

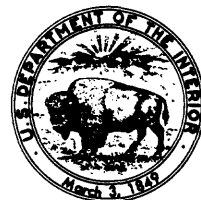
# HYDROLOGIC MONITORING IN THE AREA OF THE TENNESSEE-TOMBIGBEE WATERWAY, MISSISSIPPI-ALABAMA, FISCAL YEAR 1989

By Fred Morris III

---

U.S. GEOLOGICAL SURVEY  
Open-File Report 91-520

Prepared in cooperation with the  
U.S. ARMY CORPS OF ENGINEERS  
MOBILE DISTRICT



Jackson, Mississippi  
1991

U.S. DEPARTMENT OF THE INTERIOR  
MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY  
Dallas L. Peck, Director

---

For additional information write to:

U.S. Geological Survey  
Water Resources Division  
100 W. Capitol Street, Suite 710  
Jackson, MS 39269

U.S. Geological Survey  
Water Resources Division  
520 19th Avenue  
Tuscaloosa, AL 35401

Copies of this report can be purchased from:

U.S. Geological Survey  
Books and Open-File Reports  
Box 25425, Federal Center  
Denver, CO 80225

## CONTENTS

	Page
Abstract.....	1
Program changes for 1989.....	2
Hydrologic monitoring.....	2
Ground water .....	13
Network.....	13
Levels .....	13
Surface water .....	13
Network.....	13
Stage and discharge .....	13
Quality.....	14
Quality assurance.....	16
Ground-water levels.....	16
Surface-water stage and discharge.....	16
Water quality .....	16
Selected references.....	18
Appendixes.....	21
Explanation of codes and abbreviations contained in data tables in the appendixes.....	23
Appendix A--Ground-water data .....	25
Descriptions of wells.....	27
Hydrographs .....	33
Appendix B--Surface-water data.....	103
Descriptions of sites.....	105
Water-quality analyses .....	109

## ILLUSTRATIONS

	Page
1. Index map of study area .....	3
 Figures 2-10. Maps showing:	
2. Location of hydrologic monitoring sites in the Divide Section.....	4
3. Location of hydrologic monitoring sites in the vicinity of Pools D and E .....	5
4. Location of hydrologic monitoring sites in the vicinity of Pool C...	6
5. Location of hydrologic monitoring sites in the vicinity of Pool B...	7
6. Location of hydrologic monitoring sites in the vicinity of Pool A...	8
7. Location of hydrologic monitoring sites in the vicinity of Aberdeen Pool .....	9
8. Location of hydrologic monitoring sites in the vicinity of Columbus Pool.....	10
9. Location of hydrologic monitoring sites in the vicinity of Aliceville Pool.....	11
10. Location of hydrologic monitoring sites in the vicinity of Gainesville Pool.....	12

## CONVERSION FACTORS AND VERTICAL DATUM

<u>Multiply</u>	<u>By</u>	<u>To obtain</u>
inch (in.)	25.40	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
square mile (mi <sup>2</sup> )	2.590	square kilometer
acre-foot (acre-ft)	1,233	cubic meter
cubic foot per second (ft <sup>3</sup> /s)	0.02832	cubic meter per second
gallon per minute (gal/min)	0.06308	liter per second
micromho per centimeter at 25 °Celsius (umho/cm at 25 °C)	1.000	microsiemens per centimeter at 25 °Celsius

---

To convert degrees Celsius (°C) to Fahrenheit (°F), use the following:

$$^{\circ}\text{F} = \frac{9}{5}^{\circ}\text{C} + 32$$

**Sea level:** In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Sea Level Datum of 1929."

# **HYDROLOGIC MONITORING IN THE AREA OF THE TENNESSEE-TOMBIGBEE WATERWAY, MISSISSIPPI- ALABAMA, FISCAL YEAR 1989**

by Fred Morris III

---

## **ABSTRACT**

This report, the sixteenth in a series of annual reports, presents hydrologic data collected in the area of the Tennessee-Tombigbee Waterway during the fiscal year ending September 30, 1989. Included in this report are data on ground-water levels and surface-water stage, discharge, and quality. These data were obtained at the request of the U.S. Army Corps of Engineers, Mobile District, as part of a comprehensive program to monitor the hydrologic effects of construction and operation of the Waterway.

## **PROGRAM CHANGES FOR 1989**

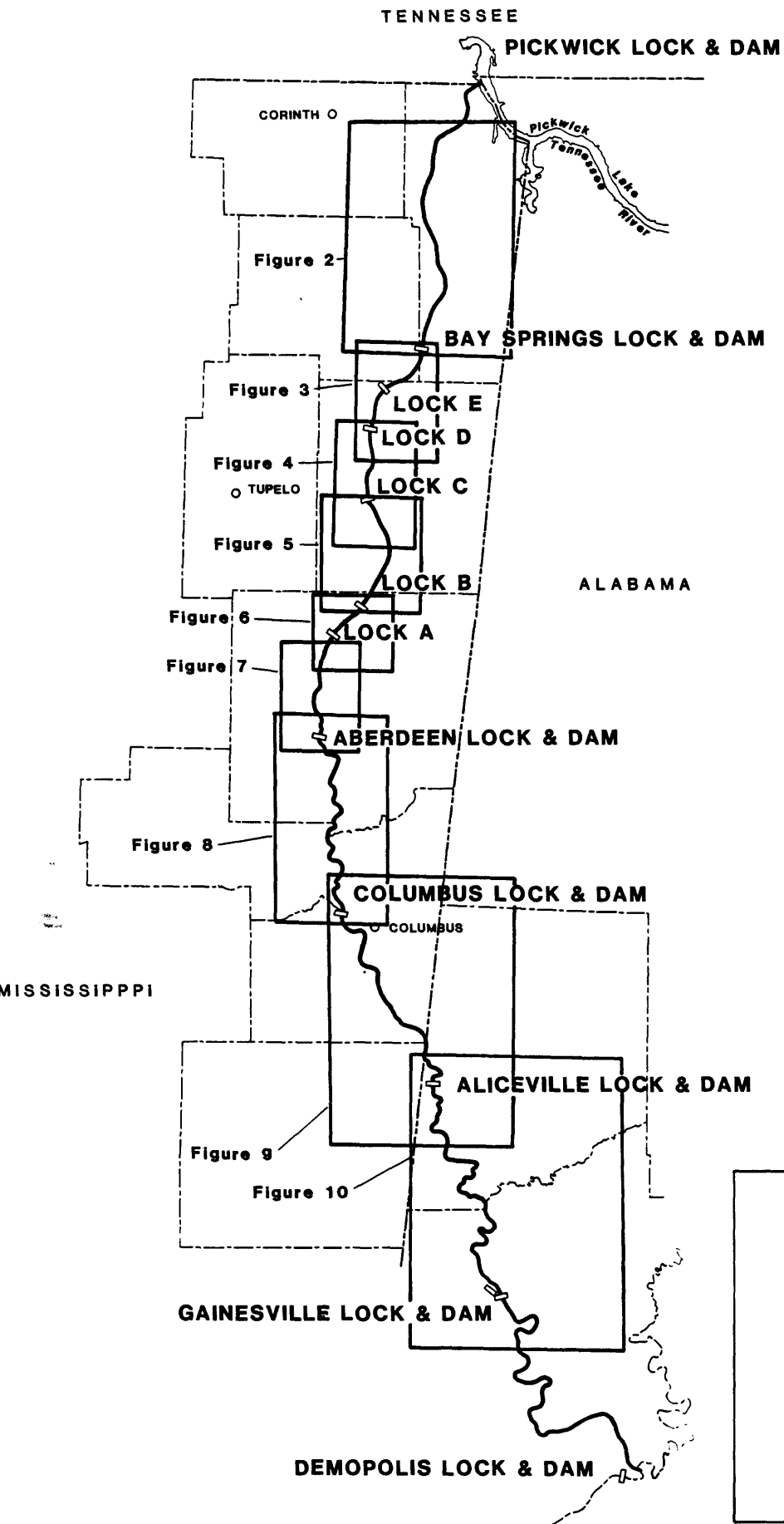
For Fiscal Year 1989 (FY89), the disposal area network was discontinued and the number of sites in the surface-water network at which water-quality data were collected was decreased from 26 to 15. Beginning in FY89, water-quality samples were analyzed by the U.S. Geological Survey (USGS).

## **HYDROLOGIC MONITORING**

Surface-water sites and observation wells in the original hydrologic monitoring network, used to define hydrologic conditions in the area of the Tennessee-Tombigbee Waterway prior to construction, are described by Brahana and others (1974) in the U.S. Army Corps of Engineers report, "First Supplemental Environmental Report, Continuing Environmental Studies, Tennessee-Tombigbee Waterway, Alabama and Mississippi." The present hydrologic monitoring network includes:

- Major aquifers that may have been stressed by the Waterway construction and operation;
- Surface-water sites near locks and dams where the effects of construction may have been greatest, or at sites of inflow or outflow;
- Areas of known or suspected hydrologic problems;
- Selected sites on and near Pickwick Lake and Demopolis Lake.

The purpose of the present hydrologic monitoring network is to document changes in the hydrologic environment that may occur during operation of the Waterway. The locations of all the hydrologic monitoring sites in the vicinity of the Waterway at which data have been collected since the beginning of the project are shown in figures 1 through 10, except for a few sites which are not shown because of the limited coverage of the maps (furnished by the U.S. Army Corps of Engineers, Mobile District).



**TENNESSEE-TOMBIGBEE WATERWAY  
HYDROLOGIC MONITORING PROGRAM**

**INDEX MAP**

PREPARED FOR  
MOBILE DISTRICT, CORPS OF ENGINEERS  
MOBILE, ALABAMA

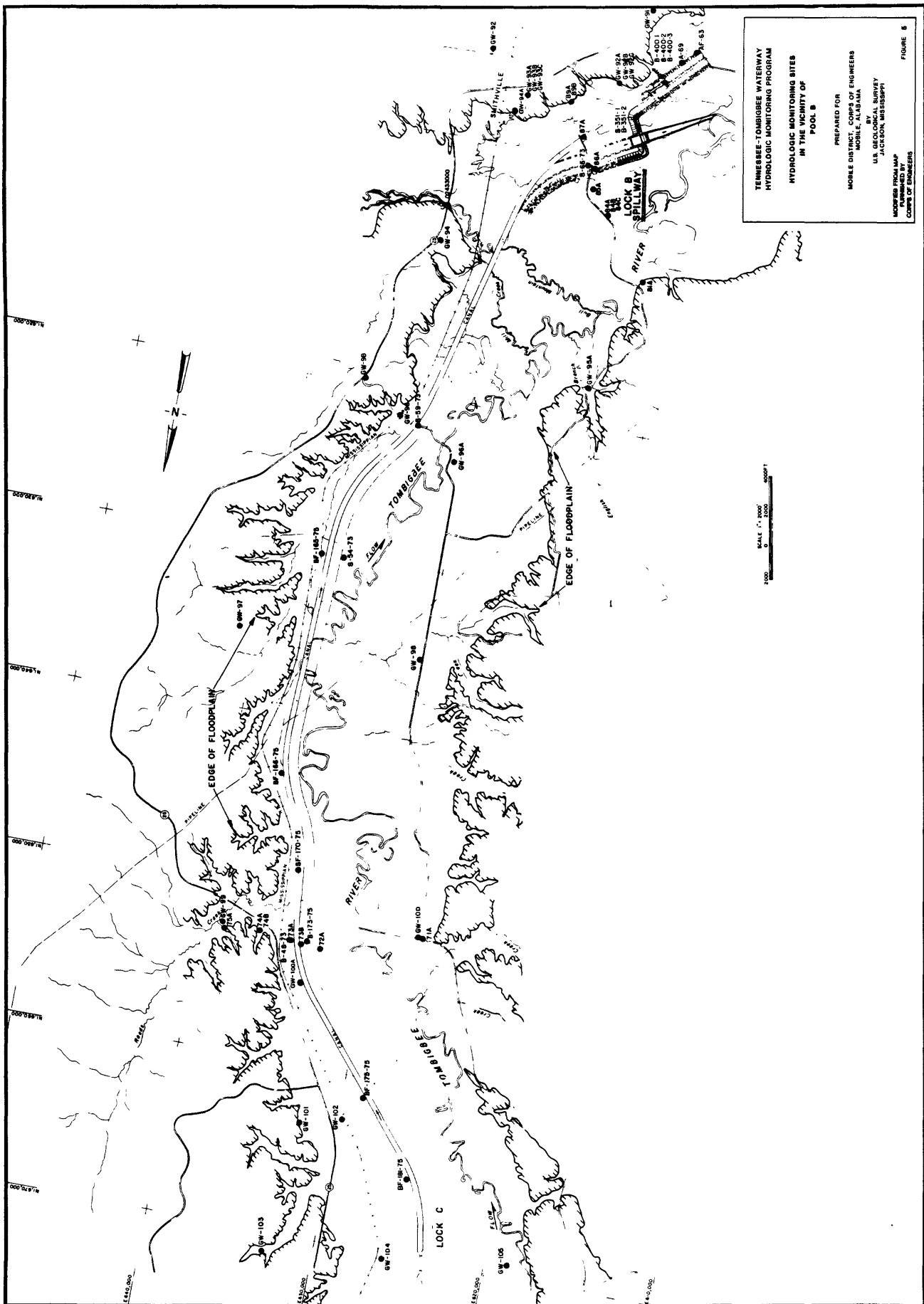
BY  
U.S. GEOLOGICAL SURVEY  
JACKSON, MISSISSIPPI

**FIGURE 1**

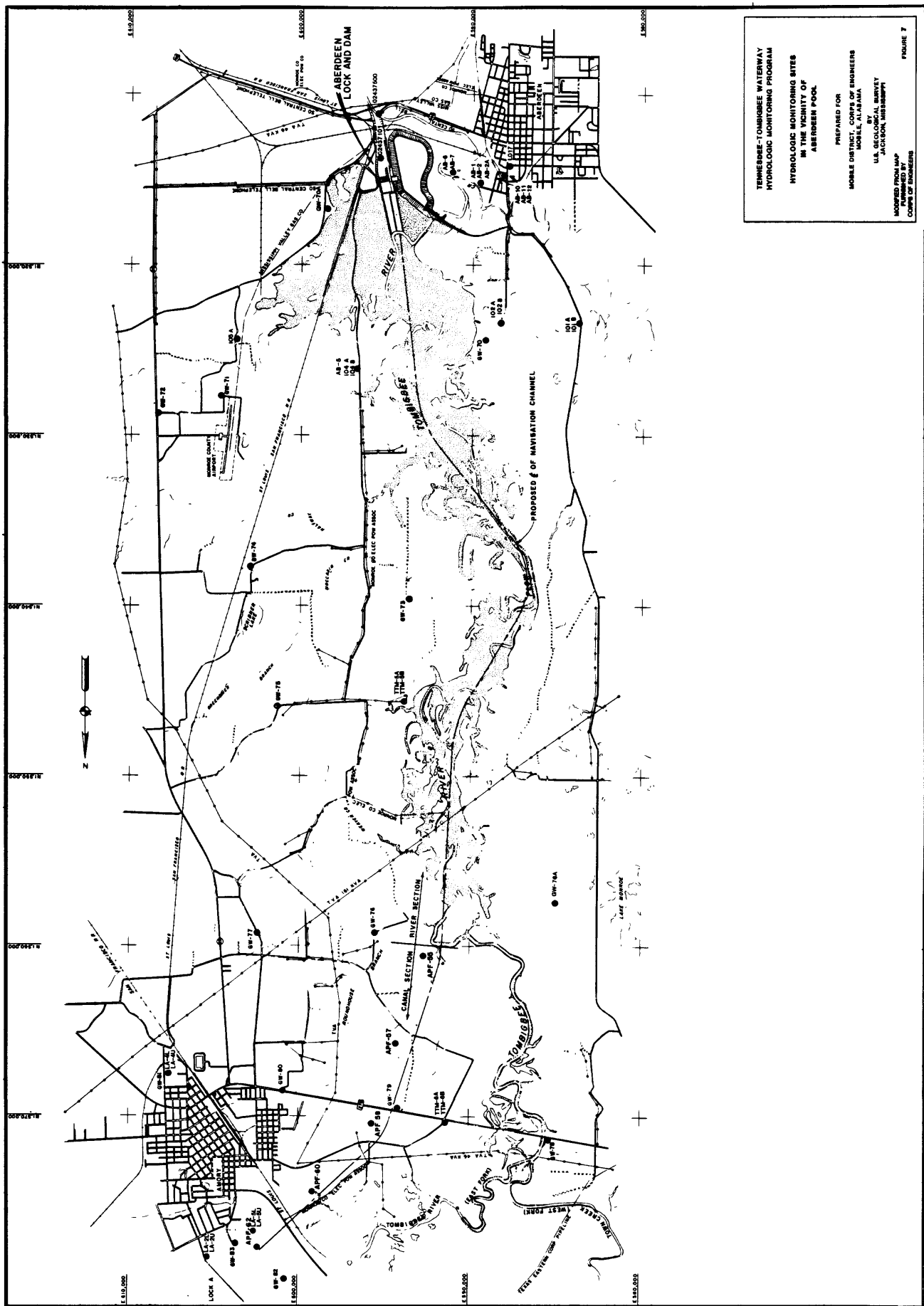




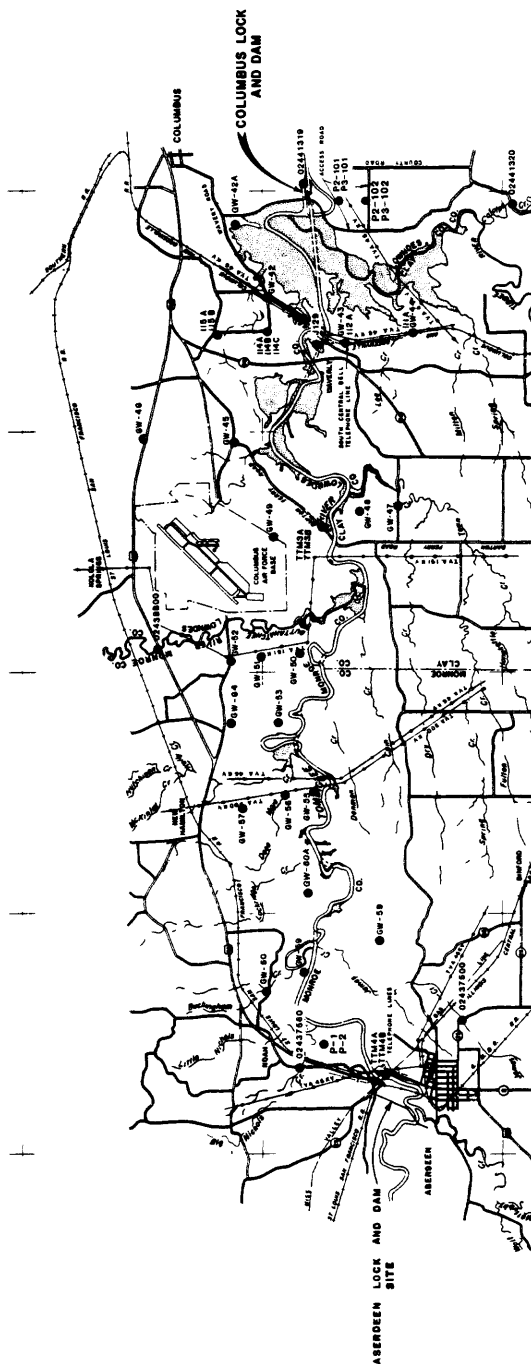








NOT SHOWN ON MAP  
 OZARKO MISSISSIPPI RIVER  
 BELOW HAMILTON, AL (7.1 INVER)  
 RIVER NEAR COLUMBUS, MISSISSIPPI  
 RIVER NEAR COLUMBUS, MISSISSIPPI



NOT SHOWN ON MAP  
 02441000  
 1177 INVER (7.1 INVER)  
 1177 INVER (7.1 INVER)

SCALE IN FEET  
 0 1000 2000

MISSISSIPPI-TOMBIGBEE WATERWAY  
 HYDROLOGIC MONITORING PROGRAM  
 HYDROLOGIC MONITORING SITES  
 IN THE VICINITY OF  
 COLUMBUS LOCK

PREPARED FOR  
 MOBILE DISTRICT, CORPS OF ENGINEERS  
 BY  
 U.S. GEOLOGICAL SURVEY  
 JACKSON, MISSISSIPPI

MODIFIED FROM MAP  
 PREPARED BY  
 CORPS OF ENGINEERS

FIGURE 8





## Ground Water

### Network

The present ground-water network consists of 267 wells in the regional aquifers and the shallower alluvial and terrace aquifers. The relation between shallow water-bearing units and regional aquifers is described by Brahana and others (1974). The descriptions of wells in the network are tabulated in Appendix A.

### Levels

Under natural conditions, water levels in wells fluctuate seasonally and reflect recharge to and discharge from aquifers. Water-level fluctuations ranging from less than 1 foot to more than 10 feet per year have been observed in the aquifers in the study area. Water-level fluctuations generally were larger in the alluvial and terrace aquifers than in the regional aquifers.

During FY89, water levels in 134 observation wells in the network were scheduled to be measured quarterly, 27 wells during the first and second quarters, and 106 during the first quarter only, by the USGS. However, 16 wells (11C, 14A, 14C, 23D, 23I, 23L, 23O, 42A, 43A, 43D, 45A, GW94, GW97, MW2-3, W8-1, and 6DP164) were dry or could not be measured because of obstructions in the wells. Hydrographs showing water-level variations in the wells for the period of USGS record are presented in Appendix A.

## Surface Water

### Network

The surface-water network, which is designed to monitor water quality, currently consists of 15 sites in the area of the Tennessee-Tombigbee Waterway. Descriptions of these sites are tabulated in Appendix B.

### Stage and Discharge

Surface-water stage and discharge data were collected at numerous sites (including most sites at which water-quality data were collected) in the area of the Tennessee-Tombigbee Waterway. The collection of stage and discharge data at these sites was funded by cooperative programs with various State and Federal agencies. Data collected at these sites are available either in the Jackson, Miss., or Tuscaloosa, Ala., office of the USGS.

## Quality

Water-quality data were collected by the USGS at 15 surface-water sites in the network during the 1989 reporting period (Appendix B). Five sites were added at the beginning of the 1989 reporting period; 16 sites were discontinued.

### New sites:

02433000	Bull Mountain Creek near Smithville, Miss.
02441400	Tombigbee River near Columbus, Miss.
02446500	Sipsey River near Elrod, Ala.
02448500	Noxubee River near Geiger, Ala.
02467001	Tombigbee River below Demopolis Lock and Dam, Ala.

### Discontinued sites:

343140088192235	TTW Bay Springs Lake Navigation Mile 412.3
02430005	Tenn-Tom Waterway below Bay Springs Lock and Dam, Miss.
342201088242935	TTW Lock "D" Pool Sedimentation Range 1AD
340103088285435	TTW Lock "A" Pool Sedimentation Range 1AA
02430100	Mackeys Creek near Moores Mill, Miss.
02437000	Tombigbee River near Amory, Miss.
335008088311335	TTW Aberdeen Lake Sedimentation Range 1A
02437101	Tombigbee River below Aberdeen Lock and Dam, Miss.
334219088281935	TTW Columbus Lake McKinley Creek Bend SR 50A
333119088291435	TTW Columbus Lake Sedimentation Range 1A
02441391	Tombigbee River below Columbus Lock and Dam, Miss.
02444158	Tombigbee River above Bevill Lock and Dam, Ala.
02444161	Tombigbee River below Bevill Lock and Dam, Ala.
02447020	Tombigbee River above Gainesville Lock and Dam, Ala.
02449000	Tombigbee River at Gainesville, Ala.
02466998	Tombigbee River above Demopolis Lock and Dam, Ala.

Data for site 02433000, Bull Mountain Creek near Smithville, Miss., and site 02441000, Tibbee Creek near Tibbee, Miss. may not represent water-quality conditions upstream of the sampling sites. Normal pool elevation of 245.00 feet above sea level for Pool B creates a stage of about 10.2 feet at the Bull Mountain Creek site; a normal pool elevation of 163.00 feet above sea level for Columbus Lake creates a stage of about 8.8 feet at the Tibbee Creek site, resulting in variable backwater conditions. Measurements of stream discharge were not obtained during backwater conditions.

Data for suspended-sediment concentration, particle-size distribution of suspended sediment, and particle-size distribution of stream bed material were collected at site 02436500, Town Creek near Nettleton, Miss. and site 02448000, Noxubee River at Macon, Miss. Data for suspended-sediment concentration and particle-size distribution of stream bed material were collected at the following sites:

332929088273300	TTW Aliceville Lake above Columbus Bend
02441498	Tombigbee River Columbus Bend SR 11B at Columbus, Miss.
332751088261000	TTW Aliceville Lake Columbus Cut
3321120882235	TTW Aliceville Lake above Hairston Bend
3321000882248	TTW Aliceville Lake Hairston Bend SR 11HB
02447008	Tombigbee River above Cooks Bend SR 5A near Warsaw, Ala.
02447010	Tombigbee River Cooks Bend near Warsaw, Ala.
325645088100700	TTW Gainesville Lake Cooks Bend Cut SR 4AD
323704087542400	TTW Demopolis Lake above Rattlesnake Bend SR 12CA
323653087540800	TTW Demopolis Lake Rattlesnake Bend SR RB1
323642087541800	TTW Demopolis Lake Rattlesnake Cut SR 12CB.

Data for suspended-sediment concentration was collected at the following sites:

02430500	Tombigbee River near Marietta, Miss.
02430680	Twentymile Creek near Guntown, Miss.
02430690	Twentymile Creek near Mantachie, Miss.
02431000	Tombigbee River near Fulton, Miss.
02431410	Mantachie Creek below Dorsey, Miss.
02433500	Tombigbee River at Bigbee, Miss.
02437000	Tombigbee River near Amory, Miss.
02437500	Tombigbee River at Aberdeen, Miss.
02439400	Buttahatchee River near Aberdeen, Miss.
02441400	Tombigbee River near Columbus, Miss.
02443500	Luxapallila Creek near Columbus, Miss.
3320300882122	TTW Aliceville Lake Hairston Cut
02444157	Tombigbee River at St Hwy 86 near Pickensville, Ala.
02444500	Tombigbee River near Cochrane, Ala.

Specific conductance and water temperature were measured daily, and miscellaneous samples were collected periodically at two sites on the lower Tombigbee River: site 02449000, Tombigbee River at Gainesville, Ala. (monthly), and site 02469762, Tombigbee River below Coffeerville Lock and Dam, Ala. (quarterly). The results of these USGS measurements and analyses are presented in Appendix B. Collection of these data was funded by cooperative agreements with various State and Federal agencies.

## QUALITY ASSURANCE

### Ground-Water Levels

The collection, analysis, and computation of ground-water level records are conducted in accordance with techniques and procedures established by the USGS and are within the guidelines recommended in the "National Handbook of Recommended Methods for Water-Data Acquisition" (Office of Water Data Coordination, 1977).

### Surface-Water Stage and Discharge

The collection, analysis, and computation of surface-water stage and discharge records are conducted in accordance with procedures described in a series entitled "Techniques of Water-Resources Investigations of the U.S. Geological Survey" (TWRI). Field activities are presented in three chapters entitled "General Procedure for Gaging Streams" (Carter and Davidian, 1968); "Stage Measurements at Gaging Stations" (Buchanan and Somers, 1968); and "Discharge Measurements at Gaging Stations" (Buchanan and Somers, 1969); and more recently in Water-Supply Paper 2175, "Measurement and Computation of Streamflow: Volume 1, Measurement of Stage and Discharge" (Rantz and others, 1982). Daily discharge is computed in conformance with procedures described in Water Supply Paper 2175, "Measurement and Computation of Streamflow: Volume 2, Computation of Discharge" (Rantz and others, 1982). All these procedures are within the guidelines recommended in the "National Handbook of Recommended Methods for Water-Data Acquisition" (Office of Water Data Coordination, 1977).

### Water Quality

Procedures used by the USGS in the collection and analysis of samples of water and bottom materials are in conformance with the methods of laboratory analysis and sample preservation and handling described in TWRI Chapter A1, Book 5, "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments" (Fishman and Friedman, 1989).

Water samples collected as a part of this investigations were analyzed in one of the National Water-Quality Laboratories of the Water Resources Division, USGS. The National Water Quality Laboratories have an effective quality control program that includes the use of duplicate samples and standard reference water samples. TWRI "Quality Assurance Practices for the Chemical and Biological Analysis of Water and Fluvial Sediments"

(Friedman and Erdmann, 1982) describes quality control techniques, quality assurance practices, and statistical techniques used by the National Water-Quality Laboratories.

The methods used in the collection and analyses of bacteriological samples are given in TWRI "Methods for collection and Analysis of Aquatic Biological and Microbiological Samples" (Britton and Greeson, 1989). All bacteriological analyses were performed in the field within a few hours after the samples were collected.

The methods used in the collection and analyses of suspended-sediment samples are given in TWRI "Field Methods for Measurement of Fluvial Sediment" (Guy and Norman, 1970) and "Laboratory Theory and Methods for Sediment Analysis" (Guy, 1969).

Procedures used for water-quality field data collection are in accordance with techniques established by the USGS and are within the guidelines recommended in the "National Handbook of Recommended Methods for Water-Data Acquisition" (Office of Water Data Coordination, 1977).

## SELECTED REFERENCES

- Brahana, J.V., German, E.R., Davis, M.E., and Wasson, B.E., 1974, Predicted effects of the Tennessee-Tombigbee Waterway on the hydrologic environment, Mississippi-Alabama *in* First supplemental environmental report, continuing environmental studies, Tennessee-Tombigbee Waterway, Alabama and Mississippi: U.S. Army Corps of Engineers, Mobile District, v. 2, 3, and 4.
- Britton, L.J., and Greeson, P.E., editors, 1989, Methods for collection and analysis of aquatic biological and microbiological samples, Chapter A4 of Book 5, Laboratory analyses: U.S. Geological Survey Techniques of Water-Resources Investigations, 363 p.
- Buchanan, T.J., and Somers, W.P., 1968, Stage measurements at gaging stations, Chapter A7 of Book 3, Applications of hydraulics: U.S. Geological Survey Techniques of Water-Resources Investigations, 28 p.
- 1969, Discharge measurements at gaging stations, Chapter A8 of Book 3, Applications of hydraulics: U.S. Geological Survey Techniques of Water-Resources Investigations, 65 p.
- Carter, R.W., Davidian, Jacob, 1968, General procedure for gaging streams, Chapter A6 of Book 3, Applications of hydraulics: U.S. Geological Survey Techniques of Water-Resources Investigations, 13 p.
- Fishman, M.J., and Friedman, L.C., 1989, Methods for determination of inorganic substances in water and fluvial sediments, Chapter A1 of Book 5, Laboratory analysis: U.S. Geological Survey Techniques of Water-Resources Investigations, 545 p.
- Friedman, L.C., and Erdmann, D.E., 1982, Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, Chapter A6 of Book 5, Laboratory analysis: U.S. Geological Survey Techniques of Water-Resources Investigations, 181 p.
- Guy, H.P., 1969, Laboratory theory and methods for sediment analysis, Chapter C1 of Book 5, Laboratory analysis: U.S. Geological Survey Techniques of Water-Resources Investigations, 58 p.
- Guy, H.P., and Norman, V.W., 1970, Field methods for measurement of fluvial sediment, Chapter C2 of Book 3, Application of hydraulics: U.S. Geological Survey Techniques of Water-Resources Investigations, 59 p.
- Leake, S.A., 1977, Simulation of flow to a partially penetrating trench: U.S. Geological Survey Journal of Research, v. 5, no. 5, 15 p.

- Morris, Fred, III, 1983, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1982: U.S. Geological Survey Open-File Report 83-764, 189 p.
- 1984, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1983: U.S. Geological Survey Open-File Report 84-717, 174 p.
- 1985, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1984: U.S. Geological Survey Open-File Report 85-692, 152 p.
- 1986, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1985: U.S. Geological Survey Open-File Report 86-493, 311 p.
- 1988, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1986: U.S. Geological Survey Open-File Report 88-321, 500 p.
- 1991, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1987: U.S. Geological Survey Open-File Report 91-447, 245 p.
- 1991, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1988: U.S. Geological Survey Open-File Report 91-511, 231 p.
- Office of Water Data Coordination, U.S. Geological Survey, 1977: National handbook of recommended methods for water-data acquisition.
- Rantz, S.E., and others, 1982, Measurement and computation of streamflow: U.S. Geological Survey Water-Supply Paper 2175, v. 1 and 2, 631 p.
- Seaber, P.R., Kapinos, F.P., and Knapp, G.L., 1987, Hydrologic unit maps: U.S. Geological Survey Water-Supply Paper 2294, 63 p.
- Shell, J.D., 1976, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, July 1974 through June 1975: U.S. Geological Survey open-file report, 252 p.
- 1977, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, July 1975 through September 1976: U.S. Geological Survey open-file report, 227 p.

- Shell, J.D., 1978, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1977: U.S. Geological Survey open-file report, 155 p.
- 1979, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1978: U.S. Geological Survey open-file report, 198 p.
- 1980, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1979: U.S. Geological Survey open-file report, 153 p.
- Tomaszewski, D.J., 1981, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1980: U.S. Geological Survey Open-File Report 81-546, 142 p.
- 1982, Hydrologic monitoring in the area of the Tennessee-Tombigbee Waterway, Mississippi-Alabama, Fiscal Year 1981: U.S. Geological Survey Open-File Report 82-503, 140 p.

## APPENDIXES

EXPLANATION OF CODES AND ABBREVIATIONS CONTAINED IN DATA TABLES  
IN THE APPENDIXES

PRINCIPAL AQUIFER

Geologic unit code	Aquifer name and age
110ALVM	Quaternary alluvium, Quaternary
110TRCS	Undifferentiated terrace deposits, Quaternary
211TBGB	Tombigbee Sand Member of Eutaw Formation, Upper Cretaceous
211EUTW	Eutaw Formation, Upper Cretaceous
211EUTWR	Eutaw Formation (Restricted), Upper Cretaceous
211EUTWL	Lower Eutaw Formation, Upper Cretaceous
211MCSN	McShan Formation, Upper Cretaceous
211GORD	Gordo Formation, Upper Cretaceous
330MSSP	Mississippian System, Mississippian

HYDROLOGIC UNIT

An eight-digit hydrologic unit code refers to a specific drainage basin as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps (Seaber and others, 1987).

WATER-QUALITY REMARKS

Remark Code	Remark
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)

**APPENDIX A**  
**GROUND-WATER DATA**

**APPENDIX A**

**GROUND-WATER DATA**

**DESCRIPTIONS OF WELLS**

DESCRIPTIONS OF GROUND-WATER WELLS

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAM- ETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
ALCORN COUNTY								
L034	USCE NW1-1	211GORD	NENES32T03SR09E	04/28/1978	500	280	1.50	--
L036	USCE NW1-3	211EUTW	NESES32T03SR09E	05/12/1978	500	207	1.50	--
L038	USCE NW2-2	211GORD	NWNES06T04SR09E	04/06/1978	600	400	1.50	--
L040	USCE NW2-3	211EUTW	NWNES06T04SR09E	04/13/1978	580	327	1.50	--
L042	USCE NW3-2	211GORD	NENWS01T04SR08E	04/28/1980	590	398	1.50	--
L043	USCE NW3-3	211EUTW	NENWS01T04SR08E	06/09/1980	590	320	1.50	--
L047	USCE W4-2	211EUTW	SESES06T03SR09E	04/02/1981	600	259	3	--
L048	USCE W4-3	211EUTW	SESES06T03SR09E	04/01/1981	600	315	3	--
L049	USCE W7-1	211GORD	SWSWS17T03SR09E	03/26/1982	600	430	1.50	--
L050	USCE W7-2A	211EUTW	SWSWS17T03SR09E	--/--/1981	600	380	1.50	--
L051	USCE W8-1	211GORD	SESES05T04SR09E	03/21/1982	537	340	1.50	--
L052	USCE W8-2	211GORD	SESES05T04SR09E	03/28/1983	537	263	3	--
ITAWAMBA COUNTY								
A023	USCE GW118	211MCSN	SESES36T07SR08E	07/08/1975	325.70	23	1.50	--
A024	USCE GW119	110ALVM	NESES35T07SR08E	07/10/1975	295	38	1.50	--
A025	USCE GW120	110ALVM	SESES34T07SR08E	07/14/1975	297.20	21	1.50	--
B005	USCE GW117	110ALVM	SWSWS29T07SR09E	07/16/1975	359.20	21	1.50	--
B008	USCE P601B	211GORD	SWSWS21T07SR09E	05/16/1978	440	187	1.50	--
B009	USCE P602B	211GORD	NWNES28T07SR09E	06/23/1978	450	200	1.50	--
D039	USCE CF87	211EUTW	NWSES25T08SR08E	10/01/1975	271.10	66	1.50	--
D040	USCE GW110	110ALVM	NENES12T09SR08E	07/02/1975	282.70	23	1.50	--
D041	USCE GW112A	110ALVM	NENWS25T08SR08E	06/19/1975	275	28	1.50	--
D042	USCE GW115	110ALVM	SESES10T08SR08E	07/15/1975	299.20	29	1.50	--
D043	USCE GW116	211EUTW	SESWWS06T08SR09E	07/08/1975	333.50	30	1.50	--
D044	USCE GW116A	110ALVM	SWSSES01T08SR08E	06/17/1980	285	25	1.50	--
D045	USCE P500B	211GORD	SWSSES25T08SR08E	08/28/1978	290	124	1.50	--
D046	USCE P501B	211GORD	SESES24T08SR08E	05/01/1978	308.50	152	1.50	--
E005	USCE 65A	211GORD	NESES18T08SR09E	05/18/1972	325	130	4	7.0
E009	USCE GW113	110ALVM	SWNES17T08SR09E	07/07/1975	329.50	26	1.50	--
E010	USCE GW114	110ALVM	NESES18T08SR09E	07/03/1975	311.70	12	1.50	--
E011	USCE P503B	211GORD	NWNES30T08SR09E	05/15/1978	420	221	1.50	--
G065	USCE 67A	211GORD	SWSSES27T09SR08E	08/12/1975	270	179	4	--
G066	USCE 67B	211EUTW	SWSSES27T09SR08E	08/13/1975	270	71	4	--
G067	USCE GW106B	211GORD	SWSSES25T09SR08E	04/19/1978	284	175	6	--
G068	USCE GW106A	110ALVM	SWSSES25T09SR08E	04/19/1978	290	10	2	--
G070	USCE GW104C	110ALVM	NWSWS26T09SR08E	01/01/1980	260	24	2	--
G072	USCE C38	110ALVM	SWNWS25T09SR08E	04/12/1973	263.20	33	1.50	--
G074	USCE GW104A	211GORD	NESWS36T09SR08E	04/20/1978	290	88	1.50	--
G075	USCE GW104B	211GORD	NESWS36T09SR08E	04/20/1978	290	138	1.50	--
G076	USCE GW105	110ALVM	NESES34T09SR08E	07/11/1975	254.60	29	1.50	--
G077	USCE GW107	110ALVM	SWSSES27T09SR08E	07/02/1975	273.30	31	1.50	--
G078	USCE GW108	211EUTW	NESWS13T09SR08E	07/02/1975	284.50	14	1.50	--
G079	USCE GW108B	211GORD	NESWS13T09SR08E	04/27/1978	284.50	150	1.50	--
G080	USCE GW109	110ALVM	NWSWS15T09SR08E	07/03/1975	278.20	24	1.50	--
G081	USCE GW109B	211GORD	NWSWS15T09SR08E	05/05/1978	278.20	198	1.50	--
G082	USCE GW111	110ALVM	SESWWS02T09SR08E	07/23/1975	270.90	35	1.50	--
G083	USCE GW112	110ALVM	NWSWS03T09SR08E	09/01/1975	292.90	24	1.50	--
G084	USCE GW104	110ALVM	SWNWS36T09SR08E	07/01/1975	240	26	2	--
K039	USCE 71A	211GORD	NENWS24T10SR08E	06/20/1972	273	170	4	7.0
K041	USCE GW100	110ALVM	NENES24T10SR08E	06/24/1975	269.20	21	1.50	--
K042	USCE BF179-75	211GORD	NENES12T10SR08E	01/14/1976	250	46	2	--
L014	USCE 74A	211GORD	SWSWS17T10SR09E	06/22/1972	270	150	4	200
L016	USCE 75A	211GORD	SWSSES17T10SR09E	06/22/1972	300	144	4	195
L017	USCE 72A	110ALVM	NWSES18T10SR09E	06/11/1972	249	21	4	7.0
L021	USCE BF170-75	211EUTW	NESES19T10SR09E	08/20/1975	247.50	67	1.50	--
L022	USCE BF173-75	211GORD	NESES18T10SR09E	07/15/1975	252.20	51	1.50	--
L023	USCE GW99	110ALVM	SWSSES17T10SR09E	06/26/1975	282.80	30	1.50	--
L024	USCE GW100A	110ALVM	NWNWS18T10SR09E	07/08/1980	255	32	1.50	--
L025	USCE GW101	110ALVM	SESWWS06T10SR09E	06/26/1975	304.80	21	1.50	--
L026	USCE GW102	110ALVM	SESES01T10SR08E	06/22/1975	277.10	21	1.50	--
N028	USCE 81A	211GORD	NESWS26T11SR08E	07/13/1972	246	180	4	8.0
N029	USCE GW95A	110ALVM	SESES23T11SR08E	06/16/1975	242.40	35	1.50	--
O010	USCE GW94	110ALVM	SESES20T11SR09E	06/18/1975	278	23	1.50	--
O011	USCE GW95	110ALVM	SWSWS17T11SR09E	06/19/1975	325.40	29	1.50	--
O012	USCE GW96	110ALVM	NWSES18T11SR09E	06/20/1975	262.90	23	1.50	--
O013	USCE GW96A	110ALVM	SWNWS20T11SR09E	06/22/1975	238.60	24	1.50	--
O014	USCE GW97	110ALVM	SESWWS14T10SR09E	06/25/1975	393.90	60	1.50	--
O015	USCE GW98	110ALVM	SWSWS31T10SR09E	06/23/1975	267.20	23	1.50	--

DESCRIPTIONS OF GROUND-WATER WELLS--Continued

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAM- ETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
MONROE COUNTY								
B068	USCE APF58	211EUTW	NENWS34T12SR19W	01/15/1976	210	60	2	--
C051	USCE 84A	211GORD	NWNWS36T11SR08E	06/29/1972	234	170	4	30
C052	USCE 84B	211GORD	NWNWS36T11SR08E	07/10/1972	234	110	4	10
C053	USCE 84C	110ALVM	NWNWS36T11SR08E	07/10/1972	234	27	4	10
C054	USCE 85A	110ALVM	SWNWS36T11SR08E	07/11/1972	235	21	4	18
C057	USCE 89A	211GORD	SWNES01T12SR08E	06/30/1972	245	166	4	20
C058	USCE 89B	211MCSN	SWNES01T12SR08E	07/06/1972	245	45	4	2.0
C061	USCE 91A	211MCSN	SWSWS17T12SR08E	07/---/1972	218	88	4	--
C062	USCE 92A	211GORD	NWSWS20T12SR08E	07/---/1972	216	200	4	--
C068	USCE 92B	110ALVM	NWSWS20T12SR08E	08/30/1972	216	19	4	7.0
C069	USCE 91B	110ALVM	SWSWS17T12SR08E	08/---/1972	218	20	4	4.0
C070	USCE 96B	110TRCS	SWSES20T12SR18W	08/---/1972	257	16	24	--
C080	USCE TTM6A	211TBGB	NENES33T13SR19W	05/14/1975	210	65	4	--
C081	USCE TTM6B	110ALVM	NENES33T13SR19W	05/16/1975	210	38	6	--
C085	USCE A1A	110ALVM	SWSWS20T12SR08E	06/17/1982	215	5	1.50	--
C086	USCE A1	110ALVM	SWSWS20T12SR08E	06/17/1982	215	24	1.50	--
C087	USCE A2	110ALVM	NWNWS29T12SR08E	06/18/1982	215	29	1.50	--
C088	USCE A2A	110ALVM	NWNWS29T12SR08E	06/18/1982	215	5	1.50	--
C089	USCE A3	110ALVM	NWNWS29T12SR08E	06/21/1982	215	25	1.50	--
C090	USCE A3A	110ALVM	NWNWS29T12SR08E	07/01/1982	215	5	1.00	--
C092	USCE GW80	110ALVM	SWNES35T12SR19W	05/28/1975	236.40	33	1.50	--
C093	USCE GW81	110ALVM	NESES36T12SR19W	05/29/1975	235.70	25	1.50	--
C094	USCE GW83	110ALVM	SESES30T12SR08E	06/02/1975	213.20	33	1.50	--
C095	USCE GW85	110ALVM	SWSES20T12SR18W	06/10/1975	257.60	26	1.50	--
C096	USCE GW86	110ALVM	NWNES19T12SR18W	06/09/1975	247.10	24	1.50	--
C097	USCE GW86A	110ALVM	NESWS21T12SR08E	06/23/1980	210	31	1.50	--
C098	USCE GW87	110ALVM	SENWS16T12SR18W	06/18/1975	258	30	1.50	--
C099	USCE GW88	110ALVM	SWSWS15T12SR08E	06/05/1975	244.20	24	1.50	--
C100	USCE GW89	110ALVM	SESWS09T12SR08E	06/04/1975	225.20	30	1.50	--
C101	USCE GW90	110ALVM	NENWS13T12SR08E	06/13/1975	270	26	1.50	--
C102	USCE GW91	110ALVM	SENES11T12SR08E	06/12/1975	261.30	23	1.50	--
C105	USCE GW92B	211EUTW	NWSWS01T12SR08E	04/14/1975	257.30	122	1.50	--
C106	USCE GW92C	211EUTW	NWSWS01T12SR08E	04/14/1975	257.40	100	1.50	--
C107	USCE LA2L	211GORD	SWNWS24T12SR19W	05/01/1975	220	147	1.50	--
C108	USCE LA2U	211EUTW	SWNWS24T12SR19W	05/02/1975	220	67	1.50	--
C109	USCE LA4L	211GORD	NESES36T12SR19W	05/03/1975	235	190	1.50	--
C110	USCE LA4U	211EUTW	NESES36T12SR19W	05/04/1975	235	122	1.50	--
C111	USCE LA5L	211GORD	SWSES30T12SR08E	05/05/1975	210	205	1.50	--
C112	USCE LA5U	211EUTW	SWSES30T12SR08E	05/06/1975	210	57	1.50	--
C113	USCE AF63	211EUTW	SWSES03T12SR08E	01/20/1976	230	54	2	--
D032	USCE GW92	110ALVM	NESWS06T12SR09E	06/11/1975	266.70	20	1.50	--
D033	USCE GW93A	211GORD	SWNWS06T12SR09E	05/15/1975	259.20	178	1.50	--
D034	USCE GW93B	211EUTW	SWNWS06T12SR09E	05/15/1975	259.40	102	1.50	--
D035	USCE GW93C	110ALVM	SWNWS06T12SR09E	05/15/1975	259.40	20	1.50	--
D036	USCE GW94A	110ALVM	NWNWS06T12SR09E	06/26/1975	255	27	1.50	--
G052	USCE APF55	211EUTW	NESWS03T13SR19W	08/05/1975	205.70	69	1.50	--
G053	USCE APF57	211EUTW	SESWS34T12SR19W	07/22/1975	207.30	50	1.50	--
G054	USCE GW73	110ALVM	SESWS27T13SR07E	05/23/1975	198	32	1.50	--
G055	USCE GW74	110ALVM	SWNWS36T13SR19W	05/26/1975	214.30	32	1.50	--
G056	USCE GW76	110ALVM	NWNES10T13SR19W	06/02/1975	203.40	45	1.50	--
G057	USCE GW76A	110ALVM	NWSES15T13SR07E	06/18/1975	202.40	25	1.50	--
G058	USCE GW77	110ALVM	NENES11T13SR19W	05/31/1975	234.20	46	1.50	--
G059	USCE GW78	110ALVM	NENWS03T13SR07E	05/20/1975	205.30	36	1.50	--
G060	USCE GW75	110ALVM	NWSES23T13SR19W	05/21/1975	200	30	2	--
H018	USCE TTM5B	110ALVM	SESWS22T13SR19W	05/08/1975	200	26	6	--
L062	USCE 105A	211EUTW	SWSWS19T14SR19W	08/11/1972	210	64	4	--
L063	USCE 101A	211EUTW	SWSWS15T14SR07E	08/09/1972	202	90	4	--
L064	USCE 102A	211EUTW	NWNWS23T14SR07E	08/04/1972	191	50	4	--
L065	USCE 104A	211EUTW	SESES10T14SR19W	08/14/1972	194	55	4	--
L067	USCE 104B	110ALVM	SESES10T14SR19E	08/15/1972	194	24	4	--
L068	USCE 102B	110ALVM	NWNWS23T14SR07E	08/07/1972	191	30	4	--
L069	USCE 101B	110TRCS	SWSWS15T14SR07E	08/09/1972	202	20	4	--
L075	USCE AB11	211MCSN	SWSWS26T14SR07E	12/11/1976	200	224	4	--
L077	USCE AB10	211EUTW	SWSWS26T14SR07E	12/15/1976	200	145	4	--
L078	USCE AB12	211EUTW	SWSWS26T14SR07E	12/17/1976	200	90	4	--
L084	USCE AB1	211EUTW	NWSWS26T14SR07E	10/28/1976	195	80	1.50	--
L085	USCE AB2	211EUTW	NWSWS26T14SR07E	10/28/1976	195	146	1.50	--
L086	USCE AB2A	211EUTW	NWSWS26T14SR07E	11/06/1976	195	119	1.50	--
L087	USCE AB5	211EUTW	NESES10T14SR19W	10/14/1976	192	150	1.50	--
L088	USCE AB6	211EUTW	NWSWS26T14SR07E	11/07/1976	190	70	1.50	--

DESCRIPTIONS OF GROUND-WATER WELLS--Continued

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAM- ETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
MONROE COUNTY--Continued								
L089	USCE AB7	211EUTW	NWSWS26T14SR07E	11/07/1976	187.40	133	1.50	--
L090	USCE GW70	110ALVM	SWSWS14T14SR07E	05/28/1975	193.30	26	1.50	--
L091	USCE GW70A	110ALVM	NWNWS23T14SR19W	06/17/1980	193	27	1.50	--
L092	USCE GW71	110ALVM	NENWS12T14SR19W	05/15/1975	225.40	32	1.50	--
L093	USCE GW72	110ALVM	SESES01T14SR19W	05/19/1975	220.80	30	1.50	--
L095	USCE P1	211EUTW	NENWS35T14SR19W	10/05/1982	190	38	1.50	--
L096	USCE P2	211EUTW	NENWS35T14SR19W	10/01/1982	190	42	1.50	--
PRENTISS COUNTY								
D028	USCE MW1-2	211EUTW	NWNES33T04SR09E	08/18/1977	510	158	1.50	--
D030	USCE MW1-4	211GORD	NENES33T04SR09E	09/04/1978	510	285	1.50	--
D032	USCE MW2-2	211GORD	NESES10T04SR09E	03/18/1980	440	220	1.50	--
D033	USCE MW2-3	211EUTW	NESES10T04SR09E	03/25/1980	440	181	1.50	--
D036	USCE W1-1	211GORD	SWNWS08T04SR09E	07/07/1980	580	371	1.50	--
D037	USCE W1-2	211EUTW	SWNWS08T04SR09E	07/07/1980	580	280	1.50	--
D039	USCE W3-1	211GORD	SESWS15T04SR09E	12/04/1980	500	215	1.50	--
D040	USCE W3-2	211EUTW	SESWS15T04SR09E	12/10/1980	500	180	1.50	--
H026	USCE SW2-3	211GORD	SWSES10T05SR09E	12/13/1977	480	217	1.50	--
H028	USCE SW3-2	211GORD	SWNWS16T05SR09E	02/04/1980	450	192	1.50	--
H029	USCE SW3-3	211EUTW	SWNWS16T05SR09E	07/02/1980	450	132	1.50	--
H031	USCE SW2-4	211MCSN	SWSES10T05SR09E	01/01/1977	480	133	1.50	--
H033	USCE W6-2	211GORD	SESES10T05SR09E	03/04/1982	480	162	1.50	--
M016	USCE 53A	211GORD	NWSES10T07SR09E	05/--/1972	332	35	4	3.0
M017	USCE 43C	211EUTWR	NWNWS27T06SR09E	05/--/1972	445	90	4	--
M018	USCE 43B	211MCSN	NWNWS27T06SR09E	05/--/1972	460	120	4	--
M019	USCE 52A	211GORD	NESES09T07SR09E	05/--/1972	324	40	4	20
M020	USCE 51A	211GORD	SENWS09T07SR09E	05/--/1972	356	64	4	6.0
M021	USCE 41A	211GORD	SENWS28T06SR09E	05/--/1972	480	226	4	--
M022	USCE 41B	211EUTW	SENWS28T06SR09E	05/--/1972	480	176	4	16
M023	USCE 43A	211GORD	NWNWS27T06SR09E	05/--/1972	460	170	4	--
M025	USCE 43D	211EUTWR	NWNWS27T06SR09E	05/--/1975	460	118	4	--
M026	USCE 42A	211EUTW	NENES28T06SR09E	05/--/1975	420	69	4	--
M027	USCE 42B	211EUTW	NENES28T06SR09E	05/--/1975	420	49	4	--
M028	USCE GW123A	110TRCS	NWNWS16T07SR09E	01/01/1980	316	23	2	--
M030	USCE GW122	110ALVM	SWSES07T07SR09E	02/21/1975	330	23	2	--
M031	USCE GW123	110ALVM	SESWS15T07SR09E	07/15/1975	354	22	2	--
M032	USCE GW124	110ALVM	SENWS09T07SR09E	07/18/1975	350	39	2	--
TISHMINGO COUNTY								
A017	USCE 10DP177	211GORD	NENWS36T02SR09E	05/14/1973	433.40	48	4	--
A019	USCE 2MW16	211EUTW	NWSES35T02SR09E	--/--/1981	500	108	1.50	--
A020	USCE 2MW17	211GORD	NWSES35T02SR09E	--/--/1981	500	119	1.50	--
D037	USCE 14A	211GORD	SENWS36T03SR09E	03/06/1972	545	184	2	--
D040	USCE 12A	211GORD	SESES34T03SR09E	03/09/1972	485	190	8	--
D041	USCE 12B	211EUTWR	SESES34T03SR09E	03/17/1972	485	150	8	60
D042	USCE 12C	211EUTWR	SESES34T03SR09E	03/21/1972	485	88	6	58
D044	USCE 14C	211EUTW	SENWS36T03SR09E	02/29/1972	545	106	4	--
D047	USCE 1DP141	211EUTWR	SENWS35T03SR09E	05/--/1972	464.50	134	3	2.0
D048	USCE 1DP142	211EUTWR	SENWS35T03SR09E	05/--/1972	462	57	1.50	--
D050	USCE 11C	211GORD	SWSES33T03SR09E	10/21/1975	505	404	6	--
D051	USCE 11D	211EUTW	SWSES33T03SR09E	10/21/1976	505	210	6	--
D055	USCE 3DP151	211GORD	NESES14T03SR09E	08/30/1972	453.30	163	3	--
D056	USCE 3DP152	211EUTW	NESES14T03SR09E	09/11/1972	451.40	100	3	--
D059	USCE 7DP167	211GORD	NESES01T03SR09E	03/12/1973	447	88	3	--
D060	USCE 7DP168	211EUTW	NESES01T03SR09E	03/13/1973	446.60	43	4	--
D064	USCE W2-3	211GORD	SWSWS11T03SR09E	11/03/1980	480	172	1.50	--
D065	USCE W2-4	211EUTW	SWSWS11T03SR09E	11/06/1980	479	104	1.50	--
D067	USCE 2MW6	211GORD	SWSWS01T03SR09E	--/--/1981	455	90	1.50	--
D068	USCE 2MW7	211EUTW	SWSES02T03SR09E	--/--/1981	475	110	1.50	--
D069	USCE 2MW8	211GORD	SWSES02T03SR09E	--/--/1981	475	131	1.50	--
E014	USCE 15A	211GORD	NWSWS31T03SR10E	02/15/1972	540	340	2	20
E015	USCE 15B	211GORD	NWSWS31T03SR10E	02/24/1972	540	204	4	3.0
E016	USCE 15C	211EUTWR	NWSWS31T03SR10E	02/--/1972	540	130	4	3.0
E027	USCE NE2-3	211GORD	SWSWS33T03SR10E	03/07/1970	580	157	1.50	--
E028	USCE NE2-4	211GORD	SWSWS33T03SR10E	03/24/1978	580	340	1.50	--
E033	USCE NE3-4	211GORD	SESWS26T03SR10E	11/21/1979	585	135	1.50	--
E034	USCE NE3-5	211EUTW	SESWS26T03SR10E	11/27/1979	585	63	1.50	--
E040	USCE E2-1	211GORD	SESES20T03SR10E	03/08/1983	550.40	156	1.50	--
E041	USCE E2-2	211EUTW	SWSES20T03SR10E	03/08/1983	550.20	107	1.50	--

DESCRIPTIONS OF GROUND-WATER WELLS--Continued

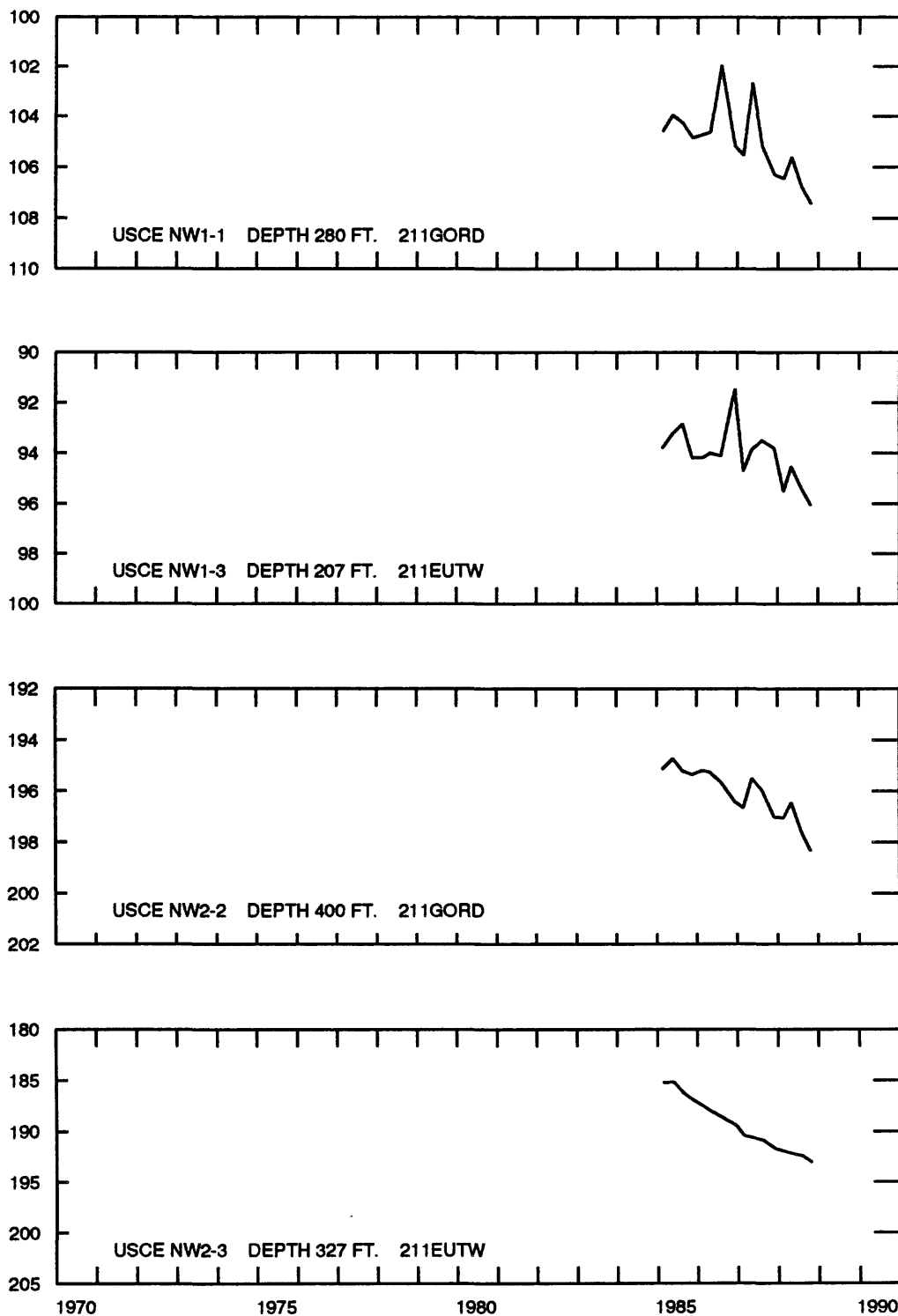
LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAM- ETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
TISHOMINGO COUNTY--Continued								
E042	USCE 2MW9	211EUTW	SENWS06T03SR10E	--/--/1981	450	36	1.50	--
E043	USCE 2MW10	211EUTW	SENWS06T03SR10E	--/--/1973	450	42	3	--
E044	USCE 2MW13	211EUTW	NWSWS36T02SR09E	--/--/1981	472	88	1.50	--
E045	USCE 2MW14	211GORD	NWSWS36T02SR09E	--/--/1981	472	99	1.50	--
G004	USCE 21A	211GORD	SWSWS26T04SR09E	05/24/1971	585	278	4	3.0
G005	USCE 21B	211EUTWL	SWSWS26T04SR09E	05/--/1971	585	235	4	11
G013	USCE 35A	211GORD	NESWS33T04SR10E	07/--/1971	600	300	4	6.0
G014	USCE 35B	211EUTWR	NESWS33T04SR10E	07/22/1971	600	203	4	5.0
G015	USCE 25A	211GORD	NWSWS20T04SR10E	07/28/1971	610	235	4	--
G016	USCE 25B	211EUTWR	NWSWS20T04SR10E	08/03/1971	610	200	4	30
G017	USCE 26A	211GORD	NESES20T04SR10E	07/28/1971	565	250	2	--
G018	USCE 26B	211EUTWR	NESES20T04SR10E	07/--/1971	565	127	4	--
G019	USCE 26C	211EUTWR	NESES20T04SR10E	07/--/1971	565	72	2	5.0
G020	USCE 23C	211GORD	NWNWS30T04SR10E	08/25/1971	588	330	2	--
G023	USCE 23G	211GORD	NWNWS30T04SR10E	09/15/1971	601.3	260	2	--
G027	USCE 23I	330MSSP	NWNWS30T04SR10E	10/07/1971	587	492	2	--
G031	USCE 23J	211GORD	NWNWS30T04SR10E	12/02/1971	587	380	4	60
G032	USCE 23L	211EUTWR	NWNWS30T04SR10E	12/08/1971	563	126	8	60
G033	USCE 23D	211EUTWR	NWNWS30T04SR10E	08/31/1971	590	145	4	20
G034	USCE 23E	211EUTWR	NWNWS30T04SR10E	09/30/1971	585	92	2	--
G038	USCE 22A	211GORD	SWNWS25T04SR09E	01/31/1972	625	360	4	--
G040	USCE 22B	211EUTWR	NWSWS25T04SR09E	02/04/1972	625	240	4	--
G041	USCE 23N	211MCSN	NWNWS30T04SR10E	01/24/1972	600	200	4	20
G042	USCE 23O	211EUTW	NWNWS30T04SR10E	02/01/1972	561	60	6	9.0
G079	USCE 6DP163	211GORD	SESES24T04SR09E	02/20/1973	573	222	4	--
G080	USCE 6DP164	211EUTW	SESES24T04SR09E	02/23/1973	572.60	125	4	--
G083	USCE ME1-1	211GORD	NENWS05T04SR10E	10/17/1977	500	190	3	--
G085	USCE ME1-3	211EUTW	NENWS05T04SR10E	06/22/1978	495	65	3	--
G086	USCE ME1-1	211GORD	NENES21T04SR10E	02/08/1979	560	204	1.50	--
G087	USCE ME1-2	211EUTWL	NENES21T04SR10E	02/13/1979	560	129	1.50	--
G092	USCE ME2-1	211GORD	NWSWS14T04SR10E	02/16/1979	560	162	1.50	--
G093	USCE ME2-2	211EUTW	NWSWS14T04SR10E	02/16/1979	560	67	1.50	--
G095	USCE ME3-2	211GORD	SWNES13T04SR10E	08/28/1979	517	93	1.50	--
G100	USCE SE1-2	211GORD	SWNWS35T04SR10E	06/08/1979	560	218	1.50	--
G102	USCE SE1-4	211EUTW	SWNWS35T04SR10E	04/30/1979	560	73	1.50	--
G104	USCE SE2-2	211GORD	NWSWS25T04SR10E	05/17/1979	580	183	1.50	--
G106	USCE SE2-4	211EUTW	NWSWS25T04SR10E	05/24/1979	580	103	1.50	--
G112	USCE 2DP147	211GORD	SESWS11T04SR09E	07/20/1972	504.50	165	3	--
G113	USCE 2DP148	211EUTW	SESWS11T04SR09E	07/25/1972	504.70	130	3	--
G116	USCE 4DP156	211GORD	SESWS31T04SR10E	01/01/1973	490.10	153	3.50	--
G118	USCE 4DP158	211EUTW	SESWS31T04SR10E	10/26/1972	487.70	56	4	--
G121	USCE 9DP173	211GORD	NESES14T04SR09E	04/19/1973	552.20	220	4	--
G122	USCE 9DP174	211EUTW	NESES14T04SR09E	04/23/1973	552.40	163	4	--
J008	USCE 33A	211EUTWL	SESES06T05SR09E	07/--/1971	515	172	4	--
J013	USCE 34A	211GORD	NENWS05T05SR10E	07/--/1971	560	266	4	8.0
J014	USCE 34B	211EUTWR	NENWS05T05SR10E	07/--/1971	560	134	4	8.0
J016	USCE 33B	211EUTWR	SESES06T05SR09E	07/--/1971	515	90	4	--
J017	USCE 33C	211GORD	SESES06T05SR09E	09/01/1971	515	212	2	--
J018	USCE 31A	211GORD	SWSES01T05SR09E	03/15/1972	473	178	4	1.0
J019	USCE 31B	211EUTWR	SWSES01T05SR09E	03/27/1972	473	74	4	--
J020	USCE 32A	211GORD	NWNWS06T05SR10E	04/27/1972	530	240	4	10
J021	USCE 32B	211EUTWR	NWNWS06T05SR10E	04/--/1972	530	112	4	8.0
J066	USCE SW1-2	211EUTW	NWNWS12T05SR09E	09/01/1977	560	150	1.50	--
J075	USCE SW1-1	211GORD	SWNWS12T05SR09E	08/25/1977	560	264	1.50	--
J076	USCE 5DP159	211GORD	NESWS08T05SR10E	11/06/1972	437.20	148	4	--
J077	USCE 5DP160	211EUTW	NESWS08T05SR10E	11/08/1972	436	60	3	--
J080	USCE E1-2	211GORD	SWSES09T05SR10E	02/16/1981	520	131	1.50	--
J081	USCE E1-3	211EUTW	SWSES09T05SR10E	03/16/1981	520	102	1.50	--
L029	USCE 54A	211GORD	SWSWS11T07SR09E	04/28/1972	332	27	4	--
L030	USCE 55A	211GORD	SESES11T07SR09E	05/11/1972	380	50	4	18
L031	USCE 45A	211GORD	NWSWS25T06SR09E	03/29/1972	485	92	4	--
L032	USCE 45B	211MCSN	SWNWS25T06SR09E	03/29/1972	485	76	4	--
L033	USCE 54B	110ALVM	SWSWS11T07SR09E	06/06/1972	332	12	4	0.50
L034	USCE 54C	110ALVM	SWSWS11T07SR09E	05/01/1972	333	13	2	--
L051	USCE GW125	110ALVM	SESES02T07SR09E	07/22/1975	367.10	17	2	--

**APPENDIX A**

**GROUND-WATER DATA**

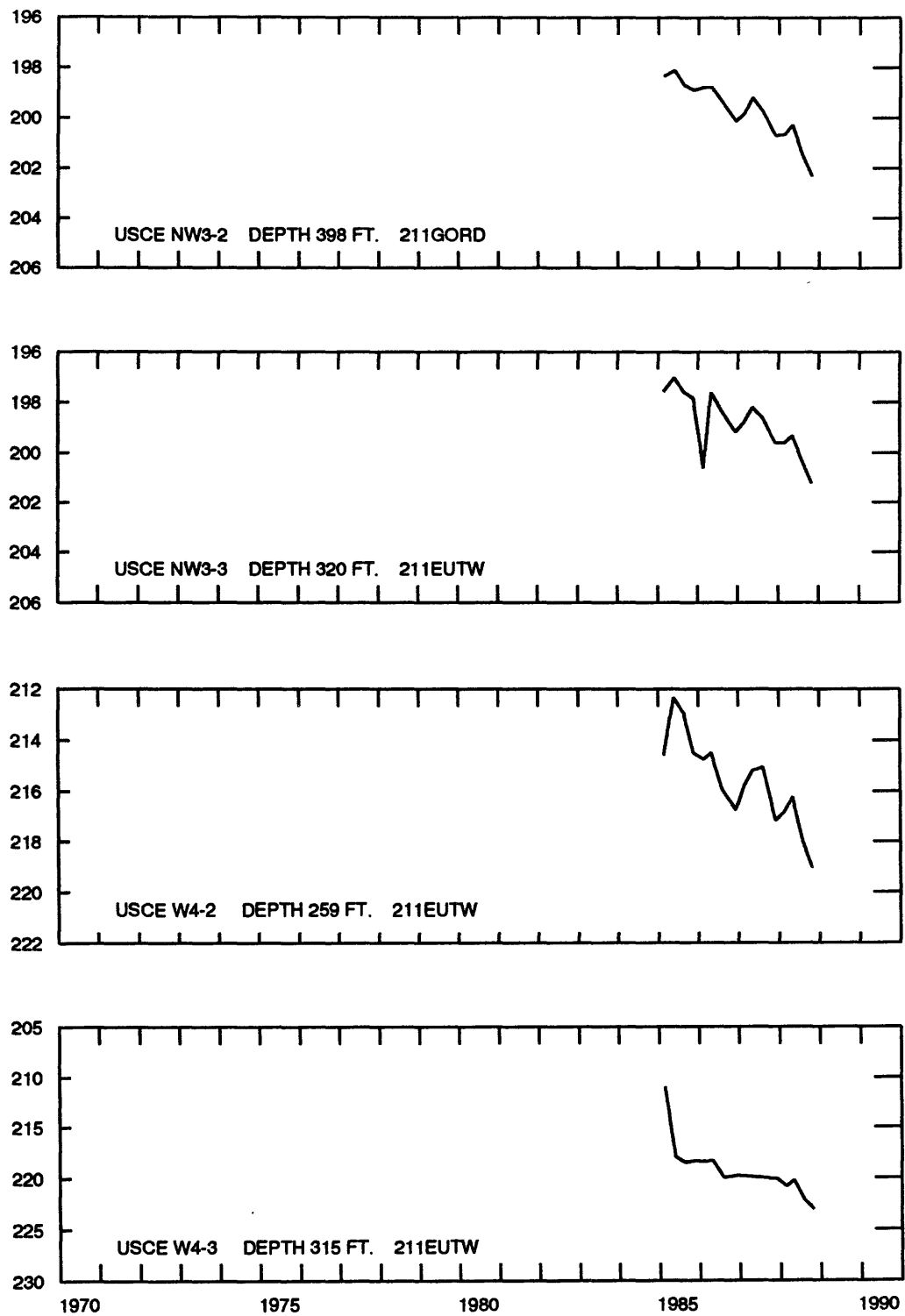
**HYDROGRAPHS**

WATER LEVEL, IN FEET BELOW LAND SURFACE



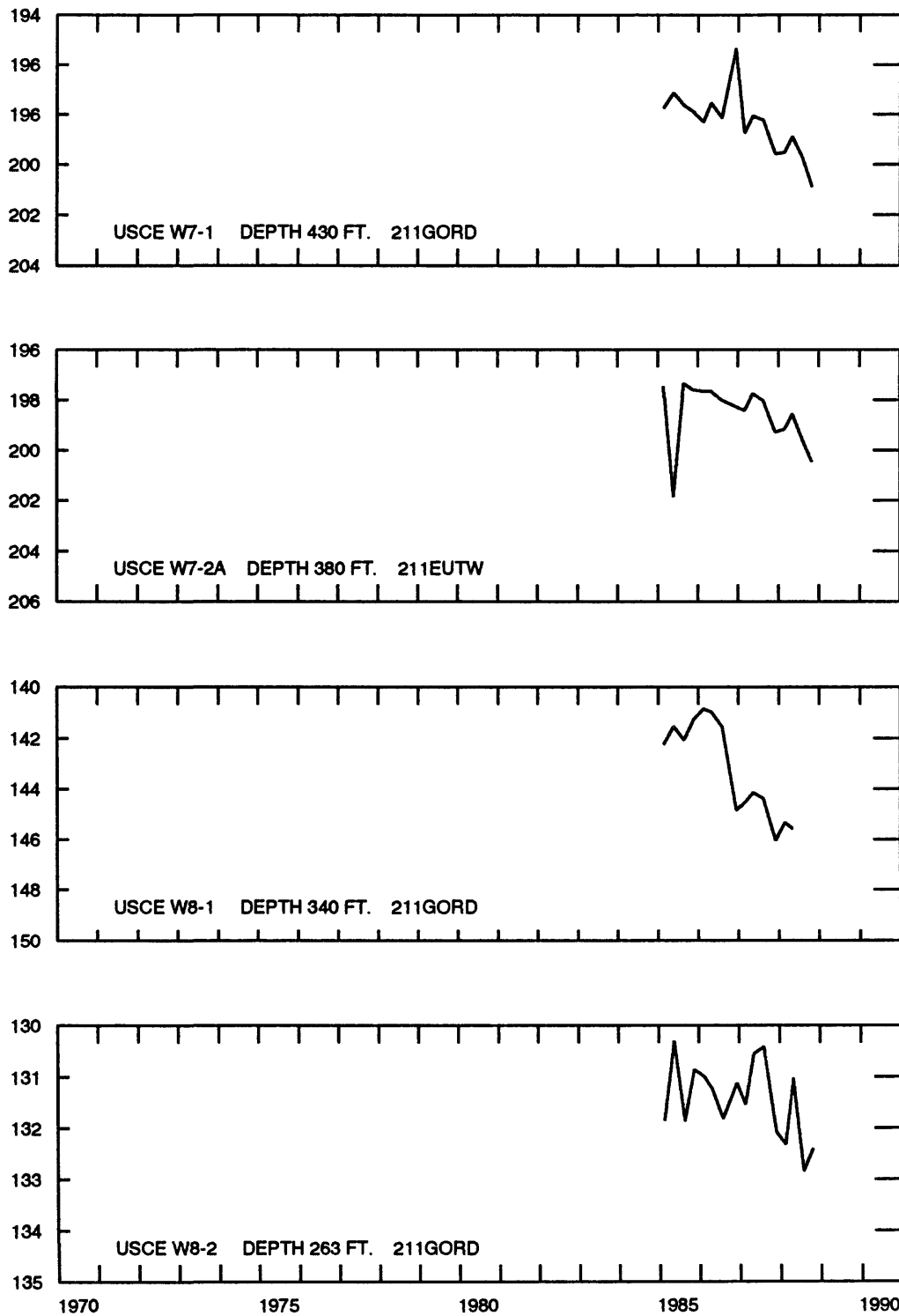
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



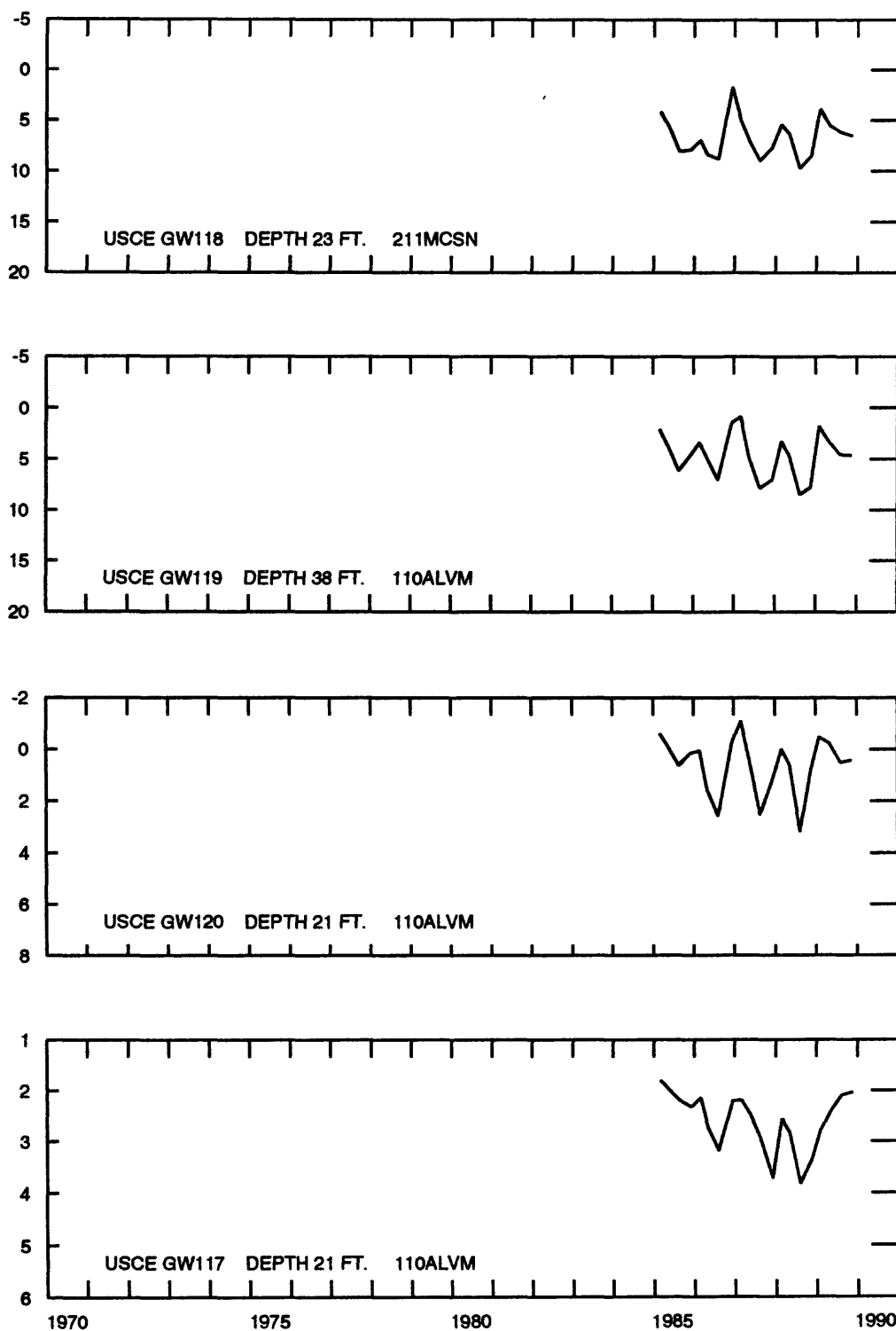
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



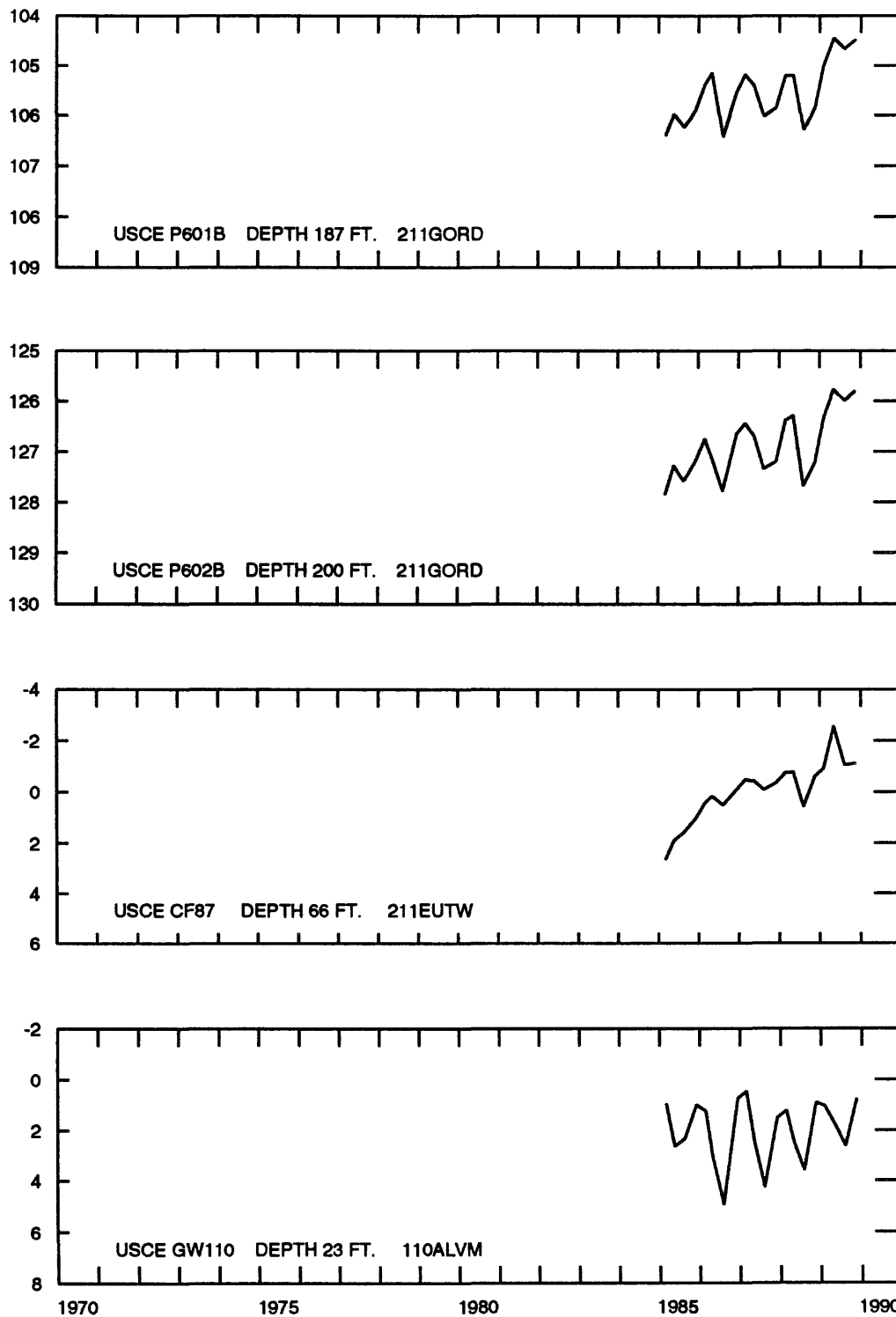
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



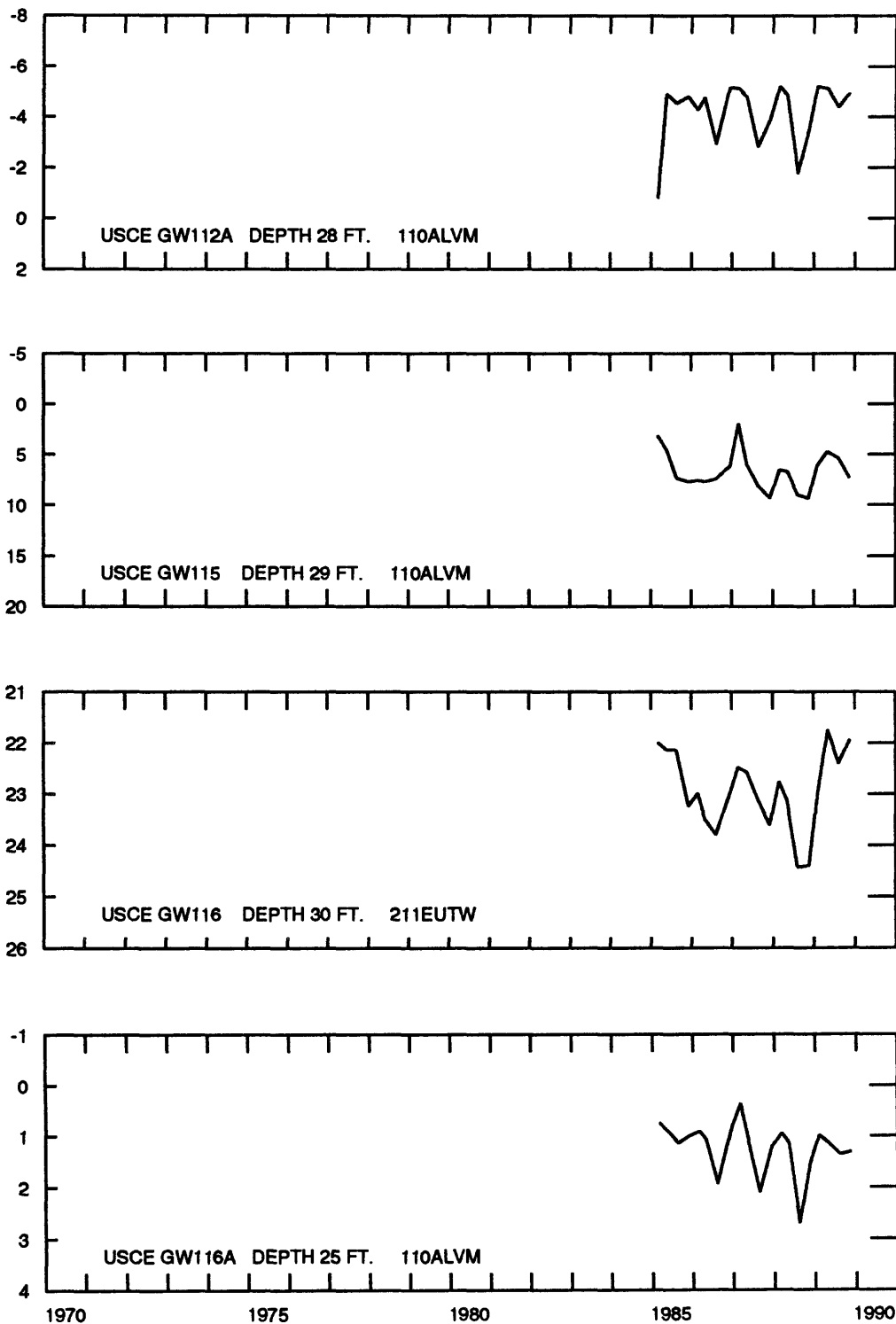
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



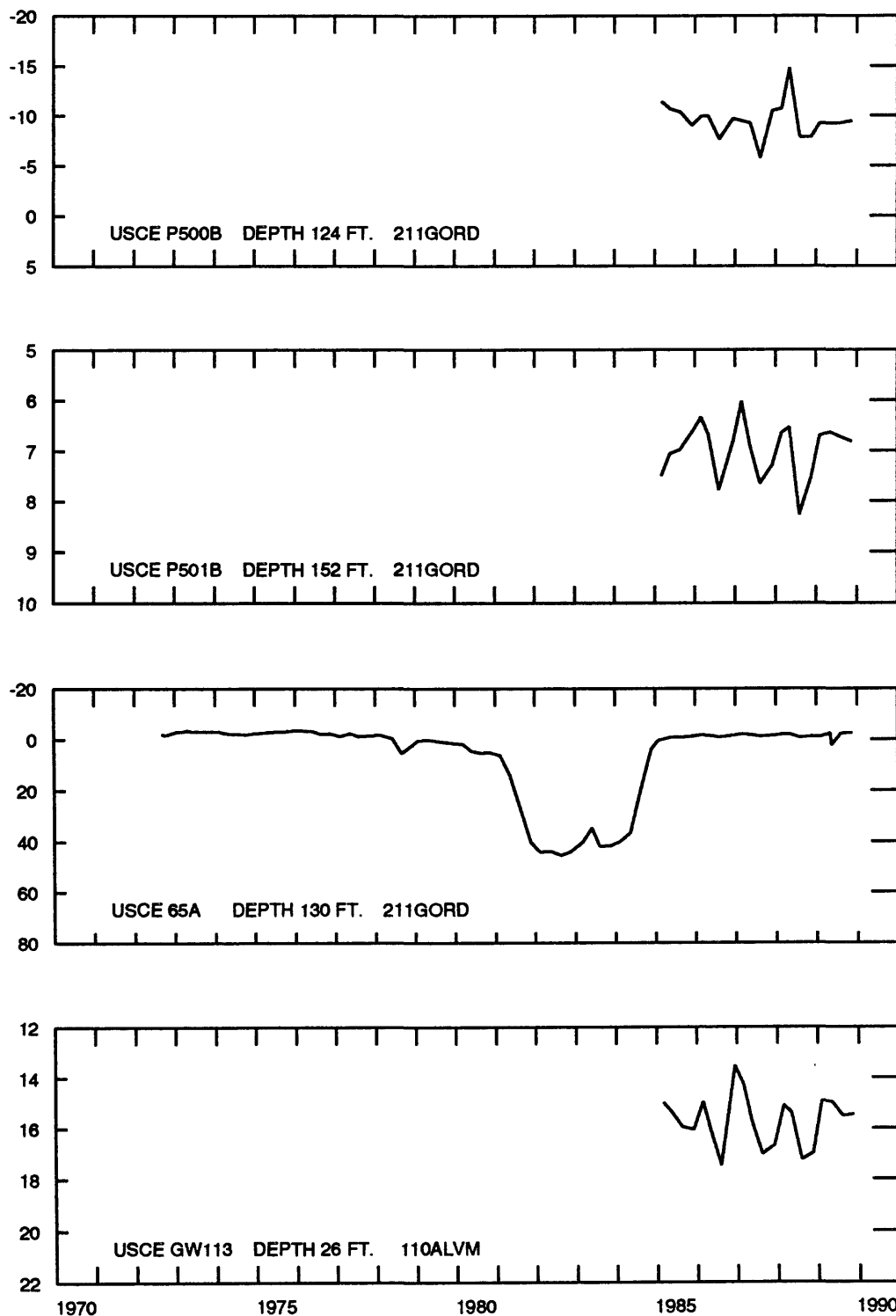
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



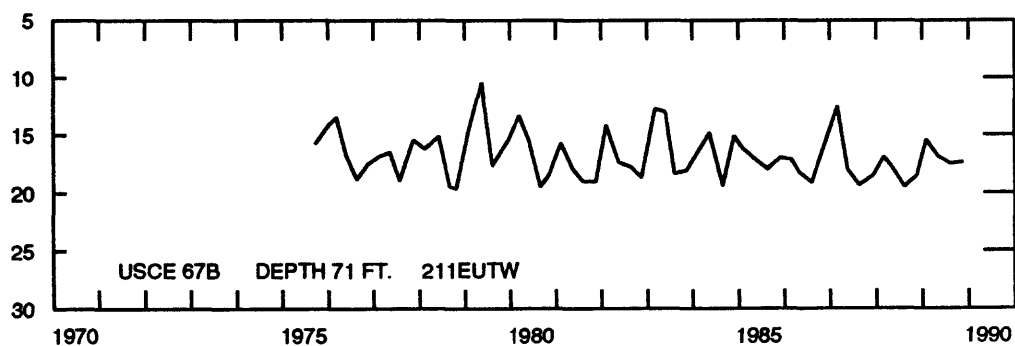
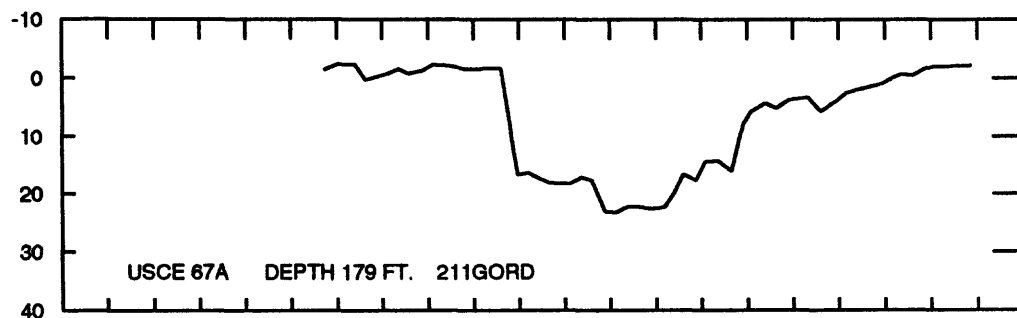
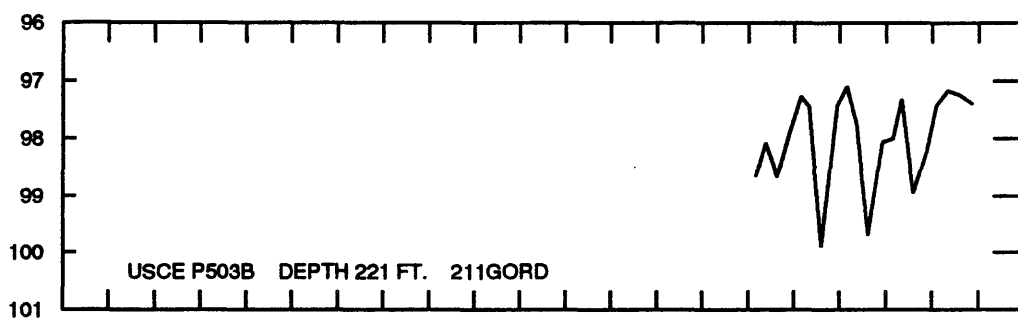
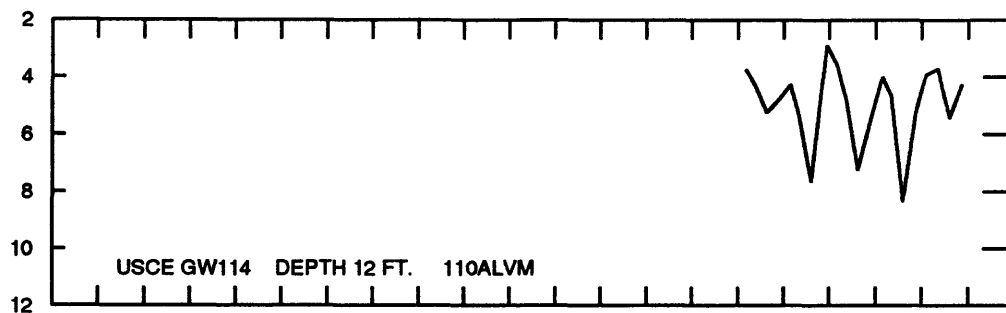
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



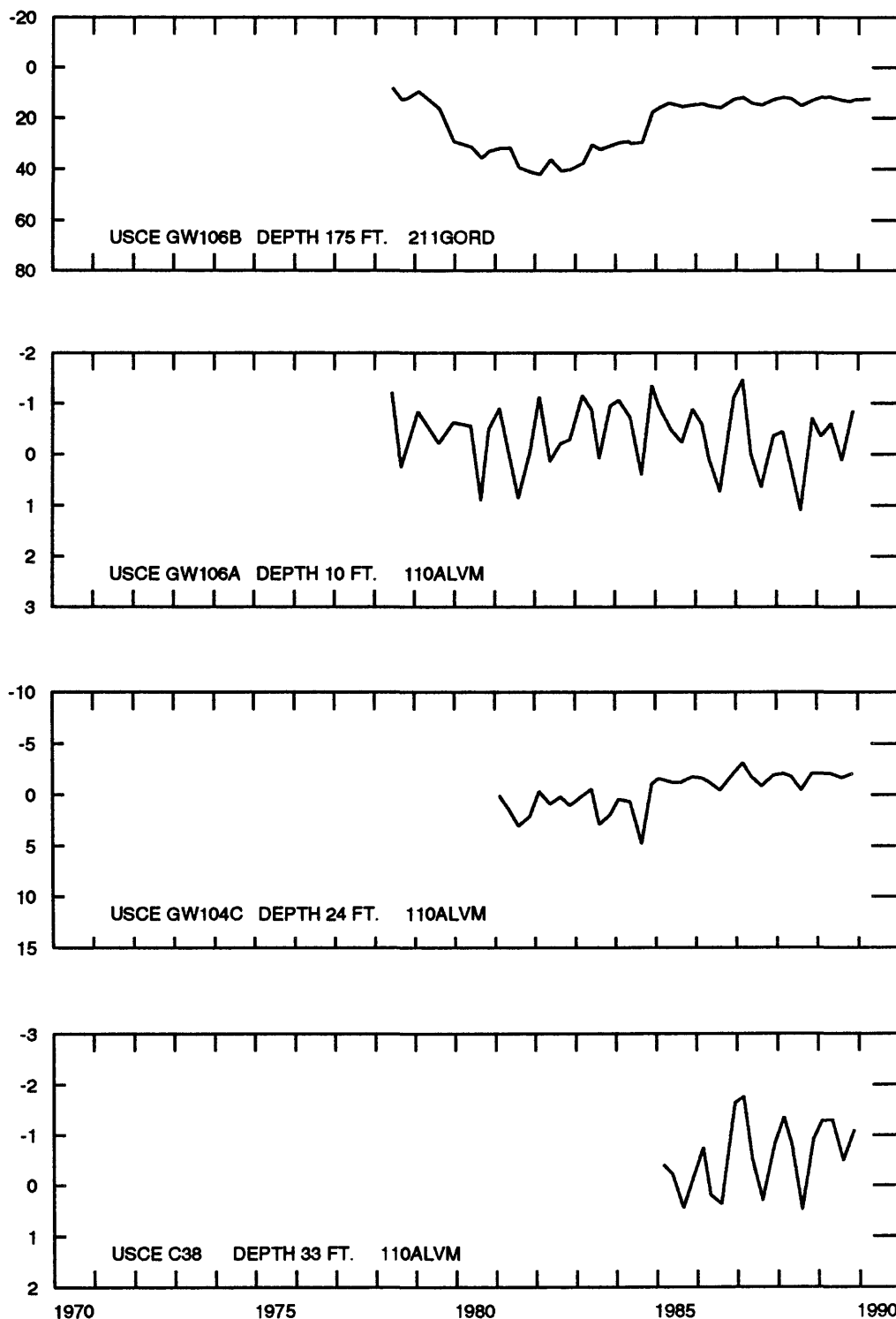
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



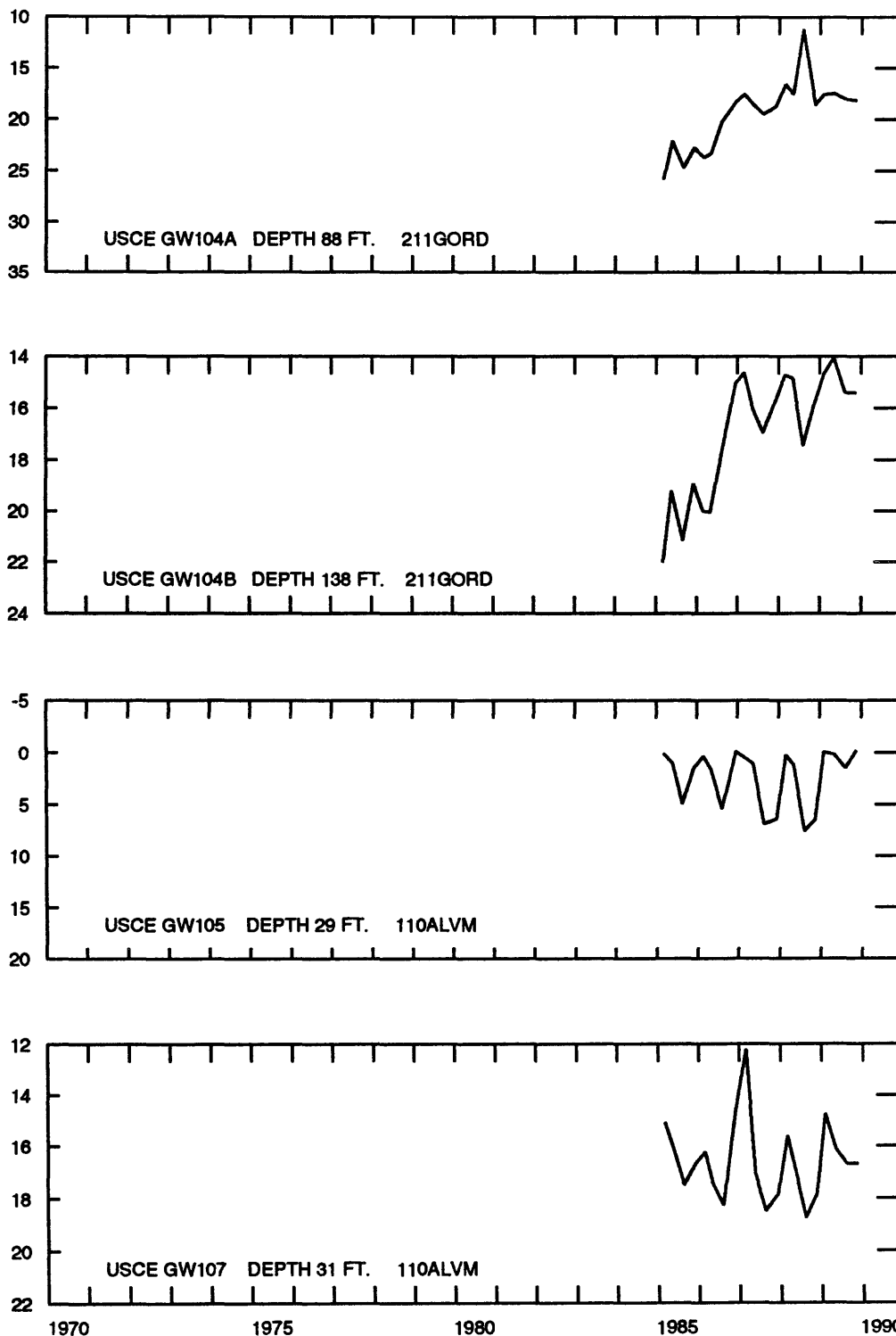
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



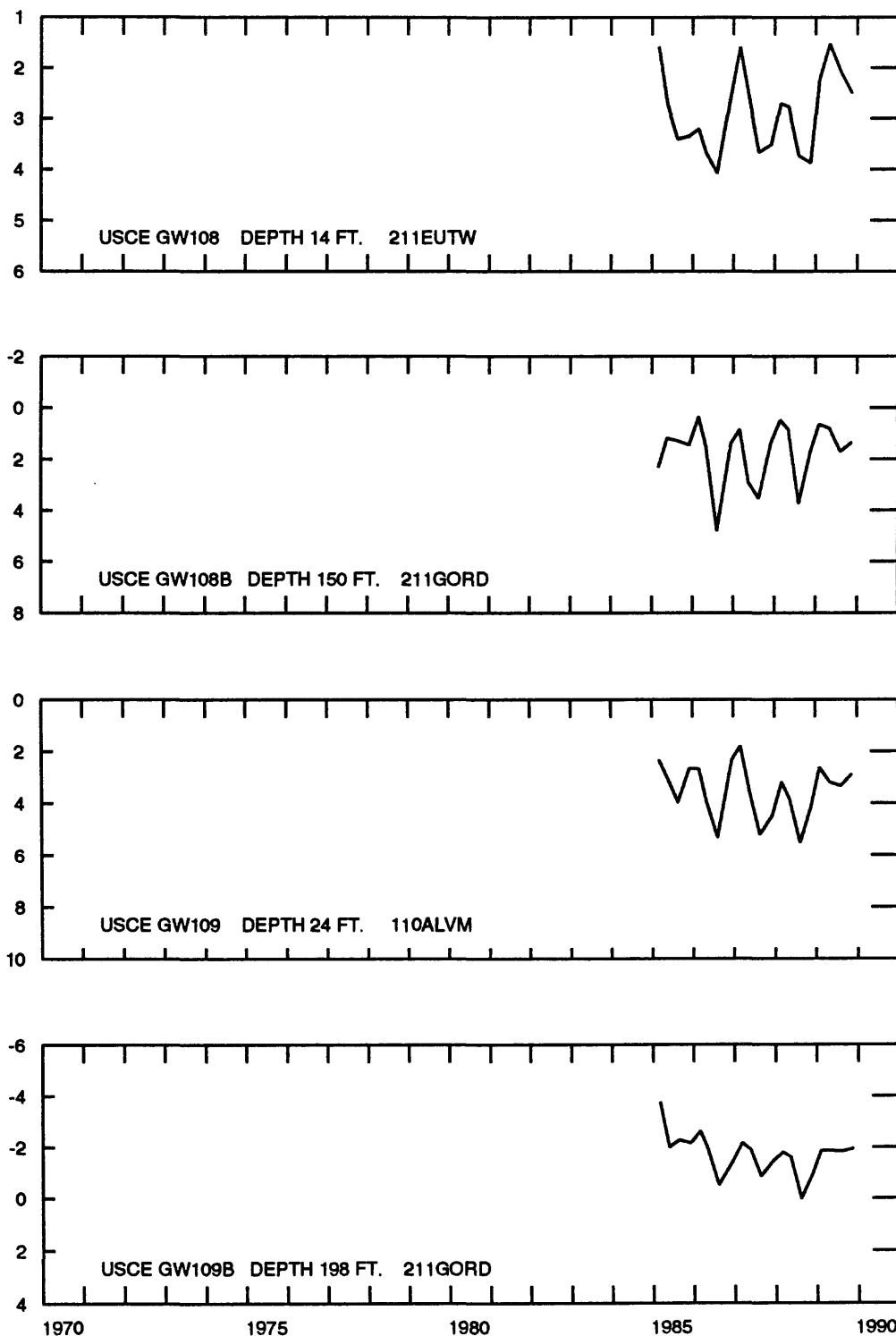
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



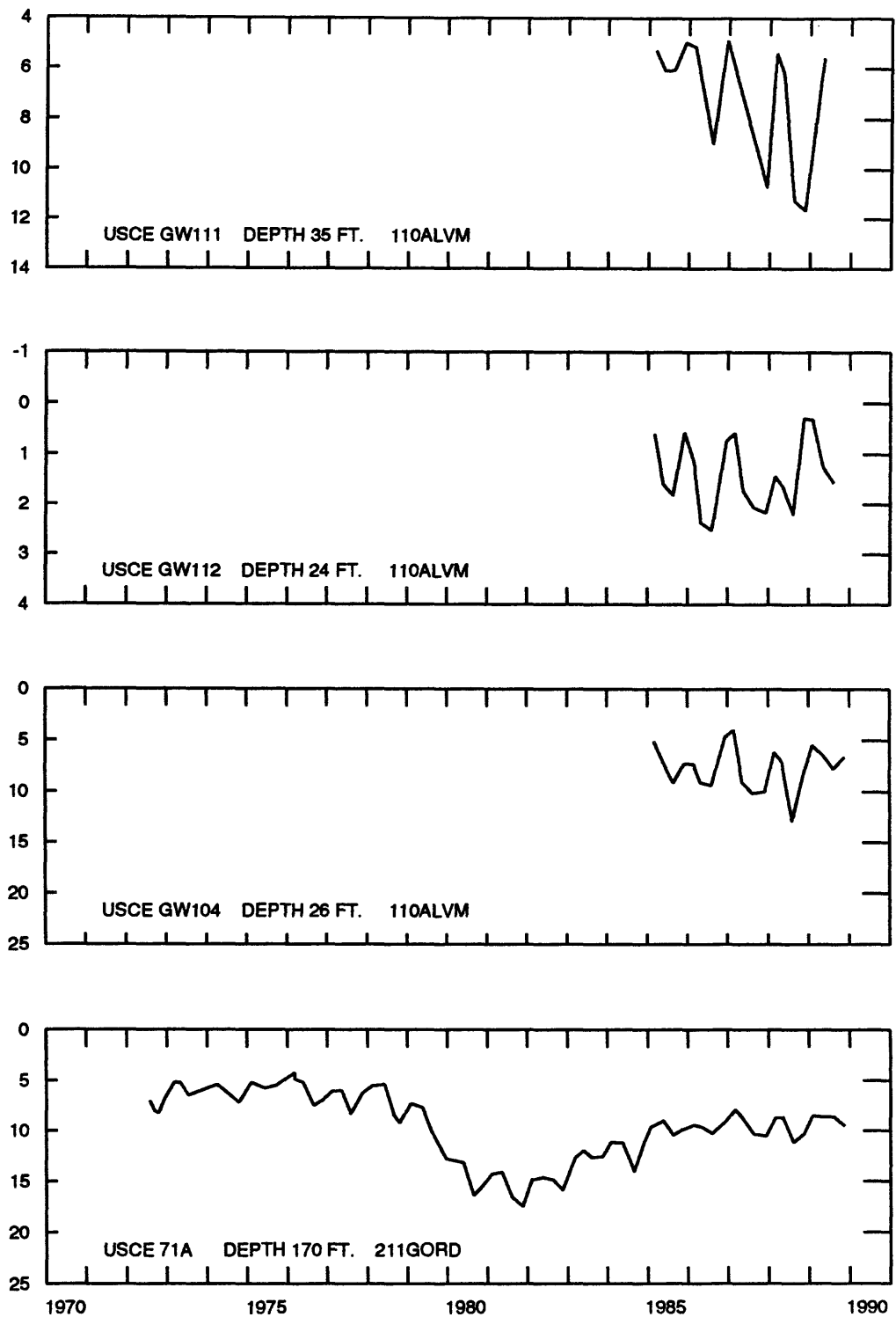
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



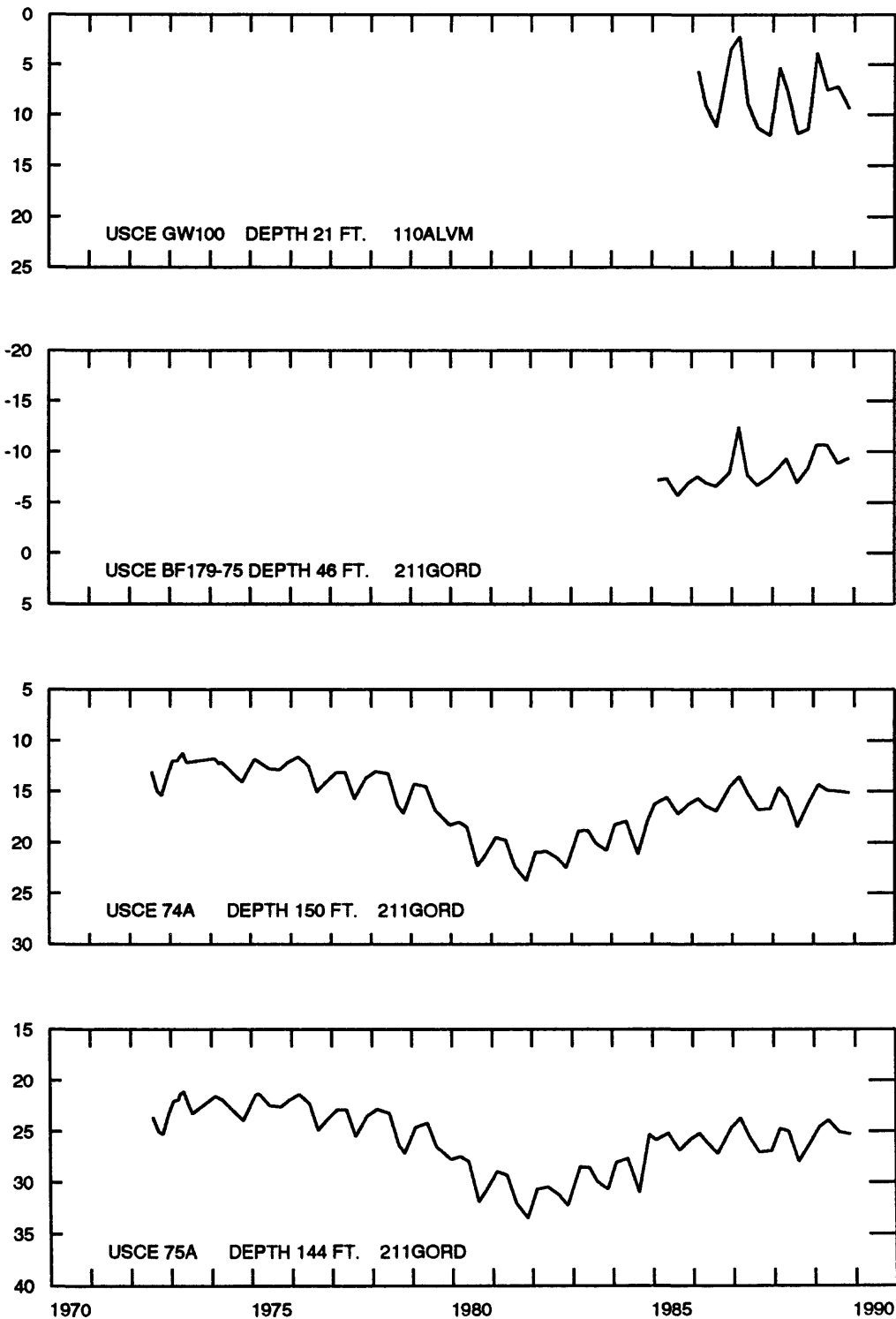
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



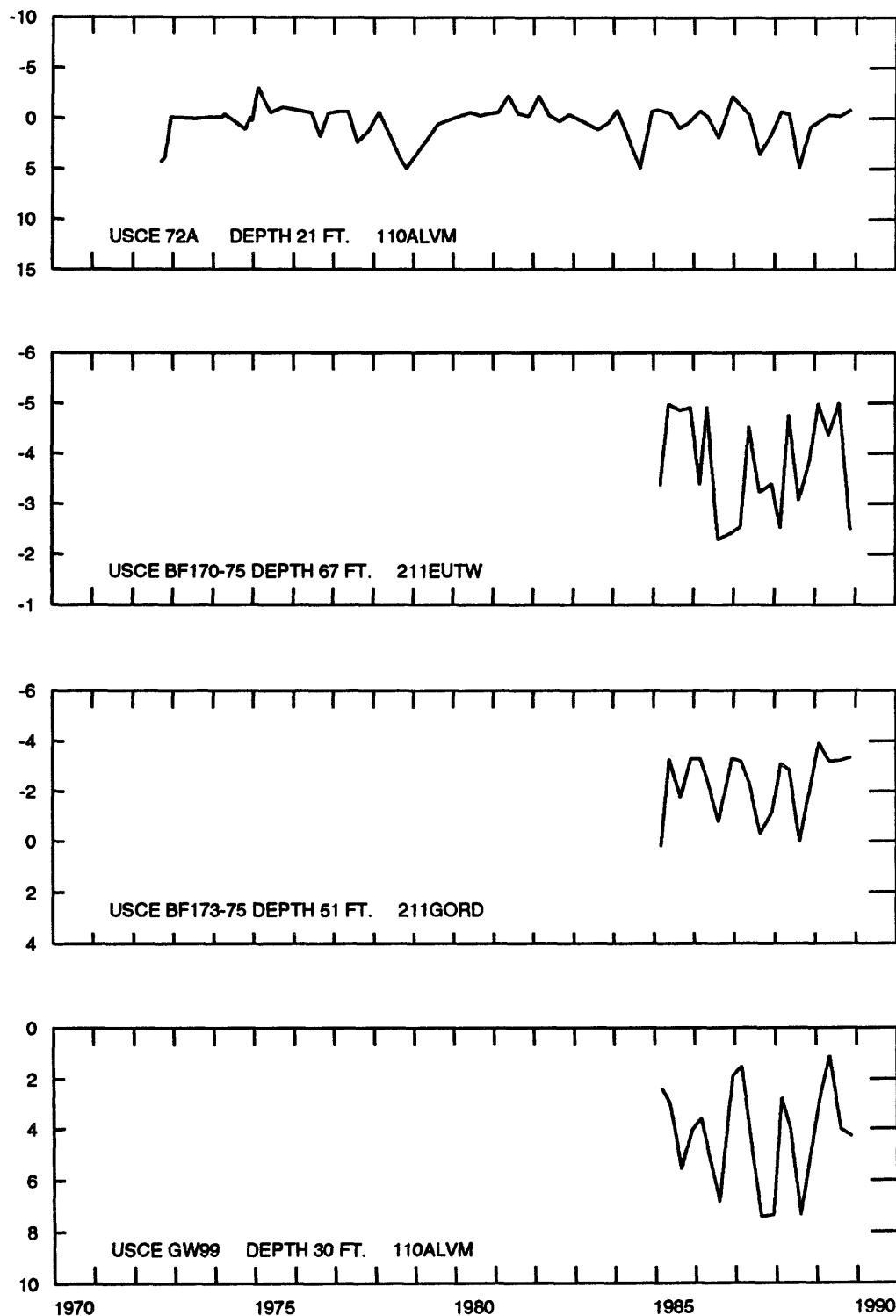
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



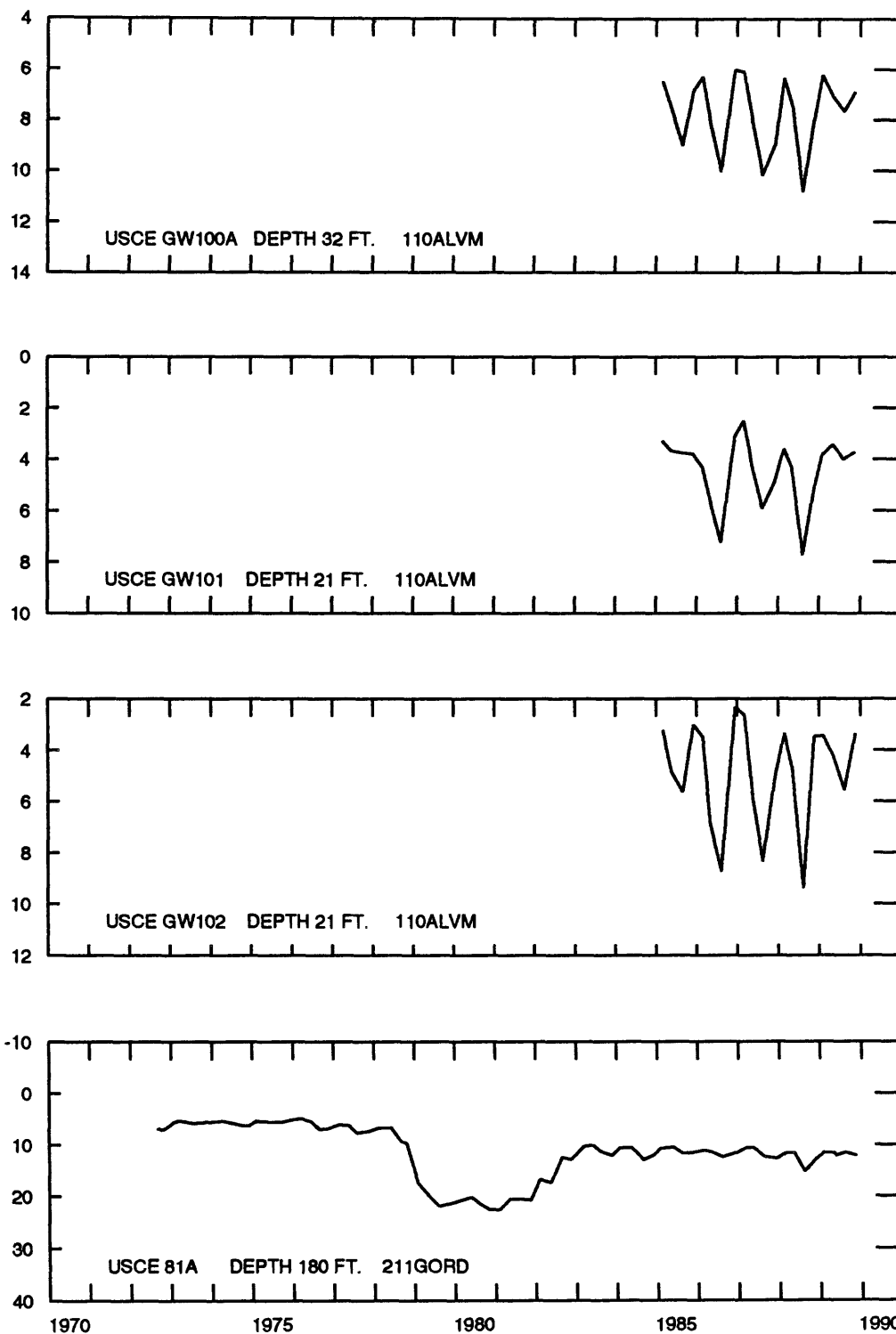
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



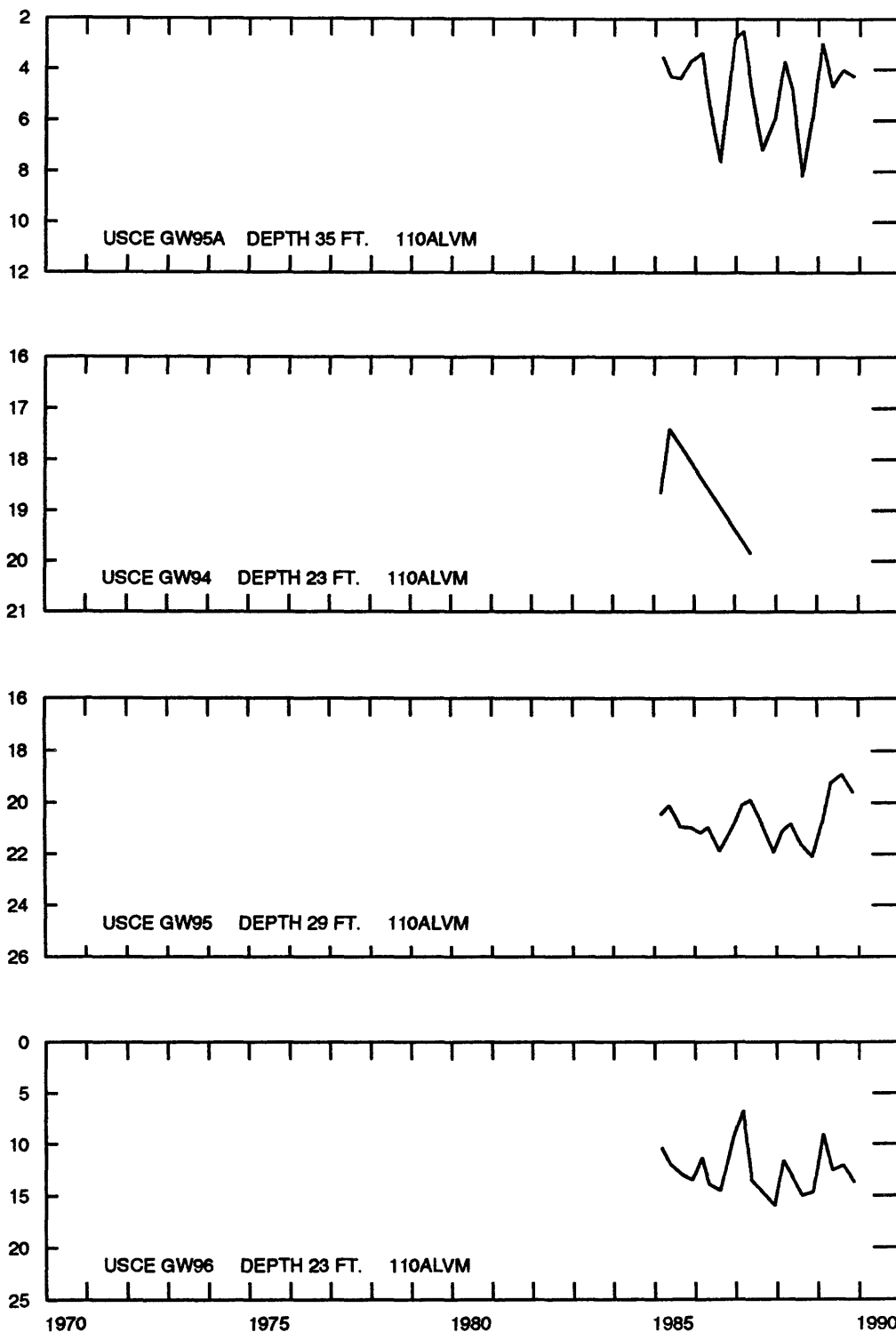
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



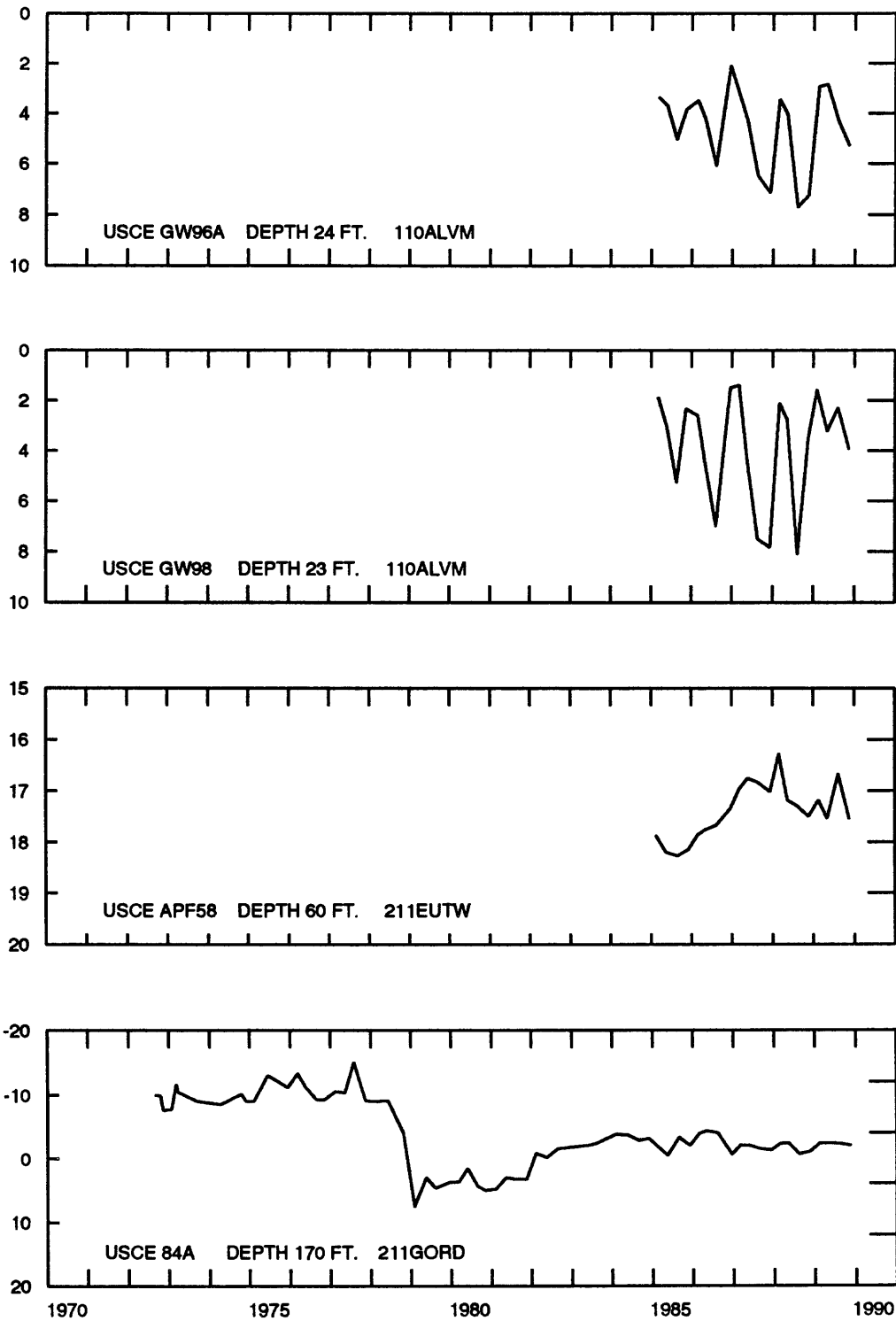
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



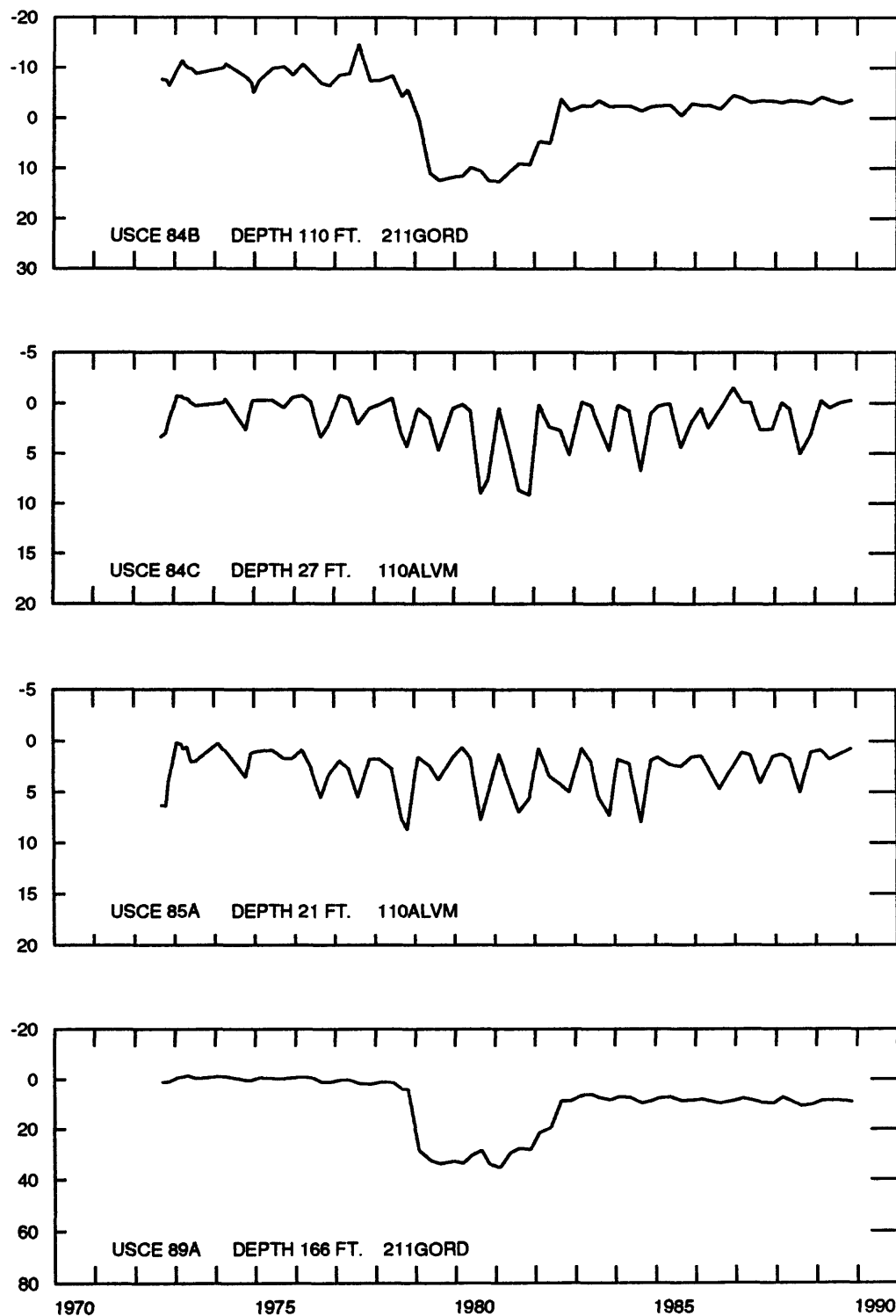
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



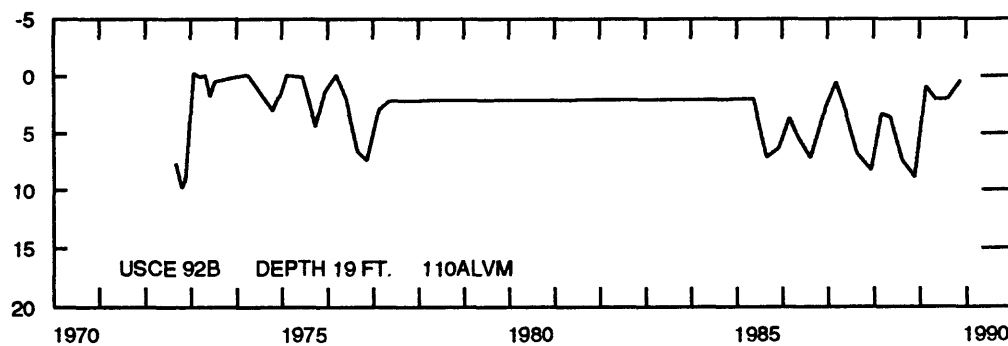
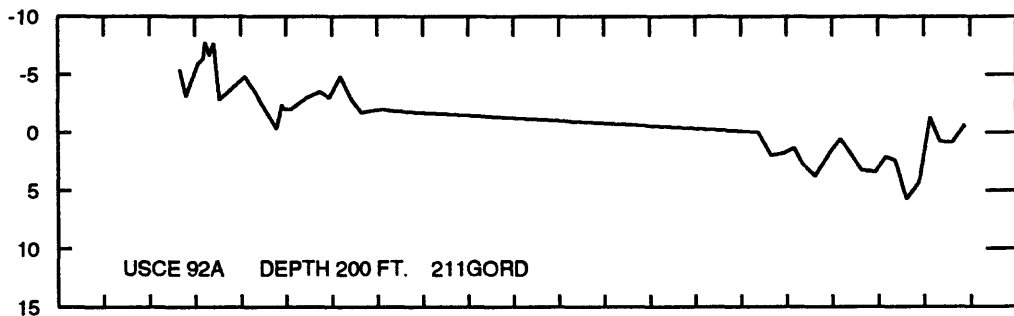
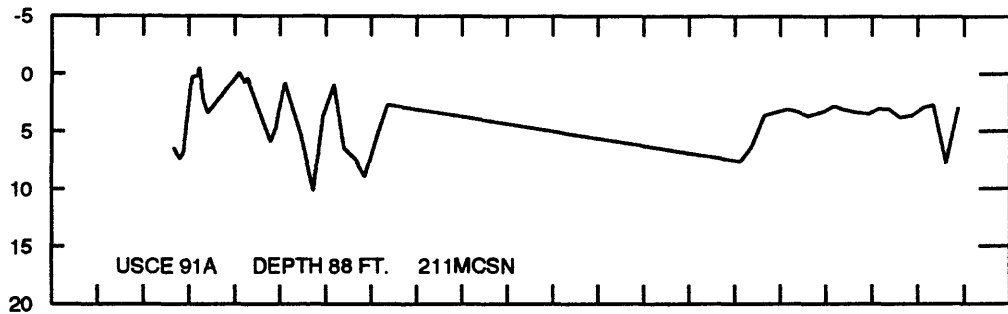
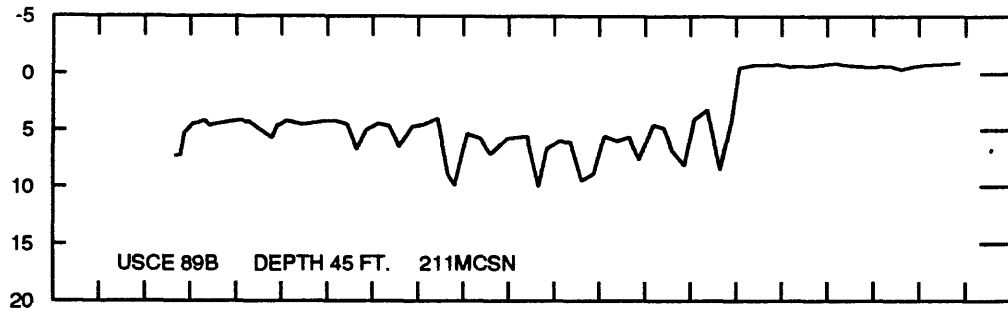
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



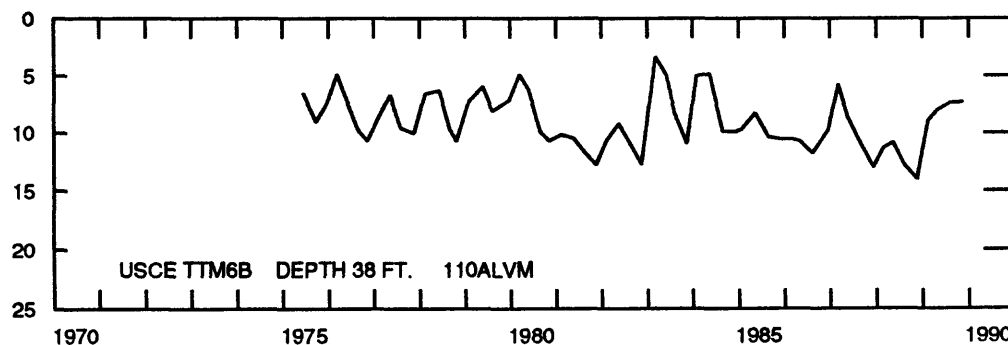
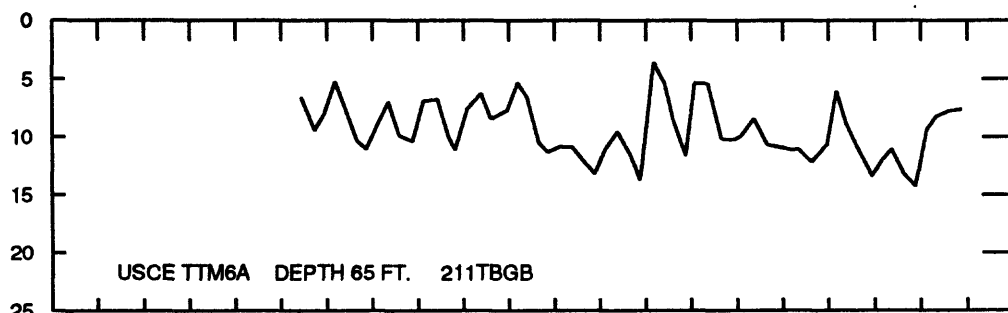
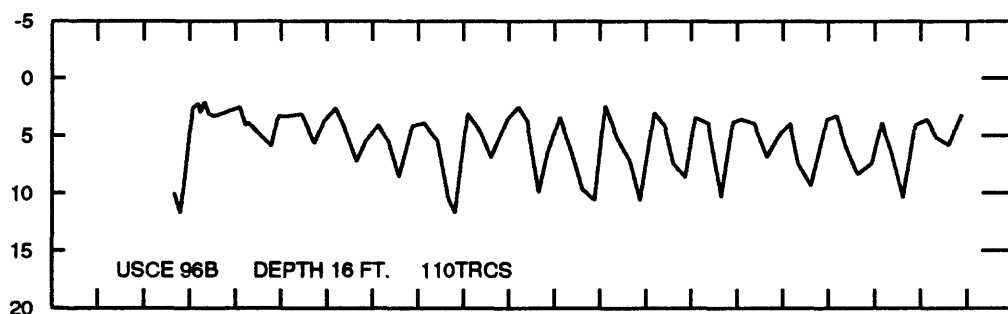
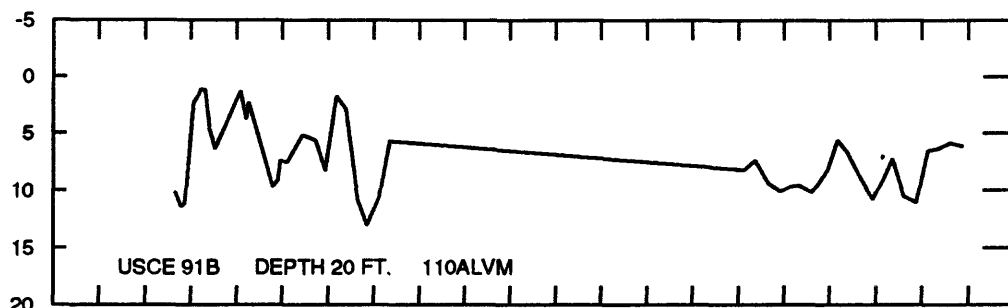
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



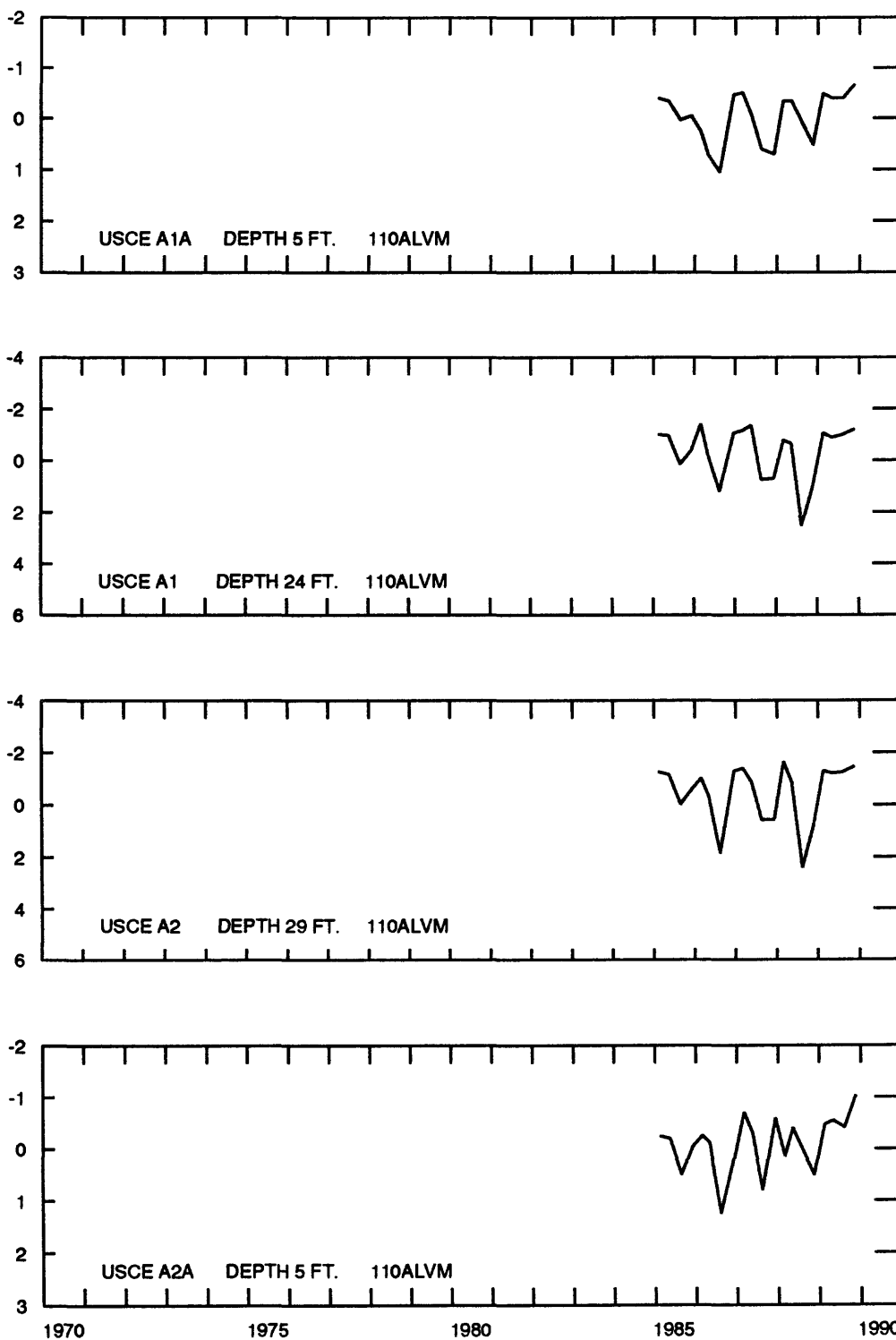
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



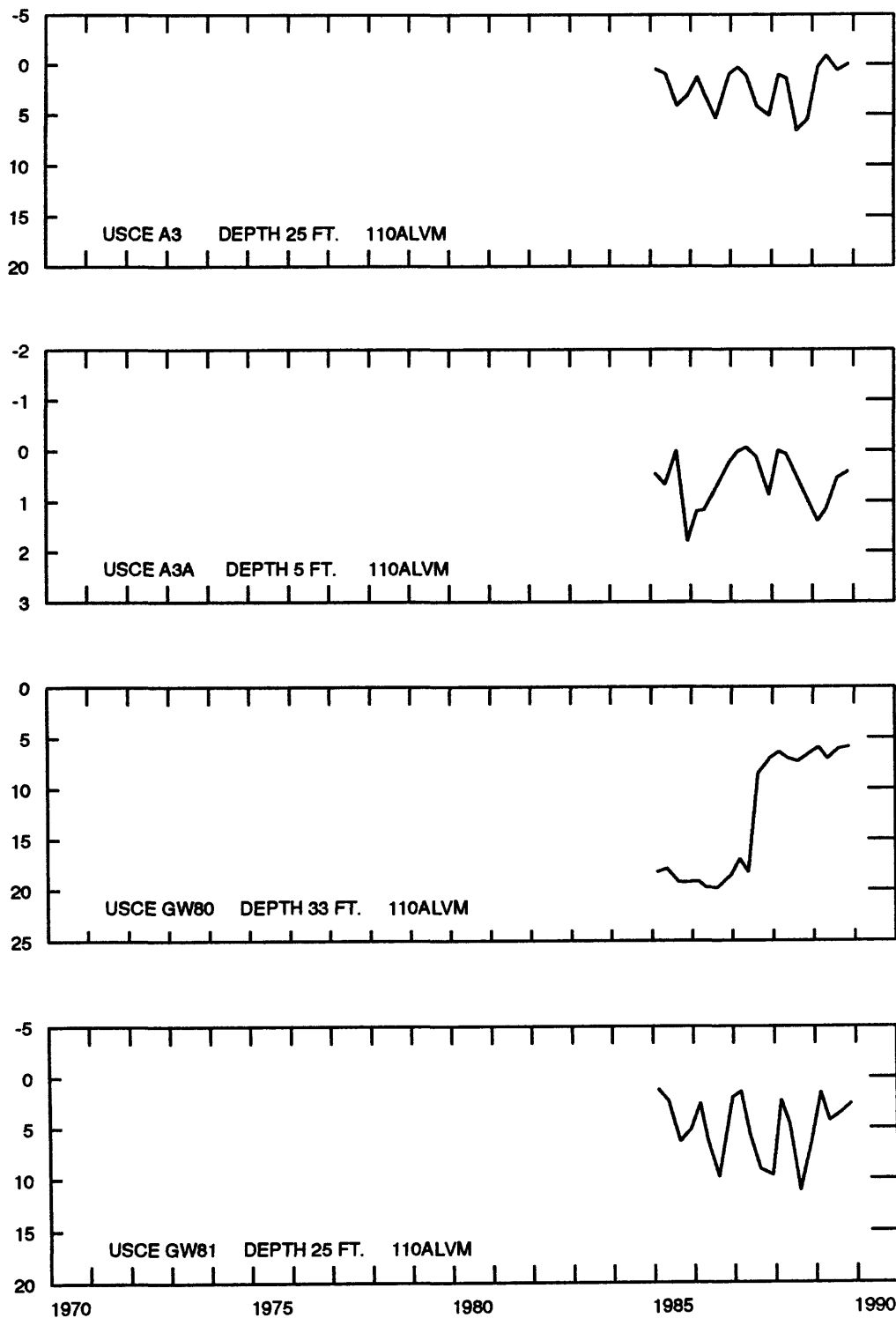
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



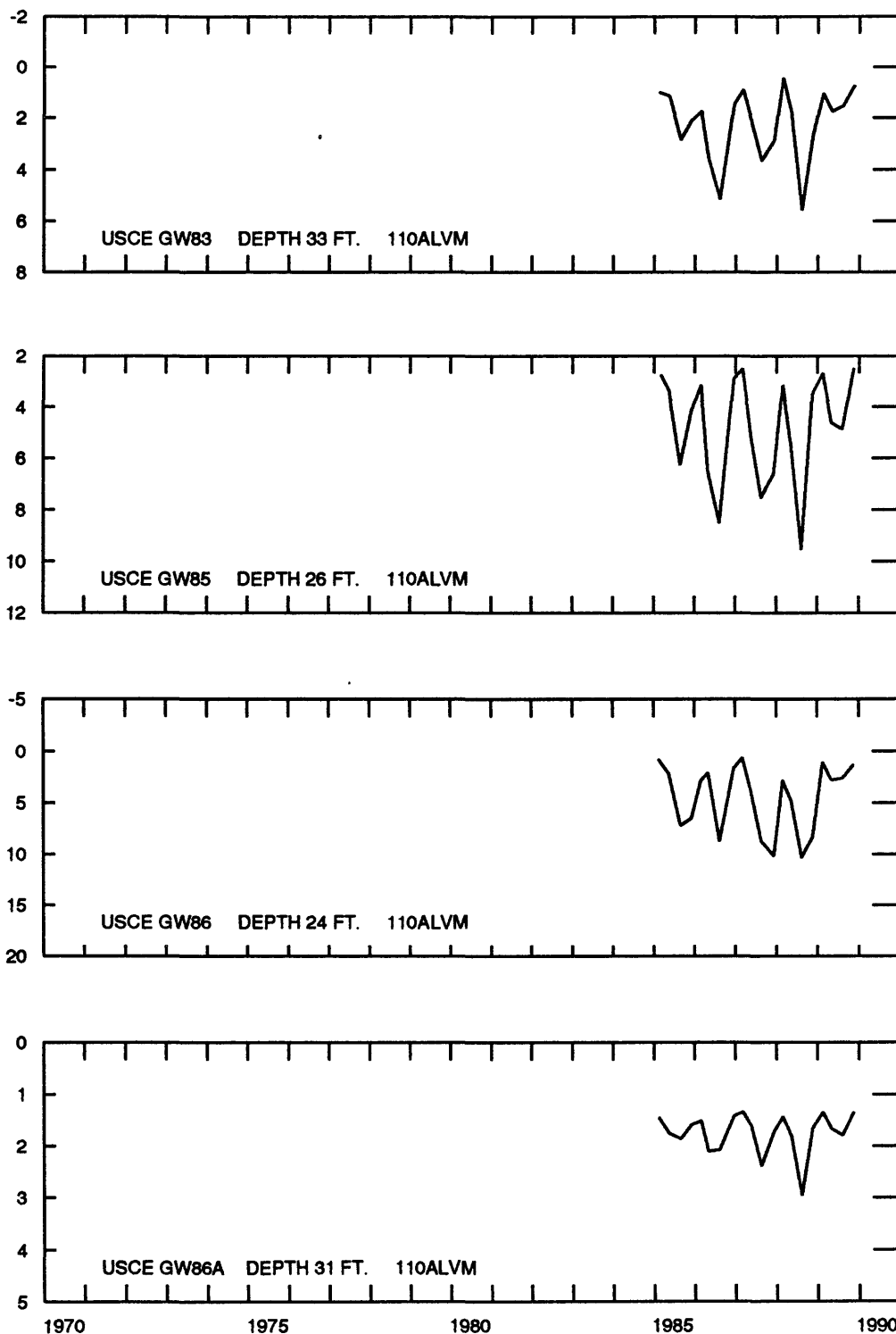
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



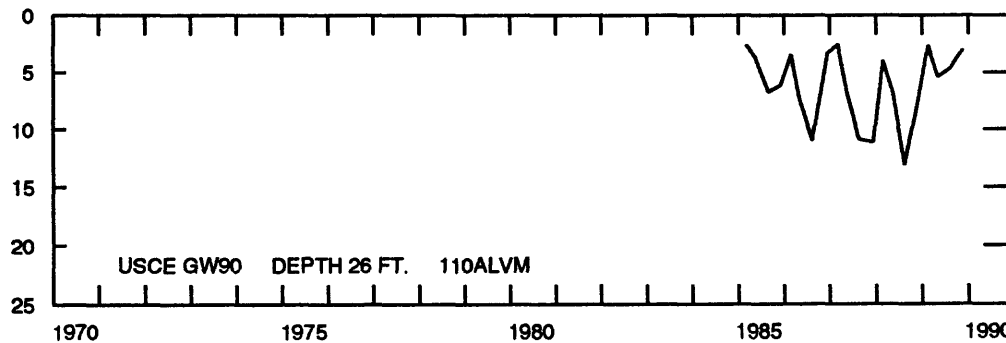
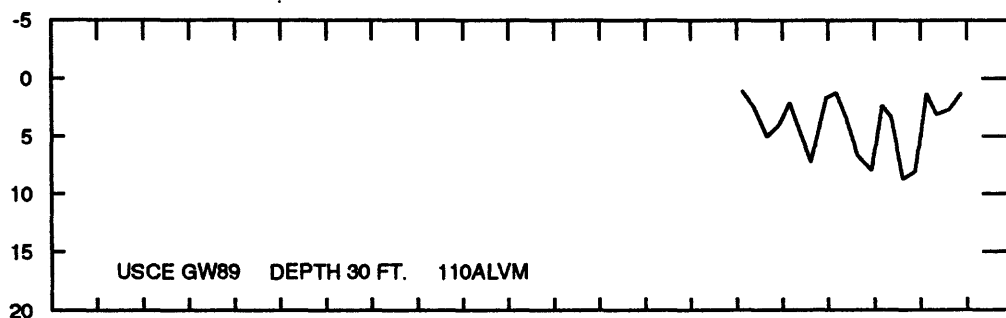
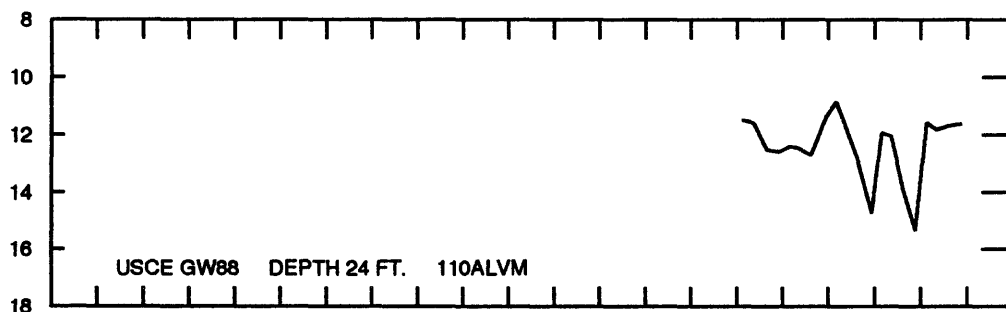
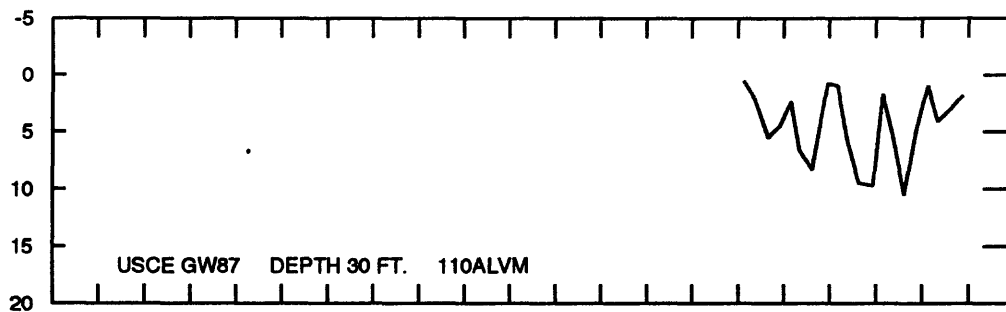
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



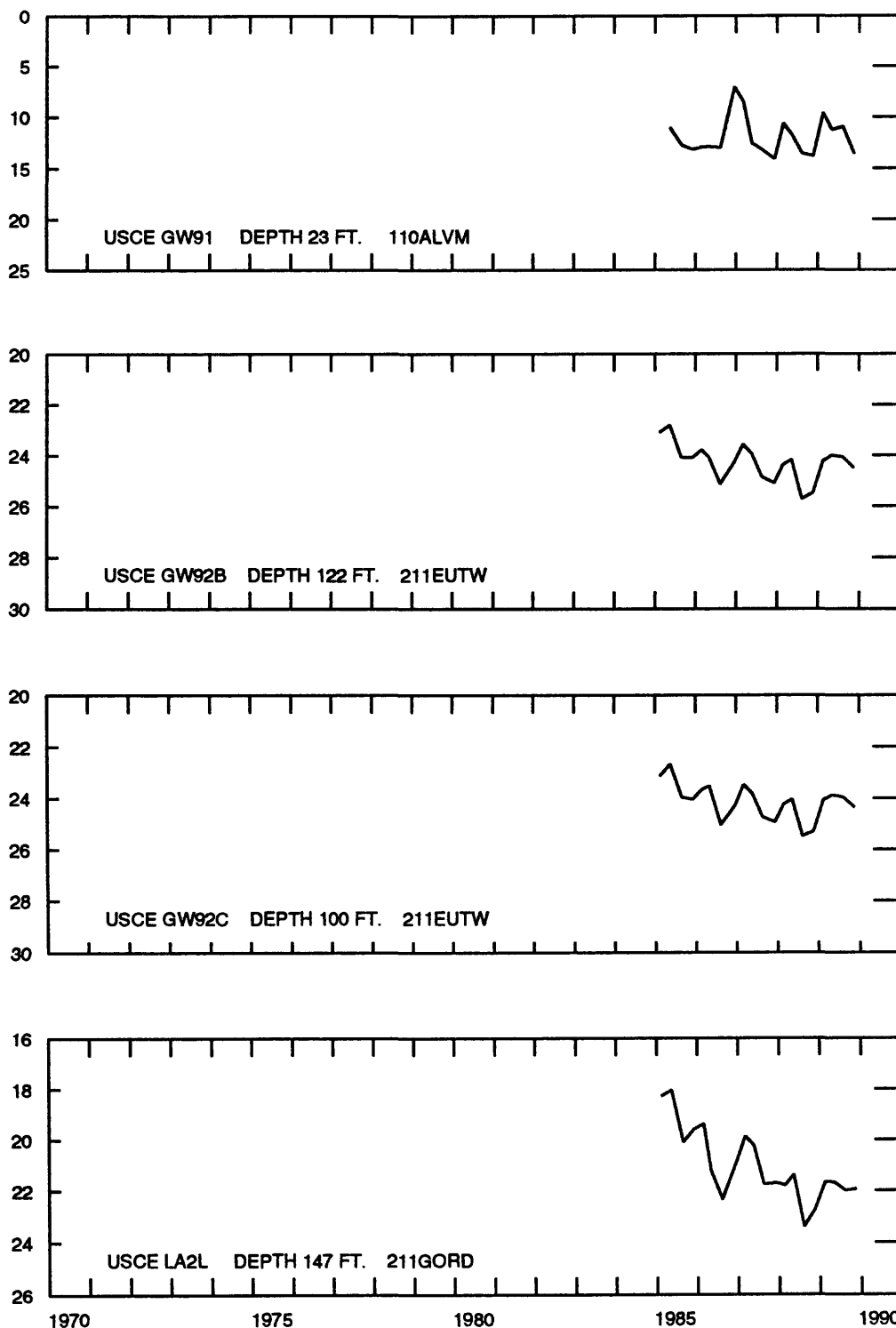
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



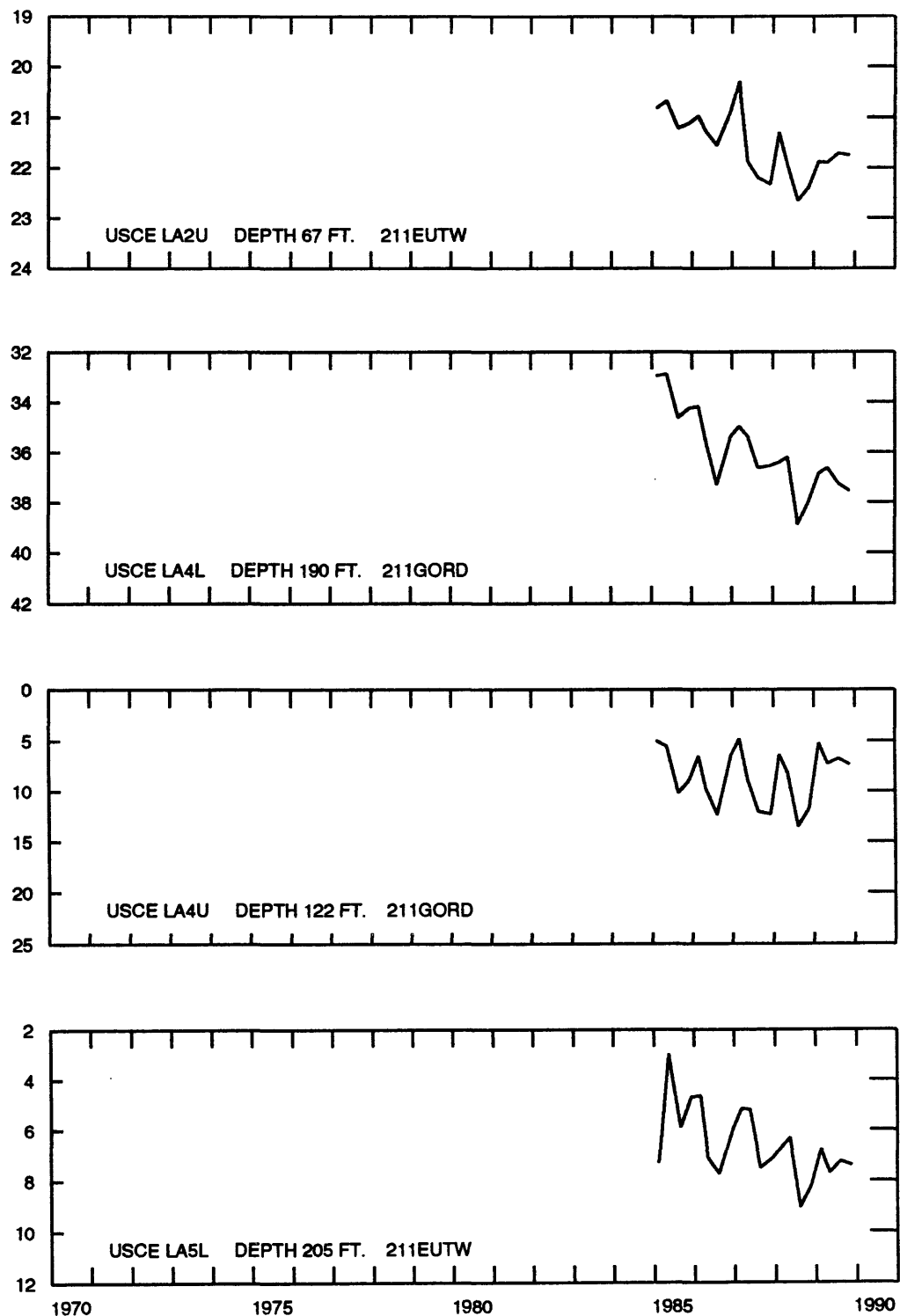
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



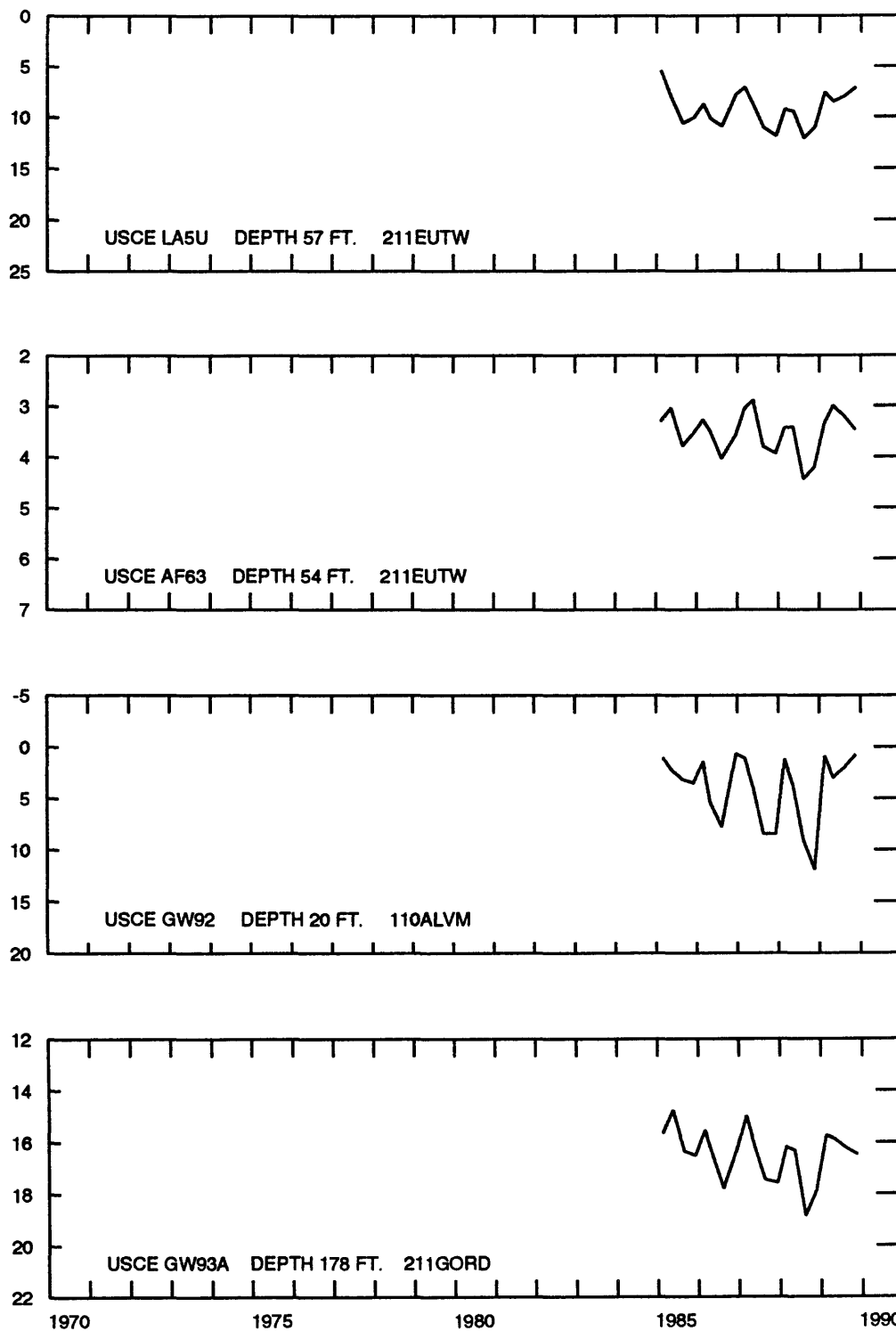
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



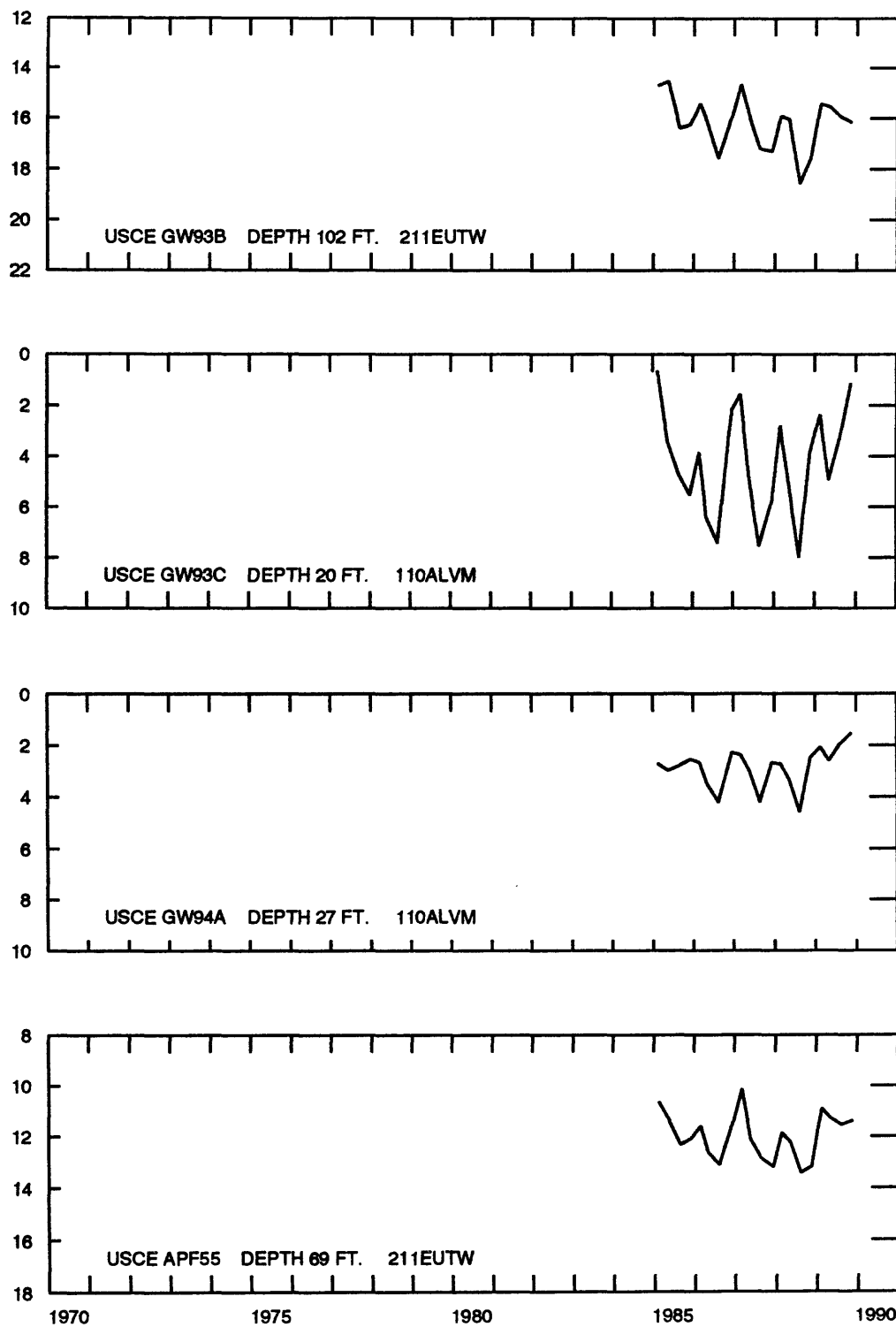
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



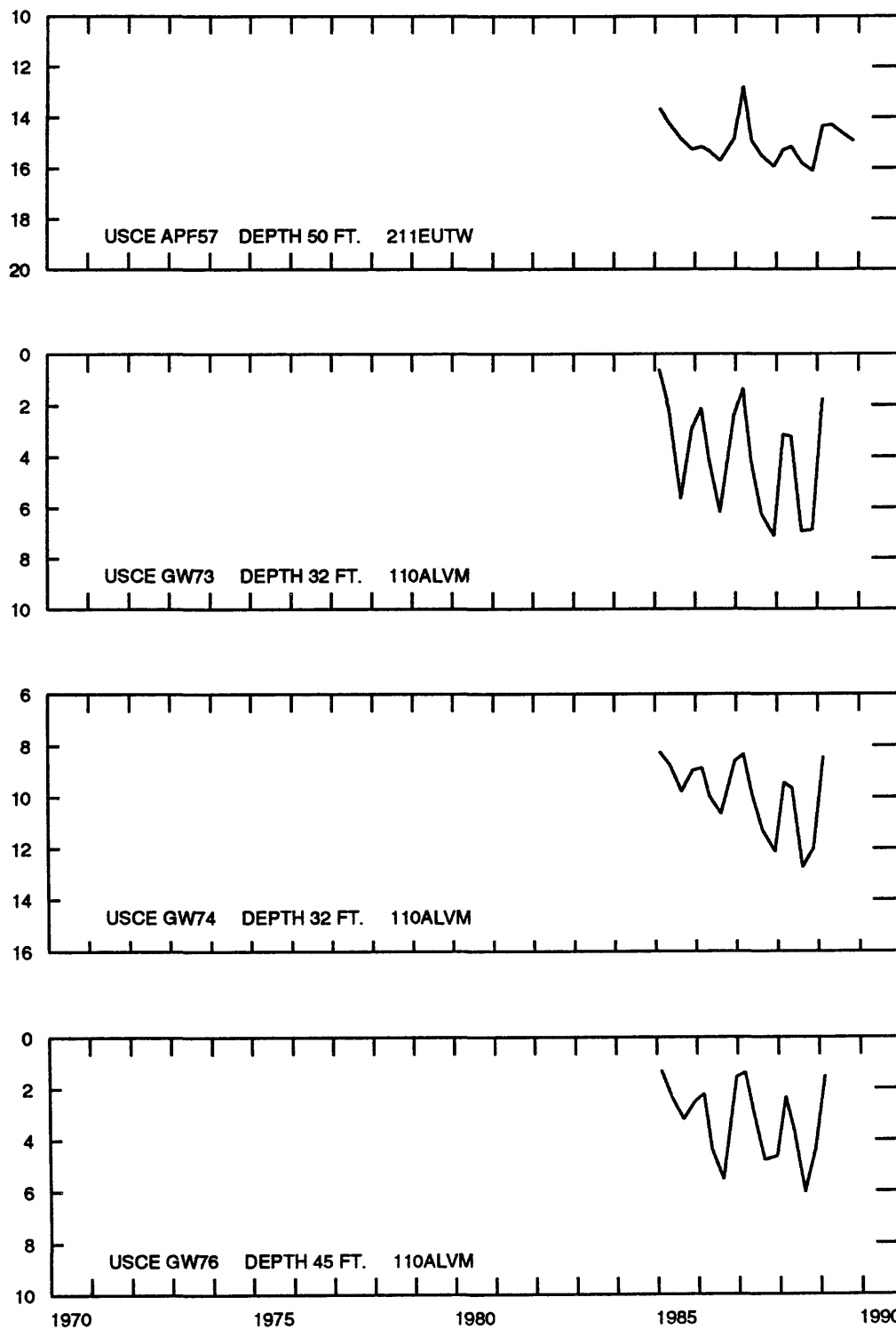
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



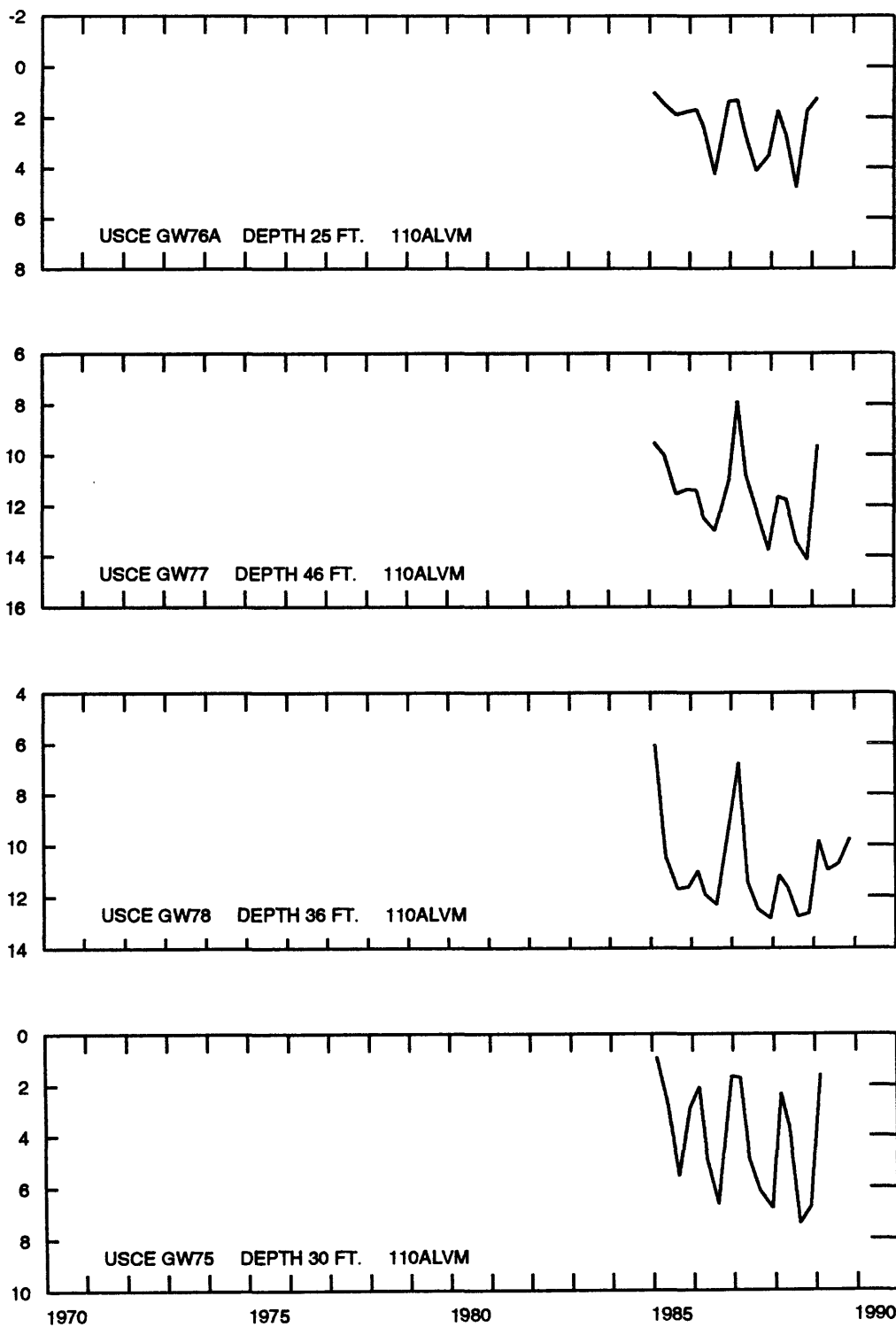
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



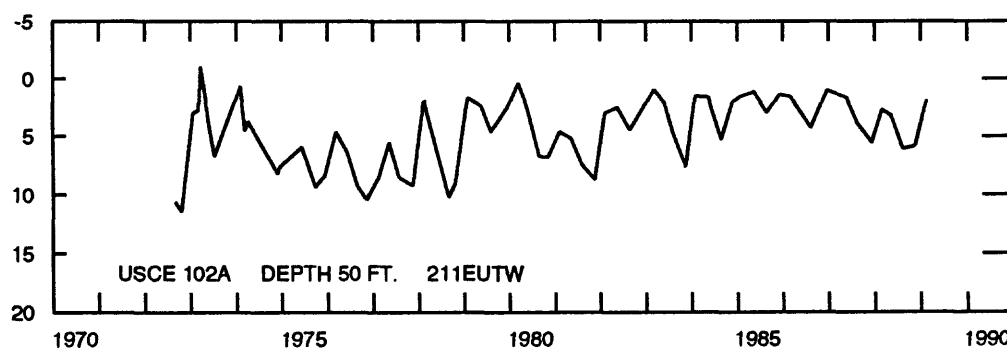
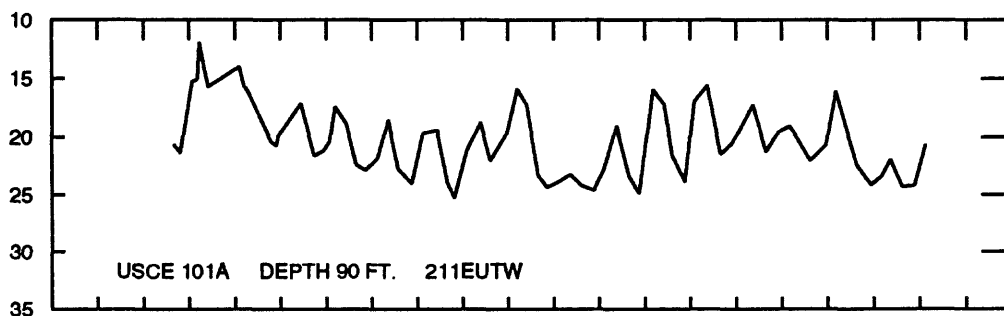
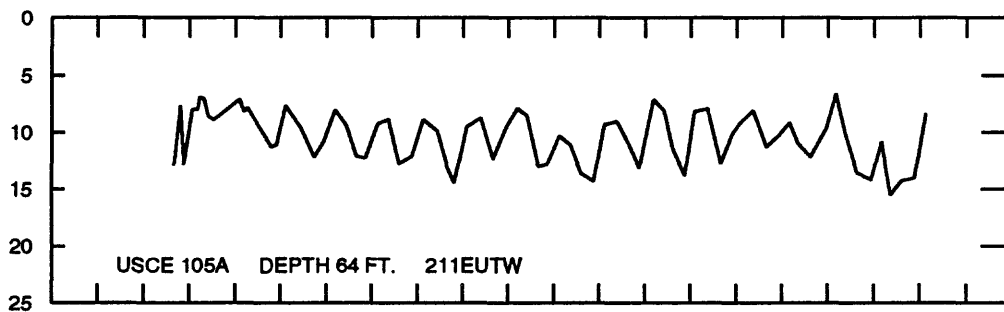
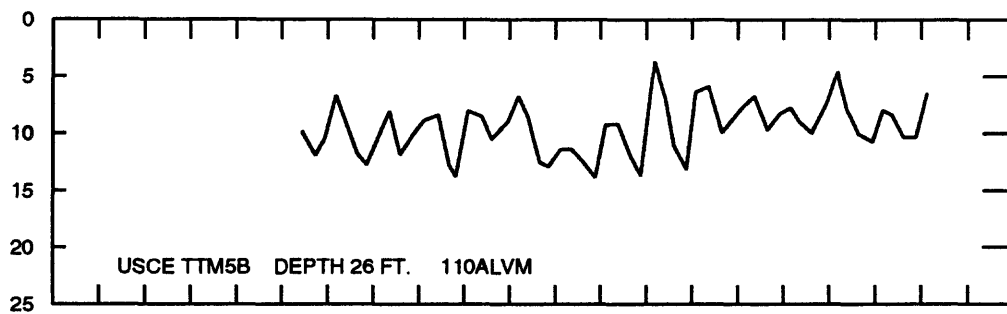
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



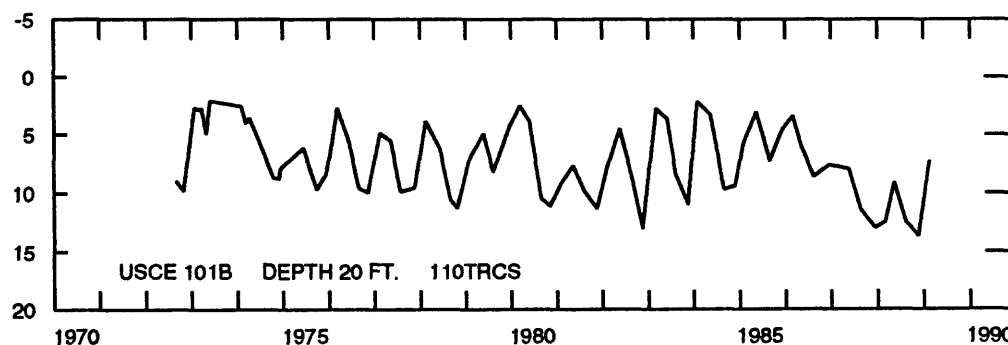
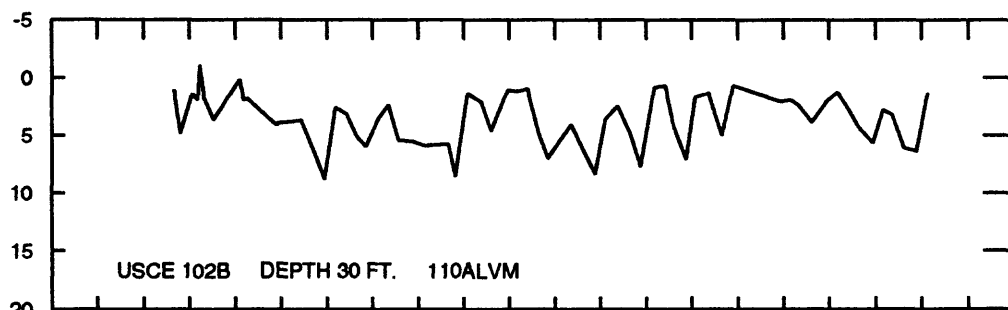
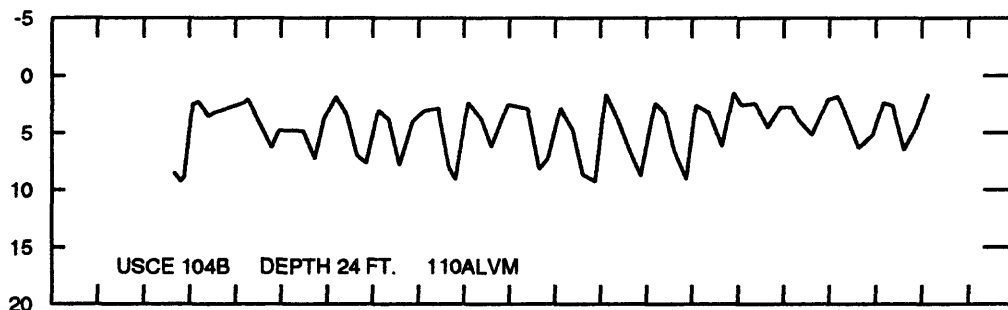
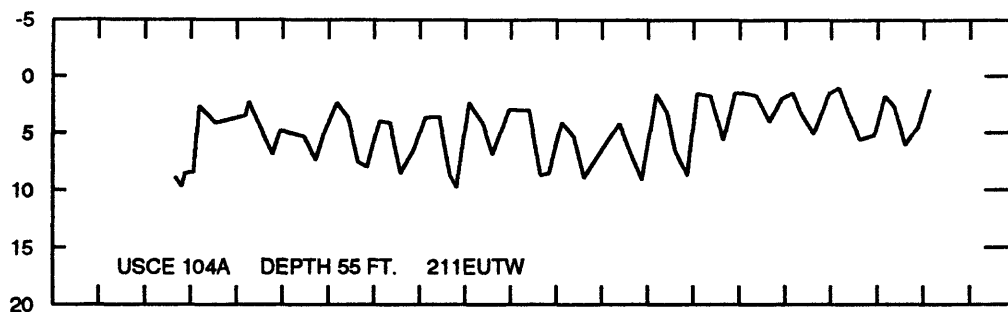
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



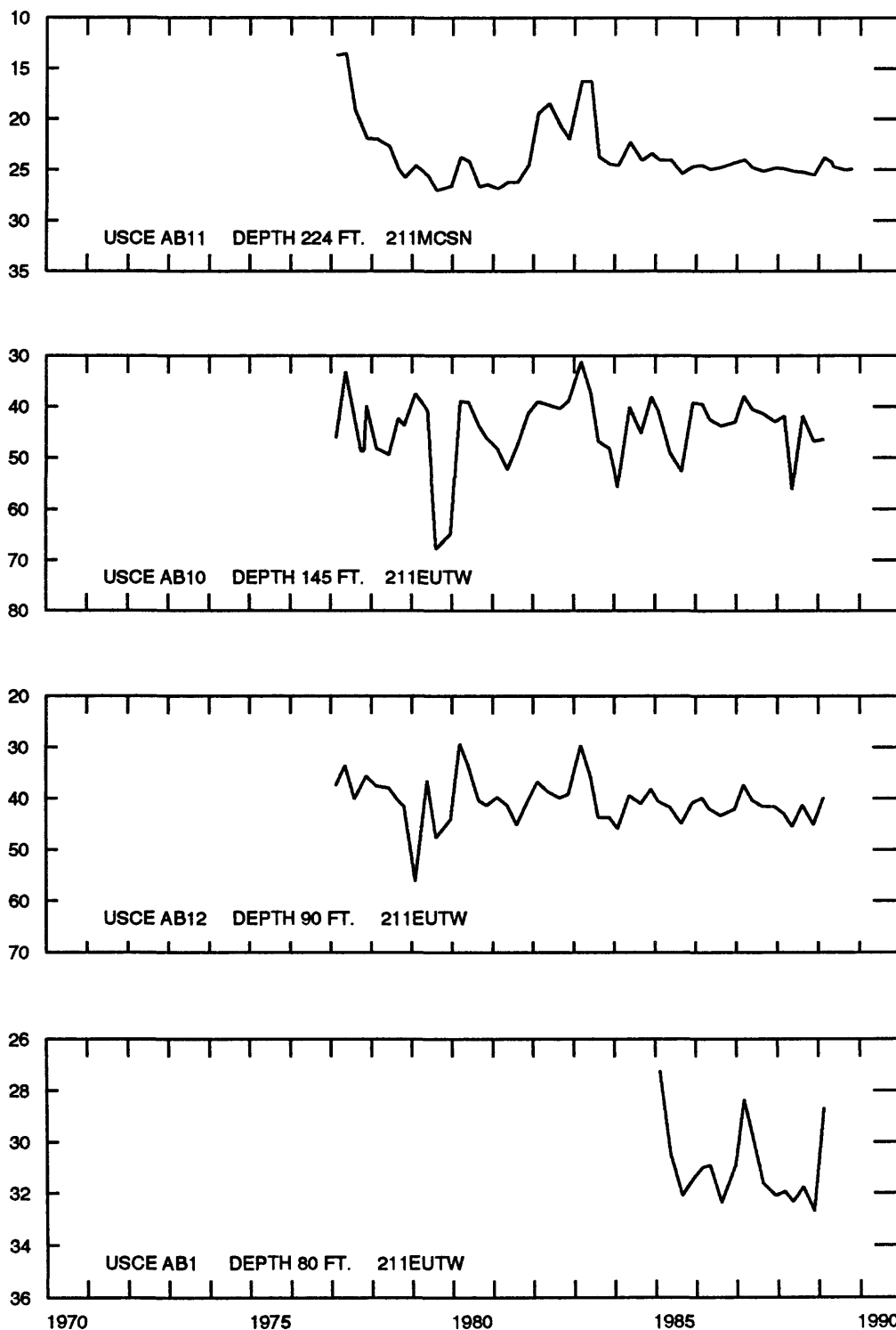
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



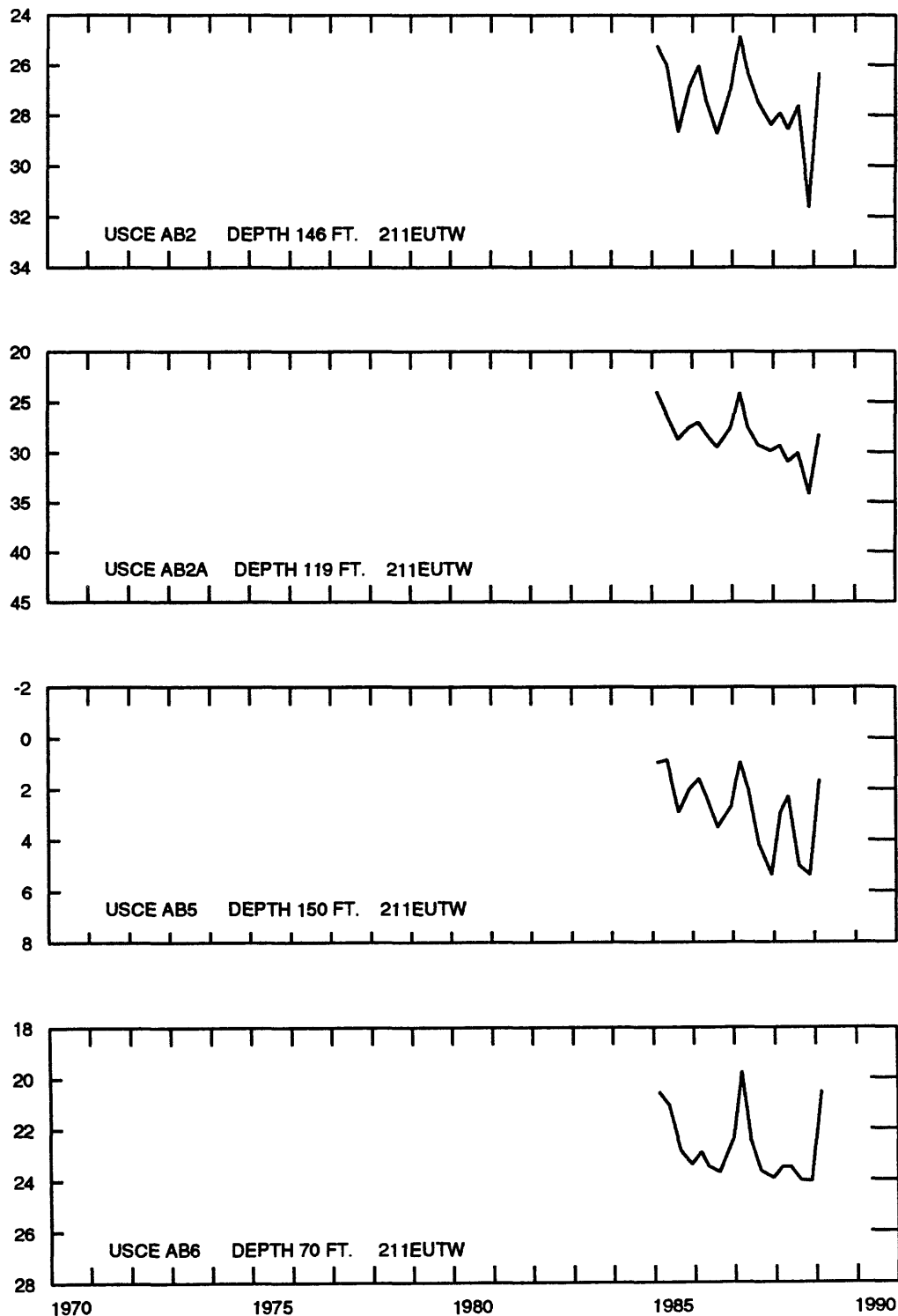
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



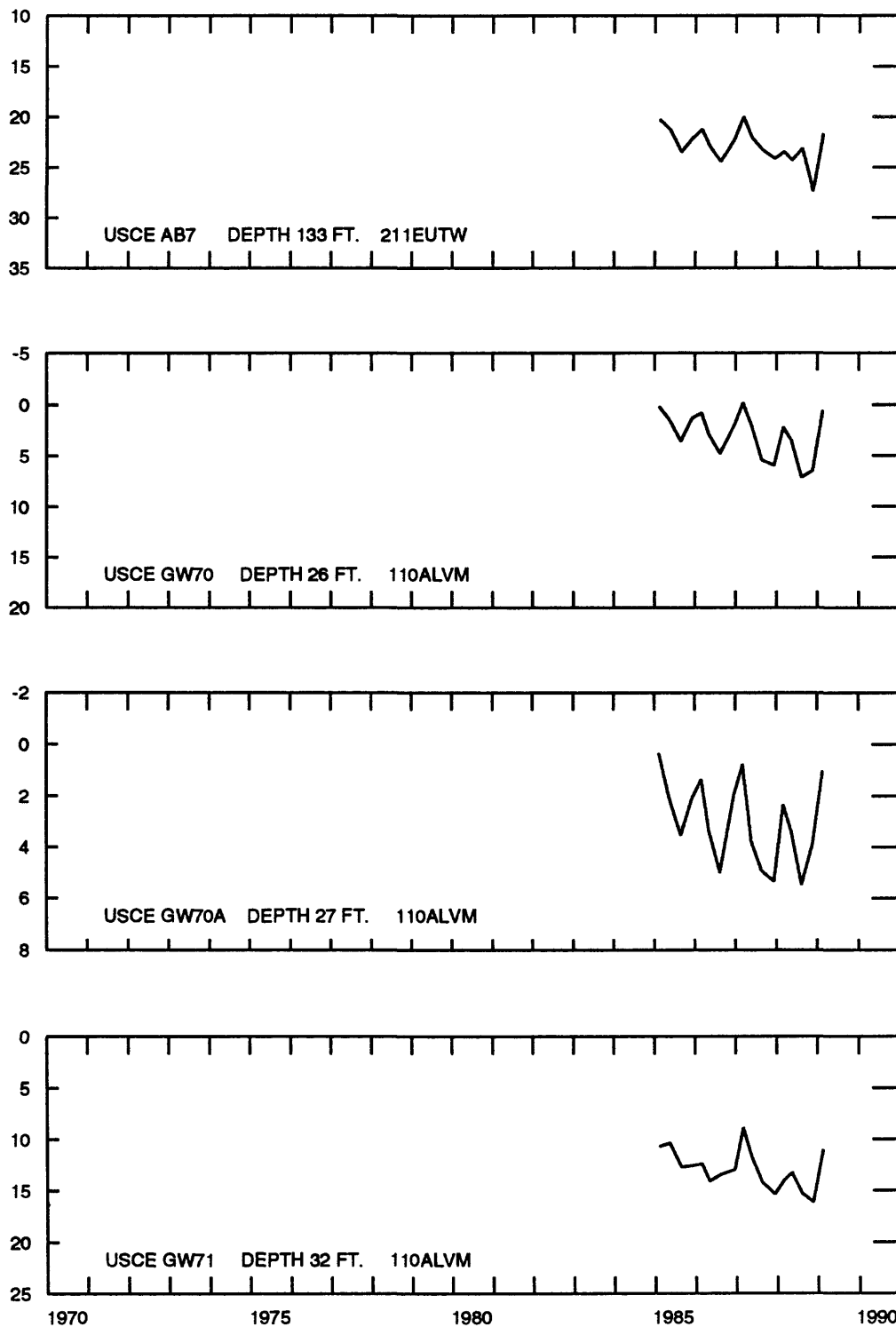
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



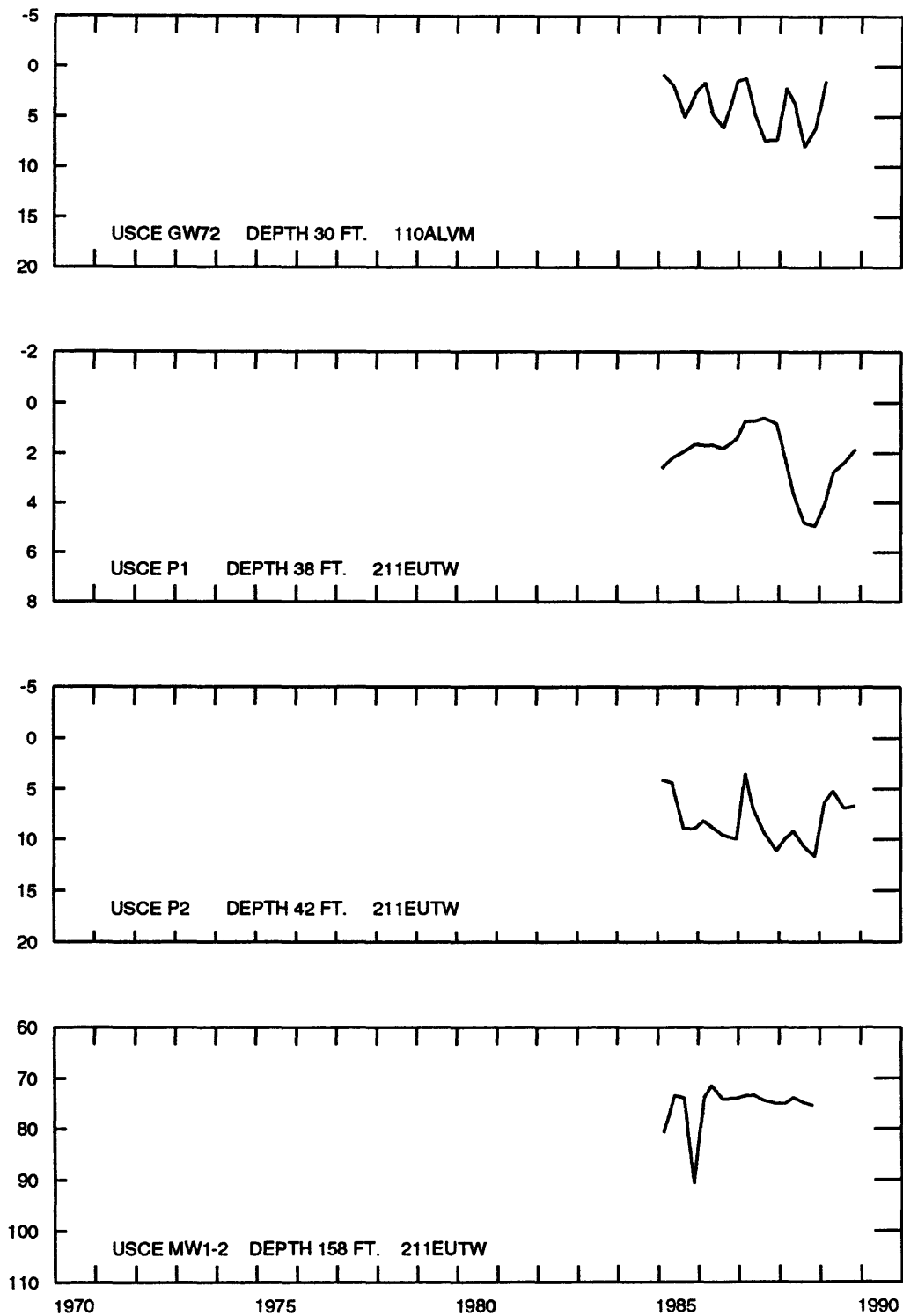
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



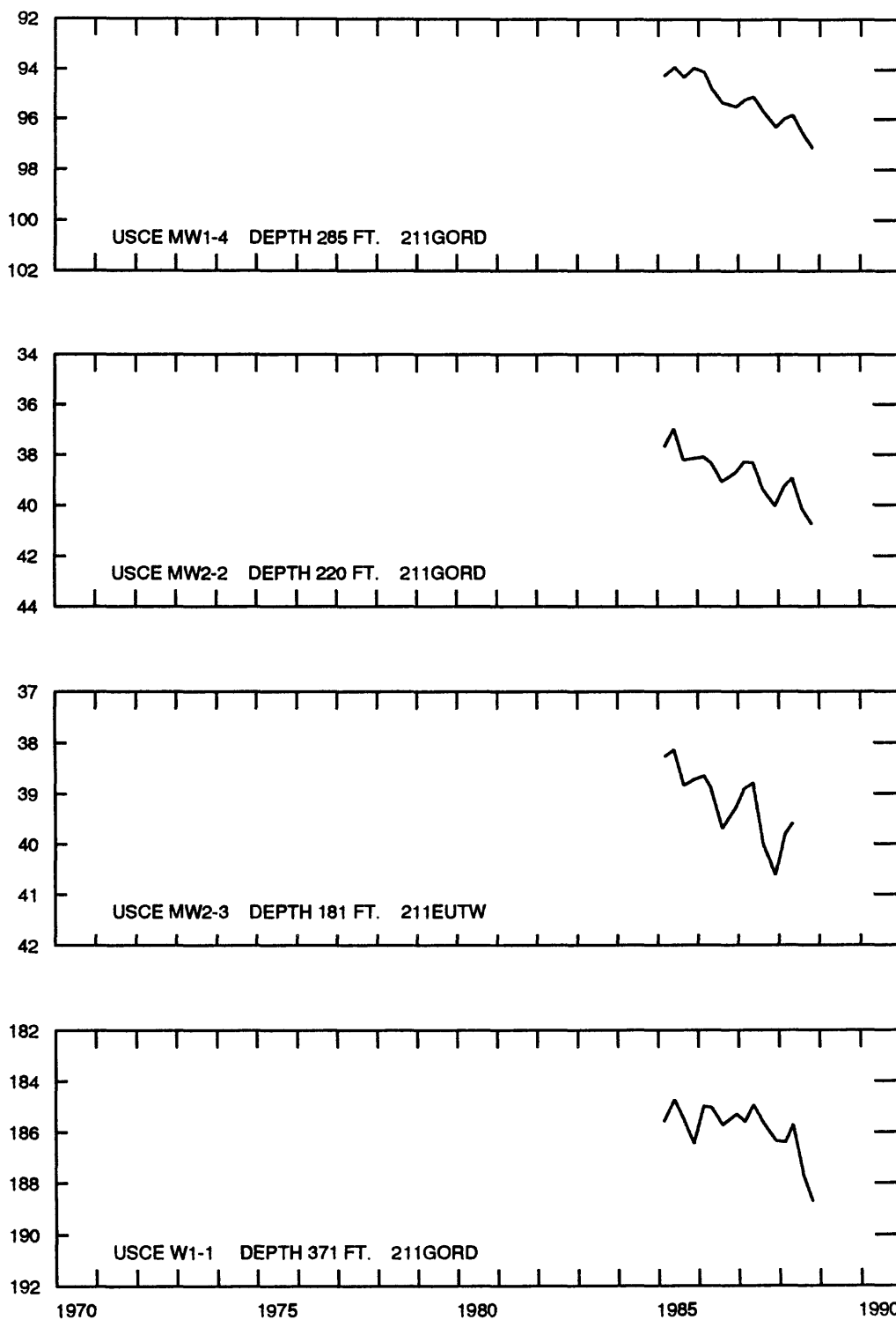
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



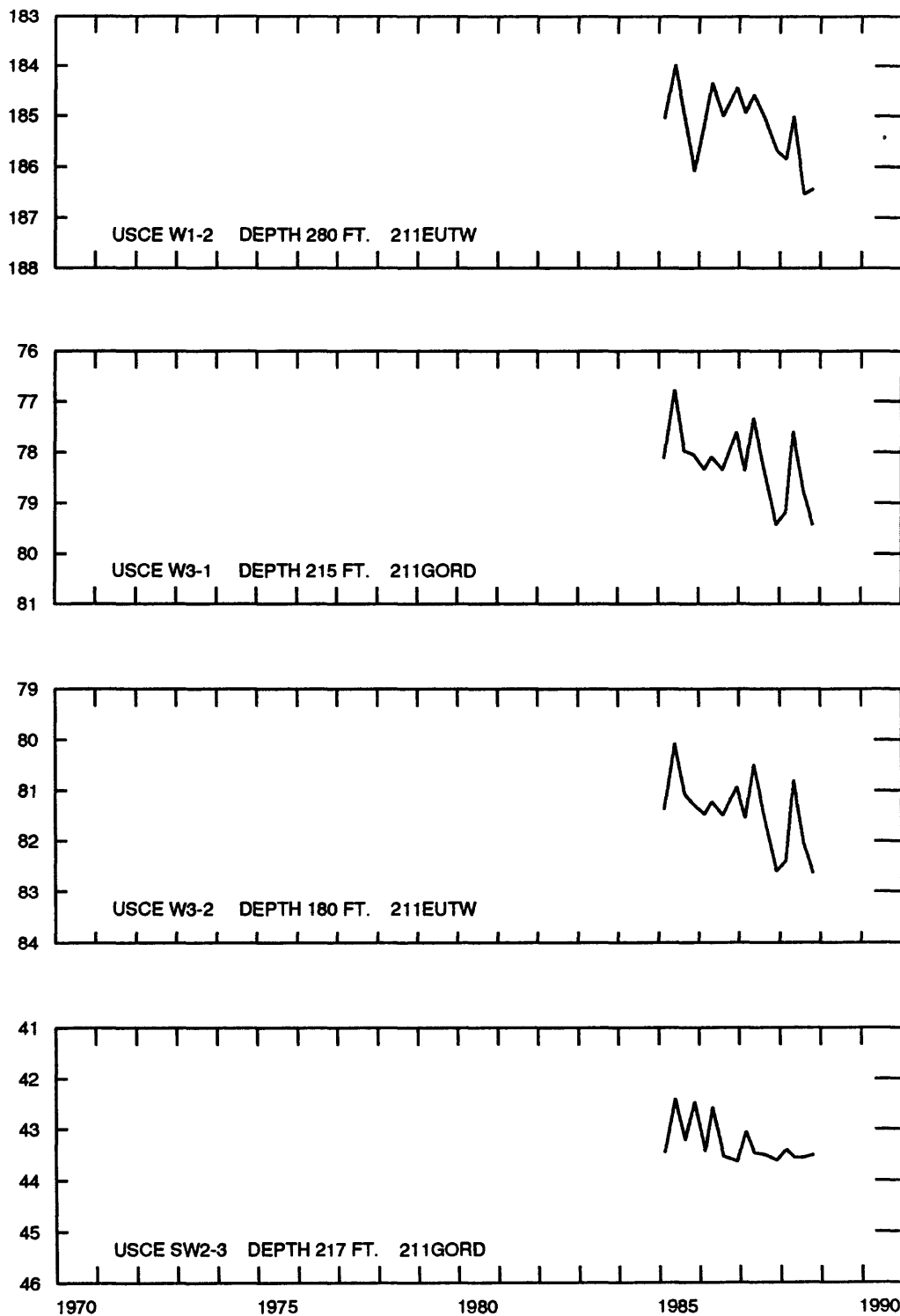
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



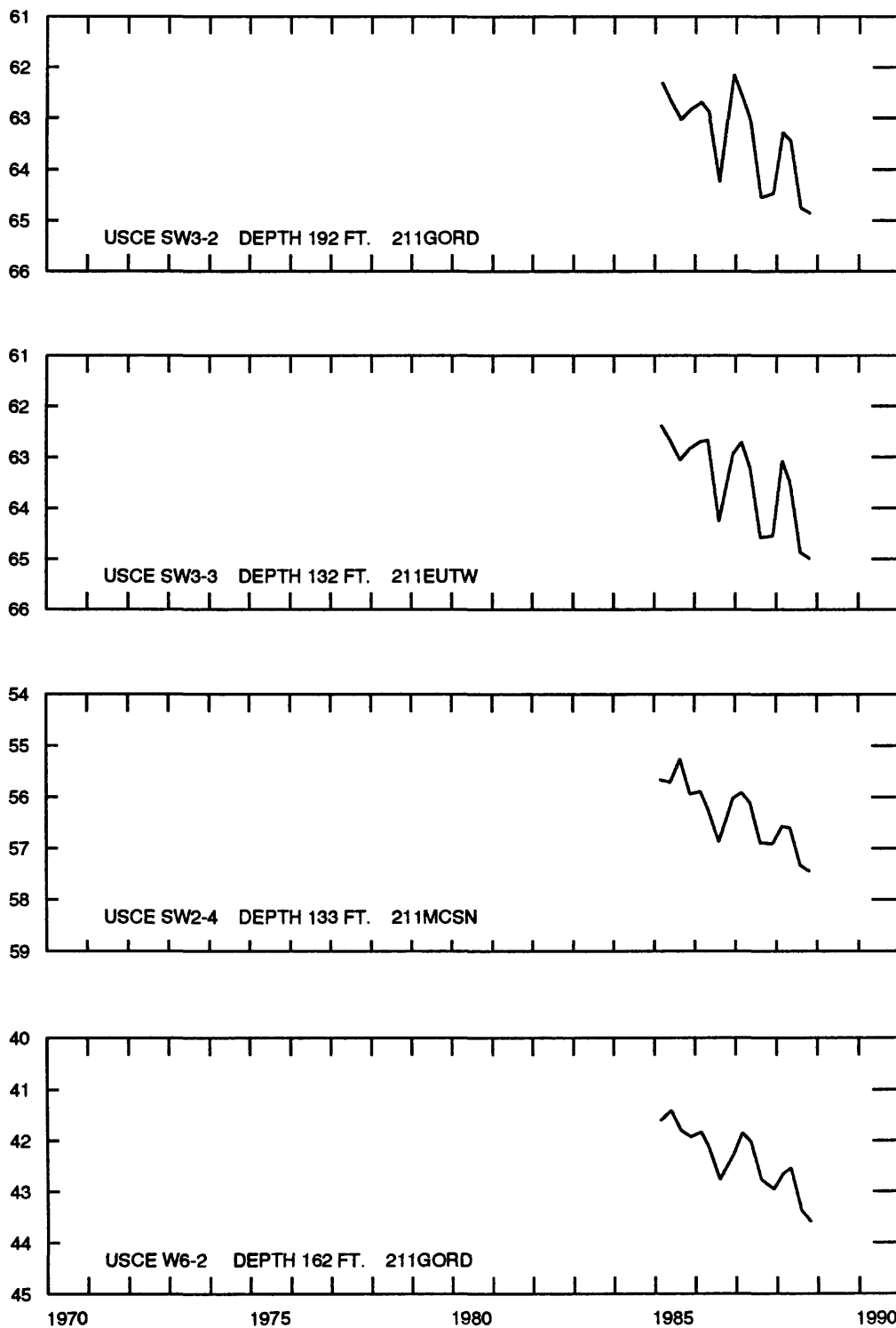
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



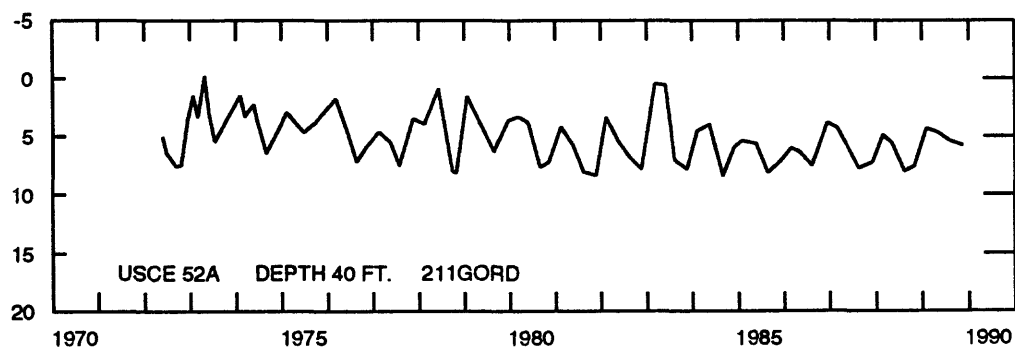
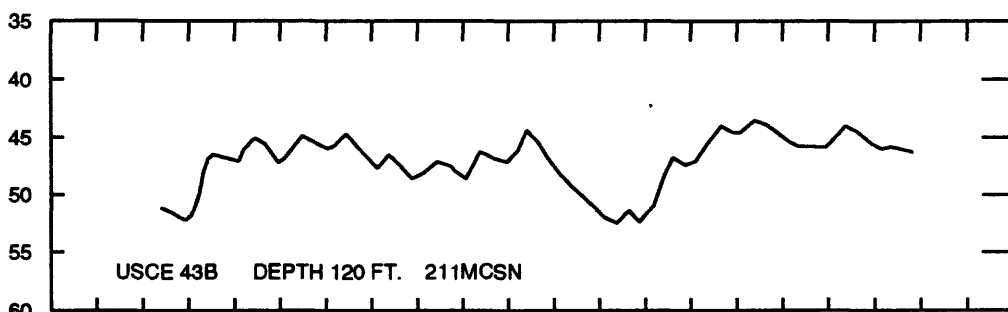
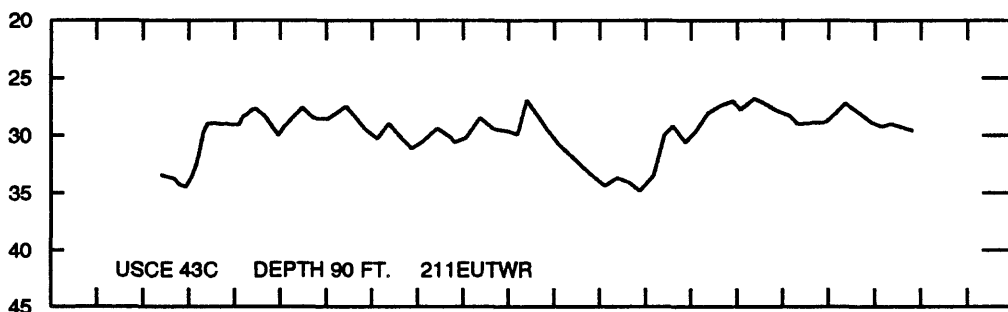
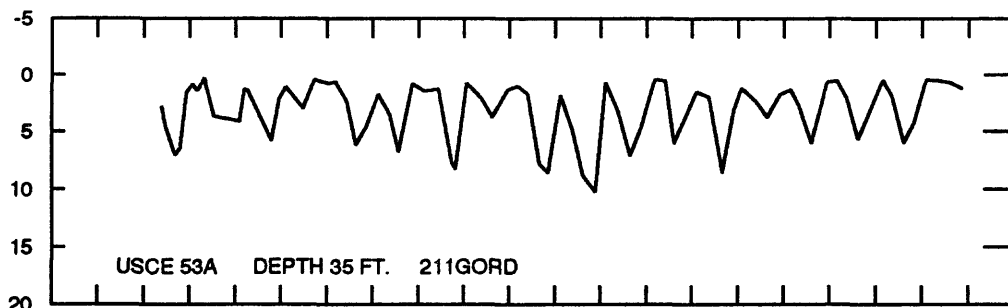
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



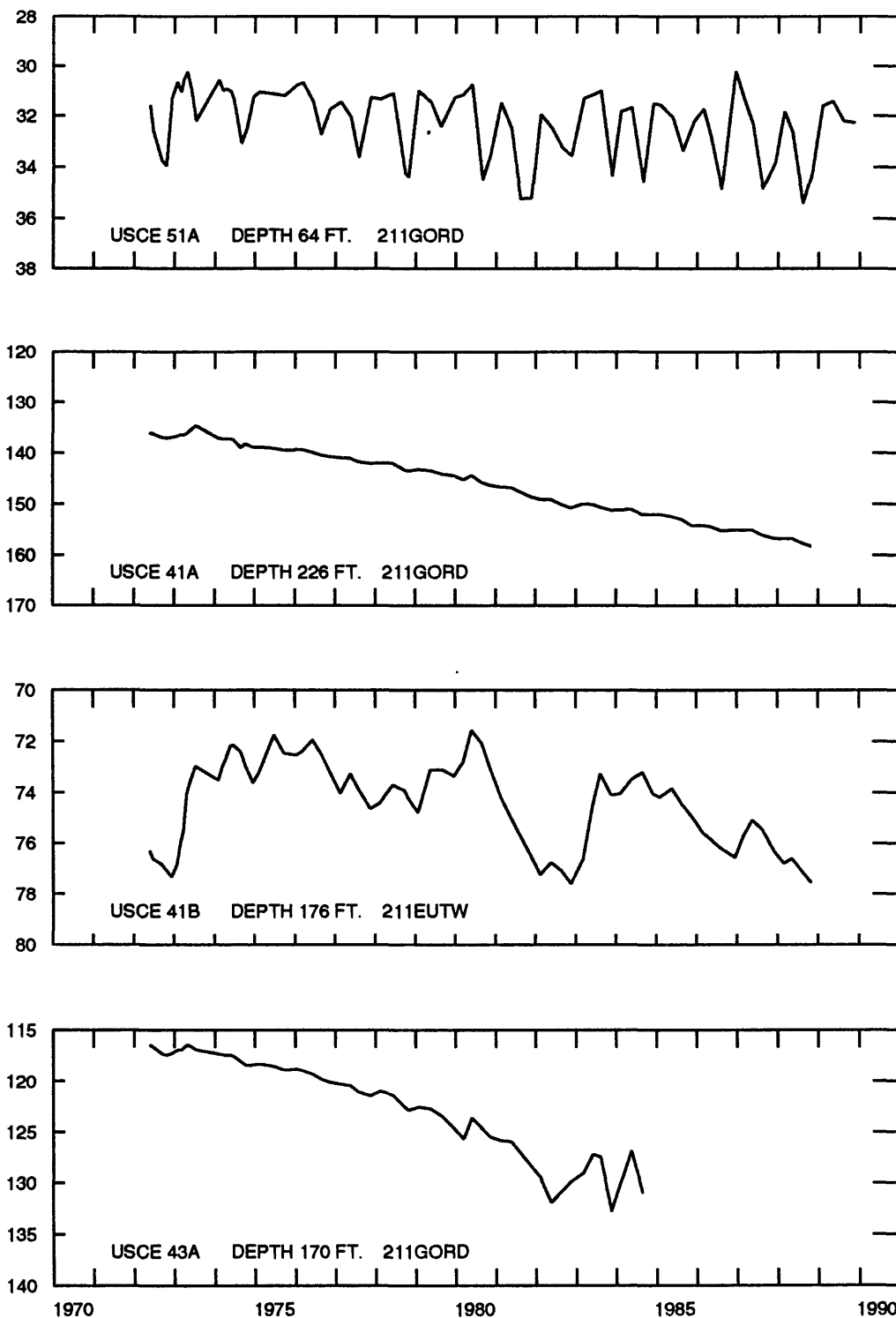
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



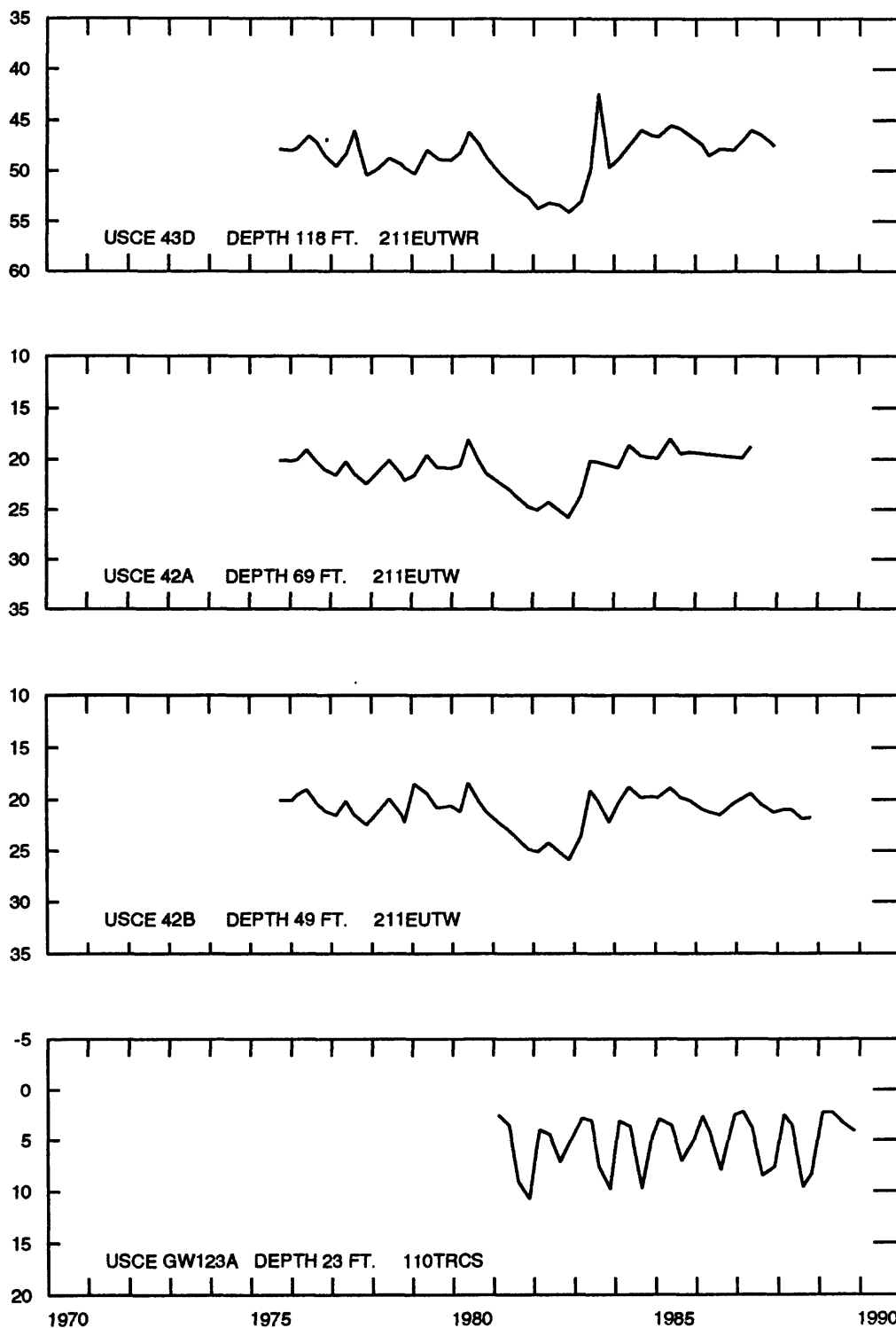
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



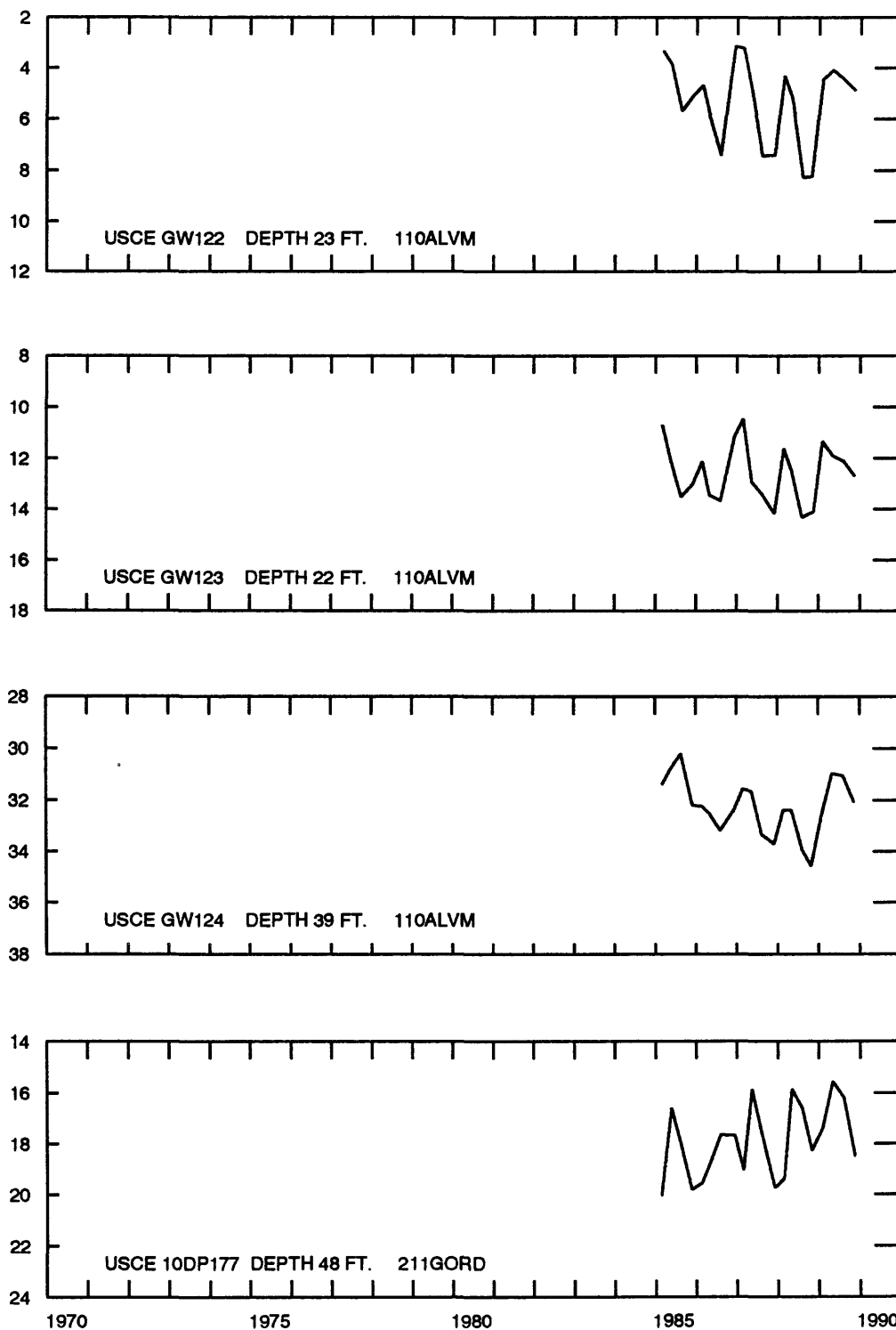
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



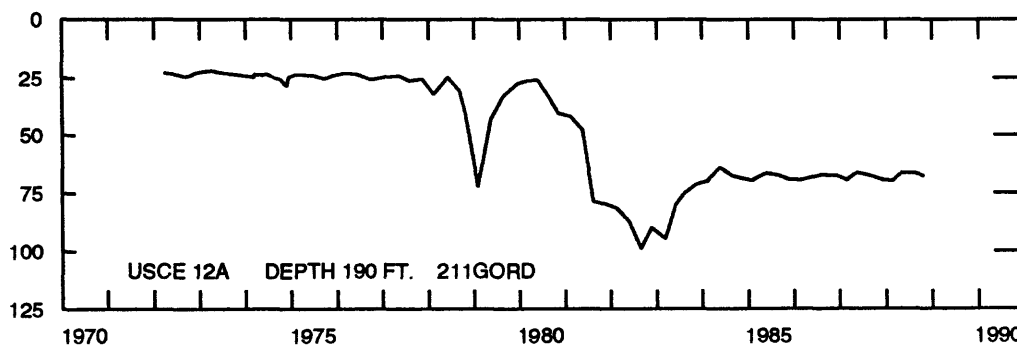
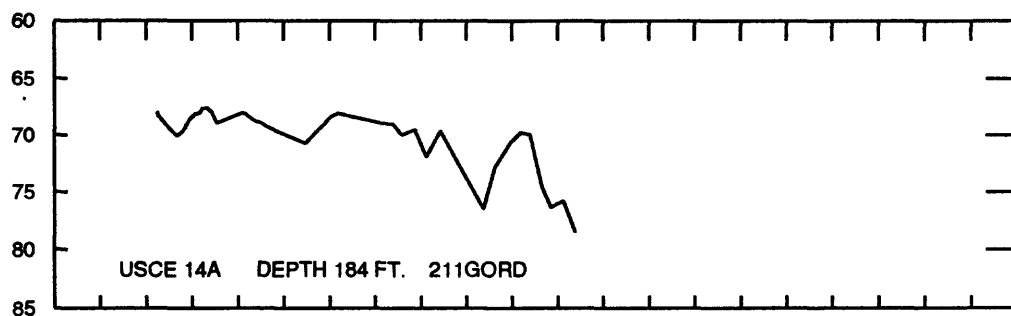
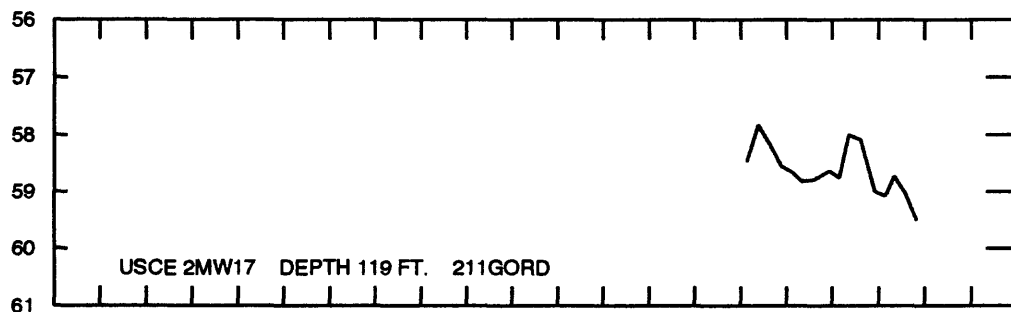
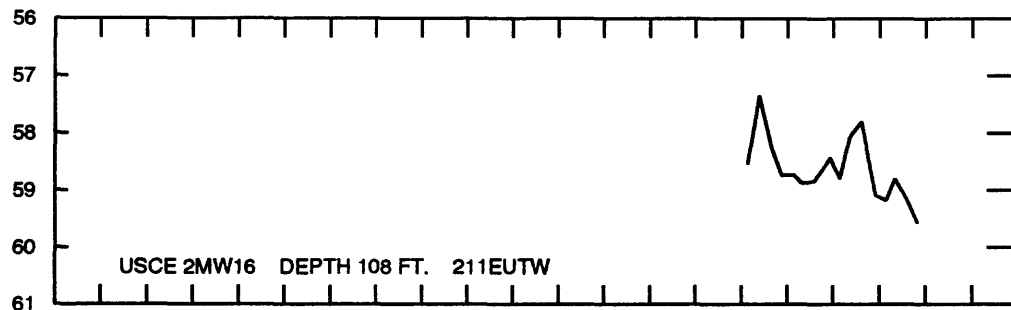
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



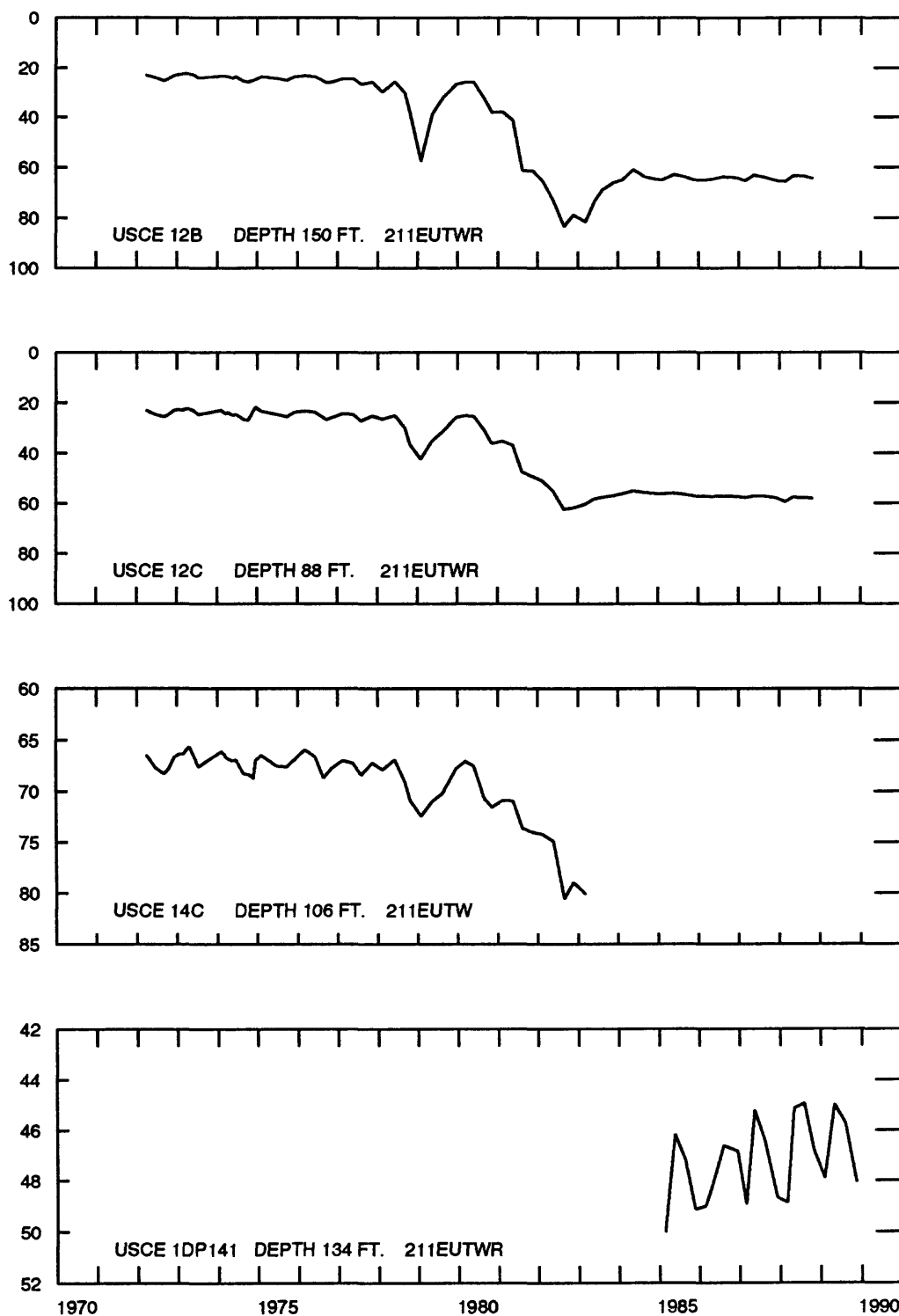
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



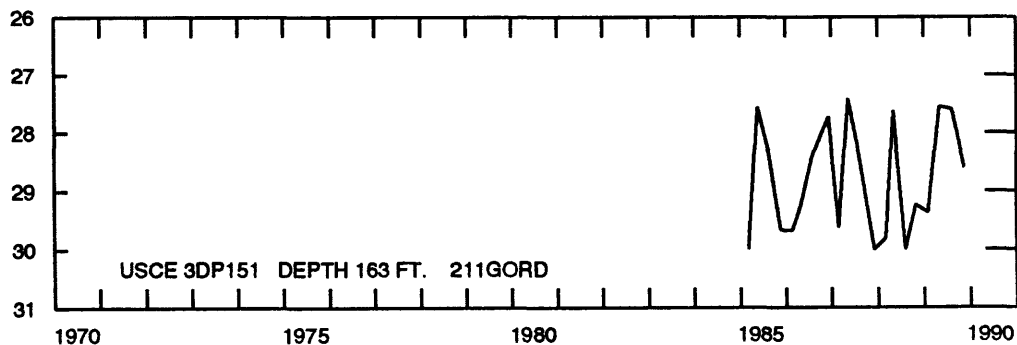
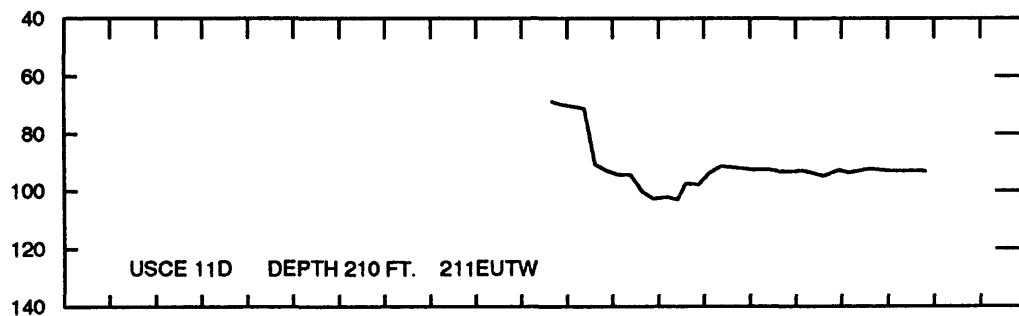
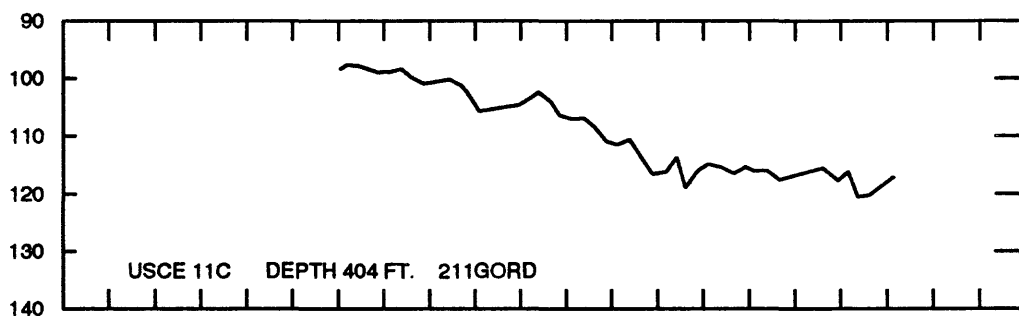
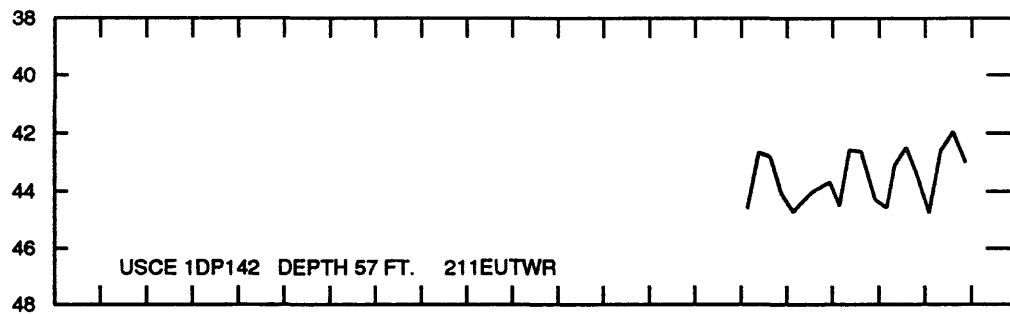
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



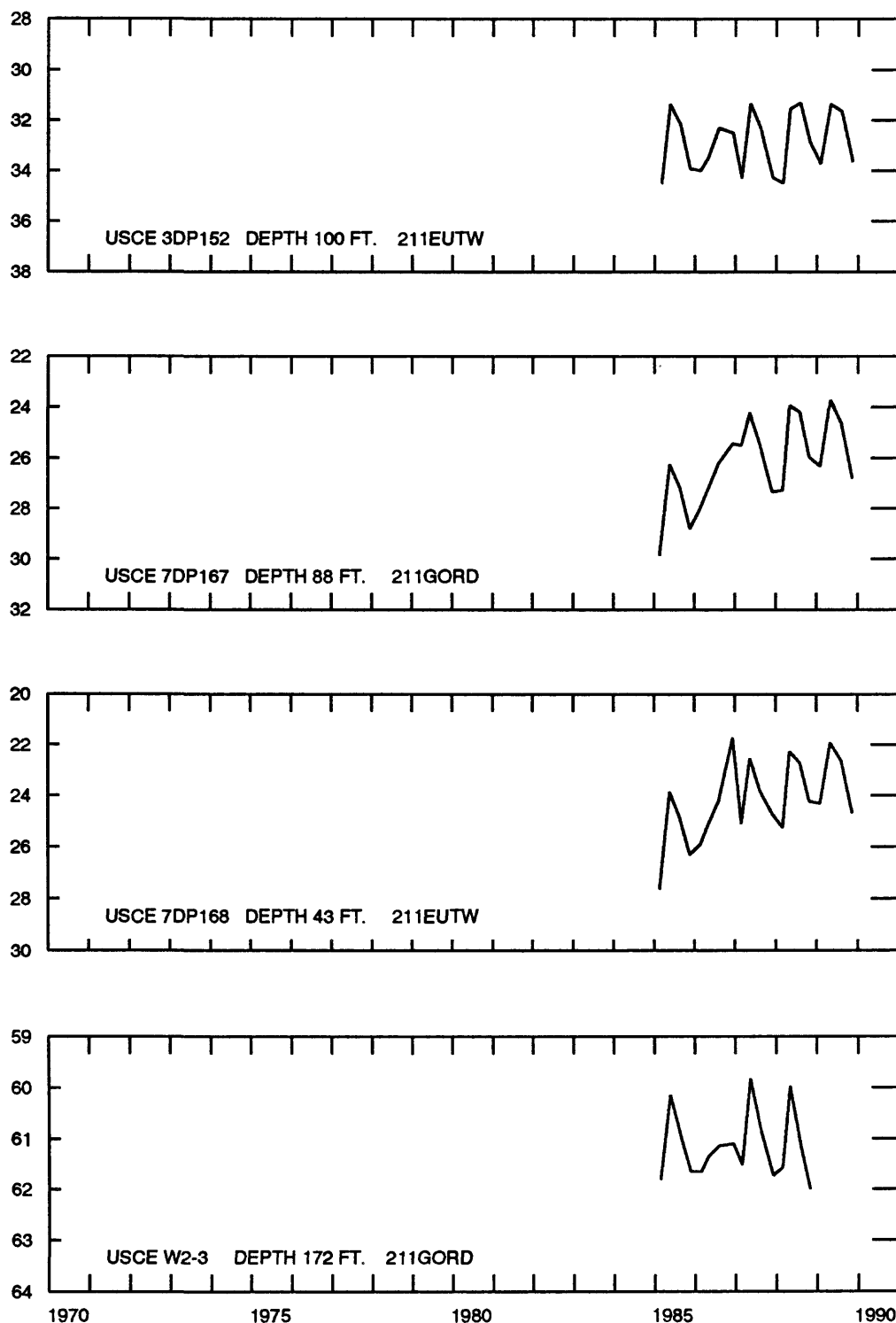
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



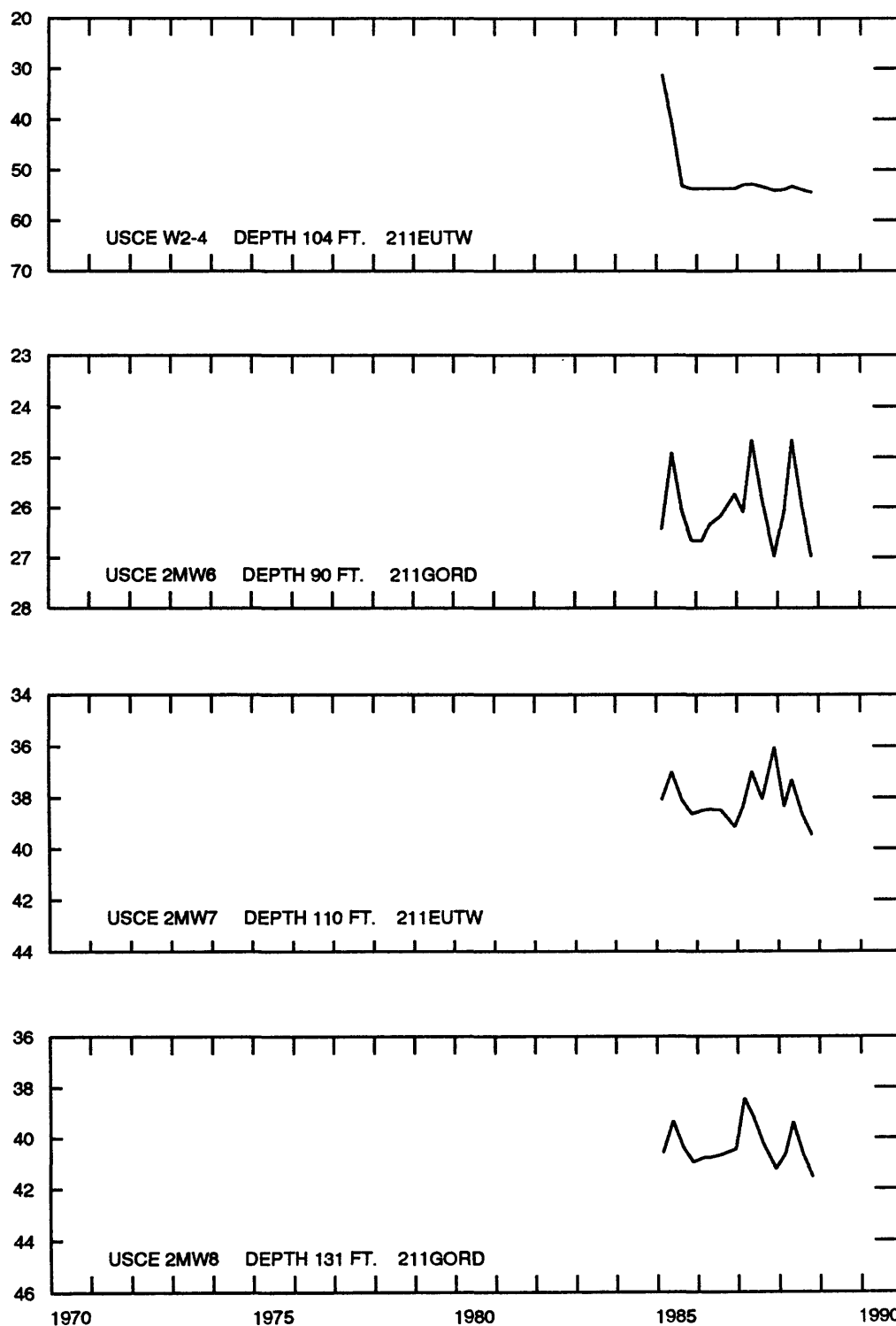
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



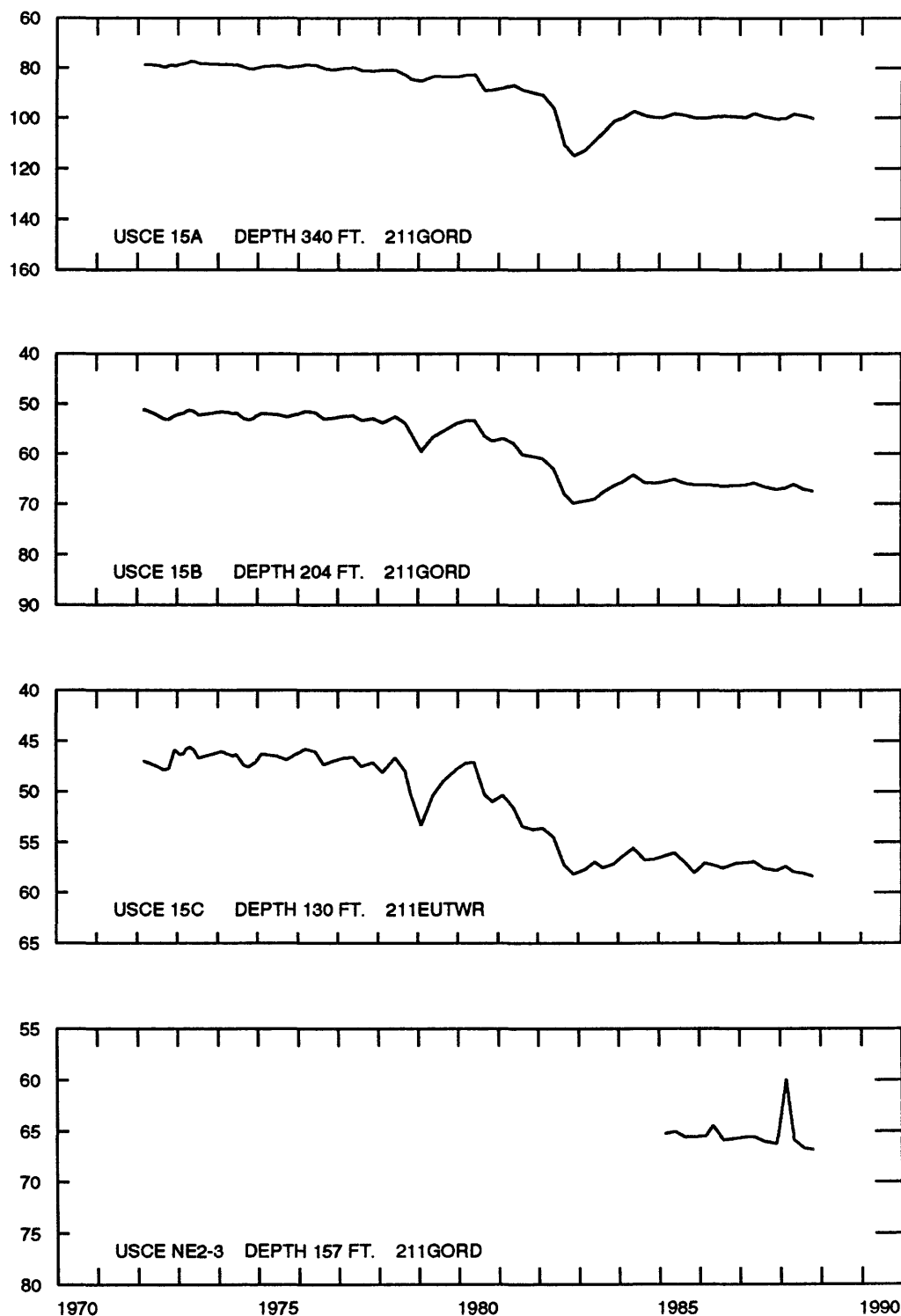
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



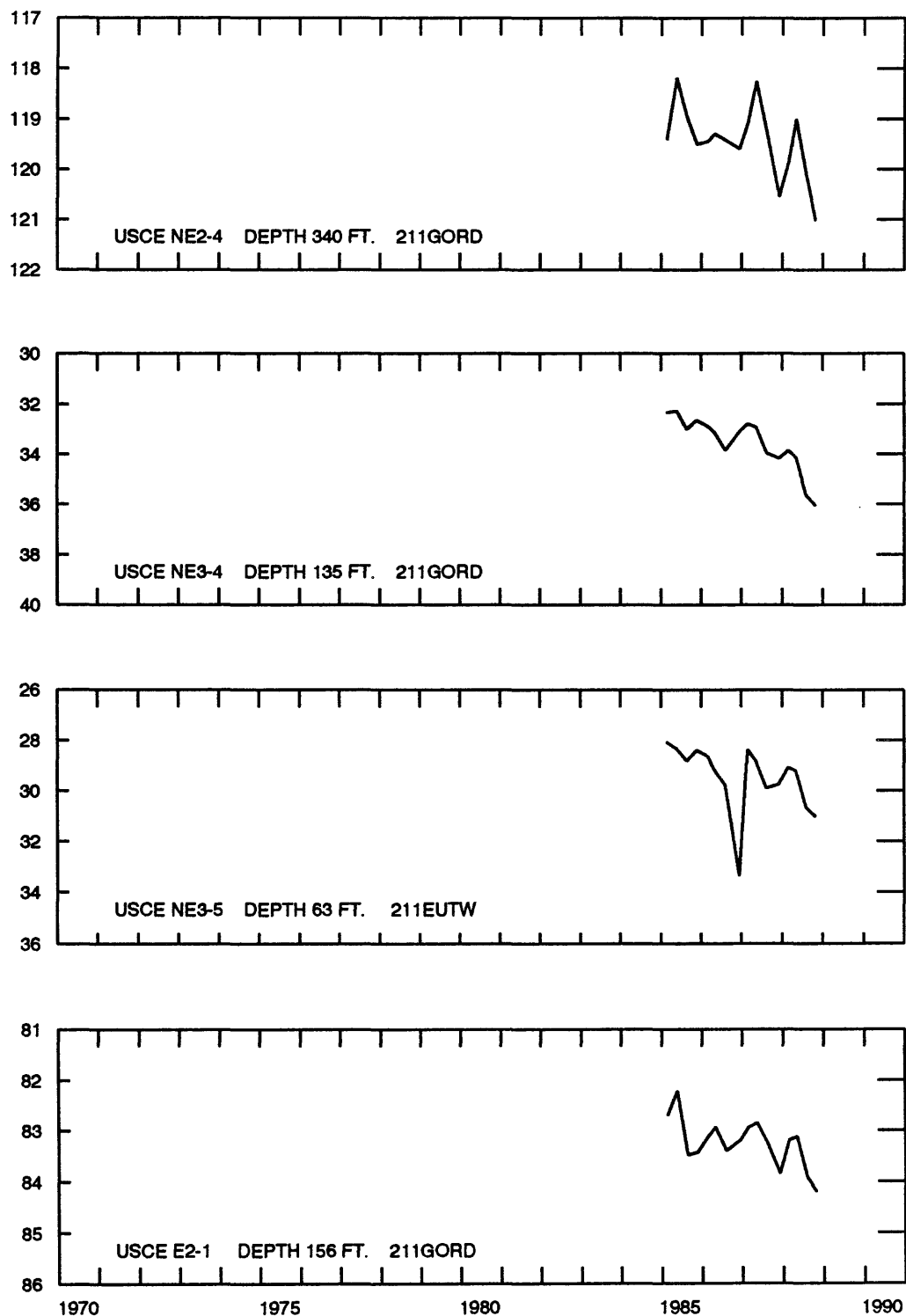
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



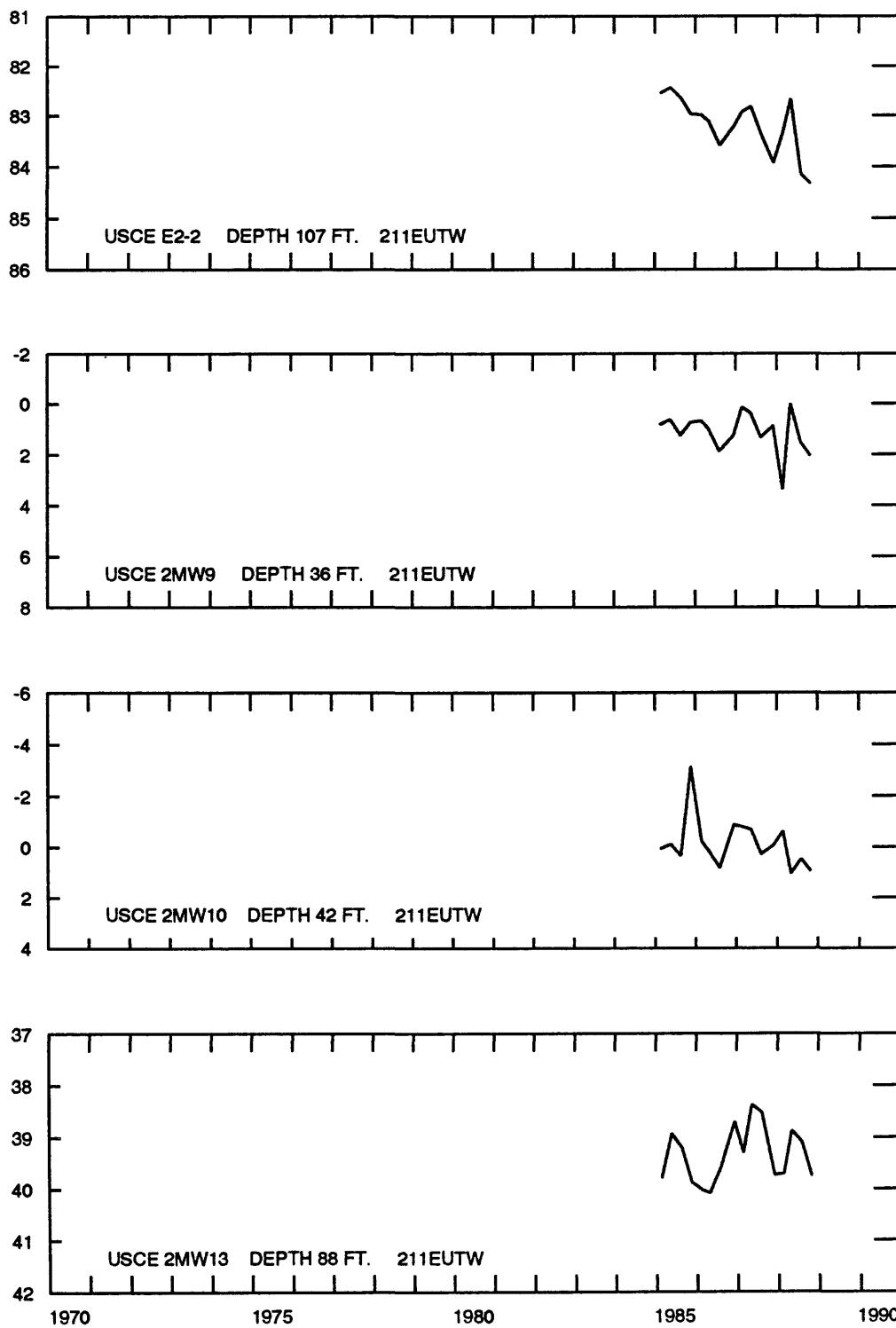
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



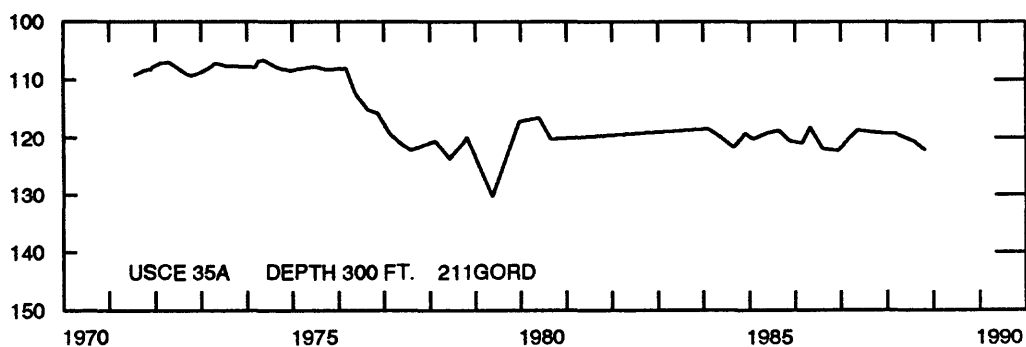
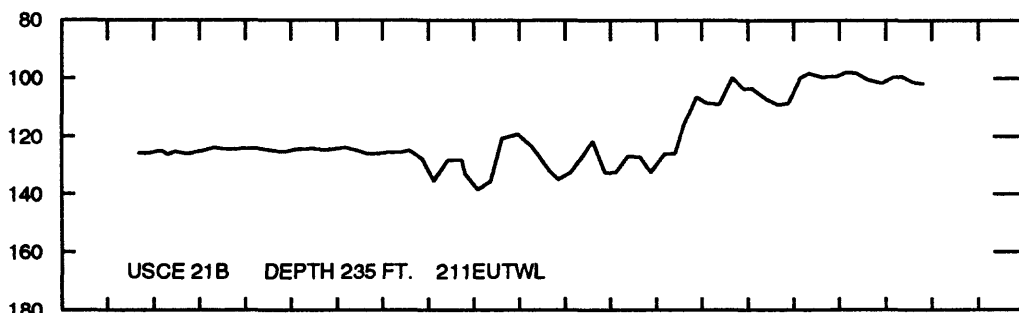
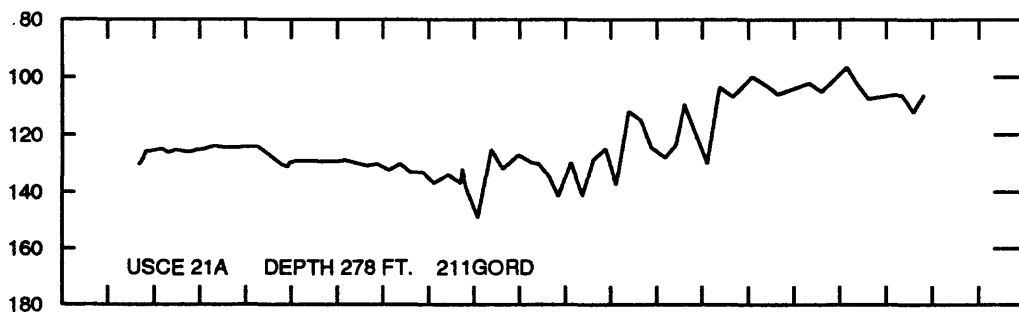
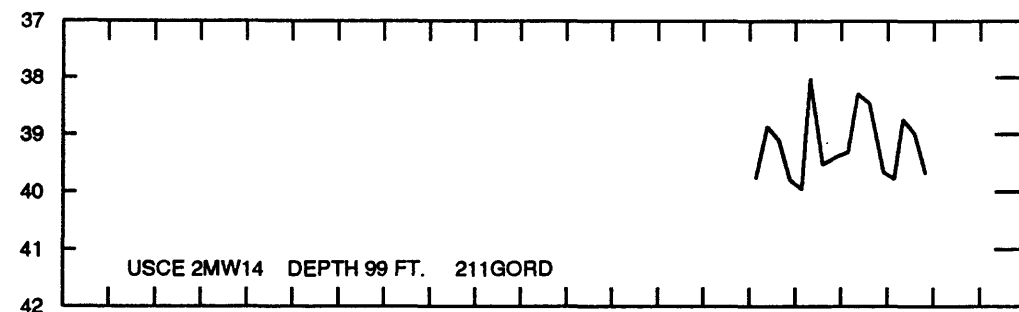
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



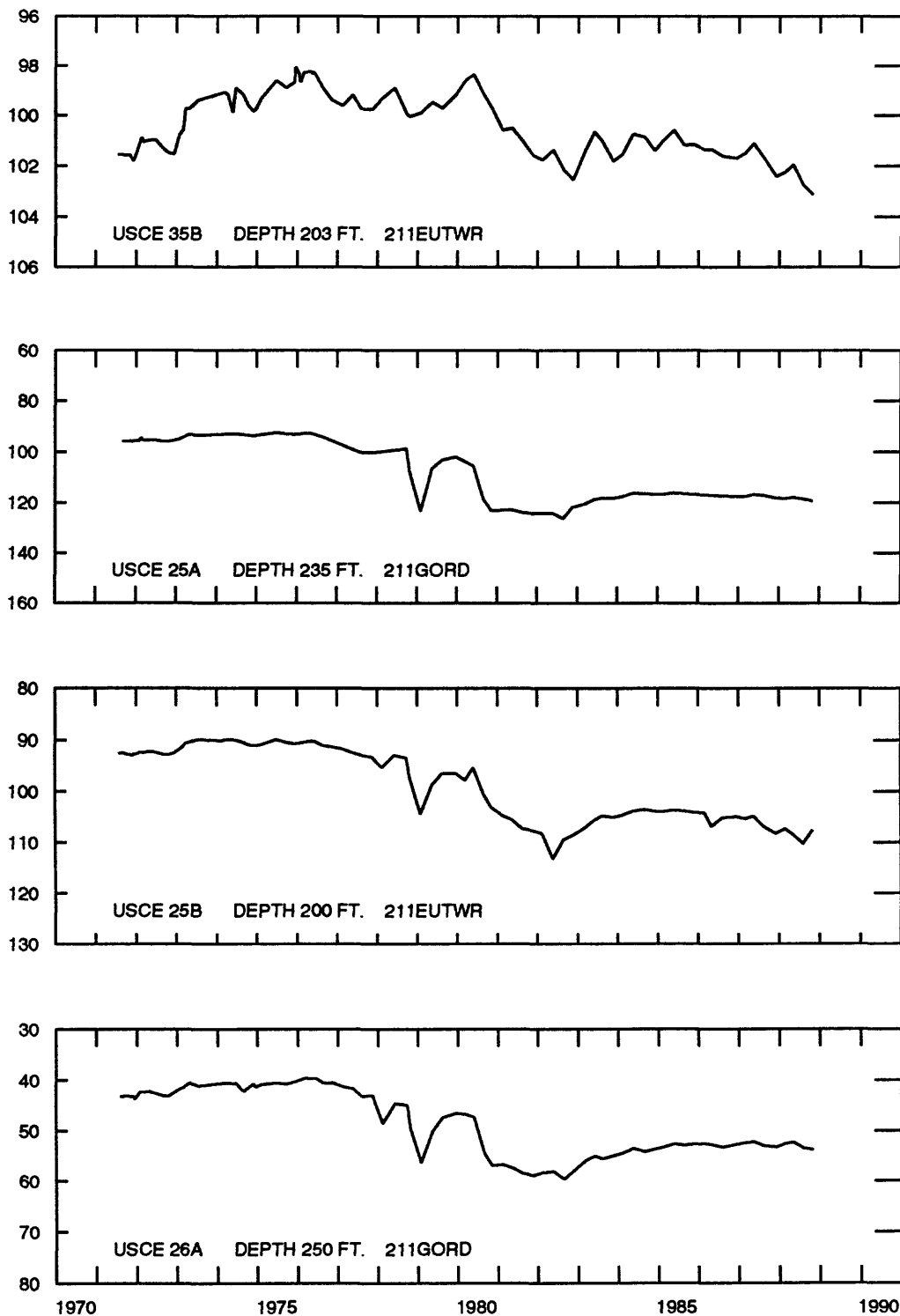
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



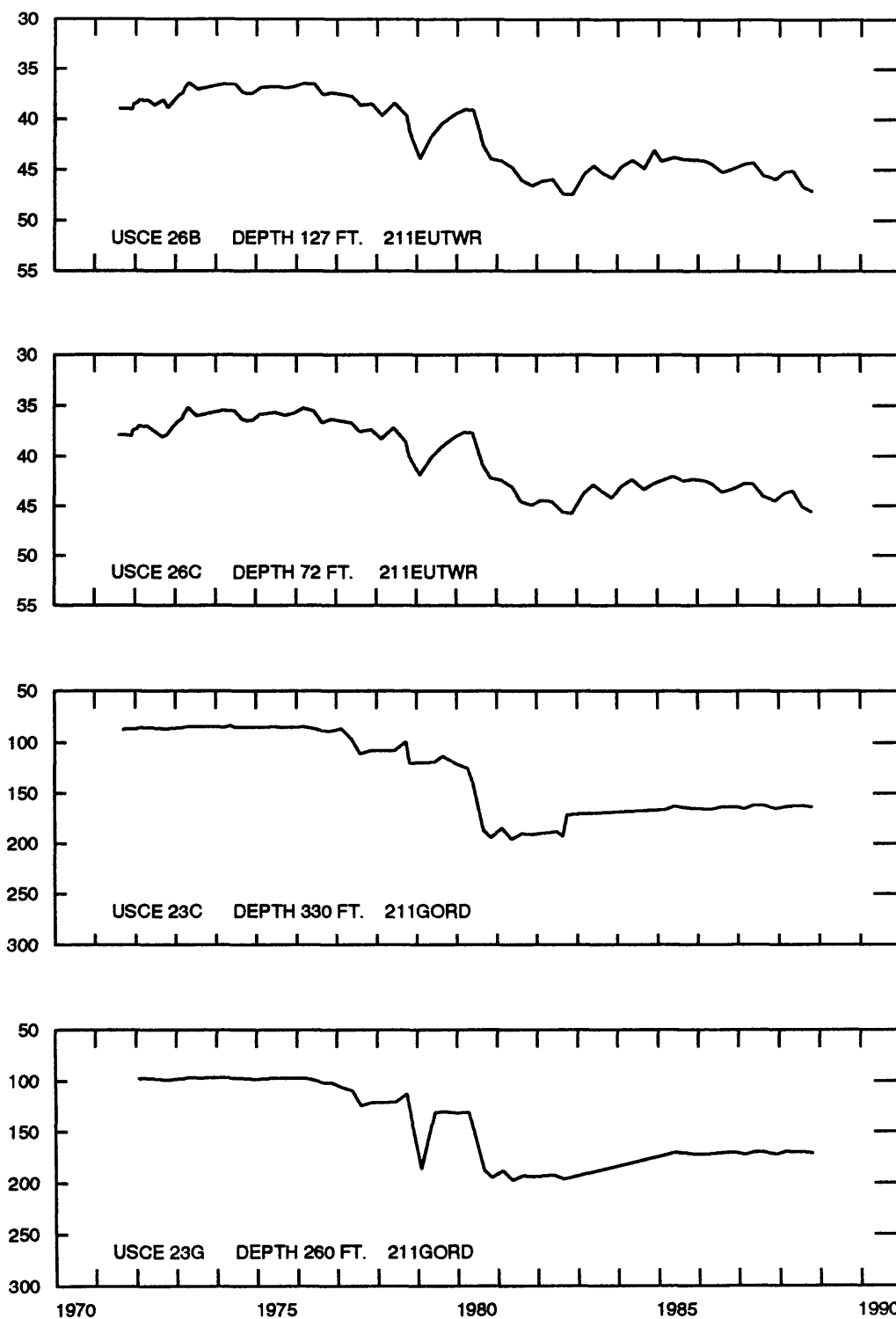
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



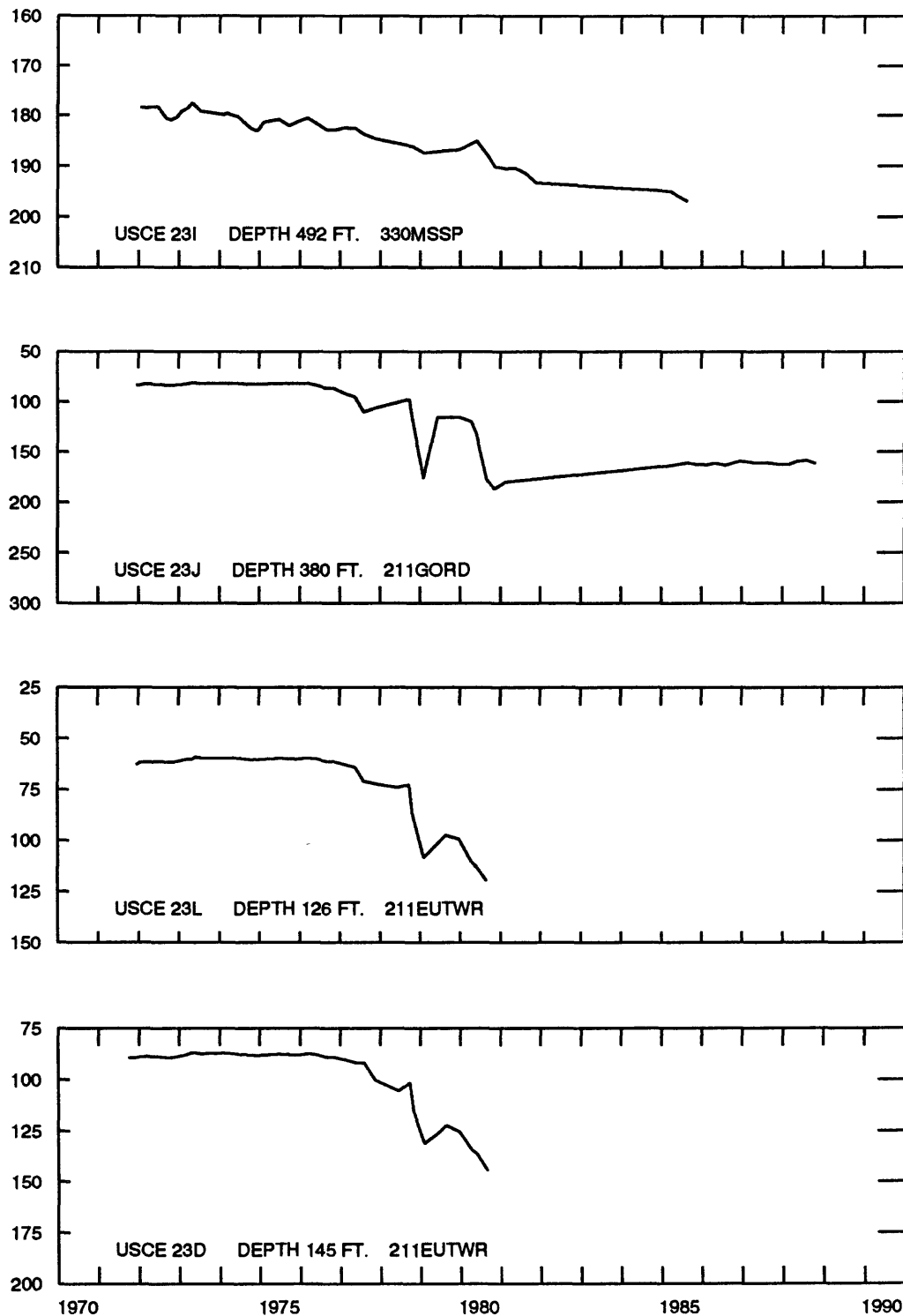
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



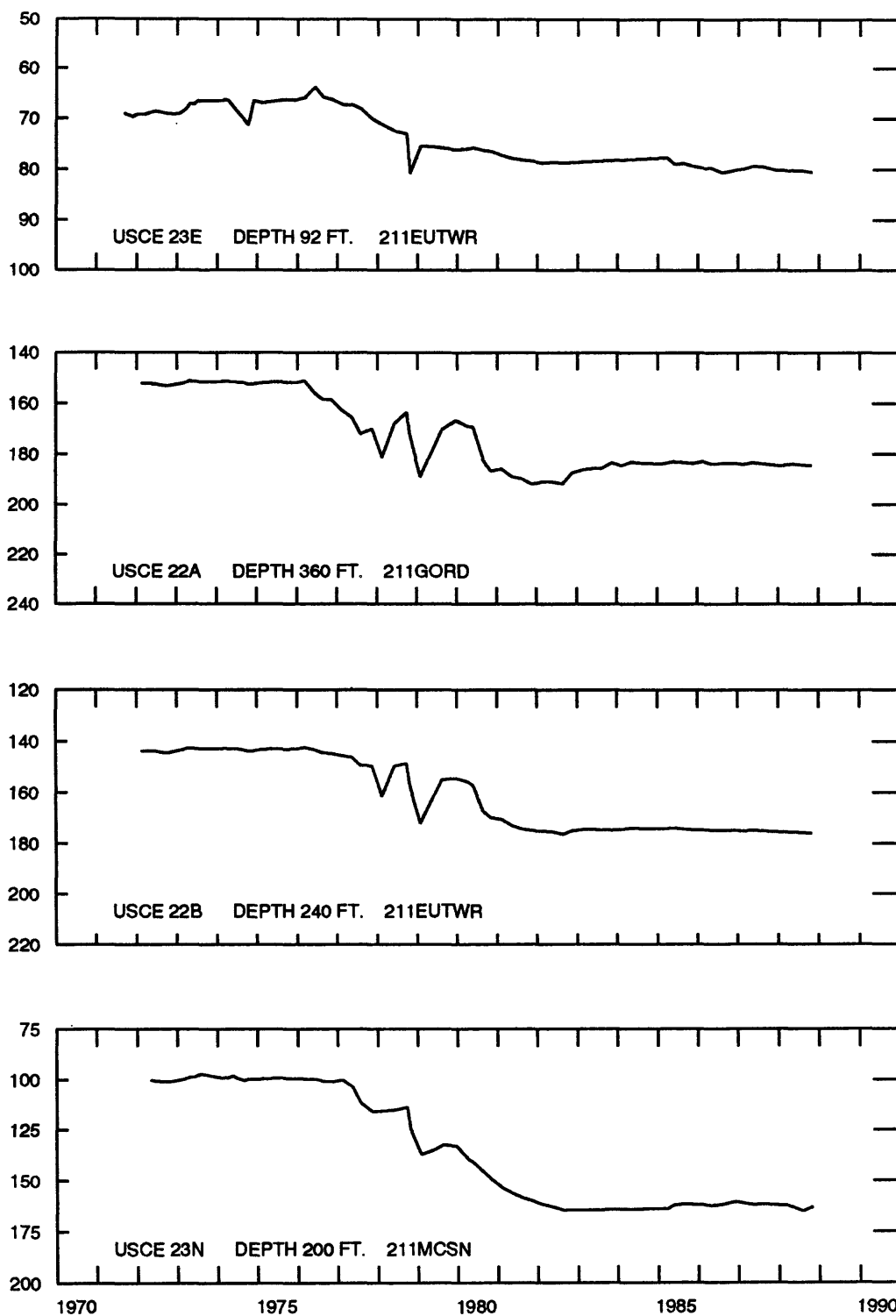
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



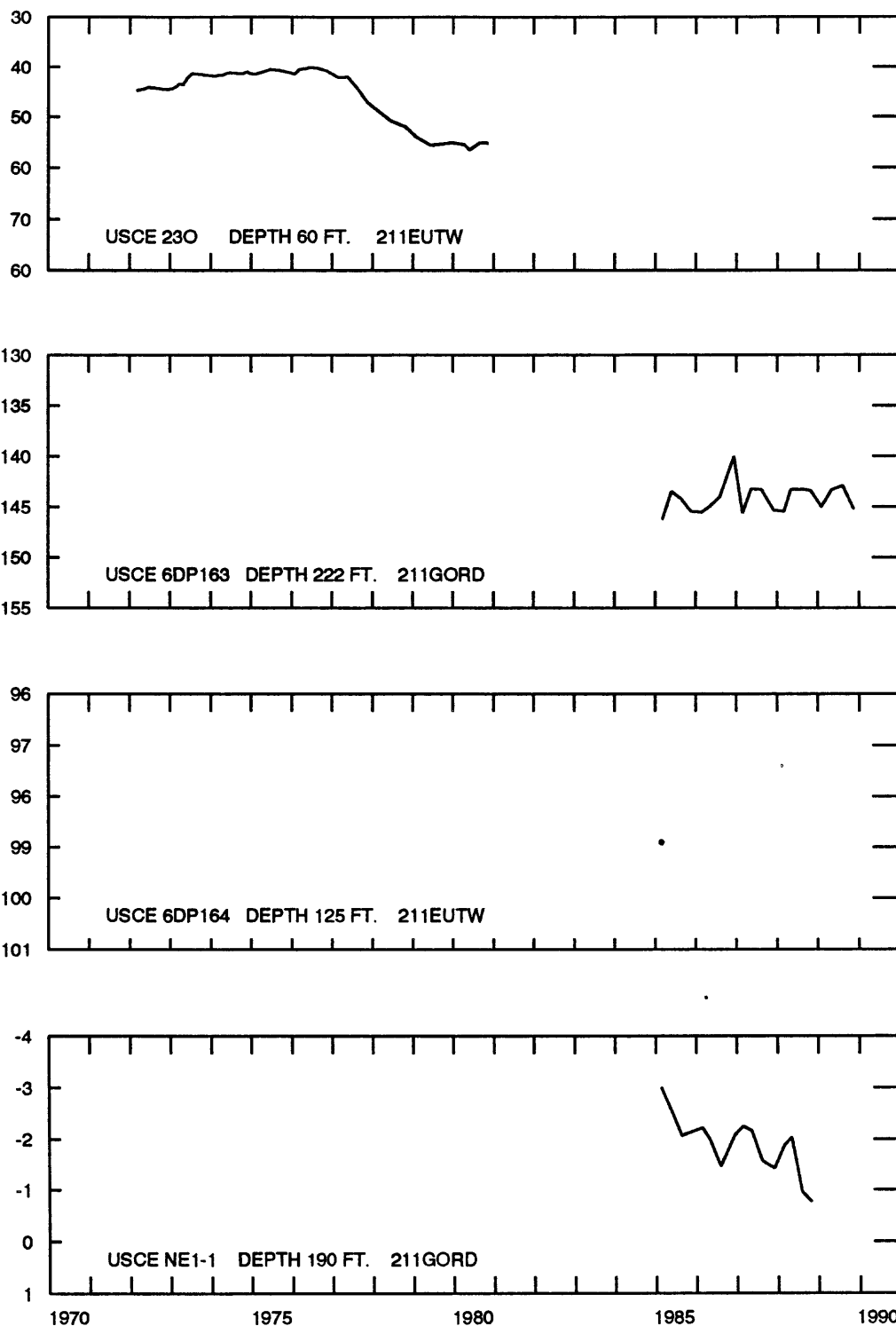
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



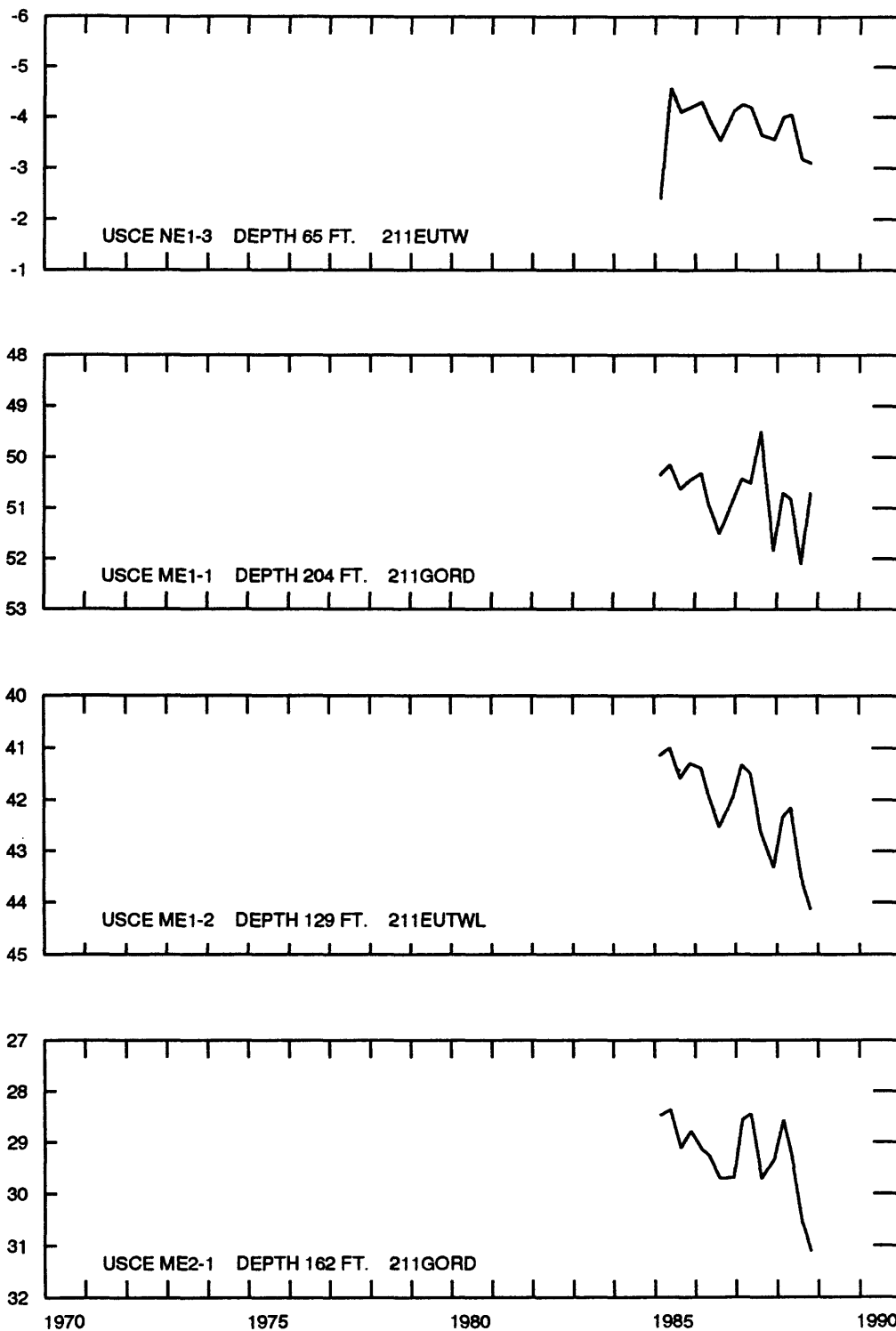
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



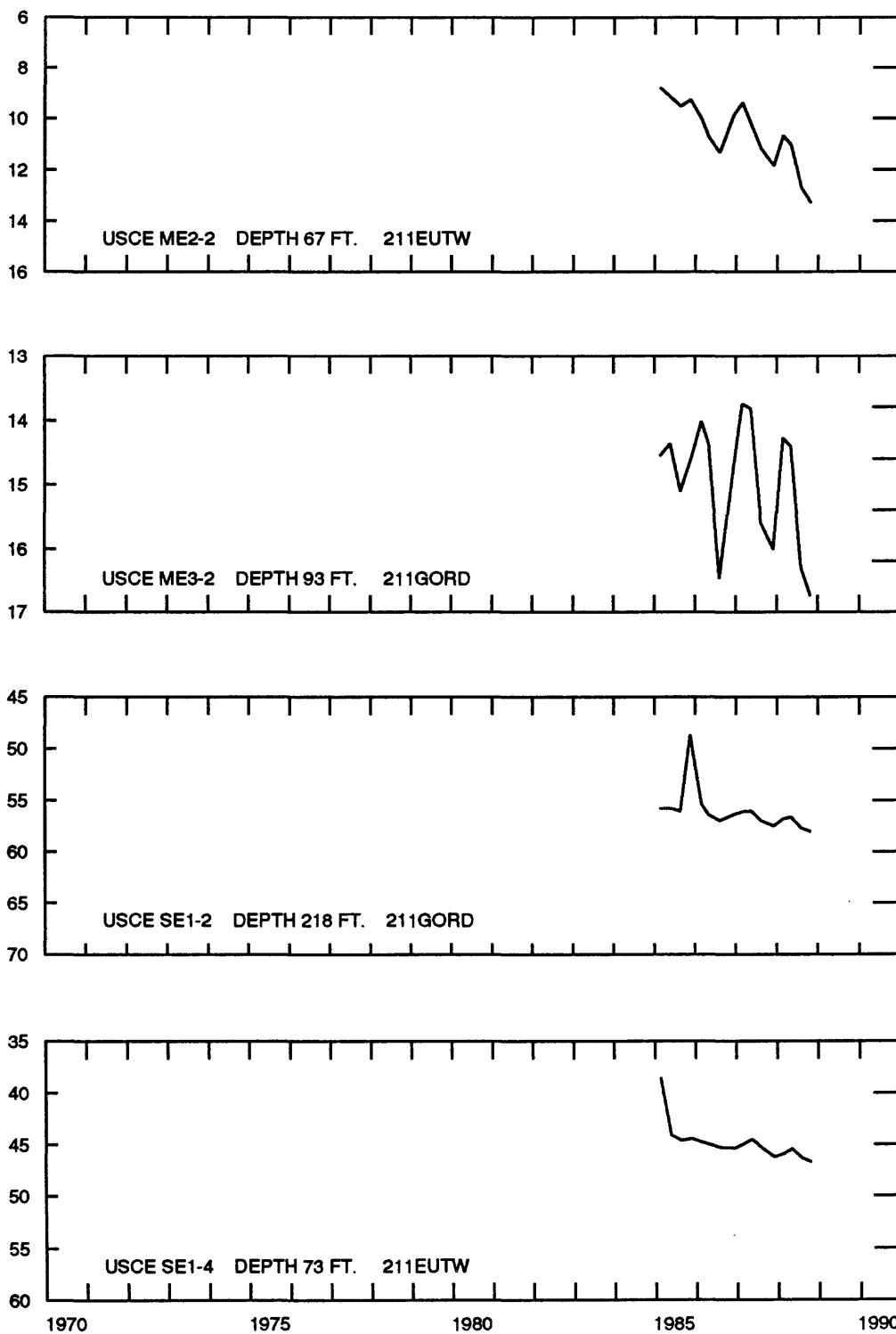
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



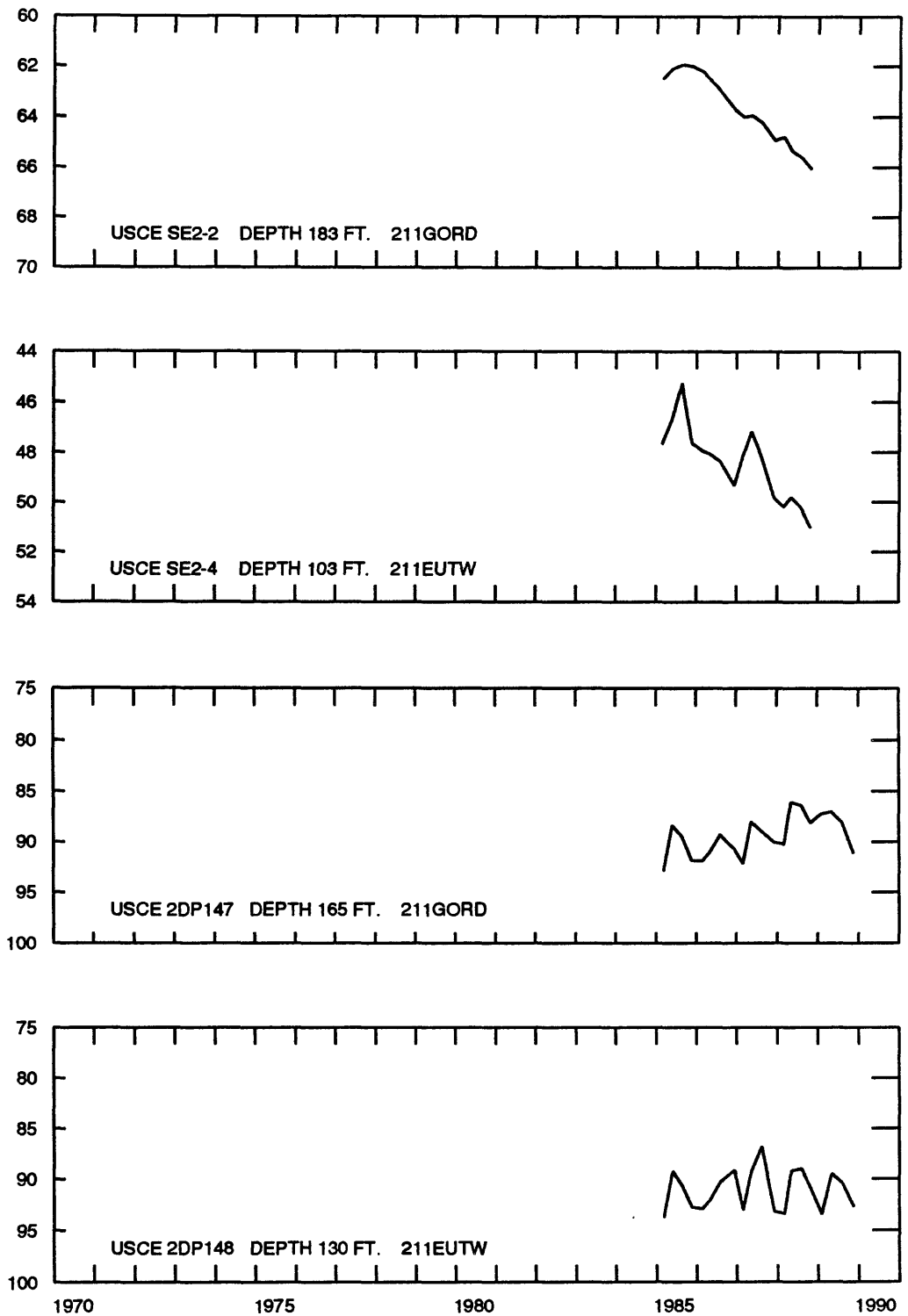
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



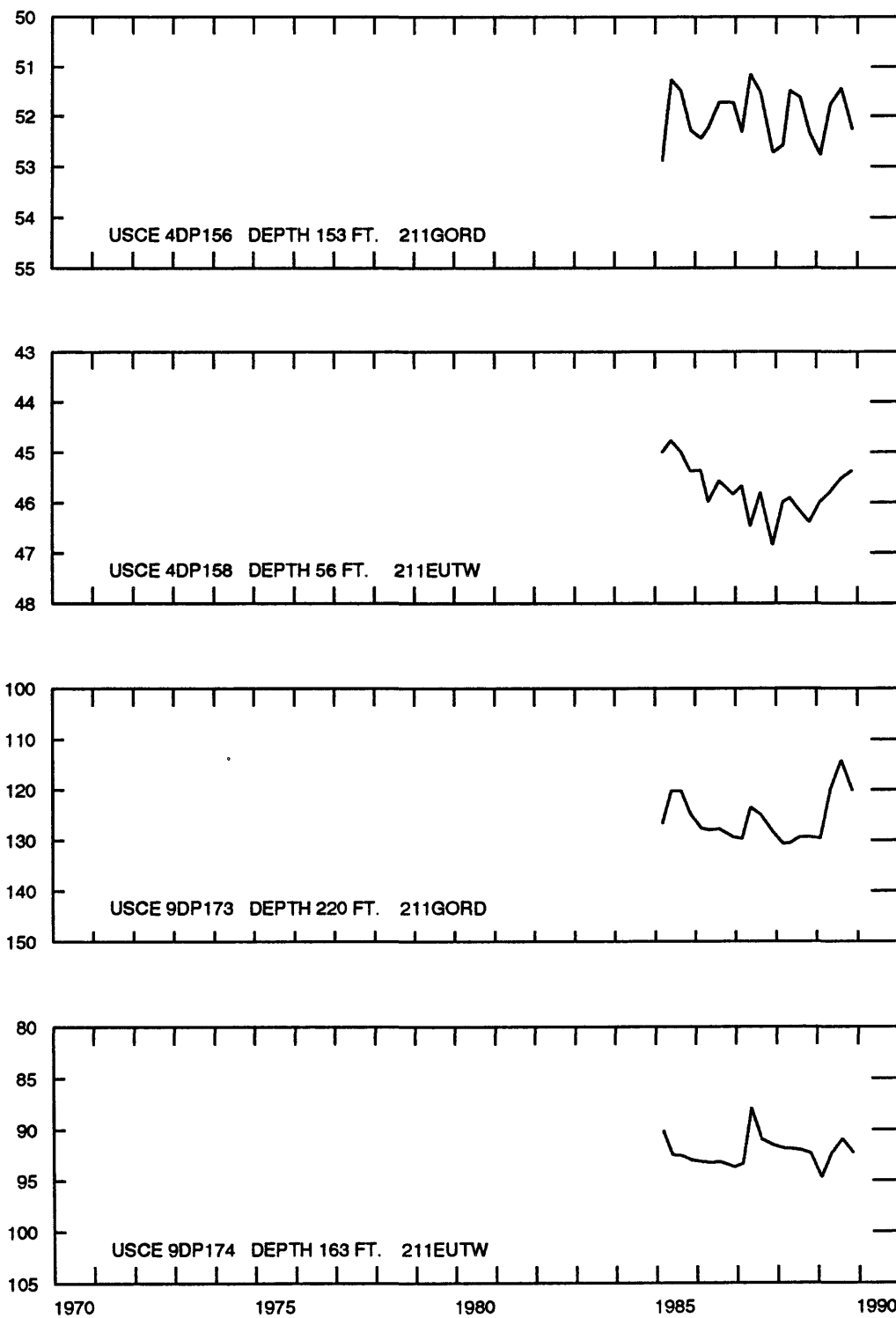
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



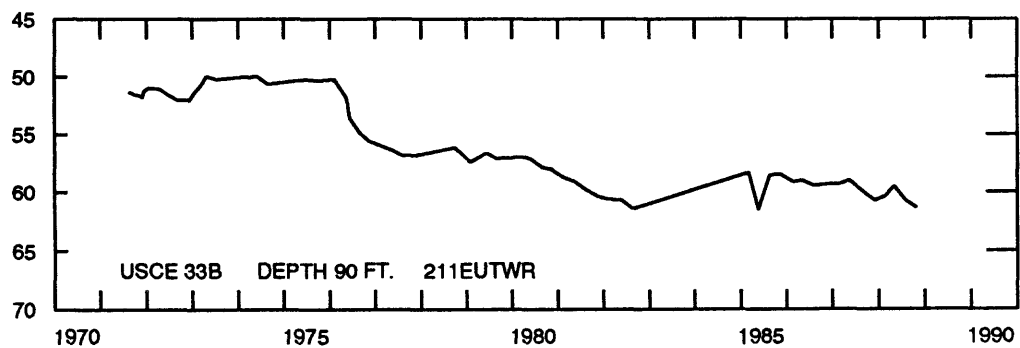
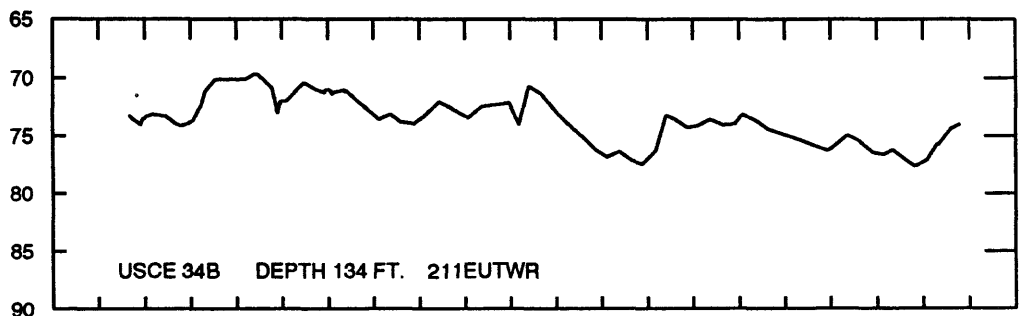
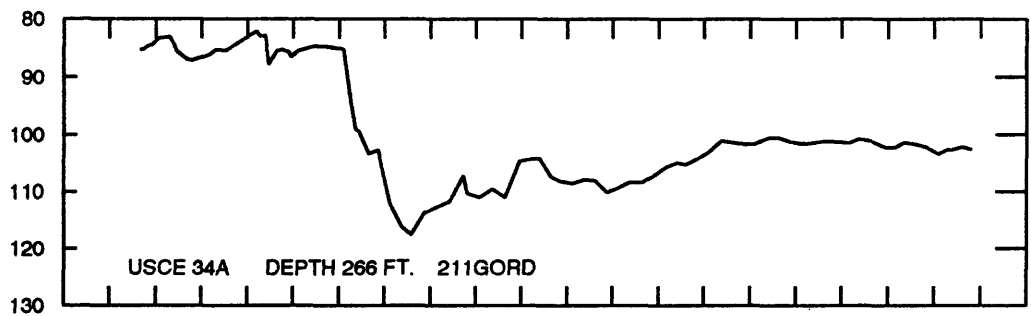
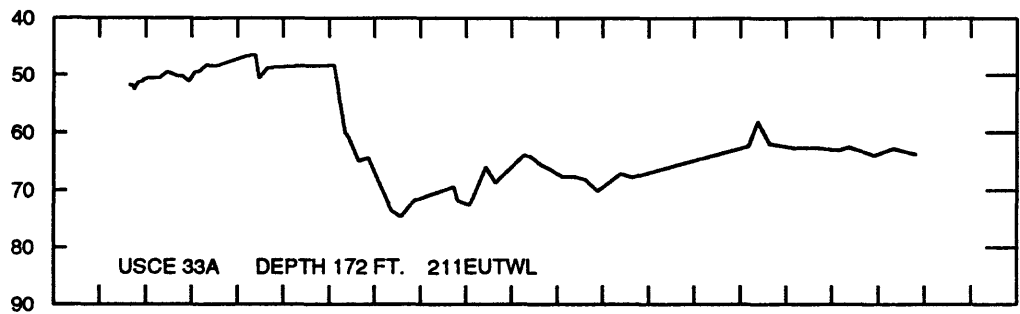
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



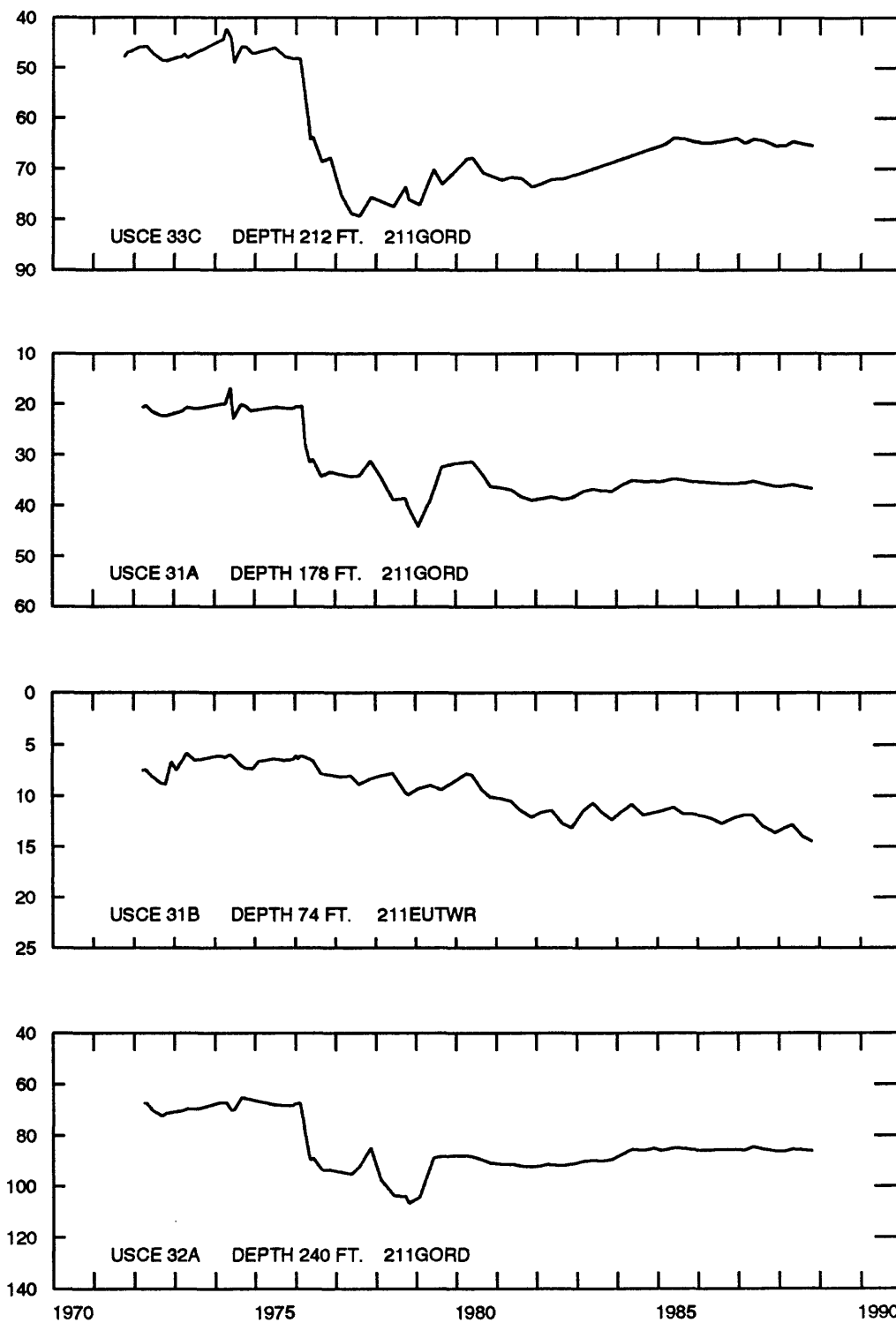
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



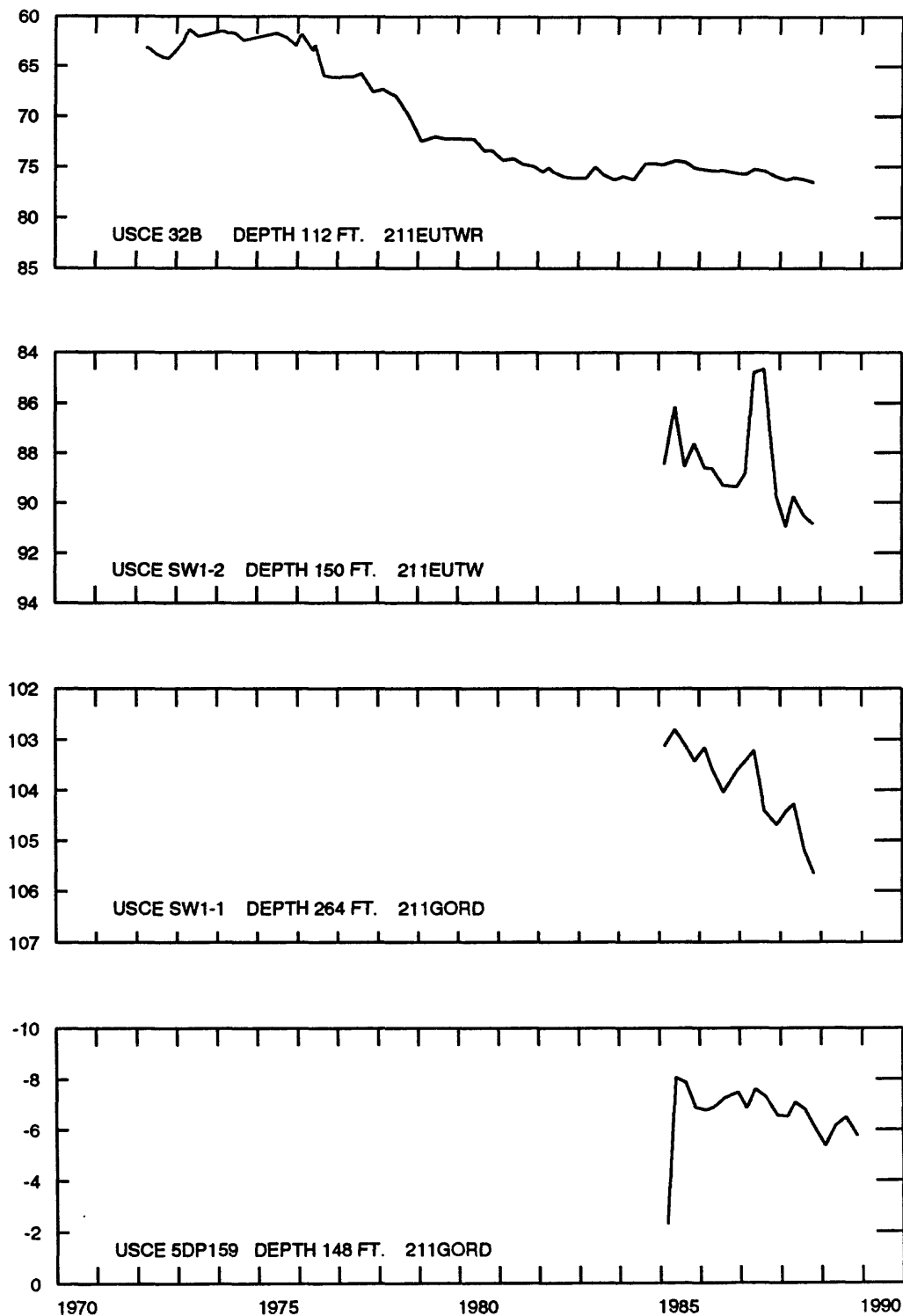
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



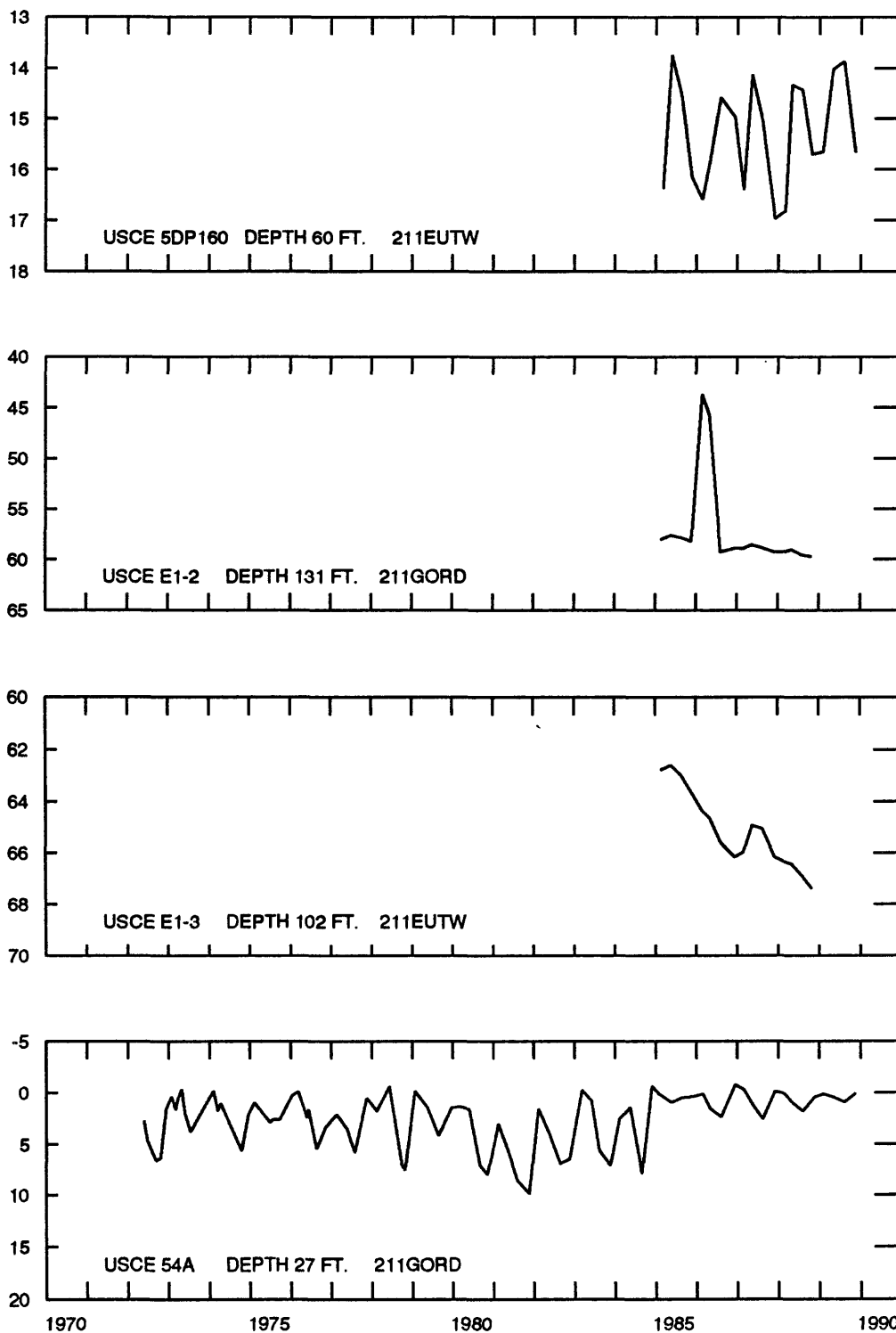
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



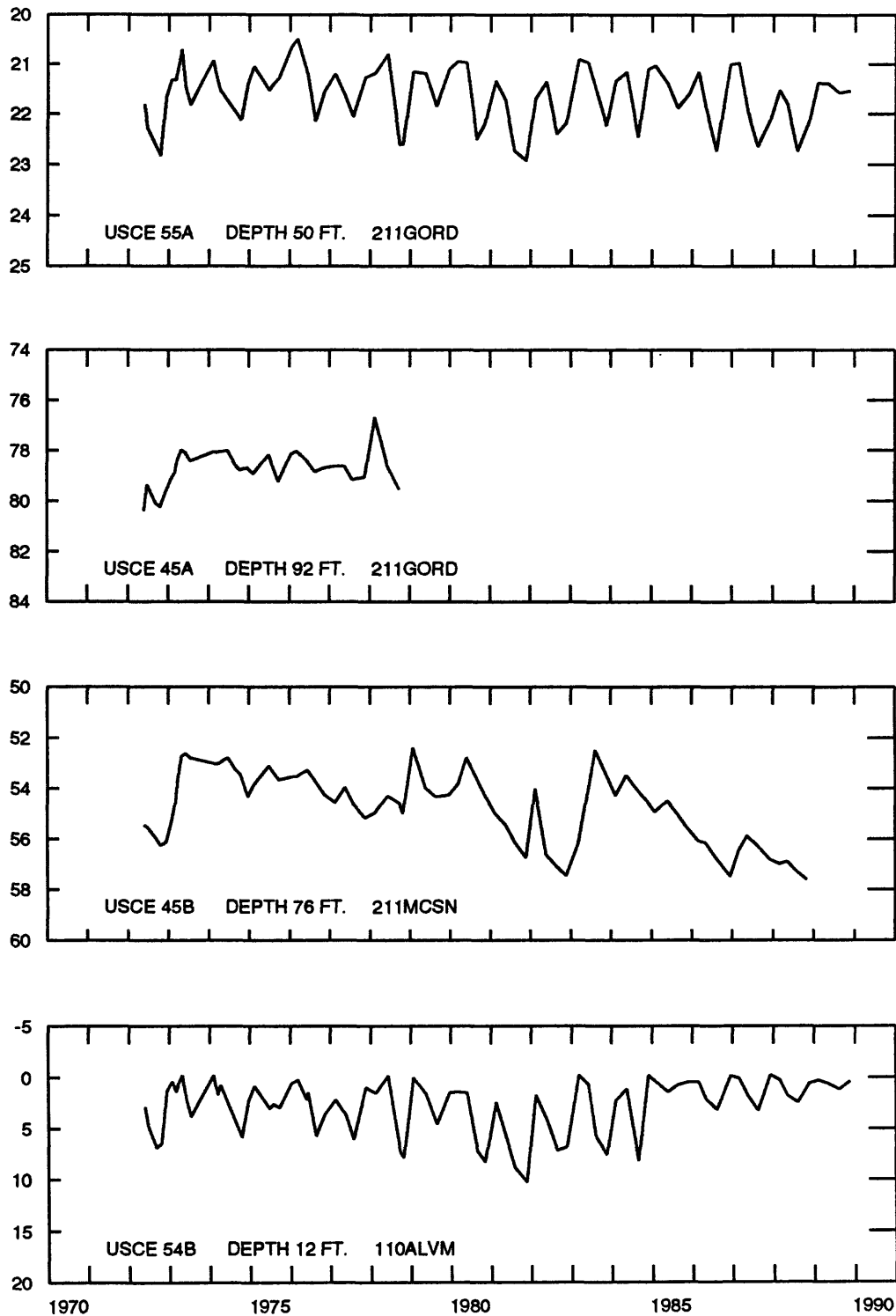
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



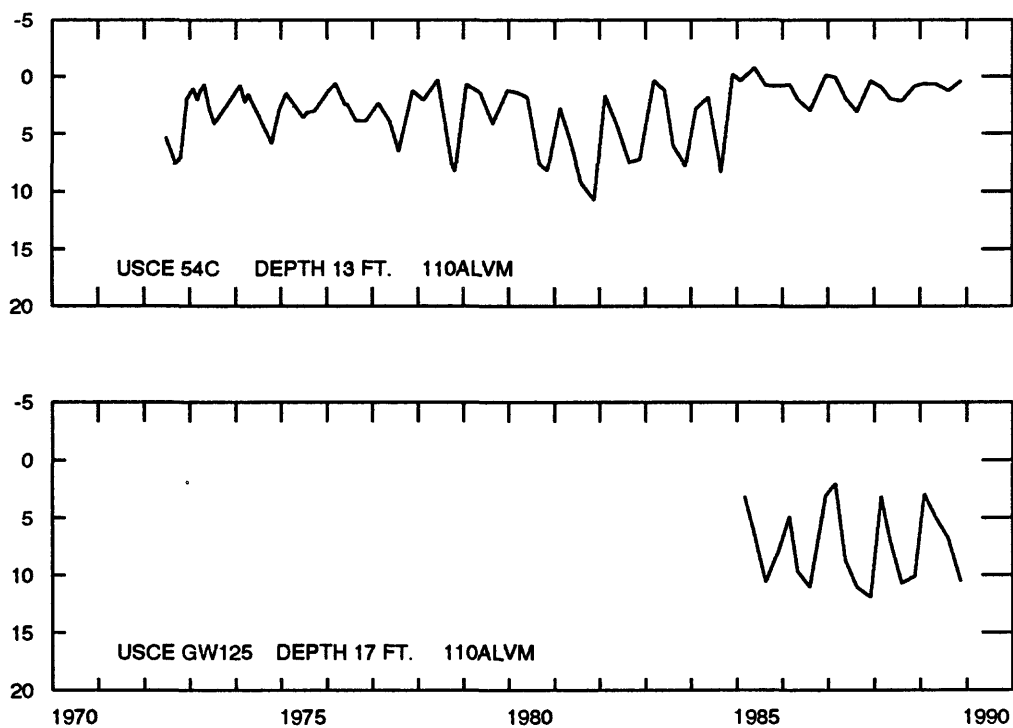
HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

WATER LEVEL, IN FEET BELOW LAND SURFACE



HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

**APPENDIX B**

**SURFACE-WATER DATA**

**APPENDIX B**

**SURFACE-WATER DATA**

**DESCRIPTIONS OF SITES**

DESCRIPTIONS OF SURFACE-WATER SITES

STATION NUMBER	STATION NAME	LATITUDE	LONGITUDE	SEQ. NO.	HYDRO-LOGIC UNIT CODE	DRAIN-AGE AREA (SQ. MI.)
SURFACE-WATER NETWORK						
03592824	TENNESSEE-TOMBIGBEE WATERWAY AT CROSS ROADS, MS	34 54 51	088 14 48	00	06030005	
02433000	BULL MOUNTAIN CREEK NEAR SMITHVILLE, MS	34 05 18	088 23 26	00	03160101	336
02436500	TOWN CREEK NEAR NETTLETON, MS	34 03 32	088 37 40	00	03160102	620
333927088304935	TTW COLUMBUS LAKE BUTTAHATCHEE RIVER BEND SR 26A	33 39 27	088 30 49	35	03160101	
02439600	BUTTAHATCHEE RIVER NEAR KOLOLA SPRINGS, MS	33 40 24	088 25 45	00	03160103	855
02441000	TIBBEE CREEK NEAR TIBBEE, MS	33 32 17	088 38 00	00	03160104	926
02441400	TOMBIGBEE RIVER NEAR COLUMBUS, MS	33 29 40	088 27 40	00	03160101	4450
02441498	TOMBIGBEE RIVER COLUMBUS BEND SR 11B AT COLUMBUS, MS	33 26 06	088 29 38	35	03160101	
02443500	LUXAPALLILA CREEK NEAR COLUMBUS, MS	33 30 50	088 23 42	00	03160105	715
02443610	TOMBIGBEE RIVER PRATT CAMP SR 5HB BELOW COLUMBUS, MS	33 20 30	088 23 40	00	03160106	
02444210	TOMBIGBEE RIVER BIG CREEK BEND NEAR PICKENSVILLE, AL	33 11 11	088 16 03		03160106	
02446500	SIPSEY RIVER NEAR ELROD, AL	33 15 25	087 46 35		03160107	528
02447010	TOMBIGBEE RIVER COOKS BEND NEAR WARSAW, AL	32 57 38	088 11 14		03160106	
02448500	NOXUBEE RIVER NEAR GEIGER, AL	32 55 06	088 17 45		03160108	1100
02467001	TOMBIGBEE RIVER BELOW DEMOPOLIS LOCK AND DAM, AL	32 31 15	087 52 48		03160201	15400
SITES NOT IN THE SURFACE-WATER NETWORK						
02430500	TOMBIGBEE RIVER NEAR MARIETTA, MS	34 25 35	088 25 16	00	03160101	308
02430680	TWENTYMILE CREEK NEAR GUNTOWN, MS	34 27 11	088 34 38	00	03160101	131
02430690	TWENTYMILE CREEK NEAR MANTACHIE, MS	34 23 10	088 27 40	00	03160101	150
02431000	TOMBIGBEE RIVER NEAR FULTON, MS	34 15 53	088 26 42	00	03160101	612
02431410	MANTACHIE CREEK BELOW DORSEY, MS	34 13 41	088 27 08	00	03160101	66.9
02433500	TOMBIGBEE RIVER AT BIGBEE, MS	34 00 40	088 30 50	00	03160101	1230
02437000	TOMBIGBEE RIVER NEAR AMORY, MS	33 59 07	088 33 03	00	03160101	1930
02437500	TOMBIGBEE RIVER AT ABERDEEN, MS	33 49 14	088 31 07	00	03160101	2170
02439400	BUTTAHATCHEE RIVER NEAR ABERDEEN, MS	33 47 24	088 18 55	00	03160103	798
332929088273300	TTW ALIVEVILLE LAKE ABOVE COLUMBUS BEND	33 29 29	088 27 33		03160101	
332751088261000	TTW ALICEVILLE LAKE COLUMBUS CUT	33 27 51	088 26 10		03160101	
3321120882235	TTW ALICEVILLE LAKE ABOVE HAIRSTON BEND	33 21 12	088 22 35		03160106	
3321000882248	TTW ALICEVILLE LAKE HAIRSTON BEND SR 11HB	33 21 00	088 22 48		03160106	
3320300882122	TTW ALICEVILLE LAKE HAIRSTON CUT	33 20 30	088 21 22		03160106	
02444157	TOMBIGBEE RIVER AT ST HWY 86 NEAR PICKENSVILLE, AL	33 13 35	088 17 29	00	03160106	
02444500	TOMBIGBEE RIVER NEAR COCHRANE, AL	33 04 56	088 14 16		03160106	5940
02447008	TOMBIGBEE RIVER ABOVE COOKS BEND SR 5A NR WARSAW, AL	32 57 22	088 09 45		03160106	
325645088100700	TTW GAINESVILLE LAKE COOKS BEND CUT SR 4AD	32 56 45	088 10 07		03160106	
02448000	NOXUBEE RIVER AT MACON, MS	33 06 08	088 33 40	00	03160108	768
02449000	TOMBIGBEE RIVER AT GAINESVILLE, AL	32 49 30	088 09 24	00	03160106	8630
323704087542400	TTW DEMOPOLIS LAKE ABOVE RATTLESNAKE BEND SR 12CA	32 37 04	087 54 24		03160106	
323653087540800	TTW DEMOPOLIS LAKE RATTLESNAKE BEND SR RB1	32 36 53	087 54 08		03160106	
323642087541800	TTW DEMOPOLIS LAKE RATTLESNAKE CUT SR 12CB	32 36 42	087 54 18		03160106	
02469762	TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL	31 45 30	088 07 35		03160203	18400

**APPENDIX B**

**SURFACE-WATER DATA**

**WATER-QUALITY ANALYSES**



## SURFACE-WATER SITES

03592824 TENNESSEE-TOMBIGBEE WATERWAY AT CROSS ROADS, MS

								OXYGEN, DIS-SOLVED (PERCENT SATURATION)		
DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)				
DEC 1988										
	12...	1531	1.00	99	7.30	8.0	12.0	102		
	12...	1532	5.00	99	7.40	8.0	12.9	109		
	12...	1533	10.0	99	7.40	8.0	12.5	106		
	12...	1534	15.0	99	7.40	7.5	12.4	104		
	12...	1535	19.0	99	7.50	7.5	12.5	105		
FEB 1989										
	28...	1501	1.00	66	6.50	8.5	11.1	96		
	28...	1502	5.00	66	6.80	8.5	11.9	103		
	28...	1503	10.0	66	7.10	8.0	12.8	109		
	28...	1504	14.0	66	7.10	8.0	12.9	110		
JUN										
	06...	1501	1.00	122	6.90	25.5	8.0	100		
	06...	1502	5.00	122	7.10	25.5	8.0	100		
	06...	1503	10.0	119	7.10	25.0	7.8	96		
	06...	1504	15.0	110	7.10	24.5	7.3	89		
	06...	1505	20.0	102	7.00	24.0	7.3	88		
	06...	1506	21.0	102	7.00	24.0	7.3	88		
AUG										
	08...	1631	1.00	112	7.50	27.5	8.3	107		
	08...	1632	5.00	112	7.80	27.5	8.3	107		
	08...	1633	10.0	111	7.70	27.0	8.2	105		
	08...	1634	15.0	111	7.50	27.0	8.2	105		
	08...	1635	16.0	111	7.50	27.0	8.2	105		
		GAGE HEIGHT (FEET)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	TRANSPAR-ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	
DEC 1988										
	12...	1530	9.35	40	19	18.0	4.3	K46	12	2.1
FEB 1989										
	28...	1500	11.73	20	22	20.4	1.2	310	8.8	1.6
JUN										
	06...	1500	13.71	<5	6.0	36.0	0.9	400	16	2.6
AUG										
	08...	1630	12.54	10	6.8	37.2	1.2	K20	15	2.9
DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	
DEC										
	12...	28	12	5.1	0.20	71	8	0.150	0.060	0.23
FEB										
	28...	17	12	2.9	0.20	53	14	0.190	0.080	0.61
JUN										
	06...	42	9.8	3.9	0.20	87	10	0.070	0.050	0.23
AUG										
	08...	39	9.5	3.7	0.10	70	10	<0.020	0.010	0.21
DATE	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)		
DEC										
	12...	0.060	0.020	--	--	<1	--	1.00	0.100	
FEB										
	28...	0.040	0.020	1200	110	<1	--	<0.500	<0.900	
JUN										
	06...	0.100	<0.020	530	90	<1	--	3.50	<0.400	
AUG										
	08...	0.030	<0.020	310	120	<1	<0.01	4.80	<0.500	

## SURFACE-WATER SITES--Continued

## 02430500 TOMBIGBEE RIVER NEAR MARIETTA, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 1988 17...	1120	160	18	7.8	MAY 1989 03...	1015	169	59	27
DEC 29...	1400	773	217	453					

## 02430680 TWENTYMILE CREEK NEAR GUNTOWN, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 1988 29...	1030	268	193	140	MAY 05...	1300	1510	1150	4690
FEB 1989 15...	1015	953	254	654	JUN 16...	1415	499	115	155

## 02430690 TWENTYMILE CREEK NEAR MANTACHIE, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 1988 29...	1600	446	145	175	MAY 05...	1530	1840	938	4660
FEB 1989 17...	1315	1030	282	784	JUN 16...	1115	918	180	446

## 02431000 TOMBIGBEE RIVER NEAR FULTON, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 1988 23...	1045	320	142	123	FEB 22...	0600	13400	347	12600
DEC 28...	1200	1690	1310	5980	23...	1445	7650	197	4070
JAN 1989 20...	1030	1510	121	493	27...	1125	1590	267	1150
FEB 21...	1150	9680	770	20100	MAR 22...	1420	940	129	327
21...	1940	13100	713	25200	MAY 01...	1200	755	140	285
					JUN 21...	1100	1850	110	549

## SURFACE-WATER SITES--Continued

## 02431410 MANTACHIE CREEK BELOW DORSEY, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
NOV 1988					MAY				
22...	1520	6.6	66	1.2	01...	1400	102	91	25
DEC					09...	1110	171	263	121
28...	1445	933	833	2100	09...	1840	145	181	71
FEB 1989					JUN				
17...	1100	752	909	1850	14...	0215	103	69	19
MAR					14...	0510	159	134	58
05...	0100	1250	2630	8880	14...	0610	334	526	474
05...	0205	2680	5290	38300	14...	0800	437	1200	1420
05...	0515	6480	3610	63200	14...	1330	477	511	658
05...	0815	6810	1650	30300	14...	1545	518	434	607
05...	1315	4410	1240	14800	15...	0850	4170	2290	25800
05...	1800	2140	1110	6410	15...	1350	3250	1170	10300
22...	1115	73	39	7.7	16...	0900	1210	194	634
29...	1405	42	44	5.0					

## 02433000 BULL MOUNTAIN CREEK NEAR SMITHVILLE, MS

				SPE- CIFIC CON- DUCT- ANCE	PH (STAND- ARD	TEMPER- ATURE WATER	COLOR (PLAT- INUM- COBALT	TUR- BID- ITY	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY
DATE	TIME	GAGE HEIGHT (FEET)		(US/CM)	UNITS)	(DEG C)	UNITS)	(NTU)	(IN)	(MG/L)		(MG/L)
MAR 1989												
01...	0830	9.92		14	6.80	8.0	40	29	18.0	11.9	101	2.9
JUN												
07...	0800	9.65		--	6.80	23.5	50	27	14.6	8.3	99	1.1
AUG												
09...	1000	9.74		25	7.70	22.0	70	29	15.6	8.5	98	0.9
DATE		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	
MAR												
01...		420	1.4	0.50	2.0	3.7	1.2	0.20	17	23	0.090	
JUN												
07...		130	2.2	0.70	3.6	3.0	1.5	0.20	--	47	0.160	
AUG												
09...		K31	2.7	0.80	4.3	2.8	2.1	0.10	30	28	0.200	
DATE		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	
MAR												
01...		<0.010	0.26	0.050	<0.020	1100	55	<1	--	<0.500	<0.900	
JUN												
07...		0.060	0.38	0.060	0.030	2700	220	<1	--	1.20	0.400	
AUG												
09...		0.030	0.27	0.040	0.020	1900	160	<1	<0.01	<0.400	<0.400	

## 02433500 TOMBIGBEE RIVER AT BIGBEE, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JAN 1989					MAY				
05...	1600	3200	131	1130	10...	1000	1800	244	1190
FEB					JUN				
16...	1650	3550	339	3250	20...	1035	5130	128	1770
MAR					SEP				
29...	1015	838	31	70	18...	1435	317	41	35

## SURFACE-WATER SITES--Continued

02436500 TOWN CREEK NEAR NETTLETON, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)
DEC 1988 13...	0900	88	300	--	3.5	5	8.8	>25.2	12.7	96	3.3
MAR 1989 01...	0730	3580	138	7.90	8.0	--	160	6.00	12.3	104	2.8
JUN 07...	0900	1300	185	7.60	22.0	40	110	--	9.1	106	2.6
AUG 09...	0800	210	243	7.60	21.5	20	29	17.5	10.0	114	2.4

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SUS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, PENDE (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
DEC 13...	K8600	44	2.6	104	24	17	0.20	185	9	0.630
MAR 01...	3400	23	1.2	54	10	3.1	0.30	91	268	0.200
JUN 07...	K2800	28	1.4	66	11	5.5	0.40	123	247	0.440
AUG 09...	5000	38	2.3	91	14	12	0.30	155	49	0.400

DATE	NITRO- GEN,AM- MONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 13...	0.170	0.46	0.160	0.060	--	--	1	--	2.20	0.300
MAR 01...	0.040	0.27	0.310	0.040	9100	170	1	--	1.00	<0.900
JUN 07...	0.080	0.65	0.300	0.070	8300	270	<1	--	3.60	<0.400
AUG 09...	0.010	0.40	0.200	0.090	2200	150	<1	0.01	9.40	1.10

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 1988 06...	1130	179	114	55	--
NOV 18...	1300	88	12	2.9	--
JAN 1989 05...	1120	578	82	128	--
13...	1140	24200	759	49600	51
13...	1645	20700	751	42000	--
14...	0940	9080	562	13800	--
15...	0930	12500	611	20600	--
16...	0920	3840	480	4980	--
18...	0920	1960	359	1900	--
FEB 15...	1525	4870	722	9490	--
MAR 05...	1105	24400	992	65400	--
05...	1430	25400	708	48600	65
06...	0950	9540	522	13400	--
06...	1450	5930	540	8650	--
31...	1045	3210	1500	13000	--
APR 28...	1330	162	48	21	--
JUN 19...	1620	2240	870	5260	--

## SURFACE-WATER SITES--Continued

## 02436500 TOWN CREEK NEAR NETTLETON, MS--Continued

DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
JAN 1989										
13...	1140	28	30	33	38	45	51	63	88	100
MAR										
05...	1430	42	45	48	53	59	65	78	98	100

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
JAN 1989							
14...	1437	25.0	<1	1	7	77	100
14...	1439	50.0	0	<1	4	71	100
14...	1441	75.0	<1	1	11	90	100
MAR							
05...	1432	25.0	1	2	23	90	100
05...	1434	50.0	1	2	14	85	100
05...	1436	75.0	1	1	12	77	100

## 02437000 TOMBIGBEE RIVER NEAR AMORY, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JUN 1989				
20...	1400	6010	206	3340

## 02437500 TOMBIGBEE RIVER AT ABERDEEN, MS

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JAN 1989					FEB				
13...	1445	7530	602	12200	22...	0425	11400	521	16000
14...	1045	6950	449	8430	22...	1000	10800	413	12000
18...	1145	1560	25	105	23...	1215	7970	210	4520
FEB					27...	0940	1160	132	413
21...	1710	10700	560	16200	JUN				
					22...	1050	9610	54	1400

## SURFACE-WATER SITES--Continued

333927088304935 TTW COLUMBUS LAKE BUTTAHATCHEE RIVER BEND SR 26A

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
DEC 1988									
13...	1401	1.00	161	7.60	9.5	13.7	120		
13...	1402	5.00	162	7.60	9.0	14.2	123		
13...	1403	10.0	162	7.70	8.5	14.7	126		
13...	1404	15.0	162	7.70	8.5	14.4	123		
13...	1405	20.0	161	7.70	8.5	14.2	121		
MAR 1989									
01...	1431	1.00	63	7.60	8.5	10.5	90		
01...	1432	5.00	63	7.70	8.0	10.2	86		
01...	1433	10.0	63	7.70	8.0	11.1	94		
01...	1434	15.0	63	7.70	8.0	11.3	95		
01...	1435	17.0	63	7.70	8.0	11.1	94		
JUN									
07...	1201	1.00	119	7.40	23.5	10.0	120		
07...	1202	5.00	120	7.40	23.5	9.6	115		
07...	1203	10.0	120	7.40	23.5	9.1	109		
07...	1204	15.0	120	7.40	23.5	8.7	104		
AUG									
09...	1231	1.00	144	7.90	30.0	7.1	94		
09...	1232	5.00	144	7.90	29.0	7.5	98		
09...	1233	10.0	146	7.70	28.5	7.5	97		
09...	1234	12.0	146	7.70	28.5	7.5	97		
DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)
DEC 1988									
13...	1400	40	20	24.0	2.1	K17	21	1.8	116
MAR 1989									
01...	1430	--	110	8.40	2.8	E1000	11	0.80	23
JUN									
07...	1200	80	100	8.40	2.0	K200	19	1.2	40
AUG									
09...	1230	10	17	19.2	3.2	K13	20	1.9	15
DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)
DEC 13...		18	16	0.20	125	13	0.220	0.160	0.81
MAR 01...		5.6	2.3	0.20	52	128	0.130	0.040	0.36
JUN 07...		6.8	4.1	0.30	95	132	0.600	0.100	0.68
AUG 09...		8.6	7.3	0.20	90	21	0.030	<0.010	0.22
DATE	TIME	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 13...		0.100	0.040	--	--	<1	--	1.20	<0.100
MAR 01...		0.200	0.050	4600	150	<1	--	<0.500	<0.900
JUN 07...		0.180	0.040	4300	150	<1	--	1.80	<0.400
AUG 09...		0.070	<0.020	950	120	<1	0.01	28.0	2.20

## SURFACE-WATER SITES--Continued

## 02439400 BUTTAHATCHEE RIVER NEAR ABERDEEN, MS

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 1988					MAY				
16...	1200	889	150	360	10...	1430	1440	37	144
JAN 1989					JUN				
05...	1130	3030	40	327	20...	1645	2080	260	1460
FEB					AUG				
16...	1230	1250	132	446	01...	1515	594	32	51
MAR					SEP				
30...	1000	1580	37	158	13...	1330	561	59	89

## 02439600 BUTTAHATCHEE RIVER NEAR KOLOLA SPRINGS, MS

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)
DEC 1988											
13...	1045	682	29	7.40	7.0	30	4.2	48.0	12.2	100	2.5
MAR 1989											
01...	1000	17500	16	6.70	8.5	20	15	20.4	11.0	94	3.5
JUN											
07...	1030	1280	29	6.80	22.0	60	20	22.8	8.9	103	0.9
AUG											
10...	0900	453	33	7.00	23.0	40	13	33.6	6.3	74	1.0

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
DEC 13...	K40	2.8	0.90	5.7	3.3	3.0	0.10	27	2	0.290
MAR 01...	K650	1.5	0.60	2.3	3.3	1.6	0.10	29	20	0.140
JUN 07...	K40	2.5	0.80	5.6	2.8	2.2	0.30	39	43	0.220
AUG 10...	K40	3.0	1.1	7.9	2.3	3.1	0.10	30	13	0.200

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)
DEC 13...	0.020	<0.20	0.040	0.040	--	--	<1	--	<0.500	<0.100
MAR 01...	<0.010	0.24	0.040	0.030	1000	78	<1	--	0.500	0.900
JUN 07...	0.060	0.50	0.050	<0.020	2900	250	<1	--	0.800	<0.400
AUG 10...	0.030	0.39	0.020	<0.020	1700	240	<1	<0.01	0.800	<0.400

## 02441000 TIBBEE CREEK NEAR TIBBEE, MS

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)
DEC 1988											
13...	1530	<700	269	8.00	7.5	5	3.5	32.4	13.8	115	3.6
MAR 1989											
01...	1200	22100	65	7.60	8.5	--	140	6.00	10.0	85	3.2
JUN											
07...	1330	3300	140	7.20	22.5	60	22	--	7.5	88	2.0
AUG											
10...	0730	<700	188	7.50	22.5	30	33	12.0	7.1	82	1.6

## SURFACE-WATER SITES--Continued

## 02441000 TIBBEE CREEK NEAR TIBBEE, MS--Continued

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
DEC 13...	K37	45	2.6	107	22	11	0.20	171	2	0.070
MAR 01...	E2000	10	1.2	22	7.9	1.8	0.20	58	156	0.080
JUN 07...	K110	21	1.5	42	10	5.2	0.30	121	44	0.940
AUG 10...	K170	28	2.1	69	12	4.9	0.30	118	45	0.100
DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	CHLOROPHYTON CHROMO FLUOROM (UG/L)	CHLOROPHYTON PLANKTON CHROMO FLUOROM (UG/L)
DEC 13...	0.010	0.25	0.080	0.020	--	--	<1	--	2.00	0.200
MAR 01...	<0.010	<0.20	0.200	0.040	4500	150	<1	--	<0.500	<0.900
JUN 07...	0.050	0.55	0.170	0.080	1500	70	<1	--	0.900	<0.400
AUG 10...	0.040	0.45	0.120	0.050	1400	120	<1	0.01	3.40	<0.400

## 02441400 TOMBIGBEE RIVER NEAR COLUMBUS, MS

							OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)			
DEC 1988									
14...	0931	1.00	100	7.30	7.5	12.5	105		
14...	0932	5.00	100	7.30	7.5	12.5	105		
14...	0933	10.0	100	7.40	7.5	12.0	100		
14...	0934	15.0	100	7.50	7.5	12.0	100		
14...	0935	20.0	100	7.50	7.5	12.0	100		
MAR 1989									
01...	1601	1.00	74	7.50	8.0	10.8	91		
01...	1602	5.00	73	7.60	8.0	10.7	90		
01...	1603	10.0	72	7.60	8.0	11.3	95		
01...	1604	15.0	70	7.70	8.0	11.4	96		
01...	1605	20.0	71	7.80	8.0	10.8	91		
01...	1606	25.0	69	7.80	8.0	11.0	93		
01...	1607	30.0	68	7.80	8.0	11.1	94		
JUN									
07...	1431	1.00	154	7.40	24.5	10.2	124		
07...	1432	5.00	148	7.40	24.5	9.8	119		
07...	1433	10.0	148	7.40	24.5	9.2	112		
07...	1434	15.0	144	7.40	24.5	9.3	113		
07...	1435	18.0	142	7.30	24.5	9.5	115		
AUG									
09...	1401	1.00	165	--	29.5	7.1	94		
09...	1402	5.00	165	--	28.5	6.0	78		
09...	1403	10.0	166	--	28.0	6.6	85		
09...	1404	12.0	166	--	28.0	6.6	85		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC 1988									
14...	0930	1560	40	16	19.2	1.9	K22	12	1.4
MAR 1989									
01...	1600	48100	--	130	8.40	3.3	E3000	12	0.80
JUN									
07...	1430	12900	40	53	8.40	2.0	K300	21	1.3
AUG									
09...	1400	2350	10	17	19.2	3.8	<10	24	1.7

## SURFACE-WATER SITES--Continued

02441400 TOMBIGBEE RIVER NEAR COLUMBUS, MS--Continued

DATE	ALKA- LINTY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)
DEC 14...	25	9.1	8.4	0.10	68	16	0.220	0.100	0.46
MAR 01...	26	6.1	2.5	0.20	58	160	0.140	0.030	0.30
JUN 07...	46	8.5	6.5	0.30	110	78	0.770	0.100	0.61
AUG 09...	51	9.7	12	0.20	109	28	<0.020	<0.010	0.22

DATE	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 14...	0.070	0.020	--	--	1	--	2.50	0.200
MAR 01...	0.250	0.030	4400	170	<1	--	<0.500	<0.900
JUN 07...	0.150	0.030	2800	130	<1	--	3.60	<0.400
AUG 09...	0.100	<0.020	1000	120	<1	0.01	22.0	1.90

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
JUN 1989 22...	1815 14900		106	4260

332929088273300 TTW ALICEVILLE LAKE ABOVE COLUMBUS BEND

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
MAR 05...	1640	25.0	46200	149	18600
05...	1642	50.0	46200	173	21600
05...	1645	75.0	46200	202	25200
06...	1025	25.0	61000	378	62300
06...	1027	50.0	61000	420	69200
06...	1023	75.0	61000	394	64900
07...	0918	25.0	43000	168	19500
07...	0915	50.0	43000	168	19500
07...	0909	75.0	43000	159	18500
08...	0800	25.0	43500	100	11700
08...	0805	50.0	43500	106	12400
08...	0810	75.0	43500	103	12100

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN 05...	1530	25.0	0	2	21	32	36	39	47	65	96
05...	1545	50.0	0	1	4	9	11	13	19	35	80
05...	1600	75.0	0	4	29	48	51	52	60	76	96

## SURFACE-WATER SITES--Continued

02441498 TOMBIGBEE RIVER COLUMBUS BEND SR 11B AT COLUMBUS, MS

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)					
DEC												
05...	1300	--	110	7.2	10.5	12.0	107					
05...	1301	5.00	110	--	10.0	11.6	--					
05...	1302	10.0	115	--	10.0	11.4	--					
05...	1303	12.0	115	--	10.0	11.4	--					
FEB												
27...	1500	--	65	7.6	7.0	16.4	138					
27...	1501	5.00	65	7.1	7.0	15.7	--					
27...	1502	10.0	65	7.1	7.0	15.0	--					
27...	1503	15.0	64	7.1	7.0	15.0	--					
27...	1504	20.0	63	7.1	7.0	14.9	--					
JUN												
05...	1500	--	143	6.9	26.5	9.1	115					
05...	1501	5.00	145	6.9	26.5	8.8	--					
05...	1502	10.0	144	6.9	26.5	8.9	--					
05...	1503	15.0	143	6.9	26.5	9.1	--					
05...	1504	20.0	143	6.9	26.5	9.0	--					
05...	1505	25.0	141	6.9	26.5	8.9	--					
05...	1506	30.0	140	6.9	26.5	8.6	--					
AUG												
07...	1345	--	124	7.5	29.5	7.5	100					
07...	1347	5.00	124	7.1	29.5	7.4	--					
07...	1348	10.0	124	7.0	29.5	7.3	--					
07...	1349	15.0	123	7.0	29.5	7.2	--					
07...	1350	20.0	124	7.0	29.5	7.3	--					
07...	1351	25.0	122	7.0	29.5	7.2	--					
07...	1352	26.0	121	7.0	29.5	7.1	--					
DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
DEC												
05...	1300	60	24	11.5	6.0	82	12	1.2	25	7.6	5.4	0.20
FEB												
27...	1500	--	53	10.5	5.9	270	8.2	0.80	16	6.3	3.2	0.20
JUN												
05...	1500	30	17	11.8	2.4	K12	19	1.4	33	9.2	17	0.30
AUG												
07...	1345	20	23	14.3	1.6	44	16	1.4	330	7.6	11	0.20
DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC												
05...	71	30	0.170	0.040	0.25	0.080	0.020	--	--	<1	--	--
FEB												
27...	49	50	0.120	<0.010	0.36	0.100	0.020	2100	100	1	0.600	<0.100
JUN												
05...	113	48	0.070	0.060	0.26	0.080	0.030	2000	190	<1	4.60	0.400
AUG												
07...	83	31	0.020	0.040	0.21	0.070	<0.020	1500	190	<1	--	--
DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)							
MAR												
05...	1257	25.0	9100	129	3170							
05...	1255	50.0	9100	182	4470							
05...	1300	75.0	9100	151	3710							
06...	1032	25.0	14200	395	15100							
06...	1038	50.0	14200	453	17400							
06...	1035	75.0	14200	410	15700							
07...	0925	25.0	6500	186	3260							
07...	0923	50.0	6500	182	3190							
07...	0920	75.0	6500	163	2860							
08...	0845	25.0	7100	99	1900							
08...	0855	50.0	7100	98	1880							
08...	0910	75.0	7100	97	1860							

## SURFACE-WATER SITES--Continued

02441498 TOMBIGBEE RIVER COLUMBUS BEND SR 11B AT COLUMBUS, MS--Continued

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN											
05...	1745	25.0	1	7	19	68	76	79	81	86	98
05...	1800	50.0	0	2	5	10	12	13	20	38	78
05...	1815	75.0	15	29	33	36	39	45	56	74	95

332751088261000 TTW ALICEVILLE LAKE COLUMBUS CUT

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN											
05...	1700	25.0	0	2	12	64	86	90	92	96	98
05...	1715	50.0	0	5	25	100	100	100	100	100	100
05...	1730	75.0	3	8	29	82	86	90	95	99	100

02443500 LUXAPALLILA CREEK NEAR COLUMBUS, MS

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)
DEC 1988											
14...	1030	298	28	7.40	6.0	30	4.5	60.0	11.2	90	2.2
MAR 1989											
01...	1700	9440	16	7.60	8.5	--	80	10.2	10.3	88	2.4
JUN											
07...	1530	2100	25	6.30	22.5	100	23	12.6	8.2	96	1.2
AUG											
10...	1000	320	35	7.50	23.5	60	7.1	70.8	6.5	77	0.9
DATE		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
DEC											
14...		48	2.1	0.80	3.6	4.2	3.1	0.10	28	12	0.150
MAR											
01...		1200	1.5	0.50	1.6	3.5	1.4	0.20	29	46	0.080
JUN											
07...		200	2.5	0.70	2.5	3.4	1.8	0.20	43	36	0.620
AUG											
10...		K30	3.1	1.3	17	2.8	2.8	<0.10	35	6	0.150

## SURFACE-WATER SITES--Continued

## 02443500 LUXAPALLILA CREEK NEAR COLUMBUS, MS--Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 14...	0.060	0.75	0.030	0.030	--	--	<1	--	<0.500	<0.100
MAR 01...	0.010	0.36	0.080	0.030	2100	110	1	--	<0.500	<0.900
JUN 07...	0.050	0.52	0.070	<0.020	3100	320	<1	--	0.600	<0.400
AUG 10...	0.010	0.28	0.020	<0.020	2100	370	<1	<0.01	<0.400	<0.400

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
NOV 1988 15...	1345	614	17	28	MAY 11...	0925	1270	23	79
JAN 1989 04...	1330	2960	12	96	JUN 21...	1305	2640	27	192
FEB 15...	1225	1040	73	205	AUG 02...	1200	538	18	26
MAR 28...	1000	1020	17	47	SEP 14...	1450	149	19	7.6

## 3321120882235 TTW ALICEVILLE LAKE ABOVE HAIRSTON BEND

		SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDEDD (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDD (T/DAY)							
MAR												
	06...	1308	25.0 69200	446 83300								
	06...	1306	50.0 69200	460 85900								
	06...	1303	75.0 69200	426 79600								
	07...	1316	25.0 56000	190 28700								
	07...	1318	50.0 56000	173 26200								
	07...	1320	75.0 56000	178 26900								
	08...	1155	25.0 51300	133 18400								
	08...	1152	50.0 51300	142 19700								
	08...	1150	75.0 51300	117 16200								
DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	
JUN												
	06...	1115	25.0	0	1	3	5	6	6	9	16	55
	06...	1130	50.0	0	1	5	16	28	31	34	48	69
	06...	1145	75.0	0	4	13	18	24	30	41	62	89
	06...	1200	25.0	0	2	8	17	20	24	33	51	91
	06...	1215	50.0	0	2	28	32	42	46	56	72	97
	06...	1230	75.0	0	1	2	4	5	7	12	24	50

## SURFACE-WATER SITES--Continued

3321000882248 TTW ALICEVILLE LAKE HAIRSTON BEND SR 11HB

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY)
MAR					
06...	1252	25.0	9030	435	10600
06...	1255	50.0	9030	437	10700
06...	1258	75.0	9030	403	9830
07...	1307	25.0	5580	221	3330
07...	1305	50.0	5580	182	2740
07...	1302	75.0	5580	167	2520
08...	1340	25.0	6000	125	2030
08...	1345	50.0	6000	121	1960
08...	1350	75.0	6000	125	2030

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JUN											
06...	1245	25.0	0	0	0	1	1	2	3	3	9
06...	1300	50.0	1	3	8	23	30	35	40	48	59
06...	1315	75.0	0	1	1	1	2	2	3	4	14

02443610 TOMBIGBEE RIVER PRATT CAMP SR 5HB BELOW COLUMBUS, MS

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
05...	1415	--	125	7.1	11.0	10.8	98
05...	1416	5.00	125	--	10.5	10.4	--
05...	1417	10.0	130	--	10.5	10.2	--
05...	1418	14.0	130	--	10.5	10.0	--
FEB							
28...	0845	--	89	7.5	7.0	15.0	124
28...	0846	5.00	88	7.4	7.0	14.1	--
28...	0847	10.0	88	7.4	7.0	14.0	--
28...	0848	15.0	89	7.3	7.0	13.7	--
28...	0849	20.0	88	7.3	7.0	13.6	--
28...	0850	25.0	88	7.4	7.0	13.5	--
JUN							
06...	1320	--	125	7.7	27.0	9.4	120
06...	1321	5.00	134	7.4	26.0	7.4	--
06...	1322	10.0	130	7.1	26.0	6.1	--
06...	1323	15.0	177	6.9	24.0	3.2	--
06...	1324	16.0	180	6.9	24.0	1.9	--
AUG							
08...	0930	--	149	7.3	28.5	7.5	97
08...	0931	5.00	145	7.2	28.5	5.2	--
08...	0932	10.0	137	7.2	28.0	5.3	--

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
DEC												
05...	1415	65	37	11.0	2.1	56	14	1.2	32	7.1	4.3	0.20
FEB												
28...	0845	--	58	9.50	7.0	600	13	0.90	27	8.0	3.4	0.30
JUN												
06...	1320	20	20	13.8	5.2	--	22	1.2	47	9.1	5.5	0.30
AUG												
08...	0930	30	22	15.3	1.5	K2	6.2	1.6	17	4.9	2.8	0.20

## SURFACE-WATER SITES--Continued

02443610 TOMBIGBEE RIVER PRATT CAMP SR 5HB BELOW COLUMBUS, MS--Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 05...	72	29	0.150	0.070	0.31	0.100	0.020	--	--	1	--	--
FEB 28...	63	86	0.180	0.040	0.33	0.150	0.020	2500	120	<1	0.900	0.100
JUN 06...	102	34	0.210	0.030	0.34	0.100	0.030	1600	190	<1	7.20	0.600
AUG 08...	49	30	0.050	0.010	0.42	0.080	0.060	2700	470	<1	--	--

3320300882122 TTW ALICEVILLE LAKE HAIRSTON CUT

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
MAR					
06...	1319	25.0	60200	422	68600
06...	1317	50.0	60200	464	75400
06...	1315	75.0	60200	460	74800
07...	1238	25.0	50400	173	23500
07...	1237	50.0	50400	176	24000
07...	1233	75.0	50400	192	26100
08...	1315	25.0	45300	118	14400
08...	1320	50.0	45300	147	18000
08...	1325	75.0	45300	126	15400

02444157 TOMBIGBEE RIVER AT ST HWY 86 NEAR PICKENSVILLE, AL

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					
21...	1115	25.0	4600	32	397
21...	1125	50.0	4600	19	236
21...	1130	75.0	4600	22	273
DEC					
07...	1430	25.0	3500	28	265
07...	1435	50.0	3500	45	425
07...	1440	75.0	3500	40	378
JAN					
12...	1445	25.0	54500	361	53100
12...	1500	50.0	54500	275	40500
12...	1510	75.0	54500	416	61200
MAR					
01...	1130	25.0	64500	329	57300
01...	1140	50.0	64500	292	50900
01...	1145	75.0	64500	310	54000
APR					
12...	0950	25.0	7870	13	276
12...	0955	50.0	7870	16	340
12...	1000	75.0	7870	11	234
MAY					
23...	1000	25.0	9570	17	439
23...	1010	50.0	9570	27	698
23...	1015	75.0	9570	29	749
JUL					
05...	1030	25.0	26600	71	5100
05...	1035	50.0	26600	50	3590
05...	1045	75.0	26600	96	6890
AUG					
15...	1020	25.0	3700	8	80
15...	1025	50.0	3700	10	100
15...	1030	75.0	3700	6	60

## SURFACE-WATER SITES--Continued

02444210 TOMBIGBEE RIVER BIG CREEK BEND NEAR PICKENSVILLE, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
06...	0930	--	70	6.7	6.5	13.2	107
06...	0931	5.00	72	6.5	6.5	12.6	--
06...	0932	6.00	72	6.5	6.5	12.4	--
FEB							
28...	1210	--	68	7.2	9.5	12.6	110
28...	1211	5.00	68	7.1	9.0	12.5	--
28...	1212	10.0	68	7.0	8.0	13.2	--
28...	1213	15.0	68	7.1	7.0	14.0	--
28...	1214	17.0	68	7.1	7.0	14.1	--
JUN							
06...	1500	--	67	7.5	26.5	9.2	115
06...	1501	5.00	47	7.0	23.0	7.3	--
06...	1502	10.0	38	6.3	21.5	6.8	--
AUG							
08...	1145	--	64	6.6	24.0	7.1	85
08...	1146	5.00	63	6.6	23.5	6.6	--

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
DEC												
06...	0930	30	9.0	24.5	4.7	150	4.8	1.6	15	4.7	3.5	0.10
FEB												
28...	1210	--	47	9.50	7.9	390	8.9	0.90	19	6.6	1.8	0.20
JUN												
06...	1500	30	18	12.0	9.1	--	5.6	1.0	12	3.9	2.4	0.30
AUG												
08...	1145	20	18	17.3	1.7	200	23	1.3	54	8.3	4.9	0.10

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE D (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 06...	51	5	0.110	0.030	<0.20	0.060	<0.020	--	--	<1	--	--
FEB 28...	48	46	0.120	0.020	0.20	0.120	<0.020	2200	160	4	1.70	0.100
JUN 06...	57	64	0.150	0.030	0.41	0.160	0.040	2700	230	<1	15.0	0.900
AUG 08...	90	25	<0.020	0.010	0.33	0.100	0.020	1000	170	<1	--	--

## SURFACE-WATER SITES--Continued

## 02444500 TOMBIGBEE RIVER NEAR COCHRANE, AL

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT					
21...	1250	25.0	2170	86	504
21...	1300	50.0	2170	20	117
21...	1305	75.0	2170	20	117
DEC					
08...	1425	25.0	4380	15	177
08...	1430	50.0	4380	15	177
08...	1440	75.0	4380	16	189
JAN					
12...	1615	25.0	55300	355	53000
12...	1620	50.0	55300	358	53500
12...	1630	75.0	55300	409	61100
MAR					
01...	1310	25.0	64500	325	56600
01...	1315	50.0	64500	359	62500
01...	1320	75.0	64500	437	76100
APR					
12...	1121	25.0	8930	11	265
12...	1130	50.0	8930	6	145
12...	1135	75.0	8930	11	265
MAY					
23...	1105	25.0	9990	19	512
23...	1110	50.0	9990	26	701
23...	1115	75.0	9990	32	863
JUL					
05...	1140	25.0	27200	78	5730
05...	1150	50.0	27200	72	5290
05...	1155	75.0	27200	64	4700
AUG					
15...	1130	25.0	3420	12	111
15...	1135	50.0	3420	14	129
15...	1140	75.0	3420	14	129

## 02446500 SIPSEY RIVER NEAR ELROD, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
05...	0915	--	70	6.2	7.5	9.9	82
05...	0916	5.00	70	6.2	7.5	9.6	--
05...	0917	8.00	70	6.2	7.5	9.6	--
FEB							
27...	0940	--	52	7.3	8.5	11.9	103
27...	0941	5.00	52	6.7	8.0	12.0	--
27...	0942	10.0	52	6.4	8.0	11.3	--
27...	0943	12.0	52	6.4	8.0	10.9	--
JUN							
05...	0915	--	85	6.4	23.5	6.5	77
05...	0916	4.00	84	6.4	23.5	6.4	--
AUG							
07...	0945	--	90	8.4	26.5	6.0	76
07...	0946	3.00	91	7.8	26.5	5.5	--

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC									
05...	0915	1270	30	4.1	39.8	3.8	130	4.2	2.9
FEB									
27...	0940	2890	40	11	30.0	1.8	230	3.1	2.2
JUN									
05...	0915	215	40	10	30.3	0.4	470	6.0	4.0
AUG									
07...	0945	255	40	11	31.5	5.0	47	7.3	4.5

## SURFACE-WATER SITES--Continued

## 02446500 SIPSEY RIVER NEAR ELROD, AL--Continued

DATE	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
DEC 05...	6.2	18	2.3	0.20	60	<1	0.050	0.010
FEB 27...	4.4	13	1.9	0.10	42	6	0.020	<0.010
JUN 05...	17	14	2.1	0.20	65	18	0.190	0.050
AUG 07...	20	16	2.2	0.10	62	10	0.230	0.050
DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 05...	0.23	0.040	0.040	--	--	<1	--	--
FEB 27...	0.27	0.030	<0.020	1000	37	5	0.700	0.100
JUN 05...	0.21	0.050	0.030	2000	500	<1	1.10	0.200
AUG 07...	0.23	0.040	<0.020	1700	600	<1	--	--

## 02447008 TOMBIGBEE RIVER ABOVE COOKS BEND SR 5A NEAR WARSAW, AL

		SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE	SEDI- MENT, DIS- CHARGE, SUS- PENDE						
		DATE	TIME	(MG/L)	(T/DAY)						
JAN											
	13...	1300	25.0	62600	578 97700						
	13...	1305	50.0	62600	570 96300						
	13...	1310	75.0	62600	449 75900						
	13...	1455	25.0	72300	803157000						
	13...	1500	50.0	72300	612119000						
	13...	1505	75.0	72300	574112000						
	15...	1300	25.0	89200	334 80400						
	15...	1305	50.0	89200	356 85700						
	15...	1310	75.0	89200	394 94900						
	17...	1330	25.0	107000	167 48200						
	17...	1340	50.0	107000	230 66400						
	17...	1350	75.0	107000	259 74800						
	19...	0935	25.0	74900	66 13300						
	19...	0932	50.0	74900	68 13800						
	19...	0930	75.0	74900	72 14600						
	19...	1258	25.0	66900	55 9930						
	19...	1257	50.0	66900	64 11600						
	19...	1256	75.0	66900	61 11000						
	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	
DATE	TIME										
JAN											
20...	0945	25.0	0	0	1	8	16	19	25	39	75
20...	1000	50.0	0	1	5	13	15	20	29	57	98
20...	1015	75.0	0	0	8	100	100	100	100	100	100

## SURFACE-WATER SITES--Continued

02447010 TOMBIGBEE RIVER COOKS BEND NEAR WARSAW, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
06...	1515	--	100	6.6	10.0	12.0	106
06...	1516	5.00	100	6.5	10.0	12.0	--
06...	1517	10.0	100	6.5	9.5	12.0	--
06...	1518	15.0	100	6.5	10.0	12.0	--
06...	1519	20.0	95	6.5	9.5	12.0	--
06...	1520	25.0	90	6.5	9.5	12.0	--
06...	1521	30.0	90	6.5	9.5	12.0	--
06...	1522	35.0	90	6.5	9.5	11.9	--
06...	1523	40.0	110	6.5	9.5	11.8	--
MAR							
01...	0920	--	93	7.7	7.5	13.1	109
01...	0921	5.00	93	7.7	7.5	12.8	--
01...	0922	10.0	93	7.7	7.5	12.6	--
01...	0923	15.0	92	7.7	7.5	12.5	--
01...	0924	20.0	93	7.7	7.5	12.4	--
01...	0925	25.0	92	7.7	7.5	12.3	--
01...	0926	30.0	91	7.7	7.5	12.1	--
01...	0927	35.0	91	7.7	7.5	12.0	--
01...	0928	40.0	90	7.7	7.5	12.3	--
01...	0929	45.0	90	7.7	7.5	12.2	--
01...	0930	50.0	89	7.7	7.5	12.1	--
01...	0931	55.0	88	7.7	7.5	12.1	--
01...	0932	60.0	88	7.7	7.5	12.1	--
JUN							
07...	0930	--	134	7.0	26.0	9.3	116
07...	0931	5.00	135	7.0	26.0	8.6	--
07...	0932	5.00	133	6.9	26.0	8.1	--
07...	0933	5.00	133	6.9	26.0	8.1	--
07...	0934	5.00	131	6.9	26.0	8.1	--
07...	0935	5.00	130	6.9	26.0	8.0	--
07...	0936	5.00	128	6.9	26.0	7.9	--
07...	0937	5.00	128	6.9	26.0	7.9	--
07...	0938	5.00	128	6.9	26.0	7.7	--
07...	0939	5.00	125	6.9	26.0	7.7	--
AUG							
09...	1000	--	112	7.2	28.5	6.0	78
09...	1001	5.00	113	7.0	28.5	5.7	--
09...	1002	10.0	113	7.0	28.5	5.5	--
09...	1003	15.0	113	7.0	28.5	5.4	--
09...	1004	20.0	112	6.9	28.5	5.5	--
09...	1005	25.0	111	6.9	28.5	5.4	--
09...	1006	30.0	110	6.9	28.5	5.2	--
09...	1007	35.0	109	6.9	28.5	5.1	--

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	
DEC 06...	1515	60	15	14.0	6.7	47	8.0	1.7	18	15	5.0	0.20	
MAR 01...	0920	--	190	6.50	4.8	2800	15	0.90	33	6.8	2.5	0.30	
JUN 07...	0930	30	21	10.3	7.0	K82	17	1.4	114	8.5	11	0.20	
AUG 09...	1000	30	19	17.8	6.0	K6	18	1.5	36	6.7	6.0	0.30	
DATE	TIME	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC 06...	69	20	0.090	0.030	0.37	0.070	0.020	--	--	<1	--	--	
MAR 01...	70	372	0.190	0.040	0.50	0.330	0.030	7100	270	--	0.800	0.100	
JUN 07...	102	70	0.160	0.050	0.37	0.120	0.030	2900	260	<1	5.30	0.400	
AUG 09...	74	15	0.090	0.060	0.34	0.060	0.020	1100	110	<1	--	--	

## SURFACE-WATER SITES--Continued

02447010 TOMBIGBEE RIVER COOKS BEND NEAR WARSAW, AL--Continued

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JAN					
13...	1325	25.0	36500	625	61600
13...	1330	50.0	36500	670	66000
13...	1335	75.0	36500	846	83400
13...	1525	25.0	32900	547	48600
13...	1530	50.0	32900	700	62200
13...	1535	75.0	32900	802	71200
15...	1250	25.0	36400	299	29400
15...	1255	50.0	36400	436	42900
15...	1300	75.0	36400	523	51400
17...	1320	25.0	49500	222	29700
17...	1325	50.0	49500	231	30900
17...	1330	75.0	49500	253	33800
19...	0927	25.0	34900	68	6410
19...	0926	50.0	34900	91	8570
19...	0922	75.0	34900	118	11100
19...	1254	25.0	29100	57	4480
19...	1253	50.0	29100	156	12300
19...	1251	75.0	29100	77	6050

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN											
20...	0900	25.0	0	0	34	100	100	100	100	100	100
20...	0910	50.0	0	2	50	95	95	96	96	97	100
20...	0920	75.0	4	8	23	12	14	16	20	23	30

325645088100700 TTW GAINESVILLE LAKE COOKS BEND CUT SR 4AD

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JAN					
13...	1315	25.0	26100	477	33600
13...	1320	50.0	26100	528	37200
13...	1325	75.0	26100	545	38400
13...	1505	25.0	39400	546	58100
13...	1510	50.0	39400	721	76700
13...	1515	75.0	39400	630	67000
15...	1245	25.0	52800	419	59700
15...	1250	50.0	52800	349	49800
15...	1255	75.0	52800	347	49500
17...	1305	25.0	57300	192	29700
17...	1310	50.0	57300	191	29500
17...	1315	75.0	57300	195	30200
19...	0936	25.0	40000	73	7880
19...	0939	50.0	40000	61	6590
19...	0942	75.0	40000	68	7340
19...	1259	25.0	37800	62	6330
19...	1304	50.0	37800	59	6020
19...	1306	75.0	37800	53	5410

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN											
20...	0815	25.0	0	0	3	35	39	41	47	64	91
20...	0830	50.0	--	--	--	--	--	--	--	--	--
20...	0845	75.0	0	0	0	20	58	66	73	83	97

## SURFACE-WATER SITES--Continued

02448000 NOXUBEE RIVER AT MACON, MS

		DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM						
DATE	TIME										
OCT 1988											
04...	1530	636	270	464	--						
NOV											
14...	1355	636	161	276	--						
DEC											
29...	1330	515	97	135	--						
JAN 1989											
13...	1745	6730	116	2110	--						
14...	1445	9030	99	2410	--						
15...	1310	14900	49	1970	--						
16...	1300	13000	47	1650	55						
19...	1030	6600	59	1050	--						
23...	1230	664	78	140	--						
FEB											
13...	1300	881	139	331	--						
MAR											
05...	1800	7310	143	2820	--						
06...	1030	7250	136	2660	--						
27...	1320	1000	99	267	--						
MAY											
08...	1450	2630	115	817	--						
09...	1645	3340	102	920	--						
09...	2230	3600	128	1240	--						
10...	0945	3820	124	1280	--						
11...	0900	4190	37	419	88						
11...	1900	4170	68	766	--						
12...	1000	3880	75	786	--						
JUN											
23...	0940	696	66	124	--						
AUG											
03...	1000	2230	373	2250	--						
SEP											
15...	1115	364	103	101	--						
DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
JAN 1989											
16...	1300	45	48	49	51	53	55	62	97	100	--
MAY											
11...	0900	53	60	68	74	82	88	--	--	--	100
DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM				
JAN 1989											
16...	1302	25.0	21	56	85	97	100				
16...	1304	50.0	5	25	89	98	100				
MAY											
11...	0902	25.0	2	5	21	100	--				

## SURFACE-WATER SITES--Continued

02448500 NOXUBEE RIVER NEAR GEIGER, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
DEC									
06...	1315	--	180	7.4	7.0	13.2	108		
06...	1316	5.00	180	--	7.0	13.6	--		
FEB									
28...	1500	--	125	7.9	8.0	13.6	115		
28...	1501	5.00	126	7.9	8.0	11.9	--		
28...	1502	10.0	126	7.9	8.0	11.4	--		
28...	1503	15.0	126	7.9	8.0	10.9	--		
28...	1504	18.0	126	8.0	8.0	10.9	--		
JUN									
06...	1745	--	130	7.5	23.5	7.6	90		
06...	1746	5.00	130	7.5	23.5	6.9	--		
AUG									
08...	1445	--	114	7.3	27.0	6.8	86		
08...	1446	5.00	113	7.4	27.0	6.0	--		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC									
06...	1315	354	45	12	20.5	4.1	47	22	2.3
FEB									
28...	1500	5940	--	140	10.0	1.8	K6000	20	1.5
JUN									
06...	1745	2270	70	99	9.00	5.0	--	20	1.5
AUG									
08...	1445	536	70	38	15.8	0.9	K110	16	1.8
DATE	TIME	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
DEC									
06...	53	15	5.0	0.20	113	16	0.200	0.010	
FEB									
28...	46	12	3.4	0.50	98	196	0.170	0.030	
JUN									
06...	45	9.1	4.1	0.30	117	44	0.530	0.010	
AUG									
08...	37	9.5	3.6	0.20	81	45	0.180	0.020	
DATE	TIME	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
DEC									
06...	0.39	0.120	0.040	--	--	<1	--	--	
FEB									
28...	0.46	0.290	0.040	4700	220	<1	1.70	0.100	
JUN									
06...	0.41	0.250	0.060	6100	340	<1	1.00	0.100	
AUG									
08...	0.28	0.110	0.050	2000	120	<1	--	--	

SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)
OCT 12...	0945	E1000	121	7.4	20.0	16	9.2	101	12	1	47
NOV 16...	0930	E6000	150	7.6	17.0	8.5	9.5	99	130	120	56
DEC 07...	0825	E5900	95	7.2	10.0	23	12.4	110	11	11	39
JAN 10...	1030	E32000	110	7.3	9.0	46	12.2	105	>600	3400	48
MAR 01...	1400	E74000	102	7.3	8.0	140	11.6	98	4200	8800	44
15...	1000	E14500	72	7.2	13.5	27	10.8	104	49	K17	28
APR 17...	1015	E5400	79	7.5	15.0	17	10.8	107	27	15	33
MAY 09...	1000	E21500	124	7.8	20.0	25	8.6	96	120	59	48
JUN 07...	1300	E27600	127	7.5	26.0	42	8.1	102	K30	470	53
JUL 11...	1000	E15400	100	7.5	30.0	31	6.8	90	140	750	43
AUG 09...	1215	E1700	111	7.1	29.0	19	7.4	96	K15	K19	43
SEP 13...	1000	E500	136	7.4	29.5	7.0	7.5	99	K19	30	52

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 12...	16	1.7	5.4	19	0.3	2.5	43	35	15	7.2	0.10
NOV 16...	19	2.0	5.7	17	0.3	2.6	44	36	16	11	0.10
DEC 07...	13	1.6	3.2	14	0.2	2.3	34	28	16	4.7	<0.10
JAN 10...	17	1.4	3.2	12	0.2	2.0	41	34	17	5.7	0.10
MAR 01...	16	1.0	2.3	10	0.2	1.5	38	31	14	3.8	0.10
15...	9.3	1.2	2.3	14	0.2	1.3	25	20	13	3.5	0.10
APR 17...	11	1.4	2.5	13	0.2	1.3	27	22	7.7	3.3	0.10
MAY 09...	17	1.4	3.7	14	0.2	1.9	46	37	10	5.4	0.10
JUN 07...	19	1.4	3.8	13	0.2	1.9	50	41	9.0	6.7	0.10
JUL 11...	15	1.3	2.7	12	0.2	1.7	46	38	6.0	3.0	0.10
AUG 09...	15	1.4	3.0	13	0.2	1.7	45	37	7.0	5.3	0.10
SEP 13...	18	1.6	4.9	16	0.3	2.0	51	42	9.0	8.6	0.10

## SURFACE-WATER SITES--Continued

## 02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 12...	5.9	90	76	0.12	0.230	0.040	0.70	0.080	0.040	0.020
NOV 16...	4.6	84	83	0.11	0.160	0.020	0.70	0.070	0.030	0.010
DEC 07...	7.0	78	65	0.11	<0.100	0.050	0.60	0.080	0.030	0.010
JAN 10...	7.3	112	74	0.15	0.130	0.090	0.80	0.120	0.070	0.050
MAR 01...	5.2	79	64	0.11	0.180	0.060	0.90	0.250	0.030	0.020
15...	5.5	53	49	0.07	<0.100	0.020	0.40	0.040	0.010	0.020
APR 17...	6.6	62	48	0.08	<0.100	0.030	0.30	0.060	0.020	<0.010
MAY 09...	5.6	139	68	0.19	<0.100	<0.010	0.70	0.110	--	<0.010
JUN 07...	5.9	77	74	0.10	0.350	0.060	0.90	0.080	0.040	0.030
JUL 11...	7.6	67	61	0.09	0.110	0.040	0.40	0.070	0.040	0.030
AUG 09...	6.9	73	64	0.10	0.140	0.060	0.40	0.060	0.020	0.020
SEP 13...	4.4	90	74	0.12	<0.100	0.030	0.30	0.050	0.010	<0.010

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 12...	30	1	24	0.9	<1.0	1	<3	2	110	<5
MAR 01...	100	<1	20	<0.5	3.0	<1	<3	15	180	<5
APR 17...	100	<1	30	<0.5	<1.0	<1	<3	2	470	<5
AUG 09...	10	<1	21	<0.5	<1.0	<1	<3	1	140	<1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 12...	<4	<1	<0.1	<10	2	<1	<1.0	100	<6	11
MAR 01...	<4	41	0.1	<10	3	<1	<1.0	100	<6	23
APR 17...	<4	45	<0.1	<10	5	<1	<1.0	72	<6	12
AUG 09...	<4	3	0.4	<10	1	<1	<1.0	100	<6	<3

## SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
12...	0945	--	E1000	19	51	--
NOV						
16...	0930	--	E6000	27	437	94
DEC						
07...	0825	--	E5900	20	319	100
JAN						
10...	1030	--	E32000	79	6830	94
10...	1100	16.0	E32000	77	6650	--
10...	1110	32.0	E32000	75	6480	--
10...	1120	48.0	E32000	83	7170	--
10...	1125	64.0	E32000	88	7600	--
10...	1130	80.0	E32000	84	7260	--
17...	1235	16.0	104000	264	74100	--
17...	1250	32.0	104000	322	90400	--
17...	1300	48.0	104000	270	75800	--
17...	1310	64.0	104000	275	77200	--
17...	1320	80.0	104000	344	96600	--
18...	0810	16.0	107000	216	62400	--
18...	0820	32.0	107000	217	62700	--
18...	0830	48.0	107000	204	58900	--
18...	0840	64.0	107000	207	59800	--
18...	0850	80.0	107000	206	59500	--
20...	1400	16.0	54000	52	7580	--
20...	1410	32.0	54000	48	7000	--
20...	1415	48.0	54000	54	7870	--
20...	1425	64.0	54000	58	8460	--
20...	1435	80.0	54000	48	7000	--
21...	0900	16.0	40000	49	5290	--
21...	0905	32.0	40000	54	5830	--
21...	0910	48.0	40000	54	5830	--
21...	0920	64.0	40000	60	6480	--
21...	0930	80.0	40000	60	6480	--
MAR						
01...	1400	--	E74000	497	99100	60
01...	1500	16.0	E75000	403	81600	--
01...	1515	32.0	E75000	405	82000	--
01...	1520	48.0	E75000	363	73500	--
01...	1530	64.0	E75000	390	79000	--
01...	1540	80.0	E75000	334	67600	--
15...	1000	--	E14500	21	822	93
APR						
17...	1015	--	E5400	28	408	84
MAY						
09...	1000	--	E21500	32	1860	92
JUN						
07...	1300	--	E27600	114	8500	76
JUL						
11...	1000	--	E15400	50	2080	--
AUG						
09...	1215	--	E1700	27	124	94
SEP						
13...	1000	--	E500	12	16	97

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN											
10...	1200	25.0	0	<1	3	14	16	20	28	47	93
10...	1210	50.0	0	<1	3	28	42	45	52	71	95
10...	1220	75.0	<1	<1	16	98	100	100	100	100	100
21...	1000	25.0	0	0	5	14	16	17	20	29	75
21...	1015	50.0	0	0	7	17	18	20	29	67	98
21...	1030	75.0	0	1	19	89	99	100	100	100	100

## SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	187	164	174	112	100	107	112	108	110	143	126	136
2	177	148	169	114	99	106	111	104	107	125	114	119
3	156	143	147	116	105	111	106	101	104	113	108	110
4	160	145	154	121	102	107	109	96	101	109	99	104
5	155	146	150	177	105	135	100	94	97	101	94	98
6	167	153	159	190	144	163	123	91	99	96	92	94
7	166	150	159	158	123	137	116	88	94	97	90	94
8	161	155	160	143	122	130	99	84	91	94	78	85
9	156	151	154	144	128	136	124	79	90	102	79	85
10	157	151	155	143	128	133	131	81	91	114	99	108
11	156	147	151	138	129	133	96	80	89	116	110	113
12	149	121	132	144	134	137	112	81	88	121	109	115
13	126	120	123	189	136	153	130	80	93	113	106	110
14	124	120	122	181	140	157	116	83	92	109	93	101
15	122	118	120	160	135	149	119	81	91	93	80	87
16	124	119	122	165	143	154	107	82	90	80	71	76
17	121	117	119	176	140	148	131	85	97	72	67	69
18	124	115	118	180	144	149	133	87	94	67	64	66
19	123	114	116	145	127	138	130	88	98	66	63	64
20	123	115	119	152	141	146	118	84	90	70	65	67
21	153	115	131	150	132	144	112	84	94	82	69	75
22	166	131	147	131	126	128	96	89	93	92	81	86
23	152	120	138	149	131	141	162	88	109	93	69	84
24	137	114	122	148	138	144	119	106	112	79	70	75
25	159	133	144	138	125	131	124	111	116	78	67	74
26	144	119	130	125	111	119	133	113	121	86	73	78
27	127	117	120	141	114	124	130	118	127	86	69	75
28	133	110	120	124	98	107	136	128	131	90	73	78
29	115	106	110	99	94	96	152	133	141	90	72	80
30	116	104	109	111	98	105	152	140	145	113	74	92
31	118	101	109	---	---	---	145	139	142	108	97	101
MONTH	187	101	136	190	94	132	162	79	104	143	63	90
FEBRUARY			MARCH			APRIL			MAY			
1	103	95	99	110	91	101	118	106	110	107	91	95
2	109	100	103	96	80	89	122	118	120	118	94	106
3	127	109	117	80	66	73	126	114	119	116	94	103
4	123	118	121	77	66	69	117	103	111	107	95	101
5	129	115	122	89	78	81	125	103	113	105	94	99
6	119	113	116	97	79	86	121	109	116	136	96	112
7	123	116	120	89	82	86	109	98	103	147	134	140
8	119	114	116	82	76	79	98	89	92	135	127	131
9	117	112	114	76	68	72	105	87	96	127	116	123
10	119	106	112	74	69	70	98	91	96	115	104	108
11	112	104	108	80	73	77	93	89	91	111	101	106
12	103	100	102	82	77	79	92	89	91	101	97	98
13	119	103	107	82	74	78	99	90	95	99	97	98
14	103	97	101	80	72	76	98	80	91	120	95	100
15	100	87	92	81	72	76	88	81	85	119	106	110
16	101	90	94	88	76	80	89	81	86	120	112	116
17	104	99	101	85	78	81	104	78	86	112	102	107
18	114	100	106	87	78	82	99	76	89	106	98	102
19	123	115	121	98	77	85	104	78	91	125	106	116
20	134	120	127	104	77	88	128	77	91	122	106	111
21	152	132	141	122	75	102	116	82	87	127	117	120
22	138	120	129	109	101	106	100	84	91	124	116	121
23	118	101	111	110	106	108	115	85	91	142	123	132
24	100	91	96	128	107	115	128	84	96	153	135	142
25	91	87	89	128	122	125	114	83	94	148	131	137
26	88	86	87	122	117	119	104	85	96	156	139	147
27	87	85	86	121	111	117	119	85	97	165	146	157
28	99	83	89	131	106	114	112	87	96	174	149	163
29	---	---	---	138	104	112	125	91	103	166	143	155
30	---	---	---	129	112	118	112	91	98	171	143	154
31	---	---	---	115	107	109	---	---	---	165	136	150
MONTH	152	83	108	138	66	92	128	76	97	174	91	121

## SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	158	142	150	130	97	114						
2	160	134	142	116	96	108						
3	165	142	154	118	98	110						
4	158	142	152	104	85	95						
5	146	132	140	122	88	98						
6	133	116	126	132	87	110						
7	137	117	127	120	81	95						
8	147	136	141	95	79	88						
9	149	132	141	113	81	91						
10	131	115	121	114	78	92						
11	121	112	116	---	---	---						
12	132	112	118	---	---	---						
13	111	100	107	---	---	---						
14	111	97	100	---	---	---						
15	129	110	119	---	---	---						
16	132	127	130	---	---	---						
17	132	124	129	---	---	---						
18	127	122	125	---	---	---						
19	121	114	117	---	---	---						
20	123	112	117	---	---	---						
21	145	117	130	---	---	---						
22	128	117	122	---	---	---						
23	122	106	114	---	---	---						
24	114	96	109	---	---	---						
25	119	95	103	---	---	---						
26	119	113	116	---	---	---						
27	127	114	121	---	---	---						
28	125	114	119	---	---	---						
29	123	93	108	---	---	---						
30	132	94	110	---	---	---						
31	---	---	---	---	---	---						
MONTH	165	93	124	---	---	---						

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.0	19.5	20.5	15.5	.5	8.5	12.5	12.0	12.5	11.0	10.0	10.5
2	25.0	22.5	24.5	16.5	.5	3.5	12.0	11.5	12.0	10.0	9.5	10.0
3	25.0	22.0	23.5	17.5	.5	5.5	11.5	11.0	11.5	10.0	10.0	10.0
4	24.0	23.5	23.5	18.5	.5	16.0	11.0	10.5	11.0	10.0	10.0	10.0
5	23.0	22.5	23.0	18.0	.5	10.0	11.0	10.5	10.5	10.0	9.5	10.0
6	22.5	21.5	22.0	15.5	.5	1.5	10.5	9.5	10.0	10.5	10.0	10.0
7	22.0	20.5	21.5	17.5	.5	15.5	11.0	10.0	10.5	11.0	10.0	10.5
8	21.5	20.0	21.0	16.5	13.0	14.0	10.5	10.0	10.5	11.0	11.0	11.0
9	21.0	20.5	20.5	17.0	13.0	15.0	10.5	9.5	10.0	11.0	10.5	11.0
10	21.0	20.0	20.5	17.0	16.0	17.0	10.0	9.5	10.0	10.5	10.0	10.5
11	20.5	17.5	20.0	17.5	14.0	15.5	9.5	9.0	9.5	10.0	9.5	10.0
12	20.5	19.0	20.0	17.0	16.5	17.0	9.5	9.0	9.5	11.0	10.0	10.5
13	20.0	19.0	19.5	17.0	15.5	16.5	9.5	8.5	9.0	11.5	11.0	11.0
14	19.5	18.5	19.5	16.5	15.5	16.0	9.5	9.0	9.0	11.5	11.5	11.5
15	19.5	18.0	19.0	17.0	16.5	16.5	9.5	9.0	9.5	11.5	10.5	11.0
16	19.5	18.0	19.0	17.5	17.0	17.0	9.5	8.5	9.0	10.5	10.0	10.0
17	20.0	18.5	19.5	17.0	16.0	16.5	8.5	7.5	8.5	10.0	9.5	9.5
18	20.0	18.0	19.5	16.5	15.5	16.5	8.5	7.0	8.5	9.5	9.0	9.5
19	19.5	18.0	19.0	17.0	16.5	16.5	8.5	7.5	8.0	9.5	9.0	9.0
20	19.0	17.5	18.5	17.0	16.5	17.0	9.0	8.0	8.5	9.5	9.0	9.0
21	18.5	17.5	18.0	16.5	16.0	16.5	9.0	8.5	9.0	9.0	9.0	9.0
22	17.5	12.0	16.0	16.0	15.0	15.5	9.5	9.0	9.0	9.0	9.0	9.0
23	18.5	7.0	15.0	15.0	14.5	15.0	10.5	9.5	9.5	9.0	8.5	9.0
24	18.5	.5	6.0	14.5	14.5	14.5	11.0	10.0	10.5	9.0	9.0	9.0
25	16.5	.5	12.0	14.5	14.0	14.5	10.5	10.5	10.5	9.5	9.0	9.0
26	18.0	.5	14.0	14.5	14.0	14.5	11.0	10.5	10.5	9.5	9.5	9.5
27	18.5	.5	16.5	14.5	14.5	14.5	11.0	10.5	11.0	10.0	9.5	10.0
28	18.0	.5	15.0	14.5	13.5	14.0	11.5	11.0	11.5	10.5	10.0	10.0
29	17.5	.5	13.0	13.5	13.0	13.0	11.5	11.0	11.5	10.5	10.0	10.5
30	17.5	.5	15.5	13.0	12.5	13.0	11.5	11.0	11.0	11.5	10.5	11.0
31	16.0	.5	12.5	---	---	---	11.0	10.5	11.0	12.0	11.5	11.5
MONTH	25.0	.5	18.5	18.5	.5	14.0	12.5	7.0	10.0	12.0	8.5	10.0

## SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.5	11.5	12.0	8.0	7.5	8.0	17.0	17.0	17.0	23.5	22.5	23.0
2	13.0	12.5	12.5	8.5	8.0	8.0	17.0	17.0	17.0	23.5	22.5	23.0
3	13.5	13.0	13.0	9.0	8.5	8.5	17.5	17.0	17.0	23.0	23.0	23.0
4	13.0	12.5	13.0	9.5	9.0	9.0	17.5	17.0	17.5	23.0	22.0	22.5
5	12.5	12.0	12.5	11.5	9.5	10.5	17.5	17.0	17.5	22.5	22.0	22.0
6	12.0	10.0	11.5	12.0	11.0	11.5	17.0	16.5	16.5	22.0	21.0	21.5
7	10.0	7.5	8.5	11.0	10.0	10.5	16.5	16.0	16.0	20.5	20.0	20.5
8	7.5	7.0	7.0	10.0	9.0	9.5	16.0	15.5	15.5	20.0	19.5	20.0
9	7.0	6.0	6.5	9.0	8.5	8.5	15.5	14.5	15.0	20.0	20.0	20.0
10	6.0	5.5	6.0	9.0	8.5	8.5	14.5	13.5	14.0	20.0	19.5	20.0
11	6.0	5.5	6.0	9.5	9.0	9.5	14.0	13.5	13.5	20.0	19.5	19.5
12	6.5	6.0	6.0	11.0	9.5	10.0	13.5	13.0	13.5	20.0	19.5	19.5
13	7.5	6.5	7.0	12.0	11.0	11.5	14.0	13.0	13.5	19.5	19.5	19.5
14	8.5	7.5	8.0	13.0	12.0	12.5	14.0	14.0	14.0	19.5	18.5	19.0
15	10.0	8.5	9.0	14.5	13.5	14.0	14.5	14.0	14.5	19.0	18.5	19.0
16	11.5	10.0	10.5	15.0	14.5	15.0	15.5	14.5	15.0	19.0	18.5	19.0
17	12.0	11.5	11.5	16.0	15.0	15.5	16.0	15.0	15.5	19.5	19.0	19.0
18	12.0	11.5	12.0	16.5	15.5	16.0	17.0	15.5	16.5	20.0	19.0	19.5
19	12.0	11.5	12.0	17.0	16.5	16.5	17.5	16.5	17.0	20.5	19.5	20.5
20	12.0	11.0	11.5	17.5	16.5	17.0	18.5	17.0	17.5	21.5	20.5	21.0
21	11.5	11.0	11.0	17.5	16.5	17.0	18.5	17.5	18.0	22.0	21.5	21.5
22	11.0	10.5	11.0	16.5	15.0	16.0	19.0	18.0	18.5	22.5	22.0	22.5
23	10.5	9.5	10.0	15.0	14.0	14.5	19.5	18.5	19.0	23.0	22.5	23.0
24	9.5	8.0	8.5	14.0	13.0	13.5	21.5	19.0	20.0	23.5	23.0	23.5
25	8.0	7.5	7.5	13.5	13.0	13.0	21.5	20.0	20.5	24.5	23.5	24.0
26	7.0	7.0	7.0	13.5	13.0	13.5	22.0	20.5	21.0	25.0	24.0	24.5
27	7.0	7.0	7.0	14.0	13.5	14.0	22.5	21.0	22.0	26.0	24.0	25.0
28	7.5	7.0	7.5	15.0	14.0	14.5	22.5	21.5	22.0	26.5	25.0	25.5
29	---	---	---	16.0	15.0	15.5	22.5	22.0	22.5	26.5	25.5	26.0
30	---	---	---	17.0	16.0	16.5	23.0	22.0	22.5	27.0	25.5	26.5
31	---	---	---	17.0	17.0	17.0	---	---	---	27.5	26.5	26.5
MONTH	13.5	5.5	9.5	17.5	7.5	12.5	23.0	13.0	17.5	27.5	18.5	22.0
JUNE			JULY			AUGUST			SEPTEMBER			
1	28.0	26.5	27.0	27.5	26.0	27.0						
2	28.0	27.0	27.5	27.0	26.5	27.0						
3	28.0	27.0	27.5	26.5	26.0	26.0						
4	26.5	26.0	26.5	26.0	26.0	26.0						
5	27.0	26.0	26.5	26.0	26.0	26.0						
6	26.5	26.0	26.5	26.5	26.0	26.0						
7	26.0	25.5	26.0	27.0	26.0	26.5						
8	26.0	24.5	25.5	27.0	26.5	27.0						
9	25.0	23.5	24.0	27.5	27.0	27.0						
10	24.0	23.5	23.5	27.5	27.0	27.0						
11	24.0	23.5	24.0	---	---	---						
12	25.0	24.0	24.5	---	---	---						
13	25.5	25.0	25.0	---	---	---						
14	26.0	25.5	25.5	---	---	---						
15	25.5	25.0	25.5	---	---	---						
16	25.0	24.0	24.5	---	---	---						
17	24.0	23.5	24.0	---	---	---						
18	24.5	24.0	24.0	---	---	---						
19	24.5	24.0	24.5	---	---	---						
20	25.0	24.5	25.0	---	---	---						
21	25.5	25.0	25.5	---	---	---						
22	26.0	25.5	26.0	---	---	---						
23	26.0	26.0	26.0	---	---	---						
24	26.5	26.0	26.0	---	---	---						
25	26.5	26.0	26.5	---	---	---						
26	27.0	26.5	26.5	---	---	---						
27	27.0	26.0	26.5	---	---	---						
28	27.5	26.5	27.0	---	---	---						
29	27.5	27.0	27.5	---	---	---						
30	28.0	27.0	27.5	---	---	---						
31	---	---	---	---	---	---						
MONTH	28.0	23.5	25.5	---	---	---						

SURFACE-WATER SITES--Continued

323704087542400 TTW DEMOPOLIS LAKE ABOVE RATTLESNAKE BEND SR 12CA

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JAN					
14...	1325	25.0	78500	730155000	
14...	1330	50.0	78500	527112000	
14...	1335	75.0	78500	1060225000	
16...	1245	25.0	101000	475130000	
16...	1248	50.0	101000	535146000	
16...	1250	75.0	101000	803219000	
18...	1230	25.0	118000	298 94900	
18...	1228	50.0	118000	337107000	
18...	1225	75.0	118000	544173000	
20...	1115	25.0	103000	131 36400	
20...	1120	50.0	103000	192 53400	
20...	1125	75.0	103000	202 56200	
21...	0920	25.0	66800	91 16400	
21...	0925	50.0	66800	117 21100	
21...	0930	75.0	66800	182 32800	

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN											
21...	1000	25.0	--	--	--	--	--	--	--	--	--
21...	1015	50.0	1	18	89	90	91	93	95	98	100
21...	1030	75.0	<1	1	54	100	100	100	100	100	100

323653087540800 TTW DEMOPOLIS LAKE RATTLESNAKE BEND SR RB1

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JAN					
14...	1312	25.0	42100	829 94200	
14...	1310	50.0	42100	770 87500	
14...	1306	75.0	42100	761 86500	
16...	1335	25.0	36800	569 56500	
16...	1340	50.0	36800	543 54000	
16...	1345	75.0	36800	460 45700	
18...	1220	25.0	46800	317 40100	
18...	1217	50.0	46800	355 44900	
18...	1215	75.0	46800	293 37000	
20...	1055	25.0	41700	100 11300	
20...	1100	50.0	41700	77 8670	
20...	1105	75.0	41700	86 9680	
21...	0940	25.0	25000	102 6890	
21...	0945	50.0	25000	102 6890	
21...	0955	75.0	25000	95 6410	

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN											
21...	1200	25.0	1	9	70	99	100	100	100	100	100
21...	1215	50.0	0	0	4	81	99	99	100	100	100
21...	1230	75.0	0	2	7	8	14	28	54	80	97

## SURFACE-WATER SITES--Continued

323642087541800 TTW DEMOPOLIS LAKE RATTLESNAKE CUT SR 12CB

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
JAN					
14...	1250	25.0	36400	792	77800
14...	1255	50.0	36400	809	79500
14...	1300	75.0	36400	986	96900
16...	1315	25.0	64200	500	86700
16...	1320	50.0	64200	533	92400
16...	1325	75.0	64200	767	133000
18...	1230	25.0	71600	367	70900
18...	1233	50.0	71600	382	73800
18...	1235	75.0	71600	530	102000
20...	1046	25.0	61000	209	34400
20...	1049	50.0	61000	212	34900
20...	1050	75.0	61000	283	46600
21...	0900	25.0	41800	89	10000
21...	0905	50.0	41800	118	13300
21...	0910	75.0	41800	179	20200

DATE	TIME	SAMPLE LOCAT. X-SECT. LOOKING UPSTRM. (% FROM R BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
JAN											
21...	1100	25.0	0	1	9	12	16	22	31	54	92
21...	1115	50.0	--	--	--	--	--	--	--	--	--
21...	1130	75.0	<1	10	99	100	100	100	100	100	100

02467001 TOMBIGBEE RIVER BELOW DEMOPOLIS LOCK AND DAM, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
07...	1215	--	190	6.9	12.5	12.4	116
07...	1216	5.00	190	7.1	12.5	11.2	--
07...	1217	10.0	200	7.1	13.0	11.0	--
07...	1218	15.0	200	7.2	12.5	11.0	--
07...	1219	20.0	200	7.2	12.5	11.2	--
07...	1220	25.0	200	7.2	12.5	11.1	--
MAR							
02...	1400	--	124	7.7	9.0	13.5	117
02...	1401	5.00	123	7.5	8.5	13.4	--
02...	1402	10.0	122	7.5	8.5	13.0	--
02...	1403	15.0	122	7.5	8.5	12.9	--
02...	1404	20.0	122	7.6	8.5	12.9	--
02...	1405	25.0	122	7.5	8.5	12.9	--
02...	1406	30.0	123	7.6	8.5	12.8	--
02...	1407	35.0	123	7.5	8.5	12.9	--
02...	1408	40.0	122	7.5	8.5	12.8	--
02...	1409	45.0	121	7.5	8.5	12.8	--
02...	1410	50.0	121	7.5	8.5	12.5	--
02...	1411	55.0	120	7.5	8.5	12.7	--
02...	1412	60.0	120	7.5	8.5	12.7	--
JUN							
08...	0745	--	144	7.3	27.0	8.0	102
08...	0746	5.00	143	7.3	27.0	7.6	--
08...	0747	10.0	143	7.3	27.0	7.6	--
08...	0748	15.0	142	7.2	27.0	7.9	--
08...	0749	20.0	141	7.3	27.0	7.6	--
08...	0750	25.0	140	7.3	27.0	7.6	--
08...	0751	30.0	139	7.3	27.0	7.7	--
08...	0752	33.0	138	7.3	27.0	7.6	--
AUG							
10...	0830	--	136	7.4	29.5	7.6	100
10...	0831	5.00	136	7.4	29.5	7.1	--
10...	0832	10.0	136	7.4	29.5	7.0	--
10...	0833	15.0	135	7.4	29.5	6.7	--
10...	0834	20.0	135	7.4	29.5	6.6	--

## SURFACE-WATER SITES--Continued

02467001 TOMBIGBEE RIVER BELOW DEMOPOLIS LOCK AND DAM, AL--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	TRANS-PAR-ENCY (SECCHI DISK) (IN)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC 07...	1215	10600	35	8.3	18.0	4.0	170	17	4.5
MAR 02...	1400	124000	--	160	4.50	1.7	K3200	14	2.9
JUN 08...	0745	35000	30	21	9.00	3.1	190	18	2.5
AUG 10...	0830	6090	30	18	17.0	1.8	K4	17	3.7

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
DEC 07...	39	30	5.0	0.20	114	12	0.350	0.030
MAR 02...	30	22	3.0	0.40	83	314	0.400	0.050
JUN 08...	41	15	5.7	0.30	99	56	0.160	0.050
AUG 10...	34	21	5.3	0.20	84	14	0.290	0.050

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	PHENOLS TOTAL (UG/L)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L)
DEC 07...	0.26	0.070	0.040	--	--	<1	--	--
MAR 02...	0.34	0.270	0.020	7400	400	3	0.700	0.100
JUN 08...	0.29	0.090	0.030	2000	150	<1	4.40	0.300
AUG 10...	0.20	0.050	0.020	800	90	<1	--	--

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOC CI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 20...	1025	4910	238	7.6	21.0	11	9.3	104	5	13	72	21
FEB 23...	1040	67200	128	7.3	9.0	77	11.8	101	--	710	57	18
APR 13...	1020	62800	132	7.3	15.0	39	9.0	89	K160	270	47	14
AUG 17...	1000	4620	146	7.4	29.0	16	8.0	104	26	32	50	15

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 20...	4.8	18	34	0.9	2.7	61	50	34	17	0.10	5.7
FEB 23...	2.9	5.4	17	0.3	1.6	43	35	29	7.9	0.10	7.2
APR 13...	3.0	5.0	18	0.3	1.6	38	31	16	4.3	0.10	8.0
AUG 17...	2.9	8.6	27	0.5	1.8	44	36	17	9.1	0.10	7.1

## SURFACE-WATER SITES--Continued

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL--Continued

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
OCT 20...	141	135	0.19	1870	0.300	0.010	0.70	0.040	0.030	0.020	10
FEB 23...	163	97	0.22	29600	0.290	0.090	0.30	0.200	0.050	0.070	930
APR 13...	84	72	0.11	14200	0.220	0.050	0.50	0.070	0.030	<0.010	70
AUG 17...	100	85	0.14	1250	0.250	0.030	0.40	0.060	0.020	0.010	40
DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 20...	1	39	<0.5	1.0	<1	<3	2	180	<5	8	11
FEB 23...	1	43	<0.5	<1.0	<1	<3	2	1300	<5	<4	160
APR 13...	<1	30	<0.5	3.0	<1	<3	7	350	<5	<4	12
AUG 17...	1	27	<0.5	<1.0	<1	<3	<1	150	<1	<4	15
DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 20...	<0.1	<10	<1	<1	<1.0	120	<6	14	7	90	99
FEB 23...	<0.1	<10	<1	<1	<1.0	110	<6	41	229	41500	76
APR 13...	0.1	<10	<1	<1	<1.0	89	<6	8	178	30200	65
AUG 17...	<0.1	<10	<1	<1	<1.0	92	<6	7	19	237	99
DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS- SOLVED (UG/L AS U)		
FEB 23...		4.0	10	2.0	6.2	1.7	5.6	0.04	0.14		
AUG 17...		<0.4	1.5	4.0	1.2	3.2	1.0	0.10	0.36		

## SURFACE-WATER SITES--Continued

## 02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	210	167	121	---	---	97	143	145	---	102	115
2	222	205	164	135	117	117	108	133	145	---	107	124
3	198	164	160	138	110	122	112	138	146	---	106	123
4	192	165	152	129	122	115	115	141	151	92	104	118
5	190	151	155	139	123	97	111	149	146	122	111	123
6	187	155	153	131	103	102	110	150	161	126	105	124
7	173	161	156	127	124	117	118	---	160	122	103	127
8	168	192	152	124	129	107	121	137	144	125	96	129
9	162	174	150	123	138	104	73	---	135	109	110	136
10	158	176	154	---	141	95	118	---	131	86	97	133
11	162	178	158	146	142	92	79	142	138	82	85	128
12	160	176	165	131	140	91	122	149	148	80	104	128
13	178	197	164	---	141	115	134	142	---	80	105	139
14	176	176	168	---	150	101	154	133	146	78	101	135
15	181	182	---	---	161	107	164	138	149	78	109	134
16	180	180	173	131	146	124	130	134	---	79	114	132
17	179	180	144	---	138	125	126	136	---	78	100	131
18	188	170	145	114	132	117	132	128	---	73	97	132
19	192	175	147	100	123	116	142	121	---	80	104	133
20	190	158	184	93	130	125	140	124	148	78	109	132
21	191	160	195	91	118	111	138	150	140	78	114	128
22	190	163	194	97	128	110	140	---	141	84	117	121
23	177	167	196	112	132	109	140	---	167	90	120	122
24	200	168	160	105	130	107	142	---	190	88	120	121
25	189	164	162	116	130	107	143	138	206	86	126	128
26	210	160	148	115	111	109	144	140	175	87	125	138
27	216	153	145	115	122	110	143	143	145	87	125	136
28	235	148	148	116	113	101	144	142	---	97	122	130
29	---	148	149	125	---	---	143	141	---	97	121	128
30	222	146	150	112	---	98	145	144	---	96	124	126
31	214	---	142	116	---	117	---	143	---	---	118	---
MEAN	190	170	160	119	129	109	128	139	---	91	110	128
WTR YR 1989	MEAN	136	MAX	235	MIN	73						

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	20.0	15.0	13.0	---	---	17.5	22.5	27.0	---	29.0	32.0
2	28.0	19.5	14.0	12.5	14.5	9.5	18.0	23.0	27.0	---	29.0	32.0
3	27.5	19.5	14.0	13.0	14.0	10.0	18.0	23.0	28.0	---	30.0	31.5
4	25.0	20.5	14.0	12.0	13.5	11.0	18.5	23.0	28.0	26.0	30.0	31.0
5	25.0	20.0	14.0	12.0	13.5	11.5	19.0	23.0	28.0	26.0	30.0	32.5
6	25.0	20.0	14.0	15.0	13.0	11.0	18.5	23.0	28.0	26.0	30.5	31.0
7	24.0	19.5	14.0	12.0	13.0	12.0	18.0	---	28.0	26.0	30.0	31.0
8	24.0	20.0	14.0	12.0	12.0	11.0	19.0	23.0	27.0	26.0	30.0	31.0
9	23.5	19.5	14.0	---	12.0	12.0	16.0	---	26.5	26.0	30.0	31.5
10	23.5	19.0	14.0	---	10.0	12.0	15.0	---	27.0	26.0	30.0	31.0
11	24.0	19.0	13.0	12.0	10.0	13.0	15.0	22.0	27.0	27.0	29.0	31.0
12	24.0	19.0	12.0	12.0	10.0	13.0	15.0	22.0	26.5	27.5	30.0	31.0
13	22.0	19.0	12.0	---	10.0	14.0	15.0	21.5	---	27.0	29.5	29.5
14	22.0	20.0	12.0	---	11.0	15.0	15.0	22.0	27.0	27.0	29.0	30.0
15	22.0	20.0	---	---	12.0	15.0	16.0	22.0	26.0	27.5	30.0	29.0
16	22.0	20.0	12.0	---	12.0	16.0	16.0	21.5	---	27.5	30.0	29.0
17	22.0	20.0	12.0	---	12.0	16.0	17.0	22.0	---	28.0	30.0	29.0
18	21.5	20.0	12.0	12.0	12.0	16.0	17.0	24.0	---	28.0	30.0	29.0
19	21.5	20.0	12.0	11.0	12.0	16.0	18.0	23.0	---	28.0	30.0	29.0
20	21.0	19.0	12.0	12.0	12.5	17.0	18.0	22.0	26.0	28.0	30.0	29.0
21	21.0	18.5	12.0	11.0	14.0	17.0	18.0	23.0	26.0	28.0	30.0	29.0
22	21.0	18.0	12.0	11.0	13.0	17.0	18.0	---	26.0	27.5	30.0	29.0
23	21.0	17.5	12.0	11.0	12.0	17.0	19.0	---	27.0	28.0	31.0	29.0
24	21.0	17.0	12.0	11.0	12.0	16.0	19.0	---	26.5	28.0	31.0	27.0
25	21.0	17.0	13.0	12.0	11.0	16.0	20.0	24.0	27.0	28.0	31.0	26.0
26	21.0	17.0	13.0	12.0	10.5	16.0	21.5	24.5	27.0	28.0	31.0	26.0
27	21.0	17.0	13.0	12.0	11.0	17.0	22.0	25.5	26.5	28.0	31.0	25.0
28	21.5	16.0	13.0	12.0	11.0	16.0	22.0	25.5	---	29.0	31.0	25.0
29	---	16.0	12.0	11.5	---	---	22.0	27.0	---	29.0	31.0	25.0
30	21.0	16.0	13.0	13.0	---	17.0	22.5	26.5	---	29.0	31.0	25.0
31	19.5	---	13.0	13.0	---	17.0	---	26.0	---	29.0	32.0	---
MEAN	23.0	19.0	13.0	---	12.0	14.5	18.0	23.5	---	27.5	30.0	29.0
WTR YR 1989	MEAN	20.5	MAX	32.5	MIN	9.5						