

Summary of entries in the Soil Incubation Database

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Database summary and statistics

This file contains a summary of the data currently available in the soil incubation database **siddb**. Currently, the number of entries in the database is 36. Most entries have multiple time-series of CO₂ flux release from incubation experiments. The current total number of time-series is 588, and the total number of datapoints is 10543. The last entry was added on 2017-02-07.

citationKey	doi	entryAuthor	entryCreationDate
Andrews2000SBB	10.1016/S0038-0717(99)00206-0	Heidi Voelkel	2016-04-27
Arevalo2012	10.2136/sssaj2011.0126	Heidi Voelkel	2016-04-27
Barrett2006	10.1016/j.soilbio.2006.03.025	Heidi Voelkel	2016-05-09
Bradford2010	10.1111/j.1365-2486.2009.02040.x	Heidi Voelkel	2016-07-11
Chen2010	10.1016/j.soilbio.2010.08.030	Heidi Voelkel	2016-07-25
Conant2008a	10.1111/j.1365-2486.2008.01541.x	Heidi Voelkel	2016-07-26
Conant2008b	10.1890/08-0137.1	Heidi Voelkel	2016-07-26
Craine2010NatGeo	10.1038/NGEO1009	Maddie Tilyou	2016-07-25
CurielYuste2007	10.1111/j.1365-2486.2007.01415.x	Heidi Voelkel	2016-08-02
Cusack2010GCB	10.1111/j.1365-2486.2009.02131.x	Maddie Tilyou	2016-06-21
Dalias2001b	10.1046/j.1365-2486.2001.00386.x	Heidi Voelkel	2016-08-10
Fang2005	10.1038/nature03138	Heidi Voelkel	2016-08-19
Fissore2009	10.1111/j.1365-2486.2009.01903.x	Heidi Voelkel	2016-08-19
Gillabel2010	10.1111/j.1365-2486.2009.02132.x	Heidi Voelkel	2016-08-23
Grisi1998	10.1016/S0038-0717(98)00016-9	Heidi Voelkel	2016-08-23
Haddix2011	10.2136/sssaj2010.0118	Heidi Voelkel	2016-08-24
Hartley2008	10.1111/j.1461-0248.2008.01223.x	Heidi Voelkel	2016-08-30
HartleyIneson2008	10.1016/j.soilbio.2008.01.007	Heidi Voelkel	2016-08-30
Hopkins2006	10.1016/j.soilbio.2006.01.012	Heidi Voelkel	2016-09-20
JenkinsAdams2011	10.1016/j.soilbio.2011.02.017	Heidi Voelkel	2016-09-22
Lavoie2011JGR	10.1029/2010JG001629	Maddie Tilyou	2016-10-13
LeifeldFuhrer2005	10.1007/s10533-005-2237-4	Heidi Voelkel	2016-09-30
NeffHooper2002	10.1046/j.1365-2486.2002.00517.x	Heidi Voelkel	2016-10-07
Niklinska1999	10.1023/A:1006049204600	Heidi Voelkel	2016-10-17
Reichstein2000	10.1016/S0038-0717(00)00002-X	Heidi Voelkel	2016-10-27
Rey2008	10.1111/j.1365-2389.2008.01065.x	Heidi Voelkel	2016-11-29
ReyJarvis2006	10.1111/j.1365-2486.2006.01230.x	Heidi Voelkel	2016-10-27
Sierra2017BG	10.5194/bg-2016-474	Carlos A. Sierra	2017-01-24
Song2010	10.1016/j.ejsobi.2010.09.003	Heidi Voelkel	2017-01-06
Stewart2008SBB	10.1016/j.soilbio.2008.02.014	Maddie Tilyou	2016-10-4
Townsend1997	10.1023/A:1017942918708	Heidi Voelkel	2017-01-06
Wang2010	10.1016/S1001-0742(09)60217-5	Heidi Voelkel	2017-01-10
WicklandNeff2008	10.1007/s10533-007-9166-3	Heidi Voelkel	2017-01-26
Winkler1996	10.1016/0038-0717(96)00076-4	Heidi Voelkel	2017-01-30
Zhang2007	10.1016/S1001-0742(07)60052-7	Heidi Voelkel	2017-01-31
ZhuCheng2011	10.1016/j.soilbio.2010.12.021	Heidi Voelkel	2017-02-07

Location and ecosystem types

Locations for which data are available are presented in the following map



Ecosystem types

A list of all ecosystem types in the database, with their number of occurrences

Arable rotation	1
Beans and Maize	1
Boreal forest	1
Cereals	1
Coniferous forest	1
Cropland	2
Cultivated	1
Evergreen forest	1
Farmland	1
Forest	5
Forest-Tundra	2
Glacial dry land	1
Grassland	4
Grassland (G)	1
lower montane forest	1
Maize	1
Native forest and pasture	2
Native grassland and cultivated	4
Northern mixed-grass prairie	1
Oak savanna	1
Pasture	3
Peatland	1
Permanent grassland	1
Pine, Hardwood	6
Polar	1
Ponderosa pine plantation	1
Scots pine monocultures	7
Sitka spruce plantation	1
Southern mixed-grass prairie	1

Tundra	2
Tundra (Tussock, Shrub)	1
Tundra (Tussock, Spruce)	1
Tundra (Tussock, Wet sedge)	1
Tundra (Tussock)	1
wet tropical rainforest	1
Wheat cropland	2
Winter barley cropland	1
Woodland with Grass understorey (WG)	1
Woodland with Shrub understorey (WS)	1

Climate

Climate types with their number of occurrences

Boreal	2
Cold	3
Cool temperate	1
Cool-temperate	1
Mediterranean	1
Semi-arid	1
Sub-tropical	1
Temperate	17
Temperate Atlantic	1
Temperate continental	1
Tropical	4
Wet Mediterranean	2

Soil Type

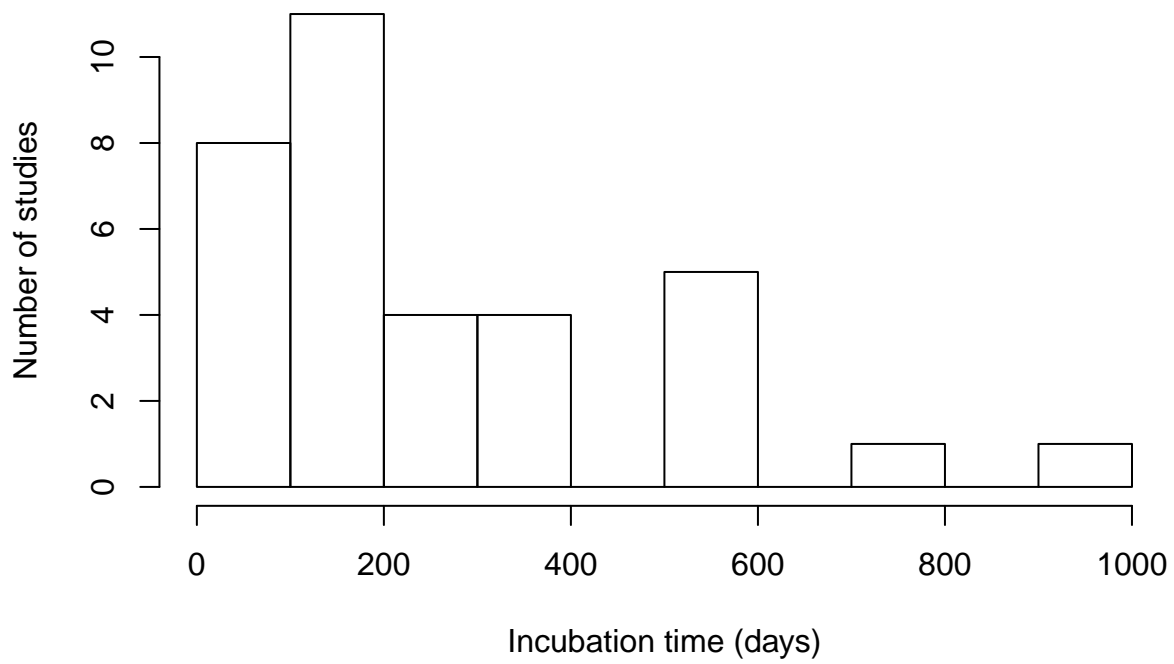
Soil types with their number of occurrences

Aeric Haplaquept	1
Alfisol	1
Andisol	1
Aquic Haplustoll	1
Aridic Paleustoll	1
Cambic podzol	1
Cambisol	2
Chernic tenosol	1
Chromic cambisol	1
Chromic luvisol	1
Coarse loamy Haplumbrepts, organic-rich (CH)	1
Coarse- to fine loamy	1
Dark grey Luvisol	1
Dystric cambisol	3
Ferric podzol	1
Fine loamy Haplumbrepts, organic-poor (CL)	1
Fine-loamy Dystrochrept (HMC)	1
Gelic Cambisol	1
Gelisol histel	1
Gelisol orthel	1

Gelisols	1
Gleyic luvisol	2
Haplocryods, Cryochrepts	1
Haploorthods, Fragiorthods	1
Hapludalfs, Quartzipsamment, Endoaquults, Paleaquults, Alaquods	1
Hapludults, Dystrochrepts	1
Helena series, Ultisol	1
Humic anisol	1
Hydric Melanudand	1
Inceptisol cryept	1
Kanhapludults	1
Luvisol	2
Mollic Udifluvent	1
mor-type humus layer	7
NA	5
organic-poor (HMC, HMH)	1
organic-rich (HOC, HOH)	1
Orthic Black Chernozem	1
Oxyaquic Hapludalf	1
Paleudult & Kandidult	1
Peaty gley	2
Permafrost	1
silt loam haplic Luvisol	1
Stagnic Cambisol	1
Stagnic Gleysol	1
Typic Hapludalf	1
Typic Argiboroll	1
Typic Argiudoll	1
Typic Paleustoll	1
Typical Fluvaquent	1
Typical Haplaquept	1
Typical Hapludult	1
Udic Boroll	1
Udipsamment	1
Ultisol	2
Ultisol	1

Incubation time

A histogram of the incubation time for all entries



Datasets

The file `~/scripts/plotEntry.R` can be used to plot individual entries from the database. For example

```
source("~/sidb/scripts/plotEntry.R")
plotEntry(entry=Andrews2000SBB)
```

