



**GIS-504/DGIS-504/CGIS-504**

**M.A. /M.Sc. Geoinformatics/ DGIS/ CGIS**

## **CARTOGRAPHY**

**DEPARTMENT OF REMOTE SENSING AND GIS  
SCHOOL OF EARTH AND ENVIRONMENT SCIENCE  
UTTARAKHAND OPEN UNIVERSITY  
HALDWANI (NAINITAL)**



**M.A. /M.Sc. Geo-informatics/ DGIS/CGIS**

**UTTARAKHAND OPEN UNIVERSITY**

**CARTOGRAPHY**

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SCHOOL OF EARTH AND ENVIRONMENTAL SCIENCE  
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# **BLOCK 1: MAP-A SPECIAL GRAPHIC COMMUNICATOR**

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## **UNIT 1: HISTORY AND DEFINITION OF MAPS**

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### ***1.1 OBJECTIVES***

### ***1.2 INTRODUCTION***

### ***1.3 HISTORY AND DEFINITION OF MAPS***

### ***1.4 SUMMARY***

### ***1.5 GLOSSARY***

### ***1.6 ANSWER TO CHECK YOUR PROGRESS***

### ***1.7 REFERENCES***

### ***1.8 TERMINAL QUESTIONS***

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## ***1.1 OBJECTIVES***

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After reading this unit you will be able to:

- Know about history of maps
- Understand the definition of maps

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## ***1.2 INTRODUCTION***

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Histories of maps are very ancient. From starting humans begin to understand about their surroundings. To gain the knowledge of places where human travelling was not possible, human tried to make unclear sketch of that places. At the beginning in the era of Greeks and Romans, maps were used to show known and unknown area/parts of the earth surface. Eratosthenes, Hipparchus & Ptolemy were provided scientific base maps in this era. Today earth's different forms, its types, its symptoms & distribution are shown and explained by maps in small & large scale. Such maps are more complex and more technical than simple. In the field of remote sensing and GIS the role of cartography is very important. Without cartography we can't imagine remote sensing and GIS. In this unit we will talk about the History and definition of maps. How was map formed?

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## ***1.3 HISTORY AND DEFINITION OF MAPS***

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From the earliest civilizations onwards people have been drawing the world around them on stones, clay tablets, papyrus, and more. The earliest positive evidence of graphical representation of Earth parts was shown century before the Christian era, when Babylonians drew maps on the clay tables, of which the oldest specimens found so far that have been dated about 2300 bce. It may be assumed that map making goes back much further and it may begin among non-literate peoples. It's logical to assume that, very early man made efforts to communicate with each other regarding their environment by searching locations, routes & hazards on the ground and later on bark and skins.

Personal experience and familiarity with local features is the base of earliest maps. Doubtless routes were shown by earliest maps to neighboring tribes, where other necessities & water might be found and the location of enemies and other dangers. Stimulation of such efforts done by Nomadic life by recording ways to cross mountains and deserts, the relative locations of summer and winter pastures, & dependable springs, wells, and other information's.

Cave walls markings that are associated with primitive man's paintings have been identified by some archaeologist as attempt to show the game trials of the animals depicted, though there is no general agreement on this. Similarly, hunting trails could be possibly represented by network of lines scratched on certain bone tablets, but definitely there is no conclusive evidence that the tablets are indeed maps.

Many non-literate people are skilled in depicting essential features of their localities and travels. During exploration of Dr. Charles Wilkes's of the South Sea's in the 1840's, a friendly islander

drew a good sketch of the whole Tuamotu Archipelago on the deck of the captain's bridge. Pawnee Indians in North America are reputed to have used star charts painted on elk skin to guide them on night marches across the plains. Cortes a map of the whole Mexican Gulf area painted on cloth was taken from Montezuma, while Pedro de Gambia reported that the Incas used sketch maps and cut some in stone to show relief features. Many specimens of early Eskimo sketch maps on skin, wood, and bone have been found.

### **1. Early Maps**

From about 2300 B.C. the oldest known maps are preserved on Babylonian clay tablets. In ancient Greece cartography was considerably advanced. Greece philosophers were well known of the concept of a spherical earth by the time of Aristotle (ca.350 B.C.) and since, have been accepted by all geographers. Map 1.1 is the world map of Babylonia. Clay material is used in making it. Its height is 12.2 cm. (4.8 in) and width is 8.2 cm. (3.2 in). The writing form of this map is Cuneiform. It was created in 6<sup>th</sup> century BC.

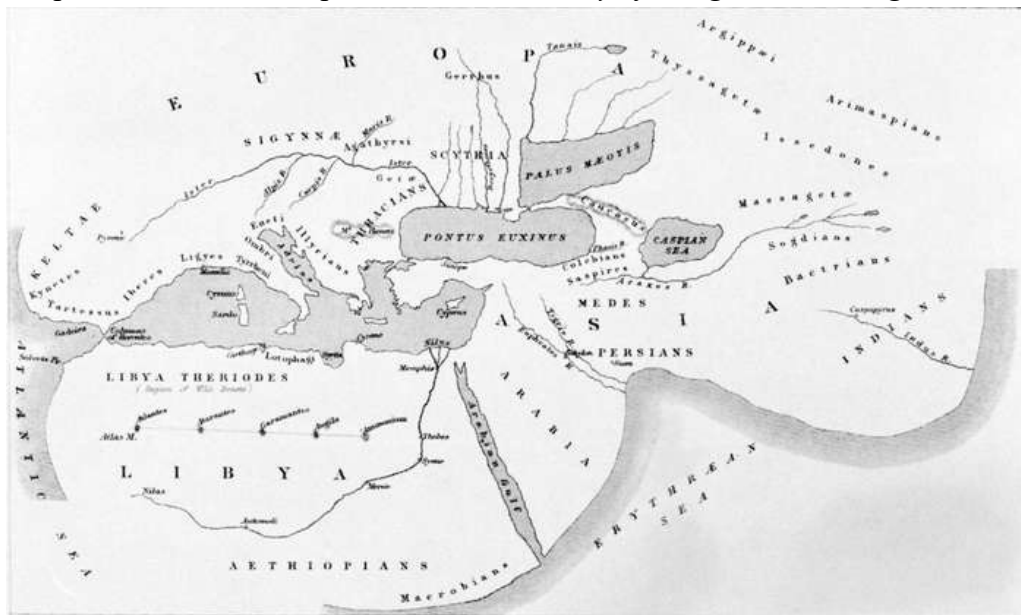
Map 1.1: Babylonian Map of the World



Source: [https://en.wikipedia.org/wiki/Babylonian\\_Map\\_of\\_the\\_World](https://en.wikipedia.org/wiki/Babylonian_Map_of_the_World)

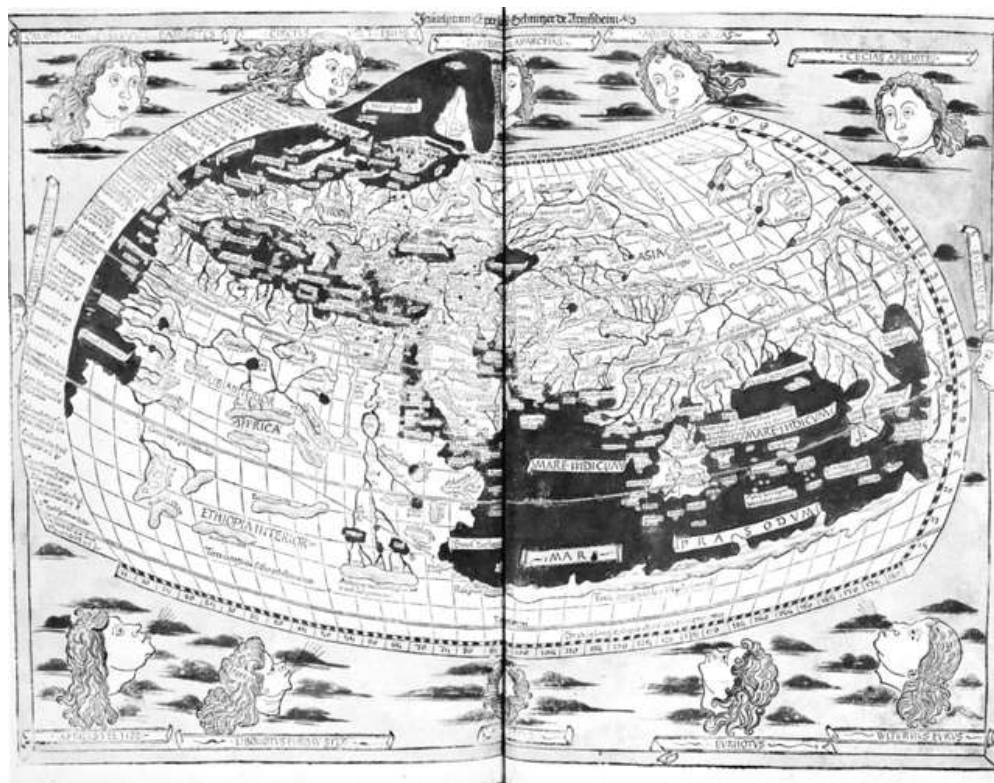
Roman and Greek cartographer reached a culmination with Claudius Ptolemaeus (Ptolemy, about A.D. 85-165). His “world map” depicted old world from about 60°N to 30°S latitudes. Map 1.2 is the world map. This map was created by Herodotus. It is one of the earliest maps. Map 1.3 is also a world map and created by Ptolemy. This is also an example of earliest maps. Both maps can be considered as scientific maps.

Map 1.2: Herodotus' map of the world. *Library of Congress, Washington, D.C.*



Source: Google

Map 1.3: world map Ptolemy's map of the world, as printed at Ulm, 1482. *Library of Congress, Washington, D.C.*



Source: Google