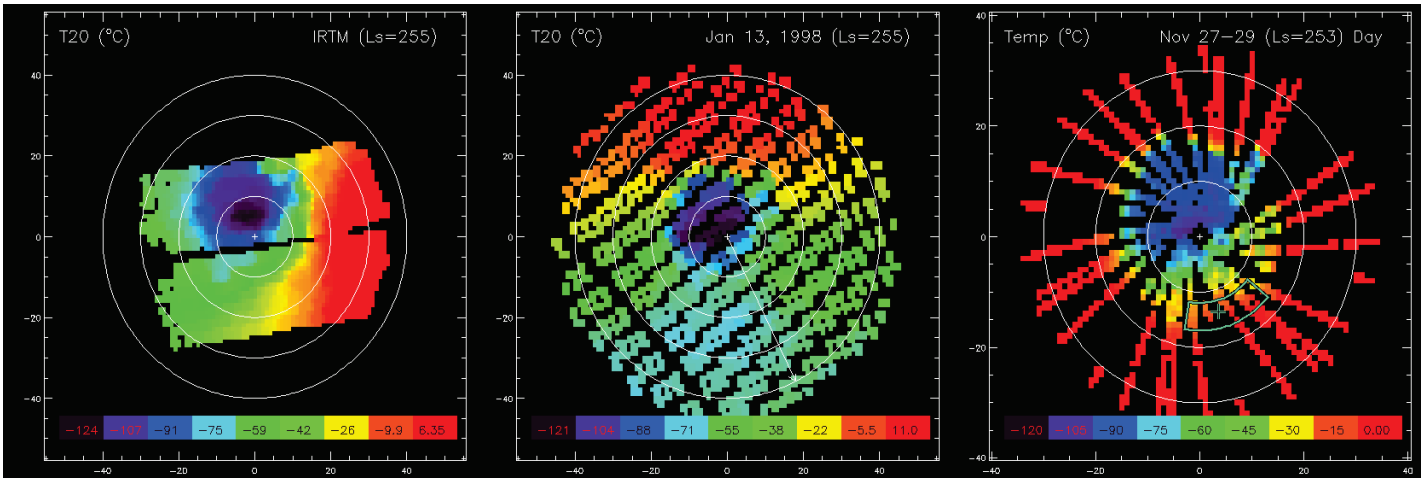
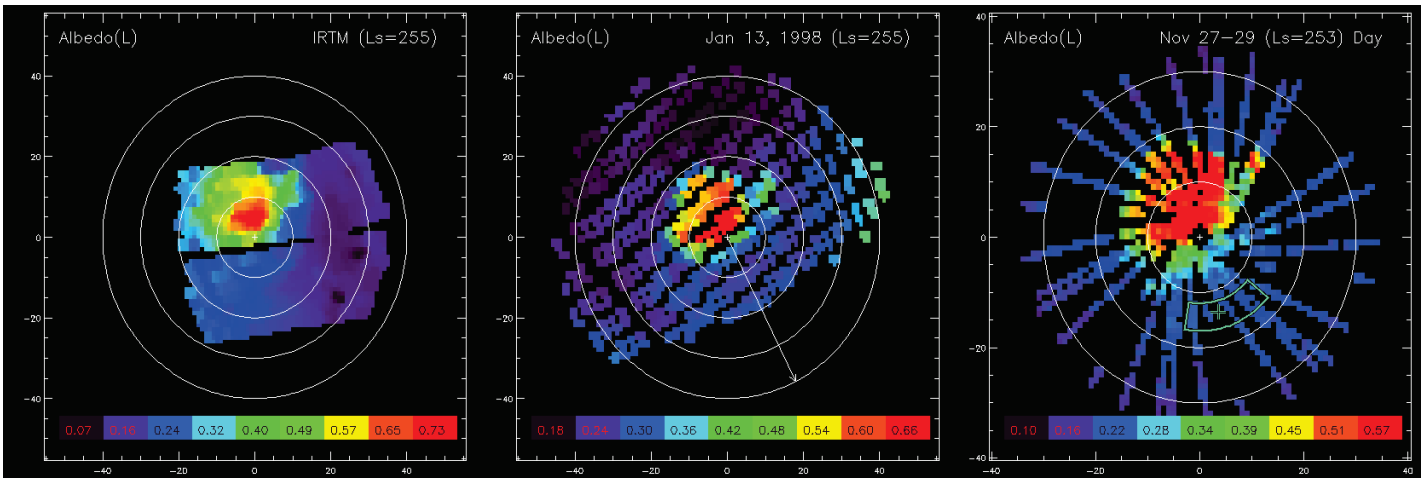
What did Mars South Polar Cap look like 2 years ago... 22 years ago?

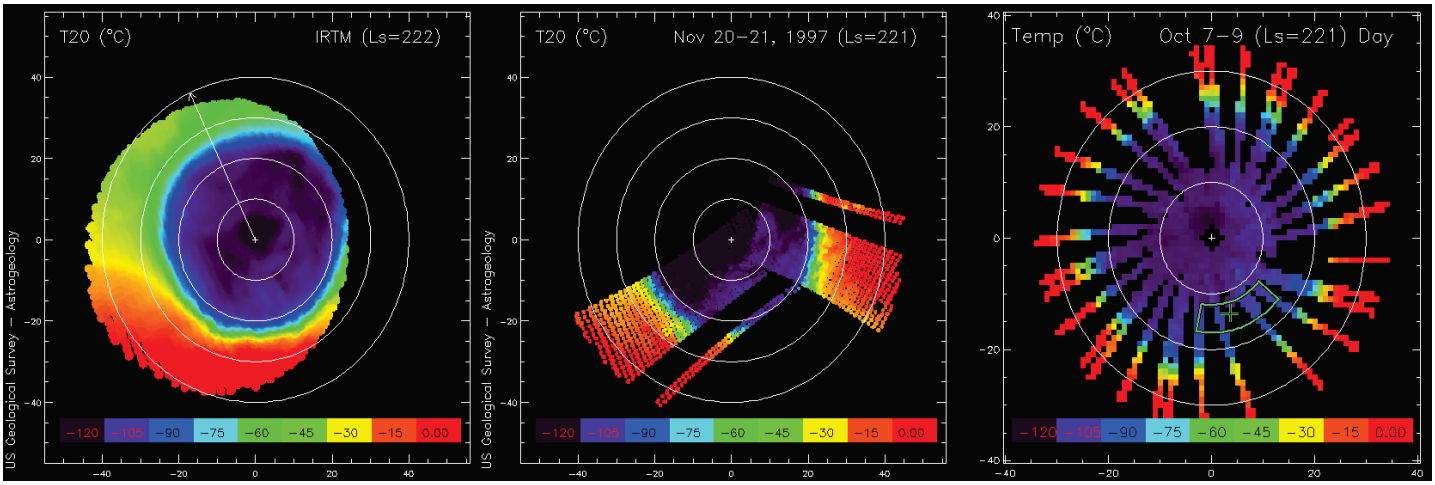
Here are side-by-side comparisons of TES data from 1998 and Viking IRTM from 1977, taken for approximately the current season on Mars. A comparison of past data with current TES data shows a polar cap receding in much the same manner year after year.



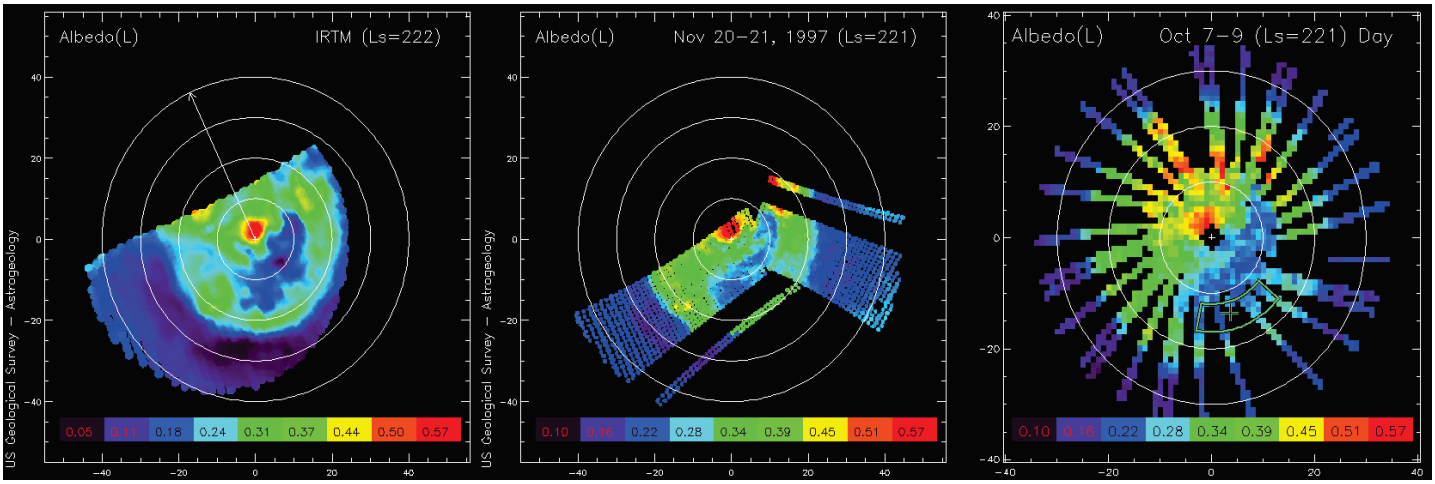
The left image is a 20 µm image of the south pole reconstructed from Viking 2 IRTM data (Mar 1977). The next image is TES data taken January 13, 1998, at about the same season. The last image is current TES bolometric data from Nov 27-29, 1999. The arrows point in the direction of midnight.



The left image is the albedo of the south pole reconstructed from Viking 2 IRTM data (Mar 1977). The next image is TES data taken January 13, 1998, at about the same season. The last image is the cap's recent Albedo data. The arrows point in the direction of midnight.



The left image is a 20 μm image of the south pole reconstructed from Viking 2 IRTM data (Jan 1977). The arrows point in the direction of midnight. The next image is TES data taken November 20-21, 1997, at about the same season. The last image is current TES bolometric data from Oct 1-3, 1999.



The left image is the albedo of the south pole reconstructed from Viking 2 IRTM data (Jan 1977). The arrows point in the direction of midnight. The next image is TES data taken November 20-21, 1997, at about the same season. The last image is the cap's recent Albedo data. All three Martians years show the Cryptic Region in approximately the same location.