

blanketing. It lies below the Cretaceous peneplain level, having been worn down below that in the Postcretaceous erosion cycle.

The Precambrian boundary presents quite different characters on the north from those seen at the south. It is much more sinuous and much more abrupt. There is no Potsdam in face, and the Precambrian rocks are apt to tower somewhat abruptly from 25 feet to 100 feet or more above the Potsdam level. Between these outlying ridges embayments run, carrying the slope of the plain in between the ridges, and in many of these embayments the Potsdam is found, lying between the gneisses of the adjoining ridges. Faulting has undoubtedly played some part, perhaps a major part, in the production of these features, but it does seem quite clear, nevertheless, that the shore had a steeper slope than on the south, and that the surface was much less even.

Northern hills and valleys

The ridges and valleys of a large part of the Adirondack region show a general north-south to northeast-southwest trend, this being more prominently the case in the eastern half of the region. The precise cause for this general trend is not clear. The larger faults have this direction and are undoubtedly influential factors in the topographic control; the strike, both of the foliation and of the Grenville bedding, has often the same direction, and has no doubt its share in determining the topographic alignment; one main joint set has the same trend and may also be a factor; finally, the ice sheet moved over the district with a south to southwest direction; and, though the direction of the basal currents was mainly controlled by the existing topography rather than the topographic trend a result of the ice direction, yet some share in the general shaping of the region must be allotted to it. It seems likely that all these factors have combined in the production of the present trend; but it is as yet wellnigh impossible to determine definitely their relative importance. The frequent independence of this trend shown by the strike naturally suggests that it is of less importance than the others. The prominence of other joint sets, in addition to