

JMMC/SUV

AG JMMC 2022 - Observatoire de Paris



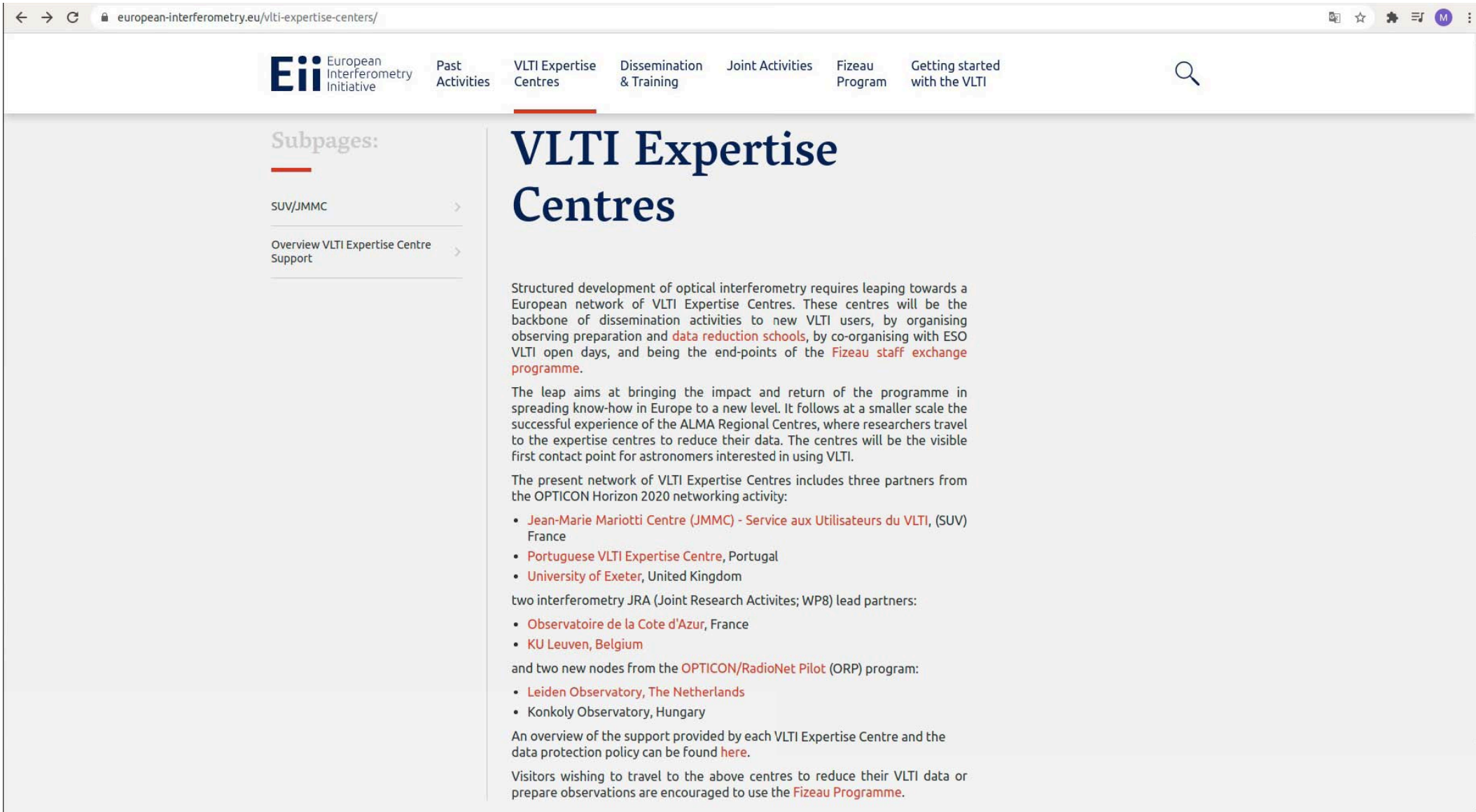
Alexis Matter

Laboratoire J.-L. Lagrange - Observatoire de la Côte d'Azur



European-interferometry.eu/vlti-expertise-centers

WP17 → OPTICON/RadioNet Pilot program (EU funding)



The screenshot shows a web browser window with the URL european-interferometry.eu/vlti-expertise-centers/. The page features a navigation menu with the following items: **Eii** European Interferometry Initiative, Past Activities, **VLTI Expertise Centres** (highlighted with a red underline), Dissemination & Training, Joint Activities, Fizeau Program, and Getting started with the VLTI. A search icon is located to the right of the navigation menu. On the left side, there is a 'Subpages:' section with two links: [SUV/JMMC](#) and [Overview VLTI Expertise Centre Support](#). The main content area is titled **VLTI Expertise Centres**. The text describes the structured development of optical interferometry, the role of VLTI Expertise Centres as a backbone for dissemination, and lists three partners from the OPTICON Horizon 2020 networking activity: Jean-Marie Mariotti Centre (JMMC) - Service aux Utilisateurs du VLTI, (SUV) France; Portuguese VLTI Expertise Centre, Portugal; and University of Exeter, United Kingdom. It also lists two JRA (Joint Research Activities; WP8) lead partners: Observatoire de la Cote d'Azur, France and KU Leuven, Belgium, and two new nodes from the OPTICON/RadioNet Pilot (ORP) program: Leiden Observatory, The Netherlands and Konkoly Observatory, Hungary. An overview of support and data protection policy is available [here](#). Visitors are encouraged to use the [Fizeau Programme](#) for observations.

European-interferometry.eu/vlti-expertise-centers

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The screenshot shows a web browser window with the URL `european-interferometry.eu/vlti-expertise-centers/63-overview_vlti_expertise_centre_support`. The page features a navigation menu with the following items: **Eii** European Interferometry Initiative, Past Activities, **VLT Expertise Centres** (highlighted with a red underline), Dissemination & Training, Joint Activities, Fizeau Program, and Getting started with the VLT. A search icon is located on the right side of the navigation bar. The main content area has a large heading: **Overview VLT Expertise Centre Support**. Below the heading, there is a paragraph: "Below is an overview of the support and resources provided by each of the VLT Expertise Centres. Please refer to individual webpages for details." This is followed by two bulleted lists. The first list is for **JMMC/SUV** and includes: End-to-end support for GRAVITY and MATISSE (proposal preparation, Phase 2 observation preparation, data reduction, training in JMMC preparation and modeling tools (ASPRO2, SearchCal, LITpro), image reconstruction), ESO pipelines installed on a dedicated server, and support for scientists in Paris (GRAVITY), Nice (MATISSE), Grenoble (GRAVITY), and Lyon (Model fitting, image reconstruction). A **Webpage** link is also listed. The second list is for the **Portuguese VLT Expertise Centre** and includes: 2 support scientists, support for GRAVITY (proposal preparation, data reduction, model fitting, image reconstruction), and ESO pipelines installed on a dedicated workstation.

Below is an overview of the support and resources provided by each of the VLT Expertise Centres. Please refer to individual webpages for details.

- **JMMC/SUV**
 - End-to-end support for GRAVITY and MATISSE
 - proposal preparation
 - Phase 2 observation preparation
 - data reduction
 - training in JMMC preparation and modeling tools (ASPRO2, SearchCal, LITpro)
 - image reconstruction
 - ESO pipelines are installed on a dedicated server
 - Currently supports scientists in Paris (GRAVITY), Nice (MATISSE), Grenoble (GRAVITY), and Lyon (Model fitting, image reconstruction)
 - [Webpage](#)
- **Portuguese VLT Expertise Centre**
 - 2 support scientists
 - Support for GRAVITY
 - proposal preparation
 - data reduction
 - model fitting
 - image reconstruction
 - ESO pipelines installed on a dedicated workstation.

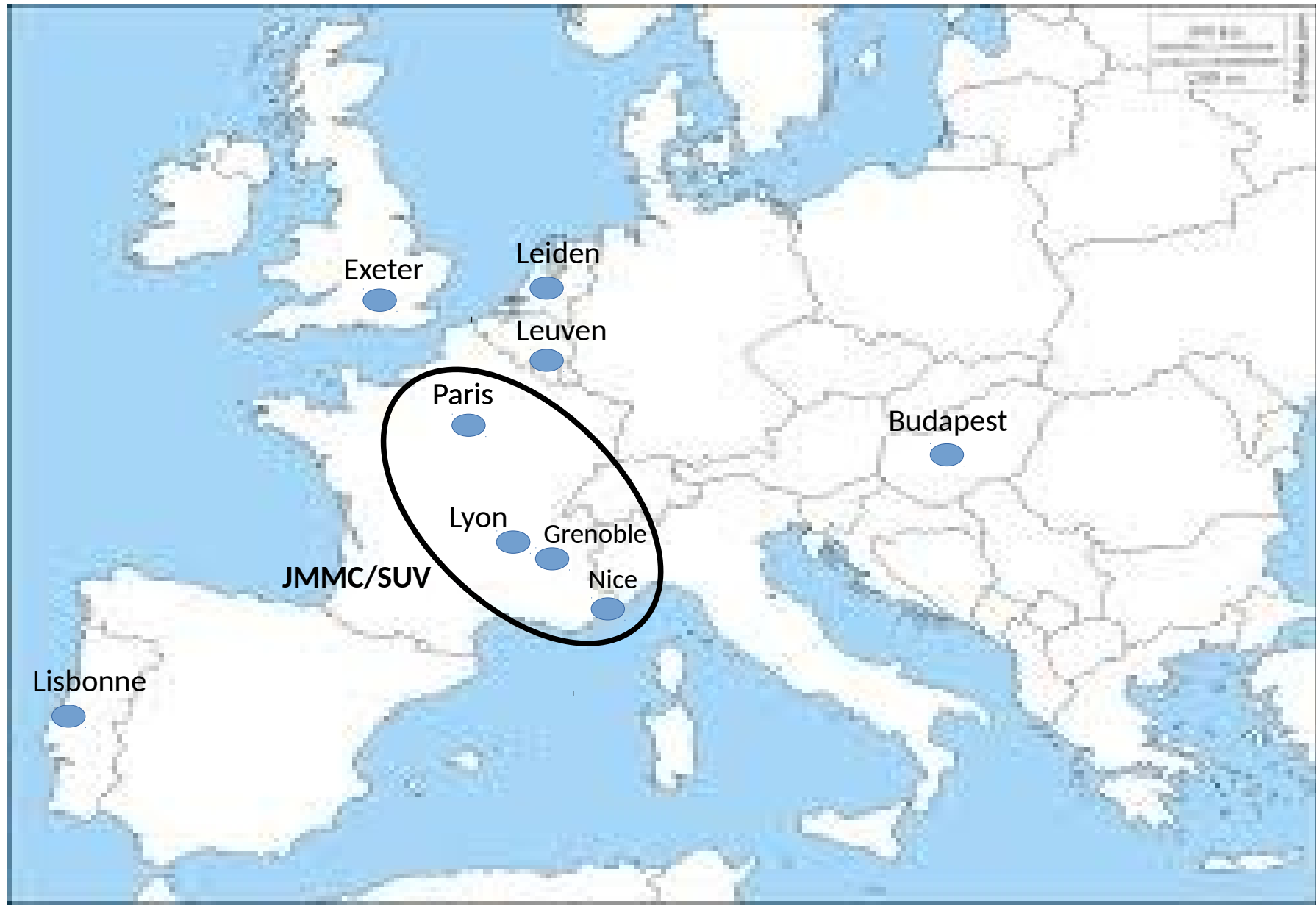
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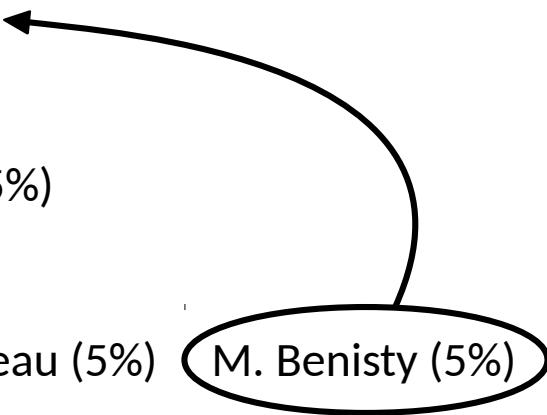
- ✓ **Coordination** : quarterly coordination meetings between ECs and ESO (Last meeting on Sep 8 2021)

- ✓ **Communication aspects** :
 - Contacting PIs of accepted and rejected VLTI proposals
 - Dedicated VLTI/EC session for the 2022 EAS conference

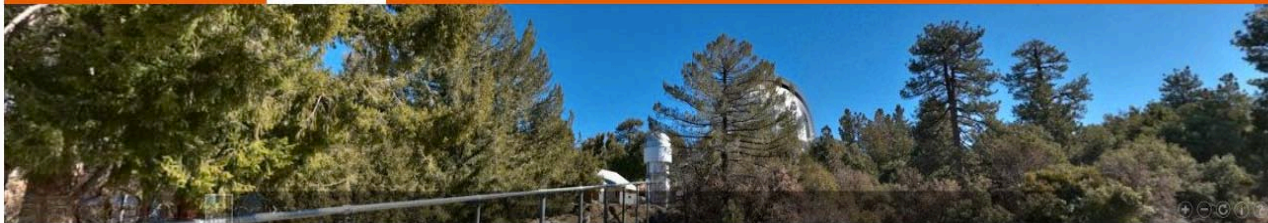
- ✓ **Data reduction aspects** :
 - Common agreement on a systematic deposit of « VLTI EC-reduced » data on OADB
 - How to make available and science-ready the unused VLTI archival data ?
 - Upcoming 'workshop on VLTI reduced data' organized by ESO



Available manpower (BDD INSU Dec 2021)

- ✓ Nice : 2 researchers → A. Matter (20%), F. Millour (5%)
 - ✓ Paris : 2 researchers → F. Vincent (5%), M. Montargès (5%)
 - ✓ Grenoble : 2 researchers → K. Perraut (20%), J.C. Augereau (5%) **M. Benisty (5%)**
 - ✓ Lyon : 3 researchers → I. Tallon-Bosc (5%), E. Thiebaut (5%), M. Tallon(5 %)
- 

www.jmmc.fr/SUV



THE JMMC

- Who are we?
- Structure
- MOIO
- SUV**
- Who was JMM?

Home > The JMMC > SUV

SUV

the french VLTI center

Need for support? Visit the [HELPDESK ...](#)

A. Matter (OCA-LAGRANGE), Principal Investigator

As a new service of the JMMC, SUV (Service aux Utilisateurs du VLTI) provides, in four different sites (Nice, Grenoble, Paris, and Lyon), a complete support to the users of the 2nd generation VLTI instruments. This support consists of an individualized assistance (FAQ, questions submission, face-to-face meetings) that covers the preparation of observing proposals and observations, and the GRAVITY and MATISSE data reduction. It also includes an assistance in the critical use of the JMMC model fitting and image reconstruction softwares.

SUV is coordinated by the Observatoire de la Côte d'Azur (OCA) in Nice, with three other local nodes in Paris (Observatoire de Paris), Grenoble (IPAG), and Lyon (Observatoire de Lyon). A centralized helpdesk platform, hosted at OCA, collects all the user questions and requests for a face-to-face assistance in one of the four nodes. These questions and visit requests are then redirected to the relevant node. The SUV helpdesk is accessible through the JMMC webpage.

List of SUV nodes

- Observatoire de la Côte d'Azur (Nice)
Fields of expertise: Observation and data reduction for MATISSE, image reconstruction
Website: www.oca.eu
- Observatoire de Paris-Meudon
Fields of expertise: Observation and data reduction for GRAVITY
Website: www.obspm.fr
- Institut de Planétologie et d'Astrophysique de Grenoble
Fields of expertise: Observation and data reduction for GRAVITY
Website: inap.osug.fr

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THE JMMC

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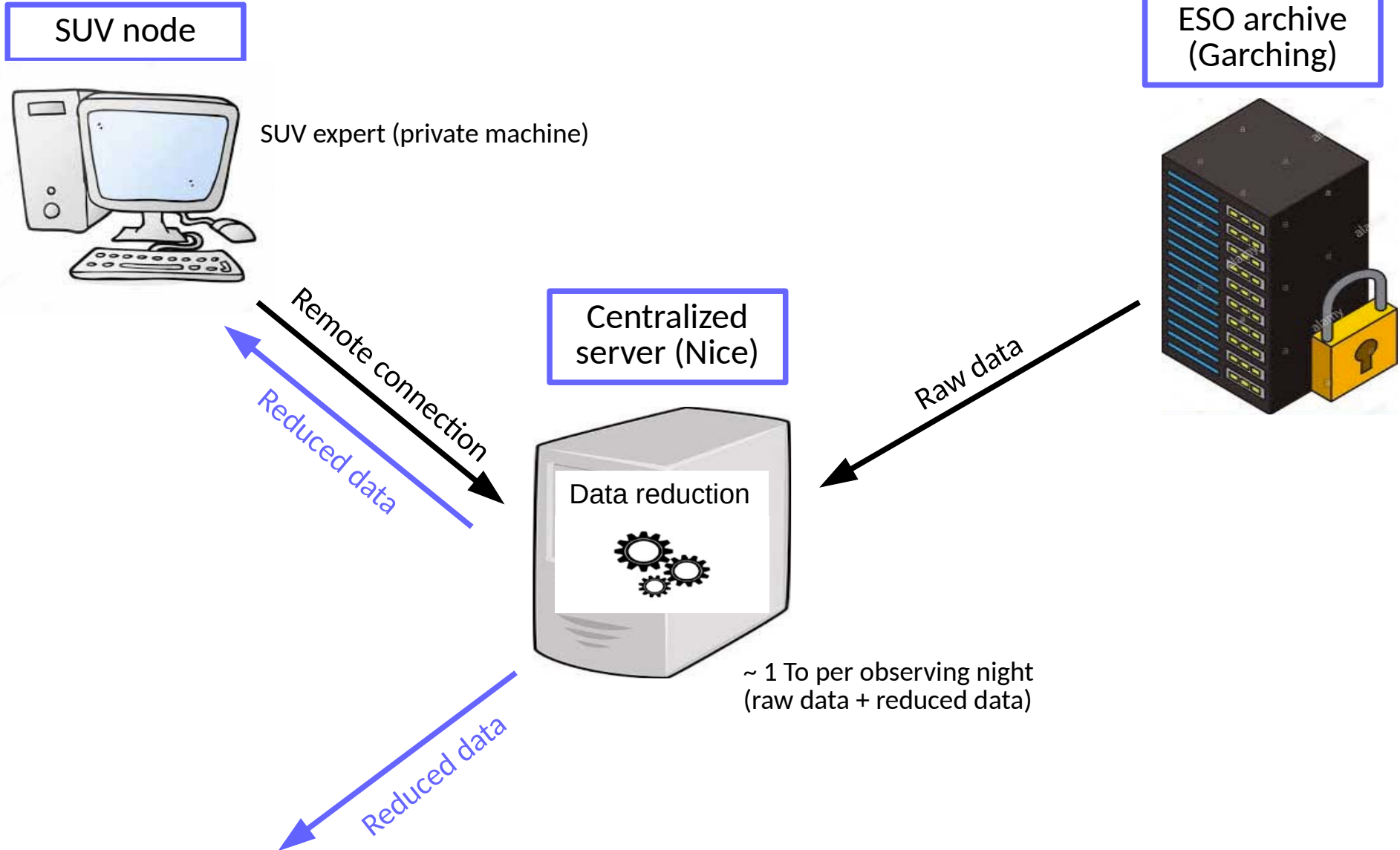
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Need for support? Visit the



Link to the JMMC ticket system



Private data collection
(data protected until first paper or until 2 years after the observations)

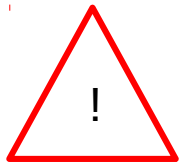
Centralized server

➔ Server (2*20 cores) is installed on the OCA mesocentre and accessible by SUV experts

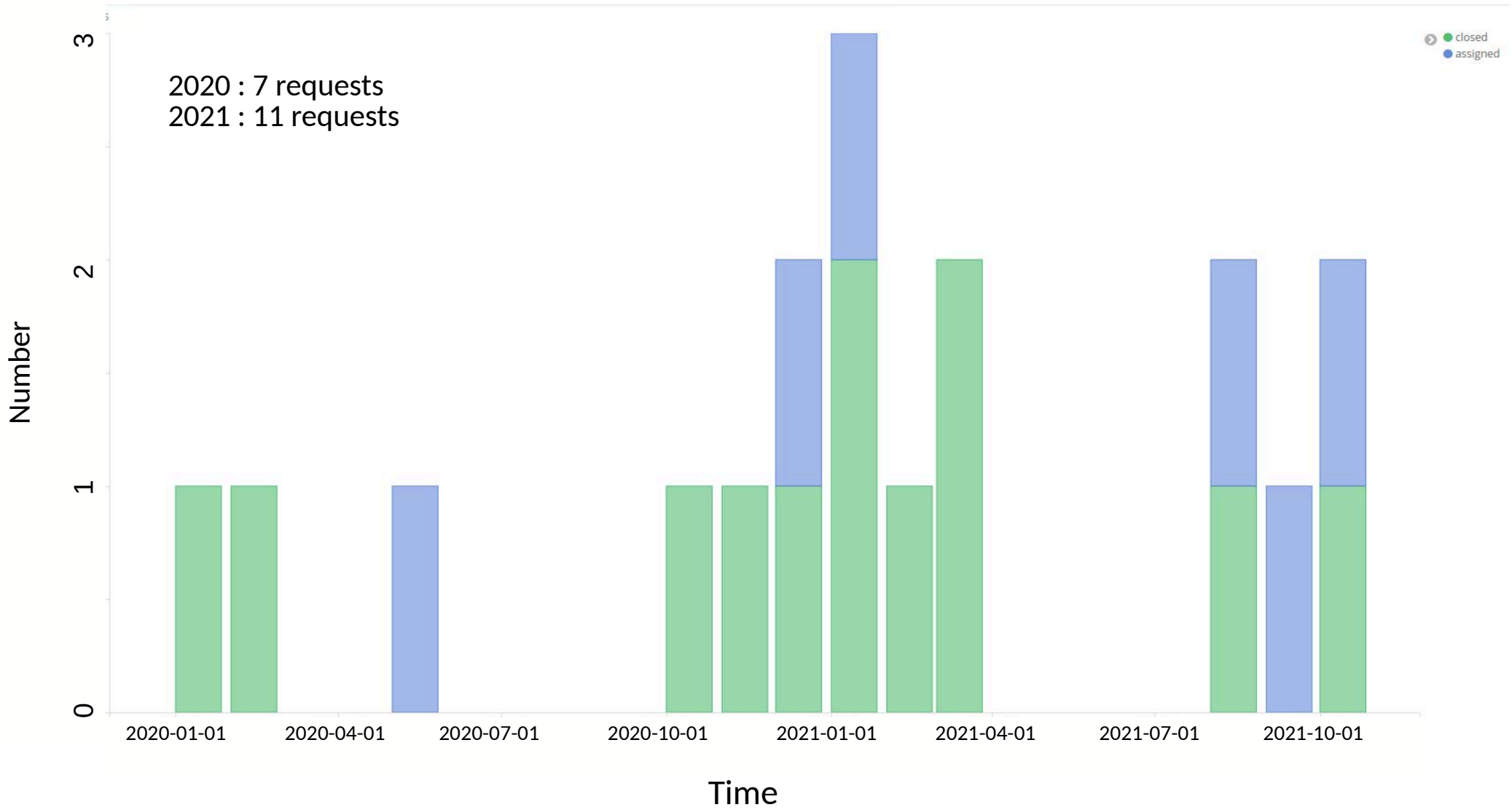
Pipelines

➔ MATISSE pipeline + pre and post-processing Python scripts library → installed and functional

➔ GRAVITY pipeline + pre and post-processing Python scripts library → installed but not running



SUV tickets (2020-2021)



OIDB

- ✓ Current status : 3 data PIs (→ several L2 and L3 datasets) + few more to come

Peer-reviewed Publications

✓ 2020 → 1 article (MATISSE results)

- Kirchsclager, F., Ertel, S., Wolf, S., et al. (2020) "First L band detection of hot exozodiacal dust with VLTI/MATISSE," MNRAS, 499, L47-L52 - 2020MNRAS.499L..47K

✓ 2021 → 3 articles (MATISSE results)

- Zain Mobeen, M., Kamiński, T., Matter, A., et al. (2021) "The mid-infrared environment of the stellar merger remnant V838 Monocerotis," arXiv, arXiv:2110.12758 - 2021arXiv211012758Z

- Corporaal, A., Kluska, J., Van Winckel, H., et al. (2021) "Multi-wavelength VLTI study of the puffed-up inner rim of a circumbinary disc," A&A, 650, L13 - 2021A&A...650L..13C

- Hocdé, V., Nardetto, N., Matter, A., et al. (2021) "Mid-infrared circumstellar emission of the long-period Cepheid ℓ Carinae resolved with VLTI/MATISSE," A&A, 651, A92 - 2021A&A...651A..92H

Want to submit a request to SUV ?

Let's make a demo

GRAVITY pipeline

- ✓ Still problems of installation and run on the SUV machine
 - seems to be esorex-related
 - need for help to re-install the GRAVITY pipeline

Activity level

- ✓ ~ 11 tickets in 2021 → mostly MATISSE
- ✓ Almost no activity on the GRAVITY side (obs preparation, data reduction)
- ✓ No activity on the model fitting/image reconstruction side

2022

Fully functional pipelines on the SUV machine

- ✓ Full data reduction support on VLTI instruments
- ✓ Tutorial session to be organized early 2022 for the SUV experts

Communication actions to be maintained

Introductory documentation on interferometry

- ✓ Better handling of novice users

Systematic archiving of L3 interferometric data

- ✓ Generalized use of OADB through the 'VLTI center' channel

2023

Data reduction service 'à la SPHERE data-center'

- ✓ Systematic processing of all VLTI data (after some deadline) → link with the other Ecs and ESO
- ✓ Centralized server → the recent one installed in Nice ?

Extension to other interferometers ?

- ✓ Support to CHARA instruments → under discussion

- ✓ Need for a more 'international' and 'consistent' acronym (in the frame of the VLT/ECs network)
- ✓ First idea from Isabelle for a generic name : ECUS = Expertise Center for User Support
- ✓ Other ideas ?

Merci !