04:45 p.m. Bieman, Paul R. No. 32683
THE EVOLUTION OF GRANITIC LANDFORMS -- FIELD OBSERVATIONS AND COSMOGENIC INSIGHTS.
BIEMAN, Paul R. and GILLESPIE, Alan R., Department of Geological Sciences, University of Washington, Seattle, WA 98195.
The rate and processes by which distinctive granitic landforms such as pediments, inselbergs, and batards evolve have puzzled and intrigued geomorphologists for over a century. Because these landforms are of erosional and because they appear to be linked to long-term stratigraphic and short-term processes, they have been studied. As a result, these unusual and picturesque landforms remain poorly understood. We are currently investigating the evolution of a suite of granitic landforms in the Abbot's Valley (Owens Valley, CA), Llano Uplift (El Paso, TX), and Stone Mountain (Atlanta, GA) using a combination of field mapping, petrographic, and isotopic techniques. Field observations suggest that the processes and agencies hardening an important factor in the longevity of Abbot's Valley landforms. Granitic batards in Texas appear to lose mass primarily by shooting whereas loss by solution may be the predominant means by which granitic landforms in the humid southeastern US are degraded. We are estimating effective exposure ages (erosion rates) by measuring the concentration of six initial produced cosmogenic isotopes: 10 Be, 26 Al, 36 Cl, 10 Be, 14 N, and 26 Al. Initial 

SESSION 33, 1:00 p.m.
MONDAY, OCTOBER 21, 1991
GEOPHYSICS/TECTONOPHYSICS SDCC: Room 17B

01:00 p.m. Meyers, Jayson B. No. 25031
Deep Seismic Imaging of the Continent-Ocean Crust Transition, Central West Africa
MEYERS, Jayson B. and ROSENDAHL, Bruce R., Project PROBE, Marine Geology and Geophysics, University of Miami - R.S.M.A.S., 4600 Rickenbacker Causeway, Miami Beach, FL 33149.
Seventeen deep-imaging, long aperture seismic reflection profiles record the transition from rifted continental crust to Cenozoic oceanic crust along the West African margin from Senegal to甜美。Some of these profiles occur seaward of the shelf break, which may explain the gap between the West African and equatorial Atlantic in plate reconstructions that use the shelf-break for continental limit. NNE-SSW trending fractures zones intersect the margin obliquely and the transition occurs farther seaward on the southern sides of the fracture zones, causing the transition width to increase to more than 100km in the south. As a general rule, profiles subparallel to fracture zones show gradual transitions and relatively flat reflection Moho (two-way travel-time) across the entire transition zone. Profiles subnormal to spreading direction show narrower transitions and possibly offsets in reflection Moho. On one NW-SE trending profile the transition is so abrupt that stretched continental and oceanic crust are essentially juxtaposed, with possibly a 2s offset in reflection Moho. Varying scales (20-120km wide, 1-5km deep) of wedge-shaped reflection packages occur within the transition zones along some but not all profiles. Where they occur, these packages appear to overlap continental crust and either early oceanic basement or transitional crust created during initial breakup. Based upon form, position, and interval velocity character, these packages may be interpreted as seismic reflection packages. On one NW-SE trending profile the transition is so abrupt that stretched continental and oceanic crust are essentially juxtaposed, with possibly a 2s offset in reflection Moho. Varying scales (20-120km wide, 1-5km deep) of wedge-shaped reflection packages occur within the transition zones along some but not all profiles. Where they occur, these packages appear to overlap continental crust and either early oceanic basement or transitional crust created during initial breakup. Based upon form, position, and interval velocity character, these packages may be interpreted as seismic reflection packages. On one NW-SE trending profile the transition is so abrupt that stretched continental and oceanic crust are essentially juxtaposed, with possibly a 2s offset in reflection Moho.

01:15 p.m. Anseltetti, Flavio S. No. 28596
FROM OUTCROPS TO SEISMIC PROFILES: AN ATTEMPT TO MODEL THE CARBONATE PLATFORM MARGIN OF THE MAELLA, ITALY
ANNELMETTI, Flavio S. and EBRELL, Georg F., Univ. of Miami, RSMAS-MGG, 4600 Rickenbacker Causeway, Miami, FL 33149.
Genève, 13 Rue de Marolles, CH-1211 Geneva, Switzerland, BERNOUlli.
Chapel, Geological Institute ETH, CH-8092 Zürich, Switzerland.
Synthetic seismic profiles across the platform margin of the Carnaxide/Terresante carbonate platform (Abruzzo, Central Italy) help understand the seismic reflection

ANNUAL MEETING, SAN DIEGO, CALIFORNIA