

THE OPTICAL IMAGING INSTRUMENTS AND THEIR APPLICATIONS: AATSR AND MERIS

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ABSTRACT

The global mission of AATSR and MERIS will make a major contribution towards our understanding of the role of the oceans and ocean productivity in the climate system and will also enhance our ability to model and forecast change. The availability of these two complementary sensors on the same platform also offers new opportunities for the synergistic use of data in multi-disciplinary oceanographic and climate studies.

MERIS is primarily dedicated to observing oceanic biology and marine water quality through observations of watercolour. However, it will also make contributions to atmospheric and land-surface-related studies. Similarly, the main role of AATSR is to provide detailed Sea Surface Temperature maps, and yet it also provides the capability to measure a range of parameters for cloud microphysics, plus surface temperatures and various vegetation indices over land. Data from these instruments are therefore applicable to a wide range of environmental application.