

Biome	GPP estimated by Beer et al. (2010) in PgCyr^{-1}	Biome area (10^9 ha)	Anticipated F_{OCS} , plants from GPP estimate ($\text{pmol m}^{-2} \text{s}^{-1}$)	F_{OCS} , soil ($\text{pmol m}^{-2} \text{s}^{-1}$)	F_{OCS} , ecosystem by GPP method ($\text{pmol m}^{-2} \text{s}^{-1}$)	F_{OCS} , ecosystem field observations ($\text{pmol m}^{-2} \text{s}^{-1}$)
Tropical forests	40.8	1.75	-75	No data ^a	-83 to -73	No data
Temperate forests	9.9	1.04	-30	-8 to 1.45 ^b	-38 to -29	~ 0 to 93 ^h
Boreal forests	8.3	1.37	-19	1.2 to 3.8 ^c	-18 to -16	0 to -22 ⁱ
Tropical savannas and grasslands	31.3	2.76	-36	No data	-61 to -29	No data
Temperate grasslands and shrublands	8.5	1.78	-15	-25 to 7.3 ^d	-40 to -8	-26 growing season; +6.1 non-growing season ^j
Deserts	6.4	2.77	-7	0 (?) ^e	-7 (?)	No data
Tundra	1.6	0.56	-9	5.27 to 27.6 ^f	-4 to 18	-15 to -1 ^k
Croplands	14.8	1.35	-35	-18 to 40 ^g	-53 to 5	-22 to -16, +18 during non-growing season ^l
Total	121.7	13.38				