VSO: A short history

- A bit of (really boring) history
- First attempts organized *c.* 1995 by K. Reardon and L. Sanchez-Duarte as the "Whole Sun Catalog"
  - unfunded by European sources
- BoF session at 2000 SPD (Lake Tahoe), proposal effort led by F. Hill (NSO)
  - unfunded by NSF
- Parallel effort led by R. Bogart (Stanford)
  - unfunded by NASA LWS DATM (now TR&T)
- Proposed as leading to the "withering away" of the SDAC
  - funded by NASA SEC senior review (2001)

VSO: Who?

- Steering Committee
  - Todd Hoeksema (NASA HQ)
  - Rob Bentley, *chair* (MSSL, UK; EGSO)
  - Sam Freeland (LMSAL)
  - Steve Walton (CSUN)
  - Dominic Zarro (L-3 GSI/GSFC)

- NASA
  - Chuck Holmes (MO&DA Program Manager)
  - Joe Gurman (GSFC; *de facto* project scientist)

VSO Team

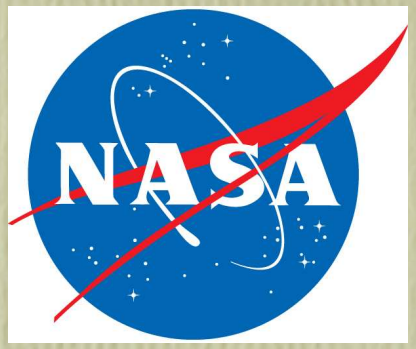
Rick Bogart, Karen Tian (Stanford)
Frank Hill, Igor Suarez-Sola
Steve Wampler (NSO)
Piet Martens, Alisdair Davey (MSU)
Joe Gurman, George Dimitoglou (GSFC)

And *you*

User comments at AAS, AGU, SPD sessions and BoF's

Any input/any time

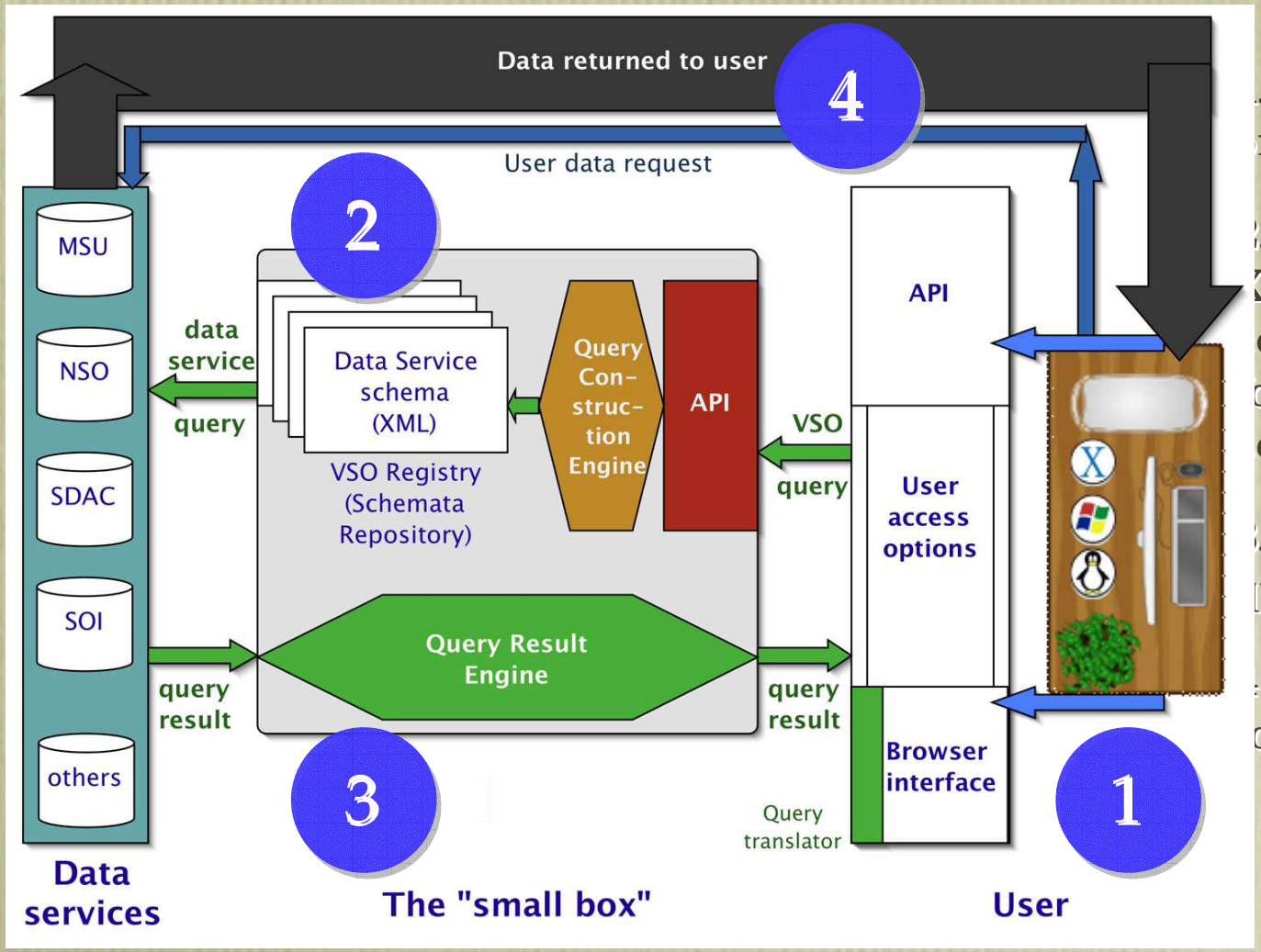
Community testing/adoption (or not)



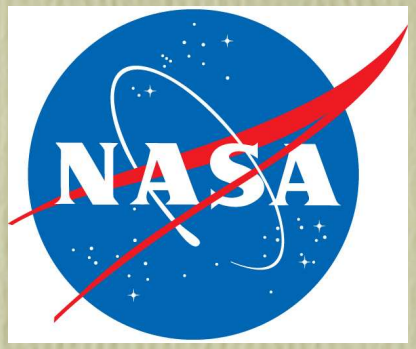
VSO: What?

- It should be distributed
- It should let us search for and access data from multiple missions/observatories/wavelengths without intimate knowledge of the data organization (*e.g.* by physical observable and/or mission/instrument)
- It should provide access to analysis software, instrument descriptions, &c. that enable use of the data for research
- It should be easy to add new data sets
- (Given the funding profile for this effort) it has to attempt to draw a "small box" around a small set of attributes that are useful for doing science

VSO: How ?



1. Access through a browser or an API
2. "Small box" uses registry of XML data service schema to construct appropriate queries for each relevant data service
3. API or browser can refine queries
4. Final data transfer is direct to requestor (no middleman)

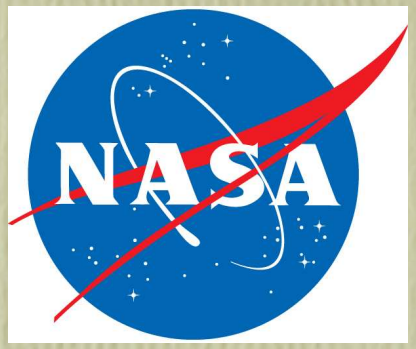


VSO: When?

- Study (Completed 2002 November; approved by Steering Committee 2003/01)
- Contract (2 years, 2003 May - 2005 April): GSFC to NSO, Stanford, MSU as subcontractors
- 0.5 beta 1 roll-out at San Francisco AGU (2003 December 9, 11): U22A-0011, -0012, SH42A-0503
- Four sites (multiple data services)
- Test usefulness/usability with community (feedback)
- IFF the prototype proves useful to the community
- Refine data model
- Add services (conversations with RHESSI, BBSO, HAO)
- Add "research opportunities" (separately funded)
  - Distributed processing (*e.g.* CoSEC)
  - Connections with other efforts (EGSO, LWSDE)
  - Extended maintenance phase to add nodes, support old, new nodes (after 2005/04)

What will it take to join the VSO?

- You have a network-accessible archive
- VSO should be able to help small data services get online
- Your observations can be described with a few "metadata" parameters understandable by most solar physicists: name, date and time, frequency/wavelength, &c.
- See current data model at: http://virtualsolar.org/docs/ — *liable to change soon*
- In current model, will require registering and running a SOAP server
- Data service as Web service



VSO Resources

- VSO homepage
- http://virtualsolar.org/

- VSO UI test page
- http://vso.stanford.edu/

- Strawman proposal
- http://virtualsolar.org/docs/VSO_strawman_20021125.pdf

- Sample XML schemas:
- http://virtualsolar.org/docs/schemas/