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14. ABSTRACT The ITOP (The Impact of Typhoons on the Ocean in the Pacific) Field Campaign in 2010 studied the interaction between typhoons and the underlying ocean with specific regard to the 4-dimensional response of the ocean underneath and behind the storm. This project involved instrumented aircraft and ships from the US and Taiwan as well as ship-deployed instruments including floats, gliders, drifters and moorings. The complexity of the observational campaign and proposed measurement strategies necessitated a dry run experiment in October of 2009 to develop effective sampling strategies for 2010. EOL/Computing Data and Software Facility (CDS) supported the ITOP Dry Run with the development and deployment of a field catalog. The ITOP Field Catalog hosted a complete set of operational and model products and were accessible to all investigators via the world-wide-web. These catalog products contained imagery and data plots of atmospheric and ocean conditions in the project area as well as conditions in and around typhoons of opportunity that occurred.					
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Final Report
ITOP Dry Run Field Catalog Support
2009-10

National Center for Atmospheric Research
Earth Observing Laboratory

The ITOP (The Impact of Typhoons on the Ocean in the Pacific) Field Campaign in 2010 studied the interaction between typhoons and the underlying ocean with specific regard to the 4-dimensional response of the ocean underneath and behind the storm. This project involved instrumented aircraft and ships from the US and Taiwan as well as ship-deployed instruments including floats, gliders, drifters and moorings. The complexity of the observational campaign and proposed measurement strategies necessitated a dry run experiment in October of 2009 to develop effective sampling strategies for 2010.

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The 2009 ITOP Dry Run Catalog (see url: http://catalog.eol.ucar.edu/itop_2009/) contains products from 21 September through 32 October 2009. The catalog remains accessible at EOL at the above mentioned url.

The products listed by catalog category include:

Operational Products	34708 products	11.05Gb (disk storage space)
Model Products	59779 products	2.82Gb
Research	16 products	0.002Gb
Reports	384 reports/images	0.12 Gb

There were a total of 94887 products and documents and 13.99 Gb of disk space are used to house the full content of the ITOP 2009 Dry Run Catalog.

EOL Field Project Services (FPS) supported the planning and preparations for the 2010 field deployment. This was done through continuing discussions with the project investigators and ONR program managers. In addition, EOL attended the 27 October 2009 ITOP Planning Meeting in Monterey, CA. Detailed discussions were held on the set-up and support for an operations center in

Guam, logistical arrangements in Guam for scientific staff accompanying the USAF C-130 aircraft and evaluation of the operations planning function as carried out during the ITOP dry run in October 2009.

A series of 'mock' reports were also prepared, based on prevailing weather at the time, to help the team determine the timing of aircraft operations, deployment of special oceanographic sensors from ships and work through other operational details (multiple aircraft deployments, crew duty rest cycles, timing of daily planning meetings, etc.).

ITOP operations support was built on the successful set-up and support for the 2008 T-PARC/TCS-08. The requirement for a site survey trip in 2010 to secure proper support for the ITOP Project coordination center in Guam was identified. The outline of the ITOP Operations Plan was finalized and writing assignments were assigned and begun.