An Experimental Study on Distributed Ocean Surface Radar

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Ocean surface radar is installed along a coastline to observe ocean surface current in the range further than tens of kilometers to about 200km. Phased array antenna system of ocean surface radar needs hundreds of meters of land for its antenna installation as it uses lower frequency in HF bands. We have proposed Distributed Ocean Surface Radar System that enables efficient installation. Distributed Ocean Surface Radar System includes transceivers at each antenna and these transceivers work in synchronization without being-connected by coaxial cables.

This is the report of our first experiment in which we placed one distributed receiver at one of the existing antennas of our 9MHz band radar system.

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