Corrected Equation, Table, and Figures appearing in the Supplementary Section

Updated equation (SE8a) appearing in Text S5

$$\sigma_y = \sqrt{\frac{1}{12-1} \times \sum_{m=1}^{12} \left(\overline{Z_{m,y}} - \mu_y\right)^2}$$ (SE8a)

> **Commented [JA1]:** This has to be squared

Updated Table S4

Table S4. ISAM estimated change (%) in maize and soybean yields due to elevated [CO_2] concentration are compared with FACE site data and CLM and AgMIP model results under wet/irrigated conditions[1].

Crop	FACE	Model		
		ISAM[4]	CLM[7]	AgMIP[7]
Maize	-1.0[2]	-0.03	0.9	0.2 - 7.7
Soybean	14.4 ± 12.5[3]	17.5± 2.7[5] (32.1± 4.3)[6]	22	5.2 - 44.4

> **Commented [JA2]:** This is the correct value

[1] The positive values are net sink of C by the terrestrial ecosystem
[2] German- FACE site
[3] SoyFACE site
[4] See supplementary Text S7 for ISAM simulations
[5] Calculated by the revised version of ISAM
[6] Calculated by the original version of ISAM
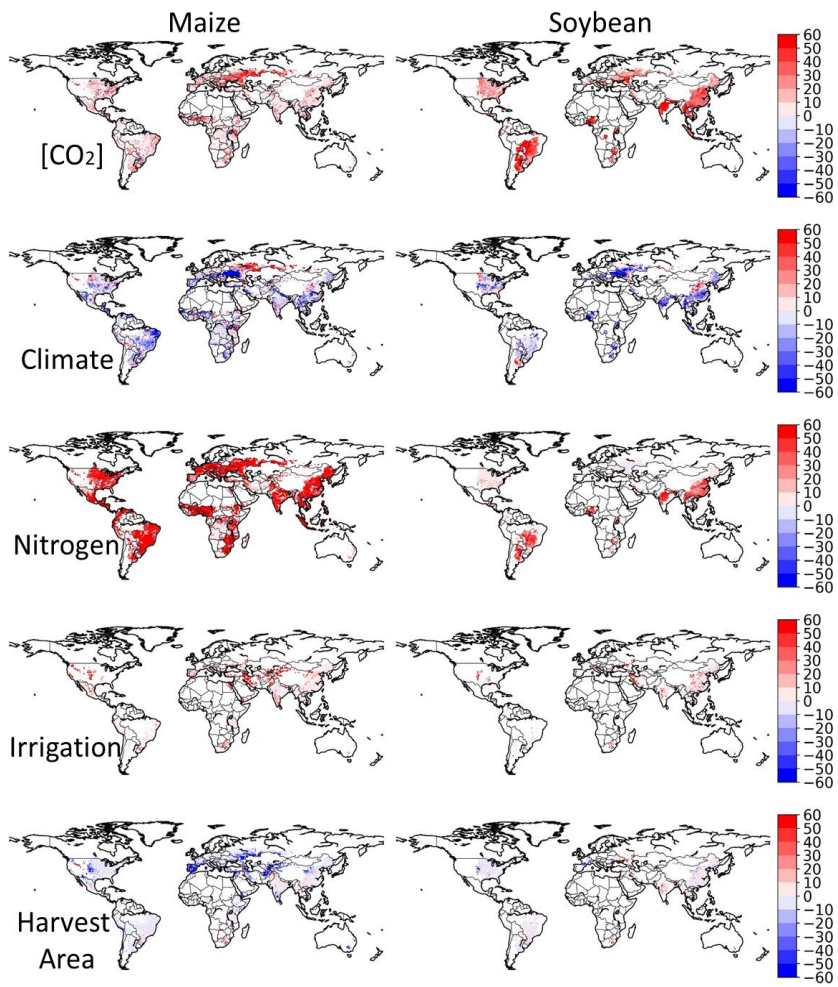[7] Deryng et al. (2016) (See Text S11 for CLM and AgMIP models simulations)

Figure S11b. Same as Figure S12a, but the changes (%) from 1996-2005 and to 2090s under RCP4.5.
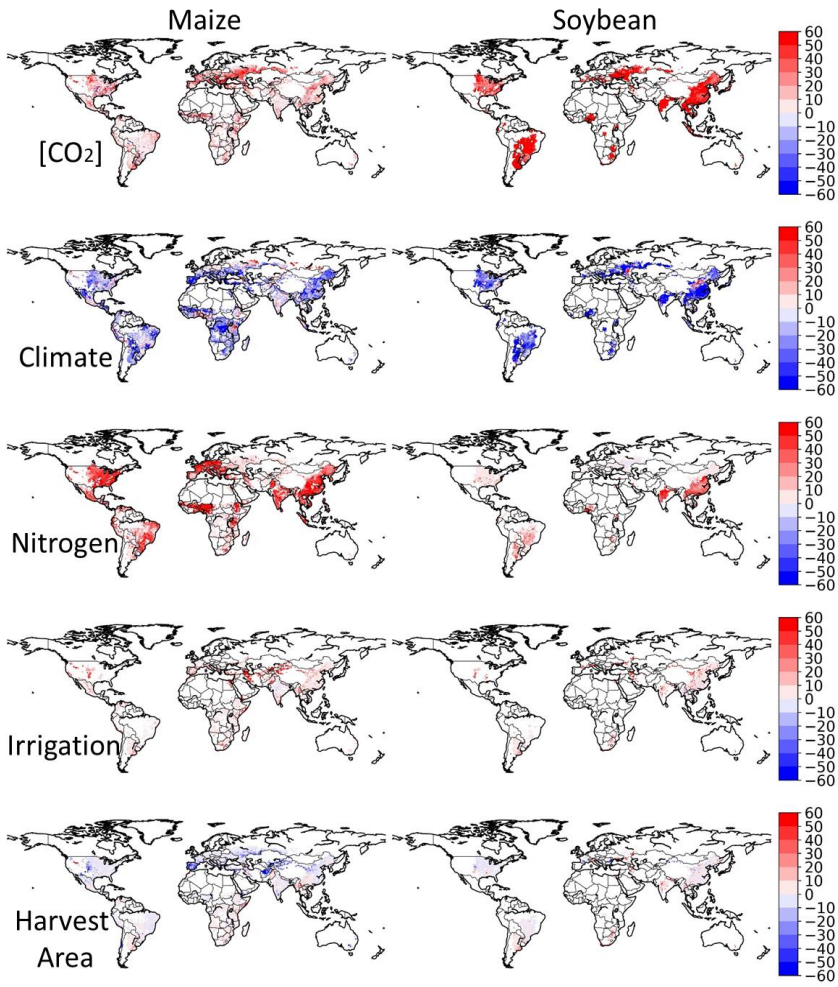
Figure S11c. Same as Figure S11a, but the changes (%) from 1996-2005 and to 2090s under RCP8.5.