

Earth and Atmospheric Sciences Cornell University

International Energy Forum Human Resources

Larry Brown
Chair

Art DeGaetano
Associate Co-Chair

EAS at Cornell

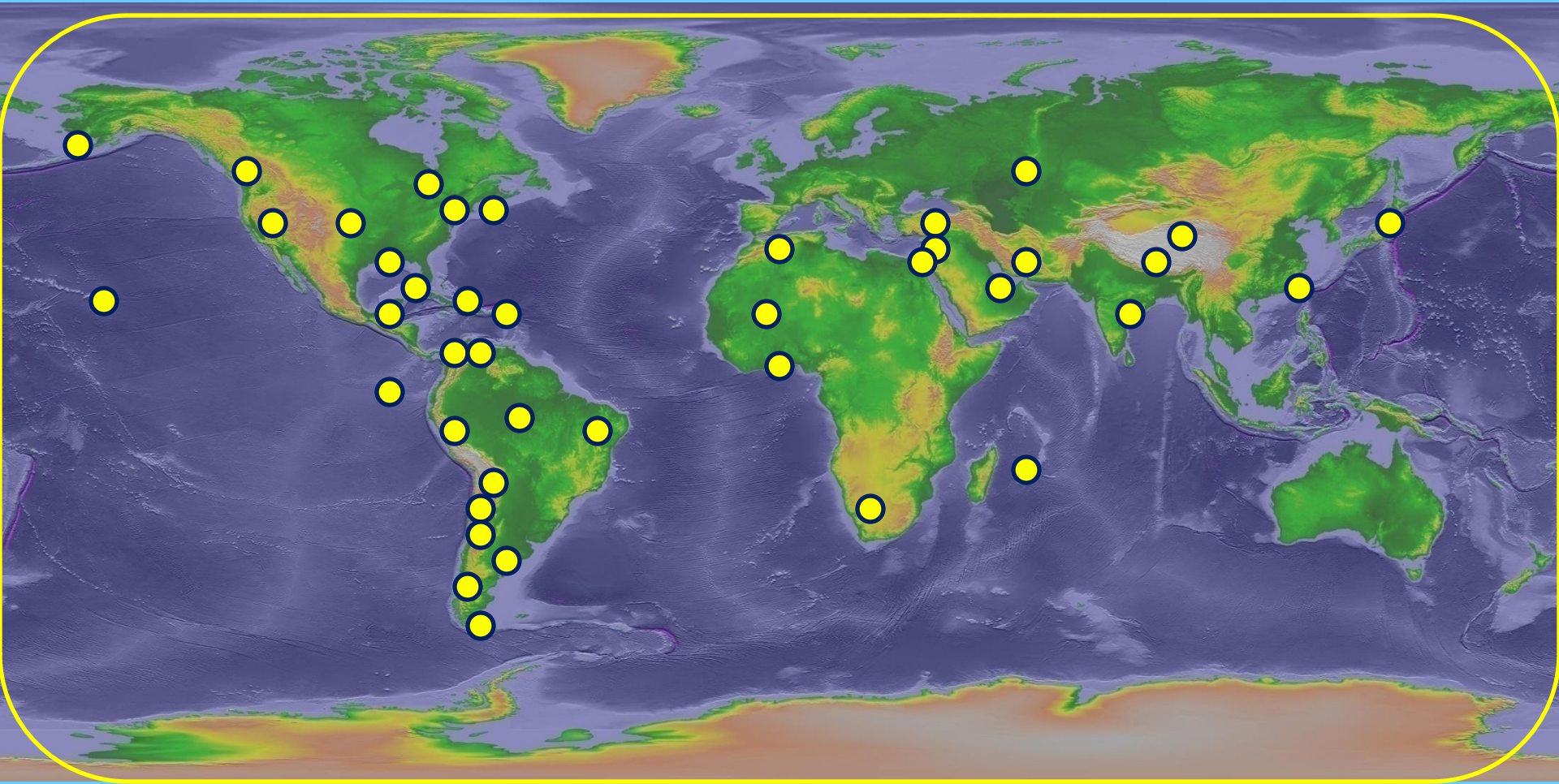
Multiple Masters, Multiple Opportunities

- Engineering College
 - Endowed (Private)
 - Faculty lines, facilities (Snee), majors
- College of Agriculture and Life Sciences
 - Contract (State)
 - Faculty lines, facilities (Bradfield), majors
 - Land Grant Mission (outreach)
- Arts and Sciences
 - Endowed
 - Majors
- Graduate Program
 - Field of Geological Sciences
 - Field of Atmospheric Sciences

EAS: Vital Stats at a Glance

- Faculty
 - ENG: 17 bodies, 10 FTE (7@50%)
 - CALS: 5 (+ 1 Senior Lecturer)
- Graduate Students
 - GeoSci: 30
 - ATM: 8
- Undergraduate Students
 - SES: 68 (38 CALS, 16 A&S, 14 ENG)
 - ATM: 62
- Administrative Staff
 - ENG: 5.5
 - CALS: 3
- Proposals Awarded
 - FY 2008: \$3.48M (CoE), -----
 - FY 2007: \$2.65M (CoE), \$2.39 (CALS)

EAS Research

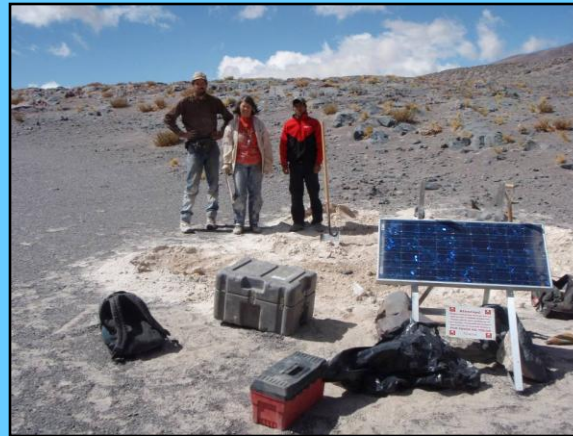
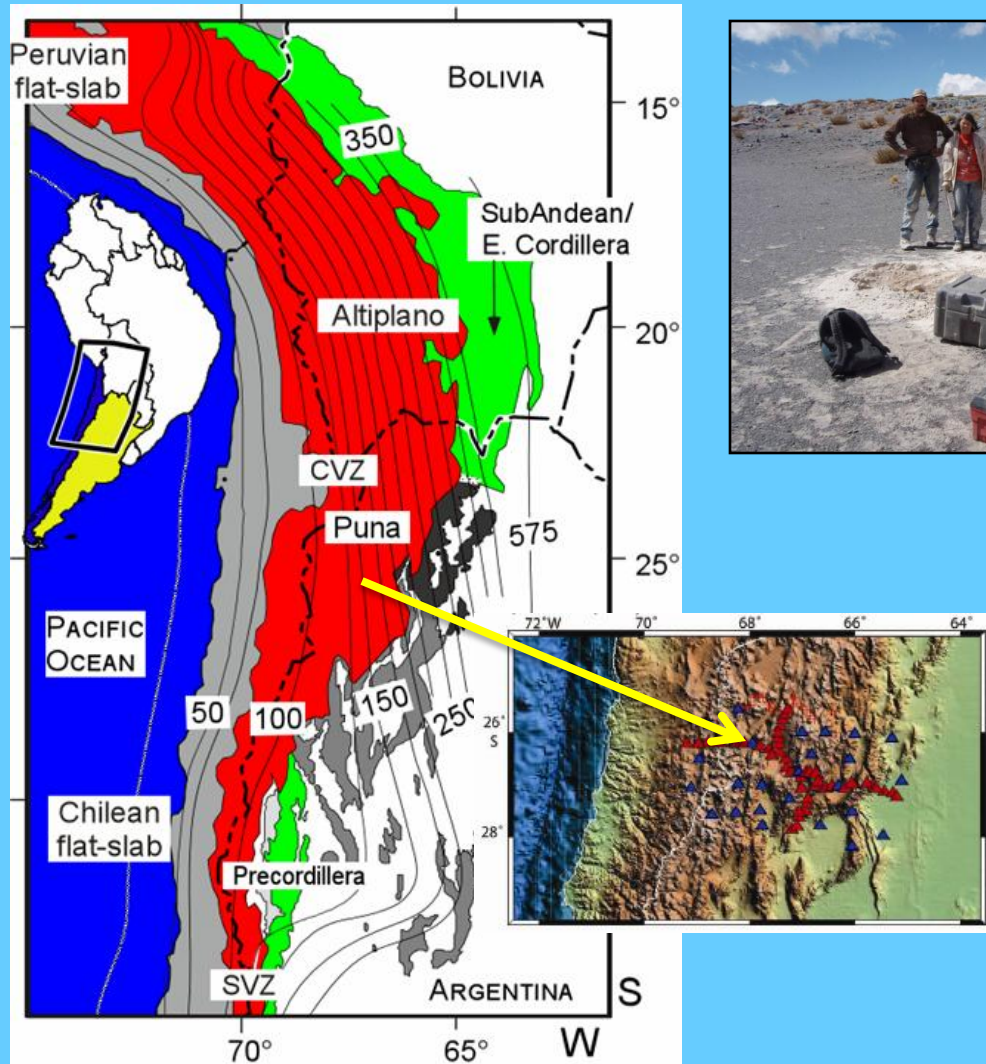


Example: PUNA Project

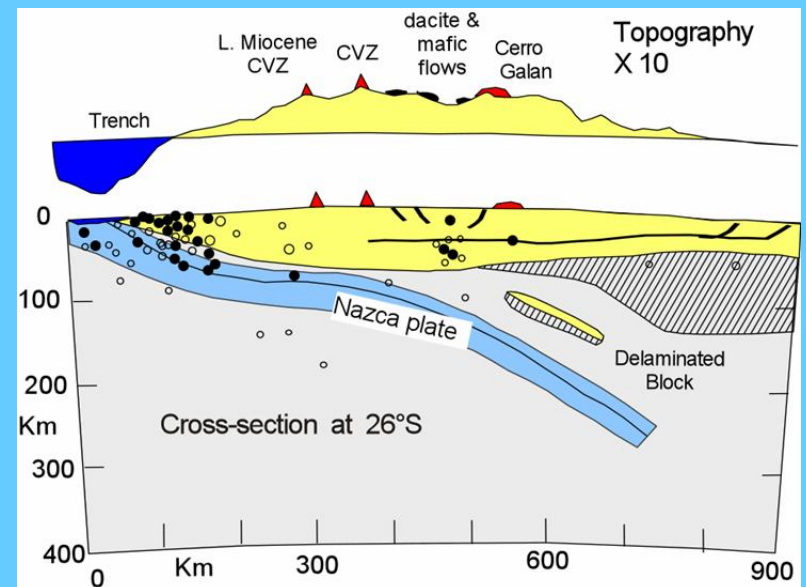


Sue Kay

Multinational
Multidisciplinary



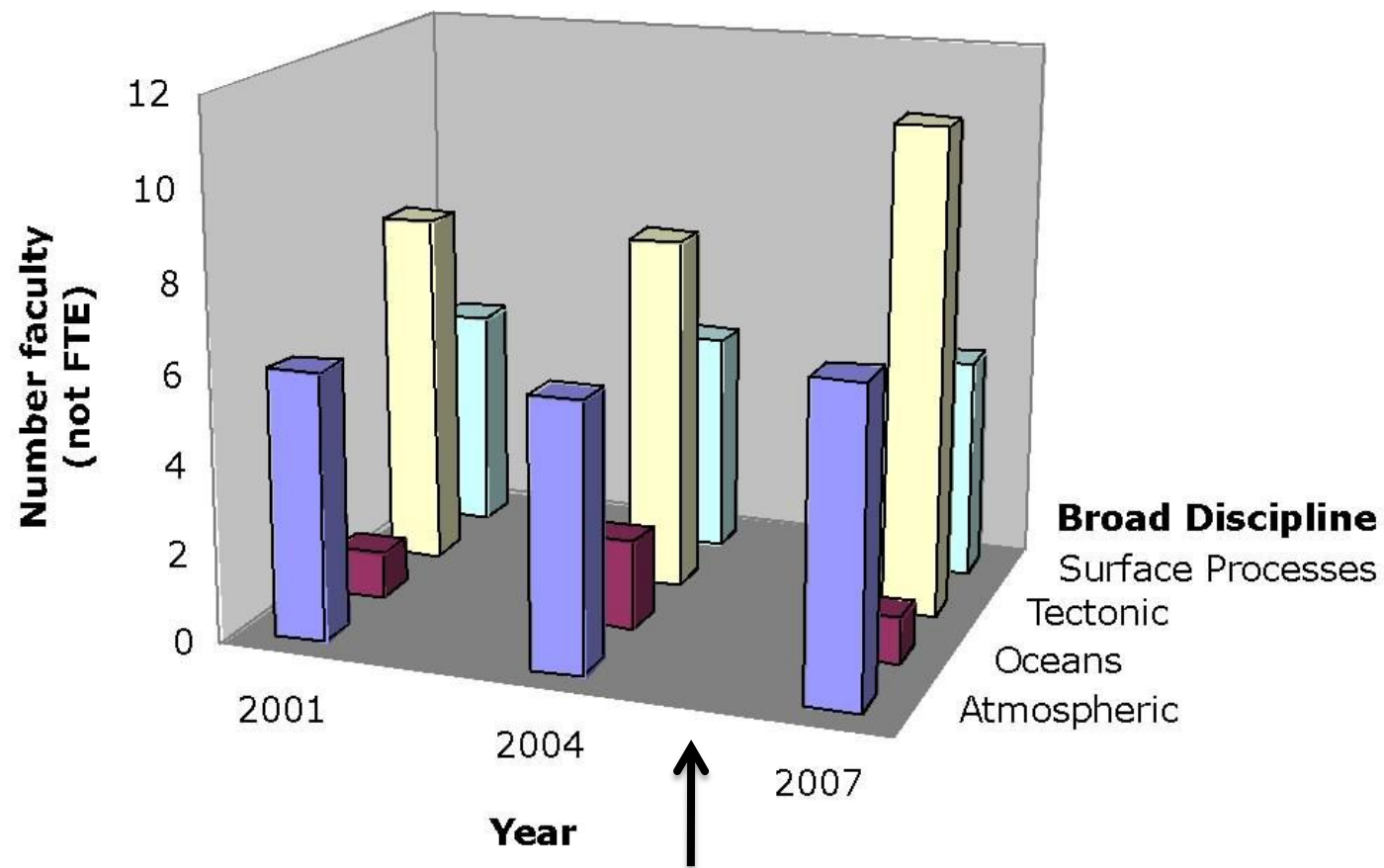
Delamination?



e.g. Kay et al., 1999

EAS's Faculty

EAS Disciplinary Balance



Plan development interval



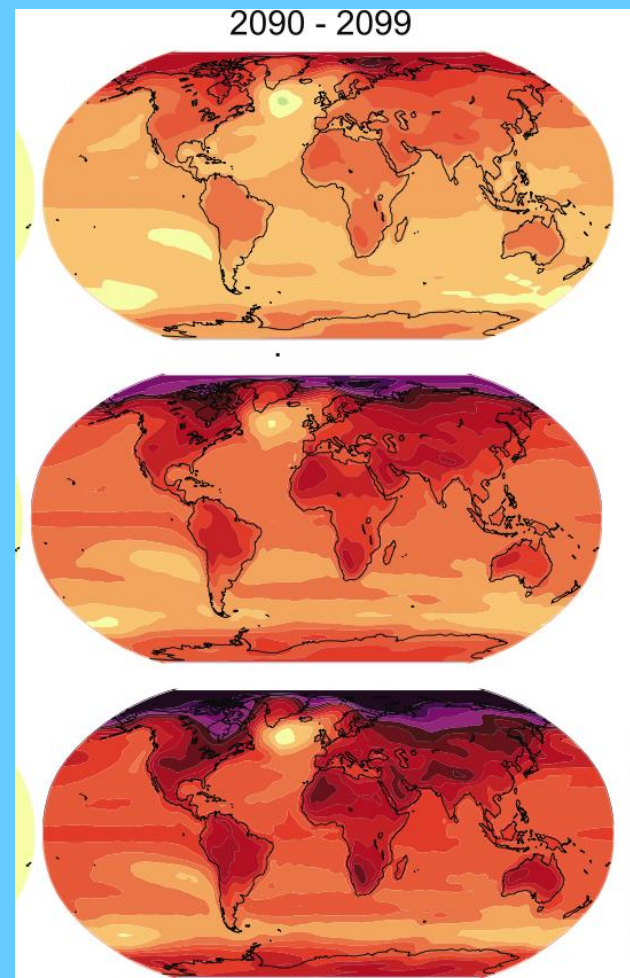
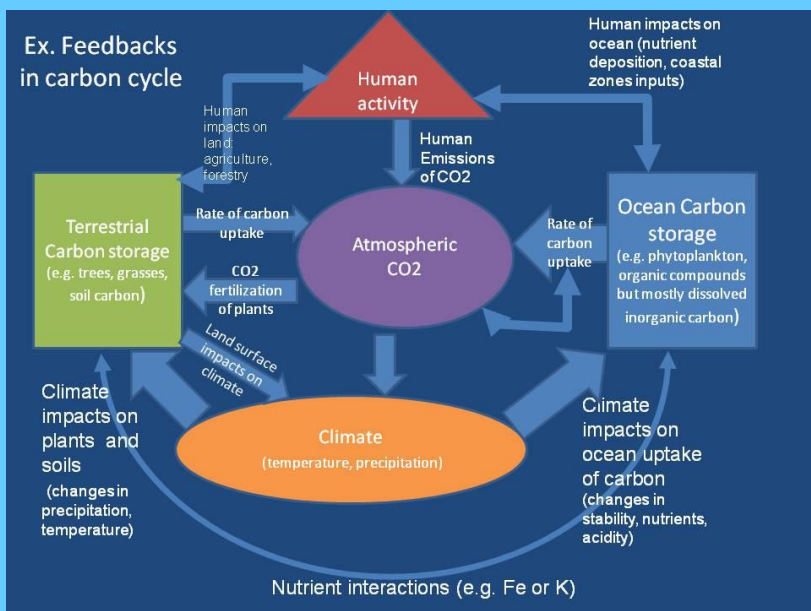
Global Change



Art DeGaetano

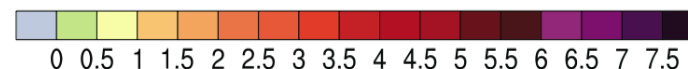
Natalie Mahowald

- CCSF Activities
- Impact of Aerosols
- NE Regional Climate Center
- CO₂ sequestration



Low CO₂

High CO₂



(°C)

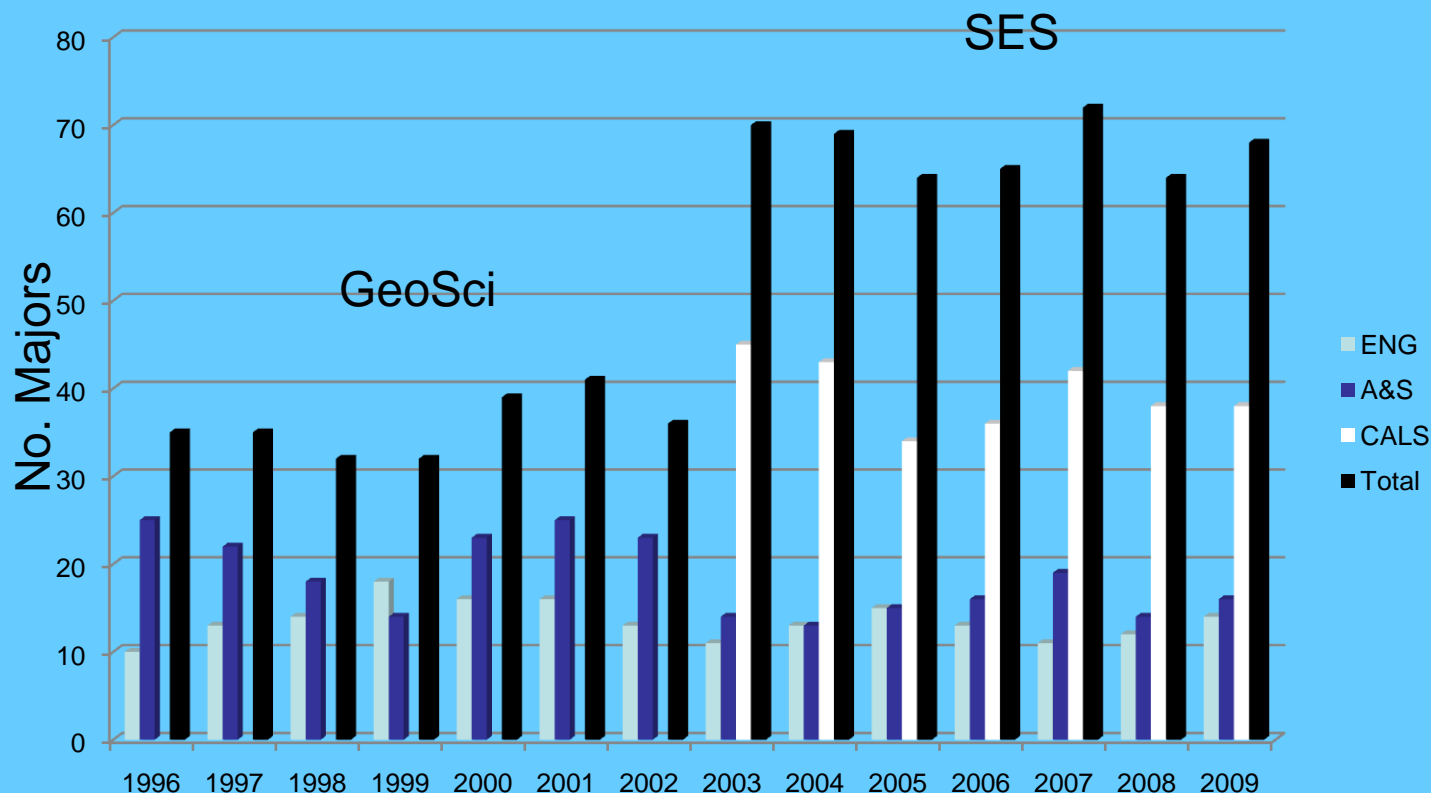


John Cisne
DUGS

Undergraduate Program (SES)



Chuck Green
Chair, Curriculum EAS Comm.



+ Cornell Chapters of American Association of Petroleum Geologists
and Society of Exploration Geophysicists



Terry Jordan

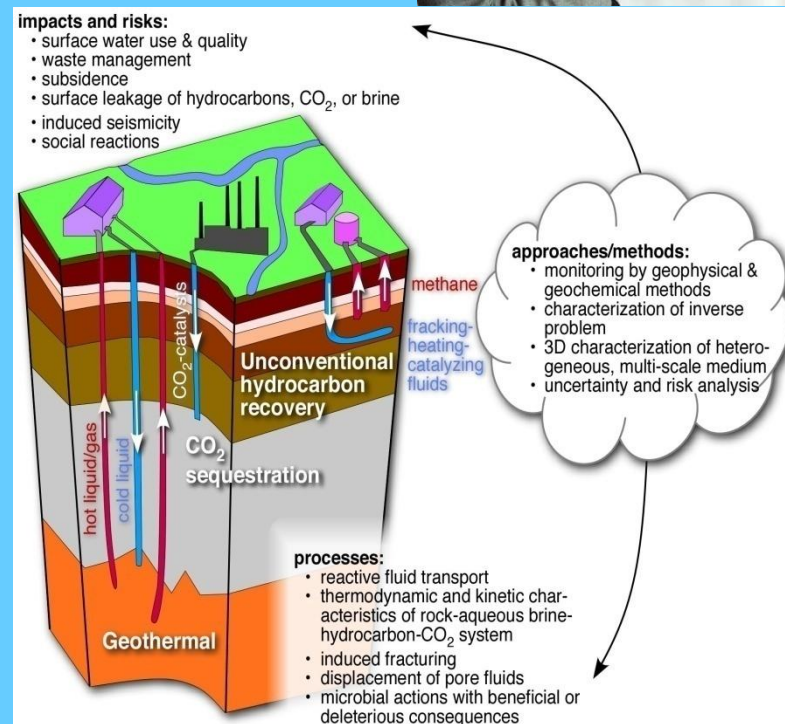
Energy



Larry Cathles

- Snee preparing to host Energy Institute
- New collaborations on Energy/Sequestration
 - Chemical and Biomolecular Engineering
 - Material Science and Engineering
 - Civil and Environmental Engineering
- NY Sequestration Study (NYSERDA)
- KAUST-Cornell Center for Energy and Sustainability
- EFRC Proposal (\$25M) DOE pending:
 - GEOLOGIC SEQUESTRATION OF CARBON ..
- IGERT Sustainable Energy Proposal (NSF)
- Proposals in development for 3 DOE FOA due Spr 2009

Jeff Tester



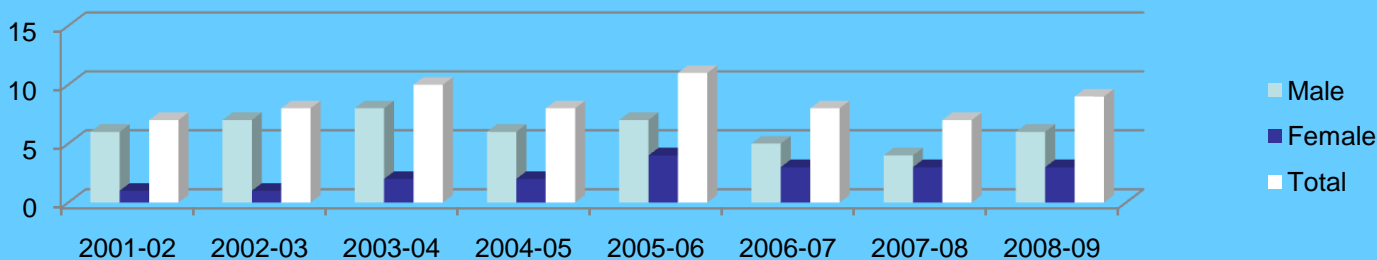


Dan Wilks
DGS AS

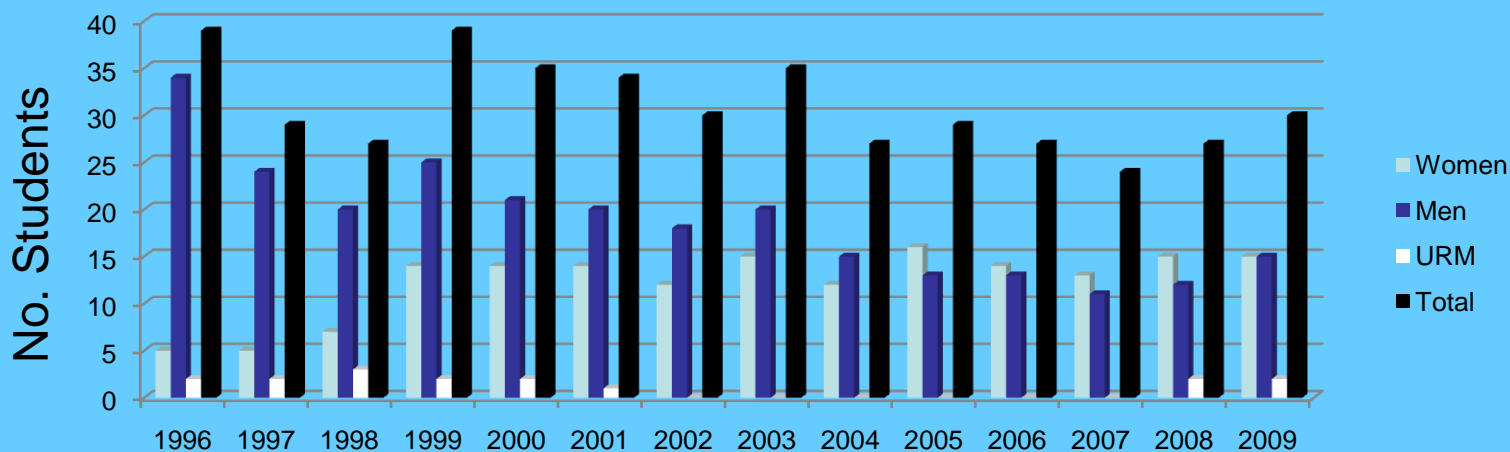
Graduate Programs



Bill White
DGS GS



Atmospheric Sciences

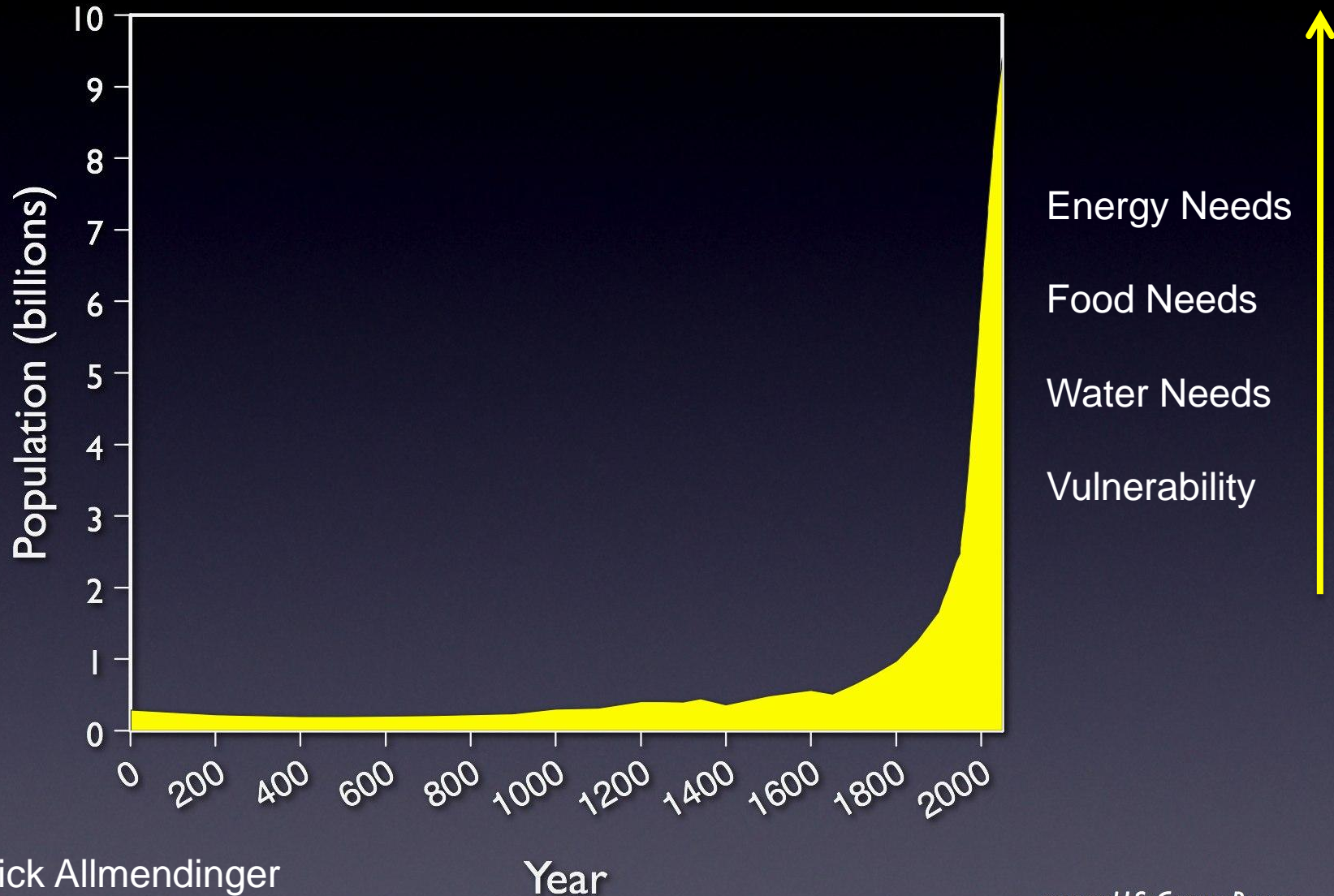


Geological Sciences

New MEng/MS Offerings

- Subsurface Energy Systems
 - Geological Sequestration of CO₂
 - Geothermal Energy
 - Unconventional Hydrocarbons (e.g. Marcellus)
- Emphasis on Monitoring Technologies
 - Geochemical
 - Nanotech
 - Geodetic (GPS, INSAR)
 - Seismic

World Population Since 0 AD



Courtesy Rick Allmendinger

source: U.S. Census Bureau

Earth Science
+
Engineering
=
Critical Partnership