**The following .csv files contain leaf area index (LAI) data for 2004-2010**

‘2004 LAI ring means.csv’

‘2005 LAI ring means.csv’

‘2006 LAI ring means.csv’

‘2007 LAI ring means.csv’

‘2008 LAI ring means.csv’

‘2009 LAI ring means.csv’

‘2010 LAI ring means.csv’

Each .csv file contains the columns

A: Year

B: CO2 (CO2 treatment; 370 or 550)

C: treatment (CO2 treatment; control or carbon\_dioxide)

D: Ring (Treatment plot)

E: block (experimental replicate)

F: date

G: DOY (Julian Date, or day of year)

H: LAI (leaf area index; unitless)

**The file’ Fig\_S2\_TableS2\_LAI\_ANOVA.sas’ runs a mixed model ANOVA on LAI data from each year, where block is treated as a random effect and CO2 treatment, day of year (DOY) and the CO2\*DOY interaction are treated as fixed effects. The ANOVA output are presented in table S2, and the model-corrected means (lsmeans) are presented in Figure S2.**