

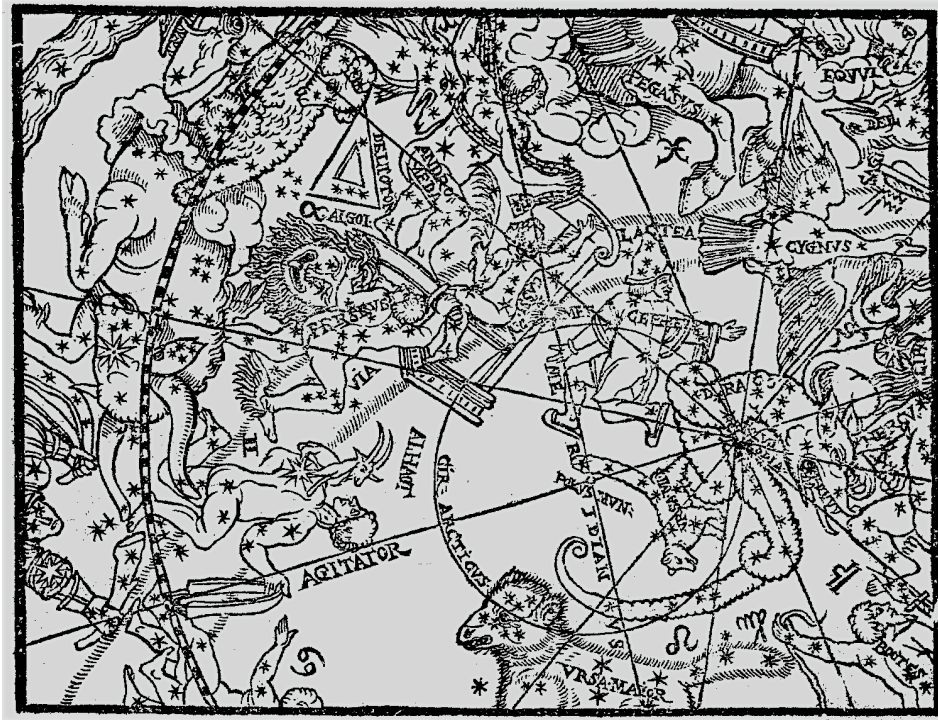


Girolamo Porro, Venice, 1572

There are relatively few miniature nautical charts. Girolamo Porro produced a finely engraved and rhumb-lined one covering an area about two thirds of his oval world map (see above & 1572): really an Atlantic chart with parts of the Pacific and Indian Oceans. Pietro M. Marchetti published a crowded world *Carta marina* (see 1598) and a very similar, but clearer copy of it, was issued a century later by Domenico Lovisa (see 1697).

The most numerous miniature nautical charts are those rare items engraved by Benjamin Wright (see 1603, 1611a & 1649a). *Le Petit flambeau de la mer* of René Bougard (see 1684a), contains a series of crude little woodcut charts. Rigobert Bonne's lovely miniature maritime atlas included some coastal charts of France (see 1762) but Andrew Dury's plates of the coasts of the British Isles were maps not charts (see 1764b).

Woodcut pictures of constellations are among the earliest of printed celestial charts. Some small ones, including miniatures, appeared in books by Theodore Graminaeus, published at Cologne in 1573 and 1578; others only 45 mm. square were published at Frankfurt in 1578 by Christoph Egen. There are one or two charts (see below) in Georg Busch's essays on the comets of 1572/3 and 1577. A chart of the Plough/the Great Bear appeared in Peter Apian's *Cosmographia* (see 1524) and a series of forty woodcuts in a book on astronomy (see 1587).



Georg Busch, Erfurt, 1573

Celestial hemispheres are found in just a few early pocket world atlases: Pieter van den Keere (see 1598a); Jan B. Vrients (see 1601); Jodocus Hondius Junior (see 1616); Tobias Lobeck (see 1744). Celestial hemispheres sometimes appeared as insets on large world maps and the first two of these miniatures were copied from those of Petrus Plancius and included Polophilax: his own very short lived southern constellation.

A series of plates was included in a rare star catalogue of 1612. *Catalogus veteres affixarum longitudes ac latitudes conferens cum novis* was published in Rome by Bartholomaeus Zannettus in 1612 and reissued at Augsburg in 1679. This star catalogue by the Jesuit astronomer Christoph Grienberger is a very rare work today, but there are copies in the Butler Library at Columbia University and in the Bibliothèque Nationale. The book also includes a celestial atlas and in the Butler copy, three of these plates are twice the size but twenty-two are fairly uniform miniature constellation charts. Three are illustrated on page 101 of *The Sky explored* by Deborah J. Warner, 1979.

Aegidius Strauch's tiny constellation charts (see 1659b) appeared two decades before the better known small double-page plates in John Seller's pocket stellar atlas. Other charts followed (see 1723, 1730, 1731 & 1805) and some were also printed on cards, (see 1656, 1676d, 1719, 1828a & 1829a). Several miniature celestial atlases were published in the nineteenth century, (see 1849a, 1855, 1896a).

Both the French and the German editions of Allain Manesson Mallet's five volume *Description de l'univers* (see 1683 & 1684) include celestial charts, together with some town views and plans.





Jodocus Hondius II, Amsterdam, 1616

Town plans seem to have evolved from the pretty medieval woodcut townscapes, often fanciful, which were used to illustrate various early compendia, including the well known *Nuremberg chronicle* (see 1496). Real views from various perspectives, bird's-eye views and then plans followed. Invariably attractive and interesting, they were sometimes included in sets of miniature maps (see Mexico City above) and they also appeared as decorative insets on some folio ones.

The first city atlas was soon followed by a pocket version (see 1593) and there were further series of miniatures, including examples of all the intermediate stages in the evolution of plans (see 1595, 1610, 1623, 1635, 1652, 1661, 1665 & 1685). Later ones include French fortified towns (see 1736) and seaports (see 1762), Spanish American towns (see 1758a) and towns in the British Isles (1764b). Two tiny atlases of Paris consisted of sectional plans (see 1762a & 1764c) and borderless ones illustrated a walking guide to London (see 1817) and a directory of Paris (see 1832c).

