

DEEP HST OBSERVATIONS OF PALOMAR 5 AND ITS TIDAL TAILS

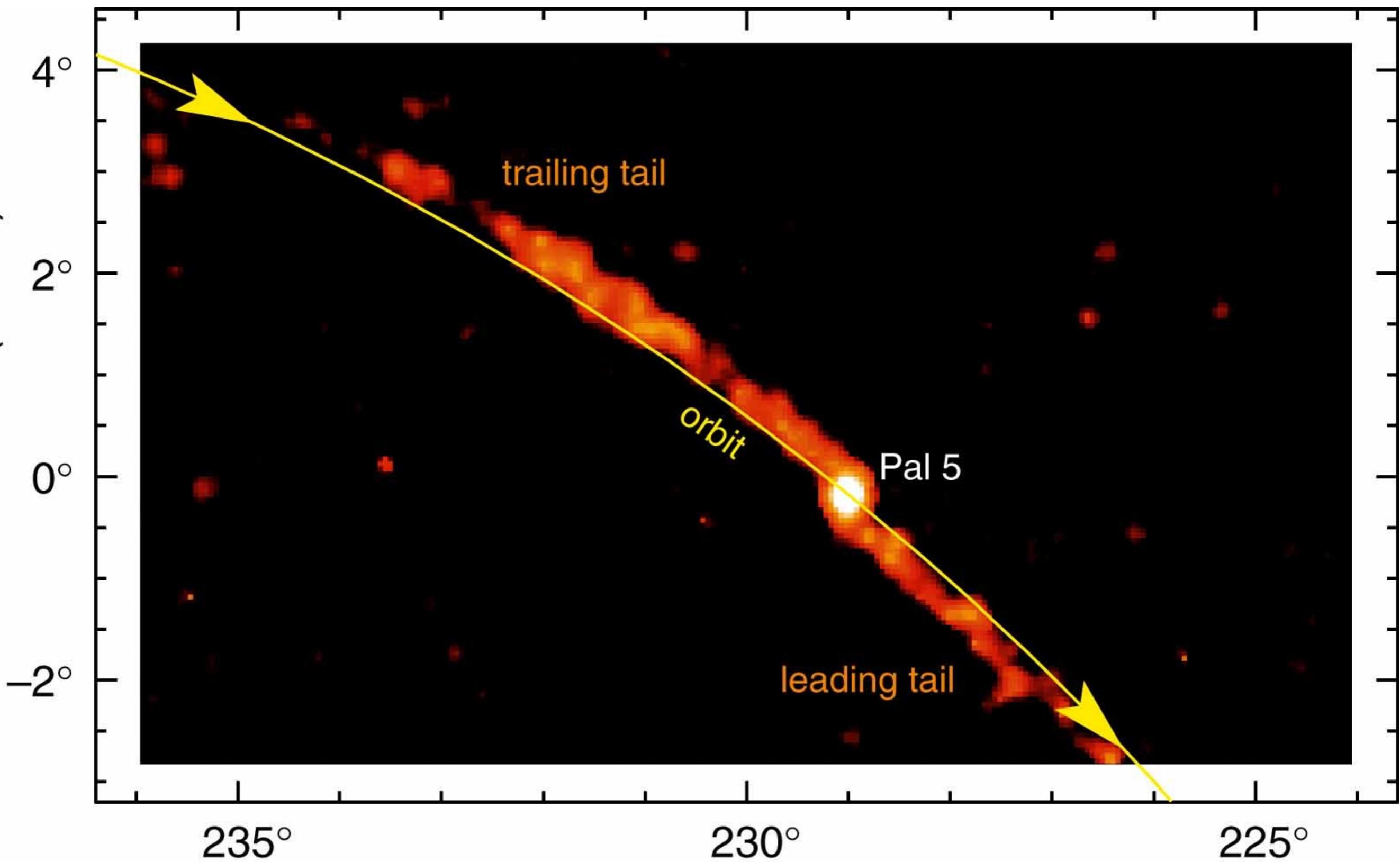


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NADINE NEUMAYER RESEARCH GROUP ON
GALACTIC NUCLEI

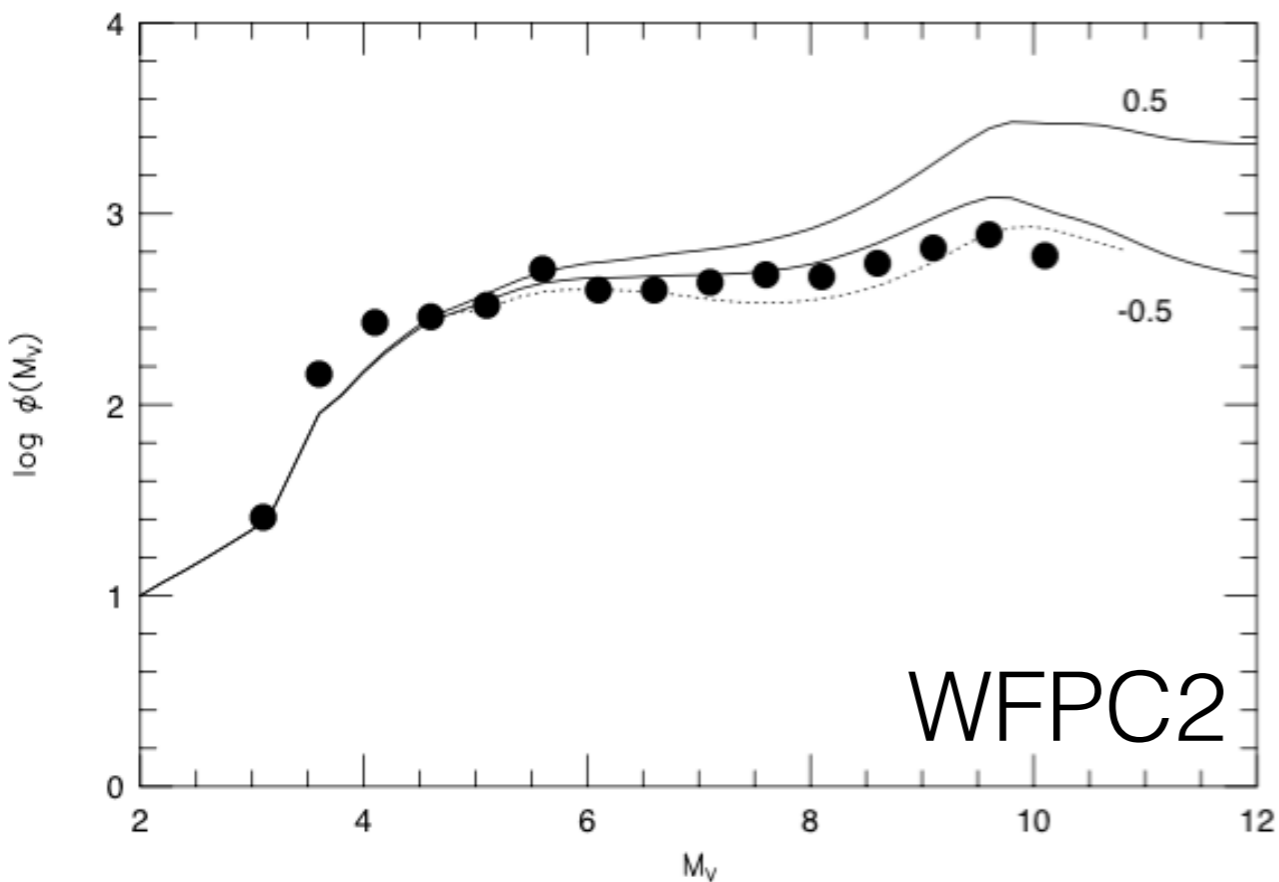
A. KÜPPER, P. GOUDFROOIJ, A. BELLINI, L. BEDIN, ET AL.



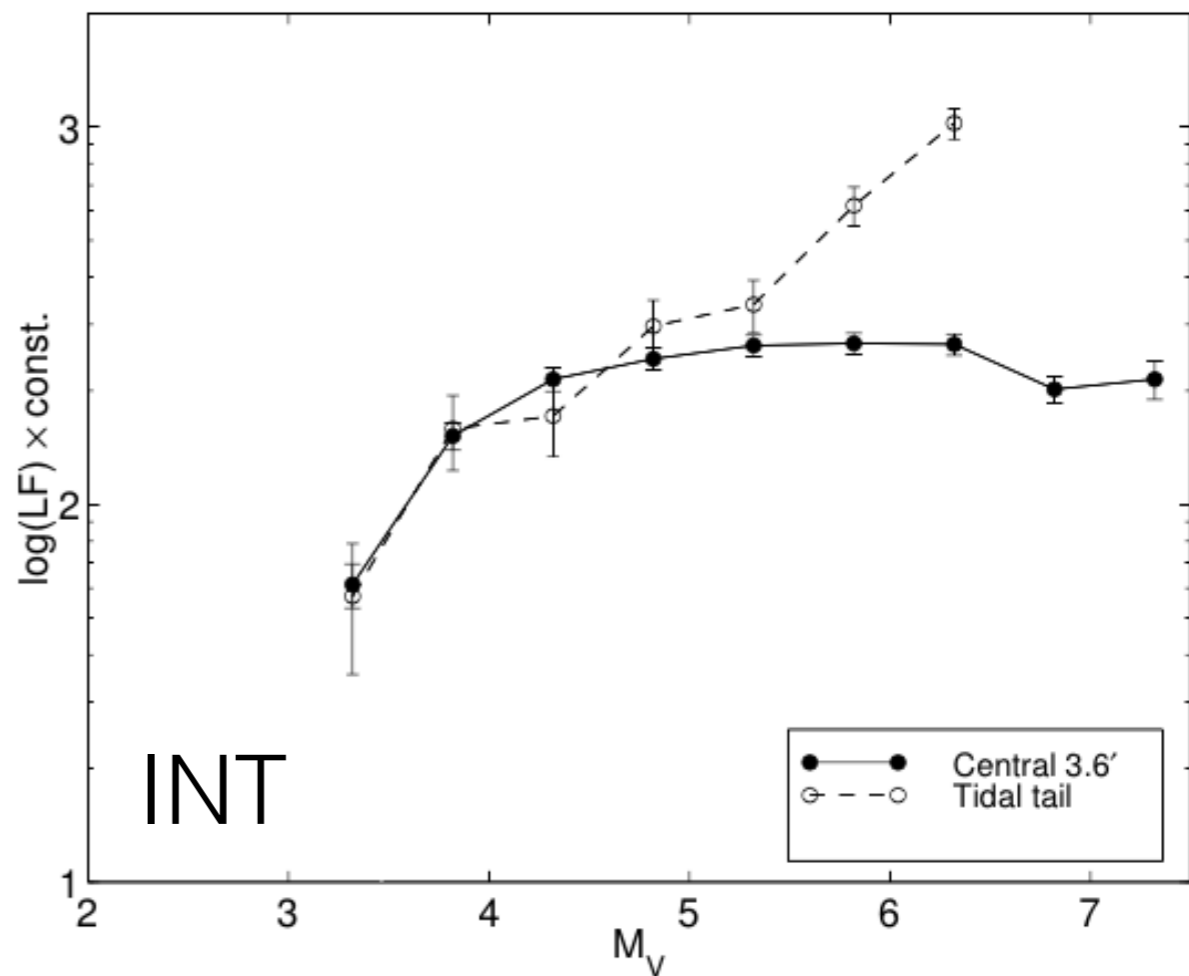


Right Ascension (J2000)

Flatten mass function within Pal5 r_t ; steeper in the TT

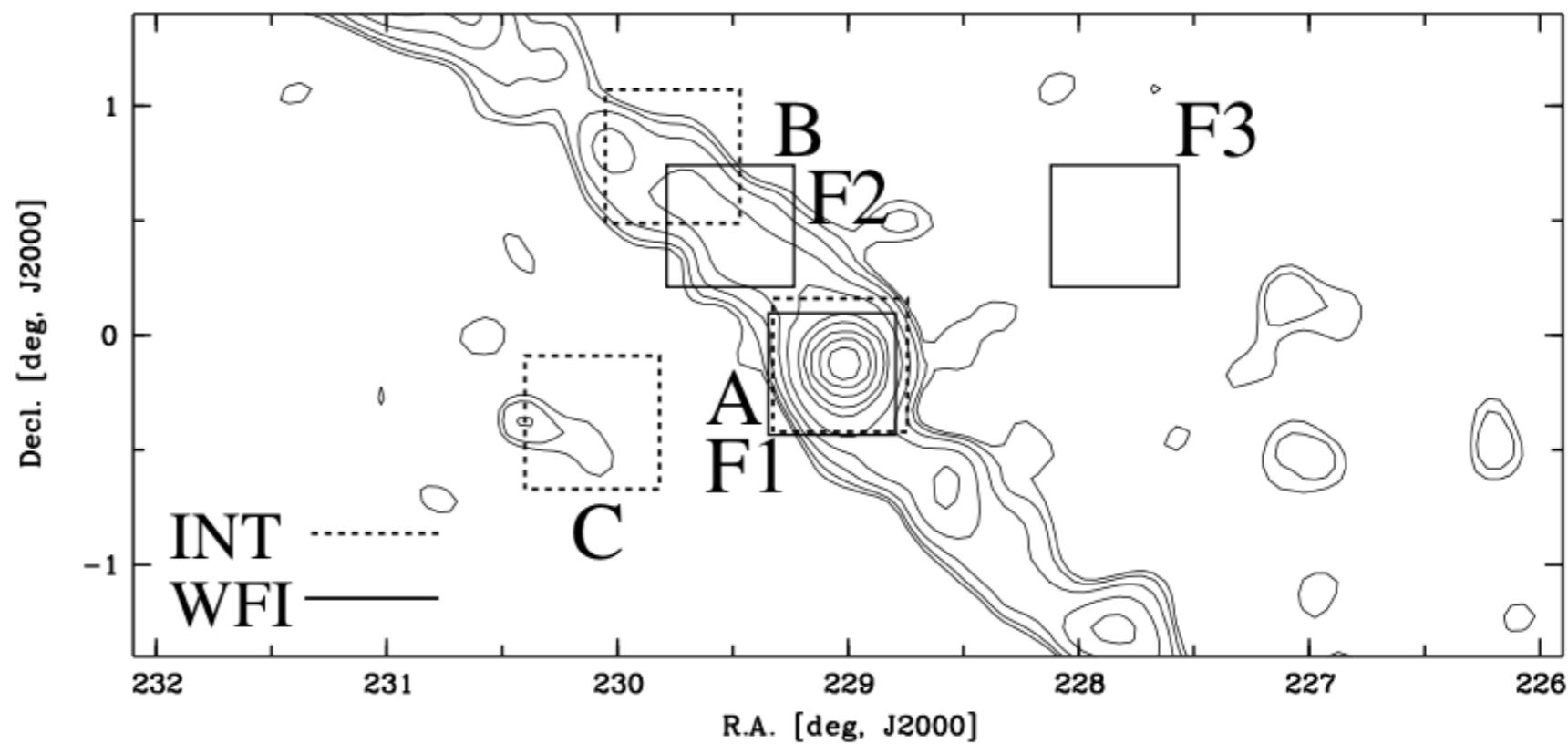


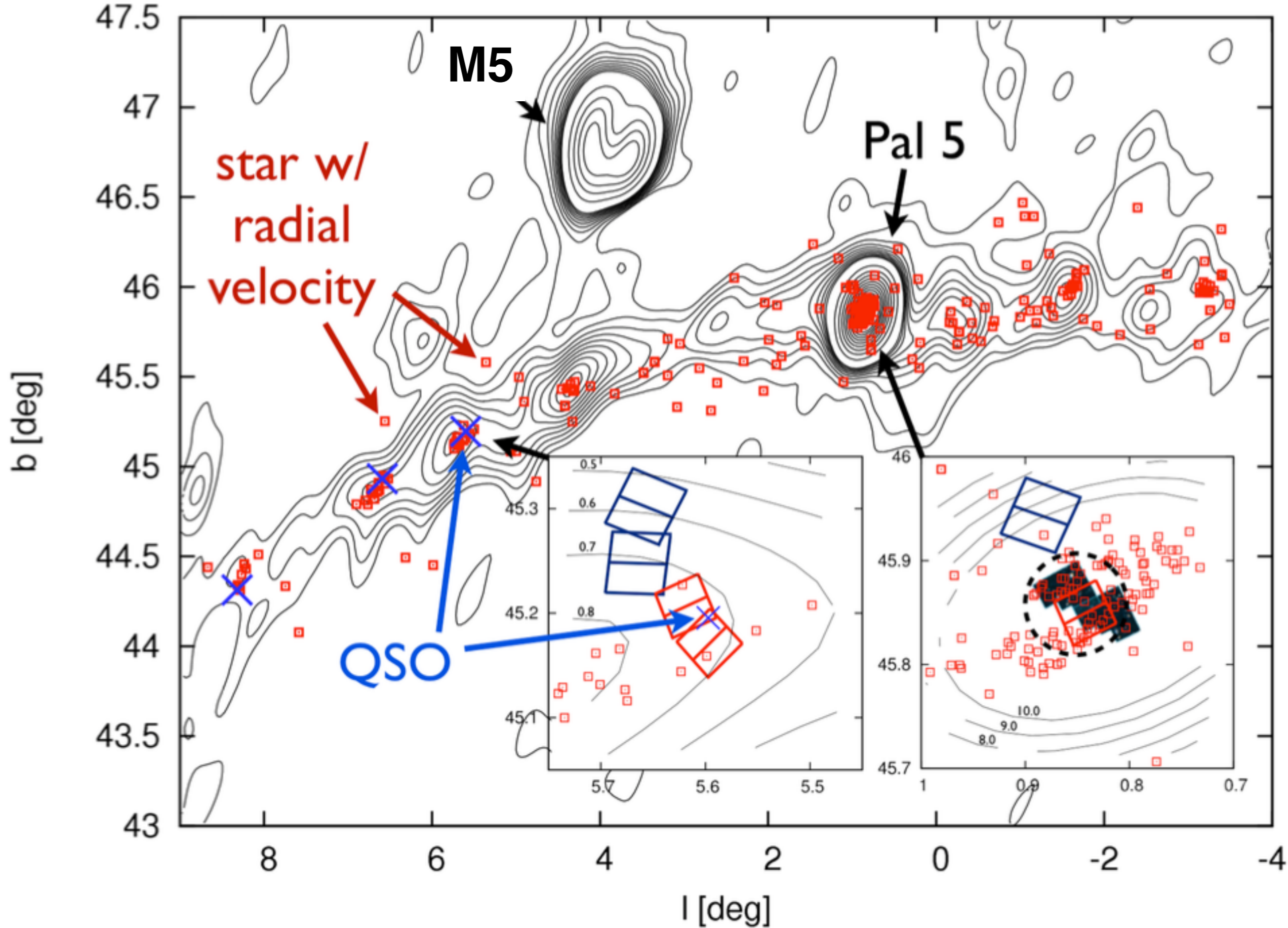
Grillmair & Smith (2001)



Koch et al (2004)

A very steep MF at the TT overdensity?

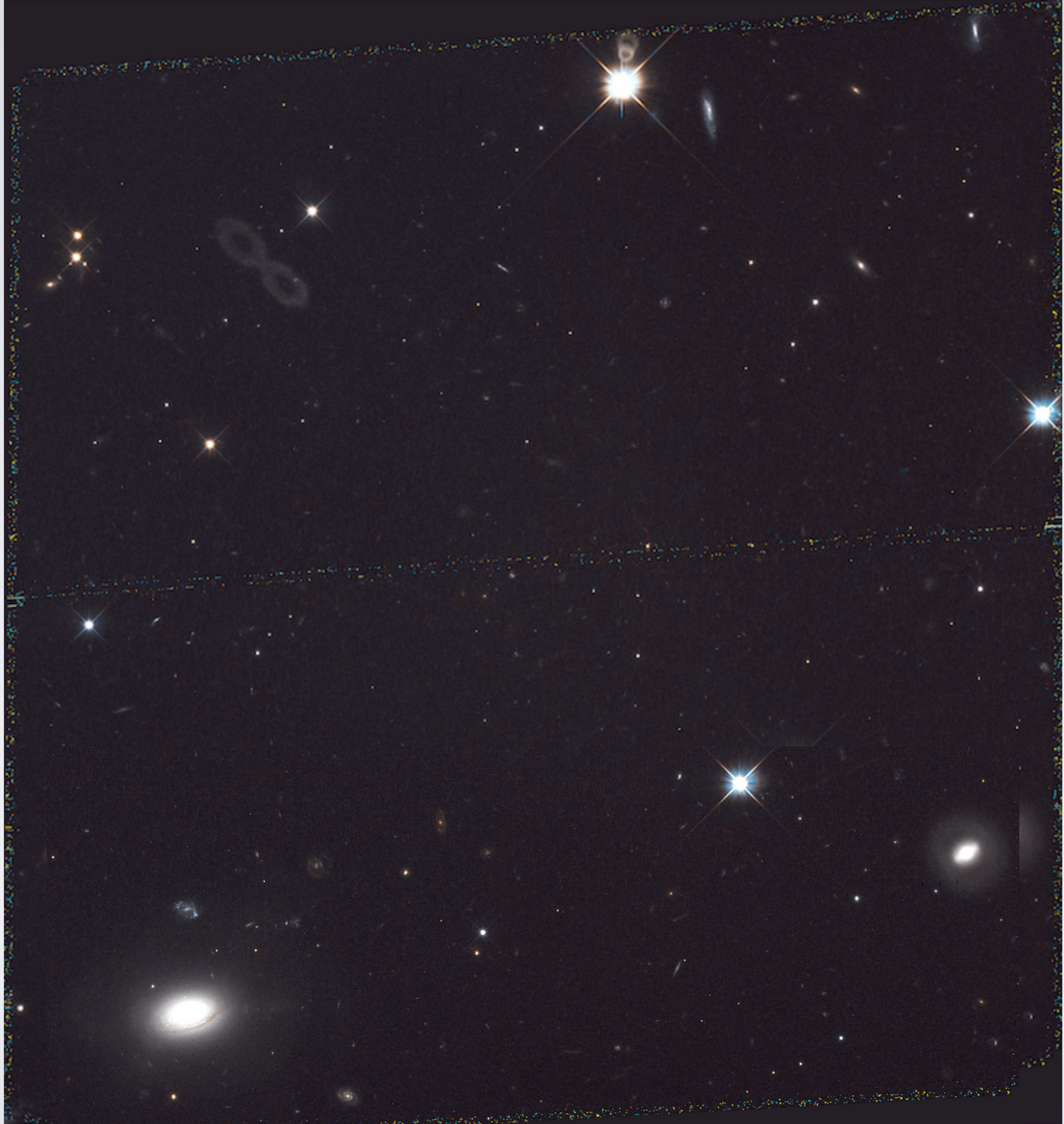


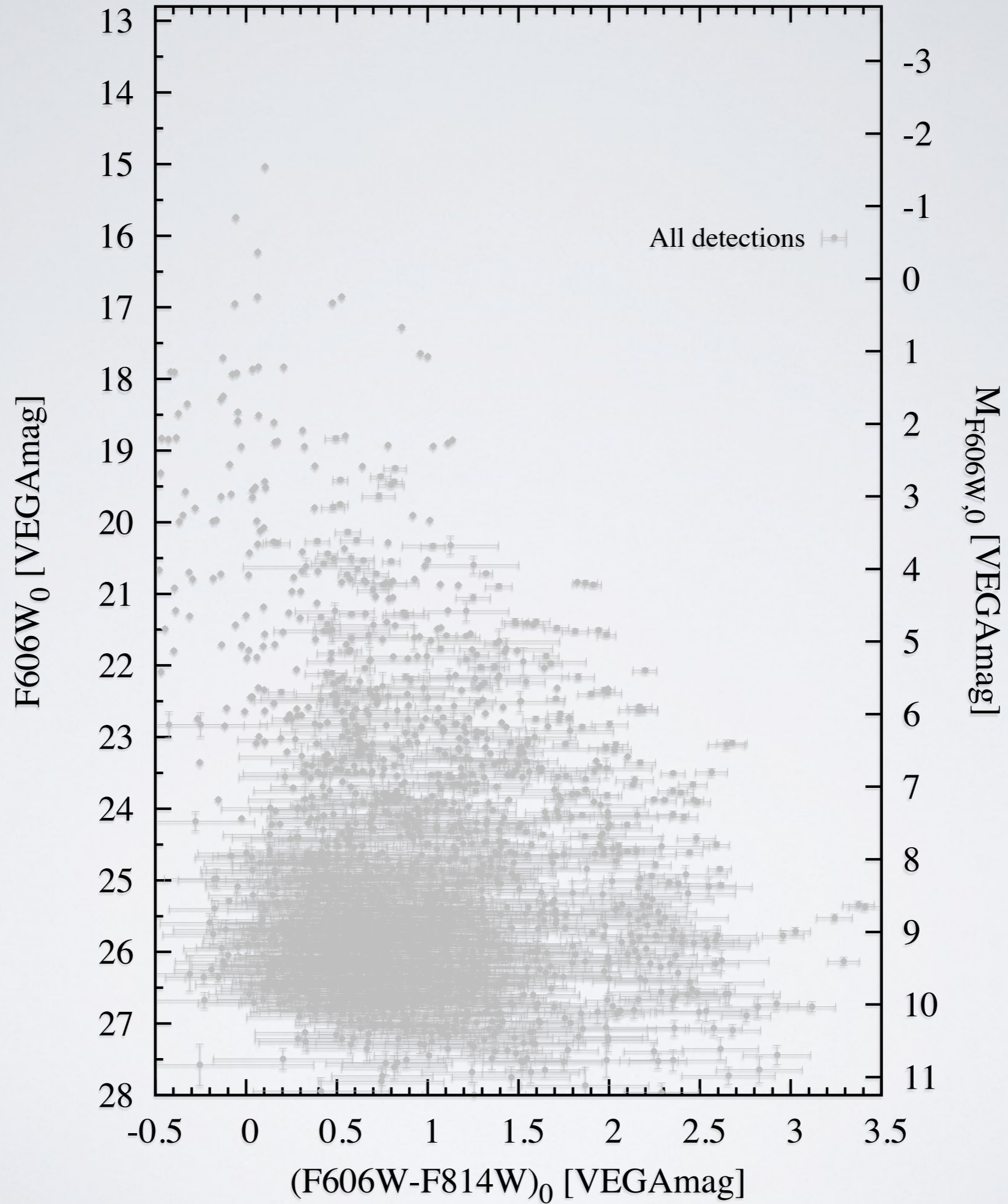


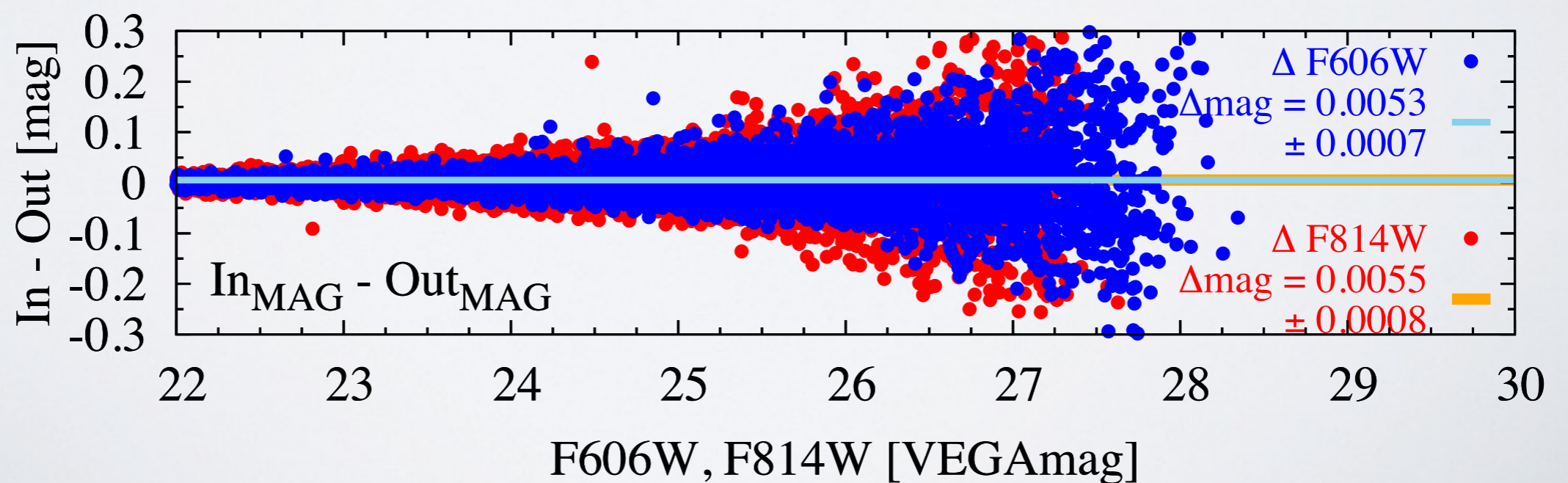
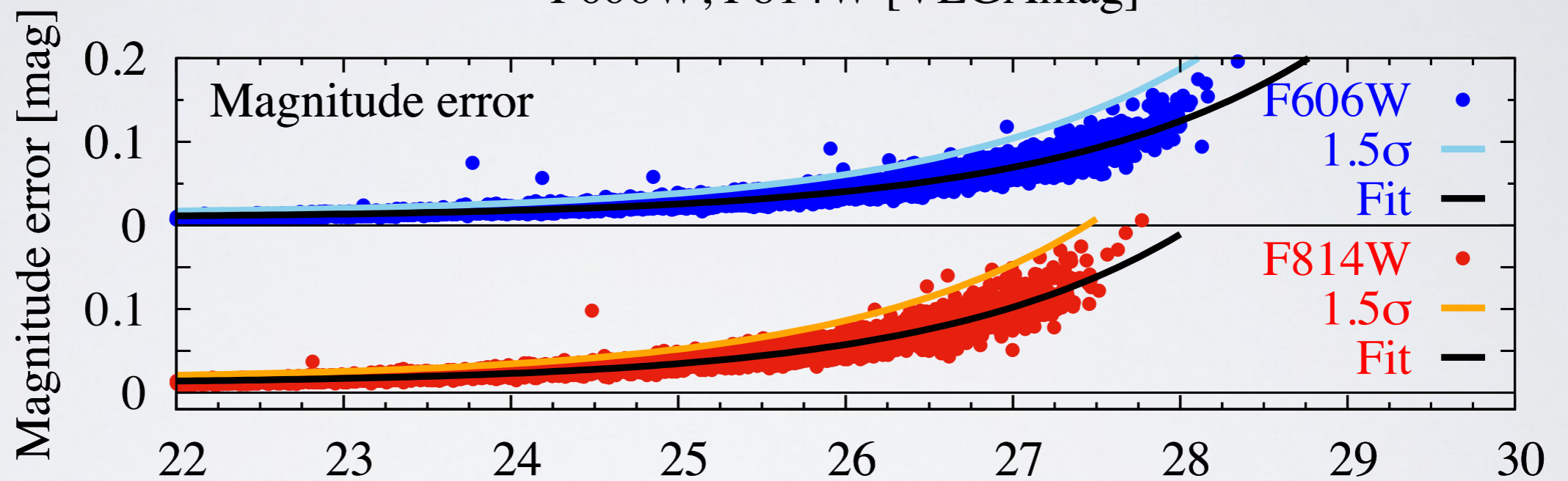
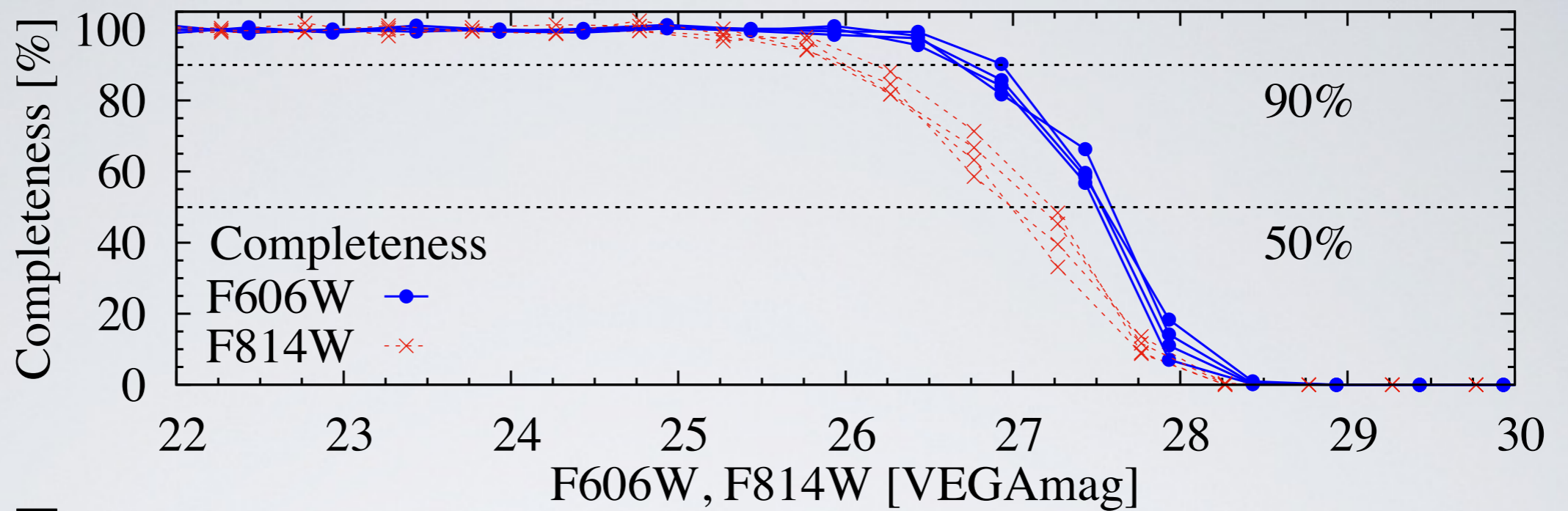
8 orbits WFC3&ACS: F606W, F814W; 147.22 arcmin² @ 3.4deg (1.2kpc) from Pal; **4yr** baseline

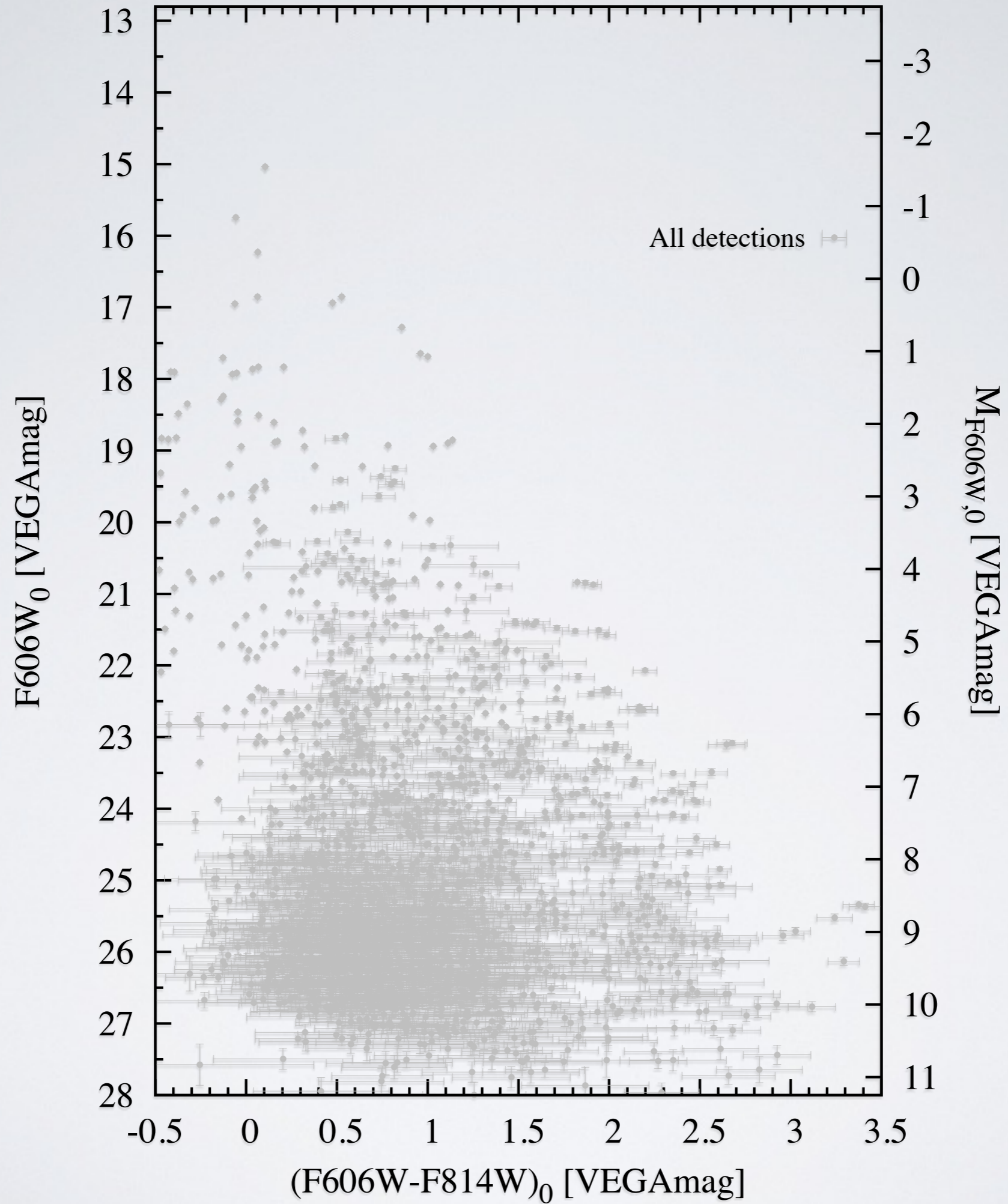
EP1: TT CMD analysis: mass function, distance

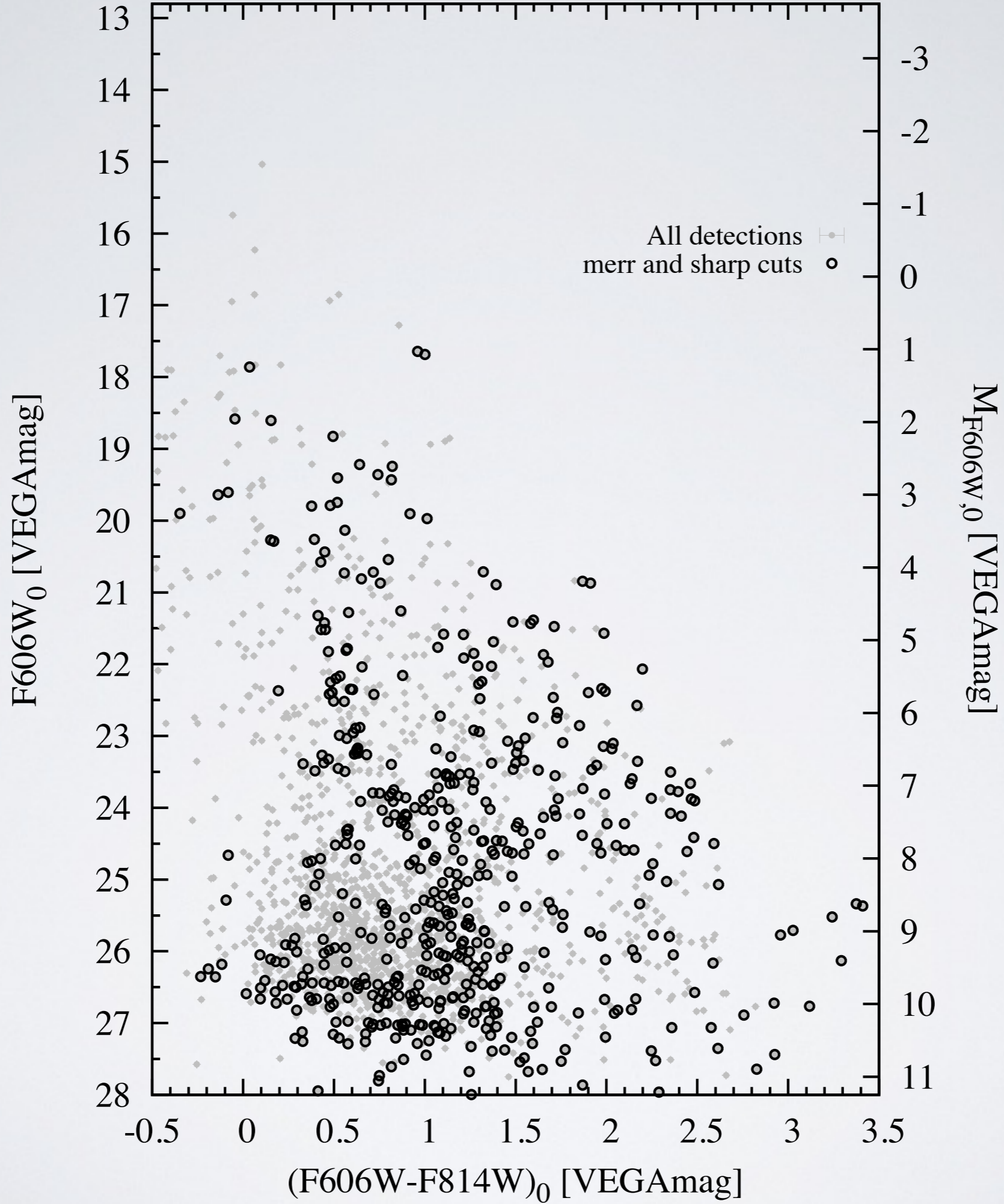
EP2: PM analysis: 3D kinematics + CMD

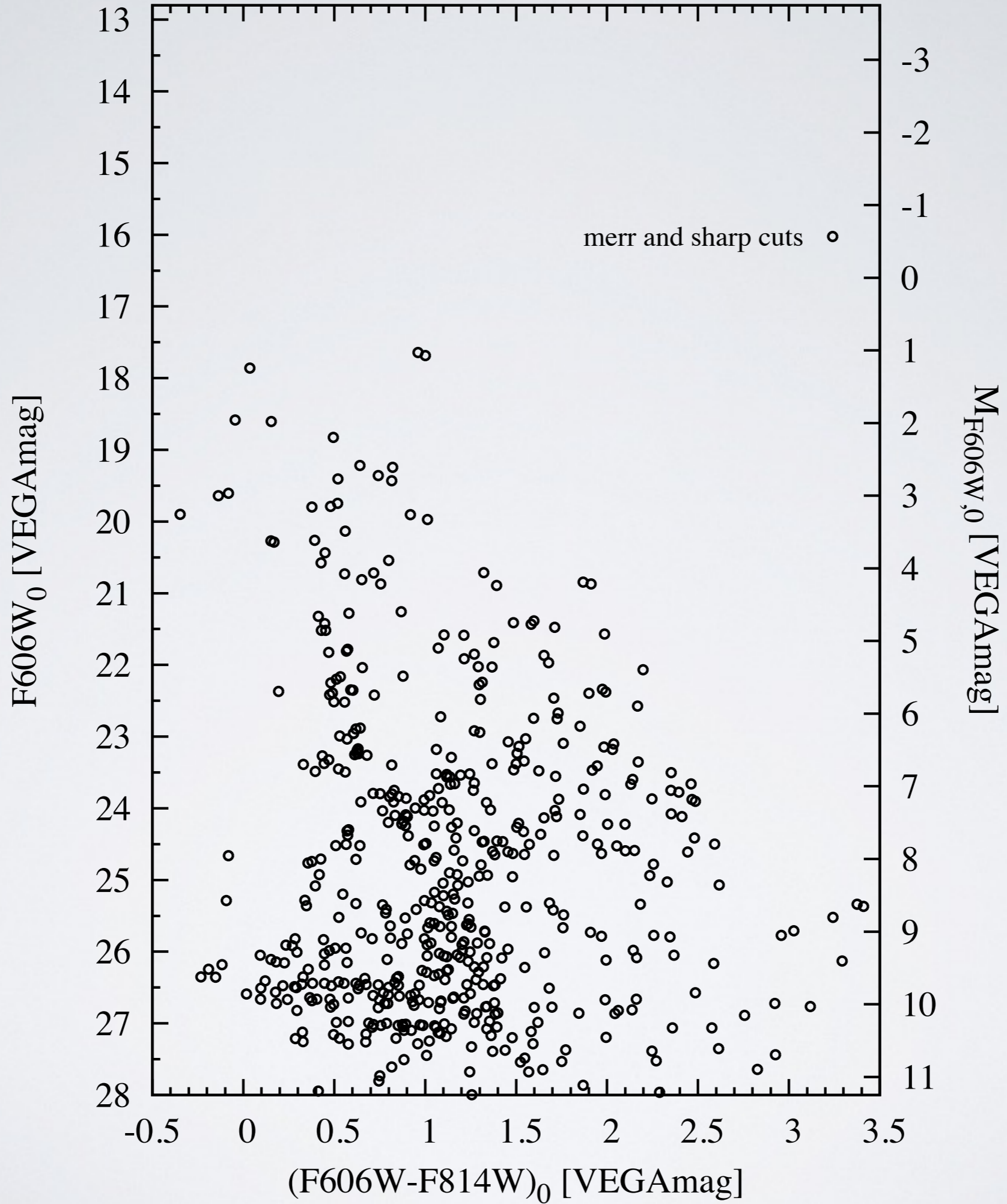


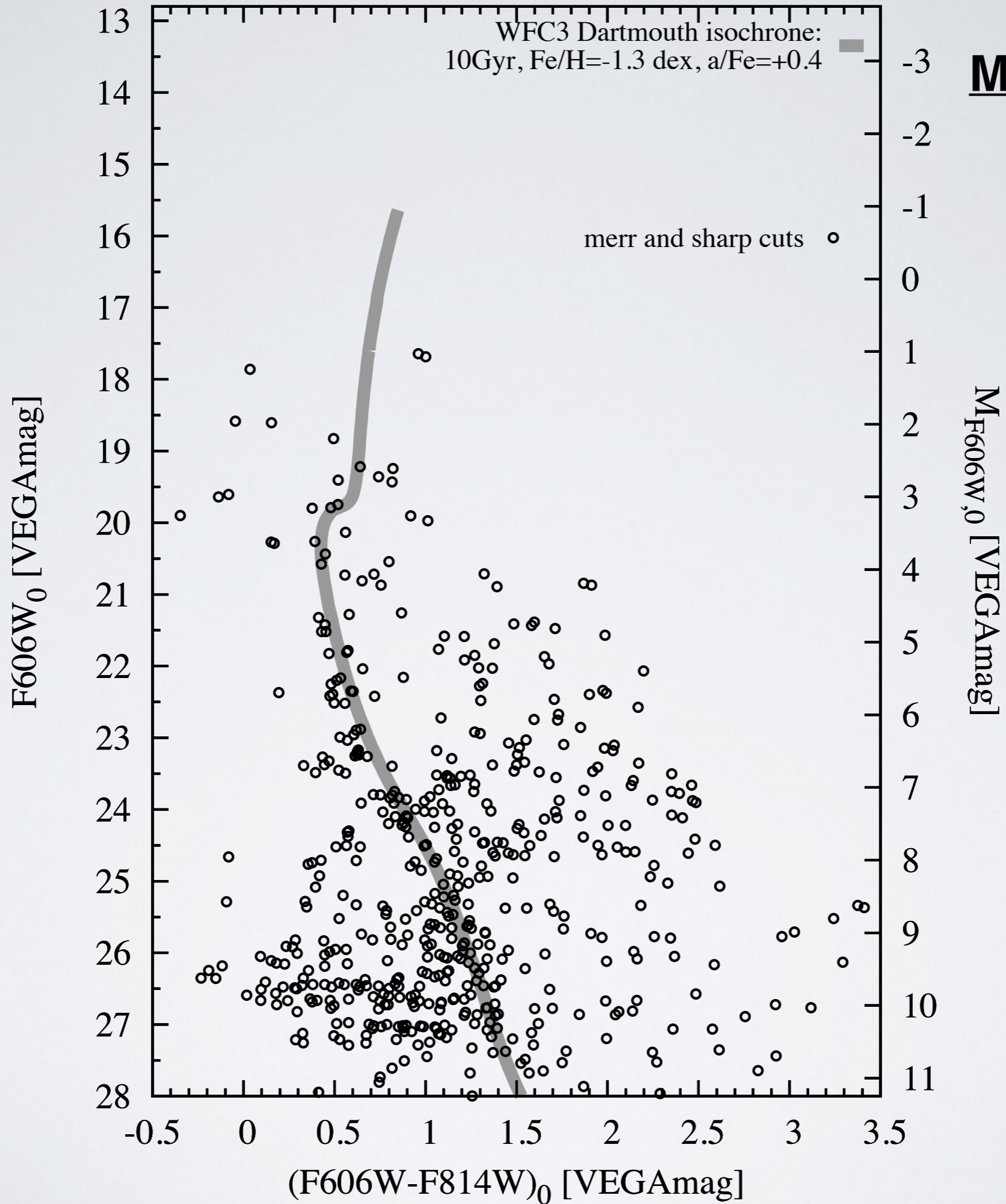






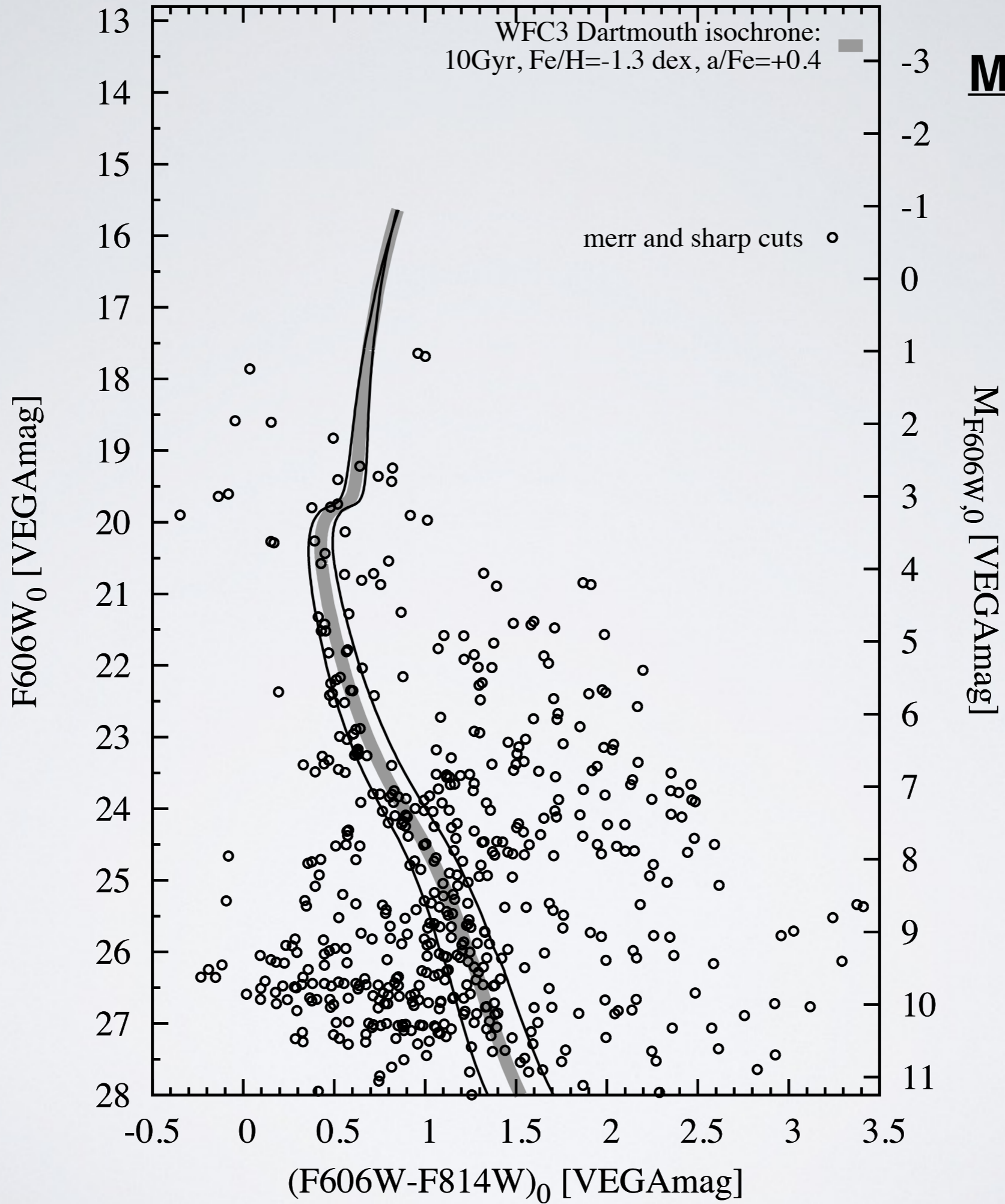






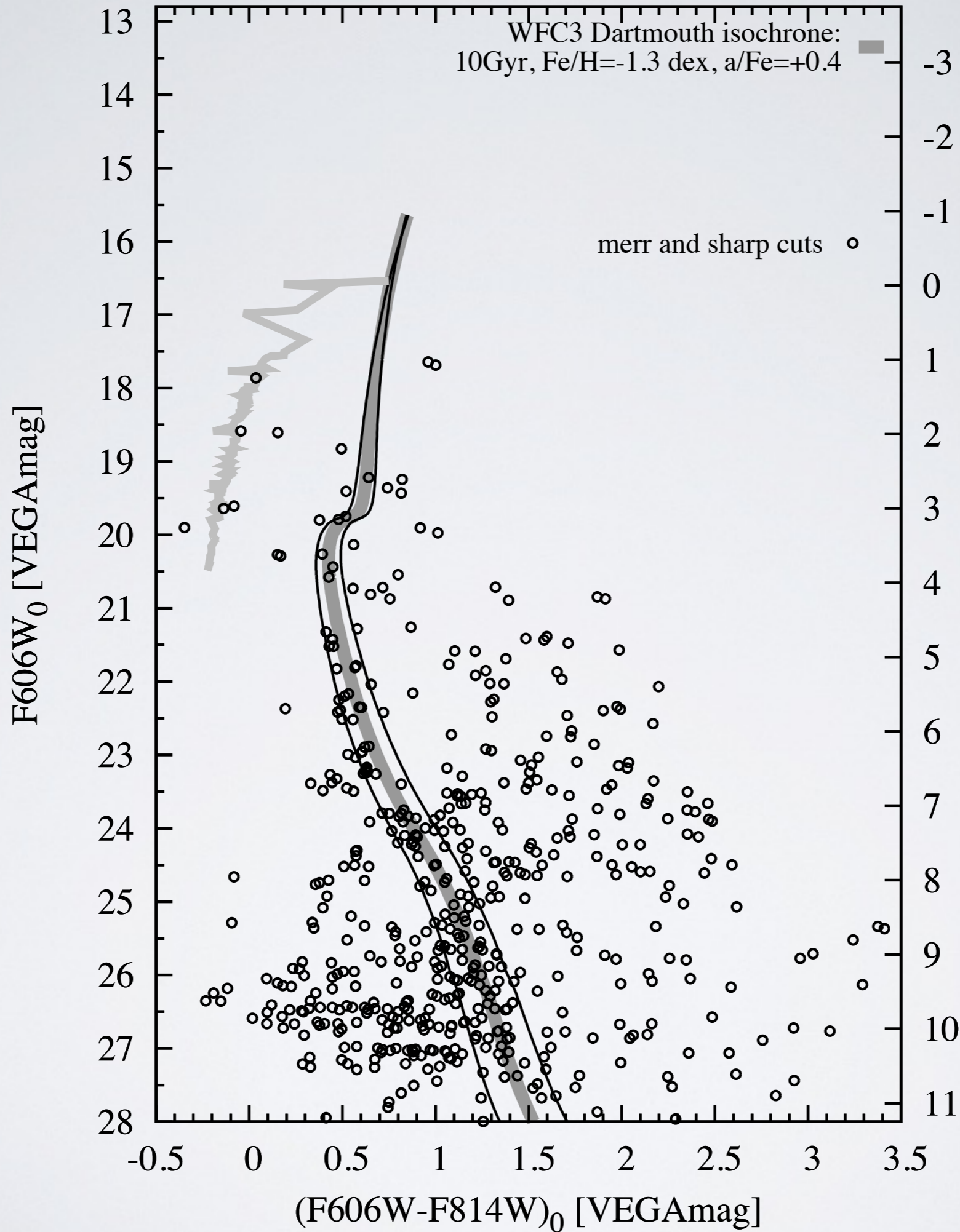
ML-CMD fitting

Kroupa IMF
w bf=0-0.4



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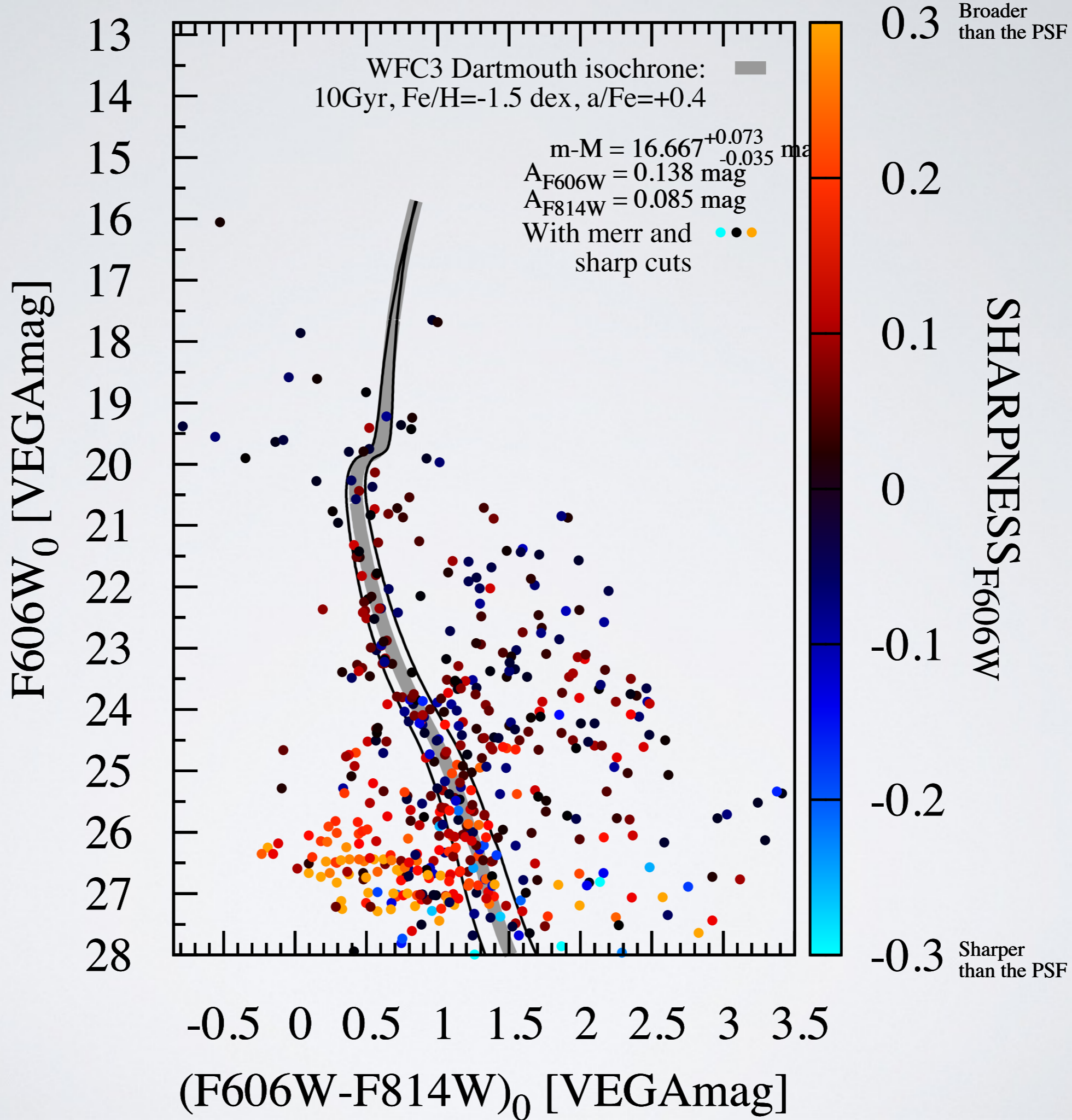


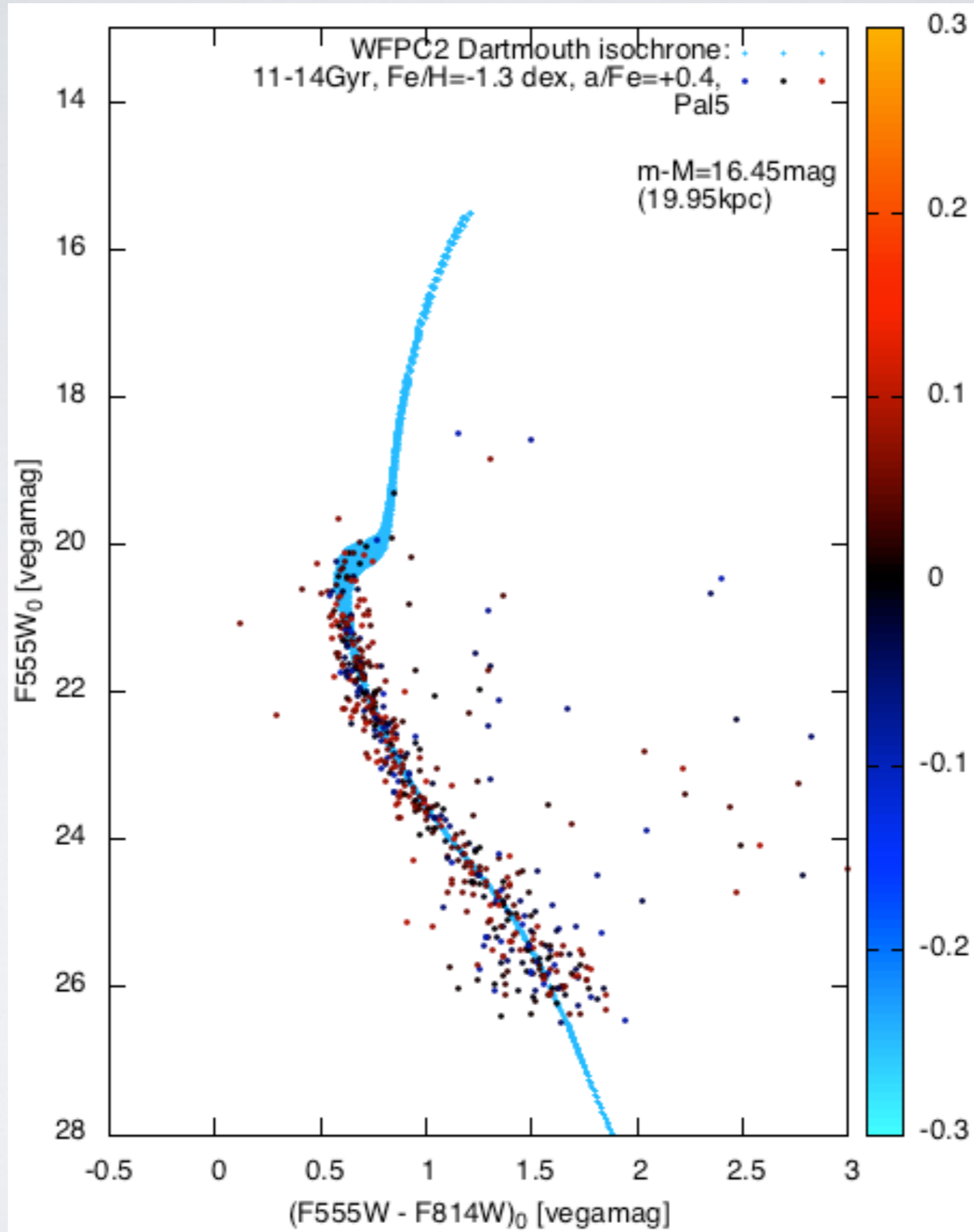
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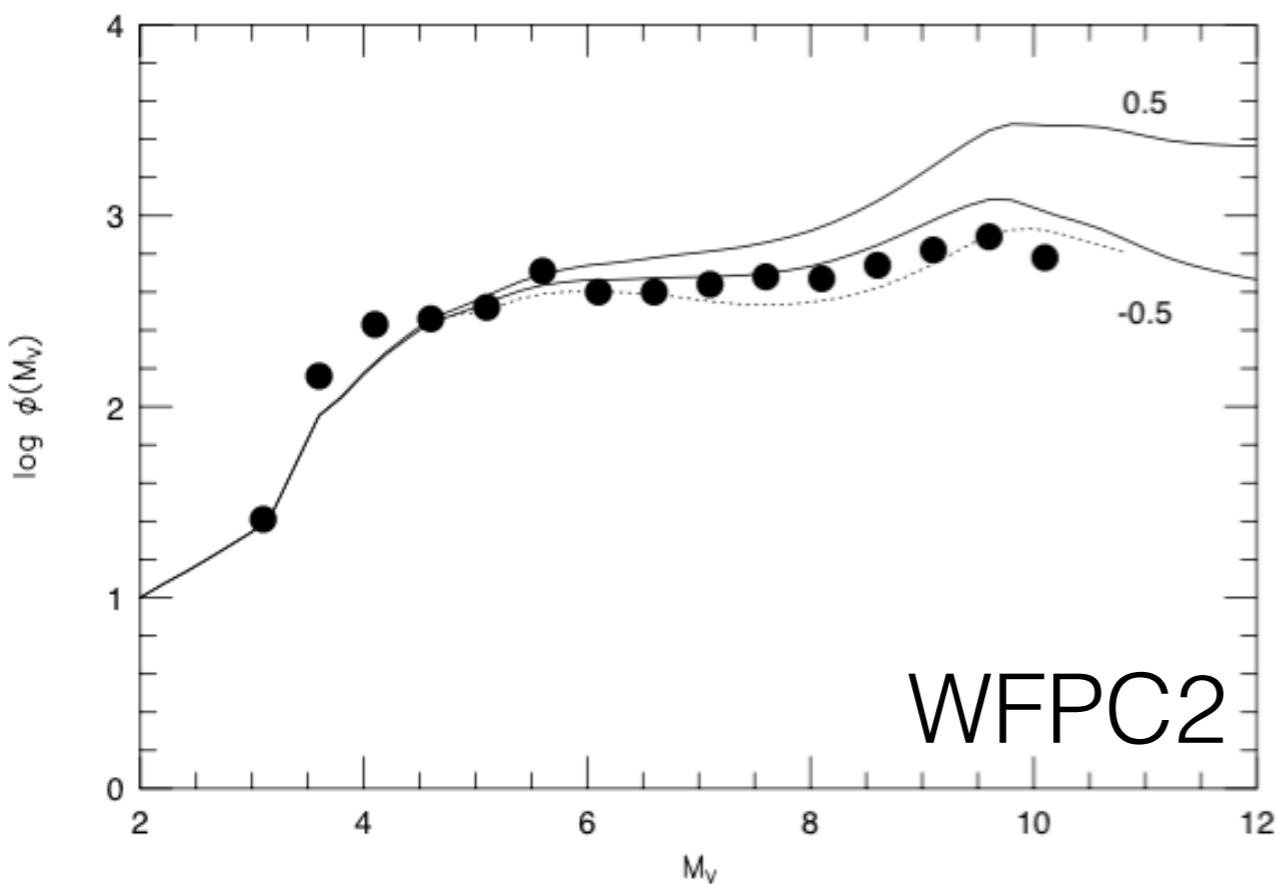
Synthetic HB

M_{F606W,0} [VEGAmag]

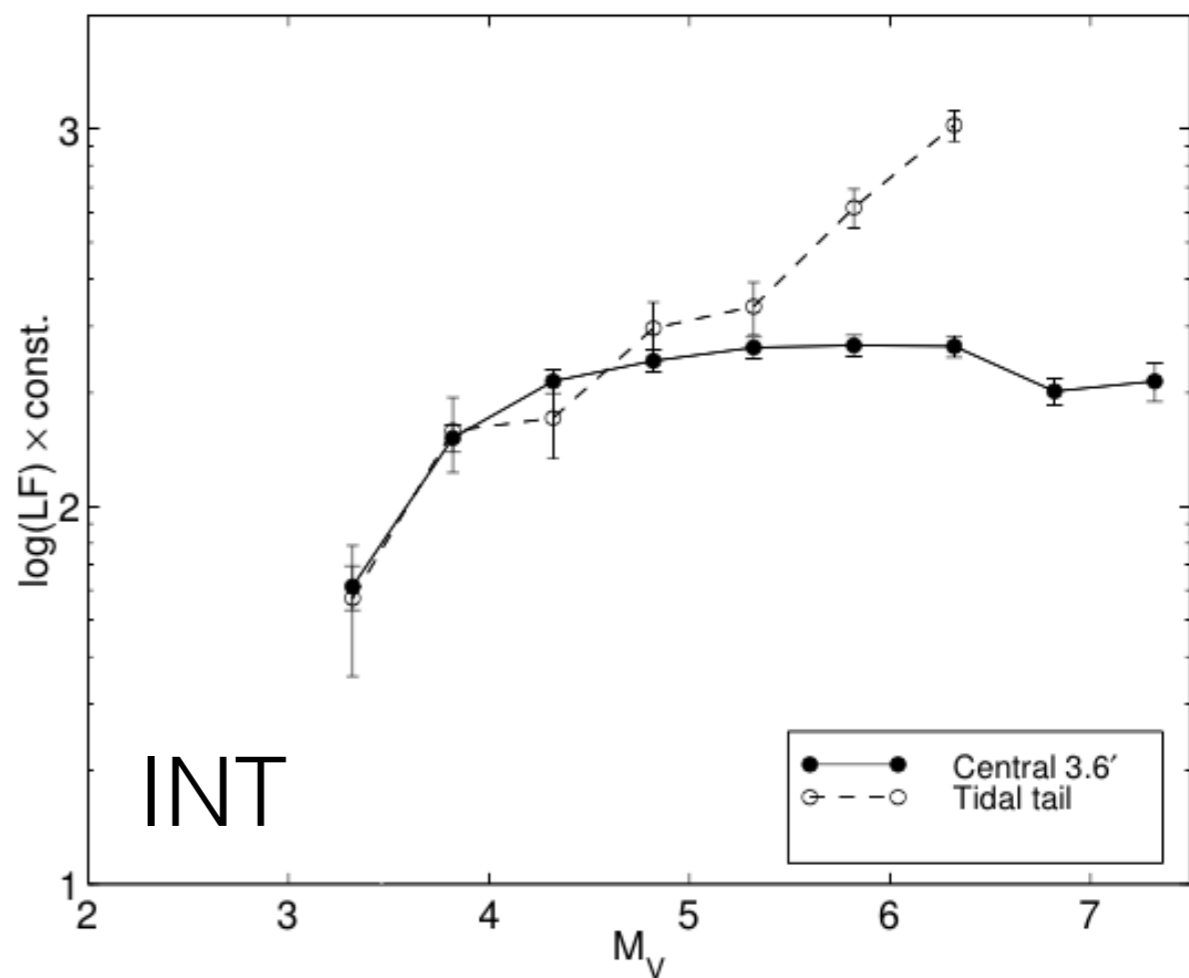




Flatten mass function within Pal5 r_t ; steeper in the TT

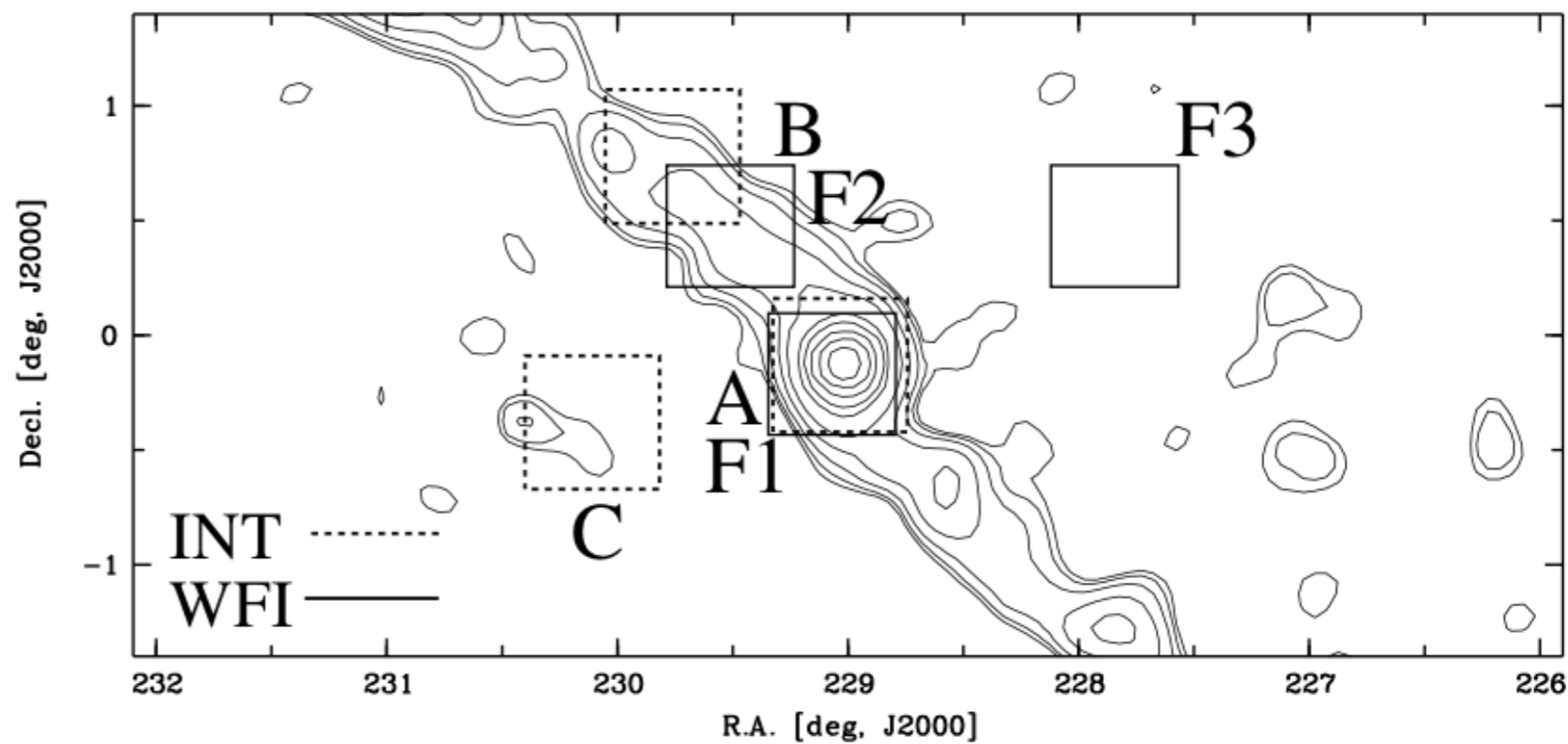


Grillmair & Smith (2001)

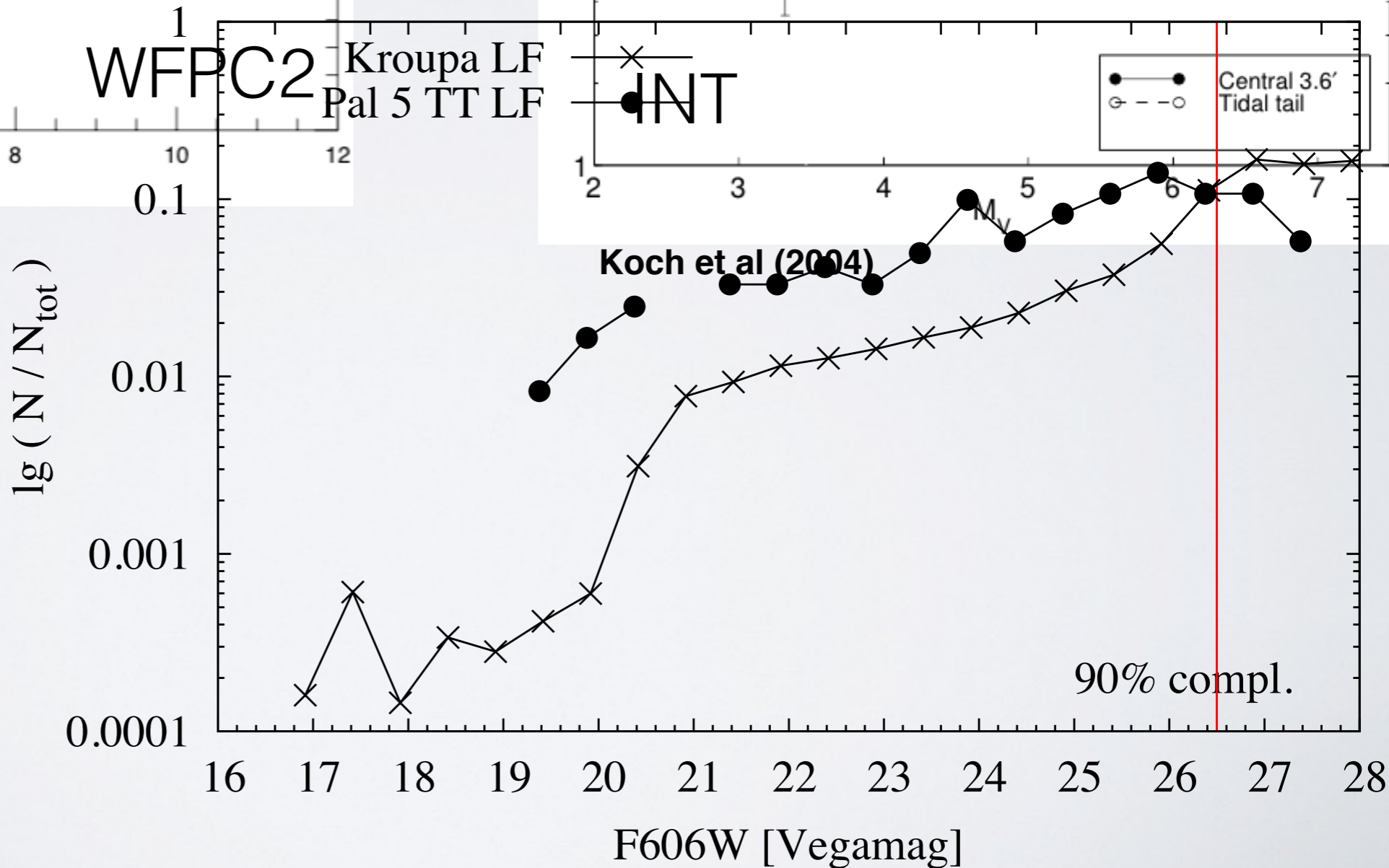
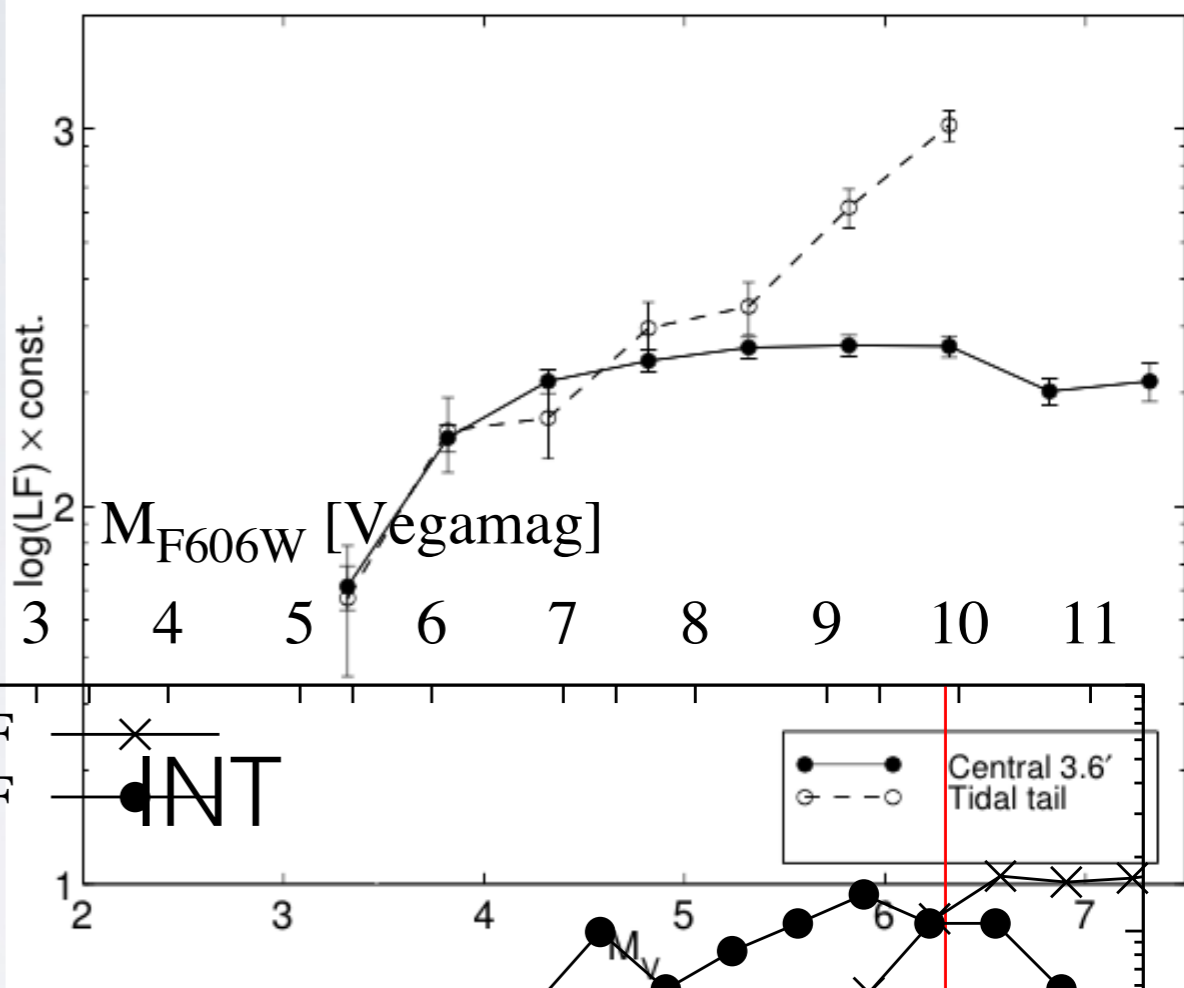
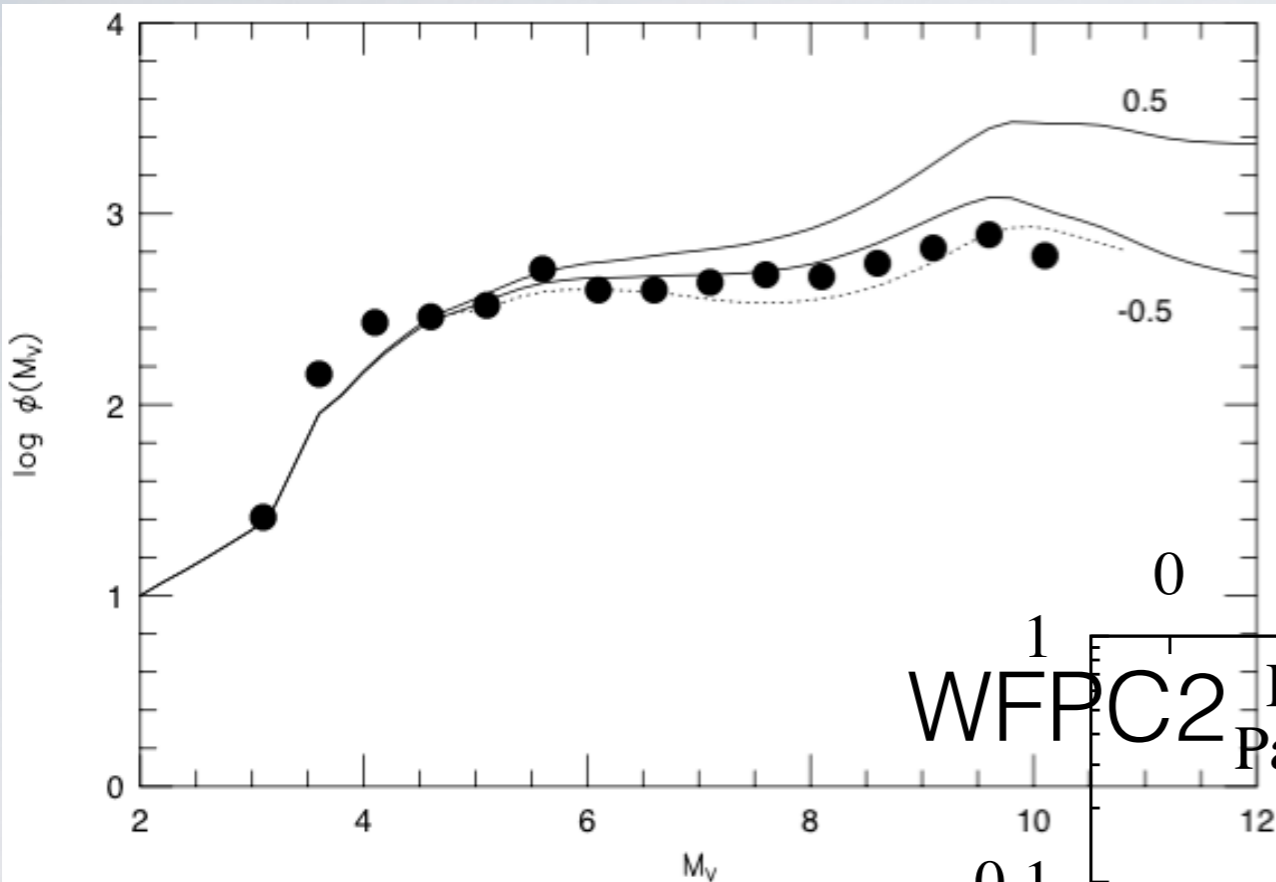


Koch et al (2004)

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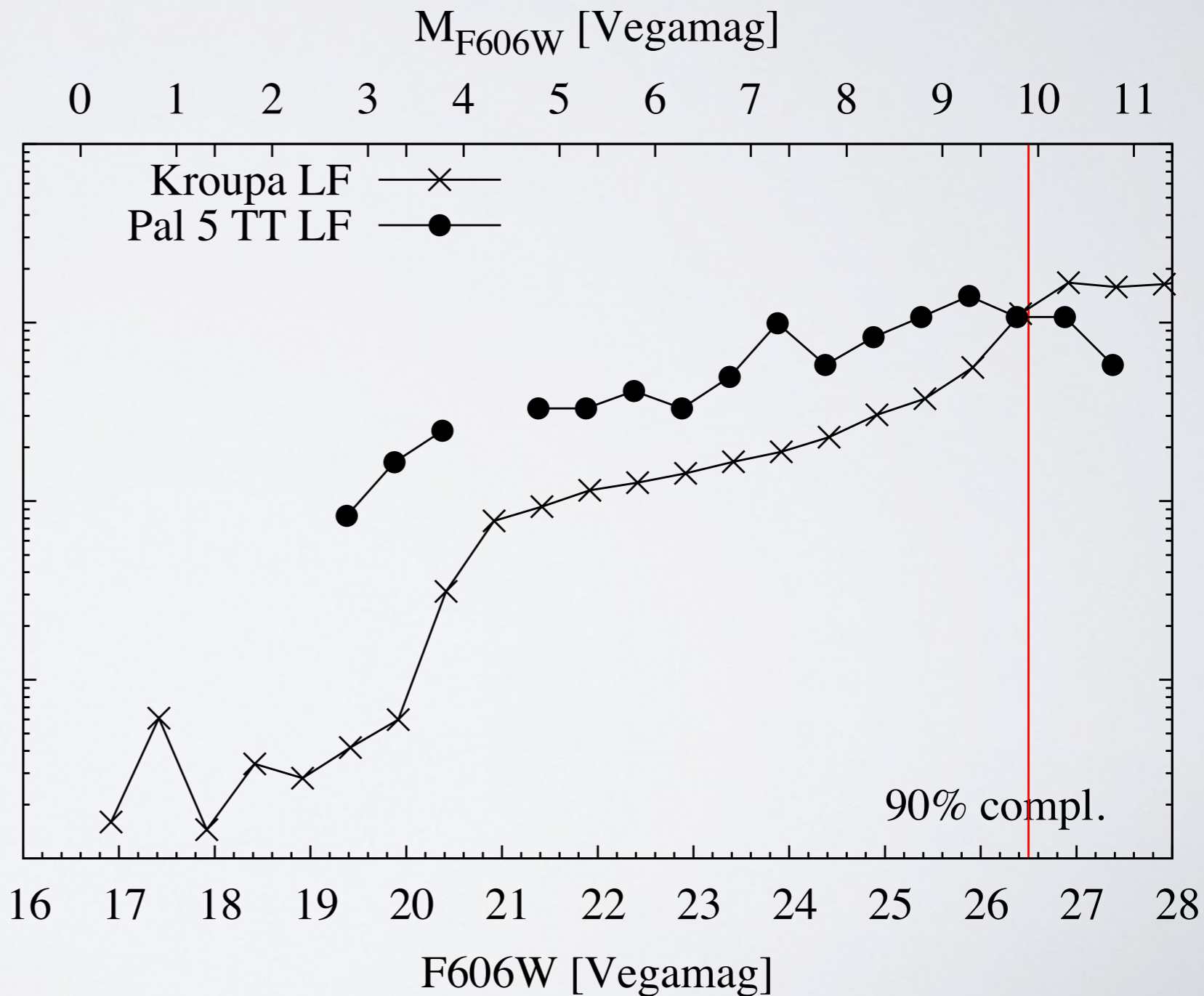
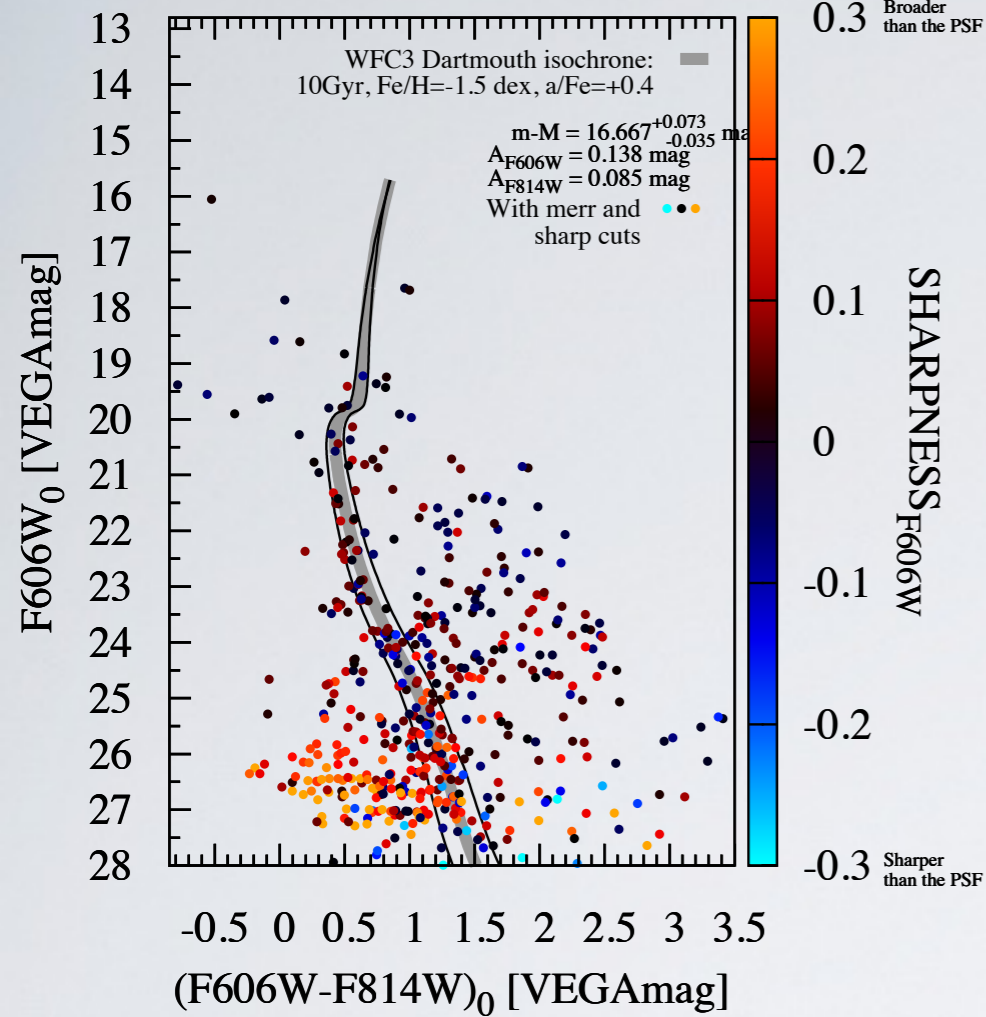
Grillmair & Smith (2001)

A very steep MF at the TT over-density?

- 121 CMD stars
- LF rather parallel to a standard Kroupa LF
- 0.86 * arcsec^2

Conclusions

New CMD distances to Pal5 and the over-dense TT region (20 and 21.55 kpc)



- 121 CMD stars
- LF rather parallel to a standard Kroupa LF
- 0.86 * arcsec^2