

# New Features in SPLAT-VO

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- ▶ SPLAT is a graphical tool for displaying, comparing, modifying and analysing astronomical spectra.
- ▶ Powerful spectral analysis tool with VO functionality
- ▶ First developed in the STARLINK project (Peter Draper, Mark Taylor), now part of the STARJAVA collection.

- ▶ Since November 2011 SPLAT-VO is being developed within the GAVO (German VO) project
- ▶ Mainly by the GAVO team at Heidelberg University in the future also by Tübingen University.
- ▶ First goal: increase flexibility of VO part (server selection, queries, metadata), add new VO features
- ▶ Later new spectral analysis features (also in cooperation with Petr Skoda, Academy of Sciences of the Czech Republic)

# SPLAT-VO original query interface

Starlink SPLAT-VO. Query VO for Spectra

File Options Resolver Interop Help

Search region:

Object:

RA:

Dec:

Radius:


Band:

Time:


Query results:

ELODIE	INES ARCHIVE	HST STIS Spectra	HST/GHRS Spectra	HST Spectra	IUE	TBL Narval	Gastor		
Flash/Heros SSAP	HEROS OND	CUTOFF	ST-ECF/HST/SSA	HEROS OND	ESO_SSAP	ESO SAF SSA			
index	Title	Camera	Image	Dispersion	Aperture	Object	RA	DEC	SkyLocation
1	IUE/INES Spectrum: SWP29865L	SWP	29865	LOW	LARGE	IUE SKY	279.231	38.7795	(279.2, 38.7795)
2	IUE/INES Spectrum: SWP30550L	SWP	30550	LOW	LARGE	IUE SKY	279.231	38.7795	(279.2, 38.7795)
3	IUE/INES Spectrum: LWR03002R	LWR	03002	HIGH	SMALL	HD 172167	279.2323	38.7777	(279.2, 38.7777)
4	IUE/INES Spectrum: LWR03002H	LWR	03002	HIGH	SMALL	HD 172167	279.2323	38.7777	(279.2, 38.7777)
5	IUE/INES Spectrum: LWR04154R	LWR	04154	HIGH	SMALL	HD 172167	279.2323	38.7777	(279.2, 38.7777)
6	IUE/INES Spectrum: LWR04154H	LWR	04154	HIGH	SMALL	HD 172167	279.2323	38.7777	(279.2, 38.7777)
7	IUE/INES Spectrum: LWR07008R	LWR	07008	HIGH	SMALL	HD 172167	279.231	38.7795	(279.2, 38.7795)
8	IUE/INES Spectrum: LWR07008H	LWR	07008	HIGH	SMALL	HD 172167	279.231	38.7795	(279.2, 38.7795)
9	IUE/INES Spectrum: LWR07585R	LWR	07585	HIGH	LARGE	HD 172167	279.2311	38.7798	(279.2, 38.7798)
10	IUE/INES Spectrum: LWR07585H	LWR	07585	HIGH	LARGE	HD 172167	279.2311	38.7798	(279.2, 38.7798)
11	IUE/INES Spectrum: LWR08629R	LWR	08629	HIGH	SMALL	HD 172167	279.231	38.7795	(279.2, 38.7795)
12	IUE/INES Spectrum: LWR08629H	LWR	08629	HIGH	SMALL	HD 172167	279.231	38.7795	(279.2, 38.7795)
13	IUE/INES Spectrum: LWR08630R	LWR	08630	HIGH	LARGE	HD 172167	279.231	38.7795	(279.2, 38.7795)
14	IUE/INES Spectrum: LWR08630H	LWR	08630	HIGH	LARGE	HD 172167	279.231	38.7795	(279.2, 38.7795)
15	IUE/INES Spectrum: LWR09830R	LWR	09830	HIGH	SMALL	HD 172167	279.231	38.7795	(279.2, 38.7795)
16	IUE/INES Spectrum: LWR09830H	LWR	09830	HIGH	SMALL	HD 172167	279.231	38.7795	(279.2, 38.7795)
17	IUE/INES Spectrum: LWR18455R	LWR	18455	HIGH	LARGE	HD 172167	279.231	38.7795	(279.2, 38.7795)
18	IUE/INES Spectrum: LWR18455H	LWR	18455	HIGH	LARGE	HD 172167	279.231	38.7795	(279.2, 38.7795)
19	IUE/INES Spectrum: LWP03008R	LWP	03008	HIGH	SMALL	HD 172167	279.2297	38.7905	(279.2, 38.7905)
20	IUE/INES Spectrum: LWP03008H	LWP	03008	HIGH	SMALL	HD 172167	279.2297	38.7905	(279.2, 38.7905)
21	IUE/INES Spectrum: LWP04836R	LWP	04836	HIGH	SMALL	HD 172167	279.231	38.7798	(279.2, 38.7798)
22	IUE/INES Spectrum: LWP04836H	LWP	04836	HIGH	SMALL	HD 172167	279.231	38.7798	(279.2, 38.7798)
23	IUE/INES Spectrum: LWP04837R	LWP	04837	HIGH	LARGE	HD 172167	279.231	38.7798	(279.2, 38.7798)
24	IUE/INES Spectrum: LWP04837H	LWP	04837	HIGH	LARGE	HD 172167	279.231	38.7798	(279.2, 38.7798)
25	IUE/INES Spectrum: LWP04838L	LWP	04838	LOW	LARGE	HD 172167	279.2311	38.7887	(279.2, 38.7887)
26	IUE/INES Spectrum: LWP04840R	LWP	04840	HIGH	SMALL	HD 172167	279.231	38.7784	(279.2, 38.7784)
27	IUE/INES Spectrum: LWP04840H	LWP	04840	HIGH	SMALL	HD 172167	279.231	38.7784	(279.2, 38.7784)

- ▶ PREVIOUS VERSION: SPLAT-VO queries the registry for a list of SSAP servers and stores it.
- ▶ You may want to use a server that is not yet in the registry database (e.g. private server, or still in testing phase,...)
- ▶ NEW: Possibility to add a new server to the table of servers

- ▶ PREVIOUS VERSION: the SSAP queries are sent to all servers stored in SPLAT-VO, possible to remove uninteresting servers
- ▶ You may want to make different queries with different subsets of servers (only theory servers, or only servers that support data with certain metadata, etc)
- ▶ NEW: Selection of subset of servers by data source (theory, survey, archive), or waveband
- ▶ NEW: User-defined tags, where only chosen servers can be used (e.g. "my favorite servers" )...
- ▶  Data source and waveband information are queried from the registry, but not all information in the registries is complete or up to date

- ▶ **PREVIOUS VERSION:** Support only for basic queries (pos, targetname, size, band, time...)
- ▶ You may want to send a query based on other metadata parameters
- ▶ **NEW:** Possibility to add new metadata parameters to the query according to selected servers
- ▶ **NEW:** New GUI layout to include server selection and metadata options

- ▶ PREVIOUS VERSION: All data stored in SSAP servers is public
- ▶ You may want to use your data with SPLAT-VO, or share with a few people, but not YET disclose it
- ▶ NEW: Password authentication for servers or for datasets
- ▶  Simple use case with HTTP Authentication. This feature works with supporting SSAP servers. Can be adapted to other kinds of authentication if necessary.



# SPLAT-VO new query interface

server selection options

SSAP servers

query parameters

optional query parameters

results

- ▶ SPLAT-VO development is ongoing, other changes are to be expected
- ▶ Improvement of GUI
- ▶ New analysis functions
- ▶ New VO functions (next: GET DATA)
- ▶ We'll gladly consider new ideas and suggestions
- ▶ Thanks to Petr Skoda for good advice and beta testing

# Where to find it

- ▶ Beta version: <http://soft.g-vo.org/splat-beta/>
- ▶ New release to be integrated into starjava shortly
- ▶ Feedback to [mcneves@ari.uni-heidelberg.de](mailto:mcneves@ari.uni-heidelberg.de)
- ▶ thank you!!!