

THE METEOROLOGICAL MAGAZINE

No. 1326

January 1983

Vol. 112

CONTENTS

Page

The Meteorological Office main marine data bank. R. J. Shearman	1
Concentrations of Aitken nuclei in the boundary layer round the British Isles. M. Kitchen and J. R. Leighton	11
Further composite rainfall records for the United Kingdom. P. D. Jones	19
Notes and news	
Retirement of Dr Gwyn James	27

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 569, London SE1 9NH.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd, 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

© Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly

Dd. 717701 K15 1/83

Annual subscription

£26.50 including postage

ISBN 0 11 726930 1

ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1327

February 1983

Vol. 112

CONTENTS

An aircraft encounter with a tornado. W. T. Roach and J. Findlater	29
COMPSTAT 82. R.C. Tabony	49
Notes and news	
Retirement of Captain G.A. White	50
100 years ago	51
Printouts of weather data	52
Honour	52
Obituary	52

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 569, London SE1 9NH.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd, 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus Microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

© Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly

Dd. 717701 K15 2/83

Annual subscription £26.50 including postage

ISBN 0 11 726931 X

ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1328

March 1983

Vol. 112

CONTENTS

	<i>Page</i>
A re-evaluation of the cloudiness factor in the Ångström-Penman equations for assessing short-wave and long-wave radiation exchanges at a surface. B. Henderson-Sellers, P. Tucker and B. G. Wales-Smith	53
A cloud-like land feature in satellite imagery of Saudi Arabia. M. S. Al-Zaheri and B. N. Charles.	64
Awards	
L. G. Groves Memorial Prizes and Awards.	69
Notes and news	
50 years ago	73
Obituary	74

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 569, London SE1 9NH.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd. 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus Microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

© Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly
Dd. 717701 K15 3/83

Annual subscription £26.50 including postage
ISBN 0 11 726932 8
ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1329

April 1983

Vol. 112

CONTENTS

Page

Extreme value analysis in meteorology. R. C. Tabony. 77

Forecasting urban minimum temperatures from rural observations. J. Roodenburg 99

Notes and news

Retirement of Mr T. Nagle 108

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 569, London SE1 9NH.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd, 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

© *Crown copyright 1983*

Printed in England by Robendene Ltd, Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly
Dd. 717701 K15 4/83

Annual subscription £26.50 including postage
ISBN 0 11 726933 6
ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1330

May 1983

Vol. 112

CONTENTS

	<i>Page</i>
The work of the Boundary Layer Branch of the Meteorological Office. C. J. Readings, P. J. Mason and F. B. Smith	109
Exceptional orographic rainfall in the Mountains of Mourne, S. J. Caughey and S. J. G. Partington	125
Notes and news	
Building and Construction Climatology Unit.	143
International Symposium on Building Climatology	143
Falklands conflict (operation CORPORATE): honours and awards for Meteorological Office staff	144
Review	
Climate, history and the modern world. H. H. Lamb. <i>R. P. W. Lewis</i>	146
NERC Automatic Weather Station Pool	147

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 569, London SE1 9NH.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd. 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

© Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly

Annual subscription £26.50 including postage

Dd 736047 C15 5/83

ISBN 0 11 726934 4
ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1331

June 1983

Vol. 112

CONTENTS

	<i>Page</i>
Radar and rain-gauge observations of a severe thunderstorm near Manchester: 5/6 August 1981.	
M. J. Bader, C. G. Collier and F. F. Hill	149
Regional-scale interannual variability of climate — a north-west European perspective.	
C. K. Folland	163
Documentation of a Southern Oscillation index. D. E. Parker	184

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 276, London SW8 5DT.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd. 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

©Crown copyright 1983

Printed in England by Robendene Ltd., Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly
Dd. 736047 K15 6/83

Annual subscription £26.50 including postage
ISBN 0 11 726935 2
ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1332

July 1983

Vol. 112

CONTENTS

	<i>Page</i>
Analyses of moisture and convective activity from cloud, visibility and present weather reports.	
A. G. Higgins and P. R. W. Wardle	189
Global solar radiation measurements on 6 August 1981. A day of midday darkness. R. J. Armstrong	200
Wave heights estimated by the Voluntary Observing Fleet compared with instrumental measurements at fixed positions. Anne E. Graham	210
World Meteorological Organization Commission for Agricultural Meteorology (CAgM) Eighth Session, Geneva, 21 February — 4 March 1983. N. Thompson	225
Review	
Carbon dioxide review: 1982. William C. Clark (editor). <i>J. F. B. Mitchell</i>	225
Obituary	226

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 569, London SE1 9NH.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd, 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

©Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks.

and published by

HER MAJESTY'S STATIONERY OFFICE

£2 monthly

Dd. 717701 K15 7/83

Annual subscription £26.50 including postage

ISBN 0 11 726936 0

ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1333

August 1983

Vol. 112

CONTENTS

	<i>Page</i>
The WPL Profiler: a new source of mesoscale observations. P. K. James	229
Long-range transport of air pollution. F. B. Smith	237
Noctilucent clouds over western Europe during 1982. D. H. McIntosh and Mary Hallissey ..	245
Meteorology and crop-spraying. N. Thompson	249
Concorde forecasts and the new 15-level model. N. J. Atkins	261
Notes and news. Dr G.O.P. Obasi (Nigeria) appointed Secretary-General of WMO	266
Obituary	266

NOTICES

It is requested that all books for review and communications for the Editor be addressed the Director-General, Meteorological Office, London Road, Bracknell RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 276, London SW8 5DT.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd. 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus Microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

©Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks,
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly

Annual subscription £26.50 including postage

Dd 717701 C15 8/83

ISBN 0 11 726937 9
ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1334

September 1983

Vol. 112

CONTENTS

	<i>Page</i>
Retirement of Sir John Mason CB FRS.. .. .	269
Sir John Mason as seen by the Chairman of the Meteorological Committee. The Earl of Halsbury, FRS .. .	274
A synoptic case-study using a numerical model. E. McCallum, J.R. Grant and B.W. Golding .. .	275
An analysis of noctilucent cloud over western Europe during the period 1966 to 1982. D.A.R. Simmons and D.H. McIntosh .. .	289
Notes and news	
Extracts from an ancient file .. .	299
Honour .. .	300

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 276, London SW8 5DT.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd. 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus Microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

©Crown copyright 1983

Printed in England by Robendene Ltd., Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly
Dd. 717701 K15 9/83

Annual subscription **£26.50 including postage**
ISBN 0 11 726938 7
ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1335

October 1983

Vol. 112

CONTENTS

	<i>Page</i>
Director-General of the Meteorological Office	301
A study of the Gumbel and Weibull methods of extreme-value analysis using air temperature data from six Ocean Weather Stations. Anne E. Graham	303
The Ben Nevis Meteorological Observatory 1883–1904. Part I. Historical background, methods of observation and published data. Marjory G. Roy	318
Award	330
Notes and news	
The Steeple Challenge Trophy	330

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 276, London SW8 5DT.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd, 24–28 Oval Road, London NW1 7DX, England.

Please write to Kraus microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

©Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly

Dd. 736047 C15 10/83

Annual subscription £26.50 including postage

ISBN 0 11 726939 5

ISSN 0026–1149

THE METEOROLOGICAL MAGAZINE

No. 1336

November 1983

Vol. 112

CONTENTS

	<i>Page</i>
The use of rainfall data from radar for hydrometeorological services.	
S. G. Palmer, C. A. Nicholass, M. J. Lee and M. J. Bader	333
The estimation of point rainfall over the south-west peninsula by gauges and radar. B. R. May.	347
Notes and news	
Papers requested for AAAS meeting	360

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 276, London SW8 5DT.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd, 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

© *Crown copyright 1983*

Printed in the UK for HMSO

£2 monthly
Dd. 736047 C15 11/83

Annual subscription £26.50 including postage
ISBN 0 11 726940 9
ISSN 0026-1149

THE METEOROLOGICAL MAGAZINE

No. 1337

December 1983

Vol. 112

CONTENTS

	<i>Page</i>
Predictability in science and society. Sir John Mason, CB, FRS.	361
The NAVAID dropsonde. P. Ryder, A. F. Lewis and D. A. Bennetts	367
Notes and news	
Sir John Mason appointed Scientific Director of acid rain project	381
50 years ago	381
Oceanology International Conference and Exhibition	382
Correction	382

NOTICES

It is requested that all books for review and communications for the Editor be addressed to the Director-General, Meteorological Office, London Road, Bracknell, Berkshire RG12 2SZ and marked 'For Meteorological Magazine'.

The responsibility for facts and opinions expressed in the signed articles and letters published in this magazine rests with their respective authors.

Applications for postal subscriptions should be made to HMSO, PO Box 276, London SW8 5DT.

Complete volumes of 'Meteorological Magazine' beginning with Volume 54 are now available in microfilm form from University Microfilms International, 18 Bedford Row, London WC1R 4EJ, England.

Full-size reprints of out-of-print issues are obtainable from Johnson Reprint Co. Ltd, 24-28 Oval Road, London NW1 7DX, England.

Please write to Kraus Microfiche, Rte 100, Millwood, NY 10546, USA, for information concerning microfiche issues.

©Crown copyright 1983

Printed in England by Robendene Ltd, Amersham, Bucks.
and published by
HER MAJESTY'S STATIONERY OFFICE

£2 monthly
Dd. 736047 C15 12/83

Annual subscription £26.50 including postage
ISBN 0 11 726941 7
ISSN 0026-1149