Bayesian Parameter Estimation in a 1D Model of Precipitation and Evaporation: Comparison of Middle Miocene and Modern Climates Using Plant Lipid Deuterium ($\delta D$) Measurements

Brian Blais$^{1,2}$, Colin Gannon$^1$, Qin Leng$^1$, Robert Patalano$^1$, Hong Yang$^1$
$^1$Laboratory of Terrestrial Environments, Department of Science and Technology, Bryant University
$^2$Institute for Brain and Neural Systems, Brown University

Extra Slides
Modern values of $\tau_E$ and $\tau_P$
$\tau_E$ and $\tau_P$ from an all-land model

Modern (first run)

$\hat{\tau}_E = 16.94 \pm 2.409 [1\sigma]$  

$\hat{\tau}_P = 33.11 \pm 5.022 [1\sigma]$
\( \tau_E \) and \( \tau_P \) from an all-land model

**Miocene (first run)**

\[ \hat{\tau}_E = 48.07 \pm 16.5[1\sigma] \]

\[ \hat{\tau}_P = 58.12 \pm 16.61[1\sigma] \]
$\tau_E$ and $\tau_P$ from an all-ocean model

Modern
$\tau_E$ and $\tau_P$ from an all-ocean model

Miocene
Modern $\delta D$ and Climactic Variables