Development of an ocean monitoring system with the meteorological satellite "Himawari"

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In Japan, problems of primary industry's succession due to the declining birthrate and aging population are getting worse. Fishermen are decreasing, and young people are not established as fishermen. There is also problem that the jobs and knowledges based on the fisherman's intuition and experience (which can not be visualized) can not be inherited. The shortage of young fishermen is a serious problem in the maintaining and the developing the Japanese fishery industry. Fish catch is changed in day by day, and fuel is wasteful.

Fish catch depends on wind direction and velocity on the sea, direction and speed of ocean current, sea water temperature, distribution condition of phytoplankton. These parameters can be estimated from the huge amount of satellite data (big data) acquired by the Japan Meteorological Agency and JAXA. However, it is difficult to use the data, and it is not suitable to use for fishermen.

We are developing an application that can monitor the ocean condition with iPad and iPhone. In this presentation, we introduce a system that can obtain and view the cloud distribution, sea surface temperature, chlorophyll a distribution using the latest data of meteorological satellite "Himawari".

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