

## Animation

### RV *Investigator* – towing scientific equipment (general)

[YouTube] ref: [http://youtu.be/cvJEi\\_e8Vxo](http://youtu.be/cvJEi_e8Vxo)

#### Transcript

[Music plays and plankton appear on screen with text: Marine National Facility]

[Camera pans over a school of southern bluefin tuna]

[Image changes to show an animation of a the RV *Investigator*]

[Text appears: RV *INVESTIGATOR* Towed Equipment]

[Camera pans over the length of the ship and text appears: Scientific instruments can be towed behind *Investigator* and controlled by scientists onboard via a fibre optic cable.]

[Camera zooms in on a towed camera as it slowly rotates. Text appears: Towed cameras record images up to 6 kilometres below the ocean's surface.]

[Image changes to show a Triaxus slowly rotating then zooms out to show the Triaxus on the deck of the ship. Text appears: The TRIAXUS can operate down to 350 m below the ocean's surface.]

[Image changes to show a Triaxus being lowered into the ocean from the stern and then being towed behind the boat]

[Image changes to show the Triaxus being towed under water. A vertical arrow pointing downwards appears on the left side of the screen with 350 m at the base. Text appears: The electronic sensors on the TRIAXUS measure: Temperature. Oxygen levels. Conductivity, the amount of salt present in the water. Fluorescence, the quantity of chlorophyll in the phytoplankton, which fluoresces more during the day, compared to night.]

[Images move through a temperature graph, an oxygen graph, a salinity graph and a fluorescence graph in the background with the towed Triaxus in the foreground]

[Image changes to show phytoplankton and zooms in on the phytoplankton from various angles. Text appears: Sensors measure the light available to phytoplankton for photosynthesis. Phytoplankton is critical to ocean health. The data from the TRIAXUS is used to work out where species live eat and breed. ]

[Image changes to show the towed Triaxus with a black background spotlighting on the ocean floor. Camera zooms in on the spotlighted area showing fish and marine life. Text appears: Biologists use the data from towed cameras to identify and track the movement of species.]

[Camera pans over the ocean floor. Text appears: Marine geologists use cameras to better understand geological features in the sea floor and to find mineral resources. Footnote appears: Submarine Ring of Fire 2004 Exploration, NOAA Vents Program]

[CSIRO logo appears with text: Big ideas start here [www.csiro.au](http://www.csiro.au)]

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MNF: <http://www.marine.csiro.au/nationalfacility/>

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