We thank the reviewer for their very thoughtful and thorough comments, and believe they have improved the quality of our manuscript. Below are our responses to the reviewer's comments, with our responses bolded following the comment.

Referee Report
Reviewer's Comments:
I thank the authors for their clearly written manuscript. I recommend the article for publication after the minor comments below are addressed.

General comments:

-The authors are in a good position to make some general comments on the detectability of super-Earth transits around M-dwarfs. It might benefit the community if they provide a short discussion on the feasibility of such observations and rough limits on what sorts of mass loss rates/exosphere densities are needed for detection. This could provide a good reference for observers attempting to execute similar campaigns. This is optional and I leave it up to the authors' discretion as to whether or not it is included. **We appreciate the reviewer's suggestion and agree that this would be very interesting and useful. However, we think that providing the appropriate discussion would be substantial and is beyond the scope of this paper. Similar work has recently been published by Gómez de Castro et al. (2018) and Dos santos+2018**

-Please provide a table that lists the important system parameters (stellar mass, radius, effective temperature, etc.) for the reader's reference. **We have added the suggested table.**

-Check unit presentation throughout the paper. I believe current AAS journal format is to use negative exponents and not slashes ("/") to indicate "per" units. **We changed the y-axis units from "a/b" to "a b^-1" on figure 5 as well as in all relevant equations and tables, and some places in the text. However, we left radius and flux ratios expressed as a/b as is customary in the exoplanet community.**

Introduction:

-Please clarify that O2 and O3 may be unreliable biosignatures *specifically for M-dwarfs*. The way the sentence is worded makes it sound as if they are unreliable tracers for all spectral types, which is not the case. **We made the appropriate specification, bolded in the current version.**

-I suggest changing the name Gliese 436 b -> GJ 436 b since this is the most common nomenclature in the literature. **We prefer the original notation of Gliese, as the Gl prefix is correct for numbers < 1000 which come from the original CNS and Gliese (1969). Jahreiss was only added as a coauthor in the Gliese & Jahreiss (1979) update where numbers 1000-2159 were added.**

-It is unclear to me that "this implies a tenuous habitability of cooler rocky planets orbiting similar stars." This seems too direct of a comparison between the obviously inhabitable GJ 1132 b and planets with lower incident stellar

radiation and cooler temperatures. I do not think that a lack of atmosphere around GJ 1132 b necessarily has an implications for the habitability of cooler planets. I believe the authors are trying to get at the fact that we don't have great constraints on the parameters which dictate atmospheric retention. Since this is well-said in the next sentence ("Knowing whether warm..."), I would recommend removing or modifying the previous sentence. **We removed the statement "...implies a tenuous habitability...".**

Section 2:

Third paragraph - Please be consistent with exposure time units, either use 2000 s and 500 s or 2 ks and 0.5 ks. **We made the exposure time units consistent, in ks.**

Section 3:

Sub-section 3.3, paragraph 4 - Please define what "4" is ("see 4" is ambiguous) **We redefined "4" as "Fig. 4".**

Section 4:

Sub-section 4.1, eq. 3 - Technically the expansion velocity is also a function of r since v(r) must increase as n(r) decreases in order for Mdot to stay constant at a given distance from the planet. Please amend the variable v -> v(r). **We changed v to v(r).**

Sub-section 4.2, paragraph 2 - It is unclear to me why ISM absorption changes the expected percentage of flux absorption. Is this because the absorption from the exosphere is not uniform across the blue wing and thus the ISM obscures the portion of the blue wing where most of the exospheric flux reduction occurs? This would benefit from some clarification. **We added a clarifying sentence and bolded the change.**

Sub-section 4.2 - It would be useful to the reader if the simulated Lyman-alpha transit absorption was shown in a separate plot, perhaps as a sub-panel of Figure 8. This would help the reader compare the observations to a Lyman-alpha transit that might be expected from the simulations. **We have added a plot similar to what was suggested, showing an in-transit and out-of-transit spectrum from the EVE simulated spectra.**

Conclusions:

Second paragraph - Similar to my previous comment, I recommend tempering the language about M-dwarfs in the habitable zone since the current study only places very loose upper limits on the planet's mass loss rate. Furthermore, GJ 1132 b is not in the habitable zone so extensions to habitable zone planets are tenuous at best. Any comparison should include analysis of mass loss over time, which includes how the stellar X-ray/EUV flux is changing throughout the pre-main sequence and current main sequence lifetime, planet migration, etc. **We removed a sentence about planetary habitability and added a statement about how UV activity decreases over an M dwarf lifetime and therefore this is a biased estimate.**