

Sesión especial de PANIC 4K: cómo sacar el mayor partido a tu tiempo asignado de observación



Software I: Generic InfraRed Software (GEIRS)

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(MPIA)

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Software I: Generic InfraRed Software (GEIRS)

- Developed by MPIA over the last 20+ yrs
 - *Generic*: core part of the software has been adapted to generations of MPIA electronics that control infrared detectors
- ⇒ Compatible with older instruments

Source: *GEIRS Manual*

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Software I: Generic InfraRed Software (GEIRS)

- Low level software in charge of the communication with the detector
- Assembles parameter lists and commands received from its own graphical interface or other higher level software
- Translates these into the firmware language of the MPIA readout electronics (ROE)
- Initializes the readout cycles
- Accumulates the frames received from the ADC's of the electronics as FITS files or screen images

Source: GEIRS Manual



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It is NOT:

- a data pipeline or data reduction tool for an type of infrared images or detectors
- a FITS display tool

Source: *GEIRS Manual*



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Infraestructura
Científica y Técnica
(Inagotable)



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```
panic@irws1:~> geirs_start_panic
starting GEIRS for PANIC ...
Playing bong.au test sound
PING 192.168.70.30 (192.168.70.30) 56(84) bytes of data.
64 bytes from 192.168.70.30: icmp_seq=1 ttl=128 time=1.13 ms
64 bytes from 192.168.70.30: icmp_seq=2 ttl=128 time=1.09 ms

--- 192.168.70.30 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 100lms
rtt min/avg/max/mdev = 1.094/1.112/1.131/0.018 ms
PING 192.168.70.20 (192.168.70.20) 56(84) bytes of data.
64 bytes from 192.168.70.20: icmp_seq=1 ttl=128 time=1.12 ms
64 bytes from 192.168.70.20: icmp_seq=2 ttl=128 time=1.08 ms

--- 192.168.70.20 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 100lms
rtt min/avg/max/mdev = 1.082/1.099/1.117/0.017 ms
cmdServer at port '28501' started

cmdServer at port '28501' started
```

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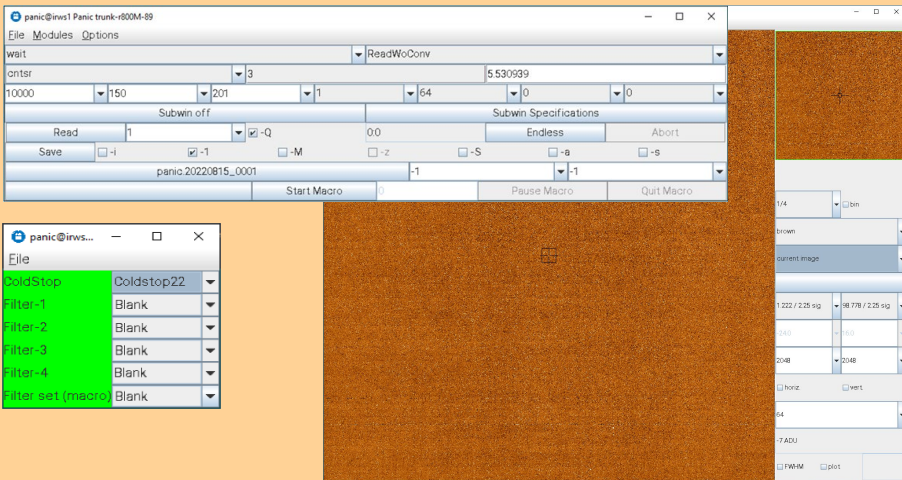


de.mpg.mpia.geirs.InitGUI PANIC@irws1

OBSERVER	V._Naranjo	▼
Hawaii chip ID	0	▼
CAM_NDET	1	▼
CAMDET	1 (=Hawaii-4RG)	▼
DATAINPORT(s)	00 01	
CAMPORT	tcp://192.168.70.30:4000	▼
MOTPORT	tcp://192.168.70.20:4000	▼
TEMPORT		▼
TELESCOPE	CA2.2m	▼
Telescope Access	false	▼
CAMFNTSZ	12	▼
OK all 17 Cancel		

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Infraestructura Científica y Tecnológica



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"Una manera de hacer Europa"

CAHA15-CE-39



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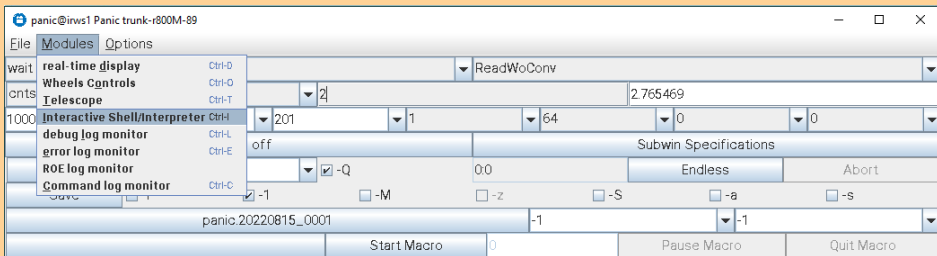


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Software I: Generic InfraRed Software (GEIRS)

- Control window



Software I: Generic InfraRed Software (GEIRS)



```
Panicpanic@irws1-Inst Panicpanic@irws1-InstrumentShell

GENERIC Infrared Camera
nicpanic@irws1> .

Use <TAB>[<TAB>] for c
and the cursor keys
(Quit the --more-- li
Panicpanic@irws1> █

Wheel-Macro time: 23 sec
wheel: terminated ok
INFO Filter 3 target position 6
DEBUG Waiting for max. 60 sec on wheel phys=3,ln=3
wheels are already moving
ERROR wheels are already moving
ERROR analyse_wait4pid: exit-status: 52 (if geirs-error: (E_wheel=52) wheels are
moving)
INFO WHEEL[1],wprfocus[5]=0
INFO WHEEL[2],wprfocus[0]=54
INFO WHEEL[3],wprfocus[5]=0
INFO WHEEL[4],wprfocus[5]=0
INFO WHEEL[1],wprfocus[5]=0
INFO WHEEL[2],wprfocus[0]=54
INFO WHEEL[3],wprfocus[5]=0
INFO WHEEL[4],wprfocus[5]=0
INFO focus needs no correction
wheel3 (phys=3) moving time: 2 sec
wheel: terminated ok

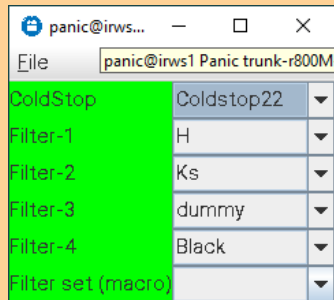
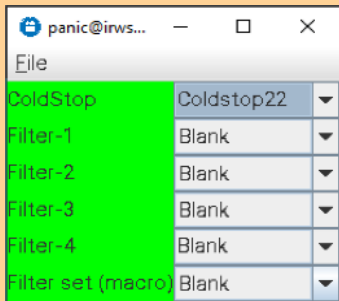
Panicpanic@irws1> INFO starting ROE .. (idle wait frame timeout 5,5 s)
total ctime (measure not available) / preset-ctime=5530.9389192
read: terminated ok
█
```

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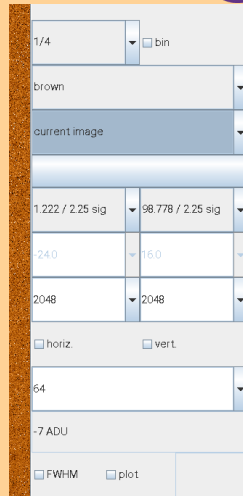
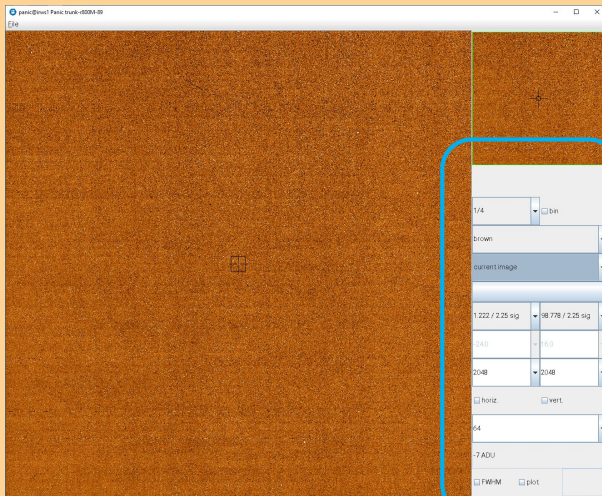
Software I: Generic InfraRed Software (GEIRS)

- Filter wheel window



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- Display window



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For more information and details visit:

www.caha.es/panic

→ During observations

→ GEIRS (Generic InfraRed Software)