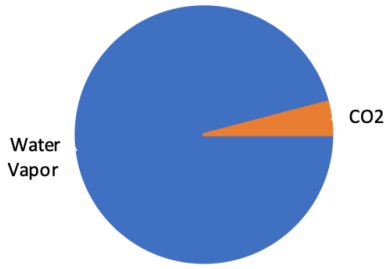
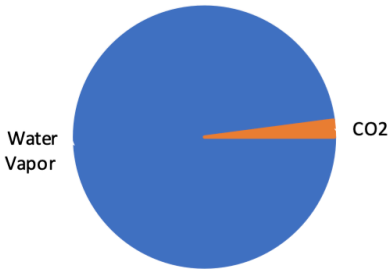
Relative Proportions of the Primary Greenhouses Gases, Water Vapor and CO2
Example Proportions at Illustrative Latitudes

44° North Latitude (Chicago)



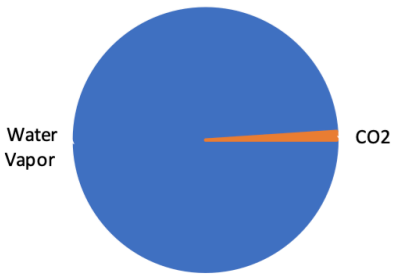
	Parts per Million		Share of Atmosphere	Share of Green-house Gases
CO2	425	ppm	0.0425%	4.1%
Water Vapor	10,000	ppm	1.0000%	95.9%

22° North Latitude (Honolulu)



CO2	425	ppm	0.0425%	2.1%
Water Vapor	20,000	ppm	2.0000%	97.9%

Equator (Indonesia)



CO2	425	ppm	0.0425%	1.1%
Water Vapor	40,000	ppm	4.0000%	98.9%

The earth's dry atmosphere is composed mostly (99%) of oxygen and nitrogen, but neither of these gases absorbs infrared energy, so they play no role in warming the earth. Warming is caused by greenhouse gases. Water vapor (as measured by absolute humidity, not relative humidity) is the most abundant and important greenhouse gas in the atmosphere. The percentage of water vapor in the air varies based on temperature and atmospheric pressure. The percent of water vapor in the warmest tropical air may contain up to 4% water vapor (40,000 parts per million), while the percentage near the north and south poles may reach as low as 0.2% (2,000 ppm). CO2, the second most important greenhouse gas, comprises just over 4/100ths of 1% (425 ppm) of the atmosphere. The increase in CO2 in the atmosphere since 1800, from both human and natural causes, is just over 1/100 of 1% (140 ppm). (Various sources)