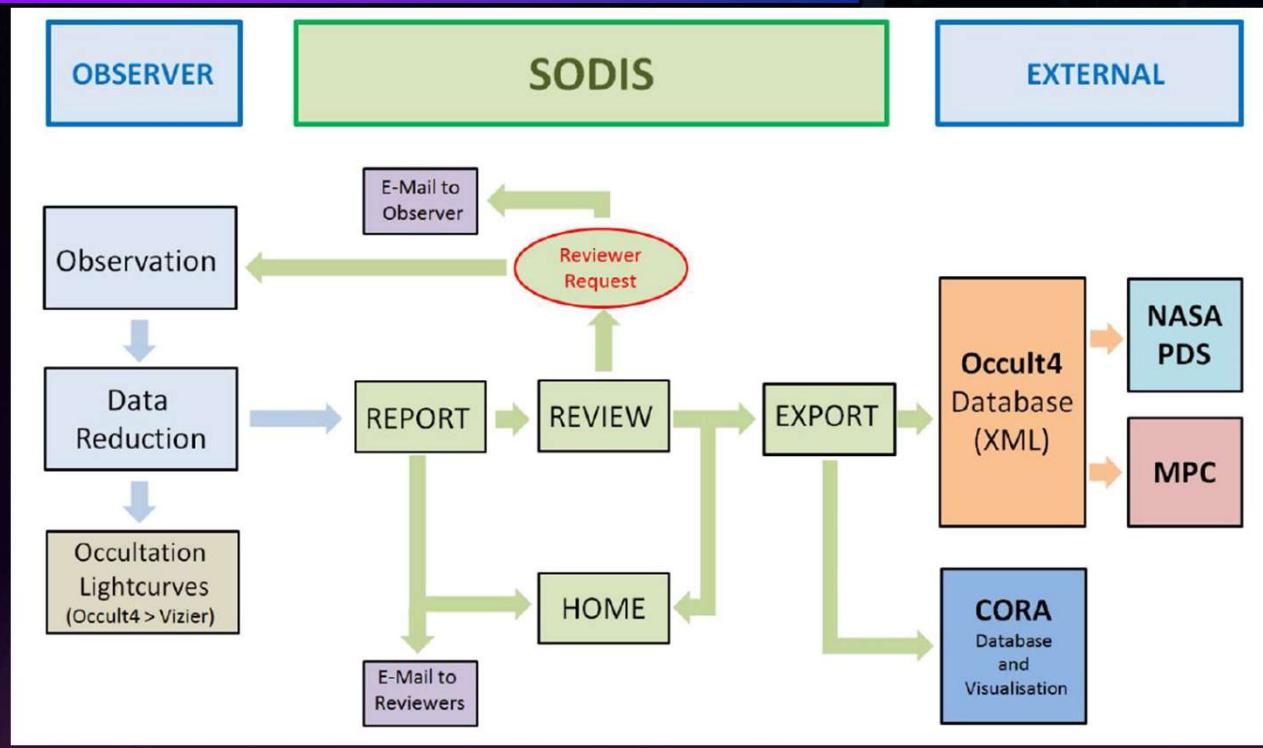




# Atelier de photométrie Gemini Pro-Am

Arnaud Leroy, Thierry Midavaine – 05/07/2025

# Fonctionnement



# Organisation

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## 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 »

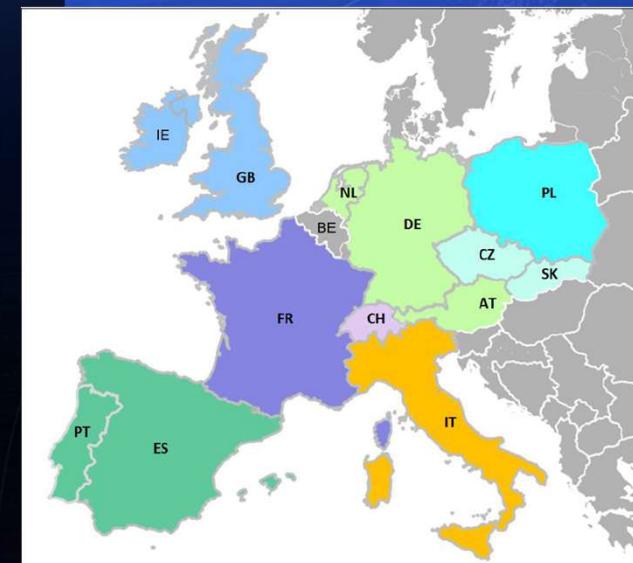
### Reviewer teams

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](https://iota-es.de/sodis/Sodis_manual_engl.pdf) : Le manuel !!! A lire avec attention

```
#IDOTA-ES ASTEROIDAL OCCULTATION - REPORT FORM 2.03
#Event
#Occultation: POSITIVE
#DATE: 25 August 2022
#PRODUCEDTIME: 25 Aug; 2022 20:03:31 UT
#STAR: UCAC4 3SB-187717
#ASTEROID: Hildrun
#Nr: 928
#OBSERVER
#Oserver1: Wilhelm Herschel
#Oserver2:
#moreObs:
#E-mail: myemail@myprovider.de
#Address: mystreet 5, 12345 MyCity
#SERVING_STATION
#NearestCity: Berlin
#Countrycode: DE
#Coordinates LAT +/-00 MM SS.S LON +/-00 MM SS.S
#Latitude: +52 58 48.5
#Longitude: +013 22 13.7
#Altitude: 37.4
#Datum _blank=0GS84 N=AD1927 E=ED1950 T=Tokyo G=GS1936 "unspecified, or other
#Datum:
#Teleskop _unstated 1=Refractor 2=Newtonian 3=SCT 4=Obsonian 5=Binoculars 6=Other 7=None 8=Scope
#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
#0 DeMain Star >second Star >satellite main star >satellite 2nd star >ring >non detection +time hh:mm:ss.s
#D: 020:02:30.0
#AC: D: 0.5
#R: DeMain Star >second Star >satellite main star b=satellite 2nd star >ring >non detection +time hh:mm:ss.s
#R: R20:02:34.0
#AC: R: 0.5
#EndObs: 20:03:34.01
#Duration: 4.0
#Obj_Time: 1.0
#TimeSource _unspecified a=GPS b=NTP c=Telephone (fixed or mobile) d=Radio time signal e=Internal clock of recorder f=Stopwatch g=Other
#TimeSource: a
#Camera: (HY)174N 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=Ay 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 (v01)

Read Form		Choose File   No file chosen <b>Read in an event file created by OccultWatcher here (recommended, see User Guide)</b>		READ	
Occultation	<b>Positive</b> <b>Choose</b>	Date dd/mm/yyyy <b>Fill in</b> (Date of recording)	Predictdate dd/mm/yyyy <b>Optional</b>	Predicttime Predicted date and time of the event (Not the time when the prediction was made) 22:08:51 <b>Optional</b>	
Observer 2	<b>Paul Miller</b> <b>Optional</b>	Name of a second observer (only, nothing else) (The name of the first observer is automatically filled in)		<input type="checkbox"/> More Obs <b>Optional</b> (Check if three and more observers, these can not be named)	
Star	UCAC4 641-041764, TYC 1843-01187-1 <b>Fill in</b> (Name of occ. star, exactly written; spaces!)	Asteroid 1999 VZ52 <b>Fill in</b> (Name of asteroid, exactly written; spaces!)	No	<b>Fill in</b> (Number of asteroid) 24127	
Xtown	<b>Fill in</b> (Nearest city, only, nothing else)	Country Code GB <b>Choose</b>			
Nearest City	-02 30 58.0 (-DD MM SS.s) <b>Fill in</b> (exactly written; spaces!, no units)	Longitude 10 22 58.7 (-DD MM SS.s) <b>Fill in</b> (exactly written; spaces!, no units)	Altitude 20.3 <b>Fill in</b> (in m, no unit) m	Datum Type WGS84 <b>Choose</b>	
Latitude	Newtonian			89	
Telescope	Unstated <b>Choose</b>	Aperture <b>Fill in</b> (in cm, no unit) cm	Focal Length <b>Optional</b> (effective FL; in cm, no unit) 89 cm		
Obs Method	Analogue & digital video unspecified <b>Choose</b>	Exp Time 0.32 <b>Optional</b> (no unit)		5.55	
Start Obs	22 05 30 HH MM SS <b>Fill in</b> (Start of recording)	End Obs 22 10 32 HH MM SS <b>Fill in</b> (End of recording)		563 ms	
D	Main star <b>Choose</b> „Main star“ (or applicbl.)	D Time 22 06 35 HH MN SS <b>Fill in</b> (D time)	Acc_D 0.17 <b>Fill in</b> (Accuracy of D time; no unit)	5.55	
Duration	3.051	Fill in (Duration of the drop, not the duration of the recording; no unit)		s	
R	Main star <b>Choose</b> „Main star“ (or applicbl.)	R Time 22 06 38 HH MN SS <b>Fill in</b> (R time)	Acc_R 0.34 <b>Fill in</b> (Accuracy of R time; no unit)	5.55	
Time Source	GPS unspecified <b>Choose</b>	Camera QHY174GPS <b>Optional</b>	Signal/Noise 8.5 <b>Optional</b> (no unit)		
Wind	2 <b>Optional</b> (no unit) Bft.	Temp -12 <b>Optional</b> (no unit) °C	Transparency Clear <b>Choose</b>	Seeing Steady unstated <b>Choose</b>	
Drag & drop here (or browse) required images and files according to the SODIS User Guide, p. 4, <a href="https://iota-es.de/sodis/Sodis_manual_engl.pdf">https://iota-es.de/sodis/Sodis_manual_engl.pdf</a>		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 <a href="https://forum.iota-es.de/showthread.php?tid=106">https://forum.iota-es.de/showthread.php?tid=106</a>					
<b>Legend:</b> Blue: Entry examples Red: Mandatory entries Green: Optional entries (recommended)					

# Une occultation négative

SODIS – Entries for a negative report (n)

Read Form  No file chosen

Occultation:	<b>Negative</b>	Date:	08/02/2023 <input type="text" value="dd/mm/yyyy"/> <input type="button" value="Fill in (Date of recording)"/>	Predictdate:	08/02/2023 <input type="text" value="dd/mm/yyyy"/> <input type="button" value="Optional"/>	Predicttime:	22:08:51 <input type="text" value="Optional"/> <input type="button" value="Predicted date and time of the event (Not the time when the prediction was made)"/>		
Observer 2:	<b>Paul Miller</b>	<b>Optional</b>	Name of a second observer (only, nothing else) (The name of the first observer is automatically filled in)						
Star:	UCAC4 641-041764, TYC 1843-01187-1 <input type="text" value="Fill in (Name of occ. star, exactly written; spaces!)"/>	Asteroid:	1999 VZ52 <input type="text" value="Fill in (Name of asteroid, exactly written; spaces!)"/>	No:	24127 <input type="text" value="Fill in (Number of asteroid)"/>				
Xtown:	<input type="text" value="Fill in (Nearest city, only, nothing else)"/>		Country Code:	GB <input type="text" value="AD"/> <input type="button" value="Choose"/>					
Nearest City:	<input type="text" value="Fill in (Nearest city, only, nothing else)"/>		Latitude:	-02 30 58.0 (-DD MM SS.s) <input type="text" value="Fill in (exactly written; spaces!, no units)"/>	Longitude:	10 22 58.7 (-DD MM SS.s) <input type="text" value="Fill in (exactly written; spaces!, no units)"/>	Altitude:	53 <input type="text" value="Fill in (in m, no unit)"/> m	
Telescope:	Unstated	<b>Choose</b>	Aperture:	<input type="text" value="Fill in (in cm, no unit)"/>		Focal Length:	<b>Optional</b> (effective FL; in cm, no unit)		
Obs Method:	Analogue & digital video			Exp Time:	0.32 <b>Optional</b> (no unit)				
Start Obs:	22 HH	05 MM	30 <input type="text" value="SS"/> <input type="button" value="Fill in (Start of recording)"/>	234 ms	End Obs:	22 HH	10 MM	32 <input type="text" value="SS"/> <input type="button" value="Fill in (End of recording)"/> ms	
D:	<b>Choose „Non Detection“</b>	<input type="text" value="D Time"/>	HH <input type="text" value="No entry"/>	SS <input type="text" value="ss"/>	ms <input type="text" value="ms"/>	Acc_D:	<b>No entry</b>		
Duration:	<b>No entry</b>								
R:	<b>Choose „Non Detection“</b>	<input type="text" value="R Time"/>	HH <input type="text" value="No entry"/>	SS <input type="text" value="ss"/>	ms <input type="text" value="ms"/>	Acc_R:	<b>No entry</b>		
Time Source:	GPS	<input type="text" value="QHY174GPS"/>		<b>Optional</b>		Signal/Noise:	8.5 <b>Optional</b> (no unit)		
Wind:	2 <b>Optional</b> (no unit)	Bft:	Temp:	-12 <b>Optional</b> (no unit)	°C <input type="text" value="Optional"/>	Transparency:	Clear <input type="text" value="Clear"/> <input type="button" value="Choose"/>	Seeing:	Steady <input type="text" value="unstated"/> <input type="button" value="Choose"/>
Drag & drop here (or browse) required images and files according to the SODIS User Guide, p. 4, <a href="https://iota-es.de/sodis/Sodis_manual_engl.pdf">https://iota-es.de/sodis/Sodis_manual_engl.pdf</a>									
Comment: <input forum.iota-es.de="" https:="" showthread.php?tid='106"' type="text" value="Usually, here no comments required/allowed. Do not comment about the prediction or other things. See &lt;a href="/> https://forum.iota-es.de/showthread.php?tid=106"/>									
Entry all times in UTC !									
Example is fictitious									
Legend: 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				 Textfile (... AOTA_Report.txt) from AOTA „tab 6“; „Save Report“
Py-Movie, PyOTE			 Image from PyOTE: (... PYOTE.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

Résultats scientifiques

# Conclusions

- A ce jour , il y a depuis le 1<sup>er</sup> janvier 2023, 8453 entrées
- 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)

