60th INTERDEPARTMENTAL HURRICANE CONFERENCE

“Hurricane Season 2006: Building on the Historic 2005 Season”
March 20 - 24, 2006
Tropical Cyclone Research: Priorities for the Next Decade

Moderator: Dr. Robert Serafin
• Planning activities are encouraging
  – Interagency Joint Action Group
  – National Science Board
  – NOAA Science Advisory Board WG
Tropical Cyclone Research: Priorities for the Next Decade

- Priorities established by JAG very good
  - Intensity/Structure
  - Track
  - Landfall Impacts
  - Socio-economic
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• Plans are not comprehensive
  – Tactical, short-range, specific event-driven
  – Not strategic
End-to-End research program needs

- Seasonal forecasting
- Climatology/Variability of TC intensity and frequency at annual, inter-annual, longer time scales
- Causes of variability
- Stochastic component
- Climate change influences
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• National emphasis on mitigation
  – Event specific
  – Long-range planning
  – Mitigation need: impact simulation combining
    • Coupled atmosphere/ocean models
    • Storm surge models
    • GIS Technologies
    • Identify impacts at all vulnerable regions/areas e.g. schools, hospitals, nursing homes, airports, harbors, etc.
• Agencies should:
  – Coordinate
  – Collaborate
  – Cooperate
  – Commit for decade–long research effort
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• Immediate need:
  – Greater emphasis on data assimilation
    • Especially for Joint Hurricane Test bed
      – Human infrastructure Issue
        » Dearth of data assimilation people