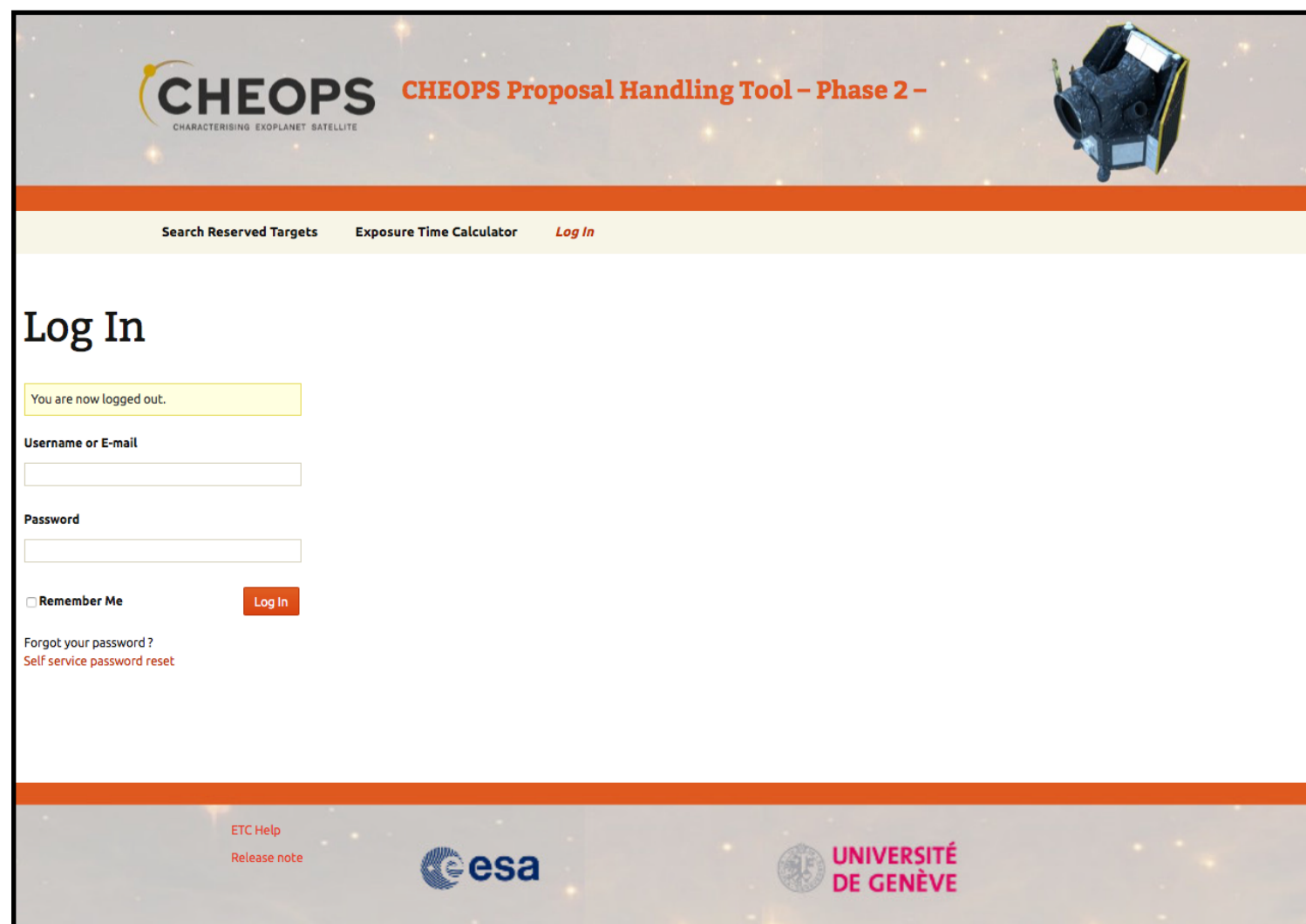


# CHEOPS Proposal Handling Tool Phase 2 (PHT2) Guidelines (v\_1.4)

# Proposal Handling Tool Phase II

## PHT2 Guidelines

URL: <https://cheops.unige.ch/pht2/>



CHEOPS CHARACTERISING EXOPLANET SATELLITE

CHEOPS Proposal Handling Tool – Phase 2 –

Search Reserved Targets Exposure Time Calculator Log In

### Log In

You are now logged out.

Username or E-mail

Password

☐ Remember Me Log In

Forgot your password?  
Self service password reset

ETC Help  
Release note

esa

UNIVERSITÉ DE GENÈVE

Note: PHT2 was tested on Chrome, Safari and Firefox web browsers.

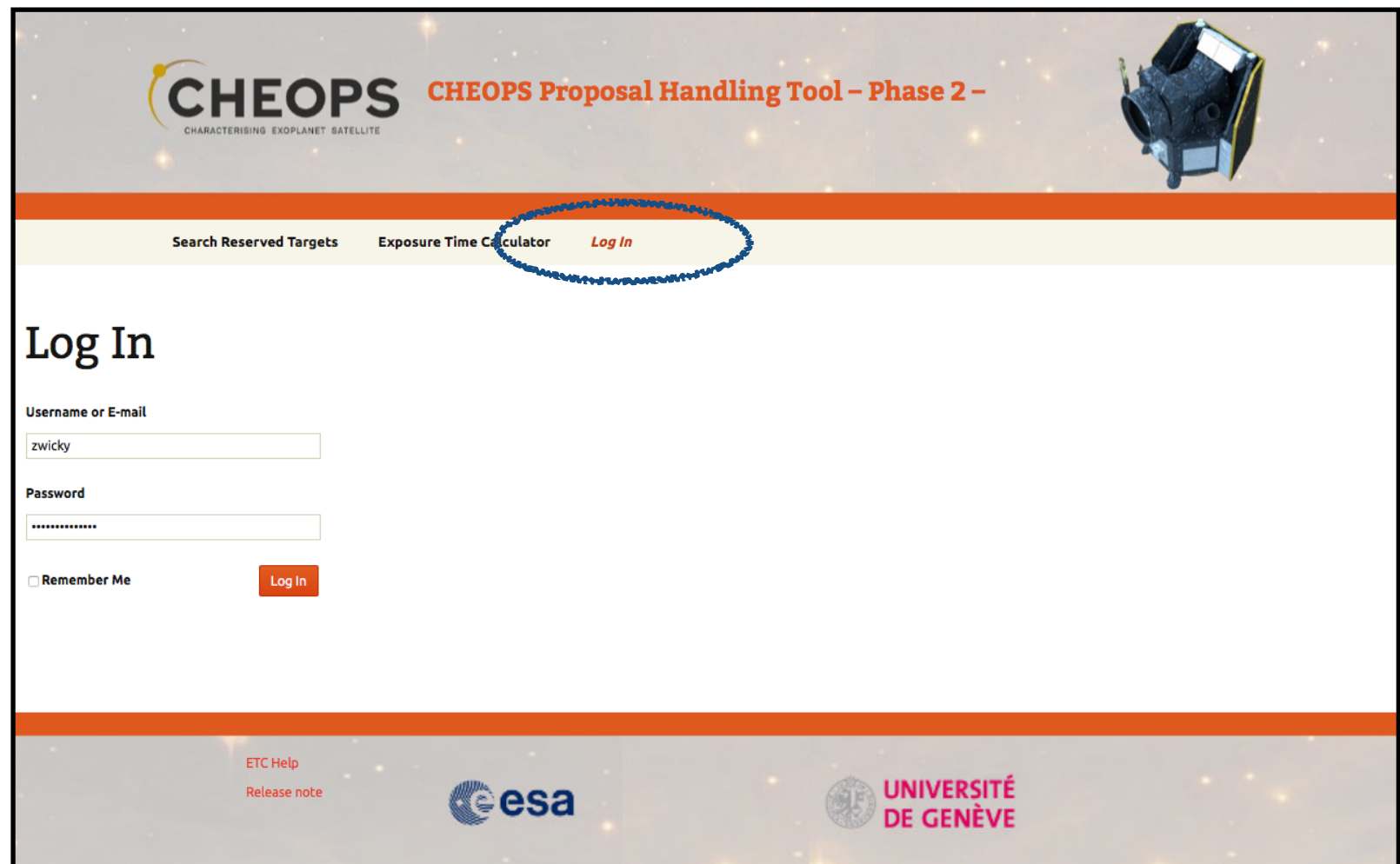
Please consult the [\*\*\*CHEOPS Observers Manual\*\*\*](#) for details on how to observe with CHEOPS

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Please login

with username and password  
received from SOC



**CHEOPS** CHARACTERISING EXOPLANET SATELLITE

**CHEOPS Proposal Handling Tool – Phase 2 –**

Search Reserved Targets Exposure Time Calculator **Log In**

### Log In

Username or E-mail  
zwicky

Password  
\*\*\*\*\*

☐ Remember Me **Log In**

[ETC Help](#)  
[Release note](#)

**esa** **UNIVERSITÉ DE GENÈVE**

# Proposal Handling Tool Phase II

## PHT2 Guidelines

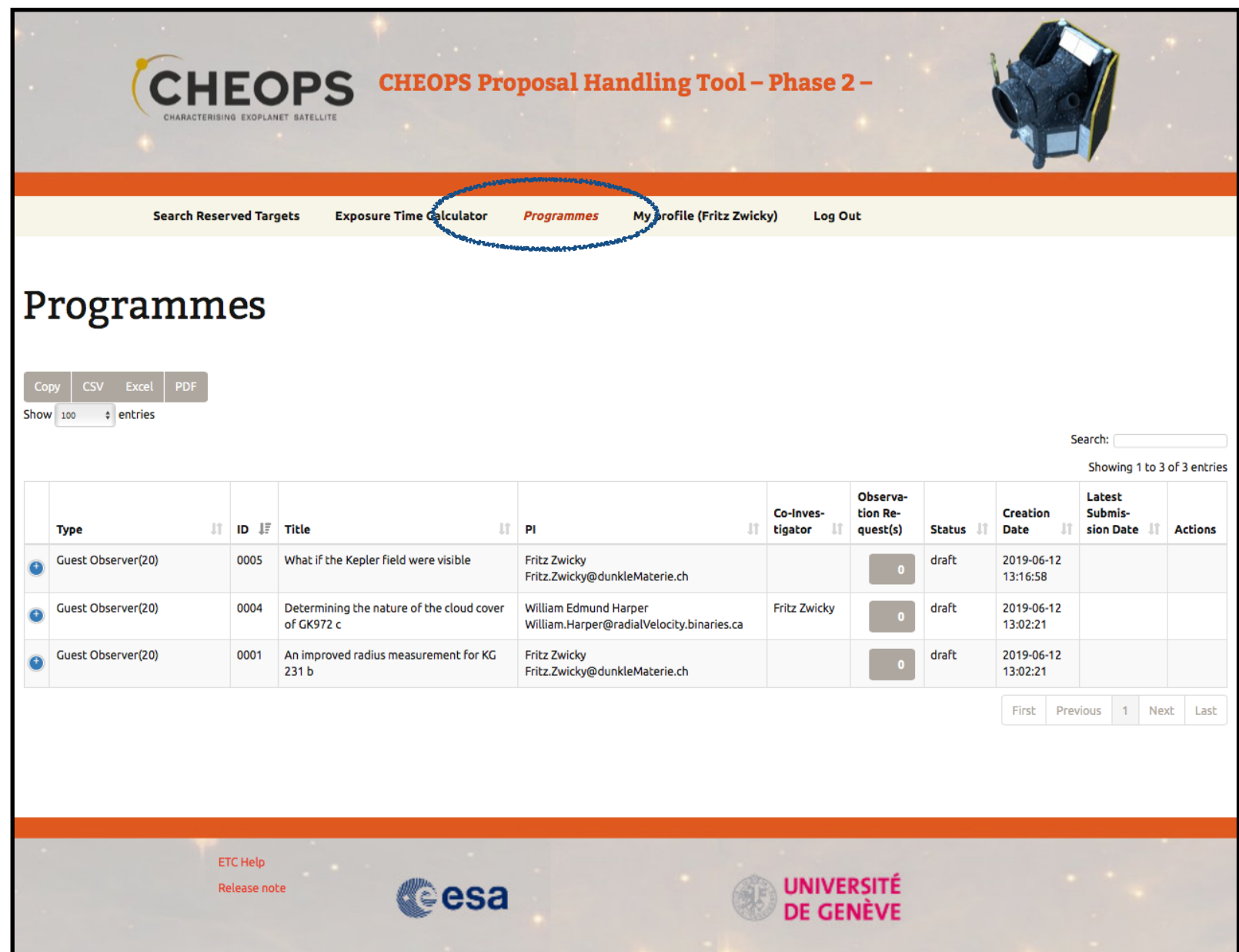
### Your accepted “Programmes”

PHT2 programme = CHEOPS  
Proposal submitted to ESA

List of *accepted* GO and DDT  
programmes on which *you are*  
*the PI or the additional Co-I*

Pre-filled information ingested  
from Phase-1 stage (e.g. title)

You see only proposals for which  
you are either the PI or the  
additional co-I as noted in the  
Phase I Proposal Handling Tool  
web inputs



**CHEOPS** CHEOPS Proposal Handling Tool – Phase 2 –

Search Reserved Targets Exposure Time Calculator **Programmes** My profile (Fritz Zwicky) Log Out

### Programmes

Copy CSV Excel PDF

Show 100 entries

Search:

Showing 1 to 3 of 3 entries

Type	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions
Guest Observer(20)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:16:58		
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21		
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21		

First Previous 1 Next Last

ETC Help  
Release note

esa

UNIVERSITÉ DE GENÈVE



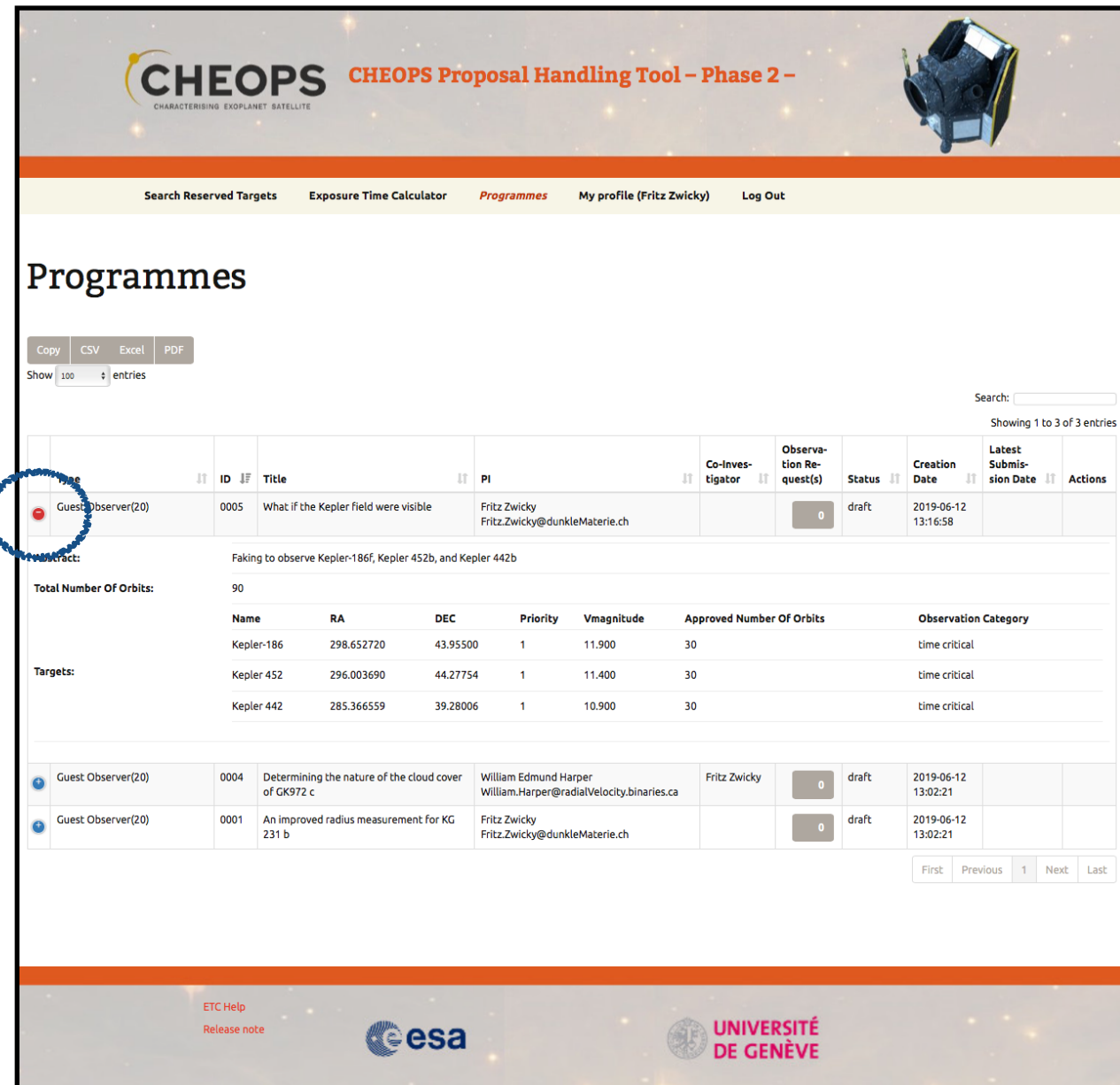
# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Your accepted “Programmes”

Explore Programme summary  
Accepted targets  
Accepted telescope time  
ESA-assigned Science priority

Programme-level information  
cannot be edited



**CHEOPS** CHEOPS Proposal Handling Tool – Phase 2 –

Search Reserved Targets Exposure Time Calculator **Programmes** My profile (Fritz Zwicky) Log Out

### Programmes

Copy CSV Excel PDF

Show 100 entries



Search:

Showing 1 to 3 of 3 entries

Name	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions																												
Guest Observer(20)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:16:58																														
<p><b>Abstract:</b> Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b</p> <p><b>Total Number Of Orbits:</b> 90</p> <table border="1"> <thead> <tr> <th>Name</th> <th>RA</th> <th>DEC</th> <th>Priority</th> <th>Vmagnitude</th> <th>Approved Number Of Orbits</th> <th>Observation Category</th> </tr> </thead> <tbody> <tr> <td>Kepler-186</td> <td>298.652720</td> <td>43.95500</td> <td>1</td> <td>11.900</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler 452</td> <td>296.003690</td> <td>44.27754</td> <td>1</td> <td>11.400</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler 442</td> <td>285.366559</td> <td>39.28006</td> <td>1</td> <td>10.900</td> <td>30</td> <td>time critical</td> </tr> </tbody> </table>										Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category	Kepler-186	298.652720	43.95500	1	11.900	30	time critical	Kepler 452	296.003690	44.27754	1	11.400	30	time critical	Kepler 442	285.366559	39.28006	1	10.900	30	time critical
Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category																															
Kepler-186	298.652720	43.95500	1	11.900	30	time critical																															
Kepler 452	296.003690	44.27754	1	11.400	30	time critical																															
Kepler 442	285.366559	39.28006	1	10.900	30	time critical																															
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21																														
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21																														

First Previous 1 Next Last

ETC Help  
Release note

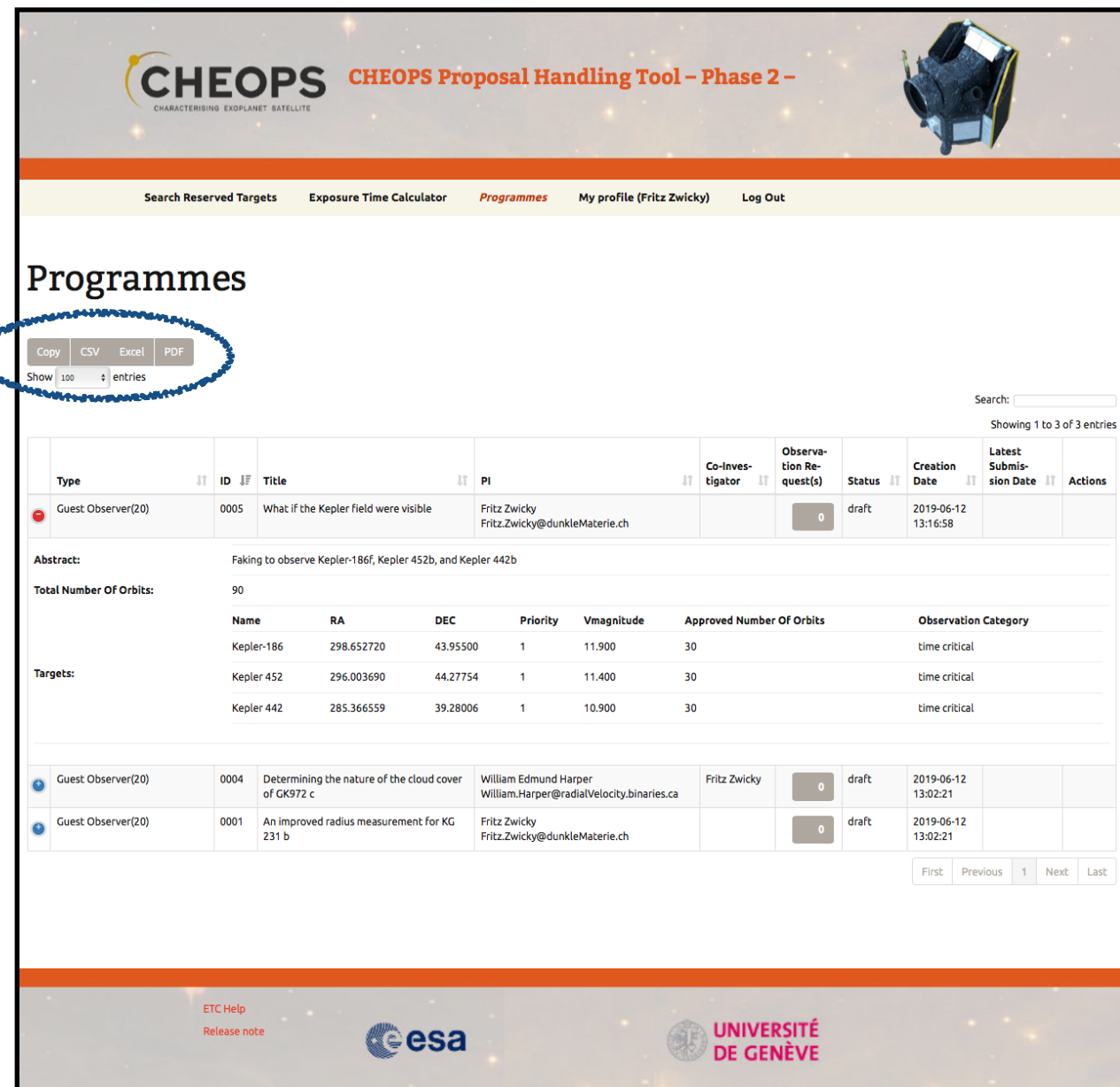
 

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Your accepted “Programmes”

Programmes list can be exported in various formats for convenience.



**CHEOPS** CHEOPS Proposal Handling Tool – Phase 2 –

Search Reserved Targets Exposure Time Calculator **Programmes** My profile (Fritz Zwicky) Log Out

### Programmes

Copy CSV Excel PDF  
Show 100 entries

Showing 1 to 3 of 3 entries

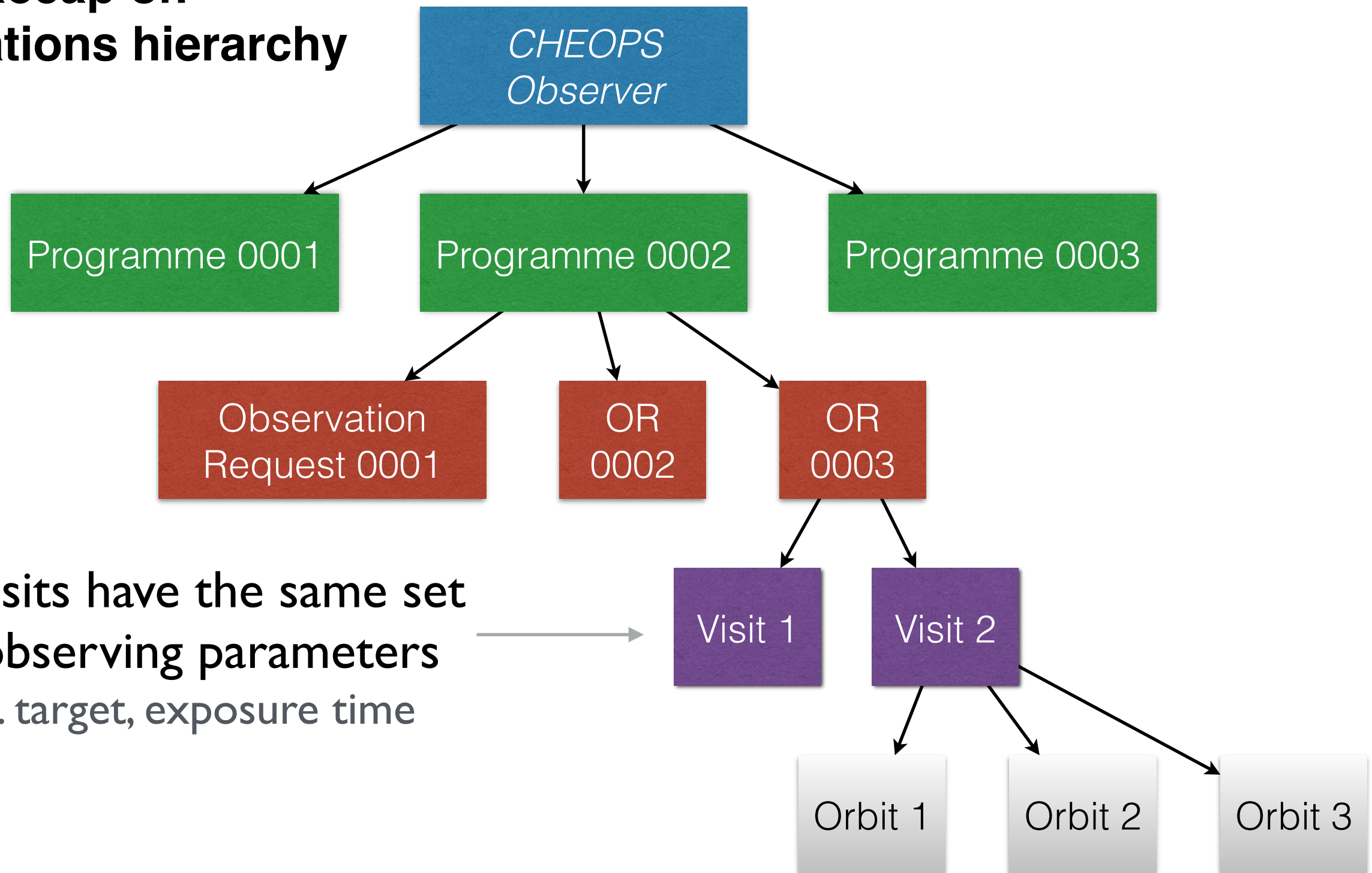
Type	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions																												
Guest Observer(20)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:16:58																														
<p><b>Abstract:</b> Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b</p> <p><b>Total Number Of Orbits:</b> 90</p> <table border="1"> <thead> <tr> <th>Name</th> <th>RA</th> <th>DEC</th> <th>Priority</th> <th>Vmagnitude</th> <th>Approved Number Of Orbits</th> <th>Observation Category</th> </tr> </thead> <tbody> <tr> <td>Kepler-186</td> <td>298.652720</td> <td>43.95500</td> <td>1</td> <td>11.900</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler 452</td> <td>296.003690</td> <td>44.27754</td> <td>1</td> <td>11.400</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler 442</td> <td>285.366559</td> <td>39.28006</td> <td>1</td> <td>10.900</td> <td>30</td> <td>time critical</td> </tr> </tbody> </table>										Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category	Kepler-186	298.652720	43.95500	1	11.900	30	time critical	Kepler 452	296.003690	44.27754	1	11.400	30	time critical	Kepler 442	285.366559	39.28006	1	10.900	30	time critical
Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category																															
Kepler-186	298.652720	43.95500	1	11.900	30	time critical																															
Kepler 452	296.003690	44.27754	1	11.400	30	time critical																															
Kepler 442	285.366559	39.28006	1	10.900	30	time critical																															
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21																														
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21																														

First Previous 1 Next Last

ETC Help  
Release note

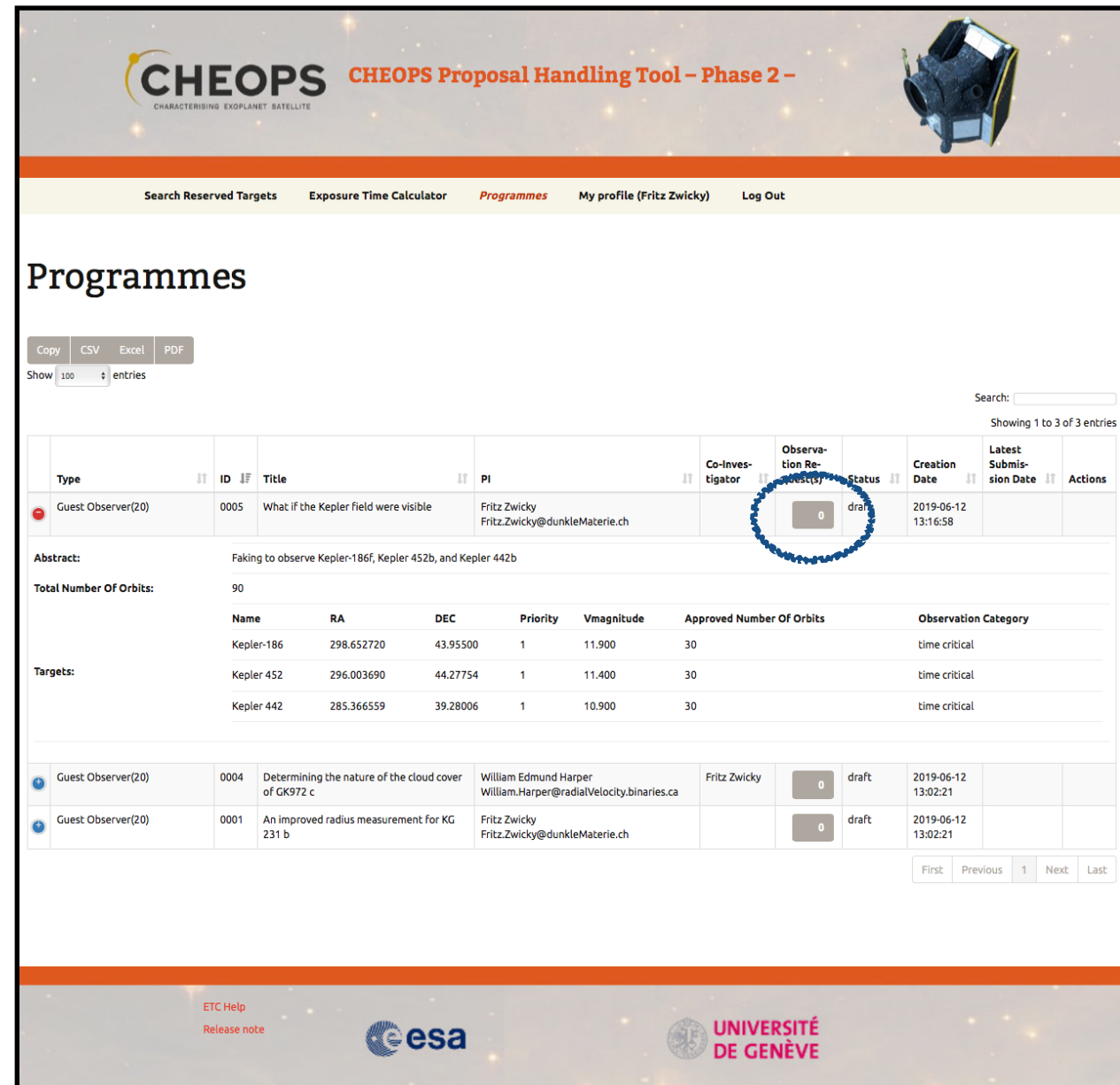
esa UNIVERSITÉ DE GENÈVE

### Recap on Observations hierarchy



### Create an Observation Request

Click this icon to view / create observation requests



**CHEOPS** CHEOPS Proposal Handling Tool – Phase 2 –

Search Reserved Targets Exposure Time Calculator **Programmes** My profile (Fritz Zwicky) Log Out

### Programmes

Copy CSV Excel PDF

Show 100 entries

Search:

Showing 1 to 3 of 3 entries

Type	ID	Title	PI	Co-Investigator	Observation Request	Status	Creation Date	Latest Submission Date	Actions																												
Guest Observer(20)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:16:58																														
<p><b>Abstract:</b> Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b</p> <p><b>Total Number Of Orbits:</b> 90</p> <table border="1"> <thead> <tr> <th>Name</th> <th>RA</th> <th>DEC</th> <th>Priority</th> <th>Vmagnitude</th> <th>Approved Number Of Orbits</th> <th>Observation Category</th> </tr> </thead> <tbody> <tr> <td>Kepler-186</td> <td>298.652720</td> <td>43.95500</td> <td>1</td> <td>11.900</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler 452</td> <td>296.003690</td> <td>44.27754</td> <td>1</td> <td>11.400</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler 442</td> <td>285.366559</td> <td>39.28006</td> <td>1</td> <td>10.900</td> <td>30</td> <td>time critical</td> </tr> </tbody> </table>										Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category	Kepler-186	298.652720	43.95500	1	11.900	30	time critical	Kepler 452	296.003690	44.27754	1	11.400	30	time critical	Kepler 442	285.366559	39.28006	1	10.900	30	time critical
Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category																															
Kepler-186	298.652720	43.95500	1	11.900	30	time critical																															
Kepler 452	296.003690	44.27754	1	11.400	30	time critical																															
Kepler 442	285.366559	39.28006	1	10.900	30	time critical																															
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21																														
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21																														

First Previous 1 Next Last

ETC Help  
Release note

esa UNIVERSITÉ DE GENÈVE

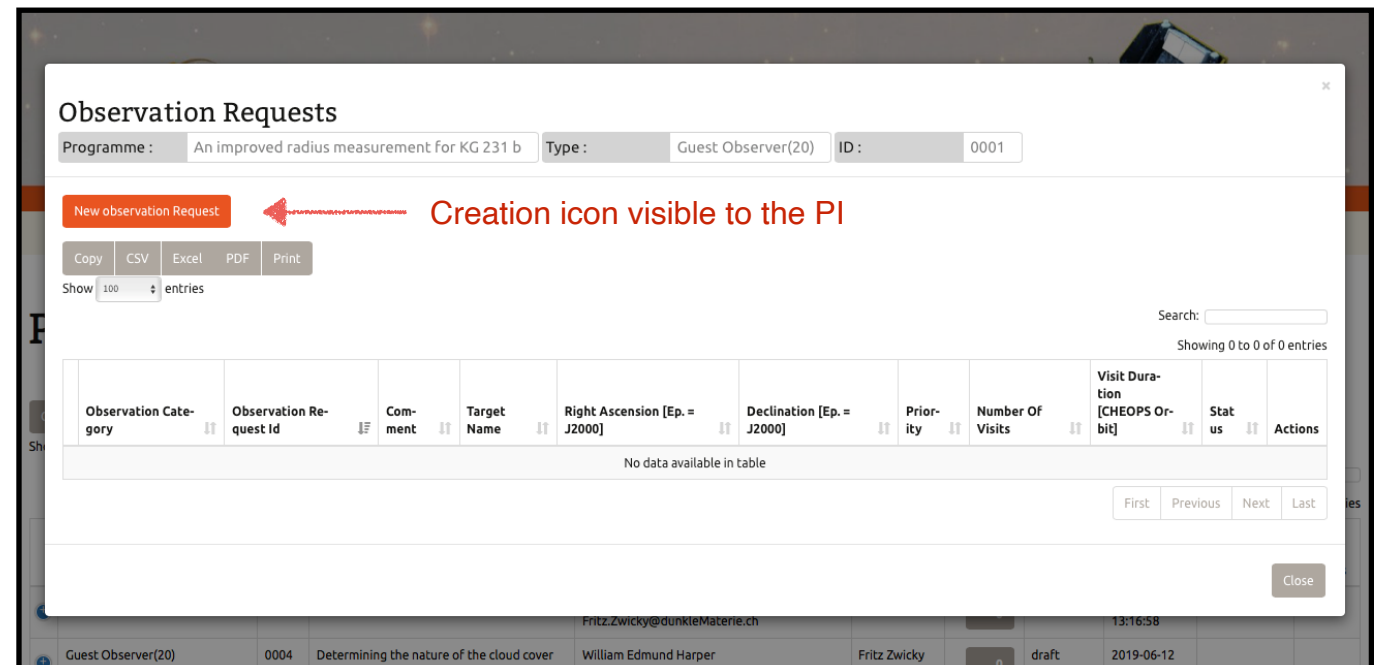
# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Create an Observation Request


The PI owns the programme and can create / edit / delete observation requests.

Co-Is can only consult observation requests, not edit them.



Observation Requests

Programme : An improved radius measurement for KG 231 b Type : Guest Observer(20) ID : 0001

New observation Request  Creation icon visible to the PI

Copy CSV Excel PDF Print

Show 100 entries

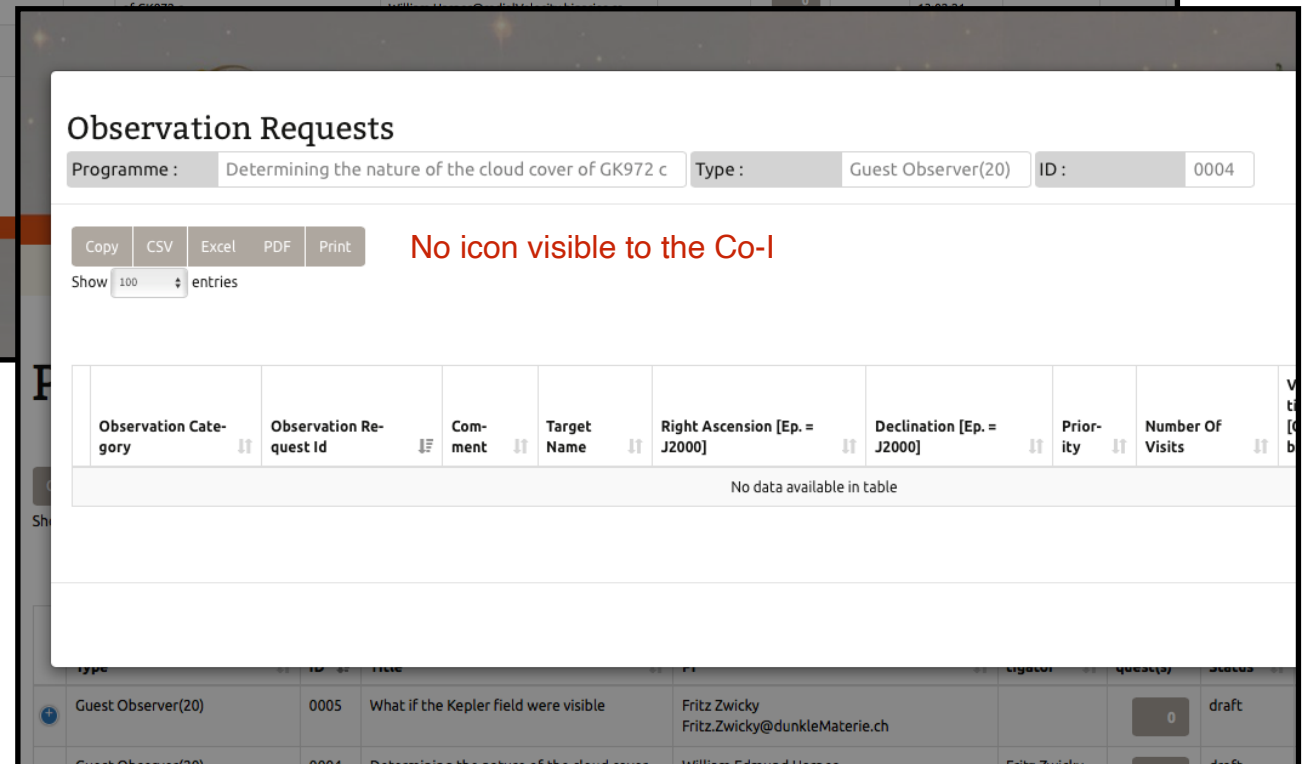
Search:

Showing 0 to 0 of 0 entries

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number Of Visits	Visit Duration [CHEOPS Orbit]	Status	Actions
No data available in table										

First Previous Next Last

Close



Observation Requests

Programme : Determining the nature of the cloud cover of GK972 c Type : Guest Observer(20) ID : 0004

Copy CSV Excel PDF Print

Show 100 entries

No icon visible to the Co-I

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number Of Visits	Visit Duration [CHEOPS Orbit]	Status	Actions
No data available in table										



# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Create an Observation Request

Take the following example of 3 targets, each with 30 accepted orbits.

Click the observation request icon to create one.

**Abstract:** Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b

**Total Number OF Orbits:** 90

Name	RA	DEC	Priority	Vmagnitude	Approved Number OF Orbits	Observation Category
Kepler-186	298.652720	43.95500	1	11.900	30	time critical
Kepler 452	296.003690	44.27754	1	11.400	30	time critical
Kepler 442	285.366559	39.28006	1	10.900	30	time critical

**Targets:**

Type	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21		
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21		

First Previous

### Programmes

Copy CSV Excel PDF

Show 100 entries

Search:

Showing 1 to 3 of 3 entries

Type	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions
Guest Observer(20)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:16:58		

**Abstract:** Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b

**Total Number OF Orbits:** 90

Name	RA	DEC	Priority	Vmagnitude	Approved Number OF Orbits	Observation Category
Kepler-186	298.652720	43.95500	1	11.900	30	time critical
Kepler 452	296.003690	44.27754	1	11.400	30	time critical
Kepler 442	285.366559	39.28006	1	10.900	30	time critical

**Targets:**

Type	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21		
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21		

First Previous 1 Next Last

ETC Help  
Release note

esa

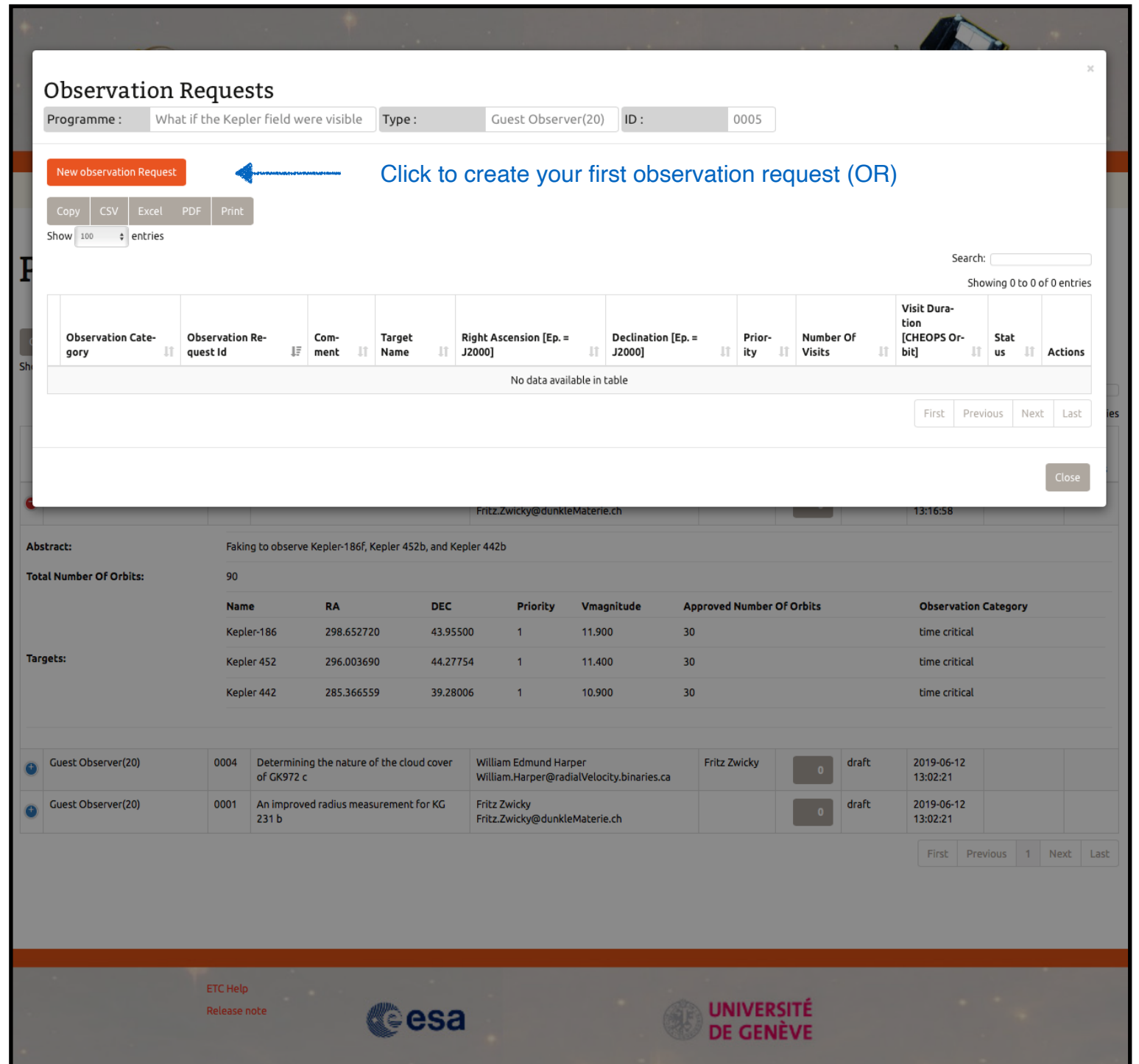
UNIVERSITÉ DE GENÈVE

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Create an Observation Request

List of Observation Request is empty at this stage



**Observation Requests**

Programme : What if the Kepler field were visible Type : Guest Observer(20) ID : 0005

[New observation Request](#) Click to create your first observation request (OR)

Copy CSV Excel PDF Print

Show 100 entries

Search:

Showing 0 to 0 of 0 entries

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number Of Visits	Visit Duration [CHEOPS Orbit]	Status	Actions
No data available in table										

First Previous Next Last

Close

Abstract: Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b

Total Number Of Orbits: 90

Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category
Kepler-186	298.652720	43.95500	1	11.900	30	time critical
Kepler 452	296.003690	44.27754	1	11.400	30	time critical
Kepler 442	285.366559	39.28006	1	10.900	30	time critical

Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21

First Previous 1 Next Last

ETC Help  
Release note

esa

UNIVERSITÉ DE GENÈVE

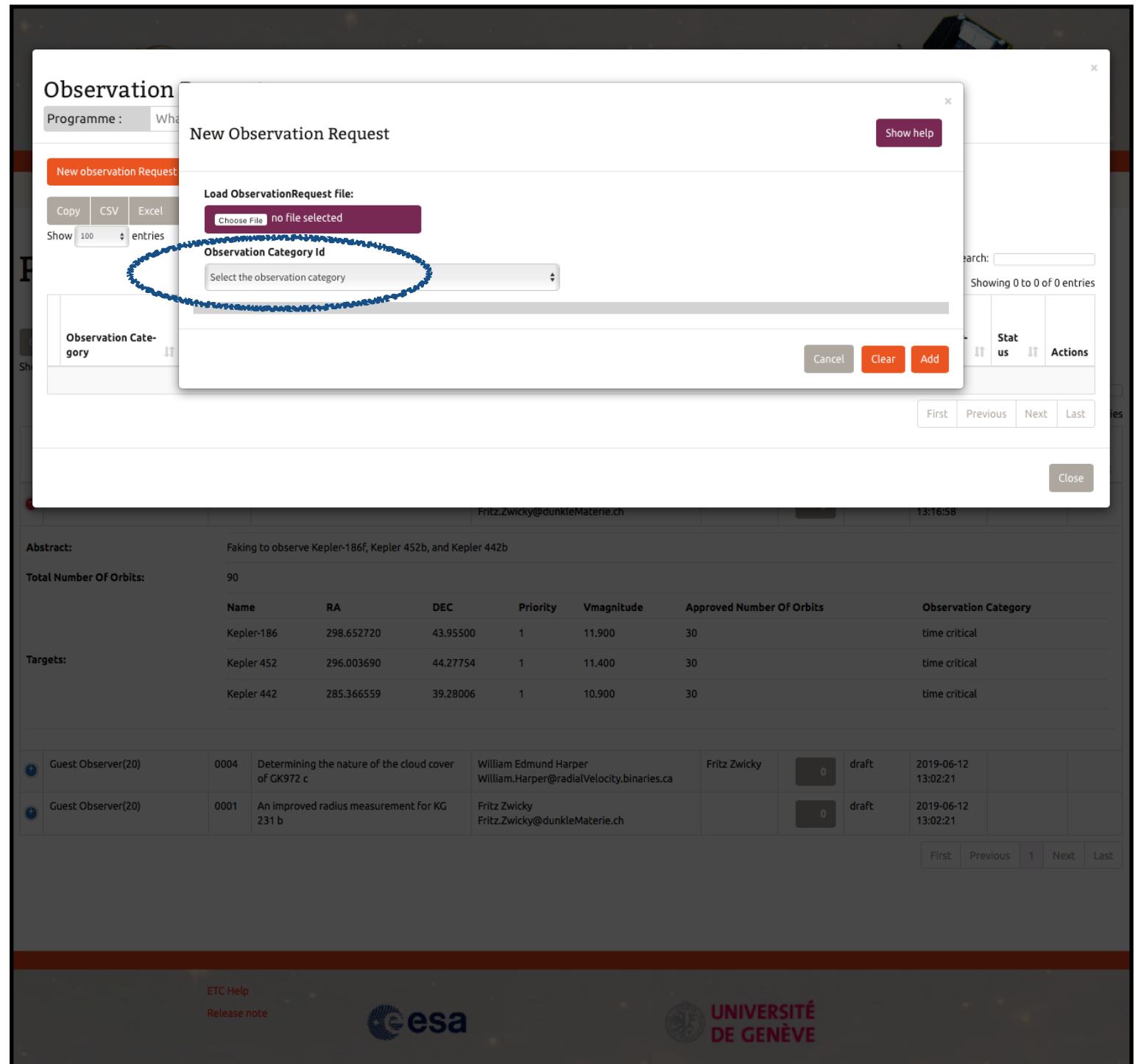
# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Create an Observation Request

Select the observation category:

- **Time-Critical:**  
Observation associated with a transit (more generally any periodic event)
- **Non-Time-Critical:**  
Observation not associated with a periodic event, typically for phase curves or other filler programmes



**New Observation Request**

Load ObservationRequest file:

Choose File no file selected

Observation Category Id

Select the observation category

Cancel Clear Add

Close

Name	RA	DEC	Priority	Vmagnitude	Approved Number Of Orbits	Observation Category
Kepler-186	298.652720	43.95500	1	11.900	30	time critical
Kepler 452	296.003690	44.27754	1	11.400	30	time critical
Kepler 442	285.366559	39.28006	1	10.900	30	time critical

Abstract: Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b

Total Number Of Orbits: 90

Targets:

Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2019-06-12 13:02:21

First Previous 1 Next Last

ETC Help  
Release note

esa

UNIVERSITÉ DE GENÈVE

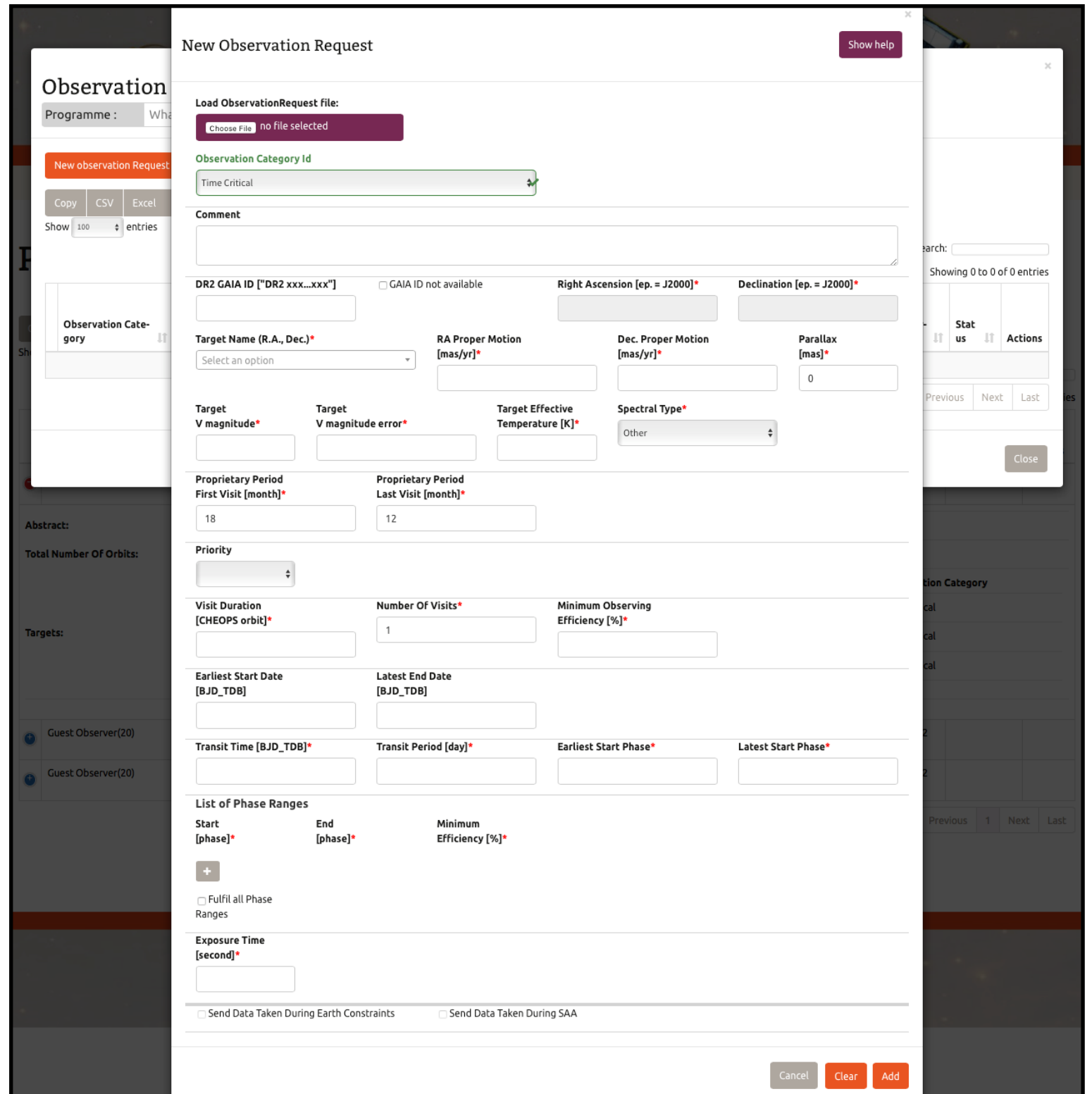
# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Fill in the Observation Request

Define the parameters of your observation

Some parameters are mandatory (indicated with a **\***)



**New Observation Request** Show help

Load ObservationRequest file:  
 no file selected

Observation Category Id  
Time Critical

Comment

DR2 GAIA ID ["DR2 xxx...xxx"] ☐ GAIA ID not available

Right Ascension [ep. = J2000]\*  Declination [ep. = J2000]\*

Target Name (R.A., Dec.)\*  RA Proper Motion [mas/yr]\*  Dec. Proper Motion [mas/yr]\*  Parallax [mas]\*

Target V magnitude\*  Target V magnitude error\*  Target Effective Temperature [K]\*  Spectral Type\*

Proprietary Period First Visit [month]\*  Proprietary Period Last Visit [month]\*

Priority

Visit Duration [CHEOPS orbit]\*  Number Of Visits\*  Minimum Observing Efficiency [%]\*

Earliest Start Date [BJD\_TDB]  Latest End Date [BJD\_TDB]

Transit Time [BJD\_TDB]\*  Transit Period [day]\*  Earliest Start Phase\*  Latest Start Phase\*

List of Phase Ranges  

Start [phase]*	End [phase]*	Minimum Efficiency [%]*
+		

☐ Fulfil all Phase Ranges

Exposure Time [second]\*

☐ Send Data Taken During Earth Constraints ☐ Send Data Taken During SAA

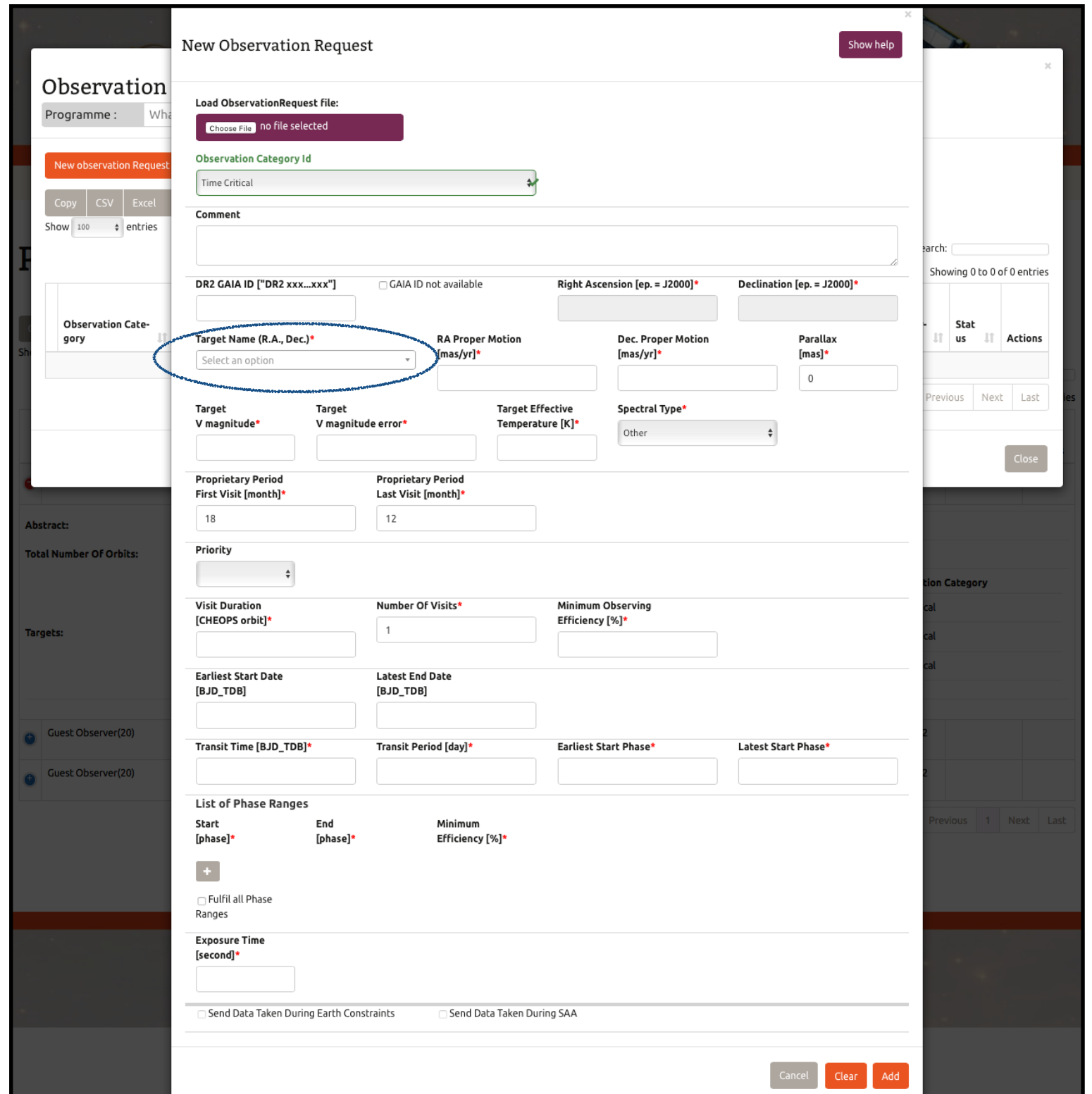
Cancel Clear Add

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Fill in the Observation Request

First select a target star from the scroll-down menu  
(only targets accepted by the ESA TAC show in the menu)





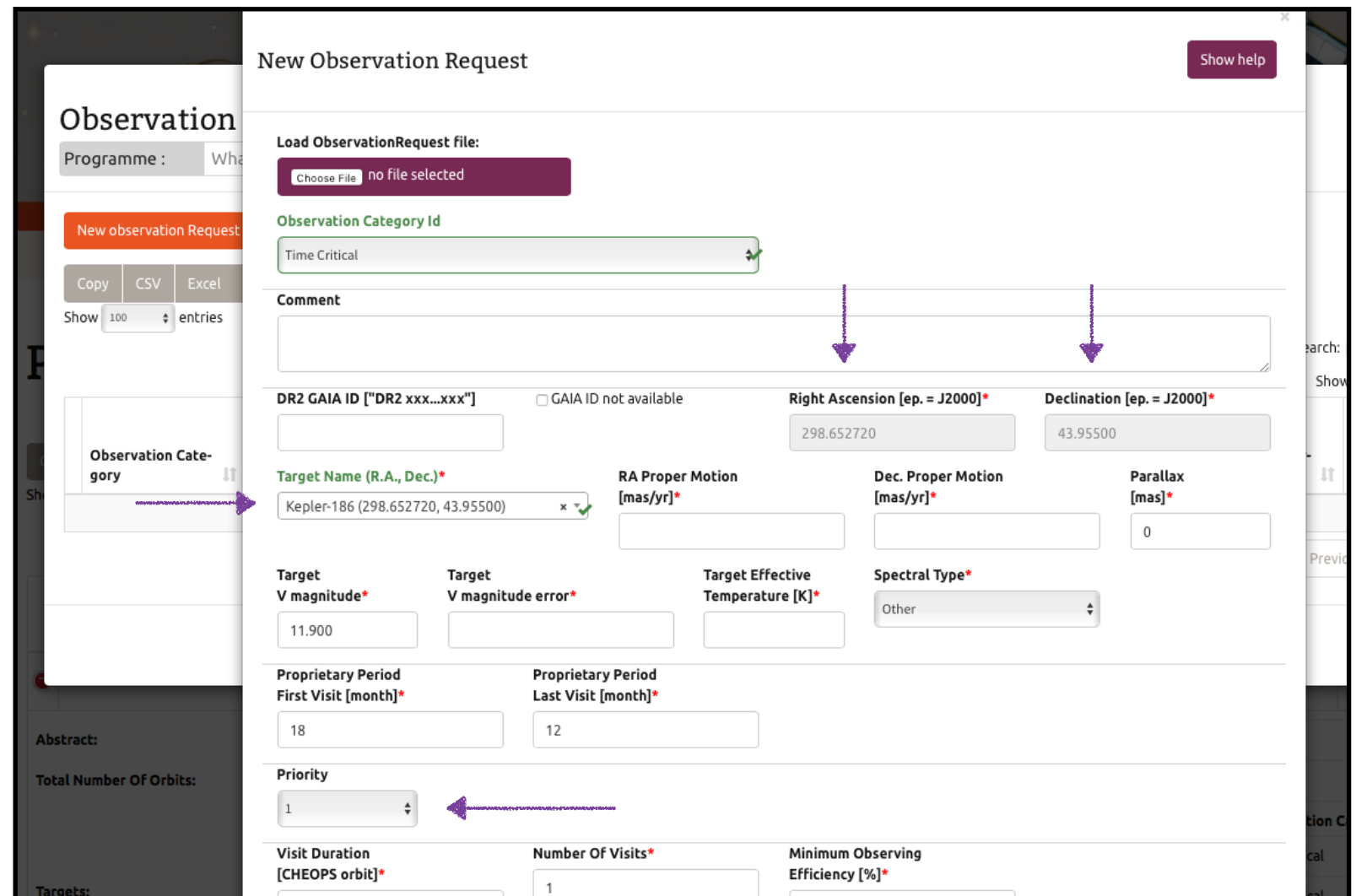
# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Fill in the Observation Request

Target coordinates are pre-filled with user-defined values from PHT-1

Priority field is pre-filled with the ESA-assigned priority for this target



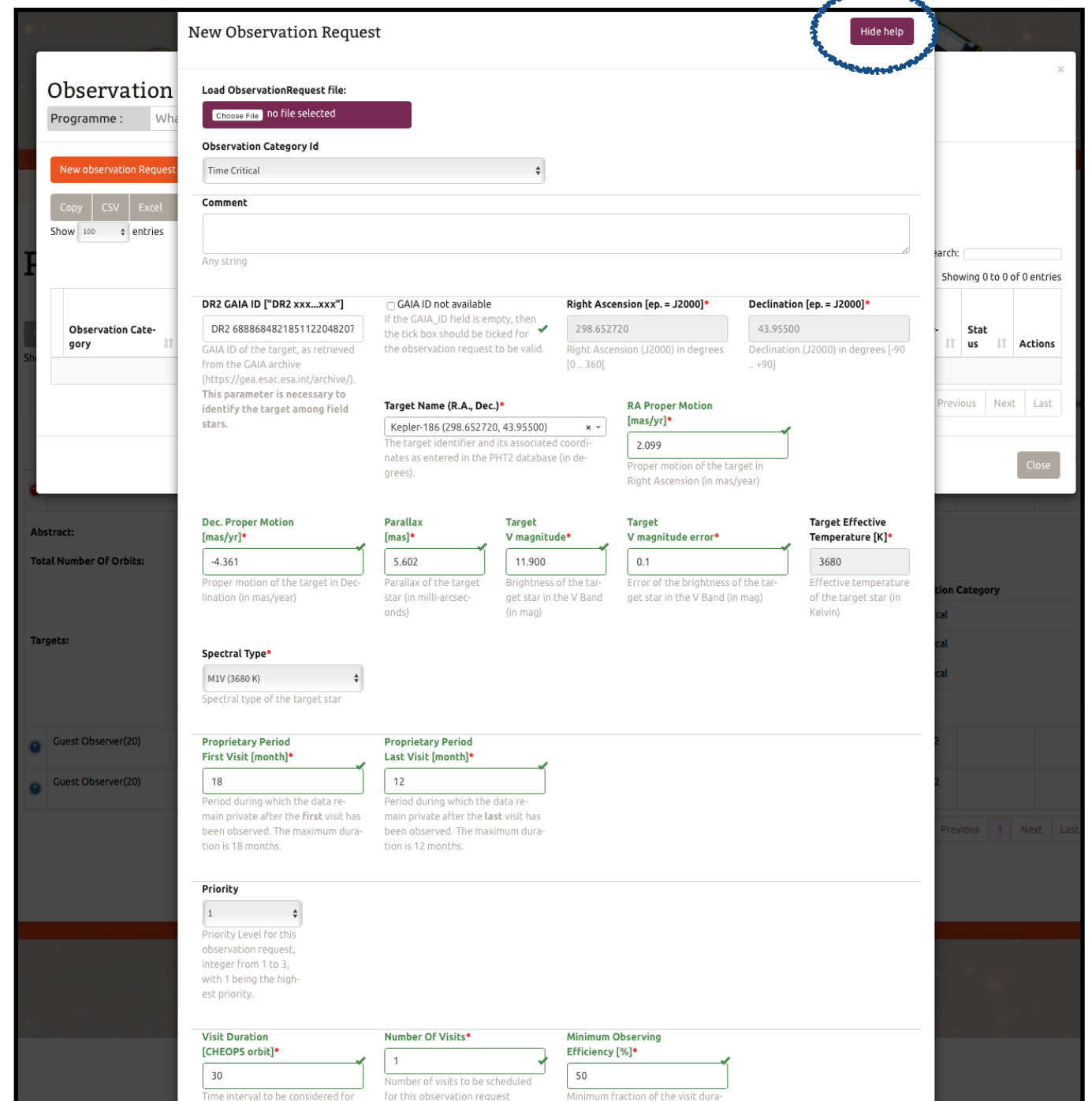
The screenshot shows the 'New Observation Request' form. On the left, a sidebar contains an 'Observation' section with a 'New observation Request' button and a table of observation categories. A purple arrow points from the 'Observation Category' field in the sidebar to the 'Observation Category Id' field in the main form, which is pre-filled with 'Time Critical'. Another purple arrow points from the 'Target Name (R.A., Dec.)' field in the sidebar to the 'Target Name (R.A., Dec.)' field in the main form, which is pre-filled with 'Kepler-186 (298.652720, 43.95500)'. A third purple arrow points from the 'Priority' field in the sidebar to the 'Priority' field in the main form, which is pre-filled with '1'. The main form fields include: 'Load ObservationRequest file:' (Choose File, no file selected), 'Observation Category Id' (Time Critical), 'Comment' (empty), 'DR2 GAIA ID ["DR2 xxx...xxx"]' (empty), 'GAIA ID not available' (checkbox), 'Right Ascension [ep. = J2000]\*' (298.652720), 'Declination [ep. = J2000]\*' (43.95500), 'Target Name (R.A., Dec.)\*' (Kepler-186 (298.652720, 43.95500)), 'RA Proper Motion [mas/yr]\*' (empty), 'Dec. Proper Motion [mas/yr]\*' (empty), 'Parallax [mas]\*' (0), 'Target V magnitude\*' (11.900), 'Target V magnitude error\*' (empty), 'Target Effective Temperature [K]\*' (empty), 'Spectral Type\*' (Other), 'Proprietary Period First Visit [month]\*' (18), 'Proprietary Period Last Visit [month]\*' (12), 'Priority' (1), 'Visit Duration [CHEOPS orbit]\*' (empty), 'Number Of Visits\*' (1), and 'Minimum Observing Efficiency [%]\*' (empty).

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Fill in the Observation Request

Click on the “*Show help*” button to view additional information that will guide you to fill in individual fields.



**New Observation Request**

**Load ObservationRequest file:**  
Choose File no file selected

**Observation Category Id**  
Time Critical

**Comment**  
Any string

**DR2 GAIA ID ["DR2 xxx...xxx"]**  
DR2 6888684821851122048207  
GAIA ID of the target, as retrieved from the GAIA archive (https://gea.esac.esa.int/archive/). This parameter is necessary to identify the target among field stars.

☐ GAIA ID not available  
If the GAIA\_ID field is empty, then the tick box should be ticked for the observation request to be valid.

**Right Ascension [ep. = J2000]**  
298.652720  
Right Ascension (J2000) in degrees [0 .. 360]

**Declination [ep. = J2000]**  
43.95500  
Declination (J2000) in degrees [-90 .. +90]

**Target Name (R.A., Dec.)**  
Kepler-186 (298.652720, 43.95500)  
The target identifier and its associated coordinates as entered in the PHT2 database (in degrees).

**RA Proper Motion [mas/yr]**  
2.099  
Proper motion of the target in Right Ascension (in mas/year)

**Dec. Proper Motion [mas/yr]**  
-4.361  
Proper motion of the target in Declination (in mas/year)

**Parallax [mas]**  
5.602  
Parallax of the target star (in milli-arcseconds)

**Target V magnitude**  
11.900  
Brightness of the target star in the V Band (in mag)

**Target V magnitude error**  
0.1  
Error of the brightness of the target star in the V Band (in mag)

**Target Effective Temperature [K]**  
3680  
Effective temperature of the target star (in Kelvin)

**Spectral Type**  
M1V (3680 K)  
Spectral type of the target star

**Proprietary Period First Visit [month]**  
18  
Period during which the data remain private after the first visit has been observed. The maximum duration is 18 months.

**Proprietary Period Last Visit [month]**  
12  
Period during which the data remain private after the last visit has been observed. The maximum duration is 12 months.

**Priority**  
1  
Priority Level for this observation request, integer from 1 to 3, with 1 being the highest priority.

**Visit Duration [CHEOPS orbit]**  
30  
Time interval to be considered for

**Number Of Visits**  
1  
Number of visits to be scheduled for this observation request

**Minimum Observing Efficiency [%]**  
50  
Minimum fraction of the visit duration

# Proposal Handling Tool Phase II

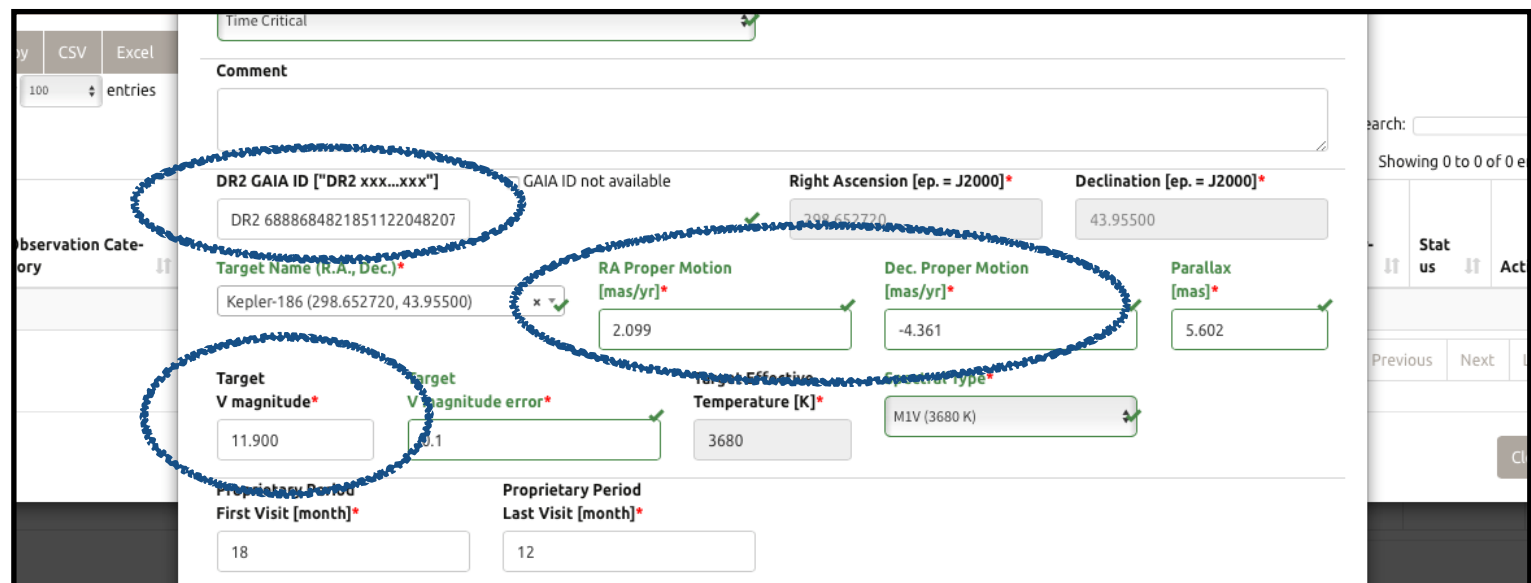
## PHT2 Guidelines

### Fill in the Observation Request

- *Comment* field may be useful for your own record, or for describing the observing strategy to the SOC / Mission planner. *Public OR description* is a mandatory field.

<b>Public OR description*</b> Brief description of observation (e.g. phase curve of planet b). Information is publicly available on PHT2 pages.	<b>Comment</b> Private comment, for your own records or for informing the SOC about specificities of the observing strategy (does not preclude the full definition of the observations in the OR fields below)
--	---

- Fill in the missing target information:
  - **GAIA ID** is critical for on-board target identification. Field must start with “**DR2 xxxxxxxx**”. GAIA ID can be fetched from the [GAIA Archive](#)
  - **Proper motion** may be critical for on-board target identification. Can be fetched from [SIMBAD](#)
  - **Magnitude** may also be critical for on-board target identification. Can be fetched from [SIMBAD](#)



The screenshot shows the PHT2 Observation Request form. Key fields are highlighted with blue circles:

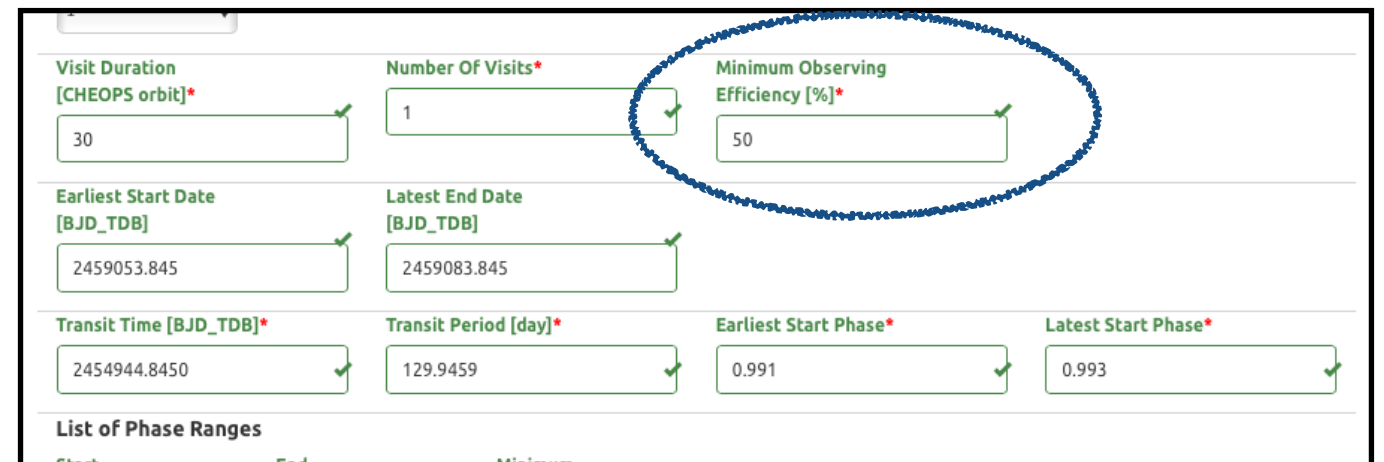
- DR2 GAIA ID** ["DR2 xxx...xxx"]
- Target Name (R.A., Dec.)**
- Target V magnitude**
- RA Proper Motion [mas/yr]**
- Dec. Proper Motion [mas/yr]**
- Parallax [mas]**
- Temperature [K]**
- Proprietary Period Last Visit [month]**

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Fill in the Observation Request

- **Observing efficiency** is a critical element for the schedulability of your observation. Expected observing efficiency can be checked with the Science Feasibility Checker (Phase-1).



Notes from the template observationRequest file that you have used for preparing the Phase-1 (feasibility check):

```
<!-- This parameter defines the minimum on-source time relative to the visit duration -->
<!-- (excluding interruptions due to the SAA, Earth Occultations, and straylight constraints) -->
<!-- NOTE: For visits with scheduling flexibility, especially those shorter than 3 orbits, the effective -->
<!-- observing efficiency may end up to be lower than the requested value by up to ~ 15%. -->
<!-- This may happen under special circumstances, typically when the scheduleSolver algorithm adjusts -->
<!-- the visit start time to optimise the overall schedule, which may result in a visit being shifted -->
<!-- toward the SAA, Earth occultations or straylight regions. -->
```

As the observing efficiency is mainly driven by the target location in the sky, it is highly **recommended** to set the requested observing efficiency to a rather low value, **typically 50%**, for all targets, except if the science case requires very high observing efficiency (assuming this efficiency is reachable for at least one visit)

# Proposal Handling Tool Phase II

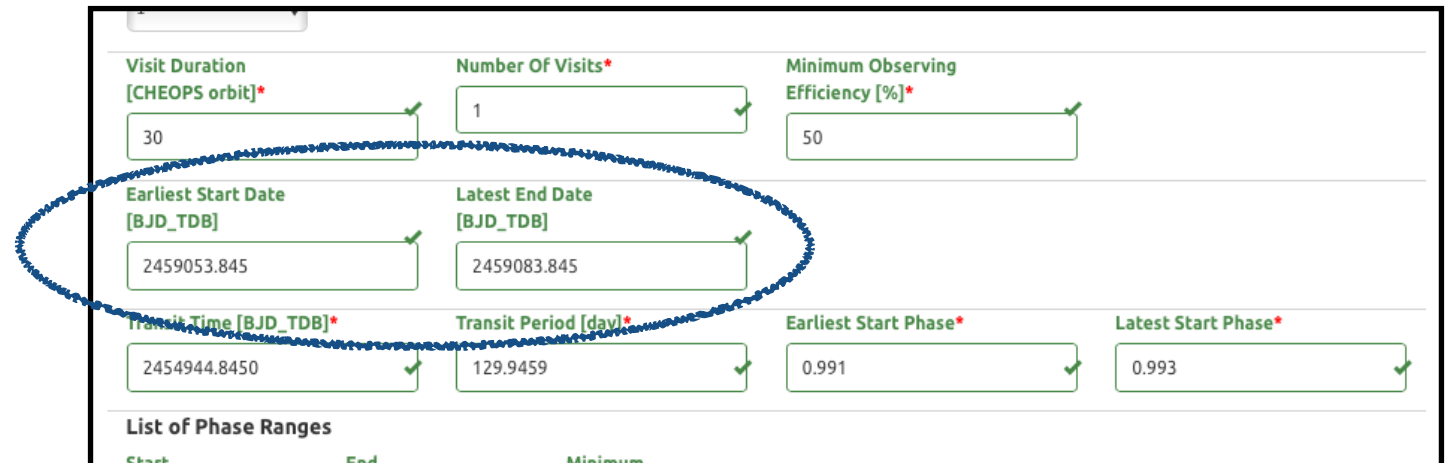
## PHT2 Guidelines

### Fill in the Observation Request

- Use **time bracketing** to constrain the scheduling dates of your observations.

This might be useful for “catching” specific transits, typically for TTVs.

This parameter is optional.



Visit Duration [CHEOPS orbit]* 30	Number Of Visits* 1	Minimum Observing Efficiency [%]* 50	
Earliest Start Date [BJD_TDB] 2459053.845	Latest End Date [BJD_TDB] 2459083.845		
Transit Time [BJD_TDB]* 2454944.8450	Transit Period [day]* 129.9459	Earliest Start Phase* 0.991	Latest Start Phase* 0.993

List of Phase Ranges

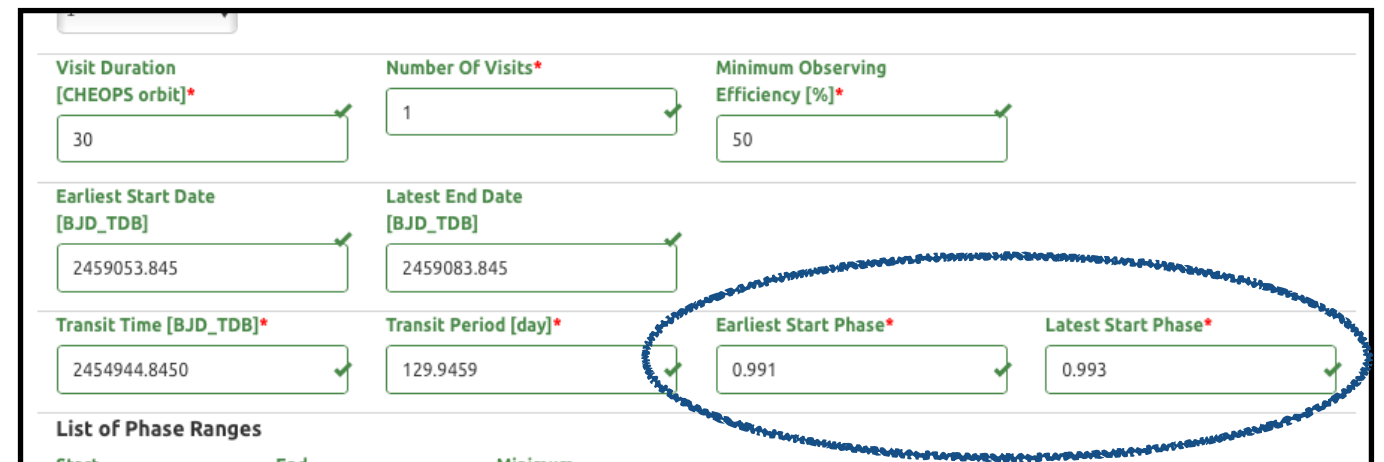
Start	End	Minimum
-------	-----	---------



# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Fill in the Observation Request



Visit Duration [CHEOPS orbit]* 30	Number Of Visits* 1	Minimum Observing Efficiency [%]* 50
Earliest Start Date [BJD_TDB] 2459053.845	Latest End Date [BJD_TDB] 2459083.845	
Transit Time [BJD_TDB]* 2454944.8450	Transit Period [day]* 129.9459	Earliest Start Phase* 0.991
		Latest Start Phase* 0.993

List of Phase Ranges

Start End Minimum

- **Earliest/Latest\_start\_phase** parameters are used to define the allowed start time of *time-critical* visits.

Notes from the template observationRequest file that you have used for preparing the Phase-1 (feasibility check):

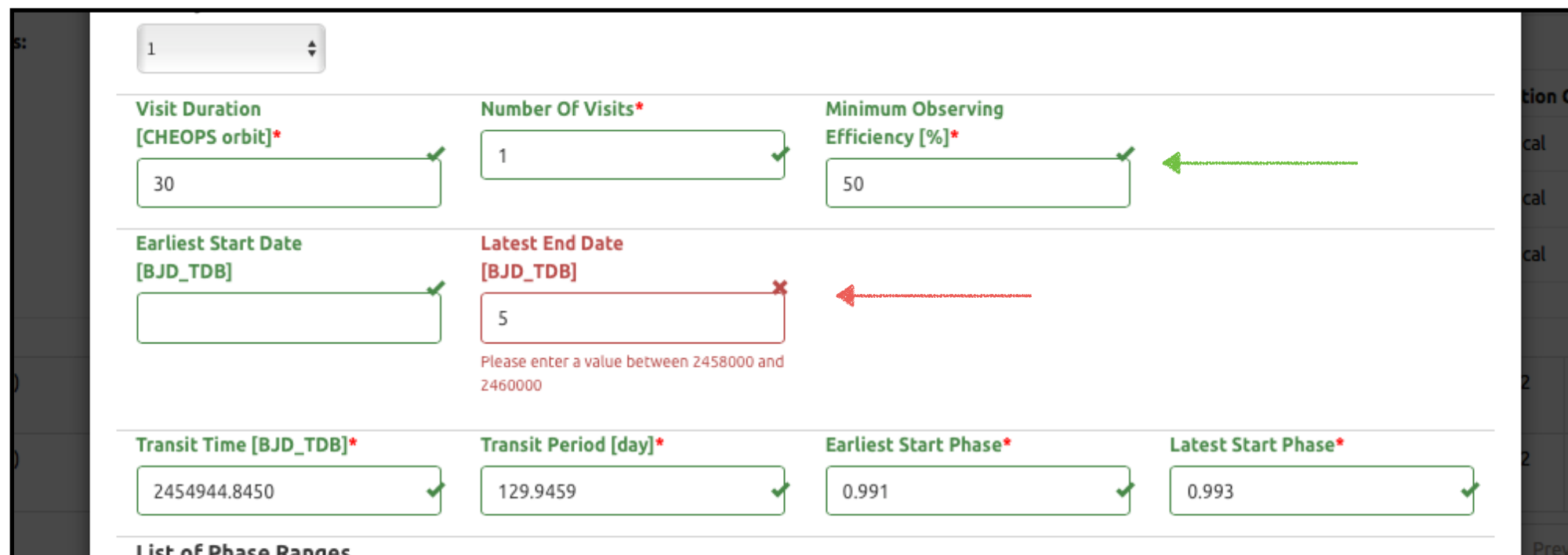
```
<!-- This parameter defines the flexibility of a visit start time in units of planetary orbital phase. -->
<!-- Two values are defined to bound the allowed start time of the visit. -->
<!-- NOTE: Leaving no slack for the observation start time reduces the chance of being scheduled -->
<!-- NOTE: Requesting flexibility on the start time implies that the effective observing efficiency may in some rare cases -->
<!-- be lower than the requested value (see comment above in <Minimum_Effective_Duration>) -->
```

The start\_phase slack allows for some scheduling flexibility. Be careful however that the slack is commensurate with the visit duration, i.e. that the visit covers the intended time period, typically the transit, for any start time during the start\_phase slack.

The Mission Planning System **does not support cases where the visit duration is longer than the transit period**

### Fill in the Observation Request

Valid and invalid entries are identified as such in the form.



The screenshot shows a web form for submitting an observation request. It includes a dropdown menu at the top set to '1'. Below are several input fields with green checkmarks indicating valid entries and one red 'X' indicating an invalid entry. A red arrow points to the 'Latest End Date' field with an error message.

Field	Value	Status
Visit Duration [CHEOPS orbit]*	30	Valid (✓)
Number Of Visits*	1	Valid (✓)
Minimum Observing Efficiency [%]*	50	Valid (✓)
Earliest Start Date [BJD_TDB]		Valid (✓)
Latest End Date [BJD_TDB]	5	Invalid (✗)
Please enter a value between 2458000 and 2460000		
Transit Time [BJD_TDB]*	2454944.8450	Valid (✓)
Transit Period [day]*	129.9459	Valid (✓)
Earliest Start Phase*	0.991	Valid (✓)
Latest Start Phase*	0.993	Valid (✓)


List of Phase Ranges

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Fill in the Observation Request

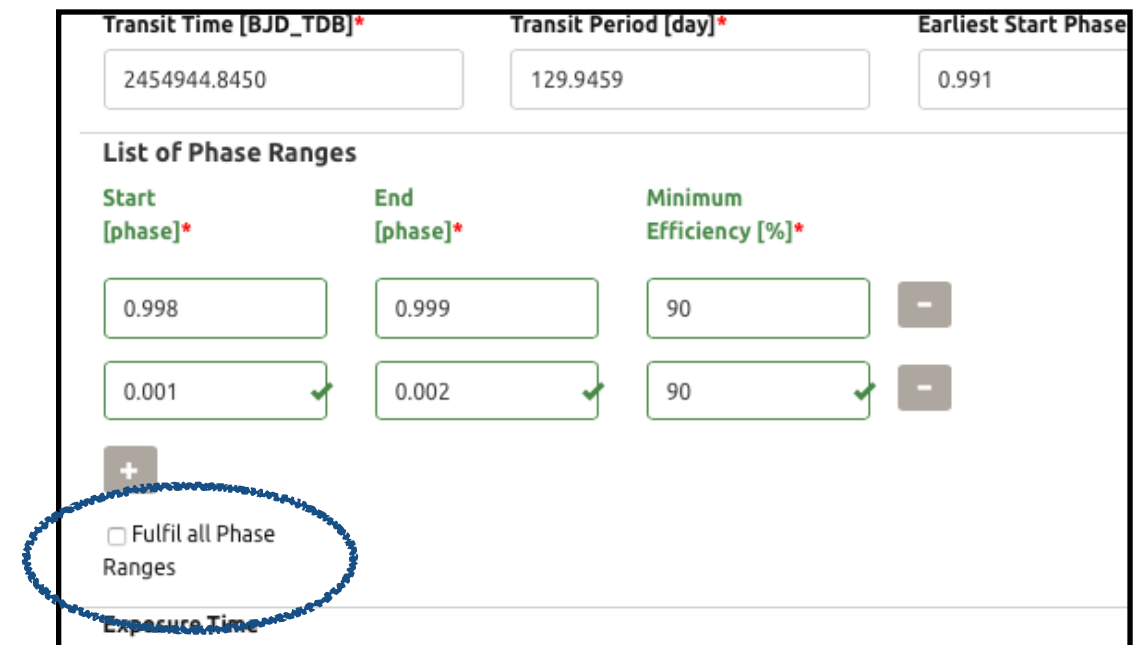
For *time-critical* observations only, you may define **critical phase ranges**, i.e. specific time periods within the visit with an increased requested observing efficiency.



Start [phase]*	End [phase]*	Minimum Efficiency [%]*
0.998	0.999	90
0.001	0.002	90

☐ Fulfil all Phase Ranges

Exposure Time [second]\*



Start [phase]*	End [phase]*	Minimum Efficiency [%]*
0.998	0.999	90
0.001	0.002	90

☐ Fulfil all Phase Ranges

Exposure Time

As those put stringent constraints on the schedulability of your observations, **they should be used *only* if justified by the science case.**

Please make sure that the **requested critical phase ranges are always contained within the visit**, for all possible start times defined by the earliest\_/latest\_start\_phase parameters.

Notes from the template observationRequest file that you have used for preparing the Phase-1 (feasibility check):

```
<!-- The set of parameters below is used to define specific (orbital) phase ranges -->
<!-- within which the observing efficiency may be increased to a specific value -->
<!-- Convention is that the transit is at phase=0 (or equivalently 1) -->
<!-- This can be seen as a local requirement on the observing efficiency (e.g. egresses) -->
<!-- NOTE: Requiring critical phase ranges is an additional constraint that will result in lower chances of being scheduled -->
```

When two phase ranges are specified, you may decide to request that both, or only one, phase ranges are observed. This is equivalent to the logical AND / OR, respectively.

### Fill in the Observation Request

- **Exposure Time** is critical for the technical validity of your observations.

Ranges

Exposure Time  
[second]\*

60


☐ Send Data Taken During Earth Constraint

Please consult the [CHEOPS Observers Manual](#) to understand the impact of the exposure time on the on-board image stacking strategy.

Table 2: Image and imagette stacking order, image cadence and duty cycle as a function of the exposure time. An image cadence of  $f$  means that one image is recorded every  $f$  seconds. In ULTRABRIGHT read-out mode (shaded rows), the detector has to be read-out sequentially and not in parallel to the exposition, introducing a significant decrease of the duty cycle, calculated as  $d = t_{exp} / (t_{exp} + 1.1 \text{ s})$ . See Table 1 for details. Mind the gap in duty cycle between exposure times of 1 s and 1.05 s!

Exposure time (s)	Image stacking order	Imagette stacking order	Stacked image cadence (s)	Duty cycle (%)
$t_{exp} < 0.1$	40	4	$f < 48$	$d < 8.3$
$0.1 \leq t_{exp} < 0.15$	39	3	$46.8 \leq f < 48.8$	$8.3 \leq d < 12$
$0.15 \leq t_{exp} < 0.2$	36	3	$45 \leq f < 46.8$	$12 \leq d < 15.4$
$0.2 \leq t_{exp} < 0.4$	33	3	$42.9 \leq f < 49.5$	$15.4 \leq d < 26.7$

Please follow the guidelines from the Exposure Time Calculator to set up the exposure time.



CHEOPS Proposal Handling Tool – Phase 2 –

Search Reserved Targets **Exposure Time Calculator** Programmes Targets My profile (Nicolas Billot) Log Out

### Exposure Time Calculator

**Input Parameters**

Stellar Type:

Magnitude (V band):

Duration:  [h]

Right Ascension:  [hhmmss / decimal deg]

Declination:  [ddmmss / decimal deg]

Exposure Time:  [s]

**Additional Parameters**

☐ Expected flux in CHEOPS passband

Flux:  [e-/s]

☐ Specify visit/observation efficiency

Efficiency:  [%]

**Exposure time guidelines**

Minimum suggested exposure time: PSF peak at 10% of full well capacity

Maximum suggested exposure time: PSF peak at 98% of full well capacity, or the limit exposure time of 60s

Note: The suggested exposure time is close to the maximum exposure times in the tables below.

MOV star		
MAG V	MINIMUM EXPOSURE TIME [S]	MAXIMUM EXPOSURE TIME [S]
6	0.04	0.38
6.5	0.07	0.60
7	0.10	0.96
7.5	0.15	1.52
8	0.25	2.40
8.5	0.39	3.81
9	0.62	6.04
9.5	0.98	9.57
10	1.55	15.16
10.5	2.45	24.03
11	3.89	38.09
11.5	6.16	60.00
12	9.76	60.00
12.5	15.47	60.00

#### Exposure Times

##### Minimum exposure time

The minimum suggested exposure time corresponds to the time in seconds needed to fill 10% of the full well capacity at the highest peak of the PSF.

##### Maximum exposure time

The suggested maximum exposure time for a non-saturated image corresponds to the time in seconds needed to fill 98% of the full well capacity at the highest peak of the PSF. We suggest that for bright stars the exposure time is chosen close (or equal) to the maximum suggested exposure time.

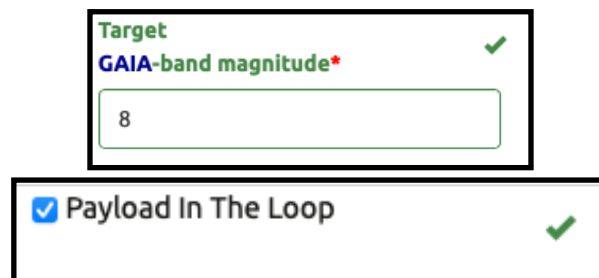
The absolute maximum possible exposure time is 60 seconds.

### Fill in the Observation Request

Payload-In-The-Loop (PITL) configuration:

- PITL active: spacecraft pointing is locked on the science target
- PITL inactive: spacecraft pointing solely relying on star trackers
- See [CHEOPS Observers Manual](#) for more details

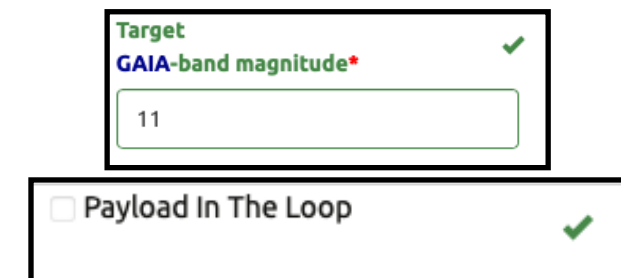
PHT2 sets automatically the PITL configuration:



Target  
GAIA-band magnitude\*  
8

☒ Payload In The Loop

PITL is set to active  
on targets brighter than Gmag=11



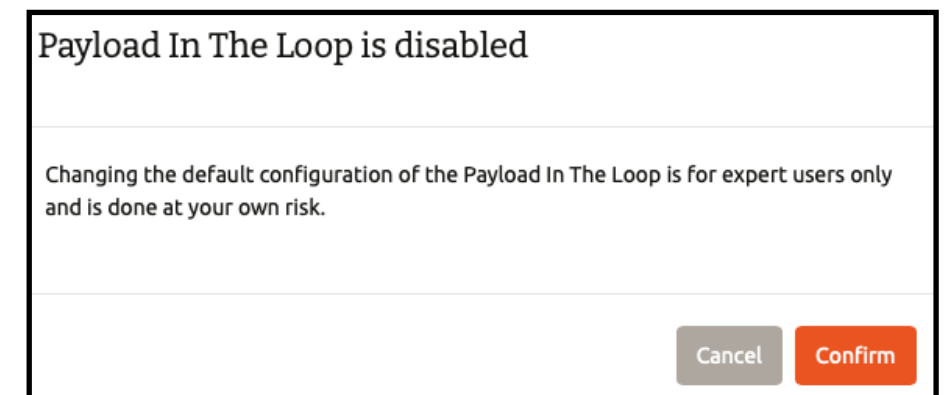
Target  
GAIA-band magnitude\*  
11

☐ Payload In The Loop

PITL is set to inactive  
on targets fainter than Gmag=11

The PI can request to disable the PITL for bright targets, typically in case of close and bright contaminants that could degrade the pointing performance if the PITL were active.

**This setting is meant for experts and at the observer's own risk.**



Payload In The Loop is disabled

Changing the default configuration of the Payload In The Loop is for expert users only and is done at your own risk.

Cancel Confirm

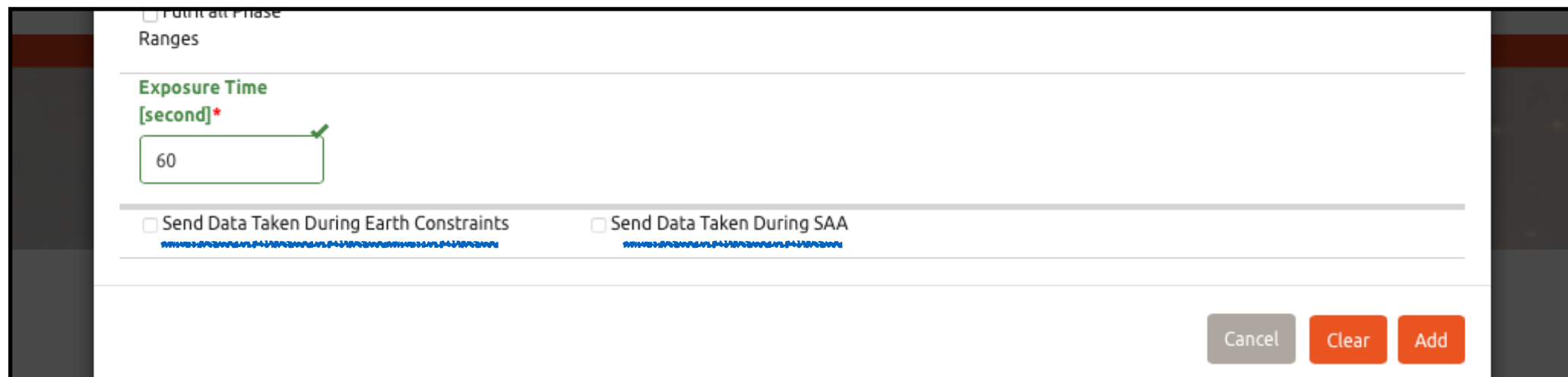


### Fill in the Observation Request

Options on *data downlink* are not editable for nominal science users.

Radio buttons indicate whether data recorded on-board during SAA crossings or during Earth constraints (hard occultation and high-levels of straylight) will be downlinked.

Their current default value for nominal science is False, i.e. data taken during SAA and Earth constraints will NOT be downlinked.



The screenshot shows a web form for submitting an observation request. At the top, there is a checkbox labeled "Full-time Phase" which is unchecked. Below it is a section titled "Ranges". The first field is "Exposure Time [second]\*", which contains the value "60" and has a green checkmark icon to its right. Below this are two radio button options: "Send Data Taken During Earth Constraints" and "Send Data Taken During SAA". Both radio buttons are currently unchecked. At the bottom right of the form are three buttons: "Cancel" (grey), "Clear" (orange), and "Add" (orange).

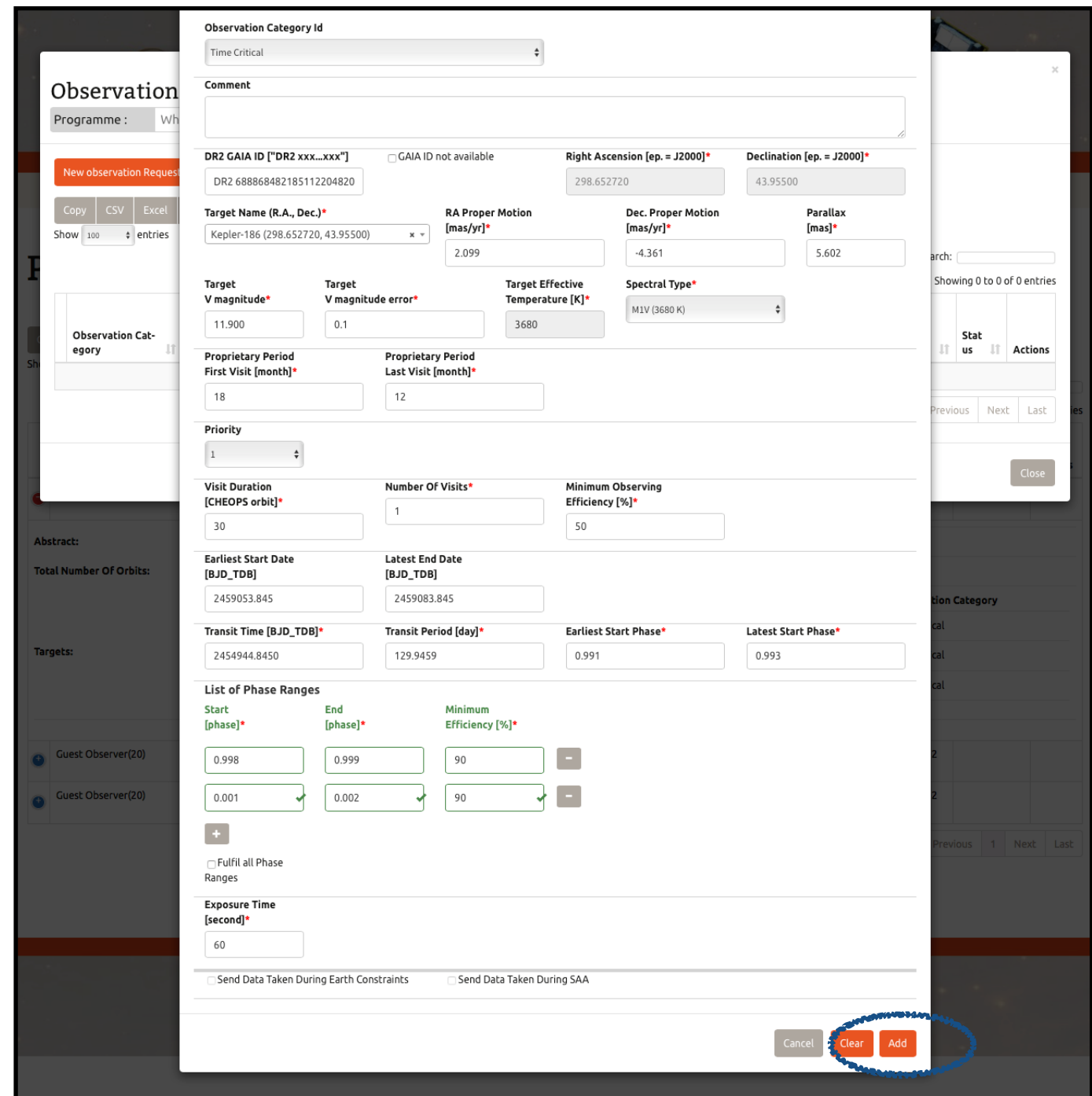
# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Finalise the Observation Request

Once your observation request is complete, please:

Click “Add”



**Observation Category Id**  
Time Critical

**Comment**  
[Text area]

**DR2 GAIA ID** ["DR2 xxx...xxx"] ☐ GAIA ID not available  
DR2 688868482185112204820

**Right Ascension [ep. = J2000]**  
298.652720

**Declination [ep. = J2000]**  
43.95500

**Target Name (R.A., Dec.)**  
Kepler-186 (298.652720, 43.95500)

**RA Proper Motion [mas/yr]**  
2.099

**Dec. Proper Motion [mas/yr]**  
-4.361

**Parallax [mas]**  
5.602

**Target V magnitude**  
11.900

**Target V magnitude error**  
0.1

**Target Effective Temperature [K]**  
3680

**Spectral Type**  
M1V (3680 K)

**Proprietary Period First Visit [month]**  
18

**Proprietary Period Last Visit [month]**  
12

**Priority**  
1

**Visit Duration [CHEOPS orbit]**  
30

**Number Of Visits**  
1

**Minimum Observing Efficiency [%]**  
50

**Earliest Start Date [BJD\_TDB]**  
2459053.845

**Latest End Date [BJD\_TDB]**  
2459083.845

**Transit Time [BJD\_TDB]**  
2454944.8450

**Transit Period [day]**  
129.9459

**Earliest Start Phase**  
0.991

**Latest Start Phase**  
0.993

**List of Phase Ranges**

Start [phase]	End [phase]	Minimum Efficiency [%]
0.998	0.999	90
0.001	0.002	90

☐ Fulfil all Phase Ranges

**Exposure Time [second]**  
60

☐ Send Data Taken During Earth Constraints ☐ Send Data Taken During SAA

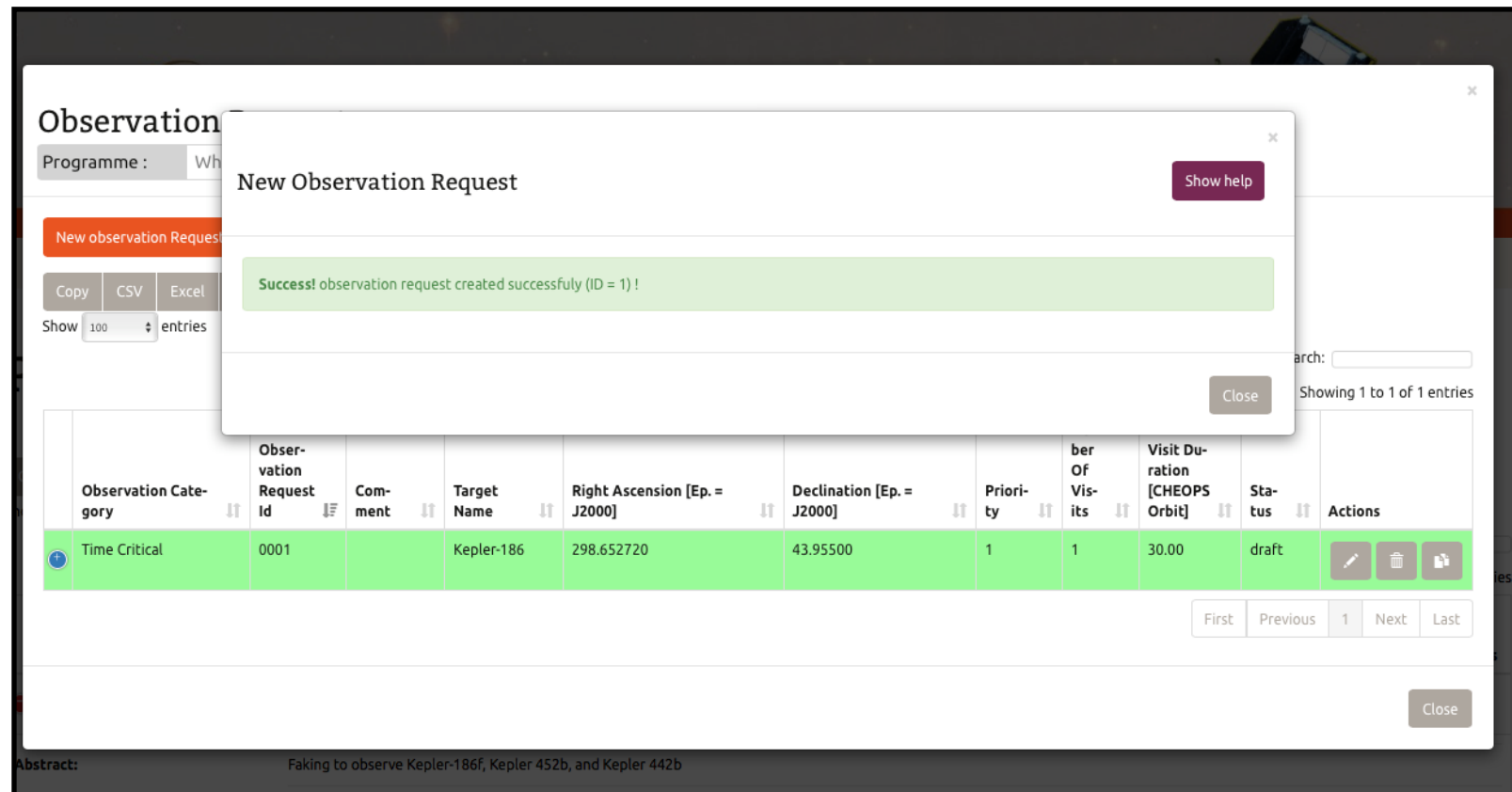
Cancel Clear Add

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Finalise the Observation Request

The new Observation Request now appears in the list

The screenshot shows the 'Observation' tool interface. A modal window titled 'New Observation Request' is open, displaying a green success message: 'Success! observation request created successfully (ID = 1) !'. Below the modal, a table lists the observation requests. The first row is highlighted in green and corresponds to the newly created request.

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number Of Visits	Visit Duration [CHEOPS Orbit]	Status	Actions
Time Critical	0001		Kepler-186	298.652720	43.95500	1	1	30.00	draft	[Edit] [Delete] [Share]




At the bottom of the interface, there is an 'Abstract' section with the text: 'Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b'.

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Complete your programme

Your newly created Observation Request now appears in the list

You can **Edit** , **Delete** ,  
or **Clone**  your observation requests

### Observation Requests

Programme :

What if the Kepler field were visible

Type :

Guest Observer(20)

ID :

0005

New observation Request

Copy

CSV

Excel

PDF

Print

Show

100

entries

Search:

Showing 1 to 1 of 1 entries

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number Of Visits	Visit Duration [CHEOPS Orbit]	Status	Actions
Time Critical	0001		Kepler-186	298.652720	43.95500	1	1	30.00	Draft	<div> <div></div> <div></div> <div></div> </div>

First

Previous

1

Next

Last

Close

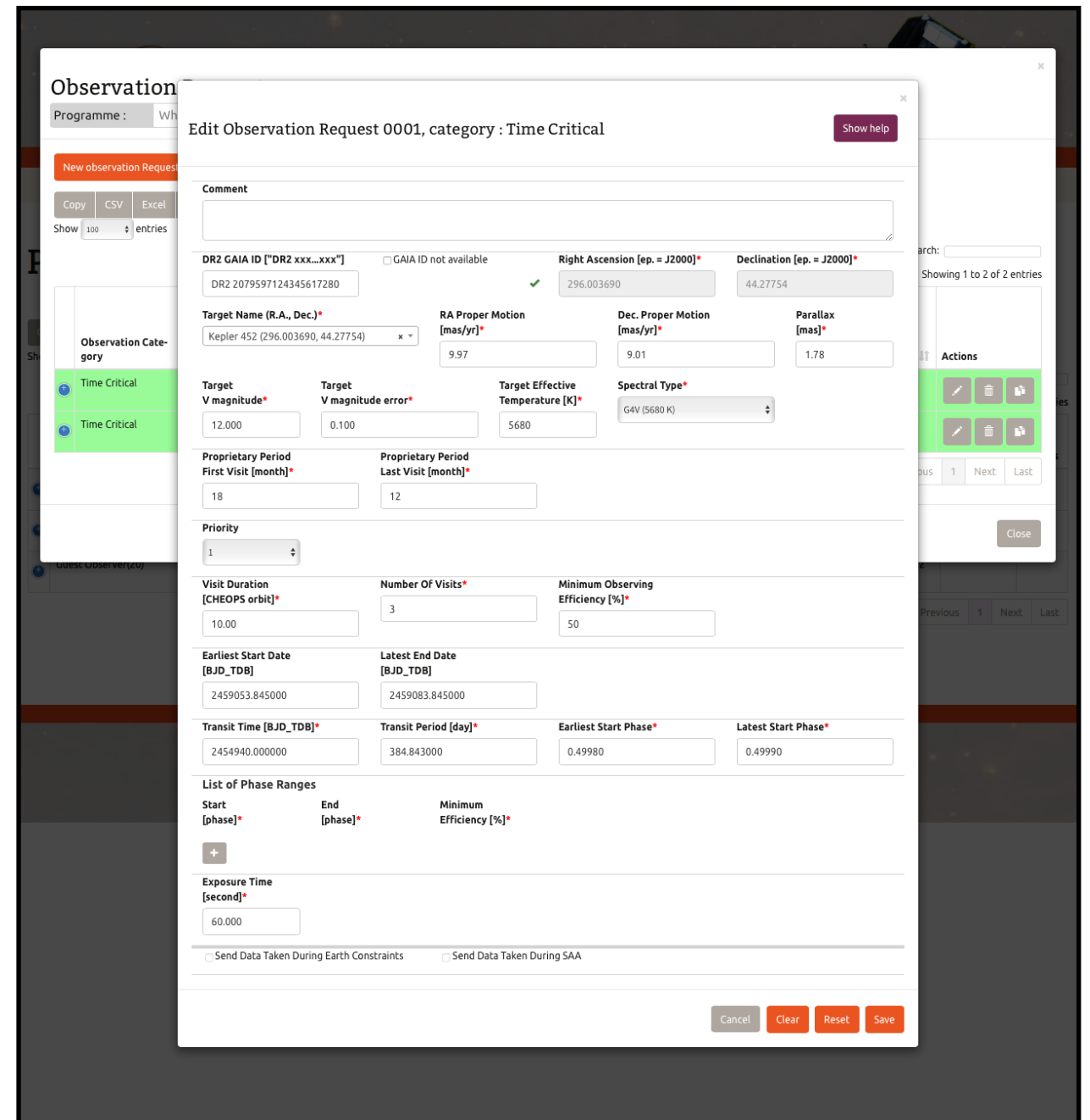
Abstract:

Faking to observe Kepler-186f, Kepler 452b, and Kepler 442b

### Complete your programme



**Cloning** an observation request creates a new observation request (new ID) with fields pre-filled with values from the parent request. This may be used to speed up the creation of observation requests if only a few parameters change with respect to existing requests.



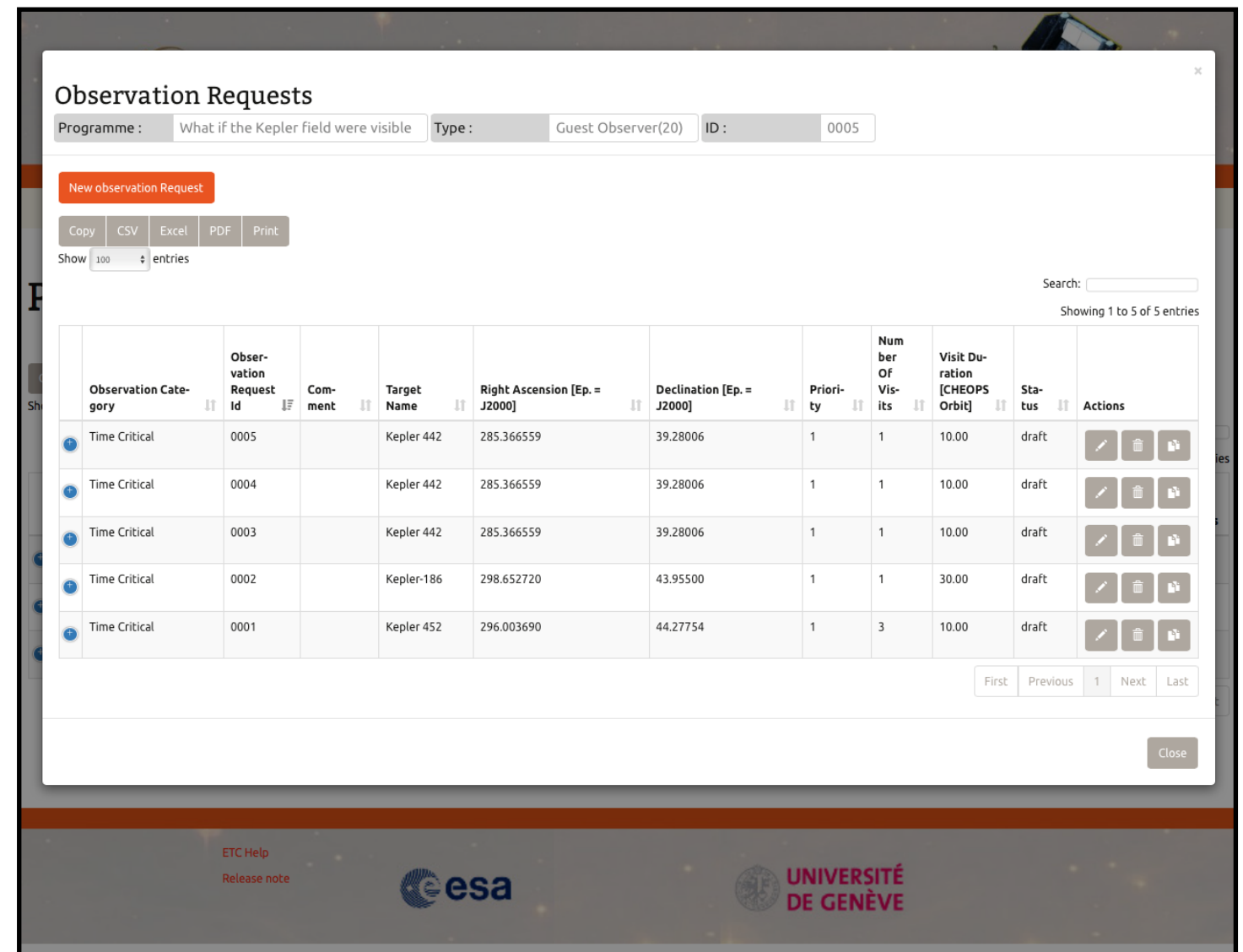
# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Complete your programme

Every new Observation Request appears in the list of observations in your programme.

The total time required to execute all observation requests in a given programme must remain within the time allocated by the ESA TAC



**Observation Requests**

Programme : What if the Kepler field were visible Type : Guest Observer(20) ID : 0005

[New observation Request](#)

[Copy](#) [CSV](#) [Excel](#) [PDF](#) [Print](#)

Show 100 entries

Search:



Showing 1 to 5 of 5 entries

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number Of Visits	Visit Duration [CHEOPS Orbit]	Status	Actions
Time Critical	0005		Kepler 442	285.366559	39.28006	1	1	10.00	draft	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Duplicate</a>
Time Critical	0004		Kepler 442	285.366559	39.28006	1	1	10.00	draft	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Duplicate</a>
Time Critical	0003		Kepler 442	285.366559	39.28006	1	1	10.00	draft	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Duplicate</a>
Time Critical	0002		Kepler-186	298.652720	43.95500	1	1	30.00	draft	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Duplicate</a>
Time Critical	0001		Kepler 452	296.003690	44.27754	1	3	10.00	draft	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Duplicate</a>

First Previous 1 Next Last

[Close](#)

ETC Help  
Release note



# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Complete your programme

You cannot exceed the number of accepted orbits for a given target.

This example is for a target with only 10 orbits left to be allocated.

$$10 \times 1 = 10 \quad \text{— OK}$$

Visit Duration [CHEOPS orbit]*	Number Of Visits*
<input type="text" value="10"/>	<input type="text" value="1"/>
Earliest Start Date [BJD_TDB]	Latest End Date [BJD_TDB]

$$3 \times 3 \leq 10 \quad \text{— OK}$$

1	Visit Duration [CHEOPS orbit]*	Number Of Visits*	Minimum Observing Efficiency [%]*
	<input type="text" value="3"/>	<input type="text" value="3"/>	<input type="text" value="50"/>
	Earliest Start Date [BJD_TDB]	Latest End Date [BJD_TDB]	

$$3 \times 4 = 12 > 10 \quad \text{— Not OK}$$


Visit Duration [CHEOPS orbit]*	Number Of Visits*
<input type="text" value="3"/>	<input type="text" value="4"/>
Earliest Start Date [BJD_TDB]	Latest End Date [BJD_TDB]

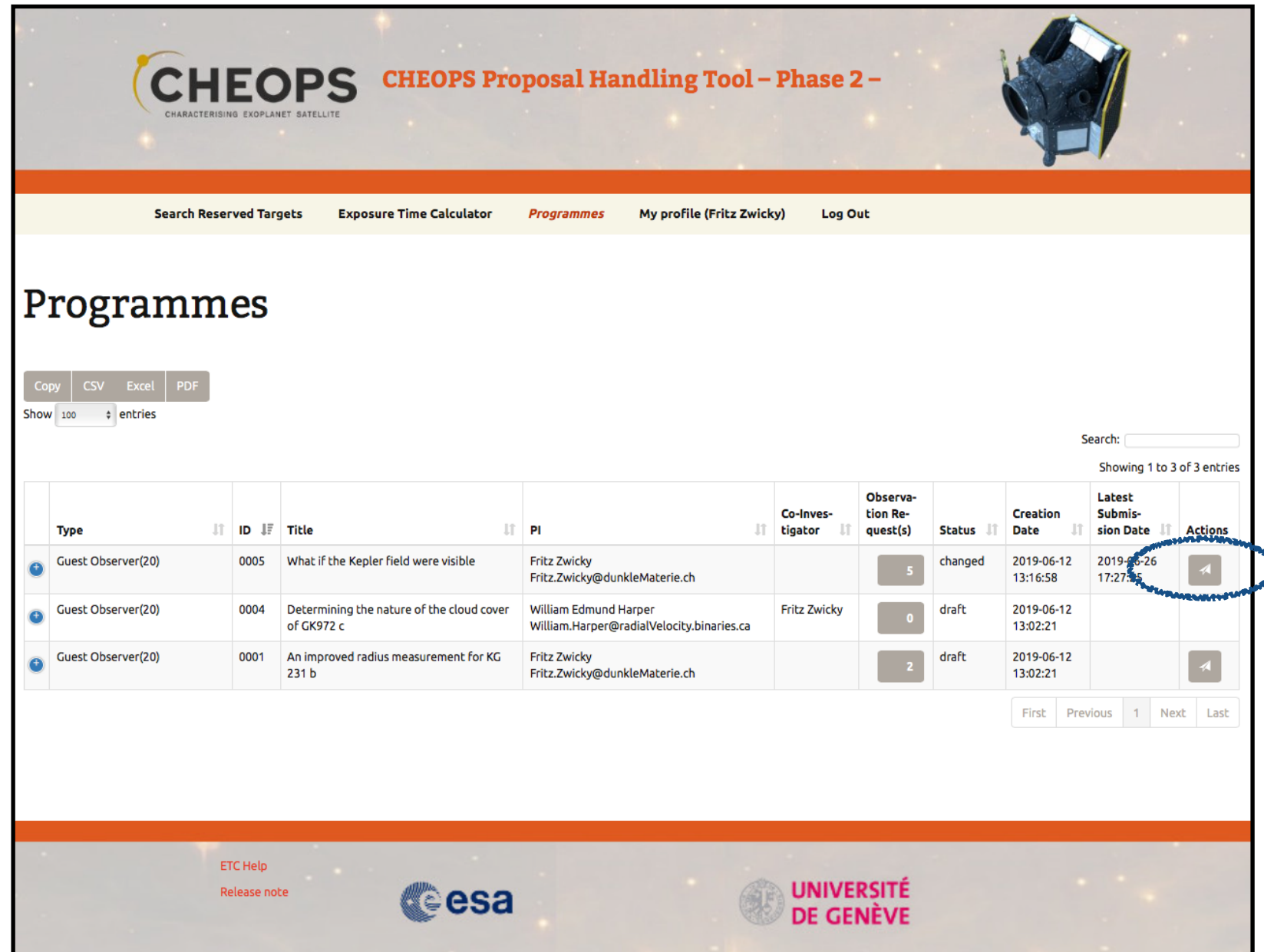
Approved number of orbits for the target **Kepler 442** exceeded (30) !  
Reduce the visit duration or the number of visits(<=3).

# Proposal Handling Tool Phase II



## PHT2 Guidelines

### Submit your programme

Programmes that you own can be submitted with the  icon.




The screenshot shows the 'Programmes' section of the CHEOPS Proposal Handling Tool - Phase 2. The interface includes a header with the CHEOPS logo and a navigation bar with links: Search Reserved Targets, Exposure Time Calculator, Programmes (active), My profile (Fritz Zwicky), and Log Out. Below the header, there are buttons for Copy, CSV, Excel, and PDF, and a 'Show 100 entries' dropdown. A search bar is located on the right. The main content is a table with 11 columns: Type, ID, Title, PI, Co-Investigator, Observation Request(s), Status, Creation Date, Latest Submission Date, and Actions. Three entries are listed, all of type 'Guest Observer(20)'. The first entry has an observation request of 5 and a status of 'changed'. The second entry has 0 requests and a status of 'draft'. The third entry has 2 requests and a status of 'draft'. The 'Actions' column for each entry contains a submit icon (a paper plane), which is circled in blue in the original image. At the bottom of the table, there are pagination controls: First, Previous, 1, Next, Last. The footer of the page includes links for ETC Help and Release note, and logos for ESA and the University of Geneva.

Type	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions
Guest Observer(20)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		5	changed	2019-06-12 13:16:58	2019-06-26 17:27:55	
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21		
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		2	draft	2019-06-12 13:02:21		

# Proposal Handling Tool Phase II

## PHT2 Guidelines

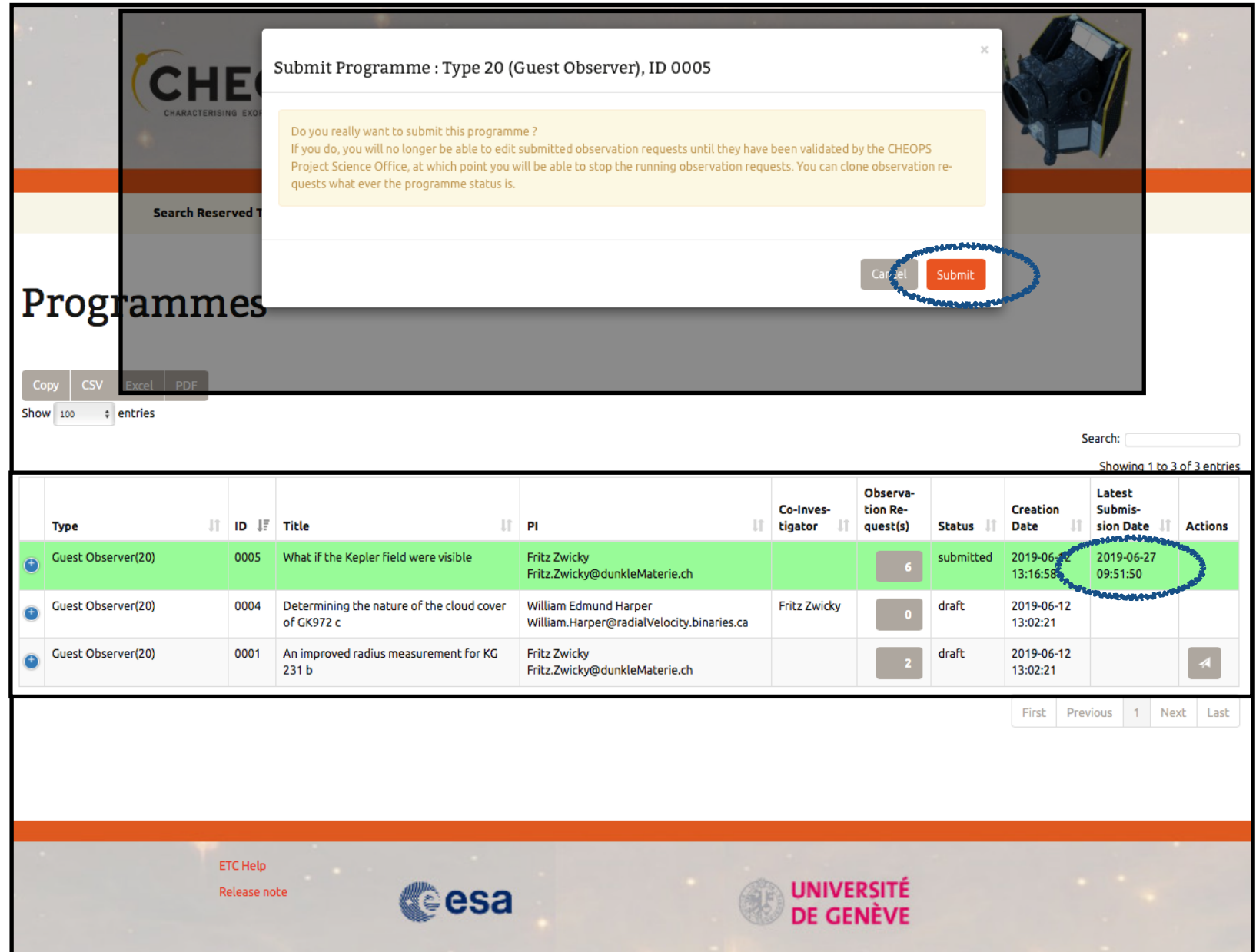
### Submit your programme

Programmes that you own can be submitted with the  icon.

**Only submit your programme if it is complete.**

**You cannot modify your programme or observation requests after it is submitted!**

Date of submission is recorded.  
Status changes to “Submitted”.



**Submit Programme : Type 20 (Guest Observer), ID 0005**

Do you really want to submit this programme ?  
If you do, you will no longer be able to edit submitted observation requests until they have been validated by the CHEOPS Project Science Office, at which point you will be able to stop the running observation requests. You can clone observation requests whatever the programme status is.

Search Reserved T


Programmes

Copy CSV Excel PDF

Show 100 entries



Search:

Showing 1 to 3 of 3 entries

Type	ID	Title	PI	Co-Investigator	Observation Request(s)	Status	Creation Date	Latest Submission Date	Actions
Guest Observer(20)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		6	submitted	2019-06-12 13:16:58	2019-06-27 09:51:50	
Guest Observer(20)	0004	Determining the nature of the cloud cover of GK972 c	William Edmund Harper William.Harper@radialVelocity.binaries.ca	Fritz Zwicky	0	draft	2019-06-12 13:02:21		
Guest Observer(20)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		2	draft	2019-06-12 13:02:21		

First Previous 1 Next Last

ETC Help  
Release note

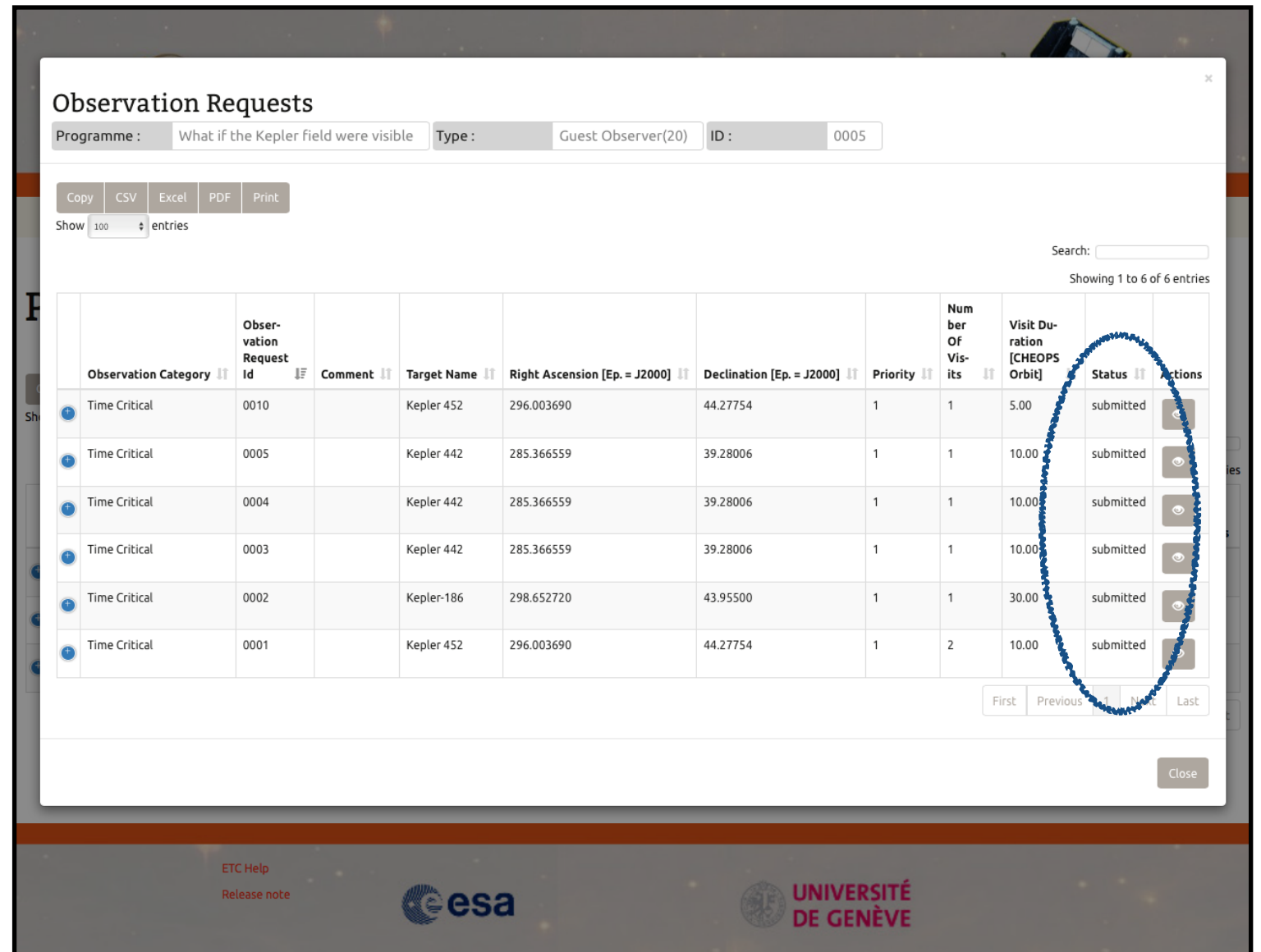
  UNIVERSITÉ DE GENÈVE

# Proposal Handling Tool Phase II

## PHT2 Guidelines

### Submit your programme

Observation requests are in status “submitted”. They cannot be edited anymore.



**Observation Requests**

Programme : What if the Kepler field were visible Type : Guest Observer(20) ID : 0005

Copy CSV Excel PDF Print

Show 100 entries

Search:



Showing 1 to 6 of 6 entries

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Num ber Of Vis-its	Visit Du-ration [CHEOPS Orbit]	Status	Actions
Time Critical	0010		Kepler 452	296.003690	44.27754	1	1	5.00	submitted	
Time Critical	0005		Kepler 442	285.366559	39.28006	1	1	10.00	submitted	
Time Critical	0004		Kepler 442	285.366559	39.28006	1	1	10.00	submitted	
Time Critical	0003		Kepler 442	285.366559	39.28006	1	1	10.00	submitted	
Time Critical	0002		Kepler-186	298.652720	43.95500	1	1	30.00	submitted	
Time Critical	0001		Kepler 452	296.003690	44.27754	1	2	10.00	submitted	

First Previous Next Last

Close

ETC Help  
Release note

# Proposal Handling Tool Phase II

## PHT2 Guidelines

You will be notified by email if/when your targets are scheduled for observations, typically a few days before the actual observations are executed.

You will receive another email when your data are available on the CHEOPS archive for you to download.