

N. Sanna & the ETC team

Input parameters by the user

ANDES ETC v5.2

Versioning & Updates

power law



OBSERVING MODE

Seeing Limited (SL)

Currently only Seeing Limited mode available

TARGET

Target input (°)

Power law index

Power law

-2.0

MAGNITUDE / NORMALIZATION

Magnitude band

Mag system

Mag value

U

Vega

15.0

OBSERVING CONDITIONS

Altitude (1.0-5.5)

Seeing (arcsec)

Sky Transparency (°)

Moist phase (°)

1.0

0.8

CLEAR

0

INSTRUMENT / EXPOSURE

Binning (°)

Total Exposure Time (s)

NDT (n. of sub-exposures) (°)

1x1 (Best mode)

60.0

1

Use different exposure parameters per subsystem

SUBMIT

ANDES ETC v5.2

Versioning & Updates

user template

ANDES

OBSERVING MODE

Seeing limited (SL)

Currently only Seeing limited mode available

TARGET

Target input (i)

3.0

3.0

User Template

Upload template (v2)

Import template

Remove file selection

MAGNITUDE / NORMALIZATION

Magnitude band

Mag system

Mag value

U

Vega

15.0

OBSERVING CONDITIONS

Airmass (1.0-2.0)

Seeing (arcsec)

Sky Transparency (i)

Moon phase (i)

1.0

0.0

CLEAR

0

INSTRUMENT / EXPOSURE

Filtering (i)

Total Exposure Time (s)

NOT in. of sub-exposures (i)

1x1 (best mode)

60.0

1

Use different exposure parameters per subarray

SUBMIT

embedded parameters

fibers, efficiencies, ron, dark, ...



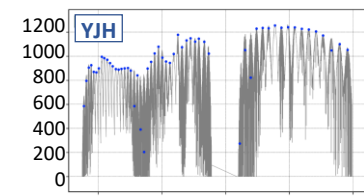
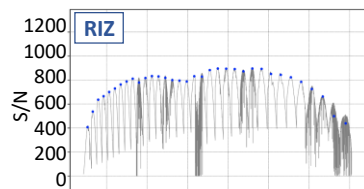
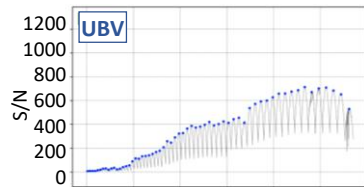
Updated with the instrument design

<https://andes-etc.brera.inaf.it/>

The ANDES Exposure Time Calculator

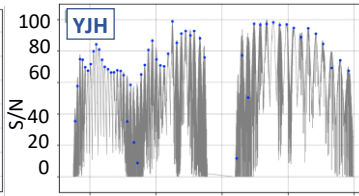
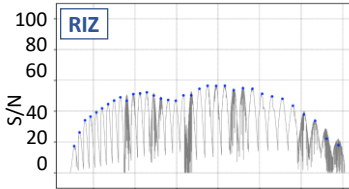
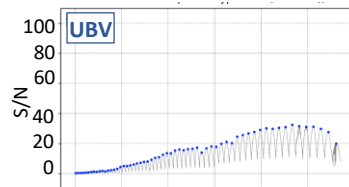
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Star (K2V) V=13 mag Exp=1 hr



HARPS → S/N~20 in B,
S/N~40 in V&R
NIRPS → S/N~60 in Y,
S/N~80 in J&H

Star (G2V) V=17 mag Exp=1 hr



HARPS → S/N~1.5 in B,
S/N~2 in V&R
NIRPS → S/N~2 in Y,
S/N~3 in J&H

Li-rich stars at low-metallicity

Li-rich: star with Li abundance higher than expected
Few targets (~30 in the field and 16 in GGCs)

How do they form?

- Fresh Li production (Cameron-Fowler mechanism)
- Mass transfer in binary system/planet engulfment
- Mass accretion from novae burst

To test the binarity multi-epochs are needed