RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. FITZHUGH TALMAN, Professor in charge of Library.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

Aeronautics. London. v. 9. 1915.
Ledeboer, John H. The elements of aerodynamics and the theory of flight. I. Properties of the air and the work of the wind. II. The wind and its internal work. p. 76–78; 93–97. (Aug. 4, 11.)

British rainfall organization. British rainfall. London. 1914.
Isomeric rainfall maps of the British isles. p. 25–44.
Fairgrieve, James. The rain-fields of the thunderstorm of June 14th, 1914. p. 48–56.

Engineering news. New York. v. 74. 1915.
Heron, Kenneth A. Evaporation and seepage from irrigation reservoirs. p. 294–295. (Aug. 12.)
An earthquake-proof concrete tower. p. 308–309. (Aug. 12.)
Erie rainstorm and flood. p. 326–329. (Aug. 12.)
Sargent, Edward H. Long-term rainfall records in New York state. p. 403. (Aug. 26.)
Galveston survives hurricane. p. 424–425. (Aug. 26.)
Babbitt, R. P. Effect of Galveston storm on seawall and causeway. p. 427. (Aug. 26.)

Indian meteorological department. Memoirs. Calcutta. v. 19. 1915.
Harwood, W. A. A discussion of the anemographic observations recorded at Deesa from January 1879 to December 1904. p. 275–303.
Harwood, W. A. A discussion of the anemographic observations recorded at Karachi from January 1873 to December 1894. p. 307–335.

International institute of agriculture. Bureau of agricultural intelligence and plant diseases. Monthly bulletin. Rome. 6th year. May, 1915.
Day, P[reston] C. What the Weather bureau is doing in agricultural meteorology. p. 649–652.

Nature. London. v. 95. 1915.
Jordan, F. W. Experiment on sunset colours. p. 590–591. (July 29.)
A. J. Herbertson. [Obituary notice.] p. 623–624. (Aug. 5.)

Royal meteorological society. Quarterly journal. London. v. 41. July, 1915.
Duffield, W. Geoffrey. The meteorology of the sun. p. 177–200.
Clayton, H. Helm. A study of the moving waves of weather in South America. p. 201–208.
Chapman, Ernest H. The correlation between changes in barometric height at stations in the British Isles. p. 209–229.

Scientific American supplement. New York. v. 80. August 14, 1915.
The prevision of earthquakes. Conditions from which seismic disturbances may be foretold. p. 98–99.
Swaine, William. Dust. What it is, what it does and the reason for its being where it is. p. 102–103. [Reprint from Knowledge.]
Icebergs and their detection. The international patrol and the valuable work accomplished by it. p. 110–111. [Extract from U. S. Coast guard, Bull. 3.]

Smithsonian institution. Annual report. Washington. 1914.
Marais, Eugène N. Notes on some effects of extreme drought in Waterberg, South Africa. p. 511–522. [Describes especially the effect on animal life and vegetation.]
Schuchert, Charles. Climates of geologic time. p. 277–311. [Revised and reprinted from E. Huntington's "The climatic factor."]

Terrestrial magnetism and atmospheric electricity. Baltimore. v. 20. March, 1915.
Störmer, Carl. Preliminary report on the results of the aurora-polaris expedition to Bossekop in the spring of 1913. p. 1–12.
Swan, W. F. G. The atmospheric-electric observations on the third cruise of the *Carnegie*, 1914. p. 13–48.

Wireless world. London. v. 3. August, 1915.
Dowsett, H. M. The physical and electrical state of the atmosphere. p. 278–282.

Académie des sciences. Comptes rendus. Paris. tome 161. 2 août 1915.
Chudeau, R[ené]. La température en Afrique occidentale et équatoriale. p. 106–109.

Annalen der Hydrographie und maritimen Meteorologie. Berlin. 43. Jahrgang. Heft 7, 1915.
Hesselberg, Th. Über oszillatorische Bewegungen der Luft. p. 311–317.

Meteorologische Zeitschrift. Braunschweig. Band 32. Juli 1915.
Róna, S[igmund]. Isanomalen des September 1912 und des Juli 1913. p. 289–298. [Presents charts of temperature isametrals (not isanomals) for Europe during two unusually cool months.]
Range, Paul. Neue Temperaturbeobachtungen aus dem Süden Deutsch-Südwest-Afrikas. p. 298–307.
Hellmann, G[ustav]. Überschätzung und richtige Bewertung lokaler meteorologischer Einflüsse. p. 307–311.
Hesselberg, Th. Über den Zusammenhang zwischen Druck und Temperaturschwankungen in der Atmosphäre. p. 311–318.
Exner, F[elix] M. Vertikale Temperaturverteilung als Effekt des Umsturzes der Strahlungsschichten. p. 318–322.

Switzerland. Meteorologische Zentral-Anstalt. Annalen. Zürich. 1913.
Billwiller, R. Der walliser Talwind. Anhang Nr. 7.

Hemel en Dampkring. Den Haag. 13. Jaargang. Juli 1915.
Gulik, D. van. Parelsnoerbliksems. p. 37–38.

Netherlands. K. Meteorologisch instituut. Mededeelingen en verhandelingen. Utrecht. no. 19. 1915.
Gallé, P. H. Waarnemingen in den N. Atlantischen Oceaan in Mei 1914, hoofdzakelijk ter vergelijking van gemeten en geschatte windkracht en windrichting. p. 3–31.

Pontificia accademia romana dei Nuovi Lincei. Memorie. Roma. v. 32. 1914.
Galli, Ignazio. Effetti dei fulmini globulari sull' uomo e sugli animali. Memoria quinta. p. 223–341.

Sociedad de geographia. Boletim. Lisboa. 33. sér. Fevereiro 1915.
Dalgado, D. G. The climate of Portugal. p. 88–91.

K. Svenska vetenskapsakademien. Arkiv för matematik, astronomi och fysik. Stockholm. Band 10. Häfte 1–2. 1914.
Ekholm, Nils. Über die monatliche Luftdruckschwankungen und deren Beziehung zu den monatlichen Lufttemperaturschwankungen, der Luftfeuchtigkeit und der geographischen Breite. p. 1–11. (no: 3).
Cederberg, Ivar F. Über die Berechnung von Dampfdruckkurven Erste Mitteilung. p. 1–71. (no: 7).

NOTES FROM THE WEATHER BUREAU LIBRARY.

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A TENTATIVE CLASSIFICATION FOR METEOROLOGICAL LITERATURE.

(Adapted from the scheme used in the International Catalogue of Scientific Literature.)

By Miss ELEANOR BUYNITZKY.

00 General works
Philosophy, theories, etc.
01 Mythology. History
02 Biography
03 Dictionaries. Encyclopædias
04 Periodicals. Reports of institutions, societies, etc.
05 Bibliographies
06 General treatises, text-books, etc.
07 Addresses, lectures, etc., of a miscellaneous character
08 Study and teaching
09 Expeditions. Travels
10 Observatories. Methods of observation
11 Construction, equipment and inspection of observatories
12 Instructions for observers
13 Tables for reductions
14 Computation of mean results
15 Applications of the theory of probability
16 Periodicity, analysis and computation

20 Instruments

See also 32.1, Dust-counters; 81, Atmospheric electricity—apparatus and methods; 38.1, Aerological apparatus and methods.

21 For measuring temperature and radiation

Thermometers, thermographs, pyrheliometers, sunshine recorders, etc.

22 For measuring atmospheric pressure

Barometers, barographs, etc.

23 For measuring humidity

Hygrometers, hygrographs, psychrometers, etc.

24 For measuring precipitation

Rain-gages, snow-gages, etc.

25 For measuring evaporation

Atmometers, atmographs, etc.

26 For measuring wind

Wind-vanes, anemometers, anemographs, etc.

27 For measuring clouds

Nephoscopes, etc.

28 Meteorographs

29 Miscellaneous

30 Physics of the atmosphere. Cosmical relations. Aerology

31 Extent and composition of the atmosphere

32 Impurities

32.1 Dust-counters

33 Mechanics of the atmosphere

34 Acoustic phenomena

35 Optical phenomena

35.1 Astronomical refraction, scintillation, mirage
.2 Polarization of skylight
.3 Colors of the sky, twilight phenomena
.4 Transparency
.5 Halos, coronas, rainbows

36 Atmosphere of planets

37 Cosmical relations

37.1 Solar
.2 Lunar
.3 Planetary
.4 Phenomena attending eclipses

38 Aerology [1]

38.1 Aerological apparatus and methods
.2 Aerological observations

39 Aeronautical meteorology

Subdivided geographically if desired.

40 Pressure

41 Distribution at earth's surface

42 Vertical distribution

43 Reduction to sea level, hypsometry

44 Periodic variations

45 Non-periodic variations

50 Temperature. Radiation

51 Atmospheric temperature

51.1 Distribution at earth's surface
.2 Vertical distribution
.3 Periodic variations
.4 Non-periodic variations
.5 Maximum and minimum temperatures
.6 Frosts and cold periods

[1] Upper-air or free-air investigations with kites, balloons, etc.

52 Earth temperature

52.1 Surface
.2 Vertical variation
.3 Frozen soil

53 Sea temperature

53.1 Surface
.2 Vertical variation
.3 Frozen sea

54 Temperature of springs, rivers, lakes

54.1 Springs
.2 Rivers
.3 Lakes
.4 Anchor ice

55 Solar radiation

55.1 Atmospheric absorption
.2 Atmospheric radiation
.3 Terrestrial radiation
.4 Sunshine

60 Atmospheric moisture

61 Humidity, relative humidity, vapor tension

61.1 Vertical distribution
.2 Periodic variation

62 Evaporation

63 Condensation

64 Fog, mist

65 Cloud

65.1 Geographical distribution

66 Precipitation

See also, under Hydrology, 67.3 and 67.5.

66.1 Geographical distribution
.2 Variation with altitude
.3 Periodicity
.4 Excessive falls. Droughts
.5 Percolation
.6 Dew, hoar frost. Rime.[2] Glazed frost[3] ("silver thaw," "ice storm")
.7 Rain
.71 Artificial production
.8 Hail, sleet, snow
.9 Other solid precipitates*

Dust falls, "blood rain", "ink rain", etc.

67 Hydrology

67.1 Lake and river fluctuations
.2 Floods
.3 Relation of precipitation to water supply and stream flow
.4 Relation of vegetation (forests, etc.) to water supply and stream flow

70 Circulation of the atmosphere

71 Wind in general

71.1 Geographical distribution
.2 Relation to atmospheric pressure
.3 Variations
.4 Wind pressure

72 Permanent winds

Trades, counter-trades, westerlies of middle latitudes.[4]

[2] A rough deposit of frozen moisture due to fog.

[3] A smooth deposit of frozen moisture due to rain.

[4] The counter-trades, also known as "return trades", lie vertically over the trade winds and blow in the opposite direction. The term "anti-trades" has been applied both to the counter-trades and to the prevailing westerly winds of the middle latitudes.

73 Periodic winds
73.1 Monsoons
.2 Land and sea breezes. Land and lake breezes
.3 Mountain and valley breezes
Many winds of this class have been given individual local names; e. g., the *pontias*, *vésine* and *solore* of the French Alps; the *joran* of Lake Geneva; the *breva* and *tivano* of Lake Como.

74 Non-periodic winds
Föhn, sirocco, norther, mistral, bora, etc.

75 Cyclones, anticyclones, storms
75.1 Geographical distribution of storms in general
.2 Cyclones and anticyclones
.3 Tropical cyclones
Hurricane of the West Indies; *typhoon* of the China Sea; *baguio* of the Philippines.
.4 Thunderstorms and squalls
See also 85, Lightning.
.5 Spouts[5]
.6 Tornadoes
.7 Dust storms

80 **Atmospheric electricity**
81 Apparatus and methods
82 Geographical distribution
83 Ionisation, dissipation, conductivity
84 Potential
85 Lightning and lightning protection
See also 75.4, Thunderstorms

[5] i. e., landspouts and waterspouts. A tornado is a violent landspout.

86 St Elmo's fire
87 Aurora

90 **Climate and weather**
91 Variations of climate
92 Climatography. Records of observations
Subdivided geographically.
93 Relation of climate and weather to geography and geology
94 Relation of climate and weather to plants
94.1 Phenology
.2 Agricultural
.3 Forest relations
See also 67.4, Relation of vegetation (forests, etc.) to water supply and stream flow.
95 Relation of climate and weather to animal life
Includes relations to various human activities, arts, industries, etc. *See also* 94.1, Phenology.
96 Mountain meteorology
97 Subterranean meteorology
98 Marine meteorology
99 Weather forecasting
99.1 Weather Warnings
Includes flags, whistles, lanterns, etc.
.2 Weather telegraphy
.3 Synoptic meteorology
.4 Weather types
5 Long-range forecasts
.6 Weather lore