

Spin-up

1701 - 1900 transient

1901-2018 transient

CTRL,  
CO<sub>2</sub>,  
CO<sub>2</sub> + CLIM,  
CO<sub>2</sub> + CLIM + LUC

Constant CO<sub>2</sub>  
Recycled climate 1901-1920  
Landcover distribution year 1700  
*Nfert* year 1850  
*Ndep* year 1860

CTRL

Constant CO<sub>2</sub>  
Recycled climate 1901-1920  
Landcover distribution year 1700  
*Nfert* year 1850  
*Ndep* year 1860

CO<sub>2</sub>

Transient CO<sub>2</sub>  
Recycled climate 1901-1920  
Landcover distribution year 1700  
*Nfert* year 1850  
*Transient Ndep* from year 1860

CO<sub>2</sub> + CLIM

Transient CO<sub>2</sub>  
Recycled climate 1901-1920  
Landcover distribution year 1700  
*Nfert* year 1850  
*Transient Ndep* from year 1860

CO<sub>2</sub> + CLIM  
+  
LUC

Transient CO<sub>2</sub>  
Recycled climate 1901-1920  
Transient land-use change  
*Transient Nfert* from year 1850  
*Transient Ndep* from year 1860

CTRL

Constant CO<sub>2</sub>  
Recycled climate 1901-1920  
Landcover distribution year 1700  
*Nfert* year 1850  
*Ndep* year 1860

CO<sub>2</sub>

Transient CO<sub>2</sub>  
Recycled climate 1901-1920  
Landcover distribution year 1700  
*Nfert* year 1850  
*Transient Ndep*

CO<sub>2</sub> + CLIM

Transient CO<sub>2</sub>  
Transient climate forcing  
Landcover distribution year 1700  
*Nfert* year 1850  
*Transient Ndep*

CO<sub>2</sub> + CLIM  
+  
LUC

Transient CO<sub>2</sub>  
Transient climate forcing  
Transient land-use change  
*Transient Nfert*  
*Transient Ndep*

1701-2018 transient population density forcing  
1701-2018 transient lightning forcing