

Table of ceasefire violations as of 20 November 2016¹

SMM position	Location of event	Observation	Type of weapon/ammunition	Date/time	
Park Inn Hotel (“DPR”-controlled, Donetsk city centre)	5-8km NW	Heard 11 undetermined explosions	N/K	18 November, 19:00-19:18	
	5-8km WSW	Heard 16 undetermined explosions		18 November, 19:20-19:30	
	5-8km NW	Heard 2 undetermined explosions		18 November, 19:32	
	5-8km WSW	Heard 1 undetermined explosion		18 November, 19:35	
	5-8km NW	Heard 2 undetermined explosions		18 November, 19:36	
	5-8km WSW	Heard 7 undetermined explosions		18 November, 19:39	
	7-10km WSW	Heard 6 undetermined explosions		18 November, 19:54	
	5-8km NW	Heard 6 undetermined explosions		18 November, 19:54-20:07	
	5-8km WSW	Heard 7 undetermined explosions		18 November, 20:11	
	7-10km WSW	Heard 1 undetermined explosion		18 November, 20:13	
	5-8km NW	Heard 13 undetermined explosions		18 November, 20:25 - 20:32	
	7-10km WSW	Heard 11 undetermined explosions		18 November, 20:36	
	5-8km NW	Heard 6 undetermined explosions		18 November, 20:39	
	7-10km WSW	Heard 7 undetermined explosions		18 November, 20:45	
	7-10km WSW	Heard 31 undetermined explosions		18 November, 20:50 - 20:58	
	5-8km NW	Heard 2 undetermined explosions		18 November, 20:11	
	7-10km WSW	Heard 34 undetermined explosions		18 November, 21:00-20:15	
	5-8km NW	Heard 4 undetermined explosions		18 November, 21:24	
	7-10km WSW	Heard 16 undetermined explosions Heard 23 undetermined explosions Heard 7 undetermined explosions		18 November, 21:25 - 21:36	
				18 November, 21:43 - 22:00	
				18 November, 22:02-22:08	
	5-8km NW	Heard 1 undetermined explosions		18 November, 22:08	
	7-10km WSW	Heard 12 undetermined explosions		18 November, 22:14-22:34	
	5-8km NW	Heard 3 undetermined explosions		18 November, 22:35	
	7-10km WSW	Heard 23 undetermined explosions Heard 10 undetermined explosions Heard 29 undetermined explosions		18 November, 22:40-23:06	
				18 November, 23:35-23:49	
				19 November, 00:01-00:17	
	3-5km NNW	Heard 3 bursts (3-5 shots each)		Small arms	19 November, 00:20
	6-10km NNW	Heard 5 undetermined explosions		N/K	19 November, 00:20-00:26
	7-10km WSW	Heard 9 undetermined explosions	19 November, 00:30-00:44		
Heard 10 undetermined explosions		19 November, 00:59			
7-10km NE	Heard 1 undetermined explosion	19 November, 01:47			
2-3km NE	Heard 3 bursts (2 shots each)	Small arms	19 November, 02:14		
3-5km NE	Heard 1 burst (10 shots)		19 November, 02:20		

¹ The table only includes ceasefire violations directly observed by the SMM and it may include those also assessed to be live-fire exercises, controlled detonations, etc. Details provided—in terms of distance, direction, weapons-type, etc.—are based on assessments provided by monitors on the ground, and are not always necessarily precise. When information is not known (indicated with an “N/K”), the SMM was unable to ascertain such information due to distance, weather conditions and/or other considerations. Ceasefire violations recorded by more than one patrol and assessed to be the same are entered only once.

	7-10km N	Heard 18 undetermined explosions	N/K	19 November, 02:40-02:54	
Debaltseve ("DPR"-controlled, 58km NE of Donetsk)	0.5-0.6km N	Heard 2 explosions (outgoing)	Mortar N/K (calibre)	18 November, 20:48-20:50	
	6-12km NW	Heard 12 undetermined explosions	N/K		
	N/K N/K	Heard 1 bursts (3 shots)		18 November, 20:53	
	0.5-0.6km N	Heard 14 explosions (outgoing)	Mortar N/K (calibre)	18 November, 20:57-21:00	
	N/K N/K	Heard 6 explosions (impacts)		18 November, 21:00-21:02	
	N/K N	Heard 1 explosion (outgoing)	N/K	18 November, 21:15	
	3-4km N	Heard 1 explosion (impact)		18 November, 21:22	
		Heard 1 explosion (impact)		18 November, 21:23	
		Heard 2 explosions (impacts)		18 November, 21:25	
		Heard 2 explosions (impacts)		18 November, 21:27	
		Heard 3 explosions (impacts)		18 November, 21:28	
	6-12km NW	Heard 23 undetermined explosions		N/K	18 November, 21:30-22:20
		Heard 59 undetermined explosions			18 November, 22:45-22:59
	6-12km N	Heard 2 undetermined explosions			19 November, 03:55
	1-4km N	Heard 2 explosions (outgoing)			19 November, 04:02
4-10km N	Heard 4 undetermined explosions	19 November, 06:15			
Horlivka ("DPR"-controlled, 39km NE of Donetsk)	5-10km SW	Heard 3 bursts (3-5 shots each)	Small arms		18 November, 17:53
		Heard 5 undetermined explosions	N/K		
		Heard 15 shots	Small arms		18 November, 18:00
		Heard 2 undetermined explosions	N/K		
		Heard 1 undetermined explosion			18 November, 18:19
		Heard 1 undetermined explosion	HMG	18 November, 18:20	
		Heard at least 6 bursts (3-5 shots each)			
		Heard at least 3 bursts (3-5 shots each)	Small arms	18 November, 18:25	
		Heard 2 undetermined explosions	N/K	18 November, 18:26	
	8-12km N	Heard at least 10 bursts (3-5 shots each)	HMG	18 November, 18:30	
	5-10km SW	Heard at least 6 bursts (3-5 shots each)	Small arms	18 November, 18:33	
	8-12km N	Heard at least 20 bursts (3-5 shots each)	HMG	18 November, 18:42	
		Heard 10 shots	Small arms	18 November, 18:43	
	Heard at least 5 bursts (3-5 shots each)	18 November, 18:46			
	5-12km NW	Heard 1 undetermined explosion	N/K	18 November, 18:47	
		Heard 1 burst		18 November, 18:51	
	8-12km NNW	Heard 1 burst	Small arms	18 November, 18:53	
		Heard 4 shots			
	5-10km WSW	Heard 1 undetermined explosion	N/K	18 November, 18:57	
	8-12km NNW	Heard 1 burst	Small arms		18 November, 19:02
		Heard 2 burst (3-5 shots each)		18 November, 19:08	
	5-10km WSW	Heard 2 burst (3-5 shots each)	N/K	18 November, 19:12	
		Heard 1 undetermined explosion		18 November, 19:19	
	8-12km N	Heard 1 undetermined explosion	HMG	18 November, 19:26	
		Heard at least 8 bursts (3-5 shots each)	N/K	18 November, 19:27	
		Heard 1 undetermined explosion	HMG	18 November, 19:27-19:30	
		Heard at least 30 bursts (3-5 shots each)	N/K	18 November, 19:30	
		Heard 1 undetermined explosion	HMG	18 November, 19:33	
		Heard 2 bursts (3-5 shots each)	N/K	18 November, 19:34	
		Heard 3 undetermined explosions	Small arms	18 November, 19:35	
Heard 3 shots					
Heard 2 burst (3-5 shots each)		HMG	18 November, 19:36		
Heard 3 undetermined explosions	N/K				

		Heard at least 30 bursts (3-5 shots each)	HMG	18 November, 19:36-19:37
		Heard 1 undetermined explosion	N/K	18 November, 19:38
		Heard at least 10 bursts (3-5 shots each)	HMG	18 November, 19:39
		Heard 4 undetermined explosion	N/K	
		Heard at least 80 bursts (3-5 shots each)	HMG	18 November, 19:41-19:43
		Heard 5 undetermined explosions	N/K	18 November, 19:41-19:43
	5-12km NW	Heard at least 80 bursts (3-5 shots each)	HMG	18 November, 19:45-19:46
	8-12km N	Heard 4 undetermined explosions	N/K	18 November, 19:46-19:47
	5-12km NW	Heard at least 10 bursts (3-5 shots each)	HMG	18 November, 19:49
	8-12km N	Heard 1 undetermined explosion	N/K	18 November, 19:50
	5-12km NW	Heard at least 120 bursts (3-5 shots each)	HMG	18 November, 19:50-19:52
	8-12km N	Heard 1 undetermined explosion	N/K	18 November, 19:53
	5-12km NW	Observed 1 illumination flare		HMG
		Heard at least 5 bursts (3-5 shots each)		
		Heard 9 undetermined explosions	N/K	18 November, 19:56-19:58
		Heard at least 110 bursts (3-5 shots each)	HMG	18 November, 20:00-20:02
		Heard 3 undetermined explosions	N/K	18 November, 20:00-20:03
		Observed 1 illumination flare		18 November, 20:01
	5-10km SW	Heard at least 3 bursts (3-5 shots each)	HMG	18 November, 20:04
		Heard at least 110 bursts (3-5 shots each)		
Heard 1 undetermined explosion		N/K	18 November, 20:05	
8-12km N	Heard 3 undetermined explosions			
5-10km SW	Heard at least 5 bursts (3-5 shots each)		18 November, 20:07	
8-12km N	Heard at least 5 bursts (3-5 shots each)		18 November, 20:08	
5-12km NW	Heard at least 4 bursts (3-5 shots each)		18 November, 19:01-19:05	
4-5 km ESE	Heard 6 bursts		HMG	18 November, 19:11-19:13
	Heard 6 bursts			18 November, 19:15-19:19
	Heard 7 bursts	18 November, 19:29		
	Heard 4 bursts	18 November, 19:50-19:53		
	Heard 7 bursts	18 November, 20:10-20:17		
6-8 km SE	Heard 9 undetermined explosions	N/K	18 November, 20:19-20:42	
	Heard 10 undetermined explosions		18 November, 20:43-20:47	
	Heard 6 undetermined explosions		18 November, 20:50-20:59	
	Heard 9 undetermined explosions		18 November, 21:03-21:05	
	Heard 3 undetermined explosions		18 November, 21:08-21:14	
	Heard 4 undetermined explosions		18 November, 21:21-21:26	
	Heard 8 undetermined explosions			
Svitlodarsk (government-controlled, 57km NE of Donetsk)				

		Heard 8 undetermined explosions		18 November, 21:46-21:54
	4-5 km ESE	Heard 11 undetermined explosions		18 November, 21:55-22:04
	4-6km SE	Heard 8 undetermined explosions		19 November, 06:02-06:15
		Heard 6 undetermined explosions		19 November, 07:43-08:13
	4-6km SSE	Heard 11 undetermined explosions		19 November, 12:26-12:50
	4-6km SE	Heard 5 bursts	HMG	19 November, 12:51
	4-6km SSE	Heard 3 undetermined explosions	N/K	19 November, 12:52-12:54
	4-6km SE	Heard 4 bursts	HMG	19 November, 12:54
	4-6km SSE	Heard 15 undetermined explosions	N/K	19 November, 13:03-13:43
		Heard 2 undetermined explosions		19 November, 15:32-15:33
	4-6km SE	Heard 14 bursts	HMG	19 November, 15:34-15:36
		Heard 6 explosions (outgoing)	Mortar (120 mm)	19 November, 15:38-15:40
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	4-6 km ESE	Recorded 3 undetermined explosions	N/K	18 November, 20:52
	4-6 km ESE	Recorded 1 undetermined explosion		18 November, 20:53
	4-6 km ESE	Recorded 2 undetermined explosions		18 November, 20:54
	4-6 km ESE	Recorded 1 undetermined explosion		18 November, 20:55
	4-6 km ESE	Recorded 1 undetermined projectile in flight from N to S		18 November, 21:12
	4-6 km ESE	Recorded 1 undetermined explosion		18 November, 21:12
	4-6 km ESE	Recorded 1 undetermined projectile in flight from N to S		18 November, 21:15
	2-4 km SE	Recorded 30 undetermined projectiles in flight from E to W		19 November, 06:56
	2-4 km SE	Recorded 4 undetermined explosions		19 November, 07:06-07:16
	2-4 km SE	Recorded 4 undetermined explosions		19 November, 16:21
	3-5km NE	Recorded 10 undetermined explosions		19 November, 17:01
		Recorded 3 undetermined explosions		19 November, 17:29
Recorded 8 undetermined explosions		19 November, 17:36		
SMM camera in Shyrokyne (20km E of Mariupol)	N/K NNE	Recorded 7 indirect rocket-assisted projectiles in flight from W to E	N/K	18 November, 22:04 – 22:05
		Recorded 11 bursts in flight from E to W		18 November, 22:04
		Recorded 3 indirect rocket-assisted projectiles in flight from W to E		18 November, 22:13 – 22:14
Mariupol (government-controlled, 102km S of Donetsk)	N/K E	Heard 8 undetermined explosions	N/K	19 November, 00:18
	N/K E	Heard 9 undetermined explosions		19 November, 06:45-07:03
	N/K E	Heard 10 undetermined explosions		19 November, 07:40 – 08:00
SMM camera at Oktiabr mine (9km NW of Donetsk city centre)	4-6km NE	Recorded 2 bursts from NW to SE	HMG	19 November, 16:29
		Recorded 7 bursts from SE to NW		19 November, 17:00

Petrivske (“DPR”-controlled, 41km south of Donetsk)	3-5km W	Heard 1 undetermined explosion	N/K	19 November, 10:58	
	2-3km S	Heard 2 undetermined explosions		19 November, 11:46	
Yasynuvata (“DPR”-controlled, 16km NE of Donetsk)	2-4km SW	Heard 11 undetermined explosions	N/K	19 November, 08:29-08:39	
	4-5km SW	Heard 2 undetermined explosions		19 November, 10:34	
	6-7km W	Heard 1 undetermined explosion		19 November, 10:39	
		Heard 2 undetermined explosions		19 November, 10:43	
		Heard 2 undetermined explosions		19 November, 10:53	
	4-5km SW	Heard 2 undetermined explosions		19 November, 11:38	
	1-2km W	Heard 1 undetermined explosion		19 November, 11:42	
	3-4km SW	Heard 4 undetermined explosions		19 November, 11:48	
	1-2km W	Heard 1 undetermined explosion		19 November, 11:55	
	5-6km SW	Heard 2 undetermined explosions		19 November, 11:56	
	6-7km SW	Heard 1 undetermined explosion		19 November, 12:02	
	6-7km W	Heard 12 undetermined explosions		19 November, 12:05	
	6-7km SW	Heard 1 undetermined explosion		19 November, 12:06	
	6-7km W	Heard 11 undetermined explosions		19 November, 12:09	
	3-5km NNW	Heard 1 undetermined explosion		19 November, 12:33	
	5-7km NW	Heard 1 undetermined explosion		19 November, 13:24	
	5-7km NE	Heard 1 undetermined explosion		19 November, 13:27	
	2-4km W	Heard 1 burst		Small arms	19 November, 13:34
	5-7km W	Heard 1 undetermined explosion	N/K	19 November, 13:37	
	3-4km W	Heard 1 undetermined explosion		19 November, 14:09	
3-4km NE	Heard 1 undetermined explosion	19 November, 14:10			
	Heard 1 undetermined explosion	19 November, 14:17			
Avdiivka (government-controlled, 17km N of Donetsk)	2-4km NE	Heard 1 explosion (outgoing)	Mortar (82mm)	19 November, 10:35	
	2-4km SE	Heard 2 explosions (outgoing)	N/K	19 November, 10:47	
	5-7km ESE	Heard 1 undetermined explosion		19 November, 11:07	
	5-7km SE	Heard 5 undetermined explosions		19 November, 11:08	
	5-7km NE	Heard 1 undetermined explosion		19 November, 11:14	
	3-5km E	Heard 7 bursts		HMG	19 November, 11:20
	5-8km E	Heard 1 undetermined explosion	N/K	19 November, 11:21	
	4-7km E	Heard 1 burst	HMG	N/K	19 November, 11:22
		Heard 2 undetermined explosions			
	5-7km E	Heard 2 undetermined explosions		19 November, 11:23-11:24	
	5-8km S	Heard 1 undetermined explosion		19 November, 11:25	
	2-4km SSE	Heard 39 undetermined explosions			19 November, 11:35-11:40
		Heard 2 bursts	Small arms		
		Heard 1 undetermined explosion	N/K		
Heard 1 burst		Small arms		19 November, 11:47	
5-8km S	Heard 2 undetermined explosions			19 November, 11:52	
	Heard 1 undetermined explosion	N/K		19 November, 12:00	
	Heard 12 undetermined explosions		19 November, 12:05		
4-6km S	Heard 5 bursts	HMG		19 November, 12:10-12:13	
Berdianske (government-controlled, 18km E of Mariupol)	N/K E	Heard 5 explosions (impacts)	N/K	19 November, 10:18-10:20	
N of Lebedynske (government-controlled, 16km NE of Mariupol)	5km NNE	Heard 13 undetermined explosions	N/K	19 November, 12:49-12:52	
0.4km N of Zaichenko (“DPR”-controlled, 26km NE of Mariupol)	N/K SW	Heard 1 explosion (outgoing)	N/K	19 November, 13:00	
1.6km SE of Lomakyne (government-controlled, 15km NE of Mariupol)	N/K ENE	Heard 6 bursts	Small arms	19 November, 13:13	

Orlivske (government-controlled, 23km NE of Mariupol)	4km NNE	Heard 1 undetermined explosion	N/K	19 November, 14:12
SMM camera in Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	0.6-0.8km SSE	Recorded 2 projectiles in flight from NE to SW	Anti-tank guided missile	17 November, 19:51
	0.4km SE	Recorded 1 illumination flare fired to SW	N/K	17 November, 21:02
Pervomaisk (“LPR”-controlled, 58km W of Luhansk)	10km SW	Heard 3 undetermined explosions	N/K	19 November, 10:40
Zolote (government-controlled, 60km W of Luhansk)	0.5-0.8km SE	Heard 1 undetermined explosion		19 November, 11:30
Kalynove (“LPR”-controlled, 60km W of Luhansk)	5km S	Heard 8 undetermined explosions		19 November, 12:20-12:41
Slovianoserbsk (“LPR”-controlled, 28km NW of Luhansk)	2-3km NW	Heard 2 bursts	Small arms	19 November, 12:27
Novooleksandrivka (65km W of Luhansk)	10-15km SE	Heard 4 undetermined explosions	N/K	19 November, 12:33-12:36
2km SW of Zolote (government-controlled 60km W of Luhansk)	500m NE	Heard 4 undetermined explosions		19 November, 13:18-13:22
Park Inn Hotel (“DPR”-controlled, Donetsk city centre)	7-9 km NNW	Heard 7 undetermined explosions	N/K	19 November, 18:42-18:46
		Heard 23 undetermined explosions		19 November, 19:03-19:53
		Heard 6 undetermined explosions		19 November, 20:07-20:38
	4-6 km NNW	Heard 10 undetermined explosions		19 November, 20:42-20:53
		Heard 9 undetermined explosions		19 November, 21:00-21:06
	3-4 km NNW	Heard 3 undetermined explosions		19 November, 21:08-21:12
	4-6 km NNW	Heard 6 undetermined explosions		19 November, 21:17-21:24
	3-4 km NNW	Heard 2 undetermined explosions		19 November, 21:27
		Heard 3 undetermined explosions		19 November, 21:42
	4-6 km NNW	Heard 11 undetermined explosions		19 November, 21:44
		Heard 84 undetermined explosions		19 November, 22:00-22:58
		Heard 7 undetermined explosions		19 November, 23:04-23:07
	7-9 km NNW	Heard 18 undetermined explosions		19 November, 23:22-23:54
		Heard 5 undetermined explosions		20 November, 00:10-00:40
		Heard 4 undetermined explosion		20 November, 00:59-01:02
Heard 14 undetermined explosions		20 November, 01:16-01:58		
		Heard 7 undetermined explosions		20 November, 02:58-03:42
SMM camera at Oktiabr mine (9km NW of Donetsk city centre)	4-5 km NNE	Recorded 17 tracers in flight from E to W	N/K	19 November, 19:11-19:20
		Recorded 21 tracers in flight from W to E		19 November, 19:11-19:20
		Recorded 5 undetermined projectiles in flight from W to E		19 November, 19:51
		Recorded 1 undetermined projectile in flight from W to E		19 November, 19:52
		Recorded 3 undetermined		19 November, 19:59-

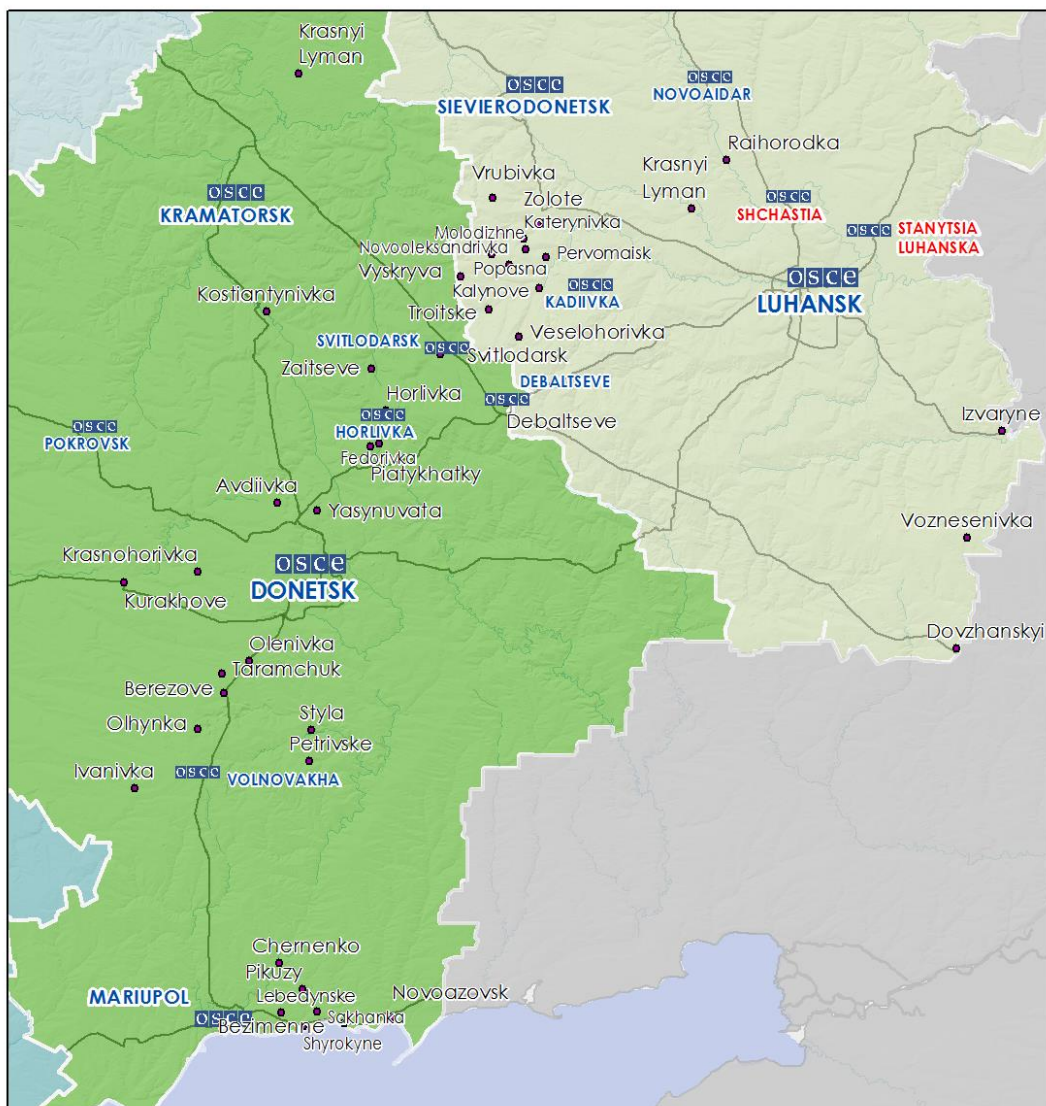
		projectiles in flight from E to W	20:01
		Recorded 1 undetermined explosion	19 November, 21:06
		Recorded 1 undetermined explosion	19 November, 21:13
	3-4 km NNE	Recorded 10 undetermined projectiles in flight from E to W	19 November, 21:55-21:56
		Recorded 44 undetermined projectiles in flight from E to W	19 November, 21:58-22:00
	4-5 km NNE	Recorded 6 undetermined explosions	19 November, 22:03-22:04
		Recorded 3 undetermined explosions	19 November, 22:11-22:13
		Recorded 22 undetermined projectiles in flight from W to E	19 November, 22:11-22:13
		Recorded 14 undetermined projectiles in flight from E to W	19 November, 22:11-22:13
		Recorded 2 undetermined projectiles in flight from W to E	19 November, 22:14
		Recorded 5 undetermined projectiles in flight from E to W	19 November, 22:14
		Recorded 10 undetermined explosions	19 November, 22:17-22:20
		Recorded 6 undetermined projectiles in flight from W to E	19 November, 22:21-22:23
		Recorded 4 undetermined projectiles in flight from E to W	19 November, 22:21-22:23
		Recorded 7 undetermined explosions	19 November, 22:21-22:25
		Recorded 40 tracers in flight from E to W	19 November, 22:25
		Recorded 2 undetermined explosions	19 November, 22:27
		Recorded 25 tracers in flight from E to W	19 November, 22:31-22:32
		Recorded 1 undetermined explosion	19 November, 22:40
		Recorded 2 undetermined explosions	19 November, 22:57
		Recorded 1 illumination flare	19 November, 23:28
		Recorded 1 illumination flare	19 November, 23:44
		2-3 km NNE	Recorded 1 undetermined projectile in flight from W to E
	2-3 km NNE	Recorded 1 undetermined projectile in flight from W to E	20 November, 03:57
	3-4 km NE	Recorded 6 bursts of tracers (4-6 shots each)	20 November, 15:55-15:59
		Recorded 9 bursts of tracers (4-6 shots each)	20 November, 16:01-16:02
	SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	4-5 km SSW	Recorded 1 undetermined projectile in flight from E to W
Recorded 1 undetermined explosion			19 November, 22:13
Recorded 1 undetermined explosion			19 November, 22:37
Recorded 1 undetermined explosion			19 November, 22:44
Recorded 4 undetermined explosions			19 November, 22:48
Recorded 1 undetermined explosion			19 November, 22:49
Recorded 2 undetermined explosions			19 November, 22:57
Recorded 1 illumination flare			19 November, 23:11
Recorded 2 undetermined			19 November, 23:26

		explosions		
		Recorded 3 undetermined explosions		19 November, 23:27
		Recorded 1 illumination flare		19 November, 23:28
		Recorded 1 illumination flare		19 November, 23:44
		Recorded 2 undetermined explosions		20 November, 00:22
		Recorded 2 undetermined explosions		20 November, 01:02
		Recorded 1 undetermined explosion		20 November, 01:16
		Recorded 1 undetermined explosion		20 November, 01:21
		Recorded 1 undetermined projectile in flight from W to E		20 November, 01:23
		Recorded 1 undetermined explosion		20 November, 01:27
	2-4 km SE	Recorded 6 shots of tracers		20 November, 15:57
	2.6 km SE	Recorded 22 shots of tracers	IFV (N/K) cannon (N/K calibre)	20 November, 16:03-16:04
	2-4 km SE	Recorded 21 shots of tracers	N/K	20 November, 16:15-16:21
Debaltseve ("DPR"-controlled, 58km NE of Donetsk)	5-12km NW	Heard 4 undetermined explosions	N/K	19 November, 19:10
	3-4km NW	Heard 4 explosions (outgoing)		19 November, 21:10
	5-12km NW	Heard 6 undetermined explosions		19 November, 21:42-21:58
		Heard 16 undetermined explosions		19 November, 22:52-23:12
		Heard 18 undetermined explosions		20 November, 02:30-03:50
Horlivka ("DPR"-controlled, 39km NE of Donetsk)	3-5km NE	Heard 1 shot	Anti-aircraft-gun (ZU-23-2, 23mm)	19 November, 21:24
		Heard 4 shots		19 November, 21:36
Svitlodarsk (government-controlled, 57km NE of Donetsk)	2-3km ESE	Heard 29 bursts	HMG	19 November, 19:00-19:20
	4-5km SE	Heard 4 undetermined explosions	Recoilless gun (SPG-9, 73mm)	19 November, 19:30-19:40
	2-3km ESE	Heard 7 bursts	HMG	19 November, 19:35-19:40
	4-5km SE	Heard 4 undetermined explosions	Recoilless gun (SPG-9, 73mm)	19 November, 19:55-20:00
	3-4km ESE	Heard 2 explosions (impacts)	AGL	19 November, 20:05-20:10
	2-3km ESE	Heard 35 bursts	Small arms	19 November, 20:15-20:55
		Heard 14 bursts	HMG	19 November, 20:15-20:25
		Heard 18 bursts		19 November, 20:30-21:00
	3-4km ESE	Heard 2 explosions (impacts)	AGL	19 November, 21:15
	2-3km ESE	Heard 13 bursts	HMG	19 November, 21:17-21:24
		Heard 8 bursts	Anti-aircraft-gun (ZU-23-2, 23mm)	19 November, 21:26-21:35
	4-5km SE	Heard 2 undetermined explosions	Recoilless gun (SPG-9, 73mm)	19 November, 21:27
	2-3km ESE	Heard 6 undetermined explosions	IFV (BMP-1) cannon (73mm)	19 November, 21:30-21:40
		Heard 18 bursts	HMG	19 November, 21:40-21:55
		Heard 25 bursts	Small arms	19 November, 22:10-22:25
Heard 5 undetermined explosions		IFV (BMP-1) cannon (73mm)	19 November, 22:22-22:24	
3-4km ESE	Heard 4 explosions (impacts)	AGL	19 November, 22:25-	

				22:30
	2-3km ESE	Heard 9 bursts	HMG	19 November, 23:00-23:15
		Heard 8 bursts	Anti-aircraft-gun (ZU-23-2, 23mm)	19 November, 23:35-23:52
	3-4km ESE	Heard 12 explosions (impacts)	AGL	20 November, 02:00-02:20
	2-3km ESE	Heard 18 bursts	HMG	20 November, 02:20-02:40
	4-5km SE	Heard 20 undetermined explosions	Mortar (120mm)	20 November, 04:12-04:45
		Heard 17 undetermined explosions		20 November, 05:40-06:00
	3-4km SE	Heard 5 undetermined explosions	N/K	20 November, 08:10-08:15
		Heard 3 undetermined explosions		20 November, 08:30-08:35
		Heard 4 bursts	HMG	
		Heard 5 undetermined explosions	N/K	20 November, 08:40-08:45
	1-2km SE	Heard 26 bursts	HMG	20 November, 16:50-17:22
		Heard 1 explosion (outgoing)	Recoilless gun (RPG-9, 73mm)	
		Heard 1 explosion (impact)		
		Heard 3 bursts	Anti-aircraft gun (23-2 23mm) or IFV (BMP-2) cannon (30mm)	
SMM camera in Shyrokyne (20km E of Mariupol)	N/K NNE	Recorded 2 undetermined explosions	N/K	19 November, 22:30
		Recorded 21 undetermined explosions		19 November, 22:32
		Recorded 3 undetermined explosions		19 November, 22:33
		Recorded 14 undetermined explosions		19 November, 23:05
Avdiivka (government-controlled, 17km N of Donetsk)	4-6km SE	Heard 6 bursts	HMG	20 November, 11:27
		Heard 8 bursts		20 November, 11:35
		Heard 2 explosions (impacts)	Mortar (82mm)	20 November, 11:36
		Heard 6 bursts	HMG	20 November, 11:56
		Heard 4 bursts		20 November, 12:15
		Heard 2 explosions (impacts)	Mortar (82mm)	20 November, 12:16
		Heard 1 undetermined explosion	N/K	20 November, 12:47
		Heard uncountable overlapping bursts	Small arms	20 November, 12:51
	Heard 2 explosions (impacts)	Mortar (82mm)	20 November, 12:52	
	Heard uncountable overlapping bursts and single shots	Small arms	20 November, 12:53	
	3km SE	Heard 1 explosion (outgoing)	Mortar (82mm)	20 November, 12:55
Heard 1 explosion (outgoing)		20 November, 13:04		
Verkhnoшыrokiyske (formerly Oktiabr, "DPR"-controlled, 29km NE of Mariupol)	N/K NNW	Heard 3 undetermined explosions	N/K	20 November, 10:15
Lebedynske (government-controlled, 16km ENE of Mariupol)	N/K E	Heard 2 undetermined explosions	N/K	20 November, 11:56
1.4km S of Sakhanka ("DPR"-controlled, 24km ENE of Mariupol)	N/K SW	Heard 2 undetermined explosions		20 November, 13:05
2km NE of Chernenko (government-controlled, 21km NE of Mariupol)	N/K S	Heard 25 undetermined explosions		20 November, 13:43-13:55
Sokolnyky ("LPR"-controlled, 38km NW of Luhansk)	3-5km SW	Heard 30 shots		HMG
	3-5km SW	Heard 4 shots	Cannon (30mm)	
Krasnyi Lyman ("LPR"-	3-5km SE	Heard intense exchange of fire	HMG, small arms,	20 November, 10:20-

controlled, 30km NW of Luhansk)			recoilless gun (SPG)	10:30
Molodizhne (“LPR”-controlled, 63km NW of Luhansk)	2-3km SW	Heard 2 undetermined explosions	AGL (AGS)	20 November, 11:29
Trokhizbenka (government-controlled, 32km NW of Luhansk)	3-4km SW	Heard 1 undetermined explosion	N/K	20 November, 12:06
Novooleksandrivka (65km west of Luhansk)	3-4km SW	Heard 3 bursts	HMG	20 November, 12:26
Troitske (government-controlled, 69km W of Luhansk)	5km S	Heard 8 undetermined explosions	N/K	20 November, 14:43
	5km S	Heard 2 bursts	HMG	
Kadiivka (formerly Stakhanov, “LPR”-controlled 50km W of Luhansk)	2km SE	Heard 3 bursts	Small arms	20 November, 15:15-15:17

Map of Donetsk and Luhansk regions²



² The SMM is actively deployed to ten locations throughout Ukraine, Kherson, Odessa, Lviv, Ivano-Frankivsk, Kharkiv, Donetsk, Dnipro, Chernivtsi, Luhansk and Kyiv, as per Permanent Council Decision 1117 of 21 March 2014. This map of eastern Ukraine is meant for illustrative purposes and indicates locations mentioned in the report, as well as those where the SMM has offices (monitoring teams, patrol hubs, and forward patrol bases) in Donetsk and Luhansk regions. (In red: forward patrol bases from which SMM staff has temporarily relocated since 27 September based on recommendations of security experts from participating States).