

CSC BA Tools Quick Guide (V2.0)

**Prepared by Han Xuhui, Xiao Yujie and Zhang Pinpin on behalf of
the SUSS development team at CSC**

For BA Training

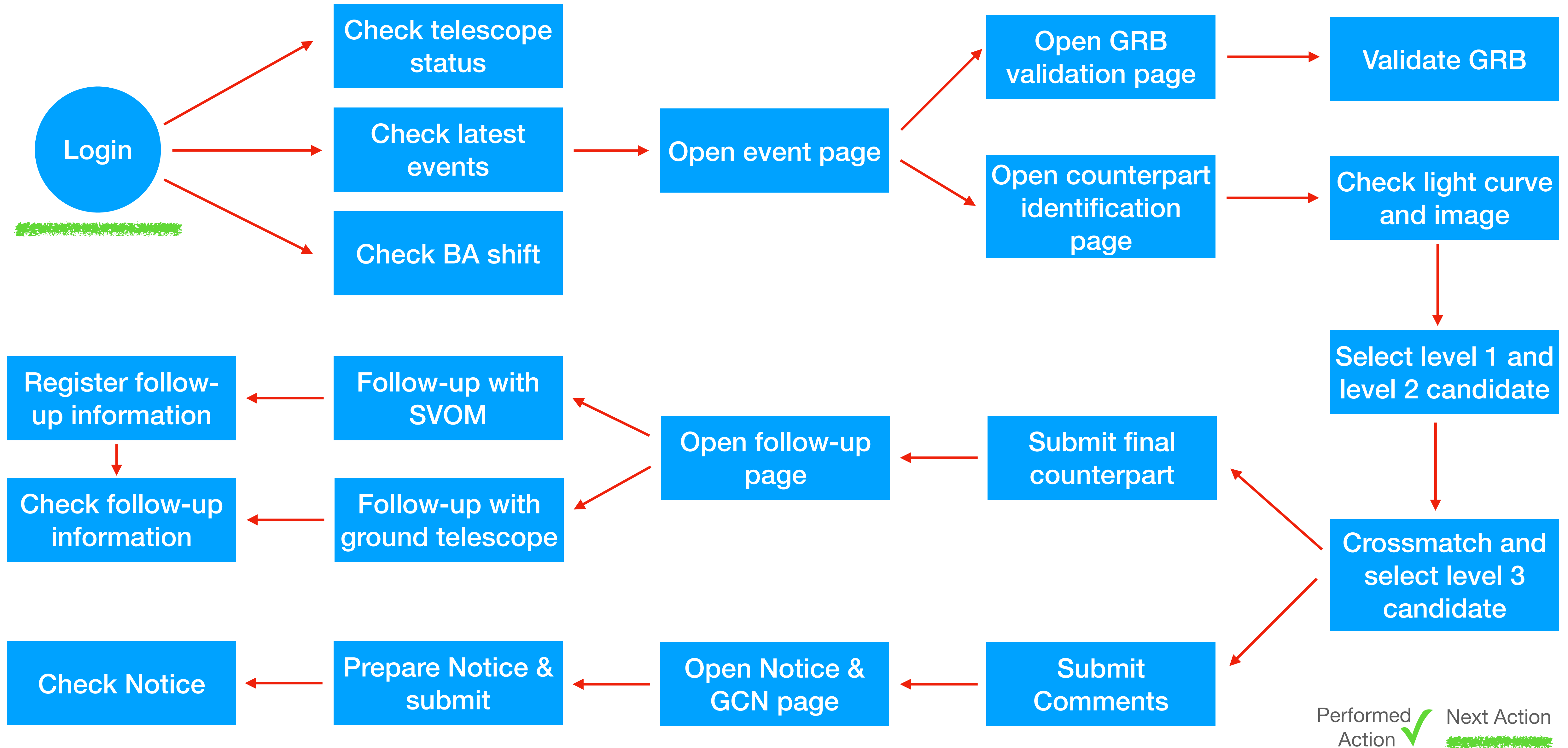
The functions available in CSC BA tools

1. Login
2. BA Shift
3. GRB/GW event list
4. Details of GRB
5. GRB event validation
6. Optical counterpart identification for GRB in CGFT images and VT images (partially)
7. Follow-up observation organization for SVOM onboard instruments and CGFT
8. SVOM Notice preparation for CGFT
9. SVOM Circular preparation for VT and CGFT

The functions under development

- Real-time status of follow-up telescopes
- Data visualisation for data stream
- Optical counterpart identification for ToO-MM
- Follow-up observation organization for extended telescopes such as LCOGT
- Follow-up data uploads
- GCN Circular preparation

Working with CSC BA tools



1. Login

SVOM IFSC SVOM MC SVOM CSC SVOM

SVOM Science User Support System

Screenshot

SUSS HOME NEWS OBSERVING WITH SVOM HELP LOGIN REGISTER

Username or Email

Password

FIND PASSWORD SIGN UP CONTACT US

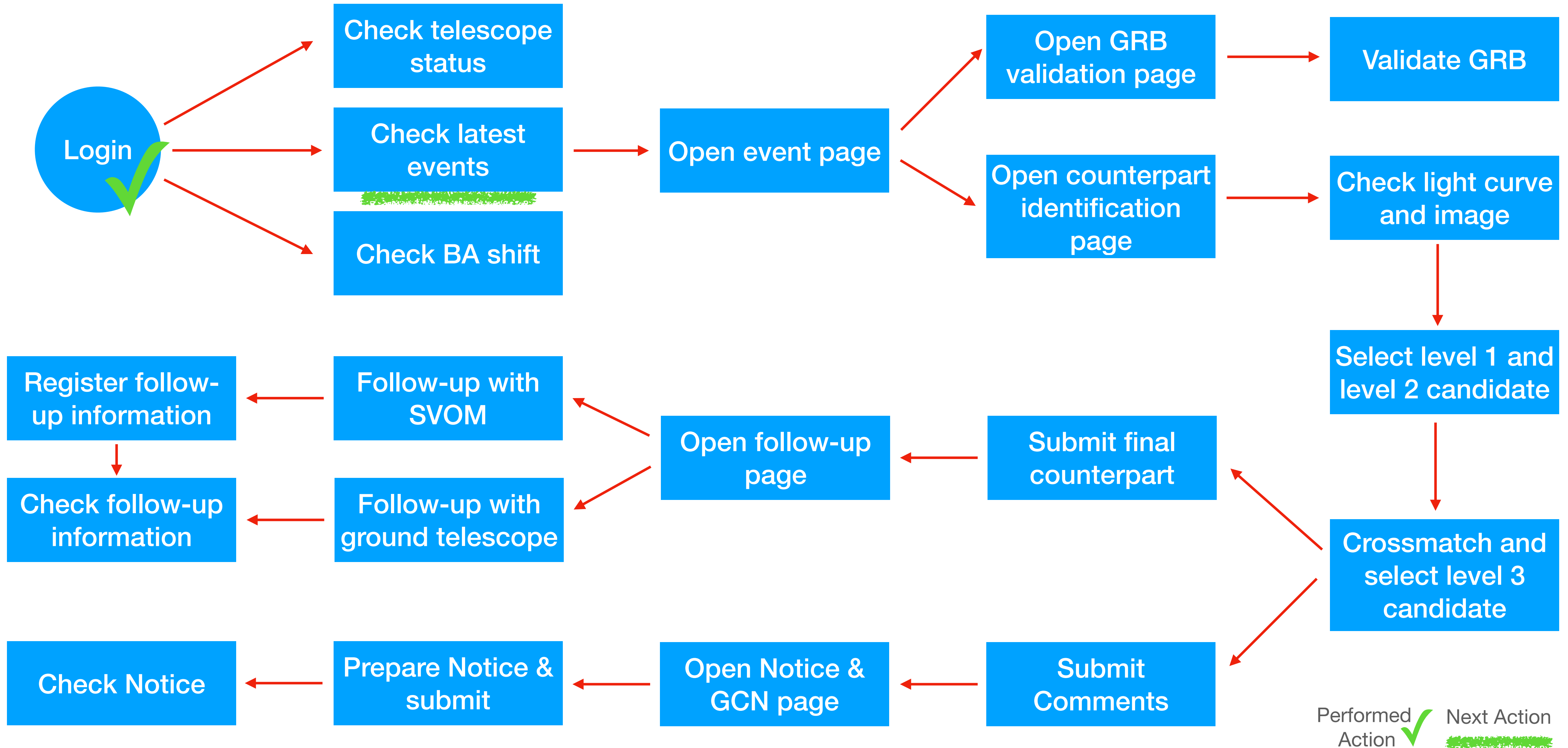
- Link: <https://svom-gwacn.cn/suss/#/>
- Username: ba_team_* (letter of your group, e.g. ba_team_a)
- Password: 123

1. Select BA Tools

The screenshot displays the SVOM Science User Support System interface. At the top, there is a header with the SVOM logo and navigation links for SVOM IFSC, SVOM MC, SVOM CSC, and SVOM. Below the header, the main title 'SVOM Science User Support System' is visible, along with navigation links for SUSS HOME, NEWS, OBSERVING WITH SVOM, HELP, ADMIN, and LOG OUT. A 'Screenshot' button is also present. The main content area is divided into three columns for login options:

- Login as ToO :**
 - ToO Proposer
 - ToO Scientist
 - PI
- Login as GP :**
 - GP Manager
 - TAC Chairman
 - TAC Member
 - GP Proposer
- Login as BA :**
 - BA** (highlighted with a red box and a red arrow)
 - BA Manager
 - BA Assistant

Working with CSC BA tools



3. GRB/GW event list

This table can be accessed at



2023-09-18T09:08:32.556Z (UT)

Event	ALL	SVOM GRB	OTHER GRB	GW	Lastest Alert received at:2023-09-18T09:07:29					
ID	Mission	Trigger name	Event name	SVOM Burst ID	Trigger time(T0,UT)	Lastest RA	Lastest DEC	Err	Source type	BA
999999	SVOM		sb24041201		sb24041201	2024-04-12T20:55:00.000	14:10:37.198	+29:41:56.18		
1432	SVOM		sb23091816		sb23091816	2023-09-18T03:53:03.970	16:19:43.752	-14:31:37.20		
1431	SVOM		sb23091812		sb23091812	2023-09-18T02:52:55.970	19:58:29.040	+35:26:39.84		
1430	SVOM		sb23091815		sb23091815	2023-09-18T03:46:15.970	17:27:37.200	-15:08:32.28		
1429	SVOM		sb23091810		sb23091810	2023-09-18T02:29:27.970	16:18:41.232	-15:25:14.88		
1428	SVOM		sb23091813		sb23091813	2023-09-18T03:08:47.970	05:33:18.312	+21:22:25.32		
1427	SVOM		sb23091811		sb23091811	2023-09-18T02:40:31.970	17:26:20.016	-15:54:01.08		
1426	SVOM		sb23091809		sb23091809	2023-09-18T02:15:51.970	16:19:03.936	-15:36:38.16		
1425	LIGO/Virgo		S230918ae			2023-09-18T08:56:09.000				
1424	Swift		1192492			2023-09-18T03:59:51.970	17:26:36.480	-14:55:53.76		

selectedColumns

ID Mission TriggerName (+8 others)

GRB/GW List

Total: 134

< 1 2 3 ... 132 133 134 >

Items/Page 10

BA **ON DUTY** **STAND BY** **OFF DUTY** Updated at:2023-09-18T17:08:13

DATE BA SIDE STATUS BEGIN (UT) END (UT) TIME TO HANDOVER

No data available

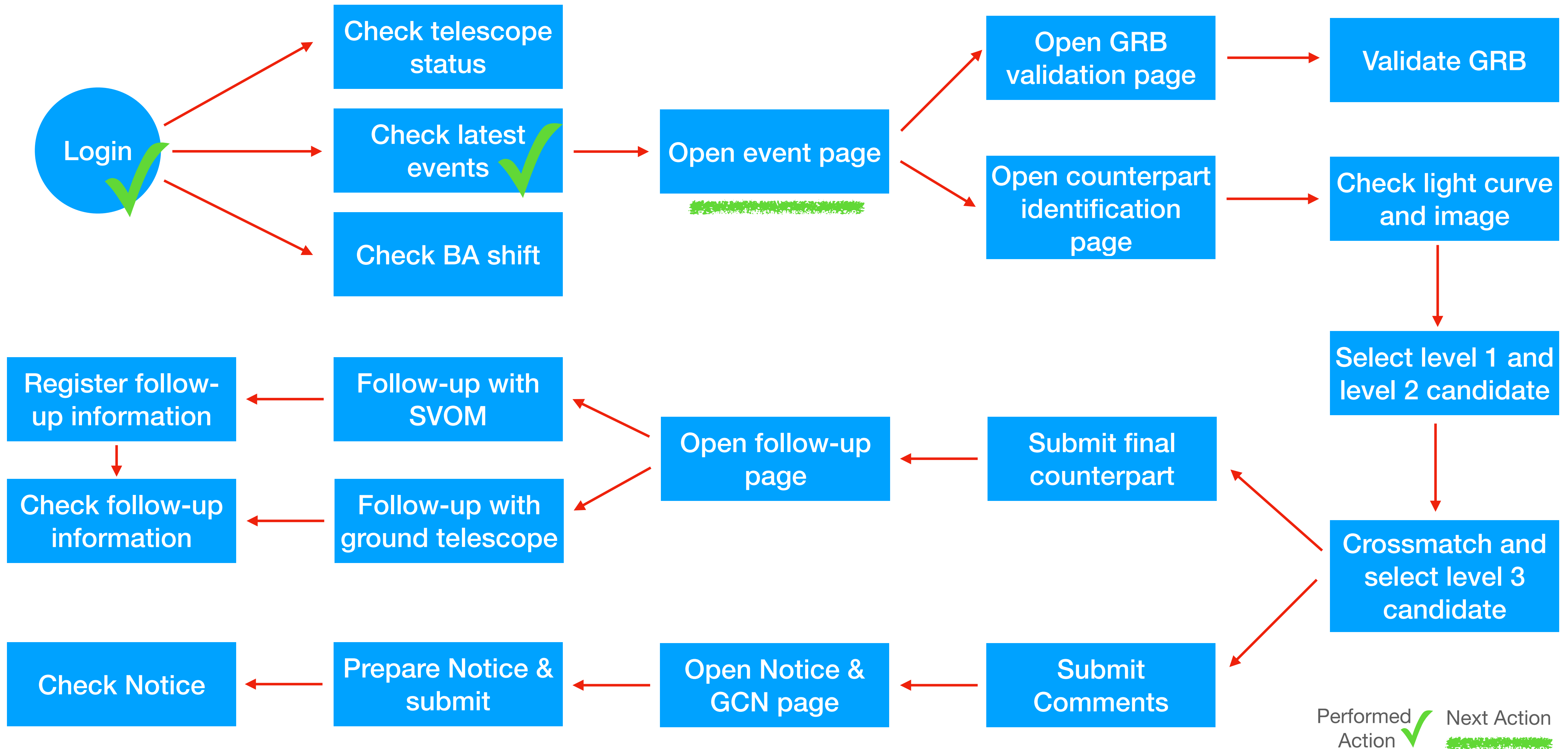
Total: 0

< >

Items/Page 10

Summary

Working with CSC BA tools



4. Event page

Submit successfully!

SVOM IFSC SVOM MC SVOM CSC SVOM I

SVOM Science User Support System

Screenshot

SUSS HOME

Switch tabs to see different information of a GRB

2023-09-18T09:30:31.000Z (UT)

sb24041200

TABLE MODE FORUM M

EVENT & ALERT DATA COUNTERPART OBSERVATION NOTICE & CIRCULAR DISCUSSION

Event Actions: VALIDATE EVENT

Mission	Trigger Name	Event Name	svom Burst Id	Type	Trigger time(T0,UT)	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	Validation Status
SVOM	sb24041200		sb24041200	Gamma-ray Burst	2024-04-12T20:55:00.000	212.654992809	29.69893975659	0.0501	

RA(J2000)

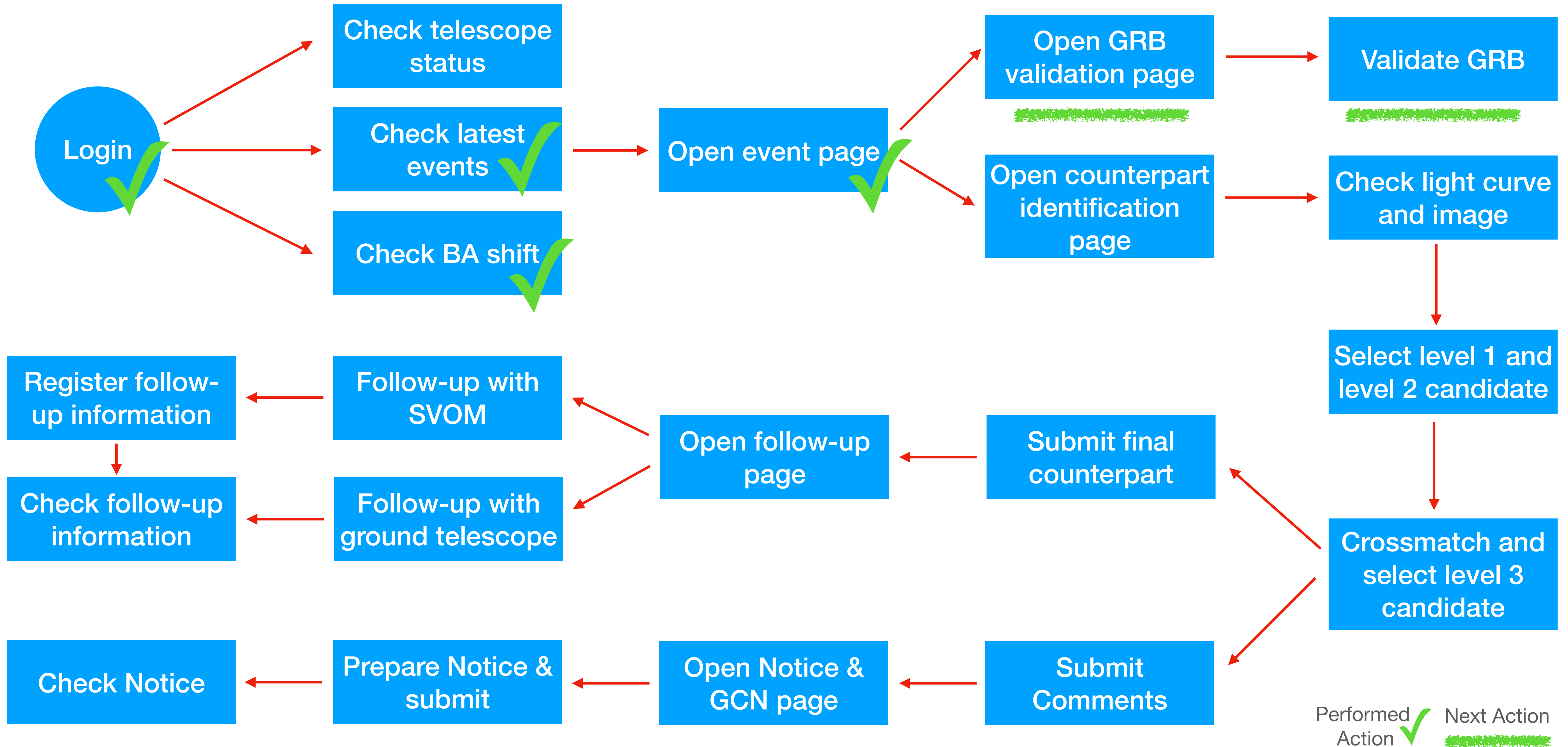
Alert

Alert Time(UT)	Alert ID	Alert type	Alert Number	Instrument	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	Duration	SNR	Event Proba	Alert Ivorn Link
2023-07-13T07:17:24.330120	-1	observation	1	Svom-Eclairs	212.65499877929688	29.69894027709961				1	ivo://org.svom/fsc#sb23021661_eclairs-wakeup

Event page

Total: 1 < 1 > Items/Page 10

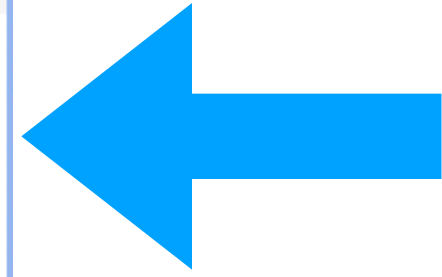
Working with CSC BA tools



5. GRB validation

Actions:

VALIDATE EVENT



Open the GRB validation page

SUSS HOME NEWS OBSERVING WITH SVOM HELP ADMIN LOG OUT

2023-09-18T09:48:49.720Z (UT) TABLE MODE FORUM MODE

sb24041200

EVENT & ALERT DATA COUNTERPART OBSERVATION NOTICE & CIRCULAR DISCUSSION

Event

Actions: VALIDATE EVENT

Mission	Trigger Name	Event Name	svom Burst Id	Type	Trigger time(T0,UT)	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	Validation Status
SVOM	sb24041200		sb24041200	Gamma-ray Burst	2024-04-12T20:55:00.000	212.654992809	29.69893975659	0.0501	

RA(J2000)

Alert

Alert Time(UT)	Alert ID	Alert type	Alert Number	Instrument	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	Duration	SNR	Event Proba	Alert Ivorn Link
2023-07-13T07:17:24.330120	-1	observation	1	Svom-Eclairs	212.65499877929688	29.69894027709961				1	ivo://org.svom/fsc#sb23021661_eclairs-wakeup

GRB validation page

Total: 1 < 1 > Items/Page 10

5. GRB validation

BA needs to set the event name for the GRB

SVOM Science User Support System

Validate

* Event Name: * SVOM BURST ID: real false

SUBMIT

Comment

* title

* content

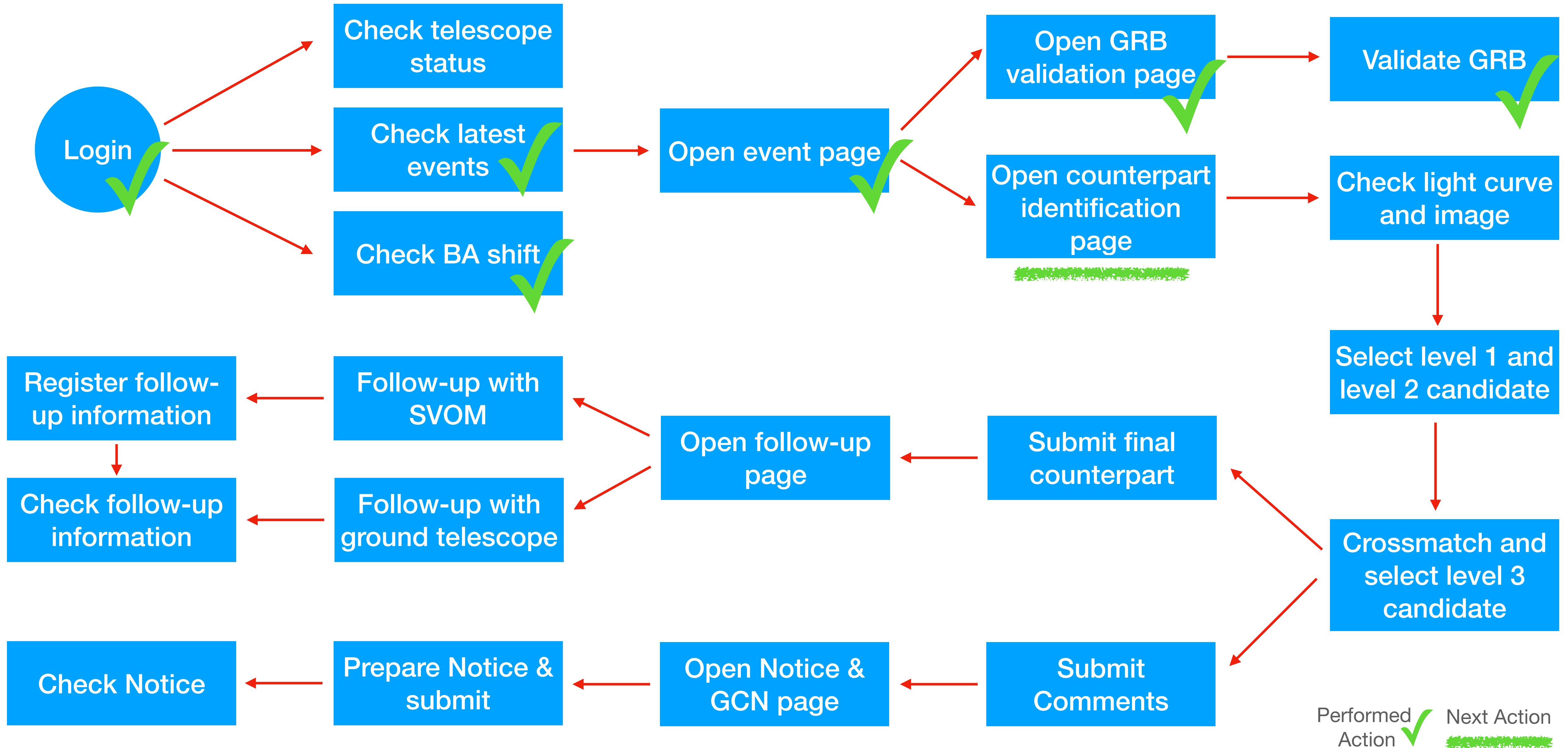
POST

7-13T07:17:24 330120 -1 observation 1 Svom-Eclairs 212.6549987792968 8 29.69894027709961 1 ivo://org.svom/fsc rs-wakeup

Items/Page

BA can leave comments

Working with CSC BA tools



6. Counterpart identification

The screenshot displays the SVOM Science User Support System interface. At the top, a navigation bar includes links for SVOM IFSC, SVOM MC, SVOM CSC, and SVOM. A notification box in the top right corner states "not found Coordinate!". The main header area contains "SVOM Science User Support System" and navigation links for SUSS HOME, NEWS, OBSERVING WITH SVOM, HELP, ADMIN, and LOG OUT. A "Screenshot" button is also present.

The main content area shows a search bar with the ID "sb24041200" and a timestamp of "2023-09-18T04:08:27.164Z (UT)". Below the search bar are tabs for "EVENT & ALERT", "DATA", "COUNTERPART", "OBSERVATION", "NOTICE & CIRCULAR", and "DISCUSSION". The "DATA" tab is active, displaying a table of data entries.

ID	Data Arriving Time(UT)	Telescope	Data	Data Type	Standard	Counterpart	Note	Action
1	2023-09-14T12:00:00Z	CGFT	202309151911344_F_s b24041201_sb2404120 1_i_1686836307_0020_ 2.fit.lc	STANDARD DATA	Y			VALIDATE COUNTERPART
-1	2023-09-15T06:40:30Z	CGFT	202309151438313_F_s b24041201_sb2404120 1_i_1686836307_0006_ 2.fit.lc	lightcurve	Y		auto-upload	VALIDATE COUNTERPART
-2	2023-09-15T06:40:30Z	CGFT	202309151438313_F_s b24041201_sb2404120 1_i_1686836307_0006_ 2.fit.lc	lightcurve	Y	sb23033100_3	auto-upload	VALIDATE COUNTERPART

A red arrow points from the "UPLOAD DATA" dropdown menu to the "VALIDATE COUNTERPART" button in the first row of the table. A yellow banner at the bottom of the table area reads "Select here to open counterpart identification page".

At the bottom of the page, a teal banner reads "Access counterpart validation page".

6. Counterpart identification

Selected Counterpart

All identified counterpart

COUNTERPART	Telescope	DETECTION TIME (UT)	T-T0(SEC.)	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	Action
No Data							

Total: 0 < > Items/Page 10

Data and Candidate Level 1

Data for level 1 candidate

Data and Type
TIME: LAST UPDATE TIME. STANDARD DATA IS USED FOR COUNTERPART IDENTIFICATION

TELESCOPE	TIME	SVOM S
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Joint Analysis and Candidate Level 2:

SELECT CANDIDATES TO MAKE CORRELATION. SET THE FIRST SELECTED ONE TO THE CENTER.

CROSS MATCH

<input type="checkbox"/>	ID CL2	TELESCOPE	DETECTION TIME(UT)	T-T0(SEC.)	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	DIS-ECLAIRS (ARCSEC.)	DIS-MXT (ARCSEC.)
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Joint analysing with data from different telescope to get level 3 candidate

Counterpart Selection and Candidate Level 3:

SELECT CANDIDATE AS COUNTERPART.

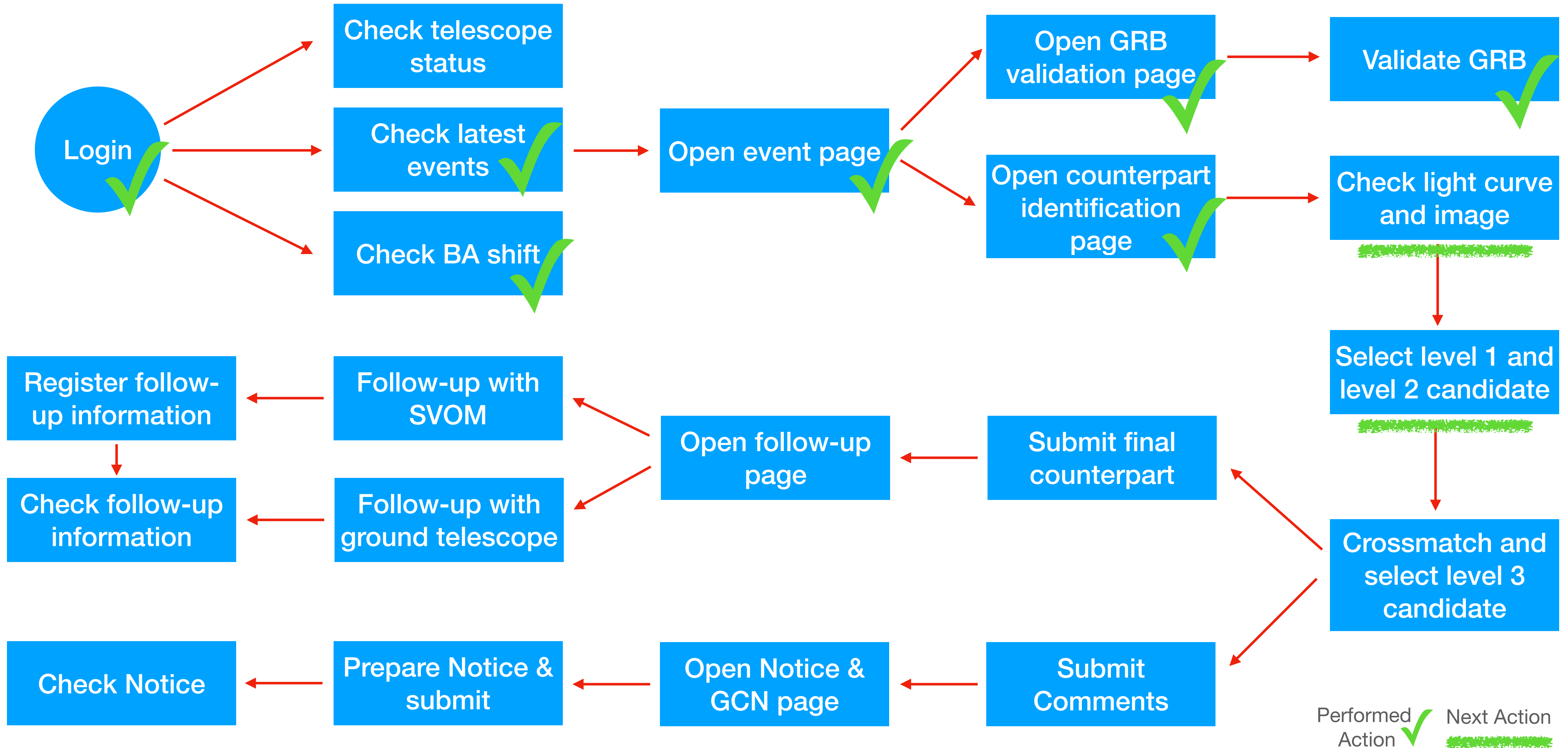
SUBMIT

<input type="checkbox"/>	ID CL3	TELESCOPE	DETECTION TIME (UT)	T-T0(SEC.)	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	DIS-ECLAIRS (ARCSEC.)	DIS-MXT (ARCSEC.)
No Data									

Total: 0 < > Items/Page 10

The level 3 candidate list

Working with CSC BA tools



6. Counterpart identification

Telescope and data list to be working with

Data and Candidate Level 1:

*可以做成下拉菜单, 节省显示空间

Data and Type

TIME: LAST UPDATE TIME. STANDARD DATA IS USED FOR COUNTERPART IDENTIFICATION

TELESCOPE	TIME (UT)	SVOM SDP	STANDARD DATA	IMAGE	DATE PACKAGE
CGFT	2022-01-01T13.58.40.5	Y	N	Y	Y
VT	2022-01-01T13.58.40.5	Y	Y	Y	N
FGFT	2022-01-01T13.58.40.5	N	N	N	Y
LCOGT	2022-01-01T13.58.40.5	N	N	N	Y
2.16M	2022-01-01T13.58.40.5	N	N	N	Y
GWAC	2022-01-01T13.58.40.5	N	N	N	Y

Column 1

The interface shows a sidebar with a tree view of telescope categories: GENERAL, SVOM, MXT, VT, FOLLOW-UP TELESCOPE, AUTOMATIC PHOTOMETRY (CGFT, FGFT, LCOGT), MANUAL PHOTOMETRY (2.16M), AUTOMATIC SPECTROSCOPY (2.16M), MANUAL SPECTROSCOPY (VLT), SURVEY, and GWAC. The main area displays a table of data points for counterpart identification, with columns for Telescope, Time (UT), SVOM SDP, Standard Data, Image, and Date Package. A dropdown menu labeled 'Column 1' is located below the table.

6. Counterpart identification


To select counterpart level 2 based on light curve and image

Data and Candidate Level 1:

GENERAL **Light Curve**

SVOM ^
MXT
VT
FOLLOW-UP TELESCOPE ^
AUTOMATIC PHOTOMETRY ^
CGFT
FGFT
LCOGT
MANUAL PHOTOMETRY ^
2.16M
AUTOMATIC SPECTROSCOPY ^
2.16M
MANUAL SPECTROSCOPY ^
VLT
SURVEY ^
GWAC

CL1-1 in R
CL1-2 in R
CL1-3 in B



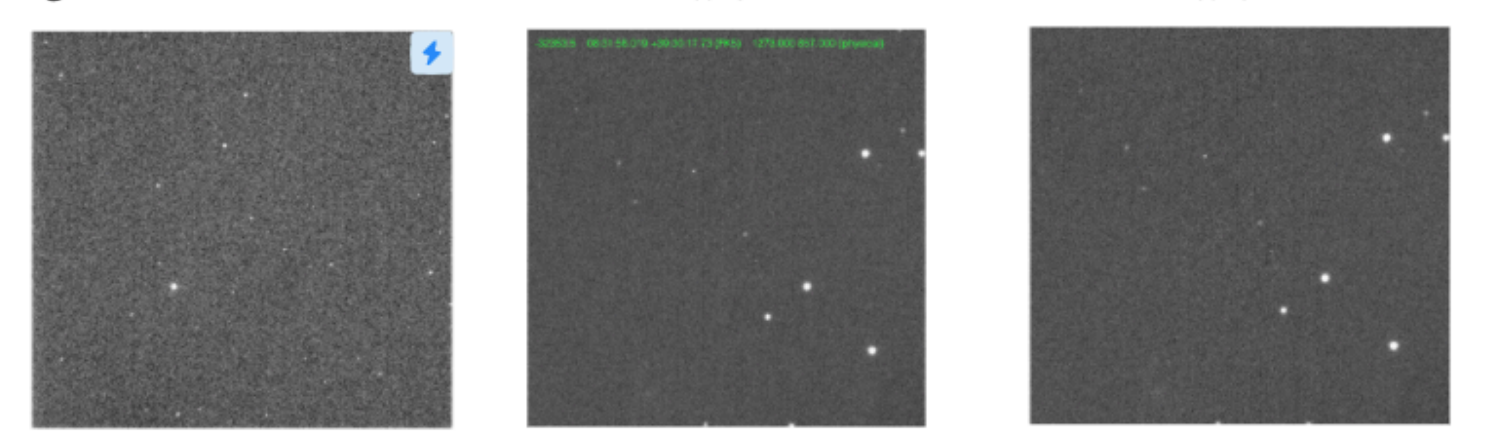
Sub-image window
download

ADD CANDIDATE CHECK MINOR PLANET CHECK VARIABLE STAR

ID	TIME (UT)	RA (J2000)	DEC (J2000)	ERR (ARCSEC)	MAG	MAG ERR	UPLIMIT	FILTER
1	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.03945	13.453	0.34	13.453	R
2	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.03945	13.453	0.34	13.453	R
3	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.03945	13.453	0.34	13.453	R
4	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.03945	13.453	0.34	13.453	R
4	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.03945	13.453	0.34	13.453	R
5	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.03945	13.453	0.34	13.453	R

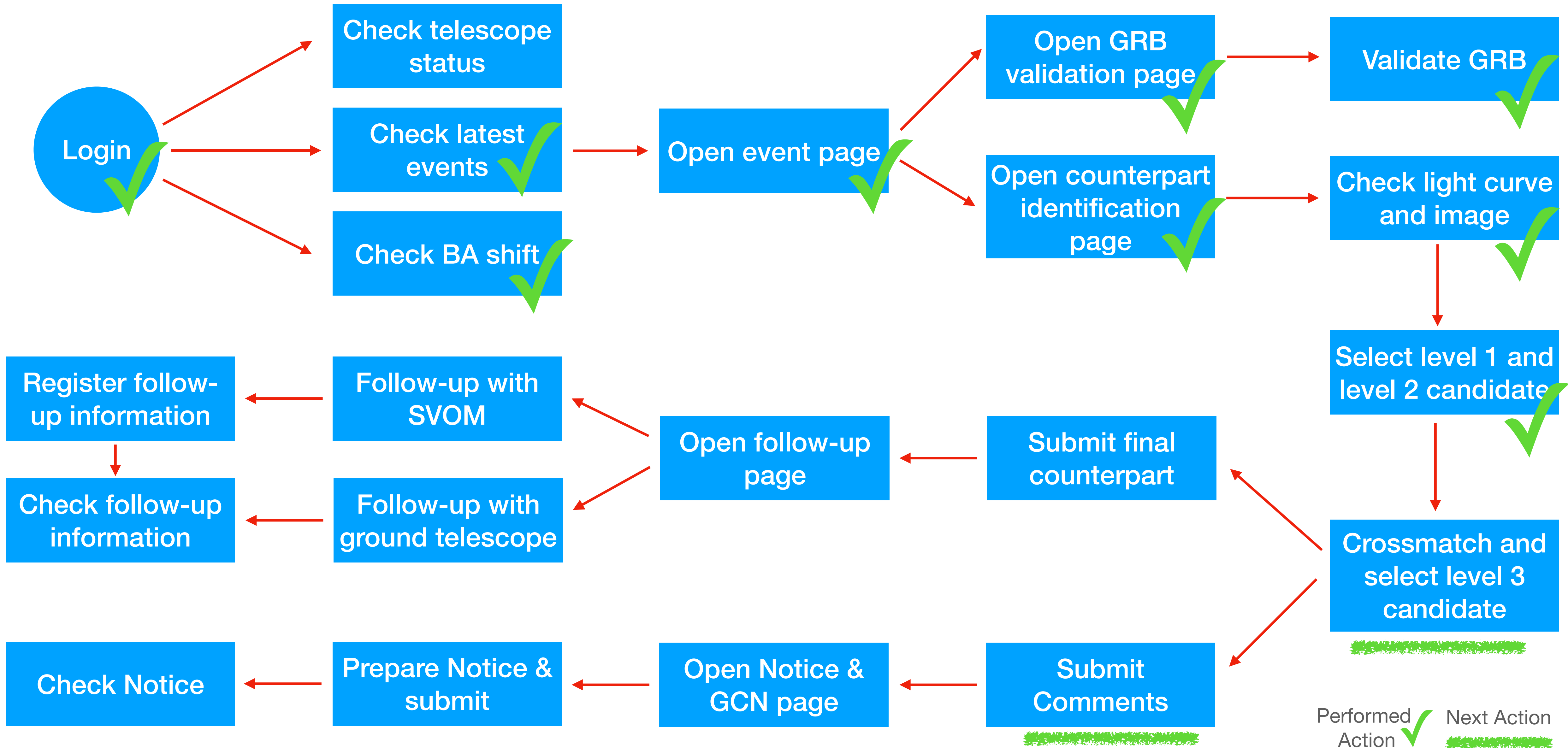
Column 1 Total < 1 2 3 4 5 6 7 ... 3 > 10 To

Image g band r band i band



download download download

Working with CSC BA tools



6. Counterpart identification

Choose level 2 candidates for joint analysis

Joint Analysis and Candidate Level 2:

SELECT CANDIDATES TO MAKE CORRELATION. SET THE FIRST SELECTED ONE TO THE CENTER.

CROSS MATCH

	ID CL2	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCS EC.)	ERR (ARCSEC.)	DIS-MXT (ARCSEC.)
	GRB342234_CL2_1234	CGFT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
	GRB342234_CL2_1235	VT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
	GRB342234_CL2_1236	FGFT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
	GRB342234_CL2_1237	CGFT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
	GRB342234_CL2_1238	VT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
	GRB342234_CL2_1239	GWAC	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

Column 1

6. Counterpart identification

First target is in the center.
Check the rest targets by
crossmatching in a circle.

Cross Match To Select Candidate Level 3

CENTER

ID CL2	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCS EC.)	DIS-ECLAIRS (ARCSEC.)	DIS-MXT (ARCSEC.)
GRB342234_CL2_1235	VT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

MATCH TARGET

ID CL2	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCS EC.)	DIS-ECLAIRS (ARCSEC.)	DIS-MXT (ARCSEC.)
GRB342234_CL2_1235	VT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
GRB342234_CL2_1236	FGFT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
GRB342234_CL2_1239	GWAC	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

CROSSMATCH RADIUS

5 arcsec.

CANDIDATE LEVEL 3

ID CL3	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCSEC.)	DIS-ECLAIRS (ARCSEC.)
<input checked="" type="checkbox"/> GRB342234_CL3_1235	VT <input type="button" value="v"/>	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

Column 1

6. Counterpart identification

Add the results into candidate level 3

Cross Match To Select Candidate Level 3

CENTER

ID CL2	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCS EC.)	DIS-ECLAIRS (ARCSEC.)	DIS-MXT (ARCSEC.)
GRB342234_CL2_1235	VT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

MATCH TARGET

ID CL2	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCS EC.)	DIS-ECLAIRS (ARCSEC.)	DIS-MXT (ARCSEC.)
GRB342234_CL2_1235	VT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
GRB342234_CL2_1236	FGFT	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
GRB342234_CL2_1239	GWAC	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

CROSSMATCH RADIUS

5 arcsec.

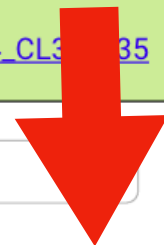
CROSSMATCH

CANDIDATE LEVEL 3

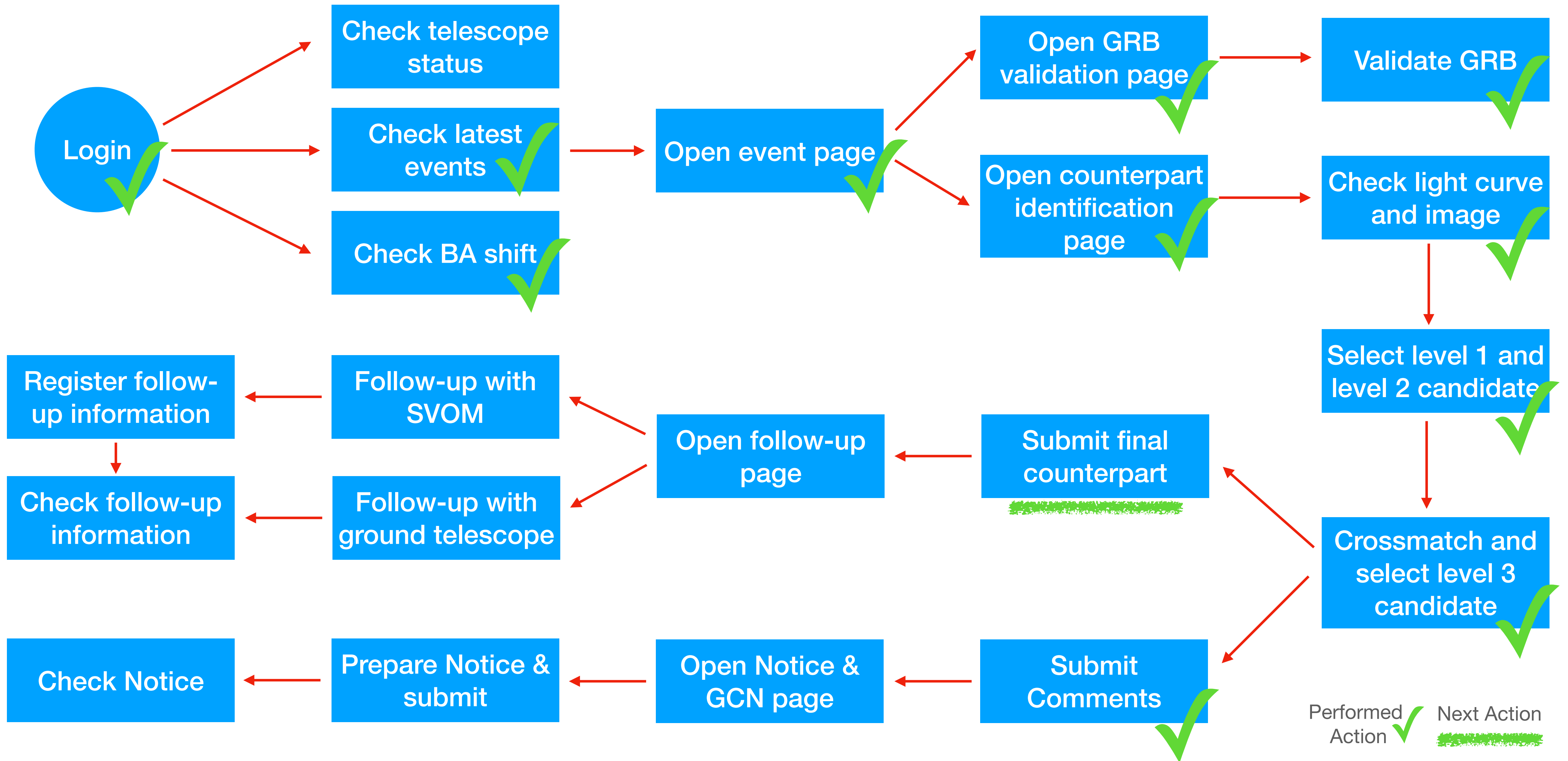
ID CL3	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCSEC.)	DIS-ECLAIRS (ARCSEC.)
GRB342234_CL3_1235	VT	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

Column 1

ADD TO LEVEL 3



Working with CSC BA tools









6. Counterpart identification

Add the candidate level 3 to the counterpart list

Counterpart Selection and Candidate Level 3:

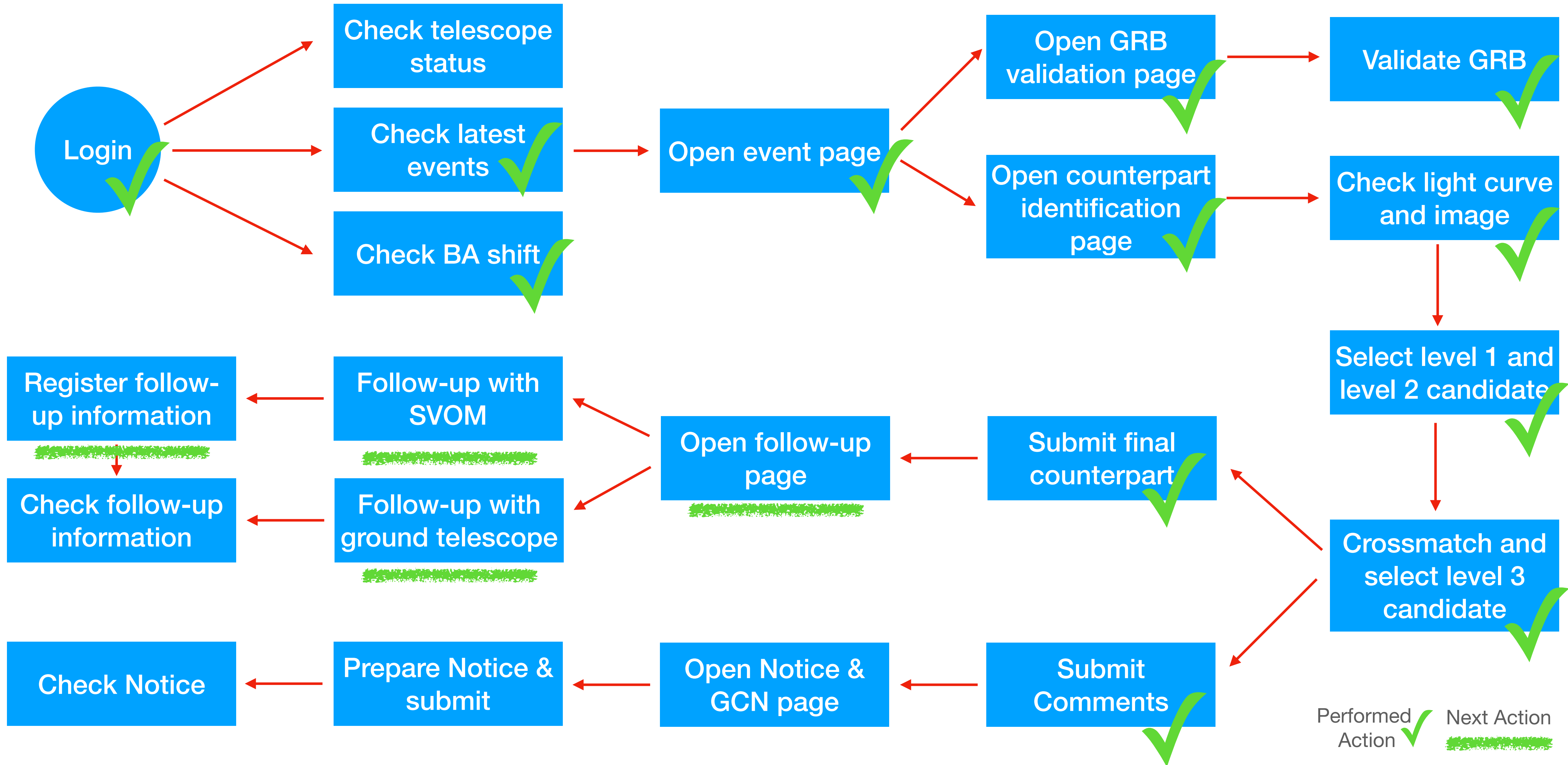
SELECT CANDIDATE AS COUNTERPART.

SUBMIT

	ID CL3	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCS EC.)	DIS-ECLAIRS (ARCSEC.)	DIS-MXT (ARCSEC.)
 GRB342234_CL3_1234 <small>* 点击打开LEVEL 4数据可视化页面</small>	VT	▼	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
 GRB342234_CL3_1235	CGFT	▼	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
 GRB342234_CL3_1236	VT	▼	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
 GRB342234_CL3_1237	FGFT	▼	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
 GRB342234_CL3_1238	VT	▼	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2
 GRB342234_CL3_1239	CGFT	▼	2022-01-01T13.58.40.5	176.5	06:02:52.007	-08:36:00.00	0.4	23.43	1.2

Column 1

Working with CSC BA tools



7. Follow-up observations

[Click here to open follow-up page](#)

2022-10-01 22:22:22 (UT) ⌵


GRB 231212 * EVENT NAME BACK TO EVENT PAGE ⚡

Selected Counterpart

	COUNTERPART	TELESCOPE	DETECTION TIME (UT)	T-T0 (SEC.)	RA (J2000)	DEC (J2000)	ERR (ARCSEC)	ACTION
✕	GRB203942-1234 ⚡	VT ⌵	2022-01-01T13.58.40.5	123.43	06:02:52.007	-08:36:00.00	0.03945	FOLLOW-UP ⌵
<small>* 点击打开 LEVEL 4 数据可视化页面</small>								
✕	GRB203942-1234	CGFT ⌵	2022-01-01T13.58.40.5	06:02:52.007	-08:36:00.00	0.03945	0.34	FOLLOW-UP ⌵

Column 1 ⌵

Total 321 < 1 2 3 4 5 6 7 ... 33 > 10 Item/Page ⌵ To Page



7. Follow-up observations

Check the telescope availability

2022-10-01 22:22:22 (UT)

GRB 231212 * EVENT NAME

BACK TO EVENT PAGE

Selected Target

PREPARE FOLLOW-UP

FOR SVOM, WILL OPEN TOO TOOLS

Remove Target After FOLLOW-UP Keep

TRIGGER NAME	EVENT NAME	SVOM BURST ID	COUNTERPART	TELESCOPE	RA	DEC	FOLLOW-UP
811922345	GRB 231212	811922345	GRB232112-34532	VT	06:02:52.007	-08:36:00.00	SVOM

Column 1

Follow-up

Telescope:
TIME: LAST UPDATE TIME. AVAILABLE TELESCOPE IS IN GREEN.

TELESCOPE	TIME
CGFT	2016-05-02T23:32:23.2
FGFT	2016-05-02T23:32:23.2
2.16M	2016-05-02T23:32:23.2
GWAC	2016-05-02T23:32:23.2

7 Follow-up observations

Using SVOM for follow-ups

Telescope:

SVOM
To use SVOM, Please open TOO TOOLS to submit a SVOM TOO proposal

SELECT

GENERAL

SVOM

MXT

VT

FOLLOW-UP TELESCOPE

AUTOMATIC PHOTOMETRY

CGFT

FGFT

LOGGT

MANUAL PHOTOMETRY

2.16M

AUTOMATIC SPECTROSCOPY

2.16M

MANUAL SPECTROSCOPY

VLT

SURVEY

GWAC

2022-10-01 22:22:22 (UT)

GRB 231212 * EVENT NAME **BACK TO EVENT PAGE**

Selected Target **PREPARE FOLLOW-UP**
FOR SVOM, WILL OPEN TOO TOOLS

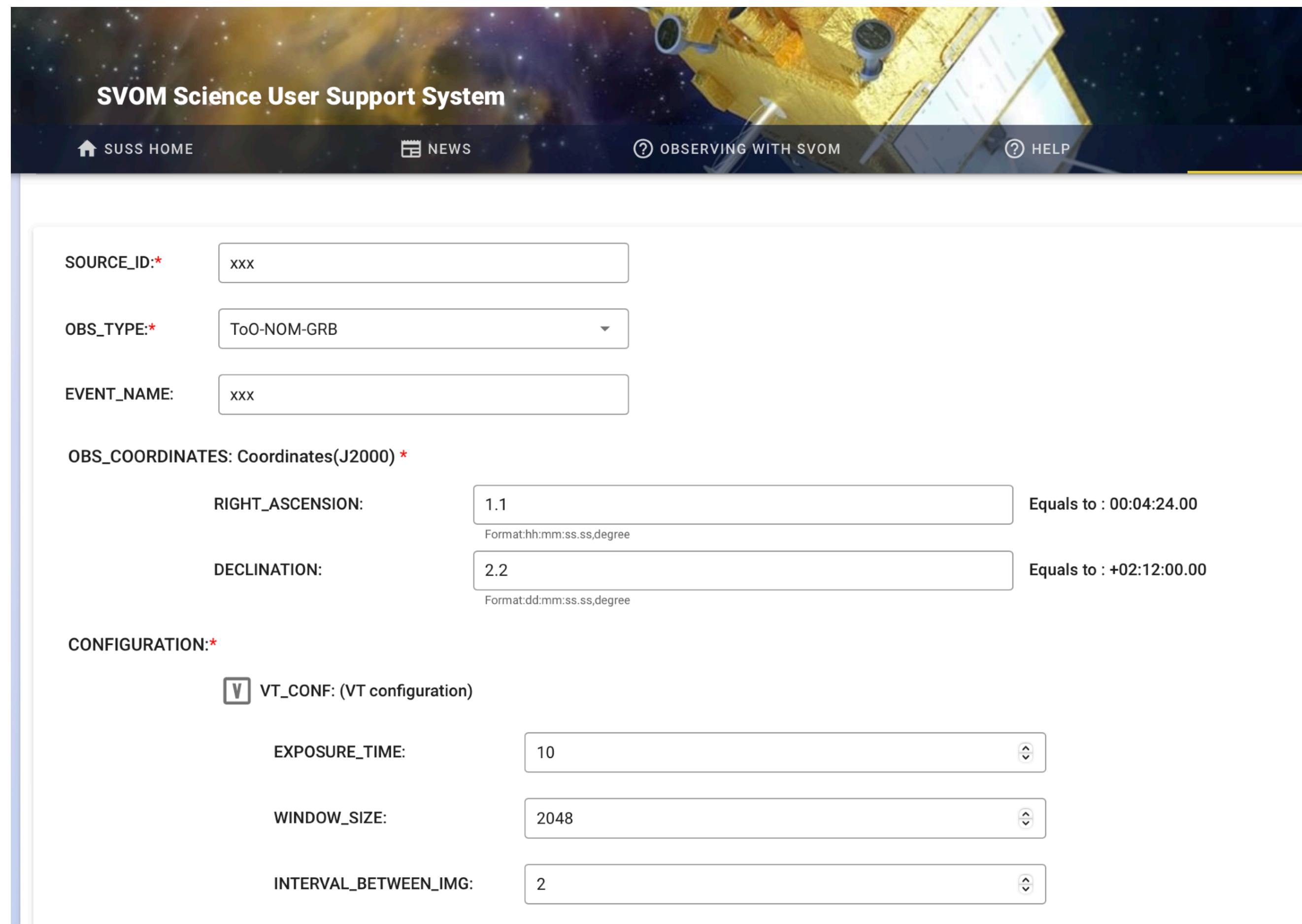
Remove Target After FOLLOW-UP Keep

	TRIGGER NAME	EVENT NAME	SVOM BURST ID	COUNTERPART	TELESCOPE	RA	DEC	FOLLOW-UP	
	811922345	GRB 231212	811922345	GRB232112-34532	VT	06:02:52.007	-08:36:00.00	SVOM	LC ANALYSIS

Column 1

7 Follow-up observations

The follow-up request of SVOM made in ToO Tools



The screenshot displays the SVOM Science User Support System (SUSS) interface. The header features the system name and navigation links: SUSS HOME, NEWS, OBSERVING WITH SVOM, and HELP. The main form area contains several input fields and sections:

- SOURCE_ID:*** Text input field containing "xxx".
- OBS_TYPE:*** Dropdown menu set to "ToO-NOM-GRB".
- EVENT_NAME:** Text input field containing "xxx".
- OBS_COORDINATES: Coordinates(J2000) *** Section containing:
 - RIGHT_ASCENSION:** Text input field containing "1.1", with a note "Equals to : 00:04:24.00" and "Format:hh:mm:ss.ss,degree".
 - DECLINATION:** Text input field containing "2.2", with a note "Equals to : +02:12:00.00" and "Format:dd:mm:ss.ss,degree".
- CONFIGURATION:*** Section containing:
 - VT_CONF: (VT configuration)**
 - EXPOSURE_TIME:** Spin box set to "10".
 - WINDOW_SIZE:** Spin box set to "2048".
 - INTERVAL_BETWEEN_IMG:** Spin box set to "2".

7. Follow-up observations

The follow-up request of ground telescope made inside of BA Tools

Prepare FOLLOW-UP REQUEST

REQUESTED DATE: 2021-05-23T23:32:23
YYYY-MM-DDThh:mm:ss

OBJ NAME: XXXSSEEXX RA: 06:02:52.004 Dec: -08:36:00.00 **LC ANALYSIS**
if counterpart_name, then obj_name = counterpart_name, else, event_name + svom_burst_db_id * 待开发

TELESCOPE: CGFT MODE: PHOTOMETRY

CONTACT INFORMATION: XXXXXXXXXXXXXXX
XXXXXXXXXXXX
XXXXXXXXXXXX

FILTER: SAME FOR EACH FILTER g r i

EXPOSURE	<input type="text" value="30"/>	<input type="text" value="单行输入"/>	<input type="text" value="单行输入"/>	<input type="text" value="单行输入"/>
FRAME	<input type="text" value="10"/>	<input type="text" value="单行输入"/>	<input type="text" value="单行输入"/>	<input type="text" value="单行输入"/>

LOOP COUNT:

OBS. MODE: Queue Loop * Queue mode: AAAABBBBCCCC...; Loop mode: ABC...ABC...ABC...ABC...

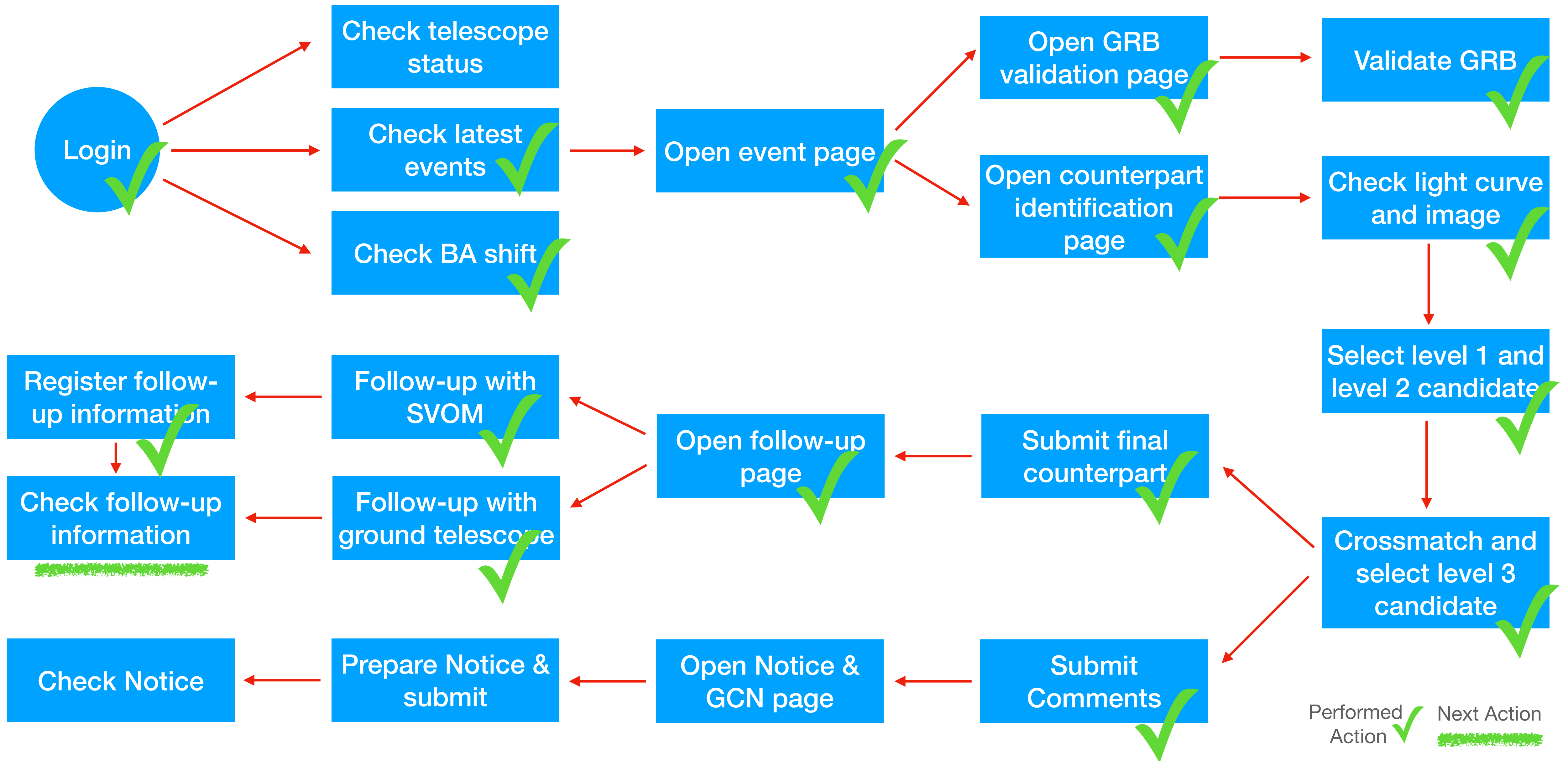
OBSERVER: ASDFAEAESFEF PHONE: 12234556677889

GENERATE FOLLOW-UP REQUEST **SAVE JSON FILE** **SEND FOLLOW-UP REQUEST** * 此操作需要有确认弹窗

FOLLOW-UP REQUEST JSON FILE: 20230602T020000_20230603T020000_20230601T052900_1.json 2021-06-02T03:11:18.001Z

```
{
  "Schema": {
    "SchemaName": "", "SchemaVersion": 2.0, "FITSVersion": 5, "SchemaExplanation": ""
  },
  "MessageHeader": {
    "msg_sn": {"value": "", "FitsHeader": "MSG_SN", "type": "int", "mandatory": "Y", "note": ""},
    "msg_tim": {"value": "", "FitsHeader": "MSG_TIM", "type": "string", "mandatory": "Y", "note": "UTC"},
    "msg_typ": {"value": "", "FitsHeader": "MSG_TYP", "type": "string", "mandatory": "Y", "note": "obs is for real obs msg, obs_test is for test obs msg"},
    "msg_src": {"value": "", "FitsHeader": "MSG_SRC", "type": "string", "mandatory": "Y", "note": ""},
    "msg_crt": {"value": "", "FitsHeader": "MSG_CRT", "type": "string", "mandatory": "Y", "note": ""},
    "req_id": {"value": "", "FitsHeader": "REQ_ID", "type": "int", "mandatory": "N", "note": ""},
    "msg_fits": {"value": "", "FitsHeader": "MSG_FITS", "type": "int", "mandatory": "Y", "note": "equal to FITSVersion"}
  }
}
```

Working with CSC BA tools



7. Follow-up observations

The follow-ups applied with BA Tools

GRB 231212 * EVENT NAME

EVENT & ALERT DATA COUNTERPART **OBSERVATION** NOTICE & CIRCULAR DISCUSSION

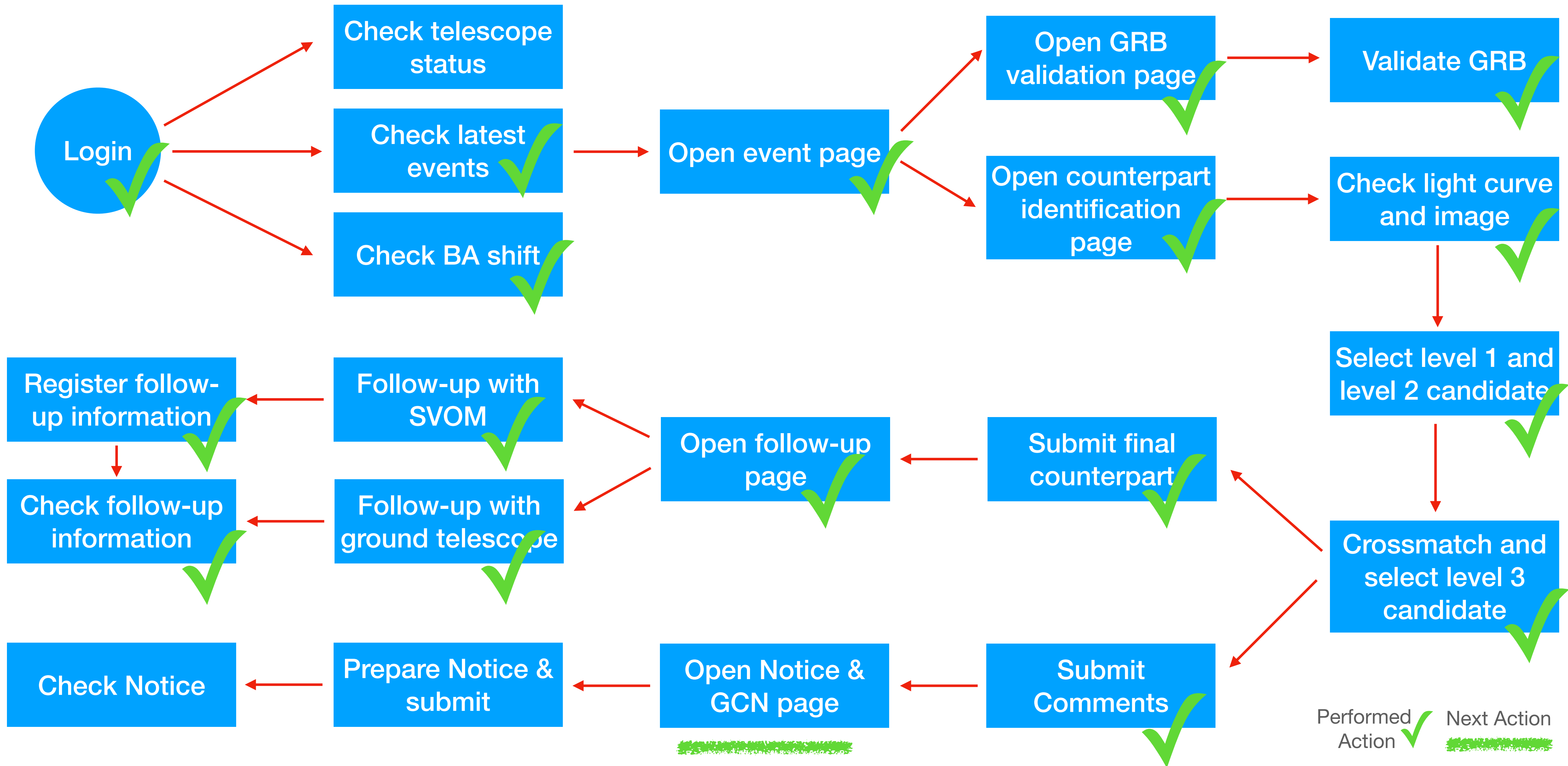
Observation List: ACTIONS: FOLLOW-UP

ID	OBSERVATION TYPE	OBSERVATION TIME (UT)	FOLLOW-UP REQUEST ID	COUNTERPART	TELESCOPE	REQUEST INFO.	ACTION
1	SVOM	2022-01-01T13.58.40.5			SVOM (ECLAIRS)		UPLOAD DATA
2	SVOM	2022-01-01T13.58.40.5			SVOM (VT)		UPLOAD DATA
3	GRB REVISIT (SVOM)	2022-01-01T13.58.40.5	300	GRB234344-1234	SVOM (MXT)	XXXXXX	UPLOAD DATA
4	GRB REVISIT (SVOM)	2022-01-01T13.58.40.5	300	GRB234344-1234	SVOM (VT)	XXXXXX	UPLOAD DATA
5	GROUND FOLLOW-UP	2022-01-01T13.58.40.5	123	GRB234344-1234	2.16M	XXXXXX	UPLOAD DATA
6	GROUND FOLLOW-UP	2022-01-01T13.58.40.5	300	GRB234344-1234	FGFT	XXXXXX	UPLOAD DATA
7	GROUND FOLLOW-UP	2022-01-01T13.58.40.5	300	GRB234344-1234	GWAC-F60A	XXXXXX	UPLOAD DATA

Column 1

Total 321 < 1 2 3 4 5 6 7 ... 33 > 10 Item/Page To Page

Working with CSC BA tools



8. Prepare Notice and Circular

2022-10-01 22:22:22 (UT) TABLE MODE FORUM MO

GRB 231212 * EVENT NAME

EVENT & ALERT DATA COUNTERPART OBSERVATION NOTICE & CIRCULAR DISCUSSION

Notice List: ACTIONS: PREPARE NOTICE

ID	NOTICE TEMPLATE	NOTICE TIME (UT)	COUNTERPART	NOTICE INFO.	NOTICE ID
1	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXXXXXXXXXXXXXX	123456
2	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXXXXXXXXXXXXXX	123456
3	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456
4	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456
4	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456
5	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456
6	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456
7	N2F CGFT DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456

Column 1 Total 321 1 2 3 4 5 6 7 ... 33 10 Item/Page

Circular List: ACTIONS: PREPARE CIRCULAR

ID	CIRCULAR TEMPLATE	CREATION TIME (UT)	COUNTERPART	GIRCULAR INFO.	GIRCULAR ID
1	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXXXXXXXXXXXXXX	123456
2	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXXXXXXXXXXXXXX	123456
3	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456
4	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	123456
4	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	
5	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	
6	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	
7	CGFT FIRST DETECTION	2022-01-01T13.58.40.5	GRB232112-34532	XXXXXX	

Column 1 Total 321 1 2 3 4 5 6 7 ... 33 10 Item/Page To Page

8. Prepare SVOM Notice

Select a notice template

Notice Template

≡ N2F

CGFT DETECTION

CGFT UPLIMIT

FGFT DETECTION

FGFT UPLIMIT

GWAC DETECTION

GWAC UPLIMIT

≡ N3

N2F CGFT DETACTION Template

```
<Who>
<AuthorIVORN></AuthorIVORN>
<Date></Date>
</Who>
<What>
<Param name="Packet_Type" value="" ucd="meta.id" dataType="int" />
<Param name="msg_level" value="N2f" ucd="meta.code.class"/>
<Param name="msg_num" value="" ucd="meta.id" dataType="int"/>
<Param name="burst_id" value="" ucd="meta.id"/>
<Param name="instrument" value="" ucd="instr"/>
<Param name="cf_obs_id" value="" />
<Param name="ExpoStart_TJD" value="" unit="days" ucd="time" />
<Param name="ExpoStart_SOD" value="" unit="sec" ucd="time" />
<Param name="Point_RA" value="" unit="deg" ucd="pos.eq.ra" />
<Param name="Point_Dec" value="" unit="deg" ucd="pos.eq.dec" />
<Group name="Request_flag">
<Param name="req_source" value="" />
<Param name="req_id" value="" />
</Group>
<Group name="Exposure_parameters">
<Description>Exposure parameters for follow-up observations</Description>
<Param name="Filter" value="" unit="dn" ucd="" />
<Param name="Magnitude" value="" unit="" ucd="" />
</Group>
</What>
<WhereWhen>
<ObsDataLocation>
<ObservatoryLocation id="GEOLUN"/>
<ObservationLocation>
<AstroCoordSystem id="UTC-FK5-GEO"/>
<AstroCoords coord_system_id="UTC-FK5-GEO">
<Time unit="s">
<TimeInstant>
<ISOTime>2024-01-17T13:02:00</ISOTime>
</TimeInstant>
</Time>
</WhereWhen>
```

SELECT

8. Prepare SVOM Notice

Generate notice automatically

Prepare Notice

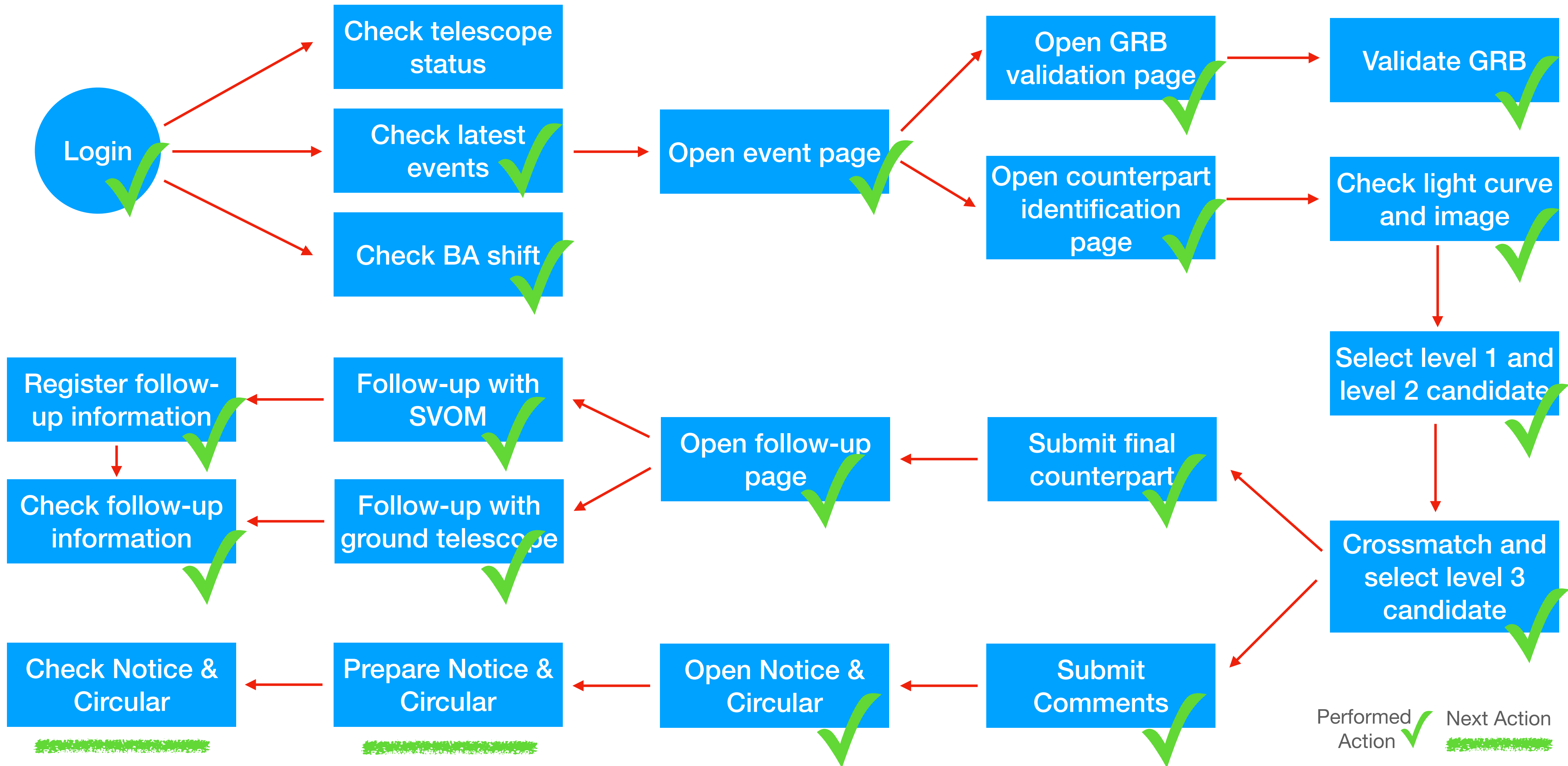
SVOM BURST ID	SB23455432	TYPE	N2F
TELESCOPE	CGFT	TELESCOPE OBS ID	AF1345345653
EXPOSURE START TJD	20304	EXPOSURE START SOD	20304.0
FILTER	R	MAGNITUDE	14.34
COUNTERPART RA	14.34	COUNTERPART DEC	14.34
PROBABILITY	14.34		

GENERATE NOTICE **SAVE XML FILE** **SEND NOTICE**

NOTICE FILE: voevent-n2f_2022-03-28T16-08-35.780061_1648444695.985821_19.xml 2021-06-02T03:11:18.001Z

```
<Who>
<AuthorIVORN></AuthorIVORN>
<Date></Date>
</Who>
<What>
<Param name="Packet_Type" value="" ucd="meta.id" dataType="int" />
<Param name="msg_level" value="N2f" ucd="meta.code.class"/>
<Param name="msg_num" value="" ucd="meta.id" dataType="int"/>
<Param name="burst_id" value="sb24011754" ucd="meta.id"/>
<Param name="instrument" value="CGFT" ucd="instr"/>
<Param name="cf_obs_id" value="2566914148"/>
<Param name="ExpoStart_TJD" value="20326" unit="days" ucd="time" />
<Param name="ExpoStart_SOD" value="46920.0" unit="sec" ucd="time" />
<Param name="Point_RA" value="169.78236" unit="deg" ucd="pos.eq.ra" />
<Param name="Point_Dec" value="3.11844" unit="deg" ucd="pos.eq.dec" />
<Group name="Request_flag">
<Param name="req_source" value="" />
<Param name="req_id" value="" />
</Group>
<Group name="Exposure_parameters">
<Description>Exposure parameters for follow-up observations</Description>
<Param name="Filter" value="r" unit="dn" ucd="" />
<Param name="Magnitude" value="14.3239" unit="" ucd="" />
</Group>
</What>
<WhereWhen>
<ObsDataLocation>
<ObservatoryLocation id="GEOLUN"/>
<ObservationLocation>
<AstroCoordSystem id="UTC-FK5-GEO"/>
<AstroCoords coord_system_id="UTC-FK5-GEO">
<Time unit="s">
<TimeInstant>
<ISOTime>2024-01-17T13:02:00</ISOTime>
```

Working with CSC BA tools



8. Prepare GCN Circular

Select a circular template

Circular Template

CGFT CIRCULAR TEMPLATE ^

CGFT FIRST DETECTION

CGFT FIRST UPLIMIT

CGFT LATER DETECTION

CGFT LATER UPLIMIT

VT CIRCULAR TEMPLATE ^

VT DETECTION

VT UPLIMIT

GWAC CIRCULAR TEMPLATE

CGFT FIRST DETECTION

SUBJECT: * Template 不可编辑

An opticle counterpart is detected by CGFT

AUTHOR LIST:

XXXX (BA and Affiliation), LipingXin (NAOC), Chao Wu (NAOC), Xuhui Han (NAOC), Xiaomeng Lu (NAOC), Damien Turpin(CEA), Zhenwei Li (CHO), Pinpin Zhang (NAOC), Ruosong Zhang (NAOC), Yulei Qiu (NAOC), You Lv (CHO), Jing Wang(GXU), Cordier Bertrand (CEA) and Jianyan Wei (NAOC) on behalf of SVOM GRB team

DESCRIPTION OF THE OBSERVATION:

We observed the burst \$burst name (XXX et al. GCN Circ.XXX) on XXXXX UT, XXX. XX, 2023, about XXX seconds after the Swift trigger.

A series of X and X band images were obtained. The exposure time was XX-XX seconds for each frame.

DESCRIPTION OF THE DETECTION:

An uncatalogued sourceis detected within the XRT enhanced error box (XXX et al., GCNXXX).The position is :

R.A.: XX:XX:XX (J2000)

DEC. XX:XX:XX (J2000)

The brightness was fading from XXX mag to XXX mag during our observations. The photometry calibration was carried out with the UCAC-4 catalogs.

ADDITIONAL DESCRIPTION:

The observations and the data analysis are still continuously. More detailed analysis is continuing.

We thank the observation assistant XXXXXX at Jilin observatory for their excellent support.

This message may be cited.

DESCRIPTION OF THE INSTRUMENT:

The C-GFT (Chinese Ground Follow-up Telescope in SVOM mission) is located at Jilin (long.=126.33 deg, lat.= 43.8243778 deg), Changchun Observatory, National Astronomical Observatories, CAS. It has FOV of 1.5 deg X 1.5 deg with a 4k*4k CMOS detector mounted on the primary

8. Prepare GCN Circular

Edit circular manually

Prepare Circular

SVOM BURST ID	SB23455432	TELESCOPE	CGFT	TYPE	CGFT FIRST DETECTION
DETECTION TIME (UT)	2030-23-21T23:32:32.0	T-T0 (SEC.)	102.0		
RA (J2000)	23:23:32.34	DEC (J2000)	12:23:23.02	ERR (ARCSEC)	2.015

SUBJECT:

An opticle counterpart is detected by CGFT

AUTHOR LIST:

XXXX (BA and Affiliation), LipingXin (NAOC), Chao Wu (NAOC), Xuhui Han (NAOC), Xiaomeng Lu (NAOC), Damien Turpin(CEA), Zhenwei Li (CHO), Pinpin Zhang (NAOC), Ruosong Zhang (NAOC), Yulei Qiu (NAOC), You Lv (CHO), Jing Wang(GXU), Cordier Bertrand (CEA) and Jianyan Wei (NAOC) on behalf of SVOM GRB team

DESCRIPTION OF THE OBSERVATION:

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A series of X and X band images were obtained. The exposure time was XX-XX seconds for each frame.

DESCRIPTION OF THE DETECTION:

An uncatalogued sourceis detected within the XRT enhanced error box (XXX et al., GCNXXX).The position is :
R.A.: XX:XX:XX (J2000)
DEC. XX:XX:XX (J2000)
The brightness was fading from XXX mag to XXX mag during our observations.
The photometry calibration was carried out with the UCAC-4 catalogs.

ADDITIONAL DESCRIPTION:

The observations and the data analysis are still continuously.
More detailed analysis is continuing.

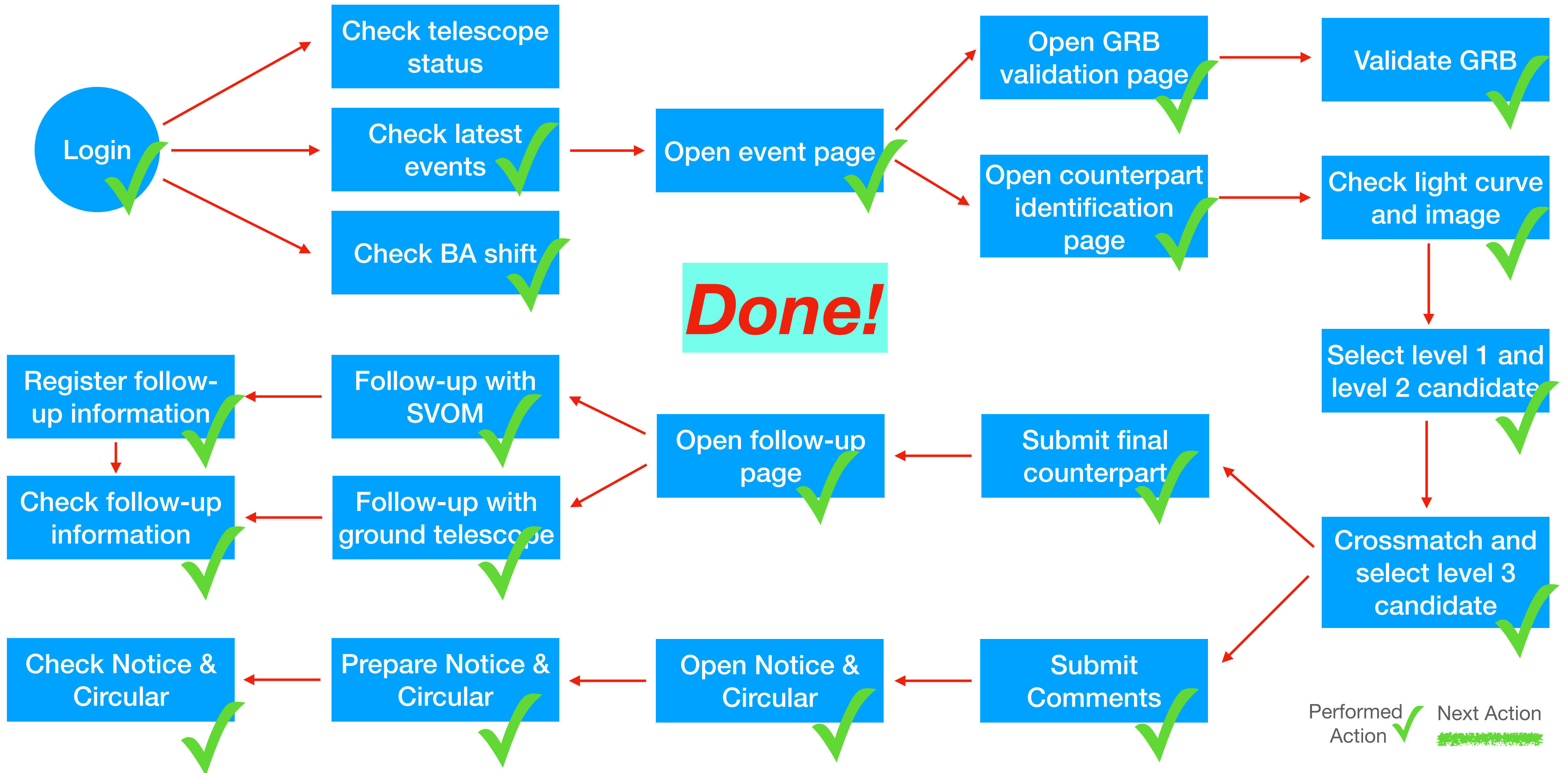
We thank the observation assistant XXXXXX at Jilin observatory for their excellent support.

This message may be cited.

DESCRIPTION OF THE INSTRUMENT:

The C-GFT (Chinese Ground Follow-up Telescope in SVOM mission) is located at Jilin (long.=126.33 deg, lat.= 43.8243778 deg), Changchun Observatory, National Astronomical Observatories, CAS. It has FOV of 1.5 deg X 1.5 deg with a 4k*4k CMOS detector mounted on the primary focus of 1.2-meter-aperture telescope.

Working with CSC BA tools



Launching the VXPP process

2023-09-18T12:45:22.323Z (UT) TABLE MODE FORUM MODE

sb24041200

EVENT & ALERT DATA COUNTERPART OBSERVATION NOTICE & CIRCULAR DISCUSSION

Event Actions: **VALIDATE EVENT** ^

Mission	Trigger Name	Event Name	svom Burst Id	Type	Trigger time(T0,UT) ↕	RA(J2000)	DEC(J2000)	ERR(ARC)
SVOM	sb24041200		sb24041200	Gamma-ray Burst	2024-04-12T20:55:00.000	212.654992809	29.69893975659	0.0501

column ▾

Alert

Alert Time(UT) ↕	Alert ID	Alert type	Alert Number	Instrument	RA(J2000)	DEC(J2000)	ERR(ARCSEC)	Duration	SNR	Event Proba	Alert Ivorn Link
2023-07-13T07:17:24.330120	-1	observation	1	Svom-Eclairs	212.654999	29.6989403				1	ivo://org.svom/fsc#sb23021661_eclairs-wakeup

Total: 1 < **1** > Items/Page

Launching the VXPP process

Give the initial position for VXPP and start the pipeline



GRB 231212 * EVENT NAME

BACK TO LOCATION PAGE

Selected Location SET LOCATION PARAMETER FOR VXPP

Remove Target After Starting VXPP Keep

	DETECTOR	ORIGIN	DETECTION TIME (UT)	DT-T0 (S.)	RA	DEC	ERR	DIS. MXT (arcsec)
X	Eclairs	N1e	2022-01-01T13.58.40.5	300	06:02:52.007	-08:36:00.00	0.0394	0.6

Column 1

Initial Location:

	DETECTOR	ORIGIN	DETECTION TIME (UT)	DT-T0 (S.)	RA	DEC	ERR	DIS. MXT (arcsec)
	Eclairs	N1e	2022-01-01T13.58.40.5	300	06:02:52.007	-08:36:00.00	0.03945	0.34
	MXT	PO_MXT	2022-01-01T13.58.40.5	300	06:02:52.007	-08:36:00.00	0.03945	0.34
	VT	N2v	2022-01-01T13.58.40.5	300	06:02:52.007	-08:36:00.00	0.03945	0.34
	MXT	QPO_MXT	2022-01-01T13.58.40.5	300	06:02:52.007	-08:36:00.00	0.03945	0.34
	VT	QPO_VT	2022-01-01T13.58.40.5	300	06:02:52.007	-08:36:00.00	0.03945	0.34

Column 1 Total 321 < 1 2 3 4 5 6 7 ... 33 > 10 Item/Page To Page

Add New Location:

	DETECTOR	ORIGIN	DETECTION TIME (UT)	DT-T0 (S.)	RA	DEC	ERR	DIS. MXT (arcsec)
	Eclairs	N1e	2022-05-18T10:29:30	81.532	23:32:23.1	23:32:23.1	0.209	0.209

ADD

Format: hh:mm:ss, degree Format: dd:mm:ss, degree

* 添加到 location pool

Thanks