



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_29808
Title of the Manuscript:	H _α AND H _β PROFILE VARIATIONS IN THE SPECTRA OF EARLY SUPERGIANTS HD198478 AND HD187982
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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

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)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	The paper shows the analysis of spectroscopic observations made by the 2-m telescope at the Shamakhy Astrophysical Observatory in the years 2010-2015 for supergiant star HD 198478 and in the years 2010 – 2014 for supergiant star HD 187982. The method used is the same like that used by Maharramov, Y.M; Baloglanov, A. Sh. 2015, Odessa Astronomical Publications, vol. 28, p. 39 (2015), the standard technique using the DECH20 and DECH20t software in addition to the visual inspection of the appearance and disappearance of spectral lines. After an overview of the literature for two supergiant stars I can see this work	I agree with the reviewer's comments. I corrected all of the comments in the manuscript.



SDI Review Form 1.6

is similar to that made with above previous published work especially for the star HD187982 with difference in years of observations. The paper delivers results concerning the variations of line profiles of H Alpha and H Beta and determination of some parameters (Radial Velocity & Equivalent Width). These results can be considered to shed light on the spectral variations of these systems with their determined parameters and can be of interest for community of researchers interested in this and similar systems and should be published. As the outcome of the paper the Authors have formulated a number of conclusions compiled in 3 points of one section. Conclusions 1-2 concerning the spectral behavior of the H Alpha line for the star HD198478 with interpretation, while conclusion 3 regarding the spectral behavior of H Alpha line for star HD187982 with explanation for time variations.

Below are listed my specific comments with the list of



SDI Review Form 1.6

	<p>changes I suggest to introduce in the paper to make it more clear and more easy in reception by a reader. Most of them are simple corrections or omissions.</p> <p>Specific comments</p> <p>*****</p> <p>*****</p> <p>Abstract</p> <p>Page 1 line 10: from observations should be from spectroscopic observations</p> <p>I. Introduction</p> <p>Page 1 lines (50 - 52)</p> <p>In the study of $H\alpha$, $H\gamma$, $Mg\ II\ (4481\ \text{\AA})$, and $Fe\ II\ (4924\ \text{\AA},\ 5018\ \text{\AA},\ 5169\ \text{\AA})$ lines observed in the atmospheres of this 52 supergiant is presented [4-5, 11, 12].</p> <p>should be</p> <p>Some spectral lines $H\alpha$, $H\gamma$, $Mg\ II\ (4481\ \text{\AA})$, and $Fe\ II\ (4924\ \text{\AA},\ 5018\ \text{\AA},\ 5169\ \text{\AA})$ are observed in the</p>	
--	--	--



SDI Review Form 1.6

	<p>atmosphere of HD187982, [4-5, 11, 12].</p> <p>Page 2 line 59</p> <p>We believe our results will be of interest for further studies of these remarkable stars</p> <p>must be omitted</p> <p>II. Observations and processing</p> <p>Page 2 line 106</p> <p>the Hα line was observed</p> <p>should be</p> <p>the Hα line shows</p> <p>Page 2 line 109</p> <p>Note that</p> <p>Should be</p> <p>It is noted that</p> <p>Page 2 line 111</p> <p>were observed</p> <p>should be</p> <p>show</p> <p>Page 3 line 131</p> <p>It is also interesting that</p>	
--	--	--



SDI Review Form 1.6

	<p>should be</p> <p>It is also found that</p> <p>Page 3 line 158</p> <p>to reveal periodic processes additional observation materials is necessary</p> <p>should be</p> <p>to reveal periodicity additional observational materials are necessary</p> <p>Page 3 line 164</p> <p>determined for mean velocities</p> <p>should be</p> <p>determined the mean velocities</p> <p>III. Results and discussion</p> <p>Page 4 line 177</p> <p>These changes may be a sign of complex motions</p> <p>should be</p> <p>These changes may be an indication of complex motions</p> <p>IV. Conclusions</p> <p>Page 5 line 233</p>	
--	---	--



SDI Review Form 1.6

	First time should be For the first time Figures Page 6 label of figure 1 must be corrected for another star I mean HD187982 must be HD198478	
<u>Optional/General</u> comments		