ID: Type: **Poster**

T1.3-P08. Influence of precipitation on 7Be concentrations in air as measured by CTBTO global monitoring system

Data collected by the International Monitoring System (IMS) during 2009-2012 were used to study influence of precipitation on changes in 7Be concentrations in atmosphere. The significant decrease in 7Be concentrations, corresponding to measurements collected by stations located within Intertropical Convergence Zone (ITCZ) is demonstrated. This effect can be attributed to the process of enhanced wet deposition within the ITCZ. To quantify this effect data collected by IMS stations within ITCZ were thoroughly analyzed. It was found that the atmospheric content of 7Be strongly decreases under the rain conditions. The rain mediated depletion of 7Be to half of its before rain value, needs about 62 hours in case of light precipitation, while in the case of moderate precipitation about 38 hours is needed. The apparent residence time of 7Be aerosols, based on their MDC value, depends on the initial activity concentration and on the precipitation amount, and may vary between 10 and 25 days.

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