

Corrigendum to

“Feedbacks and responses of coral calcification on the Bermuda reef system to seasonal changes in biological processes and ocean acidification” published in Biogeosciences, 7, 2509–2530, doi:10.5194/bg-7-2509-2010, 2010

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Fig. 5. Note: The Fig. 5 caption incorrectly referred to a panel (d). The caption should read as follows.

(a) Annual composite of rates of NEC_{reef} ($\text{g CaCO}_3 \text{ m}^{-2} \text{ d}^{-1}$; green line) and NEP_{reef} ($\text{g C m}^{-2} \text{ d}^{-1}$; blue line) for the Bermuda reef using seawater TA and DIC data from Hog Reef and BATS, and the alkalinity anomaly-water mass residence technique. Positive NEC_{reef} values represent net calcification, and negative values represent net dissolution, with the zero line denote by grey dashed line. Positive NEP_{reef} values represent net heterotrophy, and negative values represent net autotrophy, with the zero line denote by grey dashed line. (b) Annual composite and comparison of surface seawater $[\text{CO}_3^{2-}]$ data ($\mu\text{moles kg}^{-1}$; gray circles) and skeletal growth rates (i.e., G_{diploria} ; $\text{mg CaCO}_3 \text{ g}^{-1} \text{ d}^{-1}$) for Hog Reef and Twin Breakers (Table 2). (c) Repeat of (b) showing the CREF hypothesis superimposed on Hog Reef data. In early summer, enhancement of $[\text{CO}_3^{2-}]$ and calcification during June and July [green arrow] occurs due to positive NEP. In late summer, suppression during September and October on the Bermuda reef due to negative NEP (blue arrow). The dashed line illustrates the hypothesized $[\text{CO}_3^{2-}]$ in absence of the feedback on carbonate chemistry due to seasonal changes in NEP.

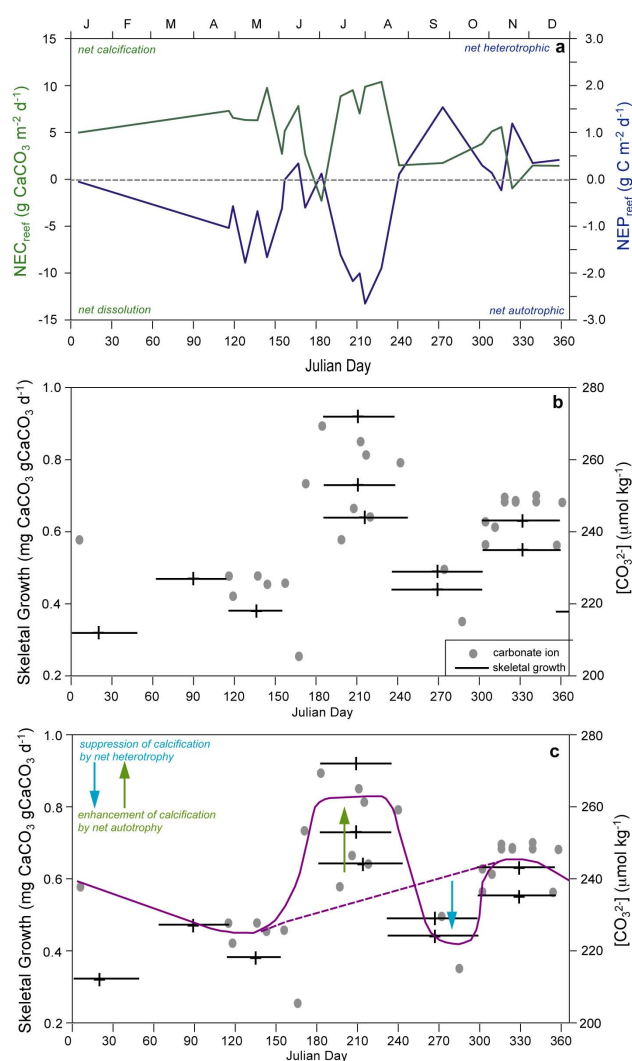


Fig. 5.



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Table 2. Note: A number of incorrect rates and day of year values were mistakenly published in Table 2 of the paper. The correct skeletal growth rates that were used in the published paper text and figures are tabulated in Table 2 below. In addition, we have added the skeletal growth rate values from Twin Breakers (Amat and Bates, 2003).

In situ rates of skeletal growth of *Diploria labyrinthiformis* from Hog Reef on the rim reef of Bermuda. Skeletal growth rate values from Twin Breakers (Amat and Bates, 2003) are also tabulated for comparison.

Date	Day of year	<i>n</i>	Skeletal Growth (mg CaCO ₃ g ⁻¹ d ⁻¹)	Skeletal Growth (mg CaCO ₃ cm ⁻² d ⁻¹)	SST (°C)	<i>Q</i> _{sw} (W m ⁻² d ⁻¹)
Hog Reef						
1 Jul 2002–21 Aug 2002	182–233	8	0.70 ± 0.09	0.84 ± 0.19	nm	6773 ± 1209
21 Aug 2002–19 Oct 2002	233–292	8	0.40 ± 0.07 ^a	0.73 ± 0.17 ^a	26.0 ± 0.7 ^b	5217 ± 1328
29 Oct 2002–22 Dec 2002	302–356	8	0.52 ± 0.15 ^a	0.87 ± 0.20 ^a	23.1 ± 0.9	3138 ± 701
22 Dec 2002–17 Feb 2003	356–48	6	0.28 ± 0.07 ^a	0.40 ± 0.13 ^a	20.2 ± 0.6	3014 ± 542
4 Mar 2003–27 Apr 2003	63–117	8	0.47 ± 0.08 ^a	0.72 ± 0.07 ^a	20.0 ± 0.5	4985 ± 999
27 Apr 2003–4 Jun 2003	117–155	8	0.38 ± 0.11 ^a	0.59 ± 0.09 ^a	22.2 ± 0.8	5890 ± 1800
1 Jul 2003–5 Sep 2003	182–248	8	0.64 ± 0.05 ^{a,c}	0.96 ± 0.15 ^{a,c}	28.4 ± 0.9	7368 ± 963
5 Sep 2003–6 Nov 2003	248–310	8	1.10 ± 0.12 ^c	0.62 ± 0.16 ^c	26.3 ± 1.1	4485 ± 1082
Twin Breakers						
1 Jul 2002–21 Aug 2002	182–233	8	0.92 ± 0.18	n/a	nm	6773 ± 1209
21 Aug 2002–19 Oct 2002	233–292	8	0.49 ± 0.09	n/a	nm	5217 ± 1328
29 Oct 2002–22 Dec 2002	302–356	8	0.63 ± 0.11	n/a	nm	3138 ± 701
22 Dec 2002–17 Feb 2003	356–48	6	0.32 ± 0.07	n/a	nm	3014 ± 542

Note: standard deviation of skeletal growth rates, sea surface temperature (SST) and *Q*_{sw} are also shown in the table. nm denotes not measured.

^a Skeletal growth rates coincided with measurements of seawater carbonate chemistry and used in Fig. 3;

^b Surface temperatures only available for day of year 287–329;

^c Several of the coral specimens had moderate signs of bleaching potentially suppressing coral skeletal growth;

^d Coral specimens were weighed on 5 September at BIOS for subsequent in situ deployment at Hog Reef but were held in aquaria at BIOS until after the passage of Hurricane Fabian on the 7 September 2004, and returned to Hog Reef on the 12 September 2004. These data was not included in the ranges reported in the text.