**The Blue Carbon Continuum and Carbon Sequestration Efficiency: Evidence from China’s Mangrove–Salt Marsh–Seagrass Ecosystems**

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**Research data**

**Appendix A-1 Sampling sites and associated climatic data for soil organic carbon stocks along the South China coastal zone**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | Longitude | Latitude | Region | SOC (Mg C/ha) | AMT (℃) | AP (mm) | AMSST (℃) | Elevation(m) | Salinity (%) | TR(m) | Source |  |
| 1 | 21.586 | 108.179 | Zhenzhu Bay, Guangxi | 155 | 23.38 | 1901 | 25.05 | 2 | 33.2 | 4.18 | Li et al, 2018 |  |
| 2 | 21.593 | 108.188 | Sanya Bay, Hainan | 219 | 23.3 | 1485 | 25.55 | 4 | 33.2 | 1.56 | Xin et al, 2014 |  |
| 3 | 21.605 | 108.197 | Zhenzhu Bay, Guangxi | 87 | 23.34 | 1893 | 25.05 | 1 | 33.2 | 4.18 | Li et al, 2018 |  |
| 4 | 21.602 | 108.208 | Zhenzhu Bay, Guangxi | 89 | 23.33 | 1893 | 25.05 | 2 | 33.2 | 4.18 | Fu et al, 2021 |  |
| 5 | 21.613 | 108.231 | Zhenzhu Bay, Guangxi | 220 | 23.3 | 1885 | 25.05 | 2 | 33.2 | 4.18 | Tao et al, 2020b |  |
| 6 | 21.614 | 108.233 | Zhenzhu Bay, Guangxi | 172 | 23.3 | 1885 | 25.05 | 2 | 33.2 | 4.18 | Tao et al, 2020b |  |
| 7 | 21.614 | 108.243 | Zhenzhu Bay, Guangxi | 207 | 23.32 | 1866 | 25.05 | 1 | 33.2 | 4.18 | Tao et al, 2020b |  |
| 8 | 21.881 | 108.561 | Maowei Sea, Guangxi | 107 | 22.99 | 1732 | 24.85 | 3 | 33.2 | 4.16 | Fu et al, 2021 |  |
| 9 | 21.863 | 108.579 | Maowei Sea, Guangxi | 236 | 23.02 | 1757 | 24.85 | 1 | 33.2 | 4.18 | Meng et al, 2016 |  |
| 10 | 21.745 | 108.587 | Maowei Sea, Guangxi | 281 | 23.1 | 1862 | 24.95 | 7 | 33.2 | 4.18 | Tao et al, 2020a |  |
| 11 | 21.745 | 108.587 | Maowei Sea, Guangxi | 281 | 23.1 | 1862 | 24.95 | 7 | 33.2 | 4.16 | Tao et al, 2020a |  |
| 12 | 21.845 | 108.595 | Qingjiang Estuary, Guangxi | 328 | 23.02 | 1764 | 24.95 | 2 | 33.2 | 4.18 | Gan et al, 2013 |  |
| 13 | 21.797 | 108.871 | Maowei Sea, Guangxi | 148 | 23.01 | 1684 | 25.15 | 10 | 33.2 | 4.11 | Tao et al, 2020a |  |
| 14 | 21.566 | 109.099 | Lianzhou Bay, Guangxi | 28 | 23.19 | 1579 | 25.45 | 0 | 33.2 | 4.11 | Yang et al, 2017 |  |
| 15 | 21.578 | 109.099 | Nanliu Estuary, Guangxi | 129 | 23.19 | 1579 | 25.45 | 0 | 33.2 | 4.11 | Gan et al, 2013 |  |
| 16 | 21.578 | 109.103 | Nanliu Estuary, Guangxi | 183 | 23.19 | 1579 | 25.45 | 4 | 33.2 | 4.11 | Fu et al, 2021 |  |
| 17 | 19.769 | 109.257 | Xinying, Harbor, Hainan | 302 | 24.92 | 1470 | 26.45 | 3 | 33.2 | 3.35 | Xin et al, 2014 |  |
| 18 | 21.436 | 109.287 | Zhenzhu Bay, Guangxi | 58 | 23.32 | 1544 | 25.65 | 3 | 33.2 | 4.11 | Fu et al, 2021 |  |

**Appendix A-1 continued**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 21.573 | 109.673 | Dandou Sea, Guangxi | 208 | 23.18 | 1464 | 25.55 | 4 | 33.2 | 4.27 | Fu et al, 2021 |
| 20 | 21.567 | 109.75 | Yingluo Bay, Guangdong | 248 | 23.16 | 1478 | 25.55 | 3 | 33.2 | 4.27 | Gao et al, 2019 |
| 21 | 21.567 | 109.75 | Yingluo Bay, Guangdong | 298 | 23.16 | 1478 | 25.55 | 3 | 33.2 | 4.27 | Gao et al, 2019 |
| 22 | 21.568 | 109.756 | Yingluo Bay, Guangdong | 263 | 23.17 | 1470 | 25.55 | 2 | 33.2 | 4.27 | Fu et al, 2021 |
| 23 | 21.555 | 109.757 | Yingluo Bay, Guangdong | 38 | 23.2 | 1470 | 25.55 | 4 | 33.2 | 4.27 | Zhu et al, 2016 |
| 24 | 21.57 | 109.757 | Yingluo Bay, Guangdong | 280 | 23.17 | 1470 | 25.55 | 4 | 33.2 | 4.27 | Wang et al, 2013 |
| 25 | 21.561 | 109.758 | Yingluo Bay, Guangdong | 171 | 23.2 | 1470 | 25.55 | 4 | 33.2 | 4.27 | Zhu et al, 2016 |
| 26 | 21.567 | 109.758 | Yingluo Bay, Guangdong | 237 | 23.18 | 1470 | 25.55 | 6 | 33.2 | 4.27 | Wang et al, 2019 |
| 27 | 21.563 | 109.759 | Yingluo Bay, Guangdong | 210 | 23.2 | 1470 | 25.55 | 5 | 33.2 | 4.27 | Wang et al, 2019 |
| 28 | 21.48 | 109.76 | Shankou, Guangxi | 90 | 23.27 | 1475 | 25.65 | 0 | 33.2 | 4.27 | Xia et al, 2017 |
| 29 | 21.564 | 109.76 | Yingluo Bay, Guangdong | 262 | 23.2 | 1470 | 25.55 | 3 | 33.2 | 4.27 | Wang et al, 2013 |
| 30 | 21.565 | 109.76 | Yingluo Bay, Guangdong | 241 | 23.2 | 1470 | 25.55 | 4 | 33.2 | 4.27 | Wang et al, 2019 |
| 31 | 21.565 | 109.76 | Yingluo Bay, Guangdong | 110 | 23.2 | 1470 | 25.55 | 4 | 33.2 | 4.27 | Zhu et al, 2016 |
| 32 | 21.495 | 109.765 | Yingluo Bay, Guangdong | 76 | 23.2 | 1476 | 25.65 | 16 | 33.2 | 4.27 | Fu et al, 2021 |
| 33 | 21.489 | 109.768 | Shankou, Guangxi | 118 | 23.2 | 1476 | 25.65 | 0 | 33.2 | 4.27 | Xia et al, 2015 |
| 34 | 21.566 | 109.768 | Yingluo Bay, Guangdong | 184 | 23.2 | 1470 | 25.55 | 4 | 33.2 | 4.27 | Wang et al, 2013 |
| 35 | 21.566 | 109.769 | Yingluo Bay, Guangdong | 95 | 23.2 | 1470 | 25.55 | 1 | 33.2 | 4.27 | Lu et al, 2014 |
| 36 | 21.566 | 109.769 | Yingluo Bay, Guangdong | 116 | 23.2 | 1470 | 25.55 | 3 | 33.2 | 4.27 | Lu et al, 2014 |
| 37 | 21.546 | 109.771 | Yingluo Bay, Guangdong | 287 | 23.21 | 1473 | 25.55 | 5 | 33.2 | 4.27 | Wang et al, 2019 |
| 38 | 21.553 | 109.772 | Yingluo Bay, Guangdong | 276 | 23.21 | 1473 | 25.55 | 9 | 33.2 | 4.27 | Wang et al, 2013 |
| 39 | 21.535 | 109.779 | Yingluo Bay, Guangdong | 188 | 23.22 | 1474 | 25.55 | 3 | 33.2 | 4.27 | Wang et al, 2013 |
| 40 | 21.532 | 109.78 | Yingluo Bay, Guangdong | 167 | 23.22 | 1474 | 25.55 | 1 | 33.2 | 4.27 | Wang et al, 2019 |
| 41 | 21.501 | 109.786 | Yingluo Bay, Guangdong | 82 | 23.2 | 1476 | 25.65 | 0 | 33.2 | 4.27 | Fu et al, 2021 |
| 42 | 21.519 | 109.786 | Yingluo Bay, Guangdong | 64 | 23.24 | 1474 | 25.55 | 0 | 33.2 | 4.27 | Zhu et al, 2016 |
| **Appendix A-1 continued** | | |  |  |  |  |  |  |  |
| 43 | 21.526 | 109.788 | Yingluo Bay, Guangdong | 159 | 23.23 | 1474 | 25.55 | 0 | 33.2 | 4.27 | Zhu et al, 2016 |
| 44 | 21.53 | 109.79 | Yingluo Bay, Guangdong | 59 | 23.23 | 1474 | 25.55 | 0 | 33.2 | 4.27 | Zhu et al, 2016 |
| 45 | 20.97 | 109.82 | Liusha Bay, Guangdong | 64.93 | 23.6 | 1750 | 25.9 | 2 | 33.1 | 3.1 | Jiang et al, 2020 |
| 46 | 21.67 | 109.85 | Yinglei Bay, Guangxi | 190 | 23.6 °C | 2000 | 26.2 | 1 | 30 | 3 | Xia et al, 2022 |
| 47 | 21.433 | 109.91 | Zhangjiang Estuary, Guangdong | 270 | 23.34 | 1892 | 25.65 | 2 | 33.2 | 1.23 | Hu et al, 2019a |
| 48 | 18.39 | 110.02 | Xincun Bay, Hainan | 34 | 24.5 °C | 1500 | 26.3 | 1 | 32 | 0.8 | Xia et al, 2022 |
| 49 | 18.4 | 110.03 | Xincun Bay, Hainan | 54 | 24.5 °C | 1500 | 26.5 | 1 | 32 | 0.8 | Xia et al, 2022 |
| 50 | 20.997 | 110.152 | Zhanjiang, Guangdong | 116 | 23.67 | 1423 | 25.85 | 1 | 32.9 | 2.78 | Fu et al, 2021 |
| 51 | 20.939 | 110.162 | Leizhou Peninsula, Guangdong | 90 | 23.72 | 1418 | 25.85 | 0 | 32.9 | 2.78 | Gao et al, 2017 |
| 52 | 20.94 | 110.163 | Leizhou Peninsula, Guangdong | 84 | 23.72 | 1418 | 25.85 | 0 | 32.9 | 2.78 | Feng et al, 2019 |
| 53 | 20.952 | 110.166 | Leizhou Peninsula, Guangdong | 100 | 23.71 | 1420 | 25.85 | 1 | 32.9 | 2.78 | Fu et al, 2021 |
| 54 | 20.903 | 110.169 | Leizhou Peninsula, Guangdong | 94 | 23.76 | 1416 | 25.85 | 2 | 32.9 | 2.78 | Zhu et al, 2016 |
| 55 | 20.878 | 110.184 | Leizhou Peninsula, Guangdong | 116 | 23.79 | 1416 | 25.85 | 0 | 32.9 | 2.78 | Zhu et al, 2016 |
| 56 | 21.009 | 110.189 | Zhanjiang, Guangdong | 226 | 23.65 | 1426 | 25.85 | 0 | 32.9 | 2.78 | Hu et al, 2019a |
| 57 | 21.076 | 110.213 | Leizhou Peninsula, Guangdong | 69 | 23.59 | 1433 | 25.75 | 0 | 32.8 | 2.78 | Zhu et al, 2016 |
| 58 | 21.041 | 110.243 | Leizhou Peninsula, Guangdong | 90 | 23.62 | 1435 | 25.75 | 1 | 32.8 | 2.78 | Zhu et al, 2016 |
| 59 | 21.08 | 110.279 | Leizhou Peninsula, Guangdong | 77 | 23.58 | 1429 | 25.75 | 0 | 32.8 | 2.78 | Zhu et al, 2016 |
| 60 | 21.23 | 110.38 | Donghai Island, Guangdong | 33.8 | 23.1 | 1820 | 24.5 | 2 | 28.5 | 2.8 | Jiang et al, 2020 |
| 61 | 20.661 | 110.397 | Leizhou Peninsula, Guangdong | 75 | 23.98 | 1404 | 25.65 | 1 | 32.9 | 2.78 | Zhu et al, 2016 |
| 62 | 20.002 | 110.54 | Dongzhai Harbor, Hainan | 262 | 24.53 | 1575 | 25.65 | 1 | 33 | 2.23 | Huang et al, 2017 |
| 63 | 19.975 | 110.543 | Dongzhai Harbor, Hainan | 292 | 24.55 | 1580 | 25.65 | 1 | 33 | 2.23 | Huang et al, 2017 |
| 64 | 19.981 | 110.548 | Dongzhai Harbor, Hainan | 433 | 24.56 | 1578 | 25.55 | 1 | 33 | 2.78 | Wang et al, 2019 |

**Appendix A-1 continued**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 65 | 19.971 | 110.551 | Dongzhai Harbor, Hainan | 273 | 24.57 | 1582 | 25.65 | 2 | 33 | 2.23 | Huang et al, 2017 |
| 66 | 20.006 | 110.557 | Dongzhai Harbor, Hainan | 244 | 24.54 | 1575 | 25.65 | 0 | 33 | 2.23 | Xiong et al, 2018a |
| 67 | 19.979 | 110.563 | Dongzhai Harbor, Hainan | 250 | 24.54 | 1582 | 25.55 | 0 | 33 | 2.23 | Gao et al, 2018 |
| 68 | 19.948 | 110.579 | Dongzhai Harbor, Hainan | 341 | 24.56 | 1590 | 25.55 | 3 | 33 | 2.23 | Xiong et al, 2018a |
| 69 | 19.929 | 110.589 | Dongzhai Harbor, Hainan | 220 | 24.58 | 1598 | 25.55 | 2 | 33 | 2.23 | Xin et al, 2014 |
| 70 | 19.93 | 110.589 | Dongzhai Harbor, Hainan | 206 | 24.58 | 1598 | 25.55 | 3 | 33 | 2.23 | Xin et al, 2014 |
| 71 | 19.937 | 110.597 | Dongzhai Harbor, Hainan | 281 | 24.59 | 1598 | 25.55 | 0 | 33 | 2.23 | Xiong et al, 2018b |
| 72 | 19.916 | 110.599 | Dongzhai Harbor, Hainan | 331 | 24.6 | 1596 | 25.55 | 1 | 33 | 2.23 | Wang et al, 2019 |
| 73 | 19.928 | 110.612 | Dongzhai Harbor, Hainan | 99 | 24.59 | 1596 | 25.55 | 0 | 33 | 2.23 | Fu et al, 2021 |
| 74 | 19.978 | 110.614 | Dongzhai Harbor, Hainan | 249 | 24.55 | 1575 | 25.55 | 0 | 33 | 2.23 | Wang et al, 2019 |
| 75 | 19.924 | 110.618 | Dongzhai Harbor, Hainan | 343 | 24.59 | 1588 | 25.55 | 1 | 33 | 2.23 | Wang et al, 2019 |
| 76 | 19.6 | 110.797 | Qinglan Bay, Hainan | 261 | 24.73 | 1704 | 25.55 | 3 | 33.2 | 1.56 | Fu et al, 2021 |
| 77 | 19.61 | 110.798 | Qinglan Bay, Hainan | 447 | 24.74 | 1675 | 21.66 | 2 | 33.2 | 3.23 | Gao et al, 2019 |
| 78 | 21.474 | 111.02 | Maoming, Guangdong | 183 | 23.42 | 1541 | 18.38 | 4 | 32.6 | 2.78 | Hu et al, 2019a |
| 79 | 21.932 | 112.386 | Zhenhai Bay, Guangdong | 228 | 23.41 | 1783 | 24.85 | 3 | 31.3 | 2.26 | Fu et al, 2021 |
| 80 | 22.124 | 113.023 | Jiangmeng, Guangdong | 197 | 23.37 | 1655 | 17.83 | 2 | 27.9 | 3.35 | Hu et al, 2019a |
| 81 | 22.654 | 113.55 | Sanmin Island, Guangdong | 183 | 23.02 | 1424 | 23.95 | 1 | 24.8 | 2.27 | Wu et al, 2014 |
| 82 | 22.517 | 113.588 | Zhongshan, Guangdong | 264 | 23.17 | 1421 | 17.42 | 4 | 24.9 | 3.35 | Hu et al, 2019a |
| 83 | 22.434 | 113.622 | Qi’ao Island, Guangdong | 288 | 23.26 | 1429 | 17.6 | 5 | 25.3 | 3.35 | Hu et al, 2019a |
| 84 | 22.43 | 113.624 | Qi’ao Island, Guangdong | 91 | 23.24 | 1450 | 24.15 | 9 | 25.3 | 2.27 | Yu et al, 2020 |
| 85 | 22.44 | 113.625 | Qi’ao Island, Guangdong | 184 | 23.26 | 1426 | 24.15 | 0 | 25.3 | 2.27 | Hu et al, 2019b |
| 86 | 22.428 | 113.626 | Qi’ao Island, Guangdong | 91 | 23.24 | 1450 | 24.15 | 4 | 25.3 | 2.27 | Yu et al, 2020 |

**Appendix A-1 continued**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 87 | 22.429 | 113.629 | Qi’ao Island, Guangdong | 110 | 23.24 | 1450 | 24.15 | 0 | 25.3 | 2.27 | Yu et al, 2020 |
| 88 | 22.425 | 113.634 | Qi’ao Island, Guangdong | 162 | 23.23 | 1450 | 24.25 | 3 | 25.3 | 2.27 | Hu et al, 2019b |
| 89 | 22.613 | 113.649 | Guanzhou, Guangdong | 237 | 23.09 | 1424 | 17.19 | 2 | 24.8 | 3.35 | Hu et al, 2019a |
| 90 | 22.528 | 114 | Shenzhen Bay, Guangdong | 225 | 23.23 | 1389 | 24.35 | 1 | 25.7 | 2.21 | Hu et al, 2019a |
| 91 | 22.525 | 114.01 | Shenzhen Bay, Guangdong | 49 | 23.25 | 1389 | 24.35 | 3 | 25.7 | 2.21 | Lunstrum et al, 2014 |
| 92 | 22.519 | 114.025 | Shenzhen Bay, Guangdong | 190 | 23.24 | 1385 | 25.55 | 1 | 25.7 | 1.23 | Hu et al, 2019a |
| 93 | 22.519 | 114.025 | Shenzhen Bay, Guangdong | 190 | 23.24 | 1385 | 17.76 | 2 | 25.7 | 2.43 | Lunstrum et al, 2014 |
| 94 | 22.488 | 114.028 | Shenzhen Bay, Guangdong | 254 | 23.28 | 1387 | 17.64 | 2 | 25.7 | 3.35 | Hu et al, 2019a |
| 95 | 22.512 | 114.03 | Maipo, Hong Kong | 225 | 23.27 | 1383 | 17.76 | 4 | 25.7 | 3.35 | Chen et al, 2010 |
| 96 | 22.494 | 114.032 | Maipo, Hong Kong | 234 | 23.28 | 1384 | 17.64 | 1 | 25.7 | 3.35 | Chen et al, 2010 |
| 97 | 22.5 | 114.033 | Shenzhen Bay, Guangdong | 162 | 23.27 | 1383 | 24.45 | 0 | 25.7 | 2.21 | Mao et al, 2011 |
| 98 | 22.828 | 114.769 | Shenzhen Bay, Guangdong | 574 | 22.91 | 1442 | 17.12 | 3 | 30.3 | 3.45 | Hu et al, 2019a |
| 99 | 23.494 | 116.855 | Zhangjiang Estuary, Fujian | 80 | 22.23 | 1235 | 22.75 | 0 | 32.2 | 1.67 | Feng et al, 2017 |
| 100 | 23.493 | 116.856 | Zhangjiang Estuary, Fujian | 147 | 22.23 | 1235 | 22.75 | 0 | 32.2 | 1.67 | Sun et al, 2018 |
| 101 | 23.465 | 116.874 | Chaoshan, Guangdong | 143 | 22.24 | 1237 | 16.01 | 1 | 32.2 | 2.23 | Hu et al, 2019a |
| 102 | 23.546 | 116.92 | Chaoshan, Guangdong | 321 | 22.17 | 1230 | 15.78 | 1 | 32.2 | 3.35 | Hu et al, 2019a |
| 103 | 23.883 | 117.383 | Zhangjiang Estuary, Fujian | 105 | 21.73 | 1149 | 21.95 | 13 | 32 | 2.99 | Gao et al, 2018 |
| 104 | 23.883 | 117.383 | Zhangjiang Estuary, Fujian | 88 | 21.73 | 1149 | 21.95 | 13 | 32 | 2.99 | Gao et al, 2018 |
| 105 | 23.927 | 117.414 | Zhangjiang Estuary, Fujian | 115 | 21.86 | 1173 | 21.95 | 0 | 32 | 2.99 | Feng et al, 2017 |
| 106 | 23.928 | 117.415 | Zhangjiang Estuary, Fujian | 88 | 21.86 | 1173 | 24.95 | 2 | 32 | 4.27 | Feng et al, 2017 |
| 107 | 23.93 | 117.415 | Zhangjiang Estuary, Fujian | 129 | 21.86 | 1173 | 21.95 | 0 | 32 | 2.99 | Wang et al, 2019 |

**Appendix A-1 continued**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 108 | 23.975 | 117.415 | Qi’ao Island, Guangdong | 114 | 16.95 | 1052 | 17.55 | 3 | 16.1 | 3.73 | Hu et al, 2019a |
| 109 | 23.921 | 117.417 | Zhangjiang Estuary, Fujian | 104 | 21.86 | 1169 | 21.95 | 8 | 32 | 2.99 | Fu et al, 2021 |
| 110 | 23.923 | 117.419 | Zhangjiang Estuary, Fujian | 149 | 21.86 | 1159 | 21.95 | 0 | 32 | 2.99 | Wang et al, 2019 |
| 111 | 23.918 | 117.423 | Zhangjiang Estuary, Fujian | 102 | 21.78 | 1159 | 22.05 | 0 | 32 | 2.99 | Wang et al, 2019 |
| 112 | 23.72 | 117.43 | Dongcan Harbor, Guangdong | 27.35 | 25.3 | 2010 | 22.8 | 2 | 22.4 | 2.2 | Jiang et al, 2020 |
| 113 | 23.929 | 117.438 | Zhangjiang Estuary, Fujian | 64 | 21.88 | 1159 | 22.05 | 0 | 32 | 2.99 | Feng et al, 2017 |
| 114 | 23.927 | 117.444 | Zhangjiang Estuary, Fujian | 64 | 21.86 | 1159 | 21.95 | 2 | 32 | 2.99 | Feng et al, 2017 |
| 115 | 23.929 | 117.446 | Zhangjiang Estuary, Fujian | 81 | 21.87 | 1147 | 22.05 | 0 | 32 | 2.99 | Feng et al, 2017 |
| 116 | 23.928 | 117.452 | Zhangjiang Estuary, Fujian | 107 | 21.87 | 1145 | 22.05 | 0 | 32 | 2.99 | Li et al, 2018 |
| 117 | 24.449 | 117.909 | Jiulong Estuary, Fujian | 162 | 21.43 | 1262 | 21.55 | 3 | 31.6 | 3.66 | Fu et al, 2021 |
| 118 | 24.394 | 117.911 | Jiulong Estuary, Fujian | 150 | 21.46 | 1254 | 21.65 | 5 | 31.6 | 3.66 | Chen et al, 2018 |
| 119 | 24.395 | 117.912 | Jiulong Estuary, Fujian | 130 | 21.46 | 1254 | 21.65 | 4 | 31.6 | 3.66 | Chen et al, 2018 |
| 120 | 24.394 | 117.921 | Jiulong Estuary, Fujian | 170 | 21.46 | 1254 | 21.65 | 5 | 31.6 | 3.66 | Chen et al, 2018 |
| 121 | 24.405 | 117.921 | Jiulong Estuary, Fujian | 162 | 21.45 | 1254 | 22.75 | 1 | 31.6 | 3.35 | Chen et al, 2018 |
| 122 | 24.957 | 118.688 | Quanzhou Bay, Fujian | 108 | 20.78 | 1162 | 21.15 | 3 | 31.1 | 4.19 | Fu et al, 2021 |
| 123 | 24.932 | 118.697 | Quanzhou Bay, Fujian | 72 | 20.78 | 1144 | 21.65 | 2 | 31.1 | 2.23 | Fu et al, 2021 |
| 124 | 25.987 | 119.426 | Minjiang Estuary, Fujian | 174 | 20.55 | 1294 | 20.25 | 2 | 30 | 4.21 | Wang et al, 2018 |
| 125 | 25.995 | 119.43 | Minjiang Estuary, Fujian | 162 | 20.55 | 1294 | 20.25 | 1 | 30 | 4.21 | Wang et al, 2018 |
| 126 | 25.994 | 119.431 | Minjiang Estuary, Fujian | 148 | 20.55 | 1294 | 20.25 | 2 | 30 | 4.21 | Wang et al, 2018 |
| 127 | 25.978 | 119.442 | Minjiang Estuary, Fujian | 150 | 20.54 | 1288 | 20.25 | 2 | 30 | 4.21 | Wang et al, 2018 |
| 128 | 25.968 | 119.443 | Minjiang Estuary, Fujian | 77 | 20.54 | 1282 | 20.25 | 2 | 30 | 4.21 | Wang et al, 2015 |
| 129 | 25.67 | 119.485 | Luoyuan Bay, Fujian | 78 | 20.49 | 1187 | 20.55 | 2 | 30.4 | 4.26 | Ye et al, 2014 |
| 130 | 26.034 | 119.614 | Minjiang Estuary, Fujian | 265 | 20.48 | 1303 | 20.45 | 1 | 30.2 | 4.21 | He et al, 2020 |
| **Appendix A-1 continued** | | |  |  |  |  |  |  |  |  |  |
| 131 | 26.038 | 119.618 | Minjiang Estuary, Fujian | 167 | 20.48 | 1303 | 20.45 | 1 | 30.2 | 4.21 | Jin et al, 2017 |
| 132 | 26.035 | 119.62 | Minjiang Estuary, Fujian | 256 | 20.48 | 1303 | 20.45 | 2 | 30.2 | 4.21 | Wang et al, 2018 |
| 133 | 26.022 | 119.624 | Minjiang Estuary, Fujian | 158 | 20.46 | 1304 | 20.55 | 1 | 30.2 | 4.21 | Wang et al, 2018 |
| 134 | 26.032 | 119.626 | Minjiang Estuary, Fujian | 165 | 20.48 | 1304 | 20.45 | 1 | 30.2 | 4.21 | Fu et al, 2021 |
| 135 | 26.027 | 119.644 | Minjiang Estuary, Fujian | 204 | 20.46 | 1301 | 20.55 | 1 | 30.2 | 4.21 | Wang et al, 2018 |
| 136 | 26.026 | 119.654 | Minjiang Estuary, Fujian | 233 | 20.46 | 1304 | 20.55 | 1 | 30.2 | 4.21 | Wang et al, 2018 |
| 137 | 26.023 | 119.654 | Minjiang Estuary, Fujian | 219 | 20.46 | 1304 | 20.55 | 1 | 30.2 | 4.21 | Wang et al, 2018 |
| 138 | 26.021 | 119.667 | Minjiang Estuary, Fujian | 259 | 20.45 | 1306 | 20.55 | 1 | 30.2 | 4.21 | Wang et al, 2018 |
| 139 | 26.022 | 119.668 | Minjiang Estuary, Fujian | 97 | 20.45 | 1306 | 20.55 | 1 | 30.2 | 4.21 | Sun et al, 2018 |
| 140 | 26.768 | 120.062 | Xiapu, Fujian | 72 | 19.95 | 1260 | 20.25 | 2 | 29.7 | 4.08 | Fu et al, 2021 |
| 141 | 27.266 | 120.203 | Fuding, Fujian | 139 | 19.59 | 1415 | 19.95 | 1 | 29.5 | 4.08 | Yan et al, 2013 |
| 142 | 27.278 | 120.299 | Fuding, Fujian | 182 | 19.51 | 1343 | 19.95 | 2 | 29.5 | 4.08 | Yan et al, 2013 |
| 143 | 19.95 | 110.57° | Dongzhai Harbor | 240 | 24.5 | 1500 | 25.9 | 2 | 33 | 1 | Xia et al, 2022 |

**Appendix A-2**

**Appendix A-2 Variation in organic carbon content among different mangrove, salt marsh, and seagrass species**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number | Latitude | Longitude | Species | **organic carbon content** (%) | Source |
|
| 1 | 19.233 | 110.601 | *S. apetala* | 0.077 | Ding et al, 2014 |
| 2 | 19.557 | 110.835 | *S. apetala* | 0.0086 | Bao et al, 2013 |
| 3 | 19.617 | 110.783 | *S. apetala* | 0.019 | Ding et al, 2014 |
| 4 | 19.931 | 110.597 | *S. apetala* | 0.0225 | Zhang et al, 2012 |
| 5 | 19.953 | 110.588 | *S. apetala* | 0.0225 | Zhang et al, 2018 |
| 6 | 20.887 | 110.169 | *A. marina* | 0.0041 | Yang et al, 2014 |
| 7 | 20.951 | 110.166 | *S. apetala* | 0.01 | Fu et al, 2021 |
| 8 | 20.993 | 110.147 | *A.corniculatum* | 0.0188 | Yang et al, 2014 |
| 9 | 21.149 | 110.433 | *A. marina* | 0.006 | Yang et al, 2014 |
| 10 | 21.418 | 109.219 | *A. marina* | 0.0084 | Liu et al, 2017 |
| 11 | 21.48 | 109.76 | *A.corniculatum* | 0.0093 | Xia et al, 2017 |
| 12 | 21.489 | 109.768 | *A.corniculatum* | 0.0129 | Xia et al, 2015 |
| 13 | 21.492 | 109.761 | *A.corniculatum* | 0.0167 | Xia et al, 2015 |
| 14 | 21.494 | 109.763 | *K. candel* | 0.013 | Zhang et al, 2021 |
| 15 | 21.494 | 109.758 | *R. stylosa* | 0.0167 | Xia et al, 2015 |
| 16 | 21.495 | 109.765 | *B. gymnorrhiza* | 0.0087 | Xia et al, 2015 |
| 17 | 21.497 | 109.76 | *R. stylosa* | 0.022 | Zhang et al, 2021 |
| 18 | 21.498 | 109.761 | *B. gymnorrhiz* | 0.012 | Zhang et al, 2021 |
| **Appendix A-2 continued** | |  |  |  |  |
| 19 | 21.501 | 109.786 | *A. marina* | 0.0081 | Gan et al, 2013 |
| 20 | 21.519 | 109.786 | *A. marina* | 0.0066 | Zhu et al, 2016 |
| 21 | 21.526 | 109.788 | *A. marina* | 0.0141 | Zhu et al, 2016 |
| 22 | 21.53 | 109.79 | *A. marina* | 0.0076 | Zhu et al, 2016 |
| 23 | 21.546 | 109.763 | *A. marina* | 0.015 | Yu et al, 2021 |
| 24 | 21.547 | 109.764 | *A. marina* | 0.023 | Yu et al, 2021 |
| 25 | 21.548 | 109.764 | *A. marina* | 0.024 | Yu et al, 2021 |
| 26 | 21.555 | 109.757 | *A. marina* | 0.004 | Zhu et al, 2016 |
| 27 | 21.561 | 109.758 | *A. orniculatum* | 0.0162 | Zhu et al, 2016 |
| 28 | 21.565 | 109.76 | *A. orniculatum* | 0.0124 | Zhu et al, 2016 |
| 29 | 21.567 | 109.672 | *A. marina* | 0.0208 | Xia et al, 2015 |
| 30 | 21.573 | 109.673 | *A.corniculatum* | 0.0208 | Fu et al, 2021 |
| 31 | 21.574 | 109.763 | *A. marina* | 0.0038 | Yang et al, 2014 |
| 32 | 21.576 | 109.101 | *A.corniculatum* | 0.029 | Liu et al, 2017 |
| 33 | 21.578 | 109.099 | *A.corniculatum* | 0.0141 | Gan et al, 2013 |
| 34 | 21.579 | 109.101 | *A.corniculatum* | 0.0183 | Liu et al, 2017 |
| 35 | 21.615 | 109.016 | *S. alterliflora* | 0.01 | Wang et al, 2017 |
| 36 | 21.618 | 108.244 | *K. obovata* | 0.0146 | Xia et al, 2012 |
| 37 | 21.845 | 108.595 | *S. alterliflora* | 0.029 | Gan et al, 2013 |
| 38 | 21.854 | 108.577 | *A. ilicifolius* | 0.0183 | Xia et al, 2015 |
| 39 | 21.859 | 108.598 | *A.corniculatum* | 0.0183 | Xia et al, 2015 |
| 40 | 21.867 | 108.574 | *K. obovata* | 0.024 | Meng et al, 2016 |
| 41 | 21.932 | 112.386 | *A.corniculatum* | 0.0228 | Fu et al, 2021 |
| 42 | 22.423 | 113.617 | *S. apetala* | 0.0171 | Ye et al, 2018 |
| 43 | 22.502 | 114.034 | *A. marina* | 0.016 | Zhao et al, 2012 |
| **Appendix A-2 continued** | |  |  |  |  |
| 44 | 22.508 | 114.034 | *A. marina* | 0.0055 | Qiao et al, 2018 |
| 45 | 22.512 | 114.03 | *A. marina* | 0.0116 | Li et al, 2016 |
| 46 | 22.513 | 114.021 | *S. apetala* | 0.015 | Lunstrum, 2014 |
| 47 | 22.529 | 114.003 | *A. marina* | 0.0225 | Fu et al, 2020 |
| 48 | 23.467 | 116.874 | *K. obovata* | 0.016 | He et al, 2021 |
| 49 | 23.468 | 116.874 | *S. apetala* | 0.0088 | He et al, 2021 |
| 50 | 23.529 | 114.004 | *K. obovata* | 0.0198 | Chen et al, 2021 |
| 51 | 23.928 | 117.452 | *K. obovata* | 0.0107 | Li et al, 2018 |
| 52 | 24.392 | 117.905 | *K. obovata* | 0.0172 | Alongi et al, 2005 |
| 53 | 24.393 | 117.905 | *K. obovata* | 0.0172 | Chen et al, 2018 |
| 54 | 24.394 | 117.923 | *K. obovata* | 0.0153 | Gao et al, 2016 |
| 55 | 24.395 | 117.909 | *K. obovata* | 0.0153 | Chen et al, 2018 |
| 56 | 24.395 | 117.913 | *K. obovata* | 0.0136 | Chen et al, 2018 |
| 57 | 24.397 | 117.905 | *K. obovata* | 0.012 | Alongi et al, 2005 |
| 58 | 24.4 | 117.902 | *K. obovata* | 0.0149 | Alongi et al, 2005 |
| 59 | 24.796 | 118.652 | *S. alterniflora* | 0.0046 | Li et al, 2008 |
| 60 | 24.957 | 118.681 | *A.corniculatum* | 0.0062 | Chen et al, 2021 |
| 61 | 24.957 | 118.684 | *K. obovata* | 0.0051 | Chen et al, 2021 |
| 62 | 26.364 | 119.667 | *S. alterniflora* | 0.0076 | Ye et al, 2014 |
| 63 | 26.365 | 119.665 | *S. alterniflora* | 0.0076 | Ye et al, 2014 |

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