

Experiment Name	Description of the experiment	CO2	Other GHG and aerosols	Year of Vegetation map	SSTs	Number of simulations per ensemble OR Length of simulation
LUCID_PI	Pre-industrial Simulation, with CO2, greenhouse gases, aerosols, land-cover map and SSTs being prescribed at their pre-industrial values	280 ppm	Pre-industrial	1870	Prescribed 1870-1900	Ensemble 5-10 runs
LUCID_PD	Present-day Simulation, with CO2, greenhouse gases, aerosols, land-cover map and SSTs being prescribed at their present-day values	375 ppm	Pre-industrial	1992	Prescribed 1972-2002	Ensemble 5-10 runs
LUCID_Piv	Pre-industrial Simulation with CO2, greenhouse gases, aerosols and SSTs being prescribed at their pre-industrial value BUT with present-day land-cover map	280 ppm	Pre-industrial	1992	Prescribed 1870-1900	Ensemble 5-10 runs
LUCID_PDv	Present-day Simulation with CO2, greenhouse gases, aerosols and SSTs being prescribed at their present-day values BUT with pre-industrial land-cover map	375 ppm	Pre-industrial	1870	Prescribed 1972-2002	Ensemble 5-10 runs
LUCID_PIs	Pre-industrial equilibrium Simulation, with CO2, greenhouse gases, aerosols and land-cover map being prescribed at their pre-industrial values. SST is computed by the OGCM	280 ppm	Pre-industrial	1870	Computed	≥ 500 years
LUCID_PDs	Present-day equilibrium Simulation, with CO2, greenhouse gases, aerosols and land-cover map being prescribed at their present-day values. SST is computed by the OGCM	280 ppm	Pre-industrial	1992	Computed	≥ 500 years
LUCID_C20C_NoLUCC	Simulations of the past 130 years with CO2, greenhouse gases, aerosols, and SSTs being prescribed at their observed values, and updated yearly as in the C20C project. Land-cover map is set to its pre-industrial distribution.	Historical yearly evolution	Historical yearly evolution	1870	Prescribed 1870-2002	Ensemble at least 4 runs
LUCID_C20C_LUCC	Simulations of the past 130 years with CO2, greenhouse gases aerosols, land-cover and SSTs being prescribed at their observed values, and updated yearly as in the C20C project.	Historical yearly evolution	Historical yearly evolution	1870-2002	Prescribed 1870-2002	Ensemble at least 4 runs
LUCID_A1b_NoLUCC	IPCC-like simulations from pre-industrial till year 2100. CO2, greenhouse gases and aerosols are prescribed at their observed values, and updated yearly. Land-cover map is set to its pre-industrial distribution. SST is computed by the OGCM	Historical yearly evolution	Historical yearly evolution	1870	Computed	Ensemble ?
LUCID_A1b_LUCC	IPCC-like simulations from pre-industrial till year 2100. CO2, greenhouse gases, aerosols and land-cover are prescribed at their observed values, and updated yearly. SST is computed by the OGCM. Scenario A1b is used for future projection of CO2, GES, aerosols and land-use.	Historical yearly evolution	Historical yearly evolution	1870-2100	Computed	Ensemble ?

Exhaustive list of experiments to be carried out within the LUCID project