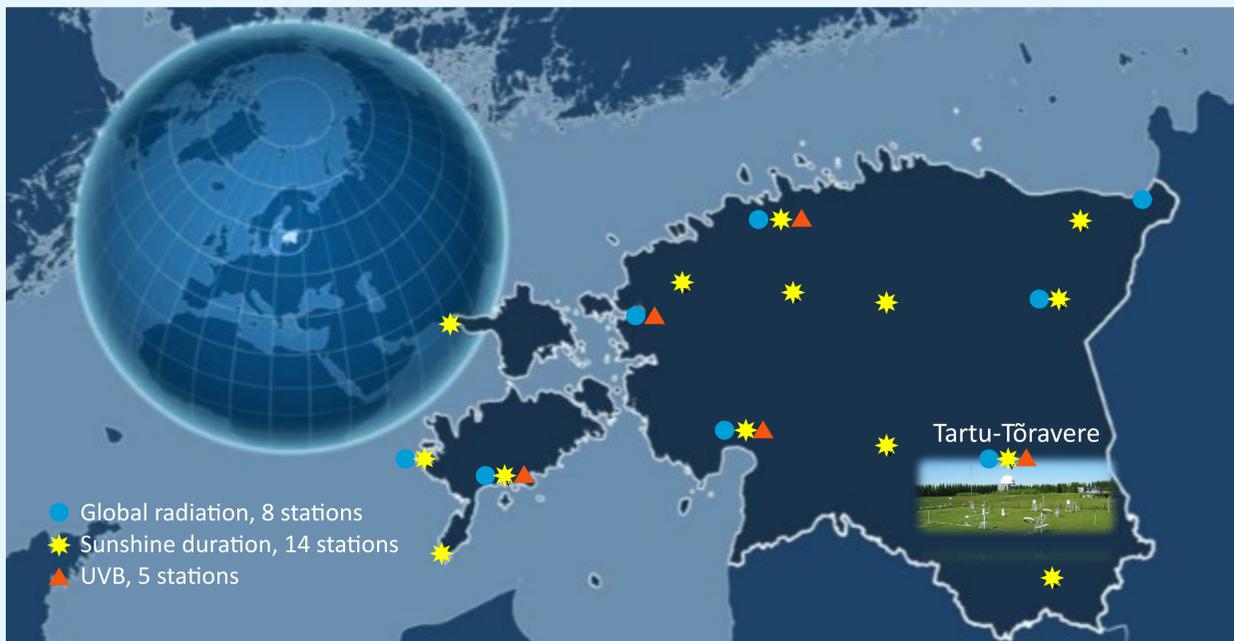


# Status of Tartu-Tõravere (TOR) BSRN Station

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## Tartu Actinometric Station (1950-1965)

$\Phi = 58^{\circ}21'$   $\lambda = 26^{\circ}41'$   $h = 76$  m

The longest time series of radiation measurements in Estonia can be obtained from Tartu-Tõravere. Tartu Actinometric Station was established in 1950, it was also the beginning of regular measurements of global and direct irradiance. The measurements of diffuse irradiance were added in 1954, reflected irradiance in 1955.

## Tartu-Tõravere Meteorological Station (since 1965)

$\Phi = 58^{\circ}16'$   $\lambda = 26^{\circ}28'$   $h = 70$  m

Radiation measurements were moved to Tõravere, 20 km from Tartu, in 1965. The station became a BSRN candidate in 1993, since 1999 it has operated as a BSRN station.

Data from period 19.01.1999 - 31.05.2018 are submitted to BSRN archive.

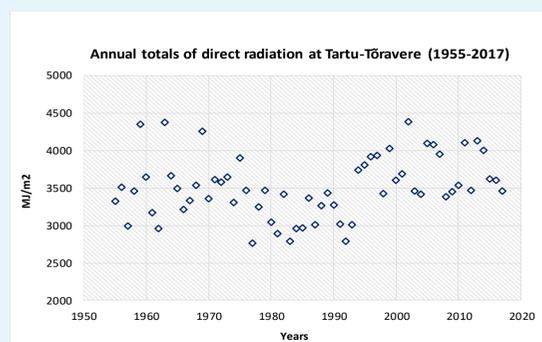
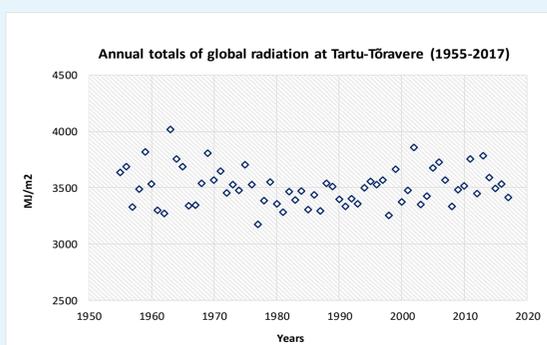
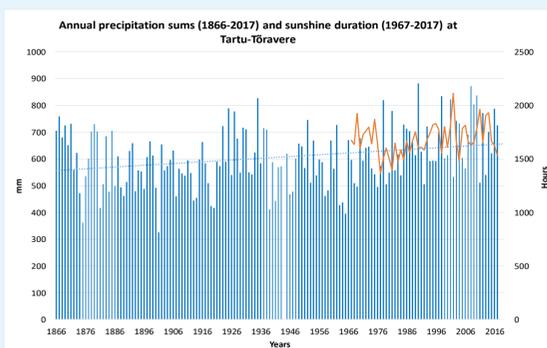
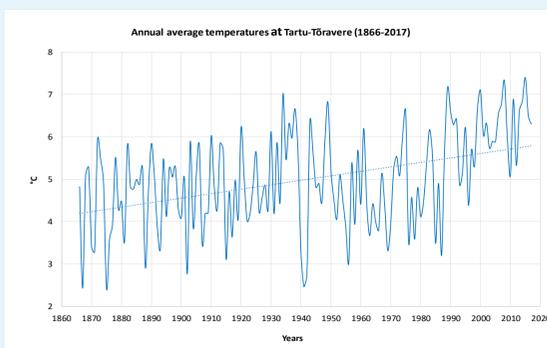
### Radiation sensors:

1. direct irradiance (PMO6 absolute radiometer, pyrhemometers AT-50, NIP, CHP1, spectral radiometer PFR)
2. global, diffuse and reflected irradiance (pyranometers CM-21 with ventilation unit)
3. broadband UV, UVB narrowband, UVE irradiance (CUV3, CUVB1, UVS-E-T)
4. photosynthetically active irradiance, global and direct (LI-COR LI-190SA)
5. downward longwave irradiance (pyrgeometer CGR4 with CVF4 ventilation)
6. upward longwave irradiance (Eppley PIR)
7. sun tracker 2AP
8. total ozone measurements (MICROTOPS II)

### New sensors mounted during summer 2018:

1. global, diffuse and reflected irradiance (pyranometers SMP-21 with CVF4 ventilation unit)
3. broadband UV, UVB (CUV5, UVS-B-T)

All sensors will be connected with new data acquisition system.



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