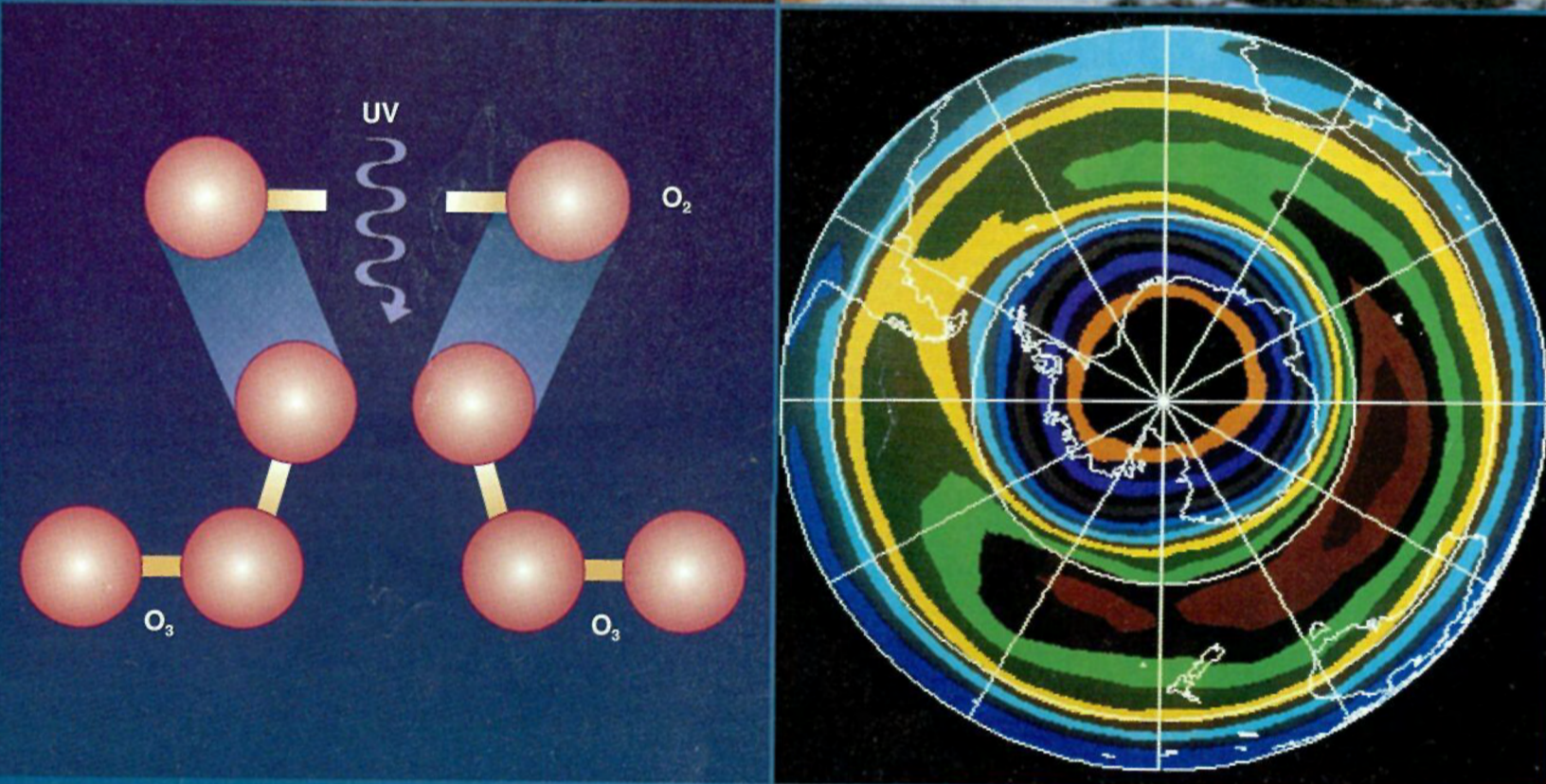
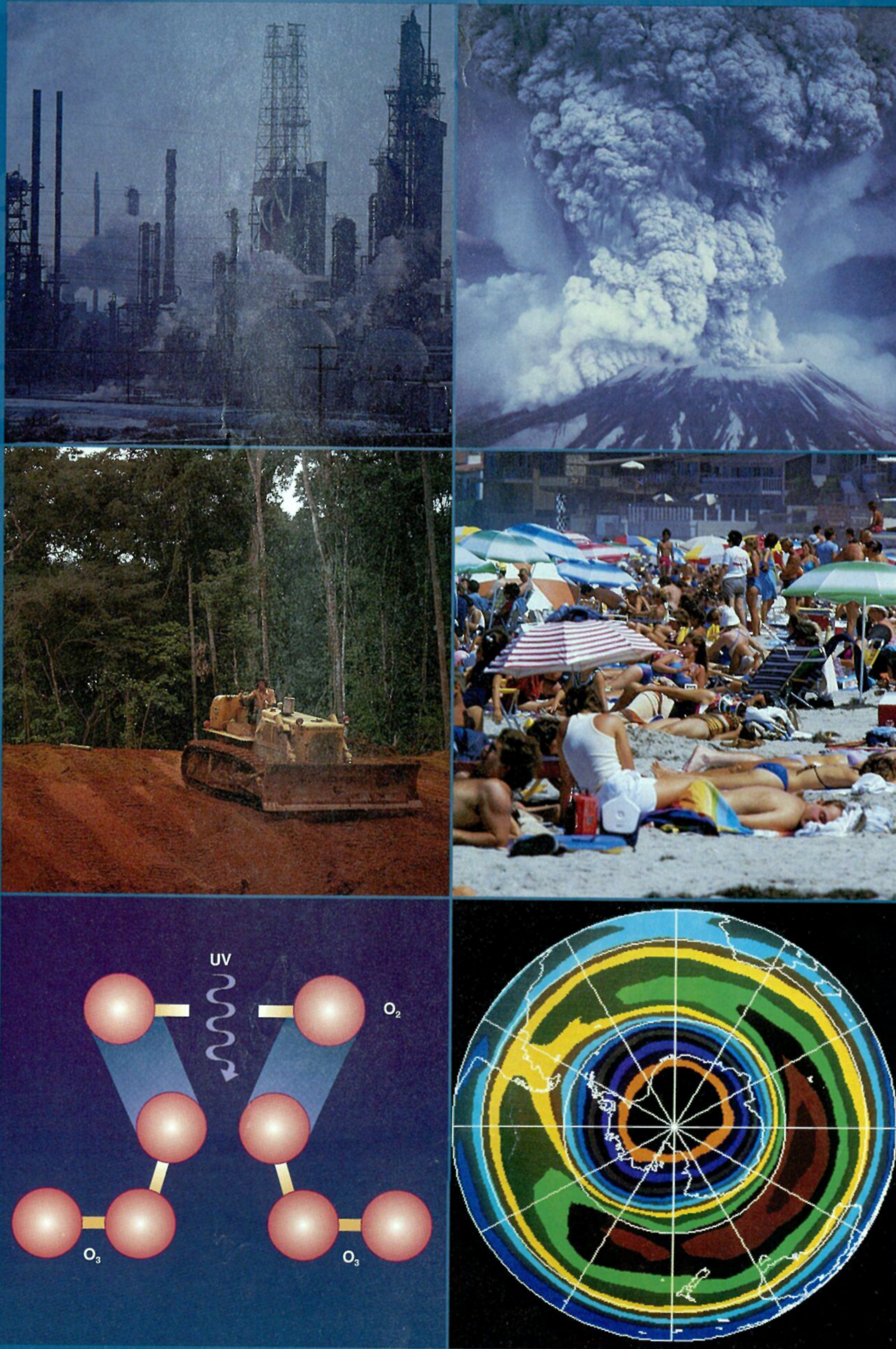


UARS

Upper Atmosphere Research Satellite



UARS is the first comprehensive space experiment ever mounted to study the coupled chemistry, dynamics, and energetics of the Earth's upper atmosphere. It will provide vital scientific input to critical policy decisions in the 1990s aimed at protecting the thin, fragile ozone layer. Ozone is our shield against harmful solar ultraviolet radiation and is a major atmospheric driver of the Earth's climate system. It is highly vulnerable to destruction by man-made chemicals and to ongoing changes in the natural Earth system.



Natural changes and human activities affect atmospheric composition. Ozone depletion, leading to increased atmospheric transmission of solar ultraviolet radiation and climate change, is a result. Clockwise from upper left: industrial products affect atmospheric chemistry worldwide; volcanoes inject material into the upper atmosphere; sunbathers are exposed to increasing solar ultraviolet radiation as ozone decreases; satellite map of the Antarctic ozone hole, a spectacular example of ozone depletion; chemical processes control ozone levels; tropical deforestation alters the balance of gases in the atmosphere with potentially large impacts.

