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Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	Ms_BJAST_19669
Title of the Manuscript:	Sverdrup Munk Bretschneider (SMB) Modification for Wave Height Predictors in Java Sea
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	Abstract and the whole text are to be re-structured. Language is poor. It must be improved. In the abstract, briefly it is to be mentioned that why modification is required for SMB method. Expand in the abstract, SMB, NLARX, ANN, BMKG, RMSE when it is used for the first time. The authors used to predict the average wave height of the one third the highest wave heights. It is usually termed as significant wave height H_s or $H_{1/3}$. The authors are encouraged to use the term H_s or $H_{1/3}$. Use the term significant wave height instead of wave height.	Sverdrup Munk Bretschneider (SMB) methods is a semi-empirical method that has been used for the prediction of the significant wave height – H_s in global watersheds. Indonesian waters are surrounded by thousands of islands and wind movement has different nature with the waters of free movement. Java sea is flanked by the waters of Java and Borneo island. Sea breeze movement in Indonesia as a result of changes in atmospheric pressure in Asia and Australia. SMB methods require modification in the waters of Indonesia, so as to be used as a predictor in accordance with the high degree of accuracy. In this paper, a propose methods of designing the predictor with a modified SMB. The method compared by numerical methods of Nonlinear Autoregressive Exogeneous (NLARX) and expertise method of Artificial Neural Network (ANN). Case studies conducted in the Java sea along Surabaya – Banjarmasin cruises. This line is a busiest sea transportation in Indonesia. The data obtained from Badan Meteorologi, Klimatologi dan Geofisika (BMKG), the agency of meteorology, climatology and geophysics in Indonesia. The data are the wind speed and significant wave height.



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	Change the title of the paper to "SVERDRUP MUNK BRETSCHNEIDER MODIFICATION (SMB) FOR SIGNIFICANT WAVE HEIGHT PREDICTIONS IN JAVA SEA" Expand SPM and CEM in page 1. Equation 1. <u>Correction</u> Write, g-acceleration due to gravity (9.8 m/s²) Page 2. Line 44-45: NLARX structure is expressed in equation (1). Is it correct?. I think SMB model is given in equation (1). Line 46. What is t? Give the units. Lines 59-61. It is well known that N and S are latitudes and E and W are longitudes. Hence	The length of data in interval 6 years, since 2006 until 2011. Predictor results shows a Root Mean Square Error - RMSE of modified SMB is 0.05, while NLARX method and ANN respectively are 0.24 and 0.16. <u>Correction</u> Sverdrup Munk Bretschneider Modification (SMB) for Significant Wave Height Predictions in Java Sea Equation 1. <u>Correction</u> g = acceleration due to gravity (9.8 m/s²) Structure of NLARX is shows in equation 5. $y(t) = f[y(t-1), \dots, y(t-n_a), u(t-n_k), \dots, u(t-n_k-n_b+1)] + e(t) \quad (5)$ yes, The SMB equation in (1) t = time (hour) yes, all the note N and S are deleted
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	Delete the words `latitude and longitude`. <u>Page 4:</u> Line 130: Correct the equation number to '4'. Line 143: Correct the equation number to '5'. There is no figure legend for fig. 5 in the appendix	<u>Page 4:</u> Yes, the equation number is 4 Yes, the equation number is 5 It is not correct All of the figure in appendix with the legend It is in Bahasa The grey colour is data BMKG The blue colour is NLARX The red colour is JST, JST = jaringan syaraf tiruan = ANN The green colour is SMB modification
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<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	The work is interesting and it has practical application. But the paper is very carelessly written. There are many grammatical mistakes in almost all the sentences. The text is to be re-structured and language is to be improved. Major revision is required. Further the authors claim that SMB method predicts the required significant wave height very accurately. SMB (modified) method seems to be the best method. The methodology is of regional application. The paper is acceptable if all the comments are properly addressed.	