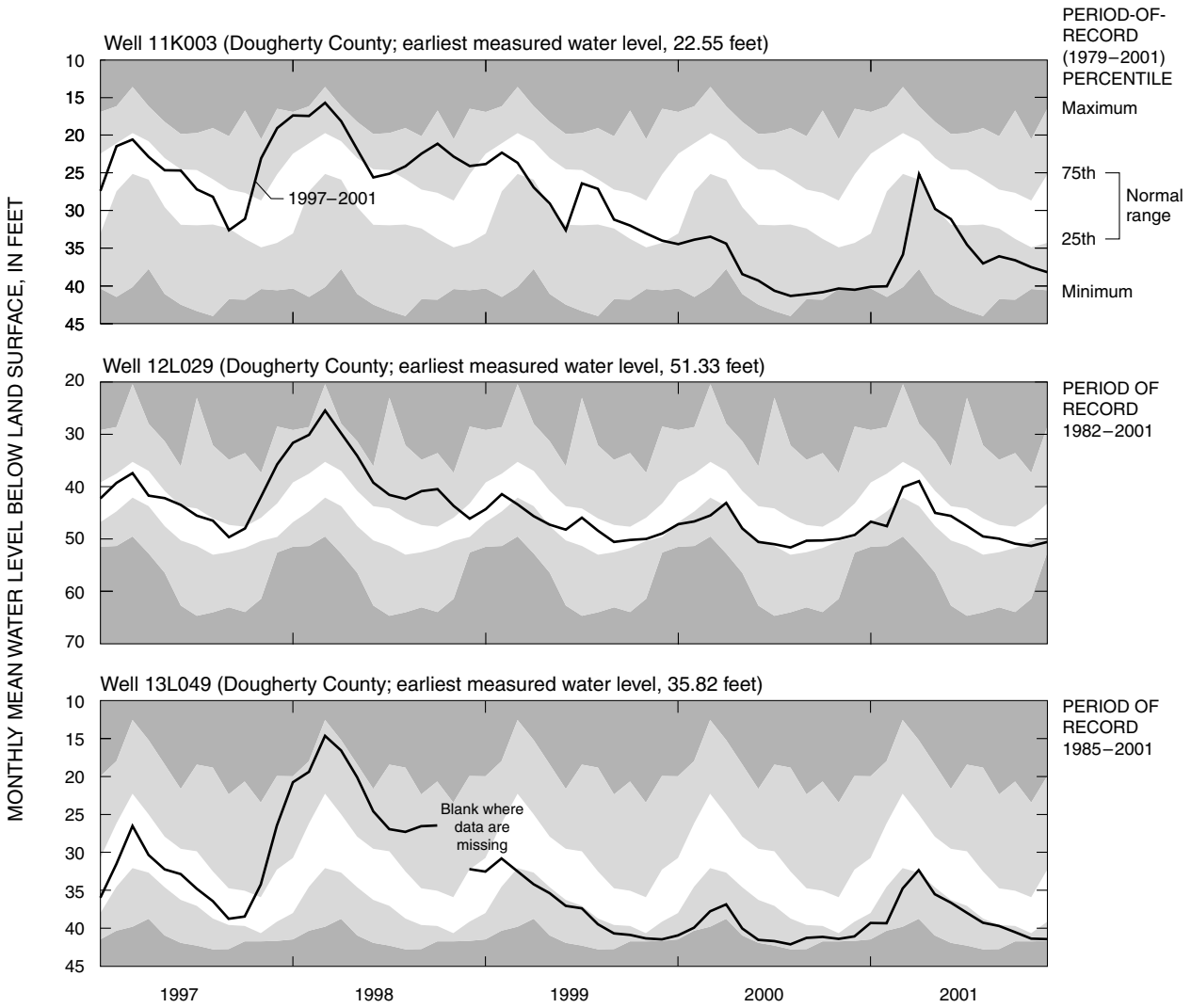
Upper Floridan Aquifer

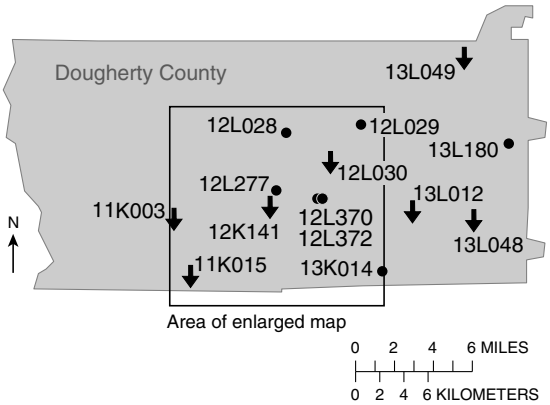
City of Albany–Dougherty County area

Water levels in 14 wells were used to define ground-water conditions in the Upper Floridan aquifer near Albany, Georgia, during 2001 (Dougherty County map, facing page). In this area, water in the Upper Floridan aquifer is confined. Water levels in 7 of the 14 wells were within the normal range during 2001. Water levels in the other seven wells were below normal.

Water-level hydrographs for three Upper Floridan aquifer wells in the Albany area (shown below) were chosen to illustrate monthly mean water levels during 1997–2001 and period-of-record water-level statistics. Effects from drought are apparent from water-level declines of three wells beginning in mid-1998. The water level in well 11K003 in the southwest was at or above normal during 1997, 1998, and most of 1999, but dropped below normal for most of 2000 and 2001. The water level in well 12L029 in the northeastern area had a similar response to drought, except the water level returned to normal for most of 2001. The water level in well 13L049 also declined during 1998–2001 with the water level falling below normal earlier than in the other two wells.

In addition to continuous water-level monitoring, synoptic water-level measurements are periodically taken in wells in and around the Albany area. During November 2001, water-level measurements from 65 wells were taken and subsequently used to construct a map showing the potentiometric surface of the Upper Floridan aquifer. The potentiometric-contour map (facing page) shows that water generally flowed from northwest to southeast, toward the Flint River. A small mound was present in the center of the area. When this mound is present, water flows away from the mound in all directions. In the southeastern part of the mapped area, flow was away from the river to the southwest.





EXPLANATION

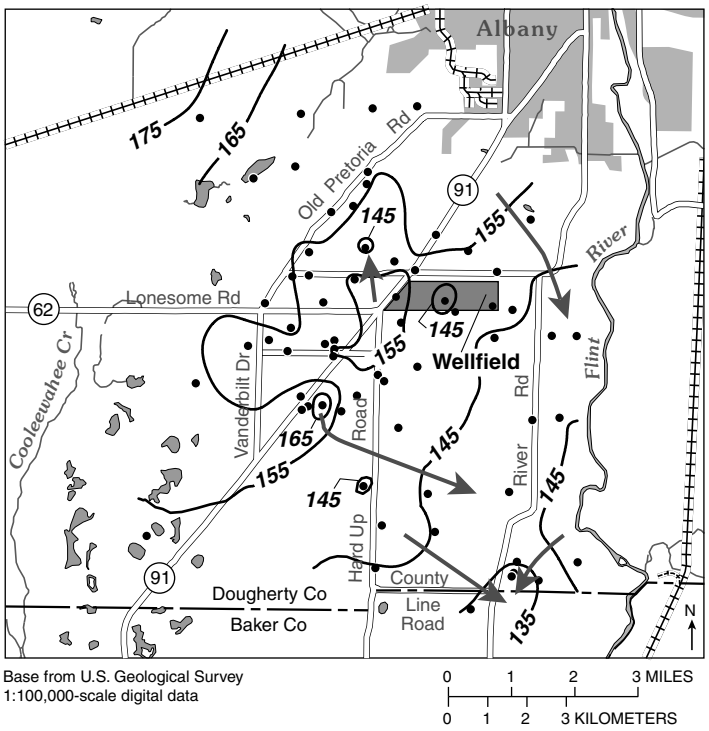
Upper Floridan aquifer

City of Albany–Dougherty County area

Observation well, site name, and comparison of monthly mean water level during 2001 to period-of-record water level

13K014● Normal—Between 25th and 75th percentile water levels for period of record

12K141⬇ Below normal—Below 25th percentile water level for period of record



EXPLANATION

— *165* — **Potentiometric contour**—Shows altitude at which water level would have stood in tightly cased wells during November 2001. Contour interval 10 feet. Datum is NAVD 88

Direction of ground-water flow

Well

Site name	County	Other identifier
11K003	Dougherty	Nilo test well, north
11K015	Dougherty	U.S. Geological Survey, test well 14
12K141	Dougherty	Albany Water, Gas, and Light Commission, A750
12L028	Dougherty	Vandy W. Musgrove
12L029	Dougherty	U.S. Geological Survey, test well 13
12L030	Dougherty	U.S. Geological Survey, test well 16
12L277	Dougherty	Albany Water, Gas, and Light Commission, test well 1
12L370	Dougherty	Albany Water, Gas, and Light Commission, MW-100D
12L372	Dougherty	Albany Water, Gas, and Light Commission, MW-100I
13K014	Dougherty	U.S. Geological Survey, test well 15
13L012	Dougherty	U.S. Geological Survey, test well 3
13L048	Dougherty	U.S. Geological Survey, test well 17
13L049	Dougherty	Miller Ammo Supply
13L180	Dougherty	Marine Corps Logistic Base, core hole 3