

Interactive comment on “Derivation of land surface temperature from Landsat Thematic Mapper (TM) sensor data and analyzing relation between land use changes and surface temperature” by S. Zareie et al.

S. Zareie et al.

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Received and published: 8 May 2016

Dear Reviewer in Chief,

My revised paper has been attached. It has been provided based on your comments. We tried to provide paper based on all of comments. The revised parts has been shown with different colors. If there is any problems do not hesitate to get in touch me.

What is the “Within Groups”? The formula for the one-way Variance Analysis of relationship between land surface temperature and normalized difference vegetation index (NDVI) F-test statistic is $F = (\text{explained variance}) / (\text{unexplained variance})$ or $C1$

$F = (\text{Between group variability}) / (\text{Within Group variability})$ “Within Group variability” is the “unexplained variance” that shows experimental error rate. $\sum_{i=1}^n (Y_i - \bar{Y})^2 / ((K - 1))$ where \bar{Y} denotes the sample mean in the i th group, n_i is the number of observations in i th group, K is the number of groups, $n = \sum_{i=1}^K n_i$ is the total number of observations, n_i is the number of observations in the i th group, K is the number of groups, $n = \sum_{i=1}^K n_i$ is the total number of observations. The statistic will be large if the between-group variability is larger relative to the within-group variability, which is unlikely to happen if the variables within the group of variables are measuring the same thing, some measure, assuming that each group reflects one overall trait, of how each trait (group) is related to the response variable.

Best Regards,

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Please also note the supplement to this comment:

<http://www.solid-earth-discuss.net/se-2016-22/se-2016-22-AC2-supplement.pdf>

Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-22, 2016.