

Table of ceasefire violations as of 3 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 1 undetermined explosion	N/K	1 December, 18:33
		Recorded 2 undetermined explosions		1 December, 18:34
		Recorded 1 undetermined explosion		1 December, 18:38
		Recorded 3 undetermined explosions		1 December, 18:41
		Recorded 3 projectiles from E to W		1 December, 18:54
		Recorded 3 projectiles from E to W		1 December, 18:55
		Recorded 1 undetermined explosion		1 December, 19:24
		Recorded 1 projectile from E to W		1 December, 19:42
		Recorded 2 projectiles from E to W		1 December, 19:43
		Recorded 2 projectiles from E to W		1 December, 20:36
		Recorded 1 undetermined explosion		1 December, 20:47
		Recorded 1 tracer from E to W		1 December, 20:48
		Recorded 1 undetermined explosion		1 December, 20:50
		Recorded 1 undetermined explosion		1 December, 21:34
		Recorded 1 undetermined explosion		1 December, 21:36
		Recorded 1 undetermined explosion		1 December, 21:39
		Recorded 1 undetermined explosion		1 December, 21:42
		Recorded 1 projectile from E to W		1 December, 21:43
		Recorded 1 undetermined explosion		1 December, 21:45
		Recorded 13 tracers from E to W		1 December, 21:46
		Recorded 2 undetermined explosions		1 December, 21:47
		Recorded 1 undetermined explosion		1 December, 21:47
		Recorded 2 projectiles from E to W		1 December, 21:48
		Recorded 10 undetermined explosions		1 December, 21:48
		Recorded 22 tracers from E to W		1 December, 21:48
		Recorded 4 undetermined explosions		1 December, 21:50
		Recorded 1 projectile from W to E		1 December, 21:50
		Recorded 5 tracers from E to W		1 December, 21:51
		Recorded 1 undetermined explosion		1 December, 21:52
		Recorded 1 undetermined explosion		1 December, 21:52
		Recorded 2 undetermined explosions		1 December, 21:53
		Recorded 1 tracer from E to W		1 December, 21:53
		Recorded 1 tracer from W to E		1 December, 21:54
		Recorded 13 projectiles from W to E		1 December, 21:54
		Recorded 2 projectiles from E to W		1 December, 21:55
		Recorded 5 undetermined explosions		1 December, 21:55
		Recorded 1 tracer from E to W		1 December, 21:56
		Recorded 5 undetermined explosions		1 December, 21:56
		Recorded 3 tracers from E to W		1 December, 21:56
		Recorded 1 tracer from W to E		1 December, 21:56
Recorded 1 undetermined explosion	1 December, 22:00			
Recorded 4 undetermined explosions	1 December, 22:02			
Recorded 1 projectile from W to E	1 December, 22:02			
Recorded 19 tracers from E to W	1 December, 22:02			
Recorded 1 tracer from W to E	1 December, 22:03			
Recorded 1 undetermined explosion	1 December, 22:03			
Recorded 1 projectile from W to E	1 December, 22:04			
Recorded 2 undetermined explosions	1 December, 22:04			
Recorded 1 undetermined explosion	1 December, 22:05			

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 1 undetermined explosion	1 December, 22:06
	Recorded 2 undetermined explosions	
	Recorded 1 projectile from W to E	1 December, 22:07
	Recorded 1 projectile from E to W	
	Recorded 2 undetermined explosions	1 December, 22:08
	Recorded 2 undetermined explosions	
	Recorded 1 projectile from W to E	1 December, 22:09
	Recorded 1 undetermined explosion	1 December, 22:10
	Recorded 4 undetermined explosions	1 December, 22:11
	Recorded 1 undetermined explosion	1 December, 22:12
	Recorded 1 undetermined explosion	1 December, 22:13
	Recorded 1 tracer from E to W	
	Recorded 9 tracers from W to E	1 December, 22:18
	Recorded 1 undetermined explosion	1 December, 22:19
	Recorded 1 undetermined explosion	1 December, 22:22
	Recorded 1 undetermined explosion	1 December, 22:25
	Recorded 8 tracers from E to W	
	Recorded 1 tracer from W to E	1 December, 22:28
	Recorded 2 undetermined explosions	1 December, 22:30
	Recorded 2 undetermined explosions	
	Recorded 1 projectile from W to E	1 December, 22:31
	Recorded 1 undetermined explosion	1 December, 22:32
	Recorded 2 undetermined explosions	1 December, 22:46
	Recorded 3 undetermined explosions	1 December, 22:56
	Recorded 3 projectiles from W to E	1 December, 23:08
	Recorded 1 projectile from E to W	
	Recorded 1 tracer from W to E	2 December, 00:12
	Recorded 3 tracers from E to W	
	Recorded 4 tracers from E to W	2 December, 00:37
	Recorded 1 undetermined explosion	2 December, 01:10
	Recorded 3 tracers from E to W	
	Recorded 1 projectile from W to E	2 December, 01:11
	Recorded 12 tracers from E to W	2 December, 01:12
	Recorded 3 undetermined explosions	2 December, 01:13
	Recorded 1 undetermined explosion	2 December, 01:14
	Recorded 5 tracers from E to W	2 December, 01:25
	Recorded 1 undetermined explosion	
	Recorded 1 tracer from E to W	2 December, 01:29
	Recorded 3 undetermined explosions	
	Recorded 5 tracers from E to W	2 December, 01:31
	Recorded 1 undetermined explosion	
	Recorded 12 tracers from E to W	2 December, 01:32
	Recorded 2 tracers from E to W	2 December, 01:38
	Recorded 1 tracer from E to W	2 December, 01:39
	Recorded 1 tracer from E to W	2 December, 01:41
	Recorded 7 tracers from E to W	
	Recorded 1 undetermined explosion	2 December, 01:42
	Recorded 1 undetermined explosion	
	Recorded 3 undetermined explosions	2 December, 01:45
	Recorded 31 tracers from E to W	2 December, 01:53
	Recorded 2 undetermined explosions	
	Recorded 2 tracers from E to W	2 December, 01:55
	Recorded 1 undetermined explosion	2 December, 01:56
	Recorded 2 tracers from E to W	
	Recorded 1 projectile from W to E	2 December, 02:22
	Recorded 1 tracer from W to E	
	Recorded 1 tracer from W to E	2 December, 02:26
	Recorded 1 tracer from W to E	2 December, 02:28
	Recorded 1 tracer from W to E	2 December, 02:30
	Recorded 1 undetermined explosion	
	Recorded 2 tracers from E to W	2 December, 02:40
	Recorded 2 undetermined explosions	
	Recorded 1 tracer from E to W	2 December, 02:41
	Recorded 1 tracer from E to W	2 December, 02:56
	Recorded 1 undetermined explosion	2 December, 03:25
	Recorded 1 projectile from E to W	2 December, 03:51

	Recorded 1 undetermined explosion	2 December, 03:53
	Recorded 2 projectiles from E to W	2 December, 04:18
	Recorded 1 undetermined explosion	2 December, 11:36
	Recorded 10 undetermined explosions	2 December, 13:38
	Recorded 1 undetermined explosion	2 December, 13:39
	Recorded 1 projectile from W to E	2 December, 13:40
	Recorded 1 undetermined explosion	2 December, 13:47
	Recorded 2 undetermined explosions	2 December, 13:50
	Recorded 2 undetermined explosions	2 December, 15:22
	Recorded 1 undetermined explosion	2 December, 15:24
	Recorded 2 undetermined explosions	2 December, 15:25
	Recorded 12 undetermined explosions	2 December, 15:26
	Recorded 6 undetermined explosions	2 December, 15:27
	Recorded 1 undetermined explosion	2 December, 15:28
	Recorded 1 projectile from W to E	2 December, 15:29
	Recorded 1 undetermined explosion	2 December, 15:30
	Recorded 1 projectile from W to E	2 December, 15:30
	Recorded 14 undetermined explosions	2 December, 15:32
	Recorded 1 undetermined explosion	2 December, 15:32
	Recorded 1 undetermined explosion	2 December, 15:53
	Recorded 5 undetermined explosions	2 December, 15:54
	Recorded 3 undetermined explosion	2 December, 15:55
	Recorded 1 explosion (outgoing)	2 December, 15:55
	Recorded 1 projectile from E to W	2 December, 15:56
	Recorded 3 undetermined explosions	2 December, 15:56
	Recorded 1 explosion (outgoing)	2 December, 15:56
	Recorded 1 projectile from E to W	2 December, 15:57
	Recorded 4 undetermined explosions	2 December, 15:57
	Recorded 1 explosion (outgoing)	2 December, 15:57
	Recorded 1 explosion (impact)	2 December, 15:57
	Recorded 6 undetermined explosions	2 December, 15:58
	Recorded 5 undetermined explosions	2 December, 15:59
	Recorded 6 undetermined explosions	2 December, 16:00
	Recorded 4 projectiles from E to W	2 December, 16:08
	Recorded 1 undetermined explosion	2 December, 16:09
	Recorded 2 explosions (outgoing)	2 December, 16:09
	Recorded 1 projectile from N to S	2 December, 16:09
	Recorded 1 projectile from N to S	2 December, 16:10
	Recorded 3 projectiles from N to S	2 December, 16:10
	Recorded 3 explosions (impacts)	2 December, 16:10
	Recorded 1 undetermined explosion	2 December, 16:10
	Recorded 1 projectile from N to S	2 December, 16:11
	Recorded 2 projectiles from N to S	2 December, 16:11
	Recorded 2 explosions (impacts)	2 December, 16:11
	Recorded 1 projectile from N to S	2 December, 16:12
	Recorded 1 projectile from N to S	2 December, 16:12
	Recorded 1 explosion (impact)	2 December, 16:12
	Recorded 1 explosion (outgoing)	2 December, 16:12
	Recorded 1 undetermined explosion	2 December, 16:13
	Recorded 4 explosions (outgoing)	2 December, 16:13
	Recorded 1 explosion (impact)	2 December, 16:13
	Recorded 3 projectiles from N to S	2 December, 16:14
	Recorded 1 projectile from E to W	2 December, 16:14
	Recorded 1 explosion (impact)	2 December, 16:14
	Recorded 1 explosion (outgoing)	2 December, 16:14
	Recorded 1 projectile from N to S	2 December, 16:15
	Recorded 3 explosions (outgoing)	2 December, 16:15
	Recorded 3 projectiles from E to W	2 December, 16:15
	Recorded 2 projectiles from E to W	2 December, 16:16
	Recorded 3 explosions (outgoing)	2 December, 16:16
	Recorded 2 explosions (outgoing)	2 December, 16:17
	Recorded 2 projectiles from E to W	2 December, 16:17
	Recorded 1 undetermined explosion	2 December, 16:18
	Recorded 1 undetermined explosion	2 December, 16:18

		Recorded 2 explosions (outgoing)			
		Recorded 2 projectiles from E to W			
		Recorded 2 explosions (outgoing)			2 December, 16:19
		Recorded 2 projectiles from E to W			
		Recorded 3 explosions (outgoing)			2 December, 16:20
		Recorded 2 projectiles from E to W			
		Recorded 2 explosions (outgoing)			2 December, 16:21
		Recorded 2 projectiles from E to W			
		Recorded 1 undetermined explosion			2 December, 16:22
		Recorded 2 explosions (outgoing)			2 December, 17:45
		Recorded 2 projectiles from E to W			2 December, 17:47
		Recorded 1 undetermined explosion			
		Recorded 2 undetermined explosions			
		SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)			3-5km ESE
Recorded 2 undetermined explosions	1 December, 22:24				
Recorded 1 projectile from S to N	1 December, 22:43				
Recorded 3 undetermined explosions	1 December, 22:44				
Recorded 4 undetermined explosions	1 December, 22:45				
Recorded 6 tracers from W to E	2 December, 13:56				
Recorded 1 undetermined explosion	2 December, 15:35				
Recorded 1 undetermined explosion	2 December, 15:48				
Recorded 1 undetermined explosion	2 December, 16:12				
Recorded 5 tracers from W to E	2 December, 16:13				
Recorded 1 undetermined explosion	2 December, 16:21				
Recorded 1 undetermined explosion					
Recorded 1 undetermined explosion					
Recorded 1 undetermined explosion					
SW edge of Avdiivka (government-controlled, 17km N of Donetsk)	2-4km S	Heard 3 undetermined explosions	N/K	2 December, 10:30-10:45	
	2-4km SE	Heard 10 bursts	Small arms	2 December, 11:00-11:03	
	2-4km S	Heard 17 bursts			
	2-4km ESE	Heard 39 undetermined explosions	N/K	2 December, 13:40-13:50	
		Heard 20 bursts	Small arms		
		Heard 24 undetermined explosions	N/K	2 December, 13:50-13:55	
		Heard 35 bursts	Small arms		
		Heard 75 undetermined explosions	N/K	2 December, 14:00-14:25	
		Heard 44 bursts	Small arms		
		Heard 56 undetermined explosions	N/K	2 December, 14:25-14:55	
		Heard 56 bursts	Small arms		
	Railway station in Yasynuvata ("DPR"-controlled, 16km NE of Donetsk)	2-3km NW	Heard 1 burst	Small arms	2 December, 10:00
		5-6km W	Heard 1 undetermined explosion	N/K	2 December, 10:14-10:24
		3-4km W	Heard 1 burst	Small arms	
Heard 1 undetermined explosion			N/K		
2-3km W		Heard 1 undetermined explosion	Small arms	2 December, 10:30-10:40	
		Heard 2 bursts			
3-4km W		Heard 1 undetermined explosion	N/K	2 December, 10:58-11:16	
2-3km NW		Heard 5 bursts	Small arms		
2-3km W		Heard 12 bursts	N/K	2 December, 11:22-11:24	
2-3km NNW		Heard 2 undetermined explosions			
		Heard 17 bursts	Small arms		
		Heard 16 shots			
Heard uncountable overlapping bursts and shots		2 December, 11:24-11:34			
2-3km W		Heard 1 undetermined explosion	N/K	2 December, 11:37	
2-3km NNW		Heard 3 undetermined explosions	Small arms	2 December, 11:40-11:41	
2-3km W		Heard 5 bursts			
2-3km NW		Heard 3 bursts	N/K, artillery (type N/K), HMG, small arms	2 December, 13:38-14:27	
2-3km WNW/NW		Heard at least 300 undetermined explosions and uncountable overlapping bursts and shots			
1-2km W		Heard 3 undetermined explosions	N/K	2 December, 14:41-14:53	
2-3km W		Heard 20 undetermined explosions			
	Heard 47 bursts	HMG/small arms			
SW edge of Yasynuvata ("DPR"-controlled, 16km NE)	2-3km W	Heard 3 shots	Small arms	2 December, 12:43-12:53	
	3-4km W	Heard 2 undetermined explosions	N/K		
	2-3km NW	Heard 2 undetermined explosions			

of Donetsk)		Heard 1 burst	Small arms	2 December, 13:07-13:25																			
		Heard 2 shots																					
	3-4km W	Heard 1 burst																					
	3-4km NW	Heard 2 bursts	N/K																				
		Heard 2 undetermined explosions																					
	3-4km W	Heard 1 burst	Small arms																				
	3-4km NW	Heard 20 bursts																					
	2-3km W	Heard 5 bursts	HMG																				
		Heard 1 burst																					
2-4km NW	Heard 2 bursts	Small arms																					
	Heard 1 burst																						
2-3km WNW and NW	Heard uncountable overlapping explosions, bursts and shots	N/K, HMG, small arms	2 December, 13:34-13:37																				
Oleksandrivka (“DPR”-controlled, 20km SW of Donetsk)	2km SW	Heard 1 undetermined explosion	N/K	2 December, 09:48																			
Oleksandrivske (“DPR”-controlled, 47km NE of Donetsk)	5-8km NW	Heard 2 undetermined explosions	N/K	2 December, 10:15-10:18																			
Dokuchaievsk (“DPR”-controlled, 30km SW of Donetsk)	2-4km WSW	Heard 1 undetermined explosion	N/K	2 December, 11:30																			
		Heard 5 shots																					
	2-4km SW	Heard 5 shots	HMG	2 December, 12:10																			
Bezimenne (“DPR”-controlled, 30km E of Mariupol)	N/K NW	Heard 6 undetermined explosions	N/K	2 December, 10:01-10:02																			
2km S of Sakhanka (“DPR”-controlled, 24km NE of Mariupol)	N/K NW	Heard 4 shots	AGL	2 December, 10:35																			
	N/K WNW	Heard 5 shots	Small arms	2 December, 10:42																			
		Heard 2 bursts																					
	N/K ENE	Heard 40 shots	HMG	2 December, 10:45-10:50																			
		Heard 12 bursts																					
	N/K NW	Heard 11 undetermined explosions	N/K	2 December, 10:55-10:59																			
		Heard 30 shots	AGL																				
		Heard 22 bursts	HMG																				
	N/K WNW	Heard 1 undetermined explosion	N/K	2 December, 11:00																			
		Heard 5 shots	Small arms	2 December, 11:15																			
	N/K NW	Heard 4 explosions (outgoing)	N/K	2 December, 11:17																			
		Heard 4 explosions (impact)																					
	N/K NNW	Heard 2 explosions (outgoing)			N/K	2 December, 11:28-11:31																	
		Heard 4 explosions (impacts)																					
	N/K NNW	Heard 6 undetermined explosions					N/K	2 December, 11:32-11:35															
		Heard 2 undetermined explosions																					
	N/K NW	Heard 2 undetermined explosions							N/K	2 December, 11:40													
		Heard 1 explosion (outgoing)																					
		Heard 1 undetermined explosion																					
	N/K N	Heard 5 explosions (outgoing)								N/K	2 December, 12:06												
		Heard 5 explosions (impacts)																					
	N/K NW	Heard 8 explosions (outgoing)										N/K	2 December, 12:09										
		Heard 8 explosions (impacts)																					
		Heard 1 undetermined explosion												N/K	2 December, 12:18								
		Heard 1 explosion (outgoing)																					
		Heard 1 explosion (impacts)														N/K	2 December, 12:21						
		Heard 5 undetermined explosions																					
Heard 14 shots		N/K																2 December, 12:24					
Heard 12 explosions (outgoing)																							
Heard 2 explosions (impacts)																			N/K	2 December, 12:25-12:36			
Heard 1 shot																							
Heard 2 explosions (outgoing)	N/K												2 December, 12:38-12:45										
Heard 2 explosions (impacts)																							
Heard 7 shots															N/K						2 December, 12:47-12:50		
Heard 3 explosions (outgoing)																							
																	Small arms					N/K	2 December, 12:53
																	N/K						
			Small arms	N/K													2 December, 12:59						
			N/K																				

		Heard 3 explosions (impacts)		
		Heard 3 shots	Small arms	2 December, 13:07
		Heard 2 explosions (outgoing)		2 December, 13:12
		Heard 2 undetermined explosions	N/K	2 December, 13:16
		Heard 2 undetermined explosions		
	N/K W	Heard 2 shots	Small arms	2 December, 13:20
N/K NW	Heard 6 shots			
	Heard 10 bursts	HMG		
		Heard 5 shots	Small arms	2 December, 13:33
2.5km NE of Berezove (government-controlled, 32km SW of Donetsk)	0.8km SE	Heard 3 bursts	HMG	2 December, 10:41
W edge of Lebedynske (government-controlled, 16km NE of Mariupol)	N/K NE	Heard 35 undetermined explosions	N/K	2 December, 10:55-11:00
2.6km SSE of Lomakyne (government-controlled, 15km NE of Mariupol)	N/K SE	Heard 4 undetermined explosions	N/K	2 December, 11:03-11:07
	N/K E	Heard 2 undetermined explosions		2 December, 11:20
		Heard 9 undetermined explosions		2 December, 11:25-11:29
		Heard 3 bursts	HMG	
		Heard 1 undetermined explosion	N/K	2 December, 11:30
	N/K NE	Heard 1 undetermined explosion		
N/K SE	Heard 1 undetermined explosion			
2.3km SSE of Lebedynske (government-controlled, 16km NE of Mariupol)	N/K NNE	Heard 3 undetermined explosions	N/K	2 December, 11:22-11:28
Shyrokyne (20km E of Mariupol)	N/K NE	Heard 3 bursts	Small arms	2 December, 12:05
		Heard 2 shots		2 December, 12:19-12:25
	N/K NNE	Heard 1 undetermined explosion	N/K	2 December, 12:28-12:34
		Heard 4 shots	Small arms	
N/K NE	Heard 5 bursts	HMG		
1.4km N of Sopyne (government-controlled, 16km E of Mariupol)	N/K NE	Heard 4 undetermined explosions	N/K	2 December, 12:10
		Heard 2 undetermined explosions		
	N/K N	Heard 1 burst	Small arms	2 December, 13:22
Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-6km SE	Heard 1 burst	HMG	1 December, 19:17
		Heard 3 bursts		1 December, 19:40
		Heard 5 shots	Small arms	1 December, 19:51
		Heard 7 bursts	HMG	1 December, 19:54 – 20:00
		Heard 9 undetermined explosions	N/K	1 December, 20:09
		Heard 3 bursts	Small arms	1 December, 20:16
		Heard 32 shots		1 December, 20:43-20:48
		Heard 2 undetermined explosions	N/K	1 December, 20:52
		Heard 3 bursts	HMG	1 December, 20:58
		Heard 3 undetermined explosions	N/K	1 December, 21:00
		Heard 24 shots	Small arms	1 December, 21:02-21:05
		Heard 5 undetermined explosions	N/K	1 December, 21:05
		Heard 3 undetermined explosions		1 December, 21:10
		Heard 4 undetermined explosions		1 December, 21:12
		Heard 3 bursts	Small arms	1 December, 21:14
		Heard 3 bursts		1 December, 21:17
		Heard 8 shots		1 December, 21:24
		Heard 5 undetermined explosions	N/K	1 December, 21:26- 21:28
		Heard 38 shots	Small arms	1 December, 21:30- 21:35
		Heard 4 bursts		1 December, 21:45
		Heard 3 undetermined explosion	N/K	1 December, 21:46
		Heard 8 shots	Small arms	1 December, 21:54
Heard 6 undetermined explosions	N/K	1 December, 21:55-21:58		
Heard 4 undetermined explosions		1 December, 22:00		

		Heard 8 undetermined explosions		1 December, 22:50-23:00
	2-4km SE	Heard 10 explosions (outgoing)		1 December, 23:30-23:40
	4-6km SE	Heard 4 undetermined explosions	N/K	2 December, 10:20
Heard uncountable overlapping bursts		Small arms	2 December, 15:05	
SMM camera in Zolote (government-controlled, 60km NW of Luhansk)	3-5km ESE	Recorded 1 projectile from NW to SE (unable to assess whether inside or outside the disengagement area)	N/K	1 December, 20:17
E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	3-4km SSW	Heard 5 shots (assessed as inside disengagement area)	Small arms	1 December, 20:18-20:22
		Heard 2 bursts (assessed as inside disengagement area)	HMG	1 December, 20:40-20:49
Holubivske ("LPR"-controlled, 51km W of Luhansk)	20km SSW	Heard 16 undetermined explosions	N/K	2 December, 08:44-09:05
		Heard 27 undetermined explosions	N/K	2 December, 09:10-09:15
S edge of Zolote disengagement area (58km NW of Luhansk)	12-16km S	Heard 63 undetermined explosions	N/K	2 December, 08:50
Kalynove ("LPR"-controlled, 60km W of Luhansk)	5km SSW	Heard 50 undetermined explosions	N/K	2 December, 08:50-09:15
		Heard 6 bursts	HMG	
Pervomaisk ("LPR"-controlled, 58km W of Luhansk)	3-5km SSE	Heard 2 bursts	HMG	2 December, 10:38
Novotoshkivske (government-controlled, 53km W of Luhansk)	1km SE	Heard 3 explosions (impacts)	Mortar (type N/K)	2 December, 11:51-11:53
Slovianoserbsk ("LPR"-controlled, 28km N of Luhansk)	5km E	Heard 3 undetermined explosions	N/K	2 December, 11:20
Dachne ("LPR"-controlled, 47km W of Luhansk)	10km W	Heard 1 explosion (outgoing)	N/K	2 December, 12:18
		Heard 1 explosion (impact)		
N edge of Popasna (government-controlled, 69km W of Luhansk)	10km SE	Heard 10 explosions	N/K	2 December, 16:38-16:42
	10km SE	Heard 5 undetermined explosions	N/K	2 December, 18:30-18:45
Kadiivka (formerly Stakhanov, "LPR"-controlled, 50km W of Luhansk)	10km W	Heard 27 explosions	N/K	2 December, 16:50-17:18
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.5-1.5km S	Recorded 1 undetermined explosion	N/K	2 December, 18:35
		Recorded 1 undetermined explosion		2 December, 18:56
		Recorded 1 undetermined explosion		2 December, 19:35
		Recorded 1 projectile from W to E		2 December, 19:36
		Recorded 1 undetermined explosion		
		Recorded 1 undetermined explosion		2 December, 20:28
		Recorded 2 projectiles from E to W		2 December, 20:43
		Recorded 2 undetermined explosions		2 December, 20:50
		Recorded 1 projectile from E to W		
		Recorded 2 undetermined explosions		2 December, 20:55
		Recorded 3 undetermined explosions		2 December, 20:56
		Recorded 2 undetermined explosions		2 December, 20:57
		Recorded 5 projectiles from E to W		2 December, 22:03
		Recorded 1 undetermined explosion		
		Recorded 20 tracers from E to W		2 December, 22:16
		Recorded 1 tracer from E to W		2 December, 22:17
		Recorded 5 tracers from E to W		2 December, 22:23
		Recorded 10 tracers from E to W		2 December, 22:24
		Recorded 1 tracer from E to W		2 December, 22:25
		Recorded 1 undetermined explosion		2 December, 22:28
Recorded 5 tracers from E to W				

		Recorded 9 tracers from E to W		2 December, 22:32
		Recorded 18 tracers from E to W		2 December, 22:34
		Recorded 11 tracers from E to W		2 December, 22:36
		Recorded 18 tracers from E to W		2 December, 22:37
		Recorded 2 tracers from E to W		2 December, 22:40
		Recorded 4 tracers from E to W		2 December, 22:45
		Recorded 4 undetermined explosions		
		Recorded 1 projectile from E to W		2 December, 22:46
		Recorded 38 tracers from E to W		
		Recorded 6 tracers from E to W		2 December, 22:48
		Recorded 1 undetermined explosion		2 December, 22:49
		Recorded 6 tracers from E to W		2 December, 22:55
		Recorded 3 tracers from E to W		2 December, 22:56
		Recorded 6 tracers from E to W		2 December, 23:00
		Recorded 1 undetermined explosion		2 December, 23:02
		Recorded 6 undetermined explosions		2 December, 23:03
		Recorded 1 undetermined explosion		
		Recorded 70 tracers from E to W		2 December, 23:04
		Recorded 41 tracers from E to W		2 December, 23:05
		Recorded 1 undetermined explosion		
		Recorded 8 tracers from E to W		2 December, 23:07
		Recorded 6 undetermined explosions		
		Recorded 5 tracers from E to W		2 December, 23:09
		Recorded 3 undetermined explosions		2 December, 23:10
		Recorded 1 undetermined explosion		2 December, 23:14
		Recorded 1 undetermined explosion		2 December, 23:18
		Recorded 2 undetermined explosions		2 December, 23:26
		Recorded 1 undetermined explosion		
		Recorded 3 tracers from E to W		2 December, 23:29
		Recorded 27 tracers from E to W		2 December, 23:30
		Recorded 1 undetermined explosion		2 December, 23:31
		Recorded 1 undetermined explosion		2 December, 23:32
		Recorded 2 undetermined explosions		
		Recorded 8 tracers from E to W		2 December, 23:34
		Recorded 1 undetermined explosion		2 December, 23:40
		Recorded 2 undetermined explosions		3 December, 01:08
		Recorded 2 undetermined explosions		3 December, 02:07
		Recorded 1 tracer from W to E		3 December, 02:10
		Recorded 3 tracers from E to W		3 December, 03:18
		Recorded 2 tracers from E to W		3 December, 03:36
		Recorded 1 tracer from E to W		3 December, 04:35
		Recorded 1 projectile from E to W		3 December, 04:36
		Recorded 1 projectile from E to W		3 December, 04:37
		Recorded 1 undetermined explosion		3 December, 12:46
		Recorded 1 undetermined explosion		3 December, 14:25
		Recorded 1 undetermined explosion		3 December, 14:55
		Recorded 18 tracers from NE to SW		3 December, 18:14
		Recorded 3 tracers from NE to SW		3 December, 18:28
		Recorded 22 tracers from NE to SW		
		Recorded 8 undetermined explosions		3 December, 18:29
SMM camera at entry-exit checkpoint in Pyshchevyk (government-controlled, 25km NE of Mariupol)	N/K	Recorded 1 undetermined explosion	N/K	2 December, 21:42
		Recorded 1 undetermined explosion		2 December, 21:54
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	3-5km ESE	Recorded 1 tracer from N to S	N/K	3 December, 01:32
		Recorded 6 tracers from S to N		3 December, 01:35
		Recorded 2 tracers from S to N		3 December, 01:54
		Recorded 2 undetermined explosions		3 December, 02:06
		Recorded 1 undetermined explosion		3 December, 02:08
		Recorded 3 tracers from E to W		3 December, 18:16
Railway station in Yasynuvata ("DPR")-	2-3km NW	Heard 2 undetermined explosions	N/K	
		Heard 30 shots	Small arms	3 December, 08:42-08:50

controlled, 16km NE of Donetsk)	3-4km NNW	Heard 3 shots		
		Heard 1 burst		
	1-2km NW	Heard 1 undetermined explosion	N/K	3 December, 09:00-09:28
	2-3km NW	Heard 2 undetermined explosions		
	2-3km W	Heard 3 shots	Small arms	
	2-3km SW	Heard 1 shot		
	1km W	Heard 5 shots		
		Heard 6 bursts		
	1km N	Heard 1 burst		
	1km W	Heard 3 bursts		3 December, 10:34-10:42
	1km SSW	Heard 3 bursts		
	1km W	Heard 10 undetermined explosions	N/K	3 December, 13:40-13:47
		Heard 21 bursts	Small arms	
		Heard 4 shots	N/K	
	2km W	Heard uncountable overlapping bursts and shots	Small arms	3 December, 13:48
	1km W	Heard 2 undetermined explosions	N/K	3 December, 13:49
		Heard 8 bursts	Small arms	
	1km SSW	Heard 14 bursts	N/K	3 December, 13:50-13:52
		Heard 5 undetermined explosions	Small arms	
		Heard 6 shots	N/K	
	1-2km SW	Heard 6 undetermined explosions	N/K	3 December, 13:53-14:17
	3-4km W	Heard 6 bursts	Small arms	
	2-3km W	Heard 4 undetermined explosions	N/K	
	1-2km W	Heard 3 undetermined explosions		
	4-5km SW	Heard 3 bursts	HMG	
		Heard 7 shots	Small arms	
	1-2km SW	Heard 2 undetermined explosions	N/K	
	2-3km W	Heard 22 shots	Small arms	
		Heard 21 bursts		
		Heard 1 undetermined explosion	N/K	
	1-2km W	Heard 3 shots	Small arms	
	2-3km W	Heard 3 undetermined explosions	N/K	
		Heard 1 burst	Small arms	
1-2km W	Heard 3 shots	N/K		
	Heard 2 undetermined explosions			
2-3km W	Heard 1 undetermined explosion			
2-4km W	Heard 6 bursts	Small arms		
0.5-1km W	Heard 1 shot			
2-3km SW	Heard 8 shots			
1-2km SSW	Heard 42 undetermined explosions	N/K	3 December, 14:20-14:45	
	Heard 89 bursts	HMG		
	Heard 235 shots	Small arms		
SW edge of Yasynuvata ("DPR"-controlled, 16km NE of Donetsk)	2-3km W	Heard 2 undetermined explosions	N/K	3 December, 12:20-12:34
	5-6km W	Heard 24 shots	Small arms	
		Heard 2 undetermined explosions	N/K	
	4-5km W	Heard 2 bursts	Small arms	3 December, 12:44-12:48
	2-3km W	Heard 2 undetermined explosions	N/K	3 December, 12:52-12:57
		Heard 16 bursts	HMG	
		Heard 6 shots	Small arms	
		Heard 11 bursts	HMG	3 December, 13:10-13:20
		Heard 2 undetermined explosions	N/K	
	Heard 6 shots	Small arms		
3-5km W or SW	Heard uncountable overlapping bursts and shots	HMG/small arms	3 December, 13:17-13:35	
1-2km W	Heard 6 undetermined explosions	N/K		
3-5km W	Heard 6 undetermined explosions			
SW edge of Avdiivka (government-controlled, 17km N of Donetsk)	1-2km SE	Heard 3 bursts	Small arms	3 December, 10:45-10:51
		Heard 5 shots		
	3-5km SE	Heard 1 undetermined explosion	N/K	3 December, 11:02-11:13
	1-2km SE	Heard 3 bursts	Small arms	
	2-3km E	Heard 9 bursts	HMG	
3-5km S	Heard 2 undetermined explosions	N/K	3 December, 11:36-11:38	

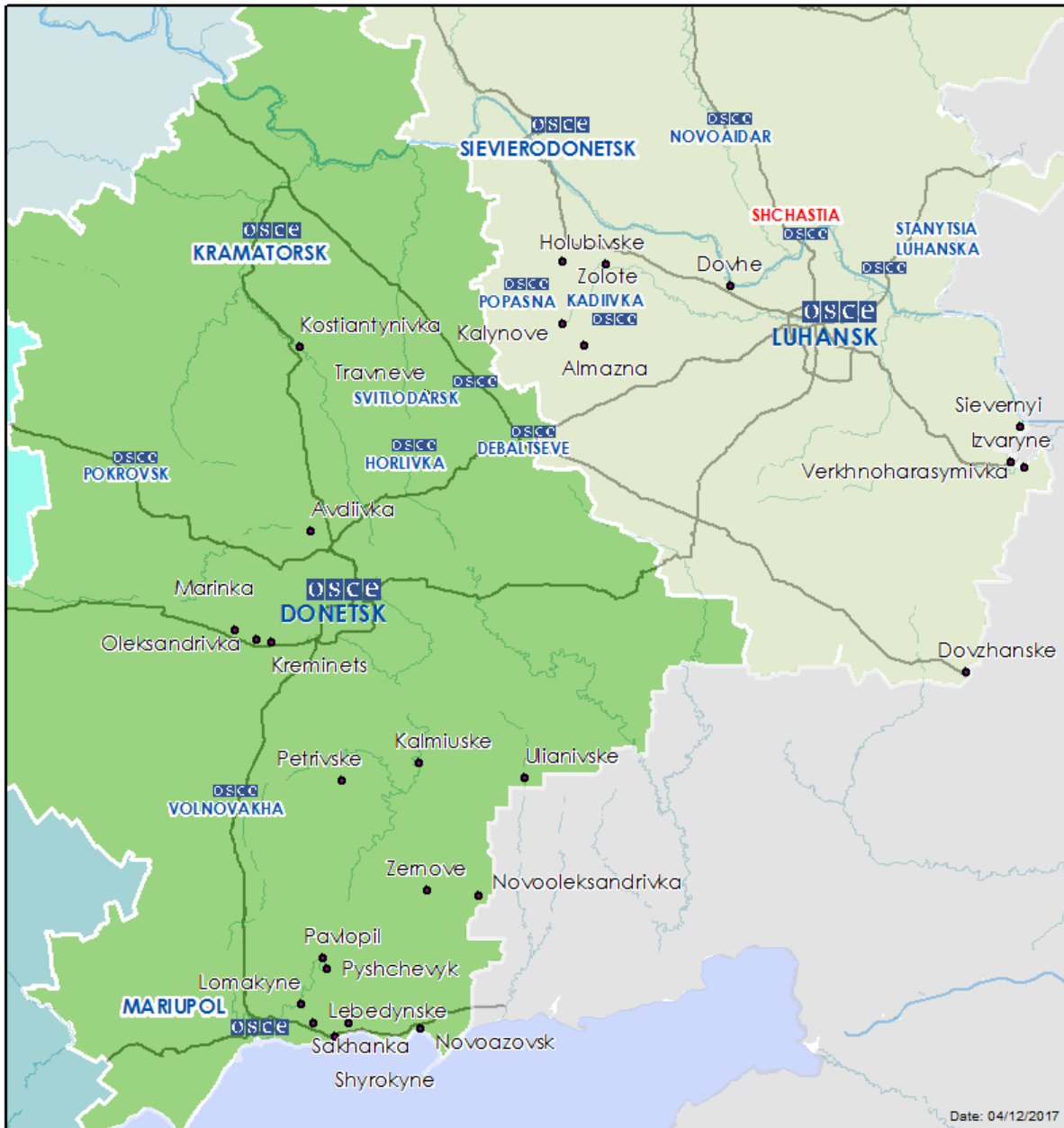
	1-2km SE	Heard 3 bursts	Small arms	3 December, 11:44-11:52
	2-3km S	Heard 3 bursts	HMG	
	2-3km SE	Heard 1 undetermined explosion	N/K	3 December, 12:01-12:10
		Heard 8 shots	HMG	
	3-5km E	Heard 1 undetermined explosion	N/K	3 December, 12:50-12:57
	3-5km SE	Heard 2 undetermined explosions		
2-3km E	Heard 5 bursts	HMG		
2-3km SE	Heard 3 bursts			
Avdiivka (government-controlled, 17km N of Donetsk)	3-5km ESE	Heard 9 undetermined explosions	N/K	3 December, 14:20-15:00
	2-3km ESE	Heard 3 undetermined explosions		
	1-2km ESE	Heard 5 bursts	Small arms	
	3-5km E	Heard 11 undetermined explosions	N/K	
Dokuchaievsk ("DPR"-controlled, 30km SW of Donetsk)	2-3km W	Heard 3 undetermined explosions	N/K	3 December, 10:46-11:00
Oleksandrivka ("DPR"-controlled, 20km SW of Donetsk)	5-7km NNW	Heard 17 undetermined explosions	N/K	3 December, 11:15-11:26
	1-2km W	Heard 2 shots	Small arms	
		Heard 1 undetermined explosion	N/K	
Donetsk central railway station ("DPR"-controlled, 6km NW of Donetsk city centre)	2-5km NE	Heard 9 undetermined explosions	N/K	3 December, 14:08-14:30
		Heard 2 burst	HMG	
		Heard 20 shots		
1km NNW of Pyschchevyk (government-controlled, 25km NE of Mariupol)	N/K E	Heard 7 bursts	Small arms	3 December, 09:56
	N/K SSE	Heard 3 shots		
			Heard 3 bursts	
	N/K NNE	Heard 3 explosions (outgoing)	N/K	3 December, 14:25
		Heard 3 subsequent explosions (impact)		3 December, 14:31
	N/K SSE	Heard 2 undetermined explosions	Small arms	3 December, 14:36-14:49
	N/K NNE	Heard 10 explosions (outgoing)		
		Heard 10 subsequent explosions (impact)		
		Heard 13 bursts		
	N/K SSE	Heard 16 bursts	N/K	3 December, 14:49-14:54
N/K SE	Heard 21 bursts			
	Heard 1 explosion (outgoing)			
	N/K NNE	Heard 1 subsequent explosion (impact)		
		Heard 6 bursts	Small arms	
3km NE of Berezove (government-controlled, 32km SW of Donetsk)	N/K SE	Heard 1 burst	IFV (BMP-2) cannon (30mm)	3 December, 10:40
2.5km S of Lebedynske (government-controlled, 16km NE of Mariupol)	N/K NNE	Heard 31 shots	Small arms	3 December, 11:46-12:02
		Heard 3 bursts		
		Heard 1 undetermined explosion	N/K	
1.5km SE of Lomakyne (government-controlled, 15km NE of Mariupol)	N/K ENE	Heard 33 bursts	Small arms	3 December, 12:41-13:20
		Heard 16 shots		
		Heard 2 explosions (outgoing)		
	N/K NNE	Heard 13 explosions (outgoing)	Mortar (type N/K)	3 December, 15:11-15:18
N/K NE	Heard 13 subsequent explosions (impacts)			
	3-4km SE	Heard 5 shots	Small arms	
Kulykove ("DPR"-controlled, 30km NE of Mariupol)	N/K NW	Heard 1 shot	Small arms	3 December, 13:33
Lukove ("DPR"-controlled, 72km S of Donetsk)	N/K W	Heard 1 undetermined explosion	N/K	3 December, 14:11
Verkhnohyrokiivske (formerly Oktiabr, "DPR"-controlled,	N/K NW	Heard 5 undetermined explosions	N/K	3 December, 14:45

29km NE of Mariupol)					
Horlivka (“DPR”-controlled, 39km NE of Donetsk)	7-10km NNE	Heard 33 undetermined explosions	N/K	2 December, 22:05-22:11	
	1-2km WSW	Heard 2 explosions (outgoing)	Artillery (122mm)	3 December, 15:27	
		Heard 1 explosion (outgoing)		3 December, 15:30	
	2-3km WSW	Heard 1 explosion (impact)	N/K	3 December, 15:33	
	1-2km WSW	Heard 1 explosion (outgoing)	Artillery (152mm)	3 December, 15:37	
Heard 2 explosions (outgoing)		Artillery (122mm)	3 December, 15:40		
Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-4km SE	Heard 1 undetermined explosion	N/K	2 December, 19:55	
		Heard 3 shots	Small arms	2 December, 19:59	
		Heard 2 undetermined explosions	N/K	2 December, 20:02	
		Heard 2 undetermined explosions		2 December, 20:04	
		Heard 1 undetermined explosion		2 December, 20:12	
		Heard 2 undetermined explosions		2 December, 20:20	
		Heard 20 undetermined explosions		2 December, 20:32	
	Heard 22 undetermined explosions	2 December, 20:33			
	4-5km SE	Heard uncountable overlapping bursts and shots	Small arms and HMG	2 December, 20:34	
		Heard 10 undetermined explosions	N/K	2 December, 20:35	
		Heard 7 bursts	HMG	2 December, 20:37	
		Heard 3 undetermined explosions	N/K	2 December, 20:39	
		Heard 6 undetermined explosions		2 December, 20:44	
		Heard 11 bursts	HMG	2 December, 20:45	
		Heard 2 undetermined explosions	N/K		
		Heard 15 bursts	HMG	N/K	
		Heard 4 undetermined explosions	2 December, 20:48		
		Heard 4 undetermined explosions	2 December, 20:50		
		Heard 2 undetermined explosions	2 December, 20:53		
		Heard 6 undetermined explosions	2 December, 20:54		
		Heard 1 undetermined explosion	HMG		2 December, 20:58
		Heard 2 bursts			2 December, 21:01
		6-7km SE	Heard 2 undetermined explosions	N/K	2 December, 21:06
			Heard 4 undetermined explosions		2 December, 21:10
			Heard 6 undetermined explosions		2 December, 21:11
	Heard 4 undetermined explosions		2 December, 21:12		
	Heard 4 undetermined explosions		2 December, 21:13		
	Heard 10 undetermined explosions		2 December, 21:16		
	Heard 2 undetermined explosions				
	Heard 8 undetermined explosions				
	6-7km SW		Heard 10 undetermined explosions		2 December, 21:20
			Heard 15 undetermined explosions		2 December, 21:25
		Heard 5 undetermined explosions	N/K	2 December, 21:27	
	4-5km SE	Heard 4 bursts	HMG	2 December, 21:28	
	6-7km SW	Heard 6 undetermined explosions	N/K	2 December, 21:30	
	4-5km SE	Heard 2 undetermined explosions		2 December, 21:31	
	6-7km SW	Heard 5 undetermined explosions		2 December, 21:32	
	4-5km SE	Heard 6 bursts	HMG	2 December, 21:35	
		Heard 10 bursts		2 December, 21:38	
	6-7km SW	Heard 6 undetermined explosions	N/K	2 December, 21:41	
Heard 4 undetermined explosions		2 December, 21:43			
Heard 5 undetermined explosions		2 December, 21:44			
Heard 1 undetermined explosion		2 December, 21:47			
4-5km SE	Heard 3 undetermined explosions	N/K	2 December, 21:48		
6-7km SW	Heard 3 undetermined explosions		2 December, 21:48		
4-5km SE	Heard 5 shots	Small arms	2 December, 21:51		
	Heard 8 bursts	HMG	2 December, 21:53		
6-7km SW	Heard 5 undetermined explosions	N/K	2 December, 21:58		
	Heard 10 undetermined explosions		2 December, 22:03		
	Heard 5 undetermined explosions		2 December, 22:05		
	Heard 9 undetermined explosions		2 December, 22:06		
	Heard 3 undetermined explosions		2 December, 22:11		
	Heard 5 undetermined explosions		2 December, 22:16		
	Heard 7 undetermined explosions		2 December, 22:19		

		Heard 7 undetermined explosions		2 December, 22:20
		Heard 3 undetermined explosions		2 December, 22:25
		Heard 6 undetermined explosions		2 December, 22:26
		Heard 5 undetermined explosions		2 December, 22:28
		Heard 5 undetermined explosions		2 December, 22:35
		Heard 4 undetermined explosions		2 December, 22:36
		Heard 8 undetermined explosions		2 December, 22:42
		Heard 3 undetermined explosions		2 December, 22:43
		Heard 12 undetermined explosions		2 December, 22:52
		Heard 2 undetermined explosions		2 December, 22:53
		Heard 2 undetermined explosions		3 December, 07:33
	3-4km SE	Heard 1 burst	HMG	3 December, 15:10
		Heard 1 shot	Small arms	
		Heard 17 shots	AGL	
		Heard 3 undetermined explosions	IFV (BMP-1) cannon (73mm)	3 December, 15:35
		Heard 1 shot	AGL	3 December, 15:43
		Heard 10 bursts	HMG	3 December, 16:06
		Heard 6 bursts		3 December, 16:20
		Heard 6 shots	AGL	3 December, 17:05
Heard 6 bursts		HMG	3 December, 17:07	
Heard 4 bursts	3 December, 17:24			
Kurdiuivka (government-controlled, 54km N of Donetsk)	3-5km SSE	Heard 1 undetermined explosion	N/K	3 December, 11:40
N edge of Popasna (government-controlled, 69km W of Luhansk)	3-5km S	Heard 8 undetermined explosions	N/K	2 December, 19:14-19:21
	6-9km SW	Heard 56 undetermined explosions	Artillery (type N/K)	2 December, 20:20-21:38
	2-4km NW	Saw and heard 3 explosions (outgoing)		2 December, 21:04-21:05
	3-5km S	Heard 12 undetermined explosions	N/K	2 December, 21:20-21:36
	3-5km SE	Heard 8 bursts	HMG	2 December, 21:35-21:38
	3-5km SE	Heard 11 undetermined explosions	N/K	2 December, 21:54-22:10
	3-5km SE	Heard 3 bursts	HMG	2 December, 22:15-22:16
	6-9km SW	Heard 8 undetermined explosions	Artillery (type N/K)	2 December, 22:19-22:27
1.7km SE of Popasna (government-controlled, 69km W of Luhansk)	1km E	Heard 50 shots	Small arms	3 December, 13:48-13:51
		Heard 1 explosion (impact)	Mortar (type N/K)	3 December, 13:48-13:51
	1.5-2km E	Heard 2 explosions (impacts)	Artillery (type N/K)	3 December, 14:38-15:10
		Heard 6 explosions (impacts)	Mortar (type N/K)	
		Heard 2 explosions (outgoing)	Recoilless gun (SPG-9, 73mm)	
		Heard 1 explosion (outgoing)	RPG (type N/K)	
	Heard 8 explosions (outgoing)	Mortar (type N/K)		
	1km E	Heard 250 bursts	Small arms	
600m SE	Heard 2 explosions (outgoing)	IFV (BMP-1) cannon		
Kadiivka (formerly Stakhanov, "LPR"-controlled, 50km W of Luhansk)	10km W	Heard 97 undetermined explosions	N/K	2 December, 19:50-22:56
	15km N	Heard 44 undetermined explosions	N/K	
E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	1-2km S	Heard 3 bursts (assessed as outside disengagement area)	Small arms	2 December, 23:34-23:38
	2-3km SW	Heard 6 shots (assessed as outside disengagement area)	Small arms	2 December, 23:54 -3 December, 00:06
		Heard 5 bursts (assessed as outside disengagement area)	Small arms	
	1.5km S	Heard 1 undetermined explosion (assessed as outside disengagement area)	N/K	3 December, 16:18
1.5km S of Molodizhne ("LPR"-controlled, 63km NW of Luhansk)	3-5km S	Heard 2 undetermined explosions	N/K	3 December, 09:20
4km NE of Kalynove ("LPR"-controlled, 60km W of Luhansk)	2-3km W	Heard 2 explosions	N/K	3 December, 09:25-09:27

Kruta Hora ("LPR"-controlled, 16km NW of Luhansk)	2-3km S	Heard 6 shots	Small arms	3 December, 09:34
2.6km NE of Kalynove ("LPR"-controlled, 60km W of Luhansk)	6-8km WNW	Heard 5 undetermined explosions	N/K	3 December, 10:01-10:15
	6-8km W	Heard 4 bursts	HMG	3 December, 10:22
Holubivske ("LPR"-controlled, 51km W of Luhansk)	15km SW	Heard 6 undetermined explosions	N/K	3 December, 09:20
1.8km NNE of Kalynove-Borshchuvate ("LPR"-controlled, 61km W of Luhansk)	3-5km SSW	Heard 9 undetermined explosions	N/K	3 December, 10:00
4km NW of Almazna ("LPR"-controlled, 55km W of Luhansk)	8-10km WSW	Heard 42 undetermined explosions	N/K	3 December, 12:09-12:21
4km SW of Almazna ("LPR"-controlled, 55km W of Luhansk)	8-10km WNW	Heard 13 undetermined explosions	N/K	3 December, 12:37-12:55
		Heard 5 bursts	HMG	

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.)