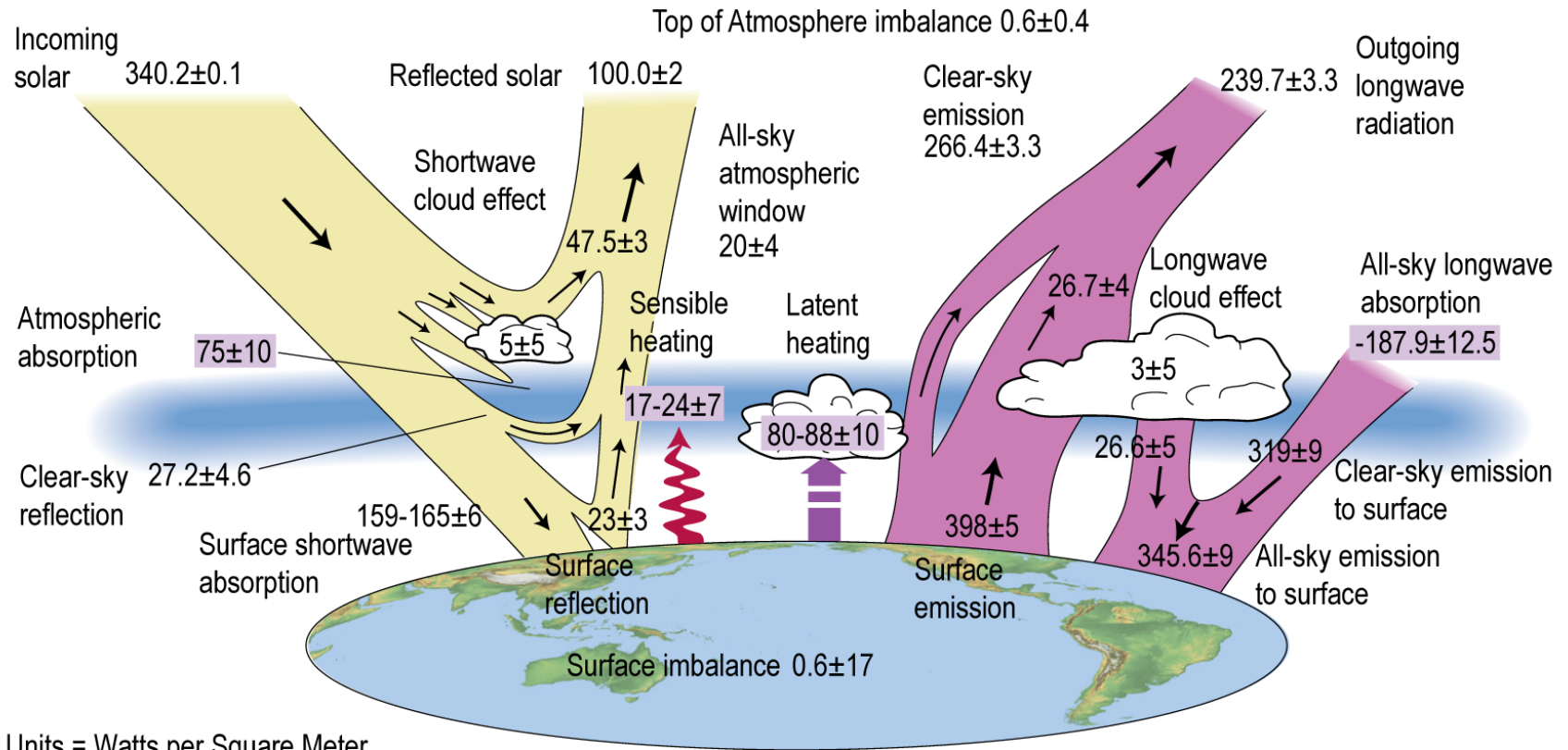


ATM 622

General Circulation

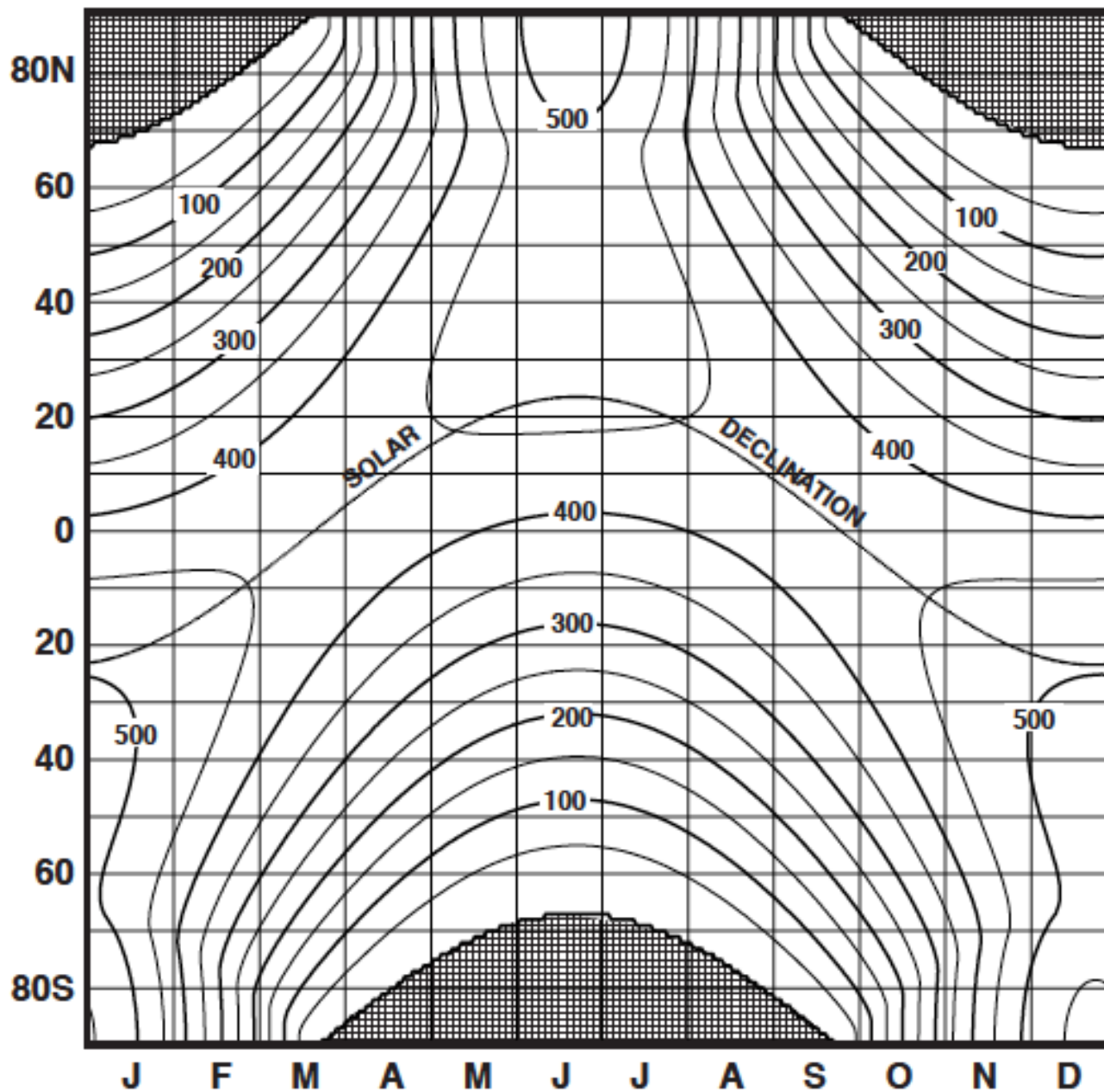
1. Earth's Radiation Budget

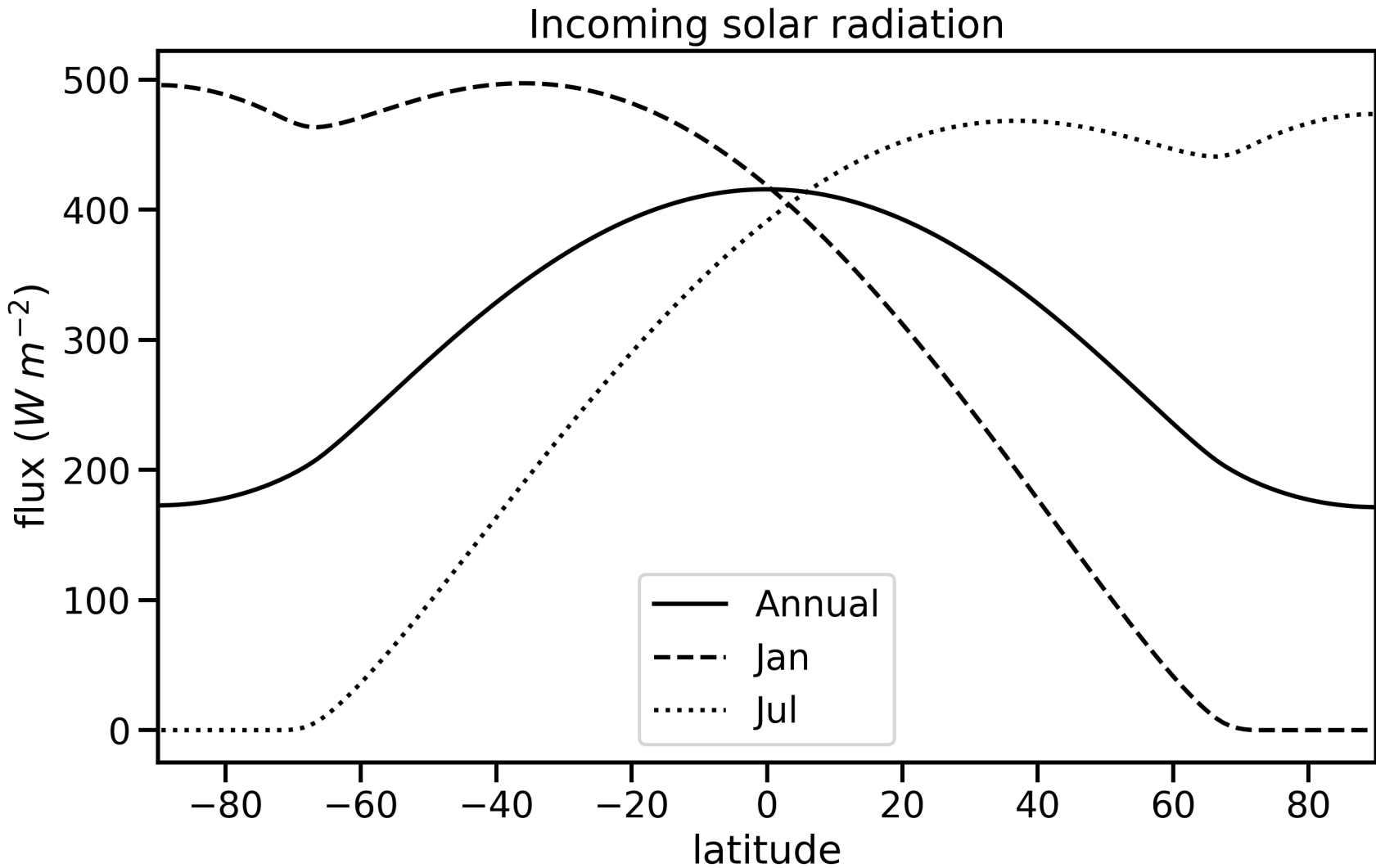
Earth's Energy Balance



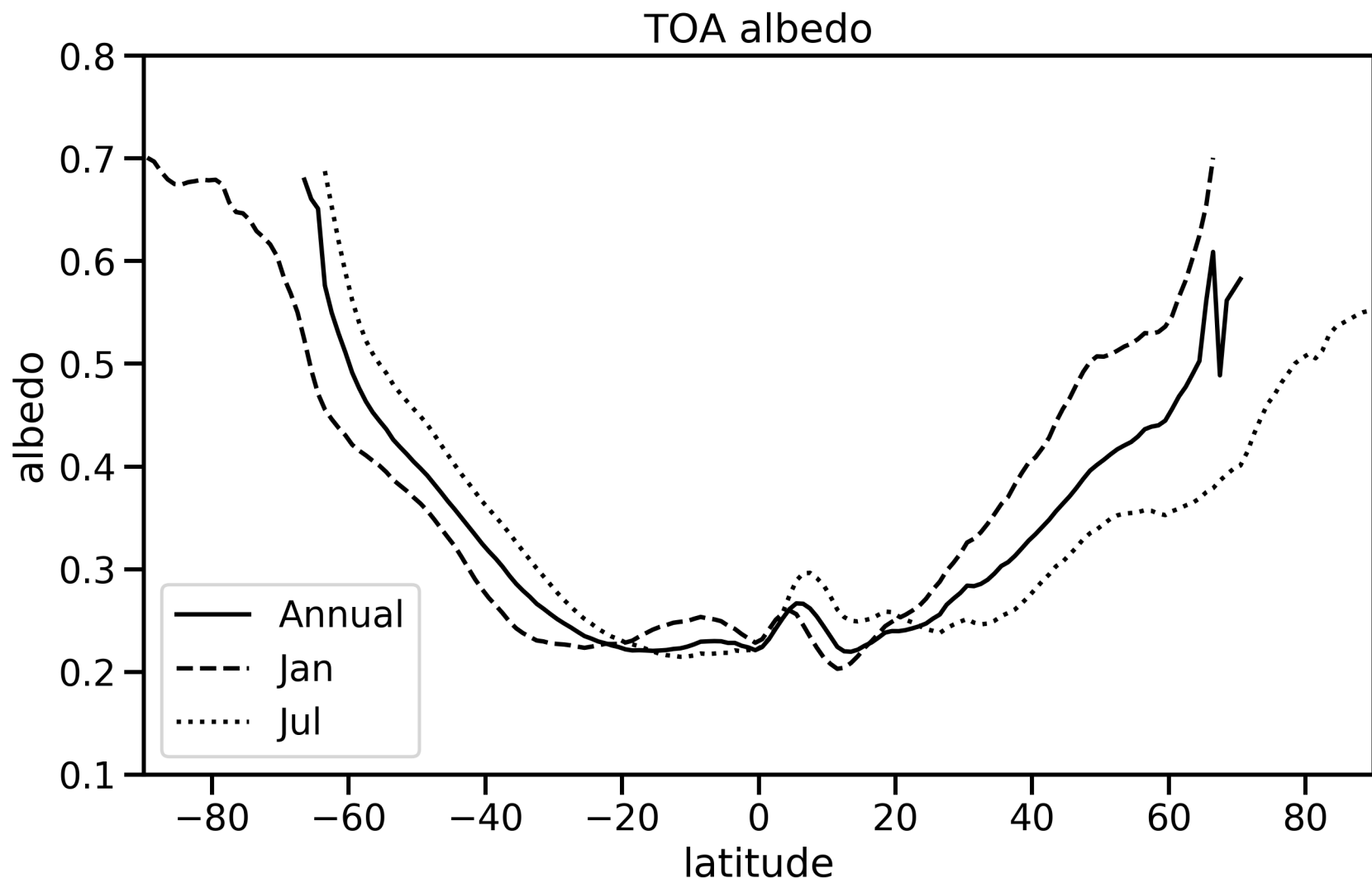
Stephens et al. 2012

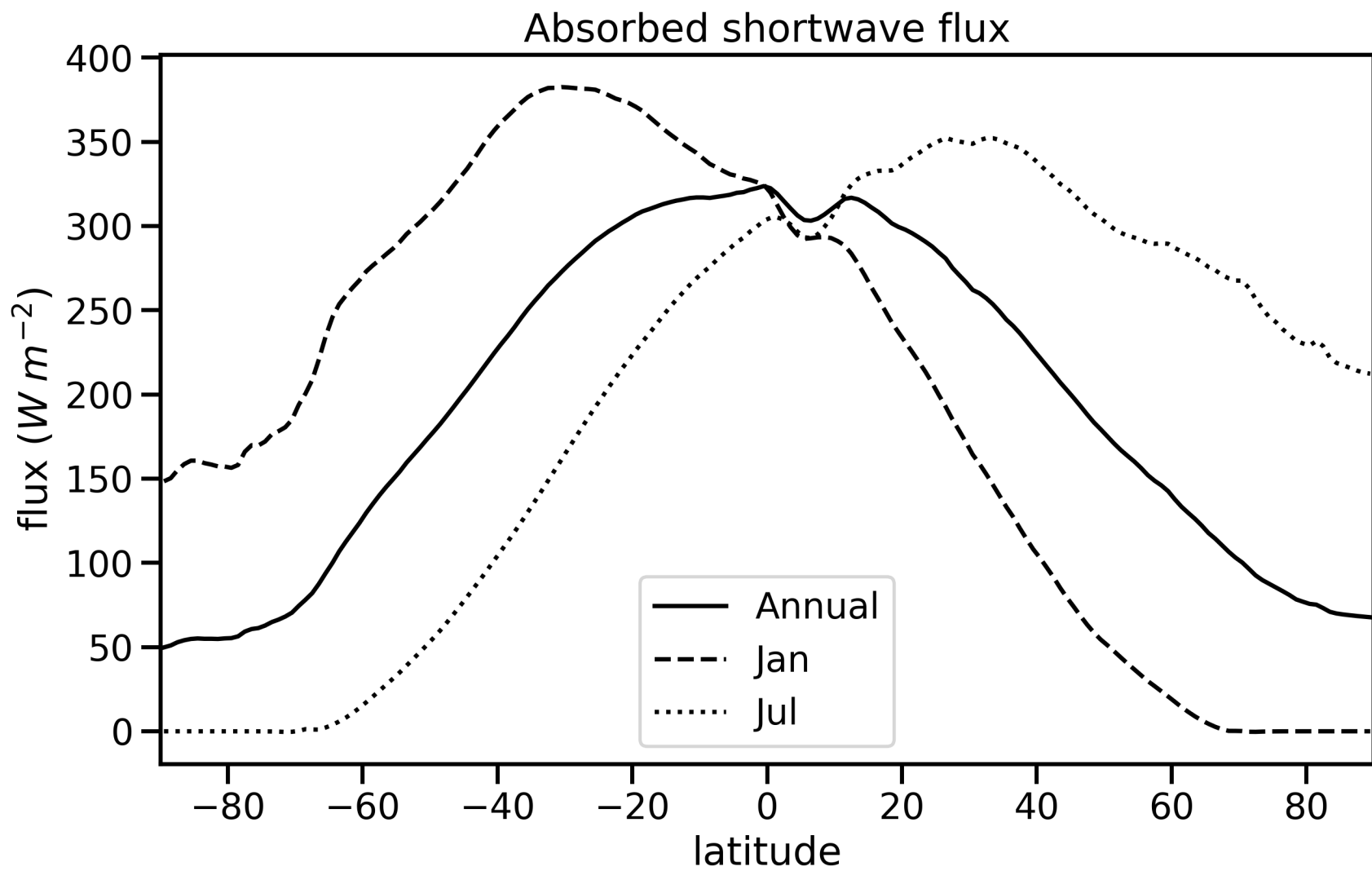
Zonally averaged insolation (W m^{-2}) at TOA



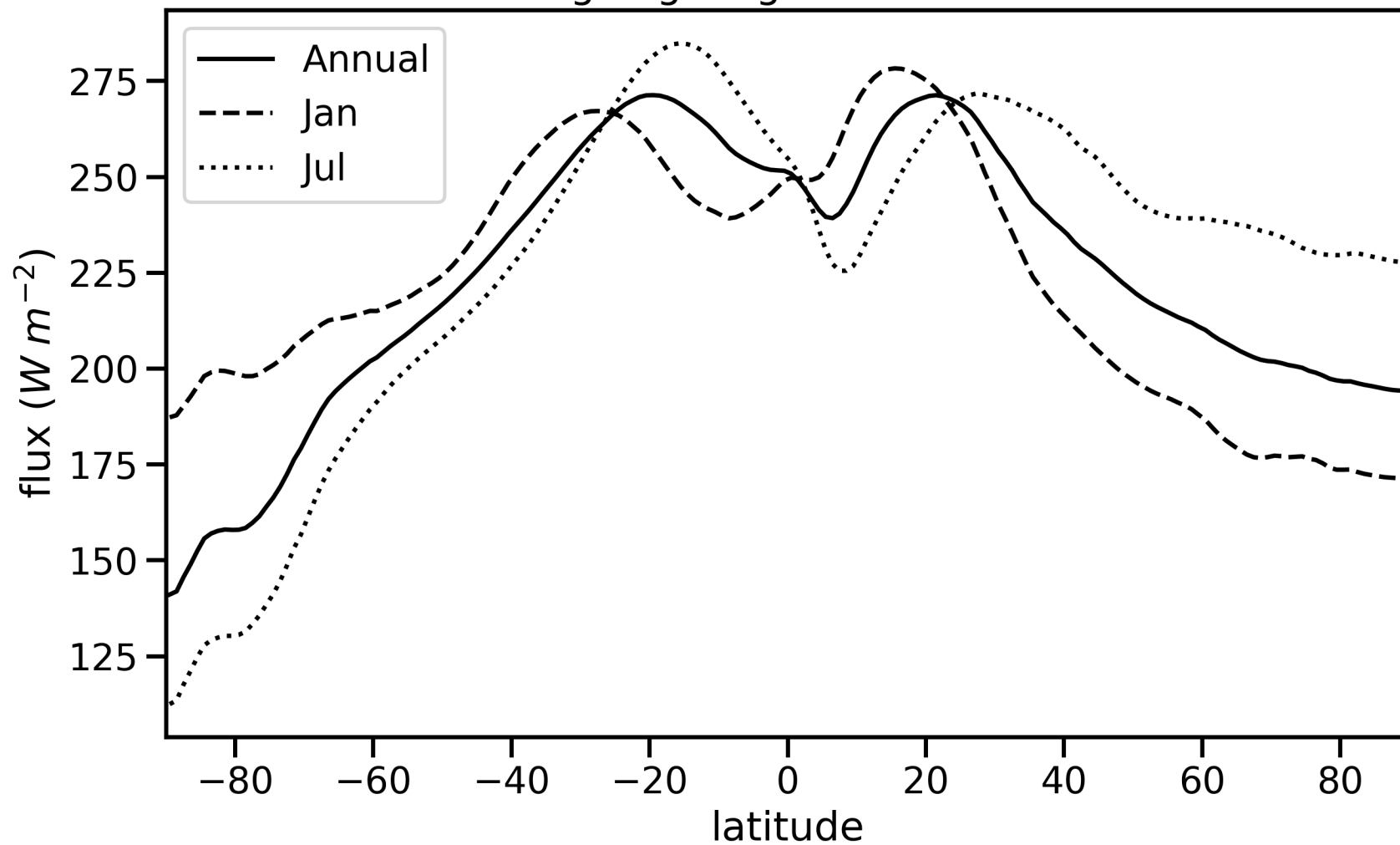


Data from Clouds and the Earth's Radiant Energy System (CERES) energy budget adjusted fluxes (EBAF; Kato et al. 2018). Climatology from 2005–2015.

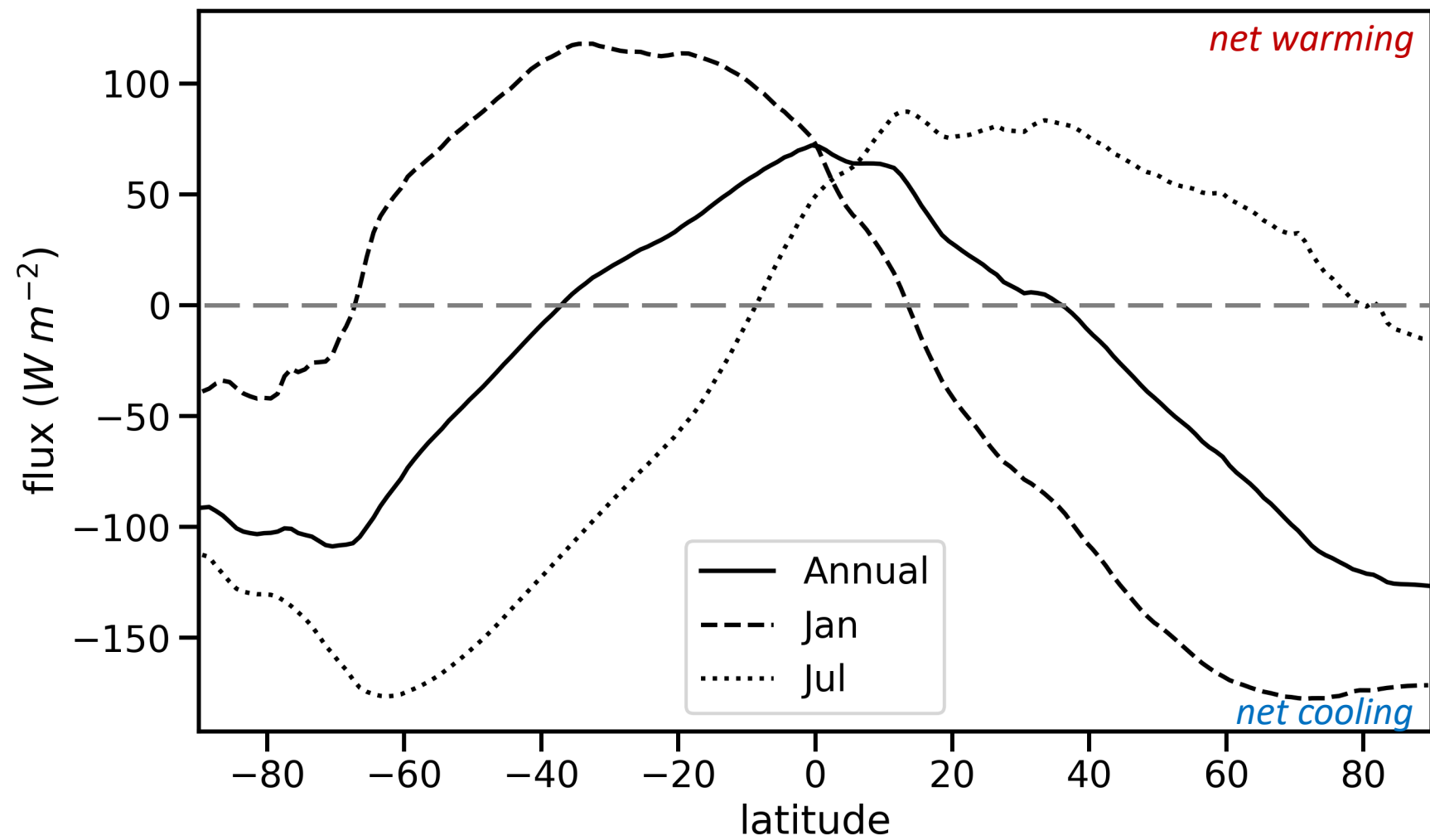




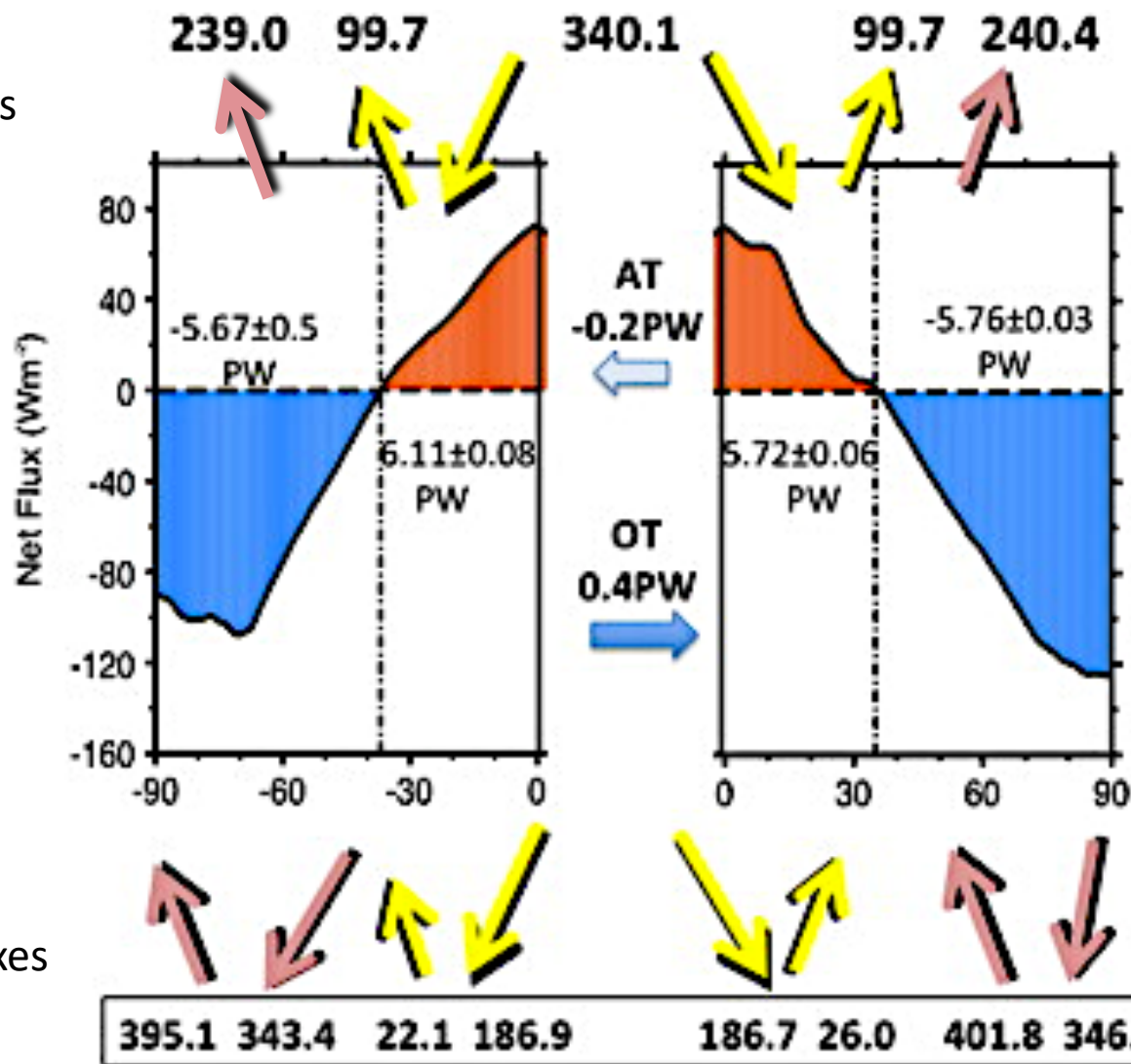
Outgoing longwave radiation



TOA net radiative flux

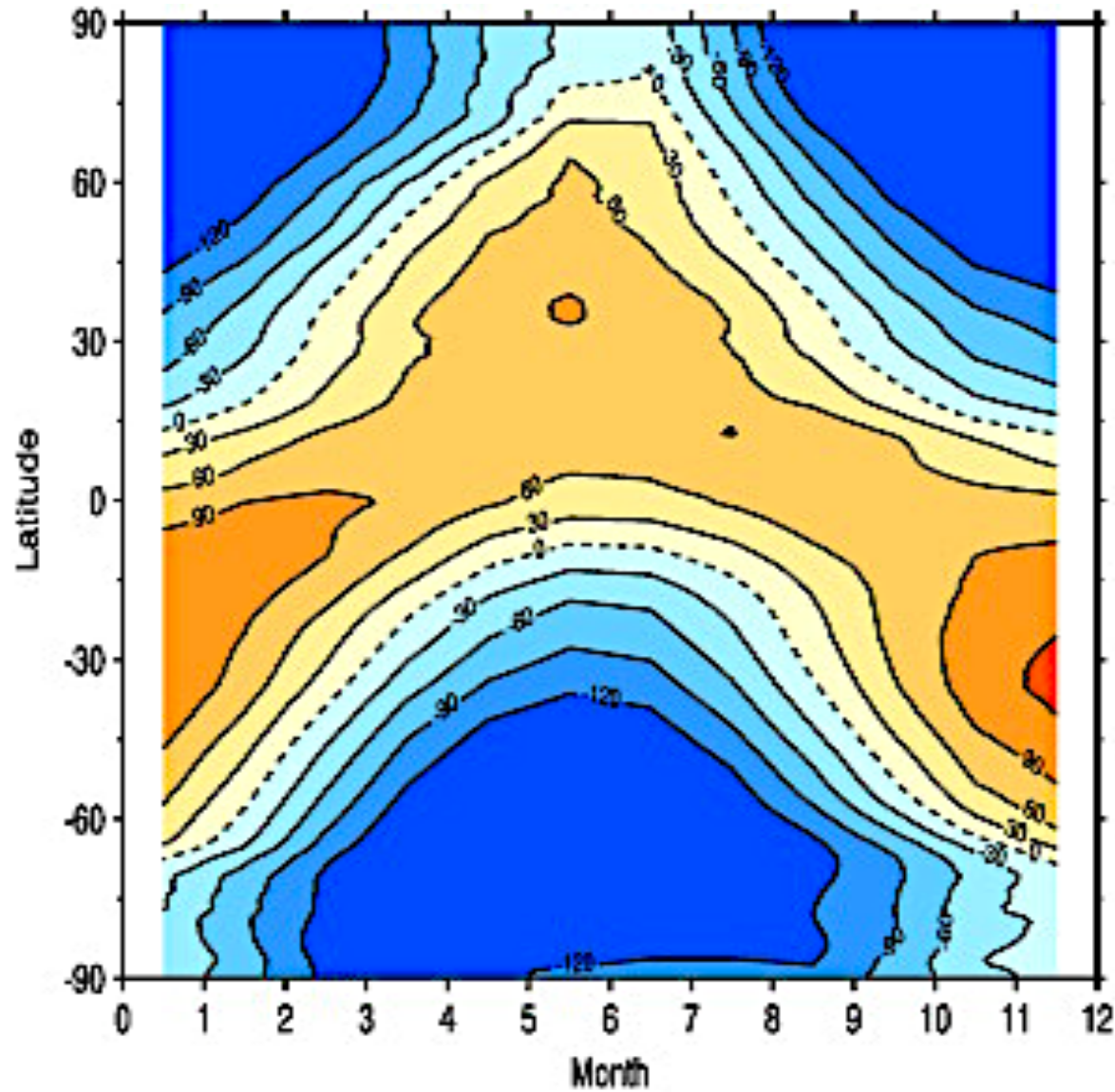


TOA fluxes
(W m^{-2})



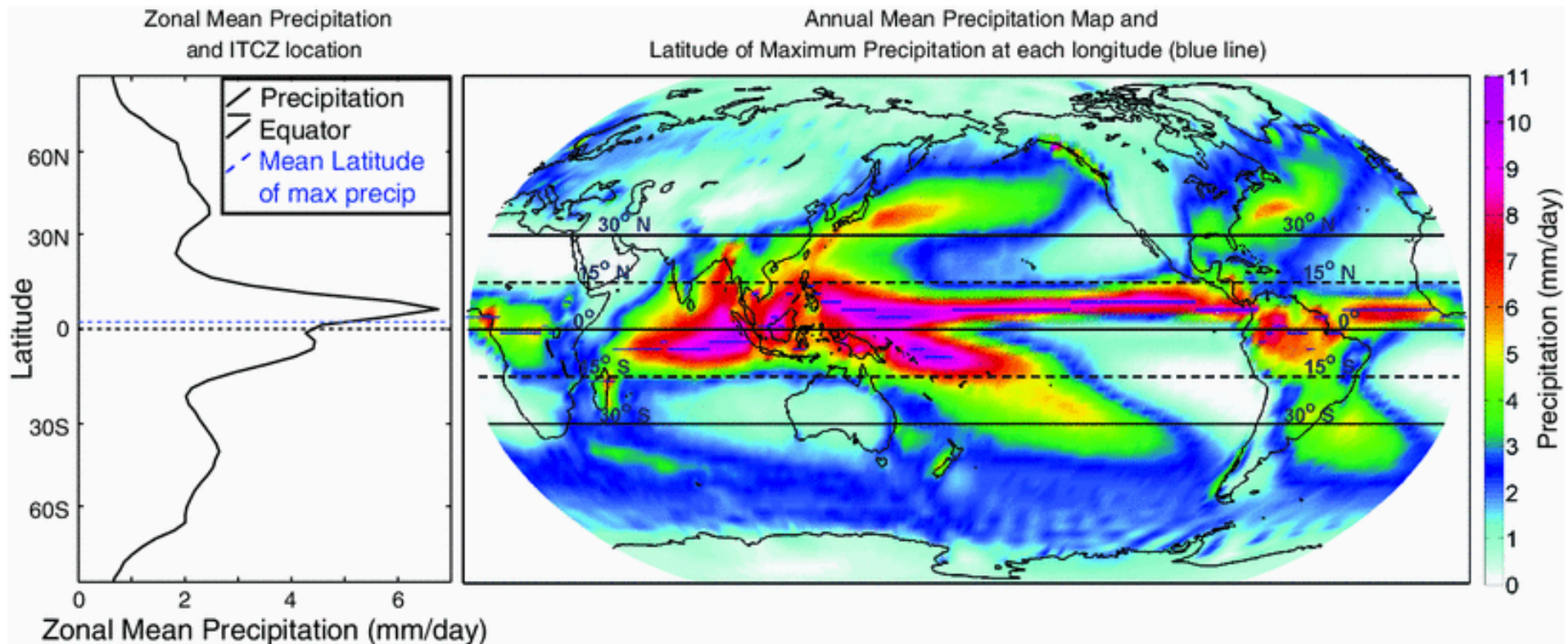
Surface fluxes
(W m^{-2})

Heat storage rate input into the Earth–atmosphere system (W m^{-2})



Stephens and L'Ecuyer 2015

Why is the annual mean precipitation maximum (ITCZ) located in the NH?



Marshall et al. 2014

Seasonal heat transport (PW)

