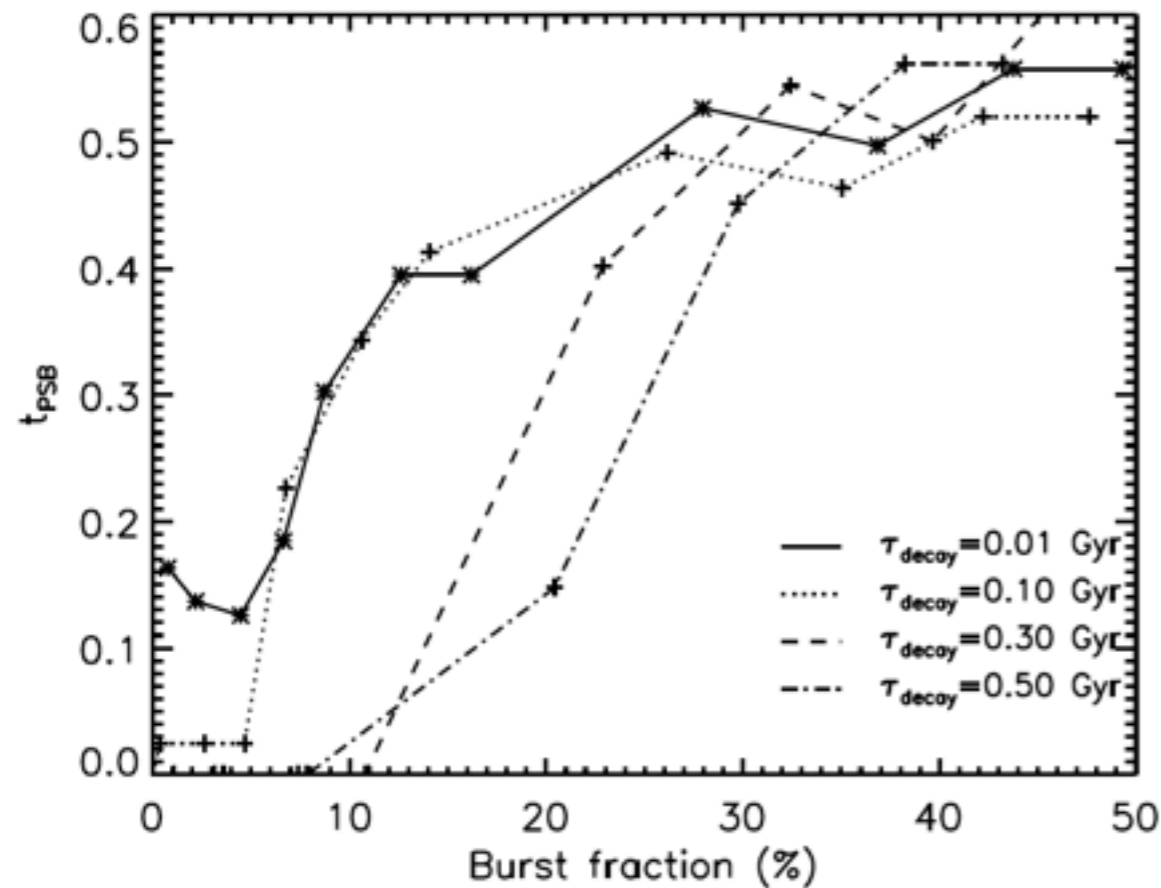


# Time-scales - post-starburst galaxies

Wild et al (2010)



Nice, because we know that (optically visible) SF has stopped.

To be able to detect these clearly the time-scale has to be  $\lesssim 0.1$  Gyr

Strong PSBs are *much* more common at high-z at the same mass.

At low-z rapid suppression of star-formation might still happen at lower mass though.

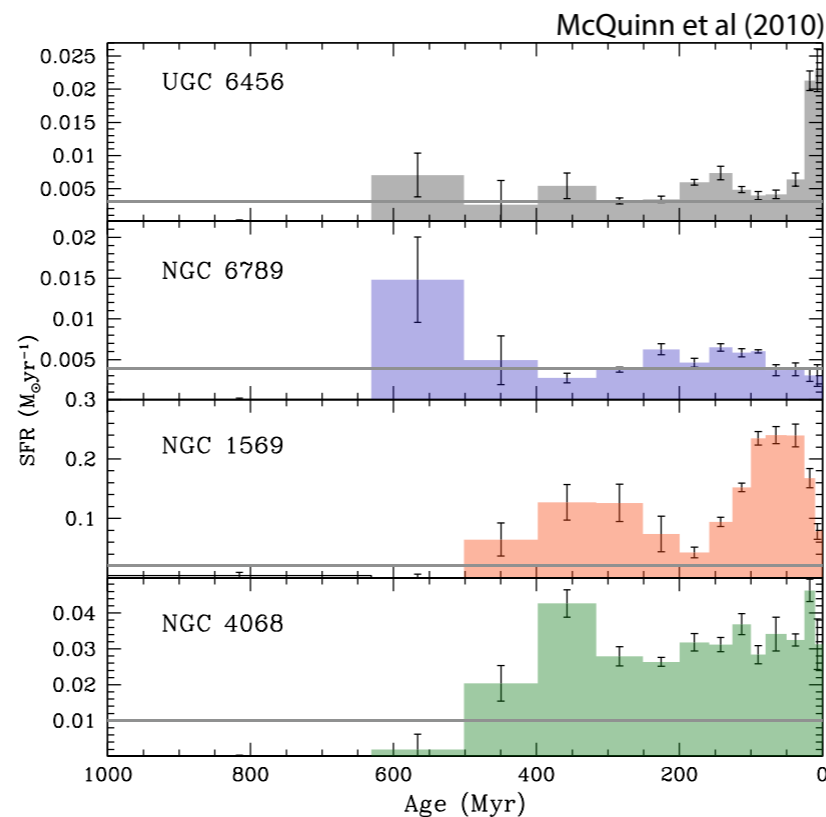
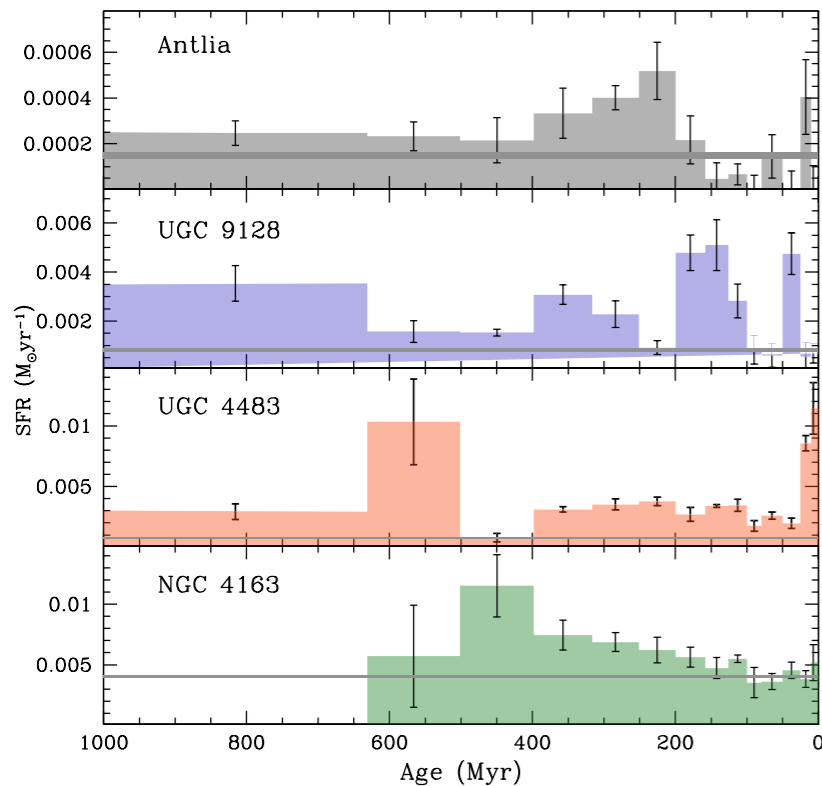
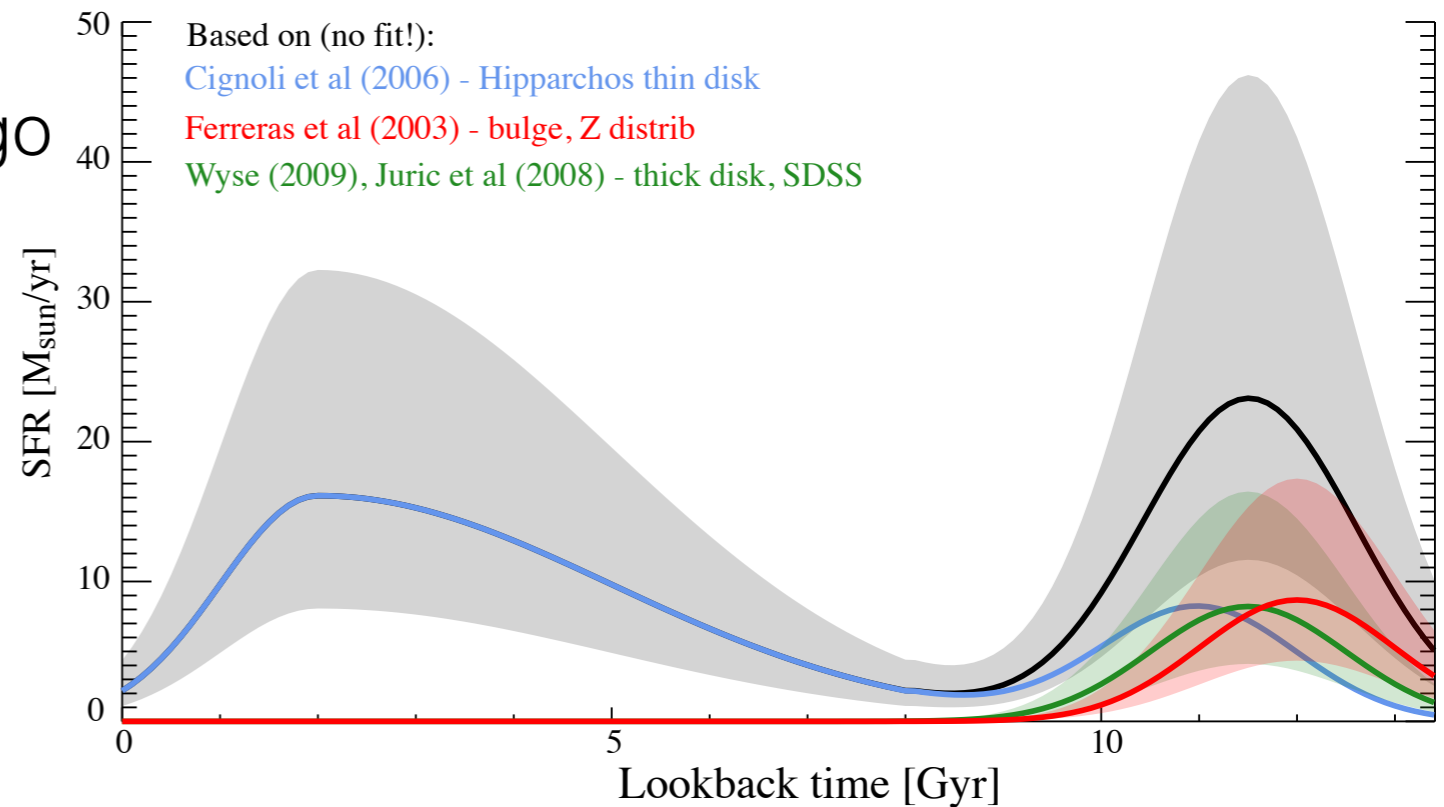
# Archaeological time-scales

## MW:

Bulge:  $\Delta t < 1$  Gyr, ending  $\sim 10$  Gyr ago

Thick disk: Similar to bulge(?)

Thin disk: Two epochs of SF?



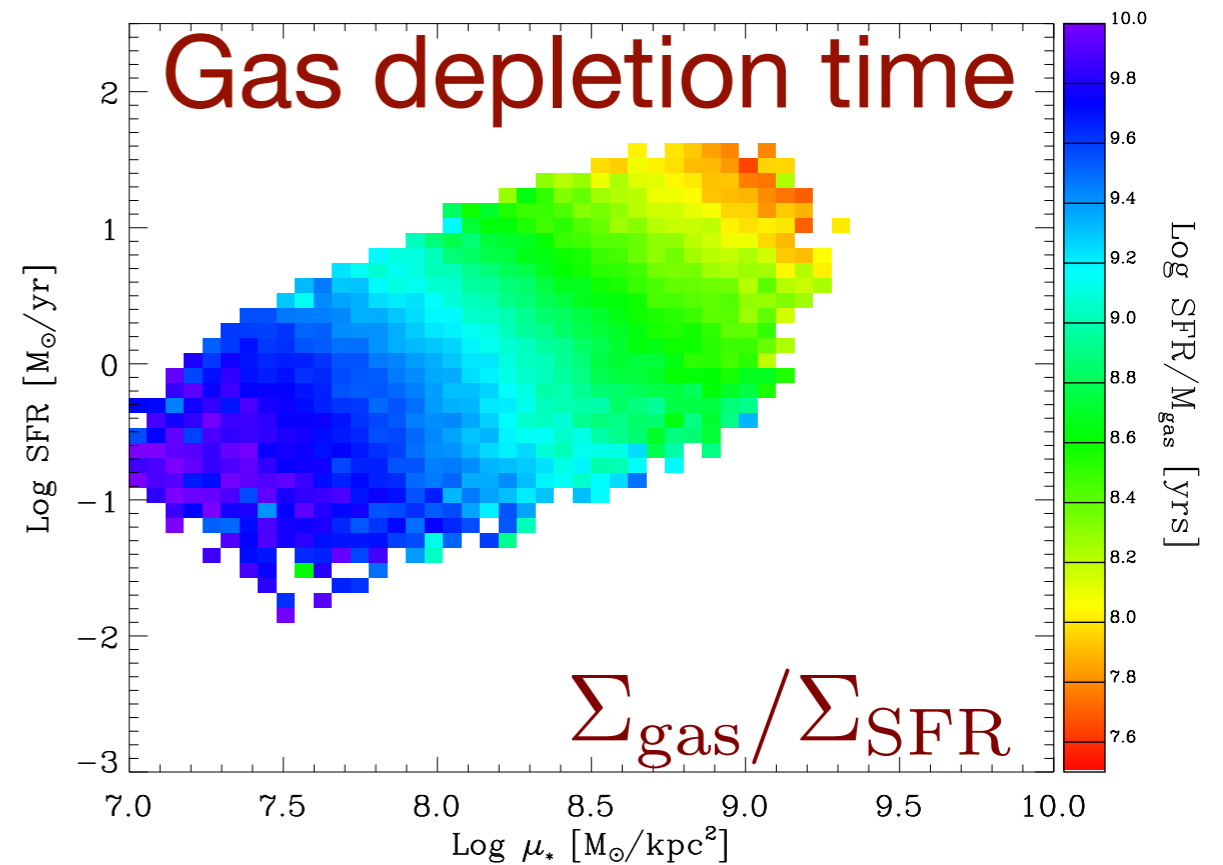
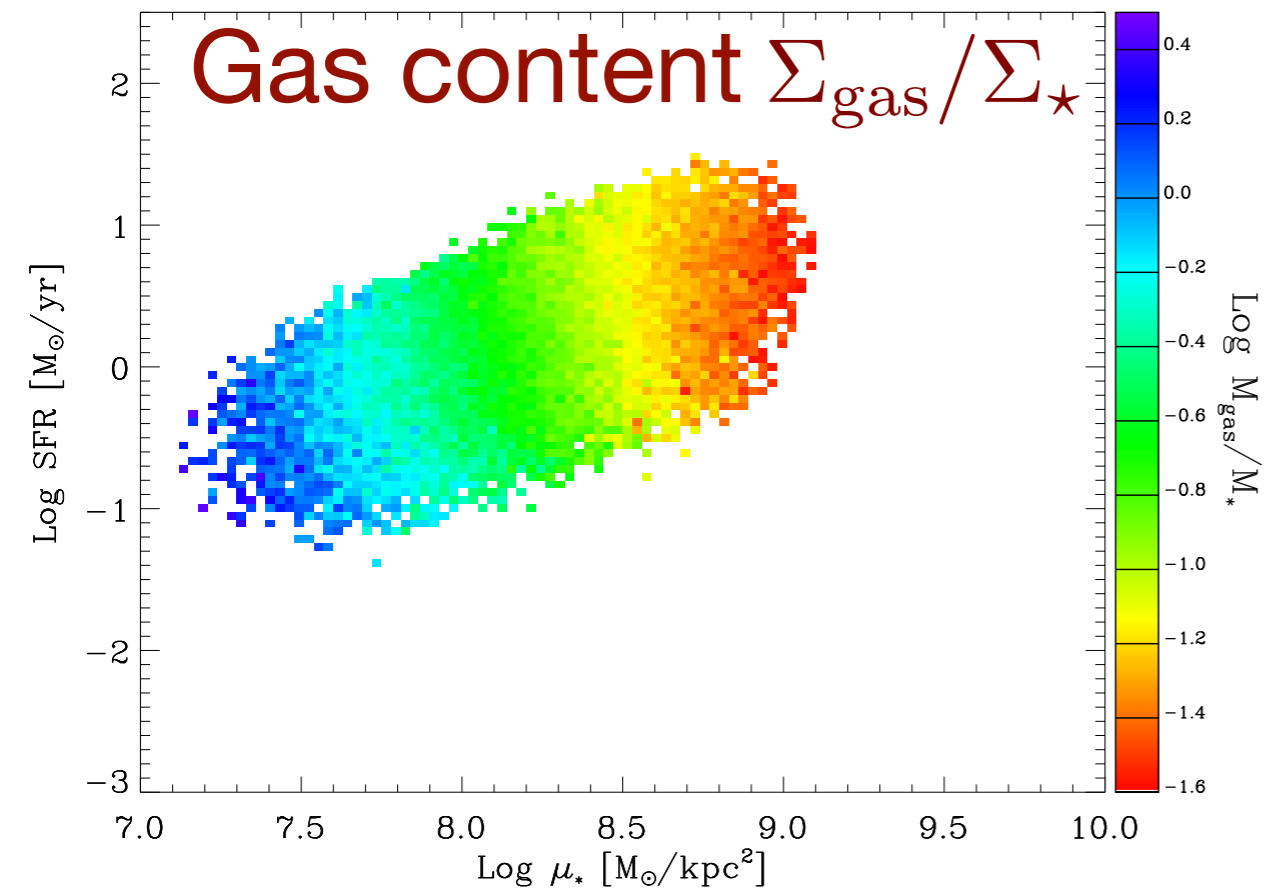
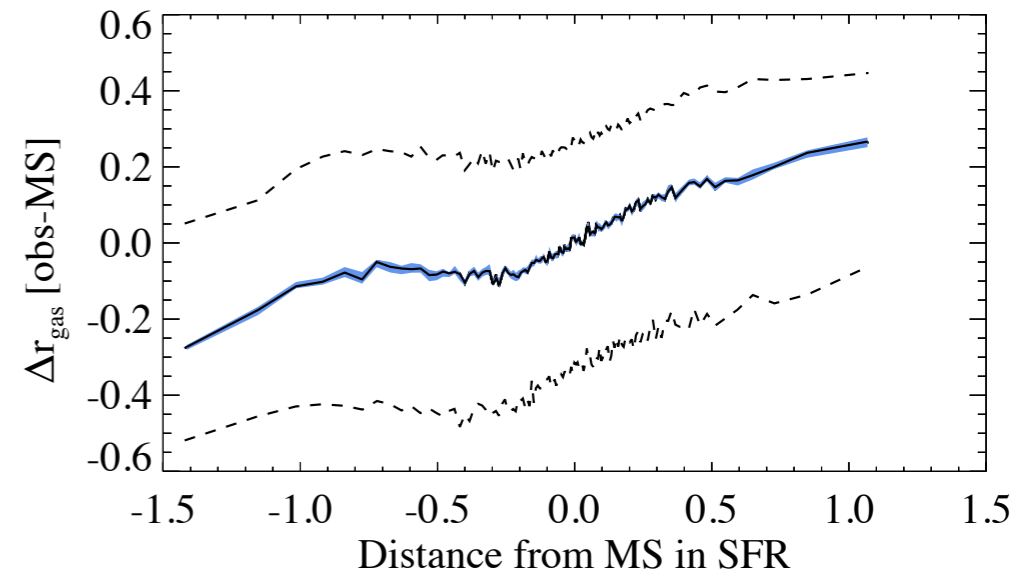
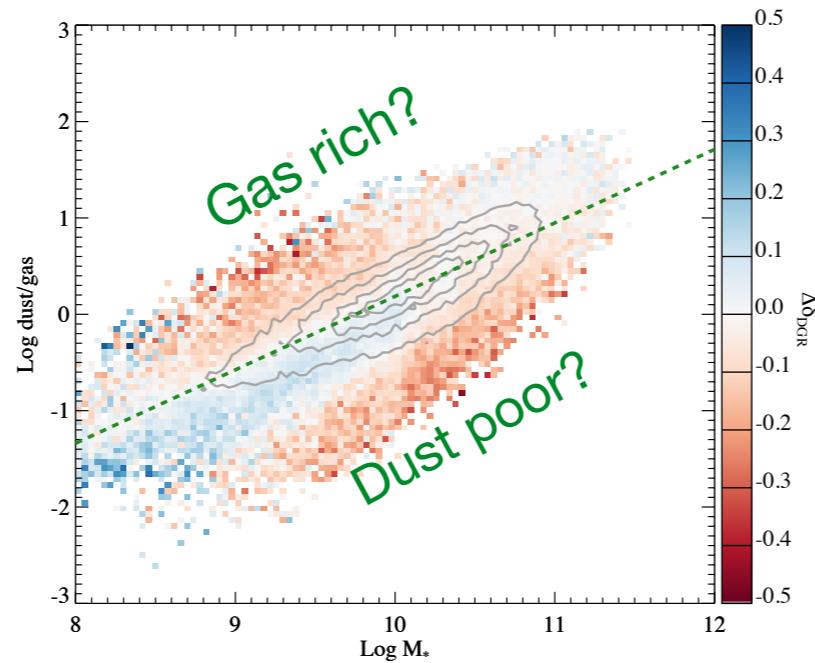
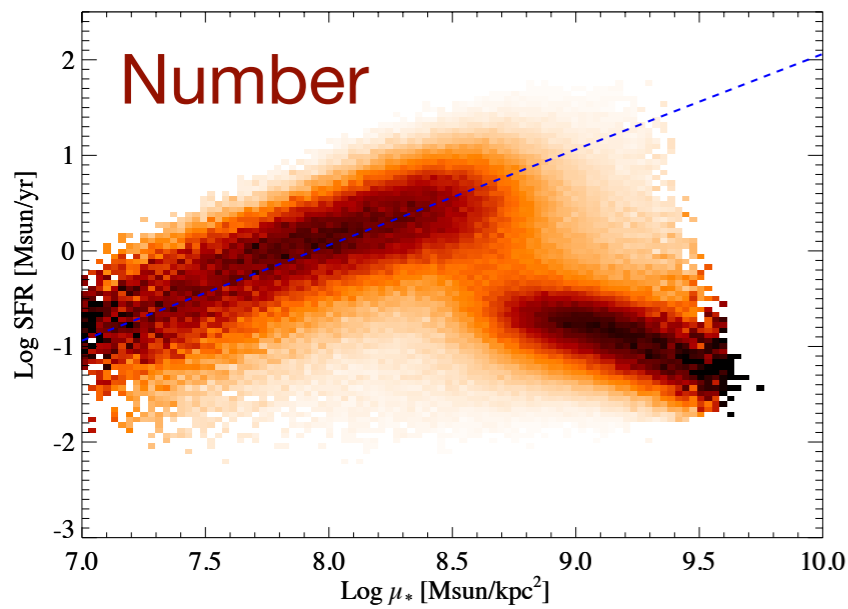
McQuinn et al (2010):

Dwarfs: typical SB duration  $\sim 100$ s of Myr.

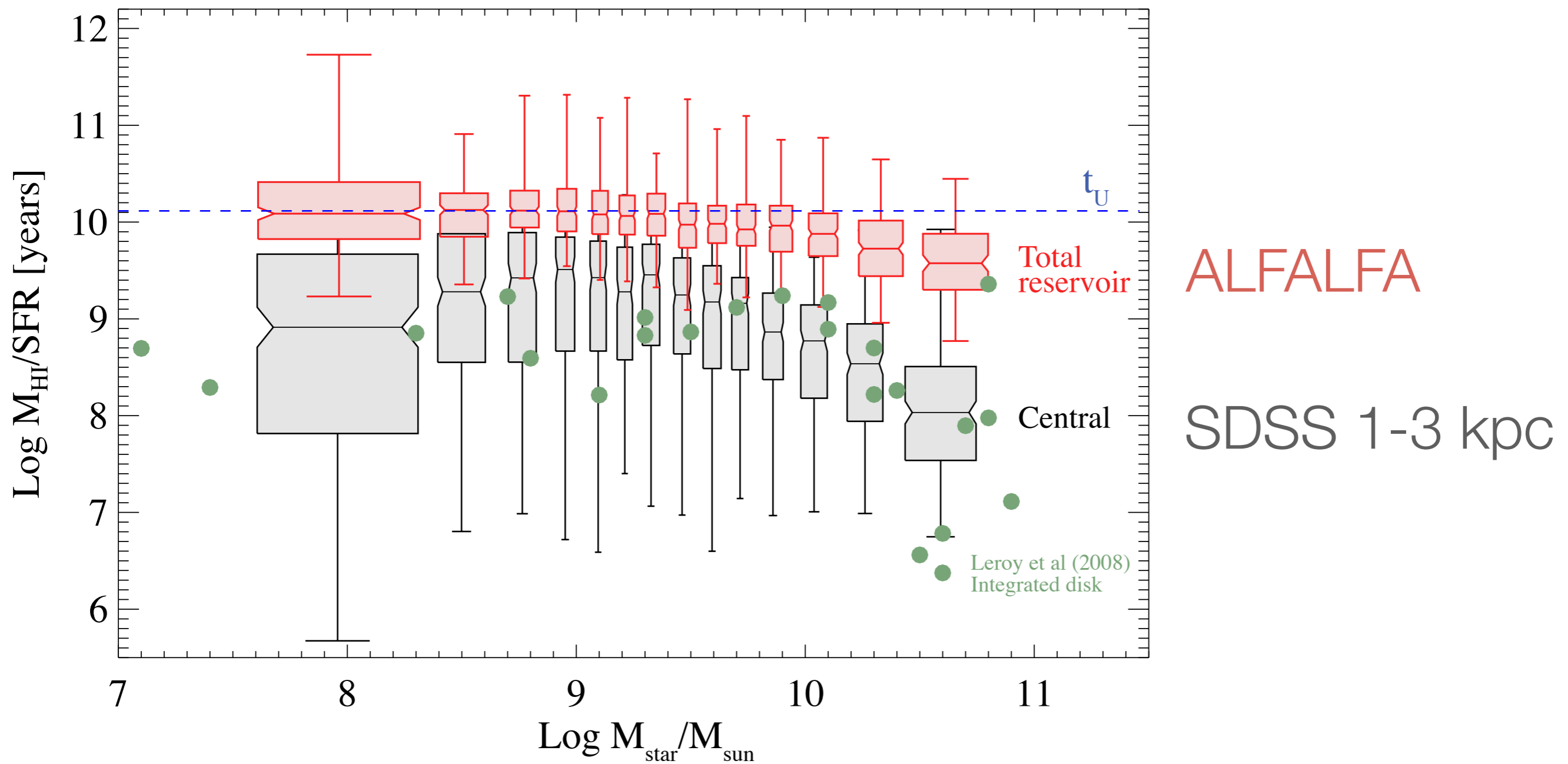
Large amplitude variations.

# Gas and SF at low-z

Dust/gas and gas fraction as a function MS location



# Different scales give different views:



Gas depletion time in the centre and overall for gas-rich galaxies.