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## SiPM application for a detector for UHE neutrinos tested at Sphinx Station

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We present the preliminary test results of the prototype detector, working at Sphinx Observatory Center, Jungfrauoch (~3800 m a.s.l.) HFSJG - Switzerland. This prototype detector is designed to measure a large angle cosmic rays flux emerging from the Earth crust. This station provides us an opportunity to understand if the prototype detector works safely under harsh environmental conditions ( the air temperature changes between  $-25^{\circ}\text{C}$  and  $-5^{\circ}\text{C}$ ). This detector prototype is using silicon photomultiplier (SiPM) produced by SensL and DRS4 board as read-out part. Measurements at different temperature at fixed bias voltage ( $\sim 29.5\text{ V}$ ) were performed to reconstruct tracks by time of flight. Several array Tests deployed for 18 months at KIT to study the shower reconstruction and background are also presented.

### Summary

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