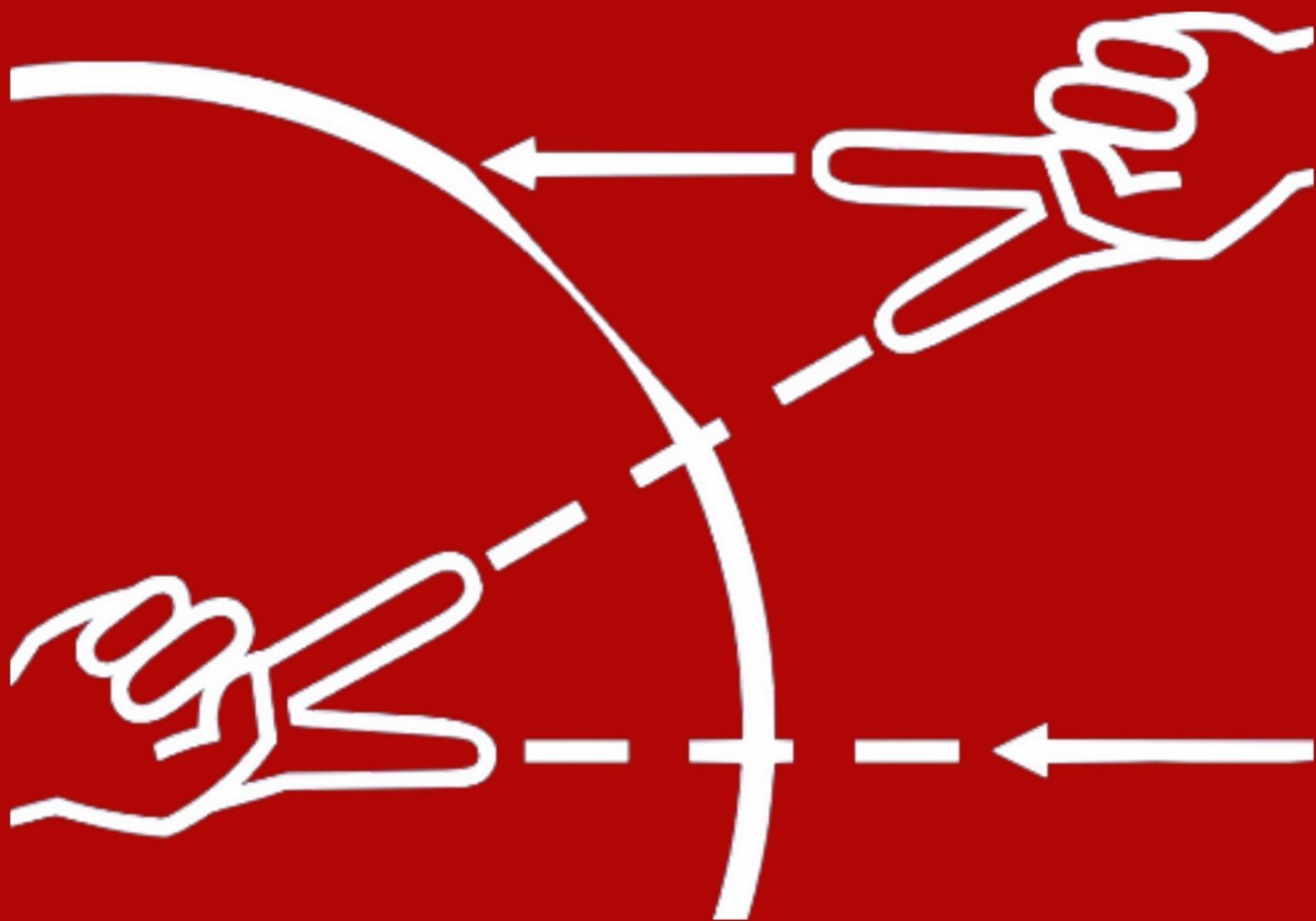


Eratosthenes



3 Continents

7 Countries

14 Schools

62 Measures

3 Continents

7 Countries

14 Schools

62 Measures

ARGENTINA (2)

Alta Gracia, Pergamino

BRAZIL (3)

Itajubá, Piranguinho, Rio de Janeiro

CHILE (1)

Santiago

FRANCE (1)

Lafrançaise

GREECE (5)

Aigio, Athens, Ilion 3, Ilion 11, Piraeus

INDIA (1)

Dhoplur

ROMANIA (1)


Busteni

Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417
	Athens	Greece	Experimental College Agion Anargyron	38.027	23.726
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535
	Dholpur	India	GSSS Tagawali	26.708	77.908
	Ilion	Greece	3rd Junior High School of Ilion	38.037	23.712
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697
	Itajubá	Brazil	Universidade Federal de Itajubá	-22.415	-45.449
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237
	Pergamino	Argentina	Cesar Arrigo	-33.923	-60.573
	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
	Santiago	Chile	Clube de Astronomia do Rio de Janeiro	-33.417	-70.583

Aigio, Greece

January 2018

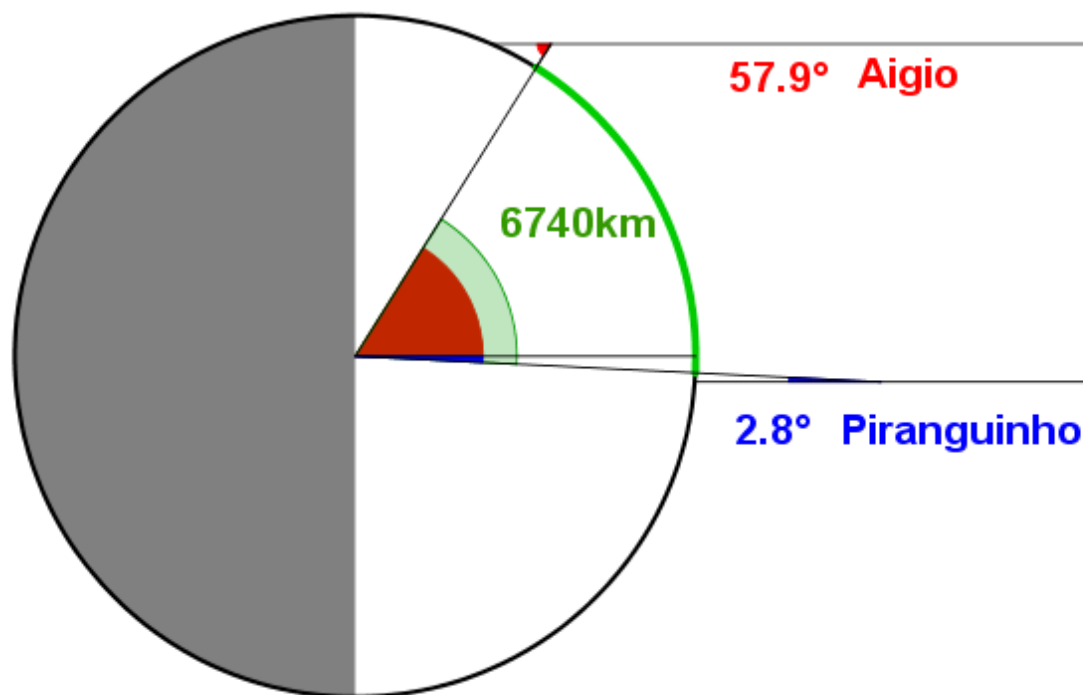


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079

Date	Gnomon	Shadow	Angle
16 January 2018	50 cm	84 cm	59.2 °
19 January 2018	30 cm	49 cm	58.5 °

23/01/2018 (Aigio-Greece) Latitude: 38.252°

23/01/2018 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 6740\text{km}}{57.9^\circ + 2.8^\circ} = 39974 \text{ km}$$



Alta Gracia, Argentina

January 2018

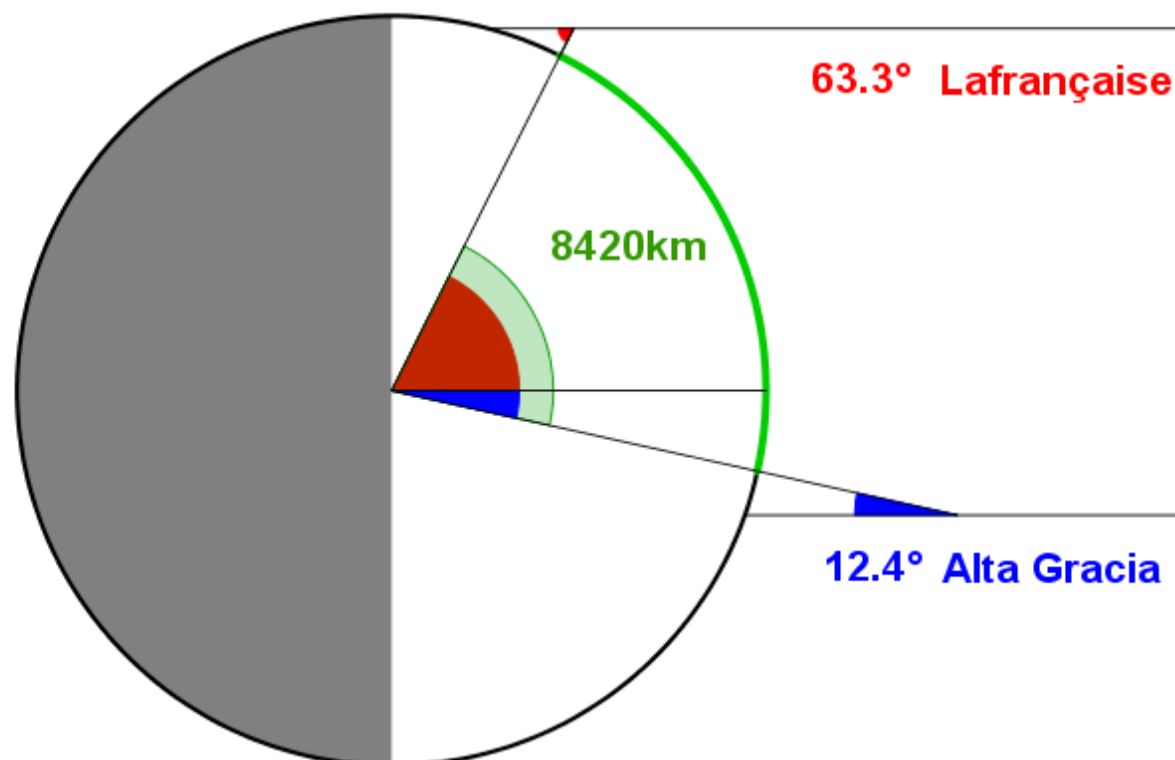


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417

Date	Gnomon	Shadow	Angle
06 January 2018	75 cm	-12 cm	-9.1 °
08 January 2018	75 cm	-11.4 cm	-8.6 °
09 January 2018	75 cm	-11.6 cm	-8.8 °
09 January 2018	39 cm	-6 cm	-8.7 °
11 January 2018	75 cm	-12.5 cm	-9.5 °
15 January 2018	75 cm	-13.5 cm	-10.2 °
16 January 2018	75 cm	-14 cm	-10.6 °
22 January 2018	75 cm	-15.1 cm	-11.4 °
25 January 2018	75 cm	-16.5 cm	-12.4 °
26 January 2018	75 cm	-17.0 cm	-12.8 °
29 January 2018	75 cm	-17.5 cm	-13.1 °

25/01/2018 (Lafrançaise-France) Latitude: 44.127°

25/01/2018 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 8420\text{km}}{63.3^\circ + 12.4^\circ} = 40042 \text{ km}$$



Athens, Greece

January 2018



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

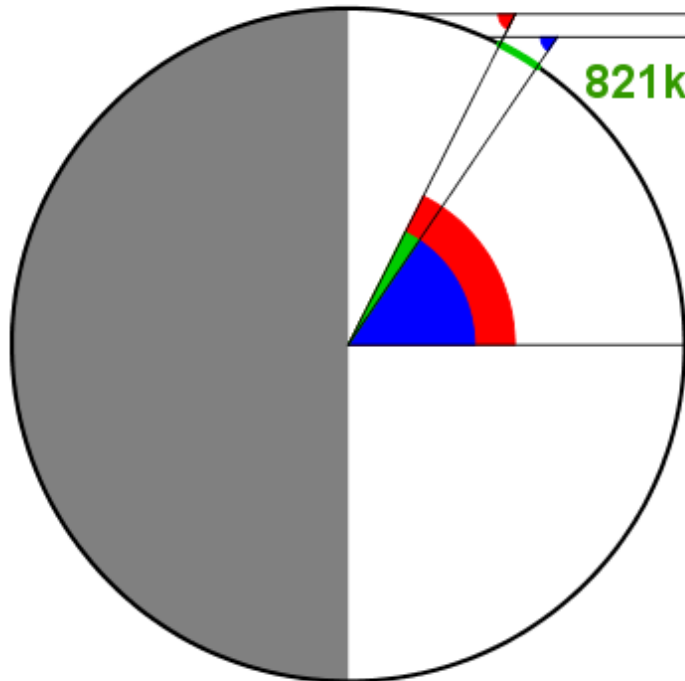
Date	Gnomon	Shadow	Angle
29 January 2018	247 cm	364 cm	55.8 °
30 January 2018	20.0 cm	29.0 cm	55.4 °
31 January 2018	49 cm	71 cm	55.4 °

29/01/2018 (Busteni-Romania) Latitude: 45.416°

29/01/2018 (Athens-Greece) Latitude: 38.027°

63.2° Busteni

55.8° Athens



821km


$$\text{circumference} = \frac{360^\circ \times 821\text{km}}{63.2^\circ - 55.8^\circ} = 39941 \text{ km}$$



Busteni, Romania

January 2018

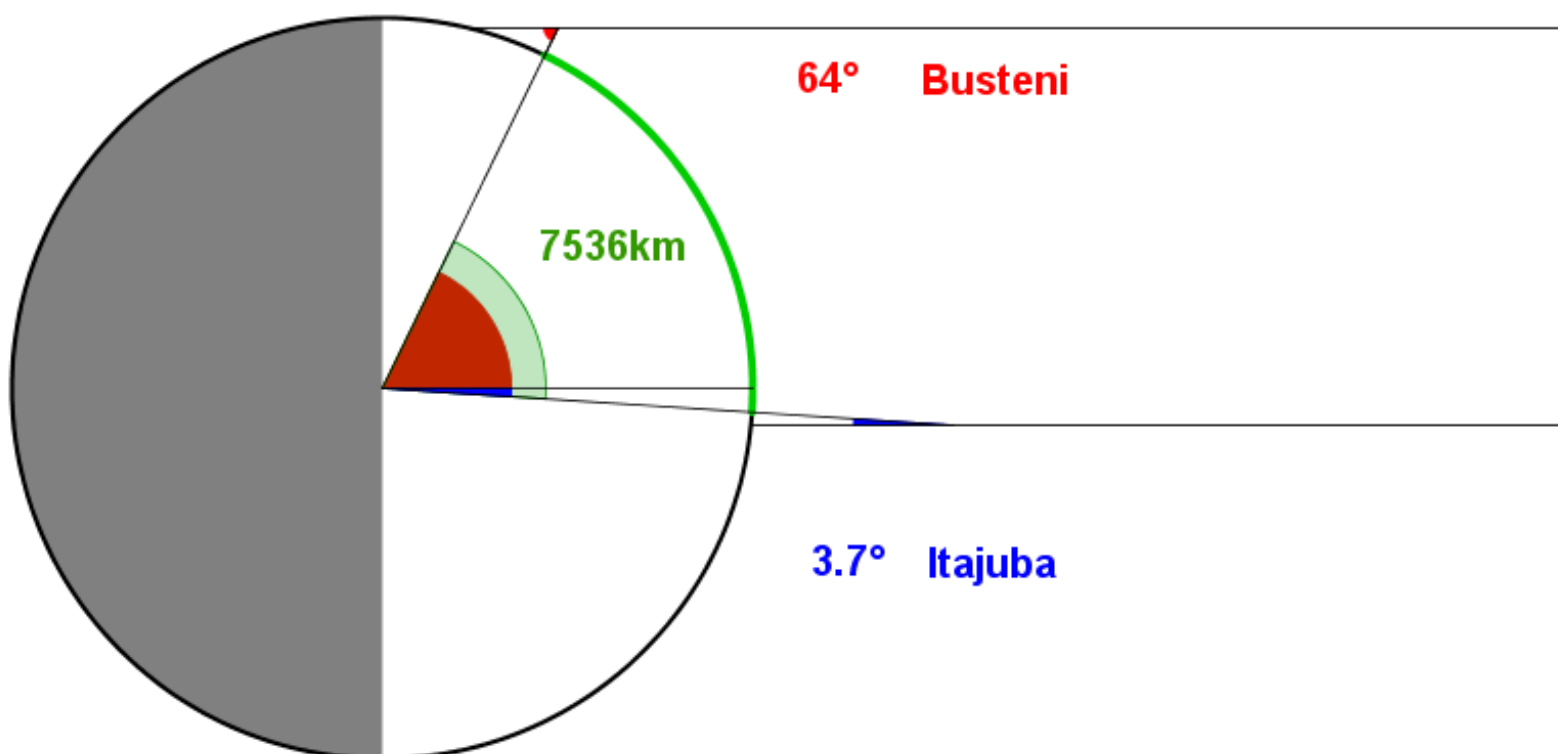


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535

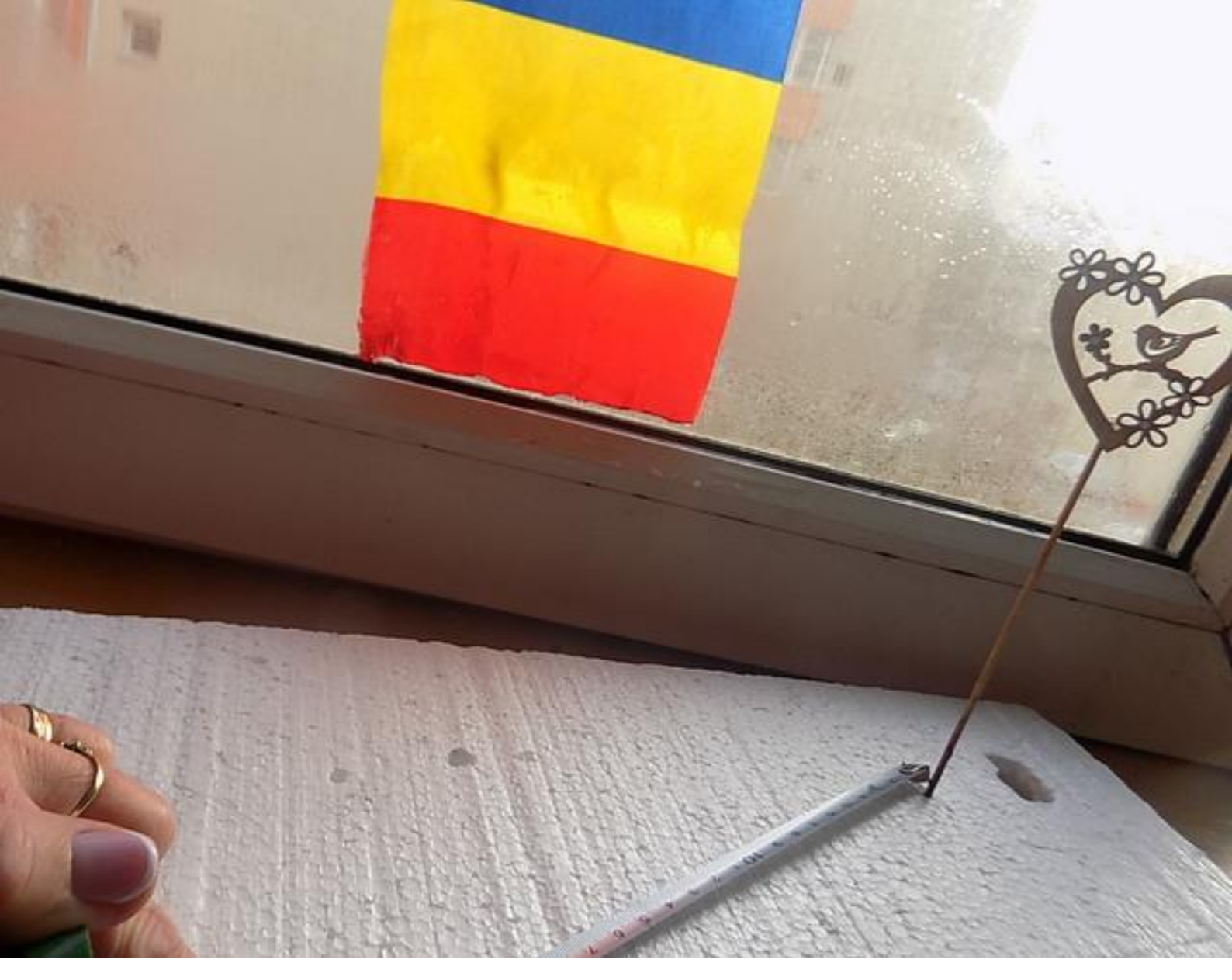
Date	Gnomon	Shadow	Angle
05 January 2018	12.5 cm	30 cm	67.4 °
09 January 2018	12.5 cm	30 cm	67.4 °
15 January 2018	19.7 cm	45 cm	66.4 °
16 January 2018	19 cm	43 cm	66.2 °
18 January 2018	18 cm	40 cm	65.8 °
19 January 2018	16.3 cm	36 cm	65.6 °
24 January 2018	23.4 cm	49 cm	64.5 °
25 January 2018	31.4 cm	65 cm	64.2 °
26 January 2018	16.1 cm	33 cm	64 °
29 January 2018	20.2 cm	40 cm	63.2 °
30 January 2018	14.8 cm	29.0 cm	63 °
31 January 2018	12.9 cm	25 cm	62.7 °

26/01/2018 (Busteni-Romania) Latitude: 45.416°

26/01/2018 (Itajuba-Brazil) Latitude: -22.415°




$$\text{circumference} = \frac{360^\circ \times 7536\text{km}}{64^\circ + 3.7^\circ} = 40073 \text{ km}$$



Dholpur, India

January 2018

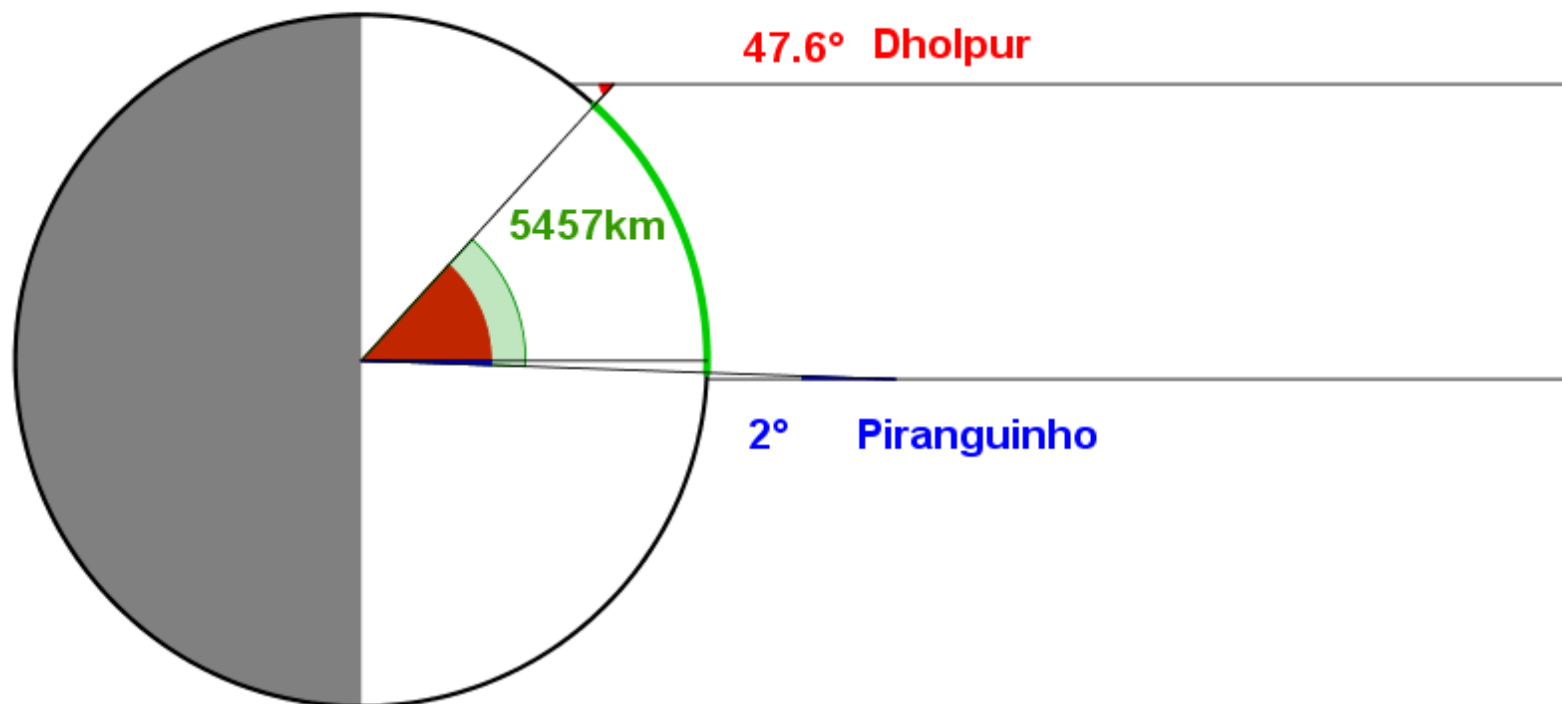


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Dholpur	India	GSSS Tagawali	26.708	77.908

Date	Gnomon	Shadow	Angle
16 January 2018	68 cm	61 cm	41.9 °
17 January 2018	58 cm	63.5 cm	47.6 °

17/01/2018 (Dholpur-India) Latitude: 26.708°

17/01/2018 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 5457\text{km}}{47.6^\circ + 2^\circ} = 39607 \text{ km}$$

राजकीय उच्च माध्यमिक विद्यालय तगावली, धौ



...ted Vigyan Prasar Network of Science Clubs

Club Name : Tagawali Vigyan Club

Club Unique Authorization Number : VP-RJ0060



Ilion 3rd, Greece

January 2018

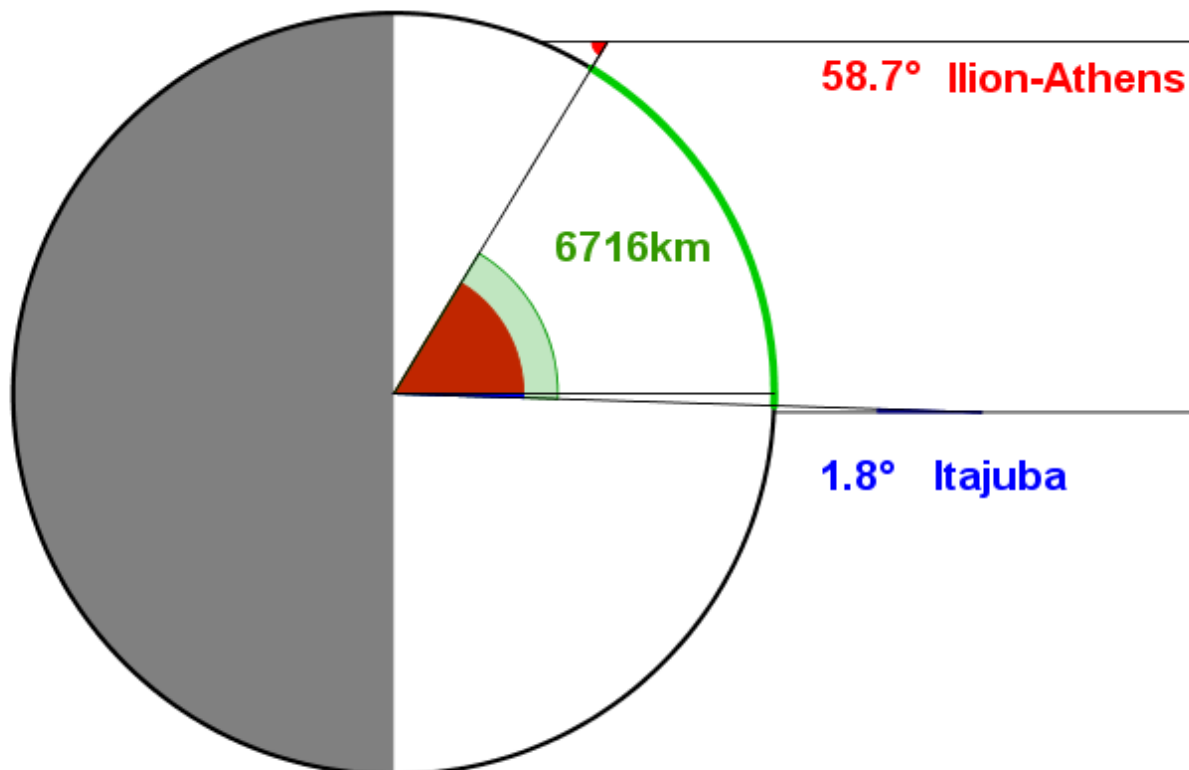


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ilion	Greece	3rd Junior High School of Ilion	38.037	23.712

Date	Gnomon	Shadow	Angle
17 January 2018	100 cm	163.8 cm	58.6 °
19 January 2018	100 cm	164.2 cm	58.7 °
26 January 2018	100 cm	158.3 cm	57.7 °

19/01/2018 (Ilion-Athens-Greece) Latitude: 38.037°

19/01/2018 (Itajuba-Brazil) Latitude: -22.415°



$$\text{circumference} = \frac{360^\circ \times 6716\text{km}}{58.7^\circ + 1.8^\circ} = 39963 \text{ km}$$



Ilion 11th, Greece

January 2018

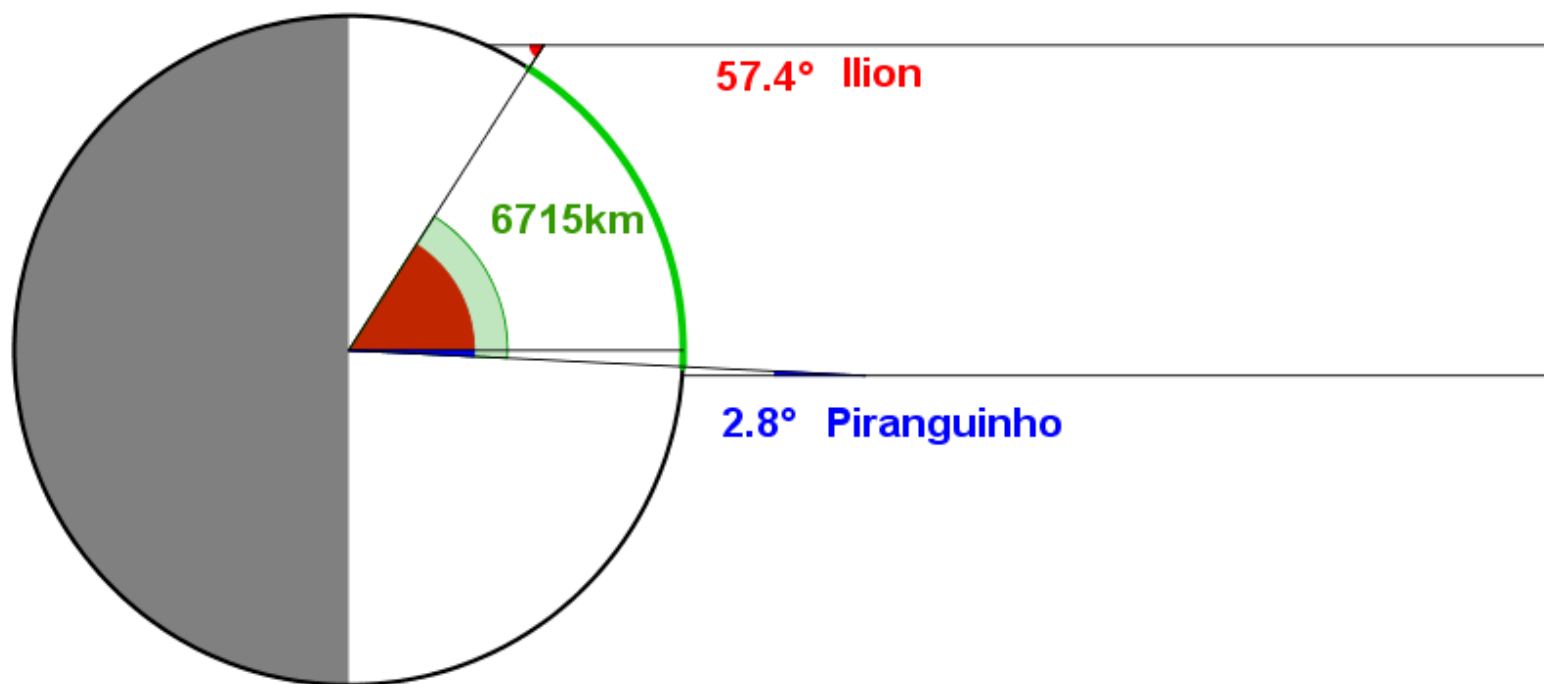


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697

Date	Gnomon	Shadow	Angle
23 January 2018	30.4 cm	47.5 cm	57.4 °
25 January 2018	30.4 cm	46.7 cm	56.9 °

23/01/2018 (Ilion-Greece) Latitude: 38.033°

23/01/2018 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 6715\text{km}}{57.4^\circ + 2.8^\circ} = 40156 \text{ km}$$



Itajuba, Brazil

January 2018

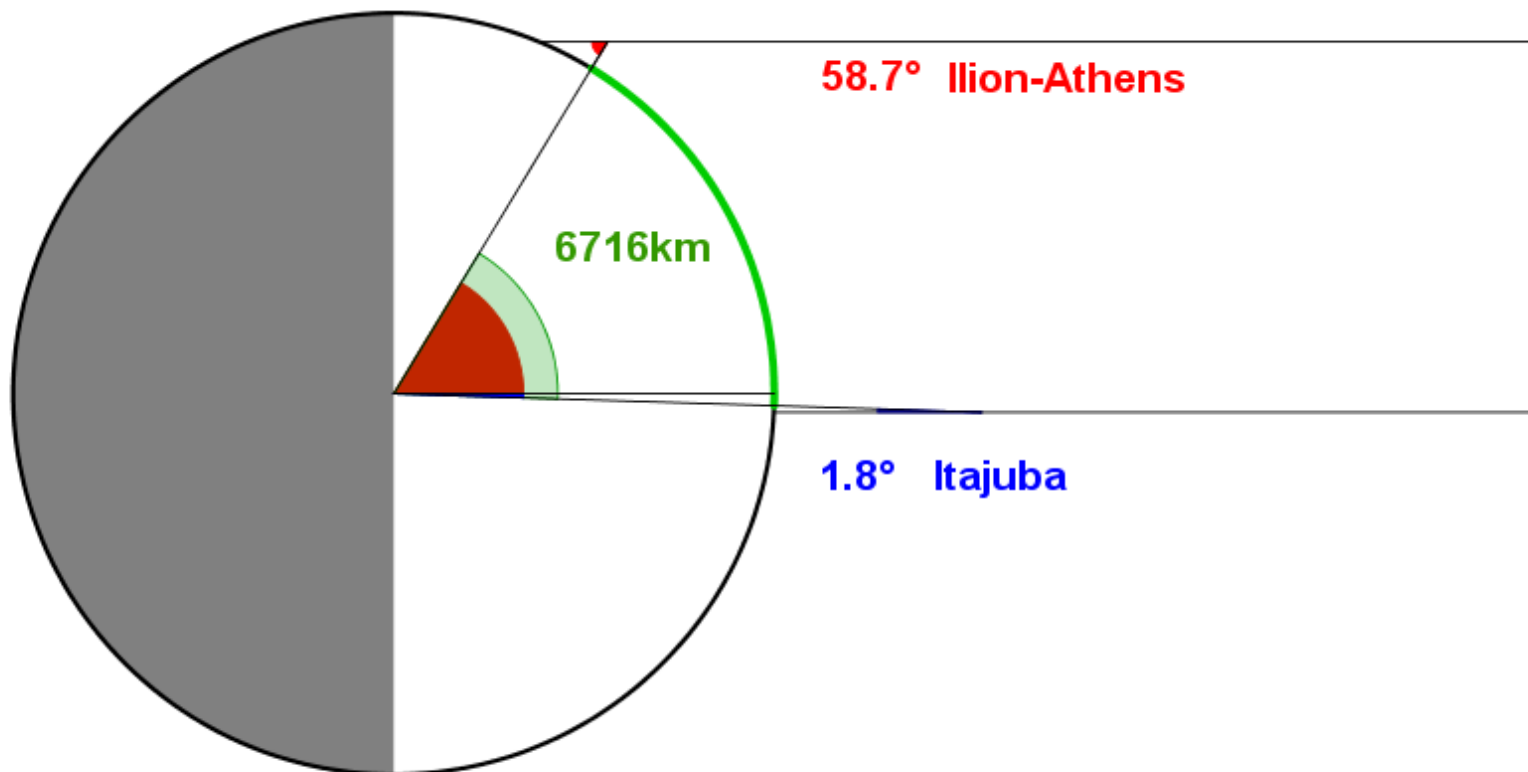


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Itajubá	Brazil	Universidade Federal de Itajubá	-22.415	-45.449

Date	Gnomon	Shadow	Angle
19 January 2018	47.3 cm	-1.5 cm	-1.8 °
26 January 2018	47.3 cm	-3.1 cm	-3.7 °

19/01/2018 (Ilion-Athens-Greece) Latitude: 38.037°

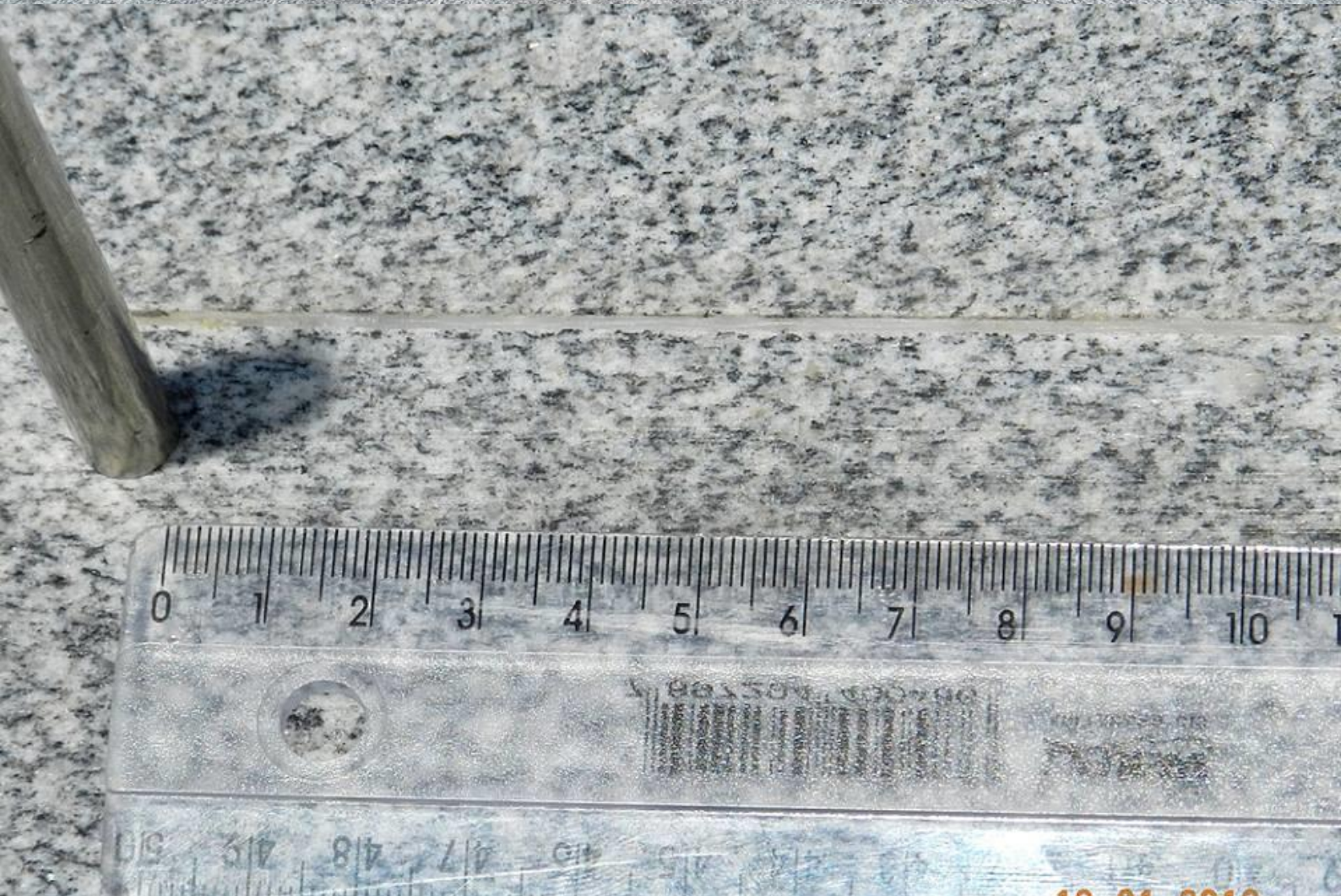
19/01/2018 (Itajuba-Brazil) Latitude: -22.415°



$$\text{circumference} = \frac{360^\circ \times 6716\text{km}}{58.7^\circ + 1.8^\circ} = 39963 \text{ km}$$




26.01.2018



Lafrançaise, France

January 2018

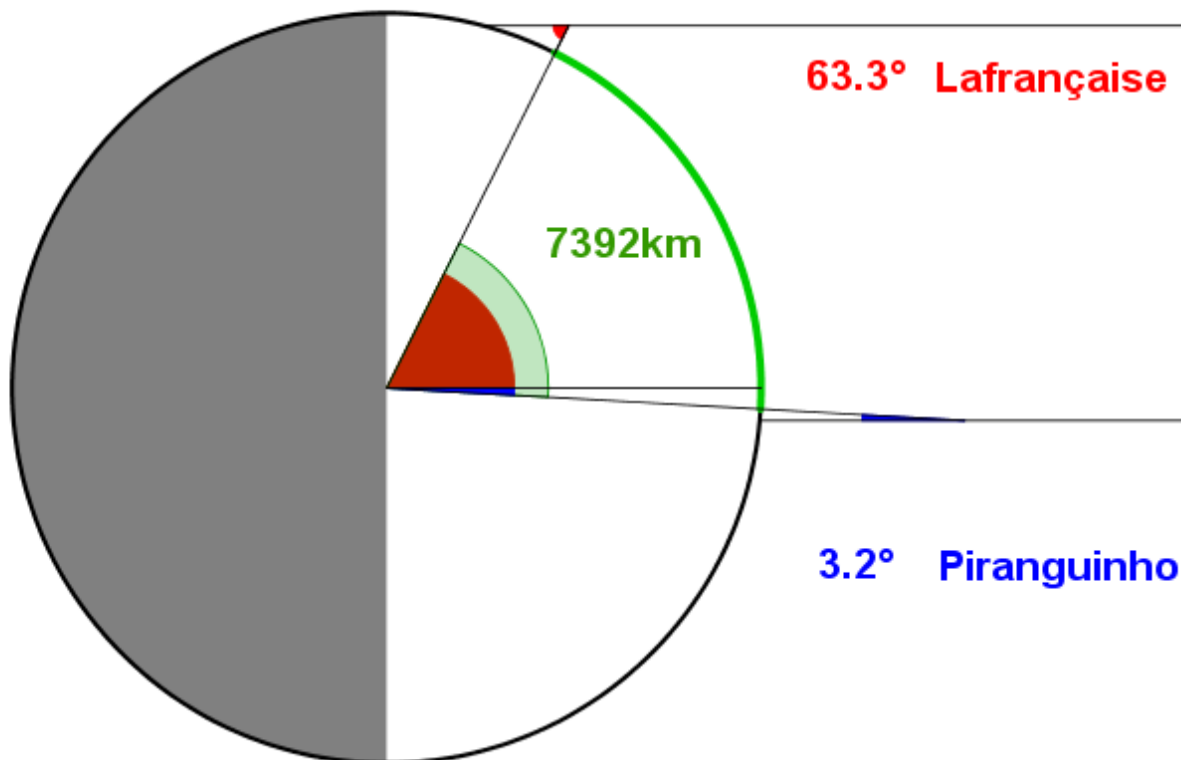


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237

Date	Gnomon	Shadow	Angle
19 January 2018	100 cm	206 cm	64.1 °
25 January 2018	100 cm	199 cm	63.3 °

25/01/2018 (Lafrançaise-France) Latitude: 44.127°

25/01/2018 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 7392\text{km}}{63.3^\circ + 3.2^\circ} = 40017 \text{ km}$$



Pergamino, Argentina

January 2018

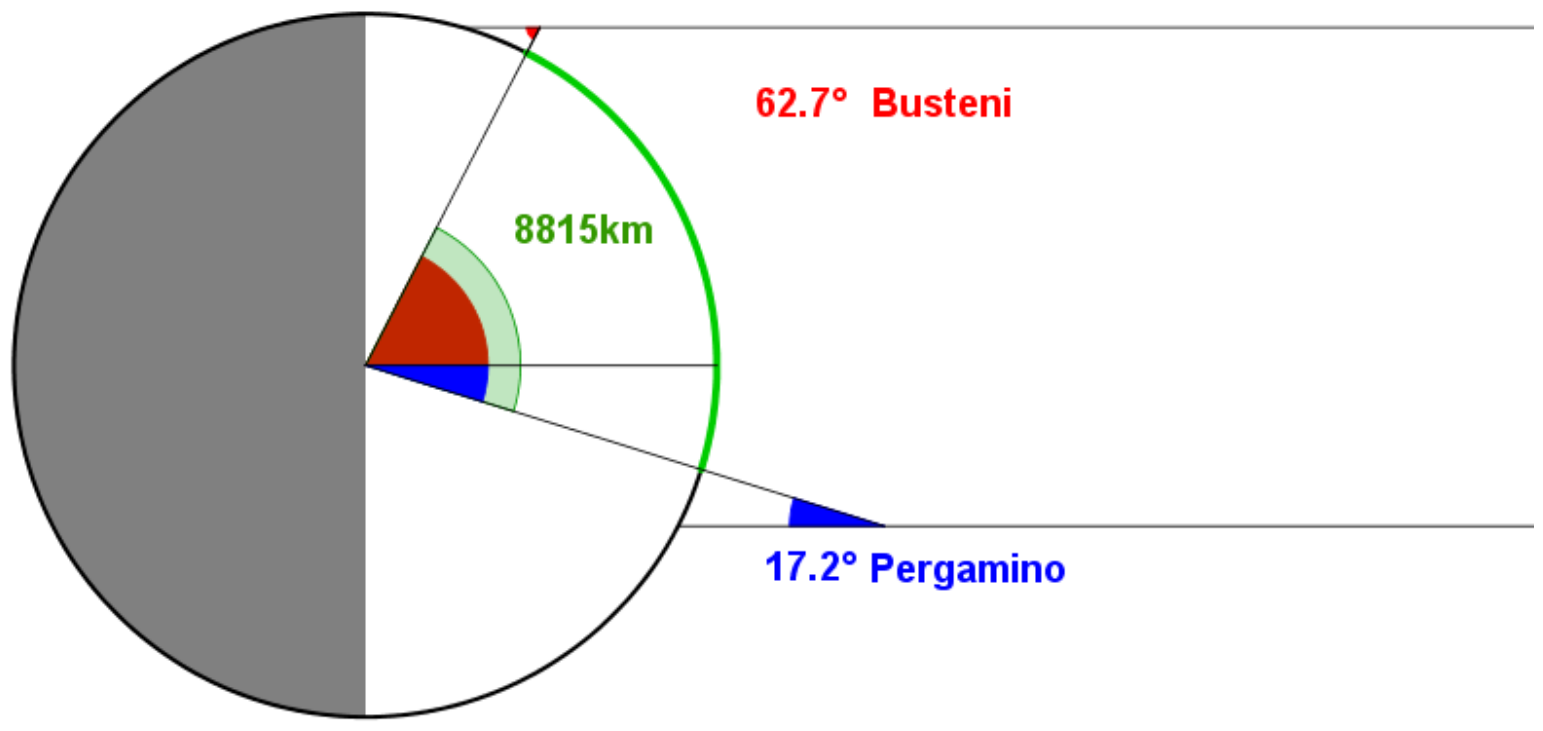


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Pergamino	Argentina	Cesar Arrigo	-33.923	-60.573

Date	Gnomon	Shadow	Angle
31 January 2018	105 cm	-32.5 cm	-17.2 °

31/01/2018 (Busteni-Romania) Latitude: 45.416°

31/01/2018 (Pergamino-Argentina) Latitude: -33.923°



circumference = $\frac{360^\circ \times 8815\text{km}}{62.7^\circ + 17.2^\circ} = 39717 \text{ km}$



Piraeus, Greece

January 2018

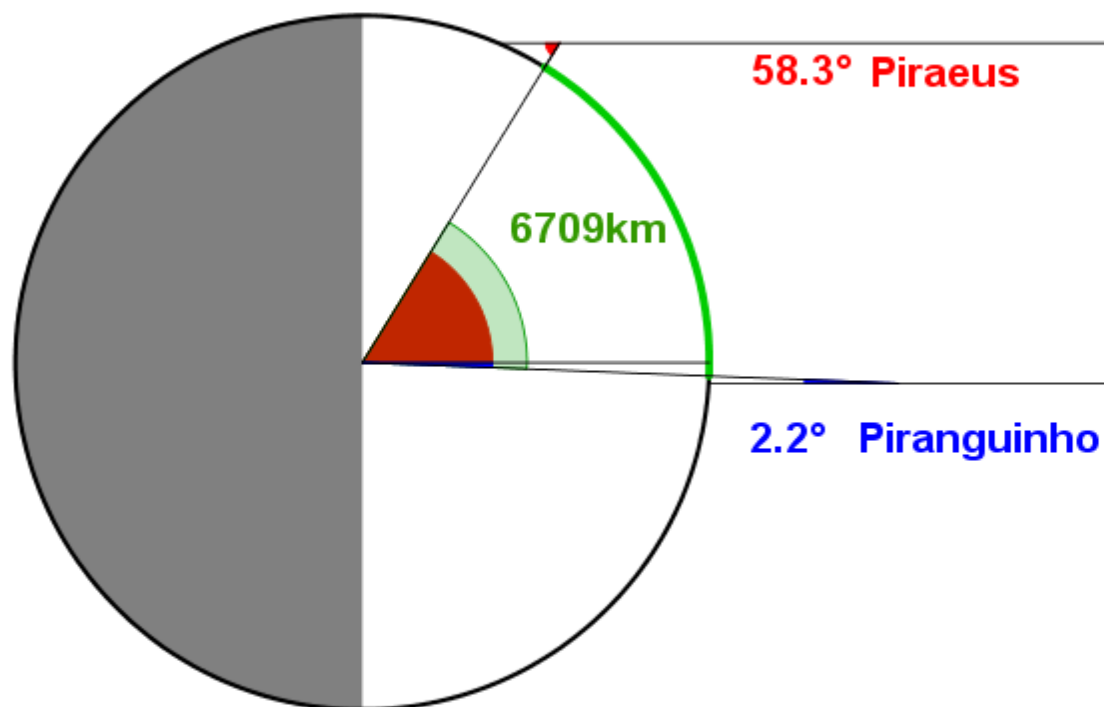


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piraeus	Greece	2nd Junior High School of Korydallos	37.977	23.655

Date	Gnomon	Shadow	Angle
09 January 2018	100 cm	171 cm	59.7 °
16 January 2018	100 cm	161 cm	58.2 °
18 January 2018	100 cm	162 cm	58.3 °

18/01/2018 (Piraeus-Greece) Latitude: 37.977°

18/01/2018 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 6709\text{km}}{58.3^\circ + 2.2^\circ} = 39921 \text{ km}$$



Piranguinho, Brazil

January 2018

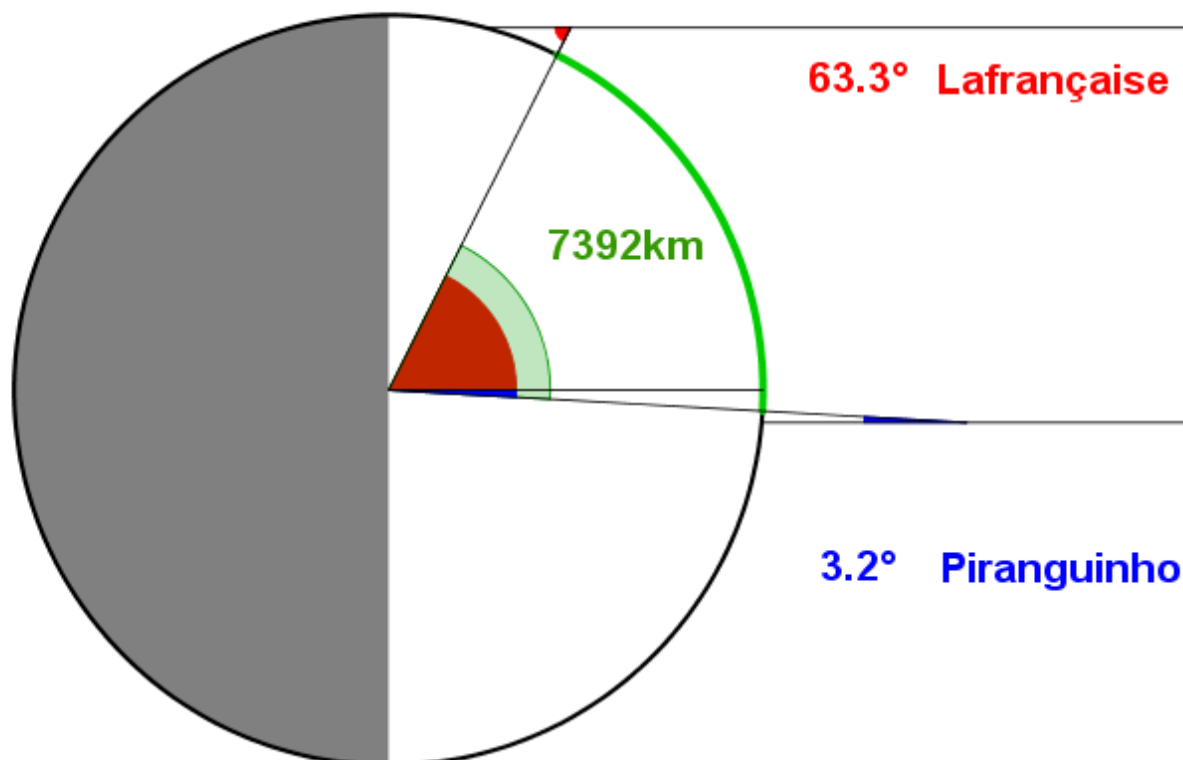


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535

Date	Gnomon	Shadow	Angle
02 January 2018	70 cm	0.8 cm	0.7 °
03 January 2018	70 cm	0.5 cm	0.4 °
09 January 2018	70 cm	-0.2 cm	-0.2 °
11 January 2018	70 cm	-0.5 cm	-0.4 °
15 January 2018	70 cm	-1.4 cm	-1.1 °
17 January 2018	70 cm	-2.5 cm	-2 °
18 January 2018	70 cm	-2.7 cm	-2.2 °
22 January 2018	70 cm	-3.1 cm	-2.5 °
23 January 2018	70 cm	-3.4 cm	-2.8 °
24 January 2018	70 cm	-4.3 cm	-3.5 °
25 January 2018	70 cm	-3.9 cm	-3.2 °

25/01/2018 (Lafrançaise-France) Latitude: 44.127°

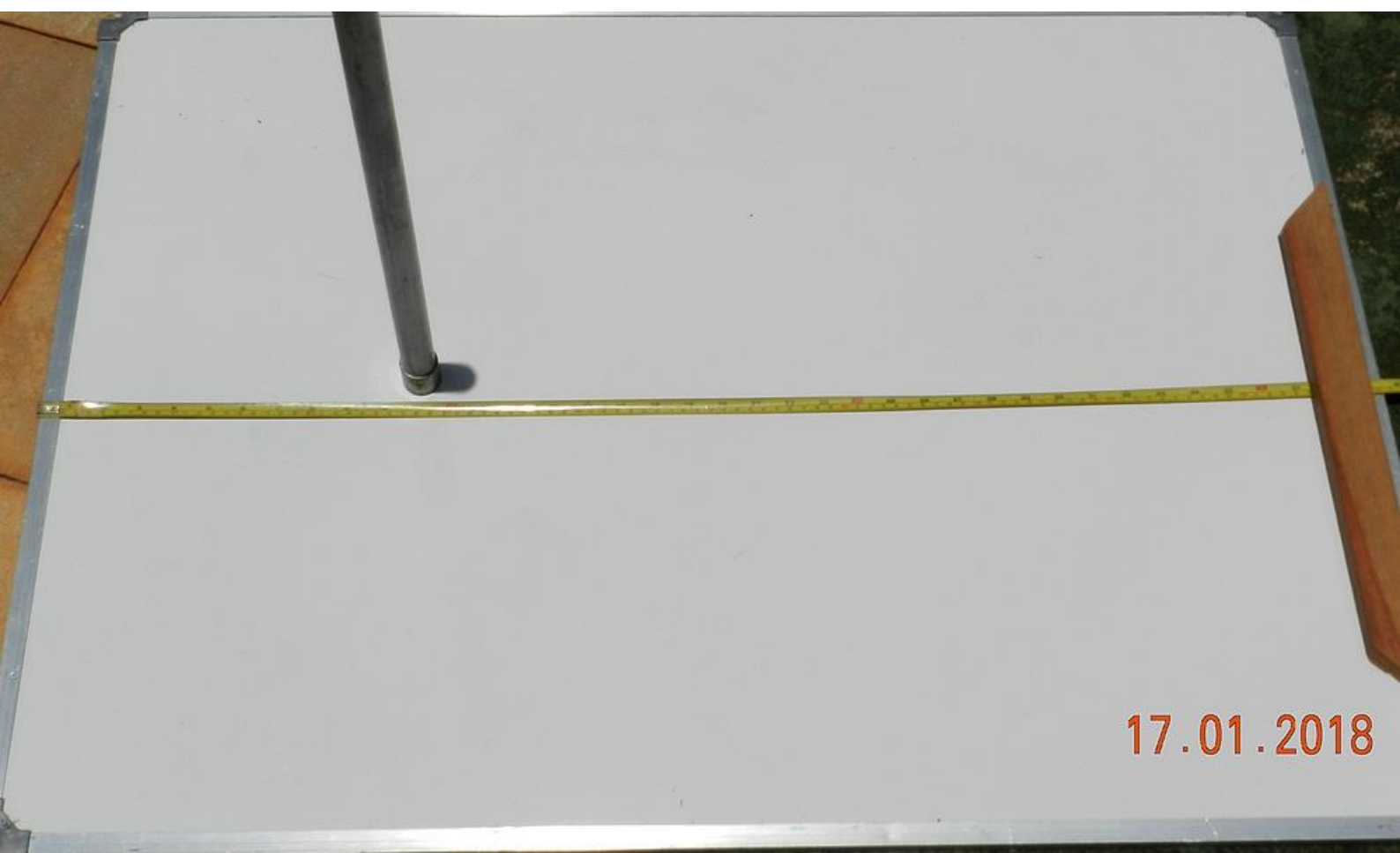
25/01/2018 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 7392\text{km}}{63.3^\circ + 3.2^\circ} = 40017 \text{ km}$$



17.01.2018




17.01.2018

Rio de Janeiro CENOM, Brazil

January 2018

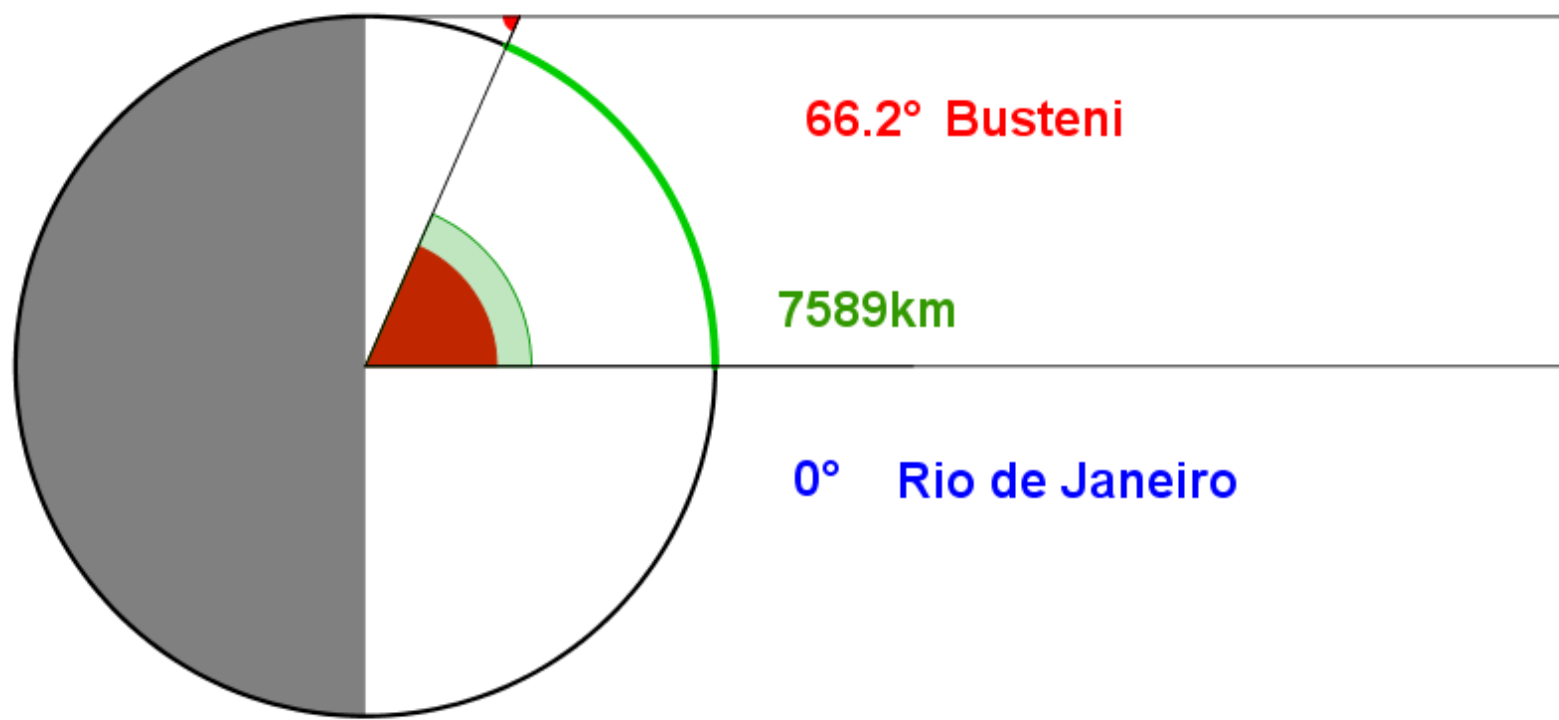


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
16 January 2018	100 cm	0 cm	0 °
17 January 2018	100 cm	0 cm	0 °
18 January 2018	100.0 cm	0.0 cm	0.0 °

16/01/2018 (Busteni-Romania) Latitude: 45.416°

16/01/2018 (Rio de Janeiro-Brazil) Latitude: -22.89°




$$\text{circumference} = \frac{360^\circ \times 7589\text{km}}{66.2^\circ + 0^\circ} = 41269 \text{ km}$$



Santiago, Chile

January 2018

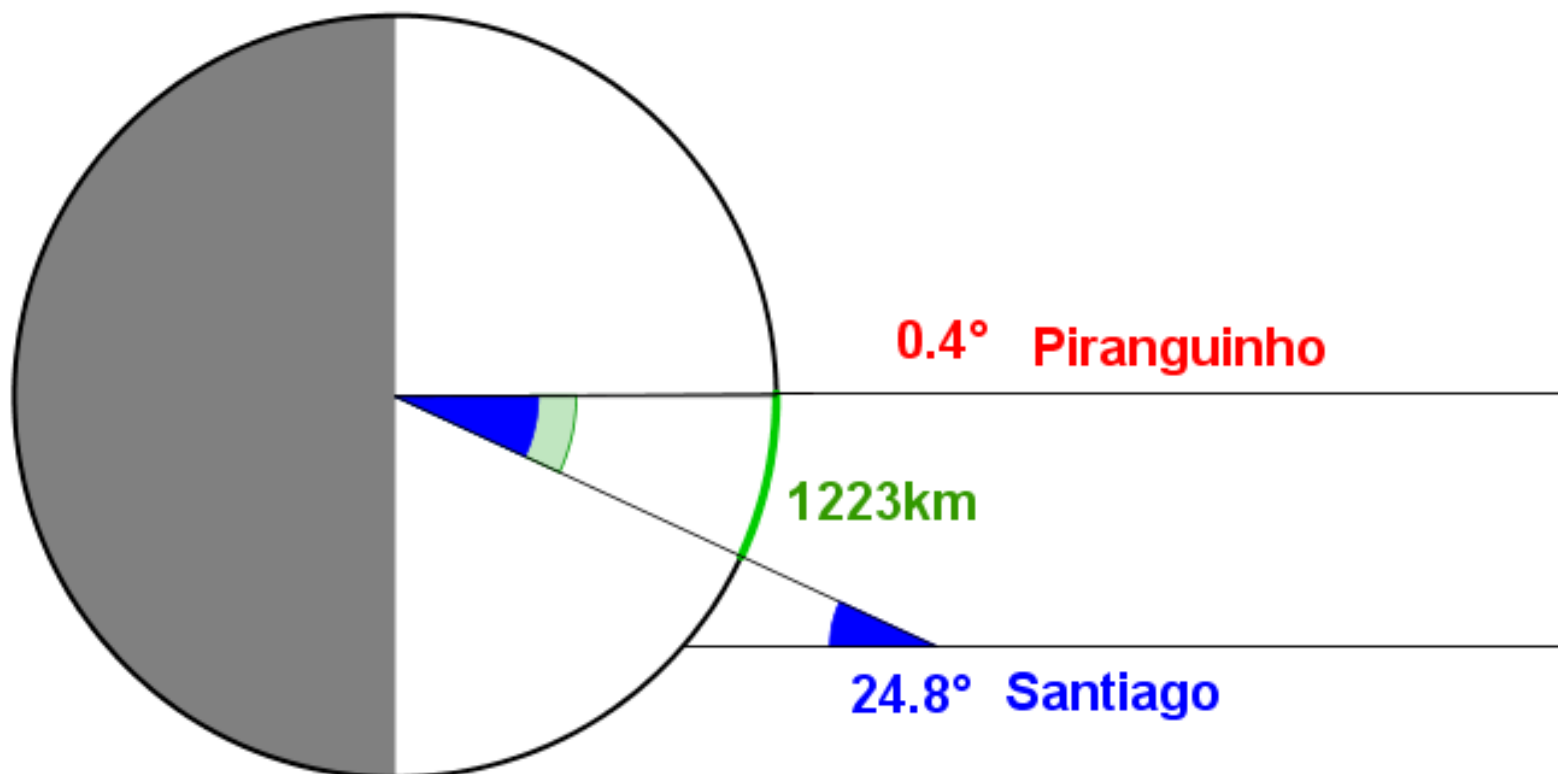


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Santiago	Chile	Clube de Astronomia do Rio de Janeiro	-33.417	-70.583

Date	Gnomon	Shadow	Angle
01 January 2018	98 cm	-43 cm	-23.7 °
02 January 2018	21 cm	-11 cm	-27.6 °
03 January 2018	234 cm	-108 cm	-24.8 °

03/01/2018 (Piranguinho-Brazil) Latitude: -22.411°

03/01/2018 (Santiago-Chile) Latitude: -33.417°



$$\text{circumference} = \frac{360^\circ \times 1223\text{km}}{0.4^\circ + 24.8^\circ} = 17471 \text{ km}$$



