Data for Resilience

The Centre for Environment, Fisheries and Aquaculture Science (Cefas), as part of the Commonwealth Marine Economies Programme (CMEP), appointed TCarta to create a surface model combining coastal and near shore areas both pre and posthurricane event.
Rebuilding smarter

TCarta provided innovative surface model data to inform resilient futures for Antigua & Barbuda

“With little baseline data available and a tight deadline, satellite imagery was the best available option.”
Richard Flemmings, Marine Operational Director, Tcarta

Nearly 90% of all structures across the island of Barbuda were damaged
Two seamless high resolution land to water surface models were created entirely from satellites.
TCarta recruited a team of innovative partners to access and develop the input needed for their dynamic surface model.

**DigitalGlobe**
- 8-band multispectral imagery
- Pre-event coverage from archive
- WorldView2 and WorldView3 tasking for post-event coverage

**DHI**
- Shallow water depth mapping

**Vricon**
- Terrain mapping
Dimensional data enhances situational awareness and provides a valuable tool for decision makers.
Shaping the future

TCarta delivered a seamless terrestrial and marine surface model at short notice to:

• Quickly quantify change
• Access and share comprehensive data with local stakeholders
• Inform resilient planning strategies
• 2,000 sq km combined land and water surface model delivered in under 3 months
Antigua and Barbuda government now have a valuable planning tool that will act as a baseline for future risk mitigation.