

SUPPLEMENT S1: Input data set of relative plate Euler poles.

Pacific rots (all) 2my Harada and Hamano 2000, p.335 + Acton + others

hs- 999

hs-pa	2	0	47.400	258.000	-1.925	Harada and Hamano, 2000
hs-pa	4	0	50.800	258.500	-3.603	lt & lg values shifted
hs-pa	6	0	54.200	255.700	-5.268	to end of each 2 my
hs-pa	8	0	57.100	258.100	-6.919	period for mpfinf3.f
hs-pa	10	0	59.000	257.600	-8.556	
hs-pa	12	0	63.100	262.300	-10.174	14jan2005 NOW with hs-pa
hs-pa	14	0	64.000	263.600	-11.774	ver hs5a w/ pa -rots
hs-pa	16	0	65.300	265.900	-13.353	
hs-pa	18	0	64.000	263.500	-14.909	03feb2006 edit 2my epole
hs-pa	20	0	67.400	271.500	-16.441	to 47.400 258.000 -1.925
hs-pa	22	0	69.100	277.600	-17.946	to be like 2jan2006
hs-pa	24	0	69.100	279.000	-19.424	'12_acton91b_a6c_noit.asc'
hs-pa	26	0	67.800	280.400	-20.871	
hs-pa	28	0	67.000	281.500	-22.287	
hs-pa	30	0	66.700	282.300	-23.669	
hs-pa	32	0	66.400	282.700	-25.016	
hs-pa	34	0	66.200	285.300	-26.326	
hs-pa	36	0	66.100	287.000	-27.597	
hs-pa	38	0	66.000	289.500	-28.828	
hs-pa	40	0	65.900	290.200	-30.016	
hs-pa	42	0	65.700	291.700	-31.160	
hs-pa	44	0	65.400	292.300	-32.257	
hs-pa	46	0	63.800	293.300	-33.307	
hs-pa	48	0	61.900	290.100	-34.307	
hs-pa	50	0	60.400	289.100	-35.255	
hs-pa	52	0	58.800	288.400	-36.151	
hs-pa	54	0	57.600	287.400	-36.991	
hs-pa	56	0	56.800	289.500	-37.775	
hs-pa	58	0	55.000	285.900	-38.499	
hs-pa	60	0	53.900	284.600	-39.164	
hs-pa	62	0	53.300	283.700	-39.765	
hs-pa	64	0	52.600	283.200	-40.303	
hs-pa	66	0	52.100	283.000	-40.775	
hs-pa	68	0	51.800	283.200	-41.179	
hs-pa	200	68				
pa-an	11	0	72.00	-70.00	9.75	Stock & Molnar, 87
pa-an	20	0	71.25	-73.19	15.41	Stock & Molnar, 87
pa-an	35	0	74.83	-56.86	28.01	Stock & Molnar, 87
pa-an	41	0	75.08	-51.25	32.56	Stock & Molnar, 87
pa-an	58	41	-47.87	107.21	-6.58	Stock & Molnar, 87
pa-an	68	58	-47.87	107.21	-8.42	Stock & Molnar, 87
pa-an	83	0	64.94	-62.49	53.09	Mayes et al. 90

pa-an	90	0	64.03	-56.96	57.65	Mayes et al. 90
pa-an	200	90				
pa-co	2	0	37.70	-107.10	4.50	Schilt et al., 1982
pa-co	12	0	35.50	253.80	33.20	D.C. Demets [pc > gaj]
pa-co	15	12	40.00	-121.00	8.80	D.C. Demets [pc > gaj]
pa-co	26	15	40.00	-121.00	32.40	D.C. Demets [pc > gaj]
pa-co	200	26	40.00	-121.00	32.40	D.C. Demets [pc > gaj]
nz-pa	4	0	50.90	-87.00	-7.00	Chase [1978a] in gaj86
nz-pa	26	0	63.00	-90.60	-39.60	Pilger [1978]
nz-pa	28	0	64.50	-93.00	-41.30	Pilger [1978]
nz-pa	29	0	64.80	-95.60	-42.70	Pilger [1978]
nz-pa	30	0	64.80	-96.90	-43.90	Pilger [1978]
nz-pa	32	0	65.20	-99.60	-45.10	Pilger [1978]
nz-pa	34	0	67.10	-99.90	-45.90	Pilger [1978]
nz-pa	37	0	69.40	-102.50	-49.80	Pilger [1978]
nz-pa	40	0	70.80	-107.80	-52.70	Pilger [1978]
nz-pa	42	0	72.80	-112.50	-57.10	Pilger [1983]
nz-pa	56	0	75.10	-125.50	-68.80	Pilger [1983]
nz-pa	200	56				
pa-fa	8	0	-59.25	-165.76	-4.85	Nishimura et al.[1984]
pa-fa	28	0	81.00	65.00	19.00	Engebretson et al. 84
pa-fa	37	28	80.00	212.00	13.10	Engebretson et al. 84
pa-fa	43	37	80.00	212.00	11.00	Engebretson et al. 84
pa-fa	48	43	80.00	212.00	8.00	Engebretson et al. 84
pa-fa	56	48	77.00	178.00	10.50	Engebretson et al. 84
pa-fa	85	56	66.00	64.00	20.70	Engebretson et al. 84
pa-fa	200	85				
pa-ku	48	0	0.00	0.00	0.00	Engebretson et al. 84
pa-ku	56	48	18.00	111.00	2.60	Engebretson et al. 84#
pa-ku	61	56	18.00	111.00	1.70	Engebretson et al. 84
pa-ku	67	61	18.00	111.00	3.80	Engebretson et al. 84
pa-ku	200	67				
an-po	4	0	0.00	0.00	0.00	Engebretson et al. 84
an-po	6	4	33.00	338.00	0.50	D.C. DeMets [gaj PC],85
an-po	16	6	33.00	338.00	5.30	D.C. DeMets [gaj PC],85
an-po	23	16	33.00	338.00	2.80	D.C. DeMets [gaj PC],85
an-po	45	23	33.00	338.00	8.10	D.C. DeMets [gaj PC],85
an-po	51	45	-3.80	315.30	4.10	D.C. DeMets [gaj PC],85
an-po	64	51	-14.90	309.00	15.70	D.C. DeMets [gaj PC],85
an-po	200	64				
au-an	11	0	13.10	36.10	-6.61	Royer and Chang, 91
au-an	20	0	15.40	32.70	-11.97	Royer and Chang, 91
au-an	35	0	13.80	33.40	-20.41	Royer and Chang, 91
au-an	41	0	8.68	34.52	-22.80	Stock & Molnar, 87
au-an	58	0	4.45	35.99	-25.55	Stock & Molnar, 87
au-an	68	0	3.76	36.23	-26.08	Stock & Molnar, 87

au-an	79	0	6.20	35.10	-26.37	Royer and Sandwell, 89
au-an	83	0	4.90	35.80	-26.81	Royer and Sandwell, 89
au-an	200	83				
af-an	11	0	8.20	-49.40	-1.53	Royer and Chang, 91
af-an	20	0	10.70	-47.90	-2.78	Royer and Chang, 91
af-an	35	0	12.00	-48.40	-5.46	Royer and Chang, 91
af-an	59	0	8.80	-42.60	-10.83	Royer and Chang, 91
af-an	64	0	2.76	-40.26	-11.63	Molnar et al., 88
af-an	67	0	2.22	-40.74	-12.50	Molnar et al., 88
af-an	79	0	0.75	-42.06	-15.71	Molnar et al., 88
af-an	83	0	-5.03	-36.12	-18.24	Molnar et al., 88
af-an	200	83				
sa-af	11	0	59.99	321.11	3.13	Shaw and Cande, 90
sa-af	20	0	58.07	322.58	7.04	Shaw and Cande, 90
sa-af	27	0	57.16	324.66	9.98	Shaw and Cande, 90
sa-af	35	0	56.63	326.09	13.38	Shaw and Cande, 90
sa-af	44	0	57.62	327.93	17.58	Shaw and Cande, 90
sa-af	50	0	59.30	328.41	20.08	Shaw and Cande, 90
sa-af	58	0	61.07	328.51	22.30	Shaw and Cande, 90
sa-af	66	0	63.30	326.55	24.77	Shaw and Cande, 90
sa-af	73	0	63.11	326.19	27.93	Shaw and Cande, 90
sa-af	79	0	62.91	325.81	30.97	Shaw and Cande, 90
sa-af	83	0	61.59	325.85	33.50	Shaw and Cande, 90
sa-af	200	83				
na-af	11	0	79.08	77.95	2.41	Klitgord & Schouten '86
na-af	20	0	79.57	37.84	5.29	Klitgord & Schouten '86
na-af	35	0	76.41	7.12	9.81	Klitgord & Schouten '86
na-af	48	0	74.51	-4.83	15.32	Klitgord & Schouten '86
na-af	58	0	80.60	-0.50	18.07	Klitgord & Schouten '86
na-af	66	0	82.51	-0.63	20.96	Klitgord & Schouten '86
na-af	71	0	81.35	-9.15	22.87	Klitgord & Schouten '86
na-af	73	0	80.76	-11.76	23.91	Klitgord & Schouten '86
na-af	79	0	78.30	-18.35	27.06	Klitgord & Schouten '86
na-af	83	0	76.55	-20.73	29.60	Klitgord & Schouten '86
na-af	200	83				
in-af	11	0	23.70	33.30	-4.61	Royer and Chang, 91
in-af	20	0	30.90	17.50	-6.32	Royer and Chang, 91
in-af	35	0	21.80	35.00	-14.39	Royer and Chang, 91
in-af	52	0	17.60	38.90	-29.54	Royer and Chang, 91
in-af	59	0	23.10	26.70	-31.71	Royer and Chang, 91
in-af	64	0	18.29	26.56	-39.88	Molnar et al, 88
in-af	67	0	18.45	23.47	-44.14	Molnar et al, 88
in-af	79	0	20.32	21.39	-51.30	Molnar et al, 88
in-af	83	0	23.36	19.57	-51.54	Molnar et al, 88
in-af	200	83				
af-ar	20	0	26.50	21.50	7.60	KcKensie etal.[1976]gaj

[illegible]

SUPPLEMENT S2: Maximum velocity (mm/a), azimuth (degrees), acceleration (mm/yr/Myr) for NOIT and 4448 for plates 1-8, 10-12, 14

Plate 1 (AF)

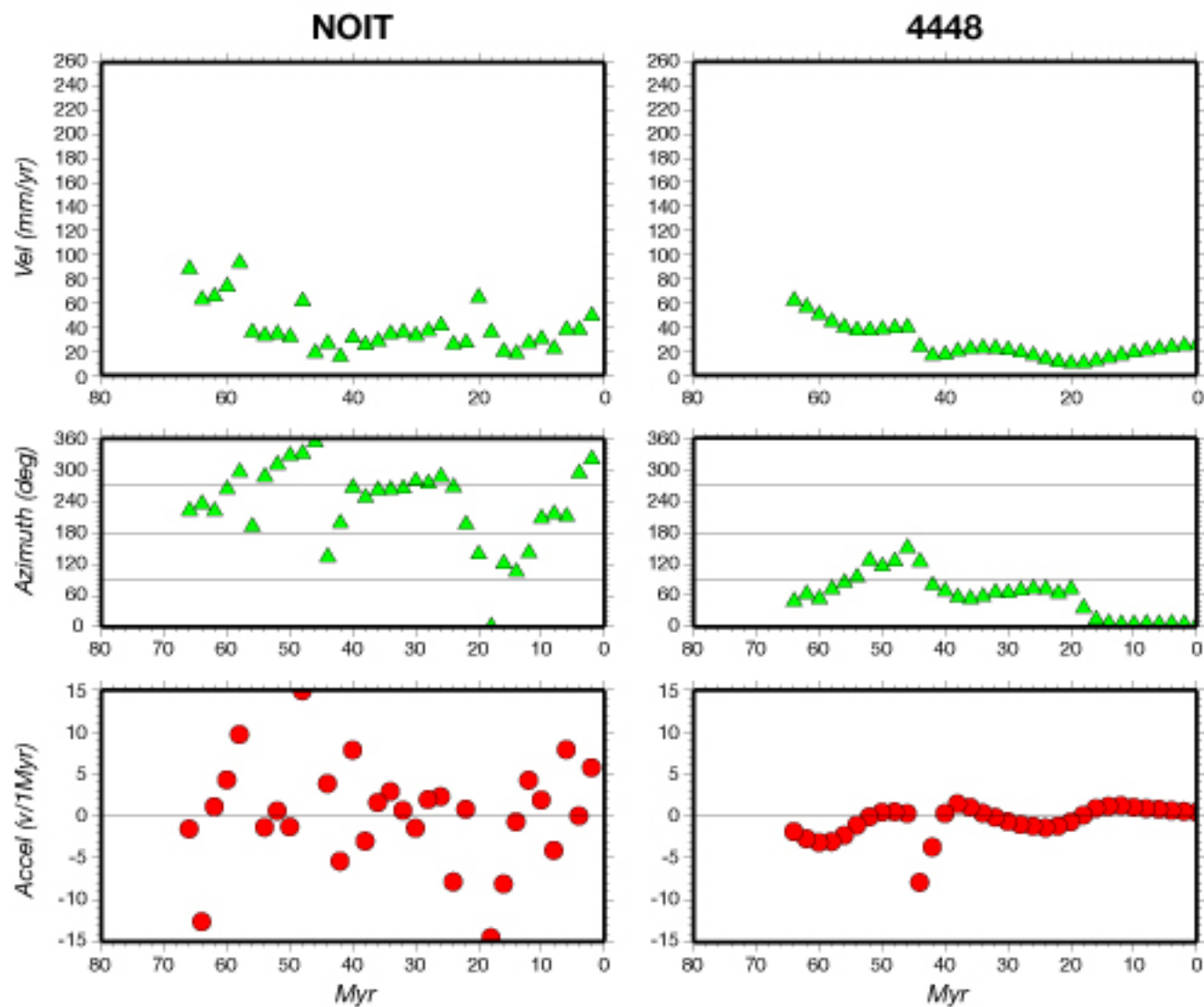


Plate 2 (AN)

NOIT

4448

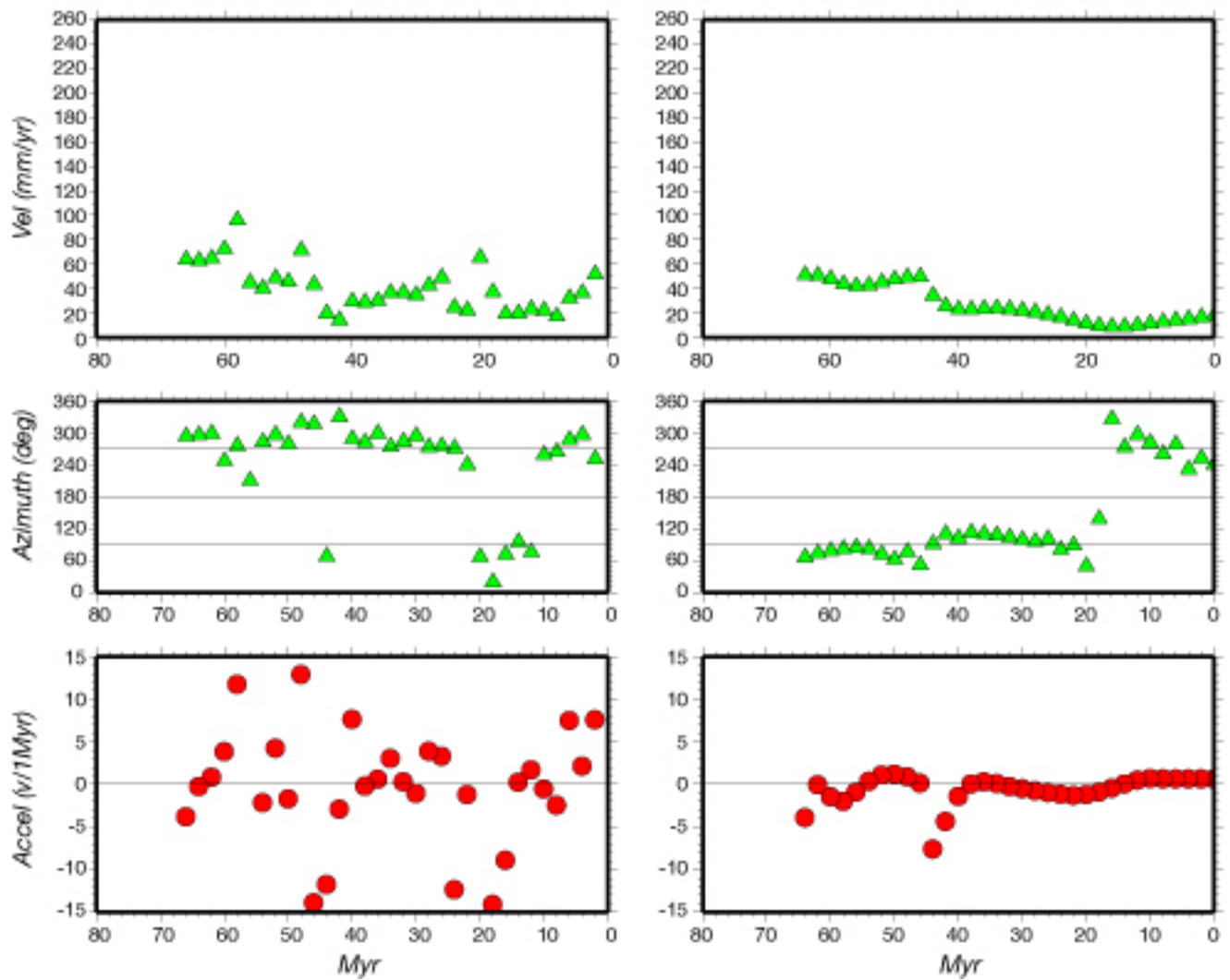


Plate 3 (AR)

NOIT

4448

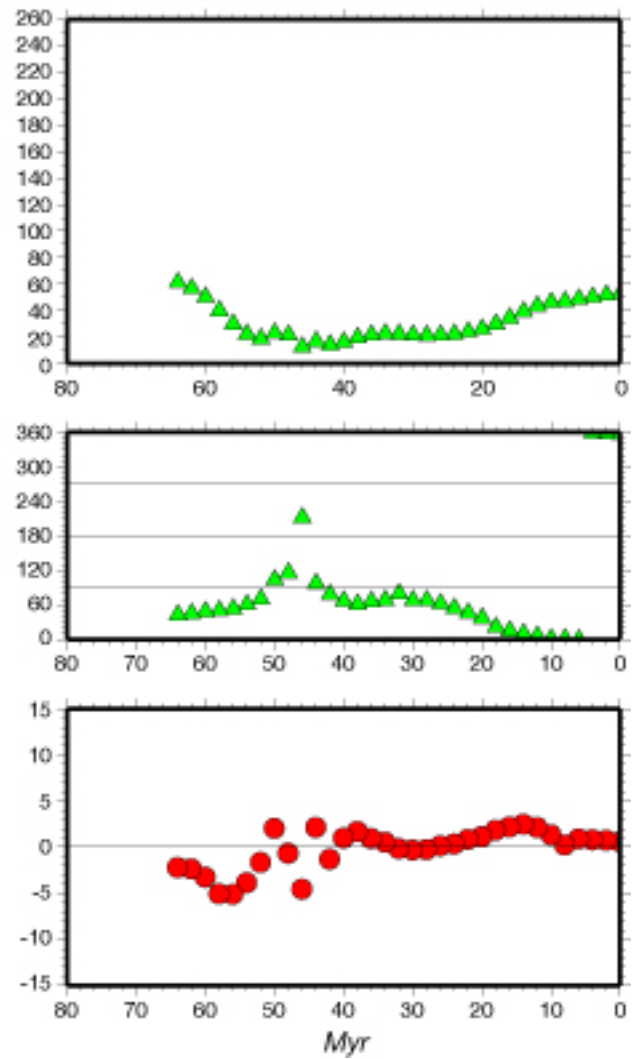
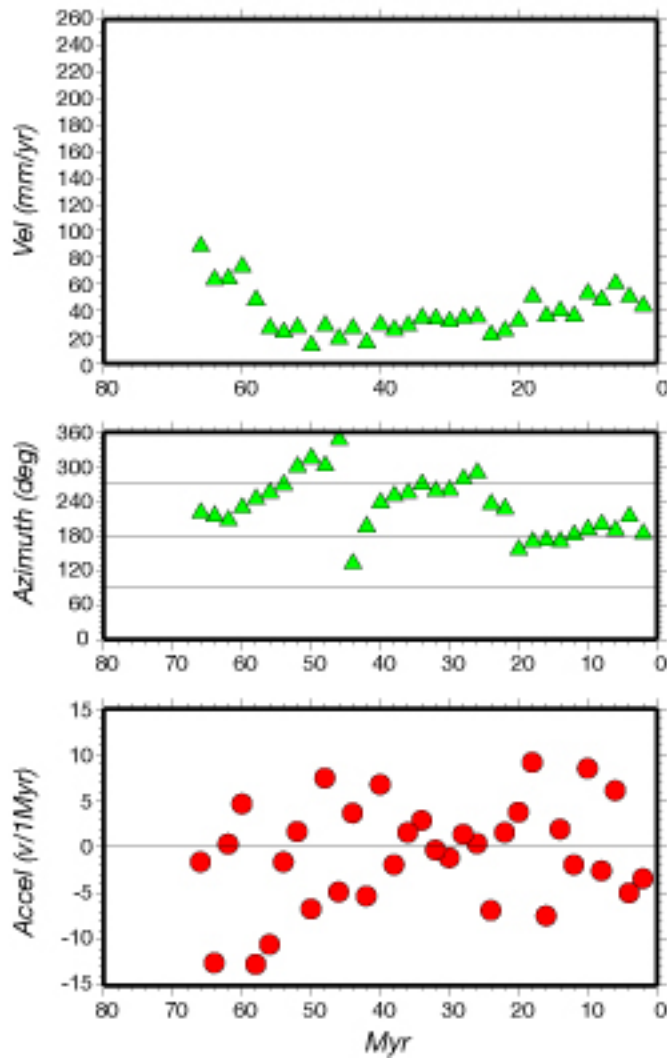


Plate 4 (AU)

NOIT

4448

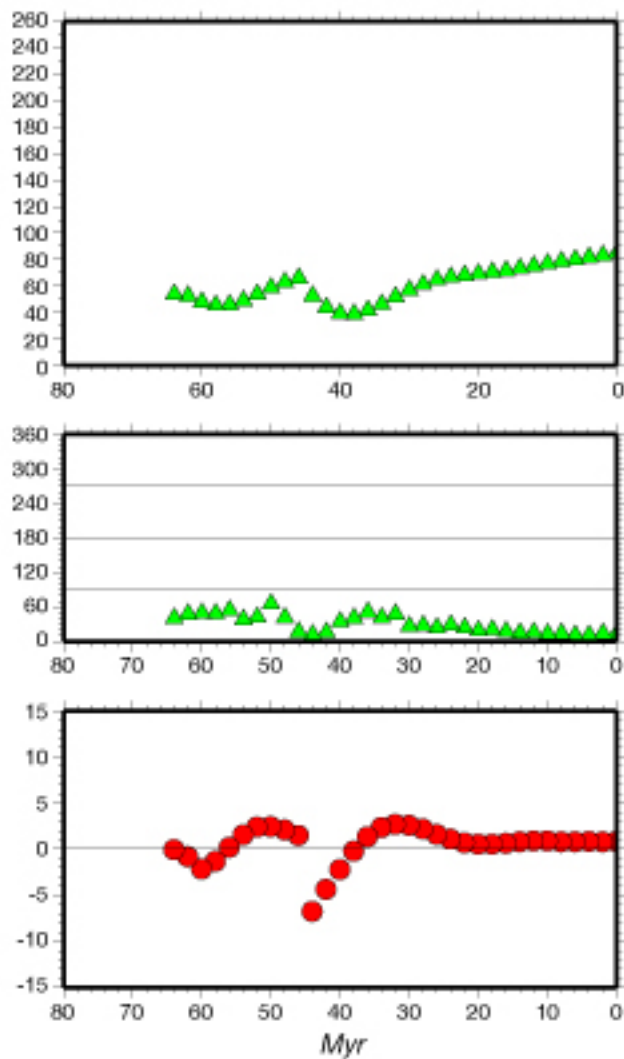
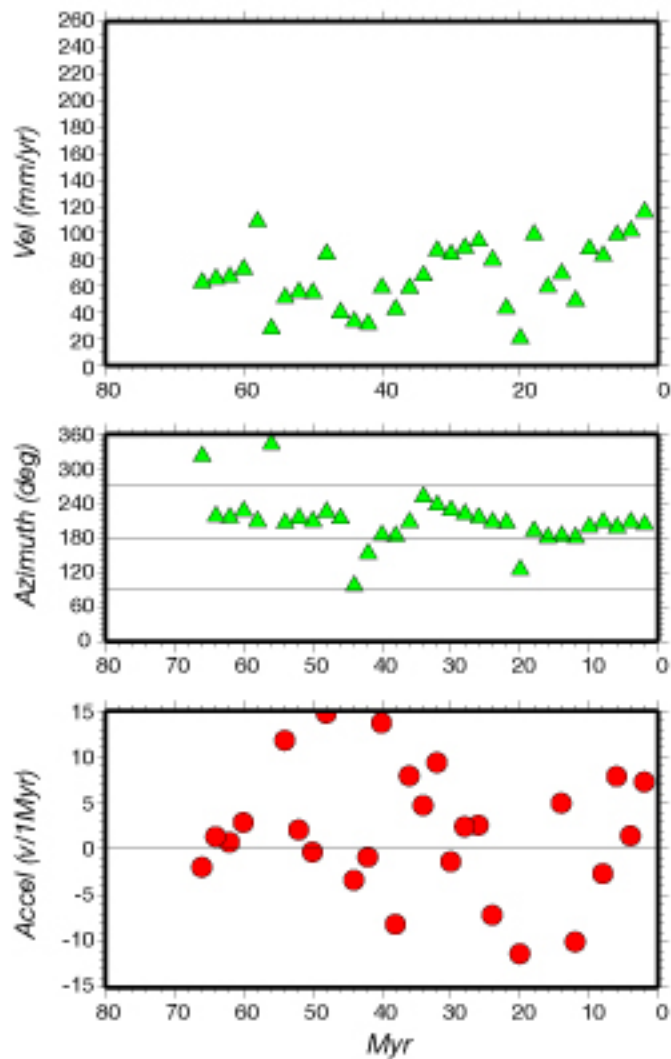


Plate 5 (CA)

NOIT

4448

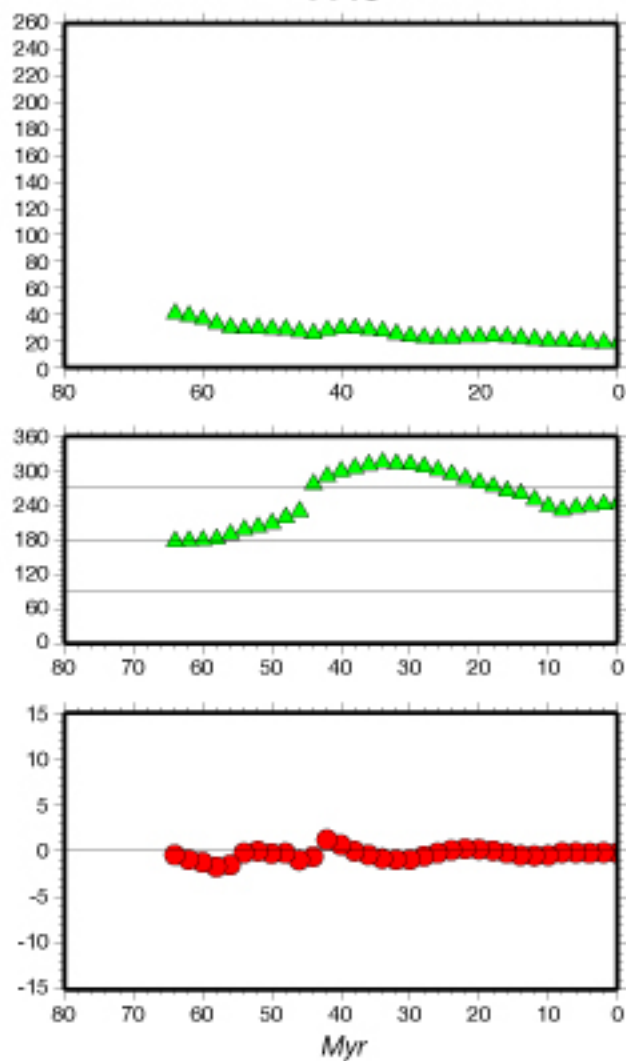
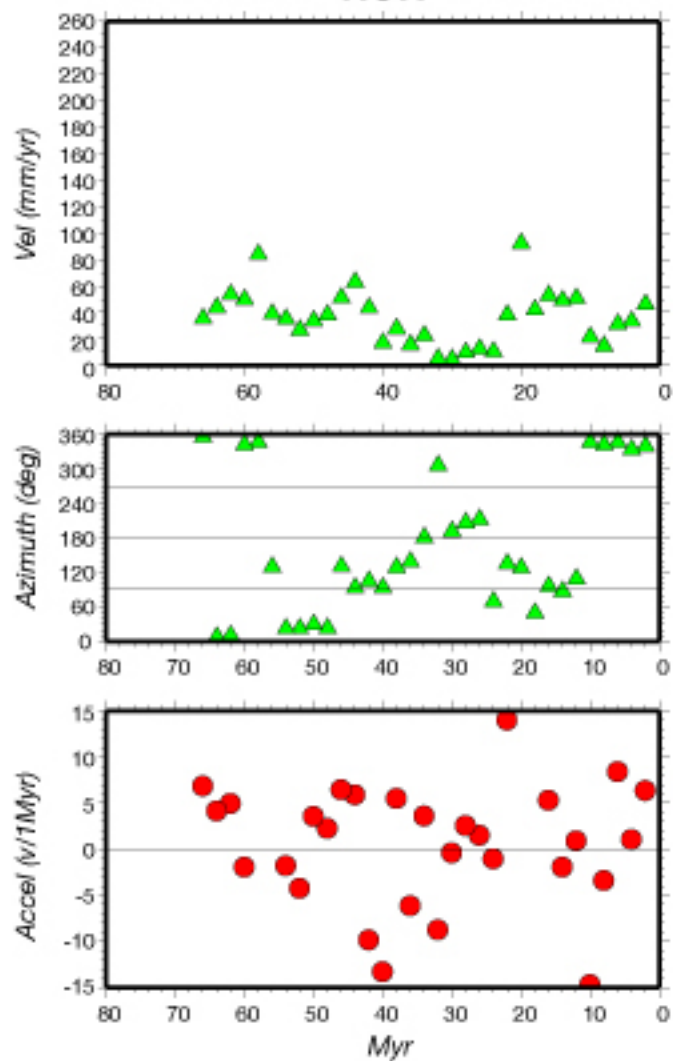


Plate 6 (CO)

NOIT

4448

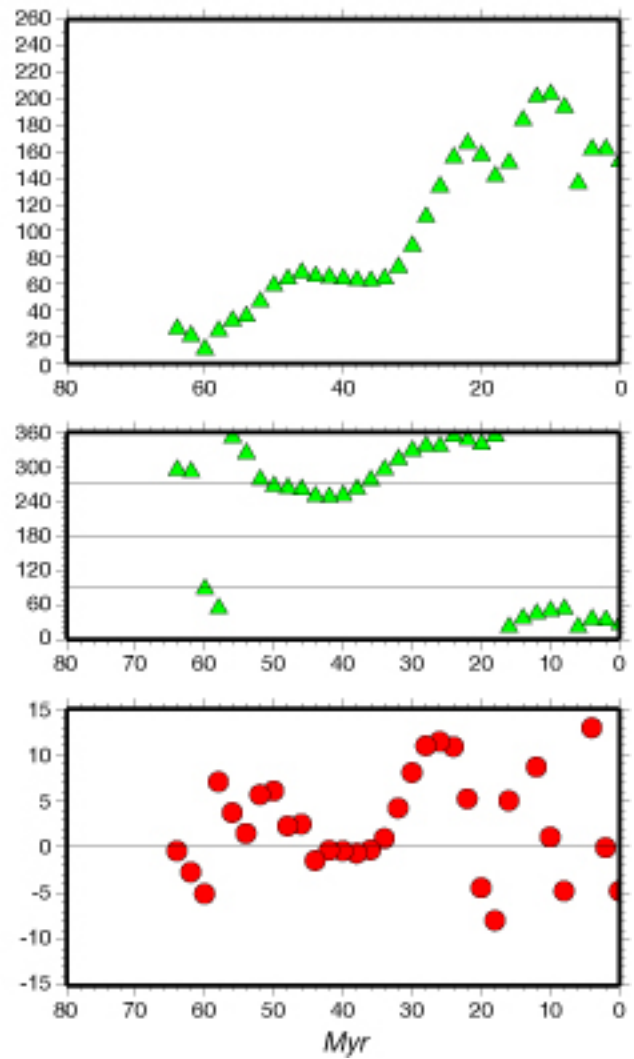
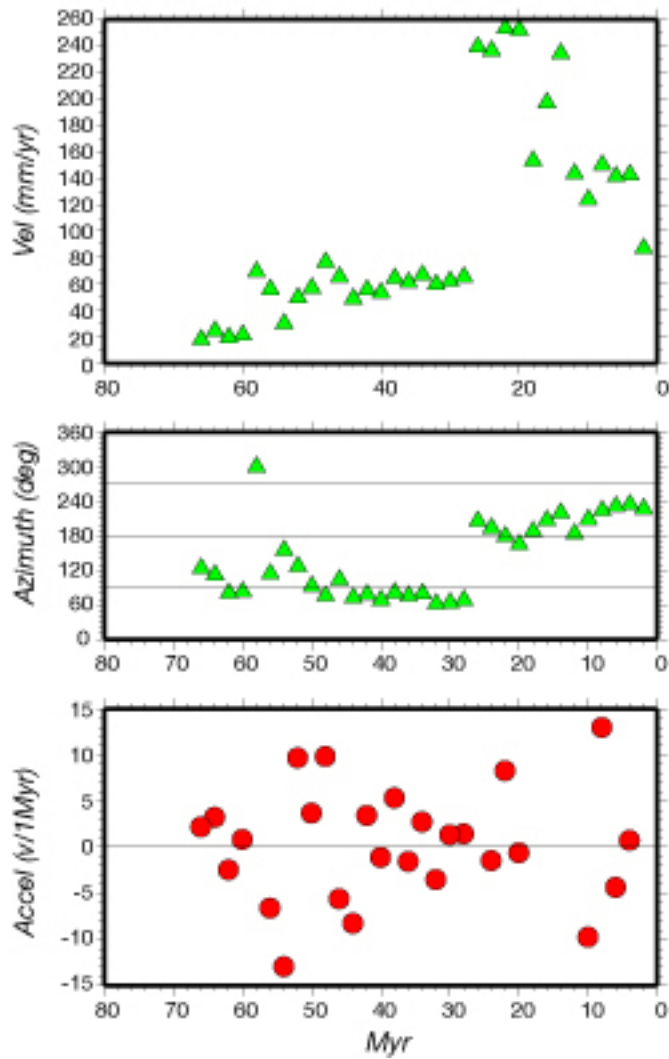
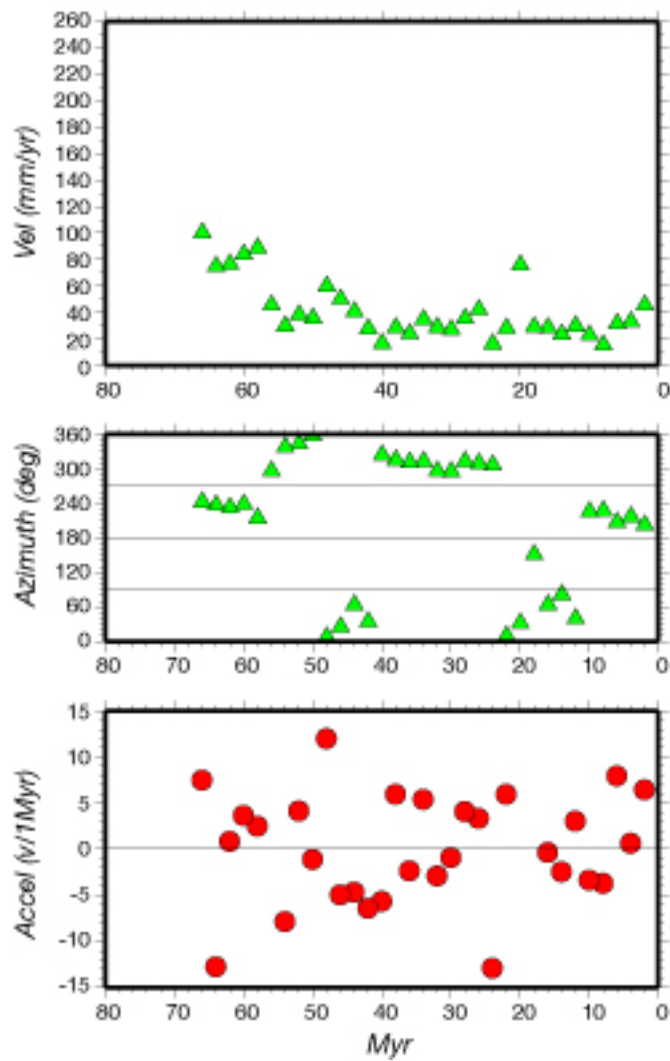


Plate 7 (EU)

NOIT



4448

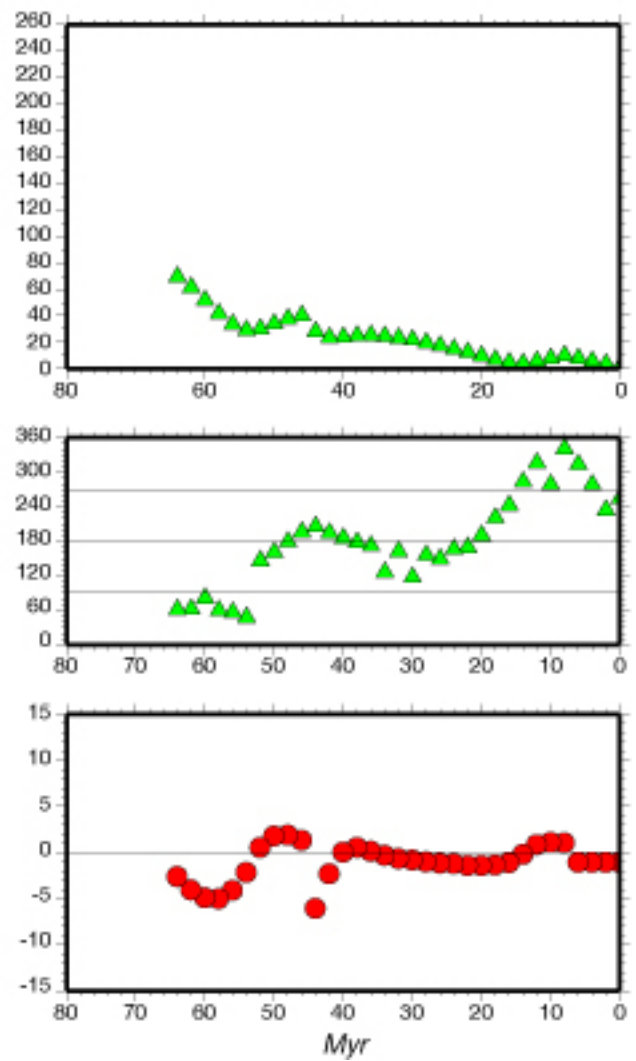


Plate 8 (IN)

NOIT

4448

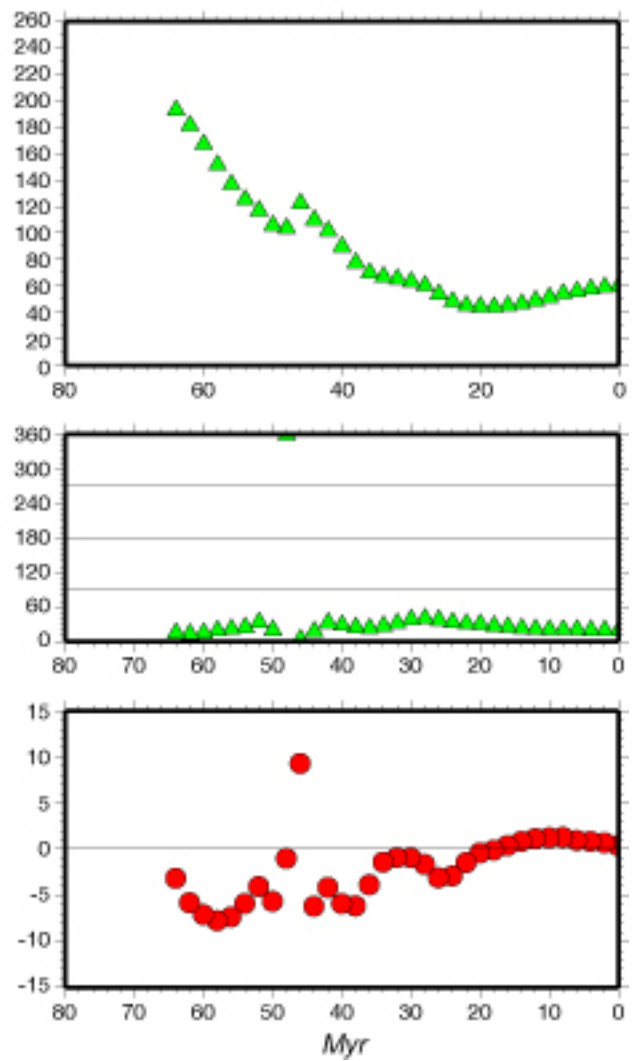
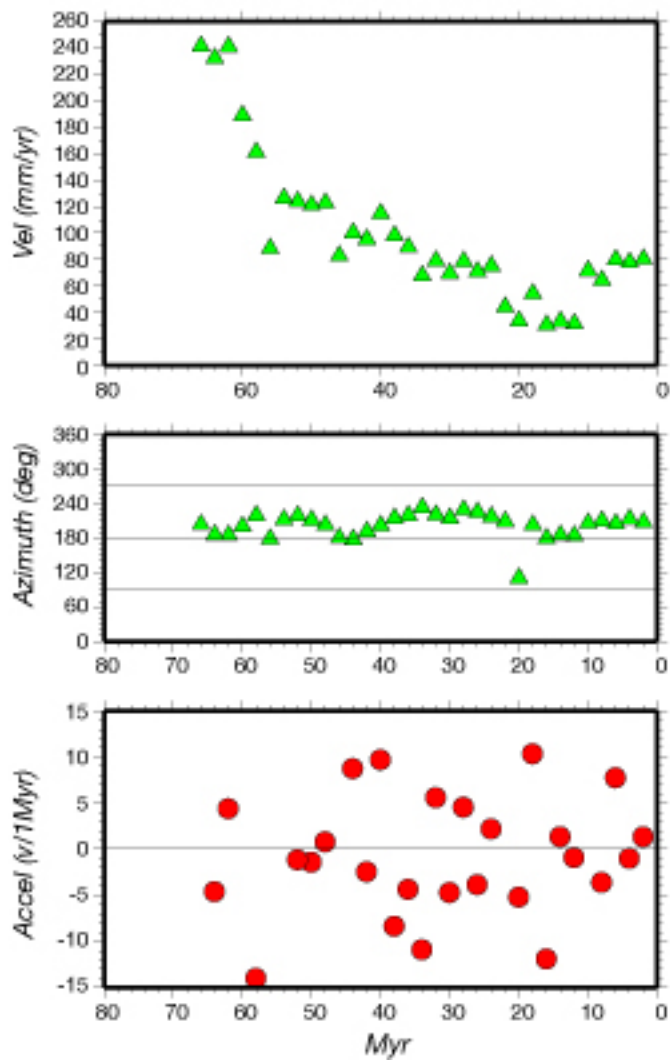


Plate 10 (NA)

NOIT

4448

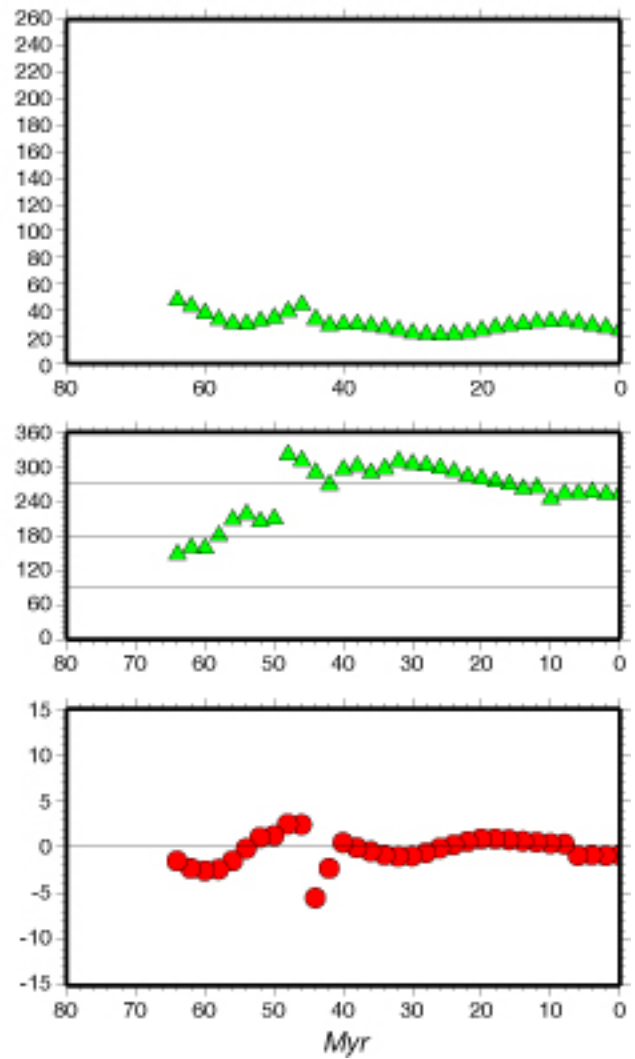
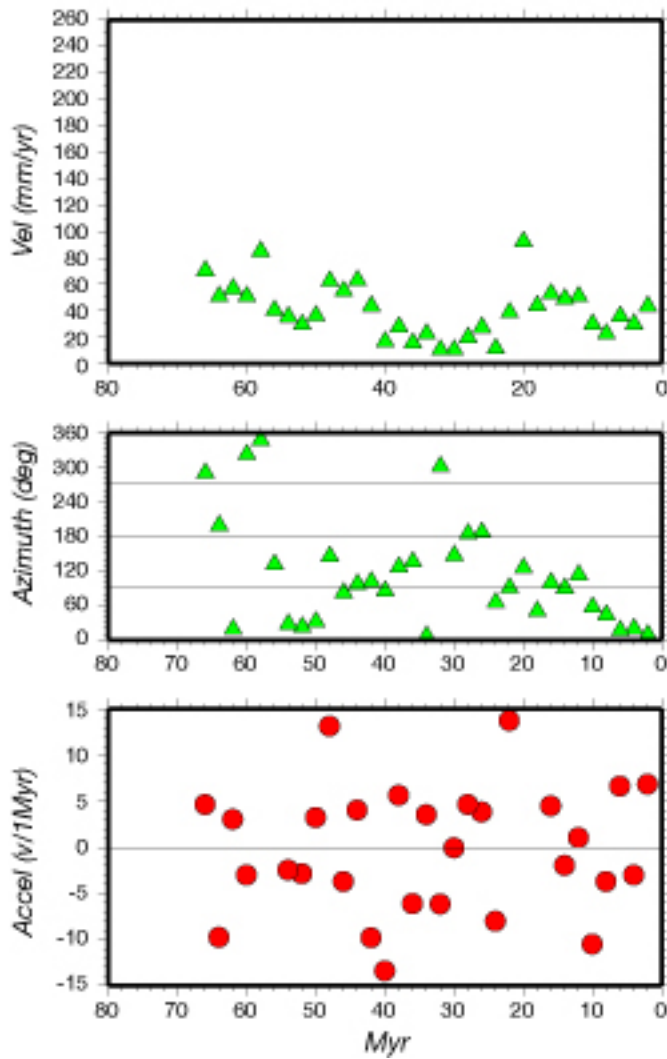


Plate 11 (NZ)

NOIT

4448

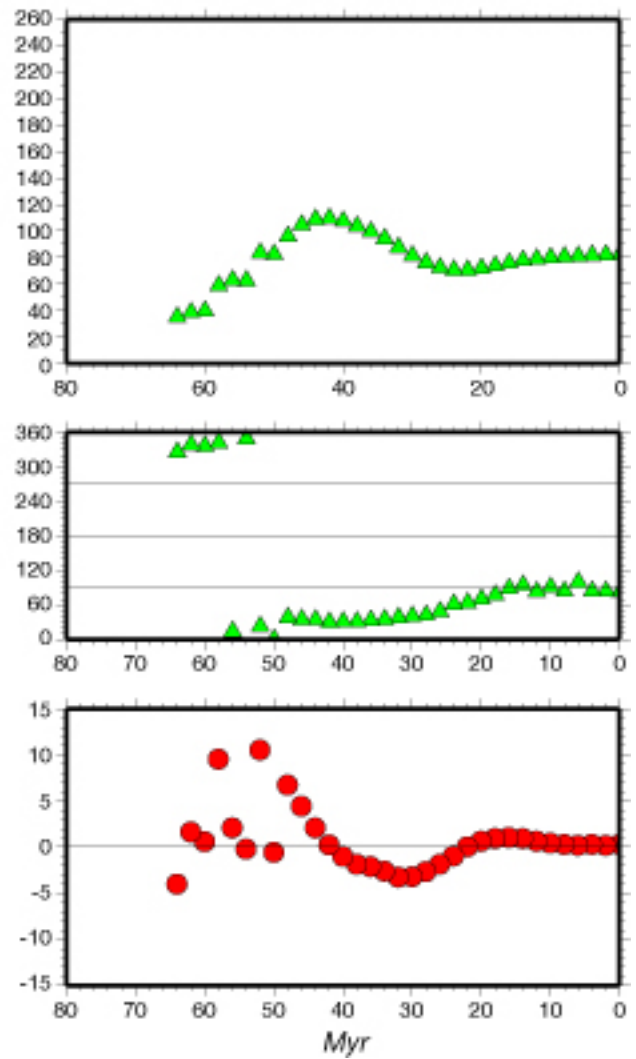
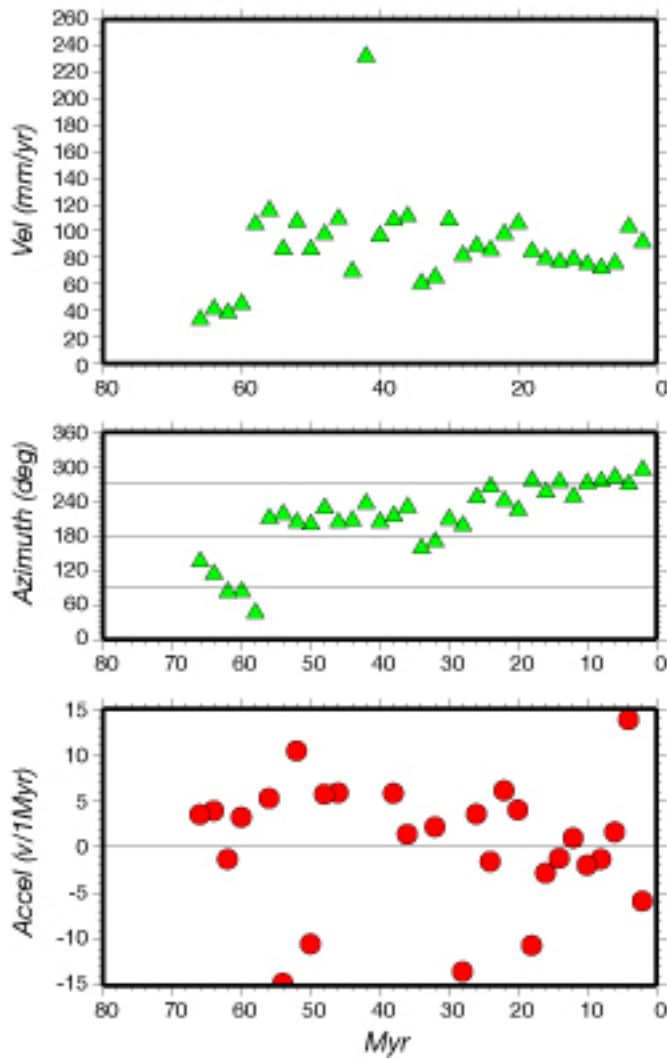


Plate 12 (PA)

NOIT

4448

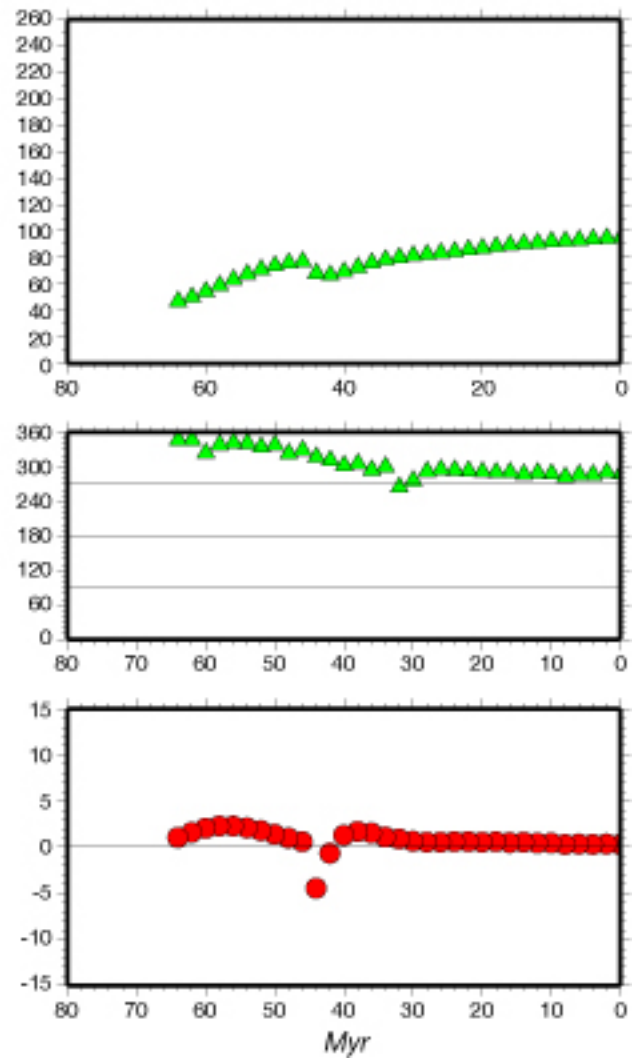
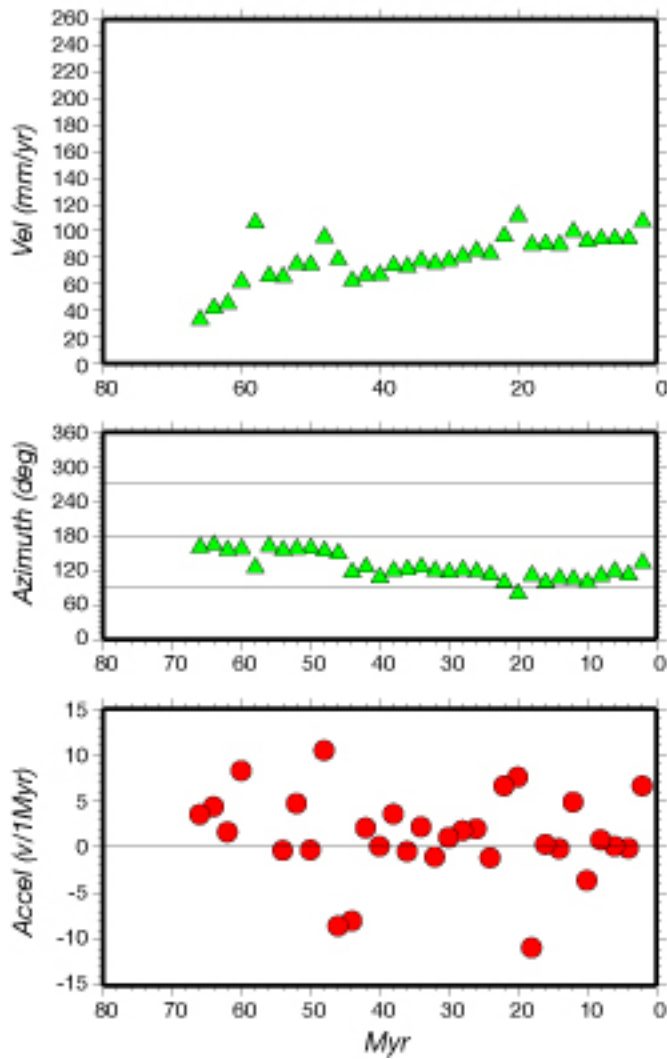
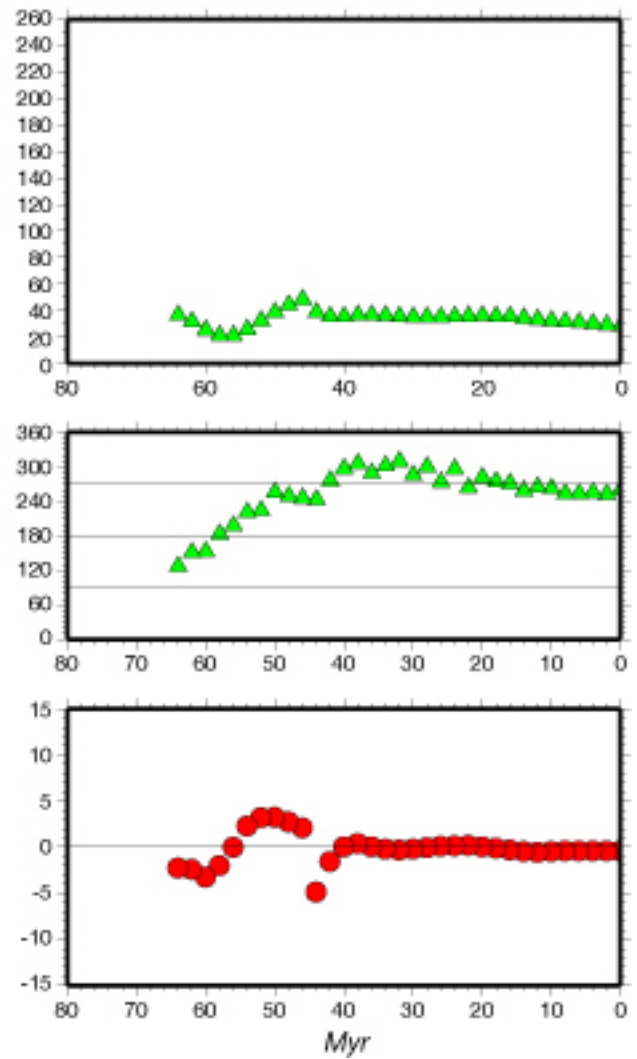
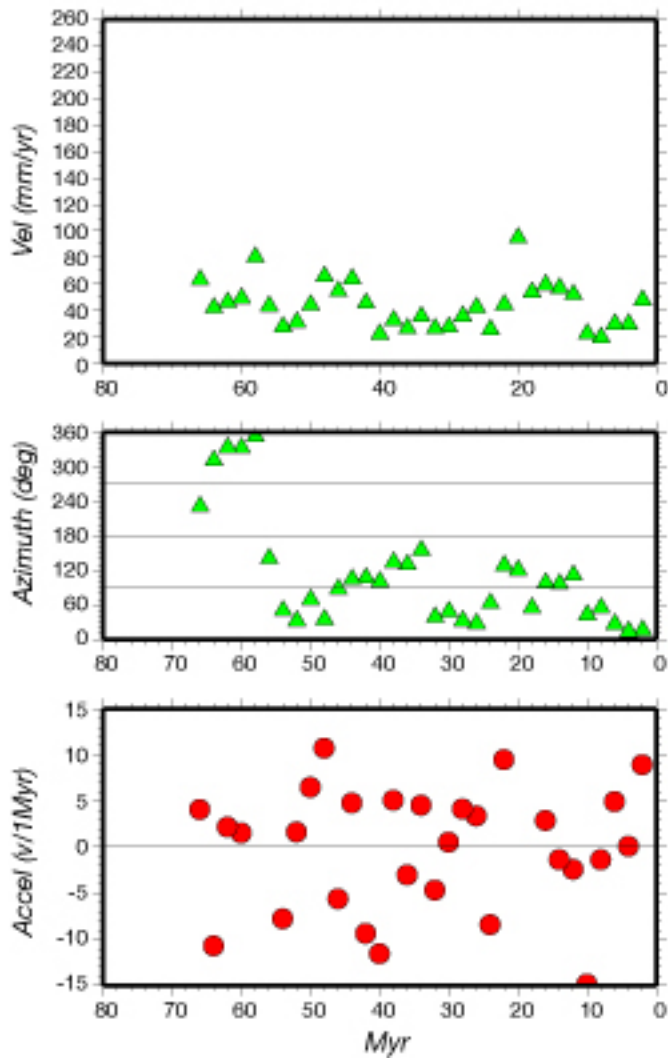


Plate 14 (SA)

NOIT

4448



SUPPLEMENT S3: QuickTime movie of global plate velocities for the 4448 filtered Stage Poles.

Download '4448_wr_4a.mov' [wr=with reverse] from the Supplement zip file

SUPPLEMENT S4: Iterative (1024) smoothed Euler and Stage Poles for 4448 data. Column's are: Plate number, Myr, stage pole (lat, long, angle - in degrees), Euler pole (lat, long, angle - in degrees), stage rate (in degrees per Myr).

1.0	2	25.853	46.006	1.104	25.853	46.006	1.104	0.552
1.0	4	3.562	-9.693	0.394	22.035	30.979	1.356	0.197
1.0	6	3.378	-9.947	0.387	18.812	21.654	1.657	0.194
1.0	8	2.989	-10.621	0.367	16.415	15.667	1.968	0.184
1.0	10	2.691	-11.752	0.335	14.698	11.597	2.264	0.168
1.0	12	3.273	-13.221	0.296	13.566	8.687	2.531	0.148
1.0	14	6.016	-15.059	0.251	13.022	6.535	2.761	0.125
1.0	16	13.133	-17.193	0.209	13.138	4.909	2.954	0.104
1.0	18	27.163	-20.452	0.177	14.020	3.652	3.112	0.088
1.0	20	46.861	-26.316	0.172	15.758	2.624	3.243	0.086
1.0	22	63.804	-38.690	0.197	18.388	1.668	3.358	0.099
1.0	24	72.150	-61.634	0.242	21.850	0.599	3.469	0.121
1.0	26	72.669	-84.854	0.291	25.967	-0.799	3.589	0.146
1.0	28	69.331	-97.227	0.337	30.455	-2.742	3.728	0.168
1.0	30	64.630	-101.718	0.372	34.962	-5.395	3.892	0.186
1.0	32	59.773	-102.256	0.396	39.140	-8.796	4.084	0.198
1.0	34	55.519	-101.629	0.403	42.712	-12.757	4.299	0.201
1.0	36	53.529	-99.127	0.390	45.543	-16.787	4.534	0.195
1.0	38	55.917	-94.491	0.353	47.680	-20.102	4.779	0.176
1.0	40	67.429	-78.608	0.300	49.332	-21.713	5.027	0.150
1.0	42	72.338	24.531	0.290	50.747	-20.524	5.278	0.145
1.0	44	44.137	58.942	0.424	51.979	-15.393	5.552	0.212
1.0	46	28.728	65.701	0.709	52.577	-5.459	5.913	0.354
1.0	48	31.876	67.136	0.699	52.759	3.084	6.340	0.349
1.0	50	37.086	64.932	0.680	52.723	9.745	6.838	0.340
1.0	52	44.200	57.823	0.664	52.684	14.284	7.407	0.332
1.0	54	51.751	43.681	0.668	52.790	16.695	8.045	0.334
1.0	56	56.527	22.162	0.709	53.083	17.137	8.752	0.354
1.0	58	56.483	-0.061	0.791	53.511	15.882	9.530	0.395
1.0	60	53.510	-15.824	0.900	53.966	13.300	10.387	0.450
1.0	62	50.173	-25.134	1.014	54.337	9.840	11.323	0.507
1.0	64	47.588	-30.284	1.112	54.557	5.985	12.334	0.556
1.0	66	46.022	-32.851	1.179	54.617	2.185	13.404	0.589
1.0	68	45.498	-33.622	1.202	54.559	-1.207	14.507	0.601

2.0	2	22.618	61.174	1.150	22.618	61.174	1.150	0.575
2.0	4	-5.279	32.117	0.248	18.151	55.759	1.350	0.124
2.0	6	-5.852	33.138	0.243	14.736	52.182	1.560	0.122
2.0	8	-7.900	36.119	0.226	12.002	50.088	1.763	0.113
2.0	10	-10.747	42.163	0.202	9.730	49.237	1.949	0.101
2.0	12	-13.349	52.669	0.176	7.852	49.486	2.112	0.088
2.0	14	-12.982	68.577	0.159	6.422	50.753	2.253	0.079
2.0	16	-7.083	87.475	0.156	5.579	52.977	2.376	0.078
2.0	18	3.330	104.358	0.172	5.496	56.076	2.487	0.086
2.0	20	14.443	116.325	0.205	6.316	59.925	2.596	0.102
2.0	22	24.014	125.295	0.247	8.096	64.360	2.710	0.124
2.0	24	31.580	132.662	0.293	10.766	69.206	2.836	0.147
2.0	26	37.236	139.784	0.337	14.135	74.316	2.978	0.168
2.0	28	41.007	147.687	0.373	17.928	79.609	3.135	0.186
2.0	30	42.888	155.705	0.401	21.841	85.058	3.307	0.200
2.0	32	42.943	163.345	0.418	25.570	90.646	3.492	0.209
2.0	34	41.621	168.270	0.427	28.823	96.286	3.696	0.213
2.0	36	39.529	169.146	0.423	31.335	101.722	3.927	0.211
2.0	38	37.294	162.979	0.413	32.907	106.475	4.204	0.206
2.0	40	34.041	147.981	0.410	33.442	109.903	4.548	0.205
2.0	42	27.838	125.874	0.461	32.965	111.416	4.995	0.230
2.0	44	19.988	106.380	0.616	31.583	110.734	5.595	0.308
2.0	46	14.149	93.924	0.891	29.456	108.052	6.423	0.445
2.0	48	16.556	95.473	0.883	28.052	106.313	7.271	0.442
2.0	50	21.198	95.597	0.853	27.441	105.089	8.107	0.426
2.0	52	28.495	94.006	0.808	27.634	104.110	8.905	0.404
2.0	54	38.655	89.922	0.769	28.621	103.197	9.646	0.384
2.0	56	50.779	81.646	0.757	30.370	102.232	10.323	0.378
2.0	58	62.048	66.041	0.788	32.819	101.129	10.944	0.394
2.0	60	68.807	41.131	0.860	35.866	99.827	11.528	0.430
2.0	62	70.059	15.351	0.952	39.350	98.289	12.102	0.476
2.0	64	68.663	-1.114	1.039	43.058	96.508	12.698	0.520
2.0	66	67.205	-9.027	1.100	46.743	94.513	13.338	0.550
2.0	68	66.645	-11.313	1.121	50.157	92.388	14.034	0.561

3.0	2	26.827	36.332	1.792	26.827	36.332	1.792	0.896
3.0	4	19.278	11.327	1.176	24.474	26.074	2.905	0.588
3.0	6	19.272	11.321	1.162	23.230	21.724	4.040	0.581
3.0	8	19.282	11.278	1.119	22.507	19.386	5.144	0.559
3.0	10	19.425	11.250	1.052	22.071	17.960	6.187	0.526
3.0	12	19.915	11.229	0.967	21.842	17.025	7.148	0.483
3.0	14	21.051	11.208	0.866	21.803	16.390	8.010	0.433
3.0	16	23.247	11.117	0.761	21.964	15.948	8.768	0.380
3.0	18	27.055	10.742	0.655	22.347	15.630	9.419	0.328
3.0	20	33.087	9.559	0.558	22.972	15.376	9.965	0.279
3.0	22	41.670	6.513	0.478	23.848	15.127	10.415	0.239
3.0	24	52.508	-1.096	0.418	24.968	14.820	10.775	0.209
3.0	26	62.613	-18.784	0.387	26.303	14.387	11.058	0.194
3.0	28	66.716	-50.768	0.379	27.808	13.766	11.273	0.189
3.0	30	62.288	-78.281	0.386	29.417	12.911	11.432	0.193
3.0	32	54.719	-91.414	0.397	31.056	11.808	11.548	0.198
3.0	34	48.174	-96.221	0.402	32.644	10.500	11.638	0.201
3.0	36	44.487	-97.202	0.388	34.105	9.112	11.720	0.194
3.0	38	45.997	-94.885	0.349	35.379	7.864	11.817	0.175
3.0	40	57.620	-85.680	0.288	36.428	7.074	11.953	0.144
3.0	42	75.913	-0.169	0.268	37.235	7.131	12.161	0.134
3.0	44	48.978	59.047	0.405	37.785	8.431	12.479	0.202
3.0	46	33.497	66.818	0.699	38.030	11.279	12.967	0.350
3.0	48	36.774	67.731	0.693	38.363	13.863	13.473	0.346
3.0	50	41.778	64.485	0.677	38.786	15.997	14.010	0.338
3.0	52	48.148	55.494	0.663	39.310	17.524	14.589	0.331
3.0	54	54.024	38.584	0.668	39.937	18.329	15.216	0.334
3.0	56	56.138	15.367	0.710	40.658	18.358	15.899	0.355
3.0	58	53.622	-5.439	0.792	41.444	17.622	16.643	0.396
3.0	60	49.203	-18.923	0.901	42.249	16.206	17.454	0.451
3.0	62	45.150	-26.677	1.015	43.023	14.255	18.334	0.508
3.0	64	42.215	-30.958	1.114	43.723	11.966	19.278	0.557
3.0	66	40.486	-33.097	1.180	44.324	9.556	20.276	0.590
3.0	68	39.915	-33.739	1.203	44.822	7.236	21.305	0.601

4.0	2	17.835	48.392	2.297	17.835	48.392	2.297	1.148
4.0	4	11.223	33.997	1.435	15.511	42.711	3.700	0.717
4.0	6	11.268	34.099	1.428	14.437	40.247	5.114	0.714
4.0	8	11.448	34.424	1.410	13.858	38.949	6.517	0.705
4.0	10	11.825	34.977	1.381	13.546	38.230	7.895	0.691
4.0	12	12.520	35.767	1.350	13.422	37.859	9.244	0.675
4.0	14	13.593	36.784	1.317	13.454	37.727	10.561	0.659
4.0	16	15.100	37.996	1.289	13.630	37.773	11.850	0.645
4.0	18	16.970	39.308	1.266	13.937	37.953	13.114	0.633
4.0	20	19.065	40.623	1.247	14.356	38.231	14.355	0.623
4.0	22	21.136	41.836	1.227	14.855	38.573	15.572	0.613
4.0	24	22.967	42.944	1.200	15.394	38.952	16.758	0.600
4.0	26	24.357	43.870	1.160	15.929	39.340	17.901	0.580
4.0	28	25.092	44.779	1.101	16.413	39.722	18.985	0.551
4.0	30	25.043	45.785	1.022	16.806	40.089	19.991	0.511
4.0	32	24.034	47.249	0.927	17.077	40.448	20.905	0.464
4.0	34	21.852	49.511	0.831	17.206	40.816	21.724	0.415
4.0	36	18.615	53.133	0.746	17.191	41.226	22.455	0.373
4.0	38	14.763	58.371	0.698	17.043	41.725	23.125	0.349
4.0	40	11.664	64.491	0.706	16.792	42.364	23.778	0.353
4.0	42	10.779	70.193	0.785	16.485	43.202	24.476	0.393
4.0	44	12.197	74.114	0.942	16.179	44.284	25.294	0.471
4.0	46	14.933	76.164	1.184	15.932	45.642	26.319	0.592
4.0	48	18.234	77.315	1.129	15.841	46.894	27.299	0.565
4.0	50	22.628	76.428	1.053	15.923	47.967	28.228	0.527
4.0	52	28.441	72.794	0.965	16.194	48.800	29.098	0.483
4.0	54	35.741	65.074	0.880	16.663	49.346	29.902	0.440
4.0	56	43.502	51.327	0.823	17.332	49.576	30.638	0.412
4.0	58	48.882	31.138	0.816	18.193	49.481	31.311	0.408
4.0	60	49.598	9.894	0.862	19.224	49.075	31.930	0.431
4.0	62	47.180	-5.731	0.941	20.389	48.395	32.514	0.470
4.0	64	44.316	-14.954	1.022	21.644	47.503	33.081	0.511
4.0	66	42.339	-19.592	1.081	22.934	46.480	33.651	0.541
4.0	68	41.647	-20.985	1.103	24.202	45.421	34.240	0.551

5.0	2	21.849	58.191	1.139	21.849	58.191	1.139	0.569
5.0	4	-42.049	2.914	0.353	8.776	47.924	1.240	0.177
5.0	6	-44.016	2.278	0.353	-2.203	40.426	1.416	0.177
5.0	8	-49.489	0.499	0.356	-11.428	34.983	1.632	0.178
5.0	10	-57.673	-3.150	0.363	-19.679	30.946	1.866	0.181
5.0	12	-66.658	-8.802	0.378	-27.439	27.878	2.113	0.189
5.0	14	-75.240	-19.553	0.396	-34.851	25.525	2.371	0.198
5.0	16	-82.014	-45.205	0.412	-41.860	23.756	2.640	0.206
5.0	18	-83.595	-108.403	0.420	-48.370	22.503	2.914	0.210
5.0	20	-78.895	-145.503	0.419	-54.337	21.726	3.186	0.209
5.0	22	-72.385	-157.508	0.410	-59.808	21.369	3.447	0.205
5.0	24	-65.166	-161.593	0.400	-64.903	21.326	3.691	0.200
5.0	26	-57.801	-162.096	0.396	-69.774	21.405	3.919	0.198
5.0	28	-51.345	-160.672	0.403	-74.558	21.266	4.142	0.202
5.0	30	-46.395	-158.422	0.424	-79.317	20.226	4.375	0.212
5.0	32	-44.174	-156.282	0.455	-83.977	16.180	4.642	0.228
5.0	34	-44.331	-155.143	0.488	-88.160	-9.115	4.960	0.244
5.0	36	-47.266	-156.034	0.517	-87.423	-130.762	5.342	0.258
5.0	38	-52.853	-160.903	0.531	-84.591	-146.595	5.785	0.265
5.0	40	-60.835	-175.339	0.531	-82.793	-155.012	6.272	0.266
5.0	42	-66.361	146.034	0.539	-82.144	-166.371	6.779	0.270
5.0	44	-56.570	100.595	0.609	-82.203	173.537	7.288	0.304
5.0	46	-39.047	80.764	0.796	-81.332	141.552	7.806	0.398
5.0	48	-35.819	67.643	0.713	-79.684	119.791	8.262	0.357
5.0	50	-31.619	53.286	0.635	-78.004	104.155	8.644	0.318
5.0	52	-25.882	36.963	0.569	-76.541	91.375	8.942	0.285
5.0	54	-18.111	18.740	0.531	-75.334	79.611	9.151	0.266
5.0	56	-9.089	0.354	0.538	-74.300	67.774	9.273	0.269
5.0	58	-1.041	-15.619	0.592	-73.246	55.269	9.320	0.296
5.0	60	4.619	-27.786	0.678	-71.883	42.072	9.316	0.339
5.0	62	8.068	-36.261	0.771	-69.901	28.834	9.293	0.386
5.0	64	9.990	-41.715	0.852	-67.103	16.626	9.289	0.426
5.0	66	10.928	-44.750	0.907	-63.521	6.358	9.341	0.453
5.0	68	11.201	-45.725	0.926	-59.415	-1.603	9.474	0.463

6.0	2	33.548	-110.195	2.366	33.548	-110.195	2.366	1.183
6.0	4	24.575	-106.126	4.750	27.519	-107.540	7.094	2.375
6.0	6	24.574	-106.338	4.756	26.312	-107.132	11.846	2.378
6.0	8	24.524	-106.942	4.768	25.795	-107.136	16.612	2.384
6.0	10	24.344	-107.845	4.773	25.494	-107.347	21.384	2.387
6.0	12	23.985	-108.915	4.754	25.272	-107.689	26.135	2.377
6.0	14	23.393	-110.018	4.685	25.067	-108.114	30.815	2.342
6.0	16	22.517	-111.021	4.548	24.842	-108.583	35.355	2.274
6.0	18	21.310	-111.800	4.328	24.572	-109.062	39.670	2.164
6.0	20	19.682	-112.274	4.018	24.238	-109.526	43.670	2.009
6.0	22	17.497	-112.262	3.628	23.823	-109.950	47.271	1.814
6.0	24	14.499	-111.637	3.172	23.313	-110.319	50.402	1.586
6.0	26	10.271	-110.148	2.680	22.696	-110.623	53.016	1.340
6.0	28	4.170	-107.390	2.192	21.964	-110.856	55.095	1.096
6.0	30	-4.739	-102.839	1.751	21.116	-111.020	56.649	0.876
6.0	32	-17.468	-95.613	1.407	20.156	-111.124	57.711	0.704
6.0	34	-33.314	-84.581	1.199	19.101	-111.184	58.334	0.600
6.0	36	-48.941	-68.134	1.125	17.977	-111.223	58.576	0.562
6.0	38	-60.430	-44.939	1.128	16.827	-111.272	58.496	0.564
6.0	40	-66.580	-13.864	1.152	15.706	-111.368	58.143	0.576
6.0	42	-66.977	22.811	1.165	14.682	-111.555	57.555	0.583
6.0	44	-60.587	56.141	1.178	13.836	-111.881	56.754	0.589
6.0	46	-48.127	79.419	1.229	13.262	-112.400	55.758	0.615
6.0	48	-47.584	89.134	1.140	12.776	-113.018	54.873	0.570
6.0	50	-46.214	97.574	1.058	12.373	-113.704	54.094	0.529
6.0	52	-44.345	104.445	0.978	12.046	-114.427	53.414	0.489
6.0	54	-42.262	109.790	0.898	11.786	-115.155	52.827	0.449
6.0	56	-40.153	113.807	0.814	11.585	-115.864	52.323	0.407
6.0	58	-38.120	116.731	0.731	11.433	-116.533	51.893	0.366
6.0	60	-36.223	118.772	0.652	11.320	-117.153	51.526	0.326
6.0	62	-34.518	120.110	0.582	11.239	-117.721	51.209	0.291
6.0	64	-33.107	120.904	0.527	11.179	-118.246	50.929	0.264
6.0	66	-32.146	121.299	0.492	11.131	-118.743	50.673	0.246
6.0	68	-31.800	121.413	0.480	11.086	-119.233	50.426	0.240

7.0	2	27.380	53.001	1.058	27.380	53.001	1.058	0.529
7.0	4	-3.756	-9.253	0.214	24.189	42.643	1.157	0.107
7.0	6	-5.172	-9.457	0.205	20.990	34.831	1.276	0.103
7.0	8	-9.577	-9.736	0.180	17.937	29.389	1.391	0.090
7.0	10	-18.777	-10.318	0.142	15.020	25.898	1.480	0.071
7.0	12	-36.461	-9.680	0.101	12.215	24.045	1.531	0.051
7.0	14	-73.085	1.606	0.072	9.566	23.708	1.537	0.036
7.0	16	-56.460	154.747	0.080	7.223	24.958	1.499	0.040
7.0	18	-25.966	159.176	0.119	5.463	28.048	1.421	0.060
7.0	20	-8.924	160.372	0.168	4.704	33.426	1.313	0.084
7.0	22	2.214	161.591	0.218	5.495	41.741	1.192	0.109
7.0	24	9.822	164.273	0.268	8.385	53.783	1.080	0.134
7.0	26	14.668	167.979	0.313	13.378	70.126	1.012	0.156
7.0	28	16.872	173.020	0.354	19.034	90.117	1.024	0.177
7.0	30	16.668	178.480	0.389	22.876	110.981	1.138	0.195
7.0	32	14.333	-176.454	0.419	23.732	129.287	1.348	0.209
7.0	34	10.473	-172.947	0.441	22.252	143.322	1.634	0.221
7.0	36	5.727	-172.169	0.452	19.514	153.040	1.975	0.226
7.0	38	0.575	-175.605	0.447	16.315	158.901	2.351	0.223
7.0	40	-4.752	174.270	0.427	13.135	161.255	2.741	0.213
7.0	42	-9.084	154.010	0.424	10.237	160.203	3.135	0.212
7.0	44	-9.840	126.835	0.505	7.757	155.659	3.543	0.253
7.0	46	-7.184	105.062	0.724	5.772	147.623	4.024	0.362
7.0	48	0.553	100.768	0.676	5.449	141.300	4.512	0.338
7.0	50	11.056	94.629	0.608	6.519	136.273	4.951	0.304
7.0	52	25.961	84.477	0.544	8.872	132.156	5.296	0.272
7.0	54	44.060	65.666	0.530	12.557	128.612	5.525	0.265
7.0	56	56.541	33.539	0.602	17.753	125.339	5.637	0.301
7.0	58	57.721	1.253	0.749	24.694	122.020	5.666	0.375
7.0	60	54.217	-17.409	0.930	33.503	118.259	5.682	0.465
7.0	62	50.794	-26.835	1.106	43.882	113.462	5.784	0.553
7.0	64	48.396	-31.677	1.251	54.830	106.618	6.069	0.626
7.0	66	47.015	-34.017	1.346	64.764	95.939	6.592	0.673
7.0	68	46.562	-34.711	1.379	72.095	78.874	7.337	0.689

8.0	2	23.856	41.945	2.028	23.856	41.945	2.028	1.014
8.0	4	20.373	9.007	1.011	23.646	30.929	2.943	0.505
8.0	6	20.405	8.971	1.000	23.246	25.298	3.895	0.500
8.0	8	20.553	9.007	0.974	22.944	21.996	4.841	0.487
8.0	10	20.904	9.205	0.932	22.765	19.904	5.756	0.466
8.0	12	21.636	9.936	0.888	22.712	18.561	6.634	0.444
8.0	14	22.930	11.463	0.846	22.795	17.764	7.475	0.423
8.0	16	24.834	14.091	0.818	23.021	17.422	8.291	0.409
8.0	18	27.225	17.834	0.810	23.392	17.487	9.099	0.405
8.0	20	29.650	22.260	0.832	23.892	17.912	9.924	0.416
8.0	22	31.663	26.691	0.877	24.485	18.637	10.786	0.438
8.0	24	32.944	30.384	0.945	25.120	19.582	11.708	0.473
8.0	26	33.381	32.935	1.026	25.732	20.650	12.705	0.513
8.0	28	33.092	34.396	1.111	26.263	21.750	13.785	0.555
8.0	30	32.088	34.967	1.194	26.660	22.806	14.951	0.597
8.0	32	30.536	35.063	1.276	26.892	23.777	16.204	0.638
8.0	34	28.553	35.104	1.360	26.943	24.657	17.544	0.680
8.0	36	26.390	35.498	1.452	26.817	25.477	18.977	0.726
8.0	38	24.318	36.553	1.565	26.532	26.296	20.519	0.783
8.0	40	22.664	38.427	1.711	26.121	27.189	22.197	0.855
8.0	42	21.605	41.051	1.899	25.623	28.229	24.048	0.950
8.0	44	21.213	44.224	2.142	25.080	29.477	26.120	1.071
8.0	46	21.432	47.620	2.449	24.533	30.968	28.470	1.224
8.0	48	25.610	39.923	2.213	24.482	31.620	30.662	1.107
8.0	50	27.953	29.766	2.103	24.728	31.573	32.761	1.051
8.0	52	27.608	19.012	2.120	25.120	30.915	34.839	1.060
8.0	54	24.969	9.954	2.249	25.537	29.726	36.973	1.125
8.0	56	21.259	3.614	2.463	25.888	28.096	39.231	1.231
8.0	58	17.541	-0.284	2.726	26.115	26.137	41.666	1.363
8.0	60	14.368	-2.452	3.004	26.191	23.975	44.311	1.502
8.0	62	11.927	-3.535	3.260	26.122	21.737	47.173	1.630
8.0	64	10.234	-3.996	3.467	25.940	19.539	50.231	1.734
8.0	66	9.246	-4.138	3.602	25.689	17.470	53.436	1.801
8.0	68	8.922	-4.154	3.648	25.420	15.594	56.722	1.824

10.0	2	4.622	42.661	0.937	4.622	42.661	0.937	0.469
10.0	4	-50.056	-24.138	0.591	-18.202	24.640	1.199	0.295
10.0	6	-50.992	-24.611	0.588	-30.438	13.015	1.636	0.294
10.0	8	-53.754	-26.234	0.580	-37.402	5.519	2.130	0.290
10.0	10	-58.010	-28.903	0.569	-42.281	0.384	2.636	0.284
10.0	12	-63.387	-33.158	0.553	-46.321	-3.384	3.133	0.277
10.0	14	-69.419	-40.232	0.533	-49.991	-6.321	3.607	0.267
10.0	16	-75.379	-52.907	0.510	-53.459	-8.731	4.051	0.255
10.0	18	-80.040	-81.549	0.481	-56.783	-10.816	4.455	0.241
10.0	20	-79.805	-127.679	0.450	-59.982	-12.758	4.814	0.225
10.0	22	-74.089	-155.132	0.420	-63.073	-14.782	5.126	0.210
10.0	24	-66.214	-164.796	0.396	-66.072	-17.211	5.395	0.198
10.0	26	-57.995	-166.999	0.386	-68.984	-20.523	5.631	0.193
10.0	28	-50.782	-165.747	0.391	-71.772	-25.394	5.850	0.195
10.0	30	-46.052	-162.963	0.412	-74.326	-32.668	6.076	0.206
10.0	32	-44.126	-160.080	0.445	-76.440	-43.070	6.333	0.223
10.0	34	-44.755	-158.269	0.481	-77.882	-56.385	6.639	0.241
10.0	36	-48.025	-158.600	0.511	-78.609	-70.720	7.005	0.256
10.0	38	-53.907	-163.115	0.528	-78.941	-83.553	7.428	0.264
10.0	40	-62.048	-177.742	0.532	-79.445	-93.722	7.890	0.266
10.0	42	-67.137	142.087	0.540	-80.692	-101.694	8.362	0.270
10.0	44	-56.504	97.155	0.610	-83.155	-109.209	8.822	0.305
10.0	46	-38.459	78.330	0.797	-87.152	-126.068	9.265	0.398
10.0	48	-34.962	65.454	0.714	-88.852	112.116	9.664	0.357
10.0	50	-30.537	51.368	0.635	-86.126	69.892	10.007	0.318
10.0	52	-24.647	35.308	0.569	-83.549	57.031	10.285	0.285
10.0	54	-16.838	17.271	0.531	-81.224	46.561	10.493	0.266
10.0	56	-7.919	-1.073	0.538	-79.011	36.302	10.634	0.269
10.0	58	-0.066	-17.122	0.592	-76.720	25.961	10.718	0.296
10.0	60	5.389	-29.393	0.678	-74.147	15.834	10.765	0.339
10.0	62	8.670	-37.950	0.771	-71.143	6.449	10.804	0.385
10.0	64	10.475	-43.454	0.852	-67.664	-1.713	10.865	0.426
10.0	66	11.346	-46.515	0.907	-63.805	-8.382	10.977	0.453
10.0	68	11.596	-47.497	0.926	-59.764	-13.508	11.158	0.463

11.0	2	47.612	-68.117	1.851	47.612	-68.117	1.851	0.925
11.0	4	57.930	-80.071	1.455	52.343	-72.561	3.286	0.727
11.0	6	57.821	-80.632	1.453	54.115	-74.720	4.731	0.726
11.0	8	57.488	-82.271	1.448	54.985	-76.313	6.174	0.724
11.0	10	56.976	-84.923	1.439	55.454	-77.830	7.608	0.719
11.0	12	56.356	-88.552	1.423	55.719	-79.456	9.024	0.711
11.0	14	55.691	-93.228	1.398	55.886	-81.280	10.411	0.699
11.0	16	55.017	-99.140	1.365	56.026	-83.360	11.757	0.682
11.0	18	54.232	-106.498	1.327	56.185	-85.749	13.052	0.663
11.0	20	53.160	-115.443	1.291	56.395	-88.504	14.290	0.646
11.0	22	51.462	-125.684	1.267	56.666	-91.685	15.471	0.634
11.0	24	48.916	-136.398	1.267	56.990	-95.350	16.604	0.633
11.0	26	45.699	-146.355	1.299	57.341	-99.531	17.709	0.650
11.0	28	42.230	-154.747	1.367	57.675	-104.226	18.812	0.683
11.0	30	39.162	-161.416	1.463	57.949	-109.373	19.944	0.731
11.0	32	36.770	-166.662	1.577	58.125	-114.856	21.133	0.789
11.0	34	35.145	-171.005	1.696	58.188	-120.521	22.400	0.848
11.0	36	34.172	-175.052	1.809	58.154	-126.217	23.753	0.905
11.0	38	33.585	-179.386	1.904	58.064	-131.837	25.182	0.952
11.0	40	33.058	175.499	1.974	57.970	-137.346	26.660	0.987
11.0	42	32.209	169.154	2.021	57.923	-142.792	28.147	1.010
11.0	44	30.598	161.301	2.054	57.961	-148.296	29.596	1.027
11.0	46	27.686	152.034	2.092	58.095	-154.037	30.958	1.046
11.0	48	26.554	152.905	2.005	57.917	-159.114	32.323	1.003
11.0	50	24.979	153.261	1.882	57.530	-163.509	33.634	0.941
11.0	52	22.763	153.090	1.725	57.016	-167.268	34.839	0.862
11.0	54	19.626	152.364	1.542	56.430	-170.472	35.894	0.771
11.0	56	15.205	151.044	1.348	55.810	-173.213	36.766	0.674
11.0	58	9.105	149.097	1.159	55.176	-175.582	37.438	0.580
11.0	60	1.130	146.544	0.997	54.535	-177.660	37.914	0.499
11.0	62	-8.201	143.554	0.878	53.889	-179.520	38.213	0.439
11.0	64	-17.238	140.557	0.807	53.234	178.777	38.376	0.404
11.0	66	-23.741	138.270	0.775	52.565	177.181	38.457	0.388
11.0	68	-26.087	137.418	0.767	51.880	175.654	38.518	0.383

12.0	2	-42.028	77.569	1.984	-42.028	77.569	1.984	0.992
12.0	4	-67.707	83.185	1.677	-53.822	78.919	3.569	0.839
12.0	6	-67.849	83.835	1.674	-58.326	79.786	5.208	0.837
12.0	8	-68.201	85.782	1.666	-60.760	80.667	6.854	0.833
12.0	10	-68.643	89.028	1.655	-62.359	81.738	8.494	0.828
12.0	12	-69.032	93.474	1.640	-63.542	83.063	10.120	0.820
12.0	14	-69.209	98.826	1.623	-64.477	84.654	11.728	0.812
12.0	16	-69.082	104.696	1.604	-65.239	86.496	13.314	0.802
12.0	18	-68.628	110.667	1.585	-65.867	88.563	14.878	0.793
12.0	20	-67.875	116.458	1.564	-66.383	90.820	16.416	0.782
12.0	22	-66.892	121.983	1.543	-66.806	93.239	17.927	0.772
12.0	24	-65.724	127.287	1.521	-67.152	95.799	19.409	0.761
12.0	26	-64.432	132.398	1.501	-67.436	98.483	20.862	0.750
12.0	28	-62.959	137.210	1.480	-67.663	101.277	22.285	0.740
12.0	30	-61.330	141.404	1.459	-67.830	104.148	23.677	0.730
12.0	32	-59.570	144.474	1.436	-67.923	107.034	25.037	0.718
12.0	34	-57.750	145.711	1.405	-67.917	109.823	26.362	0.702
12.0	36	-55.990	144.287	1.364	-67.782	112.349	27.650	0.682
12.0	38	-54.171	139.177	1.308	-67.484	114.395	28.893	0.654
12.0	40	-51.736	129.134	1.245	-66.986	115.718	30.084	0.623
12.0	42	-47.273	113.836	1.200	-66.247	116.083	31.216	0.600
12.0	44	-39.108	95.828	1.224	-65.212	115.307	32.287	0.612
12.0	46	-28.057	79.712	1.383	-63.800	113.300	33.307	0.692
12.0	48	-23.985	79.477	1.361	-62.343	111.590	34.273	0.681
12.0	50	-20.713	79.048	1.326	-60.889	110.132	35.187	0.663
12.0	52	-18.165	78.452	1.277	-59.481	108.881	36.049	0.638
12.0	54	-16.265	77.701	1.212	-58.151	107.799	36.858	0.606
12.0	56	-14.942	76.804	1.136	-56.921	106.854	37.613	0.568
12.0	58	-14.124	75.778	1.054	-55.804	106.019	38.314	0.527
12.0	60	-13.735	74.661	0.972	-54.799	105.270	38.965	0.486
12.0	62	-13.675	73.532	0.898	-53.897	104.590	39.571	0.449
12.0	64	-13.813	72.527	0.840	-53.078	103.963	40.146	0.420
12.0	66	-13.992	71.817	0.803	-52.317	103.379	40.701	0.401
12.0	68	-14.072	71.560	0.790	-51.587	102.830	41.255	0.395

14.0	2	0.786	61.029	1.009	0.786	61.029	1.009	0.504
14.0	4	-70.886	43.368	0.555	-23.324	58.133	1.289	0.278
14.0	6	-71.664	45.906	0.558	-37.483	56.362	1.709	0.279
14.0	8	-73.760	54.381	0.566	-46.274	55.966	2.191	0.283
14.0	10	-75.782	71.147	0.580	-52.415	57.068	2.708	0.290
14.0	12	-75.991	95.153	0.597	-57.069	59.758	3.248	0.298
14.0	14	-73.397	116.425	0.617	-60.678	64.076	3.807	0.308
14.0	16	-68.941	130.104	0.633	-63.382	69.952	4.377	0.316
14.0	18	-63.625	138.092	0.642	-65.217	77.112	4.949	0.321
14.0	20	-58.091	143.003	0.647	-66.229	85.062	5.516	0.323
14.0	22	-52.558	146.852	0.643	-66.521	93.212	6.068	0.322
14.0	24	-47.393	150.443	0.637	-66.252	101.076	6.601	0.318
14.0	26	-42.867	154.463	0.630	-65.608	108.402	7.114	0.315
14.0	28	-39.367	159.088	0.626	-64.763	115.142	7.612	0.313
14.0	30	-37.255	164.112	0.628	-63.855	121.342	8.106	0.314
14.0	32	-36.552	169.144	0.635	-62.981	127.028	8.606	0.318
14.0	34	-37.517	173.171	0.646	-62.199	132.136	9.126	0.323
14.0	36	-40.197	175.054	0.653	-61.542	136.478	9.676	0.327
14.0	38	-44.732	173.088	0.651	-61.030	139.758	10.260	0.326
14.0	40	-50.973	163.856	0.638	-60.670	141.597	10.873	0.319
14.0	42	-56.437	140.449	0.636	-60.434	141.571	11.507	0.318
14.0	44	-53.302	104.884	0.691	-60.228	139.249	12.155	0.346
14.0	46	-40.996	80.088	0.866	-59.829	134.279	12.827	0.433
14.0	48	-37.763	76.931	0.790	-59.300	129.941	13.425	0.395
14.0	50	-34.727	71.734	0.691	-58.782	126.173	13.925	0.346
14.0	52	-31.300	63.152	0.576	-58.382	122.870	14.303	0.288
14.0	54	-26.030	48.843	0.460	-58.188	119.905	14.540	0.230
14.0	56	-16.092	26.726	0.379	-58.260	117.144	14.624	0.189
14.0	58	-1.908	1.067	0.379	-58.641	114.441	14.551	0.189
14.0	60	8.891	-18.842	0.459	-59.352	111.640	14.335	0.229
14.0	62	14.356	-30.947	0.569	-60.386	108.565	13.998	0.284
14.0	64	16.851	-37.716	0.669	-61.699	105.015	13.575	0.335
14.0	66	17.918	-41.137	0.737	-63.197	100.779	13.112	0.368
14.0	68	18.210	-42.185	0.761	-64.724	95.683	12.653	0.380