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consequences of nuclear disaster: 10 years of Fukushima Daiichi meltdown and the role of CTBTO in nuclear emergency response

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Nuclear accidents are capable of exponential damage, and in particular can be the reason for acute environmental degradation. Radioactive contamination can occur for multiple reasons like damage in the nuclear reactors, from nuclear waste and also from the temporary storage of spent radioactive fuel. Radioactive emissions are fundamentally airborne and guarantees contamination for the next hundred years.

In 2011, massive earthquake with tsunamis in Japan caused by the Fukushima Daiichi nuclear accident. Implications of the Fukushima Daiichi meltdown were not only regional but global at the same time. After the accident, an immense amount of radioactive materials was released into the atmosphere through varied meteorological conditions like wind and precipitation. CTBTO and its monitoring stations played significant role after the disaster to study the radioactive fallout and its consequences.

The proposed paper is divided into two parts. Firstly, it will assess the environmental consequences of nuclear disaster in general. Secondly it will study the Fukushima Daiichi nuclear disaster and its implications on environmental degradation over the last 10 years. The paper will further evaluate the role of CTBTO to lay out a potential nuclear emergency response mechanism in the context of the disaster.

Promotional text

The proposed paper will assess the environmental consequences of nuclear disaster in general and will also reflect on the Fukushima Daiichi nuclear disaster and its implications on climate change since the last 10 years.

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