

enough to permit a single scattering approximation. Dept. of Engrg. Sci. and Mech., Pennsylvania State Univ., University Park, PA 16802, USA.

86:1734

White, H.H. (ed.), 1984. *Concepts in Marine Pollution Measurements*. Maryland Sea Grant College, College Park; 743pp.

Based on a 1982 workshop on 'Meaningful Measures of Marine Pollution Effects,' this book presents a critical look at most of the measurement techniques in common usage in pollution studies. The credibility and significance of each category of techniques is emphasized, rather than the specifics of the methodology. Chapters on toxicity tests, microcosms, community measures, bioaccumulation, chemical measurements and effects, field anomalies, enclosures, and monitoring programs are followed by an overall summary and commentary, including guidelines for change. Maryland Sea Grant College, Univ. of Maryland, 1222 H.J. Patterson Hall, College Park, MD 20742, USA. (gsb)

86:1735

Williams, A.J. III, 1985. *BASS, an acoustic current meter array for benthic flow-field measurements*. *Mar. Geol.*, 66(1-4):345-355.

The Benthic Acoustic Stress Sensor is a pulse-travel-time acoustic current meter which measures velocity vectors with an accuracy of 0.3 cm s^{-1} , a precision of 0.03 cm s^{-1} , and can sample the flow at 5 Hz to prevent aliasing in flows as great as 75 cm s^{-1} . An assembly of sensors in a vertical array permits profiles of mean velocity, turbulent kinetic energy, and Reynolds stress. WHOI, Woods Hole, MA 02543, USA.

86:1736

Willmott, C.J. et al., 1985. *Statistics for the evaluation and comparison of models*. *J. geophys. Res.*, 90(C5):8995-9005.

Procedures that may be used to evaluate the operational performance of a wide spectrum of geophysical models are introduced. Primarily using a complementary set of difference measures, both model accuracy and precision can be meaningfully estimated, regardless of whether the model predictions are manifested as scalars, directions, or vectors. The reliability of accuracy and precision measures can be determined from bootstrap estimates of confidence and significance. Recommended procedures are illustrated with a comparative evaluation of two models that estimate wind velocity. Center for Climatic Res., Dept. of Geography, Univ. of Delaware, Newark, DE, USA.

F40. Area studies, surveys (multidisciplinary)

86:1737

Geodekyan, A.A., Yu.P. Neprochnov, V.V. Sedov, L.R. Merklin and V.Ya. Trotsyuk, 1985. *Geological, geophysical, gas, and biochemical research on the Bering Sea*. *Int. Geol. Rev.*, 27(3):267-272. (Russian original.)

Geophysical surveying, echo sounding and magnetometry, and continuous seismic profiling data were obtained from the Bering Sea; most studies were concentrated over a $44,300 \text{ km}^2$ area near the Navarin Basin. The geomorphology, structure, and sediments are described for the Khatyr Basin, the Shirshov Ridge, the Komandorskiy Basin and the Aleutian Trench. Possible areas of petroleum potential are located in the northern part of the Khatyr Basin, the diapiric structures around the buried ridges of the Komandorskiy Basin, and the diapiric uplifts and deep horizons within the Aleutian Trench. Inst. of Oceanol., Acad. of Sci., USSR. (hbf)

86:1738

Gerdas, Dieter, 1985. *The composition and distribution of zooplankton, and the content of chlorophyll and seston in different water masses of the German Bight in the years 1982/83*. *Veröff. Inst. Meeresforsch. Bremerh.*, 20(2):119-139. (In German, English abstract.)

Mesozooplankton, chlorophyll, seston, temperature, and salinity were measured at 16 stations in the German Bight; variations of the different parameters, especially of the mesozooplankton, are described in detail. Four different water masses could be identified by means of the abundance and composition of the mesozooplankton, by the content of chlorophyll and seston, and by temperature and salinity. Inst. für Meeresforschung, Am Handelshafen 12, D-2850 Bremerhaven, FRG.

86:1739

Hirano, Toshiyuki (KER general project leader), 1985. *Kuroshio exploitation and utilization research (KER)*. Summary report, 1977-1982. Japan Marine Science and Technology Center, Yokosuka, Japan; 125 pp.

The Kuroshio exhibits several types of flow patterns south of Japan. A quasi-stationary type (Type A) with a large meander off Kishu-Enshu Nada exists for 2-10 years; this pattern was observed from 1975-1980 and again from late 1981 to the present. In the absence of Type A, five non-stationary