

Review Response 1

I would like to thank the reviewer for their in-depth and constructive comments. The paper is much better with the critiques made by the reviewer. I have addressed all the comments below.

Major Revisions

- **Even though the measurements of spectra 3 and 7 were excluded in analysis, they should still be reported in Table 3. Otherwise, this is an omission of data, and failure to report these values may compromise the integrity of the paper.**
 - o I agree with this comment. The results of FXCOR analysis for spectrum 7 were added to table 3 along with an additional description of why this spectrum was excluded. I did not explain why spectrum 3 omitted well. Since the atomic lines were so blended, FXCOR could not return two peaks and thus it is impossible to determine velocities for spectrum 3 using FXCOR. Therefore, spectrum 3 is still omitted from table 3 but a better explanation is provided. I hope this addressed the concerns of the reviewer.

- **Can the claim really be made that the ephemeris from Kepler is incorrect? All of the error bars of the O-C points contain 0, so there is not enough of a difference between these points and 0 to claim that the ephemeris is incorrect. The ephemeris may need a slight update, but the use of such strong language as “incorrect” is not appropriate in this case.**
 - o Agreed, the use of language such as incorrect is too strong. The wording has been corrected to suggest a refinement of the ephemeris

- **In the discussion, it seems that the author is assuming his results are correct and that those report by other papers are incorrect. For example, at the end of paragraph 1 in the discussion, it says, “These results demonstrate the importance of in-depth studies of contact binaries...to refine the parameters reported in large pipeline studies.” The values reported by the author may be more precise but may not be refined if the true value is closer to an older reported value than the value determined by this paper.**
 - o I do expect the parameters determined by this paper to be much better than the previous literature, but the reason why was poorly explained. The previous study used an estimator to get estimated values. On top of this, the model light curve created using the previous values does not fit the observations well. A better explanation as to why the determined values are more accurate is included. Along with this, Figure 4 has been edited to include the light curve model created using the old values, which clearly shows that they do not match the observations
- **If reported with error bars, could the equivalent radii of the stars be flipped, where, within the uncertainty, the secondary star is the larger star? If so, then the classification of the binary cannot be determined. This issue demonstrates the importance of reporting uncertainties with results. However, not all values in Table 5 or those mentioned in the discussion were reported with uncertainties.**
 - o This is a good point and will be addressed in the future MCMC study of the light curve. Due to the time frame and issues with MCMC analysis on the data, an MCMC sample of the light curve will be left to a future study, which has already been started by the author.

Minor Revisions

- **The author uses “we” and “us” (plural) when there is only one author on the paper.**
 - o While there is only one author, I prefer to use we to acknowledge all the people (professors and students) that have contributed and helped with the project. Therefore, I would like to leave this alone
- **All final measurements (stellar parameters, ephemeris) should be given in the abstract.**
 - o All these values are now listed in the abstract
- **“The stars in contact binaries are so close that tidal distortions become present” should be cited. “The gravitational and tidal interactions distort the two stars” can be deleted because this is pretty much stated in the previous sentence. Figure 3 should not be referenced in the introduction since no results should be mentioned in this section.**
 - o These three comments were all on the same paragraph, so I have condensed them into one response. This paragraph has been removed and subsequently rewritten. A citation has been included for the distortion and contact between the two stars. The reference to Figure 3 has been removed. An additional sentence has been added to the caption of Figure 3 to explain the “peanut shape” discussed in the introduction.
- **The discussion of B-type stars at the end of paragraph 3 can be moved to paragraph 4.**

- The discussion on B-type stars has been moved to paragraph 4. A little statement in parenthesis was left to mention that B-type stars are an exception to the equivalent temperature rule and that they are discussed shortly.
- **In Table 1, instead of “in cgs units” can be moved to the end of the reported value to be consistent with the other values in the table where the unit is attached to the value rather than the parameter name.**
 - For consistency, the “in cgs units” was moved to the end of the reported value
- **The author needs to give more information on the Kepler and TESS observations. He should give the exact dates over which observations were conducted, filters, etc.**
 - The quarters in which the target was observed by Kepler were added. The bandpass for both Kepler and TESS were added.
- **“The spectra were reduced through a pipeline...” What is this pipeline? Are there any details that can be provided about it? The citation of personal communication with Orosz can be removed. Instead, if there is a paper listing this information, this should be cited, and Orosz can just be listed in the acknowledgements.**
 - The spectra were reduced prior to being obtained by the project PI. The only information known about the reduction process is from the personal communication with Orosz so I think this should be left in.
- **In Equation 1, it should be specified that the epoch is reported in days. Also, the ephemeris is T_{obs} , so to show what the ephemeris is, the equation should be rewritten as $T_{obs}=T_0+PE$.**
 - The units for the ephemeris and period (days) are now stated in the paper. Also, the ephemeris is T_0 , not T_{obs} . This is now stated explicitly in the paper for

clarity. Since equation 1 is meant to show how phase is calculated (which is the decimal part of E), I think Equation 1 should be left as is.

- **Instead of “Spectrum 4 was obtained at a phase of 0.997, during the primary eclipse,” it should say something like “It is best to obtain spectra during an eclipse,” and the 0.997 phase should be mentioned later when it talks about how Spectrum 4 was used as a template.**
 - o I have reworked these sentences to make them more clear
- **What is VHELIO?**
 - o A new explanation of VHELIO and the other returned velocity, VOBS, was added to clear up any confusion
- **Are the values used as initial values those in Table 1?**
 - o Yes, this has now been added to the paper. Also, Table 4 has been edited to include the initial values and the optimized values
- **More detail should be given about what the Nelder-Mead optimizer does and how it works.**
 - o A discussion of the Nelder-Mead optimizer in 2-D has been added to discuss how the algorithm works
- **Is Table 4 showing the initial values?**
 - o No, as stated in Section 4, Table 4 displays the optimized parameters
- **On Figure 6, the axis labels of “asini” and “lnprobability” should be remade so that they are more readable (spaces between “a sin i” for example?) Also, is log probability log 10 or ln? In the text it says “log” implying log 10, but on the y-axis of the plot in Figure 6, it says “ln.”**

- I feel that the axis labels are legible. They were enlarged and bolded so that they are clear. However, I have changed the label on the log probability to read “log probability” instead of “lnprobability.” While this quantity is computed using the natural log, it is generally written as log probability. An explanation of this has been added
- **The initial value for the passband luminosity should be given in whichever table shows the initial and final values. The corner plot in Figure 7 should be bigger.**
 - This section has been completely reworked. An MCMC run for the light curve parameters will be left to a future study, which is already in the works. Therefore, figure 7 has been removed and the passband luminosities are not mentioned anymore
- **Table 5 can be combined with Table 4 to compare the initial values and the results. Also, the eccentricity does not need to be reported in the table if it is an assumed value.**
 - The eccentricity has been removed from Table 5. Table 4 has been re-worked to include the initial values to show the difference between the optimized values and the literature values. Overall, the tables have been changed and I think they better display the results now.
- **All values in Table 5 need uncertainties.**
 - Uncertainties are included for the radial velocity parameters. Due to the time frame and issues with MCMC for the light curve parameters, they will be analyzed in a future study. This paper discusses the overall change in values from the literature

- **The first few sentences about TRO and AML can be moved to the introduction.**
 - o These sentences have been removed and a discussion of the background for the period study has been added to the introduction
- **Is there a reason why TESS data and not Kepler data were used for this analysis?**
 - o Since I am adopting the Kepler ephemeris and period, checking with the Kepler measurements would be redundant. The TESS observations were used since they were obtained after the Kepler measurements. A sentence has been added to clear up confusion
- **When comparing the values to Prsa et al. 2011, it might be best to mention what the values from this paper were to facilitate comparisons for the reader.**
 - o Reference to table 1, where the values from Prsa et al. 2011 are listed, was added
- **All values mentioned in the discussion need to be reported with their uncertainties.**
 - o As stated earlier, the determination of light curve parameter error ranges will be left to an additional study
- **Red nova candidates should be introduced and explained in the introduction.**
 - o The discussion on red nova candidates has been moved to the intro
- **From the evaluation of criteria:**
- **Are the title and abstract sufficiently informative?**
 - o I think “Stellar Peanuts” is a nice title, but a re-work including this phrase will be considered. The values have been added to the abstract and the fact that this is the first photometric and spectroscopic study has been added

Review Response 2

I would like to thank the reviewer for their constructive comments. The edits have been made and the paper is much better thanks to these comments. Below I have responded on all the critiques.

Major Revisions

- **“the semi-major axis of the system was set by visually inspecting the radial velocity curve”**: the author should explain how he inspects the radial velocity curve.
 - o An additional sentence has been added to explain how an initial semi-major axis value was selected.
- **“However, analysis of the O-C diagram reveals no period changes between the Kepler and TESS observations. Therefore, KIC 7766185 is not a red nova candidate”**: The time difference is only 6 years (short compared to the life time of stars), is it too little to conclude if the period actually changes?
 - o This is a good point. This study determines no period fluctuations between the Kepler and TESS observations. However, the lack of a detection may be due to the short time span between the two observations. An explanation of this has been added to Section 6
- **The word “conducted” is overused (3 times).**
 - o The abstract has been edited so the word conducted is not overused
- **“Figure 3 displays the model ...”**: While I understand the author refer to the shape which can only be shown after the analysis, it is weird to see Figure 3 before Figure 1 and 2. I think in a paper, the first figure listed should be 1. Because this is just

introduction, I suggest that the author should remove this part “Figure 3 ... shape of W Ums stars.”

- The reference to Figure 3 in the intro has been removed. The caption of Figure 3 has been edited to make reference to the “stellar peanut” idea mentioned in the introduction
- **“W Uma stars have 3 sub-types ... above 1000 K”: this paragraph introduces the types of W Uma stars, but the previous paragraph (“Due to ... more than 1000 K”) already explains one specific type. These two paragraphs should be reversed or arranged differently.**
 - The arrangement of these paragraphs has been changed to improve the flow of the introduction
- **“W Uma stars have 3 sub-types ... above 1000 K”: this paragraph does not have any citations for the first and second sentences.**
 - The information from this paragraph comes from the citation at the end of the paragraph, Csizmadia and Klagyivik (2004). I think the changes to the structure of this discussion makes the citations clear
- **“Several measurements ... a phase folded light curve”: a period of the star should be specified here.**
 - I have made the requested change.
- **“The Kepler light curve is displayed in Figure 1”: this is a folded light curve, not just a light curve.**
 - I have added that this is the Kepler phase folded light curve

- **“the outliers were removed using the outlier removal function”**: the author needs to explain what this outlier removal function is or what mechanism it uses to remove outliers.
 - o An explanation to the Peranso outlier removal function has been added.
- **“The binary analysis was conducted with the Kepler light curve only. The TESS measurements were only utilized for the period analysis section.”**: the author needs to explain why he used one but not the other for the binary analysis.
 - o A sentence was added to explain that the Kepler measurements were used for binary analysis since they were obtained around the same time as the spectroscopic observations
- **“They were reduced in IRAF using the echelle package”**: citations for IRAF and echelle package are needed.
 - o Citations for both of these have been added
- **“The deepest lines ... telluric interference”**: more explanations or definition of telluric interference should be mentioned.
 - o An brief explanation of telluric interference has been added.
- **“The most prominent real absorption lines ... 4861 Angstrom”**: I think this sentence moves away from the author’s discussion on how to reduce the spectra. I would suggest the author to remove this sentence.
 - o This sentence has been removed as it does not contribute much to the discussion of the spectroscopic observations

- **“The phase was calculated ... Kepler Eclipsing Binary Catalog” citation for the catalog should be listed again here.**
 - o The citation for the Kepler Eclipsing Binary Catalog was already given when the catalog was first introduced
- **“For each range, the VHELIO measurement...”: the definition of the VHELIO measurement should be provided.**
 - o An explanation of VHELIO and the other returned velocity VOBS has been added
- **“The values reported in the literature were inputted as initial values”: the author should refer back to Table 1 here.**
 - o Instead of referring back to Table 1, Table 4 has been edited to display the initial values and the optimized values for a better comparison.
- **“Once the initial values were tweaked to moderately match the data...”: the author should provide the initial values after being tweaked here.**
 - o The initial values were not substantially changed from the literature values.
Essentially, the only thing changed was the semi-major axis. This sentence was changed to better encapsulate what was done.
- **“The Nelder-Mead method of minimization was first proposed...”: the author should briefly mention how this method works.**
 - o A description of Nelder-Mead in 2-d has been included to explain how the optimizer works
- **“Since the radial velocity curve only consists ... just the radial velocity curve”: I do not see the connection between these 2 sentences, the author should explain in more**

details here. For example, why can't the radial velocity parameters be optimized by both the light curve and the radial velocity curve?

- Essentially, since the light curve contains many more data points than the radial velocity curve, the radial velocity measurements are essentially overlooked by the optimizer. A better explanation of this has been provided.
- **“While the Nelder-Mead Optimizer can be used to ... they are under-estimated”:
citations or explanation are needed.**
 - This has been removed from the paper as the goals have been changed and MCMC sampling on the light curve will be left to a future study
- **“MCMC (Markov Chain Monte Carlo)” : I think it should be Markov Chain Monte Carlo (MCMC). Also, more explanations on how MCMC works should be stated (for example, what is the concept of Monte Carlo? Does it use randomization?).**
 - I have made the requested change about the meaning of MCMC. I also added that MCMC randomly samples the posterior pdf.
- **“A set of prior distributions may also be added to the sampler” : to the knowledge of the reviewer, prior must be added for MCMC to run, not just “may”.**
 - Generally, priors are only used if one has a reliable estimate from the literature.
Or, priors can be added to prevent walkers from wandering into unwanted regions of the parameter space
- **“PHOEBE utilizes the MCMC sampler emcee developed ...” : the author should explain what the differences are (if any, or what is special about) between emcee and other MCMC sampler.**

- I feel that this dives a bit too deep into MCMC, which is not the focus of this paper. I think mentioning which program PHOEBE and adding a citation is sufficient
- **“The log probability plots computes the log probability for each walker at each iteration”**: the author should explain what log probability after each walker is.
 - This has been modified to state that log probability is the natural logarithm or the probability of each walker and a better description of what the probability includes has been added.
- **“The first MCMC run returned ... for mass ratio of ...”**: the author should explain what the errors associated with the values of $a \sin(i)$ and mass ratio are (for example, are they 1-standard deviation, or are they 16% and 85% quantile values, or are they something else?). **“The radial velocity parameters have errors determined from MCMC sampling”**: similar to the previous comment, the author should explain what the errors actually are (standard deviation or quantile range).
 - I have added that the error ranges are based on a 1-sigma range.
- **The corner plots should be bigger, the numbers on the plots are hard to read.**
 - As stated before, the goals of the paper have been adjusted and the MCMC run for the light curve has been relegated to a future study. Therefore, the corner plots for the light curve which were hard to visualize have been removed
- **“Thermal Relaxation Oscillation (TRO) and Angular Momentum Loss (AML)”**: need citations for these two concepts.

- The background discussion for the period study has been moved to the introduction. The focus has been shifted primarily to angular momentum loss and citations have been provided for this
- **“using the Find Extremum function in Peranso”: citation for Peranso is needed here.**
 - The citation for Peranso was given when the program was introduced
- **“While the temperature reported by Kepler is not reliable as a primary temperature”: citations or explanations are needed.**
 - The reason for this was given in the end of Section 1. In parenthesis, I have added “see end of section 1” for a reference as to why the Kepler temperature is not reliable as a primary temperature.

Review Response

I would like to thank the reviewer for their constructive comments. The paper is much better after the suggested changes. Below I have addressed all the critiques:

Major Points:

- **There are a couple of instances throughout the paper in which the author mentions concepts/methods utilized within the study but does not expand on it which stirs some confusion.**
 - o Many discussions in the paper have been expanded and additional explanations have been included. I hope the additions clear up the confusion of the reviewer. I do request that specific sections which were not explained well be listed so I can gauge what needs to be improved

Minor Points:

- **The order in which the figures are mentioned in the paper are out of order (Figure 3 is the first figure mentioned in-text and not Figure 1). The author could make it so that they appear in the appropriate order.**
 - o The reference to Figure 3 in the introduction has been removed. Instead, the caption of Figure 3 has been modified to make reference to the shape of the stars mentioned in the introduction.

Review Response 4

I would like to thank the reviewer for their constructive comments. The paper is much better after the edits and suggestions. Below I have addressed all the critiques.

Major Points

- **None**

Minor Points

- **“We report a new value for the ephemeris of KIC 7766185.” What is this new value?**
These results should be present in the abstract.
 - o The ephemeris and all other values determined in the study have been added to the abstract
- **Comments on Section 2: Equation (1)**
 - o Explicit definitions of the variables are now provided. Now that the variables are clearly defined, I do not believe there will be any confusion with the T's being related to temperature and time, especially since it is stated that this equation is used to compute phase, which has nothing to do with temperature. The variables in Equation 2 have been changed to match Equation 1 so I think any confusion will be explained now.
- **Comment on section 4**
 - o A description for how the semi-major axis was set has been added
- **Comment on section 5**
 - o This is a good point. Essentially, we do not see any period changes between the Kepler and TESS measurements. A discussion has been added explaining that the short time frame could contribute to the null result

- **Comment on section 6:**

- o A description of the previous study has been added to the introduction which explains that an estimator was used to get the values. Essentially, the previous study determined estimates on the parameters.

Review Response 5

I would like to thank the reviewer for their constructive comments. The paper is much better with the edits and suggestions. Below I have addressed all the critiques

Major Revisions

- None

Minor Revisions

- **State new ephemeris value in abstract**
 - o The new ephemeris and all the other determined parameters are now listed in the abstract
- **§2.1 author could explain how we know the stars are late type as this is an important trait here**
 - o The system was determined to be a spectral type of F3V in a previous study, Frasca, A. et al. 2016. Reference is made to this study which determined the spectral type
- **§2.1 author could state why binary analysis only used *Kepler* data while *TESS* was only used for period analysis**
 - o Binary Analysis was performed on Kepler data since these observations occurred around the same time as the spectroscopic observations. This explanation has been added to the paper
- **§2.2 a brief explanation of telluric interference would be helpful**
 - o The nature of telluric interference has been added to this section
- **Mark the H α and H β lines on Fig 2 for clarity**

- After reading the comments of another reviewer, mention of the H α and H β lines were removed as this does not contribute anything to the discussion of the spectral observations
- **Figure 4: blue overlaid on black is hard to see**
 - The figure has been modified to improve readability
- **Paper would benefit from an additional proofread**
 - Agreed, I will be reading the paper over before final submission

Review Response 6

I would like to thank the reviewer for their constructive comments. The paper is much better with the edits and suggestions. Below I have responded to all the critiques

Minor Points

- **The fourth paragraph in the introduction section discusses how stars in W UMa systems typically have the same temperature. The next paragraph then describes three sub-types that all consist of two stars with different temperatures. The author should clarify that A-type and W-type systems are the ones previously discussed with low temperature differences to avoid this confusion.**
 - o To clear up confusion, this paragraphs states that B-type are the only ones with large temperature differences. Then, the next paragraph describes all three sub-types in detail
- **Section 2.1 classifies KIC 7766185 as a W UMa system because of the equal depth eclipses and the late type stars. However, the author does not state how he knows that the stars are late type stars.**
 - o A previous study determined the spectral type of the target to be F3V. This is mentioned in the introduction and listed in Table 1
- **The large empty space between the end of Table 2 and the beginning of section 3 should be deleted. The same formatting issue happens again after Table 3 and before Table 4.**
 - o There are a couple formatting issues like this. Once all the major edits are complete, and sections are no longer being added/removed/moved around, the formatting will be corrected
- **Section 4 references values from literature that the author put into his *PHOEBE* code as initial values. He should state the inputs *PHOEBE* takes for initial values, so the reader knows what parameters he took from literature.**

- Table 4 has been modified to include the initial values and the optimized values. I think this should clearly display which values were inputted to create the models
- **The blue line in Figure 4 is hard to see compared to the light curve data in black. It might help to change the model light curve to a light/ brighter color.**
 - Figure 4 has been modified for better legibility
- **The author states that the Nelder-Mead Optimizer underestimates error ranges on the system parameters. If there is a specific reason for the underestimation, then the author should include this as justification for switching to MCMC for error ranges.**
 - This statement has been removed and there have been additions to the discussion of MCMC. MCMC is the best way to get accurate error ranges on these parameters and this is explained better in the text
- **The term “fillout factor” should be quickly defined because it is brought up multiple times throughout the paper.**
 - The fillout factor should be understood by those in the field

Major Points

- **The author needs to complete the second run of the MCMC sampling to obtain error bars for the light curve parameters.**
 - Due to the time constraints and issues with MCMC sampling, the MCMC sample over the light curve parameters will be left to a future study, which has been started by the author

Review Response 7

I would like to thank the reviewer for their comments. They have been considered and used to improve the paper. Below are my responses to all the critiques

Major Points:

- None

Minor Points:

- **In the abstract, I think it would be beneficial if the author gave a sentence or two of background about contact binaries and their importance so the reader has a better idea of what is going on right away.**
 - o I don't believe background material should be presented in the abstract; it should be saved for the introduction. The reader should get the project goals and results from the abstract and continue to the introduction for a more in-depth discussion and background of the topic.
- **In the abstract, the author says that the ephemeris from a past study done on this system is "incorrect." I do not think that this is the correct way of denouncing another study, especially in the abstract. It is a very bold claim and immediately made me suspicious when I read it. I think it would be better to say something like "a different ephemeris was reported" or something along those lines, rather than just outright saying a published value from a well-known study is wrong.**
 - o The wording has been modified to suggest a refinement in the ephemeris value

- **I think the entire introduction section is a little wordy and disorganized. Things can definitely be more concise, and I am not sure about the overall language used. It does not seem extremely professional and geared to people in the field. It seems like the author is talking to an audience of amateur astronomers.**
 - o Parts of the introduction have been re-written and explained differently. The reviewer should provide examples instead of saying the whole section is disorganized and written for amateurs so I can gauge what needs improvement. This comment is slightly confusing because the claim is that the introduction seems as if it is written for amateurs, but then throughout the review additional clarification is requested by the reviewer for terms that should be recognized
- **In the introduction, the author refers to figure 3, which is part of the results. It would make more sense to first refer to a figure 1, and not to a figure from the results this early on in the paper.**
 - o Reference to Figure 3 in the introduction has been removed
- **In Table 1, the author lists “sini” as an element, but I am not sure what “i” stands for. I think it should be labeled. Similarly, the author lists “asini” also, but I do not know what that is. Lastly, in Table 4, R_{sun} is listed, but maybe it would be important to know a value for that.**
 - o The “i” is inclination and will be recognized as inclination by those in the field. asini is the projected semi-major axis and also will be recognized by those in the field. I am unsure what the last part of this comment is asking. Is this requesting I give the radius of the sun in some other unit for comparison? Using solar radius to measure the radii of other stars is standard practice and it would be very odd, and inconvenient, to give the radius in other units

- **The author uses the phrase “in-depth” study to describe what he is doing, however he does not exactly specify what an in-depth study entails and how it is different from studies done in the past (in the intro).**
 - o The paper states that this study will analyze spectroscopic and photometric observations and conduct a period study. A period study has not been conducted yet and previous analyses only looked at light curves. An explanation of the previous study has been added to demonstrate how this project will improve on the system parameters
- **Figure 2 is an example spectra, but I think that it would be good to see all of the spectra in an image appendix.**
 - o I don’t believe that all 7 spectra need to be displayed. This is also not done in other papers which conducted similar analyses on other stars.
- **This sentence is in section 3: “By using one of the obtained spectra as a template, the systemic velocity cannot be determined, however, this information is not important for determining system parameters through binary analysis.” What is the point of this sentence if the information is not important anyways?**
 - o The point of this sentence is to state that the systemic velocity, which usually would have to be accounted for, is not an issue when using one of the obtained spectra as a template
- **Section 3 is a little disorganized and wordy. This sentence is towards the end of the paragraph: “Spectrum 4 was used as a template and thus could not be used to obtain measurements.” This is the second time that the author mentioned Spectrum 4 was a template, and I don’t think it was necessary to repeat.**

- o I have tried to re-work section 3 to make it less wordy and more organized. It would be helpful if the reviewer could give examples so I can gauge what needs improvement. About this sentence, it mentions that Spectrum 4 was used as a template again but is mentioned mainly to stress why results are omitted for this spectrum
- **Why are the parameters from the Nelder-Mead Optimizer under-estimated?**
 - o This statement has been removed and a better explanation of the Nelder-Mead optimizer and MCMC is offered.
- **What is convergence? I am not sure if that is something which should be explained or if it is something that I should have already been aware of. Based on the rather basic language used in the rest of the paper, it seems like something which should be explained.**
 - o While convergence will most likely be known by most readers, a short description has been added.
- **The author mentions again about the Kepler study being incorrect, but I think there needs to be more information about why it is incorrect if he wants to keep such a bold statement.**
 - o The use of strong language such as incorrect has been modified to suggest a refinement or update to the Kepler ephemeris
- **Why is the temperature reported by Kepler not reliable as a primary temperature?**
 - o The reason for this was mentioned in the introduction. This discussion was referenced in parenthesis for the reader to recap why the Kepler temperature is not reliable as a primary temperature

- **There are 3 or 4 instances where there should be something cited. For example, the author states “A-Type systems occur when the hotter star is the larger star.” Where did this come from?**

- o It would be helpful if the reviewer could mention those 3 or 4 instances so I could know what needs a citation. The part of the discussion which determines that KIC 7766185 is A-type W UMa comes from the background presented in the introduction. However, a citation has been added to this sentence.