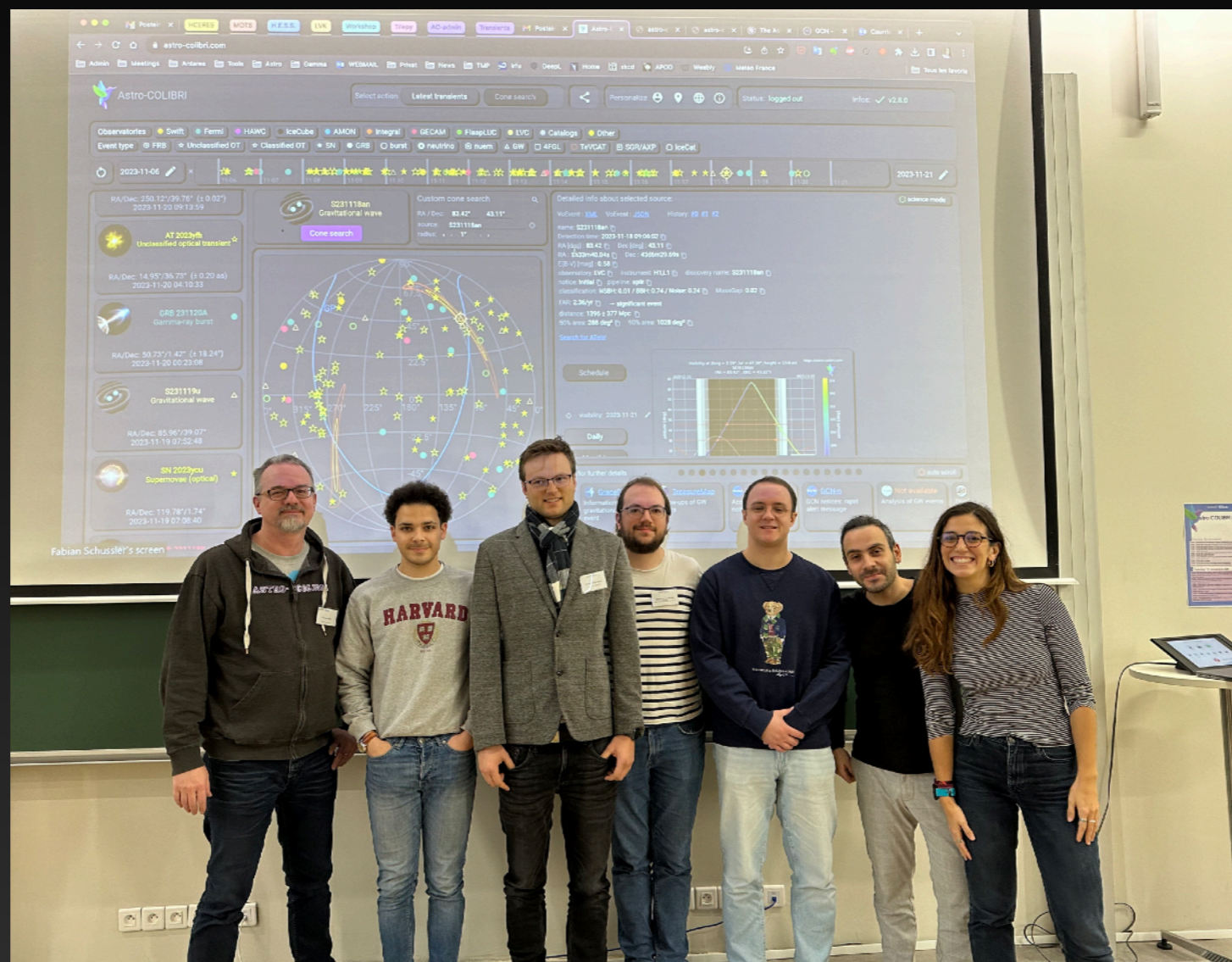




Astro-COLIBRI



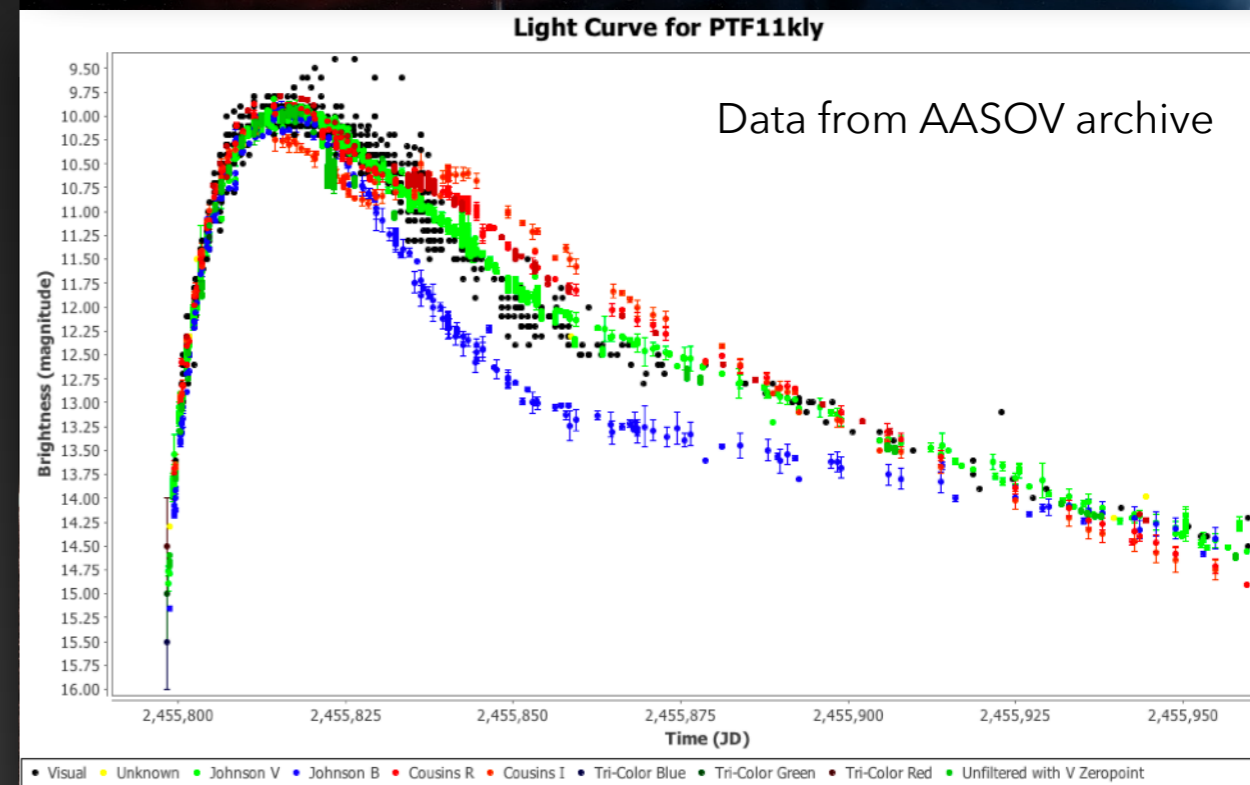
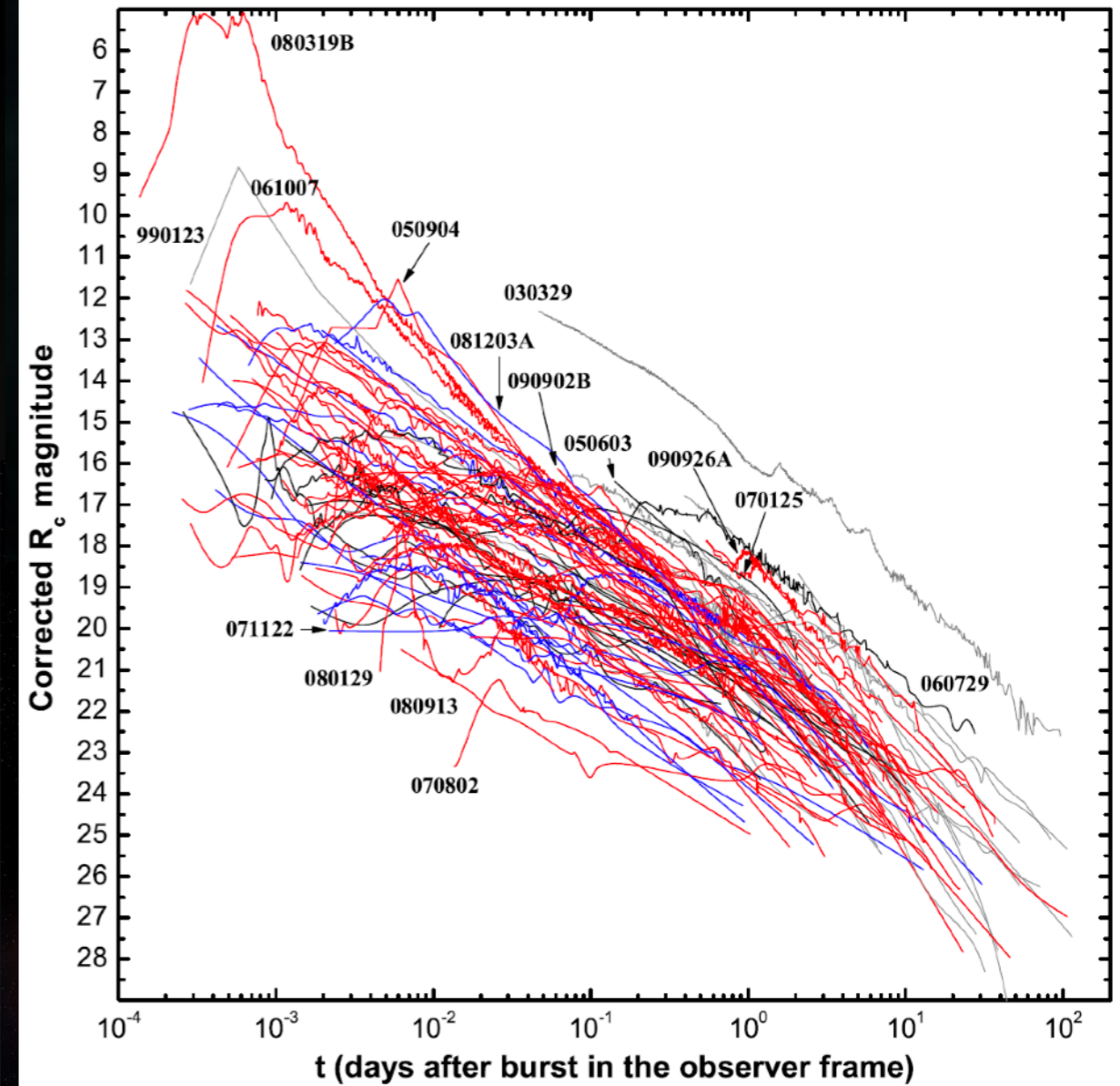
Fabian Schüssler (IRFU, CEA Paris-Saclay)



Astronomie des phénomènes transitoires

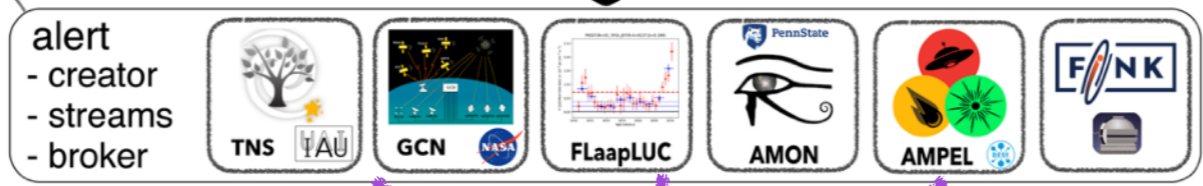
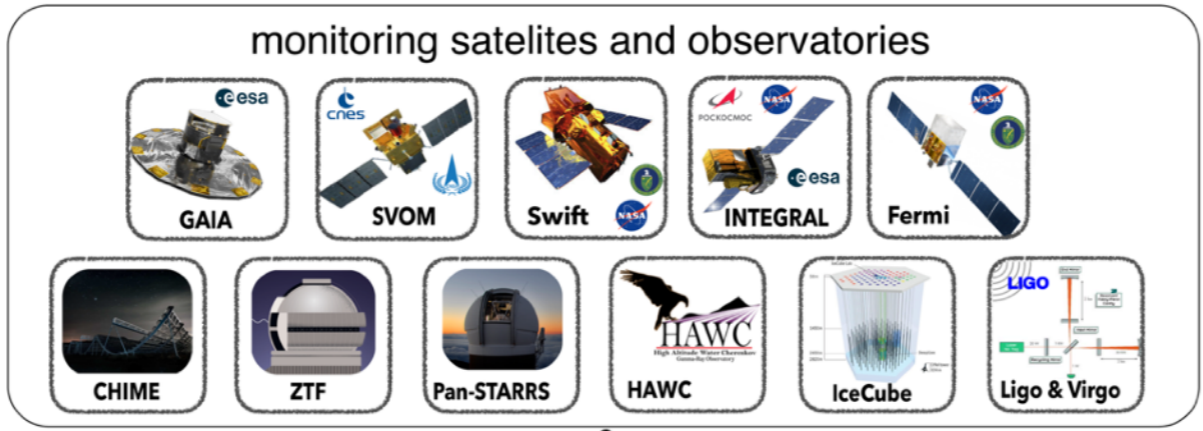
Les phénomènes les plus violents de l'univers

- Supernovae + sursauts gamma
- Novae + CV + TDE + ...
- Sursauts radio rapides
- Étoiles à neutrons, magnetars, ...
- **Phénomènes multi-messagers**

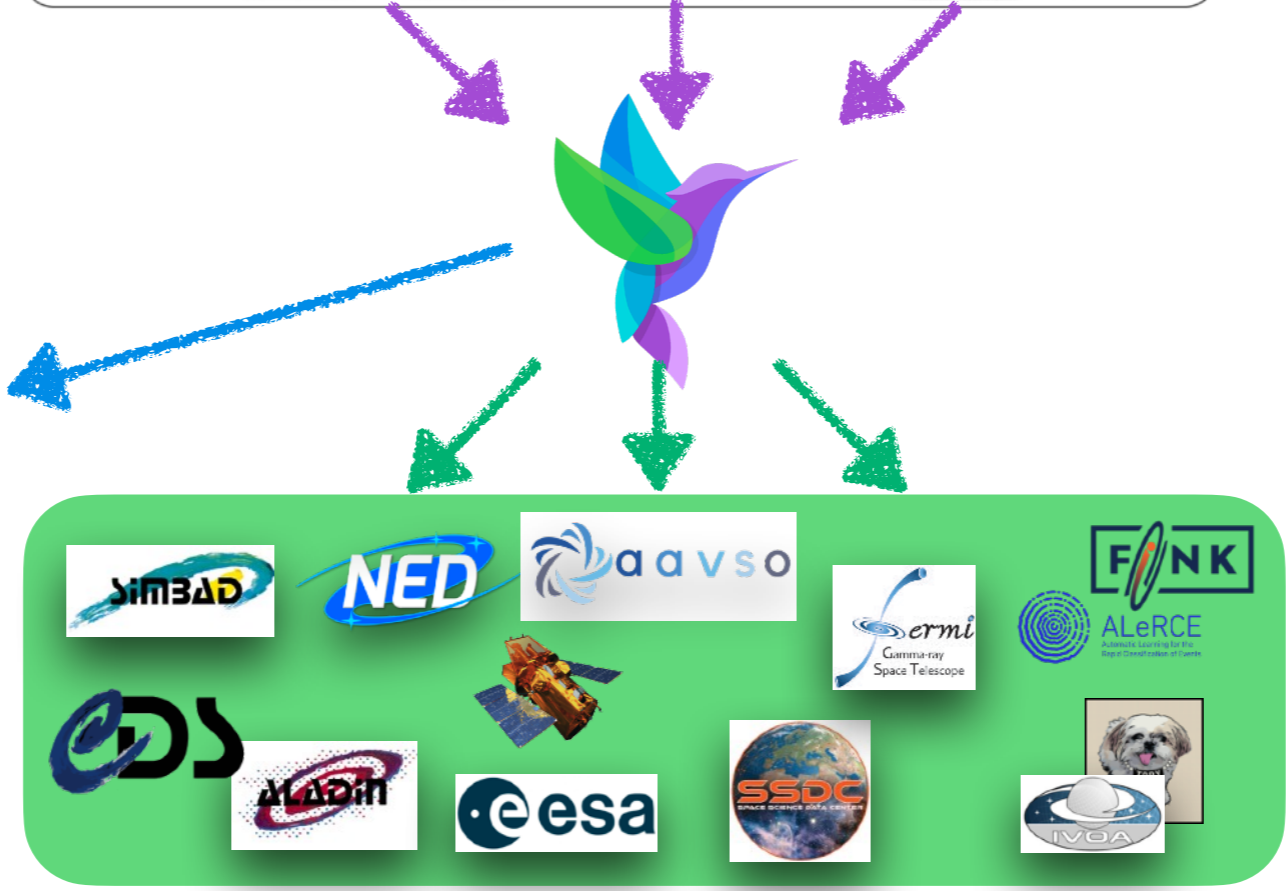




photons, GWs, ν , (CRs)



follow-up-observ.





Interfaces graphiques

Observatories: Swift, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FlapLUC, LVC, Catalogs, Other
Event type: FRB, Unclassified OT, Classified OT, SN, GRB, burst, neutrino, nuem, GW, 4FGL, TeVCAT, SGR/AXP, IceCat

2023-11-08 | 2023-11-23

S231123cg Gravitational wave
RA/Dec: 243.63°/44.20°
2023-11-23 13:54:30

GRB 231123A Gamma-ray burst
RA/Dec: 83.78°/-19.57° (± 9.16°)
2023-11-23 02:44:04

GRB 231122A Gamma-ray burst
RA/Dec: 106.16°/21.30° (± 1.59°)
2023-11-22 15:12:41

GRB 231122A Gamma-ray burst
RA/Dec: 108.45°/-5.54° (± 3.82°)
2023-11-22 12:44:22

RXJ131058 8+923335 GeV flare

Custom cone search
RA / Dec: 243.63° / 44.2°
source: S231123cg
radius: 1°

Detailed info about selected source:
name: S231123cg
Detection time: 2023-11-23 13:54:30
RA (deg): 243.63 Dec (deg): 44.20
RA: 16h14m30.49s Dec: 44d12m5.51s
observatory: LVC instrument: H1L1 discovery name: S231123cg
classification: BBH: 1.00

Gravitational waves are distortions of space-time. They are generated by all accelerated masses but their amplitude that only the most massive objects in the universe create waves that are sufficiently powerful to be detected by the current generation of instruments. This event has been recorded by both Advanced LIGO laser interferometers, likely due to the merger of two black holes.

Learn more about GWs: [link](#)
Discuss this event on Twitter: [@AstroColibri](#)



<https://astro-colibri.com>

Astro-COLIBRI

MS230110g
RA/Dec: 122.34° / 23.89°
2023-01-10 06:05:42

SN 2022bf
RA/Dec: 20.86° / 49.97°
2022-01-03 21:07:12

GRB 220103A
RA/Dec: 36.86° / -15.70°
error: 8.4°
2022-01-03 21:03:12

HAWC-220103A
RA/Dec: 156.33° / 1.83°
error: 0.599°
2022-01-03 08:01:56

Visibility at H.E.S.S.
lat=-23.27°, long=16.5°, h=1835.0m

Weather:
Forecast Seeing Sky view

Daily visibility
Source location: (RA = 112.7°, DEC = 9.6°)

Monthly visibility
2022



Android + iOS

Cone ...
ra=77.43°, ...

Astro-COLIBRI

Source info
ed: GRB 220107A
a.gsfc.gcn/Fermi#GBM_Fin_Pos2
5.31.93_663259536_0-516
168.17° / 34.98°
11h12m40.8s / 34d58m48.0s
ory: Fermi
nce: 68.3 σ
t: long GRB

Visibility at H.E.S.S.
lat=-23.27°, long=16.5°, h=1835.0m

Notifications

Gravitational waves, click here: ^

- All GW alerts
- Significant GW alerts
- NS/NSBH GW alerts
- Well localized GW alerts

Optical transients, click here: ^

- Optical transients: SNe
- Optical transients: other
- Bright optical transients (mag < 18)
- Unistellar: bright and early optical transients
- GRB alerts
- Neutrino alerts
- FlaapLUC (Fermi-LAT alerts)
- Burst alerts
- Special targets (e.g. TCrB)
- Astro-COLIBRI announcements

Real-time notifications

- Bright optical transients (mag < 18)
- Unistellar: bright and early optical transients

- Special targets (e.g. TCrB)
- Astro-COLIBRI announcements



Les derniers transitoires

Astro-COLIBRI interface showing a list of transients and a detailed view of S231123cg.

Observatories: Swift, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FlaapLUC, LVC, Catalogs, Other

Event type: FRB, Unclassified OT, Classified OT, SN, GRB, burst, neutrino, nuem, GW, 4FGL, TeVCAT, SGR/AXP, IceCat

Timeline: 2023-11-08 to 2023-11-23

Selected source: S231123cg Gravitational wave

Custom cone search: RA / Dec: 243.63° 44.2°
source: S231123cg
radius: 1°

Detailed info about selected source:

name: S231123cg
Detection time: 2023-11-23 13:54:30
RA [deg]: 243.63 Dec [deg]: 44.20
RA: 16h14m30.49s Dec: 44d12m5.51s
observatory: LVC instrument: H1,L1 discovery name: S231123cg
classification: BBH: 1.00

Gravitational waves are distortions of space-time! They are generated by all accelerated masses but their amplitude is so tiny that only the most massive objects in the universe create waves that are sufficiently powerful to be detected by the current generation of instruments. This event has been recorded by both Advanced LIGO laser interferometers. It is most likely due to the merger of two black holes.

Learn more about GWs: [link](#)

Discuss this event on Twitter: [@AstroColibri](#)

Links for further details:

- GraceDB: Information on the gravitational wave event
- TreasureMap: Follow-ups of GW events
- ALADIN: Displays event in an interactive sky atlas
- ESASky: Displays event in an interactive sky atlas
- TNS: Transient Name Server



Timeline + Filters

The screenshot displays the Astro-COLIBRI web interface. At the top, there is a navigation bar with the Astro-COLIBRI logo, a search bar, and various action buttons like 'Select action', 'Latest transients', and 'Cone search'. Below this is a filter bar with buttons for 'Observatories' (Swift, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FlaapLUC, LVC, Catalogs, Other) and 'Event type' (FRB, Unclassified OT, Classified OT, SN, GRB, burst, neutrino, nuem, GW, 4FGL, TeVCAT, SGR/AXP, IceCat). A timeline at the top shows dates from 2023-11-08 to 2023-11-23, with a yellow highlight around the filter bar and timeline area. The main content area is divided into several panels: a left sidebar with event cards for 'S231123cg Gravitational wave', 'GRB 231123A Gamma-ray burst', 'Gamma-ray burst', 'GRB 231122A Gamma-ray burst', and 'RXJ131058.8+323335 GeV flare'; a central 'Cone search' panel with a sky map showing a search region; and a right panel with 'Detailed info about selected source' for S231123cg, including detection time, coordinates, and classification. At the bottom right, there are links for further details from external sources like GraceDB, TreasureMap, ALADIN, ESASky, and TNS.



Filtrer les phénomènes

Astro-COLIBRI interface showing a search filter overlay. The overlay is titled "Other" and contains the following options:

- Everything else
- observatory == Gaia
- observatory == ZTF
- observatory == ATLAS
- observatory == Pan-STARRS
- observatory == MASTER

The background interface displays a sky map with various astronomical events and a list of event details on the left:

- S231123cg** Gravitational wave (RA/Dec: 243.63°/44.20°, 2023-11-23 13:54:30)
- GRB 231123A** Gamma-ray burst (RA/Dec: 83.78°/-19.57° (± 9.16°), 2023-11-23 02:44:04)
- Gamma-ray burst** (RA/Dec: 106.16°/-21.30° (± 1.59°), 2023-11-22 15:12:41)
- GRB 231122A** Gamma-ray burst (RA/Dec: 108.45°/-5.54° (± 3.82°), 2023-11-22 12:44:22)
- RXJ131058.8+323335** GeV flare

Additional interface elements include a top navigation bar with "Select action", "Latest transients", and "Cone search"; a filter bar with "Observatories" (Swift, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FlaapLUC, LVC, Catalogs, Other) and "Event type" (FRB, Unclassified OT, Classified OT, SN, GRB, burst, neutrino, nuem); and a bottom section with "Links for further details" including GraceDB, TreasureMap, ALADIN, ESASky, and TNS.



Filtrer les phénomènes

The screenshot displays the Astro-COLIBRI web interface. At the top, there's a navigation bar with 'Select action' (Latest transients, Cone search), 'Personalize', and 'Status: logged out'. Below this is a filter bar for 'Observatories' (Swift, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FlaapLUC, LVC, Catalogs, Other) and 'Event type' (FRB, Unclassified OT, Classified OT, SN, GRB, burst, neutrino, nuem, GW, 4FGL, TeVCAT, SGR/AXP, IceCat). A date range is set to '2023-11-23'. A search filter overlay is active, showing 'Unclassified OT' with 'Everything else' and 'Unistellar' checked, and 'Magnitude <= 18.0'. The main content area features a sky map with a 'Cone search' for 'S231123cg Gravitational wave' centered at RA/Dec: 243.63° / 44.2° with a radius of 1°. A detailed info panel for this source is visible, including detection time (2023-11-23 13:54:30), RA/Dec (243.63 / 44.20), and classification (BBH: 1.00). A list of other events is shown on the left, including GRB 231123A, GRB 231122A, and RXJ131058.8+323335. At the bottom, there are links for further details from GraceDB, TreasureMap, ALADIN, ESASky, and TNS.



Définition des observatoires

Astro-COLIBRI interface showing the "Location of observer" configuration panel. The panel is titled "Location of observer" and contains the following text: "The observability is calculated for an observer at custom position: long = 2.15°, lat = 48.72°, height = 0m. You can change the observer location by choosing one of the following observatories".

The observatories are categorized into three groups:

- Radio:** ALMA, ASKAP, ATCA, MWA, Nançay, Murriyang/Parkes
- Optical:** Jilin, Keck, Mount Wilson, OHP, Palomar, SALT, San Pedro Mártir, VLT Paranal, Victor M
- High energy:** HAWC, H.E.S.S., LHAASO, LST, MAGIC, VERITAS

Under "My observatories:", there is a button for "saclay" with a red 'x' icon to remove it.

The "Additional settings" section is expanded, showing the following values:

Parameter	Value
longitude	5.39478
latitude	43.30548
altitude [m]	40
FoV [deg]	0.1
Zenith limit [deg]	45
name	Marseille
moon fraction [0-1]	1.0
obs. duration [min]	30

At the bottom of the settings panel, there are two buttons: "Select coordinates" and "Save observatory".

The background shows a detailed view of a source (S231123cg) with various parameters like detection time, RA, Dec, and classification. A purple arrow points from the location pin icon in the top navigation bar to the "Location of observer" panel.



Filtrer les phénomènes

Astro-COLIBRI interface showing a search filter overlay for the event S240530a.

Observatories: Swift, SVOM, HESS, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FlaapLUC, LVC, Catalogs, Other

Event type: FRB, Unclassified OT, Classified OT, SN, GRB, burst, neutrino, nuem, GW, 4FGL, TeVCAT, SGR/AXP, IceCat

Filter overlay (general):

- Observatory visibility 45
- Retracted
- Sun distance > 0
- Everything else
- Fink
- Ampel
- Unistellar

Event S240530a details:

- Gravitational wave
- RA/Dec: 322.73°/6.77°
- 2024-05-30 01:24:17
- Instrument: H1,L1,V1
- Discovery name: S240530a
- Line: pycbc
- MassGap: 0.08
- Significant event
- 90% area: 190 deg²

Left sidebar events:

- AT 2024jxb: Unclassified optical transient (2024-05-30 06:35:30)
- S240530a: Gravitational wave (2024-05-30 01:24:17)
- AT 2024jxg: Unclassified optical transient (2024-05-29 15:22:00)
- AT 2024jvr: Classified optical transient (2024-05-29 10:29:54)
- AT 2024jro: Unclassified optical transient

Bottom right links: GraceDB, TreasureMap, GCN Viewer, GCN-n



Plans d'observations



Astro-COLIBRI Select action Latest transients Cone search Share Download Personalize Status: **logged out** Infos: **✓ v2.9.1**

Observatories: Swift Fermi HAWC IceCube AMON Integral GECAM FlaapLUC LVC Catalogs Other

Event type: FRB Unclassified OT Classified OT SN GRB burst neutrino nuem GW 4FGL TeV CAT SGR/AXP IceCat

2023-12-01 12-01 12-03 12-05 12-07 12-09 12-11 12-13 12-15 12-17 12-19 12-21 12-23 12-25 12-27 12-29 12-31

RA/Dec: 189.84°/39.64°
2024-01-17 02:59:50

S231213ap_tile_012
tilepy

RA/Dec: 146.43°/2.69°
2024-01-17 03:59:50

S231213ap_tile_013
tilepy

RA/Dec: 195.64°/41.81°
2024-01-17 04:29:50

S231213ap_tile_014
tilepy

RA/Dec: 144.84°/-1.94°
2024-01-17 04:59:50

S231213ap_tile_015
tilepy

RA/Dec: 140.80°/-5.08°
2024-01-17 05:29:50

S231213ap
Gravitational wave

Latest transients

Custom cone search
source: S231213ap
RA / Dec: 170.95° 29.83°
error: < 0.00° >

observatory: LVC instrument: H1,L1 discovery name: S231213ap
notice: Update pipeline: pycbc
classification: BBH: 1.00
FAR: 0.02/yr → significant event
distance: 3861 ± 1257 Mpc
50% area: 356 deg² 90% area: 1451 deg²

[Search for ATels!](#)

Discuss this event in our forum:

The following observation plan is proposed by [tilepy.com](#)
It covers 44.8% of the GW localisation uncertainty region.
Full details: [JSON](#)

Schedule

visibility: 2024-01-21

ID	coverage [%]	RA [deg°]	Dec [deg]
S231213ap_tile_000	0.88	140.27	-0.15
S231213ap_tile_001	3.41	158.03	19.16
S231213ap_tile_002	3.96	169.45	28.80
S231213ap_tile_003	3.79	165.23	25.45

weather: [observatory](#) [forecast](#) [seeing](#)
sky view: [HeavensAbove](#)

Links for further details

- [GraceDB](#) Information on the gravitational wave event
- [TreasureMap](#) Follow-ups of GW events
- [GCN Viewer](#) Access to GCN notices and circulars
- [GCN-n](#) GCN notices: rapid alert message
- [GW_Fermi-LAT](#) Analysis of GW events



Le ciel (trop) transitoire

~300 nouveau détections par semaine
comment choisir quelques évènements intéressants et accessibles?

The screenshot displays the Astro-COLIBRI web interface. At the top, there are navigation buttons for 'Latest transients' and 'Cone search', along with utility icons for personalization, location, globe, moon, and info. The status bar indicates the user is logged in as 'fabian.sch' and the version is 'v2.12.1'. Below this, there are filters for 'Observatories' (Swift, SVOM, HESS, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FlaapLUC, LVC, Catalogs, Other) and 'Event type' (FRB, Unclassified OT, Classified OT, SN, GRB, burst, neutrino, nuem, GW, 4FGL, TeVCAT, SGR/AXP, IceCat). A timeline shows the date '2024-04-10' to '2024-04-25'. On the left, a list of events includes:

- S240422ed** Gravitational wave (RA/Dec: 170.95°/9.01°, 2024-04-25 06:03:23)
- S240425y** Gravitational wave (RA/Dec: 334.15°/-55.11°, 2024-04-25 05:00:13)
- GRB 240425A** Gamma-ray burst (RA/Dec: 227.67°/46.68° (± 3.63°), 2024-04-25 00:21:20)
- AT 2024hfg** Unclassified optical transient (RA/Dec: 320.90°/19.12°, 2024-04-24 11:55:56)
- RXJ131058.8+323335** GeV flare (RA/Dec: 197.76°/32.56° (± 0.04°), 2024-04-24 10:02:23)

The central part of the interface features a sky map with a 'Custom cone search' for source 'S240422ed' at RA/Dec: 123.31° -26.07° with a 0.00° error. The map shows a dense field of yellow stars and triangles, with a blue cone search area centered on the target. On the right, 'Detailed info about selected source:' for S240422ed is shown, including detection time (2024-04-22 21:35:13), RA/Dec (123.31, -26.07), sun distance (96.27), E(B-V) (0.14), observatory (LVC), instrument (H1,L1,V1), discovery name (S240422ed), notice (Update), pipeline (gstlal), classification (NSBH: 1.00, HasNS: 1.00, MassGap: 0.34), FAR (9.77e-6/yr), distance (188 ± 43 Mpc), and area (50% area: 72 deg², 90% area: 258 deg²). A 'visibility' graph for H.E.S.S. is also visible. At the bottom, there are links for 'Start follow-up campaigns' and buttons for 'GraceDB', 'TreasureMap', 'GCN Viewer', and 'GCN alert'.



Communauté

Select action

Latest transients

Cone search



Personalize



Status: **logged out**

Infos: ✓ v2.9.1

Observatories Swift Fermi HAWC IceCube AMON Integral GECAM FlaapLUC LVC Catalogs Other

Event type FRB Unclassified OT Classified OT SN GRB burst neutrino nuem GW 4FGL TeVCAT SGR/AXP IceCat



Share "deep-links" to a selected event



Download all selected events



Discussion forum

API: <https://astro-colibri.science>

First version of an OpenAI GPT ChatBot



Liste d'évènements "phares"

<https://forum.astro-colibri.science/c/rapas>

Semaine N-1

SN 2024bch	66%
AT 2024eff	66%
SN 2024eib	66%
V4370 Oph	66%
SN 2024elf	33%
Swift J151857.0-572147	0%
OP 313	0%
IC 310	0%
PNV J17261813-3809354	0%
SN 2024ech	0%

3 voters
9 total votes

Semaine N-1

astro.colibri 5d

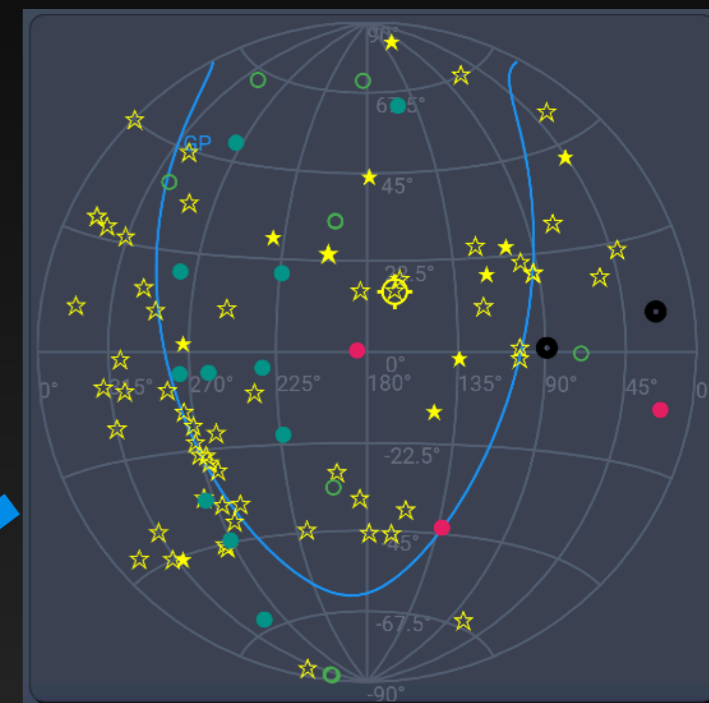
New Astrophysical Transient Alert: AT 2024eyn

We invite all amateur astronomers to participate in the follow-up observations of this exciting new transient event. For more details, including visibility and coordinates, please visit the Astro-COLIBRI platform: [Astro-COLIBRI](#)

Alerte Nouvel Événement Transitoire Astrophysique : AT 2024eyn

Nous invitons tous les astronomes amateurs à participer aux observations de suivi de ce nouvel événement transitoire passionnant. Pour plus de détails, y compris la visibilité et les coordonnées, veuillez visiter la plateforme Astro-COLIBRI : [Astro-COLIBRI](#)

Semaine N-1



Une nouvelle liste est créée le vendredi après-midi

Semaine N

Envoi à RAPAS@groups.io

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> SN 2024bch | <input type="checkbox"/> AT 2024eyn |
| <input type="checkbox"/> AT 2024eff | <input type="checkbox"/> IceCube-240327B |
| <input type="checkbox"/> V4370 Oph | <input type="checkbox"/> IceCube-240327A |
| <input type="checkbox"/> SN 2024eib | <input type="checkbox"/> AT 2024exw |
| <input type="checkbox"/> SN 2024elf | |



Astro-COLIBRI / RAPAS observation list (2024-03-29) ➔



astro.colibri@gmail.com
an mich ▾

Chers membres du réseau RAPAS,

Nous sommes ravis d'annoncer une nouvelle liste de cibles astronomiques pour l'observation !

Veuillez visiter le lien suivant pour voir les détails : ["RAPAS observation list starting 2024-03-29"](#)

Ciels dégagés,
L'équipe Astro-COLIBRI



Astro-COLIBRI

- Les nouveaux filtres permettent un affichage plus personnalisé
- Propositions d'améliorations ?
 - Filtres
 - Notifications
 - ...
- Forum de discussion: <https://forum.astro-colibri.science>
 - Annonces des développeurs + discussions d'améliorations
 - Mise en avant de quelques événements intéressantes
 - Forum de discussion RAPAS
 - ...



Astro-COLIBRI

Contact: astro.colibri@gmail.com

- Central webpage: [**https://astro-colibri.science**](https://astro-colibri.science)

Android Play Store



Apple iOS App Store

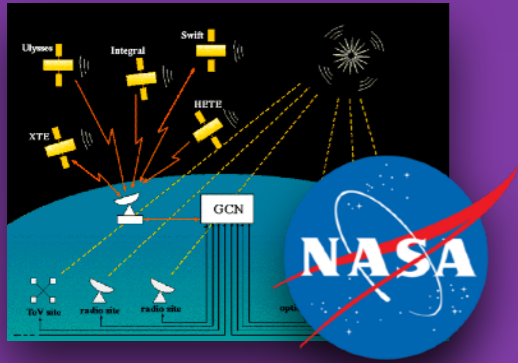


Introductions/tutorials on YouTube

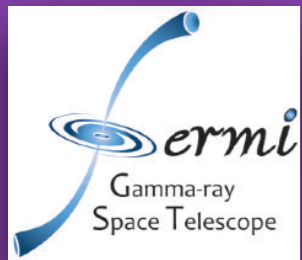
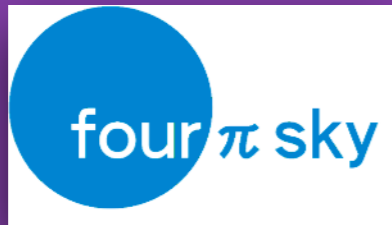


Twitter: @AstroColibri
astrodon.social/@astro_colibri

Main idea



TRANSIENT NAME SERVER



...



...



Recherches d'événements

Astro-COLIBRI interface showing event search results for IceCube-230405A Neutrino.

Navigation: Select action | Latest transients | Cone search | Personalize | Status: logged out | Infos: v2.4.2

Filters: Observatories: Swift, Fermi, HAWC, IceCube, AMON, Integral, GECAM, FLAapLUC, LVC, other. Event type: FRB, OT, SN, GRB, burst, neutrino, nuem, GW, 4FGL, TeVCAT, SGR/AXP, IceCat.

Timeline: 2023-03-01 to 2023-04-07

Event Details (IceCube-230405A Neutrino):

- RA/Dec: 120.85°/9.75°
- Detection time: 2023-04-05 13:20:20
- Localisation: RA [deg]: 120.85, Dec [deg]: 9.75
- RA: 8h3m23.98s, Dec: 9d45m0s
- error [deg]: 2.9700
- observatory: IceCube
- notice: Bronze
- FAR: 2.84/yr, P_astro: 0.30, E: 110.43 TeV

Custom cone search: RA / Dec: 120.85° 9.75°, source: IceCube-230405A, radius: 2.97°

Search for ATels!

Visibility Graph: Visibility at H.E.S.S. IceCube-230405A (RA = 120.8°, DEC = 9.8°) for 2023-06-15. Shows depth [deg] vs. width [deg].

Links for further details: GCN.Viewer, GCN-n, GCN-c, ALADIN, ESASky, Brok time class.



Ondes gravitationnelles

Astro-COLIBRI Select action Latest transients Cone search Personalize Status: logged out Infos: v2.4.2

Observatories: Swift Fermi HAWC IceCube AMON Integral GECAM FLaapLUC LVC other
Event type: FRB OT SN GRB burst neutrino nuem GW 4FGL TeV CAT SGR/AXP IceCat
2023-05-31 05-31 06-01 06-02 06-03 06-04 06-05 06-06 06-07 06-08 06-09 06-10 06-11 06-12 06-13 06-14 06-15 2023-06-15

- S230615an**
Gravitational wave
RA/Dec: 170.02°/-46.96°
2023-06-15 13:35:22
- S230615ak**
Gravitational wave
RA/Dec: 272.29°/3.28°
2023-06-15 13:25:23
- S230615af**
Gravitational wave
RA/Dec: 317.71°/52.99°
2023-06-15 12:54:10
- S230615t**
Gravitational wave
RA/Dec: 156.97°/-20.42°
2023-06-15 10:21:29
- S230615k**
Gravitational wave



Detailed info about selected source: science mode

VoEvent: [XML](#) [JSON](#) History: [#0](#) [#1](#) [#2](#) [#3](#)

name: S230601bf
Detection time: 2023-06-01 22:41:34
RA [deg]: 307.97 Dec [deg]: -40.82
RA : 20h31m52.5s Dec : -40d49m1.38s
observatory: LVC instrument: H1,L1 discovery name: S230601bf
notice: Update pipeline: spsir
classification: BBH: 1.00
FAR: 5.41e-8/yr → significant event
distance: 3565 ± 1260 Mpc
50% area: 907 deg² 90% area: 2497 deg²

[Search for ATels!](#)

[Schedule](#)

visibility: 2023-06-15

[Daily](#) [Monthly](#)

Visibility at H.E.S.S.
S230601bf
(RA = 308.0°, DEC = -40.8°)

Links for further details auto scroll

- [GraceDB](#)
Information on the gravitational wave event
- [TreasureMap](#)
Follow-ups of GW events
- [GCN Viewer](#)
Access to GCN notices and circulars
- [GCN-n](#)
GCN notices: rapid alert message
- [ALADIN](#)
Displays event in an interactive sky atlas



Informations détaillées

Astro-COLIBRI interface showing detailed information for a selected source. The interface includes a top navigation bar with options like 'Select action', 'Latest transients', 'Cone search', 'Personalize', and 'Status: logged out'. A central panel displays the following details:

Detailed info about selected source:
VoEvent : [XML](#) VoEvent : [JSON](#) History: [#0](#) [#1](#) [#2](#) [#3](#)
name: S230601bf
Detection time: 2023-06-01 22:41:34
RA [deg] : 307.97 Dec [deg] : -40.82
RA : 20h31m52.5s Dec : -40d49m1.38s
observatory: LVC instrument: H1,L1 discovery name: S230601bf
notice: Update pipeline: spiiir
classification: BBH: 1.00
FAR: $5.41e-8/\text{yr}$ → significant event
distance: 3565 ± 1260 Mpc
50% area: 907 deg² 90% area: 2497 deg²
[Search for ATels!](#)

A 'Schedule' button is highlighted with a purple dashed border. Below the main panel, there is a 'Visibility at H.E.S.S.' plot showing altitude and azimuth over time, and two buttons for 'GraceDB' and 'TreasureMap'.

<https://astro-colibri.com>



Plan d'observation

Astro-COLIBRI Select action Latest transients Cone search Personalize Status: logged out Infos: v2.4.2

Observatories: Swift Fermi HAWC IceCube AMON Integral GECAM FLaapLUC LVC other

Event type: FRB OT SN GRB burst neutrino nuem GW 4FGL TeV CAT SGR/AXP IceCat

2023-05-31 05-31 06-01 06-02 06-03 06-04 06-05 06-06 06-07 06-08 06-09 06-10 06-11 06-12 06-13 06-14 06-15 2023-06-15

S230601bf_tile_015 tilepy △
RA/Dec: 22.37°/-58.35° (± 2.00°)
2023-06-16 03:36:11

S230601bf_tile_014 tilepy △
RA/Dec: 337.13°/-56.06° (± 2.00°)
2023-06-16 03:06:11

S230601bf_tile_013 tilepy △
RA/Dec: 300.59°/-33.33° (± 2.00°)
2023-06-16 02:36:11

S230601bf_tile_012 tilepy △
RA/Dec: 14.91°/-59.30° (± 2.00°)
2023-06-16 02:06:11

S230601bf_tile_011 tilepy △



Detailed info about selected source: science mode

VoEvent: [XML](#) [JSON](#) History: [#0](#) [#1](#) [#2](#) [#3](#)

name: S230601bf
Detection time: 2023-06-01 22:41:34
RA [deg]: 307.97 Dec [deg]: -40.82
RA : 20h31m52.5s Dec : -40d49m1.38s
observatory: LVC instrument: H1,L1 discovery name: S230601bf
notice: Update pipeline: spsir
classification: BBH: 1.00
FAR: 5.41e-8/yr → significant event
distance: 3565 ± 1260 Mpc
50% area: 907 deg² 90% area: 2497 deg²

[Search for ATels!](#)

The following observation schedule is proposed by tilepy. It covers 11.8% of the GW localisation uncertainty region.

Schedule Full details: [JSON](#)

visibility	ID	coverage [%]	RA [deg ²]	Dec [deg]
2023-06-15	S230601bf_tile_000	0.14	285.82	-17.74
	S230601bf_tile_001	0.64	288.81	-8.69

Daily Monthly

Links for further details auto scroll

- [GraceDB](#) Information on the gravitational wave event
- [TreasureMap](#) Follow-ups of GW events
- [GCN Viewer](#) Access to GCN notices and circulars
- [GCN-n](#) GCN notices: rapid alert message
- [ALADIN](#) Displays event in an interactive sky atlas

<https://astro-colibri.com>

<https://tilepy.com>



Astro-COLIBRI

- Astro-COLIBRI: plateforme automatique et gratuite pour accéder aux détections de phénomènes transitoires
 - supernovae, sursauts gamma, sursauts radio, neutrinos de haute énergie, **ondes gravitationnelles**, ...
 - interfaces: <https://astro-colibri.com> + Android + iOS
 - une API centrale et publique: <https://astro-colibri.science>
- References
 - P. Reichherzer et al., ApJS 256 5, 2021 ([link](#)) + Galaxies 11(1), 2022 ([link](#))



Architecture

