

# Agency Resource Contributions to THORPEX

John Gaynor

USTEC

October 7, 2009

# NOAA

- Since 2004, NOAA has had about \$1.23M per year available for THORPEX in a budget line under the USWRP. From this NOAA has funded and currently funds:
  - 3-yr external grants of about \$1M per year up to 2007
  - Since 2004, US contribution to the THORPEX IPO (\$150K per year)
  - Since about 2006, \$20K-\$60K per year to support the US PO/Admin. Office
  - TIGGE archive at NCDC - \$50K/yr
  - YOTC admin. Office (recently) - \$20K/yr
  - Support Winter T-PARC field experiment (aircraft time, dropsondes, enhancement of Russia radiosondes, E-AMDAR – approximately \$220K
  - Internal THORPEX ensemble modeling research and development, such as NAEFS, EnKF – large majority of funds since 2007.
- In kind:
  - GIV, P3, and modeling support for the 2003 Pacific THORPEX Observing System Test (TOST) and GIV and modeling support for the 2004 Atlantic TOST
  - Executive secretariat, Chair of USTEC, representative to ICSC, THORPEX-related travel
  - Representation on USTSSC, NARC, international working groups
  - Winter T-PARC lead

# NSF

## (For revision by NSF)

- T-PARC
  - About \$6M for field phase in 2008
  - About \$2M/yr for analysis
- Since about 2006, \$20K - \$60K per year for US THORPEX PO/Admin. Office support
- \$20K/yr for YOTC admin. office support (recent)
- \$50K for YOTC archive support (recent)

# Navy

## (For revision by Navy)

- ONR: T-PARC (TCS-08) – about \$3M
- NRL: About \$1.5M/yr for internal THORPEX-related research
- In kind:
  - USTSSC Chair
  - Warm season T-PARC lead

# NASA

## (For revision by NASA)

- AMMA 2006 – about \$5M (funds for analysis?)
- THORPEX-related ROSES awards - ?
- \$20K - \$60K per year for US THORPEX PO/Admin. Office support
- In kind:
  - Special satellite obs and ER2 for Pacific (2003) and Atlantic (2004) THORPEX Observing System Tests (TOSTs)
  - YOTC data archiving support
  - Winter T-PARC data archiving support

# DRAFT

## US THORPEX External Support

	<b>NOAA</b>	<b>NSF</b>	<b>NASA</b>	<b>NAVY</b>	<b>TOTAL</b>
<b>Total Funding (2004-2009)</b>	<b>\$ 4.4 M</b>	<b>\$ 8.23 M?</b>	<b>\$ 5.16 M?</b>	<b>\$ 3 M?</b>	<b>\$ 20.79 M</b>
<b>Major in kind Contributions</b>	<ul style="list-style-type: none"> <li>- GIV, P3 &amp; Modeling support for 2003 Pacific THORPEX Observing System Test (TOST) &amp; GIV &amp; modeling Support for the 2004 Atlantic TOST</li> <li>- Executive Secretariat, Chair of USTEC, rep. to ICSC, THORPEX – related travel</li> <li>- Winter T-PARC lead</li> </ul>	?????	<ul style="list-style-type: none"> <li>- Special Satellite obs. &amp; ER2 for Pacific (2003) &amp; Atlantic (2004) THORPEX TOSTs</li> <li>- YOTC data archiving support</li> <li>- Winter T-PARC data archiving support</li> </ul>	<ul style="list-style-type: none"> <li>- USTSSC Chair</li> <li>- Warm season T-PARC lead</li> </ul>	
<b>2010 Contributions</b>	<b>\$ 240 K</b>	<b>\$ ??</b>	<b>\$ ??</b>	<b>\$ ??</b>	<b>\$ ??</b>

# For Discussion

- Overall, are we comfortable with agency support for THORPEX?
- Is the level of collaboration among USTEC agencies on THORPEX research projects adequate?
- Should there be more collaboration between USTEC agencies and international THORPEX partners in research and field experiments?
- Is there a need to increase USTEC agency resources to fund THORPEX activities? If so, how?