## Notes to authors

## bg-2014-527: Reconstruction of super-resolution fields of ocean pCO<sub>2</sub> and air-sea fluxes of CO<sub>2</sub> from satellite imagery in the Benguela Upwelling System (version 7)

Ms Version 7: Before final decision:

- Include a short statement (summarizing the explanation provided to the editor), clarifying the referee-query about pCO<sub>2</sub> and xCO<sub>2</sub>. This should follow the section on data description referring to use of GLOBALVIEW data (after line 240).
- Please check of the status of the "Sudre et al." ms before quoting and listing as reference (line 434, lines 548-9): is there further indication whether this ms. is yet accepted? doi? If not quote where appropriate as "pers. comm." or remove.
- "Nb" is not an accepted abbreviation for number : use "No." throughout; check tables.
- Ensure that <u>offshore</u> Benguela is referred to throughout e.g. line 708 insert "offshore". Your findings do not address the actual Benguela upwelling.
- The grammar and language usage must be improved throughout to give flow and better understanding to the text. Some obvious improvements are suggested:

Line No	Correct			
5	Bracket pCO <sub>2</sub>			
38	Remove "in particular"			
57	image			
63-64 improve	remove "we can find the work by"Takahashi et al. (2002,			
	2009) that interpolate			
72	Remove "Beside the Takahashi's works"			
73	Change to "recently been"			
75	Remove "later"			
77	approaches			
78	have been			
81	Remove "an"			
84	on direct remove "the"			
97	Remove "of"			
113	Comma after flow			
121	and Turiel			
122	allows study of its			
140	current			
149	flux			
153	descriptions			
168	Remove "more precisely"			
175	This paper			
237	Change to "We use values taken at the closest sea-level station			
	to the Benguela, located			
258	Change sentence order: sentence "Examples" before			
	sentence beginning "Results"			
268	Leave out "when dealing with CO <sub>2</sub> for instance"			
386	cruise			
396	Insert "With that functional"			
405	Change "like" to "such as"			

254	Change "with" to "to"		
468	carbonate		
478	"These" and "they" (line 482) – clarify? results of Montes et al.?		
492	Improve:concentrations (SST and Chl-a) with pCO <sub>2</sub> , is		
	performed in order to obtain a proxy for pCO <sub>2</sub> at high resolution		
	by using		
515	functional what? – word missing		
517	Wavelet		
590	ability to obtain		
653	MERIS. This is discussed in more depth in the next sections.		
	(delete bracket contents)		
684	Change "From use" to "Henceforward we use"		
681	slight		
698	Delete "will"		
749	Change "mentionedcombinations" to "above-mentioned		
	product combinations		
755	product		
757 onwards; fig 8	Clarify (also in label fig.8) whether you mean"compares the		
	spatial distribution of the pCO <sub>2</sub> infer values to the time averages		
	over 2006 and 2008 for the three product combinations"		
807	51%, and is more affected		
825	to examine the transition fronts		
828	Delete "One can see that"		
834	as happens in the ocean		
842	Delete "in particular"		
849	product		
859	Most days		
860	On some days		
862	fluctuations as		
866	Delete "on one hand,"		
882	due to cloudiness		
929	Delete "the fact"		
944	statistical		
948	Delete "that"		
961	scale		
963	given		
967	flux		
972	have also been obtained		
973	Use the word "capturing" not "catching"		
978	Replace "have obtained" with "show"		
984	Delete" From": These results indicate that		
985	will be only as good		
991	work		
992-3	on the extensionto larger areas in order to infer		
994 - end	Clumsy last sentence. Remove "us to perform an even "from		
331 0114	more in-situ measurements. Remove lines 996,997.		
	mere in electrication nemotic med 330,337.		