Effect of AGN on star formation with ALMA and EAGLE
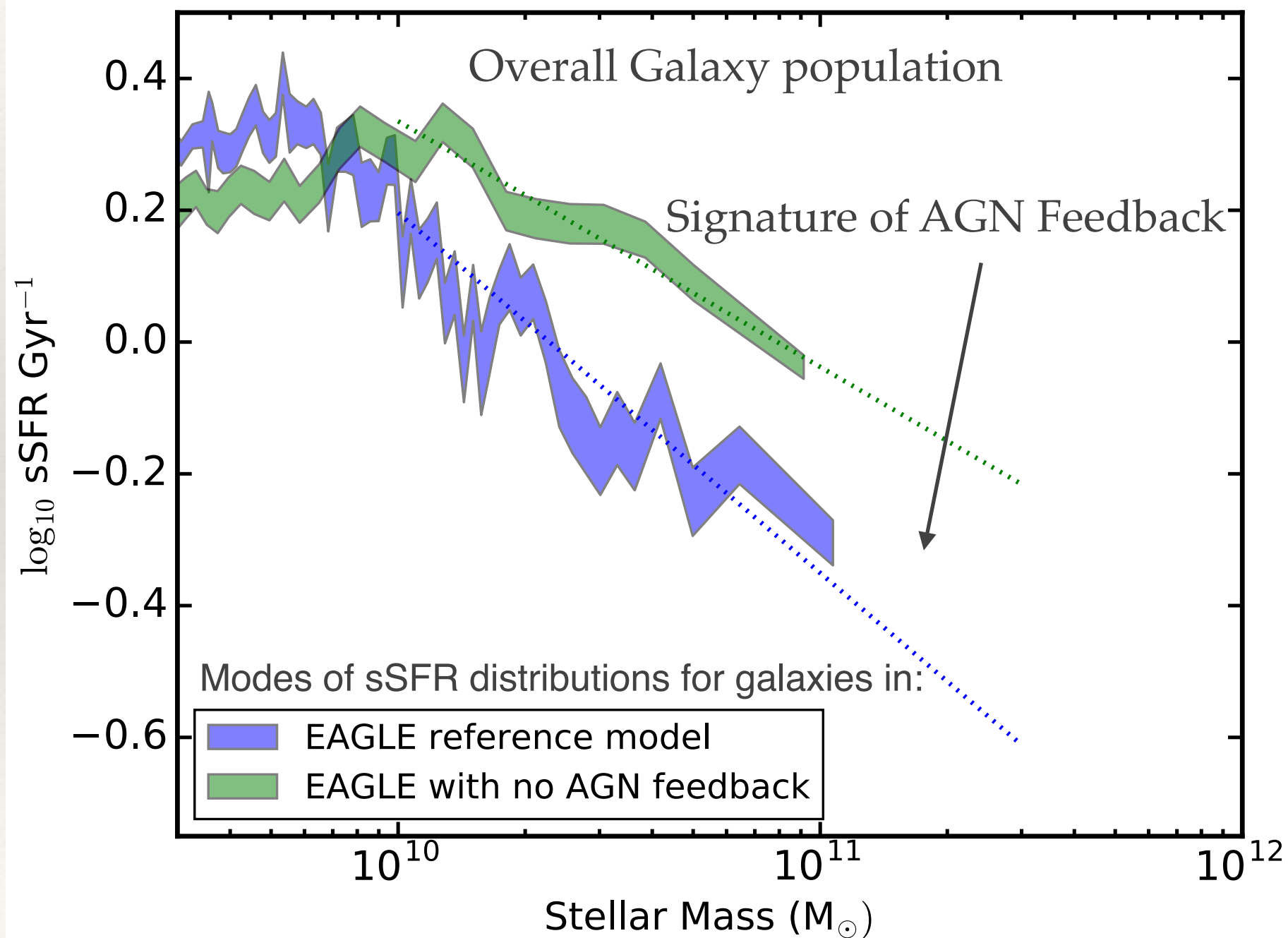
JAN SCHOLTZ
Durham University
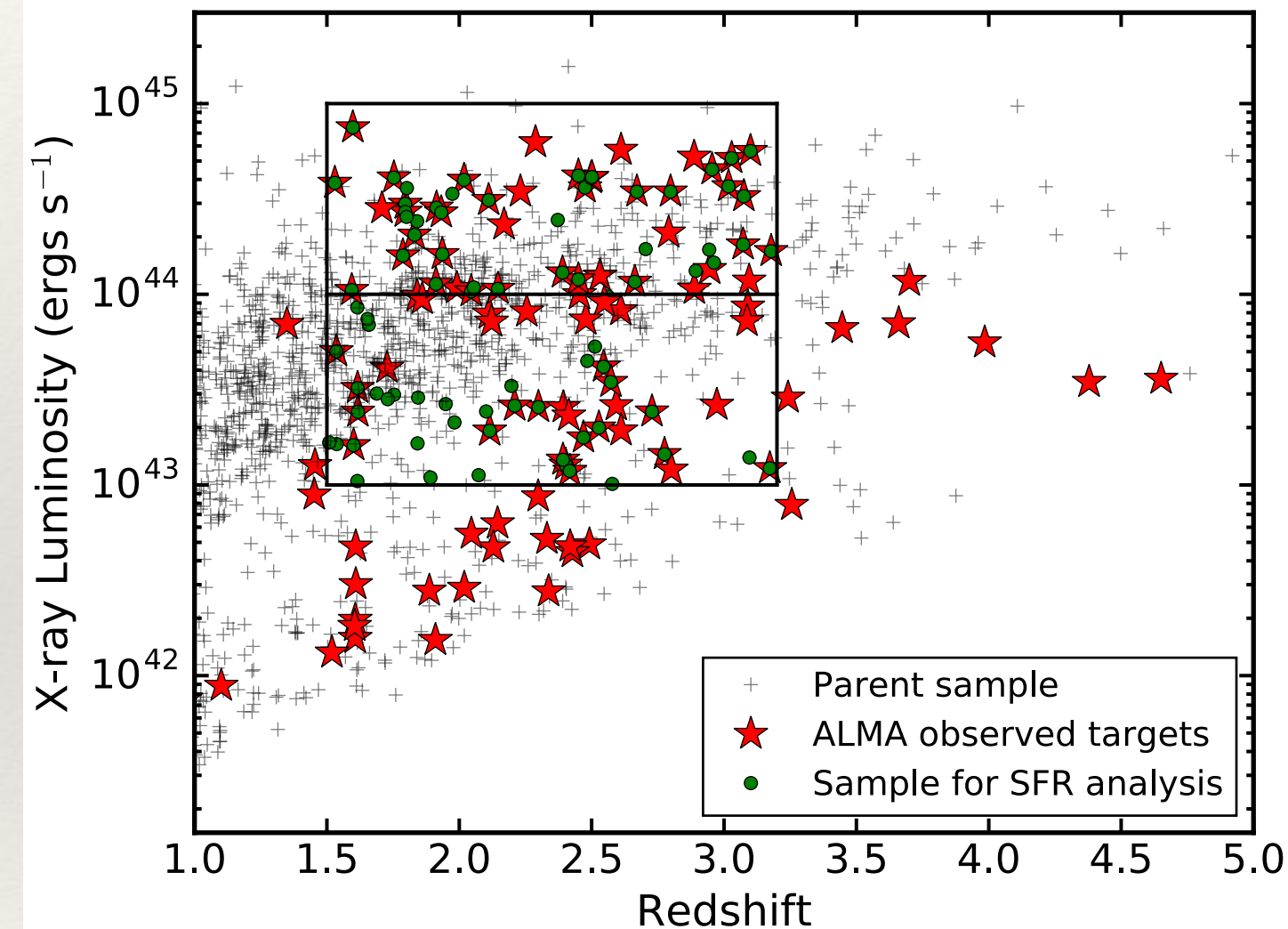
Durham University

Dave Alexander, David Rosario, Chris Harrison and others
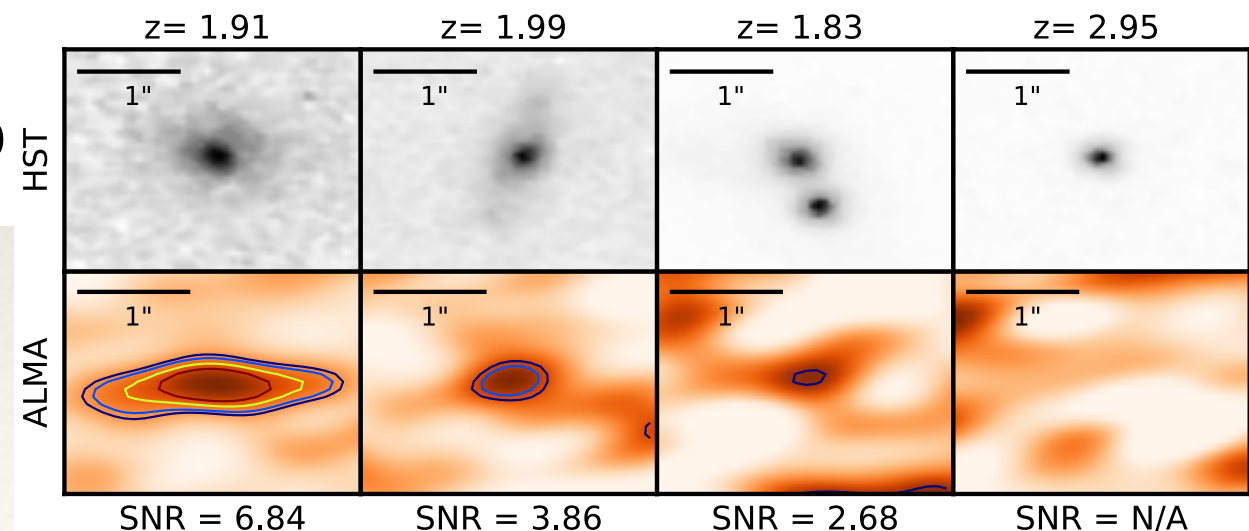
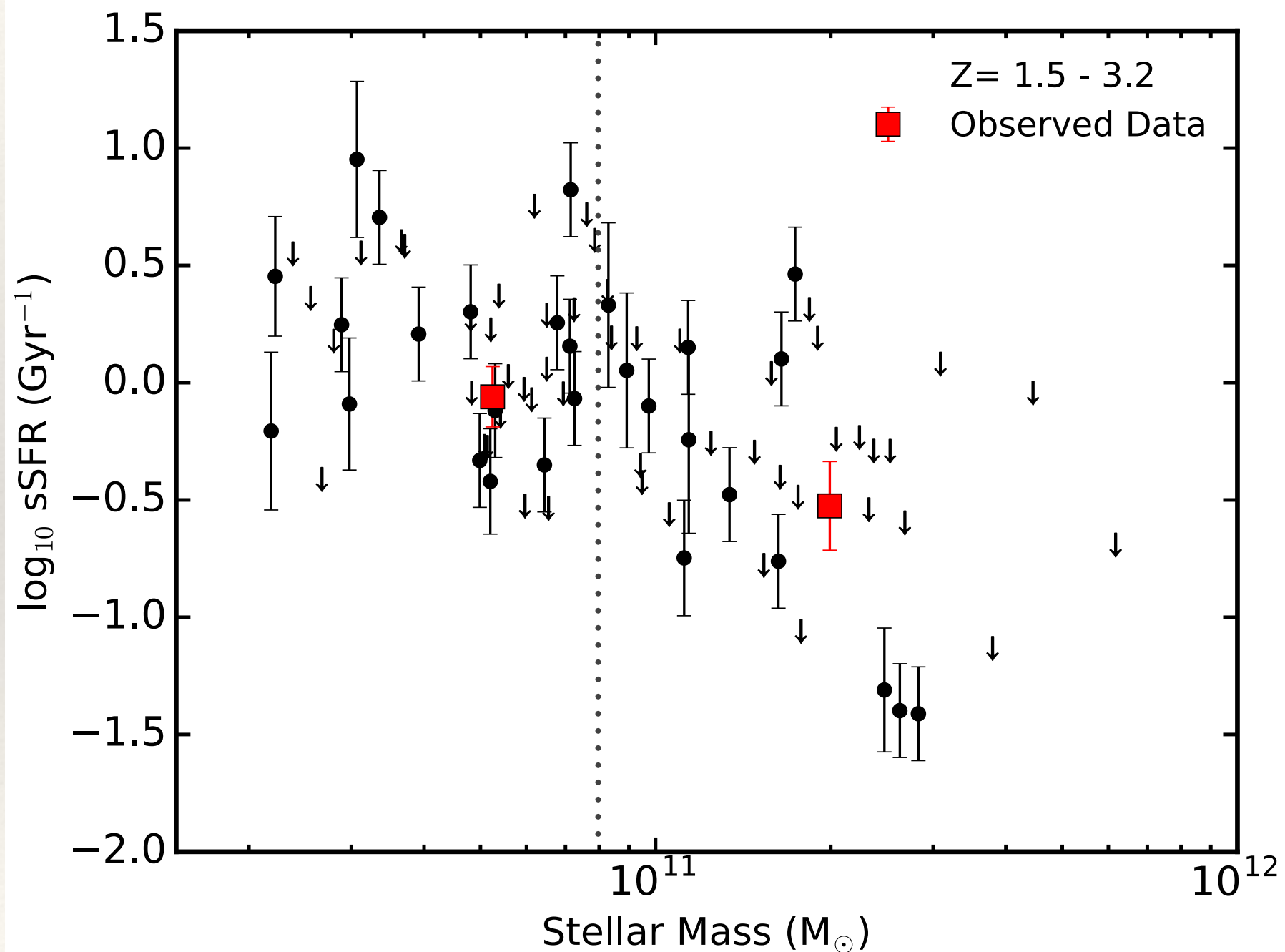DEX- XIII Edinburgh 2017

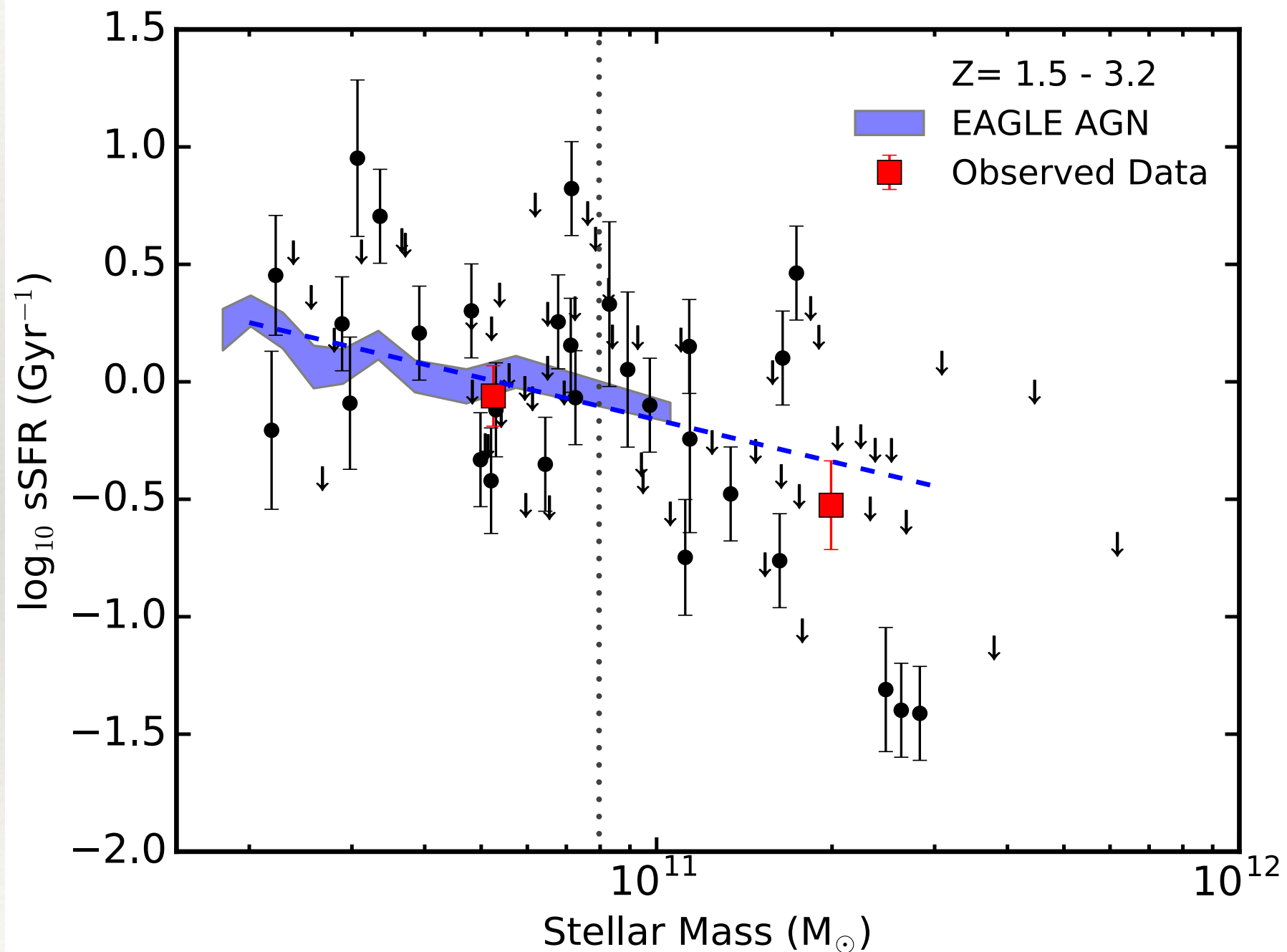# Evidence of Feedback in Simulations

Observational Data

❖ 89 luminous AGN in redshift 1.5 - 3.2, observed with ALMA

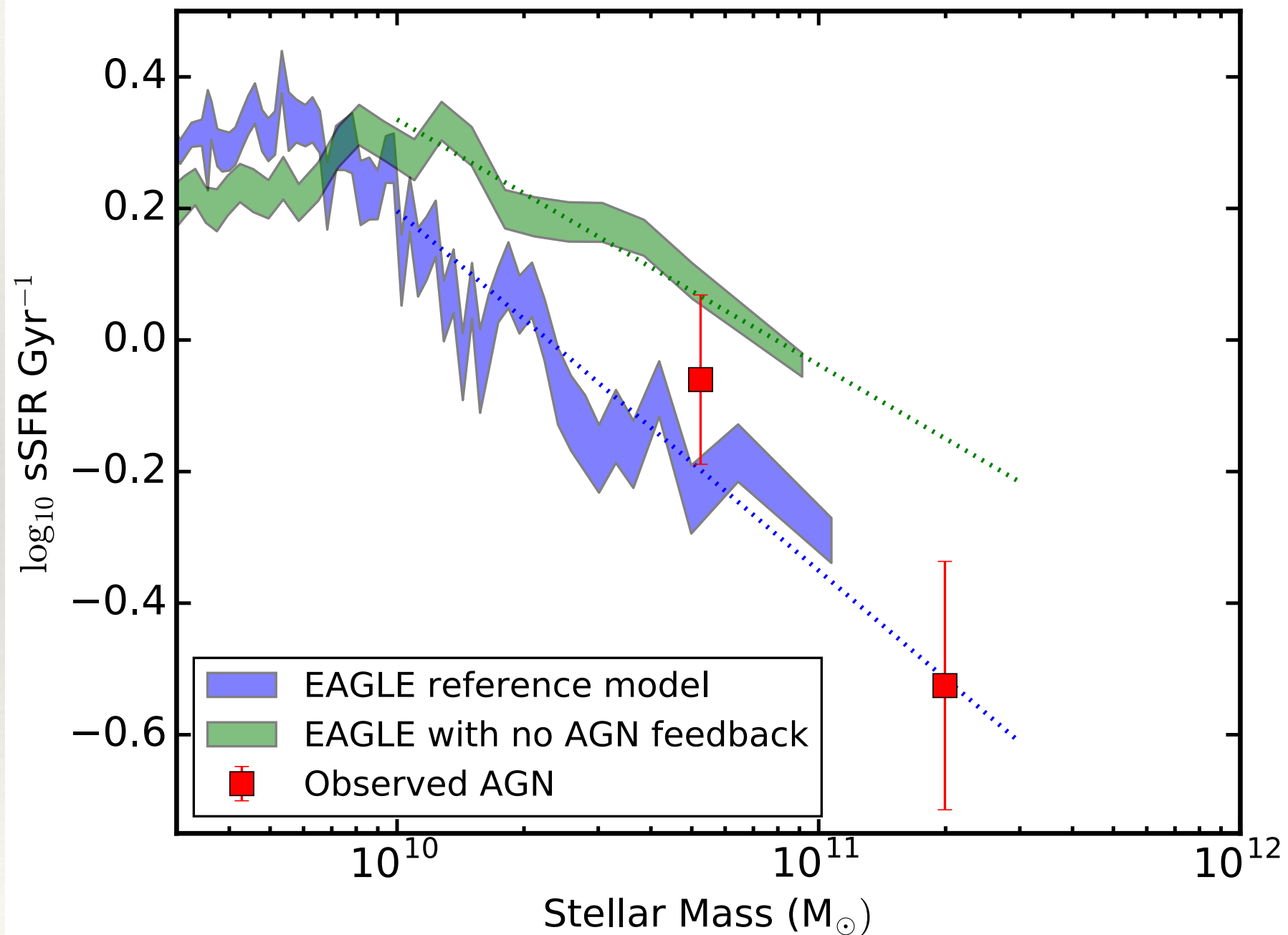❖ We fitted SF and AGN templates to ALMA, HERSCHEL and MIPS photometry

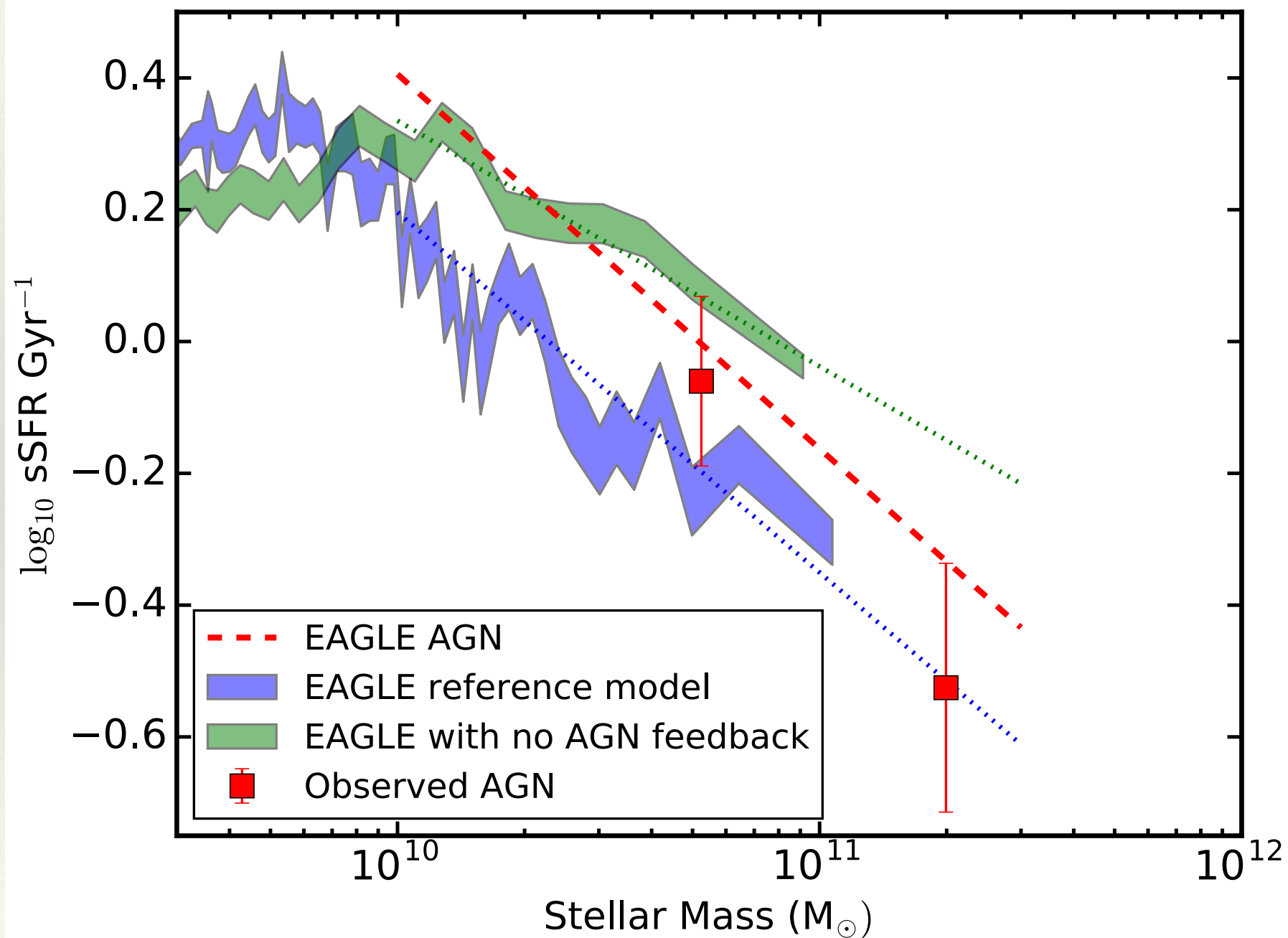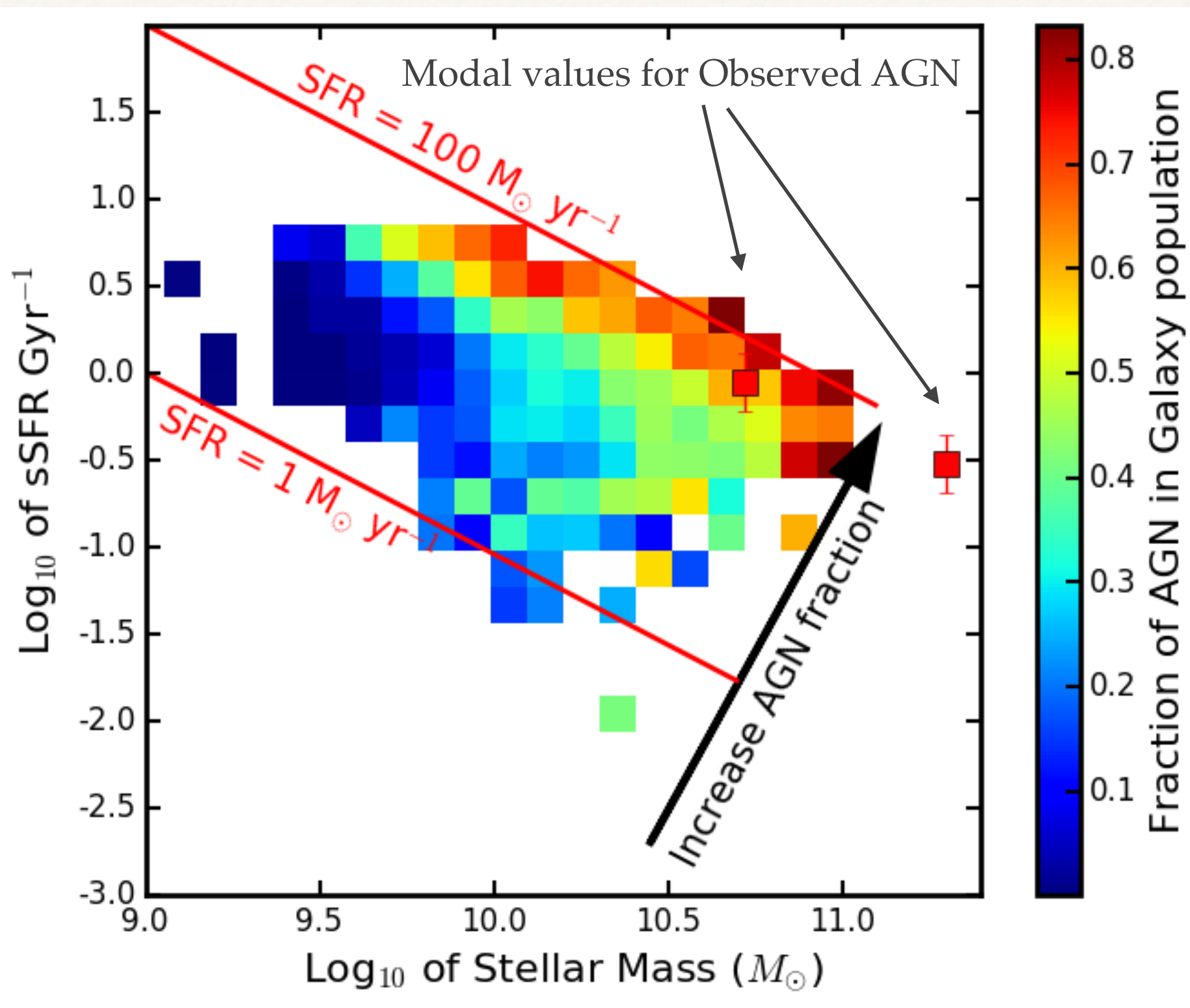# AGN show decreasing sSFR with Stellar Mass

and so does EAGLE AGN

Evidence of Feedback

Evidence of Feedback

Where are AGN?

Summary

- We used to different versions of EAGLE and ALMA observations to investigate effect of AGN Feedback

- AGN feedback can be seen in the decline of sSFR with stellar mass

- By selecting AGN, we also select star-forming galaxies boosting the modes of distributions of s(SFR)

- talk to me about more results

sSFR vs X-ray Luminosity