



What is Gaia? Gaia, the Global Astrometric Interferometer for Astrophysics, is a European Space Agency astronomical observatory mission. Its goal is to create the largest, most precise three-dimensional map of the Milky Way by surveying about 1% of the galaxy's 100 billion stars. Nation European Space Agency (ESA) Objective(s) Sun-Earth L2 Lagrange Point Spacecraft Gaia [???



This visualization shows the central disk of our Milky Way galaxy and a smaller nearby galaxy called the Large Magellanic Cloud. A new, all-sky star map charts the location of stars in the Milky Way's outer reaches (known as the galactic halo), about 200,000 light years to 325,000 light years from the Milky Way's center.



Visualize orbits, relative positions and movements of the Solar System objects in an interactive 3D Solar System viewer and simulator. We use cookies to deliver essential features and to measure their performance. Learn more. Got It! menu. Major ???



The Solar System; The Universe; Science; Aeronautics; Technology; Learning Resources; About NASA; Espa?ol; NASA's Roman Team Selects Survey to Map Our Galaxy's Far Side. Article. 6 Min Read NASA's Webb Reveals New Features in Heart of Milky Way. Multimedia Go To Galleries Go To Galleries Keep Exploring Discover More Topics From



This map shows the full extent of the Milky Way galaxy - a spiral galaxy of at least two hundred billion stars. Our Sun is buried deep within the Orion Arm about 26 000 light years from the centre. Towards the centre of the Galaxy the stars are packed together much closer than they are where we live. Notice also the presence of small globular



Our home galaxy is called the Milky Way. It's a spiral galaxy with a disk of stars spanning more than 100,000 light-years. Earth is located along one of the galaxy's spiral arms, about halfway from the center. Our solar system takes about 240 million years to orbit the Milky Way just once.



As to the thickness of the disk, most current estimates put it at around 1,000 light years thick. Obviously our solar system lies very close to the galaxy's equator. Figure 1. Polar view of the Milky Way Galaxy showing the location of the Solar System.



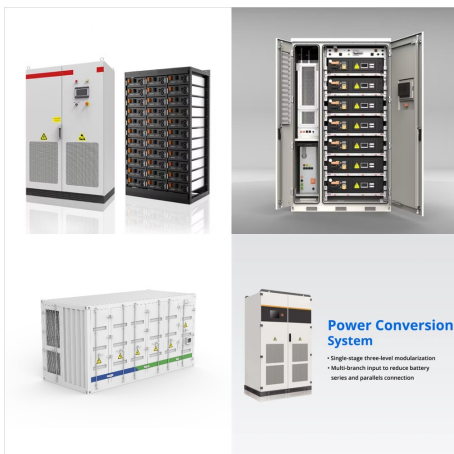
? This article discusses the structure, properties, and component parts of the Milky Way Galaxy. For a full-length discussion of the cosmic universe of which the Galaxy is only a ???



Astronomers use this telescope to observe objects in the Solar System and the Milky Way, as well as other galaxies, including the supermassive black holes known as quasars. Astronomers also use the 1.2-Meter Telescope to observe star systems that might contain exoplanets, which is a major program for the observatory.



Solar System & Milky Way Project. Thread starter SimCity-SFS; Start date Nov 12 nebulae and exoplanets totaling over 1,000 celestial bodies and over 500 Heightmaps.(realistic height maps? 1/4 ?Some heightmaps are not made by Myself).And Still updating now.If Add over 20 new stars and planets within the Milky Way galaxy Add 7 new wandering



Gaia is an ambitious mission to chart a three-dimensional map of our Galaxy, the Milky Way, in the process revealing the composition, formation and evolution of the Galaxy. The formation of the Sun, the Solar System and the subsequent emergence of life on Earth may be a consequence of a collision between our galaxy, the Milky Way, and a



According to Hubble's classification system, the Milky Way is a spiral galaxy, although more recent mapping evidence indicates that it may be a barred spiral galaxy. The Milky Way has more than hundreds of billions of individual stars. It's approximately 100,000 light-years in diameter, and the sun is located about 28,000 light years from the



? Milky Way Galaxy - Structure, Dynamics, Stars:
The first reliable measurement of the size of the Galaxy was made in 1917 by American astronomer Harlow Shapley. He arrived at his size determination by establishing the spatial distribution of globular clusters. Shapley found that, instead of a relatively small system with the Sun near its centre, as had previously been ???



Our solar system is located about 27,000 light-years from the galactic center within one of the disk's four spiral arms. the researchers plan to refine their 3D map of the Milky Way by



A discussion of the position, orientation and orbit of the Solar System within the Milky Way galaxy: Part 1 Click to enlarge (with local arms labelled)Base map: NASA / JPL-Caltech / R. Hurt (SSC-Caltech) When I wrote recently about the pole stars of other planets, I was aware of one thing my sky maps didn't show---the rotation poles of our galaxy.



Contained in the Milky Way are stars, clouds of dust and gas called nebulae, planets, and asteroids. Stars, dust, and gas fan out from the center of the Galaxy in long spiraling arms. The Milky Way is approximately 100,000 light-years in diameter. Our solar system is 26,000 light-years from the center of the Galaxy.



Introduction. The planetary system we call home is located in an outer spiral arm of the Milky Way galaxy. Our solar system consists of our star, the Sun, and everything bound to it by gravity ??? the planets Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune; dwarf planets such as Pluto; dozens of moons; and millions of asteroids, comets, and meteoroids.



A new study in Nature finds that the Milky Way is part of a broader supercluster of 100,000 galaxies known as Laniakea. Nature Video We know that the Earth and the solar system are located in the

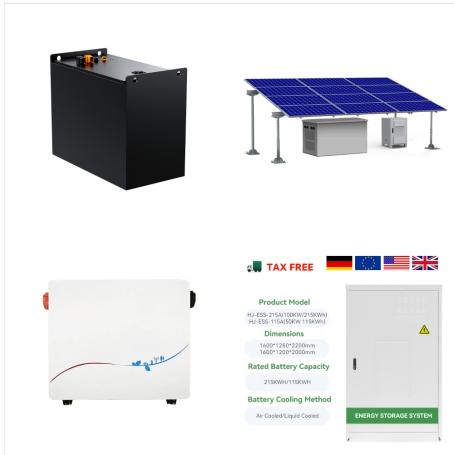


Figure 1. The observed structure of the Milky Way's spiral arms [1]. The Orion Arm, also known as the Orion???Cygnus Arm, is a minor spiral arm within the Milky Way Galaxy spanning 3,500 light-years (1,100 parsecs) in width and extending roughly 20,000 light-years (6,100 parsecs) in length. [2] This galactic structure encompasses the Solar System, including Earth.



Galaxy Map brings together the latest scientific results mapping our home galaxy, the Milky Way. If you are new to this site, you may want to start with the section on the basic plan of the Milky Way and take a look at some of the other chapters in Our Galactic Region. This is not only a guide to the maps on this site and how they were constructed, but includes a growing amount of ???



Earth is in a relatively quieter part of the Milky Way Galaxy. Our solar system sits in one of the galaxy's many spiral arms, called the Orion Arm or Orion Spur. Picture the Milky Way as a swirling disk with a bright center and long, winding arms. Earth is ???



The data could help astronomers answer a number of different scientific questions, including how the Milky Way was formed over time, where the solar system and other star systems are headed, what