

The Hungarian Virtual Observatory

A. Holl, Konkoly Observatory, Budapest

Sofia, 2008, VO-day - EuroVO-DCA workshop



- HVO: member of the IVOA, <http://hvo.elte.hu/en/>

-> Eötvös Loránd University, Budapest

<http://www.complex.elte.hu/astro.html>

Group connected with A. Szalay - Sloan, NVO

-> Konkoly Observatory, HAS <http://www.konkoly.hu>

- a small on-going project: IBVS,

some data already in the VO: KISAG/ISO and



some promising future projects

->> IAU Information Bulletin on Variable Stars

<http://www.konkoly.hu/IBVS/IBVS.html>

eIBVS: A. Holl

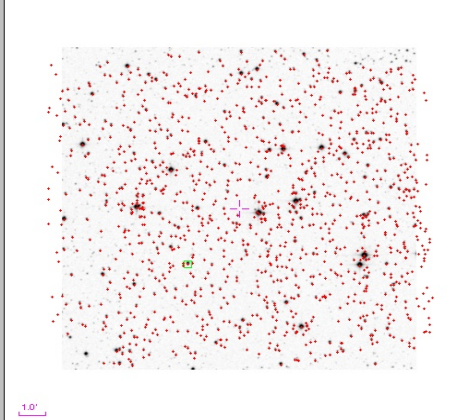
- electronic journal - testbed for ideas
- small but important: IAU Comm. 27/42
- VO technologies, standards used:
 - some real VO, some VO-like
- the use of CDS Aladin as a third party visualization tool

 **Aladin sky atlas** 

[CDS](#) · [Simbad](#) · [VizieR](#) · [Aladin](#) · [Catalogues](#) · [Nomenclature](#) · [Biblio](#) · [StarPages](#) · [AstroWeb](#)

Aladin Load... Links... VOPlot... Help... Detach

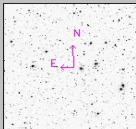
J2000 [02:10:32.46 +57:09:28.5] Field: 02:10:18.55 +57:11:36.6 12.9'x12.9'



1.0"

IBVS 5488-10
DSS2_F.POSS0

Zoom 1/2x



uv PER 870 | 13.55 | 0.620 | 0.370 | 0.381 |

© ULP/CNRS 1999-2004 - Centre de Données astronomiques de Strasbourg

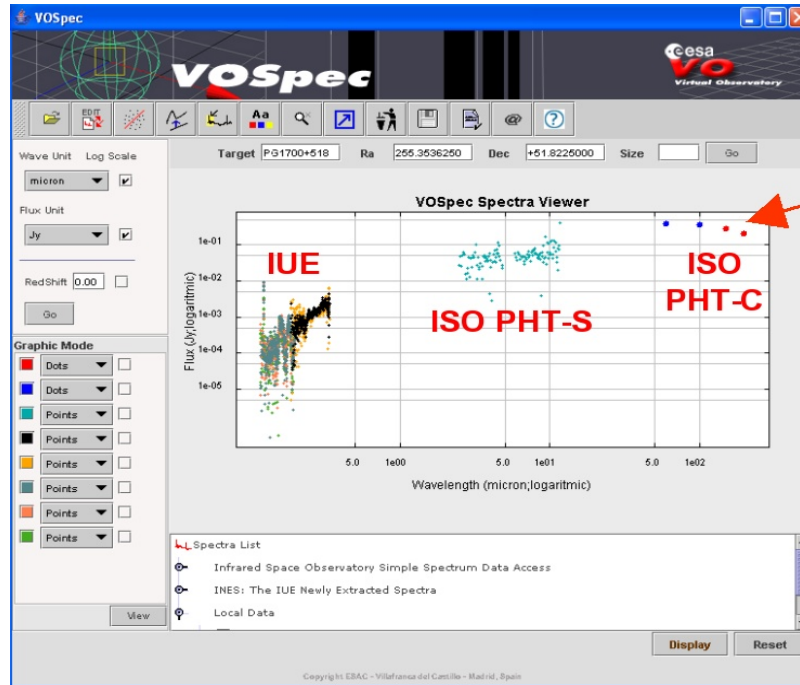
- IBVS (contd.)
 - using local VO-tools, like VO-plot ?
 - VOTable for data files
 - experiments for object and author name resolution using Simbad, GCVS and ADS for the Advanced Search Tool

-» Konkoly Infrared Space Astronomy Group (KISAG)

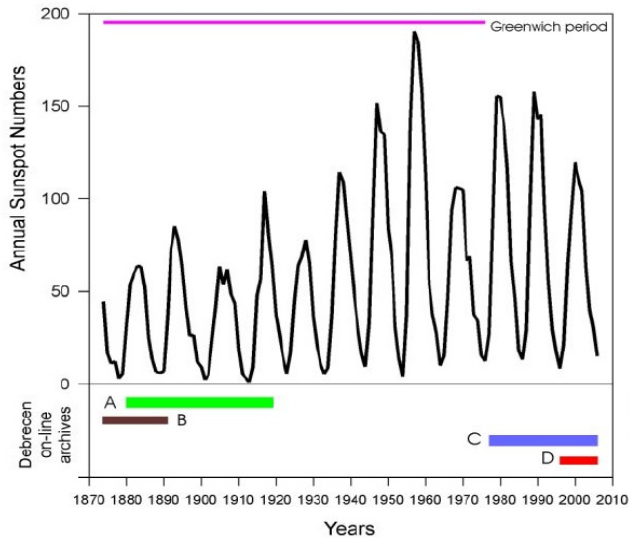
- IR satellite data (ISO),
already in VO via ESA

- tools: IRSAM, IR confusion noise estimator

P. Ábrahám & al. <http://kisag.konkoly.hu/>



- » Debrecen Heliophysical Observatory
 - large white-light (photospheric) solar database
 - http://fenyi.solarobs.unideb.hu/deb_obs_en.html
 - A. Ludmány & al.



- A: Fényi's full-disk sunspot drawings - ready
- B: Konkoly's full-disk sunspot drawings - in preparation
- C: Debrecen daily sunspot data, full-disk white light observations, sunspot group images, magnetic observations - ready or in preparation
- D: SOHO/MDI-Debrecen hourly sunspot data, full-disk continuum and magnetic observations, sunspot group images - ready or in preparation

-» time series analysis / HAT

- software & algorithms for the HAT project:
suitable for variability / exoplanet surveys

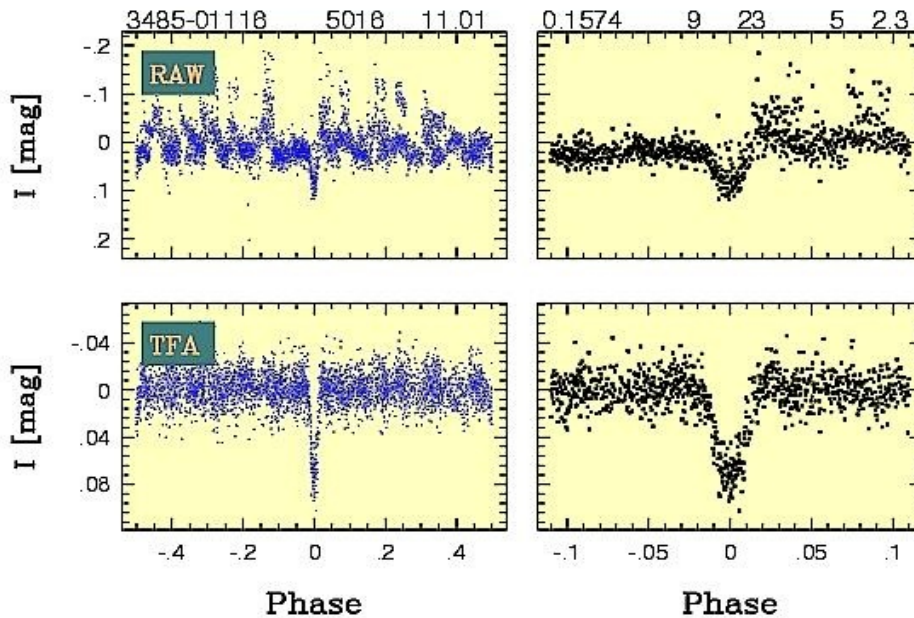
G. Kovács & al.

- Trend Filtering Algorithm (TFA)

<http://adsabs.harvard.edu/abs/2005MNRAS.356..557K>

- Least-Squares Box-fitting (BLS)

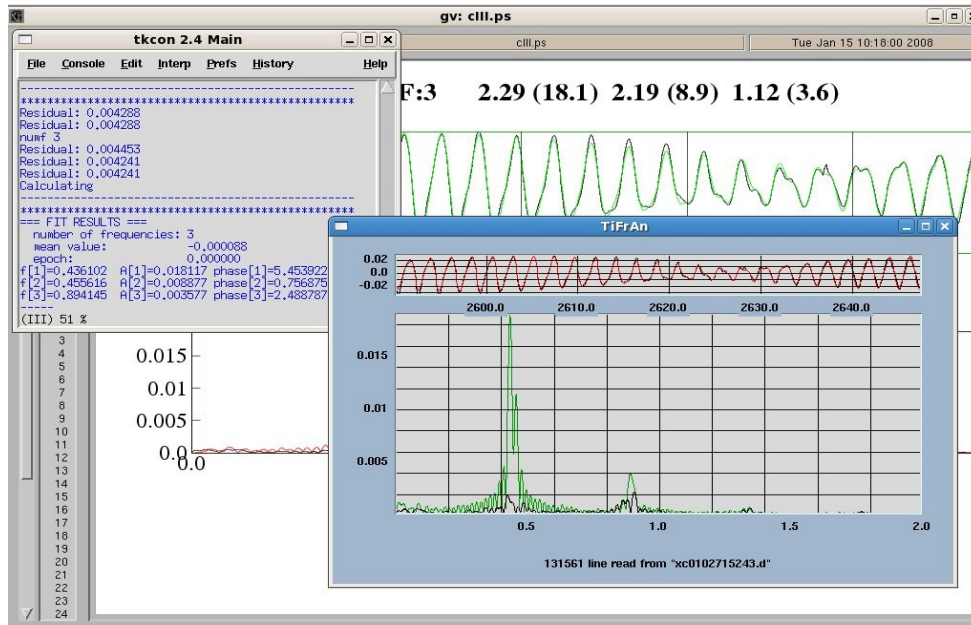
<http://adsabs.harvard.edu/abs/2002A%26A...391..369K>



- scriptable time series analysis software
(TiFrAn), suitable for pipelines

Z. Kolláth & al.

<http://www.konkoly.hu/tifran/index.html>



-» Images ?

- Plate archive? CCD frames? Wise HAT data?

- Problems

- Manpower / hardware

- standardization of data

- VO software:

standards for time-series data needed

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