

OLLI Climate Change

Winter 2023 with Nicole Myers

Week 1

Digital presentations associated with the course & handouts will be available at:

<https://www.appreciatingearth.com/olli>

A Few Helpful Definitions:

- **Climate** - long-term characteristic atmospheric conditions
- **Temperature** – a measure of a substance’s heat energy
- **Paleothermometer** – record of past temperature
- **Paleo-proxy climate record** – paleo=ancient & proxy=represents the value of something else; so a paleo-proxy record is an ancient representation of the climate as recorded by natural processes
- **Historical climate record** – recorded human observations of weather & climate related phenomena
- **Instrumental record** – scientific instruments are used to measure & collect data, though the accuracy of the instruments & their records improve with time due to scientific innovation

Earth System: Matter & Energy Cycles: this week we will focus on types of climate records and the data they produce. Geologic climate records are those recorded by natural processes & stored in Earth materials.

Figure from: NASA Goddard Space Flight Center https://www.researchgate.net/figure/The-Earths-interacting-subsystems-Lithosphere-hydrosphere-cryosphere-atmosphere_fig1_279400330

