3. Sulfur flow

flow	magnitude [1012 kg(S)/yr]
plant uptake of sulfur	
continents	0.15
oceans	0.6
flow of SO_2 and SO_4^{-2} to Earth's surface,	0.24
mostly in precipitation as H ₂ SO ₄ and by dry	
deposition of aerosols	
flow of S to the atmosphere from biological	0.15
sources, sea spray, and volcanoes [about	
33% of this flow is SO_4^{-2} , the remainder	
being H ₂ S and SO ₂ ; the volcanic contribu-	
tion is about 20% and the sea spray contri-	
bution is 25%.]	
emissions to the atmosphere of SO ₂ from fossil	0.085
fuel burning, and metal-ore smelting (2006)	
river flow of sulfur to the sea	0.1
fertilizer and industrial SO ₄ 2 production	0.03
(2006)	