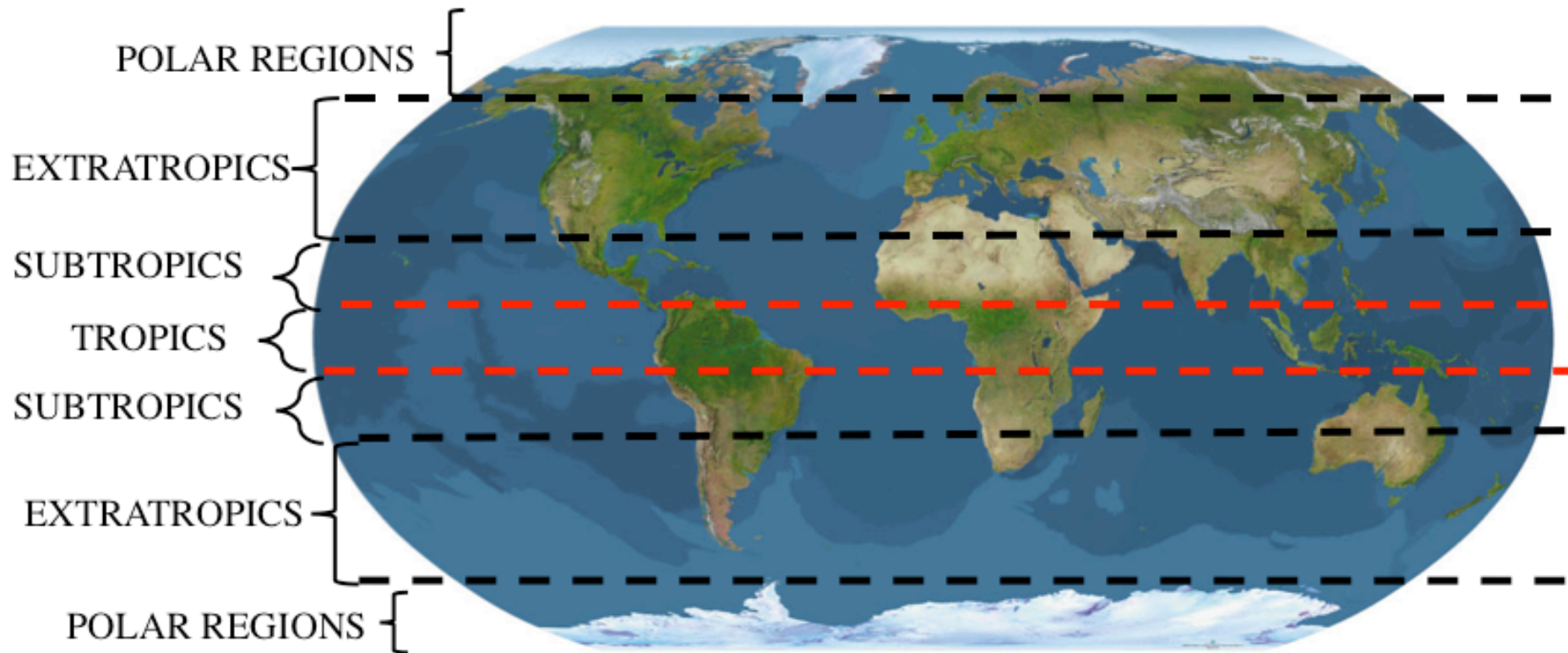


Wednesday, Aug 28, 2019

Lecture #1

EAS 0309



TROPICS: 15S – 15N
SUBTROPICS: 15 – 25
EXTRATROPICS: 25 – 70
POLES: 70-90

Are there differences in the tropics, subtropics and midlatitudes in the cloud pattern?

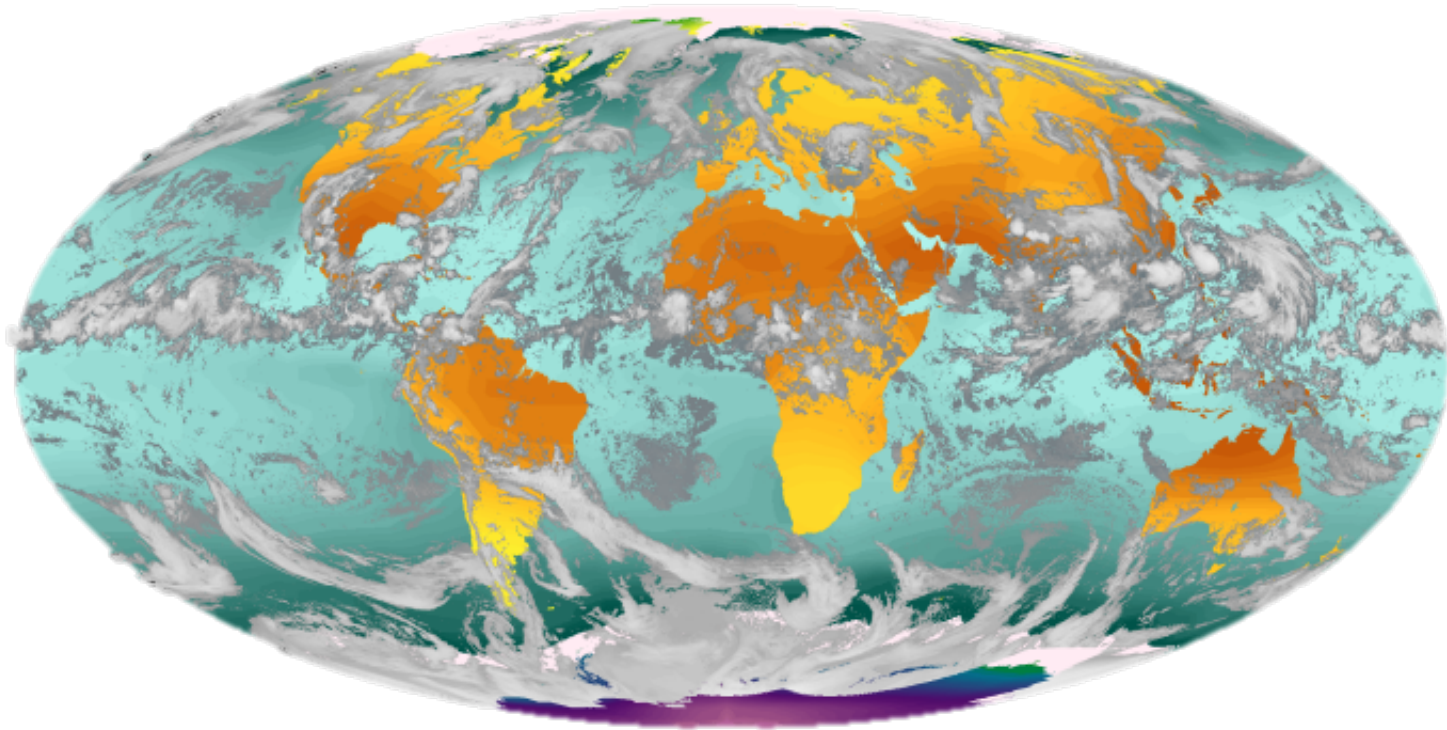
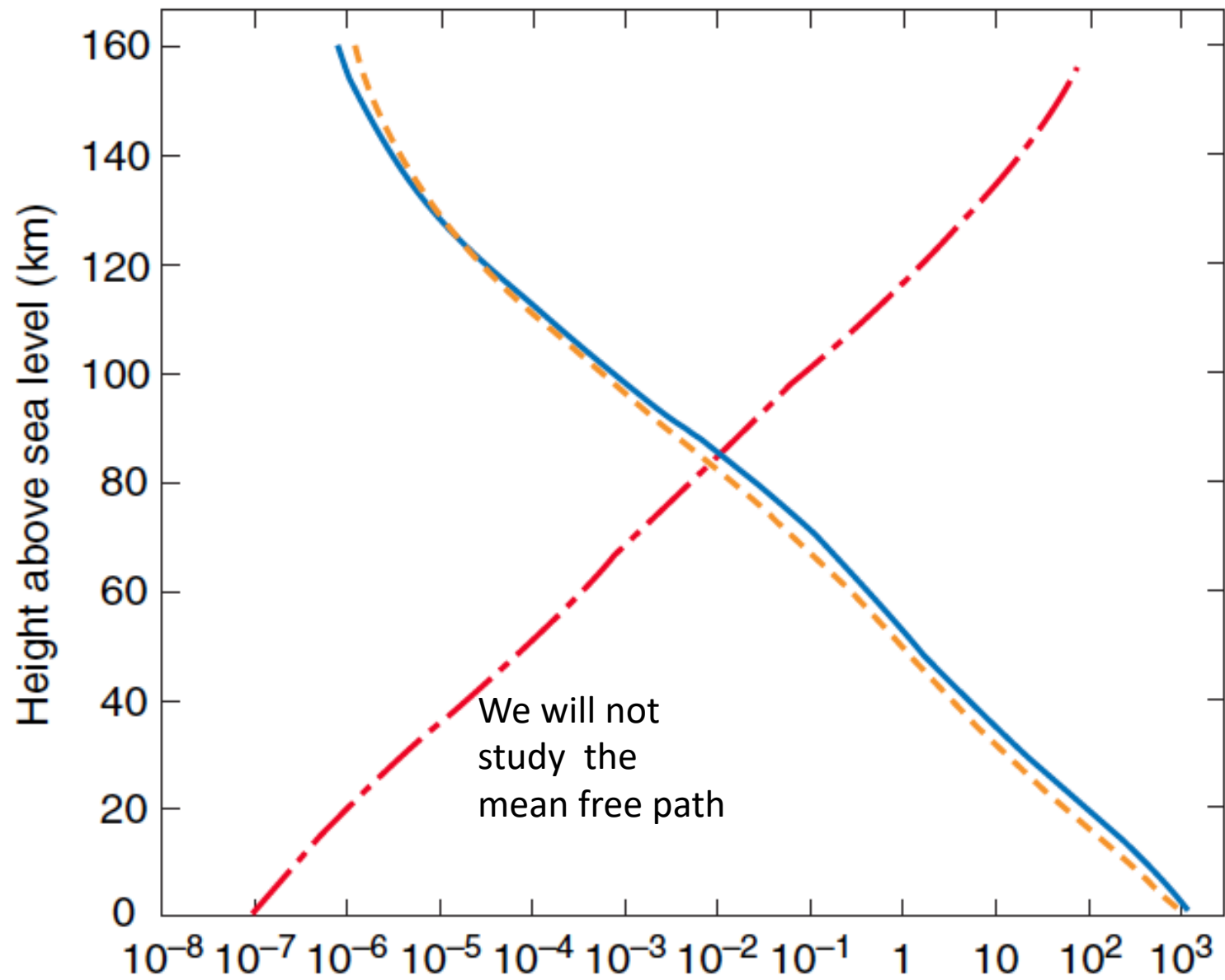


Fig from Wallace and Hobbs

The atmosphere is very thin!
i.e., the zonal and meridional domains are
much larger than the vertical.



Fig from Wallace and Hobbs



NOTICE: the x-axis is on the log scale.

--- Pressure (hPa)
— Density (g m⁻³)
- - - Mean free path (m)

Fig from
Wallace and
Hobbs

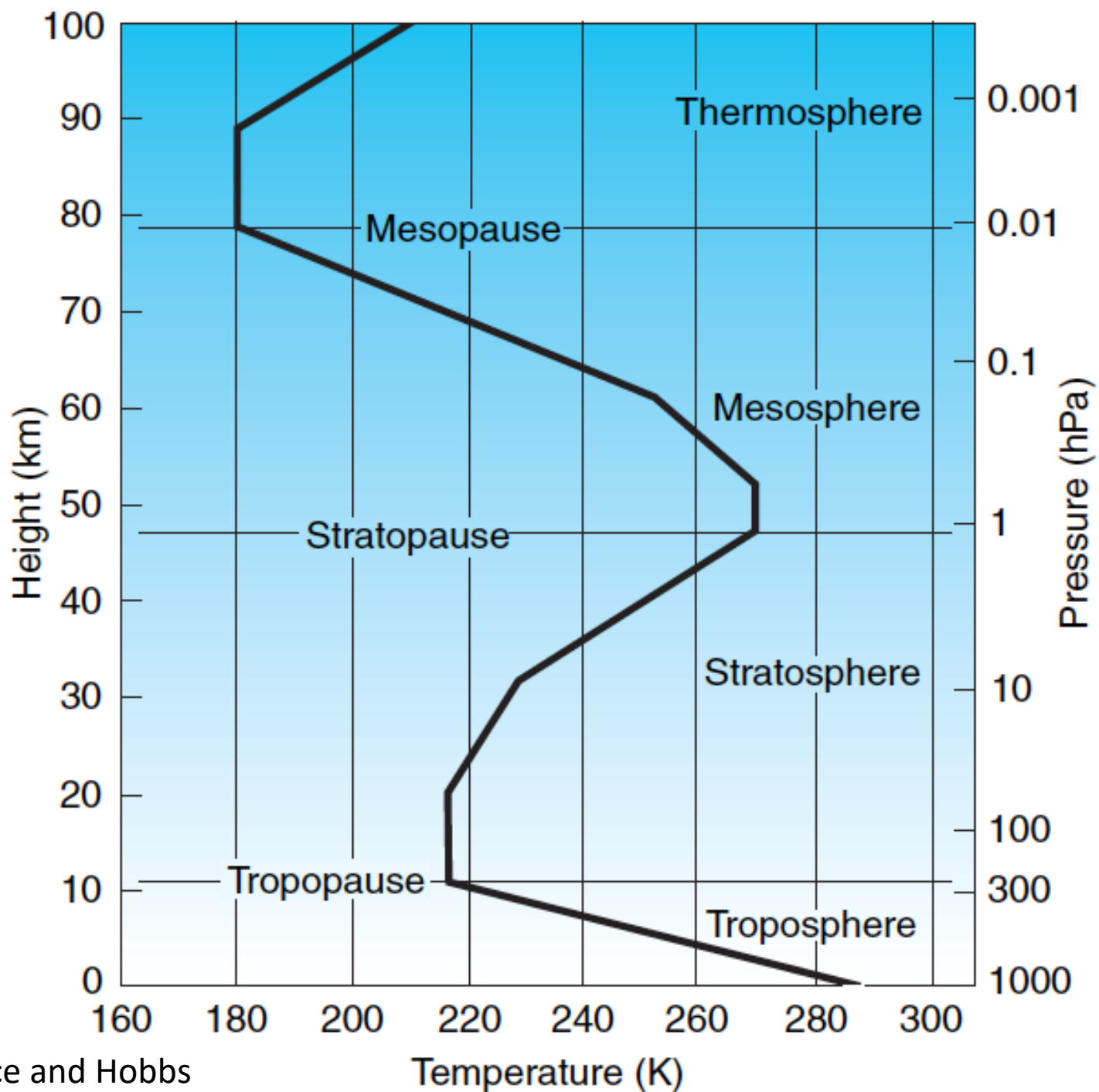


Fig from Wallace and Hobbs

WHERE IS THE TROPOPAUSE IN THIS FIGURE?



Fig. 1.10 A distinctive “anvil cloud” formed by the spreading of cloud particles carried aloft in an intense updraft when they encounter the tropopause. [Photograph courtesy of Rose Toomer and Bureau of Meteorology, Australia.]

Fig from Wallace and Hobbs

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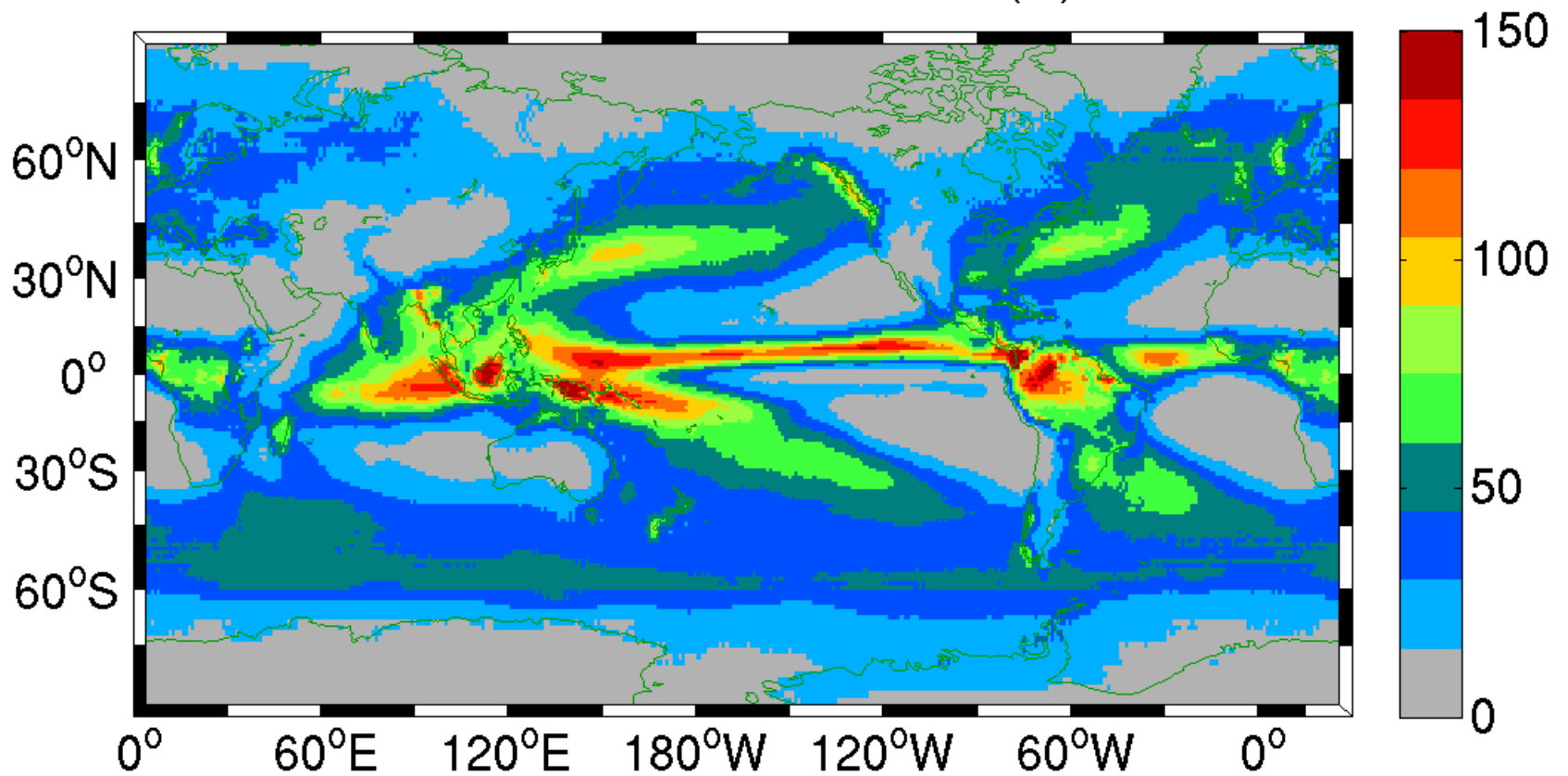


Fig by J Booth

Weather Webpages

National Hurricane Center: <https://www.nhc.noaa.gov>

Example of a webpage with weather forecasts:
<https://weather.cod.edu/forecast/>

Near-real time satellite precipitation estimate:
<https://pmm.nasa.gov/gpm/IMERG-global-image>