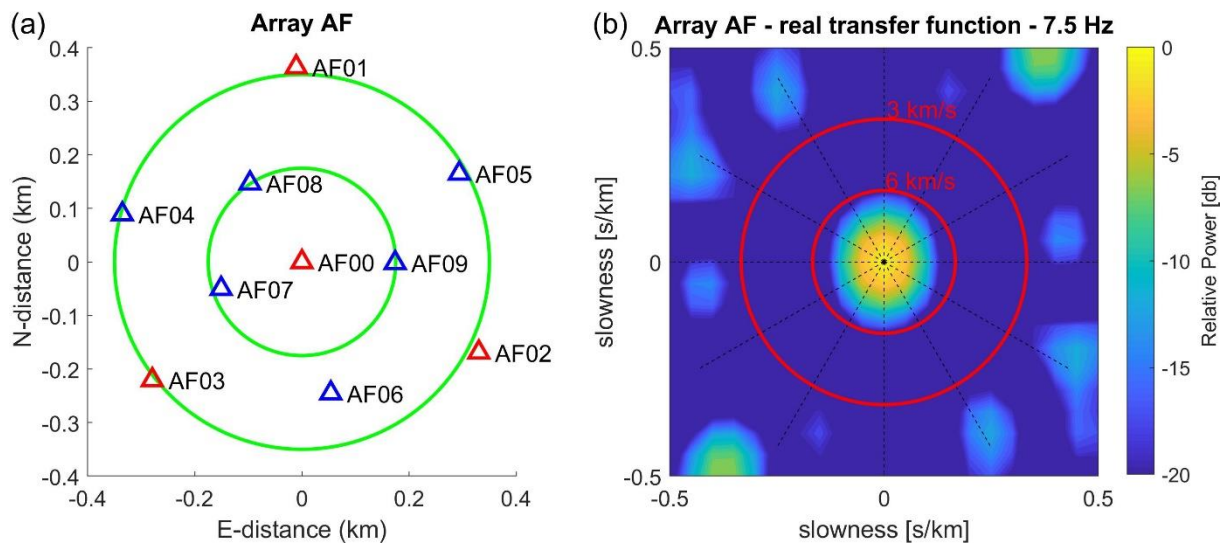
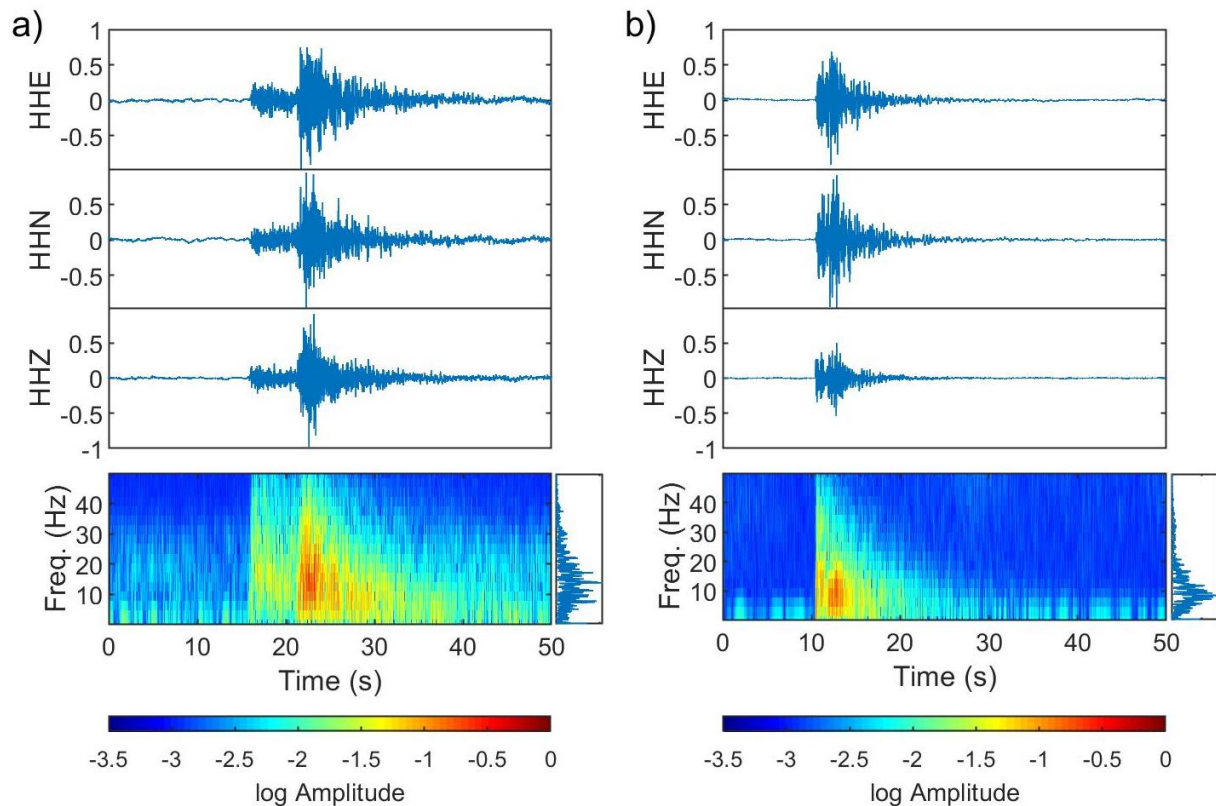


## S1 Array transfer function



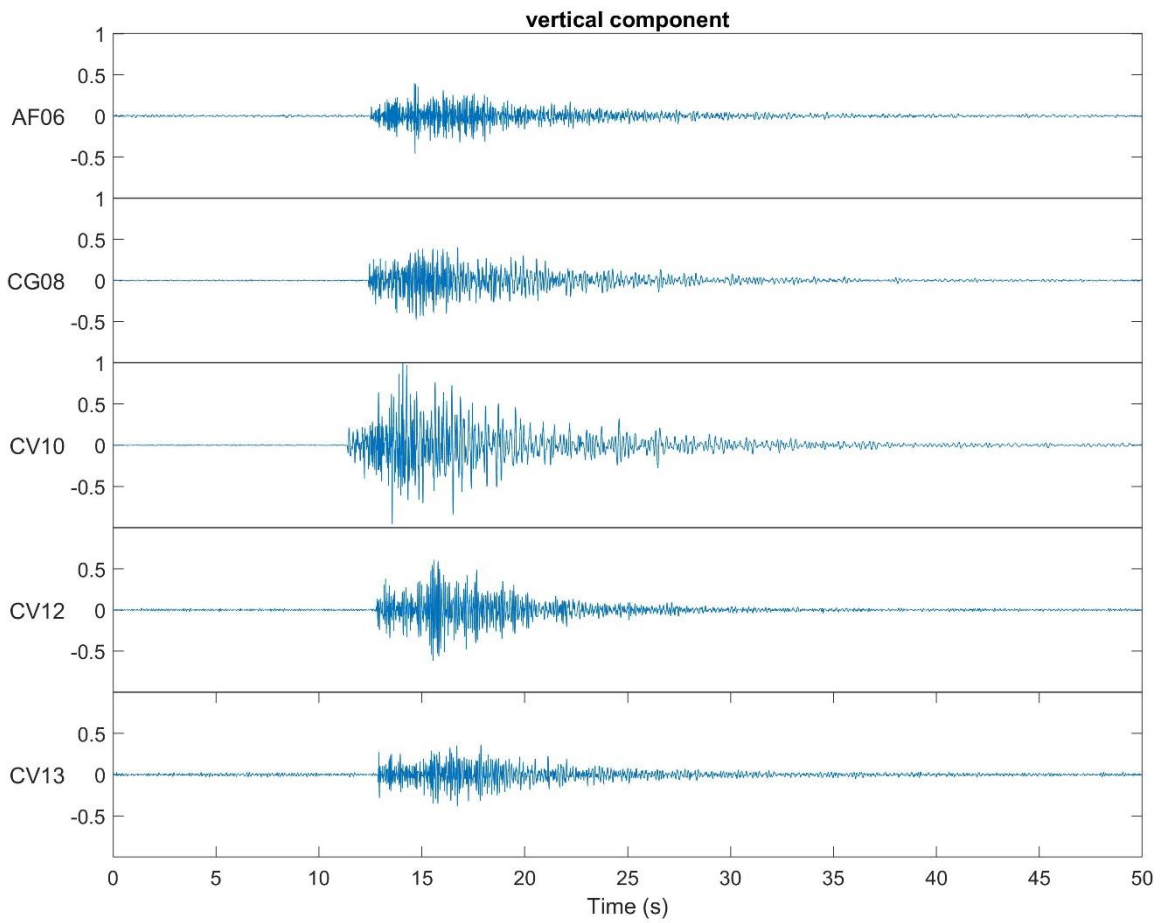
**Figure S1 (a)** Array configuration of the array AF. Red triangles: broad-band stations; blue triangles: short-period stations. The green circles mark the diameters of 700 m and 350 m, respectively. **(b)** Array transfer function of the array AF for a reference frequency of 7.5 Hz. Red circles: apparent velocities of 3 and 6 km/s, respectively.

## S2 Comparison of earthquake traces and spectrograms, recorded on Fogo and Brava



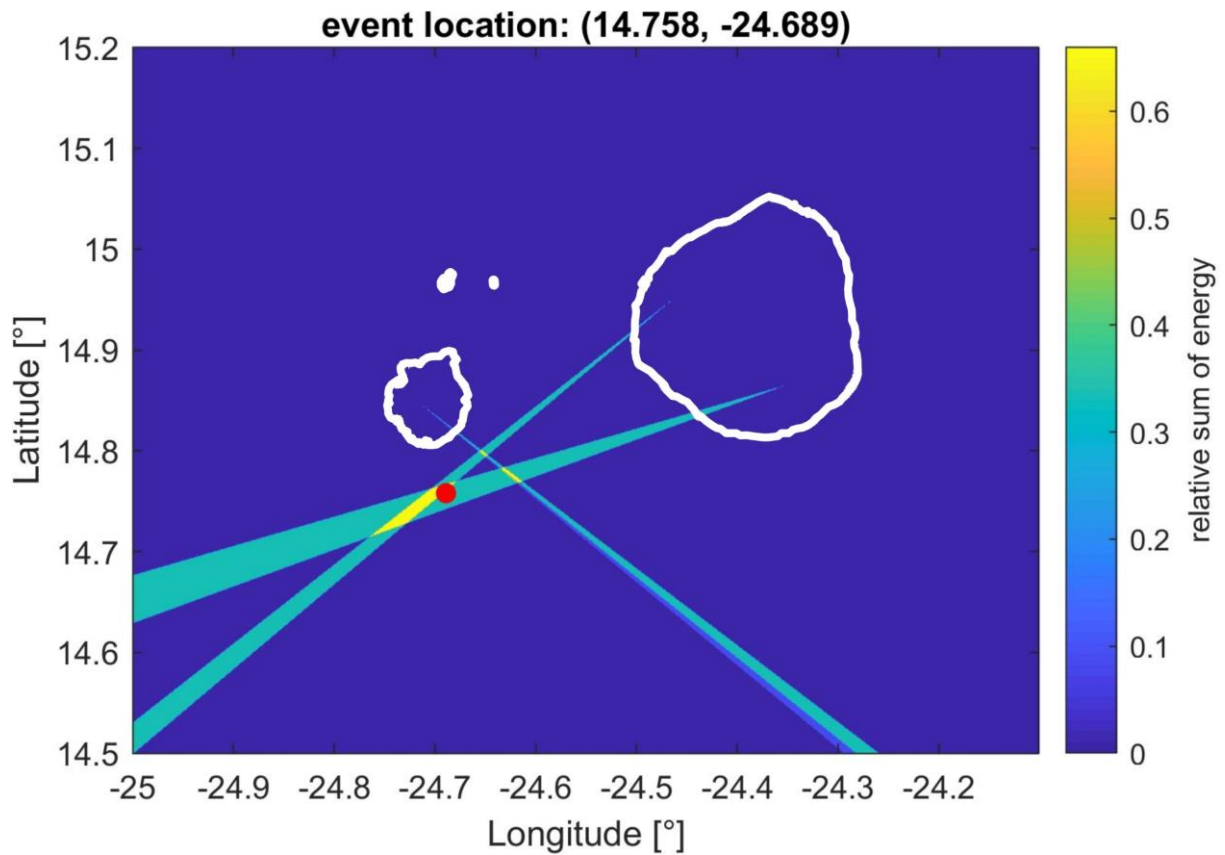
**Figure S2 a)** Top: example of a typical earthquake recorded at the broad-band station AF00 on Fogo on 13 Dec 2017 (08:12 UTC). Bottom left: spectrogram of the vertical component, bottom right: corresponding frequency content. **b)** Same earthquake, recorded at the broad-band station BR01 on Brava. The event is located close to Brava.

### S3 Vertical traces of a hybrid event recorded on Fogo



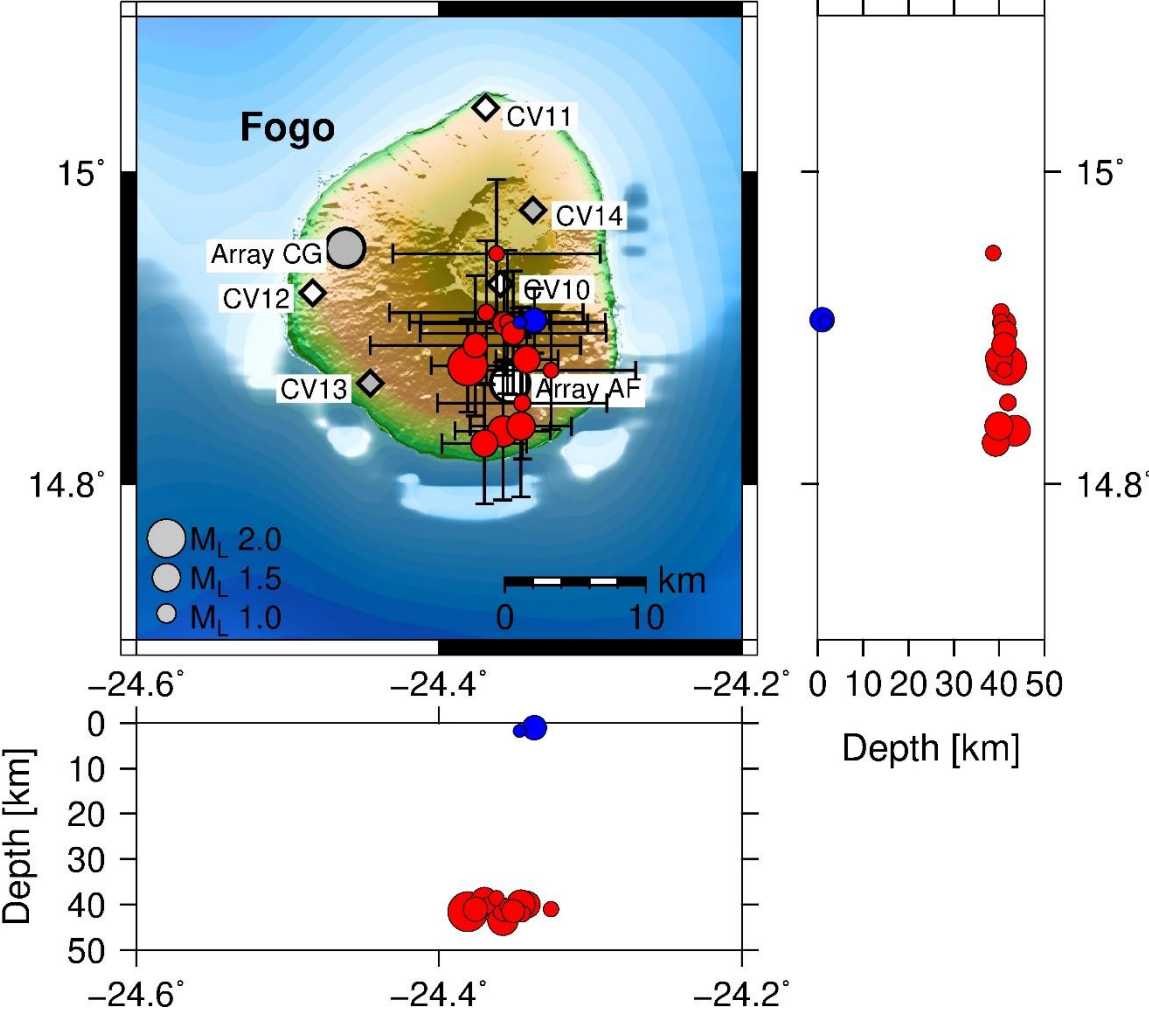
**Figure S3** Vertical traces of a hybrid event recorded on 17 Aug 2017 (02:54 UTC) occurring in the collapse scar of Fogo. Traces of short-period stations are normalized for a better comparison.

#### S4 Standard deviation for varying frequencies



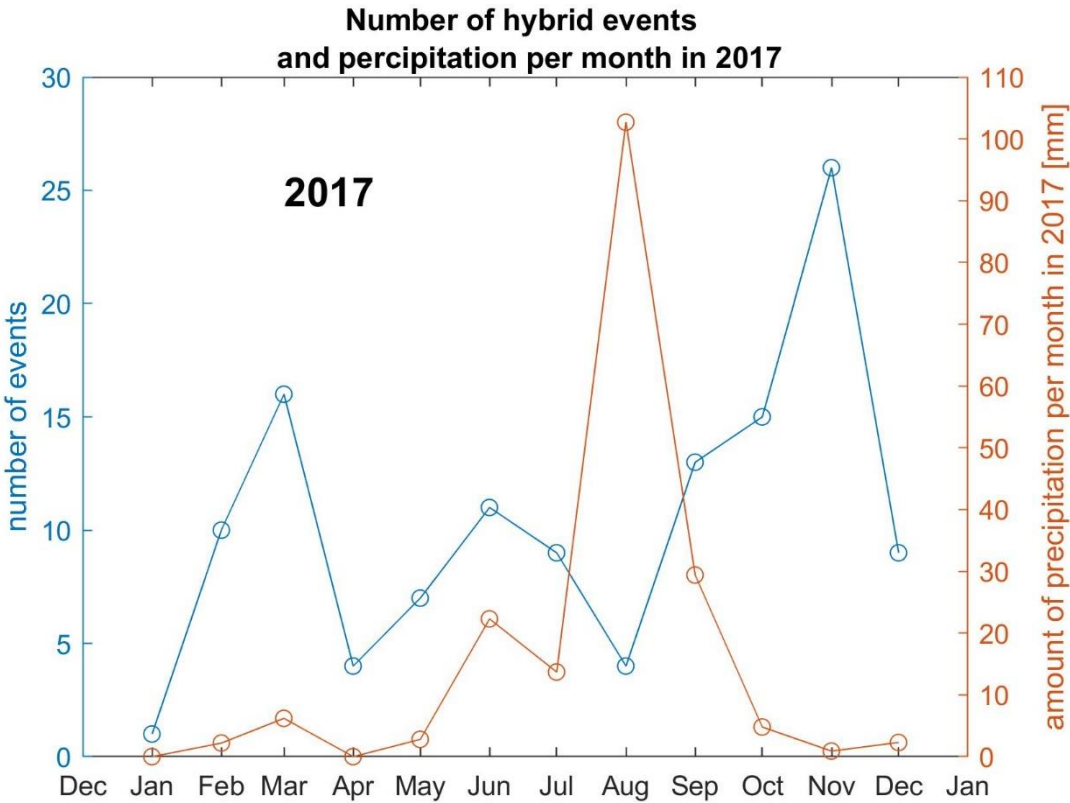
**Figure S4** Intersection of the beams resulting from the standard deviation analysis of varying frequencies. The analysis frequencies for each array are varied between 2 Hz and 8 Hz for the lower and between 15 Hz and 30 Hz for the upper cut-off frequency. This variation is performed 100 times. The resulting standard deviation of the backazimuth values is small leading to narrow beams. Thus, the effect of the chosen cut-off frequency on the result is negligible.

**S5 Locations of earthquake swarms beneath Fogo in August 2016 and September 2017**



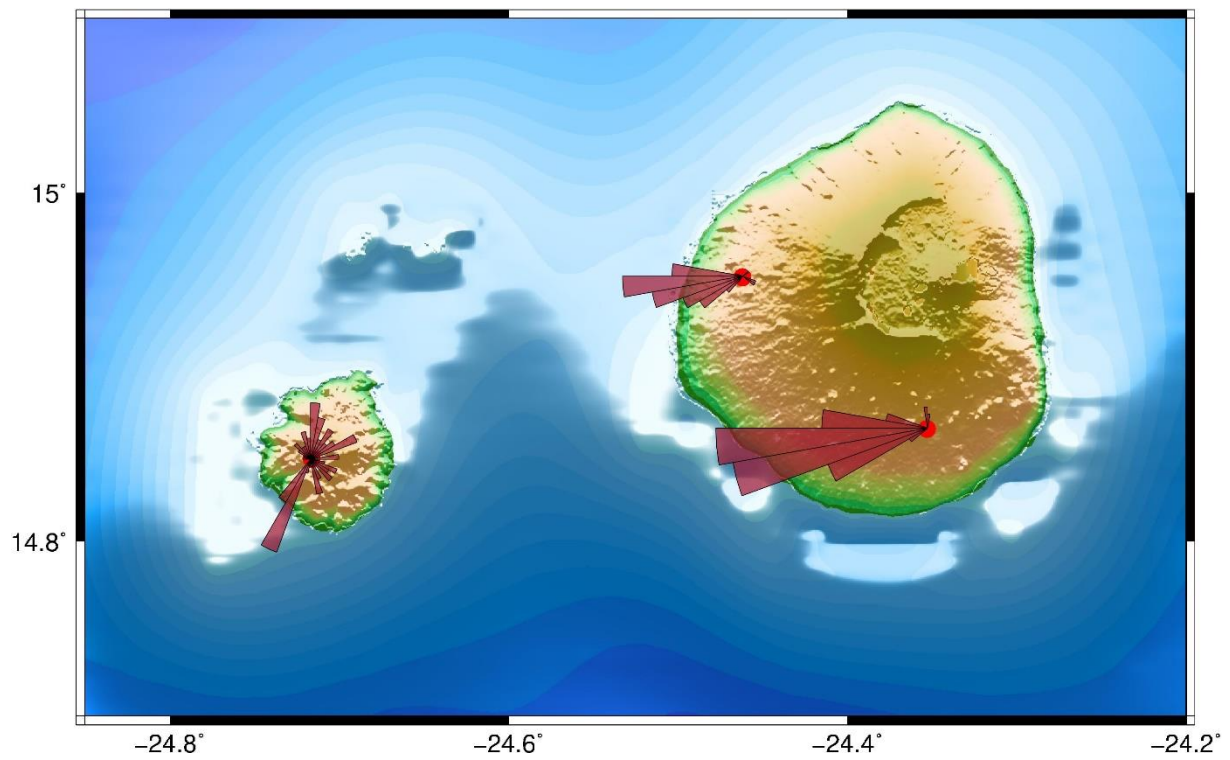
**Figure S5** Locations of the subcrustal earthquake swarm of August 2016 (Leva et al., 2019) in red and locations of the shallow crustal earthquakes in September 2017 in blue. White and grey circles mark the array locations, white and grey diamonds mark the single station locations. White stations/ arrays were operational in 2016 and 2017, grey stations/ arrays were operational in 2017. Topographic and bathymetry data are from Ryan et al. (2009).

**S6 Comparison of the number of hybrid events and precipitation data**

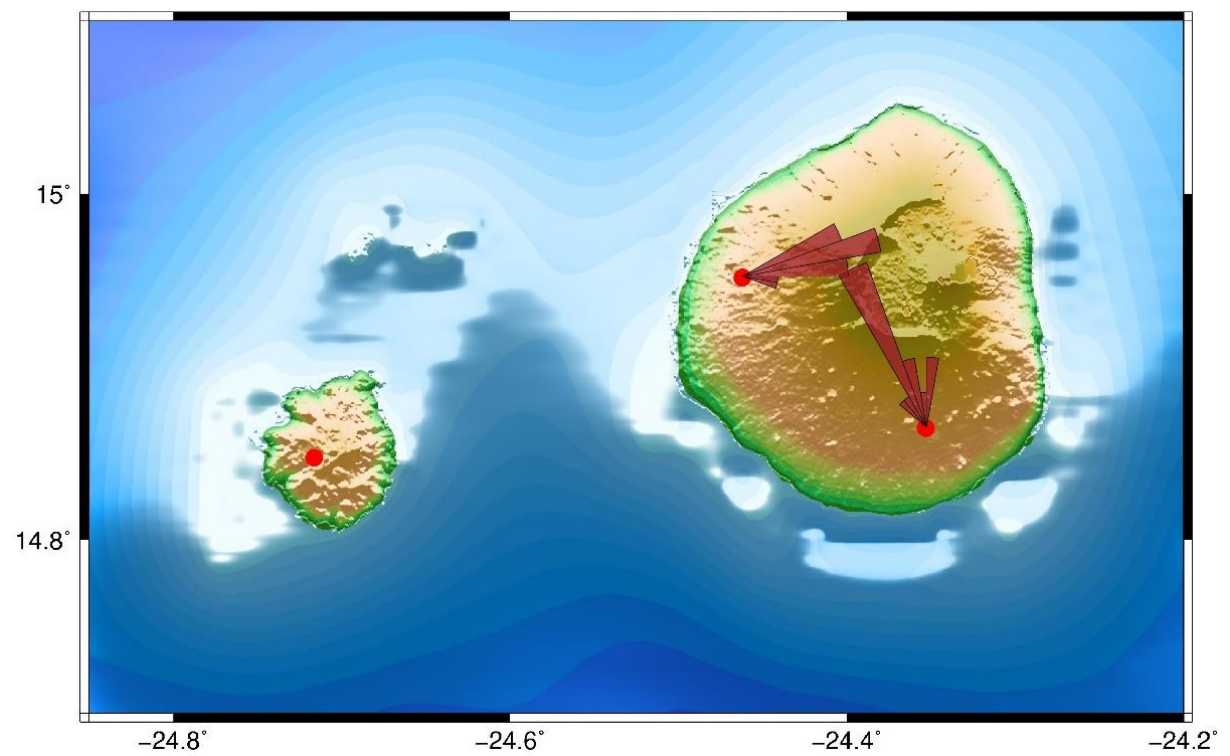


**Figure S6** Number of hybrid events per month in 2017 compared to the amount of precipitation per month in 2017. The precipitation data are taken from WorldWeatherOnline.com (2021) for a weather station in Praia.

### S7 Distribution of backazimuth values



**Figure S7.1** Distribution of backazimuth values of earthquakes at the three arrays binned in 10° steps. Topographic and bathymetry data are from Ryan et al. (2009).



**Figure S7.2** Distribution of backazimuth values of hybrid events at the three arrays binned in 10° steps. Topographic and bathymetry data are from Ryan et al. (2009).

## References

Leva, C., Rumpker, G., Link, F., and Wölbern, I.: Mantle earthquakes beneath Fogo volcano, Cape Verde: Evidence for subcrustal fracturing induced by magmatic injection, *J. Volcanol. Geoth. Res.*, 386, 106672, doi:10.1016/j.jvolgeores.2019.106672, 2019.

Ryan, W. B. F., Carbotte, S. M., Coplan, J. O., O'Hara, S., Melkonian, A., Arko, R., Weissel, R. A., Ferrini, V., Goodwillie, A., Nitsche, F., Bonczkowski, J., and Zemsky, R.: Global Multi-Resolution Topography synthesis, *Geochem. Geophys. Geosy.*, 10, Q03014, doi:10.1029/2008GC002332, 2009.

World Weather Online, <https://www.worldweatheronline.com/praia-weather-averages/praia/cv.aspx>, last access: 30 March 2021.

## S8 Table of results from the multi-array analysis

**Table S1:** Table of analyzed hybrid events

Array	Date [dd_mm_yyyy]	Time [hh:mm]	baz [°]	app. velocity [km/s]	baz std. [°]	app. velo. std. [km/s]	longitude [°]	latitude [°]	error lon. Min [°]	error lon. Max [°]	error lat. Min [°]	error lat. Max [°]	Magnitude M <sub>L</sub>
AF	03_03_2017	09:47	2.2	7.8	140.5	1.4	-24.350	14.961	-24.366	-24.332	14.955	14.972	1.4
CG			84.3	6.7	52.6	2.5							
AF	05_02_2017	21:12	315.1	9	56	2.2	-24.426	14.942	-24.432	-24.415	14.937	14.946	0.4
CG			104	9.9	82.2	2.6							
AF	17_02_2017	12:58	338.6	6.8	94.2	1.2	-24.387	14.958	-24.393	-24.380	14.954	14.963	1
CG			84.3	6.7	82.8	1.9							
AF	17_08_2017	02:54	334.5	8	100.2	2.3	-24.400	14.969	-24.408	-24.392	14.963	14.973	0.9
CG			75.4	8.5	99.9	2.6							
AF	18_09_2017	14:45	338.8	10.5	119.9	12.2	-24.391	14.967	-24.403	-24.385	14.959	14.975	0.5
CG			76.5	7.9	94.4	2.7							
AF	20_03_2017	06:34	349.9	7.1	133.9	1.6	-24.365	14.949	-24.373	-24.359	14.934	14.957	1
CG			93.1	11.3	63	3.8							
AF	20_10_2017	12:40	330.7	5.5	55.7	1.9	-24.411	14.970	-24.421	-24.406	14.961	14.977	1.1
CG			68.2	7.5	102	2.1							
AF	23_06_2017	04:39	0	8.5	103.4	2.5	-24.351	14.982	-24.362	-24.340	14.968	14.998	0.9
CG			73.3	9.7	86	1.9							
AF	23_06_2017	15:57	357.3	9.7	116.1	1.7	-24.360	14.989	-24.380	-24.331	14.969	15.014	1.7
CG			73	8.4	104	5.5							
AF	25_02_2017	17:42	337.9	7	106.7	1.9	-24.392	14.964	-24.396	-24.385	14.957	14.968	0.8
CG			80.9	8	101.9	2.4							
AF	27_04_2017	12:58	342.5	5.1	109.6	4	-24.388	14.981	-24.391	-24.381	14.972	14.986	0.8
CG			68.2	7.5	106.8	2.6							
AF	27_05_2017	07:08	329.1	8.7	113.3	2.3	-24.418	14.973	-24.424	-24.409	14.966	14.977	1.5
CG			65.5	8.4	120.4	2.5							

**Table S2:** Table of analyzed earthquakes

Array	Date [dd_mm_yyyy]	Time [hh:mm]	baz [°]	app. velocity [km/s]	baz std. [°]	app. velo. std. [km/s]	longitude [°]	latitude [°]	error lon. Min [°]	error lon. Max [°]	error lat. Min [°]	error lat. Max [°]	Magnitude $M_L$
AF	01_03_2017	08:58	271.9	6.8	74.0	1.3	-24.738	14.907	-24.743	-24.732	14.899	14.911	1.4
BR			340.9	7.4	122.9	3.2							
CG			280.9	7.7	97.3	2.2							
AF	01_06_2017	20:19	253.2	5.9	59.9	1.2	-24.625	14.799	-24.642	-24.599	14.787	14.807	2.3
BR			116.5	8.3	75.9	2.8							
CG			253.8	8.1	115.5	2.1							
AF	01_09_2017	17:54	240.0	6.8	74.0	1.6	-24.852	14.577	-24.859	-24.837	14.572	14.604	2.3
BR			206.6	5.7	89.6	1.5							
CG			--	--	--	--							
AF	01_10_2017	05:17	--	--	--	--	-24.737	14.914	-24.756	-24.724	14.897	14.941	1.7
BR			341.6	12.8	151.9	3.7							
CG			262.3	9.2	92.3	2.2							
AF	02_02_2017	08:27	237.3	6.1	38.4	1.5	-24.824	14.608	-24.851	-24.802	14.562	14.648	3.1
BR			203.7	3.3	88.9	1.2							
CG			237.4	6.9	69.0	1.9							
AF	02_05_2017	02:00	266.5	6.3	67.0	5.6	-24.785	14.851	-24.850	-24.717	14.839	14.853	0.3
BR			281.4	13.3	98.6	11.2							
CG			--	--	--	--							
AF	02_05_2017	17:37	--	--	--	--	-24.713	14.851	-24.716	-24.697	14.848	14.873	0.5
BR			32.0	21.5	111.6	13.2							
CG			241.0	9.9	92.4	3.6							
AF	02_08_2017	05:00	259.1	6.4	68.6	2.8	-24.707	14.853	-24.711	-24.705	14.851	14.854	0.3
BR			60.9	9.9	95.8	3.0							
CG			258.7	8.0	108.2	2.3							
AF	02_08_2017	05:06	264.7	6.3	97.6	1.9	-24.707	14.853	-24.714	-24.704	14.849	14.854	-0.2
BR			60.9	9.9	97.9	3.1							
CG			--	--	--	--							
AF	02_08_2017	17:48	271.9	6.8	106.9	1.9	-24.743	14.878	-24.770	-24.717	14.849	14.909	2.5
BR			318.5	16.9	91.5	14.1							
CG			--	--	--	--							
AF	03_03_2017	02:12	251.6	6.4	87.3	1.2	-24.673	14.732	-24.676	-24.666	14.716	14.738	0.5
BR			159.4	4.8	72.2	1.9							
CG			220.0	5.0	65.9	1.7							
AF	03_06_2017	00:49	252.7	6.1	59.1	1.4	-24.795	14.725	-24.821	-24.767	14.684	14.761	1.2
BR			212.6	3.4	97.3	6.1							
CG			--	--	--	--							
AF	03_06_2017	03:12	260.2	6.9	75.2	3.2	-24.639	14.816	-24.683	-24.616	14.808	14.833	1.2
BR			112.8	9.9	93.8	2.7							
CG			--	--	--	--							
AF	03_07_2017	05:55	264.1	7.0	56.2	1.4	-24.759	14.904	-24.763	-24.753	14.901	14.908	1.5
BR			323.2	10.2	69.9	4.1							
CG			264.3	6.7	72.5	2.0							
AF	03_07_2017	20:00	246.8	6.7	68.8	2.8	-24.612	14.754	-24.615	-24.605	14.748	14.754	1.4
BR			131.9	7.6	65.2	2.5							
CG			--	--	--	--							
AF	03_10_2017	04:27	250.9	7.4	90.9	1.9	-24.793	14.712	-24.822	-24.778	14.684	14.739	0.9
BR			209.7	8.4	74.4	3.7							
CG			266.1	7.0	85.3	1.9							
AF	04_05_2017	02:09	268.3	6.0	74.3	1.3	-24.742	14.866	-24.790	-24.717	14.848	14.900	0.4
BR			305.1	16.7	114.6	16.5							
CG			--	--	--	--							
AF	04_10_2017	02:14	253.5	7.2	61.2	1.7	-24.767	14.750	-24.806	-24.745	14.708	14.781	0.8
BR			208.0	12.0	102.5	4.3							
CG			--	--	--	--							
AF	05_02_2017	21:56	263.1	6.1	59.3	1.3	-24.691	14.819	-24.704	-24.671	14.797	14.833	1.4
BR			138.0	7.6	96.5	2.2							
CG			266.3	6.5	58.4	1.4							
AF	05_03_2017	02:09	248.6	6.8	73.5	2.0	-24.773	14.702	-24.796	-24.747	14.652	14.766	2.0
BR			201.1	3.3	78.6	1.0							
CG			240.5	7.7	88.0	2.4							
AF	05_03_2017	02:11	251.0	6.6	85.8	1.2	-24.762	14.724	-24.777	-24.761	14.683	14.724	0.7

BR			200.3	3.5	83.9	2.2							
CG			--	--	--	--							
AF	05_03_2017	15:57	243.4	6.5	90.1	1.5	-24.799	14.644	-24.840	-24.792	14.600	14.661	2.1
BR			202.1	5.9	75.2	1.3							
CG			228.4	8.4	88.3	2.2							
AF	05_09_2017	06:17	233.5	6.1	59.3	1.3	-24.841	14.496	-24.875	-24.811	14.450	14.553	1.7
BR			199.8	5.3	116.7	2.1							
CG			253.3	9.7	81.9	2.3							
AF	05_12_2017	04:19	252.6	5.5	73.1	6.2	-24.683	14.887	-24.704	-24.666	14.864	14.903	0.7
BR			39.5	9.2	83.4	3.2							
CG			262.9	8.4	99.7	2.6							
AF	05_12_2017	10:23	264.7	6.3	77.0	1.5	-24.685	14.832	-24.716	-24.640	14.808	14.848	1.3
BR			116.5	13.0	104.9	3.3							
CG			--	--	--	--							
AF	06_03_2017	23:29	262.9	6.3	62.6	1.6	-24.707	14.854	-24.711	-24.705	14.852	14.855	0.3
BR			57.2	12.2	104.4	5.1							
CG			257.2	9.0	71.1	2.6							
AF	06_09_2017	16:50	271.8	6.2	66.7	1.6	-24.716	14.876	-24.719	-24.710	14.865	14.919	1.3
BR			0.1	16.9	111.7	7.9							
CG			--	--	--	--							
AF	07_03_2017	07:52	281.3	6.6	83.6	1.7	-24.679	14.931	-24.689	-24.668	14.912	14.943	1.1
BR			25.5	8.7	105.9	3.8							
CG			--	--	--	--							
AF	07_05_2017	04:20	253.3	6.5	52.0	1.1	-24.768	14.740	-24.781	-24.762	14.722	14.743	0.9
BR			205.8	6.3	87.4	1.7							
CG			--	--	--	--							
AF	07_05_2017	05:39	259.1	6.4	66.2	2.0	-24.705	14.850	-24.716	-24.680	14.848	14.855	0.8
BR			80.2	6.9	83.5	7.3							
CG			254.1	7.0	89.4	2.0							
AF	07_05_2017	05:40	266.3	6.5	85.9	3.7	-24.710	14.848	-24.716	-24.686	14.848	14.852	1.1
BR			84.1	7.0	98.4	2.6							
CG			254.1	7.0	78.2	1.8							
AF	07_11_2017	04:54	264.5	6.5	47.4	1.2	-24.746	14.892	-24.795	-24.734	14.874	14.962	1.9
BR			325.6	10.5	130.4	10.9							
CG			271.8	6.4	99.6	2.2							
AF	08_05_2017	06:15	237.3	6.1	55.5	1.3	-24.835	14.555	-24.841	-24.727	14.540	14.819	1.8
BR			202.1	5.9	105.2	1.5							
CG			242.1	10.6	80.9	2.4							
AF	08_07_2017	02:55	282.6	5.5	99.6	1.7	-24.791	14.963	-24.840	-24.733	14.952	14.975	1.3
BR			--	--	--	--							
CG			272.0	7.0	106.7	1.5							
AF	08_08_2017	03:10	258.3	6.9	65.9	2.5	-24.698	14.788	-24.707	-24.691	14.771	14.816	0.6
BR			163.7	8.1	115.4	2.2							
CG			--	--	--	--							
AF	08_09_2017	18:52	251.0	6.6	56.3	1.7	-24.697	14.854	-24.713	-24.696	14.849	14.854	1.7
BR			72.5	5.5	98.0	1.3							
CG			--	--	--	--							
AF	10_06_2017	09:47	251.0	6.6	70.8	1.8	-24.707	14.841	-24.708	-24.704	14.838	14.842	1.8
BR			128.0	7.0	81.5	2.5							
CG			253.3	6.5	98.1	1.3							
AF	10_06_2017	09:56	251.0	6.6	57.7	1.6	-24.639	14.788	-24.655	-24.632	14.781	14.799	1.4
BR			128.0	7.0	77.3	2.7							
CG			230.9	9.9	111.6	3.8							
AF	10_06_2017	15:07	252.8	6.7	75.4	1.6	-24.624	14.776	-24.640	-24.616	14.773	14.788	1.4
BR			128.0	7.0	75.1	2.8							
CG			--	--	--	--							
AF	11_09_2017	09:10	241.8	6.4	74.0	1.7	-24.837	14.605	-24.870	-24.716	14.540	14.847	2.8
BR			206.6	5.7	106.9	1.2							
CG			249.0	7.3	73.3	1.9							
AF	12_03_2017	00:29	266.8	5.8	66.8	1.5	-24.700	14.920	-24.716	-24.682	14.910	14.928	1.6
BR			18.5	21.4	81.4	2385							
CG			263.7	3.7	90.8	1.6							
AF	12_03_2017	08:56	271.9	6.8	75.4	1.1	-24.709	14.877	-24.715	-24.702	14.853	14.890	1.5
BR			14.1	9.9	96.5	3.5							
CG			--	--	--	--							
AF	12_03_2017	20:28	281.7	6.9	94.8	1.0	-24.629	14.929	-24.656	-24.602	14.906	14.950	0.7
BR			47.3	11.5	76.4	3.3							
CG			--	--	--	--							
AF	12_03_2017	20:41	266.8	5.8	47.7	1.5	-24.715	14.851	-24.716	-24.714	14.848	14.855	1.0

BR			13.4	9.4	102.0	2.6							
CG			--	--	--	--							
AF	12_03_2017	20:55	257.7	6.2	57.4	5.8	-24.716	14.851	-24.716	-24.715	14.848	14.855	0.1
BR			10.1	11.8	91.7	4.2							
CG			--	--	--	--							
AF	12_07_2017	16:42	263.1	6.1	98.3	1.8	-24.757	14.941	-24.768	-24.748	14.930	14.945	1.9
BR			337.1	7.2	93.8	876.0							
CG			270.0	7.3	87.2	1.9							
AF	13_12_2017	08:12	261.1	6.3	64.2	1.6	-24.721	14.850	-24.726	-24.716	14.848	14.852	2.1
BR			296.7	22.7	85.3	8.5							
CG			249.0	7.3	84.5	2.5							
AF	14_02_2017	03:53	252.7	6.1	63.9	1.8	-24.688	14.777	-24.697	-24.679	14.766	14.792	1.9
BR			159.1	9.0	84.1	2.6							
CG			239.4	6.5	89.9	2.2							
AF	14_03_2017	20:51	242.6	6.7	56.1	1.5	-24.888	14.582	-24.940	-24.857	14.530	14.620	2.2
BR			212.3	5.7	49.5	1.3							
CG			--	--	--	--							
AF	15_05_2017	06:08	271.9	6.8	72.9	1.4	-24.707	14.884	-24.716	-24.677	14.875	14.913	0.7
BR			26.6	30.2	101.5	1231							
CG			261.3	7.7	106.3	2.7							
AF	15_05_2017	06:10	257.3	6.4	67.8	1.5	-24.707	14.864	-24.716	-24.694	14.850	14.887	1.3
BR			33.7	28.1	110.2	874.9							
CG			258.7	8.0	107.1	2.6							
AF	16_02_2017	05:20	259.1	6.4	73.4	1.9	-24.727	14.800	-24.732	-24.723	14.780	14.819	0.2
BR			192.8	4.5	84.5	2.9							
CG			--	--	--	--							
AF	16_04_2017	16:34	--	--	--	--	-24.797	14.717	-24.810	-24.741	14.710	14.805	1.3
BR			211.8	6.0	112.1	1.4							
CG			235.0	8.3	59.7	2.1							
AF	16_08_2017	06:02	261.1	6.3	74.0	1.7	-24.692	14.852	-24.716	-24.653	14.848	14.856	1.6
BR			80.2	6.9	83.2	2.3							
CG			--	--	--	--							
AF	16_11_2017	00:58	--	--	--	--	-24.712	14.920	-24.716	-24.699	14.901	14.937	0.8
BR			3.6	12.7	112.5	5.0							
CG			262.9	6.3	101.0	1.6							
AF	17_02_2017	04:27	266.3	6.5	70.2	1.4	-24.717	14.851	-24.721	-24.714	14.848	14.865	-0.4
BR			0.1	16.9	150.1	7.8							
CG			--	--	--	--							
AF	17_03_2017	12:28	247.9	7.0	43.3	2.0	-24.800	14.683	-24.829	-24.782	14.630	14.706	2.9
BR			206.6	6.1	68.6	1.6							
CG			225.0	6.9	86.1	2.5							
AF	17_05_2017	01:00	262.2	6.9	75.2	1.8	-24.627	14.922	-24.662	-24.612	14.903	14.930	2.2
BR			54.4	11.8	88.3	4.5							
CG			262.9	6.3	59.5	2.6							
AF	17_05_2017	01:33	270.0	6.6	81.5	1.4	-24.700	14.860	-24.716	-24.677	14.848	14.876	0.3
BR			54.4	11.8	89.7	4.4							
CG			--	--	--	--							
AF	18_02_2017	04:13	266.3	6.5	73.9	1.5	-24.721	14.852	-24.737	-24.716	14.848	14.865	0.0
BR			310.7	22.1	75.9	14.2							
CG			--	--	--	--							
AF	18_02_2017	13:31	257.7	6.2	82.7	1.6	-24.712	14.851	-24.716	-24.707	14.848	14.854	2.4
BR			54.1	5.7	41.1	1.1							
CG			241.7	6.9	73.3	2.1							
AF	18_02_2017	15:12	265.0	6.0	84.6	1.2	-24.709	14.851	-24.716	-24.680	14.848	14.865	1.0
BR			60.5	5.9	91.3	1.8							
CG			--	--	--	--							
AF	18_04_2017	06:20	242.4	8.6	69.0	8.9	-24.686	14.728	-24.692	-24.676	14.694	14.729	1.0
BR			165.9	8.2	92.4	2.4							
CG			236.3	14.1	69.2	6.7							
AF	18_04_2017	06:30	260.6	6.7	70.4	1.8	-24.708	14.851	-24.716	-24.650	14.848	14.876	1.2
BR			67.1	9.9	121.5	3.2							
CG			255.5	7.3	66.8	2.1							
AF	18_07_2017	10:56	271.9	6.8	93.8	2.5	-24.716	14.865	-24.730	-24.708	14.848	14.920	1.7
BR			0.1	16.9	152.5	7.3							
CG			--	--	--	--							
AF	18_08_2017	03:42	247.6	11.1	54.7	2.1	-24.707	14.719	-24.710	-24.697	14.670	14.740	1.1
BR			175.2	5.6	87.3	4.1							
CG			--	--	--	--							
AF	18_11_2017	04:19	2.0	7.0	137.9	3.1	-24.349	15.022	-24.367	-24.338	15.011	15.046	1.2

BR			80.9	8.0	66.5	4.9							
CG			53.1	8.1	123.9	2.6							
AF	19_02_2017	23:23	254.8	5.9	94.6	1.4	-24.775	14.750	-24.794	-24.766	14.731	14.765	0.6
BR			210.9	8.7	72.7	3.7							
CG			--	--	--	--							
AF	19_12_2017	01:04	271.8	6.2	109.0	1.6	-24.785	14.902	-24.828	-24.767	14.890	14.935	2.6
BR			308.2	11.4	90.1	13.3							
CG			264.3	6.7	83.4	2.8							
AF	20_07_2017	21:12	240.8	7.1	73.0	2.0	-24.770	14.714	-24.795	-24.760	14.670	14.740	1.8
BR			202.1	5.9	84.3	1.9							
CG			243.5	11.4	73.9	4.1							
AF	20_08_2017	00:58	249.7	7.1	65.8	2.2	-24.625	14.764	-24.631	-24.616	14.755	14.765	1.0
BR			131.9	7.6	71.5	2.7							
CG			--	--	--	--							
AF	21_03_2017	23:02	265.1	5.8	67.4	2.3	-24.710	14.918	-24.722	-24.698	14.874	14.952	2.1
BR			3.6	12.7	143.8	3.9							
CG			279.5	6.7	106.9	1.8							
AF	21_04_2017	01:36	270.0	6.6	72.4	1.7	-24.699	14.871	-24.712	-24.684	14.854	14.887	0.4
BR			37.2	6.5	97.0	7.3							
CG			--	--	--	--							
AF	21_10_2017	03:22	282.1	7.1	58.7	1.2	-25.235	14.979	-25.360	-25.110	14.947	15.010	1.9
BR			270.1	17.0	69.8	5.9							
CG			--	--	--	--							
AF	22_02_2017	16:43	264.7	6.3	68.1	1.6	-24.718	14.864	-24.724	-24.713	14.850	14.877	2.1
BR			353.0	25.2	105.7	21.4							
CG			255.6	6.4	86.3	1.8							
AF	22_03_2017	11:49	284.1	6.2	69.0	3.1	-24.707	14.960	-24.758	-24.659	14.942	14.983	1.5
BR			4.5	15.6	149.5	4.1							
CG			272.0	7.0	88.5	1.8							
AF	22_07_2017	00:53	--	--	--	--	-24.694	14.966	-24.701	-24.683	14.961	14.988	0.3
BR			10.8	9.5	92.3	3.1							
CG			272.3	8.1	104.4	1.9							
AF	22_07_2017	23:35	285.7	6.1	72.8	1.7	-24.746	14.936	-24.756	-24.740	14.925	14.942	2.1
BR			340.6	11.3	54.4	4.6							
CG			265.8	7.5	65.0	2.0							
AF	22_11_2017	22:55	271.8	6.2	119.2	2.1	-24.684	14.880	-24.699	-24.647	14.865	14.895	0.7
BR			45.0	13.0	103.2	2.7							
CG			--	--	--	--							
AF	23_02_2017	19:46	243.4	6.1	72.4	1.4	-24.717	14.683	-24.723	-24.716	14.673	14.697	1.4
BR			181.1	4.0	80.2	0.8							
CG			223.4	8.2	75.4	2.0							
AF	23_03_2017	02:00	268.3	6.0	72.6	1.6	-24.661	14.873	-24.664	-24.658	14.872	14.875	0.6
BR			67.0	5.7	57.6	1.5							
CG			260.6	6.7	69.9	1.3							
AF	23_12_2017	10:51	271.9	6.8	82.0	1.4	-24.753	14.879	-24.770	-24.737	14.865	14.893	2.0
BR			310.3	11.9	92.0	15.8							
CG			--	--	--	--							
AF	24_05_2017	05:16	--	--	--	--	-24.746	14.977	-24.750	-24.745	14.976	14.989	0.5
BR			200.8	9.1	83.5	3.5							
CG			275.0	8.8	76.1	4.0							
AF	24_09_2017	01:14	353.1	6.1	93.9	3.2	-24.353	14.882	-24.355	-24.352	14.867	14.891	0.5
BR			--	--	--	--							
CG			122.7	12.2	86.0	4.2							
AF	24_09_2017	03:38	5.5	9.6	101.2	3.3	-24.349	14.895	-24.350	-24.345	14.880	14.913	0.3
BR			--	--	--	--							
CG			118.5	16.2	70.1	5.3							
AF	24_09_2017	04:26	255.5	7.3	67.6	2.0	-24.771	14.757	-24.808	-24.758	14.710	14.778	1.9
BR			210.9	11.6	104.7	4.0							
CG			--	--	--	--							
AF	24_09_2017	04:51	356.2	6.8	81.4	6.3	-24.353	14.887	-24.354	-24.352	14.876	14.902	0.2
BR			--	--	--	--							
CG			119.7	12.6	92.8	4.5							
AF	24_09_2017	06:09	241.8	6.4	65.5	3.2	-24.910	14.567	-24.943	-24.836	14.548	14.631	2.8
BR			213.7	6.3	97.1	1.6							
CG			259.5	7.4	101.9	1.9							
AF	24_12_2017	06:37	--	--	--	--	-24.716	14.920	-24.724	-24.711	14.909	14.931	0.5
BR			0.1	11.9	86.4	3.0							
CG			262.9	8.4	114.7	1.8							
AF	25_02_2017	14:01	264.1	7.0	91.9	1.6	-24.635	14.832	-24.653	-24.626	14.828	14.837	1.2

BR			102.2	8.6	84.5	2.5							
CG			235.3	6.4	105.6	1.7							
AF	25_06_2017	13:49	--	--	--	--	-24.689	14.935	-24.701	-24.680	14.925	14.944	1.5
BR			18.5	8.0	112.3	1.8							
CG			265.8	7.5	77.2	3.4							
AF	25_06_2017	13:50	--	--	--	--	-24.705	14.927	-24.712	-24.693	14.918	14.944	1.6
BR			6.1	10.6	84.4	2.7							
CG			264.3	6.7	93.3	1.9							
AF	25_09_2017	00:36	356.2	6.8	104.3	2.9	-24.352	14.866	-24.353	-24.352	14.865	14.875	0.5
BR			91.4	5.0	56.8	1.8							
CG			124.6	12.9	60.5	4.6							
AF	25_10_2017	06:35	264.8	6.1	68.9	1.2	-24.666	14.837	-24.715	-24.637	14.830	14.847	0.9
BR			102.5	7.3	84.1	2.4							
CG			--	--	--	--							
AF	26_09_2017	05:19	257.9	7.1	62.2	2.0	-24.756	14.952	-24.778	-24.740	14.930	14.963	2.7
BR			341.6	12.8	124.7	4.0							
CG			270.0	7.5	84.3	1.4							
AF	27_01_2017	05:37	255.1	6.6	110.3	1.5	-24.698	14.773	-24.706	-24.690	14.748	14.806	0.2
BR			166.8	6.6	80.5	1.2							
CG			--	--	--	--							
AF	27_01_2017	11:31	263.4	7.8	113.4	3.9	-24.715	14.849	-24.716	-24.713	14.848	14.851	0.4
BR			39.3	14.3	117.8	5.4							
CG			--	--	--	--							
AF	27_04_2017	06:49	251.0	6.6	65.4	1.6	-24.656	14.784	-24.700	-24.638	14.770	14.831	1.0
BR			134.9	9.6	79.5	3.0							
CG			247.8	8.6	102.7	3.5							
AF	27_04_2017	16:03	255.1	6.6	69.8	1.1	-24.788	14.749	-24.793	-24.776	14.746	14.766	1.8
BR			216.2	6.3	73.7	2.1							
CG			--	--	--	--							
AF	27_09_2017	23:04	277.2	6.3	74.4	2.5	-24.618	14.903	-24.651	-24.602	14.884	14.912	1.0
BR			60.6	11.1	83.1	2.8							
CG			--	--	--	--							
AF	27_10_2017	01:20	268.2	6.6	69.7	1.5	-24.739	14.889	-24.753	-24.727	14.873	14.906	1.9
BR			330.3	12.6	147.7	16.4							
CG			276.4	7.5	89.6	1.5							
AF	28_01_2017	05:15	242.7	6.2	34.4	0.7	-24.800	14.656	-24.810	-24.789	14.633	14.682	1.1
BR			203.7	3.3	71.7	1.8							
CG			236.8	6.5	107.6	1.7							
AF	28_01_2017	05:29	--	--	--	--	-24.678	14.881	-24.692	-24.668	14.871	14.890	0.2
BR			48.4	5.6	100.1	2.4							
CG			252.0	5.2	77.3	0.9							
AF	29_06_2017	22:34	270.0	6.6	90.3	1.9	-24.717	14.860	-24.723	-24.712	14.848	14.888	0.9
BR			353.8	22.4	118.7	7.4							
CG			--	--	--	--							
AF	29_09_2017	19:15	262.2	6.9	83.1	4.2	-24.736	14.812	-24.790	-24.678	14.771	14.832	1.9
BR			--	--	--	--							
CG			244.8	10.8	69.2	2.8							
AF	30_06_2017	00:46	271.8	6.2	83.6	1.6	-24.716	14.871	-24.725	-24.707	14.848	14.888	1.5
BR			354.4	20.2	138.3	7.4							
CG			--	--	--	--							
AF	30_12_2017	02:36	266.1	7.0	70.3	1.7	-24.688	14.837	-24.702	-24.636	14.816	14.842	1.6
BR			111.3	8.2	89.4	1.6							
CG			--	--	--	--							
AF	30_12_2017	07:50	249.9	6.4	56.6	9.5	-24.663	14.746	-24.675	-24.658	14.736	14.760	0.8
BR			152.5	7.2	87.0	2.7							
CG			--	--	--	--							
AF	31_07_2017	04:59	250.5	6.2	72.0	1.4	-24.711	14.832	-24.711	-24.703	14.807	14.833	2.0
BR			161.5	9.2	78.8	2.7							
CG			253.8	8.1	77.1	2.3							
AF	31_07_2017	05:03	257.3	6.4	70.3	1.8	-24.709	14.814	-24.715	-24.698	14.761	14.843	1.8
BR			168.1	10.5	74.8	2.4							
CG			260.2	6.9	71.1	2.0							
AF	31_08_2017	16:12	278.6	6.1	83.7	1.5	-24.683	14.922	-24.692	-24.663	14.902	14.954	1.3
BR			24.0	6.9	83.4	2.2							
CG			270.1	15.7	117.0	4.8							
AF	31_12_2017	06:07	261.1	6.3	59.3	2.1	-24.708	14.851	-24.716	-24.697	14.848	14.854	1.2
BR			66.8	13.3	115.9	4.5							
CG			260.2	6.9	104.3	1.9							