Addressing User Demands: Enhancing NOAA Coral Reef Watch’s Satellite Decision Support System for Coral Reef Managers

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New Coral Reef Watch Early Warning System for Mass Coral Bleaching Events
(Current system: 50-km, twice-weekly; Next-generation system: 5-km, daily)

Sea Surface Temperature
Degree Heating Weeks
Coral Bleaching HotSpots

CRW: NOAA/NESDIS program, funded predominantly by the NOAA Coral Reef Conservation Program (CRCP), integrates scientists from the Center for Satellite Applications and the Research (STAR) and Office of Satellite and Product Operations (OSPO).

Sea Surface Temperature
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Bleaching Alert Area products provide direction for reef surveys. The surveys confirm the accuracy of predictions.

CRW utilizes NOAA’s operational 5-km Geostationary-Polar Blended SST Analysis. Blended satellite data is essential for reliable gap-free analysis. VIIRS data blended with 2-km Himawari-8 and GOES-R SST will provide CRW the opportunity to test products at 1 km.

New Regional Virtual Station captures 2014 bleaching in Hawai’i.

5-km CRW products provide new perspective on bleaching at or near reef scale.

https://coralreefwatch.noaa.gov

The only satellite-based system available for U.S. and global coral reef management.