Bright example — Limit example

Massive/hot stars (winds, binaries)
req NUV≥50, VIS≥100, NIR≥30

NUV | gap | VIS | gap | NIR phot

ONC d≈382 pc V=4.76 Teff=23082K
t=5.0 min; req NUV≥50 VIS≥100 NIR≥30
SNR@t: NUV 788 VIS 632 NIR 24069 (σ/f≈0.00415%)

ONC d≈398 pc V=8.28 Teff=16106K
t=5.0 min; req NUV≥50 VIS≥100 NIR≥30
SNR@t: NUV 109 VIS 124 NIR 5006 (σ/f≈0.02%)
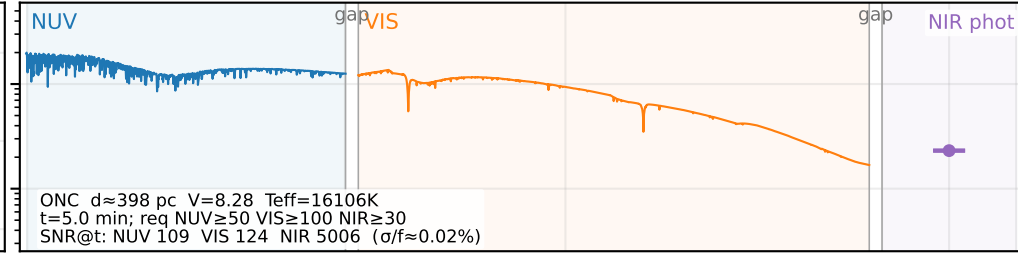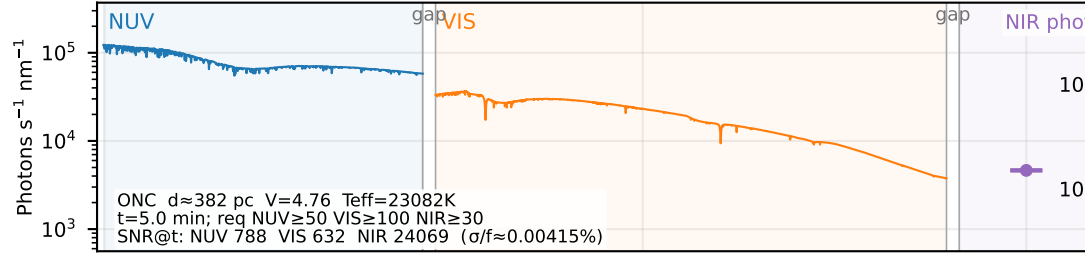
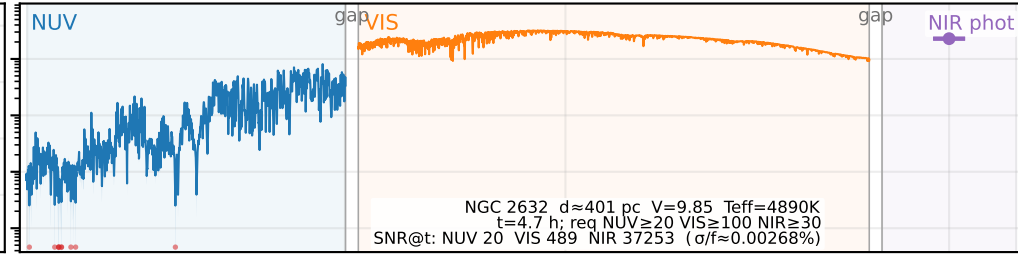**Quiet FGK stars (reference library)**
req NUV≥20, VIS≥200, NIR≥30

NGC 2632 d≈187 pc V=6.54 Teff=5919K
t=5.0 min; req NUV≥20 VIS≥200 NIR≥30
SNR@t: NUV 47 VIS 292 NIR 21933 (σ/f≈0.00456%)

ONC d≈394 pc V=10.89 Teff=6213K
t=4.9 h; req NUV≥20 VIS≥200 NIR≥30
SNR@t: NUV 20 VIS 290 NIR 18364 (σ/f≈0.00545%)
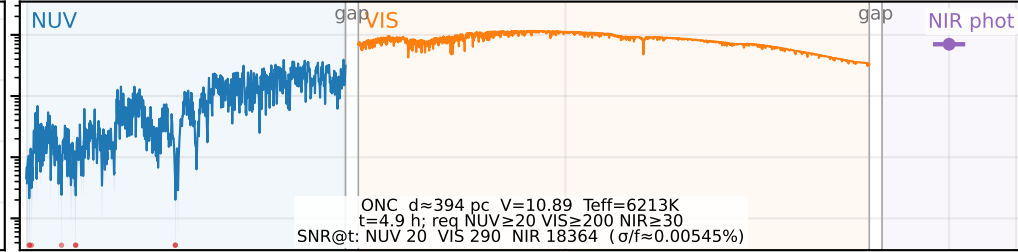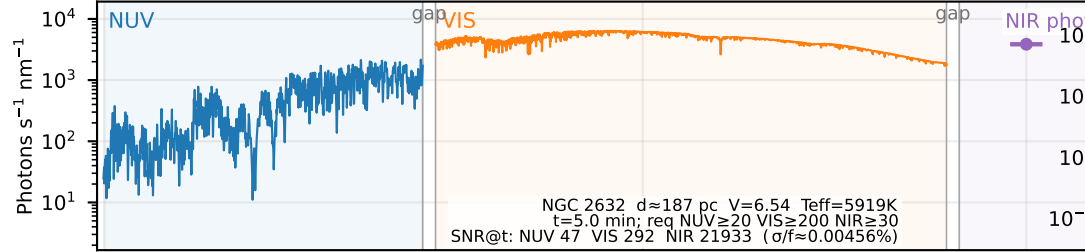
Active K/M dwarfs (activity, flares)
req NUV≥20, VIS≥100, NIR≥30

NGC 2632 d≈184 pc V=6.33 Teff=4998K
t=5.0 min; req NUV≥20 VIS≥100 NIR≥30
SNR@t: NUV 31 VIS 335 NIR 27118 (σ/f≈0.00369%)

NGC 2632 d≈401 pc V=9.85 Teff=4890K
t=4.7 h; req NUV≥20 VIS≥100 NIR≥30
SNR@t: NUV 20 VIS 489 NIR 37253 (σ/f≈0.00268%)
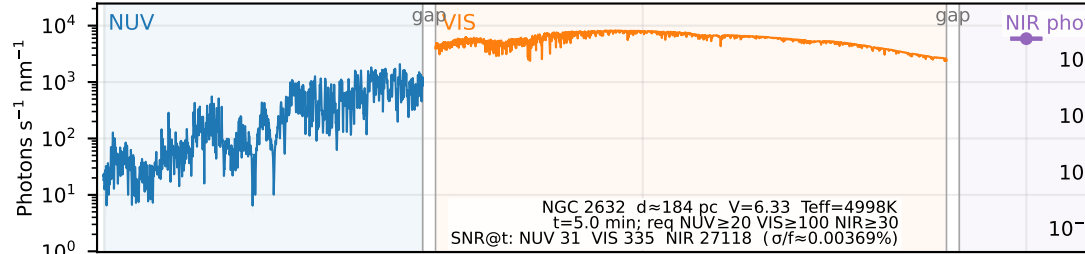
PMS K/M stars (ONC; no A_V here)
req NUV≥5, VIS≥300, NIR≥30

ONC d≈305 pc V=7.54 Teff=5124K
t=12 min; req NUV≥5 VIS≥300 NIR≥30
SNR@t: NUV 24 VIS 300 NIR 24127 (σ/f≈0.00414%)

ONC d≈443 pc V=10.90 Teff=4761K
t=4.8 h; req NUV≥5 VIS≥300 NIR≥30
SNR@t: NUV 8 VIS 300 NIR 21107 (σ/f≈0.00474%)
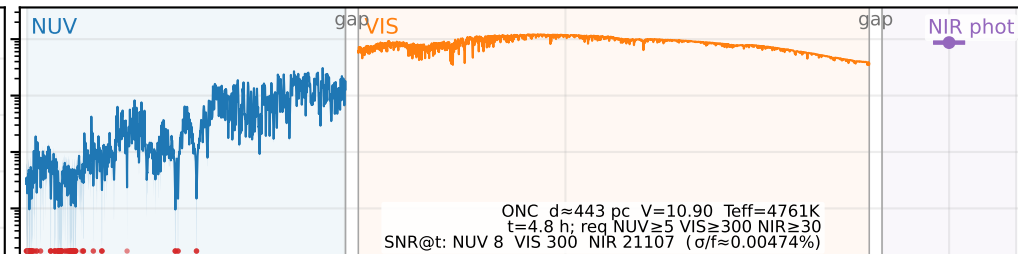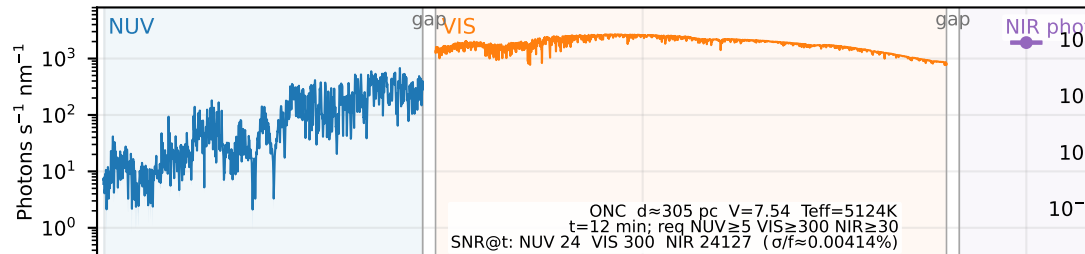
Wavelength (nm)

Red dots: wavelength bins where ±1σ shading is clipped for display.