Early Human Impact:
How long have human activities been affecting the climate system?

Carlo Barbante
IDPA-CNR, University of Venice
The concentrations of CO$_2$ have increased to levels unprecedented in at least the last 800,000 years.
Testing Ruddiman Hypothesis

Current Interglaciation

Farming

Forest clearance

GHG Conc.

10,000

5,000

0

Years Ago

Previous Interglaciations (Natural)

www.earlyhumanimpact.eu
Fires in the Earth’s System

NASA Global Fire Map  2002-2016