## **APPENDIX B:**

## Tables and Plots for the Comparison of 20 Local Events at Each Station

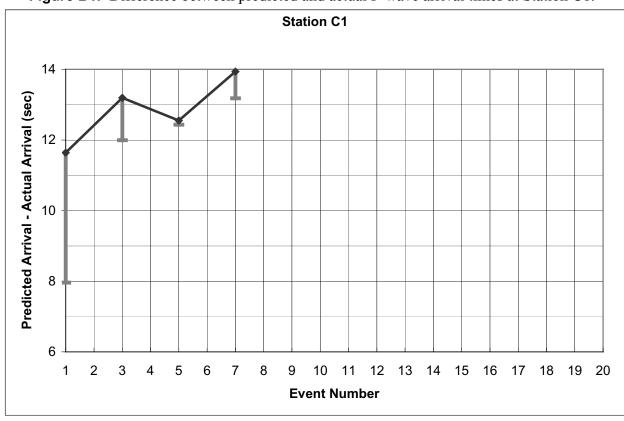
**Table B1.** The 20 local events used to compare predicted and actual arrivals.

Event No.	Date	Time (UTC)	ts used to compa	Longitude	Depth (km)	Magnitude (local Mb)
1	5/12/2000	11:34:52.53	18° 28.20' N	67° 00.54' W	96.4	2.7
2	5/15/2000	04:48:46.73	17° 59.64' N	67° 08.10' W	13.7	2.8
3	5/15/2000	05:20:06.10	18° 14.52' N	66° 21.06' W	35.7	3.5
4	5/21/2000	06:33:34.39	17° 49.32' N	66° 45.60' W	5.5	2.1
5	5/21/2000	17:05:0 .90	18° 16.62' N	67° 06.12' W	25.3	3.1
6	5/22/2000	07:26:54.14	17° 51.90' N	66° 46.14' W	3.4	3.0
7	5/23/2000	11:32:46.55	18° 08.70' N	66° 46.50' W	16.8	2.5
8	5/23/2000	21:03:08.58	17° 59.64' N	67° 10.38' W	12.8	2.5
9	5/31/2000	07:00:30.01	18° 08.46' N	66° 40.14' W	17.4	2.2
10	6/2/2000	08:32:26.16	18° 15.90' N	67° 13.50' W	1.7	3.3
11	6/3/2000	04:11:33.12	18° 09.78' N	67° 21.96' W	12.9	3.0
12	6/7/2000	10:51:53.94	17° 54.96' N	66° 51.54' W	18.3	2.9
13	6/8/2000	06:26:31.65	18° 00.84' N	67° 07.32' W	14.8	3.0
14	6/8/2000	16:58:25.71	18° 00.72' N	66° 19.02' W	0.5	2.7
15	6/10/2000	01:26:34.13	18° 09.24' N	66° 58.02' W	24.9	2.2
16	6/11/2000	18:42:13.91	18° 07.86' N	67° 16.74' W	18.4	2.6
17	6/12/2000	01:25:33.96	18° 13.86' N	67° 09.54' W	100.3	2.9
18	6/12/2000	04:20:33.33	17° 56.04' N	67° 07.26' W	20.3	2.6
19	6/12/2000	11:11:34.60	18° 25.50' N	66° 36.30' W	61.9	2.6
20	6/13/2000	05:45:21.15	17° 57.48' N	66° 57.06' W	15.8	2.3

**Table B2.** Comparison of predicted and actual arrivals across events for Station C1.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error + (s)	Picking Error - (s)
C1	1	13.30	24.94	11.64		3.68
C1	3	13.65	26.84	13.19		1.2
C1	5	8.51	21.06	12.55		0.12
C1	7	11.30	25.24	13.94		0.76

Figure B1. Difference between predicted and actual P-wave arrival times at Station C1.

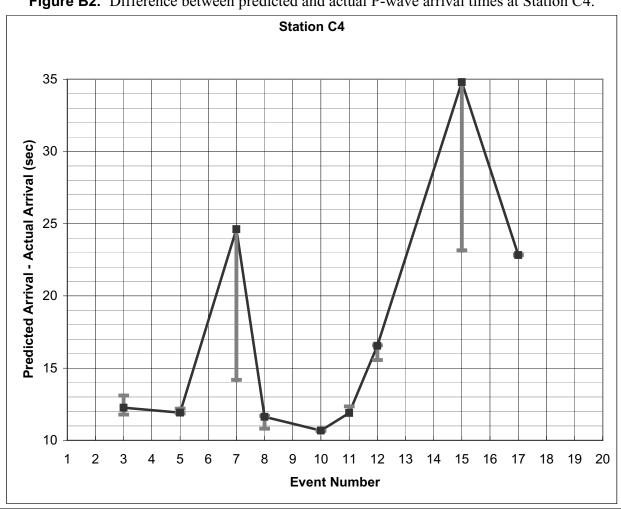


**Table B3.** Comparison of predicted and actual arrivals across events for Station C4.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error + (s)	Picking Error - (s)
C4	3	16.24	28.50**	12.26	0.84	0.48
C4	5	12.34	24.26	11.92	0.28	0.06
C4	7	14.88	39.50*	24.62		10.4
C4	8	16.71	28.34	11.63	0.06	0.82
C4	10	14.19	24.86	10.67	0.02	0.02
C4	11	14.93	26.82	11.89	0.46	
C4	12	17.64	34.18**	16.54	0.04	0.98
C4	15	14.10	48.90*	34.80		11.6
C4	17	17.54	40.36	22.82	0.06	0.02

<sup>\*</sup>used horizontal component 1 to pick arrival time; vertical component was unclear or bad \*\*used horizontal component 2 to pick arrival time; vertical component was unclear or bad

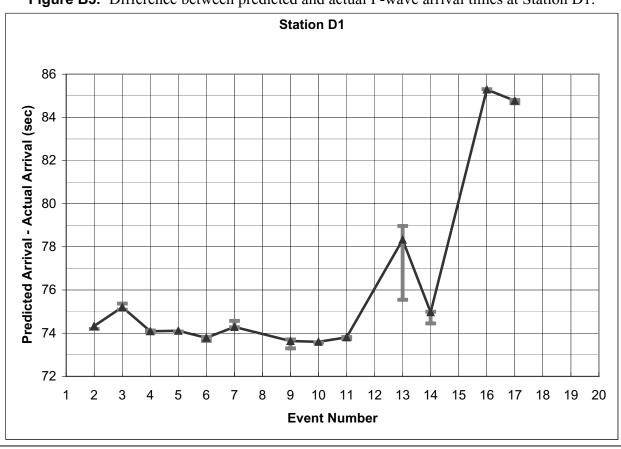
Figure B2. Difference between predicted and actual P-wave arrival times at Station C4.



**Table B4.** Comparison of predicted and actual arrivals across events for Station D1.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error + (s)	Picking Error - (s)
D1	2	5.46	79.80	74.34		0.14
D1	3	14.23	89.44	75.21	0.16	0.12
D1	4	11.73	85.82	74.09	0.04	0.06
D1	5	4.91	79.02	74.11		0.04
D1	6	11.41	85.20	73.79	0.04	0.14
D1	7	8.85	83.14	74.29	0.28	0.02
D1	9	10.25	83.88	73.63	0.08	0.34
D1	10	1.84	75.44	73.60		0.04
D1	11	2.71	76.52	73.81	0.02	0.08
D1	13	5.35	83.68	78.33	0.64	2.78
D1	14	16.73	91.70	74.97	0.02	0.52
D1	16	3.35	88.64	85.29	0.02	
D1	17	13.21	97.98	84.77	0.04	0.12

Figure B3. Difference between predicted and actual P-wave arrival times at Station D1.

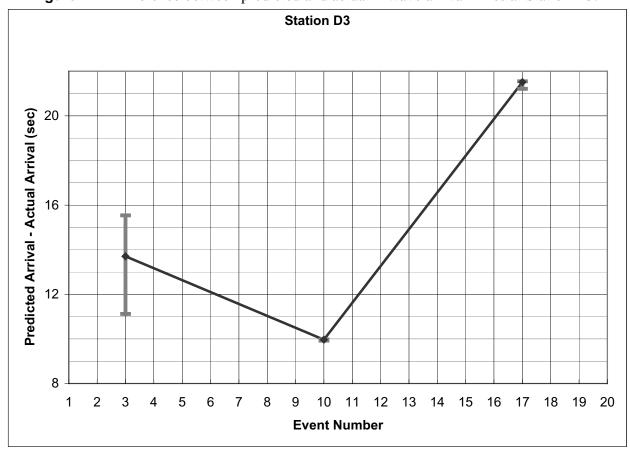


**Table B5.** Comparison of predicted and actual arrivals across events for Station D3.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error + (s)	Picking Error - (s)
D3	3	14.30	28.00*	13.70	1.84	2.58
D3	10	12.28	22.24*	9.96	0.02	0.04
D3	17	16.31	37.82*	21.51	0.04	0.3

<sup>\*</sup>used hydrophone to pick arrival time; vertical component was bad

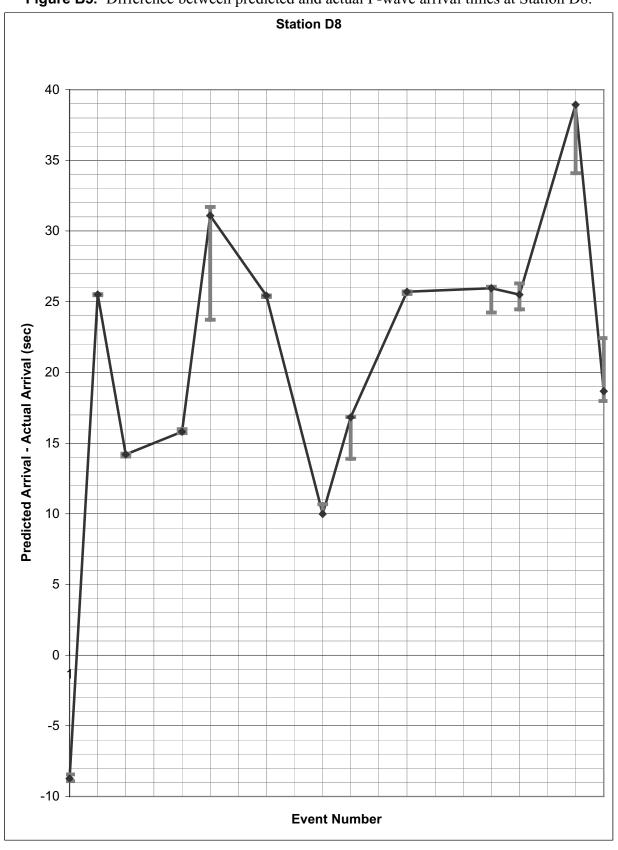
Figure B4. Difference between predicted and actual P-wave arrival times at Station D3.



**Table B6.** Comparison of predicted and actual arrivals across events for Station D8.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error + (s)	Picking Error - (s)
D8	1	16.02	7.30	-8.72	0.28	0.2
D8	2	14.57	40.08	25.51	0.02	0.06
D8	3	20.48	34.68	14.20	0.06	0.14
D8	5	11.63	27.44	15.81	0.18	0.1
D8	6	19.99	51.08	31.09	0.62	7.36
D8	8	14.35	39.78	25.43	0.02	0.1
D8	10	11.85	21.84	9.99	0.7	
D8	11	11.01	27.84	16.83	0.02	2.94
D8	13	14.37	40.08	25.71	0.02	0.16
D8	16	11.69	37.64	25.95	0.1	1.72
D8	17	16.52	42.02	25.50	0.8	1.04
D8	19	18.71	57.64	38.93		4.84
D8	20	16.34	35.00	18.66	3.76	0.68

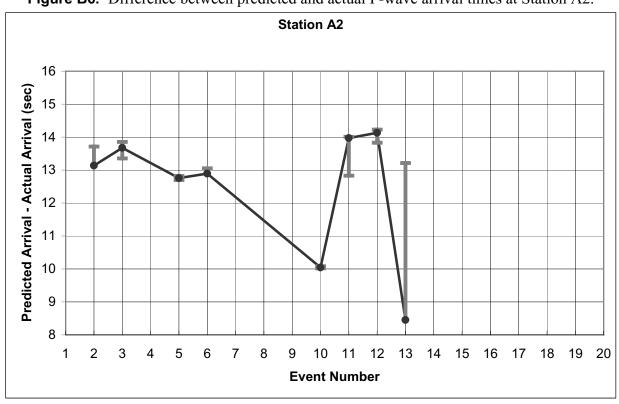
Figure B5. Difference between predicted and actual P-wave arrival times at Station D8.



**Table B7.** Comparison of predicted and actual arrivals across events for Station A2.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error + (s)	Picking Error - (s)
A2	2	8.95	22.08	13.13	0.58	
A2	3	19.14	32.82	13.68	0.18	0.32
A2	5	9.68	22.44	12.76	0.06	0.06
A2	6	15.09	27.98	12.89	0.16	
A2	10	8.94	18.98	10.04	0.04	0.02
A2	11	5.71	19.68	13.97	0.04	1.14
A2	12	12.59	26.72	14.13	0.1	0.3
A2	13	9.05	17.50	8.45	4.76	

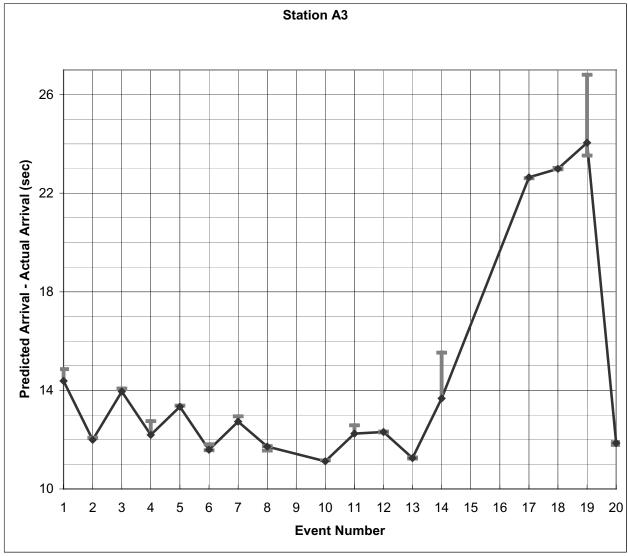
Figure B6. Difference between predicted and actual P-wave arrival times at Station A2.



**Table B8.** Comparison of predicted and actual arrivals across events for Station A3.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error +	Picking Error -
			(3)		(s)	(s)
A3	1	16.36	30.74	14.38	0.48	
A3	2	4.80	16.80	12.00	0.08	
A3	3	14.37	28.32	13.95	0.12	
A3	4	7.39	19.58	12.19	0.56	
A3	5	9.00	22.34	13.34	0.04	
A3	6	7.57	19.16	11.59	0.22	0.02
A3	7	9.27	22.00	12.73	0.22	
A3	8	4.76	16.48	11.72	0.02	0.16
A3	10	9.80	20.92	11.12	0.04	
A3	11	8.14	20.38	12.24	0.34	
A3	12	6.27	18.58	12.31	0.02	0.02
A3	13	5.16	16.42	11.26	0.02	0.02
A3	14	15.13	28.80	13.67	1.86	
A3	17	14.73	37.38	22.65		0.04
A3	18	4.37	27.36	22.99	0.04	0.02
A3	19	15.12	39.16	24.04	2.76	0.52
A3	20	5.56	17.42	11.86	0.04	0.08

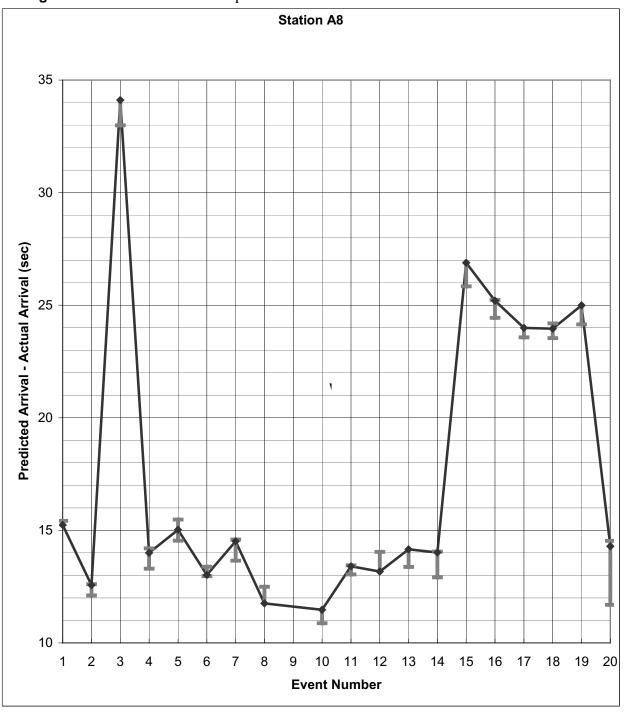
**Figure B7.** Difference between predicted and actual P-wave arrival times at Station A3.



**Table B9.** Comparison of predicted and actual arrivals across events for Station A8.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)		Picking Error - (s)
A8	1	17.18	32.42	15.24	0.18	
A8	2	6.17	18.74	12.57	0.04	0.46
A8	3	15.01	49.12	34.11		1.12
A8	4	7.72	21.72	14.00	0.2	0.7
A8	5	10.22	25.24	15.02	0.46	0.48
A8	6	8.06	21.08	13.02	0.36	0.06
A8	7	10.19	24.70	14.51	0.08	0.86
A8	8	6.17	17.92	11.75	0.74	
A8	10	11.27	22.74	11.47		0.6
A8	11	9.42	22.82	13.40	0.04	0.36
A8	12	6.95	20.12	13.17	0.88	
A8	13	6.51	20.66	14.15		0.78
A8	14	15.50	29.52	14.02	0.04	1.1
A8	15	8.94	35.82	26.88		1.04
A8	16	8.40	33.60	25.20	0.04	0.76
A8	17	15.37	39.36	23.99		0.42
A8	18	5.47	29.42	23.95	0.24	0.42
A8	19	15.51	40.50	24.99		0.84
A8	20	6.55	20.84	14.29	0.24	2.6

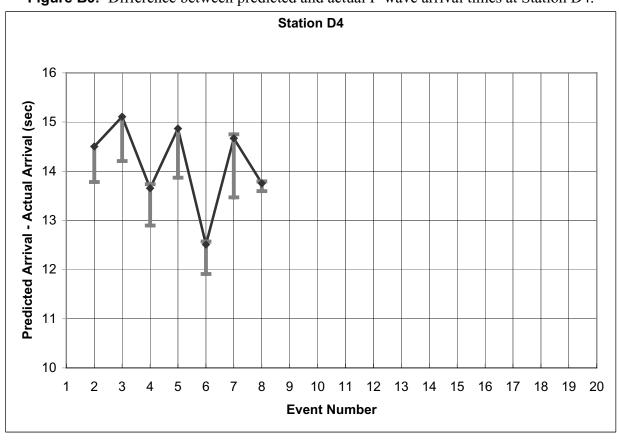
**Figure B8.** Difference between predicted and actual P-wave arrival times at Station A8.



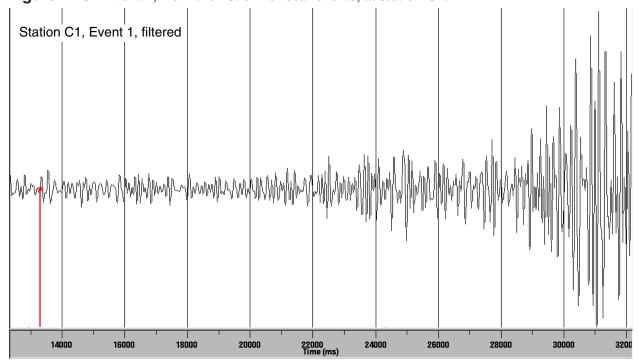
**Table B10.** Comparison of predicted and actual arrivals across events for Station D4.

Station	Event No.	Predicted Arrival (s)	Actual Arrival (s)	Difference (s)	Picking Error + (s)	Picking Error - (s)
D4	2	9.48	23.98	14.50		0.72
D4	3	17.27	32.38	15.11		0.9
D4	4	10.08	23.74	13.66	0.08	0.76
D4	5	13.17	28.04	14.87		1
D4	6	10.65	23.16	12.51	0.06	0.6
D4	7	12.91	27.58	14.67	0.08	1.2
D4	8	9.48	23.24	13.76	0.04	0.16

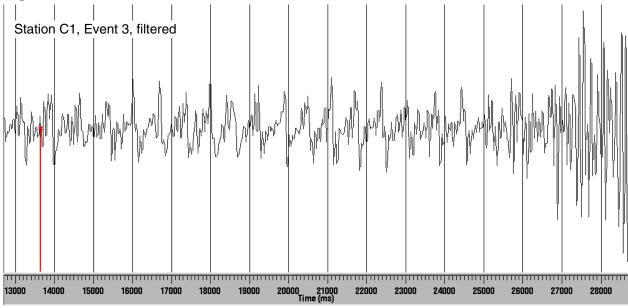
Figure B9. Difference between predicted and actual P-wave arrival times at Station D4.



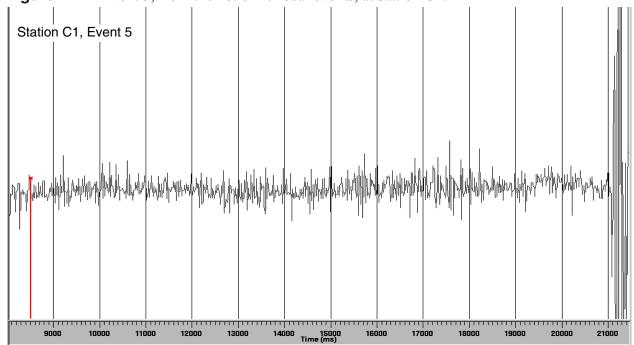
**Figure B10.** Event 1, from the list of 20 local events, at station C1.



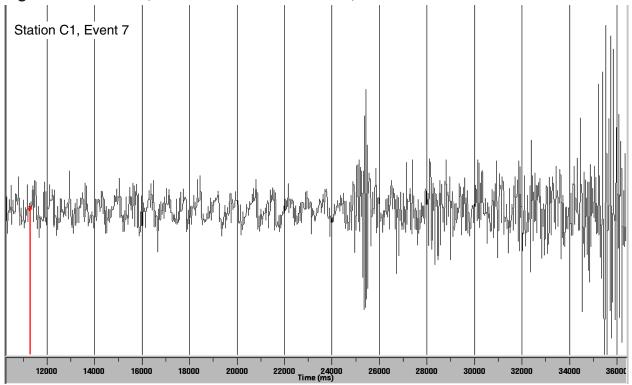
**Figure B11.** Event 3, from the list of 20 local events, at station C1.



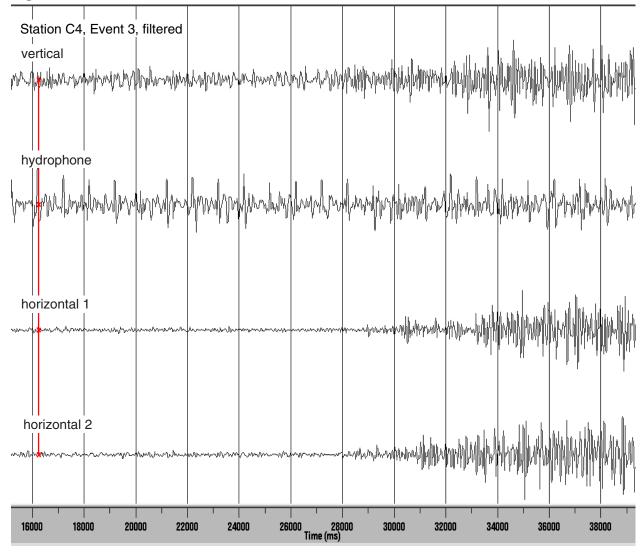
**Figure B12.** Event 5, from the list of 20 local events, at station C1.



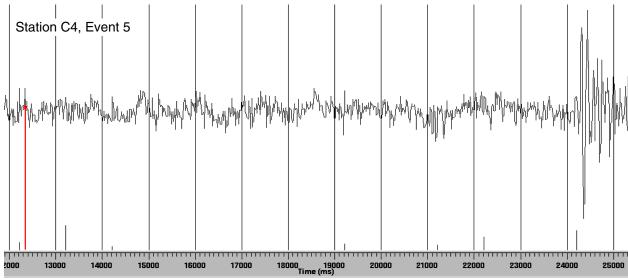
**Figure B13.** Event 7, from the list of 20 local events, at station C1.



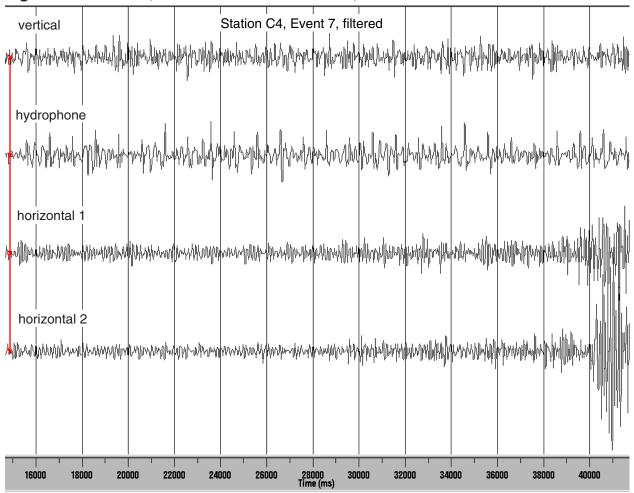
**Figure B14.** Event 3, from the list of 20 local events, at station C4.



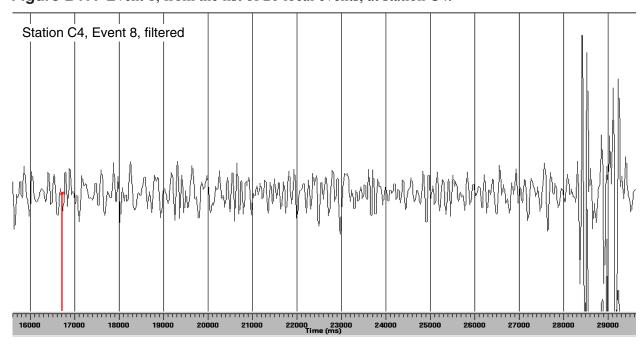
**Figure B15.** Event 5, from the list of 20 local events, at station C4.



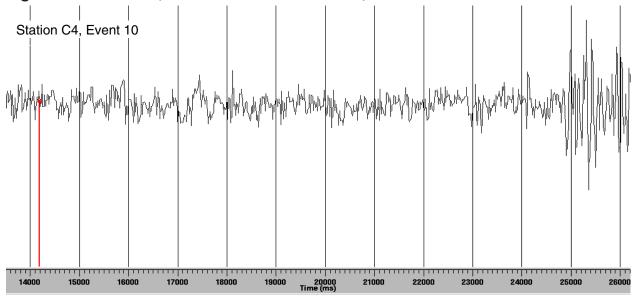
**Figure B16.** Event 7, from the list of 20 local events, at station C4.



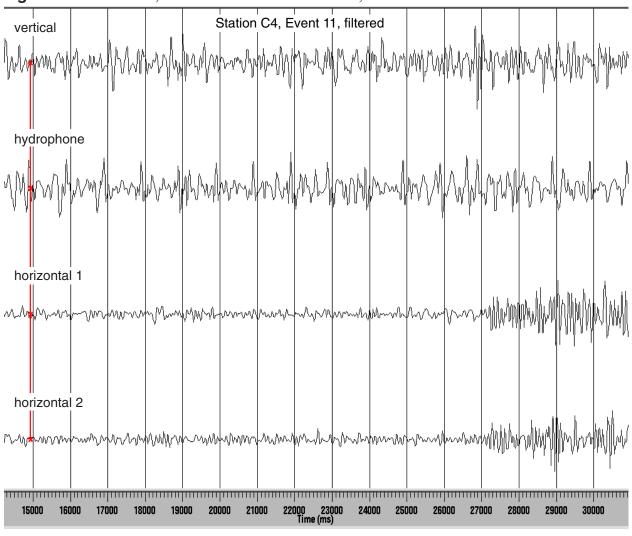
**Figure B17.** Event 8, from the list of 20 local events, at station C4.

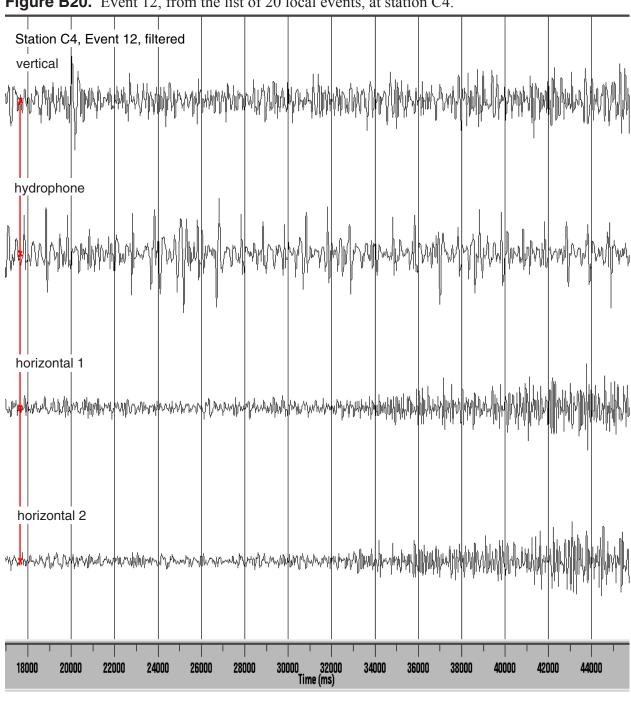


**Figure B18.** Event 10, from the list of 20 local events, at station C4.



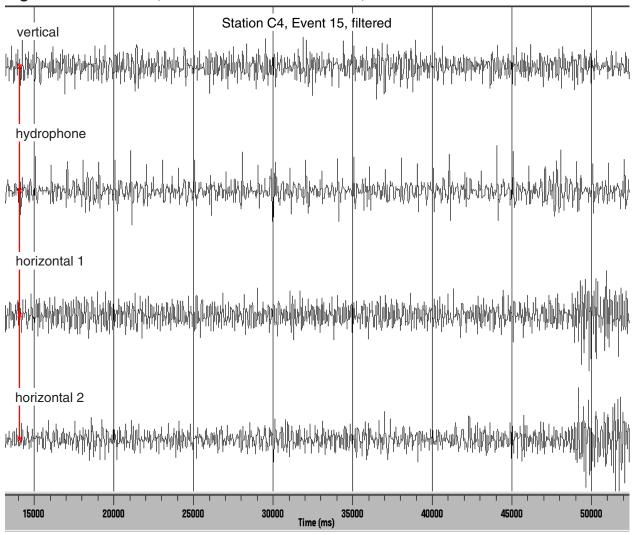
**Figure B19.** Event 11, from the list of 20 local events, at station C4.



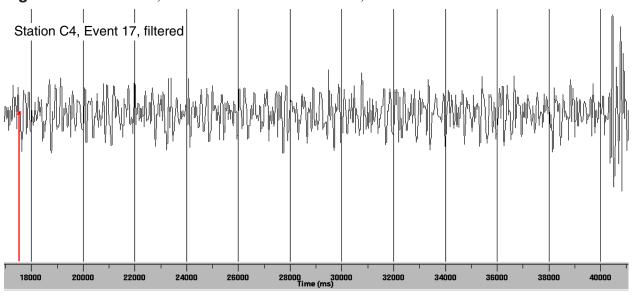


**Figure B20.** Event 12, from the list of 20 local events, at station C4.

**Figure B21.** Event 15, from the list of 20 local events, at station C4.

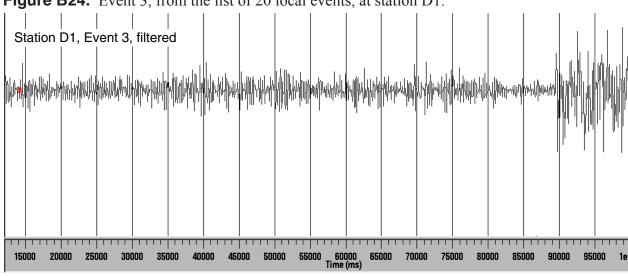


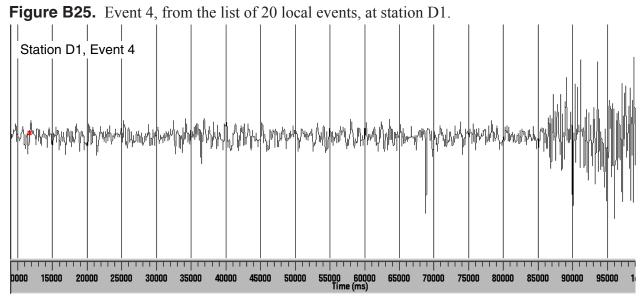
**Figure B22.** Event 17, from the list of 20 local events, at station C4.

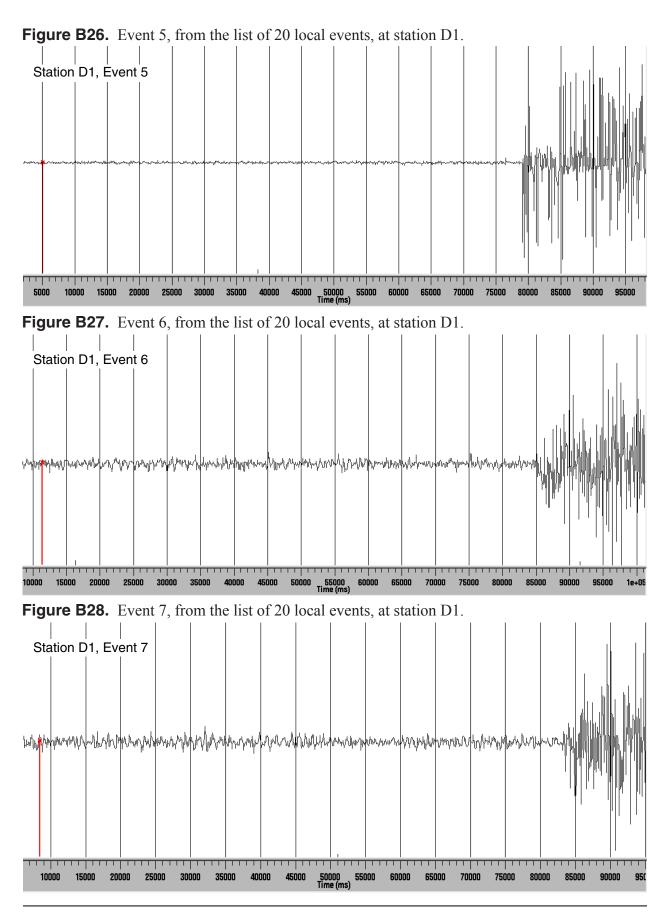


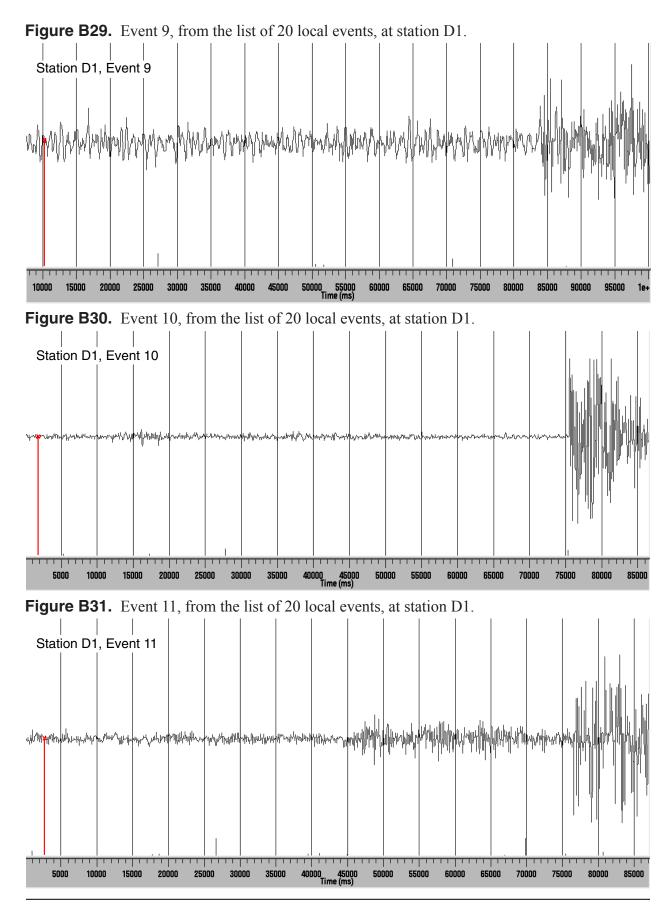
**Figure B23.** Event 2, from the list of 20 local events, at station D1. Station D1, Event 2 Station D1, Event 3, filtered

**Figure B24.** Event 3, from the list of 20 local events, at station D1.



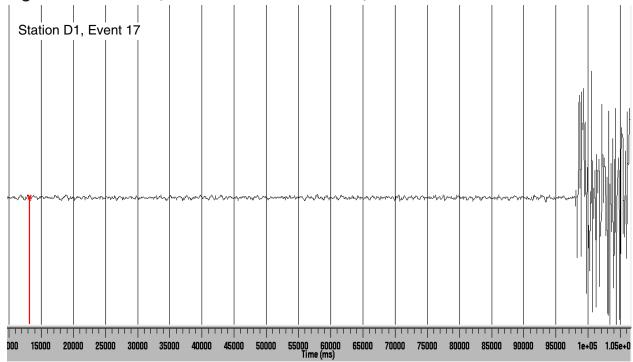




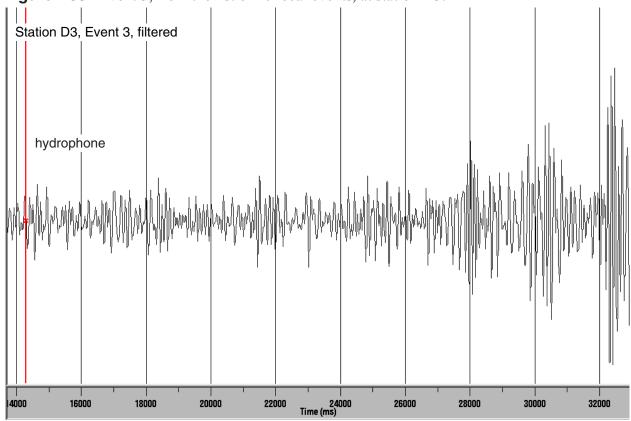


**Figure B32.** Event 13, from the list of 20 local events, at station D1. Station D1, Event 13 80000 90000 1e+05 **Figure B33.** Event 14, from the list of 20 local events, at station D1. Station D1, Event 14 15000 20000 25000 30000 35000 40000 45000 50000 55000 65000 70000 75000 80000 85000 90000 95000 1e+05 1.05e+05 Time (ms) **Figure B34.** Event 16, from the list of 20 local events, at station D1. Station D1, Event 16 10000 15000 20000 25000 30000 35000 40000 60000 80000 85000 5000

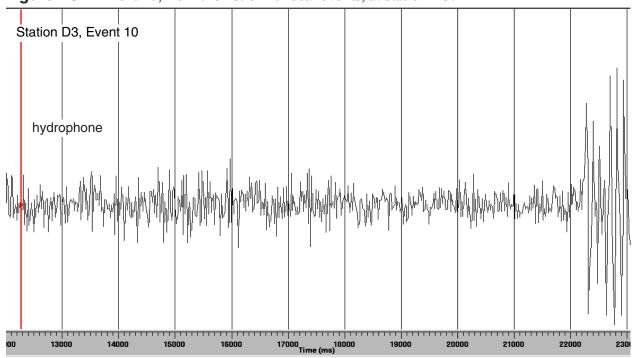
**Figure B35.** Event 17, from the list of 20 local events, at station D1.



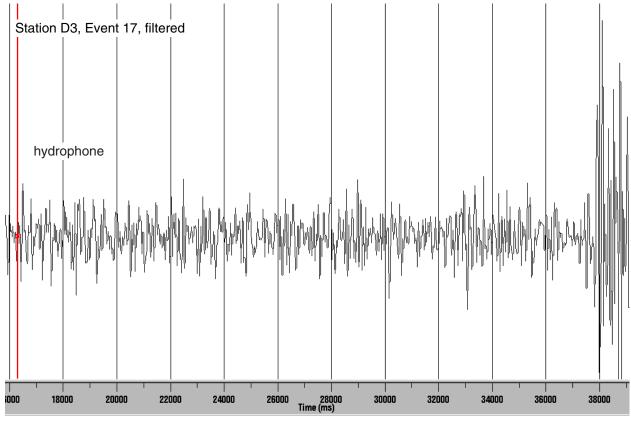
**Figure B36.** Event 3, from the list of 20 local events, at station D3.



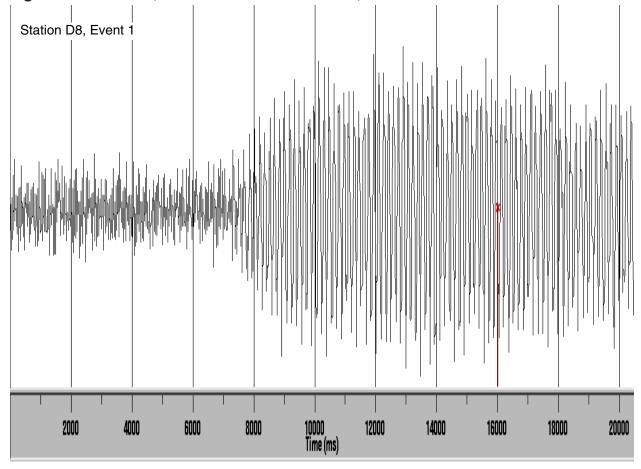
**Figure B37.** Event 10, from the list of 20 local events, at station D3.



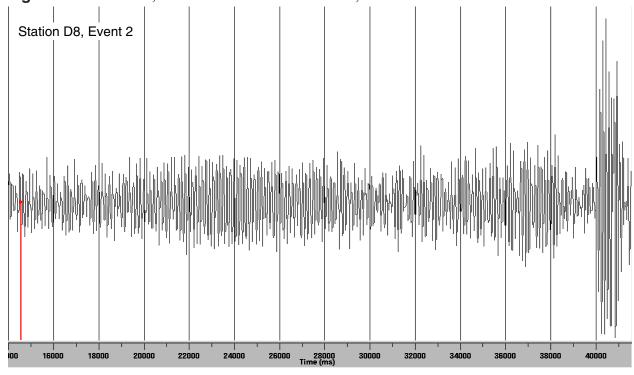
**Figure B38.** Event 17, from the list of 20 local events, at station D3.



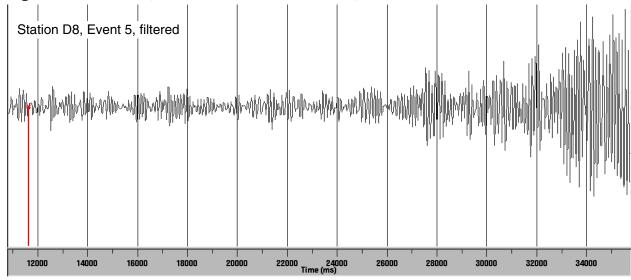
**Figure B39.** Event 1, from the list of 20 local events, at station D8.



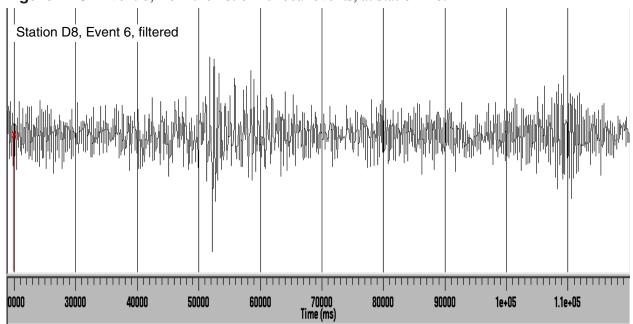
**Figure B40.** Event 2, from the list of 20 local events, at station D8.



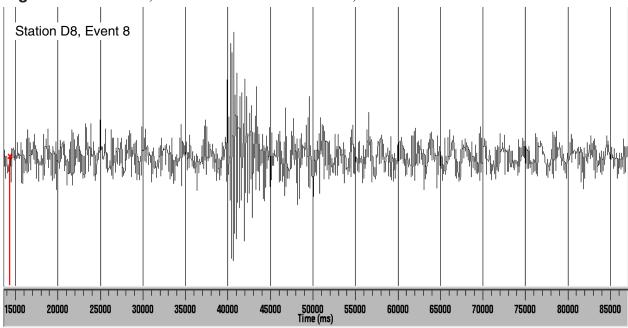
**Figure B41.** Event 3, from the list of 20 local events, at station D8. Station D8, Event 3 vertical when the distribution of the contribution of t horizontal 1 horizontal 2 15000 20000 25000 30000 35000 50000 55000 60000 65000 70000 **Figure B42.** Event 5, from the list of 20 local events, at station D8.



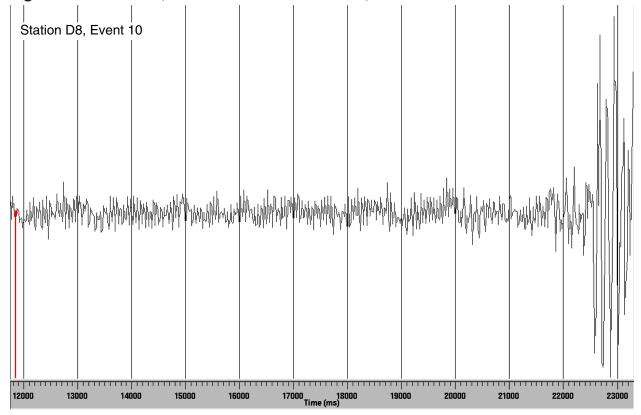
**Figure B43.** Event 6, from the list of 20 local events, at station D8.



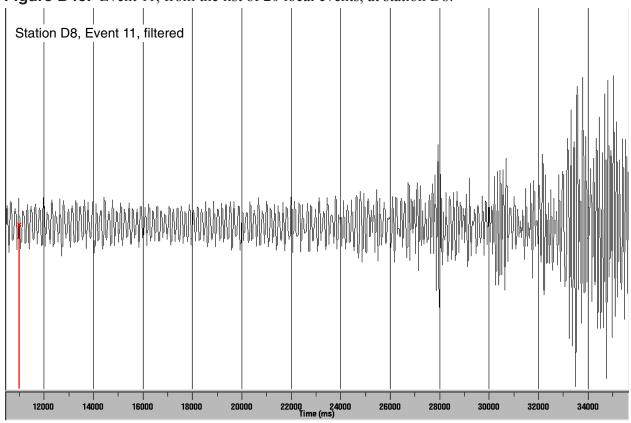
**Figure B44.** Event 8, from the list of 20 local events, at station D8.



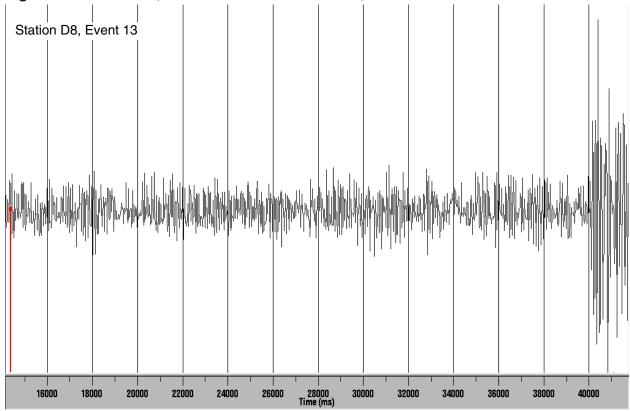
**Figure B45.** Event 10, from the list of 20 local events, at station D8.



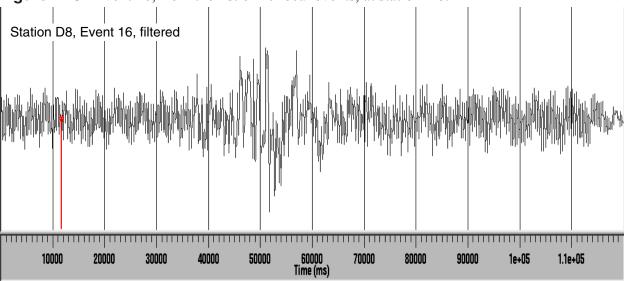
**Figure B46.** Event 11, from the list of 20 local events, at station D8.



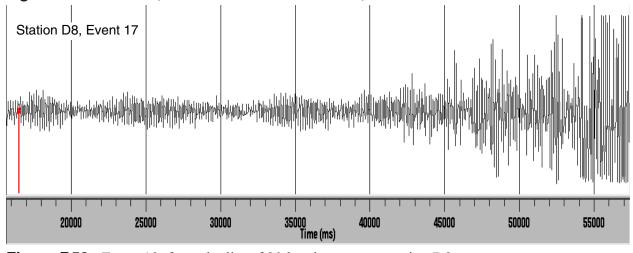
**Figure B47.** Event 13, from the list of 20 local events, at station D8.



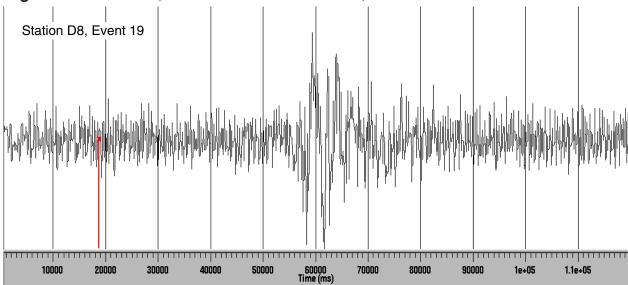
**Figure B48.** Event 16, from the list of 20 local events, at station D8.



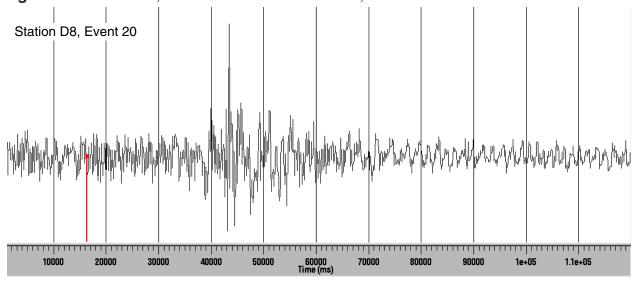
**Figure B49.** Event 17, from the list of 20 local events, at station D8.

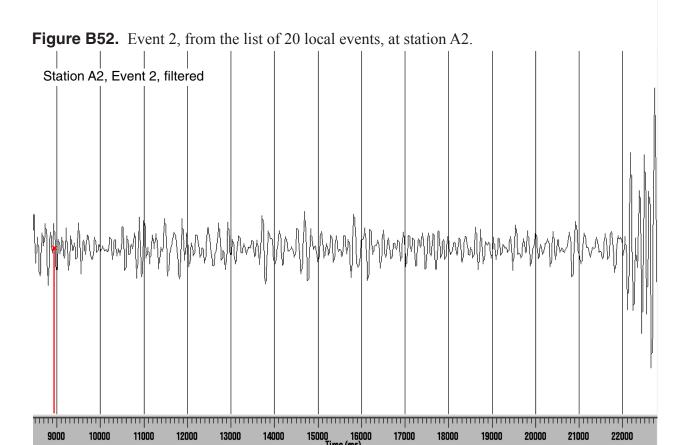


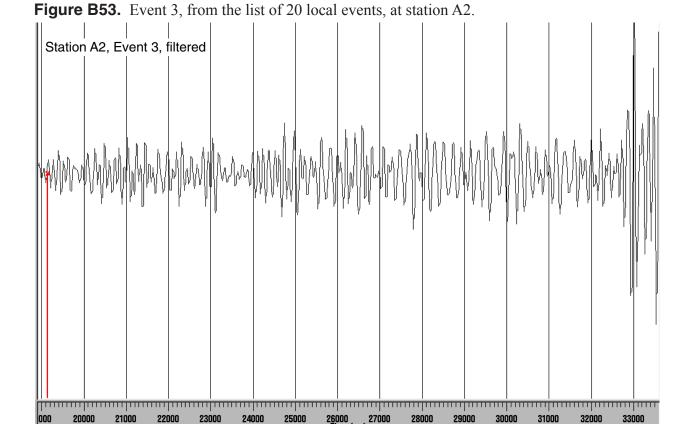
**Figure B50.** Event 19, from the list of 20 local events, at station D8.



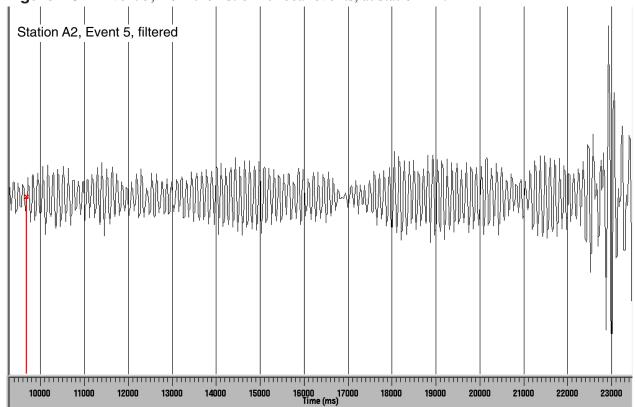
**Figure B51.** Event 20, from the list of 20 local events, at station D8.



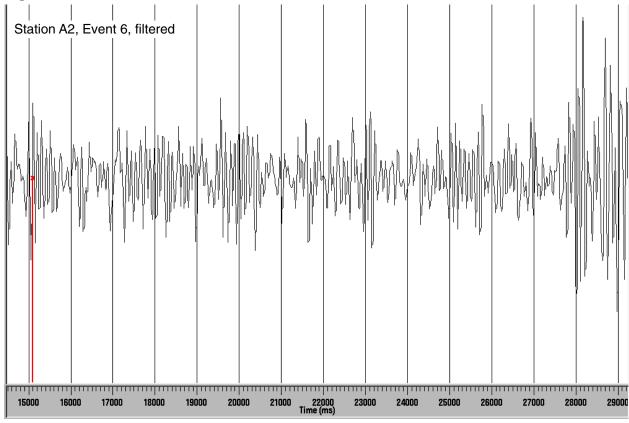




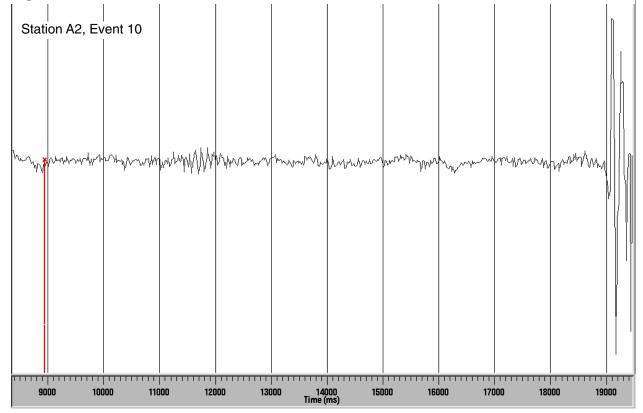
**Figure B54.** Event 5, from the list of 20 local events, at station A2.



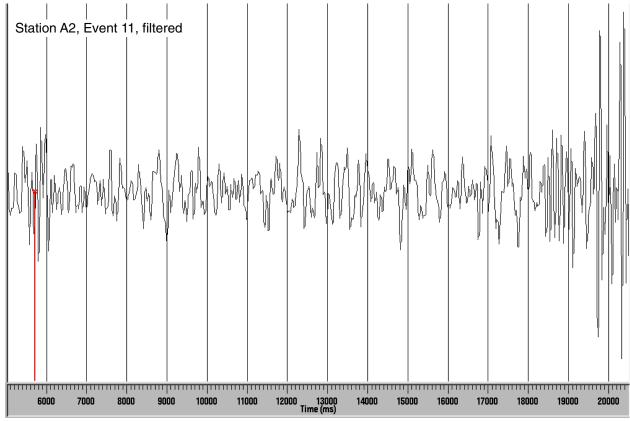
**Figure B55.** Event 6, from the list of 20 local events, at station A2.



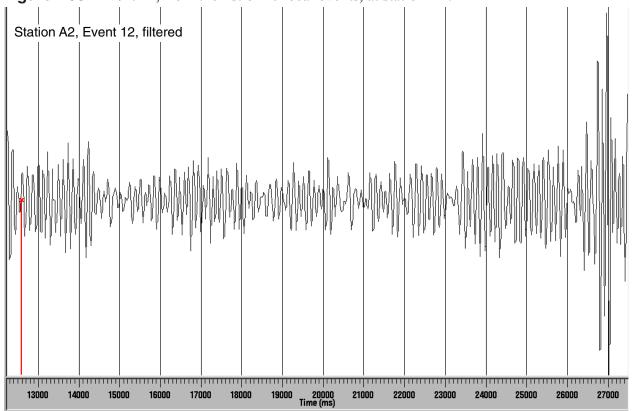
**Figure B56.** Event 10, from the list of 20 local events, at station A2.



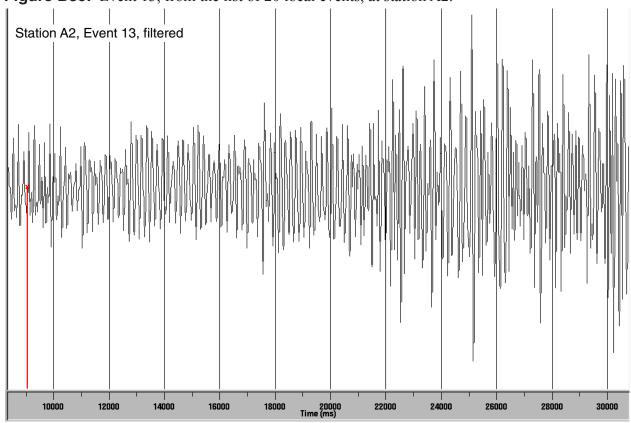
**Figure B57.** Event 11, from the list of 20 local events, at station A2.



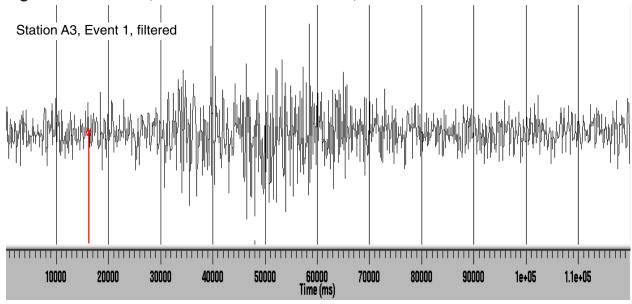
**Figure B58.** Event 12, from the list of 20 local events, at station A2.



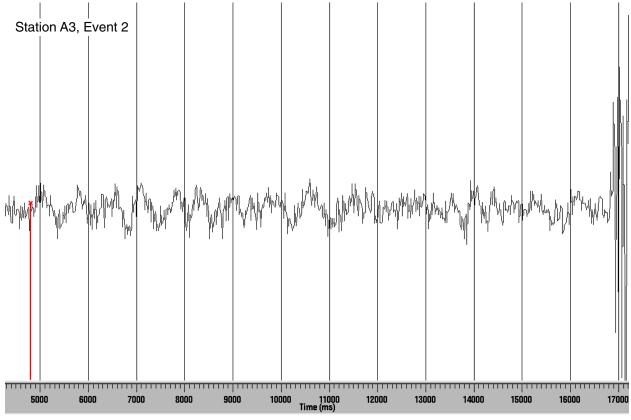
**Figure B59.** Event 13, from the list of 20 local events, at station A2.

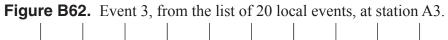


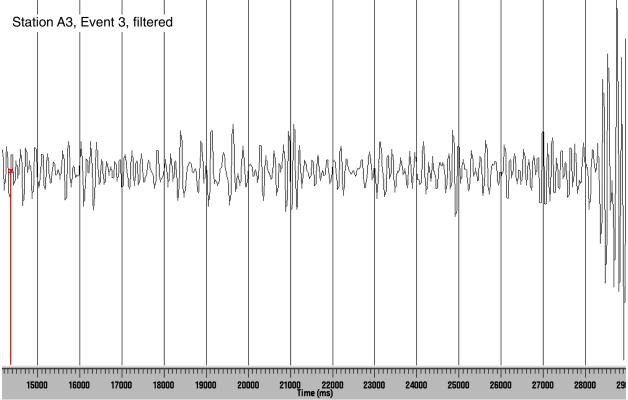
**Figure B60.** Event 1, from the list of 20 local events, at station A3.



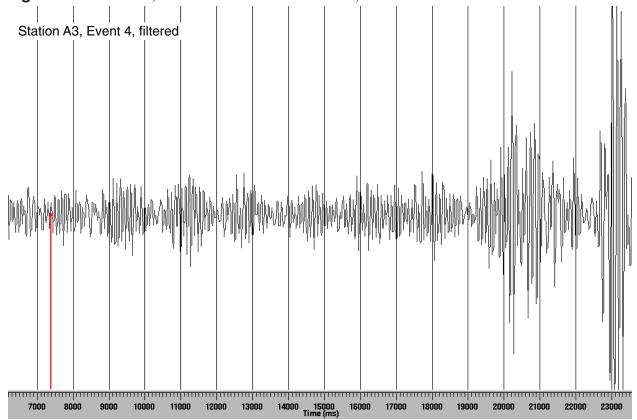




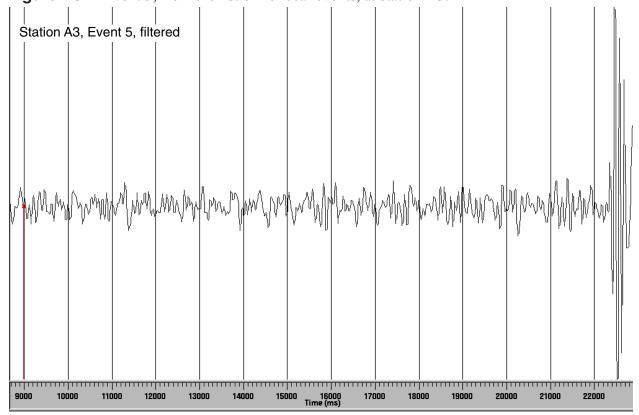




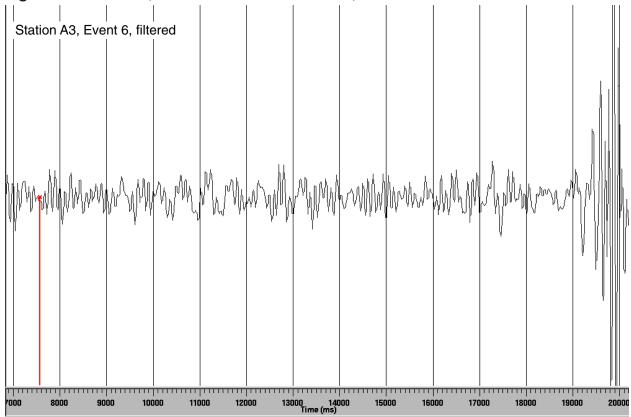
**Figure B63.** Event 4, from the list of 20 local events, at station A3.



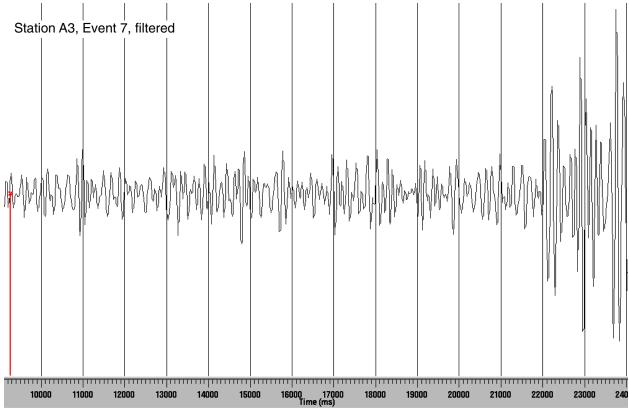
**Figure B64.** Event 5, from the list of 20 local events, at station A3.



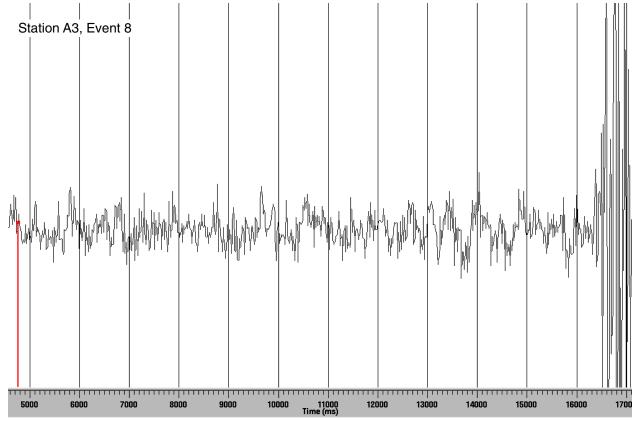
**Figure B65.** Event 6, from the list of 20 local events, at station A3.



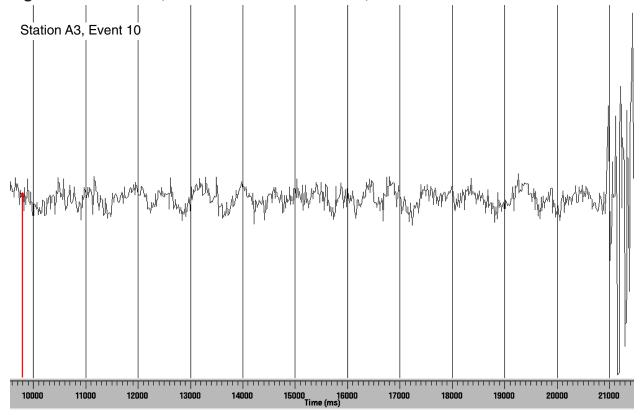




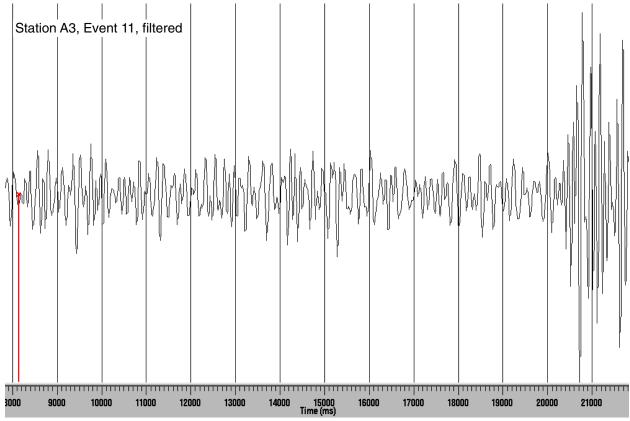
**Figure B67.** Event 8, from the list of 20 local events, at station A3.



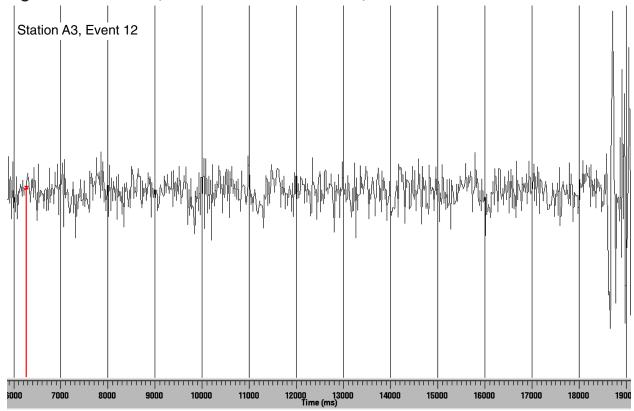
**Figure B68.** Event 10, from the list of 20 local events, at station A3.



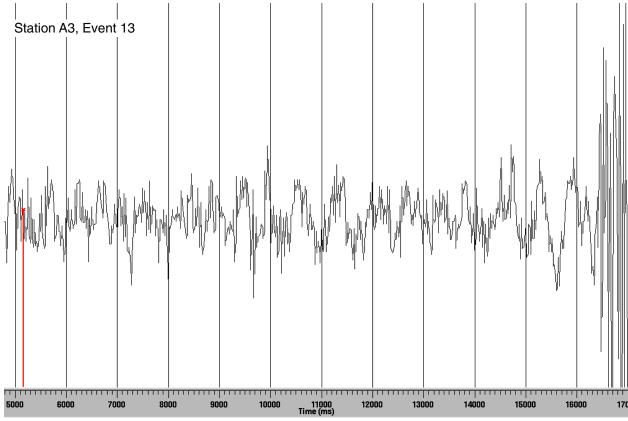
**Figure B69.** Event 11, from the list of 20 local events, at station A3.



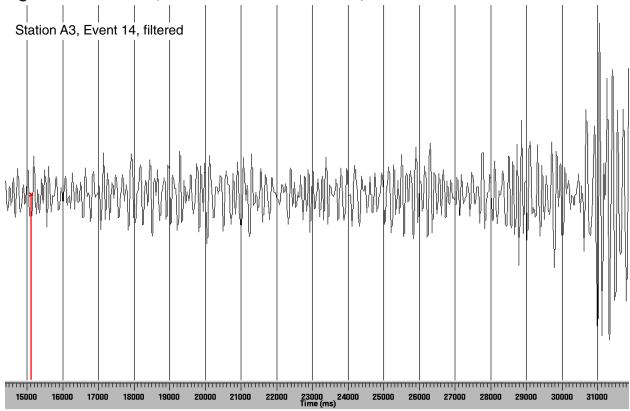
**Figure B70.** Event 12, from the list of 20 local events, at station A3.



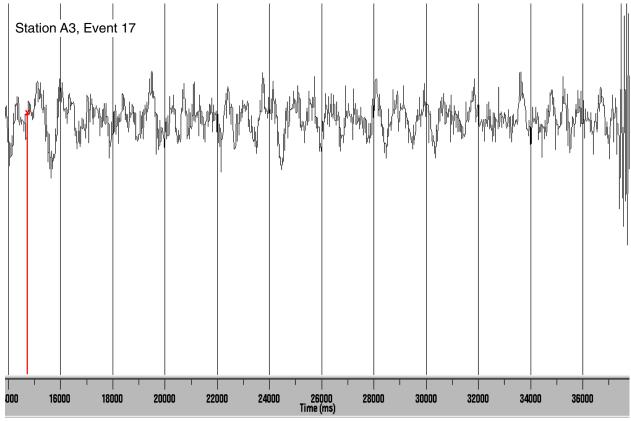
**Figure B71.** Event 13, from the list of 20 local events, at station A3.



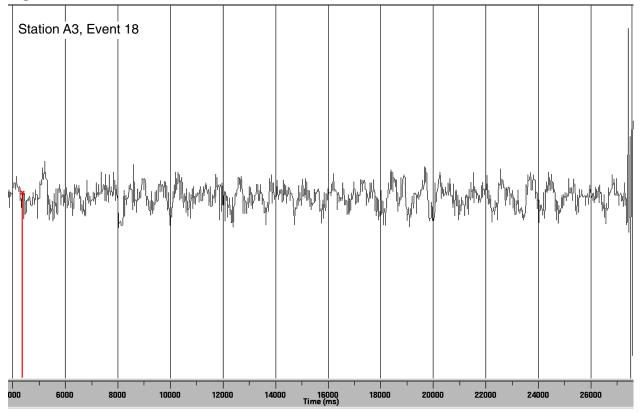
**Figure B72.** Event 14, from the list of 20 local events, at station A3.



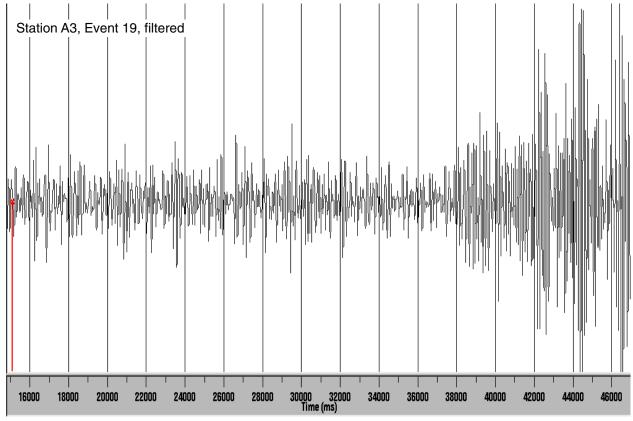
**Figure B73.** Event 17, from the list of 20 local events, at station A3.



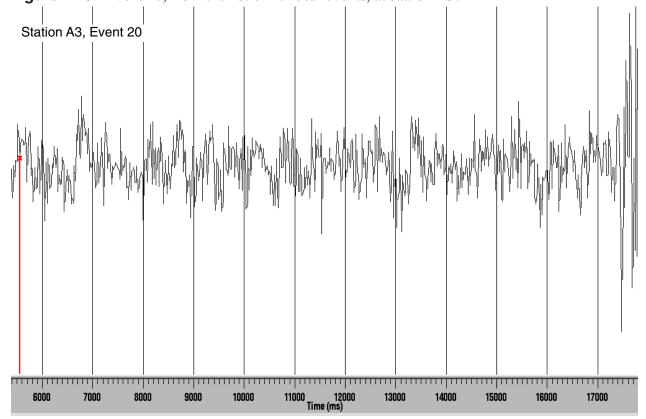
**Figure B74.** Event 18, from the list of 20 local events, at station A3.



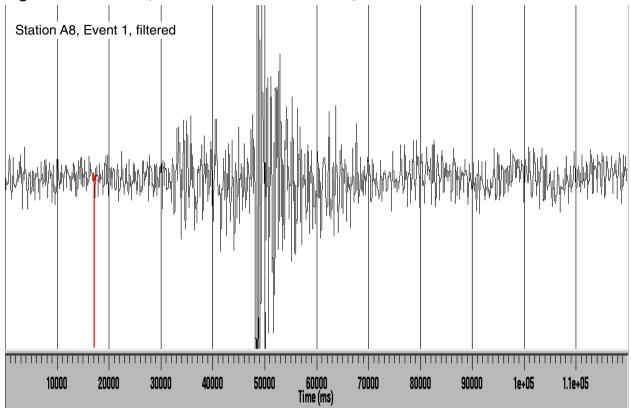
**Figure B75.** Event 19, from the list of 20 local events, at station A3.



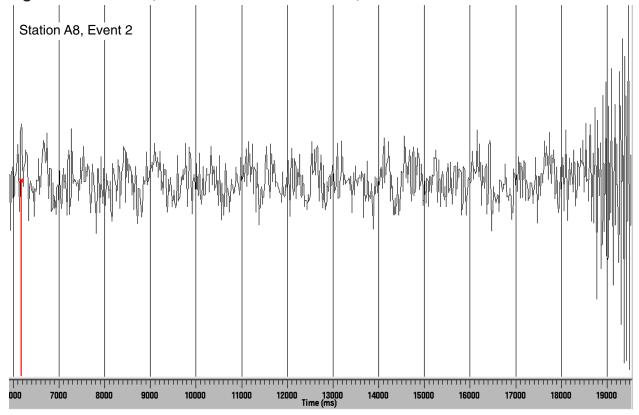
**Figure B76.** Event 20, from the list of 20 local events, at station A3.



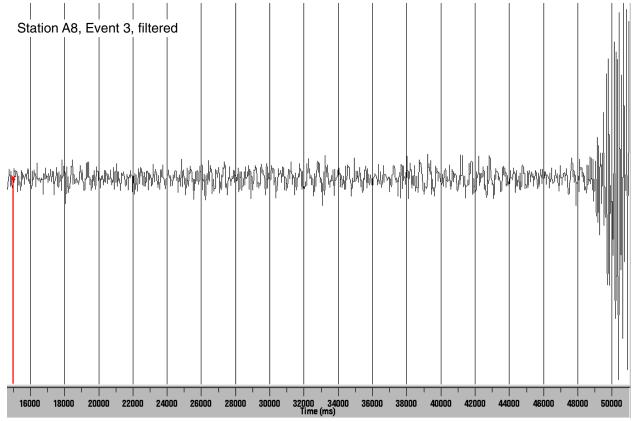
**Figure B77.** Event 1, from the list of 20 local events, at station A8.



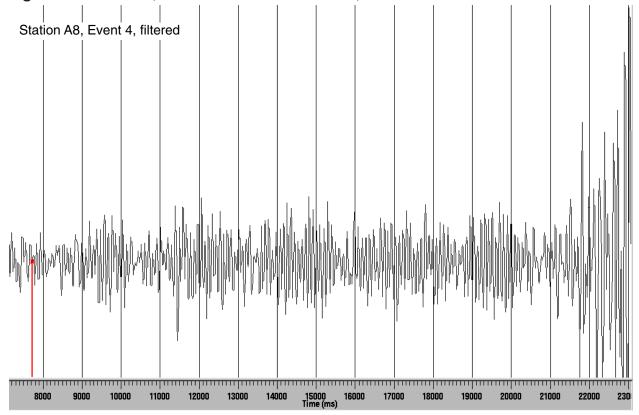
**Figure B78.** Event 2, from the list of 20 local events, at station A8.



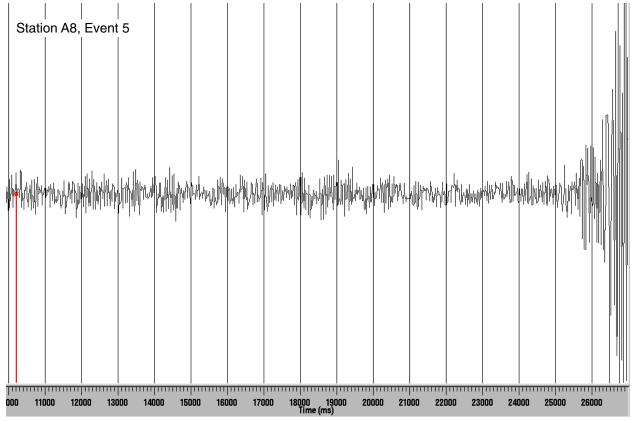
**Figure B79.** Event 3, from the list of 20 local events, at station A8.



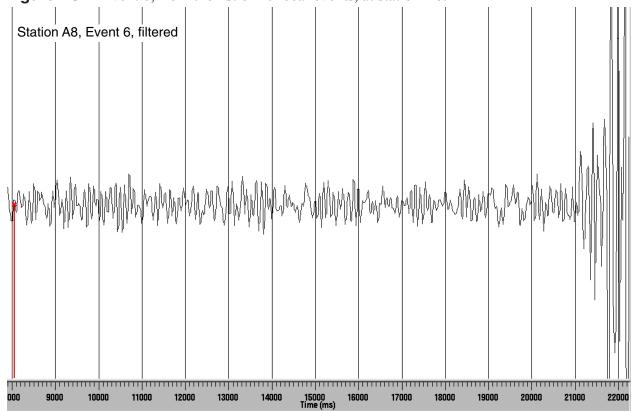
**Figure B80.** Event 4, from the list of 20 local events, at station A8.



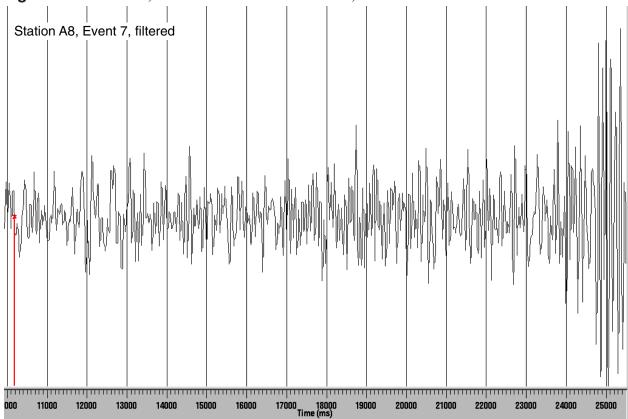
**Figure B81.** Event 5, from the list of 20 local events, at station A8.



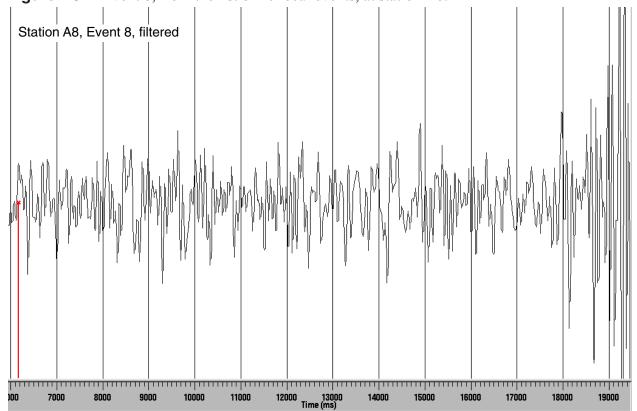
**Figure B82.** Event 6, from the list of 20 local events, at station A8.



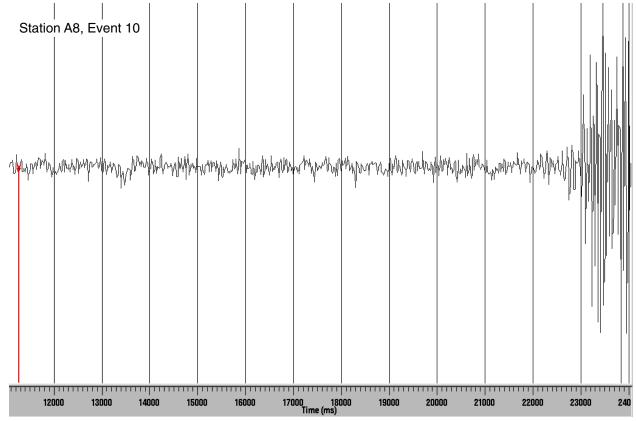
**Figure B83.** Event 7, from the list of 20 local events, at station A8.



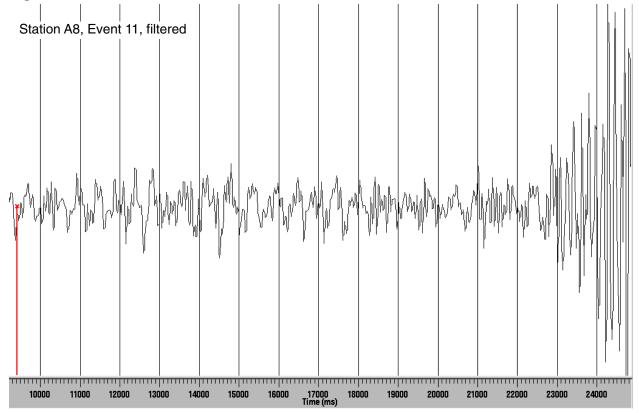
**Figure B84.** Event 8, from the list of 20 local events, at station A8.



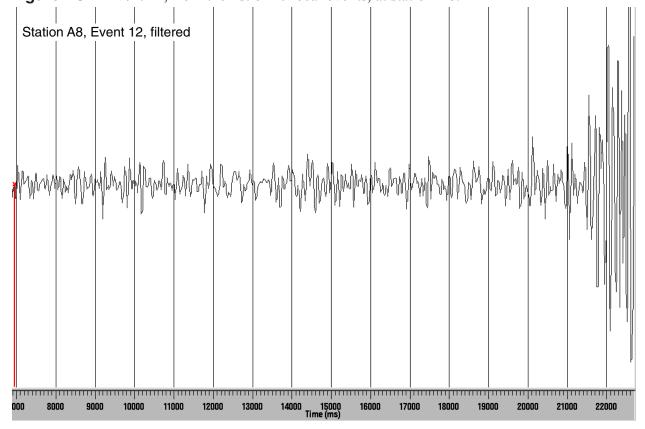
**Figure B85.** Event 10, from the list of 20 local events, at station A8.

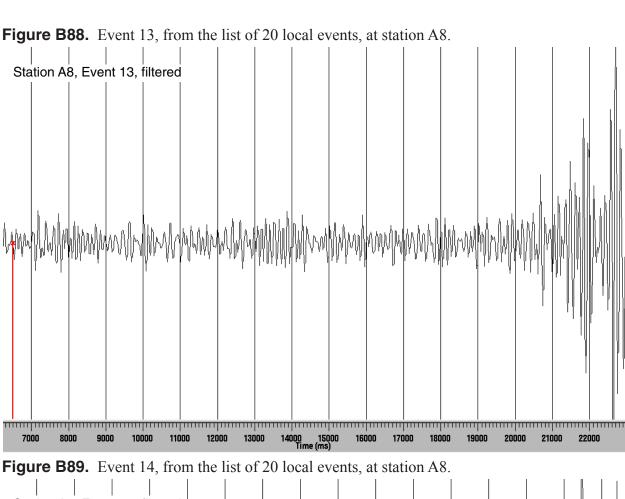


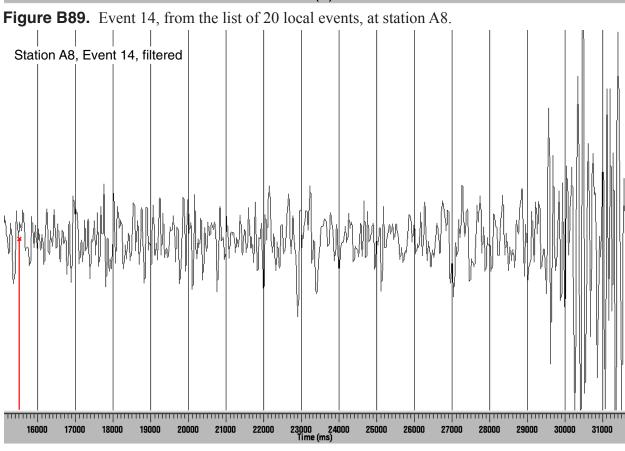
**Figure B86.** Event 11, from the list of 20 local events, at station A8.



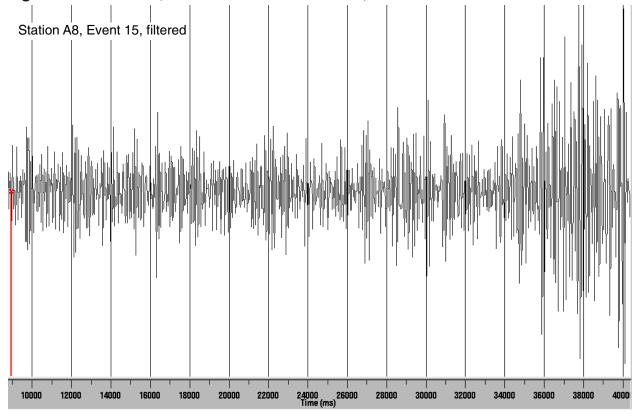
**Figure B87.** Event 12, from the list of 20 local events, at station A8.



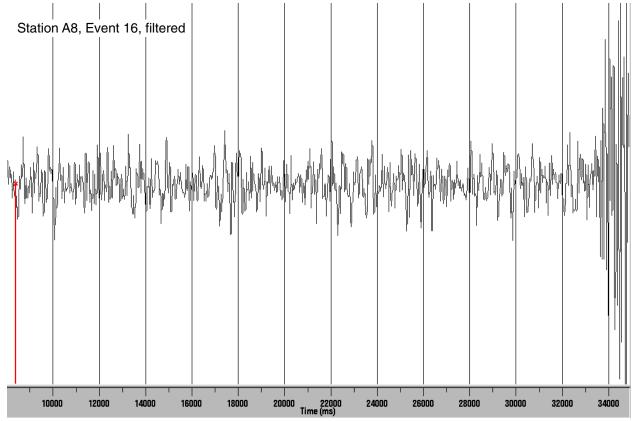




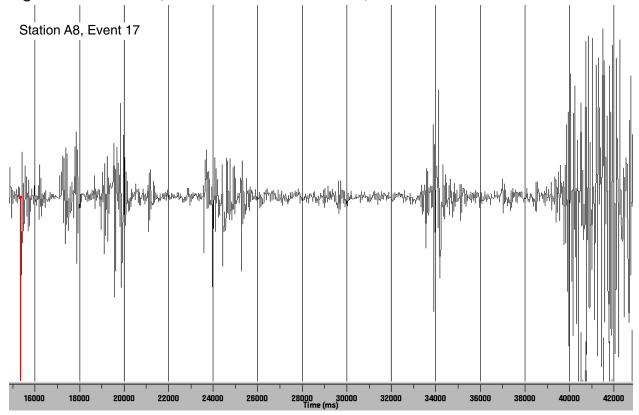
**Figure B90.** Event 15, from the list of 20 local events, at station A8.



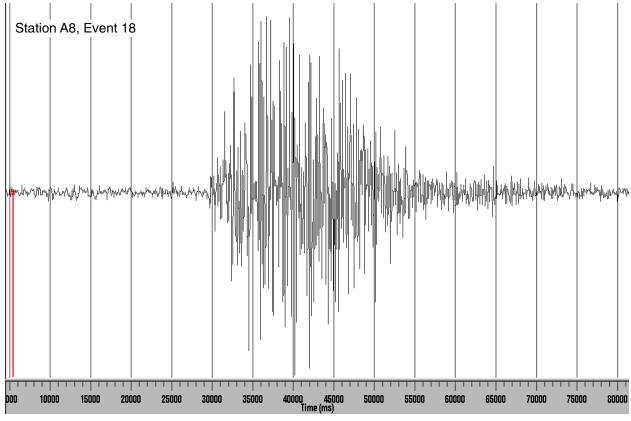
**Figure B91.** Event 16, from the list of 20 local events, at station A8.



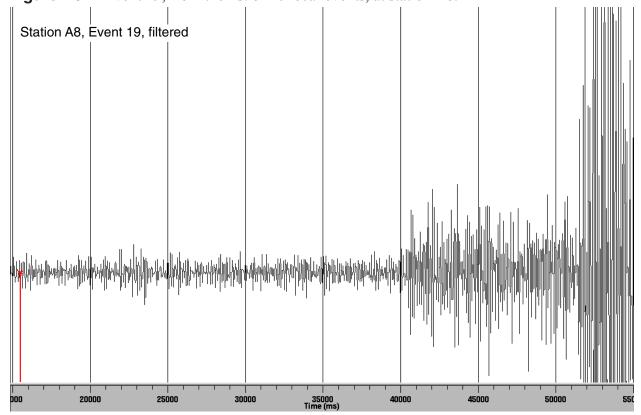
**Figure B92.** Event 17, from the list of 20 local events, at station A8.



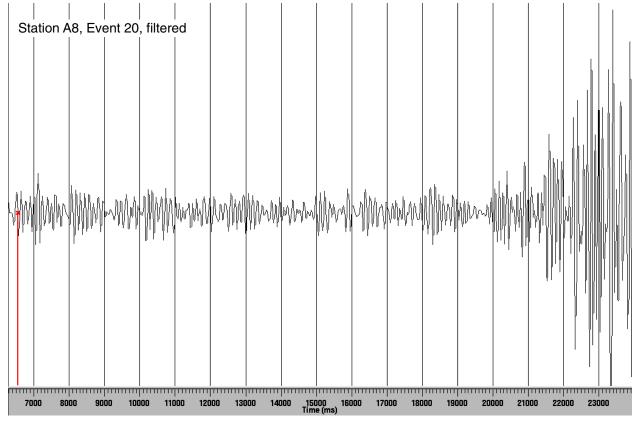
**Figure B93.** Event 18, from the list of 20 local events, at station A8.

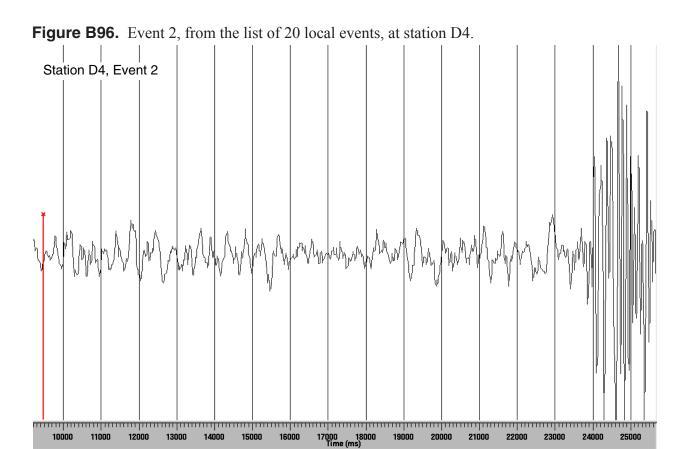


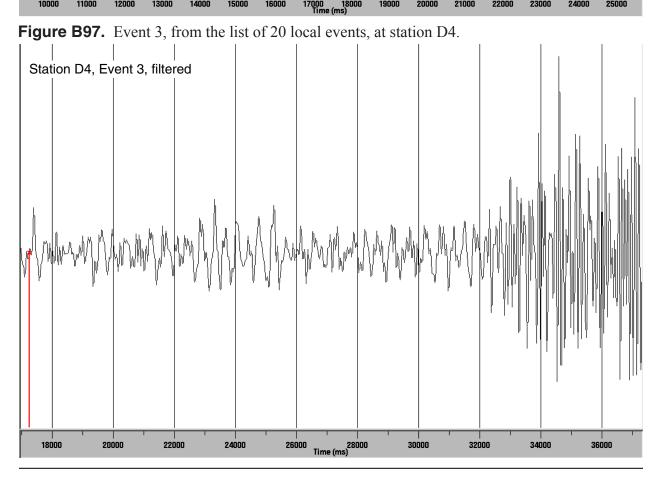
**Figure B94.** Event 19, from the list of 20 local events, at station A8.



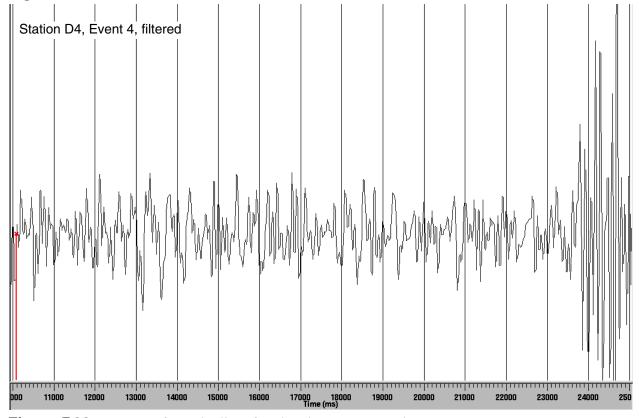
**Figure B95.** Event 20, from the list of 20 local events, at station A8.



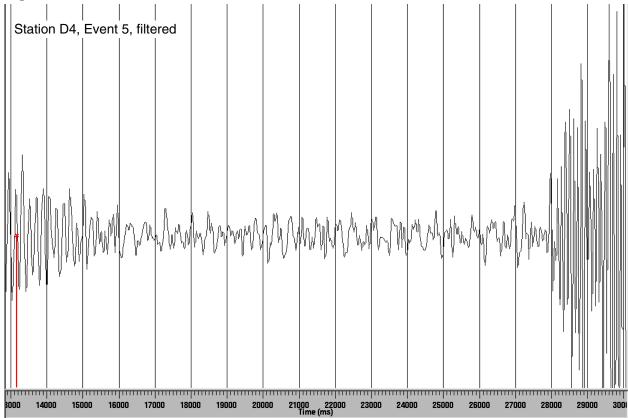




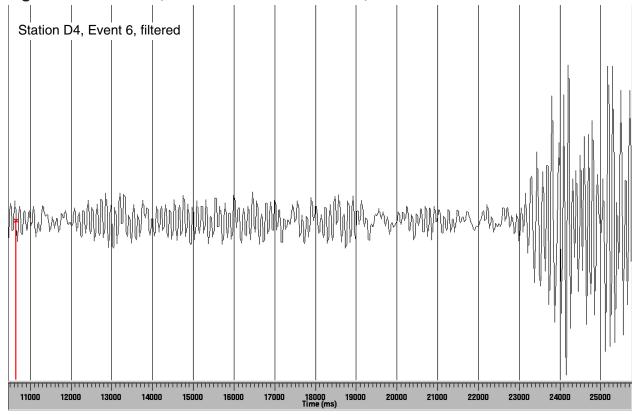
**Figure B98.** Event 4, from the list of 20 local events, at station D4.



**Figure B99.** Event 5, from the list of 20 local events, at station D4.



**Figure B100.** Event 6, from the list of 20 local events, at station D4.



**Figure B101.** Event 7, from the list of 20 local events, at station D4.

