

Surface elevation change across the West Antarctic ice sheet. Orbiting satellites with altimeters send electromagnetic pulses earthward that reflect off the surface. Their time of flight is used to measure the elevation of the ice sheet and repeated measurements can detect where the ice sheet is growing or thinning. Here color is used to depict this growth (yellow, brown, red and purple) or shrinkage (gray, green and blue) over the period from April 1992 to April 2001. A complex pattern illustrates the variety of ways in which the ice sheet responds to climate. (Data from radar altimeters on the European Space Agency ERS-1 and ERS-2 satellites. Figure courtesy H. J. Zwally.)

