



Seismic Activity in/around Belgium in 2023

In 2023, 120 earthquakes and 3 induced earthquakes were located by the Royal Observatory of Belgium in or near Belgium.

Six earthquakes were felt by the population near the Belgian territory (Germany).

In 2023, 120 natural earthquakes occurred in a zone between 1° and 8°E longitude and 49° and 52°N latitude (Figure 1). During the same period, the Royal Observatory of Belgium (ROB) also measured 3 induced events, 344 quarry blasts and at least 13 explosions offshore linked to controlled explosions of WW1 and WW2 bombs by the Belgian, Dutch or French Armies.

The 2023 ROB catalogue is complete for natural earthquakes with a magnitude ML larger than 1.0. Events with magnitudes lower than 1.0 were also routinely detected where the Belgian seismic network is denser. The 2023 ROB seismic catalogue also contains a selection of quarry blasts, earthquakes induced by human activities, e.g. linked to (rock) mass removal in quarries or geothermal exploitation.

23 natural earthquakes and at least 3 induced earthquakes occurred on the Belgian territory. The largest earthquake was the event on 22 February 2023 in Maasmechelen, with a local magnitude ML of 2.0. This earthquake was not felt by the population.

In comparison, last year in 2022, 99 earthquakes occurred in and around Belgium.



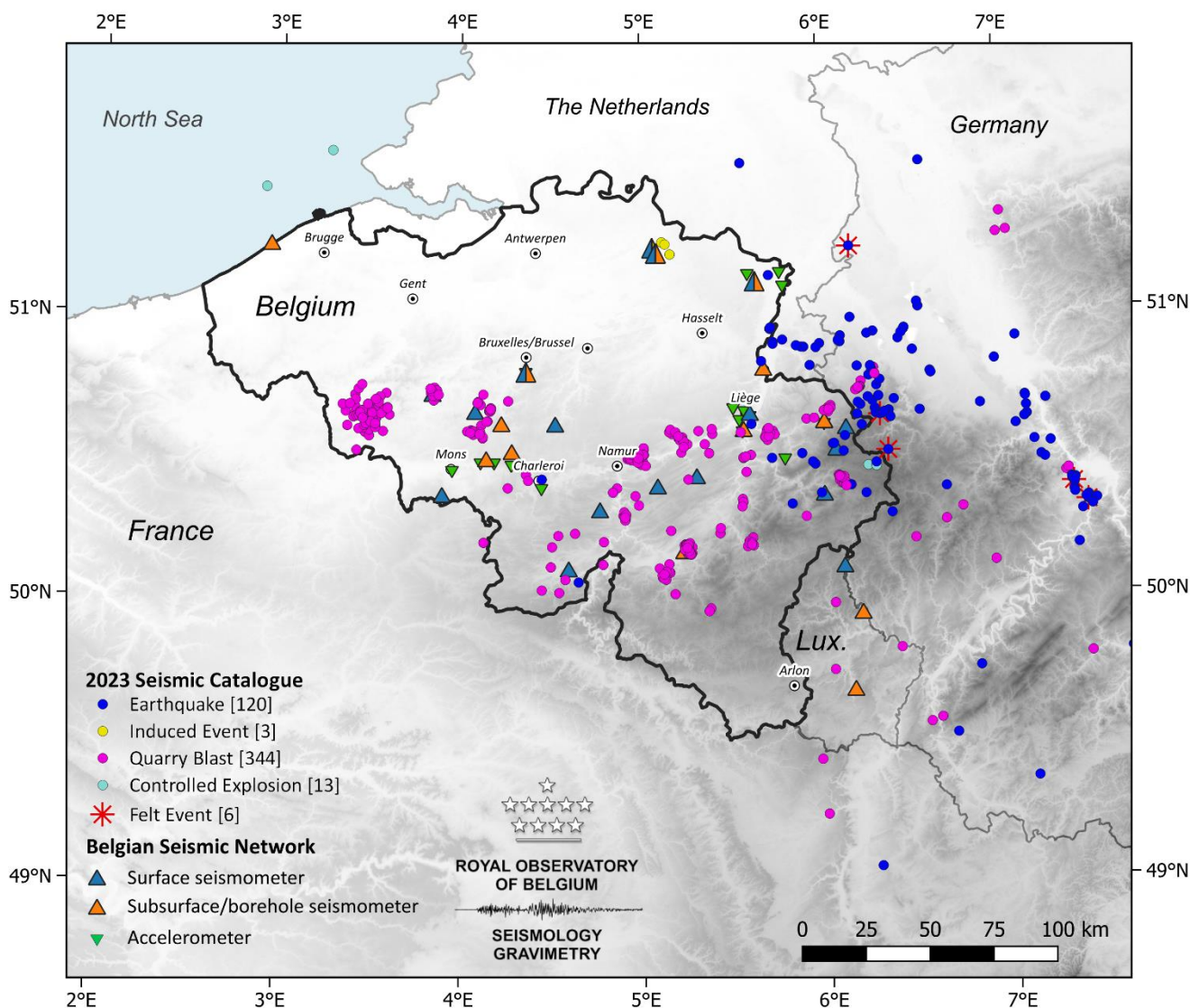


Figure 1: Events recorded in 2023 by the Belgian Seismic Network of the Royal Observatory of Belgium

Website:

<http://seismologie.be/en>

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