These sky maps were made using the freeware UNIX program "starchart", from Alan Paeth and Craig Counterman, with some postprocessing by Stuart Levy. You're free to use them however you wish.

There are five equatorial maps: three covering the equatorial strip from declination −60 to +60 degrees, corresponding roughly to the evening sky in northern winter (eq1), spring (eq2), and summer/autumn (eq3), plus maps covering the north and south polar areas to declination about +/− 25 degrees.

Grid lines are drawn at every 15 degrees of declination, and every hour (= 15 degrees at the equator) of right ascension.

The equatorial−strip maps use a simple rectangular projection; this shows constellations near the equator with their true shape, but those at declination +/− 30 degrees are stretched horizontally by about 15%, and those at the extreme 60−degree edge are plotted twice as wide as you'll see them on the sky. The sinusoidal curve spanning the equatorial strip is, of course, the Ecliptic −− the path of the Sun (and approximately that of the planets) through the sky.

The polar maps are plotted with stereographic projection. This preserves shapes of small constellations, but enlarges them as they get farther from the pole; at declination 45 degrees they're about 17% oversized, and at the extreme 25−degree edge about 40% too large.

These charts plot stars down to magnitude 5, along with a few of the brighter deep−sky objects −− mostly star clusters and nebulae. Many stars are labelled with their Bayer Greek−letter names.

Also here are similarly−plotted maps, based on galactic coordinates. The midline of the strip maps is the plane of our Milky Way galaxy.

Unlike the ecliptic, which matters only within our solar system, the Milky Way plane would be important to observers on any of the hundreds of billions of stars in our galaxy. It's also important to Earth−based observers, as the Milky Way's structure determines where in the sky we can find various types of deep−sky objects: for example, open star clusters, and "planetary" and gaseous nebulae are concentrated toward the galactic plane; globular star clusters appear all over the sky, with more of them toward the galactic center; and Milky Way dust, concentrated in the galactic plane, obscures distant objects in and beyond the plane, so most external galaxies appear well above or below the Milky Way plane.

If you have any questions about the maps, or would like the tools I used so you can make others of your own, contact me:

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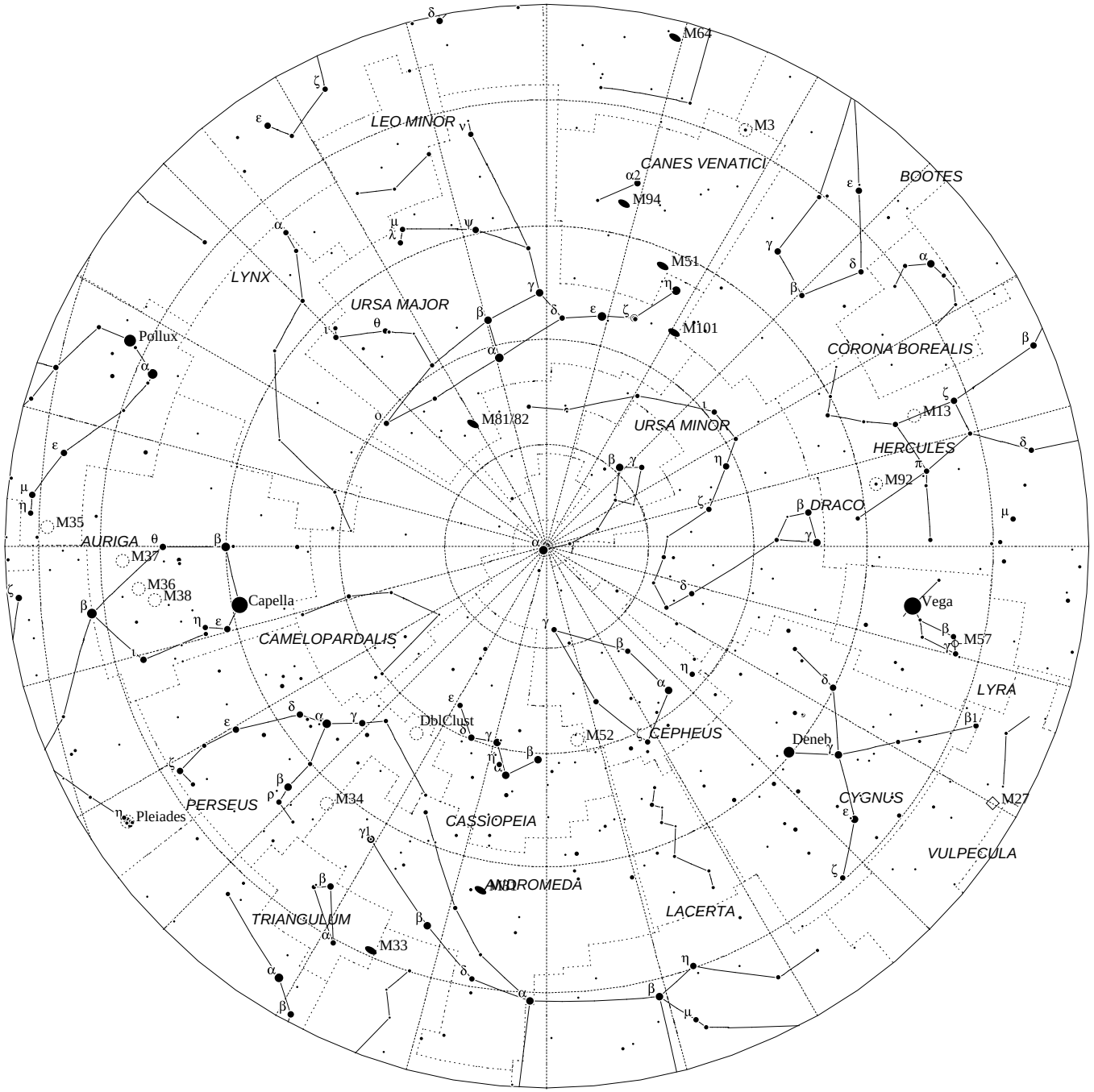
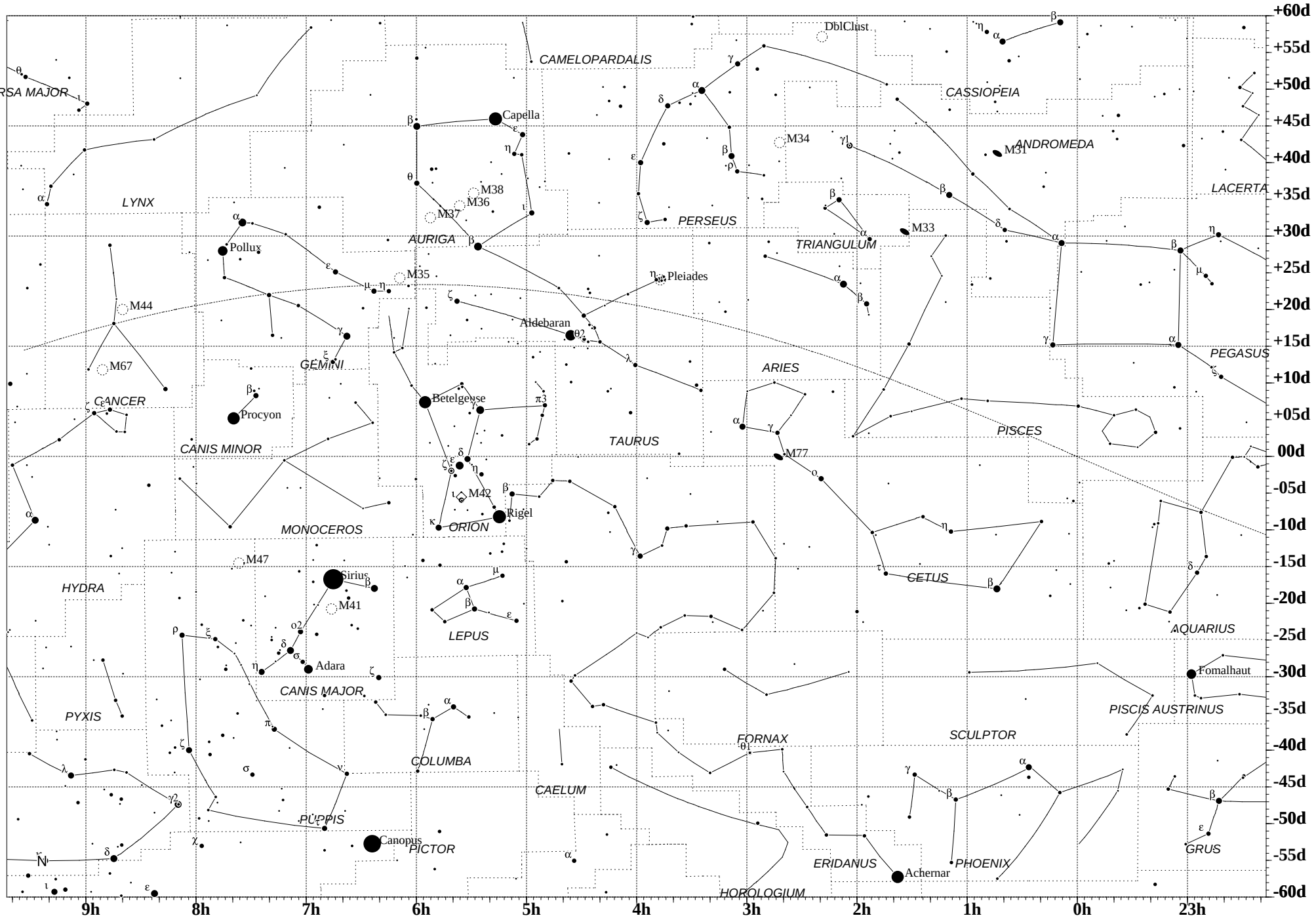
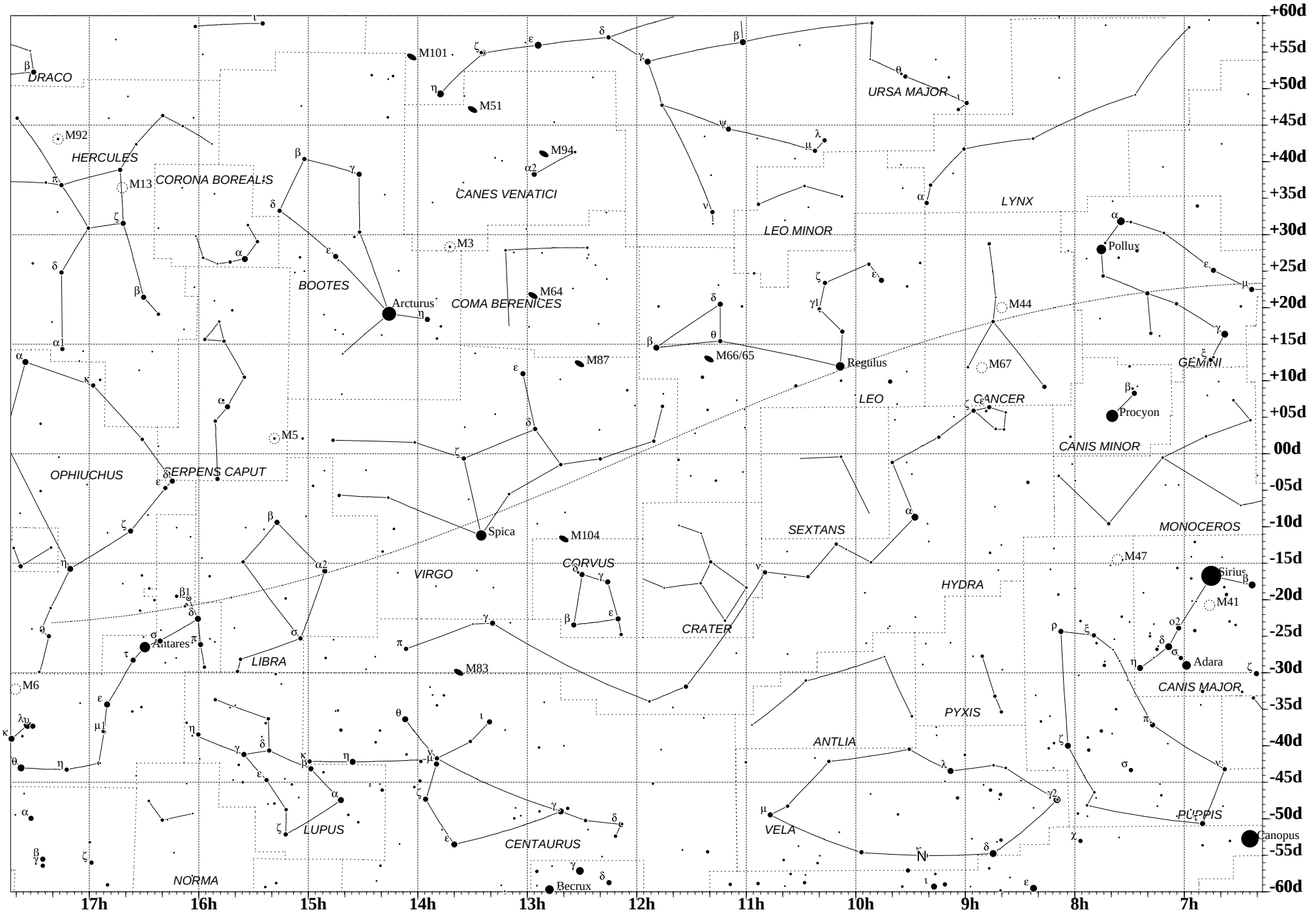


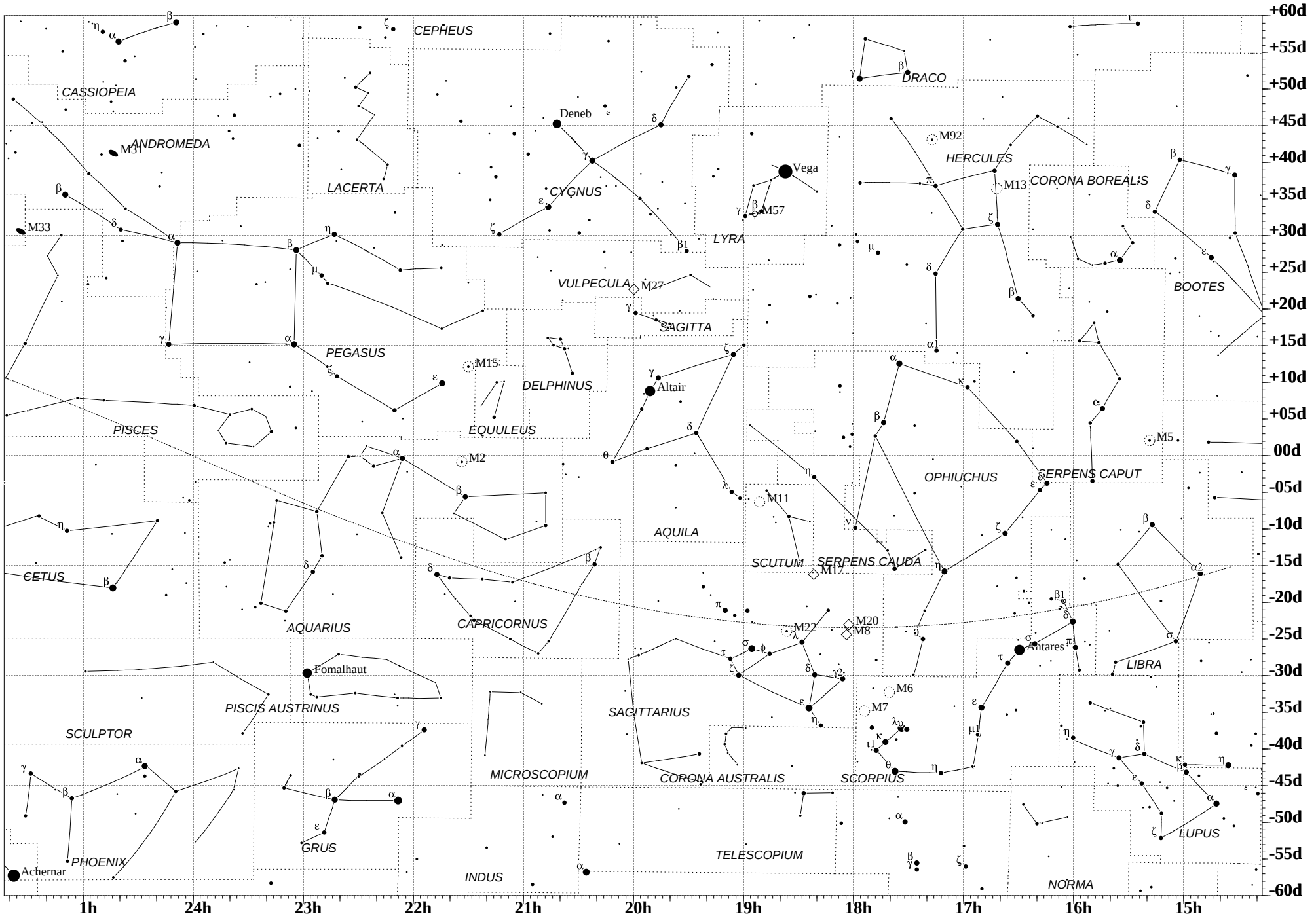
North Polar: 0h,+90d lim: 5.0



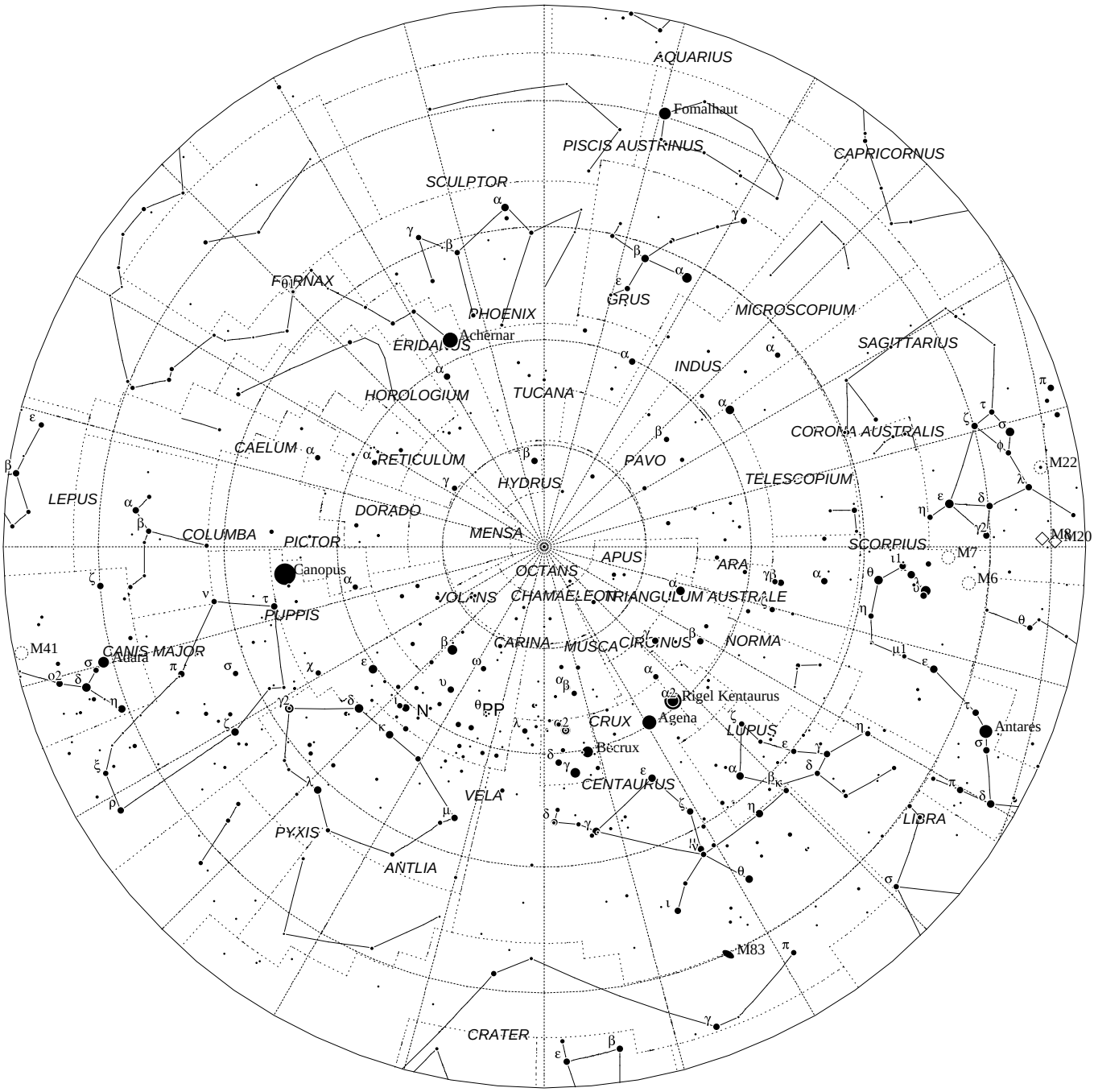
Winter: 4h, 00d lim: 5.0



Spring: 12h, 00d lim: 5.0



Summer/Autumn: 20h, 00d lim: 5.0



South Polar

(0h,-90d lim: 5.0)

-1 0 1
2 3 4
5

	double	variable
Planet	Asteroid	Comet
Cluster	Globular	Open
Nebula	Planetary	Diffuse
Galaxy	Elliptical	Spiral
Unknown	Other	Quasar