List of Danish Geodetical and Geophysical Publications 1964

(Compiled by Dansk Geofysisk Forening)
Published in Copenhagen 1964 unless otherwise stated

Geodætisk Institut:
Bulletin of the seismological station København.
No. 82, Jan.–Dec. 1961.
Bulletin of the seismological station Scoresbysund.
No. 43, Jan.–Jun. 1961.

I. M. JACKEROTT, T. STOCKFLET JØRGENSEN og J. TAAGHOLT: Observations of whistlers and VLF-emissions at Godhavn, Narssarssuaq and Tromsø, Norway, in 1962. 68 s. Final Report USAF Contract AF 61 (052)–652. Ionosfærelaboratoriets rapport nr. 18, januar, 1964.

M. JESPERSEN, O. E. PETERSEN, J. RYBNER et al.: Electron and ion density observations in the D-region during auroral absorption. Planetary and Space Science, 1964, vol. 12, pp. 534–551.

M. JESPERSEN, O. E. PETERSEN, J. RYBNER et al.: Electron density and collision frequency observations in the lower D-region during auroral absorption, Proceedings of the NATO Advanced Study Institute, Skeikampen, Norway, april 1963. (I: Electron density distribution in ionosphere and exosphere, editor E. Thrane, 1964).

AXEL JESSEN: Chandler's period in the mean sea level. Tellus XVI (1964), 4, pp. 513–516.

The monthly mean sea levels are divided in groups of 5 years; in each group the constants of a 15-month oscillation are calculated. The variation of the phases between the groups indicate a period of 434 days. The calculation is performed for 9 ports and the results are compared with the corresponding results of the International Latitude Service.

AXEL JESSEN: Lokale højdevariationer i Danmark. Geodætisk Instituts skrifter, 3. række, bind XXXV, 1964, pp. 1–71 + kort.

The results of about 70 years' levelling at 13 danish localities are presented. The annual variations in units of 0.0001 m/year of many bench-marks are shown on maps.

T. STOCKFLET JØRGENSEN: Some observations of VLF-hiss and correlated phenomena. Journal of Atmospheric and Terrestrial Physics 1964, vol. 26, pp. 626–628.

T. STOCKFLET JØRGENSEN: Artikel om COSPAR's 7. møde i Firenze, maj 1964, Ingeniørens Ugeblad, 4. juli 1964, 1 s.

B. LANDMARK & O. PETERSEN: Electron Density Observations in the D-region during Auroral Absorption, Aeronomy Report No. 1, University of Illinois, Dec. 1, 1963.

K. LASSEN, O. RUD LAURSEN, J. OLSEN: Danish Visual Aurora Observations 1957–60. Met. Inst. Medd. nr. 18.

I. LEHMANN: On the travel times of P as determined from nuclear explosions. Bull. Seism. Soc. Am., Vol. 54, pp. 123–139 (1964).

I. LEHMANN: On the velocity of P in the upper mantle. Bull. Seism. Soc. Am., Vol. 54, pp. 1097–1103. (1964).

I. LEHMANN: The Hindu Kush earthquake of March 4, 1949, as recorded in Europe. Bull. Seism. Soc. Am., Vol. 54, pp. 1915–1925. (1964).

Meteorologisk Institut:
Magnetic Yearbook,
Part 2: A, Godhavn 1955.
Part 2: A, Godhavn 1956.
Part 2: A, Godhavn 1960.

J. K. OLESEN: Om »flutter-fading« og andre kortbølgeforstyrrelser, Populær Radio og Fjernsyn, nr. 10, oktober 1964, 2 s. (Kort referat vedr. »Spread F«-konferencen ved Ionosfærelaboratoriet, DTH, august 1964).

J. RYBNER & OVE E. PETERSEN: Danmarks deltagelse i det skandinaviske og europæiske rumforskningssamarbejde, Ingeniøren nr. 2, 15. januar 1964, s. 97–100.

OVE E. PETERSEN: Raketmåleudstyr til bestemmelse af ionosfærens elektrontæthed og kollisionsfrekvens. Ingeniøren, nr. 2, 15. januar 1964, s. 101–107.

SVEND SAXOV og NIELS ABRAHAMSEN: Some Rock Densities in Bornholm. Geologiska Föreningens i Stockholm Förhandlinger, Vol. 86 (Stockholm) 1964, pp. 83–95.

Density values from 223 rock samples from Bornholm are listed together with previously known values, and a separate table gives the mean density values with the corresponding standard deviations.

It was found that the Rønne Granodiorite and the Paradisbakke Migmatite are much alike, having a mean density of 2.75 and 2.74 g/cm³, respectively; likewise the Vang Granite, the Svaneke Granite, and the Granitic Gneiss are very similar, the mean value being 2.69, 2.70, and 2.68 g/cm³, respectively. Moreover the Hammer Granite and the Alminding Granite have the same value of 2.64 g/cm³. These findings are in agreement with recent mineralogical results.

The diabase samples collected at the most important dykes are varying in mean density from 2.79 to 3.04 g/cm³, and the spread inside each group is rather great.

Regarding the consolidated sedimentary rocks the standard deviations in general are greater and this shows that these rocks are more heterogeneous. The Nexø Sandstone, the Balka Quartzite, and the Grønne skifre are much alike, the mean value being 2.58, 2.60, and 2.57 g/cm³, respectively.

SVEND SAXOV and NIELS ABRAHAMSEN: A Note on Some Gravity and Density Measurings in the Faroe Islands. Bollettino di Geofisica Teorica ed Applicata, Vol. VI, No. 23, 1964, pp. 249–262.

A Bouguer anomaly map emanated from a survey made in 1954 is presented, the main feature being a pronounced gravimetric syncline in the northern group and a less pronounced anticline in the southern group of the islands; the terrain-corrected Bouguer anomalies are all positive, running from +23 to +38 mGals.

The main lines in the geology are given, the dominating rocks being flood-basalt. The basalts are gently folded, forming an anticline to the north and a syncline to the south.

Density determinations of about 100 samples give 2.86, 2.82, and 2.90 g/cm³ for the upper, the middle and the lower series, respectively. Based upon the values of the standard deviations it is concluded that there is no systematic variation in the series and a mean value of 2.86 g/cm³ is obtained. The values are listed in an appendix.

In the discussion of the gravity anomalies several possibilities are considered. It is concluded that the most likely interpretation is a local depression together with a varying thickness of the crust.

JENS SMED: Monthly Anomalies of the Sea Surface Temperature in Areas of the Northern North Atlantic in 1961. – Monthly Anomalies of the Surface Temperature in an Area of the Eastern Coast of Scotland in 1961. – Annales Biologiques, Vol. XIX, pp. 17–21 and p. 28.

The yearly averages of monthly anomalies of the temperature of the surface water (the period 1876–1915 being taken as standard) are positive for all areas except three of the southernmost ones. For nearly the whole region, however, there is a small decline of temperature from 1960 to 1961.

JENS SMED: Monthly Anomalies of the Surface Salinity in an Area of the Southern North Sea during the Years 1951–1958. – Annales Biologiques, Vol. XIX, pp. 36–37.

An earlier study of the surface salinities for the years 1902–1950 (cf. the 1951 list of publications) has been carried up to 1958. It appears that there is a slight predominance of positive anomalies in the period 1951–1958.

JENS SMED: Monthly Anomalies of the Surface Salinity in the Celtic Sea during 1903–1958. – Annales Biologiques, Vol. XIX, pp. 50–53.

As a supplement (for fisheries hydrography purposes) to the monthly anomalies of the surface temperature in two areas (50°–52° N, 5°–10° W, and 47°–50° N, 5°–10° W) of the Celtic sea during the period 1903–1958 published earlier (cf. the 1952 and 1963 lists of publications) monthly anomalies of the surface salinity in the same areas and during the same period were calculated. The results are given as tables and graphs.

E. UNGSTRUP: Use of "Local Mean Auroral Time" for VLF emissions. Nature, vol. 198, no. 4883, p. 874.

E. UNGSTRUP: Propagation of VLF radio waves across the auroral zone. Techn. Rep. No. 1-NSF-GA, Stanford Electronics Lab., 1964, 20 s.

E. UNGSTRUP: Association between VLF emissions and flickering aurora. Techn. Rep. No. 3412–4 AF grant 62–370. Stanford Electronics Lab., 1964, 4 s.