

I would like to thank the authors for the comprehensive reply to the reviewer comments, and I would like to apologize for my very late review.

In the new version of the manuscript, parts of the discussion of the results are more clear, and sections of the methodology have very much improved!

Three questions or worries remain:

1. Are the NDVI differences calculated against monthly mean NDVI or yearly mean NDVI?

In line 201 I read: 'For the calculation of the correlation coefficients, NDVI time series were linearly detrended and its mean seasonal cycle was removed', which suggests that the mean seasonal cycle was not removed for the other analyses?

And in line 240 I read: 'To compare NDVI in different months and locations, differences (anomalies) of individual NDVI values against NDVI mean throughout the study period were calculated.'

I would highly recommend to remove the mean seasonal cycle from the NDVI for all analyses, specifically for fig 7 and fig 8. Removing the seasonal cycle would help you to tackle the problem of 'event-III', as described in section 3.4.1 and fig S4. Because fig S4 now shows (mainly) the seasonal cycle, and not the effect of the drought that you are interested in.

2. In section 3.4.3, NDVI differences are discussed for the dry and wet season of three specific drought years. Figure 9 compares the mean seasonal NDVI over three selected years with the mean yearly NDVI over the study period. The magnitude of the NDVI difference for the wet season is larger than for the dry season (Fig. 9), or actually, NDVI difference is positive rather than negative during the dry season. It is concluded that (line 415): "The results show that the smaller negative SPI amplitudes found in these selected years during the wet season have huge impacts on declining the wet season vegetation amounts over the whole study area compared to the dry season." Is there a reason that the vegetation could have increased due to droughts in the dry season? Generally, I think that the comparison between the wet and the dry season is a bit unfair. For most (or all) regions in Madagascar, the wet season NDVI values are larger than the dry season NDVI values. Therefore, finding a large decrease in NDVI during the dry season is less likely than finding a similar large decrease in NDVI during the wet season.
3. Line 211 "This indicates that drought occurrences are indeed among the factors contributing to the deterioration of Madagascar's vegetation." I would think that a detrended and deseasonalized time series cannot be used to draw conclusions about a slow evolving process like 'deterioration of the vegetation'. Because, if there is a long-term trend of deterioration of the vegetation, this trend will have been removed from the time series. Rather, I think that the results indicate that above or below average NDVI is – to some extent – related to above or below average precipitation.