KARL W. BUTZER completed a geo-archeological study of the Classical Axum. This civilization, spanning the first millennium A.D., had its settlement core on the now denuded, subhumid plateau of northern Ethiopia. Axum, a new city, began A.D. 100 as a ceremonial center, growing to over 10,000 people as a prosperous emporium for international trade. Intensified land use led to mass movements in slope soils before A.D. 300, but a range of clayey stream deposits also implicates strong periodic floods and seasonally abundant moisture. The paleoclimatic ensemble suggests that stronger and more reliable spring rains allowed two crops yearly without irrigation, compared to only one with normal summer rains. Trade declined after 600, and Axum was essentially landlocked by 715. Intense land pressure and more erratic rainfall favored soil destruction and ecological degradation during the seventh and eighth centuries. Largely abandoned by 800 and pillaged by border tribes, Axum retained only symbolic significance as power shifted to more fertile lands of humid, central Ethiopia. Axum shows how spatial and temporal variability of resources, and the interactions between a society and its resource base, can be fundamental in the analysis of historical process. The results are in press in American Antiquity.