

Supplemental Table 4.1 Parameters of Earthquakes Located in or near the Rome Trough, Eastern Kentucky

Earthquakes within a $\sim 2^\circ$ by 2° area centered on the center of the temporary network installed in Rome Trough of eastern Kentucky. Depth, focal depth below sea level; Npha, number of non-zero-weight phases used in the location; Nsta, number of stations whose phases were used; Dmin, distance to the closest station; Gap, largest azimuthal separation between stations; RMS, route-mean-square travel-time residual; ERY, ERX, ERZ, formal errors in latitude, longitude, and depth, respectively, at the 90 percent confidence level.

Date	Time	Latitude (°N)	Longitude (°E)	Depth (km)	M _L	M _C	Npha	Nsta	Dmin (km)	Gap (°)	RMS (s)	ERY (km)	ERX (km)	ERZ (km)
2015-06-27	07:16:24.7	38.6407	-82.9005	1.1	1.0	1.2	9	6	30.9	198	0.08	4.2	4.8	10.3
2015-07-03	05:20:52.7	36.8573	-83.7341	25.6	1.3	1.3	13	7	38.5	146	0.38	2.7	5.6	15.4
2015-10-18	07:24:11.3	38.7240	-82.5541	0.0	1.2	1.6	22	14	36.3	86	0.18	0.7	1.2	2.7
2015-11-29	01:27:29.9	38.2367	-83.2233	21.8	1.6	2.2	29	20	15.9	58	0.12	0.6	0.9	1.4
2015-12-22	15:20:33.0	38.2630	-83.4189	1.4	1.7	1.7	30	17	31.3	64	0.13	0.7	0.6	1.8
2016-02-02	08:09:02.4	38.3319	-84.3931	34.4	1.3	1.3	13	9	8.01	173	0.09	1.8	1.3	1.6
2016-02-24	03:30:05.0	38.5290	-83.8417	5.0	1.4	1.8	21	13	13.9	161	0.16	1.2	1.3	3.8
2016-03-08	14:25:29.4	38.9085	-82.4389	18.9	1.8	2.0	23	17	16.1	73	0.12	0.7	1.8	1.7
2016-04-26	19:24:03.8	38.1233	-83.5105	5.0	1.8	2.0	23	16	32.5	47	0.14	0.6	0.7	6.1
2016-05-27	06:04:18.0	38.7881	-82.4091	14.2	1.1	1.4	12	8	22.9	154	0.08	2.2	5.6	3.6
2016-08-06	12:39:13.8	37.8899	-82.0947	34.2	2.0	2.2	31	22	47.2	84	0.23	1.3	1.0	2.8
2016-09-20	11:10:52.9	37.6746	-82.7800	20.4	1.5	1.7	22	13	4.370	171	0.17	1.3	1.6	1.6
2016-09-22	12:57:21.5	37.3891	-82.5282	28.9	1.9	2.4	32	24	40.2	80	0.17	1.0	2.0	2.6
2016-10-13	11:56:20.2	38.9018	-83.1776	28.0	1.0	1.3	15	9	20.0	131	0.13	1.8	1.9	5.8
2016-10-17	10:14:17.4	37.6743	-82.2233	17.5	1.2	1.7	25	15	46.5	187	0.19	1.6	1.5	5.9

2016-11-02	12:29:41.3	38.7831	-82.6311	17.4	1.5	1.8	17	11	37.3	119	0.15	0.7	1.2	4.3
2016-12-03	16:54:19.2	37.7280	-84.2933	37.9	0.9	0.9	12	7	37.7	120	0.08	2.8	2.7	3.5
2016-12-10	22:19:08.9	38.2825	-83.3363	3.0	0.8	1.3	9	5	26.5	196	0.05	1.8	1.6	3.9
2016-12-22	04:34:26.4	38.4123	-83.1857	21.1	1.3	1.7	21	15	13.6	77	0.08	1.0	1.2	3.1
2017-01-03	11:25:17.5	38.1703	-83.3032	11.8	0.4	0.5	15	9	18.0	99	0.10	1.3	1.8	3.4
2017-01-23	06:30:23.3	38.5392	-82.3189	29.2	1.6	2.0	24	19	39.5	89	0.14	0.8	1.3	3.2
2017-01-25	22:54:10.4	38.6553	-83.3081	18.6	1.4	1.9	22	16	38.5	110	0.13	0.7	1.3	2.1
2017-02-04	08:25:32.8	36.9877	-83.3551	18.2	1.1	2.1	18	15	32.1	80	0.20	1.2	3.0	4.6
2017-02-20	03:49:37.2	37.9669	-82.5262	10.5	0.3	1.1	19	10	9.47	237	0.16	1.1	2.0	1.7
2017-02-22	09:44:36.7	37.2125	-82.8404	17.2	1.2	2.2	22	18	32.8	121	0.14	0.9	1.8	3.0
2017-03-04	12:43:17.9	38.4965	-83.0209	20.8	1.7	2.6	20	14	12.60	225	0.12	1.6	1.3	2.3
2017-03-26	17:56:13.9	38.1194	-83.3006	19.5	0.5	0.4	12	8	17.2	222	0.14	2.3	3.0	3.6
2017-05-14	05:03:26.8	38.7161	-83.7899	19.0	1.4	1.8	12	11	32.4	213	0.07	2.3	5.9	3.7
2017-05-16	20:42:24.7	36.9024	-83.3834	24.0	2.2		25	20	41.8	81	0.16	0.9	1.5	3.8
2017-06-20	02:06:48.3	37.2513	-83.3409	7.5	2.1	2.9	27	22	11.9	100	0.20	1.3	1.8	4.0
2017-06-26	21:18:50.5	38.7142	-83.7701	14.5	1.6	1.6	11	6	32.0	181	0.04	1.3	2.9	5.7
2017-07-17	05:03:33.2	38.0370	-83.4670	9.8	0.4	0.4	12	7	23.3	238	0.07	1.4	1.6	5.6
2017-07-18	22:52:20.5	38.4570	-83.2152	5.0	1.1	1.5	12	6	37.7	270	0.04	3.2	3.1	20.3
2017-07-19	01:23:12.4	38.4524	-83.2012	10.3	0.7	1.0	10	5	16.5	287	0.05	3.1	3.0	13.4
2017-08-24	05:56:10.4	37.9922	-84.0772	9.9	1.0	1.2	13	9	16.2	244	0.12	1.4	3.0	5.3
2017-09-04	13:43:06.9	37.9930	-83.1262	16.5	1.4	1.7	30	17	13.90	56	0.08	0.5	0.5	1.1
2017-10-13	07:02:09.6	38.3673	-83.6159	10.1	1.0	1.6	22	14	13.4	79	0.12	0.9	0.7	2.5
2017-10-16	22:10:15.0	37.9919	-84.4791	16.0	1.6	2.1	16	11	5.18	102	0.10	0.7	1.3	1.1
2017-10-18	15:54:38.6	37.9992	-84.4748	18.6	1.9	2.5	21	17	33.9	102	0.11	1.0	1.3	2.0

2017-10-22	01:12:04.9	37.1775	-83.6400	15.2	1.2	1.9	12	9	51.4	138	0.12	2.8	4.1	11.1
2017-10-23	22:04:07.3	37.5585	-83.2108	16.1	1.0	1.0	16	9	10.6	217	0.15	1.5	1.3	1.8
2017-10-30	05:39:37.1	36.8551	-83.8325	17.0	2.6	3.0	21	16	42.8	131	0.10	0.9	1.3	4.3
2017-11-03	02:18:25.4	38.5675	-83.8634	11.9	0.9	0.9	12	7	18.5	169	0.15	2.6	1.9	5.9
2017-11-10	14:22:05.7	37.4472	-83.3871	18.4	1.5	1.9	16	10	20.60	244	0.11	2.1	1.1	1.4
2017-11-11	00:37:08.7	38.4408	-83.6437	8.9	0.9	1.3	15	10	9.48	122	0.11	0.9	1.6	2.7
2017-12-17	05:08:35.9	38.6803	-83.9036	12.5	2.0	3.5	31	23	31.2	75	0.14	0.9	1.1	3.3
2018-01-22	12:07:43.5	36.8898	-83.6861	27.3	1.9	2.3	21	14	40.3	74	0.23	1.5	2.8	7.0
2018-03-09	16:27:02.1	37.2758	-82.9741	15.0	1.8	1.9	18	12	20.8	181	0.18	1.5	2.1	5.2
2018-03-25	09:26:49.6	38.6427	-83.4276	15.6	1.1	2.3	25	19	20.9	113	0.08	0.6	0.7	2.0
2018-04-06	17:34:58.3	37.5528	-82.5526	21.9	1.5	1.8	19	12	36.6	282	0.13	2.6	2.7	7.3
2018-05-27	08:40:46.3	37.0616	-82.9554	22.9	0.9	1.5	13	12	30.7	209	0.22	3.9	6.8	5.6
2018-06-16	08:02:00.3	37.0165	-83.4311	18.6	1.0	1.4	13	9	32.8	154	0.13	1.0	3.3	3.5
2018-06-18	02:13:57.0	37.3150	-83.3801	0.9	1.0	1.8	15	12	16.9	127	0.11	1.6	2.6	3.6
2018-07-18	02:35:18.4	38.0367	-83.4335	12.2	0.7	0.7	14	8	21.0	178	0.13	1.4	1.6	4.6
2018-07-25	12:42:19.0	37.6659	-82.7471	16.3	0.9	0.7	24	13	4.41	246	0.17	1.6	2.2	1.3
2018-08-02	23:08:22.0	38.2920	-83.9066	7.6	1.5	2.2	26	19	20.2	122	0.18	1.0	0.9	6.3