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| **Name** | **Description** | |
| 1. Content Citation |  | |
| 1.1 Title | Supporting data of the paper Sasmito et al. Soil Carbon Burial and Source Patterns across Coastal Mudflat and Mangrove Hydrogeomorphic Settings in West Papua, Indonesia. Submitted to Ecosystems. | |
| 1.2 Publication date | In preparation | |
| 1.3 Originator |  | |
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| 1.4 Publisher | na | |
| 1.4.1 Journal | na | |
| 1.4.2 Volume | na | |
| 1.4.3 Pages | na | |
| 1.4.4 Link | na | |
| 1.5 Metadata contact | Same as Originator | |
| 2. Content description | Dataset used in Sasmito et al. Soil Carbon Burial and Source Patterns across Coastal Mudflat and Mangrove Hydrogeomorphic Settings in West Papua, Indonesia. Submitted to Ecosystems. | |
| 2.1 Abstract | The supporting information contains three datasets. The first one (Dataset210Pb) presents data soil physicochemical properties, 210Pb activity, and soil accretion rate. The second one (DatasetCarbonBurial) presents data soil physicochemical properties and carbon burial. The third one (DatasetCarbonSource) presents data stable isotope and elemental ratio of organic carbon and nitrogen of collected vegetation and soil samples. | |
| 2.2 Data presentation | Spreadsheets | |
| 2.3 Specific content |  | |
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| 2.3.1 **Dataset210Pb** | | |
| 2.3.1.1 Site | Site location | http://id.agrisemantics.org/gacs/C27134 |
| 2.3.1.2 Soil\_depth | Soil depth layer; cm | http://id.agrisemantics.org/gacs/C3303 |
| 2.3.1.3 Total\_210Pb | Total 210Pb activity; Bq kg–1 |  |
| 2.3.1.4 Uncertainty\_210Pb | Uncertainty of 210Pb activity Bq kg–1 |  |
| 2.3.1.5 Supported\_210Pb | Supported 210Pb activity; Bq kg–1 |  |
| 2.3.1.6 Excess\_210Pb | Excess 210Pb activity; Bq kg–1 |  |
| 2.3.1.7 Mass\_flux | Mass flux; g cm–2 | http://id.agrisemantics.org/gacs/C18369 |
| 2.3.1.8 Inventory\_excess | Inventory excess 210Pb; Bq m–2 |  |
| 2.3.1.9 Acc\_excess | Accumulation of excess 210Pb; Bq m–2 |  |
| 2.3.1.10 Est\_deposit | Estimated deposition time; yr | http://id.agrisemantics.org/gacs/C7544 |
| 2.3.1.11 Est\_year | Estimated year of deposition | http://id.agrisemantics.org/gacs/C7544 |
| 2.3.1.12 Mass\_acc | Mass accumulation rates; g cm–2 yr–1 |  |
| 2.3.1.13 BD | Bulk density; g cm–3 | http://id.agrisemantics.org/gacs/C4134 |
| 2.3.1.14 SAR | Soil accretion rate; mm yr–1 |  |
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| 2.3.2 **DatasetCarbonBurial** | | |
| 2.3.1.1 Site | Site location | http://id.agrisemantics.org/gacs/C27134 |
| 2.3.2.2 Plot | Plot | http://id.agrisemantics.org/gacs/C5855 |
| 2.3.2.3 Soil\_depth | Soil depth layer; cm | http://id.agrisemantics.org/gacs/C3303 |
| 2.3.2.4 Thick | Sample thickness; cm | http://id.agrisemantics.org/gacs/C3303 |
| 2.3.2.5 DW | Sample dry weight; g |  |
| 2.3.2.6 Vol | Sample volume; cm-3 | http://id.agrisemantics.org/gacs/C3399 |
| 2.3.2.7 BD | Bulk density; g cm-3 | http://id.agrisemantics.org/gacs/C4134 |
| 2.3.2.8 N\_cont | Nitrogen content; % | http://id.agrisemantics.org/gacs/C990 |
| 2.3.2.9 C\_cont | Carbon content; % | http://id.agrisemantics.org/gacs/C336 |
| 2.3.2.10 CN\_ratio | Carbon to nitrogen contents ratio |  |
| 2.3.2.11 C\_density | Carbon density; mg C cm-3 |  |
| 2.3.2.12 C\_stock | Carbon stock; Mg C ha-1 | http://id.agrisemantics.org/gacs/C12978 |
| 2.3.2.13 SAR | Soil accretion rate; cm yr-1 |  |
| 2.3.2.14 C\_burial | Carbon burial; mg C cm-2 yr-1 |  |
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| 2.3.3 **DatasetCarbonSource** | | |
| 2.3.3.1 LC | Land cover | http://id.agrisemantics.org/gacs/C14370 |
| 2.3.3.2 Site | Site location | http://id.agrisemantics.org/gacs/C27134 |
| 2.3.3.3 Sample | Sample type | http://id.agrisemantics.org/gacs/C23360 |
| 2.3.3.4 Tissue | Tissue type | http://id.agrisemantics.org/gacs/C5136 |
| 2.3.3.5 End\_member | End member name |  |
| 2.3.3.6 Soil\_depth | Soil depth layer; cm | http://id.agrisemantics.org/gacs/C3303 |
| 2.3.3.7 d15N | δ15N; ‰ |  |
| 2.3.3.8 N\_cont | Nitrogen content; % | http://id.agrisemantics.org/gacs/C990 |
| 2.3.3.9 d13C | δ13C; ‰ |  |
| 2.3.3.10 C\_cont | Carbon content; % | http://id.agrisemantics.org/gacs/C336 |
| 2.3.3.11 CN\_ratio | Carbon to nitrogen contents ratio |  |
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| 3. Keyword | Blue carbon, 210Pb sediment dating, δ13C and δ15N signatures, coastal wetlands, soil carbon sequestration, climate change mitigation, soil carbon accrual | |
| 4. Constrain information |  | |
| 4.1 Access | Restricted | |
| 6. Spatial representation information |  | |
| 6.1 Geographic extent | West Papua, Indonesia | |