

# HCERES

High Council for the Evaluation of Research  
and Higher Education

Department of Research evaluation

report on research unit:

Observatoire Astronomique de Strasbourg

ObAS

Under the supervision of  
the following institutions  
and research bodies:

Université de Strasbourg

Centre National de la Recherche Scientifique - CNRS

Evaluation Campaign 2016-2017 (Group C)

# HCERES

High Council for the Evaluation of Research  
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*In the name of HCERES,<sup>1</sup>*

Michel Cosnard, president

*In the name of the experts committee,<sup>2</sup>*

Anne-Marie Lagrange, chairwoman of the  
committee

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Under the decree No.2014-1365 dated 14 november 2014,

<sup>1</sup> The president of HCERES "countersigns the evaluation reports set up by the experts committees and signed by their chairman." (Article 8, paragraph 5)

<sup>2</sup> The evaluation reports "are signed by the chairman of the expert committee". (Article 11, paragraph 2)

## Evaluation report

This report is the sole result of evaluation by the expert committee, the composition of which is specified below.

The assessments contained herein are the expression of an independent and collegial reviewing by the committee.

Unit name: Observatoire Astronomique de Strasbourg

Unit acronym: ObAS

Label requested: UMR

Current number: UMR 7550

Name of Director  
(2016-2017): Mr Hervé WOZNIAK

Name of Project Leader  
(2018-2022): Mr Pierre-Alain Duc

## Expert committee members

Chair: Ms Anne-Marie LAGRANGE, CNRS

Experts:

- Mr Pascal BALLESTER, ESO, Garching bei München, Germany
- Mr Stéphane BASA, CNRS
- Ms Sylvie BRAU-NOGUE, CNRS (representative of supporting personnel)
- Ms Kumiko KOTERA, CNRS (representative of the CoNRS)
- Mr Philippe SAVOINI, Université Pierre et Marie Curie, Paris (representative of the CNU)
- Ms Caroline SOUBIRAN, CNRS, (representative of the CNAP)

Scientific delegate representing the HCERES:  
Mr Michel BLANC

Representatives of supervising institutions and bodies:

Ms Catherine FLORENTZ, Université de Strasbourg

Mr Paul-Antoine HERVIEUX, Université de Strasbourg

Mr Guy PERRIN, CNRS, INSU

Mr Patrice SOULLIE, CNRS, Délégué régional Alsace

Deputy Director of Doctoral School:

Mr Michel RAUSCH, Doctoral School n° 182, “Physique et Chimie-Physique”

## 1 • Introduction

### History and geographical location of the unit

ObAS is a medium-size unit in the French astronomy landscape, with 82 members (including 28 permanent researchers, 28 engineers, technicians and administrative staff, 12 PhD students, 14 Postdocs and CDDs). It is located in a historical observatory built in the 19<sup>th</sup> century. The buildings are used for research, education and training only.

ObAS is both an “Unité Mixte de Recherche” (UMR 7550) and an “Observatoire des Sciences de l’Univers” (OSU), funded by CNRS and Strasbourg University (called thereafter Unistra). It is associated to Doctorale School ED182. As an UMR, it has research and teaching duties. As an OSU, it ensures duties (Services d’Observations and teaching).

As the contours of both structures (UMR and OSU) are identical, we will produce one single report.

### Management team

The Director of the Observatory was Mr Hervé WOZNIAK during the 2011-2016 reference period, and is Mr Pierre-Alain Duc, since 2017. The director of CDS (Centre de Données astronomiques de Strasbourg) was Ms Françoise GENOVA until 2015, and is since then Mr Mark ALLEN.

### HCERES nomenclature

ST3, Sciences de la Terre et de l’Univers

### Scientific domains

The Observatory includes the Centre de Données de Strasbourg (CDS), who has been an international leader in the domain of data management and dissemination since decades, and is a jewel for the observatory. ObAS also includes two research teams (“Galaxies” and “High Energy”, hereafter GAL and HE, respectively) and researchers who, in addition to their own researches, bring their competences to the CDS and thus contribute to its success.

## Unit workforce

| Unit workforce   | Number on<br>30/06/2016 | Number on<br>01/01/2018 |
|--|-------------------------|-------------------------|
| N1: Permanent professors and similar positions                         | 18                      | 17                      |
| N2: Permanent researchers from Institutions and similar positions      | 10                      | 9                       |
| N3: Other permanent staff (technicians and administrative personnel)   | 27                      | 27                      |
| N4: Other researchers (Postdoctoral students, visitors, etc.)          | 1                       |                         |
| N5: Emeritus   | 7                       |                         |
| N6: Other contractual staff (technicians and administrative personnel) | 6                       |                         |
| N7: PhD students   | 13                      |                         |
| TOTAL N1 to N7   | 82                      |                         |
| Qualified research supervisors (HDR) or similar positions              | 23                      |                         |

| Unit record   | From 01/01/2011<br>to 30/06/2016 |
|---|----------------------------------|
| PhD theses defended   | 11                               |
| Postdoctoral scientists having spent at least 12 months in the unit           | 9                                |
| Number of Research Supervisor Qualifications (HDR) obtained during the period | 7                                |

## 2 • Assessment of the unit

### Global assessment of the unit

ObAS plays a special role in the astronomy landscape in France, as it includes, in addition to research teams, the Centre de Données de Strasbourg (CDS), a structure offering astrophysical data related services to the worldwide community. With 800 000 hit queries to the CDS per day, CDS is probably one of the best-known astronomical structures in France. CDS has its own governance and identified budget and an international Scientific Council but it is also a Research team within the ObAS. Researchers of the team actively participate to the work of CDS through their “tâches de service” for the CNAP members, or as part of their research for CNRS members. In addition, CDS takes benefits from the competence and inputs of the researchers of the two other teams as well (GAL and HE).

GAL covers a wide and coherent range of astrophysics, from stellar populations to galaxy formation and evolution, up to re-ionisation times. HE covers various high energy related topics: plasmas, disks, pulsars, X-ray astronomy.

The involvement at different levels, in the ground segments of major space (e.g. XMM, GAIA, SVOM, ATHENA project) or ground projects (WEAVE, CFIS), in close link with both the researchers activities and the CDS adds to the coherence of the ObAS activities. In return, these commitments guarantee for the projects a very high level of competence.

Then, globally, there is a strong coherence between the various activities of the ObAS staff.

The activities of ObAS were very highly rated by the previous visiting committee, and the recommendations (in particular those related to the strategic planning of future activities and to teaching activities) were well taken into account.

Conclusion: ObAS has an excellent reputation and visibility both nationally and internationally. CDS has an outstanding activity in terms of services and R&D on data mining, data-matching and capability to set international standards in this field. The GAL and HE teams are very active, they produce highly and sometimes very highly rated science in various fields of astronomy.