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| **Name** | **Description** | |
| 1. Content Citation |  | |
| 1.1 Title | Supporting data of the paper Sasmito et al. Mangrove blue carbon stocks and dynamics are controlled by hydro-geomorphic setting and land-use. Submitted to Global Change Biology. | |
| 1.2 Publication date | In preparation | |
| 1.3 Originator |  | |
| 1.3.1 Name | Sigit Deni Sasmito | |
| 1.3.2 Organization | 1. RIEL-Charles Darwin University; 2. Center for International Forestry Research | |
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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. Mangrove blue carbon stocks and dynamics are controlled by hydro-geomorphic setting and land-use. Submitted to Global Change Biology. | |
| 2.1 Abstract | The supporting information contains five datasets. All datasets were contain specific species, DBH, above-belowground biomass of vegetation. Each dataset represent different land use, macroscale and hydro-period typology. Arguni Bay, Buruway, and Etna Bay represent undisturbed mangrove. Kaimana City consist of undisturbed mangrove and shrimp pond. Meanwhile, Bintuni Bay describe harvested, regenerated (5, 10, 25 yr old), and undisturbed mangrove.  All the datasets explained forest structure and above-belowground biomass specify with species name, DBH diameter, wood density, AGB, BGB, sub-plot area, also basal area. | |
| 2.2 Data presentation | Spreadsheets | |
| 2.3 Specific content |  | |
|  |  | |
| 2.3.1 **SWAMP Data-Trees-Arguni Bay-West Papua-2015** | | |
| 2.3.1.1 General info | | |
| 2.3.1.1.1 No ID | No ID |  |
| 2.3.1.1.2 General information | General information; site name, sampling year, latitude, longitude, country, land use, or cover type, area sampled. Topography, disturbance, personel trained, research objectives, principle contact, protocol used, associated publication, local partner, data available, latest data modification |  |
| 2.3.1.1.3 Description | Specific description | http://id.agrisemantics.org/gacs/C2939 |
| 2.3.1.2 Data | | |
| 2.3.1.2.1 No ID | Nomor ID |  |
| 2.3.1.2.2 Site ID | Site ID |  |
| 2.3.1.2.3 Data collection date | (dd/mm/yyyy) |  |
| 2.3.1.2.4 Plot | Plot | http://id.agrisemantics.org/gacs/C3354 |
| 2.3.1.2.5 Sub-plot | Sub-plot |  |
| 2.3.1.2.6 Longitude | Longitude; decimal degree | http://id.agrisemantics.org/gacs/C30792 |
| 2.3.1.2.7 Latitude | Latitude; decimal degree | http://id.agrisemantics.org/gacs/C7389 |
| 2.3.1.2.8 Macroscale typology | Macroscale; tidal estuary |  |
| 2.3.1.2.9 Hydroperiod typology | Hydro-period; Interior |  |
| 2.3.1.2.10 Species name (scientific) | Scientific species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.1.2.11 Species name (local) | Local species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.1.2.12 DBH | Diameter Breast Height; cm |  |
| 2.3.1.2.13 Status | Status of tree; live, 1) Status 1 trees are recently dead and maintain many smaller branches and twigs. 2) Status 2 trees have lost small branches and twigs, and a portion of large branches. 3) Decay status 3 applies to standing ‘snags’, where most branches have been lost and only the main stem remains. |  |
| 2.3.1.2.14 Notes | Notes |  |
| 2.3.1.2.15 Wood density | Wood density; g cm-3 | http://id.agrisemantics.org/gacs/C11727 |
| 2.3.1.2.16 Volume | Volume of tree; cm3 | http://id.agrisemantics.org/gacs/C3399 |
| 2.3.1.2.17 Total AGB | Total Aboveground Biomass; kg | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.1.2.18 BG root mass | Belowground root biomass; kg |  |
| 2.3.1.2.19 Sub-plot area | Sub-plot area; ha |  |
| 2.3.1.2.20 Sub-plot design | Sub-plot design; Circular |  |
| 2.3.1.2.21 AGB | Aboveground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.1.2.22 BGB | Belowground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.1.2.23 AGC | Aboveground carbon; Mg C ha-1 |  |
| 2.3.1.2.24 BGC | Belowground carbon; Mg C ha-1 |  |
| 2.3.1.2.25 Basal area | Basal area per ha; m2 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.1.2.26 AGB summed per plot | Aboveground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.1.2.27 BGB summed per plot | Belowground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.1.2.28 AGC summed per plot | Aboveground carbon summed per plot; Mg C ha-1 |  |
| 2.3.1.2.29 BGC summed per plot | Belowground carbon summed per plot; Mg C ha-1 |  |
| 2.3.1.2.30 Basal area summed per plot | Basal area summed per plot; m2 ha-1 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.1.2.31 source for density | Literature source for density |  |
| 2.3.1.2.32 source for AGB allometry | Literature source for Aboveground biomass allometry |  |
| 2.3.1.2.33 source for BGB allometry | Literature source for Belowground biomass allometry |  |
|  |  | |
| 2.3.2 **SWAMP Data-Trees-Bintuni Bay-West Papua-2018** | | |
| 2.3.2.1 General info | | |
| 2.3.2.1.1 No ID | No ID |  |
| 2.3.2.1.2 General information | General information; site name, sampling year, latitude, longitude, country, land use, or cover type, area sampled. Topography, disturbance, personel trained, research objectives, principle contact, protocol used, associated publication, local partner, data available, latest data modification |  |
| 2.3.2.1.3 Description | Specific description | http://id.agrisemantics.org/gacs/C2939 |
| 2.3.2.2 Data | | |
| 2.3.2.2.1 No ID | Nomor ID |  |
| 2.3.2.2.2 Site ID | Site ID |  |
| 2.3.2.2.3 Data collection date | (dd/mm/yyyy) |  |
| 2.3.2.2.4 Plot | Plot | http://id.agrisemantics.org/gacs/C3354 |
| 2.3.2.2.5 Sub-plot | Sub-plot |  |
| 2.3.2.2.6 Longitude | Longitude; decimal degree | http://id.agrisemantics.org/gacs/C30792 |
| 2.3.2.2.7 Latitude | Latitude; decimal degree | http://id.agrisemantics.org/gacs/C7389 |
| 2.3.2.2.8 Macroscale typology | Macroscale; tidal estuary |  |
| 2.3.2.2.9 Hydroperiod typology | Hydro-period; Interior |  |
| 2.3.2.2.10 Species name (scientific) | Scientific species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.2.2.11 Species name (local) | Local species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.2.2.12 DBH | Diameter Breast Height; cm |  |
| 2.3.2.2.13 Status | Status of tree; live, 1) Status 1 trees are recently dead and maintain many smaller branches and twigs. 2) Status 2 trees have lost small branches and twigs, and a portion of large branches. 3) Decay status 3 applies to standing ‘snags’, where most branches have been lost and only the main stem remains. |  |
| 2.3.2.2.14 Notes | Notes |  |
| 2.3.2.2.15 Wood density | Wood density; g cm-3 | http://id.agrisemantics.org/gacs/C11727 |
| 2.3.2.2.16 Volume | Volume of tree; cm3 | http://id.agrisemantics.org/gacs/C3399 |
| 2.3.2.2.17 Total AGB | Total Aboveground Biomass; kg | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.2.2.18 BG root mass | Belowground root biomass; kg |  |
| 2.3.2.2.19 Sub-plot area | Sub-plot area; ha |  |
| 2.3.2.2.20 Sub-plot design | Sub-plot design; Circular |  |
| 2.3.2.2.21 AGB | Aboveground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.2.2.22 BGB | Belowground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.2.2.23 AGC | Aboveground carbon; Mg C ha-1 |  |
| 2.3.2.2.24 BGC | Belowground carbon; Mg C ha-1 |  |
| 2.3.2.2.25 Basal area | Basal area per ha; m2 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.2.2.26 AGB summed per plot | Aboveground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.2.2.27 BGB summed per plot | Belowground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.2.2.28 AGC summed per plot | Aboveground carbon summed per plot; Mg C ha-1 |  |
| 2.3.2.2.29 BGC summed per plot | Belowground carbon summed per plot; Mg C ha-1 |  |
| 2.3.2.2.30 Basal area summed per plot | Basal area summed per plot; m2 ha-1 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.2.2.31 source for density | Literature source for density |  |
| 2.3.2.2.32 source for AGB allometry | Literature source for Aboveground biomass allometry |  |
| 2.3.2.2.33 source for BGB allometry | Literature source for Belowground biomass allometry |  |
|  |  |  |
| 2.3.3 **SWAMP Data-Trees-Buruway-West Papua-2016** | | |
| 2.3.3.1 General info | | |
| 2.3.3.1.1 No ID | No ID |  |
| 2.3.3.1.2 General information | General information; site name, sampling year, latitude, longitude, country, land use, or cover type, area sampled. Topography, disturbance, personel trained, research objectives, principle contact, protocol used, associated publication, local partner, data available, latest data modification |  |
| 2.3.3.1.3 Description | Specific description | http://id.agrisemantics.org/gacs/C2939 |
| 2.3.3.2 Data | | |
| 2.3.3.2.1 No ID | Nomor ID |  |
| 2.3.3.2.2 Site ID | Site ID |  |
| 2.3.3.2.3 Data collection date | (dd/mm/yyyy) |  |
| 2.3.3.2.4 Plot | Plot | http://id.agrisemantics.org/gacs/C3354 |
| 2.3.3.2.5 Sub-plot | Sub-plot |  |
| 2.3.3.2.6 Longitude | Longitude; decimal degree | http://id.agrisemantics.org/gacs/C30792 |
| 2.3.3.2.7 Latitude | Latitude; decimal degree | http://id.agrisemantics.org/gacs/C7389 |
| 2.3.3.2.8 Macroscale typology | Macroscale; tidal estuary |  |
| 2.3.3.2.9 Hydroperiod typology | Hydro-period; Interior |  |
| 2.3.3.2.10 Species name (scientific) | Scientific species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.3.2.11 Species name (local) | Local species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.3.2.12 DBH | Diameter Breast Height; cm |  |
| 2.3.3.2.13 Status | Status of tree; live, 1) Status 1 trees are recently dead and maintain many smaller branches and twigs. 2) Status 2 trees have lost small branches and twigs, and a portion of large branches. 3) Decay status 3 applies to standing ‘snags’, where most branches have been lost and only the main stem remains. |  |
| 2.3.3.2.14 Notes | Notes |  |
| 2.3.3.2.15 Wood density | Wood density; g cm-3 | http://id.agrisemantics.org/gacs/C11727 |
| 2.3.3.2.16 Volume | Volume of tree; cm3 | http://id.agrisemantics.org/gacs/C3399 |
| 2.3.3.2.17 Total AGB | Total Aboveground Biomass; kg | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.3.2.18 BG root mass | Belowground root biomass; kg |  |
| 2.3.3.2.19 Sub-plot area | Sub-plot area; ha |  |
| 2.3.3.2.20 Sub-plot design | Sub-plot design; Circular |  |
| 2.3.3.2.21 AGB | Aboveground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.3.2.22 BGB | Belowground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.3.2.23 AGC | Aboveground carbon; Mg C ha-1 |  |
| 2.3.3.2.24 BGC | Belowground carbon; Mg C ha-1 |  |
| 2.3.3.2.25 Basal area | Basal area per ha; m2 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.3.2.26 AGB summed per plot | Aboveground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.3.2.27 BGB summed per plot | Belowground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.3.2.28 AGC summed per plot | Aboveground carbon summed per plot; Mg C ha-1 |  |
| 2.3.3.2.29 BGC summed per plot | Belowground carbon summed per plot; Mg C ha-1 |  |
| 2.3.3.2.30 Basal area summed per plot | Basal area summed per plot; m2 ha-1 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.3.2.31 source for density | Literature source for density |  |
| 2.3.3.2.32 source for AGB allometry | Literature source for Aboveground biomass allometry |  |
| 2.3.3.2.33 source for BGB allometry | Literature source for Belowground biomass allometry |  |
|  |  |  |
| 2.3.4 **SWAMP Data-Trees-Etna Bay-West Papua-2017** | | |
| 2.3.4.1 General info | | |
| 2.3.4.1.1 No ID | No ID |  |
| 2.3.4.1.2 General information | General information; site name, sampling year, latitude, longitude, country, land use, or cover type, area sampled. Topography, disturbance, personel trained, research objectives, principle contact, protocol used, associated publication, local partner, data available, latest data modification |  |
| 2.3.4.1.3 Description | Specific description | http://id.agrisemantics.org/gacs/C2939 |
| 2.3.4.2 Data | | |
| 2.3.4.2.1 No ID | Nomor ID |  |
| 2.3.4.2.2 Site ID | Site ID |  |
| 2.3.4.2.3 Data collection date | (dd/mm/yyyy) |  |
| 2.3.4.2.4 Plot | Plot | http://id.agrisemantics.org/gacs/C3354 |
| 2.3.4.2.5 Sub-plot | Sub-plot |  |
| 2.3.4.2.6 Longitude | Longitude; decimal degree | http://id.agrisemantics.org/gacs/C30792 |
| 2.3.4.2.7 Latitude | Latitude; decimal degree | http://id.agrisemantics.org/gacs/C7389 |
| 2.3.4.2.8 Macroscale typology | Macroscale; tidal estuary |  |
| 2.3.4.2.9 Hydroperiod typology | Hydro-period; Interior |  |
| 2.3.4.2.10 Species name (scientific) | Scientific species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.4.2.11 Species name (local) | Local species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.4.2.12 DBH | Diameter Breast Height; cm |  |
| 2.3.4.2.13 Status | Status of tree; live, 1) Status 1 trees are recently dead and maintain many smaller branches and twigs. 2) Status 2 trees have lost small branches and twigs, and a portion of large branches. 3) Decay status 3 applies to standing ‘snags’, where most branches have been lost and only the main stem remains. |  |
| 2.3.4.2.14 Notes | Notes |  |
| 2.3.4.2.15 Wood density | Wood density; g cm-3 | http://id.agrisemantics.org/gacs/C11727 |
| 2.3.4.2.16 Volume | Volume of tree; cm3 | http://id.agrisemantics.org/gacs/C3399 |
| 2.3.4.2.17 Total AGB | Total Aboveground Biomass; kg | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.4.2.18 BG root mass | Belowground root biomass; kg |  |
| 2.3.4.2.19 Sub-plot area | Sub-plot area; ha |  |
| 2.3.4.2.20 Sub-plot design | Sub-plot design; Circular |  |
| 2.3.4.2.21 AGB | Aboveground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.4.2.22 BGB | Belowground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.4.2.23 AGC | Aboveground carbon; Mg C ha-1 |  |
| 2.3.4.2.24 BGC | Belowground carbon; Mg C ha-1 |  |
| 2.3.4.2.25 Basal area | Basal area per ha; m2 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.4.2.26 AGB summed per plot | Aboveground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.4.2.27 BGB summed per plot | Belowground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.4.2.28 AGC summed per plot | Aboveground carbon summed per plot; Mg C ha-1 |  |
| 2.3.4.2.29 BGC summed per plot | Belowground carbon summed per plot; Mg C ha-1 |  |
| 2.3.4.2.30 Basal area summed per plot | Basal area summed per plot; m2 ha-1 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.4.2.31 source for density | Literature source for density |  |
| 2.3.4.2.32 source for AGB allometry | Literature source for Aboveground biomass allometry |  |
| 2.3.4.2.33 source for BGB allometry | Literature source for Belowground biomass allometry |  |
|  |  |  |
| 2.3.5 **SWAMP Data-Trees-Kaimana City-West Papua-2017** | | |
| 2.3.5.1 General info | | |
| 2.3.5.1.1 No ID | No ID |  |
| 2.3.5.1.2 General information | General information; site name, sampling year, latitude, longitude, country, land use, or cover type, area sampled. Topography, disturbance, personel trained, research objectives, principle contact, protocol used, associated publication, local partner, data available, latest data modification |  |
| 2.3.5.1.3 Description | Specific description | http://id.agrisemantics.org/gacs/C2939 |
| 2.3.5.2 Data |  |  |
| 2.3.5.2.1 No ID | Nomor ID |  |
| 2.3.5.2.2 Site ID | Site ID |  |
| 2.3.5.2.3 Data collection date | (dd/mm/yyyy) |  |
| 2.3.5.2.4 Plot | Plot | http://id.agrisemantics.org/gacs/C3354 |
| 2.3.5.2.5 Sub-plot | Sub-plot |  |
| 2.3.5.2.6 Longitude | Longitude; decimal degree | http://id.agrisemantics.org/gacs/C30792 |
| 2.3.5.2.7 Latitude | Latitude; decimal degree | http://id.agrisemantics.org/gacs/C7389 |
| 2.3.5.2.8 Macroscale typology | Macroscale; tidal estuary |  |
| 2.3.5.2.9 Hydroperiod typology | Hydro-period; Interior |  |
| 2.3.5.2.10 Species name (scientific) | Scientific species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.5.2.11 Species name (local) | Local species name | http://id.agrisemantics.org/gacs/C1468 |
| 2.3.5.2.12 DBH | Diameter Breast Height; cm |  |
| 2.3.5.2.13 Status | Status of tree; live, 1) Status 1 trees are recently dead and maintain many smaller branches and twigs. 2) Status 2 trees have lost small branches and twigs, and a portion of large branches. 3) Decay status 3 applies to standing ‘snags’, where most branches have been lost and only the main stem remains. |  |
| 2.3.5.2.14 Notes | Notes |  |
| 2.3.5.2.15 Wood density | Wood density; g cm-3 | http://id.agrisemantics.org/gacs/C11727 |
| 2.3.5.2.16 Volume | Volume of tree; cm3 | http://id.agrisemantics.org/gacs/C3399 |
| 2.3.5.2.17 Total AGB | Total Aboveground Biomass; kg | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.5.2.18 BG root mass | Belowground root biomass; kg |  |
| 2.3.5.2.19 Sub-plot area | Sub-plot area; ha |  |
| 2.3.5.2.20 Sub-plot design | Sub-plot design; Circular |  |
| 2.3.5.2.21 AGB | Aboveground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.5.2.22 BGB | Belowground biomass; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.5.2.23 AGC | Aboveground carbon; Mg C ha-1 |  |
| 2.3.5.2.24 BGC | Belowground carbon; Mg C ha-1 |  |
| 2.3.5.2.25 Basal area | Basal area per ha; m2 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.5.2.26 AGB summed per plot | Aboveground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C14301 |
| 2.3.5.2.27 BGB summed per plot | Belowground biomass summed per plot; Mg ha-1 | http://id.agrisemantics.org/gacs/C30585 |
| 2.3.5.2.28 AGC summed per plot | Aboveground carbon summed per plot; Mg C ha-1 |  |
| 2.3.5.2.29 BGC summed per plot | Belowground carbon summed per plot; Mg C ha-1 |  |
| 2.3.5.2.30 Basal area summed per plot | Basal area summed per plot; m2 ha-1 | http://id.agrisemantics.org/gacs/C7164 |
| 2.3.5.2.31 source for density | Literature source for density |  |
| 2.3.5.2.32 source for AGB allometry | Literature source for Aboveground biomass allometry |  |
| 2.3.5.2.33 source for BGB allometry | Literature source for Belowground biomass allometry |  |
|  |  |  |
| 3. Keyword | Productivity, emission reduction, mangroves, ecological restoration, mitigation, climate change, tropics, carbon stock, blue carbon | |
| 4. Constrain information |  | |
| 4.1 Access | Restricted | |
| 6. Spatial representation information |  | |
| 6.1 Geographic extent | West Papua, Indonesia | |