

Uranometria 2000.0's Dark Nebulae Database

This atlas contains 367 dark nebulae, which are drawn to scale with a dashed outline if larger than 10'. Objects smaller than 10' are drawn as dashed-line square boxes in two sizes (10' to 5' and less than 5'). On the 2× close-up maps they are plotted to scale if larger than 2.5', on the 3× maps, if larger than 1.7'.

Dark nebulae are composed of clouds of dust and gas sufficiently dense as to become opaque. They are detectable if positioned between the observer and a bright nebula or a very dense star field, against which they can be seen silhouetted. Observationally, dark nebulae are among the most difficult deep-sky objects. The Coalsack, near the Southern Cross (Charts 198 and 209), is an example clearly visible to the unaided eye because it happens to lie in front of the rich, starry background of the Milky Way. On the other hand, the well-known Horsehead Nebula (cataloged as Barnard 33 on Chart 116) is much more typical. It is a difficult object because of its small size and because it lies in front of a rather faint background object, emission nebula IC 434. In this case the resulting contrast between the dark nebula and background is very low, making it difficult to distinguish. Dark nebulae are usually seen best with wide-field, low-power eyepieces, which provide a large, bright surrounding field. While these objects emit no light of their own, nebula filters may help increase the contrast if the background is an emission nebula.