





**Figure 1.** DOC/DON ratio in the pore waters (lower panel) and in the BIGO chambers (upper panel). All values, measured at one station are presented as one box. The DOC/DON of  $\sim Inf.$  due to DON concentrations below detection were assumed as not a number and were excluded from the box plot.

**Table 1.** Calculated fluxes and gradients of DOC and optically active DOM components

Sampling system	Station /Parameter	$a_{CDOM}(325)^a$	$S_{275-295}^b$	Comp.1 ( $\times 10^{-2}$ ) <sup>c</sup>	Comp.2 <sup>c</sup>	Comp.3 <sup>c</sup>	Comp.4 <sup>c</sup>
BIGO	St.1	-0.1 $\pm$ 1.2	-0.016 $\pm$ 0.017	2.99 $\pm$ 0.15	0.04 $\pm$ 0.05	-0.24 $\pm$ 0.82	0.086 $\pm$ 0.112
	St.2	0.06 $\pm$ 0.16	-0.008 $\pm$ 0.009	2.69 $\pm$ 0.08	0.08 $\pm$ 0.03	0.09 $\pm$ 0.07	0.043 $\pm$ 0.044
	St.3	-1.4 $\pm$ 1.0	-0.013 $\pm$ 0.009	2.72 $\pm$ 0.04	0.07 $\pm$ 0.02	0.05 $\pm$ 0.23	0.046 $\pm$ 0.024
	St.4	0.8 $\pm$ 1.0	-0.004 $\pm$ 0.006	0.13 $\pm$ 0.02	0.04 $\pm$ 0.05	-0.44 $\pm$ 0.65	-0.005 $\pm$ 0.039
	St.5	-0.5 $\pm$ 1.3	-0.011 $\pm$ 0.016	2.65 $\pm$ 0.08	0.06 $\pm$ 0.04	0.14 $\pm$ 0.10	0.046 $\pm$ 0.043
	St.6	-0.6 $\pm$ 0.7	-0.009 $\pm$ 0.005	2.83 $\pm$ 0.10	0.08 $\pm$ 0.04	0.01 $\pm$ 0.44	0.039 $\pm$ 0.112

(a) CDOM gradient in  $m^{-1}d^{-1}$ , (b) CDOM spectral slope gradient in  $mm^{-1}d^{-1}$ , (c) FDOM gradients in  $QSE d^{-1}$ .