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| --- | --- | --- | --- | --- | --- |
| **Region** | **Area (km2)** | **Flux**  **(mol CO2 m-2 yr-1)** | **Flux**  **(g C yr-1)** | **Observation-based or model** | **Reference** |
| **North American Atlantic Coast (NAAC)** | | | | | |
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| **Gulf of Mexico (GoMex)** | | | | | |
| Whole Gulf of Mexico | 1.56✕106 | 0.19 ± 0.08 |  | Observation-based estimate | Robbins et al. 2014 |
| 0.71 ± 0.54 |  | Model (7-year average 2005-2010) | Xue et al. 2016 |
| Open Gulf of Mexico | 1.01✕106 | 0.48 ± 0.07 |  | Observation-based | Robbins et al. 2014 |
| 1.04 ± 0.46 |  | Model (7-year average 2005-2010) | Xue et al. 2016 |
| West Florida Shelf | 0.15✕106 | −0.37 ± 0.11 |  | Observation-based | Robbins et al. 2014 |
| −0.38 ± 0.48 |  | Model (7-year average 2005-2010) | Xue et al. 2016 |
| Northern Gulf of Mexico | 0.15✕106 | 0.44 ± 0.37 |  | Observation-based | Robbins et al. 2014 |
| 0.32 ± 0.74 |  | Model (7-year average 2005-2010) | Xue et al. 2016 |
| ?? | 0.96±3.7 |  | Observation-based | Huang et al. 2015 |
| ?? | 0.99±0.4 |  | Combination of in situ and satellite observations | Lohrenz et al. 2017 |
| Western Gulf of Mexico | 0.08✕106 | −0.18 ± 0.05 |  | Observation-based | Robbins et al. 2014 |
| −0.34 ± 0.32 |  | Model (7-year average 2005-2010) | Xue et al. 2016 |
| Mexico Shelf | 0.18✕106 | 0.09 ± 0.05 |  | Observation-based | Robbins et al. 2014 |
| 0.19 ± 0.35 |  | Model (7-year average 2005-2010) | Xue et al. 2016 |
| **North America Pacific Coast (NAPC)** | | | | | |
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| **North American Arctic (NAA)** | | | | | |
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**Table 16.1:** Regional estimates of air-sea CO2 flux from observations and regional models.