



# JMMC

# SearchFTT

AG JMMC

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Grenoble



# Une interface simple pour

## GRAVITY-wide: finding off-axis fringe tracking targets.

This newborn tool is in its first versions and is subject to various changes in its early development phase.

### Underlying method:

You can query one or several Science Targets. For each of them, suitable ring Tracker Targets will be given using following research methods:

- Main catalogs
  - GSC2 [The Guide Star Catalogue, Version 2.4.2 \(2020\)](#)
  - Simbad CDS / Simbad
  - Gaia DR3 Gaia DR3 catalogues and cross-matched catalogues through [ESA archive center](#).
- Additional catalogs (use toggle button in the menu to get result tables)
  - GDR2AP The [Astrophysical Parameters from Gaia DR2, 2MASS & AllWISE](#) catalog through the GAVO DC.
  - Gaia DR2 Gaia DR2 catalogues [with its external catalogues cross-match](#) through [ESA archive center](#).

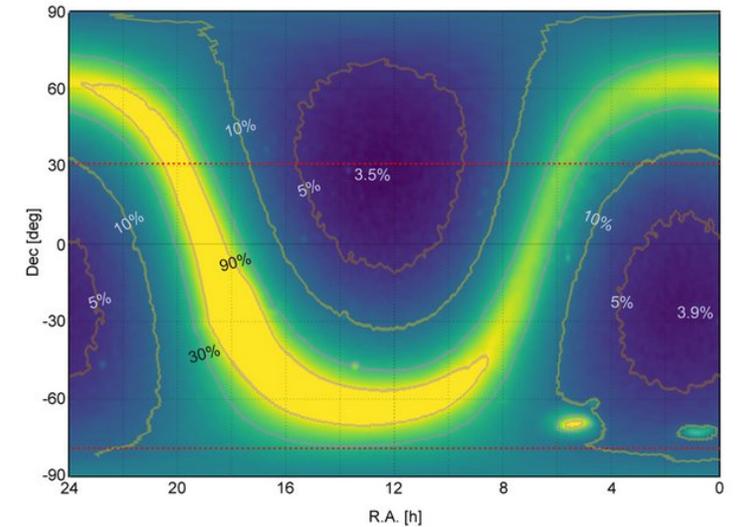
Each query is performed within 30" of the Science Target. A magnitude filter is applied on every Fringe Tracker Targets according to the best limits offered in P110 for **UT (MACAO) OR AT (NAOMI)** respectively ( $K < 11$  AND  $V < 15$ ) OR ( $K < 10$  AND  $R < 12.5$ ). When missing, the V and R magnitudes are computed from the Gaia G, Grb and Grp magnitudes. The user must **refine its target selection** to take into account [VLTI Adaptive Optics specifications](#) before we offer a configuration selector in a future release.

- Enter comma separated names ( SearchFTT will try to resolve it using [Simbad](#) ) or coordinates (RA +/-DEC in degrees J2000), in the TextBox below.
- Move your pointer to the column titles of the result tables to get the column descriptions.
- To send a target to [Aspro2](#) (already open), click on the icon in the [GetStar](#) column, then press "Send Votable".
- Please [fill a report](#) for any question or remark.

Science identifiers (comma separated)



Fig. 12



Sky coverage for laser guide star adaptive optics supported off-axis fringe tracking with a fringe tracking star as faint as  $m_K = 13$ , and a maximum allowed separation of 30 arcsec.

# Une interface simple ...des recherches multi-datacenters/catalogues

- Contraintes instrumentales
  - pré-définies & paramétrables manuellement
- Génération dynamique de requêtes ADQL
  - 1 par target et par datacenter
- Regroupement des résultats
- Export vers Aspro2 en passant par GetStar

**JMMC** SearchFTT Home extended catalogs extended columns queries hide table hide orphan debug V.1.4 stable

**NAME Sgr A\***  
ICRS coord. [deg] (ep=J2000) : 266.41681662499997 -29.00782497222222  
Proper motions [mas/yr] :  
1 Gaia DR3 1 Gaia DR2

Sorry, no fringe tracking star found for NAME Sgr A\* in GSC2.  
Sorry, no fringe tracking star found for NAME Sgr A\* in Simbad.

1 Simbad link for Gaia DR3	j2000_dist [arcsec]	ra [deg]	dec [deg]	mag_ks [mag]	mag_g [mag]	mag_v (computed)	mag_r (computed)	GetStar
<a href="#">USNO-A2.0 0600-28577051</a>	19.065	266.42	-29.003	9.395	14.228	14.61	13.952	

**HD224803**  
ICRS coord. [deg] (ep=J2000) : 0.20702433180999996 36.78009900429  
Proper motions [mas/yr] : -24.63 -22.343  
2 GSC2 2 Simbad 2 Gaia DR3 2 GDR2AP 2 Gaia DR2

2 Simbad link for GSC2	j2000_dist [arcsec]	ra [deg]	dec [deg]	mag_ks [mag]	mag_v [mag]	mag_r [mag]	GetStar	
<a href="#">GSC2 NBH5000476</a>	0.077	0.207	36.78	6.181	8.283	-	-	
<a href="#">GSC2 NBH5000478</a>	15.447	0.203	36.777	8.82	10.308	13.672	-	

2 Simbad link for Simbad	j2000_dist [arcsec]	ra [deg]	dec [deg]	mag_ks	mag_g	mag_v	mag_r	GetStar
<a href="#">HD 224803</a>	0	0.207	36.78	6.181	8.053	8.26	-	
<a href="#">HIP_70</a>	15.38	0.203	36.778	8.82	10.379	10.22	-	

2 Simbad link for Gaia DR3	j2000_dist [arcsec]	ra [deg]	dec [deg]	mag_ks [mag]	mag_g [mag]	mag_v (computed)	mag_r (computed)	GetStar
<a href="#">HD 224803</a>	0.078	0.207	36.78	6.181	8.053	8.27	7.795	

# Démo !

<https://searchftt.jmmc.fr>

<https://searchftt-beta.jmmc.fr>

Pub : retrouvez toutes les versions des softs sur

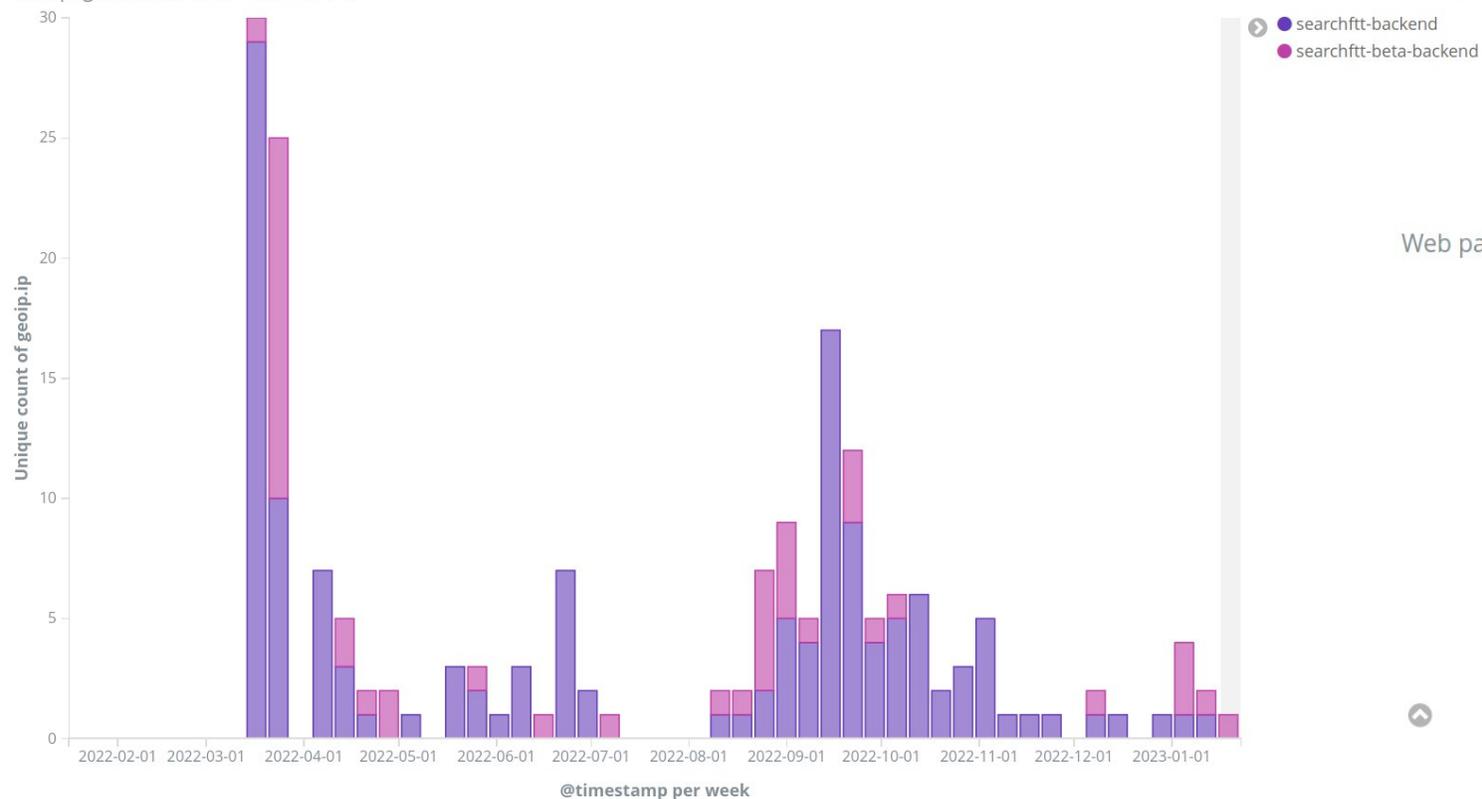
<https://releases.jmmc.fr>

# Disponible sur GitHub

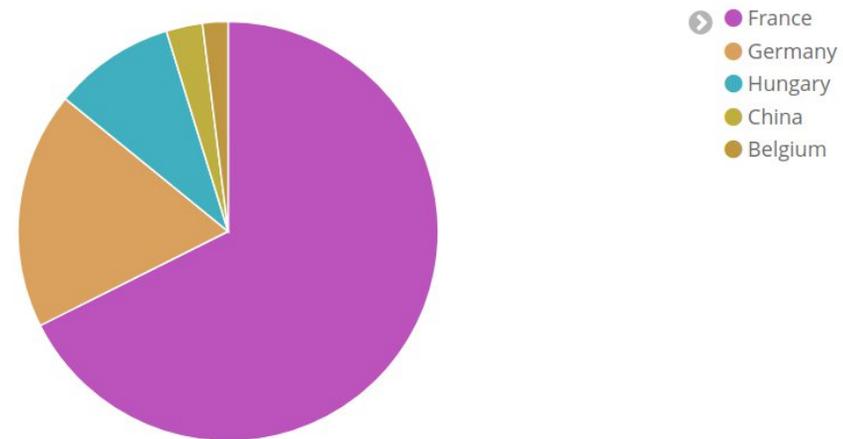
- Depuis sa création en mars 2022 (3 jours de dev pour la V.1)
  - <https://github.com/JMMC-OpenDev/searchftt>
- Avec le reste de ses dépendances (jmmc-resources)
  - Depuis nov 2022 ([12 dépôts existdb](#))
- Intégration continue ( github actions )
  - Automatisation des releases depuis jan. 2023
  - Gain de temps pour les déploiements (infra docker/kubernetes)

# Statistiques utilisateurs

Web pages and services - Distinct-IPs



Web pages and services - Top Countries



# Quelle(s) publication(s) cite(nt) SearchFTT ?

- <https://publications.olbin.org/toads?tag=SearchFTT>

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1  2022A&A...665A..75G      2022/09    cited: 7        

First light for GRAVITY Wide. Large separation fringe tracking for the Very Large Telescope Interferometer

GRAVITY+ Collaboration; Abuter, R.; Allouche, F. *and 114 more*

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# Possibles évolutions

- Réduction ou unification des catalogues d'entrée
- Interrogation par batch d'étoiles
  - Possible sur plusieurs centaines de cibles
- Extension des critères de recherche
  - AT/UT, SEEING, périodes CFP...
- Export des résultats votables, csv...

