

# Executive Summary

## Forbush decrease on September 6-13, 2017 observed by the Tanca water-Cherenkov detector

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### **What is this contribution about?**

Forbush decreases recorded by water Cherenkov detector located in University of Campinas, Brazil, called Tanca, during a non-typical period where numerous solar events were registered.

### **Why is it relevant / interesting?**

The observations carried out by the Tanca detector show the effects of solar events on the Earth's magnetic field for a region of energy above the energies observed by space missions, adding information about the effects of the more energetic particles of these events.

### **What have we done?**

After correcting the barometric effects in the Tanca data, it was verified its behaviour during the first weeks of September 2017 and whether the arrival of CME shocks caused any variation in the measurements. The results were compared with observations made by neutron monitors and indices of the Earth's magnetic activity.

### **What is the result?**

Tanca registered four signal decreases: three caused by the shock of CMEs in arrival time at 2017-09-06, 2017-09-07 and 2017-09-12 and one by a stream interaction region in 2017-09-14.