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Acronyms and Abbreviations

ARS	Agricultural Research Service (USDA)
BOREAS	BOReal Ecosystem-Atmosphere Study
BR	Bowen Ratio/Energy Balance (flux measurement towers)
CCSP	Carbon Cycle Science Plan
CFCs	chlorofluorocarbons
CLIVAR	Climate Variability and Predictability Programme (WCRP)
DIC	dissolved inorganic carbon
DOE	Department of Energy
DOM	dissolved organic matter
FAO	Food and Agriculture Organization
FIA	Forest Inventory Analysis (program of the U.S. Forest Service)
ENSO	El Niño–Southern Oscillation
GAIM	Global Analysis,Interpretation and Modelling (IGBP program)
GCOS	Global Climate Observing System
GCTE	Global Change and Terrestrial Ecosystems (IGBP program)
GEOSECS	Geochemical Ocean Sections program
GEWEX/GCIP	Global Energy and Water Cycle Experiment/Continental Scale International Project (World Climate Research Program project)
GOOS	Global Ocean Observing System
Gt C/yr	Billions of metric tons (or “gigatons”) of carbon per year
GTOS	Global Terrestrial Observing System
IGAC	International Global Atmospheric Chemistry Program
IGBP	International Geosphere–Biosphere Program
IPCC	Intergovernmental Panel on Climate Change
JGOFS	Joint Global Ocean Flux Study (IGBP program)
LTER	Long-Term Ecological Research (study sites maintained by the National Science Foundation)
MERIS	Medium Resolution Imaging Spectrometer
MODIS	Moderate-Resolution Imaging Spectroradiometer
NAO	North Atlantic Oscillation
NASA	National Aeronautics and Space Administration
NBP	net biome production
NEP	net ecosystem production
NOAA	National Oceanic and Atmospheric Administration
NRC	National Research Council
NSF	National Science Foundation
POM	Particulate organic matter
TOC	total organic carbon
TOGA	Tropical Ocean–Global Atmosphere Program
TRANSCOM	Atmospheric transport model comparison study (GAIM project)
USDA	U.S.Department of Agriculture
USGCRP	U.S.Global Change Research Program
VEMAP	Vegetation/Ecosystem Modeling and Analysis Project
WCRP	World Climate Research Programme
WOCE	World Ocean Circulation Experiment (WCRP program)