

Table of ceasefire violations as of 13 November 2016¹

SMM position	Location of event	Observation	Type of weapon/ammunition	Date/time
Debaltseve (“DPR”-controlled, 58km NE of Donetsk)	8-10km NW	Heard 5 undetermined explosions	N/K	11 November, 16:00-16:15
	5-8km WNW	Heard 74 undetermined explosions	N/K	11 November, 20:22-20:52
		Heard 76 undetermined explosions		11 November, 20:55-21:30
		Heard 20 undetermined explosions		11 November, 21:47-22:00
		Heard 59 undetermined explosions		12 November, 02:43-03:20
Horlivka (“DPR”-controlled, 39km NE of Donetsk)	7-8km NW	Heard 9 undetermined explosions	N/K	11 November, 18:47-18:48
	8-10km SSW	Heard 1 undetermined explosion		11 November, 18:55
	3-4km W	Heard an intense exchange of fire	HMG and small arms	11 November, 19:00 - 19:02
	4-5km W	Heard 3 explosions (impacts)	Mortar (82mm)	
	4-5km SSW	Heard 2 bursts	Small arms	11 November, 19:07
	7-8km W	Heard 3 undetermined explosions	N/K	11 November, 19:14
	8-10km SSW	Heard 1 undetermined explosion		11 November, 19:16
	7-8km W	Heard 1 undetermined explosion		11 November, 19:17
	8-10km SSW	Heard 2 undetermined explosions		11 November, 19:31
	3-4km W	Heard 22 bursts (2-5 shots each)	HMG	11 November, 19:32 - 19:36
		Heard at least 190 shots		
	4-5km W	Heard 42 shots	IVF (BMP-2) cannon (30mm)	
	6-7km W	Heard 3 undetermined explosions	N/K	
	3-4km W	Heard 1 burst (10 shots)	Small arms	11 November, 19:37
	4-5km W	Heard 12 bursts (2-3 shots each)	IVF (BMP-2) cannon (30mm)	11 November, 19:38 - 19:39
	3-4km W	Heard 14 bursts (3-10 shots each)	Small arms	11 November, 19:40
	5-6km W	Heard 4 bursts (2-3 shots each)	IVF (BMP-2) cannon (30mm)	11 November, 19:44
	7-8km WNW	Heard 5 undetermined explosions	N/K	11 November, 19:46
	7-8km SW	Heard 2 undetermined explosions		11 November, 19:58
	7-8km NW	Heard 3 undetermined explosions		11 November, 19:59-20:00
	4-5km WSW	Heard 7 explosions (outgoing)	IVF (BMP-1) cannon (73mm)	11 November, 20:05
		Heard 3 bursts	IVF (BMP-2) cannon (30mm)	
		Heard 2 bursts	Small arms	
Heard 10 shots		HMG		
Heard 7 bursts		Small arms		
Heard 7 shots				
4-5km W	Heard 9 shots		11 November, 20:07	
	Heard 3 shots	AGL		
	Heard 10 undetermined explosions	N/K		
	Heard at least 42 bursts	Small arms		
	Heard at least 45 bursts	Anti-aircraft gun (ZU-2, 23mm)		
	Heard 5 explosions (outgoing)	IVF (BMP-1) cannon	11 November, 20:08-20:11	

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.

			(73mm)	
	7-8km NW	Heard 2 undetermined explosions	N/K	11 November, 20:17
	8-9km W	Heard 1 undetermined explosion		11 November, 20:18
	5-6km NNW	Heard 8 bursts	HMG	11 November, 20:22-20:24
		Hear 1 explosion (impact)	Mortar (82mm)	
	5-6km W	Heard 6 explosions (outgoing)	IVF (BMP-1) cannon (73mm)	11 November, 20:27-20:32
	4-5km W	Heard 41 bursts	Small arms	11 November, 20:34-20:38
		Heard 18 undetermined explosions	N/K	
		Heard at least 12 bursts	IVF (BMP-2) cannon (30mm)	
		Heard at least 12 bursts	Anti-aircraft gun (ZU-2, 23mm)	
		Heard 9 bursts	Small arms	11 November, 20:39
		Heard 2 explosions (outgoing)	IVF (BMP-1) cannon (73mm)	11 November, 20:40
	4-5km WNW	Heard 1 undetermined explosion	N/K	11 November, 20:41
	5-6km W	Heard 10 undetermined explosions		11 November, 20:42-20:43
		Heard 5 bursts	Small arms	11 November, 20:45-20:50
		Heard 4 bursts	Anti-aircraft gun (ZU-2, 23mm)	
	4-5km W	Heard 12 undetermined explosions	N/K	
		Heard 4 bursts	IVF (BMP-2) cannon (30mm)	
	5-7km NW	Heard 1 undetermined explosion	N/K	11 November, 20:52
	7-8km W	Heard 1 undetermined explosion		11 November, 20:54
	3-4km WNW	Heard 13 bursts (3-5 shots each)	Small arms	11 November, 20:59
	5-6km NW	Heard 2 explosions (outgoing)	N/K	11 November, 21:11
	3-5km W	Heard 19 bursts	Small arms	11 November, 21:13-21:14
		Heard 11 bursts	HMG	
	5-6km NW	Heard 2 undetermined explosions	N/K	11 November, 21:15
		Heard 2 explosions (outgoing)		11 November, 21:24
	3-5km NW	Heard 13 bursts	Small arms	11 November, 21:25-21:27
		Heard 11 bursts	HMG	
	7-8km NW	Heard 4 undetermined explosions	N/K	11 November, 21:28
	4-5km NW	Heard 10 bursts (3-5 shots each)	Small arms	11 November, 21:29-21:31
		Heard 2 bursts (2-3 shots each)	HMG	
	8-9km NW	Heard 4 undetermined explosions	N/K	11 November, 21:33-21:42
		Heard 14 undetermined explosions		
	5-6km NW	Heard 4 bursts	HMG	11 November, 21:43
	8-9km NW	Heard 7 undetermined explosions	N/K	11 November, 21:43-21:47
	5-6km NW	Heard 7 bursts	HMG	11 November, 21:50
	4-5km NW	Heard 1 burst		
	5-6km NW	Heard 3 undetermined explosions	N/K	11 November, 21:51-21:57
	4-5km NW	Heard 9 undetermined explosions		
			Heard 7 bursts	HMG
	8-9km NNW	Heard 1 undetermined explosion	N/K	11 November, 21:58
	4-5km NNW	Heard 1 burst (4 shots)	HMG	11 November, 22:06-22:11
		Heard 11 bursts (3-5 shots each)	Small arms	
	8-9km W	Heard 19 undetermined explosions	N/K	11 November, 22:17-22:31
	5-6km W	Heard 1 burst	Anti-aircraft gun (ZU-2, 23mm)	11 November, 22:23
	8-9km W	Heard 5 undetermined explosions	N/K	11 November, 22:34-22:35
	5-6km W	Heard 1 burst	Anti-aircraft gun (ZU-2, 23mm)	11 November, 22:36-22:38
	8-9km W	Heard 6 undetermined explosions	N/K	

	5-6km W	Heard 3 bursts	HMG	11 November, 22:40
		Heard 2 bursts	IVF (BMP-2) cannon (30mm)	
	8-9km W	Heard 2 undetermined explosions	N/K	11 November, 22:42
	5-6km W	Heard 44 bursts	Anti-aircraft gun (ZU-2, 23mm)	11 November, 23:08-23:30
	6-7km W	Heard 2 explosions (impacts)	N/K	11 November, 23:31
	5-6km WNW	Heard 7 bursts	IVF (BMP-2) cannon (30mm)	11 November, 23:32-23:33
	5-6km W	Heard 3 bursts	Anti-aircraft gun (ZU-2, 23mm)	11 November, 23:35
	5-6km WNW	Heard 2 undetermined explosions	N/K	11 November, 23:36
		Heard 3 explosions (outgoing)	IVF (BMP-1) cannon (73mm)	11 November, 23:38
	4-5km WNW	Heard 1 burst	HMG	
	5-6km WNW	Heard 10 bursts	Anti-aircraft gun (ZU-2, 23mm)	11 November, 23:40-23:43
		Heard 2 undetermined explosions	N/K	11 November, 23:44
		Heard 1 explosion (outgoing)	IVF (BMP-1) cannon (73mm)	11 November, 23:47
	5-6km W	Heard 2 undetermined explosions	N/K	11 November, 23:57-00:08
5-6km WNW	Heard 1 undetermined explosion	11 November, 00:10		
Park Inn Hotel ("DPR"-controlled, Donetsk)	5-10km NW	Heard 134 undetermined explosions	N/K	11 November, 19:56-22:30
		Heard 220 undetermined explosions		11 November, 22:32-23:42
		Heard 53 undetermined explosions		12 November, 00:12-01:42
SMM camera in Shyrokyne (20km E of Mariupol)	N/K NNE	Recorded 1 shot in flight from ESE to WNW	N/K	11 November, 20:08
		Recorded 6 burst of direct fire (3 shots each) fired from ESE to WNW		11 November, 20:10
		Recorded 1 shot in flight from ESE to WNW		11 November, 20:11
		Recorded 5 shots in flight from ESE to WNW		11 November, 20:34
		Recorded 6 indirect rocket assisted projectiles in flight from ESE to WNW		11 November, 20:41
		Recorded 2 shots in flight from ESE to WNW		11 November, 20:49
		Recorded 2 shots in flight from ESE to WNW		11 November, 20:50
		Recorded 2 shots in flight from ESE to WNW		11 November, 20:51
		Recorded 1 shot in flight from ESE to WNW		11 November, 20:52
		Recorded 1 burst of tracer fire (4 shots) from ESE to WNW		Cannon (N/K calibre)
	N/K	Recorded 1 tracer round fired ESE to WNW	N/K	11 November, 21:29
		Recorded 1 tracer round fired ESE to WNW		11 November, 21:41
	N/K	Recorded 1 explosion (impact)	N/K	12 November, 16:24
		Recorded 1 explosion (impact)		12 November, 16:24
		Recorded 1 explosion (impact)		12 November, 16:27
		Recorded 1 explosion (impact)		12 November, 16:30
		Recorded 1 explosion (impact)		12 November, 16:31
		Recorded 1 explosion (impact)		12 November, 16:33

		Recorded 1 explosion (impact)		12 November, 16:37
Svitlodarsk (government-controlled, 57km north-east of Donetsk)	3-5km NW	Heard 32 undetermined explosions	Artillery (N/K calibre)	11 November, 20:22-20:30
		Heard 9 undetermined explosions		11 November, 20:30-20:40
		Heard 7 undetermined explosions		11 November, 20:40-20:50
		Heard 7 undetermined explosions		11 November, 20:50-21:00
	2-3km SE	Heard 10 undetermined explosions	N/K	11 November, 21:20
	3-5km NW	Heard 15 explosions (outgoing)	Artillery (N/K calibre)	11 November, 21:47-21:52
SMM camera at Oktiabr mine ("DPR"-controlled, 9km NW of Donetsk city centre)	3-5km NNW	Recorded 6 undetermined explosions	N/K	11 November, 23:26
		Recorded 4 undetermined explosions		11 November, 23:30
		Recorded 3 undetermined explosions		11 November, 23:31
		Recorded 3 undetermined explosions		11 November, 23:33
		Recorded 3 undetermined explosions		11 November, 23:34
		Recorded 2 undetermined explosions		11 November, 23:35
		Recorded 3 undetermined explosions		11 November, 23:36
		Recorded 4 undetermined explosions		11 November, 23:38
		Recorded 9 undetermined explosions		11 November, 23:39
		Recorded 5 undetermined explosions		11 November, 23:41
		Recorded 3 undetermined explosions		11 November, 23:42
	4-6km NE	Recorded 9 undetermined projectiles in flight from SW to NE	N/K	12 November, 17:50-17:53
		Recorded 6 undetermined projectiles in flight from SW to NE		12 November, 17:58-18:00
7km N of Horlivka ("DPR"-controlled, 39km NE of Donetsk)	3-4km N	Heard 2 bursts	Small arms	12 November, 08:55
		Heard 5 shots		
	3-4km NW	Heard 2 bursts (2-4 shots in each)		12 November, 09:04
Lebedynske (government-controlled, 16km NE of Mariupol),	3-5km N	Heard 10 undetermined explosions.	N/K	12 November, 09:24-09:27
	5km NNE	Heard 1 undetermined explosion		12 November, 09:45
Yasynuvata ("DPR"-controlled, 16km NE of Donetsk)	3-5km SW	Heard 1 undetermined explosion	N/K	12 November, 09:28
	3km WSW	Heard 1 shot	Small arms	12 November, 09:40
		Heard 1 burst (3 shots)		12 November, 09:41
	2-3km WSW	Heard 2 shots		12 November, 09:46
		Heard 2 shots		12 November, 09:47
	5km W	Heard 3 undetermined explosions	N/K	12 November, 09:48
	3km WSW	Heard 2 shots	Small arms	12 November, 09:50
	5km W	Heard 2 undetermined explosions	N/K	12 November, 09:54
	3km WSW	Heard 1 shot	Small arms	12 November, 09:55
	2-3km WSW	Heard 1 shot		12 November, 09:56
	2-3km W	Heard 4 shot		12 November, 09:59
Heard 36 shots		12 November, 10:06-10:43		

	600m-800m W	Heard 1 explosion (outgoing)	Tank	12 November, 10:07
	3-5km WSW	Heard 4 undetermined explosions	N/K	12 November, 10:30-11:31
		Heard 13 bursts		12 November, 10:33
	1km NW	Heard 4 shots		12 November, 10:45
	2-3km SW	Heard 6 shots		12 November, 11:00
	2-3km WSW	Heard 2 shots	Small arms	12 November, 11:02
	3-5km NW	Heard 15 shots		12 November, 11:03
		Heard 7 shots		12 November, 11:06
	2-3km WSW	Heard 5 shots		12 November, 11:17
	3-5km SW	Heard 7 shots	Cannon (30mm)	12 November, 11:26
	3-5km WSW	Heard 19 shots	Small arms	12 November, 11:34-11:45
	5-7km WSW	Heard 1 undetermined explosion	N/K	12 November, 11:47
	3-5km WSW	Heard 23 shots	Small arms	12 November, 11:52-11:57
		Heard 3 bursts		
		Heard 24 shots		
		Heard 3 shots	AGL	12 November, 11:59-12:11
		Heard 1 explosion (outgoing)	Tank	12 November, 12:15
		Heard 2 undetermined explosion	N/K	
	Heard 7 bursts			
	3-4km NW	Heard 5 shots	Small arms	12 November, 12:30
		Heard 4 shots		12 November, 12:33
		Heard 1 explosion (outgoing)	Tank	12 November, 12:34
		Heard 4 shots		12 November, 12:40
	3-5km NW	Heard 4 shots		12 November, 12:44
	3-4km NW	Heard 7 shots		12 November, 12:47
	3-4km W	Heard 8 shots	Small arms	
	3-5km WSW	Heard 5 shots		12 November, 12:50
		Heard 4 shots		12 November, 12:51
	5-6km NW	Heard 4 shots		12 November, 12:52
		Heard 1 undetermined explosion	N/K	12 November, 12:54
	3-5km WSW	Heard 5 bursts	HMG	
	4-5km NW	Heard 2 explosions (outgoing)	Tank	12 November, 12:55
		Heard 10 bursts		
	2-3km WSW	Heard 5 bursts	HMG	12 November, 12:56
		Heard 6 bursts		
		Heard 18 shots	Small arms	12 November, 12:57
		Heard 10 shots		12 November, 12:58
	3-5km NW	Heard 1 undetermined explosion	N/K	12 November, 13:15
	2-3km NW	Heard 35 bursts	Small arms	12 November, 13:24-13:38
		Heard 31 shots		
	3-5km NW	Heard 2 undetermined explosions	N/K	12 November, 13:31
		Heard 1 undetermined explosion		12 November, 13:40
	2-3km NW	Heard 23 bursts	Small arms	12 November, 13:40-13:53
		Heard 20 shots		
		Heard 5 shots		12 November, 14:05
	7-10km WNW	Heard 1 undetermined explosion	N/K	12 November, 14:07
	2-3km NW	Heard 28 shots	Small arms	12 November, 14:12-14:16
		Heard 1 burst		12 November, 14:23
	3-5km NW	Heard 5 undetermined explosions	N/K	12 November, 14:25-

	2-3km NW	Heard 32 shots	Small arms	14:30	
Hnutove (government-controlled, 20km NE of Mariupol)	5km SSE	Heard 1 explosion (outgoing)	Mortar (N/K calibre)	12 November, 09:43	
		Heard and saw 1 explosion (impact)	N/K	12 November, 09:45	
	2-3km SSE	Heard 5 bursts	Small arms	12 November, 12:59	
5km SW of Olenivka ("DPR"-controlled, 23km SW of Donetsk)	1-2km SSE	Heard 7 bursts	Small arms	12 November, 10:05	
		Heard 1 burst		12 November, 10:10	
	5-7km NNW	Heard 1 undetermined explosion	N/K	12 November, 14:03	
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	4-5km SE	Recorded 1 undetermined explosion	N/K	12 November, 10:35	
	4-5km SE	Recorded 1 undetermined explosion		12 November, 15:05	
		Recorded 2 undetermined explosions		12 November, 15:28	
	2-3km SE	Recorded 1 undetermined explosion		12 November, 15:34	
	2-3km SE	Recorded 1 undetermined explosion		12 November, 15:35	
	4-5km SE	Recorded 1 undetermined explosion		12 November, 15:36	
	2-3km SE	Recorded 1 undetermined explosion		12 November, 15:38	
		Recorded 1 undetermined explosion		12 November, 15:40	
	4-5km E	Recorded 3 undetermined projectiles in flight from W to E		12 November, 16:21-16:24	
	3-4km E	Recorded 1 airburst		12 November, 16:25	
	5-6km E	Recorded 3 undetermined projectiles in flight from E to W		12 November, 16:25-16:30	
	4-5km E	Recorded 5 undetermined projectiles in flight from W to E		12 November, 16:32-16:34	
	9-10km ESE	Recorded 1 undetermined explosions		12 November, 16:43	
	5-6km ESE	Recorded 1 explosion (impact)		12 November, 16:47	
		Recorded 1 explosion (outgoing)		12 November, 16:47	
	4-5km ESE	Recorded 1 explosion (impact)		12 November, 16:48	
		Recorded 1 explosion (outgoing)		12 November, 16:55	
	5-6km ESE	Recorded 1 illumination flare		12 November, 16:58	
	4-5km ESE	Recorded 1 explosion (impact)		12 November, 17:50	
		Recorded 2 explosions (impacts)		12 November, 17:55	
2-4km SE	Recorded 2 undetermined explosions	N/K	12 November, 18:47		
	Recorded 2 undetermined explosions		12 November, 18:52		
	Recorded 2 undetermined explosions		12 November, 19:02		
Pyshchevyk (government-controlled, 25km NE of Mariupol)	N/K SE	Heard 19 undetermined explosions	N/K	12 November, 10:19-10:24	
SW edge of Shyrokyne (government-controlled, 20km E of Mariupol)	5-7km N	Heard 14 undetermined explosions	N/K	12 November, 10:19-10:23	
	5-7km NE	Heard 23 explosions		12 November, 10:43-10:47	
	5-7km N	Heard 5 undetermined explosions	N/K	12 November, 10:50	
	3-5km NW	Heard 1 burst (25-30 shots)	Small arms	12 November, 11:02-11:05	
Berezove (government-controlled, 31km SW of Donetsk)	3-5km N	Heard 1 undetermined explosion	N/K	12 November, 11:23	
Petrivske ("DPR"-controlled, 41km S of Donetsk)	4-6km NW	Heard 1 undetermined explosion	N/K	12 November, 11:30	
	10-15km NW	Heard 17 undetermined explosions		12 November, 14:55-15:30	
1.5km N of Petrivske ("DPR"-controlled, 41km S of Donetsk)	8-10km NW	Heard 3 undetermined explosions		12 November, 13:33	
		Heard 4 undetermined explosions		12 November, 13:38	
		Heard 4 undetermined explosions		12 November, 14:04	
		Heard 1 undetermined explosion		12 November, 14:15	
		Heard 2 undetermined explosions		12 November, 14:17	
Bohdanivka	N/K NNW	Heard 1 undetermined explosion		N/K	12 November, 11:48

(Government controlled, 41km S of Donetsk)		Heard 1 undetermined explosion		12 November, 12:18
		Heard 9 undetermined explosions		12 November, 14:04-14:30
		Heard 30 undetermined explosions		12 November, 14:30-15:00
		Heard 3 shots	Small arms	
		Heard 46 undetermined explosions	N/K	12 November, 15:00-15:28
Kulykove (“DPR”-controlled, 30km NE of Mariupol)	N/K NNW	Heard 1 undetermined explosion	N/K	12 November, 11:59
3km NE of Zaichenko (“DPR”-controlled, 26km NE of Mariupol)	N/K SW	Heard 1 undetermined explosion	N/K	12 November, 13:01
Novohnativka (government-controlled, 40km S of Donetsk)	N/K NNE	Heard 3 undetermined explosions	N/K	12 November, 13:05-13:12
Orlivske (government-controlled, 23km NE of Mariupol)	3-5km NE	Heard 3 undetermined explosions	N/K	12 November, 13:40
3km NNE of Debaltseve (“DPR”-controlled, 58km NE of Donetsk)	7-10km N	Heard 23 undetermined explosions	N/K	12 November, 14:14
	8-10km N	Heard 1 undetermined explosion		12 November, 14:45
Mariupol (government-controlled)	N/K E	Heard 15 undetermined explosions	N/K	12 November, 15:40-16:07
		Heard 20 undetermined explosions		12 November, 17:06
		Heard 5 undetermined explosions		12 November, 17:45
		Heard 5 undetermined explosions		12 November, 18:13-18:20
SMM camera in Shyrokyne (20km E of Mariupol)	N/K NE	Recorded 1 undetermined explosion	N/K	12 November, 18:27
		Recorded 3 shots from ENE to WSW	Small arms	
		Recorded 4 explosions (impacts)	N/K	12 November, 21:54-21:56
	N/K N	Recorded 1 explosion (impact)		12 November, 23:19
Kadiivka (“LPR”-controlled, formerly Stakhanov, 50km W of Luhansk)	5-10km WNW	Heard 94 undetermined explosions (impacts and outgoing)	Artillery and MLRS	11 November, 19:20-20:32
	5-15km WSW	Heard 355 undetermined explosions (at least 16 were impacts, 26 rounds of 152mm were outgoing and their respective impacts, and 25 were MLRS explosions)	Artillery and MLRS	11 November, 20:32-22:33
	N/K N	Heard 9 undetermined explosions	Artillery	11 November, 21:28-21:44
	5km NW	Heard multiple bursts	HMG	11 November, 22:00
	10km WNW	Heard 4 undetermined explosions	Artillery	12 November, 01:30
	5km W	Heard 50 explosions (outgoing)	Artillery	12 November, 02:50-03:20
	15km WSW	Heard 80 explosions (50 outgoing and their corresponding impacts and 30 separate impacts)	Artillery	12 November, 02:50-03:20
	5-10km WSW	Heard 100 outgoing (explosions)	Artillery	12 November, 03:20-04:10
	10-15km WSW	Heard 150 explosions (impacts)	Artillery	12 November, 04:10-04:20
10-20km	Heard 50 explosions (impacts and	Artillery	12 November,	

	WSW	outgoing)		04:45-05:00
Slovianoserbsk ("LPR"-controlled, 28km NW of Luhansk)	3-4km NW	Heard 73 undetermined explosions	N/K	12 November, 09:27-09:56
	3km NW	Heard 5 undetermined explosions	N/K	12 November, 10:30-10:35
Kalynove ("LPR"-controlled, 60km W of Luhansk)	3-6km W	Heard 4 explosions (outgoing)	Artillery (120mm)	12 November, 09:40
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	2-4km SE	Recorded 2 undetermined explosions		12 November, 19:30
		Recorded 2 undetermined explosions		12 November, 21:27
		Recorded 3 undetermined explosions		12 November, 22:29
		Recorded 3 undetermined explosions		12 November, 22:30
		Recorded 4 undetermined explosions		12 November, 22:31
		Recorded 2 undetermined explosions		12 November, 22:36
	3-5km ESE	Recorded 1 undetermined explosion		13 November, 10:51
	4-6km SE	Recorded 2 rocket-assisted projectiles in flight from N to S		13 November, 15:34
	4-6km SE	Recorded 1 undetermined explosion		13 November, 15:34
	4-6km ESE	Recorded 2 undetermined explosions		13 November, 15:38
	4-6km SE	Recorded 2 rocket-assisted projectiles fired from S to N		13 November, 15:38
		Recorded 1 rocket-assisted projectile in flight from S to N		13 November, 15:40
	4-6km ESE	Recorded 1 undetermined explosion		13 November, 15:40
		Recorded 1 undetermined explosion		13 November, 15:44
		Recorded 3 undetermined explosions		13 November, 15:45
		Recorded 1 undetermined explosion		13 November, 15:46
		Recorded 1 undetermined explosion		13 November, 15:52
		Recorded 3 undetermined explosions		13 November, 15:53
	4-6km ESE	Recorded 1 undetermined explosion		13 November, 16:02
		Recorded 3 rocket-assisted projectiles in flight from S to N		13 November, 16:05
	4-6km SE	Recorded 2 rocket-assisted projectiles in flight from N to S		13 November, 16:05
		Recorded 1 rocket-assisted projectile in flight from S to N		13 November, 16:28
	4-6km SE	Recorded 1 rocket-assisted projectile in flight from S to N		13 November, 16:31
Recorded 1 rocket-assisted projectile in flight from S to N		13 November, 16:31		
Svitlodarsk (government-controlled, 57km NE of Donetsk)	2-3km SE	Heard 1 burst	HMG	12 November, 19:33
	4-5km E	Heard 3 undetermined explosions	N/K	12 November, 20:17
		Heard 1 undetermined explosion		12 November, 20:45
	1-2km S	Heard 5 shots	Small arms	12 November, 21:07
	2-3km SSE	Heard 5 bursts		
		Heard 1 undetermined explosion	N/K	
		Heard 11 explosions (impact)	12 November, 21:18	
		Heard 6 explosions (outgoing)	12 November, 21:35	
	2-3km SSE	Heard 5 explosions (impact)	Mortar	12 November, 21:48
		Heard 6 explosions (outgoing)		12 November, 22:09
	4-6km E	Heard 10 undetermined explosions	N/K	12 November, 22:33-22:37
	2-3km SE	Heard 8 explosions (impacts)	Mortar	13 November, 09:42-10:00
		Heard 1 explosion (impact)		13 November, 10:05

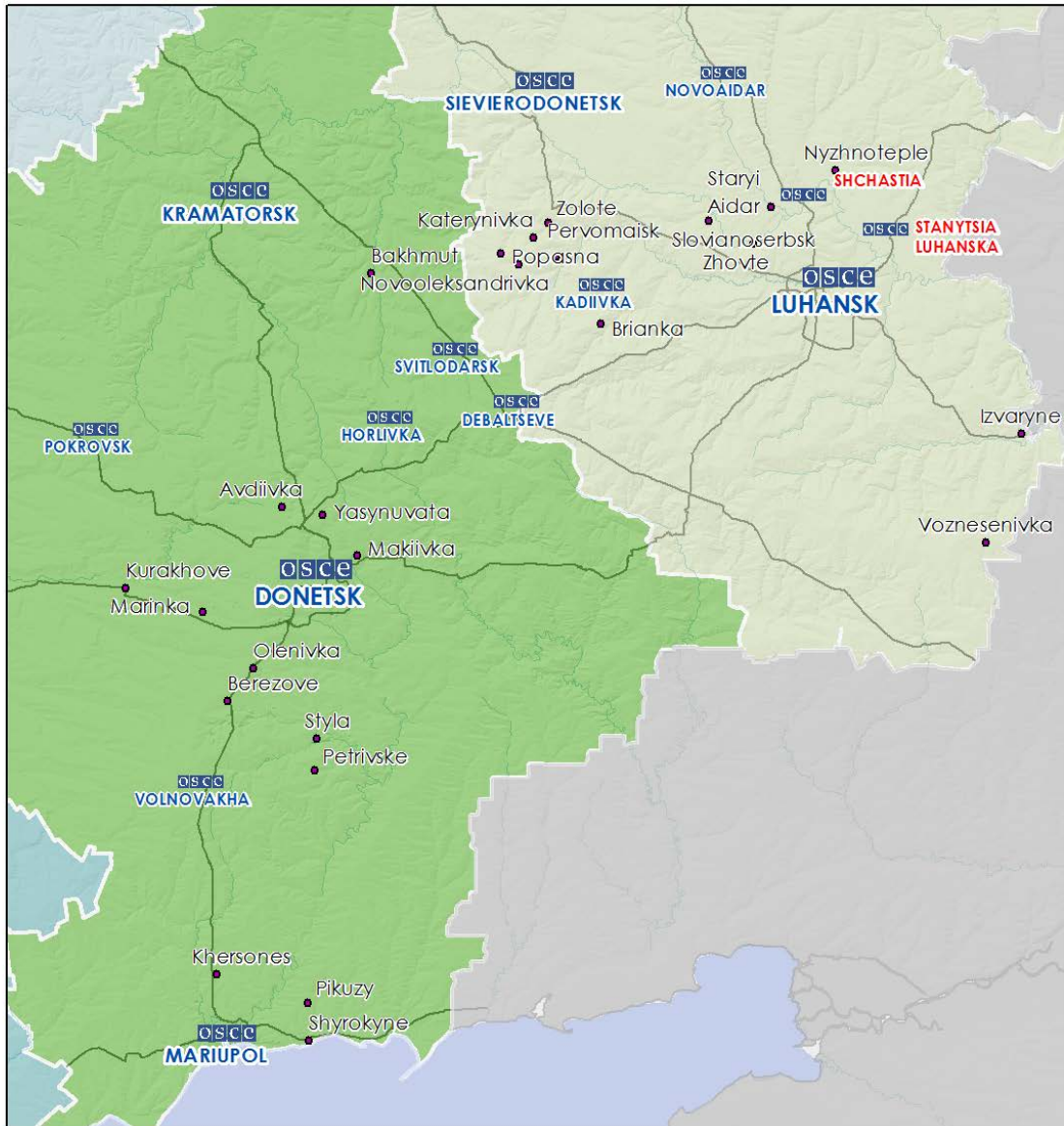
		Heard 8 explosions (impacts)		13 November, 10:20-10:22			
		Heard 7 explosions (impacts)		13 November, 12:30-12:40			
		Heard 5 explosions (impacts)		13 November, 12:40-12:50			
	2-3km SSE		Heard 10 bursts	HMG	13 November, 17:44-18:00		
			Heard 4 bursts	Small arms			
			Heard 4 bursts	Anti-aircraft gun (ZU-23)			
			Heard 1 undetermined explosion	N/K			
				Heard 17 bursts	HMG	13 November, 18:14-18:30	
				Heard 11 bursts	Anti-aircraft gun (ZU-23)		
				Heard 2 bursts	Small arms		
					Heard 2 explosions (impacts)	Mortar	13 November, 18:31
					Heard 7 bursts	HMG	
					Heard 1 undetermined explosion	N/K	
Horlivka ("DPR"-controlled, 39km NE of Donetsk city centre)	4-5km S	Heard 1 undetermined explosion	N/K	12 November, 19:45			
		7-8km SW		Heard 4 undetermined explosions	12 November, 21:45-21:51		
	4-5km SW	Heard 4 shots	IFV (BMP-2) cannon (30mm)	12 November, 21:56			
	4-5km W	Heard 9 bursts (3-5 shots)	HMG	12 November, 22:12-22:15			
		Heard 6 shots	Small arms				
		Heard 3 undetermined explosions	IFV (BMP-1) cannon (73mm)				
	8-7km W	Heard 1 undetermined explosion	N/K	12 November, 22:17			
	6-7km W	Heard 12 undetermined explosions		12 November, 22:25-22:30			
	6-8km W	Heard 2 undetermined explosions		12 November, 22:35			
	Debaltseve ("DPR"-controlled, 58km NE of Donetsk)	7-10km WNW	Heard 23 undetermined explosions	N/K	12 November, 23:42-23:44		
Park Inn Hotel ("DPR"-controlled, Donetsk)	5-10km NW	Heard 7 undetermined explosions	N/K	12 November, 23:56-23:58			
		Heard 43 undetermined explosions		13 November, 00:02-00:51			
		Heard 53 undetermined explosions		13 November, 01:14-03:01			
Avdiivka (government-controlled, 17km N of Donetsk)	8km S	Heard 1 undetermined explosion	N/K	13 November, 10:02			
		Heard 1 undetermined explosion		13 November, 10:04			
	3km SE	Heard 4 explosions (outgoing)	Mortar (82mm)	13 November, 10:22			
		Heard 2 explosions (impacts)		13 November, 10:24			
	4km E	Heard uncountable/unquantifiable overlapping bursts and single shots	Small arms and HMG	13 November, 10:25			
	4km SE	Heard 3 bursts	HMG	13 November, 10:35			
		Heard 5 bursts	Small arms	13 November, 10:37			
	4km E	Heard 1 explosion (impact)	Mortar (82mm)	13 November, 10:42			
		Heard uncountable/unquantifiable overlapping bursts and single shots	Small arms	13 November, 10:42			
2km SE	Heard 1 explosion (impact)	Mortar (120mm)	13 November, 10:51				
4km E	Heard 1 undetermined explosion	N/K	13 November, 10:52				

		Heard uncountable/unquantifiable overlapping bursts and single shots	Small arms	13 November, 10:54
	3km SE	Heard 1 explosion (outgoing)	Mortar (82mm)	13 November, 10:55
	4km SE	Heard 3 explosions (impacts)		13 November, 10:57
	4km E	Heard uncountable overlapping single shots and bursts	Small arms	13 November, 11:26
		Heard 1 explosion (impact)	Mortar (82mm)	13 November, 11:34
	3km SE	Heard 4 explosions (outgoing)		13 November, 11:35
		Heard 1 explosion (impact)		13 November, 11:36
	4km SE	Heard 4 bursts	HMG	13 November, 11:51
	5km SE	Heard 5 bursts		13 November, 11:53
	4km SE	Heard 2 undetermined explosions	N/K	13 November, 11:59
		Heard 2 undetermined explosions	N/K	13 November, 11:59
	4km SE	Heard uncountable overlapping single shots and bursts	IFV (BMP-2 cannon, 30mm), HMG and small arms	13 November, 12:17-12:19
		Heard 1 explosion (impact)	Mortar (82mm)	13 November, 12:21
		Heard 1 explosion (impact)		13 November, 12:25
		Heard uncountable single shots and bursts	HMG and small arms	13 November, 13:01-13:07
		Heard 20 bursts	IFV (BMP-2) cannon (30mm)	
		Heard 10 undetermined explosions	Mortar (82mm)	
		Heard 30 bursts	AGL	
			Heard 2 explosions (impacts)	Artillery (122mm)
		Heard 2 explosions (impacts)	13 November, 13:10	
	4km S	Heard 1 explosion (impact)	Mortar (120mm)	13 November, 13:15
		Heard 1 explosion (impact)		13 November, 13:21
	4km SE	Heard 1 burst	Small arms	13 November, 13:23
Yasynuvata ("DPR"-controlled, 16km NE of Donetsk)	3-5km WSW	Heard 1 undetermined explosion	N/K	13 November, 10:53
	5-8km W	Heard 3 undetermined explosions		13 November, 10:57-10:59
	2-3km SW	Heard 42 undetermined explosions		13 November, 13:00-13:10
	3-5km SW	Heard 1 explosion (outgoing)		13 November, 13:23
		Heard 1 explosion (impact)		
		Heard 1 explosion (outgoing)		
		Heard 1 explosion (impact)		
	3-5km SE	Heard 1 undetermined explosion		13 November, 13:34
	3-5km WSW	Heard 1 undetermined explosion	13 November, 13:36	
	2-3km SE	Heard 31 bursts (2-3 shots each)	Small arms	13 November, 13:40-13:50
	2-3km SSE	Heard 9 bursts		13 November, 13:53-14:10
		Heard 14 shots		
Heard 5 shots		13 November, 14:15		
Heard 35 shots		13 November, 14:20-		

				14:26
		Heard 1 undetermined explosion	N/K	13 November, 14:27
1.5km ENE of Pikuzy (“DPR”-controlled, 23km NE of Mariupol)	N/K SSE	Heard 2 undetermined explosions	N/K	13 November, 11:02
Pikuzy (“DPR”-controlled, 23km NE of Mariupol)	5km SSE	Heard 3 bursts	IFV (BMP-2) cannon (30mm)	13 November, 11:32-11:40
		Heard 3 bursts		13 November, 12:25-12:30
	1km SSE	Heard 2 explosions (outgoing)	N/K	13 November, 13:08-13:10
1.9km ENE of Bohdaniivka (government-controlled, 41km S of Donetsk)	3km SSE	Heard 1 undetermined explosion	N/K	13 November, 11:43
	N/K SSE	Heard 1 undetermined explosion		13 November, 12:00
	N/K NNE	Heard 1 undetermined explosion		
Park Inn Hotel (“DPR”-controlled, Donetsk)	6-10km NW	Heard at least 100 undetermined explosions	N/K	13 November, 13:00-15:00
Petrivske (“DPR”-controlled, 41km S of Donetsk)	6-8km SW	Heard 1 undetermined explosion	N/K	13 November, 13:36
Maiorsk (government-controlled, 45km NE of Donetsk)	1-2km E	Heard 1 undetermined explosion	N/K	13 November, 14:20
	2-3km NE	Heard 3 undetermined explosions		13 November, 14:55
7km N of Horlivka (“DPR”-controlled, 39km north of Donetsk)	4km N	Heard 1 undetermined explosion	N/K	13 November, 14:21
SMM camera at Oktiabr mine” (9km NW of Donetsk city centre)	6-8 km NE	Recorded 2 rocket-assisted projectiles in flight from N to S	N/K	13 November, 16:22
Kalynove (“LPR”-controlled, 58km W of Luhansk)	5-10km NNW	Heard 12 undetermined explosions	N/K	13 November, 09:25-10:11
	10km SW	Heard 1 undetermined explosion		
1km NW of Pervomaisk (“LPR”-controlled, 57km west of Luhansk)	>10km SW	Heard 2 undetermined explosions	N/K	13 November, 09:44
Sokilnyky (“LPR”-controlled, 38km NW of Luhansk)	3km SW	Heard 1 burst	HMG	13 November, 11:34
Lopaskyne (government-controlled, 23km NW of Luhansk)	2-3km N	Heard 5-7 shots	Small arms	13 November, 12:33
Kadiivka (formerly Stakhanov, “LPR”-controlled, 50km W of Luhansk)	10km WSW	Heard 10 undetermined explosions	N/K	13 November, 13:12-13:42
	10km SW	Heard 7 undetermined explosions		13 November, 16:18-16:20
Novotoshkiivske (government-controlled, 53km NW of Luhansk)	4-5km SE	Heard 3 undetermined explosions	N/K	13 November, 13:30-13:33
Staryi Aidar (government-controlled, 20km NW of Luhansk)	3-5km S	Heard 8 shots	HMG	13 November, 13:30
	8-10km S	Heard 6 undetermined explosions	N/K	13 November, 13:35
Troitske (government-	5km S	Heard 6 undetermined explosions	N/K	13 November, 13:40

controlled, 69km west of Luhansk)				
Zhovte ("LPR"-controlled, 17km NW of Luhansk)	200-300m W	Heard 1 explosion	Assessed as anti-personnel mine	13 November, 14:10
	5-10km WNW	Heard 10 undetermined explosions	N/K	13 November, 14:15-14:38

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).