

Daily Report 274/2019

19 November 2019¹

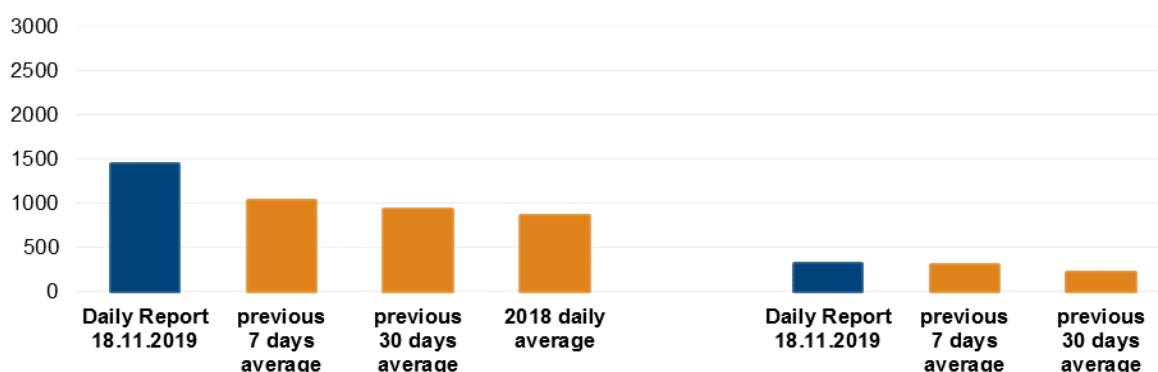
Summary

- Compared with the previous 24 hours, the SMM recorded more ceasefire violations in Donetsk region and fewer in Luhansk region.
- The SMM continued to monitor the situation at the Petrivske and Zolote disengagement areas.
- Inside the Stanytsia Luhanska disengagement area, the Mission continued to observe construction works at the broken section of the bridge.
- The SMM observed four weapons in violation of the withdrawal lines in non-government-controlled areas of Donetsk region.
- The SMM saw for the first time unexploded ordnance on a road between the entry-exit checkpoint near Pyshevyk and checkpoint near Verkhnohyrokiivske.
- Restrictions of the SMM's freedom of movement continued, including at checkpoints near government-controlled Nevelske and non-government-controlled Boikiivske and Sosniivske, as well as near border crossing points in non-government-controlled areas of Luhansk region.*

Ceasefire violations²

Number of recorded ceasefire violations³

Number of recorded explosions⁴



¹ Based on information from the Monitoring Teams as of 19:30, 18 November 2019. All times are in Eastern European Time.

² For a complete breakdown of ceasefire violations, please see the annexed table. During the reporting period, fog limited the observation capabilities of some of the SMM cameras.

³ Including explosions.

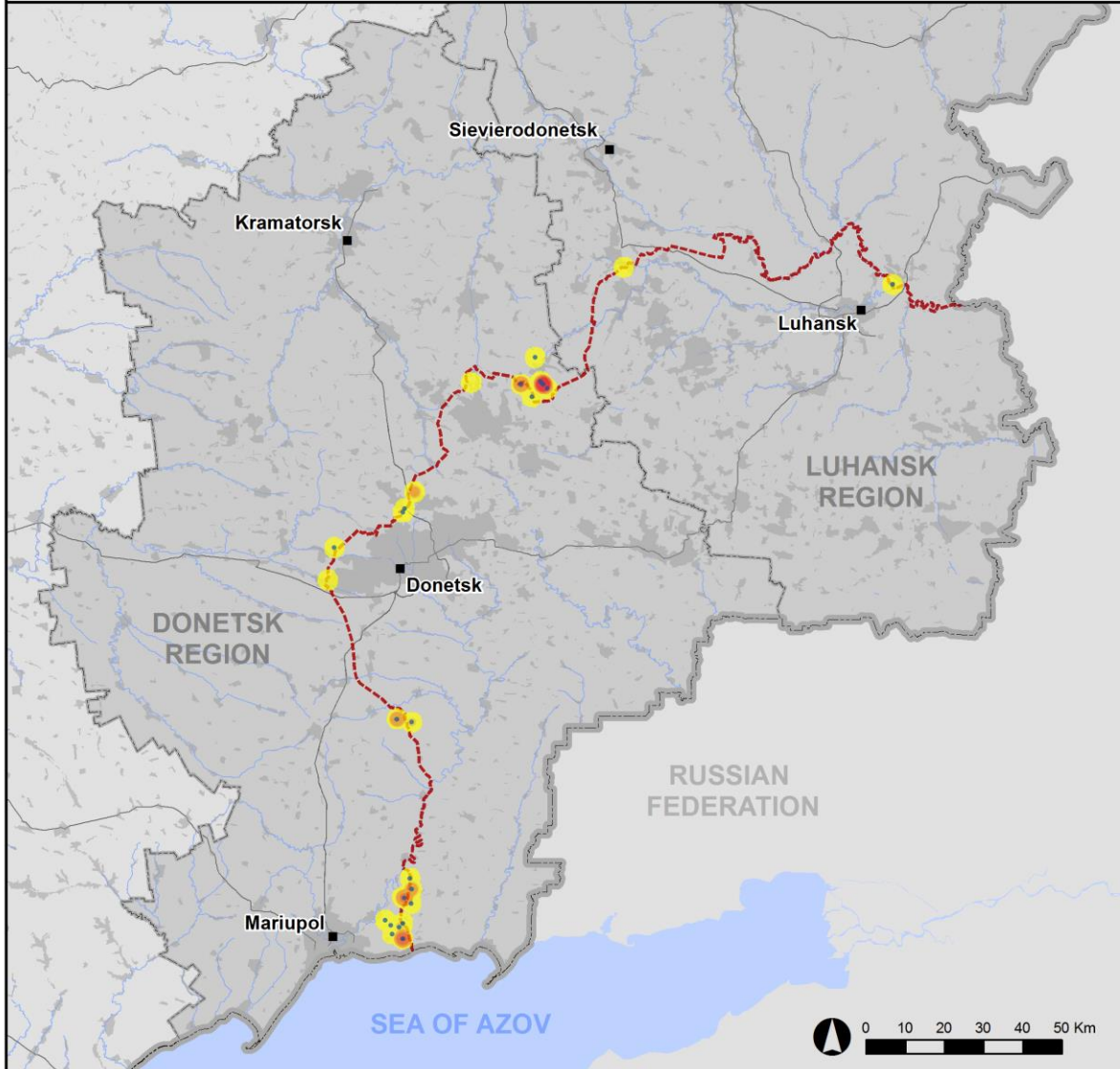
⁴ Including from unidentified weapons.

Map of recorded ceasefire violations

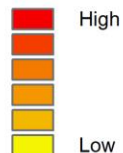


Organization for Security and
Co-operation in Europe
Special Monitoring Mission to Ukraine

Ceasefire violations observed by the SMM 18 November 2019



Ceasefire violation concentration



- Explosion
- Settlement
- Estimated line of contact

Sources: Administrative Boundaries - OCHA; Roads, Rivers - OpenStreetMap; Sea - VLIZ (2005). IHO Sea Areas; Other - OSCE.

Coordinate System: WGS 1984 UTM Zone 37N

This map is provided for illustrative purposes only. Its content is not warranted to be error-free and does not imply endorsement or acceptance by the OSCE SMM.

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Created: 19/11/2019

In Donetsk region, the SMM recorded more ceasefire violations, including more explosions (about 315), compared with the [previous 24 hours](#) (about 290 explosions). The majority of ceasefire violations, including the majority of explosions, were recorded at southerly directions of Svitlodarsk (government-controlled, 57km north-east of Donetsk), in areas north of Shyrokyne (government-controlled, 100km south of Donetsk), and at easterly directions of Hnutove (government-controlled, 90km south of Donetsk).

In Luhansk region, the SMM recorded fewer ceasefire violations (two in total, including an explosion), compared with the [previous 24 hours](#) (about 180 explosions).

Disengagement areas near Petrivske, Zolote and Stanytsia Luhanska⁵

On 18 November, positioned about 2km north of Petrivske (non-government-controlled, 41km south of Donetsk), the SMM saw ten deminers from non-government-controlled areas in a minibus and a truck heading towards **the disengagement area**. While positioned at the same location, the SMM heard and saw an explosion about 2.5km west-south-west, assessed as a controlled detonation inside the disengagement area and two minutes later, it heard ten explosions assessed as impacts, and saw smoke, about 2.5km south-south-west, assessed as inside the disengagement area. Positioned about 1.2km north-east of Bohdanivka (government-controlled, 41km south-west of Donetsk), the SMM heard two explosions at least about 3km east and at least 2km south, both assessed as controlled detonations and outside the disengagement area.

Outside the disengagement area, on 16 November, an SMM long-range unmanned aerial vehicle (UAV) spotted two infantry fighting vehicles (IFV) (BMP variant) and an armoured personnel carrier (probable MT-LB) about 1.2km south-east of its south-western edge, assessed as belonging to the Ukrainian Armed Forces. About 3km north-west of the area's north-western edge, the UAV spotted an armoured combat vehicle (ACV), assessed as belonging to the Ukrainian Armed Forces. About 3km north-east of the north-eastern edge of the disengagement area, the UAV also spotted an ACV, assessed as belonging to the armed formations.

On 18 November, positioned on the northern edge of **the disengagement area near Zolote** (government-controlled, 60km west of Luhansk), the SMM heard an explosion 600-800m south, inside the area, assessed as a controlled detonation.

On the same day, positioned on the southern edge of the disengagement area, the SMM saw 17 workers and seven deminers from non-government-controlled areas with metal detectors, and three members of the armed formations (wearing armbands with "JCCC" written on them) entering the disengagement area. Thereafter, the Mission saw eight workers clearing vegetation 1-2m north and south of a road leading east towards Zolote-5/Mykhailivka (non-government-controlled, 58km west of Luhansk). Positioned on the southern edge of the disengagement area, the SMM saw smoke about 300m north, assessed as burning vegetation.

Outside the disengagement area, on 15 November, in Zolote-4/Rodina (government-controlled, 59km west of Luhansk), an SMM mini-UAV spotted for the first time a 40m-long extension (assessed as constructed between 12 and 22 October) of a trench (about 200m), about 870m north-east of the disengagement area. On 16 November, an SMM long-range UAV spotted two

⁵ Disengagement is foreseen in the Framework Decision of the Trilateral Contact Group relating to disengagement of forces and hardware of 21 September 2016.

IFVs (BMP-variants) about 130m east of the checkpoint of the Ukrainian Armed Forces about 300m north of the disengagement area.

On 18 November, the SMM camera in Zolote recorded a projectile in flight 2-4km east-south-east, assessed as outside the disengagement area.

On 18 November, inside **the disengagement area near Stanytsia Luhanska** (government-controlled, 16km north-east of Luhansk), the SMM observed ten workers from government-controlled areas painting pillars of the newly constructed section of the Stanytsia Luhanska bridge (15km north-east of Luhansk) and consolidating the ground at its northern end.

On the same day, the SMM saw five workers from non-government-controlled areas installing five concrete light poles at the parking lot of the checkpoint of the armed formations south of the bridge. The Mission observed seven workers clearing and burning vegetation around 50m west of the road south of the checkpoint. The SMM also saw at least seven members of the armed formations (wearing armbands with “JCCC” written on them) between the checkpoint and the southern edge of the newly constructed section of the bridge.

Outside the disengagement area, on 17 November, an SMM mini-UAV spotted an anti-aircraft gun (ZU-23, 23mm) near the Prince Ihor monument. On the evening of the same day, while on the eastern edge of Stanytsia Luhanska, the SMM heard an undetermined explosion at an assessed range of 4-5km south-west, assessed as outside the disengagement area but within its 5km periphery.

SMM long-range UAV recorded rocket propelled grenade launcher fire

On 17 November, in the eastern outskirts of Krasnohorivka (government-controlled, 21km west of Donetsk), an SMM long-range UAV spotted three persons, one of which fired two rounds of a rocket-propelled grenade launcher (RPG-7) eastwards. The UAV also spotted an impact in the western outskirts of Staromykhailivka (non-government-controlled, 15km west of Donetsk), 500m from the nearest civilian houses.

Withdrawal of weapons

The SMM continued to monitor the withdrawal of weapons in implementation of the Memorandum and the Package of Measures and its Addendum.

The Mission observed four weapons in violation of the withdrawal lines in non-government-controlled areas of Donetsk region. It observed 24 weapons beyond withdrawal lines but outside of designated storage sites mainly in non-government-controlled areas of Luhansk region (for further details, see the tables below).

Indications of military and military-type presence in the security zone⁶

The SMM observed military and military-type presence inside the security zone on both sides of the contact line, including armoured reconnaissance vehicles, IFVs, a trench digger and an anti-aircraft gun in government-controlled areas of Donetsk and Luhansk regions, as well as

⁶ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

ACVs in non-government-controlled areas of Donetsk and Luhansk regions (for further details, see the table below).

Anti-tank guided missile tailfin near a school in Zolote-5/Mykhailivka and unexploded ordnance (UXO) on a road between Pyshevyk and Verkhnoшыrovkivske

On 15 November, in Zolote-5/Mykhailivka (non-government-controlled, 58km west of Luhansk), an SMM mini-UAV spotted the tailfin of an exploded anti-tank guided missile (9M111 *Fagot*) in an open field about 350m east of a functioning School No. 4, about 150m north of the nearest civilian houses.

On 17 November, the SMM saw for the first time a piece of UXO, assessed as a (40mm) rocket (OG-7 type) in a field 5m north of the road between the entry-exit checkpoint near Pyshevyk (government-controlled, 84km south of Donetsk) and a checkpoint of the armed formations near Verkhnoшыrovkivske (formerly Oktiabr, non-government-controlled, 85km south of Donetsk).

On 18 November, the Mission saw for the first time a mine hazard sign (a red square with “Stop. Mines” written in Ukrainian and Russian) in a residential area on the south-eastern edge of Semyhiria (government-controlled, 58km north-east of Donetsk).

On the same day, the Mission also saw white strips attached to sticks on both sides of an unpaved track (300-400m-long) leading east from Novoluhanske (government-controlled, 53km north-east of Donetsk) towards the Vuhlehirsk Thermal Power Plant.

SMM facilitation of repairs to and operation of critical civilian infrastructure

The SMM continued to facilitate the operation of the Donetsk Filtration Station (DFS) (15km north of Donetsk). An SMM camera at the DFS and SMM patrols positioned in and near Avdiivka (government-controlled, 17km north of Donetsk) and Kamianka (government-controlled, 20km north of Donetsk) recorded ceasefire violations in the 5km periphery of the DFS (see ceasefire violations table below).

Border areas not under government control

While at a border crossing point near Izvaryne (52km south-east of Luhansk) for about 30 minutes, the SMM saw 38 cars (16 with Ukrainian, 12 with Russian Federation, and one with Belarusian licence plates, as well as nine with “LPR” plates), four covered cargo trucks (two with Ukrainian and two with Belarusian licence plates), as well as three pedestrians (two women and one man, mixed ages) exiting Ukraine. Thereafter, a member of the armed formations told the SMM to leave the area.*

While at a border crossing point near Voznesenivka (formerly Chervonopartyzansk, 65km south-east of Luhansk) for about ten minutes, the Mission saw a bus with Russian Federation licence plates entering Ukraine, as well as five cars and three covered cargo trucks (all with Ukrainian licence plates) exiting Ukraine. Thereafter, a member of the armed formations told the SMM to leave the area.*

The Mission continued monitoring in Kherson, Odessa, Lviv, Ivano-Frankivsk, Kharkiv, Dnipro, Chernivtsi and Kyiv.

***Restrictions of the SMM's freedom of movement or other impediments to fulfilment of its mandate**

The SMM's monitoring and freedom of movement are restricted by security hazards and threats, including risks posed by mines, UXO and other impediments – which vary from day to day. The SMM's mandate provides for safe and secure access throughout Ukraine. All signatories of the Package of Measures have agreed on the need for this safe and secure access, that restriction of the SMM's freedom of movement constitutes a violation, and on the need for rapid response to these violations. They have also agreed that the JCCC should contribute to such response and co-ordinate mine clearance. Nonetheless, the armed formations in parts of Donetsk and Luhansk regions frequently deny the SMM access to areas adjacent to Ukraine's border outside control of the Government (for example, see below). The SMM's operations in Donetsk and Luhansk regions remain restricted following [the fatal incident of 23 April 2017 near Pryshyb](#); these restrictions continued to limit the Mission's observations.

Denial of access:

- At a checkpoint about 2km north of Nevelske (government-controlled, 18km north-west of Donetsk) an unarmed Ukrainian Armed Forces personnel denied the SMM passage, citing “security of the SMM”.
- At a checkpoint between Boikivske (formerly Telmanove, non-government-controlled, 67km south-east of Donetsk) and Staromarivka (62km south of Donetsk), an armed member of the armed formations denied the SMM passage, citing “orders from superiors”.
- At a checkpoint north-east of Sosnivske (non-government-controlled, 78km south of Donetsk), a member of the armed formations denied the Mission passage, citing “orders from superiors”.
- At a border crossing point near Izvaryne (non-government-controlled, 52km south-east of Luhansk), a member of the armed formations told the SMM to leave the area.
- At a border crossing point near Voznesenivka (formerly Chervonopartyzansk, non-government-controlled, 65km south-east of Luhansk), a member of the armed formations told the SMM to leave the area.

Regular restrictions related to disengagement areas and mines/UXO:

- The sides continued to deny the SMM full access, as well as the ability to travel certain roads previously identified as important for effective monitoring by the Mission and for civilians' movement, through failure to conduct comprehensive clearance of mines, UXO and other obstacles.

Other impediments:

- On 16 November, an SMM long-range UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying between Ozarianivka (formerly Pershe Travnia, government-controlled, 52km north of Donetsk) and Petrivske (non-government-controlled, 41km south of Donetsk) and again between Kalynove (non-

government-controlled, 60km west of Luhansk) and Kaiutyne (non-government-controlled, 47km north-east of Donetsk).⁷

- On 17 November, an SMM long-range UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying between Stepanivka (government-controlled, 54km north of Donetsk) and Ivanopillia (government-controlled, 51km north of Donetsk), Pravdivka (government-controlled, 38km north of Donetsk) and Yasne (non-government-controlled, 30km south-west of Donetsk), as well as between Petrivske and Diakove (non-government-controlled, 70km south-west of Luhansk).
- On 18 November, an SMM mid-range UAV experienced GPS signal interference, assessed as probable jamming while flying near Nova Marivka (non-government-controlled, 64km south of Donetsk).

⁷ The interference could have originated from anywhere within the radius of kilometres from the UAVs' positions.

Table of weapons

Weapons in violation of the withdrawal lines

| Date | No. of weapons | Type of weapon | Location | Source of observation |
|--|----------------|---|--|-----------------------|
| Non-government-controlled areas | | | | |
| 16/11/2019 | 3 | Tank (T-64) | Near Novoselivka (37km north-east of Donetsk) (for previous observations in the area, see SMM Daily Report 5 November 2019) | Long-range UAV |
| 17/11/2019 | 1 | Probable surface-to-air missile system (9K35 <i>Strela-10</i>) | Near Dokuchaievsk (30km south-west of Donetsk) | |

Beyond withdrawal lines but outside of designated storage sites

| Date | No. of weapons | Type of weapon | Location | Source of observation |
|--|----------------|---|---|-----------------------|
| Government-controlled areas | | | | |
| 18/11/2019 | 1 | Self-propelled anti-aircraft gun (2K22 <i>Tunguska</i>) | In Kurakhove (40km west of Donetsk) | Patrol |
| 18/11/2019 | 1 | Self-propelled anti-aircraft gun (2K22 <i>Tunguska</i>) | Near Novoselydivka (38km west of Donetsk) | Patrol |
| Non-government-controlled areas | | | | |
| 15/11/2019 | 18 | Towed howitzer (ten 2A65 <i>Msta-B</i> , 152mm and eight 2A36 <i>Giatsint-B</i> , 152mm) | In two compounds near Khrustalniyi (formerly Krasnyi Luch, 54km south-west of Luhansk) (for previous observations in the area, see SMM Daily Report 22 October 2019) | Mini-UAV |
| | 3 | Tank (two T-64 and a T-72) | | |
| | 1 | Surface-to-air missile system (9K35 <i>Strela-10</i>) | | |

Table of indications of military and military-type presence in the security zone⁸

| Date | No. | Type | Location | Source of observation |
|------------------------------------|-----|--|---|-----------------------|
| Government-controlled areas | | | | |
| 16/11/2019 | 1 | Armoured reconnaissance vehicle (BRDM-2) | Near Svitlodarsk (57km north-east of Donetsk) | Long-range UAV |
| | 2 | Armoured reconnaissance vehicle (BRDM-2) | Near Troitske (69km west of Luhansk) | |
| | 2 | Infantry fighting vehicle (BMP variant) | | |
| | 2 | Armoured combat vehicle | Near Starohnativka (51km south of Donetsk) | |
| 17/11/2019 | 1 | Armoured combat vehicle | Near Nevelske (18km north-west of Donetsk) | Long-range UAV |
| | 3 | Armoured combat vehicle | Near Krasnohorivka (21km west of Donetsk) | |

⁸The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

| | | | | |
|--|---|--|--|----------------|
| | 2 | Armoured combat vehicle | Near a residential area in Trokhizbenka (32km north-west of Luhansk) | |
| | 3 | Armoured combat vehicle | Near Krymske (42km north-west of Luhansk) | |
| | 1 | Infantry fighting vehicle (BMP-2) | In Zolote (60km west of Luhansk) | |
| | 4 | Armoured combat vehicle | | |
| | 1 | Trench digger (probable PZM-2) | | |
| | 1 | Infantry fighting vehicle (BMP-1) | Near Troitske (69km west of Luhansk) | |
| | 2 | Armoured personnel carrier (MT-LB) | | |
| | 1 | Armoured combat vehicle | | |
| | 1 | Probable armoured combat vehicle | Near Myronivskiyi (62km north-east of Donetsk) | |
| | 1 | Armoured reconnaissance vehicle (BRDM-2) | Near Svitlodarsk (57km north-east of Donetsk) | |
| | 1 | Armoured combat vehicle | Near Troitske (30km north of Donetsk) | |
| | 1 | Armoured combat vehicle | Near Kamianka (20km north of Donetsk) | |
| | 2 | Armoured combat vehicle | Near Zalizne (formerly Artemove, 42km north-east of Donetsk) | |
| 18/11/2019 | 1 | Anti-aircraft gun (ZU-23, 23mm) | Near Nevelske (18km north-west of Donetsk) | Patrol |
| Non-government-controlled areas | | | | |
| 16/11/2019 | 2 | Armoured combat vehicle | Near Molodizhne (63km west of Luhansk) | Long-range UAV |
| | 1 | Armoured combat vehicle | Near Kalynove-Borshchuvate (61km west of Luhansk) | |
| 17/11/2019 | 1 | Armoured combat vehicle | Pryshyb (34km north-west of Luhansk) | Mini-UAV |
| | 2 | Infantry fighting vehicle (BMP variant) | In a compound in Debaltseve (58km north-east of Donetsk) | |

Table of ceasefire violations as of 18 November 2019⁹

| SMM position | Event location | Means | No. | Observation | Description | Weapon | Date, time |
|--|----------------|----------|------------|-------------|---|---------------|---------------|
| SMM camera in Avdiivka (government-controlled, 17km N of Donetsk) | 3-5km ESE | Recorded | 1 | Projectile | SW to NE | N/K | 17-Nov, 20:05 |
| | 3-5km SE | Recorded | 4 | Explosion | Undetermined (also recorded by SMM camera at the DFS) | N/K | 17-Nov, 20:06 |
| | 3-5km SE | Recorded | 11 | Explosion | Undetermined (also recorded by SMM camera at the DFS) | N/K | 17-Nov, 20:07 |
| | 3-5km SE | Recorded | 10 | Explosion | Undetermined (also recorded by SMM camera at the DFS) | N/K | 17-Nov, 20:08 |
| | 3-5km SE | Recorded | 2 | Projectile | WSW to ENE | N/K | 17-Nov, 20:13 |
| | 3-5km SE | Recorded | 4 | Projectile | In vertical flight | N/K | 17-Nov, 20:13 |
| | 3-5km ESE | Recorded | 1 | Projectile | NNE to SSW | N/K | 17-Nov, 20:20 |
| | 3-5km ESE | Recorded | 6 | Projectile | WSW to ENE | N/K | 17-Nov, 20:29 |
| | 3-5km ESE | Recorded | 1 | Projectile | NNE to SSW | N/K | 17-Nov, 20:30 |
| | 3-5km ESE | Recorded | 2 | Projectile | SW to NE | N/K | 17-Nov, 20:30 |
| | 3-5km ESE | Recorded | 1 | Projectile | NNE to SSW | N/K | 17-Nov, 20:32 |
| | 3-5km ESE | Recorded | 1 | Projectile | NNE to SSW | N/K | 17-Nov, 20:33 |
| | 3-5km SE | Recorded | 1 | Projectile | WSW to ENE | N/K | 17-Nov, 20:33 |
| | 3-5km SE | Recorded | 10 | Projectile | WSW to ENE | N/K | 17-Nov, 20:45 |
| 3-5km SE | Recorded | 3 | Projectile | W to E | N/K | 17-Nov, 20:54 | |
| SMM camera in Chermalyk (government-controlled, 77km S of Donetsk) | 3-5km SE | Recorded | 7 | Projectile | NE to SW | N/K | 17-Nov, 18:41 |
| | 2-4km SE | Recorded | 4 | Projectile | NE to SW | N/K | 17-Nov, 21:21 |
| | 2-4km SE | Recorded | 1 | Explosion | Airburst | N/K | 17-Nov, 21:21 |
| | 2-4km SSE | Recorded | 4 | Projectile | NE to SW | N/K | 17-Nov, 22:00 |
| | 2-4km SSE | Recorded | 3 | Projectile | NE to SW | N/K | 17-Nov, 22:01 |
| | 2-4km SSE | Recorded | 1 | Projectile | NE to SW | N/K | 17-Nov, 22:01 |
| | 2-4km SSE | Recorded | 1 | Explosion | Impact | N/K | 17-Nov, 22:01 |
| | 2-4km SSE | Recorded | 2 | Projectile | NE to SW | N/K | 17-Nov, 22:02 |
| | 2-4km SSE | Recorded | 4 | Projectile | NE to SW | N/K | 17-Nov, 22:11 |
| | 2-4km SE | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 22:12 |
| | 2-4km SE | Recorded | 2 | Projectile | NE to SW | N/K | 18-Nov, 05:10 |
| | 2-4km SE | Recorded | 1 | Projectile | SW to NE | N/K | 18-Nov, 18:07 |
| | 2-4km SE | Recorded | 2 | Projectile | SW to NE | N/K | 18-Nov, 18:08 |
| | 2-4km SE | Recorded | 5 | Projectile | N to S | N/K | 18-Nov, 18:08 |
| 3-5km SE | Recorded | 2 | Projectile | SW to NE | N/K | 18-Nov, 18:28 | |
| SMM camera at Donetsk Filtration Station (15km N of Donetsk) | 1-2km S | Recorded | 1 | Projectile | NW to SE | N/K | 17-Nov, 19:24 |
| | 1-2km S | Recorded | 7 | Projectile | NE to SW | N/K | 17-Nov, 19:43 |
| | 1-2km SSW | Recorded | 2 | Projectile | E to W | N/K | 17-Nov, 19:44 |
| | 1-2km SSW | Recorded | 7 | Projectile | E to W | N/K | 17-Nov, 19:45 |
| | 1-2km SSW | Recorded | 5 | Projectile | E to W | N/K | 17-Nov, 19:46 |
| | 1-2km SSW | Recorded | 2 | Projectile | ENE to WSW | N/K | 17-Nov, 19:52 |
| | 1-2km SSW | Recorded | 1 | Projectile | NE to SW | N/K | 17-Nov, 19:52 |
| | 1-2km SSW | Recorded | 1 | Projectile | E to W | N/K | 17-Nov, 19:52 |
| | 2-4km SSW | Recorded | 2 | Explosion | Undetermined | N/K | 17-Nov, 20:00 |

⁹ 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 camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk) | 1-2km SSW | Recorded | 1 | Projectile | W to E | N/K | 17-Nov, 20:01 |
| | 1-2km SSW | Recorded | 1 | Projectile | W to E (also recorded by SMM camera in Avdiivka) | N/K | 17-Nov, 20:02 |
| | 1.5-3km SSW | Recorded | 7 | Projectile | WNW to ESE (also recorded by SMM camera in Avdiivka) | N/K | 17-Nov, 20:07 |
| | 0.7-1km SSE | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:08 |
| | 0.7-1km SSE | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:10 |
| | 0.7-1km S | Recorded | 4 | Explosion | Undetermined | N/K | 17-Nov, 20:10 |
| | 1.5-3km SSW | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:10 |
| | 2-4km SSW | Recorded | 10 | Projectile | SE to NW | N/K | 17-Nov, 20:11 |
| | 1.5-3km S | Recorded | 2 | Explosion | Undetermined | N/K | 17-Nov, 20:11 |
| | 2-4km SSW | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:34 |
| | 1.5-2km SSW | Recorded | 1 | Projectile | ESE to WNW | N/K | 17-Nov, 20:52 |
| | 1-2km SSW | Recorded | 1 | Projectile | NW to SE | N/K | 17-Nov, 21:36 |
| | 0.7-1km S | Recorded | 9 | Muzzle flash | | N/K | 17-Nov, 21:39 |
| | 0.7-1km S | Recorded | 14 | Muzzle flash | | N/K | 17-Nov, 22:02 |
| | 0.7-1km S | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 22:14 |
| | 2-3km SSW | Recorded | 1 | Projectile | ESE to WNW | N/K | 17-Nov, 22:55 |
| | 1-3km SSW | Recorded | 1 | Explosion | Undetermined (also recorded by SMM camera in Avdiivka) | N/K | 17-Nov, 23:58 |
| | 2-3km SSW | Recorded | 4 | Projectile | ESE to WNW | N/K | 18-Nov, 00:39 |
| | 2-3km SSW | Recorded | 4 | Projectile | ESE to WNW | N/K | 18-Nov, 00:47 |
| | 0.7-1km SSE | Recorded | 4 | Muzzle flash | | N/K | 18-Nov, 01:01 |
| | 2-3km SSW | Recorded | 2 | Projectile | ESE to WNW | N/K | 18-Nov, 01:02 |
| | 2-3km SSW | Recorded | 3 | Projectile | ESE to WNW | N/K | 18-Nov, 01:26 |
| | 3-5km ESE | Recorded | 1 | Projectile | SSW to NNE | N/K | 17-Nov, 20:03 |
| | 3-5km E | Recorded | 1 | Projectile | | N/K | 17-Nov, 20:09 |
| | 3-5km ESE | Recorded | 3 | Explosion | Undetermined | N/K | 17-Nov, 20:09 |
| | 3-5km ESE | Recorded | 3 | Explosion | Undetermined | N/K | 17-Nov, 20:09 |
| | 3-5km E | Recorded | 2 | Explosion | Undetermined | N/K | 17-Nov, 20:10 |
| | 3-5km SE | Recorded | 2 | Projectile | NNE to SSW | N/K | 17-Nov, 20:17 |
| | 3-5km SE | Recorded | 7 | Projectile | NNE to SSW | N/K | 17-Nov, 20:18 |
| | 3-5km SE | Recorded | 5 | Projectile | SSW to NNE | N/K | 17-Nov, 20:19 |
| | 3-5km SE | Recorded | 1 | Projectile | NNE to SSW | N/K | 17-Nov, 20:19 |
| | 3-5km ESE | Recorded | 7 | Projectile | SSW to NNE | N/K | 17-Nov, 20:47 |
| | 3-5km ESE | Recorded | 4 | Projectile | SSW to NNE | N/K | 17-Nov, 20:48 |
| | 3-5km E | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:49 |
| | 3-5km E | Recorded | 3 | Explosion | Undetermined | N/K | 17-Nov, 20:50 |
| | 3-5km E | Recorded | 2 | Explosion | Undetermined | N/K | 17-Nov, 20:55 |
| | 3-5km SE | Recorded | 1 | Projectile | NNE to SSW | N/K | 17-Nov, 20:56 |
| | 3-5km ESE | Recorded | 2 | Explosion | Outgoing | N/K | 17-Nov, 20:56 |
| | 3-5km ESE | Recorded | 2 | Projectile | SSW to NNE (subsequent to previous event) | N/K | 17-Nov, 20:56 |
| | 3-5km E | Recorded | 2 | Impact | Undetermined (subsequent to previous event) | N/K | 17-Nov, 20:56 |
| | 3-5km SE | Recorded | 6 | Projectile | SSW to NNE | N/K | 17-Nov, 20:57 |
| | 3-5km E | Recorded | 1 | Explosion | Airburst | N/K | 17-Nov, 21:23 |
| | 3-5km SE | Recorded | 3 | Projectile | NNE to SSW | N/K | 17-Nov, 21:34 |

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|--|-----------|----------|----|--------------------|--|-----|---------------|
| | 3-5km E | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 21:35 |
| | 2-4km ESE | Recorded | 1 | Projectile | SSW to NNE | N/K | 17-Nov, 21:44 |
| | 2-4km ESE | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 21:44 |
| | 3-5km ESE | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 21:44 |
| | 2-4km E | Recorded | 4 | Explosion | Undetermined | N/K | 17-Nov, 21:55 |
| | 3-5km SE | Recorded | 4 | Projectile | SSW to NNE | N/K | 17-Nov, 22:41 |
| | 3-5km E | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 22:46 |
| | 3-5km ESE | Recorded | 3 | Projectile | SSW to NNE | N/K | 17-Nov, 23:11 |
| | 3-5km E | Recorded | 2 | Explosion | Undetermined | N/K | 17-Nov, 23:54 |
| | 3-5km E | Recorded | 2 | Explosion | Undetermined | N/K | 18-Nov, 00:14 |
| | 3-5km ESE | Recorded | 5 | Projectile | SW to NE | N/K | 18-Nov, 02:18 |
| | 3-5km ESE | Recorded | 3 | Projectile | SW to NE | N/K | 18-Nov, 03:33 |
| | 3-5km ESE | Recorded | 1 | Projectile | WNW to ESE | N/K | 18-Nov, 03:33 |
| | 3-5km ESE | Recorded | 20 | Projectile | SW to NE | N/K | 18-Nov, 03:34 |
| | 3-5km ESE | Recorded | 4 | Projectile | SW to NE | N/K | 18-Nov, 03:45 |
| | 3-5km ESE | Recorded | 19 | Projectile | SW to NE | N/K | 18-Nov, 03:56 |
| | 3-5km ESE | Recorded | 1 | Explosion | Also recorded by SMM camera in Lomakyne | N/K | 18-Nov, 10:50 |
| | 3-5km ESE | Recorded | 1 | Muzzle flash | | N/K | 18-Nov, 18:15 |
| | 3-5km ESE | Recorded | 1 | Projectile | NNW to SSE | N/K | 18-Nov, 18:15 |
| | 3-5km ESE | Recorded | 4 | Projectile | SSW to NNE | N/K | 18-Nov, 18:16 |
| | 3-5km ESE | Recorded | 2 | Projectile | NNW to SSE | N/K | 18-Nov, 18:16 |
| | 3-5km ESE | Recorded | 1 | Projectile | SSW to NNE | N/K | 18-Nov, 18:17 |
| SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) | 2-4km ENE | Recorded | 1 | Illumination flare | In vertical flight | N/K | 17-Nov, 23:50 |
| SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk) | 2-4km NNE | Recorded | 2 | Projectile | W to E | N/K | 17-Nov, 21:48 |
| SMM camera at entry-exit checkpoint in Pyshchevyk (government-controlled, 84km S of Donetsk) | 2-4km ESE | Recorded | 3 | Projectile | WSW to ENE | N/K | 17-Nov, 22:56 |
| | 2-4km ESE | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 23:01 |
| | 2-4km ESE | Recorded | 6 | Projectile | WSW to ENE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:04 |
| | 2-4km ESE | Recorded | 6 | Explosion | Undetermined (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:04 |
| | 2-4km ESE | Recorded | 5 | Projectile | NNW to SSE (also recorded by an SMM camera in Chermalyk) | N/K | 17-Nov, 23:06 |
| | 2-4km ESE | Recorded | 1 | Projectile | SSW to NNE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:12 |
| | 2-4km ESE | Recorded | 1 | Projectile | SSW to NNE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:14 |
| | 2-4km ESE | Recorded | 2 | Projectile | SSW to NNE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:18 |

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|--|-----------|----------|------------|-----------------------------------|---|---------------|---------------|
| | 2-4km ESE | Recorded | 1 | Burst | SSW to NNE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:18 |
| | 2-4km ESE | Recorded | 2 | Projectile | SSW to NNE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:23 |
| | 2-4km ESE | Recorded | 3 | Projectile | SSW to NNE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:24 |
| | 2-4km ESE | Recorded | 2 | Projectile | SSW to NNE (also recorded by SMM camera in Chermalyk) | N/K | 17-Nov, 23:25 |
| SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk) | 2-4km ESE | Recorded | 1 | Projectile | SSW to NNE | N/K | 18-Nov, 00:06 |
| | 3-5km N | Recorded | 6 | Projectile | E to W | N/K | 17-Nov, 18:24 |
| | 3-5km N | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 18:36 |
| | 3-5km N | Recorded | 5 | Projectile | ESE to WNW | N/K | 17-Nov, 18:43 |
| | 3-5km N | Recorded | 26 | Projectile | E to W | N/K | 17-Nov, 18:44 |
| | 3-5km N | Recorded | 8 | Projectile | ESE to WNW | N/K | 17-Nov, 18:45 |
| | 3-5km N | Recorded | 14 | Projectile | E to W | N/K | 17-Nov, 19:19 |
| | 3-5km N | Recorded | 4 | Projectile | E to W | N/K | 17-Nov, 19:21 |
| | 3-5km N | Recorded | 4 | Projectile | E to W | N/K | 17-Nov, 19:22 |
| | 3-5km N | Recorded | 1 | Projectile | E to W | N/K | 17-Nov, 19:23 |
| | 3-5km N | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 19:26 |
| | 3-5km N | Recorded | 1 | Muzzle flash | | N/K | 17-Nov, 19:26 |
| | 3-5km N | Recorded | 1 | Projectile | W to E | N/K | 17-Nov, 19:26 |
| | 3-5km N | Recorded | 4 | Projectile | E to W | N/K | 17-Nov, 19:35 |
| | 3-5km N | Recorded | 30 | Projectile | E to W | N/K | 17-Nov, 19:52 |
| | 3-5km N | Recorded | 7 | Projectile | E to W | N/K | 17-Nov, 20:15 |
| | 3-5km N | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:15 |
| | 3-5km N | Recorded | 3 | Projectile | E to W | N/K | 17-Nov, 20:16 |
| | 3-5km N | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:16 |
| | 3-5km N | Recorded | 5 | Projectile | E to W | N/K | 17-Nov, 20:23 |
| | 3-5km N | Recorded | 1 | Projectile | E to W | N/K | 17-Nov, 20:24 |
| | 3-5km N | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:29 |
| | 3-5km N | Recorded | 9 | Projectile | E to W | N/K | 17-Nov, 20:42 |
| | 3-5km N | Recorded | 1 | Projectile | E to W | N/K | 17-Nov, 20:44 |
| | 3-5km N | Recorded | 1 | Explosion | Undetermined | N/K | 17-Nov, 20:44 |
| | 3-5km N | Recorded | 2 | Explosion | Undetermined | N/K | 17-Nov, 20:49 |
| | 3-5km N | Recorded | 14 | Projectile | E to W | N/K | 18-Nov, 02:29 |
| | 7-9km N | Recorded | 1 | Explosion | Undetermined (also recorded by SMM camera in Lomakyne) | N/K | 18-Nov, 16:29 |
| | 7-9km N | Recorded | 1 | Projectile | Airburst (also recorded by SMM camera in Lomakyne) | N/K | 18-Nov, 16:29 |
| | 3-5km N | Recorded | 4 | Projectile | E to W | N/K | 18-Nov, 16:45 |
| | 3-5km N | Recorded | 3 | Projectile | E to W | N/K | 18-Nov, 16:46 |
| | 3-5km N | Recorded | 6 | Projectile | W to E | N/K | 18-Nov, 16:46 |
| 3-5km N | Recorded | 1 | Projectile | E to W | N/K | 18-Nov, 16:47 | |
| 3-5km N | Recorded | 3 | Projectile | W to E | N/K | 18-Nov, 16:47 | |
| 3-5km N | Recorded | 2 | Projectile | E to W | N/K | 18-Nov, 16:47 | |
| 3-5km N | Recorded | 2 | Explosion | Undetermined | N/K | 18-Nov, 16:47 | |
| 3-5km N | Recorded | 3 | Explosion | Undetermined | N/K | 18-Nov, 16:50 | |
| 7-9km N | Recorded | 2 | Explosion | Undetermined, also recorded by | N/K | 18-Nov, 16:50 | |

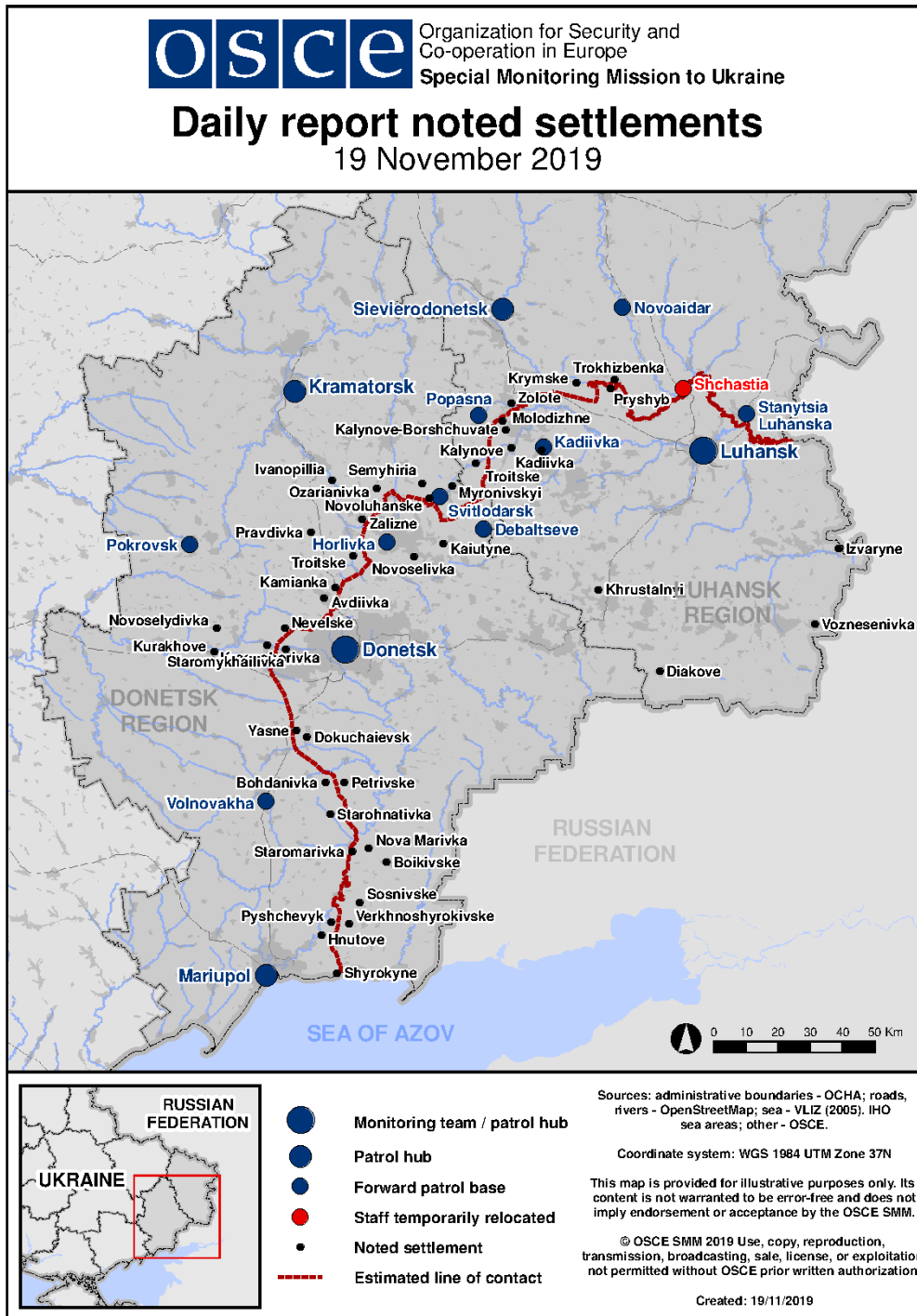
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|---|-----------|---------------|----|------------|--|------------|---------------------|
| | | | | | SMM camera in Lomakyne | | |
| | 3-5km N | Recorded | 14 | Projectile | E to W | N/K | 18-Nov, 17:13 |
| | 3-5km N | Recorded | 2 | Projectile | E to W | N/K | 18-Nov, 17:22 |
| | 3-5km N | Recorded | 3 | Projectile | E to W | N/K | 18-Nov, 17:23 |
| | 3-5km N | Recorded | 2 | Projectile | SW to NE | N/K | 18-Nov, 17:27 |
| | 3-5km N | Recorded | 7 | Projectile | W to E | N/K | 18-Nov, 17:32 |
| | 7-9km NNW | Recorded | 1 | Explosion | Undetermined (also recorded by SMM camera in Lomakyne) | N/K | 18-Nov, 17:56 |
| | 7-9km N | Recorded | 1 | Explosion | Undetermined (also recorded by SMM camera in Lomakyne) | N/K | 18-Nov, 18:02 |
| | 3-5km N | Recorded | 1 | Explosion | Undetermined | N/K | 18-Nov, 18:02 |
| | 3-5km N | Recorded | 3 | Projectile | W to E | N/K | 18-Nov, 18:13 |
| SE edge of Avdiivka (government-controlled, 17km N of Donetsk) | 2km SE | Heard | 1 | Explosion | Undetermined | N/K | 18-Nov, 09:23 |
| | 2-3km SSE | Heard | 1 | Explosion | Undetermined | N/K | 18-Nov, 13:51 |
| Krasnohorivka (government-controlled, 21km W of Donetsk) | 2-3km NE | Heard | 1 | Explosion | Undetermined | N/K | 18-Nov, 11:23 |
| About 1.8km N of Petrivske (non-government-controlled, 41km S of Donetsk) | 2.5km SSW | Heard | 10 | Explosion | Impact (assessed as inside the disengagement area) | N/K | 18-Nov, 12:52 |
| 2km SW of Pyshchevyk (government-controlled, 84km S of Donetsk) | 2-4km ESE | Heard | 10 | Shot | | Small arms | 18-Nov, 10:00 |
| | 2-4km ESE | Heard | 30 | Burst | | HMG | 18-Nov, 10:03-10:05 |
| | 2-3km ESE | Heard | 5 | Shot | | Small arms | 18-Nov, 13:38-13:40 |
| | 2-3km ESE | Heard | 10 | Burst | | HMG | 18-Nov, 13:38-13:40 |
| | 2-4km ESE | Heard | 4 | Explosion | Undetermined | N/K | 18-Nov, 13:45-13:50 |
| | 2-4km ESE | Heard | 8 | Shot | | Small arms | 18-Nov, 13:45-13:50 |
| | 2-4km ESE | Heard | 25 | Burst | | HMG | 18-Nov, 13:45-13:50 |
| 2.5km SSE of Lomakyne (government-controlled, 93km S of Donetsk) | 2-3km NNE | Heard and saw | 2 | Explosion | Impact (followed by black smoke) | N/K | 18-Nov, 00:00 |
| About 3km SE of Lomakyne (government-controlled, 93km S of Donetsk) | 2-3km SE | Heard | 1 | Explosion | Undetermined | N/K | 18-Nov, 12:11 |
| | 3-4km E | Heard | 6 | Shot | | Small arms | 18-Nov, 12:40 |
| | 3-4km E | Heard | 1 | Explosion | Undetermined | N/K | 18-Nov, 12:40 |
| Verkhnohyrokiivske (formerly Oktiabr, non-government-controlled, 85km S of Donetsk) | 3-4km SW | Heard | 1 | Explosion | Undetermined | N/K | 18-Nov, 11:08 |
| Pavlopil (government-controlled, 84km S of Donetsk) | 2-4km E | Heard | 2 | Explosion | Undetermined | N/K | 18-Nov, 11:35 |

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| About 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk) | N/K SSW | Heard | 35 | Shot | Assessed as outside the Petrivske disengagement area | AGL | 18-Nov, 12:32-12:37 |
| | N/K SE | Heard | 7 | Explosion | Undetermined (assessed as outside the Petrivske disengagement area) | N/K | 18-Nov, 11:56 |
| | N/K SSW | Heard | 6 | Explosion | Undetermined (assessed as outside the Petrivske disengagement area) | N/K | 18-Nov, 11:57 |
| | N/K SSW | Heard | 2 | Burst | Assessed as outside the Petrivske disengagement area | HMG | 18-Nov, 11:57 |
| | N/K SSW | Heard | 3 | Explosion | Undetermined (assessed as outside the Petrivske disengagement area) | N/K | 18-Nov, 13:02 |
| | N/K SSW | Heard | 1 | Explosion | Undetermined (assessed as outside the Petrivske disengagement area) | N/K | 18-Nov, 13:13 |
| | N/K SSW | Heard | 1 | Explosion | Undetermined (assessed as outside the Petrivske disengagement area) | N/K | 18-Nov, 14:09 |
| | N/K SSW | Heard | 3 | Explosion | Undetermined (assessed as outside the Petrivske disengagement area) | N/K | 18-Nov, 14:27 |
| | N/K SSW | Heard | 1 | Burst | Assessed as outside the Petrivske disengagement area | Small arms | 18-Nov, 14:27 |
| Svitlodarsk (government-controlled, 57km NE of Donetsk) | 3-5km SW | Heard | 14 | Burst | | HMG | 17-Nov, 18:40-18:44 |
| | 3-5km SW | Heard | 12 | Burst | | Small arms | 17-Nov, 19:02-19:05 |
| | 3-5km SW | Heard | 4 | Explosion | Undetermined | N/K | 17-Nov, 19:02-19:05 |
| | 3-5km SW | Heard | 12 | Burst | | HMG | 17-Nov, 19:02-19:05 |
| | 3-5km SW | Heard | 6 | Burst | | Small arms | 17-Nov, 19:16-19:19 |
| | 3-5km SW | Heard | 4 | Shot | | Small arms | 17-Nov, 19:16-19:19 |

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| 3-5km SW | Heard | 6 | Explosion | Undetermined | N/K | 17-Nov, 19:16-19:19 |
| 3-5km SW | Heard | 6 | Burst | | HMG | 17-Nov, 19:16-19:19 |
| 3-5km SW | Heard | 3 | Explosion | Undetermined | N/K | 17-Nov, 19:22 |
| 3-5km SW | Heard | 5 | Burst | | HMG | 17-Nov, 19:22 |
| 3-5km SW | Heard | 1 | Explosion | Undetermined | N/K | 17-Nov, 19:28 |
| 3-5km SW | Heard | 2 | Explosion | Undetermined | N/K | 17-Nov, 19:36 |
| 3-5km SW | Heard | 4 | Explosion | Undetermined | N/K | 17-Nov, 19:40-19:45 |
| 3-5km S | Heard | 1 | Burst | | HMG | 17-Nov, 19:47 |
| 3-5km SE | Heard | 7 | Burst | | HMG | 17-Nov, 20:28 |
| 3-5km SE | Heard | 18 | Burst | | HMG | 17-Nov, 20:39-20:44 |
| 3-5km SE | Heard | 3 | Explosion | Undetermined | N/K | 17-Nov, 20:45 |
| 3-5km SE | Heard | 3 | Burst | | HMG | 17-Nov, 20:45 |
| 3-5km SE | Heard | 30 | Burst | | Small arms | 17-Nov, 21:05-21:10 |
| 3-5km SE | Heard | 12 | Burst | | HMG | 17-Nov, 21:05-21:10 |
| 3-5km SE | Heard | 1 | Burst | | Cannon (30mm) | 17-Nov, 21:05-21:10 |
| 5-7km S | Heard | 1 | Explosion | Undetermined | N/K | 17-Nov, 21:10 |
| 3-5km SE | Heard | 1 | Burst | | Small arms | 17-Nov, 21:12 |
| 3-5km SE | Heard | 4 | Burst | | HMG | 17-Nov, 21:25 |
| 3-5km SE | Heard | 1 | Explosion | Undetermined | N/K | 17-Nov, 21:27 |
| 3-5km SE | Heard | 9 | Burst | | Small arms | 17-Nov, 21:34 |
| 3-5km SE | Heard | 2 | Burst | | HMG | 17-Nov, 21:34 |
| 3-5km SE | Heard | 2 | Explosion | Undetermined | N/K | 17-Nov, 21:34-21:37 |
| 3-5km SE | Heard | 1 | Burst | | Cannon (30mm) | 17-Nov, 21:41 |
| 4-7km SE | Heard | 5 | Explosion | Undetermined | N/K | 17-Nov, 21:41-21:44 |
| 3-5km SE | Heard | 6 | Burst | | Cannon (30mm) | 17-Nov, 21:46-21:50 |
| 3-5km SE | Heard | 8 | Burst | | HMG | 17-Nov, 21:46-21:50 |
| 3-5km SE | Heard | 4 | Burst | | HMG | 17-Nov, 22:04 |
| 4-6km SE | Heard | 8 | Burst | | Small arms | 17-Nov, 22:10-22:14 |
| 4-6km SE | Heard | 14 | Burst | | HMG | 17-Nov, 22:10-22:14 |
| 3-5km SE | Heard | 7 | Burst | | HMG | 17-Nov, 22:15 |
| 3-5km SE | Heard | 2 | Explosion | Undetermined | N/K | 17-Nov, 22:15 |
| 3-5km SE | Heard | 3 | Burst | | Small arms | 17-Nov, 22:15 |
| 3-5km SE | Heard | 5 | Burst | | HMG | 17-Nov, 22:31 |
| 3-5km SE | Heard | 3 | Explosion | Undetermined | N/K | 17-Nov, 22:32-22:33 |
| 3-5km SE | Heard | 25 | Burst | | HMG | 17-Nov, 22:34-22:36 |
| 3-4km SE | Heard | 8 | Explosion | Undetermined | N/K | 17-Nov, 22:43 |
| 3-5km SE | Heard | 41 | Burst | | HMG | 17-Nov, 23:18-23:28 |
| 3-5km SE | Heard | 6 | Explosion | Undetermined | N/K | 17-Nov, 23:18-23:28 |
| 3-5km SE | Heard | 21 | Shot | | Small arms | 17-Nov, 23:20-23:28 |

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| | 3-5km SE | Heard | 51 | Shot | | Small arms | 17-Nov, 23:29 |
| | 3-5km SE | Heard | 12 | Burst | | Small arms | 17-Nov, 23:29 |
| | 2-4km SE | Heard | 3 | Explosion | Undetermined | N/K | 17-Nov, 23:46 |
| | 3-4km SE | Heard | 2 | Explosion | Undetermined | N/K | 18-Nov, 11:21 |
| | 3-4km SE | Heard | 3 | Explosion | Undetermined | N/K | 18-Nov, 15:12-15:13 |
| | 2-4km SE | Heard | 9 | Explosion | Undetermined | N/K | 18-Nov, 15:41-15:43 |
| | 2-4km SE | Heard | 8 | Burst | | HMG | 18-Nov, 15:41-15:43 |
| | 3-5km SE | Heard | 67 | Burst | | HMG | 18-Nov, 15:44-15:54 |
| | 3-5km SE | Heard | 46 | Explosion | Undetermined | N/K | 18-Nov, 15:44-15:54 |
| | 3-5km SE | Heard | 139 | Burst | | Small arms | 18-Nov, 15:44-15:54 |
| | 3-5km SE | Heard | 104 | Shot | | Small arms | 18-Nov, 15:44 |
| | 3-5km SE | Heard | 20 | Shot | | Cannon (30mm) | 18-Nov, 15:44-15:54 |
| | 3-5km SE | Heard | 44 | Explosion | Undetermined | N/K | 18-Nov, 15:55-16:04 |
| | 3-5km SE | Heard | 33 | Burst | | HMG | 18-Nov, 15:55-16:04 |
| | 3-5km SE | Heard | 10 | Shot | | Small arms | 18-Nov, 15:55-16:04 |
| | 3-5km SE | Heard | 14 | Burst | | Small arms | 18-Nov, 15:55-16:04 |
| | 3-5km SE | Heard | 8 | Shot | | Cannon (30mm) | 18-Nov, 15:55-16:04 |
| | 3-5km SE | Heard | 8 | Burst | | HMG | 18-Nov, 16:05-16:08 |
| | 3-5km SE | Heard | 4 | Explosion | Undetermined | N/K | 18-Nov, 16:05-16:08 |
| | 3-5km SE | Heard | 2 | Shot | | Cannon (30mm) | 18-Nov, 16:05-16:08 |
| | 3-5km SE | Heard | 5 | Explosion | Undetermined | N/K | 18-Nov, 16:19-16:21 |
| SW edge of Novoluhanske (government-controlled, 53km NE of Donetsk) | 6-8km NE | Heard | 6 | Explosion | Undetermined | N/K | 18-Nov, 12:51-13:07 |
| About 500m NE of Kamianka (government-controlled, 20km N of Donetsk) | 3-4km SE | Heard | 25 | Burst | | HMG | 18-Nov, 13:55 |
| SMM camera in Zolote (government-controlled, 60km W of Luhansk) | 2-4km ESE | Recorded | 1 | Projectile | ESE to SE (assessed as outside the disengagement area) | N/K | 18-Nov, 17:43 |
| E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk) | 4-5km SW | Heard | 1 | Explosion | Undetermined (assessed as outside the disengagement area) | N/K | 17-Nov, 22:10 |

Map of Donetsk and Luhansk regions¹⁰



¹⁰ 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: a forward patrol base from which SMM staff has temporarily relocated based on recommendations of security experts from participating States as well as SMM security considerations. The SMM uses the premises during daylight hours and patrols in this settlement during daylight hours, as well).