## Dear Authors

Thank-you for your revised manuscript. I am asking for minor revisions, mainly for clear meaning to readers of Ocean Science. Please remember that this is a journal for oceanographers; the majority are not remote sensing specialists. In particular, there can be confusion if words used in every-day English or other specific topics are used here with a different meaning specific to remote sensing. In such cases the specific remote-sensing meaning should be stated. Please edit according to suggestions in the following "Detailed comments". I would also suggest that you think carefully about which content detail is really necessary to support your results and findings.

Yours sincerely

John Huthnance (editor)

Dear Professor John Huthnance, honestly, thank you for your sincere support and for your excellent linguistic rectifications to improve the quality of this paper.

**Detailed comments** 

Line 11. "homologous" —> "corresponding"? Best to avoid "homologous" in the abstract and before its meaning in this context is defined.

Done

Line 13. Either ". . environment off southeastern Bahrain . ." or ". . environment southeast of Bahrain . ." (maybe "Bahrain Island")

**Done** 

Line 25. ". . sensors, it is difficult . ."

**Done** 

Line 30. "the higher" -> "more".

Done

Line 32. "homologous" -> "corresponding" or "respective"?

Done

Line 50. "seagrass beds can store twice as much as forests". Is it "twice as much" per unit area or as a global total?

Done

Line 100. Maybe better "... the orbits of these four satellites (Sentinel 2A and 2B, Landsat 8 and 9) are designed ... "to remind the reader after 8 lines.

Done

Lines 103-104 ". . analogous manner for relative spectral filters position and bandwidths between bands . .". Thank-you for this definition. Might it be simpler, e.g. "closely related spectral filter positions and bandwidths"?

Done

Lines 123, 275. In your response you say that the sediment-substrate is not transparent, so "clear" -> "pale", "light" or "bright"?

## Done

The "review" section 2 is quite long so a stand-alone section is appropriate. On the other hand the objectives are logically placed at the end of the Introduction where the need for the research is explained. Maybe a new sentence at line 117 would help, pointing to section 2 for further background and motivation for the research - but use your words not mine!

Done

Line 177. "very high pixel size" makes no sense and your response (bullet 1) refers to "high spatial resolution" not "high size" in relation to pixels. These problems with terminology can be avoided by giving (a range of) values (in metres for pixel size, nm for spectral resolution).

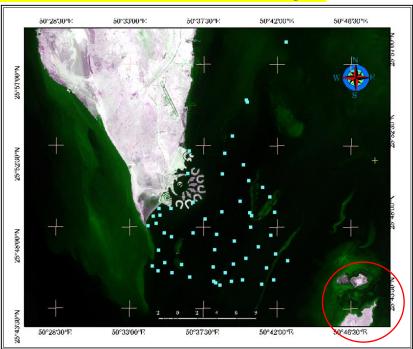
Done

Line 272. See comment on line 13.

## **Done**

Figure 3. Reviewer 1 asked for the rectangle to be extended to include Hawar Islands. I see no change to the figure but anyway I think the Hawar Islands are not relevant to the study. Maybe change the caption instead?

Yes, the rectangle was moved very slightly according to the GPS coordinates (Please, see the following map with sampling point positions), to cover our study site as indicated by the title of this Figure. Indeed, Hawar Islands (in the red circle) are far from our study site and are too close to the borders of the national waters of Qatar.



Line 307. "..., others scattered, or dense patches were a mixture.." does not read correctly. Maybe "...; other scattered or dense patches were a mixture.." but I don't know if this is what you mean.

## **Done**

Lines 321-322. ". . separated or mixed sample . ."?

Done

Line 332 end. ". . Lambertian"?

Done, clarification is added.

Line 463. "the MSI and OLI relative spectral response profiles" -> "the respective MSI and OLI spectral response profiles"?

Done

Line 464. "relatively" is a bit strange here. Maybe "band differ slightly (Fig. 6) . ." or "band differ somewhat (Fig. 6) . ."

Done

Line 489. Omit "relatively"? ["relative" to what?}

**Done** 

Line 498. "stands out relatively" -> "is relatively apparent"?

Done

Line 530. "around 0.29. Subsequently followed by HS and BA" -> "around 0.29, followed by HS and BA"?

**Done** 

Figure 7 (e-h). Please explain in the caption the thin cyan, blue, green, red and magenta lines common to these figures. (Maybe refer to figure 6?)

**Done** 

Line 539. "narrow" -> "weak" or "slight"?

Done

Line 550. "unlike" -> "varied"

Done

Line 587. Omit "and unchangeable"?

**Done** 

Line 598. I think you mean ". . (R2 of 0.99), VARI estimates with the MSI sensor exceed those estimated from OLI,"

**Done** 

Lines 605-606. "such as" is a bit awkward next to VARI. Maybe ". . VARI (e.g. vegetation cover species, canopy architecture and sun illumination geometry.) . ." or move this list (in parentheses) forward to after "factors"

**Done** 

Line 612. "are predicting similarly" -> "give similar estimates of"?

**Done** 

Line 616. "equal" -> "equal to"

Done

Line 634. ". . equation, fits were insignificant (R2 of 0.40) but . ."?

Line 655. "relatively identical" does not make sense. "Identical" is absolute and cannot be qualified. Maybe "very close"?

**Done** 

Line 684. "homogenize" – "homogenized" or "homogeneous". Done

Lines 703-704. I think ". . (diffusion and absorption). Despite corrections of all these anomalies before the information extraction, biases still occur . ." reads better.

Done

Line 711. "restrictions" -> "aspects" or "factors"?

Done

Line 773. ". . rather than mapping . ." Done

Line 775. "of" -> "to"

Done

Line 776. ". . transformations showing that . ."?

Done

Line 787. Not "dynamic". Maybe "distribution"?

Around Line 798. There needs to be a statement about Data Availability. See https://www.ocean-science.net/policies/data\_policy.html Done.