

Table of ceasefire violations as of 17 December 2017¹

SMM position	Location of event	Observation	Type of weapon/ammunition	Date/time
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.5-1.5km S	Recorded 2 undetermined explosions	N/K	15 December, 19:03
		Recorded 3 projectiles from E to W		15 December, 21:30
		Recorded 1 projectile from E to W		15 December, 21:35
		Recorded 1 undetermined explosion		15 December, 21:36
		Recorded 1 illumination flare in vertical flight		15 December, 21:42
		Recorded 3 projectiles from W to E		16 December, 00:05
		Recorded 1 undetermined explosion		16 December, 00:34
		Recorded 1 projectile from E to W		16 December, 00:35
		Recorded 1 projectile from E to W		16 December, 00:37
		Recorded 1 undetermined explosion		16 December, 00:39
		Recorded 1 projectile from E to W		16 December, 00:44
		Recorded 2 projectiles from W to E		16 December, 00:45-00:46
		Recorded 2 undetermined explosions		16 December, 00:55
		Recorded 3 projectiles from E to W		16 December, 00:59
		Recorded 1 undetermined explosion		16 December, 01:07
		Recorded 1 projectile from E to W		16 December, 01:14-01:15
		Recorded 2 projectiles from E to W		16 December, 01:40
		Recorded 3 projectiles from E to W		16 December, 02:01-02:02
		Recorded 1 projectile from E to W		16 December, 02:17
		Recorded 3 projectiles from E to W		16 December, 02:39
		Recorded 1 undetermined explosion		16 December, 02:40
		Recorded 7 projectiles from E to W		16 December, 02:41
		Recorded 1 projectile from W to E		16 December, 02:45
		Recorded 1 undetermined explosion		16 December, 02:46
		Recorded 5 projectiles from E to W		16 December, 02:49-02:52
		Recorded 4 projectiles from E to W		16 December, 03:12
		Recorded 2 undetermined explosions		16 December, 03:14
		Recorded 13 projectiles from E to W		16 December, 03:24
		Recorded 1 projectile from E to W		16 December, 03:41
		Recorded 1 projectile from SE to NW		16 December, 03:58
		Recorded 2 projectiles from SE to NW		16 December, 04:08
		Recorded 4 projectiles from E to W		16 December, 16:03
		Recorded 2 projectiles from W to E		16 December, 16:04
		Recorded 13 projectiles from W to E		16 December, 16:05
		Recorded 2 projectiles from E to W		16 December, 16:14
		Recorded 1 undetermined explosion		16 December, 16:15
		Recorded 2 projectiles from E to W		16 December, 16:17
		Recorded 1 projectile from E to W		
		Recorded 17 projectiles from W to E		
		Recorded 2 projectiles from E to W		

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.

		Recorded 5 projectiles from W to E		16 December, 16:20
		Recorded 3 projectiles from E to W		16 December, 16:42
		Recorded 1 undetermined explosion		
		Recorded 1 projectile from W to E		16 December, 16:56
		Recorded 1 projectile from W to E		16 December, 17:08
		Recorded 2 projectile from E to W		16 December, 17:10
		Recorded 1 projectile from W to E		
		Recorded 2 projectiles from E to W		16 December, 17:11
		Recorded 1 undetermined explosion		
		Recorded 3 projectiles from W to E		16 December, 17:20
		Recorded 1 projectile from W to E		16 December, 17:32
		Recorded 1 projectile from E to W		
		Recorded 1 projectile from NE to SW		16 December, 17:38
		Recorded 1 projectile from W to E		
		Recorded 1 projectile from W to E		16 December, 17:39
		Recorded 1 projectile from W to E		16 December, 17:46
		Recorded 1 projectile from W to E		16 December, 17:49
		Recorded 62 projectiles from W to E		16 December, 17:58-18:04
		Recorded 3 projectiles from E to W		16 December, 18:08
		Recorded 2 projectiles from W to E		
		Recorded 10 projectiles from E to W		16 December, 18:10
		Recorded 4 projectiles from W to E		
		Recorded 4 undetermined explosions		
		Recorded 15 projectiles from W to E		16 December, 18:14
		Recorded 1 undetermined explosion		
		Recorded 8 projectiles from E to W		16 December, 18:15
		Recorded 1 illumination flare in vertical flight		16 December, 18:19
		Recorded 4 projectiles from W to E		
		Recorded 7 projectiles from W to E		16 December, 18:20
		Recorded 3 projectiles from E to W		
		Recorded 1 illumination flare in vertical flight		
		Recorded 10 projectiles from W to E		16 December, 18:21
SMM camera 1km SW of Shyrokyne (20 km E of Mariupol)	5-8km N	Recorded 1 projectile from W to E	N/K	16 December, 16:44
		Recorded 1 projectile from E to W		16 December, 17:07
		Recorded 10 projectiles from E to W		16 December, 17:18
		Recorded 11 projectiles from E to W		16 December, 17:21-17:23
		Recorded 1 projectile from E to W		16 December, 17:29
		Recorded 2 projectiles from E to W		16 December, 17:34
		Recorded 10 projectiles from E to W		16 December, 17:36-17:37
		Recorded 2 projectiles from E to W		16 December, 17:48
		Recorded 2 projectiles from E to W		16 December, 17:51
		Recorded 2 projectiles from E to W		16 December, 18:00
		Recorded 2 projectiles from E to W		16 December, 18:06
		Recorded 13 projectiles from E to W		16 December, 18:11-18:12
		Recorded 4 projectiles from E to W		16 December, 18:17
		Recorded 1 projectile from W to E		
		Recorded 4 projectiles from E to W		16 December, 18:18
SMM camera in Petrivske ("DPR"-controlled, 41km S of Donetsk)	N/K S	Recorded 1 projectile from W to E (unable to assess whether inside or outside the disengagement area)	N/K	14 December, 00:57
		Recorded 5 projectiles from W to E (unable to assess whether inside or outside the disengagement area)		14 December, 15:56
		Recorded 4 tracers from N to S (unable to assess whether inside or outside the disengagement area)		

		Recorded 2 projectiles from E to W (unable to assess whether inside or outside the disengagement area)		14 December, 16:00	
		Recorded 10 projectiles from W to E (unable to assess whether inside or outside the disengagement area)		14 December, 16:23	
Railway station in Yasnuyvata ("DPR"-controlled, 16km NE of Donetsk)	3-5km W	Heard 9 undetermined explosions	N/K	16 December, 08:53-09:30	
		Heard 2 bursts	HMG	16 December, 09:14	
	2-4km ESE	Heard 8 bursts (assessed as live-fire training)	Small arms		16 December, 09:33-09:37
		Heard 24 shots (assessed as live-fire training)			
		Heard 2 bursts (assessed as live-fire training)			
	3-4km WSW	Heard 1 undetermined explosion	N/K	16 December, 09:38-09:43	
	2-4km ESE	Heard 1 burst (assessed as live-fire training)	Small arms		
	3-4km WSW	Heard 7 shots	N/K	16 December, 09:45-09:46	
		Heard 1 undetermined explosion			
	2-4km ESE	Heard 3 shots (assessed as live-fire training)	Small arms	16 December, 09:48-09:50	
	2-4km WSW	Heard 2 undetermined explosions	N/K		
	3-5km WSW	Heard 2 shots	Small arms	16 December, 09:51-09:56	
	2-4km ESE	Heard 11 shots (assessed as live-fire training)			
	3-5km WSW	Heard 2 undetermined explosions	N/K	16 December, 10:02	
		Heard 2 shots			
	2-4km ESE	Heard 11 shots (assessed as live-fire training)	Small arms	16 December, 10:05	
	3-4km WNW	Heard 2 bursts		16 December, 10:08	
	2km NNE	Heard 15 shots		16 December, 10:12	
	2km WNW	Heard 3 shots		16 December, 10:14	
	2km NNE	Heard 29 shots	Small arms	16 December, 10:15	
		Heard 1 burst		16 December, 10:17-10:19	
	3-4km WNW	Heard 1 undetermined explosion	N/K	16 December, 10:19	
	2km NNE	Heard 1 undetermined explosion	Small arms	16 December, 10:21	
		Heard 8 shots			
	2km ESE	Heard 1 burst (assessed as live-fire training)	Small arms	16 December, 10:23	
		Heard 21 bursts (assessed as live-fire training)			
	3-4km WNW	Heard 1 undetermined explosion	Small arms	16 December, 10:33-10:52	
		Heard 5 shots			
	2km ENE	Heard 19 bursts	N/K	16 December, 10:37	
	3-4km WNW	Heard 2 undetermined explosions	Small arms	16 December, 10:45	
		Heard 13 shots		16 December, 10:56	
	2km ENE	Heard 4 bursts	Small arms	16 December, 11:13-11:30	
		Heard 65 bursts (assessed as live-fire training)			
	3-5km SE	Heard 8 shots (assessed as live-fire training)	Small arms	16 December, 11:30-11:45	
		Heard 2 undetermined explosions			
	3-4km W	Heard 2 undetermined explosions	N/K	16 December, 10:37	
Heard 1 burst		Small arms	16 December, 10:45		
Heard 1 undetermined explosion		N/K	16 December, 10:56		
3-5km W	Heard 6 undetermined explosions	Small arms	16 December, 11:13-11:30		
2-3km W	Heard 25 shots				
3-5km SE	Heard 7 bursts (assessed as live-fire training)				
3-5km WSW	Heard uncountable overlapping shots	Small arms	16 December, 11:30-11:45		
	Heard 12 bursts				

		Heard 1 undetermined explosion	N/K	16 December, 11:37
		Heard uncountable overlapping shots	Small arms	16 December, 11:48-11:55
		Heard 4 bursts		16 December, 11:55
		Heard 2 undetermined explosions	N/K	16 December, 12:45-13:01
SW edge of Yasynuvata ("DPR"-controlled, 16km NE of Donetsk)	2km SW	Heard 3 bursts	Small arms	16 December, 13:23
	2-4km W	Heard 2 undetermined explosions	N/K	16 December, 13:33
		Heard 12 shots	Small arms	
		Heard 3 bursts		
		Heard 1 undetermined explosion		N/K
		Heard 10 bursts	HMG	16 December, 13:42-14:56
Heard 43 shots	Small arms			
Trudivski area, Petrovskiyi district ("DPR"-controlled, 15km SW of Donetsk city centre)	1km SW	Heard 4 explosions (outgoing)	N/K	16 December, 08:59
		Heard 4 explosions (outgoing)		16 December, 09:04
Donetsk central railway station ("DPR"- controlled, 6km NW of Donetsk city centre)	3-5km W	Heard 2 undetermined explosions	N/K	16 December, 13:44
		Heard 7 undetermined explosions		16 December, 13:52-13:56
SW edge of Avdiivka (government-controlled, 17km N of Donetsk)	2-3km ESE	Heard 3 undetermined explosions	N/K	16 December, 10:00
	2-3km E	Heard 2 undetermined explosions		16 December, 11:00
	2-3km ESE	Heard 1 undetermined explosion		16 December, 11:10
		Heard 1 undetermined explosion		16 December, 11:44
	3-4km SSE	Heard 7 undetermined explosions		16 December, 12:51
	2-3km SE	Heard uncountable overlapping shots and bursts	Small arms, HMG	16 December, 12:55-12:56
Dokuchaievsk ("DPR"-controlled, 30km SW of Donetsk)	2-4km SW	Heard 2 shots	AGL	16 December, 10:45
		Heard 12 shots	HMG	16 December, 10:55-11:02
		Heard 4 shots	Small arms	16 December, 11:06
		Heard 4 bursts		
		Heard 11 shots	HMG	16 December, 11:08-11:13
		Heard 2 shots	AGL	16 December, 11:17
	2-4km ENE	Heard 1 shot	Small arms	16 December, 11:20
	2-3km SW	Heard 12 shots	AGL	16 December, 11:21-11:31
E edge of Pavlopil (government-controlled, 26km NE of Mariupol)	N/K NNE	Heard 2 bursts	Small arms	16 December, 09:45
2.2km SSE of Sakhanka ("DPR"-controlled, 24km E of Mariupol)	2-3km SW	Heard 3 shots	Small arms	16 December, 10:55-10:57
		Heard 4 shots		16 December, 11:05-11:07
		Heard 4 shots		16 December, 11:11-11:12
	2-3km WSW	Heard 2 bursts	HMG	16 December, 11:14-11:18
		Heard 4 shots	Small arms	
	1-2km WSW	Heard 8 shots	Under barrel grenade launcher	16 December, 12:44
	N/K WSW	Heard 8 subsequent explosions (impact)		
	1.5km WSW	Heard 40-50 shots		16 December, 12:48-13:05
	N/K WSW	Heard 40-50 subsequent explosions (impacts)		
1-2km WSW	Heard 4 shots	Small arms	16 December, 14:20-14:21	
NE edge of Sartana (government-controlled, 15km NE of Mariupol)	N/K W	Heard 3 undetermined explosions	N/K	16 December, 12:10
NW edge of Sartana (government-controlled, 15km NE of Mariupol)	N/K ESE	Heard 6 explosions (outgoing)	N/K	16 December, 12:25-12:35
		Heard 6 subsequent explosions (impacts)		
		Heard 5 undetermined explosions		

E edge of Talakivka (government-controlled, 17km NE of Mariupol)	N/K ESE	Heard 12 undetermined explosions	N/K	16 December, 13:14-13:30
1km NNW of the entry-exit checkpoint in Pyshevyk (government-controlled, 25km NE of Mariupol)	N/K E	Heard 9 undetermined explosions	N/K	16 December, 14:32-14:35
	N/K E	Heard 36 undetermined explosions		16 December, 14:35-15:00
	5km SSE	Saw 1 explosion (impact)	Artillery (type N/K)	16 December, 15:00-15:15
	N/K E	Heard 9 undetermined explosions	N/K	
	5km SSE	Heard and saw 2 explosions (impacts)	Artillery (type N/K)	
	1km SE	Saw 3 explosions (impacts)	N/K	
SW edge of Lebedynske (government-controlled, 16km E of Mariupol)	N/K SSE	Heard 125 bursts	Anti-aircraft cannon (ZU-23, 23mm)	16 December, 15:05-15:17
		Heard 40 explosions (impact)	Artillery (type N/K)	
		Heard 35 explosions (outgoing)	N/K	
		Heard 25 bursts	HMG	
Svitlodarsk (government-controlled, 57km NE of Donetsk)	7-8km SE	Heard 12 explosions (impacts)	Artillery (122mm)	15 December, 18:21-18:34
	6-7km SW	Heard 6 explosions (impacts)	Artillery (type N/K)	15 December, 18:37-18:38
	5-6km SW	Heard 20 bursts	Small arms	15 December, 18:39-18:40
	8-9km SE	Heard 4 explosions (impacts)	Artillery (152mm)	15 December, 18:44-18:45
	5-6km SW	Heard 10 bursts	HMG	15 December, 18:50
	7-8km SE	Heard 6 explosions (impacts)	Artillery (type N/K)	15 December, 19:03-19:05
	6-8km SE	Heard 20 explosions (outgoing)	IFV (BMP-1) cannon (73mm)	15 December, 19:06-19:08
	6-7km SE	Heard 10 bursts	HMG	15 December, 19:10
		Heard 20 bursts	Small arms	15 December, 19:14-19:17
		Heard 40 shots		
	5-6km SSE	Heard 10 bursts	Small arms	15 December, 19:20-19:22
		Heard 10 shots		
	6-7km SE	Heard 10 bursts	HMG	15 December, 19:24-19:27
		Heard 30 bursts	Small arms	
		Heard 50 shots		
	8-9km SE	Heard 4 explosions (impacts)	Artillery (type N/K)	15 December, 23:02
		Heard 6 explosions (impacts)		15 December, 23:12-23:13
		Heard 6 explosions (impacts)		15 December, 23:20-23:21
		Heard 4 explosions (impacts)		15 December, 23:27
	6-7km SE	Heard 5 bursts	HMG	15 December, 23:31
	8-9km SE	Heard 2 explosions (impacts)	Artillery (type N/K)	16 December, 12:25
	5-6km SSE	Heard 10 bursts	HMG	16 December, 15:05-15:10
		Heard 20 bursts	Small arms	
		Heard 4 explosions (impacts)	Mortar (82mm)	
		Heard 40 shots	Small arms	
	7-8km SE	Heard 4 undetermined explosions	N/K	16 December, 15:20
	5-6km SW	Heard 5 bursts	HMG	16 December, 15:30-15:33
		Heard 30 bursts	Small arms	
		Heard 50 shots		
		Heard 6 explosions (impact)	Mortar (N/K type)	
	5-6km SW	Heard 5 bursts	Small arms	16 December, 15:44
		Heard 20 shots		
	7-8km SE	Heard 2 explosions (impacts)	Artillery (152mm)	16 December, 16:05
5-6km SE	Heard 2 explosions (impacts)	16 December, 16:07		
6-7km SE	Heard 2 explosions (impacts)	16 December, 16:10		
5-6km SW	Heard 5 bursts	HMG	16 December, 16:15	
6-8km SE	Heard 10 bursts	IFV (BMP-2) cannon (30mm)	16 December, 16:44	
	Heard 20 bursts	HMG	16 December, 16:44-16:55	
	Heard uncountable overlapping bursts	Small arms		

		Heard 4 undetermined explosions	Mortar (120mm)		
		Heard 33 explosions (outgoing)	MBT (type N/K)	16 December, 17:00-17:15	
		Heard 10 explosions (outgoing)	IFV (BMP-1) cannon		
		Heard 6 explosions (impacts)	Artillery (152mm)	16 December, 17:30-17:35	
		Heard 2 bursts	HMG		
Horlivka ("DPR"-controlled, 39km NE of Donetsk)	5-8km NW	Heard 7 undetermined explosions	N/K	16 December, 18:14-18:15	
		Heard 2 undetermined explosions		16 December, 18:20	
		Heard 4 undetermined explosions		16 December, 18:23	
		Heard 2 undetermined explosions		16 December, 18:30	
		Heard 6 undetermined explosions		16 December, 18:34	
		Heard 3 undetermined explosions		16 December, 18:38	
		Heard 2 undetermined explosions		16 December, 18:46	
		Heard 3 undetermined explosions		16 December, 18:50	
		Heard 4 undetermined explosions		16 December, 18:52	
		Heard 5 undetermined explosions		16 December, 19:02	
	5-8km W	Heard 2 undetermined explosions		16 December, 19:05	
		Heard 4 undetermined explosions		16 December, 19:14	
	5-8km NW	Heard 2 undetermined explosions		16 December, 19:18	
		Heard 3 undetermined explosions		16 December, 19:20	
		Heard 2 undetermined explosions		16 December, 19:25	
	3-5km W	Heard 3 undetermined explosions		16 December, 20:55	
Heard 1 undetermined explosions		16 December, 20:57			
Heard 2 undetermined explosions		16 December, 20:58			
Holmivskiyi ("DPR"-controlled, 49km NE of Donetsk)	6-7 km E	Heard 1 undetermined explosion	N/K	16 December, 11:49	
	6-7 km W	Heard 10 undetermined explosions		16 December, 11:51-11:53	
	6-7 km E	Heard 2 undetermined explosions		16 December, 12:22	
	6-7km NE	Heard 3 undetermined explosions		16 December, 12:38	
	6-7km NW	Heard 2 undetermined explosions		16 December, 12:40	
Novoluhanske (government-controlled, 53km NE of Donetsk)	2-3km W	Heard 4 undetermined explosions	N/K	16 December, 12:34	
		Heard 4 bursts	HMG		
		Heard 11 undetermined explosions	N/K	16 December, 12:28	
		Heard 4 bursts	HMG		
E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	4-6km SW	Heard 3 undetermined explosions (assessed as outside the disengagement area)	N/K	15 December, 18:38-18:48	
		Heard 4 bursts (assessed as outside the disengagement area)	HMG		
		Heard 19 undetermined explosions (assessed as outside the disengagement area)	N/K		15 December, 18:53-19:00
		Heard 40 shots (assessed as outside the disengagement area)	Small arms		
	4-6km SW	Heard 35 undetermined explosions (assessed as outside the disengagement area)	N/K	15 December, 19:03-19:18	
		Heard 118 bursts (assessed as outside the disengagement area)	HMG		
		Heard 11 explosions (impacts) (assessed as outside the disengagement area)	AGL (type N/K)		
		Heard 40 shots (assessed as outside the disengagement area)	Small arms		
3-5km SE	Heard 17 explosions (impacts) (assessed as outside the disengagement area)	AGL (type N/K)	15 December, 21:35-21:45		
NW edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	1.5-2km SW	Heard 12 bursts (assessed as outside the disengagement area)	HMG	16 December, 15:10-15:11	
	12-15km W	Heard 70 undetermined explosions	N/K	15 December, 19:32-19:52	

Kadiivka (“LPR”-controlled, 50km W of Luhansk)	12-18km W	Heard 93 undetermined explosions		15 December, 20:01-20:32
	12-18km WSW	Heard 61 undetermined explosions		15 December, 20:34-20:38
	12-15km W	Heard 12 undetermined explosions		15 December, 20:43-20:50
	12-18km WSW	Heard 5 undetermined explosions		
N edge of Popasna (government-controlled, 60km W of Luhansk)	3-4km SW	Heard 6 explosions (outgoing)	IFV (BMP-1) cannon	15 December, 22:45-23:02
		Heard 5 shots	Small arms	
		Heard 1 explosion (outgoing)	IFV (BMP-1) cannon	15 December, 23:13-23:25
		Heard 1 burst	HMG	
		Heard 1 explosion (outgoing)	IFV (BMP-1) cannon	16 December, 01:03
		Heard 1 burst	HMG	16 December, 01:15
		Heard 3 shots	Small arms	16 December, 01:17-01:19
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.5-1.5km S	Recorded 1 undetermined explosion	N/K	
		Recorded 3 projectiles from W to E		16 December, 18:32
		Recorded 2 undetermined explosions		
		Recorded 3 projectiles from W to E		16 December, 18:34
		Recorded 3 projectiles from E to W		16 December, 18:38
		Recorded 2 projectiles from E to W		
		Recorded 1 undetermined explosion		16 December, 18:39
		Recorded 1 illumination flare in vertical flight		
		Recorded 2 projectiles from E to W		16 December, 18:42
		Recorded 1 undetermined explosion		
		Recorded 9 projectiles from W to E		16 December, 18:44
		Recorded 2 projectiles from E to W		16 December, 19:57
		Recorded 3 undetermined explosion		
		Recorded 8 projectiles from W to E		16 December, 20:17
		Recorded 14 projectiles from W to E		
		Recorded 10 projectiles from W to E		16 December, 20:27
		Recorded 10 projectiles from W to E		16 December, 20:59
		Recorded 2 undetermined explosions		16 December, 21:00
		Recorded 8 projectiles from W to E		16 December, 21:02
		Recorded 2 projectiles from W to E		16 December, 21:03
		Recorded 16 projectiles from W to E		16 December, 21:07
		Recorded 1 projectiles from W to E		16 December, 21:08
		Recorded 7 projectiles from W to E		16 December, 21:19
		Recorded 1 undetermined explosion		
		Recorded 3 projectiles from W to E		16 December, 21:20
		Recorded 1 undetermined explosion		
		Recorded 2 projectiles from W to E		16 December, 21:23
		Recorded 1 projectile from E to W		16 December, 21:24
		Recorded 3 projectiles from W to E		
		Recorded 1 projectile from E to W		16 December, 21:29
		Recorded 6 projectiles from W to E		16 December, 21:30
		Recorded 2 projectiles from E to W		16 December, 21:33
		Recorded 1 projectiles from W to E		16 December, 21:34
		Recorded 5 projectiles from W to E		
		Recorded 3 undetermined explosions		16 December, 21:37
		Recorded 1 projectile from E to W		
		Recorded 1 illumination flare in vertical flight		16 December, 21:53
		Recorded 1 projectile from W to E		
		Recorded 2 projectiles from E to W		16 December, 22:00
		Recorded 2 undetermined explosions		16 December, 22:02
Recorded 2 projectiles from E to W	16 December, 22:04			
Recorded 1 projectile from E to W	16 December, 22:13			
Recorded 1 projectile from E to W	16 December, 22:16			
Recorded 1 undetermined explosion	16 December, 22:17			

	Recorded 15 projectiles from W to E	16 December, 22:18
	Recorded 3 projectiles from W to E	16 December, 22:19
	Recorded 9 projectiles from W to E	16 December, 22:20
	Recorded 5 projectiles from E to W	16 December, 22:21
	Recorded 2 projectiles from W to E	16 December, 22:37
	Recorded 1 projectile from W to E	16 December, 22:38
	Recorded 1 projectile from W to E	16 December, 22:47
	Recorded 1 projectile from E to W	16 December, 23:00
	Recorded 1 projectile from E to W	16 December, 23:01
	Recorded 1 projectile from E to W	16 December, 23:11
	Recorded 3 projectiles from E to W	16 December, 23:15
	Recorded 4 projectiles from E to W	16 December, 23:22
	Recorded 1 undetermined explosion	16 December, 23:24
	Recorded 2 projectiles from E to W	16 December, 23:29
	Recorded 3 undetermined explosions	16 December, 23:39
	Recorded 1 projectile from E to W	16 December, 23:40
	Recorded 2 projectiles from E to W	16 December, 23:41
	Recorded 2 undetermined explosions	16 December, 23:42
	Recorded 1 projectile from E to W	16 December, 23:43
	Recorded 1 undetermined explosion	16 December, 23:44
	Recorded 4 projectiles from E to W	16 December, 23:45
	Recorded 1 undetermined explosion	16 December, 23:49
	Recorded 1 projectile from E to W	16 December, 23:57
	Recorded 2 projectiles from E to W	16 December, 23:58
	Recorded 1 projectile from E to W	16 December, 23:59
	Recorded 2 projectiles from W to E	17 December, 00:02
	Recorded 3 projectiles from E to W	17 December, 00:06
	Recorded 1 projectile from E to W	17 December, 00:10
	Recorded 1 projectile from W to E	17 December, 00:11
	Recorded 2 projectiles from E to W	17 December, 00:27
	Recorded 1 undetermined explosion	17 December, 00:28
	Recorded 2 projectiles from E to W	17 December, 00:29
	Recorded 7 projectiles from SE to NW	17 December, 00:32
	Recorded 1 undetermined explosion	17 December, 00:33
	Recorded 3 projectiles from E to W	17 December, 00:34
	Recorded 3 projectiles from E to W	17 December, 00:36-00:37
	Recorded 3 projectiles from W to E	17 December, 00:51
	Recorded 1 undetermined explosion	17 December, 01:18
	Recorded 4 projectiles from E to W	17 December, 01:26
	Recorded 4 projectiles from E to W	17 December, 01:27
	Recorded 2 projectiles from E to W	17 December, 01:28
	Recorded 1 undetermined explosion	17 December, 01:30
	Recorded 3 projectiles from W to E	17 December, 01:39
	Recorded 2 projectiles from W to E	17 December, 02:28
	Recorded 1 projectile from E to W	17 December, 02:29
	Recorded 3 projectiles from E to W	
	Recorded 1 projectile from N to S	
	Recorded 5 projectiles from W to E	

		Recorded 1 projectile from E to W		
		Recorded 6 projectiles from W to E		17 December, 02:30
		Recorded 1 projectile from E to W		17 December, 02:37
		Recorded 1 projectile from E to W		17 December, 02:41
		Recorded 6 projectiles from W to E		
		Recorded 5 projectiles from E to W		17 December, 02:43
		Recorded 10 projectiles from W to E		17 December, 02:44
		Recorded 1 undetermined explosion		17 December, 03:19
		Recorded 2 projectiles from E to W		17 December, 03:27
		Recorded 3 projectiles from E to W		17 December, 03:30
		Recorded 3 projectiles from E to W		17 December, 04:07
		Recorded 1 undetermined explosion		17 December, 04:08
		Recorded 1 undetermined explosion		17 December, 04:46
		Recorded 1 undetermined explosion		
		Recorded 3 projectiles from W to E		17 December, 16:39
		Recorded 1 undetermined explosion		17 December, 16:40
		Recorded 5 projectiles from W to E		17 December, 16:48
		Recorded 1 projectile from E to W		17 December, 17:33
		Recorded 1 projectile from E to W		
		Recorded 8 projectiles from W to E		17 December, 17:34
		Recorded 5 projectiles from W to E		17 December, 17:40
		Recorded 2 projectile from E to W		17 December, 17:41
		Recorded 1 undetermined explosion		17 December, 17:42
		Recorded 7 projectiles from W to E		17 December, 17:49
		Recorded 4 projectile from E to W		17 December, 18:19
		Recorded 1 undetermined explosion		17 December, 18:22
		Recorded 2 projectile from E to W		
		Recorded 2 undetermined explosions		17 December, 18:24
		Recorded 1 undetermined explosion		
		Recorded 5 projectile from E to W		17 December, 18:25
SMM camera 1km SW of Shyrokyne (20 km E of Mariupol)	5-8km N	Recorded 11 projectiles from E to W	N/K	16 December, 18:44
		Recorded 17 projectiles from E to W		16 December, 18:47
		Recorded 3 projectiles from E to W		16 December, 18:51
		Recorded 2 projectiles from W to E		16 December, 19:00
		Recorded 1 projectile from W to E		16 December, 19:02
		Recorded 2 projectiles from E to W		16 December, 19:06
		Recorded 4 projectiles from E to W		16 December, 20:04
		Recorded 2 undetermined explosions		
		Recorded 6 tracers from E to W		16 December, 20:15
		Recorded 5 projectiles from E to W		16 December, 20:36
		Recorded 4 tracers from E to W		16 December, 20:42
		Recorded 4 projectiles from E to W		16 December, 20:43
		Recorded 4 projectiles from E to W		16 December, 21:43
		Recorded 3 projectiles from E to W		16 December, 21:58
		Recorded 5 projectiles from E to W		16 December, 22:42
		Recorded 1 projectile from W to E		16 December, 22:43
		Recorded 4 projectiles from E to W		16 December, 23:03
		Recorded 1 projectile from E to W		17 December, 02:15
		Recorded 3 projectiles from E to W		17 December, 02:45
		Recorded 7 projectiles from E to W		17 December, 02:58
		Recorded 6 projectiles from E to W		
		Recorded 1 undetermined explosion		17 December, 16:16
		Recorded 2 projectiles from E to W		17 December, 16:17
		Recorded 2 projectiles from E to W		17 December, 16:18
		Recorded 3 projectiles from E to W		17 December, 16:19
		Recorded 2 projectiles from E to W		
		Recorded 2 tracers from E to W		17 December, 16:34
		Recorded 1 undetermined explosion		17 December, 16:35

		Recorded 1 projectile from E to W					
		Recorded 1 projectile from W to E		17 December, 16:37			
		Recorded 1 projectile from E to W		17 December, 16:47			
		Recorded 2 projectiles from E to W		17 December, 16:52			
		Recorded 2 projectiles from E to W		17 December, 16:57			
		Recorded 4 projectiles from E to W		17 December, 17:06			
		Recorded 7 projectiles from E to W		17 December, 17:08			
		Recorded 16 projectiles from E to W		17 December, 17:11-17:13			
		Recorded 2 projectiles from E to W		17 December, 17:15			
		Recorded 17 projectiles from E to W		17 December, 17:51			
		Recorded 5 projectiles from E to W		17 December, 17:52			
		Recorded 3 projectiles from E to W		17 December, 18:06			
		Recorded 2 projectiles from E to W		17 December, 18:08			
		Recorded 5 projectiles from E to W		17 December, 18:10			
		Recorded 10 projectiles from E to W		17 December, 18:16			
		Recorded 3 projectiles from E to W		17 December, 18:18			
SMM camera in Petrivske ("DPR"-controlled, 41km S of Donetsk)	N/K S	Recorded 1 projectile in vertical flight (unable to assess whether inside or outside the disengagement area)	N/K	14 December, 21:22			
		Recorded 2 projectiles from W to E (unable to assess whether inside or outside the disengagement area)					
	N/K WSW	Recorded 1 projectile from S to N (unable to assess whether inside or outside the disengagement area)		N/K	14 December, 21:30		
	N/K SW	Recorded 1 projectile from E to W (unable to assess whether inside or outside the disengagement area)					
	N/K SW	Recorded 1 projectile from SE to NW (unable to assess whether inside or outside the disengagement area)					
	N/K S	Recorded 1 projectile from E to W (unable to assess whether inside or outside the disengagement area)					
		Recorded 1 undetermined explosion (unable to assess whether inside or outside the disengagement area)					
		Recorded 2 projectiles from E to W (unable to assess whether inside or outside the disengagement area)					
		Recorded 1 undetermined explosion (unable to assess whether inside or outside the disengagement area)					
	N/K SW	Recorded 2 projectiles from W to E (unable to assess whether inside or outside the disengagement area)					14 December, 21:31
		Recorded 1 undetermined explosion (unable to assess whether inside or outside the disengagement area)					14 December, 21:32
	N/K W	Recorded 2 projectiles from S to N (unable to assess whether inside or outside the disengagement area)					14 December, 21:32
	N/K S	Recorded 2 projectiles from W to E (unable to assess whether inside or outside the disengagement area)					14 December, 21:35
		Recorded 3 tracers from W to E (unable to assess whether inside or outside the disengagement area)					14 December, 21:35
Recorded 1 projectile from W to E (unable to assess whether inside or outside the disengagement area)			14 December, 21:40				
3-5km WNW	Heard uncountable overlapping explosions	N/K	17 December, 06:47-07:10				

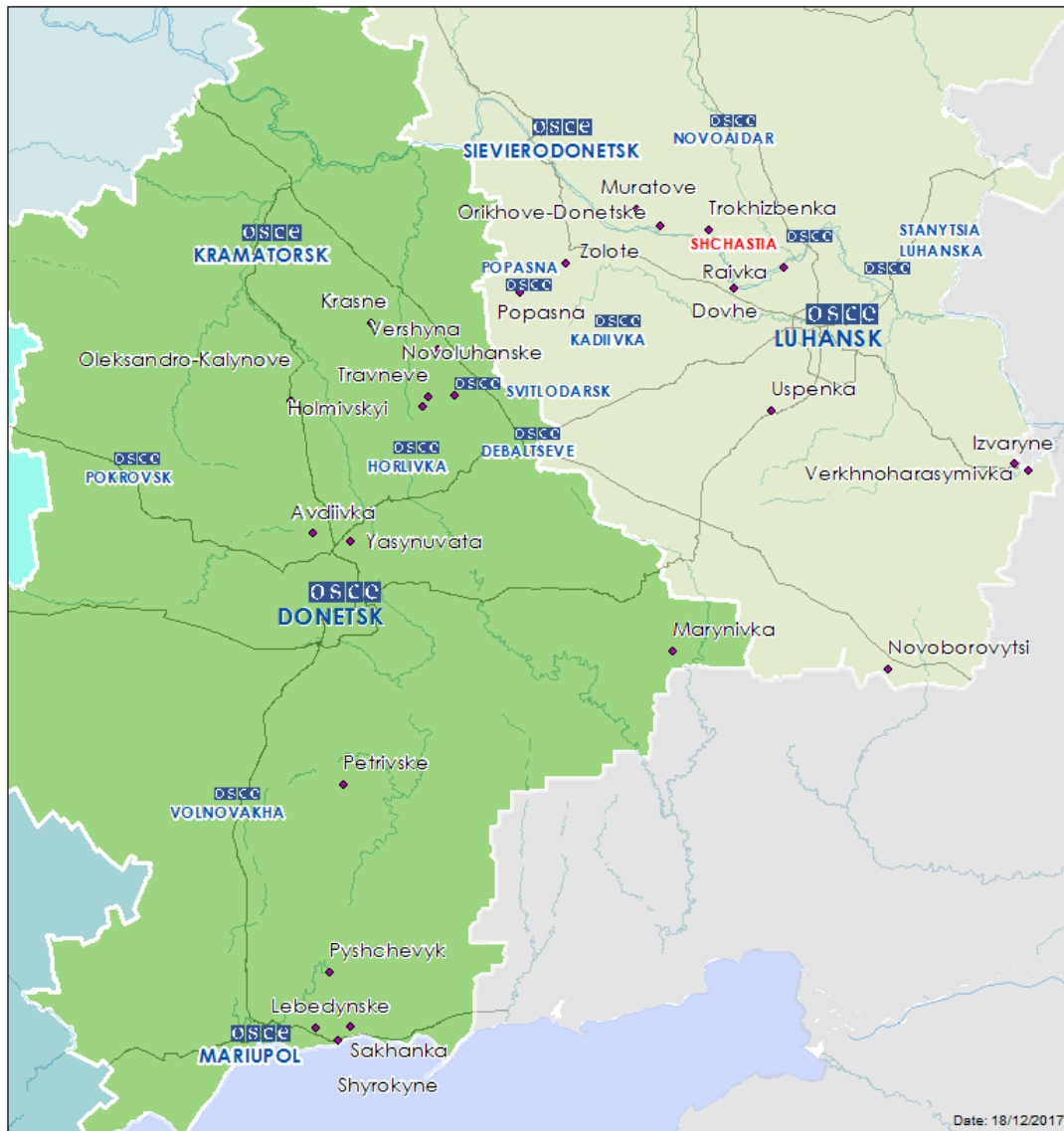
Debaltseve ("DPR"-controlled, 58km NE of Donetsk)		Heard 1 undetermined explosion		17 December, 08:08	
	2-4km NW	Heard 9 undetermined explosions		17 December, 15:55-16:00	
Railway station in Yasynuvata ("DPR"-controlled, 16km NE of Donetsk)	1-2km WSW	Heard 6 undetermined explosions	N/K	17 December, 09:00-09:20	
		Heard 4 shots	HMG		
	1-2km W	Heard 4 shots		17 December, 09:40-09:42	
	1-2km NW	Heard 4 explosions (outgoing)	N/K		
		Heard 2 bursts	HMG		
	1-2km WNW	Heard 18 bursts	AGL	17 December, 10:01-10:28	
		Heard 1 burst	Small arms		
		Heard 2 undetermined explosions	N/K		
		Heard 17 shots	Small arms		
	2-3km WNW	Heard 4 undetermined explosions	N/K	17 December, 10:32-10:54	
		Heard 12 bursts	AGL		
	1-2km WNW	Heard 16 bursts	Small arms	17 December, 10:59	
		Heard 2 shots			
	1-2km W	Heard 6 undetermined explosions	N/K	17 December, 11:02-11:34	
	1-2km WSW	Heard 12 shots	Small arms		
	2-3km SW	Heard 1 undetermined explosion	N/K		
	1-2km WNW	Heard 1 burst	HMG		
	2-3km WNW	Heard 2 bursts			
	2-3km SW	Heard 3 bursts	Small arms		
	1-2km W	Heard 3 shots	HMG		
		Heard 6 bursts			
		Heard 8 shots			
	1-2km W	Heard 3 shots	Small arms		17 December, 11:39-11:55
	2-3km W	Heard 1 burst	HMG		
	1-3km SW	Heard 25 bursts			
	1-2km WSW	Heard 9 shots		N/K	
		Heard 14 bursts			
	1-2km W	Heard 1 undetermined explosion			
	N/K SW	Heard 20 bursts	Small arms	17 December, 12:02-12:25	
		Heard 11 shots			
	1-2km W	Heard 1 undetermined explosion	N/K	17 December, 12:39-12:50	
	2-3km W	Heard 1 undetermined explosion			
	1-2km W	Heard 13 bursts	Small arms		
		Heard 3 shots			
	1-1.5km WNW	Heard 7 bursts			
	2-3km W	Heard 1 undetermined explosion	N/K	17 December, 12:58-13:00	
		Heard 3 bursts			
1km W	Heard 2 bursts	AGL	17 December, 13:06-13:20		
1-2km W	Heard 13 bursts	Small arms			
	Heard 20 bursts	N/K			
1-2km W	Heard 1 explosion (outgoing)		17 December, 13:23-13:26		
1-2km W	Heard 2 undetermined explosions				
1-1.5km NW	Heard 1 undetermined explosion	N/K	17 December, 13:35-13:59		
6-8km SW	Heard 2 undetermined explosions				
1-2km W	Heard 9 shots	Small arms	17 December, 14:10-14:18		
1-2km SW	Heard 7 shots	HMG			
2km SW	Heard 2 undetermined explosions	N/K	17 December, 14:24-14:28		
1-2km SW	Heard 20 bursts	Small arms			
2-4km NW	Heard 4 bursts	AGL	17 December, 14:24-14:28		
2-4km W	Heard 11 bursts	Small arms			
1-2km W	Heard 7 bursts				
		Heard 1 undetermined explosion	N/K		
3-4km N	Heard 2 undetermined explosions	N/K	17 December, 13:25		

Donetsk central railway station ("DPR"- controlled, 6km NW of Donetsk city centre)	2-4km W	Heard 3 undetermined explosions		17 December, 13:34-13:50
		Heard 2 shots	Small arms	
		Heard 47 shots	HMG	
		Heard 2 bursts		
	3-5km NW	Heard 3 undetermined explosions	N/K	17 December, 14:00-14:09
	2km NW	Heard 4 shots	Small arms	
Heard 12 shots		HMG		
Heard 1 undetermined explosion		N/K		
3km NE	Heard 1 undetermined explosion			
Oleksandrivka ("DPR"-controlled, 20km SW of Donetsk)	3-5km W	Heard 4 undetermined explosions	N/K	17 December, 09:38
	3-5km N	Heard 2 undetermined explosions		17 December, 09:43-09:45
1.8km NNW of Oleksandrivka ("DPR"-controlled, 20km SW of Donetsk)	2-3km NW	Heard 5 explosions (outgoing)	N/K	17 December, 10:05-10:26
		Heard 5 subsequent explosions (impacts)		
		Heard at least 20 shots	Small arms	
Petrivske ("DPR"- controlled, 41km S of Donetsk)	2-4km SE	Heard 9 bursts (assessed as outside the disengagement area)	Small arms	17 December, 09:41-09:44
		Heard 10 shots (assessed as outside the disengagement area)		
Dokuchaievsk ("DPR"-controlled, 30km SW of Donetsk)	2-4km SE	Heard 12 shots	Small arms	17 December, 10:40-10:44
		Heard 3 bursts		
2.3km SSW of Sarabash (formerly Komunarivka, "DPR"- controlled, 26km S of Donetsk)	2-3km NW	Heard 1 burst	HMG	17 December, 11:00
	3-5km SW	Heard 5 undetermined explosions	N/K	17 December, 11:43
2.2km WSW of Pyshchevyk (government-controlled, 25km NE of Mariupol)	N/K N	Heard 1 undetermined explosion	N/K	17 December, 10:27
		Heard 1 undetermined explosion		17 December, 10:32
1km NNW of Pyshchevyk (government-controlled, 25km NE of Mariupol)	N/K SE	Heard 1 undetermined explosion	N/K	17 December, 14:05
1km N of Zaichenko ("DPR"-controlled, 26km NE of Mariupol)	N/K SSW	Heard 3 bursts	AGL	17 December, 10:45-11:00
		Heard 30 bursts	HMG	
	N/K NNW	Heard 2 undetermined explosions	N/K	17 December, 11:05-11:12
	N/K S	Heard 2 undetermined explosions		
	N/K SSW	Heard 2 undetermined explosions	AGL	
		Heard 10 bursts	HMG	
3km SE of Lomakyne (government-controlled, 15km NE of Mariupol)	N/K SE	Heard 2 undetermined explosions	N/K	17 December, 11:05-11:08
		Heard 1 burst	HMG	
	3-4km SE	Heard 3 bursts	Small arms	17 December, 11:25-11:27
		Heard 5 shots		
Novohnativka (government-controlled, 40km S of Donetsk)	N/K NNW	Heard uncountable overlapping shots and bursts	Small arms	17 December, 11:08-11:10
Pikuzy (formerly Kominternove) ("DPR"-controlled, 23km NE of Mariupol)	N/K SSW	Heard 15 shots	Small arms	17 December, 11:28-11:35

Bezimenne ("DPR"-controlled, 30km E of Mariupol)	N/K NW	Heard 3 undetermined explosions	N/K	17 December, 13:10-13:18	
		Heard 1 burst	HMG		
		Heard 6 undetermined explosions	N/K		
Svitlodarsk (government-controlled, 57km NE of Donetsk)	6-7km SE	Heard 5 bursts	HMG	16 December, 18:01-18:03	
		Heard 10 bursts	Small arms		
		Heard 30 shots			
	7-8km SE	Heard 2 explosions (impacts)	Artillery (152mm)	16 December, 18:10	
		Heard 1 explosion (impact)	Artillery (type N/K)	16 December, 18:17	
	6-7km SE	Heard 1 explosion (impact)			16 December, 19:25
	5-6km SSE	Heard 10 bursts	HMG	16 December, 19:31-19:34	
		Heard 20 bursts	Small arms		
		Heard 40 shots			
	6-7km SE	Heard 3 bursts	IFV (BMP-2) cannon	16 December, 19:37	
	8-9km SE	Heard 1 explosion (impact)	Artillery (type N/K)	16 December, 20:15	
	6-7km SE	Heard 5 bursts	IFV (BMP-2) cannon	16 December, 21:28	
		Heard 4 bursts	HMG	16 December, 21:44	
		Heard 3 bursts			
		Heard 6 bursts	IFV (BMP-2) cannon	16 December, 22:18-22:22	
	Heard 5 bursts	HMG			
	2-3km N	Heard at least 120 explosions (outgoing)	Artillery (122mm)	17 December, 06:45-07:40	
	4-5km NE	Heard at least 120 explosions (outgoing)			
	6-8km SE	Heard at least 180 explosions (subsequent impacts)			
	5-7km SSE	Heard at least 60 explosions (subsequent impacts)			
	6-8km SE	Heard at least 100 bursts	IFV (BMP-2) cannon		
		Heard at least 20 explosion (outgoing)	MBT (type N/K)		
	5-7km SSE	Heard at least 500 overlapping bursts and shots	Small arms		
	5-8km SE	Heard at least 200 overlapping bursts and shots			
		Heard 24 explosions (impacts)	Artillery (152mm)		
		Heard at least 20 undetermined explosions	Mortar (type N/K)		
		Heard at least 30 explosion (outgoing)	IFV (BMP-1) cannon (73mm)		
	6-8km SE	Heard 100 bursts	HMG		
		Heard 9 explosions (impacts)	Artillery (152mm)		17 October 07:50-07:58
	6-7km SE	Heard 3 explosions (outgoing)	IFV (BMP-1) cannon		17 October 09:22
		Heard 2 explosions (impacts)	Artillery (152mm)		17 October 10:31
	6-7km SE	Heard 2 explosions (impacts)			
	4-6km SE	Heard 6 explosions (outgoing)	IFV (BMP-1) cannon		17 December, 13:15
5-7km ESE	Heard 18 explosions (outgoing)	Artillery (type N/K)	17 December, 15:56-16:02		
3-5km S	Heard 2 undetermined explosions	N/K	17 December, 16:04		
3-5km ESE	Heard 12 shots	HMG	17 December, 16:39		
	Heard 9 bursts		17 December, 16:44		
	Heard 5 bursts		17 December, 16:48		
	Heard 3 shots		17 December, 16:51		
2-3km SSE	Heard 9 shots			17 December, 16:55-16:57	
	Heard 1 bursts			17 December, 17:00-17:02	
	Heard 13 shots			17 December, 17:03	
3-4km SSE	Heard 4 bursts			17 December, 17:14	
	Heard 5 bursts			17 December, 17:15	
5-7km S	Heard 3 bursts			17 December, 17:15	

	3-5km ESE	Heard 7 shots	IFV (BMP-2) cannon	17 December, 17:17
		Heard 3 bursts	HMG	17 December, 17:18
		Heard 3 explosions (outgoing)	N/K	17 December, 17:19
		Heard 4 shots	IFV (BMP-2) cannon	17 December, 17:20
		Heard 6 explosions (outgoing)	N/K	17 December, 17:21-17:24
		Heard 8 shots	IFV (BMP-2) cannon	17 December, 17:25
		Heard 7 explosions (outgoing)	N/K	17 December, 17:26
		Heard 2 bursts	HMG	17 December, 17:27
	4-6km ESE	Heard 12 shots	IFV (BMP-2) cannon	17 December, 17:28
	4-6km E	Heard 1 undetermined explosion (impact)	N/K	
3-5km ESE	Heard 7 shots	Small arms	17 December, 17:51	
	Heard 1 undetermined explosion	N/K	17 December, 17:57	
SMM camera in Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	2.3km SSE	Recorded 1 undetermined explosion (impact) (assessed as the same explosion as recorded by the Prince Ihor Monument camera)	N/K	16 December, 21:15
SMM camera near the Prince Ihor Monument SE of Stanytsia Luhanska bridge (15km NE of Luhansk)	0.16km ENE	Recorded 1 undetermined explosion (impact)	N/K	
E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	3-4km SW	Heard 1 undetermined explosion (assessed as outside the disengagement area)	N/K	16 December, 21:14
N edge of Popasna (government-controlled, 69km W of Luhansk)	3-5km SE/S	Heard 200 undetermined explosions	N/K	16 December, 20:43-21:52
	3-4km S	Heard 6 undetermined explosions		
		Heard 10 shots	Small arms	17 December, 01:44-01:50
		Heard 3 undetermined explosions	N/K	17 December, 02:16-02:20
		Heard 6 explosions (outgoing)	IFV (BMP-1) cannon	17 December, 02:52-02:57
		Heard 16 explosions (outgoing)		17 December, 03:05-03:38
Muratove (government-controlled, 51km north-west of Luhansk)	1km SE	Heard 5 undetermined explosions	N/K	17 December, 04:42-04:46
		Heard 6 shots (assessed as live-fire training)	Small arms	17 December, 10:25-10:34
		Heard 4 bursts (assessed as live-fire training)	HMG	
	1km E	Heard 91 shots (assessed as live-fire training)	Small arms	17 December, 11:05-11:35
	4-5km E/SE	Heard 1 undetermined explosion (assessed as live-fire training)	N/K	17 December, 11:26
	1-1.5km E	Heard 15 shots (assessed as live-fire training)	Small arms	17 December, 11:35-11:58
1-1.5km SE	Heard 6 shots (assessed as live-fire training)	17 December, 11:55-11:58		
Zolote-4/Rodina (government-controlled, 60km NW of Luhansk)	4km SSW	Heard 1 explosion (impact)	Artillery (152mm)	17 December, 11:26
S edge Kalynove-Borshchuvate ("LPR"-controlled, 61km W of Luhansk)	5-10km SW	Heard 1 undetermined explosion	N/K	17 December, 12:19

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.)