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Cosmic tests of the ALICE TOF system

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Preliminary tests of the ALICE Time-Of-Flight (TOF) system components, built of numerous MRPC strips, were not possible with beam particles and extensively involved cosmic measurements. For this purpose, a Cosmic Ray Test Facility (CRTF) was specially constructed, built and put into action at CERN. It represents a two-layer telescope of Scintillation Tiles with MRS APD Light Readout, provides 100% detection efficiency for MIP and negligible intrinsic noise.
All ALICE TOF modules were tested and calibrated at CRTF before their installation into the ALICE experimental area, detected faults were repaired. The tests were performed with the final versions of electronics and software (mood, PVSS), currently used in ALICE. Subsequent measurements taken during commissioning of the ALICE TOF proved to be in good agreement with preliminary calibration at CRTF.
CRTF, or similar cosmic setup, can be used in the future for tests of large-scale TOF systems at CBM (FAIR) and MPD (NICA).

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