elapsed since the Cobalt series was deposited on its surface, it is
possible to discover the degree of relief possessed by this ancient surf
from a study of its contacts with the overlying sediments. In n
localities, where the contact is exposed at numerous points or wh
numerous small scattered remnants of the sedimentary cover occur,
seen that the surface was generally one of low relief. In a few pla
however, there are hills composed of rocks belonging to the basal comp
which rise to elevations of several hundred feet above outcrops of
Cobalt series exposed at their base—as for example the Abijevis
in Destor township; if these hills have not been raised to their pres
elevation above the Cobalt series by faulting, they must repres
monadnocks which stood above the surface of the ancient plain. T
ancient erosion surface, moreover, was developed over the territory—
least 50,000 square miles in area—extending from the north shore of
Huron to lake Mistassini throughout which the Cobalt series is fou
so that it was not merely a local base-level but a wide plain of low re
with remnants of erosion rising here and there above the general le
of its surface. This Pre-Cambrian surface of denudation, therefo
represents a remnant of a peneplain once buried and later exh ed
falls into the class of land form known as a palæoplain.

In Chapter III of this report, it is pointed out that the Pre-Cambr
basal complex of Timiskaming region includes parts of three great lit
logical belts or zones: a southern zone extending from the east shore
Georgian bay to the lower Ottawa, in which crystalline limestones
common lithological type; a northern belt extending from lake Supe
and the north shore of lake Huron to lake Mistassini, throughout wh
volcanic lavas are the dominant rocks; and between these two zones,
intermediate belt of banded gneisses stretches from the north shore
Georgian bay to the gulf of St. Lawrence. If an examination be ma
of the geological maps of the territory in which these belts occur, i
seen that the late Pre-Cambrian Huronian sediments which rest on
truncated surface of the basal complex are limited in their distribut
to the northern belt, in which the basal complex is largely composed
volcanic flows—a coincidence which can scarcely be accidental.

On the whole the elevation of the Laurentian plateau in the reg
where the Huronian sediments occur, is but little higher than the elevat
throughout the belt underlain by the banded gneisses; so that th
younger Pre-Cambrian sediments must evidently, at present, occu
a depression in the Pre-Huronian peneplain surface, and it is proba
that it is chiefly on this account that they have been preserved throu
out the northern geosynclinal belt while they have been denuded aw
elsewhere. To account for the occurrence of the Huronian rocks in
depression coincident with the great northern volcanic belt of the ba