ID: Type: **Poster**

# Use of Tritium as an Indicator of Underground Nuclear Explosion Venues at the STS

During the last 5 years a complex research of the main environmental components of testing sites of the STS have been carried out. It was found that biological components of the environment either at the territories with high tritium concentrations in channel water. It can be assumed that all well-mouth sites of underground tests at the «Balapan» site can be potential sources of tritium uptake into environmental objects. At the «Balapan» site in venues of UNEs presence of tritium was revealed in snow cover. Maximum concentrations of tritium in snow were found at the well heads up to 400 Bq/kg. To study the mechanism of tritium entry into snow cover boreholes were dilled and tritium content determined in soil. Tritium in soil was found in all boreholes drilled, its content is not uniformly distributed, maximum tritium concentrations up to 20 kBq/kg were found at the depth of 1 - 3 m. A conclusion was made that in the UNEs epicenters tritium contained in the snow cover enters from the soil cover naturally by means of capillary elevation. This method for determining tritium content in snow cover can be successfully used to identify venues of underground nuclear explosions.

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**Track Classification:** 2. Events and Nuclear Test Sites