

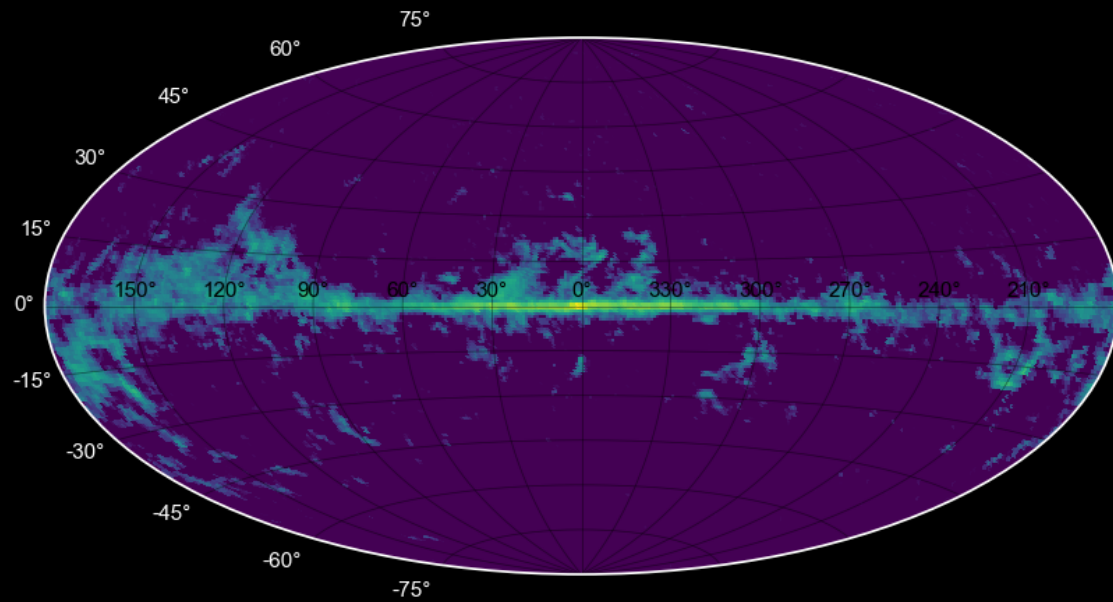
Learning about the ISM from Nuclear Decay Lines

Moritz Pleintinger
(mpleinti@mpe.mpg.de)

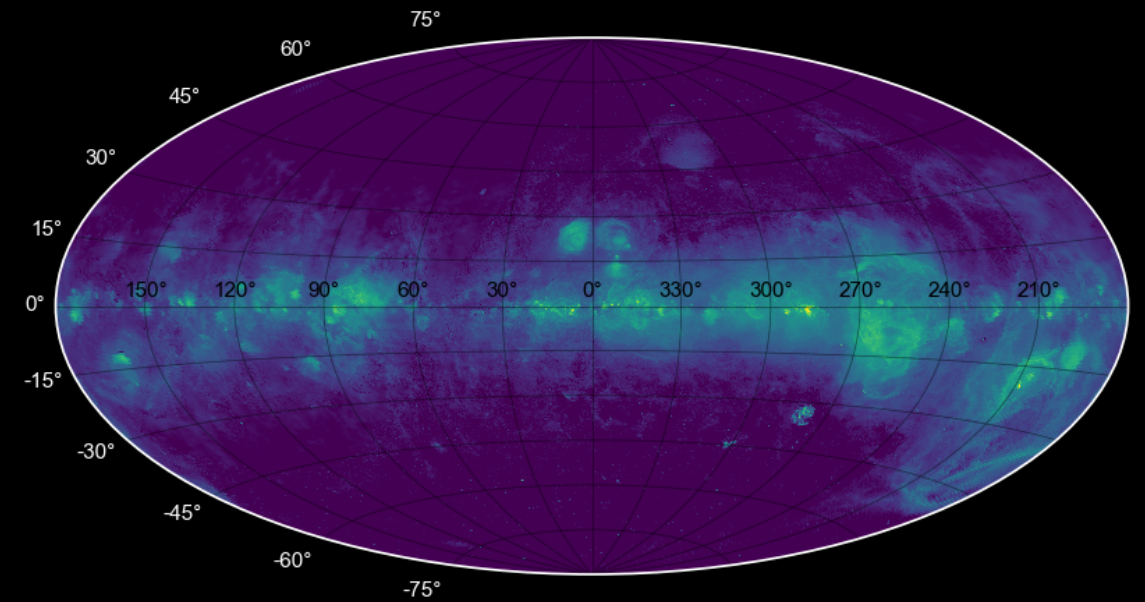
Max Planck Institute for Extraterrestrial Physics (MPE), Garching

How We Learn about the ISM

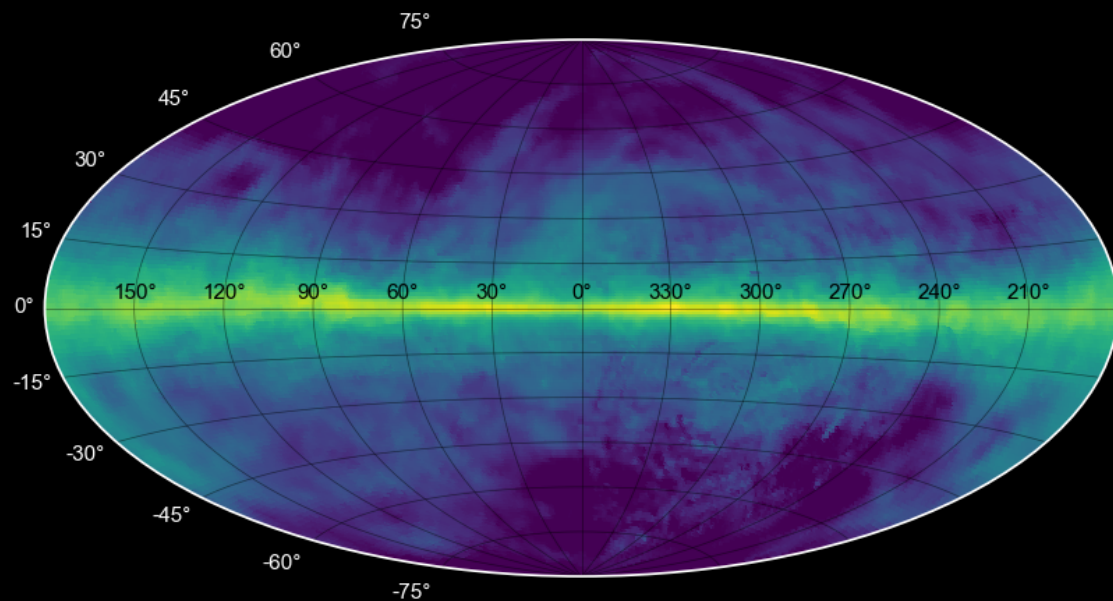
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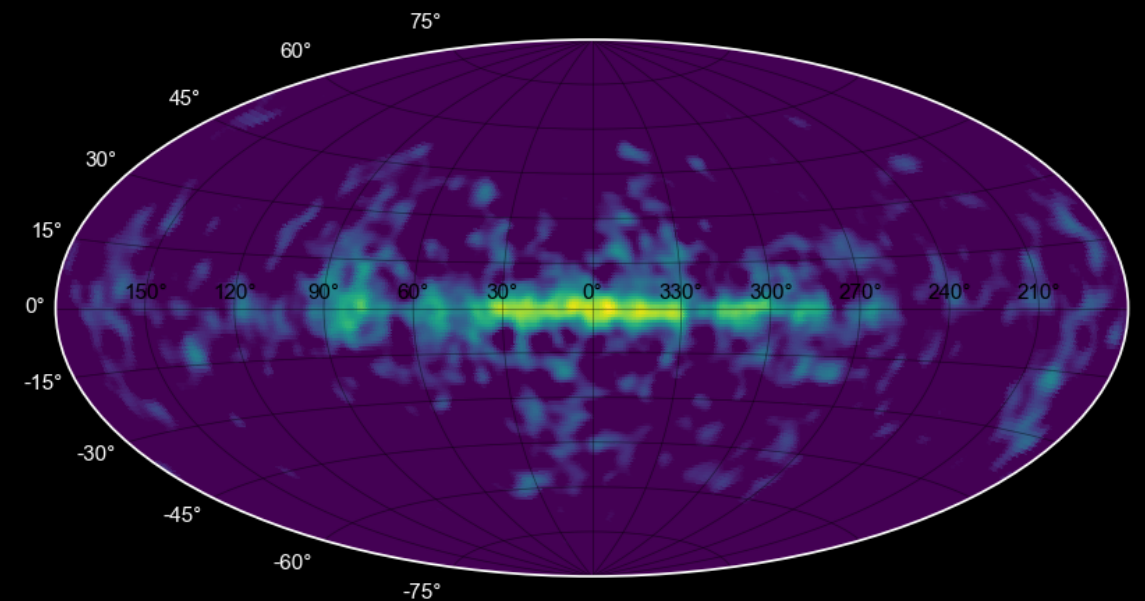
H α



HI

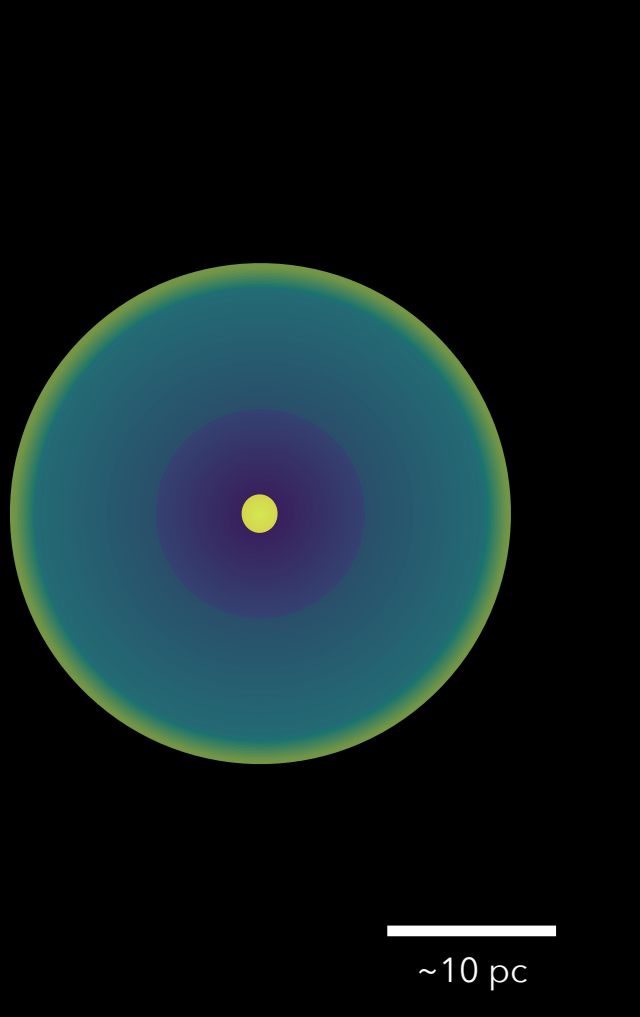


^{26}Al

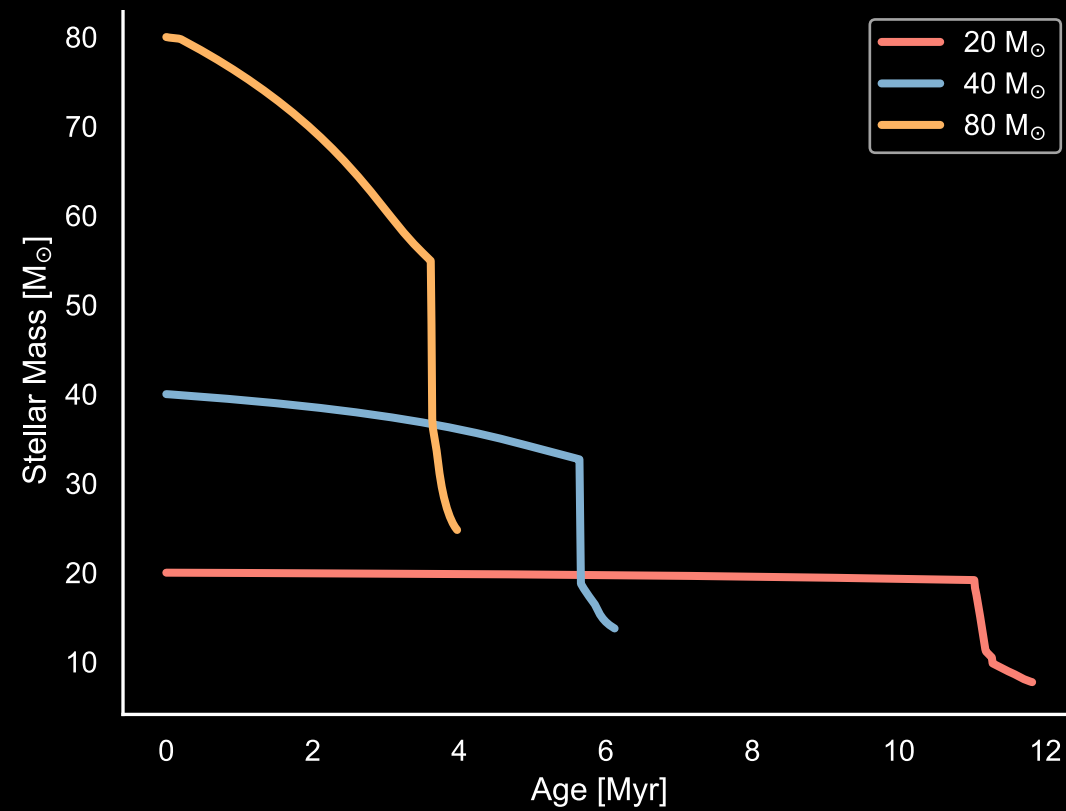


How We Learn about the ISM

Single Star



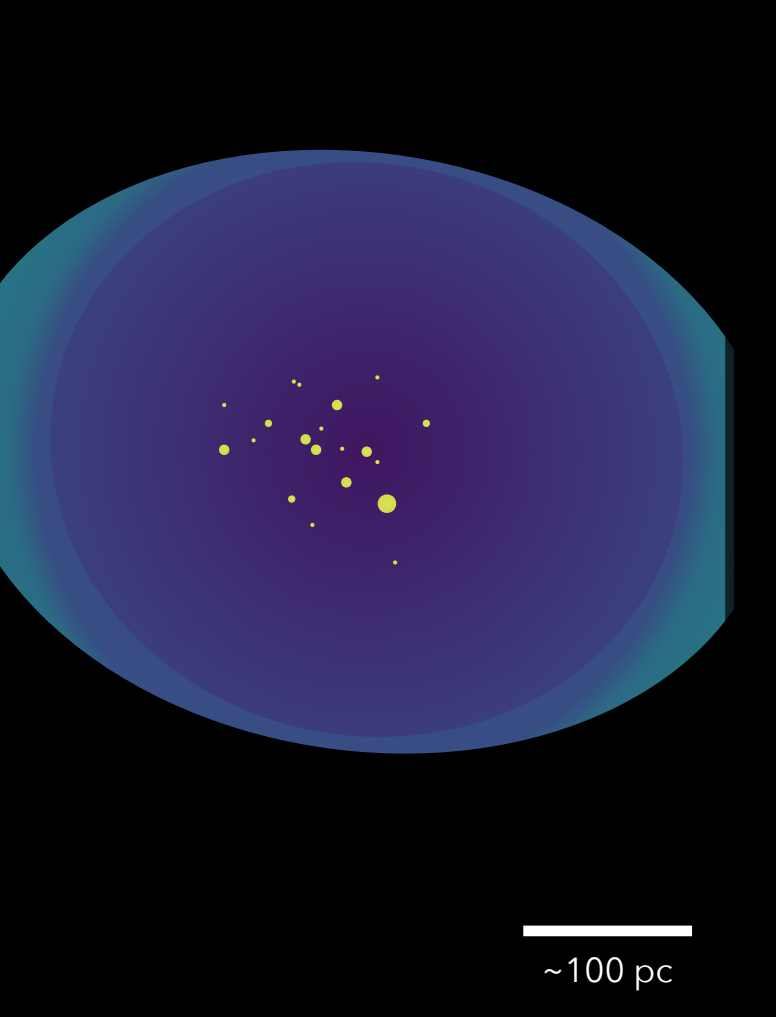
Mass Loss



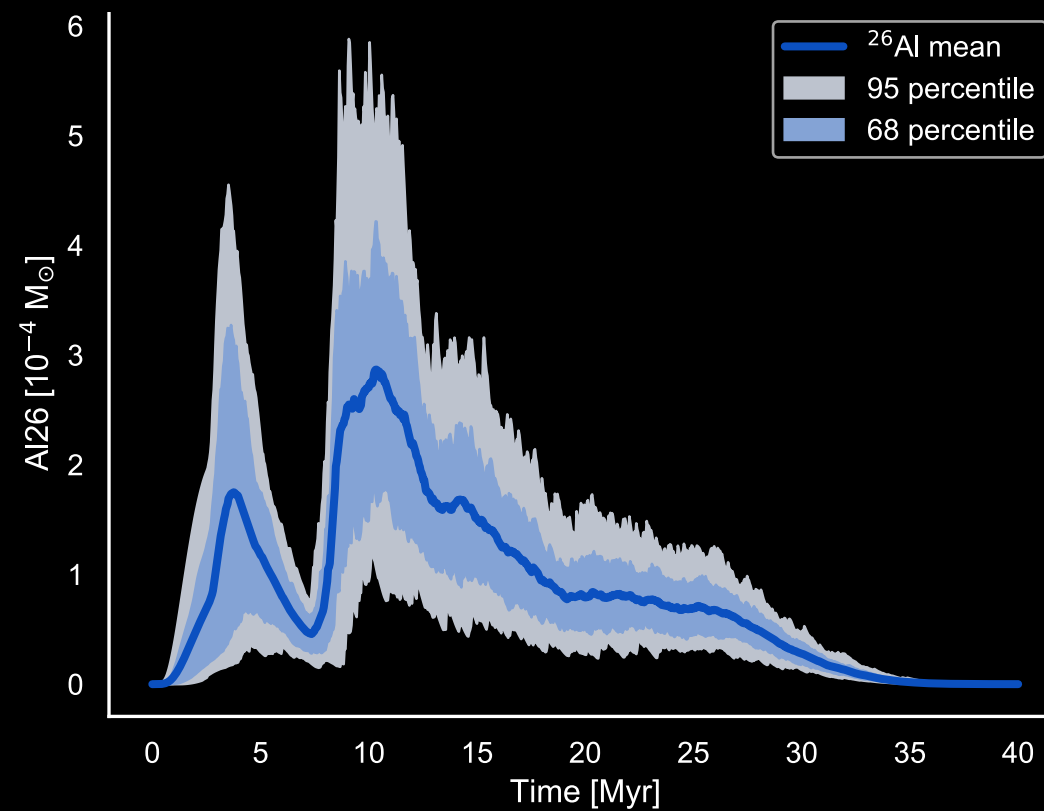
Limongi & Chieffi (2018)

How We Learn about the ISM

Superbubble

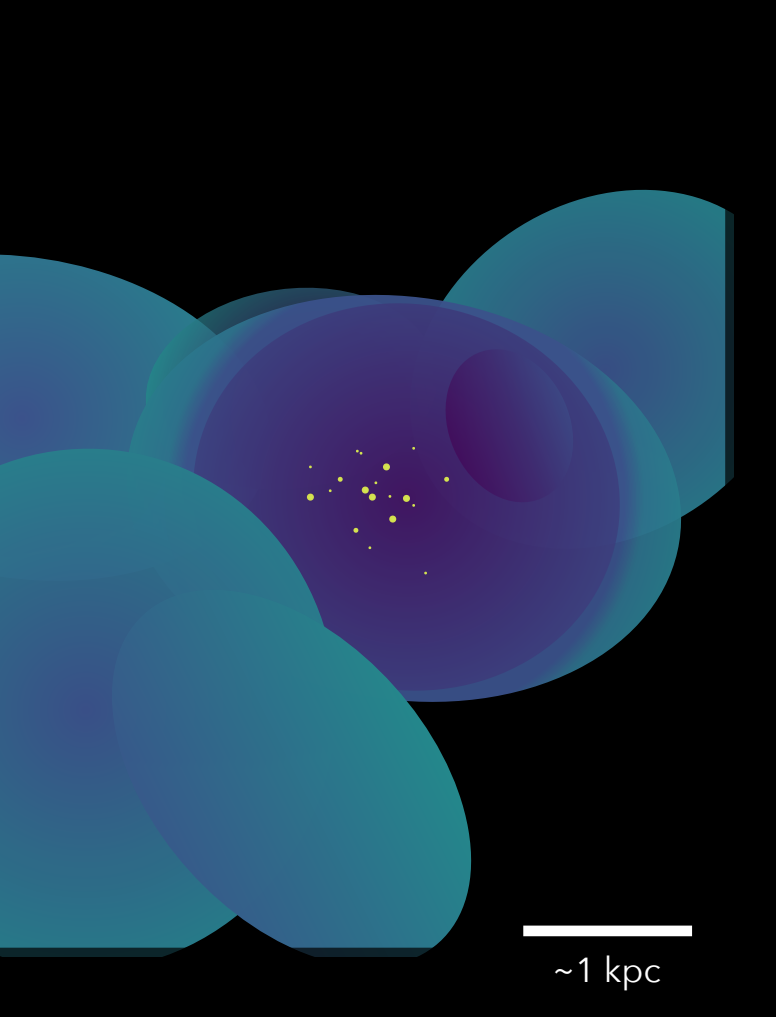


Population Synthesis

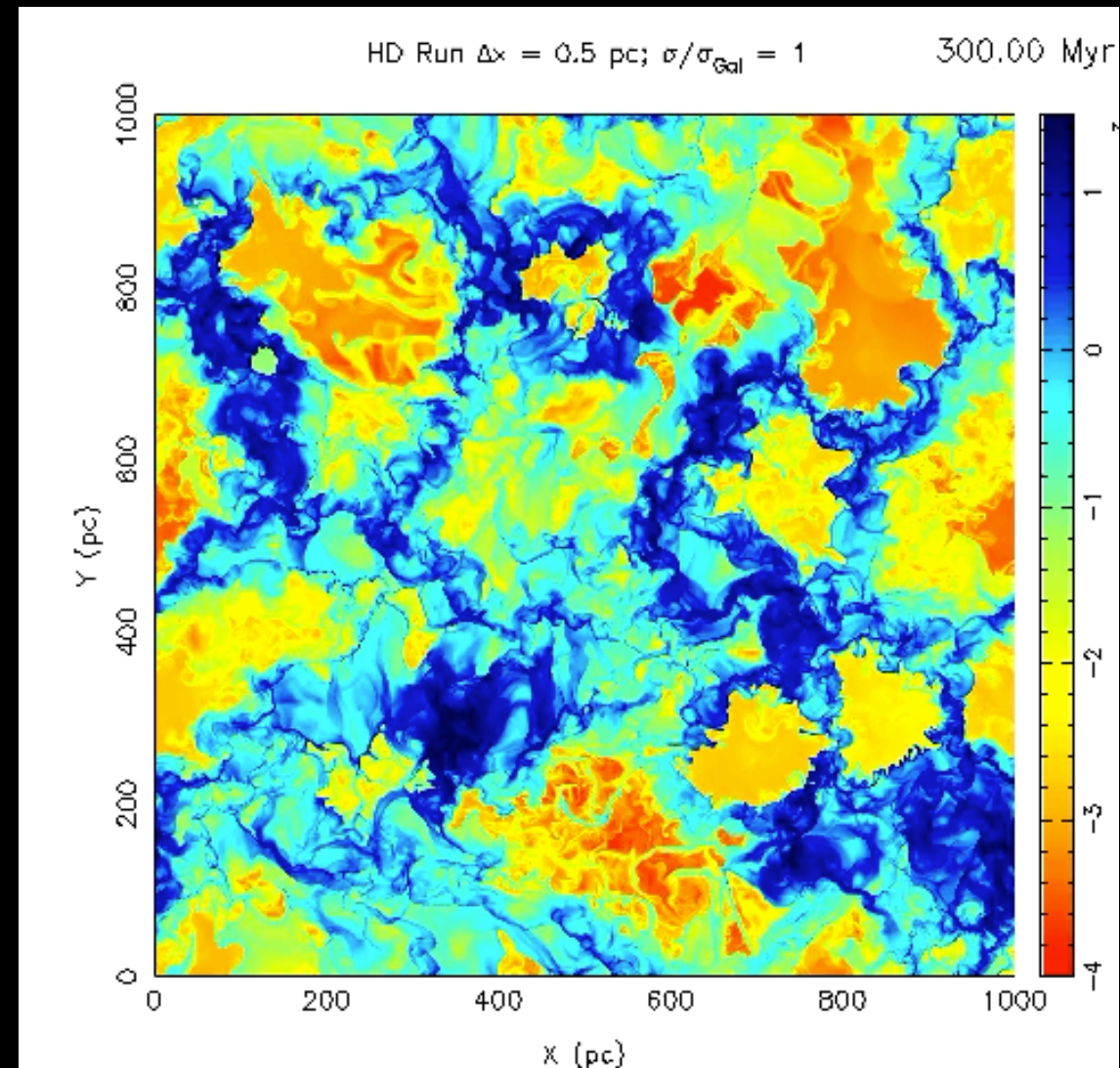


How We Learn about the ISM

Bubble Interactions



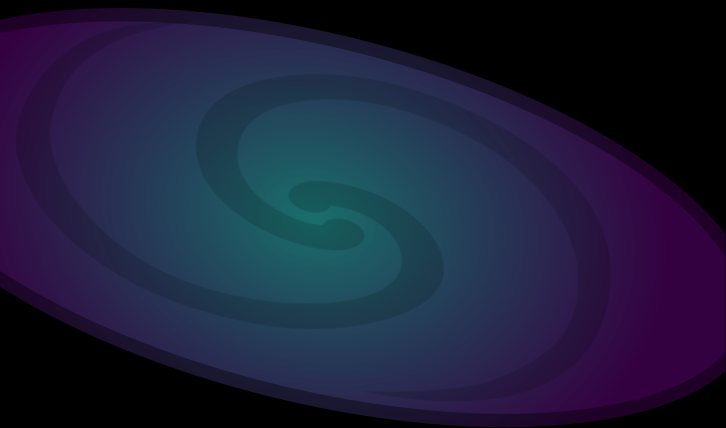
MHD Simulation



de Avillez & Breitschwerdt (2005)

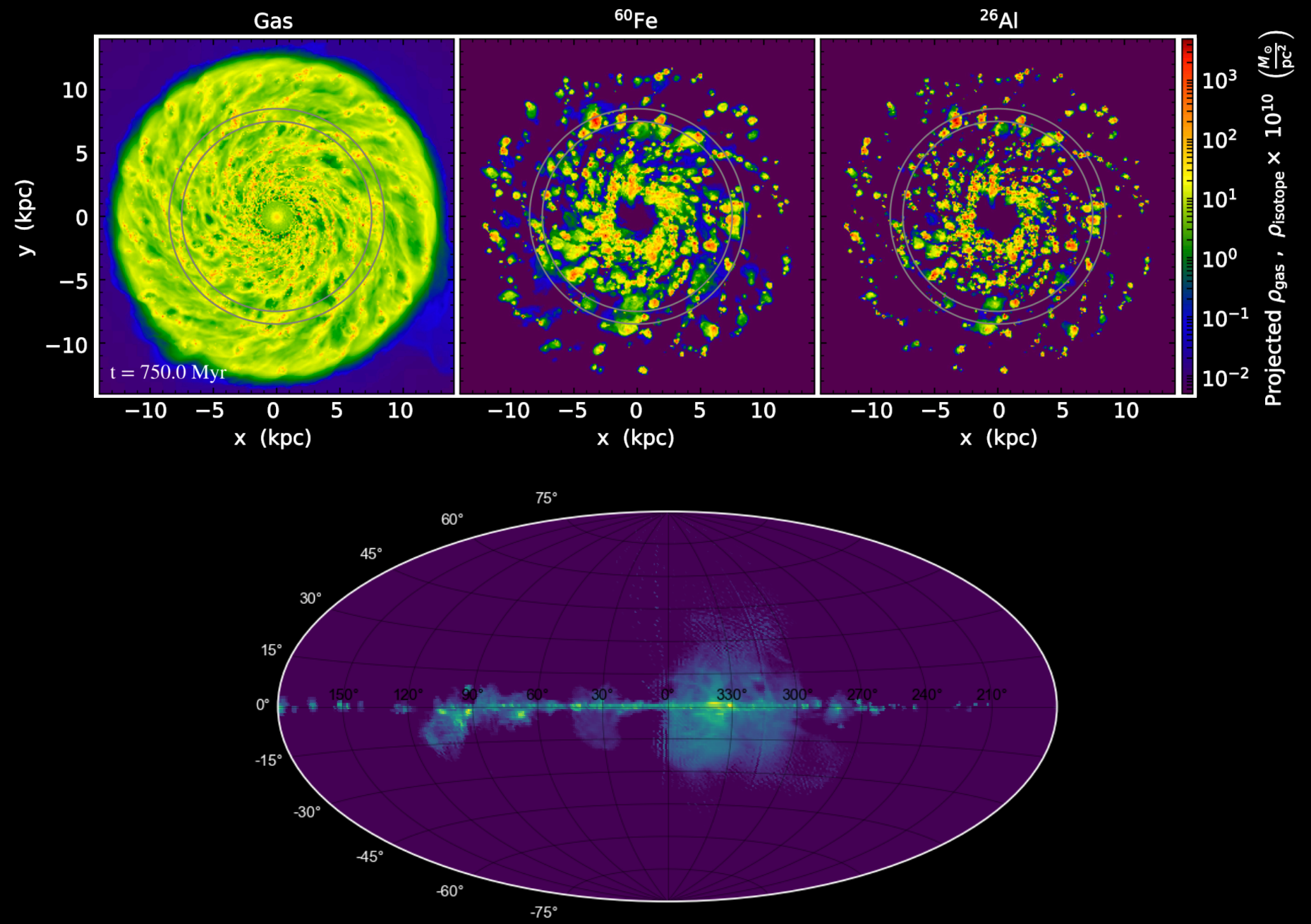
How We Learn about the ISM

Galaxy



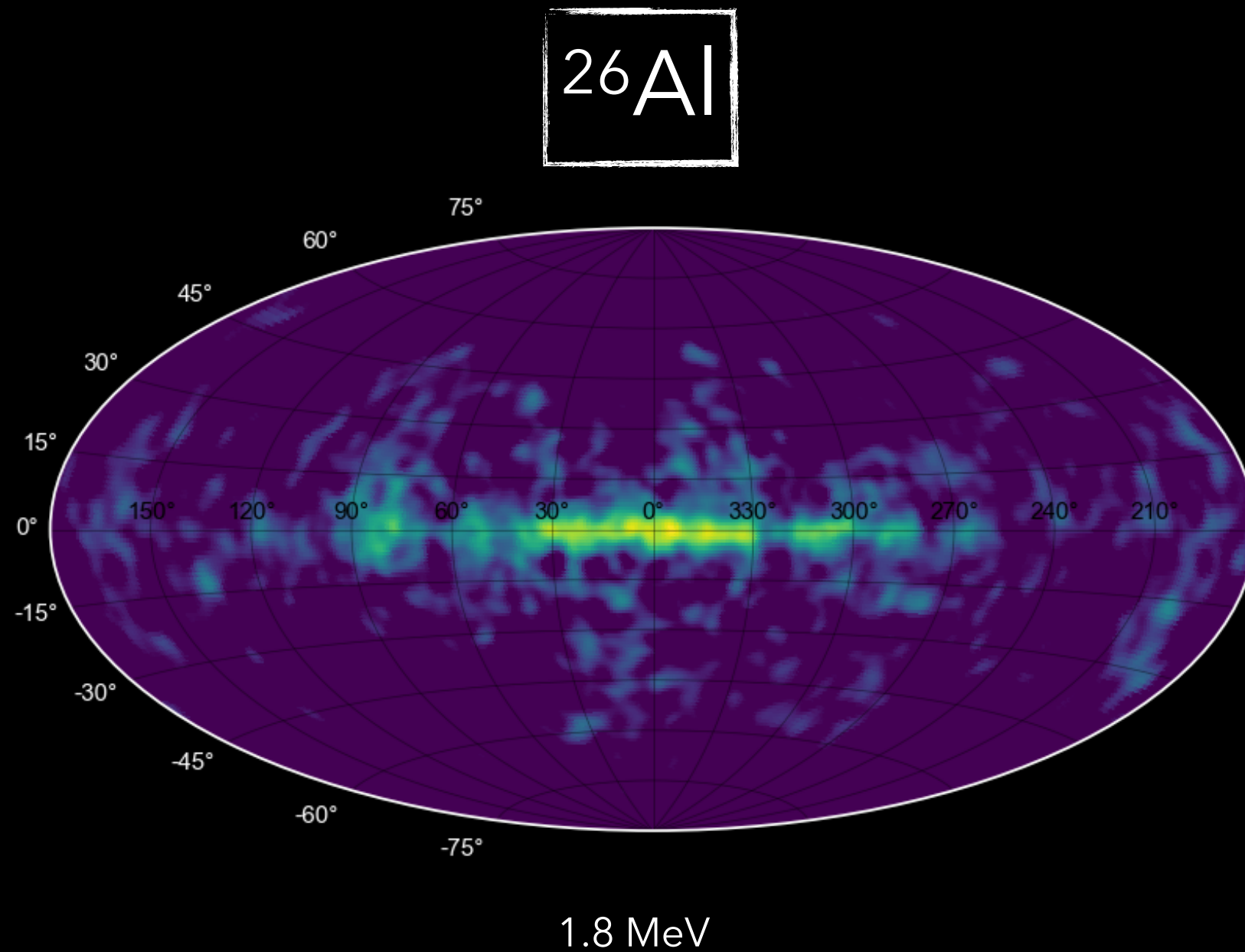
~10 kpc

Galaxy Simulation



Fujimoto et al. (2018)

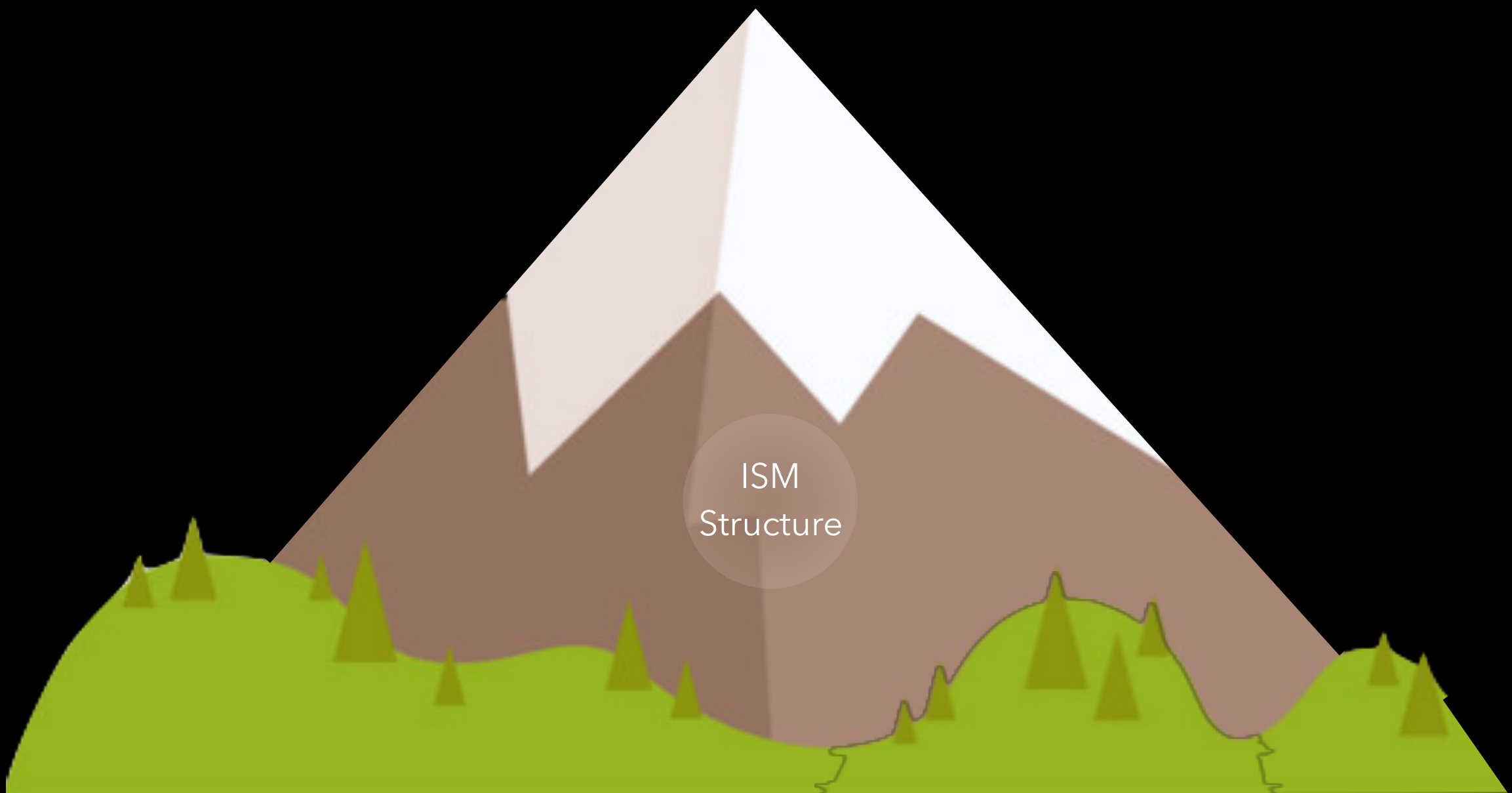
How We Learn about the ISM



Comparison of Simulations with Observations

Theory

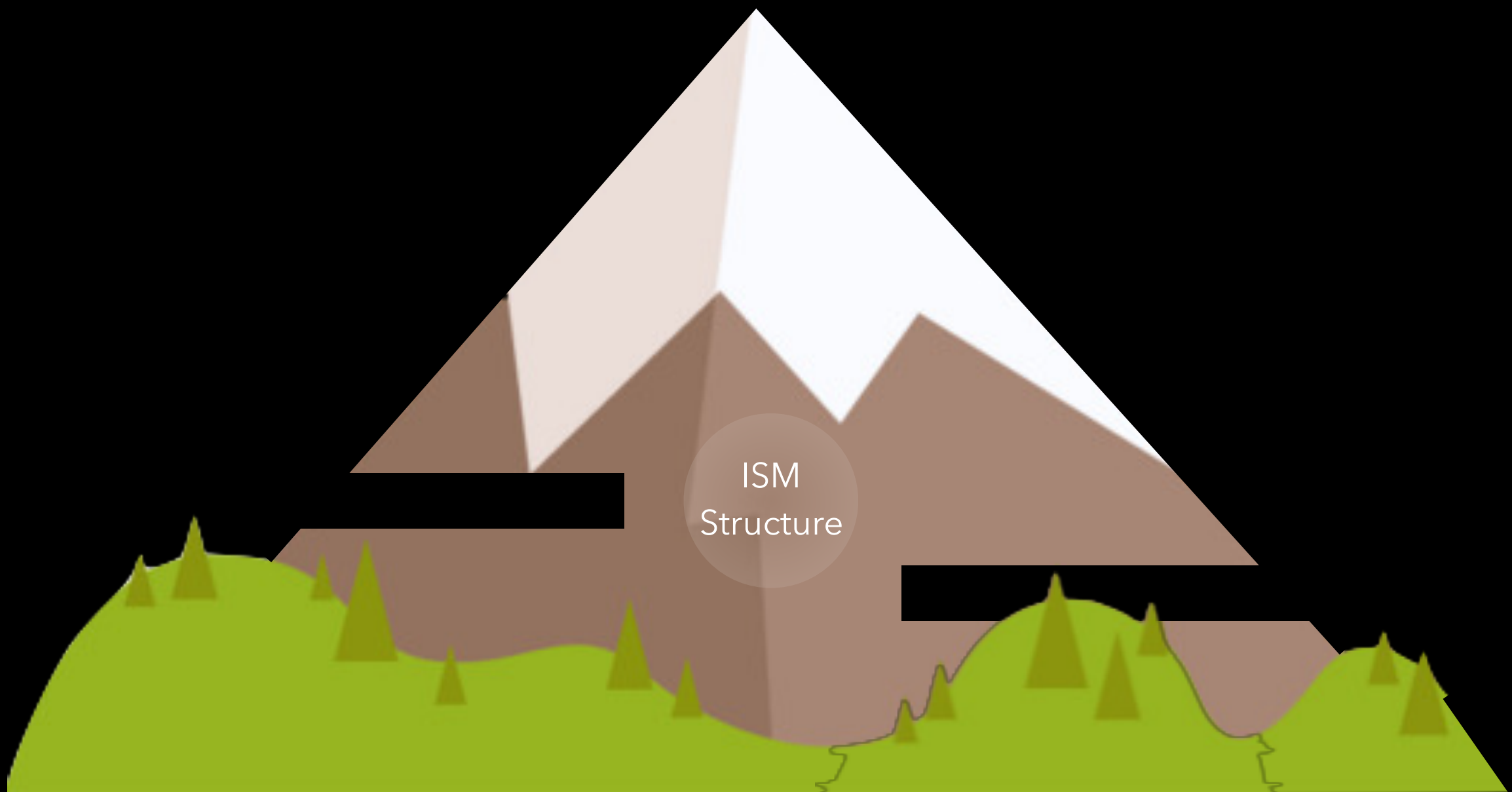
Observation



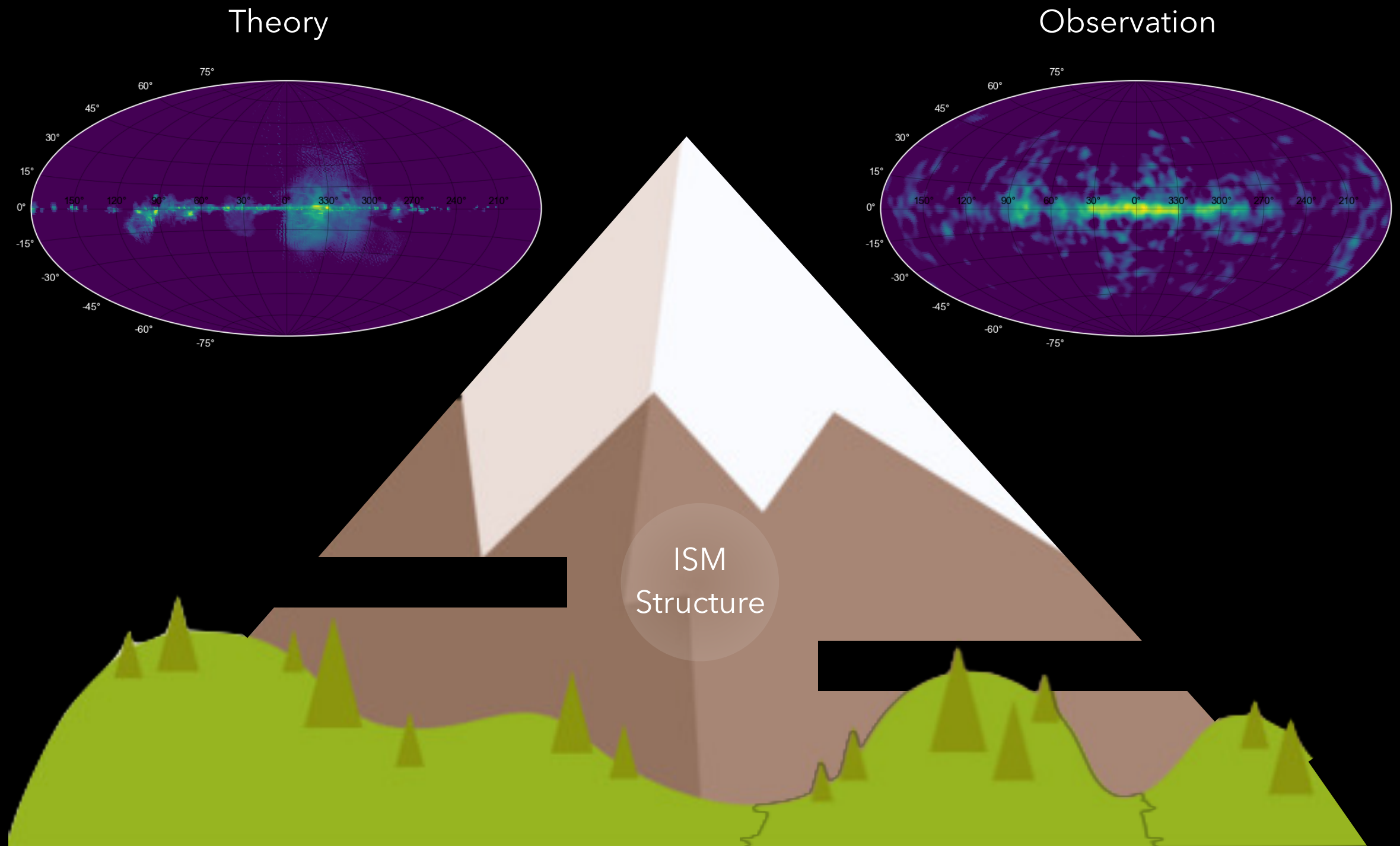
Comparison of Simulations with Observations

Theory

Observation



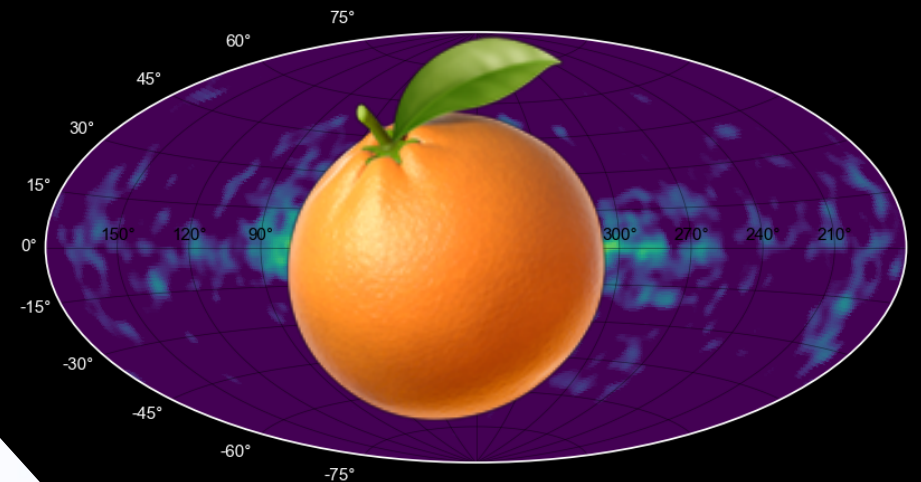
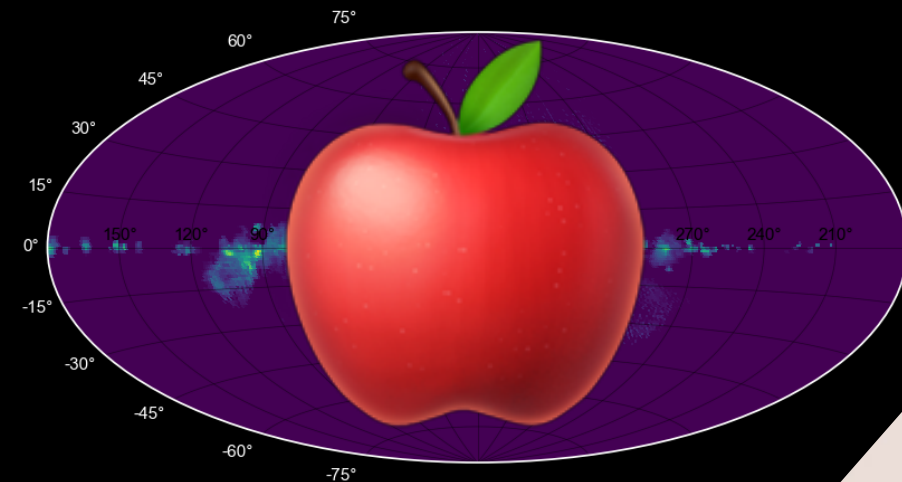
Comparison of Simulations with Observations



Comparison of Simulations with Observations

Theory

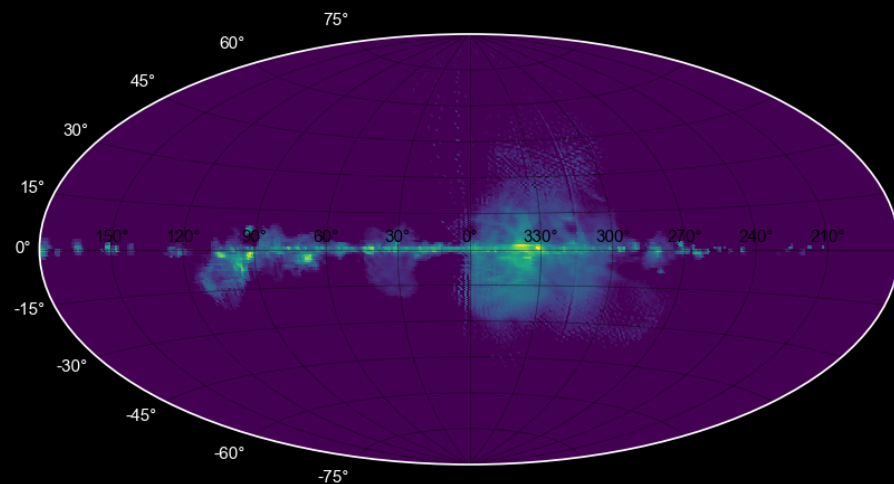
Observation



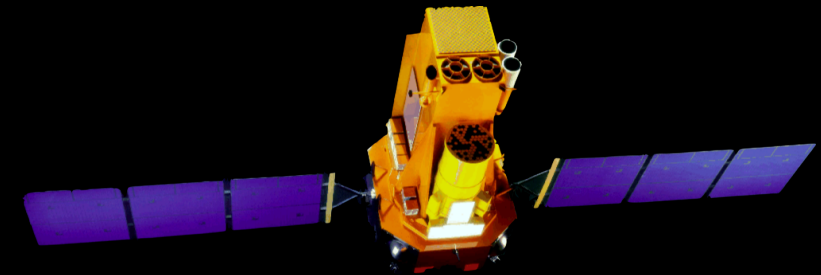
ISM
Structure

Comparison of Simulations with Observations

Theory

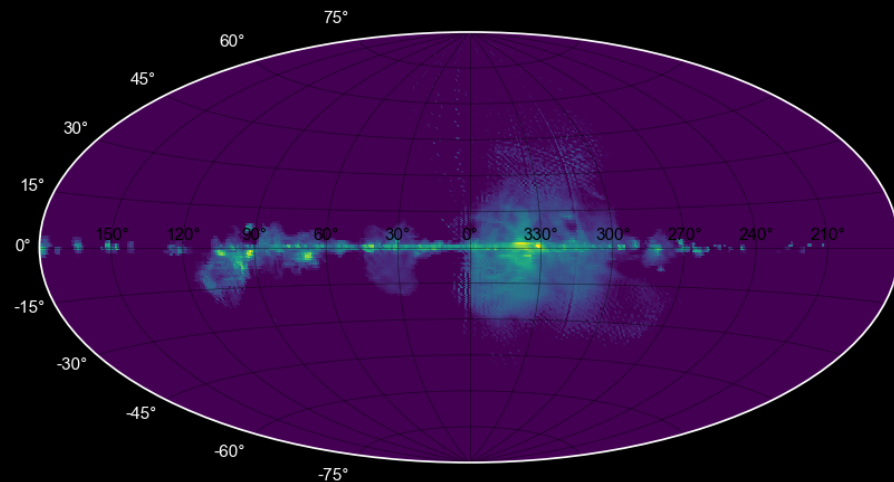


Observation

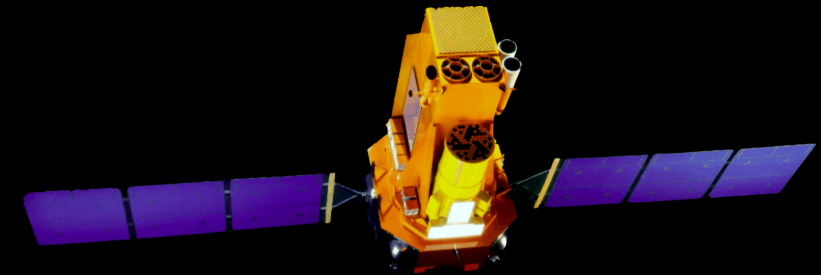


Comparison of Simulations with Observations

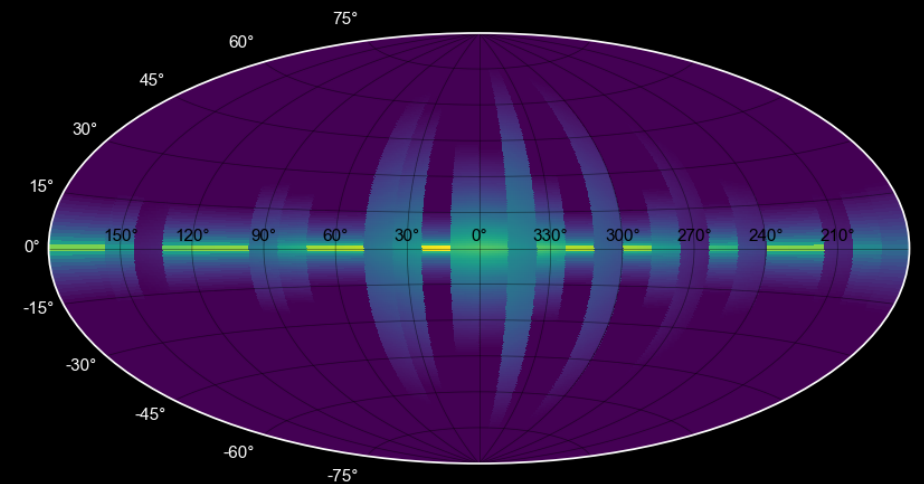
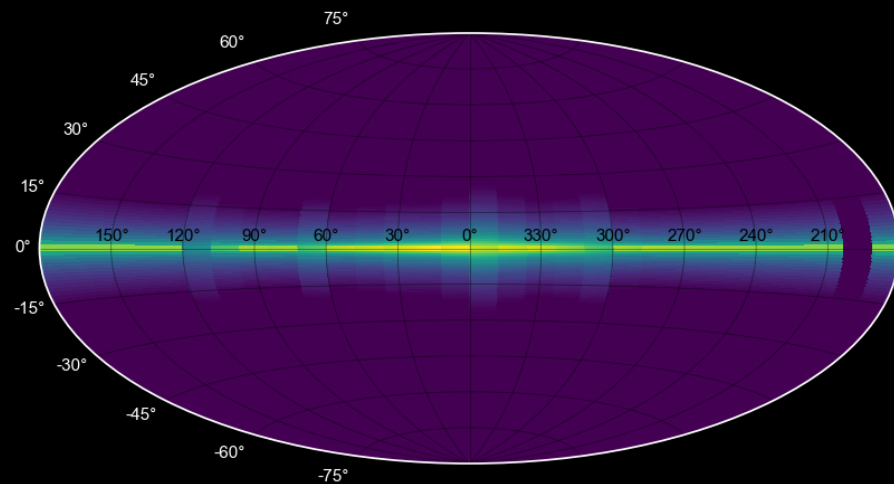
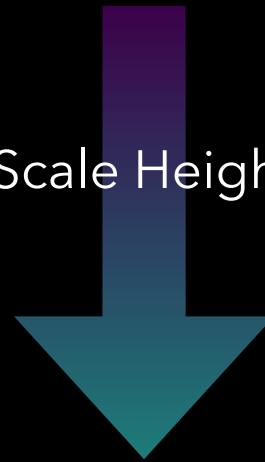
Theory



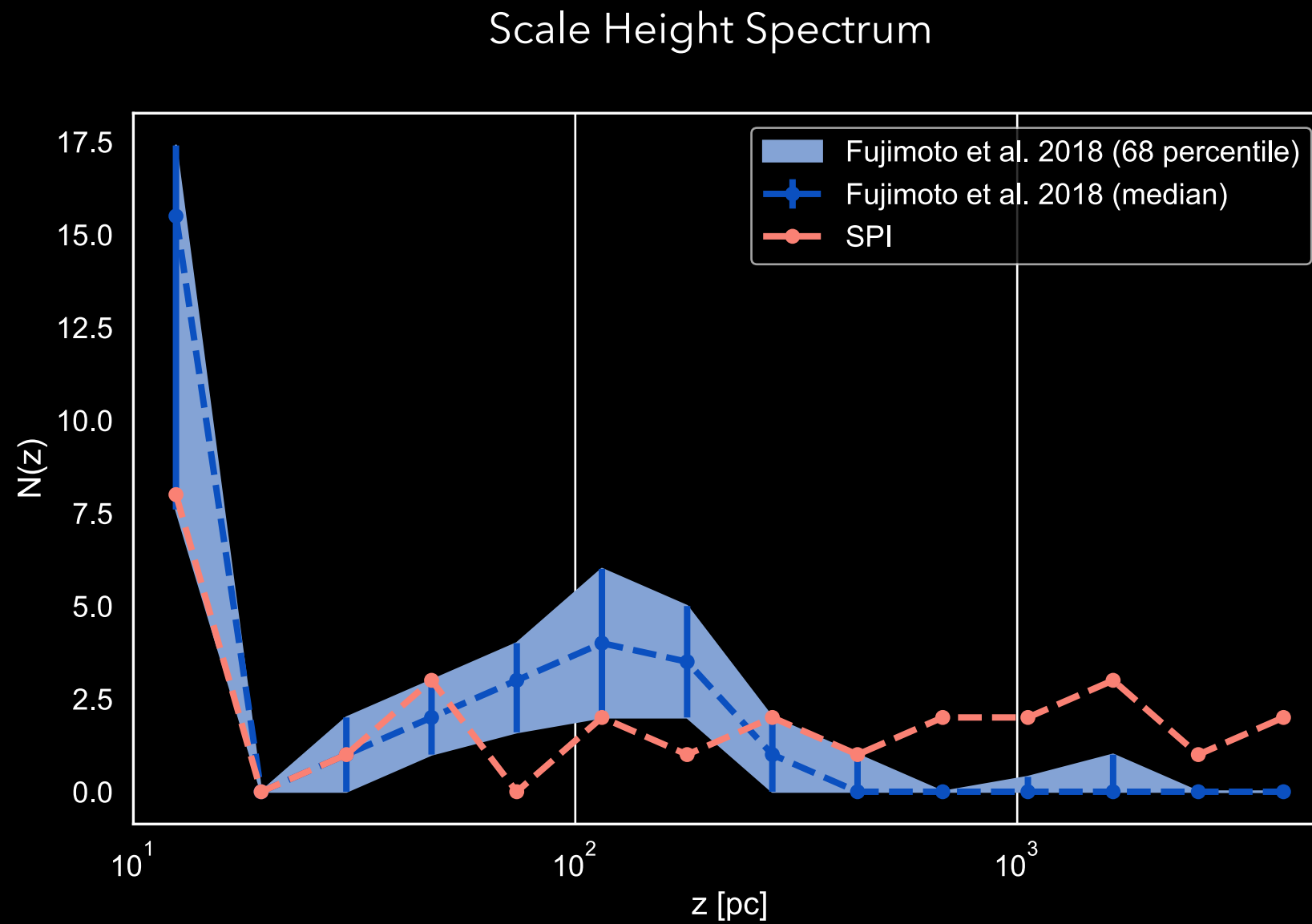
Observation



Scale Height



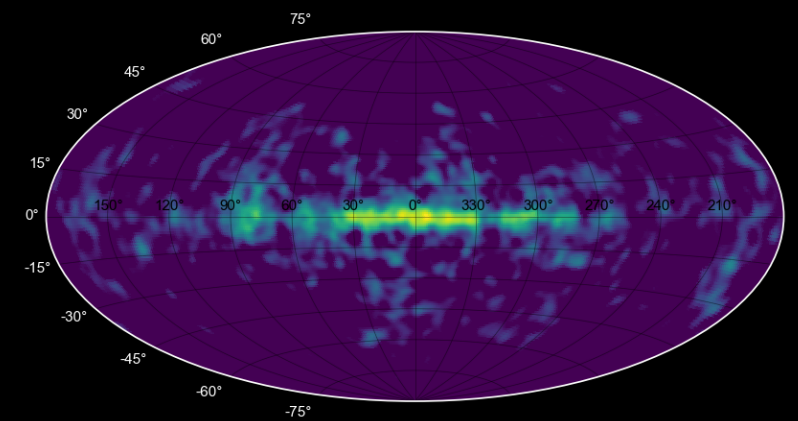
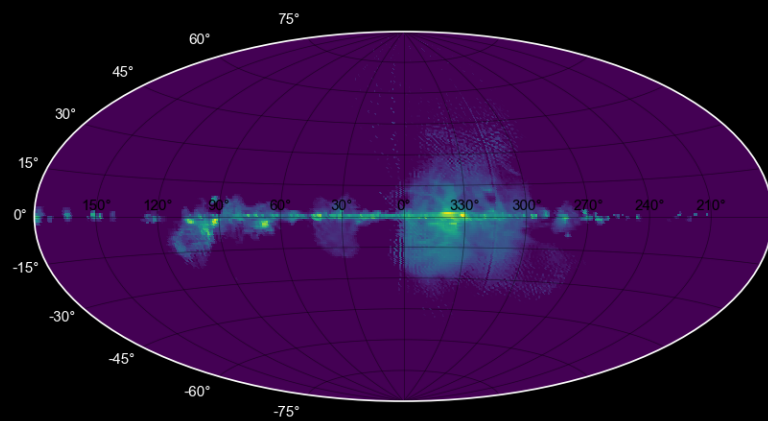
Comparison of Simulations with Observations



Comparison of Simulations with Observations

Theory

Observation



ISM
Structure

Our Approach

