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-Site Inspection: Added Complexities in the Tropics

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Success of an on-site inspection depends largely on two factors: identifying the locations of interest within an area of approximately 1000 km2 and evaluating time critical signatures enabling pinpointing ground zero. Visual observation is the technology that has developed to identify locations of interest in rapid assessment manner. This process allows concentrating the inspection to manageable extent, where detailed studies could be possible within the constraints. However, tropics pose a grave challenge in this maneuver as the ground visibility becomes almost zero in areas with thick tree canopies. Torrential rain is commonplace in tropics, which acts as a natural "eraser" for many on-site inspection (OSI) related observables. The time critical signatures, such as seismic aftershocks, tend to decay rapidly in thick-wet soft overburdens where energy absorption levels are very high. One of the most critical aspects of the OSI is the presence of radionuclide material in the samples. Rain coupled with erratic wind pattern tends to offset the potential source(s) and redeposit in elsewhere within a very narrow time window. Having hands-on experience of an Integrated Field Exercise in the tropics will provide critical and decisive experience towards adaptations to the conventional procedures, enhancing the IT functionality to cope with diverse environments.

Promotional text

The appropriateness of OSI technologies for tropics remains an ambiguous phenomenon as these techniques could function effectively in open environments. This presentation focuses on the possible changes in the tropics for an OSI and the necessity of having IFE in the tropics.

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