

Portal web de acceso a los datos de reducción de imágenes en el CEFCFA

Javier Hernández
CEFCFA



- Descarga de imágenes en tiempo real y *preprocesado* de las mismas.

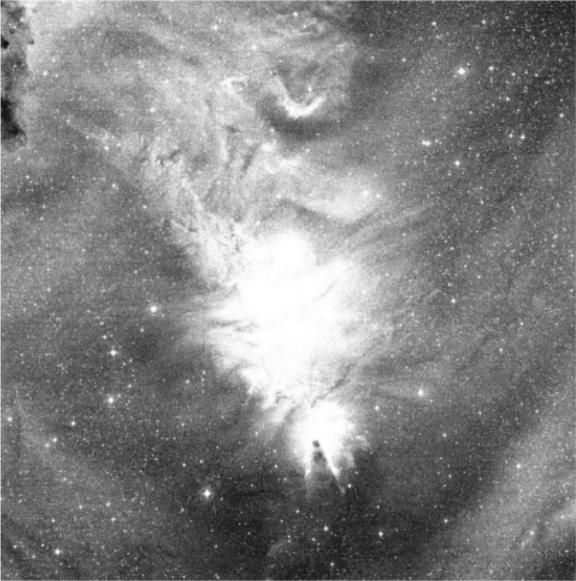


Figura: *Dashboard* de entrada.

Utiliza la base de datos de la **pipeline** de reducción:

- ▶ Facilita la visualización, la trazabilidad y el estado de la reducción de las imágenes.
- ▶ Permite validar o invalidar exposiciones visualmente mediante la inclusión de FLAGS.
- ▶ Es un apoyo a la operación nocturna en *quasi-tiempo real* para el control de calidad.

Reduced Image - j02-20230218T220511-01_proc - RA_100.22_DEC_+09.81A_03L



[Main](#)
[Cal. Frames](#)
[IDL](#)
[Astrom.](#)
[Ing.](#)

[Phot.Calib](#)
[Quality](#)
[Headers](#)
[All](#)

Type	SCIE	
Filter	J0660	
Date Obs.	2023-02-18 22:05:11	
RA	100.22037	(6:40:52.89)
DEC	9.81000	(+9:48:36)
Exp. Time	10.00	
Readout	MODE_5	
Proc. Mode	Normal	
Corrections	Overscan/Trimmed/Flat/ICOR	
Exit Status	OK	
FWHM Mean	0.833661	
FWHMG	0.814	
FWHMG Rms	0.037	
Valid		
User Comment		

[Downloads](#)
[Plots](#)

Reverse
 Back Level

Linear
Raw Detail
Flag Raw
Flag reduction

Close

Figura: Datos principales de una imagen reducida.

Reduced Image - *j02-20230218T220511-01_proc - RA_100.22_DEC_+09.81A_03L*



[Main](#)
[Cal. Frames](#)
[Data](#)
[Astrom.](#)
[Ing.](#)

[Phot.Calib](#)
[Quality](#)
[Headers](#)
[All](#)

FLAT

[j02-FLAT-b20230203e0313-J0660-00-C01M5](#)
Valid: 2023-02-03T10:00:00 - 2023-03-13T10:00:00
ADU Level: 1.034
Noise: 0.0110

ICOR

[j02-ICOR-b20230203e0313-J0660-00-C01PF168D58-1](#)
Valid: 2023-02-03T12:00:00 - 2023-03-13T12:00:00
Filter: J0660

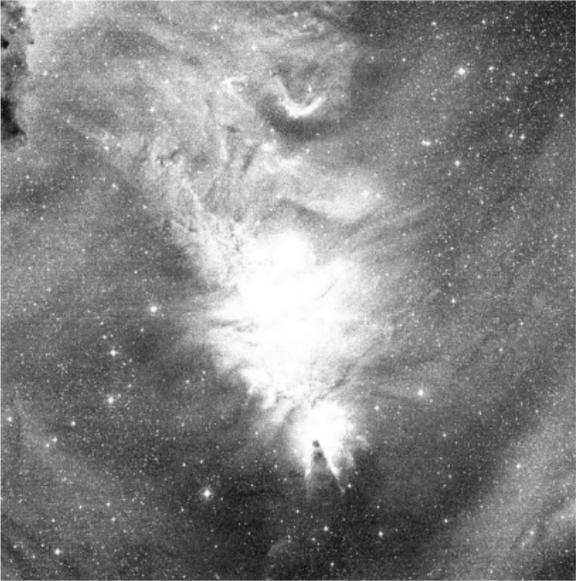
OVERSCAN

[j02-OVSC-b20230112e0101-5s20s-00-C01M5K054POYO27P27](#)
Valid: 2023-01-12T10:00:00 - 2024-01-01T10:00:00

[Downloads](#)
[Plots](#)
Linear
 Reverse
 Back Level
 [Raw Detail](#)
[Flag Raw](#)
[Flag reduction](#)
[Close](#)

Figura: Imágenes de calibración usadas.

Reduced Image - j02-20230218T220511-01_proc - RA_100.22_DEC_+09.81A_03L



[Main](#)
[Cal. Frames](#)
[IDL](#)
[Astrom.](#)
[Ing.](#)

[Phot.Calib](#)
[Quality](#)
[Headers](#)
[All](#)

Type	SCIE	
Filter	J0660	
Date Obs.	2023-02-18 22:05:11	
RA	100.22037	(6:40:52.89)
DEC	9.81000	(+9:48:36)
Exp. Time	10.00	
Readout	MODE_5	
Proc. Mode	Normal	
Corrections	Overscan/Trimmed/Flat/ICOR	
Exit Status	OK	
FWHM Mean	0.83661	
FWHMG	0.814	
FWHMG Rms	0.037	
Valid		
User Comment		

[Downloads](#)
[Plots](#)

Reverse
 Back Level

[Raw Detail](#)
[Flag Raw](#)
[Flag reduction](#)

[Close](#)

Figura: Datos de ingeniería.

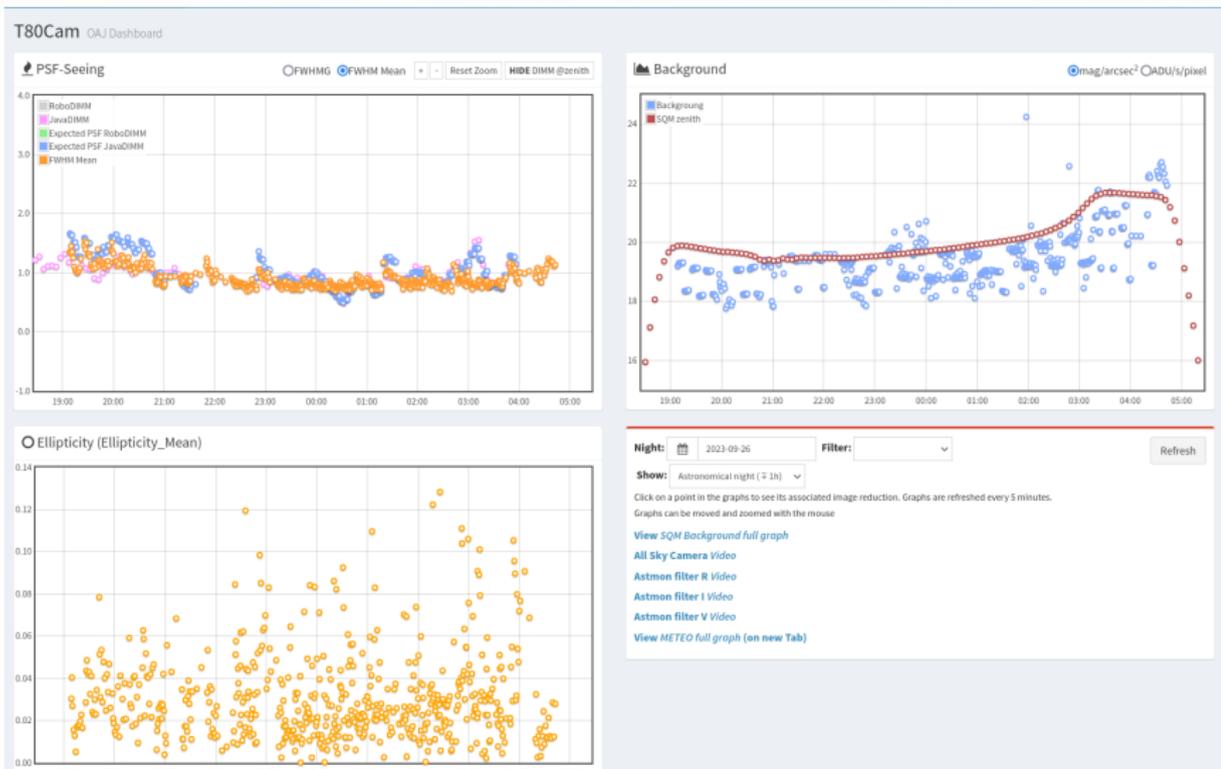


Figura: *Dashboard* de ayuda a la observación.

Raw Images T80Cam
Export as CSV

Night Search +

Main Search -

Image Name:

Name pattern (example: "proc")

Object:

MS1

Project Id:

Identifier pattern

Type: ▼

Filter: ▼

Readout: ▼

Valid: ▼

From date: 📅 2023-10-09

To date: 📅 2023-10-10

Reset
Search

Cone Search +

Name List Search +

Custom Search +

Show 10 entries
Search:

	Name	Object	Type	Filter	Date	Exp. Time	Valid	ADULevel		
1	j02-20231009T000510-01	IC348	SCIE	rSDSS	2023-10-09 00:05:10	10.00		46.31	👤	<input type="checkbox"/>
2	j02-20231009T000744-01	IC348	SCIE	rSDSS	2023-10-09 00:07:44	10.00		46.44	👤	<input type="checkbox"/>
3	j02-20231009T000821-01	IC348	SCIE	rSDSS	2023-10-09 00:08:21	7.00		32.53	👤	<input type="checkbox"/>
4	j02-20231009T000856-01	IC348	SCIE	rSDSS	2023-10-09 00:08:56	7.00		32.41	👤	<input type="checkbox"/>
5	j02-20231009T000931-01	IC348	SCIE	rSDSS	2023-10-09 00:09:31	7.00		32.40	👤	<input type="checkbox"/>
6	j02-20231009T001005-01	IC348	SCIE	gSDSS	2023-10-09 00:10:05	7.00		14.03	👤	<input type="checkbox"/>
7	j02-20231009T001040-01	IC348	SCIE	gSDSS	2023-10-09 00:10:40	7.00		14.16	👤	<input type="checkbox"/>

Loaded: 2023-10-09 2:11:42

User comment:

Name	Exit S.	Corrections	Date	FWHMG	rms
j02-20231009T001040-01_prepro	0	Overscan/Trimmed/Flat	2023-10-09T02:17:13	0.939	0.037

	Name	Object	Type	Filter	Date	Exp. Time	Valid	ADULevel	
1	j02-20231009T001113-01	IC348	SCIE	gSDSS	2023-10-09 00:11:13	7.00		14.19	👤
2	j02-20231009T001147-01	IC348	SCIE	iSDSS	2023-10-09 00:11:47	4.00		30.71	👤
3	j02-20231009T001218-01	IC348	SCIE	iSDSS	2023-10-09 00:12:18	4.00		30.32	👤

Showing 1 to 10 of 1,000 entries

Previous
1
2
3
4
5
...
100
Next

Figura: Búsqueda de imágenes raw.

Reduced Images T80Cam

[List Review](#)
[Export as CSV](#)

Main Search

Night:

Type: **Filter:**

Readout:

RAW Valid:

Process:

Reduction Name:

Object:

Project Id:

Night Range +

Cone Search +

j02-20231009T194438-01_prepro <input type="checkbox"/> JVAR02986epoch05 rSDSS Is Valid: Quality Flag:	j02-20231009T194732-01_prepro <input type="checkbox"/> JVAR02986epoch05 rSDSS Is Valid: Quality Flag:	j02-20231009T194810-01_prepro <input type="checkbox"/> JVAR02986epoch05 J0395 Is Valid: Quality Flag:	j02-20231009T195007-01_prepro <input type="checkbox"/> JVAR02986epoch05 gSDSS Is Valid: Quality Flag:
j02-20231009T195116-01_prepro <input type="checkbox"/> JVAR02986epoch05 J0515 Is Valid: Quality Flag:	j02-20231009T195233-01_prepro <input type="checkbox"/> JVAR02986epoch05 rSDSS Is Valid: Quality Flag:	j02-20231009T195348-01_prepro <input type="checkbox"/> JVAR02986epoch05 J0660 Is Valid: Quality Flag:	j02-20231009T195634-01_prepro <input type="checkbox"/> JVAR02986epoch05 iSDSS Is Valid: Quality Flag:

Figura: Visualización en mosaico.

Reduced Image List - Review 1 of 3

sources = 1 (200)
 ellipticity = 0.01
 eccentricity = 0.16
 orientation = 50.40 deg
 FWHM = 1.05 arcsec

j02-20231002T223545-01_prepro

Project	2210004	Object	IC5070	Filter	g5055	Img_Type	SCIE	Date Obs.	2023-10-02 22:35:45	Valid	
Ra	313.02122	Dec	44.11080	Exp_Time	30.00	FWHM Mean	1.04224	FWHM	1.053	Exit Status	OK
RAW Valid:		User Comment									

Linear
 Log

Figura: Revisión de lista de imágenes.

JPCam View JST250 JPCam V01

Previous Next Download All Review Detail Mode Flag Mode Normal Flip

REDUCED - j05-20231010T203023_preprot (JPAS35254) SCIE - 60.00 sec. - MODE_3

IMAGE Full View Plots

Main Search

Search: REDUCED Tray: JPS02

From date: 2023-10-10 To date:

Image Name:

Object:

Type: SCIE Filter:

Readout: Valid:

Reset Search

Search Results - REDUCED

Name	Object
j05-20231010T201203_preprot	LCO
j05-20231010T201846_preprot	LCO
j05-20231010T202050_preprot	JPAS35253
j05-20231010T202212_preprot	JPAS35253
j05-20231010T202335_preprot	JPAS35253
j05-20231010T202457_preprot	JPAS35253
j05-20231010T202730_preprot	JPAS35254
j05-20231010T202903_preprot	JPAS35254
j05-20231010T203023_preprot	JPAS35254
j05-20231010T203146_preprot	JPAS35254

REDUCED - j05-20231010T203023_preprot (JPAS35254) SCIE - 60.00 sec. - MODE_3

Figura: Visualización instrumento JPCam.

Calibration Frames T8DCam
ICOR List Review
Export as CSV

Main Search

Type:

Image Name:

Valid for day:

Readout: Exit Before:

Filter: Is Valid:

Show entries

Search:

Name	Exit Status	Is Valid	Valid from	Valid to	ADU Level	Combined	
j02-FRIN-b20230112e0829-zSDSS-00-C01M5	0		2023-01-12T10:00:00	2023-08-29T10:00:00	0.000	218	<input type="checkbox"/>
j02-FRIN-b20230112e0829-zSDSS-00-C01M5J32	0	Valid	2023-01-12T10:00:00	2023-08-29T10:00:00	0.000	215	<input type="checkbox"/>

Showing 1 to 2 of 2 entries

Flag:

i Limited to 1000 images

If your query is too vague the server will return, at most, information for 1000 images.

Quality Flag:

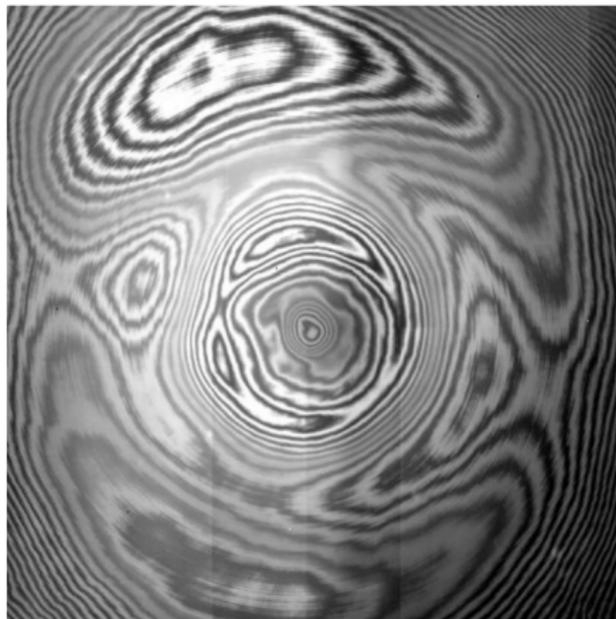
Creation Period

Name List Search

Custom Search

Figura: Búsqueda de imágenes de calibración.

FRIN - j05-FRIN-b20230503e1231-J1007-01-V01M3J3



Main	Combined	BP Mask	Quality	All
Is Valid	Valid			
Image Type	FRIN			
Date	2023-08-23			
Valid From	2023-05-03T12:00:00			
Valid To	2023-12-31T12:00:00			
ADU Level	0.000 rms: 3.7561			
Noise	1.7750 rms: 0.4972			
Filter	J1007			
Readout	MODE_3			
Selected	1405			
Combined	564			
Exit Status	Complete			
User comment				

Downloads ▾

Graphs ▾



Flag image

Close

Figura: Detalle de un *master fringing*.

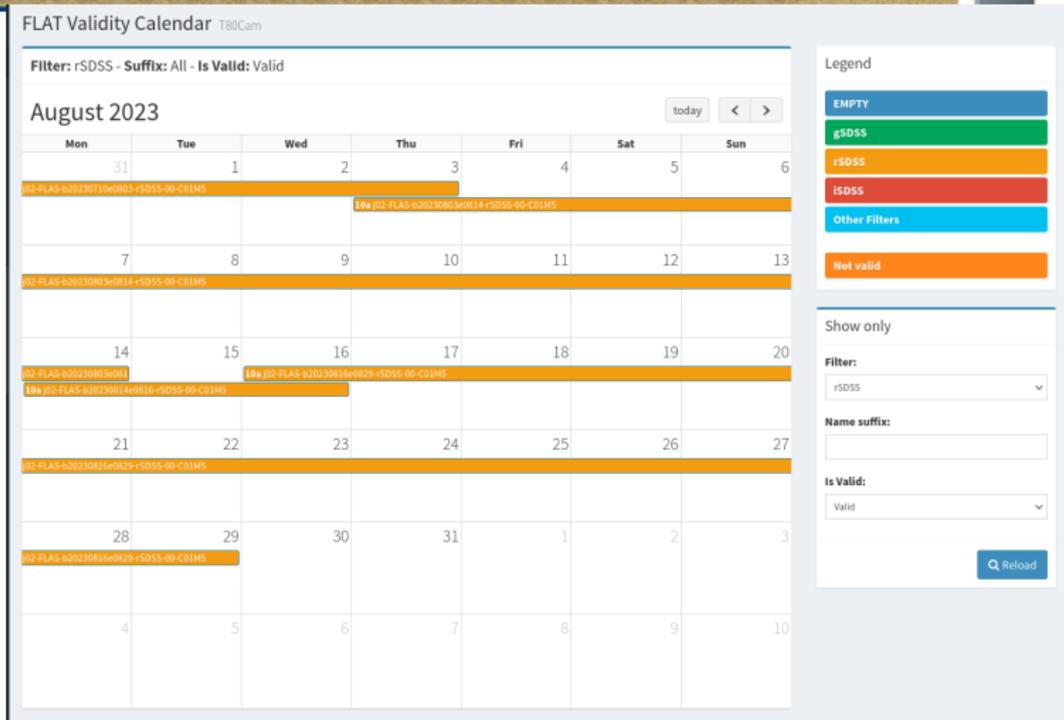


Figura: Periodos abarcados por cada imagen de calibración.

Coadded Images JST250 JPCam V01

Export as CSV Grid icons

Main Search

Image Name:

Filter:

Project Id:

From date: **To date:**

Exit Status:

Valid:

Show entries Search:

Name	RA	DEC	Filter	Combined	Selected	Exit Status	Valid
JPSV-F00001-v202310_ISDSS_swp	245.924	43.85	iSDSS	220	247	Complete	Some reduced image of the tile are invalid
JPSV-F00001-v202310_J0378_swp	245.924	43.85	J0378	18	18	Complete	
JPSV-F00001-v202310_J0390_swp	245.924	43.85	J0390	16	16	Complete	
JPSV-F00001-v202310_J0400_swp	245.924	43.85	J0400	42	42	Complete	
JPSV-F00001-v202310_J0410_swp	245.924	43.85	J0410	16	16	Complete	
JPSV-F00001-v202310_J0420_swp	245.924	43.85	J0420	18	18	Complete	
JPSV-F00001-v202310_J0430_swp	245.924	43.85	J0430	16	16	Complete	
JPSV-F00001-v202310_J0440_swp	245.924	43.85	J0440	36	36	Complete	
JPSV-F00001-v202310_J0450_swp	245.924	43.85	J0450	16	16	Complete	
JPSV-F00001-v202310_J0460_swp	245.924	43.85	J0460	16	16	Complete	

Showing 1 to 10 of 1,838 entries Previous **1** 2 3 4 5 ... 184 Next

Cone Search

Name List Search

Limited to 5000 images
 If your query is too vague the server will return, at most, information for 5000 images.

Figura: Búsqueda de imágenes Coadd.

Tile - 1000001-JPLUS-04679-v1_J0430_swp - J0430

Downloads ▾
Plots ▾

 Logarithmic render
Flag image
Close

Main **Combined** Phot.Calib Definition Quality

All

Name	Valid	Exit Status
j02-20220930T191013-01_proc		0
j02-20220930T191127-01_proc		0
j02-20220930T191242-01_proc		0
j02-20230623T014704-01_proc		0
j02-20230623T014811-01_proc		0
j02-20230623T014917-01_proc		0
Name	Valid	Exit Status

[View all](#)

Figura: Detalle de *Coadd*. Imágenes combinadas.

Implentación:

- ▶ **Python** para la parte servidora.
- ▶ Uso de librerías **Astropy**, **Pyramid**, **Healpix**.
- ▶ **MySQL** para la base de datos (*heredada de la pipeline de reducción*).

Ventajas:

- ▶ Ofrece potentes capacidades de búsqueda y acceso a los datos de imágenes.
- ▶ Previsualizaciones, Plots y descarga de productos fits.
- ▶ Integración con monitores de cielo.
- ▶ Trazabilidad. Raw - Reducciones - Imágenes de calibración. Coadds - Reducidas.

Muchas Gracias!



Financiado por
la Unión Europea
NextGenerationEU



UNIÓN EUROPEA
Fondo Europeo de Desarrollo Regional
"Una manera de hacer Europa"

