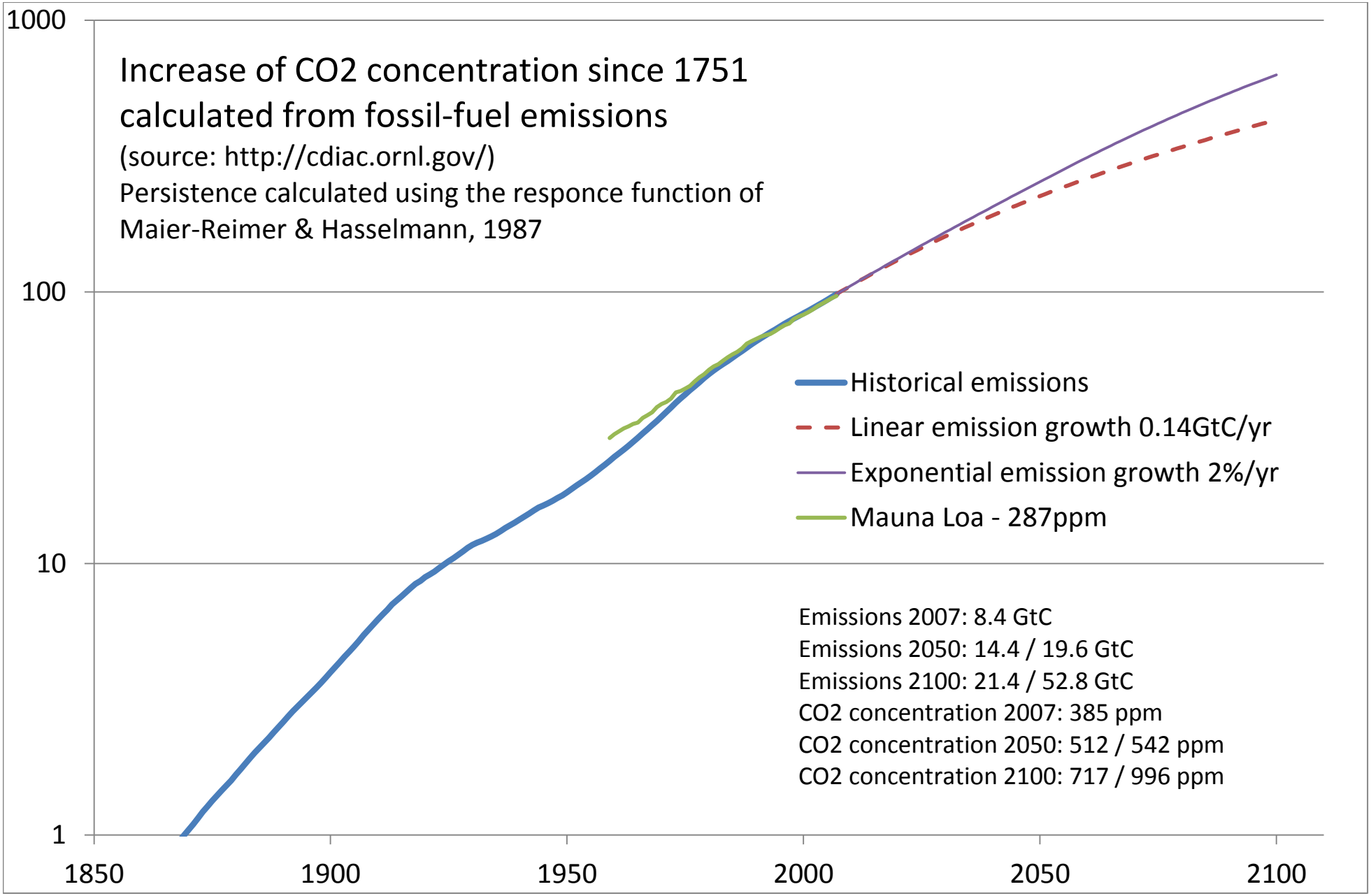
Increase of CO2 concentration since 1751
calculated from fossil-fuel emissions
(source: http://cdiac.ornl.gov/)
Persistence calculated using the responce function of
Maier-Reimer & Hasselmann, 1987
1000
100
10
1
1850
1900
1950
2000
2050
2100
Historical emissions
Linear emission growth 0.14GtC/yr
Exponential emission growth 2%/yr
Mauna Loa - 287ppm
Emissions 2007: 8.4 GtC
Emissions 2050: 14.4 / 19.6 GtC
Emissions 2100: 21.4 / 52.8 GtC
CO2 concentration 2007: 385 ppm
CO2 concentration 2050: 512 / 542 ppm
CO2 concentration 2100: 717 / 996 ppm