

## **Astro-Wise Workshop**

# **General Tutorial to the Astro-Wise system**

November 14-18, 2005

### **Introduction**

Early 2006 the OmegaCAM panoramic imager will start observations on the ESO VLT Survey Telescope at Paranal, Chile. AstroWise is the European consortium, coordinated by OmegaCEN in Groningen, that will provide the innovative software and hardware to run and analyze several large survey projects. Each one will produce Terabytes of data on which complex analysis has to be performed to meet the science goals.

The main goals of this workshop were (i) to give the nine partners in the Astro-Wise consortium a tutorial with hands-on experience on the Astro-Wise software environment, (ii) obtain an inventory for further developments and improvements of the software environment, (iii) plan the export and federation of the full software to institutes associated with the Astro-Wise project and (iv) start preparations for the survey projects on OmegaCAM using the Astro-Wise software environment.

### **The Workshop**

Forty participants joined the workshop which was the maximum number possible. The morning sessions of the workshop from Monday through Thursday were devoted to tutorials. This started with a general overview followed by presentations on data reduction, astrometry, photometry, database querying and data mining and target quality control, source variability measurements and determination of photometric redshifts. The afternoons were set aside to work on exercises with the Astro-Wise software in groups. The series of office spaces available in the Lorentz Center proved to be perfect for this set-up. This helped to make the exercises a success as exemplified by the fact that everybody showed up late at the welcoming reception on Monday in order to finish their exercises. All processing was done remotely on computing facilities provided by OmegaCEN at the Kapteyn Institute, Groningen. At the end of each day all participants reconvened in the Gratama room to wrap up issues and discussions resulting from the day. On Friday morning program coordinators for the large surveys presented their plans taking into account the experience with the AstroWise system obtained during the week. These projects are KIDS (Leiden, Bonn), VESUVIO (Groningen, Napoli), VST16 (Heidelberg), and OmegaWhite (Nijmegen), all in which the Netherlands is a partner. The Friday afternoon was used to meet in subgroups to discuss next steps for the Astro-Wise program, the surveys and the export and federation of the Astro-Wise environment and finally to wrap up the workshop.

### **Conclusions**

The workshop was a success in several respects. Both novice and advanced users of the software

were happy with the offered program. The crucial interaction between software developers and users was intense. Splinter meetings in the Lorentz Center offices were important for that. A long list of actions items on future development of the software environment was thus established. Lastly, the principal investigators of the Astro-Wise consortium were gratified by the success of this meeting and expressed their desire to hold a new Astro-Wise workshop in one year's time, when OmegaCAM has started operations.

These successes have been achieved thanks to the generosity, infrastructure and outstanding organization of the Lorentz Center and of the people working there.

The workshop organizers express their special thanks to dr. Martje Kruk and Wies Groeneboer for their help prior to and during the workshop.

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