



Supplement of

100 Years of IAHS - Graphic capitalisation and poetic celebration

Christophe Cudennec

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Figure S1: Poster of IAHS highlights during the 1922–1932 decade. Credit: IAHS and Christophe Cudennec.

Figure S2: Poster of IAHS highlights during the 1932–1942 decade. Credit: IAHS and Christophe Cudennec. Maps: © IAHS.

Figure S3: Poster of IAHS highlights during the 1942–1952 decade. Credit: IAHS and Christophe Cudennec. Maps: © IAHS.

Figure S4: Poster of IAHS highlights during the 1952–1962 decade. Credit: IAHS and Christophe Cudennec. Maps: © IAHS.

Figure S5: Poster of IAHS highlights during the 1962–1972 decade. Credit: IAHS and Christophe Cudennec. Maps: © IAHS.

Figure S6: Poster of IAHS highlights during the 1972–1982 decade. Credit: IAHS and Christophe Cudennec. Maps: © IAHS.

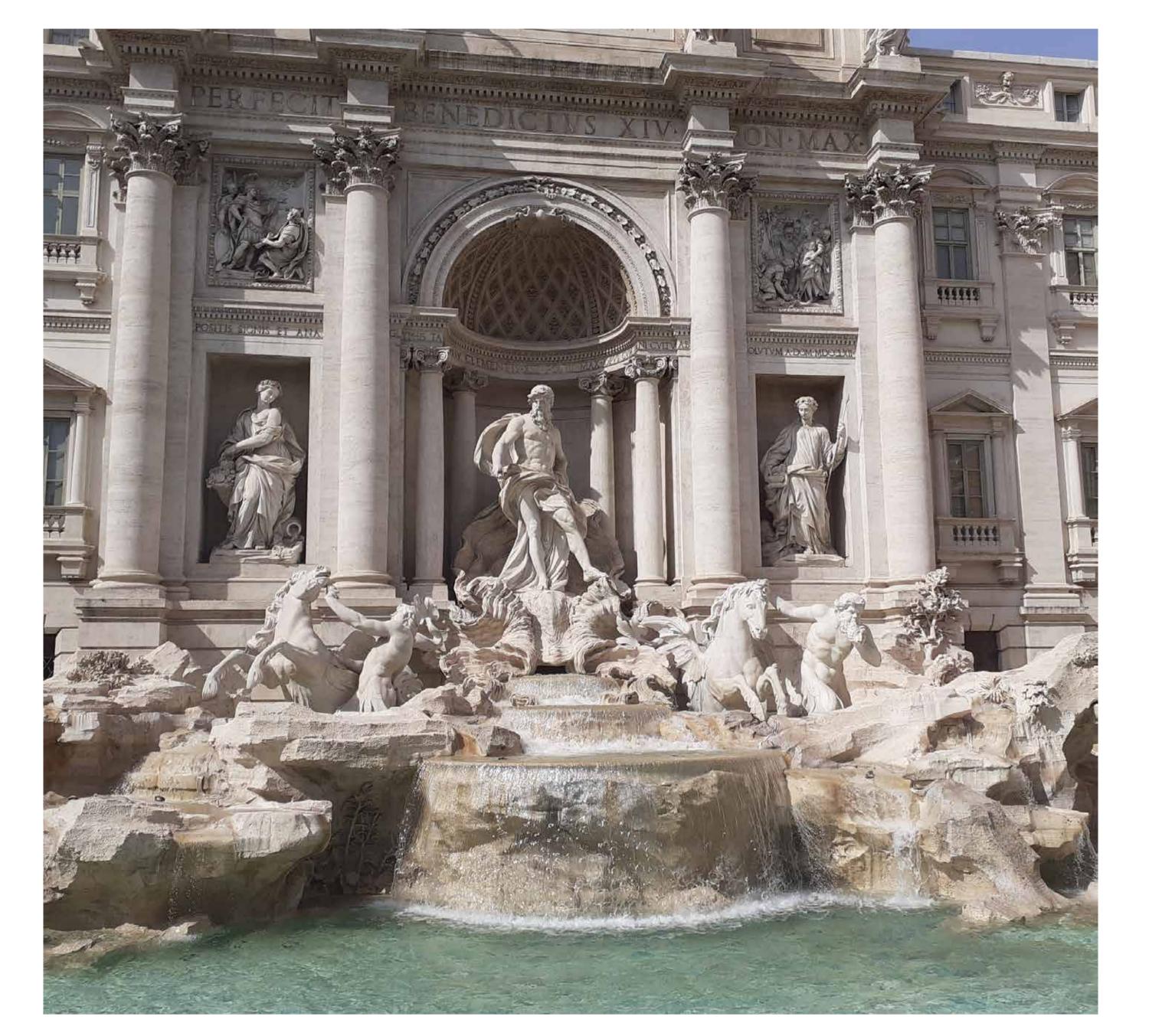
Figure S7: Poster of IAHS highlights during the 1982–1992 decade. Credit: IAHS and Christophe Cudennec.

Figure S8: Poster of IAHS highlights during the 1992–2002 decade. Credit: IAHS and Christophe Cudennec. Maps: © IAHS.

Figure S9: Poster of IAHS highlights during the 2002–2012 decade. Credit: IAHS and Christophe Cudennec.

Figure S10: Poster of IAHS highlights during the 2012–2022 decade. Credit: IAHS and Christophe Cudennec.





CONSEIL INTERNATIONAL DE RECHERCHES
UNION GÉODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE

SECTION INTERNATIONALE D' HYDROLOGIE SCIENTIFIQUE

BULLETIN N. 10

Directeur du Bureau central : G. MAGRINI, à Stra (Venise)

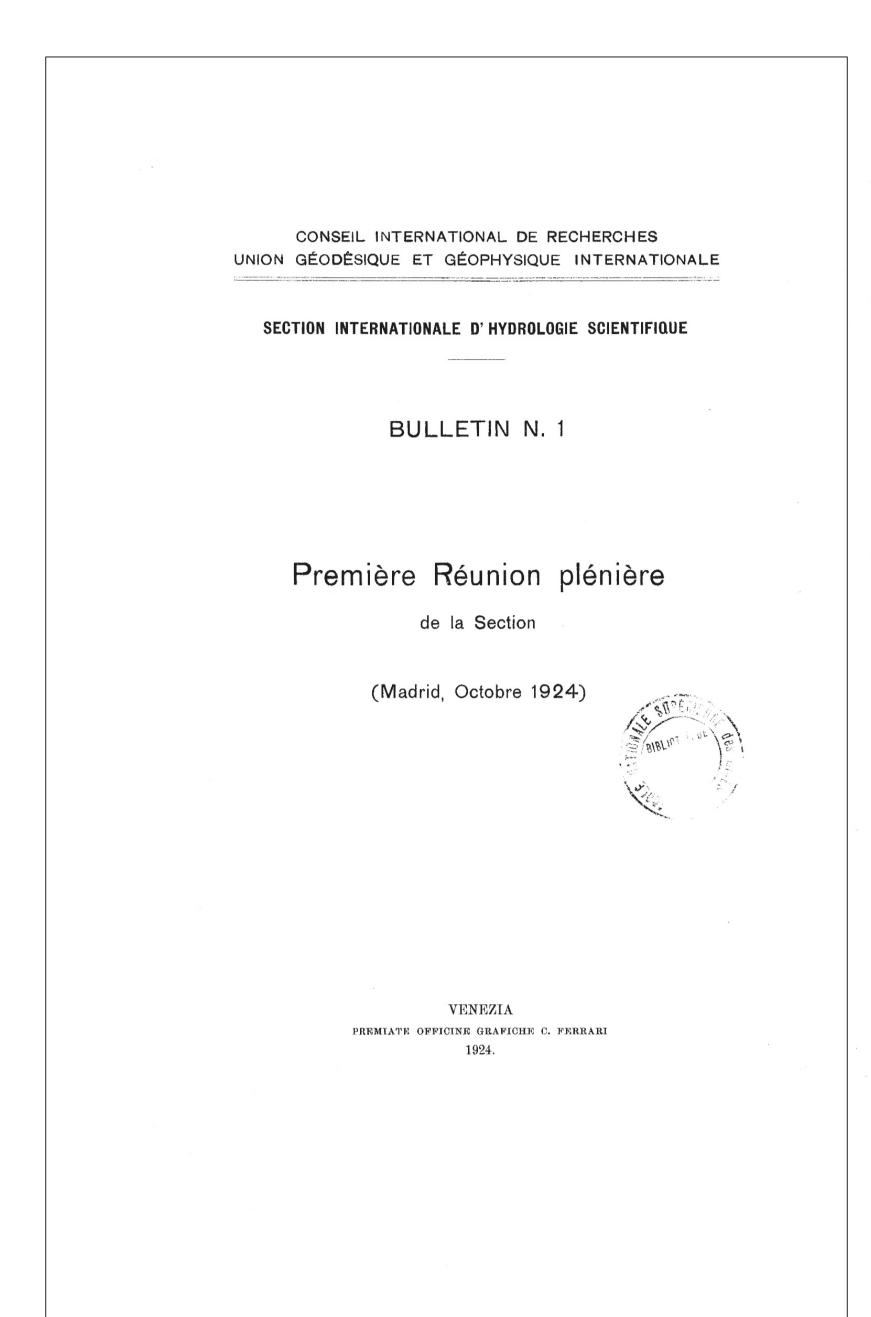
Études poursuivies dans les differents pays sur les debits solides des cours d'eau.

(EGYPTE, FRANCE, ITALIE)



1922-1932

1919: Creation of IRC, International Research Council & IUGG, International Union of Geodesy and Geophysics 1922, Rome: Creation of the Section of Scientific Hydrology Incorporation of International Commission of Glaciers (1894)



"L'Assemblée générale approuva à l'unanimité la proposition de la Commission et nomma: président de la Séction: M. M. B. H. Wade, Physical Department, Pubblice Work Ministry, Caire (Egypte) sécrétaire de la Section: M. le prof. Giovanni Magrini, professeur d'Hydrographie à l'Ecole d'application pour les ingenieurs de Padoue, Stra (Venise, Italie) — tout en remettant à la Séction le choix de son Comité exécutif. Les pays adhérants seront tenus à déleguer un membre de leur Comité national à intervenir dans le Comitè exécutif.

"L'Assemblée générale délibera d'autoriser le Comité exécutif de la Séction à l'eventuelle constitution de différentes Commissions proposées dans la relation presentée à l'Assemblée generale — On proposa aussi de considerer l'opportunité d'instituer une Commission pour l'étude des méthodes statistiques à utiliser pour les recherches de l'Hydrologie scientifique.

"Tous les Comités nationaux devraient portant pourvoir à la constitution de leur propre Séction nationale d'Hydrologie scientifique et nommer leur délégué dans le Comité exécutif de la Séction internationale ".

* *

Le président rappelle que quelques uns des Comités nationaux ont déjà répondu, annonçant la constitution de leurs Séctions nationales, d'autres déclarent vouloir attendre la première réunion, qui a lieu maintenant, pour nommer les délégués.

La réunion actuelle doit par conséquent être considérée comme étant une véritable réunion constitutive.

Le président remarque que l'ordre du jour, qui fut communiqué aux délégués déjà nommés pour assister à la présent reunion et aux différents Comités nationaux, est le suivant:

1) Ouverture de la séance.

2) Rapport du président.

3) Organisation de la Séction.

a) Costitution des Séctions nationales. Composition et consti-

tution du Comité executif.
b) Composition et constitution des Commissions d'étude.

omposition et constitution des Commissions d I — pour la Potamologie.

II — pour la Limnologie.

III — pour les eaux souterraines.

IV — pour la Glaciologie.

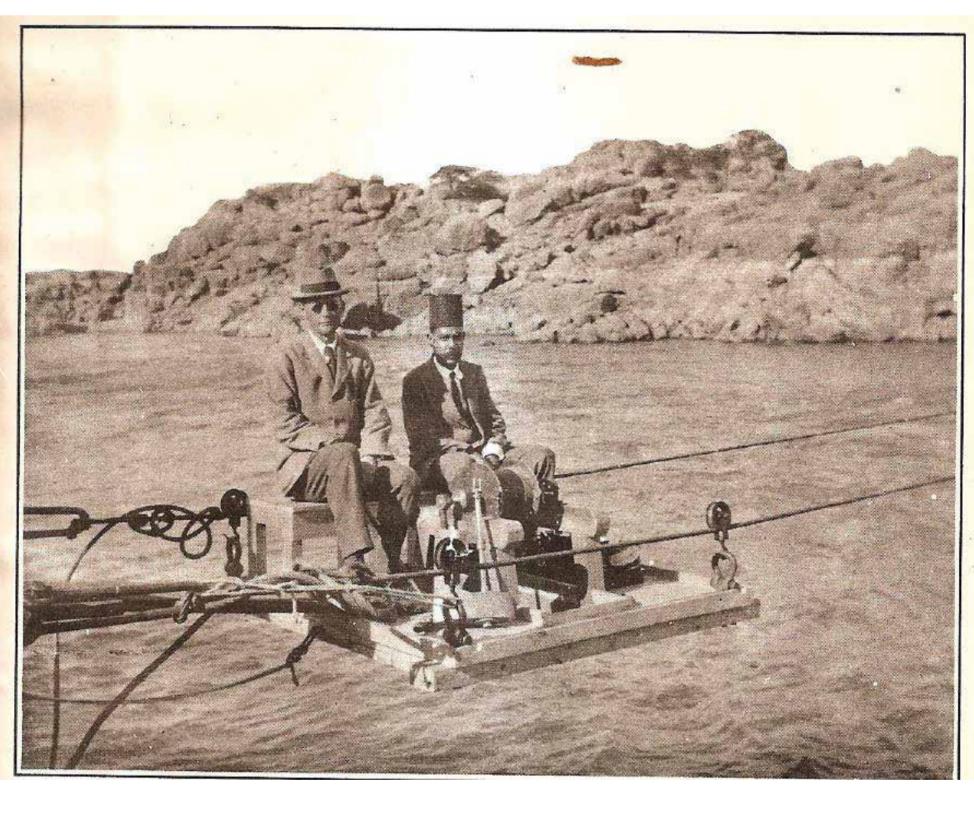
V — pour l'application des méthodes statistiques à l'Hydrologie.

c) Constitution de la Bibliothèque centrale de la Séction et preparation du catalogue relatif.

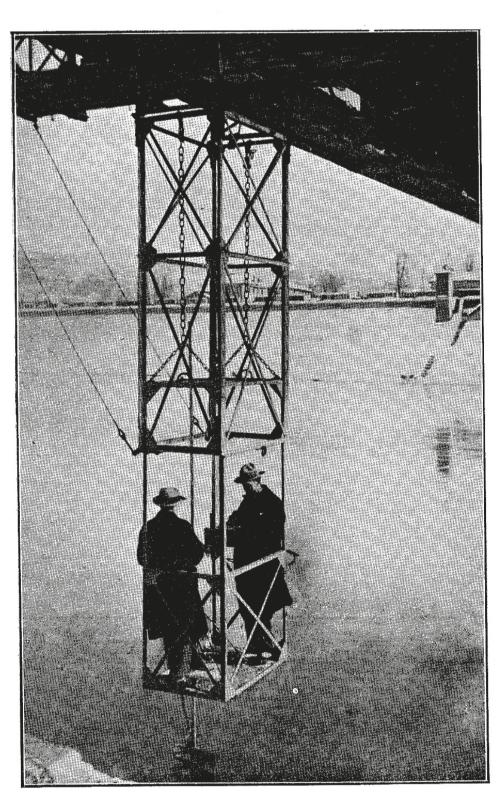
d) Publication du Bulletin bibliographique de la Séction.

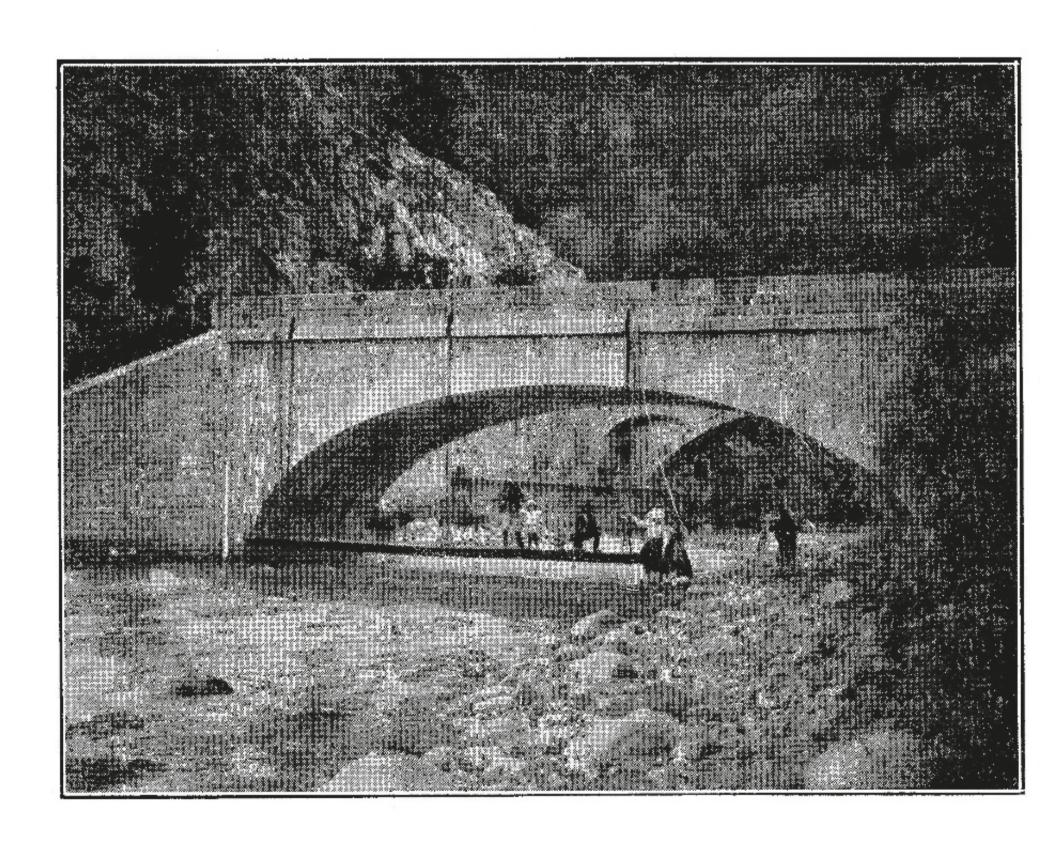
e) Échange des publications parmi les differents pays.
f) Budget. — Contribution des pays adherants pour le budget de la Séction.

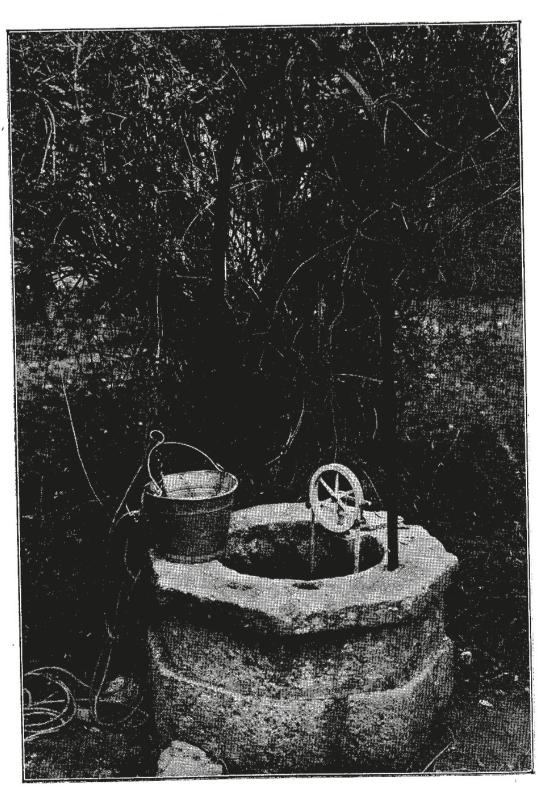
4) Rapport sur l'activité des divers pays dans le camp de l'Hydrologie scientifique.

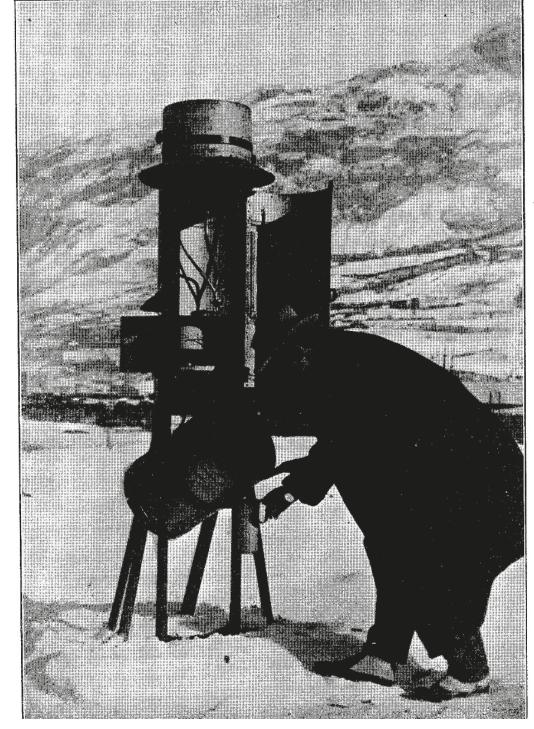


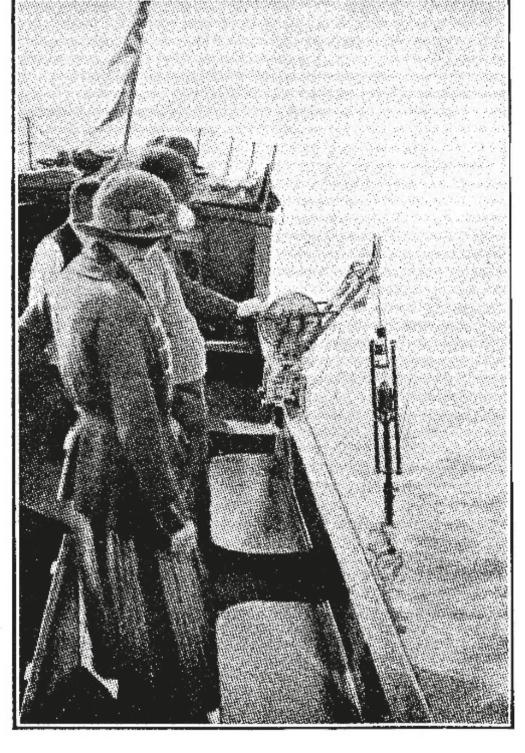












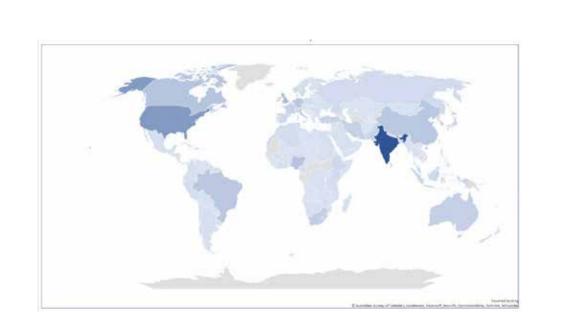
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	SECTION D'HYDROLOGIE SCIENTIFIQUE
	Siège du BUREAU CENTRAL - Stra (Prov. de Venise)
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	BULLETIN N. 14
Rapp	oort de la Commission des glaciers
	1930
	VENEZIA
	PREMIATE OFFICINE GRAFICHE CARLO FERRARI

GLACIERS	1913/14	1914/15	1915/16	1916/17	1917/18	1918	1919/20	1920/21	1921/22	1922/23	1923/24	1924/25	1925/26	1926/27	1927/
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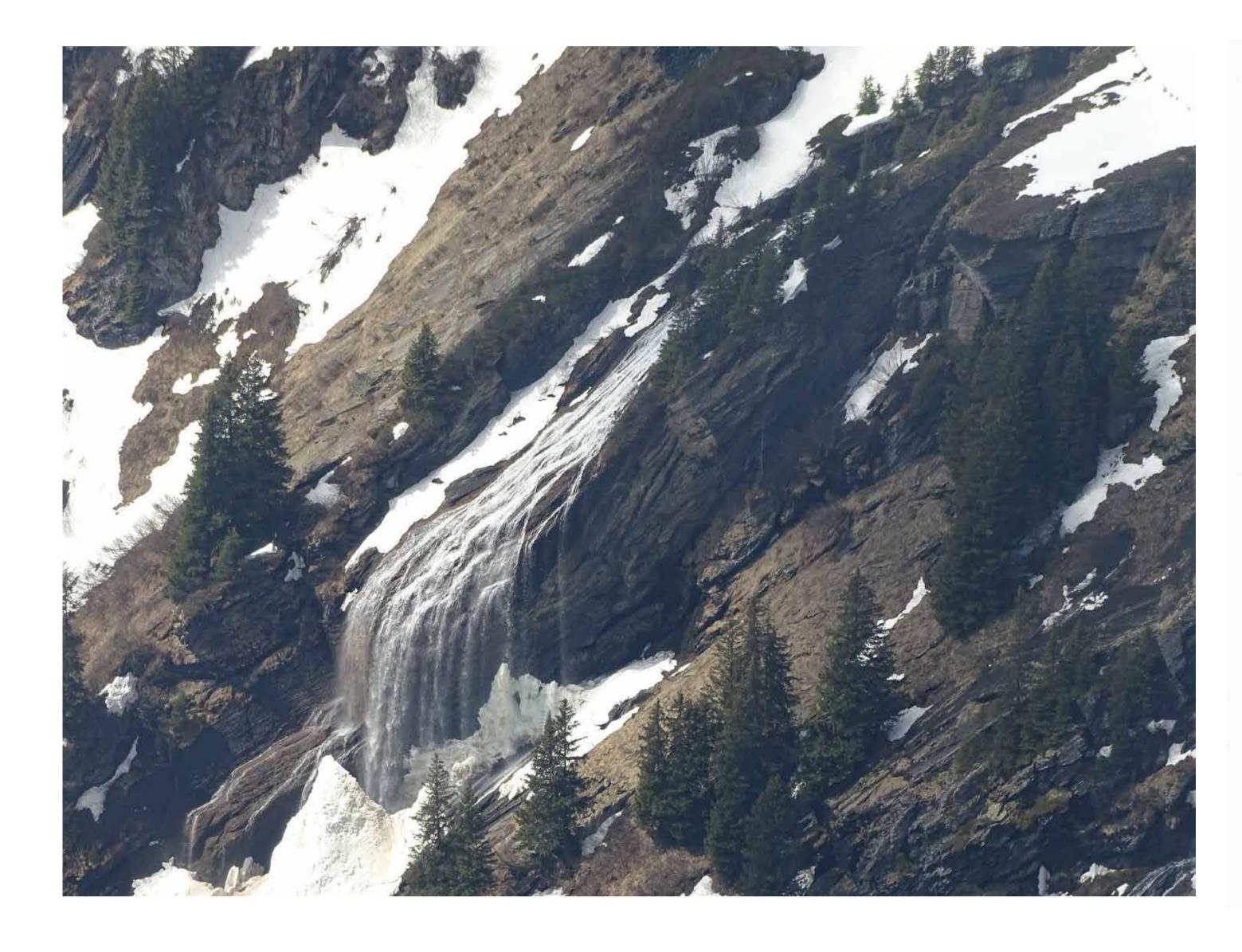


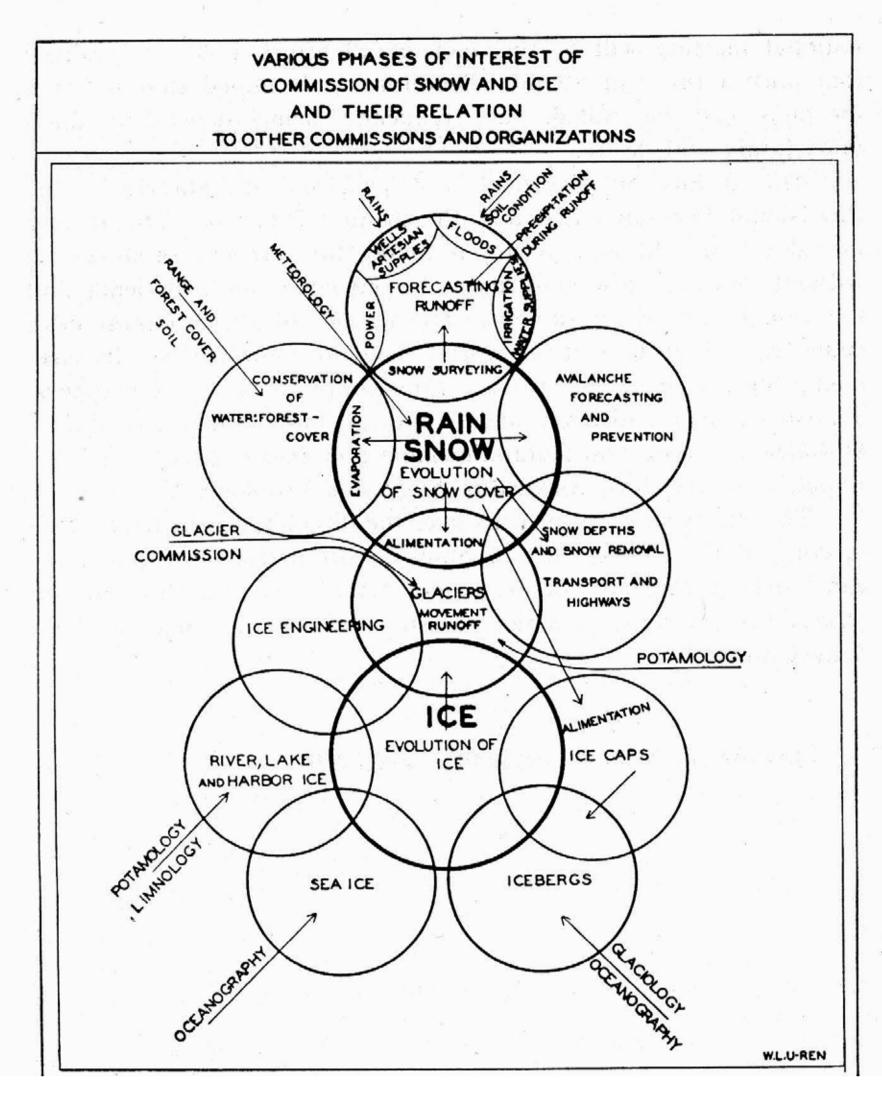


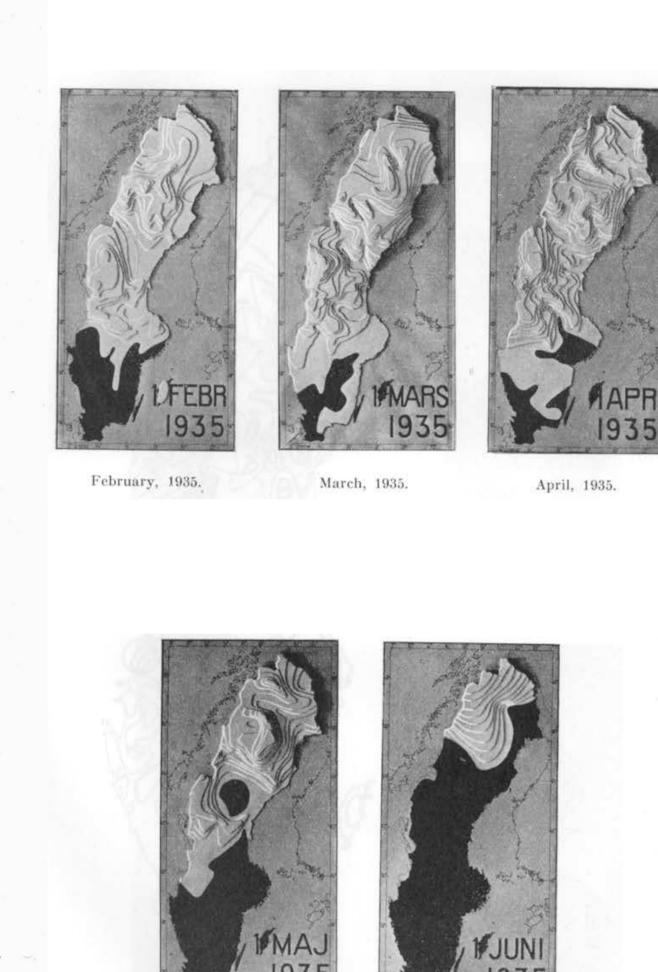


1931: IRC becomes ICSU, International Council of Scientific Unions

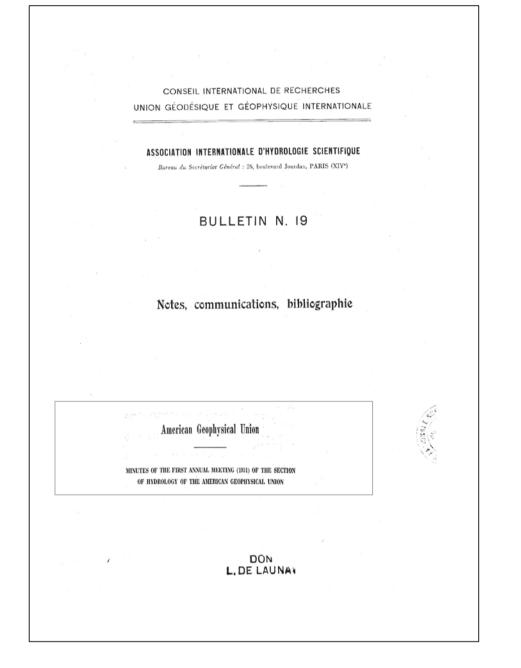
1933: the Section becomes the International Association of Scientific Hydrology

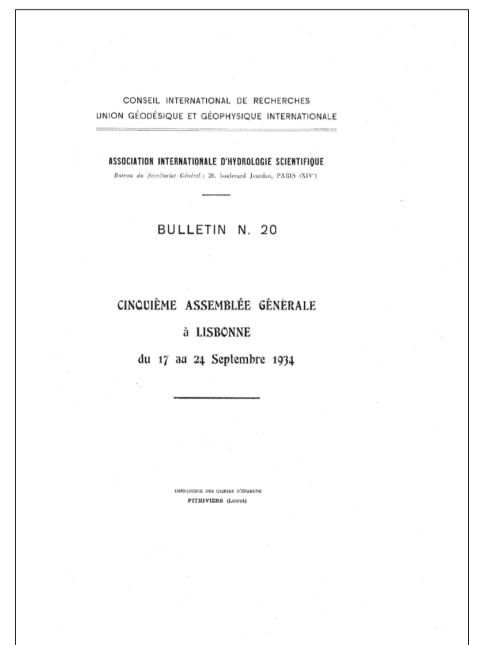


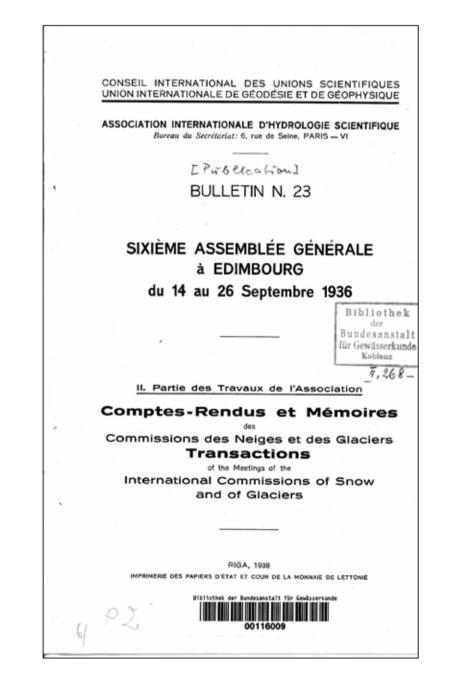


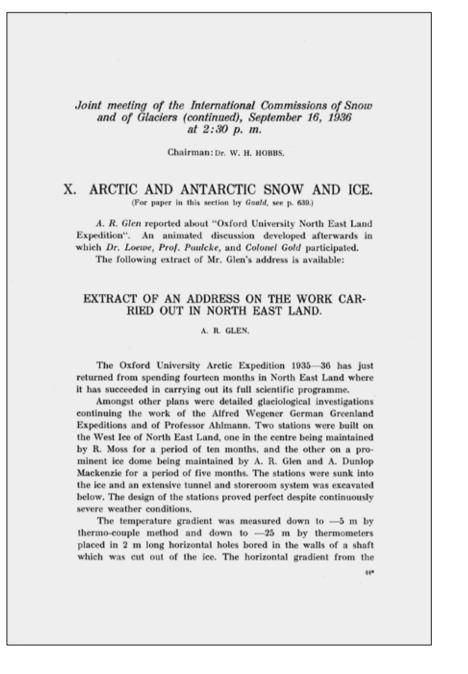


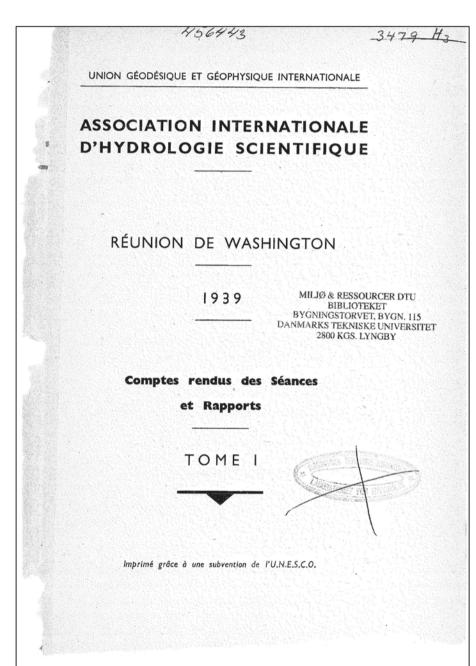
May, 1935.





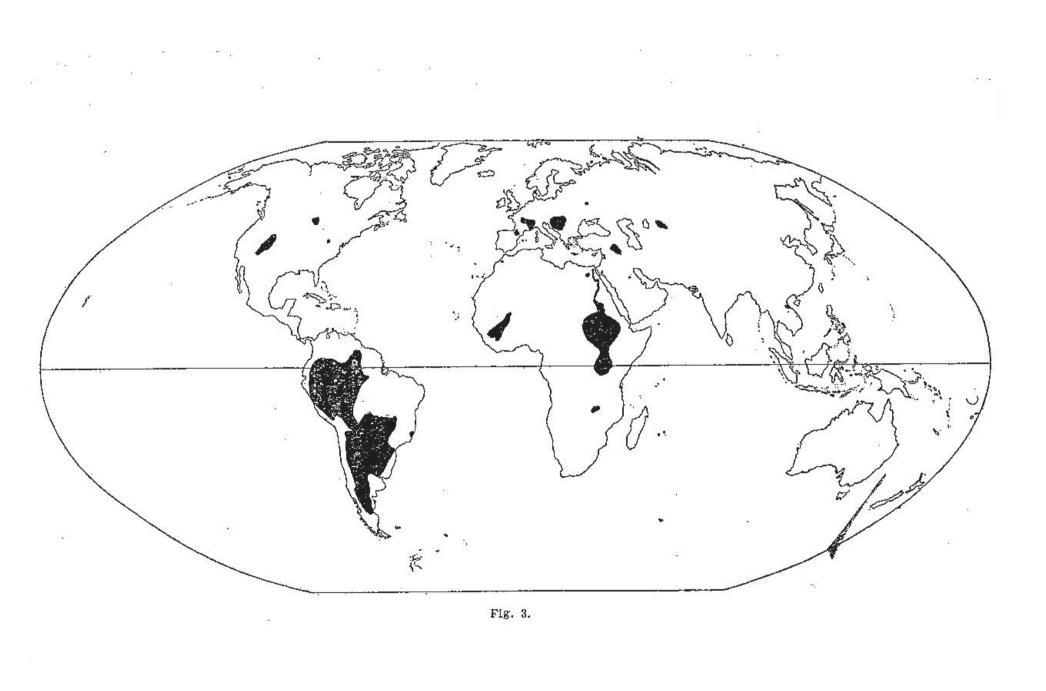


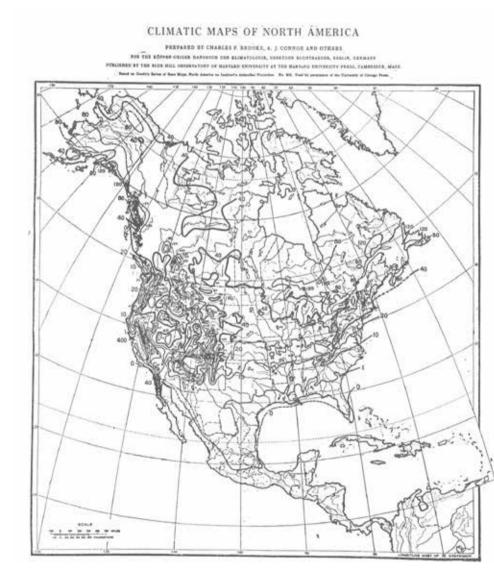


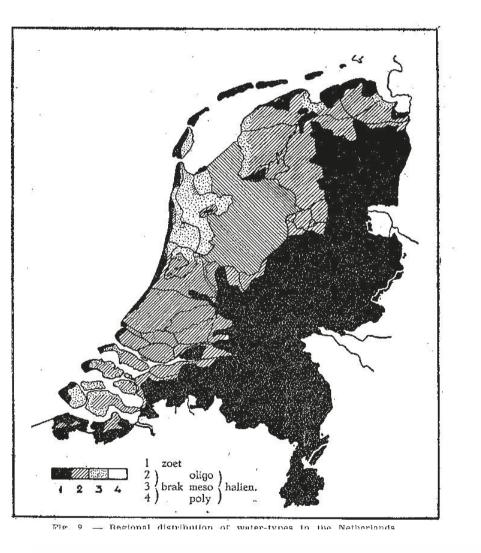


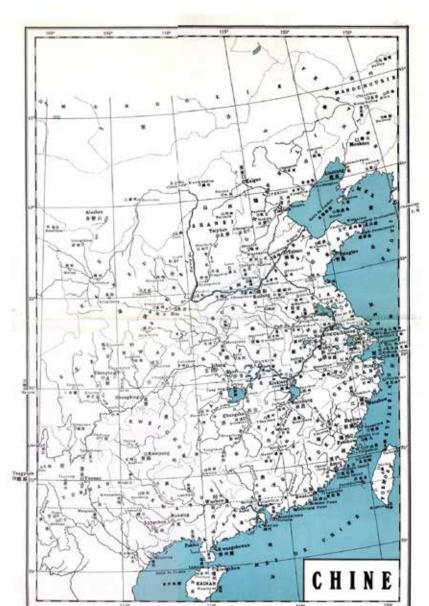


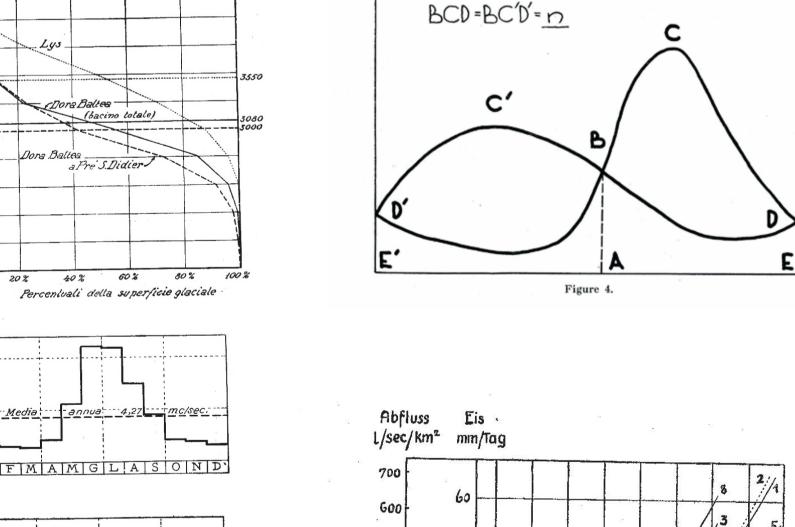
June, 1935.

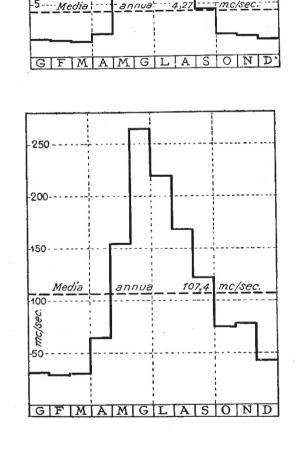


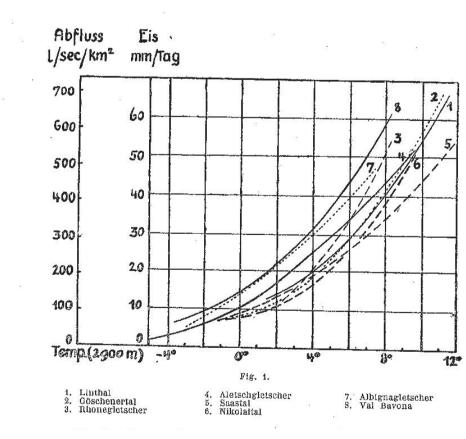


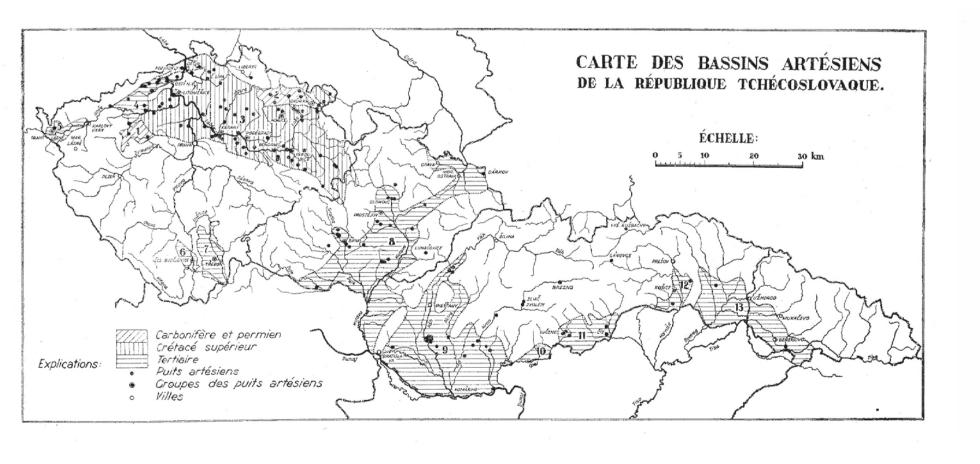


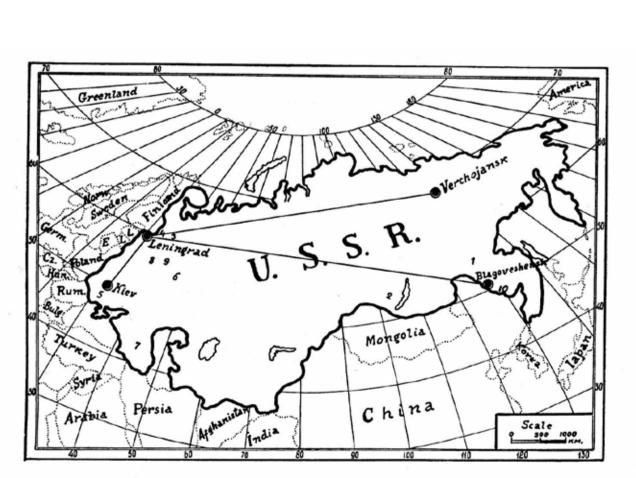


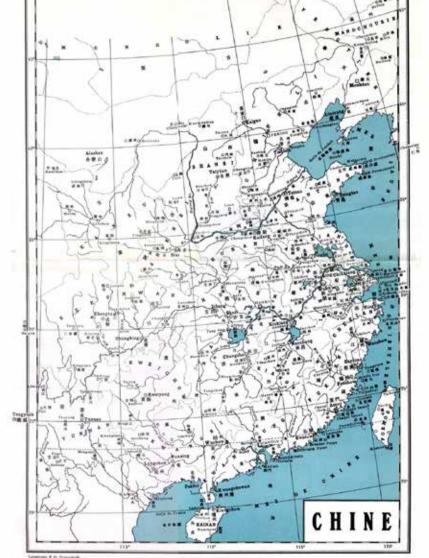


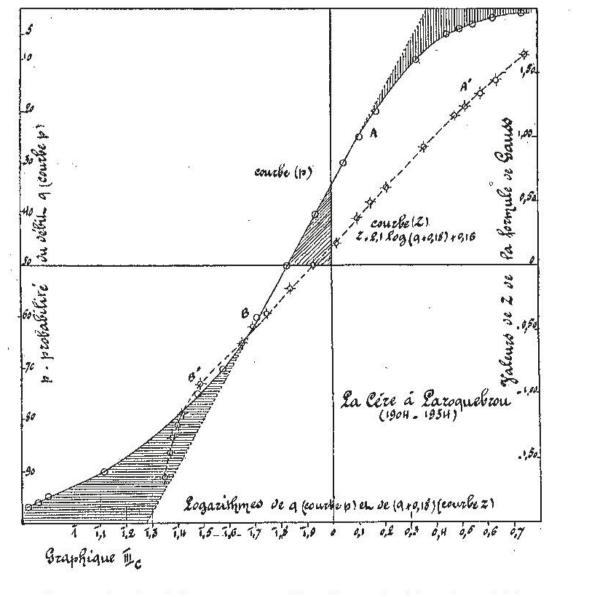








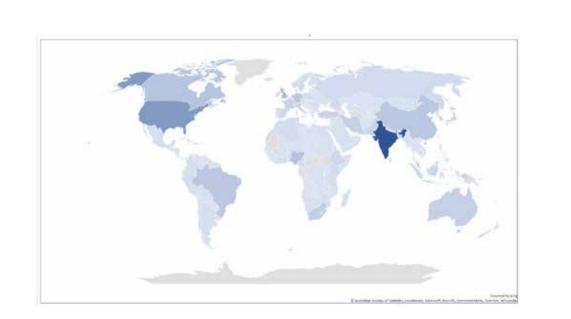
















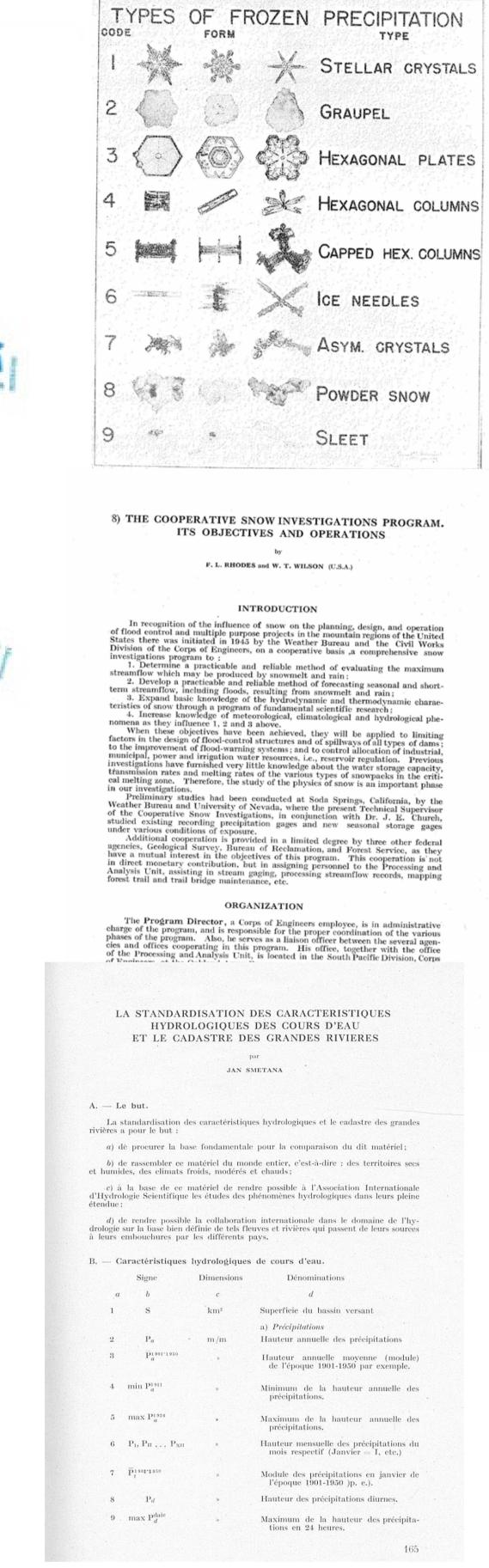


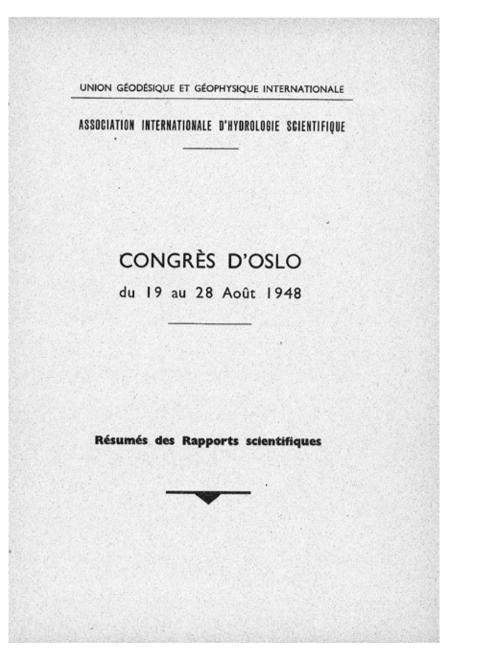




Words in Titles of publications 1922-1952



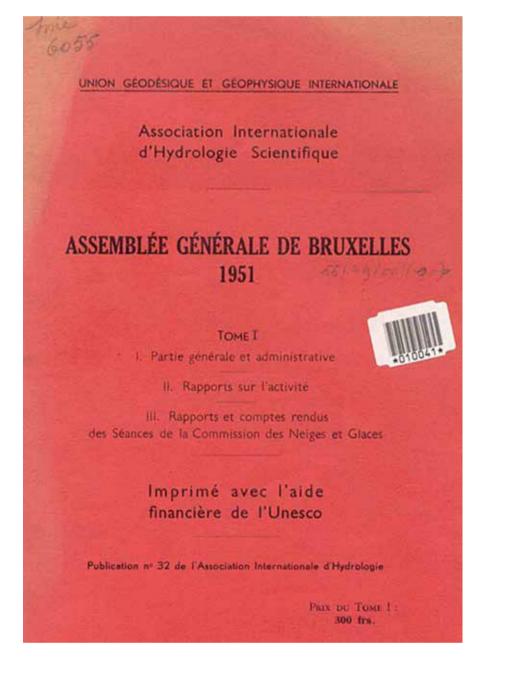


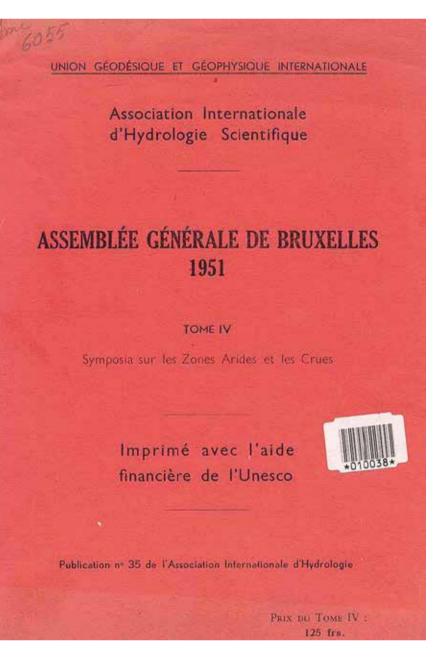


AVERAGE EVAPORATION - INCHES/YEAR

THEORETICAL

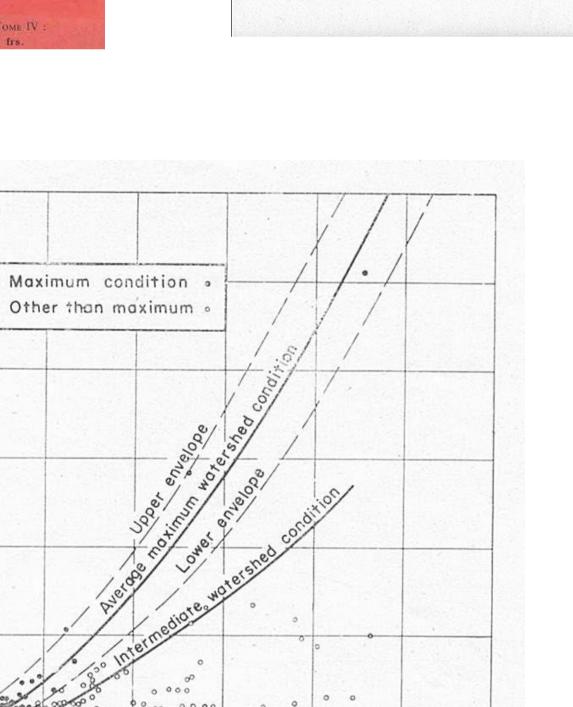
DIRECT

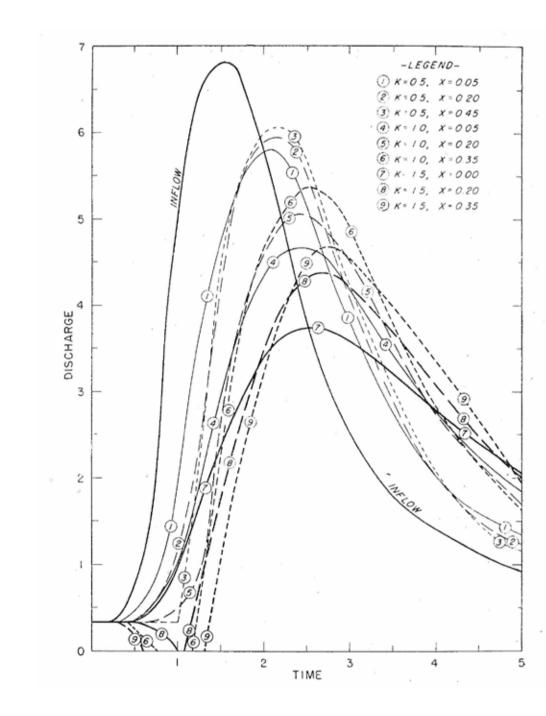


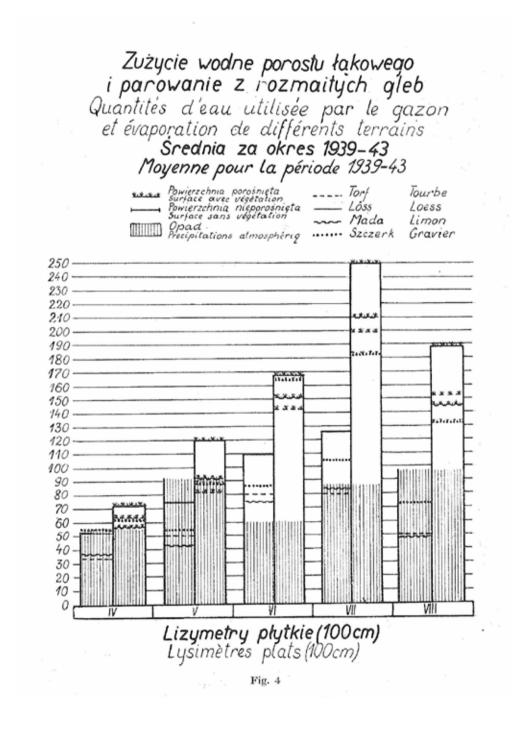


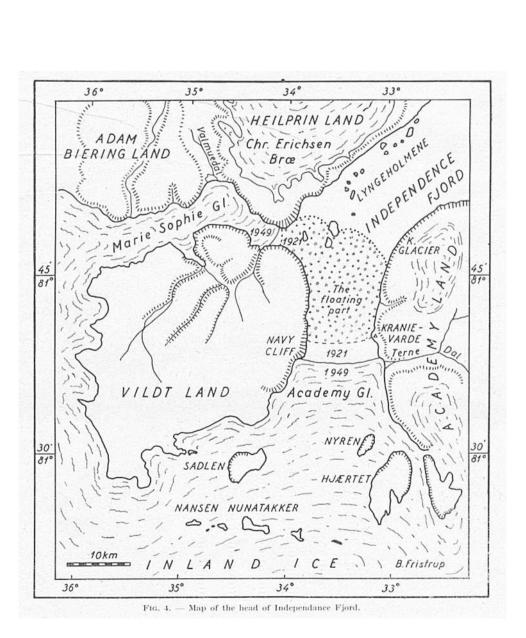
DISTRIBUTION OU DEFICIT D'ECOULEMENT

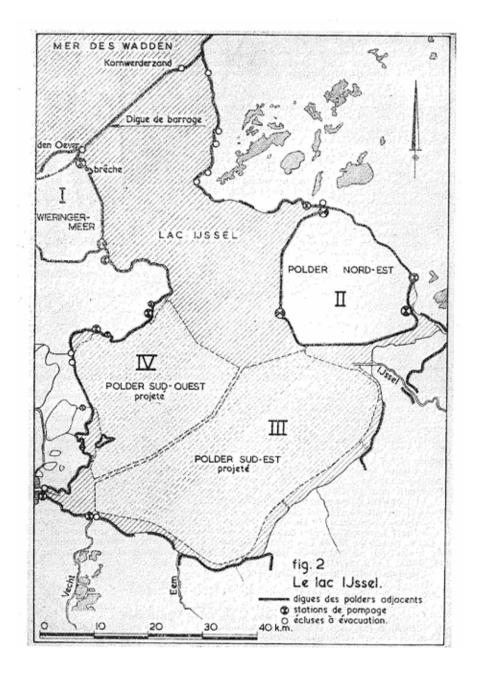
POUR LE TERRITOIRE ITALIEN.

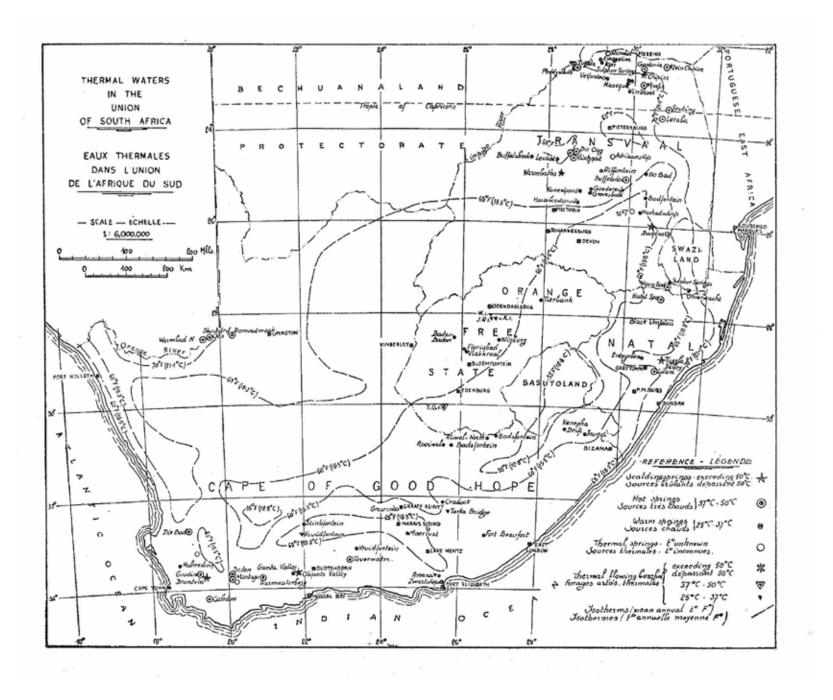




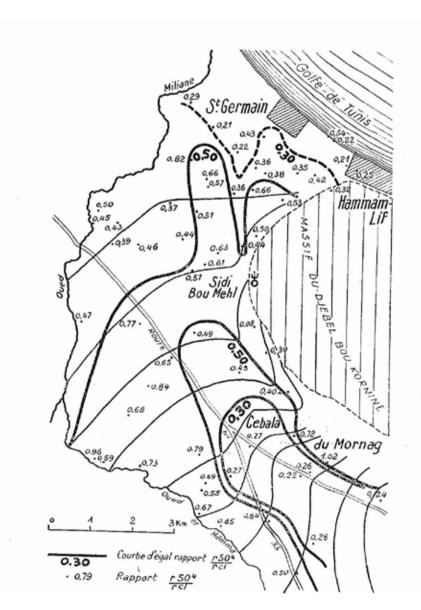


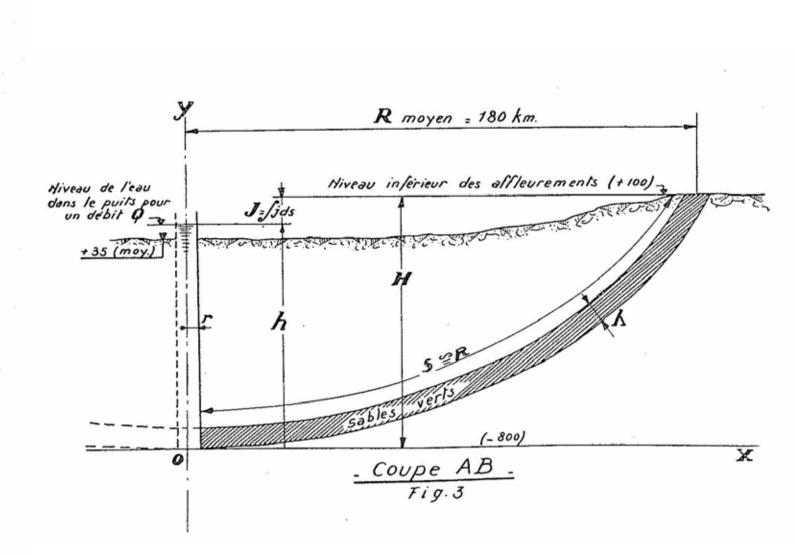






15 minute rainfall intensity (inches per hour)

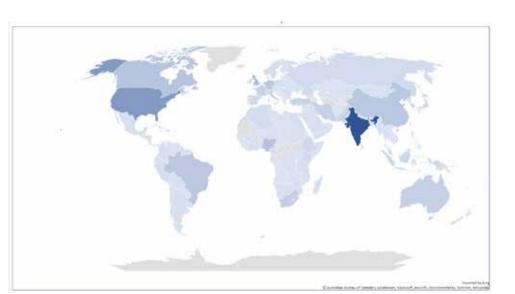




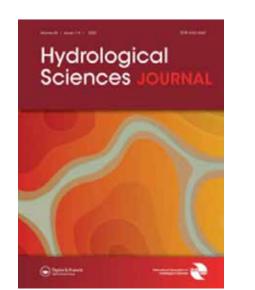








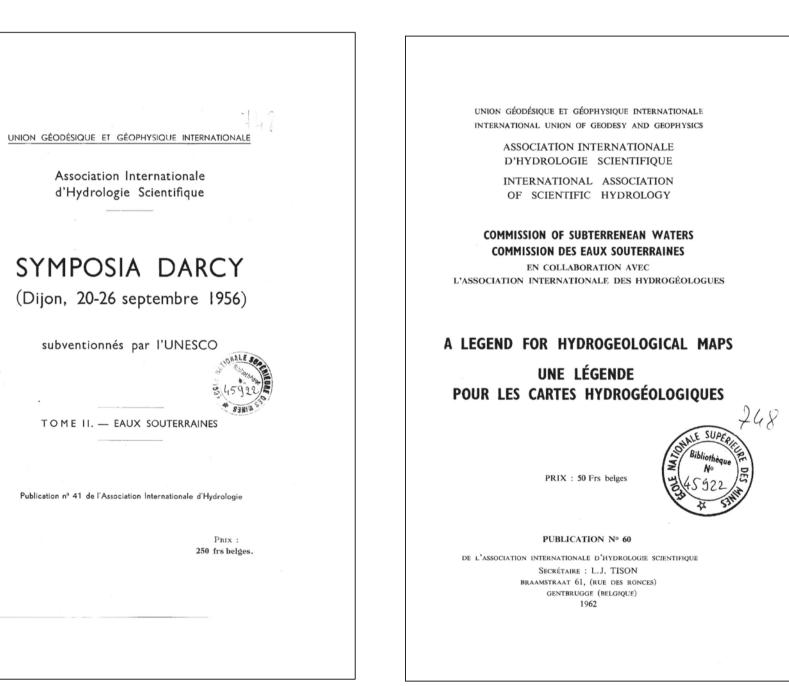


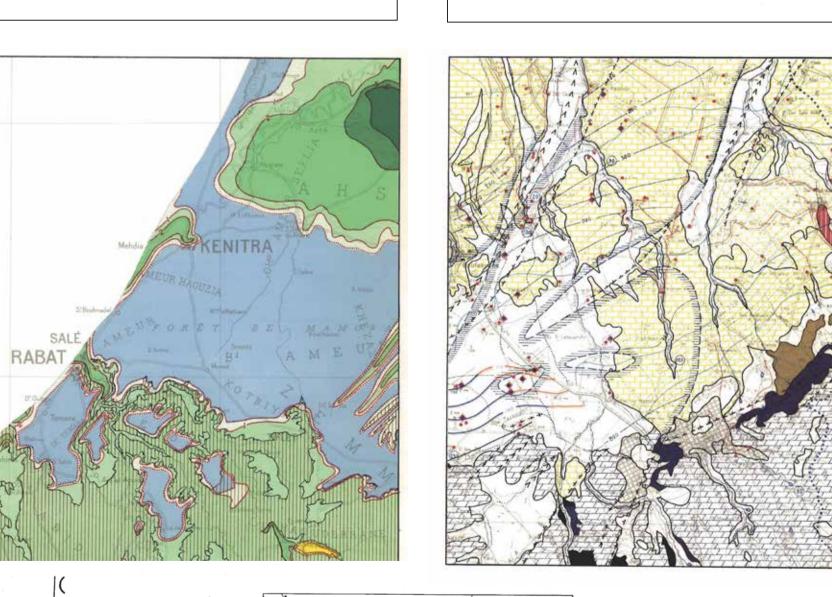


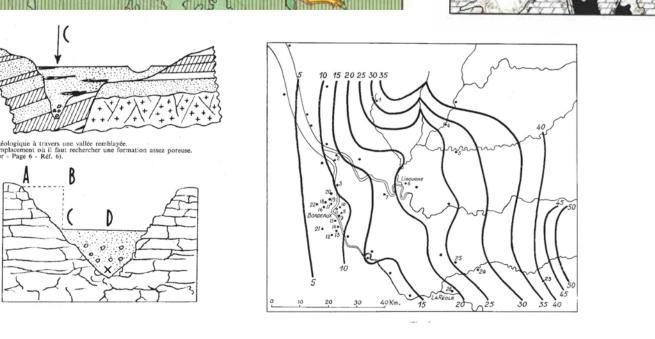


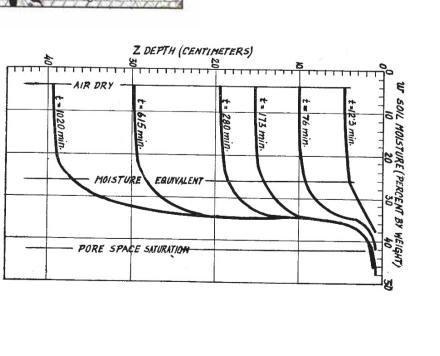


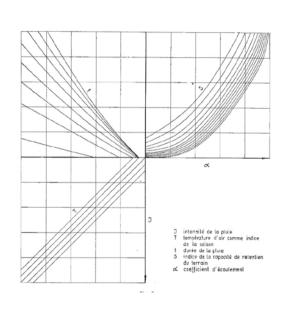
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CONSEIL INTERNATIONAL DES UNIONS SCIENTIFIQUES INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS UNION GÉODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE INTERNATIONAL UNION OF GEODÉSY AND GEOPHYSICS

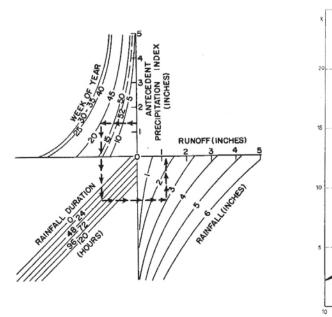
Bulletin de

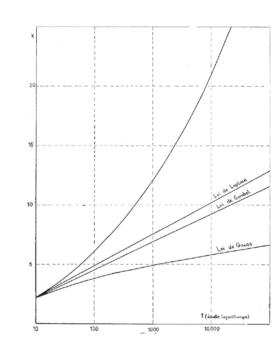
l'Association Internationale

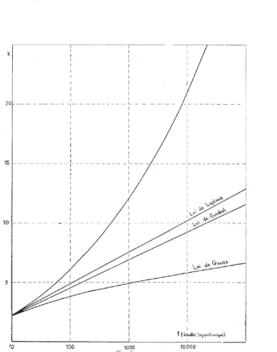
d'Hydrologie Scientifique

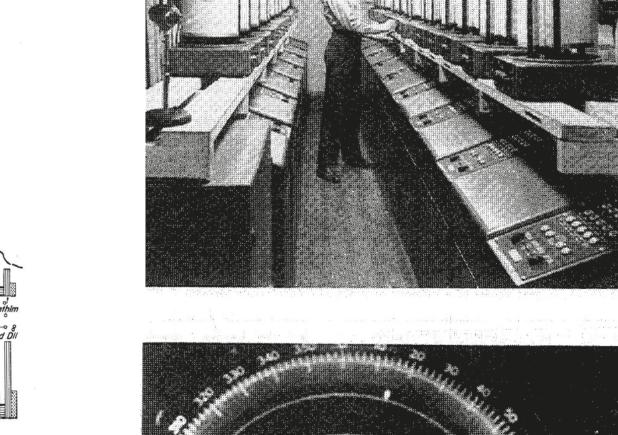
MARS 1957

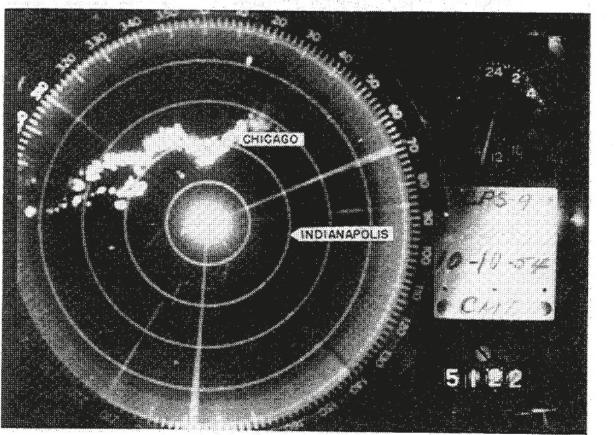
THE INTERNATIONAL ASSOCIATION OF SCIENTIFIC HYDROLOGY

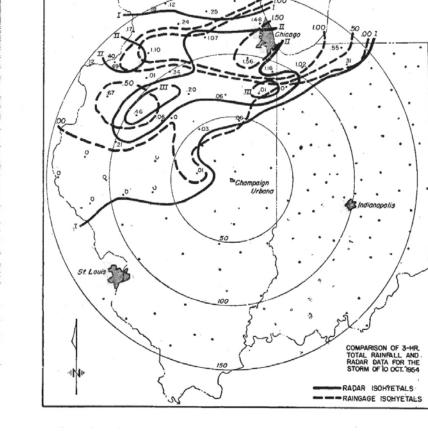


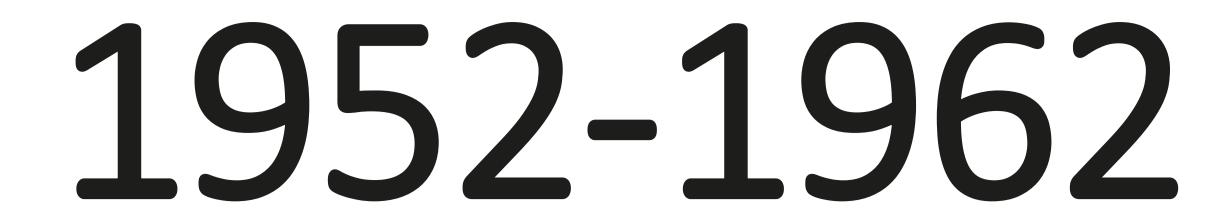








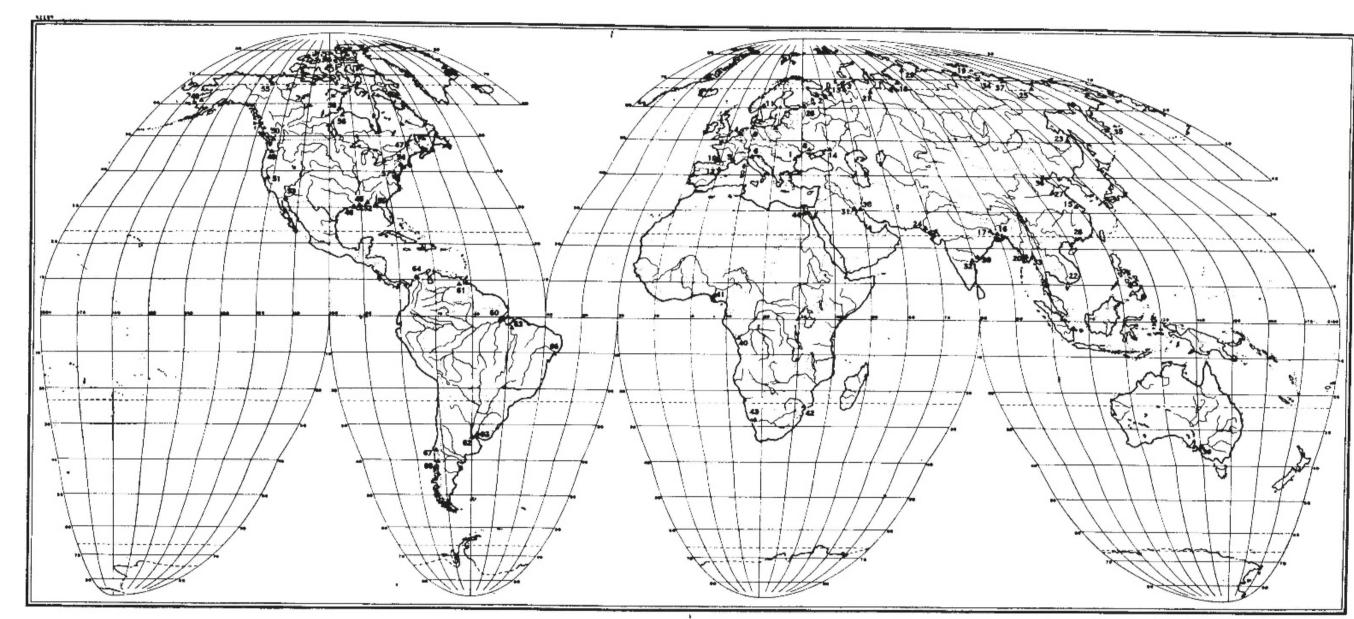




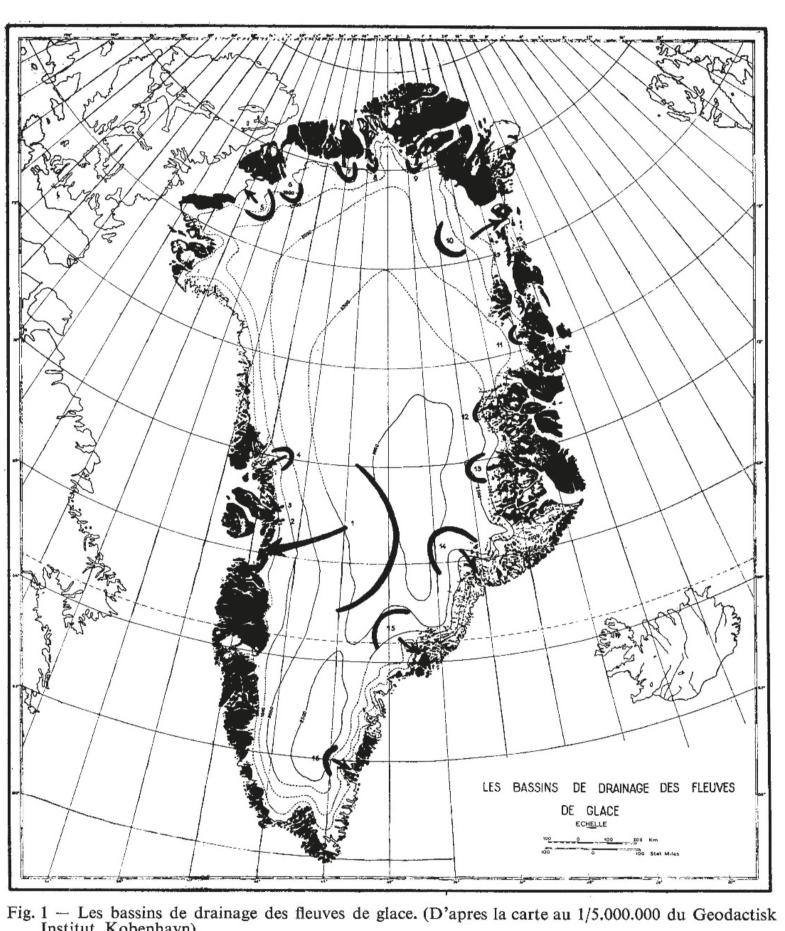
1956: Creation of the bilingual Bulletin

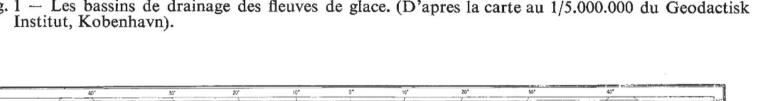
1957-58: IYG International Geophysical Year

1961: Creation of WMO Commission of Hydrometeorology, then Commission of Hydrology – IAHS official partner



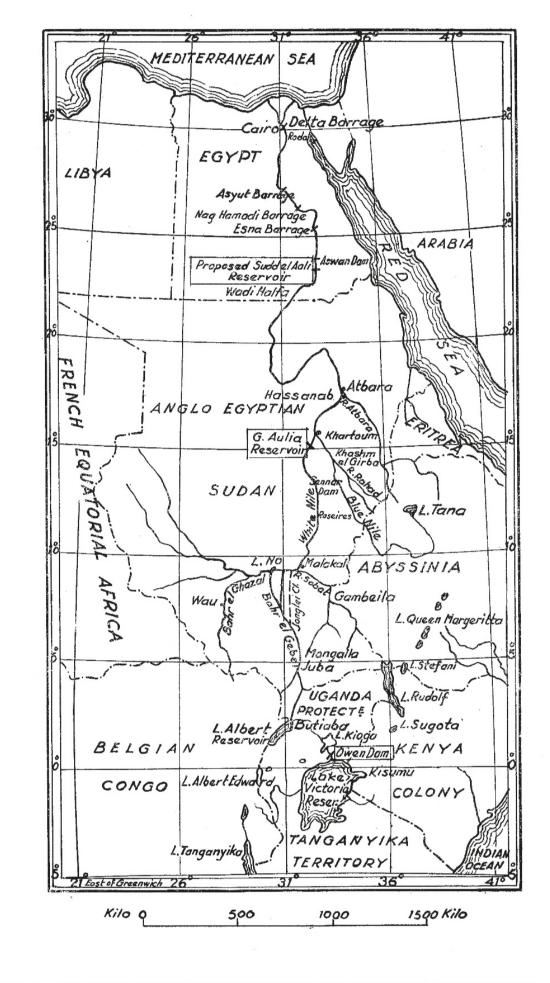
Sites selected for study of principal rivers of the world

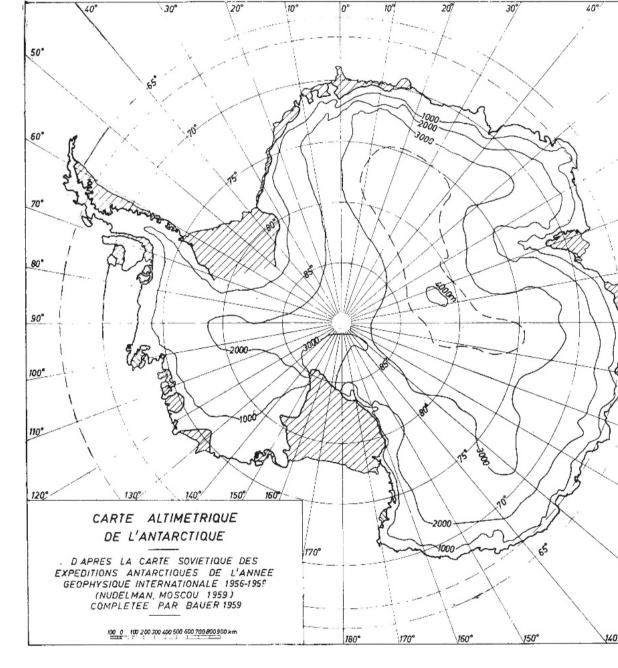


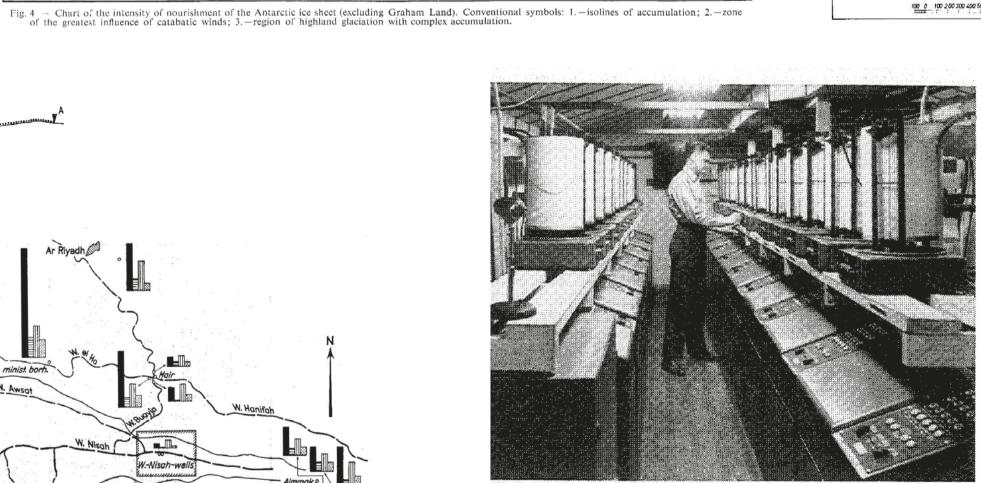


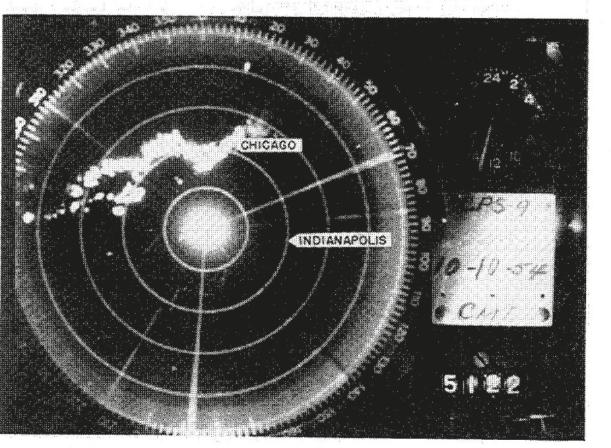
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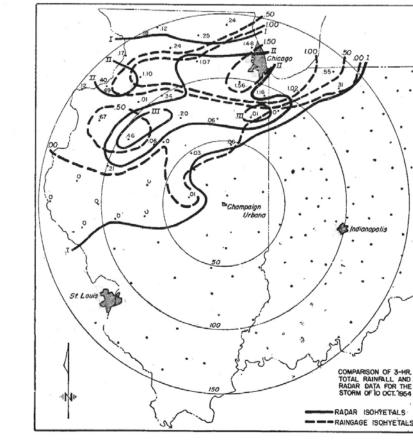
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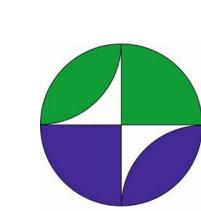












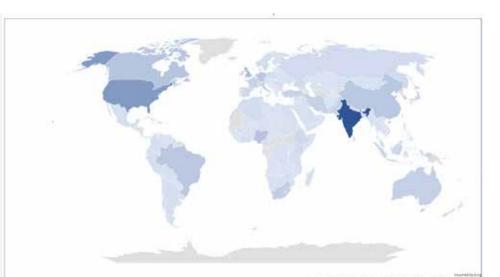
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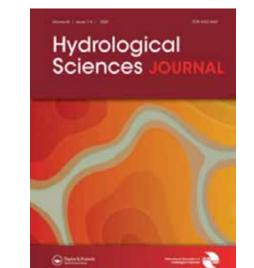


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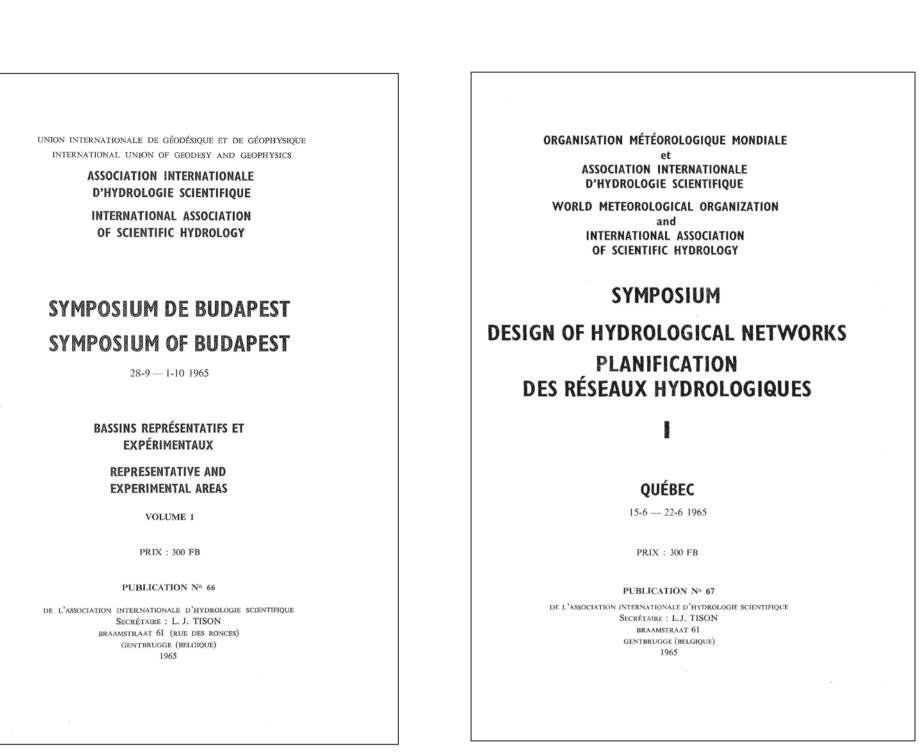


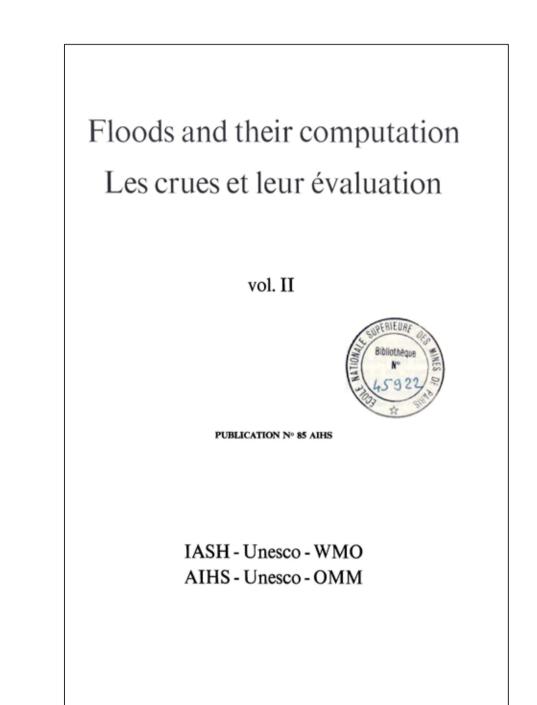


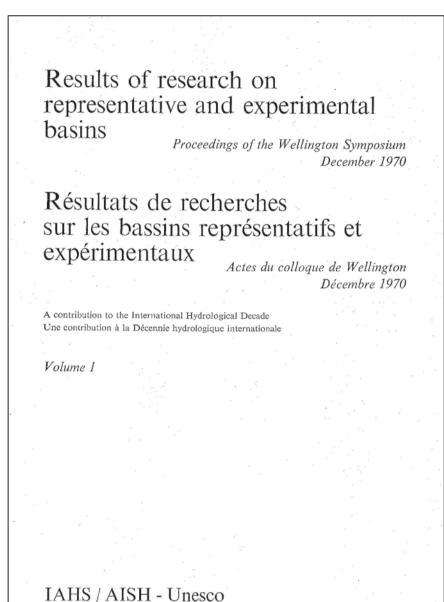
1971 Renaming: the International Association of Hydrological Sciences / L'Association Internationale des Sciences Hydrologiques



1965-1974 The International Hydrological Decade

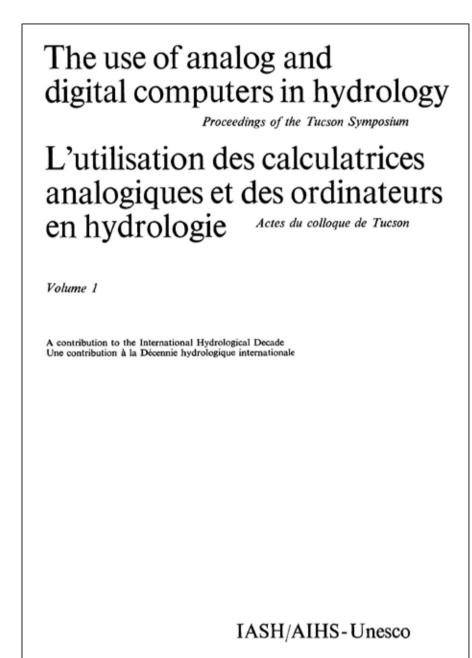


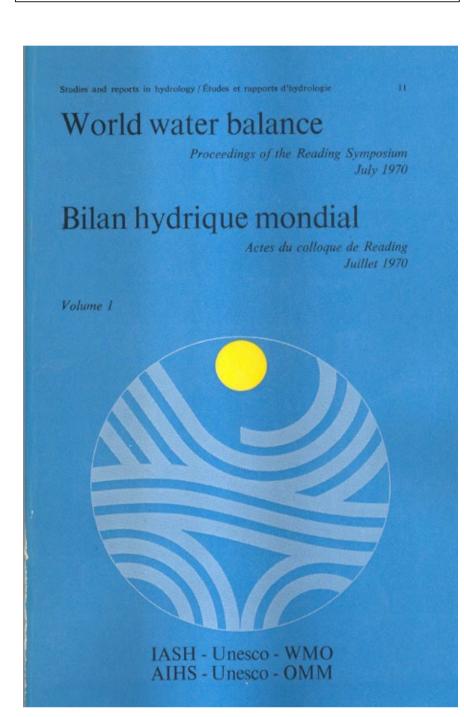




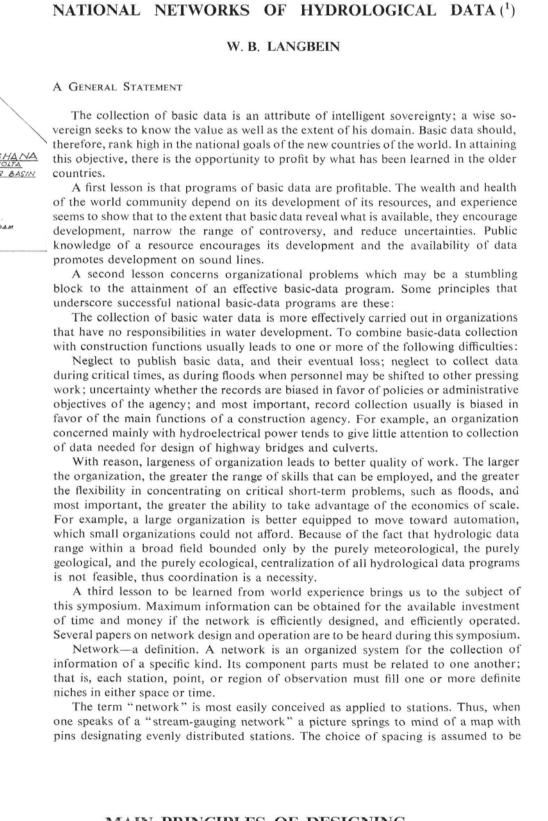
Paris 1973

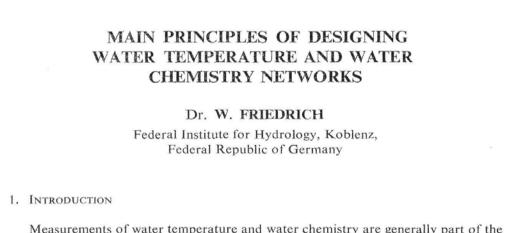
Bulletin of the International Association of Scientific Hydrology XVI, 4. 12/1971

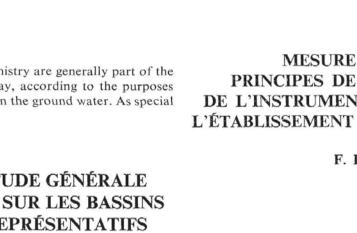


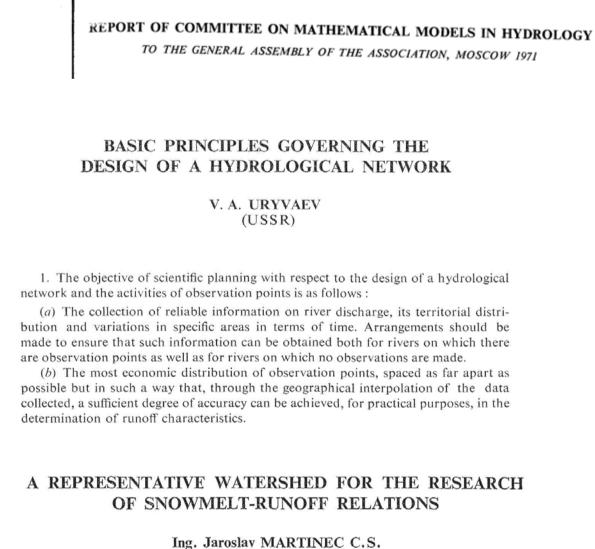




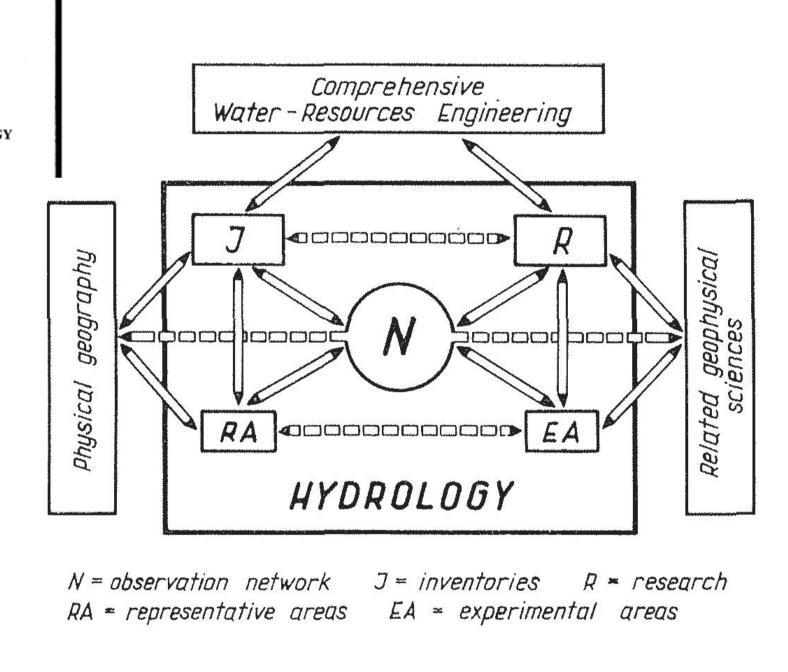








Hydraulic Research Institute, Prague, Czechoslovakia



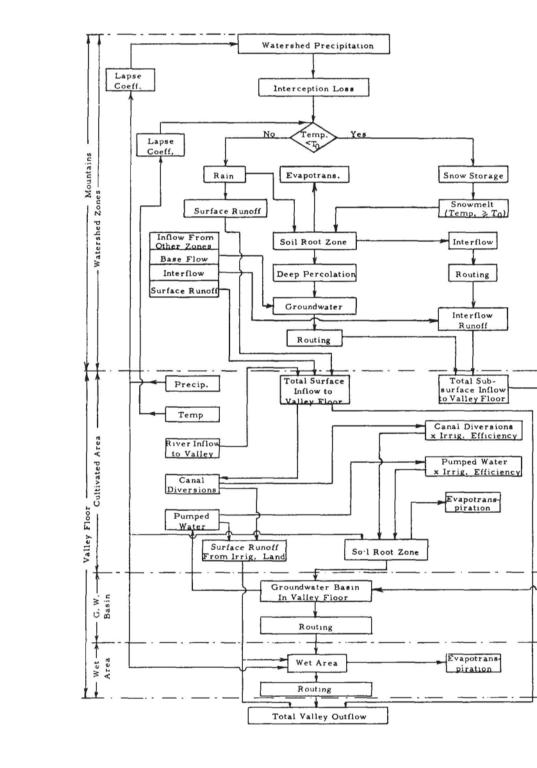
SEDIMENT INVESTIGATIONS WITH TRACERS

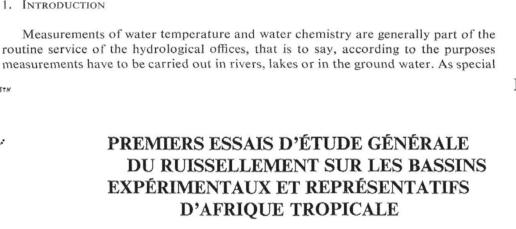
ON EXPERIMENTAL AREAS

L. RÁKÔCZI and K. STELCZER

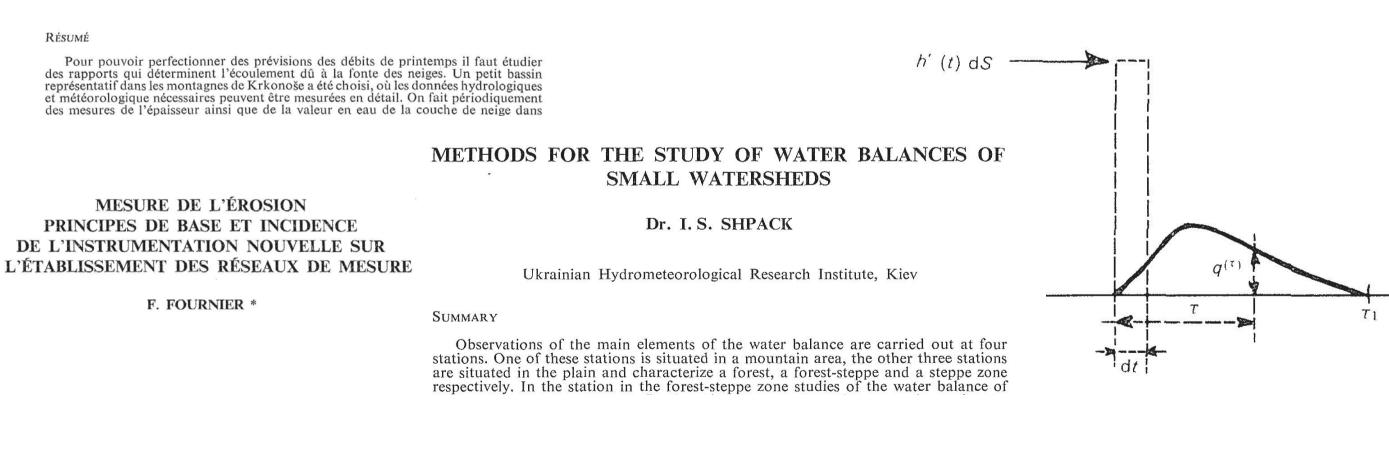
Research Institute for Water Resources Development, Budapest, Hungary

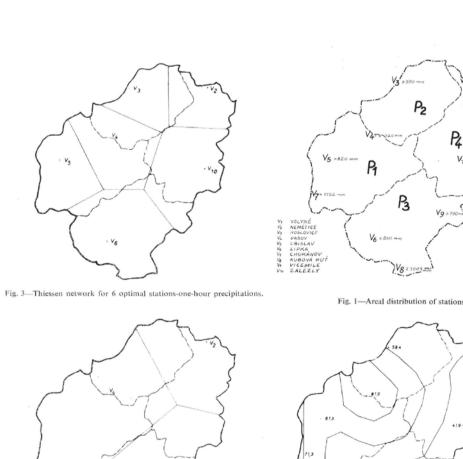
En rapport avec les recherches hydrologiques des eaux stagnantes et des cours d'eau, un des domaines les plus importants est l'étude des phénomènes du mouvemeunt du débit solide, de la déposition des sédiments et des phénomènes de l'érosion.





J.A. RODIER Ingénieur en Chef à Electricité de France (IGECO) Chef du Service Hydrologique de l'Office de la Recherche Scientifique et Technique Outre-Mer









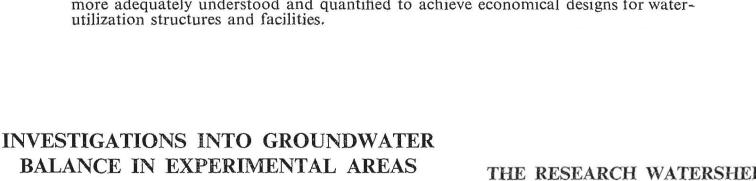
USEFUL SEDIMENTATION FACTS(1) R.F. PIEST and H.G. HEINEMANN (2)

EXPERIMENTAL WATERSHEDS CONTRIBUTE

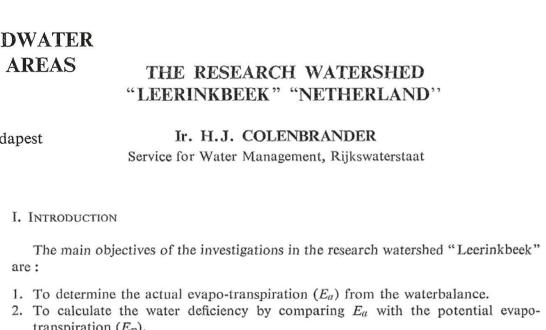
Considerable progress has been made in the evaluation of watershed factors that influence soil erosion, sediment transportation, and deposition. But the present-day intensive use of our water and soil resources requires that these basic relationships be more adequately understood and quantified to achieve economical designs for waterutilization structures and facilities.

Dr. K. UBELL

Research Institute for Water Resources, Budapest



5. To study the flood routing problem.



3. To study the realationship between rainfall, soil retention capacity and runoff. 4. To measure the peak flow and minimum discharge in the various seasons of the year.

MODÈLE DE QUESTIONNAIRE UTILISÉ AU MAROC R. HAZAN, R. DIJON et L. MONITION Service des Ressources et Eau Maroc RÉSUMÉ Depuis de nombreuses années, le Maroc procède sur son territoire à des obet des mesures d'ordre météorologique, hydrologique, hydrogéologique. Les obtenus sont utilisés pour l'élaboration de synthèses aboutissant à l'établiss Bilan d'eau en vue d'une utilisation rationnelle de ces ressources. ON THE EXPERIMENTAL WATERSHEDS AT MIWA AND YUZAWA IN JAPAN Takeo KINOSITA Dr. Sc. The Public Works Research Institute The Ministry of Construction 1. Introduction In the government of Japan there are several organizations which are meeting water problems. The Ministry of Construction is one of these organizations. It takes charges of river improvement for flood control and water resource development. The Public

LES ENQUETES SUR LES BASSINS

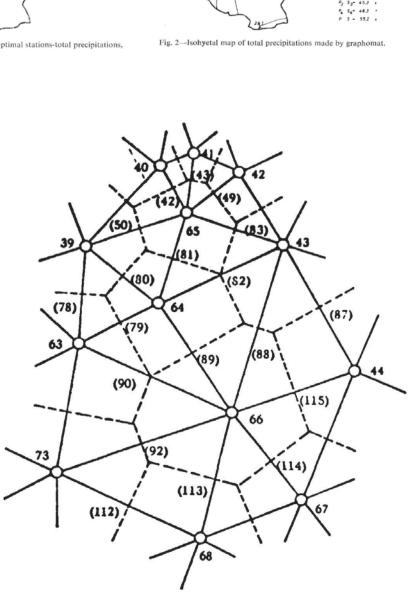




Fig. 10 — Temps de montée en fonction de R et de S — Régimes sahéliens — sub-désertiques

















Words in Titles of publications 1952-1982



1972: Renaming of the Hydrological Sciences Bulletin

1975: Creation of the International Hydrological Programme in the frame of UNESCO – IAHS Official Partner

1981: Creation of the IAHS-UNESCO-WMO International Hydrology Prize



IAHS Bureau, Paris, 1978

MATHEMATICAL MODELS IN HYDROLOGY

APPLICATION DES MODELES MATHEMATIQUES

AND WATER RESOURCES SYSTEMS

A L'HYDROLOGIE ET AUX SYSTEMES

DE RESSOURCES EN EAU

APPLICATION OF

MATHEMATICAL MODELS IN GEOPHYSICS MODELES MATHEMATIQUES EN GEOPHYSIQUE

SYMPOSIUM PREVISIONS HYDROLOGIQUES IAHS—AISH Publication No. 129 Published with the financial assistance of UNESCO

HYDROLOGICAL FORECASTING



What is a picture worth? A history of remote sensing

GERALD K. MOORE US Geological Survey, EROS Data Center, Sioux Falls, South Dakota 57198, USA Received 4 April 1979



Volume 17

Contribution from the World Meteorological Organization IAHS AND OPERATIONAL HYDROLOGY by Professor Jaromir Němec* The Bulletin of the IAHS is now celebrating its 21st birthday and the Secretary General and staff of the Secretariat of the World Meteorological Organization send their congratulations and good wishes on this happy occasion.

The fact that the Bulletin has continued for so long a period is in itself a good indication of its usefulness; but it has done much more to deserve congratulations and good wishes than simply having existed for 21 years. As the years have passed the Bulletin has in fact earned for itself a high reputation as an effective medium for the dissemination of hydrological knowledge and information and has established for itself a special place of esteem and indeed affection among the international hydrological community as a whole and not least in WMO. On such an occasion it is appropriate to review the relationship between IAHS and WMO, especially in view of the wide responsibilities in operational hydrology which WMO has accepted, and there could be no better means of publishing this review than in the pages of the

The attractive present style of the Bulletin was acquired in 1972 thanks to the efforts

Bulletin.

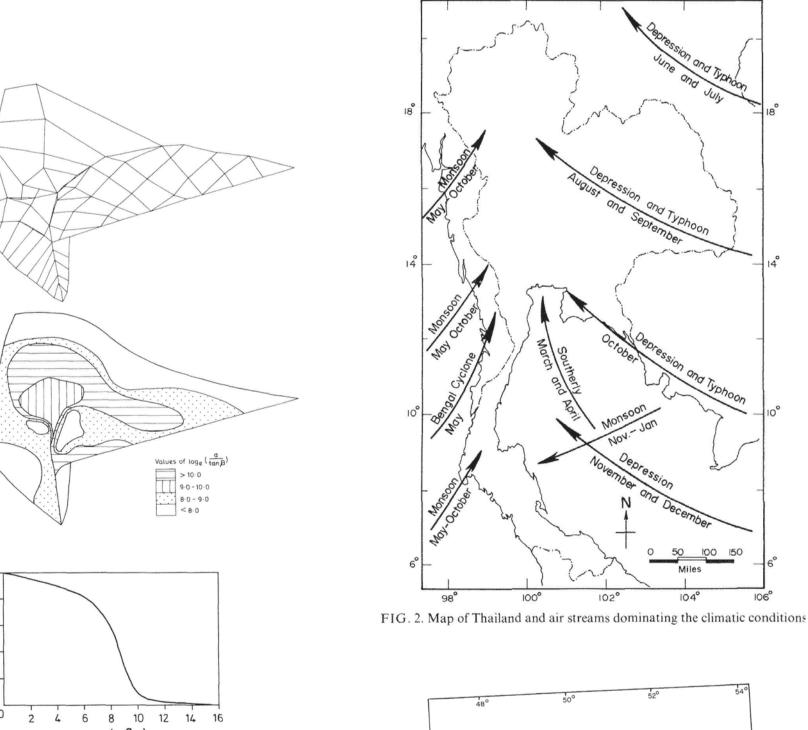
The history of hydrology as a science itself goes back of course a very long time—over 300 years. Readers of the Bulletin will doubtless recall that in 1974 an international symposium was held to commemorate 300 years of hydrology. At that symposium, it was observed (Dumitrescu and Němec, 1974) that fifty years previously, i.e. in 1924, the International Association of Hydrological Sciences (then known as the International Association of Scientific Hydrology) had been established as a first recognition of the need for the development of international cooperation in this field, and that this need had since greatly increased, particularly during the past two decades.

Several circumstances have combined to bring about this development. The water cycle, which is the main concern of hydrology, is itself a large-scale process and therefore its study. October 1972 Editor: JOHN C. RODDA, Institute of Hydrology, Wallingford, UK Associate Editors: M. I. LVOVITCH, USSR; M. SLIVITZKY, Canada; A. I. JOHNSON, USA; M. H. ZEBIDI, Tunisia; F. FOURNIER, France; J. F. NYE, UK; F. MULLER, Switzerland; M. G. VALYASHKO, USSR; Mary THOMSON, Canada; D.R. DAWDY, USA; H.RICHARDS, UK; H. COLENBRANDER, Netherlands; H. W. UNDERHILL, FAO; C. TOEBES, New Zealand; M. A. KOHLER, USA; L. R. BEARD, USA; A. P. SCHICK, Israel; H. W. ANDERSON, USA; M. RAGAN, USA; G. KIENITZ, Hungary. which is the main concern of hydrology, is itself a large-scale process and therefore its study

THE INFLUENCE OF MAN ON THE **HYDROLOGICAL REGIME WITH SPECIAL** REFERENCE TO REPRESENTATIVE AND EXPERIMENTAL BASINS **SYMPOSIUM**

L'INFLUENCE DE L'HOMME SUR LE **REGIME HYDROLOGIQUE AVEC** REFERENCE PARTICULIERE **AUX ETUDES SUR LES BASSINS** REPRESENTATIFS ET EXPERIMENTAUX

IAHS-AISH Publication No. 130



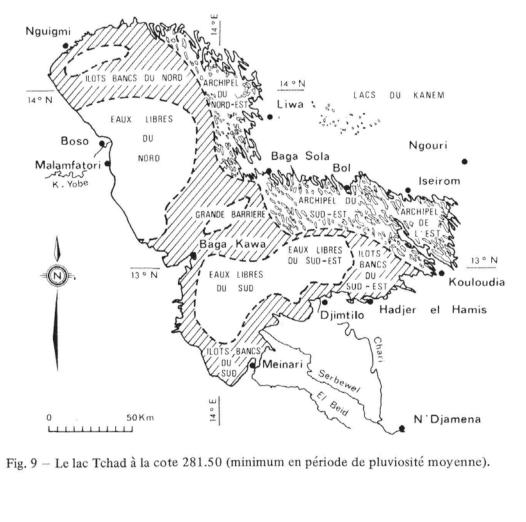
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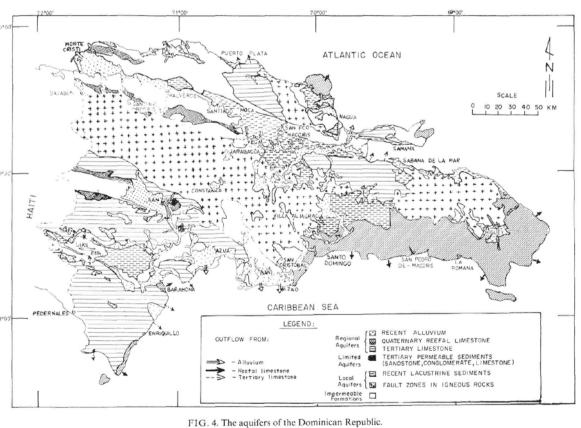
FIG. 3. Rainfall distribution of Nepal. Contours are in mm.

DATA ACQUIRED AT STATION MONTHLY AND 24 HOUR PRECIPITATION. ONTHLY, 24 HOUR AND HOURLY PRECIPITATION IPPER AIR WIND AND TEMPERATURE DATA.

EFFECTS OF URBANIZATION AND INDUSTRIALIZATION ON THE HYDROLOGICAL REGIME AND ON WATER QUALITY

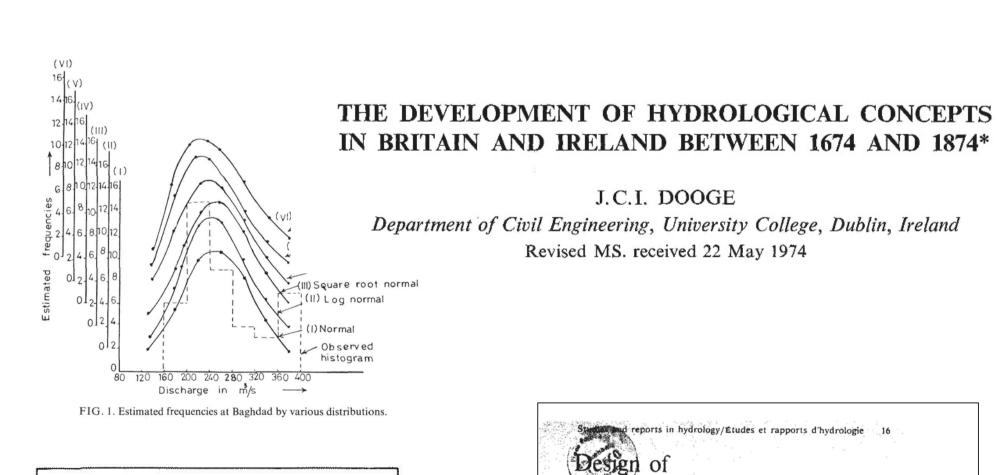
EFFETS DE L'URBANISATION ET DE L'INDUSTRIALISATION SUR LE REGIME HYDROLOGIQUE ET SUR LA QUALITE DE L'EAU





Reuse of waste water: impact on water supply planning GEORGE F. MANGAN Jr. Office of Water Research and Technology, US Department of the Interior, Washington, DC 20240, USA

HYDROLOGY IN THE DEVELOPING COUNTRIES AND THE ROLE OF by Prof. Ir. A. Volker*



APPROX. SCALE

LAND SUBSIDENCE

SUBSIDENCE TERRESTRE

FLASH FLOODS GRUES BRUTALES

WORLD GLACIER INVENTORY WORKSHOP/ATELIER

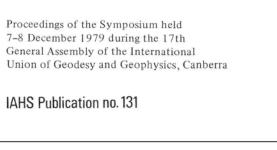
SEA LEVEL

CLIMATIC CHANGE

ICE and

INVENTAIRE **MONDIAL DES GLACIERS** IAHS-AISH Publication No. 126

> Proceedings of the Symposium held 7-8 December 1979 during the 17th General Assembly of the International





IUGG



Sea Level, Ice, and Climatic Change (Proceedings of the Canberra Symposium, December 1979). IAHS Publ. no. 131.

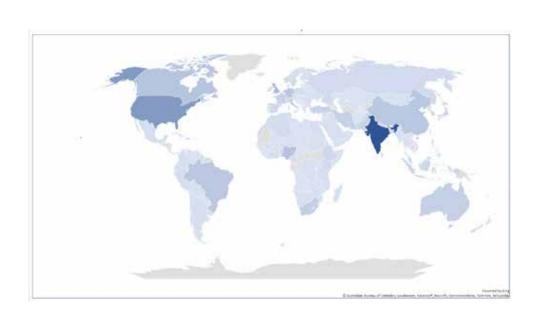
Evidence of climatic change in Antarctica over

the last 30 000 years from the Dome C ice core

C. LORIUS, L. MERLIVAT*, P. DUVAL, J. JOUZEL* &

Laboratoire de Glaciologie et de Géophysique de











water resources projects

Elaboration des projets

sans données suffisantes

d'utilisation des ressources en eau

Proceedings of the Madrid Symposium

Actes du colloque de Madrid

with inadequate data





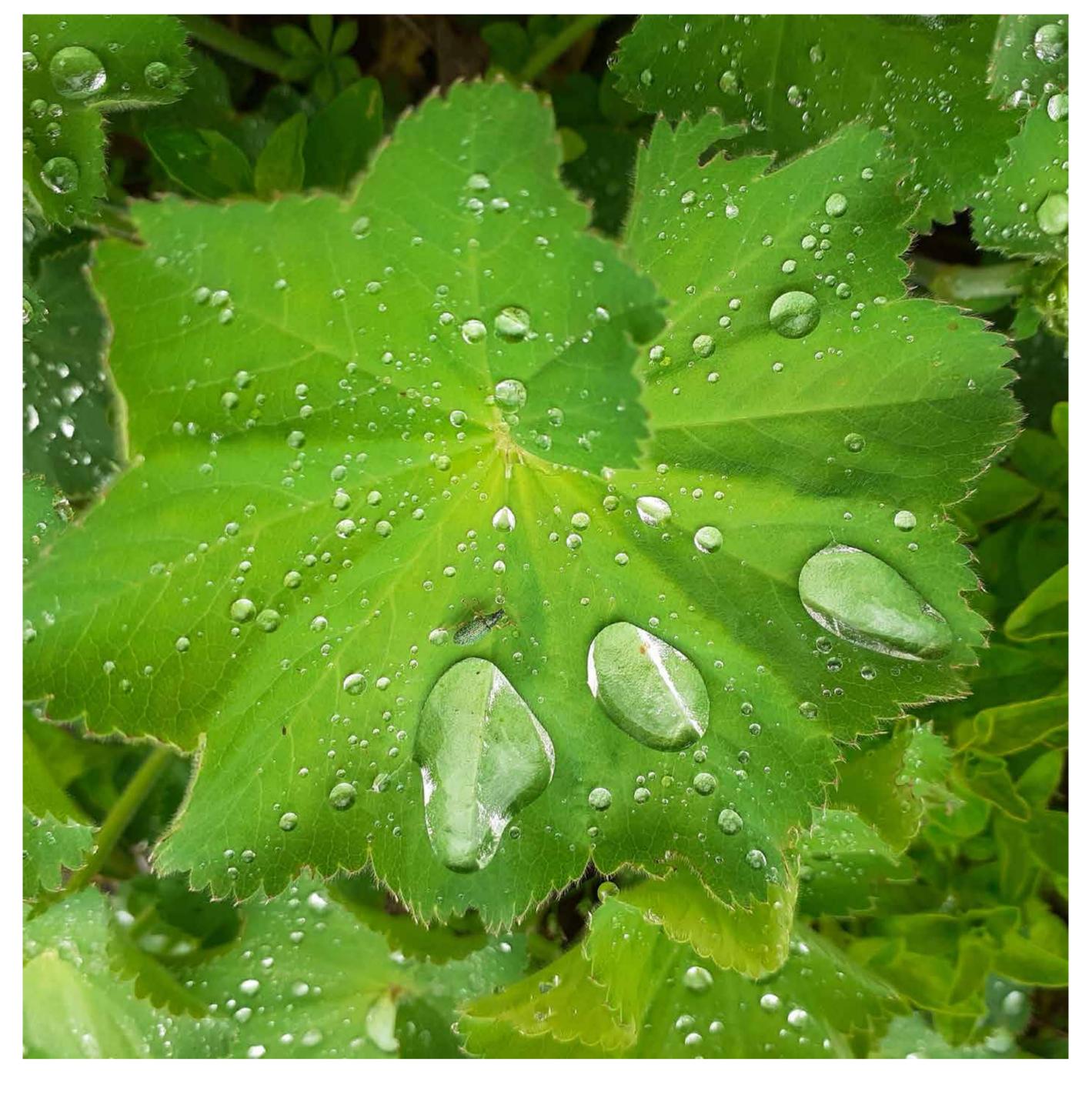


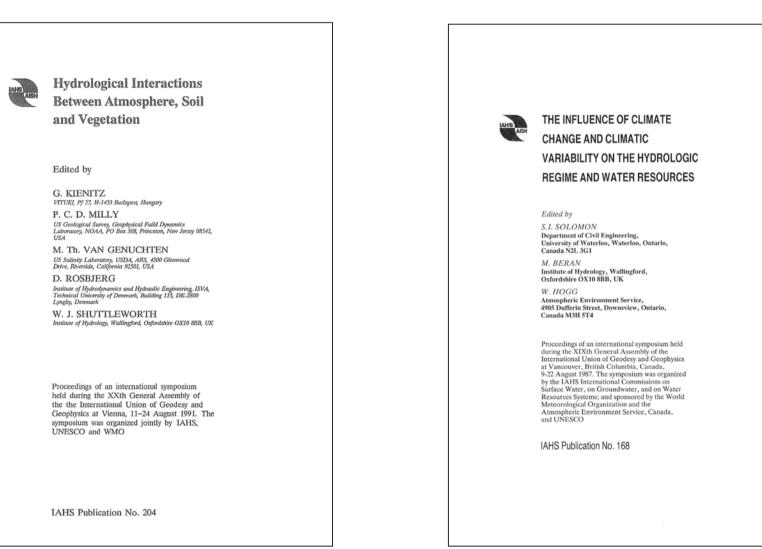
1982: First Scientfic Assembly in Exeter, UK in addition to IUGG General Assemblies

1983: Creation of the Tison Award for young hydrologists

1992: Inception of the UNESCO IHP-IAHS Kovacs Colloquium series

Contribution to the UNESCO-WMO International Glossary of Hydrology, v1 in 1974 - v2 in 1992





ESTIMATION OF AREAL EVAPOTRANSPIRATION

Edited by

T.A. Black,

Department of Soil Science University of British Columbia Vancouver, B.C. Canada V6T 2A2

D.L. Spittlehouse,

M.D. Novak & D.T. Price

Department of Soil Science University of British Columbia Vancouver, B.C. Canada V6T 2A2

Proceedings of an international workshop held during the XIXth General Assembly of the International Union of Geodesy and Geophysics at Vancouver, British Columbia, Canada, 9-22 August, 1987. The workshop was co-sponsored by the World Meteorological Organization and the International Commission on Surface Water.

Hydrological Sciences - Journal - des Sciences Hydrologiques, 36, 5, 10/1991

Intercomparison of evapotranspiration

Department of Civil Engineering, Indian Institute of Technology,

Geological

International Association of

Hydrological

Sciences

Information,

Systems and

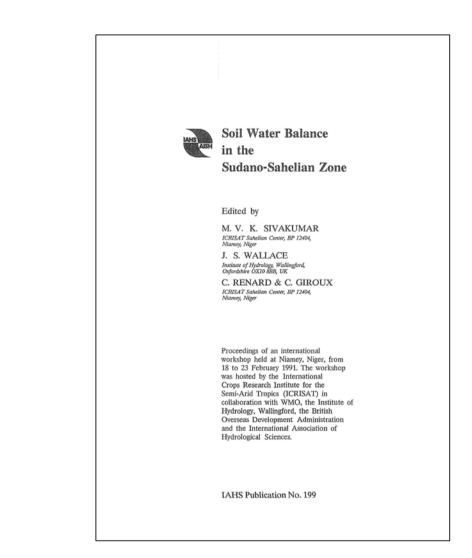
Technology

Wallingford HydroSolutions NATURAL ENVIRONMENT RESEARCH COUNCIL

WHS

estimates

Madras 600 036, India



Hydrological Sciences - Journal - des Sciences Hydrologiques, 31, 1, 3/1986

Operational testing of hydrological simulation models

V. KLEMEŠ National Hydrology Research Institute, Environment Canada, Ottawa, Ontario, Canada KIA OE7

Hydrological Sciences - Journal - des Sciences Hydrologiques, 36, 4, 8/1991

Climate and water – a call for international action*

A. J. ASKEW Hydrology and Water Resources Department, World Meteorological Organisation, 41 Avenue Giuseppe Motta, CP2300, CH-1211 Geneva, Switzerland

Abstract The work undertaken by climatologists and atmospheric physicists during the 1980s has led to far more consistent and precise predictions of future climate change being made at the close of the decade than had been made at its start. Governments have responded by calling for more information and, in some cases, have taken steps to mitigate the effects of such a change. The hydrological community has not been idle and many projects have been launched to study the interaction between climate change, the hydrological regime and water resources. However, the move towards larger scale international projects with major hydrological components will make new and extensive demands on the hydrological community, to which it must

Hydrological Sciences - Journal - des Sciences Hydrologiques, 27, 3,9/1982

Sensitivity of water resource systems to climate variation

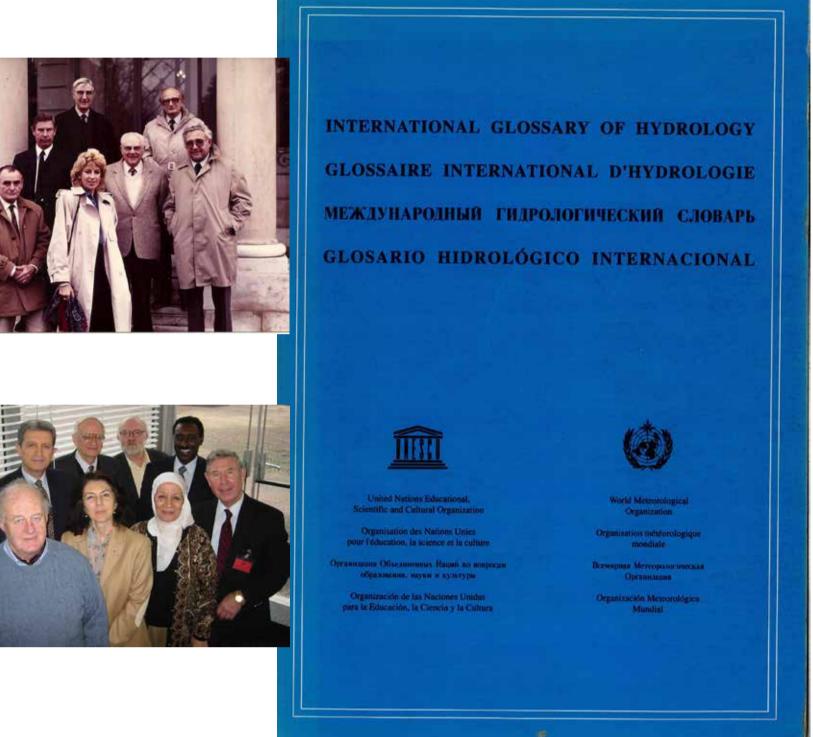
J. NĚMEC Hydrology and Water Resources Department, WMO Secretariat, CP No. 5, CH-1211 Geneva, Switzerland J. SCHAAKE Hydrologic Services Division, US NOAA-NWS, Office of Hydrology, Silver Spring, Maryland

Hydrological Sciences - Journal - des Sciences Hydrologiques, 36, 3, 6/1991

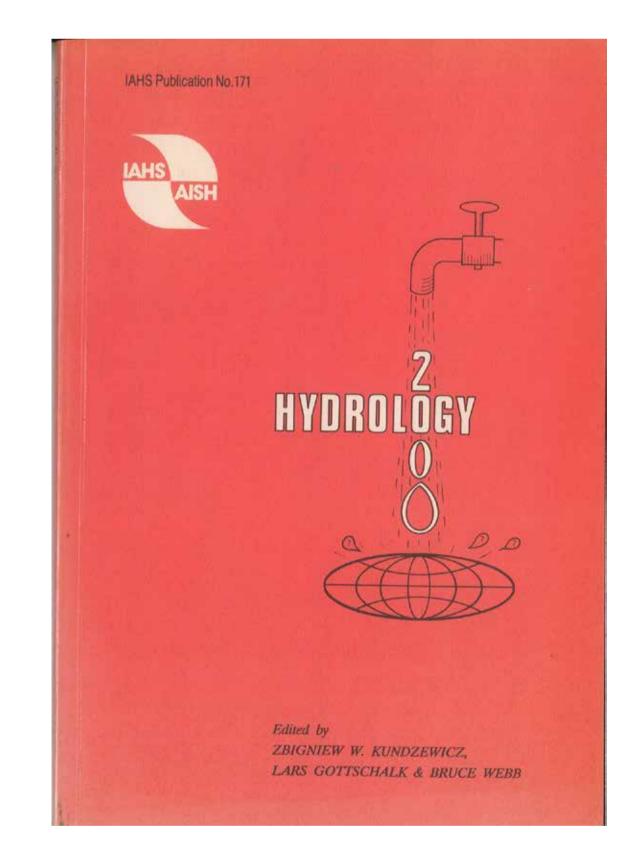
Regional climate change impacts: I. Impacts on water resources*

M. A. MIMIKOU & Y. S. KOUVOPOULOS National Technical University of Athens, Department of Civil Engineering, Division of Water Resources, Hydraulic and Maritime Engineering, 5, Iroon Polytechniou, 157 73 Athens, Greece





DISASTER



Hydrological Sciences - Journal - des Sciences Hydrologiques, 35, 6, 12/1990

The education of hydrologists

hydrological education)

J. E. NASH

P. S. EAGLESON

PO Box 821, Canberra, ACT, Australia

P. S. Eagleson

an adequate educational basis ..." (Klemes)

PREFACE by the LAHS President

correspondence:

Lindelaan 8, 6871 DX Renkum, The Netherlands

W. H. VAN DER MOLEN

J. R. PHILIP

(Report of an IAHS/UNESCO Panel on

Department of Engineering Hydrology, University College, Galway, Ireland

Ralph M. Parsons Laboratory, Department of Civil Engineering,

Commonwealth Scientific and Industrial Research Organization,

J. R. Philip

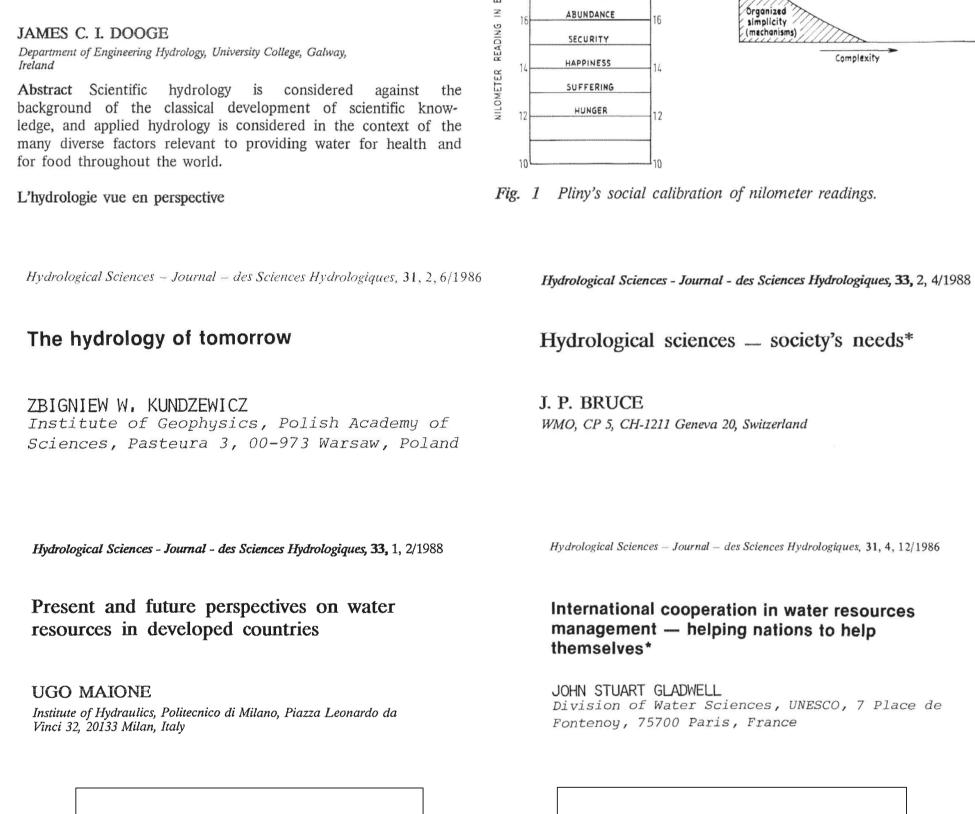
In the late 1987, I began discussion on the education of hydrologists with Dr S. Dumitrescu, Director of the Division of Water Sciences of UNESCO. Our concern is reflected in the following two excerpts from the related

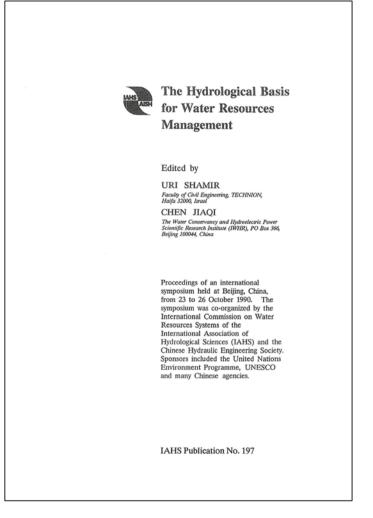
".... There has been a growing awareness that hydrology as a geophysical science is making slow progress and has no solid foundations. A major (or perhaps the major) factor in this unsatisfactory situation is the fact that the majority of hydrologists are not trained as scientists but as technologists. It seems self-evident that a science cannot be founded on a technological education. Hence, if we are not paying merely lip-service to the science of hydrology, we should make an effort to provide it with

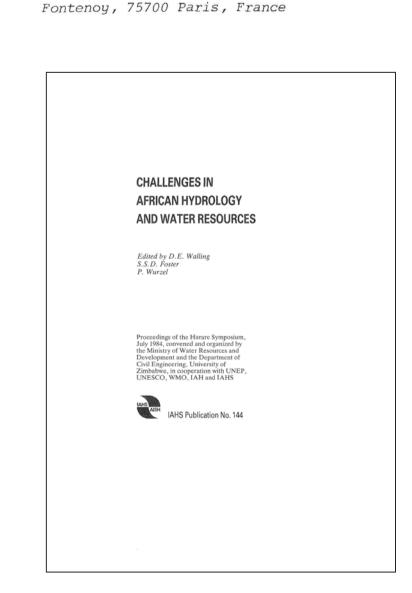
"... I fully agree with you that the time has come to better define the

position of hydrology as a geophysical science, its relations with other

Building 48-335, Massachusetts Institute of Technology, Cambridge,

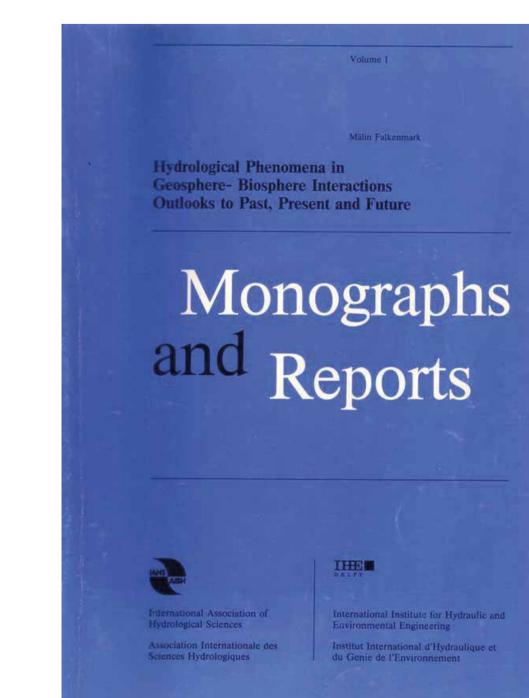






Unorganized complexity (aggregates)

Organized complexity



HYDROLOGICAL SCIENCES **JOURNAL** DES SCIENCES HYDROLOGIQUES

Volume 27, Number 1, March 1982

Editor Robin T. Clarke Institute of Hydrology, Wallingford, Oxon. OX10 8BB, UK S. Chander, India; M.H. Diskin, Israel L.W. Gelhar, USA; J. Kindler, Poland; V. Klemeš, Canada; G. Kovács, Hungary D.A. Kraijenhoff, The Netherlands; V.V. Kuprianov, USSR D.B. McWhorter, USA; D.R. Maidment, New Zealand; D.C. Midgley, South Africa; P.E. O'Connell. UK: S. Pinkayan, Thailand; D.H. Pilgrim, Australia: A.J. Raudkivi, New Zealand; J.A. Rodier, France I. Rodriguez-Iturbe, Venezuela; G.A. Schultz, FR Germany Mary E. Thompson, Canada; E. Todini, Italy A. van der Beken, Belgium; D. E. Walling, UK;

lydrological Sciences ssociation Internationale des

Development of IAHS Press, hosted since 1971 in CEH, Wallingford, UK

1989: Inception of Blue Book « Special publications » series

1991: Task Force for Developing Countries feeding 70+ key & open libraries with IAHS Publications

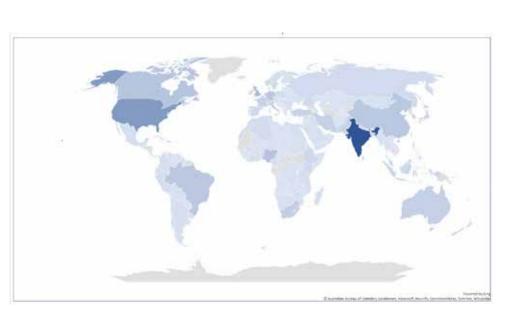
Number of HSJ Issues per year increased from 4 to 6 Red Books 134 to 210











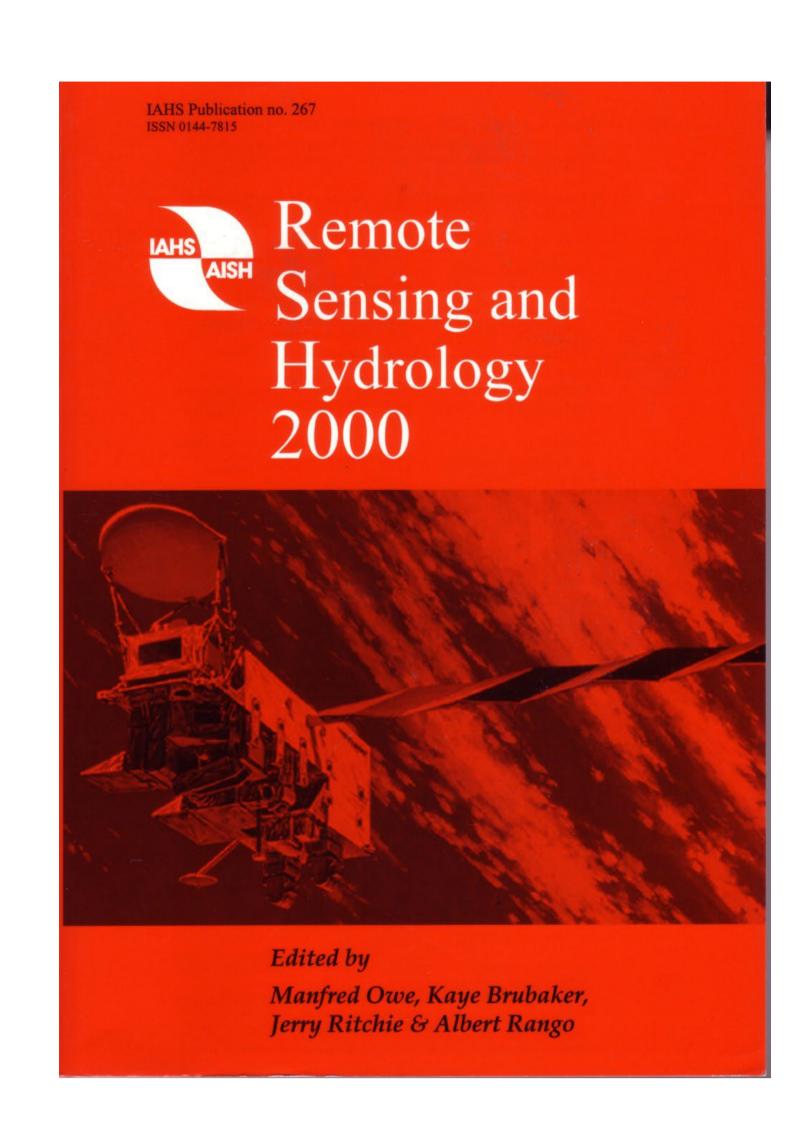


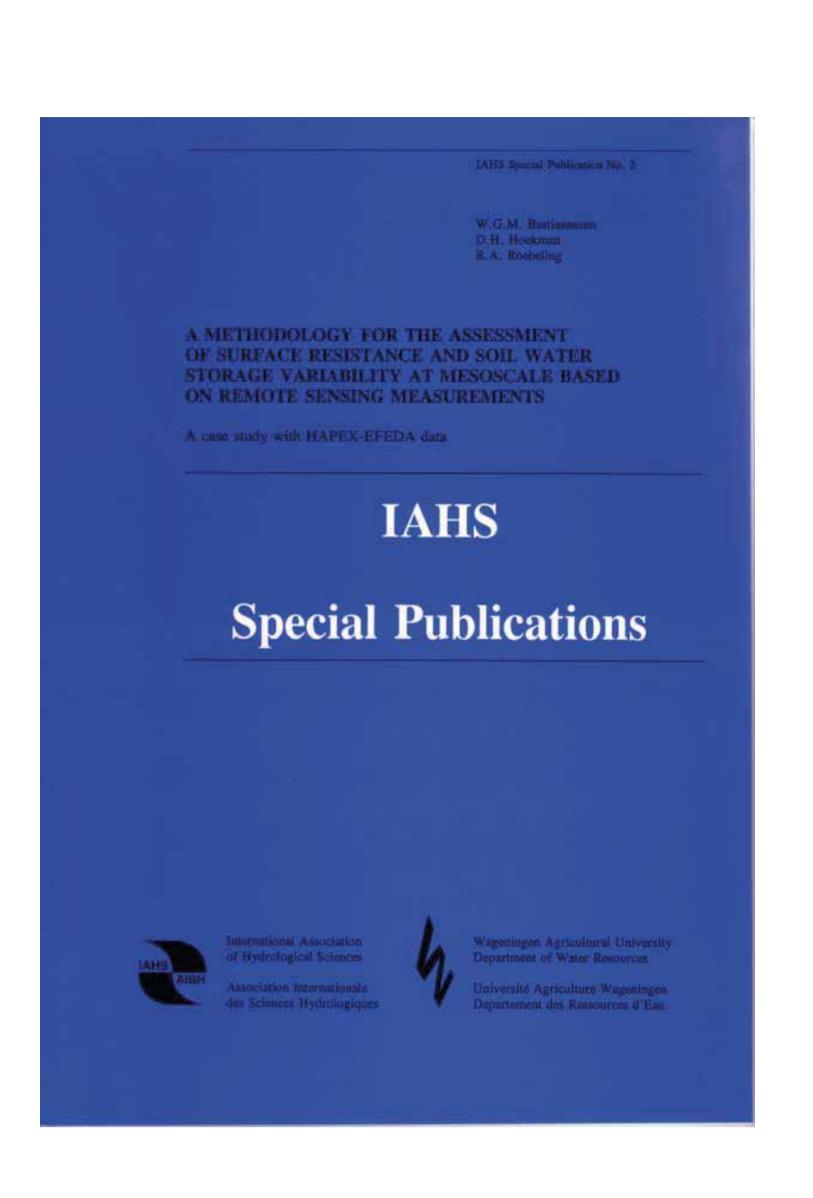


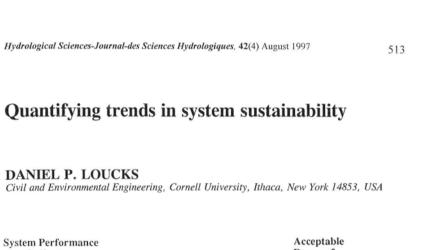


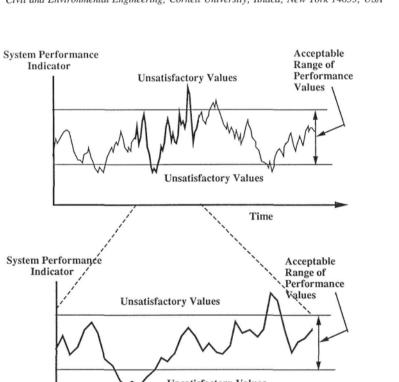


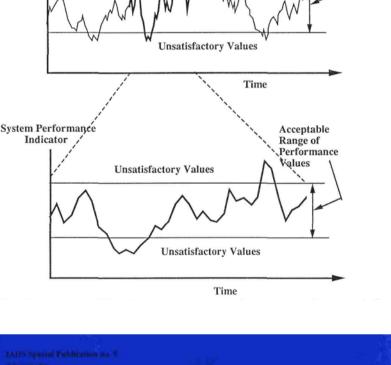


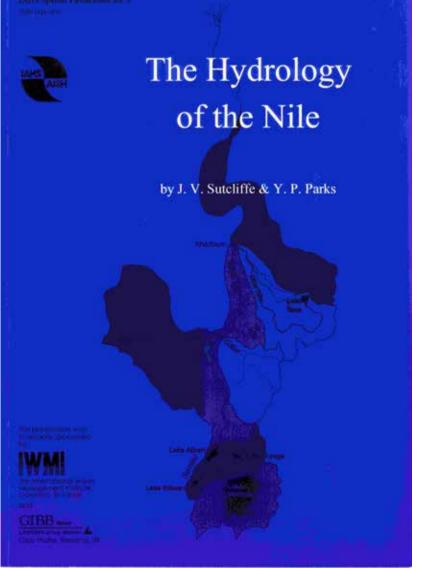




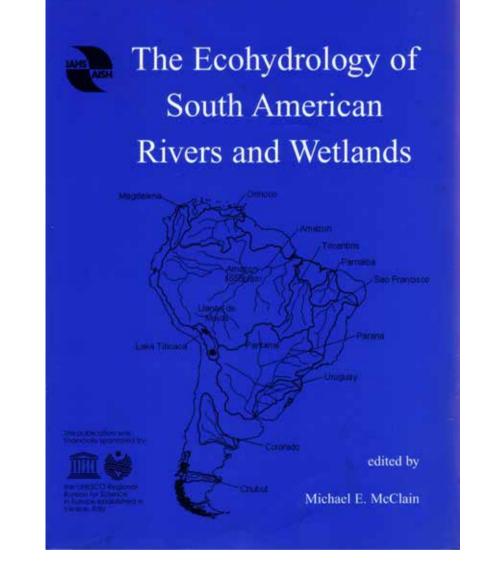




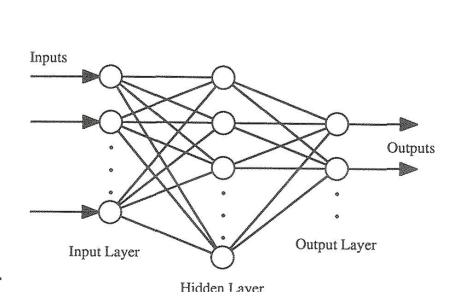




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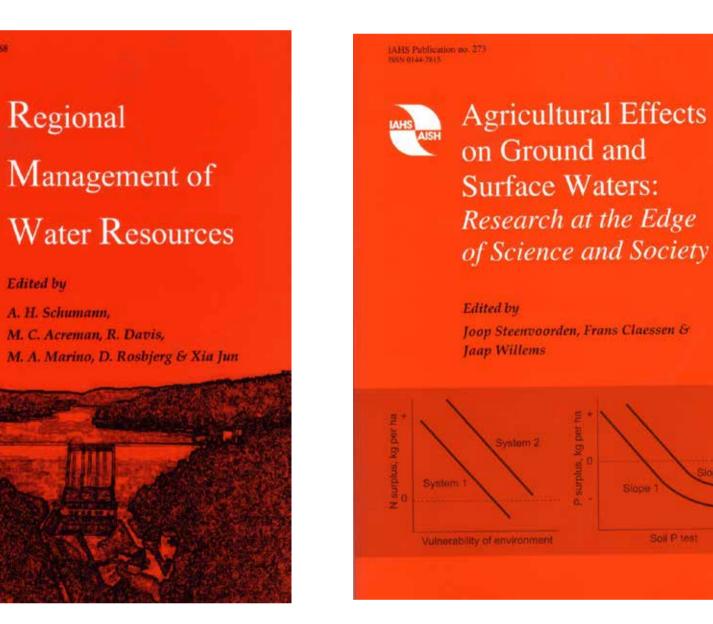
AHS Publication no. 268

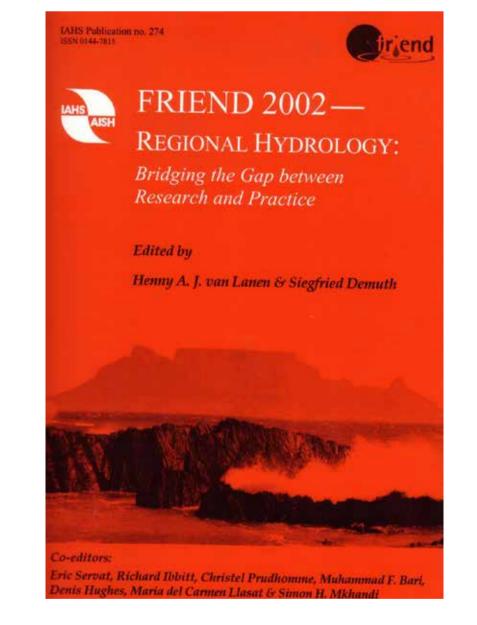


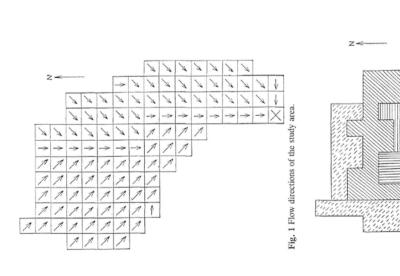


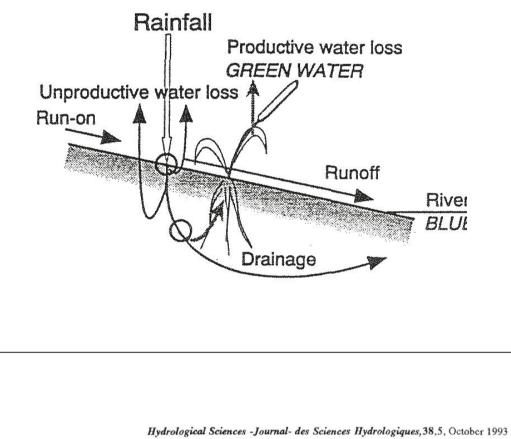












Hydrological Sciences—Journal—des Sciences Hydrologiques, 43(4) August 1998 Special issue: Monitoring and Modelling of Soil Moisture: Integration over Time and Space

measurement techniques

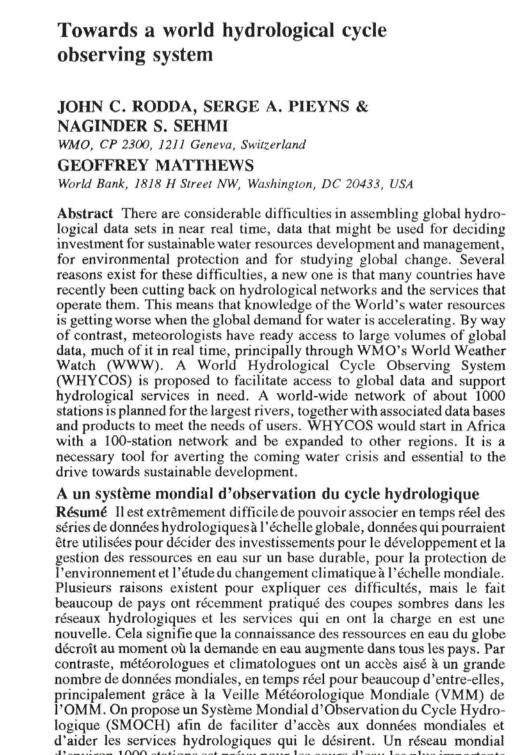
PETER J. VAN OEVELEN

e-mail: Peter.vanOevelen@users.whh.wau.nl

Soil moisture variability: a comparison between

detailed field measurements and remote sensing

Department of Water Resources, Wageningen Agricultural University, Nieuwe Kanaal 11, 6709 PA Wageningen, The Netherlands



Open for discussion until 1 April 1994

Hydrological Sciences -Journal- des Sciences Hydrologiques, 39,4, August 1994

Application of remote sensing methods to hydrology and water resources*

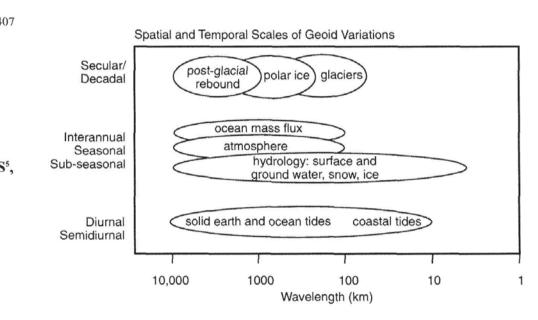
A. RANGO USDA Hydrology Laboratory, Agricultural Research Service, Beltsville, Maryland 20705, USA

USDA Hydrology Laboratory, Agricultural Research Service, Building 007, Room 104, Beltsville, Maryland 20705, USA e-mail: alrango@hydrolab.arsusda.gov AHLAM I. SHALABY Department of Civil Engineering, Howard University, 2300 Sixth Street NW, Washington DC 20059, USA

ALBERT RANGO

Hydrological Sciences-Journal-des Sciences Hydrologiques, 44(3) June 1999 Gravity and the hydrosphere: new frontier JEAN O. DICKEY1, CHARLES R. BENTLEY2,

ROGER BILHAM³, JAMES A. CARTON⁴, RICHARD J. EANES⁵, THOMAS A. HERRING⁶, WILLIAM M. KAULA⁷, GARY S. E. LAGERLOEF⁸, STUART ROJSTACZER⁹, WALTER H. F. SMITH¹⁰, HUGO M. VAN DEN DOOL¹¹; JOHN M. WAHR¹², MARIA T. ZUBER¹³ Members of the US National Research Council/National Academy of Science Committee on Earth Gravity from Space



Hydrological Sciences-Journal-des Sciences Hydrologiques, 43(6) December 1998

Operational applications of remote sensing in

hydrology: success, prospects and problems*

logical data sets in near real time, data that might be used for deciding investment for sustainable water resources development and management, for environmental protection and for studying global change. Several reasons exist for these difficulties, a new one is that many countries have recently been cutting back on hydrological networks and the services that operate them. This means that knowledge of the World's water resources is getting worse when the global demand for water is accelerating. By way of contrast, meteorologists have ready access to large volumes of global data, much of it in real time, principally through WMO's World Weather Watch (WWW). A World Hydrological Cycle Observing System (WHYCOS) is proposed to facilitate access to global data and support hydrological services in need. A world-wide network of about 1000 stations is planned for the largest rivers, together with associated data bases and products to meet the needs of users. WHYCOS would start in Africa with a 100-station network and be expanded to other regions. It is a

Résumé Il est extrêmement difficile de pouvoir associer en temps réel des séries de données hydrologiques à l'échelle globale, données qui pourraient être utilisées pour décider des investissements pour le développement et la gestion des ressources en eau sur un base durable, pour la protection de l'environnement et l'étude du changement climatique à l'échelle mondiale. Plusieurs raisons existent pour expliquer ces difficultés, mais le fait beaucoup de pays ont récemment pratiqué des coupes sombres dans les réseaux hydrologiques et les services qui en ont la charge en est une nouvelle. Cela signifie que la connaissance des ressources en eau du globe décroît au moment où la demande en eau augmente dans tous les pays. Par contraste, météorologues et climatologues ont un accès aisé à un grande nombre de données mondiales, en temps réel pour beaucoup d'entre-elles, principalement grâce à la Veille Météorologique Mondiale (VMM) de l'OMM. On propose un Système Mondial d'Observation du Cycle Hydrologique (SMOCH) afin de faciliter d'accès aux données mondiales et d'aider les services hydrologiques qui le désirent. Un réseau mondial d'environ 1000 stations est prévu pour les cours d'eau les plus importants avec des banques de données associées et des produits adaptés aux besoins des utilisateurs. Le SMOCH sera tout d'abord mis en place en Afrique, avec un réseau d'une centaine de stations, puis étendu à d'autres régions du monde. C'est un outil nécessaire pour prévenir la crise montante des

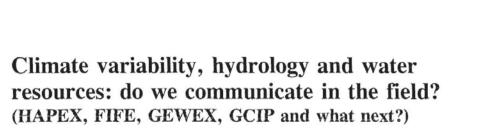
Hydrological Sciences—Journal—des Sciences Hydrologiques, 43(1) February 1998 Water resources research: trends and needs in 1997* SCIENTIFIC COMMITTEE ON WATER RESEARCH (SCOWAR)** of the International Council of Scientific Unions (ICSU) Abstract The decade of the 1990s has seen an awakening understanding by the global community of the importance of freshwater for societal and environmental vitality. In 1994, the Scientific Committee on Water Research (SCOWAR) was established by the International Council for Scientific Unions (ICSU) to address frontier freshwater-related science issues. This paper is SCOWAR's review of current trends and burning needs in selected areas of water resources research. The key future concerns to be served by the results of the research brought under review by SCOWAR are identified as equitable sharing of water resources and demand management, soil moisture for agriculture, water and health, ecological consequences of hydrological change, and improving data collection and assessment. SCOWAR also perceives immediate intellectual challenges in a number of other areas, such as, inter alia, multiple-scale problems, sustainability of reservoirs, dynamics of freshwater ecosystems. There is a general recognition that unavailability of water in sufficient quality and quantity has been and will continue to be an increasingly important constraint on socio-economic development. But the situation is not the same all over the world. SCOWAR is concerned that much of the increased pressure occurs and will occur in particular in Sub-Saharan Africa where high population growth and the desire to improve living standards expand water Orientations et besoins de recherche en 1997 dans le secteur des ressources en eau Résumé La décennie des années 1990 s'est caractérisée par une prise de conscience croissante dans la communauté scientifique de l'importance des eaux douces pour le développement de notre société et de son environnement. Le Comité Scientifique pour la Recherche dans le domaine de l'Eau (SCOWAR) a été mis en place en 1994 par le Conseil International des Unions Scientifiques (ICSU) dans le but d'identifier les questions scientifiques de pointe qui se posent dans le secteur des eaux continentales. Cet article se présente un bilan des orientations et des besoins dans certains secteurs sélectionnés de recherche sur les ressources en eau. Les secteurs essentiels qui devraient dans le futur bénéficier des orientations de recherches proposées dans cette étude ont été identifiés par le SCOWAR comme étant les suivants: partage équitable des ressources en eau et gestion de la demande; eau du sol et agriculture; eau et santé; conséquences écologiques des changements hydrologiques; amélioration des banques de données et des possibilités de prévision. Le SCOWAR perçoit des défis intellectuels immédiats dans de nombreux domaines, tel que par exemple: les problèmes d'échelles multiples, la durabilité des réservoirs, This paper, prepared by SCOWAR, served as the basis for the Scientific Lecture, "Some aspects of water research trends and needs in the late 1990s; thinking about the future" presented by Janusz Kindler, Chairman of SCOWAR, in celebration of the 75th Anniversary of IAHS at the Opening Ceremony of the IAHS 5th Scientific Assembly, Rabat, Morocco, 23 April 1997. ** Abel Afouda (Benin), Ramesh Bhatia (India), Alfred Becker (Germany), Sandy Cairncross (UK), Malin Falkenmark (Sweden), Janusz Kindler (Poland)—Chairman, Wolfgang Kinzelbach (Switzerland), Robert J. Naiman (USA), Lekan Oyebande (Nigeria), W. J. Shuttleworth (USA), Kuniyoshi Takeuchi (Japan), George Vachaud (France), Jan A. Veltrop (USA), Adrianus Verwey





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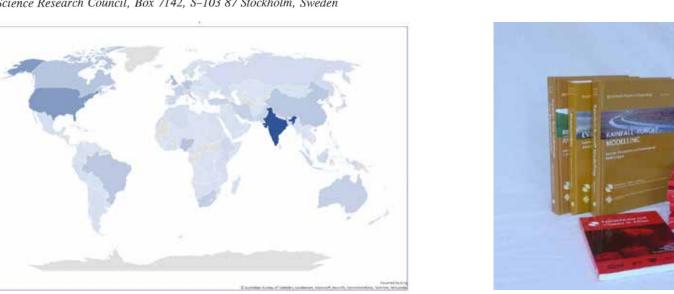
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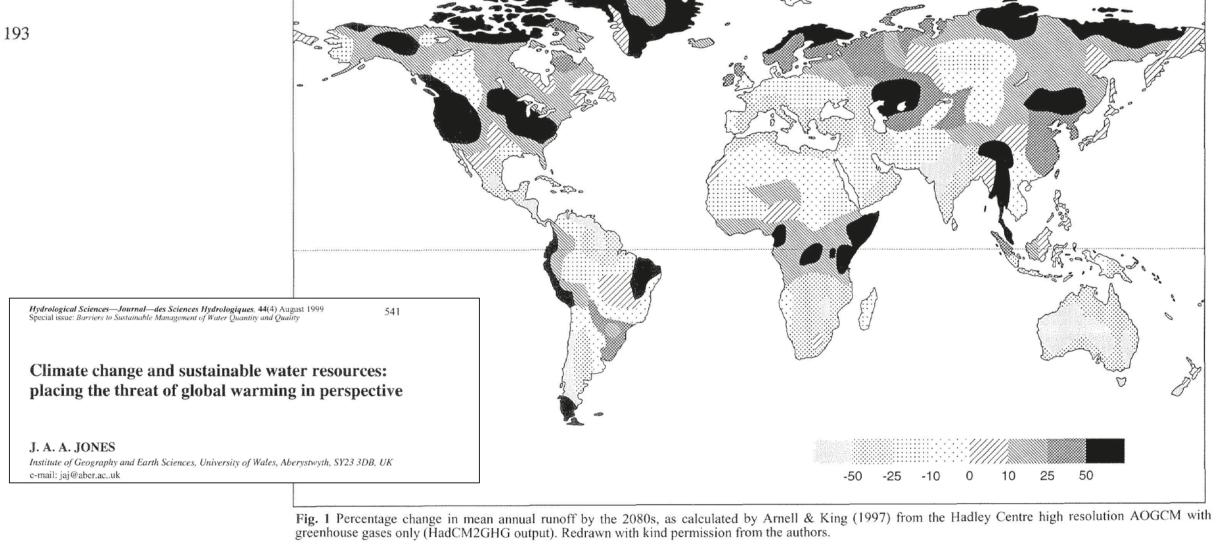
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Hydrological Sciences-Journal-des Sciences Hydrologiques, 42(4) August 1997

Society's interaction with the water cycle: a conceptual framework for a more holistic approach

M. FALKENMARK Natural Science Research Council, Box 7142, S-103 87 Stockholm, Sweden



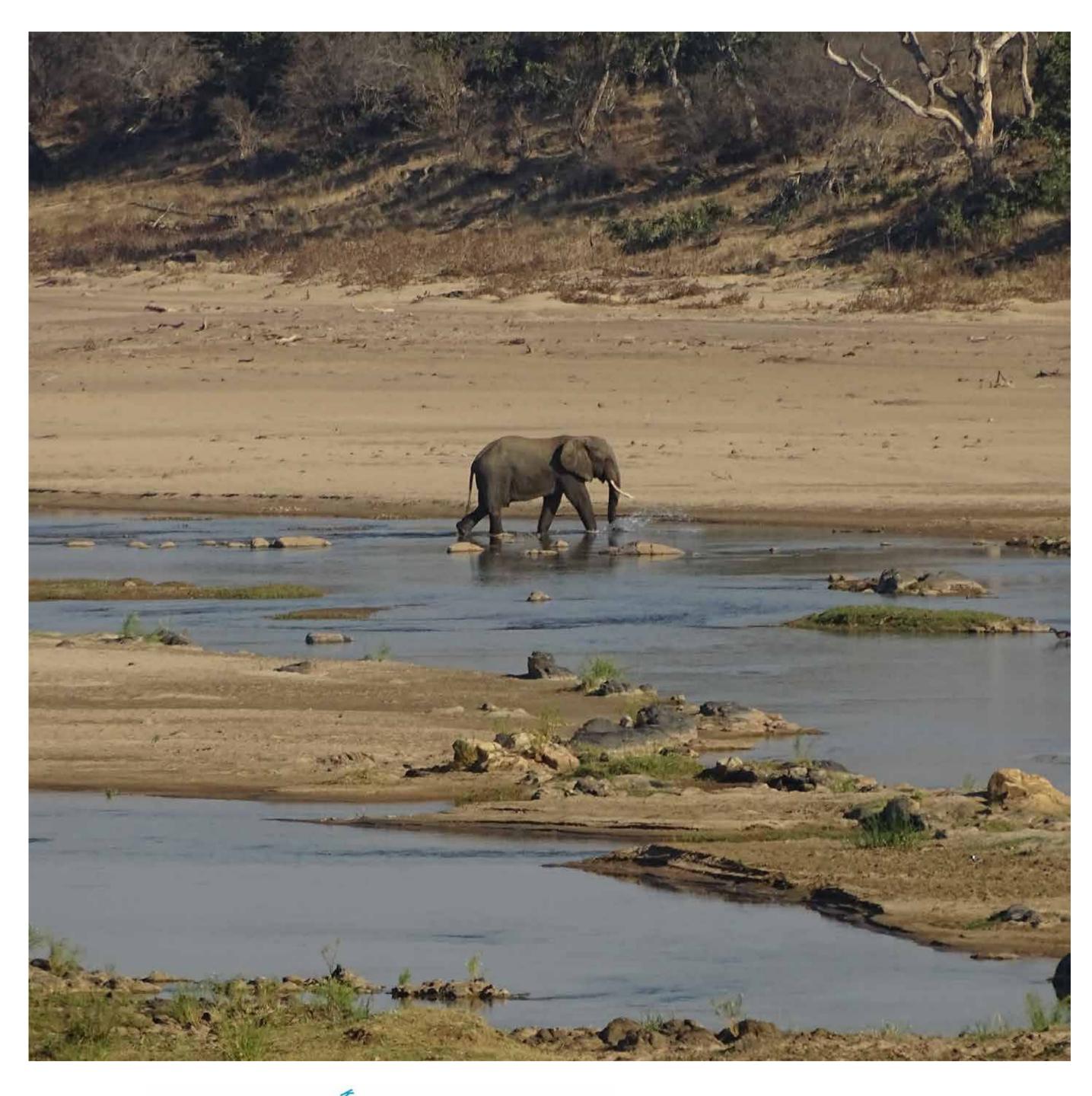




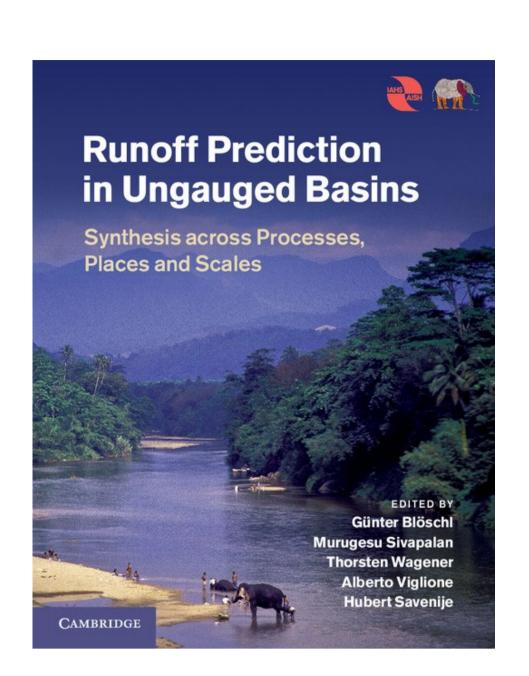


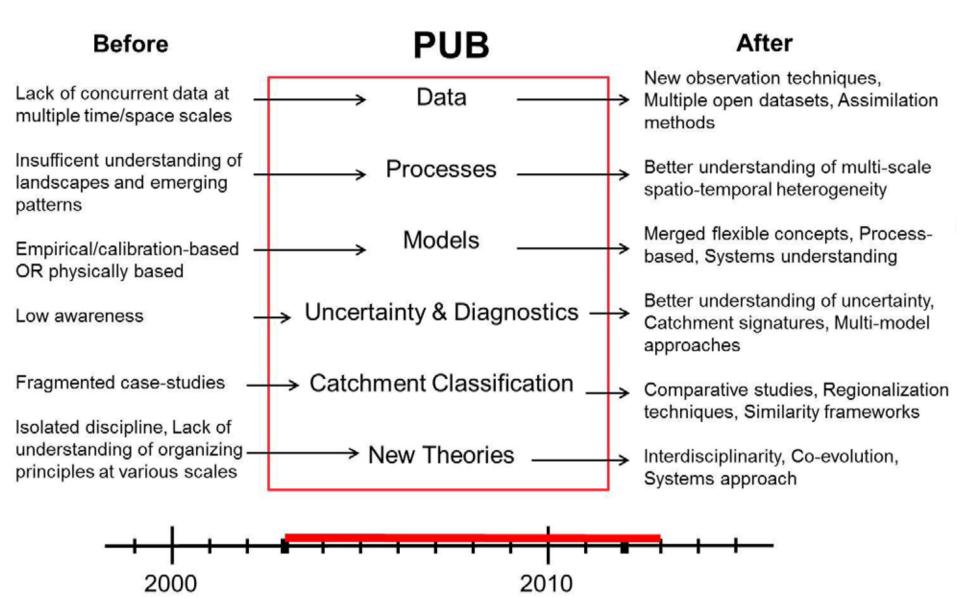




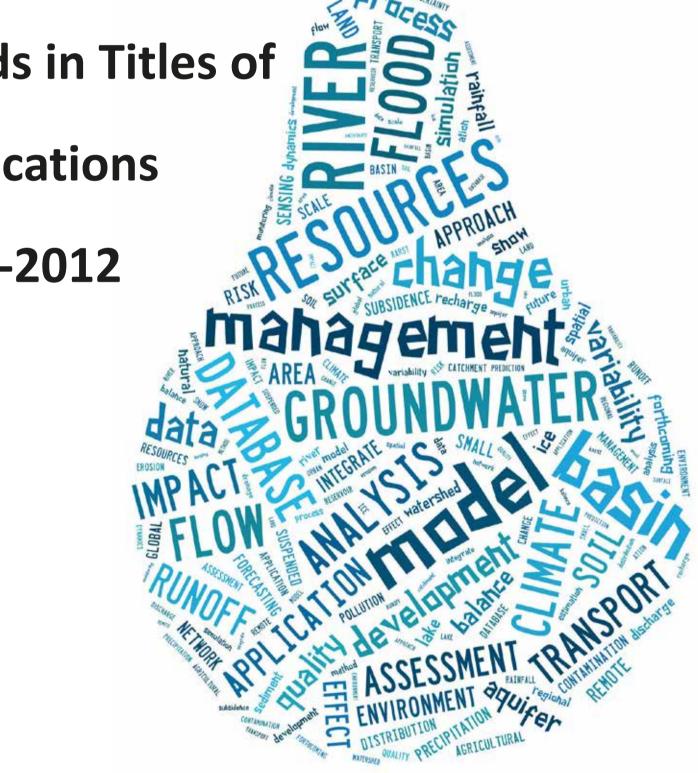






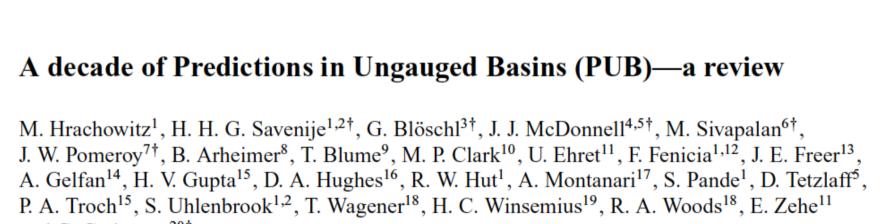


Words in Titles of publications 1982-2012

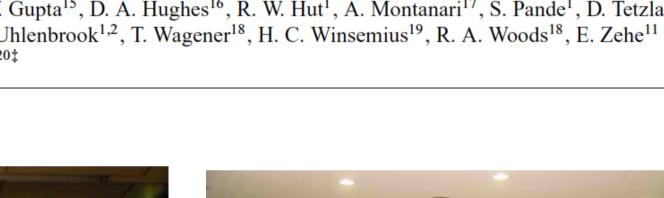


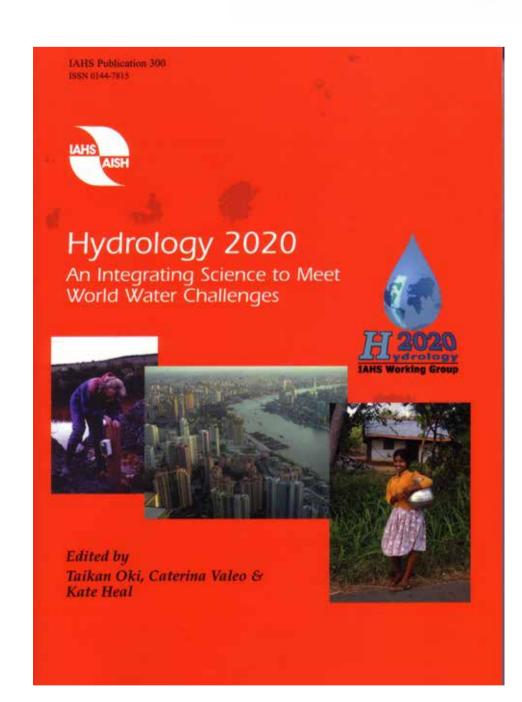


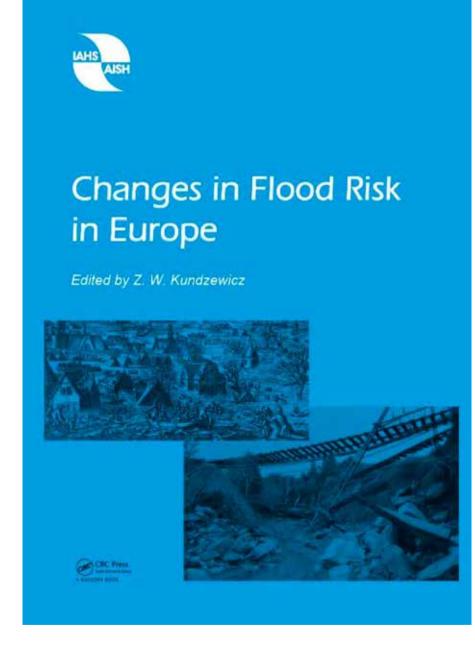


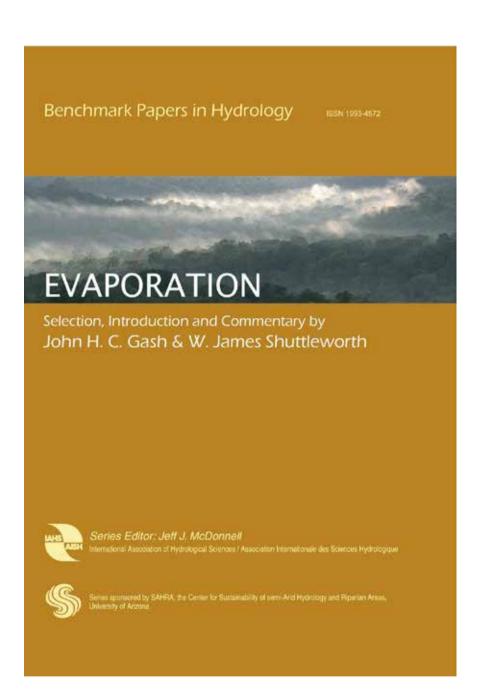


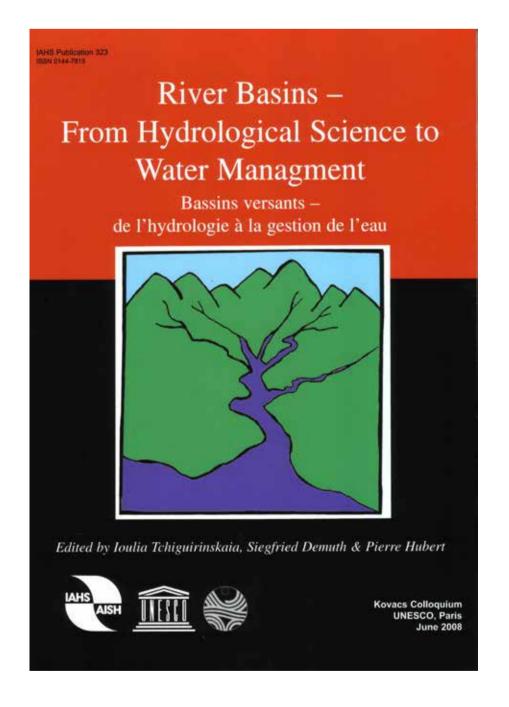
Hydrological Sciences Journal – Journal des Sciences Hydrologiques, 2013 http://dx.doi.org/10.1080/02626667.2013.803183

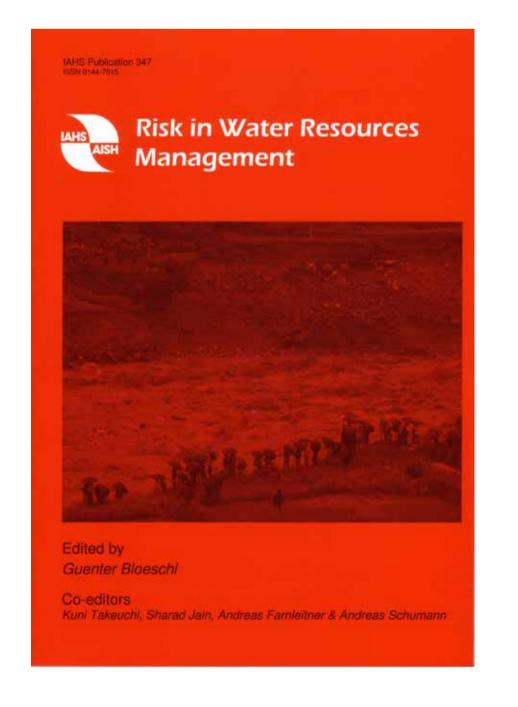


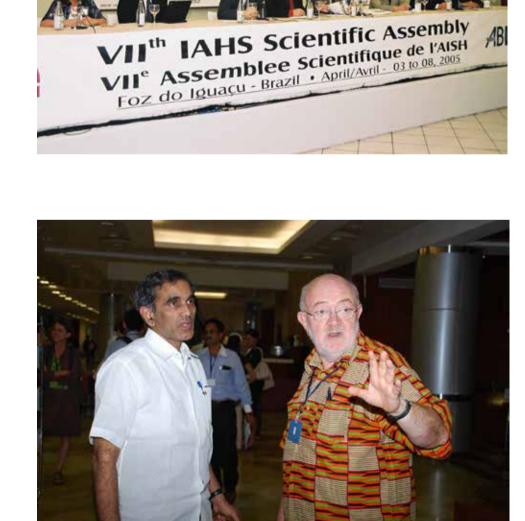
















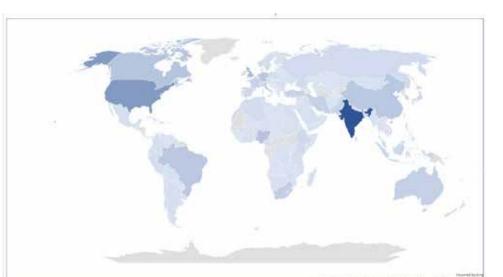




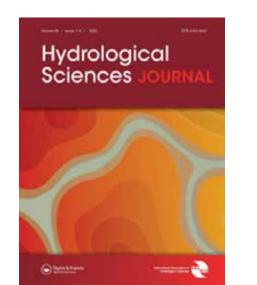










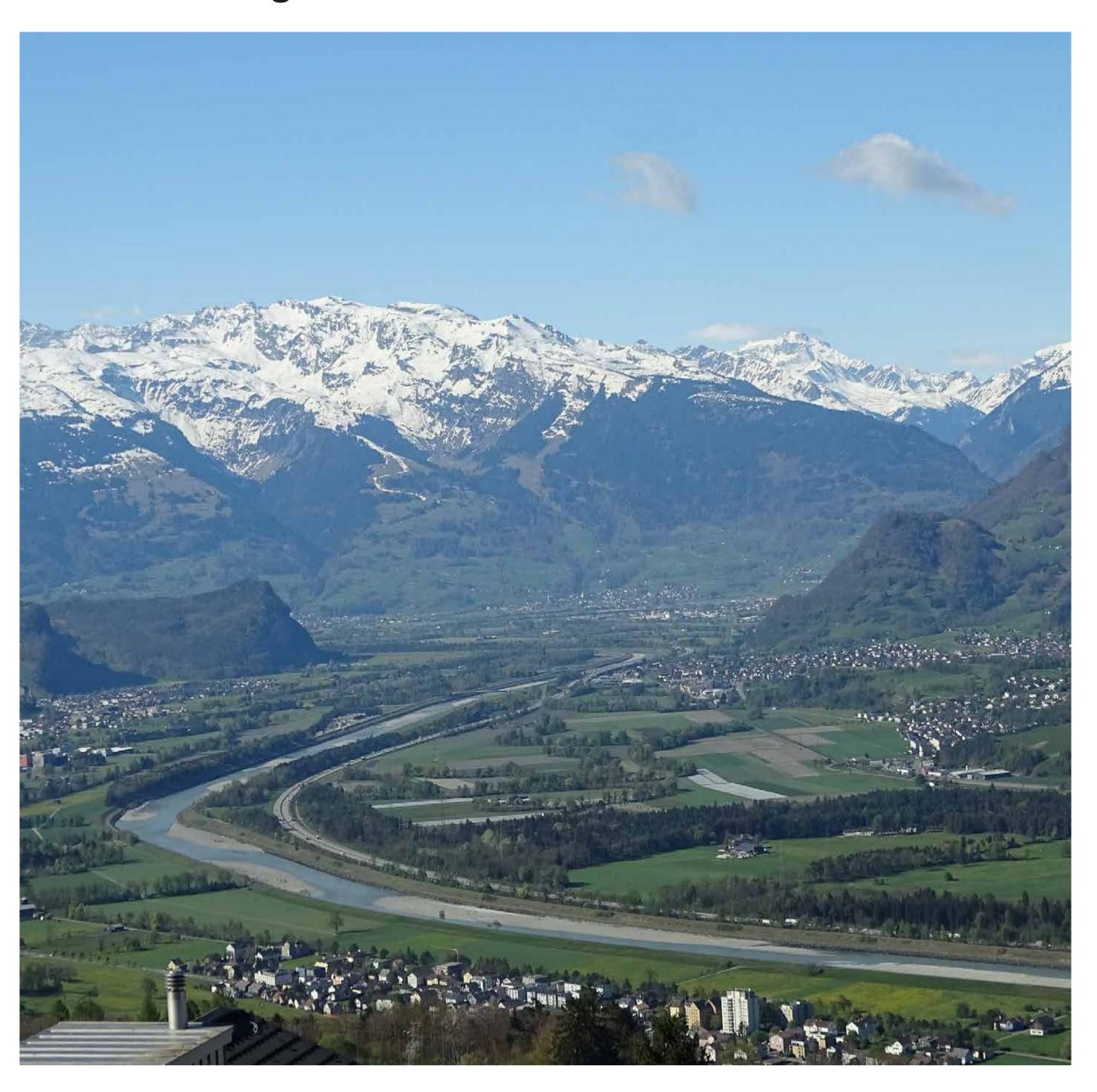




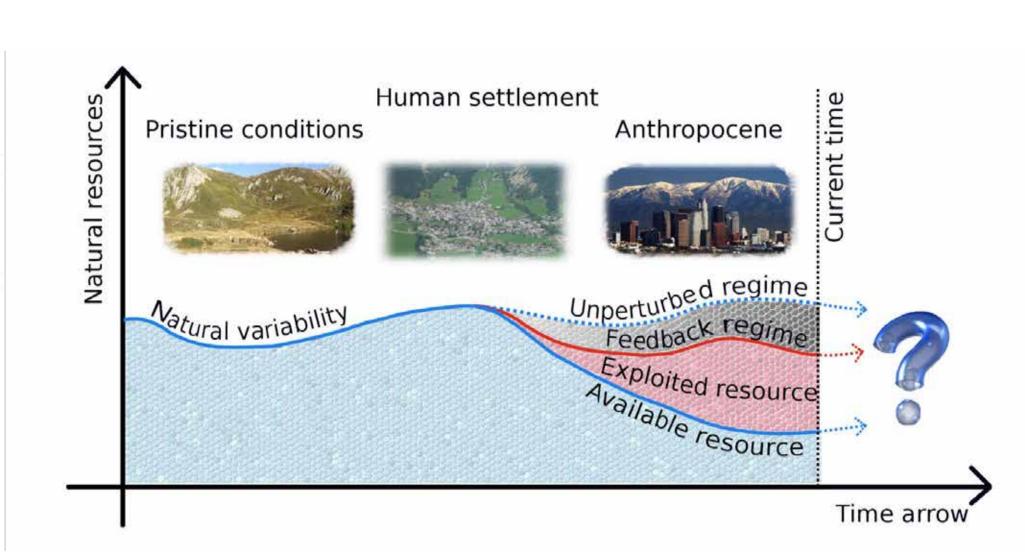


2018: ICSU merges into the ISC International Science Council

IAHS official partner of UN Water, including WWDRs & SDG6 process







"Panta Rhei—Everything Flows": Change in hydrology and society—The IAHS Scientific Decade 2013–2022

- A. Montanari¹, G. Young², H. H. G. Savenije³, D. Hughes⁴, T. Wagener⁵, L. L. Ren⁶,
- D. Koutsoyiannis⁷, C. Cudennec⁸, E. Toth¹, S. Grimaldi⁹, G. Blöschl¹⁰, M. Sivapalan¹¹, K. Beven¹²,
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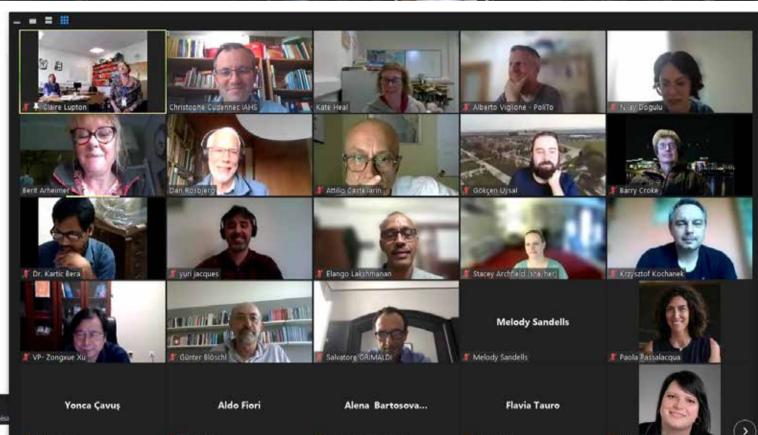






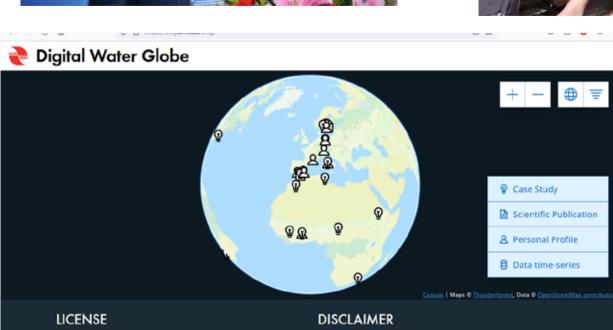


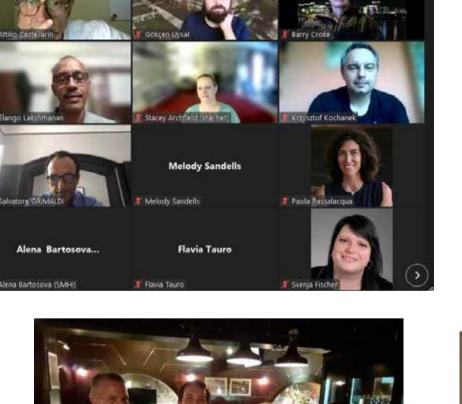


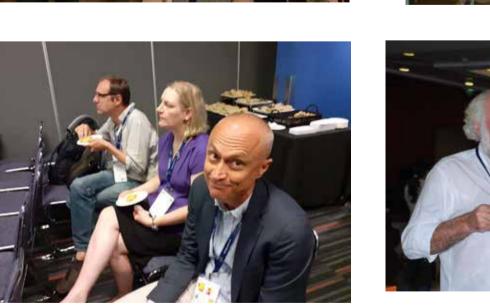


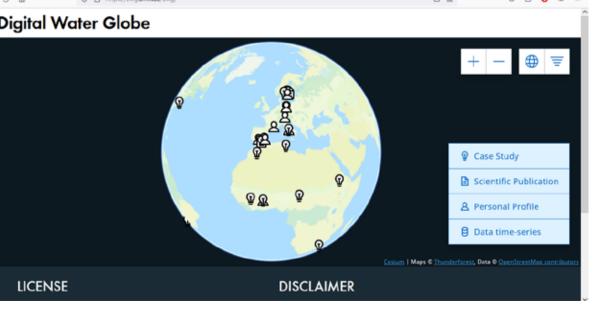










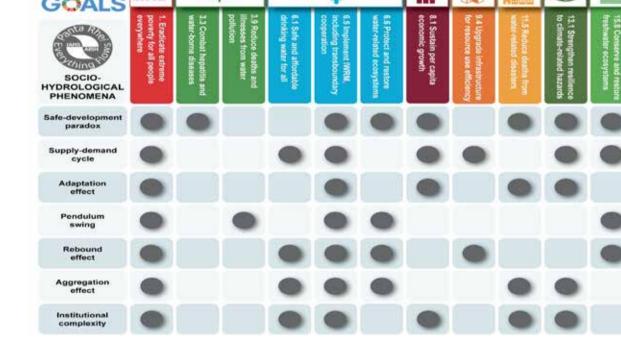








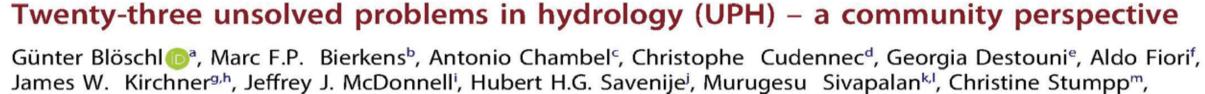




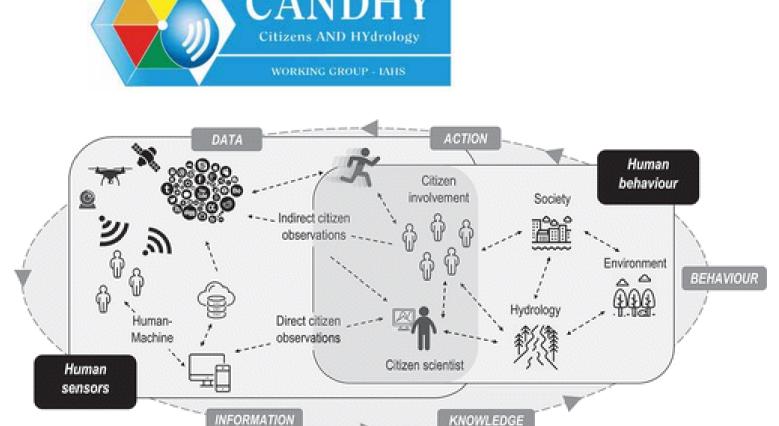
HYDROLOGICAL SCIENCES JOURNAL 2019, VOL. 64, NO. 10, 1141-1158 https://doi.org/10.1080/02626667.2019.1620507

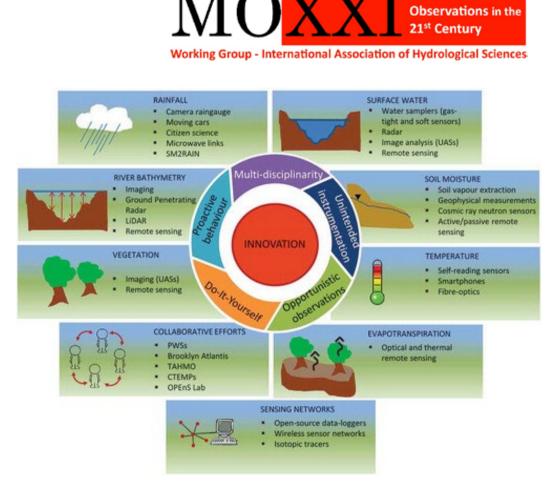


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Early Career committee, Partnership with Waternet, Archive digitization, PIAHS transition, SYSTA Grants, Water Globe platform, EDI Policy









