

KORESPONDENSI PAPER

Judul : Carbon dioxide flux in the Java Sea, estimated from satellite measurements

Jurnal : Remote Sensing Applications: Society and Environment / Elsevier (Q1)

No	Aktivitas	Tanggal	Keterangan	Lamp.
1	Submission	13/12/2019	Successfully received: submission Carbon dioxide flux in the Java Sea, estimated from satellite measurements for Remote Sensing Applications: Society and...	1
2	Hasil review ronde 1	19/03/2020	Revision requested for RSASE_2019_420 Major revision dengan 2 reviewer	2
3	Revision round 1 submitted	11/05/2020	Received revision RSASE_2019_420_R1 Balasan komentar reviewer terlampir	3
4	Hasil review ronde 2	23/06/2020	Revision Requested - RSASE_2019_420_R1 for Remote Sensing Applications: Society and Environment Minor revision	4
5	Revision round 2 submitted	11/05/2020	Received revision RSASE_2019_420_R2 Balasan komentar reviewer terlampir	5
4	Accepted	05/08/2020	Your manuscript RSASE_2019_420_R2 has been accepted	6
7	Published	23/08/2020	[Share your article [RSASE_100376] published in Remote Sensing Applications: Society and Environment	7

Note : semua proses submission sampai published dilakukan melalui system. Email terlampir hanya report dari system.

Lampiran 1

Successfully received: submission Carbon dioxide flux in the Java Sea, estimated from satellite measurements for Remote Sensing Applications: Society and...

From: Remote Sensing Applications: Society and Environment (evisesupport@elsevier.com)

To: aninosi@yahoo.co.id

Date: Friday, December 13, 2019, 10:04 PM GMT+7

This message was sent automatically.

Ref: RSASE_2019_420

Title: Carbon dioxide flux in the Java Sea, estimated from satellite measurements

Journal: Remote Sensing Applications: Society and Environment

Dear Dr. Wirasatriya,

Thank you for submitting your manuscript for consideration for publication in Remote Sensing Applications: Society and Environment . Your submission was received in good order.

To track the status of your manuscript, please log into EVISE® at:

http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=RSASE and locate your submission under the header 'My Submissions with Journal' on your 'My Author Tasks' view.

Thank you for submitting your work to this journal.

Kind regards,

Remote Sensing Applications: Society and Environment

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.

Lampiran 2

Revision requested for RSASE_2019_420

From: Xiaoli Ding (evisesupport@elsevier.com)

To: aninosi@yahoo.co.id

Date: Thursday, March 19, 2020, 05:06 PM GMT+7

Ref: RSASE_2019_420

Title: Carbon dioxide flux in the Java Sea, estimated from satellite measurements

Journal: Remote Sensing Applications: Society and Environment

Dear Dr. Wirasatriya,

Thank you for submitting your manuscript to Remote Sensing Applications: Society and Environment . I have completed the review of your manuscript and a summary is appended below. The reviewers recommend reconsideration of your paper following major revision. I invite you to resubmit your manuscript after addressing all reviewer comments.

When resubmitting your manuscript, please carefully consider all issues mentioned in the reviewers' comments, outline every change made point by point, and provide suitable rebuttals for any comments not addressed.

To submit your revised manuscript:

- Log into EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jsp?JRNL_ACR=RSASE
- Locate your manuscript under the header 'My Submissions that need Revisions' on your 'My Author Tasks' view
- Click on 'Agree to Revise'
- Make the required edits
- Click on 'Complete Submission' to approve

What happens next?

After you approve your submission preview you will receive a notification that the submission is complete. To track the status of your paper throughout the editorial process, log in to Evise® at:

http://www.evise.com/evise/faces/pages/navigation/NavController.jsp?JRNL_ACR=RSASE.

Data in Brief (optional):

We invite you to convert your supplementary data (or a part of it) into an additional journal publication in Data in Brief, a multi-disciplinary open access journal. Data in Brief articles are a fantastic way to describe supplementary data and associated metadata, or full raw datasets deposited in an external repository, which are otherwise unnoticed. A Data in Brief article (which will be reviewed, formatted, indexed, and given a DOI) will make your data easier to find, reproduce, and cite.

You can submit to Data in Brief via the Remote Sensing Applications: Society and Environment submission system when you upload your revised Remote Sensing Applications: Society and Environment manuscript. To do so, complete the template and follow the co-submission instructions found here: www.elsevier.com/dib-template. If your Remote Sensing Applications: Society and Environment manuscript is accepted, your Data in Brief submission will automatically be transferred to Data in Brief for editorial review and publication.

Please note: an open access Article Publication Charge (APC) is payable by the author or research funder to cover the costs associated with publication in Data in Brief and ensure your data article is immediately and permanently free to access by all. For the current APC see: <https://www.elsevier.com/journals/data-in-brief/2352-3409/open-access-journal>

Please contact the Data in Brief editorial office at dib-me@elsevier.com or visit the Data in Brief homepage (www.journals.elsevier.com/data-in-brief/) if you have questions or need further information.

I look forward to receiving your revised manuscript as soon as possible.

Kind regards,

Professor. Ding
Editor-in-Chief
Remote Sensing Applications: Society and Environment

Comments from the editors and reviewers:
-Reviewer 1

-

The main goal of the paper is to quantify the ocean - atmosphere CO₂ fluxes in the Java Sea region. To reach the main objectives authors apply the typical for such study methodology and obtain finally the results that are quite similar to results of the previous studies for the western Pacific area. What is the novelty of the study or methods? What are the differences from similar previous studies? What is the accuracy of applied methods for flux estimation in the region under study? How they were validated?

It is well known that the CO₂ flux between ocean and the atmosphere is very sensitive to the air-sea pCO₂ difference estimation. Some uncertainties in estimations of the CO₂ air and sea concentrations lead obviously to mistakes of CO₂ flux estimations. In the study it is not clear which data have been used to derive the temporal and spatial variability of atmospheric CO₂ concentration (in space and time) and how e.g. the dissolved inorganic carbon (DIC) has been taken into account in calculating the CO₂ concentration in the sea water?

The discussion chapter is very short and needs deeper analysis of all obtained results.

The paper includes a lot of figures and maps. But not all figures are comprehensively discussed in the paper. Some maps are printed with low quality. I guess some part of these maps can be easily shifted into the supplemented materials.

Conclusion is also too short and must be extended.

The paper requires moderate English changes.

Specific comments

Line 64

" Ocean has a dominant role in the global carbon (CO₂) cycle. " Do you talk about CO₂ fluxes or carbon storage? If you talk about CO₂ fluxes such information is outdated. It is should be in agreement with the recent IPCC report. The references to recent studies are required.

Line 67-70

It is also not obvious. Reference is too old. References to modern studies are necessary.

Line 82 The references are too old...

Line 160 El Nino 2015-16

Line 181 What is about DIC?

Line 196 ONI is based on SST in Nino3.4 . Nino4 is more suitable for the study area.

The sentence needs revision.

Line 232 sea - atmosphere

Line 264 The equation is written both for organic carbon and DIC, isn't it? What is about PIC?

Did you make any validation of applied method? Or you used it as a "black box"?

Line 266 derived or measured?

Line 357-364 it is actually discussion, not results

-Reviewer 2

-

MethodsX (optional)

We invite you to submit a method article alongside your research article. This is an opportunity to get full credit for the time and money you have spent on developing research methods, and to increase the visibility and impact of your work.

If your research article is accepted, your method article will be automatically transferred over to the open access journal, MethodsX, where it will be editorially reviewed and published as a separate method article upon acceptance. Both articles will be linked on ScienceDirect.

Please use the MethodsX template available here when preparing your article: <https://www.elsevier.com/MethodsX-template>. Open access fees apply.

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

One or more files have been made available to you as part of this decision. You can access them by clicking on the link(s) below.

[Review_of_RSASE_2019_420.pdf](#)

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.

Lampiran 3

Received revision RSASE_2019_420_R1

From: Remote Sensing Applications: Society and Environment (evisesupport@elsevier.com)

To: aninosi@yahoo.co.id

Date: Monday, May 11, 2020, 01:57 AM GMT+7

This message was sent automatically.

Ref: RSASE_2019_420_R1

Title: Carbon dioxide flux in the Java Sea estimated from satellite measurements

Journal: Remote Sensing Applications: Society and Environment

Dear Dr. Wirasatriya,

Thank you for submitting your revised manuscript for consideration for publication in Remote Sensing Applications: Society and Environment . Your revision was received in good order.

To track the status of your manuscript, please log into EVISE®

http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=RSASE and locate the submission under the header 'My Submissions with Journal' on your 'My Author Tasks' view.

We appreciate your submitting your revision to this journal.

Kind regards,

Remote Sensing Applications: Society and Environment

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.

General Response : *We would like to thanks to both reviewers for suggestions, comments, questions and criticisms that improve the quality of this manuscript. We have added more explanation to describe the figures and added latest references (< 10 years) to make this study become more up to date.*

Reviewer 1

The main goal of the paper is to quantify the ocean - atmosphere CO₂ fluxes in the Java Sea region. To reach the main objectives authors apply the typical for such study methodology and obtain finally the results that are quite similar to results of the previous studies for the western Pacific area. What is the novelty of the study or methods? What are the differences from similar previous studies?

R: *Thank you very much for your questions. We have declared more clearly about the novelties in the end of the introduction part (L257-267). Our study area is Java Sea, marginal sea that has different characteristic with the western Pacific area. The problem of this study started by the distribution of CO₂ flux in the Indonesian Seas which was left blank by Takahasi et al. (2009) due to the absence of pCO₂ measurements (L194). By using sea surface pCO₂ from 1984 to 2013 Kartadikaria et al. (2015) obtained Indonesian Seas majorly act as the carbon source (L209-216). However, due to the weakness of observational data which is sparse and discontinue, they cannot show the distribution of CO₂ flux spatially and temporally. **The present study comes to fill those gaps.** Since we use remote sensing data that has wide coverage and continuous monitoring, we could firstly show the spatial and temporal variation of CO₂ flux in the Java Sea. It is also the first study to examine the key parameters at the sea surface (SST, Chl-a, Sea surface salinity, and surface wind) to obtain the most influencing parameter for carbon dioxide flux in the Java Sea. Furthermore, the effect of El Niño 2015-16 which is categorized by Super El Niño is also described in the present study. The reason why we only choose Java Sea and not for all Indonesian Seas as our study area is related to reliability of the method and dataset that we used in this study that will be described below.*

What is the accuracy of applied methods for flux estimation in the region under study? How they were validated? It is well known that the CO₂ flux between ocean and the atmosphere is very sensitive to the air-sea pCO₂ difference estimation. Some uncertainties in estimations of the CO₂ air and sea concentrations lead obviously to

mistakes of CO₂ flux estimations. In the study it is not clear which data have been used to derive the temporal and spatial variability of atmospheric CO₂ concentration (in space and time) and how e.g. the dissolved inorganic carbon (DIC) has been taken into account in calculating the CO₂ concentration in the sea water?

R: Thank you very much for your questions and comments. We did not do validation for the method used for estimating CO₂ flux in the Java Sea since we have no observational data in the study area. However, we do careful about the accuracy of our method. Here is the reason. The algorithm used in the present study adopts Zhu et al. (2009) that has been used to estimate CO₂ flux in the South China Sea. They did validation by using observational data and the root mean square error (RMSE) of the estimated pCO₂ is only 4.6 μatm which ensure the high accuracy of this algorithm for estimating CO₂ flux in South China Sea (L228). Since Java Sea has similar characteristic with South China Sea (located close each other, shallow bathymetry and both areas are parts of Asia-Australia monsoon path), we used this algorithm to estimate CO₂ flux in Java Sea. We cannot expand our analysis for whole Indonesian Seas since the characteristics of the western Indonesian Seas is different with Eastern Indonesian Seas which may lead to the failure of CO₂ flux estimation by using this algorithm. This becomes the reason why our study area is limited only in Java Sea. The CO₂ flux estimates by this method refer to DIC, POC calculation can refer to Xie et al. (2019) which is beyond the scope of the present study.

The discussion chapter is very short and needs deeper analysis of all obtained results.

R: We have rearrange the structure of the paper to increase the length of the discussion.

The paper includes a lot of figures and maps. But not all figures are comprehensively discussed in the paper. Some maps are printed with low quality. I guess some part of these maps can be easily shifted into the supplemented materials.

R: Thank you very much for your comments. We have add longer descriptions to discuss all figures presented in this paper. The low quality figures are actually related to the limitation of satellite data to observe sea surface during the cloudy condition. Thus, during Northwest monsoon which is rainy season, many blank areas shown in Fig. 3 and 4. However, we still keep these figures, to give the information to the

readers that although many blank areas in the observation during northwest monsoon, we still can extract some values within the study area that can be used to construct time series plot shown in Fig. 10-14.

Conclusion is also too short and must be extended.

R: Thank you very much for your comment. We have added 2 points in the conclusion.

The paper requires moderate English changes.

R: Thank you very much for your comments. We have carefully checked the english to improve the revised manuscript.

Specific comments

Line 64

" Ocean has a dominant role in the global carbon (CO₂) cycle. " Do you talk about CO₂ fluxes or carbon storage? If you talk about CO₂ fluxes such information is outdated. It is should be in agreement with the recent IPCC report. The references to recent studies are required.

R: Thank you very much for you comments and suggestions. Recent studies has shown the importance of ocean for carbon storage. We have change it into carbon storage and add recent supporting references including the latest IPCC report (L124-158).

Line 67-70

It is also not obvious. Reference is too old. References to modern studies are necessary.

R: We have changed into the recent references i.e., Sabine et al., (2004); Khatiwala et al., (2009); Le Quéré et al. (2010); (Adams and Caldiera 2008). (L145-155)

Line 82 The references are too old...

R: We have changed into Takahashi et al. (2009) (L170).

Line 160 El Nino 2015-16

R: It is done. (L264)

Line 181 What is about DIC?

R: We do not have DIC data, but the algorithm used in the present study refer to DIC.

Line 196 ONI is based on SST in Nino3.4 . Nino4 is more suitable for the study area.
The sentence needs revision.

R: Thank you very much for your comments. We used Nino 3.4 index rather than Nono 4 index since the Niño 3.4 index is the most commonly used indices to define El Niño and La Niña events (<https://climatedataguide.ucar.edu/climate-data/nino-sst-indices-nino-12-3-34-4-oni-and-mi>). Nino 3.4 index is also been widely used to investigate the effect of ENSO to the variability of ocean phenomena within Indonesian Seas (e.g. Susanto and Marra, 2005; Iskandar et al. 2009; Wirasatriya et al. 2017, Setiawan et al. 2019,2020). We also have fixed the sentence. (L302-309)

Line 232 sea - atmosphere

R: It is done. (L361)

Line 264 The equation is written both for organic carbon and DIC, isn't it? What is about PIC?

R: It is refer to DIC, as also used by Feely et al. (2001); Tsai and Liu (2003); Takahashi et al. (2002) (L348-359). PIC is not the scope of the present study.

Did you make any validation of applied method? Or you used it as a "black box"?

R: We did not do any validation but we concern about the accuracy of the algorithm used in this study. Please see our response in the major comment for more explanation.

Line 266 derived or measured?

R: we changed into "calculated". (L397)

Line 357-364 it is actually discussion, not results

R: We have moved this part to discussion which makes the discussion longer. (L704-729)

Additional References

- Iskandar, I., S.A. Rao, and T. Tozuka. 2009. "Chlorophyll-a bloom along the southern coasts of Java and Sumatra during 2006.", *International Journal of Remote Sensing* 30(3): 663 - 671. doi: 10.1080/01431160802372309.
- Setiawan, R. Y., E. Setyobudi, A. Wirasatriya, A.S. Muttaqin, and L. Maslukah. 2019. "The Influence of Seasonal and Interannual Variability on Surface Chlorophyll-a Off the Western Lesser Sunda Islands." *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 12(11): 4191-4197. doi: 10.1109/JSTARS.2019.2948385.
- Setiawan, R.Y., A. Wirasatriya, U. Hernawan, S. Leung and I. Iskandar. 2020. "Spatio-temporal variability of surface chlorophyll-a in the Halmahera Sea and its relation to ENSO and the Indian Ocean Dipole". *International Journal of Remote Sensing*. 41(1): 284-299. Advance online publication. <https://doi.org/10.1080/01431161.2019.1641244>.
- Susanto, R.D., and J. Marra. 2005. "Effect of the 1997/98 El Nino on Chlorophyll-a Variability Along the Southern Coasts of Java and Sumatra." *Oceanography* (18) 4: 124-127.
- Xie, F., Z. Tao, X. Zhou, T. Lv, J. Wang. 2019. "Spatial and Temporal Variations of Particulate Organic Carbon Sinking Flux in Global Ocean from 2003 to 2018." *Remote Sens.*, 11, 2941, doi:10.3390/rs11242941

Reviewer 2

General comments:

The authors examine 3-year satellite observational data to study the seasonal variations of carbon dioxide flux in the Java Sea and its relationship with wind and SST. The methods described and results shown are convincing and publication worthy. Correlations between variables appear strong and the authors present suggested causality. Overall, there is a good story here and the regional variability is interesting. In my personal opinion, the manuscript is acceptable after revision. A more detailed list of comments and suggestions are provided below.

R: Thank you very much for your motivating comments. We have improved the manuscript by following your suggestions and corrections.

Minor Comments and Suggestions:

Title: delete the coma

R: It is done.

The unit font between text and Fig. 10-14 is not the same. The units in Fig. 10-14 should not be written in capital font.

R: Thank you very much for your corrections. It is done

Line 25: The Oceans play a pivotal role

R: It is done. (L32)

Line 26: Previous study (without the)

R: It is done. (L34)

Line 33: delete The parameter

R: It is done. (L40)

Line 36: ...sea level pressure were analyzed to calculate...

R: It is done. (L42)

Line 38: delete also

R: It is done. (L45)

Line 52: increased

R: It is done. (L64)

Line 64: The Oceans have...

R: It changes into The oceans play.... (L139)

Line 90: The Atlantic Ocean becomes

R: It is done. (L183)

Line 91: The Indian Ocean and Southern Ocean

R: It is done. (L185)

Line 93: The Pacific Ocean

R: It is done. (L187)

The authors should provide reference(s) for the sentences of Line 90-93.

R: We have modified the paragraph. It is belong to Takahashi et al. (2009). (L170)

Line 96: ...due to the limitation of DpCO₂ measurements

R: It is done. (L195)

Line 104: Indonesian Throughflow which transports...from the Pacific Ocean to the Indian Ocean...

R: It is done. (L202)

Line 114: spread from...

R: It is done. (L214)

Line 137: delete also

R: We think that "also" is needed.

Line 155: Taking the advantage of satellite..., the present study is the first study to investigate the spatio-temporal distribution of...

R: It is done. (L255-259)

Line 187: The spatial resolution of AIRS is 2.5°ˆ2° or 2.5°ˆ2.5° ?

R: The pixel of AIRS data is not square. The resolution is 2.5° x 2°

Line 220: ...the limitation of observation period...

R: It is done. (L338)

Line 227: ...categorized as normal year...

R: It is done. (L344)

Line 230: The estimation of carbon flux follows Robbins et al...

R: We have modified the sentences. (L348-359)

Line 300: Moreover

R: We have modified the paragraph. (L438-445)

Line 303: June to August 2016

R: It is done (L447)

Line 327: ..., we cannot observe the spatial distribution of carbon dioxide flux during this period due to high cloud coverage.

R: It is done. (L484-488)

Line 380: This means that Java Sea acts as a carbon dioxide source for the atmosphere.

R: It is done. (L554-556)

Line 491: Thus, as both areas exhibit similar characteristics,...

R: It is done. (L677)

Line 496: They found that Java Sea mostly becomes the source of CO₂ and this is in line with the results of the present study (Fig. 15).

R: It is done. (L682-684)

Line 504: ..., while the present study suggests that ...

R: It is done. (L690)

Line 507: During winter monsoon, the effect of ENSO to the variability of $\Delta p\text{CO}_2$ might be different as Wirasatriya et al. (2018) found that El Niño (La Niña) tends to increase (reduce) SST in Java Sea during this season due to the reduction (increase) of northwesterly wind speed.

R: It is done. (L693-699).

Lampiran 4

Revision Requested - RSASE_2019_420_R1 for Remote Sensing Applications: Society and Environment

From: Remote Sensing Applications: Society and Environment (evisesupport@elsevier.com)

To: aninosi@yahoo.co.id

Date: Thursday, July 23, 2020, 11:38 AM GMT+7

This message was sent automatically.

Ref: RSASE_2019_420_R1

Title: Carbon dioxide flux in the Java Sea estimated from satellite measurements

Journal: Remote Sensing Applications: Society and Environment

Dear Dr. Wirasatriya,

On 23/Jun/2020 I sent the above-referenced request for your manuscript, and would kindly like to remind you to respond to this request by 22/Aug/2020.

To view the request, log into EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=RSASE and click on the title of your manuscript, located under 'My Author Tasks' on your homepage. Complete the required steps and submit the manuscript.

What happens next?

After you submit your manuscript you will receive an email confirmation that your submission is complete. To track the status of your manuscript throughout the editorial process, log into EVISE® at: http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=RSASE and locate your submission under the header 'My Submissions with Journal' on your 'My Author Tasks' view.

Kind regards,

Remote Sensing Applications: Society and Environment

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.

Lampiran 5
Received revision RSASE_2019_420_R2

From: Remote Sensing Applications: Society and Environment (evisesupport@elsevier.com)

To: aninosi@yahoo.co.id

Date: Thursday, July 23, 2020, 10:05 PM GMT+7

This message was sent automatically.

Ref: RSASE_2019_420_R2

Title: Carbon dioxide flux in the Java Sea estimated from satellite measurements

Journal: Remote Sensing Applications: Society and Environment

Dear Dr. Wirasatriya,

Thank you for submitting your revised manuscript for consideration for publication in Remote Sensing Applications: Society and Environment . Your revision was received in good order.

To track the status of your manuscript, please log into EVISE® http://www.evise.com/evise/faces/pages/navigation/NavController.jspx?JRNL_ACR=RSASE and locate the submission under the header 'My Submissions with Journal' on your 'My Author Tasks' view.

We appreciate your submitting your revision to this journal.

Kind regards,

Remote Sensing Applications: Society and Environment

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.

General Response

We thank to both reviewers for the suggestions and comments that could improve the quality of our manuscript. In this revision, mainly we solve English issues, enrich the discussion part and change the equation symbols following Zhu et al. (2009).

Response to reviewer 1

The paper is significantly revised. There are however several positions that have to be improved.

1. The English in the present manuscript is **still** not of publication quality and requires some improvement. Please carefully proof-read spell check to eliminate grammatical and stylistic errors. Native speaker manuscript spell-checking is preferable.

R: Thank you very much for you comment. To improve the English quality of our manuscript, Prof. Magaly Koch from Center for Remote Sensing, Boston University, USA has helped us to check and revise the English issues. Hopefully, this version is good enough for RSASE standard.

2. Discussion chapter doesn't still cover some important points:

- Any limitations of the study should be acknowledged and evaluated.
- Relevant recommendations should be made for further studies.
- The importance of the obtained results should be emphasized.

R: Thank you very much for you suggestion. We have add those points in the end of discussion part (L659-L677).

3. Some additional comments can be found in attached pdf-file.

R: We reply reviewer's comments in the PDF-file.

Lampiran 6
Your manuscript RSASE_2019_420_R2 has been accepted

From: Xiaoli Ding (evisesupport@elsevier.com)
To: aninosi@yahoo.co.id
Date: Wednesday, August 5, 2020, 11:14 AM GMT+7

Ref: RSASE_2019_420_R2
Title: Carbon dioxide flux in the Java Sea estimated from satellite measurements
Journal: Remote Sensing Applications: Society and Environment

Dear Dr. Wirasatriya,

I am pleased to inform you that your paper has been accepted for publication. My own comments as well as any reviewer comments are appended to the end of this letter.

Your accepted manuscript will now be transferred to our production department. We will create a proof which you will be asked to check. You can read more about this [here](#). Meanwhile, you will be asked to complete a number of online forms required for publication. If we need additional information from you during the production process, we will contact.

Thank you for submitting your work to Remote Sensing Applications: Society and Environment . We hope you consider us again for future submissions.

Kind regards,

Xiaoli Ding
Editor-in-Chief
Remote Sensing Applications: Society and Environment

Comments from the editors and reviewers:

Have questions or need assistance?

For further assistance, please visit our [Customer Support](#) site. Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about EVISE® via interactive tutorials. You can also talk 24/5 to our customer support team by phone and 24/7 by live chat and email.

Copyright © 2018 Elsevier B.V. | [Privacy Policy](#)

Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.

Lampiran 7

Share your article [RSASE_100376] published in Remote Sensing Applications: Society and Environment

From: Elsevier - Article Status (article_status@elsevier.com)

To: aninosi@yahoo.co.id

Date: Sunday, August 23, 2020, 04:20 PM GMT+7

ELSEVIER

Share your article!

Dear Dr. Wirasatriya,

We are pleased to let you know that the final version of your article *Carbon dioxide flux in the Java Sea estimated from satellite measurements* is now available online, containing full bibliographic details.

To help you access and share this work, we have created a Share Link – a personalized URL providing **50 days' free access** to your article. Anyone clicking on this link before October 12, 2020 will be taken directly to the final version of your article on ScienceDirect, which they are welcome to read or download. No sign up, registration or fees are required.



Your personalized Share Link:

<https://authors.elsevier.com/a/1bc-D8M-mmdnYI>

Click on the icons below to share with your network:



We encourage you to use this Share Link to download a copy of the article for your own archive. The URL is also a quick and easy way to share your work with colleagues, co-authors and friends. And you are welcome to add the Share Link to your homepage or social media profiles, such as Facebook and Twitter.

You can find out more about Share Links on [Elsevier.com](https://www.elsevier.com).

Did you know, as an author, you can use your article for a wide range of scholarly, non-commercial purposes, and share and post your article online in a variety of

ways? For more information visit www.elsevier.com/sharing-articles.

Kind regards,
Elsevier Researcher Support

Increase your article's impact

Our [Get Noticed](#) guide contains a range of practical tips and advice to help you maximize visibility of your article.

Publishing Lab

Do you have ideas on how we can improve the author experience? Sign up for the [Elsevier Publishing Lab](#) and help us develop our publishing innovations!

Have questions or need assistance?

Please do not reply to this automated message.

For further assistance, please visit our [Elsevier Support Center](#) where you search for solutions on a range of topics and find answers to frequently asked questions.

You can also talk to our researcher support team by phone 24 hours a day from Monday-Friday and 24/7 by live chat and email.

© 2018 Elsevier Ltd | Privacy Policy <http://www.elsevier.com/privacypolicy>

Elsevier Limited, The Boulevard, Langford Lane, Kidlington, Oxford, OX5 1GB, United Kingdom, Registration No. 1982084. This e-mail has been sent to you from Elsevier Ltd. To ensure delivery to your inbox (not bulk or junk folders), please add article_status@elsevier.com to your address book or safe senders list.