Japan emphasises on global food production system

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Aquaculture has become a key component of the global food production system

UMITRON K.K. has been selected for the innovative satellite demonstration program of the Japan Aerospace Exploration Agency (JAXA) in cooperation with the Tokyo Institute of Technology and others. A small satellite will be launched in FY2022 with a mission to gather ocean observations for aquaculture. High-frequency and high-resolution observations of plankton and nutrient levels will be acquired to support the aquaculture industry including fish, shellfish and algae farmers.

Aquaculture has become a key component of the global food production system. At the same time, the world's oceans are in a state of rapid environmental change creating a number of risks and challenges for today's farmers. For example, fish can be easily killed by algae blooms and seaweed or shellfish growth can be inhibited by nutrient depletion.

In order to reduce these risks and stabilize aquaculture production, information on the ocean environment such as the distribution of plankton and nutrients is critical for the industry.

UMITRON has been working with a research group led by the Tokyo Institute of Technology to collect high-frequency and high-resolution data that enables the close observation of coastal regions which are a key area for aquaculture operations. As a member of the research consortium UMITRON is in charge of demonstrating the use of satellite data for the aquaculture industry.