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Subject: Reading Assignment - Study Guide Questions
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Hi all:

Please do not spent too much time on the Esaias et al. (1998) paper that I handed out yesterday in class. While it is a classical MODIS paper written by many of the people who developed the initial science programs for the data this satellite gathers, it is very technical, detailed, and challenging in places, however, it is one of the most cited papers within the MODIS community. With this introductory commentary, here is a set of study guide questions you may think of when reading/browsing/skimming the paper:

1. What do the authors mean when they talk about ocean color?
2. What was the initial main goal of the MODIS satellite mission?
3. Why is MODIS (mistakenly, I believe) often refered to as a biological satellite sensor system?
4. Roughly, how much of the signals received by the satellite sensors originates from the ocean?
5. What are the other 5 sources of signals sensed by instruments at the top of the atmosphere (TOA)?
6. Why do many derived MODIS products (algorithm) not depend too strongly on absolute uncertainties?
7. How many of its 36 channels (frequency bands) has MODIS set aside to estimate Sea Surface Temperature (SST)?
8. How accurate does the paper claim the derived SST are?
9. What level of MODIS data do you need, if you do not want any spatial or temporal averaging or interpolations?

There will be NO quizz tuesday, but I may ask some of these question in class. And while I do not expect everyone to have the answer to every of these questions, I like to encourage you as a class to perhaps compare your ideas on you may answer some of these questions. As there are 9 questions and 6 students, if everyone knows the answer to at least 2 well and you communicate well as a group, all should be covered.

Please skip and ignore the following sections:

- 2. Comparison with precursor sensors
- 3F. Phycoerythrin
- 3H. Solar-stimulated fluorescence
- 3K. Data Days

Hope this helps with the reading of a challenging paper.

andreas

P.S.: I am also working on our lab session friday when we will get started on the aspects that related to the Homework. Not all the listed files are presently in the right directories, so please try not to start on this just yet.

P.P.S.: After talking with some of you about research interests and backgrounds, I wonder if we should not have 2 groups with 3 people each (rather than 3 groups of 2). We thus may have one group focused on a marginal sea of the Atlantic Ocean and the other group focusing on a marginal sea of the Pacific Ocean. Any input on this would be most welcome as I am trying to have the actual study areas as close to your (research) interests as possible.

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