

Table of ceasefire violations as of 15 September 2019¹

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.8-1km S	Recorded	10	Projectile	W to E (followed by ricochet)	N/K	13-Sep, 20:43
	0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 20:46
	0.3-0.6km SSE	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 20:46
	0.2-0.4km SSW	Recorded	7	Muzzle flash		N/K	13-Sep, 20:51
	0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 20:52
	0.3-0.6km SSW	Recorded	9	Muzzle flash		N/K	13-Sep, 20:58
	0.3-0.6km S	Recorded	5	Explosion	Impact	N/K	13-Sep, 20:58
	0.3-0.6km SSE	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 20:58
	0.3-0.6km SSW	Recorded	6	Explosion	Undetermined	N/K	13-Sep, 20:59
	0.3-0.6km S	Recorded	2	Muzzle flash		N/K	13-Sep, 21:00
	0.3-0.6km SSW	Recorded	10	Explosion	Undetermined	N/K	13-Sep, 21:00
	0.3-0.6km SSW	Recorded	15	Muzzle flash		Small arms	13-Sep, 21:01
	0.3-0.6km SSW	Recorded	4	Explosion	Undetermined	N/K	13-Sep, 21:01
	0.3-0.6km S	Recorded	1	Muzzle flash		N/K	13-Sep, 21:02
	0.3-0.6km SSW	Recorded	2	Explosion	Undetermined	N/K	13-Sep, 21:02
	0.3-0.6km SSW	Recorded	7	Muzzle flash		N/K	13-Sep, 21:02
	0.3-0.6km SSW	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:04
	0.8-1km SSE	Recorded	2	Muzzle flash		N/K	13-Sep, 21:07
	0.3-0.6km SSW	Recorded	2	Muzzle flash		N/K	13-Sep, 21:07
	0.3-0.6km SSW	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:08
	0.3-0.6km SSW	Recorded	3	Explosion	Undetermined	N/K	13-Sep, 21:09
	0.3-0.6km S	Recorded	3	Explosion	Undetermined	N/K	13-Sep, 21:09
	0.3-0.6km SSE	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:09
	0.8-1km SSW	Recorded	1	Projectile	WNW to ESE	N/K	13-Sep, 21:10
	0.3-0.6km SSW	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:15
	0.3-0.6km SSW	Recorded	3	Explosion	Outgoing	N/K	13-Sep, 21:16
	0.3-0.6km SSW	Recorded	2	Explosion	Subsequent impacts	N/K	13-Sep, 21:16
	0.3-0.6km S	Recorded	13	Muzzle flash		N/K	13-Sep, 21:17
	0.3-0.6km W	Recorded	13	Explosion	Subsequent to previous event	N/K	13-Sep, 21:17
	0.3-0.6km W	Recorded	9	Explosion	Undetermined	N/K	13-Sep, 21:17
	0.8-1.4km SSW	Recorded	1	Projectile	WNW to ESE	N/K	13-Sep, 21:17
	0.3-0.6km S	Recorded	4	Explosion	Impact	N/K	13-Sep, 21:17
	0.3-0.6km S	Recorded	1	Explosion	Impact	N/K	13-Sep, 21:17
	0.3-0.6km SSW	Recorded	1	Explosion	Outgoing	N/K	13-Sep, 21:17
	0.2-0.4km S	Recorded	1	Explosion	Impact	N/K	13-Sep, 21:17
	0.3-0.6km SSW	Recorded	2	Explosion	Undetermined	N/K	13-Sep, 21:18
	0.8-1.2km SSE	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:18
	0.8-1.2km S	Recorded	1	Projectile	W to E	N/K	13-Sep, 21:18
	0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:18
	0.8-1.2km S	Recorded	6	Explosion	Undetermined	N/K	13-Sep, 21:19
	0.3-0.6km SSW	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:20
	0.8-1.2km S	Recorded	8	Explosion	Undetermined	N/K	13-Sep, 21:21
	0.8-1.2km SSE	Recorded	3	Explosion	Undetermined	N/K	13-Sep, 21:21
	0.3-0.6km SSW	Recorded	3	Explosion	Undetermined	N/K	13-Sep, 21:21
	0.8-1.2km S	Recorded	4	Explosion	Undetermined	N/K	13-Sep, 21:22
	0.2-0.6km S	Recorded	18	Projectile	WSW to ENE	N/K	13-Sep, 21:22
	0.8-1.2km S	Recorded	2	Explosion	Undetermined	N/K	13-Sep, 21:23
0.2-0.6km S	Recorded	18	Projectile	WSW to ENE	N/K	13-Sep, 21:23	
0.3-0.6km SSW	Recorded	8	Explosion	Outgoing	N/K	13-Sep, 21:23	
0.2-0.6km S	Recorded	1	Projectile		N/K	13-Sep, 21:24	
0.3-0.6km S	Recorded	2	Muzzle flash		N/K	13-Sep, 21:24	
0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:24	
0.3-0.6km S	Recorded	11	Projectile	WSW to ENE	N/K	13-Sep, 21:24	
0.2-0.6km S	Recorded	17	Projectile	WNW to ESE	N/K	13-Sep, 21:25	
0.2-0.6km S	Recorded	2	Projectile	W to E	N/K	13-Sep, 21:25	
0.3-0.6km SSW	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:25	

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.

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	0.8-1.2km SSW	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:30
	0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:35
	0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:36
	0.3-0.6km SSE	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:36
	0.3-0.6km SSW	Recorded	2	Explosion	Undetermined	N/K	13-Sep, 21:38
	0.8-1.2km SSE	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:38
	1-2km SSW	Recorded	1	Projectile	W to E	N/K	13-Sep, 21:39
	0.3-0.6km S	Recorded	2	Explosion	Undetermined	N/K	13-Sep, 21:40
	0.3-0.6km SSW	Recorded	3	Muzzle flash		N/K	13-Sep, 21:40
	0.3-0.6km S	Recorded	16	Projectile	W to E	N/K	13-Sep, 21:40
	0.3-0.6km S	Recorded	13	Projectile	W to E	N/K	13-Sep, 21:41
	0.3-0.6km S	Recorded	11	Projectile	W to E	N/K	13-Sep, 21:42
	0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:42
	1-2km SSW	Recorded	1	Projectile	W to E	N/K	13-Sep, 21:44
	0.3-0.6km S	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:44
	0.3-0.6km SSW	Recorded	2	Explosion	Undetermined	N/K	13-Sep, 21:44
1-2km S	Recorded	1	Illumination flare	In vertical flight	N/K	13-Sep, 22:38	
1-2km SSW	Recorded	3	Explosion	Undetermined	N/K	14-Sep, 01:34	
SMM camera 1.5km NE of Hnutove (government-controlled, 20km NE of Mariupol)	4-6km ESE	Recorded	1	Projectile	SSW to NNE	N/K	13-Sep, 20:13
	4-6km ESE	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 20:24
	4-6km ESE	Recorded	2	Projectile	In vertical flight	N/K	13-Sep, 20:26
	4-6km ESE	Recorded	1	Burst	In vertical flight	N/K	13-Sep, 21:33
	4-6km ENE	Recorded	1	Projectile	N to S	N/K	13-Sep, 21:59
	4-6km ENE	Recorded	1	Projectile	N to S	N/K	13-Sep, 23:01
	4-6km ENE	Recorded	1	Projectile	In vertical flight	N/K	13-Sep, 23:01
	4-6km ENE	Recorded	3	Projectile	N to S	N/K	13-Sep, 23:02
	4-6km NE	Recorded	1	Illumination flare	In vertical flight, also recorded by Lomakyne camera	N/K	14-Sep, 03:27
SMM camera E of Lomakyne (government-controlled, 15km NE of Mariupol)	3-4km ENE	Recorded	1	Explosion	Impact	N/K	13-Sep, 19:08
	4-5km ENE	Recorded	1	Projectile	In vertical flight	N/K	13-Sep, 19:23
	4-5km NE	Recorded	1	Projectile	SE to NW	N/K	13-Sep, 19:38
	3-5km NE	Recorded	1	Projectile	SE to NW	N/K	13-Sep, 21:21
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	1-3km E	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 20:29
	1-3km E	Recorded	1	Explosion	Airburst	N/K	13-Sep, 20:50
	10-14km E	Recorded	1	Illumination flare	In vertical flight	N/K	13-Sep, 21:32
	1-3km ENE	Recorded	3	Projectile	NNW to SSE	N/K	13-Sep, 22:09
	1-3km ENE	Recorded	4	Projectile	NNW to SSE	N/K	13-Sep, 22:10
	1-3km ENE	Recorded	2	Projectile	NNW to SSE	N/K	13-Sep, 22:12
	1-3km ENE	Recorded	7	Projectile	NNW to SSE	N/K	13-Sep, 22:13
	1-3km ENE	Recorded	1	Projectile	NNW to SSE	N/K	13-Sep, 22:14
	2-4km ENE	Recorded	3	Projectile	ESE to WNW	N/K	13-Sep, 23:11
	1-3km ENE	Recorded	2	Projectile	NNW to SSE	N/K	13-Sep, 23:15
	1-3km ENE	Recorded	4	Projectile	NNW to SSE	N/K	13-Sep, 23:17
	1-3km ENE	Recorded	3	Projectile	WSW to ENE	N/K	13-Sep, 23:18
	1-3km ENE	Recorded	1	Projectile	NW to SE	N/K	13-Sep, 23:19
SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 25km NE of Mariupol)	3-5km SSE	Recorded	4	Projectile	W to E	N/K	13-Sep, 20:14
	3-5km SSE	Recorded	1	Projectile	W to E	N/K	13-Sep, 20:15
	3-5km S	Recorded	1	Burst	In vertical flight	N/K	13-Sep, 20:19
	3-5km SSE	Recorded	2	Projectile	W to E	N/K	13-Sep, 20:25
	3-5km SSE	Recorded	11	Projectile	W to E	N/K	13-Sep, 20:26
	3-5km S	Recorded	2	Projectile	In vertical flight	N/K	13-Sep, 20:26
	3-5km S	Recorded	1	Projectile	In vertical flight	N/K	13-Sep, 22:23
	3-5km S	Recorded	4	Projectile	In vertical flight	N/K	13-Sep, 22:26
	3-5km S	Recorded	10	Projectile	W to E	N/K	13-Sep, 22:26
	3-5km S	Recorded	2	Projectile	W to E	N/K	13-Sep, 22:27
	3-5km S	Recorded	5	Projectile	W to E	N/K	13-Sep, 22:28
	3-5km S	Recorded	1	Projectile	W to E	N/K	13-Sep, 22:30
	3-5km S	Recorded	3	Projectile	W to E	N/K	13-Sep, 22:31
1-3km S	Recorded	2	Projectile	W to E	N/K	13-Sep, 22:33	
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-7km E	Recorded	1	Explosion	Undetermined	N/K	13-Sep, 21:04
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	2km SW	Heard	5	Shot		Small arms	14-Sep, 09:20-09:23
	2-3km NNW	Heard	1	Shot		HMG	14-Sep, 09:22
	2-3km N	Heard	8	Shot		Small arms	14-Sep, 12:20-12:25
	2-3km W	Heard	1	Explosion	Undetermined	N/K	14-Sep, 11:08
About 1km NNE of Donetsk	1-2km NNE	Heard	30	Shots and bursts		Small arms	14-Sep, 13:35

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
central railway station (non-government-controlled, 6km NW of Donetsk city centre)	2-3km NNE	Heard	1	Explosion	Undetermined	N/K	14-Sep, 13:40
Marinka (government controlled, 23km SW of Donetsk)	2-3km SW	Heard	21	Burst		Small arms	14-Sep, 13:01-13:05
	2-3km SW	Heard	27	Shot		Small arms	14-Sep, 13:01-13:05
	2-3km SE	Heard	12	Shot		Small arms	14-Sep, 13:22
Bohdanivka (government-controlled, 41km SW of Donetsk)	0.5km W	Heard	3	Burst	Assessed as outside of Petrivske disengagement area	Small arms	14-Sep, 09:50
	0.5km W	Heard	6	Explosion	Undetermined (Assessed as outside Petrivske disengagement area)	N/K	14-Sep, 11:13-11:15
Svitlodarsk (government-controlled, 57km NE of Donetsk)	2-3km SE	Heard	2	Burst		HMG	13-Sep, 18:39
	1-3km SE	Heard	3	Burst		Small arms	13-Sep, 18:43
	2-4km SE	Heard	4	Explosion	Undetermined	N/K	13-Sep, 18:54
	1-3km SE	Heard	2	Burst		Small arms	13-Sep, 19:30
	1-2km SE	Heard	4	Burst		Small arms	13-Sep, 19:44
	1-2km SE	Heard	4	Shot		Small arms	13-Sep, 19:44
	1-3km SE	Heard	30	Burst		Small arms	13-Sep, 19:48-19:52
	2-4km SE	Heard	4	Explosion	Undetermined	N/K	13-Sep, 19:53
	1-2km SE	Heard	4	Shot		Small arms	13-Sep, 19:53
	2-3km SE	Heard	11	Burst		Small arms	13-Sep, 19:55
	1-2km SE	Heard	4	Shot		Small arms	13-Sep, 19:55
	2-3km S	Heard	18	Burst		Small arms	13-Sep, 19:57-19:59
	2-4km S	Heard	3	Explosion	Undetermined	N/K	13-Sep, 19:59
	2-3km S	Heard	34	Burst		Small arms	13-Sep, 20:00-20:03
	2-4km S	Heard	3	Explosion	Undetermined	N/K	13-Sep, 20:01
	2-3km S	Heard	2	Burst		Small arms	13-Sep, 20:05
	2-4km S	Heard	6	Explosion	Undetermined	N/K	13-Sep, 20:17
	1-3km S	Heard	2	Explosion	Undetermined	N/K	13-Sep, 20:20
	3-5km S	Heard	1	Explosion	Undetermined	N/K	13-Sep, 20:22
	2-3km SE	Heard	3	Burst		Small arms	13-Sep, 20:27
	2-3km SE	Heard	3	Burst		Small arms	13-Sep, 20:31
	6-8km ESE	Heard	2	Explosion	Undetermined	N/K	13-Sep, 20:32
	1-2km SE	Heard	5	Shot		Small arms	13-Sep, 20:36
	1-2km SSW	Heard	6	Shot		Small arms	13-Sep, 20:46
	1-2km SSW	Heard	6	Shot		Small arms	13-Sep, 20:48
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	13-Sep, 21:11
	2-3km SE	Heard	6	Burst		Small arms	13-Sep, 21:34
	1-2km SE	Heard	4	Shot		Small arms	13-Sep, 21:36
	2-3km SE	Heard	9	Burst		Small arms	13-Sep, 21:37
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	13-Sep, 21:38
	2-3km SSE	Heard	33	Burst		Small arms	13-Sep, 21:39-21:42
	1-2km SSE	Heard	3	Burst		Small arms	13-Sep, 21:45
	1-2km SSE	Heard	11	Burst		Small arms	13-Sep, 21:47-21:48
	1-2km SE	Heard	36	Burst		Small arms	13-Sep, 21:49-21:51
	1-2km SE	Heard	9	Shot		Small arms	13-Sep, 21:51
	1-2km SE	Heard	25	Burst		HMG	13-Sep, 21:54-21:55
	1-2km SE	Heard	10	Shot		Small arms	13-Sep, 21:55
	2-3km SE	Heard	13	Burst		Small arms	13-Sep, 21:55
	2-4km S	Heard	5	Explosion	Undetermined	N/K	13-Sep, 21:57
	2-3km S	Heard	32	Burst		Small arms	13-Sep, 21:57-21:58
	2-4km S	Heard	3	Explosion	Undetermined	N/K	13-Sep, 21:58
	2-4km S	Heard	1	Explosion	Undetermined	N/K	13-Sep, 21:59
	2-3km SSW	Heard	8	Burst		HMG	13-Sep, 22:00
1-2km SSW	Heard	5	Burst		Small arms	13-Sep, 22:00	
2-4km SSW	Heard	2	Explosion	Undetermined	N/K	13-Sep, 22:01	
1-2km SSW	Heard	20	Shot		Small arms	13-Sep, 22:01-22:02	
1-3km SSW	Heard	3	Burst		Small arms	13-Sep, 22:02	

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	3-5km SSW	Heard	2	Explosion	Undetermined	N/K	13-Sep, 22:24
	2-3km SE	Heard	8	Burst		Small arms	13-Sep, 22:33
	2-3km SE	Heard	3	Burst		Small arms	13-Sep, 22:42
	1-2km SE	Heard	1	Shot		Small arms	13-Sep, 22:56
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	13-Sep, 23:46
	2-3km S	Heard	2	Explosion	Undetermined	N/K	14-Sep, 07:55
	2-3km ESE	Heard	4	Burst		Small arms	14-Sep, 08:33
	3-5km SSW	Heard	1	Explosion	Undetermined	N/K	14-Sep, 12:05
S edge of Zolote-5/Mykhailivka (non-government-controlled, 58km NW of Luhansk)	1-2km NNW	Heard	5	Explosion	Undetermined (assessed as outside the disengagement area. The same ceasefire violations was recorded by SMM while in government-controlled areas)	N/K	14-Sep, 11:18-11:24
W edge of Smile (31km NW of Luhansk)	1-2km SW	Heard	24	Shot		Small arms	14-Sep, 12:58-13:04
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	4-6km SE	Recorded	1	Illumination flare	In vertical flight	N/K	14-Sep, 21:25
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.8-1.2km S	Recorded	1	Muzzle flash		N/K	14-Sep, 23:15
	0.5-1km S	Recorded	3	Projectile	W to E	N/K	14-Sep, 23:29
	0.5-1km SSE	Recorded	4	Muzzle flash		N/K	14-Sep, 23:30
	0.3-0.5km SSW	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:30
	0.3-0.5km S	Recorded	2	Explosion	Undetermined	N/K	14-Sep, 23:30
	0.3-0.5km SSW	Recorded	4	Muzzle flash		N/K	14-Sep, 23:30
	0.3-0.5km S	Recorded	2	Projectile	W to E (subsequent to previous event)	N/K	14-Sep, 23:30
	0.3-0.5km S	Recorded	1	Projectile	W to E	N/K	14-Sep, 23:30
	0.3-0.5km SSW	Recorded	3	Muzzle flash		N/K	14-Sep, 23:31
	0.3-0.5km SSE	Recorded	3	Explosion	Undetermined	N/K	14-Sep, 23:31
	0.3-0.5km SSW	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:31
	0.3-0.5km S	Recorded	1	Projectile	W to E	N/K	14-Sep, 23:32
	0.3-0.5km SSW	Recorded	1	Muzzle flash		N/K	14-Sep, 23:32
	0.3-0.5km SSW	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:32
	0.5-1km SSE	Recorded	2	Explosion	Undetermined	N/K	14-Sep, 23:33
	0.5-1km S	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:34
	0.3-0.5km SSW	Recorded	3	Explosion	Undetermined	N/K	14-Sep, 23:34
	0.3-0.5km SSW	Recorded	2	Muzzle flash		N/K	14-Sep, 23:34
	0.3-0.5km S	Recorded	2	Explosion	Undetermined	N/K	14-Sep, 23:35
	0.3-0.5km SSW	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:35
	0.5-1km S	Recorded	1	Projectile	W to E	N/K	14-Sep, 23:35
	0.2-0.4km S	Recorded	1	Muzzle flash		N/K	14-Sep, 23:38
	0.3-0.5km SSW	Recorded	16	Muzzle flash		N/K	15-Sep, 00:29
	0.3-0.5km SSW	Recorded	5	Explosion	Undetermined	N/K	15-Sep, 00:29
	0.5-0.8km S	Recorded	5	Explosion	Undetermined	N/K	15-Sep, 00:29
	0.3-0.8km S	Recorded	9	Projectile	WNW to ESE	N/K	15-Sep, 00:29
	0.3-0.8km SSW	Recorded	4	Muzzle flash		N/K	15-Sep, 00:30
	0.3-0.8km S	Recorded	19	Projectile	W to E	N/K	15-Sep, 00:30
	0.5-1km S	Recorded	5	Muzzle flash		N/K	15-Sep, 00:30
	0.3-1km SSE	Recorded	3	Explosion	Undetermined	N/K	15-Sep, 00:30
	0.5-1km SSE	Recorded	1	Muzzle flash		N/K	15-Sep, 00:31
	0.3-0.5km SSW	Recorded	2	Muzzle flash		N/K	15-Sep, 00:31
	0.3-1km SSW	Recorded	1	Projectile	NW to SE	N/K	15-Sep, 00:31
	0.3-0.5km SSW	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 00:32
	0.7-1.2km S	Recorded	2	Explosion	Undetermined	N/K	15-Sep, 00:32
	0.3-0.7km S	Recorded	25	Projectile	W to E	N/K	15-Sep, 00:32
	0.3-0.7km S	Recorded	11	Projectile	W to E	N/K	15-Sep, 00:33
	0.3-0.7km SSW	Recorded	2	Muzzle flash		N/K	15-Sep, 00:33
	0.3-0.7km SSE	Recorded	2	Explosion	Undetermined	N/K	15-Sep, 00:33
	0.2-0.4km SSW	Recorded	4	Muzzle flash		N/K	15-Sep, 00:34
0.8-1.2km S	Recorded	1	Explosion	Subsequent to previous event	N/K	15-Sep, 00:35	
0.3-0.6km SSW	Recorded	2	Muzzle flash		N/K	15-Sep, 00:35	
0.3-0.8km S	Recorded	2	Projectile	NW to SE (subsequent to previous event)	N/K	15-Sep, 00:35	
0.6-0.8km SSE	Recorded	2	Explosion	Subsequent to previous event	N/K	15-Sep, 00:35	
0.6-1km S	Recorded	2	Muzzle flash		N/K	15-Sep, 00:35	

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	0.6-1km S	Recorded	1	Projectile	NW to SE	N/K	15-Sep, 00:35
	0.8-1km S	Recorded	1	Explosion	Subsequent to previous event	N/K	15-Sep, 00:35
	0.8-1km SSE	Recorded	1	Explosion	Airburst, Subsequent to previous event	N/K	15-Sep, 00:36
	0.3-1km S	Recorded	13	Explosion	Undetermined	N/K	15-Sep, 00:36
	0.3-0.5km SSW	Recorded	3	Explosion	Undetermined	N/K	15-Sep, 00:36
	0.7-1.5km SSW	Recorded	1	Projectile	NW to SE	N/K	15-Sep, 00:36
	0.3-1km S	Recorded	1	Projectile	NW to SE	N/K	15-Sep, 00:37
	0.6-1km SSE	Recorded	1	Explosion	Impact. Subsequent to previous event	N/K	15-Sep, 00:37
	0.2-0.4km SSW	Recorded	2	Muzzle flash		N/K	15-Sep, 00:39
	0.2-0.4km S	Recorded	1	Projectile	W to E (subsequent to previous event)	N/K	15-Sep, 00:39
	0.4-1km SSE	Recorded	2	Explosion	Undetermined	N/K	15-Sep, 00:39
	0.8-1km S	Recorded	1	Projectile	SSW to NNE	N/K	15-Sep, 00:43
	0.3-0.5km S	Recorded	1	Muzzle flash		N/K	15-Sep, 00:43
	0.3-0.8km S	Recorded	3	Projectile	W to E	N/K	15-Sep, 00:44
	0.3-0.7km S	Recorded	1	Muzzle flash		N/K	15-Sep, 00:45
	0.5-1km S	Recorded	1	Burst	SE to NW (approximately 25 rounds)	N/K	15-Sep, 00:45
	1-2km S	Recorded	1	Projectile	N to S	N/K	15-Sep, 00:46
	0.5-1km S	Recorded	2	Projectile	NW to SE	N/K	15-Sep, 00:47
	0.5-1km S	Recorded	1	Muzzle flash		N/K	15-Sep, 00:47
	0.5-1km SSW	Recorded	1	Projectile	NW to SE	N/K	15-Sep, 00:49
	0.4-1km S	Recorded	7	Projectile	ESE to WNW	N/K	15-Sep, 00:49
	0.3-0.5km S	Recorded	2	Muzzle flash		N/K	15-Sep, 00:49
	0.5-1km S	Recorded	3	Muzzle flash		N/K	15-Sep, 00:50
	0.5-1km S	Recorded	4	Projectile	E to W	N/K	15-Sep, 00:50
	0.5-1km S	Recorded	6	Projectile	E to W	N/K	15-Sep, 00:51
	0.4-0.8km SSE	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 00:54
	0.4-0.8km S	Recorded	3	Projectile	W to E	N/K	15-Sep, 01:05
	0.2-0.4km S	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:05
	0.4-0.8km S	Recorded	1	Projectile	W to E	N/K	15-Sep, 01:06
	0.5-1km S	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:06
	0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:09
	1-2km SSW	Recorded	1	Illumination flare	In vertical flight	N/K	15-Sep, 01:12
	0.2-0.5km SSE	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:17
	0.2-0.5km SSE	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:21
	0.2-0.4km SSW	Recorded	2	Muzzle flash		N/K	15-Sep, 01:29
	0.6-0.8km SSW	Recorded	1	Muzzle flash		N/K	15-Sep, 01:29
	0.5-0.8km S	Recorded	4	Explosion	Undetermined	N/K	15-Sep, 01:31
	0.8-1km SSE	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:31
	0.2-0.4km SSW	Recorded	6	Muzzle flash		N/K	15-Sep, 01:31
	0.6-0.8km SSW	Recorded	2	Muzzle flash		N/K	15-Sep, 01:31
	0.2-0.5km SSW	Recorded	5	Explosion	Undetermined	N/K	15-Sep, 01:31
	0.8-1km SSE	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:32
	0.6-0.8km SSW	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:32
	0.2-0.4km SSW	Recorded	2	Muzzle flash		N/K	15-Sep, 01:32
	0.6-0.8km S	Recorded	1	Muzzle flash		N/K	15-Sep, 01:32
	0.6-0.8km S	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:33
	0.6-0.8km S	Recorded	1	Muzzle flash		N/K	15-Sep, 01:33
	0.2-0.4km SSW	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:33
	0.2-0.7km S	Recorded	1	Projectile	WNW to ESE	N/K	15-Sep, 01:33
	0.2-0.4km SSW	Recorded	3	Explosion	Undetermined	N/K	15-Sep, 01:35
	0.2-0.4km SSW	Recorded	2	Explosion	Undetermined	N/K	15-Sep, 01:36
	0.2-0.4km SSW	Recorded	1	Muzzle flash		N/K	15-Sep, 01:36
	0.2-0.4km SSW	Recorded	2	Explosion	Undetermined	N/K	15-Sep, 01:37
	0.2-0.4km SSW	Recorded	1	Muzzle flash		N/K	15-Sep, 01:37
	0.2-0.5km S	Recorded	1	Projectile		N/K	15-Sep, 01:37
	0.8-1km SSE	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:38
	0.8-1km SSW	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 01:38
	0.8-1km SSE	Recorded	2	Explosion	Undetermined	N/K	15-Sep, 01:40
	0.8-1km SSE	Recorded	1	Muzzle flash		N/K	15-Sep, 01:43
	0.8-1km S	Recorded	1	Illumination flare	In vertical flight	N/K	15-Sep, 01:43
	0.6-0.8km SSW	Recorded	1	Muzzle flash		N/K	15-Sep, 01:43
	0.4-0.6km SSW	Recorded	1	Muzzle flash		N/K	15-Sep, 01:46
	0.8-1km SSE	Recorded	1	Muzzle flash		N/K	15-Sep, 01:47
	0.8-1km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	15-Sep, 01:47

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	0.2-0.4km SSW	Recorded	1	Explosion	Outgoing	N/K	15-Sep, 01:49
	0.2-0.4km SSW	Recorded	2	Explosion	Outgoing	N/K	15-Sep, 01:50
	0.8-1.2km SSE	Recorded	1	Illumination flare		N/K	15-Sep, 01:54
	0.2-0.4km SSW	Recorded	1	Explosion	Outgoing	N/K	15-Sep, 01:55
	0.6-0.8km SSE	Recorded	2	Explosion	Impact	N/K	15-Sep, 01:55
	0.4-0.6km SSW	Recorded	1	Explosion	Undetermined	N/K	15-Sep, 02:09
	0.5-1.5km SSW	Recorded	1	Projectile	NW to SE	N/K	15-Sep, 02:32
	0.5-1.5km SSW	Recorded	6	Projectile	W to E	N/K	15-Sep, 02:48
	0.8-1.2km S	Recorded	1	Projectile	W to E	N/K	15-Sep, 02:49
	0.8-1.5km SSW	Recorded	1	Projectile	NNW to SSE	N/K	15-Sep, 02:49
	1-2km SSW	Recorded	2	Projectile	NNW to SSE	N/K	15-Sep, 02:49
	0.5-1.5km SSW	Recorded	1	Projectile	NNW to SSE	N/K	15-Sep, 03:07
	0.8-1km S	Recorded	4	Projectile	WNW to ESE	N/K	15-Sep, 03:51
0.8-1km S	Recorded	4	Projectile	WNW to ESE	N/K	15-Sep, 03:52	
0.8-1km S	Recorded	1	Projectile	WNW to ESE	N/K	15-Sep, 04:21	
SMM camera 1.5km NE of Hnutove (government-controlled, 20km NE of Mariupol)	3-5km E	Recorded	1	Projectile	NW to SE	N/K	14-Sep, 22:37
	3-5km ESE	Recorded	1	Projectile	SW to NE	N/K	15-Sep, 03:32
SMM camera in Hranitne (government-controlled, 60km S of Donetsk)	2-4km E	Recorded	1	Explosion	Airburst	N/K	14-Sep, 22:06
	2-4km E	Recorded	1	Projectile	NW to SE	N/K	14-Sep, 22:06
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	3-4km E	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 21:46
	3-4km ENE	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 21:46
	1-3km ENE	Recorded	2	Projectile	N to S	N/K	14-Sep, 21:46
	1-3km ESE	Recorded	3	Explosion	Undetermined	N/K	14-Sep, 23:13
	1-3km ESE	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:15
	1-3km ENE	Recorded	1	Projectile	NNW to SSE	N/K	14-Sep, 23:34
	3-4km ENE	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:34
	3-4km ENE	Recorded	1	Burst	SW to NE (approximately 20 rounds)	N/K	14-Sep, 23:44
	1-3km ENE	Recorded	1	Projectile	NNW to SSE	N/K	15-Sep, 00:11
	1-3km E	Recorded	3	Projectile	N to S	N/K	15-Sep, 02:37
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	1-3km E	Recorded	16	Projectile	N to S	N/K	15-Sep, 02:38
	1-3km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 22:50
SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 25km NE of Mariupol)	1-3km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Sep, 23:17
	4-6km S	Recorded	5	Projectile	NE to SW	N/K	14-Sep, 02:33
	4-6km SSE	Recorded	1	Projectile	NE to SW	N/K	14-Sep, 02:54
	4-6km SSE	Recorded	1	Projectile	NE to SW	N/K	14-Sep, 03:29
	4-6km S	Recorded	7	Projectile	NW to SE	N/K	14-Sep, 03:29
	4-6km S	Recorded	6	Projectile	NW to SE	N/K	14-Sep, 03:32
	4-6km S	Recorded	1	Projectile	NW to SE	N/K	14-Sep, 03:38
	4-6km S	Recorded	1	Explosion	Impact, subsequent to previous event	N/K	14-Sep, 03:38
	4-6km S	Recorded	3	Projectile	NE to SW	N/K	14-Sep, 03:58
	4-6km S	Recorded	2	Projectile	NE to SW	N/K	14-Sep, 04:02
	4-6km S	Recorded	3	Projectile	W to E	N/K	14-Sep, 04:57
	4-6km S	Recorded	1	Projectile	NE to SW	N/K	14-Sep, 04:57
	4-6km S	Recorded	2	Projectile	E to W	N/K	14-Sep, 20:35
	4-6km SSE	Recorded	1	Projectile	NE to SW	N/K	14-Sep, 20:35
	4-6km S	Recorded	4	Projectile	W to E	N/K	14-Sep, 20:35
	4-6km S	Recorded	5	Projectile	W to E	N/K	14-Sep, 20:39
	4-6km S	Recorded	5	Projectile	NE to SW	N/K	14-Sep, 20:52
	4-6km S	Recorded	4	Projectile	W to E	N/K	14-Sep, 20:52
	4-6km S	Recorded	2	Projectile	NNW to SSE	N/K	14-Sep, 20:52
	4-6km S	Recorded	16	Projectile	W to E	N/K	14-Sep, 20:53
	4-6km S	Recorded	6	Projectile	ENE to WSW	N/K	14-Sep, 20:53
	4-6km S	Recorded	2	Projectile	NNW to SSE	N/K	14-Sep, 22:54
	4-6km S	Recorded	2	Projectile	W to E	N/K	14-Sep, 22:57
	4-6km S	Recorded	1	Projectile	W to E	N/K	14-Sep, 22:58
	4-6km S	Recorded	5	Projectile	W to E	N/K	14-Sep, 22:59
	4-6km S	Recorded	2	Projectile	W to E	N/K	14-Sep, 23:09
	4-6km SSE	Recorded	3	Projectile	W to E	N/K	14-Sep, 23:25
	4-6km SSE	Recorded	1	Projectile	W to E	N/K	14-Sep, 23:29
	4-6km SSE	Recorded	3	Projectile	W to E	N/K	14-Sep, 23:33
	4-6km SSE	Recorded	2	Projectile	NNE to SSW	N/K	14-Sep, 23:33
	4-6km SSE	Recorded	5	Projectile	W to E	N/K	14-Sep, 23:34

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	4-6km SSE	Recorded	3	Projectile	NNW to SSE	N/K	14-Sep, 23:34
	4-6km SSE	Recorded	1	Projectile	NNE to SSW	N/K	14-Sep, 23:36
	4-6km SSE	Recorded	1	Projectile	NNW to SSE	N/K	14-Sep, 23:36
	4-6km SSE	Recorded	1	Projectile	W to E	N/K	14-Sep, 23:36
	4-6km S	Recorded	2	Projectile	E to W	N/K	14-Sep, 23:59
	4-6km SSE	Recorded	2	Projectile	ENE to WSW	N/K	15-Sep, 00:47
	4-6km SSE	Recorded	9	Projectile	W to E	N/K	15-Sep, 01:17
	4-6km SSE	Recorded	4	Projectile	E to W	N/K	15-Sep, 01:20
	4-6km S	Recorded	1	Projectile	W to E	N/K	15-Sep, 01:45
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-7km ENE	Recorded	17	Projectile	N to S	N/K	14-Sep, 20:55
About 1km , NNE of Donetsk central railway station(non-government-controlled, 6km NW of Donetsk)	1km N	Heard	2	Burst		Small arms	15-Sep, 10:04
	1km N	Heard	5	Shot		Small arms	15-Sep, 10:04
	1km N	Heard	3	Burst		Small arms	15-Sep, 11:06
	3km NW	Heard	4	Shot		Small arms	15-Sep, 11:18
	2.5-3km NE	Heard	3	Shot		Small arms	15-Sep, 11:24
	3km SW	Heard	1	Shot		Small arms	15-Sep, 12:27
	4-5km SW	Heard	2	Explosion	Undetermined	N/K	15-Sep, 12:29
	4-5km W	Heard	1	Explosion	Undetermined	N/K	15-Sep, 12:35
	4-5km SW	Heard	1	Explosion	Undetermined	N/K	15-Sep, 12:37
	4km SW	Heard	1	Explosion	Undetermined	N/K	15-Sep, 12:39
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	3km SW	Heard	1	Shot		Small arms	15-Sep, 12:45
	4-5km W	Heard	2	Explosion	Undetermined	N/K	15-Sep, 12:55
About 1km W of Verkhnohyrokiivske (formerly Oktiabr, non-government-controlled, 29km NE of Mariupol)	2-3km WNW	Heard	2	Shot		Small arms	15-Sep, 09:05
	2-3km WNW	Heard	3	Shot		Small arms	15-Sep, 09:11-09:14
1-2km NW	Heard	Uncountable	Shots and bursts	Undetermined (Also HMG)	Small arms	15-Sep, 13:49	
Svitlodarsk FPB (government-controlled, 57km NE of Donetsk)	3-5km ESE	Heard	1	Explosion	Undetermined	N/K	14-Sep, 20:51
	2-3km E	Heard	8	Burst		Small arms	14-Sep, 22:13
	2-3km E	Heard	4	Burst		Small arms	14-Sep, 22:52
	2-3km E	Heard	7	Burst		Small arms	14-Sep, 22:54
	3-5km E	Heard	1	Explosion	Undetermined	N/K	14-Sep, 22:54
	6-8km E	Heard	7	Explosion	Undetermined	N/K	14-Sep, 23:15-23:16
	6-8km SSE	Heard	7	Explosion	Undetermined	N/K	14-Sep, 23:16-23:17
	6-8km SSW	Heard	17	Explosion	Undetermined	N/K	14-Sep, 23:54-23:58
2-3km SE	Heard	1	Explosion	Undetermined	N/K	15-Sep, 17:57	
Horlivka FPB (non-government-controlled, 39km NE of Donetsk)	4-6km NW	Heard	10	Explosion	Undetermined	N/K	14-Sep, 23:14-23:16
	4-6km NW	Heard	4	Explosion	Undetermined	N/K	14-Sep, 23:35-23:36
	4-6km NW	Heard	4	Explosion	Undetermined	N/K	14-Sep, 23:45-23:46
	4-6km NW	Heard	22	Explosion	Undetermined	N/K	14-Sep, 23:49-23:54
	4-6km NW	Heard	8	Explosion	Undetermined	N/K	14-Sep, 23:55-23:57
	4-6km NW	Heard	6	Explosion	Undetermined	N/K	15-Sep, 00:02-00:03
	4-6km NW	Heard	3	Explosion	Undetermined	N/K	15-Sep, 00:15-00:17
	4-6km NW	Heard	2	Explosion	Undetermined	N/K	15-Sep, 00:17-00:18
	4-6km NW	Heard	23	Burst		HMG	15-Sep, 00:30-00:33
	4-6km NW	Heard	6	Explosion	Undetermined	N/K	15-Sep, 00:33-00:34
	4-6km NW	Heard	18	Burst		HMG	15-Sep, 00:33-00:35
	4-6km NW	Heard	6	Explosion	Undetermined	N/K	15-Sep, 00:37-00:38
	4-6km NW	Heard	20	Burst		HMG	15-Sep, 00:39-00:40

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	4-6km NW	Heard	4	Explosion	Undetermined	N/K	15-Sep, 00:43-00:44
	4-6km NW	Heard	6	Burst		HMG	15-Sep, 00:44-00:46
	2-4km NW	Heard	35	Burst		HMG	15-Sep, 08:15-08:30
N edge of Popasna (government-controlled, 69km W of Luhansk)	10-15km S	Heard	43	Explosion	Undetermined	N/K	14-Sep, 23:30-00:05