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Generation Particulate Monitoring

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Operated by the Comprehensive Nuclear-Test-Ban Treaty Organization, the International Monitoring System is used by almost 200 nations to monitor for nuclear weapons tests. After more than 20 years, the network is mostly complete, however the technology utilized for the particulate monitoring component remains practically the same, despite a number of laboratories developing coincidence systems that can offer orders of magnitude improvements in detection sensitivity and reliability. Here we describe the status of the technology, and the advantages of implementing this within the International Monitoring System. Furthermore, the performance of a prototype system developed by the Comprehensive Nuclear-Test-Ban Treaty Organization is presented.

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Promotional text

Next generation particulate monitors (dual detector, coincidence based systems) are now robust enough for station operations. An operational system, which dramatically improves both reliability and sensitivity, is currently being tested for installation in the IMS.

Oral preference format

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