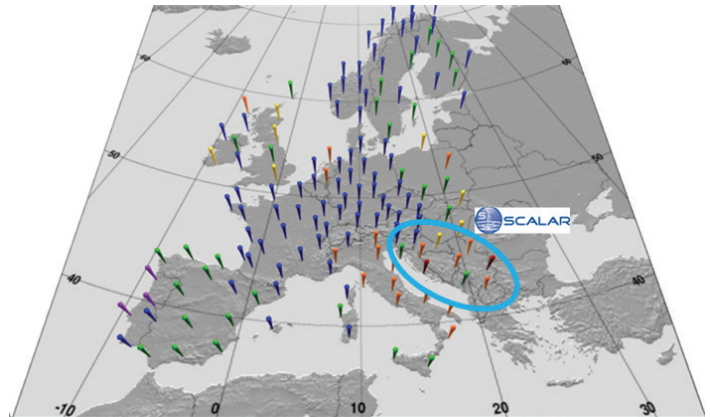


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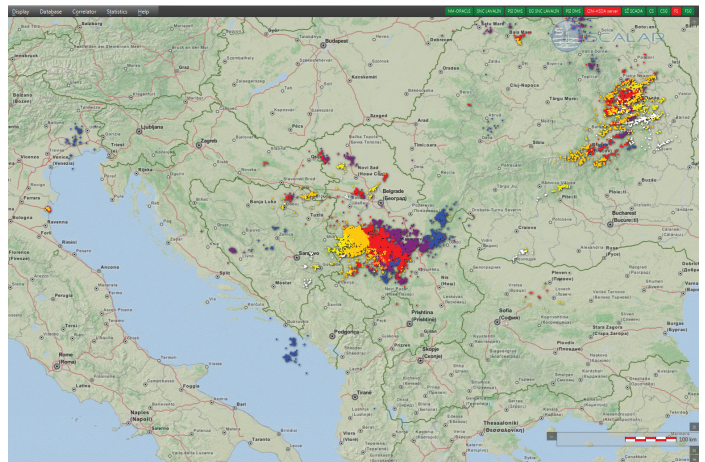


SCALAR is a lightning localization system, which has been operating since 1997. From the beginning, the system has been developed taking into account the needs of transmission and distribution system operators, especially in the field of power system operation, planning and maintenance. The users of the system have required a very high level of efficiency and availability of delivering lightning data and related services. Nowadays the system serves also users from other domains, such as transportation (railway, aviation), communications (broadcasting radio and television and telecommunication companies) and supports the insurance business.

SCALAR is a part of EUCLID network consisting of European lightning detection system operators. More than 150 sensors are part of the EUCLID network, covering vast area all the way from Sicily to Nordkapp.



EUCLID and SCALAR network



Access to real-time and archive of lightning data



Real-time correlator of power line outages due to lightning



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The core mission of the SCALAR system is the localisation of atmospheric discharges and providing related services. The following services are available:



Real-time observation of thunderstorm progress and access to archive data



Real-time correlation of object outages (overhead powerlines, electrified railway tracks, telephone exchanges, GSM base stations, etc.) and flash strokes



On-line access to long-term high-resolution flash density map



Flash density map and storm days map calculations for any specific area (rectangle, circle, areas defined as an area along a powerline, highway, railway, etc.)



An atmospheric discharges finder, where the location in question is determined via a house address



Real-time alarming that helps to increase public safety and mitigate damage incurred by flashes



Statistical analysis of flash stroke amplitudes, released charge, number of return strokes, etc.



Providing composite images of radar rainfall data (10 minute interval) and flash stroke locations

SCALAR has been developed, maintained and operated by the ELECTRIC POWER SYSTEM CONTROL AND OPERATION DEPARTMENT at the EIMV.

Additional information: **www.scalar.si**.

