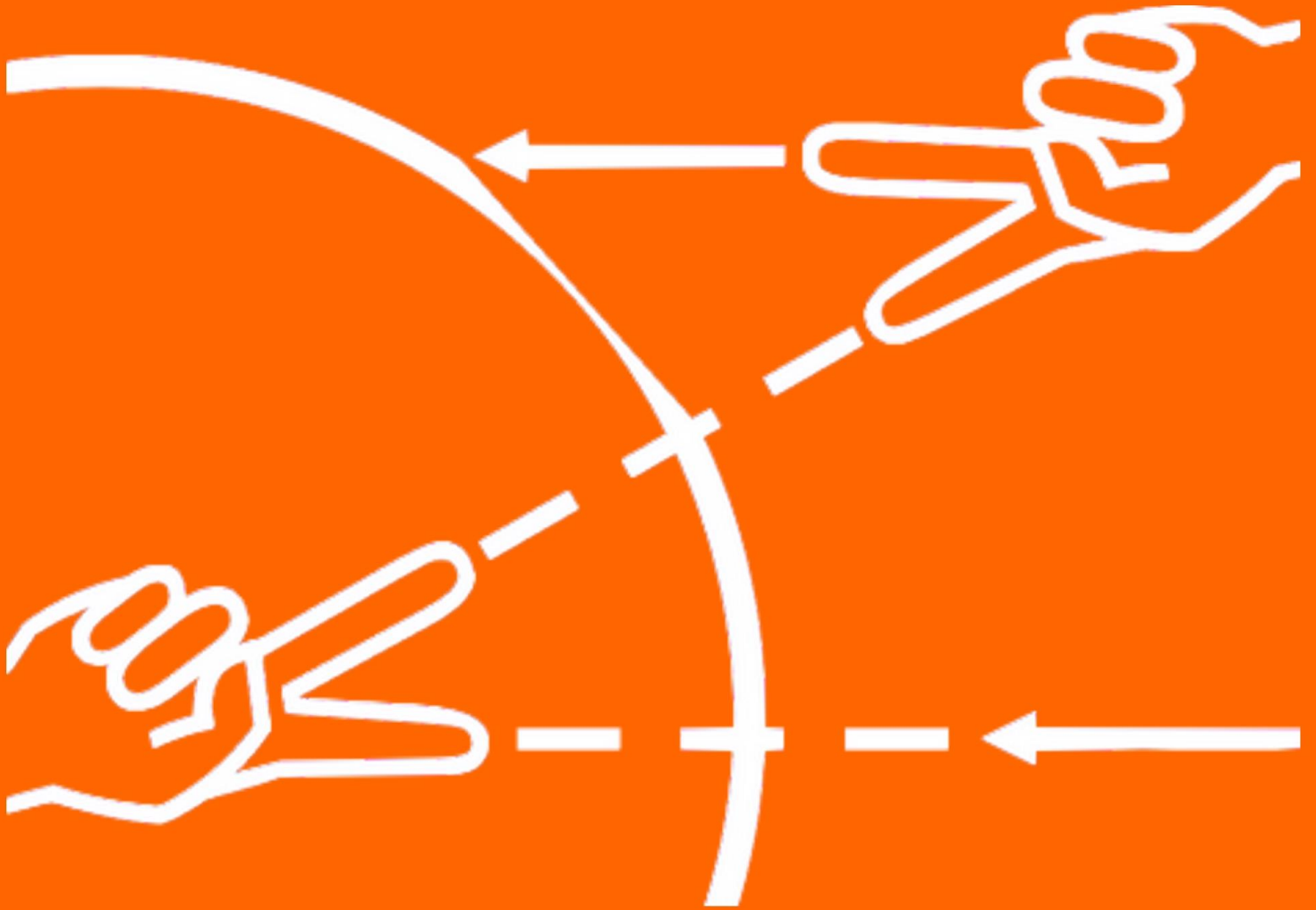


Eratoosthenes



February 2017

4^{Continents} 12^{Countries} 21^{Schools} 73^{Measures}

ARGENTINA (1)

Anisacate

BRAZIL (3)

Itajubá, Piranguinho, Rio de Janeiro

CROATIA (2)

Brštanovo, Donji Muć

FRANCE (1)

Lafrançaise

FYROM (1)

Skopje

GREECE (7)

Aigio, Ano Komi, Athens, Ilion, Ioannina, Petroupoli, Piraeus

ITALY (2)

Marina di Carrara, Merlara

MALAYSIA (1)

Kuantan

PAKISTAN (1)

Bahawalpur

ROMANIA (1)

Busteni

TUNISIA (1)

Sfax

Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079
	Anisacate	Argentina	Fundación Caminos de Anisacate	-31.717	-64.400
	Ano Komi	Greece	Ano Komi Kozanis	40.226	21.831
	Athens	Greece	Experimental College Agion Anargyron	38.027	23.726
	Bahawalpur	Pakistan	Gvt Abbasia Higher Secondary School	29.396	71.661
	Brštanovo	Croatia	Osnovna škola kneza Branimira	43.658	16.415
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535
	Donji Muć	Croatia	oš kneza Branimira	43.694	16.462
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697
	Ioannina	Greece	Experimental College	39.666	20.845
	Itajubá	Brazil	Universidade Federal de Itajubá	-22.415	-45.449
	Kuantan	Malaysia	SMK St Thomas	3.817	103.333
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237
	Marina di Carrara	Italy	M Buonarroti primary school	44.045	10.031
	Merlara	Italy	Lower Secondary School "Dante Alighieri"	45.166	11.433
	Petroupoli	Greece	4o Junior High School	38.036	23.674
	Piraeus	Greece	2nd Junior High School of Korydallos	37.977	23.655
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317
	Sfax	Tunisia	école de Sakiét Eddayer	34.789	10.780
	Skopje	FYROM	OOU "Nevena Georgieva - Dunja"	41.980	21.445

Aigio, Greece

February 2017

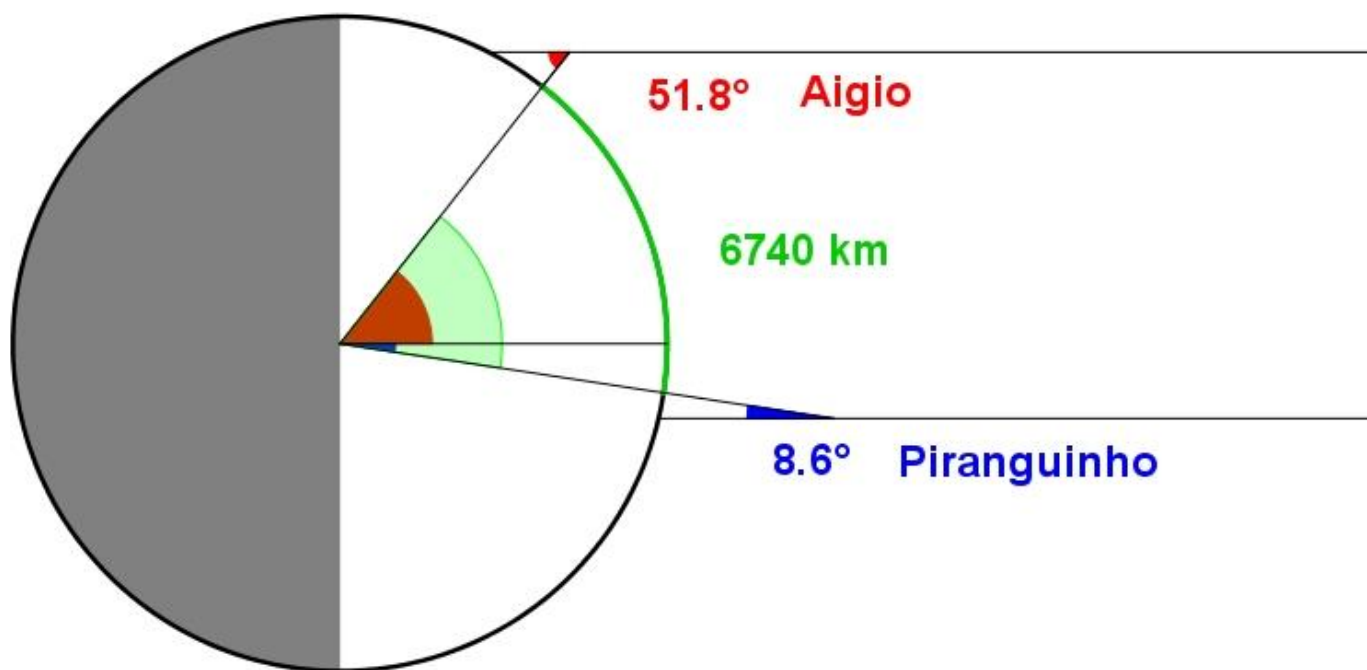


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079

Date	Gnomon	Shadow	Angle
13 February	11.5 cm	14.6 cm	51.8°
17 February	17 cm	20.3 cm	50.1°

13 February 2017 (Aigio-GREECE) Latitude: 38.252 °

13 February 2017 (Piranguinho-BRAZIL) Latitude: -22.411 °



$$\text{circumference} = \frac{360^\circ \times 6740 \text{ km}}{51.8^\circ + 8.6^\circ} = 40172 \text{ km}$$



Anisacate, Argentina

February 2017

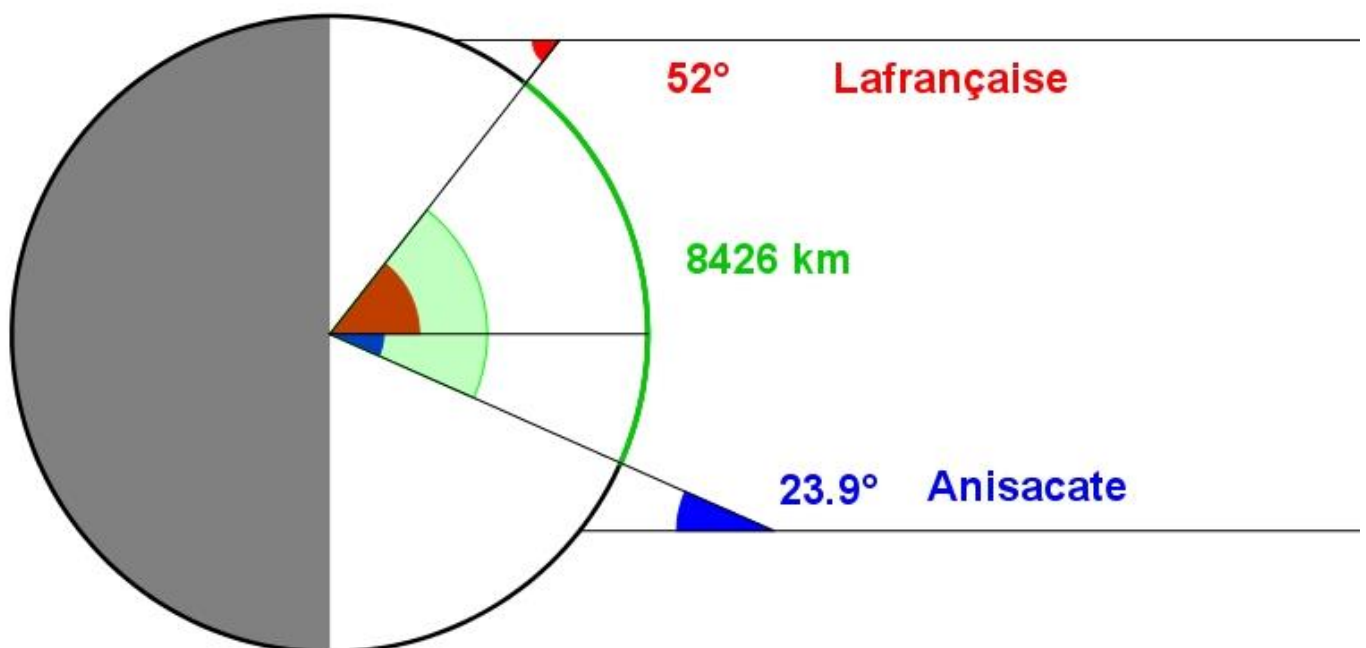


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Anisacate	Argentina	Fundación Caminos de Anisacate	-31.717	-64.400

Date	Gnomon	Shadow	Angle
02 February	100 cm	-27.5 cm	-15.4°
13 February	100 cm	-34 cm	-18.8°
14 February	100 cm	-34.5 cm	-19.0°
15 February	100 cm	-35.4 cm	-19.5°
16 February	100 cm	-36 cm	-19.8°
21 February	55 cm	-21.5 cm	-21.4°
22 February	100 cm	-40.5 cm	-22°
23 February	100 cm	-41.4 cm	-22.5°
24 February	100 cm	-42 cm	-22.8°
27 February	100 cm	-44.3 cm	-23.9°
28 February	100 cm	-45 cm	-24.2°

27 February 2017 (Lafrançaise-FRANCE) Latitude: 44.127 °

27 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 8426 \text{ km}}{52^\circ + 23.9^\circ} = 39965 \text{ km}$$



Ano Komi, Greece

February 2017

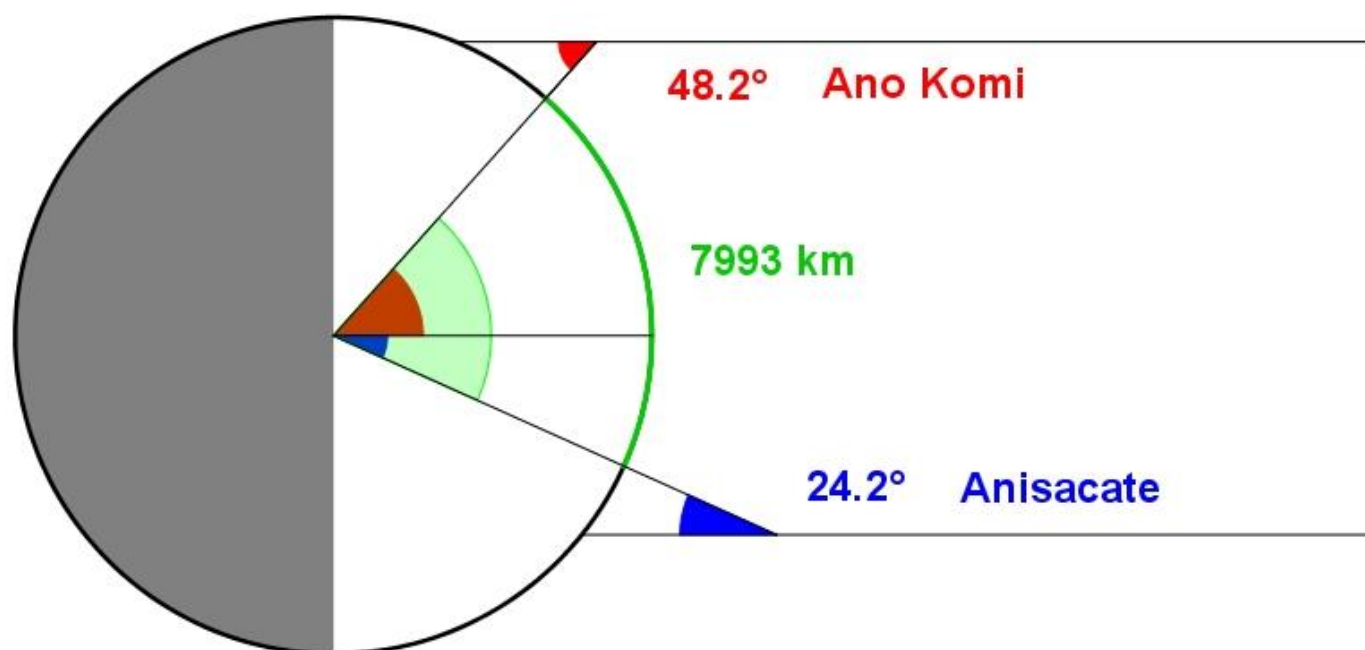


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ano Komi	Greece	Ano Komi Kozanis	40.226	21.831

Date	Gnomon	Shadow	Angle
28 February	100 cm	112 cm	48.2°

28 February 2017 (Ano Komi-GREECE) Latitude: 40.226 °

28 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 7993 \text{ km}}{48.2^\circ + 24.2^\circ} = 39744 \text{ km}$$



Athens-A, Greece

February 2017

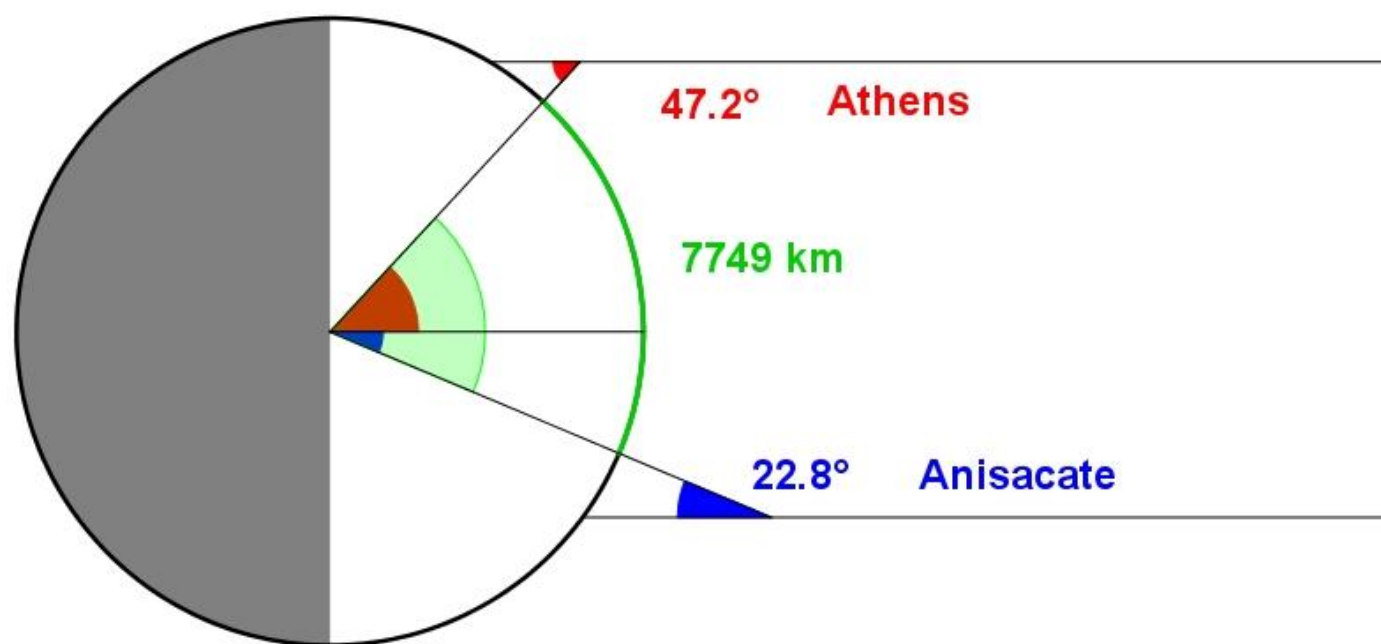


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Athens	Greece	Experimental College Agion Anargyron	38.027	23.726

Date	Gnomon	Shadow	Angle
03 February	49 cm	68 cm	54.2°
09 February	248 cm	320 cm	52.2°
10 February	247 cm	310 cm	51.3°
24 February	49 cm	53 cm	47.2°

24 February 2017 (Athens-GREECE) Latitude: 38.027 °

24 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 7749 \text{ km}}{47.2^\circ + 22.8^\circ} = 39852 \text{ km}$$



Bahawalpur, Pakistan

February 2017

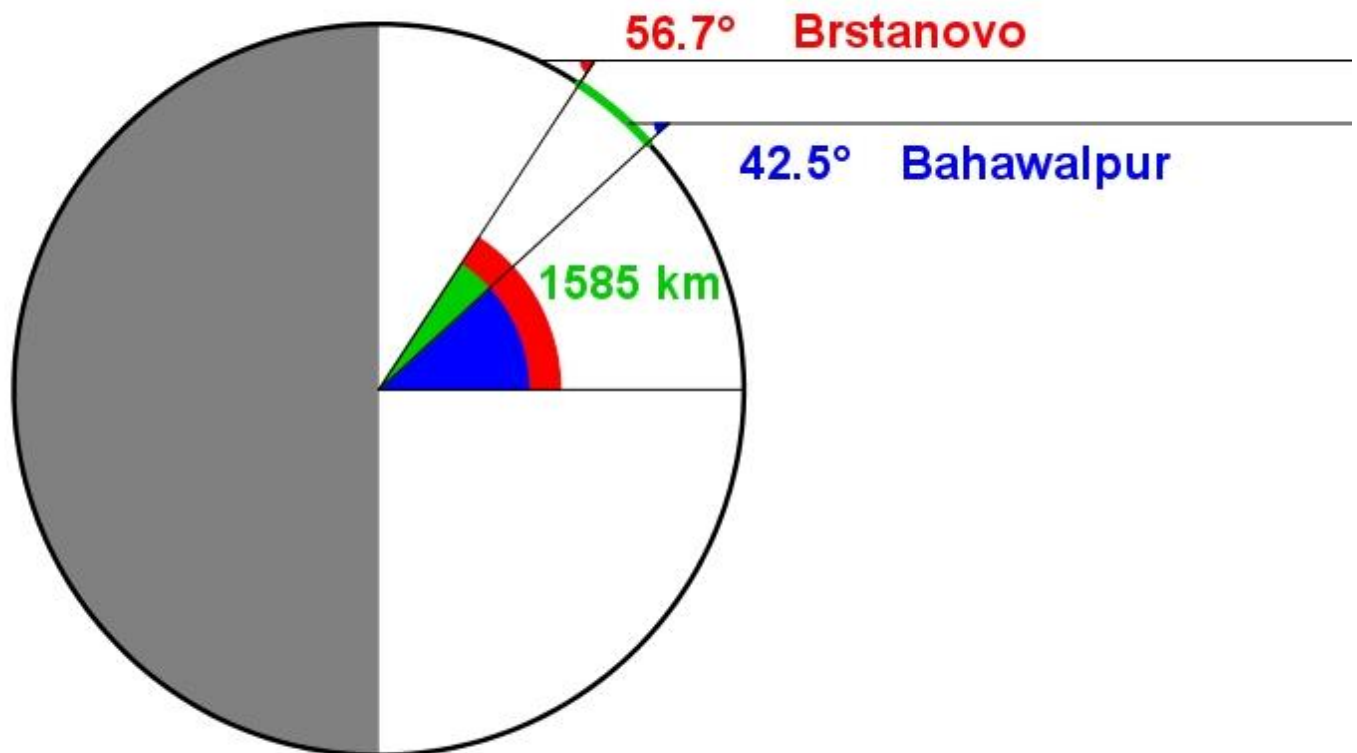


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Bahawalpur	Pakistan	Gvt Abbasia Higher Secondary School	29.396	71.661

Date	Gnomon	Shadow	Angle
14 February	73 cm	66.8 cm	42.5°

14 January 2017 (Brstanovo-CROATIA 43.658)

14 January 2017 (Bahawalpur-PAKISTAN 29.395)



$$\text{circumference} = \frac{360^\circ \times 1585 \text{ km}}{56.7^\circ - 42.5^\circ} = 40183 \text{ km}$$



Brštanovo, Croatia

February 2017

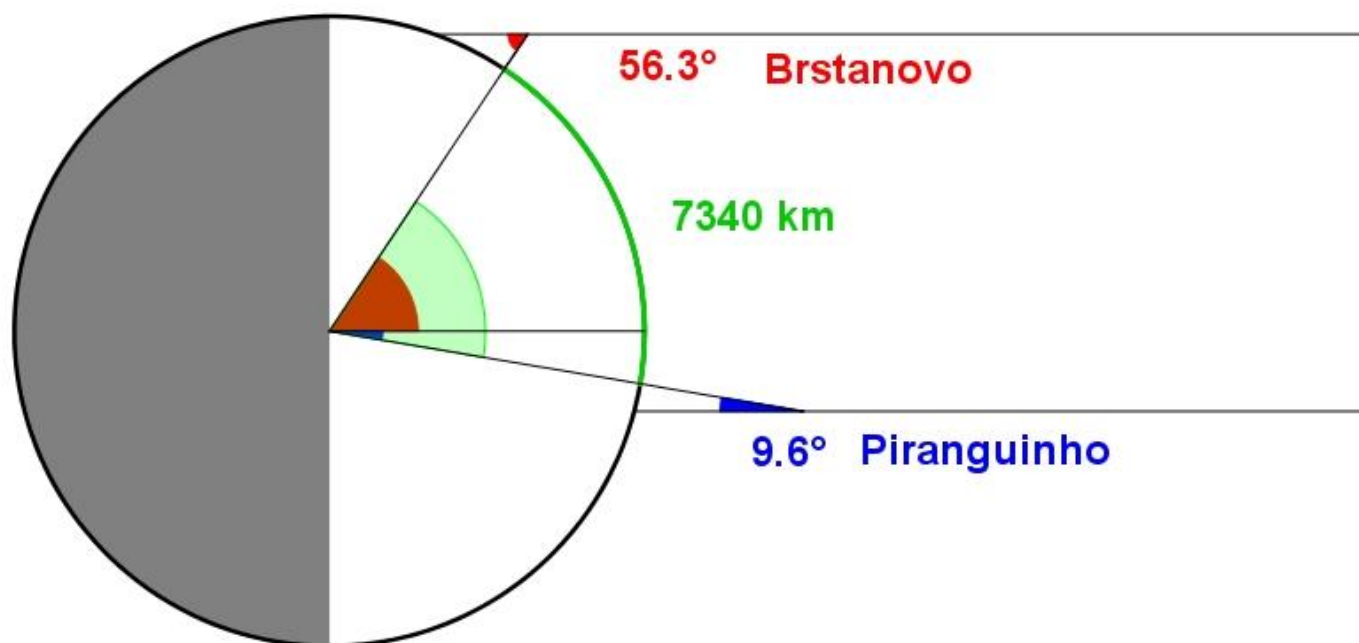


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Brštanovo	Croatia	Osnovna škola kneza Branimira	43.658	16.415

Date	Gnomon	Shadow	Angle
14 February	100 cm	152 cm	56.7°
15 February	100 cm	150.2 cm	56.3°
21 February	100 cm	138.6 cm	54.2°
22 February	100 cm	138.2 cm	54.1°
28 February	100 cm	125.9 cm	51.5°

15 February 2017 (Brstanovo-CROATIA) Latitude: 43.658 °

15 February 2017 (Piranguinho-BRAZIL) Latitude: -22.411 °



$$\text{circumference} = \frac{360^\circ \times 7340 \text{ km}}{56.3^\circ + 9.6^\circ} = 40097 \text{ km}$$



Busteni, Romania

February 2017

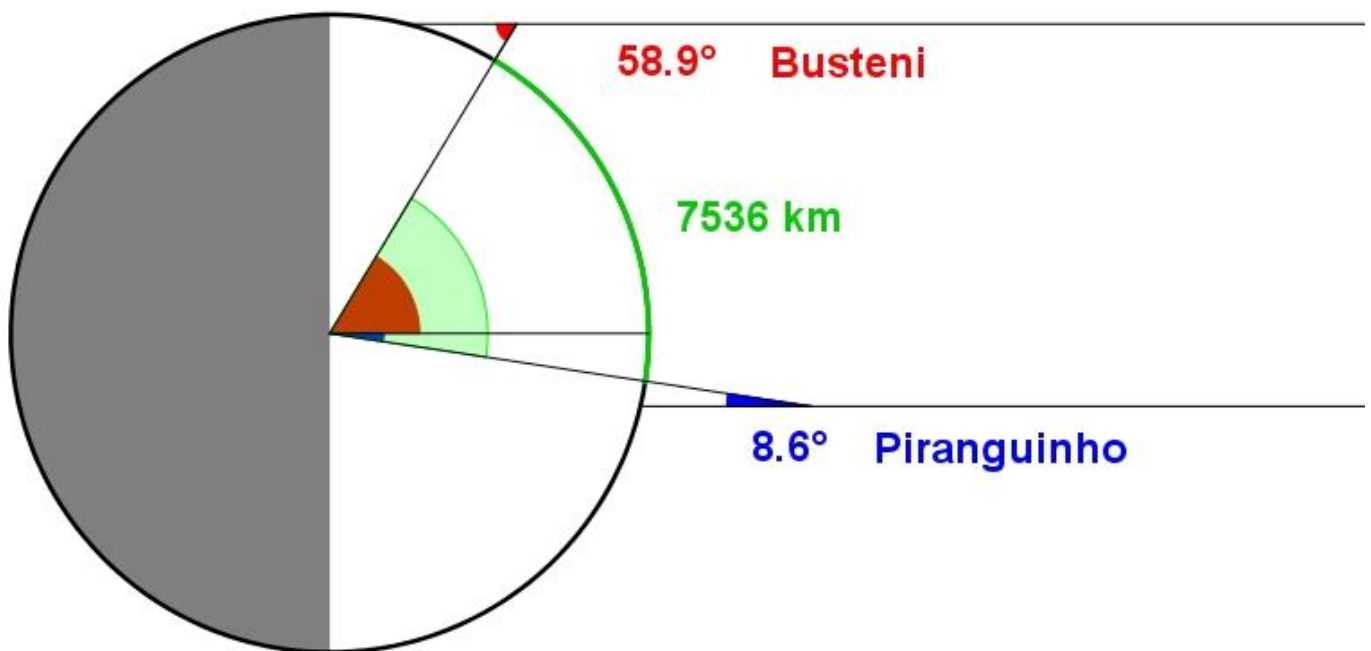


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535

Date	Gnomon	Shadow	Angle
01 February	18.3 cm	35 cm	62.4°
03 February	32.3 cm	60 cm	61.7°
13 February	60.3 cm	100 cm	58.9°
23 February	65.4 cm	95 cm	55.4°
24 February	65.4 cm	92.7 cm	54.8°

13 February 2017 (Busteni-ROMANIA) Latitude: 45.416 °

13 February 2017 (Piranguinho-BRAZIL) Latitude: -22.411 °



$$\text{circumference} = \frac{360^\circ \times 7536 \text{ km}}{58.9^\circ + 8.6^\circ} = 40192 \text{ km}$$



Donji Muć, Croatia

February 2017

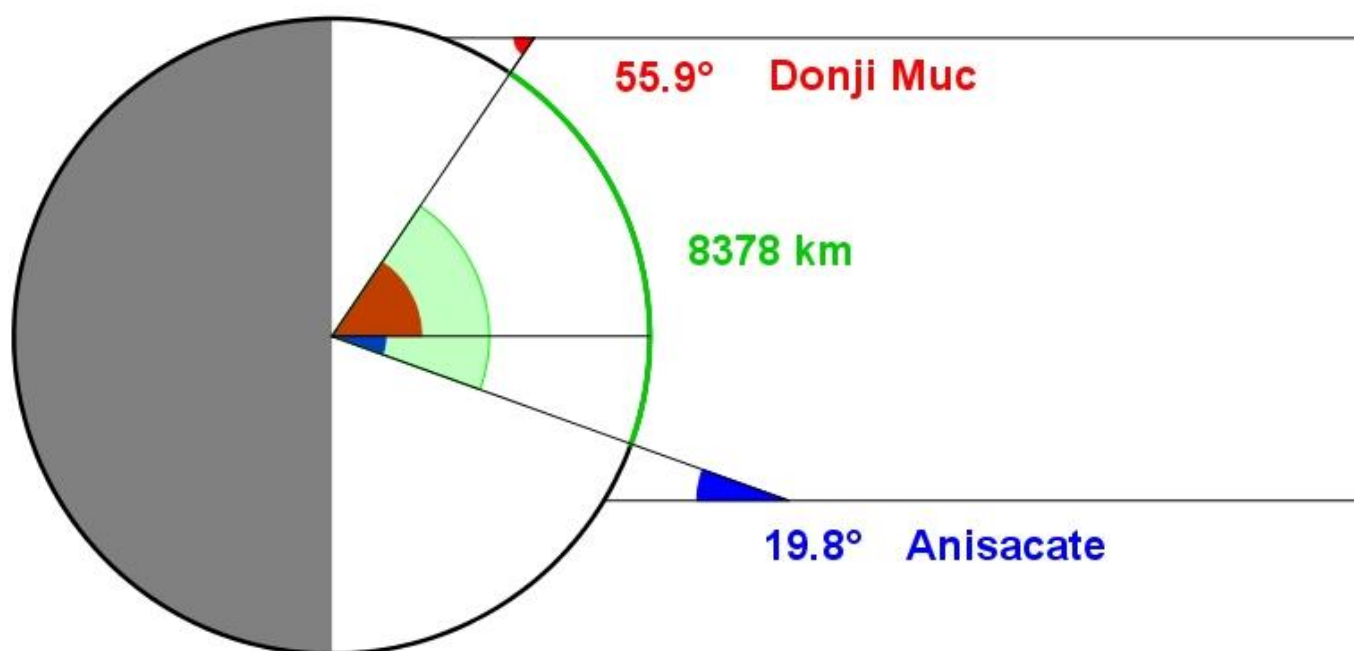


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Donji Muć	Croatia	oš kneza Branimira	43.694	16.462

Date	Gnomon	Shadow	Angle
09 February	100 cm	161 cm	58.2°
16 February	100 cm	147.7 cm	55.9°
23 February	100 cm	134.9 cm	53.5°

16 February 2017 (Donji Muc-CROATIA) Latitude: 43.697 °

16 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 8378 \text{ km}}{55.9^\circ + 19.8^\circ} = 39843 \text{ km}$$



Ilion, Greece

February 2017

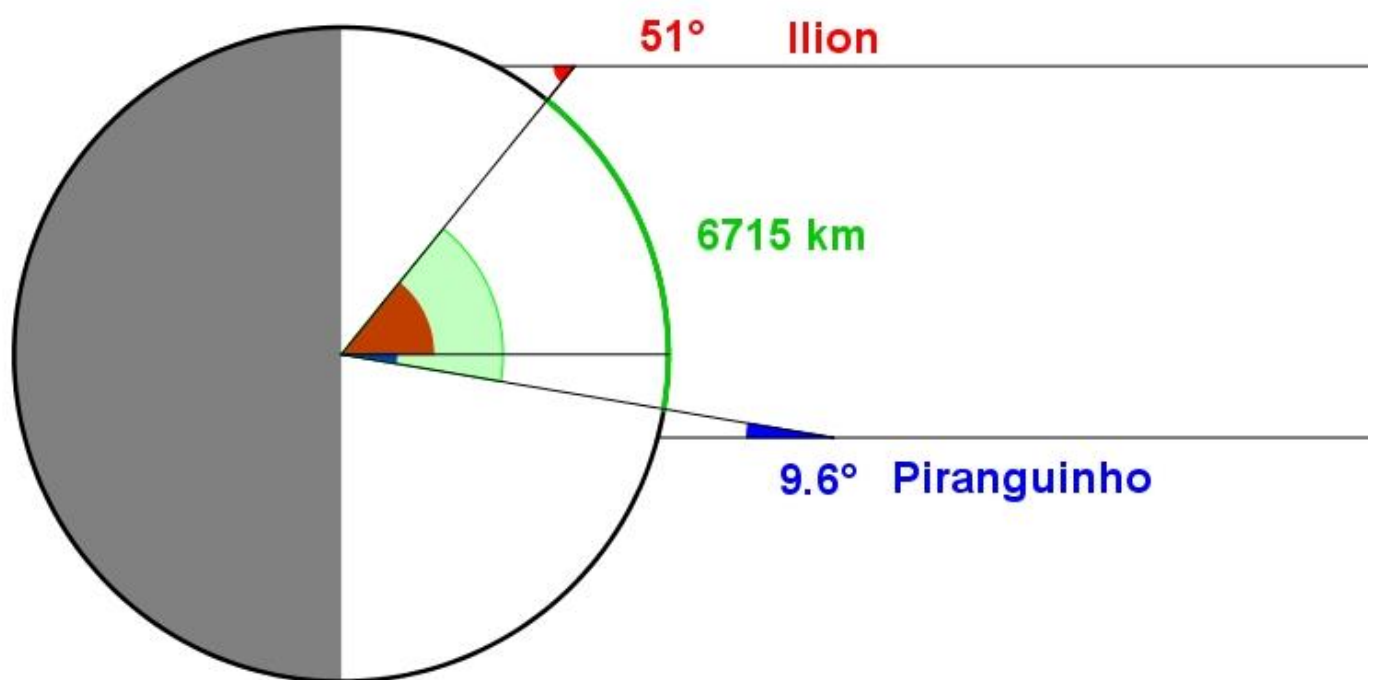


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697

Date	Gnomon	Shadow	Angle
01 February	30.4 cm	43.5 cm	55.1°
03 February	30.4 cm	42.5 cm	54.4°
10 February	30.4 cm	39.5 cm	52.4°
15 February	30.4 cm	37.5 cm	51.0°
17 February	99.5 cm	118.2 cm	49.9°
22 February	99,5 cm	111 cm	49.1°

15 February 2017 (Ilion-GREECE) Latitude: 38.033 °

15 February 2017 (Piranguinho-BRAZIL) Latitude: -22.411 °



$$\text{circumference} = \frac{360^\circ \times 6715 \text{ km}}{51^\circ + 9.6^\circ} = 39891 \text{ km}$$



Ioannina, Greece

February 2017

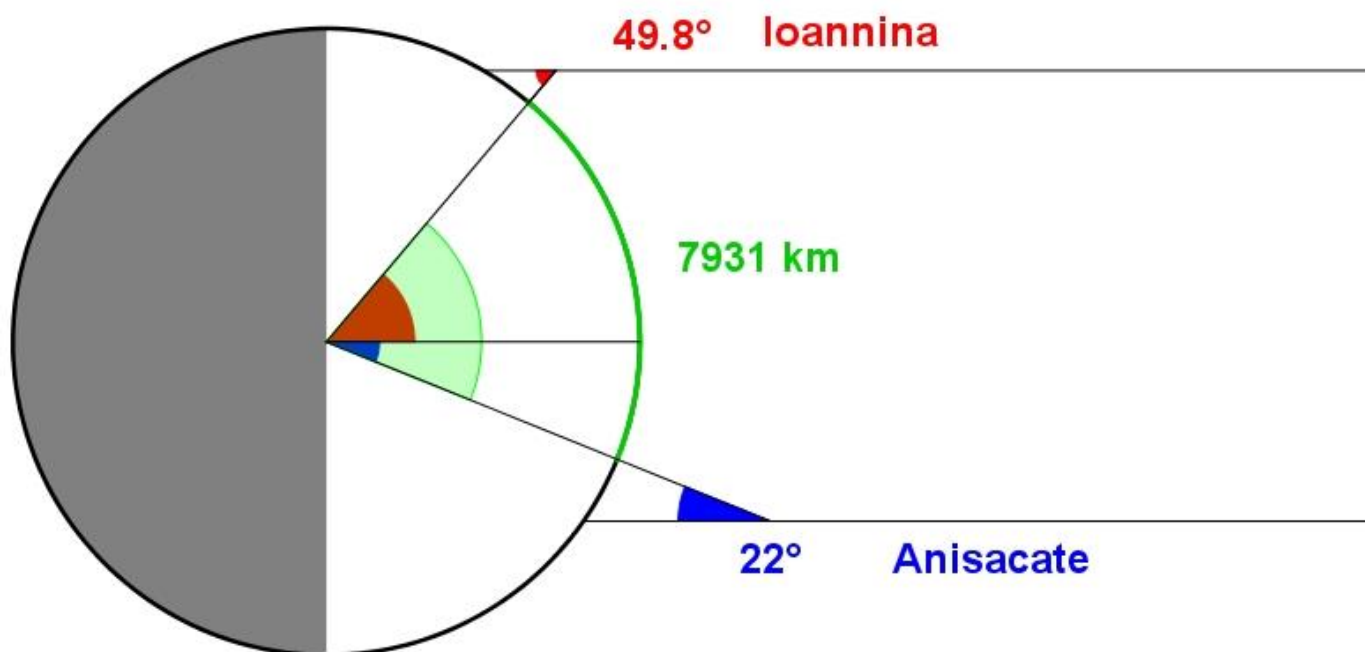


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ioannina	Greece	Experimental College	39.666	20.845

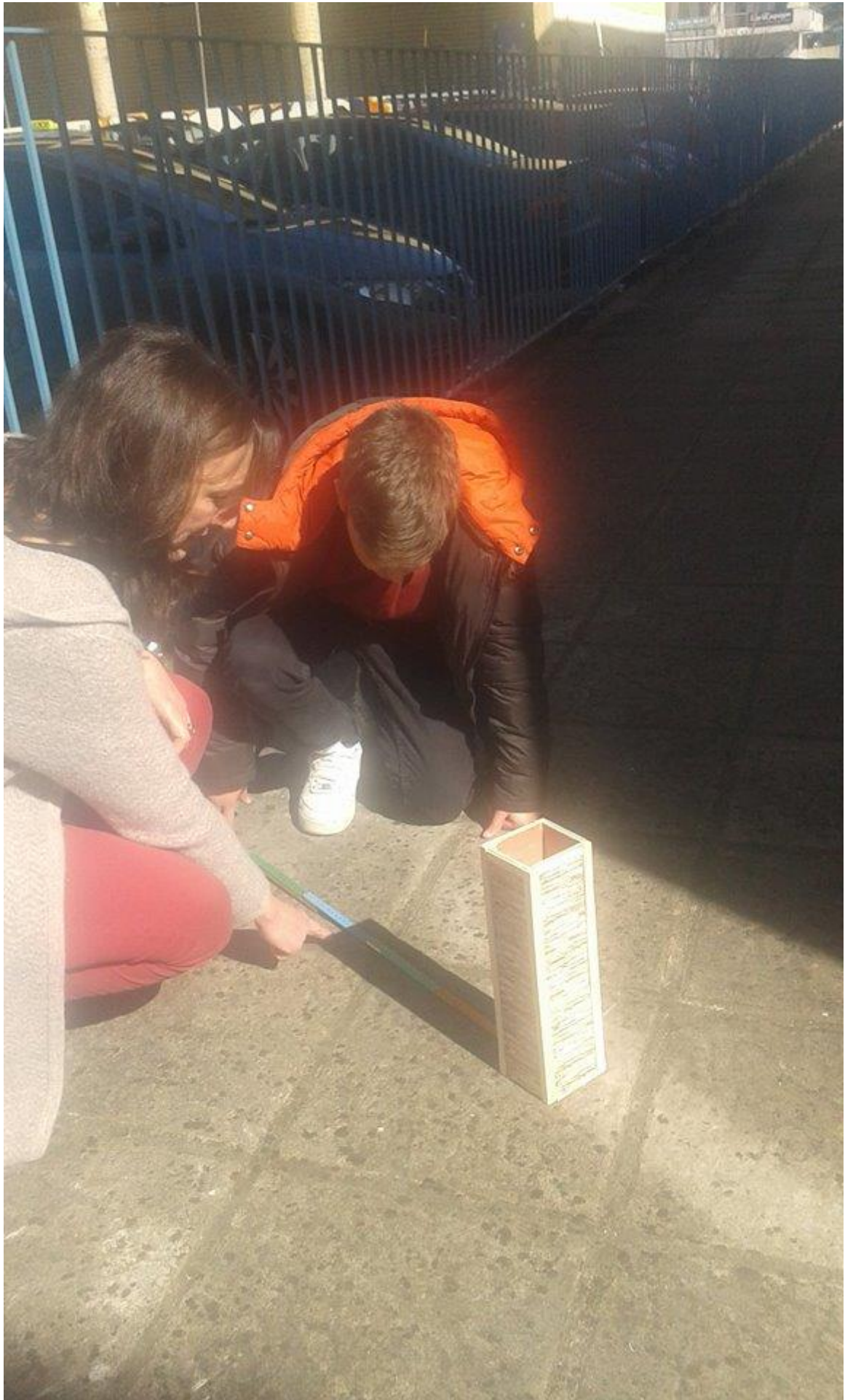
Date	Gnomon	Shadow	Angle
22 February	35 cm	41.4 cm	49.8°

22 February 2017 (Ioannina-GREECE) Latitude: 39.667 °

22 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 7931 \text{ km}}{49.8^\circ + 22^\circ} = 39765 \text{ km}$$



Itajubá, Brazil

February 2017

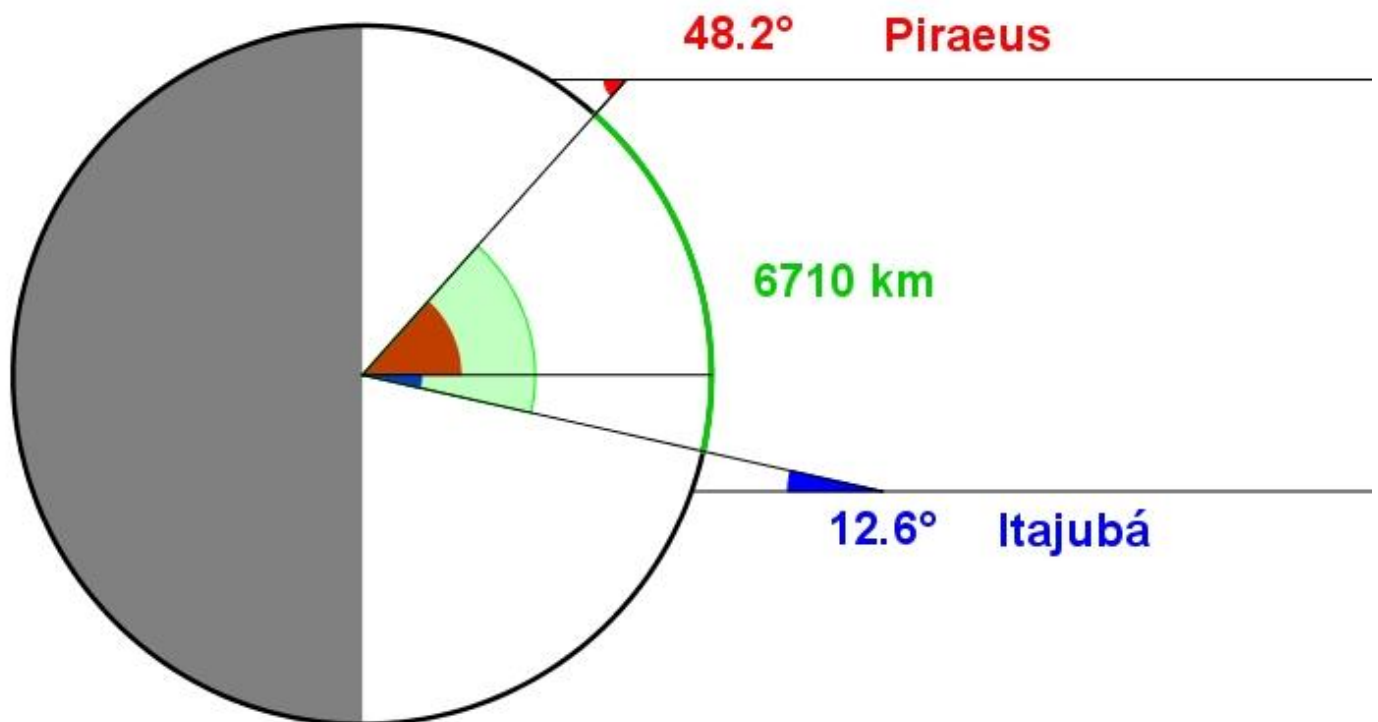


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Itajubá	Brazil	Universidade Federal de Itajubá	-22.415	-45.449

Date	Gnomon	Shadow	Angle
20 February	70 cm	-15.6 cm	-12.6°

20 February 2017 (Piraeus-GREECE) Latitude: 37.977 °

20 February 2017 (Itajubá-BRAZIL) Latitude: -22.415 °



$$\text{circumference} = \frac{360^\circ \times 6710 \text{ km}}{48.2^\circ + 12.6^\circ} = 39730 \text{ km}$$



Kuantan, Malaysia

February 2017

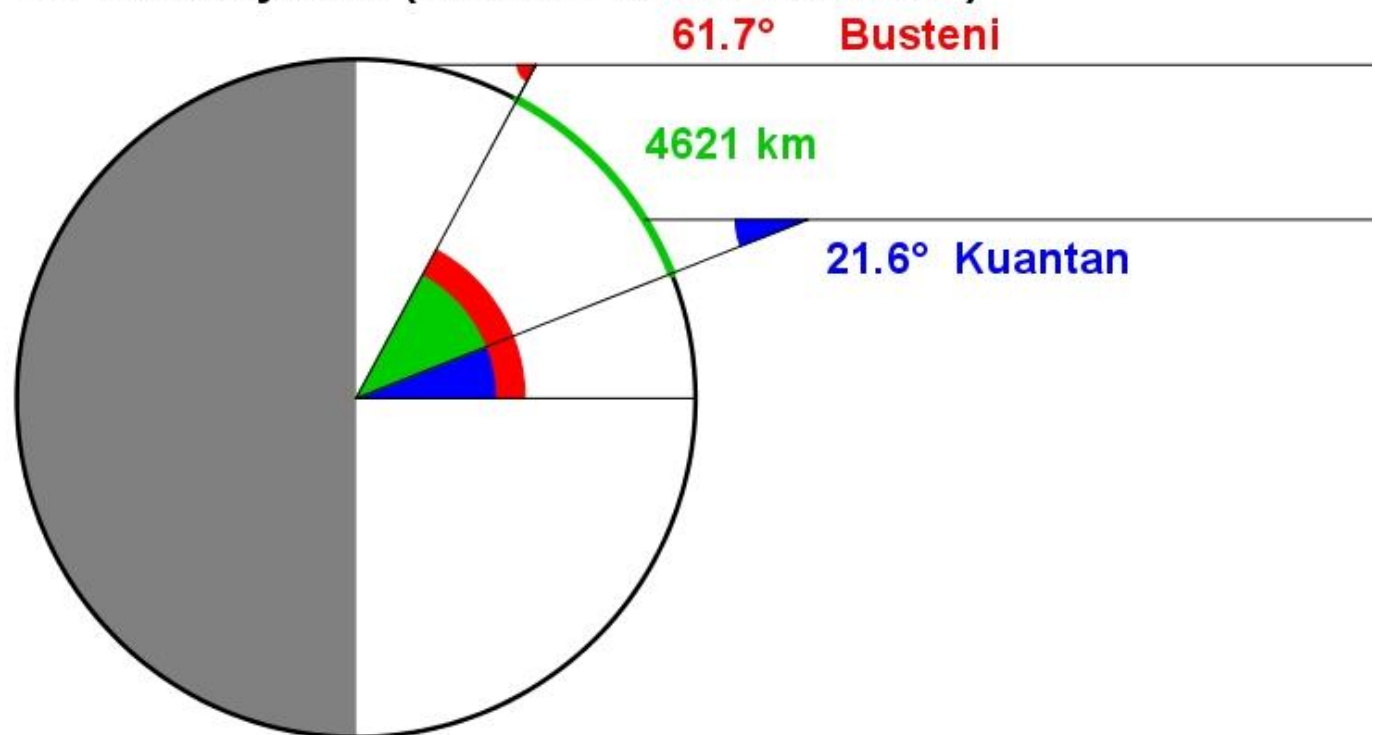


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Kuantan	Malaysia	SMK St Thomas	3.817	103.333

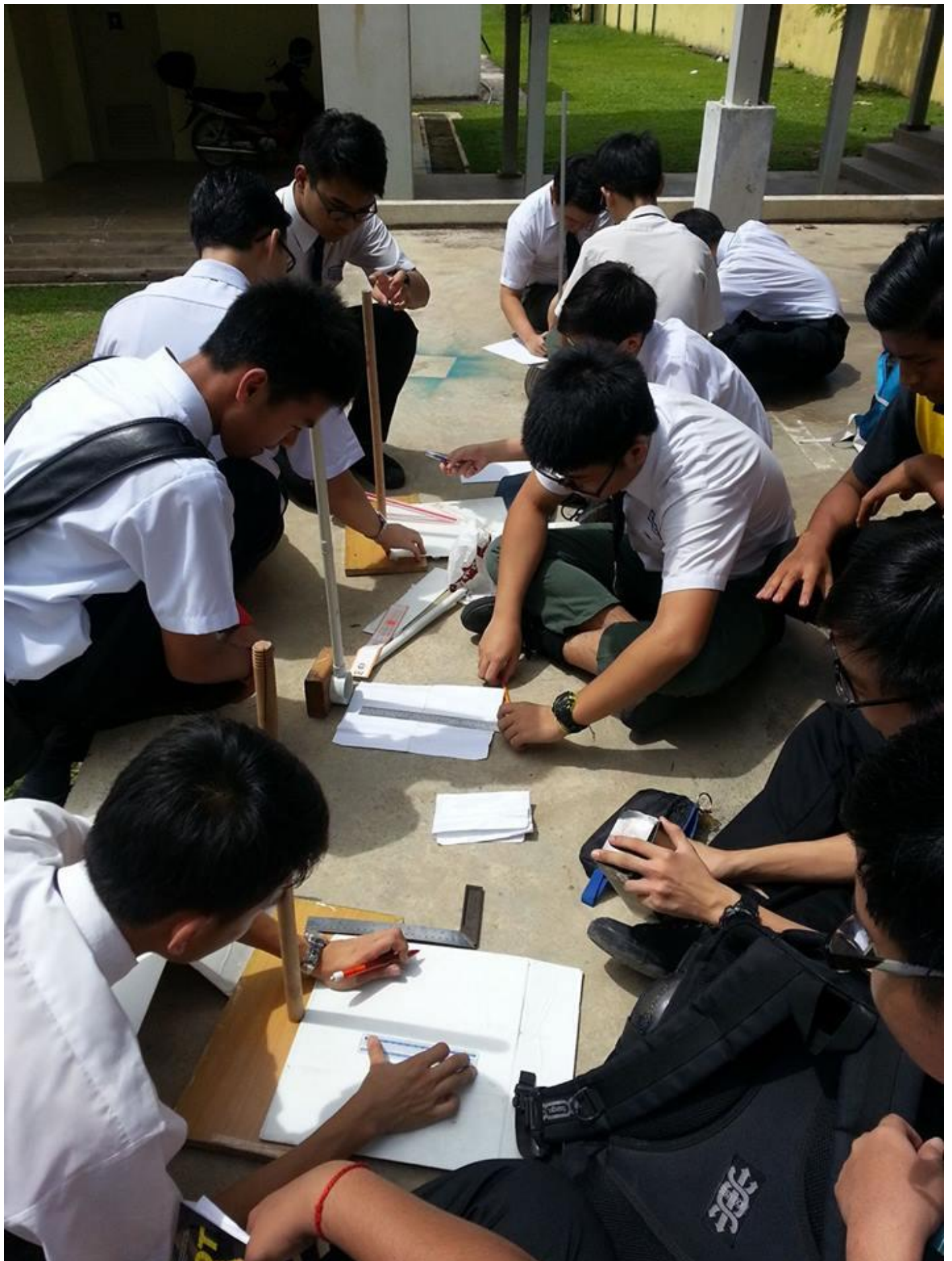
Date	Gnomon	Shadow	Angle
03 February	58.5 cm	23.2 cm	21.6°
06 February	59 cm	20.5 cm	19.2°

03 February 2017 (Busteni-ROMANIA 45.416)

03 February 2017 (Kuantan-MALAYSIA 3.827)



$$\text{circumference} = \frac{360^\circ \times 4621 \text{ km}}{61.7^\circ - 21.6^\circ} = 41485 \text{ km}$$



Lafrançaise, France

February 2017

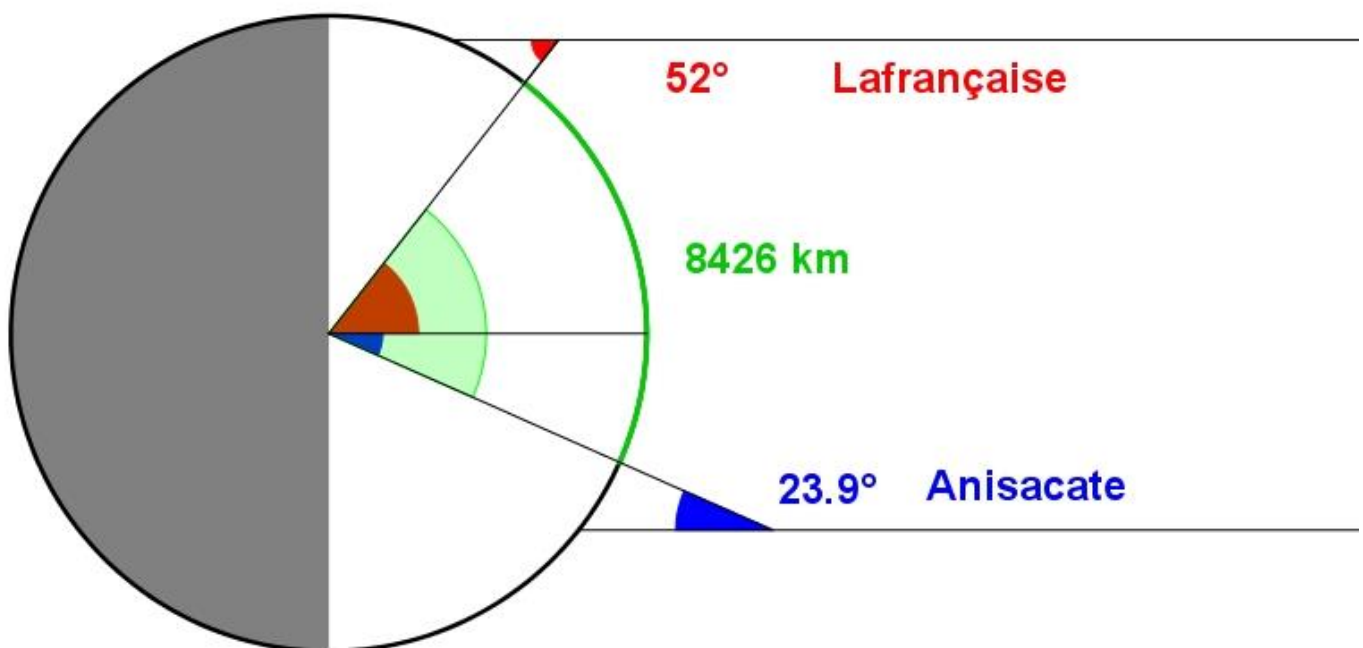


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237

Date	Gnomon	Shadow	Angle
20 February	100 cm	142.8 cm	55°
21 February	100 cm	139.7 cm	54.4°
24 February	100 cm	133.2 cm	53.1°
27 February	100 cm	128 cm	52°

27 February 2017 (Lafrançaise-FRANCE) Latitude: 44.127 °

27 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 8426 \text{ km}}{52^\circ + 23.9^\circ} = 39965 \text{ km}$$



Marina di Carrara, Italy

February 2017

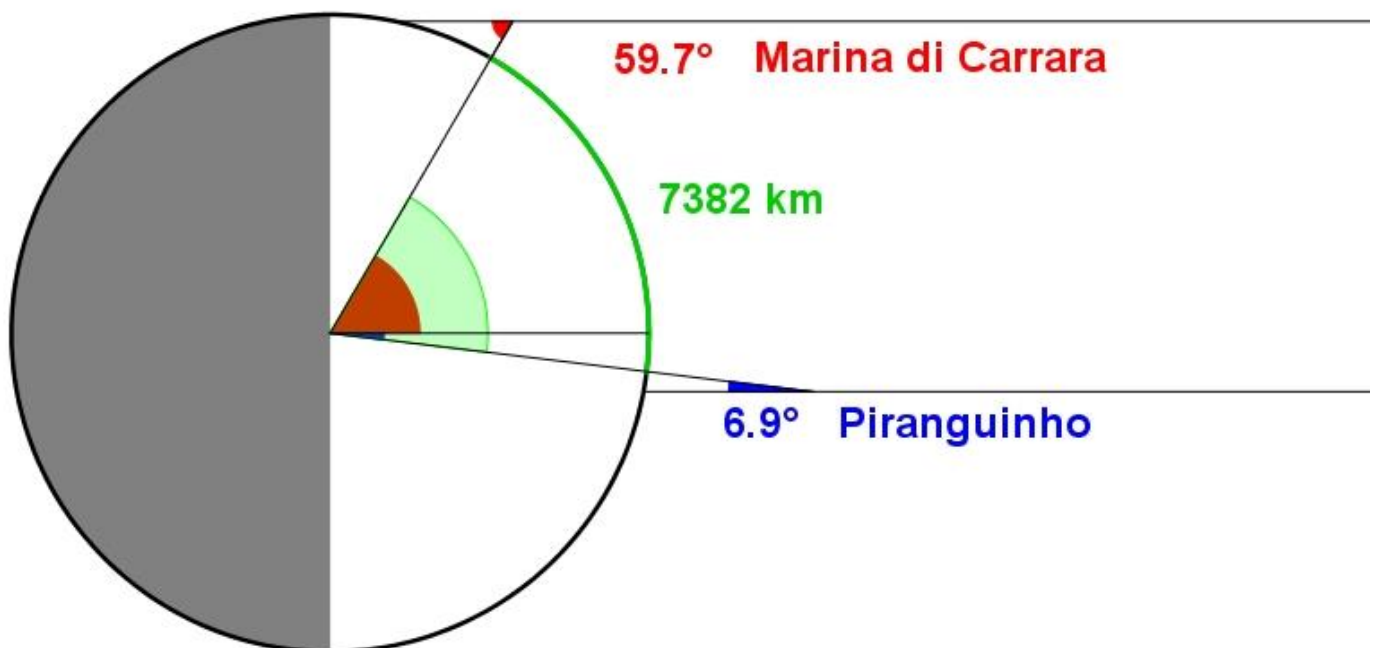


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Marina di Carrara	Italy	M Buonarroti primary school	44.045	10.031

Date	Gnomon	Shadow	Angle
07 February	10 cm	17.1 cm	59.7°

07 February 2017 (Marina di Carrara-ITALY) Latitude: 44.033 °

07 February 2017 (Piranguinho-BRAZIL) Latitude: -22.411 °



$$\text{circumference} = \frac{360^\circ \times 7382 \text{ km}}{59.7^\circ + 6.9^\circ} = 39903 \text{ km}$$



Merlara, Italy

February 2017

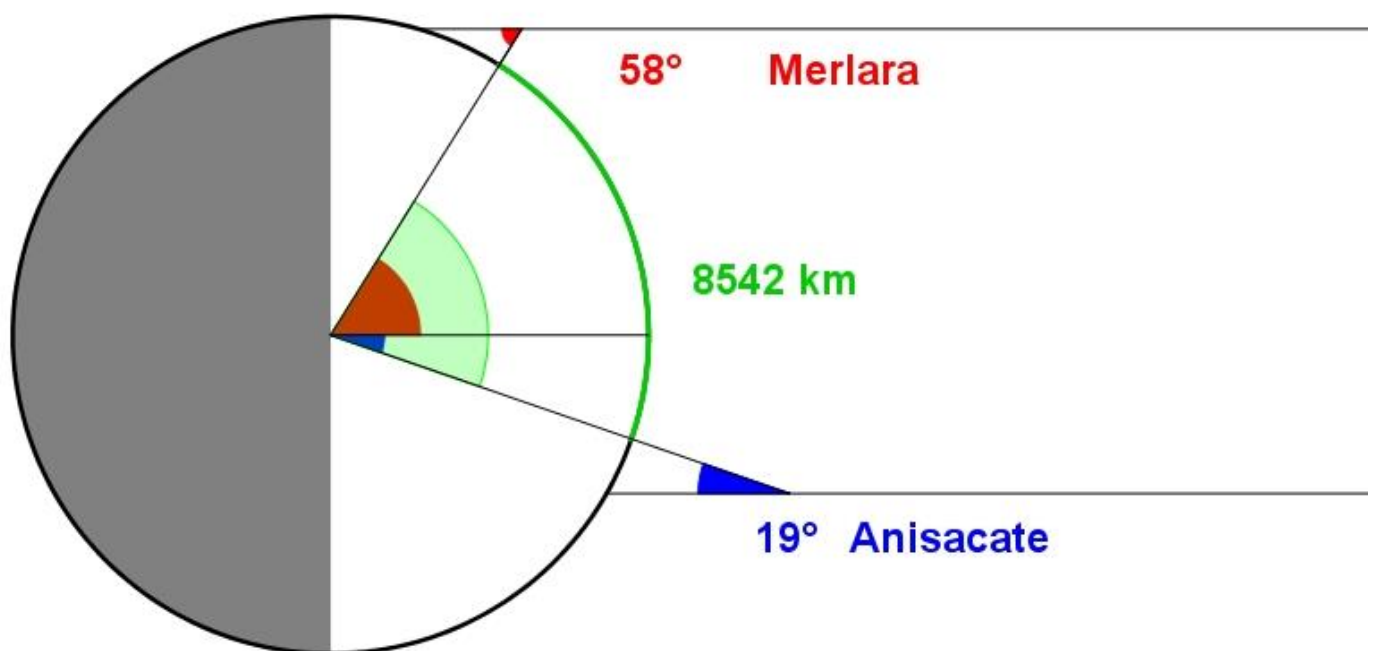


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Merlara	Italy	Lower Secondary School "Dante Alighieri"	45.166	11.433

Date	Gnomon	Shadow	Angle
14 February	100 cm	160 cm	58°
20 February	100 cm	146 cm	55.6°

14 February 2017 (Merlara-ITALY) Latitude: 45.166 °

14 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 8542 \text{ km}}{58^\circ + 19^\circ} = 39937 \text{ km}$$



Petroupoli, Greece

February 2017

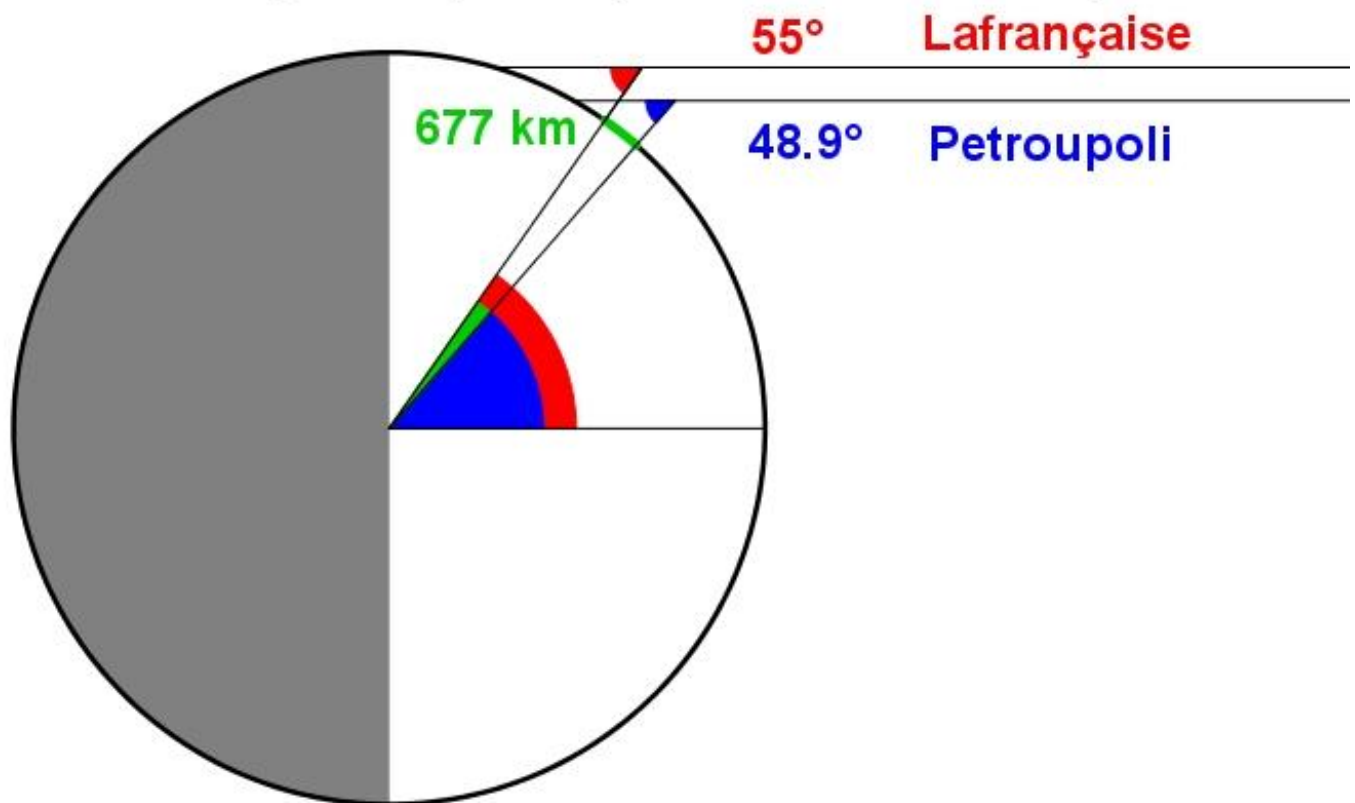


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Petroupoli	Greece	4o Junior High School	38.036	23.674

Date	Gnomon	Shadow	Angle
02 February	52.3 cm	74 cm	54.7°
20 February	52.3 cm	60 cm	48.9°

20 February 2017 (Lafrançaise-FRANCE 44.127)

20 February 2017 (Petroupoli-GREECE 38.036)



$$\text{circumference} = \frac{360^\circ \times 677 \text{ km}}{55^\circ - 48.9^\circ} = 39954 \text{ km}$$



Piraeus, Greece

February 2017

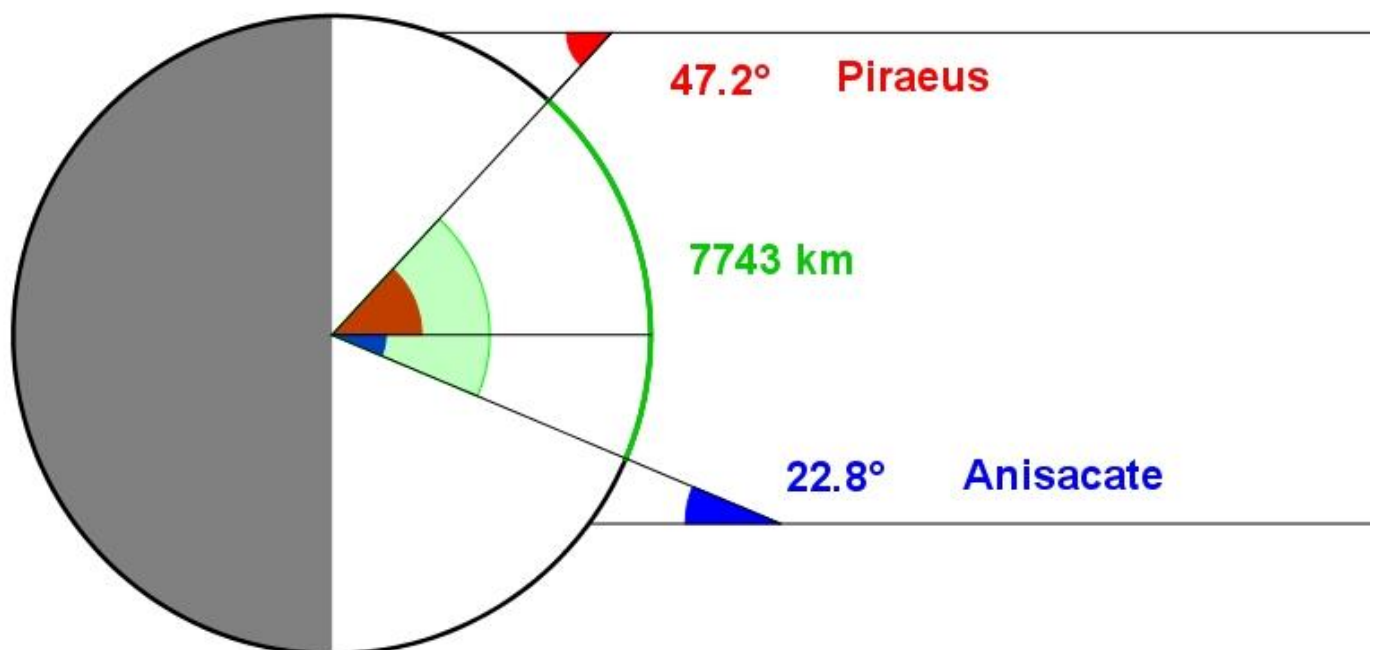


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piraeus	Greece	2nd Junior High School of Korydallos	37.977	23.655

Date	Gnomon	Shadow	Angle
01 February	100 cm	142 cm	54.8°
09 February	100 cm	125 cm	51.3°
20 February	100 cm	112 cm	48.2°
24 February	100 cm	108 cm	47.2°

24 February 2017 (Piraeus-GREECE) Latitude: 37.977 °

24 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 7743 \text{ km}}{47.2^\circ + 22.8^\circ} = 39821 \text{ km}$$



Piranguinho, Brazil

February 2017

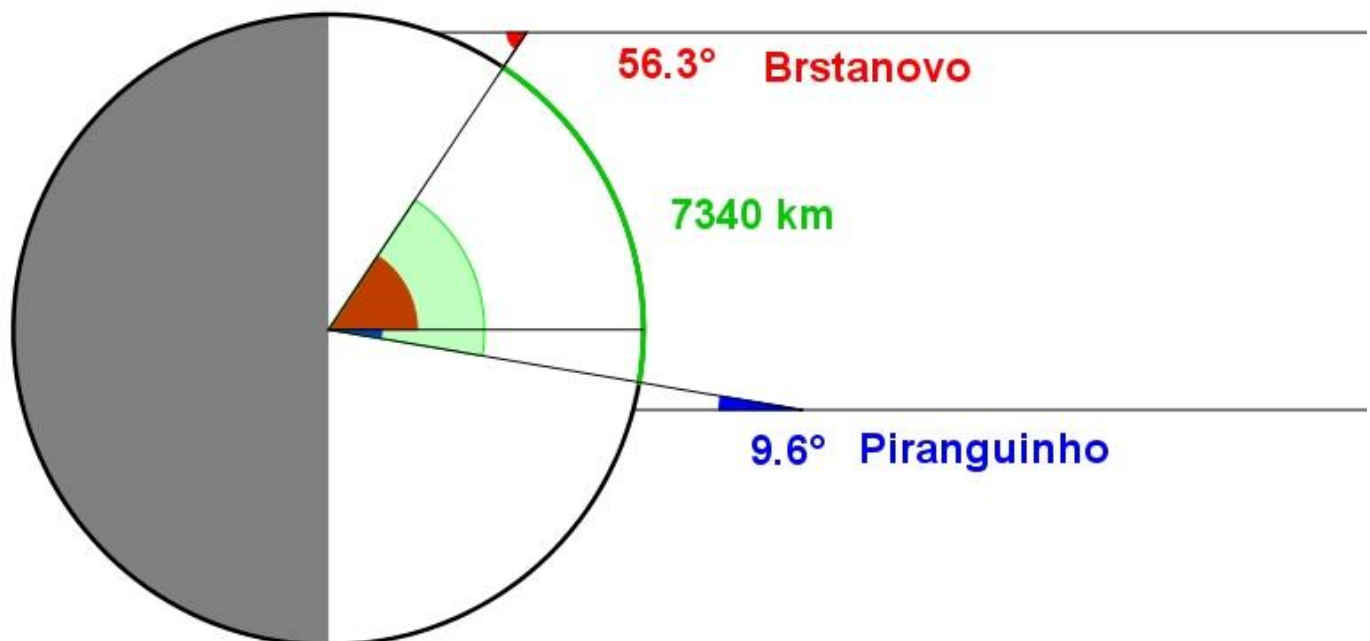


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535

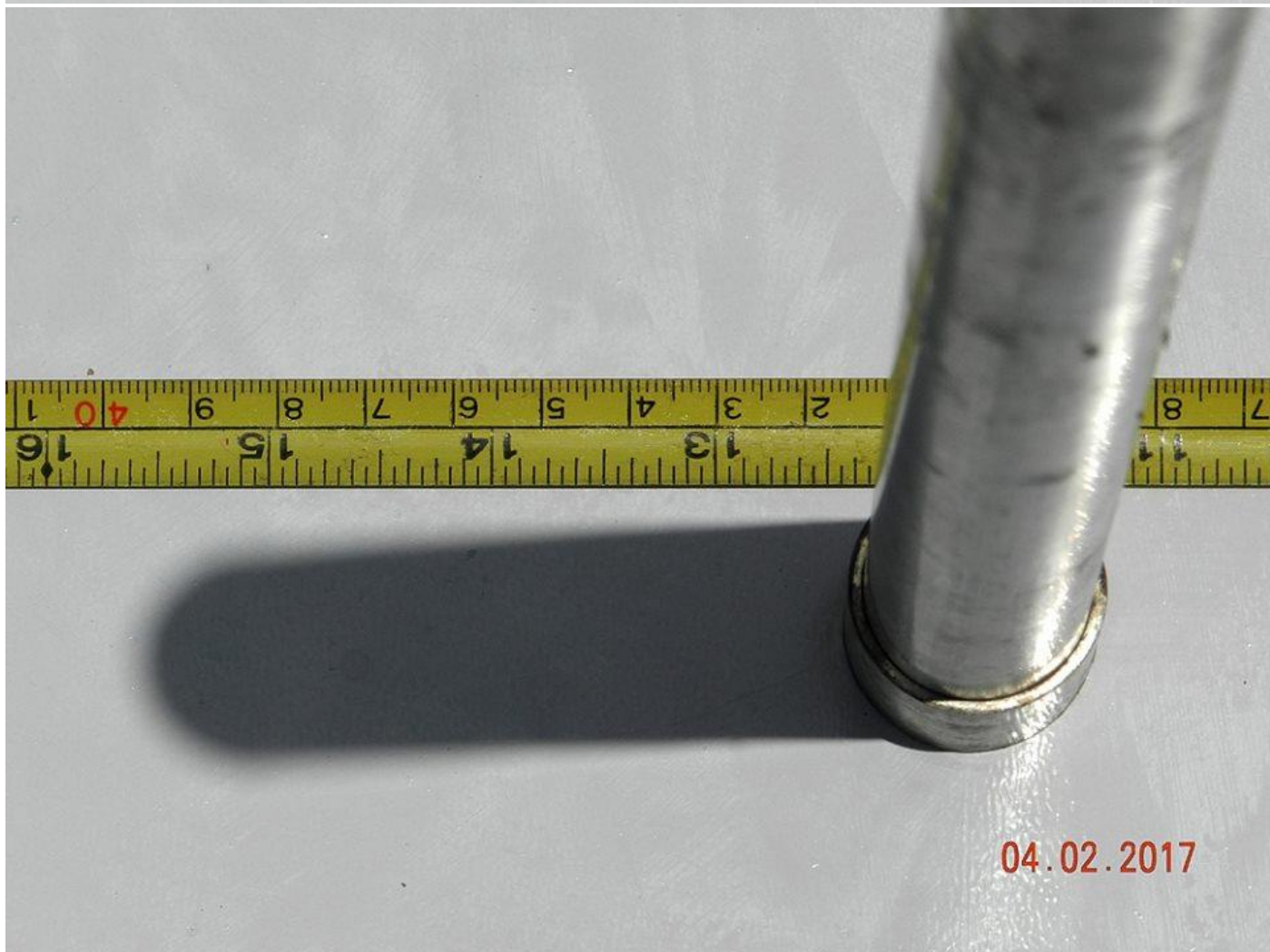
Date	Gnomon	Shadow	Angle
04 February	70 cm	-8 cm	-6.5°
05 February	70 cm	-7.8 cm	-6.4°
07 February	70 cm	-8.5 cm	-6.9°
08 February	70 cm	-9.1 cm	-7.4°
09 February	70 cm	-9.6 cm	-7.8°
11 February	70 cm	-10.1 cm	-8.2°
13 February	70 cm	-10.6 cm	-8.6°
15 February	70 cm	-11.8 cm	-9.6°

15 February 2017 (Brstanovo-CROATIA) Latitude: 43.658 °

15 February 2017 (Piranguinho-BRAZIL) Latitude: -22.411 °



$$\text{circumference} = \frac{360^\circ \times 7340 \text{ km}}{56.3^\circ + 9.6^\circ} = 40097 \text{ km}$$



Rio de Janeiro CENOM, Brazil

February 2017

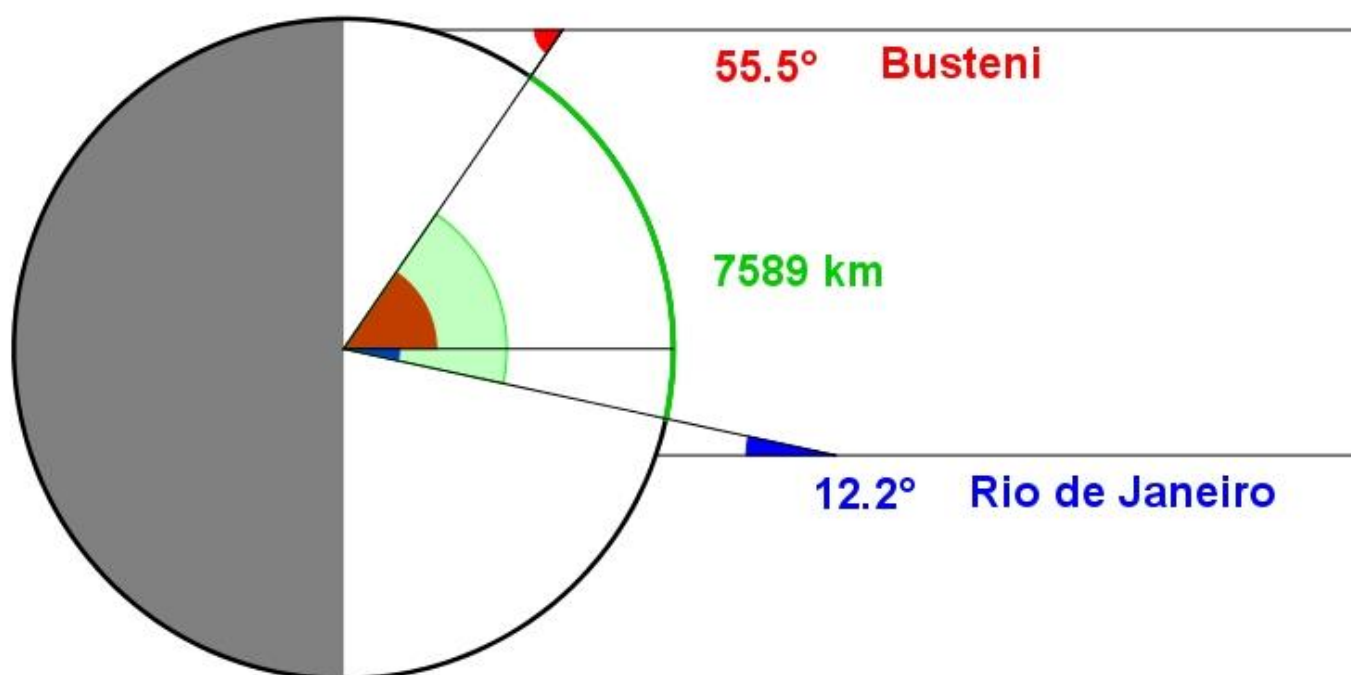


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
10 February	74 cm	-10 cm	-7.7°
14 February	74 cm	-10 cm	-7.7°
15 February	74 cm	-12 cm	-9.2°
17 February	74 cm	-12 cm	-9.2°
21 February	74 cm	-14 cm	-10.7°
22 February	74 cm	-14 cm	-10.7°
23 February	74 cm	-16 cm	-12.2°
24 February	74 cm	-16 cm	-12.2°

23 February 2017 (Busteni-ROMANIA) Latitude: 45.416 °

23 February 2017 (Rio de Janeiro-BRAZIL) Latitude: -22.89 °



$$\text{circumference} = \frac{360^\circ \times 7589 \text{ km}}{55.5^\circ + 12.2^\circ} = 40355 \text{ km}$$



Sfax, Tunisia

February 2017

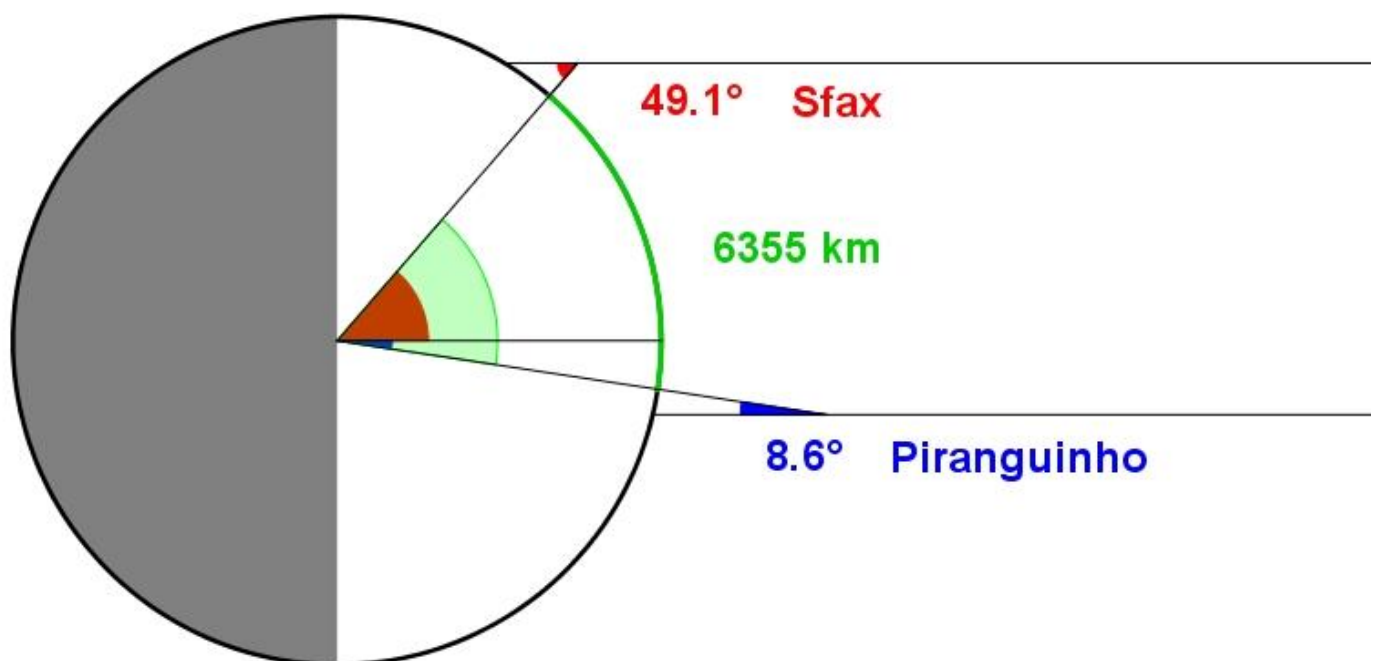


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Sfax	Tunisia	école de Sakiét Eddayer	34.789	10.780

Date	Gnomon	Shadow	Angle
13 February	100 cm	115.5 cm	49.1 °

13 February 2017 (Sfax-TUNISIA) Latitude: 34.789 °

13 February 2017 (Piranguinho-BRAZIL) Latitude: -22.411 °



$$\text{circumference} = \frac{360^\circ \times 6355 \text{ km}}{49.1^\circ + 8.6^\circ} = 39650 \text{ km}$$



Skopje, FYROM

February 2017

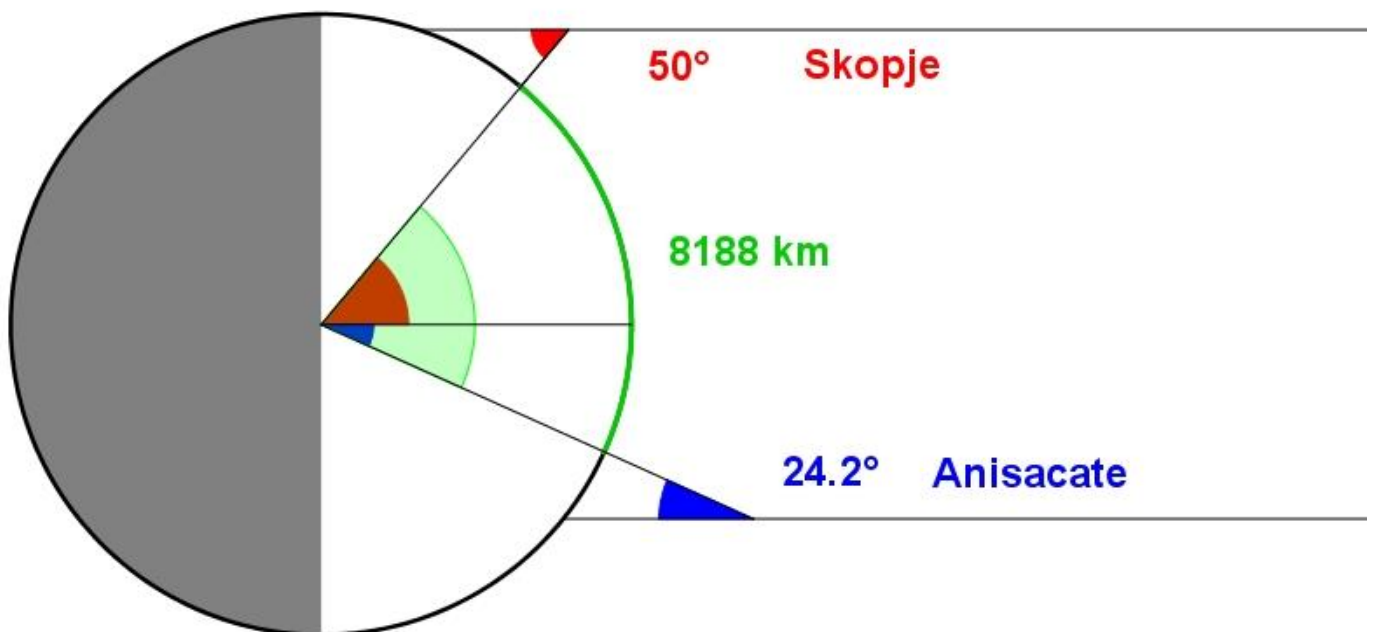


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Skopje	FYROM	OOU "Nevena Georgieva - Dunja"	41.980	21.445

Date	Gnomon	Shadow	Angle
28 February	95.5 cm	11 cm	50.0°

28 February 2017 (Skopje-FYROM) Latitude: 41.98 °

28 February 2017 (Anisacate-ARGENTINA) Latitude: -31.717 °



$$\text{circumference} = \frac{360^\circ \times 8188 \text{ km}}{50^\circ + 24.2^\circ} = 39726 \text{ km}$$



