

## Tomographic observation of solar wind using interplanetary scintillation

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The interplanetary scintillation (IPS) method can observe the dynamics and structure of the solar wind in three dimensions with a relatively short time cadence using IPS radio sources distributed over the sky. Because of this advantage over in-situ measurements, we have been conducting multi-station 327 MHz IPS observations at the Solar-Terrestrial Environment Laboratory (STELab). The IPS measurement is a line-of-sight integration which is convolution of the solar wind structures, the distance of these from the Earth and other diffraction effects present along the line of sight. We have recently succeeded in developing a method to deconvolve the line-of-sight integration effects using a computer-assisted-tomography (CAT) technique to obtain solar wind speed and electron density fluctuations. The CAT analysis not only retrieves three-dimensional solar wind parameters, but also provides better spatial resolutions than previous analysis techniques.