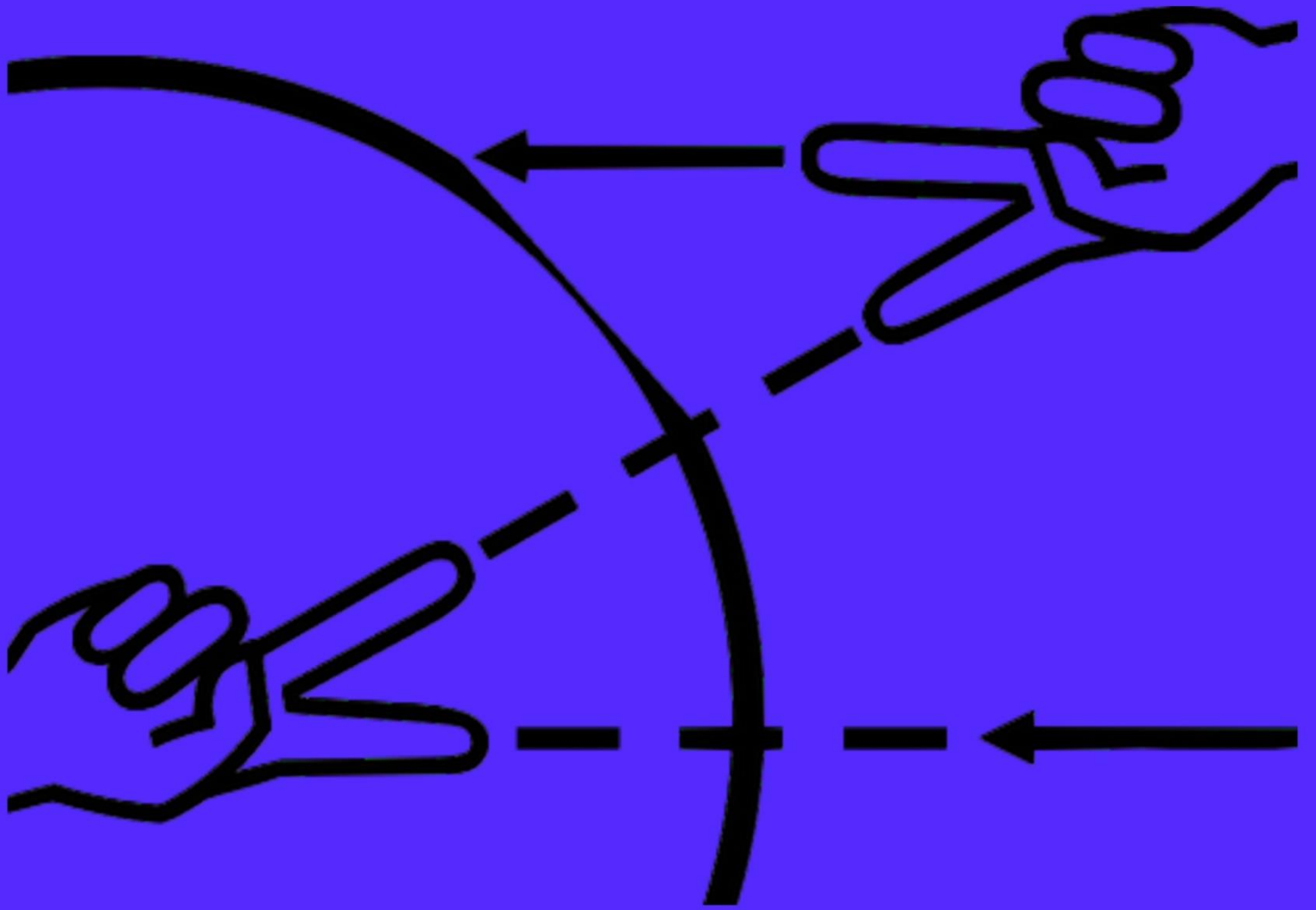


Eratosthenes



october 2017

3 Continents

10 Countries

21 Schools

83 Measures

ARGENTINA (2)

Alta Gracio, Rio Cuarto

BRAZIL (4)

Itajubá, Piranguinho, Rio de Janeiro (2)

COLOMBIA (1)

Guarne

CROATIA (2)

Brštanovo, Donji Muć

FRANCE (2)

Lafrancaise, Cernay

GREECE (5)

Aigio, Andritsaina, Ilion, Petroupoli, Piraeus

INDIA (1)

Fatehabadad

ITALY (1)

Merlara

MALAYSIA (1)

Kuantan

ROMANIA (2)


Busteni, Râmnicu Vâlcea

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
	Andritsaina	Greece	Gymnasio Andritsainas	34.484	21.909
	Brštanovo	Croatia	Osnovna škola kneza Branimira	43.658	16.415
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535
	Cernay	France	Collège René Cassin	47.814	7.183
	Donji Muć	Croatia	oš kneza Branimira	43.694	16.462
	Fatehabad	India	Girls Upper Primary School	27.026	78.301
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697
	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
	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
	Râmnicu Vâlcea	Romania	S.G. Nr4 Gradinita Dumbrava Minuata	45.093	24.358
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317
	Rio Cuarto	Argentina	IPEM No 79 "Ing. Renato de Marco"	-33.151	-64.341
	Rio de Janeiro	Brazil	Museu Da Aeronautica Campos Dos Afonso	-22.881	-43.382

Aigio, Greece

October 2017

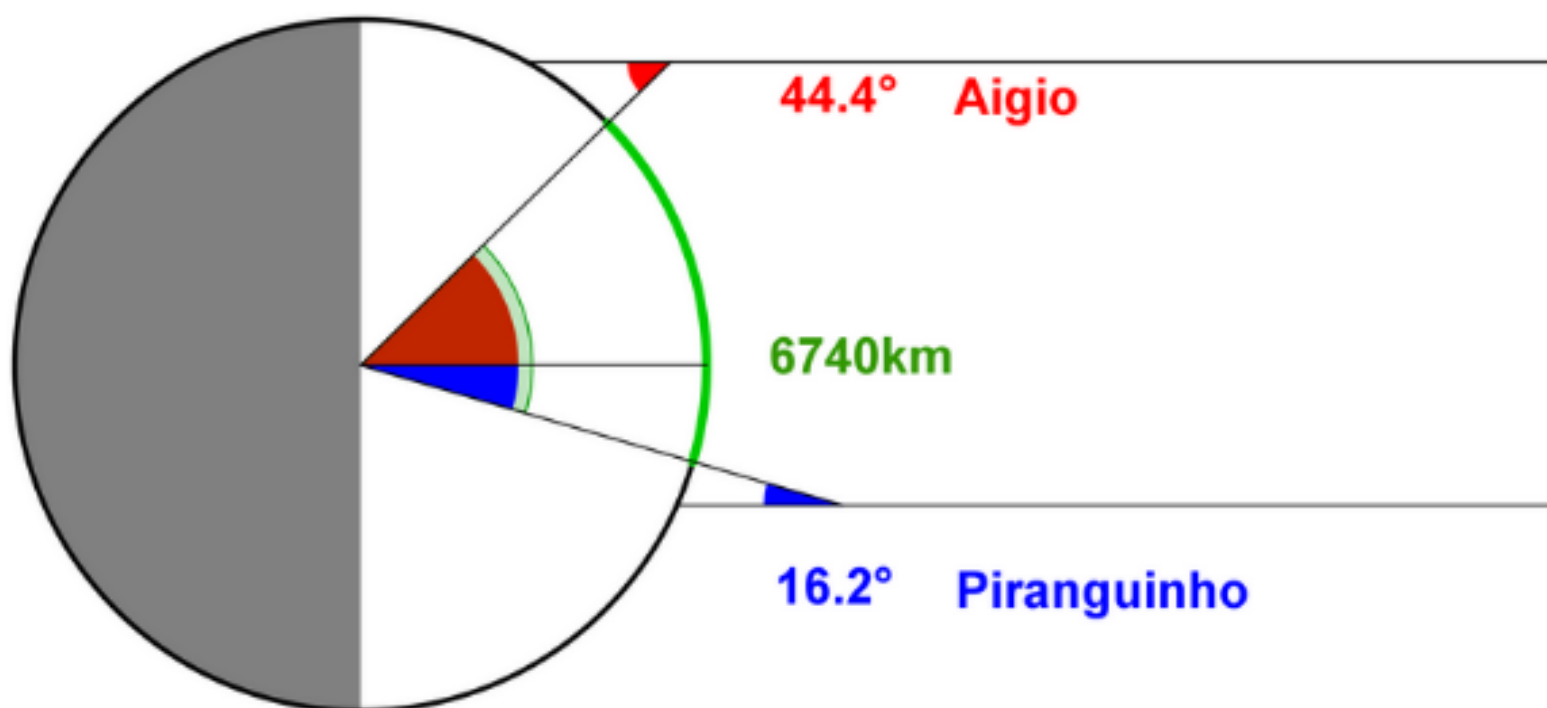


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079

Date	Gnomon	Shadow	Angle
09 October	50 cm	49 cm	44.4 °

9/10/2017 (Aigio-Greece) Latitude: 38.252°

09/10/2017 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 6740\text{km}}{44.4^\circ + 16.2^\circ} = 40040 \text{ km}$$




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Alta Gracia, Argentina

October 2017

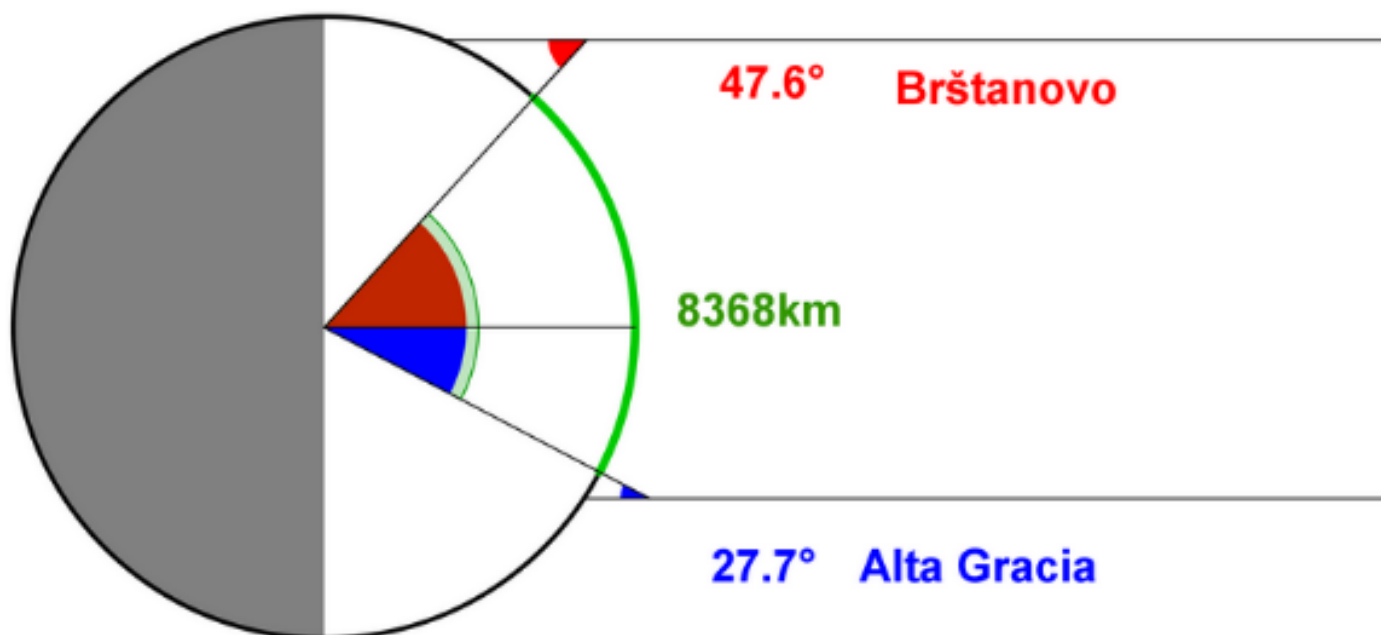


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417

Date	Gnomon	Shadow	Angle
02 October	39 cm	-20.5 cm	-27.7 °
03 October	39 cm	-20 cm	-27.1 °
05 October	39 cm	-19.4 cm	-26.4 °
06 October	39 cm	-19.2 cm	-26.2 °
09 October	39 cm	-18.2 cm	-25 °
17 October	39 cm	-16 cm	-22.3 °
18 October	39 cm	-14.5 cm	-20.4 °
19 October	39 cm	-15.5 cm	-21.7 °
20 October	39 cm	-15 cm	-21 °
23 October	39 cm	-14 cm	-19.7 °
24 October	39 cm	-13.6 cm	-19.2 °
26 October	39 cm	-13.2 cm	-18.7 °
27 October	39 cm	-13 cm	-18.4 °
30 October	39 cm	-12.4 cm	-17.6 °
31 October	39 cm	-12 cm	-17.1 °

02/10/2017 (Brštanovo-Croatia) Latitude: 43.658°

02/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 8368\text{km}}{47.6^\circ + 27.7^\circ} = 40006 \text{ km}$$



Andritsaina, Greece

October 2017

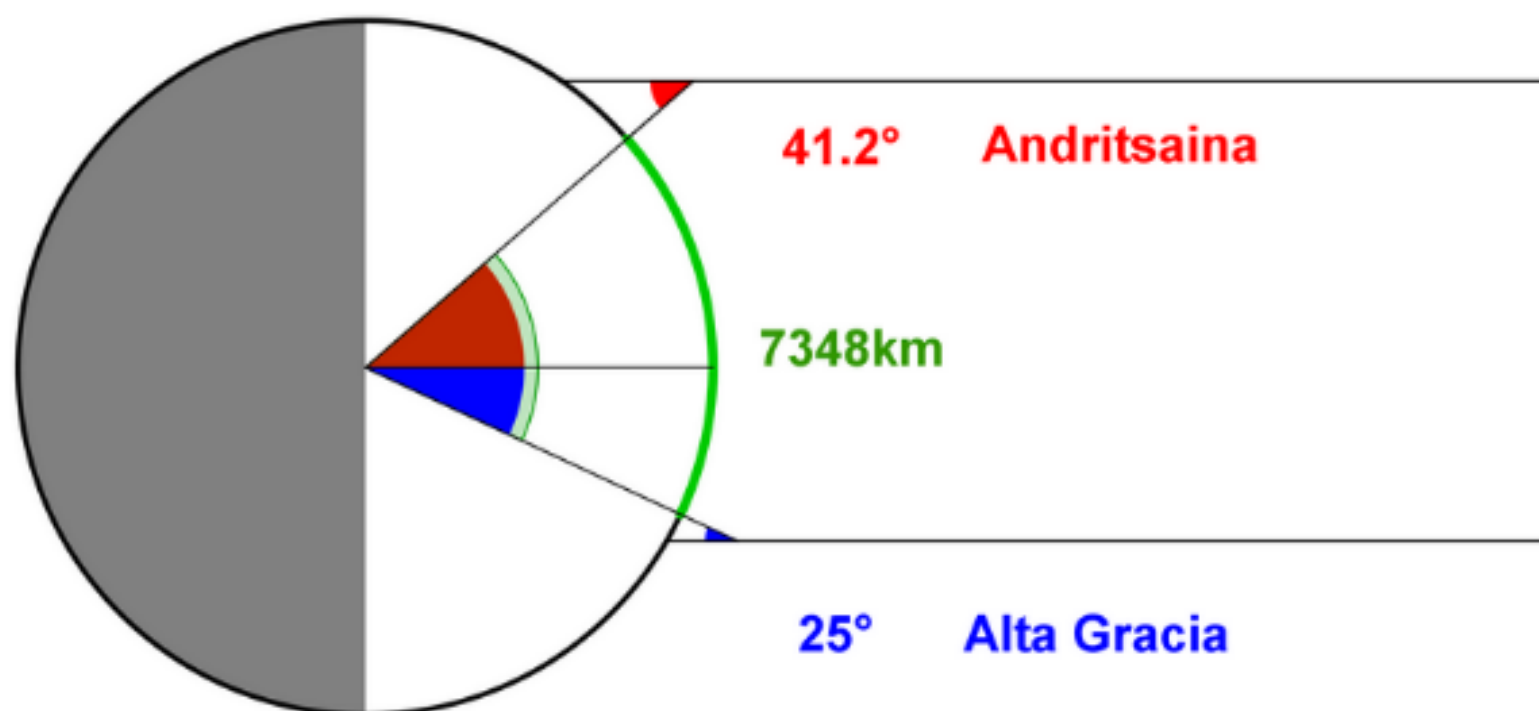


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Andritsaina	Greece	Gymnasio Andritsainas	34.484	21.909

Date	Gnomon	Shadow	Angle
09 October	100 cm	87.5 cm	41.2 °

09/10/2017 (Andritsaina-Greece) Latitude: 34.484°

09/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 7348\text{km}}{41.2^\circ + 25^\circ} = 39959 \text{ km}$$



Brštanovo, Croatia

October 2017

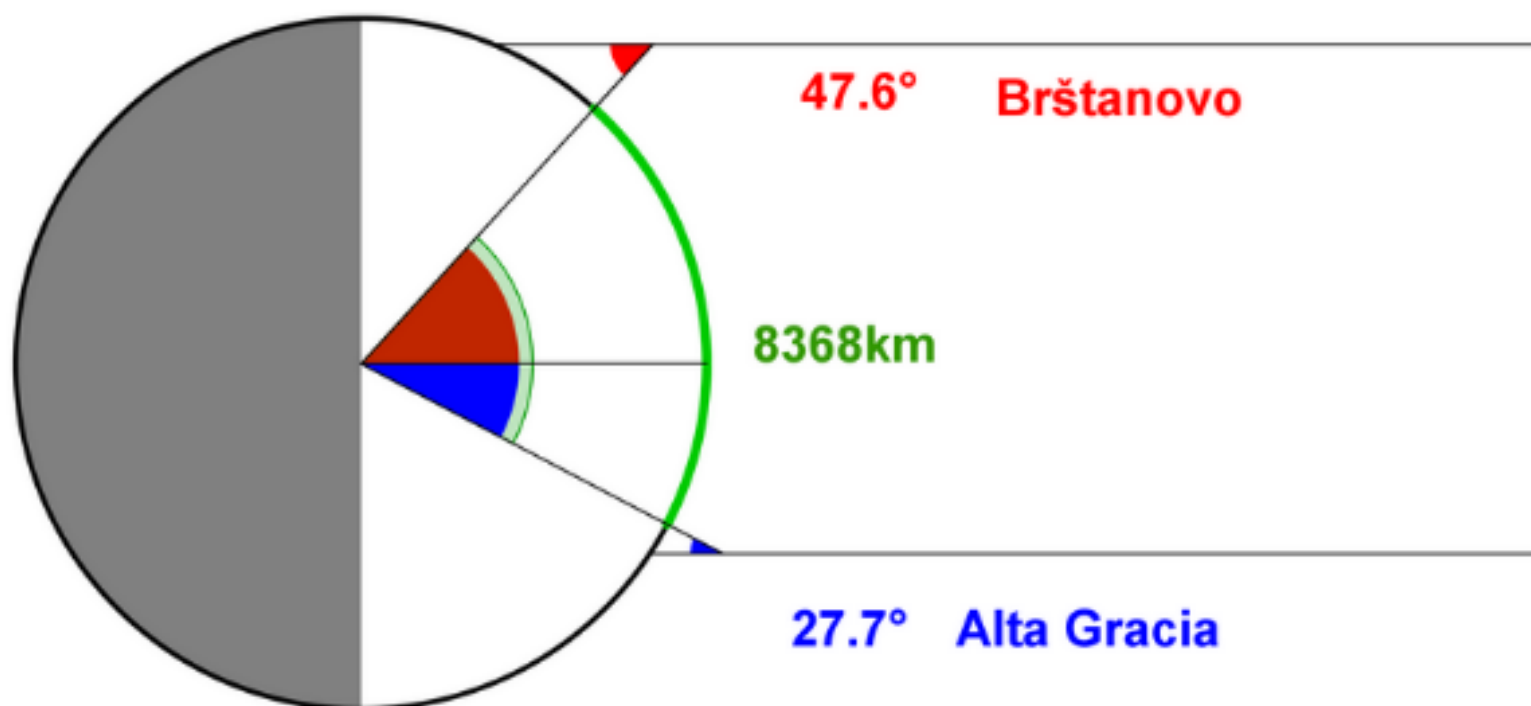


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Brštanovo	Croatia	Osnovna škola kneza Branimira	43.658	16.415

Date	Gnomon	Shadow	Angle
02 October	100 cm	109.7 cm	47.6 °
11 October	100 cm	123.7 cm	51 °
18 October	100 cm	135.5 cm	53.6 °

02/10/2017 (Brštanovo-Croatia) Latitude: 43.658°

02/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°




$$\text{circumference} = \frac{360^\circ \times 8368\text{km}}{47.6^\circ + 27.7^\circ} = 40006 \text{ km}$$



Busteni, Romania

October 2017

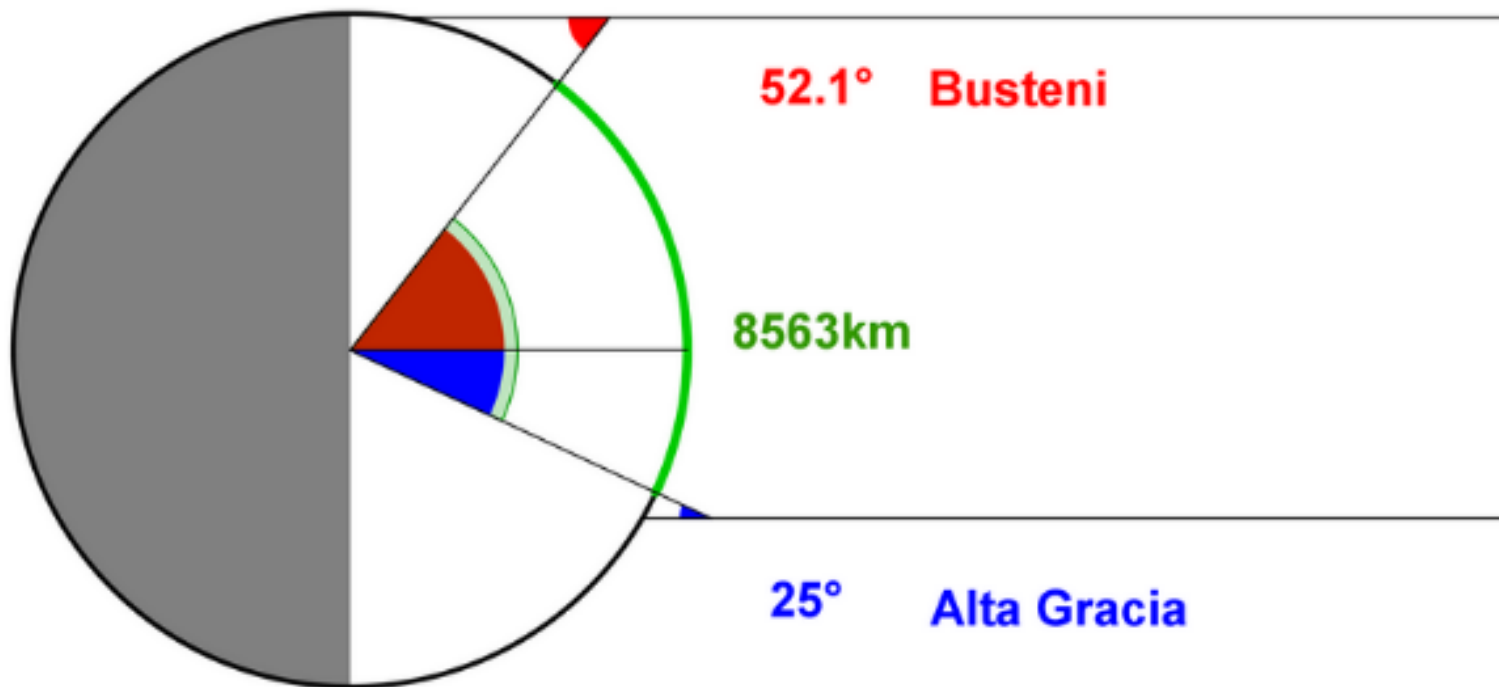


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535

Date	Gnomon	Shadow	Angle
02 October	100 cm	116.2 cm	49.3 °
03 October	100 cm	117.9 cm	49.7 °
05 October	20.6 cm	25 cm	50.5 °
09 October	20.5 cm	26.3 cm	52.1 °
10 October	100 cm	130 cm	52.4 °
11 October	100 cm	131.8 cm	52.8 °
12 October	100 cm	133.6 cm	53.2 °
13 October	20 cm	27.7 cm	53.5 °
16 October	100 cm	141.2 cm	54.7 °
17 October	100 cm	143.2 cm	55.1 °
19 October	100 cm	147.1 cm	55.8 °
20 October	100 cm	149.1 cm	56.2 °
25 October	25 cm	39.8 cm	57.9 °
26 October	100 cm	161.6 cm	58.3 °
27 October	100 cm	163.7 cm	58.6 °
31 October	100 cm	172.5 cm	59.9 °

09/10/2017 (Busteni-Romania) Latitude: 45.416°

09/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 8563\text{km}}{52.1^\circ + 25^\circ} = 39983 \text{ km}$$



Cernay, France

October 2017

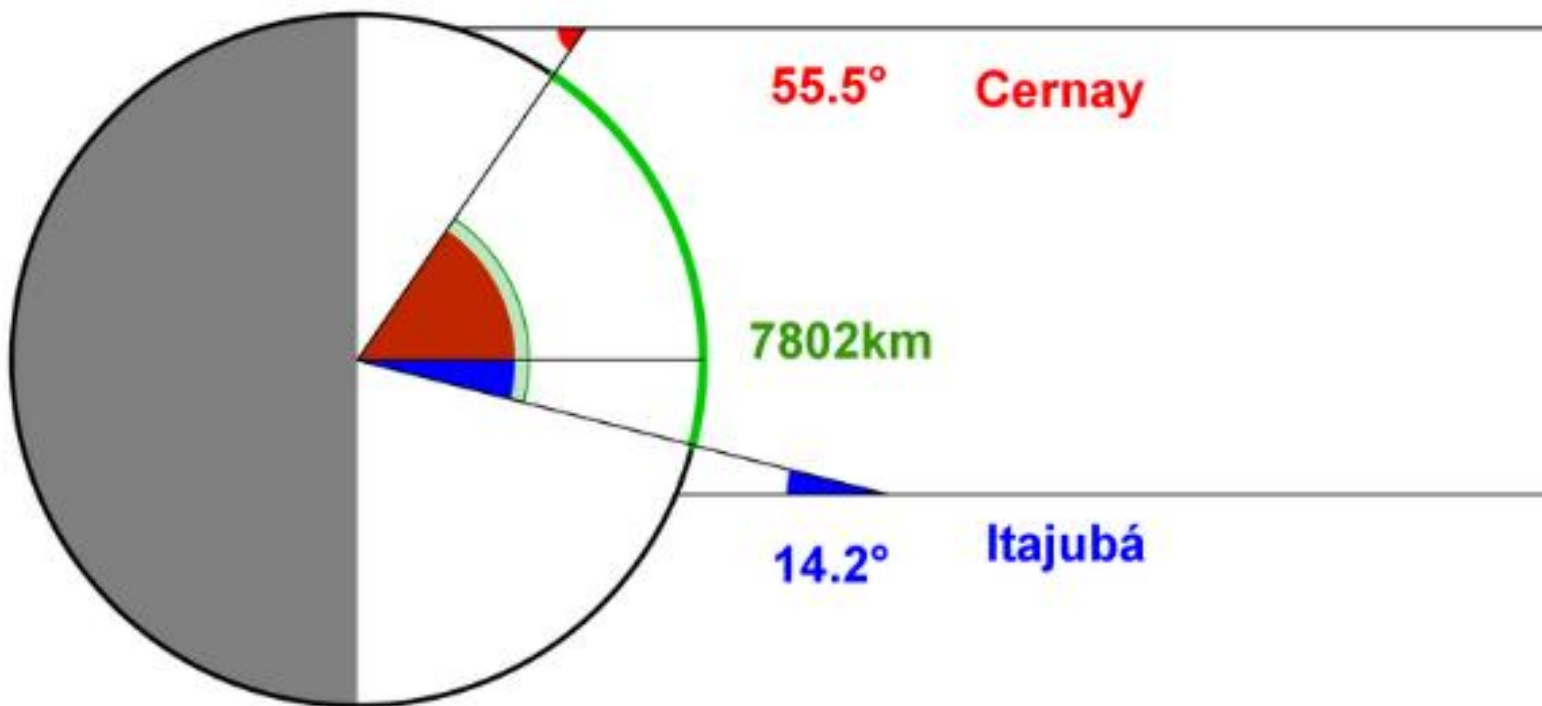


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Cernay	France	Collège René Cassin	47.814	7.183

Date	Gnomon	Shadow	Angle
13 October	368.5 cm	536 cm	55.5 °

13/10/2017 (Cernay-France) Latitude: 47.814°

13/10/2017 (Itajubá-Brazil) Latitude: -22.415°




$$\text{circumference} = \frac{360^\circ \times 7802\text{km}}{55.5^\circ + 14.2^\circ} = 40297 \text{ km}$$



Donji Muc, Croatia

October 2017

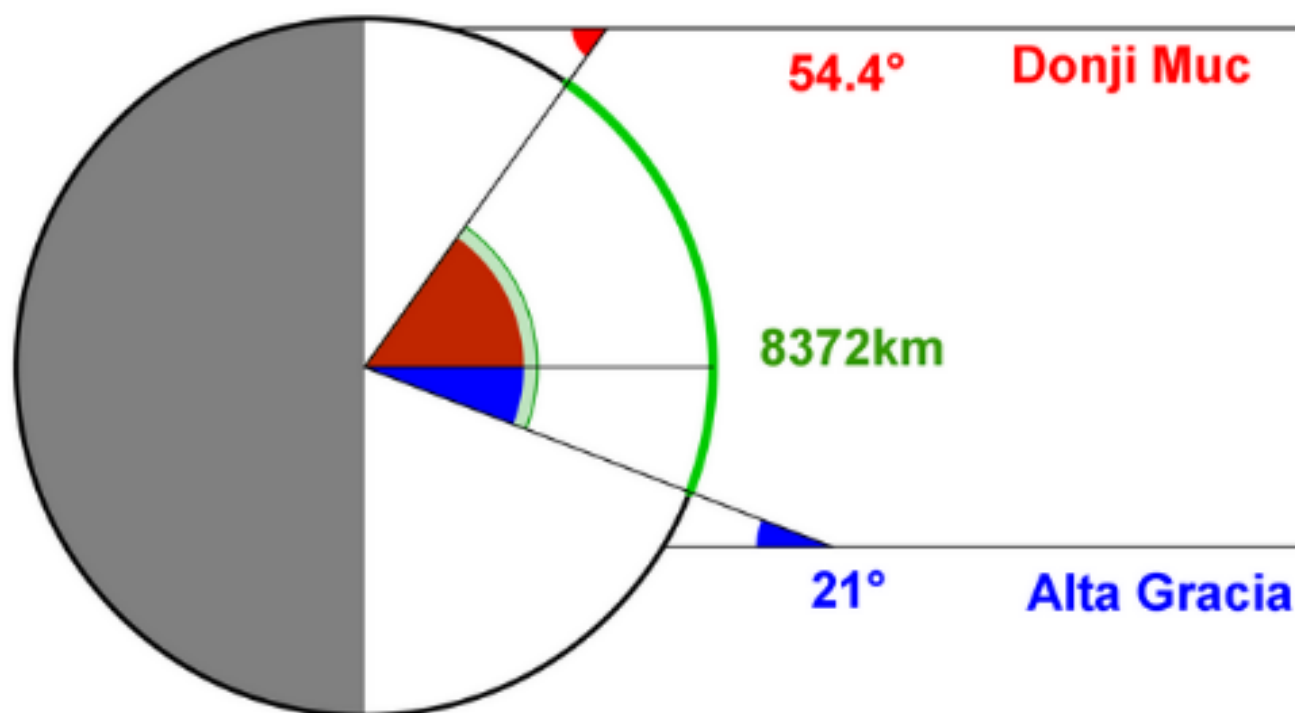


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Donji Muć	Croatia	oš kneza Branimira	43.694	16.462

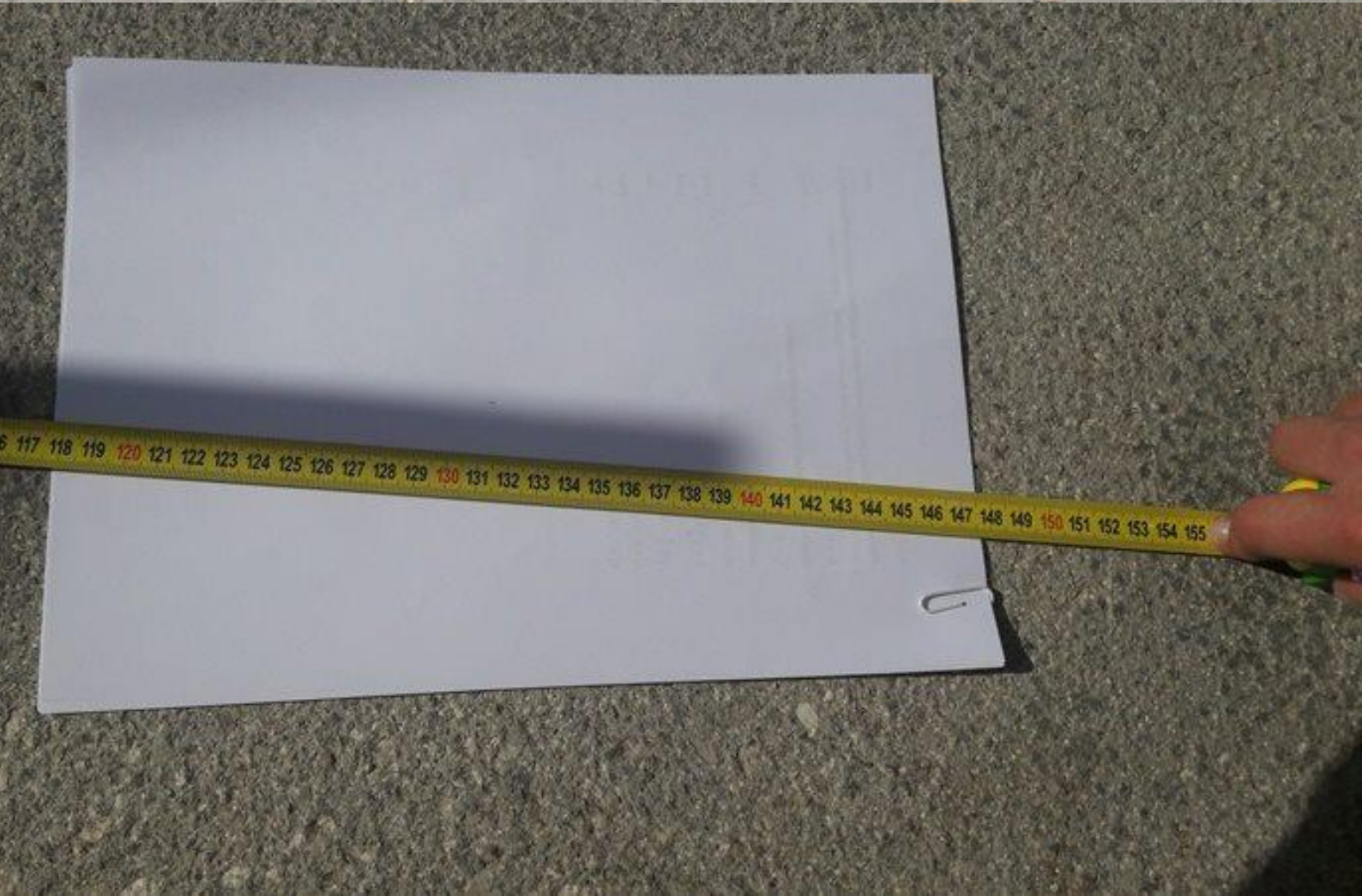
Date	Gnomon	Shadow	Angle
20 October	100 cm	139.8 cm	54.4 °

20/10/2017 (Donji Muc-Croatia) Latitude: 43.694°

20/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 8372\text{km}}{54.4^\circ + 21^\circ} = 39972 \text{ km}$$



Fatehabad, India

October 2017

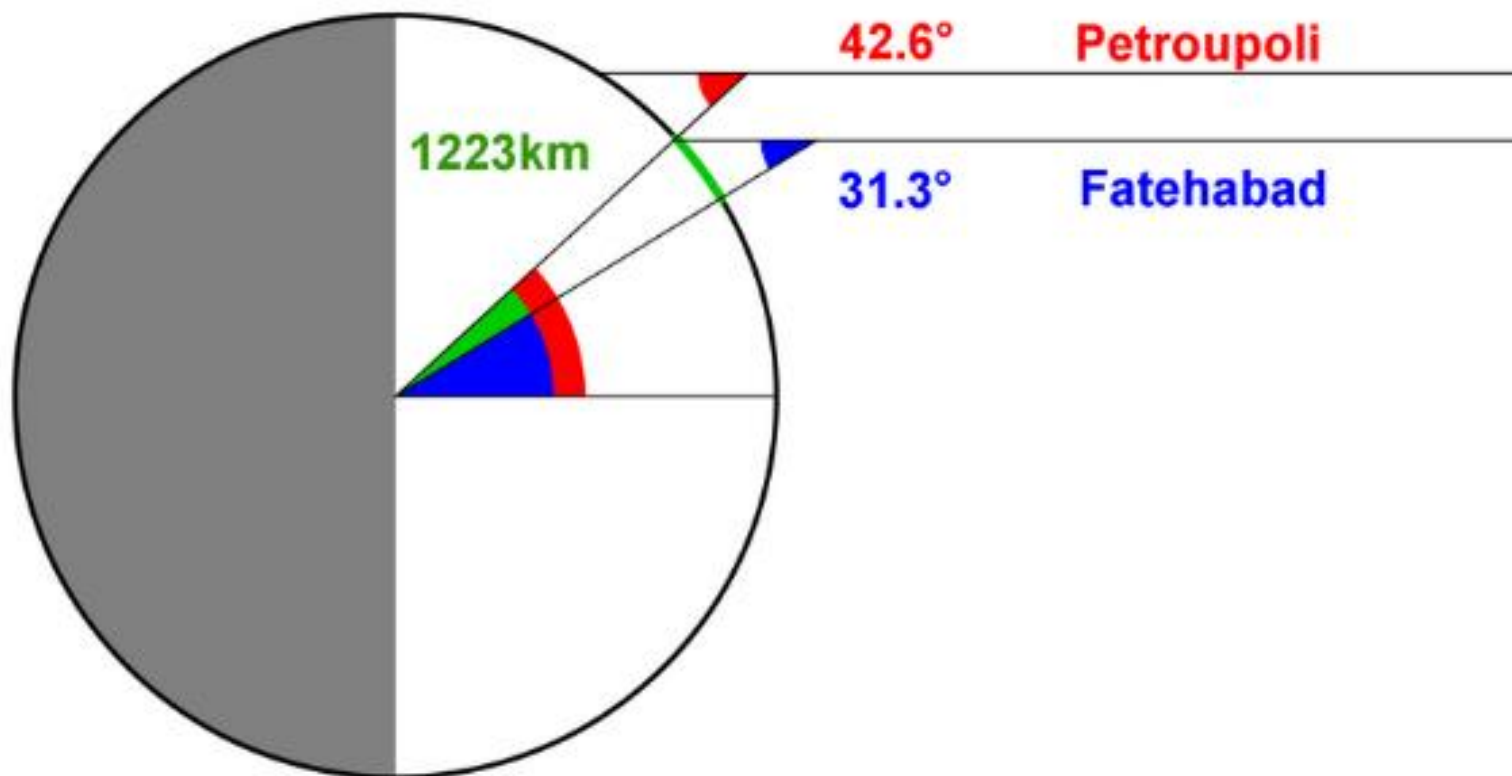


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Fatehabad	India	Girls Upper Primary School	27.026	78.301

Date	Gnomon	Shadow	Angle
04 October	27.8 cm	16.9 cm	31.3 °

04/10/2017 (Petroupoli-Greece) Latitude: 38.036°

04/10/2017 (Fatehabad-India) Latitude: 27.026°




$$\text{circumference} = \frac{360^\circ \times 1223\text{km}}{42.6^\circ - 31.3^\circ} = 38963 \text{ km}$$



Guarne, Colombia

October 2017

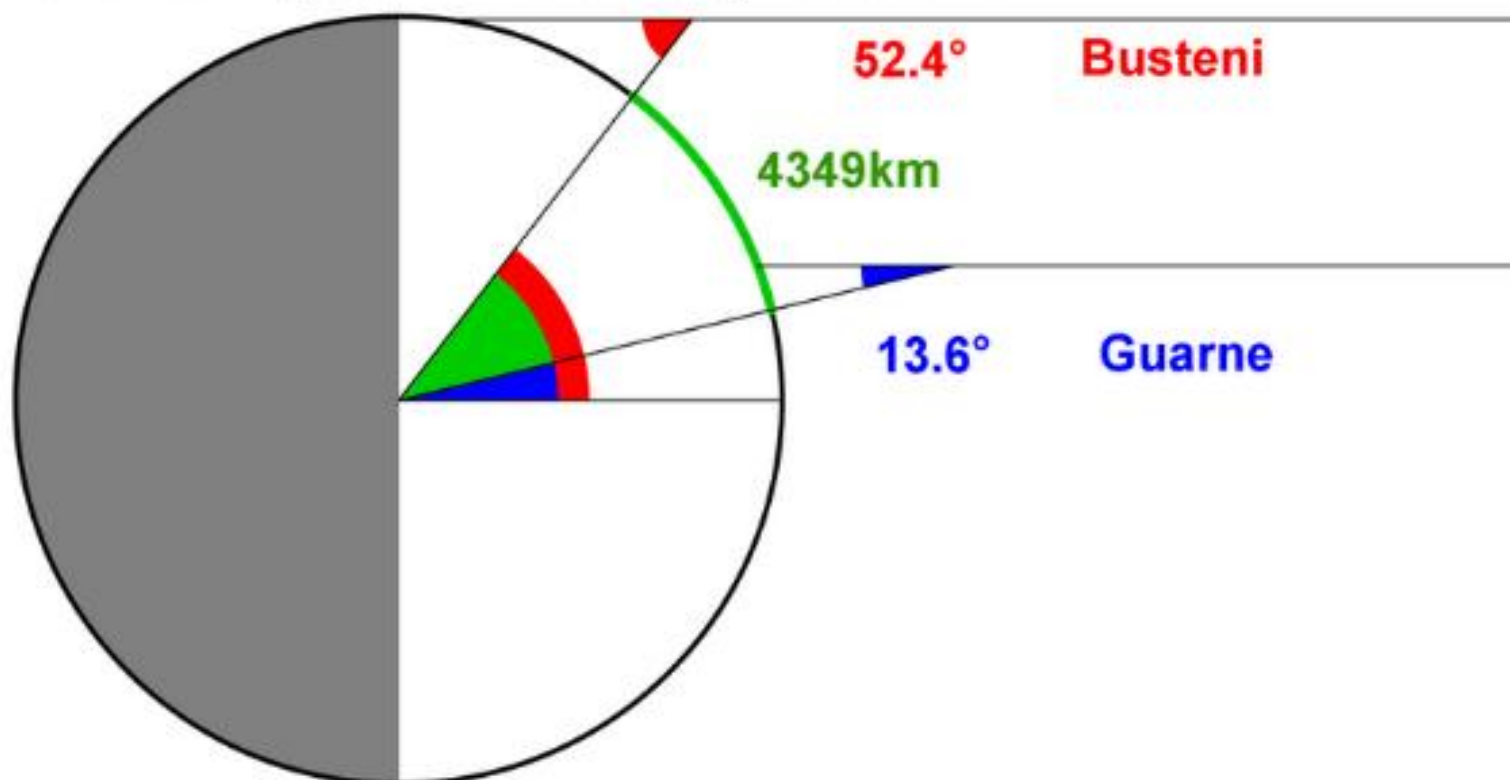


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449

Date	Gnomon	Shadow	Angle
10 October	64.8 cm	15.7 cm	13.6 °

10/10/2017 (Busteni-Romania) Latitude: 45.416°

10/10/2017 (Guarne-Colombia) Latitude: 6.274°



$$\text{circumference} = \frac{360^\circ \times 4349\text{km}}{52.4^\circ - 13.6^\circ} = 40352 \text{ km}$$



Ilion, Greece

October 2017



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

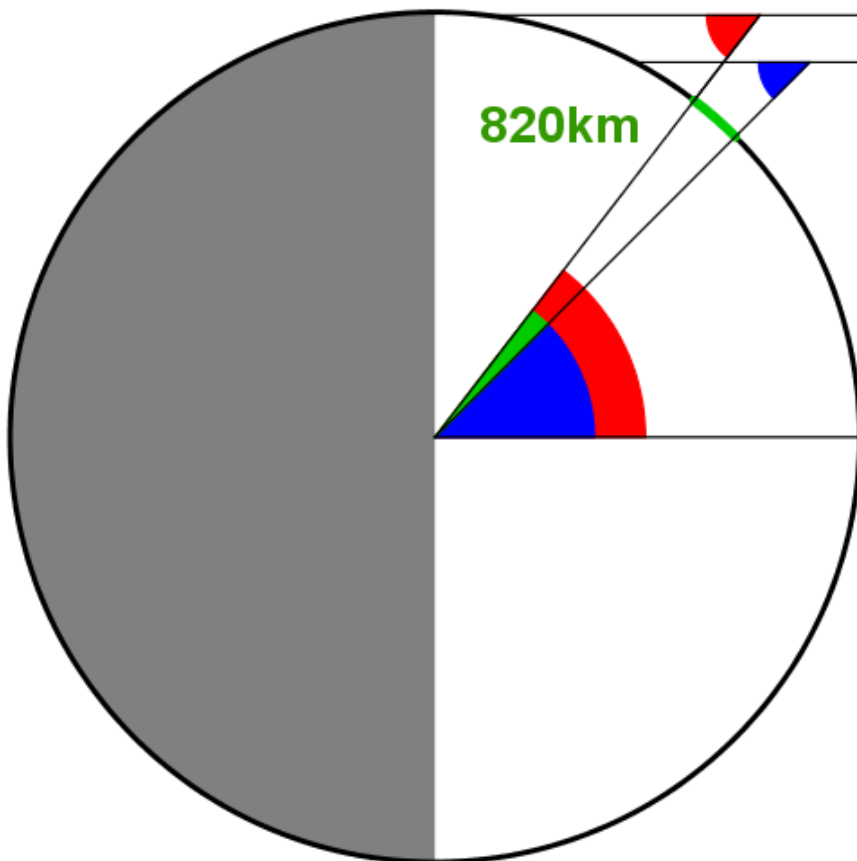
Date	Gnomon	Shadow	Angle
10 October	119 cm	119 cm	45 °

10/10/2017 (Busteni-Romania) Latitude: 45.416°

10/10/2017 (Ilion-Greece) Latitude: 38.033°

52.4° Busteni

45° Ilion



$$\text{circumference} = \frac{360^\circ \times 820\text{km}}{52.4^\circ - 45^\circ} = 39892 \text{ km}$$



Itajubá, Brazil

October 2017

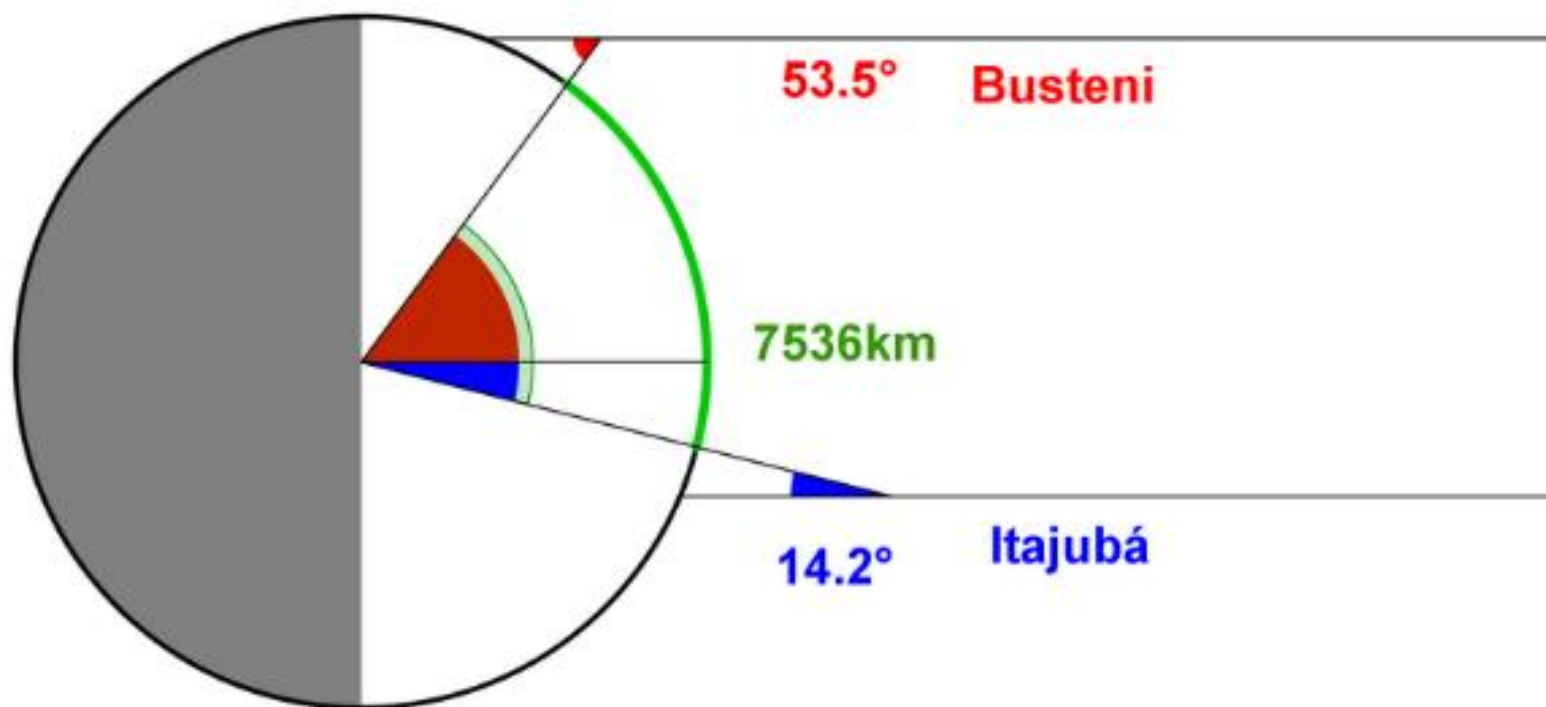


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Itajubá	Brazil	Universidade Federal de Itajubá	-22.415	-45.449

Date	Gnomon	Shadow	Angle
13 October	81.5 cm	-20.6 cm	-14.2 °

13/10/2017 (Busteni-Romania) Latitude: 45.416°

13/10/2017 (Itajubá-Brazil) Latitude: -22.415°




$$\text{circumference} = \frac{360^\circ \times 7536\text{km}}{53.5^\circ + 14.2^\circ} = 40073 \text{ km}$$



Kuantan, Malaysia

October 2017

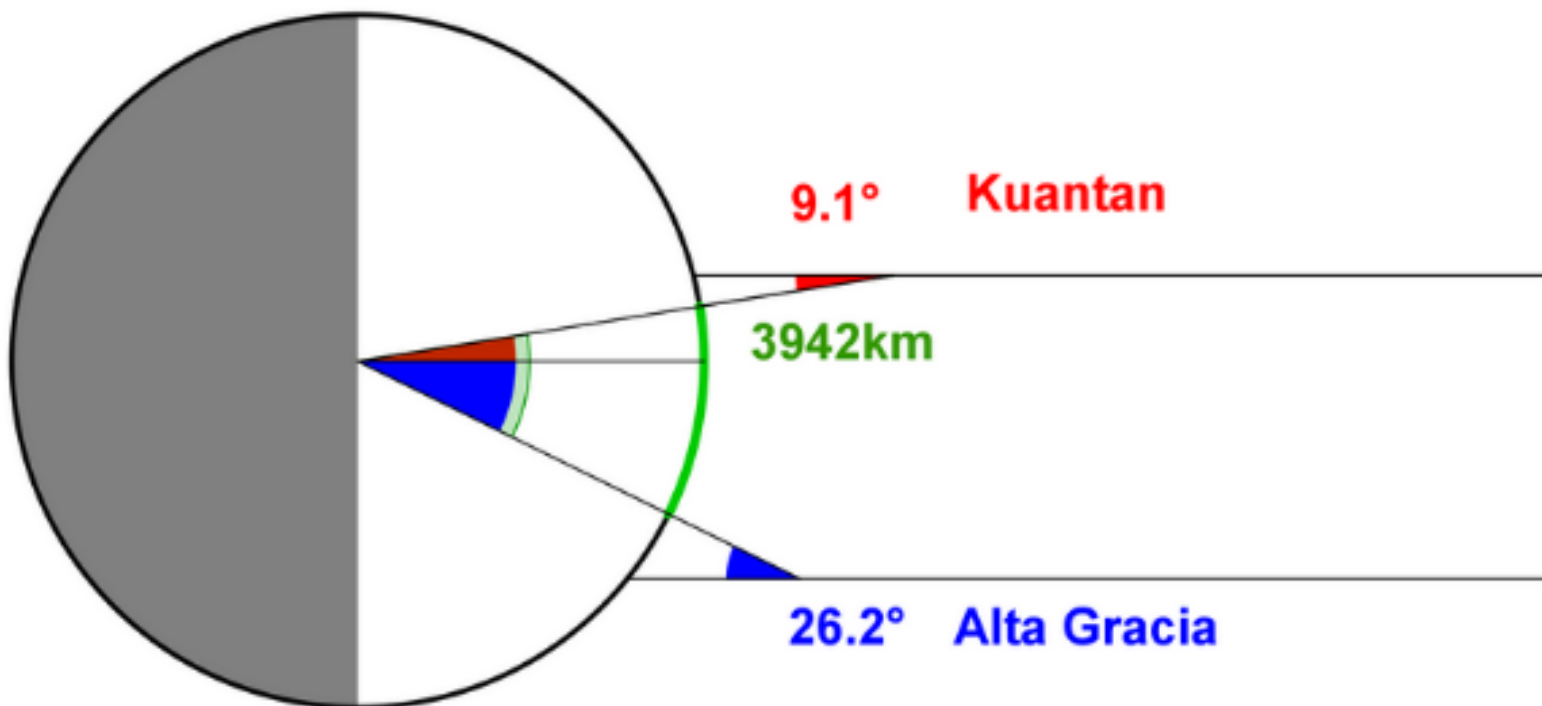


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Kuantan	Malaysia	SMK St Thomas	3.817	103.333

Date	Gnomon	Shadow	Angle
05 October	59 cm	10 cm	9.6 °
06 October	58 cm	9.3 cm	9.1 °
07 October	58.5 cm	9.9 cm	9.6 °
09 October	58 cm	11.1 cm	10.8 °

06/10/2017 (Kuantan-Malaysia) Latitude: 3.827°

06/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°




$$\text{circumference} = \frac{360^\circ \times 3942\text{km}}{9.1^\circ + 26.2^\circ} = 40202 \text{ km}$$



Lafrançaise, France

October 2017

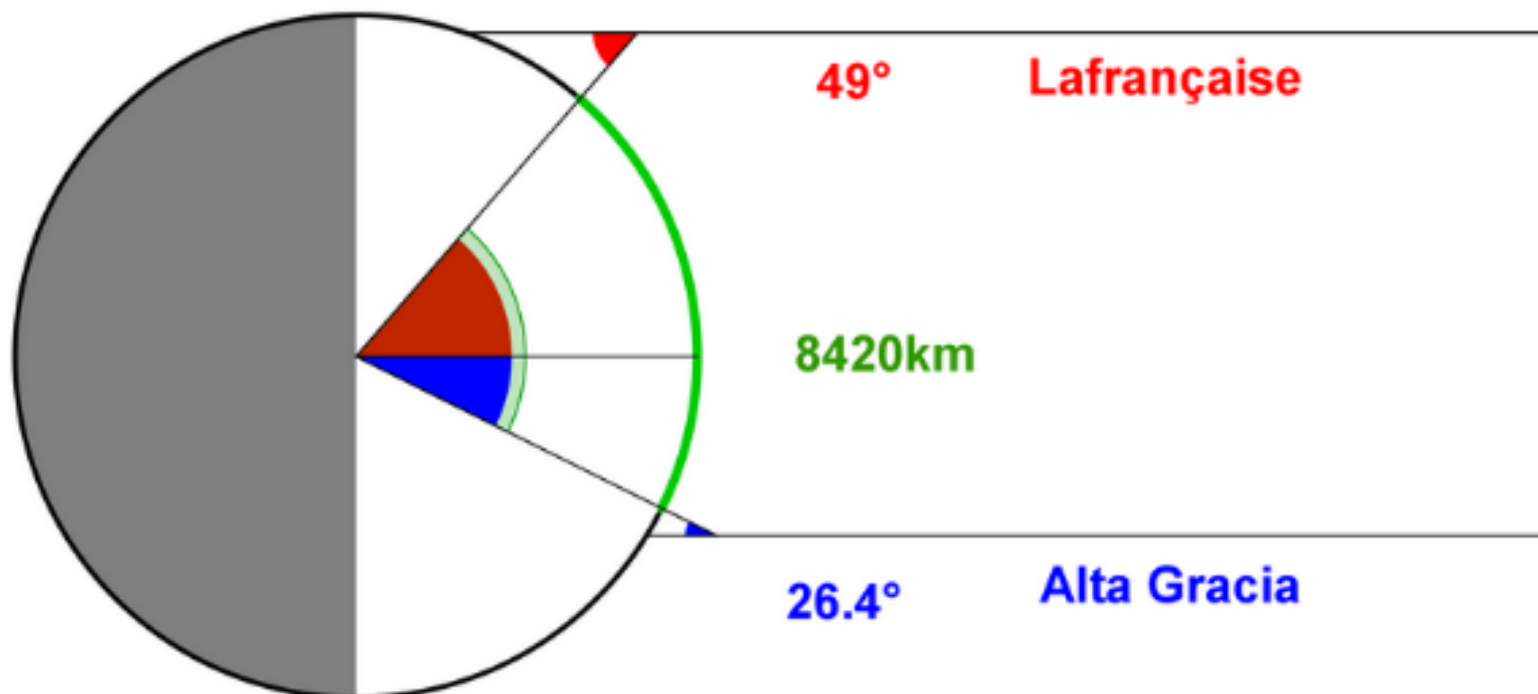


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237

Date	Gnomon	Shadow	Angle
05 October	100 cm	114.9 cm	49 °
06 October	100 cm	115 cm	49 °
12 October	100 cm	126 cm	51.6 °
13 October	100 cm	126.8 cm	51.7 °
16 October	100 cm	132 cm	59.9 °

05/10/2017 (Lafrançaise-France) Latitude: 44.127°

05/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°




$$\text{circumference} = \frac{360^\circ \times 8420\text{km}}{49^\circ + 26.4^\circ} = 40202 \text{ km}$$



Merlara, Italy

October 2017

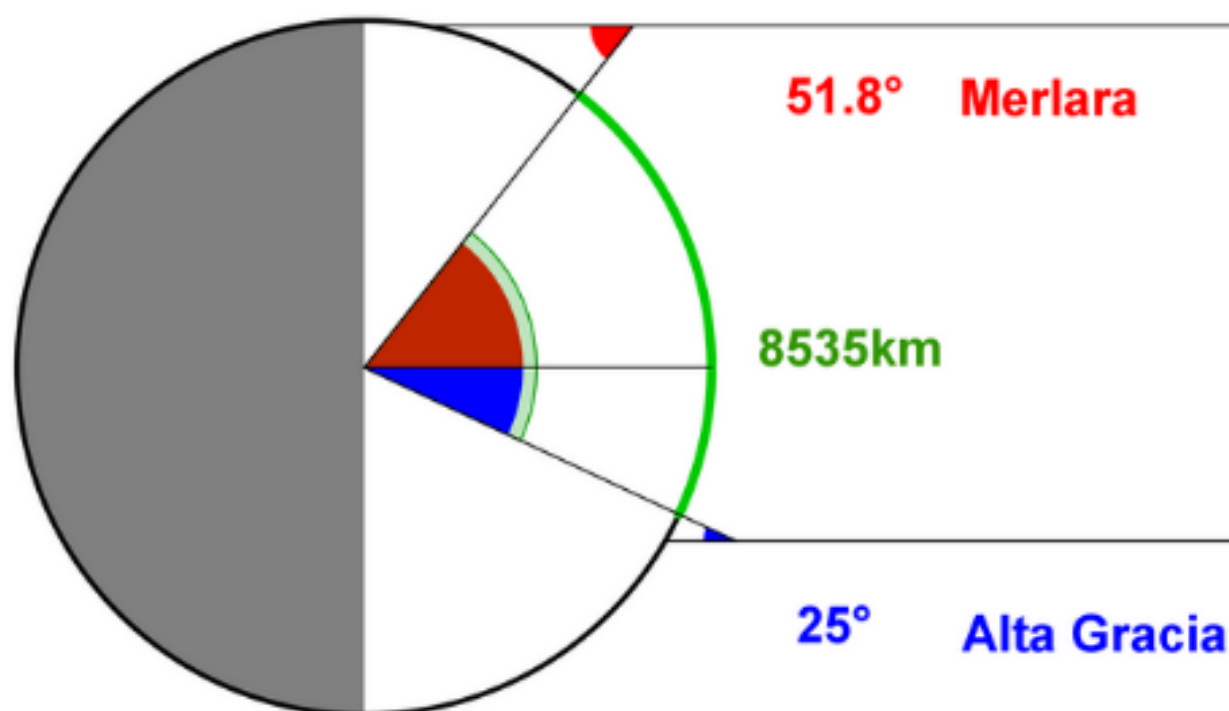


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Merlara	Italy	Lower Secondary School "Dante Alighieri"	45.166	11.433

Date	Gnomon	Shadow	Angle
09 October	100 cm	127 cm	51.8 °
16 October	100 cm	137.5 cm	54 °
31 October	100 cm	162 cm	58.3 °

9/10/2017 (Merlara-Italy) Latitude: 45.166°

09/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 8535\text{km}}{51.8^\circ + 25^\circ} = 40008 \text{ km}$$




MERLARA
16-10-2017

Petroupoli, Greece

October 2017

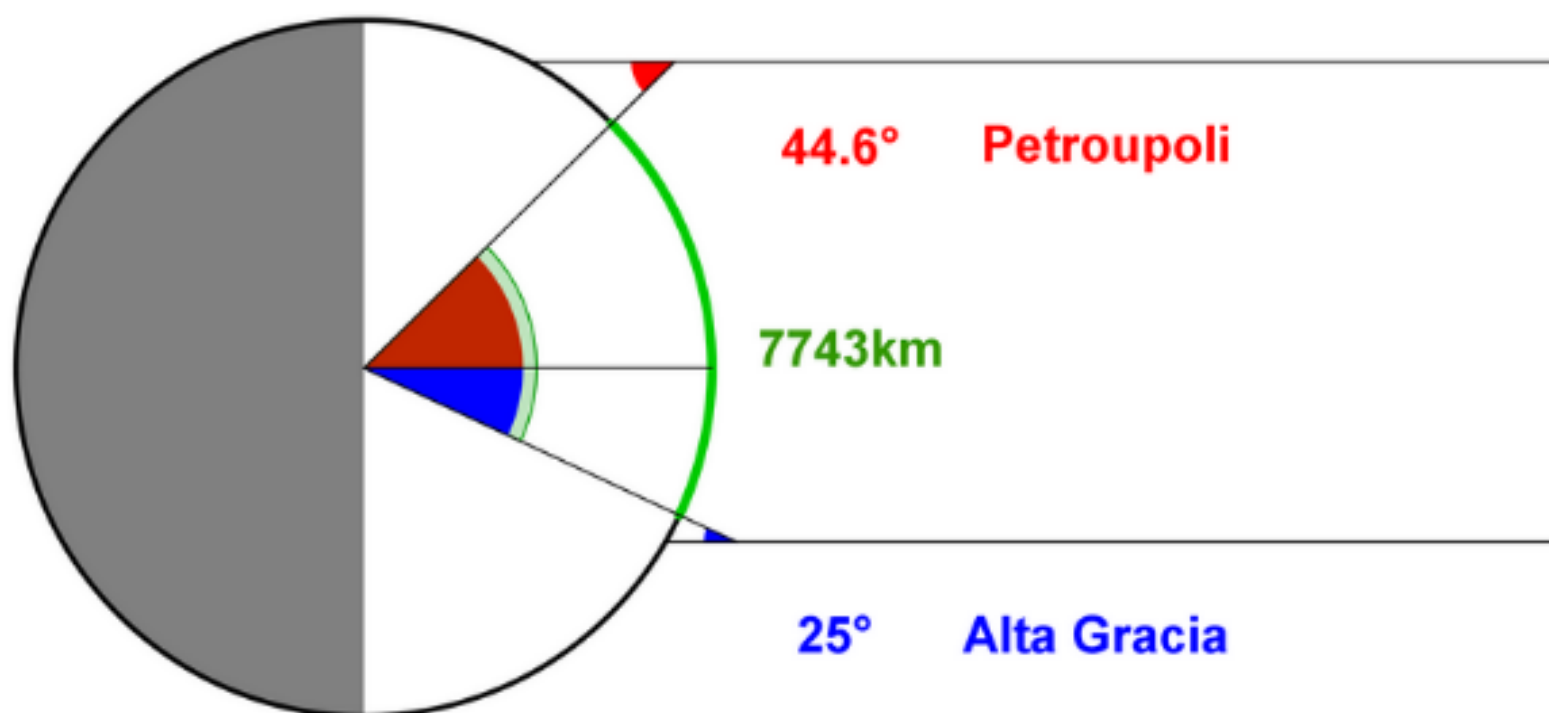


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Petroupoli	Greece	4o Junior High School	38.036	23.674

Date	Gnomon	Shadow	Angle
02 October	52.3 cm	46.6 cm	41.7 °
04 October	52.3 cm	48.1 cm	42.6 °
09 October	52.3 cm	51.5 cm	44.6 °
13 October	52.3 cm	55 cm	46.4 °
16 October	52,3 cm	56.7 cm	47.3 °

09/10/2017 (Petroupoli-Greece) Latitude: 38.036°

09/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 7743\text{km}}{44.6^\circ + 25^\circ} = 40050 \text{ km}$$



Piraeus, Greece

October 2017

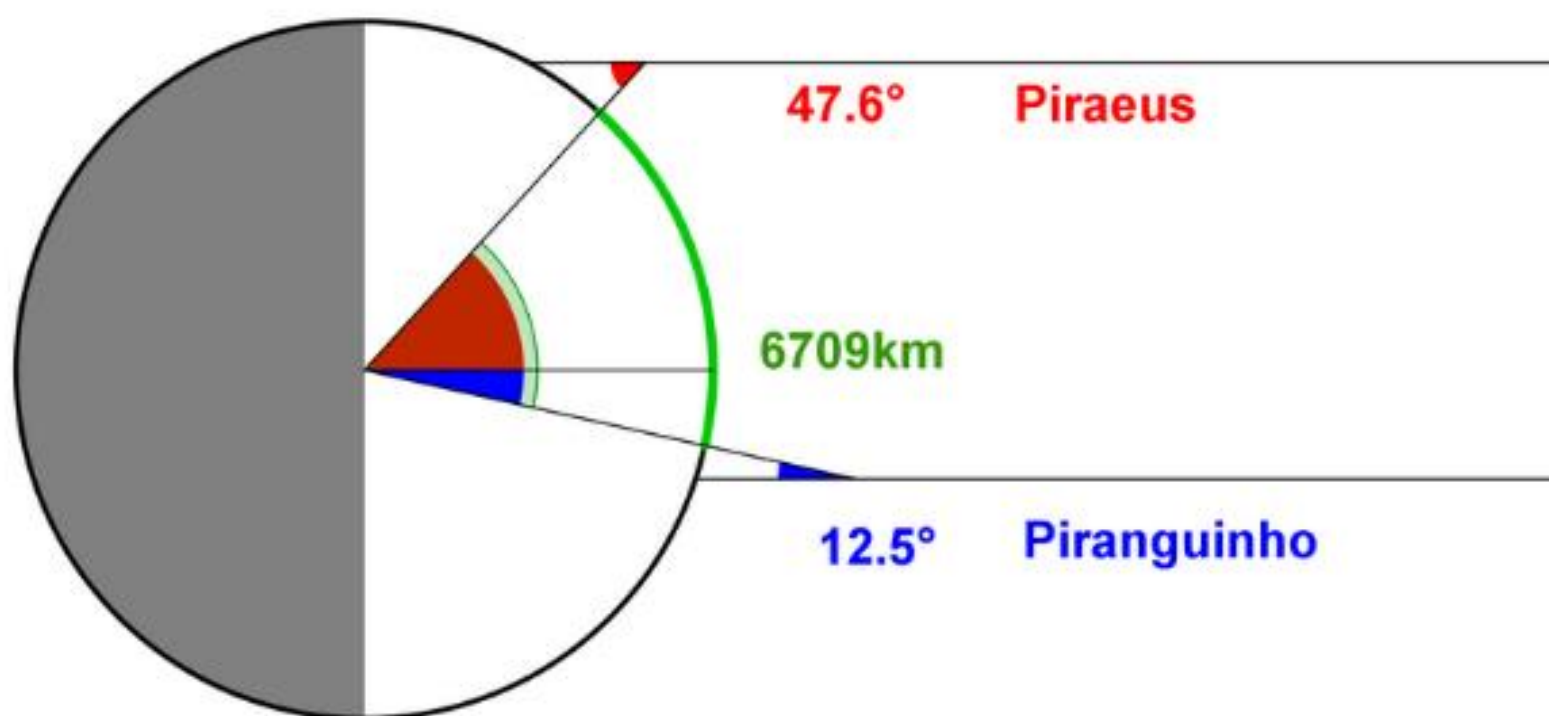


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piraeus	Greece	2nd Junior High School of Korydallos	37.977	23.655

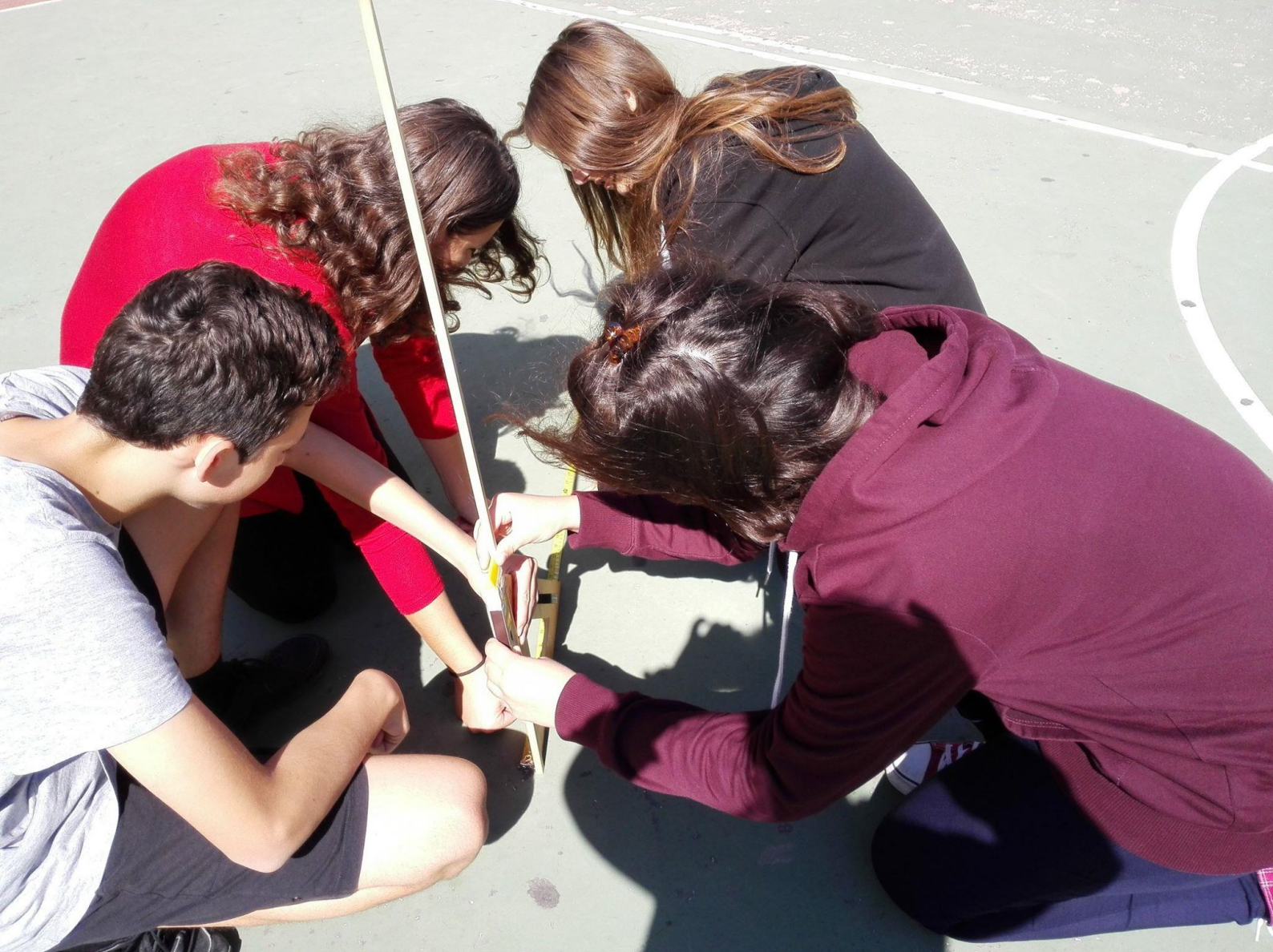
Date	Gnomon	Shadow	Angle
05 October	100 cm	92 cm	42.6 °
10 October	100 cm	98 cm	44.4 °
18 October	100 cm	109.5 cm	47.6 °

18/10/2017 (Piraeus-Greece) Latitude: 37.977°

18/10/2017 (Piranguinho-Brazil) Latitude: -22.411°

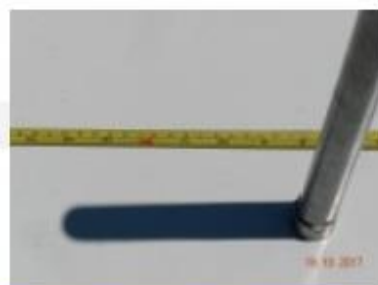


$$\text{circumference} = \frac{360^\circ \times 6709\text{km}}{47.6^\circ + 12.5^\circ} = 40187 \text{ km}$$



Piranguinho, Brazil

October 2017

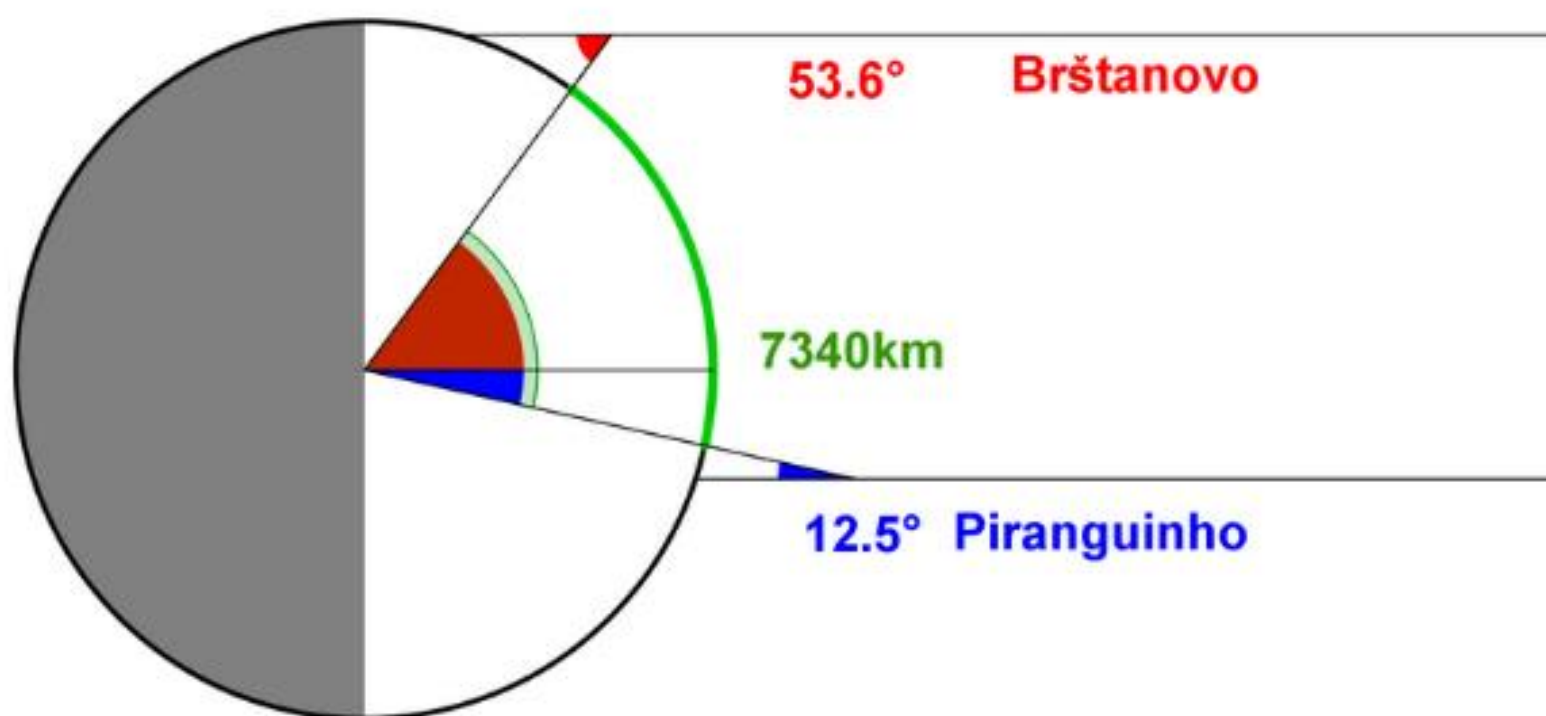


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535

Date	Gnomon	Shadow	Angle
09 October	70 cm	-20.4 cm	-16.2 °
14 October	70 cm	-17.5 cm	-14.0 °
17 October	70 cm	-16.1 cm	-13 °
18 October	70 cm	-15.5 cm	-12.5 °
19 October	70 cm	-12.4 cm	-10 °
25 October	70 cm	-12.1 cm	-9.8 °
26 October	70 cm	-13 cm	-10.5 °
31 October	70 cm	-9.9 cm	-8 °

18/10/2017 (Brštanovo-Croatia) Latitude: 43.658°

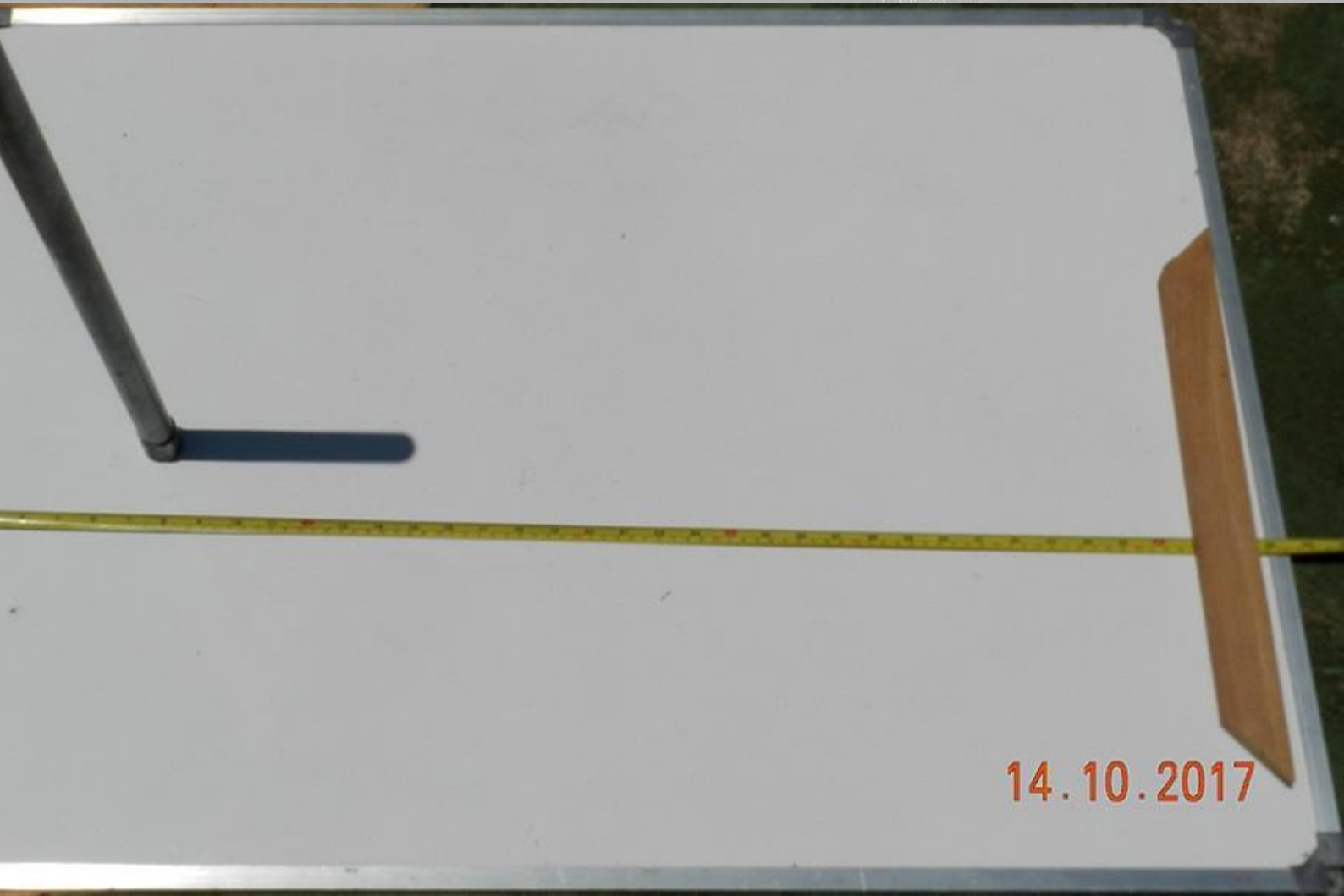
18/10/2017 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 7340\text{km}}{53.6^\circ + 12.5^\circ} = 39976 \text{ km}$$



14.10.2017



14.10.2017

Râmnicu Vâlcea, Romania

October 2017

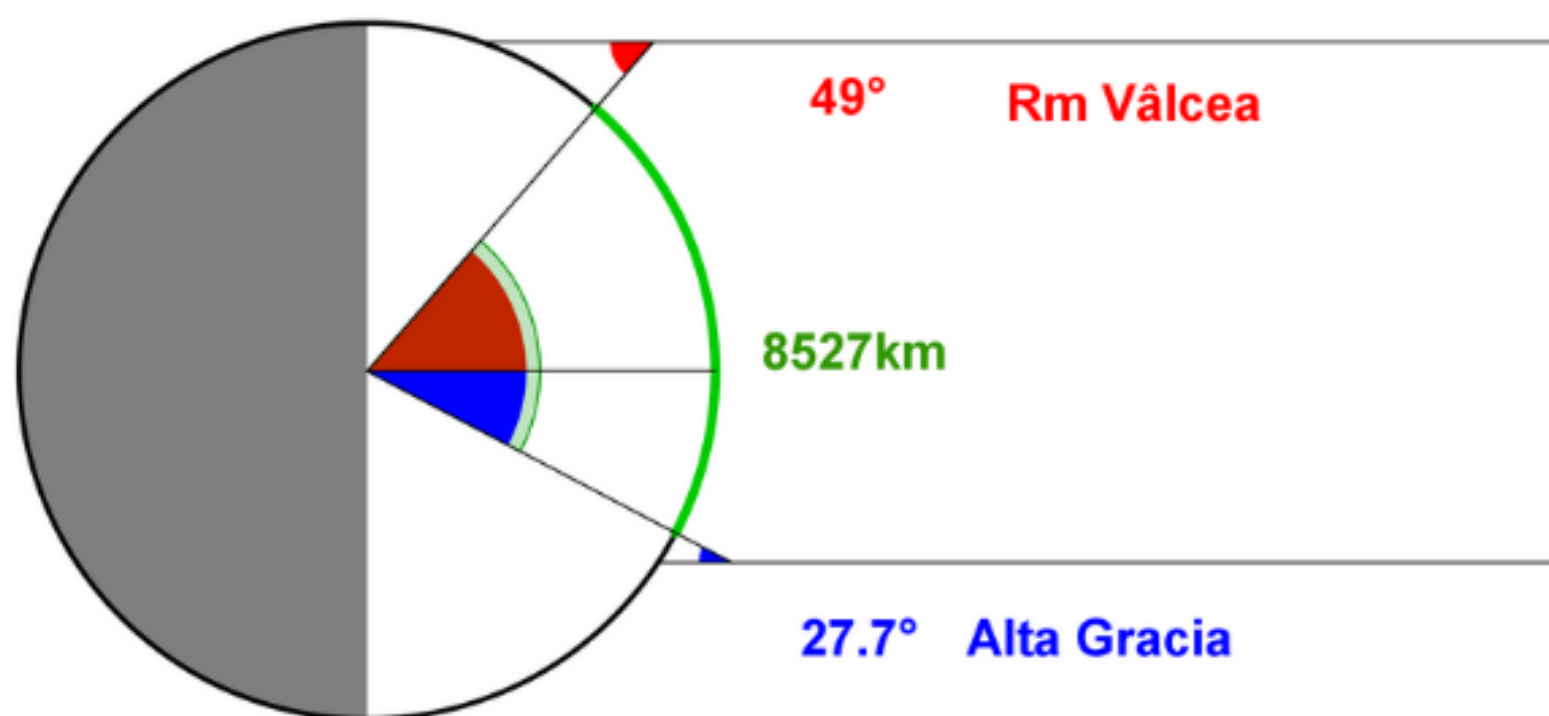


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Râmnicu Vâlcea	Romania	S.G. Nr4 Gradinita Dumbrava Minuata	45.093	24.358

Date	Gnomon	Shadow	Angle
02 October	30 cm	34.5 cm	49 °
16 October	30 cm	41.9 cm	54.4 °

02/10/2017 (Rm Vâlcea-Romania) Latitude: 45.093°

02/10/2017 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 8527\text{km}}{49^\circ + 27.7^\circ} = 40022 \text{ km}$$



Rio Cuarto Concordia, Argentina

October 2017

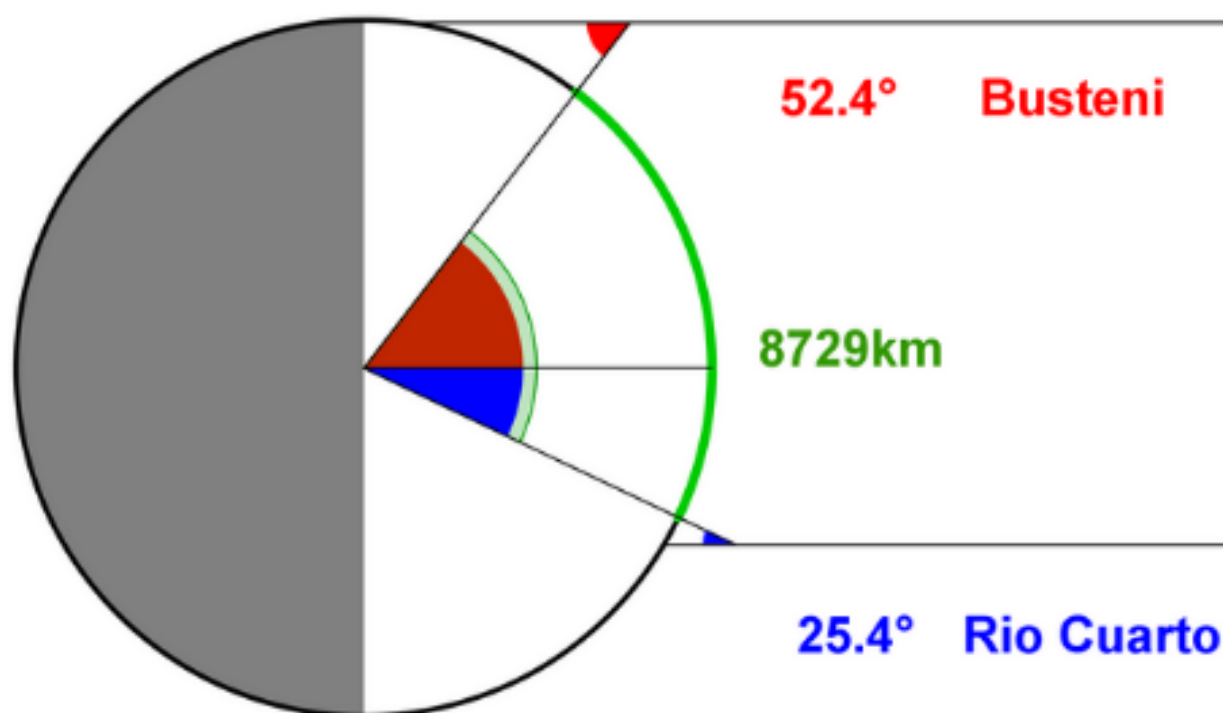


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio Cuarto	Argentina	IPEM No 79 "Ing. Renato de Marco"	-33.151	-64.341

Date	Gnomon	Shadow	Angle
10 October	53.5 cm	-25.4 cm	-25.4 °

10/10/2017 (Busteni-Romania) Latitude: 45.416°

10/10/2017 (Rio Cuarto-Argentina) Latitude: -33.149°




$$\text{circumference} = \frac{360^\circ \times 8729\text{km}}{52.4^\circ + 25.4^\circ} = 40391 \text{ km}$$



Rio de Janeiro CENOM, Brazil

October 2017

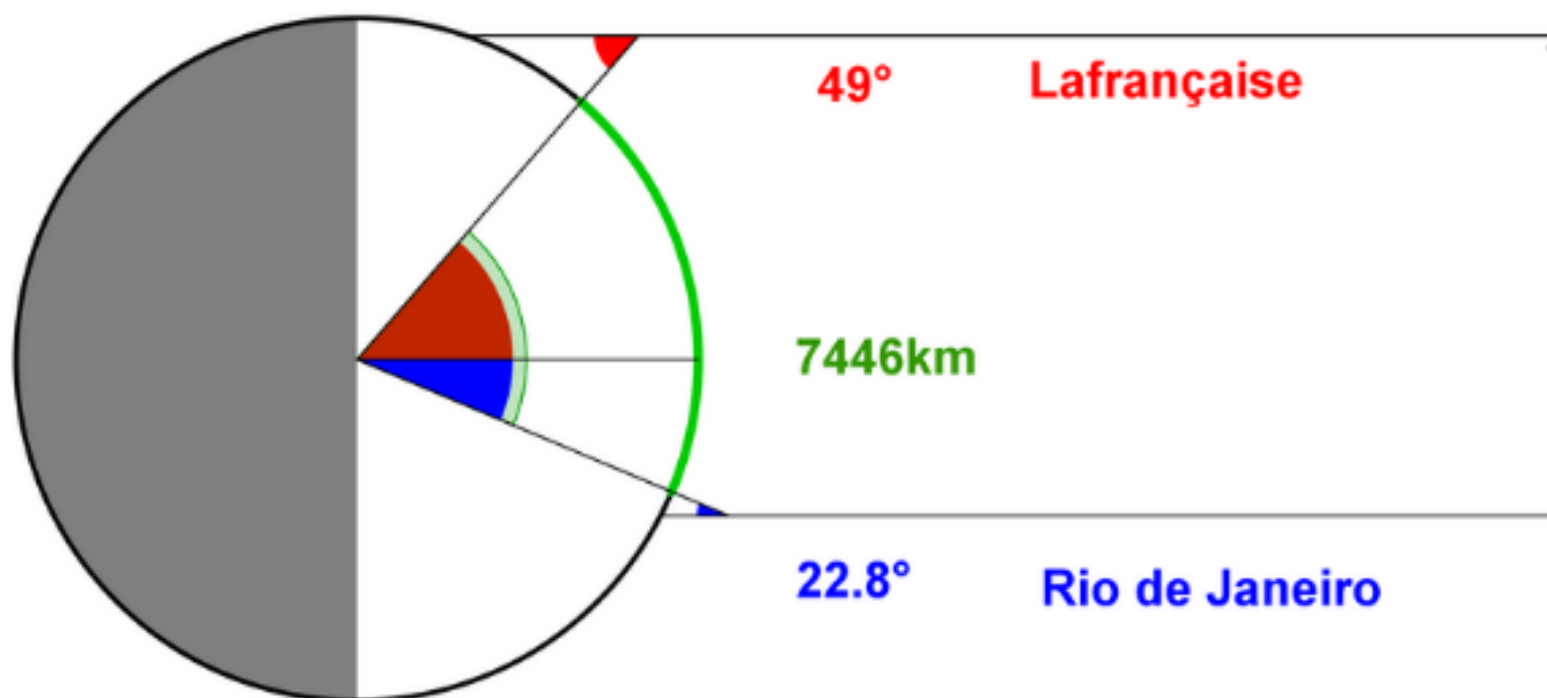


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
05 October	100 cm	-42 cm	-22.8 °
06 October	100 cm	-44 cm	-23.7 °
09 October	100 cm	-44 cm	-23.7 °
10 October	100 cm	-43 cm	-23.3 °
11 October	100 cm	-42 cm	-22.8 °
14 October	100 cm	-41 cm	-22.3 °
17 October	100 cm	-39 cm	-21.3 °
18 October	100 cm	-38 cm	-20.8 °
19 October	100 cm	-38 cm	-20.8 °

05/10/2017 (Lafrançaise-France) Latitude: 44.127°

05/10/2017 (Rio de Janeiro-Brazil) Latitude: -22.891°



$$\text{circumference} = \frac{360^\circ \times 7446\text{km}}{49^\circ + 22.8^\circ} = 37334 \text{ km}$$



Rio de Janeiro MDA, Brazil

October 2017



Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Museu Da Aeronautica Campos Dos Afonso	-22.881	-43.382

Date	Gnomon	Shadow	Angle
01 October	46.5 cm	-15 cm	-17.9 °





