

being obtained by the use of the sextant, however, longitude would most likely be distorted because of the lack of an accurate sea-going chronometer needed in establishing time.

The best-fit qualities of the digitized overlays has been examined several ways. The local shifting, block by block, to match alike corresponding centers of registration, resulted in local agreement improving the correlation for that particular block. This method, however, re-oriented the alignment of other areas of the maps, which made the correlation worse for those areas.

The best-fit qualities improved by shifting the overlays locally only in the region at the mouth of the Chesapeake Bay. The presumption that the entrance of the bay is where Herrman started his mapping and this would then be the control upon which he would base his measurements. One can expect the entrance of the bay to be used as the orientation or starting point of the survey for the bay's interior. Therefore, the assumption can be made that for best control one should establish the mouth of the Chesapeake Bay as the beginning point of the survey and anticipate errors in survey computations to increase further away from the established control (starting point). This potential for surveying error would be