NOAA Data Rescue Programs

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Projects For Discussion

- Climate Database Modernization Program
- African Upper-Air Data
- Hurricane Mitch Recovery

Climate Database Modernization Program

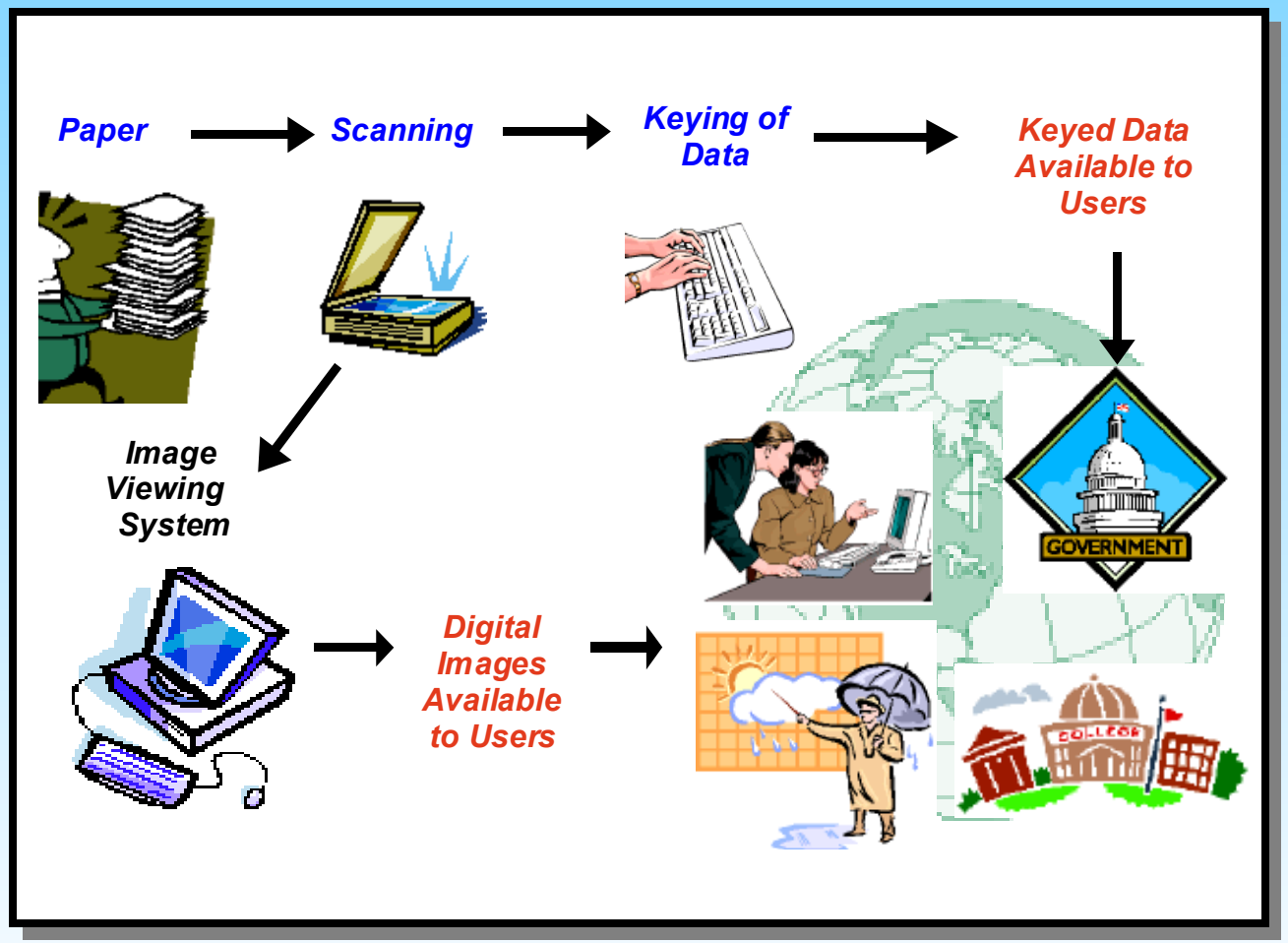
- **Goal:** To make major climate databases available via the world wide web thus increasing the utilization of the climate information.

CLIMATE DATABASE MODERNIZATION PROGRAM

Utilizing a National Resource

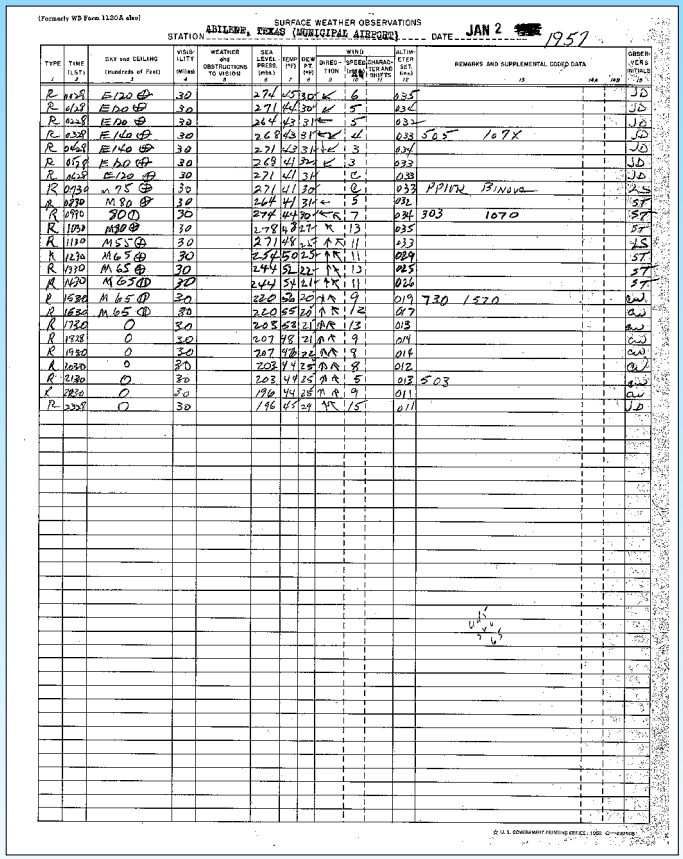
CDMP

CDMP - Improving Data Access



CDMP – Improving Data Access

- Surface Weather Observations
  - 1900 - present
  - 35 million original paper records in collection
  - 25 million imaged and indexed to date
  - Web accessible through NCDC's WSSRD system


(Formerly WB Form 1130A also)

SURFACE WEATHER OBSERVATIONS

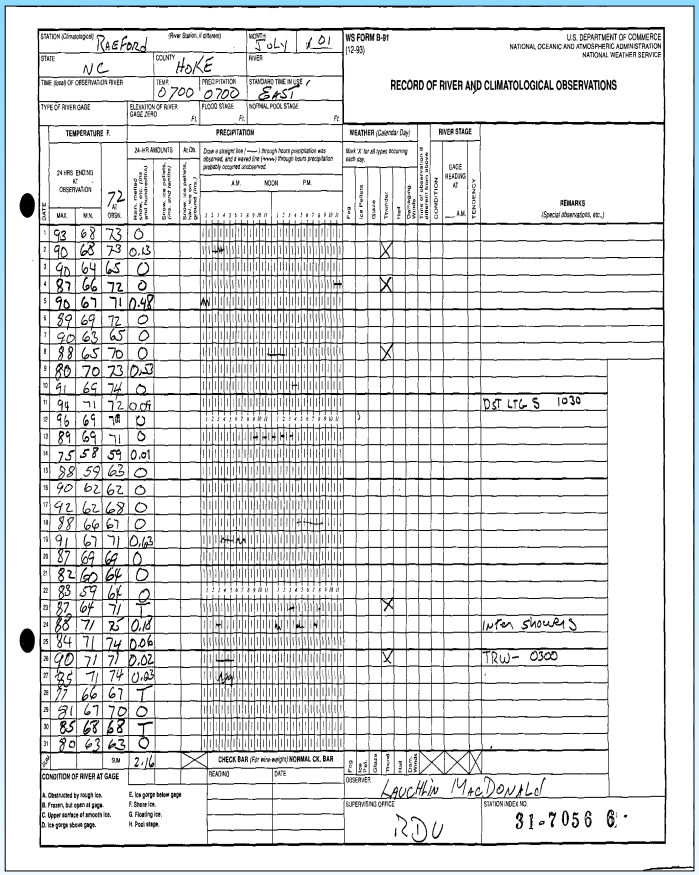
STATION ABILENE, TEXAS (MUNICIPAL AIRPORT) DATE JAN 2 [redacted] 1957

TYPE 1	TIME (LST) 2	SKY and CEILING (Hundreds of Feet) 3	VISIBILITY (Miles) 4	WEATHER and OBSTRUCTIONS TO VISION 5	SEA LEVEL PRESS. (mbs) 6	TEMP (°F) 7	DEW PT (°F) 8	WIND DIRECTION 9	WIND SPEED (Knots) 10	CHARACTER AND TENDENCY 11	ALTIMETER SET. (Ins) 12	REMARKS AND SUPPLEMENTAL CODED DATA 13	OBSERVER'S INITIALS 14
R	0158	E120	30		274	43	30	K	6		035		JD
R	0238	E120	30		271	42	30	K	5		034		JD
R	0328	E120	30		264	43	31	K	5		032		JD
R	0338	E140	30		268	43	31	K	4		033	505 107X	JD
R	0428	E140	30		271	43	31	K	3		034		JD
R	0518	E120	30		268	41	32	K	3		033		JD
R	0528	E120	30		271	41	31		C		033		JD
R	0730	M75	30		271	41	30		C		033	PIPIRR B INSVR	JD
R	0730	M80	30		264	41	31	K	5		032		ST
R	0830	300	30		274	44	30	K	7		034	303 1070	ST
R	1030	M80	30		278	48	27	K	13		035		ST
R	1130	M55	30		271	48	25	K	11		033		JS
R	1230	M65	30		254	50	25	K	11		029		ST
R	1330	M65	30		244	52	22	K	13		025		ST
R	1430	M65	30		244	54	21	K	11		026		ST
R	1530	M65	30		220	56	20	K	9		019	730 1570	CW
R	1630	M65	30		220	55	20	K	12		017		CW
R	1730	0	30		208	52	21	K	13		013		CW
R	1828	0	30		207	48	21	K	9		014		CW
R	1930	0	30		207	48	22	K	9		016		CW
R	2030	0	30		208	44	25	K	8		012		CW
R	2130	0	30		203	44	25	K	5		013	503	CW
R	2230	0	30		196	44	25	K	9		011		CW
R	2335	0	30		196	43	29	K	15		011		JD

☆ U. S. GOVERNMENT PRINTING OFFICE : 1951 O—[illegible]

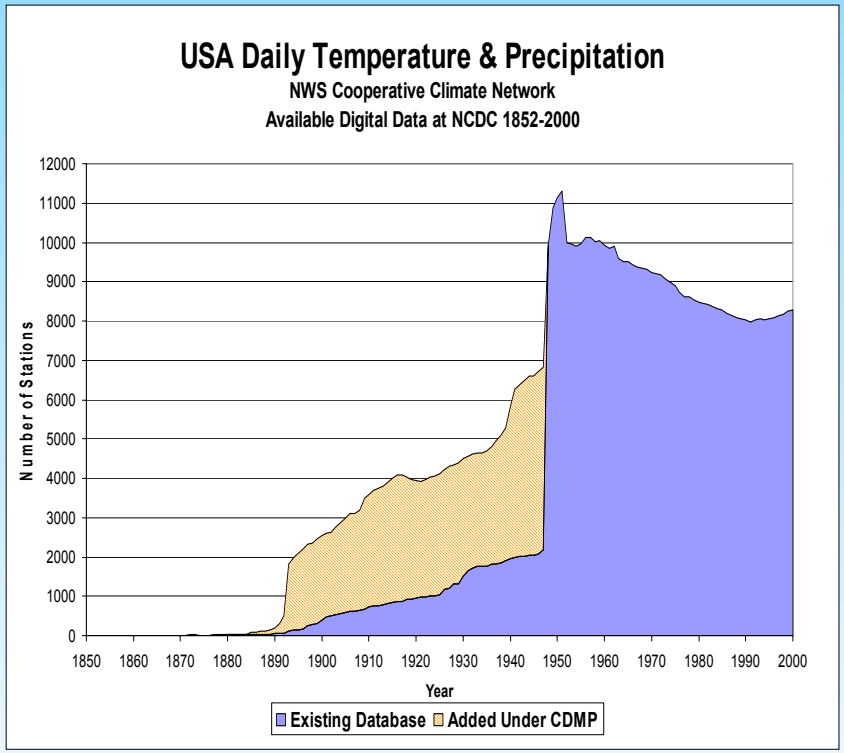
CDMP – Improving Data Access

- Cooperative Observations
  - 100,000 forms per year
  - 1995-2000 imaged
  - 1980-1994 being imaged
  - Web accessible via NCDC's WSSRD & on-line store systems



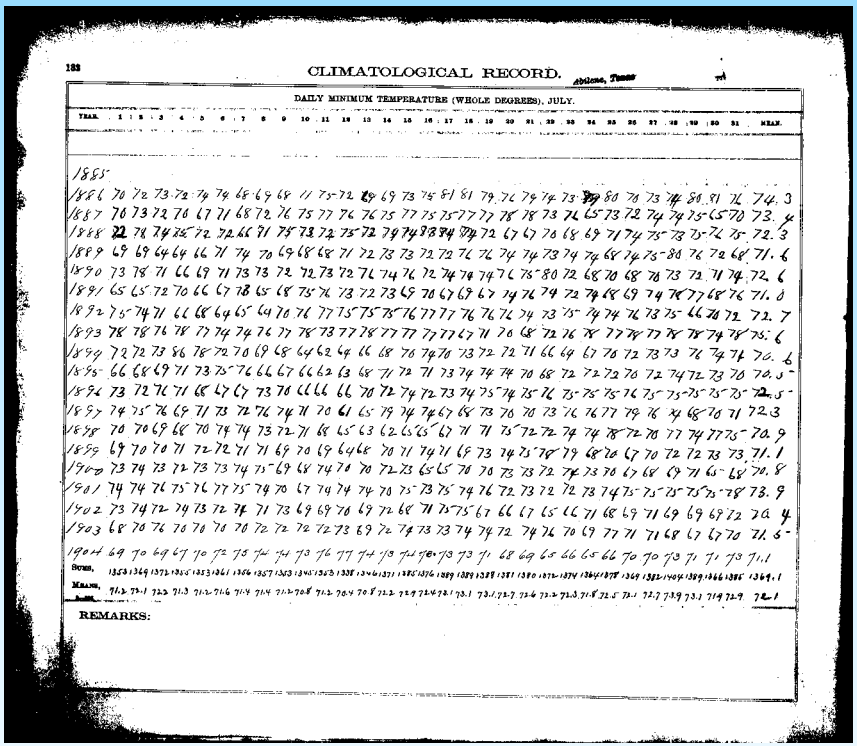
CDMP – Improving Data Access

- Cooperative Observations
  - Keying 1890-1948 daily observations
  - 171,850 station years
  - Being integrated into previously keyed database
  - Web accessible via NCDC's on-line store



CDMP - *Improving Data Access*

- Climate Record Books
  - Monthly climate summaries, 1860-1990
  - 175,000 images from microfilm
  - 60 unique summaries being keyed
  - Web accessible via NCDC's WSSRD & on-line store systems



CDMP - Improving Data Access

- Station History
  - Location & instrument history for 25,000 cooperative stations
  - 600,000 images from paper
  - Web accessible via NCDC's WSSRD system

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                NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION        (Page 1)
                          NATIONAL WEATHER SERVICE
                       COOPERATIVE STATION REPORT
Rendition:  12                                                        Network: ab

-------------------------  IDENTIFICATION SECTION  -------------------------

Station Name: CENTER                  Station No: 41-1578-04     SID: CENT2
State: TEXAS                          Station Type: 92           Region: 2
County: SHELBY                        Township:                  Range:
Latitude: 31°48'27"N                  Elev:     325 ft MSL       Section:
Longitude:  94° 9'51"W                Zero Datum:
Time Zone: CENTRAL                    Hydrologic Unit No: 12010004
Station Begin Date: 07/01/1922        River Basin: SABINE 12
Equipment is Located at:
OBSERVERS RESIDENCE WITHIN AND 1 MI NE OF PO AT CENTER TX

----------------------------  OBSERVER SECTION  ----------------------------
Observer 1:
  JAMES W FORBES                      DOS: 11/01/1968            Gender: M
  811 RAINBOW DRIVE                                     Telephones
  CENTER  TX  75935                                     Home: 936-598-3585

                                                        Office:    -    -NONE
Observer 2:
                                      DOS:                 Gender:

-----------------------  STATION MANAGEMENT SECTION  -----------------------

CPA: SHV   WFO: SHV   HSA: SHV   ET:       MISC1:       CWA: SHV   RFC: FWR

------------------- EXPOSURE/TOPOGRAPHY/DIRECTION SECTION -------------------

Exposure (AZIMUTH/RANGE/ELEV Nomenclature):
        MMTS 270/20  HOUSE 170-200/60/25  OPEN ALL OTHER QUADS


Topography:
        AWAY FROM CITY MOSTLY SMALL ROLLING HILLS WITH SCATTERED
        TO HEAVY TREE GROWTH                              LON/LAT = GPS

Driving Directions:
        FROM JCT. OF HWYS. 7 & 2788 EAST SIDE OF CITY; TAKE HWY. 1788 1 BLOCK
        TO RAINBOW DR., TURN LEFT ON RAINBOW DR. AND FOLLOW TO RESIDENCE
        LOCATED AT 811 RAINBOW DR.

-------------------------  MISCELLANEOUS SECTION  -------------------------

Remarks:


Reason for Report:
10. CHANGE OBSVR PHONE.  UPDATE.
Effective Date: 09/01/00              Authorization: "A" NETWORK
Date of Change: 11/24/00              B44 Signature: MARION KUYKENDALL DAPM/SHV

Distribution: NCDC-2,OS014,RHQ,DAPM/SHV RFC/FWR COE/FTW
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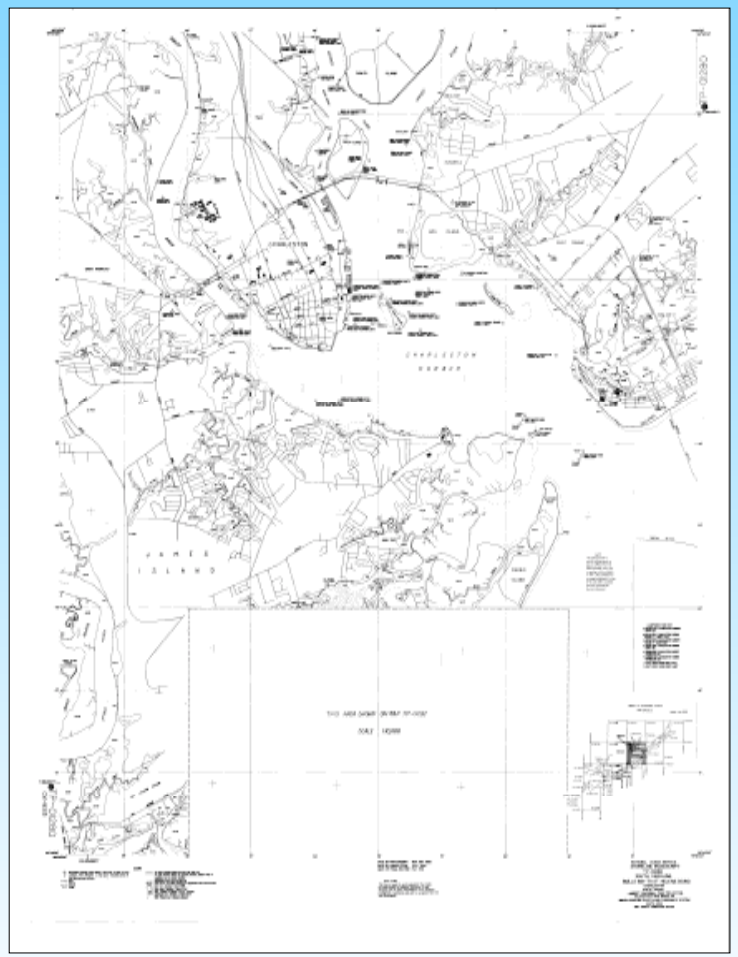
CDMP - Improving Data Access

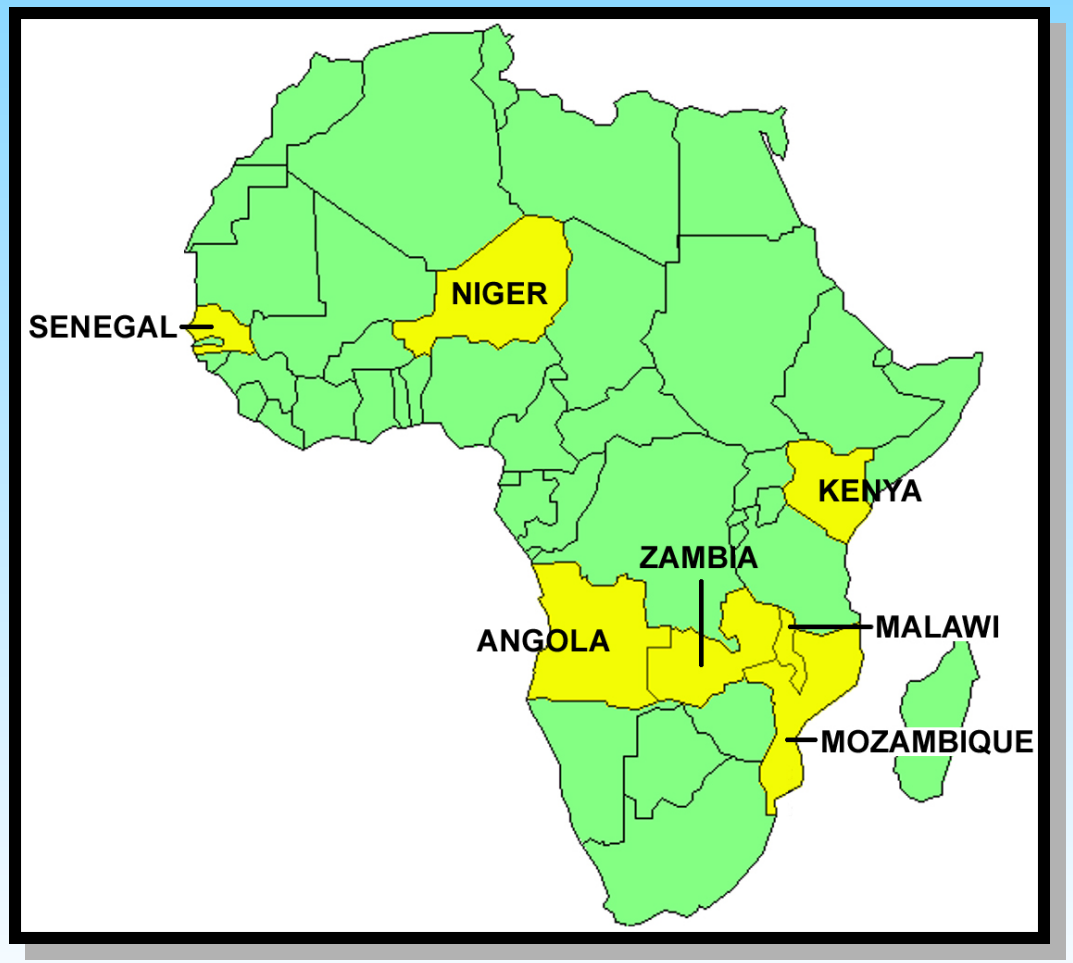
- National Shoreline Maps
  - 14,000 maps imaged
  - 2,000 maps vectorized for input to GIS
  - Web accessible through NOAA's Coastal Services Center



Climate Database Modernization Program
Utilizing a National Resource
CDMP

African Upper-Air Data

Goal: Provide the world community with a process to rescue hydrometeorological observations from developing countries and to provide those data in a secure media and an easy-to-use format.



African Upper-Air Data Project Objectives

1. Rescue historical upper-air hydrometeorological data from countries of: Angola, Kenya, Malawi, Mozambique, Niger, Senegal, and Zambia by copying vulnerable records onto a less vulnerable media;
2. Digitize rescued historical upper-air hydrometeorological data;
3. Provide equipment, software, and training to enable the national service to provide scanned and digitized upper-air data to the world community;

African Upper-Air Data Project Objectives Cont'

4. Provide the world community with a complete set of all available upper-air data and a process to ensure accuracy and currency of those data;
5. Provide the basis for an expansion of the process to include other developing countries as well as other data sets.

African Upper-Air Data

Project Completion: December 2002

Deliverables:

- Scanners; PCs; training to countries
- CD-ROMs of scanned data
- Complete upper-air data set of data from their country delivered to each country (digital and CD-ROM images)

Hurricane Mitch Recovery

Goal:

Conclusion

1. *What does data rescue mean? Just preserving or making it useful?*

2. *How should various projects be coordinated?*