## Table of ceasefire violations as of 14 November 20219

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Avdiivka (government-controlled,	2-3km NNE	Recorded	1	Projectile	WNW to ESE	N/K	12-Nov, 22:09
17km N of Donetsk)	2-3km NNE	Recorded	1	Projectile	WNW to ESE	N/K	12-Nov, 22:10
SMM camera in Berezove (government-controlled,	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	13-Nov, 17:03
31km SW of Donetsk)	2-4km ESE	Recorded	4	Explosion	Undetermined, subsequent to previous event	N/K	13-Nov, 17:03
	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	13-Nov, 17:04
	2-4km ESE	Recorded		Explosion	Undetermined	N/K	13-Nov, 17:04
	2-4km SE	Recorded		Explosion	Undetermined	N/K	13-Nov, 17:05
	2-4km ESE	Recorded	3	Projectile	SW to NE	N/K	13-Nov, 17:06
	2-4km SE	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 17:06
SMM camera 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	1-3km SE	Recorded	1	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 20:14
	1-3km SE	Recorded	2	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 20:40
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	2-5km SSW	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 22:26
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	3-4km E	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 01:37
SMM camera at Oktiabr mine (non-government-	2-4km W	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 04:41
controlled, 9km NW of Donetsk city centre)	3-6km NNE	Recorded	1	Explosion	Undetermined (also recorded by the SMM camera in DFS)	N/K	12-Nov, 22:55
SMM camera in Petrivske (non-government- controlled, 41km S of Donetsk)	2-4km WNW	Recorded	7	Projectile	SSE to NNW (assessed as outside the disengagement area)	N/K	12-Nov, 19:00
	2-4km WNW	Recorded	13	Projectile	SSE to NNW (assessed as outside the disengagement area)	N/K	12-Nov, 19:11
	2-4km WNW	Recorded	22	Projectile	SSE to NNW (assessed as outside the disengagement area)	N/K	12-Nov, 19:12
	2-4km WNW	Recorded	1	Muzzle flash	Assessed as outside the disengagement area area)	N/K	12-Nov, 19:23
	2-4km WNW	Recorded	1	Projectile	SSE to NNW subsequent to previous event (assessed as outside the disengagement area)	N/K	12-Nov, 19:23
SMM camera 1km SW of Shyrokyne (government-	5-7km N	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 19:01
controlled, 100km S of Donetsk)	5-7km N	Recorded		Explosion	Undetermined	N/K	12-Nov, 19:02
	5-7km N	Recorded	1	Muzzle flash		N/K	12-Nov, 19:05
	5-7km N	Recorded		Muzzle flash		N/K	12-Nov, 19:11
	5-7km N	Recorded	1	Projectile	W to E (subsequent to previous event)	N/K	12-Nov, 19:11
	5-7km N	Recorded		Explosion	Impact (subsequent to previous event)	N/K	12-Nov, 19:11
	5-7km N	Recorded	1	Projectile	W to E	N/K	12-Nov, 19:16
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 19:23
	5-7km N	Recorded	_	Projectile	E to W	N/K	12-Nov, 19:28
	4-6km N	Recorded		Explosion	Undetermined	N/K	12-Nov, 20:55
	7-9km N	Recorded	_	Explosion	Undetermined	N/K	12-Nov, 21:09
	7-9km N	Recorded		Projectile	SE to NW	N/K	12-Nov, 21:12
	4-6km N	Recorded	_	Projectile	W to E	N/K	12-Nov, 21:27
	3-5km N	Recorded		Explosion	Undetermined	N/K	12-Nov, 21:29
	5-7km N	Recorded		Projectile	SE to NW	N/K	12-Nov, 21:39
	5-7km N	Recorded		Projectile	SE to NW	N/K	12-Nov, 21:40
	7-9km N	Recorded	_	Explosion		N/K	12-Nov, 21:40
	5-7km N	Recorded		Muzzle flash		N/K	12-Nov, 21:47

<sup>&</sup>lt;sup>9</sup> 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.

	5 71cm N	Dagardad	1	Duningtila	CE to NW (subsequent to provious event)	NI/IV	12 Nov. 21.47
	5-7km N 5-7km N	Recorded Recorded		Projectile Explosion	· · · · · · · · · · · · · · · · · · ·	N/K N/K	12-Nov, 21:47
	3-7km N 3-5km N	Recorded		Explosion	Impact (subsequent to previous event) Undetermined	N/K N/K	12-Nov, 21:47 12-Nov, 22:39
	3-5km N 4-6km NNE	Recorded		Projectile Projectile	E to W	N/K N/K	
					SE to NW		13-Nov, 01:30
	5-7km N 4-6km N	Recorded		Projectile Projectile		N/K	13-Nov, 01:44
		Recorded		Projectile	E to W	N/K	13-Nov, 02:27
	5-7km N	Recorded		Projectile	SE to NW	N/K	13-Nov, 02:43
	3-5km N	Recorded		Projectile	W to E	N/K	13-Nov, 02:55
	4-6km NNE	Recorded		Projectile	W to E	N/K	13-Nov, 03:17
	4-6km N	Recorded		Projectile	ESE to WNW	N/K	13-Nov, 03:59
	2-4km N	Recorded		Projectile	WSW to ENE	N/K	13-Nov, 17:25
	2-4km N	Recorded		Projectile	WSW to ENE	N/K	13-Nov, 17:29
SMM camera in Svitlodarsk (government-controlled,		Recorded		Projectile	SSE to NNW	N/K	12-Nov, 20:58
57km NE of Donetsk)		Recorded		Projectile	SSE to NNW	N/K	12-Nov, 21:04
	5-7km WSW	Recorded		Projectile	NNW to SSE	N/K	12-Nov, 21:04
	5-7km WSW	Recorded	2	Explosion	Undetermined	N/K	12-Nov, 21:04
	5-7km WSW	Recorded	3	Muzzle flash		N/K	12-Nov, 21:04
	5-7km WSW	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 21:05
		Recorded		Explosion	Undetermined	N/K	12-Nov, 21:06
	5-7km WSW	Recorded		Muzzle flash		N/K	12-Nov, 21:06
	5-7km WSW	Recorded		Projectile	SSE to NNW (subsequent to previous event)	N/K	12-Nov, 21:06
	5-7km WSW	Recorded	7	Projectile	SSE to NNW	N/K	12-Nov, 21:08
		Recorded		Projectile	SSE to NNW	N/K	12-Nov, 21:21
	3-7km W 3 W	Recorded		Projectile	SSE to NNW	N/K	13-Nov, 00:34
	3-5km W	Recorded		Projectile	NNW to SSE	N/K	13-Nov, 00:35
	4-6km W	Recorded		Explosion	Undetermined	N/K	13-Nov, 00:57
	4-6km W	Recorded				N/K	
				Explosion	Undetermined SSE to NNW	_	13-Nov, 00:58
TY U.S. / A sentential 20lem NIE of	4-6km WSW	Recorded		Projectile	SSE to NNW	N/K	13-Nov, 00:58
Horlivka (non-government-controlled, 39km NE of Donetsk)	3-5km SW	Heard			Undetermined	N/K	12-Nov, 19:12-19:30
	4-6km SW	Heard		Explosion	Undetermined	N/K	12-Nov, 22:45-22:47
Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-5km SSW	Heard			Undetermined	N/K	12-Nov, 21:05
Donetsk)	4-5km SSW	Heard		Burst	<u></u>	HMG	12-Nov, 21:06
	4-5km SSW	Heard		Explosion	Undetermined	N/K	12-Nov, 21:07
	4km SSW	Heard		Burst		HMG	12-Nov, 21:08
	4-5km SSW	Heard		Explosion	Undetermined	N/K	12-Nov, 21:08
	4-5km SSW	Heard		Burst		HMG	12-Nov, 21:09
	4-5km SSW	Heard	_			HMG	12-Nov, 21:16
	4-5km SSW	Heard	5	Burst		HMG	12-Nov, 21:17
	3-4km SSW	Heard	5	Burst		HMG	12-Nov, 21:18
	3-4km SSW	Heard	5	Burst		HMG	12-Nov, 21:19
	3km SSW	Heard	7	Explosion	Undetermined	N/K	12-Nov, 21:19
	3-4km SSW	Heard	7	Burst		HMG	12-Nov, 21:21
	4-5km SSW	Heard	3	Explosion	Undetermined	N/K	12-Nov, 22:20
	4-5km SSW	Heard		Explosion	Undetermined	N/K	12-Nov, 22:30
About 1km NW of the railway station in Yasynuvata	3km WNW	Heard		Explosion	Undetermined	N/K	13-Nov, 09:15
(non-government-controlled, 16km NE of Donetsk)		Heard		Explosion	Undetermined	N/K	13-Nov, 09:17
		Heard		Explosion	Undetermined	N/K	13-Nov, 09:37
		Heard		Explosion	Undetermined	N/K	13-Nov, 09:43
	4-5km WNW			Explosion	Undetermined	N/K	13-Nov, 09:55
	4-5km WNW			Explosion	Undetermined	N/K	13-Nov, 09:57
	4-5km WNW			Explosion	Undetermined	N/K	13-Nov, 10:14
	4-5km WNW			Explosion	Undetermined	N/K	13-Nov, 10:25
		Heard		Burst	Ulldetermined	Small	13-Nov, 10:25
	J TKIII 1,1,1,	Ticara	Ĺ	Buist		arms	13 1101, 10.22
	1km WSW	Heard	1	Burst		Small arms	13-Nov, 10:30
Railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	2-3km W	Heard	12	Shot		Small arms	13-Nov, 10:40
collitolica, tokili NE of Dolletsk)	5-6km WNW	Hoord	4	Explosion	Undetermined	N/K	13-Nov, 10:44
	5-6km WNW			Explosion		N/K	
		Hearn	4 Z.	Explosion	Undetermined	IN/IN	13-Nov, 10:55

	5-6km WNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 10:56
		Heard		Explosion	Undetermined	N/K	13-Nov, 11:08
	2km WSW	Heard	_	Explosion	Undetermined	N/K	13-Nov, 11:12
	5-6km WNW		_	Explosion	Undetermined	N/K	13-Nov, 11:12
		Heard	_	Explosion	Undetermined	N/K	13-Nov, 11:21
Spartak (non-government-controlled, 9km N of Donetsk)	8-9km NNE	Heard		Explosion	Undetermined	N/K	13-Nov, 12:40
· · · · · · · · · · · · · · · · · · ·	4-6km NNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 10:49
About 2km SSE of Kamianka (government-controlled, 20km N of Donetsk)	1-2km N	Heard	3	Burst		HMG	13-Nov, 09:16
About 500m NE of Kamianka (government-	2-3km NE	Heard	3	Explosion	Undetermined	N/K	13-Nov, 09:54-09:55
controlled, 20km N of Donetsk)	2-3km NNE	Heard	_	Explosion	Undetermined	N/K	13-Nov, 10:13
	2-3km NNE	Heard	_	Explosion	Undetermined	N/K	13-Nov, 10:25
	2-3km NNE	Heard		Explosion	Undetermined	N/K	13-Nov, 10:44
	2-3km NNE	Heard		Explosion	Undetermined	N/K	13-Nov, 11:21
SE edge of Avdiivka (government-controlled, 17km Norf Donetsk)	3-5km NE	Heard	_	Explosion	Undetermined	N/K	13-Nov, 10:44
· · · · · · · · · · · · · · · · · · ·	5-7km ENE	Heard	1	Explosion	Undetermined	N/K	13-Nov, 12:05
controlled, 35km N of Donetsk)	5-7km ENE	Heard		Explosion	Undetermined	N/K	13-Nov, 12:15
Pavlopil (government-controlled, 84km S of Donetsk)	2-3km NNE	Heard	_	Shot		Small arms	13-Nov, 11:35
	3-4km E	Heard	15	Explosion	Undetermined	N/K	13-Nov, 11:52-11:55
About 2km NE of Chernenko (government-controlled, 86km S of Donetsk)	2-3km NNE	Heard	15	burst		Small arms	13-Nov, 12:50-12:55
	2-3km NNE	Heard	7	shot		Small arms	13-Nov, 12:50-12:55
About 2.5km SE of Lebedynske (government-	3-5km N	Heard	2	Explosion	Undetermined	N/K	13-Nov, 11:33-11:39
controlled, 99km S of Donetsk)	2-3km NNE	Heard	10	Shot		Small arms	13-Nov, 11:33-11:39
	2-3km N	Heard	14	Shot		Small arms	13-Nov, 11:47-11:57
	2-3km N	Heard	2	Burst		Small arms	13-Nov, 11:47-11:57
	3-5km N	Heard	7	Explosion	Undetermined	N/K	13-Nov, 12:02-12:12
	2-3km NNE	Heard	18	Shot		Small arms	13-Nov, 12:02-12:12
Berdianske (government-controlled, 102km S of Donetsk)	1-2km E	Heard	100	Burst	Assessed as a live-fire exercise	Small arms	13-Nov, 12:32-13:12
	1-2km E	Heard	100	Shot	Assessed as a live-fire exercise	Small arms	13-Nov, 12:32-13:12
Horlivka (non-government-controlled, 39km NE of Donetsk)	3-5km SW	Heard	8	Explosion	Undetermined	N/K	13-Nov, 14:40-14:44
SMM camera on N edge of Popasna (government-	3-5km ESE	Recorded	3	Projectile	SSW to NNE	N/K	12-Nov, 20:35
controlled, 69km W of Luhansk)	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	12-Nov, 20:47
	3-5km ESE	Recorded	6	Explosion	Undetermined	N/K	12-Nov, 20:58
	3-5km SE	Recorded	4	Projectile	SSW to NNE	N/K	12-Nov, 21:31
	3-5km SSE	Recorded	4	Projectile	WSW to ENE	N/K	13-Nov, 16:40
	3-5km SE	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 17:14
	3-5km SE	Recorded		Explosion	Undetermined	N/K	13-Nov, 17:24
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	2-4km ENE	Recorded	2	Projectile	NW to SE (assessed as outside the disengagement area)	N/K	12-Nov, 19:30
	3-5km E	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	12-Nov, 20:00
	2-4km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Nov, 20:31
	2-4km E	Recorded	1	Projectile	In vertical flight (assessed as outside the disengagement area)	N/K	13-Nov, 01:04
	2-4km E	Recorded	4	Projectile	SW to NE (assessed as outside the disengagement area)	N/K	13-Nov, 01:44
	2-4km E	Recorded	2	Projectile	In vertical flight (assessed as outside the disengagement area)	N/K	13-Nov, 01:44
Holubivka (Formerly Kirovsk, non-government- controlled, 51km West of Luhansk)	3-4km NNW	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	13-Nov, 09:00-09:05

		l		a.		a 11	12.37 00.00.00.05
	2-3km NNW	Heard	6	Shot		Small arms	13-Nov, 09:00-09:05
	3-4km W	Heard	3	Shot	Undetermined	Small arms	13-Nov, 10:00
Novozvanivka (governmnet-controlled, 70km West of Luhansk)	0.4-0.05km WNW	Heard	10	Shot		Small arms	13-Nov, 10:05-10:06
E outskirts of Sentianivka (formerly Frunze, non- government-controlled, 44km W of Luhansk)	2-3km NNE	Heard	14	Shot	Undetermined	Small arms	13-Nov, 11:19
Kadiivka (formerly Stakhanov, non-government-	10-12km W	Heard	19	Explosion	Undetermined	N/K	13-Nov, 16:45-17:00
controlled, 50km W of Luhansk)	14-16km N	Heard		Explosion	Undetermined	N/K	13-Nov, 17:00-17:45
	14-16km WNW	Heard	4	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	13-Nov, 17:00-17:45
SMM camera in Avdiivka (government-controlled,	4-6km NE	Recorded	5	Explosion	Airburst	N/K	13-Nov, 21:29
17km N of Donetsk)	4-6km NE	Recorded	4	Explosion	Airburst	N/K	13-Nov, 21:30
	4-6km NE	Recorded	7	Explosion	Airburst	N/K	13-Nov, 21:31
	4-6km NE	Recorded	10	Explosion	Airburst	N/K	13-Nov, 21:33
	4-6km NE	Recorded	2	Projectile	NW to SE	N/K	13-Nov, 21:33
	4-6km NE	Recorded	14	Explosion	Airburst	N/K	13-Nov, 21:35
	4-6km NE	Recorded	2	Projectile	NW to SE	N/K	13-Nov, 21:35
	4-6km NE	Recorded	7	Explosion	Airburst	N/K	13-Nov, 21:38
SMM camera 2km E of Bohdanivka (government- controlled, 41km SW of Donetsk)	2-4km ESE	Recorded	24	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 19:13
	2-4km ESE	Recorded	3	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 19:14
	2-4km ESE	Recorded	2	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	14-Nov, 00:46
	3-5km ESE	Recorded	17	Projectile	NNE to SSW (unable to assess if inside or outside the disengagement area near Petrivske)	N/K	14-Nov, 17:15
SMM camera in Chermalyk (government-controlled,	4-6km SSE	Recorded	10	Projectile	WSW to ENE	N/K	14-Nov, 03:08
77km S of Donetsk)	2-4km SE	Recorded	6	Projectile	NE to SW	N/K	14-Nov, 18:50
SMM camera in Kriakivka (government-controlled, 38km NW of Luhansk)	3-5km SSW	Recorded	3	Burst	In vertical flight (three rounds each)	N/K	14-Nov, 17:30
SMM camera at entry-exit checkpoint in Maiorsk	3-5km E	Recorded	1	Projectile	NNE to SSW	N/K	14-Nov, 16:48
(government-controlled, 45km NE of Donetsk)	3-5km E	Recorded	1	Explosion	Airburst (subsequent to previous event)	N/K	14-Nov, 16:48
SMM camera at entry-exit checkpoint in Marinka	3-4km NNE	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:01
(government-controlled, 23km SW of Donetsk)	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:08
	3-4km NNE	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:10
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:15
	3-4km NNE	Recorded	1	Muzzle flash		N/K	14-Nov, 01:17
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:17
	3-4km NNE	Recorded	5	Explosion	Undetermined	N/K	14-Nov, 01:19
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:22
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:23
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:25
	3-4km NNE	Recorded		Explosion	Undetermined	N/K	14-Nov, 01:27
SMM camera at Oktiabr mine (non-government-	2-4km W	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:00
controlled, 9km NW of Donetsk city centre)	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:01
	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:07
	2-4km W	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:08
	2-4km W	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:09
	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:10
	2-4km W	Recorded		Explosion	Undetermined	N/K	14-Nov, 01:12
	2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:14
	2-4km W	Recorded	5	Explosion	Undetermined	N/K	14-Nov, 01:16
	2-4km W	Recorded		Explosion	Undetermined	N/K	14-Nov, 01:17
	2-4km W	Recorded		Explosion	Undetermined	N/K	14-Nov, 01:18
	2-4km W	Recorded		Explosion	Undetermined	N/K	14-Nov, 01:19
	2-4km W	Recorded	4	Explosion	Undetermined	N/K	14-Nov, 01:21
	2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:23
	2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:25

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	2-4km W	Recorded		Explosion	Undetermined	N/K	14-Nov, 01:29
	3-5km WSW	Recorded	_	Explosion	Undetermined	N/K	14-Nov, 01:46
	3-5km WSW	Recorded		Explosion	Undetermined	N/K	14-Nov, 01:47
	2-4km NNE	Recorded		Projectile	WNW to ESE	N/K	13-Nov, 21:26
	2-4km NNE	Recorded	2	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:26
	2-4km NNE	Recorded		Explosion	Undetermined	N/K	13-Nov, 21:26
	2-4km NNE	Recorded	3	Explosion	Undetermined	N/K	13-Nov, 21:28
	2-4km NNE	Recorded	1	Projectile	WNW to ESE	N/K	13-Nov, 21:29
	2-4km NNE	Recorded	1	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:29
	2-4km NNE	Recorded	4	Explosion	Undetermined	N/K	13-Nov, 21:29
	2-4km NNE	Recorded	3	Projectile	WNW to ESE	N/K	13-Nov, 21:30
	2-4km NNE	Recorded	3	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:30
	2-4km NNE	Recorded	10	Explosion	Undetermined	N/K	13-Nov, 21:30
	2-4km NNE	Recorded		Projectile	WNW to ESE	N/K	13-Nov, 21:33
	2-4km NNE	Recorded		Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:33
	2-4km NNE	Recorded	9	Explosion	Undetermined	N/K	13-Nov, 21:33
	2-4km NNE	Recorded		Projectile	WNW to ESE	N/K	13-Nov, 21:35
	2-4km NNE	Recorded		Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:35
	2-4km NNE	Recorded	9	Explosion	Undetermined	N/K	13-Nov, 21:35
	2-4km NNE	Recorded		Projectile	WNW to ESE	N/K	13-Nov, 21:38
	2-4km NNE	Recorded		Explosion	Airburst	N/K	13-Nov, 21:38
SMM camera 1km SW of Shyrokyne (government-	5-7km N	Recorded		Projectile	W to E	N/K	13-Nov, 21.38 13-Nov, 19:06
controlled, 100km S of Donetsk)	5-7km N	Recorded			SW to NE	N/K	
continued, roomin is or 2 one.	5-7km N	Recorded		Projectile	W to E	N/K	13-Nov, 19:08
	2-4km N	Recorded		Projectile Projectile	WSW to ENE	N/K	13-Nov, 19:19
							13-Nov, 19:24
	2-4km N	Recorded		Projectile	WSW to ENE	N/K	13-Nov, 19:25
	5-7km N	Recorded		Projectile	SE to NW	N/K	13-Nov, 19:45
	5-7km N 5-7km N	Recorded Recorded	_	Projectile Illumination	SW to NE In vertical flight	N/K N/K	13-Nov, 19:56 13-Nov, 20:02
		<b>D</b> 1.1		flare	WIGHT DATE	27.77	12.37 20.40
	5-7km N	Recorded		Projectile	WSW to ENE	N/K	13-Nov, 20:19
	5-7km N	Recorded	_	Projectile	WSW to ENE	N/K	13-Nov, 20:26
	5-7km N	Recorded		Muzzle flash		N/K	13-Nov, 20:55
	5-7km N	Recorded	_	Explosion	Undetermined	N/K	13-Nov, 20:55
	5-7km N	Recorded	2	Projectile	WSW to ENE	N/K	13-Nov, 20:55
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 21:16
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 21:28
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 21:28
	5-7km N	Recorded	2	Projectile	WSW to ENE	N/K	13-Nov, 21:29
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 21:32
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 21:32
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 21:48
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 22:50
	5-7km N	Recorded	1	Projectile	SW to NE	N/K	13-Nov, 22:57
	5-7km N	Recorded	1	Explosion	Airburst (subsequent to previous event)	N/K	13-Nov, 22:57
	5-7km N	Recorded	1	Illumination flare	In vertical flight	N/K	13-Nov, 23:58
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 00:12
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 00:14
	5-7km NNE	Recorded		Projectile	WSW to ENE	N/K	14-Nov, 03:14
	5-7km NNE	Recorded		Projectile	E to W	N/K	14-Nov, 03:58
	5-7km NNE	Recorded		Projectile	W to E	N/K	14-Nov, 03:58
	5-7km NNE	Recorded		Projectile	In vertical flight	N/K	14-Nov, 03:58
	5-7km N	Recorded		Projectile	W to E	N/K	14-Nov, 04:25
	5-7km N	Recorded		Projectile	W to E	N/K	14-Nov, 04:38
	5-7km N	Recorded		Muzzle flash		N/K	14-Nov, 04:38
	5-7km N	Recorded	_	Projectile	W to E	N/K	14-Nov, 05:15
	2 /KIII 14	recorded		rojectiic		1 1/ 17	17 1101, 03.13

	5-7km N	Recorded	2	Projectile	SW to NE	N/K	14-Nov, 05:15
	5-7km N	Recorded		Projectile	W to E	N/K	14-Nov, 05:18
	5-7km NNE	Recorded	_	Projectile	W to E	N/K	14-Nov, 05:25
	4-6km N	Recorded	_	Projectile	E to W	N/K	14-Nov, 17:19
	4-6km N	Recorded		Projectile	In vertical flight	N/K	14-Nov, 17:19
	4-6km N	Recorded	_	Projectile	W to E	N/K	14-Nov, 18:11
	4-6km N	Recorded		Projectile	W to E	N/K	14-Nov, 18:12
SMM camera in Svitlodarsk (government-controlled,	4-6km WSW	Recorded	_	Projectile	SE to NW	N/K	13-Nov, 20:57
57km NE of Donetsk)				,			
About 2km SSE of Kamianka (government-	2-4km SE	Heard		Explosion	Undetermined	N/K	14-Nov, 09:27
controlled, 20km N of Donetsk)	2-4km SE	Heard	_	Explosion	Undetermined	N/K	14-Nov, 09:32
Orlivske (government-controlled, 82km S of Donetsk)	2-3km NNE	Heard	1	Shot		Small arms	14-Nov, 10:48
About 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	2-3km SSE	Heard		Shot	assessed as inside the disengagement area near Petrivske	Small arms	14-Nov, 12:42-12:49
	3-5km SSE	Heard	60	Explosion	Undetermined (assessed as outside the disengagement area near Petrivske)	N/K	14-Nov, 12:44-12:55
	3-5km SSE	Heard	32	Shots and bursts	Assessed as outside the disengagement area near Petrivske	Small arms	14-Nov, 12:44-12:55
About 1.5km NW of Pavlopil (government-controlled, 84km S of Donetsk)	2-3km ENE	Heard	7	Shot		Small arms	14-Nov, 12:58
Horlivka (non-government-controlled, 39km NE of Donetsk)	4-6km SW	Heard	2	Explosion	Undetermined	N/K	14-Nov, 06:54-06:55
About 1km NW of the railway station in Yasynuvata	3-4km SW	Heard	1	Explosion	Undetermined	N/K	14-Nov, 09:41
(non-government-controlled, 16km NE of Donetsk)	2-3km NW	Heard	3	Burst		HMG	14-Nov, 09:51
About 2km NW of Donetsk Railway Station (6km	3-5km NNE	Heard	3	Explosion	Undetermined	N/K	14-Nov, 09:41-09:53
NW of Donetsk city centre)	2-4km N	Heard	2	Explosion	Undetermined	N/K	14-Nov, 10:49
About 1km Dokuchaievsk (non-government-	3-4km W	Heard	_	Shot		HMG	14-Nov, 10:05
controlled, 30km SW of Donetsk)	4-5km NW	Heard		Explosion	Undetermined	N/K	14-Nov, 10:05
	6-8km NW	Heard	_	Explosion	Undetermined	N/K	14-Nov, 10:25
About 1km SE of Nyzhnie Lozove (non-government-		Heard		Shot		Small	14-Nov, 11:50
controlled, 59km NE of Donetsk)	2-3km W	Heard	1	Burst		Small	14-Nov, 11:50
Yakovlivka (non-government-controlled, 10km N of Donetsk)	5-6km N	Heard	1	Explosion	Undetermined	arms N/K	14-Nov, 11:20
Donetsk Railway Station (non-government-controlled, 6km NW of Donetsk city centre)	5-6km N	Heard	1	Explosion	Undetermined	N/K	14-Nov, 12:08
SMM camera on N edge of Popasna (government- controlled, 69km W of Luhansk)	3-7km ESE	Recorded	1	Explosion	Airburst (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 16:37
,	3-7km ESE	Recorded	1	Muzzle flash	Assessed as outside the disengagement area near Zolote	N/K	14-Nov, 16:38
	3-7km ESE	Recorded	1	Projectile	NE to SW subsequent to previous event (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 16:38
	5-7km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 16:52
Kadiivka (formerly Stakhanov, non-government-controlled, 50km West of Luhansk)	10-12km WNW	Heard	11	Explosion	Undetermined	N/K	13-Nov, 23:45-00:02
	10-12km WNW	Heard	50	Burst		HMG	13-Nov, 23:45-00:02
N edge of Popasna (government-controlled, 69km	3-5km SSE	Heard	_	Explosion	Undetermined	N/K	13-Nov, 23:46
West of Luhansk)	3-5km SSE	Heard	4	Burst		HMG	13-Nov, 23:46-23:48
	3-5km SSE	Heard	_	Explosion	Undetermined	N/K	13-Nov, 23:52-23:57
	3-5km SSE	Heard	_	Burst		HMG	13-Nov, 23:52-23:57
	3-5km SSE	Heard	2	Explosion	Undetermined	N/K	14-Nov, 00:01-00:08
	3-5km SSE	Heard	34	Burst		HMG	14-Nov, 00:01-00:08
Stanytsia Luhanska (government-controlled, 16km North East of Luhansk)	3-6km SE	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Stanytsia Luhanska)	N/K	14-Nov, 04:26
Holubivka (formerly Kirovsk, non-government- controlled, 51km west of Luhansk)	10-12km SW	Heard	4	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 10:08
Katerynivka (government-controlled 64km west of Luhansk)	3-5km WSW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	Artillery (type N/K)	14-Nov, 10:45

About 700m NE of Katerynivka (government- controlled 64km west of Luhansk)	4-6km SSW	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	Mortar (type N/K)	14-Nov, 13:40-13:51
Zolote (government-controlled, 60km west of Luhansk)	2-3km ESE	Heard	3	Burst	Assessed as outside the disengagement area near Zolote	HMG	14-Nov, 13:15-13:16
	3-4km ESE	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	Mortar (type N/K)	14-Nov, 13:20
Molodizhne (non-government-controlled, 63 km NW of Luhansk)	0.6-0.8km NE	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 10:45
About 2km SW of Berezivske (non-government-controlled, 53km north-west of Luhansk)	2-3km NW	Heard	24	Shot	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 12:47-13:03
	2-3km NW	Heard	5	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 12:47-13:03
	2-3km NW	Heard	11	Burst	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 12:47-13:03
	2-3km NW	Heard	11	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 13:03-13:19
	2-3km NW	Heard	25	Burst	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 13:03-13:19
	2-3km NW	Heard	29	Shot	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 13:03-13:19
	3-4km NNW	Heard	40	Shot	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 13:24-13:39
	8-10km W	Heard	11	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 13:24-13:39
	8-10km W	Heard	5	Burst	Assessed as outside the disengagement area near Zolote	N/K	14-Nov, 13:24-13:39
About 1km E of Popasna (government-controlled, 69km West of Luhansk)	2-3km SSE	Heard	9	Explosion	Undetermined	N/K	14-Nov, 11:15-11:16
N edge of Popasna (government-controlled, 69km	8-10km S	Heard	2	Explosion	Undetermined	N/K	14-Nov, 13:57-14:00
West of Luhansk)	5-7km S	Heard	20	Explosion	Undetermined		14-Nov, 14:33-14:56
Kadiivka (formerly Stakhanov, non-government-	8-10km W	Heard	40	Explosion	Undetermined	N/K	14-Nov, 14:08-14:30
controlled, 50km West of Luhansk)	8-12km WSW	Heard	19	Explosion	Outgoing	Artillery (type N/K)	14-Nov, 14:31-14:47
	8-12km W	Heard	19	Explosion	Impact (subsequent to previous event)	Artillery (type N/K)	14-Nov, 14:31-14:47
	12-15km N	Heard	3	Explosion	Undetermined	N/K	14-Nov, 14:59-15:17
	12-15km NW	Heard		Explosion	Undetermined (unable to assess if inside or outside the disengagement area near Zolote )	N/K	14-Nov, 17:01-17:31
	14-16km NNW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 17:01-17:31
	12-15km NW	Heard	5	Burst	Unable to assess if inside or outside the disengagement area near Zolote	HMG	14-Nov, 17:01-17:31
	14-16km N	Heard	8	Explosion	Undetermined	N/K	14-Nov, 17:32-18:00
	12-15km NW	Heard	1	Explosion	Undetermined (unable to assess if inside or outside the disengagement area near Zolote )	N/K	14-Nov, 17:45
	10-12km W	Heard	6	Explosion	Undetermined	N/K	14-Nov, 16:27-17:00
	12-15km NW	Heard	21	Explosion	Undetermined (unable to assess if inside or outside the disengagement area near Zolote )	N/K	14-Nov, 16:27-17:00
	12-15km NW	Heard	20	Burst	Unable to assess if inside or outside the disengagement area near Zolote	HMG	14-Nov, 16:27-17:00