

# مقدمة إلى علم الفلك حتى عهد بطليموس

إعداد: م. ألكسندر العادلي



Stonehenge : (1)

(Stonehenge)

(1 )

(Astronomy)

Astronomy

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x

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(

!

(Constellations) 29 365  
12 ...  
« » Zodiac 12

12

(Planets)

« »

(Venus)

(Mercury)

)

-

(

!

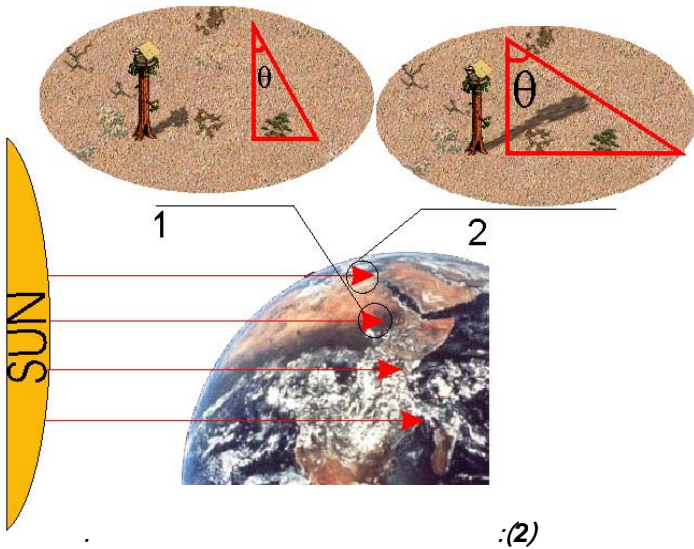
(

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(Saturn)

(Jupiter)

(Mars)

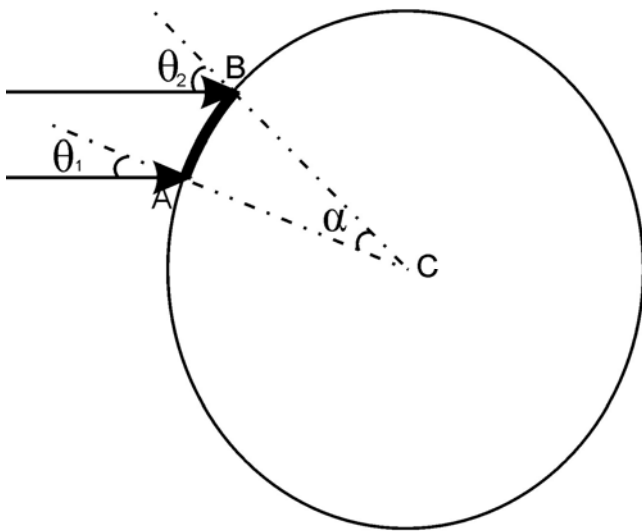


( )

(2)

!

$\theta_2 \theta_1$



1000

: .km

$$\Theta = |\theta_1 - \theta_2| = 9^\circ$$

(3)

$$\alpha = \Theta$$

AB

°360

$\alpha$

$$L = \frac{1000 \cdot 360}{9} = 40000 \text{ km}$$

« »

(... )

!



Megiste

(Klaudios Ptolemaios)

Syntaxi

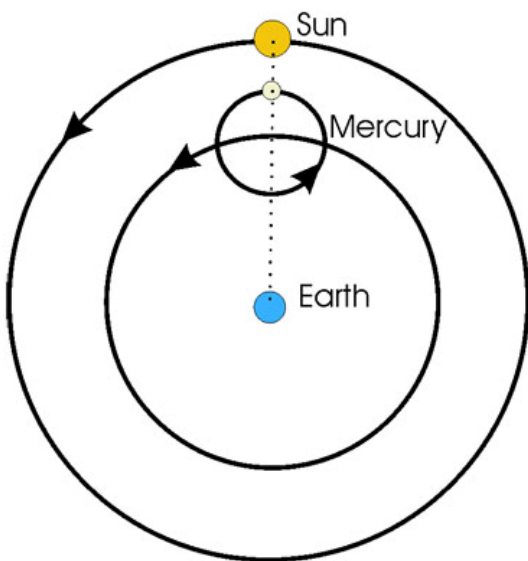
13

Hipparcos

.( 170-90)

### نظام بطليموس:

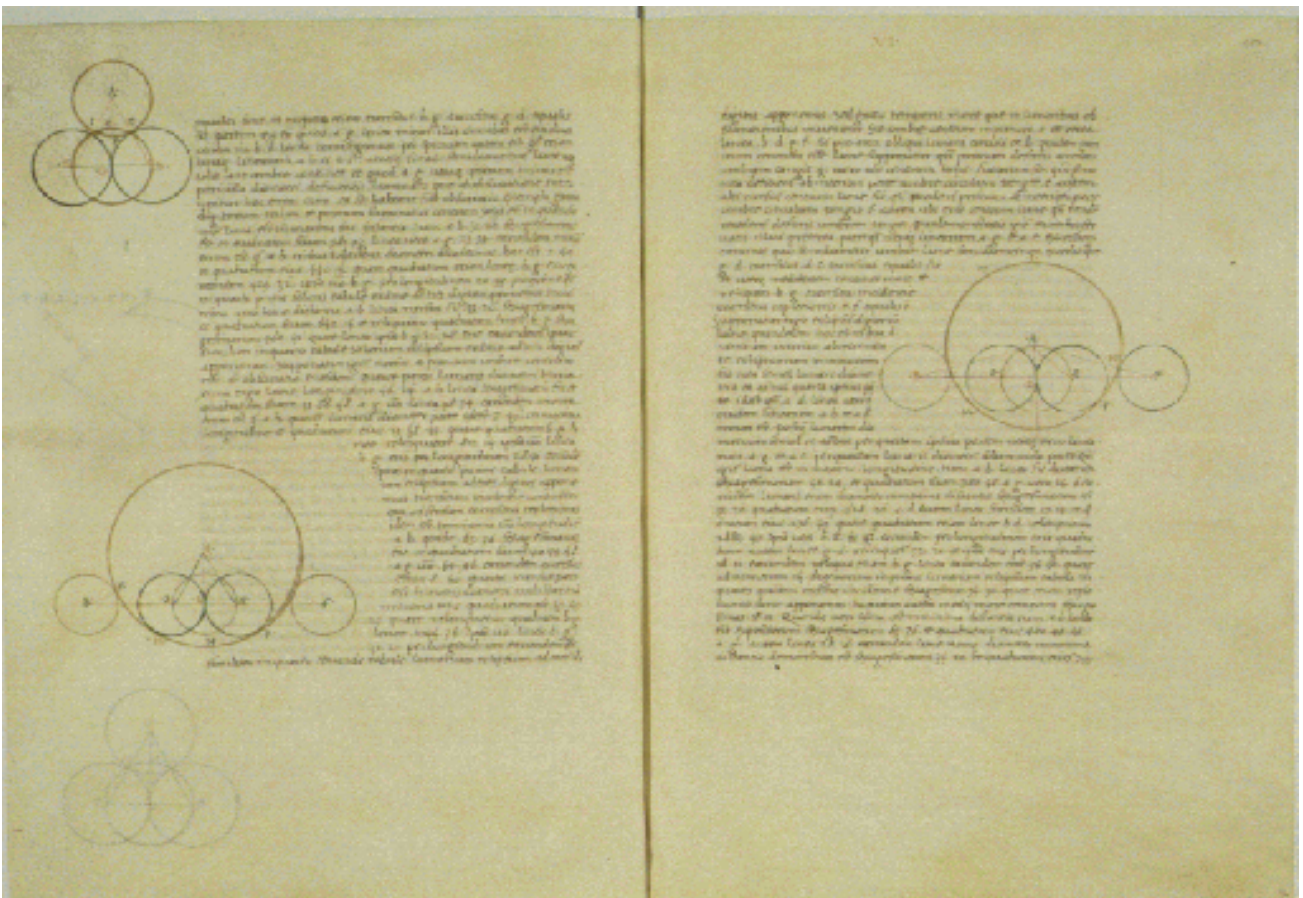
.(4 )



:(4)

« »

(5) «Almagest»



:(5)