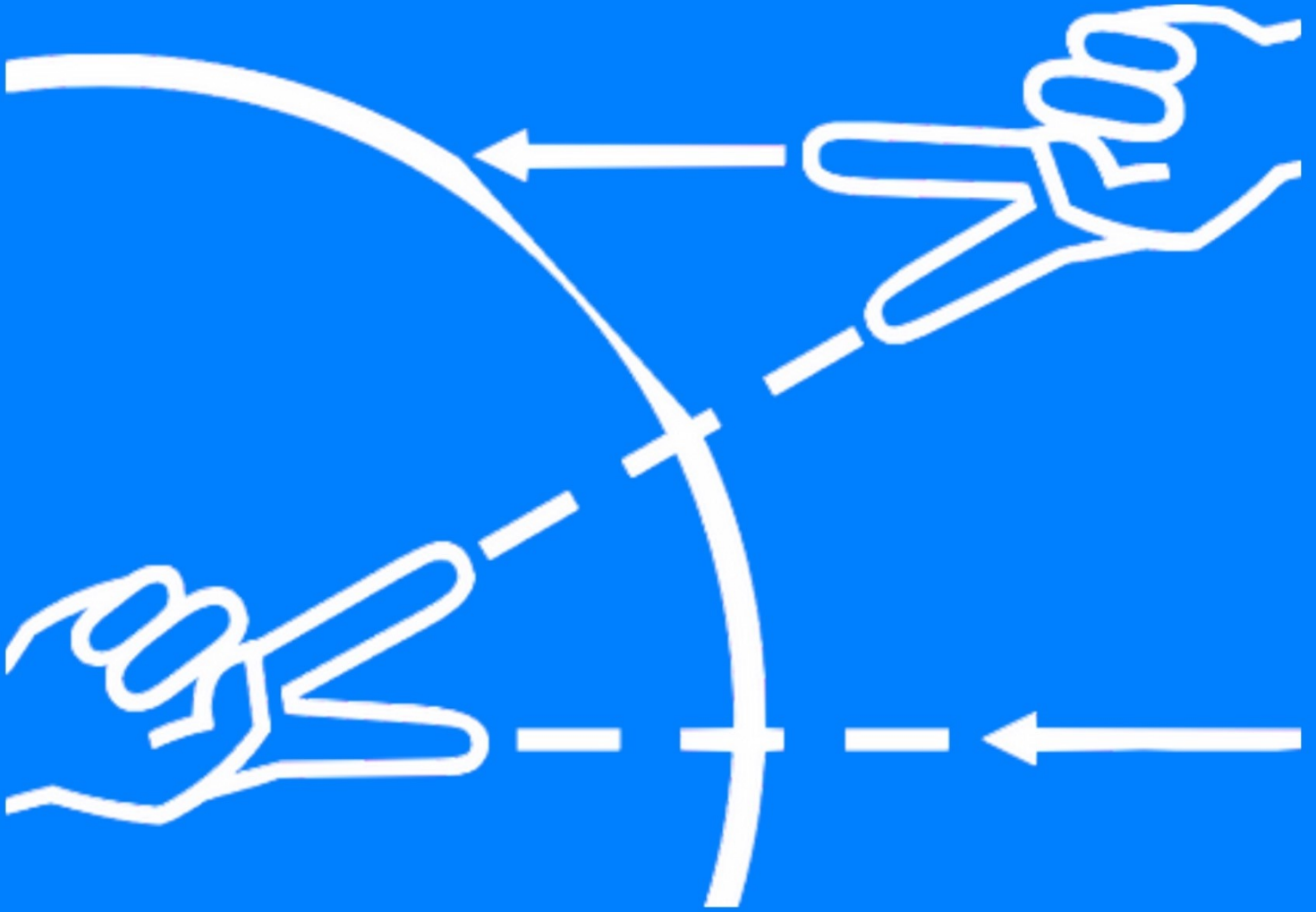


Eratostrhenes



4 Continents

12 Countries

24 Schools

142 Measures

4 Continents

12 Countries

24 Schools

142 Measures

ARGENTINA (4)

Alta Gracia, Buenos Aires, Chivilcoy, Rio Cuarto

BRAZIL (3)

Rio de Janeiro, São Mateus, Méier

COLOMBIA (3)

Guarne, Medellín, Yarumal

FRANCE (2)

Lafrançaise, Montcuq

GERMANY (1)

Garmisch Partenkirchen

GREECE (3)

Aigio, Athens, Ilion, Ioannina

INDIA (1)

Yamunanagar

PUERTO RICO (1)

Bayamón

ROMANIA (3)

Busteni, Dorohoi, Margineni

SPAIN (1)

Úbeda

VIET NAM(1)

Hồ Chí Minh City

Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079
	Alta Gracia	Argentina	Jose Luis Cabrera	-31.655	-64.414
	Athens	Greece	Experimental School Agion Anargyron	38.027	23.726
	Bayamón	Puerto Rico	AECM Carribean University	18.383	-66.168
	Buenos Aires	Argentina	Escuela 24 DE 20	-34.675	-58.483
	Busteni	Romania	Scoala Gimnaziala Sanatoriala	45.416	25.535
	Chivilcoy	Argentina	Parque Cielos del Sur	-34.911	-60.014
	Dorohoi	Romania	National College "Grigore Ghica"	47.953	26.394
	Garmisch Partenkirchen	Germany	St.-Irmengard-Gymnasium	47.493	11.102
	Guarne	Colombia	Grupo Astrofánaticos	6.274	-75.447
	Hồ Chí Minh City NT	Việt Nam	Nguyen Trai High School	10.760	106.712
	Ilion	Greece	11th Junior High School of Ilion	38.033	23.697
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237
	Margineni	Romania	Secondary School Gh. Popescu	44.533	24.554
	Medellín	Colombia	I.E. Ciudadela las Americas	6.309	-75.575
	Méier	Brazil	Escola Municipal Bento Ribeiro	-22.904	-43.280
	Mohammedia	Tunisia	Lycée M'hamdia	36.678	10.152
	Montcuq	France		44.340	1.210
	Rio Cuarto	Argentina	Colegio Concordia	-33.149	-64.351
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317
	São Mateus	Brazil	EEEM Nestor Gomes	-18.716	-39.856
	Úbeda	Spain	Colegio Salesiano Santo Domingo Savio	38.017	-3.367
	Yamunanagar	India	CV Raman VIPNET Science Club	30.140	77.275
	Yarumal	Colombia	Institución Educativa San Luis	6.966	-75.416

Aigio, Greece

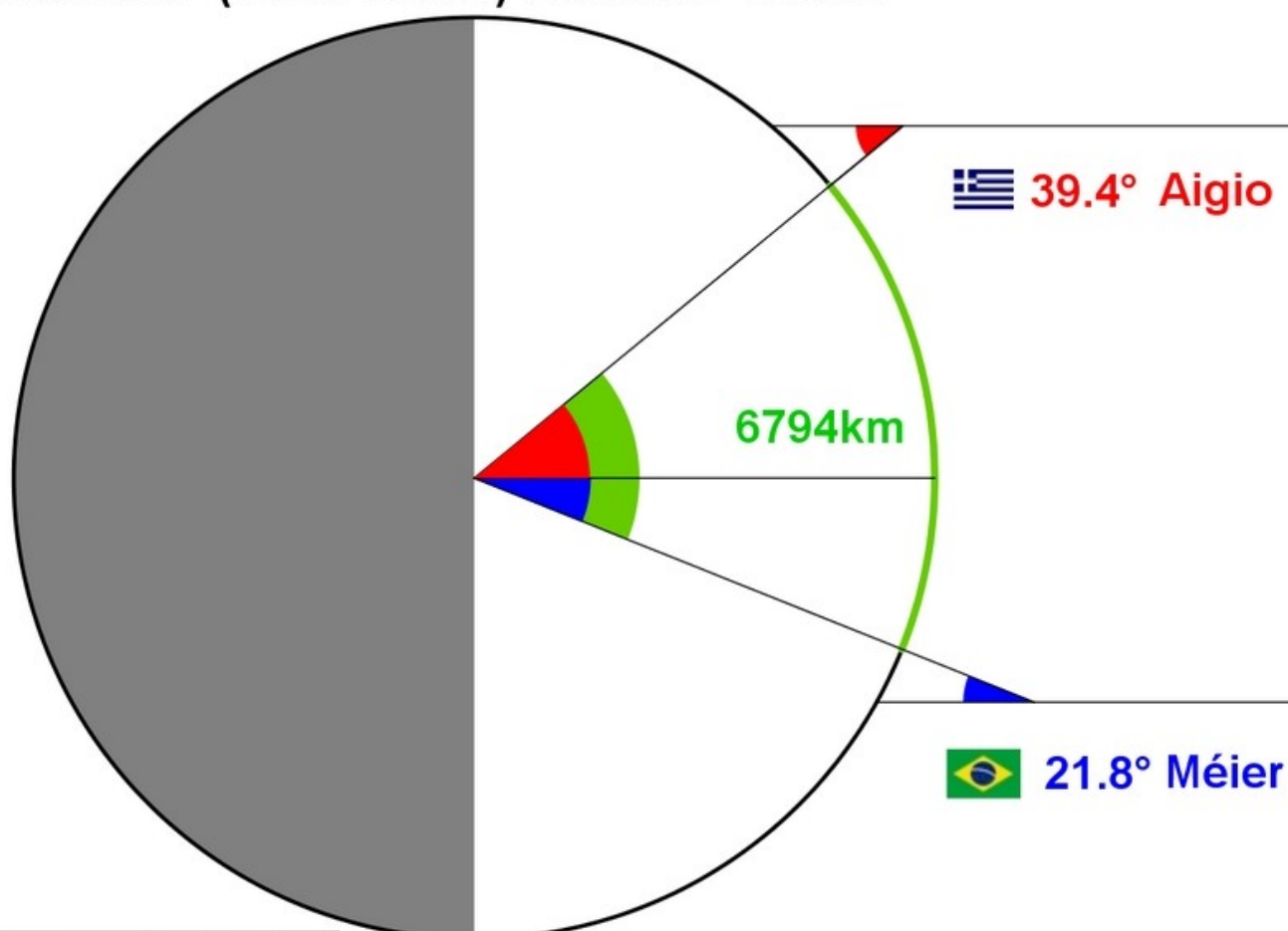


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079

Date	Gnomon	Shadow	Angle
25 September 2020	40.0cm	32.9cm	39.4°

25/09/2020 (Aigio-Greece) Latitude: 38.252°

25/09/2020 (Méier-Brazil) Latitude: -22.904°



Distance	Angle
circumference	360°
6794km	39.4° + 21.8°

$$\text{circumference} = \frac{360^\circ \times 6794\text{km}}{39.4^\circ + 21.8^\circ} = 39965 \text{ km}$$



Alta Gracia, Argentina

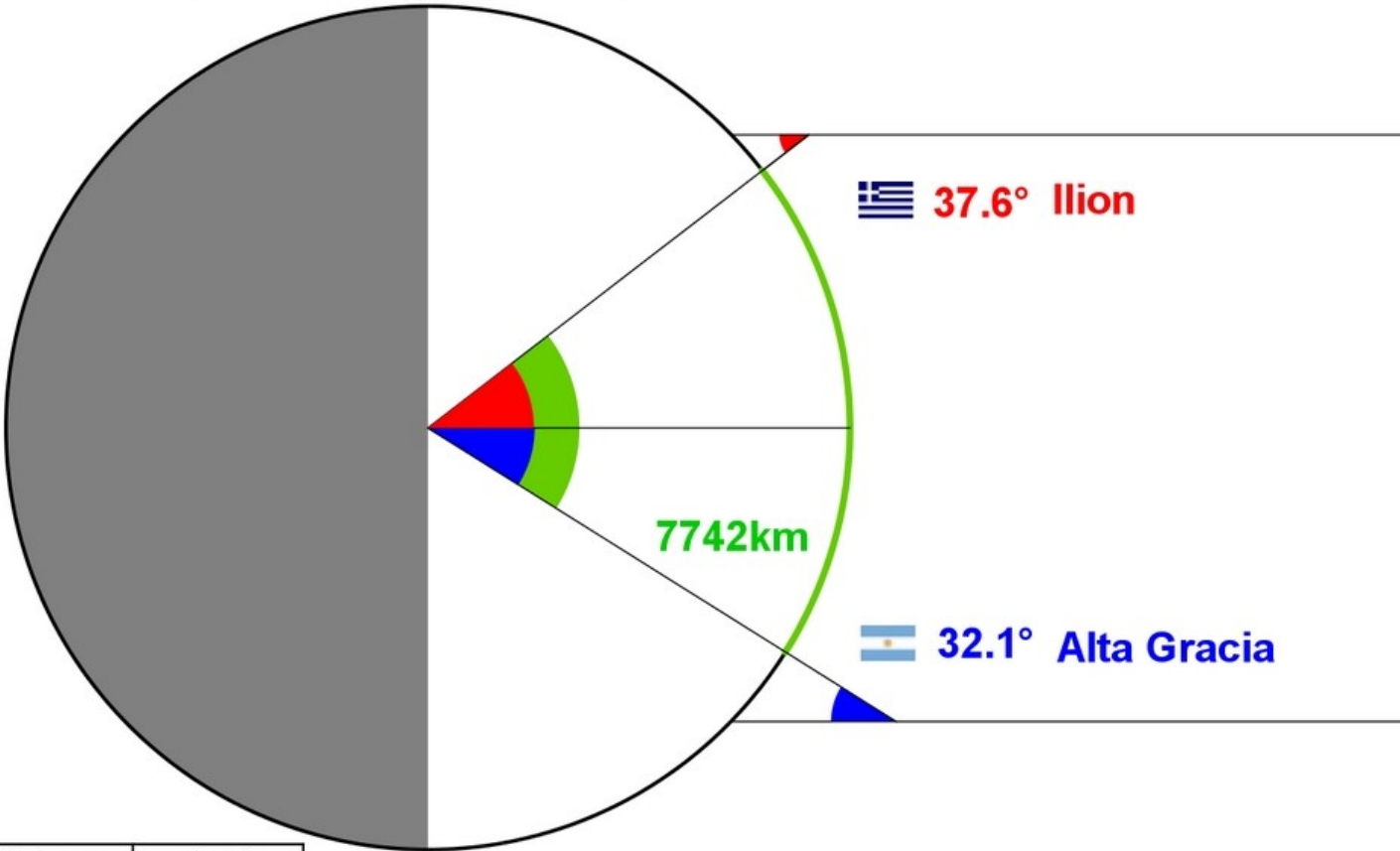


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.655	-64.414

Date	Gnomon	Shadow	Angle
05 September 2020	22.0cm	-17.6cm	-38.7°
09 September 2020	22.0cm	-16.6cm	-37.0°
10 September 2020	22.0cm	-16.1cm	-36.2°
14 September 2020	22.0cm	-15.5cm	-35.2°
15 September 2020	22.0cm	-15.2cm	-34.6°
16 September 2020	22.0cm	-15.0cm	-34.3°
18 September 2020	22.0cm	-14.6cm	-33.6°
20 September 2020	22cm	-14.2cm	-32.8°
21 September 2020	22.0cm	-13.8cm	-32.1°
22 September 2020	22.0cm	-13.9cm	-32.3°
24 September 2020	22cm	-13.3cm	-31.2°
25 September 2020	22cm	-13cm	-30.6°
28 September 2020	22cm	-12.4cm	-29.4°
30 September 2020	22.0cm	-11.9cm	-28.4°

21/09/2020 (Ilion-Greece) Latitude: 38.033°

21/09/2020 (Alta Gracia-Argentina) Latitude: -31.656°



Distance	Angle
circumference	360°
7742km	37.6°+32.1°

circumference = $\frac{360^\circ \times 7742\text{km}}{37.6^\circ + 32.1^\circ} = 39987 \text{ km}$



Athens, Greece

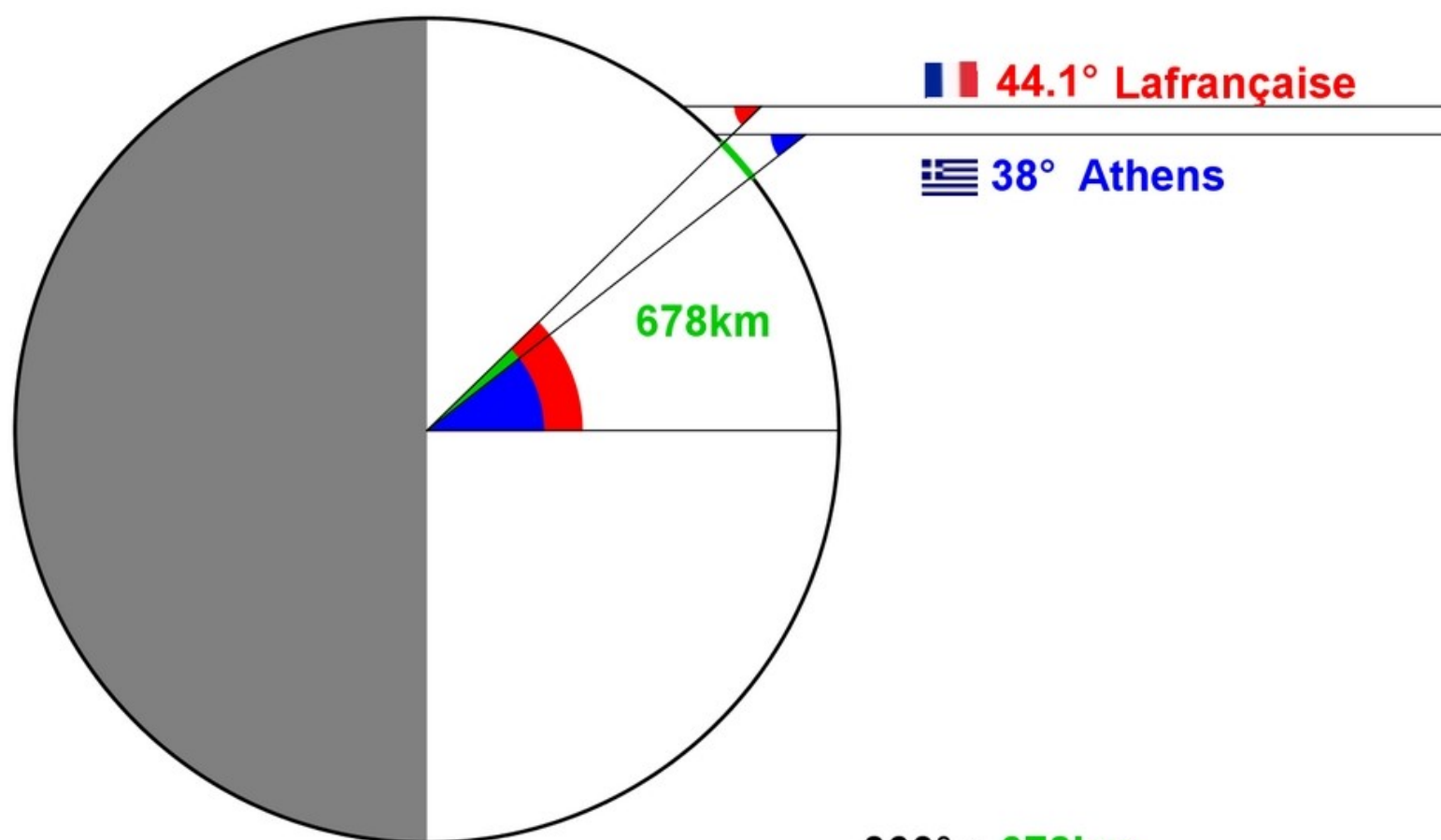


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Athens	Greece	Experimental School Agion Anargyron	38.027	23.726

Date	Gnomon	Shadow	Angle
22 September 2020	247.0cm	193.0cm	38.0°

22/09/2020 (Lafrançaise-France) Latitude: 44.127°

22/09/2020 (Athens-Greece) Latitude: 38.027°



Distance	Angle
circumference	360°
678km	44.1° - 38°

$$\text{circumference} = \frac{360^\circ \times 678\text{km}}{44.1^\circ - 38^\circ} = 40013 \text{ km}$$



Bayamón, Puerto Rico

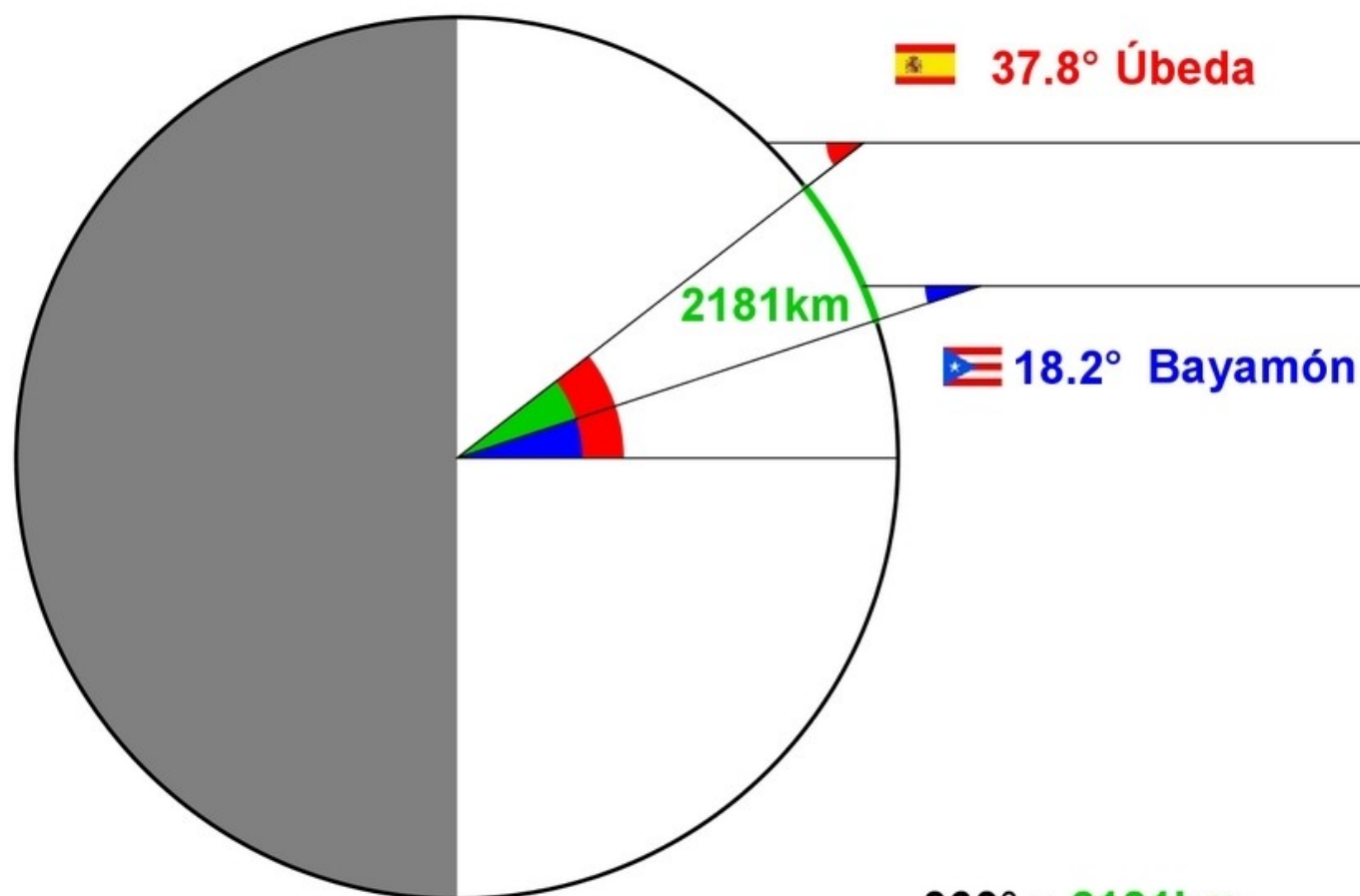


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Bayamón	Puerto Rico	AECM Carribean University	18.383	-66.168

Date	Gnomon	Shadow	Angle
09 September 2020	25.0cm	4.0cm	9.1°
11 September 2020	25.0cm	7.5cm	16.7°
18 September 2020	25.0cm	7.8cm	17.3°
21 September 2020	50.0cm	18.2cm	20.0°
22 September 2020	25.0cm	8.2cm	18.2°

22/09/2020 (Úbeda-Spain) Latitude: 38.017°

22/09/2020 (Bayamón-Puerto Rico) Latitude: 18.383°



Distance	Angle
circumference	360°
2181km	37.8° - 18.2°

$$\text{circumference} = \frac{360^\circ \times 2181\text{km}}{37.8^\circ - 18.2^\circ} = 40059 \text{ km}$$



Buenos Aires, Argentina

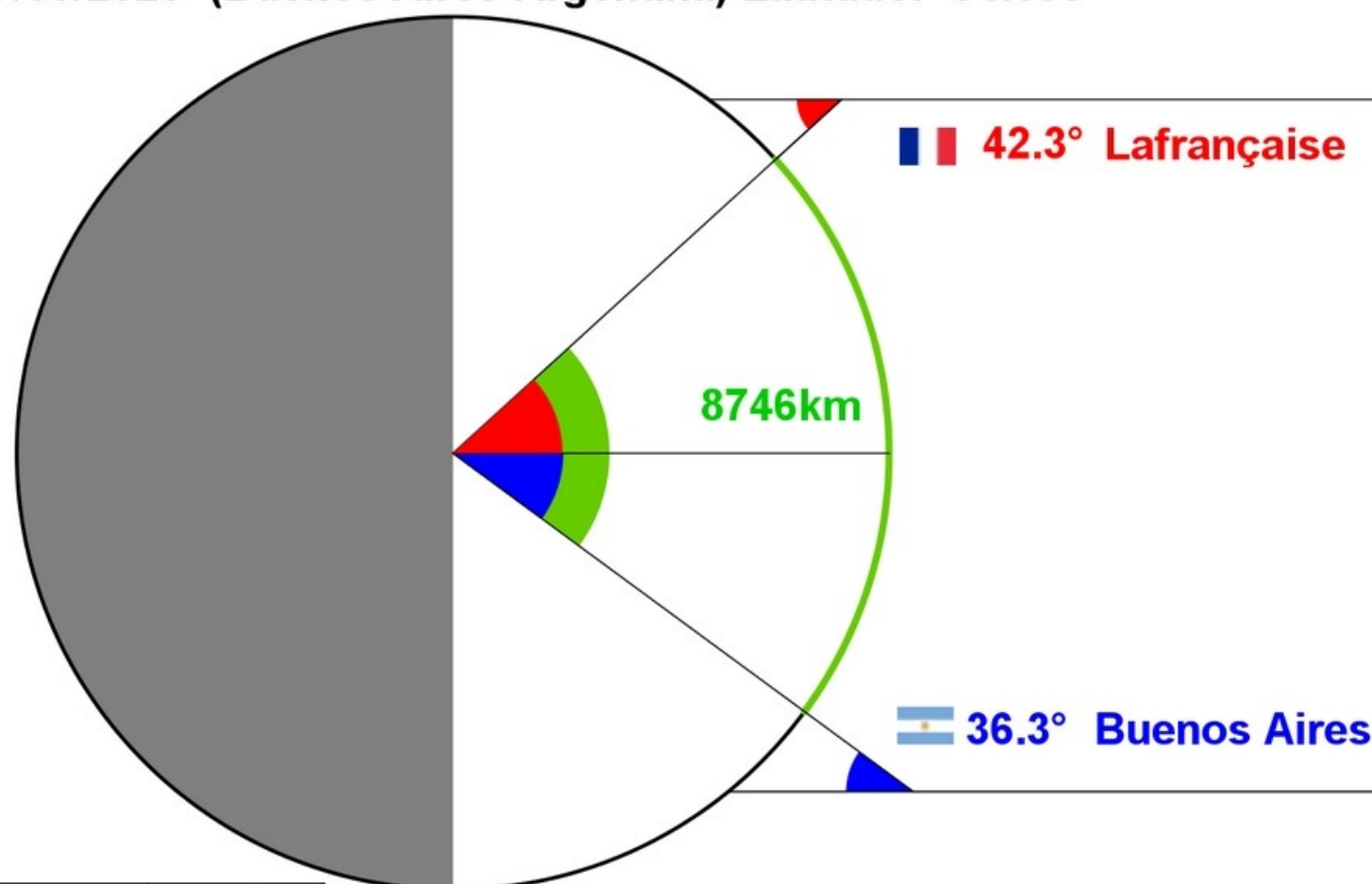


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Buenos Aires	Argentina	Escuela 24 DE 20	-34.675	-58.483

Date	Gnomon	Shadow	Angle
17 September 2020	7.5cm	-5.5cm	-36.3°
18 September 2020	7.5cm	-5.3cm	-35.2°
21 September 2020	7.5cm	-4.5cm	-31.0°
22 September 2020	7.5cm	-4.3cm	-29.8°

17/09/2020 (Lafrançaise-France) Latitude: 44.127°

17/09/2020 (Buenos Aires-Argentina) Latitude: -34.599°



Distance	Angle
circumference	360°
8746km	42.3° + 36.3°

$$\text{circumference} = \frac{360^\circ \times 8746\text{km}}{42.3^\circ + 36.3^\circ} = 40058 \text{ km}$$



FSC:24 DF:20

34 675 158 483

Busteni, Romania

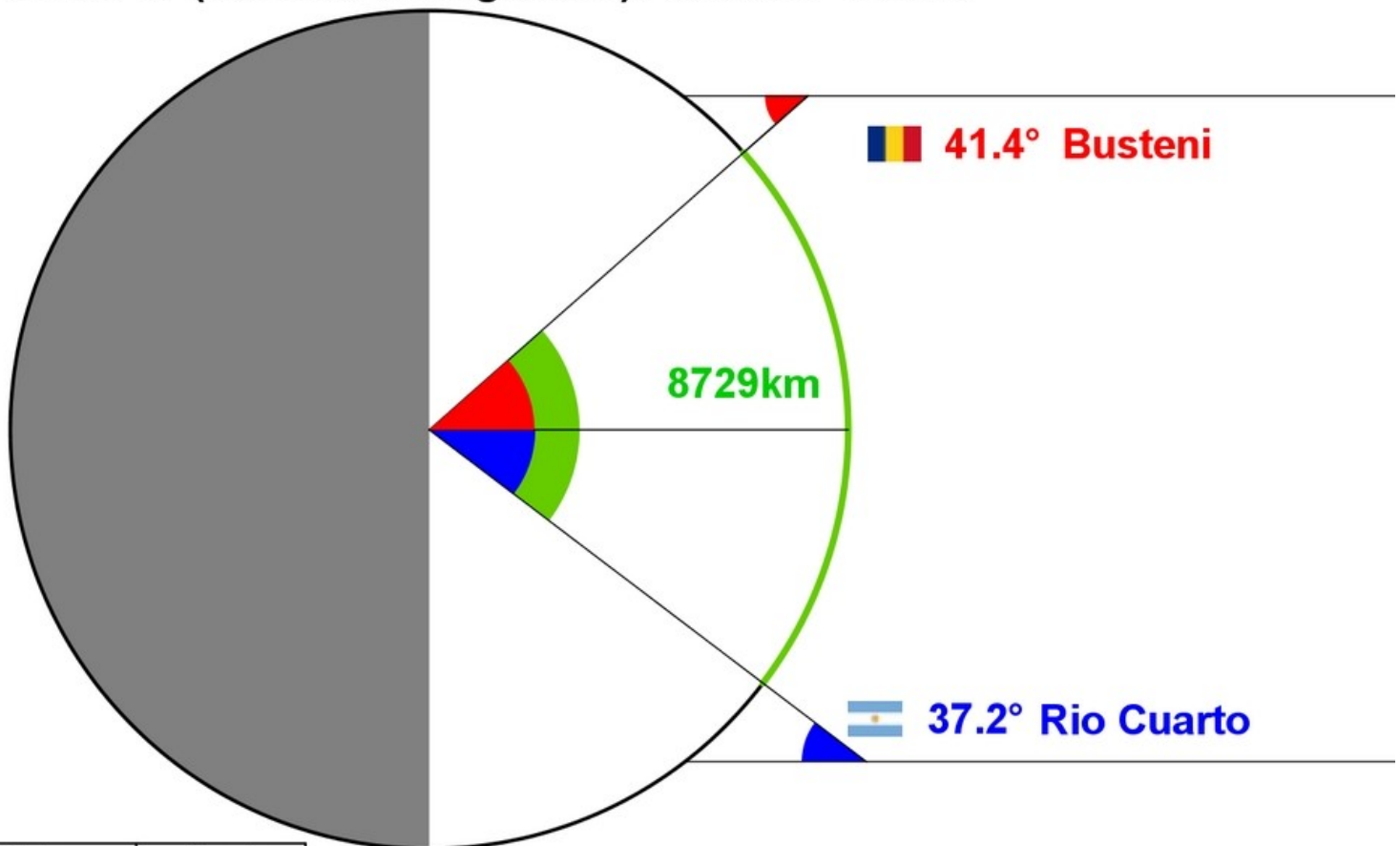


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Busteni	Romania	Scoala Gimnaziala Sanatoriala	45.416	25.535

Date	Gnomon	Shadow	Angle
07 September 2020	36.5cm	30.0cm	39.4°
08 September 2020	30.0cm	25.0cm	39.8°
09 September 2020	41.4cm	35.0cm	40.2°
11 September 2020	74.8cm	65.0cm	41.0°
12 September 2020	56.7cm	50.0cm	41.4°
15 September 2020	21.9cm	20.0cm	42.4°
16 September 2020	102.0cm	95.0cm	43.0°
17 September 2020	68.8cm	65.0cm	43.4°
24 September 2020	96.9cm	100cm	45.9°
25 September 2020	89.9cm	95cm	46.6°
26 September 2020	44.8cm	48cm	47°
29 September 2020	26.8cm	30.0cm	48.2°
30 September 2020	132.0cm	149.8cm	48.6°

12/09/2020 (Busteni-Romania) Latitude: 45.416°

12/09/2020 (Rio Cuarto-Argentina) Latitude: -33.149°



Distance	Angle
circumference	360°
8729km	41.4° + 37.2°

$$\text{circumference} = \frac{360^\circ \times 8729\text{km}}{41.4^\circ + 37.2^\circ} = 39980 \text{ km}$$



Chivilcoy, Argentina

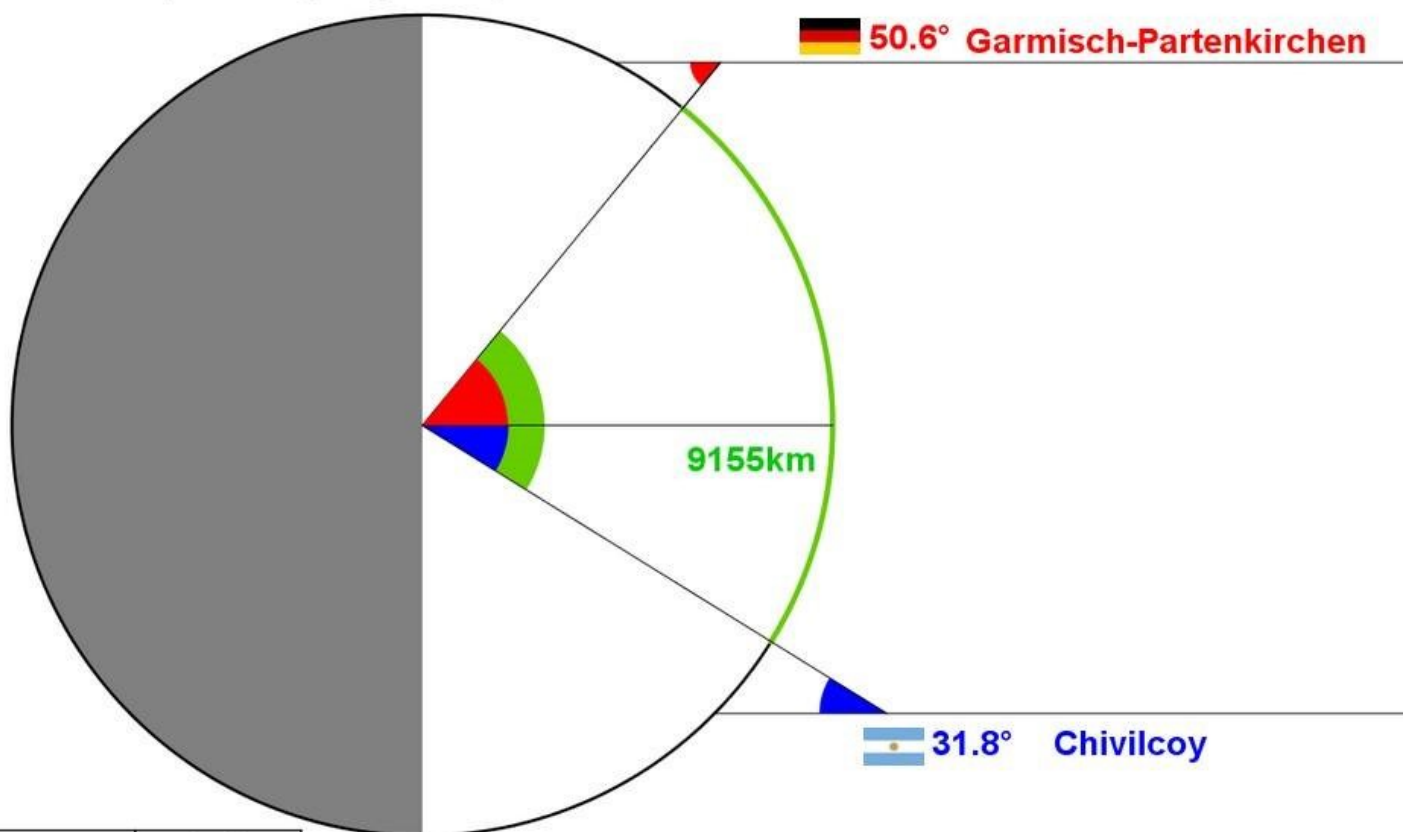


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Chivilcoy	Argentina	Parque Cielos del Sur	-34.911	-60.014

Date	Gnomon	Shadow	Angle
10 September 2020	19.4cm	-16.0cm	-39.5°
11 September 2020	cm	cm	-39.0°
12 September 2020	19.2cm	-15.4cm	-38.7°
13 September 2020	18.6cm	-14.7cm	-38.3°
14 September 2020	19.2cm	-15.0cm	-38.0°
15 September 2020	cm	cm	-37.6°
16 September 2020	19.0cm	-14.4cm	-37.2°
17 September 2020	18.7cm	-14.0cm	-36.8°
18 September 2020	18.8cm	-13.8cm	-36.3°
19 September 2020	18.5cm	-13.4cm	-35.9°
20 September 2020	19.4cm	-13.9cm	-35.6°
21 September 2020	36cm	-25.4cm	-35.2°
22 September 2020	20.8cm	-14.5cm	-34.9°
23 September 2020	20.5cm	-14.1cm	-34.5°
24 September 2020	19.6cm	-13.3cm	-34.2°
28 September 2020	15.5cm	-9.9cm	-32.6°
30 September 2020	18.7cm	-11.6cm	-31.8°

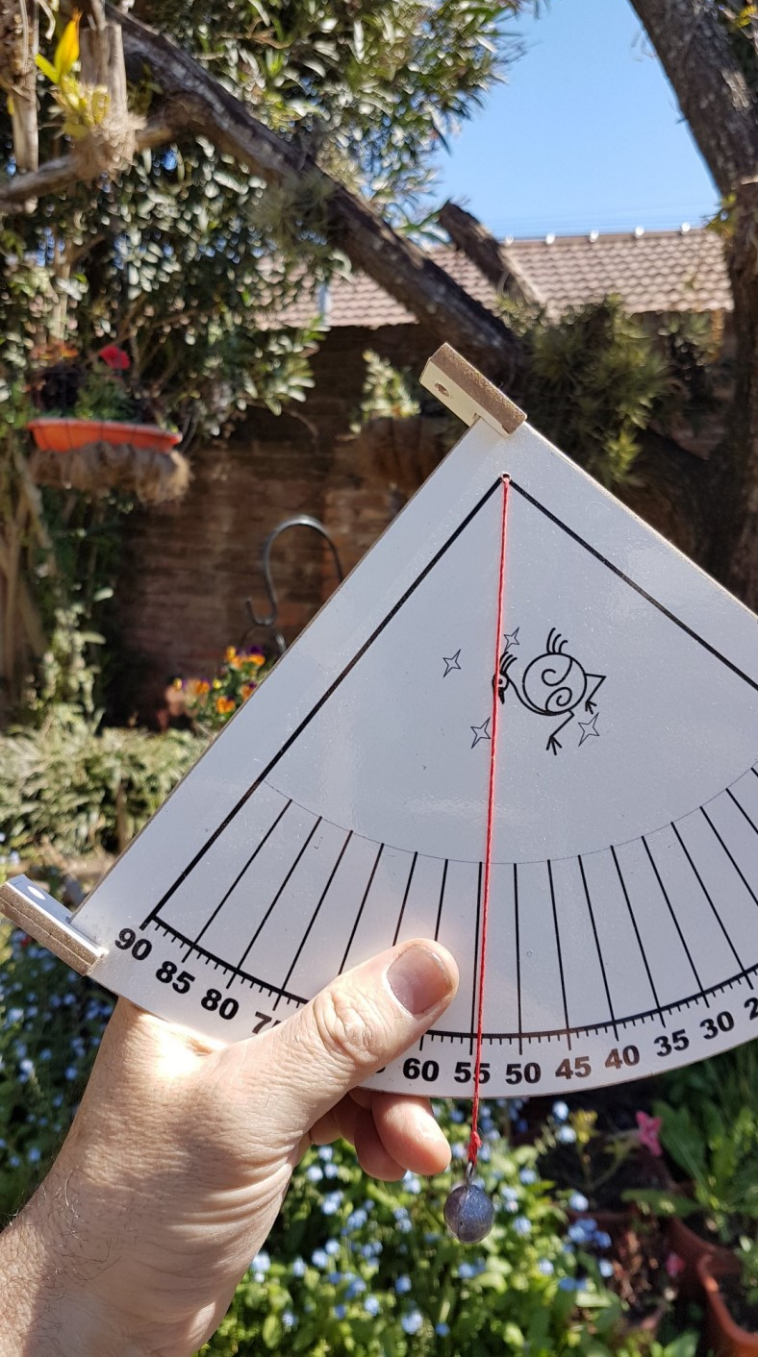
30/09/2020 (Garmisch-Partenkirchen-Germany) Latitude: 47.493°

30/09/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
9155km	50.6° + 31.8°

$$\text{circumference} = \frac{360^\circ \times 9155\text{km}}{50.6^\circ + 31.8^\circ} = 39998 \text{ km}$$



Dorohoi, Romania

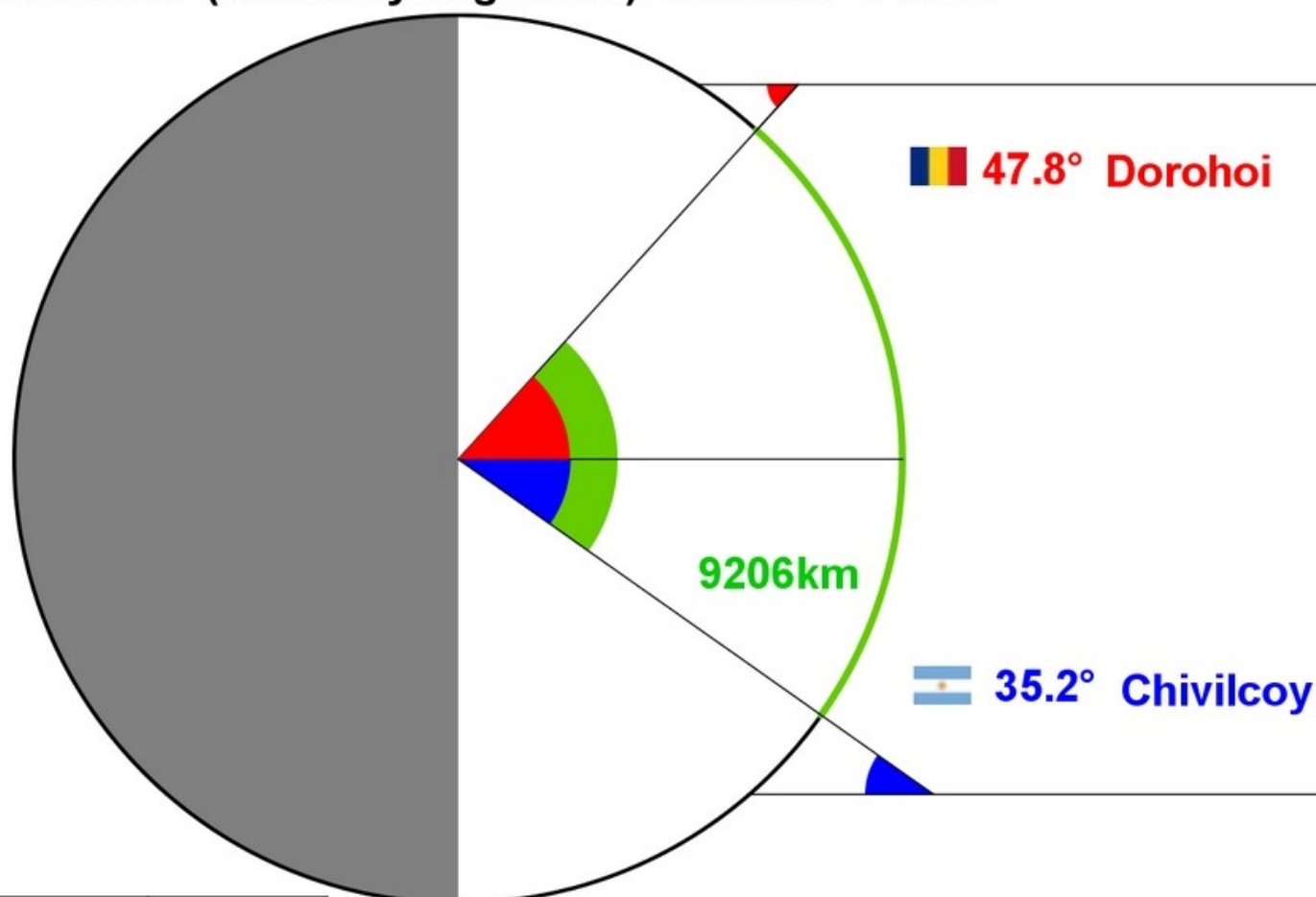


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Dorohoi	Romania	National College "Grigore Ghica"	47.953	26.394

Date	Gnomon	Shadow	Angle
21 September 2020	118cm	130cm	47.8°

21/09/2020 (Dorohoi-Romania) Latitude: 47.953°

21/09/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
9206km	47.8° + 35.2°

$$\text{circumference} = \frac{360^\circ \times 9206\text{km}}{47.8^\circ + 35.2^\circ} = 39930 \text{ km}$$



Garmisch Partenkirchen, Germany

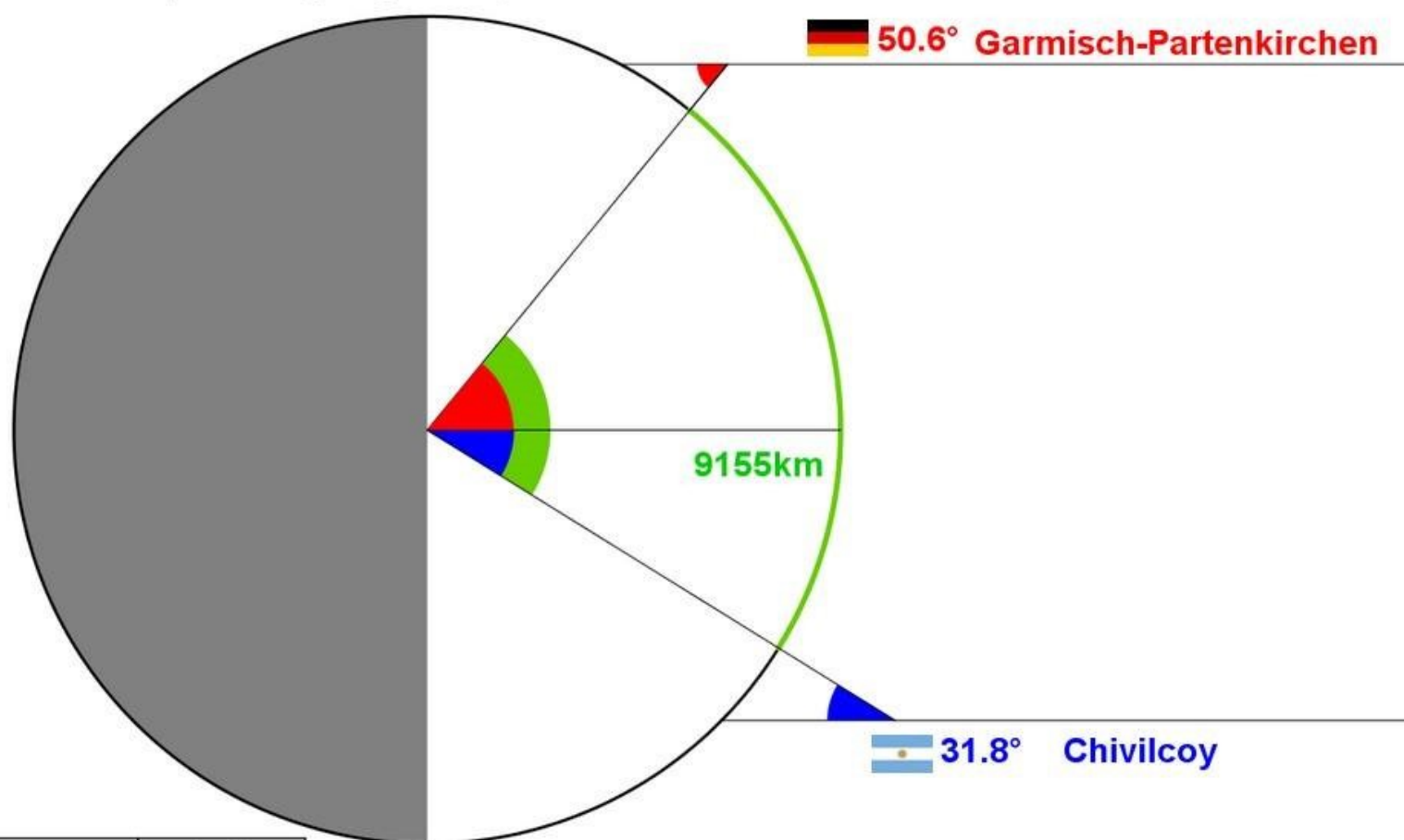


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Garmisch Partenkirchen	Germany	St.-Irmengard- Gymnasium	47.493	11.102

Date	Gnomon	Shadow	Angle
18 September 2020	152.0cm	156.0cm	45.7°
21 September 2020	75cm	80.5cm	47°
27 September 2020	93.0cm	108.0cm	49.3°
30 September 2020	88.0cm	107.0cm	50.6°

30/09/2020 (Garmisch-Partenkirchen-Germany) Latitude: 47.493°

30/09/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
9155km	50.6° + 31.8°

circumference =

$$\frac{360^\circ \times 9155\text{km}}{50.6^\circ + 31.8^\circ} = 39998 \text{ km}$$



Guarne, Colombia

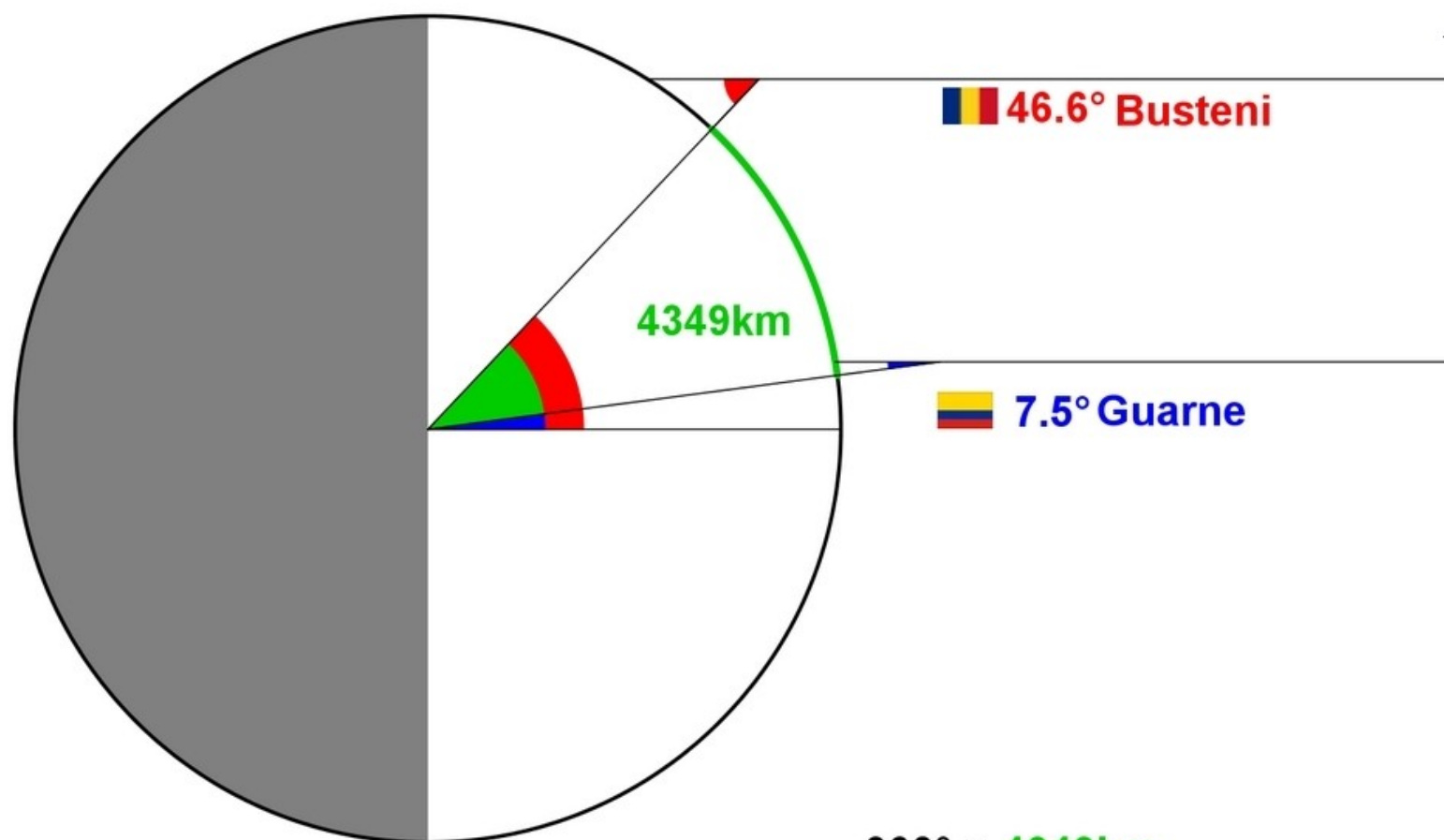


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Guarne	Colombia	Grupo Astrofánaticos	6.274	-75.447

Date	Gnomon	Shadow	Angle
18 September 2020	152.0cm	156.0cm	45.7°
21 September 2020	75cm	80.5cm	47°
27 September 2020	93.0cm	108.0cm	49.3°

25/09/2020 (Busteni-Romania) Latitude: 45.416°

25/09/2020 (Guarne-Colombia) Latitude: 6.274°



Distance	Angle
circumference	360°
4349km	46.6° - 7.5°

$$\text{circumference} = \frac{360^\circ \times 4349\text{km}}{46.6^\circ - 7.5^\circ} = 40042 \text{ km}$$



Hồ Chí Minh City NT, Việt Nam

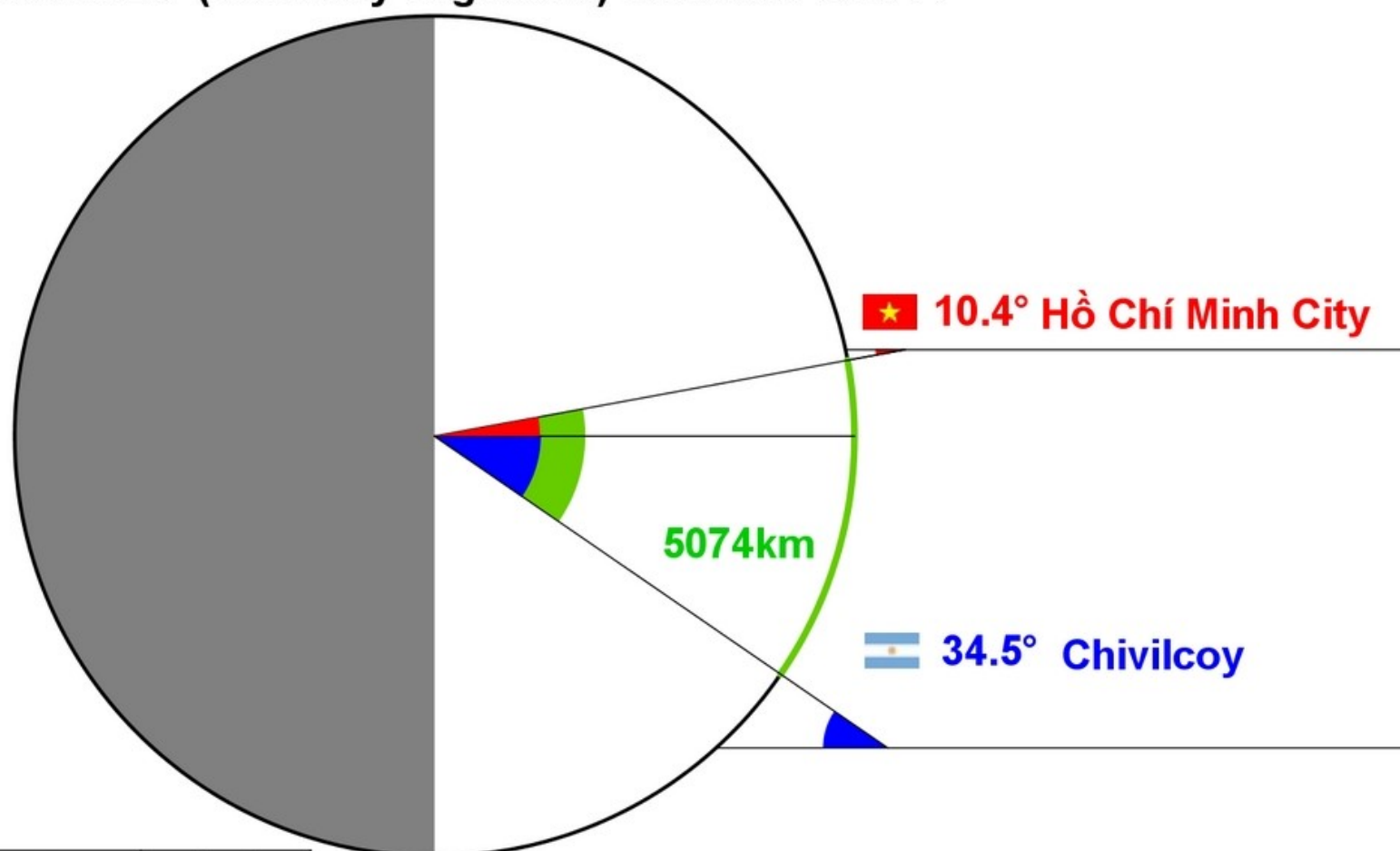


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Hồ Chí Minh City NT	Việt Nam	Nguyen Trai High School	10.760	106.712

Date	Gnomon	Shadow	Angle
23 September 2020	87cm	16cm	10.4°

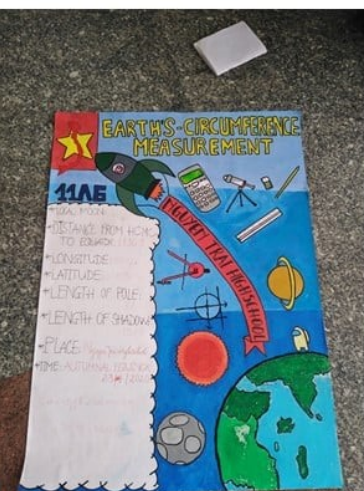
23/09/2020 (Hồ Chí Minh City NT-Việt Nam) Latitude: 10.76°

23/09/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
5074km	10.4° + 34.5°

$$\text{circumference} = \frac{360^\circ \times 5074\text{km}}{10.4^\circ + 34.5^\circ} = 40682 \text{ km}$$



Class: 11A6
 NGUYEN TRAI HIGH SCHOOL
 DATE: 23/9/2020
 Latitude: 10.759674
 Longitude: 106.712068
 Gnomon: 83 cm
 Shadow: 17,5 cm
 Local Noon: 11h48



fratos thenes
www.facebook.com/groups/Eratos



Latitude: 10.759674
 Longitude: 106.712068
 Gnomon: 87 cm
 Shadow: 13,78 cm
 Local Noon: 12h01



Class: 11A2
 NGUYEN TRAI HIGH SCHOOL
 DATE: 23/9/2020



fratos thenes
www.facebook.com/groups/Eratos

Ilion, Greece

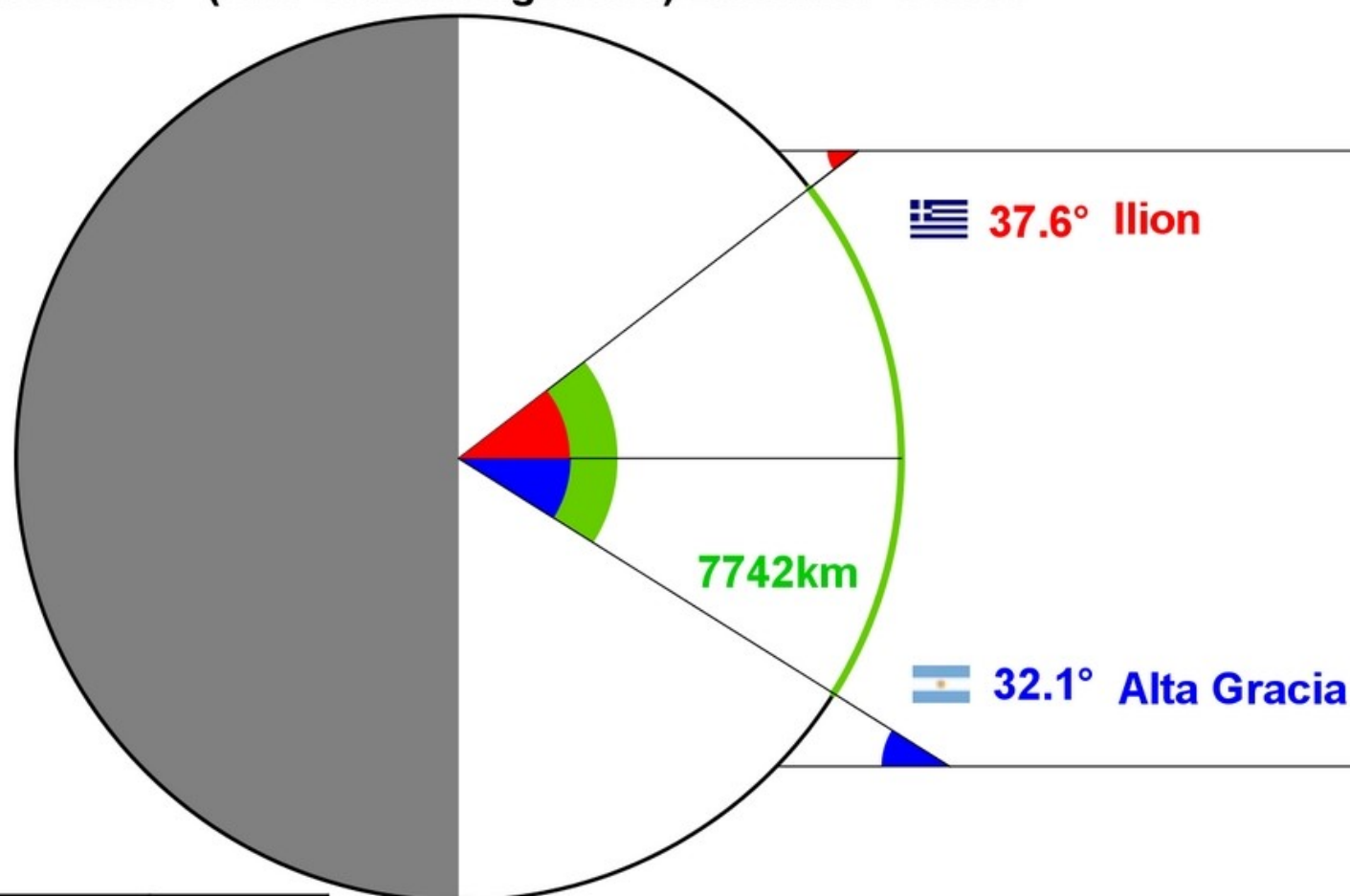


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ilion	Greece	11th Junior High School of Ilion	38.033	23.697

Date	Gnomon	Shadow	Angle
04 September 2020	24.0cm	14.5cm	31.1°
18 September 2020	40.0cm	29.5cm	36.4°
21 September 2020	40.0cm	30.8cm	37.6°
22 September 2020	40.0cm	31.5cm	38.2°
24 September 2020	40cm	32.2cm	38.8°
29 September 2020	40cm	34.5cm	40.8°

21/09/2020 (Ilion-Greece) Latitude: 38.033°

21/09/2020 (Alta Gracia-Argentina) Latitude: -31.656°



Distance	Angle
circumference	360°
7742km	37.6° + 32.1°

$$\text{circumference} = \frac{360^\circ \times 7742\text{km}}{37.6^\circ + 32.1^\circ} = 39987 \text{ km}$$



Lafrançaise, France

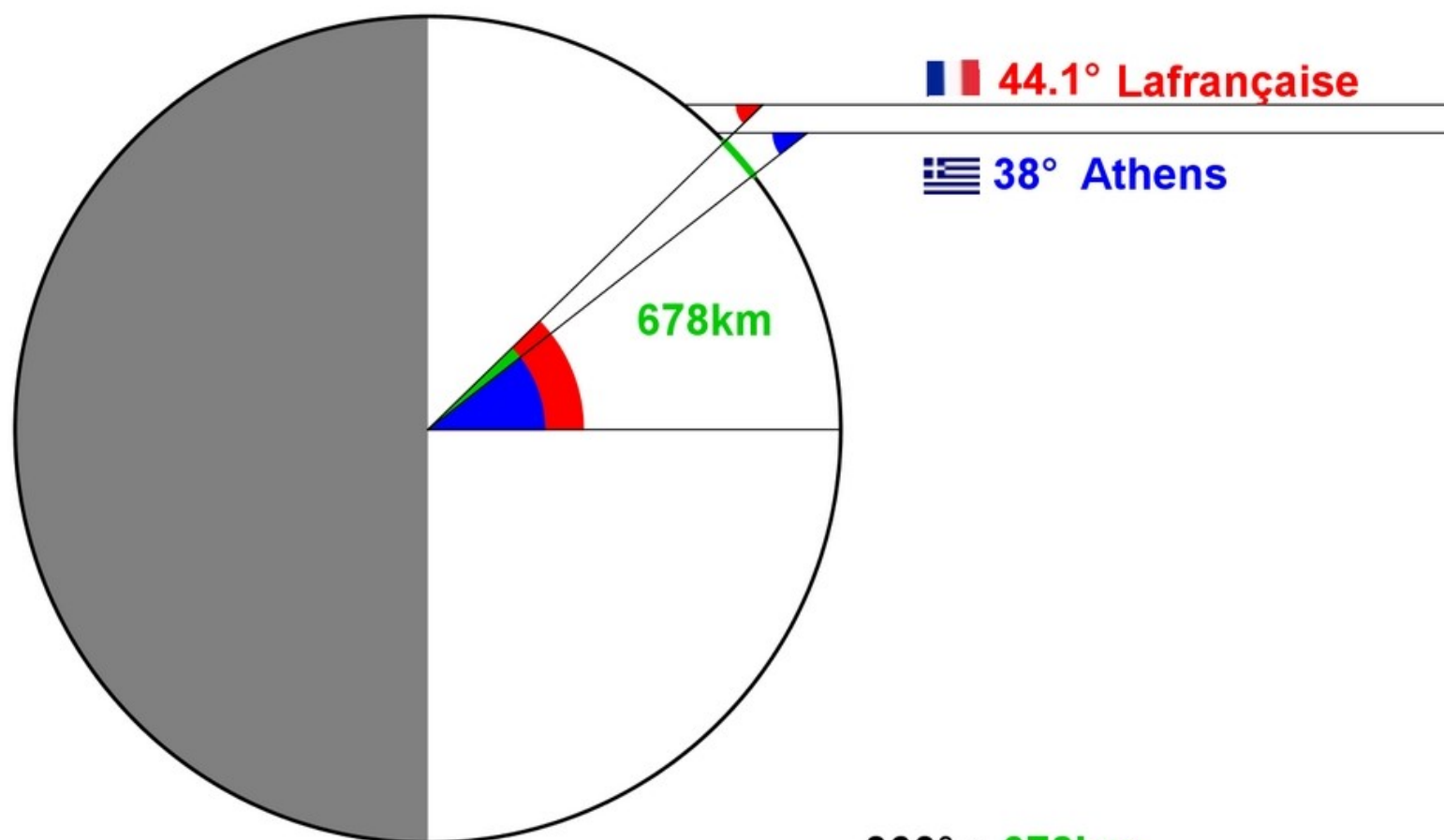


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237

Date	Gnomon	Shadow	Angle
03 September 2020	100.0cm	76.0cm	37.2°
04 September 2020	100.0cm	76.2cm	37.3°
08 September 2020	100.0cm	76.0cm	37.2°
10 September 2020	100.0cm	83.4cm	39.8°
11 September 2020	100.0cm	83.3cm	39.8°
15 September 2020	100.0cm	88.5cm	41.5°
17 September 2020	100.0cm	91.1cm	42.3°
18 September 2020	100.0cm	94.1cm	43.3°
22 September 2020	100cm	97cm	44.1°
24 September 2020	100cm	100cm	45°
25 September 2020	100cm	102cm	45.6°
29 September 2020	100.0cm	105.2cm	46.5°

22/09/2020 (Lafrançaise-France) Latitude: 44.127°

22/09/2020 (Athens-Greece) Latitude: 38.027°



Distance	Angle
circumference	360°
678km	44.1° - 38°

$$\text{circumference} = \frac{360^\circ \times 678\text{km}}{44.1^\circ - 38^\circ} = 40013 \text{ km}$$



Margineni, Romania

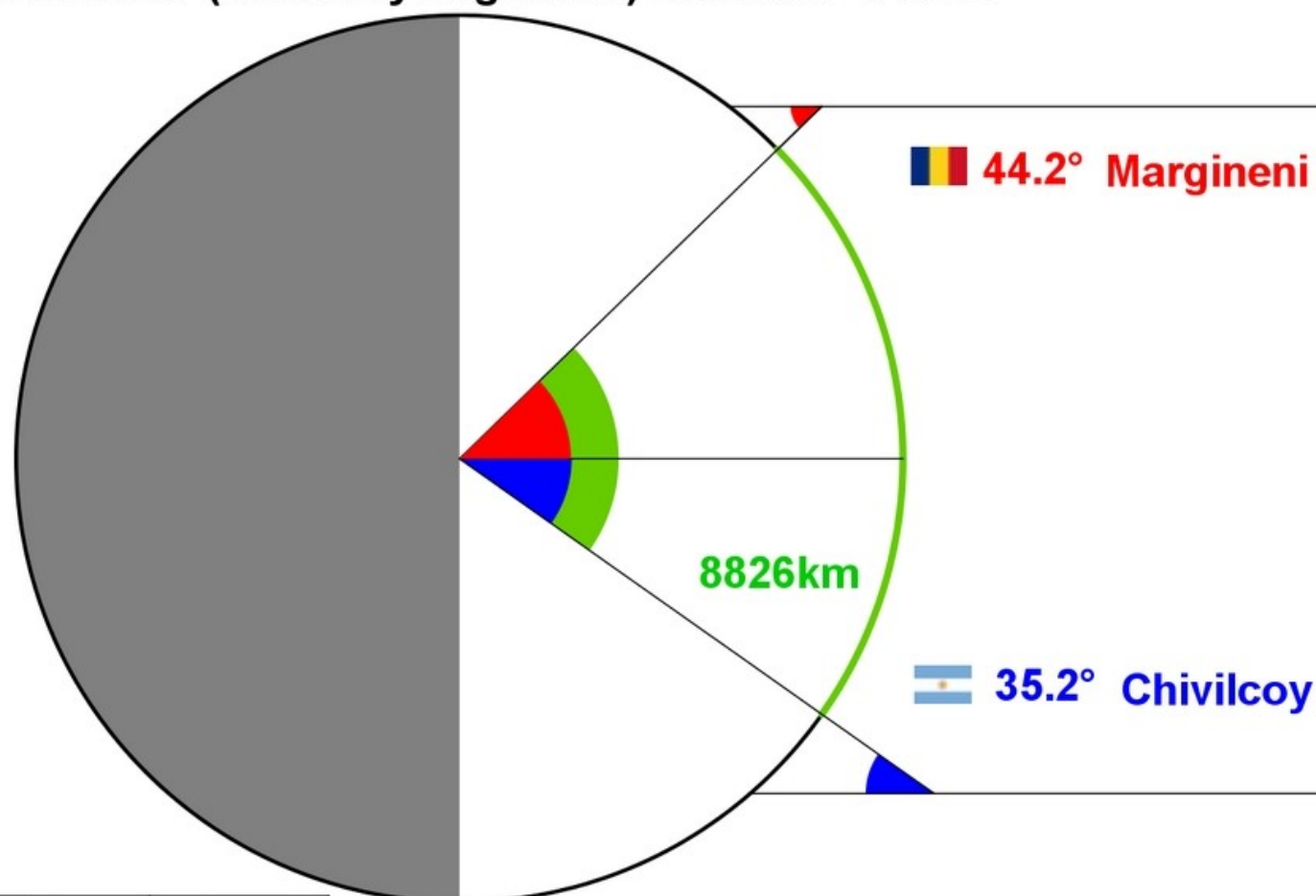


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Margineni	Romania	Secondary School Gh. Popescu	44.533	24.554

Date	Gnomon	Shadow	Angle
21 September 2020	100.0cm	97.3cm	44.2°
22 September 2020	100.0cm	97.5cm	44.3°

21/09/2020 (Margineni-Romania) Latitude: 44.533°

21/09/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
8826km	44.2° + 35.2°

$$\text{circumference} = \frac{360^\circ \times 8826\text{km}}{44.2^\circ + 35.2^\circ} = 40017 \text{ km}$$



Secondary School Gh. Popescu, Romania, 21.09.2020

Medellín, Colombia

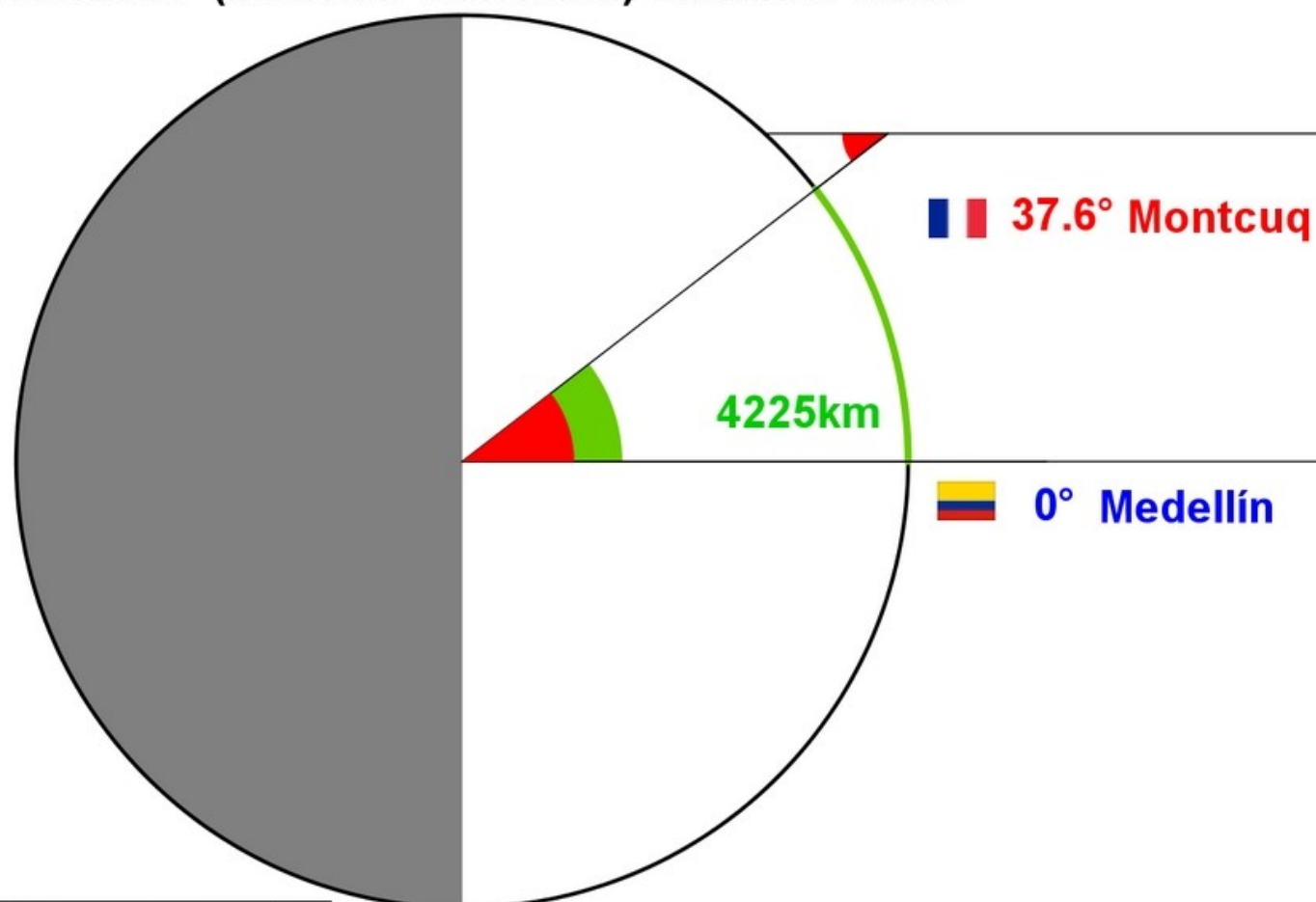


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Medellín	Colombia	I.E. Ciudadela las Americas	6.309	-75.575

Date	Gnomon	Shadow	Angle
05 September 2020	100.0cm	0.0cm	0.0°

05/09/2020 (Montcuq-France) Latitude: 44.34°

05/09/2020 (Medellín-Colombia) Latitude: 6.309°



Distance	Angle
circumference	360°
4225km	37.6° + 0°

$$\text{circumference} = \frac{360^\circ \times 4225\text{km}}{37.6^\circ + 0^\circ} = 40452 \text{ km}$$



Méier, Brazil

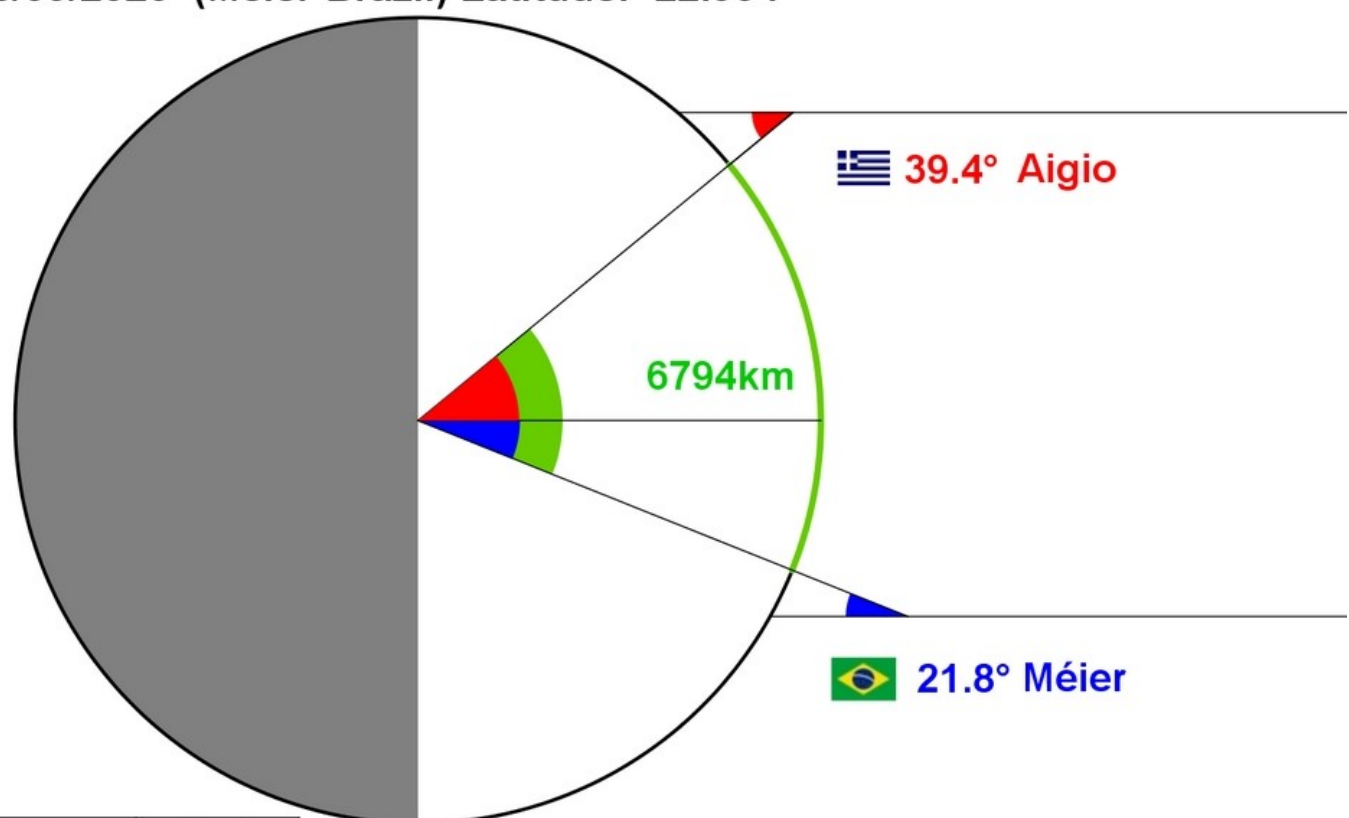


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Méier	Brazil	Escola Municipal Bento Ribeiro	-22.904	-43.280

Date	Gnomon	Shadow	Angle
03 September 2020	13.0cm	-11.0cm	-40.2°
04 September 2020	23.0cm	-11.0cm	-25.6°
05 September 2020	37.0cm	-28.0cm	-37.1°
06 September 2020	23.0cm	-15.0cm	-33.1°
08 September 2020	34.0cm	-21.0cm	-31.7°
09 September 2020	64.0cm	-43.0cm	-33.9°
10 September 2020	20.0cm	-8.0cm	-21.8°
11 September 2020	18.0cm	-9.0cm	-26.6°
12 September 2020	18.0cm	-7.0cm	-21.3°
13 September 2020	32.0cm	-17.0cm	-28.0°
14 September 2020	10.0cm	-4.0cm	-21.8°
16 September 2020	18.0cm	-6.0cm	-18.4°
17 September 2020	21.0cm	-8.0cm	-20.9°
18 September 2020	12.0cm	-5.0cm	-22.6°
19 September 2020	14cm	-5cm	-19.7°
25 September 2020	10cm	-4cm	-21.8°
28 September 2020	37cm	-30cm	-39°

25/09/2020 (Aigio-Greece) Latitude: 38.252°

25/09/2020 (Méier-Brazil) Latitude: -22.904°



Distance	Angle
circumference	360°
6794km	39.4° + 21.8°

$$\text{circumference} = \frac{360^\circ \times 6794\text{km}}{39.4^\circ + 21.8^\circ} = 39965 \text{ km}$$



Mohammedia, Tunisia

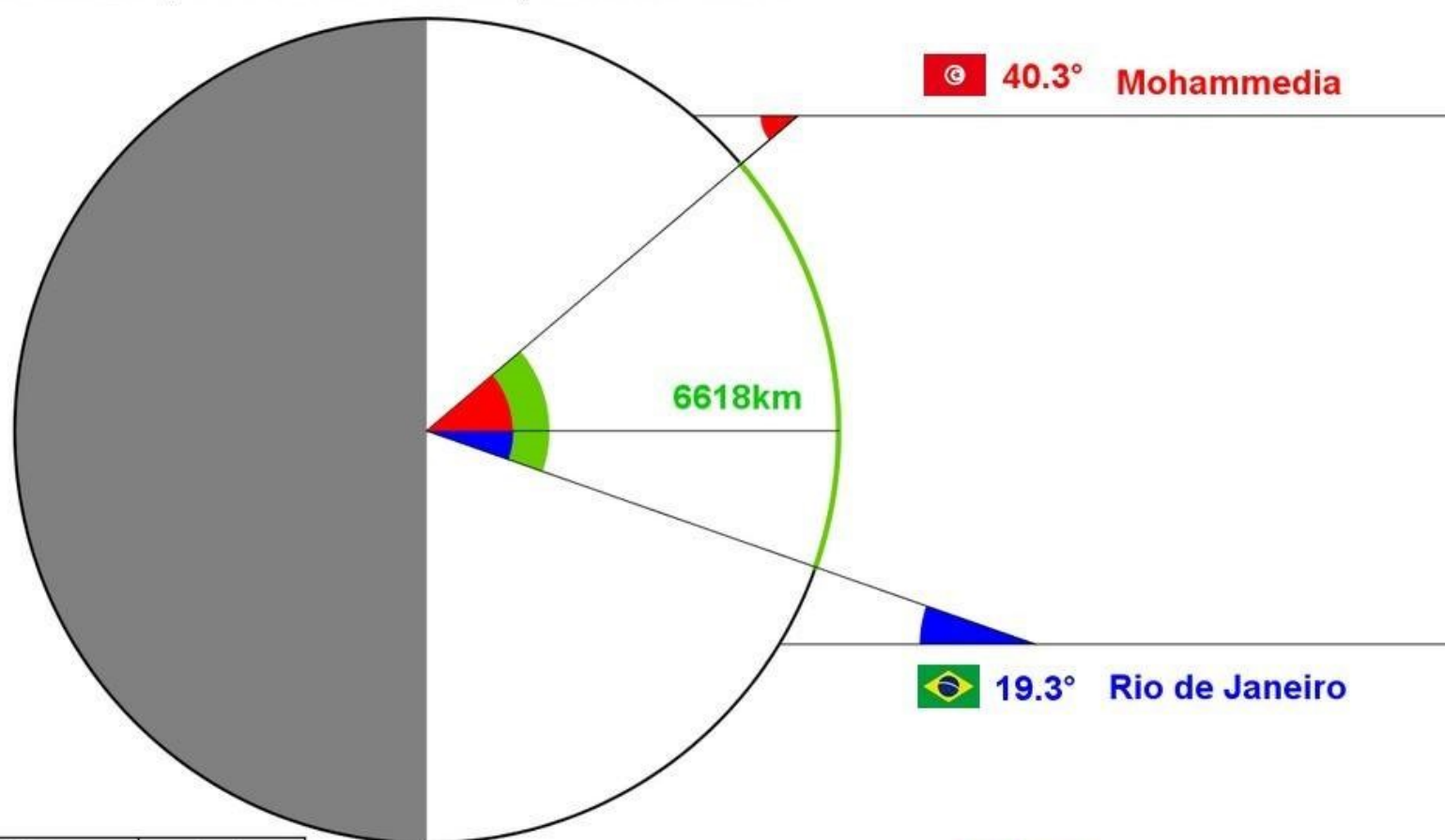


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Mohammedia	Tunisia	Lycée M'hamdia	36.678	10.152

Date	Gnomon	Shadow	Angle
30 September 2020	124.0cm	105.0cm	40.3°

30/09/2020 (Mohammedia-Tunisia) Latitude: 36.678°

30/09/2020 (Rio de Janeiro-Brazil) Latitude: -22.89°



Distance	Angle
circumference	360°
6618km	40.3° + 19.3°

circumference =

$$\frac{360^\circ \times 6618\text{km}}{40.3^\circ + 19.3^\circ} = 39974 \text{ km}$$



Montcuq, France

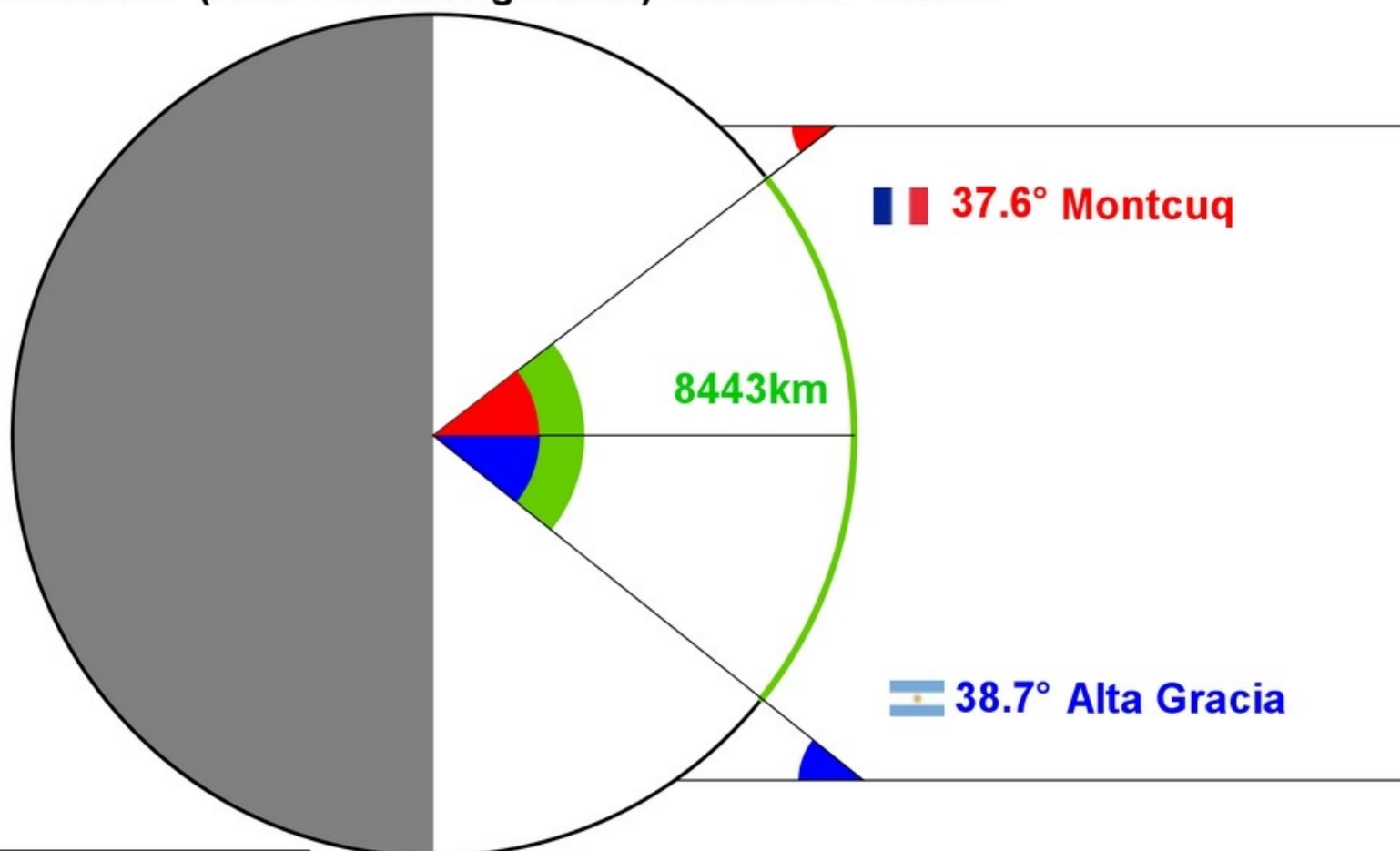


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Montcuq	France		44.340	1.210

Date	Gnomon	Shadow	Angle
05 September 2020	100.0cm	77.0cm	37.6°

05/09/2020 (Montcuq-France) Latitude: 44.34°

05/09/2020 (Alta Gracia-Argentina) Latitude: -31.655°



Distance	Angle
circumference	360°
8443km	37.6° + 38.7°

$$\text{circumference} = \frac{360^\circ \times 8443\text{km}}{37.6^\circ + 38.7^\circ} = 39836 \text{ km}$$



Rio Cuarto, Argentina

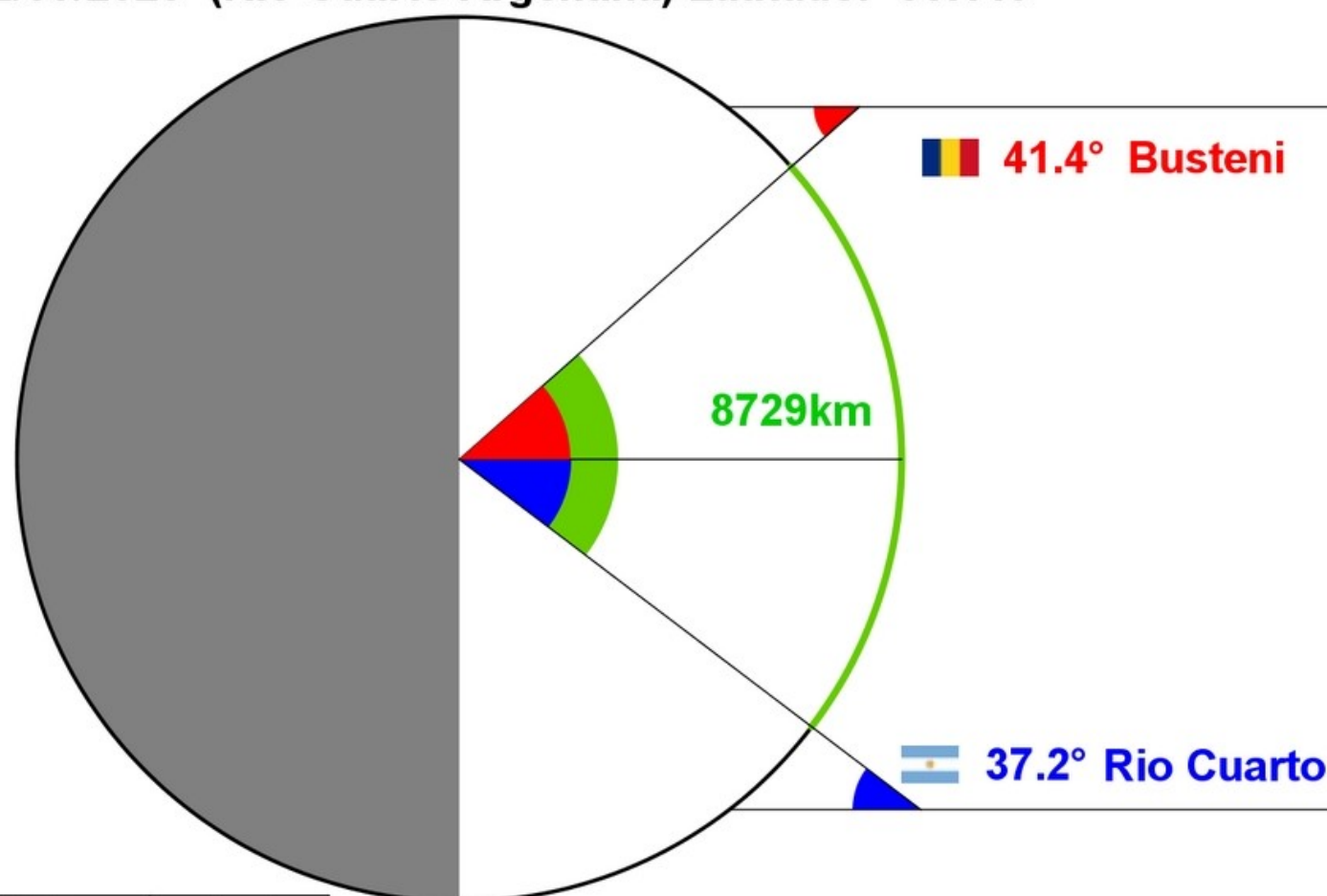


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio Cuarto	Argentina	Colegio Concordia	-33.149	-64.351

Date	Gnomon	Shadow	Angle
09 September 2020	53.0cm	-40.0cm	-37.0°
12 September 2020	30.0cm	-22.8cm	-37.2°
13 September 2020	52.5cm	-38.0cm	-35.9°
14 September 2020	51.5cm	-37.5cm	-36.1°
15 September 2020	51.5cm	-36.0cm	-35.0°
19 September 2020	51.5cm	-37.9cm	-36.4°
20 September 2020	52.5cm	-34.2cm	-33.1°

12/09/2020 (Busteni-Romania) Latitude: 45.416°

12/09/2020 (Rio Cuarto-Argentina) Latitude: -33.149°



Distance	Angle
circumference	360°
8729km	41.4° + 37.2°

$$\text{circumference} = \frac{360^\circ \times 8729\text{km}}{41.4^\circ + 37.2^\circ} = 39980 \text{ km}$$

**Colegio
Concordia**



Rio de Janeiro CENOM, Brazil

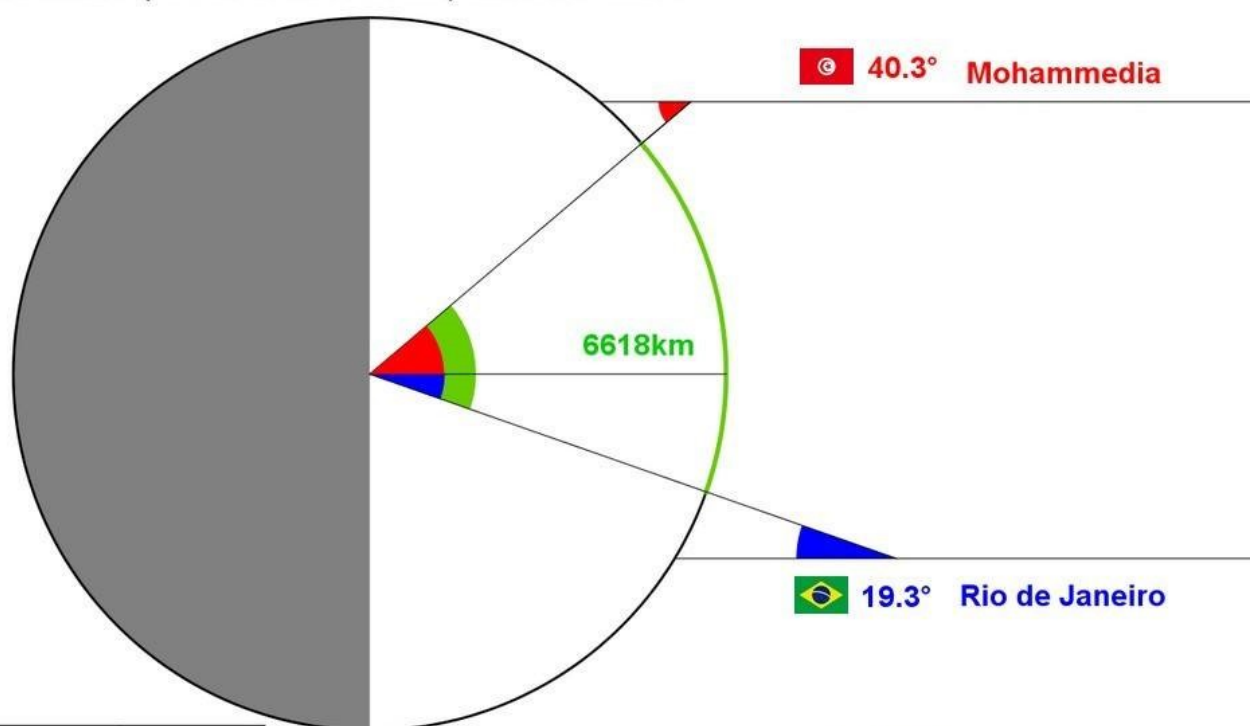


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
03 September 2020	20.0cm	-11.0cm	-28.8°
04 September 2020	20.0cm	-11.0cm	-28.8°
05 September 2020	20.0cm	-12.0cm	-31.0°
06 September 2020	20.0cm	-12.0cm	-31.0°
08 September 2020	20.0cm	-10.0cm	-26.6°
09 September 2020	20.0cm	-10.0cm	-26.6°
10 September 2020	20cm	-10cm	-26.6°
11 September 2020	20.0cm	-10.0cm	-26.6°
12 September 2020	20.0cm	-10.0cm	-26.6°
13 September 2020	20.0cm	-10.0cm	-26.6°
14 September 2020	20.0cm	-9.0cm	-24.2°
17 September 2020	20.0cm	-9.0cm	-24.2°
18 September 2020	20.0cm	-8.0cm	-21.8°
19 September 2020	20.0cm	-8.0cm	-21.8°
21 September 2020	20.0cm	-8cm	-21.8°
23 September 2020	20cm	-8cm	-21.8°
24 September 2020	20cm	-8cm	-21.8°
25 September 2020	20cm	-7.5cm	-20.6°
27 September 2020	20.0cm	-7.5cm	-20.6°
28 September 2020	20cm	-7.5cm	-20.6°
29 September 2020	20cm	-7cm	-19.3°
30 September 2020	20.0cm	-7.0cm	-19.3°

30/09/2020 (Mohammedia-Tunisia) Latitude: 36.678°

30/09/2020 (Rio de Janeiro-Brazil) Latitude: -22.89°



Distance	Angle
circumference	360°
6618km	40.3° + 19.3°

$$\text{circumference} = \frac{360^\circ \times 6618\text{km}}{40.3^\circ + 19.3^\circ} = 39974 \text{ km}$$



São Mateus, Brazil

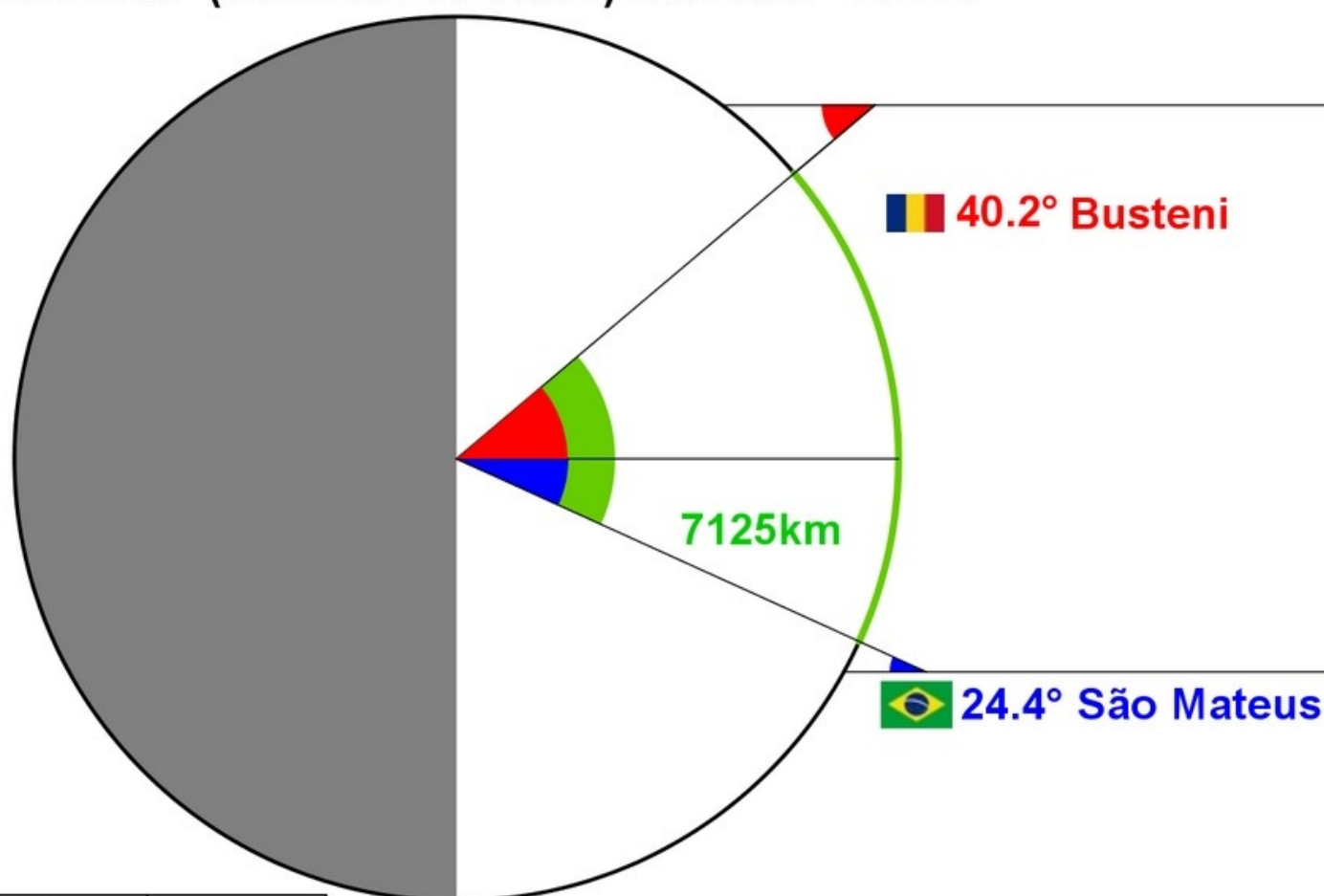


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	São Mateus	Brazil	EEEM Nestor Gomes	-18.716	-39.856

Date	Gnomon	Shadow	Angle
09 September 2020	11.0cm	-5.0cm	-24.4°
15 September 2020	11.0cm	-4.0cm	-20.0°

09/09/2020 (Busteni-Romania) Latitude: 45.416°

09/09/2020 (São Mateus-Brazil) Latitude: -18.716°



$$\text{circumference} = \frac{360^\circ \times 7125\text{km}}{40.2^\circ + 24.4^\circ} = 39706 \text{ km}$$

Distance	Angle
circumference	360°
7125km	40.2° + 24.4°



Úbeda, Spain

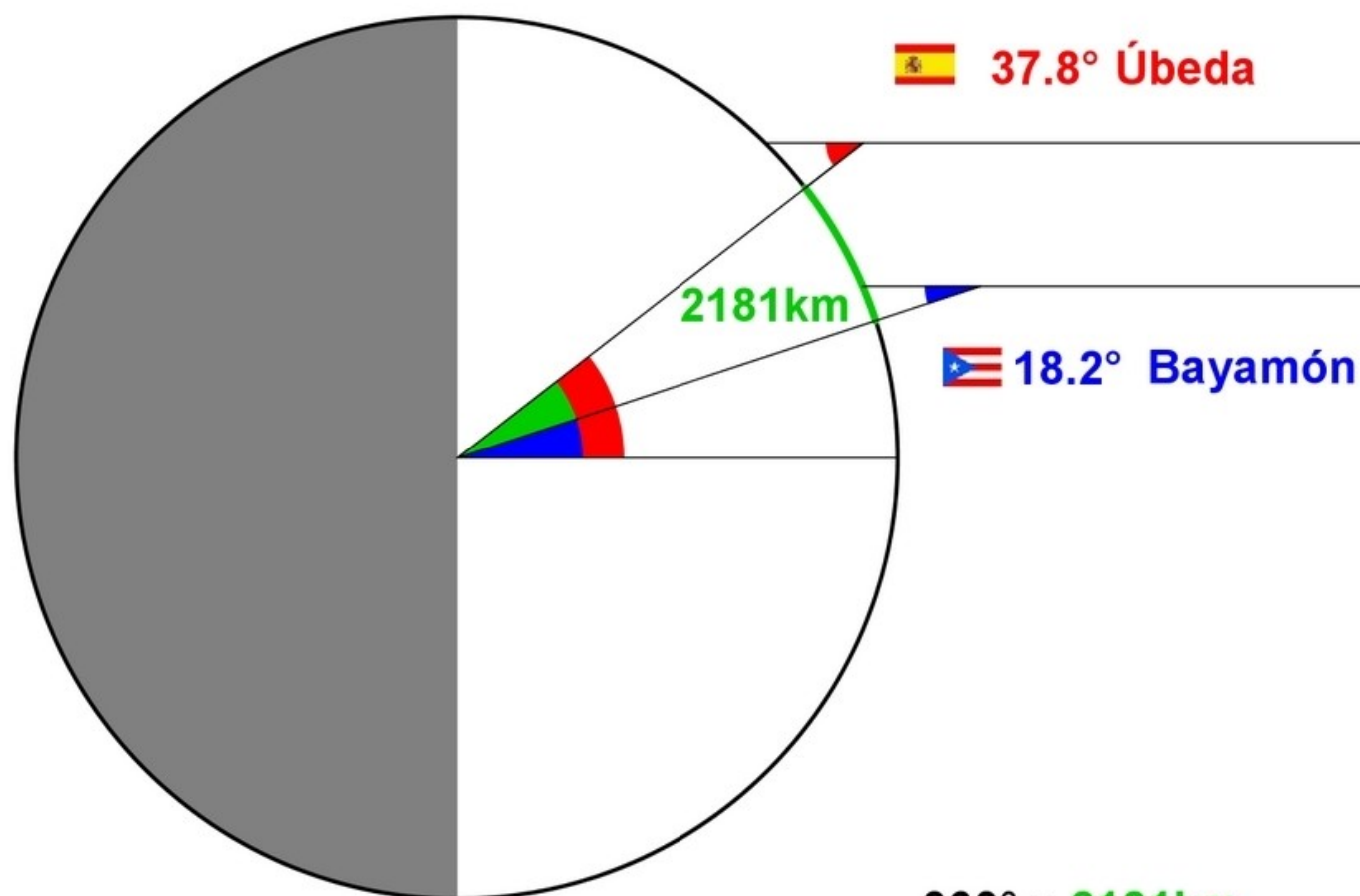


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Úbeda	Spain	Colegio Salesiano Santo Domingo Savio	38.017	-3.367

Date	Gnomon	Shadow	Angle
20 September 2020	90.6cm	67.2cm	36.6°
22 September 2020	114.6cm	88.9cm	37.8°
23 September 2020	115cm	90.4cm	38.2°

22/09/2020 (Úbeda-Spain) Latitude: 38.017°

22/09/2020 (Bayamón-Puerto Rico) Latitude: 18.383°



Distance	Angle
circumference	360°
2181km	37.8° - 18.2°

$$\text{circumference} = \frac{360^\circ \times 2181\text{km}}{37.8^\circ - 18.2^\circ} = 40059 \text{ km}$$



Yamunanagar, India

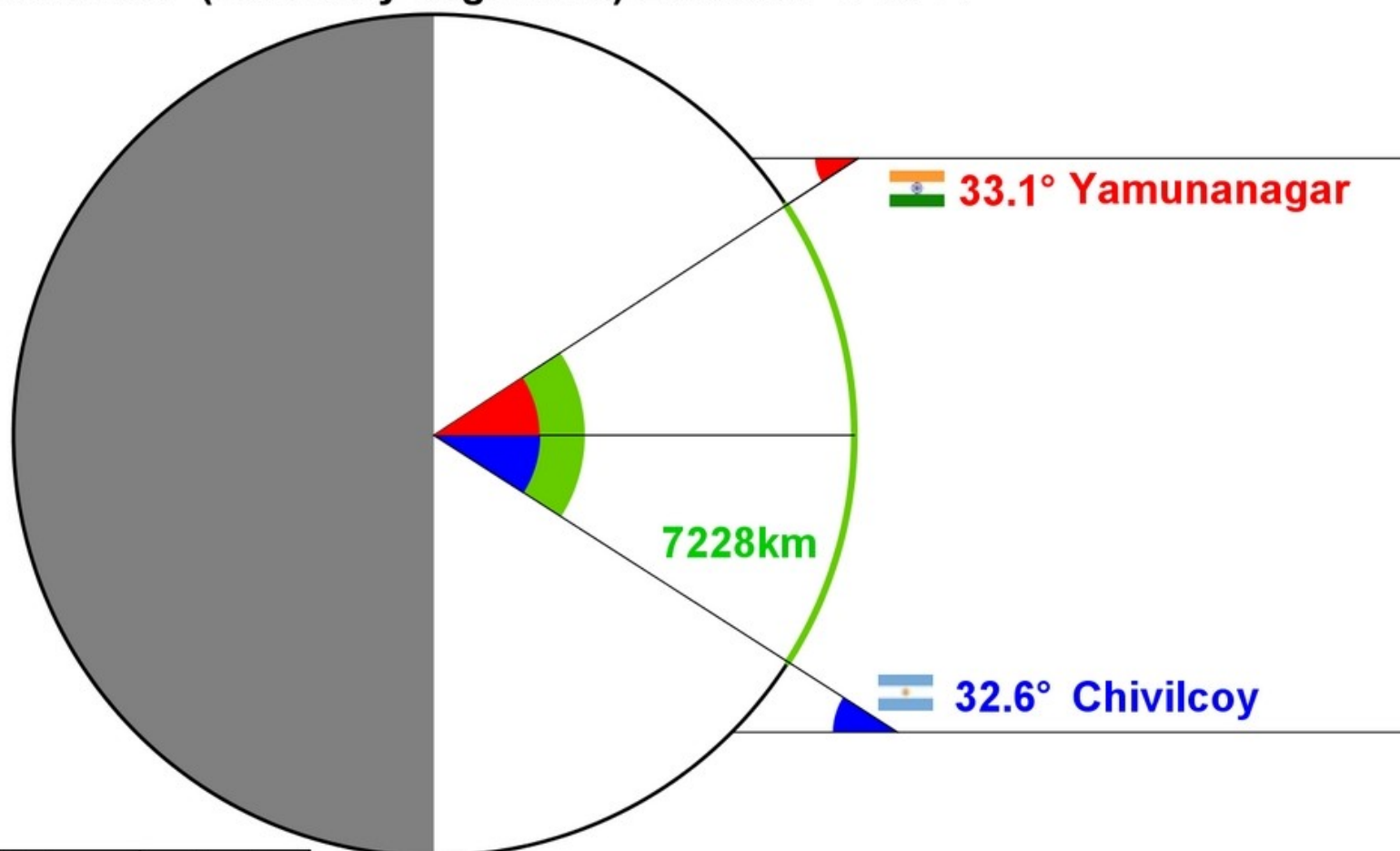


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Yamunanagar	India	CV Raman VIPNET Science Club	30.140	77.275

Date	Gnomon	Shadow	Angle
28 September 2020	13.5cm	8.8cm	33.1°

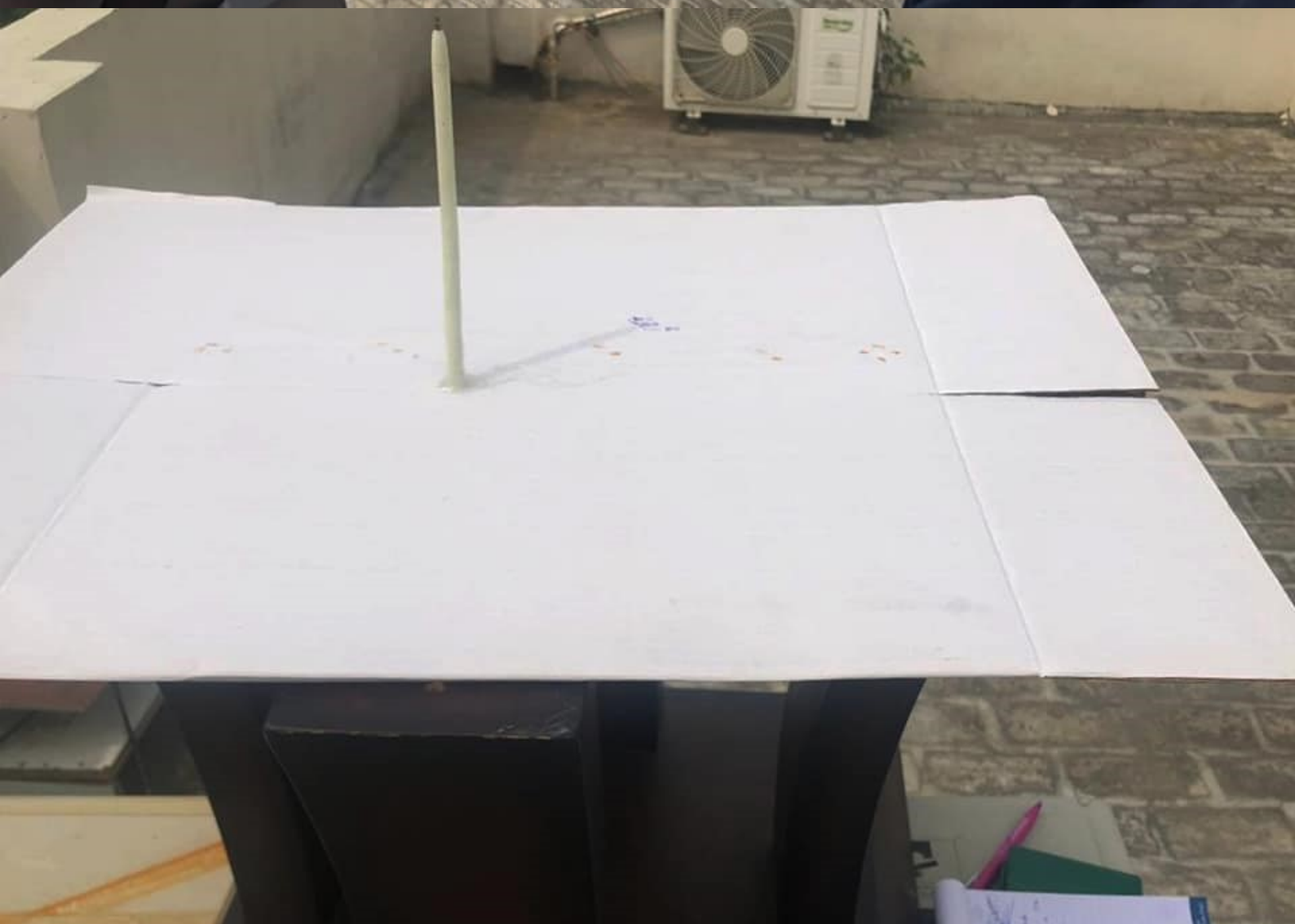
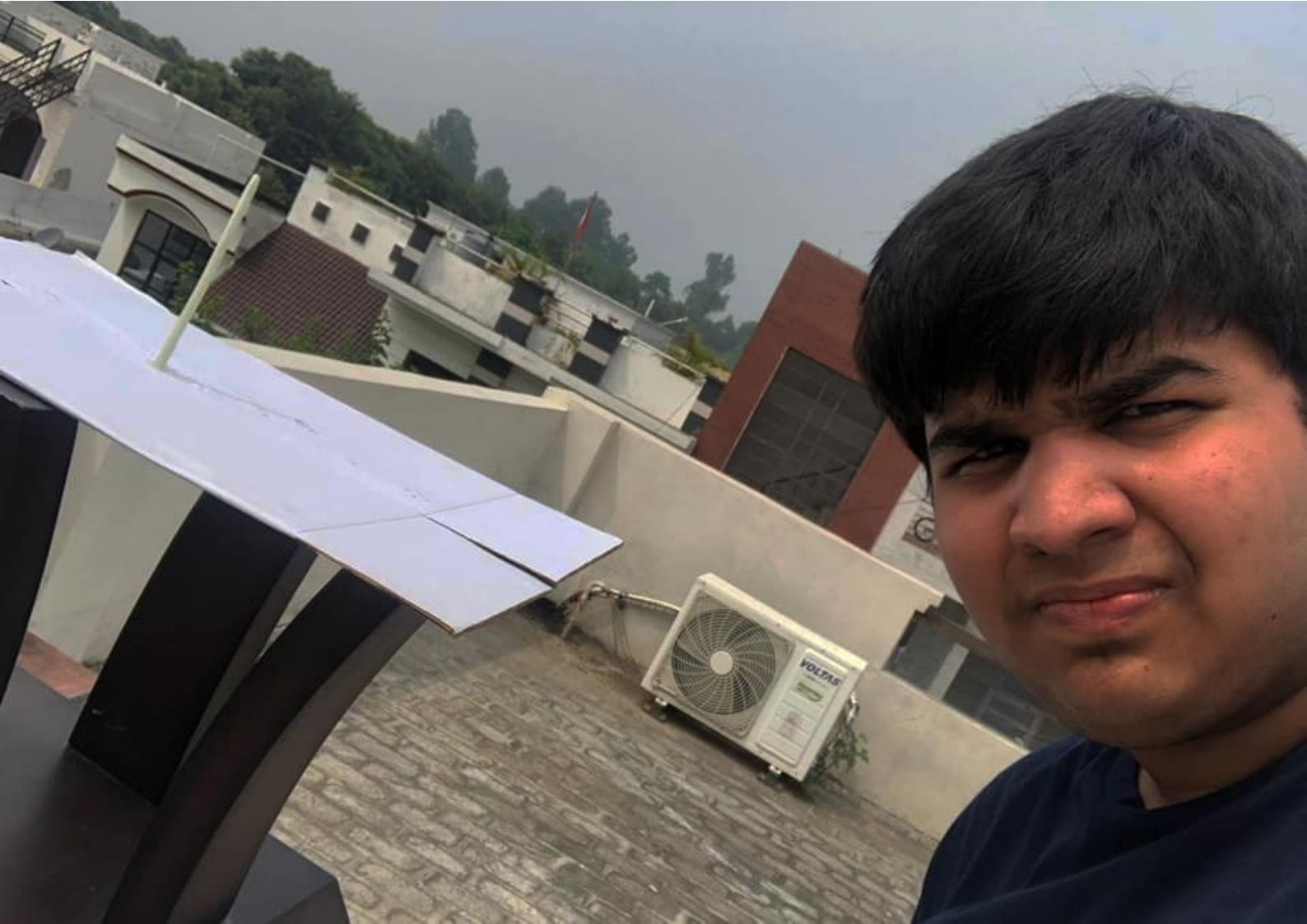
28/09/2020 (Yamunanagar-India) Latitude: 30.148°

28/09/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
7228km	33.1° + 32.6°

$$\text{circumference} = \frac{360^\circ \times 7228\text{km}}{33.1^\circ + 32.6^\circ} = 39605 \text{ km}$$



Yarumal, Colombia

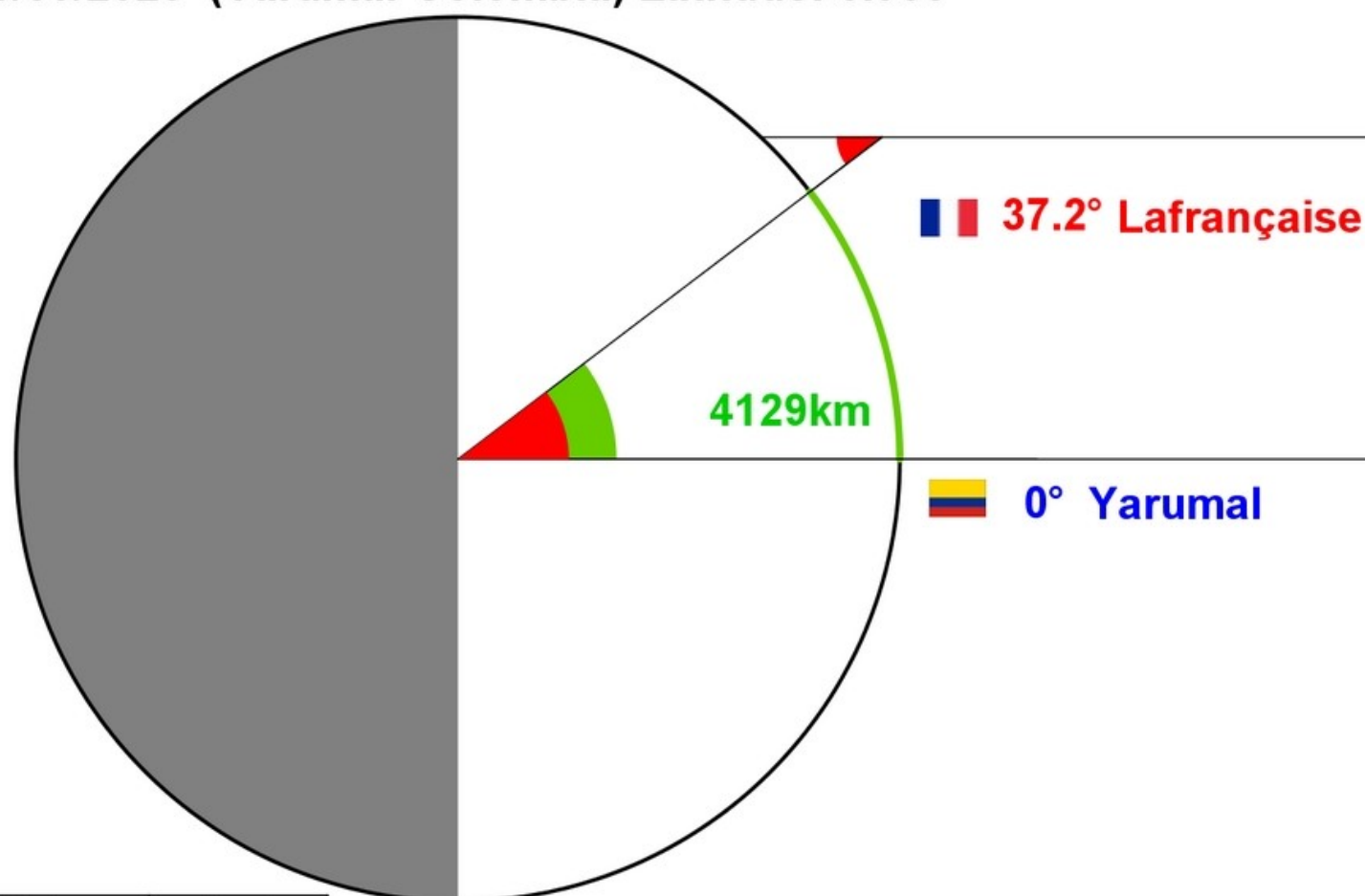


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Yarumal	Colombia	Institución Educativa San Luis	6.966	-75.416

Date	Gnomon	Shadow	Angle
03 September 2020	100.0cm	0.0cm	0.0°

03/09/2020 (Lafrançaise-France) Latitude: 44.127°

03/09/2020 (Yarumal-Colombia) Latitude: 6.966°



Distance	Angle
circumference	360°
4129km	37.2° + 0°

$$\text{circumference} = \frac{360^\circ \times 4129\text{km}}{37.2^\circ + 0^\circ} = 39958 \text{ km}$$



