



Contribution ID: 375 Contribution code: P3.1-375

Type: e-Poster

The Swedish Radioxenon CUBE Array – operational experience and first data

Thursday, 1 July 2021 09:00 (15 minutes)

The world's first radioxenon array was installed in Sweden during 2020-2021. The array consists of five so-called SAUNA CUBE units, placed with 200 – 500 km inter-distance. Each CUBE unit has a measurement sensitivity for 12-hour samples comparable to the SAUNA II systems presently used in the IMS, but to a fraction of the cost. Array design, experiences from installation, and first months of operation of the array will be reported, as well as analysis of array data compared to data collected by a next generation SAUNA III system simultaneously running in Stockholm.

Promotional text

This is the first test of a new, unique concept in radioxenon detection, that has the potential to advance the field of radioxenon verification substantially.

Primary authors: Mr AXELSSON, Anders (Swedish Defence Research Agency (FOI), Stockholm, Sweden); Mr RINGBOM, Anders (Swedish Defence Research Agency (FOI), Stockholm, Sweden); Ms SÖDERSTRÖM, Catharina (Swedish Defence Research Agency (FOI), Stockholm, Sweden); Mr OLSSON, Henrik (Swedish Defence Research Agency (FOI), Stockholm, Sweden); Mr KASTLANDER, Johan (Swedish Defence Research Agency (FOI), Stockholm, Sweden); Mr ELMGREN, Klas (Swedish Defence Research Agency (FOI), Stockholm, Sweden); Mr ALDENER, Mattias (Swedish Defence Research Agency (FOI), Stockholm, Sweden); Mr FRITIOFF, Tomas (Swedish Defence Research Agency (FOI), Stockholm, Sweden)

Presenter: Mr RINGBOM, Anders (Swedish Defence Research Agency (FOI), Stockholm, Sweden)

Session Classification: T3.1 e-poster session

Track Classification: Theme 3. Verification Technologies and Technique Application: T3.1 - Design of Sensor Systems and Advanced Sensor Technologies