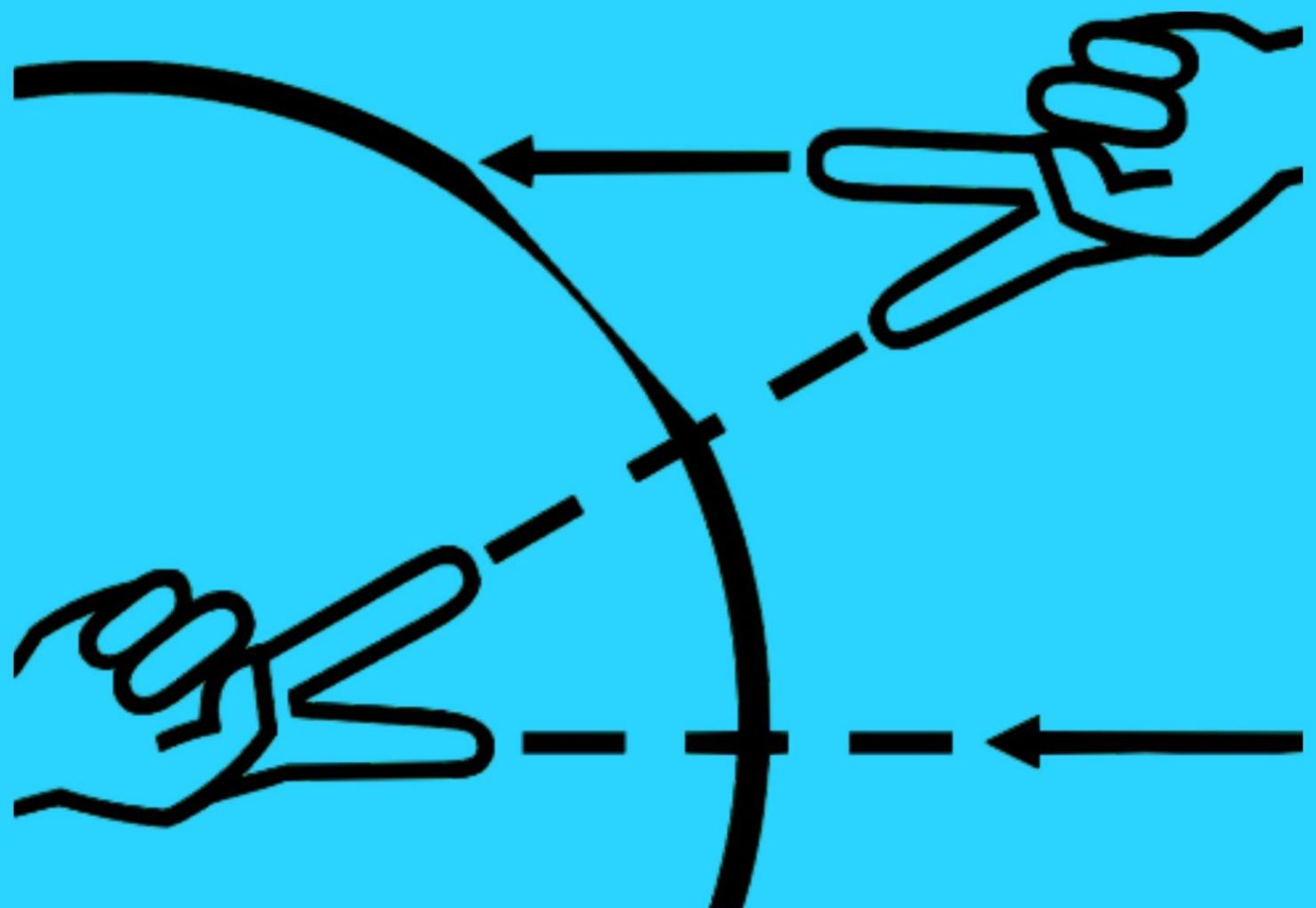


Eratosthenes



august 2017

4
Continents

8
Countries

17
Schools

37
Measures

ARGENTINA (3)

Alta Gracia, Pergamino, Rio Cuarto

BRAZIL (2)

Piranguinho, Rio de Janeiro

COLOMBIA (1)

Guarne

FRANCE (1)

Montcuq

GREECE (7)

Andritsaina, Cephalonia, Chios, Ioannina, Kalamata, Kastro, Sigri

INDIA (1)

Hyderabad

MALAYSIA (1)

Kuantan

MAURITIUS (1)

Mahebourg

European schools are on holidays, the teachers keep in touch to coordinate the measures from other continents, and the No Noon shadow day in Hyderabad

Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417
	Andritsaina	Greece	Gymnasio Andritsainas	34.4846	21.909
	Cephalonia	Greece		38.108	20.562
	Chios	Greece		39.366	26.140
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449
	Hyderabad	India	Space Adhyaan	17.385	78.487
	Ioannina	Greece	Experimental College	39.666	20.845
	Kalamata	Greece	Municipal Railway Park	37.029	22.110
	Kastro	Greece		37.891	21.141
	Kuantan	Malaysia	SMK St Thomas	3.817	103.333
	Mahebourg	Mauritius		-20.442	-57.517
	Montcuq	France		44.340	1.210
	Pergamino	Argentina		-33.923	-60.573
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535
	Rio de Janeiro	Brazil	Centro Educacional Nossa Mundo	-22.890	-43.317
	Rio Cuarto	Argentina	Colegio Concordia	-33.149	-64.351
	Sigri	Greece	National History Museum	39.211	25.855

Alta Gracia, Argentina

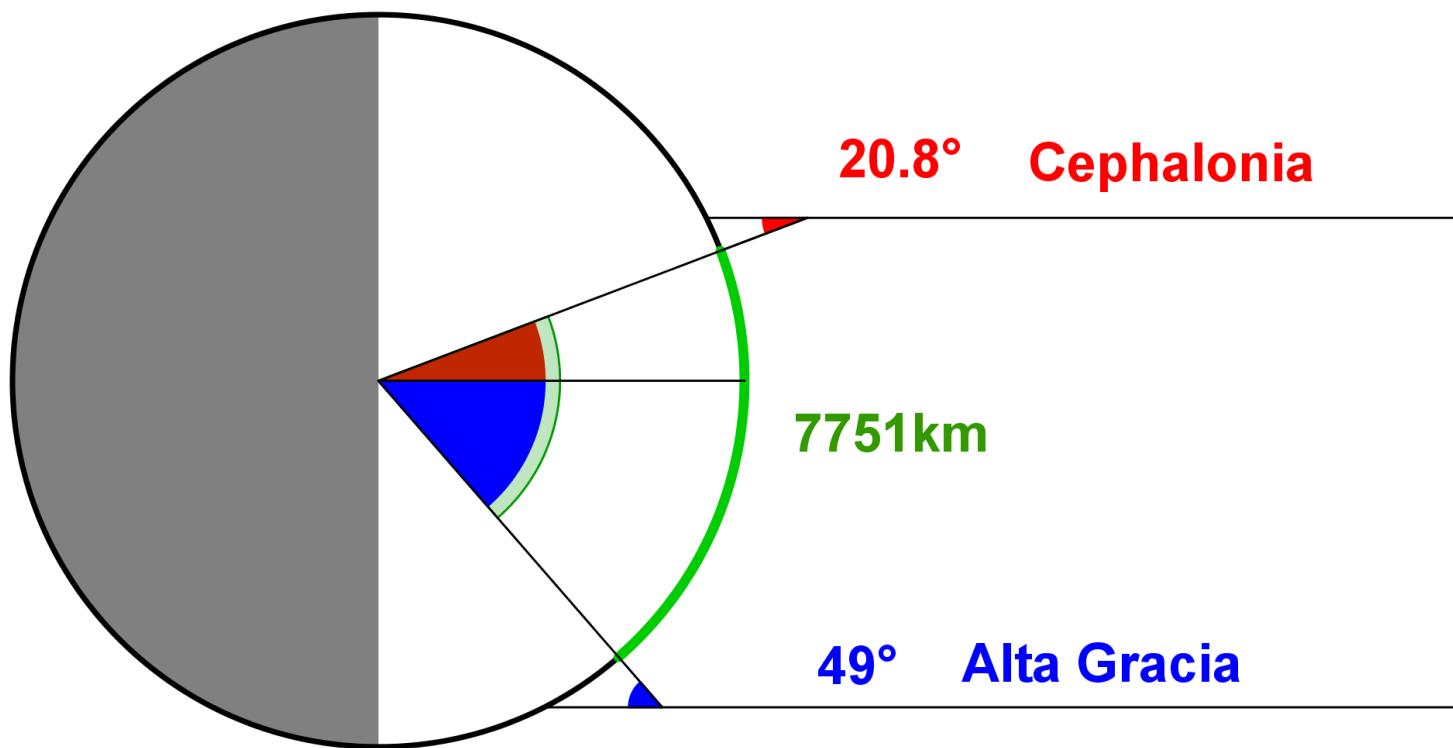
August 2017



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
02 August	39.5 cm	-45.9 cm	-49.3 °
03 August	39.5 cm	-45.4 cm	-49 °
04 August	39.5 cm	-44.9 cm	-48.7 °
08 August	39.5 cm	-43.5 cm	-47.8 °

03/08/2017 (Cephalonia-Greece) Latitude: 38.108°
03/08/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 7751\text{km}}{20.8^\circ + 49^\circ} = 39977 \text{ km}$$



Andritsaina, Greece

August 2017

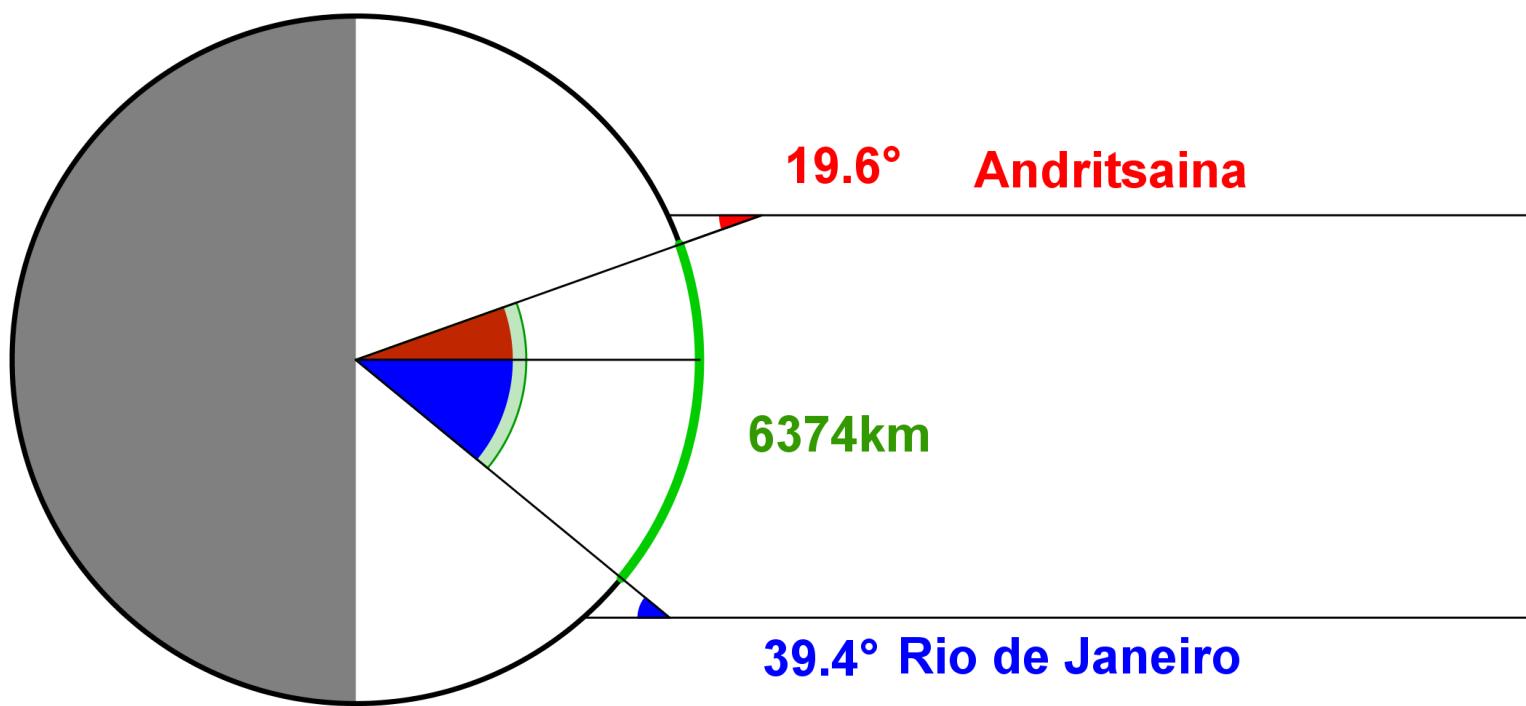


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Andritsaina	Greece	Gymnasio Andritsainas	34.4846	21.909

Date	Gnomon	Shadow	Angle
02 August	30.4 cm	10.6 cm	19.2 °
03 August	30.4 cm	10.8 cm	19.6 °

03/08/2017 (Andritsaina-Greece) Latitude: 34.484°

03/08/2017 (Rio de Janeiro-Brazil) Latitude: -22.89°



$$\text{circumference} = \frac{360^\circ \times 6374\text{km}}{19.6^\circ + 39.4^\circ} = 38892 \text{ km}$$



Cephalonia, Greece

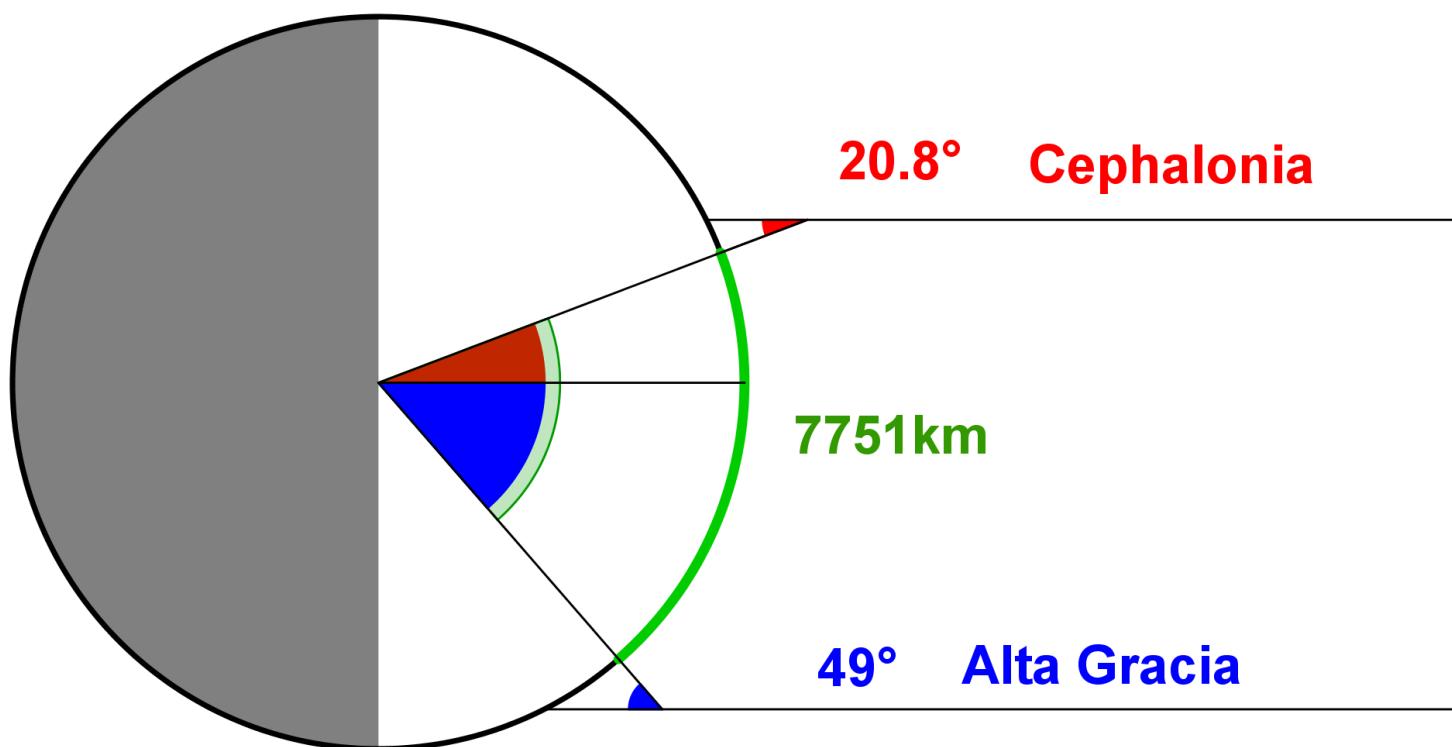
August 2017



Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Cephalonia	Greece		38.108	20.562

Date	Gnomon	Shadow	Angle
03 August	29 cm	11 cm	20,8 °

03/08/2017 (Cephalonia-Greece) Latitude: 38.108°
03/08/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 7751\text{km}}{20.8^\circ + 49^\circ} = 39977 \text{ km}$$



Chios, Greece

August 2017

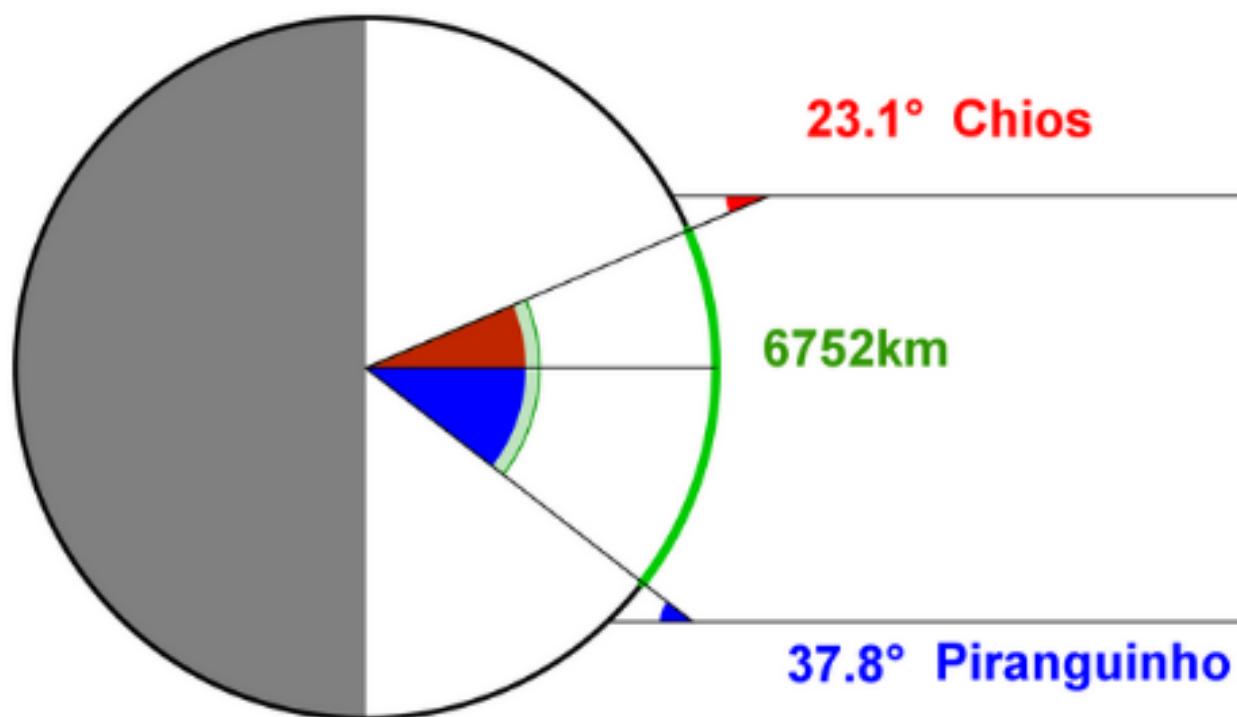


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Chios	Greece		39.366	26.140

Date	Gnomon	Shadow	Angle
10 August	150 cm	64 cm	23,1 °

10/08/2017 (Chios-Greece) Latitude: 38.366°

10/08/2017 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 6752\text{km}}{23.1^\circ + 37.8^\circ} = 39913 \text{ km}$$



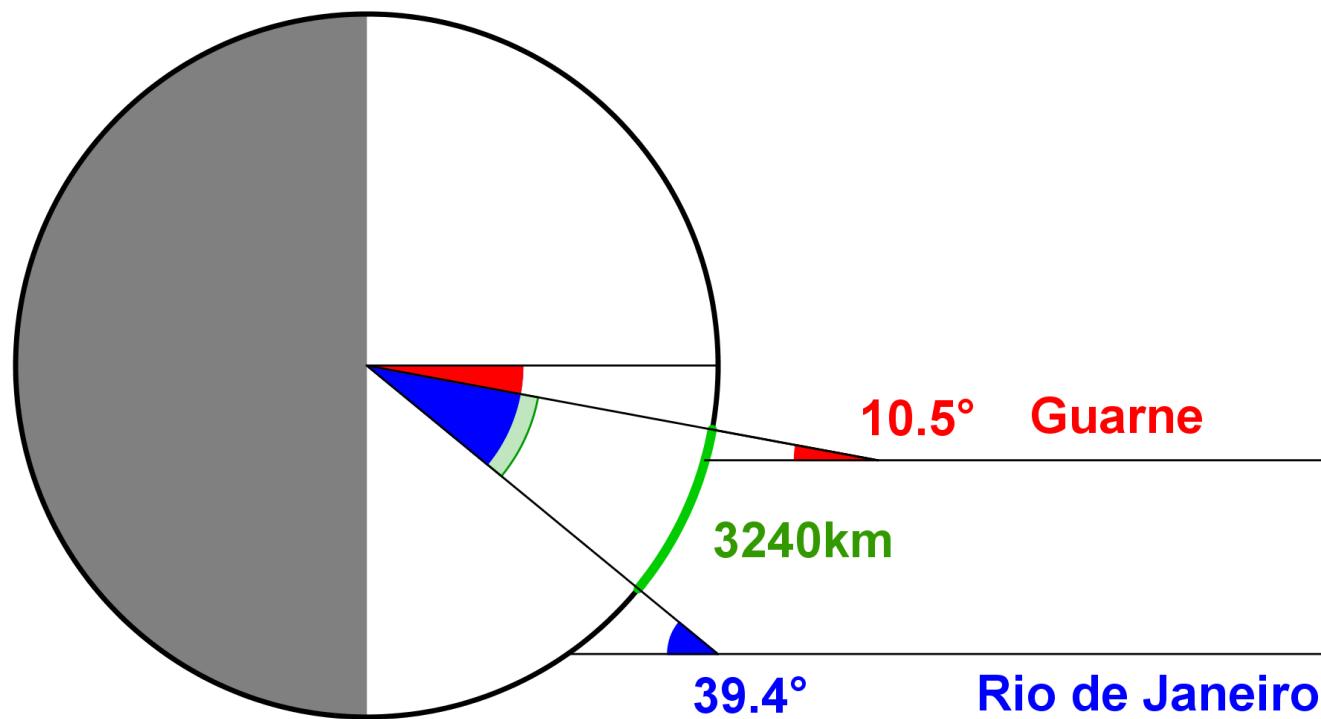


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449

Date	Gnomon	Shadow	Angle
03 August	64.8 cm	-12 cm	-10.5 °

03/08/2017 (Guarne-Colombia) Latitude: 6.274°

03/08/2017 (Rio de Janeiro-Brazil) Latitude: -22.89°



$$\text{circumference} = \frac{360^\circ \times 3240\text{km}}{39.4^\circ - 10.5^\circ} = 40360 \text{ km}$$



Hyderabad, India



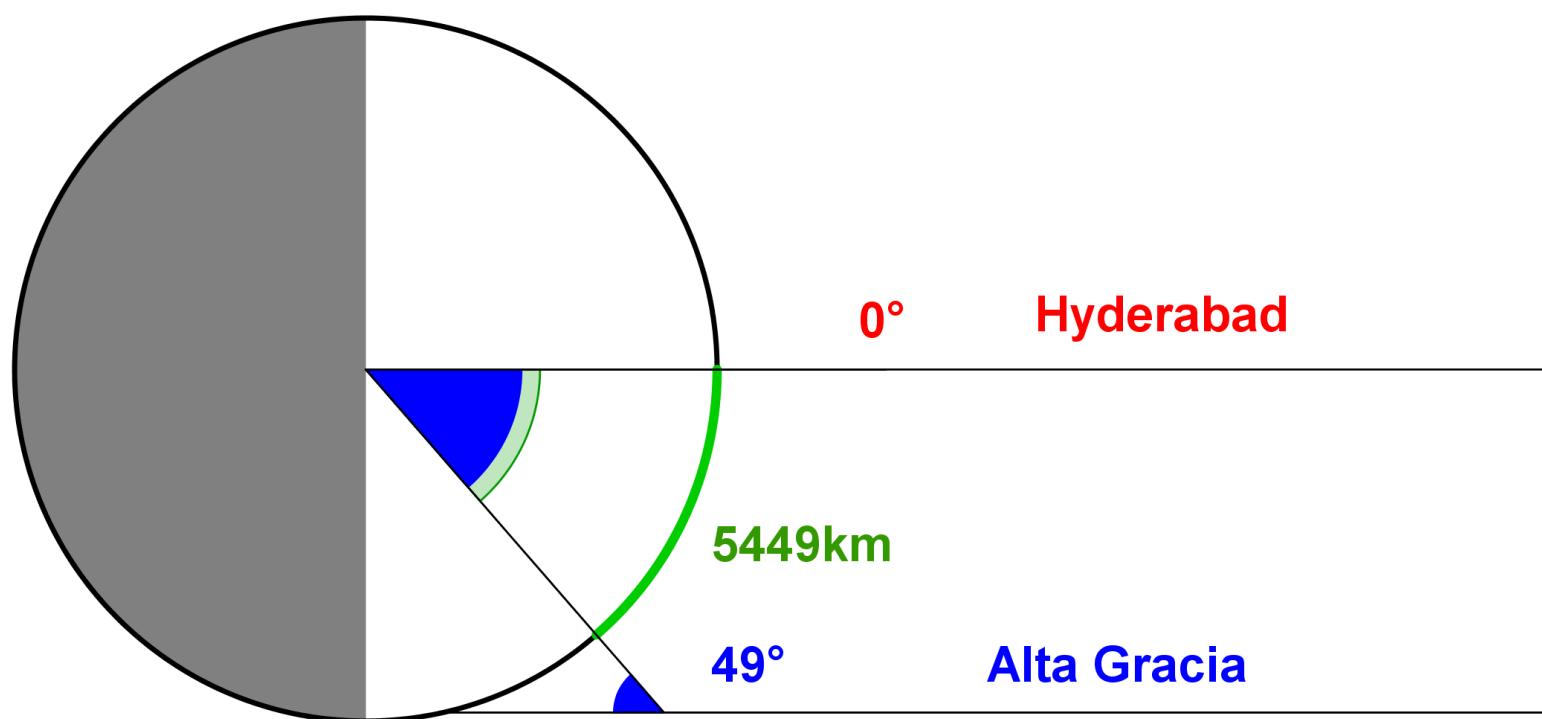
August 2017

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

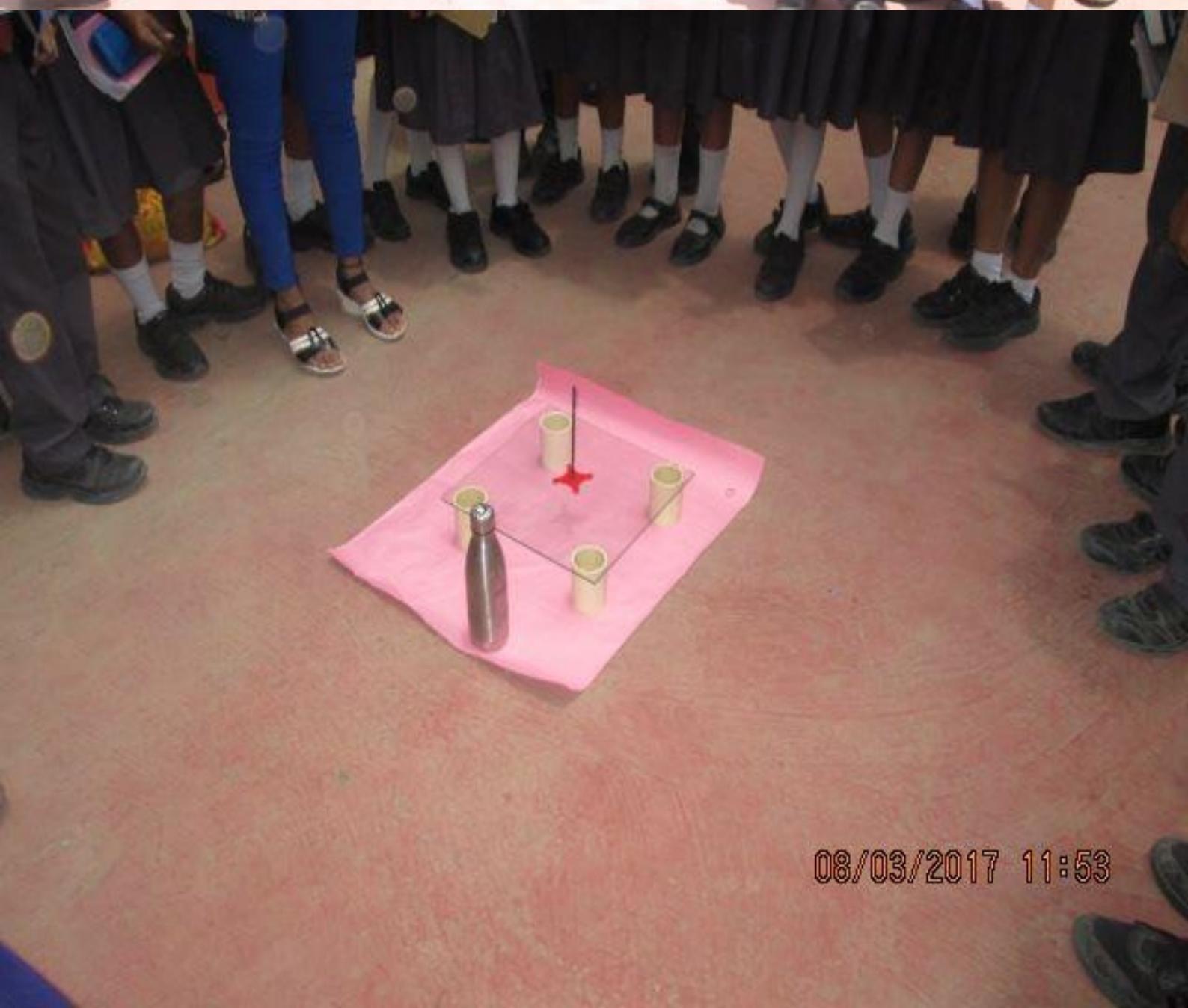
Date	Gnomon	Shadow	Angle
03 August	100 cm	0 cm	0 °

03/08/2017 (Hyderabad-India) Latitude: 17.385°

03/08/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 5449\text{km}}{49^\circ - 0^\circ} = 40033 \text{ km}$$



August 2017

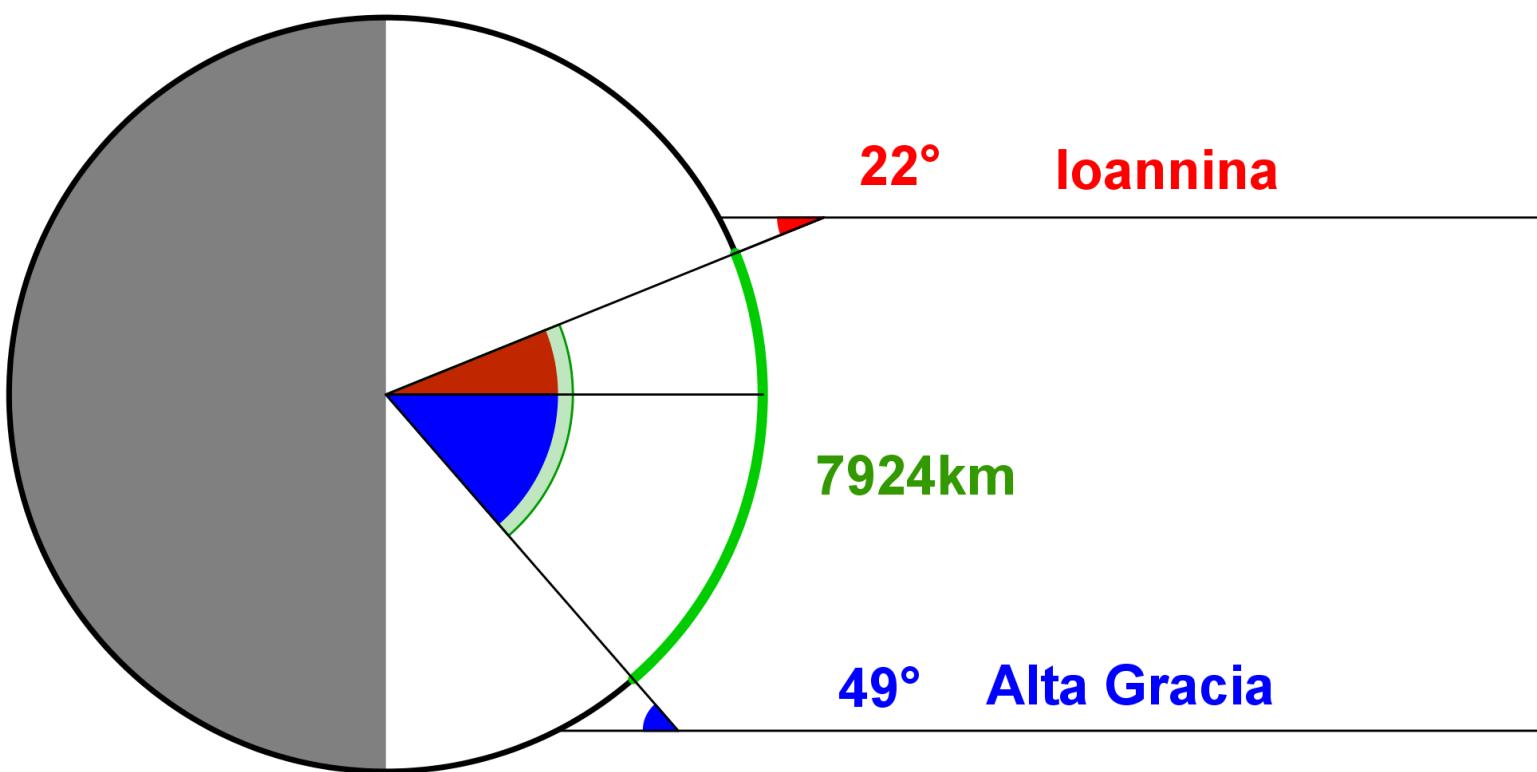


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ioannina	Greece	Experimental College	39.666	20.845

Date	Gnomon	Shadow	Angle
03 August	100 cm	40.5 cm	22 °

03/08/2017 (Ioannina-Grèce) Latitude: 39.667°

03/08/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 7924\text{km}}{22^\circ + 49^\circ} = 40178 \text{ km}$$



Kalamata, Greece

August 2017

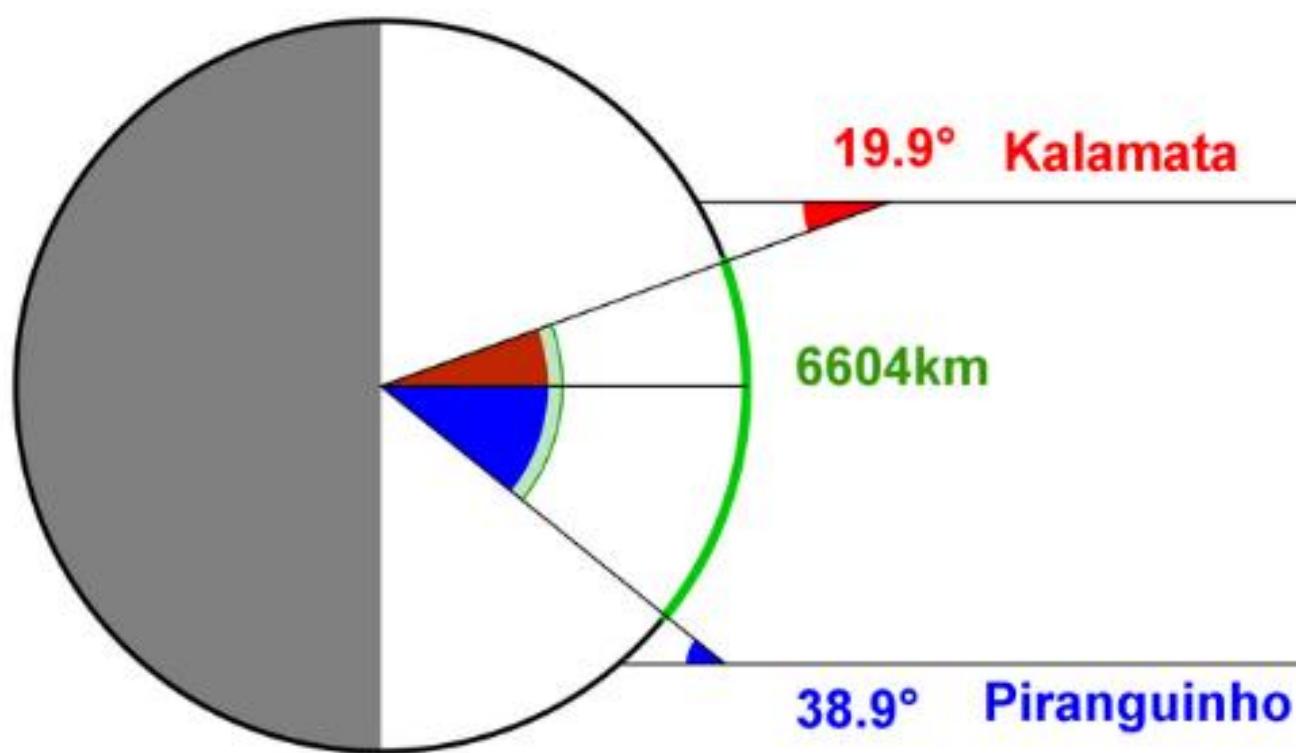


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Kalamata	Greece	Municipal Railway Park	37.029	22.110

Date	Gnomon	Shadow	Angle
07 August	30,4 cm	11 cm	19,9 °

07/08/2017 (Kalamata-Greece) Latitude: 37.029°

07/08/2017 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 6604 \text{ km}}{19.9^\circ + 38.9^\circ} = 40433 \text{ km}$$



Kastro, Greece



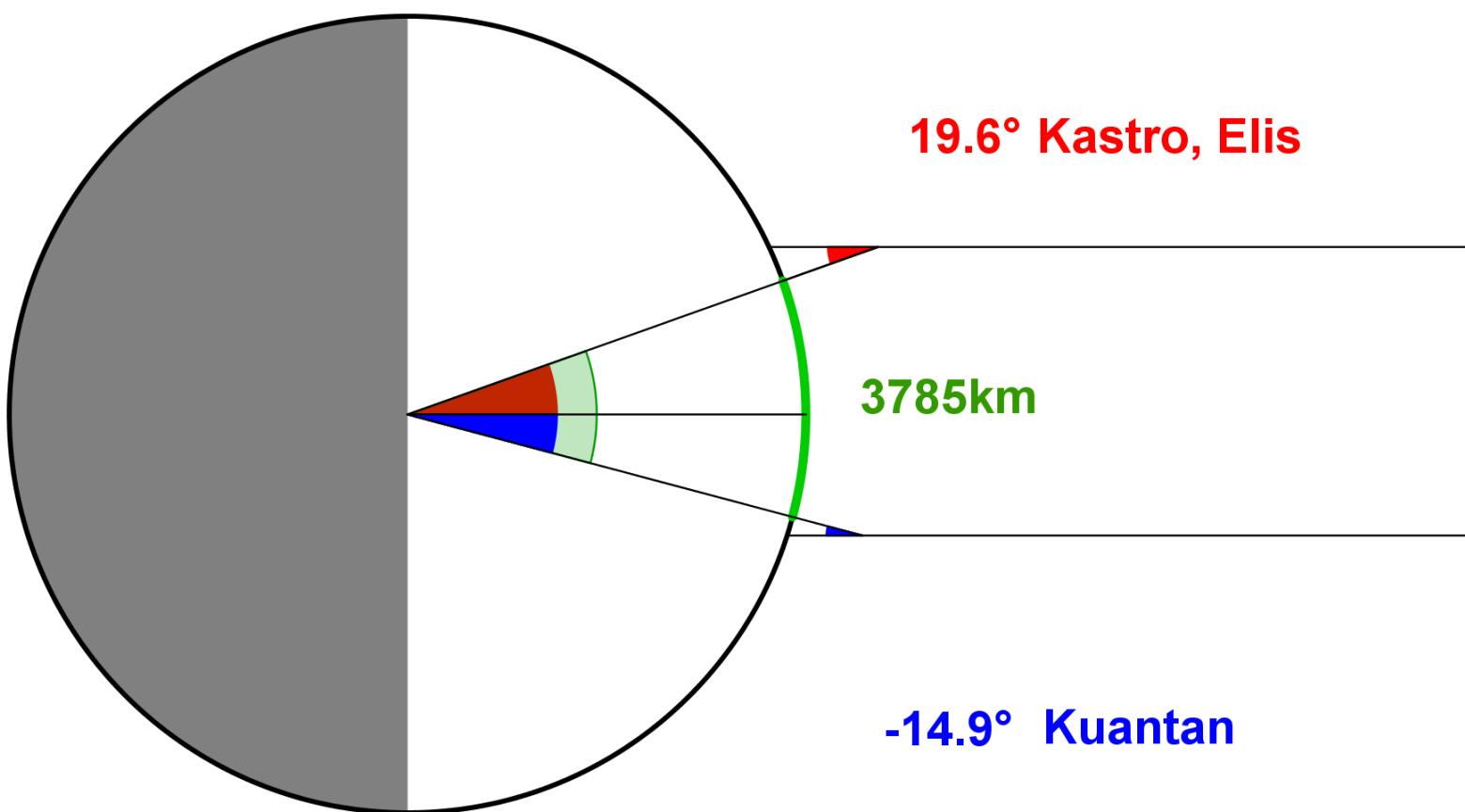
August 2017

Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Kastro	Greece		37.891	21.141

Date	Gnomon	Shadow	Angle
01 August	30,4 cm	10,8 cm	19,6 °

01/08/2017 (Kastro, Elis-Greece) Latitude: 37.891°

01/08/2017 (Kuantan-Malaysia) Latitude: 3.827°



$$\text{circumference} = \frac{360^\circ \times 3785\text{km}}{19.6^\circ + 14.9^\circ} = 39496 \text{ km}$$



Kuantan, Malaysia

August 2017

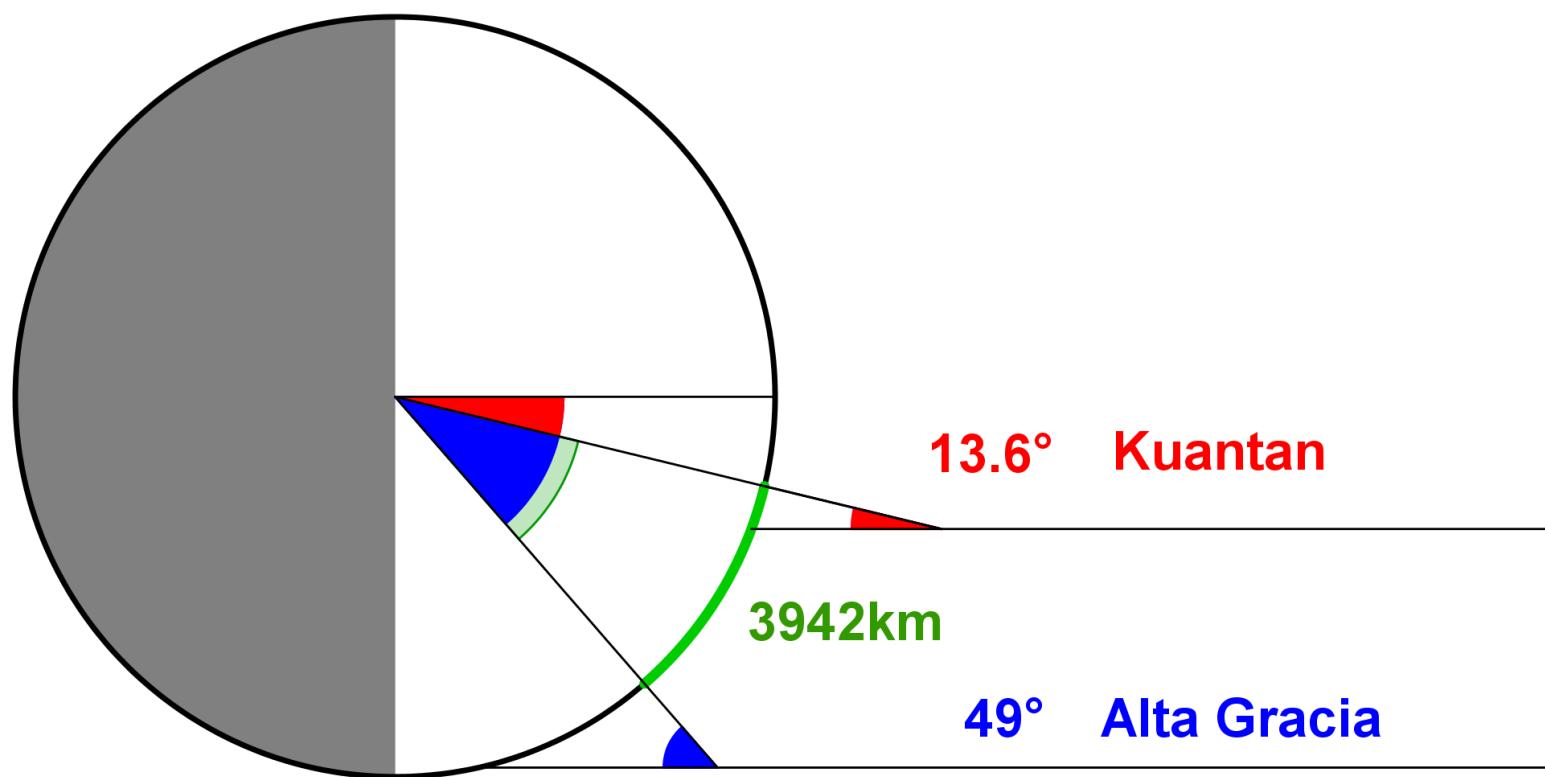


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Kuantan	Malaysia	SMK St Thomas	3.817	103.333

Date	Gnomon	Shadow	Angle
01 August	59 cm	-15.7 cm	-14.9 °
03 August	88 cm	-21.3 cm	-13.6 °

03/08/2017 (Kuantan-Malaysia) Latitude: 3.827°

03/08/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 3942\text{km}}{49^\circ - 13.6^\circ} = 40088 \text{ km}$$



Mahebourg, Mauritius

August 2017

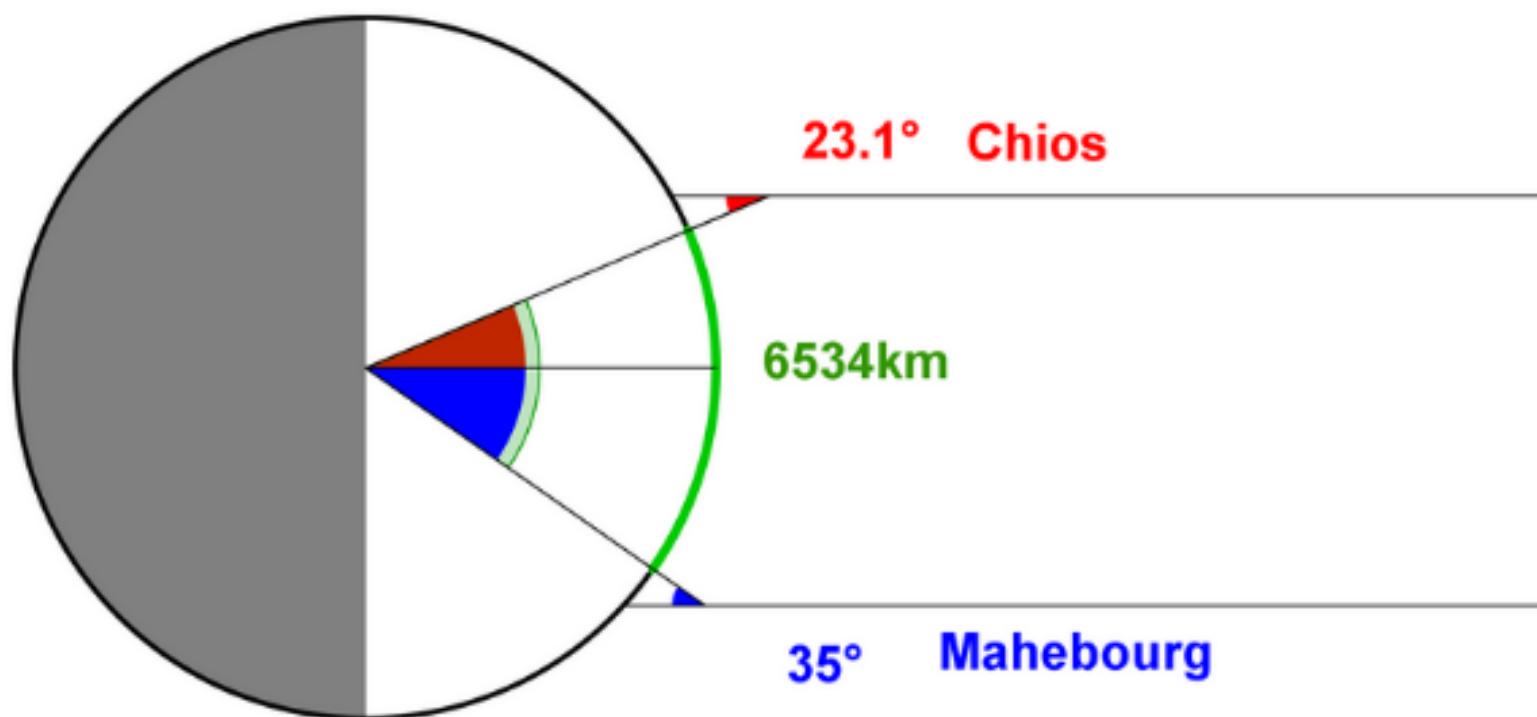


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Mahebourg	Mauritius		-20.442	-57.517

Date	Gnomon	Shadow	Angle
10 August	12 cm	-8,4 cm	-35 °

10/08/2017 (Chios-Greece) Latitude: 38.366°

10/08/2017 (Mahebourg-Mauritius) Latitude: -20.442°



$$\text{circumference} = \frac{360^\circ \times 6534\text{km}}{23.1^\circ + 35^\circ} = 40486 \text{ km}$$



Montcuq, France

August 2017

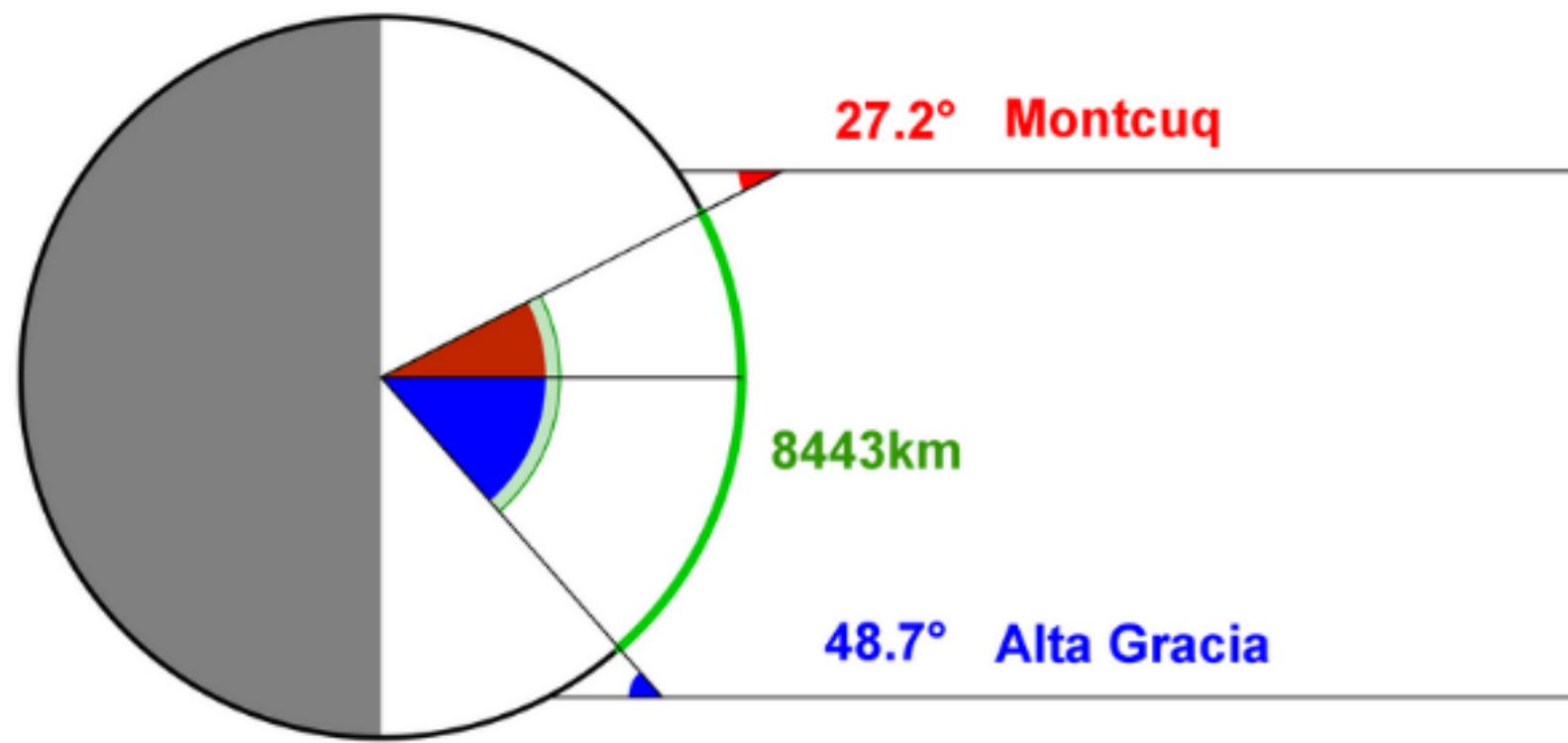


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Montcuq	France		44.340	1.210

Date	Gnomon	Shadow	Angle
02 August	271 cm	136 cm	26,6 °
03 August	271 cm	138 cm	27 °

04/08/2017 (Montcuq-France) Latitude: 44.34°

04/08/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 8443\text{km}}{27.2^\circ + 48.7^\circ} = 40046 \text{ km}$$



Pergamino, Argentina

August 2017

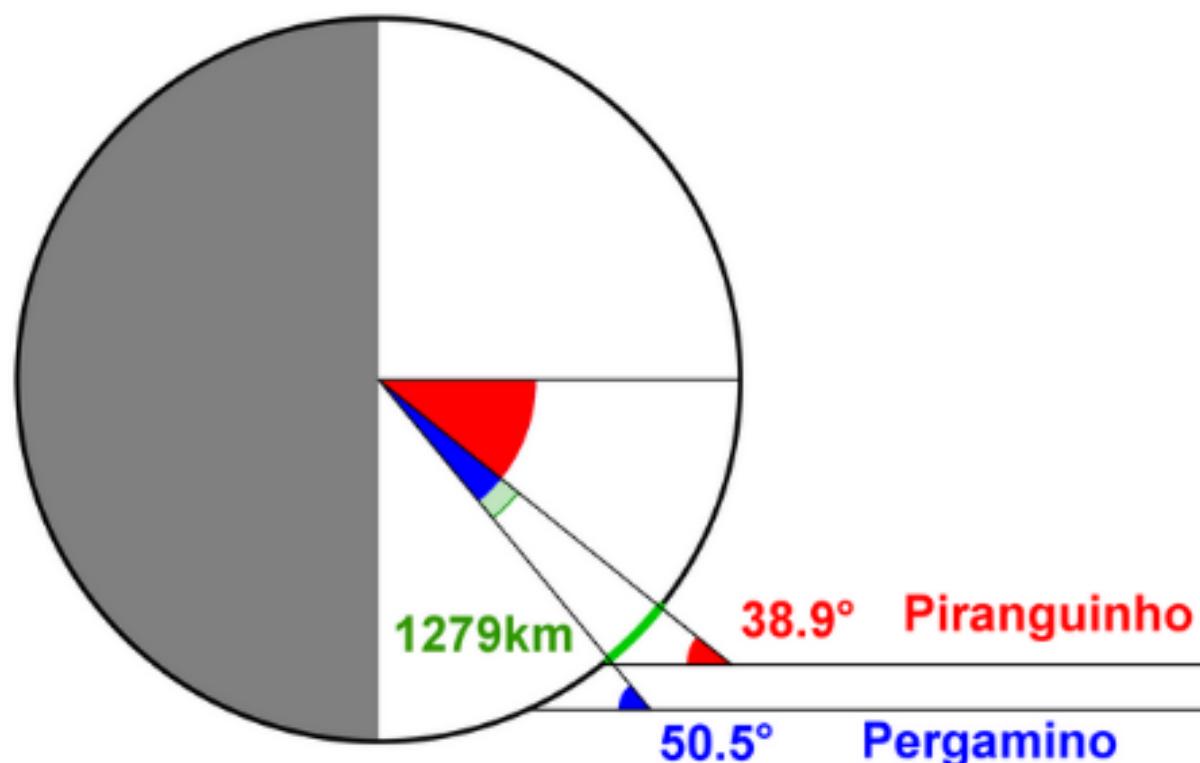


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Pergamino	Argentina		-33.923	-60.573

Date	Gnomon	Shadow	Angle
06 August	14.6 cm	-17.7 cm	-50.5 °

07/08/2017 (Piranguinho-Brazil) Latitude: -22.411°

06/08/2017 (Pergamino-Argentina) Latitude: -33.923°



$$\text{circumference} = \frac{360^\circ \times 1279 \text{ km}}{50.5^\circ - 38.9^\circ} = 39693 \text{ km}$$



Piranguinho, Brazil

August 2017

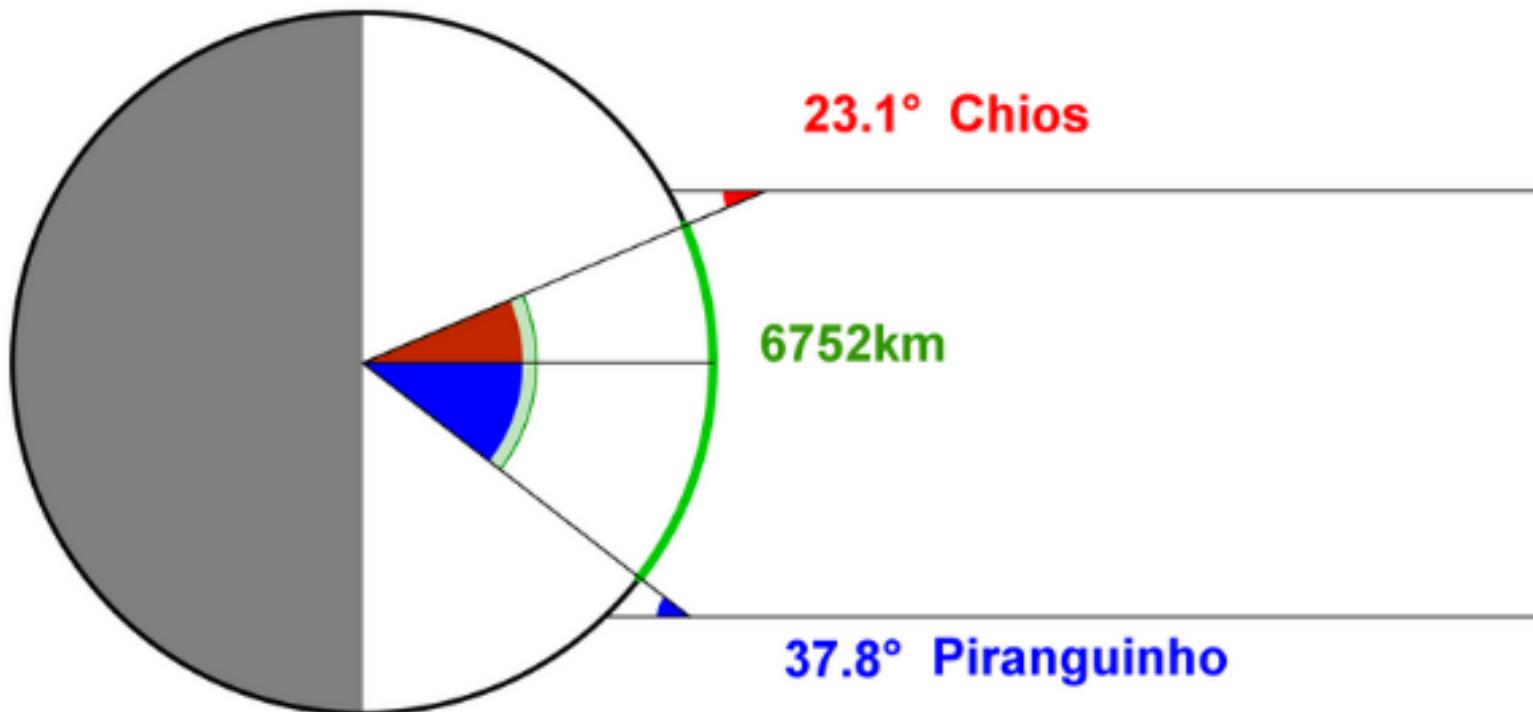


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535

Date	Gnomon	Shadow	Angle
07 August	70 cm	-56.5 cm	-38.9 °
10 August	70 cm	-54.2 cm	-37.8 °
11 August	70 cm	-54.4 cm	-37.9 °
15 August	70 cm	-52.3 cm	-36.8 °
24 August	70 cm	-47.0 cm	-33.9 °
29 August	70 cm	-43.2 cm	-31.7 °

10/08/2017 (Chios-Greece) Latitude: 38.366°

10/08/2017 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 6752\text{km}}{23.1^\circ + 37.8^\circ} = 39913 \text{ km}$$

24.08.2017



29.08.2017

Rio Cuarto, Argentina

August 2017

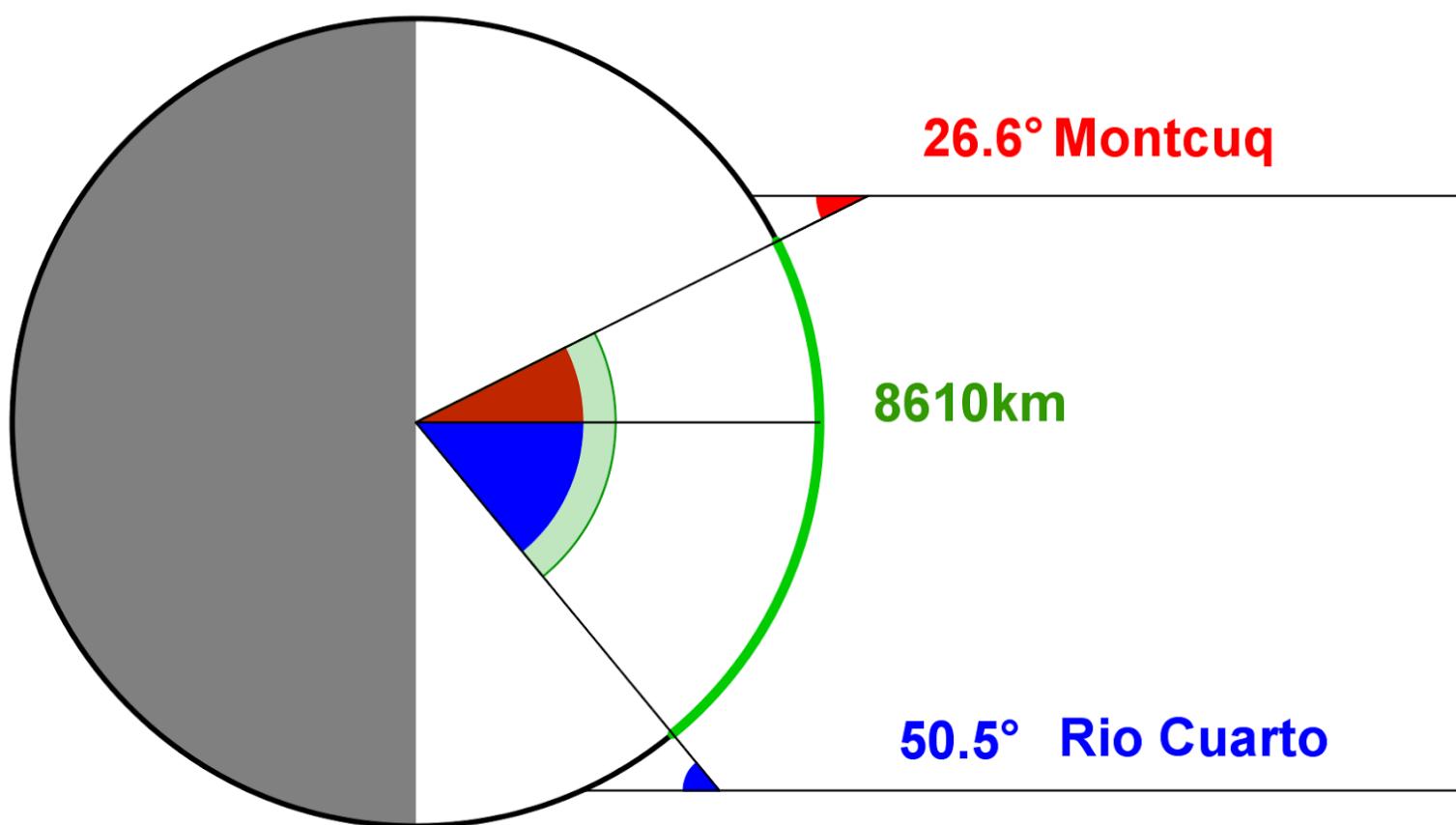


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio Cuarto	Argentina	Colegio Concordia	-33.149	-64.351

Date	Gnomon	Shadow	Angle
02 August	53.6 cm	-65 cm	-50.5 °

02/08/2017 (Montcuq-France) Latitude: 44.34°

02/08/2017 (Rio Cuarto-Argentina) Latitude: -33.159°



$$\text{circumference} = \frac{360^\circ \times 8610 \text{ km}}{26.6^\circ + 50.5^\circ} = 40202 \text{ km}$$



100 90 80 70 60 50 40 30 20 10 0

Rio de Janeiro CENOM, Brazil

August 2017

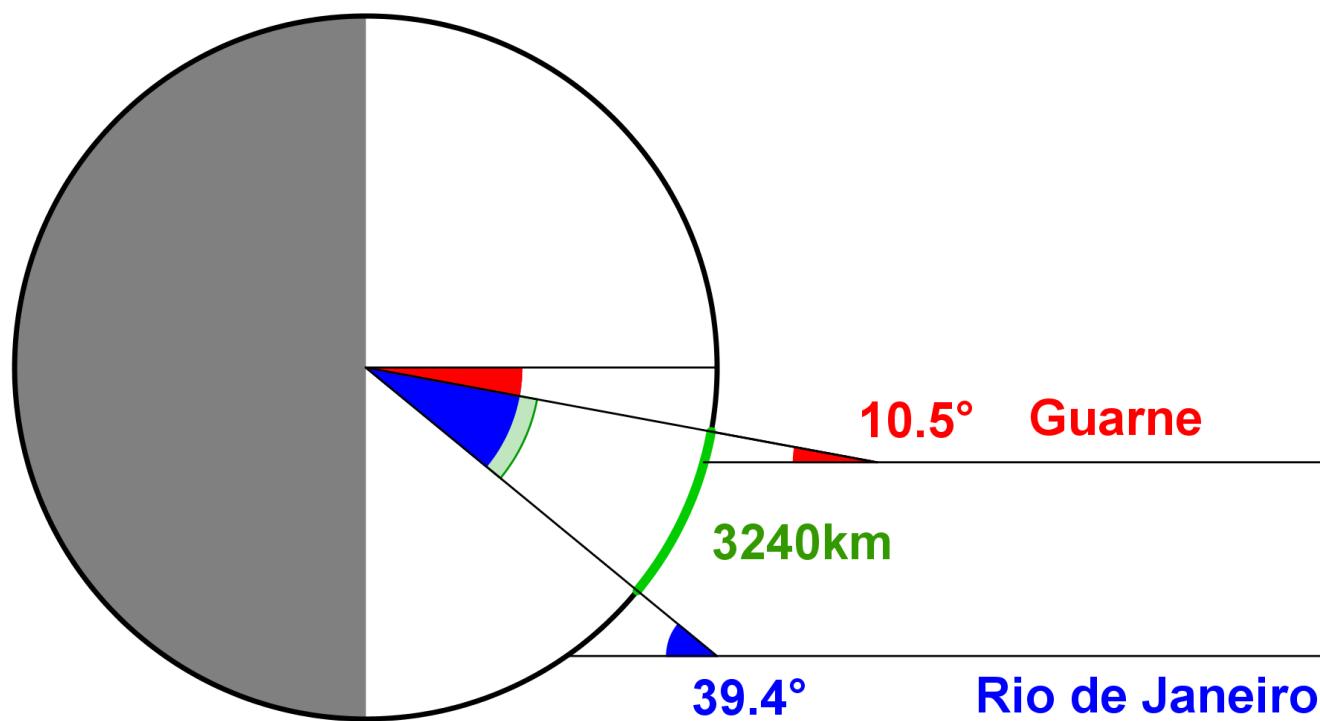


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nossa Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
01 August	100 cm	-82 cm	-39.4 °
02 August	100 cm	-82 cm	-39.4 °
03 August	100 cm	-82 cm	-39.4 °
07 August	100 cm	-80 cm	-38.7 °
08 August	100 cm	-82 cm	-39.4 °
09 August	100 cm	-80 cm	-38.7 °
14 August	100 cm	-78 cm	-38 °

03/08/2017 (Guarne-Colombia) Latitude: 6.274°

03/08/2017 (Rio de Janeiro-Brazil) Latitude: -22.89°



$$\text{circumference} = \frac{360^\circ \times 3240\text{km}}{39.4^\circ - 10.5^\circ} = 40360 \text{ km}$$



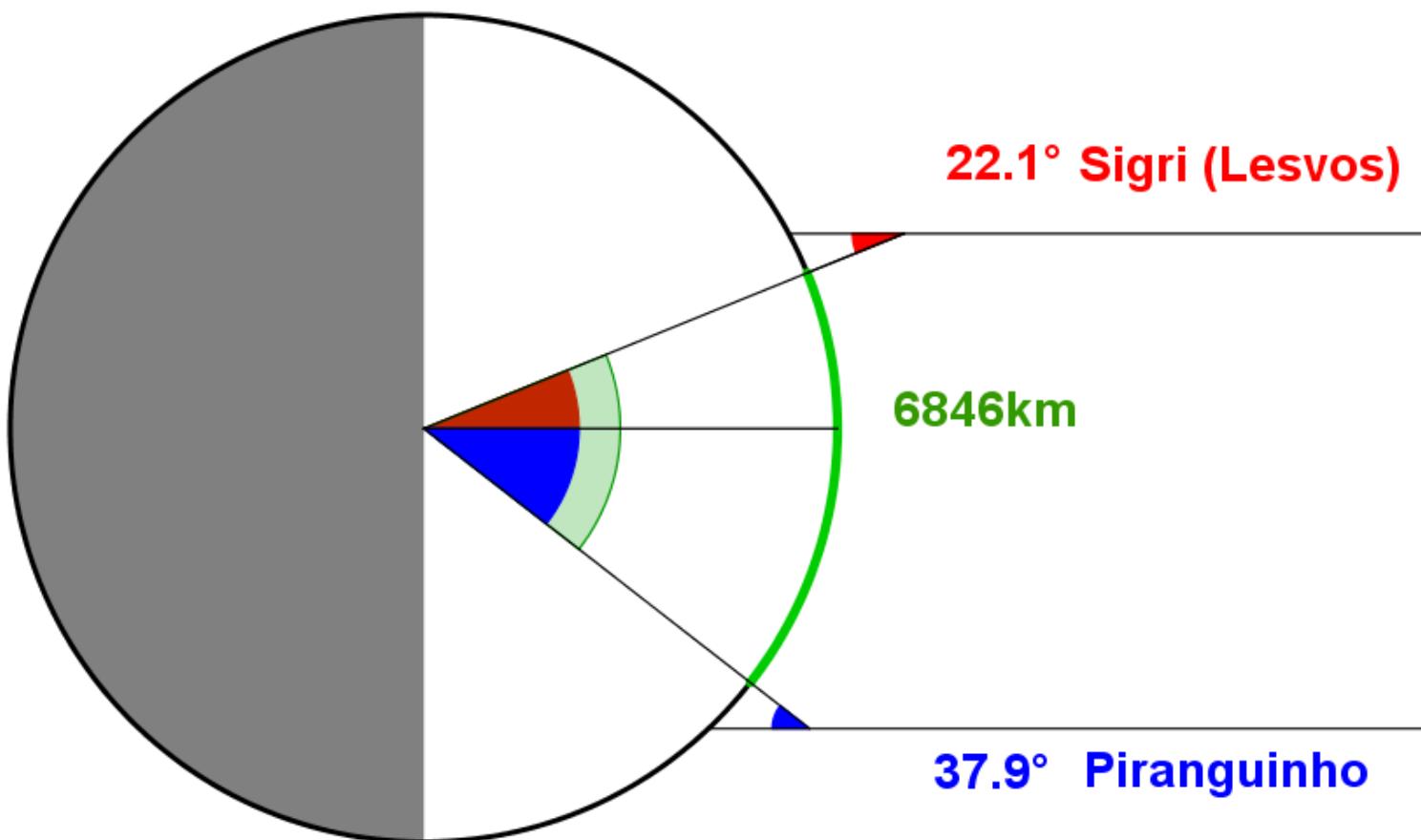


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Sigri	Greece	National History Museum	39.211	25.855

Date	Gnomon	Shadow	Angle
12 August	86 cm	35 cm	22.1 °

12/08/2017 (Sigri (Lesvos)-Greece) Latitude: 39.211°

11/08/2017 (Piranguinho-Brazil) Latitude: -22.411°



circumference = $\frac{360^\circ \times 6846\text{km}}{22.1^\circ + 37.9^\circ} = 41076\text{ km}$



