## Citizen radiation monitoring: Building a resilient society while obtaining valuable data on natural radioactivity

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This article summarizes SÚRO's long-standing involvement in citizen science activities - specifically citizen radiation monitoring. The initial impetus was the establishment of the SAFECAST organization after the nuclear power plant accident in Fukushima, Japan in 2011 and the subsequent acquisition of the first SAFECAST bGeigie Nano citizen detector.

In the following years, more than 50 bGeigie Nano devices were gradually purchased and SÚRO began lending them to interested members of the public. This resulted in a significant increase in the amount of measured data not only in the Czech Republic - data comparable to each other, measured with the same type of device. Thanks to citizen measurements, many interesting localities are now mapped in relatively detail - for some, only much less detailed data from aerial radiation monitoring was available until now. Data from citizen radiation measurements have thus become a useful source for many institutions, including SÚRO.

Thanks to educational activities associated with device lending and establishing connections with the community of "radioactivity enthusiasts", many users now primarily turn to us when detecting higher values instead of asking questions on social networks. Such users could be more resistant to fake news related to radioactivity - both because they can make their own measurements and also because they know they can trust the official radiation protection authorities.

Citizen radiation measurements are part of several current research projects, not only Czech ones within the framework of security research, but also the EU funded PIANOFORTE CITISTRA project, and are also considered as complementary data in the event of a radiological emergency.

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