



VOpubs



Enrique Solano
(on behalf of Spanish VO)



CENTRO DE ASTROBIOLOGÍA · CAB
ASOCIADO AL NASA ASTROBIOLOGY PROGRAM

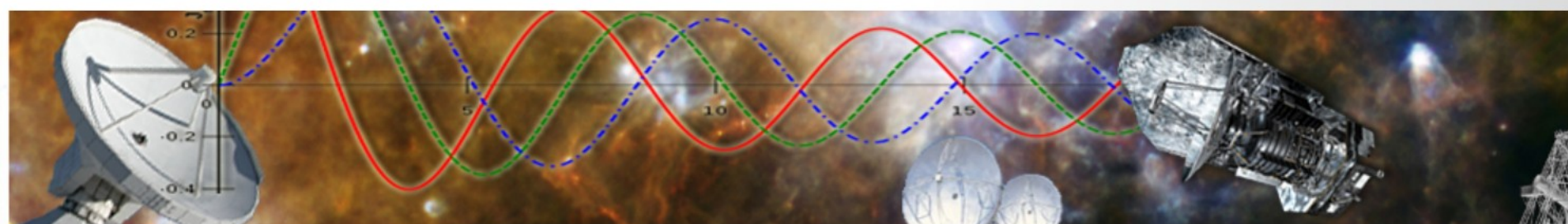
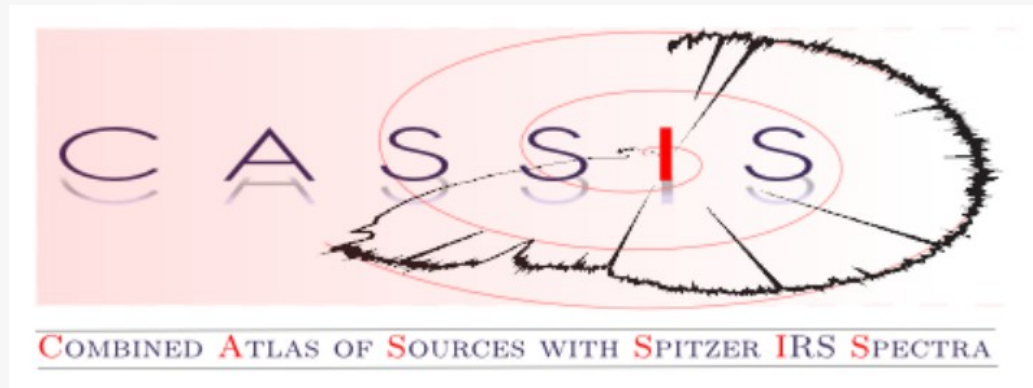


The needs

- *“I would like to compare the usage that the astronomical community makes of different VO tools and services.”*
- *“Is your service really useful for the community?” (in front of funding bodies)*
- *“Give me examples of real VO science cases” (also in front of funding bodies)*
- *What’s after VO schools? Do participants keep using VO?*
- *Featured VO papers (for the IVOA newsletters)*
- *Statistics on network traffic and automated queries in ADS using keywords may help..., but can we do it better?.*

The problems

in Sibthorpe et al. (2018). We also use *Spitzer*/IRS spectra from the CASSIS archive (Lebouteiller et al. 2011), where available.



The problems

Basic

Advanced

We are currently under construction... please excuse the mess as we update the database.
Report any issues or errors to the ALMA Helpdesk

Quick Picker

- CO $v=0$
- C¹⁷O
- CH₃OH $v_1=0$
- HCN $v=0$
- H¹³CN $v=0$
- DCN $v=0$
- CS
- NH₃
- C II
- O III
- H₂O $v=0$
- SiO $v=0$
- ¹³CO $v=0$
- C¹⁸O
- H₂CO
- HNC $v=0$
- HC¹⁵N $v=0$
- HCO⁺ $v=0$
- H¹³CO⁺
- C I
- O I
- N II
- HDO
- [More_molecules](#)



Search:

Telescope Bands:
ALMA Band 3 (84-116 GHz)
ALMA Band 4 (125-163 GHz)

Energy Range: Min Max Redshift:
 E_L (cm⁻¹) E_L (K)

Frequency Range: Min Max Frequency Unit:

Settings Name

Astronomical Filters

(Double click to unselect)

- Top 20 list
- Planetary Atmosphere
- Hot Cores
- Dark Clouds
- Diffuse Clouds
- Comets
- AGB/PPN/PN
- Extragalactic



Scan to Mobile Splat

Welcome to the "New" Splatologue!

SPLAT - Spectral Analysis Tool

Site Index

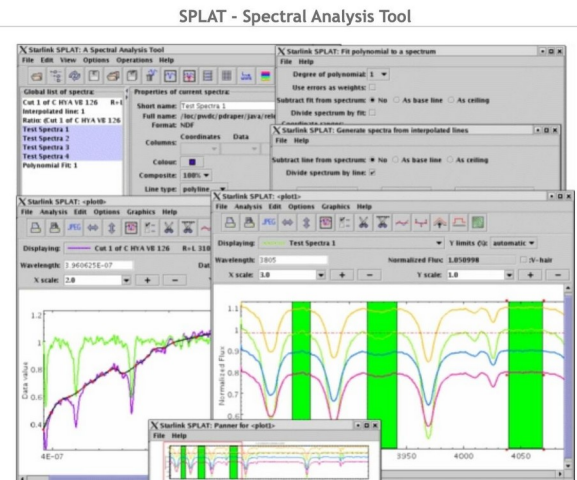
- o Site Home
- o EXTRACTOR
- o GAIA
- o IMG
- o PISA
- o SST

SPLAT Index

- o SPLAT-VO
- o GAVO SPLAT
- o More snapshots
- o Summer 2003

External Links

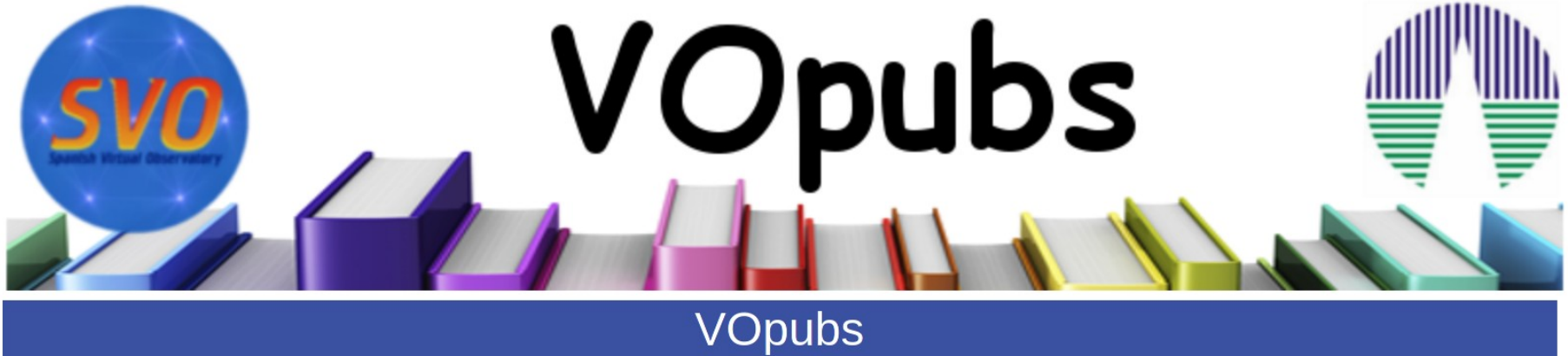
- o Durham
- o EAO
- o STFC
- o Starlink



VOPub: How does it work?

- ADS is queried on a monthly basis
 - **Journals:** A&A, AJ, AN, ApJ, ApJL, ApJS, Icar, MNRAS, PASP
 - **Keywords:** GAVO, Aladin,Splat, CASSIS, Virtual Observatory, SIMBAD, Vizier, VOSpec, STILTS, Aus-VO, BRAVO, China-VO, Vobs.it, SVO, VAO, VO-iRVO, JVO, Euro-VO, France-VO, CVO, ChiVO, SA3, VOSA,Topcat,NOVA,ESASky, ASVO, Miriade, Skybot, CDS Name resolver, CDS cross match, TAPHandle, NVO, VOSCA, VisIVO, SkyView, TOSS, IMCEE.
- Visual inspection by SVO staff

How does it work?



Search by bibcode:

Search by comment: (free text)

Only publications without comments

Search by dates:

from:

to:

The results

- *“I would like to compare the usage that the astronomical community makes of the different VO tools and services.”*
- *“Is your service really useful for the community?” (in front of funding bodies)*

329 Results

Comment	Number
Use of VO tools: TOPCAT	132
Use of VO tools: Vizier	76
Use of VO tools: SIMBAD	61
Use of VO tools: Aladin	50
Use of VO services: SVO Filter Profile Service.	45
Use of VO tools: VOSA	26
VO project (SVO) acknowledged in the paper.	24
Australian All-Sky Virtual Observatory (ASVO)	11
Use of VO tools: STILTS	10
Use of VO tools: CASSIS	10
Use of VO tools: SkyBot	5
Use of VO tools: ESASky	5
Use of VO services. Theoretical model service provided by SVO.	5
Use of VO services: JVO	4
VO project (GAVO) acknowledged in the paper	4
Use of VO tools: Sky View	4
VO project (JVO) acknowledged in the paper.	4
Use of VO tools: CDS Cross-match	3
VO project (GAVO) acknowledged in the paper. Use of Millenium database.	3
VO project (China-VO) acknowledged in the paper	3
VO project VAO (US Virtual Astronomical Observatory) acknowledged in the paper.	1

How does it work?

Bibcode		Title	author	Comment	Citation	
↑	↓				↑	↓
2022A&A...657A..10S		Gas phase Elemental abundances in Molecular cloudS (GEMS) V. Methanol in Taurus	Spezzano, S.;Fuentes, A.;Caselli, P.;Vasyunin, A.;Navarro-Almada, D.;Rodríguez-Baras, M.;Punanova, A.;Vastel, C.;Wakelam, V.	Use of VO tools: CASSIS		-
2022A&A...657A.136E		SOLIS. XIII. Nitrogen fractionation towards the protocluster OMC-2 FIR4	Evans, L.;Fontani, F.;Vastel, C.;Ceccarelli, C.;Caselli, P.;López-Sepulcre, A.;Neri, R.;Alves, F.;Chahine, L.;Favre, C.;Lattanzi, V.	Use of VO tools: CASSIS		-
2022A&A...657A.138T		Probabilistic classification of X-ray sources applied to Swift-XRT and XMM-Newton catalogs	Tranin, Hugo;Godet, Olivier;Webb, Natalie;Primorac, Daria	Use of VO tools: TOPCAT Use of VO tools: Aladin		2
2022A&A...657A..27M		A Kepler K2 view of subdwarf A-type stars	Mösenlechner, G.;Paunzen, E.;Pelisoli, I.;Seelig, J.;Stidl, S.;Maitzen, H. M.	Use of VO tools: VOSA		-
2022A&A...657A..38M		Accreting protoplanets: Spectral signatures and magnitude of gas and dust extinction at H α	Marleau, G. -D.;Aoyama, Y.;Kuiper, R.;Follette, K.;Turner, N. J.;Cugno, G.;Manara, C. F.;Haffert, S. Y.;Kitzmann, D.;Ringqvist, S. C.;Wagner, K. R.;van Boekel, R.;Sallum, S.;Janson, M.;Schmidt, T. O. B.;Venuti, L.;Lovis, Ch.;Mordasini, C.	Use of VO services. Theoretical model service provided by SVO. Use of VO services: SVO Filter Profile Service.		1
2022A&A...657A..50G		The peculiar abundances of HE 1005-1439. A carbon-enhanced extremely metal-poor star contaminated with products of both s- and i-process nucleosynthesis	Goswami, Partha Pratim;Goswami, Aruna	VO project (JVO) acknowledged in the paper. Use of VO tools: SIMBAD		-
2022A&A...657A..53B		Unveiling wide-orbit companions to K-type stars in Sco-Cen with Gaia EDR3	Bohn, Alexander J.;Ginski, Christian;Kenworthy, Matthew A.;Mamajek, Eric E.;Meshkat, Tiffany;Pecaut, Mark J.;Reggiani, Maddalena;Seay, Christopher R.;Brown, Anthony G. A.;Cugno, Gabriele;Henning, Thomas;Launhardt, Ralf;Quirrenbach, Andreas;Rickman, Emily L.;Ségransan, Damien	Use of VO tools: VOSA Use of VO tools: SIMBAD		-
2022A&A...657A..80A		Phase curves of small bodies from the SLOAN Moving Objects Catalog	Alvarez-Candal, A.;Benavidez, P. G.;Campo Bagatin, A.;Santana-Ros, T.	VO project (SVO) acknowledged in the paper.		-
2022A&A...657A...9C		Virgo filaments. I. Processing of gas in cosmological filaments around the Virgo cluster	Castignani, G.;Combes, F.;Jablonka, P.;Finn, R. A.;Rudnick, G.;Vulcani, B.;Desai, V.;Zaritsky, D.;Salomé, P.	Use of VO tools: Aladin		8
2022A&A...658A.109S		Multifilter photometry of Solar System objects from the SkyMapper Southern Survey	Sergeyev, A. V.;Carry, B.;Onken, C. A.;Devillepoix, H. A. R.;Wolf, C.;Chang, S. -W.	Use of VO tools: TOPCAT Use of VO tools: CDS Cross-match Use of VO tools: STILTS Use of VO services: SVO Filter Profile Service. Use of VO tools: SkyBot Australian All-Sky Virtual Observatory (ASVO)		-
2022A&A...658A.131Z		Chemical exploration of Galactic cold cores	Zhou, Chenlin;Vastel, Charlotte;Montillaud, Julien;Ceccarelli, Cecilia;Demyk, Karine;Harju, Jorma;Juvola, Mika;Ristorcelli, Isabelle;Liu, Tie	Use of VO tools: CASSIS		-
2022A&A...658A.133G		Near-infrared transmission spectrum of TRAPPIST-1 h using Hubble WFC3 G141 observations	Gressier, A.;Mori, M.;Changeat, Q.;Edwards, B.;Beaulieu, J. P.;Marcq, E.;Charnay, B.	Use of VO services. Theoretical model service provided by SVO.		2
2022A&A...658A.138G		A multi-planetary system orbiting the early-M dwarf TOI-1238	González-Álvarez, E.;Zapatero Osorio, M. R.;Sanz-Forcada, J.;Caballero, J. A.;Reffert, S.;Béjar, V. J. S.;Hatzes, A. P.;Herrero, E.;Jeffers, S. V.;Kemper, J.;López-González, M. J.;Luque, R.;Molaverdikhani, K.;Morello, G.;Nagel, E.;Quirrenbach, A.;Rodríguez, E.;Rodríguez-López, C.;Schlecker, M.;Schweitzer, A.;Stock, S.;Passegger, V. M.;Trifonov, T.;Amado, P. J.;Baker, D.;Boyd, P. T.;Cadieux, C.;Charbonneau, D.;Collins, K. A.;Doyon, R.;Dreizler, S.;Espinoza, N.;Fűrész, G.;Furlan, E.;Hesse, K.;Howell, S. B.;Jenkins, J. M.;Kidwell, R. C.;Latham, D. W.;McLeod, K. K.;Montes, D.;Morales, J. C.;O'Dwyer, T.;Pallé, E.;Pedraz, S.;Reiners, A.;Ribas, I.;Quinn, S. N.;Schnaible, C.;Seager, S.;Skinner, B.;Smith, J. C.;Schwarz, R. P.;Shporer, A.;Vanderspek, R.;Winn, J. N.	Use of VO tools: VOSA		1





The results

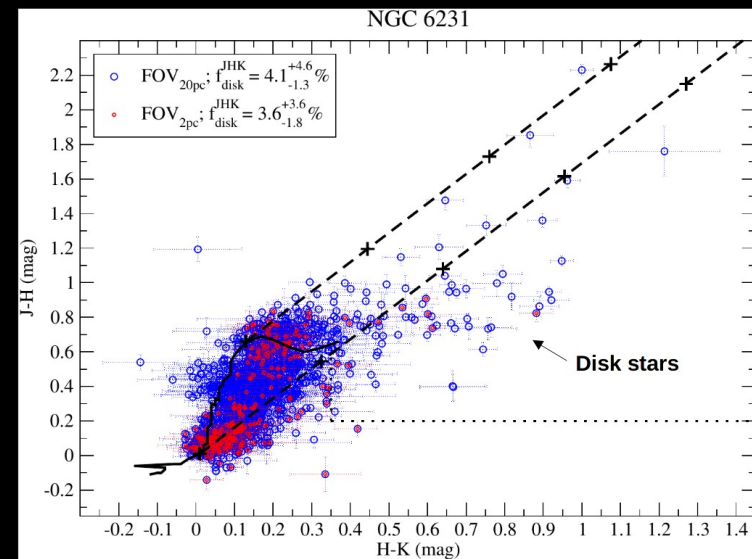
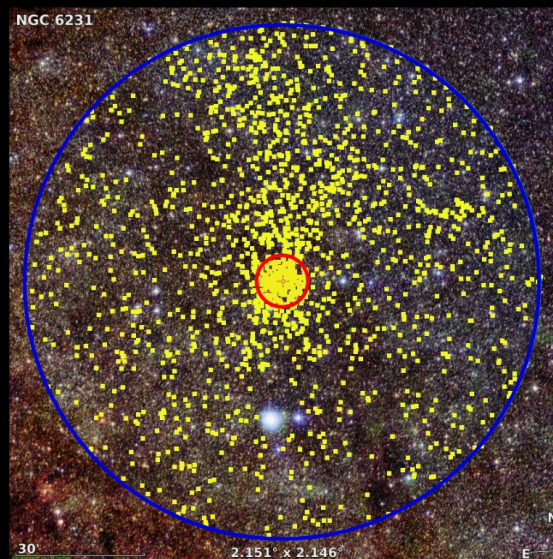
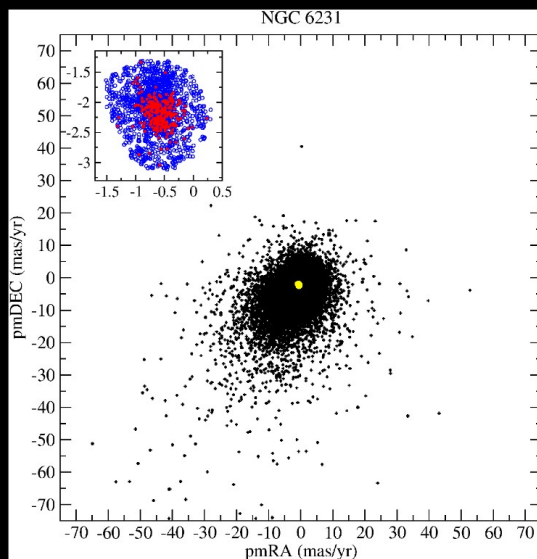
- “Give me examples of real VO science cases” (also in front of funding bodies)

A&A 664, A66 (2022)
<https://doi.org/10.1051/0004-6361/202243146>
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**Astronomy
&
Astrophysics**

Gaia EDR3 comparative study of protoplanetary disk fractions in young stellar clusters★

I. Mendigutía¹, E. Solano^{1,2}, M. Vioque^{3,4}, L. Balaguer-Nuñez⁵, A. Ribas⁶, N. Huélamo¹, and C. Rodrigo^{1,2}




The results

- *What's after VO schools? Do participants keep using VO?*

HELP: a catalogue of 170 million objects, selected at 0.36–4.5 μm , from 1270 deg^2 of prime extragalactic fields

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Raphael Shirley , Yannick Roehlly, Peter D Hurley, Veronique Buat, María del Carmen Campos Varillas, Steven Duivenvoorden, Kenneth J Duncan, Andreas Efstathiou, Duncan Farrah, Eduardo González Solares ... [Show more](#)

Monthly Notices of the Royal Astronomical Society, Volume 490, Issue 1, November 2019, Pages 634–656, <https://doi.org/10.1093/mnras/stz2509>

Published: 10 September 2019 **Article history** 

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ABSTRACT

We present an optical to near-infrared (NIR) selected astronomical catalogue covering 1270 deg^2 . This is the first attempt to systematically combine data from 23 of the premier extragalactic survey fields – the product of a vast investment of telescope time. The fields are those imaged by the *Herschel Space*

2019MNRAS.490..634S

HELP: a catalogue of 170 million objects, selected at 0.36–4.5 μm , from 1270 deg^2 of prime extragalactic fields

[Shirley](#), Raphael;Roehlly, Yannick;Hurley, Peter D.;Buat, Veronique;Campos Varillas, María del Carmen;Duivenvoorden, Steven;Duncan, Kenneth J.;Efstathiou, Andreas;Farrah, Duncan;González Solares, Eduardo;Malek, Katarzyna;Marchetti, Lucia;McCheyne, Ian;Papadopoulos, Andreas;Pons, Estelle;Scipioni, Roberto;Vaccari, Mattia;Oliver, Seb

Use of VO services: SVO Filter Profile Service.

The results

- *Featured VO papers (for the IVOA newsletters)*

**Astronomy
&
Astrophysics**

A&A 658, A109 (2022)
<https://doi.org/10.1051/0004-6361/202142074>
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Multifilter photometry of Solar System objects from the SkyMapper Southern Survey★

A. V. Sergeev^{1,7}, B. Carry¹, C. A. Onken^{2,3}, H. A. R. Devillepoix⁴, C. Wolf^{2,3}, and S.-W. Chang^{2,5,6}

2022A&A...658A.109S	Multifilter photometry of Solar System objects from the SkyMapper Southern Survey	Sergeev, A. V.; Carry, B.; Onken, C. A.; Devillepoix, H. A. R.; Wolf, C.; Chang, S. -W.	Use of VO tools: TOPCAT Use of VO tools: CDS Cross-match Use of VO tools: STILTS Use of VO services: SVO Filter Profile Service. Use of VO tools: SkyBot Australian All-Sky Virtual Observatory (ASVO)
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The results



<https://sdc.cab.inta-csic.es/vopubs/>