

Shore-based Data Analysis Plan

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NSF Award: OCE02-41250

“Collaborative Research: Site evaluations and background studies of interactions among fluid chemistry, physiology, and community ecology for Ridge 2000 Lau Basin Integrated Studies”

Relevant Cruises:

TUIM05MV

TUIM07MV

MGLN07MV

Anticipated Data Products:

- Large scale photomosaics of vent communities
- Reproductive analysis of major molluscan groups

Specific types of analyses expected to be done on each sample or with each data set.

- Distribution, abundance and diversity measures of visible macrofauna in photomosaics of communities surrounding vents.
- Histology of reproductive tissues of *Alvinoconcha hessleri*, *Ifremeria nauteliei*, and *Bathymodiolus brevior*.
- Also, MOCNESS plankton samples are archived and funding will be requested for analysis of larval distributions. Formaldehyde preserved samples are at MLML and ethanol-preserved samples are at MBARI.

Metadata for samples/data listed below have been submitted to the DMO

Expedition	Collection year	Collected by	Region	Sample	#
TUIM05MV	2005	Jason	Lau	Animal tissues	31
TUIM05MV	2005	Jason	Lau	Plankton	60
TUIM05MV	2005	Jason	Lau	Animal tissues	4
TUIM05MV	2005	Jason	Lau	Photomosaic	49
TUIM07MV	2005	Jason	Lau	Photomosaic	20
MGLN07MV	2006	Jason	Lau	Animal tissues	50
MGLN07MV	2006	Jason	Lau	Photomosaic	20?

Data Release and Submission Plan:

- Georeferenced photomosaics have been submitted to the DMO.
- Interpretation of mosaics is still underway - we expect to submit a paper in June 2009, and will release the mosaics when the paper is in review.
- Community descriptions (abundance and diversity estimates) from mosaics are being generated. We expect to submit these to the Data Portal for release in June 2009.
- Reproductive analysis (tissue histology) is underway on molluscs and is the subject of a graduate student project. Data should be complete in December 2009 and data will be submitted to the Data Portal at that time.