

Nested Model WG Breakout Summary

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More Available Nested-grid Domains

- **GEOS-FP ($1/4^\circ \times 5/16^\circ$)**
 - China, North America, Europe, Africa, Australia
 - **India** (D. Millet@UM), **West Africa** (M. Evans@York)
 - **South America** (Q. Wang@Jinan U),
SA + Atlantic Ocean + Africa (Q. Wang@Jinan U)
- **MERRA2 ($1/2^\circ \times 5/8^\circ$)**
 - Asia (including India), North America, Europe
- **WRF driven GEOS-Chem w/ multiple nesting**
(T.M. Fu@PKU)

Common User Questions/Request

- **Can I select a smaller domain within a nested domain to make my model run faster?**
 - Yes, this can be done *indirectly* by enlarging the **buffer zone** for the nested domain (default = 3)
 - Developer L. Zhang @ PKU. (will add a wiki page after GCA1)
 - J. Zhuang has a tool to run flexible domains (not in the standard code yet)
- **Are the global met fields available at native resolution for me to create a nested-grid domain of my choice?**
 - Yes, ~~but those data are not archived due to enormous data size.~~ The global MERRA-2 and GEOS-FP data are available from <http://geoschemdata.computecanada.ca> (Dalhousie)

Discussion of Development Priorities

- **1/8° GEOS-FP nested capacity**
 - Users expressed interests, but no urgent needs given the 1/4° nested GEOS-FP is still working
- **GCHP nested capacity**
 - No urgent needs from the community at present.
 - A solution is to convert the cubed-sphere meteorology to 1/8° grid for inputs to the classic nested model.