UNIVERSITY PARTICIPATION VIA UNIDATA
Part I

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The UNIDATA Project is a cooperative university project, operated by the University Corporation for Atmospheric Research (UCAR) with National Science Foundation (NSF) funding, aimed at providing interactive communication and computations to the university community in the atmospheric and oceanic sciences. The initial focus has been on providing access to data for weather analysis and prediction. However, UNIDATA is in the process of expanding and possibly providing access to the Pilot Climate Data System through the UNIDATA system in an effort to develop prototypes for an Earth science information system. The notion of an Earth science information system evolved from discussions within NASA and several advisory committees in anticipation of receiving data from the many Earth observing instruments on the space station complex (Earth Observing System).

Stimulated by the 1979 announcement of the government decision to distribute National Weather Service data for government purposes only, UCAR sought ways to provide weather data and computational capability to the university community. It formed the UNIDATA project, and preliminary plans were announced to representatives of 80 universities gathered for an organizational meeting held at the University of Wisconsin in Madison. A management structure was created that consisted of a steering committee, a management committee, and four working groups. As a result of the efforts of those within that management structure, a proposal was formulated and delivered to NSF. NSF appropriated funds for the proposed developmental phase that began over a year ago and included the determination of a set of functional requirements for system design, the investigation of communications architecture and system interfaces, the identification of components and methods of data acquisition, and, finally, the specification of an implementation plan.

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UNIDATA BROAD OBJECTIVES

FURTHER EDUCATION AND RESEARCH IN THE ATMOSPHERIC SCIENCES VIA

ADVANCED COMMUNICATIONS
COMPUTER TECHNOLOGY
VIDEO DISPLAYS

SAVE EFFORT THROUGH COMMONALITY OF

APPLICATIONS SOFTWARE
SYSTEM SOFTWARE
INTERFACES
HARDWARE

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UNIDATA BACKGROUND

EARLY '70s **– Interactive Processing and Graphics Refined for Atmospheric Study at a Few Institutions**

LATE '70s **– AMS/UCAR Attempt to Find Common Basis for Community Wide Utilization of Such Development**

EARLY '80s **– NOAA Decision on AFOS Creates Concern about Availability of Weather Data**

OCT 1982 **– UCAR UNIDATA Steering Committee Formed to Organize Community Action on Both Issues**

JUL 1983 **– Madison Workshop Endorses System Concept**

NOV 1984 **– NSF Approves Grant for UNIDATA Phase II**

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UNIDATA SYSTEM FUNCTIONS
AS ENDORSED AT JULY '83 WORKSHOP

Transmit Broad Menu of Weather Data and Appropriate Satellite Imagery

Support Local Interactive Analysis

Provide Communications Between Local Systems (Workstations) and Major Computer Centers

Permit Remote Interaction with Field Experiments

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UNIDATA COMMITTEES AND WORKING GROUPS

STEERING COMMITTEE

J Dutton (chair)	Penn State
E Agee	Purdue
D Johnson	Wisconsin
W Macintyre	NCAR
C Mass	Washington
R Serafin	NCAR
J Stephens	Florida State
V Suomi	Wisconsin/SSEC
T vonder Haar	Colorado State

MANAGEMENT ADVISORY COMMITTEE

J Dutton (chair)	Penn State
D Fulker (proj mgr)	UCAR
R Greenfield	NSF
R Orville	SUNY/Albany
S Ruttenberg	UCAR
D Sargeant	NOAA
V Suomi	Wisconsin/SSEC
R Wilhelmson	Illinois

+ 4 Working Group Chairs

COMMUNICATIONS WORKING GROUP

Chair: C Cooper, RAL

LOCAL DATA MANAGEMENT WORKING GROUP

Chair: R Hauser, Cal State/Chico

DATA ACCESS WORKING GROUP

Chair: C Mass, Washington

LOCAL HARDWARE & SOFTWARE SYSTEMS WG

Chair: E Agee, Purdue

Aug 85 - D Fulker

UNIDATA WORKING GROUP MEMBERSHIPS

COMMUNICATIONS

C Cooper (chair)	RAL
D Fulker	UCAR
K Hays	Florida State
R Pyle	SUNY/Albany
T Warner	Penn State

DATA ACCESS

C Mass (chair)	Washington
R Evans	Miami
R Jenne	NCAR
D Johnson	Wisconsin
T Schlatter	PROFS

LOCAL HARDWARE & SOFTWARE SYSTEMS

E Agee (chair)	Purdue
B Domenico	NCAR
R Hauser	Cal State/Chico
G Huffman	Maryland
K McIntyre	Florida State
R Pasken	Parks College
D Robertson	consultant
D Smith	Purdue
T Whittaker	Wisconsin/SSEC
R Wilhelmson	Illinois
L Wolfson	Scripps

LOCAL DATA MANAGEMENT

R Hauser (chair)	Cal St/Chico
J Anderson	Illinois
G Dengel	Wisconsin/SSEC
R Dengel	Wisconsin/SSEC
S Emmerson	Miami
D Fulker	UCAR
C Gautier	Scripps
D Joseph	NCAR
D Leserman	consultant
J Moore	Saint Louis

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UNIDATA – MAJOR PHASE II DECISIONS

A. Local Configuration Based on LAN Technology (Primarily Ethernet)

B. Separate Weather Data Broadcast and Long-Haul Computer-to-Computer Communications

C. Develop Local System Via Two Paths

1. VAX and MicroVAX Class Computers, Running VMS or UNIX Operating Systems: NASA's GEMPAK/GEMPLT/TAE and NCAR GRAPHICS
2. IBM PC/AT Class Computers, Running MSDOS Operating System: Wisconsin's McIDAS and NCAR GRAPHICS

D. Establish UNIDATA Project Office

Oct 85 – S Kassinger