

Table of ceasefire violations as of 21 July 2019¹

SMM position	Event location	Means	No	Observation	Description	Weapon	Date, time
SMM camera in Chermalyk (government-controlled, 31km NE of Mariupol)	2-4km SSE	Recorded	2	Projectile	NE to SW	N/K	19-Jul, 20:51
	2-4km SE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 20:53
	2-4km SE	Recorded	2	Muzzle flash		N/K	19-Jul, 20:57
	2-4km SE	Recorded	2	Projectile	NNE to SSW	N/K	19-Jul, 20:57
	2-4km SE	Recorded	1	Explosion	Impact	N/K	19-Jul, 20:57
	2-4km SSE	Recorded	3	Muzzle flash		N/K	19-Jul, 21:05
	2-4km SSE	Recorded	6	Projectile	NE to SW	N/K	19-Jul, 21:05
	2-4km SSE	Recorded	2	Projectile	N to S	N/K	19-Jul, 21:05
	2-4km SSE	Recorded	1	Muzzle flash		N/K	19-Jul, 21:06
	2-4km SSE	Recorded	4	Projectile	ENE to WSW	N/K	19-Jul, 21:06
	2-4km SSE	Recorded	1	Explosion	Impact	N/K	19-Jul, 21:06
	2-4km SSE	Recorded	1	Projectile	ENE to WSW	N/K	19-Jul, 21:07
	2-4km SSE	Recorded	2	Projectile	ENE to WSW	N/K	19-Jul, 21:08
	2-4km SSE	Recorded	4	Explosion	Undetermined	N/K	19-Jul, 21:08
	2-4km SE	Recorded	7	Projectile	ENE to WSW	N/K	19-Jul, 21:11
	2-4km SSE	Recorded	3	Projectile	NE to SW	N/K	19-Jul, 21:31
	1-3km SSE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 21:31
	2-4km SSE	Recorded	25	Projectile	NE to SW	N/K	19-Jul, 21:47
	2-4km SSE	Recorded	10	Projectile	SSW to NNE	N/K	19-Jul, 21:48
	3-5km SSE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 21:49
	2-4km SSE	Recorded	2	Muzzle flash		N/K	19-Jul, 21:51
	2-4km SSE	Recorded	10	Projectile	NNE to SSW	N/K	19-Jul, 21:51
	2-4km SSE	Recorded	9	Projectile	WSW to ENE	N/K	19-Jul, 21:59
	4-6km S	Recorded	3	Projectile	WSW to ENE	N/K	19-Jul, 22:00
	2-4km SSE	Recorded	4	Projectile	SW to NE	N/K	19-Jul, 22:00
	4-6km S	Recorded	1	Muzzle flash		N/K	19-Jul, 22:00
	2-4km SSE	Recorded	2	Projectile	WSW to ENE	N/K	19-Jul, 22:01
	2-4km SSE	Recorded	24	Projectile	WSW to ENE	N/K	19-Jul, 22:02
	2-4km SSE	Recorded	25	Projectile	ENE to WSW	N/K	19-Jul, 22:02

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.

2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:02
4-6km S	Recorded	1	Explosion		N/K	19-Jul, 22:04
2-4km SSE	Recorded	1	Muzzle flash		N/K	19-Jul, 22:07
2-4km SSE	Recorded	1	Explosion	Impact	N/K	19-Jul, 22:07
4-6km S	Recorded	1	Projectile	ENE to WSW	N/K	19-Jul, 22:12
4-6km S	Recorded	1	Explosion		N/K	19-Jul, 22:12
2-4km SSE	Recorded	5	Projectile	WSW to ENE	N/K	19-Jul, 22:13
2-4km SSE	Recorded	3	Explosion	Undetermined	N/K	19-Jul, 22:13
3-5km SSE	Recorded	1	Projectile	NNW to SSE	N/K	19-Jul, 22:15
3-5km S	Recorded	15	Projectile	WSW to ENE	N/K	19-Jul, 22:19
2-4km SSE	Recorded	1	Projectile	NE to SW	N/K	19-Jul, 22:19
2-4km SSE	Recorded	1	Explosion	Impact	N/K	19-Jul, 22:19
4-6km SSE	Recorded	2	Explosion		N/K	19-Jul, 22:28
4-6km SSE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:39
3-5km SSE	Recorded	1	Projectile	SW to NE	N/K	19-Jul, 22:43
3-5km SSE	Recorded	1	Explosion	Impact, subsequent to previous event	N/K	19-Jul, 22:43
4-6km SSE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:44
4-6km S	Recorded	2	Projectile	SW to NE	N/K	19-Jul, 22:45
4-6km S	Recorded	1	Explosion	Impact	N/K	19-Jul, 22:45
4-6km S	Recorded	2	Projectile	SW to NE	N/K	19-Jul, 22:52
4-6km S	Recorded	1	Explosion	Impact	N/K	19-Jul, 22:52
4-6km S	Recorded	1	Muzzle flash		N/K	19-Jul, 22:55
4-6km S	Recorded	1	Projectile	SW to NE	N/K	19-Jul, 22:55
4-6km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:01
4-6km S	Recorded	2	Projectile	SW to NE	N/K	19-Jul, 23:01
4-6km S	Recorded	1	Explosion	Impact	N/K	19-Jul, 23:01
4-6km S	Recorded	4	Projectile	WSW to ENE	N/K	19-Jul, 23:04
4-6km S	Recorded	2	Projectile	SW to NE	N/K	19-Jul, 23:09
4-6km S	Recorded	4	Projectile	SW to NE	N/K	19-Jul, 23:17
5-7km SSE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:18
4-6km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:20
4-6km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:34
3-5km SSE	Recorded	3	Muzzle flash		N/K	20-Jul, 01:24
3-5km SSE	Recorded	5	Projectile	ENE to WSW	N/K	20-Jul, 01:24
3-5km SSE	Recorded	16	Projectile	ENE to WSW	N/K	20-Jul, 01:37
3-5km SSE	Recorded	2	Muzzle flash		N/K	20-Jul, 01:39
2-4km SE	Recorded	20	Projectile	In vertical flight	N/K	20-Jul, 02:36
2-4km SE	Recorded	2	Projectile	In vertical flight	N/K	20-Jul, 02:38
2-4km SSE	Recorded	1	Projectile	In vertical flight	N/K	20-Jul, 02:39
2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 02:46
2-4km SE	Recorded	1	Projectile	ENE to WSW	N/K	20-Jul, 02:48
2-4km SE	Recorded	3	Muzzle flash		N/K	20-Jul, 03:21
2-4km SSE	Recorded	2	Projectile	ENE to WSW	N/K	20-Jul, 03:21

SMM camera at Donetsk Filtration Station (15km N of Donetsk)	3-5km S	Recorded	1	Muzzle flash		N/K	19-Jul, 22:44
	0.5-1km S	Recorded	1	Projectile	N to S	N/K	19-Jul, 22:50
	0.5-1km SSW	Recorded	1	Illumination flare		N/K	19-Jul, 23:46
	0.3-1km SSE	Recorded	1	Projectile	NE to SW	N/K	20-Jul, 00:55
	0.3-0.6km SSW	Recorded	1	Projectile	W to E	N/K	20-Jul, 03:09
	0.5-1km SSW	Recorded	1	Explosion	Impact	N/K	20-Jul, 03:32
	0.1-0.5km S	Recorded	1	Projectile	E to W	N/K	20-Jul, 03:38
	0.1-0.5km SSW	Recorded	3	Projectile	NW to SE	N/K	20-Jul, 03:41
SMM camera 1.5km NE of Hnutove (government-controlled, 20km NE of Mariupol)	3-5km E	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 20:54
	3-5km E	Recorded	1	Projectile	WNW to ESE	N/K	19-Jul, 20:54
	3-5km ESE	Recorded	9	Projectile	SSW to NNE	N/K	19-Jul, 21:46
	3-5km E	Recorded	3	Projectile	WSW to ENE	N/K	19-Jul, 21:49
	1-3km ESE	Recorded	10	Projectile	WSW to ENE	N/K	19-Jul, 21:53
	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 21:56
	1-3km ESE	Recorded	24	Projectile	WSW to ENE (also recorded by Pyshevyk camera)	N/K	19-Jul, 21:58
	1-3km ESE	Recorded	2	Projectile	WSW to ENE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:00
	3-5km ESE	Recorded	1	Projectile	NE to SW	N/K	19-Jul, 22:11
	3-5km ESE	Recorded	1	Explosion		N/K	19-Jul, 22:11
	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:11
	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:12
	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:14
	3-5km ESE	Recorded	2	Muzzle flash		N/K	19-Jul, 22:21
	3-5km ESE	Recorded	1	Projectile	NW to SE	N/K	19-Jul, 22:22
	3-5km S	Recorded	1	Projectile	WSW to ENE	N/K	19-Jul, 22:22
	3-5km E	Recorded	15	Projectile	NW to SE	N/K	19-Jul, 22:34
	3-5km E	Recorded	1	Projectile	NW to SE	N/K	19-Jul, 22:35
	3-5km ENE	Recorded	1	Projectile	S to N	N/K	19-Jul, 22:36
	3-5km E	Recorded	1	Projectile	NW to SE	N/K	19-Jul, 22:36
	3-5km E	Recorded	6	Projectile	SW to NE	N/K	19-Jul, 22:36
	3-5km E	Recorded	9	Projectile	WNW to ESE	N/K	19-Jul, 22:39
	2-3km E	Recorded	1	Projectile	WNW to ESE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:43
	2-3km E	Recorded	1	Explosion	Airburst	N/K	19-Jul, 22:43
	2-3km E	Recorded	12	Projectile	WNW to ESE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:44
	2-3km E	Recorded	1	Projectile	WNW to ESE	N/K	19-Jul, 22:48
	3-5km ESE	Recorded	2	Explosion	Undetermined	N/K	19-Jul, 22:49

	3-5km ESE	Recorded	4	Projectile	WSW to ENE	N/K	19-Jul, 22:49
	1-3km ENE	Recorded	1	Projectile	WNW to ESE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:49
	1-3km ENE	Recorded	1	Explosion	Also recorded by Pyshevyk camera	N/K	19-Jul, 22:49
	3-5km ESE	Recorded	1	Projectile	W to E	N/K	19-Jul, 22:50
	3-5km E	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:50
	3-5km E	Recorded	1	Explosion	Undetermined, also recorded by Pyshevyk camera	N/K	19-Jul, 22:50
	1-3km E	Recorded	1	Projectile	WNW to ESE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:52
	1-3km E	Recorded	1	Projectile	WNW to ESE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:55
	1-3km ESE	Recorded	1	Projectile	WSW to ENE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:57
	1-3km ESE	Recorded	1	Projectile	WSW to ENE (also recorded by Pyshevyk camera)	N/K	19-Jul, 22:59
	1-3km ESE	Recorded	1	Explosion	Airburst	N/K	19-Jul, 22:59
	3-5km E	Recorded	17	Projectile	WNW to ESE	N/K	19-Jul, 23:04
	3-5km E	Recorded	3	Projectile	WNW to ESE	N/K	19-Jul, 23:09
	3-5km E	Recorded	1	Explosion	Airburst	N/K	19-Jul, 23:09
	3-5km E	Recorded	2	Explosion	Undetermined	N/K	19-Jul, 23:22
	3-5km E	Recorded	1	Projectile	WNW to ESE	N/K	19-Jul, 23:22
	3-5km E	Recorded	1	Projectile	ESE to WNW	N/K	20-Jul, 00:49
	3-5km E	Recorded	1	Explosion		N/K	20-Jul, 00:49
SMM camera E of Lomakyne (government-controlled, 15km NE of Mariupol)	2-4km ENE	Recorded	3	Projectile	NW to SE	N/K	19-Jul, 21:14
	1-3km ENE	Recorded	1	Explosion	Airburst	N/K	19-Jul, 22:04
	2-4km ENE	Recorded	2	Projectile	SE to NW	N/K	19-Jul, 22:11
	2-4km NE	Recorded	1	Projectile	NW to SE	N/K	19-Jul, 22:45
	2-4km NE	Recorded	1	Projectile	In vertical flight	N/K	19-Jul, 22:45
	2-4km ENE	Recorded	1	Explosion	Airburst	N/K	19-Jul, 22:45
	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:49
	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:07
	2-4km ENE	Recorded	1	Projectile	In vertical flight	N/K	19-Jul, 23:30
	2-4km ENE	Recorded	1	Explosion	Airburst	N/K	19-Jul, 23:30
	2-4km ENE	Recorded	1	Projectile	In vertical flight	N/K	20-Jul, 00:50
	2-4km ENE	Recorded	1	Explosion	Airburst	N/K	20-Jul, 00:50
	SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of	3-4km E	Recorded	20	Muzzle flash		N/K
3-4km ENE		Recorded	40	Explosion	Impacts	N/K	19-Jul, 22:10
3-4km E		Recorded	1	Projectile	SSW to NNE	N/K	19-Jul, 22:10

Donetsk)	1-3km ENE	Recorded	4	Projectile	NW to SE	N/K	19-Jul, 22:53
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	2-4km NNE	Recorded	2	Projectile	SW to NE	N/K	20-Jul, 02:28
	2-4km NNE	Recorded	5	Projectile	ESE to WNW	N/K	20-Jul, 02:28
	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 02:29
	2-4km NNE	Recorded	1	Projectile	NW to SE	N/K	20-Jul, 02:29
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	4-6km NE	Recorded	1	Illumination flare	In vertical flight	N/K	19-Jul, 21:49
SMM camera at entry-exit checkpoint in Pyshchevyk (government-controlled, 25km NE of Mariupol)	3-5km S	Recorded	1	Projectile	E to W	N/K	19-Jul, 21:02
	3-5km S	Recorded	7	Projectile	W to E	N/K	19-Jul, 21:13
	3-5km S	Recorded	12	Projectile	W to E	N/K	19-Jul, 21:14
	3-5km S	Recorded	1	Projectile	W to E	N/K	19-Jul, 21:16
	3-5km S	Recorded	1	Projectile	NE to SW	N/K	19-Jul, 21:17
	3-5km S	Recorded	1	Projectile	W to E	N/K	19-Jul, 21:19
	3-5km S	Recorded	2	Projectile	W to E	N/K	19-Jul, 21:24
	3-5km S	Recorded	1	Projectile	In vertical flight	N/K	19-Jul, 21:24
	3-5km SSE	Recorded	6	Projectile	W to E	N/K	19-Jul, 21:53
	3-5km S	Recorded	1	Projectile	In vertical flight	N/K	19-Jul, 21:55
	3-5km S	Recorded	4	Projectile	E to W	N/K	19-Jul, 21:56
	3-5km SSE	Recorded	24	Projectile	W to E	N/K	19-Jul, 21:58
	3-5km SSE	Recorded	6	Projectile	W to E	N/K	19-Jul, 21:59
	3-5km S	Recorded	2	Muzzle flash		N/K	19-Jul, 22:00
	3-5km S	Recorded	2	Projectile	NW to SE (also recorded by Hnutove camera)	N/K	19-Jul, 22:00
	1-3km S	Recorded	1	Explosion		N/K	19-Jul, 22:04
	3-5km SSE	Recorded	1	Projectile	W to E	N/K	19-Jul, 22:07
	3-5km SSE	Recorded	3	Projectile	E to W	N/K	19-Jul, 22:07
	3-5km S	Recorded	6	Projectile	W to E	N/K	19-Jul, 22:08
	3-5km SSE	Recorded	4	Projectile	W to E	N/K	19-Jul, 22:09
	3-5km SSE	Recorded	1	Projectile	In vertical flight	N/K	19-Jul, 22:10
	3-5km SSE	Recorded	22	Projectile	W to E	N/K	19-Jul, 22:10
	3-5km SSE	Recorded	1	Muzzle flash		N/K	19-Jul, 22:10
	3-5km SSE	Recorded	1	Projectile	E to W	N/K	19-Jul, 22:10
	3-5km SSE	Recorded	1	Explosion		N/K	19-Jul, 22:10
	3-5km S	Recorded	2	Burst	NE to SW	N/K	19-Jul, 22:10
	3-5km SSE	Recorded	1	Projectile	E to W	N/K	19-Jul, 22:11
	3-5km SSE	Recorded	1	Explosion	Airburst	N/K	19-Jul, 22:11
	3-5km SSE	Recorded	2	Projectile	E to W	N/K	19-Jul, 22:11
	3-5km SSE	Recorded	1	Projectile	W to E	N/K	19-Jul, 22:11
	3-5km SSE	Recorded	1	Projectile	E to W	N/K	19-Jul, 22:12
	3-5km	Recorded	1	Explosion		N/K	19-Jul, 22:12

SSE							
3-5km S	Recorded	2	Projectile	W to E	N/K	19-Jul, 22:17	
3-5km S	Recorded	1	Projectile	In vertical flight	N/K	19-Jul, 22:18	
3-5km S	Recorded	2	Projectile	E to W	N/K	19-Jul, 22:18	
3-5km S	Recorded	3	Projectile	W to E	N/K	19-Jul, 22:18	
3-5km S	Recorded	3	Projectile	W to E	N/K	19-Jul, 22:19	
1-3km S	Recorded	1	Burst	W to E	N/K	19-Jul, 22:19	
3-5km S	Recorded	2	Projectile	W to E	N/K	19-Jul, 22:20	
3-5km S	Recorded	2	Projectile	N to S	N/K	19-Jul, 22:20	
3-5km S	Recorded	1	Projectile	In vertical flight	N/K	19-Jul, 22:21	
3-5km SSE	Recorded	1	Muzzle flash		N/K	19-Jul, 22:21	
3-5km SSE	Recorded	1	Projectile	E to W	N/K	19-Jul, 22:21	
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:21	
3-5km S	Recorded	4	Projectile	W to E	N/K	19-Jul, 22:21	
3-5km S	Recorded	2	Projectile	W to E	N/K	19-Jul, 22:23	
3-5km S	Recorded	1	Projectile	NNW to SSE	N/K	19-Jul, 22:24	
3-5km S	Recorded	1	Explosion		N/K	19-Jul, 22:27	
3-5km S	Recorded	2	Explosion		N/K	19-Jul, 22:28	
3-5km S	Recorded	1	Projectile	NE to SW	N/K	19-Jul, 22:30	
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:30	
3-5km S	Recorded	1	Projectile	NW to SE	N/K	19-Jul, 22:30	
3-5km S	Recorded	2	Projectile	W to E	N/K	19-Jul, 22:32	
3-5km SSE	Recorded	11	Projectile	W to E	N/K	19-Jul, 22:34	
3-5km SSE	Recorded	1	Projectile	NE to SW	N/K	19-Jul, 22:34	
3-5km S	Recorded	11	Projectile	W to E	N/K	19-Jul, 22:34	
3-5km S	Recorded	2	Projectile	W to E	N/K	19-Jul, 22:35	
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:39	
3-5km S	Recorded	6	Projectile	NE to SW	N/K	19-Jul, 22:39	
3-5km S	Recorded	22	Projectile	W to E	N/K	19-Jul, 22:40	
3-5km SSE	Recorded	1	Muzzle flash		N/K	19-Jul, 22:43	
3-5km S	Recorded	1	Projectile	NW to SE	N/K	19-Jul, 22:43	
2-3km SSE	Recorded	1	Projectile	W to E (also recorded by Hnutove camera)	N/K	19-Jul, 22:43	
2-3km S	Recorded	10	Projectile	NE to SW (also recorded by Hnutove camera)	N/K	19-Jul, 22:44	
3-5km SSE	Recorded	9	Projectile	W to E	N/K	19-Jul, 22:44	
3-5km S	Recorded	3	Projectile	NNW to SSE	N/K	19-Jul, 22:45	
2-4km S	Recorded	2	Projectile	NW to SE	N/K	19-Jul, 22:45	
2-4km S	Recorded	1	Explosion	Impact	N/K	19-Jul, 22:45	
3-5km S	Recorded	1	Projectile	N to S	N/K	19-Jul, 22:45	
2-4km S	Recorded	4	Projectile	NE to SW	N/K	19-Jul, 22:45	
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:47	
3-5km SSE	Recorded	1	Projectile	W to E	N/K	19-Jul, 22:48	
3-5km S	Recorded	6	Projectile	W to E	N/K	19-Jul, 22:49	
1-3km SSE	Recorded	1	Muzzle flash		N/K	19-Jul, 22:49	
1-3km SSE	Recorded	1	Projectile	E to W (also recorded by Hnutove camera)	N/K	19-Jul, 22:49	
1-3km S	Recorded	1	Explosion	Also recorded by Hnutove camera	N/K	19-Jul, 22:49	
3-5km S	Recorded	12	Projectile	W to E	N/K	19-Jul, 22:50	

3-5km S	Recorded	1	Muzzle flash		N/K	19-Jul, 22:50
3-5km SSE	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:50
3-5km SSE	Recorded	5	Projectile	W to E	N/K	19-Jul, 22:51
3-5km S	Recorded	2	Projectile	NE to SW	N/K	19-Jul, 22:51
3-5km S	Recorded	1	Muzzle flash		N/K	19-Jul, 22:52
3-5km S	Recorded	1	Projectile	W to E	N/K	19-Jul, 22:52
3-5km S	Recorded	1	Explosion		N/K	19-Jul, 22:52
3-5km SSE	Recorded	1	Explosion		N/K	19-Jul, 22:52
3-5km SSE	Recorded	1	Projectile	W to E (also recorded by Hnutove camera)	N/K	19-Jul, 22:52
3-5km SSE	Recorded	1	Muzzle flash		N/K	19-Jul, 22:55
3-5km S	Recorded	1	Projectile	W to E (also recorded by Hnutove camera)	N/K	19-Jul, 22:55
3-5km S	Recorded	1	Projectile	E to W	N/K	19-Jul, 22:55
3-5km S	Recorded	7	Projectile	W to E	N/K	19-Jul, 22:56
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 22:56
3-5km S	Recorded	1	Muzzle flash		N/K	19-Jul, 22:57
3-5km S	Recorded	1	Projectile	W to E (also recorded by Hnutove camera)	N/K	19-Jul, 22:57
3-5km S	Recorded	1	Muzzle flash		N/K	19-Jul, 22:59
3-5km S	Recorded	1	Projectile	W to E (also recorded by Hnutove camera)	N/K	19-Jul, 22:59
3-5km S	Recorded	1	Projectile	E to W	N/K	19-Jul, 22:59
3-5km S	Recorded	12	Projectile	W to E	N/K	19-Jul, 23:01
3-5km SSE	Recorded	2	Explosion	Undetermined	N/K	19-Jul, 23:01
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:01
3-5km S	Recorded	2	Projectile	E to W	N/K	19-Jul, 23:12
3-5km S	Recorded	20	Projectile	W to E	N/K	19-Jul, 23:17
3-5km S	Recorded	8	Projectile	W to E	N/K	19-Jul, 23:19
3-5km S	Recorded	1	Explosion	Airburst	N/K	19-Jul, 23:19
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:20
3-5km S	Recorded	2	Projectile	E to W	N/K	19-Jul, 23:27
3-5km S	Recorded	6	Projectile	W to E	N/K	19-Jul, 23:27
3-5km S	Recorded	1	Projectile	W to E	N/K	19-Jul, 23:30
3-5km S	Recorded	1	Explosion	Airburst	N/K	19-Jul, 23:30
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:31
3-5km SSE	Recorded	1	Projectile	E to W	N/K	19-Jul, 23:33
3-5km S	Recorded	1	Explosion	Undetermined	N/K	19-Jul, 23:34
3-5km S	Recorded	1	Projectile	W to E	N/K	19-Jul, 23:34
2-4km SSE	Recorded	3	Projectile	E to W	N/K	19-Jul, 23:35
2-4km S	Recorded	1	Projectile	W to E	N/K	19-Jul, 23:35
2-4km S	Recorded	4	Projectile	W to E	N/K	19-Jul, 23:38
3-5km S	Recorded	1	Projectile	E to W	N/K	19-Jul, 23:52
3-5km S	Recorded	1	Burst	W to E	N/K	19-Jul, 23:58
3-5km S	Recorded	4	Projectile	W to E	N/K	19-Jul, 23:59
3-5km S	Recorded	3	Projectile	NW to SE	N/K	20-Jul, 00:00
3-5km S	Recorded	3	Projectile	NW to SE	N/K	20-Jul, 00:13
2-4km S	Recorded	2	Projectile	W to E	N/K	20-Jul, 01:36
3-5km S	Recorded	4	Projectile	NW to SE	N/K	20-Jul, 00:41
2-4km S	Recorded	1	Projectile	NNE to SSW	N/K	20-Jul, 02:09

	2-4km S	Recorded	1	Projectile	E to W	N/K	20-Jul, 03:21
SE edge of Avdiivka (government-controlled, 17km N of Donetsk)	3-4km NE	Heard	2	Explosion	Undetermined	N/K	20-Jul, 09:27
	2-3km NE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 10:01
	2km NE	Heard	4	Shot		Small arms	20-Jul, 10:14
	3-4km NE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 10:17
	2-3km NE	Heard	7	Explosion	Undetermined	N/K	20-Jul, 10:19-10:21
	2-3km NE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 10:28
	2-3km SE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 11:35
About 3km NW of Pervomaiske (government-controlled, 17km NW of Donetsk)	2km WSW	Heard	6	Shot		Small arms	20-Jul, 12:44
	2km WSW	Heard	1	Shot		Small arms	20-Jul, 12:50
About 6km NW of Donetsk City centre (non-government-controlled)	2km N	Heard	1	Explosion	Undetermined	N/K	20-Jul, 11:38
	2km N	Heard	1	Explosion	Undetermined	N/K	20-Jul, 11:57
	2km N	Heard	1	Explosion	Undetermined	N/K	20-Jul, 12:01
About 1km NW of railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	1-2km NW	Heard	3	Shot		HMG	20-Jul, 10:14
	1-2km SE	Heard	15	Shot		Small arms	20-Jul, 10:51
	1-2km SE	Heard	2	Burst		Small arms	20-Jul, 10:51
	0.7-0.8km SE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 12:10
About 2km SW of Pyshevyk (government-controlled, 25km NE of Mariupol)	3-5km ESE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 10:00-10:03
	3-5km ESE	Heard and saw	3	Explosion	Impact	N/K	20-Jul, 10:00-10:03
	3-5km NNE	Heard and saw	1	Explosion	Impact	N/K	20-Jul, 10:15
	3-5km NNE	Heard and saw	1	Explosion	Impact	N/K	20-Jul, 10:22
	3-5km NE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 10:38
About 1.2km SW of Lebedynske (government-controlled, 16km NE of Mariupol)	3-5km NE	Heard and saw	3	Explosion	Impact	N/K	20-Jul, 11:45-11:47
	3-5km NE	Heard	5	Explosion	Undetermined	N/K	20-Jul, 12:20-12:23
Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-5km SW	Heard	3	Explosion	Undetermined	N/K	19-Jul, 19:12-19:13
	4-5km SW	Heard	5	Burst		HMG	19-Jul, 22:00-22:01
Horlivka (non-government-controlled, 39km NE of Donetsk)	4-6km NW	Heard	1	Explosion	Undetermined	N/K	19-Jul, 20:05
	4-6km NW	Heard	1	Burst		HMG	19-Jul, 20:07
	4-6km NW	Heard	1	Explosion	Undetermined	N/K	19-Jul, 20:11
	4-6km NW	Heard	1	Burst		HMG	19-Jul, 20:15
	4-6km NW	Heard	1	Explosion	Undetermined	N/K	19-Jul, 20:29
	4-6km NW	Heard	2	Explosion	Undetermined	N/K	19-Jul, 20:30
	4-6km SE	Heard	4	Explosion	Undetermined	N/K	20-Jul, 07:35-07:40
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	1-2km E	Heard	2	Explosion	Undetermined	N/K	20-Jul, 09:28
	5-7km SE	Heard	2	Explosion	Undetermined	N/K	20-Jul, 10:02
	2-3km SE	Heard	2	Burst		Small arms	20-Jul, 10:25
	1-2km E	Heard	1	Explosion	Undetermined	N/K	20-Jul, 10:39
SMM camera on N edge of Popasna	2-4km ESE	Recorded	2	Projectile	NNE to SSW	N/K	19-Jul, 22:31

(government-controlled, 69km W of Luhansk)	2-4km ESE	Recorded	3	Projectile	NNE to SSW	N/K	19-Jul, 22:56
	2-4km ESE	Recorded	1	Projectile	NNE to SSW	N/K	19-Jul, 22:58
	2-4km ESE	Recorded	3	Projectile	NNE to SSW	N/K	19-Jul, 23:00
	2-4km ESE	Recorded	2	Projectile	NNE to SSW	N/K	19-Jul, 23:19
	2-4km ESE	Recorded	1	Projectile	NNE to SSW	N/K	19-Jul, 23:23
	2-4km ESE	Recorded	1	Projectile	NNE to SSW	N/K	20-Jul, 01:44
	2-4km ESE	Recorded	8	Projectile	SSW to NNE	N/K	20-Jul, 01:49
	2-4km ESE	Recorded	4	Projectile	NNE to SSW	N/K	20-Jul, 01:55
	2-4km ESE	Recorded	3	Projectile	SSW to NNE	N/K	20-Jul, 02:29
	2-4km ESE	Recorded	22	Projectile	SSW to NNE	N/K	20-Jul, 02:34
	SMM camera in Zolote (government-controlled, 60km W of Luhansk)	3-5km E	Recorded	2	Projectile	NNW to SSE (assessed as outside the disengagement area)	N/K
3-5km E		Recorded	2	Projectile	In vertical flight (assessed as outside the disengagement area)	N/K	19-Jul, 21:46
3-5km E		Recorded	15	Projectile	NNW to SSE (assessed as outside the disengagement area)	N/K	19-Jul, 21:56
3-5km ESE		Recorded	2	Projectile	NNW to SSE (assessed as outside the disengagement area)	N/K	19-Jul, 22:34
2-3km SE		Recorded	1	Illumination flare	In vertical flight (assessed as inside the disengagement)	N/K	19-Jul, 22:39
3-5km S		Recorded	16	Projectile	In vertical flight (unable to assess whether inside or outside the disengagement area)	Anti-aircraft gun (ZU-23, 23mm)	19-Jul, 23:28
3-5km E		Recorded	6	Projectile	WNW to ESE (assessed as outside the disengagement area)	N/K	20-Jul, 00:56
3-5km E		Recorded	1	Projectile	WNW to ESE (assessed as outside the disengagement area)	N/K	20-Jul, 01:07
3-5km SW		Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	20-Jul, 01:12
3-5km E		Recorded	6	Projectile	NNW to SSE	N/K	20-Jul, 01:45

					(assessed as outside the disengagement area)		
	3-5km E	Recorded	2	Projectile	NNW to SSE (assessed as outside the disengagement area)	N/K	20-Jul, 01:46
	3-5km E	Recorded	20	Projectile	NNW to SSE (assessed as outside the disengagement area)	N/K	20-Jul, 02:30
	3-5km E	Recorded	2	Projectile	NNW to SSE (assessed as outside the disengagement area)	N/K	20-Jul, 02:34
N edge of Popasna (government-controlled, 69km W of Luhansk)	6-8km NE	Heard	2	Explosion	Undetermined	N/K	19-Jul, 18:24-18:26
	2-4km W	Heard	1	Explosion	Undetermined	N/K	20-Jul, 13:00-13:01
	2-4km W	Heard	5	Burst		N/K	20-Jul, 13:00-13:01
	2-4km W	Heard	2	Shot		N/K	20-Jul, 13:00-13:01
	4-5km NNE	Heard	6	Burst	Assessed as inside the disengagement area	HMG	20-Jul, 13:03
0.25km SE of Stanytsia Luhanska bridge (non-government-controlled, 15km NE of Luhansk)	1-2km NW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	20-Jul, 15:17
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	3-4km SE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 21:26
SMM camera in Chermalyk (government-controlled, 31km NE of Mariupol)	2-4km SSE	Recorded	1	Projectile	NE to SW	N/K	21-Jul, 03:49
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 20:58
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 21:01
	2-4km SSE	Recorded	1	Projectile	WSW to ENE	N/K	20-Jul, 21:03
	2-4km SSE	Recorded	1	Projectile	ENE to WSW	N/K	20-Jul, 21:09
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 21:09
	2-4km SSE	Recorded	2	Projectile	NNE to SSW	N/K	20-Jul, 21:14
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 21:18
	2-4km SSE	Recorded	20	Projectile	WSW to ENE	N/K	20-Jul, 21:29
	2-4km SSE	Recorded	1	Projectile	ENE to WSW	N/K	20-Jul, 21:30
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 21:37
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 21:41
	2-4km SSE	Recorded	1	Projectile	WSW to ENE	N/K	20-Jul, 21:45

	2-4km SE	Recorded	1	Explosion	Impact	N/K	20-Jul, 21:45
	1-3km SSE	Recorded	2	Projectile	NNE to SSW	N/K	20-Jul, 21:56
	1-3km SSE	Recorded	5	Projectile	NNE to SSW	N/K	20-Jul, 22:01
	2-4km SSE	Recorded	1	Explosion	Airburst	N/K	20-Jul, 22:02
	2-4km SE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 22:02
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 22:11
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 22:12
	2-4km SSE	Recorded	1	Projectile	NNE to SSW	N/K	20-Jul, 22:12
	2-4km SSE	Recorded	8	Projectile	NNE to SSW	N/K	20-Jul, 22:14
	2-4km SSE	Recorded	16	Projectile	NNE to SSW	N/K	20-Jul, 22:16
	2-4km SSE	Recorded	1	Projectile	N to S	N/K	20-Jul, 22:44
	2-4km SSE	Recorded	3	Projectile	NNE to SSW	N/K	20-Jul, 23:11
	2-4km SSE	Recorded	1	Explosion	Airburst	N/K	20-Jul, 23:35
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	2-4km S	Recorded	1	Illumination flare	In vertical flight	N/K	20-Jul, 23:01
	0.7-1km S	Recorded	1	Projectile	E to W	N/K	20-Jul, 23:23
	0.7-1km S	Recorded	1	Explosion	Undetermined	N/K	21-Jul, 00:33
	0.7-1km S	Recorded	1	Explosion	Undetermined	N/K	21-Jul, 02:07
SMM camera 1.5km NE of Hnutove (government-controlled, 20km NE of Mariupol)	3-5km E	Recorded	5	Projectile	N to S	N/K	20-Jul, 21:18
	3-5km ENE	Recorded	2	Projectile	N to S	N/K	20-Jul, 21:30
	3-5km E	Recorded	3	Projectile	N to S	N/K	20-Jul, 21:32
	3-5km E	Recorded	2	Muzzle flash		N/K	20-Jul, 21:32
	3-5km E	Recorded	10	Projectile	SW to NE	N/K	20-Jul, 21:49
	3-5km ENE	Recorded	1	Muzzle flash		N/K	20-Jul, 21:58
	3-5km ENE	Recorded	1	Projectile	N to S	N/K	20-Jul, 22:02
	3-5km ENE	Recorded	2	Muzzle flash		N/K	20-Jul, 22:44
	3-5km ENE	Recorded	1	Projectile	SW to NE	N/K	20-Jul, 22:44
	3-5km ESE	Recorded	2	Projectile	S to N (also recorded by Pyshchevyk camera)	N/K	20-Jul, 22:52
	3-5km E	Recorded	1	Muzzle flash		N/K	20-Jul, 22:56
	SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	1-3km E	Recorded	1	Explosion	Undetermined	N/K
2-4km E		Recorded	1	Illumination flare	In vertical flight	N/K	20-Jul, 22:22
2-4km E		Recorded	1	Projectile	In vertical flight	N/K	20-Jul, 22:34
2-4km E		Recorded	1	Explosion	Undetermined	N/K	21-Jul, 01:35
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	1-3km NNE	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 22:25
	1-3km N	Recorded	2	Explosion	Airburst/impact	N/K	20-Jul, 22:26
	1-3km N	Recorded	1	Projectile	In vertical flight	N/K	20-Jul, 22:26
	1-3km N	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 22:46
	1-3km N	Recorded	6	Projectile	SW to NE	N/K	20-Jul, 22:56
SMM camera at entry-exit checkpoint in Pyshchevyk (government-controlled, 25km NE of Mariupol)	3-5km S	Recorded	1	Projectile	W to E	N/K	20-Jul, 21:18
	3-5km S	Recorded	4	Projectile	W to E	N/K	20-Jul, 21:27
	3-5km S	Recorded	1	Projectile	In vertical flight	N/K	20-Jul, 21:35
	3-5km S	Recorded	4	Projectile	W to E	N/K	20-Jul, 21:35
	3-5km S	Recorded	8	Projectile	ENE to WSW	N/K	20-Jul, 21:42
	3-5km	Recorded	13	Projectile	W to E	N/K	20-Jul, 21:45

	SSE						
	3-5km S	Recorded	10	Projectile	W to E	N/K	20-Jul, 21:46
	3-5km S	Recorded	2	Projectile	W to E	N/K	20-Jul, 21:57
	3-5km S	Recorded	13	Projectile	W to E	N/K	20-Jul, 22:02
	3-5km S	Recorded	1	Projectile	W to E	N/K	20-Jul, 22:04
	3-5km S	Recorded	2	Projectile	W to E	N/K	20-Jul, 22:22
	3-5km S	Recorded	3	Projectile	W to E	N/K	20-Jul, 22:23
	3-5km S	Recorded	1	Explosion	Undetermined	N/K	20-Jul, 22:31
	3-5km S	Recorded	4	Projectile	W to E	N/K	20-Jul, 22:37
	3-5km SSE	Recorded	2	Projectile	ENE to WSW	N/K	20-Jul, 22:48
	3-5km S	Recorded	2	Projectile	W to E (also recorded by Hnutove camera)	N/K	20-Jul, 22:52
	3-5km S	Recorded	1	Projectile	W to E	N/K	20-Jul, 23:06
	4-6km S	Recorded	4	Projectile	W to E	N/K	20-Jul, 23:44
	4-6km S	Recorded	2	Projectile	W to E	N/K	20-Jul, 23:45
	4-6km S	Recorded	3	Projectile	W to E	N/K	20-Jul, 23:49
SE part of Avdiivka (government-controlled, 17km N of Donetsk)	2-3km SE	Heard	1	Explosion	Undetermined	N/K	21-Jul, 09:57
Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-5km SW	Heard	2	Explosion	Undetermined	N/K	20-Jul, 19:00
	4-5km SW	Heard	7	Burst		HMG	20-Jul, 19:20-19:22
	4-5km S	Heard	10	Burst		HMG	20-Jul, 19:45-19:48
	4-5km S	Heard	5	Explosion	Undetermined	N/K	20-Jul, 20:00-20:03
	4-5km SE	Heard	5	Explosion	Undetermined	N/K	20-Jul, 20:46-20:49
	4-5km SW	Heard	8	Burst		HMG	20-Jul, 20:47-20:50
	5-6km SE	Heard	1	Explosion	Undetermined	N/K	20-Jul, 21:00
	4-5km SW	Heard	4	Burst		HMG	20-Jul, 21:40-21:42
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	3-5km SSW	Recorded	10	Projectile	NW to SE (assessed as outside the disengagement area)	N/K	20-Jul, 20:57
	2-4km SE	Recorded	5	Projectile	In vertical flight, assessed as inside the disengagement area	N/K	20-Jul, 20:58
	2-4km S	Recorded	7	Projectile	In vertical flight, unable to assess whether inside or outside the disengagement area	N/K	20-Jul, 22:34
	2-4km SSE	Recorded	19	Projectile	In vertical flight, unable to assess whether inside or outside the disengagement area	N/K	20-Jul, 22:34
	2-4km S	Recorded	10	Projectile	In vertical flight, unable to assess whether inside or	N/K	20-Jul, 22:34

					outside the disengagement area		
	2-4km S	Recorded	23	Projectile	In vertical flight, unable to assess whether inside or outside the disengagement area	N/K	20-Jul, 22:34
	2-4km S	Recorded	33	Projectile	In vertical flight, unable to assess whether inside or outside the disengagement area	N/K	20-Jul, 22:34
	1-3km E	Recorded	1	Explosion	Undetermined, assessed as outside the disengagement area	N/K	20-Jul, 23:34
	2-4km SSW	Recorded	8	Projectile	In vertical flight, unable to assess whether inside or outside the disengagement area	N/K	21-Jul, 00:11
	2-4km S	Recorded	4	Projectile	In vertical flight, unable to assess whether inside or outside the disengagement area	N/K	21-Jul, 00:11
	3-5km E	Recorded	9	Projectile	NNW to SSE (assessed as outside the disengagement area)	N/K	21-Jul, 00:47
N edge of Popasna (government-controlled, 69km W of Luhansk)	4-7km SE	Heard and saw	34	Explosion	Undetermined	N/K	20-Jul, 18:56-19:59
	6-10km NE	Heard	10	Explosion	Undetermined	N/K	20-Jul, 18:56-19:59
	6-12km ESE	Heard and saw	21	Explosion	Undetermined	N/K	20-Jul, 18:56-19:59
	6-10km S	Heard	6	Explosion	Undetermined	N/K	20-Jul, 18:56-19:59
	3-6km ESE	Heard	93	Burst and shot		Small arms	20-Jul, 18:56-19:59
	3-6km ESE	Heard	5	Burst		HMG	20-Jul, 18:56-19:59
	6-10km SSE	Heard	9	Explosion	Undetermined	N/K	20-Jul, 20:07-20:20
	3-5km ESE	Heard	18	Burst and shot		Small arms	20-Jul, 20:07-20:35
	3-5km ESE	Heard	3	Burst		HMG	20-Jul, 20:08-20:35
	5-7km E	Heard	27	Burst		HMG	21-Jul, 01:13-01:31
	5-7km E	Heard	20	Burst and shot		Small arms	21-Jul, 01:13-01:31
	5-7km E	Heard	2	Explosion	Undetermined	N/K	21-Jul, 02:01-02:03
	5-7km E	Heard	4	Burst and		Small	21-Jul, 02:01-

				shot		arms	02:03
Kadiivka (formerly Stakhanov, non-government-controlled, 50km W of Luhansk)	7-9km WNW	Heard	41	Explosion	Outgoing	Artillery (type N/K)	20-Jul, 19:10-19:45
	14-16km WNW	Heard	20	Explosion	Undetermined	N/K	20-Jul, 19:10-19:45
	10-15km W	Heard	12	Explosion	Undetermined	N/K	20-Jul, 20:05-20:08

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 bases from which SMM staff has temporarily relocated based on recommendations of security experts from participating States as well as SMM security considerations).