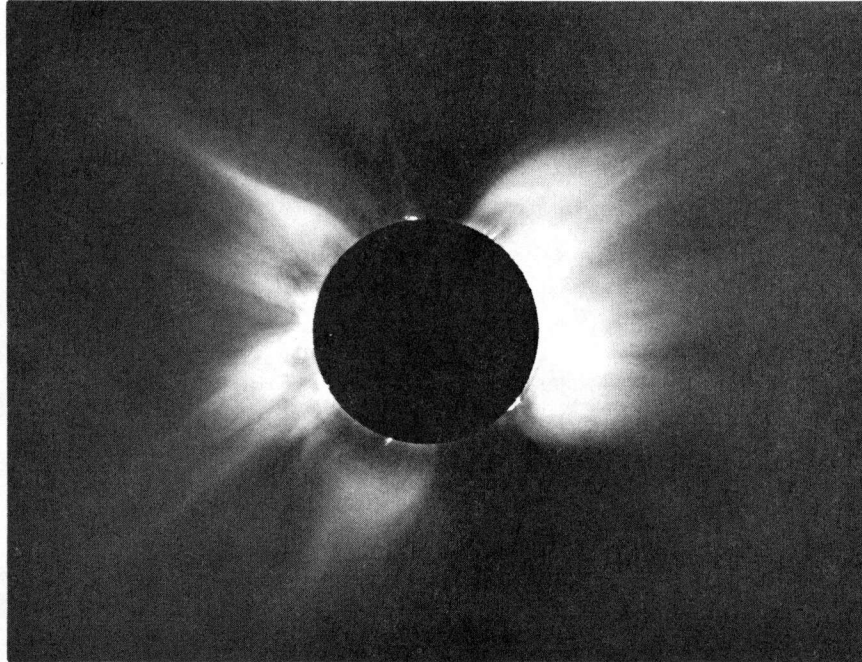


## SCIENTISTS VIEW ECLIPSE FROM SIBERIA



The photo above is of the solar corona and was taken last month by Richard Fisher and Leon Lacey (both of the High Altitude Observatory [HAO]) during the total eclipse that occurred over Siberia, USSR, on 31 July. Dick and Lee traveled to Russia as part of an eclipse expedition sponsored jointly by the National Science Foundation of the United States and the Astronomical Council of the Academy of Sciences (ACAS) of the USSR.

"It was a very successful expedition, particularly considering the cloud cover," Dick told *Staff Notes*. "About five minutes before totality a layer of cirrus clouds formed. We had only a couple of minutes to devise a contingency plan. We were using the eclipse camera developed by Gordon Newkirk [HAO] some 15 years ago. To obtain an image of the corona [the sun's tenuous outer atmosphere] through the cloud cover, we abandoned the program sequence of exposures, and

took one long exposure through the radially graded filter."

The images obtained during the eclipse will be used in conjunction with data obtained from HAO's Mark III K-coronameter at HAO's observing station on Mauna Loa, Hawaii, to study coronal "holes" (regions of the sun's outer atmosphere with abnormally low density). "The eclipse photograph and the synoptic map of the corona (drawn from data taken by the Mark III over a month-long period) represent the first dual observations of the corona over the sun's polar regions during a maximum phase in the sunspot cycle," Dick said.

Joining Dick and Lee were two Soviet astronomers, Alexander Bagrov (from ACAS) and Pavel Kovladno (from the Siberian Institute of Terrestrial Magnetism, Ionosphere, and Radio Wave Propagation). • SB

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This Week in *Staff Notes* . . .

Eclipse  
Announcements

Visitors  
Library News

Job Openings  
Calendar Notes

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## ANNOUNCEMENTS

### BSES MEETING

The Boulder Solar Energy Society will meet on Tuesday, 1 September, at 7:30 p.m. Speaker Jim Walsh from Computerized Energy Audits, Inc., will describe his experience with audits, results, and system repairs.

The meeting will be in room 1107 of the Department of Commerce Building at 325 Broadway, in Boulder. Any interested staff members or visitors are invited to attend.

### PHONE AND ROOM CHANGE

Marsha Hanson                      Ext. 565              ML room 150

### CAFETERIA NEWS

The "special special" for next Wednesday, 2 September, will be macaroni and ham au gratin, sliced tomatoes, a vegetable, cherry supreme, and coffee or tea, all for \$2.

The breakfast special for next week will be huevos rancheros with an English muffin for \$1.10.

Each Tuesday a free lunch is awarded to the person whose name is drawn from a container, located near the cashier in the Mesa Laboratory cafeteria, containing the past week's collection of signed lunch receipts. The free lunch must be collected within a week of the Tuesday drawing. The winner's name will be posted in the cafeteria above the bowl, and will also appear in Staff Notes (on Friday) as a reminder. This week's winner is:

ART BINKLEY

### JOURNAL CANCELLATIONS

The list below is the last of several that have appeared in *Staff Notes*. It includes the titles and yearly subscription rates of journals being

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Production Assistants: Mary Boyer, Reed Glenn

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considered for cancellation. If you feel strongly concerning the cancellation of any of the journals on this list, please contact Chuck Wenger on ext. 428.

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION JOURNAL (\$35)

AMERICAN STATISTICIAN (\$10)

APPLIED MATHEMATICS AND OPTIMIZATION (\$89)

APPLIED PHYSICS LETTERS (\$75)

ARCHIVES OF ENVIRONMENTAL HEALTH (\$35)

AUSTRIA. OSTERREICHE AKADEMIE DER WISSENSCHAFTEN. ABT II, MATHEMATISCH, ASTRONOMIE, PHYSIK, METEOROLOGIE UND TECHNIK (\$104.45)

CHEMTECH (\$90)

CLEAN AIR (\$11.23)

COMPUTER PROGRAM ABSTRACTS (\$6.50)

COMPUTERS, CONTROL & INFORMATION THEORY (\$80)

COMPUTERS IN INDUSTRY (\$76)

DATABASE JOURNAL (\$74)

DEUTSCHE HYDROGRAPHISCHE ZEITSCHRIFT (\$30)

DIRECTORY OF ONLINE DATABASES (\$48)

DOKLADY OF THE ACADEMY OF SCIENCES, U.S.S.R., EARTH SCIENCES SECTION (\$190)

EDITORIAL EYE (\$45)

ENVIRONMENT ABSTRACTS (\$400)

ENVIRONMENTAL POLLUTION (\$211)

ENVIRONMENTAL RESEARCH (\$183)

FLUID DYNAMICS (\$275)

GEOPHYSICAL JOURNAL, ROYAL ASTRONOMICAL SOCIETY (\$385)

GEOPHYSICS (\$36)

GLAVNAYA GEOFIZICHESKAYA IM A.I. VOLIKOVA. TRUDY (\$60)

INDUSTRIAL AND ENGINEERING CHEMISTRY FUNDAMENTALS (\$44)

INSTRUMENTATION TECHNOLOGY (\$14)

JOURNAL OF PHOTOCHEMISTRY (\$325)

JOURNAL OF STATISTICAL PLANNING & INFERENCE (\$81)

(Continued)

## VISITORS

JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH  
(\$168)

MAUSAM (\$40)

METEOR FORSCHUNGSERGEBNISSE A, B, C, AND D (\$40  
each)

MICROSCOPE (\$40)

MICROWAVE JOURNAL (\$25)

NATIONAL ACADEMY OF SCIENCE PROCEEDINGS (\$125)

NATURWISSENSCHAFTEN (\$92)

ROYAL ASTRONOMICAL SOCIETY MONTHLY NOTICES (\$530)

SCIENTIA SINICA (\$65)

SEA TECHNOLOGY (\$15)

S.I.A.M. JOURNAL ON SCIENTIFIC AND STATISTICAL  
COMPUTING (\$34)

SOIL SCIENCE SOCIETY OF AMERICAN JOURNAL (\$22)

SOVIET METEOROLOGY AND HYDROLOGY (\$220)

THORNTON PUBLICATIONS IN CLIMATOLOGY (\$50)

U.S.S.R. COMPUTATIONAL MATHEMATICS AND MATHEMATICAL  
PHYSICS (\$500)

UNION GEODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE.  
CHRONIQUE DE L'U.G.G.I. (\$23)

VAYU MANDAL (\$8)

WORLD MEETINGS OUTSIDE U.S. AND CANADA (\$135)

ZEITSCHRIFT FUER ANGEWANDTE MATHEMATIK UND PHYSIK  
(\$262)

ZEITSCHRIFT FUER NATURFORSCHUNG PART A PHYSICS  
(\$254.80)

Trish Kieseletter, *Science 81* magazine. Field of  
interest: CCOPE. 25 August.  
--Joan Frisch, Information Office

Piotr Smolarkiewicz, University of Warsaw, Poland.  
Field of interest: Influence of the dynamics of  
convective clouds on the evolution of precipita-  
tion. 21 August 1981 - 20 August 1982.  
RL-6 room A352, ext. 77-128.  
--Stephen Schneider, Advanced Study Program

David Tripp, Weber State College, Utah. Field of  
interest: Solar physics. 24-28 August. Computing  
carrels, dial "0" for paging service.  
--Scientific Computing Division

# LIBRARY NEWS

28 August 1981

## SAMPLE JOURNALS FOR REVIEW

The following journals are available in the library for your review and evaluation. We would appreciate your comments as to whether the library should subscribe to them:

ANGEWANDTE INFORMATIK APPLIED INFORMATICS. Nov. 1980. Monthly.  
ASSOCIATION FOR COMPUTING MACHINERY SIGCUE (SPECIAL INTEREST GROUP ON COMPUTER USES IN EDUCATION) BULLETIN. Oct. 1980. Quarterly.  
ASSOCIATION FOR COMPUTING MACHINERY SOFTWARE ENGINEERING NOTES. July 1980. Bimonthly.  
COMPUTER GRAPHICS AND IMAGE PROCESSING AN INTERNATIONAL JOURNAL. Jan. 1981. Monthly.  
COMPUTERS & EDUCATION AN INTERNATIONAL JOURNAL. Vol. 4, No. 4 1980. Quarterly.  
COMPUTERS & GRAPHICS AN INTERNATIONAL JOURNAL OF APPLICATIONS IN COMPUTER GRAPHICS. Vol. 5, No. 2-4. Quarterly.  
COMPUTERS & MATHEMATICS WITH APPLICATIONS. AN INTERNATIONAL JOURNAL. Vol. 6, No. 2 1980. Quarterly.  
INTER-UNIVERSITY COMMITTEE ON COMPUTING (IUCC) BULLETIN. Winter 1980. 3 times/year.  
JOURNAL OF SYSTEMS AND SOFTWARE. Vol. 1, No. 1, 1979. Quarterly.  
MICROPROCESSING AND MICROPROGRAMMING THE EUROMICRO JOURNAL. Jan. 1981. 10 times/year.

THE FOLLOWING MATERIAL WILL BE DISPLAYED IN THE MESA LIBRARY AUG. 28 - SEPT. 3, AND IN THE RL-6 LIBRARY SEPT. 4 - 10. NEW ACQUISITIONS ANNOUNCED LAST WEEK (AUG. 21) ARE PRESENTLY ON DISPLAY IN THE RL-6 LIBRARY THROUGH SEPT. 3.

## NEW BOOKS

REFERENCE material does not circulate.

TP9 E685 V. 15 1981 REF. ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY KIRK-OTHMER ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY. Mark H.F. ed., et. al.  
QC928.7 S69 1980. THE RAINMAKERS: AMERICAN "PLUVICULTURE" TO WORLD WAR II. Spence C. C.  
QD1 F58 Vol. 89 1980. PLASMA CHEMISTRY TOPICS IN CURRENT CHEMISTRY; 89-.  
QD101.2 D37 1980. QUANTITATIVE ANALYSIS 4TH ED. Day R. A.  
QD115 B6 1980. MODERN POLAROGRAPHIC METHODS IN ANALYTICAL CHEMISTRY. Bond A. M.  
QD462 C53 1980. COMPUTATIONAL ASPECTS FOR LARGE CHEMICAL SYSTEMS LECTURE NOTES IN CHEMISTRY; 19. Clementi E.  
QD501 U43 1979. CHARGE TRANSFER PROCESSES IN CONDENSED MEDIA LECTURE NOTES IN CHEMISTRY; 10. Ulstrup J.  
QD502 E86 1981. CHEMICAL KINETICS AND REACTION MECHANISMS. Espenson J. H.  
QD601 A107 V. 4 1979. ORGANIC PHOTOCHEMISTRY. Padwa A. ed.  
QD604.8 F35 1981. RADIOISOTOPE LABORATORY TECHNIQUES 4TH ED. Faires R. A.  
QE515 F69 1980. ENVIRONMENTAL GEOCHEMISTRY: A HOLISTIC APPROACH. Fortescue J. A. C.  
TJ163.2 E479 1980. ENERGY IN THE DEVELOPING WORLD: THE REAL ENERGY CRISIS. Vaclav S. ed.

## NEW TECHNICAL REPORTS

### ATMOSPHERIC SCIENCE

- 1-9937. CHARACTERISTICS OF ULTRAVIOLET RADIATION IN THE HUMAN ERYTHEMA BAND MEASURED WITH A ROBERTSON-BERGER METER AND A DOUBLE MONOCHROMATOR. Deluisi J. J., et. al. 1981.
- 1-9938. WIND CLIMATOLOGY OF AMERICAN SAMOA. Bortniak J. C. 1981.
- 1-9940. INSTRUMENT INTERCOMPARISONS AT THE BOULDER ATMOSPHERIC OBSERVATORY DURING 1980. Gaynor J.E., et. al. 1981.
- 1-9941. PROPOSED CHANGES TO THE FACSIMILE SYSTEM. Bedient H. A. 1981.
- 1-9942. FORTY-EIGHT HOUR ATMOSPHERIC DISPERSION FORECASTS AT SELECTED LOCATIONS IN THE UNITED STATES. Draxler R. R. 1981.
- 1-9943. COLLECTED REPRINTS 1979 ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORIES MIAMI, FLORIDA. U.S. National Oceanic and Atmospheric Admin. 1980.

### OCEANOGRAPHY

- 1-9936. ICE CONDITIONS IN THE EASTERN BERING SEA FROM NOAA AND LANDSAT IMAGERY: WINTER CONDITIONS 1974, 1976, 1977, 1979. McNutt L. 1981.

## NEW MICROFICHE

- PNLSA8793. AVERAGE STORM DURATION AND SEASONAL PRECIPITATION RATES FOR THE NORTHEAST SECTOR. Battelle Pacific Northwest Labs., Richland, WA. 1980.
- N8118267. TELECOMMUNICATION NEEDS AT THE ROYAL NETHERLANDS METEOROLOGICAL INSTITUTE (KNMI). A SURVEY: 1980-1990. (In Dutch). Vermaas E.H.J., et. al. 1980.
- PB81129538. THE EPA PROGRAM FOR DISPERSION MODEL DEVELOPMENT FOR SOURCES IN COMPLEX TERRAIN. Holzworth G.C. 1980.
- N8113569. MODEL FORECASTS AND WORLD OBSERVATIONS THE OZONE LAYER 1960 - 1980. NASA. 1980.

#### ATMOSPHERIC SCIENCE

- N8116681. AN AIRPORT WIND SHEAR DETECTION AND WARNING SYSTEM USING DOPPLER RADAR A FEASIBILITY STUDY. McCarthy J., et. al. 1981.
- NUREGCRI395. EOCR BUILDING WAKE EFFECTS ON ATMOSPHERIC DIFFUSION. Start G. E., et. al. 1981.
- ADA094020. COMPUTER-BASED WEATHER RESEARCH. Gerlach A. M. 1980.
- ADA093796. OUTFLOW FROM A NOCTURNAL THUNDERSTORM. Scott R. W. 1980.
- ADA093760. EVALUATION OF NUMERICAL STORM SURGE MODELS. Committee on Tidal Hydraulics (Army) Washington D.C. 1980.
- UCRL84069. DETERMINATION OF TOTAL OZONE FROM DMSP MULTICHANNEL FILTER RADIOMETER MEASUREMENTS. California Univ., Livermore. 1980.
- PB81134033. HYDROLOGY PRACTICUM (TECHNICAL MEMO). Dietrich T. 1980.
- PB81128043. FREEZING LEVEL PROGRAM. Mielke K. B. 1980.
- PB81126401. SUMMARY OF WEATHER MODIFICATION ACTIVITIES REPORTED IN 1979. Charak M. T. 1980.
- PB81124380. STUDIES OF THE ATMOSPHERE USING AEROSPACE PROBES. Suomi V. E., et. al. 1980.
- PB81119083. ENERGY AND CLIMATE: STUDIES IN GEOPHYSICS. Nat. Research Council, Washington D.C. 1977.
- N8111612. KINETIC ENERGY BUDGETS IN AREAS OF INTENSE CONVECTION. Fuelberg H. E., et. al. 1980.
- N8111594. FEASIBILITY OF QUASI RANDOM BAND MODEL IN EVALUATING ATMOSPHERIC RADIANCE. Tiwan S. N., et. al. 1980.
- LA8523MS. FUTURE CREDIBLE PRECIPITATION OCCURENCES IN LOS ALAMOS, NEW MEXICO. Abeele W. V. 1980.
- EPRIEA1538. DEVELOPMENT OF AN AIRBORNE LIDAR FOR CHARACTERIZING PARTICLE DISTRIBUTION IN THE ATMOSPHERE. SRI International, Menlo Park, CA. 1980.
- ADA091851. EVAPORATION DUCT HEIGHT MEASUREMENTS IN TEH MID-ATLANTIC. Fairall C. W., et. al. 1978.
- ADA091802. LONG TERM VARIABILITY OF WINDSPEED. Eller A. I., et. al. 1980.
- ADA091606. EXTENDED APPLICABILITY OF OPTICAL WIND SENSING TECHNIQUES. Smith J. 1980.
- ADA091504. SEASAT ALTIMETER ATMOSPHERIC RANGE CORRECTION. Hollinger J.P. 1980.
- UCRL84565. THREE-DIMENSIONAL FINITE ELEMENT MODEL OF LIQUIFIED NATURAL GAS RELEASES IN THE ATMOSPHERE. California Univ., Livermore. 1980.
- PNL3448. MEASUREMENT STRATEGIES FOR ESTIMATING LONG-TERM AVERAGE WIND SPEEDS. Battelle Pacific Northwest Labs., Richland WA. 1980.

#### ENGINEERING AND TECHNOLOGY

- PB81165318. ASSESSMENT OF DAMAGEABILITY FOR EXISTING BUILDINGS IN A NATURAL HAZARDS ENVIRONMENT, VOL. I: METHODOLOGY. Hasselman T. K., et. al. 1980.
- PB81165318. ASSESSMENT OF DAMAGEABILITY FOR EXISTING BUILDINGS IN A NATURAL HAZARDS ENVIRONMENT, VOL. II: DAMAGE COMPUTER PROGRAM USERS MANUAL. Hasselman T. K., et. al. 1980.
- ADA095531. BALLOON ELECTRICAL ENVIRONMENT PROFILING SYSTEM (BEEPS). Few A. A. 1980.
- ADA095359. THE AEROSPACE THERMAL MODEL (HFLUX)--ITS STRUCTURE AND UTILITY. Dodd J. K. 1980.
- N8116677. CAT ALTITUDE AVOIDANCE SYSTEM PATENT APPLICATION. Gary B. L. 1981.
- EPRIFF1006(VOL 2). ELECTROSTATIC PRECIPITATOR PLATE RAPPING AND RELIABILITY. Hieber G.M., et. al. 1980.
- NP25196. FERTILIZER FROM COAL. Tennessee Valley Authority, Muscle Shoals, AL. 1978.

#### ENVIRONMENTAL SCIENCE

- PB81160392. THE IMPACT OF ROAD TRAFFIC ON PLANTS. Colwill D. M., et. al. Transport and Road Research Lab, Crowthorne, England. 1979.

#### MISCELLANEOUS

- PB81124927. PUBLICATIONS AND FINAL REPORTS AND CONTRACTS AND GRANTS, 1979. National Environmental Satellite Service, Washington D.C. 1980.

#### POLLUTION

- PB81150690. COOPERATION BETWEEN THE NETHERLANDS AND THE FEDERAL REPUBLIC OF GERMANY ON AIR POLLUTION PROBLEMS. Joint German-Netherlands Research Project. 1978.
- PB81148207. ANALYTICAL CHEMISTRY OF THE CITRATE PROCESS FOR FLUE GAS DESULFUREZATION. Marchant W.N. 1980.
- PB81147340. TRANSPORT AND TRANSFORMATION OF SULFUR OXIDES THROUGH THE TENNESSEE VALLEY REGION. Crawford T. L., et. al. 1980.
- LA8619MS. SIMULATION OF LARGE-SCALE LIQUIFIED NATURAL GAS VAPOR DISPERSION. Chapyak E. J. 1980.
- DOEET12297T1. LIGNITE COMBUSTION TEST PROJECT INTERIM REPORT: TESTS L101-L114. Combustion Power Co., Inc., Menlo Park Ca. 1980.
- UCRL52989. EVOLUTION OF PARTICULATE EMISSIONS FROM A COAL-FIRED POWER PLANT. Buckholtz H.T.Y. 1980.
- SAND802175C. LAGRANGIAN MEASUREMENTS OF SULFUR DIOXIDE TO SULFATE CONVERSION RATES. Zak B.D. 1980.
- PB81126443. CRITIQUE OF METHODS TO MEASURE DRY DEPOSITION; WORKSHOP SUMMARY. Hicks B.B. et. al. 1980.
- PB81125007. GASEOUS AND PARTICULATE AMMONIA AND NITRIC ACID CONCENTRATIONS, COLUMBUS, OHIO AREA--SUMMER 1980. Braman R. S., et. al. 1980.
- PB81121147. AEROSOL FORMATION FROM DIESEL EXHAUST AND SO2 A CHAMBER STUDY. Anderson R.J., et. al. 1980.
- PB81120024. METAL PARTICULATE EMISSIONS FROM STATIONARY SOURCES, VOLUME 1. STANDARD SAMPLING AND ANALYSIS METHOD. Peters E.T., et. al. 1980.
- PB8112534. VALIDATION OF AIR MONITORING DATA. Nelson A. C., et. al. 1980.
- EPRIFF1207(Vol 4). DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCBS) AND PCB-CONTAMINATED MATERIALS. Acurex Corp., Mountain View, CA. 1980.
- EPRIEA1516. BIOGENIC SULFUR EMISSIONS IN THE SURE REGION. Adams D.F., et. al. 1980.

# JOB OPENINGS

26 August 1981

*NCAR is an equal opportunity/affirmative action employer.*

Salaries for new employees and for current employees receiving reassignments will be between the range minimum and maximum shown for each job. Specific starting salaries are determined by comparing the applicant's qualifications with the job requirements and assessing expected performance levels.

## REGULAR, FULL-TIME

### Administrative Secretary - #2844

#### ATD & JAWS

Non-exempt range 26: \$ 1,045 - \$ 1,357/month  
DUTIES: Will establish office administrative system for handling all inquiries and routine decisions in absence of staff. Will provide general secretarial support to ATD Director's office and Joint Airport Weather Studies project (JAWS). Establishes and maintains appointment schedules, typing, takes messages and assures a timely and adequate response to matters. Makes travel arrangements for staff of 15 people.

#### REQUIRES:

- Word processing and related skills
- Accurate typing skills at about 70 WPM
- High level skills organization and establishing work priorities
- Knowledge of current office procedures
- Skills in accomplishing several tasks simultaneously, often in hectic environment
- Pleasant and co-operative attitude
- Willingness to handle other miscellaneous tasks as needed
- Skills at making good judgements in decision making

NOTE: Funding for JAWS program subject to annual review by sponsor. For the first 1-2 months, successful applicant(s) may be required to perform duties at two separate locations. One location is near Crossroads shopping area, while the other is at the Mesa location. Position could possibly be shared position(1/2 time) pending application of two qualified persons and mutual agreement of applicants and NCAR management  
Esther Blazon, X581

### Applications Programmer II - III - #2818

AAP - Large Scale Dynamics/Global Climate Modeling  
Exempt range 61: \$20,880 - 31,320/year  
or 62: \$25,056 - 37,584/year

DUTIES: Will provide support to the Community Climate Model (CCM) and the Interactive Graphics Terminal (IGT). Will be responsible for

restructuring, documenting, and maintaining the code of the CCM and its processors. Will ensure efficient operation of the IGT both as a separate installation and as a remote terminal to the SCD machines. Will act as a consultant to terminal users, maintaining a comprehensive program library and helping to provide documentation on in-house software. A level III programmer will be expected to assume all responsibilities of this position almost immediately.

#### REQUIRES (level II):

- M.S. or equivalent in computer science, math, or physical sciences
- Skill in programming interactive minicomputers or skill in developing and maintaining very large codes
- High level skills in FORTRAN programming

#### REQUIRES (level III):

- All four of the above requirements

#### ALSO DESIRED, BUT NOT REQUIRED:

- Skill in coding in assembly language
- Skill in working with computer graphics
- Working knowledge of atmospheric sciences

NOTE: It is highly preferred that this position be filled at a level III.  
Margareta Domecki, X517

### Applications Programmer III - #2832

#### APP - Global Climate

Exempt range 62: \$25,056 - 37,584/year

DUTIES: Primary responsibility will be the restructure, documentation, and maintenance of the CCM (Community Climate Model) and its processors. A level III programmer will be expected to assume all responsibilities of the position immediately.

#### REQUIRES:

- M.S. or equivalent in computer science, math, or physical sciences
- High level skills in FORTRAN programming
- Experience in developing and maintaining large codes

#### ALSO DESIRED, BUT NOT REQUIRED:

- Working knowledge of atmospheric sciences

Margareta Domecki, X517

Draftsperson I - #2824

ATD - RSF

Non-exempt range 27: \$1,149 - 1,493/month

DUTIES: Will produce mechanical and electrical drawings from rough sketches or from the piece part itself. Will make printed circuit layouts from electrical drawings. Will maintain drawing and document files.

REQUIRES:

- Skill at mechanical and electrical drafting
- Knowledge of standard good drafting practices
- Familiarity with most electrical, electronic and mechanical symbols
- Skill at making neat and legible drawings
- Skill in laying out printed circuit boards
- Some knowledge of both active and passive electrical components
- Some skill at locating information in manufacturer's parts catalogs
- Two years of trade school or equivalent on-the-board experience

Margareta Domecki, X517

Electronics Engineer II-III - #2794

ATD - RSF

Exempt ranges 57: \$22,380 - 33,564/year  
or 58: \$26,856 - 40,272/year

DUTIES: Will participate as a member of a team in design, building and testing of new telecommunication systems for meteorological research programs. Some time will be spent in theoretical analysis and a great deal of time will be spent working in a lab setting.

REQUIRES (level II):

- B.S. in EE, communication engineering or physics
- Solid skills in RF design and applications
- Knowledge of solid-state circuit design and synthesis techniques as applied to receivers, transmitters, antennas, transmission lines, filters, modulators and the skill to assemble such designs
- Good working knowledge of data communication and telemetry systems
- Moderate skill in written and verbal communication, including legible hand sketches of circuits and assemblies
- Willingness/ability to occasionally participate in field trips lasting from approximately few days to a month. Travel is not a routine part of this job.

REQUIRES (level III):

- High level skill in RF design and applications
- Same requirements as for level II, but with broader range of skills and knowledge directly applicable to the position

ALSO DESIRED, BUT NOT REQUIRED (level II and III):

- Knowledge of current satellite techniques
- Knowledge of a common engineering computer language
- M.S. in electrical engineering, communication engineering or physics

NOTE: Final applicants will be asked to submit samples of their work.

Margareta Domecki, X517

Electronics Technician I - #2839

ATD - FOF

Non-exempt range 26: \$1045 - 1357/mo

DUTIES: Will work on construction, operation and maintenance of analog and digital electronic systems used for meteorological measurements.

REQUIRES:

- Working knowledge of Ohm's law and its application
- Knowledge of common electrical components and their use
- Skill at electronic assembly
- Skill in use of hand tools and basic machine shop equipment
- Skill in use of basic electronic test equipment such as multimeters and oscilloscopes
- Knowledge of standard color codes used in electronic components
- Basic skill in reading schematics
- Ability/willingness to travel for periods not usually exceeding one month but sometimes totalling 120 days/year
- Physical strength to lift up to 70 lbs occasionally
- Ability to qualify for a GSA driver's license (one cannot have more than 2 moving violations in the past 3 years)

NOTE: Final applicants will be given an electronics test

Margareta Domecki, X 517

Machinist-Welder III - #2843

ATD - Machine Shop

Non-exempt range 31: \$1683 - 2185/month

DUTIES: Will have primary responsibility for welding, and additionally, for fabrication and machining of equipment in support of research programs, working from formal drawings, sketches and verbal instructions. Will include heliarc welding of aluminum, stainless steel, some arc and wire feed welding and will cover mostly light to medium weight materials, sheet metal, with some heavy steel and aluminum structural fabrication.

REQUIRES:

- High level skill in straight, gas, heliarc and arc welding
- Skill in machine operation (lathes, mills, drill presses, surface and cylinder grinders) and structural fabrications
- Good knowledge of basic materials such as aluminum, brass, stainless steel and steel
- Skill in prototype welding and machining to include R&D work
- Skill in interpreting formal drawings, informal sketches and verbal instructions
- Skills in some of the following: sheet metal and plastics fabrication, molding and forming, brazing, precision grinding, lapping, pattern development and casting, mold making or tool and die
- Physical strength to occasionally lift 100 lbs to 3 feet height

Margareta Domecki, X 517

Ph.D. Scientist III or Senior Scientist - #2769

## ACAD

Exempt range 84: \$34,446 - 51,624/year  
or 85: \$37,860 - 56,796/year

DUTIES: Will conduct original and independent research and manage group of experimental scientists and engineers. Research likely to include marine measurements, tropospheric and stratospheric sampling, global chemical cycles and related scientific area.

## REQUIRES (Majority of the following):

- Ph.D. in chemistry, physics, oceanography, atmospheric science or a closely related discipline or equivalent plus extensive experience with laboratory and/or field measurements relevant to atmospheric chemistry
- Outstanding skill and accomplishments; in experimental techniques used in gas measurements, e.g., optical, chromatographic or other advanced instrumentation
- Outstanding nationally and internationally recognized publication record and demonstrated commitment to atmospheric chemistry and/or chemical oceanography
- Demonstrated skill at leading and supervising other experimental scientists, engineers and technicians in research endeavors
- Demonstrated skill at interacting productively with colleagues engaged in theoretical studies
- High level skill and knowledge in gas handling and in measurements of atmospheric gases
- National reputation in obtaining field measurements of atmospheric constituents using aircraft, balloons and ships as observing platforms or in laboratory measurements
- Willingness to manage group in ways consistent with NCAR policy and affirmative action program goals

NOTE: Candidates may apply by submitting a curriculum vitae and list of publications. The Ph.D. Scientist III level will be a five year term appointment. Qualification at level III or Senior Scientist will be based on the degree to which the applicant satisfies the requirements.  
Margareta Domecki, X517

Staff Scientist II - #2802

## AAP - Oceanography

Exempt range 83: \$28,860 - 43,032/year

DUTIES: Will carry out independent research on problems of ocean dynamics with emphasis on the development and application of numerical models of large-scale ocean circulation. Will also work on the theory of ocean currents and the role of the ocean in climate.

## REQUIRES:

- Background in physical oceanography/geophysical fluid dynamics equivalent to the Ph.D.

--Mathematical abilities for and experience in the development of numerical models of ocean circulation

This position is available about 1 September 1981. Candidates may apply by submitting a curriculum vitae, list of publications, salary history and requirements and five (5) references.  
Margareta Domecki, X517

Support Scientist II - #2807 (3 yr term appt)

## ATD - JAWS

Exempt range 81: \$19,920 - 29,880/year

DUTIES: Will engage in research to examine wind shear potentially hazardous to aircraft utilizing data from Doppler radar, aircraft and computer simulations of aircraft performance. Will synthesize storm structure from aircraft, Doppler radar, surface mesonet, rawinsonde, satellite and tower data. Will develop computer programs in FORTRAN. Will prepare scientific papers and present results at scientific meetings.

## REQUIRES:

- M.S. in meteorology or equivalent
- Knowledge of scientific requirements necessary to conduct a meteorological field experiment
- Experience in convective storm research
- Demonstrated skill to conduct independent research
- Skill at working well as a project member and at providing technical leadership
- Skill in writing technical and scientific reports
- Skill in programming in a high level computer language

NOTE: Funding subject to annual review by sponsors.  
Margareta Domecki, X517

Support Scientist II - #2819

## ACAD - LIMS

Exempt range 81: \$19,920 - 29,880/year

DUTIES: Major responsibilities are to 1) apply LRIR data to solve problems in the stratosphere and mesosphere, 2) carry out validation studies for LRIR and LIMS data, 3) develop and test inversion algorithms, and 4) provide inputs to reports and manuscripts for publication on results of studies.

## REQUIRES:

- M.S. or equivalent in atmospheric sciences or closely related physical sciences
- Good knowledge of at least two of the following: chemistry of the stratosphere and mesosphere, dynamics of the stratosphere and mesosphere, infrared radiative transfer in the atmosphere, or remote sensing of the atmosphere
- Skill in programming in FORTRAN as evidenced by course work and preferably about two years experience
- Skill in handling large data sets to determine atmospheric quantities, and to assist in interpretation of results

NOTE: The position is expected to last 4 years, but depending on yearly funding approval.  
Margareta Domecki, X517



Support Scientist II - #2840

HAO - Solar Maximum Mission (SMM)

Exempt Range 81: \$19,920 - 29,880/year

DUTIES: Will provide support to scientists analyzing data taken by HAO/NCAR Coronagraph/Polarimeter on the SMM satellite experiment. Tasks include: 1) programming and data processing on a variety of computers; 2) collecting and structuring data for further analysis; 3) conducting preliminary analysis of data, and 4) assisting in preparation of publication and presentation materials.

## REQUIRES:

- B.S. or equivalent in physical science or math, preferably in physics, math, engineering, or computer science
- Skill in FORTRAN programming, including writing moderately complex original programs, as demonstrated by course work or about two years experience
- Skill at gathering and analyzing physical data, as evidenced by experience or coursework in experimental physics or observational astronomy

## ALSO DESIRED, BUT NOT REQUIRED:

- Knowledge of physical optics
- Knowledge of image-processing techniques
- Advanced degree or equivalent experience

Ben Cordova/Valerie Friesen, X 508

CASUAL, STUDENT ASSISTANTStudent Assistant - #2845

HAO - ATM

Flat rate: \$4.75/hour

DUTIES: Will maintain data room, including filing, cataloging, and searching data. Assists in processing data on both large scale and mini-computer systems. Assists staff in locating and organizing data for specific studies.

## REQUIRES:

- Skills in organization, neatness, and accuracy, with attention to detail
- Skill in working independently with very little direct supervision
- Full-time student status with ability to work 20 hours/week, preferably between 8-5, during school year and full-time during summer
- Major in physical science, math, computer science, engineering or related field

## ALSO DESIRED, BUT NOT REQUIRED:

- Exposure to data processing

NOTE: This position is expected to last at least until February 1982 and possibly for three years.  
Ben Cordova/Valerie Friesen, X 508

Student Assistant II - #2838

AAP

Flat rate: \$5.80/hour

DUTIES: Will assist in analyzing data, plot data by hand or computer, do simple data evaluation; will submit, modify and run computer programs.

## REQUIRES:

- Skill at simple programming in FORTRAN IV
- Familiarity with plotting graphs
- Skill at basic math
- Completion of physical science, math, engineering, or computer science coursework

## ALSO DESIRED, BUT NOT REQUIRED:

- Knowledge of math through differential equations

NOTE: This position is expected to last until 15 March 1982.

Esther Blazon, X 581

# CALENDAR NOTES

August 31 through September 7, 1981

MONDAY, August 31

Open

TUESDAY, September 1

Open

WEDNESDAY, September 2

Open

THURSDAY, September 3

- HAO Seminar -- Coronal Transient Magnetohydro-  
dynamics, Boon Chye Low, HAO

3:30 p.m.

NCAR Mesa Lab, Main Seminar Room

FRIDAY, September 4

Open

MONDAY, September 7

Holiday!

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Calendar Notes announcements may be mailed to Vonda Giesey, ML 136. Wednesday at 12:00 noon is the deadline for items to be included in the Calendar Notes.