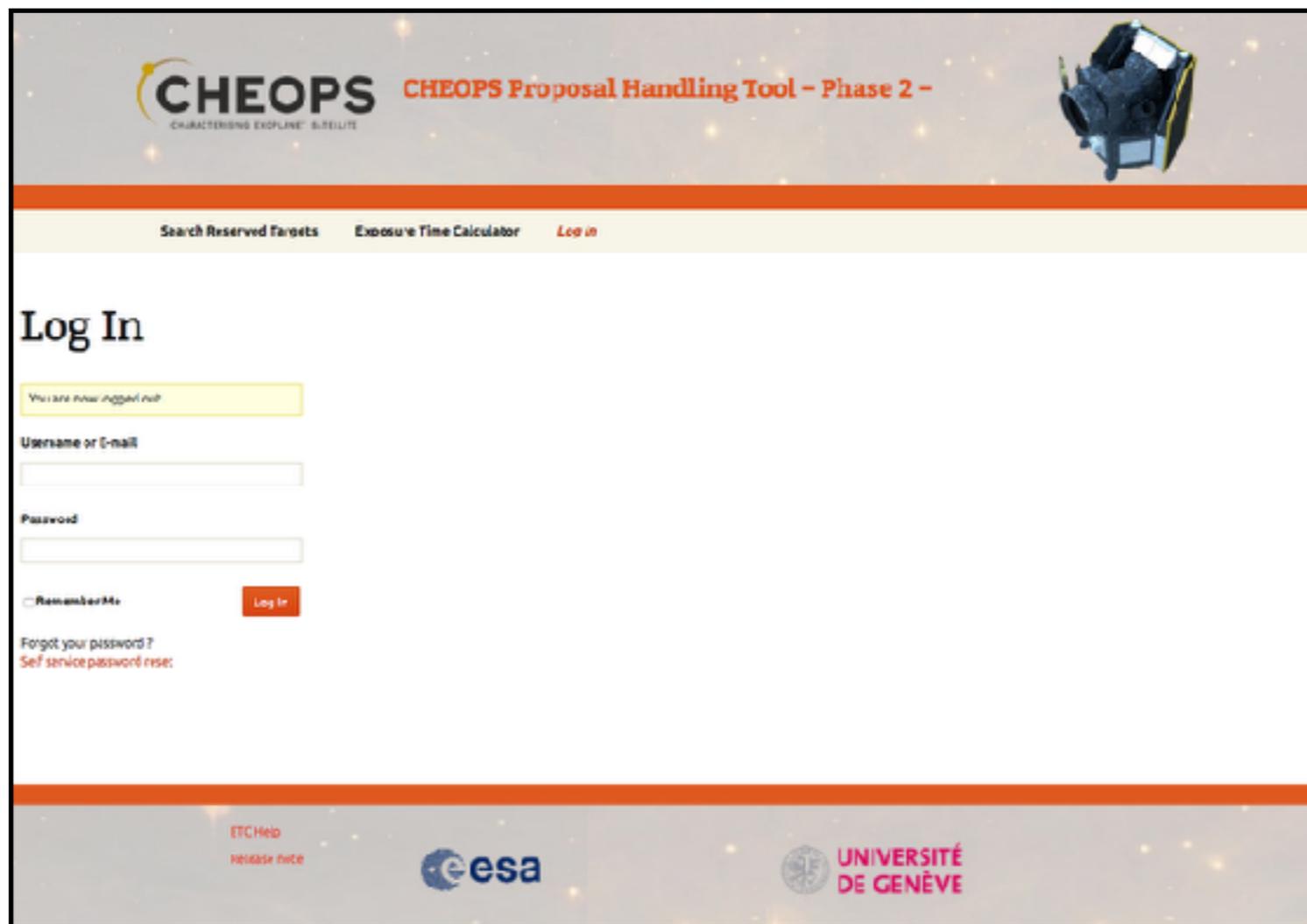


CHEOPS Proposal Handling Tool Phase 2 (PHT2) Guidelines (v_1.2)

Proposal Handling Tool Phase II

PHT2 Guidelines

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



The screenshot shows the login interface for the CHEOPS Proposal Handling Tool - Phase 2. At the top, there is a navigation bar with the CHEOPS logo (CHARACTERISING EXOPLANET SURFACES) and the text "CHEOPS Proposal Handling Tool - Phase 2 -". To the right of the navigation bar is an image of the CHEOPS satellite. Below the navigation bar, there are three links: "Search Reserved Targets", "Exposure Time Calculator", and "Log in". The main content area is titled "Log In" and contains a login form with the following elements: a yellow box with the text "You are now logged out", a "Username or E-mail" input field, a "Password" input field, a "Remember Me" checkbox, and a "Log In" button. Below the login form, there are links for "Forgot your password?" and "Self service password reset". At the bottom of the page, there is a footer with the text "ETCHelp" and "Please use this" next to the ESA logo, and the "UNIVERSITÉ DE GENÈVE" logo.

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

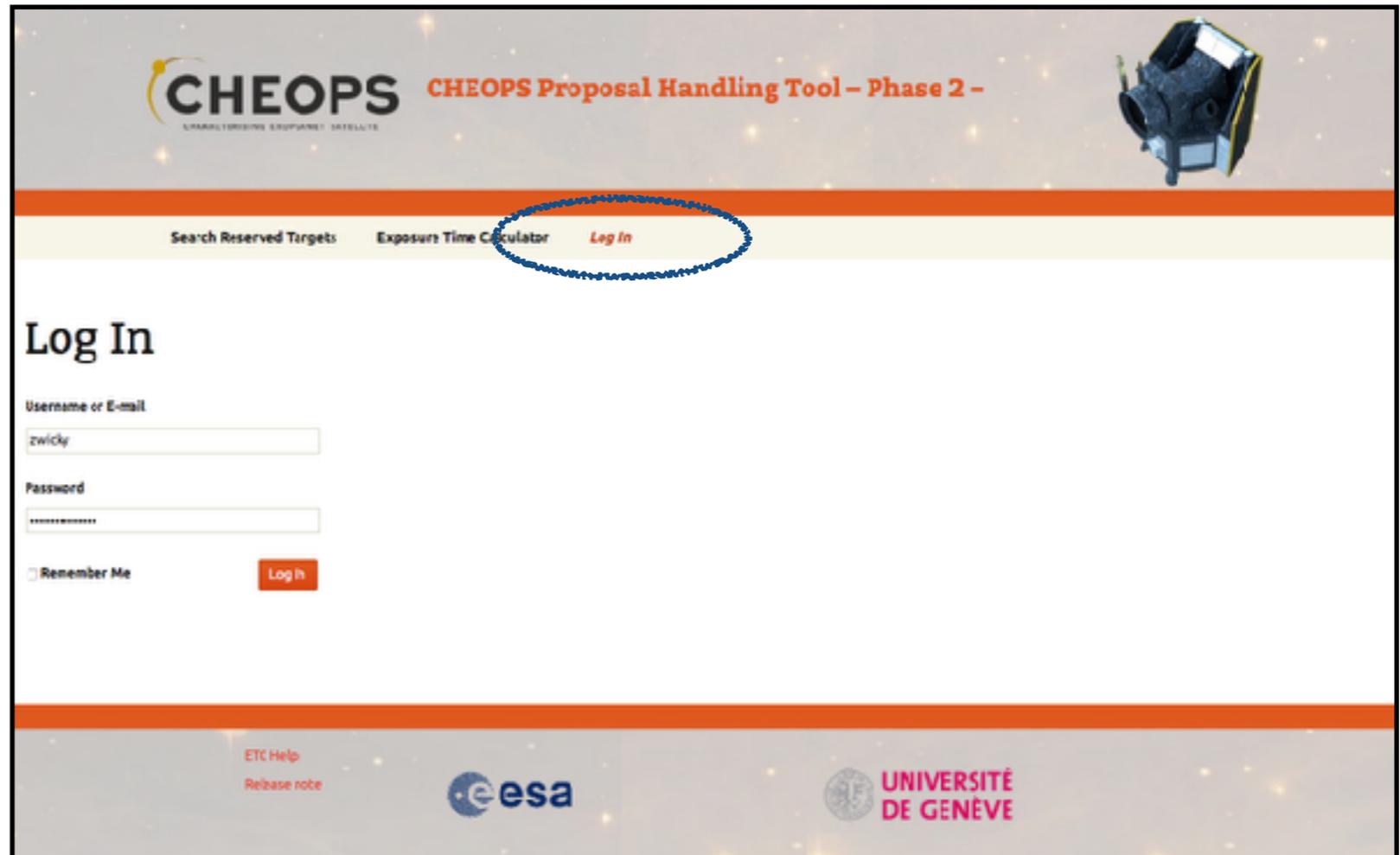
Please consult the [CHEOPS Observers Manual](#) for details on how to observe with CHEOPS

Proposal Handling Tool Phase II

PHT2 Guidelines

Please login

with username and password
received from SOC



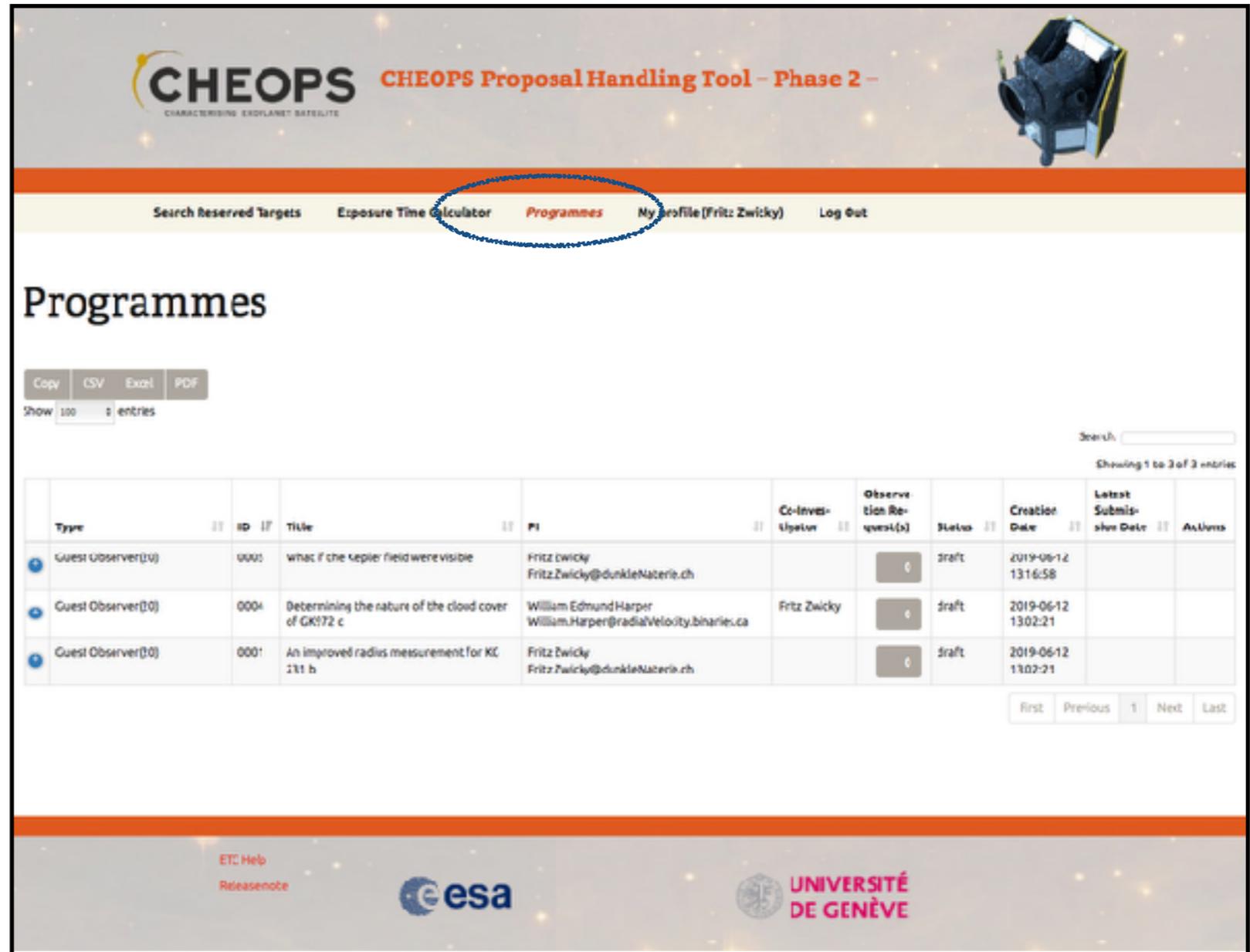
Your accepted “Programmes”

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

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(10)	0000	what if the kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch			draft	2019-06-12 13:16:58		
Guest Observer(10)	0004	Determining the nature of the cloud cover of GK172 c	William Edmund Harper William.Harper@radialVelocity.biarles.ca	Fritz Zwicky		draft	2019-06-12 13:02:21		
Guest Observer(10)	0001	An improved radius measurement for KE 211 b	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch			draft	2019-06-12 13:02:21		

First Previous 1 Next Last

ETC Help
Releasenote

esa

UNIVERSITÉ DE GENÈVE

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 -

Home | Request To visit | Document This Candidate | **Programmes** | New or Edit This Detail | Log Out

Programmes

Copy CSV Excel PDF

Showing 1 to 3 of 3 entries

ID	Title	PI	Observer	Observer Email	Status	Creation Date	Last Submission Date	Actions																												
0004	What if the Kepler twin stars were ...	Fritz Zwicky	Fritz Zwicky	Fritz.Zwicky@unige.ch	Accepted	2019-06-13 13:56:00																														
<p>0004: Making observations of Kepler-116f, Kepler-116c, and Kepler-116d</p> <p>Your Number Of Orbits: 30</p> <table border="1"> <thead> <tr> <th>Name</th> <th>RA</th> <th>DEC</th> <th>Priority</th> <th>Magnitude</th> <th>Approved Number Of Orbits</th> <th>Observation Category</th> </tr> </thead> <tbody> <tr> <td>Kepler-116f</td> <td>208.452713</td> <td>43.55520</td> <td>1</td> <td>11.900</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler-116c</td> <td>208.003593</td> <td>44.17756</td> <td>1</td> <td>11.400</td> <td>30</td> <td>time critical</td> </tr> <tr> <td>Kepler-116d</td> <td>208.166519</td> <td>39.88805</td> <td>1</td> <td>13.900</td> <td>30</td> <td>time critical</td> </tr> </tbody> </table>									Name	RA	DEC	Priority	Magnitude	Approved Number Of Orbits	Observation Category	Kepler-116f	208.452713	43.55520	1	11.900	30	time critical	Kepler-116c	208.003593	44.17756	1	11.400	30	time critical	Kepler-116d	208.166519	39.88805	1	13.900	30	time critical
Name	RA	DEC	Priority	Magnitude	Approved Number Of Orbits	Observation Category																														
Kepler-116f	208.452713	43.55520	1	11.900	30	time critical																														
Kepler-116c	208.003593	44.17756	1	11.400	30	time critical																														
Kepler-116d	208.166519	39.88805	1	13.900	30	time critical																														
0004	Determining the nature of the cloud cover of DRIFT L	William Edmund Kayser	Fritz Zwicky	William.Kayser@unige.ch	Draft	2019-06-13 13:56:21																														
0005	An improved astrometric measurement of the ...	Fritz Zwicky	Fritz Zwicky	Fritz.Zwicky@unige.ch	Draft	2019-06-13 13:56:21																														

First Previous Next Last

ETC help version 1000

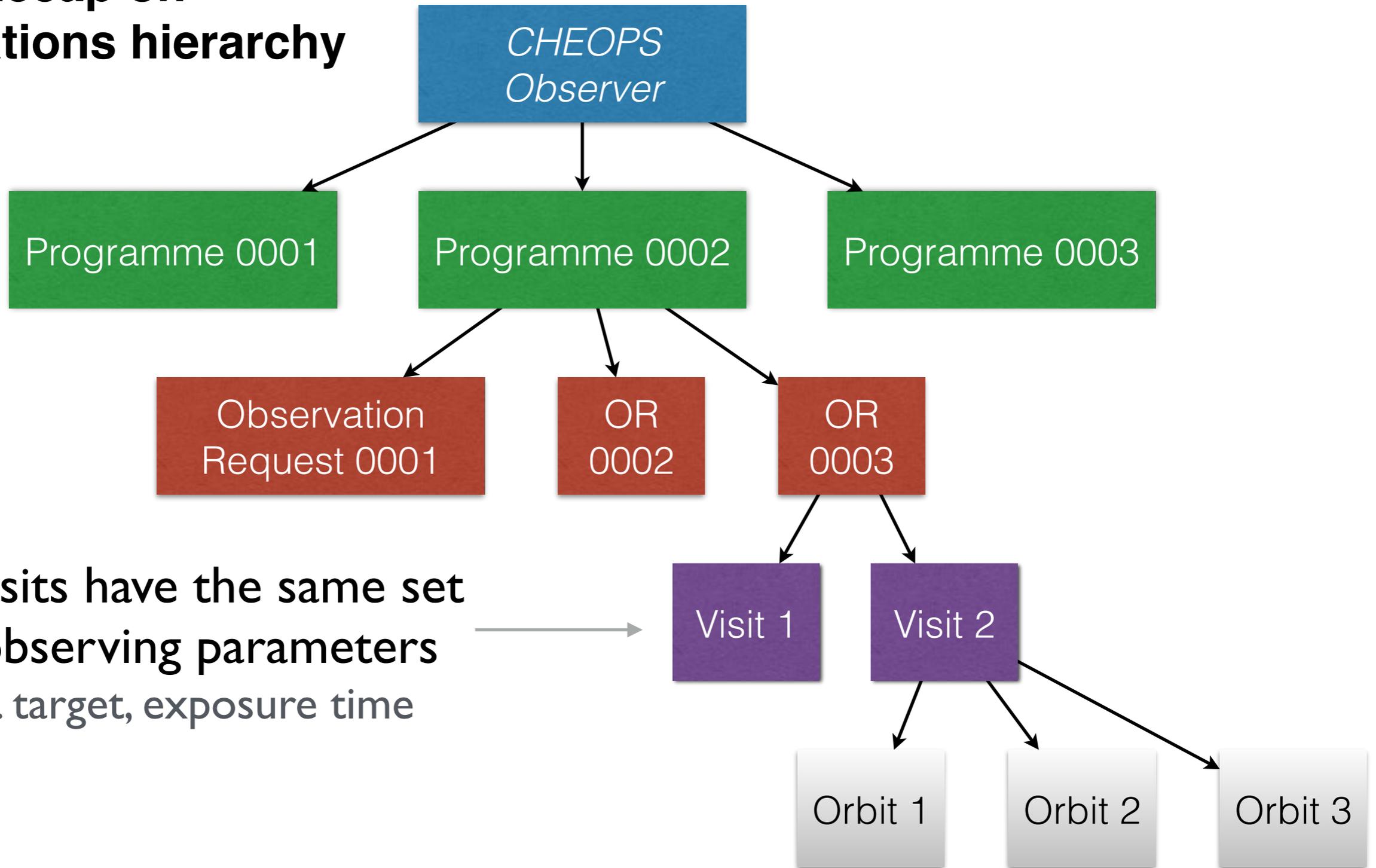
esa UNIVERSITÉ DE GENÈVE

Your accepted “Programmes”

Programmes list can be exported in various formats for convenience.

The screenshot shows the 'Programmes' section of the CHEOPS Proposal Handling Tool. At the top, there are navigation tabs: 'Back to Requested To-Do's', 'Discover This Candidate', 'Programmes', 'New or In Progress', and 'Low Ops'. Below the tabs, the word 'Programmes' is displayed. A set of buttons for exporting the list (Copy, CSV, Excel, PDF) is circled in blue. Below the buttons is a search bar and a table of programmes. The table has columns for Type, IC, Title, PI, Observer, Observer Email, Status, Creation Date, and Latest Submission Date. The first programme is '0003 What if the Kepler team were asked?' by Fritz Zwicky. Below the table, there is an 'Abstract' section for the first programme, followed by a 'Your Number of Orbits' table listing stars like Kepler-186, Kepler-52, and Kepler-42 with their respective parameters. At the bottom of the table, there are 'First', 'Previous', 'Next', and 'Last' navigation buttons. The footer contains logos for ESO, ESA, and 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 -

Home | Requested To visit | Discover This Candidate | **Programmes** | New or Edit This Request | Log Out

Programmes

Copy CSV Excel PDF

Showing 1 to 3 of 3 entries

Type	IC	Title	PI	Observer	Observer Email	Observation Request ID	Status	Creation Date	Latest Submission Date	Actions
Guest Observer (G)	005	What if the Kepler team were asked	Fritz Zwicky	Fritz.Zwicky@unige.ch		1	draft	2014-07-12 13:16:00		
Guest Observer (G)	004	Determining the nature of the cloud cover of DRIFT L	William Edmund Kayser	William.Kayser@unige.ch	Fritz Zwicky	1	draft	2014-06-12 13:02:21		
Guest Observer (G)	003	An improved astrometric measurement for HD 21810	Fritz Zwicky	Fritz.Zwicky@unige.ch		1	draft	2014-06-12 13:02:21		

Abstract: Making observations of Kepler-11af, Kepler-413c, and Kepler-60b

Total Number of Orbits: 90

Name	RA	DEC	Priority	Magnitude	Approved Number of Orbits	Observation Category
Kepler-11af	208.452713	43.55520	1	11.900	30	time critical
Kepler-413c	296.023593	44.27756	1	11.400	30	time critical
Kepler-60b	205.265519	29.88005	1	13.900	30	time critical

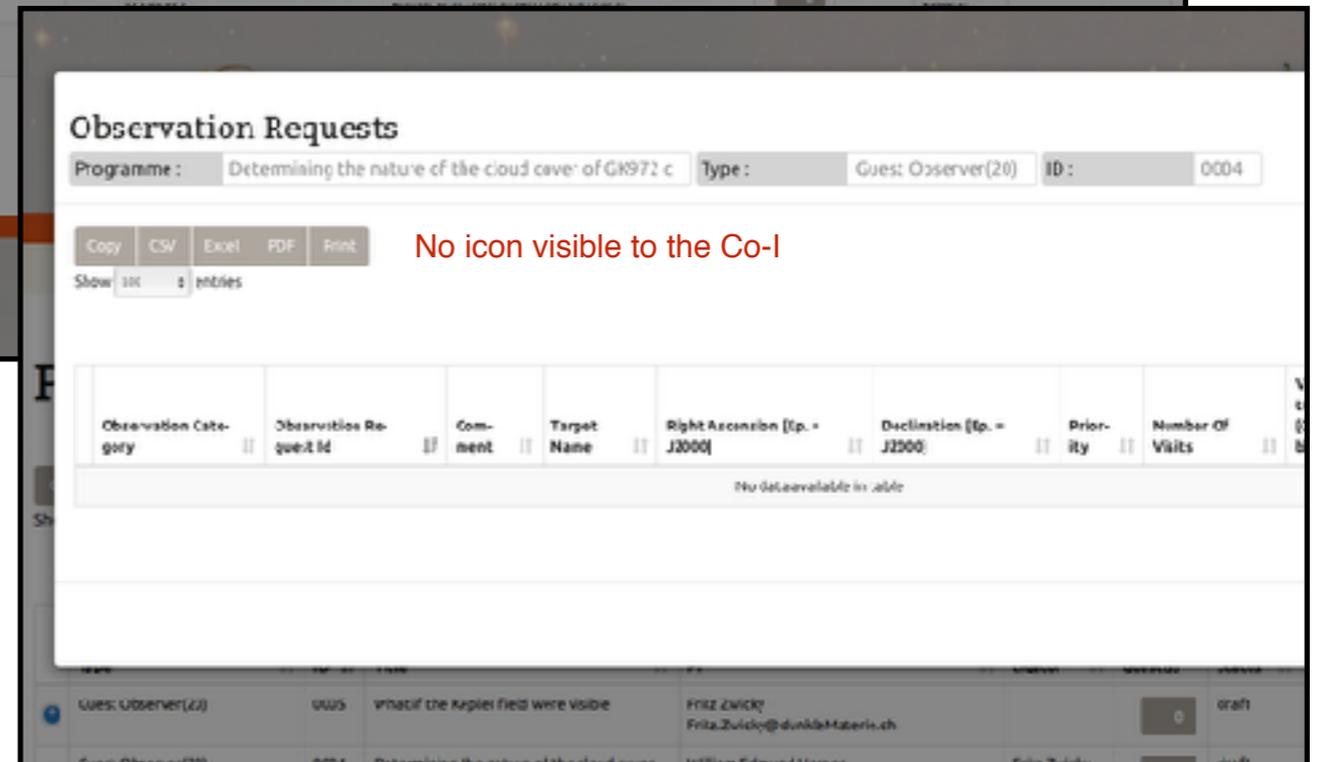
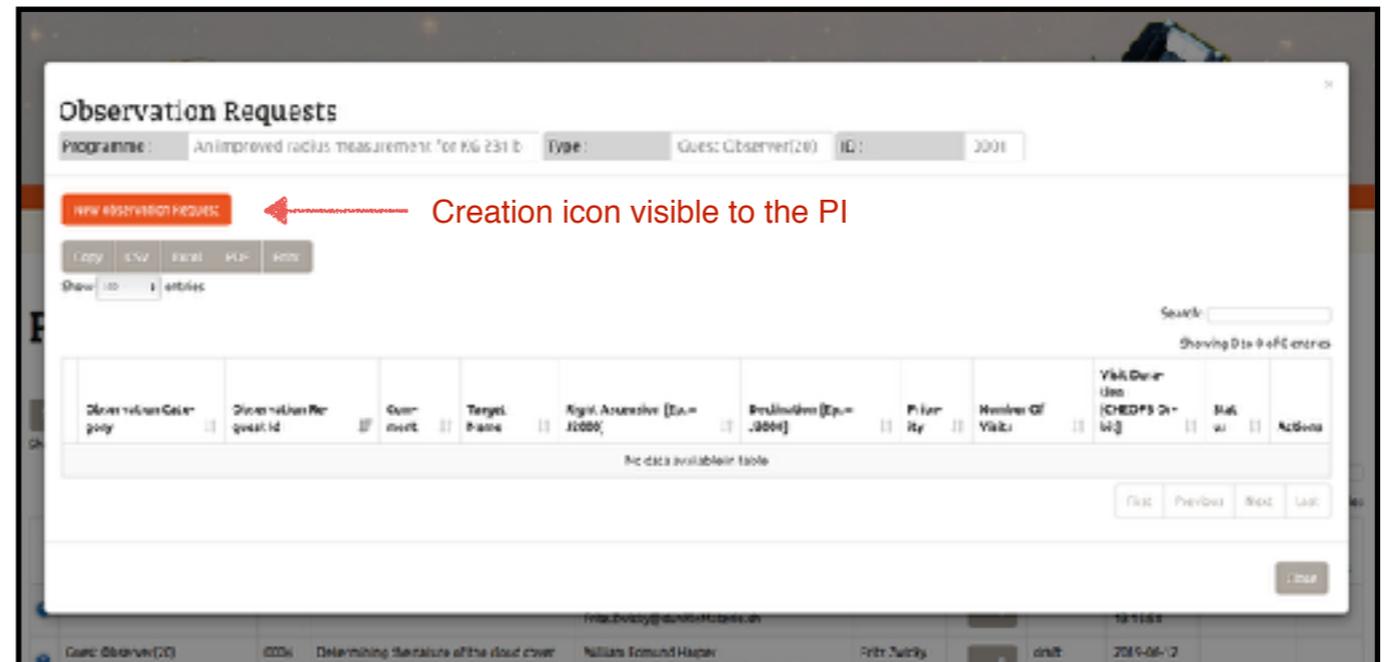
First Previous 1 Next Last

ESO - ESO
UNIVERSITÉ DE GENÈVE

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.



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	298.652723	41.35500	1	11.900	30	time critical
Kepler 452	294.003690	44.27754	1	11.400	30	time critical
Kepler 442	281.366559	39.28006	1	10.900	30	time critical

Guest Observer(0) 0004 Determining the nature of the cloud cover of GK972 : William Edmund Harper William.Harper@radialvelocity.binaries.ca Fritz Zwicky draft 2015-06-12 13:00:21

Guest Observer(0) 0001 An improved radius measurement for KO 231 b Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch draft 2015-06-12 13:00:21

Programmes

Copy CSV Excel PDF

show 10 entries

Showing 1 to 3 of 3 entries

Type	ID	Title	PI	Co-Investigator	Observations Request(s)	Status	Creation Date	Latest Submission Date	Actions
Guest Observer(0)	0001	What if the Kepler field were visible	Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch		0	draft	2015-06-12 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	298.652723	41.35500	1	11.900	30	time critical
Kepler 452	294.003690	44.27754	1	11.400	30	time critical
Kepler 442	281.366559	39.28006	1	10.900	30	time critical

Guest Observer(0) 0004 Determining the nature of the cloud cover of GK972 : William Edmund Harper William.Harper@radialvelocity.binaries.ca Fritz Zwicky draft 2015-06-12 13:00:21

Guest Observer(0) 0001 An improved radius measurement for KO 231 b Fritz Zwicky Fritz.Zwicky@dunkleMaterie.ch draft 2015-06-12 13:00:21

Create an Observation Request

List of Observation Request is empty at this stage

Observation Requests

Programme: what if the keplerfield 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 0/0 entries

Observation Category	Observation Request ID	Comment	Target Name	Right Ascension [Eq. - J2000]	Declination [Eq. - J2000]	Priority	Number Of Visits	Visit Duration [CHEOPS Gr-bit]	Status	Actions
Notice available in table										

Showing 0 in 0 of 0 entries

First Previous Next Last

Close

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

Total Number Of Orbits: 90

Name	RA	DEC	Priority	Magnitude	Approved Number Of Orbits	Observation Category
Kepler-186	298.652720	43.95100	1	11.900	30	timecritical
Kepler-452	294.003490	44.27754	1	11.400	30	timecritical
Kepler-442	285.389359	39.18900	1	16.900	30	timecritical

Guest Observer(20)	0004	Determining the nature of the cloud cover of GJ 9712	William Edmund Harper william.harper@brahms.univie.ac.at	Fritz Zwicky	0	draft	2019-06-12 13:50:21
Guest Observer(20)	0001	An improved radius measurement for GJ 2312	Fritz Zwicky Fritz.Zwicky@unige.ch		0	draft	2019-06-12 13:52:21

First Previous 1 Next Last

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

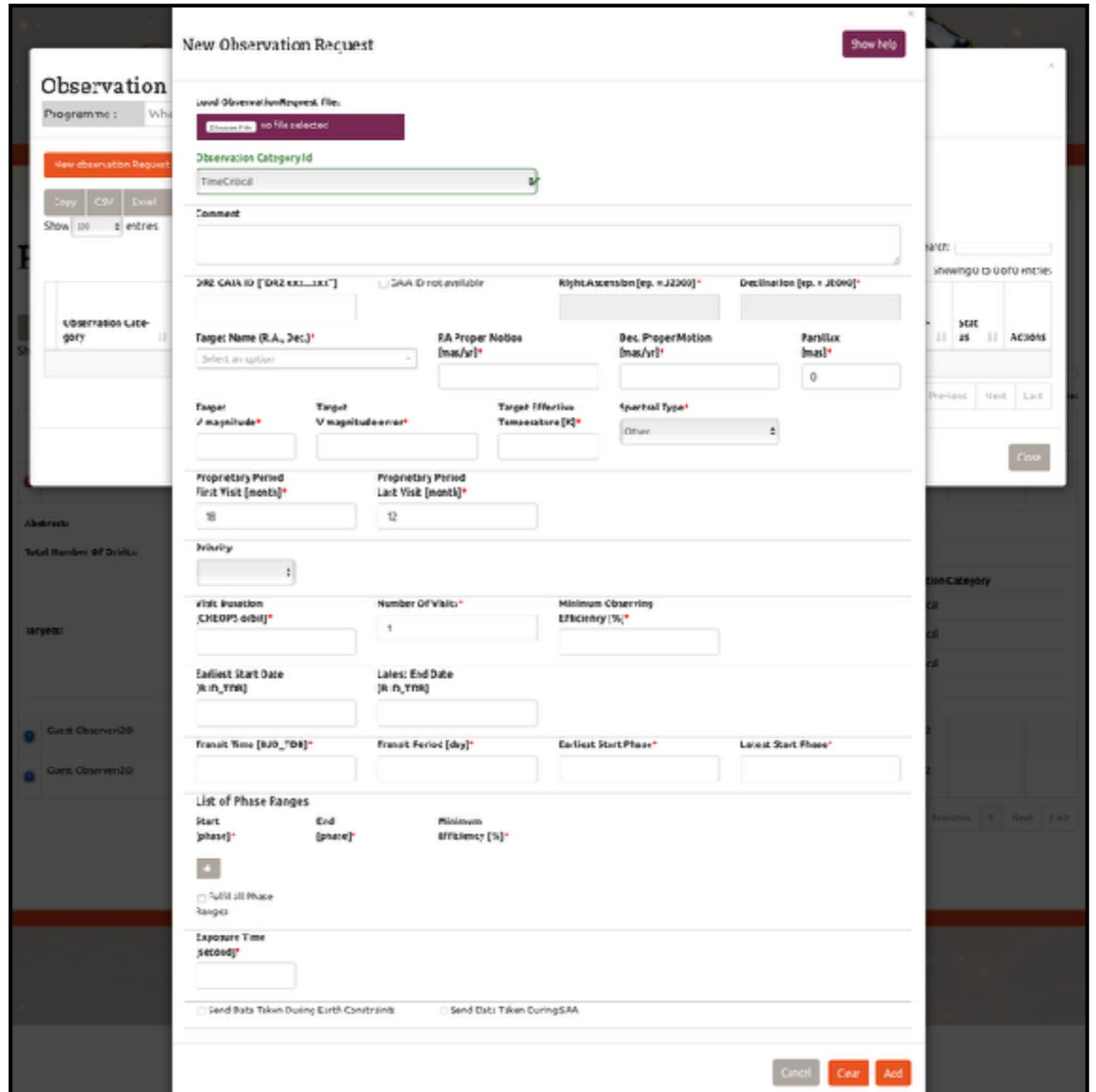
The screenshot displays the 'New Observation Request' dialog box in the PHT2 interface. The 'Observation CategoryId' dropdown menu is highlighted with a blue dashed circle. The background shows a table of observation requests with columns for Name, RA, DEC, Priority, V magnitude, Approved Number of Orbits, and Observation Category.

Name	RA	DEC	Priority	V magnitude	Approved Number of Orbits	Observation Category
Kepler 85	296.632726	43.35306	1	11900	30	time critical
Kepler 152	296.083490	44.27754	1	11400	30	time critical
Kepler 442	285.346555	79.28906	1	10900	30	time critical

Fill in the Observation Request

Define the parameters of your observation

Some parameters are mandatory (indicated with a *)



New Observation Request Show Help

Upload ObservationRequest file: no file selected

Observation CategoryId:

Comment:

DR2 GAIA ID [DR2 GALAXY]: GAIA ID not available

Rights Accession [ep. # J2200]: 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 [y m d, YMM]: Latest End Date [y m d, YMM]:

Transit Time [BJD_TDB]*: Transit Period [day]*: Earliest Start Phase*: Latest Start Phase*:

List of Phase Ranges

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

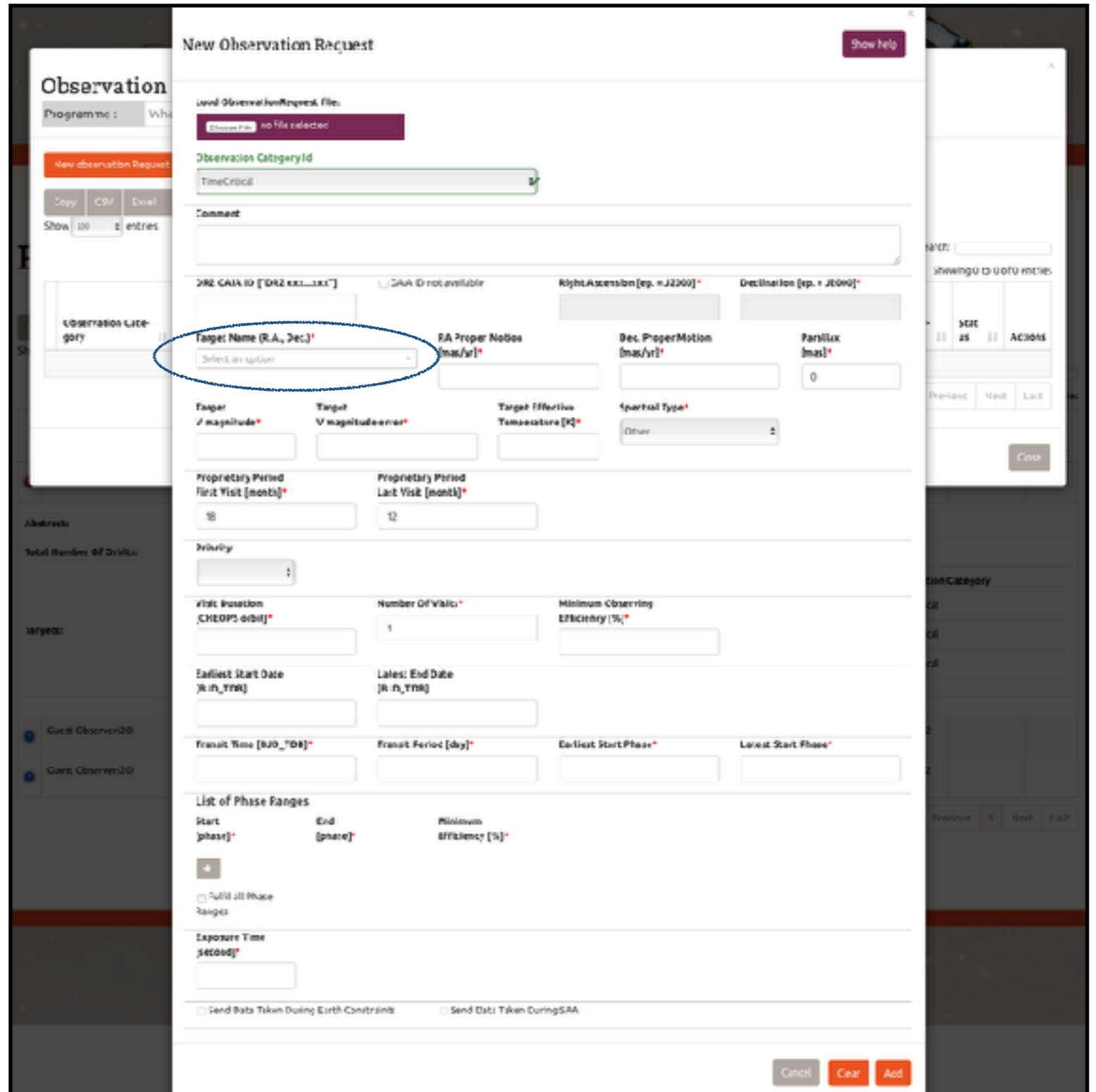
Add All Phase Ranges

Exposure Time [second]*:

Send Data Taken During Earth Constraint Send Data Taken During SAA

Fill in the Observation Request

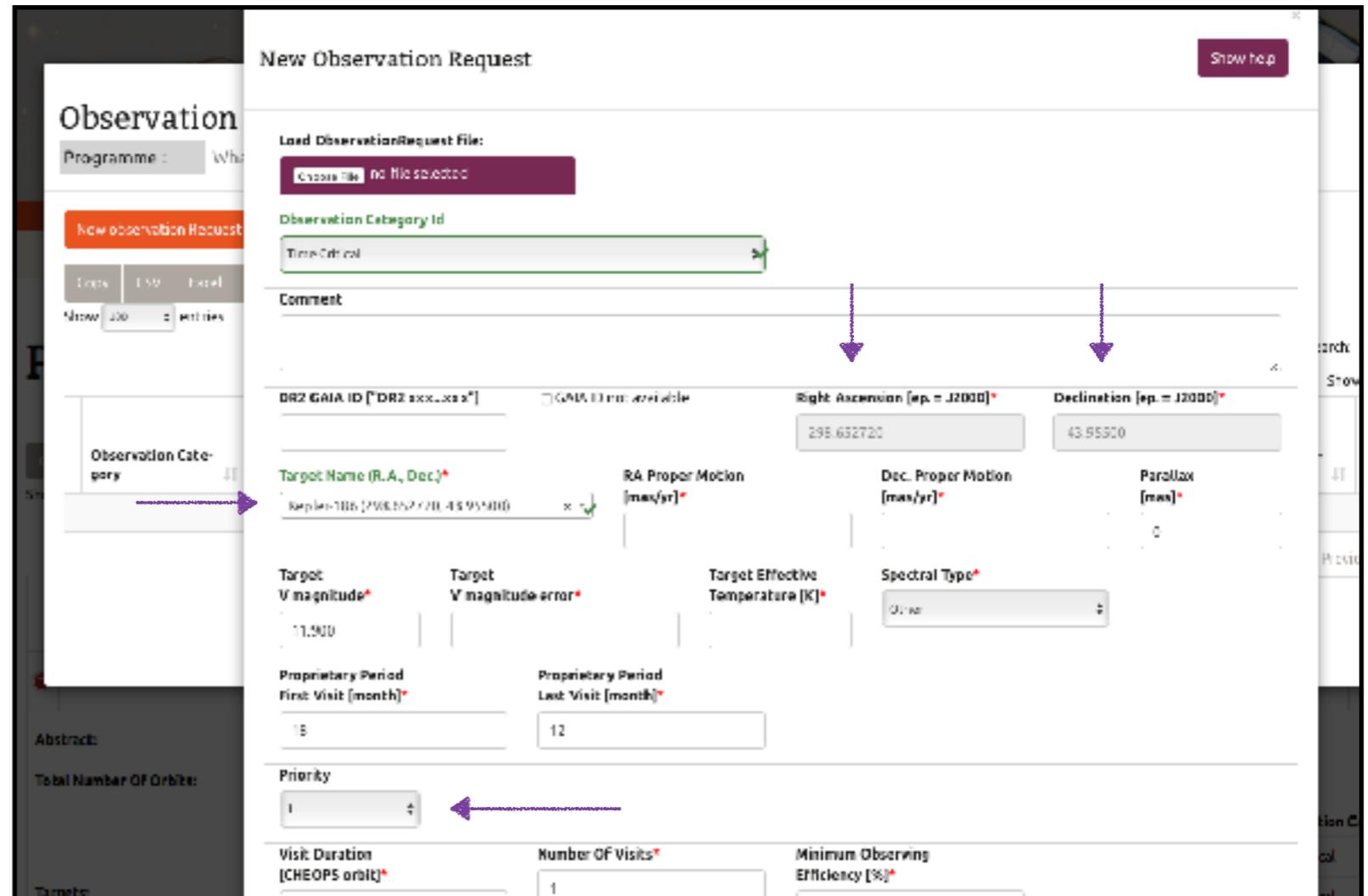
First select a target star from the scroll-down menu (only targets accepted by the ESA TAC show in the menu)



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



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] 295.652720
 Declination [ep. = J2000] 43.955200

Target Name (R.A., Dec.) Kepler-106 (295.652720, 43.955200)

RA Proper Motion [mas/yr]
 Dec. Proper Motion [mas/yr]
 Parallax [mas]

Target V magnitude 11.500
 Target V magnitude error
 Target Effective Temperature [K]
 Spectral Type G1V

Proprietary Period First Visit [month] 18
 Proprietary Period Last Visit [month] 12

Priority 1

Visit Duration [CHEOPS orbit]
 Number of Visits 1
 Minimum Observing Efficiency [%]

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

Lead Observation Request File:

Observation Category Id:

Comments:

DRG CALL ID (DRG:xxx.yyy):

Right Ascension [eq. = J2000]:

Declination [eq. = J2000]:

Target Name (RA, Dec):

RA/Dec:

Dec. Proper Motion [mas/yr]:

Parallax [mas]:

Target V magnitude:

Target V magnitude error:

Target Effective Temperature [K]:

Spectral Type:

Proprietary Period [HR:MM:SS]:

Proprietary Period [SEC]:

Priority:

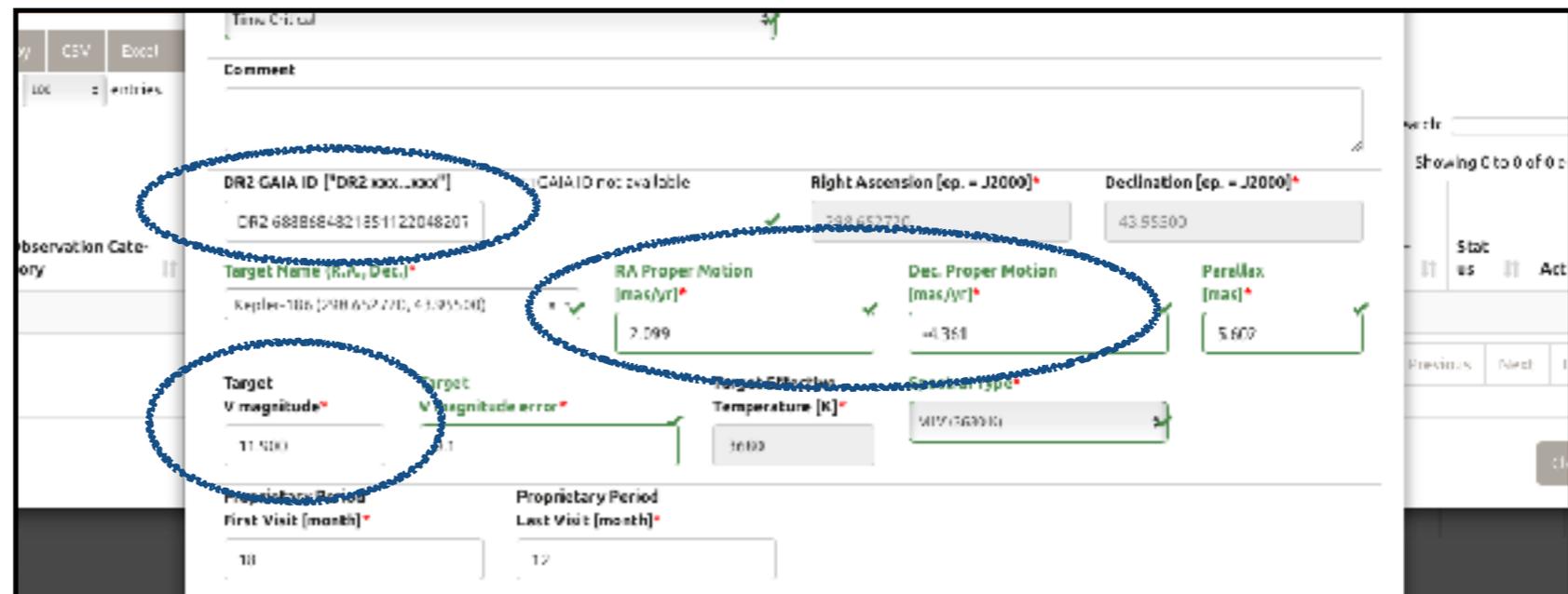
Visit Duration [M:SS]:

Number of Visits:

Minimum Observing Efficiency [%]:

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
- 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](#)



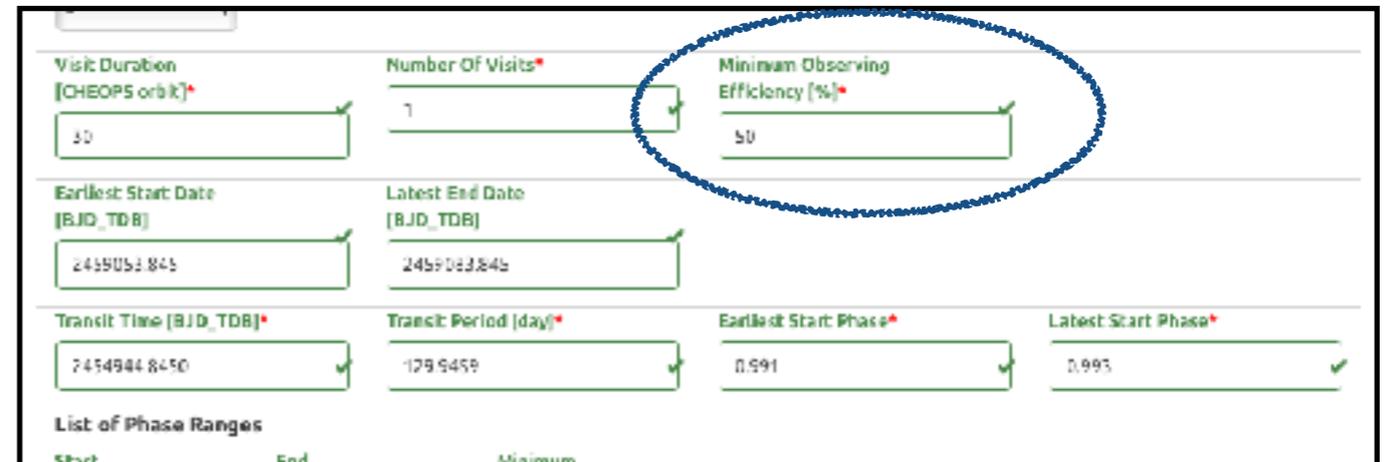
The screenshot shows a web form for submitting an observation request. Several fields are highlighted with blue dashed circles to indicate their importance:

- DR2 GAIA ID**: The field contains the value "DR2 6838684821851122048201".
- RA Proper Motion**: The field contains the value "7.099".
- Dec. Proper Motion**: The field contains the value "-4.361".
- Parallax**: The field contains the value "5.607".
- Target V magnitude**: The field contains the value "11.5103".

Other visible fields include: Comment, Target Name (Kepler-106), Right Ascension (288.652720), Declination (43.95800), Temperature (16100), and Proprietary Period (First Visit: 10, Last Visit: 12).

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).



The screenshot shows a form with several input fields. The field 'Minimum Observing Efficiency [%]' is circled in blue. The values entered are: Visit Duration [CHEOPS orbit]: 30; Number Of Visits: 7; Minimum Observing Efficiency [%]: 50; Earliest Start Date [BJD_TDB]: 2459053.845; Latest End Date [BJD_TDB]: 2459063.845; Transit Time [BJD_TDB]: 2454944.8450; Transit Period [day]: 129.9459; Earliest Start Phase: 0.991; Latest Start Phase: 0.995.

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. -->

```

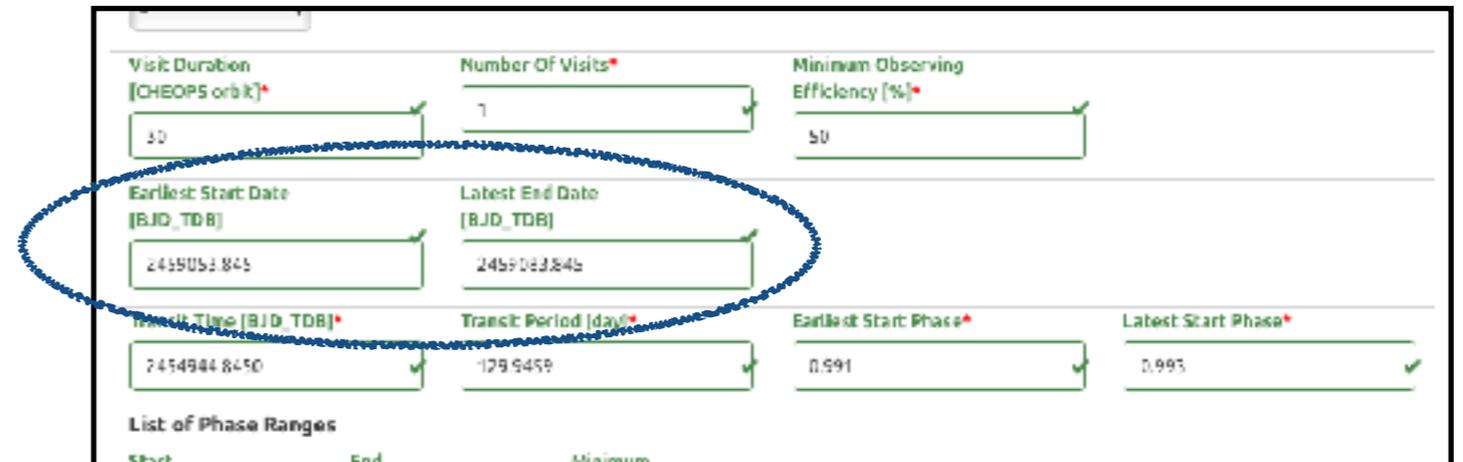
As the observing efficiency is mainly driven by the target location in the sky, it is highly **recommended** to set the requested observing efficiency to a rather low value, **typically 50%**, for all targets, except if the science case requires very high observing efficiency (assuming this efficiency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

Fill in the Observation Request

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

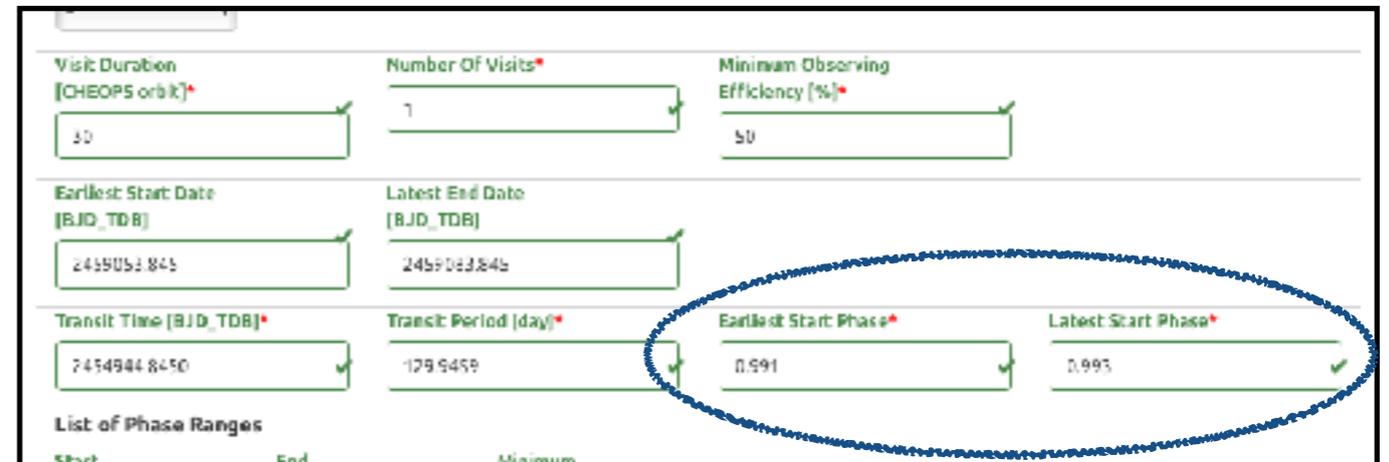
This might be useful for “catching” specific transits, typically for TTVs.

This parameter is optional.



Visit Duration [CHEOPS orbit]*	Number Of Visits*	Minimum Observing Efficiency [%]*	
30	7	50	
Earliest Start Date [BJD_TDB]	Latest End Date [BJD_TDB]		
2459053.845	2459063.845		
Transit Time [BJD_TDB]*	Transit Period [day]*	Earliest Start Phase*	Latest Start Phase*
2454944.8450	129.9459	0.991	0.995
List of Phase Ranges			
Start	End	Minimum	

Fill in the Observation Request



- **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):

```

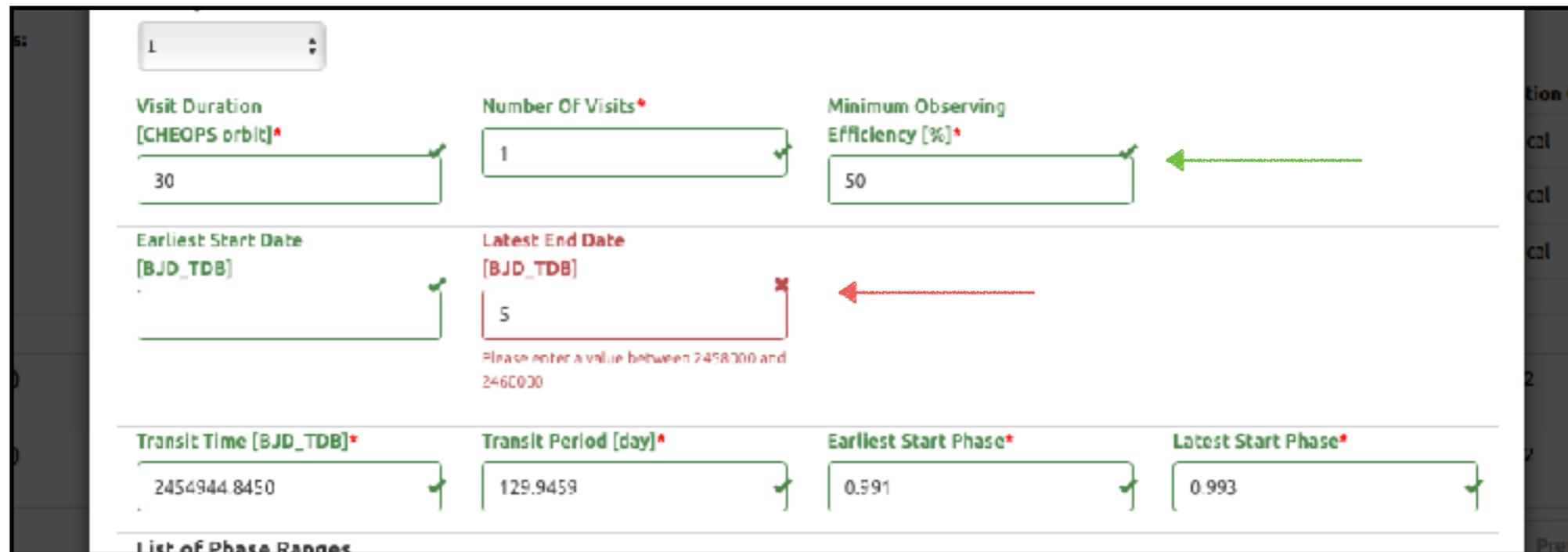
<!-- This parameter defines the flexibility of a visit start time in units of planetary orbital phase. -->
<!-- Two values are defined to bound the allowed start time of the visit. -->
<!-- NOTE: Leaving no slack for the observation start time reduces the chance of being scheduled -->
<!-- NOTE: Requesting 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.

Fill in the Observation Request

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



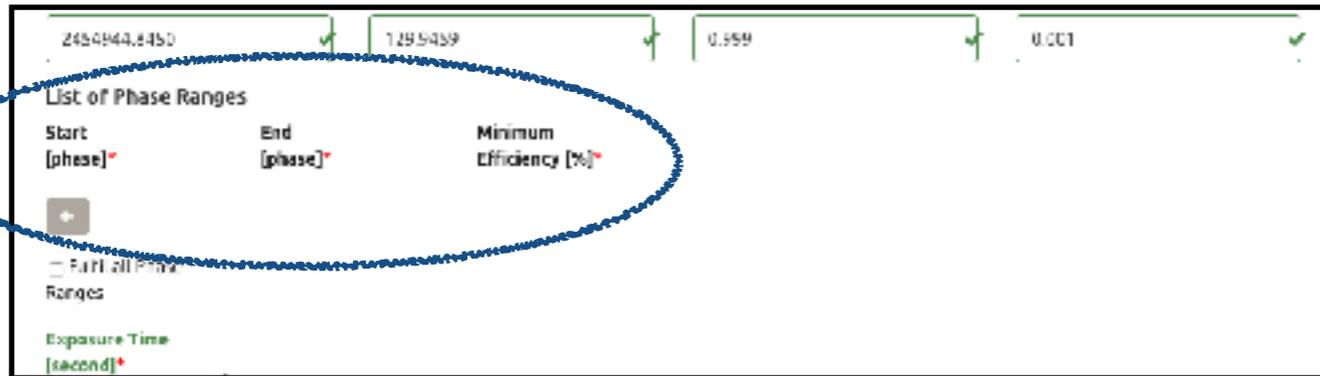
The screenshot shows a web form with several input fields. A dropdown menu at the top left shows the value '1'. The form is organized into rows and columns:

- Row 1:**
 - Visit Duration [CHEOPS orbit]*:** Input field with value '30' and a green checkmark.
 - Number OF Visits*:** Input field with value '1' and a green checkmark.
 - Minimum Observing Efficiency [%]*:** Input field with value '50' and a green checkmark. A green arrow points to this field from the right.
- Row 2:**
 - Earliest Start Date [BJD_TDB]:** Input field with a green checkmark.
 - Latest End Date [BJD_TDB]:** Input field with value '5' and a red 'X' mark. A red arrow points to this field from the right. Below the field, a red error message reads: "Please enter a value between 2458000 and 2460000".
- Row 3:**
 - Transit Time [BJD_TDB]*:** Input field with value '2454944.8450' and a green checkmark.
 - Transit Period [day]*:** Input field with value '129.9459' and a green checkmark.
 - Earliest Start Phase*:** Input field with value '0.591' and a green checkmark.
 - Latest Start Phase*:** Input field with value '0.993' and a green checkmark.

At the bottom left of the form, there is a link labeled "List of Phase Ranges".

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.

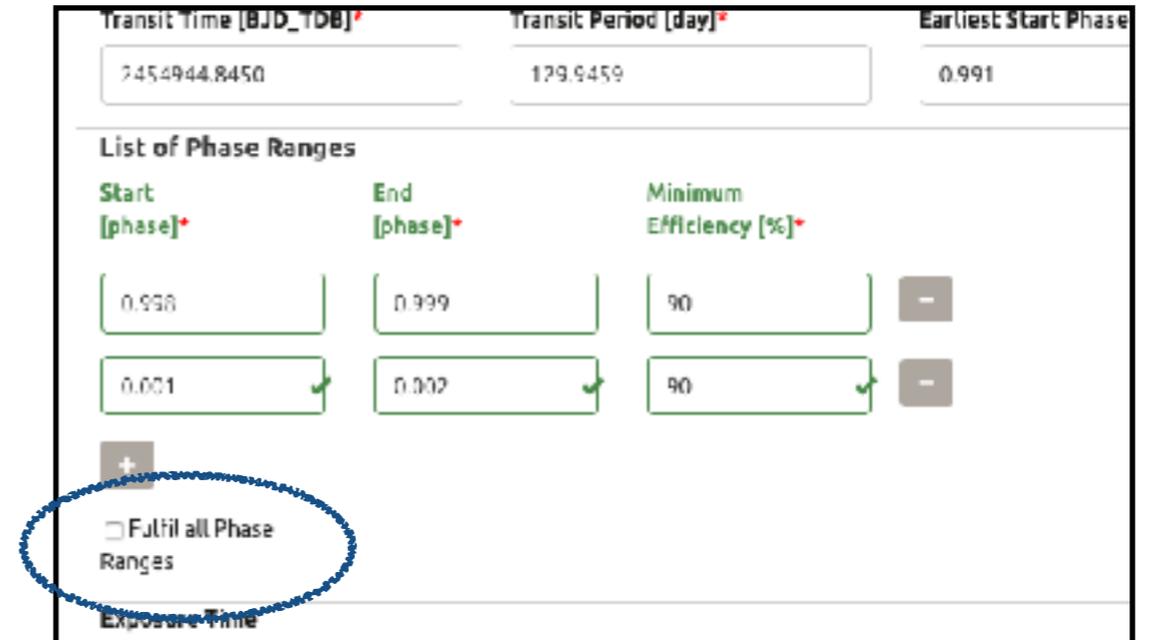


Transit Time [BJD_TDB]*: 2454944.8450
 Transit Period [day]*: 129.9459
 Earliest Start Phase: 0.991

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

Fulfill all Phase Ranges

Exposure Time [second]*



Transit Time [BJD_TDB]*: 2454944.8450
 Transit Period [day]*: 129.9459
 Earliest Start Phase: 0.991

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

Fulfill 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.**

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]*

Send Data Taken During Earth Constraints

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 exposure, introducing a significant decrease of the duty cycle, calculated as $d = t_{exp} / (t_{exp} + 1.1)$ 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	$48.8 \leq f < 48.8$	$8.3 \leq d < 12$
$0.15 \leq t_{exp} < 0.2$	38	3	$45 \leq f < 48.8$	$12 \leq d < 15.4$
$0.2 \leq t_{exp} < 0.4$	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.

Exposure Time Calculator

Input Parameters

Total Time: min

Magnitude (range): - mag

Declination: deg

Right Ascension: (minutes) (optional) deg

Declination: (degrees) (optional) deg

Exposure Time: s

Additional Parameters

Expanded Read-Out Mode (EROM)

Readout: s

Spectroscopy/Imaging/Warning

Warning: s

Exposure time guidelines

Minimum suggested exposure time: 10% of full well capacity.

Maximum suggested exposure time: 90% of full well capacity, or the time needed to fill out the detector to 90% of its maximum capacity, whichever is the smaller value.

MAGN	MINIMUM EXPOSURE TIME [s]	MAXIMUM EXPOSURE TIME [s]
5	0.01	0.18
6.5	0.01	0.40
7	0.10	0.96
7.5	0.15	1.32
8	0.25	2.40
8.5	0.30	3.61
9	0.62	6.01
9.5	0.96	9.57
10	1.58	15.14
10.5	2.48	24.03
11	3.88	36.09
11.5	6.10	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.

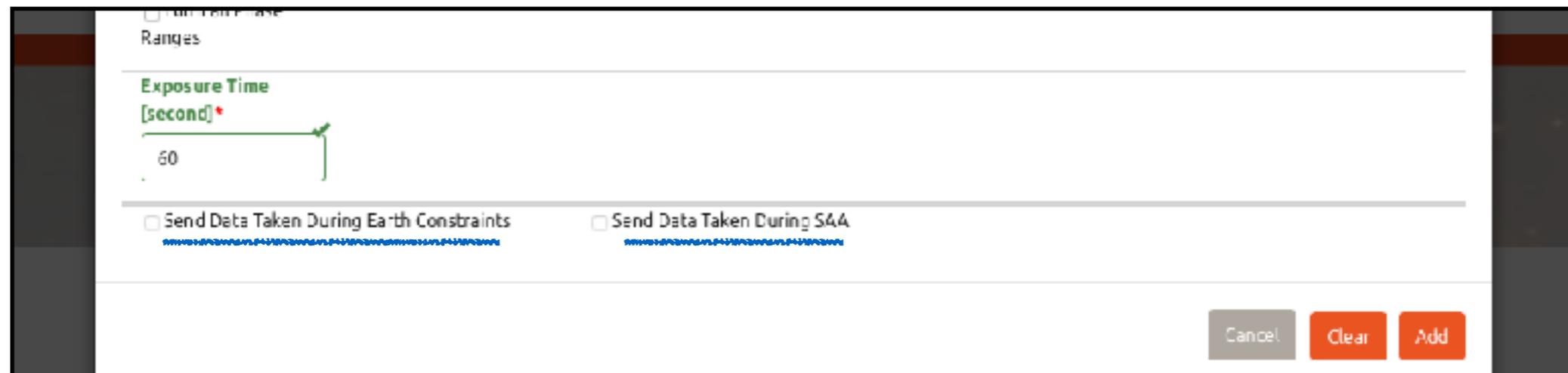
Maximum exposure time
The suggested maximum exposure time for a non-saturated image corresponds to the time in seconds needed to fill 90% of the full well capacity at the highest peak of the PSF. We suggest that for bright stars the exposure time is chosen close (or equal) to the maximum suggested exposure time. The smallest maximum possible exposure time is 60 seconds.

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 creating an observation request. The 'Ranges' section is visible, containing an 'Exposure Time' field set to 60 seconds. Below this, there are two radio buttons: 'Send Data Taken During Earth Constraints' and 'Send Data Taken During SAA', both of which are currently unselected. At the bottom right of the form, there are three buttons: 'Cancel', 'Clear', and 'Add'.

Finalise the Observation Request

Once your observation request is complete, please:

Click “Add”

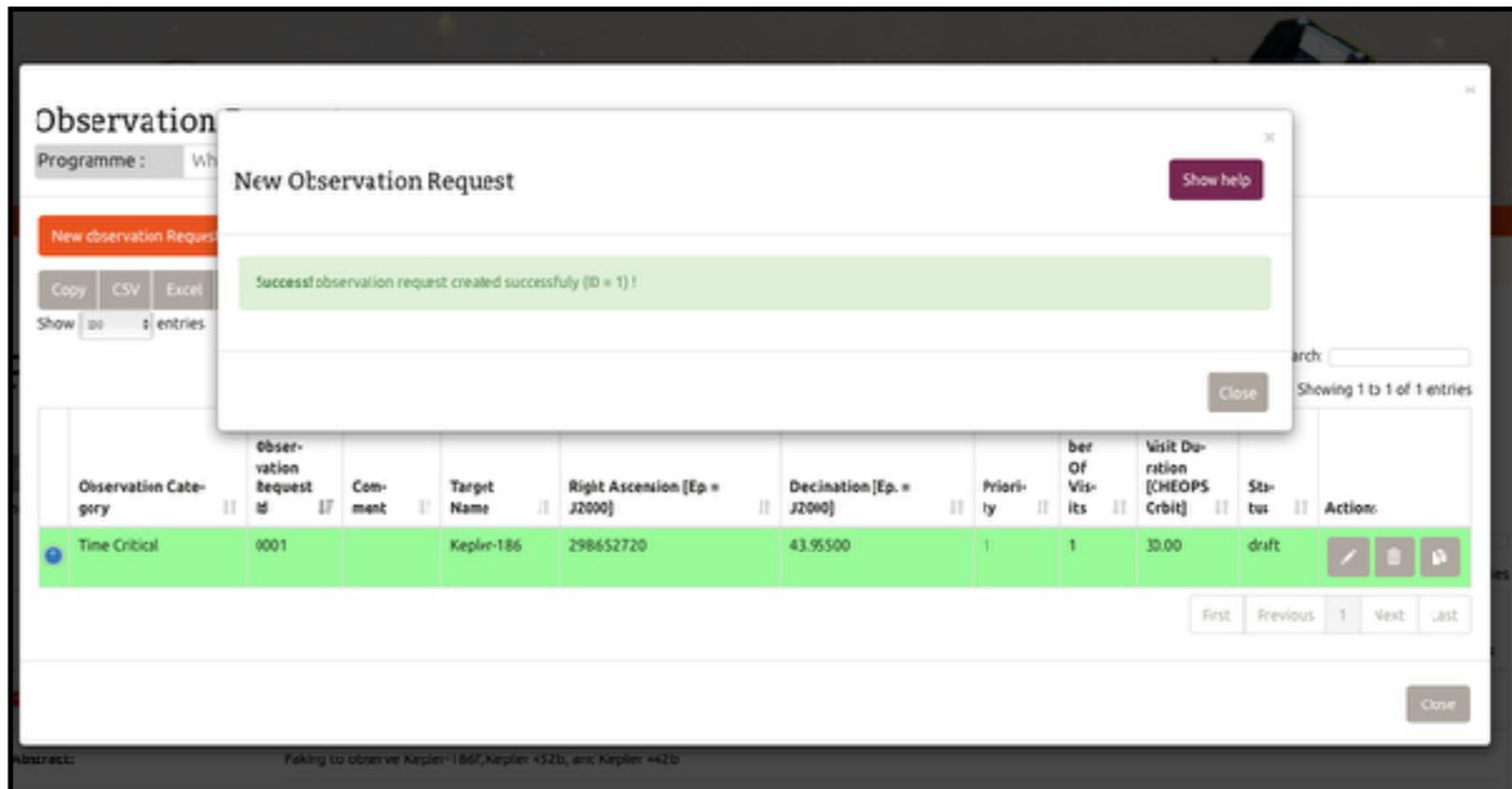
The screenshot shows a web-based form for submitting an observation request. The form is titled "Observation" and includes the following fields and sections:

- Observation Category ID:** Time Critical
- Comment:** (Empty text area)
- WFSCAM ID [YR12 xxxxxxx]:** 002.60064482185111204800
- RA Pointer [deg. = J2000]:** 214.657720
- Declination [deg. = J2000]:** 43.31520
- Target Name [I.A. Dec.]:** Kepler 130 (210.651704, 43.95500)
- RA Pointer Motion [mas/yr]:** 2.219
- Decl. Pointer Motion [mas/yr]:** -4.168
- PSBLK [mas]:** 5.600
- Target V magnitude:** 11.908
- Target V magnitude error:** 0.1
- Target Effective Temperature [K]:** 5400
- Special Type:** KEPLER130
- Propository Period First Visit [months]:** 18
- Propository Period Last Visit [months]:** 12
- Priority:** 1
- Visit Duration [CHEOPS orbit]:** 26
- Number of Visits:** 1
- Minimum Observing Efficiency [%]:** 50
- Earliest Start Date [BJD_TDB]:** 2458251.845
- Latest End Date [BJD_TDB]:** 2458283.845
- Transit Time [BJD_TDB]:** 2458261.845
- Transit Duration [day]:** 1.79819
- Radius Star Mass:** 0.991
- Planet Star Mass:** 0.991
- List of Phase Ranges:**

Start [phase]	End [phase]	Minimum Efficiency [%]
0.998	0.999	20
0.801	0.802	20
- Exposure Time [second]:** 10
- Buttons:** Cancel, Add (circled in blue), and a partially visible "Clear" button.

Finalise the Observation Request

The new Observation Request now appears in the list



The screenshot shows a web interface for managing observation requests. A modal dialog box titled 'New Observation Request' is open, displaying a green success message: 'Success! observation request created successfully (ID = 1) !'. Below the dialog, a table lists the observation requests. A blue arrow points to the first entry in the table.

Observation Category	Observation Request ID	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number of Visits	Visit Duration [CHEOPS Crbit]	Status	Action
Time Critical	0001		Kepler-186	298652720	43.95500	1	1	30.00	draft	[Edit] [Delete] [Share]

Complete your programme

Your newly created Observation Request now appears in the list

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

The screenshot shows the 'Observation Requests' interface. At the top, there are filters for Programme ('What if the Kepler field were visible'), Type ('Guest Observer(2)'), and ID ('0005'). Below the filters is a 'New observation Request' button and a toolbar with 'Copy', 'CSV', 'Excel', 'PDF', and 'Print' options. A 'Show 100 1 entries' dropdown is also present. The main table has the following columns: Observation Category, Observation Request ID, Comment, Target Name, Right Ascension [Ep. = J2000], Declination [Ep. = J2000], Priority, Number of Visits, Visit Duration [CHEOPS Orbit], Status, and Actions. The first row is highlighted in green and contains the following data: 'Time Critical', '0001', empty, 'Kepler-185', '298.652720', '43.35500', '1', '1', '30.00', and 'PHT'. The 'Actions' column for this row contains three icons: a pencil (Edit), a trash can (Delete), and a document with a plus sign (Clone). These three icons are circled in blue. At the bottom right of the table, there are navigation buttons: 'First', 'Previous', '1', 'Next', and 'Last'. A 'Close' button is located at the bottom right of the interface.

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-185	298.652720	43.35500	1	1	30.00	PHT	  

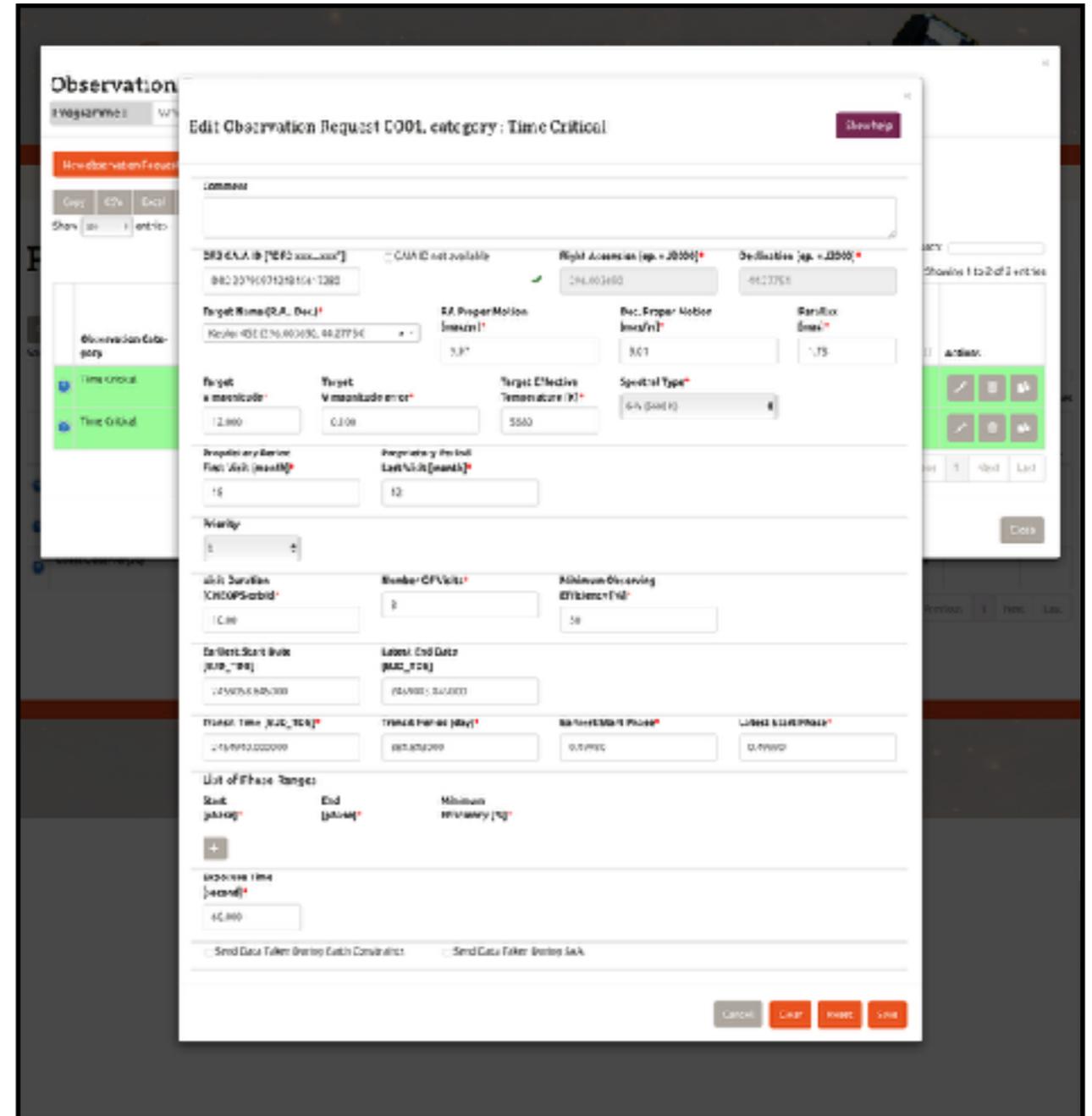
Complete your programme



Cloning an observation

request creates a new observation request (new ID) with fields pre-filled with values from the parent request.

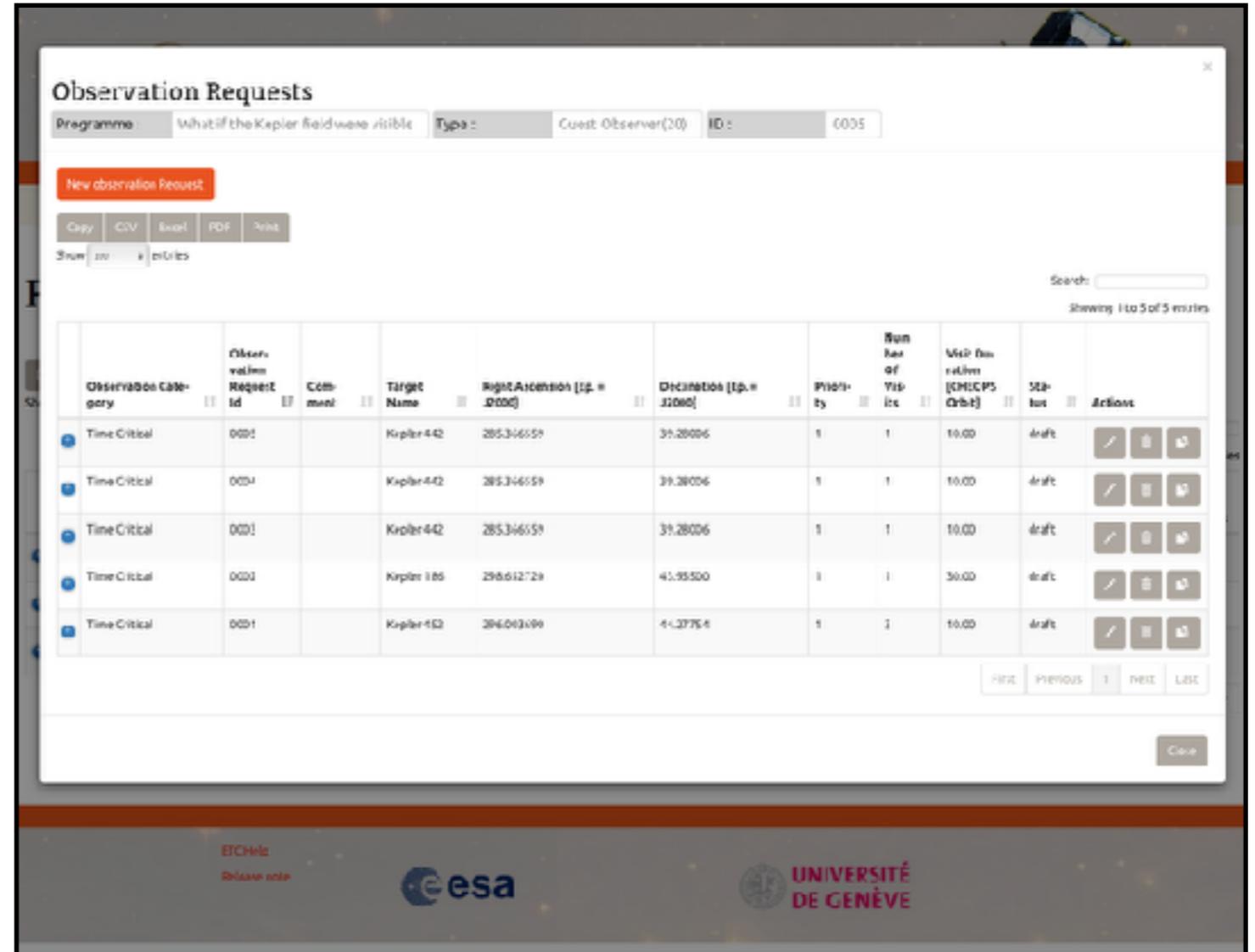
This may be used to speed up the creation of observation requests if only a few parameters change with respect to existing requests.



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



The screenshot shows the 'Observation Requests' interface. At the top, the programme is 'What if the Kepler field were visible', Type is 'Guest Observer(20)', and ID is '0005'. There is a 'New observation Request' button and a toolbar with 'Copy', 'CSV', 'Excel', 'PDF', and 'Print' options. A search bar is on the right. The main table lists 5 requests, all with 'Time Critical' category and 'draft' status. The table columns are: Observation Category, Observation Request Id, Comment, Target Name, Right Ascension [J2000], Declination [J2000], Priority, Number of Visits, Visit duration [CHEOPS Orbit], Status, and Actions.

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [J2000]	Declination [J2000]	Priority	Number of Visits	Visit duration [CHEOPS Orbit]	Status	Actions
Time Critical	0001		Kepler 442	285.346559	39.28006	1	1	10.00	draft	[edit] [delete] [refresh]
Time Critical	0001		Kepler 442	285.346559	39.28006	1	1	10.00	draft	[edit] [delete] [refresh]
Time Critical	0001		Kepler 442	285.346559	39.28006	1	1	10.00	draft	[edit] [delete] [refresh]
Time Critical	0001		Kepler 186	298.612729	41.95500	1	1	30.00	draft	[edit] [delete] [refresh]
Time Critical	0001		Kepler 182	284.043499	41.27754	1	1	10.00	draft	[edit] [delete] [refresh]

Navigation: FIRST, PREVIOUS, 1, NEXT, LAST. A 'Close' button is at the bottom right.

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*
10	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 [%]*
	3	3	50
	Earliest Start Date [BJD_TDB]	Latest End Date [BJD_TDB]	

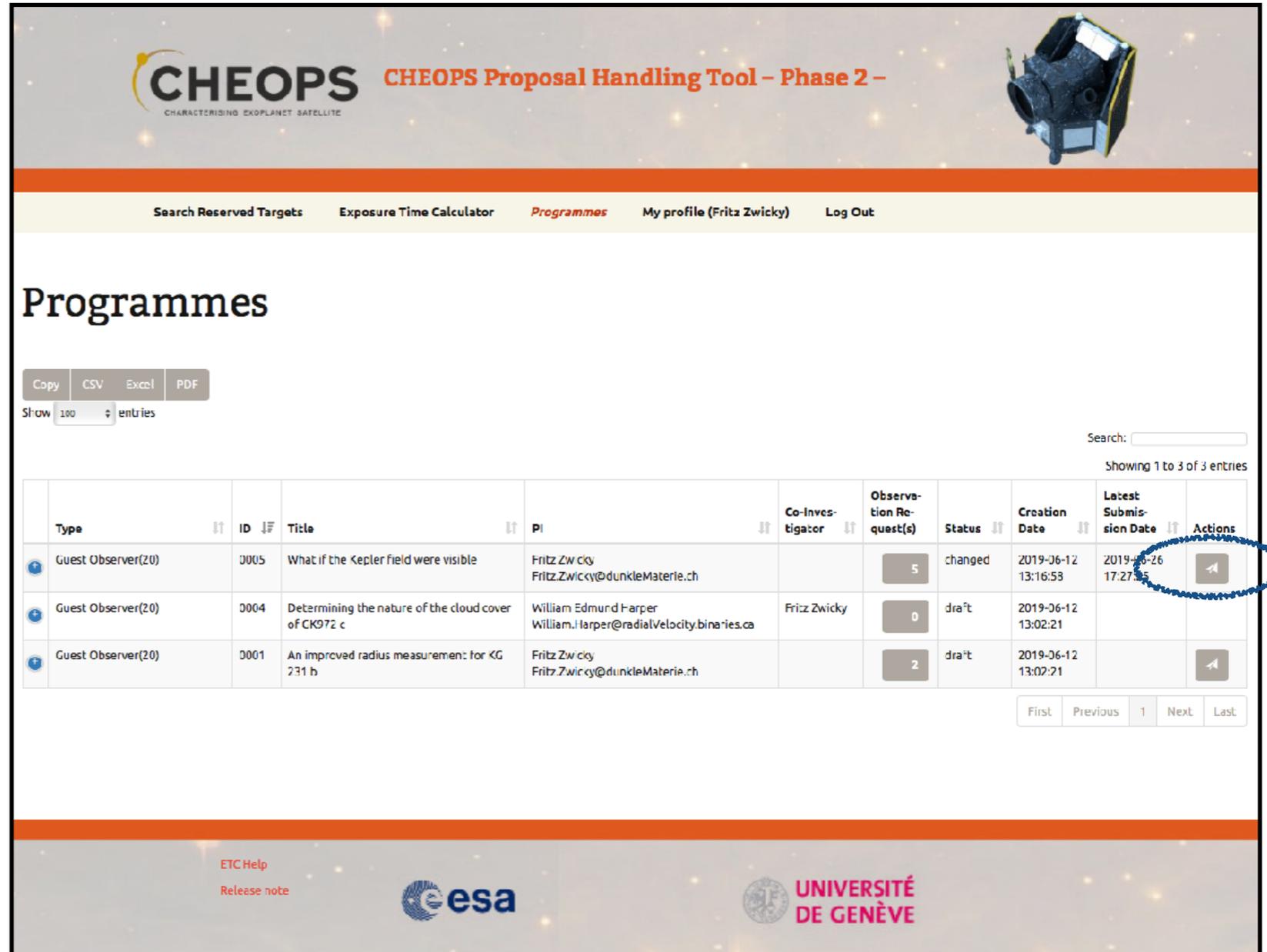
$$3 \times 4 = 12 > 10 \quad \text{— Not OK}$$

Visit Duration [CHEOPS orbit]*	Number OF Visits*
3	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).

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. The interface includes a header with the CHEOPS logo and navigation links like 'Search Reserved Targets', 'Exposure Time Calculator', and 'Programmes'. Below the header, there are options to export data (Copy, CSV, Excel, PDF) and a search bar. The main content is a table listing three programmes, each with a submit icon in the 'Actions' column. The first programme, ID 0005, is circled in blue.

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 13:16:53	2019-06-26 17:27:55	
Guest Observer(20)	0004	Determining the nature of the cloud cover of CK972 c	William Edmund Harper William.J.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		

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!

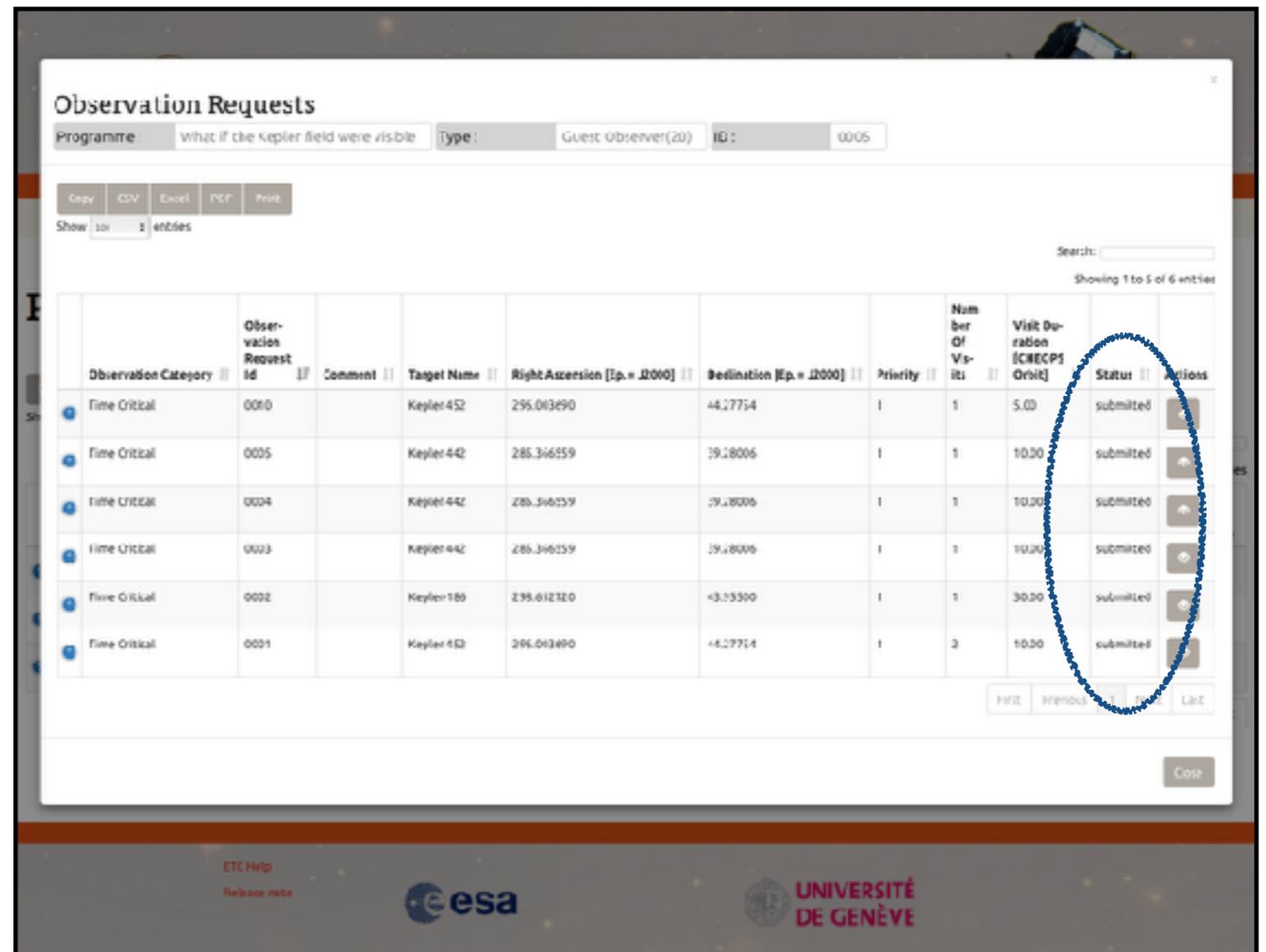
Date of submission is recorded. Status changes to “Submitted”.

The screenshot shows a web interface for submitting programmes. A modal dialog box is open, titled "Submit Programme: Type 20 (Guest Observer), ID 0005". The dialog contains a warning message: "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." There are "Cancel" and "Submit" buttons at the bottom of the dialog, with the "Submit" button circled in blue. Below the dialog is a table of programmes with columns: type, ID, title, PI, Co-Investigator, Observation Requests, status, Creation date, Latest Submission date, and Actions. The first row is highlighted in green and has its "Latest Submission date" cell circled in blue. The table shows three entries, all of type "Guest Observer(10)".

type	ID	title	PI	Co-Investigator	Observation Requests	status	Creation date	Latest Submission date	Actions
Guest Observer(10)	0005	What if the Kepler field were visible	Fritz Zwicky Fritz.zwicky@dunkleMaterie.ch		6	submitted	2019-06-13:16:58	2019-06-27 09:51:50	
Guest Observer(10)	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(10)	0001	An improved radius measurement for KG 231 b	Fritz Zwicky Fritz.zwicky@dunkleMaterie.ch		2	draft	2019-06-12 13:02:21		

Submit your programme

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



The screenshot displays the 'Observation Requests' interface. At the top, there are filters for 'Programme' (What if the Kepler field were visible), 'Type' (Guest Observer(20)), and 'ID' (0005). Below the filters are buttons for 'Copy', 'CSV', 'Excel', 'PDF', and 'Print', and a 'Show 101 2 entries' indicator. A search bar is located on the right. The main content is a table with the following columns: Observation Category, Observation Request Id, Comment, Target Name, Right Ascension [Ep. = J2000], Declination [Ep. = J2000], Priority, Number Of Visits, Visit Duration [CRECPS Orbit], Status, and Actions. The table contains six rows of data, all with a status of 'submitted'. A blue dashed circle highlights the 'submitted' status and the 'Actions' column for the first row.

Observation Category	Observation Request Id	Comment	Target Name	Right Ascension [Ep. = J2000]	Declination [Ep. = J2000]	Priority	Number Of Visits	Visit Duration [CRECPS Orbit]	Status	Actions
Time Critical	0000		Kepler 452	295.063490	44.27714	1	1	5.00	submitted	
Time Critical	0005		Kepler 442	285.366559	39.18006	1	1	10.00	submitted	
Time Critical	0004		Kepler 442	285.366559	39.18006	1	1	10.00	submitted	
Time Critical	0003		Kepler 442	285.366559	39.18006	1	1	10.00	submitted	
Time Critical	0002		Kepler 180	235.612320	-3.13300	1	1	30.00	submitted	
Time Critical	0001		Kepler 452	295.063490	44.27714	1	2	10.00	submitted	

At the bottom of the interface, there are links for 'ETC Help' and 'Feedback note', and logos for 'esa' and 'UNIVERSITÉ DE GENÈVE'. A 'Close' button is located at the bottom right.

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.