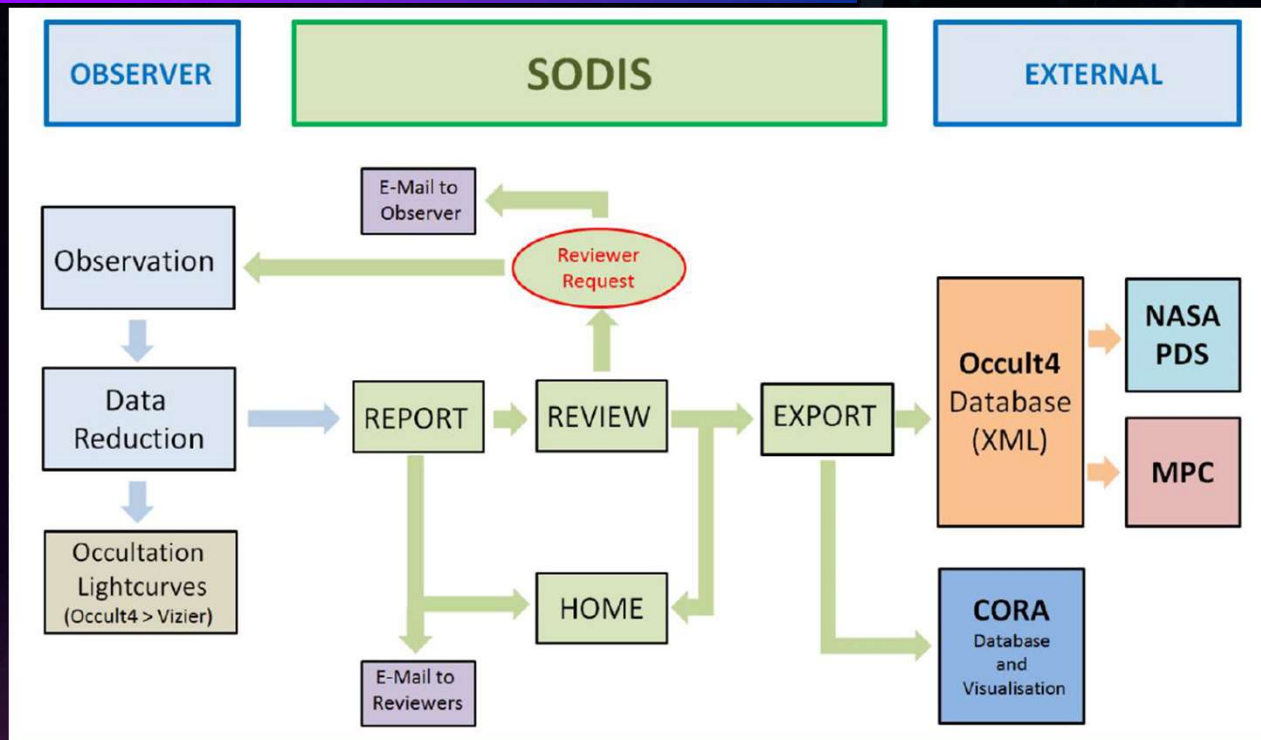




Atelier de photométrie Gemini Pro-Am

Arnaud Leroy, Thierry Midavaine – 05/07/2025

Fonctionnement



Organisation

3 types de comptes

- Observateurs
- Reviewers
- Administrateurs

A ce jour : observateurs 321 , reviewers 35, Admins 4

Et 5 “exporters” qui envoient les données à Dave Hérald

Organisation

Les équipes de « review »

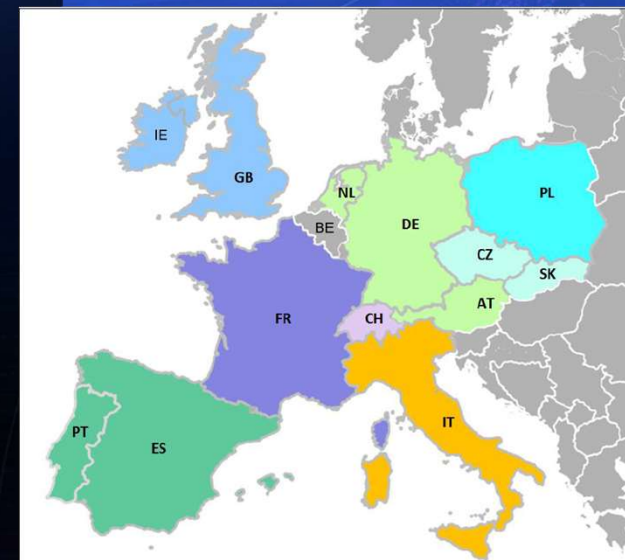
Reviewer teams

The review areas and the names of the reviewers are:

Team	Chief reviewer	Deputy reviewer	Reviewer
BE			Olivier Schreurs (BE), Roland Boninsegna (BE)
CH	Jonas Schenker (CH)	Stefan Meister (CH)	
CZ+SK	Jan Manek (CZ)	Jiri Polak (CZ)	Karel Halir (CZ)
DE+AT+NL	Wolfgang Beisker (DE)	Gregor Krannich (DE)	
EE+LT+LV		... coming soon ...	
ES+PT	Carlos Perello (ES)	Ricard Casas (ES)	Carles Schnabel (ES)
FR	Thierry Midavaine (FR)	Arnoud Leroy (FR)	Pierre le Cam (FR), Matthieu Conjat (FR)
GB+IE	Tim Haymes (GB)	Alex Pratt (GB)	Simon Kidd (GB), William Stewart (GB)
GR		... coming soon ...	
IT	Stefano Sposetti (CH)	Claudio Costa (IT)	
PL	Wojciech Burzynski (PL)	Daniel Blazewicz (PL)	

Exporters of SODIS results to D. Herald

Sven Andersson, Wolfgang Beisker, Tim Haymes, ... reinforcement in prospect ...



Envoyer un rapport

Un fichier « template » est mis à disposition pour pré remplir les informations

- <https://forum.iota-es.de/attachment.php?aid=45> (occultation positive)
- <https://forum.iota-es.de/attachment.php?aid=44> (occultation négative)
- https://iota-es.de/sodis/Sodis_manual_engl.pdf : **Le manuel !!! A lire avec attention**

```
#IOTA-ES ASTEROIDAL OCCULTATION - REPORT FORM 2.03
#Event
#Occultation: POSITIVE
#DATE: 25 August 2022
#PREDICTTIME: 25 Aug 2022 20:03:31 UT
#STAR: UCAC4 350-187717
#ASTEROID: Hilrun
#Nr: 928
#OBSERVER
#Observer1: Wilhelm Herschel
#Observer2:
#moreObs:
#E-mail: myemail@myprovider.de
#Address: mystreet 5, 12345 MyCity
#OBSERVING_STATION
#NearestCity: Berlin
#Countrycode: DE
#Coordinates LAT +/-DD MM SS.S LON +/-DDD MM SS.S
#Latitude: +52 58 48.5
#Longitude: +013 22 13.7
#Altitude: 37.4
#Datum_blank=0584 M=H01927 E=ED1958 T=Tokyo G=081936 *unspecified, or other
#Datum:
#Teleskop _unstated 1=Refractor 2=Newtonian 3=SCT 4=Obsidian 5=Binoculars 6=Other 7=None 8=telescope
#Telescope: 3
#Aperture in cm
#Aperture: 36
#Focallength in cm
#Focallength: 277
#ObservingMethod _unspecified a=Analogue & digital video b=Digital SLR-camera video c=Photometer d=Sequential images e=Drift scan f=Visual g=Other
#ObservingMethod: a
#Observation
#StartObs: 20:01:34.99
#D0 D=Main Star d=second Star G=satellite main star g=satellite 2nd star W=ring N=non detection +time hh:mm:ss
#D: 020:02:30.0
#Acc_D: 0.5
#R R=Main Star r=second Star B=satellite main star b=satellite 2nd star W=ring N=non detection +time hh:mm:ss
#R: 020:02:34.0
#Acc_R: 0.5
#EndObs: 20:03:34.01
#Duration: 4.0
#Exp_Time: 1.0
#Timesource _unspecified a=GPS b=HTP c=Telephone (fixed or mobile) d=Radio time signal e=Internal clock of recorder f=Stopwatch g=Other
#Timesource: a
#Camera: QHY174M GPS
#Signal/Noise:
#Weatherconditions
#Wind: 0
#Temperature: 22
#Transparency 1=Clear 2=Fog 3=Thin cloud <2 [mag loss <2 mag.] 4=Thick cloud >2 [mag loss >2 mag.] 5=Broken opaque cloud [that is, observed thru gaps in the cloud] 6=Star faint 7=By averted vision
#Transparency: 1
#Stability _unstated 1=Steady 2=Slight flickering 3=Strong flickering
#Stability: 1
#Comments: here only really important remarks
```

Une occultation positive

SODIS – Entries for a positive report (v.01)

Read Form | Choose File | No file chosen | Read in an event file created by OccultWatcher here (recommended, see User Guide) | READ

Occultation: Positive | Date: 08/02/2023 | Predictdate: 08/02/2023 | Predicttime: 22:08:51

Observer 2: Paul Miller | Name of a second observer (only, nothing else) | (The name of the first observer is automatically filled in) | More Obs: Optional (Check if three and more observers, these can not be named)

Star: UCAC4 641-041764, TYC 1843-01187-1 | Asteroid: 1999 VZ52 | Fill in (Name of asteroid, exactly written; spaces!) | No | Fill in (Number of asteroid)

Nearest City: Xtown | Fill in (Nearest city, only, nothing else) | Country Code: GB | AD | Choose

Latitude: -02 30 58.0 | Longitude: 10 22 58.7 | Altitude: 53 | Fill in (in m, no unit) | Datum Type: WGS84 | Choose

Telescope: Unstated | Choose | Aperture: 20.3 | Fill in (in cm, no unit) | cm | Focal Length: 89 | Optional (effective FL; in cm, no unit) | cm

Obs Method: Analogue & digital video | unspecified | Choose | Exp Time: 0.32 | Optional (no unit) | s.ss

Start Obs: 22 05 30 234 | HH MM SS ms | Fill in (Start of recording) | End Obs: 22 10 32 563 | HH MM SS ms | Fill in (End of recording)

D: Main star | Choose, Main star (or applicbl.) | D Time: 22 06 35 233 | HH MM SS ms | Fill in (D time) | Acc_D: 0.17 | Fill in (Accuracy of D time; no unit) | s.ss

Duration: 3.051 | Fill in (Duration of the drop, not the duration of the recording; no unit) | s

R: Main star | Choose, Main star (or applicbl.) | R Time: 22 06 38 284 | HH MM SS ms | Fill in (R time) | Acc_R: 0.34 | Fill in (Accuracy of R time; no unit) | s.ss

Time Source: GPS | unspecified | Choose | Camera: QHY174GPS | Optional | Signal/Noise: 8.5 | Optional (no unit)

Wind: 2 | Optional (no unit) | Bft. | Temp: -12 | Optional (no unit) | °C | Transparency: Clear | Choose | Seeing: Steady | unstated | Choose

Drag & drop here (or browse) required images and files according to the SODIS User Guide, p. 4, https://iota-es.de/sodis/Sodis_manual_engl.pdf

Comment: Usually, here no comments required/allowed. Do not comment about the prediction or other things. See <https://forum.iota-es.de/showthread.php?tid=106>

Legend: Example is fictitious
Blue: Entry examples
Red: Mandatory entries
Green: Optional entries (recommended)

Une occultation négative

SODIS – Entries for a negative report (v01)

Read Form: No file chosen **Read in an event file created by OccultWatcher here (recommended, see User Guide)**

Occultation: **Negative** Date: **08/02/2023** Predictdate: **08/02/2023** Predicttime: **22:08:51**

Observer 2: **Paul Miller** Name of a second observer (only, nothing else)
(The name of the first observer is automatically filled in) ☐ More Obs (Check if three and more observers, these can not be named)

Star: **UCAC4 641-041764, TYC 1843-01187-1** Asteroid: **1999 VZ52** No: **24127**

Xtown: **GB** Country Code: **AD**

Latitude: **-02 30 58.0** Longitude: **10 22 58.7** Altitude: **53** m Datum Type: **WGS84**

Telescope: **Unstated** Aperture: **20.3** cm Focal Length: **89** (effective FL; in cm, no unit) cm

Obs Method: **Analogue & digital video** Exp Time: **0.32** (no unit) s.ss

Start Obs: **22** **05** **30** **234** End Obs: **22** **10** **32** **563**

D: **Non Detection** **Non Detection"** D Time: **No entry** SS ms Acc_D: **No entry** s.ss

Duration: **No entry** s

R: **Non Detection** **Non Detection"** R Time: **No entry** SS ms Acc_R: **No entry** s.ss

Time Source: **GPS** Camera: **QHY174GPS** Signal/Noise: **8.5** (no unit)

Wind: **2** (no unit) Bft Temp: **-12** (no unit) °C Transparency: **Clear** Seeing: **Steady** unsteady

Drag & drop here (or browse) required images and files according to the SODIS User Guide, p. 4, https://iota-es.de/sodis/Sodis_manual_engl.pdf Drag & Drop your files or Browse **Entry all times in UTC !**

Comment: **Usually, here no comments required/allowed. Do not comment about the prediction or other things. See <https://forum.iota-es.de/showthread.php?tid=106>**

Legend: **Example is fictitious**
Blue: Entry examples
Red: Mandatory entries
Green: Optional entries (recommended)

Envoyer un rapport

Les autres informations à fournir


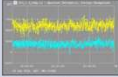
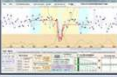

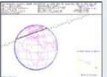
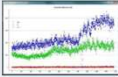


Pipeline	Event	Overview	Reduction	Log
Tangra, AOTA	 PNG-Image from Occult-Watcher: „Open Event in Occult“	 PNG-Image from Tangra: „Export lc / Save as Image File“	 PNG-Image from AOTA: „tab 5“	 Textfile („... AOTA_Report.txt“) from AOTA „tab 6“: „Save Report“
Py-Movie, PyOTE	 PNG-Image from Occult-Watcher: „Open Event in Occult“	 PNG-Image from PyMovie: „Plot“ („Composite Lightcurve Plot“)	 Image from PyOTE: („... PYOTE.png“) Image from PyOTE: („... false-positive.PY-OTE.png“)	 Textf. („... PYOTE.log“) from PyOTE
Other (SORA, Li-movie, ...)	Please provide similar information as described above.			

Figure 1.12. Data reduction pipeline depending observer required additional submissions (case of event detection - positive observation).

Please provide following files:

In case of a negative occultation:

- Occultation Map
- Image of light curve with object and referenz star (Tangra or PyMovie)
- Light Curve CSV Export

In case of a positive occultation:

- Occultation Map
- Image of light curve with object and referenz star (Tangra or PyMovie)
- Light Curve CSV Export
- AOTA evaluation: Tab5 screenshot; PyOTE evaluation: screenshot of PyOTE light curve window
- AOTA result file or PyOTE log file
- voluntary, not obligatory: DAT file of the light curve

Etude du rapport

La procédure de review

- Un ou plusieurs reviewers regardent le rapport et vérifie les informations
- Si tout est correct validation
- Si il manque quelque chose ou si la réduction des données est à affiner , demande via Sodis (qui envoie un mail à l'observateur) - Parfois , nous contactons les observateurs directement par mail pour l'envoi de certains fichiers trop lourds pour la base
- Une fois les informations complétées et correctes , création du fichier .dat pour l'envoi dans Vizier de la courbe de lumière, et validation .
- Note: toutefois , si des doutes subsistent sur la qualité du timing , nous avons la possibilité de donner un poids aux données

Exportation du rapport

Exportation vers le logiciel Occult

- Les administrateurs s'occupent des exportations de données vers Dave Herald (Occult).
- Si un problème est détecté lors de cette exportation , les reviewers et administrateurs sont contactés pour donner et/ou corriger les informations
- Dave Herald , une fois les observations validées , envoie les observations sur la base du Minor Planet Center , ainsi que les fichiers .dat vers dans la base de données Vizier

Renforcer l'équipe France SODIS

Devenez un reviewer

Devenez un exporter

- En plus SODIS est en évolution pour l'améliorer
- Renforcer aussi l'équipe des référents France pour les campagnes avec les professionnels

Roadies

Une organisation France avec un financement API

Observatoire de Paris

- Enregistrez-vous sur le site Gemini / Roadies
- Site fixe
- Station mobile
- Besoin d'une TimeBoxII ?
- Un réseau d'Observateurs France estimés à environ 100 amateurs

Conclusions

- A ce jour , il y a depuis le 1^{er} janvier 2023, 8453entrées
- Dont 5135 négatives et 3318 positives
- 392 observations pour la France , 196 positives et 190 négatives
- Les profils d'astéroïdes seront disponibles dans la base Cora et dans Occult (une fois validés par Dave Herald et Dave Gault)

