

Mercator projection (Figures 4 and 5). Thus, no projection transformations needed to be applied for the comparison since, Herrman's map is assumed to be a Mercator projection, which is the projection specifically designed for navigation. The basis for this assumption is that nearly all charting of this time period was constructed using the Mercator's projection. Gerhard Mercator first created a map in 1569 using a projection which had meridians (longitude) as straight and equally spaced parallel lines and, at right angles to the parallels (latitude), lines which are also shown as straight parallel lines. This projection construction of lines of latitude is also evident on the Herrmans map. This projection became known as the Mercators projection and had the advantage of its simplicity and convenience for laying off courses as straight lines for navigation. The loxodrome or rhumb line is a line that crosses the successive meridians at a constant angle on this projection and thus is particularly suited for sea navigation for which it was designed. A ship on one course following the plotted rhumb line will pass all points along that line exactly as they are charted. Likewise, Portolan charts of the fourteenth and fifteenth century were compiled as exploratory surveys of the times using loxodromic (rhumb) lines. These charts