

Remote Sensing Homework

Spring 2007

Please answer in complete, coherent, grammatically correct sentences and show all work!

Satellite Altimetry Due Wednesday 18 April 2007

1. What are the trade-offs that must be considered in choosing a wavelength (microwave band) for a radar system?
2. What parameters determine the power returned to the satellite radar antenna?
3. What measurements can a satellite altimeter provide?
4. What are the four major sources of error in satellite altimetry?
5. What four pieces of information must you know to measure sea-surface height (SSH) from a satellite altimeter?
6. What is aliasing in general? How can it affect retrievals of SSH?
7. What corrections to altimetry can be made by flying a passive microwave sensor along with the altimeter?