

Table of ceasefire violations as of 19 November 2017¹

SMM position	Location of event	Observation	Type of weapon/ammunition	Date/time
1.9km NW of Debaltseve (“DPR”-controlled, 58km NE of Donetsk)	3-5km N	Heard 7 undetermined explosions	N/K	18 November, 13:15-13:37
	3-5km NW	Heard 6 undetermined explosions		
	3-5km N	Heard 6 undetermined explosions		
	5-7km WNW	Heard 6 undetermined explosions	HMG	18 November, 13:57-14:05
Heard 3 shots				
	Heard 7 bursts			
SMM camera in Petrivske (“DPR”-controlled, 43km S of Donetsk city centre)	0.5-1km SSW	Recorded 17 tracers from W to E (unable to assess whether inside or outside the disengagement area)	N/K	15 November, 17:53
Railway station in Yasynuvata (“DPR”-controlled, 16km N of Donetsk)	5-8km NW	Heard 4 undetermined explosions	N/K	18 November, 09:58-10:55
	3-5km W	Heard 3 shots	HMG	18 November, 11:00
	1-2km W	Heard 9 bursts	Small arms	18 November, 12:05-12:15
	2-4km NW	Heard 5 bursts	HMG	
	1-2km W	Heard 3 bursts	Small arms	18 November, 12:25-12:44
		Heard 1 undetermined explosion	N/K	
	1-2km NW	Heard 1 undetermined explosion		
	2-4km NW	Heard 1 undetermined explosion		
	2-4km W	Heard 10 undetermined explosions		
	3-5km W	Heard 10 undetermined explosions		
		Heard 9 undetermined explosions		
2-5km W	Heard 13 undetermined explosions			
Oleksandrivka (“DPR”-controlled, 20km SW of Donetsk)	1-2km NW	Heard 1 burst	Small arms	18 November, 10:13
Donetsk central railway station (“DPR”-controlled, 6km NW of Donetsk city centre)	1-2km N	Heard 18 undetermined explosions	N/K	18 November, 13:50-13:59
		Heard uncountable overlapping bursts	Small arms	18 November, 13:59
	3-6km NW	Heard 1 undetermined explosion	N/K	18 November, 14:05
		Heard uncountable overlapping bursts	Small arms	18 November, 14:06-14:08
		Heard 1 undetermined explosion	N/K	18 November, 14:08
	3-6km NNE	Heard 1 undetermined explosion		
	3-6km NNW	Heard 4 undetermined explosions		18 November, 14:08-14:13
	2-4km NW	Heard 20 bursts	Small arms	18 November, 14:16-14:23
		Heard 2 undetermined explosions	N/K	18 November, 14:24
		Heard 11 shots	Small arms	18 November, 14:27-14:44
3-6km NW	Heard 2 undetermined explosions	N/K		
2-4km NW	Heard 10 shots	Small arms		
1km NNW of EECF Pyshchevyk (government-controlled, 25km NE of Mariupol)	4-5km NE	Heard 1 explosion (outgoing)	Mortar (type N/K)	18 November, 10:02
Horlivka (“DPR”-controlled, 39km NE of Donetsk)	7-10km SW	Heard 1 undetermined explosion	N/K	17 November, 18:50
	3-5km SW	Heard 3 bursts	Small arms	17 November, 19:15
		Heard 2 bursts	HMG	17 November, 19:17
	7-10km SW	Heard 2 undetermined explosion	N/K	17 November, 19:20
		3-5km SW	Heard 3 burst	Small arms
	7-10km SW	Heard 1 undetermined explosion	N/K	17 November, 20:00
		Heard 2 undetermined explosion		17 November, 20:40
NW edge of	8-10km SW	Heard 10 undetermined explosions	N/K	18 November, 09:45-09:50

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.

Horlivka (“DPR”-controlled, 39km NE of Donetsk)	6-8km SW	Heard 3 undetermined explosions		18 November, 10:00
		Heard 3 undetermined explosions		18 November, 10:05
		Heard 2 undetermined explosions		18 November, 10:09
		Heard 2 undetermined explosions		18 November, 10:10
		Heard 2 undetermined explosions		18 November, 11:55
		Heard 1 undetermined explosion		18 November, 11:56
	4-6km SSE	Heard 1 undetermined explosion		18 November, 12:00
Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-5km SE	Heard 18 explosions (outgoing)	N/K	18 November, 17:45-18:10
	3-5km SE	Heard 6 explosions (outgoing)	N/K	17 November, 19:06
	2-3km S	Heard 7 bursts	HMG	17 November, 19:07
	3-5km SE	Heard 20 bursts	Small arms	17 November, 19:10
	2-3km S	Heard 7 bursts	HMG	17 November, 19:12
	3-5km SE	Heard 15 explosions (outgoing)	N/K	17 November, 19:15
	2-3km S	Heard 55 bursts	Small arms	17 November, 19:17-19:30
	3-5km SE	Heard 8 explosions (outgoing)	N/K	17 November, 19:35
	5-7km E	Heard 42 explosions (impacts)		17 November, 20:00-20:27
	3-5km SE	Heard 4 explosions (outgoing)		17 November, 20:40
	2-3km S	Heard 28 bursts	Small arms	17 November, 20:50-21:00
	3-5km SE	Heard 4 explosions (outgoing)	N/K	17 November, 21:05
		Heard 16 bursts	HMG	17 November, 21:06-21:10
		Heard 4 explosions (outgoing)	N/K	17 November, 21:25-21:27
	2-3km S	Heard 24 bursts	Small arms	17 November 22:15-22:35
		Heard 12 bursts		17 November 23:00-23:15
Heard 8 bursts		17 November 23:25-23:35		
5-7km SE	Heard 25 explosions (impacts)	N/K	18 November, 07:00-07:30	
3-5km SE	Heard 6 bursts	HMG		
Zalizne (former Artemove, government-controlled, 42km NE of Donetsk)	7-10km E	Heard 3 undetermined explosions	N/K	18 November, 10:03
		Heard 2 undetermined explosions		18 November, 10:10
	5km S	Heard 1 undetermined explosion		18 November, 11:10
	2km SE	Heard 8 shots	Small arms	18 November, 11:45-12:00
	8-10km SE	Heard 2 undetermined explosions	N/K	18 November, 12:26
	1-2km E	Heard 8 shots	Small arms	18 November, 12:39
	2-3km S	Heard 2 undetermined explosions	N/K	18 November, 12:50
7-10km E	Heard 3 undetermined explosions	18 November, 10:03		
Popasna (government-controlled, 69km W of Luhansk)	5-6km SE	Heard 4 bursts	IFV (BMP-2) cannon (30mm)	17 November, 19:05-19:20
	7-8km SE	Heard 11 undetermined explosions	N/K	
	5-6km SE	Heard 3 bursts	IFV (BMP-2) cannon	17 November, 19:42-19:50
	7-8km SE	Heard 19 undetermined explosions	N/K	
	5-6km SE	Heard 11 bursts	IFV (BMP-2) cannon	17 November, 20:02-20:26
	7-8km SE	Heard 34 undetermined explosions	N/K	
	10-15km SE	Heard 6 undetermined explosions	Artillery (type N/K)	17 November, 21:45-21:51
	10-15km SE	Heard 17 undetermined explosions		17 November, 22:07-22:47
	10-15km SE	Heard 27 undetermined explosions		17 November, 22:52-23:48
	10-15km SE	Heard 16 undetermined explosions		18 November, 00:32-00:46
	5-6km SE	Heard 2 bursts	IFV (BMP-2) cannon	18 November, 12:48-13:28
	8-10km ESE	Heard 12 undetermined explosions	N/K	
	6-8km ESE	Heard 6 undetermined explosions	N/K	18 November, 13:35-13:40
6-7km SE	Heard 20 bursts	Small arms	18 November, 16:10-16:18	
	Heard 8 bursts	HMG		
	Heard 12 shots	IFV (BMP-2) cannon		
3km N of Pervomaisk (“LPR”-controlled, 58km W of Luhansk)	5-8km SW	Heard 8 undetermined explosions (assessed as outside the disengagement area)	N/K	18 November, 11:29-11:35
3km SW of Hannivka (“LPR”-controlled, 58km W of Luhansk)	12-15km NW	Heard 2 undetermined explosions	N/K	18 November, 12:00
W edge of Zolote (government-controlled 60km W of Luhansk)	8-12km SSE	Heard 34 undetermined explosions (assessed as outside the disengagement area)	N/K	18 November, 12:52-13:30
S edge of Zolote 5	10km N	Heard 4 undetermined explosions	N/K	18 November, 13:10-13:19

(Mykhailivka) ("LPR"-controlled, 61km NW of Luhansk)		(assessed as outside the disengagement area)		
Railway station in Yasynuvata ("DPR"- controlled, 16km NE of Donetsk)	2-4km WSW	Heard 1 undetermined explosion	N/K	19 November, 09:01
		Heard 5 bursts	HMG	
	1-3km WSW	Heard 3 shots	Small arms	19 November, 09:13-09:20
	2-4km SW	Heard 2 undetermined explosions	N/K	
	2-4km WSW	Heard 3 shots	Small arms	19 November, 09:31
		Heard 5 undetermined explosions		19 November, 09:44-10:10
	2-4km WSW	Heard 2 undetermined explosions	N/K	
		Heard 4 undetermined explosions		19 November, 10:13-10:32
	2-4km NW	Heard 35 bursts	HMG	
			Heard 5 undetermined explosion	N/K
	2-4km NW	Heard 1 undetermined explosion		19 November, 10:34
		Heard 4 shots	Small arms	
	2-4km WSW	Heard uncountable overlapping bursts	HMG	19 November, 10:40
	2-5km WSW	Heard 8 undetermined explosions	N/K	19 November, 11:03-11:28
	1-3km WSW	Heard 3 shots	Small arms	
	2-4km NW	Heard 14 undetermined explosions	N/K	19 November, 11:40-11:45
		Heard 8 bursts	HMG	
	2-4km WSW	Heard 8 bursts		19 November, 13:00-13:29
		Heard 2 undetermined explosions	N/K	
		Heard 6 bursts	HMG	
Heard 3 undetermined explosions		N/K		
Heard 3 bursts		Small arms		
3-5km WSW	Heard 4 undetermined explosions		19 November, 13:42-13:53	
	Heard 1 undetermined explosion	N/K		
1-2km WNW	Heard 2 undetermined explosions		19 November, 13:58	
	Heard 12 bursts			
	Heard uncountable overlapping bursts	HMG		
SW edge of Avdiivka (government- controlled, 17km N of Donetsk)	2km S	Heard 11 shots	Small arms	19 November, 10:46-11:20
	2-3km S	Heard 8 undetermined explosions	N/K	
	2km S	Heard 27 shots	Small arms	
	3-4km SW	Heard 24 undetermined explosions	N/K	19 November, 12:04-12:28
	2-3km SW	Heard 10 bursts	HMG	
	2-3km S	Heard 9 undetermined explosions	N/K	19 November, 14:18-14:53
0.8km S of Novohryhorivka ("DPR"-controlled, 61km NE of Donetsk)	1-2km W	Heard 1 undetermined explosion	N/K	19 November, 13:45
		Heard 1 undetermined explosion		19 November, 14:44-14:46
	2-2.5km NW	Heard 3 bursts		19 November, 14:51-14:57
		Heard 15 shots	Small arms	
	Heard 5 bursts			
		Heard 2 shots		
Donetsk central railway station ("DPR"-controlled, 6km NW of Donetsk city centre)	3-5km W	Heard 4 bursts	Small arms	19 November, 14:15-14:18
	3-6km W	Heard 1 undetermined explosion	N/K	
1km NNW of Pyshchevyk (government- controlled, 25km NE of Mariupol)	N/K SSE	Heard 1 burst	HMG	19 November, 09:15-09:21
		Heard 1 burst	Small arms	
		Heard 8 undetermined explosions	N/K	
		Heard 7 shots	AGL	19 November, 09:26-09:28
		Heard 3 shots		19 November, 09:43
		Heard 3 bursts	HMG	
		Heard 3 bursts		
		Heard 29 undetermined explosions	N/K	19 November, 10:01-10:25
		Heard 5 bursts	HMG	
		Heard 9 bursts	Small arms	
Heard 11 bursts		19 November, 13:25-13:40		
Heard 16 undetermined explosions	N/K			
1km N of Zaichenko ("DPR"-controlled, 26km NE of Mariupol)	2-3km SW	Heard 1 explosion (outgoing)	Recoilless gun (SPG-9, 73mm)	19 November, 10:40-11:03
		Heard 7 bursts	Small arms	
		Heard 1 burst	HMG	

		Heard 1 undetermined explosion	N/K		
	1.5-2km S	Heard 28 bursts	HMG	19 November, 11:10-11:16	
	2km SW	Heard 1 explosion (impact)	Mortar (type N/K)		
	2-3km S	Heard 5 bursts	HMG	19 November, 11:25-11:31	
	2-3km SW	Heard 1 burst			
	2-3km W	Heard 1 shot	Small arms		
	2-3km S	Heard 1 undetermined explosion	N/K	19 November, 11:38-11:42	
	2-3km SW	Heard 3 undetermined explosions			
			Heard 3 bursts	HMG	
	2km S	Heard 10 bursts	Small arms	19 November, 11:50-12:05	
			Heard 5 bursts		HMG
	2km W	Heard 2 shot	Small arms		
	2-4km SSW	Heard 1 undetermined explosion	N/K		
			Heard at least 30 single shots		Small arms
			Heard at least 15 bursts		HMG
			Heard 6 shots	AGL	
	2km W	Heard 7 bursts	HMG	19 November, 12:05-12:10	
	2-4km SW	Heard 4 shot	AGL		
	2km W	Heard 4 bursts	HMG	19 November, 12:10-12:20	
	2km SW	Heard 4 bursts			
	2km S	Heard 5 bursts			
	2km W	Heard 3 explosions (impacts)	N/K	19 November, 12:30-12:43	
	2km SSW	Heard 1 undetermined explosion			
	2km SW	Heard 1 undetermined explosion			
	2km S	Heard 6 bursts			Small arms
	2km S	Heard 7 bursts	HMG	19 November, 12:50-12:53	
			Heard 2 undetermined explosions		N/K
			Heard 23 bursts	HMG	19 November, 12:50-13:00
			Heard 7 undetermined explosions	N/K	
			Heard 5 shot	AGL	
SW edge of Orlivske (government-controlled, 23km NE of Mariupol)	N/K SE	Heard 2 undetermined explosions	N/K	19 November, 10:50-10:59	
2.5km SSE of Lomakyne (government-controlled, 15km NE of Mariupol)	N/K E	Heard 3 bursts	HMG	19 November, 11:01-11:17	
		Heard 1 undetermined explosion	N/K		
		Heard 7 bursts	Small arms		
Chermalyk (government-controlled, 31km NE of Mariupol)	N/K E	Heard 2 undetermined explosions	N/K	19 November, 11:55-12:06	
	1.5km NE	Heard at least 20 bursts	Small arms		
		Heard at least 20 single shots			
	2.5-3km ENE	Heard at least 20 bursts	Small arms		
Heard at least 20 single shots					
1.5km of SE Lomakyne government-controlled, 15km NE of Mariupol)	N/K ENE	Heard at least 100-200 shots	Small arms	19 November, 11:52-12:12	
		Heard at least 100-200 bursts			
	N/K ESE	Heard 1 undetermined explosion	N/K	19 November, 11:59	
Horlivka (“DPR”-controlled, 39km NE of Donetsk)	8-10km S	Heard 1 undetermined explosion	N/K	18 November, 19:29	
	8-12km N	Heard 4 undetermined explosions		18 November, 19:36-19:38	
	8-10km NW	Heard 4 undetermined explosions		18 November, 20:03-20:05	
	5-6km SW	Heard 1 undetermined explosion		18 November, 20:30	
	8-10km S	Heard 1 undetermined explosion		18 November, 20:38	
		Heard 1 undetermined explosion		18 November, 20:52	
	8-10km SW	Heard 6 undetermined explosions		18 November, 21:02	
Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-6km SSE	Heard 2 explosions (impact)	N/K	18 November, 20:25	
		Heard 1 explosions (impact)		18 November, 20:27	
	2-3km SSE	Heard 3 bursts	HMG	18 November, 20:58	
		Heard 2 bursts		18 November, 21:02	
		Heard 10 shots		18 November, 21:08-21:12	
		Heard 3 shots		18 November, 21:18	
		Heard 16 bursts		18 November, 21:20-21:25	

	4-6km SSE	Heard 5 explosions (impact)	Mortar (type N/K)	18 November, 21:28-21:35			
		Heard 2 explosions (outgoing)	N/K	18 November, 22:19			
	2-3km SSE	Heard 6 bursts	HMG	18 November, 22:36			
		Heard 11 bursts	Small arms	18 November, 23:01			
		Heard 32 bursts	HMG	18 November, 23:02-23:21			
		Heard 6 bursts	Small arms	18 November, 23:24			
		Heard 17 bursts	HMG	18 November, 23:28-23:41			
		Heard 5 bursts	Small arms	18 November, 23:59			
	2-4km SE	Heard 2 undetermined explosions	N/K	19 November, 10:45-10:48			
	4-6km SSE	Heard 1 undetermined explosion		19 November, 11:05			
	2-3km SE	Heard 17 bursts	Small arms	19 November, 13:43			
	2-4km SE	Heard 1 undetermined explosion	N/K	19 November, 13:50			
	3-5km SE	Heard 2 undetermined explosions		19 November, 14:30-14:33			
	5-7km E	Heard 8 undetermined explosions		19 November, 15:16-15:26			
	2-3km SE	Heard 7 bursts	Small arms	19 November, 15:26			
		Heard 2 undetermined explosions	N/K	19 November, 15:29			
		Heard 2 undetermined explosions		19 November, 15:32-15:35			
	3-5km SE	Heard 6 explosions (outgoing)	IFV (BMP-1) cannon (73mm)	19 November, 15:55-15:58			
		Heard 6 subsequent explosions (impacts)					
	5-7km S	Heard 7 undetermined explosions	N/K	19 November, 16:03-16:05			
		Heard 4 undetermined explosions		19 November, 16:30			
	3-5km SE	Heard 2 undetermined explosions		19 November, 16:42			
		Heard 1 undetermined explosion		19 November, 17:07-17:08			
	1-2km SE	Heard 6 bursts	HMG	19 November, 17:10			
		Heard 4 bursts	Small arms	19 November, 17:11			
		Heard 1 burst	HMG	19 November, 17:12			
		Heard 3 bursts	Small arms	19 November, 17:18			
		Heard 6 shots		19 November, 17:19			
		Heard 5 shots		19 November, 17:21			
		Heard 4 bursts	HMG	19 November, 17:38-17:39			
Heard 6 shots		Small arms	19 November, 17:43-17:44				
4-5km SE	Heard 3 undetermined explosions	N/K	19 November, 17:50				
2-4km SE	Heard 3 bursts	HMG	17 November, 21:13				
	Heard 3 shots	Small arms	17 November, 22:05				
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	3-5km ESE	Recorded 1 undetermined explosion	N/K	17 November, 22:54			
		Recorded 1 undetermined explosion		18 November, 00:03			
		Recorded 1 undetermined explosion		18 November, 00:06			
		Recorded 2 undetermined explosions		18 November, 00:08			
		Recorded 1 undetermined explosion		18 November, 00:12			
		Recorded 2 undetermined explosions		18 November, 00:19			
		Recorded 2 undetermined explosions		18 November, 02:02			
		Recorded 1 undetermined explosion		18 November, 18:26			
		Recorded 7 tracers from N to S		18 November, 19:24			
		Recorded 1 projectile from S to N		17 November, 18:48			
		SMM camera at Donetsk Filtration Station (15km N of Donetsk)		0.5-1.5km S	Recorded 1 undetermined explosion	N/K	17 November, 19:02
					Recorded 3 tracers from E to W		17 November, 19:03
Recorded 15 tracers from E to W							
Recorded 2 tracers from W to E							
Recorded 1 undetermined explosion	17 November, 19:04						
Recorded 1 tracer from E to W							
Recorded 2 undetermined explosions	17 November, 19:06						
Recorded 1 undetermined explosion							
Recorded 1 tracer from E to W	17 November, 19:10						
Recorded 1 undetermined explosion							
Recorded 6 projectiles from E to W	17 November, 19:11						
Recorded 1 undetermined explosion							
Recorded 3 projectiles from E to W							
Recorded 1 projectile from W to E	17 November, 20:34						
							17 November, 20:35

	Recorded 2 undetermined explosions		
	Recorded 3 projectiles from E to W		
	Recorded 10 undetermined explosions		17 November, 20:36
	Recorded 1 projectile from SE to NW		
	Recorded 2 undetermined explosions		17 November, 20:38
	Recorded 1 projectile from E to W		
	Recorded 5 undetermined explosions		17 November, 20:39
	Recorded 1 projectile from E to W		
	Recorded 2 projectiles from E to W		17 November, 20:41
	Recorded 1 undetermined explosion		17 November, 20:42
	Recorded 1 undetermined explosion		17 November, 20:54
	Recorded 1 undetermined explosion		17 November, 21:14
	Recorded 2 undetermined explosions		17 November, 21:34
	Recorded 4 undetermined explosions		17 November, 21:35
	Recorded 1 projectile from W to E		17 November, 21:36
	Recorded 1 undetermined explosion		17 November, 21:37
	Recorded 1 projectile from E to W		
	Recorded 1 explosion (outgoing)		17 November, 21:50
	Recorded 1 projectile from E to W		
	Recorded 1 explosion (incoming)		
	Recorded 1 undetermined explosion		17 November, 22:01
	Recorded 2 projectiles from E to W		17 November, 22:02
	Recorded 2 undetermined explosions		17 November, 22:03
	Recorded 1 undetermined explosion		17 November, 21:38
	Recorded 1 explosion (outgoing)		
	Recorded 1 projectile from E to W		17 November, 21:50
	Recorded 1 explosion (incoming)		
	Recorded 1 projectile from E to W		17 November, 23:46
	Recorded 1 projectile from E to W		18 November, 00:10
	Recorded 1 projectile from W to E		18 November, 01:07
	Recorded 2 projectiles from W to E		18 November, 01:16
	Recorded 1 undetermined explosion		
	Recorded 1 projectile from W to E		18 November, 02:42
	Recorded 1 undetermined explosion		18 November, 17:12
	Recorded 1 tracer from E to W		
	Recorded 1 projectile from E to W		18 November, 17:24
	Recorded 1 undetermined explosion		18 November, 17:25
	Recorded 8 undetermined explosions		18 November, 17:30
	Recorded 1 projectile from E to W		18 November, 17:31
	Recorded 2 undetermined explosions		18 November, 17:32
	Recorded 4 undetermined explosions		
	Recorded 1 projectile from W to E		18 November, 17:33
	Recorded 2 tracers from W to E		
	Recorded 1 undetermined explosion		18 November, 17:34
	Recorded 2 projectiles from E to W		18 November, 17:38
	Recorded 1 projectile from E to W		18 November, 17:42
	Recorded 2 tracers from E to W		
	Recorded 1 undetermined explosion		18 November, 17:43
	Recorded 1 undetermined explosion		18 November, 17:44
	Recorded 1 tracer from E to W		18 November, 18:02
	Recorded 1 undetermined explosion		18 November, 18:03
	Recorded 2 undetermined explosions		
	Recorded 6 tracers from E to W		18 November, 18:06
	Recorded 1 illumination flare (trajectory N/K)		
	Recorded 3 undetermined explosions		18 November, 18:07
	Recorded 6 projectiles from E to W		
	Recorded 2 undetermined explosions		
	Recorded 3 tracers from E to W		18 November, 18:08
	Recorded 2 projectiles from E to W		
	Recorded 1 undetermined explosion		18 November, 18:09

	Recorded 2 undetermined explosions	18 November, 18:10
	Recorded 3 projectiles from E to W	18 November, 18:11
	Recorded 2 projectiles from E to W	18 November, 18:15
	Recorded 1 undetermined explosion	18 November, 18:16
	Recorded 1 undetermined explosion	18 November, 18:17
	Recorded 1 undetermined explosion	18 November, 18:24
	Recorded 2 projectiles from E to W	18 November, 18:40
	Recorded 1 projectile from E to W	18 November, 18:42
	Recorded 3 tracers from E to W	18 November, 19:04
	Recorded 1 air burst	18 November, 19:05
	Recorded 1 tracer from E to W	18 November, 19:07
	Recorded 1 undetermined explosion	18 November, 19:08
	Recorded 3 projectiles from E to W	18 November, 19:10
	Recorded 3 undetermined explosions	18 November, 19:11
	Recorded 1 undetermined explosion	18 November, 19:12
	Recorded 1 undetermined explosion	18 November, 19:13
	Recorded 2 undetermined explosions	18 November, 19:15
	Recorded 2 undetermined explosions	18 November, 19:19
	Recorded 1 projectile from W to E	18 November, 19:20
	Recorded 3 undetermined explosions	18 November, 19:21
	Recorded 1 undetermined explosion	18 November, 19:22
	Recorded 3 tracers from E to W	18 November, 19:23
	Recorded 1 projectile from W to E	18 November, 19:24
	Recorded 1 tracer from E to W	18 November, 19:39
	Recorded 6 undetermined explosions	18 November, 19:45
	Recorded 2 projectiles from E to W	18 November, 20:03
	Recorded 1 undetermined explosion	18 November, 20:04
	Recorded 6 projectiles from E to W	18 November, 20:06
	Recorded 1 undetermined explosion	18 November, 20:07
	Recorded 1 undetermined explosion	18 November, 20:08
	Recorded 16 projectiles from SE to NW	18 November, 20:09
	Recorded 2 undetermined explosions	19 November, 15:53
	Recorded 1 projectile from NW to SE	19 November, 16:00
	Recorded 2 projectiles from NW to SE	19 November, 16:16
	Recorded 1 tracer from W to E	19 November, 16:18
	Recorded 1 undetermined explosion	19 November, 17:31
	Recorded 2 projectiles from W to E	19 November, 17:32
	Recorded 2 projectiles from W to E	19 November, 17:33
	Recorded 2 undetermined explosions	19 November, 17:36
	Recorded 4 tracers from E to W	19 November, 18:03
	Recorded 1 undetermined explosion	19 November, 18:09
	Recorded 3 tracers from E to W	
	Recorded 1 undetermined explosion	
	Recorded 1 tracer from E to W	
	Recorded 2 undetermined explosions	
	Recorded 3 undetermined explosions	
	Recorded 2 tracers from E to W	
	Recorded 1 undetermined explosion	

		Recorded 4 tracers from E to W		19 November, 18:20
		Recorded 2 undetermined explosions		19 November, 18:21
		Recorded 7 tracers from E to W		
		Recorded 1 tracer from E to W		19 November, 18:22
		Recorded 1 undetermined explosion		
SMM camera in Shyrokyne (20km E of Mariupol)	5-8km N	Recorded 3 tracers from W to E	N/K	17 November, 20:12
		Recorded 5 tracers from W to E		17 November, 20:13
		Recorded 1 tracer from E to W		17 November, 20:14
		Recorded 1 tracer from E to W		17 November, 20:16
		Recorded 1 tracer from SE to NW		17 November, 20:18
		Recorded 4 tracers from SE to NW		17 November, 20:19
		Recorded 2 tracers from SE to NW		17 November, 20:44
		Recorded 1 undetermined explosion		17 November, 21:00
		Recorded 2 tracers from SW to NE		17 November, 21:02
		Recorded 2 tracers from SE to NW		17 November, 21:03
		Recorded 9 tracers from SE to NW		17 November, 21:09
		Recorded 8 tracers from SE to NW		17 November, 21:40
		Recorded 1 tracer from SE to NW		17 November, 22:12
		Recorded 2 tracers from SE to NW		17 November, 22:32
		Recorded 1 tracer from SE to NW		17 November, 22:39
		Recorded 3 tracers from SE to NW		17 November, 22:40
		Recorded 4 tracers from SE to NW		17 November, 22:43
		Recorded 1 tracer from SE to NW		17 November, 22:48
		Recorded 1 tracer from W to E		17 November, 22:52
		Recorded 2 tracers from SE to NW		17 November, 22:55
		Recorded 3 undetermined explosions		17 November, 22:57
		Recorded 1 tracer from SE to NW		17 November, 22:58
		Recorded 11 tracers from SE to NW		17 November, 22:58
		Recorded 1 tracer from SE to NW		17 November, 22:59
		Recorded 2 tracers from SE to NW		
		Recorded 1 illumination flare (trajectory N/K)		17 November, 23:00
		Recorded 2 tracers from SE to NW		17 November, 23:06
		Recorded 4 tracers from SE to NW		17 November, 23:10
		Recorded 4 tracers from SE to NW		17 November, 23:14
		Recorded 1 tracer from SE to NW		17 November, 23:15
		Recorded 1 undetermined explosion		17 November, 23:18
		Recorded 3 tracers from SE to NW		17 November, 23:30
		Recorded 1 undetermined explosion		17 November, 23:38
		Recorded 6 tracers from SE to NW		17 November, 23:54
		Recorded 3 tracers from SE to NW		18 November, 00:01
		Recorded 1 tracer from W to E		18 November, 00:16
		Recorded 1 undetermined explosion		18 November, 00:19
		Recorded 16 tracers from SE to NW		18 November, 00:20
		Recorded 6 tracers from SE to NW		18 November, 00:25
		Recorded 1 tracer from SE to NW		18 November, 00:27
Recorded 3 tracers from E to W	18 November, 00:41			
Recorded 6 tracers from E to W	18 November, 00:53			
Recorded 4 tracers from W to E	18 November, 02:16			
Recorded 5 tracers from E to W				
Recorded 1 tracer from W to E	18 November, 02:17			
Recorded 1 tracer from W to E	18 November, 02:21			
Recorded 8 tracers from E to W	18 November, 02:29			
Recorded 1 tracer from W to E				
Recorded 1 tracer from E to W	18 November, 02:32			
Recorded 3 tracers from SE to NW	18 November, 02:34			
Recorded 1 tracer from E to W	18 November, 02:36			
Recorded 1 tracer from W to E	18 November, 02:44			
Recorded 2 tracers from SE to NW	18 November, 02:56			
Recorded 4 tracers from SE to NW	18 November, 03:01			
Recorded 1 illumination flare	18 November, 17:25			

		(trajectory N/K)		
		Recorded 10 tracers from E to W		18 November, 17:31
		Recorded 1 tracer from W to E		18 November, 17:32
		Recorded 1 projectile from W to E		19 November, 16:46
		Recorded 1 projectile from W to E		19 November, 16:50
		Recorded 8 projectiles from E to W		19 November, 16:51
		Recorded 21 projectiles from E to W		19 November, 16:54
		Recorded 3 projectiles from W to E		19 November, 16:55
		Recorded 4 projectiles from W to E		19 November, 16:56
		Recorded 21 projectiles from E to W		19 November, 16:57
Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	2-3km S	Heard 3 shots (unable to assess whether inside or outside the disengagement area)	Small arms	18 November, 20:35
	4-6km SSE	Heard 1 undetermined explosion (unable to assess whether inside or outside the disengagement area)	N/K	18 November, 22:18
Popasna (government-controlled, 69km W of Luhansk)	5-7km ESE	Heard 8 bursts	IFV (BMP-2) cannon (30mm)	18 November, 21:15-21:45
		Heard 10 bursts	HMG	
		Heard 8 undetermined explosions	N/K	
Popasna (government-controlled, 69km W of Luhansk)	8-10km SSE	Heard 6 undetermined explosions	N/K	19 November, 10:02-10:05
	6-8km ESE	Heard 14 bursts	IFV (BMP, type N/K)	19 November, 10:18-10:35
Heard 39 undetermined explosions		N/K		
Heard 7 bursts		HMG		
SE edge of Popasna (government-controlled, 69km W of Luhansk)	5km ESE	Heard 23 undetermined explosions	N/K	19 November, 11:00-11:12
		Heard 13 bursts	IFV (BMP, type N/K)	
NE edge of Kalynove ("LPR"-controlled, 60km W of Luhansk)	5km WSW	Heard 36 bursts	HMG	19 November, 08:51-09:09
		Heard 1 undetermined explosion	N/K	
Kalynove ("LPR"-controlled, 60km W of Luhansk)	5-10km WNW	Heard 12 undetermined explosions	N/K	19 November, 09:40-10:04
		Heard 136 bursts	HMG	
E edge of Kalynove ("LPR"-controlled, 60km W of Luhansk)	10-15km WSW	Heard 33 shots	IFV (BMP-2) cannon	19 November, 10:12-10:47
		Heard 56 bursts	HMG	
		Heard 6 bursts	Anti-aircraft cannon (ZU-23, 23mm)	
		Heard 65 undetermined explosions	N/K	
	10-15km W	Heard 12 undetermined explosions	N/K	19 November, 12:06-12:16
Kalynove-Borshchuvate ("LPR"-controlled, 61km W of Luhansk)	7-10km SSW	Heard 69 bursts	HMG	19 November, 10:46-11:50
		Heard 100 undetermined explosions	N/K	
	5-7km W	Heard 6 undetermined explosions	N/K	19 November, 11:06-11:08
5-7km NW	Heard 4 undetermined explosions	N/K		
Molodizhne ("LPR"-controlled, 63km NW of Luhansk)	10-15km SSE	Heard 8 undetermined explosions	N/K	19 November, 09:35
1.5km SW of Molodizhne ("LPR"-controlled, 63km NW of Luhansk)	1-2km W	Heard 10 shots	Small arms	19 November, 09:50
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	5-12km SSE	Heard 23 undetermined explosions (assessed as outside the disengagement area)	N/K	19 November, 10:12-10:30
Zolote-3 (government-controlled, 60km W of Luhansk)	3-6km SSE	Heard 4 bursts (unable to assess whether inside or outside the disengagement area)	IFV (BMP-2) cannon	19 November, 10:35-11:25
	2-3km SSE	Heard 7 shots (unable to assess whether inside or outside the disengagement area)	Small arms	
N edge of Zolote disengagement area (government-	6-10km SSW	Heard 3 undetermined explosions (assessed as outside the disengagement area)	N/K	19 November, 11:42

controlled, 60km W of Luhansk)		Heard 7 undetermined explosions (assessed as outside the disengagement area)		19 November, 12:04-12:07
3.5km SW of Almazna ("LPR"-controlled, 55km W of Luhansk)	10-15km WSW	Heard 111 bursts	HMG	19 November, 13:08-13:30

Map of Donetsk and Luhansk regions²



² The SMM is 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 base from which SMM staff has temporarily relocated since 27 September 2016 based on recommendations of security experts from participating States.)