Environmental Monitoring and Restoration

EDRR-1
Technology: Advanced Remote Data Acquisition Unit (arQ)

Description: arQ is the heart of all ASTI-designed weather stations. It can store, record and acquire data via integrated weather sensors that can read air pressure, temperature and humidity; wind speed and direction; and rainfall amount, duration and intensity. Data is transmitted via GSM/GPRS and/or satellite and can be viewed on the internet.

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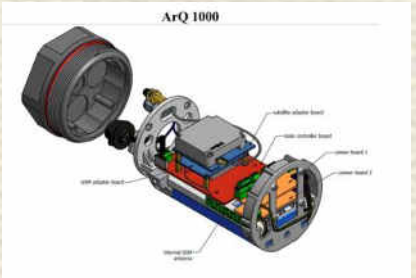

EDRR-2
Technology: Automated Weather Station (AWS)

Description: AWS uses arQ to store, record and acquire weather data through a multi-parameter sensor. Generated data can be used for weather forecasting and modelling. Data is transmitted via GSM/GPRS and/or satellite and can be viewed on the internet.

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EDRR-3

Technology: Agrometeorological Station (Agromet)

Description: Agromet is a weather station using arQ with integrated various sensors which relate to weather data impacting crop yield to benefit local farmers and communities, especially in reducing vulnerability to impacts of climate change and related natural events using timely and accurate data monitoring.

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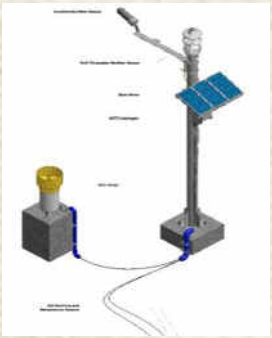

EDRR-4

Technology: Water Level Monitoring Station (WLMS)

Description: WLMS is a weather station using arQ to monitor critical flood prone areas through an ultrasonic sensor which measures water levels and rate of change of water levels. It can be used to signal potential danger and evacuation to communities.

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Environmental Monitoring and Restoration

EDRR-5

Technology: Automated Rapid Reef Assessment (ARRAS)

Description: ARRAS developed Teardrop, a diver-less banca-towable platform for capturing underwater video; and Kiko & Stitch, a software for automatic video stitching to create panoramic geotagged visual records of coral reefs. The system can generate a stitched underwater imagery map at a rate of 33 kilometers of coastline per day.

Contact Details:

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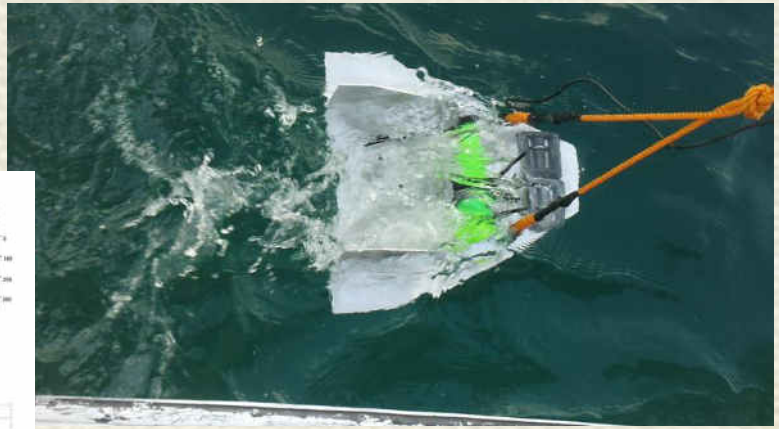

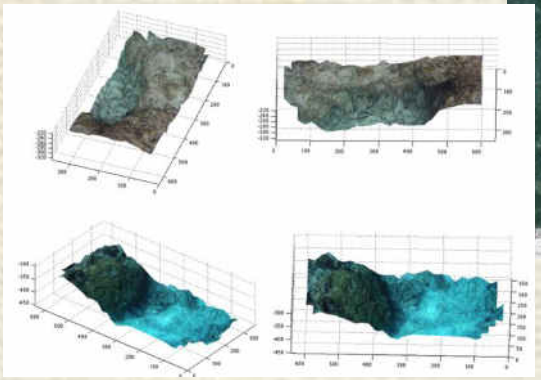

Environmental Monitoring and Restoration

EDRR-6

Technology: AquoSense

Description: AquoSense is an automated water quality monitoring system that measures water quality parameters, such as pH range, dissolved oxygen, conductivity and turbidity. It also uses lateral flow strip biosensors that detect the presence of mercury in water.

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EDRR-7

Technology: Eco-friendly Septic System (Eco-Sep)

Description: Eco-Sep is a self-sustaining portable wastewater treatment system which uses an innovative combination of filtration and bio-stimulation through organominerals. It is a low-cost and deployable method for immediate installation of domestic wastewater cleanup, especially in disaster-affected areas.

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