List of scientific papers (peer-reviewed) scrutinized during the preparation of the synthesis

Each article is assigned to at least one item in the three categories below. For some types of studies, e.g. reviews, observational or process studies, no item might be assigned in the third category, specifying the type of model applied.

Subject of study: Atmospheric composition (ATC) – Bioenergy (BIE) – Biogeochemical effects (BGC) – Biophysical effects (BPH) – Carbon cycle (CAC) – Climate change (CLC) – Climate projection (CPR) – Development (DEV) – Forrest management and cover (FMC) – Hydrology (HYD) – Land use and land cover (LUC) – Mitigation (MIT)

Type of study: Model study (MOD) – Observational study (OBS) – Process study (PRO) – Review (REV) – Scenarios (SCE) – Swedish context (SWE)

Type of model: Global climate model (GCL) – Global earth system model (GES) – Integrated assessment model (IAS) – Integrated global earth system model (IGE) – Integrated regional earth system (IRE) – Regional climate model (RCL) – Regional earth system model (RES) – Statistical model (STA) – Terrestrial ecosystem model (TES)


CPR, FMC, MIT / MOD / GES; Arora V, Montenegro A (2011) Small temperature benefits provided by realistic afforestation efforts. Nat Geosci 4: 514-518. doi: 10.1038/NGE01118


Projected increase in continental runoff due to plant responses to increasing carbon dioxide. Nature 448: 1037-1041. doi: 10.1038/nature06045


Climate, ecosystems, and planetary futures: The challenge to predict life in Earth system models. Science 359: eaam8328. doi: 10.1126/science.aam8328

On linking an Earth system model to the equilibrium carbon representation of an economically optimizing land use model. Geosci Model Dev 7: 2545-2555. doi: 10.5194/gmd-7-2545-2014


Local temperature response to land cover and management change driven by non-radiative processes. Nat Clim Change 7: 296-302. doi: 10.1038/NCLIMATE3250

Effect of anthropogenic land-use and land-cover changes on climate and land carbon storage in CMIP5 projections for the twenty-first century. J Clim 26: 6859-6881. doi: 10.1175/JCLI-D-12-00623.1


Global potential of biospheric carbon management for climate mitigation. Nat Commun 5: 5282. doi: 10.1038/ncomms6282


LUC, MIT / REV; Pannell DJ (2008) Public benefits, private benefits, and policy mechanism choice for land-use change for environmental benefits. Land Econ 84: 225-240. doi: 10.3368/le.84.2.225


Robust identification of local biogeophysical effects of land-cover change in a global climate model. J Clim 30: 1159-1176. doi: 10.1175/JCLI-D-16-0067.1


Importance of surface roughness for the local biogeophysical effects of deforestation. J Geophys Res 124: 8605-8616. doi: 10.1029/2018JD030127


Vegetation-climate feedbacks modulate rainfall patterns in Africa under future climate change. Earth Syst Dynam 7: 627-647. doi: 10.5194/esd-7-627-2016

Impacts of land use on climate and ecosystem productivity over the Amazon and the South American continent. Environ Res Lett 12: 054016. doi: 10.1088/1748-9216/aa6fd6


Climate mitigation from vegetation biophysical feedbacks during the past three decades. Nat Clim Change 7: 432-436. doi: 10.1038/NCLIMATE3299


Tundra shrubification and tree-line advance amplify arctic climate warming: results from an

