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Supporting Information for

The proximal ejecta around the marine-target Lockne impact structure, Sweden

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Contents of this file

Figures S01 to S10
Tables S01 to S02

Introduction

The material shows the location of the drillings and resistivity profiles (Fig. S01). Figures S02 to S04 shows generalized logs of the four drill cores. In figures S05 to S10, the result of the processing and the interpretation of the resistivity profiles are given, which are not included in the article. In table S01 the precise coordinates for stat and end points of the resistivity profiles are given. Also, the names of the process information file, and the names of the data files are shown. In table S02 the data for the Res2Dinv processing are shown, and the number of iterations runed and what the absolute error are given.

Data Set S1. Process info files, with the extension txt.
Data Set S2. Resistivity data files, with the extension dat.

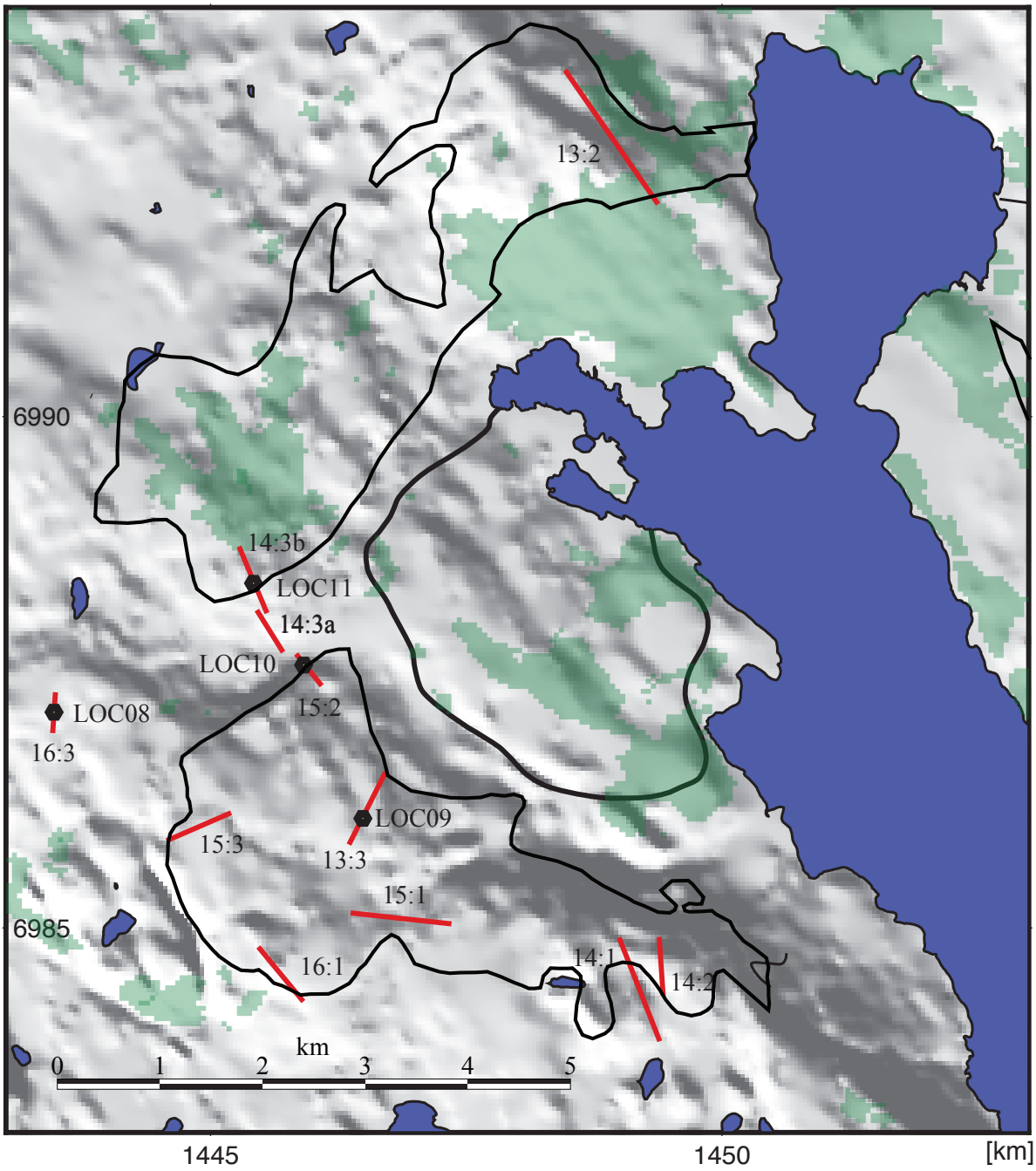


Fig. S01. Map showing the locations of the four diill holes (LOC08–11) and the resistivity profiles (in red). The background a sun-shaded map of topography, the green area is open farmland (data from the Swedish geodetic services (Lantmäteriet)). The black lines are the major geological boundaries for the ejecta and the nappe in the center of the structure, from figure 1. The coordinates are in the grid system RT 90, the official Swedish name for a transverse Mercator projection.

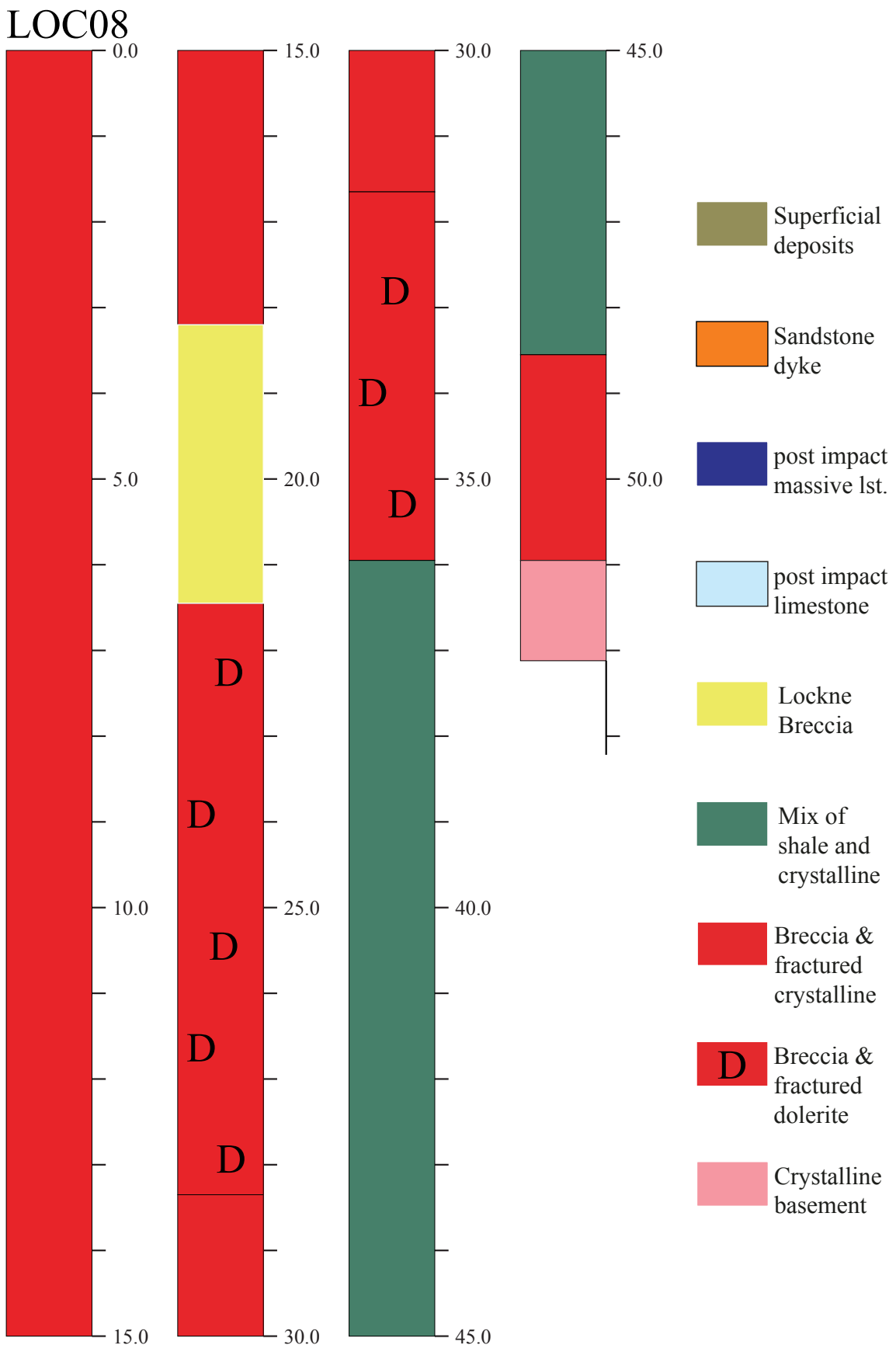


Fig. S02. Lithological log of drill core LOC08 (1443471, 6987107) see figure S01 for location.

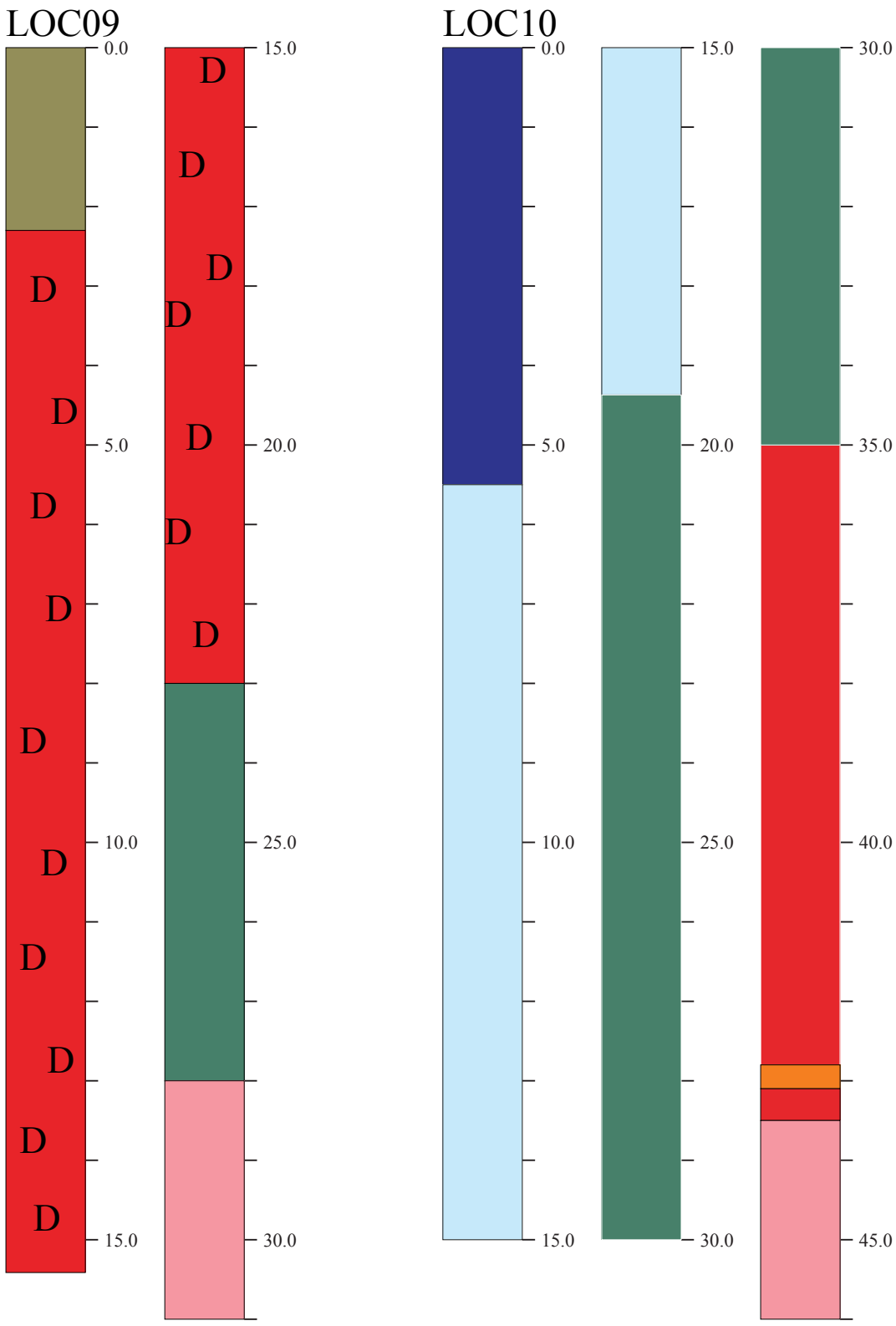


Fig. S03. Lithological log of drill cores LOC09 (1446489, 6986070) and LOC10 (1445910, 6987570) see figure S01 for location.

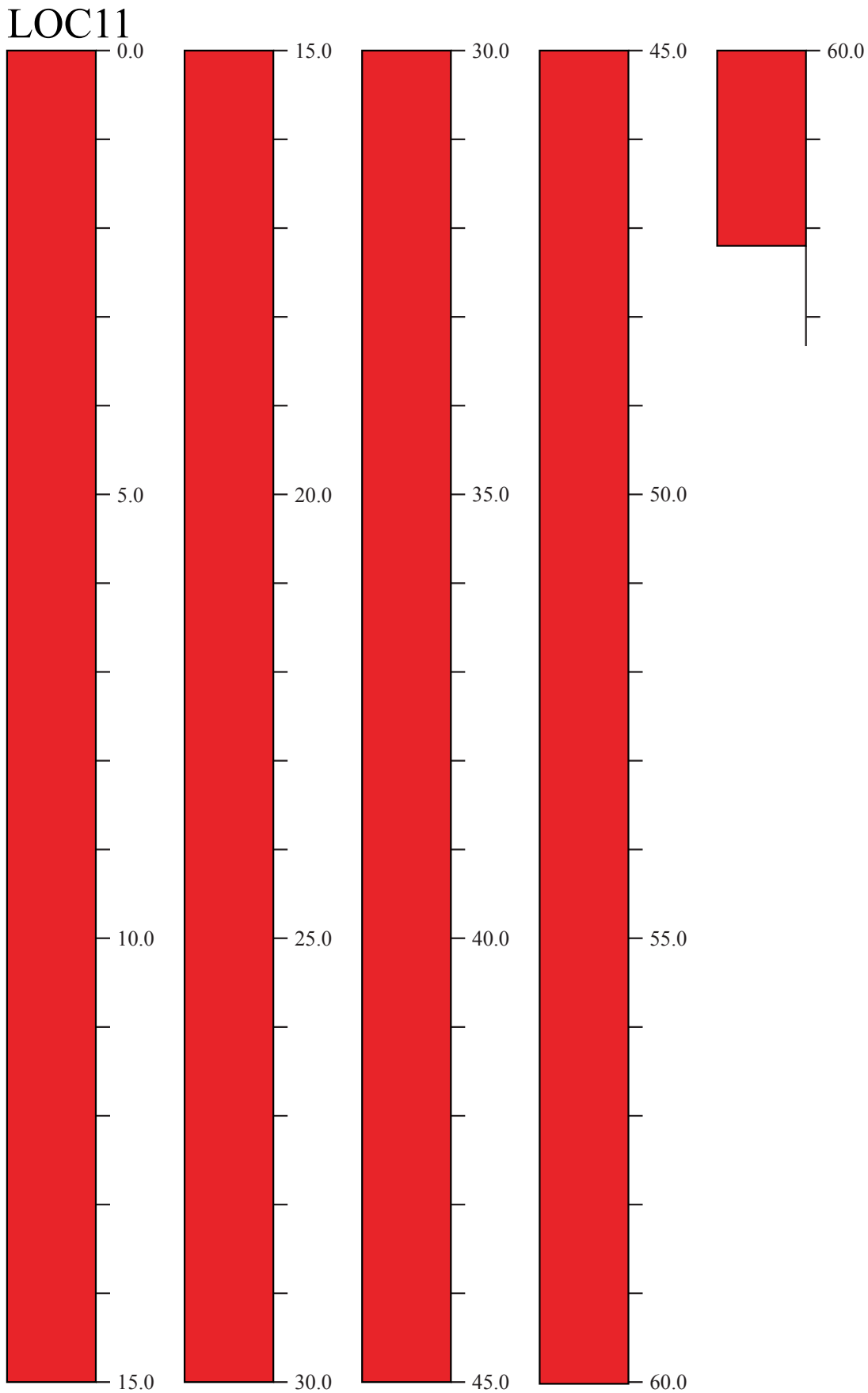


Fig. S04. Lithological log of drill core LOC11 (1445425, 6988374) see figure S01 for location.

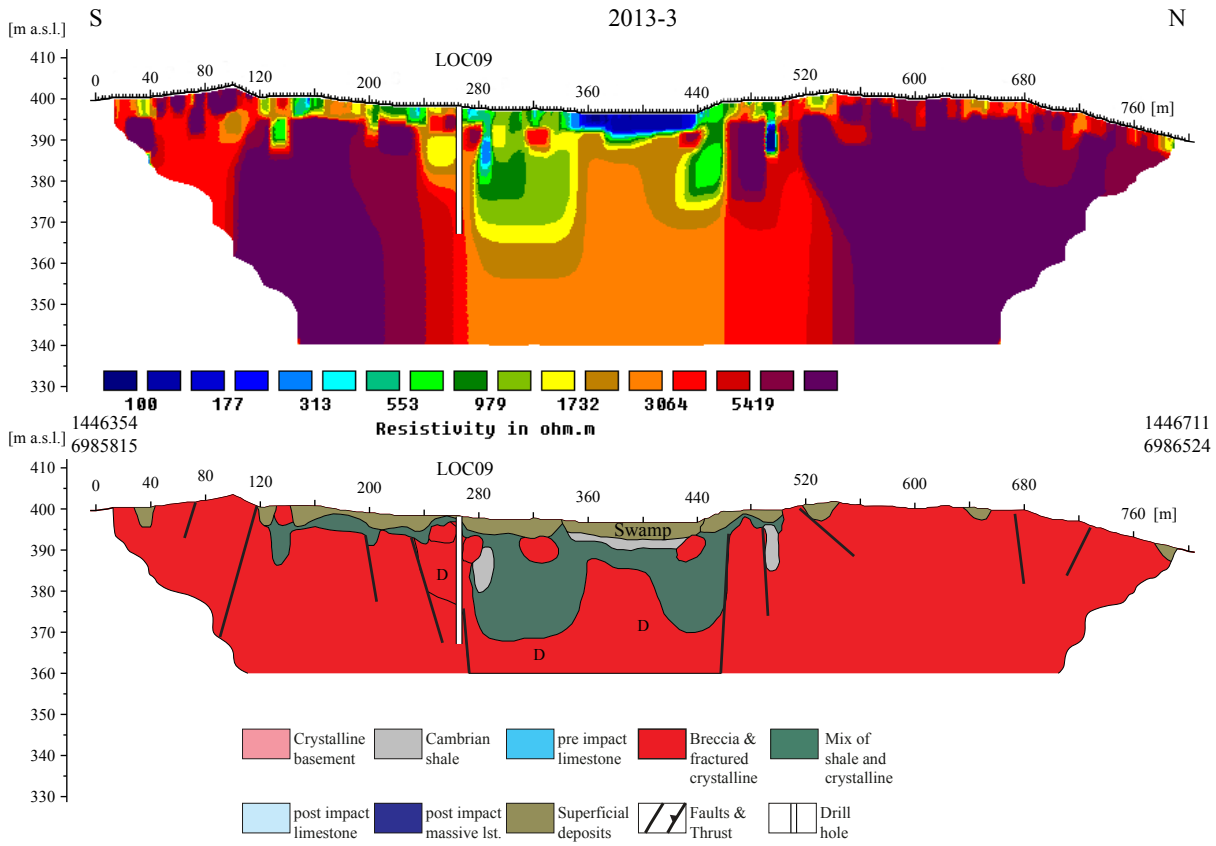


Fig. S05. Resistivity profile 13-3

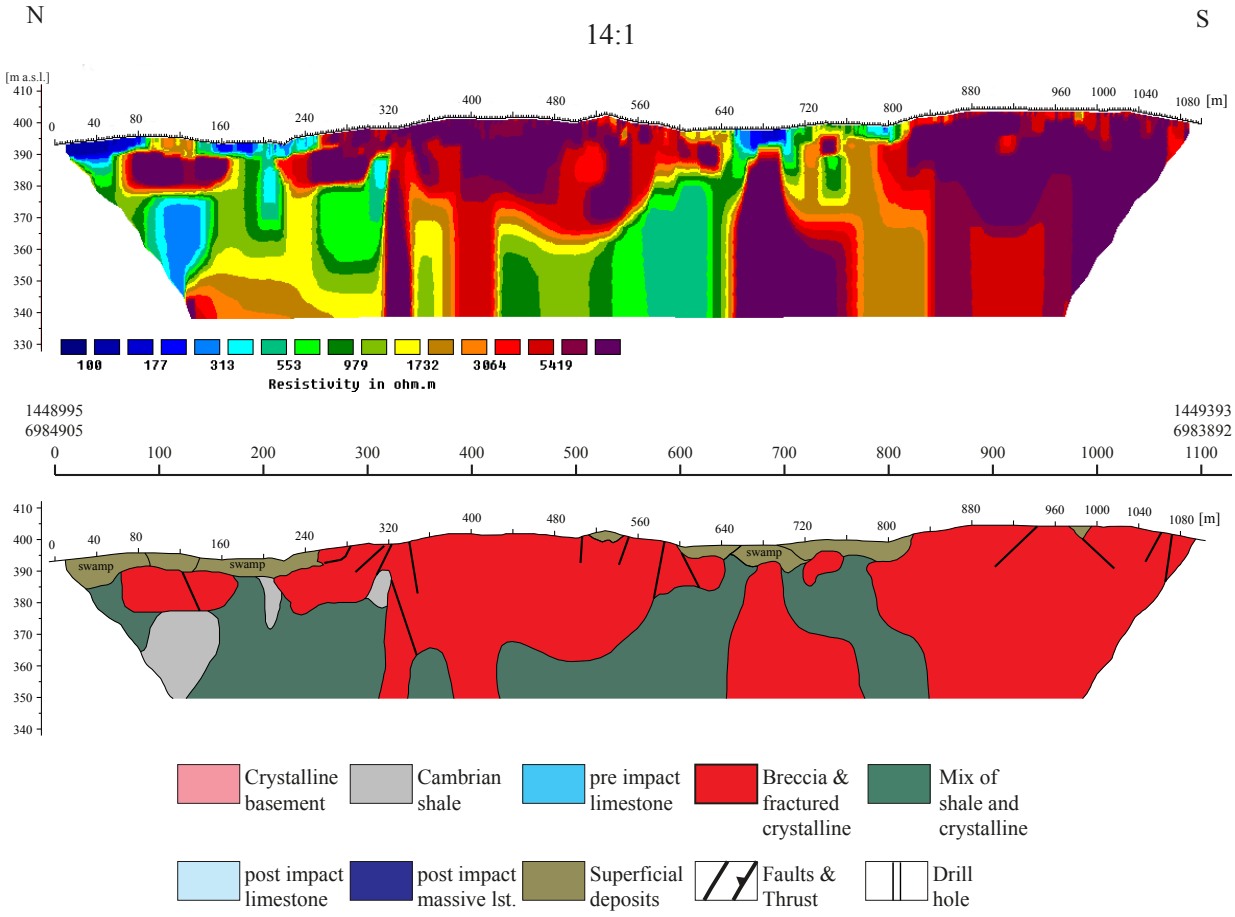


Fig. S06. Resistivity profile 14-1

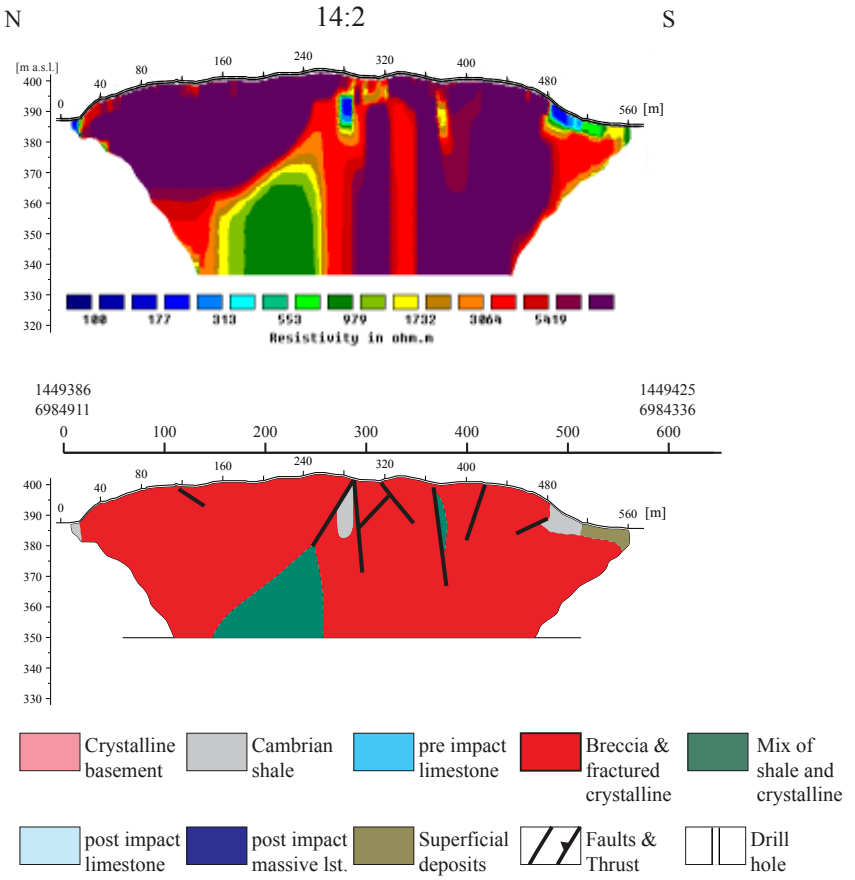


Fig. S07. Resistivity profile 14-2

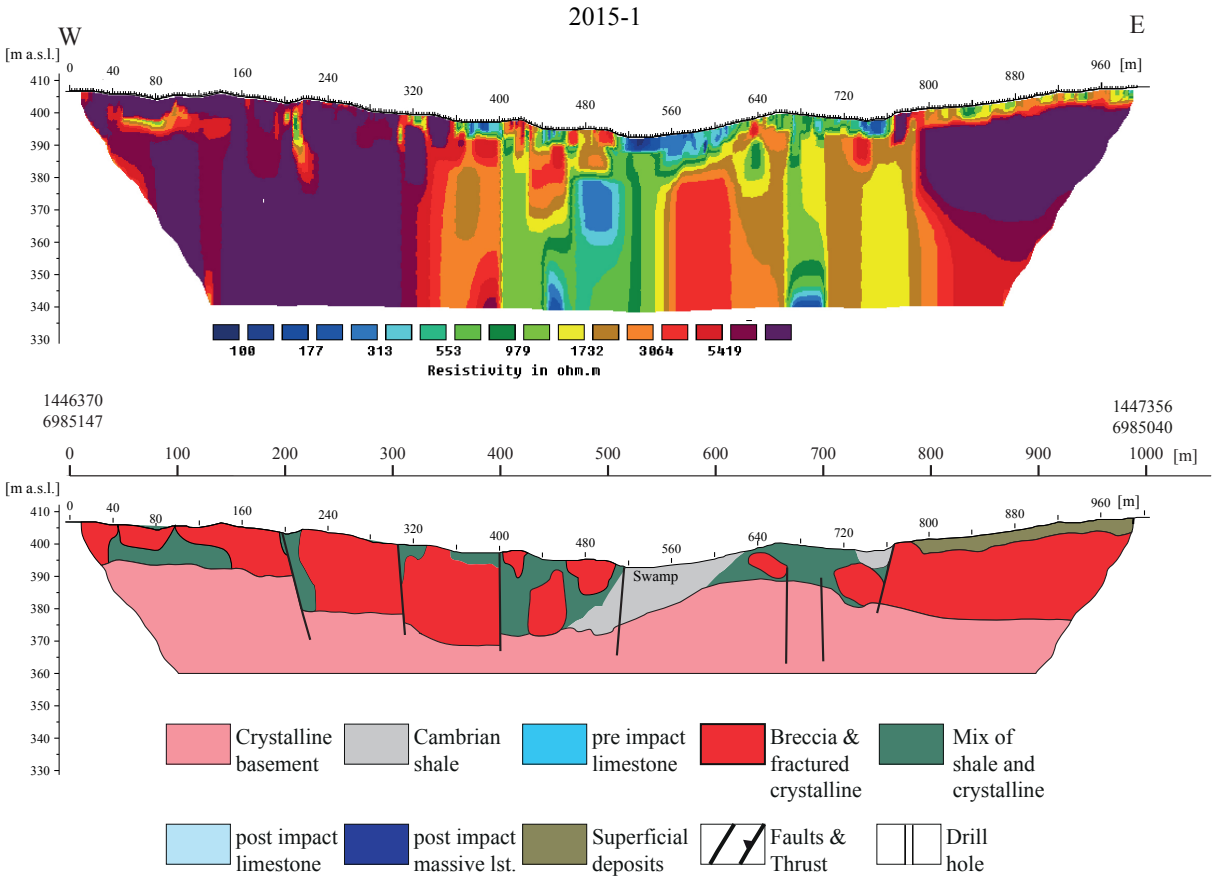


Fig. S08. Resistivity profile 15-1

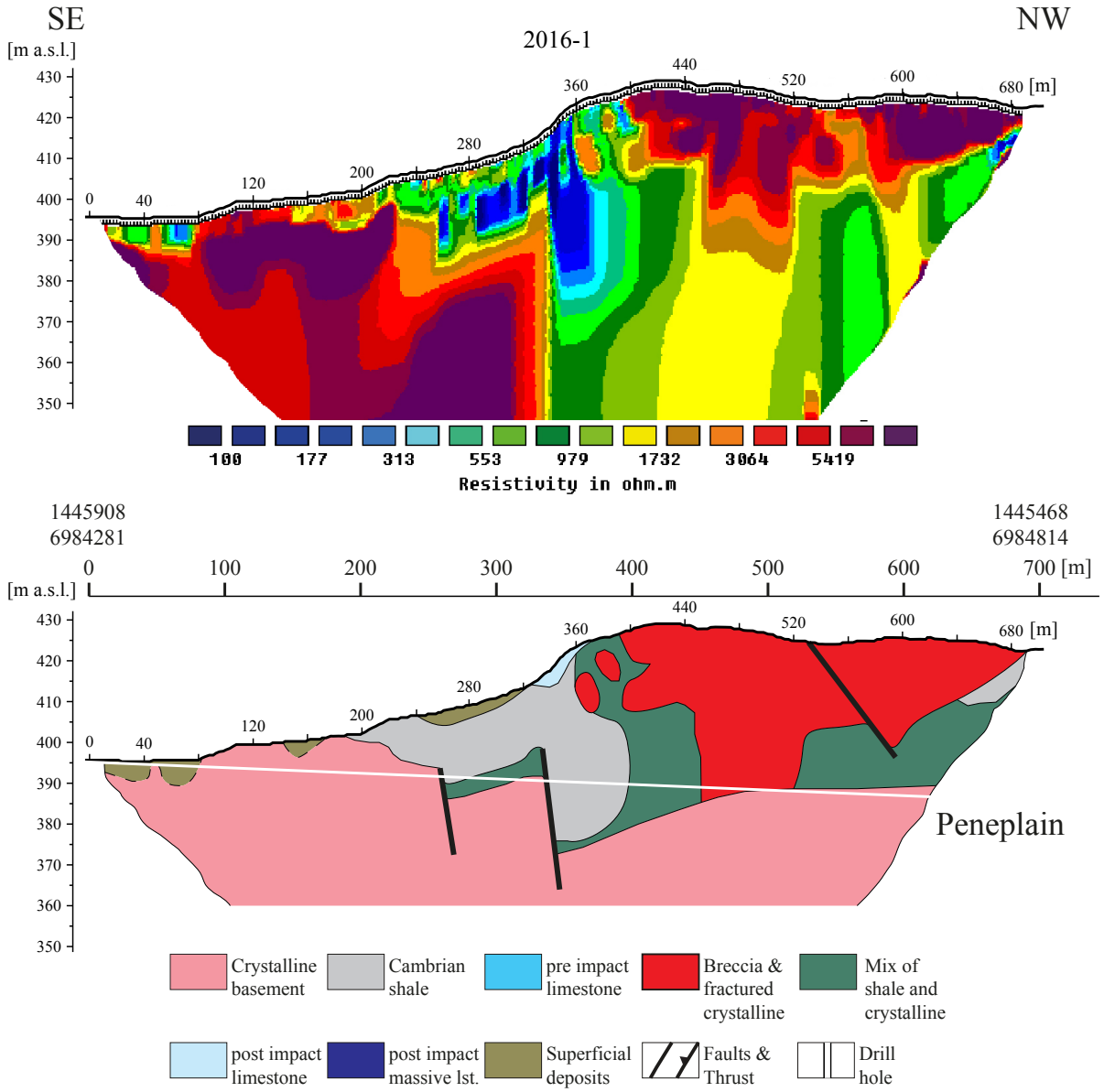


Fig. S09. Resistivity profile 16-1

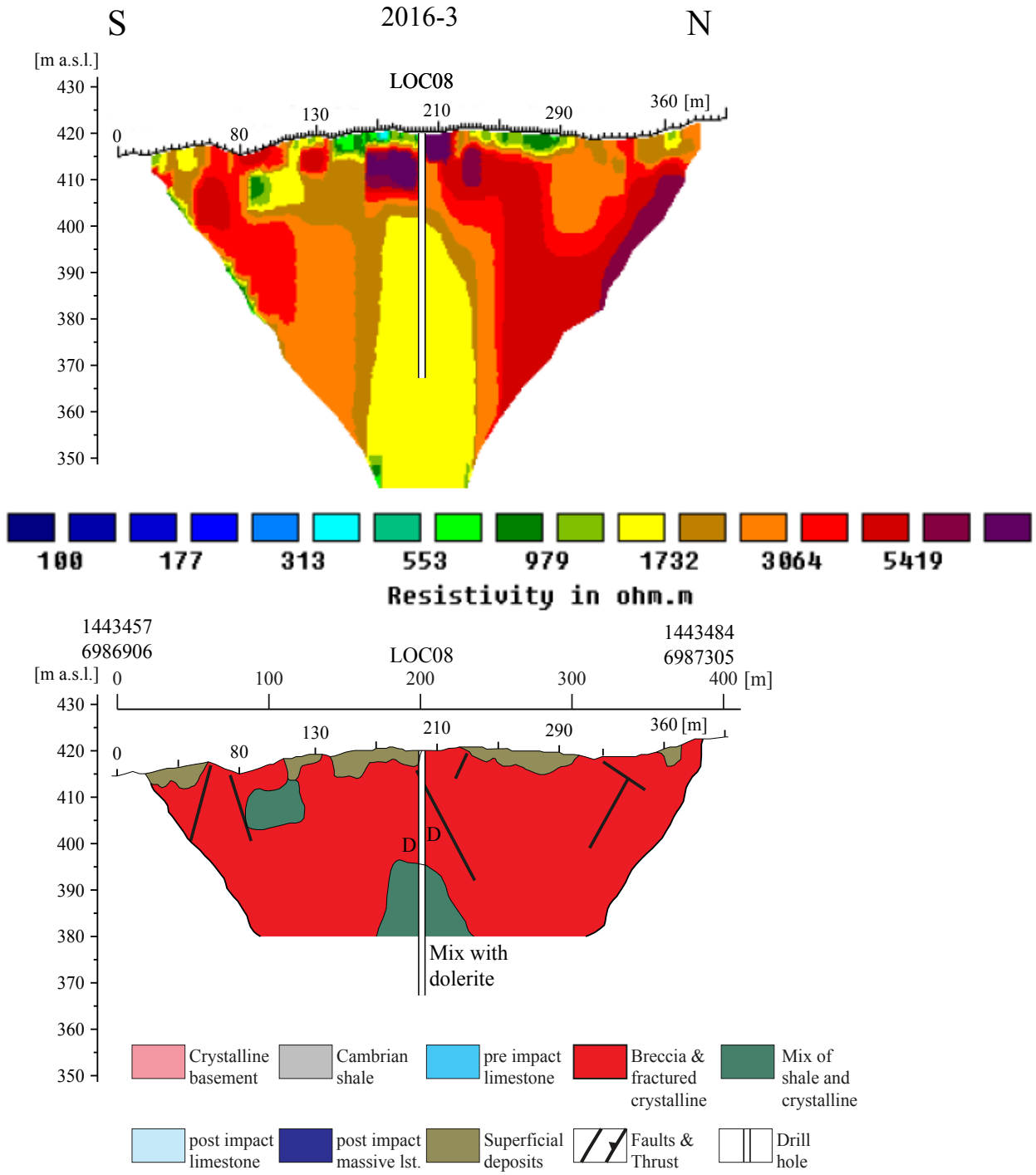


Fig. S10. Resistivity profile 16-3

Table S01. Coordinates for the start and end points of each resistivity profile measured. The coordinates are given in the Swedish grid RT90, all in meters.

Profile	E-W [m]	N-S [m]	process info file	Data file
13-2bSE	1449375	6992078	2013-2-info.txt	2013_2_n-s_topo.dat
13-2bNW	1448466	6993389		
>				
13-3S	1446354	6985815	2013-3-info.txt	2013_3_n-s_topo.dat
13-3N	1446711	6986524		
>				
14-1N	1448995	6984905	2014-1-info.txt	2014_1_s-n_topo.dat
14-1S	1449393	6983892		
>				
14-2N	1449386	6984911	2014-2-info.txt	2014_2_n-s_topo.dat
14-2S	1449425	6984336		
>				
14-3aSSE	1445709	6987696	2014-3a-info.txt	2014_3a_n-s_topo_2.dat
14-3aNNW	1445453	6988107		
>				
14-3bSSE	1445552	6988079	2014-3b-info.txt	2014_3b_n-s_topo.dat
14-3bNNW	1445279	6988730		
>				
15-1W	1446370	6985147	2015-1-info.txt	2015_1_v-e_topo.dat
15-1E	1447356	6985040		
>				
15-2SSE	1445837	6987679	2015-2-info.txt	2015_2_s-n_topo.dat
15-2NNW	1446088	6987368		
>				
15-3W	1444571	6985853	2015-3-info.txt	2015_3_e-v_0_topo.dat
15-3E	1445202	6986126		
>				
16-1SW	1445908	6984281	2016-1-info.txt	2016_1_ny_start_filt_topo.dat
16-1NE	1445468	6984814		
>				
16-3S	1443457	6986906	2016-2-info.txt	2016_2_0_filt_topo.dat
16-3N	1443484	6987305		

Table S02. Data for the Res2Dinv processing, the number of iterations runed and what the absolute error.

Profile 13-2			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	786.32	786.32	13.739
2	340.10	1126.42	6.052
3	487.57	1613.99	3.931
4	487.08	2101.07	2.943
5	487.11	2588.18	2.453
6	490.80	3078.98	2.225
7	495.65	3574.62	2.011
Profile 13-3			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	211.93	211.93	14.714
2	75.97	287.90	6.093
3	143.21	431.11	3.488
4	145.58	576.69	2.628
5	143.97	720.66	1.893
6	142.79	863.45	1.710
7	144.88	1008.33	1.562
Profile 14-1			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	125.69	125.69	14.025
2	52.12	177.81	5.711
3	79.56	257.37	3.415
4	79.50	336.87	2.360
5	78.80	415.67	1.875
6	79.48	495.15	1.659
7	81.99	577.14	1.585

Profile 14-2			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	61.40	61.40	14.368
2	21.00	82.40	4.637
3	31.82	114.22	2.505
4	31.65	145.88	1.727
5	31.50	177.37	1.418
6	31.92	209.29	1.277
7	32.51	241.80	1.201
Profile 14-3a			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	39.95	39.95	14.209
2	14.26	54.21	5.844
3	24.21	78.42	4.039
4	25.51	103.93	2.774
5	24.85	128.78	2.321
6	24.20	152.97	2.057
7	25.07	178.04	1.958
Profile 14-3b			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	69.62	69.62	16.342
2	26.41	96.03	7.712
3	44.52	140.56	4.639
4	44.38	184.94	3.018
5	44.15	229.09	2.236
6	44.55	273.64	1.885
7	43.98	317.62	1.751
Profile 15-1			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	112.88	112.88	13.690
2	40.95	153.83	5.411
3	66.11	219.95	3.205
4	66.11	286.06	2.269
5	66.83	352.89	1.826
6	66.96	419.85	1.618
7	66.22	486.07	1.514

Profile 15-2			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	30.59	30.59	19.990
2	10.70	41.29	7.138
3	20.25	61.54	4.872
4	19.61	81.15	3.685
5	20.33	101.48	3.162
6	19.83	121.31	2.868
7	19.52	140.82	2.741
Profile 15-3			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	68.23	68.24	19.627
2	26.63	94.86	7.762
3	44.10	138.96	4.792
4	44.09	183.05	3.381
5	44.46	227.51	2.810
6	43.85	271.36	2.480
7	44.29	315.65	2.337
Profile 16-1			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	60.38	60.38	18.464
2	22.94	83.31	7.759
3	40.50	123.81	5.093
4	37.80	161.61	3.852
5	39.20	200.81	2.892
6	38.06	238.88	2.526
7	38.28	277.16	2.197
Profile 16-3			
Iteration Time for this iteration Total Time % Abs. Error	Time for this iteration	Total Time	% Abs. Error
1	15.97	15.97	10.991
2	5.44	21.41	3.737
3	10.41	31.81	2.434
4	10.56	42.37	1.831
5	10.34	52.72	1.541
6	10.34	63.06	1.402
7	10.38	73.44	1.335