

Regional Earth System Data Lab 4D (lon, lat, time, var)

Vegetation data
subset

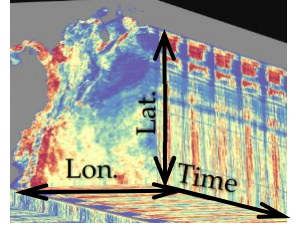
GPP

NDVI

EVI

FPAR

Analysis Ready Data
Cubes (ARDs)
dimensions



Gap
filling

Data
standardization
 $\mu = 0, \sigma = 1$

PCA

A. Pixel wise analysis

Mean
Seasonal
Cycle

PC 1

PC 2

PC 3

RGB map
(Fig. 3)

Fast Fourier
Power
Spectrum

Absolute value of
annual oscillation

Absolute value of
semiannual
oscillation

Ratio of
annual and
semiannual
oscillation

Seasonality
ratio map
(Fig. 5)

Biotic
units map

Spatio-temporal
data aggregation

Frequency
analysis

B. Biotic units analysis

Mean Seasonal
Cycle by biotic
units

Seasonality ratio
by biotic units in
the climate space

Driest month
precipitation
layer

Seasonality of biotic
units
(Fig. 6)

Seasonality ratio and
climate heatmaps
(Fig. 7)

