

# Supplement to: Depth and thickness of tectonic tremor in the northeastern Olympic Peninsula

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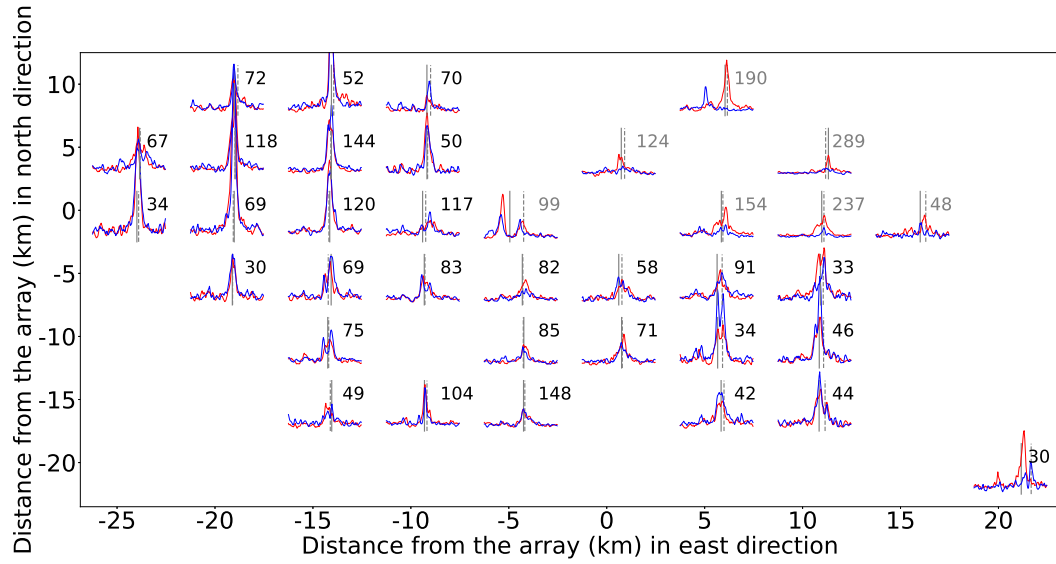
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Table S1: Depths, thicknesses and S-to-P time lags

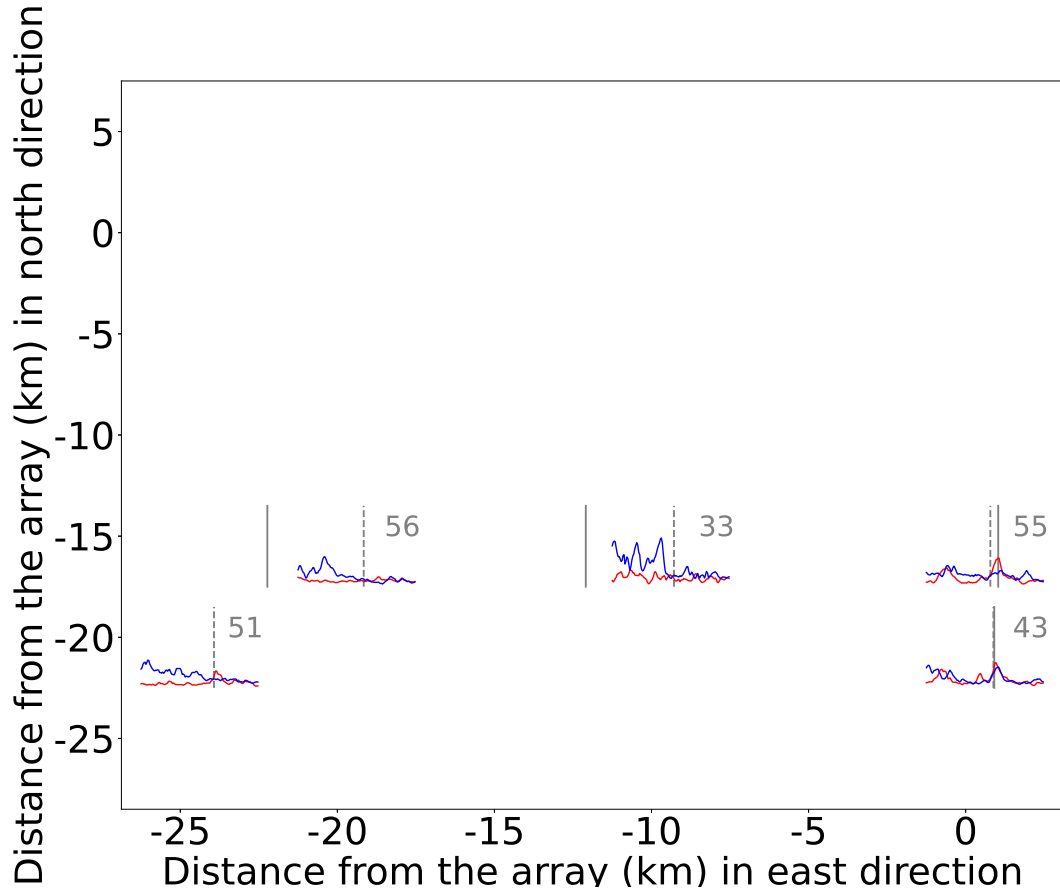
Latitude grid	Longitude grid	Depth	Thickness	S-to-P time lag	Latitude array	Longitude array
48.00568	-123.42002	31.54815	1.65708	5.61941	48.00568	-123.08435
48.05060	-123.42002	33.39968	4.14569	5.83762	48.00568	-123.08435
47.96077	-123.35288	33.60503	2.62958	5.41716	48.00568	-123.08435
48.00568	-123.35288	35.01803	0.50788	5.57185	48.00568	-123.08435
48.05060	-123.35288	35.71534	0.82604	5.64570	48.00568	-123.08435
48.09551	-123.35288	35.39573	0.86434	5.58676	48.00568	-123.08435
47.87093	-123.28575	34.96605	1.92117	5.53694	48.00568	-123.08435
47.91585	-123.28575	32.62490	2.44170	5.21036	48.00568	-123.08435
47.96077	-123.28575	36.59168	1.37536	5.48916	48.00568	-123.08435
48.00568	-123.28575	35.89275	0.91314	5.37334	48.00568	-123.08435
48.05060	-123.28575	36.78619	0.91691	5.50867	48.00568	-123.08435
48.09551	-123.28575	35.53476	0.50862	5.51101	48.00568	-123.08435
47.87093	-123.21862	31.67542	1.92960	5.11195	48.00568	-123.08435
47.96077	-123.21862	34.93296	1.77697	5.09618	48.00568	-123.08435
48.00568	-123.21862	34.22632	0.49926	4.96042	48.00568	-123.08435
48.05060	-123.21862	36.91445	0.91123	5.31363	48.00568	-123.08435
48.09551	-123.21862	35.68358	1.01354	5.31189	48.00568	-123.08435
47.87093	-123.15149	33.98015	2.03779	5.20434	48.00568	-123.08435
47.91585	-123.15149	36.14101	1.37292	5.22875	48.00568	-123.08435
47.96077	-123.15149	36.46074	1.50402	5.10543	48.00568	-123.08435
47.91585	-123.08435	36.49842	2.17686	5.21478	48.00568	-123.08435
47.96077	-123.08435	35.58549	1.80173	4.98303	48.00568	-123.08435
47.87093	-123.01722	35.26231	2.29227	5.34418	48.00568	-123.08435
47.91585	-123.01722	34.62103	1.36685	5.06163	48.00568	-123.08435
47.96077	-123.01722	35.68984	2.22221	5.01622	48.00568	-123.08435
47.87093	-122.95009	33.98689	2.33013	5.35153	48.00568	-123.08435
47.91585	-122.95009	36.14334	0.93014	5.36226	48.00568	-123.08435
47.96077	-122.95009	38.23725	1.87431	5.45880	48.00568	-123.08435
47.82602	-122.81583	31.56048	2.61761	5.86262	48.00568	-123.08435
47.82253	-123.26401	35.74926	2.11541	5.68370	47.95728	-122.92866
47.86745	-123.26401	41.08041	2.87814	5.98238	47.95728	-122.92866
47.77762	-123.19694	34.56016	3.64623	5.52653	47.95728	-122.92866
47.82253	-123.19694	35.43658	2.03552	5.34851	47.95728	-122.92866
47.86745	-123.19694	39.94581	1.62455	5.58794	47.95728	-122.92866
47.91236	-123.19694	41.07722	1.71031	5.59555	47.95728	-122.92866
47.95728	-123.19694	42.49709	2.11620	5.68647	47.95728	-122.92866
48.00220	-123.19694	39.01816	1.71031	5.41247	47.95728	-122.92866
48.00220	-123.12987	40.86172	2.03982	5.33767	47.95728	-122.92866
47.77762	-123.06280	33.16434	2.14594	4.95932	47.95728	-122.92866
47.82253	-123.06280	34.74994	2.03436	4.85144	47.95728	-122.92866
47.95728	-123.06280	37.24059	1.35377	4.74856	47.95728	-122.92866

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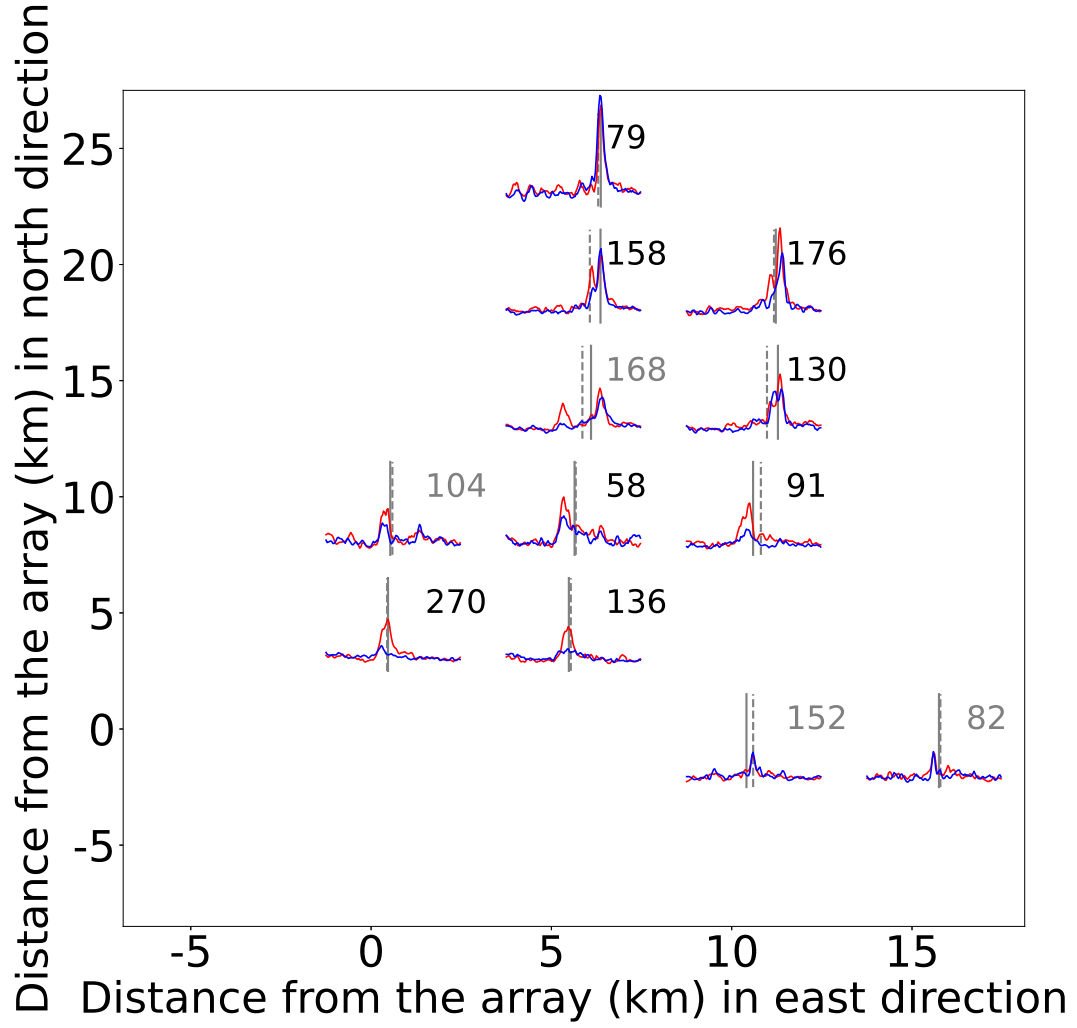
Latitude grid	Longitude grid	Depth	Thickness	S-to-P time lag	Latitude array	Longitude array
48.00220	-123.06280	38.05635	1.99664	4.88688	47.95728	-122.92866
47.91236	-122.99573	38.01949	0.44119	4.73018	47.95728	-122.92866
47.95728	-122.99573	38.77925	1.31783	4.79975	47.95728	-122.92866
48.00220	-122.99573	38.64337	1.76475	4.80089	47.95728	-122.92866
47.95728	-122.92866	38.35029	1.30400	4.70989	47.95728	-122.92866
48.00220	-122.92866	42.14840	1.51672	5.15039	47.95728	-122.92866
48.04711	-122.92866	42.26119	1.80503	5.26400	47.95728	-122.92866
48.05084	-123.31312	36.42203	1.44052	4.75103	48.00593	-123.31312
48.05084	-123.24599	36.42969	0.00000	4.77488	48.00593	-123.31312
48.09576	-123.24599	37.39737	1.90200	5.02892	48.00593	-123.31312
48.18559	-123.24599	47.25344	2.15282	6.17857	48.00593	-123.31312
48.23051	-123.24599	44.02860	1.42896	6.19100	48.00593	-123.31312
48.09576	-123.17885	35.08858	1.44200	4.94872	48.00593	-123.31312
48.14068	-123.17885	47.15230	3.02958	6.05049	48.00593	-123.31312
48.18559	-123.17885	42.57948	2.37736	5.95615	48.00593	-123.31312
48.02202	-122.91146	50.93325	1.36283	6.18599	47.93219	-123.04553
48.06693	-122.91146	49.24794	1.91613	6.19655	47.93219	-123.04553
48.05494	-123.53161	29.51566	0.93316	3.50649	48.05494	-123.46442
48.05494	-123.46442	33.80796	0.46297	4.05934	48.05494	-123.46442
47.97304	-123.33976	35.03636	0.00000	5.27955	47.97304	-123.13849
47.79337	-123.27267	31.40335	1.23311	5.23324	47.97304	-123.13849
47.83829	-123.27267	33.70694	1.21786	5.32252	47.97304	-123.13849
47.88320	-123.27267	35.90145	0.92566	5.33576	47.97304	-123.13849
47.92812	-123.27267	36.15617	0.00000	5.23042	47.97304	-123.13849
47.74846	-123.20558	22.82810	1.31211	5.19491	47.97304	-123.13849
47.79337	-123.20558	34.26325	3.64025	5.47604	47.97304	-123.13849
47.83829	-123.20558	34.71200	1.05090	5.28416	47.97304	-123.13849
47.88320	-123.20558	36.22529	0.45562	5.23800	47.97304	-123.13849
47.92812	-123.20558	38.98809	0.00000	5.38327	47.97304	-123.13849
47.88320	-123.13849	36.68302	0.88185	5.23505	47.97304	-123.13849
47.92812	-123.13849	36.54505	1.36479	5.09592	47.97304	-123.13849
47.92812	-123.07140	39.29662	0.41989	5.41719	47.97304	-123.13849
47.97304	-123.07140	39.87510	0.00000	5.46192	47.97304	-123.13849
47.88320	-123.00431	33.30555	2.26548	5.05178	47.97304	-123.13849
47.92812	-123.00431	38.03179	1.36685	5.43625	47.97304	-123.13849
47.92812	-122.93722	35.87715	2.91725	5.41123	47.97304	-123.13849



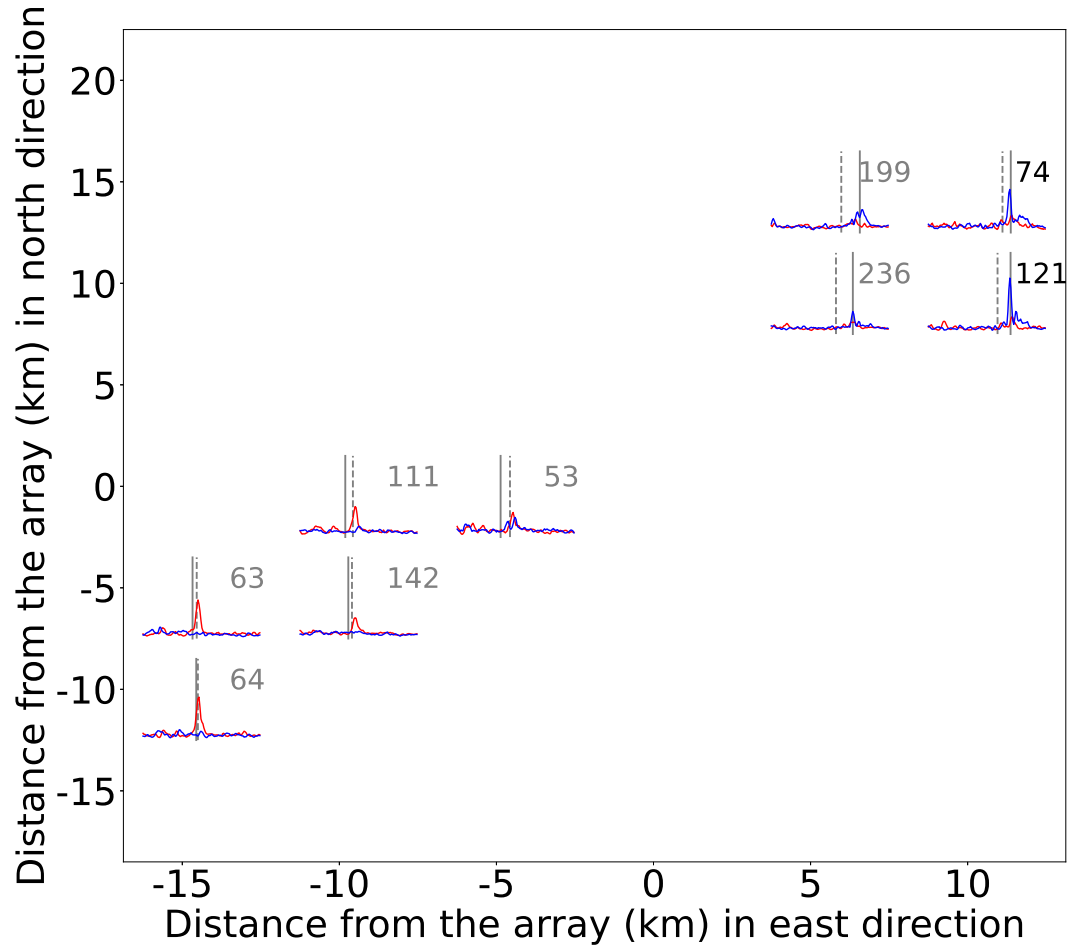
**Figure S1.** Stacks of the envelopes of the cross correlation signals for different positions of the tremor source relative to the Burnt Hill array. See caption of Figure 4 from the main text for an explanation of this figure.



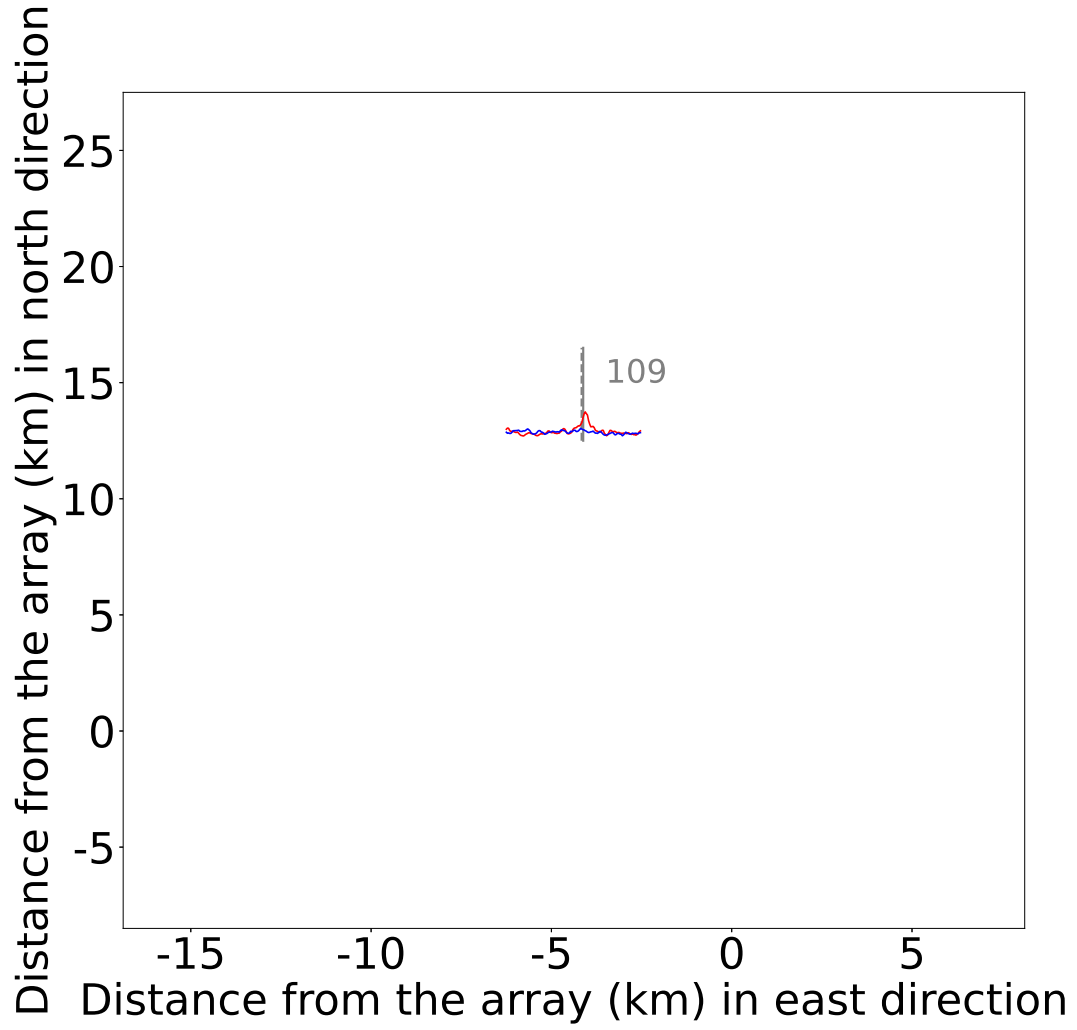
**Figure S2.** Stacks of the envelopes of the cross correlation signals for different positions of the tremor source relative to the Cat Lake array. See caption of Figure 4 from the main text for an explanation of this figure.



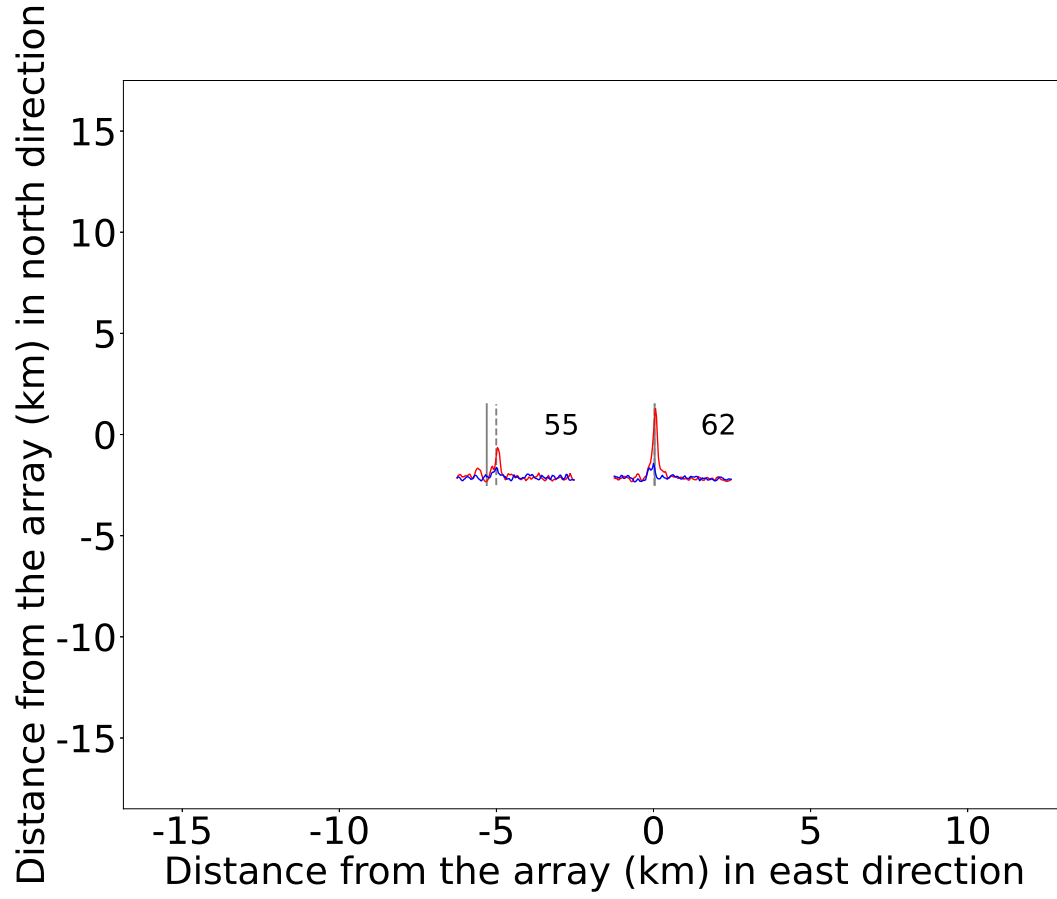
**Figure S3.** Stacks of the envelopes of the cross correlation signals for different positions of the tremor source relative to the Danz Ranch array. See caption of Figure 4 from the main text for an explanation of this figure.



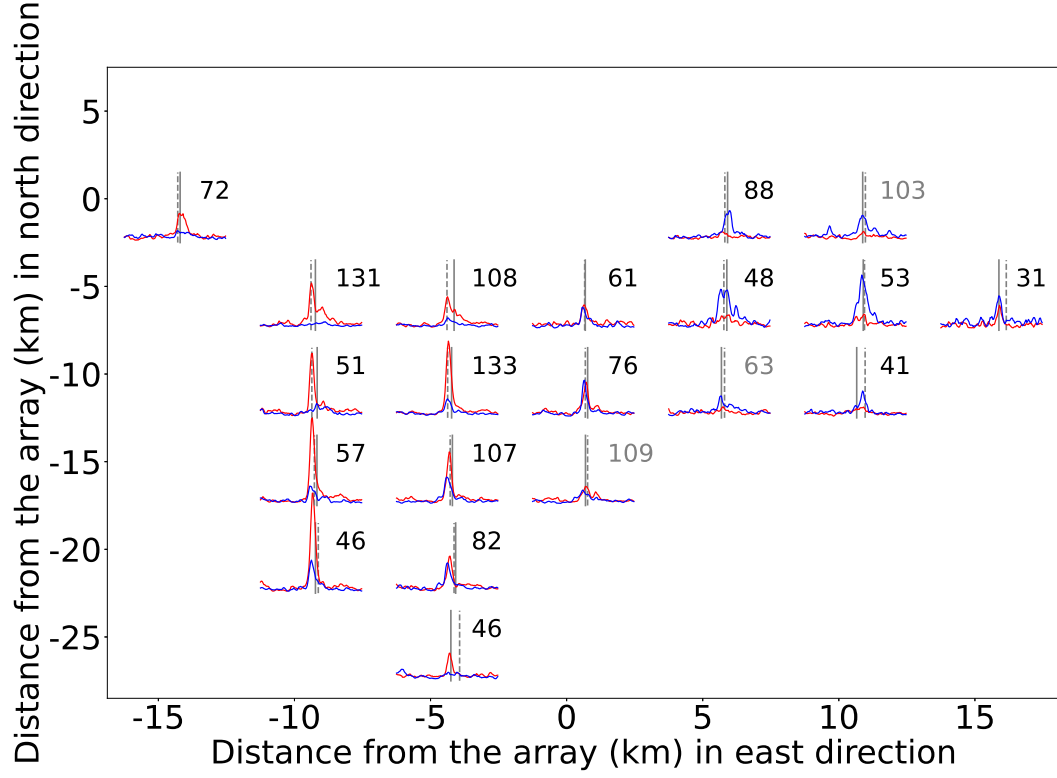
**Figure S4.** Stacks of the envelopes of the cross correlation signals for different positions of the tremor source relative to the Gold Creek array. See caption of Figure 4 from the main text for an explanation of this figure.



**Figure S5.** Stacks of the envelopes of the cross correlation signals for different positions of the tremor source relative to the Lost Cause array. See caption of Figure 4 from the main text for an explanation of this figure.

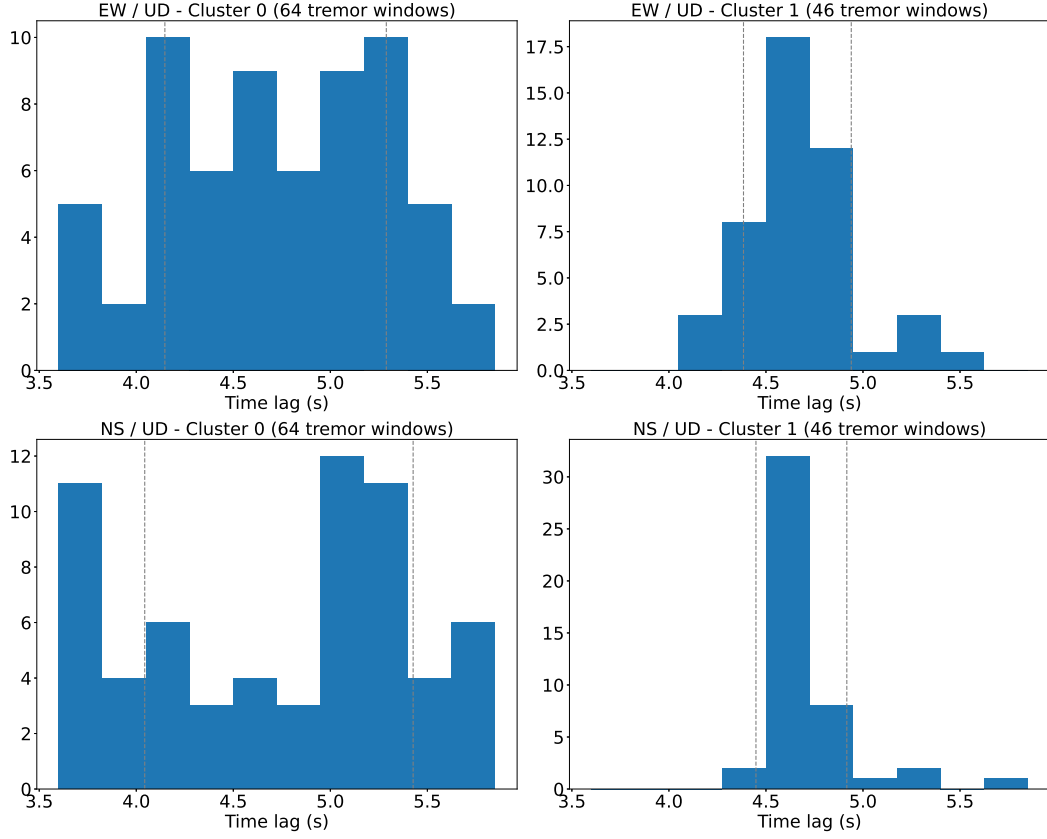


**Figure S6.** Stacks of the envelopes of the cross correlation signals for different positions of the tremor source relative to the Port Angeles array. See caption of Figure 4 from the main text for an explanation of this figure.



**Figure S7.** Stacks of the envelopes of the cross correlation signals for different positions of the tremor source relative to the Three Bumps array. See caption of Figure 4 from the main text for an explanation of this figure.





**Figure S8.** Time lags between the time corresponding to the maximum absolute value for the cross-correlation function and the time corresponding to the maximum absolute value for the stacked cross-correlation are computed for each time window for which the source of the tremor is located on a grid cell. The distribution of the time lags is shown for the time windows in cluster 0 (that is the time windows that do not fit well with the stack, left panel) and in cluster 1 (that is the time windows that fit well with the stack, right panel). Top panels are the cross-correlation of the EW component with the vertical component, and bottom panels are the cross-correlation of the NS component with the vertical component. The grey dashed lines correspond to the mean plus or minus the standard deviation. The array and the grid cell are the same as in Figures 1 and 2 from the main text.