**TYPHOON WAKES – Working group**

 **Possible ‘Headline’ Results**

* **Creation of mesoscale eddies by typhoons**

May be hard to do a definitive study

* **Typhoon wakes are capped by surface heating**

 Data is sufficient for a definitive study

 Does boundary layer decoupling play an important role?

* **Cold wakes are enhanced by continued mixing after storm has passed**

 Often claimed, perhaps incorrectly

 Data is sufficient for a definitive study – shear and mixing rates

 Near-inertial shear probably plays a definitive role – what controls this?

* **The Megi cold wake in the SCS is dramatically different**

 Strongest ITOP wake

 Large BGC response

 No rightward bias of cooling despite fast storm? Why not?

 Lack of wave swell

* **Wake decay by lateral advection and straining by mesoscale eddies?**

 Spreads wake influence far from storm track

 Resulting filamentous wake may be subject to lateral mixing

* **What is role of submesoscale restratification?**

 Work with Baylor-Fox Kemper

 Study small scale gradients from ship/glider surveys

* **How well do current models predict wake evolution?**

 Track 26-27C layer thickness in existing runs

 Compare with Rosalinda’s study

**Needed products for these studies**

Realistic wind fields

Eddy field

Drag laws

Wave field