The paper addressed an interesting question, which is can we identity whether the pattern is self-organized (scale-dependent feedbacks) using spatial statistics. It used different spatial statistical technics and applied them to the everglades ridge-slough patterns, which are often assumed to self-organized regular patterning. Their results are also intriguing. Firstly, the authors identified the water depth as the major control of the patterns, and secondly, they found that the pattern is not regular, since the patch size distribution is scale free and the pattern is aperiodic. I think the work is significant, but I have several concerns:

1. The landscape has a water gradient from northeast to southwest already introduced by human activities. And the ridge densities and shapes are shown to be significantly correlated to the water gradient. However, the statistical significant relationship between water depth and ridge density does not necessarily imply that hydrology causes the formation of ridge-slough pattern. This may be subtle: the mechanism that causes certain ecological pattern could be entirely different from variables that could influences the already formed pattern –it is likely that many variables could influences the pattern once it is formed.
2. Line 314-318: (1) the mention of percolation threshold is not relevant, because it depends on the size of the site chosen. The decision of 6km by 6km is arbitral, and if the size of 10km by10km were chosen, the number would be below ~0.59. The mention of percolation threshold here is only misleading for the readers. (2) The logic flow from the "0.59" to the statement "the failure of Monte Carlo tests within this group may be density driven, rather than a result of an underlying patterning mechanism" is shaky. I do see that the failure of the Monte Carlo significance tests is density driven, but that could indicate an underlying mechanism operating.
3. I am no expert on the wavelet analysis, and only know the basic knowledge of it. I looked up the literature they cited on this analysis and some other literature on this method, and I have some questions:
    a. Line 330- 346: the purpose of the spectral analysis was to identify peaks, and it is a little confusing to me why the authors tried to do the correlation between the *r* spectra and wave numbers on log-log scale. Maybe I am missing something?
    b. Line 332: Why the authors excluded the smallest wavenumber? Some explanation would be needed.
    c. Do you need to use null models to get the confidence interval to determine whether the result is statistically robust?
    d. Line 336-337: authors found that r spectra monotonically decrease with wavenumber, and conclude that "maximum spatial variation at the largest scale, and decreasing consistently at smaller scales". Meanwhile, in Figure 2 (b), wavenumber is "cycle/km", meaning that spatial scales decrease along x-

axis, which would a complete opposite conclusion as arrived by the authors? Just a little confusing to me.

4. Just a comment. Line 453-459: If the author's hypothesis is valid, it means that the ridges have grown since drainage (the dry part) to compensate for the decline in water level, and ridges in the wet areas should have kept the same, if not shrinking. The pattern they observed agreed with this hypothesis. The current landscape shows a gradient of degradation from north to southeast. This is interesting.