

Optical Ray-tracing Techniques for End-to-End Instrument Performance Verification for GOCI instrument

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GOCI instrument to be loaded on COMS will monitor marine environments around the Korean peninsula and product fishery information like Chlorophyll, etc. The instrument will cover 2500 km X 2500 km target area centered on 130°E, 36°N by 4 X4 scanning method having ground sampling distance 500 m X 500 m. Using ASAP optical analysis tool, we are currently developing novel targeting simulation techniques to verify the primary science objectives of the mission; coastal red tide detection. We report the current progress of the technical development, the computational details and their application to the science performance verification of the GOCI optical system.