

Appendix G: CALAND Output variables and definitions (214 variables)

These outputs are generated by running *caland.r*. The data are stored in an individual Excel workbook (.xls) for each scenario. Each variable corresponds to an individual worksheet within the file (in order below). There are values for each land category and each year simulated, as well as aggregated values by land type, ownership, and region at the bottom of each table.

Parameter	Definition
Area (ha)	
Area	Land category area
Managed_area	Simulated managed area – this may be different than the prescribed managed area due to land availability
Wildfire_area	Simulated wildfire area – this is the wildfire area as distributed across land categories, and the totals may be different than prescribed due to land availability
Carbon density (Mg C ha⁻¹)	
All_orgC_den	Total organic carbon density (sum of the seven C pools)
All_biomass_C_den	Living and dead vegetation carbon density (All_orgC_den – Soil_orgC_den)
Above_main_C_den	Main live canopy carbon density
Below_main_C_den	Main live root carbon density
Understory_C_den	Understory live carbon density
StandDead_C_den	Standing dead carbon density
DownDead_C_den	Downed dead carbon density
Litter_C_den	Litter carbon density
Soil_orgC_den	Soil organic carbon density
Carbon stock (Mg C)	
All_orgC_stock	Total organic carbon stock (sum of the seven C pools)
All_biomass_C_stock	Living and dead vegetation carbon stock (All_orgC_den – Soil_orgC_den)
Above_main_C_stock	Main live canopy carbon stock
Below_main_C_stock	Main live root carbon stock
Understory_C_stock	Understory live carbon stock
StandDead_C_stock	Standing dead carbon stock
DownDead_C_stock	Downed dead carbon stock
Litter_C_stock	Litter carbon stock
Soil_orgC_stock	Soil organic carbon stock
Wood product carbon stock (Mg C)	
Total_Wood_C_stock	Persistent wood product carbon stock

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Parameter	Definition
Wood product carbon stock (Mg C) (Cont.)	
Total_Wood_CumGain_C_stock	Cumulative gain in wood product carbon stock
Total_Wood_CumLoss_C_stock	Cumulative loss in wood product carbon stock from decay in landfills
Total_Wood_AnnGain_C_stock	Annual gain in wood product carbon stock
Total_Wood_AnnLoss_C_stock	Annual loss in wood product carbon stock from decay in landfills
Manage_Wood_C_stock	Persistent wood product carbon stock from forest management
Manage_TotWood_CumGain_C_stock	Cumulative gain in wood product carbon stock sourced from forest management (harvest plus extra slash utilization)
Manage_Harv2Wood_CumGain_C_stock	Cumulative gain in wood product carbon stock sourced from forest management harvest
Manage_Slash2Wood_CumGain_C_stock	Cumulative gain in wood product carbon stock sourced from forest management slash
Manage_Wood_CumLoss_C_stock	Cumulative loss in wood product carbon stock sourced from forest management, from decay in landfills
Manage_TotWood_AnnGain_C_stock	Annual gain in wood product carbon stock sourced from forest management (harvest plus extra slash utilization)
Manage_Harv2Wood_AnnGain_C_stock	Annual gain in wood product carbon stock sourced from forest management harvest
Manage_Slash2Wood_AnnGain_C_stock	Annual gain in wood product carbon stock sourced from forest management slash
Manage_Wood_AnnLoss_C_stock	Annual loss in wood product carbon stock sourced from forest management, from decay in landfills
LCC_Wood_C_stock	Persistent wood product carbon stock sourced from land cover change
LCC_TotWood_CumGain_C_stock	Cumulative gain in wood product carbon stock sourced from land cover change (harvest plus extra slash utilization)
LCC_Harv2Wood_CumGain_C_stock	Cumulative gain in wood product carbon stock sourced from land cover change harvest
LCC_Slash2Wood_CumGain_C_stock	Cumulative gain in wood product carbon stock sourced from land cover change slash
LCC_Wood_CumLoss_C_stock	Cumulative loss in wood product carbon stock sourced from land cover change, from decay in landfills
LCC_TotWood_AnnGain_C_stock	Annual gain in wood product carbon stock sourced from land cover change (harvest plus extra slash utilization)
LCC_Harv2Wood_AnnGain_C_stock	Annual gain in wood product carbon stock sourced from land cover change harvest

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Parameter	Definition
Wood product carbon stock (Mg C) (Cont.)	
LCC_Slash2Wood_AnnGain_C_stock	Annual gain in wood product carbon stock sourced from land cover change slash
LCC_Wood_AnnLoss_C_stock	Annual loss in wood product carbon stock sourced from land cover change, from decay in landfills
Land-Atmosphere carbon exchange (Mg C)	
Eco_CumGain_C_stock	Cumulative net gain in ecosystem carbon stock from atmosphere
Total_Atmos_CumGain_C_stock	Cumulative emissions of carbon from forest management, wildfire, land cover change, and landfill wood product decay
Manage_Atmos_CumGain_C_stock	Cumulative emissions of carbon from forest management
Fire_Atmos_CumGain_C_stock	Cumulative emissions of carbon from wildfire
LCC_Atmos_CumGain_C_stock	Cumulative emissions of carbon from land cover change
Wood_Atmos_CumGain_C_stock	Cumulative emissions of carbon from landfill wood product decay
Total_Energy2Atmos_C_stock	Cumulative emissions of carbon from biomass energy associated with forest management and land cover change
Eco_AnnGain_C_stock	Annual net gain in ecosystem carbon stock from atmosphere
Total_Atmos_AnnGain_C_stock	Annual emissions of carbon from forest management, wildfire, land cover change, and landfill wood product decay
Manage_Atmos_AnnGain_C_stock	Annual emissions of carbon from forest management
Fire_Atmos_AnnGain_C_stock	Annual emissions of carbon from wildfire
LCC_Atmos_AnnGain_C_stock	Annual emissions of carbon from land cover change
Wood_Atmos_AnnGain_C_stock	Annual emissions of carbon from landfill wood product decay
Total_AnnEnergy2Atmos_C_stock	Annual emissions of carbon from biomass energy associated with forest management and land cover change
Partitioning of land-atmosphere carbon exchange (Mg C) (all carbon emissions)	
Manage_Atmos_CumGain_FireC	Cumulative emissions of carbon from controlled burning due to forest management (prescribed burns and slash burning)

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Parameter	Definition
Partitioning of land-atmosphere carbon exchange (Mg C) (all carbon emissions) (Cont.)	
Manage_Atmos_CumGain_TotEnergyC	Cumulative emissions of carbon from total bioenergy due to forest management (harvest plus extra slash utilization)
Man_Atmos_CumGain_Harv2EnergyC	Cumulative emissions of carbon from bioenergy due to Forest management harvest
Man_Atmos_CumGain_Slash2EnergyC	Cumulative emissions of carbon from bioenergy due to Forest management extra slash utilization
Manage_Atmos_CumGain_NonBurnedC	Cumulative emissions of carbon from in situ and sawmill decay due to forest management (excludes wood product decay in landfills)
Fire_Atmos_CumGain_BurnedC	Cumulative emissions of carbon from burning due to wildfire
Fire_Atmos_CumGain_NonBurnedC	Cumulative emissions of carbon from decay due to wildfire
LCC_Atmos_CumGain_FireC	Cumulative emissions of carbon from slash burning due to land cover change (default is 0)
LCC_Atmos_CumGain_TotEnergyC	Cumulative emissions of carbon from total bioenergy due to conversion of Forest to Urban Area or Cultivated Land (harvest plus extra slash utilization)
LCC_Atmos_CumGain_Harv2EnergyC	Cumulative emissions of carbon from bioenergy due to harvest due to conversion of Forest to Urban Area or Cultivated Land
LCC_Atmos_CumGain_Slash2EnergyC	Cumulative emissions of carbon from bioenergy due to extra slash utilization associated with conversion of Forest to Urban Area or Cultivated Land (default is 0)
LCC_Atmos_CumGain_NonBurnedC	Cumulative emissions of carbon from in situ and sawmill decay due to forest management (excludes wood product decay in landfills)
Manage_Atmos_AnnGain_FireC	Annual emissions of carbon from controlled burning due to forest management (prescribed burns and slash burning)
Manage_Atmos_AnnGain_TotEnergyC	Annual emissions of carbon from total bioenergy due to forest management (harvest plus extra slash utilization)
Man_Atmos_AnnGain_Harv2EnergyC	Annual emissions of carbon from bioenergy due to Forest management harvest
Man_Atmos_AnnGain_Slash2EnergyC	Annual emissions of carbon from bioenergy due to Forest management extra slash utilization
Manage_Atmos_AnnGain_NonBurnedC	Annual emissions of carbon from in situ and sawmill decay due to forest management (excludes wood product decay in landfills)

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Parameter	Definition
Partitioning of land-atmosphere carbon exchange (Mg C) (all carbon emissions) (Cont.)	
Fire_Atmos_AnnGain_BurnedC	Annual emissions of carbon from burning due to wildfire
Fire_Atmos_AnnGain_NonBurnedC	Annual emissions of carbon from decay due to wildfire
LCC_Atmos_AnnGain_FireC	Annual emissions of carbon from slash burning due to land cover change (default is 0)
LCC_Atmos_AnnGain_TotEnergyC	Annual emissions of carbon from total bioenergy due to conversion of Forest to Urban Area or Cultivated Land (harvest plus extra slash utilization)
LCC_Atmos_AnnGain_Harv2EnergyC	Annual emissions of carbon from bioenergy due to harvest associated with conversion of Forest to Urban Area or Cultivated Land
LCC_Atmos_AnnGain_Slash2EnergyC	Annual emissions of carbon from bioenergy due to extra slash utilization associated with conversion of Forest to Urban Area or Cultivated Land (default is 0)
LCC_Atmos_AnnGain_NonBurnC	Annual emissions of carbon from in situ and sawmill decay due to land cover change (excludes wood product decay in landfills)
Man_Atmos_AnnGain_SawmillDecayC	Annual emissions of carbon from sawmill decay due to forest management harvest
Man_Atmos_AnnGain_InFrstDecayC	Annual emissions of carbon from in situ decay due to forest management
Man_Atmos_CumGain_SawmillDecayC	Cumulative emissions of carbon from sawmill decay due to forest management harvest
Man_Atmos_CumGain_InFrstDecayC	Cumulative emissions of carbon from in situ decay of carbon due to forest management
LCC_Atmos_AnnGain_SawmillDecayC	Annual emissions of carbon from sawmill decay associated with conversion of Forest to Urban Area or Cultivated Land
LCC_Atmos_AnnGain_OnSiteDecayC	Annual emissions of carbon from in situ decay due to land cover change
LCC_Atmos_CumGain_SawmillDecayC	Cumulative emissions of carbon from sawmill decay associated with conversion of Forest to Urban Area or Cultivated Land
LCC_Atmos_CumGain_OnSiteDecayC	Cumulative emissions of carbon from in situ decay due to land cover change
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative)	
Eco_CumCO2	Cumulative ecosystem CO ₂ exchange (includes management and climate effects on soil and vegetation C exchange and mortality)

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Parameter	Definition
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative) (Cont.)	
Eco_CumCH4eq	Cumulative ecosystem CH ₄ exchange (includes management and climate effects on soil and vegetation C exchange and mortality)
ManTotEnergy_CumCO2	Cumulative CO ₂ emissions from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManTotEnergy_CumCH4eq	Cumulative CH ₄ emissions from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManTotEnergy_CumBCeq	Cumulative BC emissions from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManHarv2Energy_CumCO2	Cumulative CO ₂ emissions from bioenergy due to Forest management harvest
ManHarv2Energy_CumCH4eq	Cumulative CH ₄ emissions from bioenergy due to Forest management harvest
ManHarv2Energy_CumBCeq	Cumulative BC emissions from bioenergy due to Forest management harvest
ManSlash2Energy_CumCO2	Cumulative CO ₂ emissions from bioenergy due to Forest management extra slash utilization
ManSlash2Energy_CumCH4eq	Cumulative CH ₄ emissions from bioenergy due to Forest management extra slash utilization
ManSlash2Energy_CumBCeq	Cumulative BC emissions from bioenergy due to Forest management extra slash utilization
ManFire_CumCO2	Cumulative CO ₂ emissions from controlled burning due to forest management (prescribed burns and slash burning)
ManFire_CumCH4eq	Cumulative CH ₄ emissions from controlled burning due to forest management (prescribed burns and slash burning)
ManFire_CumBCeq	Cumulative BC emissions from controlled burning due to forest management (prescribed burns and slash burning)
ManNonBurn_CumCO2	Cumulative CO ₂ emissions from in situ and sawmill decay due to forest management (excludes wood product decay in landfills)
ManSawmillDecay_AnnCO2	Annual CO ₂ emissions from sawmill decay due to Forest management
ManForestDecay_AnnCO2	Annual CO ₂ emissions from in situ decay due to Forest management
ManSawmillDecay_CumCO2	Cumulative CO ₂ emissions from sawmill decay due to Forest management
ManForestDecay_CumCO2	Cumulative CO ₂ emissions from in situ decay due to Forest management

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Parameter	Definition
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative) (Cont.)	
LCCTotEnergy_CumCO2	Cumulative CO ₂ emissions from total bioenergy due to conversion of Forest to Urban Area or Cultivated Land (harvest plus extra slash utilization)
LCCTotEnergy_CumCH4eq	Cumulative CH ₄ emissions from total bioenergy due to conversion of Forest to Urban Area or Cultivated Land (harvest plus extra slash utilization)
LCCTotEnergy_CumBCeq	Cumulative BC emissions from total bioenergy due to conversion of Forest to Urban Area or Cultivated Land (harvest plus extra slash utilization)
LCCHarv2Energy_CumCO2	Cumulative CO ₂ emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
LCCHarv2Energy_CumCH4eq	Cumulative CH ₄ emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
LCCHarv2Energy_CumBCeq	Cumulative BC emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
LCCSlash2Energy_CumCO2	Cumulative CO ₂ emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)
LCCSlash2Energy_CumCH4eq	Cumulative CH ₄ emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)
LCCSlash2Energy_CumBCeq	Cumulative BC emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)
LCCFire_CumCO2	Cumulative CO ₂ emissions from slash burning due to land cover change (default is 0)
LCCFire_CumCH4eq	Cumulative CH ₄ emissions from slash burning due to land cover change (default is 0)
LCCFire_CumBCeq	Cumulative BC emissions from slash burning due to land cover change (default is 0)
LCC_NonBurn_CumCO2	Cumulative CO ₂ emissions due land cover change, including in situ and sawmill decay (excludes landfill decay of wood products)
LCCSawmillDecay_AnnCO2	Annual CO ₂ emissions from sawmill decay due to land cover change associated with conversion from Forest to Urban Area or Cultivated Land

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Parameter	Definition
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative) (Cont.)	
LCCOnSiteDecay_AnnCO2	Annual CO ₂ emissions from in situ decay due to land cover change associated with land cover change
LCCSawmillDecay_CumCO2	Cumulative CO ₂ emissions from sawmill decay due to land cover change associated with conversion from Forest to Urban Area or Cultivated Land
LCCOnSiteDecay_CumCO2	Cumulative CO ₂ emissions from in situ decay due to land cover change
Wildfire_Decay_AnnCO2	Annual CO ₂ emissions from decay due to wildfire
Wildfire_Decay_CumCO2	Cumulative CO ₂ emissions from decay due to wildfire
TotalEnergy_CumCO2	Cumulative CO ₂ emissions from all bioenergy
TotalEnergy_CumCH4eq	Cumulative CH ₄ emissions from all bioenergy
TotalEnergy_CumBCeq	Cumulative BC emissions from all bioenergy
TotalCntlFire_CumCO2	Cumulative CO ₂ emissions from total controlled burning (prescribed burns and slash burning) associated with forest management and land cover change
TotalCntlFire_CumCH4eq	Cumulative CH ₄ emissions from total controlled burning (prescribed burns and slash burning) associated with forest management and land cover change
TotalCntlFire_CumBCeq	Cumulative BC emissions from total controlled burning (prescribed burns and slash burning) associated with forest management and land cover change
Wildfire_CumCO2	Cumulative CO ₂ emissions from wildfire (decay plus burning)
Wildfire_CumCH4eq	Cumulative CH ₄ emissions from wildfire
Wildfire_CumBCeq	Cumulative BC emissions from wildfire
Wood_CumCO2	Cumulative CO ₂ emissions from all landfill decay of wood products (forest management and land cover change)
Wood_CumCH4eq	Cumulative CH ₄ emissions from all landfill decay of wood products (forest management and land cover change)

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Parameter	Definition
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative) (Cont.)	
Eco_AnnCO2	Annual ecosystem CO ₂ exchange (includes management and climate effects on soil and vegetation C exchange and mortality)
Eco_AnnCH4eq	Annual ecosystem CH ₄ exchange (includes management and climate effects on soil and vegetation C exchange and mortality)
ManTotEnergy_AnnCO2	Annual CO ₂ emissions from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManTotEnergy_AnnCH4eq	Annual CH ₄ emissions from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManTotEnergy_AnnBCeq	Annual BC emissions from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManHarv2Energy_AnnCO2	Annual CO ₂ emissions from bioenergy due to Forest management harvest
ManHarv2Energy_AnnCH4eq	Annual CH ₄ emissions from bioenergy due to Forest management harvest
ManHarv2Energy_AnnBCeq	Annual BC emissions from bioenergy due to Forest management harvest
ManSlash2Energy_AnnCO2	Annual CO ₂ emissions from bioenergy due to Forest management extra slash utilization
ManSlash2Energy_AnnCH4eq	Annual CH ₄ emissions from bioenergy due to Forest management extra slash utilization
ManSlash2Energy_AnnBCeq	Annual BC emissions from bioenergy due to Forest management extra slash utilization
ManFire_AnnCO2	Annual CO ₂ emissions from controlled burning due to forest management (prescribed burns and slash burning)
ManFire_AnnCH4eq	Annual CH ₄ emissions from controlled burning due to forest management (prescribed burns and slash burning)
ManFire_AnnBCeq	Annual BC emissions from controlled burning due to forest management (prescribed burns and slash burning)
ManNonBurn_AnnCO2	Annual CO ₂ emissions from in situ and sawmill decay due to forest management (excludes wood product decay in landfills)
LCCTotEnergy_AnnCO2	Annual CO ₂ emissions from bioenergy due to conversion from Forest to Urban Area or Cultivated Land from Forest (harvest plus extra slash utilization)

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Parameter	Definition
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative) (Cont.)	
LCCTotEnergy_AnnCH4eq	Annual CH ₄ emissions from bioenergy due to conversion from Forest to Urban Area or Cultivated Land from Forest (harvest plus extra slash utilization)
LCCTotEnergy_AnnBCeq	Annual BC emissions from bioenergy due to conversion from Forest to Urban Area or Cultivated Land from Forest (harvest plus extra slash utilization)
LCCHarv2Energy_AnnCO2	Cumulative CO ₂ emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
LCCHarv2Energy_AnnCH4eq	Cumulative CH ₄ emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
LCCHarv2Energy_AnnBCeq	Cumulative BC emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
LCCSlash2Energy_AnnCO2	Cumulative CO ₂ emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)
LCCSlash2Energy_AnnCH4eq	Cumulative CH ₄ emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)
LCCSlash2Energy_AnnBCeq	Cumulative BC emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)
LCCFire_AnnCO2	Cumulative CO ₂ emissions from slash burning due to land cover change (default is 0)
LCCFire_AnnCH4eq	Cumulative CH ₄ emissions from slash burning due to land cover change (default is 0)
LCCFire_AnnBCeq	Cumulative BC emissions from slash burning due to land cover change (default is 0)
LCC_NonBurn_AnnCO2	Annual CO ₂ emissions due land cover change, including in situ and sawmill decay (excludes landfill decay of wood products)
TotalEnergy_AnnCO2	Annual CO ₂ emissions from all bioenergy
TotalEnergy_AnnCH4eq	Annual CH ₄ emissions from all bioenergy
TotalEnergy_AnnBCeq	Annual BC emissions from all bioenergy

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Parameter	Definition
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative) (Cont.)	
TotalCntlFire_AnnCO2	Annual CO ₂ emissions from total controlled burning (prescribed burns and slash burning) associated with forest management and land cover change
TotalCntlFire_AnnCH4eq	Annual CH ₄ emissions from total controlled burning (prescribed burns and slash burning) associated with forest management and land cover change
TotalCntlFire_AnnBCeq	Annual BC emissions from total controlled burning (prescribed burns and slash burning) associated with forest management and land cover change
Wildfire_AnnCO2	Annual CO ₂ emissions from wildfire (decay plus burning)
Wildfire_AnnCH4eq	Annual CH ₄ emissions from wildfire
Wildfire_AnnBCeq	Annual BC emissions from wildfire
Wood_AnnCO2	Annual CO ₂ emissions from all landfill decay of wood products (forest management and land cover change)
Wood_AnnCH4eq	Annual CO ₂ emissions from all landfill decay of wood products (forest management and land cover change)
Total_CumCO2	Cumulative CO ₂ exchange from all sources
Total_CumCH4eq	Cumulative CH ₄ exchange from all sources
Total_CumBCeq	Cumulative BC exchange from all sources
Total_AnnCO2	Annual CO ₂ exchange from all sources
Total_AnnCH4eq	Annual CH ₄ exchange from all sources
Total_AnnBCeq	Annual BC exchange from all sources
TotalWood_CumCO2eq_all	Cumulative emissions of CO ₂ and CH ₄ from landfill decay of wood products
TotalWood_AnnCO2eq_all	Annual emissions of CO ₂ and CH ₄ from landfill decay of wood products
TotalNonBurn_CumCO2eq_all	Cumulative exchange of CO ₂ and CH ₄ from all sources excluding controlled burning and wildfire
TotalFire_CumCO2eq_all	Cumulative emissions of CO ₂ , CH ₄ , and BC from controlled burning (prescribed burn and slash burning) and wildfire

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Parameter	Definition
Global warming potential of land-atmosphere carbon exchange (Mg CO₂ eq) (land uptake is negative) (Cont.)	
TotalEnergy_CumCO2eq_all	Cumulative emissions of CO ₂ , CH ₄ , and BC from all bioenergy (forest management and land cover change)
TotalNonBurn_AnnCO2eq_all	Annual exchange of CO ₂ and CH ₄ from all sources excluding all controlled burning and wildfire
TotalFire_AnnCO2eq_all	Annual emissions of CO ₂ , CH ₄ , and BC from controlled burning (prescribed burn and slash burning) and wildfire
TotalEnergy_AnnCO2eq_all	Annual emissions of CO ₂ , CH ₄ , and BC from all bioenergy (forest management and land cover change)
TotalBurn_CumCO2eq_all	Cumulative exchange of CO ₂ , CH ₄ , and BC from all controlled burning and wildfire
TotalBurn_AnnCO2eq_all	Annual exchange of CO ₂ , CH ₄ , and BC from all controlled burning and wildfire
Total_CumCO2eq_all	Cumulative exchange of CO ₂ , CH ₄ , and BC from all sources
Total_AnnCO2eq_all	Annual exchange of CO ₂ , CH ₄ , and BC from all sources
Additional partitioning of BC-C emissions (Mg C)	
ManFire_CumBCC	Cumulative emissions of BC from controlled burning due to Forest management (prescribed burn and slash burning)
ManTotEnergy_CumBCC	Cumulative emissions of BC from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManHarv2Energy_CumBCC	Cumulative emissions of BC from bioenergy due to Forest management harvest
ManSlash2Energy_CumBCC	Cumulative emissions of BC from bioenergy due to Forest management extra slash utilization
LCCFire_CumBCC	Cumulative BC emissions from slash burning due to land cover change (default is 0)
LCCTotEnergy_CumBCC	Cumulative BC emissions from bioenergy due to conversion from Forest to Urban Area or Cultivated Land from Forest (harvest plus extra slash utilization)
LCCHarv2Energy_CumBCC	Cumulative BC emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
LCCSlash2Energy_CumBCC	Cumulative BC emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)

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Parameter	Definition
Additional partitioning of BC-C emissions (Mg C)	
Wildfire_CumBCC	Cumulative emissions of BC from wildfire
ManFire_AnnBCC	Annual emissions of BC from wildfire
ManTotEnergy_AnnBCC	Annual emissions of BC from controlled burning due to Forest management (prescribed burn and slash burning)
ManHarv2Energy_AnnBCC	Annual emissions of BC from total bioenergy due to Forest management (harvest plus extra slash utilization)
ManSlash2Energy_AnnBCC	Annual emissions of BC from bioenergy due to Forest management harvest
LCCFire_AnnBCC	Annual emissions of BC from bioenergy due to Forest management extra slash utilization
LCCTotEnergy_AnnBCC	Annual BC emissions from slash burning due to land cover change (default is 0)
LCCHarv2Energy_AnnBCC	Annual BC emissions from bioenergy due to conversion from Forest to Urban Area or Cultivated Land from Forest (harvest plus extra slash utilization)
LCCSlash2Energy_AnnBCC	Annual BC emissions from bioenergy due to harvest associated with conversion from Forest to Urban Area or Cultivated Land
Wildfire_AnnBCC	Annual BC emissions from bioenergy due to extra slash utilization associated with conversion from Forest to Urban Area or Cultivated Land (default is 0)

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