

ISSI International Team: Sub-millimeter Solar Flare Observations
First Workshop: November 9-11, 2009, Bern, Switzerland



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The University of Bern (Switzerland) full-disk solar patrol telescopes working at 8.4, 11.8, 19.6, 35.0 and 50.0 GHz have earlier been used in support of sub-mm wave observations with KOSMA (University of Köln). The Bern telescope system was then moved to Tuorla Observatory (Finland) in 2005. The Finnish 'first light' observations have been delayed, but are now expected to happen in Spring 2010. There are plans to extend the frequency range towards the higher frequencies, after the current system is working routinely.

The earlier flare data from Bern, observed in 2001-2004 in the present format, are listed in the TUBE Radio Polarimeters Event List, located at <http://tube.utu.fi/unibe-bursts/>. Quick-look plots of new events will be added there and calibrated data will be made available upon request.

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Helsinki University of Technology
Metsähovi Radio Observatory
J. Kallunki, A. Riehoainen (Tuorla), M. Tornikoski (Director)

The observatory operates a 14-m diameter radio telescope, covered by a radome, and the activities are concentrated on millimeter and microwave observations. The frequencies used are 2–150 GHz, depending on the availability of receivers. Solar observations are done as short-term campaigns, within requested and allocated telescope time. Solar maps can be made by scanning the disk, and tracking of active regions can be done with 50 ms time resolution. The observatory also has a patrol type 1.8-m antenna that measures the full-disk solar flux at 10.7–11.7 GHz. Current solar studies focus on solar oscillations and they are done in co-operation with Tuorla Observatory.

Metsähovi has acquired unique collections of solar radio observations over the past 30 years; the more recent observations (2007–) are listed at <http://www.metsahovi.fi/en/sun/observations.shtml>.