

The 92 days will be divided between ITOP and IWISE as follows:

ITOP cold wake surveys and asset recovery	41d
ITOP ASIS/EASI service (Graber)	
12d	
IWISE HDSS surveys (Pinkel)	
10d	
IWISE moorings and surveys (Alford/Rainville/McKinnon)	29d

### Sampling Areas

IWISE operations will take place in and around Luzon Strait (Taiwan & Philippine clearance). Sampling may be opportunistic, meaning that IWISE investigators might need to specify an operating area rather than mooring locations and CTD station coordinates.

ITOP operations will range over 12-32N, 121-146E (Taiwan, Japan & Philippine clearance), excluding those areas, such as the South China Sea, 24nm Taiwanese territorial limit, etc that US vessels would not typically be granted permission to operate. Operations will include opportunistic surveys of typhoon cold wakes using ship-based instruments, glider deployments and recovery of floats and drifters previously air-dropped in front of the typhoon. As such, it will not be possible to provide a detailed sampling plan in advance. As in previous years, we'll be able to specify a broad region and provide detailed info about the activities we will pursue within that region.

Typhoons could occur anywhere within the op region. We prefer typhoons close to Taiwan, but there is a reasonable chance that no such typhoon will occur next year, which could force us to sample as far east as the area north of Guam.

We anticipate staging in Kaohsiung.

### Timing

IWISE will use the first 5 days of the 92-day window. After that, IWISE investigators will use the ship until a typhoon materializes that ITOP chooses to sample, or the ship is needed for the Graber ASIS/EASI service. If the ship is recalled for a typhoon, IWISE will immediately return Revelle to a port (Likely Kaohsiung, Keelung or Manila, though a few others are possible) agreed upon between the Master and ITOP PIs. Science party will swap at this port and ITOP work will begin. Once the cold wake work is finished, we will likely

try to swap personnel for the ITOP float and drifter deployment. Steaming times may make this impractical- we will have to decide on a case-by-case basis. It is also likely that significant time will be spent dodging subsequent typhoons. After ITOP cold wake is finished, the ship will revert to IWISE or to the ITOP ASIS/EASI service work. Any time remaining of the 41d cold wake/float & drifter recovery block might be used either for a second survey or for additional float & drifter recovery later in the time window.

What other information would you like? We'll also be using Taiwanese R/Vs and, likely, chartered fishing vessels.