Table of ceasefire violations as of 13 October 2019¹

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	2-3km ESE	Recorded	4	Projectile	SW to NE	N/K	11-Oct, 18:45
	1-2km S	Recorded	2	Projectile	WNW to ESE	N/K	11-Oct, 18:31
	1-2km S	Recorded	2	Projectile	WNW to ESE	N/K	11-Oct, 18:32
	2-3km SSE	Recorded	1	Muzzle flash		N/K	11-Oct, 18:32
	2-3km SSE	Recorded	1	Projectile	NE to SW	N/K	11-Oct, 18:32
	2-3km SSE	Recorded	2	Projectile	WSW to ENE	N/K	11-Oct, 19:06
	2-3km SSE	Recorded	1	Projectile	SW to NE	N/K	11-Oct, 19:14
	2-3km SSE	Recorded	1	Explosion	Impact	N/K	11-Oct, 19:14
	1-2km S	Recorded	3	Projectile	WNW to ESE	N/K	11-Oct, 19:14
SMM camera in Chermalyk (government-controlled, 77km S	2-3km SSE	Recorded	1	Muzzle flash		N/K	11-Oct, 19:14
of Donetsk)	2-3km SSE	Recorded	12	Projectile	SW to NE	N/K	11-Oct, 19:14
	3-5km SSE	Recorded	8	Projectile	NNE to SSW	N/K	11-Oct, 21:27
	5-8km SSE	Recorded	1	Illumination flare		N/K	11-Oct, 22:57
	2-3km SSE	Recorded	1	Projectile	NNE to SSW	N/K	11-Oct, 23:24
	3-5km SSE	Recorded	4	Projectile	NNE to SSW	N/K	12-Oct, 00:29
	3-5km SSE	Recorded	1	Projectile	In vertical flight	N/K	12-Oct, 00:29
	3-5km SSE	Recorded	12	Projectile	SW to NE	N/K	12-Oct, 01:15
	3-5km SSE	Recorded	15	Projectile	SW to NE	N/K	12-Oct, 01:16
	3-5km SSE	Recorded	5	Projectile	SW to NE	N/K	12-Oct, 01:18
	2-3km SSW	Recorded	1	Projectile	WNW to ESE	N/K	11-Oct, 21:58
	0.8-1km S	Recorded	1	Explosion	Undetermined	N/K	11-Oct, 22:19
SMM camera at Donetsk Filtration Station (15km N of	0.5-1km S	Recorded	1	Muzzle flash		N/K	11-Oct, 23:58
Donetsk)	200-500m S	Recorded	1	Muzzle flash		N/K	12-Oct, 01:58
	0.6-1.2km S	Recorded	1	Projectile	WNW to ESE	N/K	12-Oct, 03:16
	0.6-1.2km S	Recorded	1	Projectile	WNW to ESE	N/K	12-Oct, 03:19
SMM camera 1.5km NE of	2-4km ESE	Recorded	1	Explosion		N/K	11-Oct, 22:13
Hnutove (government-controlled, 90km S of Donetsk)	2-4km E	Recorded	1	Illumination flare	In vertical flight	N/K	12-Oct, 00:52
SMM camera in Krasnohorivka	3-5km ESE	Recorded	1	Projectile	In vertical flight	N/K	11-Oct, 21:58
(government-controlled, 21km W of Donetsk)	3-5km ESE	Recorded	1	Explosion	Airburst	N/K	11-Oct, 21:58
·	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 01:14
SMM camera E of Lomakyne (government-controlled, 90km S	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 01:17
of Donetsk)	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 01:23
of Dolletsk)	2-4km NE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 01:32
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	11-Oct, 20:44
	2-4km ENE	Recorded	2	Projectile	NW to SE	N/K	11-Oct, 20:45
	2-4km ENE	Recorded	1	Projectile	NW to SE	N/K	11-Oct, 20:46
	1-3km ENE	Recorded	4	Projectile	N to S	N/K	11-Oct, 20:46
SMM camera at entry-exit checkpoint in Maiorsk	1-3km ENE	Recorded	3	Muzzle flash		N/K	11-Oct, 20:46
(government-controlled, 45km	2-4km ENE	Recorded	1	Projectile	NNW to SSE	N/K	11-Oct, 20:47
NE of Donetsk)	2-4km ENE	Recorded	1	Muzzle flash		N/K	11-Oct, 20:47
	1-2km E	Recorded	3	Projectile	N to S	N/K	11-Oct, 20:56
	2-4km ENE	Recorded	1	Muzzle flash		N/K	11-Oct, 21:26

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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.	Observatio n	Description	Weapon	Date, time
	2-4km ENE	Recorded	3	Projectile	NNW to SSE	N/K	11-Oct, 21:26
	3-5km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 22:09
	2-4km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 22:11
	2-4km E	Recorded	2	Projectile	WSW to ENE	N/K	11-Oct, 23:22
	2-4km E	Recorded	1	Projectile	W to E	N/K	11-Oct, 23:22
	3-5km E	Recorded	1	Projectile	N to S	N/K	11-Oct, 23:29
	3-5km ENE	Recorded	1	Illumination flare	NNW to SSE	N/K	11-Oct, 23:32
	3-5km E	Recorded	1	Projectile	SW to NE	N/K	11-Oct, 23:42
	3-5km E	Recorded	1	Projectile	NW to SE	N/K	11-Oct, 23:42
	3-5km E	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 00:54
	4-6km E	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 00:55
	4-6km E	Recorded	Uncountable	Muzzle flash		N/K	12-Oct, 00:56
	4-6km E	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 00:56
	4-6km E	Recorded	1	Projectile	WNW to ESE	N/K	12-Oct, 00:56
	4-6km E	Recorded	1	Explosion	Impact	N/K	12-Oct, 00:56
	4-6km E	Recorded	1	Projectile	S to N	N/K	12-Oct, 01:00
	3-5km E	Recorded	1	Projectile	SSW to NNE	N/K	12-Oct, 01:02
	3-5km E	Recorded	2	Explosion	Undetermined	N/K	12-Oct, 01:04
	2-4km E	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 01:39
	1-3km E	Recorded	6	Projectile	NW to SE	N/K	12-Oct, 03:42
	3-5km E	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 04:33
SMM camera in Petrivske (non- government-controlled, 41km S of Donetsk)	0.5-1km NNW	Recorded	1	Projectile	SSW to NNE (assessed as outside the disengagement area)	N/K	9-Oct, 03:07
	3-5km S	Recorded	6	Projectile	W to E	N/K	12-Oct, 01:02
	3-5km S	Recorded	5	Projectile	W to E	N/K	12-Oct, 01:42
	3-5km S	Recorded	1	Projectile	W to E	N/K	12-Oct, 01:46
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 02:01
	3-5km S	Recorded	2	Projectile	E to W	N/K	12-Oct, 02:08
	3-5km S	Recorded	1	Projectile	NW to SE	N/K	12-Oct, 02:11
	4-6km S	Recorded	1	Illumination flare		N/K	12-Oct, 02:18
	6-8km S	Recorded	1	Illumination flare		N/K	12-Oct, 02:19
	3-5km S	Recorded	5	Projectile	W to E	N/K	12-Oct, 02:25
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 02:26
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 02:27
	3-5km S	Recorded	2	Burst	Approximately 30 rounds, in vertical flight	N/K	12-Oct, 02:27
SMM camera at entry-exit	3-5km S	Recorded	1	Burst	NE to SW	N/K	12-Oct, 02:41
checkpoint in Pyshchevyk	3-5km S	Recorded	5	Projectile	NW to SE	N/K	12-Oct, 02:45
(government-controlled, 84km S	3-5km S	Recorded	1	Explosion		N/K	12-Oct, 03:04
of Donetsk)	4-6km SSE	Recorded	1	Explosion		N/K	12-Oct, 03:08
	3-5km SSE	Recorded	3	Projectile	W to E	N/K	12-Oct, 03:14
	3-5km S	Recorded	1	Projectile	N to S	N/K	12-Oct, 03:14
	3-5km S	Recorded	2	Projectile	W to E	N/K	12-Oct, 03:32
	3-5km S	Recorded	4	Projectile	W to E	N/K	12-Oct, 03:33
	3-5km S	Recorded	8	Projectile	W to E	N/K	12-Oct, 04:11
	3-5km S	Recorded	5	Projectile	W to E	N/K	12-Oct, 04:26
	3-5km S 3-5km S	Recorded Recorded	8	Projectile Muzzle	W to E	N/K N/K	12-Oct, 04:33 12-Oct, 04:36
				flash	777. 7		-
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 04:36
	3-5km S	Recorded	1	Projectile	E to W	N/K	12-Oct, 04:40
	3-5km SSE	Recorded	5	Projectile	W to E	N/K	12-Oct, 04:40
	3-5km SSE	Recorded	19	Projectile	W to E	N/K	12-Oct, 04:41
	3-5km S	Recorded	1	Projectile	W to E	N/K	12-Oct, 04:57
	3-5km S	Recorded	1	Projectile	NW to SE	N/K	12-Oct, 04:59
	3-5km S	Recorded	1	Projectile	NW to SE	N/K	12-Oct, 05:48

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
	3-5km S	Recorded	3	Projectile	W to E	N/K	12-Oct, 05:48
	2-4km N	Recorded	4	Projectile	WNW to ESE	N/K	11-Oct, 18:40
	2-4km N	Recorded	3	Projectile	WSW to ENE	N/K	11-Oct, 18:42
	2-4km N	Recorded	1	Projectile	SW to NE	N/K	11-Oct, 18:56
	2-4km N	Recorded	10	Projectile	SW to NE	N/K	11-Oct, 19:06
	3-5km N	Recorded	1	Projectile	E to W	N/K	11-Oct, 20:14
	3-5km N	Recorded	7	Projectile	E to W	N/K	11-Oct, 20:20
	3-5km N	Recorded	2	Projectile	NNE to SSW	N/K	11-Oct, 20:38
	4-6km N	Recorded	Uncountable	Explosion		N/K	11-Oct, 20:39
	3-5km N	Recorded	8	Projectile	W to E	N/K	11-Oct, 20:39
	3-5km N	Recorded	2	Projectile	W to E	N/K	11-Oct, 20:39
	3-5km N	Recorded	10	Projectile	W to E	N/K	11-Oct, 20:40
	3-5km N	Recorded	3	Projectile	E to W	N/K	11-Oct, 20:40
	3-5km NE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 20:40
	3-5km NNE	Recorded	2	Projectile	E to W	N/K	11-Oct, 20:51
	3-5km N	Recorded	5	Projectile	W to E	N/K	11-Oct, 20:52
	2-4km NE	Recorded	1	Projectile	E to W	N/K	11-Oct, 21:38
	3-5km N	Recorded	1	Projectile	W to E	N/K	11-Oct, 21:53
	3-5km N	Recorded	1	Projectile	W to E	N/K	11-Oct, 21:54
	3-5km N	Recorded	2	Projectile	W to E	N/K	11-Oct, 22:01
	3-5km N	Recorded	3	Projectile	W to E	N/K	11-Oct, 22:02
	4-6km N	Recorded	1	Projectile	E to W	N/K	11-Oct, 22:15
SMM camera 1km SW of	4-6km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 22:56
Shyrokyne (government-controlled, 100km S of Donetsk)	4-6km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 22:57
controlled, Tookin's of Dolletsk)	3-5km NNE	Recorded	1	Illumination flare	In vertical flight	N/K	11-Oct, 23:55
	3-5km NE	Recorded	1	Illumination flare	In vertical flight	N/K	12-Oct, 00:01
	3-5km NE	Recorded	1	Projectile	SE to NW	N/K	12-Oct, 00:32
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 00:34
	3-5km NNE	Recorded	3	Projectile	W to E	N/K	12-Oct, 01:16
	3-5km N	Recorded	2	Projectile	SW to NE	N/K	12-Oct, 01:31
	3-5km NNE	Recorded	1	Projectile	SE to NW	N/K	12-Oct, 01:55
	3-5km N	Recorded	12	Projectile	W to E	N/K	12-Oct, 02:11
	3-5km N	Recorded	22	Projectile	W to E	N/K	12-Oct, 02:13
	3-5km N	Recorded	4	Projectile	E to W	N/K	12-Oct, 02:13
	4-6km NE	Recorded	1	Illumination flare		N/K	12-Oct, 02:18
	3-5km NE	Recorded	1	Illumination flare		N/K	12-Oct, 02:19
	3-5km N	Recorded	20	Projectile	SW to NE	N/K	12-Oct, 02:45
	3-5km N	Recorded	2	Projectile	SW to NE	N/K	12-Oct, 02:46
	3-5km N	Recorded	1	Projectile	E to W	N/K	12-Oct, 03:04
	4-6km NNE	Recorded	1	Explosion	Undetermined	N/K	12-Oct, 03:08
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 04:39
	3-5km N	Recorded	6	Projectile	In vertical flight	N/K	12-Oct, 04:54
	4-6km NNE	Recorded	Uncountable	Explosion	<u> </u>	N/K	12-Oct, 05:05
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 05:57
Dokuchaievsk (non-government-controlled, 30km SW of Donetsk)	2-3km SW	Heard	1	Explosion	Undetermined	N/K	12-Oct, 07:24
controlled, Sokili S w of Dolletsk)	2-3km W	Heard	3	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 09:37
About 2km N of Petrivske (non- government-controlled, 41km S of Donetsk)	2-3km W	Heard	3	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 09:57
,	2-3km SW	Heard	2	Explosion	Undetermined (assessed as inside the disengagement area)	N/K	12-Oct, 12:16- 12:25

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
	2-3km SW	Heard	16	Burst	Assessed as inside the disengagement area	HMG	12-Oct, 12:16- 12:25
	2-3km SW	Heard	2	Shot	Assessed as inside the disengagement area	HMG	12-Oct, 12:16- 12:25
	2-4km WNW	Heard	7	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:28- 12:32
	2-4km WNW	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:37- 12:39
	2-4km WNW	Heard	2	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:37- 12:39
	2-4km WNW	Heard	13	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:40- 12:49
	2-4km W	Heard	2	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:51- 12:53
	2-4km W	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:53
	2-4km WNW	Heard	6	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:55- 12:58
	2-4km WNW	Heard	3	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:58
	700m SSW	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 15:25
Petrivske (non-government-	700m SSW	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 15:33
controlled, 41km S of Donetsk)	700mSSW	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 15:44
	700m SSW	Heard	1	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 15:46
Staromykhailivka (non- government-controlled, 15km W of Donetsk)	3-5km WSW	Heard	4	Explosion	Undetermined	N/K	12-Oct, 15:35- 15:40
Donetsk central railway station(non-government-	2-3km NNW	Heard	18	Explosion	Undetermined	N/K	12-Oct, 09:40- 09:52
controlled, 6km NW of Donetsk city centre)	2-3km NNW	Heard	32	Explosion	Undetermined	N/K	12-Oct, 09:53- 10:05
<u> </u>	2-3km NNW	Heard	3	Burst	1	HMG	12-Oct, 09:53-

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
2.8km NNW of Luhanske (non- government-controlled, 15km SW of Donetsk)	8-10km NW	Heard	20	Explosion	Undetermined	N/K	12-Oct, 09:45
Oleksandrivka (non-government- controlled, 20km SW of Donetsk)	3-5km NE	Heard	25	Explosion	Undetermined	N/K	12-Oct, 09:50- 10:00
Oleksandrivka (non-government-controlled, 20km SW of Donetsk)	3-5km NE	Heard	9	Burst		HMG	12-Oct, 09:50- 10:00
About 1km E of Kruta Balka (non-government-controlled,	3-4km NE	Heard	2	Shot		Small arms	12-Oct, 10:45
16km N of Donetsk)	3-4km NE	Heard	12	Burst		HMG	12-Oct, 11:02
About 1km NW of the railway station in Yasynuvata (non-	1-2km NW	Heard	2	Burst		Small arms	12-Oct, 12:10
government-controlled, 16km NE of Donetsk)	1-2km NW	Heard	8	Shot		Small arms	12-Oct, 14:07
	3km NNW	Heard	2	Shot	Assessed as outside the disengagement area	Small arms	12-Oct, 09:57- 09:58
	2km NW	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:28- 12:35
	2km NW	Heard	3	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:28- 12:35
	2-3km NW	Heard	13	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:37- 12:45
	2-3km NW	Heard	4	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:37- 12:45
About 1km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	2-3km NW	Heard	7	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:45- 12:55
	2-3km NW	Heard	1	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:45- 12:55
	2-3km NW	Heard	9	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 12:55- 13:05
2-3km NW 4-5km NW	2-3km NW	Heard	2	Burst	Assessed as outside the disengagement area	HMG	12-Oct, 12:55- 13:05
	4-5km NW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 14:12
	4-5km WNW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Oct, 15:00
2.5km SSE of Lomakyne (government-controlled, 93km S	3-4km NE	Heard	2	Explosion	Undetermined	N/K	12-Oct, 11:20- 11:25

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
of Donetsk)							
	5km NW	Heard	1	Explosion	Undetermined	N/K Small	12-Oct, 10:53
	2-3km NW	Heard	2	Shot		arms	12-Oct, 10:53
	3-5km W	Heard	3	Explosion	Undetermined	N/K	12-Oct, 11:16- 11:18
	3-5km W	Heard	18	Explosion	Undetermined	N/K	12-Oct, 11:19- 11:29
	3-5km NW	Heard	2	Burst		Small arms	12-Oct, 11:19- 11:29
01 NF 67 11 1 (3-5km NW	Heard	Uncountable	Shot	Uncountable	Small arms	12-Oct, 11:19- 11:29
3km NE of Zaichenko (non- government-controlled, 93km S	3-5km W	Heard	5	Explosion	Undetermined	N/K	12-Oct, 11:31- 11:34
of Donetsk)	3-5km W	Heard	21	Shot		Small arms	12-Oct, 11:31- 11:34
	3-5km W	Heard	4	Explosion	Undetermined	N/K	12-Oct, 11:44- 11:57
	3-5km W	Heard	Uncountable	Shot	Uncountable	Small arms	12-Oct, 11:44- 11:57
1	500m SSW	Heard	1	Burst		Small arms	12-Oct, 12:05
	3-5km W	Heard	6	Shot		Small arms	12-Oct, 12:21
	3-5km NE	Heard	1	Explosion	Undetermined	N/K	12-Oct, 12:50
	3-5km W	Heard	6	Burst		HMG	11-Oct, 18:53- 18:59
	3-5km W	Heard	4	Explosion	Undetermined	N/K	11-Oct, 18:57- 18:59
	3-5km W	Heard	6	Burst		Small arms	11-Oct, 19:00- 19:03
	3-5km W	Heard	4	Explosion	Undetermined	N/K	11-Oct, 19:00- 19:05
Horlivka (non-government-controlled, 39km NE of Donetsk)	3-5km W	Heard	12	Burst		HMG	11-Oct, 19:00- 19:15
	3-5km W	Heard	2	Explosion	Undetermined	N/K	11-Oct, 19:14- 19:15
	3-5km W	Heard	1	Explosion	Undetermined	N/K	11-Oct, 19:18
	3-5km W	Heard	9	Burst		HMG	11-Oct, 19:18- 19:25
	5-8km NW	Heard	4	Burst		HMG	11-Oct, 19:56
	3-5km W	Heard	1	Explosion	Undetermined	N/K	11-Oct, 20:25
	3-5km W	Heard	1	Explosion	Undetermined	N/K	11-Oct, 20:32
	1-2km NW	Heard	3	Burst		Small arms	12-Oct, 11:22
	1-2km NW	Heard	5	Shot		Small arms	12-Oct, 11:25
About 7.5km NW of Horlivka (non-government controlled, 39	1-2km NW	Heard	7	Shot		Small arms	12-Oct, 11:27
km NE of Donetsk)	1-2km NW	Heard	12	Burst		HMG	12-Oct, 11:27- 11:37
	1-2km NW	Heard	15	Burst		Small arms	12-Oct, 11:27- 11:37
	1-2km NW	Heard	35	Shot		Small arms	12-Oct, 11:27- 11:37
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	3-5km SSE	Heard	1	Explosion	Undetermined	N/K	12-Oct, 11:26
	3-4km SE	Heard	25	Burst		HMG	11-Oct, 20:40- 20:44
Svitlodarsk (government-	3-4km SE	Heard	20	Burst		HMG	11-Oct, 20:45- 20:50
controlled, 57km NE of Donetsk)	4-5km S	Heard	1	Explosion	Undetermined	N/K	11-Oct, 20:50
controlled, 5/kiii IVL 01 DOIICISK)	3-5km SE	Heard	35	Burst		HMG	11-Oct, 21:43- 21:47
	3-5km SE	Heard	22	Burst		HMG	11-Oct, 22:14- 22:19

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
	4-5km SE	Heard	5	Explosion	Undetermined	N/K	11-Oct, 22:30- 22:33
	4-5km S	Heard	5	Explosion	Undetermined	N/K	11-Oct, 22:36- 22:41
	4-5km S	Heard	8	Explosion	Undetermined	N/K	11-Oct, 22:43- 22:47
	4-5km SE	Heard	4	Explosion	Undetermined	N/K	11-Oct, 22:48- 22:51
	4-5km SE	Heard	1	Explosion	Undetermined	N/K	11-Oct, 22:55
	4-5km SW	Heard	3	Explosion	Undetermined	N/K	12-Oct, 17:32
3.5km W of Kalynove (non-	3-6km W	Heard	7	Burst		HMG	12-Oct, 10:05- 10:12
government controlled, 60km W	3-6km W	Heard	1	Explosion	Undetermined	N/K	12-Oct, 10:23
of Luhansk)	3-6km W	Heard	6	Burst		N/K	12-Oct, 10:23- 10:25
	2-4km SSE	Recorded	2	Projectile	WSW to ENE		12-Oct, 20:34
	2-4km SSE	Recorded	1	Projectile	WSW to ENE		12-Oct, 20:47
	3-5km SSE	Recorded	1	Projectile	WSW to ENE		12-Oct, 20:51
SMM camera in Chermalyk	2-4km SSE	Recorded	1	Projectile	WSW to ENE		12-Oct, 20:57
(government-controlled, 77km S	2-3km SSE	Recorded	30	Projectile	WNW to ESE		12-Oct, 20:59
of Donetsk)	2-3km S 6-8km SSE	Recorded Recorded	Uncountable	Projectile	WNW to ESE		12-Oct, 21:39 12-Oct, 23:39
	3-5km SSE	Recorded	2 2	Projectile Projectile	In vertical flight ENE to WSW		13-Oct, 03:11
	3-5km SSE	Recorded	1	Projectile	In vertical flight		13-Oct, 03:11 13-Oct, 03:26
	3-5km SSE	Recorded	1	Projectile	ENE to WSW		13-Oct, 03:41
	200-400m SSW	Recorded	1	Explosion	Undetermined		13-Oct, 00:12
	0.9-1.2km S	Recorded	1	Muzzle flash	Chacternanea		13-Oct, 01:39
SMM camera at Donetsk	0.9-1.2km S	Recorded	1	Explosion	Impact	N/K	13-Oct, 01:39
SMM camera at Donetsk Filtration Station (15km N of	1-2km S	Recorded	1	Projectile	NW to SE		13-Oct, 01:39
Donetsk)	2-4km SSE	Recorded	1	Explosion	Undetermined		13-Oct, 02:06
Donetsk)	0.7-1km S	Recorded	1	Explosion	Undetermined		13-Oct, 03:44
	300-500m S	Recorded	1	Muzzle flash			13-Oct, 05:36
SMM camera 1.5km NE of Hnutove (government-controlled,	5-7km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	13-Oct, 03:59
90km S of Donetsk)	4-6km E	Recorded	7	Projectile	SSW to NNE	N/K	13-Oct, 04:46
	1-3km ESE	Recorded	4	Projectile	WSW to ENE	N/K	12-Oct, 23:00
	1-3km ESE	Recorded	1	Projectile	NNE to SSW	N/K	12-Oct, 23:00
	1-3km ESE	Recorded	3	Muzzle flash			12-Oct, 23:00
	2-4km ESE	Recorded	1	Explosion	Undetermined		12-Oct, 23:00
SMM camera in Krasnohorivka	1-3km ESE	Recorded	1	Projectile	WNW to ESE		12-Oct, 23:00
(government-controlled, 21km W	2-4km ESE	Recorded	1	Projectile	WSW to ENE		12-Oct, 23:01
of Donetsk)	2-4km ESE	Recorded	2	Projectile	W to E		12-Oct, 23:14
	2-4km ESE	Recorded	1	Projectile	NE to SW		12-Oct, 23:14
	2-4km ESE	Recorded	1	Explosion	NNE to CCW	N/K N/K	13-Oct, 01:49
	2-4km ESE 1-3km ESE	Recorded Recorded	1	Projectile Projectile	NNE to SSW NNW to SSE	N/K N/K	13-Oct, 01:50 13-Oct, 01:50
	1-3km ESE	Recorded	3	Projectile	NNE to SSW	N/K N/K	13-Oct, 01:50
	1-3km ESE	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 20:09
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	12-Oct, 20:03
	2-4km E	Recorded	1	Projectile	NNW to SSE	N/K	12-Oct, 22:01
	2-4km E	Recorded	1	Projectile	N to S	N/K	12-Oct, 22:08
	2-4km ENE	Recorded	1	Projectile	NNW to SSE	N/K	12-Oct, 22:10
	2-4km ENE	Recorded	1	Projectile	S to N	N/K	12-Oct, 22:14
SMM camera at entry-exit	2-4km E	Recorded	1	Projectile	N to S	N/K	12-Oct, 22:18
checkpoint in Maiorsk	2-4km ENE	Recorded	Uncountable	Projectile	NE to SW	N/K	12-Oct, 22:23
(government-controlled, 45km NE of Donetsk)	2-4km E	Recorded Recorded	4	Projectile Muzzle	In vertical flight	N/K N/K	13-Oct, 00:09 13-Oct, 00:49
	2-4km ENE		1	flash			·
	2-4km ENE	Recorded	5	Projectile	N to S	N/K	13-Oct, 00:56
	2-4km E	Recorded	6	Projectile	NW to SE	N/K	13-Oct, 02:11
	2-4km E	Recorded	4	Projectile	N to S	N/K	13-Oct, 03:33
	2-4km E	Recorded	3	Projectile	WNW to ESE	N/K	13-Oct, 03:33
	2-4km E	Recorded	1	Muzzle		N/K	13-Oct, 03:33

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
				flash			
	2-4km E	Recorded	4	Projectile	S to N	N/K	13-Oct, 04:10
	2-4km E	Recorded	2	Projectile	SW to NE	N/K	13-Oct, 04:10
	2-4km E	Recorded	5	Projectile	S to N	N/K	13-Oct, 04:11
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	13-Oct, 04:15
	3-5km NNE	Recorded	1	Explosion	Airburst	N/K	13-Oct, 01:50
	1-3km NNE	Recorded	9	Projectile	SW to NE	N/K	13-Oct, 03:17
	3-5km NNE	Recorded	2	Projectile	SE to NW	N/K	13-Oct, 03:17
	3-5km NNE	Recorded	1	Projectile	SE to NW	N/K	13-Oct, 03:18
	2-4km NNE	Recorded	2	Projectile	WSW to ENE	N/K	13-Oct, 04:37
	2-4km NNE	Recorded	5	Projectile	WSW to ENE	N/K	13-Oct, 04:39
	2-4km NNE	Recorded	4	Projectile	WSW to ENE	N/K	13-Oct, 04:40
	2-4km NNE	Recorded	5	Projectile	WSW to ENE	N/K	13-Oct, 04:41
SMM camera at entry-exit	2-4km NNE	Recorded	8	Projectile	WSW to ENE	N/K	13-Oct, 04:42
checkpoint in Marinka	2-4km NNE	Recorded	5	Projectile	WSW to ENE	N/K	13-Oct, 04:43
(government- controlled, 23km	2-4km NNE	Recorded	9	Projectile	WSW to ENE	N/K	13-Oct, 04:44
SW of Donetsk)	2-4km NNE	Recorded	21	Projectile	WSW to ENE	N/K	13-Oct, 04:45
	2-4km NNE	Recorded	2	Projectile	WSW to ENE	N/K	13-Oct, 04:58
	2-4km NNE	Recorded	3	Projectile	WSW to ENE	N/K	13-Oct, 04:59
	2-4km NNE	Recorded	1	Projectile	WSW to ENE	N/K	13-Oct, 05:00
	2-4km NNE	Recorded	6	Projectile	WSW to ENE	N/K	13-Oct, 05:01
	2-4km NNE	Recorded	15	Projectile	WSW to ENE	N/K	13-Oct, 05:02
	2-4km NNE	Recorded	3	Projectile	WSW to ENE	N/K	13-Oct, 05:03
	2-4km NNE	Recorded	1	Projectile	WSW to ENE	N/K	13-Oct, 05:04
	2-4km NNE	Recorded	2	Projectile	WSW to ENE	N/K	13-Oct, 05:05
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	2-4km NE	Recorded	2	Projectile	NW to SE	N/K	13-Oct, 00:27
	3-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 01:03
	3-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 01:06
	3-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 01:45
SMM camera at entry-exit	3-5km S	Recorded	1	Projectile	WNW to ESE	N/K	13-Oct, 04:34
checkpoint in Pyshchevyk	3-5km S	Recorded	20	Projectile	WNW to ESE	N/K	13-Oct, 04:38
(government-controlled, 84km S	3-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:09
of Donetsk)	3-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:17
	3-5km S	Recorded	1	Projectile	ENE to WSW	N/K	13-Oct, 05:18
	3-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:18
	3-5km S	Recorded	1	Burst	WNW to ESE	N/K	13-Oct, 05:19
	3-5km NNE	Recorded	3	Projectile	W to E	N/K	12-Oct, 21:05
	3-5km NNE	Recorded	2	Projectile	SW to NE	N/K	12-Oct, 21:05
	3-5km N	Recorded	1	Projectile	S to N	N/K	12-Oct, 21:05
	3-5km N	Recorded	8	Projectile	W to E	N/K	12-Oct, 21:06
	3-5km NNE	Recorded	1	Projectile	NNW to SSE	N/K	12-Oct, 21:06
SMM camera 1km SW of	3-5km NNE	Recorded	1	Projectile	WSW to ENE	N/K	12-Oct, 21:06
Shyrokyne (government-	3-5km N	Recorded	4	Projectile	W to E	N/K	12-Oct, 21:07
controlled, 100km S of Donetsk)	3-5km N	Recorded	2	Projectile	W to E	N/K	12-Oct, 21:08
	3-5km N	Recorded	1	Projectile	SE to NW	N/K	12-Oct, 21:08
	3-5km N	Recorded	2	Projectile	W to E	N/K	12-Oct, 22:19
	3-5km N	Recorded	3	Projectile	W to E	N/K	12-Oct, 22:52
	3-5km N	Recorded	12	Projectile	W to E	N/K	12-Oct, 22:54
	3-5km N	Recorded	5	Projectile	ESE to WNW	N/K	12-Oct, 23:04
	4-7km N	Recorded	1	Projectile	SW to NE	N/K	12-Oct, 23:25
About 3km WSW of Donetsk central railway station(non- government-controlled, 6km NW of Donetsk city centre)	1-2km NW	Heard	1	Explosion	Outgoing	N/K	13-Oct, 13:00
About 800m SSE of Novohryhorivka (non- government-controlled, 61km NE of Donetsk)	2-4km N	Heard	1	Explosion	Undetermined	N/K	13-Oct, 15:05
	4-5km SE	Heard	1	Explosion	Undetermined	N/K	12-Oct, 20:30
Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-5km S	Heard	7	Explosion	Undetermined	N/K	12-Oct, 21:30- 21:34
	4-5km S	Heard	5	Explosion	Undetermined	N/K	12-Oct, 22:31- 22:34

SMM position	Event location	Means	No.	Observatio n	Description	Weapon	Date, time
	4-5km SE	Heard	13	Explosion	Undetermined	N/K	12-Oct, 22:42- 22:46
	4-5km SE	Heard	20	Burst		HMG	12-Oct, 22:46- 22:50
	4-5km S	Heard	9	Explosion	Undetermined	N/K	12-Oct, 22:50- 22:53
	4-5km S	Heard	4	Explosion	Undetermined	N/K	12-Oct, 23:01- 23:05
	3-5km SW	Heard	5	Explosion	Undetermined	N/K	13-Oct, 15:26- 15:30
	3-5km WSW	Heard	2	Explosion	Undetermined	N/K	13-Oct, 15:28
	3-5km WSW	Heard	5	Explosion	Undetermined	N/K	13-Oct, 16:10- 16:12
	3-5km WSW	Heard	7	Explosion	Undetermined	N/K	13-Oct, 16:17- 16:19
	3-5km WSW	Heard	4	Explosion	Undetermined	N/K	13-Oct, 16:23
	2-4km NW	Heard	2	Burst		HMG	12-Oct, 19:30
	2-4km NW	Heard	21	Burst		HMG	12-Oct, 21:48- 21:52
	2-4km NW	Heard	3	Shot		Small arms	12-Oct, 23:15
	2-4km NW	Heard	8	Burst		HMG	12-Oct, 23:33- 23:37
	2-4km NE	Heard	11	Shot		Small arms	12-Oct, 23:37- 23:42
Horlivka (non-government-controlled, 39km NE of Donetsk)	2-4km NW	Heard	15	Shot		Small arms	12-Oct, 23:38
,	2-4km NE	Heard	4	Burst			12-Oct, 23:43
	2-4km NW	Heard	12	Shot		Small arms	12-Oct, 23:44
	2-4km NW	Heard	20	Burst		HMG	12-Oct, 23:45- 23:47
	2-4km NW	Heard	3	Explosion	Undetermined	N/K	12-Oct, 23:48- 23:53
	2-4km S	Heard	2	Explosion	Undetermined	N/K	13-Oct, 00:08- 00:09
	3-5km ENE	Recorded	2	Projectile	SSW to NNE (assessed as outside the disengagement area)	N/K	12-Oct, 21:06
SMM camera in Zolote (government-controlled, 60km W	3-4km ESE	Recorded	1	Muzzle flash	Assessed as outside the disengagement area	N/K	12-Oct, 21:12
of Luhansk)	3-5km E	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	12-Oct, 23:23
	3-5km E	Recorded	1	Projectile	WNW to ESE (assessed as outside the disengagement area)	N/K	12-Oct, 23:23
E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	3-4km S	Heard	1	Explosion	Undetermined (unable to assess whether inside or outside the disengagement area)	N/K	13-Oct, 06:32