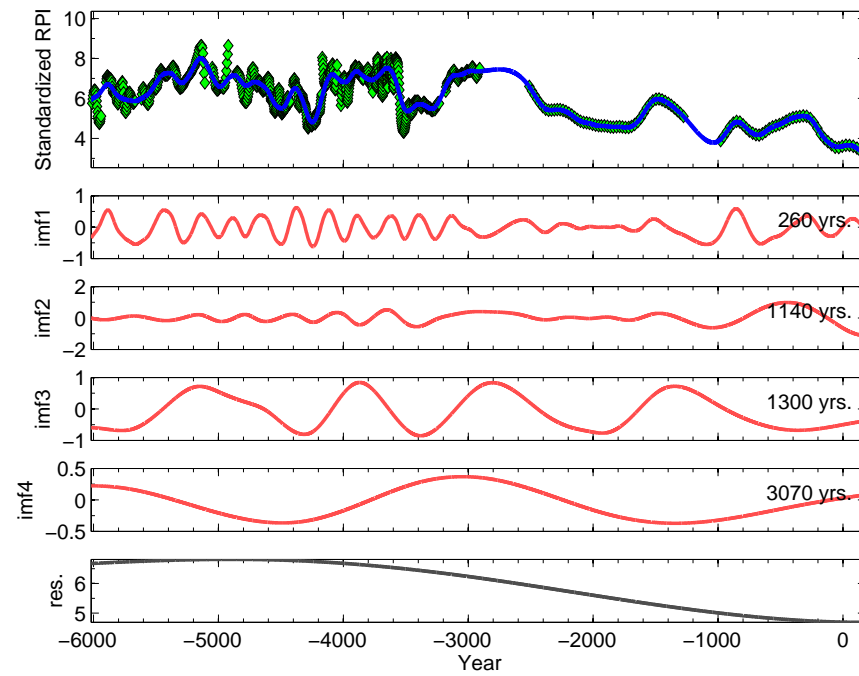
WIN – Lake Windermere, UK



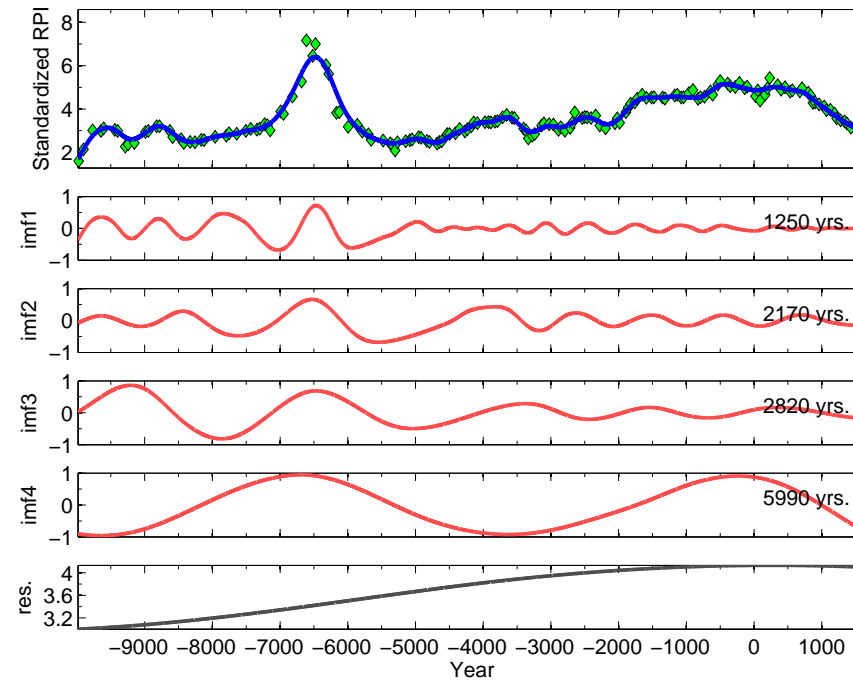
WPA – West Pacific



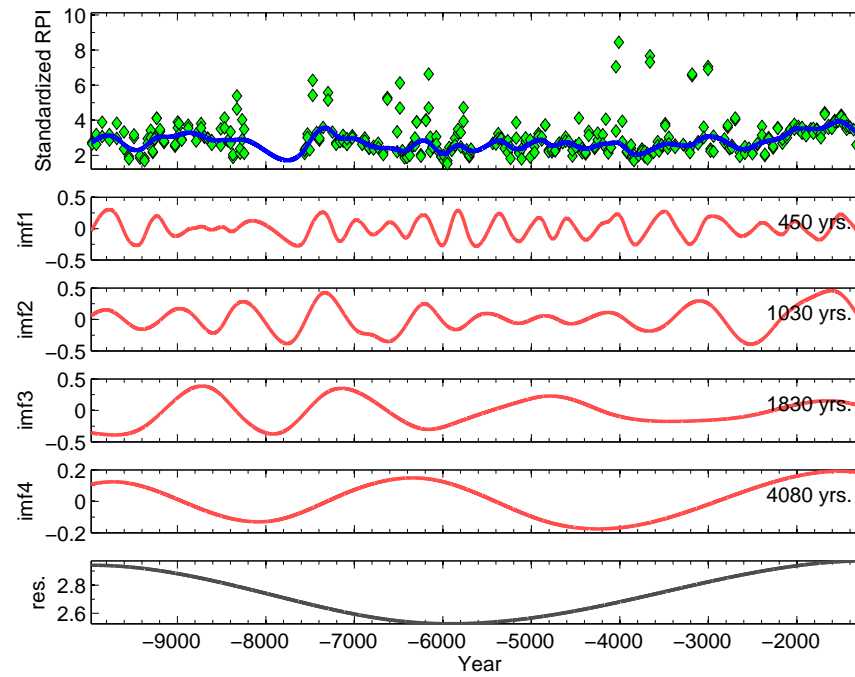
AAM – Alaskan Margin, Arctic Sea



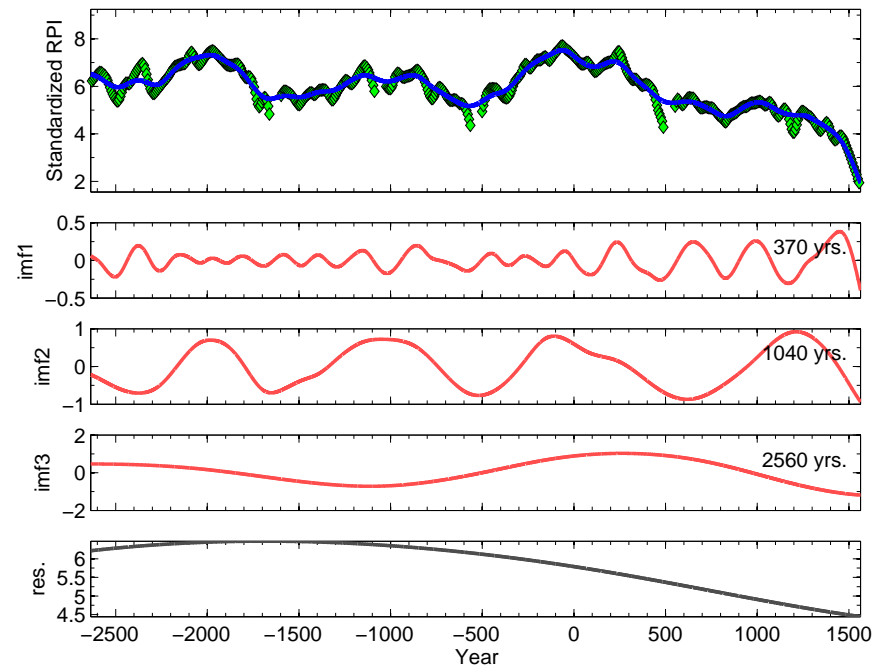
AD1 – Adriatic Sea, Italy



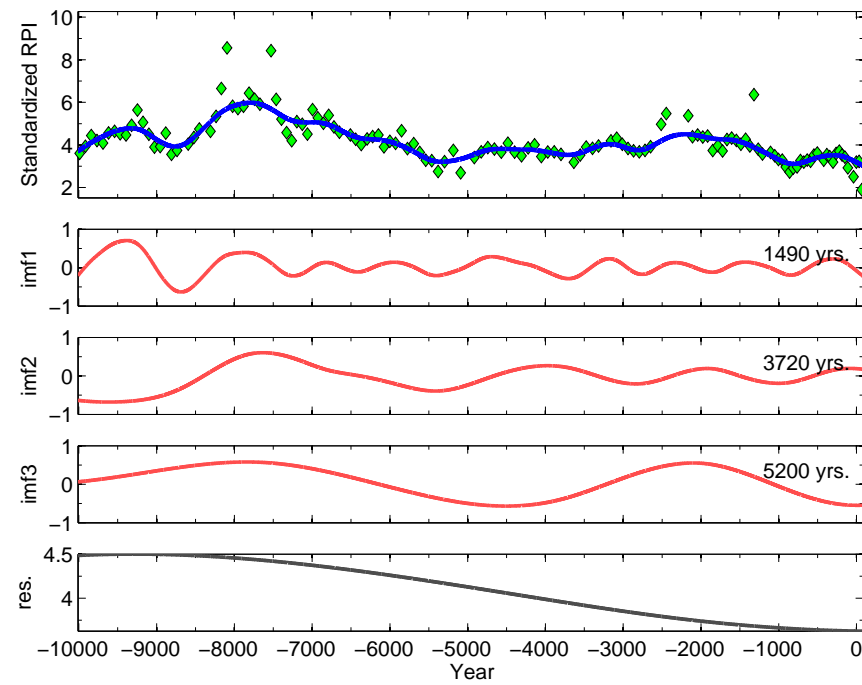
BAR – Lake Barrine, Australia



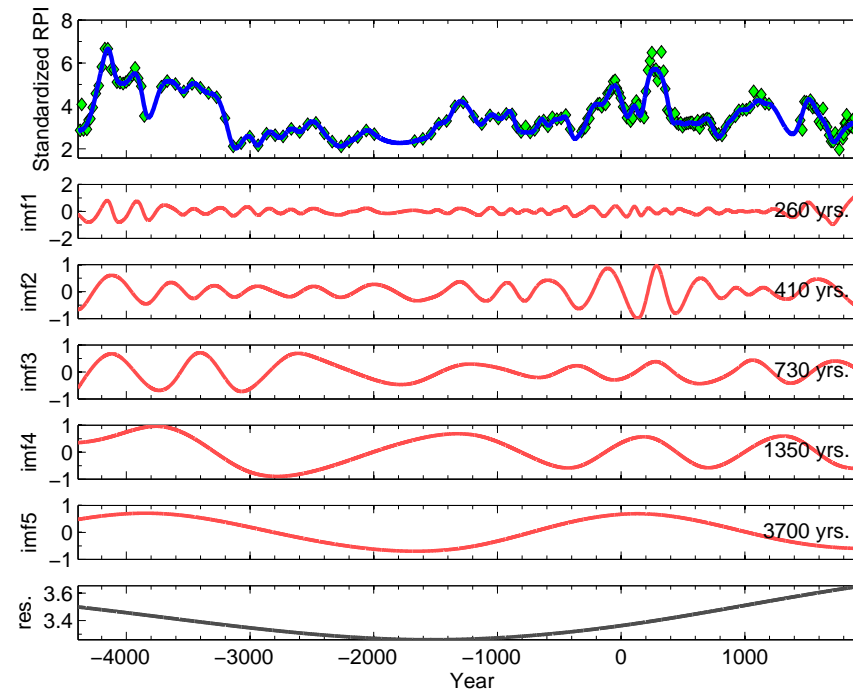
BEA – Beaufort Sea, Arctic Ocean



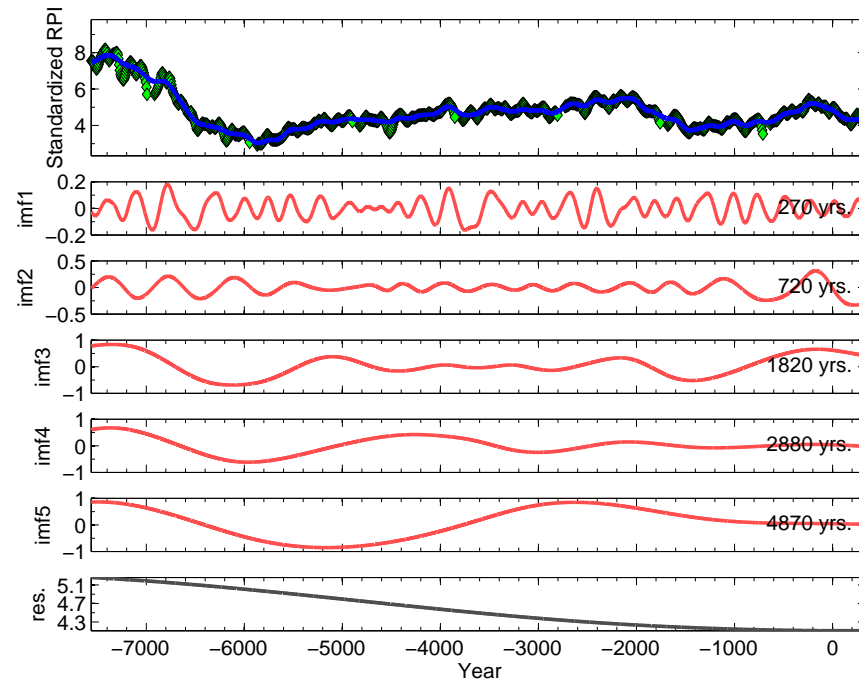
BI2 – Lake Biwa 2, Japan



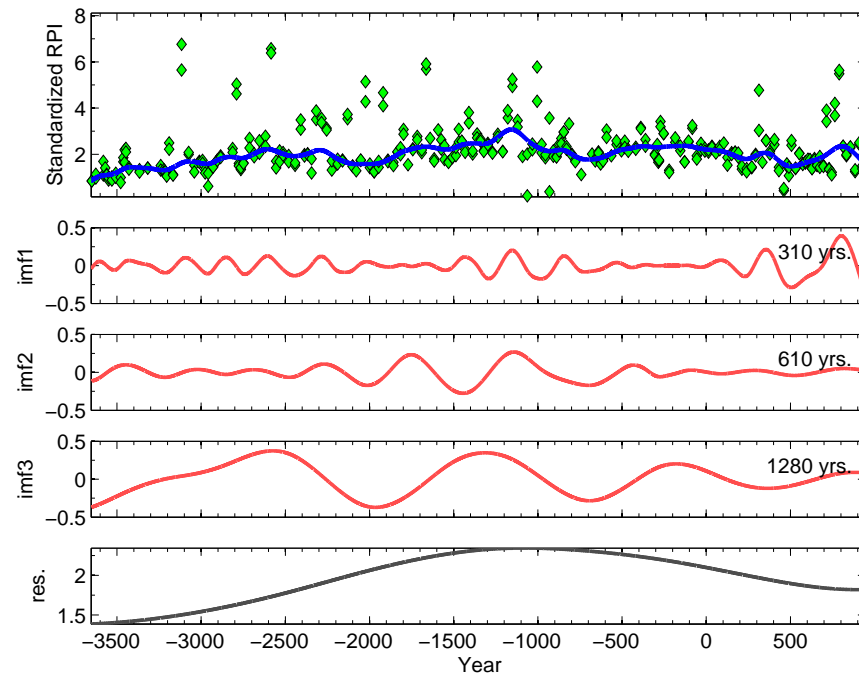
BIR – Birkat Ram, Israel



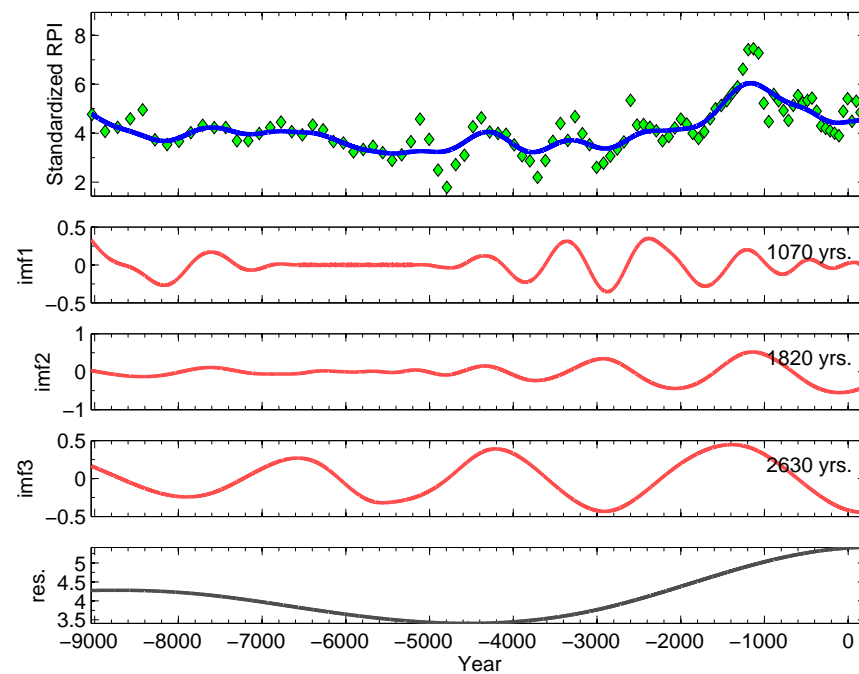
CHU – Chukchi Sea, Arctic Ocean



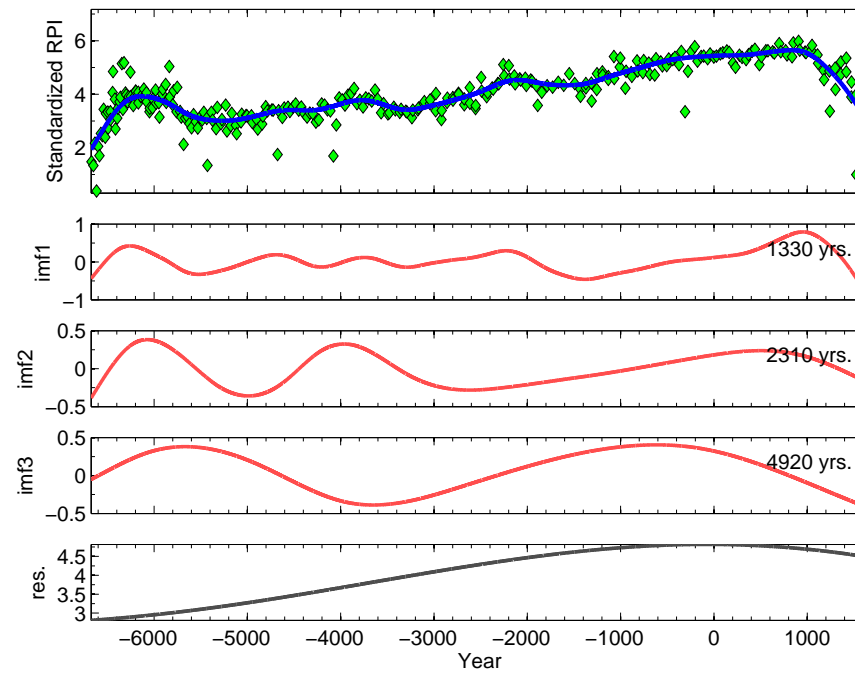
EAC – Lake Eacham, Australia



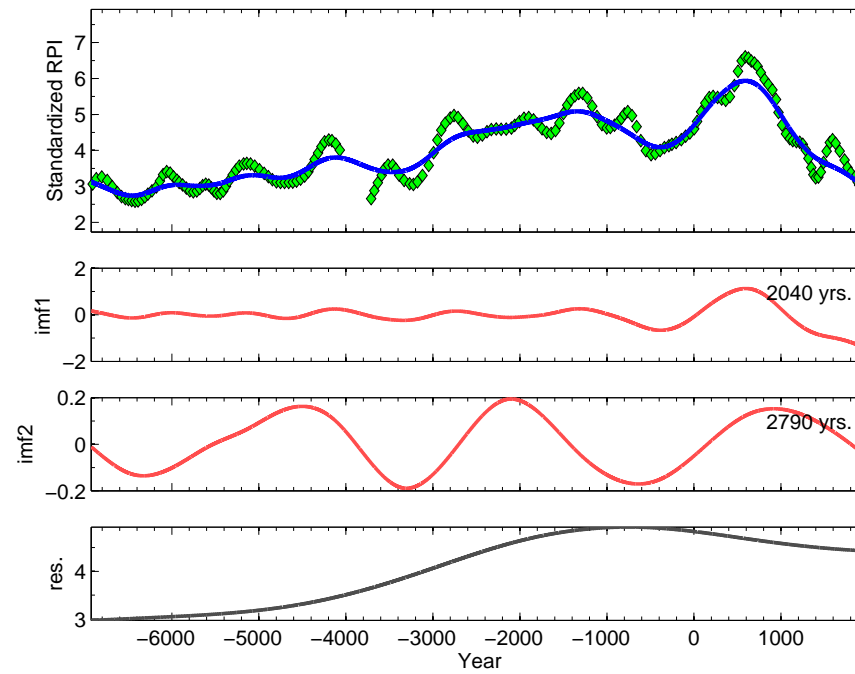
ESC – Lake Escondido, Argentina



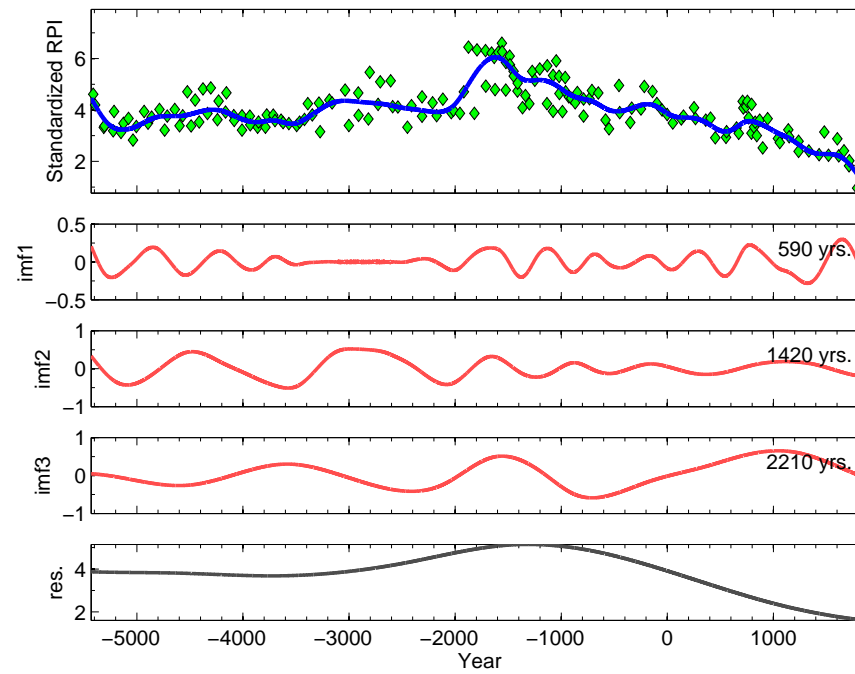
FRG – Frängsjön, Sweden



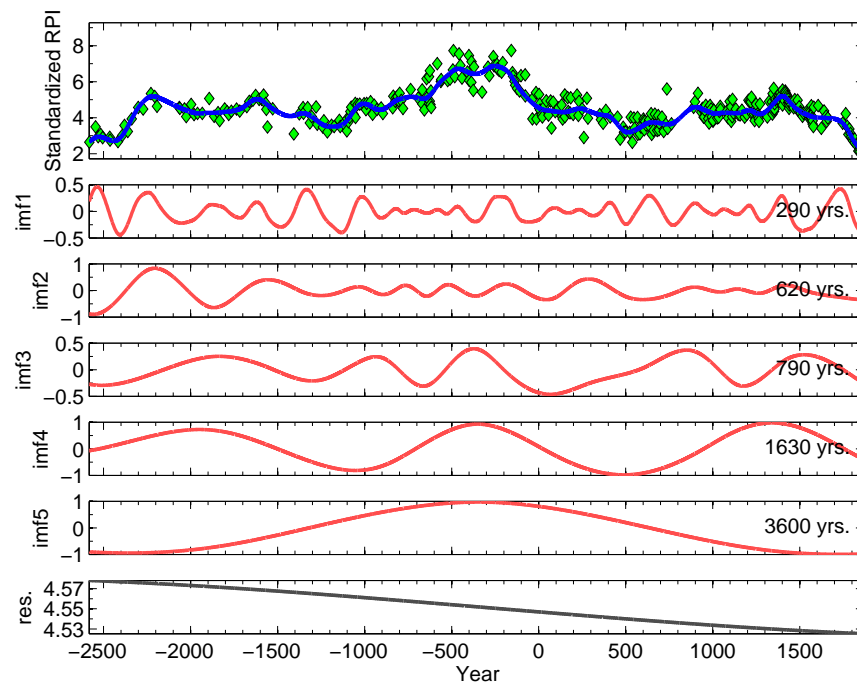
GAR – Gardar Drift, North Atlantic



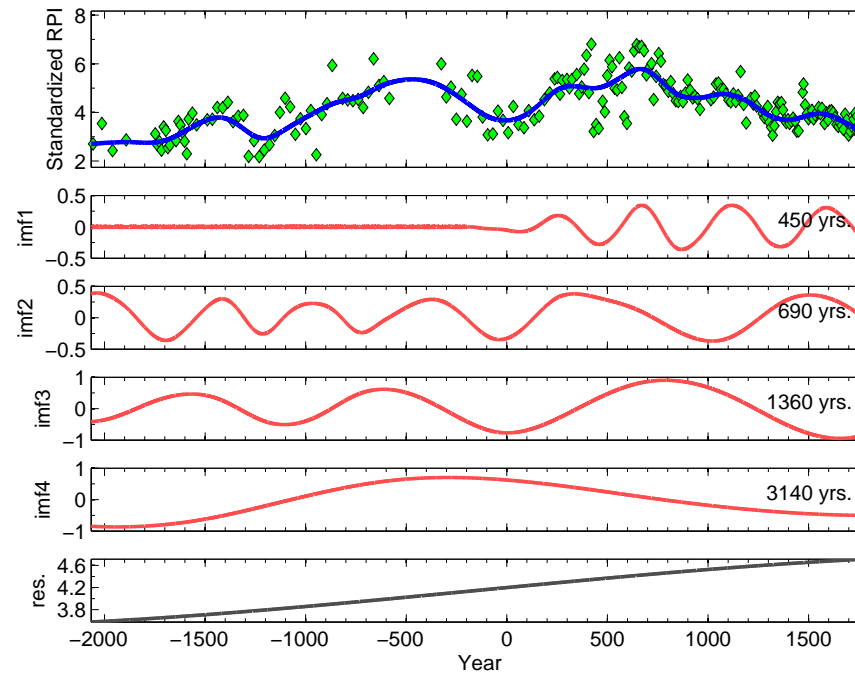
GHI – Cape Ghir, NW Afr. Margin



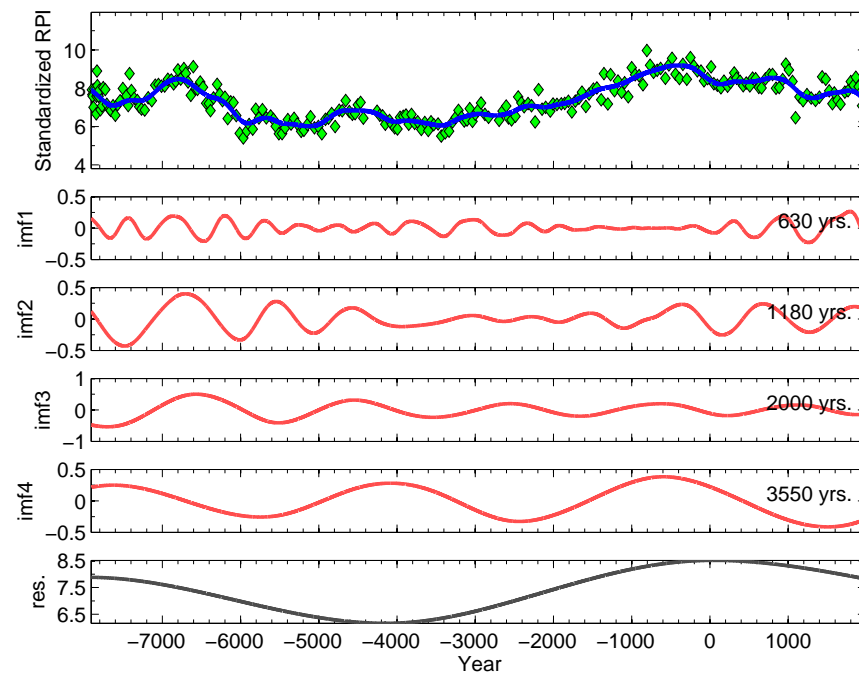
LEB – Lake LeBoeuf, USA



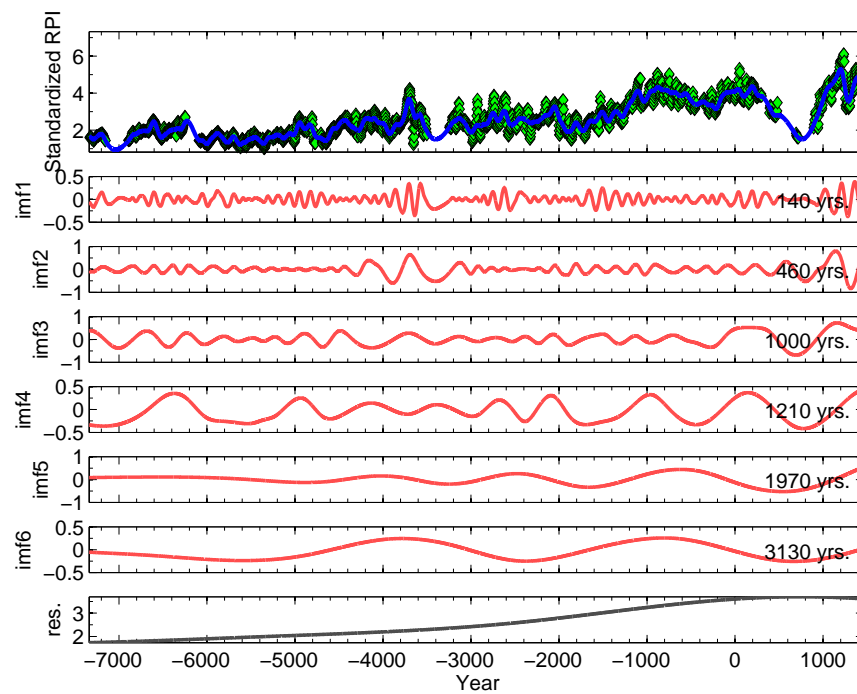
MEZ – Lago di Mezzano, Italy



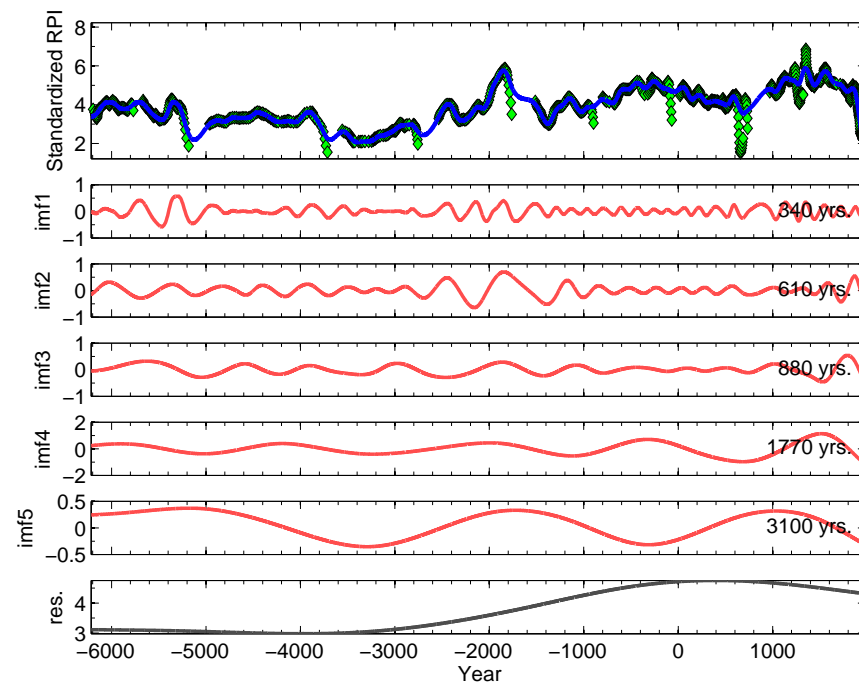
NAU – Nautajärvi, Finland



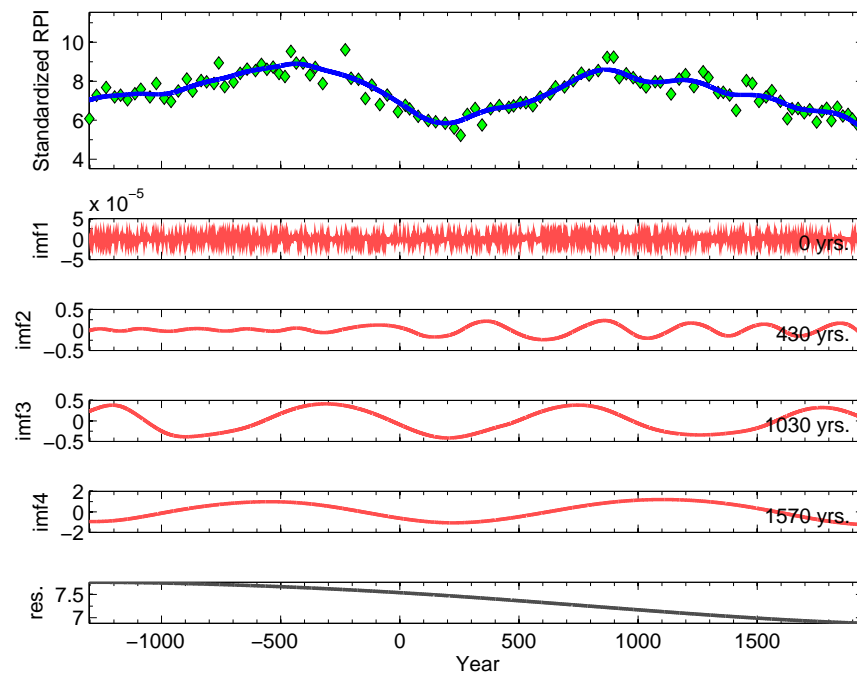
PAD – Palmer Deep, Antarctic Pen.



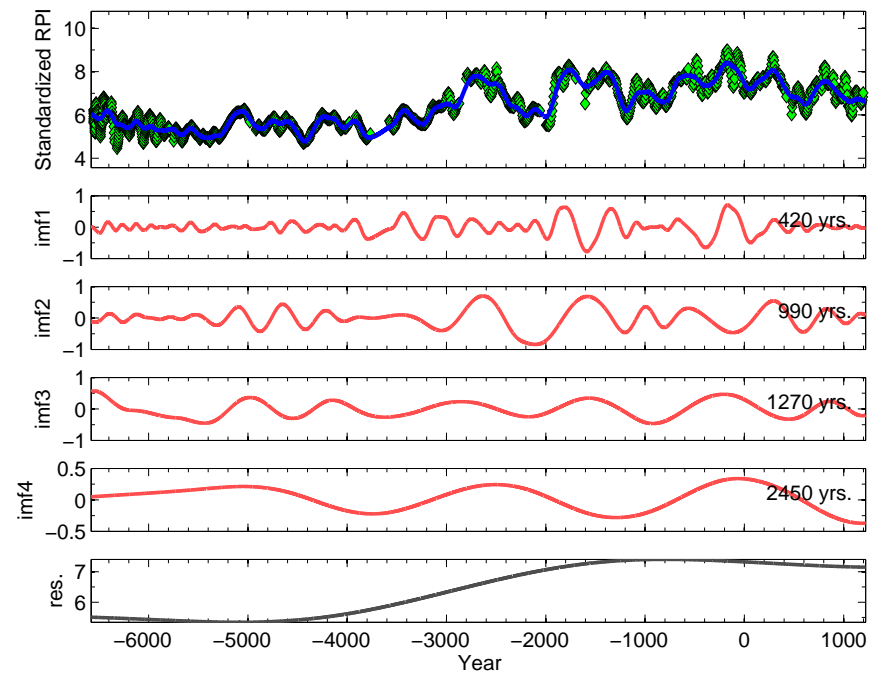
PEP – Lake Pepin, USA



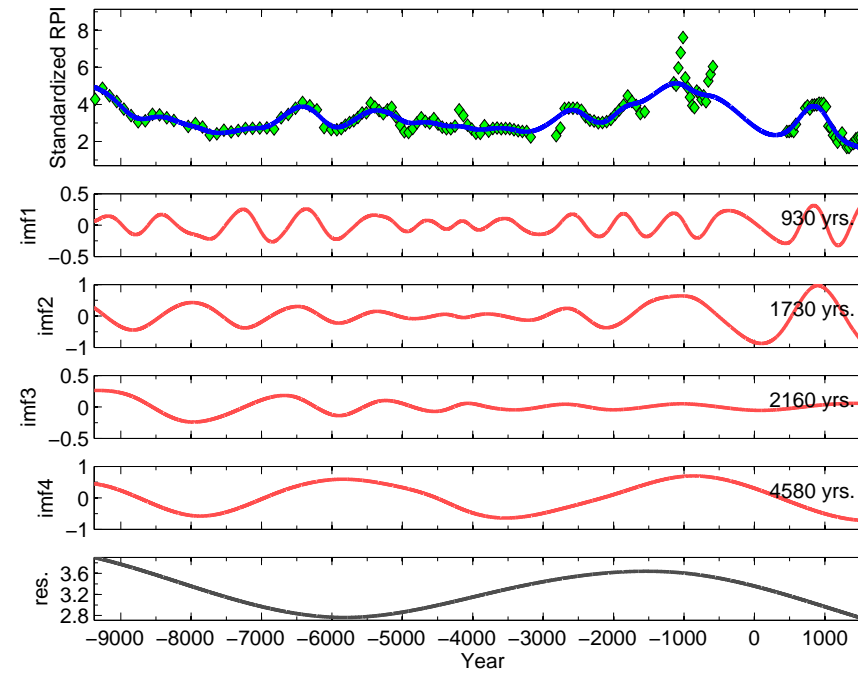
POH – Pohjajärvi, Finland



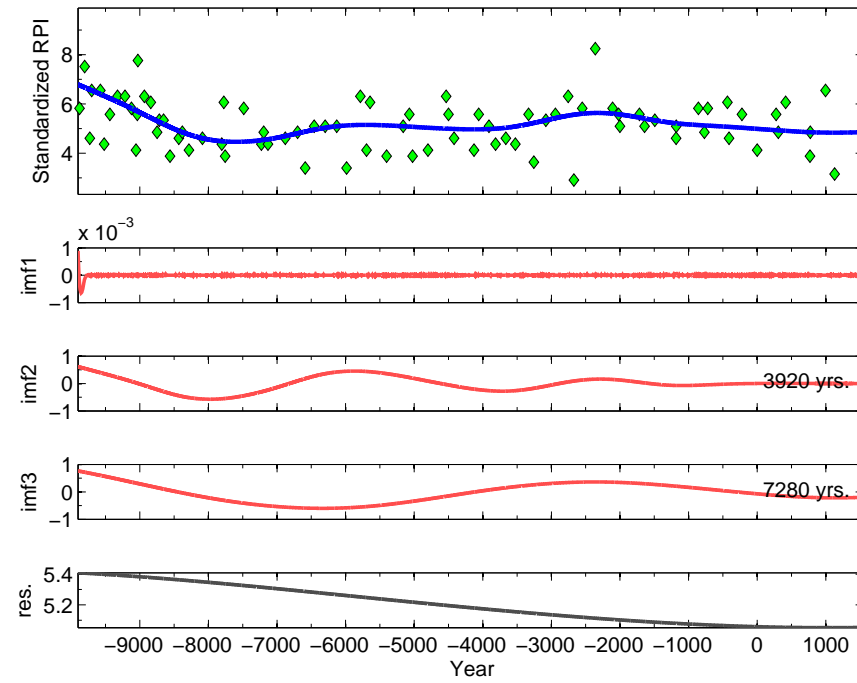
STL – St. Lawrence Est., Canada



TRE – Laguna El Trébol, Argentina



WAS – West Amundsen Sea



WPA – West Pacific

