Metadata 3B

Obligatory fields are indicated with an asterisk

|  |  |
| --- | --- |
| **Code**  | 3B |
| **Title \*** | 3B Aggregate size fractionation |
| **Acronym** | ASF |
| **Path** | Data archive\MS3 |
| **Description \***  | It is the dataset of the distributions of fraction weight, SOC contents and N contents of different-sized soil aggregates. Soil samples were collected from 12 sampling plots based on two precipitation levels (wet and dry sites) and two contrasting bedrocks (limestone and acid igneous rocks). The dataset are used to investigate how lithology and precipitation affect aggregate size and the distribution of fraction weight and C, N contents through different aggregate fractions. |
| **Creator \*** | Songyu Yang |
| **Publisher** |  |
| **Contributor** | Erik Cammeraat, Boris Jansen and Lisa Boerdam |
| **Type** | Tabular data |
| **Format \*** | csv and sav |
| **OS** |  |
| **Software** | Excel and SPSS |
| **Identifier** |  |
| **Source** |  |
| **Rights \*** | IBED, University of Amsterdam |
| **Language** | English |
| **SpatialCoverage** | Wet site (Caj): Coordinate: 7° 11’ S, 78° 35’ W, altitudes: 3500 – 3720 m; Dry site (Hua): Coordinate: 9° 22’ S, 77° 59’ W, altitudes: 3490 – 3700 m |
| **ProjectionSystem \*** | *Not available* |
| **TemporalCoverage \*** | Period 1 (Caj): 2015-07-02 to 2015-07-03, period 2 (Hua): 2016-07-02 to 2016-07-12 |
| **Keywords \*** | Soil aggregation, aggregate size distribution, dry sieving |
| **SizeMB \***  | 89KB for the csv file and 81KB for the sav file |

Column description

If the dataset is tabular, it is obligatory to describe the content of each column.

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| --- | --- | --- | --- |
| **Column name** | **unit** | **Data type +** | **description** |
| Place | no unit | Nominal | Place where the sample were taken (Caj [wet site] vs. Hua [dry site]) |
| PlaceNo | no unit | Nominal | Numbered place: 1 = Caj, 2 = Hua |
| Lithology | no unit | Nominal | Lithology (Cal (LS): limestone soil, Acid (GS): acid rock soil) |
| LithologyNo | no unit | Nominal | Numbered place: 1 = GS, 2 = LS |
| Plots | no unit | Nominal | Name of sampling plots (duplicates) |
| PlotsNo | no unit | Nominal | Nummbered sampling plots (duplicates) |
| Depth | cm | Scale | Depth of the horizon |
| Horizon | no unit | Nominal | Horizon name |
| HorizonNo | no unit | Ordinal | Numbered horizon: 1-4 = numbers of the horizon from the soil surface, 5 = the deepest horizon]\ |
| Horizon\_AvsB | no unit | Nominal | 1: A horizon, 2: B horizon |
| Fraction | no unit | Ordinal | Name of fraction |
| FractionLevel | no unit | Ordinal | Fraction level: fraction size decreases from 5 to 1 |
| LSA\_LSB\_GSA | no unit | Nominal | 1: LS-A, 2: LS-B, 3: GS-A |
| Wet\_Dry\_LSA\_B\_GS\_A | no unit | Nominal | 1: Caj-LS-A, 2: Caj-LS-b, 3: Caj-GS-A, 4: Hua-LS-A, 5: Hua-LS-B, 6: Hua-GS-A |
| FractionNo | mm | Ordinal | Medium size of the fraction |
| Place\_D | no unit | Nominal | Dummy variable for place: 1 = Hua |
| Horizon\_D | no unit | Nominal | Dummy variable for horizon: 1 = B horizon |
| Lithology\_D | no unit | Nominal | Dummy variable for lithology: 1 = GS |
| PlaceInterLitho | no unit | Nominal | Interaction between place and lithology (Place\_D\*Lithology\_D) |
| PlaceIntDepth | no unit | Scale | Interaction between place and depth (Place\_D\*Depth) |
| HorizonInterPlace | no unit | Nominal | Interaction between horizon and place (Place\_D\*Horizon\_D) |
| HorizonInterDepth | no unit | Scale | Interaction between horizon and depth (Depth\*Horizon\_D) |
| LithologyInterDepth | no unit | Scale | Interaction between lithology and depth (Depth\*Lithology\_D) |
| FractionLevel\_D1 | no unit | Ordinal | Dummy variable 1 for fraction level: 1 = 0,063mm- |
| FractionLevel\_D2 | no unit | Ordinal | Dummy variable 2 for fraction level: 1 = 0.25-2mm |
| FractionLevel\_D3 | no unit | Ordinal | Dummy variable 3 for fraction level: 1 = 2-5mm |
| FractionLevel\_D4 | no unit | Ordinal | Dummy variable 4 for fraction level: 1 = >5mm |
| WeightPercent | % | Scale | Percentage of fraction weight |
| WeightPercenNoStone | % | Scale | Percentage of fraction weight excluding gravels |
| TC\_NoStone | % | Scale | OC content excluding gravels (>2 mm) |
| N\_NoStone | % | Scale | N content excluding gravels |
| Stoniness | % | Scale | Stoneiness (gravel contents) |
| TC | % | Scale | OC content |
| TN | % | Scale | N content |
| TC\_TN | no unit | Scale | C/N ratio |
| TC\_BulkTC\_Rnot100 | % | Scale | The percentage of total C distributed in this fraction to the bulk total C |
| TOC\_BulkTOC\_Rnot100 | % | Scale | The percentage of OC distributed in this fraction to the bulk OC |
| TN\_BulkTN\_Rnot100 | % | Scale | The percentage of N distributed in this fraction to the bulk N |
| TC\_BulkTC | % | Scale | The percentage of total C distributed in this fraction to the bulk total C |
| TN\_BulkTN | % | Scale | The percentage of total C distributed in this fraction to the bulk total C |
| MWD | mm | Scale | mean weight diameter |
| MWDexclStone | mm | Scale | mean weight diameter excluding gravels |
| MWD\_TC | mm | Scale | mean weight diameter of TC(TOC) distribution |
| MWD\_TN | mm | Scale | mean weight diameter of TN distribution |
| Bulk\_N | % | Scale | N content of the bulk soil |
| Bulk\_C | % | Scale | OC content of the bulk soil |
| Bulk\_C\_N | no unit | Scale | C/N ratio of the bulk soil |
| Bulk\_pH | no unit | Scale | pH of the bulk soil |
| Bulk\_EC | dS/m | Scale | Electric conductivity of the bulk soil |
| LMa\_weight | % | Scale | Weight percentage of large macroaggregates (LM) |
| LMa\_weight\_NoStone | % | Scale | Weight percentage of the LM excluding gravels |
| LMa\_TC\_bulkTC | % | Scale | TC (TOC) percentage of the LM |
| LMa\_C | % | Scale | TC(TOC) contents of the LM |
| LMa\_TN\_bulkTN | % | Scale | TN percentage of the LM |
| LMa\_N | % | Scale | TN contents of the LM |
| SMa\_weight | % | Scale | Weight percentage of the small macroaggregates (SM) |
| SMa\_weight\_NoStone | % | Scale | Weight percentage of the SM excluding gravels |
| SMa\_TC\_bulkTC | % | Scale | TC (TOC) percentage of the SM |
| SMa\_C | % | Scale | TC(TOC) contents of the SM |
| SMa\_TN\_bulkTN | % | Scale | TN percentage of the SM |
| SMa\_N | % | Scale | TN contents of the SM |
| Mi\_weight | % | Scale | Weight percentage of the microaggregates (Mi) |
| Mi\_weight\_NoStone | % | Scale | Weight percentage of the Mi excluding gravels |
| Mi\_TC\_bulkTC | % | Scale | TC (TOC) percentage of the Mi |
| Mi\_C | % | Scale | TC(TOC) contents of the Mi |
| Mi\_TN\_bulkTN | % | Scale | TN percentage of the Mi |
| Mi\_N | % | Scale | TN contents of the Mi |
| TC\_TN\_5 | no unit | Scale | C/N ratio of the fraction >5mm |
| TC\_TN\_4 | no unit | Scale | C/N ratio of the fraction 2-5mm |
| TC\_TN\_3 | no unit | Scale | C/N ratio of the fraction 0.25-2mm |
| TC\_TN\_2 | no unit | Scale | C/N ratio of the fraction 0.063-0.25mm |
| TC\_TN\_1 | no unit | Scale | C/N ratio of the fraction <0.063mm |
| WeightPercent\_5 | % | Scale | Weight percentage of the fraction >5mm |
| WeightPercent\_4 | % | Scale | Weight percentage of the fraction 2-5mm |
| WeightPercent\_3 | % | Scale | Weight percentage of the fraction 0.25-2mm |
| WeightPercent\_2 | % | Scale | Weight percentage of the fraction 0.063-0.25mm |
| WeightPercent\_1 | % | Scale | Weight percentage of the fraction <0.063mm |
| Stoniness\_5 | % | Scale | Stoniness (gravel contents) of the fraction >5mm |
| Stoniness\_4 | % | Scale | Stoniness (gravel contents) of the fraction 2-5mm |
| TC\_5 | % | Scale | OC contents of the fraction >5mm |
| TC\_4 | % | Scale | OC contents of the fraction 2-5mm |
| TC\_3 | % | Scale | OC contents of the fraction 0.25-2mm |
| TC\_2 | % | Scale | OC contents of the fraction 0.063-0.25mm |
| TC\_1 | % | Scale | OC contents of the fraction <0.063mm |
| TN\_5 | % | Scale | N content of the fraction >5mm |
| TN\_4 | % | Scale | N content of the fraction 2-5mm |
| TN\_3 | % | Scale | N content of the fraction 0.25-2mm |
| TN\_2 | % | Scale | N content of the fraction 0.063-0.25mm |
| TN\_1 | % | Scale | N content of the fraction <0.063mm |
| TC\_bulkTC\_5 | % | Scale | TC (TOC) percentage of the fraction >5mm |
| TC\_bulkTC\_4 | % | Scale | TC (TOC) percentage of the fraction 2-5mm |
| TC\_bulkTC\_3 | % | Scale | TC (TOC) percentage of the fraction 0.25-2mm |
| TC\_bulkTC\_2 | % | Scale | TC (TOC) percentage of the fraction 0.063-0.25mm |
| TC\_bulkTC\_1 | % | Scale | TC (TOC) percentage of the fraction <0.063mm |
| TN\_bulkTN\_5 | % | Scale | TN percentage of the fraction >5mm |
| TN\_bulkTN\_4 | % | Scale | TN percentage of the fraction 2-5mm |
| TN\_bulkTN\_3 | % | Scale | TN percentage of the fraction 0.25-2mm |
| TN\_bulkTN\_2 | % | Scale | TN percentage of the fraction 0.063-0.25mm |
| TN\_bulkTN\_1 | % | Scale | TN percentage of the fraction <0.063mm |
| TC\_noStone\_5 | % | Scale | OC content excl. gravels of the fraction >5mm |
| TC\_noStone\_4 | % | Scale | OC content excl. gravels of the fraction 2-5mm |
| TC\_noStone\_3 | % | Scale | OC content excl. gravels of the fraction 0.25-2mm |
| TC\_noStone\_2 | % | Scale | OC content excl. gravels of the fraction 0.063-0.25mm |
| TC\_noStone\_1 | % | Scale | OC content excl. gravels of the fraction <0.063mm |
| TN\_noStone\_5 | % | Scale | N content excl. gravels of the fraction >5mm |
| TN\_noStone\_4 | % | Scale | N content excl. gravels of the fraction 2-5mm |
| TN\_noStone\_3 | % | Scale | N content excl. gravels of the fraction 0.25-2mm |
| TN\_noStone\_2 | % | Scale | N content excl. gravels of the fraction 0.063-0.25mm |
| TN\_noStone\_1 | % | Scale | N content excl. gravels of the fraction <0.063mm |
| TC\_BulkTC\_noStone\_5 | % | Scale | TC (TOC) percentage excl. gravels of the fraction >5mm |
| TC\_BulkTC\_noStone\_4 | % | Scale | TC (TOC) percentage excl. gravels of the fraction 2-5mm |
| TC\_BulkTC\_noStone\_3 | % | Scale | TC (TOC) percentage excl. gravels of the fraction 0.25-2mm |
| TC\_BulkTC\_noStone\_2 | % | Scale | TC (TOC) percentage excl. gravels of the fraction 0.063-0.25mm |
| TC\_BulkTC\_noStone\_1 | % | Scale | TC (TOC) percentage excl. gravels of the fraction <0.063mm |
| TN\_BulkTN\_noStone\_5 | % | Scale | TN percentage excl. gravels of the fraction >5mm |
| TN\_BulkTN\_noStone\_4 | % | Scale | TN percentage excl. gravels of the fraction 2-5mm |
| TN\_BulkTN\_noStone\_3 | % | Scale | TN percentage excl. gravels of the fraction 0.25-2mm |
| TN\_BulkTN\_noStone\_2 | % | Scale | TN percentage excl. gravels of the fraction 0.063-0.25mm |
| TN\_BulkTN\_noStone\_1 | % | Scale | TN percentage excl. gravels of the fraction <0.063mm |

+ data type: integer, double precision, timestamp without time zone, geometry, etc...