# **Project Overview**

Virtual Integrated Data System VIDS-V2 University of Miami, RSMAS Marine Technology Group

### **Project Goals**

#### Portability

Design for multiple operating systems and hardware platforms. O/S Windows, Linux, Mac Hardware PC, Mac, Embedded Systems, PDA, Tablet PC

#### Dependability

Redundancy, Data Security, Error trapping and notification Auto Recovery from certain problems.

#### Flexibility

Plug n Play Instrumentation using standard drivers. Stand Alone or System Managed data collection. Multiple methods of Communicating with Instruments. Safe, Full access to real time and archived data by science.

#### **Standard Data Formats**

## Description

- VIDS V2 is a total re-write of the current VIDS software package in use for 8 years, updated with new features introduced in National Instruments LabView 8.
- The VIDS V2 design model will be determined by RVTECHS interested in improving and standardizing data collection.
- VIDS V2 will be a highly modular system designed to allow variations of the system based on individual needs.

### **Design** Guidelines

- The failure of any given VI will not impede the performance of another VI.
- Any collection VI can function in a stand alone capacity or as a member of a larger collection system.
- All VIs can use one of several methods to communicate with an instrument.
- Allow for older software based on serial communications to participate in a network environment.
- If an error is detected, tell somebody.

# **Typical VIDS GUI**

