What's New in the CEDAR Database Since June 2004?

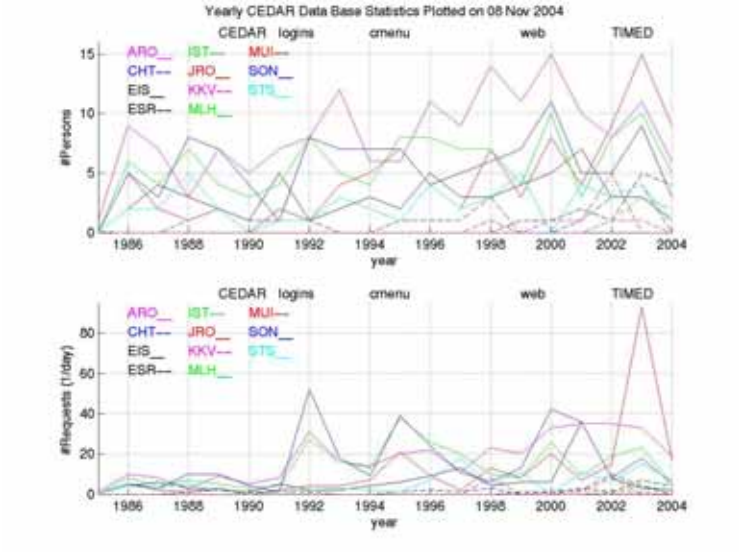
TIMED-CEDAR Data Sets:

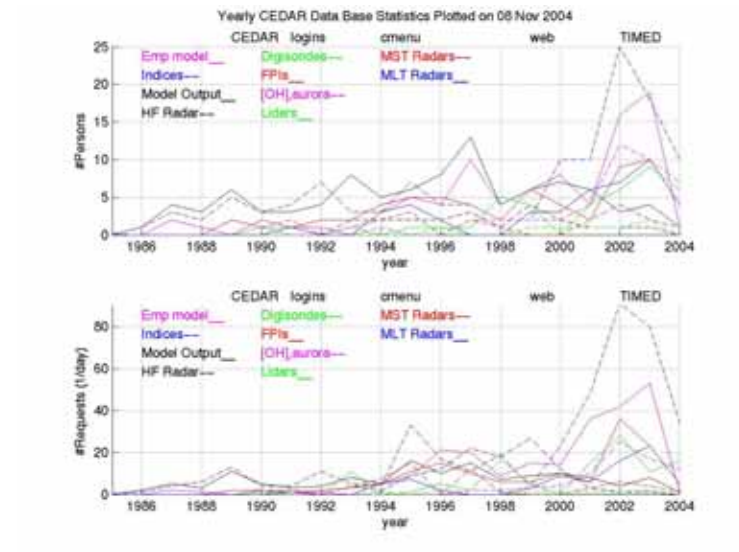
-5 MLT Radar 30-60 min winds (2002-2003 Davis, 2002-2004 Adelaide, 1998-2203 Wakkanai, 1998-2003 Yamagawa, 1998-2004 Poker Flat)
-ISR: Sondrestrom, Jicamarca (Vi)
-CSU lidar Feb-Jun 2004
-Sondrestrom FPI ~240 km Jan-Apr 2004
-Millstone Hill FPI Jan-Dec 2002
-Davis Spectrophotometer (1990, 1994-2003)

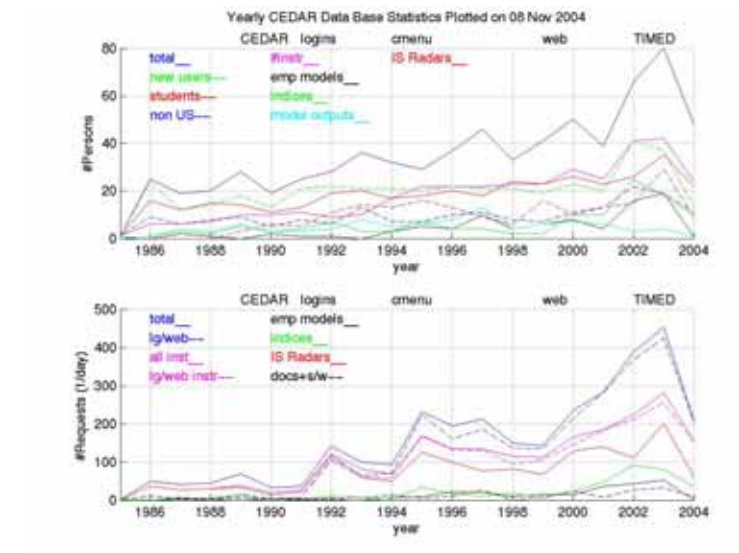
OtherData Sets in Process:

-Resolute Bay Michelson
-Jicamarca new coherent mode
-WHAM H-alpha
-MUI data
-IDI

-New CEDAR Server (and statistics)
http://cedarweb.hao.ucar.edu
-VSTO Update


Yearly CEDAR Data Base Statistics Plotted on 08 Nov 2004
CEDAR logins
cmenu
web
TIMED
ARO__
IST---
MUI---
CHT---
JRO__
SON__
EIS__
KKV---
STS__
ESR---
MLH__
#Persons
year
#Requests (1/day)


Yearly CEDAR Data Base Statistics Plotted on 08 Nov 2004
CEDAR logins
cmenu
web
TIMED
Emp model__
Digisondes---
MST Radars---
Indices---
FPIs__
MLT Radars__
Model Output__
[OH],aurora---
HF Radar---
Lidars__
#Persons
year
#Requests (1/day)


Yearly CEDAR Data Base Statistics Plotted on 08 Nov 2004
CEDAR logins
cmenu
web
TIMED
total__
#inst__
IS Radars__
new users---
emp models__
students---
indices__
non US---
model outputs__
#Persons
year
lg/web---
all inst__
lg/web inst---
docs+s/w---
#Requests (1/day)

Status of CEDARWEB

Successful release of 3.0 interface earlier in the year. Next release, 3.1, scheduled for later this year.

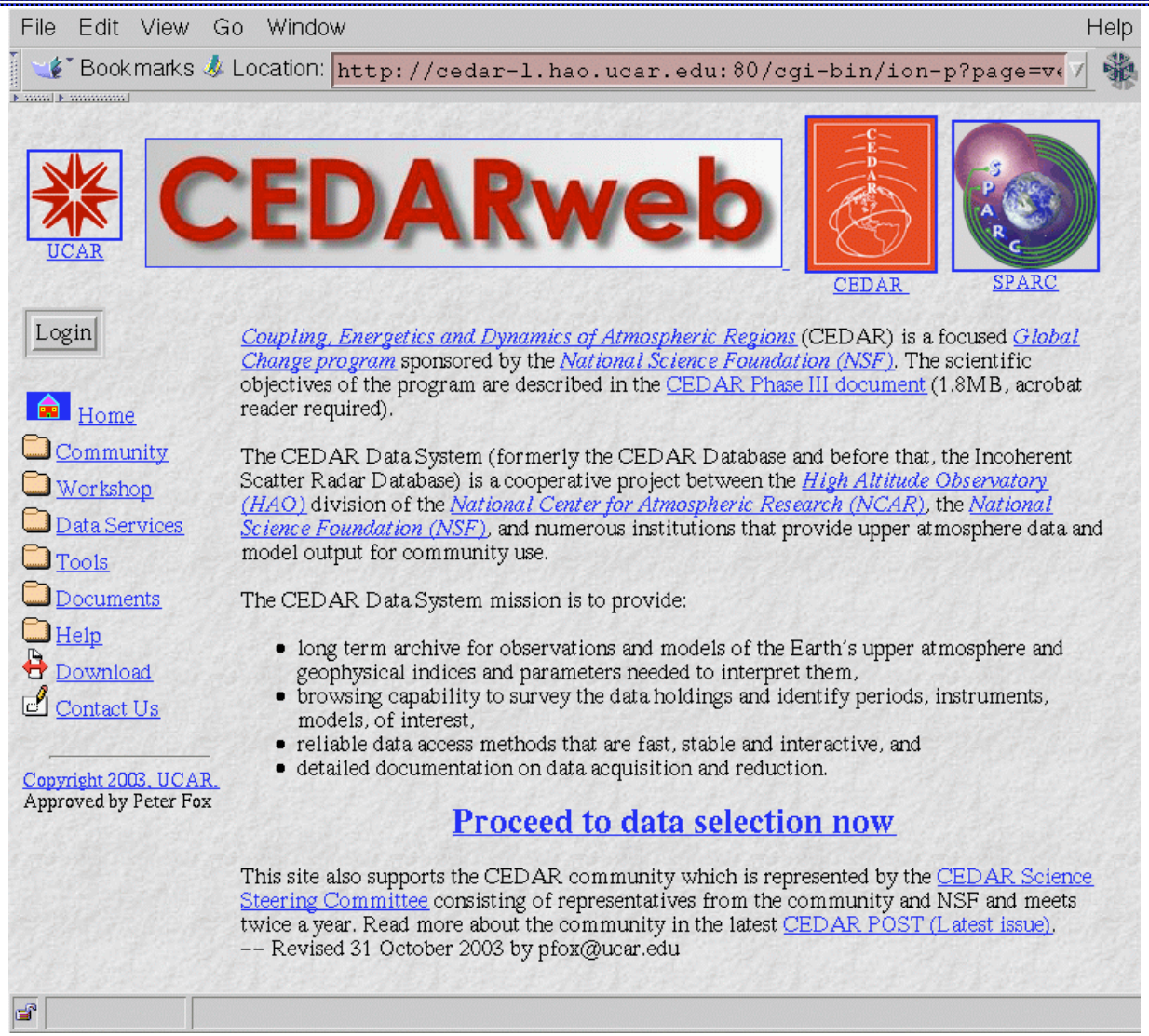
HAO has received funding from NSF/CISE/SCI to develop the Virtual Solar-Terrestrial Observatory (VSTO) which is proposed to be:

- *a distributed, scalable education and research environment for searching, integrating, and analyzing observational, experimental and model databases in the fields of solar, solar-terrestrial and space physics*

VSTO would comprise:

- *a system which provides virtual access to specific data, model, tool and material archives containing items from a variety of space- and ground-based instruments and experiments, as well as individual and community modeling and software efforts bridging research and educational use*

CEDARWEB 3.0

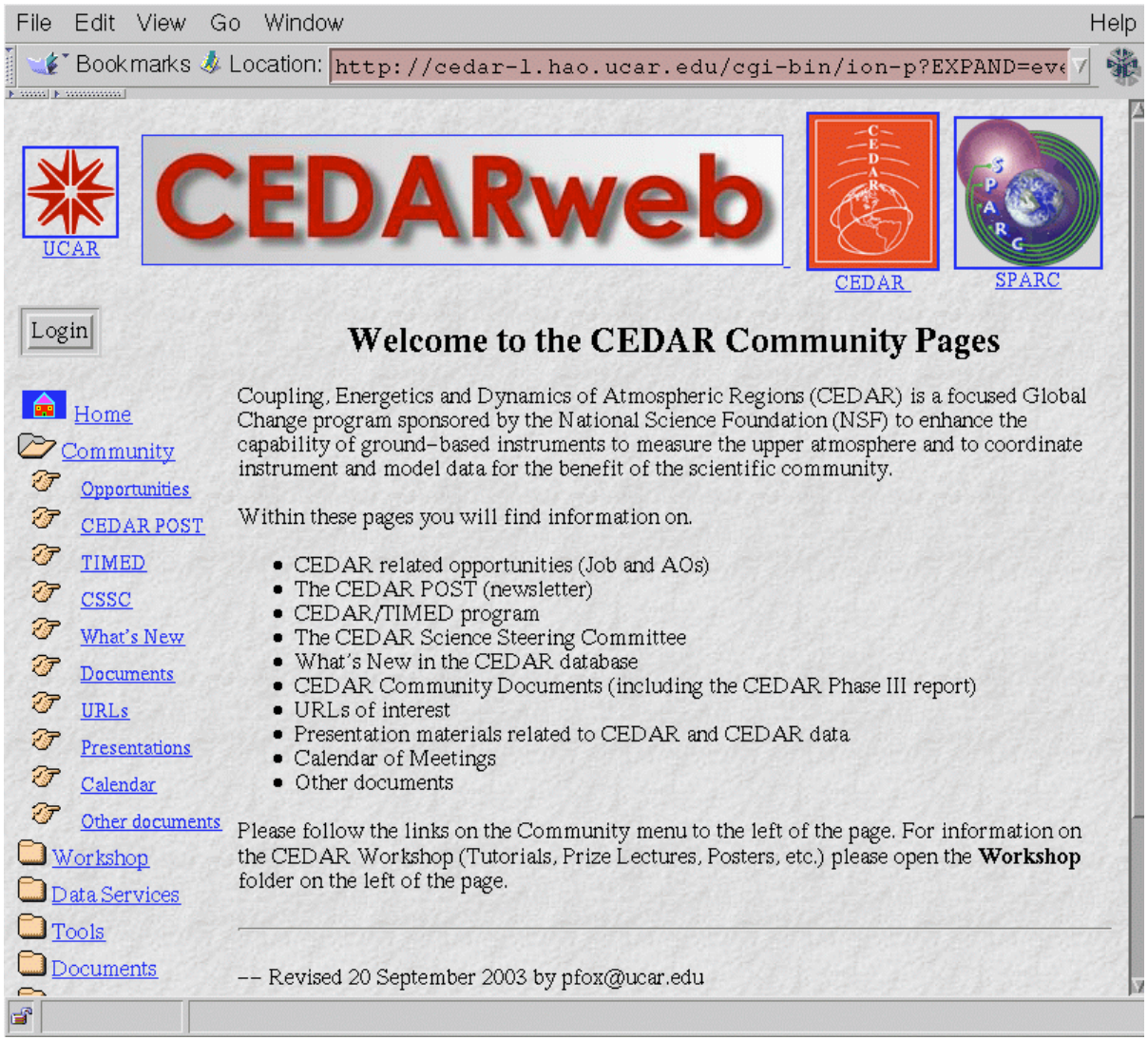


Community data archive, documents, and support.

CEDARWEB access to data

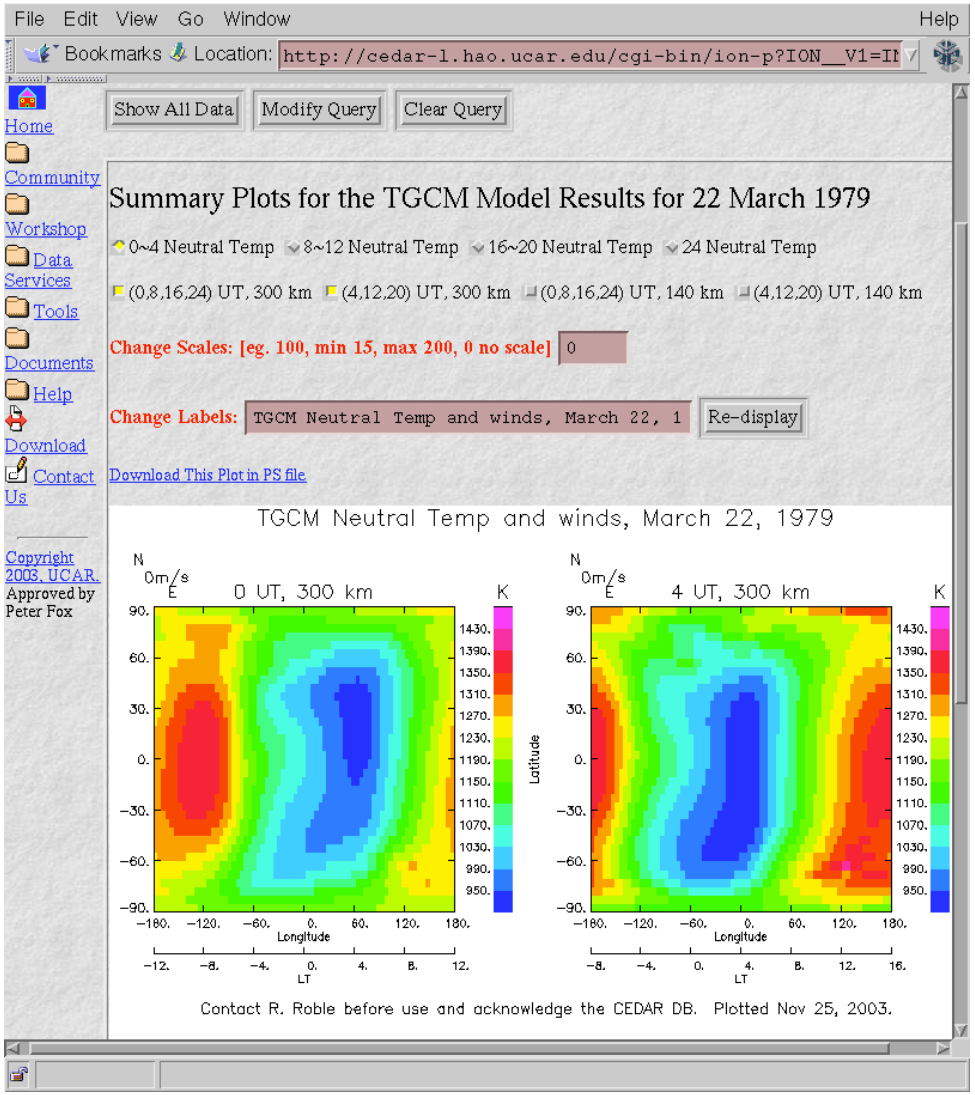
Data query, selection and retrieval interface, with integrated tools, e.g. ability to plot (preview) data before retrieving it.

CEDARWEB community



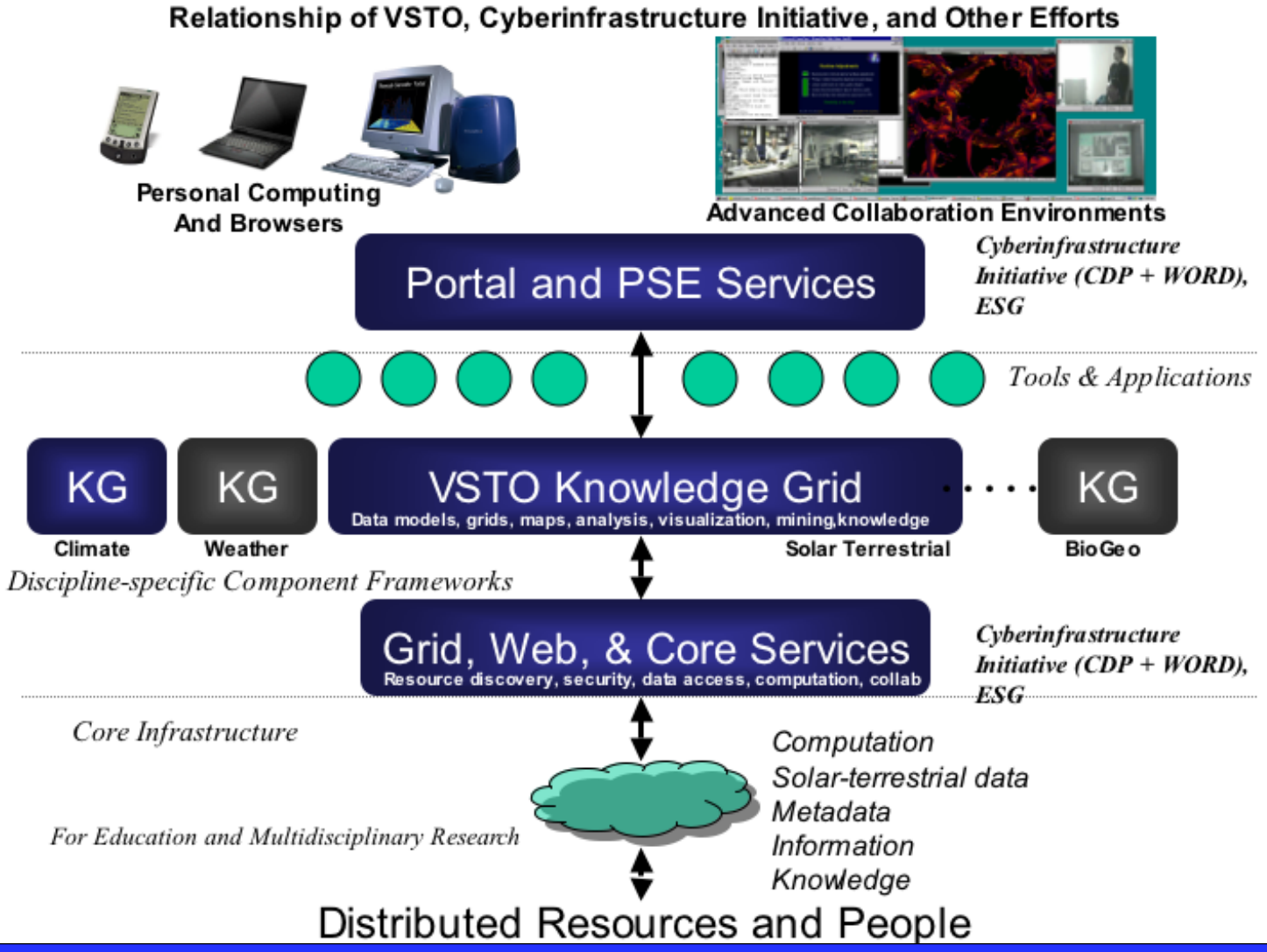
Don't just provide data, but also build in community information and ancillary information that is of value.

CEDARWEB 3.1



Ability to quickly plot data to assess suitability, quality, and produce a quick copy with some customization for a preliminary study.

VSTO Functionality



What's new about VSTO?

- Datasets alone are not sufficient to build a virtual observatory
- VSTO must address the interface problem to bring data to the users' tools, and to the tools within the VSTO, effectively and scalably
- VSTO will leverage the development of schema (e.g Earth System Grid, VSO/VHO/VSPO/VITMO, EGSO, etc.) that adequately describe the syntax (name of a variable, its type, dimensions, etc. or the procedure name and argument list, etc.) and semantics (what the variable physically is, its units, etc. or what the procedure does and returns, etc.) of the datasets and tools.

What's new about VSTO?

- A Grid-enabled virtual observatory minimizes the time to make data available and usable. Data does not have to be moved or reformatted, only registered with the catalog. It is then available from the VSTO web portal or the user's preferred application which has access to the VSTO interfaces
- VSTO will address the interdisciplinary metadata and ontology problem - bridging terminology and use of data across disciplines
- Aims to integrate tools, models, and data
- A basis for a framework for building and distributing advanced data assimilation tools
- ---> provides for the future evolution of CEDARWEB to continue to fully serve the CEDAR community and preserve and expand the CEDAR database.