

Fluctuations in the CMBR

Top three figures from COBE:

False color images of the sky as seen at microwave frequencies. The orientation of the maps are such that the plane of the Milky Way runs horizontally across the center of each image.

1st plot: blue =0K; red=4K.

2nd plot: blue=2.721K; red=2.729K. The "yin-yang" pattern is the dipole anisotropy that results from the motion of the Sun relative to the rest frame of the cosmic microwave background.

3rd plot: after the dipole anisotropy has been subtracted from the map. Red is now only 0.0002K hotter than blue.

4th plot: recent data from WMAP with the Milky Way subtracted.

Direct information on inhomogeneities in the early universe....galaxy formation, inflation,....