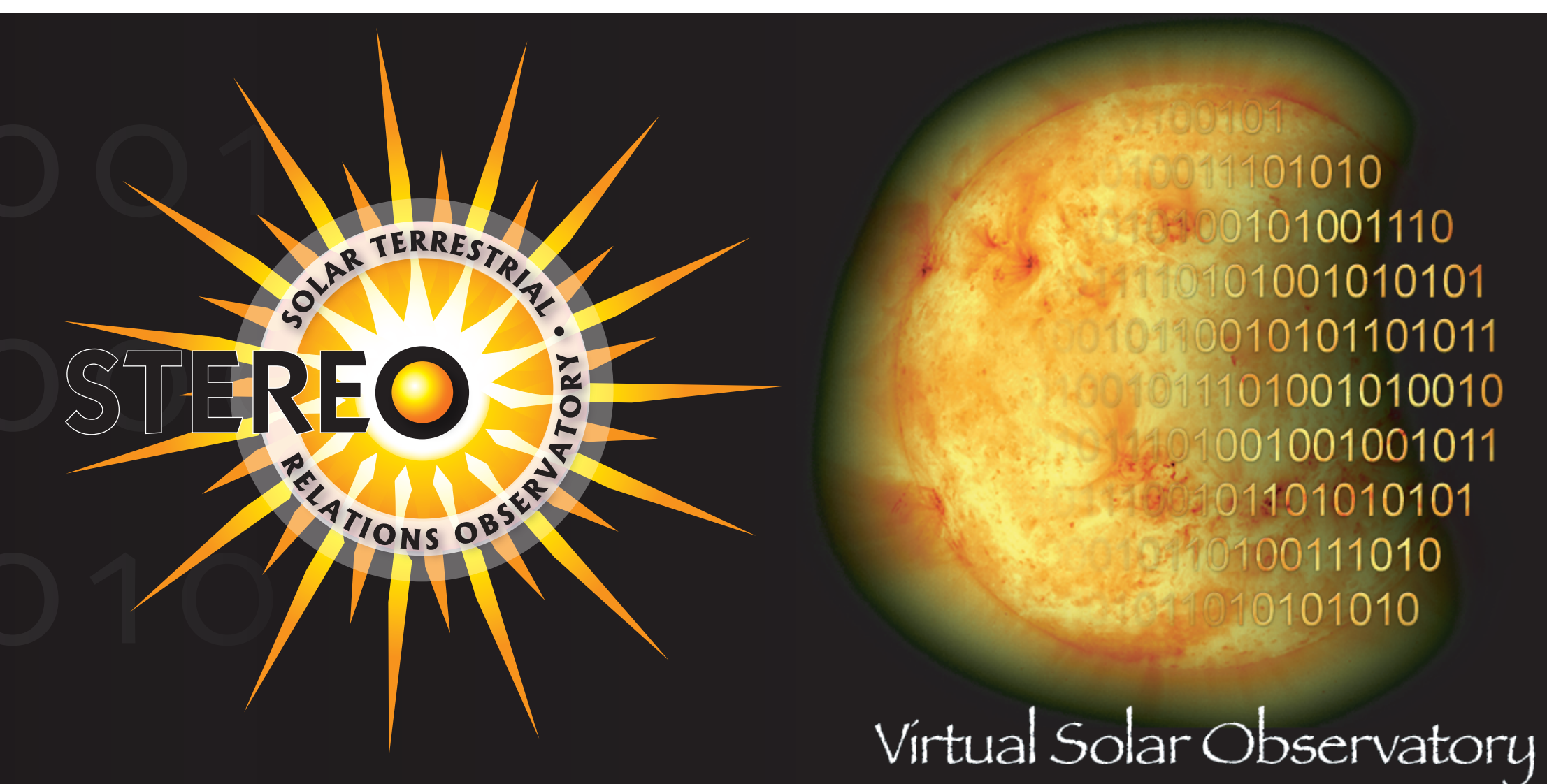


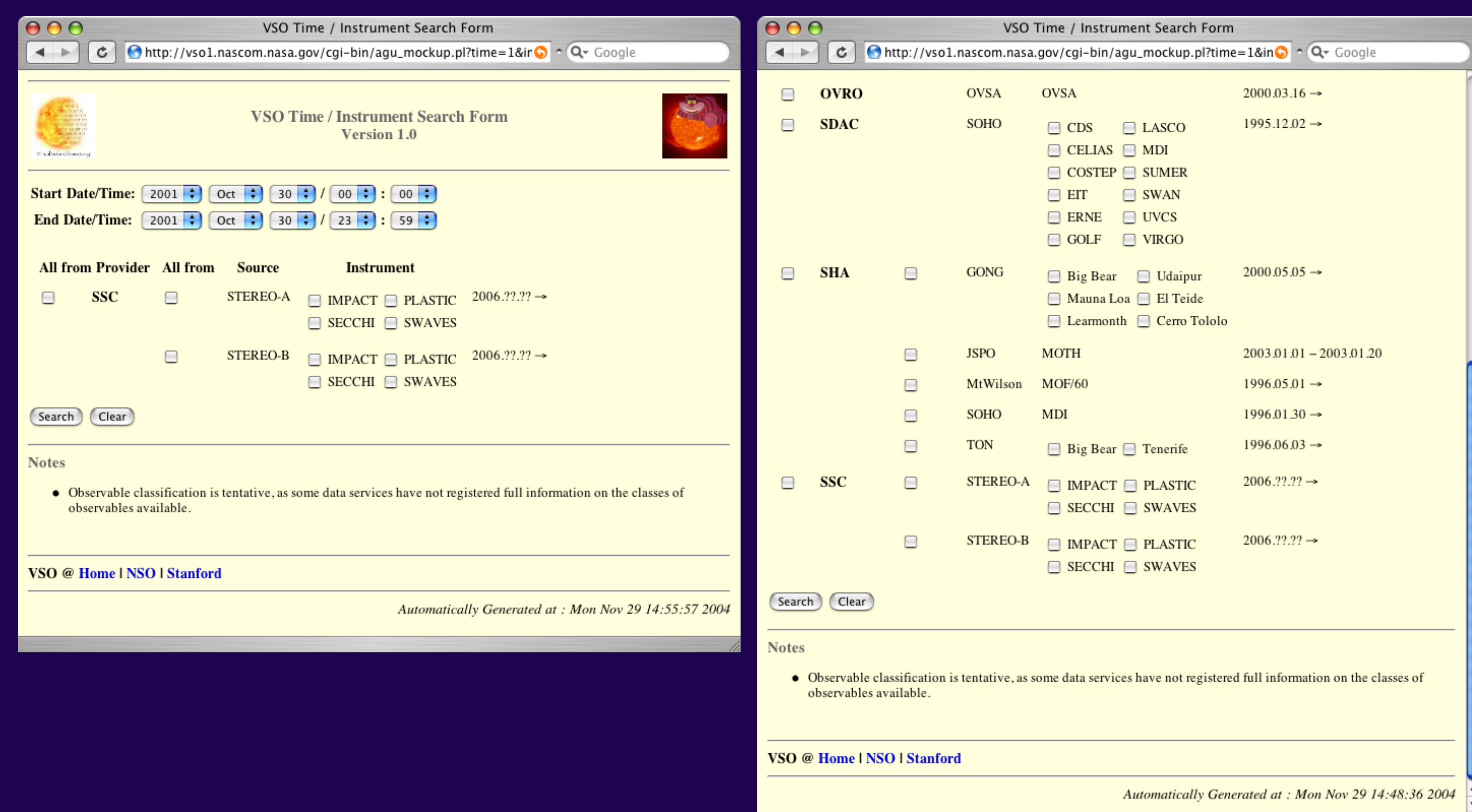
STEREO in the Virtual Solar Observatory Context



The Virtual Solar Observatory (VSO) was designed with the goal that it handle heterogeneous data sets from multiple observatories. With its two spacecraft and multiple instruments, the STEREO mission provides an excellent example of how solar physics research based on multiple data set, and a good test of the abilities of VSO. Here we will discuss how the VSO will meet the key challenges that STEREO presents. In particular, the wide range of data classes and non-stationary viewpoints of the two spacecraft demand a flexible underlying data model of the VSO.

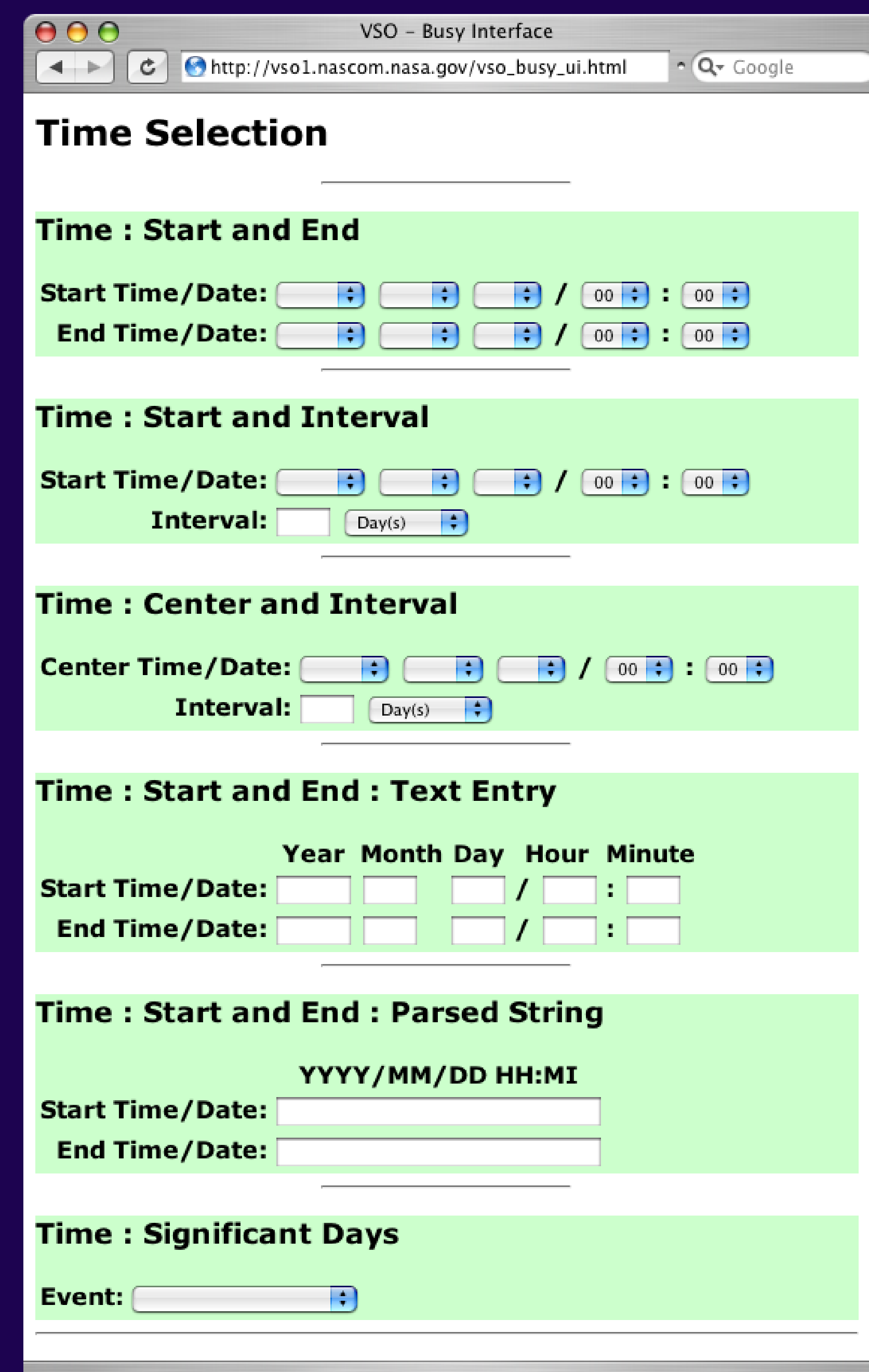
Search Flexibility

The architecture of the VSO allows there to be any number of interfaces to search data stored by the individual data providers. Some scientists may prefer searching for only STEREO data, while others may wish to search for STEREO data alongside instruments from other sources:



Parameter Flexibility

As every researcher may wish to refer to parameters in different ways, it is possible to build interfaces to suit specific users, or groups of users. Through a series of translation interfaces, we can provide the ability to specify time, or any other parameter, in a wide variety of ways:

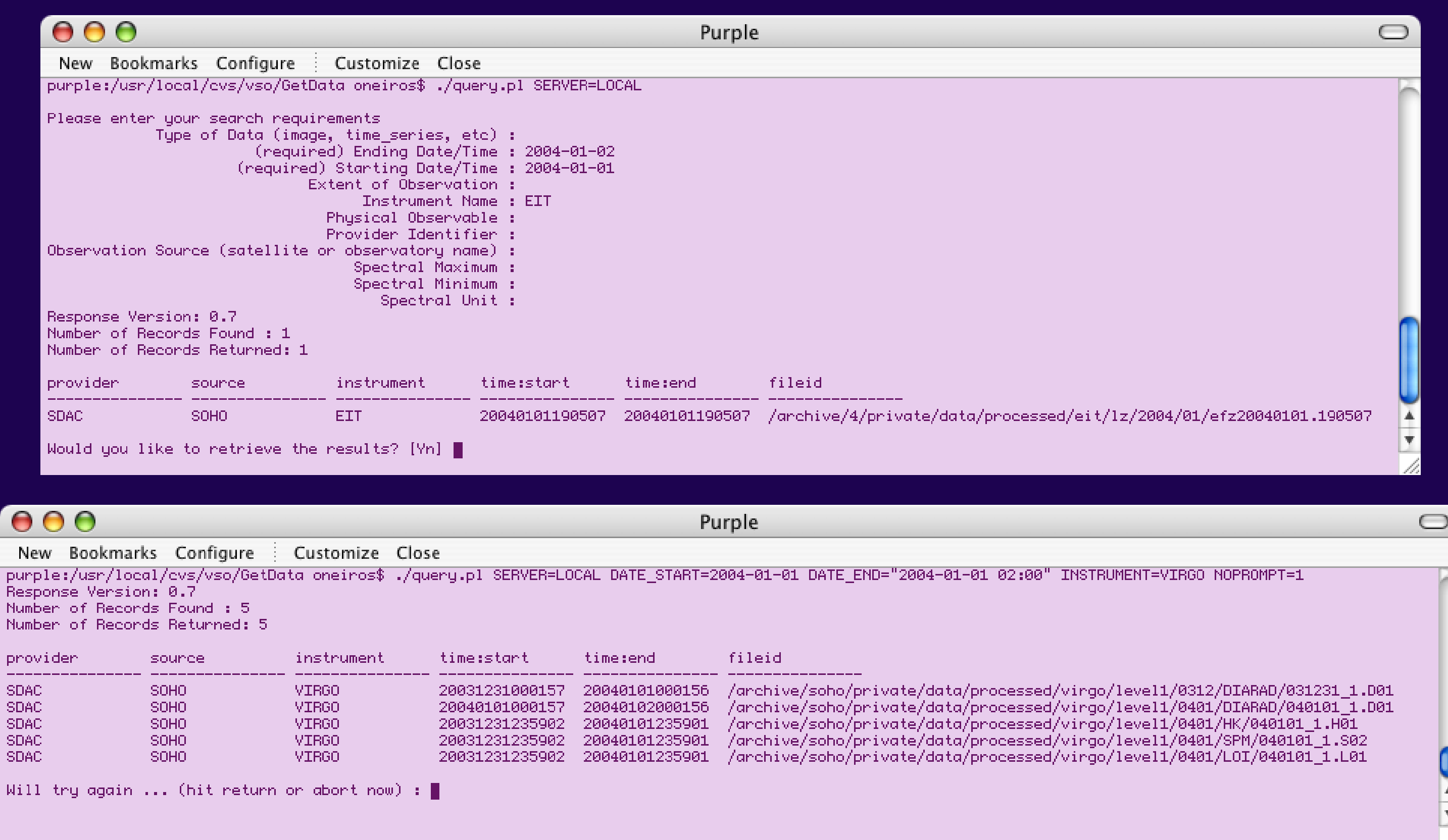


R.S. Bogart, A. Davey, G. Dimitoglou, J.B. Gurman, F. Hill, J.A. Hourclé, P.C.H. Martens, I. Suárez-Solá, K. Tian, K. Yoshimura designed by E. Drobnes

- <rbogart@spd.aas.org>, Stanford U., CSSA-HEPL, Stanford, CA 94305-4085
- <ard@boulder.swri.edu>, Dept. of Space Studies, SwRI, 1050 Walnut St., Suite 400, Boulder, CO 80302
- <george@esa.nascom.nasa.gov>, NASA/GSFC (ESA), Code 682.3, Greenbelt, MD 20771
- <gurman@gssc.nasa.gov>, NASA/GSFC, Code 682.3, Greenbelt, MD 20771
- <hill@noao.edu>, NSO/Tucson, 950 N. Cherry Ave, Tucson, AZ 85719-4933
- <hourcle@gssc.nasa.gov>, NASA/GSFC (L3-GSI), Code 682.3, Greenbelt, MD 20771
- <martens@mithra.physics.montana.edu>, Dept. of Physics, Montana State Univ., PO Box 173840, Bozeman, MT 59717
- <igor@noao.edu>, NSO/Tucson, 950 N. Cherry Ave, Tucson, AZ 85719-4933
- <ktian@stanford.edu>, Stanford U., CSSA-HEPL, Stanford, CA 94305-4086
- <yoshimura@mithra.physics.montana.edu>, Dept. of Physics, Montana State Univ., PO Box 173840, Bozeman, MT 59717

Command Line Interfaces

Although VSO is built around the principles of Web Services, it does not require that the front end be web-based. Some researchers may prefer to make use of command line searching, which can be more easily automated:



We want your input!

If you'd prefer to search for data in some way that we don't currently have available, or would prefer to search through one of the other VxOs, there is still a year before STEREO launches. Please let us how you would like to acquire data, so that we can attempt to better serve the solar community.

<http://virtualsolar.org>

