Past Independent Study Examples

Environmental Systems Analysis & Monitoring at CU Skywatch

Goals: Student will learn about scientific instrumentation by assisting Scott Kittelman at CU Skywatch in relocating several instruments and creating a method to convert their analog signal to digital on-site to reduce noise in the data.

End Product: A term paper documenting the re-siting of the instruments and the improved data output

Nonlinear Cloud Feedbacks in CESM1 and CESM2

Goals: Student will study nonlinearities in cloud feedbacks in CESM1 during CO_2 doubling and halving experiments by looking at changes in cloud fraction, cloud optical depth, and tropical circulation. Student will use the same analysis in CESM2 and contrast the inter-model results.

End Product: A term paper with poster suitable for conference presentation