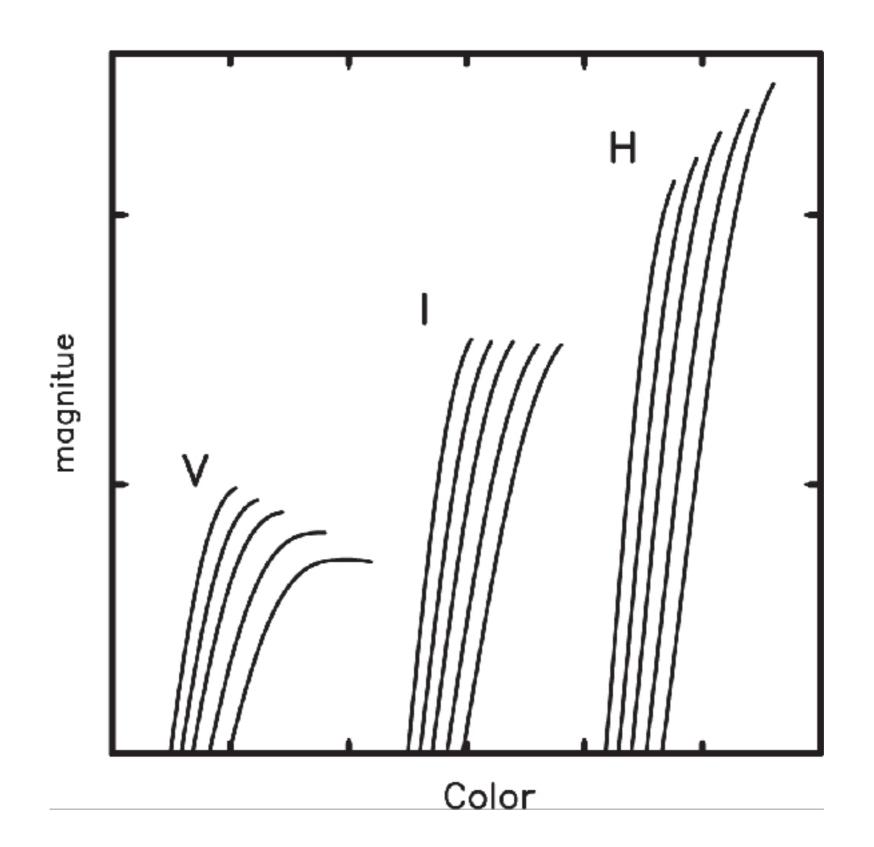
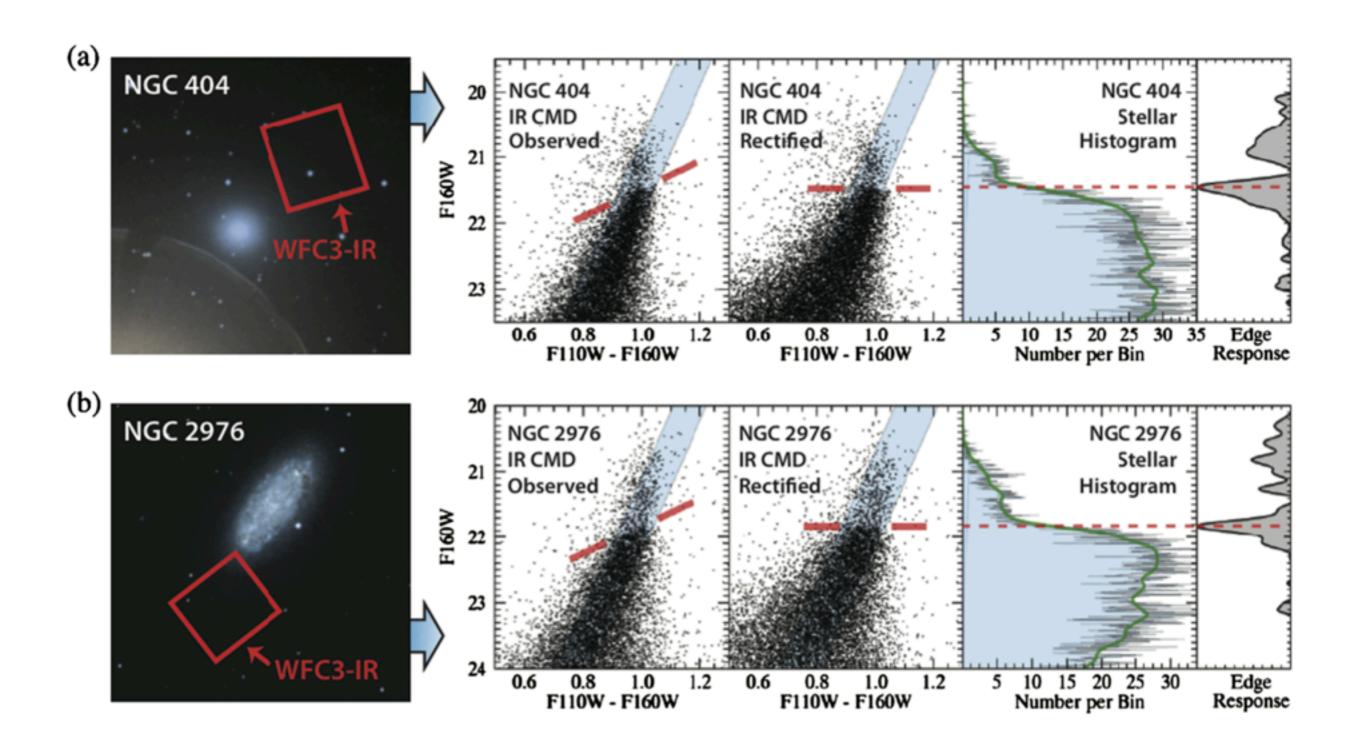
# the stability of the IR-TRGB using the PHAT machinery

meredith durbin

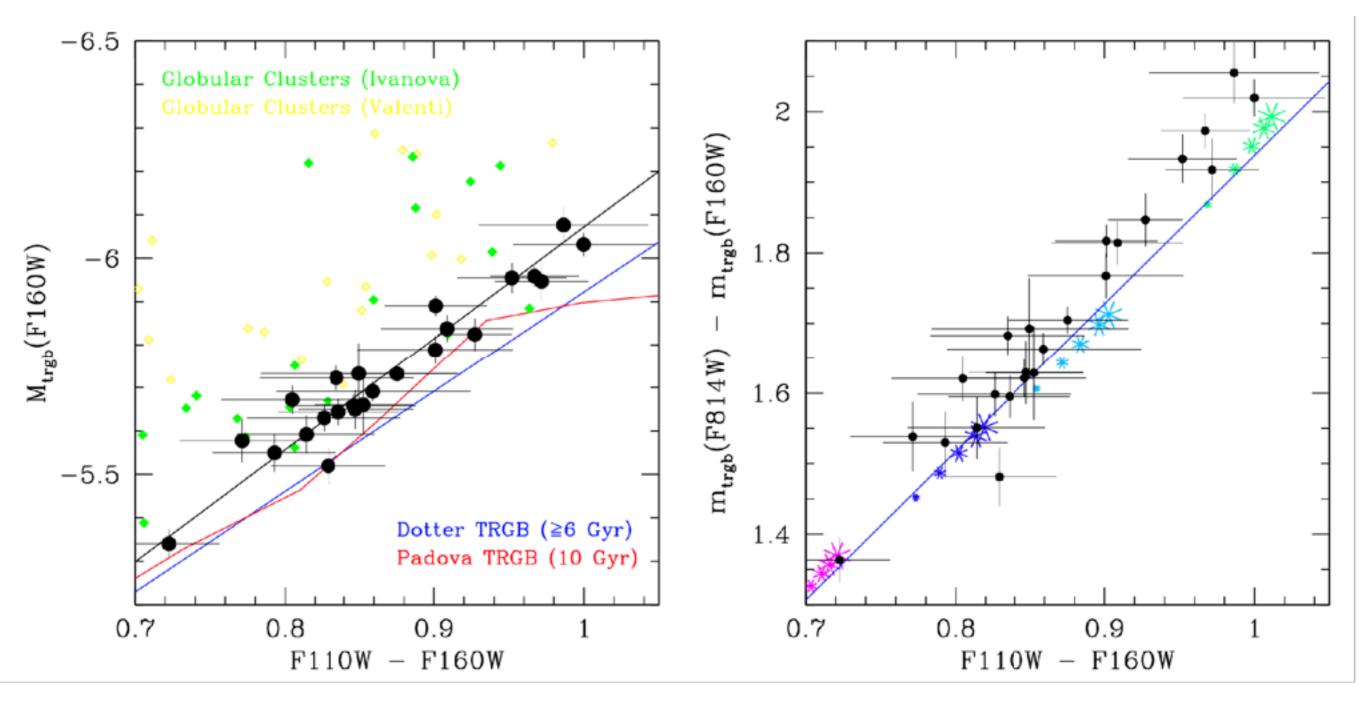
# the multiwavelength TRGB



## method: transformed photometry

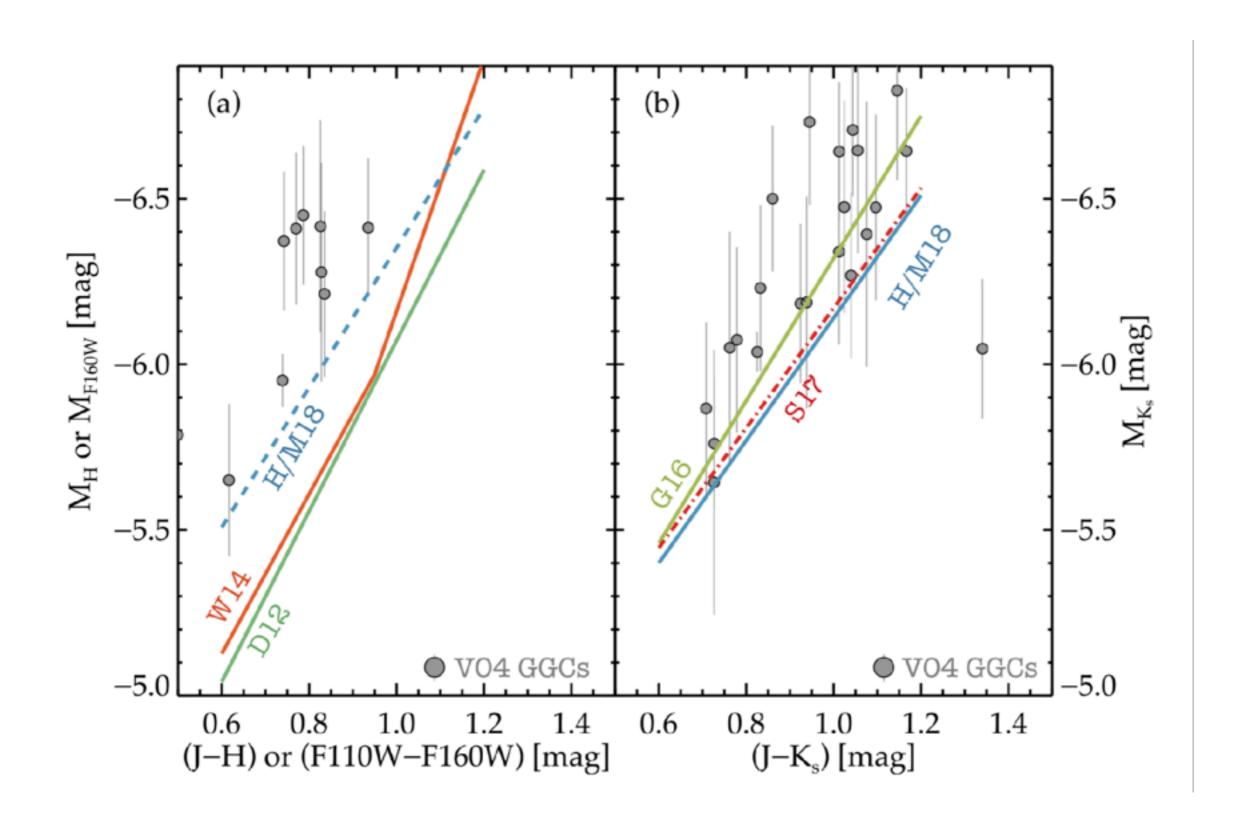


# previous calibrations



dalcanton et al. 2012, ApJS, 198, 6

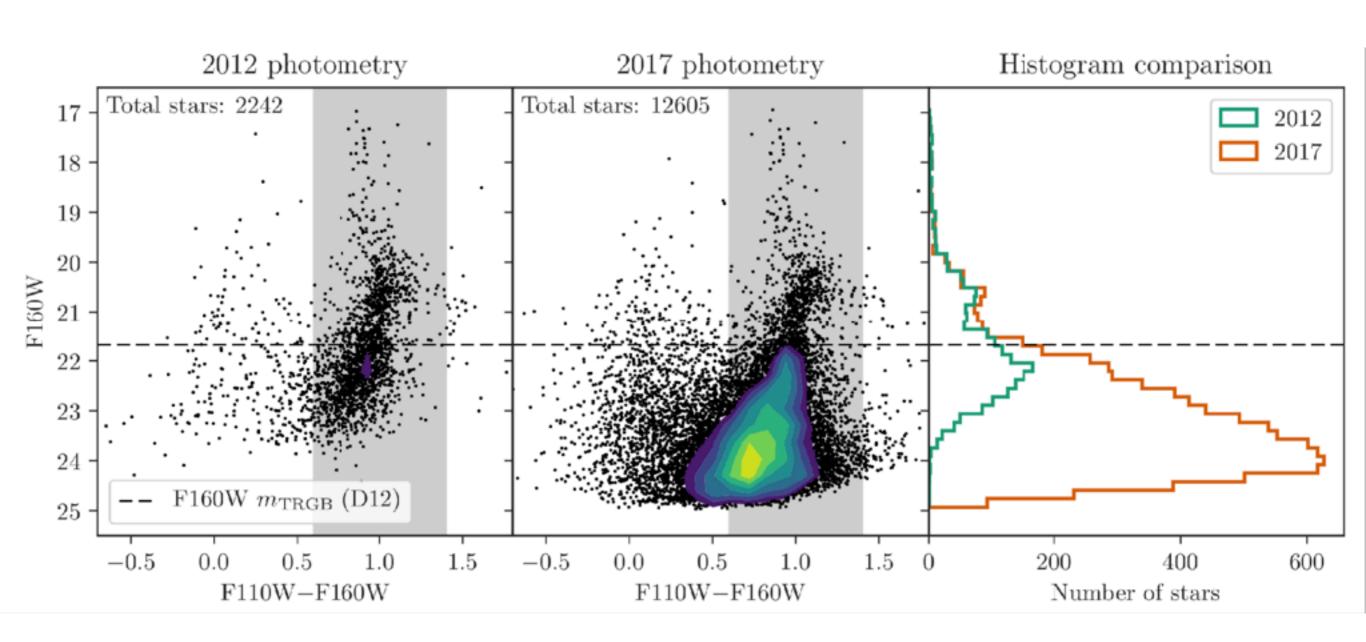
# previous calibrations



# re-reduction goals

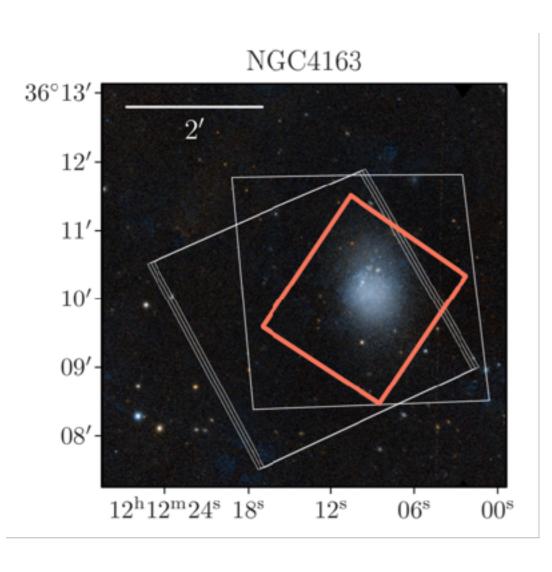
- use improved wfc3/ir calibration + photometry for more accurate tip magnitudes & colors
- correlate tip magnitude + color with SFH
- improve absolute calibration

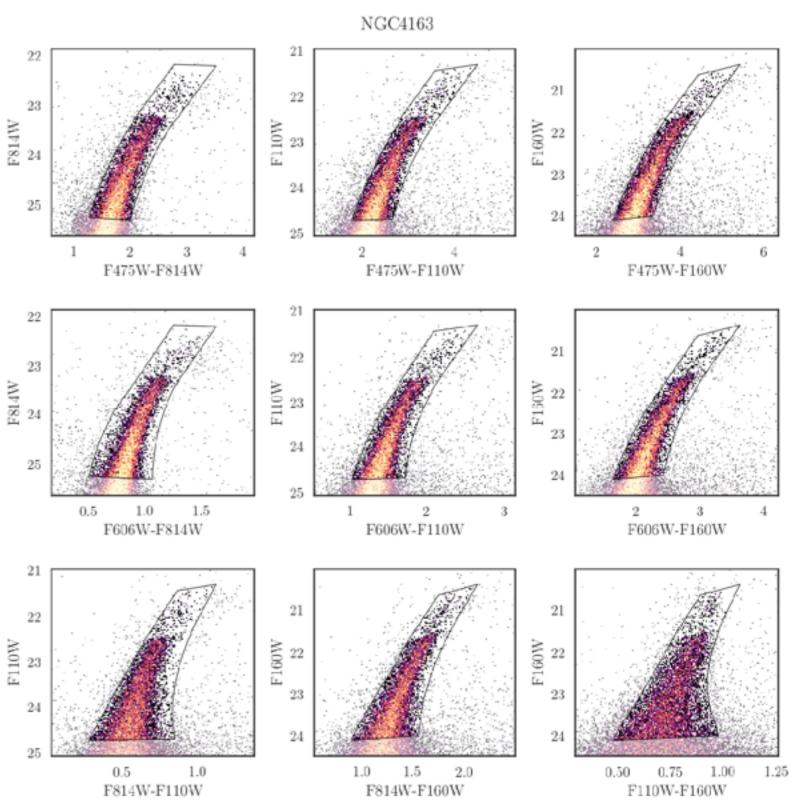
# improved photometry



pipeline: williams et al. 2014, ApJS, 215, 9

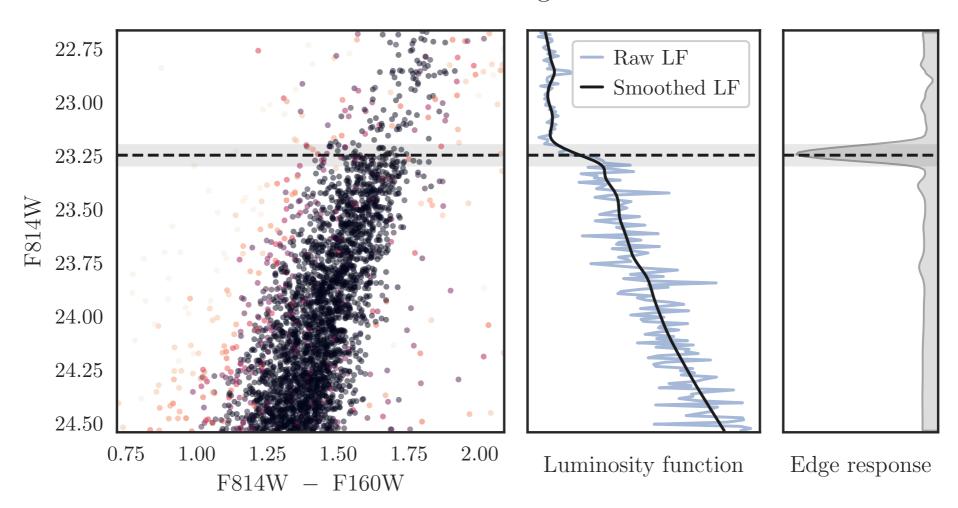
#### RGB selection



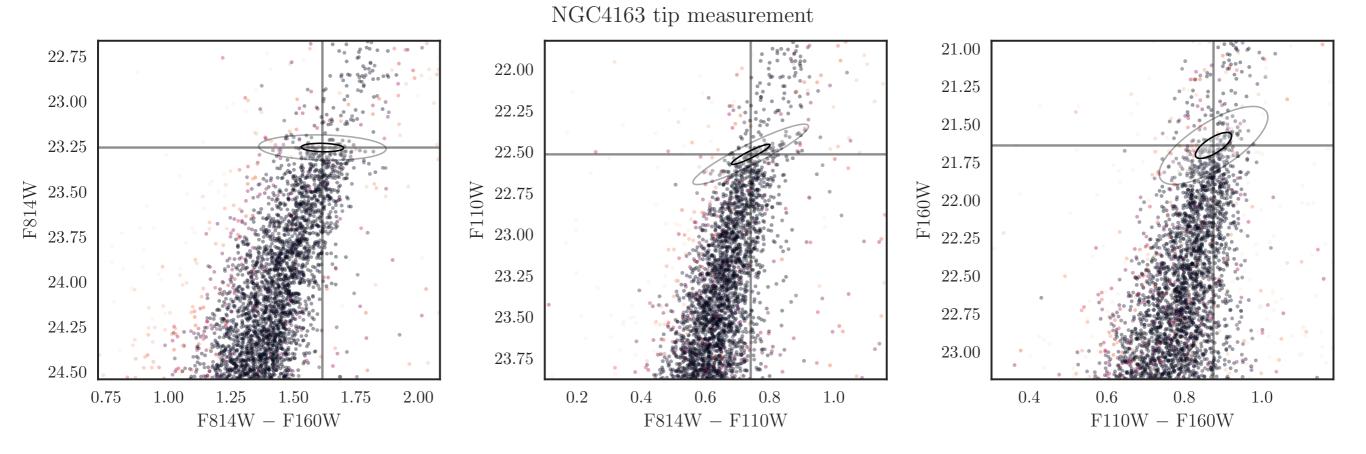


# tip star selection

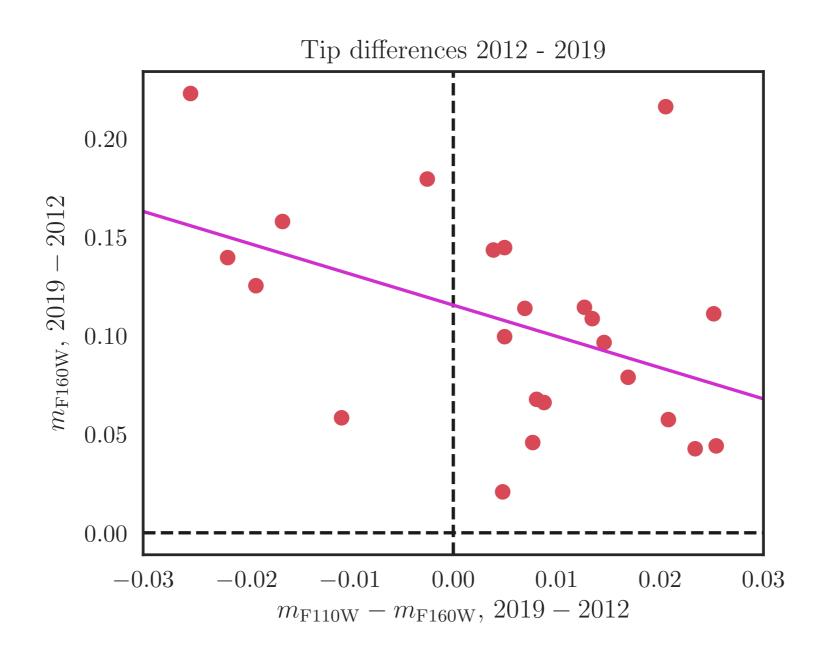
#### NGC4163 F814W edge detection



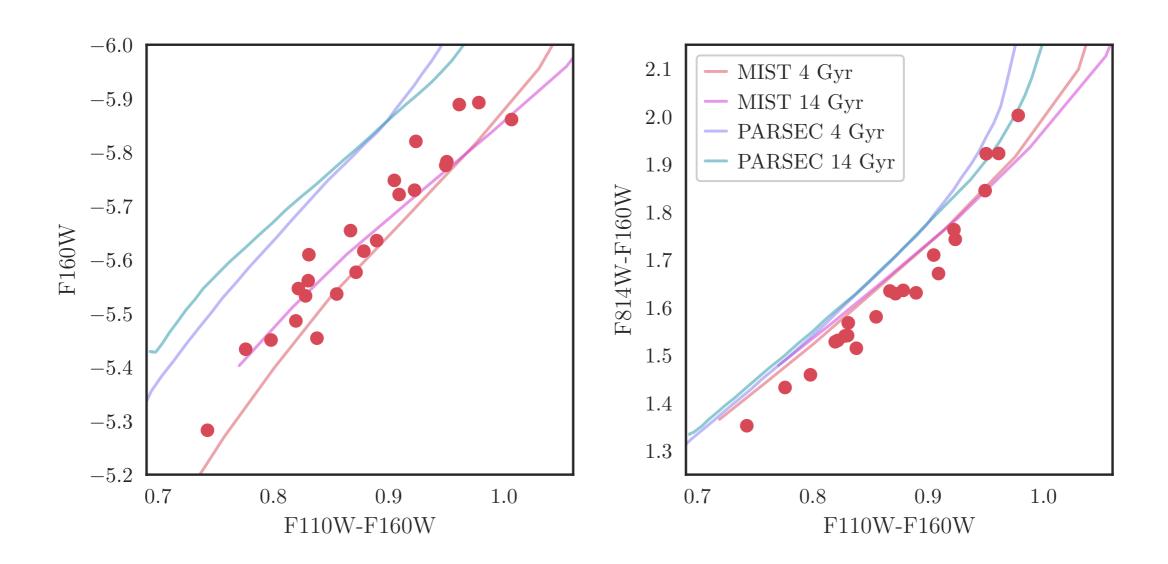
# tip fitting



### 2012 vs 2019



# color-mag & color-color relations



#### future work

- absolute calibration with Local Group
- improve model fidelity