

Table of ceasefire violations as of 31 October 2021¹⁰

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	2-4km SE	Recorded	2	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 19:52
	3-5km SE	Recorded	3	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 19:53
	3-5km SE	Recorded	1	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 19:54
	3-5km SE	Recorded	1	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 19:54
	3-5km SE	Recorded	1	Explosion	Impact (subsequent to the previous event, assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 19:54
	2-4km ESE	Recorded	1	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 20:05
	3-5km SE	Recorded	5	Explosion	Undetermined (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 20:07
	3-5km SE	Recorded	1	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 20:07
	2-4km ESE	Recorded	1	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 20:09
	3-5km SE	Recorded	2	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 20:09
	3-5km SE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 20:09
	2-4km ESE	Recorded	16	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 21:13
	2-4km ESE	Recorded	1	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 21:13
	2-4km ESE	Recorded	8	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 21:14
	2-4km ESE	Recorded	12	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 21:18
	1-3km SE	Recorded	10	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 21:29
	1-3km ESE	Recorded	2	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 21:29
	3-5km SE	Recorded	2	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 21:29
	3-5km SE	Recorded	11	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 21:52
	3-5km SE	Recorded	3	Projectile	SW to NE (assessed as outside the disengagement area near Petrivske)	N/K	29-Oct, 21:59
	1-3km E	Recorded	1	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:09
	1-3km SE	Recorded	26	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:09
	1-3km SE	Recorded	3	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:09

¹⁰ The table only includes ceasefire violations directly observed by SMM patrols or recorded by the SMM cameras, 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 technical monitoring officers, 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 technical limitations and/or other considerations. Ceasefire violations recorded by more than one patrol/camera and assessed to be the same are entered only once.

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	1-3km ESE	Recorded	3	Explosion	Undetermined (subsequent to previous event, assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:09
	2-4km SE	Recorded	9	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:10
	3-5km ESE	Recorded	5	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:11
	1-3km SE	Recorded	4	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:11
	2-4km ESE	Recorded	2	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:11
	2-4km ESE	Recorded	1	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:12
	1-3km SE	Recorded	7	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:12
	2-4km ESE	Recorded	5	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:13
	2-4km SE	Recorded	7	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:13
	2-4km ESE	Recorded	2	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:13
	1-3km SE	Recorded	12	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:14
	1-3km ESE	Recorded	1	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:14
	2-4km ESE	Recorded	5	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:15
	2-4km SE	Recorded	14	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:15
	2-4km ESE	Recorded	3	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:15
	2-4km ESE	Recorded	1	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:16
	2-4km SE	Recorded	14	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:16
	2-4km ESE	Recorded	2	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:16
	2-4km ESE	Recorded	2	Explosion	Undetermined (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:17
	2-4km ESE	Recorded	14	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:18
	2-4km SE	Recorded	5	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:18
	2-4km ESE	Recorded	1	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:19
	2-4km SE	Recorded	6	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:19
	2-4km ESE	Recorded	1	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:21
	2-4km ESE	Recorded	2	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:35
	2-4km ESE	Recorded	11	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:43
	2-4km ESE	Recorded	8	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:44
	2-4km SE	Recorded	1	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 22:44
	2-4km ESE	Recorded	18	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:21

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	2-4km ESE	Recorded	2	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:22
	2-4km ESE	Recorded	22	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:23
	2-4km SE	Recorded	1	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:23
	2-4km ESE	Recorded	1	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:24
	2-4km SE	Recorded	1	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:24
	2-4km ESE	Recorded	20	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:25
	2-4km ESE	Recorded	8	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	29-Oct, 23:28
	2-4km ESE	Recorded	6	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	30-Oct, 00:08
	2-4km SE	Recorded	2	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	30-Oct, 00:08
	2-4km SE	Recorded	1	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	30-Oct, 00:24
	2-4km E	Recorded	2	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	30-Oct, 03:04
	2-4km ESE	Recorded	1	Projectile	SSW to NNE (assessed as inside the disengagement area near Petrivske)	N/K	30-Oct, 03:43
	2-4km SE	Recorded	1	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	30-Oct, 04:01
	2-4km SE	Recorded	2	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	30-Oct, 04:43
	SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	2-4km SE	Recorded	1	Projectile	In vertical flight	N/K
2-4km SSE		Recorded	3	Projectile	SW to NE	N/K	29-Oct, 18:10
2-4km SSE		Recorded	1	Projectile	In vertical flight	N/K	29-Oct, 18:10
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	2-4km ESE	Recorded	1	Projectile	WSW to ENE	N/K	29-Oct, 18:54
	2-4km ESE	Recorded	1	Muzzle flash		N/K	29-Oct, 18:54
	2-4km ESE	Recorded	1	Projectile	WSW to ENE	N/K	29-Oct, 18:55
	2-4km ESE	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 18:55
	2-4km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	29-Oct, 19:09
	2-4km ESE	Recorded	1	Projectile	N to S	N/K	29-Oct, 19:22
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	3-5km ESE	Recorded	1	Illumination flare	In vertical flight	N/K	29-Oct, 18:59
	3-5km ENE	Recorded	1	Projectile	In vertical flight	N/K	29-Oct, 19:07
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	4-6km W	Recorded	2	Projectile	S to N	N/K	29-Oct, 20:11
	4-6km W	Recorded	15	Projectile	N to S	N/K	29-Oct, 21:30
SMM camera in Petrivske (non-government-controlled, 41km S of Donetsk)	0.2-1.5km SSW	Recorded	9	Projectile	W to E (assessed as inside the disengagement area)	N/K	29-Oct, 21:29
	1.5-2km SSW	Recorded	3	Explosion	Undetermined (assessed as inside the disengagement area)	N/K	29-Oct, 21:31
	0.2-1.5km SSW	Recorded	4	Projectile	W to E (assessed as inside the disengagement area)	N/K	29-Oct, 22:09
	0.2-1.5km SSW	Recorded	4	Explosion	Undetermined (assessed as inside the disengagement area)	N/K	29-Oct, 22:09
	0.2-1.5km SSW	Recorded	1	Projectile	W to E (assessed as inside the disengagement area)	N/K	29-Oct, 22:10
	0.2-1.5km SSW	Recorded	2	Projectile	W to E (assessed as inside the disengagement area)	N/K	29-Oct, 22:11

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	0.2-1.5km SSW	Recorded	2	Explosion	Undetermined (assessed as inside the disengagement area)	N/K	29-Oct, 22:11
	0.2-1.5km SSW	Recorded	3	Projectile	W to E (assessed as inside the disengagement area)	N/K	29-Oct, 22:13
	0.2-1.5km SSW	Recorded	1	Explosion	Undetermined (assessed as inside the disengagement area)	N/K	29-Oct, 22:13
	0.2-1.5km SSW	Recorded	8	Projectile	W to E (assessed as inside the disengagement area)	N/K	29-Oct, 22:14
	0.2-1.5km SSW	Recorded	2	Projectile	W to E (assessed as inside the disengagement area)	N/K	29-Oct, 22:15
	0.2-1.5km SSW	Recorded	2	Explosion	Impact (subsequent to previous event, assessed as inside the disengagement area)	N/K	29-Oct, 22:15
	2-4km SSW	Recorded	4	Projectile	NE to SW (unable to be assessed if inside or outside the disengagement area)	N/K	30-Oct, 00:07
	2-4km SSW	Recorded	1	Muzzle flash	Unable to be assessed if inside or outside the disengagement area	N/K	30-Oct, 00:07
SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	3-5km N	Recorded	3	Projectile	SE to NW	N/K	29-Oct, 18:50
	3-5km N	Recorded	2	Projectile	SE to NW	N/K	29-Oct, 18:52
	3-5km N	Recorded	1	Muzzle flash		N/K	29-Oct, 18:53
	3-5km N	Recorded	1	Projectile	W to E (subsequent to previous event)	N/K	29-Oct, 18:53
	3-5km N	Recorded	1	Muzzle flash		N/K	29-Oct, 18:53
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 18:53
	3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	29-Oct, 18:54
	3-5km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 18:55
	3-5km N	Recorded	1	Projectile	ESE to WNW	N/K	29-Oct, 18:55
	3-5km N	Recorded	4	Projectile	E to W	N/K	29-Oct, 18:58
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 19:05
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 19:32
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 19:38
	4-6km N	Recorded	4	Projectile	E to W	N/K	29-Oct, 19:38
	4-6km NNE	Recorded	1	Projectile	E to W	N/K	29-Oct, 19:41
	4-6km N	Recorded	2	Projectile	E to W	N/K	29-Oct, 19:46
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 19:49
	4-6km N	Recorded	1	Muzzle flash		N/K	29-Oct, 19:50
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 19:50
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 19:55
	4-6km N	Recorded	1	Projectile	E to W	N/K	29-Oct, 19:55
	4-6km N	Recorded	3	Explosion	Undetermined	N/K	29-Oct, 19:56
	4-6km N	Recorded	1	Illumination flare	In vertical flight	N/K	29-Oct, 19:56
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 19:59
	4-6km N	Recorded	1	Projectile	E to W	N/K	29-Oct, 19:59
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 20:01
	4-6km N	Recorded	2	Projectile	W to E	N/K	29-Oct, 20:01
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 20:09
	4-6km NNW	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 20:09
	4-6km N	Recorded	8	Projectile	W to E	N/K	29-Oct, 20:13
	4-6km NNW	Recorded	1	Muzzle flash		N/K	29-Oct, 20:20
	4-6km NNW	Recorded	1	Projectile	W to E (subsequent to previous event)	N/K	29-Oct, 20:20
4-6km N	Recorded	1	Explosion	Impact (subsequent to previous event)	N/K	29-Oct, 20:20	
4-6km NNW	Recorded	1	Muzzle flash		N/K	29-Oct, 20:21	

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	4-6km NNW	Recorded	1	Projectile	W to E (subsequent to previous event)	N/K	29-Oct, 20:21
	4-6km NNW	Recorded	1	Muzzle flash		N/K	29-Oct, 20:23
	4-6km NNW	Recorded	1	Projectile	W to E (subsequent to previous event)	N/K	29-Oct, 20:23
	4-6km N	Recorded	1	Explosion	Impact (subsequent to previous event)	N/K	29-Oct, 20:23
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	29-Oct, 20:26
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 20:29
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	29-Oct, 20:34
	4-6km N	Recorded	13	Projectile	W to E	N/K	29-Oct, 20:34
	4-6km N	Recorded	3	Projectile	W to E	N/K	29-Oct, 20:40
	4-6km N	Recorded	17	Projectile	W to E	N/K	29-Oct, 20:57
	4-6km N	Recorded	1	Projectile	W to E	N/K	29-Oct, 21:26
	4-6km N	Recorded	2	Illumination flare	In vertical flight	N/K	29-Oct, 21:44
	4-6km N	Recorded	1	Illumination flare	In vertical flight	N/K	29-Oct, 22:36
	4-6km N	Recorded	3	Projectile	W to E	N/K	29-Oct, 23:12
	4-6km N	Recorded	1	Projectile	E to W	N/K	29-Oct, 23:13
	4-6km N	Recorded	2	Projectile	W to E	N/K	29-Oct, 23:13
	4-6km N	Recorded	1	Projectile	E to W	N/K	29-Oct, 23:14
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	30-Oct, 00:50
	4-6km N	Recorded	1	Muzzle flash		N/K	30-Oct, 00:50
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	30-Oct, 02:05
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	30-Oct, 02:08
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	30-Oct, 02:10
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	30-Oct, 02:37
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	30-Oct, 02:41
	4-6km N	Recorded	2	Projectile	E to W	N/K	30-Oct, 04:07
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-6km WSW	Recorded	3	Explosion	Undetermined	N/K	29-Oct, 23:47
About 800m ENE of Zhabunki (non-government-controlled, 9km NW of Donetsk)	3-5km WNW	Heard	1	Explosion	Undetermined	N/K	30-Oct, 12:25
About 300m NE of Zhabunki (non-government-controlled, 9km NW of Donetsk)	4-6km NNW	Heard	1	Explosion	Undetermined	N/K	30-Oct, 12:40
Troitske (government-controlled, 30km N of Donetsk)	2-3km E	Heard	3	Burst		Small arms	30-Oct, 10:48
About 2.1km WNW of Pisky (government-controlled, 12km NW of Donetsk)	1-3km SSE	Heard	6	Burst		Small arms	30-Oct, 12:52-12:53
	1-3km SSE	Heard	4	Shot		Small arms	30-Oct, 12:52-12:53
About 2.5km SE of Lebedynske (government-controlled, 99km S of Donetsk)	2-3km NE	Heard	12	Burst		Small arms	30-Oct, 10:39-10:45
	2-3km NE	Heard	5	Shot		Small arms	30-Oct, 10:39-10:45
	1-2km E	Heard	1	Explosion	Undetermined	N/K	30-Oct, 10:39-10:45
About 2km NE of Chernenko (government-controlled, 86km S of Donetsk)	1.5-2km E	Heard	1	Explosion	Undetermined	N/K	30-Oct, 12:08-12:18
	1.5-2km E	Heard	2	Burst		Small arms	30-Oct, 12:08-12:18

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	1.5-2km E	Heard	5	Shot		Small arms	30-Oct, 12:08-12:18
Orlivske (government-controlled, 82km S of Donetsk)	4-6km NE	Heard	1	Explosion	Undetermined	N/K	30-Oct, 10:54
	4-6km E	Heard	5	Shot		Small arms	30-Oct, 11:04
Hranitne (government-controlled, 60km S of Donetsk)	1-2km NW	Heard	1	Explosion	Undetermined	N/K	30-Oct, 12:16
SMM camera on N edge of Popasna (government-controlled, 69km W of Luhansk)	4-6km ESE	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:10
	4-6km ESE	Recorded	1	Muzzle flash	Assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:10
	4-6km ESE	Recorded	1	Projectile	NNE to SSW (subsequent to previous event, assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:10
	4-6km ESE	Recorded	1	Projectile	S to N (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:12
	4-6km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:13
	4-6km ESE	Recorded	1	Muzzle flash	Assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:13
	4-6km ESE	Recorded	1	Projectile	In vertical flight (subsequent to previous event, (assessed as outside the disengagement area near Zolote))	N/K	29-Oct, 18:13
	4-6km ESE	Recorded	2	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:14
	4-6km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:15
	4-6km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:25
	4-6km ESE	Recorded	1	Projectile	SSW to NNE (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:26
	4-6km ESE	Recorded	1	Projectile	NNE to SSW (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 18:26
N edge of Popasna (government-controlled, 69km W of Luhansk)	4-6km E	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	29-Oct, 21:28-21:50
	4-6km E	Heard	10	Burst	Assessed as outside the disengagement area near Zolote	Small arms	29-Oct, 21:28-21:50
	4-6km E	Heard	3	Burst	Assessed as outside the disengagement area near Zolote	HMG	29-Oct, 21:28-21:50
	4-6km E	Heard and saw	6	Explosion	Impact (assessed as outside the disengagement area near Zolote)	N/K	30-Oct, 15:45-16:00
	3-5km SE	Heard	2	Explosion	Undetermined	N/K	30-Oct, 15:45-16:00
	4-6km E	Heard and saw	14	Explosion	Impact (assessed as outside the disengagement area near Zolote)	N/K	30-Oct, 16:10-17:00
	4-6km E	Heard	14	Burst	Assessed as outside the disengagement area near Zolote	HMG	30-Oct, 16:10-17:00
	3-5km ESE	Heard	10	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	30-Oct, 16:10-17:00
	3-5km ESE	Heard	11	Burst	Assessed as outside the disengagement area near Zolote	HMG	30-Oct, 16:10-17:00
	3-5km ESE	Heard	35	Burst	Assessed as outside the disengagement area near Zolote	Small arms	30-Oct, 16:10-17:00
	3-5km SE	Heard	5	Explosion	Undetermined	N/K	30-Oct, 16:10-17:00
	4-6km E	Heard	6	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	30-Oct, 17:10-17:40
4-6km E	Heard	23	Burst	Assessed as outside the disengagement area near Zolote	HMG	30-Oct, 17:10-17:40	

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	4-6km E	Heard	25	Burst	Assessed as outside the disengagement area near Zolote	Small arms	30-Oct, 17:10-17:40
	4-6km E	Saw	1	Illumination flare	In vertical flight (assessed as outside the disengagement area near Zolote)	N/K	30-Oct, 17:10-17:40
	3-5km ESE	Heard	13	Burst	Assessed as outside the disengagement area near Zolote	Small arms	30-Oct, 17:10-17:40
	3-5km ESE	Heard	8	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	30-Oct, 17:10-17:40
W edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	1-2km SSW	Heard	15	Shot	Assessed as outside the disengagement area	Small arms	30-Oct, 14:30-14:32
SMM camera 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	1-3km ESE	Recorded	6	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	31-Oct, 01:17
	1-3km ESE	Recorded	3	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	31-Oct, 01:45
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	5-7km ESE	Recorded	1	Explosion	Undetermined	N/K	30-Oct, 21:34
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	2-4km E	Recorded	1	Explosion	Undetermined	N/K	31-Oct, 01:30
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	2-4km W	Recorded	32	Projectile	N to S	N/K	31-Oct, 17:01
	2-4km W	Recorded	12	Projectile	N to S	N/K	31-Oct, 17:02
	2-4km W	Recorded	10	Projectile	N to S	N/K	31-Oct, 17:07
	2-4km W	Recorded	12	Projectile	N to S	N/K	31-Oct, 17:08
	2-4km W	Recorded	3	Projectile	N to S	N/K	31-Oct, 17:09
	2-4km W	Recorded	42	Projectile	N to S	N/K	31-Oct, 17:23
	2-4km W	Recorded	2	Projectile	N to S	N/K	31-Oct, 17:54
	2-4km W	Recorded	6	Projectile	N to S	N/K	31-Oct, 17:57
	2-4km W	Recorded	31	Projectile	N to S	N/K	31-Oct, 17:59
	SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	3-5km N	Recorded	5	Projectile	E to W	N/K
3-5km N		Recorded	1	Projectile	E to W	N/K	30-Oct, 19:01
3-5km N		Recorded	6	Projectile	E to W	N/K	30-Oct, 19:02
3-5km N		Recorded	1	Projectile	SE to NW	N/K	30-Oct, 20:57
3-5km N		Recorded	2	Projectile	SE to NW	N/K	31-Oct, 00:03
3-5km N		Recorded	1	Projectile	SW to NE	N/K	31-Oct, 00:03
3-5km N		Recorded	1	Projectile	S to N	N/K	31-Oct, 01:14
3-5km N		Recorded	1	Projectile	S to N	N/K	31-Oct, 01:15
4-6km N		Recorded	1	Illumination flare	In vertical flight	N/K	31-Oct, 17:21
4-6km N		Recorded	8	Projectile	W to E	N/K	31-Oct, 17:36
4-6km N		Recorded	1	Projectile	W to E	N/K	31-Oct, 17:38
4-6km N		Recorded	2	Explosion	Undetermined	N/K	31-Oct, 17:42
4-6km N		Recorded	1	Explosion	Undetermined	N/K	31-Oct, 17:43
4-6km N		Recorded	1	Muzzle flash		N/K	31-Oct, 17:46
4-6km N		Recorded	2	Explosion	Undetermined	N/K	31-Oct, 17:48
4-6km N		Recorded	4	Projectile	W to E	N/K	31-Oct, 17:49
4-6km N		Recorded	2	Muzzle flash		N/K	31-Oct, 18:13
4-6km N		Recorded	1	Illumination flare	In vertical flight	N/K	31-Oct, 18:14
4-6km N	Recorded	1	Explosion	Undetermined	N/K	31-Oct, 18:14	
4-6km N	Recorded	21	Projectile	E to W	N/K	31-Oct, 18:14	
4-6km N	Recorded	5	Explosion	Undetermined	N/K	31-Oct, 18:15	
4-6km N	Recorded	17	Projectile	E to W	N/K	31-Oct, 18:15	
4-6km N	Recorded	3	Projectile	E to W	N/K	31-Oct, 18:17	
4-6km N	Recorded	6	Projectile	W to E	N/K	31-Oct, 18:37	

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
	4-6km N	Recorded	1	Projectile	WSW to ENE	N/K	31-Oct, 18:39
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	31-Oct, 18:45
Donetsk city centre (non-government-controlled)	10km WSW	Heard	30	Explosion	Undetermined	N/K	31-Oct, 02:45-04:00
	10km WSW	Heard	10	Explosion	Undetermined	N/K	31-Oct, 05:00
About 2.5km SSE of Lomakyne (government-controlled, 93km S of Donetsk)	2-3km E	Heard	95	Shot		N/K	31-Oct, 10:30-10:37
	2-3km E	Heard	6	Burst		HMG	31-Oct, 10:30-10:37
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	4-6km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	30-Oct, 19:51
	4-6km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	30-Oct, 20:17
	4-6km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	30-Oct, 20:26
	4-6km E	Recorded	2	Projectile	In vertical flight (assessed as outside the disengagement area)	N/K	30-Oct, 20:35
	4-6km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	30-Oct, 20:49
	4-6km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	30-Oct, 21:11
	4-6km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	30-Oct, 21:17
	2-3km ESE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	31-Oct, 16:59
	2-3km ESE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	31-Oct, 17:00
	2-3km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	31-Oct, 17:06
	1-3km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	31-Oct, 17:16
	1-3km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	31-Oct, 17:18
	1-3km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	31-Oct, 17:21
	1-3km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	31-Oct, 17:22
	1-3km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	31-Oct, 17:39
About 3km N of Pervomaisk (non-government-controlled, 58km W of Luhansk)	5-6km NNE	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	31-Oct, 09:34-09:36
E edge of Popasna (government-controlled, 69km W of Luhansk)	3-5km ENE	Heard	7	Burst	Assessed as outside the disengagement area near Zolote	HMG	31-Oct, 09:55
Disengagement area near Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	4-6km SW	Heard	8	Burst	Assessed as outside the disengagement area	HMG	31-Oct, 09:47-09:48
	4-6km SW	Heard	221	Shot	Assessed as outside the disengagement area	HMG	31-Oct, 09:53-10:11
SSE edge of Popasna (government-controlled, 69km W of Luhansk)	2-2.5km E	Heard	2	Burst		HMG	31-Oct, 13:55