



# JMMC

## Updates in 2021

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# JMMC organization

Seen from the inside (French CNRS/INSU) JMMC is composed of two parts, people working on the tools and databases in a 'service' called **MOIO**, and people working on the user support, outreach, schools, surveys etc, in a 'service' called **SUV**.

JMMC *per se* is the organization of these two parts, comprising a director, a scientific council / users committee and board of directors.

( All this is probably irrelevant when seen from abroad )

Effective June 2021,

JMMC will be headed by **Isabelle Tallon-Bosc**

and **MOIO** by **Jean-Philippe Berger**.

**SUV** continues to be headed by **Alexis Matter**.



We interfere constructively



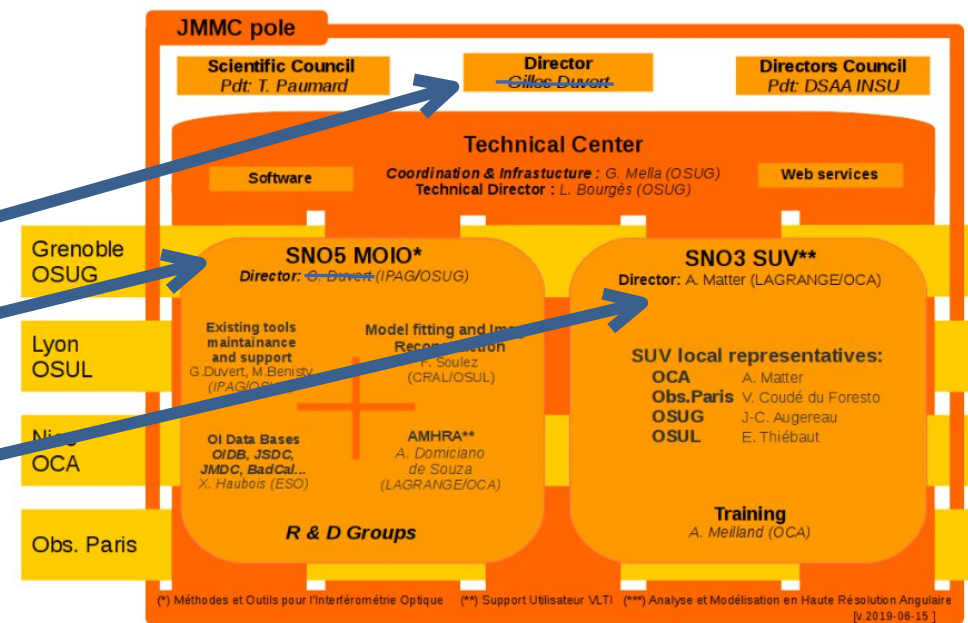
Home > The JMMC > Structure

## Structure

Organizational chart

## Informations & news on

<http://www.jmmc.fr>



(\*) Méthodes et Outils pour l'Interférométrie Optique (\*\*) Support Utilisateur VLTI (\*\*\*) Analyse et Modélisation en Haute Résolution Angulaire [v.2019-06-15]





# Service overview



VLTI



CHARA

+ Training

+ User Support



**SearchCal**

Query Parameters

Instrumental Configuration: Science (Default)

Magnitude Band: V

Wavelength (Å): 0.55

Max. Baseline [m]: 102.45

RA 2000 [h:m:s.ss]: 03:47:29.0755

DEC 2000 [d:m:s.ss]: +24:06:18.4394

Magnitude (V): 2.873

Scenario: Bright / Faint

RA Range [m]: 60.0

DEC Range [deg]: 1.5

Get Calibrators

id	name	RA	DEC	mag	u	v	w	x	y	z
1	0.0	23830	03:47:28.08	+24:06:18.5	0.0010	-0.0020	0.947	0.065	878	2.87
2	0.186	23830	03:49:29.74	+24:03:12.3	0.714	0.034	-0.403	0.026	808	1.62
3	0.46	23838	03:45:49.61	+24:22:03.3	0.396	0.036	0.418	0.023	808	1.87
4	0.595	23302	03:44:52.54	+24:06:48.0	0.71	0.035	-0.407	0.028	808	3.706

Reduce data

amdlib  
pndrs

Prepare Observations

**Aspro2**

Main settings

Interferometer: VLTI

Period: VLTI Period 88

Instrument: AMBER

Configuration: VLTI UFT 014

Filters: A1 A8 C1

Constraints: Night restrictions

Date: 2011-10-15

Min. Elevation: Wind

U (m)

V (m)

W (m)

X (m)

Y (m)

Z (m)

U-V range to plot (m)

Sampling Periodicity (ms)

Total integration time (s)

HA min: -3.85

HA max: 1.92

HA range: 12.00

Plot axes: set up tracks

Underlays a model image

Plot what: AMP

Compute OIFits data

Add error noise to data

Status: on coverage data.

Aspro2

View Data

**OIFits Explorer**

VLTI - GRAVITY [1590 nm - 2450 nm] - A0-G1-J2-K0

Day: 2016-10-05T03:30:45 - Source: MYSTERYYY

Plot of Intensity vs. Wavelength (nm)

Color by effective wave L

Info: 1269 / 1269 pix. [Date: N15366, 63.597] Y10.000... [23.874, -0.0...]

Show V0:2DATA, T3PM vs SPAT... Color by effective wave L... Skip flagged data... expr editor

1 loaded filter.

Fit Models

LITPro

**LITPro**

Target panel

Model list

Parameters

Type

Units

Value

Min value

Max value

Scale

exp/prec/def

Plot model panel

Plot image

Plot UV Map

Plot Radial

Plot weather

Plot residuals

Plot model panel

Plot image

Plot UV Map

Plot Radial

Plot weather

Plot residuals

CDS Catalogs

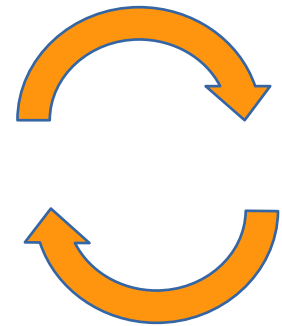
**JSDC JMDC**

Search

Columns

Filters

Name	Record number assigned by the VLTI team. Should not be used for identification.
000001	000001
000002	000002
000003	000003
000004	000004
000005	000005
000006	000006
000007	000007
000008	000008
000009	000009
000010	000010
000011	000011
000012	000012
000013	000013
000014	000014
000015	000015
000016	000016
000017	000017
000018	000018
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000093	000093
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000096	000096
000097	000097
000098	000098
000099	000099
000100	000100



OiDB

L0 to L3  
DataBases

**OiDB**

Search

Position: alpha cen

Radius: 2 arcmin

Date of observation: after YYYY-MM-DD before YYYY-MM-DD

Instrument: Any Instrument

Wavelength range: any value

Collection: Any Collection

DataPI name: Any DataPI

Data reduction level: 0, 1, 2, 3. Availability: Pub

Results

Meta-data will try to follow VOIDS proposal and KoV ObsCore document (get meta-data description in the associated doc)

19 observations from 19 vlt files (19 private)

Page 1 / 1

target_name	access_url	t_min	instrument_name	wlen_min
Alpha_Cen_B	PION16-05-28T01:56:00_739_reducedCalibrated.fits	2016-05-28T01:56:12	PIONER	1.51890030
Alpha_Cen_A	PION16-05-28T02:15:37_104_reducedCalibrated.fits	2016-05-28T02:15:21	PIONER	1.51890030

Reconstruct Images

**OImaging**

File Edit Interop Help

Data visualization

Intensity

Plot of Intensity vs. Position (x, y)

Ready to spawn process

Result sets

Plot of Intensity vs. Position (x, y)

Ready to spawn process

Result sets





# Main facts

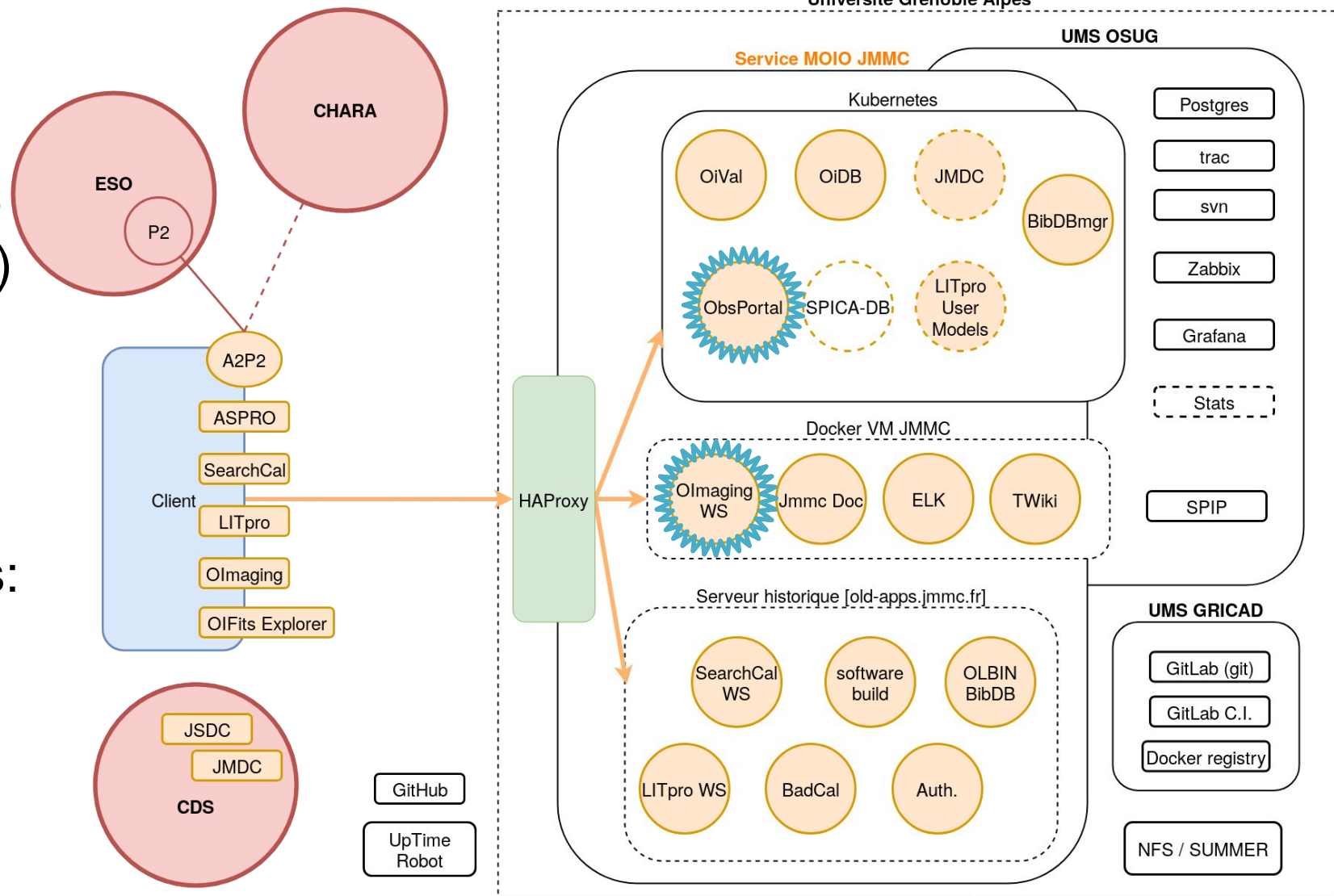
## 2018 - 2020





# Behind the scene, JMMC servers updated but *Staying alive!*

- Infrastructure moving to containers (docker, k8s)
- Plenty of software / services to maintain
- New software / services:
  - Olmaging (2018)
  - Obs Portal (2020)





# ASPRO 2 & Obs Portal

Integrate (VLT) observation logs in ASPRO2

[http://www.jmmc.fr/twiki/bin/view/Jmmc/Software/JmmcAspro2#Get\\_Information\\_about\\_past\\_obser](http://www.jmmc.fr/twiki/bin/view/Jmmc/Software/JmmcAspro2#Get_Information_about_past_obser)



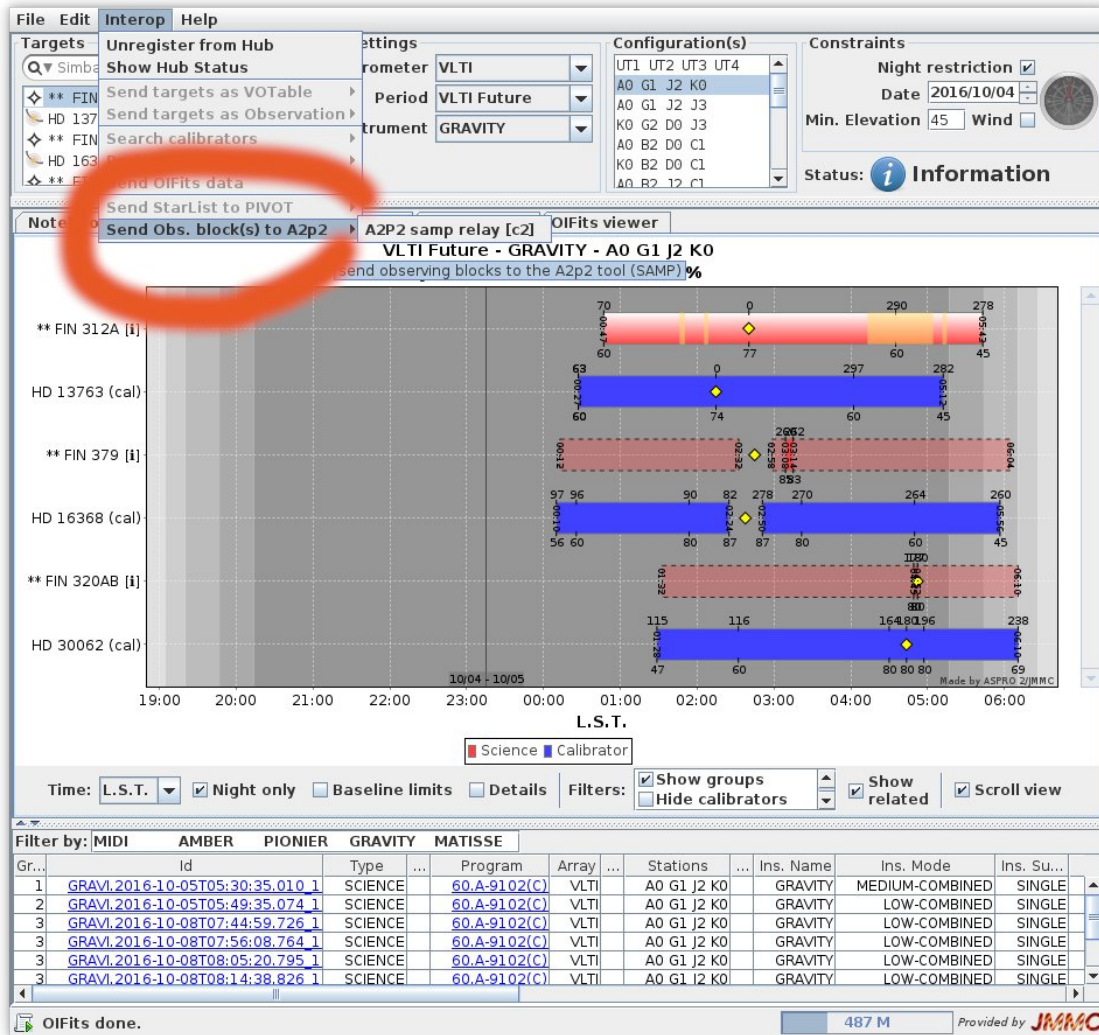
**ASPRO2 21.03  
released !**





# A2P2, the ASPRO2 companion tool in Python : send observing blocks to ...

can dialog with ASPRO and the interferometer software to send « observing blocks » to, e.g., a scheduler.



The screenshot shows the ASPRO2 software interface. It displays a list of observing blocks with columns for Project ID, Instrument, and Container type. The list includes folders and specific observing runs for instruments like GRAVITY, MATISSE, and PIONIER.

Project ID	Instrument	Container type
60.A-9003(L)	GRAVITY	VM Run (IP 107.01)
New Folder	GRAVITY	Folder
GRAVITY Test Tristra	GRAVITY	Folder
New Folder	GRAVITY	Folder
WDS_J00003_441	GRAVITY	Folder
New Folder	GRAVITY	Folder
New Folder	GRAVITY	Folder
New Folder	GRAVITY	Folder
GRAVITY tests Julien	GRAVITY	Folder
Christian	GRAVITY	Folder
60.A-9003(M)	MATISSE	VM Run (IP 107.01)
60.A-9003(N)	PIONIER	VM Run (IP 107.01)
60.A-9252(M)	GRAVITY	SM Run (IP 107.01)
60.A-9252(N)	MATISSE	SM Run (IP 107.01)
60.A-9253(T)	PIONIER	SM Run (IP 107.01)

Implemented for VLTI: ASPRO2 to ESO p2

```

LOG HELP RELEASE NOTES VLTI CHARA
-----
05:15/13:05
Object:
HD 78289 (kA3VnF5IIISr, 34.7) : G=4.3608, B=4.75, V=4.48, R=4.21, I=4.1, J=4.147, H=4.038, K=3.81
Fringe Finder:
HD 79158 : G=5.2256, B=5.148, V=5.282, J=5.409, H=5.526, K=5.531
A0 Flat Star:
HD 82328 : G=2.9735, B=3.64, V=3.18, R=2.74, I=2.47, J=2.28, H=2.08, K=1.97
Cals:
- HD_79158
-----
Only free text & generated information at present time, more to come !
OB received for 'CHARA' interferometer
VLTI [ P2API connected with jmmc ] SAMP: connected [

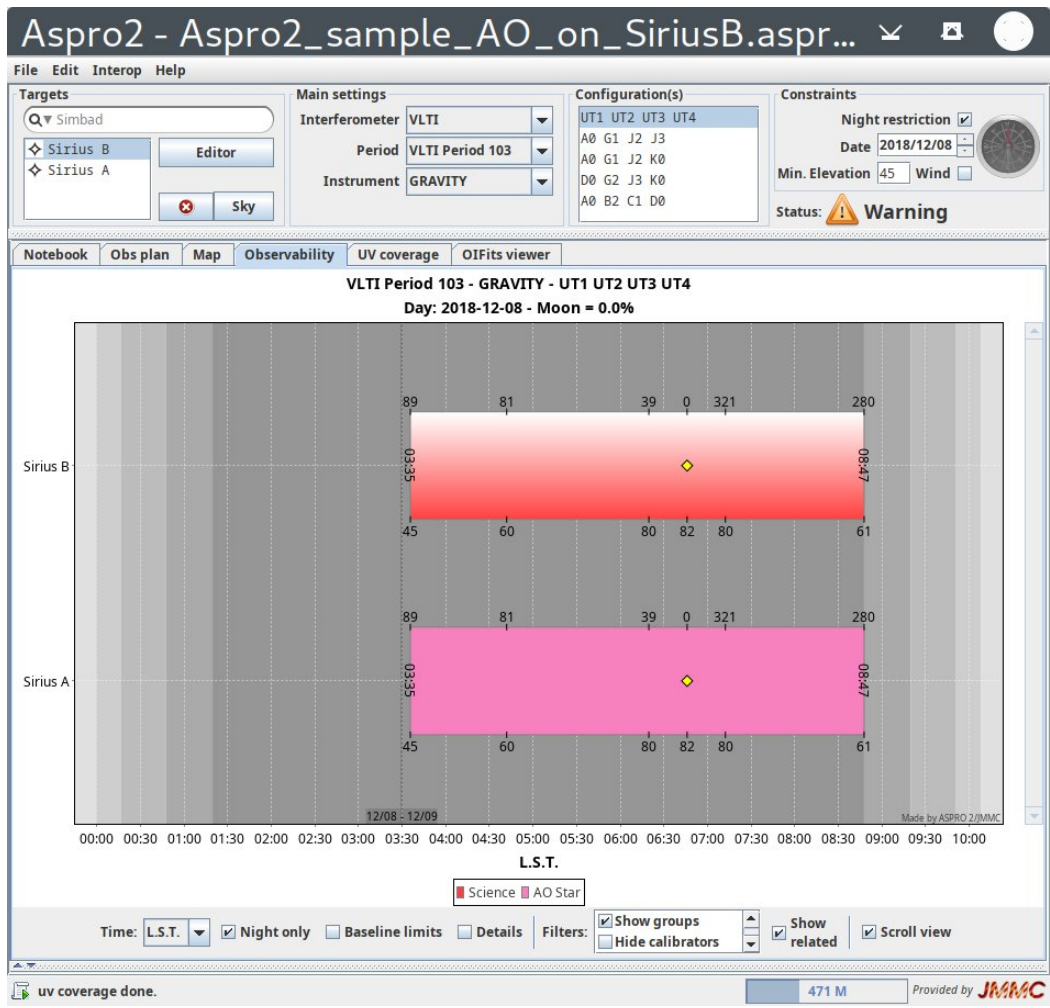
```

Basic CHARA support (to be improved) => log

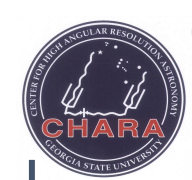
Python code on [GitHub](#) : easy to tweak, to maintain by instrument scientist. Try `pip install a2p2`



# Target Groups : AO / FT stars, custom







# Obs logs

- Get latest obs logs from obs portal
- Show table + details in tooltips
- Filter obs logs by instrument (more filters to come)

**Looking forward having CHARA logs in ASPRO2 !**

Aspro2 - Aspro2\_sample\_rawobs.aspro

File Edit Interop Help

**Targets**  
 Q Simbad  
 DoAr 44 Editor  
 Sky

**Main settings**  
 Interferometer: VLTI  
 Period: VLTI Period 106  
 Instrument: GRAVITY

**Configuration(s)**  
 UT1 UT2 UT3 UT4  
 A0 G1 J2 K0  
 A0 G1 J2 J3  
 K0 G2 D0 J3  
 A0 B2 D0 C1

**Constraints**  
 Night restriction   
 Date: 2020/04/14  
 Min. Elevation: 45 Wind

Status: Information

Notebook Map Observability UV coverage OIFits viewer

**VLTI Period 106 - GRAVITY - UT1 UT2 UT3 UT4**  
 Day: 2020-04-14 - Moon = 47.0%

**Observation Log (10):**  
 Type: SCIENCE  
 Program ID: 0103.C-0097(B)  
 Interferometer: VLTI  
 Baseline: U1 U2 U3 U4  
 Instrument: GRAVITY  
 Mode: HIGH-COMBINED  
 1818 channels [1.95 - 2.45 μm] (res= 8000)  
 Target: V2062Oph  
 Coords: 16:31:34.0488 -24:27:37.548  
 ID: GRAVI.2019-06-23T01:48:25.340\_1  
 Exp. time: 300 s  
 Start time: 2019/06/23 01:48:25  
 LST: 15.176 h  
 Tau0: 3 ms  
 Temp: 16.9 C  
 Seeing: 0.9 as

Time: L.S.T.  Night only  Baseline limits  Details Filters:  Hide calibrators  Hide ancillary stars

Filter by:	MIDI	AMBER	PIONIER	GRAVITY	MATISSE
Gro...					
19				<a href="#">GRAVI.2019-06-22T02:04:59.138_1</a>	
19				<a href="#">GRAVI.2019-06-22T02:16:14.167_1</a>	
19				<a href="#">GRAVI.2019-06-22T02:21:53.180_1</a>	
19				<a href="#">GRAVI.2019-06-22T02:27:26.194_1</a>	
19				<a href="#">GRAVI.2019-06-22T02:32:56.209_1</a>	
19				<a href="#">GRAVI.2019-06-22T02:38:35.222_1</a>	
19				<a href="#">GRAVI.2019-06-22T02:51:26.255_1</a>	
19				<a href="#">GRAVI.2019-06-22T02:57:05.268_1</a>	

OIFits done. 549 M Provided by JMMC



# Obs logs

Show UV tracks of (filtered) obs logs

Note: each ESO OB gives projected baseline (radius + pa) + mjd times

Aspro2 - Aspro2\_sample\_rawobs.aspro

File Edit Interop Help

**Targets**  
 Q Simbad  
 DoAr 44 Editor  
 Sky

**Main settings**  
 Interferometer: VLTI  
 Period: VLTI Period 106  
 Instrument: GRAVITY

**Configuration(s)**  
 UT1 UT2 UT3 UT4  
 A0 G1 J2 K0  
 A0 G1 J2 J3  
 K0 G2 D0 J3  
 A0 B2 D0 C1

**Constraints**  
 Night restriction   
 Date: 2020/04/14  
 Min. Elevation: 45 Wind   
 Status: Information

Notebook Map Observability **UV coverage** OIFits viewer

**Instrument mode**  
 LOW-COMBINED

**AO setup**  
 MACAO

**Atmosphere quality**  
 Average

**Fringe tracker mode**  
 FringeTrack GRAVITY

**U-V range to plot (m)**  
 139.06

**Sampling Periodicity (min)**  
 60

**Total Integration time (s)**  
 600

**HA min**  
 -3.32  
 -12.00

**HA max**  
 2.03  
 12.00

Plot rise/set uv tracks  
 Underplot a model image  
 Plot what ... AMP  
 Compute OIFits data

**VLTI Period 106 - GRAVITY - UT1 UT2 UT3 UT4**  
 Day: 2020-04-14 - Source: DoAr 44

**U (m) - North**

**Base line: U1-U4**  
 Observation Log  
 Type: SCIENCE  
 Program ID: 0103.C-0097(B)

**Interferometer: VLTI**  
 Baseline: U1 U2 U3 U4  
 Instrument: GRAVITY  
 Mode: HIGH-COMBINED  
 1818 channels [1.95 - 2.45 μm] (res= 8000)

**Target: V2062Oph**  
 Coords: 16:31:34.0488 -24:27:37.548

**ID: GRAVI.2019-06-23T02:05:19.382\_1**  
 Exp. time: 300 s  
 Start time: 2019/06/23 02:05:19  
 LST: 15.459 h  
 Radius: 127.1 m  
 Pos. angle: 52.7 deg

**ID: GRAVI.2019-06-23T02:05:19.382\_1**  
 Exp. time: 300 s  
 End time: 2019/06/23 02:10:19  
 LST: 15.542 h  
 Radius: 127.6 m  
 Pos. angle: 53.4 deg  
 Tau0: 3 ms  
 Temp: 16.9 C  
 Seeing: 0.8 as

Filter by: MIDI AMBER PIONIER **GRAVITY** MATISSE

Gro...	Id	Type	Parent Id	Program	Array	...	Stations	...	Ins. Nar
19	<a href="#">GRAVI.2019-06-22T02:04:59.138_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI
19	<a href="#">GRAVI.2019-06-22T02:16:14.167_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI
19	<a href="#">GRAVI.2019-06-22T02:21:53.180_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI
19	<a href="#">GRAVI.2019-06-22T02:27:26.194_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI
19	<a href="#">GRAVI.2019-06-22T02:32:56.209_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI
19	<a href="#">GRAVI.2019-06-22T02:38:35.222_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI
19	<a href="#">GRAVI.2019-06-22T02:51:26.255_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI
19	<a href="#">GRAVI.2019-06-22T02:57:05.266_1</a>	SCIENCE	42971	<a href="#">0103.C-0097(A)</a>	VLTI		U1 U2 U3 U4		GRAVI

OIFits done. 510 M Provided by JMMC



# JMMC Obs Portal

<http://obs.jmmc.fr/>

(Python / postgresql web app)

- Observation Logs VLTI
  - all instruments
  - ESO sync twice a day (TAP)
- OiDB sync => L0 ESO
- Future:
  - Better Log filtering in ASPRO2
  - VO TAP interface
  - Improved cross identification
  - **Ingest CHARA & SPICA logs**

## ObsPortal

The **JMMC** ObsPortal service provides both a web interface and a cone-search service (TAP in the future) on its database containing raw optical interferometry observations (L0):

- **ESO archive** provides VLTI observations (observing blocks & exposures). Supported instruments are MIDI, AMBER, PIONIER, GRAVITY, MATISSE.

The **JMMC** also provides the **OiDB** service that contains published & science-ready datasets (L2, L3) in the OIFITS file format.

Please contact the **JMMC user support** for any remark or issue on this service.

## Change log

- 2020.05.05: Release 20.05:
  - Automatic synchronization (ESO TAP)
  - Added UV points per baseline and atmospheric conditions
  - Improved performance: indexes + rewritten VOTable writer
  - Improved header validation
- 2020.02.25: First release, integrated in ASPRO2 20.03

Database statistics	
Header count	1014509
Target count	34719
Observation count	46406
Exposure count	332563
Valid exposure count	326476 (98.17%)
Exposure Date min	2003-06-14 07:13:36.000
Exposure Date max	2021-01-18 08:42:29.592



# JSDC 3 / SearchCal 6

Important JSDC upgrade to get latest data from  
SIMBAD / GAIA DR2 / MDFC





# JSDC3: 475 000 stars ... to 2.5m stars !

## Changes:

- Crossmatch +++ : best in 3as neighbourhood + XM flags = No duplicates.  
"CalFlag bit 3 set if the star has neighbours within 0.5 as (GAIA) or 1.0 as (2MASS)"
- Data: SIMBAD, GAIA DR2 (better ra/dec, pm, teff, dist), MDFC (flag, flux)
- [JSDC3 BRIGHT EA](http://jmmc.fr/~bourgesl/sclsvr_JSDC/JSDC_2020/LAST/) : http://jmmc.fr/~bourgesl/sclsvr\_JSDC/JSDC\_2020/LAST/
- [JSDC3 FAINT EA](http://jmmc.fr/~bourgesl/sclsvr_JSDC/JSDC_FAINT_2020/LAST/) : http://jmmc.fr/~bourgesl/sclsvr\_JSDC/JSDC\_FAINT\_2020/LAST/

Services: [SearchCal 6 EA](#): 2021 ? [GetStar EA](#)

## Perspectives:

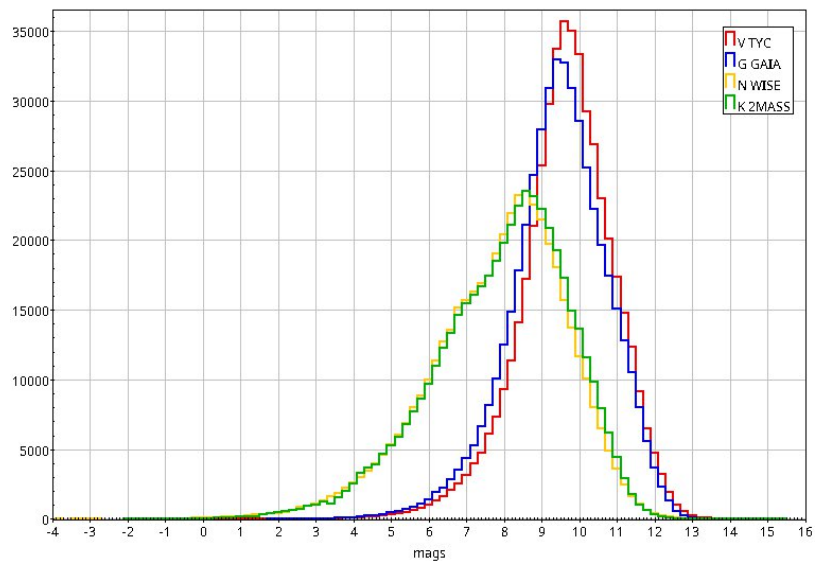
- Publish both Bright / Faint catalogs in 2021: 2.5m star (TYCHO2) in JMMC TAP interface + CDS
- Future: use updated JMDC and new color GAIA (G, Bp, Rp) + All Wise (L, M, N)



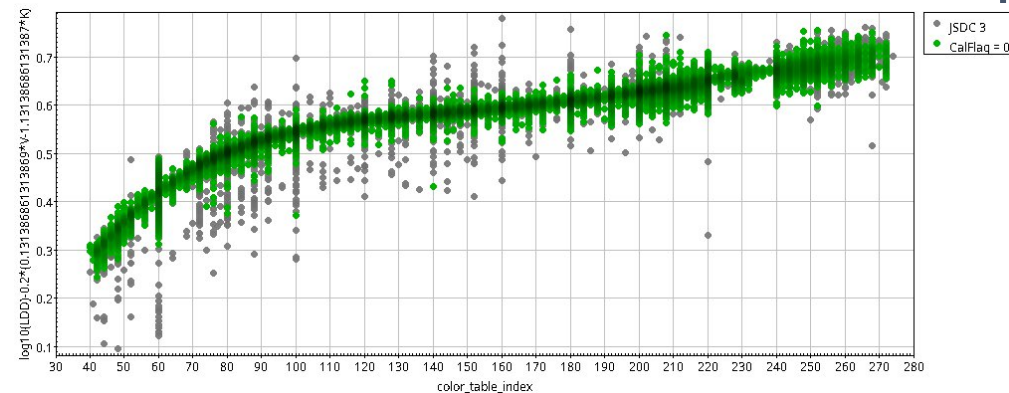


Total Rows: 474963

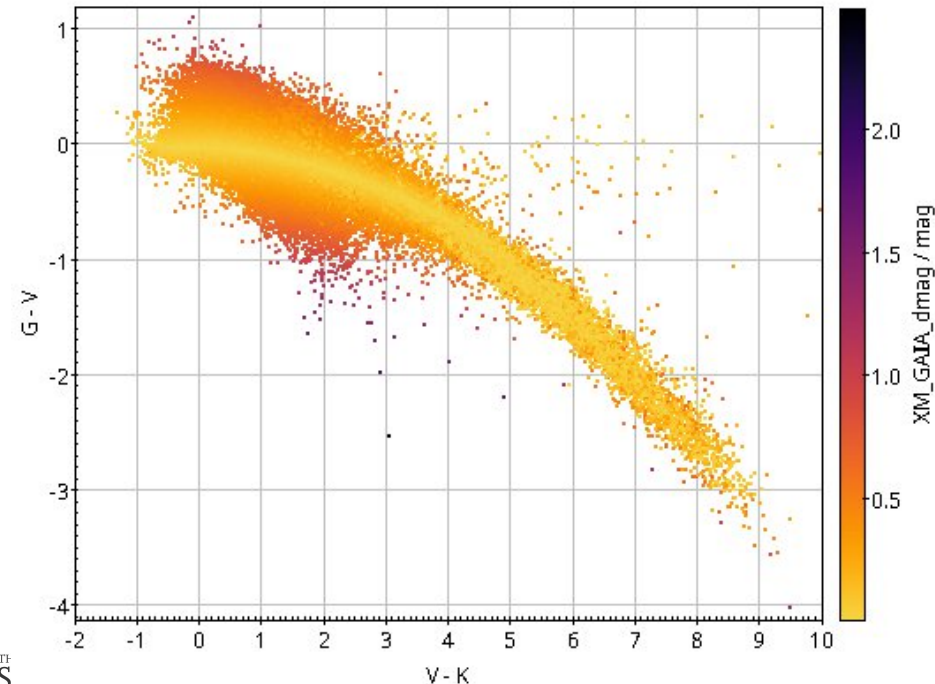
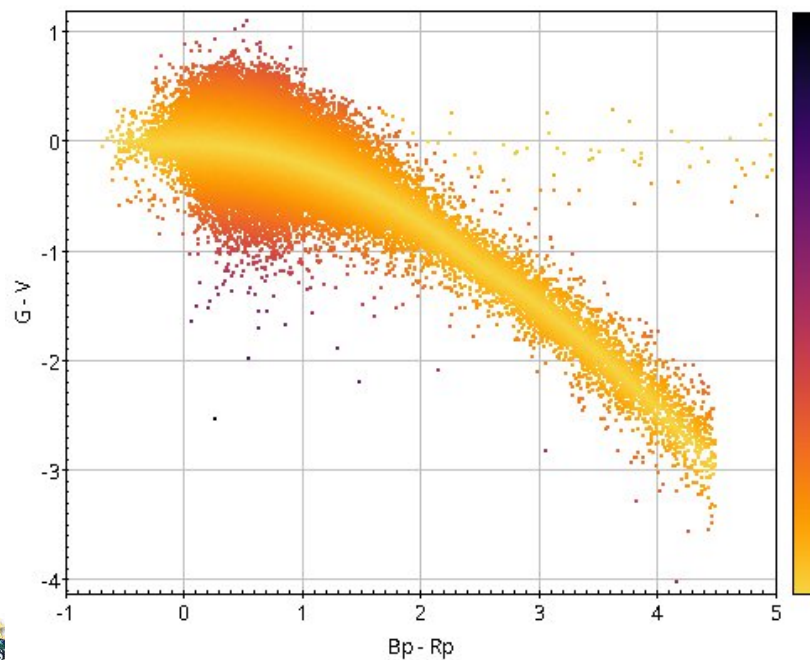
column	good
SIMBAD	474963
GAIA	471475
TYC1	473651
TYC2	473651
TYC3	474963
2MASS	474963
WISE	470294
AKARI	153541
HD	245091
HIP	105272
DM	348198
SBC9	2454
WDS	39400



## JSDC 3 BRIGHT EA:



## GAIA G color relations used by crossmatch :



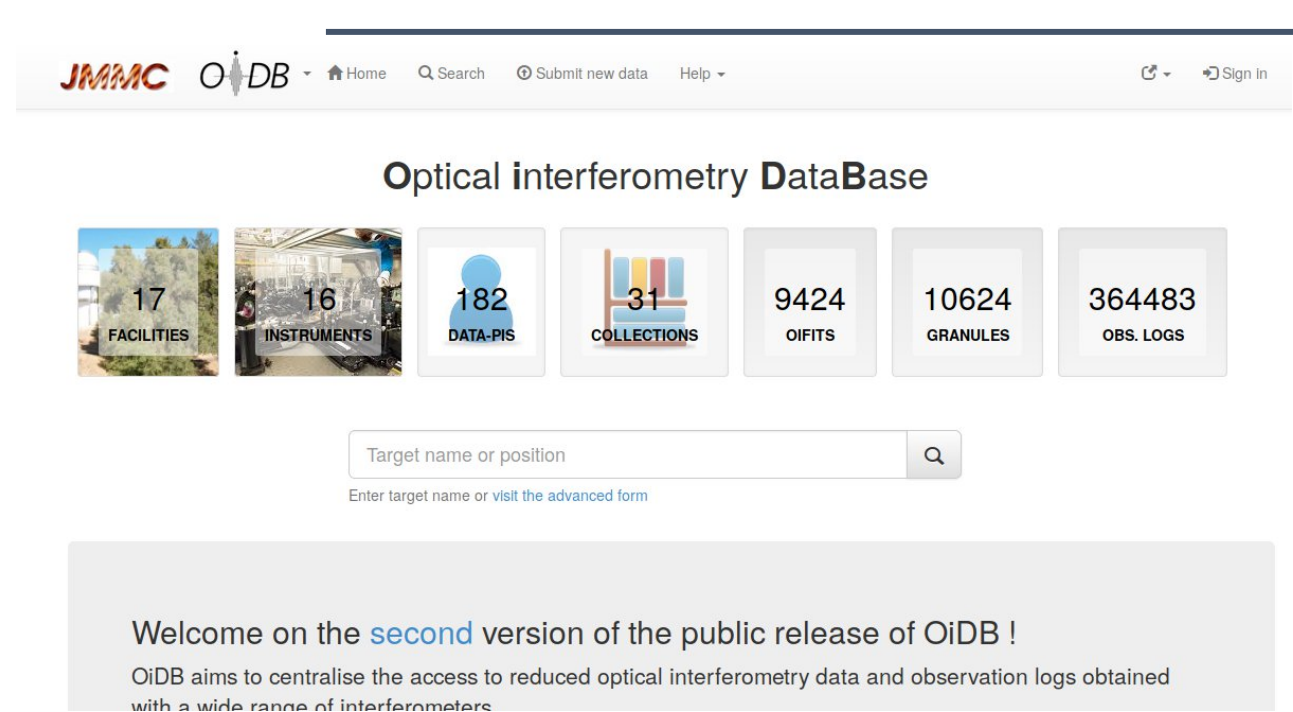


# O DB





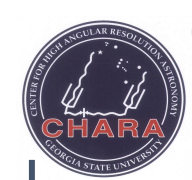
# OiDB 2.0 online



- UI enhancements:
  - search form, result table
  - quick plots, data quality plots / TF...
  - show ancillary links accross various calibration levels L(0-3) $\leftrightarrow$ L(0-3)
- New categories for data collections: simulations, private (SUV)
- Improved obs log ingestion (L0) : synchronized with Obs Portal

**CHARA obs log were uploaded into OiDB => take advantage of the coming CHARA Online Database (metadata++)**





# OiDB screenshots of https://oidb.jmmc.fr

- L band observation of Kappa Tuc
- Any Collection
- L3 - Published calibrated OIFITS / suv
  - L band observation of Kappa Tuc
- L3 - Published calibrated OIFITS / public
  - Large granulation cells on the surface of the giant star  $\pi$ 1 Gruis
  - AMBER and MIDI observations of V838 Mon
  - Optical interferometry and Gaia measurement uncertainties reveal the physics of...
  - T Pyx AMBER observations
  - Numerical simulations and infrared spectro-interferometry reveal the wind colli...
  - The R CrB star V854 Cen
  - Infrared Interferometric Three-dimensional Diagnosis of the Atmospheric Dynamic...
  - The structure of disks around intermediate-mass young stars from mid-infrared i...
  - iot Peg
- L3 - Published calibrated OIFITS / VizieR
  - VLT observations of V4334 Sgr (Chesneau+, 2009)
  - Milli-arcsecond imaging of SS Lep (Blind+, 2011)
  - (epsilon) Aur visibility measurements (Mourard+, 2012)
  - Interferometry of (alpha) Eri (Domiciano de Souza+, 2012)
  - VLT/MIDI AGN Large Program observations (Burtcher+, 2013)
  - The VLT/MIDI survey of Massive YSOs (Boley+, 2013)

JMMC O iDB Home Search Submit new data Help

Filters

Object: Name or J2000 coordinates Radius: 2 arcmin Date of observation: after YYYY-MM-DD before YYYY-MM-DD

Instrument: Any Instrument Wavelength range: any value Data reduction level:  L0,  L1,  L2,  L3 Availability:  Public  Restricted  All

Collection: FU Orionis MIRCX DataPI: Any DataPI Program: program id ObsId: observation id

10 rows max. per page, sorted by Date descending with all columns

Search Reset

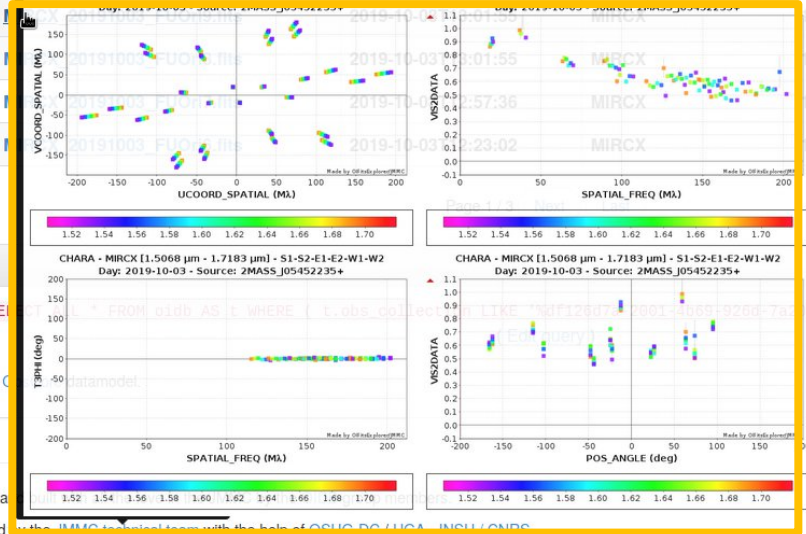
## Results 13 records from 0 obs logs and 13 oifits files

Page 1 / 3 Next Last

	L	target_name	t_min	instrument_name	wlen_min	wlen_max	nb_channels	datapi
	3	2MASS_J05452235+	2019-10-03T13:07:40	MIRCX	1.50678150	1.71825300	8	Aaron Labdon
	3	2MASS_J05452235+			50678150	1.71825300	8	Aaron Labdon
	3	2MASS_J05452235+			50678150	1.71825300	8	Aaron Labdon
	3	2MASS_J05452235+			50678150	1.71825300	8	Aaron Labdon
	3	2MASS_J05452235+			50678150	1.71825300	8	Aaron Labdon

Contact:

- Aaron Labdon (data creator)
- Aaron Labdon (data PI)
- Release date: 2019-10-03T13:03:21



Results for ADQL query

```
SELECT * FROM oidb AS I WHERE ( I.obs_co... LIKE 'MIRCX' AND I.obs_co... LIKE '2008-710...16b69c4%' ) ORDER BY t_min DESC
```

Provided metadata are an extension on top of the C...



### Add calibrated OIFITS files

Step 1 : Upload OIFITS files

Target	Instrument	Instrument mode	Time interval	Quality
+ Add files				

Step 2 : Choose collection

Step 3 : Save

### Add calibrated OIFITS files

Step 1 : Upload OIFITS files

Target	Instrument	Instrument mode	Time interval	Quality
+ Add files				

Step 2 : Choose collection

Collection details

Collection type

public  
 simulation  
 SUV

Name

Title

Description

Keywords

Data PI

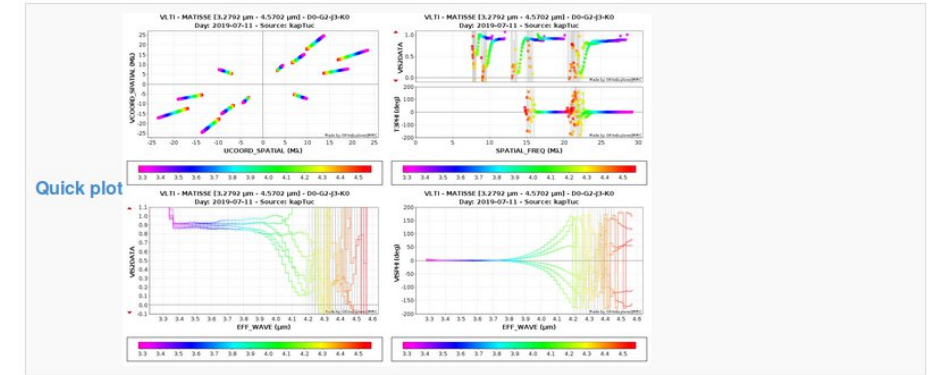
Step 3 : Save

### Contact

Data PI / OBS creator  
Florian Kirchschrager

[+ Add the first comment](#)

### Quicklook plots



### Contact

Data PI  
Not present in metadata  
OBS creator  
jmmc-tech-group - Bour

calib_level	id	obs_collection	datapi
0	1293809	ESO VLTI Import	<a href="#">✉</a>

### Comments

[+ Add the first comment](#)

### External resources

- [Details progid 0103.C-0725\(A\) on ESO archive](#)
- [Details progid 0103.C-0725\(A\) on JMMC ObsPortal](#)
- [Check or display content in OIFitsValidator](#)

### Ancillary

calib_level	id	name	creator
3	1355457	Kappa Tuc	Florian Kirchschrager
3	1355464	Kappa Tuc	Florian Kirchschrager

### External resources

- [Details progid 0103.C-0725\(A\) on ESO archive](#)
- [Details progid 0103.C-0725\(A\) on JMMC ObsPortal](#)
- [Details exposure MATIS.2019-07-11T09:03:31.168\\_1 on JMMC ObsPortal](#)





# Current projects, next operations ...



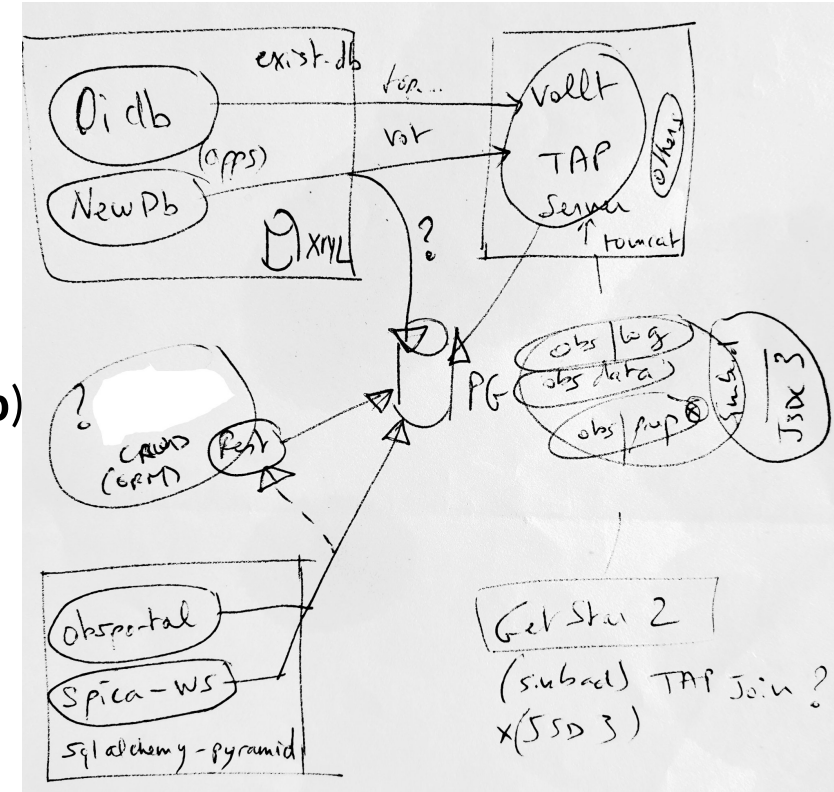


# SPICA-DB Project @ JMMC

SPICA-DB is developed on top of ( OiDB + ObsPortal + TAP ) services + JSDC data + few specific SPICA services to ingest data and manage database (authentication + specific web interface)

SPICA-DB project will lead to many benefits for CHARA & VLTI users:

- ASPRO2 enhancements:
  - Handle large programs (**filters**) + target extra informations
  - Manage observations with different instrument, modes (**multi-setup**)
  - Refine **Pops optimization** according to **groups**, selection ... find best successive PoPs to follow a target in H.A.
  - **Improve interoperability** (votable / CSV) with VO tools
- Obs Portal / OiDB: SPICA / CHARA logs + data quality flags + index OIFITS files
- New JMMC TAP server : JSDC + obs portal + OiDB (unified view)





# SPICA-DB Project @ JMMC

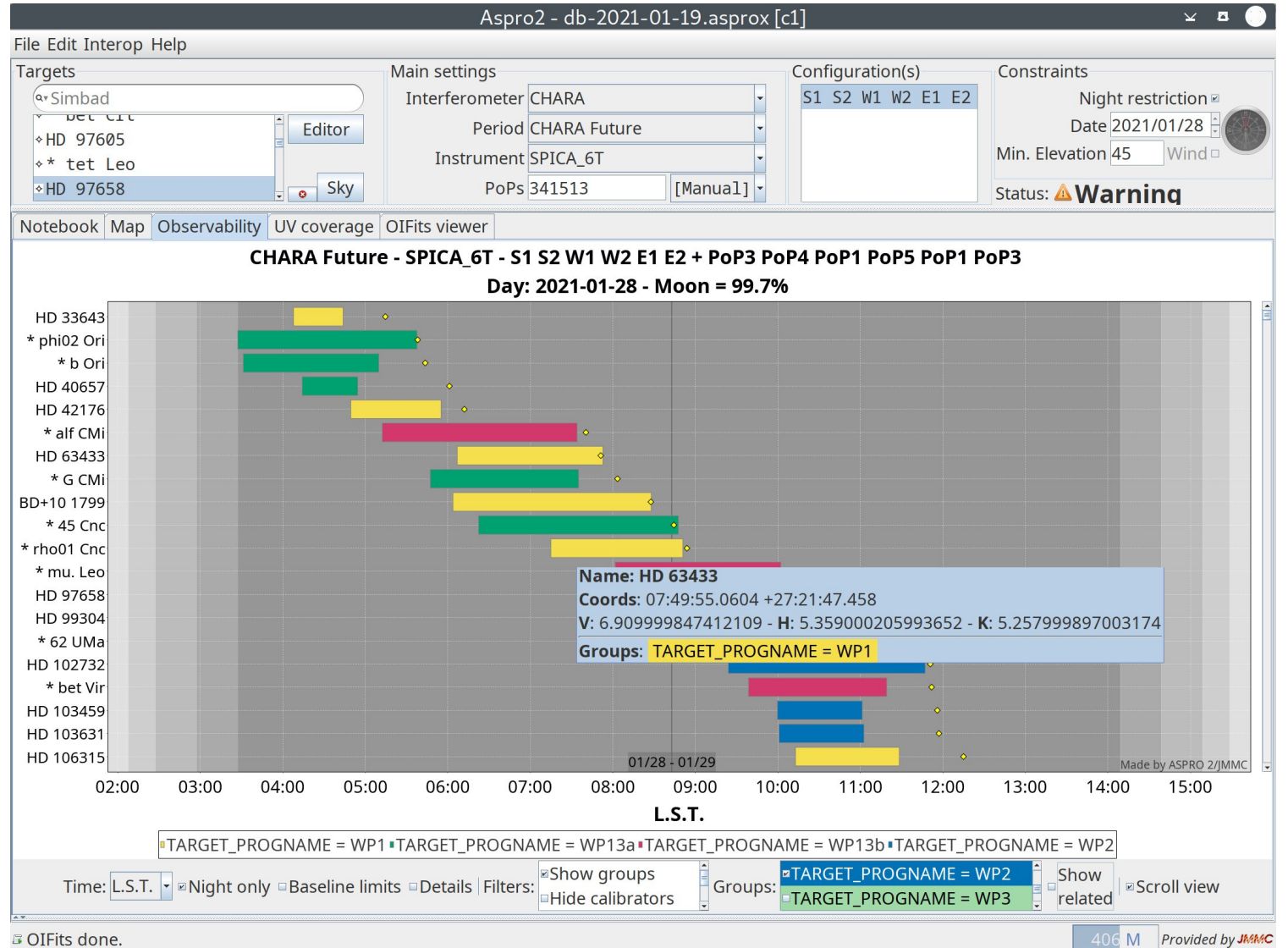
Early result:

Import SPICA's Science DB in ASPRO2:

~ 3000 sources grouped by Work Package

(best PoPs slow

& useless in such case)





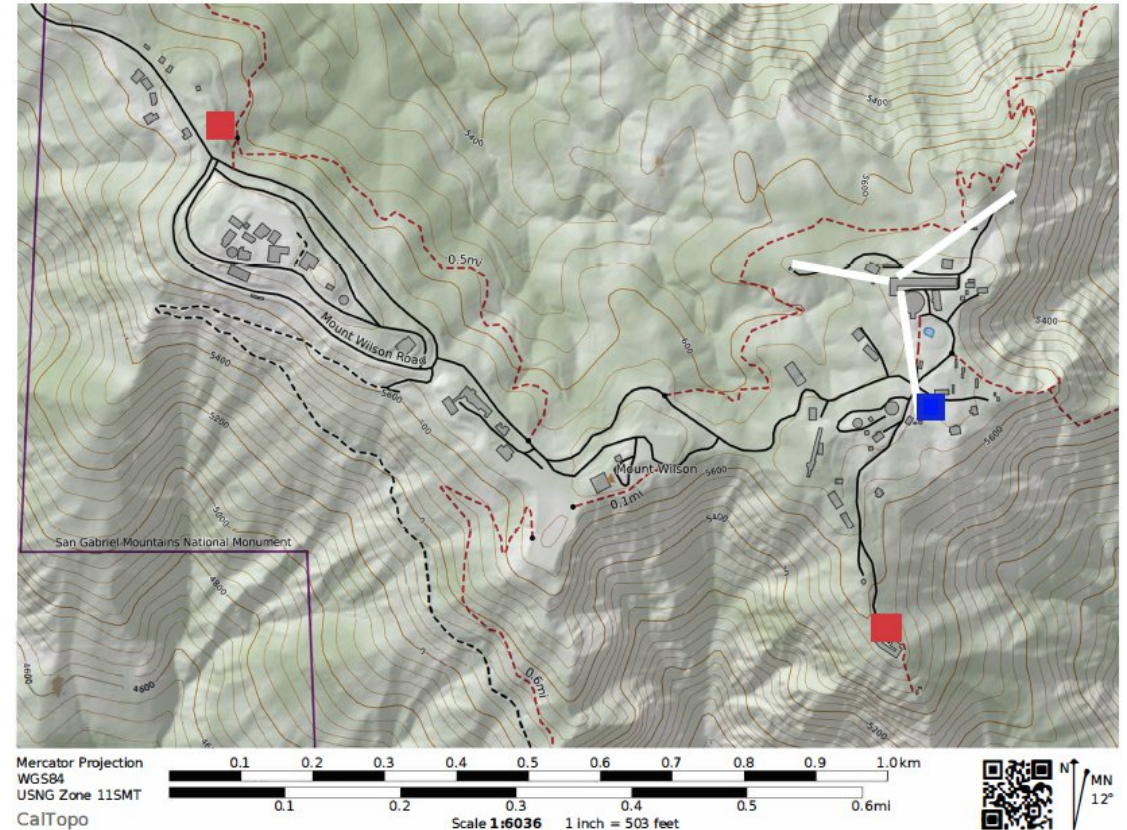
# CHARA upgrade in ASPRO2: 7th to 12 telescopes

*Aim: build a new ASPRO2 configuration editor & fix observability (refine optical path lengths, fiber length, PoPs, switchyard ...)*

- *Tiger team (Laurent, Gilles, Gail ?)*
- *Planning to be defined ? kick off ?*

## Requirements:

- edit ASPRO2 configuration files: telescope positions, elements of delay ('POPS'), length and maximum velocity of each delay line cart, length of the beam transport system
- save these edited parameter files under a different file name
- load these alternative configuration files
- A well-defined format for the configuration files so that our own engineering software is able to create and save alternative configuration files.





# Side topics

- Update LITpro / Olmaging :
  - UI enhancements
  - Fix performance issues ( be ready for next VLTI School )
  - Release new algorithms (genetic fitter, polychromatic data)
- OIFitsExplorer enhancements: binning, filtering
- Open more codes :
  - <https://github.com/JMMC-OpenDev/>
  - <https://github.com/JMMC-OpenDev/jmmc-java-build> to get source code and build all java applications
  - <https://gricad-gitlab.univ-grenoble-alpes.fr/OSUG/JMMC>



# Final words

! Special thanks to Gilles Duvert, the author of ASPRO 1 ! still in the JMMC shuttle, giving commands to the new command crew before his retirement.

Already great CHARA support @ JMMC, let's go further with new opportunities (telescope upgrades, SPICA-DB...) and have a stronger collaboration !

*Please report any problem or question  
to the JMMC User Support (SUV team)*

**Feedback always appreciated and useful !**

CHARA / JMMC action items to be planned:

- CHARA upgrade in ASPRO2
- CHARA databases  $\Leftrightarrow$  JMMC databases
- A2P2 for CHARA (cosmic debris) ?

Let's plan a regular virtual meeting ?

