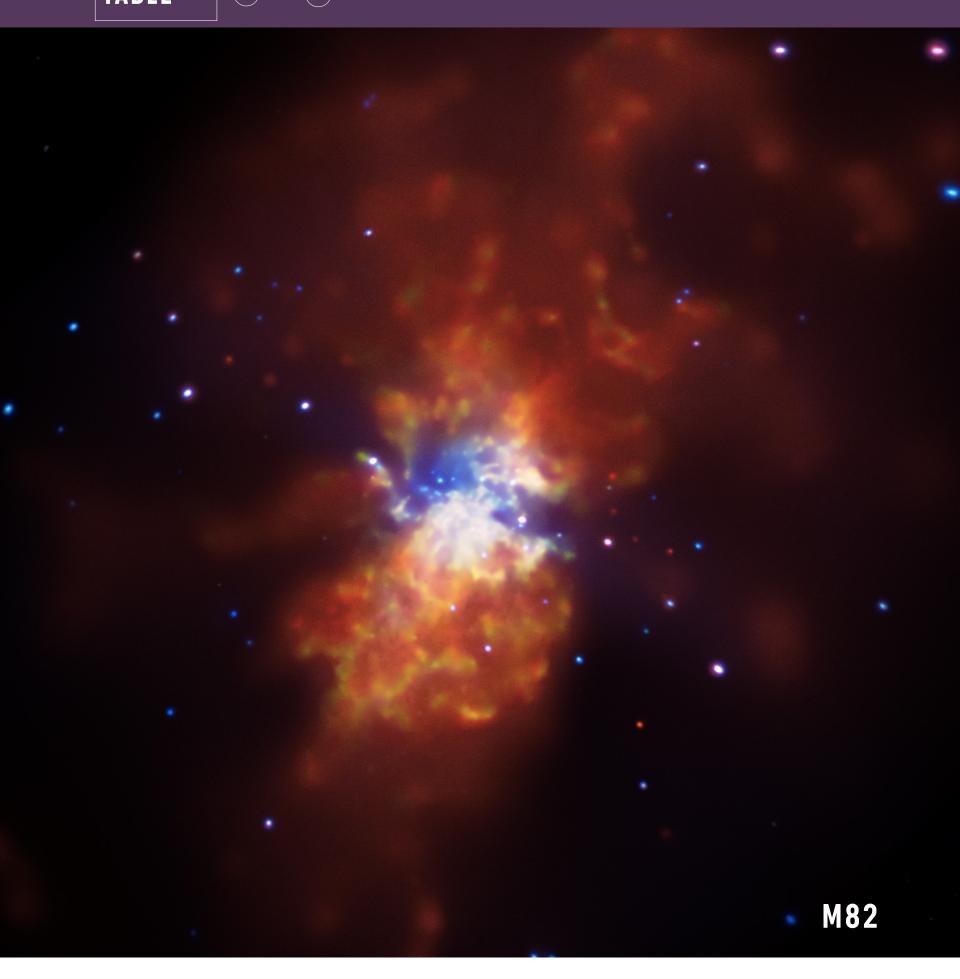


National Aeronautics and Space Administration





On a still larger scale, oxygen has been detected in intergalactic

filaments millions of light years in length. This oxygen was likely produced more than ten billion years ago, in some of the first supernovas to occur in the history of the Universe. If the rate of supernovas gets so high that the combined effects of many supernova shock waves drives a galactic-scale wind that blows the gas out of the galaxy. A prime example is the galaxy M82.