**UNM**                                    **Muh. Abdy, Ph.D. <muh.abdy@unm.ac.id>**

# AIDE-D-20-01747 - Manuscript Sent Back OR AIDE-D-20-01747 - Journal requirements for your submission OR AIDE-D-20-01747 - Manuscript Sent Back

1 pesan

**Advances in Difference Equations Editorial Office** <em@editorialmanager.com>          16 November 2020 17.11
Balas Ke: Advances in Difference Equations Editorial Office <vanessa.ledesma@springernature.com>
Kepada: Muhammad Abdy <muh.abdy@unm.ac.id>

AIDE-D-20-01747
A SIR EPIDEMIC MODEL FOR COVID-19 SPREAD WITH FUZZY PARAMETER: THE CASE OF INDONESIA
Muhammad Abdy, Associate Professor; Syafruddin Side, Professor; Suwardi Annas, Associate Professor; Wahyuddin Nur, M.Sc; Wahidah Sanusi, Associate Professor
Advances in Difference Equations


Dear Dr Abdy,

Your submission entitled "A SIR EPIDEMIC MODEL FOR COVID-19 SPREAD WITH FUZZY PARAMETER: THE CASE OF INDONESIA" has been received.

Before we can further process it you are kindly requested to make the following corrections to meet the journal's requirements (please also refer to the Submission Guidelines):

1. Please ensure that all authors have individual email addresses both within the submission system and the title page.

2. EDITABLE SOURCE FILE
We have noticed that you have submitted in PDF format. Please note, in advance, should your manuscript be editorially accepted, you will later be required to provide your manuscript source files in an editable file format (e.g. doc, docx, rtf) for production/publication purposes. Rest assured, it is possible to proceed with peer review with PDF submissions, however please feel free to update your manuscript file format from now if preferred. If your editable source file is .tex, please provide a PDF version of your manuscript and upload it as Supplementary Material.


Please log onto Editorial Manager as an author.

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If you forgot your password, you can click the 'Send Login Details' link on the EM Login page at
https://www.editorialmanager.com/aide/.

Go to the menu item 'Submissions Sent Back to Author', and click on 'Edit Submission'. If no changes are to be made in the metadata, please go to the submission step 'attach files', and upload your corrected submission. Build the PDF, view your submission, and approve the changes.

Thank you for submitting your work to this journal.

With kind regards,

Vanesa Mae Ledesma
JEO Assistant


**Our flexible approach during the COVID-19 pandemic**

If you need more time at any stage of the peer-review process, please do let us know. While our systems will continue to remind you of the original timelines, we aim to be as flexible as possible during the current pandemic.

This letter contains confidential information, is for your own use, and should not be forwarded to third parties.

Recipients of this email are registered users within the Editorial Manager database for this journal. We will keep your information on file to use in the process of submitting, evaluating and publishing a manuscript. For more information on how we use your personal details please see our privacy policy at https://www.springernature.com/production-privacy-policy. If you no longer wish to receive messages from this journal or you have questions regarding database management, please contact the Publication Office at the link below.

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**UNM**                                                 **Muh. Abdy, Ph.D. <muh.abdy@unm.ac.id>**

## RE: Your submission AIDE-D-20-01754 to Advances in Difference Equations
2 pesan

**Vanessa Ledesma** <vanessa.ledesma@springernature.com>                    18 November 2020 17.01
Kepada: "Muh. Abdy, Ph.D." <muh.abdy@unm.ac.id>

AIDE-D-20-01747
A SIR EPIDEMIC MODEL FOR COVID-19 SPREAD WITH FUZZY PARAMETER: THE CASE OF INDONESIA
Muhammad Abdy, Associate Professor; Syafruddin Side, Professor; Suwardi Annas, Associate Professor; Wahyuddin Nur, M.Sc; Wahidah Sanusi, Associate Professor
Advances in Difference Equations

Dear Dr. Abdy,

Thank you for your email.


Please note that peer review will proceed with AIDE-D-20-01747 only, so please refer to quote/this ID on future correspondence.


Should you have further questions or concerns, please feel free to let me know.


Kind Regards,


--

**Vanessa Ledesma**

(she/her/hers)

JEO Assistant

Journals Editorial Office (JEO)


**Springer Nature**


vanessa.ledesma@springernature.com

springernature.com

**Muh. Abdy, Ph.D. <muh.abdy@unm.ac.id>**

## Your submission to Advances in Difference Equations - AIDE-D-20-01747

2 pesan

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**Advances in Difference Equations Editorial Office** <em@editorialmanager.com>      25 Desember 2020 11.52
Balas Ke: Advances in Difference Equations Editorial Office <vanessa.ledesma@springernature.com>
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AIDE-D-20-01747
A SIR EPIDEMIC MODEL FOR COVID-19 SPREAD WITH FUZZY PARAMETER: THE CASE OF INDONESIA
Muhammad Abdy, Associate Professor; Syafruddin Side, Professor; Suwardi Annas, Associate Professor; Wahyuddin Nur, M.Sc; Wahidah Sanusi, Associate Professor
Advances in Difference Equations

Dear Dr Abdy,

Your manuscript "A SIR EPIDEMIC MODEL FOR COVID-19 SPREAD WITH FUZZY PARAMETER: THE CASE OF INDONESIA" (AIDE-D-20-01747) has been assessed by our reviewers. Although it is of interest, we are unable to consider it for publication in its current form. The reviewers have raised a number of points which we believe would improve the manuscript and may allow a revised version to be published in Advances in Difference Equations.

Their reports, together with any other comments, are below. Please also take a moment to check our website at https://www.editorialmanager.com/aide/ for any additional comments that were saved as attachments.

If you are able to fully address these points, we would encourage you to submit a revised manuscript to Advances in Difference Equations. Once you have made the necessary corrections, please submit online.

Please find below your log-in details to access the system.

Your username is: abdy02

If you forgot your password, you can click the 'Send Login Details' link on the EM Login page at https://www.editorialmanager.com/aide/.

Please include a point-by-point response within the 'Response to Reviewers' box in the submission system and highlight (with 'tracked changes'/coloured/underlines/highlighted text) all changes made when revising the manuscript. Please ensure you describe additional experiments that were carried out and include a detailed rebuttal of any criticisms or requested revisions that you disagreed with. Please also ensure that your revised manuscript conforms to the journal style, which can be found in the Submission Guidelines on the journal homepage.

The due date for submitting the revised version of your article is 21 Jan 2021.

Please note, if your manuscript is accepted you will not be able to make any changes to the authors, or order of authors, of your manuscript once the editor has accepted your manuscript for publication. If you wish to make any changes to authorship before you resubmit your revisions, please reply to this email and ask for a 'Request for change in authorship' form which should be completed by all authors (including those to be removed) and returned to this email address. Please ensure that any changes in authorship fulfil the criteria for authorship as outlined in BioMed Central's editorial policies (http://www.biomedcentral.com/about/editorialpolicies#authorship).

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By resubmitting your manuscript you confirm that all author details on the revised version are correct, that all authors have agreed to authorship and order of authorship for this manuscript and that all authors have the appropriate permissions and rights to the reported data.

Please be aware that we may investigate, or ask your institute to investigate, any unauthorised attempts to change authorship or discrepancies in authorship between the submitted and revised versions of your manuscript.

I look forward to receiving your revised manuscript soon.

Best wishes,

Abdon Atangana
Advances in Difference Equations
https://advancesindifferenceequations.springeropen.com/

Reviewer reports:

Reviewer #1: Dear Authors,
Please follow the following comments:
1. The paper is written very poor.
2. There is no . and , at the end of equations.
3. I suggest reading the paper by an english expert before the revised version is submitted.
4. The equations are not well written.
5. The authors should include recently published articles in the paper in both the references and text of the article. I suggest the following too:

Haar wavelet collocation approach for the solution of fractional order COVID-19 model using Caputo derivative. Alexandria Engineering Journal. 2020 Oct 1;59(5):3221-31.
 Stability analysis of a dynamical model of tuberculosis with incomplete treatment, Advances in Difference Equations (2020) 2020:499 https://doi.org/10.1186/s13662-020-02950-0
Computational and theoretical modeling of the transmission dynamics of novel COVID-19 under Mittag-Leffler Power Law. Alexandria Engineering Journal. 2020 Jul 15.
Existence results and stability criteria for ABC-fuzzy-Volterra integro-differential equation. Fractals. 2020 May 6.
Analysis of fractal-fractional malaria transmission model. Fractals. 2020 May 6.
Dynamical study of fractional order mutualism parasitism food web module. Chaos, Solitons and Fractals. 134, 109685 (2020)
Stability and numerical simulation of a fractional order plant nectar pollinator model, Alexandria Engineering Journal, 59, 49-59 (2020).
Stability analysis and numerical solutions of fractional order HIV/AIDS model. Chaos, Solitons and Fractals. 2019 : 122 ;119-128.

After these minor comments I would like to see the revised version.

Reviewer #2: My comments are

1. in title A SIR should be An SIR

2. Explain fuzzy parameter

3. Explain with more care the model and its parameter.

4. Use different notations for equilibrium point of the model and their component would not be then S but should be $S^o$

5.  Give more steps for the equation (20)  and (21)

6, The analysis is not useful beucause it is should be some related to fuzzy paramter

7. The graphical result not interested.

8. what is SIgma and $R_0(\Sigaa)$

9. I provide some literature for introduction and for further improvement of the paper

    Modeling and analysis of the dynamics of novel coronavirus (COVID-19) with Caputo fractional derivative
Results in Physics, 103669
        2020
Analysis of dengue model with fractal-fractional Caputo-Fabrizio operator

Advances in Difference Equations 2020 (1), 1-23

The dynamics of COVID-19 with quarantined and isolation

Advances in Difference Equations 2020 (1), 1-22

Mathematical modeling for novel coronavirus (COVID-19) and control
Numerical Methods for Partial Differential Equations

Modeling and Simulation of the Novel Coronavirus in Caputo Derivative
Results in Physics, 103588
Modeling the dynamics of novel coronavirus (2019-nCov) with fractional derivative
Alexandria Engineering Journal

The dynamics of COVID-19 with quarantined and isolation
Advances in Difference Equations 2020 (1), 1-22

Facemasks simple but powerful weapons to protect against COVID-19 spread: Can they have sides effects?
Results in physics, 103425
       2      2020

Reviewer #3: In this article, the authors constructed a SIR model for COVID-19 with fuzzy parameters. The SIR model is constructed by considering factors of vaccination, treatment, obedience in implementing the
health protocols, and the corona virus-load. The model analysis uses the generation matrix method to obtain the basic reproduction number and the stability of the model's equilibrium points. Simulation results shown that differences in corona virus-loads will also cause differences in the transmission of the COVID-19.

In my view there are some advices for authors as below:
1) At the end of all equations must be putted "COMMA" or "POINT" according to the typing rules. Therefore, they need to pre-check all the paper.
2)  The authors are requested to add more details regarding their original
contributions in this manuscript.
3) Papers cited in the references section must be rewritten according to journal
style before further process.
4) It is very difficult to see the real goal of the paper and the result this paper is trying to bring forward. Is it to show a novel numerical method or to address the problem of COVID-19?
5) What scientific or epidemic results the paper brings out to the world and the new knowledge it shows for the betterment of our societies that is hit by the COVID-19. ?
6) There some typos in the paper which need to be language edited by, if possible a professional.
7) The abstract is to brief and vague and can be improved, as it does not detail the real results of the paper. In my view, abstract should be accurate.
8) There is no more lines about R0, hence I ask the authors to write write more about R0; when reporting about the R-naught the author should be more precise, a recent study (Sanche S, Lin Y, Xu C, Romero-Severson E, Hengartner N, Ke R. High Contagiousness and Rapid Spread of Severe Acute Respiratory Syndrome Coronavirus 2. Emerg Infect Dis. 2020;26(7):1470-1477. https://dx.doi.org/10.3201/eid2607.200282) reports a median R0 value of 5.7 (95% CI 3.8-8.9).
9)  I suggest the authors add some recent research articles pertinant to COVID-19 in the reference section.
a)  "Examining the correlation between the weather conditions and COVID-19 pandemic in India: A mathematical evidence." Results in Physics 19 (2020): 103587.
b)  "Applying fixed point methods and fractional operators in the modelling of novel coronavirus 2019-nCoV/SARS-CoV-2." Results in Physics 19 (2020): 103433.
c)  "Facemasks simple but powerful weapons to protect against COVID-19 spread: Can they have sides effects?." Results in physics (2020): 103425.
d) "Modelling the spread of COVID-19 with new fractal-fractional operators: Can the lockdown save mankind before vaccination?." Chaos, Solitons & Fractals 136 (2020): 109860.
e) "Modeling the dynamics of novel coronavirus (2019-nCov) with fractional derivative." Alexandria Engineering Journal (2020).

If improvements to the English language within your manuscript have been requested, you should have your manuscript

**Muh. Abdy, Ph.D. <muh.abdy@unm.ac.id>**

# Decision on your Submission to Advances in Difference Equations - AIDE-D-20-01747R1 - [EMID:3c3ac8d7c887a4e9]

2 pesan

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**Advances in Difference Equations Editorial Office** <em@editorialmanager.com>     29 Januari 2021 22.41
Balas Ke: Advances in Difference Equations Editorial Office <vanessa.ledesma@springernature.com>
Kepada: Muhammad Abdy <muh.abdy@unm.ac.id>

CC: atanganaa@ufs.ac.za

AIDE-D-20-01747R1
An SIR Epidemic Model for COVID-19 Spread with Fuzzy Parameter: The Case of Indonesia
Muhammad Abdy; Syafruddin Side, Professor; Suwardi Annas; Wahyuddin Nur; Wahidah Sanusi
Advances in Difference Equations

Dear Dr. Abdy,

I am pleased to inform you that your manuscript "An SIR Epidemic Model for COVID-19 Spread with Fuzzy Parameter: The Case of Indonesia" (AIDE-D-20-01747R1) has been accepted for publication in Advances in Difference Equations.

Before publication, our production team will check the format of your manuscript to ensure that it conforms to the standards of the journal. They will be in touch shortly to request any necessary changes, or to confirm that none are needed. Articles in this journal may be held for a short period of time prior to publication.  If you have any concerns please contact the journal.

Any final comments from our reviewers or editors can be found, below. Please quote your manuscript number, AIDE-D-20-01747R1, when inquiring about this submission.

We look forward to publishing your manuscript and I hope you will consider Advances in Difference Equations again in the future.

Best wishes,

Elena Braverman
Advances in Difference Equations
https://advancesindifferenceequations.springeropen.com/

Comments:

Reviewer #1: THE PAPER HAS BEEN IMPROVED AND I LIKE TO ACCEPT THE PAPER FOR PUBLICATION IN AIDE.

Reviewer #2: Accepted

Reviewer #3: Now this form is acceptable

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**Our flexible approach during the COVID-19 pandemic**

If you need more time at any stage of the peer-review process, please do let us know. While our systems will continue to remind you of the original timelines, we aim to be as flexible as possible during the current pandemic.

This letter contains confidential information, is for your own use, and should not be forwarded to third parties.

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