Stratosphere Subgroup

- Stratosphere Model
  - Hindcast Papers
    - Comparison of time series with NDSC ground data and long-term satellite data using warm and cold hindcasts plus Goddatd CTM with interannual variability - implications for long-term trends and sensitivity to chlorine, etc. Douglass & Stolarski
    - What are the implications of the extreme warm and cold cases for understanding present and future ozone - To be further defined by Strahan
    - Volcanic sensitivity - add warm and cold cases to analysis of Goddard CTM that included runs with and without aerosols and a Pinatubo at low chlorine, Stolarski & Douglass

Stratosphere Model

– Future

- Do comparison to COMBO - 5-6 year runs with repeating single year dynamics from G4aGCM to reach SS - Susan Strahan will work with Mark S. and Mark O. to pick the year.
- Put model on shelf except for test runs

Science Problems for COMBO

The Stratospheric Slant

- Short-lived halocarbons, particularly bromoform, ethylene dibromide, methyl iodide, and a few other bromine compounds (Considine & Ko)
  - What are their contributions to ozone loss in the lowermost stratosphere?
  - Requires careful evaluation of COMBO transport and chemistry in TTL and lowermost stratosphere
  - Probably use STRAT model comparison run of COMBO to get OH and photolysis rates, then run sensitivity tests for various short-lived halocarbons and products using these as input

Science Problems for COMBO

The Stratospheric Slant

- Test COMBO with pieced forecasts
  - Evaluate both tropospheric and stratospheric performance
  - Use for mission analysis and for specific satellite time periods

The Langley Mechanism
(Considine)

- Separate mechanism from solver
- Make mechanism optional setup in pre-processor
- Test for differences with GEOS-CHEM mechanism or any other

Chemistry-Climate

- Should we take a visible role in CCMval? Yes, but what role? Evaluation using our extensive familiarity with data sets. Should submit some posters to the meeting in Boulder, October 17-10 (deadline July 15)
- Chemistry-climate interactions for the stratosphere will be most important in the polar regions - this gives reason for a more polar focus in the evaluation of the COMBO model results