

**Table 1** Summary of  $\text{CaCO}_3$  flux estimates for the ocean updated from Berelson et al. (2007)

| Flux term                              | Flux estimate<br>$\text{mmol CaCO}_3 \text{ m}^{-2} \text{ d}^{-1}$ | Flux estimate<br>$\text{Pg C yr}^{-1}$ |
|--|---|--|
| Production in the euphotic zone        | 0.4–1.0   | 0.5–1.6                                |
| Export from the surface (models)       | 0.3–1.1   | 0.4–1.8                                |
| Dissolution from 200 to 1500 m         |   |  |
| Atlantic                               | 0.3   | 0.1                                    |
| Indian                                 | 1.1   | 0.3                                    |
| Pacific                                | 0.8   | 0.6                                    |
| Total                                  |   | 1.0                                    |
| Export to sediment traps below 2000 m* | $0.24 \pm 0.03$   | $0.4 \pm 0.05$                         |
| Dissolution on sea floor below 2000 m  | $0.24 \pm 0.17$   | $0.4 \pm 0.3$                          |
| Atlantic and Pacific only              |   |  |
| Burial in sediments                    | 0.08  | 0.1                                    |

\*Data from Honjo et al. (2008).