

INTERESTING ASTRONOMICAL TIDBITS_May_2005

- * All stars in the sky, added together, are about as bright as one star at a magnitude of negative 6. The full moon is about magnitude -11 , the star Sirius is about magnitude -1.5 .
- * Extended objects (like nebulae and galaxies) cannot be viewed in any telescope as having a higher radiance than they do in the unaided eye. They only look brighter because they occupy a larger size in our vision. There is a peculiar psycho-physical effect that makes dim small objects invisible, and large dimmer objects suddenly pop into view. It is called the "night glass" effect.
- * Galaxies outnumber Milky Way stars in the average field of view, or would if most of them weren't so dim.
- * Our galaxy is not typical. The "typical" galaxy is a small elliptical.
- * Light left the nearest spiral arm of the Milky Way galaxy before people knew how to write things down. Most of what we know about even close parts of the Universe is old news.
- * Optical errors, in terms of the damage to the image, scale as the square of their amplitude. Quarter-wave optics damage the image four times as much as eighth-wave optics.
- * The "deep impact" space probe, when it hit the comet this year, was moving so fast that even had it been made out of pure TNT, the explosive would have only added a little to the energy of the impact.