

Catalogues JMDC, JSDC 3 SearchCal / GetStar 6

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- Major server changes: <https://www.jmmc.fr/~betaswmgr/SearchCal/>
 - Migrated to github + deployment (kubernetes + docker): <https://github.com/JMMC-OpenDev/SearchCal/>
 - Lower memory footprint + improved crossmatch algorithm + local caching (files)
 - All data files: https://www.jmmc.fr/~bourgesl/sclsvr_JSDC/
- Updated dataset JSDC 3 (24.12): 514k diameters (raw)
 - based on TYCHO2 (ASCC I/280) = 2.5 million candidates
 - SIMBAD (20m objects, 15.12)
 - GAIA DR3: pos + G Bp Rp (+ radius) with G to V conversion
 - MDFC: IRFlag + LMN fluxes (Jy)
 - Stats: https://www.jmmc.fr/~bourgesl/sclsvr_JSDC/JSDC/20250219/JSDC3-bright/filtered.vot.fits.stats.txt
 - See https://www.jmmc.fr/~bourgesl/sclsvr_JSDC/JSDC/20250219/

News

- Updated pipelines to
 - fit JMDC polynoms (alx/config/JMDC)
 - Prepare candidates (SIMBAD x ASCC x MDFC)
- JSDC3: same polynomial laws (= JMDC2 coefficients)

Methods:

- Bright = (VJHK + sptype)
- Faint = (VJHK – no sptype) => try all sptype in range [B0 – M5] + min(chi2) to get a diameter estimation
- Added GAIA DR3 (G, Bp, Rp) => V, used if no V flux (GetStar)

GetStar 6

<https://www.jmmc.fr/~bourgesl/getstar/sclwsGetStarProxy.php?star=mizar>

- New form to customize fluxes and spectral type
- Based on JSDC3 (2.5e6 rows) + custom queries for unknown sources
- Can use (G-> V + JHK) only
- New xmatch log (debug)

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Sauvegarde OSUG View 1 · @bourgesl'... PEPR-INTERF Home... Cegid Notilus Cegid Notilus caler

Welcome to the JMMC GetStar service.

Please enter your object name to retrieve all its information from Simbad & VizieR catalogs:

Name: Format:

Advanced parameters:

- Photometries:

- V (mag):	0.541	e_V (mag):	0.018
- J (mag):	-2.989	e_J (mag):	0.103
- H (mag):	-4.007	e_H (mag):	0.162
- K (mag):	-4.378	e_K (mag):	0.186
- Spectral Type:	M1-M2Ia-Iab		

It may take few seconds to get results (multiple CDS queries and computation of various propert.

GetStar result:

Version: SearchCal Server v6.25.02-21
GetStar software (In case of problem, please report to jmmc-user-support@jmmc.fr)
Request parameters: -objectName betelgeuse -format vot
Generated on (UTC): 2025-03-09T21:27:15

Property	Value	(Unit)	
HD	39801		HD identifier, click to call
HIP	27989		HIP identifier, click to call
DM	701055		DM number, click to call Simb
ASCC	1015030		ASCC identifier, click to cal

- Make new public releases soon (new server-side)
- Write the changelog and comparison v2 vs v3:

https://www.jmmc.fr/~bourgesl/sclsvr_JSDC/outputsJSDC/DIFF_jsdc-SVN20170503_BRIGTH.fits_jsdc-20250115_BRIGTH.fits/

=> data paper ?

- Update SearchCal GUI (6): new filters (IR flag, CalFlag), show new columns (GAIA, MDFC)
- Publish JMDC (25) + JSDC 3 (25) at CDS