**Data descriptions**

**Title:** Climate shifts root: shoot ratio pattern by altering plant functional group on Tibetan vs. Inner Mongolian Plateaus

by Wu *et al*.

**Study areas and sample sites:**

Environmental and ecological surveys were conducted along a temperate grassland transect in Inner Mongolian Plateau and an alpine grassland transect in Tibetan Plateau in China, at ends of the plant growth peak growing season from 2017 to 2020. We laid out 54 sample sites along the two broad ranges of geographic transects on the two plateaus, with 3-5 sample plots at each sample site (a total of 215 plots).

**Abbreviations:**

MAP (mm), mean annual precipitation

MAT (°C), mean annual temperature

NP, a combination of soil available nitrogen and phosphorus nutrition

RD, a combination of the plant richness and plant diversity

FG, plant functional group

grass (g·m-2), grass biomass

sedge (g·m-2), sedge biomass

forbs (g·m-2), forb biomass

RS, biomass ratio of root to shoot