1410 Chemistry of the atmosphere

EFFECTS OF NON-METHANE HYDROCARBONS ON THE ATMOSPHERE

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The chemistry of several unreactive and moderately-reactive non-methane hydrocarbons in the troposphere and stratosphere was investigated. A one-dimensional, box-model approach was employed to determine the vertical distributions of CH4, C2H2, C2H4, C3H8 and CH3CHO. The effects of the ozone, methane, and nitrous oxide perturbations on the stratospheric chemistry of these species were considered.

1420 Chemistry of waters of the sea

NORTH PACIFIC WATERS

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Benthic Boundary Layer

As GEOSecs station 28 is the basin east of the Newfounland Rise, a dramatic evidence for the "understructuring" of the benthic boundary layer was encountered. Results from the continuous temperatures, salinity and opaque measurements and from discrete water samples are presented in order to document that strong shearing within the near bottom water mass is a common occurrence. The importance of this phenomenon is that the water in the abyssal layer is less turbid (at least to the 15-meter) basin east of the Newfounland Rise and that this "new" water is not the case in the region south of this area. The thin wedge of "old" water is moving to the north from the central gyre of the western ocean. The "new" water entering the basin was generated at the north end of the Pacific and the Atlantic. The thin wedge of water is not related to the station 28 basin water column is the last vestige of the "new" bottom water. The 9- and 8-gram samples from this phenomenon, the returning tongue of central gyre water carried within it a component of water entering the western basin from the Northeastern (see Broecker et al., 1976, for a discussion of this phenomenon). This "new" water is of high and similar content of this southern water, giving the tongue its distinctive color and identity. The appearance of this "new" water was first noted at station 28. In the north basin station samples of the "new" waters dominate. At station 28 the thin wedge of new water is warmer and more saline than the overlying water. Thus the more rapid diffusion of heat relative to salt could have a stabilizing influence. However, as the opposite is true at station 27 (see Table 2), the activity of a temperature inversion cannot be ruled out as a factor for the generation of this thin wedge of benthic water. Until this problem is solved, the significance of this feature has been studied at the attempt to explain its dynamics must be premature. Hence we have examined several aspects of the phenomenon as seen at one point in time at GEOSecs station 28.

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1430 Chemistry of the ocean

AN AERIAL SURVEY OF THE OCEAN WATERS

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The composition of the geoid of the GOES-3 satellite has been computed to an accuracy of 2 m by an operational satellite. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements. The height of the GOES-3 satellite was determined to an accuracy of 2 m by a comparison of altimetric and satellite measurements.