

Planetary nebulae in narrowband filters IAC80 & 130PDS

CEA 2026

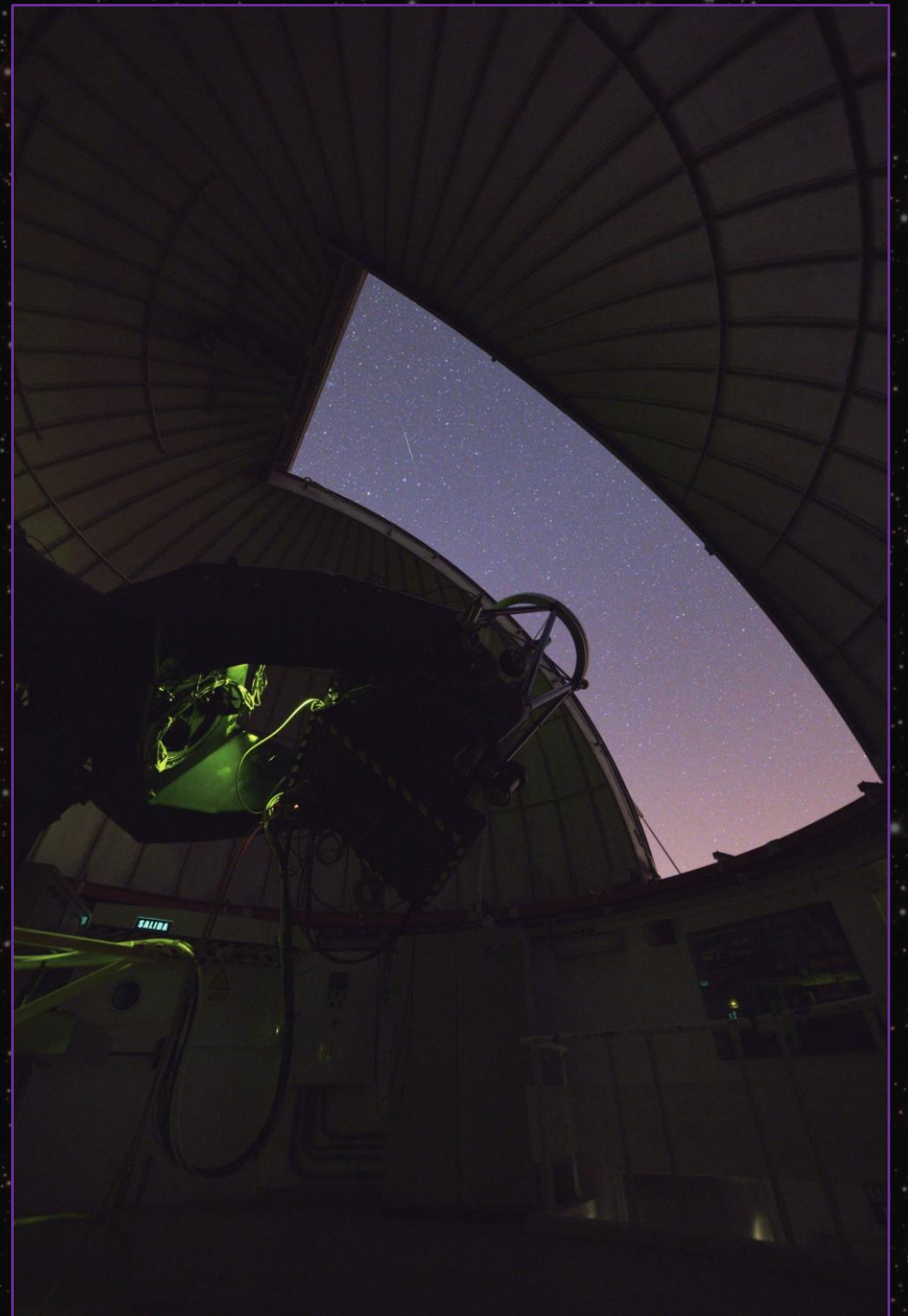
Enol Matilla Blanco



Characteristics:

IAC80:

- Focal length: 9.02 m
- Diameter: 82 cm
- f/11.3
- CCD: CAMELOT2 - CARONTE
- FOV: 11.8×11.8 - 16×12 arcmin²
- Pixel: $15 \times 15 \mu\text{m}$ - $3.76 \times 3.76 \mu\text{m}$
- Resolution: $0.322''/\text{pixel}$ - $0.081''/\text{pixel}$
- Filters:
 - Ha (656.7) 0.8nm
 - Hb (486.5) 3nm
 - O-III (500.8) 3nm



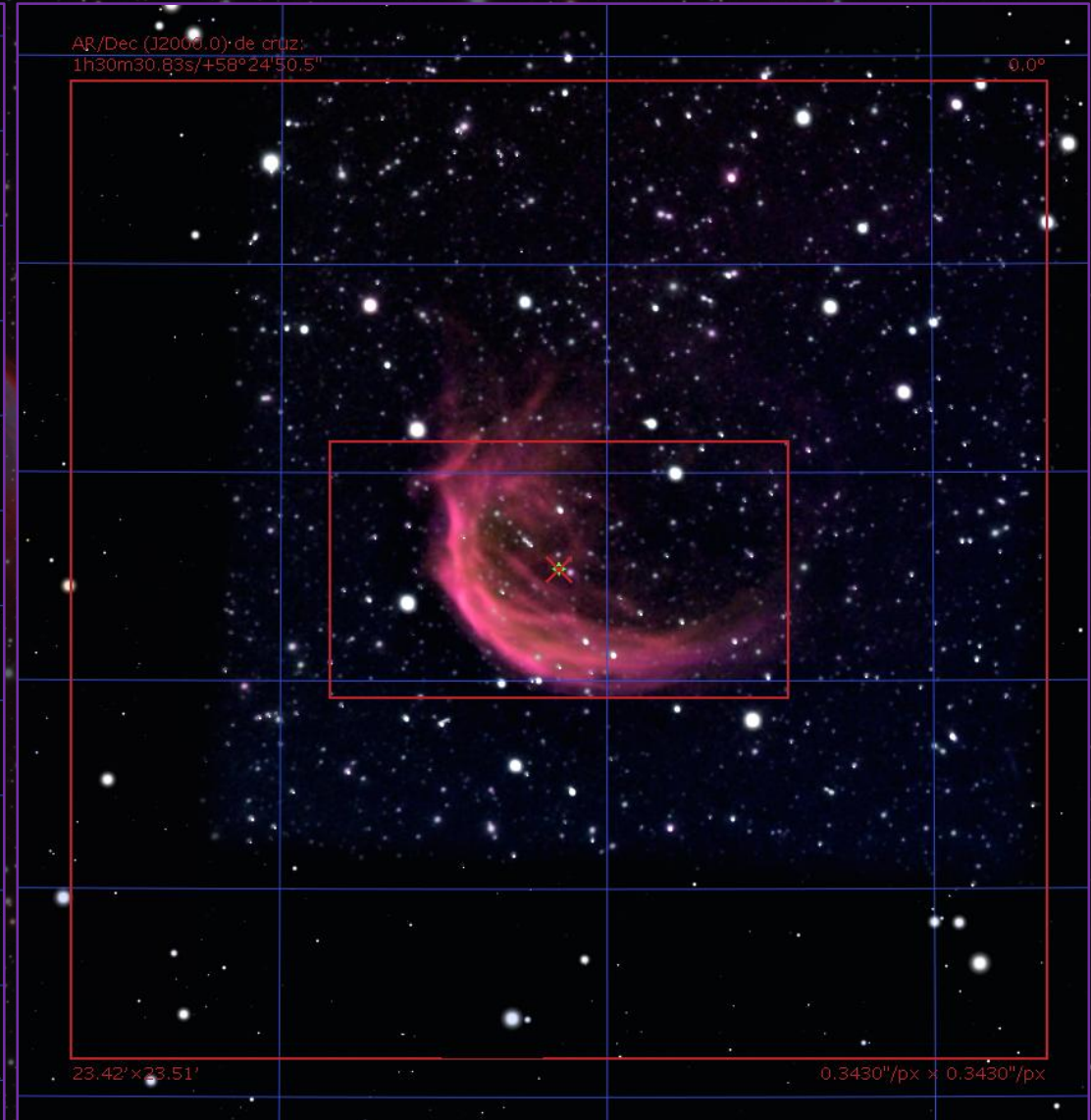
Characteristics:

130PDS:

- Focal length: 0.65 m
- Diameter: 13 cm
- f/5
- CCD: Atik 460Ex
- FOV: $1.08^{\circ} \times 0.85^{\circ}$
- Pixel: $4.54 \times 4.54 \mu\text{m}$
- Resolution: 1.44 "/pixel
- Filters:
 - Astronomik Ha (656) 6nm
 - Astronomik O-III (500) 6nm



FOV and resolution comparison



Gathering power and detail comparison

Summary:

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SNR = 22.00 db, K T_IAC80

SNR = 25.92 db, K T_130PDS

End SNRViews

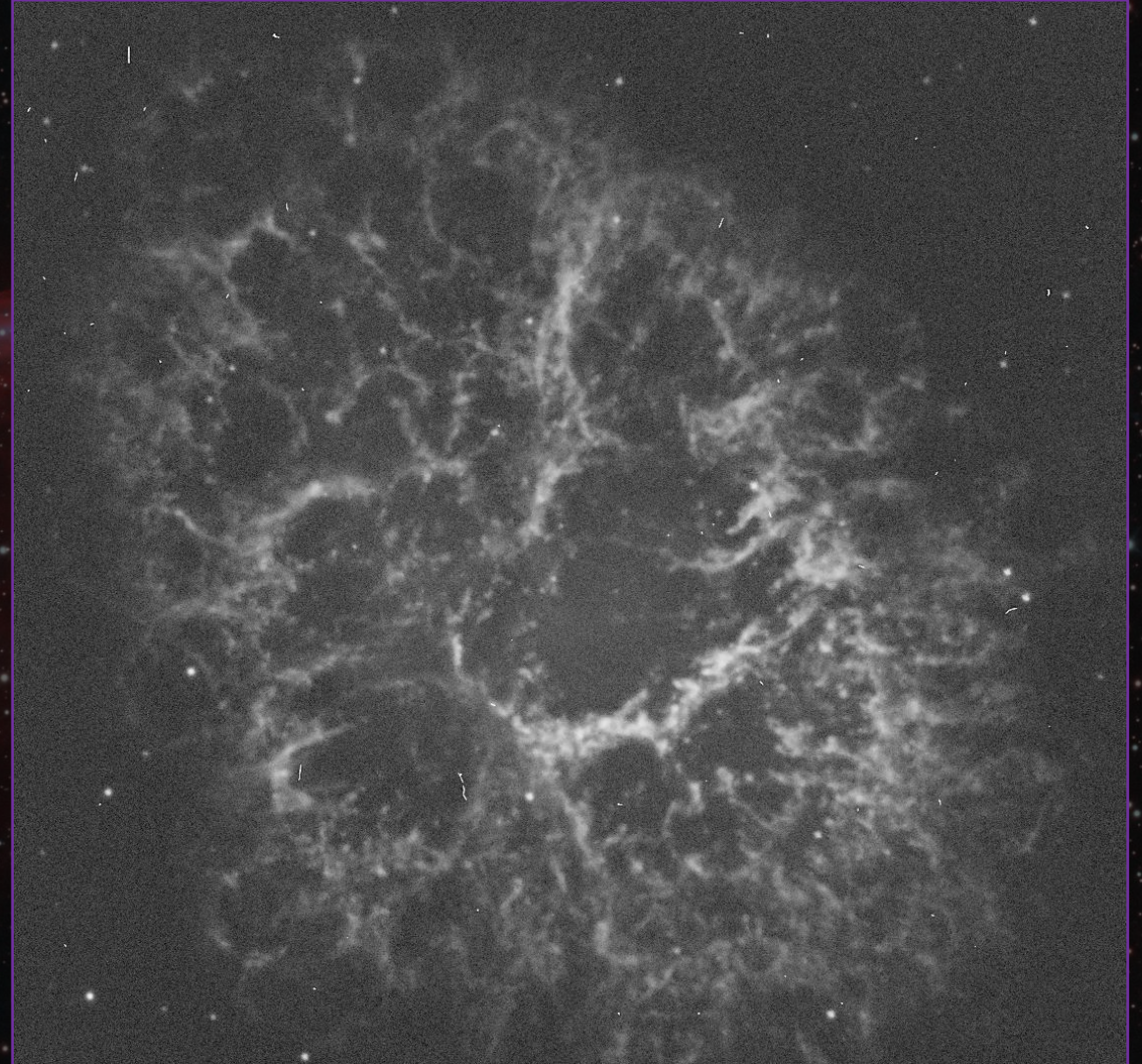
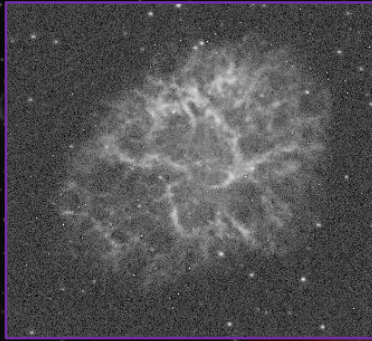
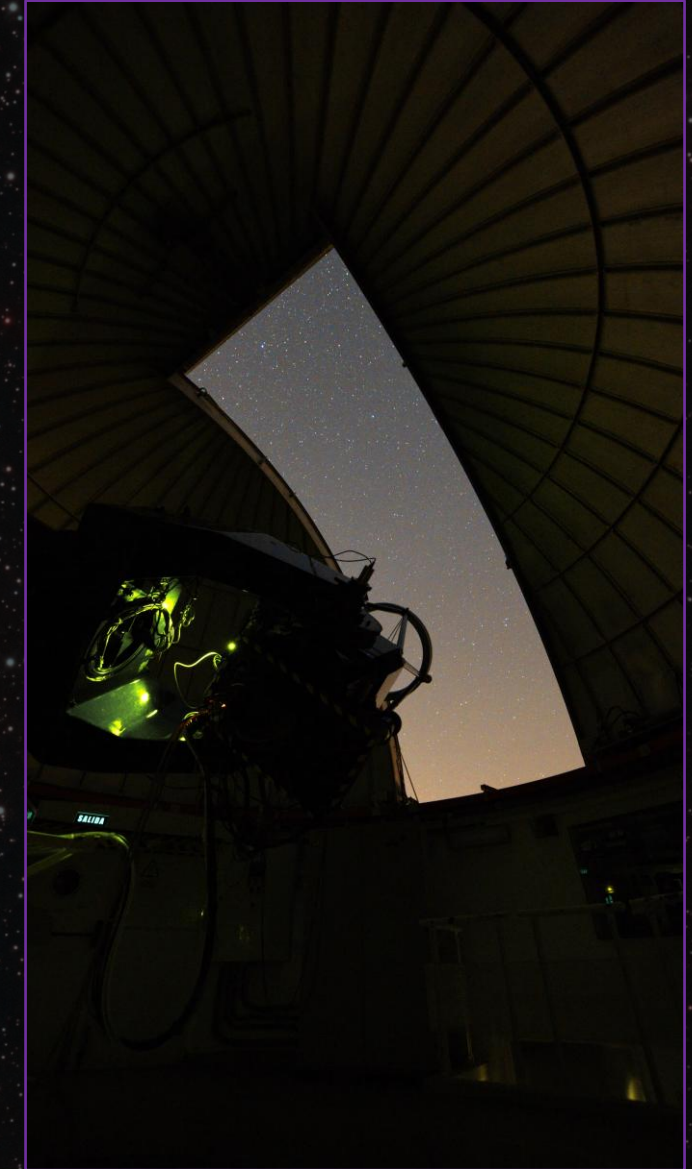


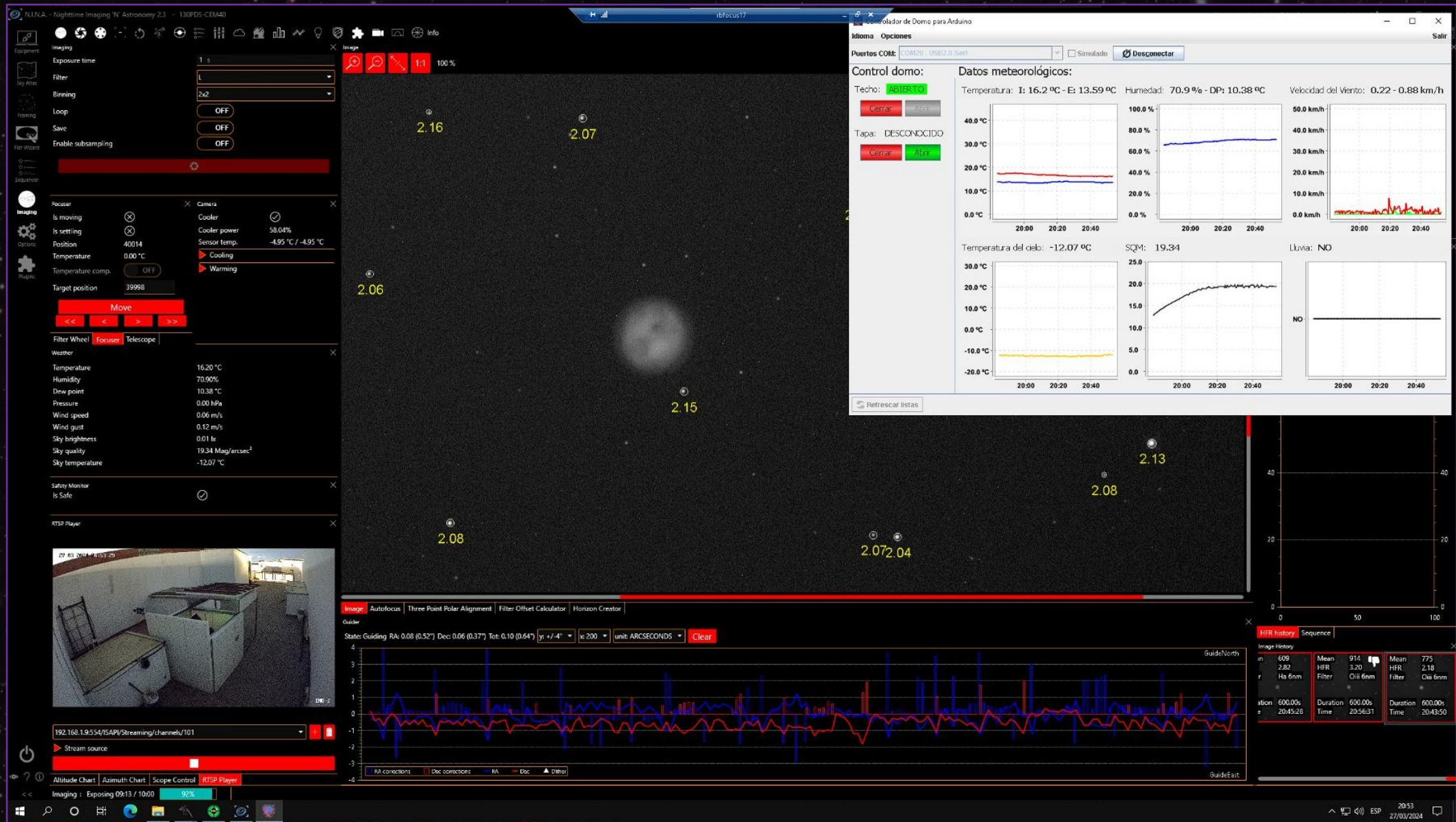
Image01	
16-bit [0,65535]	
	☐ K
count (%)	99.99919
count (px)	6045002
mean	431.3
median	424.0
avgDev	39.3
MAD	31.1
minimum	276.0
maximum	65383.0

Image06	
16-bit [0,65535]	
	☐ Scientific
	☐ K
count (%)	99.99995
count (px)	4003999
mean	233.55383645750
median	223.47625627369
avgDev	37.23221459628
MAD	29.51776113287
minimum	111.29072490654
maximum	51019.82734359932

Nights at the IAC80 (Izaña-OT)



Nights at the EMO-1



Results: IAC80 – CARONTE



M76



NGC 6445

Results: IAC80 – CAMELOT2

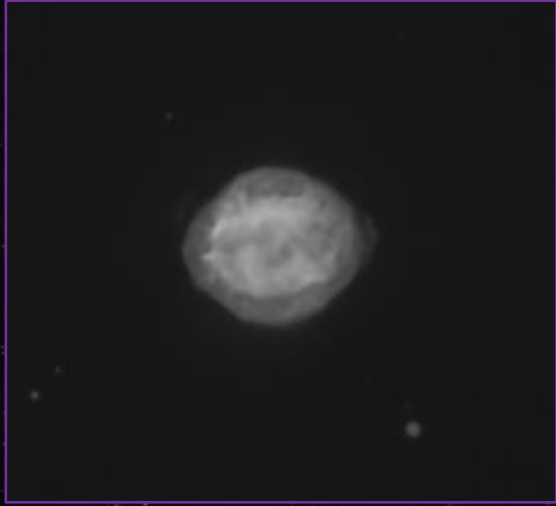


IC 1747



NGC 6720

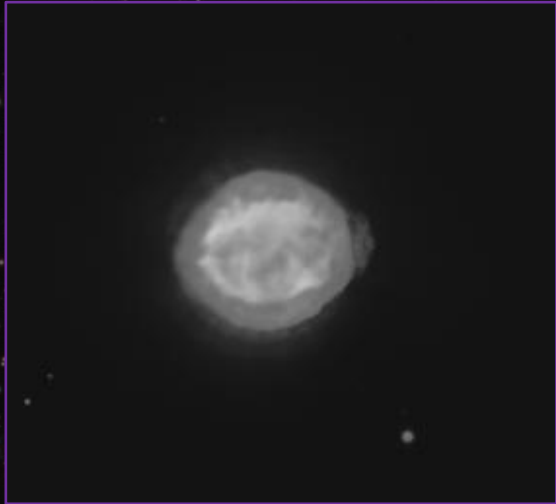
Results: IAC80 – NGC 6818



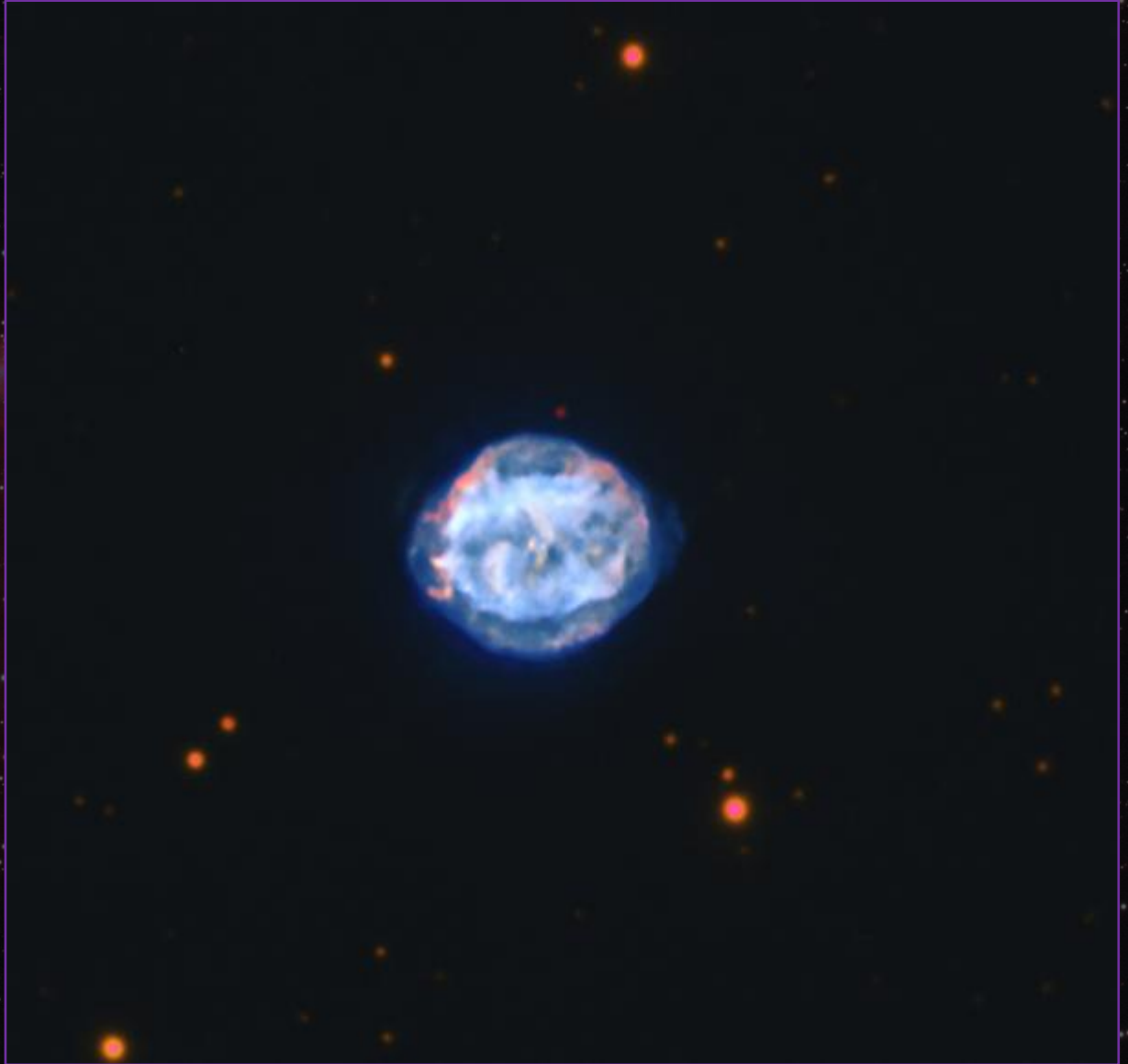
Ha



S-II



O-III



Custom SHO

Results: EMO-1



Abell 6 y HFG 1



MWP1 y PN ALV 1

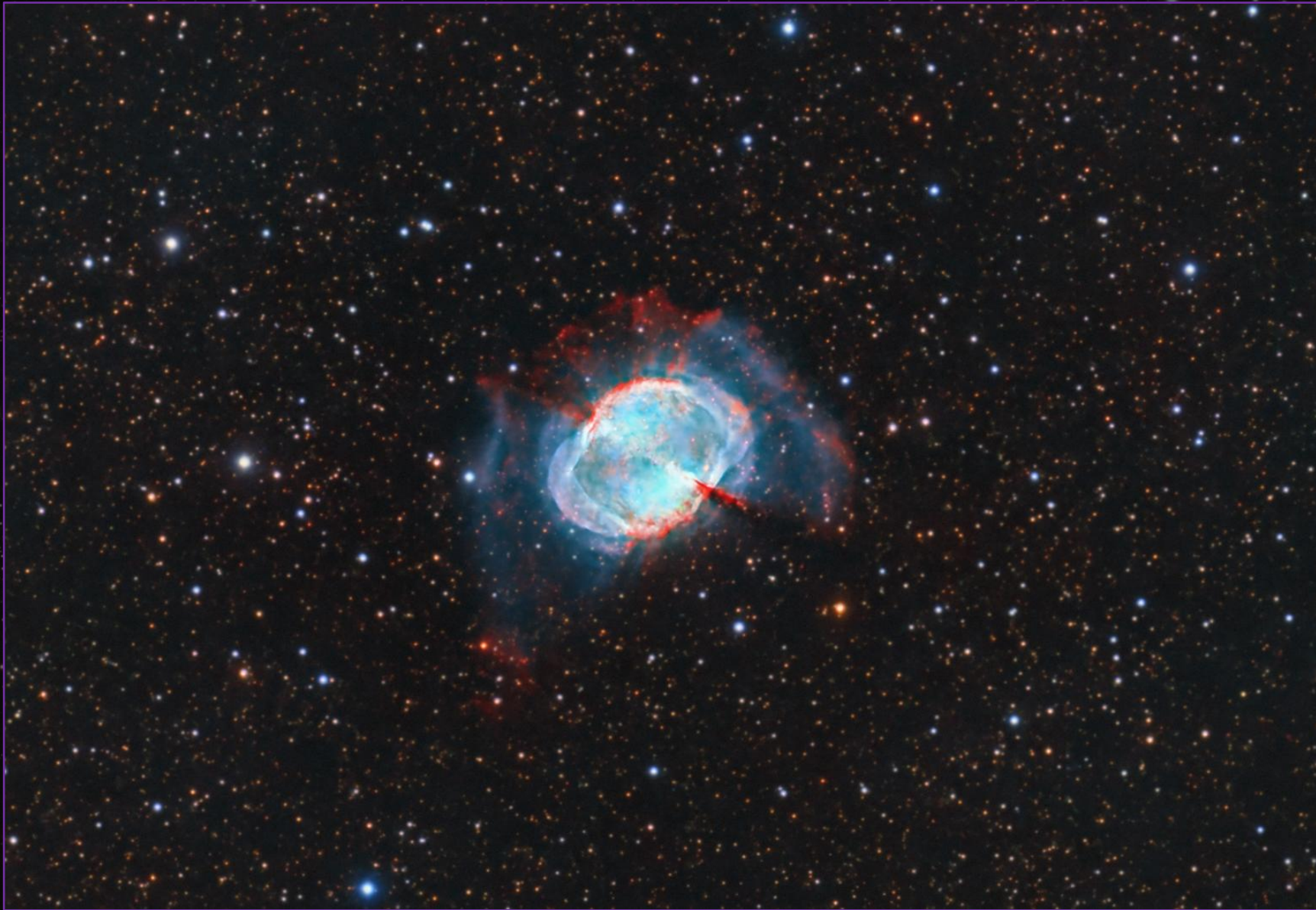
Results: EMO-1 – Long integration



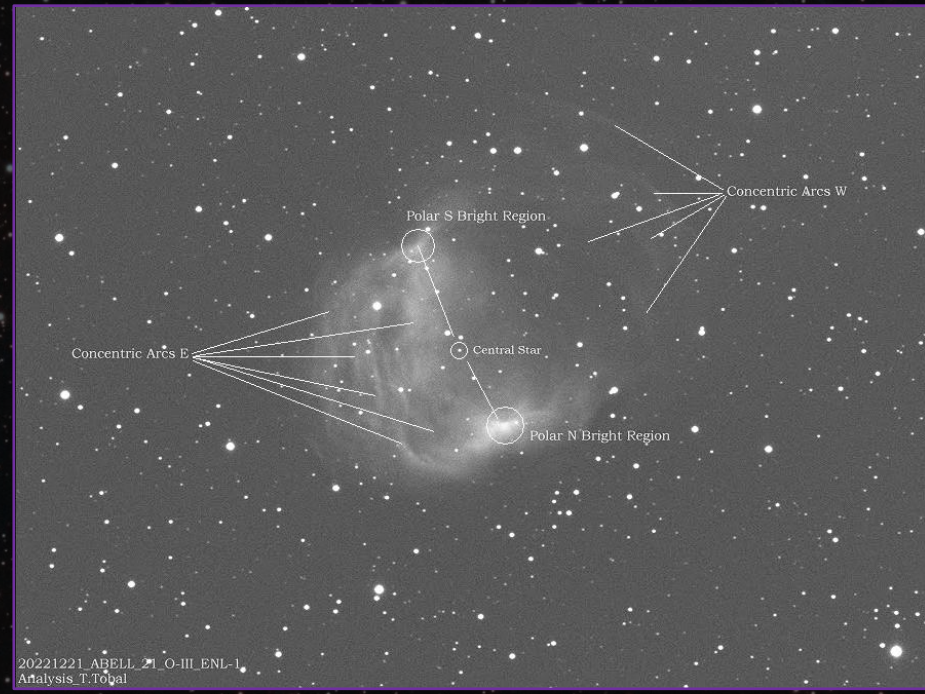
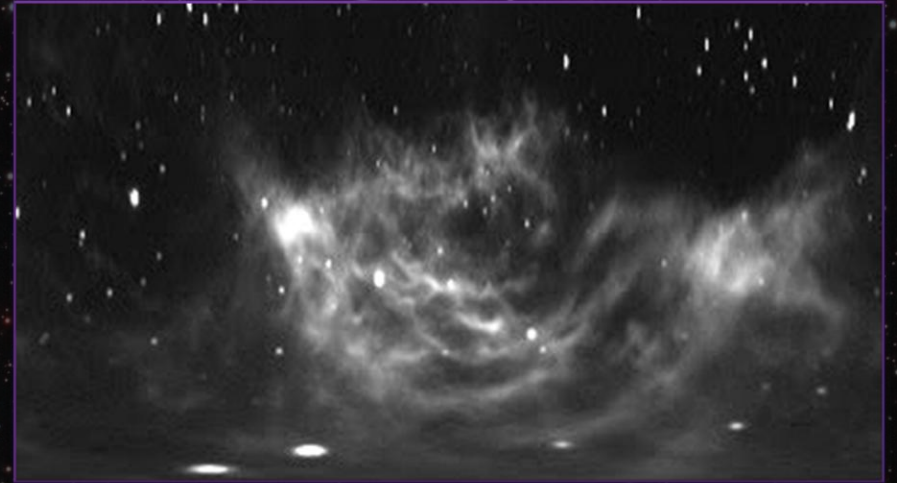
Results: EMO-1 – Long integration



Results: EMO-1 - M27



Results: EMO-1 - Abell 21



Collaborators

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