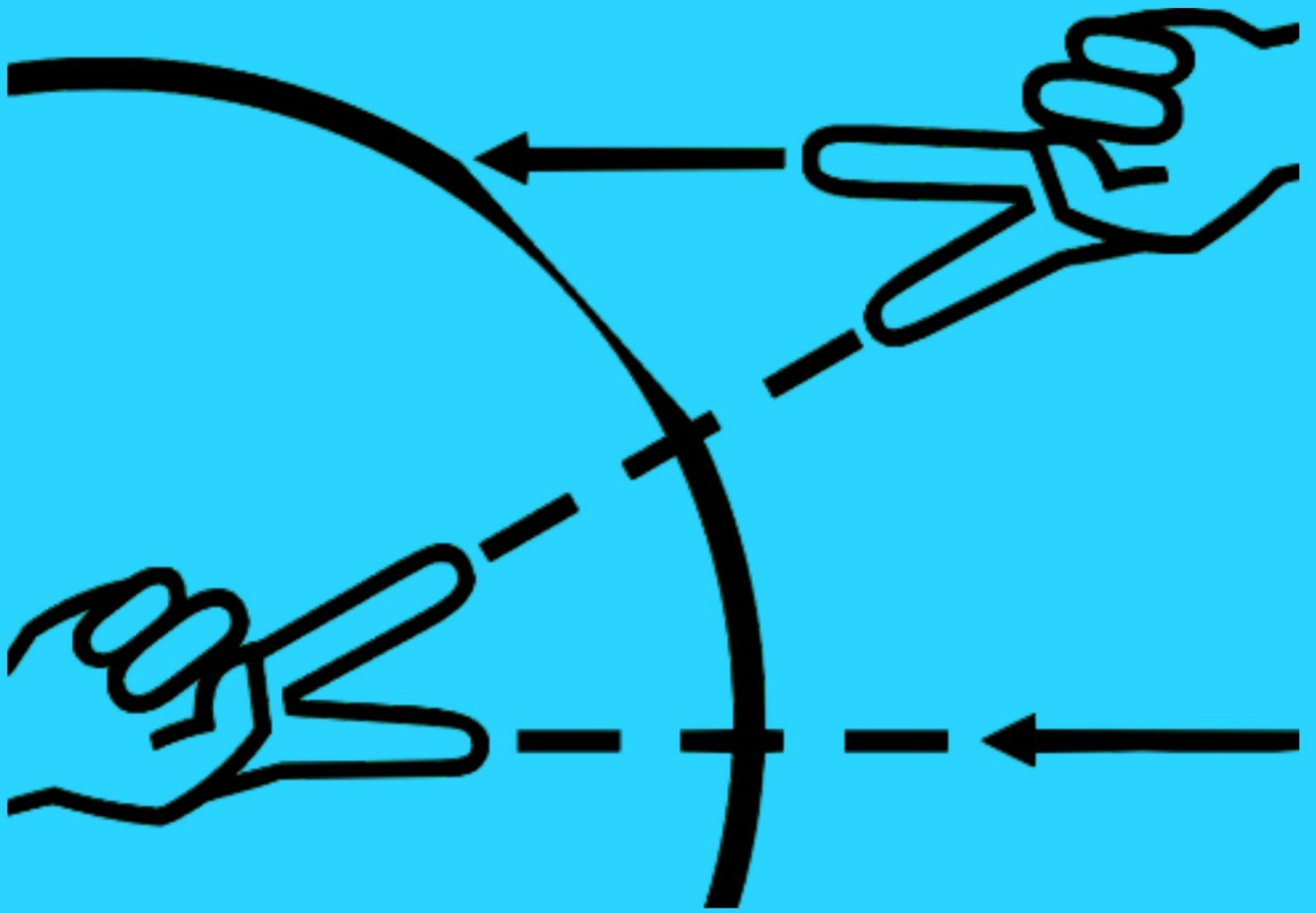


# Eratosthenes



**3** Continents

**8** Countries

**15** Schools

**32** Measures

N°32

August 2018

**3** Continents

**8** Countries

**15** Schools

**32** Measures

ARGENTINA (2)

Alta Gracia, Rio Cuarto

BRAZIL (4)

Itajubá, Piranguinho, Rio de Janeiro, São Carlos

FRANCE (1)

Montcuq

GREECE (2)

Kalamata, Petroupoli

INDIA (2)

Hyderabad, ManiA

ROMANIA (1)

Busteni

TURKEY (2)

Ephesus, Izmir

URUGUAY (1)

Paysandú

Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535
	Ephesus	Turkey	Space Camp	37.936	27.345
	Hyderabad	India	Space Adhyaan	17.385	78.487
	Itajubá	Brazil	Universidade Federal de Itajubá	-22.415	-45.449
	Izmir	Turkey	Space Camp	38.336	27.127
	Kalamata	Greece		37.033	22.114
	Mania	India	Govt utkrist primary school Durgpura	26.691	77.881
	Montcuq	France		44.340	1.210
	Paysandú	Uruguay	Liceo N° 1 de Paysandú	-32.316	-58.093
	Petroupoli	Greece	4o Junior High School	38.036	23.674
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535
	Rio Cuarto	Argentina	Colegio Concordia	-33.149	-64.351
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317
	São Carlos	Brazil	Universidade de São Paulo	-22.005	-47.897

# Alta Gracia, Argentina

August 2018

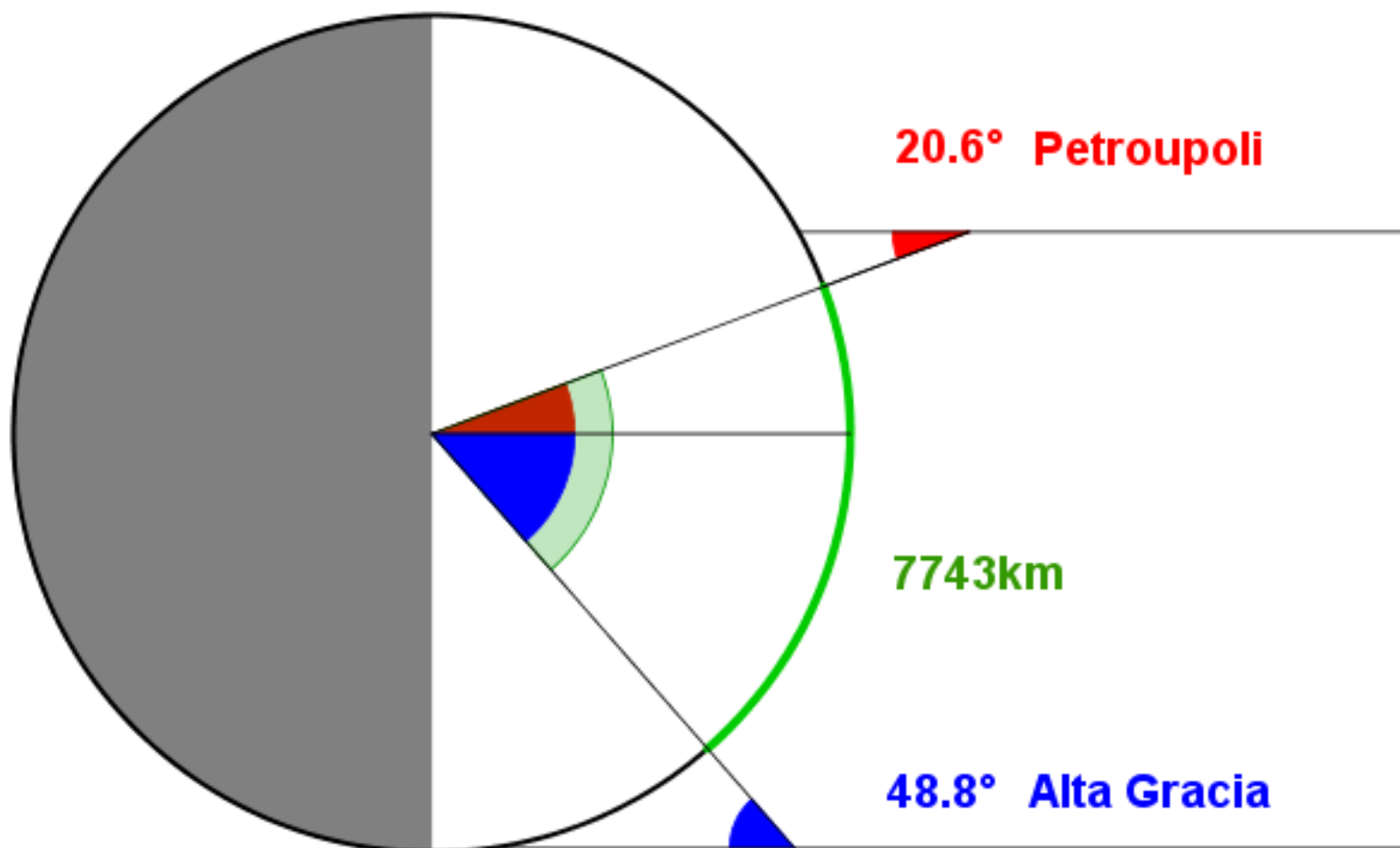


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417

Date	Gnomon	Shadow	Angle
03 August 2018	40 cm	-45.7 cm	-48.8 °
22 August 2018	39.5 cm	-37 cm	-43.1 °
25 August 2018	39.5 cm	-35.8 cm	-42.2 °

**03/08/2018 (Petroupoli-Greece) Latitude: 38.036°**

**03/08/2018 (Alta Gracia-Argentina) Latitude: -31.658°**




$$\text{circumference} = \frac{360^\circ \times 7743\text{km}}{20.6^\circ + 48.8^\circ} = 40165 \text{ km}$$



# Busteni, Romania

August 2018

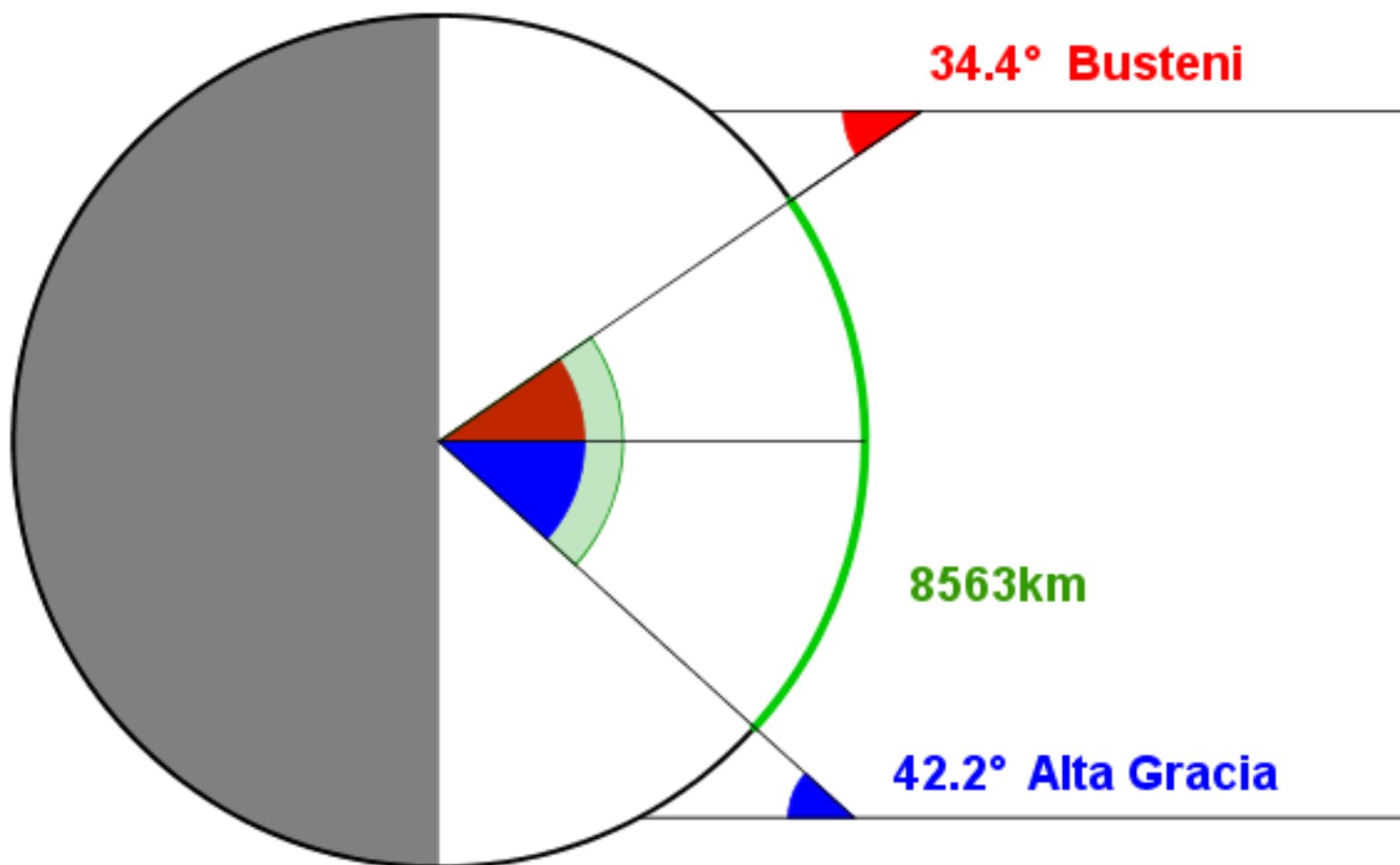


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535

Date	Gnomon	Shadow	Angle
25 August 2018	14.6 cm	10.0 cm	34.4 °
27 August 2018	7.1 cm	5 cm	35.2 °
29 August 2018	30.5 cm	22.0 cm	35.8 °

**25/08/2018 (Busteni-Romania) Latitude: 45.416°**

**25/08/2018 (Alta Gracia-Argentina) Latitude: -31.658°**




$$\text{circumference} = \frac{360^\circ \times 8563\text{km}}{34.4^\circ + 42.2^\circ} = 40244 \text{ km}$$



# Ephesus, Turkey

August 2018



Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ephesus	Turkey	Space Camp	37.936	27.345

Date	Gnomon	Shadow	Angle
02 August 2018	20 cm	7.1 cm	19.5 °








# Hyderabad, India

August 2018

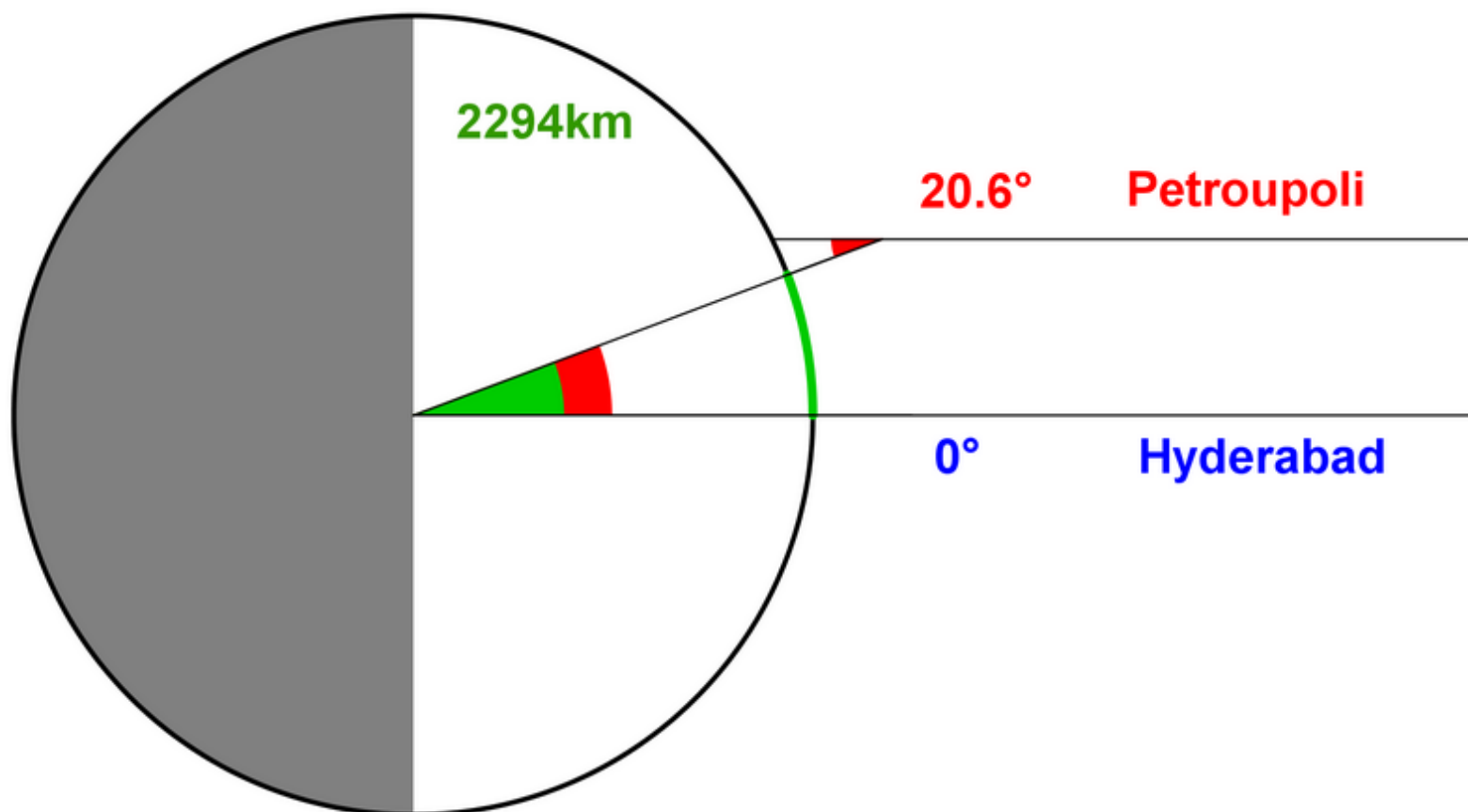


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Hyderabad	India	Space Adhyaan	17.385	78.487

Date	Gnomon	Shadow	Angle
03 August 2018	100 cm	0 cm	0°

03/08/2018 (Petroupoli-Greece) Latitude: 38.036°

03/08/2018 (Hyderabad-India) Latitude: 17.385°

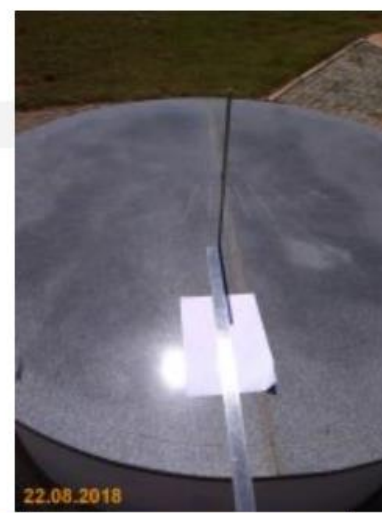


$$\text{circumference} = \frac{360^\circ \times 2294\text{km}}{20.6^\circ - 0^\circ} = 40089 \text{ km}$$



# Itajubá, Brazil

August 2018

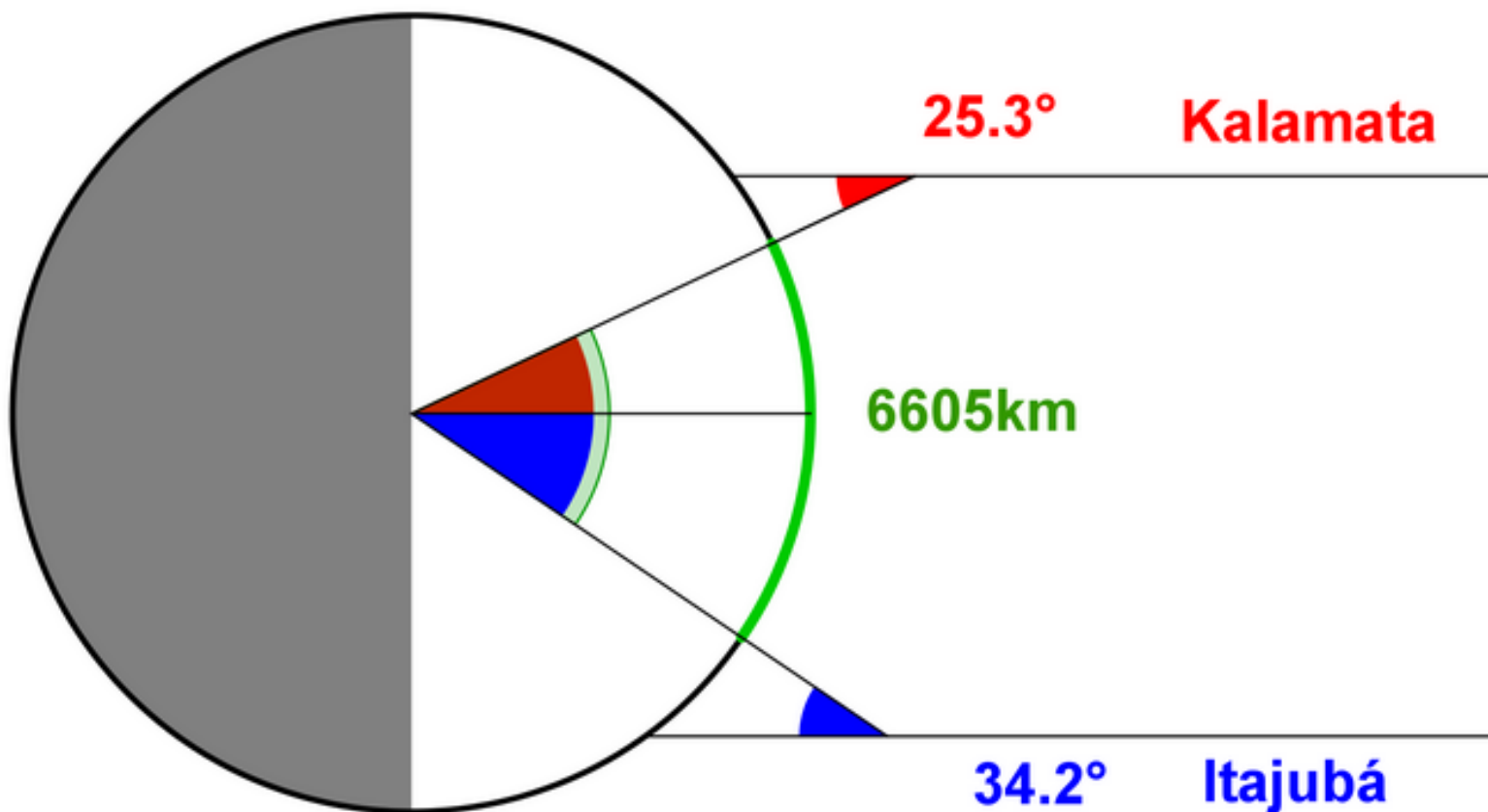


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Itajubá	Brazil	Universidade Federal de Itajubá	-22.415	-45.449

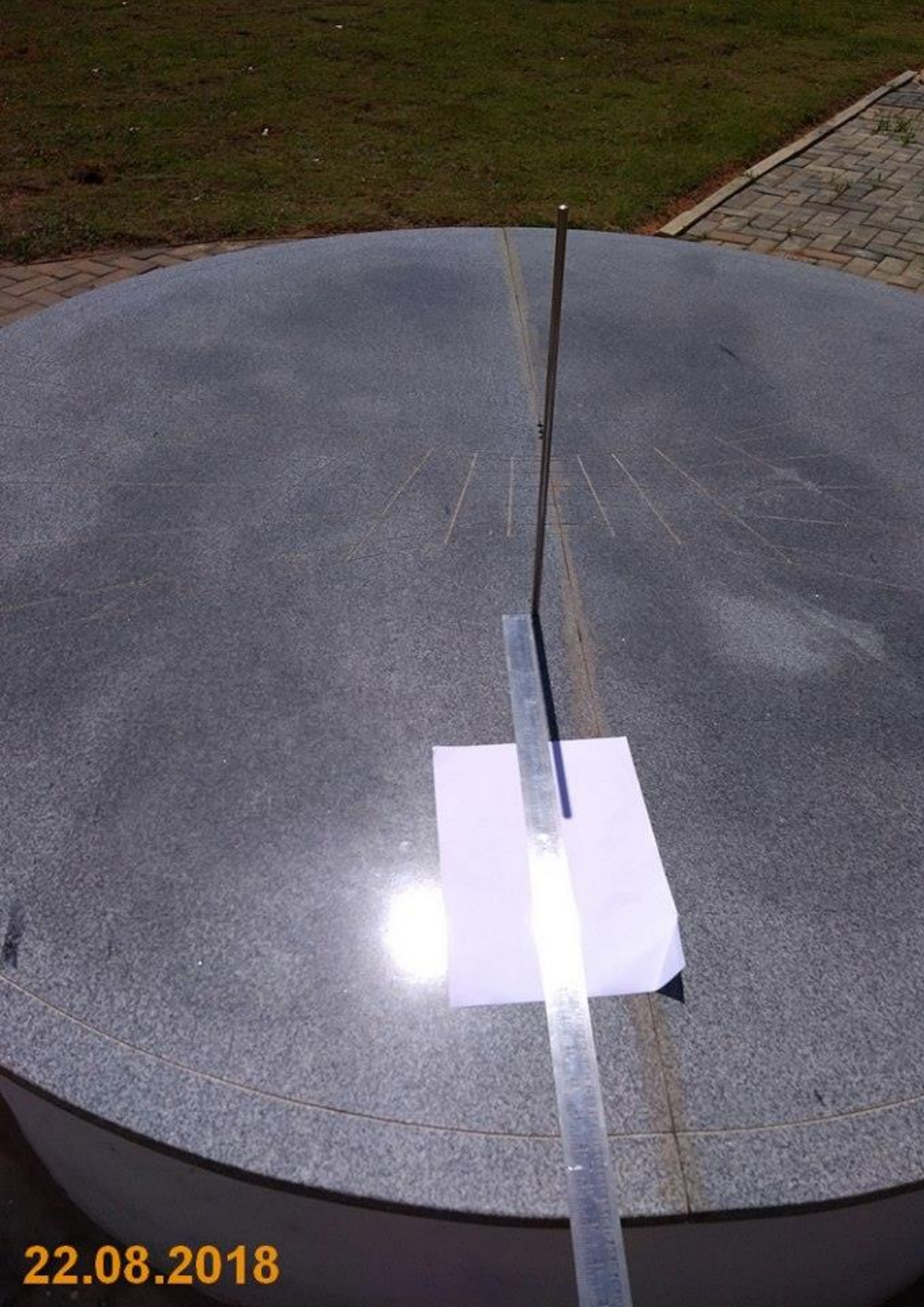
Date	Gnomon	Shadow	Angle
22 August 2018	47.3 cm	-32.1 cm	-34.2 °

**22/08/2018 (Kalamata-Greece) Latitude: 37.033°**

**22/08/2018 (Itajubá-Brazil) Latitude: -22.415°**



$$\text{circumference} = \frac{360^\circ \times 6605\text{km}}{25.3^\circ + 34.2^\circ} = 39963 \text{ km}$$




22.08.2018

# Izmir, Turkey

August 2018

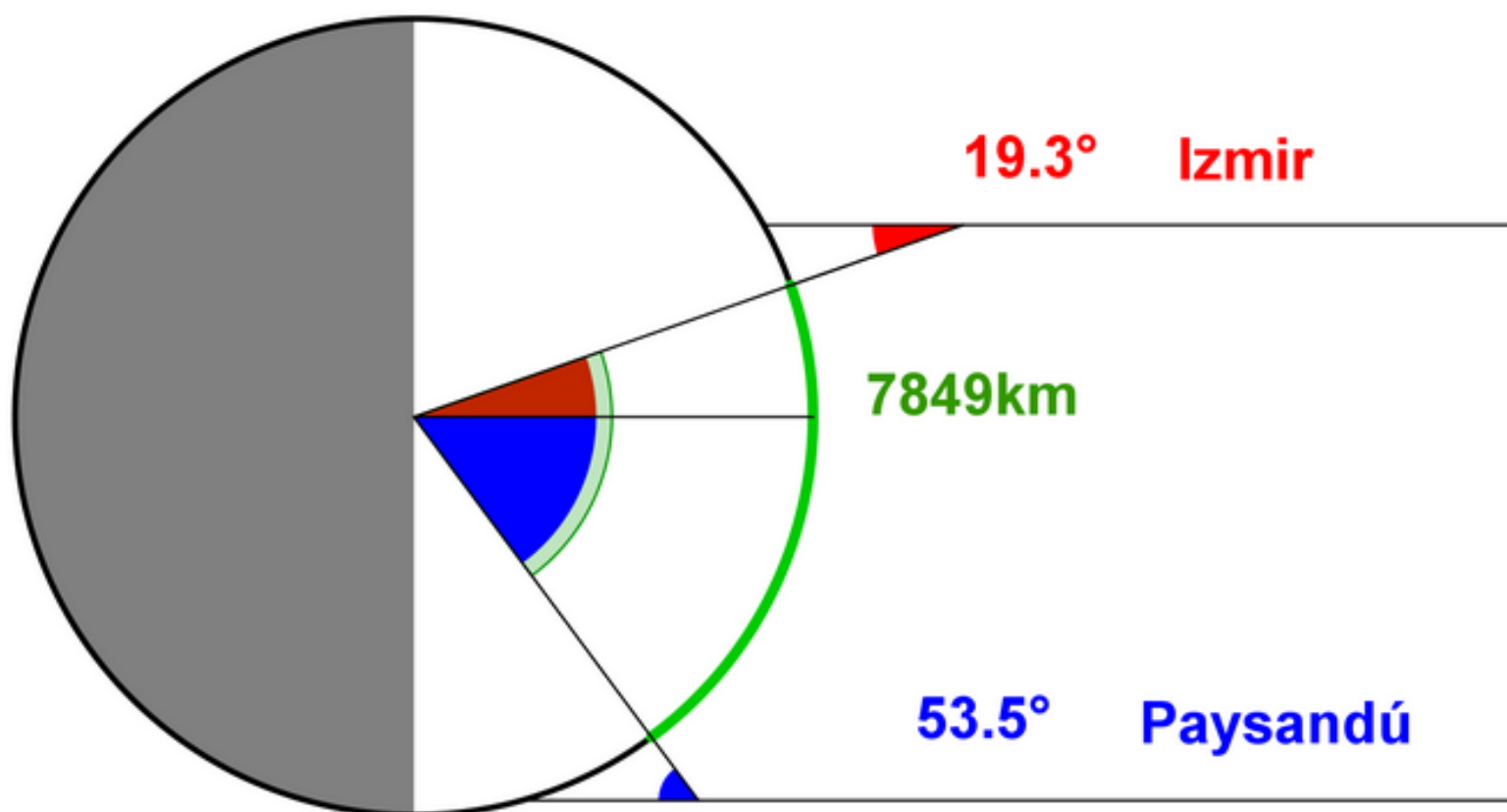


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Izmir	Turkey	Space Camp	38.336	27.127

Date	Gnomon	Shadow	Angle
01 August 2018	20 cm	7 cm	19.3 °
03 August 2018	20 cm	7.5 cm	20.6 °

**01/08/2018 (Izmir-Turkey) Latitude: 38.336°**

**01/08/2018 (Paysandú-Uruguay) Latitude: -32.316°**



$$\text{circumference} = \frac{360^\circ \times 7849\text{km}}{19.3^\circ + 53.5^\circ} = 38814 \text{ km}$$

# UZAY KAMPI TÜRKİYE



# Kalamata, Greece

August 2018

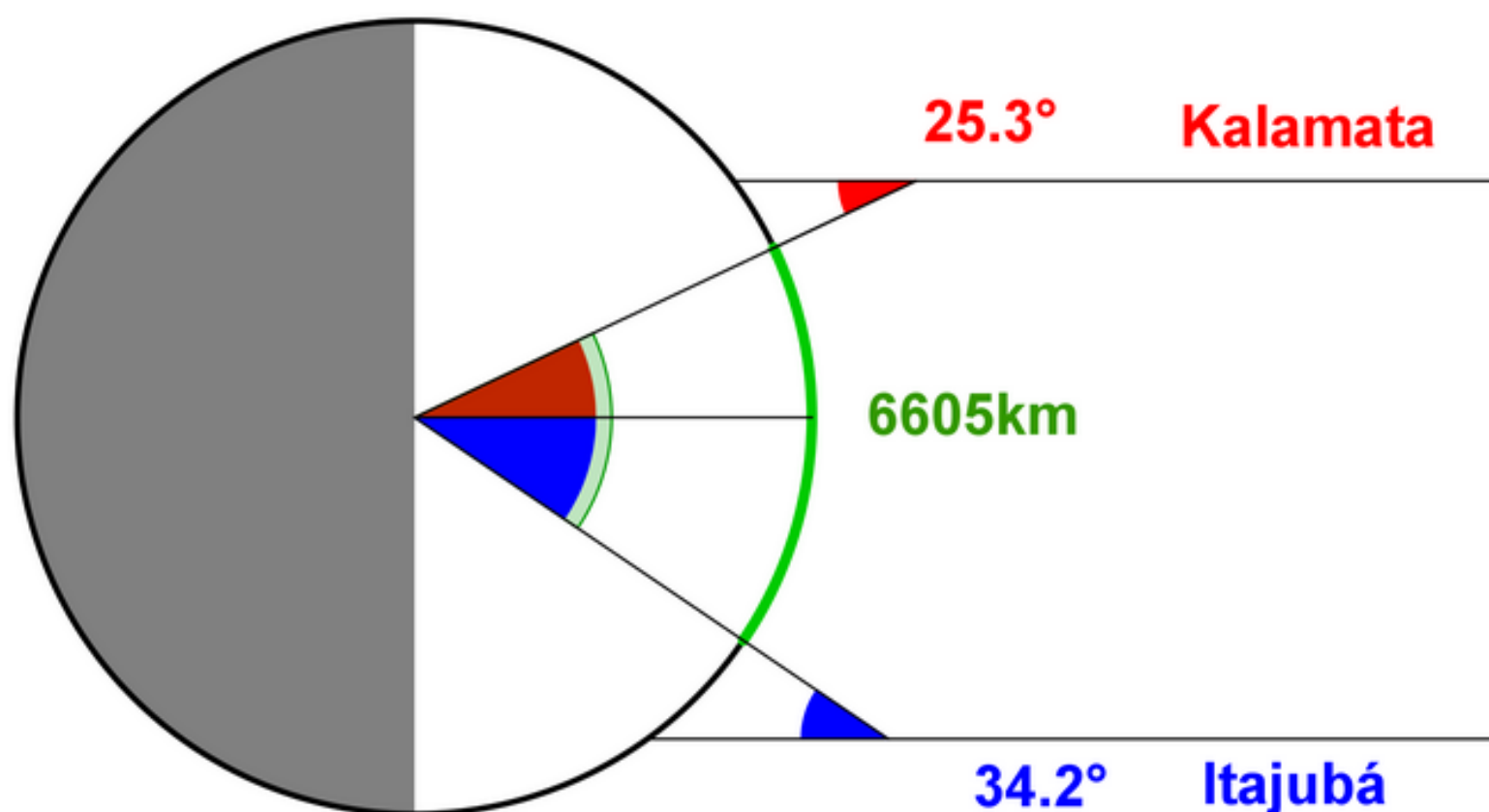


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Kalamata	Greece		37.033	22.114

Date	Gnomon	Shadow	Angle
22 August 2018	30.4 cm	14.4 cm	25.3 °

**22/08/2018 (Kalamata-Greece) Latitude: 37.033°**

**22/08/2018 (Itajubá-Brazil) Latitude: -22.415°**



$$\text{circumference} = \frac{360^\circ \times 6605\text{km}}{25.3^\circ + 34.2^\circ} = 39963 \text{ km}$$



Greetings from Greece!  
(37.633N, 22.114E)  
Gnomon: 39.4cm  
Shadow: 14.4cm  
Solar noon at 13:35 local time  
☺ D&A



# Mania, India

August 2018

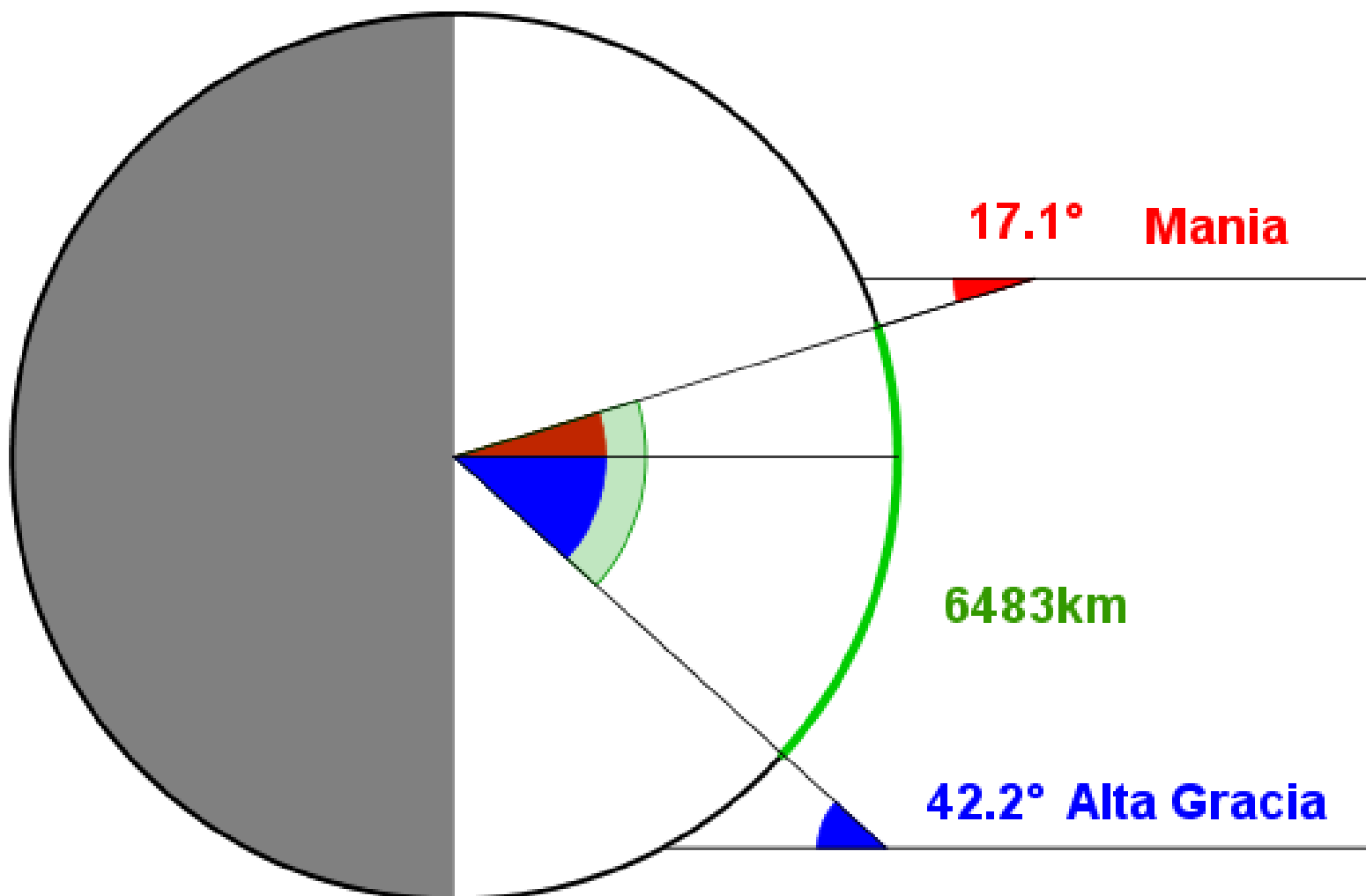


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Mania	India	Govt utkrist primary school Durgpura	26.691	77.881

Date	Gnomon	Shadow	Angle
25 August 2018	78 cm	24 cm	17.1 °

**25/08/2018 (Mania-India) Latitude: 26.691°**

**25/08/2018 (Alta Gracia-Argentina) Latitude: -31.658°**



$$\text{circumference} = \frac{360^\circ \times 6483\text{km}}{17.1^\circ + 42.2^\circ} = 39357 \text{ km}$$



# Montcuq, France

August 2018

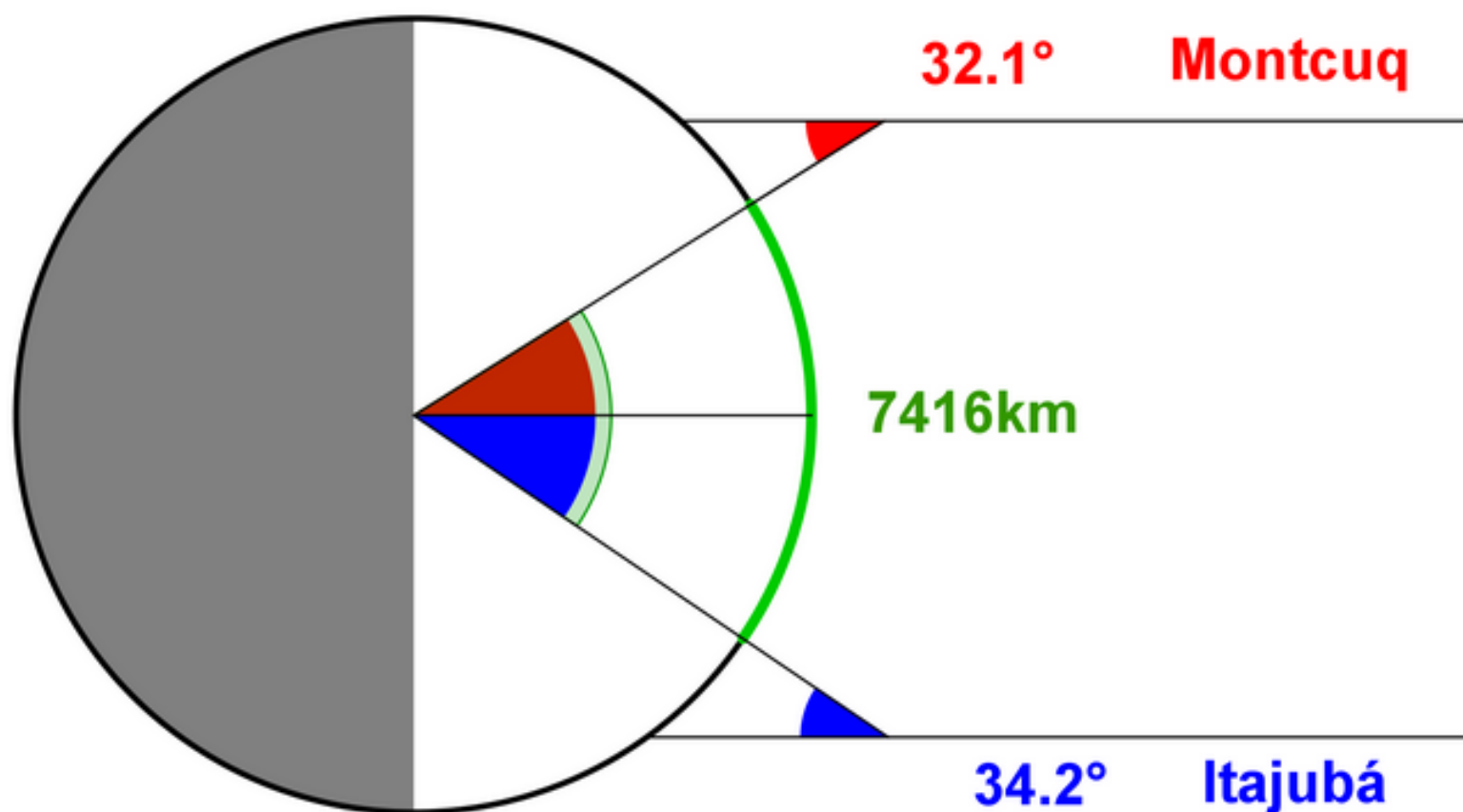


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Montcuq	France		44.340	1.210

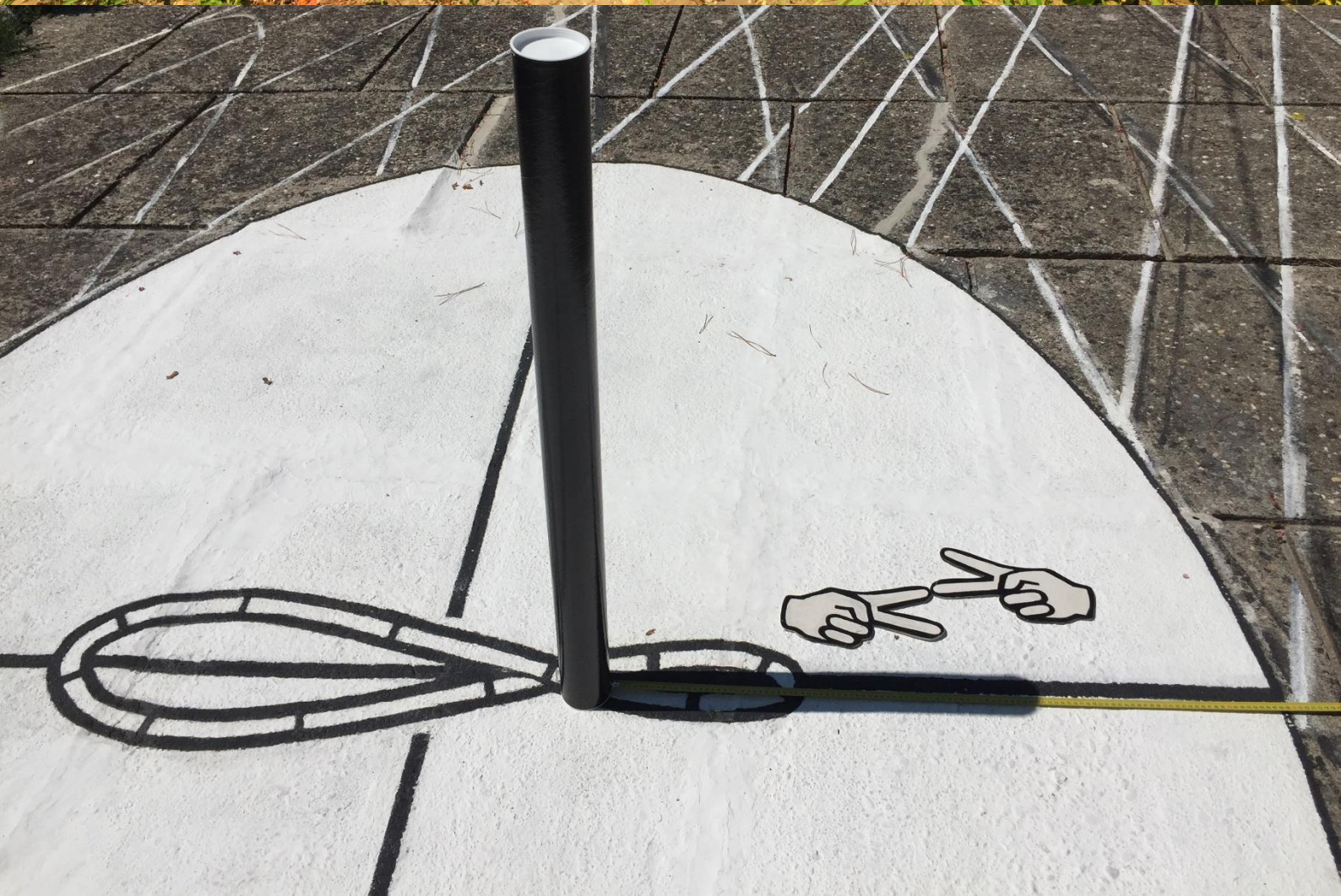
Date	Gnomon	Shadow	Angle
01 August 2018	112.4 cm	54.5 cm	25.9 °
03 August 2018	112.4 cm	55.5 cm	26.3 °
22 August 2018	112.4 cm	70.4 cm	32.1 °

**22/08/2018 (Montcuq-France) Latitude: 44.34°**

**22/08/2018 (Itajubá-Brazil) Latitude: -22.415°**



$$\text{circumference} = \frac{360^\circ \times 7416\text{km}}{32.1^\circ + 34.2^\circ} = 40268 \text{ km}$$



# Paysandú, Uruguay

August 2018

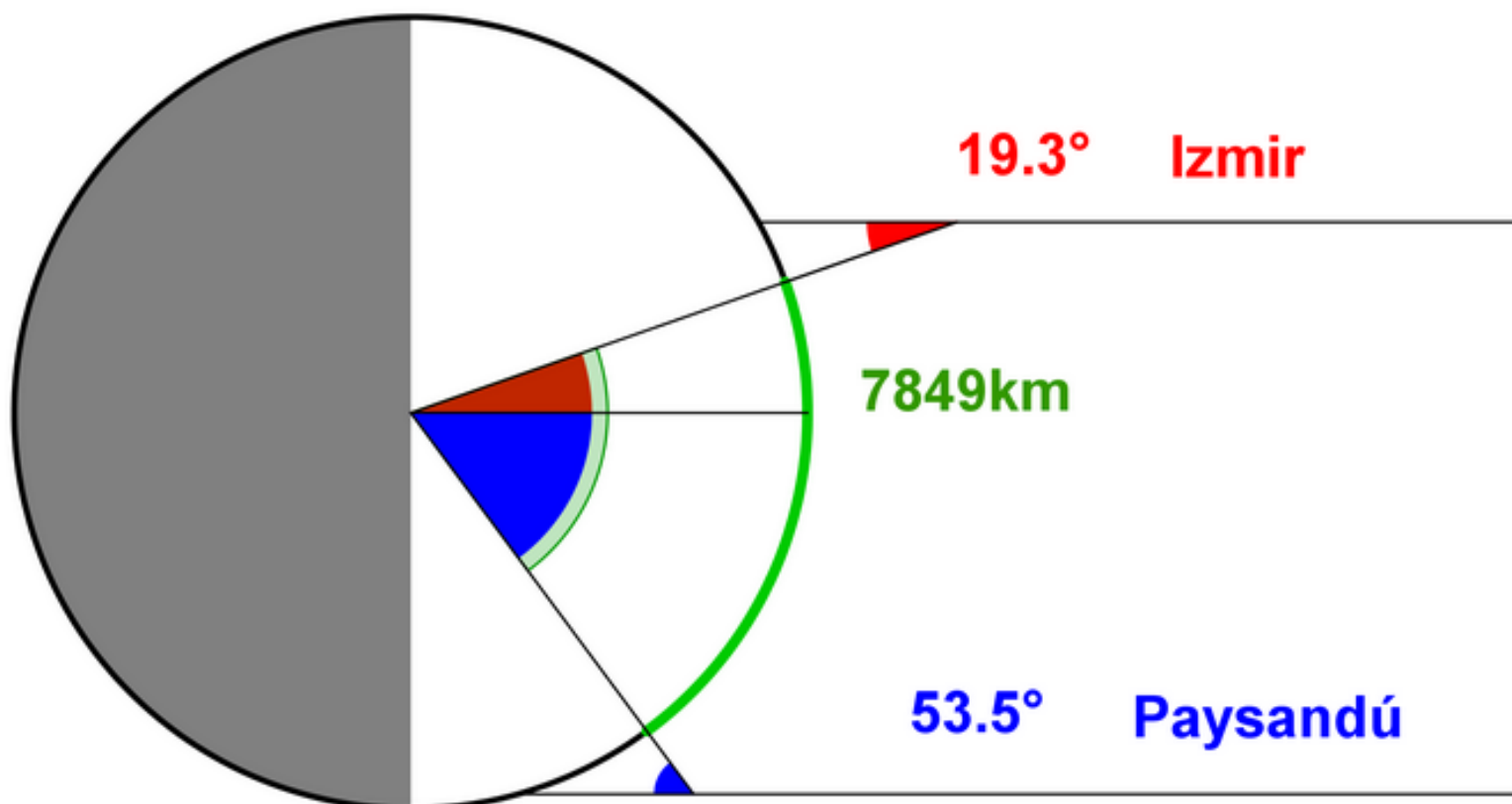


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Paysandú	Uruguay	Liceo N° 1 de Paysandú	-32.316	-58.093

Date	Gnomon	Shadow	Angle
01 August 2018	97 cm	-131 cm	-53.5 °

**01/08/2018 (Izmir-Turkey) Latitude: 38.336°**

**01/08/2018 (Paysandú-Uruguay) Latitude: -32.316°**




$$\text{circumference} = \frac{360^\circ \times 7849\text{km}}{19.3^\circ + 53.5^\circ} = 38814 \text{ km}$$



# Petroupoli, Greece

August 2018

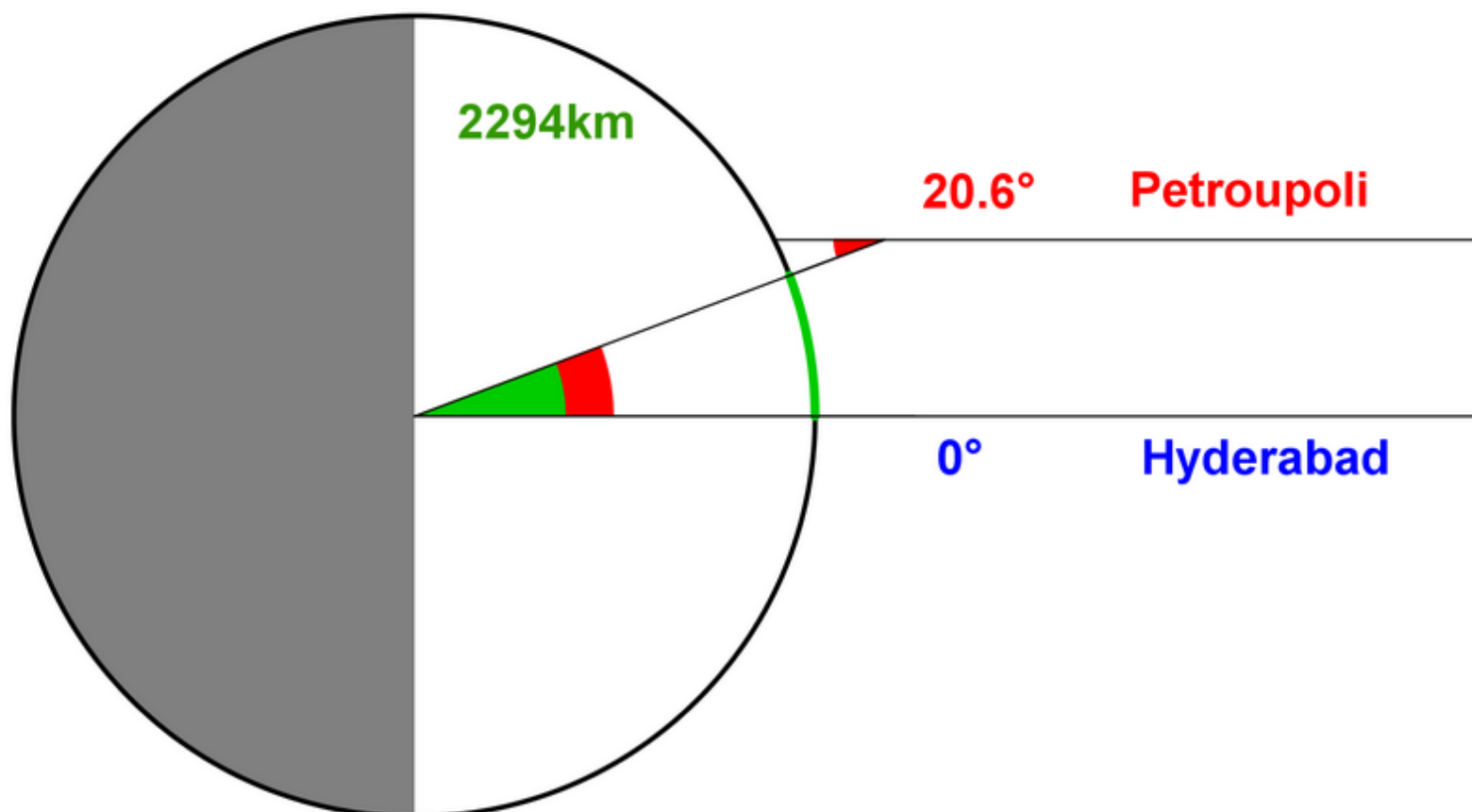


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Petroupoli	Greece	4o Junior High School	38.036	23.674

Date	Gnomon	Shadow	Angle
01 August 2018	30.4 cm	13 cm	23.2 °
03 August 2018	30.4 cm	11.4 cm	20.6 °

03/08/2018 (Petroupoli-Greece) Latitude: 38.036°

03/08/2018 (Hyderabad-India) Latitude: 17.385°



$$\text{circumference} = \frac{360^\circ \times 2294\text{km}}{20.6^\circ - 0^\circ} = 40089 \text{ km}$$





(38,036N, 23.672E)  
 Petroupoli, Greece, solar noon at 13:33  
 Measurement 5 mins earlier (instable weather)  
 Gnomon:30.4cm Shadow:13cm  
 and...no, Petroupolis in not by the sea :(  
 Greetings, friends! <3



# Piranguinho, Brazil

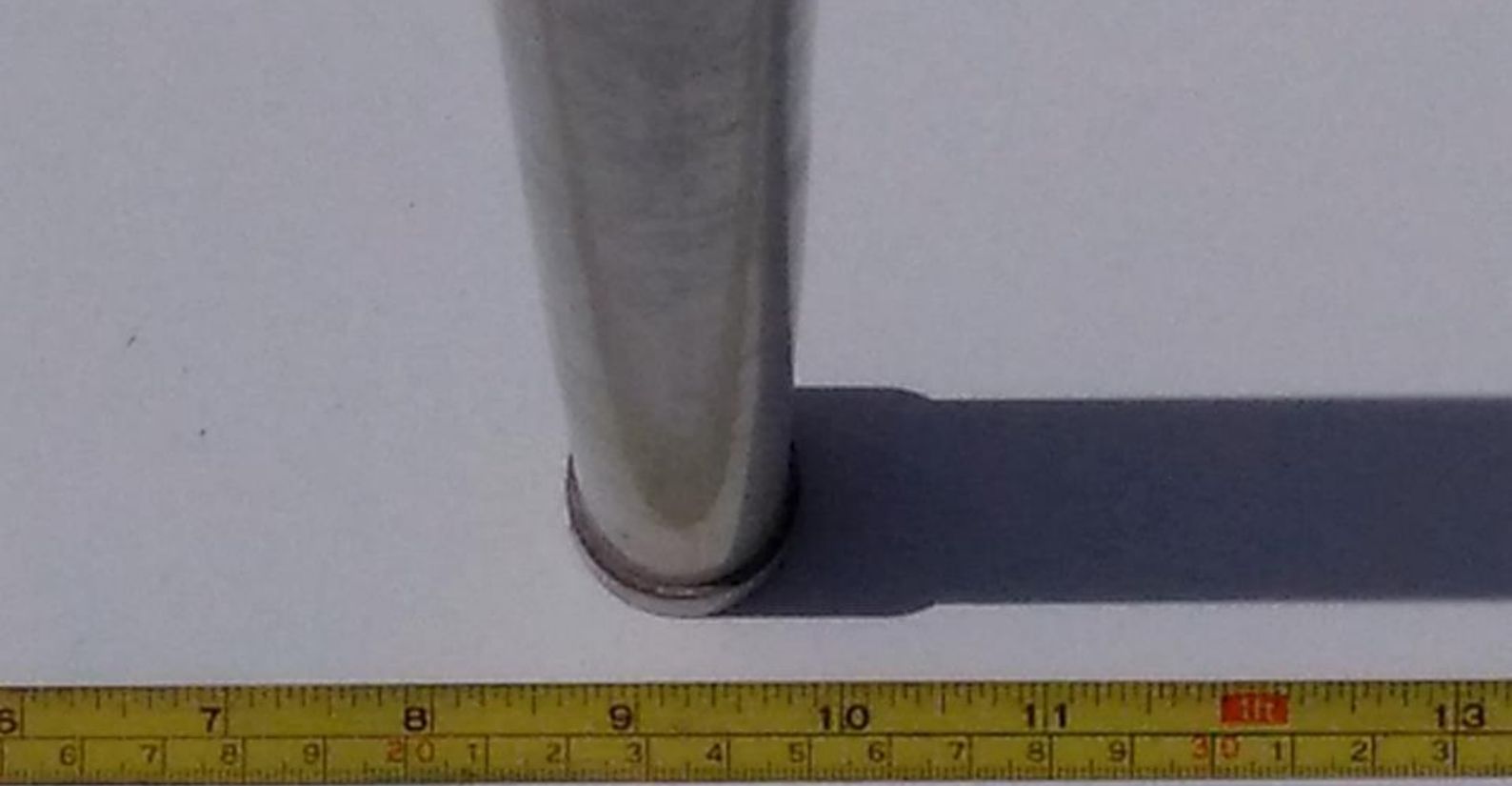
August 2018



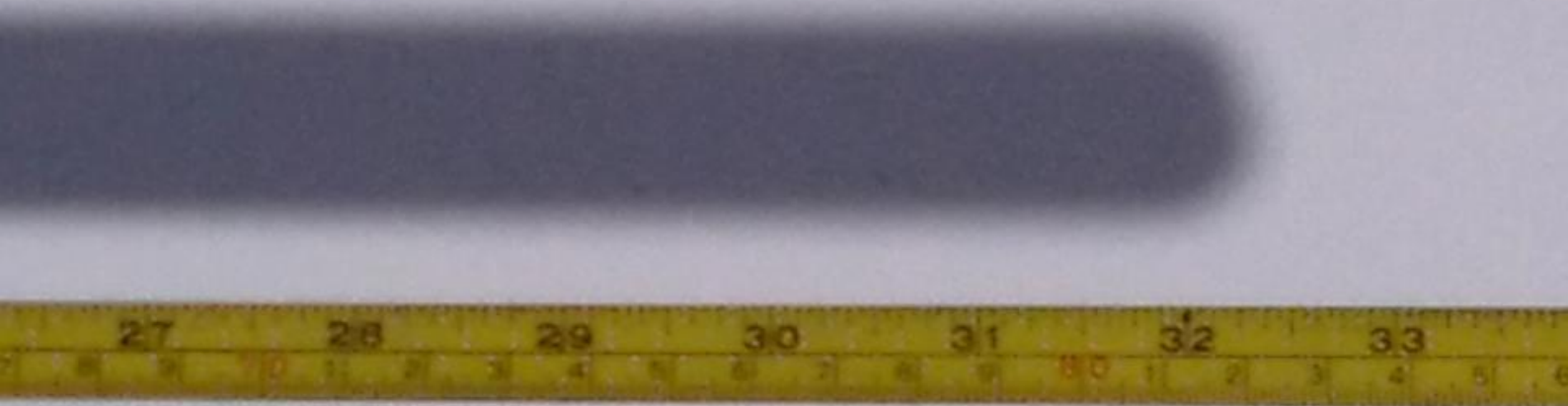
Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535

Date	Gnomon	Shadow	Angle
07 August 2018	70 cm	-57 cm	-39.2 °





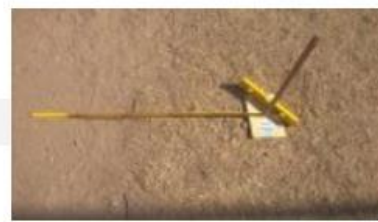
07.08.2018



07.08.2018

# Rio Cuarto, Argentina

August 2018



Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio Cuarto	Argentina	Colegio Concordia	-33.149	-64.351

Date	Gnomon	Shadow	Angle
28 August 2018	53.5 cm	-46.5 cm	-41 °






Colegio  
Concordia

# Rio de Janeiro, Brazil

August 2018

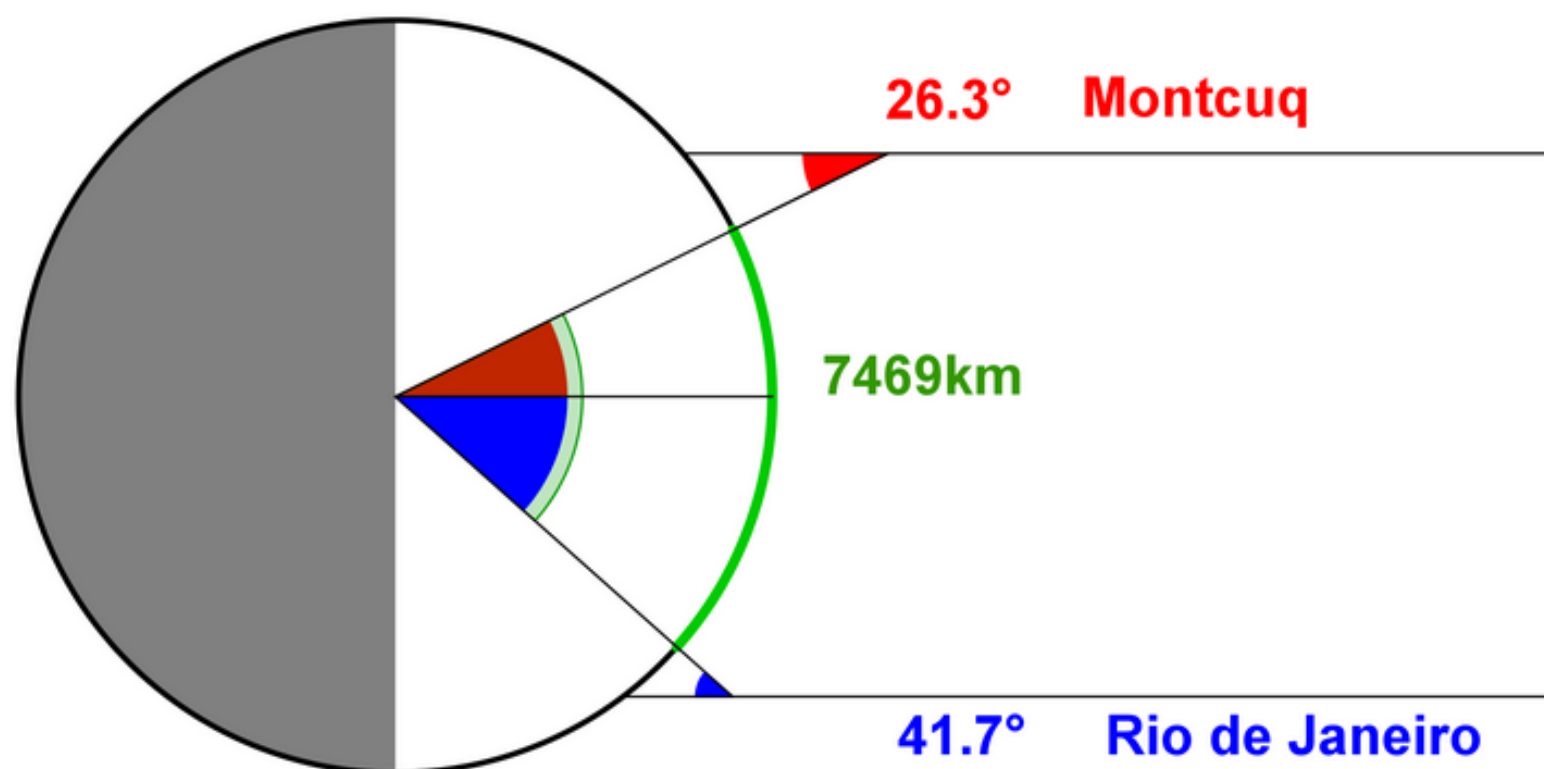


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
03 August 2018	100 cm	-89 cm	-41.7 °
08 August 2018	100 cm	-76 cm	-37.2 °
09 August 2018	100.0 cm	-76.0 cm	-37.2 °
14 August 2018	100.0 cm	-72.0 cm	-35.8 °
15 August 2018	100.0 cm	-68.0 cm	-34.2 °
20 August 2018	100 cm	-66 cm	-33.4 °
22 August 2018	100 cm	-62 cm	-31.8 °
23 August 2018	100.0 cm	-62.0 cm	-31.8 °
29 August 2018	100.0 cm	-60.0 cm	-31.0 °
30 August 2018	100.0 cm	-55.0 cm	-28.8 °

**03/08/2018 (Montcuq-France) Latitude: 44.34°**

**03/08/2018 (Rio de Janeiro-Brazil) Latitude: -22.89°**



$$\text{circumference} = \frac{360^\circ \times 7469\text{km}}{26.3^\circ + 41.7^\circ} = 39542 \text{ km}$$



# São Carlos, Brazil

August 2018



Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	São Carlos	Brazil	Universidade de São Paulo	-22.005	-47.897

Date	Gnomon	Shadow	Angle
11 August 2018	350.0 cm	-270.0 cm	-37.6 °







