permafrost is in equilibrium with environmental conditions. Given an increasing amount of temperature data from deep bore-holes and ground temperature records spanning several years, the spatial and temporal aspects of permafrost distribution can be appreciated more fully (cf. papers by Nicholson, and Taylor and Judge). This in turn allows a correlation of permafrost occurrence with such physical controls as climate, terrain and vegetation: a theme repeated by several papers dealing with permafrost distribution in Quebec. In this regard, the contemporaneity of permafrost in the Chic-chocs Mountains of Gaspé permits Gray and Brown to extrapolate the extent of permafrost bodies based on the vegetation factor alone.

The development of permafrost was also related to the presence of suprapermafrost groundwater. Nicholson's paper on permafrost variation near Schefferville provides predictive equations for ground temperature using snow depth and a groundwater factor. Wright's article on active layer hydrology further demonstrates the role of water in modifying the development of the active layer.

Other papers dealing with the active layer include Seguin and Crépault's geophysical study of a palsa field and Pilon *et al.'s* comparison of thermal and radar active layer measurements. It appears that a refinement of both geophysical techniques may allow more general applications in permafrost mapping. In terms of applied reasearch, Garg's paper on the mining of frozen iron ore is of special interest.

The scope of *Le pergélislol au Québec-Labrador* falls far short of the International Permafrost Conferences. This issue, however, appeared between two such conferences. In view of its timing, and particularly the fact that the last permafrost conference had an official submission deadline 18 months ahead of the 1978 meeting, the present issue provides a welcome update of information on permafrost research, at least for the Québec-Labrador region.

Ming-Ko Woo
Department of Geography
McMaster University
Hamilton, Ontario
L8S 4L9

OCEANOGRAPHIC ATLAS OF THE BERING SEA BASIN, By M. A. Sayles, K. Aagaard and L. K. Coachman. Seattle: University of Washington Press, 1980. 170 pages, maps, tables, bibliography. ISBN 0-295-95545-7, $15.00 U.S.

This book is a welcome contribution to the physical oceanography of one of the lesser known oceans, Bering Sea. Heretofore, there has been no adequate oceanographic description of this ocean in book form and therefore this book fills an important gap.

This book is entitled *Oceanographic Atlas of the Bering Sea Basin* and although the title indicates it as being an atlas, it contains nine pages of text that presents an up-to-date discussion on the physical oceanography of the Bering Sea which, in my opinion, is a bonus to the reader. Although the text is brief, it contains important aspects of oceanography — the water mass characteristics and circulation and their respective seasonal changes, etc., which are not found elsewhere except in specialized scientific papers.

The book starts with a brief, straightforward introduction, followed by a section on data. Here the authors state that only data that met a certain standard quality were considered. While such a procedure is completely proper, one would have liked to see a little more detail on how the data were put through quality control process. Table 1 lists which data were "corrected", but there is no indication of what these corrections were. This applies also to the reason given for the rejection of Soviet data. A more detailed explanation of this "data smoothing" would have been helpful to the interested reader.

The section on volumetric analysis is excellently done in both the text and in the coloured illustrations. The figures representing the volumetric distributions viewed perspectively are very informative.

In this analysis the authors correctly use potential temperatures rather than *in situ* temperatures. It would have been helpful if the authors had stated why they chose the former. They could have stated that the former was chosen because it is more convenient to represent data from all depths and that the use of potential temperatures at least eliminates the effect of depths on temperatures. Alternatively, they could have stated that since the adiabatic lapse rate for sea water for the region is approximately 0.1°C per 1000-metre depth, the magnitude of the potential temperatures in the upper 300-metre depth or so is numerically equivalent to the *in situ* temperatures.

The sections on water mass characteristics, horizontal distributions, and dynamic topography provide a good physical oceanographic description of the water not readily found in any oceanographis books.

All figures are well drawn and the colour-coded graduations of contours make it easier to interpret the data presentation. The only criticism I have, and this is a very minor one, is that the lines and labels for the illustrations depicting vertical sections of oceanographic properties are rather heavy and are not consistent with the

others. Figure 1 should have indicated clearly that the depths are in metres and not fathoms, although if one had followed the text it would have been obvious what unit was used.

I could not detect a single typographical error in the book — which is something of a rarity these days.

S. Tabata
Offshore Oceanography
Institute of Ocean Science
P.O. Box 6000
SIDNEY, B.C.
V8L 4B2

REGIONAL DEVELOPMENT IN THE USSR. TRENDS AND PROSPECTS/LE DEVELOPPEMENT REGIONAL EN URSS. TENDANCES ET PERSPECTIVES. Edited by THE ECONOMICS DIRECTORATE AND INFORMATION DIRECTORATE, NATO COLLOQUIUM 25-27 April 1979, Brussels, Newtonville, MA; Oriental Research Partners, 1979. 293 pages.

Analysis of regional development in the USSR has become an important component of western attempts to gauge the overall performance of the Soviet Union and the extent to which its economic growth is affected by spatial variation in natural resources, ethnicity, labor supply, and rates of population increase. The colloquium which generated *Regional Development in the USSR* was an important gathering of scholars engaged in many facets of Soviet-related social-scientific research; this volume includes some of the most active investigators of Soviet regional development, although many of the topics covered in the monograph have been more thoroughly investigated in recent volumes published by Halsted Press and in the Discussion Papers generated by the Association of American Geographers Project on Soviet Natural Resources in the World Economy. Nevertheless, publication of *Regional Development in the USSR* is timely because many of its chapters touch on themes underlying important domestic and international actions of the USSR.

The monograph contains an introductory synthesis and five major sections, each of which comprises several substantive chapters and related discursive comments. The major sections of the book relate to regional living standards, autarky and regional investment, labor force and regional raw material development, transportation and the military significance of regionalization, and trade aspects of regionalization. The introduction by James Ellis and Theodore Shabad and the summary by Alec Nove could be read independently of the substantive sections by scholars with diverse interests wishing to understand the chief objectives in, and motives behind, Soviet regional development. The major sections, however, appear to be oriented toward a specific audience.

The sections on regional living standards, autarky and regional investment are concerned with what might be termed "conventional topics of regional analysis" rather than with issues of some urgency such as those found in the remaining three substantive sections. Nevertheless, these two sections set the stage for subsequent analysis by probing the extent to which living standards and productive investment vary among regions; they also present considerable amounts of data, useful for those readers unable to consult the widely available published Russian sources from which the data have been extracted. These two sections are scholarly and relatively non-controversial.

The remaining three sections, however, directly tackle many of the issues currently of great concern to numerous western analysts: demographic variations among regions and races, exploitation of Siberia, construction of the Baykal-Amur Mainline, and the relationship between foreign trade and domestic regional development. Assessment of the importance of each of these topics is far from being unanimous, especially because many of the underlying factors have not been publicized by Soviet leaders and because the variables associated with each topic are sufficiently diverse to elicit partisan opinions from those analyzing them. The juxtapostion of chapters and comments in these three sections enhances the value of the monograph by permitting the reader quickly to consider different points expressed in the form of argument and counter-argument. The monograph thus preserves the excitement of presentation and debate which must have prevailed at the NATO colloquium itself.

The reproduction of the verbal presentations, however, while enhancing the intellectual quality of the viewpoints expressed, greatly detracts from the scholarly merits of the volume because the language is mainly vernacular, the text contains a large number of typographical errors, and the styles of presentation do not follow a standard format for naming regional units or for identifying the academic qualifications of contributors. The book desperately needs an effective editor to remove the verbosity of the original verbal presentations, to integrate textual observations and tabular (or cartographic) information, and to eliminate the physical defects which severely detract from the quality of the presentations. If the contributors to this volume were not widely known and highly revered, the reader might be tempted to conclude that the sloppy physical form of the monograph also applied to those whose ideas are contained be-