



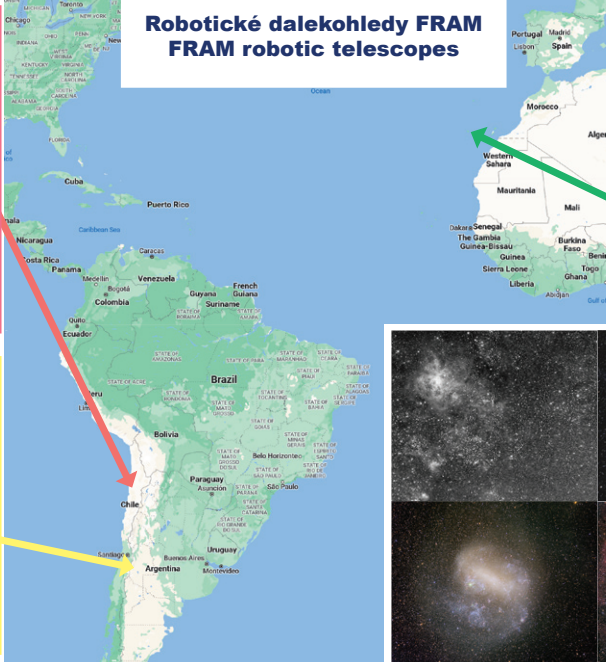
European Southern Observatory (Cherenkov Telescope Array – South) Chile – 2 ×



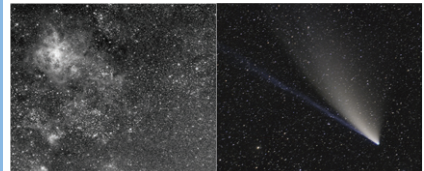
Pierre Auger Observatory Argentina – 2 ×



Robotické dalekohledy FRAM FRAM robotic telescopes



Observatorio Roque de los Muchachos (Cherenkov Telescope Array – North) La Palma – 1 ×





X 1 selected

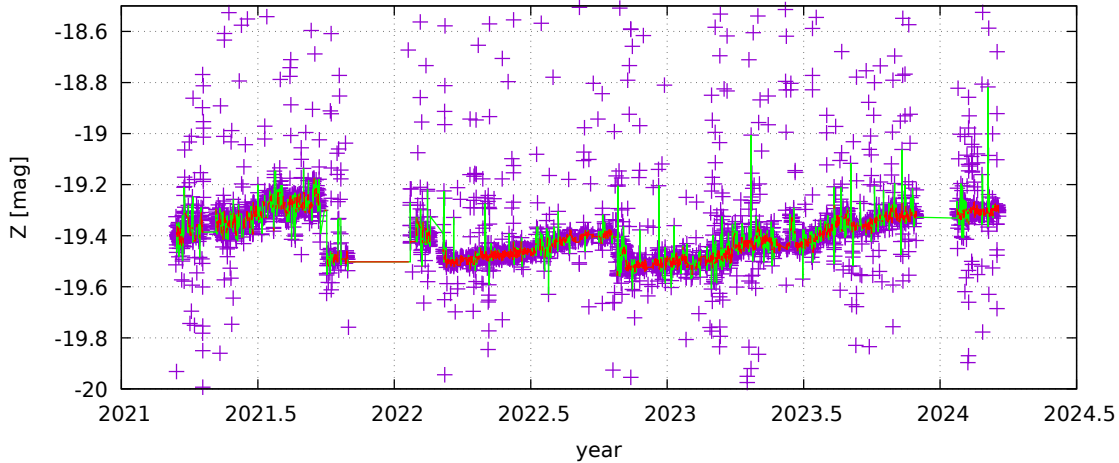
Name	Owner	Last mo...	
1 - Anexo_A_1_Documentation_Required...	M martinwill...	Dec 11, 2023	
2 - ESTUDIO_SEGURIDAD_SALUD_2206...	M martinwill...	Dec 11, 2023	
3a - Safety Documents for LST2-4	M martinwill...	Dec 11, 2023	
3b - Necessary Documents for Workers	M martinwill...	Dec 11, 2023	
DEU_evaluacion_riesgos_mpi_231025.pdf	M martinwill...	Dec 11, 2023	
DEU_plan_seguridad_salud_mpi_231025...	M martinwill...	Dec 11, 2023	
DEU_plan_seguridad_salud_mpi_231025...	M martinwill...	Dec 11, 2023	
SPA_adhesión al plan por subcontratist...	M martinwill...	Dec 11, 2023	
SPA_evaluacion_riesgos_mpi_231025.pdf	M martinwill...	Dec 11, 2023	
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SPA_planos_plan_seguridad_salud_230...	M martinwill...	Dec 11, 2023	
SPA_planos_plan_seguridad_salud_230...	M martinwill...	Dec 11, 2023	
Will-Nombramiento.pdf	M martinwill...	Oct 24, 2023	
Will-PPE.pdf	M martinwill...	Oct 24, 2023	
Will-SocSec.pdf	M martinwill...	Oct 31, 2023	
Will-WorkSafety20h.pdf	M martinwill...	Mar 31, 2023	

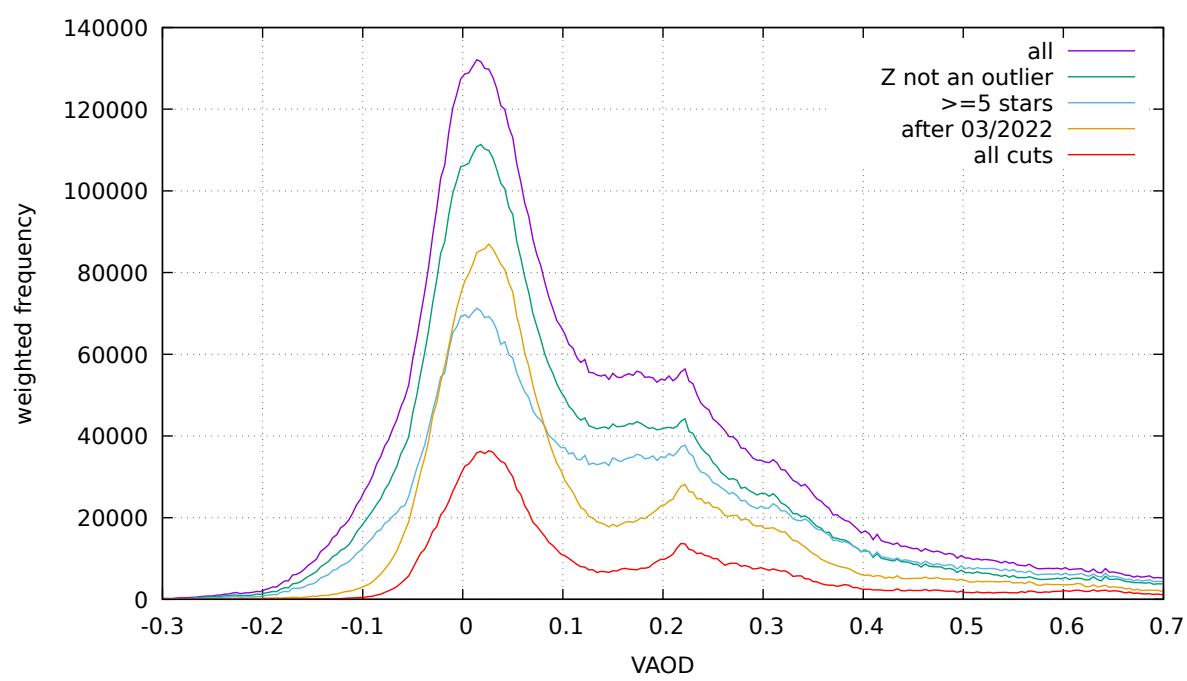
Safety documents (for the construction part) are described in the attached document:

1. Name, address and VAT number.
2. Safety plan.
3. Working procedures (work at height, work with cherry picker).
4. Risk assessment for each task
5. REA certification. Every company/institute that has a safety plan must have a REA certification.
6. Opening of the work center. They were opened during the construction of LST1, but needs to be updated with IAC as promotor.
7. Transnational provision of services ("Prestación Transnacional de Servicios"). A certificate from an "Asesoría Laboral" is ok.
8. Prevention service ("Modalidad Preventiva").
9. Civil and Corporate Liability Insurance ("Seguro de Responsabilidad Civil y Empresarial").
10. Safety Officer ("Recurso Preventivo").
11. Subcontractor book (if applicable) for every company/institute that has a safety plan.
12. List of heavy machinery and CE certifications if applicable.
13. Social security certifications (can be a letter from administration).
14. List of workers (official list), ITA or a list from the "Asesoría Laboral".
15. For each worker in the list of people to enter the site.
 - a. ID or Passport number and professional level
 - b. Medical check (fit to work certification, no personal info)
 - c. Certificate/s in basic safety training (minimum 20 hours)
 - d. Special certificate/s (work at height, cherry picker, forklift, etc.) if applicable
 - e. Certificate of delivery of Personal Protection Equipment (PPE)

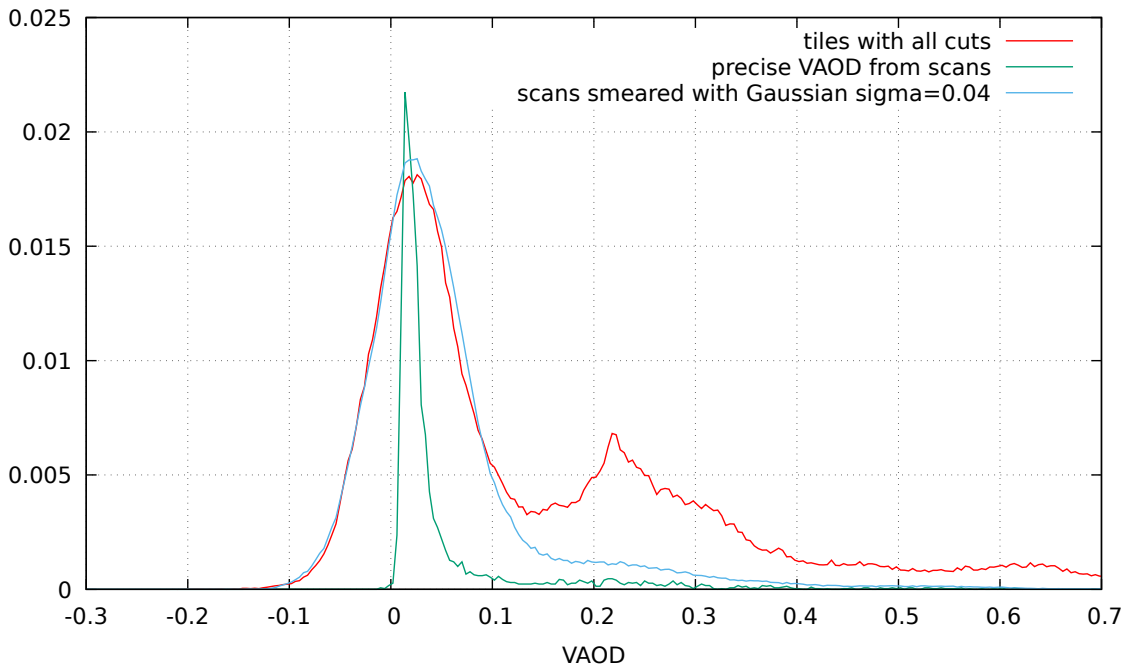
Documents are similar to documents from LST1 construction.

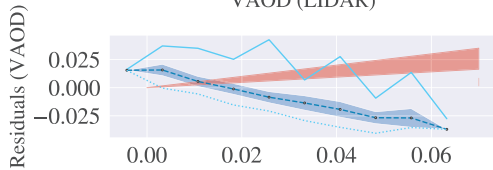
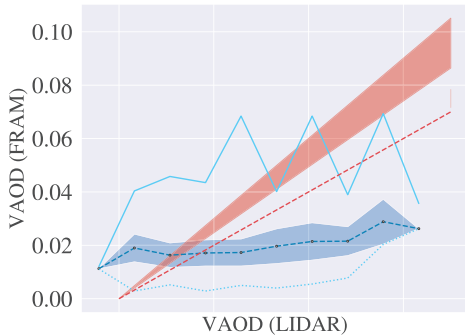
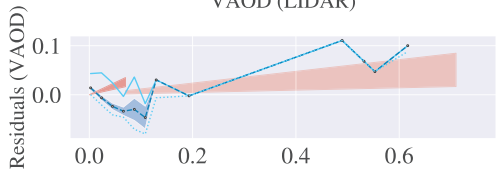
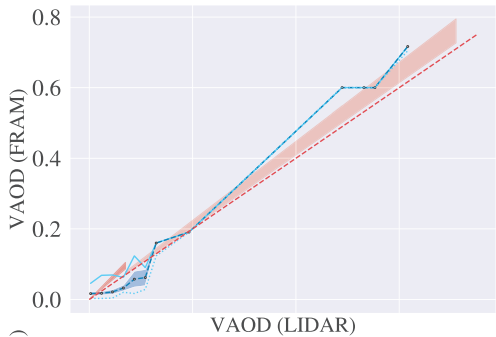
Construction Safety Coordination (Tomas Capote)



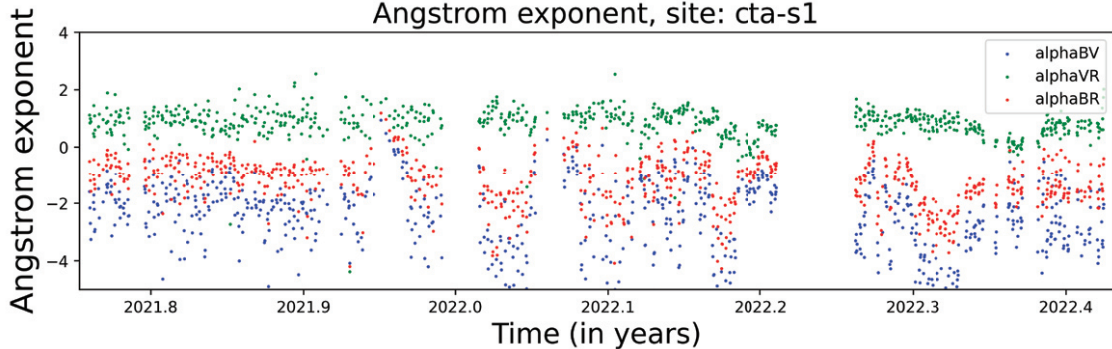


relative weighted frequency





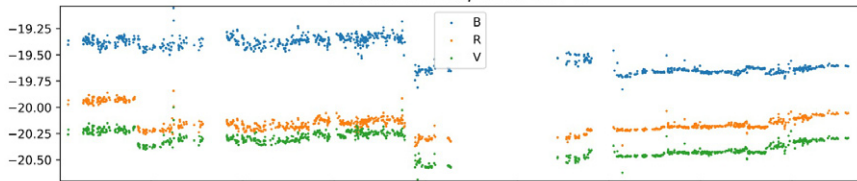
Angstrom exponent, site: cta-s1



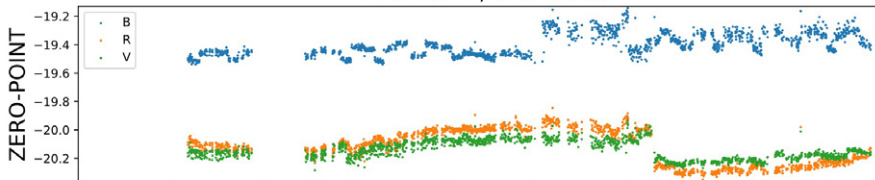
$$\tau(\lambda) = \tau_0(\lambda/\lambda_0)^\alpha$$

$$\alpha = -\frac{\log_{10}(\tau_{\lambda_1}/\tau_{\lambda_2})}{\log_{10}(\lambda_1/\lambda_2)}$$

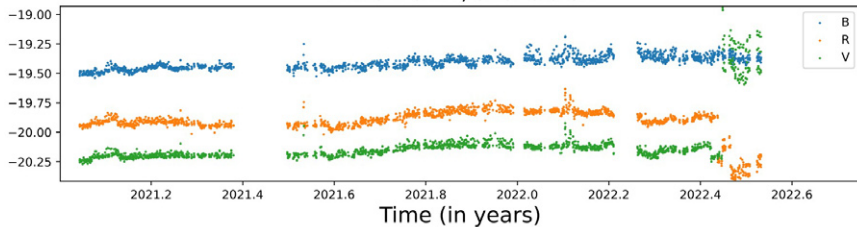
ZERO-POINT, site: cta-n

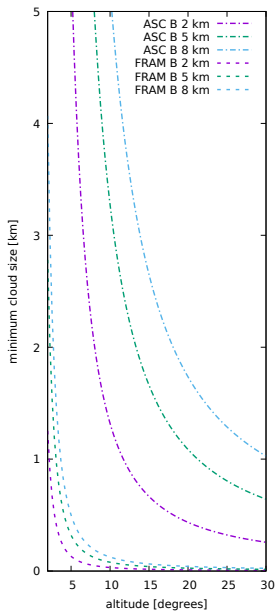
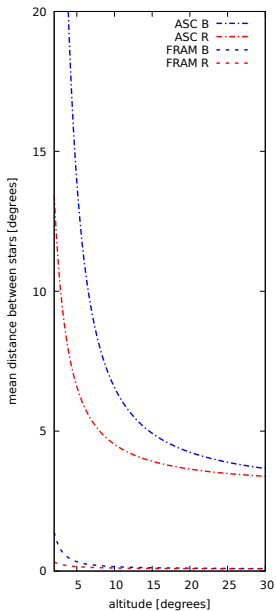
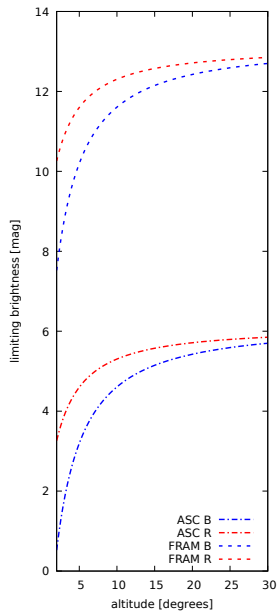


ZERO-POINT, site: cta-s0



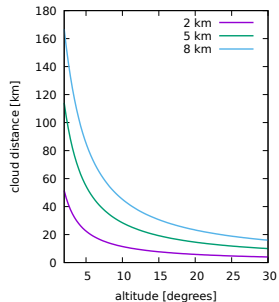
ZERO-POINT, site: cta-s1

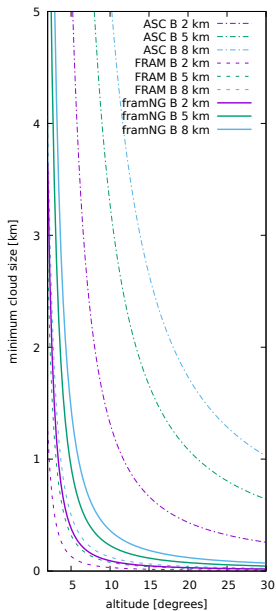
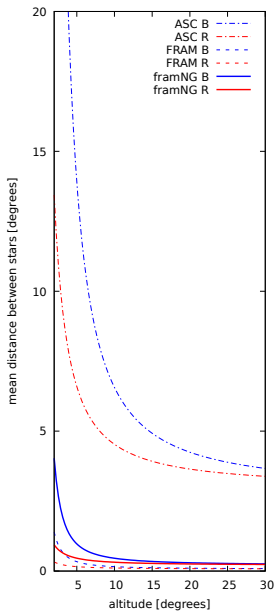
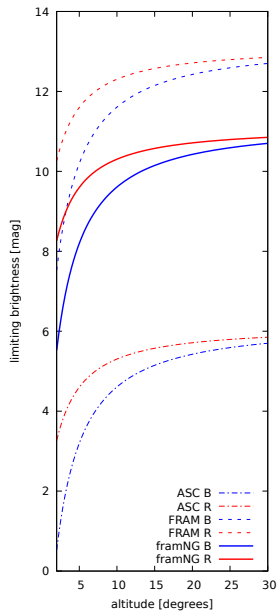




ASC 6 mag (zenith)
(30 second FD FoV)
FRAM 13 mag (zenith)
(~ 1 hour FD FoV)

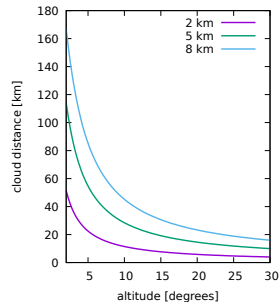
B filter $k=0.3$
R filter $k=0.15$

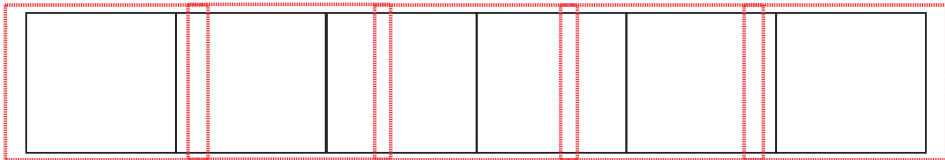




ASC 6 mag (zenith)
 (30 second FD FoV)
 FRAM 13 mag (zenith)
 (~ 1 hour FD FoV)
 framNG 11 mag (zenith)
 (30 second FD FoV)

B filter $k=0.3$
 R filter $k=0.15$



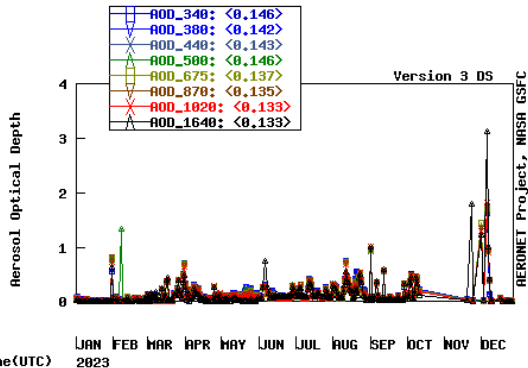


HW example:

- MII CMOS C5A-100M (16bit Sony sensor 43.8×23.9 mm)
- full chip readout 0.66 seconds
- Nikon Z 58/0.95 - FoV 40.6°×31°



MAGIC ORM_La_Palma , N 28.762, W 17.891, Alt 2200 n,
PI : Pawan Gupta and Elena Lind, Pawan.Gupta@nasa.gov and
Level 1.0 AOD; Data from 2023



Paranal_basecamp , S 24.641, W 70.387, Alt 2380 n,
PI : Jan_Ebr, ebr@fzu.cz
Level 1.0 AOD; Data from 2023

