## UNIGRAZ WP2 report

Continuous activity:

UNIGRAZ (Kanzelhoehe Solar Observatory): 1 image/minute during activity otherwise 1 image/hour in 2k x 2k format at <u>http://cesar.kso.ac.at/</u>

Task 2.6. Utilization of photospheric data in solar and space weather analyses (KO, UOulu, ROB, HVAR, UNIGRAZ)

At Graz and Hvar Observatory the long term behaviour of the solar activity cycle was studied by using proxies o solar activity (cosmogenic isotopes). These data go back 10000 yr. The first results of the C14-data were published in an international peer reviewed journal (Astronomy and Astrophysics) and presented at several international conferences. The analysis of the Be10-data and the results were submitted for a second paper. These investigations provide an extension of standard photospheric indicators backwards in time.

Task 2.5. Standardisation of database formats (KO, ROB, UNIGRAZ)

This is performed at the Kanzelhöhe observatory with the help of a person specially engaged for this purpose.

Task 2.3. White-light measurements (KO, UNIGRAZ, ROB, HVAR)

This is done at Kanzelhöhe observatory. A special software for automatic sunspot detection was implemented.

Task 2.2. Facular data (KO, UNIGRAZ, ROB)

The CaII K telescope is ready for observations and will be used routinely. A diploma thesis for this topic is nearly completed and will be published end of this year. The first results and comparisons will be published in spring 2011. This is an overlap with WP3 tasks.