



Canadian Meteorological  
and Oceanographic  
Society

La Société Canadienne  
de Meteorologie et  
d'Océanographie

C.M.O.S.  
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SPECIAL INTEREST GROUPS - AN UPDATE

During the past several years several Special Interest Groups (SIG's) have been established within CMOS to bring together members (not necessarily co-located) who have a specialized interest such as air pollution meteorology or floating ice. A SIG may be created by CMOS Council upon written request from at least 25 members. At the present time, there are five Special Interest Groups whose chairpersons are listed below:

Agricultural and Forest Meteorology:	Roger Street 416-667-4627
Air Pollution Meteorology:	Boris Weisman 416-477-0870
Floating Ice:	John Lewis 709-737-8849
Hydrology:	L. Wojtiw 403-450-5280
Operational Meteorology:	J.D. Abraham 902-835-3778

The SIG's can provide a "home" for like-minded members among the large CMOS family by increasing communication through the use of newsletters, specialized workshops & CMOS sessions. For example, the Air Pollution Special Interest Group has organized a workshop and publishes a periodic newsletter. The Agricultural and Forest Meteorology SIG, along with the Canadian Forestry Service, the Ontario Ministry of Natural Resources and the Atmospheric Environment Service recently sponsored a workshop on "Forest Climate '86". The relatively new Operational Meteorology SIG is planning an international workshop on marine meteorology (co-sponsored by AES) in Halifax in October, 1987. Subventions of funds may be awarded by CMOS Council to assist SIG's in their activities.

MAIL BALLOT

The Mail Ballot included in the October issue of the Newsletter (Vol. 14, No. 5) omitted inadvertently the month and volume and issue number in the penultimate paragraph on page 6 (page 8 in French version). It should have read as in the first line of this paragraph. Also, as the dispatch of the October Newsletter was delayed and was received by members only during the first week of December, the deadline for replies has been extended to 15 February 1987. Please remember to put MAIL BALLOT on the envelope, together with your name.

**BEST WISHES OF THE SEASON TO ALL MEMBERS....**

Executive Director

NEWS FROM CMOS HEADQUARTERS

Membership and Subscription Statistics

The yearly statistics prepared in November show a continued progress in membership and subscriptions to CMOS publications. Total membership is 1034, which represents an annual increase of about 5% since 1983 when we had only some 850 members. But we should not relax our efforts because there are still many of our colleagues that are not CMOS members. As far as subscriptions are concerned, while Atmosphere-Ocean and Climatological Bulletin have increased their subscriptions by about 7% since last year, Chinook has gone up nearly 30%. Here too we must not relax our efforts because actual numbers are still too low (Chinook about 700, A-O about 800 and C.B. about 400).

There are great possibilities for SIG's but there have also been inhibiting factors such as geographical separation of the members, great demands upon their time, dwindling funds for travel, and competition from other organizations. Perhaps some of these factors could be turned to the advantage of CMOS. Because CMOS members with specialized interest often belong to other organizations, Special Interest Groups could act as a bridge between CMOS and these other organizations by organizing activities such as joint seminars or workshops in which the members of both societies could participate. An example that comes quickly to mind is the Air Pollution Special Interest Group and the Air Pollution Control Association.

The executive would be pleased to hear any comments or suggestions with respect to the above thoughts. Any one who is interested in joining one of the existing Special Interest Groups is invited to contact the chairperson. Remember, you get out of CMOS what you put into it!

Rod Shaw  
Vice-President  
CMOS

#### REPORT ON SECOND CASP ANALYSIS WORKSHOP

The field phase of the Canadian Atlantic Storms Program (CASP) was described in CMOS Newsletter Vol. 14, No. 1.

Following the field program which ended on 15 March 1986, the intention is to hold Analysis Workshops at approximately six-month intervals to discuss the wealth of meteorological and oceanographic data gathered during the field phase, and to promote collaborative work among scientists. The first CASP Analysis Workshop was held at AES Headquarters in Downsview, Ontario in June, 1986. The second, attended by approximately 40 scientists from the federal government, universities and private industry, was held at the Bedford Institute of Oceanography, Dartmouth, Nova Scotia on 2-3 December, 1986.

The six sessions at the second workshop dealt with operational meteorology and numerical weather forecasting, storm dynamics and cloud physics, oceanic response, boundary layer and air-sea interaction. Both the meteorological and oceanographic data archives are progressing well. A consolidated meteorological and oceanographic field document will be available in February 1987 and the CASP Field Summary Document describing the 16 Intensive Observational Periods will be available at the same time. Operational meteorologists described their experience with the experimental forecasting and observational products that were tested during CASP. The information gained during CASP will almost certainly provide valuable input to the development of forecasting techniques and guidance products. Observations of the storms made by cloud physics aircraft, radar and other observing systems indicate that the structure of the storms is much more complex than the classical models, and that melting snow could induce mesoscale circulations. Methods of estimating vertical motion based upon the divergence of the surface wind were also presented.

The oceanographic papers covered a large range from energy considerations in the surf zones, sediment movement, surface currents as estimated by HF radar and the testing of a numerical ocean circulation model. In general, the oceanographic analysis is proceeding very well, with all of the data now quality checked and archived.

Several papers dealt with boundary layer winds and turbulence, WOTAN (Wind Observations Through Ambient Noise), air-sea fluxes as estimated from data from a meteorological buoy and wind generated waves and white caps. One paper describing 55  $\text{ms}^{-1}$  winds observed by boundary layer meteorological towers for periods as long as 40 minutes generated considerable discussion - were they real or not?

At the end of the Workshop, future plans were discussed. There is a possibility of a dedicated special CASP issue of Atmosphere-Ocean when more final results of the research are available. Although the CASP data appear to be very promising as indicated by the presentations during this Workshop, the detailed research is only beginning and will extend over the next several years. All participants are looking forward to the next workshop, tentatively scheduled for Montreal in June 1987.

**ANNOUNCEMENT FOR APPLICATIONS  
CMOS ACCREDITED CONSULTANT**

Background

Canadians working in the fields of meteorology and oceanography have at times found themselves at a disadvantage when competing with individuals from countries which provide recognition in the form of an accreditation. The outstanding example is the American Meteorological Society certification for consulting meteorologists (CCM).

Clients should be able to request a form of recognition which allows them to recognize who is competent to advise on or carry out meteorological and oceanographic projects, while assuring public safety and economy of programme.

For these reasons, the CMOS Council requested the Committee on Professionalism to develop a set of guidelines for accreditation of consultants. After development over two years, a final version of the guidelines was approved at the 1986 AGM.

Purpose

The purpose of the accreditation is to provide recognition to consultants that they are a CMOS Accredited Consultant and as such have been found to meet a minimum set of requirements outlined in the guidelines in three areas:

- (i) adequate professional training
- (ii) specialized on-the-job training
- (iii) appropriate experience at the working level.

Application

Applications to obtain accreditation are now being accepted by the CMOS Accreditation Committee. Application forms may be obtained from:

CMOS (Accreditation)  
Suite 903, 151 Slater Street  
Ottawa, Ontario K1P 5H3

Applications will be evaluated twice each year on May 1 and November 1. Applications must be received by March 1 and September 1 respectively in order to be considered for these evaluation dates.

**AVIS D'APPLICATION DE CONSULTANTS  
ACCREDITES PAR LA SCMO**

Les Canadiens travaillant dans le secteur de la météorologie et l'océanographie se trouvent parfois désavantagés lorsqu'ils entrent en compétition avec les particuliers des pays qui donnent une forme d'accréditation. Le sceau d'approbation de la société Américaine de Météorologie en est un exemple.

Les clients devraient être en mesure d'obtenir une forme de reconnaissance ce qui leur permettrait de reconnaître les particuliers compétents dans le but de leur assigner des projets météorologiques, ou océanographiques tout en assurant une sécurité au publique et une économie de programme.

C'est pour ces raisons que le Conseil de la SCMO a demandé que le comité sur le professionnalisme développe une série de mesures qui ont attiré à l'accréditation de consultants. Après deux années de travail, une version finale de série de mesures a été approuvée à la réunion générale annuelle de 1986.

OBJECTIF

Le but de l'accréditation est de stipuler aux consultants qu'ils sont accrédités par la SCMO et ainsi qu'ils se sont qualifiés à reconstruire un ensemble de critères minimaux stipulés dans la série de mesure touchant ces trois domaines:

- (i) formation professionnelle adéquate
- (ii) formation spécialisée durant le travail
- (iii) expérience convenant au niveau du travail.

APPLICATION

Des applications pour obtenir l'accréditation sont maintenant prêtes à être acceptées par le comité d'accréditation de la SCMO. Les formulaires d'applications sont disponibles en contactant

SCMO (Accreditation)  
Suite 903, 151 Slater Street  
Ottawa, Ontario  
K1P 5H3

Les applications seront évalués deux fois par année, le 1 Mai et le 1 Novembre. Les applications devront être reçues au plus tard le 1 Mars ou le 1 Septembre respectivement pour être considérées à ces dates d'évaluation.

## CMOS MEMBERSHIP

The Canadian Meteorological and Oceanographic Society (CMOS) exists for the advancement of Meteorology and Oceanography (including Limnology). Membership in the Society is open to persons and organizations sharing these interests. There are three types of membership - Regular Member, Student Member and Corporate Member. For 1987 the dues and subscription fees are shown below.

CMOS is a dynamic force in the Canadian meteorological and oceanographic community. An active scientific committee continually monitors trends and activities in the fields of meteorology and oceanography and recommends action. Other committees are concerned with education, professionalism, publications, and awards to individuals or groups who have made outstanding contributions to meteorology and oceanography. CMOS publishes the scientific journals "Atmosphere Ocean" and "Climatological Bulletin", the popular weather and oceanographic magazine "Chinook", as well as this Newsletter. Membership in CMOS entitles one to reduced subscription rates to these publications, as well as special registration fees for most CMOS-sponsored congresses and workshops. Positive results are felt by the community as a whole as well as by individuals within it.

In order to continue these activities, the Society needs the participation of as large a proportion of the meteorological/oceanographic community as possible. Please help the Society grow by passing the membership application form to a colleague.

### MEMBERSHIP AND SUBSCRIPTION FEES FOR 1987 COTISATIONS ET ABONNEMENTS ANNUELLES (1987)

MEMBERSHIP FEES/COTISATIONS DES MEMBRES	
Regular/Regulier	\$25.00
Student/Etudiant	\$20.00
Corporate/Corporation (min.)	\$125.00
ATMOSPHERE-OCEAN/ATMOSPHERE-OCEAN	
Members/Membres	\$20.00
Non-Members/Non-Membres	\$30.00
Institutions	\$55.00
CLIMATOLOGICAL BULLETIN	
Members and Students/Membres et Etudiants	\$12.00
Non-Members/Non-Membres	\$15.00
Institutions	\$15.00
CHINOOK	
Members and Students/Membres et Etudiants	\$10.00
Non-Members/Non-Membres	\$12.00
Institutions	\$15.00

- Note:** 1. Regular Membership includes Newsletter.  
2. Student Membership includes Newsletter and Atmosphere-Ocean.  
3. Corporate Members receive all regular publications.

- Note:** 1. Membre Regulier inclus Le Bulletin  
2. Membre Etudiant inclus Le Bulletin et Atmosphere-Océan.  
3. Tous les periodiques sont envoyes aux membres corporatifs.

## La Société Canadienne Météorologie et d'Océanographie

La Société Canadienne Météorologie et d'Océanographie (SCMO) existe pour l'avancement de ces deux disciplines scientifiques (qui inclut entre autre la Limnologie). L'adhésion à cette Société vise les personnes ou organisations qui partagent ces intérêts. La Société reconnait trois catégories d'adhésion - membre régulier, membre étudiant et membre corporatif - dont les frais de souscription sont mentionnés ci-bas.

La SCMO demure une force dynamique dans la communauté météorologique et océanographique canadienne. Un comité scientifique actif poursuit un sondage des activités et de l'évolution de ces deux disciplines pour y porter action et/ou recommandations. D'autres comités se concernent du professionnalisme, de l'éducation, des publications et des octroies aux individus ou groupes qui contribuent d'une façon exceptionnelle soit à la Météorologie ou à l'Océanographie. La SCMO publie les périodiques scientifiques; "Atmosphère-Océan", et "Bulletin Climatologique", la revue populaire, "Chinook" ainsi que le présent Bulletin de Nouvelles. L'adhésion à la SCMO permet une souscription à prix réduit de ses publications ainsi que des frais d'enregistrement réduits pour colloques et ateliers sous le patronage de la Société. Des résultats positifs se font sentir de la part de la communauté et de ses membres.

Pour porter bonne fin à ses activités, la Société exige la participation du plus grand nombre possible de la communauté météorologique et océanographique. Veuillez à ceci en distribuant la présente forme de souscription parmi vos collègues.

### ADVERTISING RATES - CMOS NEWSLETTER

The following rates are based on 8.5 X 11.5 inch (21.6 X 27.9 cm) black and white camera ready copy. Additional charges apply where typesetting, artwork, or photographic plates are required. Distribution per issue is approximately 1100.

#### RATES PER ISSUE:

Type of advertisement	Full Page	1/2	1/4
		Page	Page
Commercial	\$150.00	\$80.00	\$50.00
Position Vacancy *	\$100.00	\$60.00	\$40.00
Employment Wanted (members only)	-----	FREE	-----

\* Discounts: Corporate and Sustaining members advertisements at the Position Vacancy rate.

#### Forward advertisements To:

Mr. C. F. Mac Neil  
Editor, CMOS Newsletter  
Atmospheric Environment Service  
1496 Bedford Highway  
Bedford, Nova Scotia  
B4A 1E5

CALL FOR PAPERS  
21st Annual Congress

Canadian Meteorological and Oceanographic Society

INVITATION A PRESENTER DES COMMUNICATIONS  
21<sup>ème</sup> congrès annuel 1987  
La Société canadienne de météorologie et  
d'océanographie

The Newfoundland Centre of the Canadian Meteorological and Oceanographic Society (CMOS) will host the Twenty-first Annual CMOS Congress during 16-19 June 1987 on the campus of Memorial University in St. John's, Newfoundland. The theme is Predictability in the Atmosphere and the Ocean. The theme sessions will include: (a) Climatology, Numerical Weather Forecasting, Dynamic Meteorology and Operational Meteorology; (b) Coastal Oceanography, Deep Sea Oceanography, Sea Ice and Icebergs, and Prediction in Biological Oceanographic Systems; and (c) Atmosphere-Ocean Coupling, the Canadian Atlantic Storms Project (CASP), Dispersal of Tracers in the Atmosphere and the Ocean; and the Chemistry of the Atmosphere and the Ocean. Special sessions will include Mesoscale and Boundary Layer Meteorology, Polar Oceanography and Meteorology, Labrador Current Oceanography, Limnology, and Acoustical Oceanography, plus others as appropriate. Contributions are sought on these topics, and any other topic in meteorology and oceanography.

Abstracts will be received until 1 February 1987 and should be sent to Dr. Alex E. Hay, Department of Physics, Memorial University of Newfoundland, St. John's, Newfoundland, A1B 3X7; telephone (709) 737-8888. Each abstract, not to exceed 300 words, is to be typed single spaced on a sheet of 216 mm by 279 mm (8.5 inches by 11 inches) paper with 25 mm margins. Clean, camera-ready copy with black type is required. Elite type (12 pitch) is preferred. The heading block should consist of the following items on successive lines:

- a) THE TITLE IN UPPER CASE LETTERS
- b) The Name(s) of the Author(s) in Upper and Lower Case Letters, followed by the mailing address of the first author.

There should be a one-line space between the heading block and text. All lines, including the title, names and text, are to be typed left justified. Poster sessions may be held depending on contributions. Speakers who prefer to give a poster presentation should so indicate. In an accompanying covering letter, the authors should give their affiliation as they would like it to appear in the program and abstracts volume that will be published for the Congress.

For further information, contact the chairperson of the Local Arrangements Committee, Dr. Brian G. Sanderson, CMOS Conference, Department of Physics, Memorial University of Newfoundland, St. John's, Newfoundland, A1B 3X7; telephone (709) 737-8523.

Le Centre de Terre - Neuve de la Société canadienne de météorologie et d'océanographie (SCMO) sera l'hôte du vingt-et unième congrès annuel de la SCMO, du 16 au 19 juin 1987, qui aura lieu au campus de l'université de Memorial à St. John's, Terre Neuve. Le congrès aura pour thème La prédictabilité dans l'atmosphère et l'océan. Les sessions thématiques porteront sur: (a) la climatologie, la prévision numérique, la météorologie dynamique, et la météorologie opérationnelle; (b) l'océanographie côtière, l'océanographie des grands fonds, la glace de mer, les icebergs, la prévision dans les systèmes biologiques en océanographie; et (c) le couplage entre l'atmosphère et la mer, le Programme Canadien d'études des Tempêtes dans l'Atlantique, la dispersion des traceurs dans l'atmosphère et l'océan, et la chimie de l'atmosphère et de l'océan. Les sessions spéciales traiteront de: la météorologie de la méso-échelle, la météorologie de la couche limite, l'océanographie du courant du Labrador, la limnologie, l'océanographie acoustique, et d'autres sujets selon les besoins. On demande des communications portant sur ces sujets, et/ou tout autres sujets reliés à la météorologie et l'océanographie.

Pour le Congrès de la SCMO, la date limite de réception des résumés est le 1<sup>er</sup> février 1987. Ceux-ci doivent être adressés au M. Alex Hay, Department of Physics, Memorial University of Newfoundland, St. John's, Newfoundland, A1B 3X7; numéro de téléphone (709) 737-8888. Chaque résumé ne doit pas dépasser 300 mots et doit être dactylographié à l'encre noire à interligne simple sur une feuille de 216 mm par 279 mm (8.5 pouces par 11 pouces) ayant une marge de 25 mm (1 pouce). La copie doit être propre et prête à photocopier. L'utilisation du caractère élite (12 caractères au pouce) est préférable. L'en-tête doit contenir les renseignements suivants sur des lignes successives:

- a) LE TITRE EN LETTRES MAJUSCULES
- b) le Nom de l'Auteur en Lettres Majuscules et Minuscules, suivi de l'adresse postale du premier auteur.

On doit laisser un espace d'un interligne simple entre l'entête et le texte. Toutes les lignes, incluant le titre, le nom, et le texte, doivent commencer à la marge. Des sessions d'affichage pourront avoir lieu en fonction de la participation: les personnes intéressées doivent en faire mention. Les auteurs doivent inclure, dans une lettre jointe à leurs documents, leur affiliation telle qu'ils voudraient qu'elle apparaisse dans la publication "Programme et Résumés" qui sera publiée.

Pour de plus amples renseignements veuillez contacter le président de comité des arrangements locaux, M. Brian Sanderson, Conférence de la SCMO, Memorial University of Newfoundland, St. John's, Newfoundland, A1B 3X7; numéro de téléphone (709) 737-8523.

## Call for Papers

### Tenth Conference on Probability and Statistics in Atmospheric Science October 5 - 9, 1987 Edmonton, Alberta Canada

The Tenth Conference on Probability and Statistics in Atmospheric Science will be held jointly with the Seventh Conference on Hydrometeorology and the Eleventh Conference on Weather Modification at the Chateau Lacombe Hotel in Edmonton, Alberta. The program is being arranged by the AMC Committee on Probability and Statistics. A two day short course on robust statistical techniques will be given just prior to the meeting on October 5-6, 1987 and will be open to participants in all three conferences.

Papers are requested on all aspects of probability and statistics in atmospheric science. Papers dealing with statistical inference, particularly in hydrology, weather modification, and climatology will be key elements of this conference. In addition, papers describing new statistical techniques and applications of new and existing techniques, including work on forecasting, the utility and impact of forecasts, signal detection and climate analysis are encouraged.

Titles and reviewer's abstracts of 200 words or less should be sent no later than March 15, 1987 to Program Chairman Francis W. Zwiers, Canadian Climate Centre, 4905 Dufferin Street, Downsview, Ontario, Canada, M3H 5T4 [telephone: (416) 667-4963]. The abstracts should contain the complete mailing address and the telephone number of the lead author. Notification of the acceptance of the papers will be completed by April 15, 1987.

A preprint volume will be prepared and distributed at the Conference. Camera-ready manuscripts of no more than 8 pages, including diagrams and photographs, must be received at AMS Headquarters no later than June 15, 1987. Instructions and special typing paper will be furnished to authors well before that date. Page charges will be assessed to help defray printing costs.

Further enquiries should be directed to the Program Chairman.

In the column "Canadians in the World Climate Research Program", (C.M.O.S. Newsletter, Vol. 14, No. 5, 1986), the Canadian contribution to TOGA was given only partial credit.

Dr. Noel Boston was assigned to the International TOGA Project Office (ITPO) in Boulder, Colorado (January - June, 1985 as part of Canada's contribution to the TOGA Programme. As an original member of ITPO, Dr. Boston assisted in drafting the TOGA Implementation Plan, represented ITPO at IOC/WMO meetings on drifting buoys, participated in the TOGA Joint Steering Committee reviews, and was responsible for the design, editing and initial issues of "TOGA TOPICS", the quarterly newsletter of the ITPO.

Attention: Canadian Hydrologists

#### Membership in IAHS

The NRC Associate Committee on Hydrology (ACH) is the Canadian National Committee for the International Association of Hydrological Sciences (IAHS). The ACH has been requested by the IAHS bureau to compile a national IAHS membership list.

Membership is open to "those with established reputations (in hydrology) who have played or are playing an active part in IAHS activities"; this would include the following:

1. Those who have attended an IAHS symposium/workshop/meeting.
2. Those who have published in an IAHS publication.
3. Those who have held an IAHS office (member of IAHS bureau, member of an IAHS commission, working group or task force).
4. Those who have organised an event on behalf of IAHS.
5. Those who have been members of ACH or an ACH sub-committee or task force.
6. Those who have been national representatives for IAHS or one of its commissions or committees.

If you wish to become an IAHS member, please contact:

Dr. G.J. Young  
Executive Secretary - ACH  
Inland Waters/Lands Directorate  
Ottawa, Ontario  
K1A 0E7

NEW CMOS MEMBERS

The following new members were approved at the Council meeting of 02 JUNE 1986.

NAME	CENTRE
Mr. Simon G. P. Skey MacLaren Plansearch Ltd. (Corporate)	Halifax
Mr. Gerard Croteau (Regular)	Newfoundland
Mr. Mark Mac Neil (Student)	Halifax

The following new members were approved at the Council meeting of 03 June 1986.

NAME	CENTRE
Dr. P. B. Crean (Regular)	B.C. Mainland

The following new members were approved at the Council meeting of 23 June 1986.

NAME	CENTRE
Dr. Tom Kessler (Regular)	Halifax
Mr. John Newell (Regular)	St. John's

The following new members were approved at the Council meeting of 21 July 1986.

NAME	CENTRE
Dr. Rumen D. Bojkov (Regular)	Toronto
Dr. William M. Cameron (Regular)	B.C. Mainland
Mr. Jeffrey John McDonnell (Student)	(Christchurch New Zealand)
Mr. Jeffrey John Smith (Student)	Vancouver Island

The following new members were approved at the Council meeting of 08 September 1986.

NAME	CENTRE
Dr. Noel Boston (Regular)	B.C. Mainland
Dr. Dan Kelley (Regular)	(Woods Hole, MA)

The following new members were approved at the Council meeting of 04 - 09 December 1986.

NAME	CENTRE
Mr. Peter Kimbell (Student)	Montreal
Mr. Joachim Schug (Student)	(Sonthofen West Germany)
Mr. Steven H. Hill (Student)	B.C. Mainland
Dr. Richard J. Greatbatch (Regular)	Newfoundland
Mr. Serge Desormeaux (Regular)	Montreal
Mr. Denis Larochelle (Regular)	Montreal
Ms. Barbara J. Dowsley (Student)	Newfoundland
Mr. Darryl R. Williams (Student)	Vancouver Island
Mr. Jerry Toupin (Regular)	Alberta
Mr. John Hall (Regular)	Ottawa
Mr. Luc Sarrazin (Regular)	Montreal

The following new members were approved at the Council meeting of 08 September 1986.

NAME	CENTRE
Mr. Abdul Majid Moh'd Abdulla AL-Nahdi (Regular)	(Sana's Yemen Arab Republic)
Mrs. Mona El-Tahan Fenco Nfld. Ltd. (Corporate)	Newfoundland
Mr. Alain Frappier (Regular)	B.C. Mainland
Mr. Bechara Toulany (Regular)	Halifax
Mr. Iskandariah Roslan Addul Wahab (Student)	New Brunswick

The following new members were approved at the Council meeting of 20 October 1986.

NAME	CENTRE
Ms. Jennifer Milton (Regular)	Montreal
Mr. Richard Harvey (Regular)	Montreal

Mr. Peter L. Jackson (Student)	B.C. Mainland	Ms. Lindy A. England (Student)	St. John's
Mr. Keith N. Keddy (Regular)	Halifax	Mr. Allan W. MacAfee (Regular)	Halifax
Miss Julie Dion (Student)	Quebec	Mr. Paul J. Roebber (Regular)	Toronto
Mr. Jerome E. Salloum (Regular)	Toronto		

CMOS AND OTHER COMING EVENTS OF INTEREST TO MEMBERS

LINDAU, (FEDERAL REPUBLIC OF GERMANY)	Apr 6 1987 - Apr 10 1987	SIXTEENTH NATO/CCMS INTERNATIONAL TECHNICAL MEETING ON AIR POLLUTION MODELLING AND ITS APPLICATION
STRASBOURG, FRANCE	Apr 9 1987 - Apr 14 1987	EUROPEAN GEOPHYSICAL SOCIETY XII GENERAL ASSEMBLY
LAKE TAHOE CALIFORNIA, U.S.A.	Apr 27 1987 - Apr 30 1987	9TH CONFERENCE OF FIRE AND FOREST METEOROLOGY
U.OF ALBERTA EDMONTON, CANADA	Jun 4 1987 - Jun 6 1987	INTERNATIONAL SYMPOSIUM ON COLD REGIONS HEAT TRANSFER
QUEBEC, QUEBEC CANADA	Jun 7 1987 - Jun 11 1987	70th CANADIAN CHEMICAL CONFERENCE AND EXHIBITION (Chemistry of acidic dry deposition)
ST JOHN'S NEWFOUNDLAND	Jun 16 1987 - Jun 19 1987	21ST CMOS/SCMO ANNUAL CONGRESS (Predictability in the Atmosphere and the Ocean)
VANCOUVER, B.C.	Aug 9 1987 - Aug 25 1987	IAHS WORKSHOP ON "SPATIAL VARIABILITY AND REPRESENTATIVENESS OF HYDROGEOLOGICAL PARAMETERS" ( IUGG GENERAL ASSEMBLY )
VANCOUVER, B.C.	Aug 9 1987 - Aug 22 1987	XIX GENERAL ASSEMBLY OF THE INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS
VANCOUVER, CANADA	Aug 9 1987 - Aug 22 1987	IAHS SYMPOSIUM ON "FOREST HYDROLOGY AND WATERSHED MANAGEMENT IUGG GENERAL ASSEMBLY
OTTAWA, ONTARIO CANADA	Aug 16 1987 - Aug 19 1987	THIRTY-THIRD ANNUAL CONVENTION OF THE CANADIAN SOCIETY OF SOIL SCIENCE (Theme: Land Management in a Changing World)
HAMBURG FED. REP. GERMANY	Sep 23 1987 - Sep 29 1987	4TH INTERNATIONAL CONGRESS ON THE HISTORY OF OCEANOGRAPHY
HALIFAX, N.S. CANADA	Sep 28 1987 - Oct 1 1987	CONFERENCE AND EXPOSITION THE OCEAN - AN INTERNATIONAL WORKPLACE
ALBERTA CANADA	Oct 1 1987 - Oct 30 1987	TENTH CONFERENCE ON PROBABILITY AND STATISTICS IN ATMOSPHERIC SCIENCES
EDMONTON, ALBERTA CANADA	Oct 5 1987 - Oct 9 1987	TENTH CONFERENCE ON PROBABILITY AND STATISTICS IN ATMOSPHERIC SCIENCE
HALIFAX NOVA SCOTIA	Oct 14 1987 - Oct 16 1987	SECOND AES/CMOS WORKSHOP ON OPERATIONAL METEOROLOGY (Theme: Marine Meteorology)

# ATMOSPHERE-OCEAN

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# ATMOSPHERE-OCEAN

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## CAREER OPPORTUNITY

Environment Canada has an opening for a "Forestry Applications Meteorologist" with the Canadian Climate Centre of the Atmospheric Environment Service, located at Downsview, Ontario.

The primary responsibilities of this position include:

- planning, organizing, coordinating and conducting applied meteorological research and impact studies related to climate-forest relationships in support of improved forest productivity, management and protection; and
- provide expert scientific advice and consultation on applied forest Meteorological and impact problems; and
- negotiate and undertake studies and projects within the Department and in collaboration with external groups; and
- prepares scientific papers and reports on the results of research.

The "Basic Qualifications" for this position are:

- Graduation with an acceptable degree from a recognized university with specialization in mathematics and physics or meteorology;
- Successful completion of an approved course in meteorology;\*
- Experience in conducting applied climatological studies particularly in the area of forest climatology;
- A knowledge of the English Language is essential for this position.

**\*Note:** Applicants who meet the education and experience requirements and have not completed this course may be considered for this position.

The salary range is from \$45,041 - \$50,923 per annum.

Forward your application by March 28, 1987 quoting competition number 86-DOE-AES-TOR-OC-365 to:

Susan Hjelholt, Personnel Generalist  
Human Resources Branch  
4905 Dufferin Street  
Downsview, Ontario M3H 5T4  
Telephone No: (416) 667-4949

Preference is given to Canadian Citizens

Additional Information available on request.

## POTENTIEL DE CARRIÈRE

Environnement Canada a un poste disponible pour un "Météorologue, Applications forestières" au Centre du climatologie du Canada du Service de l'environnement atmosphérique à Downsview (Ontario).

Les fonctions principales de ce poste comprennent:

- planifier, organiser, coordonner et mener des études de recherche météorologique appliquée et des études d'impact liées aux relations entre le climat et la forêt en vue de l'amélioration de la productivité, de l'aménagement et de la protection des forêts; et
- donner des conseils scientifiques spécialisés sur des problèmes de météorologie forestière appliquée et des problèmes d'impact; et
- négocier et entreprendre des études et des projets au sein du Ministère et en collaboration avec des groupes de l'extérieur; et
- rédiger des documents et des rapports scientifiques sur les résultats des recherches.

Les conditions de candidature sont:

- grade acceptable d'une université reconnue avec spécialisation en mathématiques et en physique ou en météorologie;
- cours approuvé en météorologie terminé avec succès\*;
- l'expérience de la réalisation d'études de climatologie appliquée, particulièrement dans le secteur de la climatologie forestière;
- la connaissance de la langue anglaise est essentielle pour ce poste.

**\*Nota:** Les candidats qui satisfont aux exigences études et expérience mais qui n'ont pas terminé le cours approuvé en météorologie peuvent être pris en considération pour ce poste.

Le traitement annuel est de \$45 041 à \$50 923.

Faire parvenir sa demande avant le 28 mars, 1987 en citant le chiffre de la méthode de sélection 86-DOE-AES-TOR-OC-365 à l'adresse suivante

Susan Hjelholt, agente du personnel (généraliste)  
Direction des ressources humaines  
4905, rue Dufferin  
Downsview (Ontario)  
M3H 5T4 (416) 667-4949

Préférence est donné au citoyen Canadien

Les renseignements supplémentaires sont disponible sur demande.

THE DIVISION OF METEOROLOGY  
DEPARTMENT OF GEOGRAPHY  
UNIVERSITY OF ALBERTA  
EDMONTON, ALBERTA, CANADA

METEOROLOGY POSITION

Applicants are sought for a tenure-track position in **Meteorology**, at the Assistant Professor level, beginning July 1, 1987. A completed Ph.D. is required. The incumbent will be responsible for courses and labs in synoptic and operational meteorology. Forecasting experience would be an asset. The incumbent must have a strong research and publication record in meteorology, along with the capability to supervise graduate research in synoptic meteorology.

Please send applications with resume, transcripts, pertinent reprints and the names and addresses of three referees to:

Dr. M. John Hodgson, Chairman  
Department of Geography  
University of Alberta  
Edmonton, Alberta  
T6G 2H4

**CLOSING DATE:** March 1, 1987

The Division of Meteorology is active in research in physical, synoptic, satellite, and micrometeorology. It offers a B.Sc., M.Sc., and Ph.D. program in meteorology.

The University of Alberta is an equal opportunity employer, but, in accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

**ATLANTIC REGION CLIMATE WORKSHOP  
PROCEEDINGS AVAILABLE**

On October 30, 1985 a Climate Workshop was held in Dartmouth, Nova Scotia sponsored by the N.S. Climate Advisory Committee. Over a dozen papers were presented on topics including the Canadian Climate Program, climate network design, several mesoscale climate network reports, data loggers, and climate applications. A limited number of copies of Proceedings of the meeting have been printed. Anyone wishing to obtain a copy should contact:

Mr. William Richards  
Atmospheric Environment Service  
1496 Bedford Highway  
BEDFORD, Nova Scotia  
B4A 1E5 (902) 835-9529

**NEWSLETTER SUBMISSIONS**

The following summarizes the publishing schedule for future issues of the Newsletter. If possible the editor would appreciate receiving material in ELITE type print, 12 characters/inch, and set in columns 50 characters wide. For example set the margin at column 10 and at column 60.

DEADLINE FOR SUBMISSIONS	VOLUME AND ISSUE
FEB. 07, 1987	FEBRUARY VOL 15 NO.1
FEB. 01, 1987	MAY VOL 15 NO.2*
JUN. 19, 1987	JUNE VOL 15 NO.3
AUG. 21, 1987	AUGUST VOL 15 NO.4
OCT. 16, 1987	OCTOBER VOL 15 NO.5
DEC. 18, 1987	DECEMBER VOL 15 NO.6

\* VOL 15 No.2 is the ANNUAL REVIEW and takes longer to prepare and print therefore the deadline is much earlier than for a regular issue.

Submissions should be sent to:

Mr C.F.Mac Neil  
Editor, CMOS Newsletter  
Atmospheric Environment Service  
1496 Bedford Highway  
Bedford, Nova Scotia  
B4A 1E5

phone:(902) 835-9534

INTERA Technologies Ltd. requires a **Weather Modification Meteorologist**. The successful applicant will have an M.Sc. in meteorology or equivalent plus two field seasons experience in cloud seeding aircraft controlling or weather radar monitoring. The applicant will also have experience in radar meteorology, convective forecasting or meteorological instruction. Primary responsibilities will include in-field aircraft controlling or forecasting and analysis of collected data. This is a Calgary based contract position, to end December 1988, with a high probability of contract extension or full-time employment thereafter.

Salary will be commensurate with experience. Please reply in confidence with resume to:

INTERA Technologies Ltd.  
#1200, 510-5th Street S.W.  
Calgary, Alberta T2P 3S2

Attn: Mr. Douglas S. Davison

## EXPERIMENT ON RAPIDLY INTENSIFYING CYCLONES OVER THE ATLANTIC (ERICA)

The following article was extracted from a presentation made by RON K. HADLOCK of the BATTELLE MEMORIAL INSTITUTE. The presentation was part of the ERICA Workshop held September 15-18, 1986 at Drexel University. Dr's Rod Shaw and Ron Stewart are the canadian members of the ERICA Steering Committee.

### ERICA Hypothesis

Rapidly intensifying extratropical cyclones occur principally in the western portions of the major ocean basins during the cool season. These storms may persist for several days and adversely affect maritime interests over a substantial region. The explosive cyclogenesis phase of these cyclones tends to occur on temporal and spatial scales of a few hours and a few hundred kilometers respectively with deepening rates of ten millibars or more per six hours. Such development requires a unique interaction of synoptic, mesoscale, and boundary layer processes.

Sensible and latent heat fluxes in the marine boundary layer are crucial in generating a low static stability environment, with locally enhanced equivalent potential temperature favorable for cyclogenesis on a small scale. Frontogenetic processes along with ocean surface temperature boundaries of the Gulf Stream or along the coastal baroclinic zone can induce thermally direct circulations which help to generate concentrated regions of vorticity-rich air in this low static stability environment.

At the time of explosive deepening there is intense cyclonic vorticity advection aloft over the surface cyclone center. Organized convective disturbances may contribute substantially to cyclonic vorticity growth through a positive feedback process involving marine boundary layer convective-scale circulations and the larger-scale vertical circulation. This positive feedback process is enhanced by the favorable superposition of the updraft region of a mobile short wave trough or jet streak aloft over the vorticity-rich troposphere.

### ERICA Objectives

1. Develop an understanding of the fundamental physical processes in the atmosphere that lead to explosive cyclogenesis at sea,
2. identify measurable precursors that can be used for accurate operational dynamical meteorological forecast model predictions, and
3. determine the minimum set of these observations that is necessary for accurate forecasts of intense cyclogenesis at sea.

### ERICA Goals

1. Improved understanding of the unique interaction of synoptic, mesoscale and boundary layer processes responsible for explosive cyclogenesis on scales of a few hours and a few hundred kilometers is the first goal.
2. The second goal is the tentative identification of measurable precursors that may provide accurate prediction following operational implementation of new observation and prediction systems sometime after ERICA.

### ERICA Feasibility Hypothesis

- \* Objectives can be met by integrated measurement, theoretical, and modeling program components
- \* Field efforts can be enhanced, and the objectives can be maintained and met, though a research partnership consisting of the Office of Naval Research with its contractors, Canadian investigators, and collaborative investigators/agencies from the United States and other countries
- \* Experience from GALE and CASP, and new knowledge from other ongoing research efforts, can provide a firm foundation for further planning and realization
- \* Field operations, over 60 days during January-February 1989, can be conducted from Halifax, Nova Scotia, St. John's, Newfoundland, Boston-area bases or some combination thereof
- \* Required data can be obtained primarily by satellites, aircraft, soundings, drifting buoys and radars

**MEMBERSHIP APPLICATION FORM - DEMANDE D'ADHESION**

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(cochez s.v.p.)**

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Régulier \_\_\_\_\_ Etudiant \_\_\_\_\_ Corporation \_\_\_\_\_

**Primary Field of Interest - Sphere d'Intérêt Principal**

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Oceanography - Océanographie \_\_\_\_\_

**Special Interest Group - Groupe d'Intérêt Spécial**

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Air Pollution - Pollution de l'air \_\_\_\_\_  
Agriculture and Forest - Agriculture et forêt \_\_\_\_\_  
Operational Meteorology - Météorologie d'exploitation \_\_\_\_\_  
Floating Ice - Glace dérivante \_\_\_\_\_

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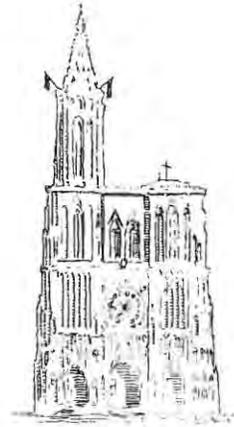
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CMOS - SCMO  
Suite 903  
151 Slater St.  
OTTAWA, Canada  
K1P 5H3

**Note:** Applications received after Oct. 1 are applied to the following year unless otherwise requested.

**Note:** Les demandes d'adhésion reçues après le 1er oct. sont pour l'année suivante à moins qu'elle soit requise pour l'année en cours.

# EUROPEAN GEOPHYSICAL SOCIETY XII GENERAL ASSEMBLY



## STRASBOURG 9 - 14 APRIL 1987

### SCIENTIFIC PROGRAMME

#### Section I (Solid Earth and Planets)

##### OPEN SESSIONS

- O.I.1 Marine Geophysics  
Convener: R.S. White (Cambridge)
- O.I.2 Seismic Hazards  
Convener: P. Burton (Edinburgh)

##### SYMPOSIA

- S.I.1 Paleomagnetism and Geophysical and Geological Events  
Conveners: F. Heller (Zurich), K.M. Storey (Bergen)
- S.I.2 Heatflow and Temperature Estimates for Past and Present Geothermal Regimes  
Conveners: G. Buntebarth (Clausthal), L. Rybach (Zürich)
- S.I.3 Seismic Absorption from the Upper Crust to the Lower Mantle  
Conveners: H. Burkhardt (Berlin), G. Payo (Toledo)
- S.I.4 Rheological Studies of the Continental Lithosphere  
Conveners: N. J. Kusznir (Liverpool), W. R. Pelletier (Toronto)
- S.I.5 Global Internal Structure of the Earth and Planets  
Conveners: A. J. Anderson (Uppsala), T. Spohn (Münster)
- S.I.6 Space Geodetic Baselines  
Conveners: G. Beuller (Bern), Ch. Reigler (München)

##### WORKSHOP

- W.I.1 ORFEUS: Broadband Seismic Data Analysis and Workstations  
Conveners: E. S. Husebye (Kjeller), B. Romanowicz (Paris)

#### Section II (Hydrospheres and Atmospheres)

##### OPEN SESSIONS

- O.II.1 Oceanography  
Convener: T. A. McClimans (Trondheim)
- O.II.2 Hydrology and Glaciology  
Convener: H. Oliver (Wallingford)
- O.II.3 Meteorology  
Convener: P. Mascart (Aubière)

##### SYMPOSIA

- S.II.1 Land Surface Processes for Climate Research Including Satellite Measurements  
Conveners: H. J. Bolle (Berlin), D. Vidal-Madjar (Issy-les-Moulineaux)
- S.II.2 Clouds and Climate  
Convener: A. Henderson-Sellers (Liverpool)
- S.II.3 Modelling Internal Gravity Waves and Their Influence in the Lower Atmosphere  
Conveners: S. D. Mobbs (Leeds), G. J. Shutts (Bracknell)
- S.II.4 Numerical Weather Forecasting  
Convener: G. Sommeria (Reading)
- S.II.5 Oceanic Studies of the Mediterranean  
Conveners: M. Crépon (Paris), P. Rizzoli (Cambridge, Mass.)

#### Section III (External Geophysics)

##### OPEN SESSIONS

- O.III.1 Sun, Cosmic Rays and Interplanetary Physics  
Convener: B. Klecker (Garching)
- O.III.2 Magnetosphere and Ionosphere of the Earth  
Conveners: A. Roux (Issy-les-Moulineaux), K. Schlegel (Lindau/Harz)
- O.III.3 Dynamics and Chemistry of the Middle and Upper Atmosphere  
Conveners: J. E. Harris (Chilton), J. P. Jégou (Verrières-le-Buisson)

##### SYMPOSIA

- S.III.1 Progress in Magnetospheric Physics: Contributions from VIKING and PROMIS  
Conveners: E. W. Hones Jr. (Los Alamos), R. Lundin (Kiruna)
- S.III.2 Progress in the Solar Terrestrial Physics Programme – STP  
Conveners: M. Dobrowolny (Frascati), P. E. Maltby (Oslo)
- S.III.3 Active Experiments in Space Plasmas  
Conveners: G. Haerendel (Garching), Bo Thidé (Uppsala)

##### WORKSHOP

- W.III.1 Workshop on Atmospheric Gravity Waves and Tides  
Convener: M. L. Chanin (Verrières-le-Buisson)

##### JOINT OPEN SESSION

- JO.1 Planetary Sciences (Planetology, Atmospheres and Magnetospheres of Planets, Moons and Smaller Bodies)  
Conveners: M. Fulchignoni (Rome), G. Tallagrand (Paris), F. Taylor (Oxford)

##### JOINT SYMPOSIUM

- JS.1 Computer Simulations in Fluid Dynamics – Earth, Atmospheres and Space Plasmas  
Conveners: U. Christensen (Mainz), J. Nihoul (Liège), D. Canolle (Toulouse)

##### SOCIETY LECTURES

- D. McKenzie (Cambridge): Crustal Deformation and Generation during Extension  
J. Nemeč (Geneva): Change in Climate Variations and Water Resources  
J. P. Crutzen (Mainz): The Antarctic Ozone Hole: Influence of Anthropogenic Activities?

#### CALL FOR PAPERS

You are invited to submit abstracts of work done in any area of geophysics within the framework of EGS. Abstracts should be typed in the EGS/AGU format. Submit your abstract to one of the conveners and send a copy to the chairman of the programme committee.

**DEADLINE FOR RECEIPT OF ABSTRACTS IS 9 JANUARY 1987**

For further details concerning the Scientific Programme contact the Chairman of the Programme Committee

Dr. Arne K. Richter  
MPI für Aeronomie  
Postfach 20  
D-34111 Kallenberg-Lindau  
Federal Republic of Germany

Tel: +49-5556-411  
Tx: 965527 aeri/d  
Telefax: +49-5556-41240

For further details concerning the Meeting and Registration contact the Chairman of the L.O.C.

M. M. Cara  
Institut de Physique du Globe  
5 rue R. Descartes  
F-67084 Strasbourg Cedex  
France

Tel: +33-88-604110  
Tx: 890826 csem/f

For Travel Grants for Young Scientists contact the EGS General Secretary

Dr. G. M. Brown  
Department of Physics  
University College of Wales  
Aberystwyth SY23 3BZ  
United Kingdom

Tel: +44-970-3111  
Tx: 35181 g

**SECOND AND THIRD CIRCULAR:** Full details concerning the Meeting and the Scientific Programme including information about the Open Sessions, Symposia, Workshops and the addresses of the conveners will be available in the SECOND CIRCULAR which will be distributed to EGS members in October 1986. Non-EGS members should contact the Chairman of the Programme Committee or the Chairman of the Local Organizing Committee (L.O.C). The Final Scientific Programme will be included in the THIRD CIRCULAR which will be distributed to those attending the XII General Assembly. Abstracts will be published in the EUG periodical TERRA COGNITA.

**EUG IV:** Those registering for the EGS XII General Assembly will also be able to attend the meetings of the European Union of Geosciences at Strasbourg, 13 - 16 April 1987, without payment of an additional fee.

CMOS - SCMO  
Suite 805  
151 Slater St.  
Ottawa, Ontario, Canada  
K1P 5H3

