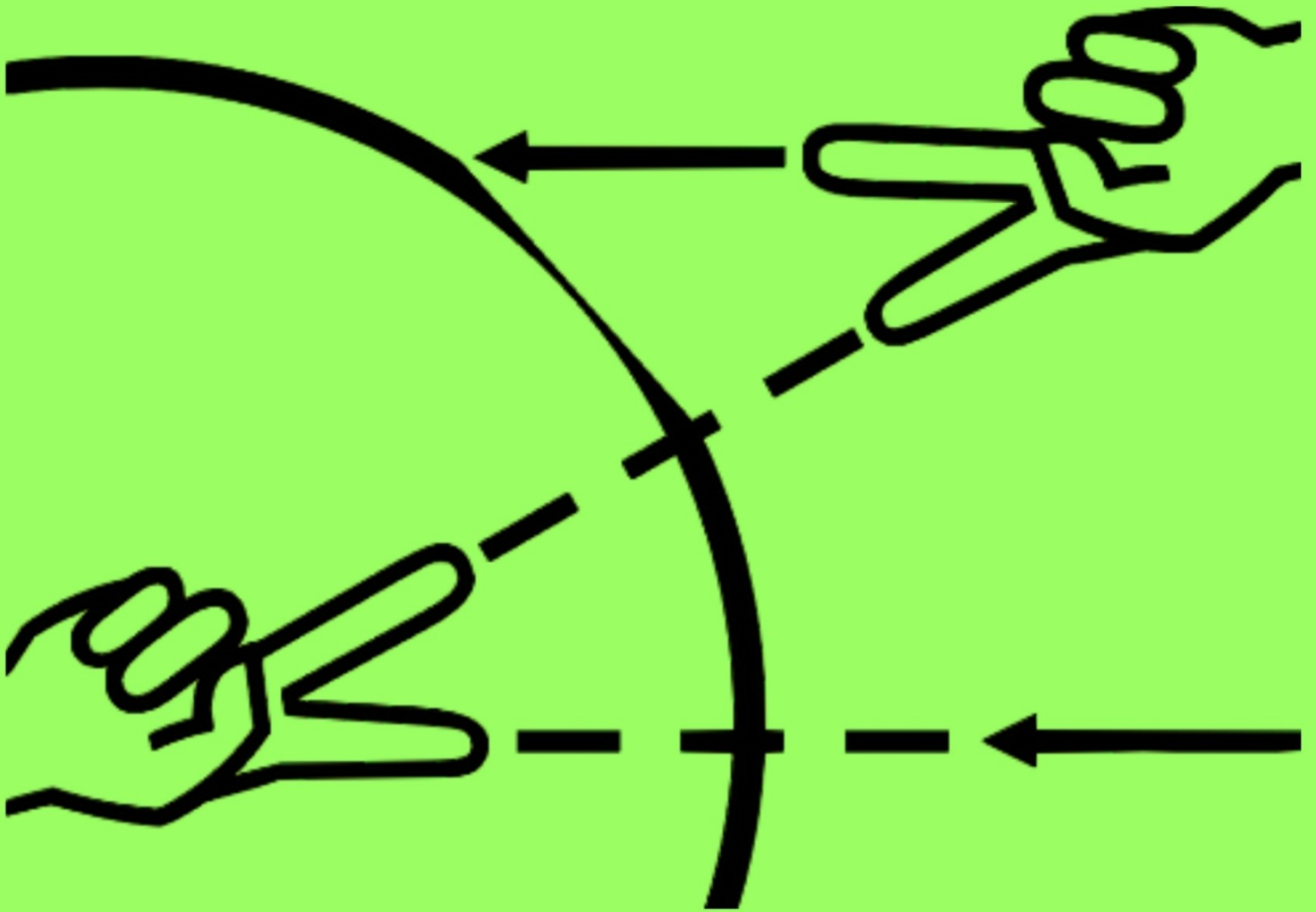


Eratostrhenes



4 Continents

12 Countries

24 Schools

240 Measures

4 Continents **12** Countries **24** Schools **240** Measures

ARGENTINA (3)

Alta Gracia, Buenos Aires, Chivilcoy

BRAZIL (6)

Piranguinho, Rio de Janeiro, Andaraí, São Mateus, Méier, Duque de Caxias

COLOMBIA (1)

Guarne

FRANCE (1)

Lafrançaise

GERMANY (1)

Garmisch Partenkirchen

GREECE (4)

Aigio, Athens, Ilion, Petroupoli

INDIA (2)

Hyderabad (Space Adhyaan - National Urdu University)

ITALY (1)

Marina di Carrara

ROMANIA (2)

Busteni, Margineni

SPAIN (1)

Úbeda

TUNISIA (1)

Mohammedia

VIETNAM (1)

Biên Hòa

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
	Andaraí	Brazil	Clube de Astronomia do Rio de Janeiro	-22.928	-43.258
	Athens	Greece	Experimental College Agion Anargyron	38.027	23.726
	Biên Hòa NQ	Việt Nam	Ngo Quyen High School	10.955	106.826
	Buenos Aires	Argentina	ENS N° 1	-34.455	-58.544
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535
	Chivilcoy	Argentina	Parque Cielos del Sur	-34.911	-60.014
	Duque de Caxias	Brazil	Complexo Cultural Caça Talentos	-21.791	-43.327
	Garmisch Partenkirchen	Germany	St.-Irmengard-Gymnasium	47.493	11.102
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449
	Hyderabad	India	Maulana Azad Nat. Urdu University	17.427	78.360
	Hyderabad	India	Space Adhyaan	17.385	78.487
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237
	Mărgineni	Romania	Gh. Popescu School	44.533	24.554
	Marina di Carrara	Italy	M Buonarroti primary school	44.033	10.033
	Méier	Brazil	Escola Municipal Bento Ribeiro	-22.904	-43.280
	Mohammedia	Tunisia	Lycée M'hamdia	36.678	10.152
	Petroupoli	Greece	4o Junior High School	38.036	23.674
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317
	São Mateus	Brazil	Escola Estadual de Ensino Médio Nestor Gomes	-18.716	-39.856
	Úbeda	Spain	Colegio Salesiano Santo Domingo Savio	38.017	-3.367

Aigio, Greece

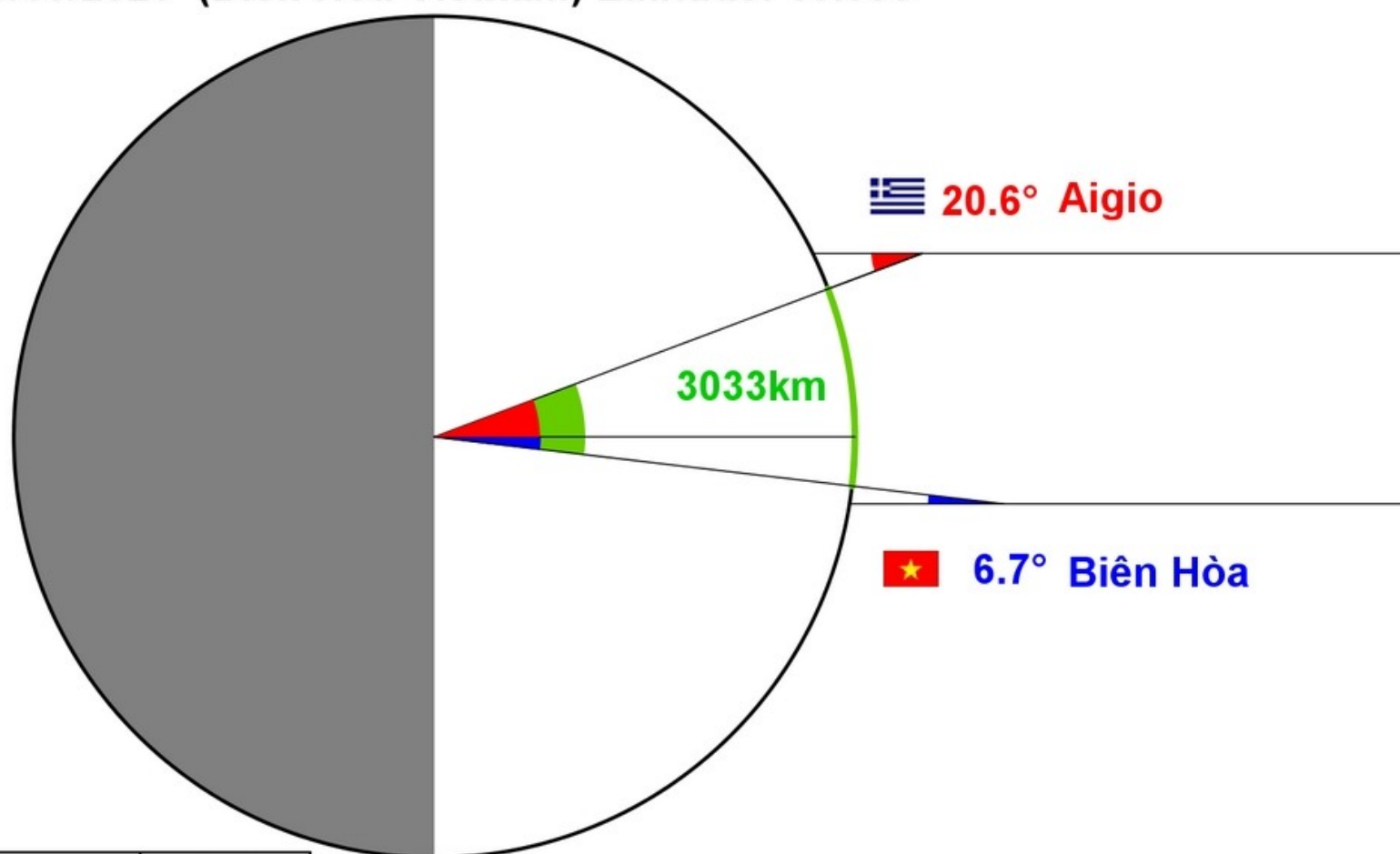


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079

Date	Gnomon	Shadow	Angle
01 May 2020	39.8cm	17.0cm	23.1°
09 May 2020	16.5cm	6.2cm	20.6°

09/05/2020 (Aigio-Greece) Latitude: 38.252°

09/05/2020 (Biên Hòa-Vietnam) Latitude: 10.955°



$$\text{circumference} = \frac{360^\circ \times 3033\text{km}}{20.6^\circ + 6.7^\circ} = 39996 \text{ km}$$

Distance	Angle
circumference	360°
3033km	20.6° + 6.7°



Alta Gracia, Argentina

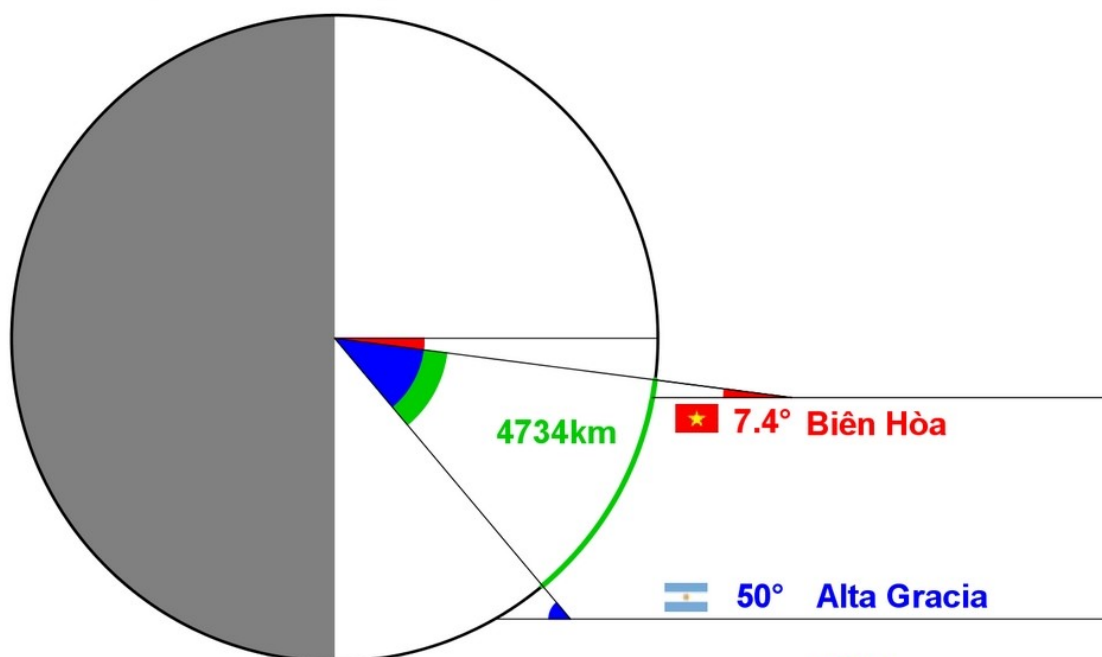


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417

Date	Gnomon	Shadow	Angle
01 May 2020	35.0cm	-37.2cm	-46.7°
02 May 2020	35cm	-37.6cm	-47.1°
05 May 2020	35.0cm	-39.0cm	-48.1°
06 May 2020	35.0cm	-39.4cm	-48.4°
08 May 2020	35.0cm	-40.0cm	-48.8°
09 May 2020	35.0cm	-40.2cm	-49.0°
10 May 2020	35.0cm	-40.7cm	-49.3°
11 May 2020	35cm	-41cm	-49.5°
12 May 2020	35.0cm	-41.7cm	-50.0°
14 May 2020	35cm	-42cm	-50.2°
15 May 2020	35cm	-42.5cm	-50.5°
16 May 2020	35cm	-42.9cm	-50.8°
17 May 2020	35cm	-43.4cm	-51.1°
18 May 2020	35.0cm	-44.0cm	-51.5°
19 May 2020	35.00cm	-44cm	-51.5°
20 May 2020	35cm	-44.4cm	-51.8°
23 May 2020	35cm	-45.3cm	-52.3°
24 May 2020	35cm	-45.4cm	-52.4°
25 May 2020	35cm	-45.6cm	-52.5°
26 May 2020	35cm	-46cm	-52.7°
27 May 2020	35cm	-46.2cm	-52.9°
28 May 2020	35cm	-46.4cm	-53°
29 May 2020	35cm	-46.9cm	-53.3°

12/05/2020 (Biên Hòa-Vietnam) Latitude: 10.955°

12/05/2020 (Alta Gracia-Argentina) Latitude: -31.659°



Distance	Angle
circumference	360°
4734km	50° - 7.4°

$$\text{circumference} = \frac{360^\circ \times 4734\text{km}}{50^\circ - 7.4^\circ} = 40006 \text{ km}$$



Andaraí, Brazil

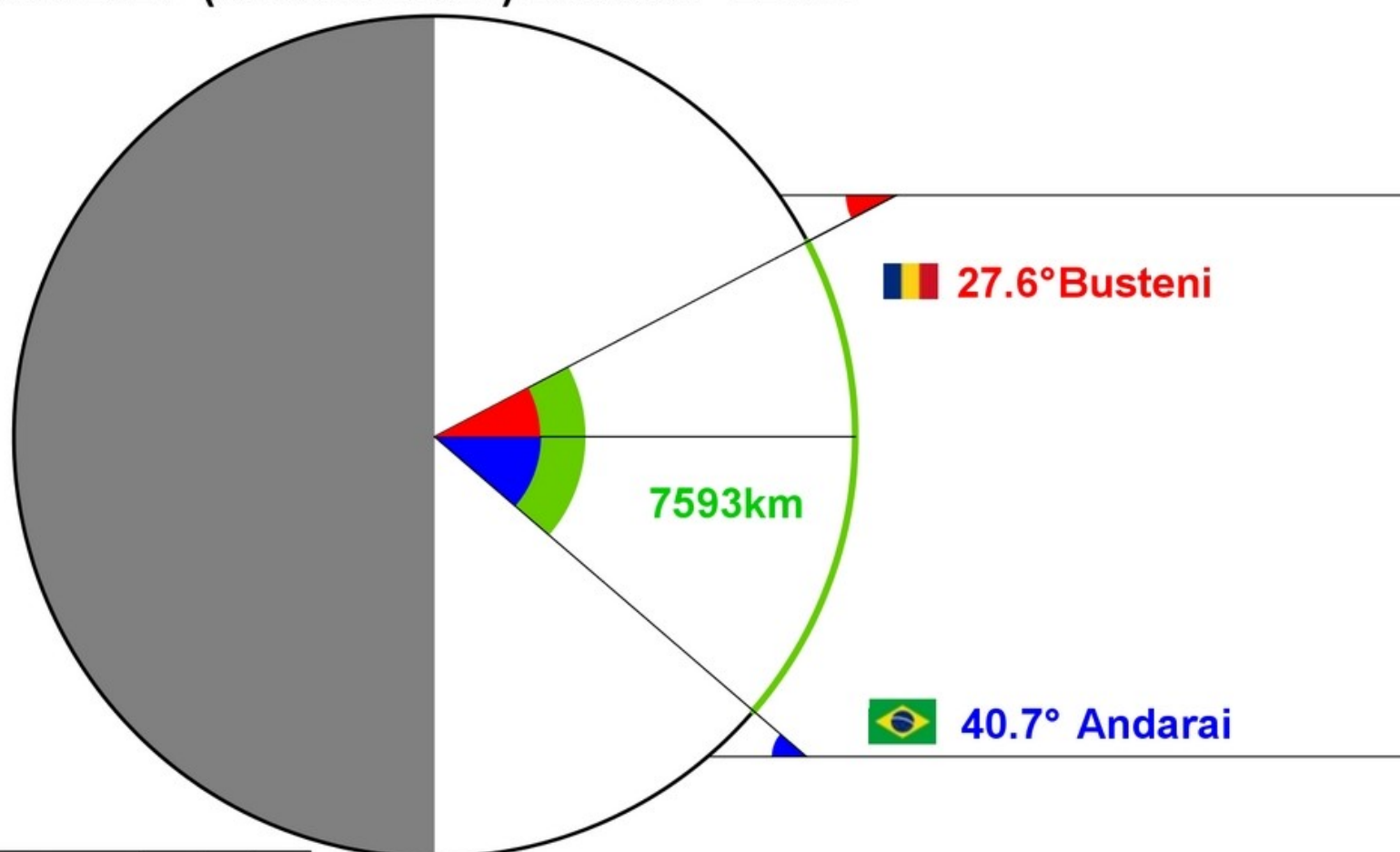


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Andaraí	Brazil	Clube de Astronomia do Rio de Janeiro	-22.928	-43.258

Date	Gnomon	Shadow	Angle
09 May 2020	25.6cm	-22.0cm	-40.7°

09/05/2020 (Busteni-Romania) Latitude: 45.416°

09/05/2020 (Andarai-Brazil) Latitude: -22.927°



$$\text{circumference} = \frac{360^\circ \times 7593\text{km}}{27.6^\circ + 40.7^\circ} = 40022 \text{ km}$$

Distance	Angle
circumference	360°
7593km	27.6° + 40.7°



Athens, Greece

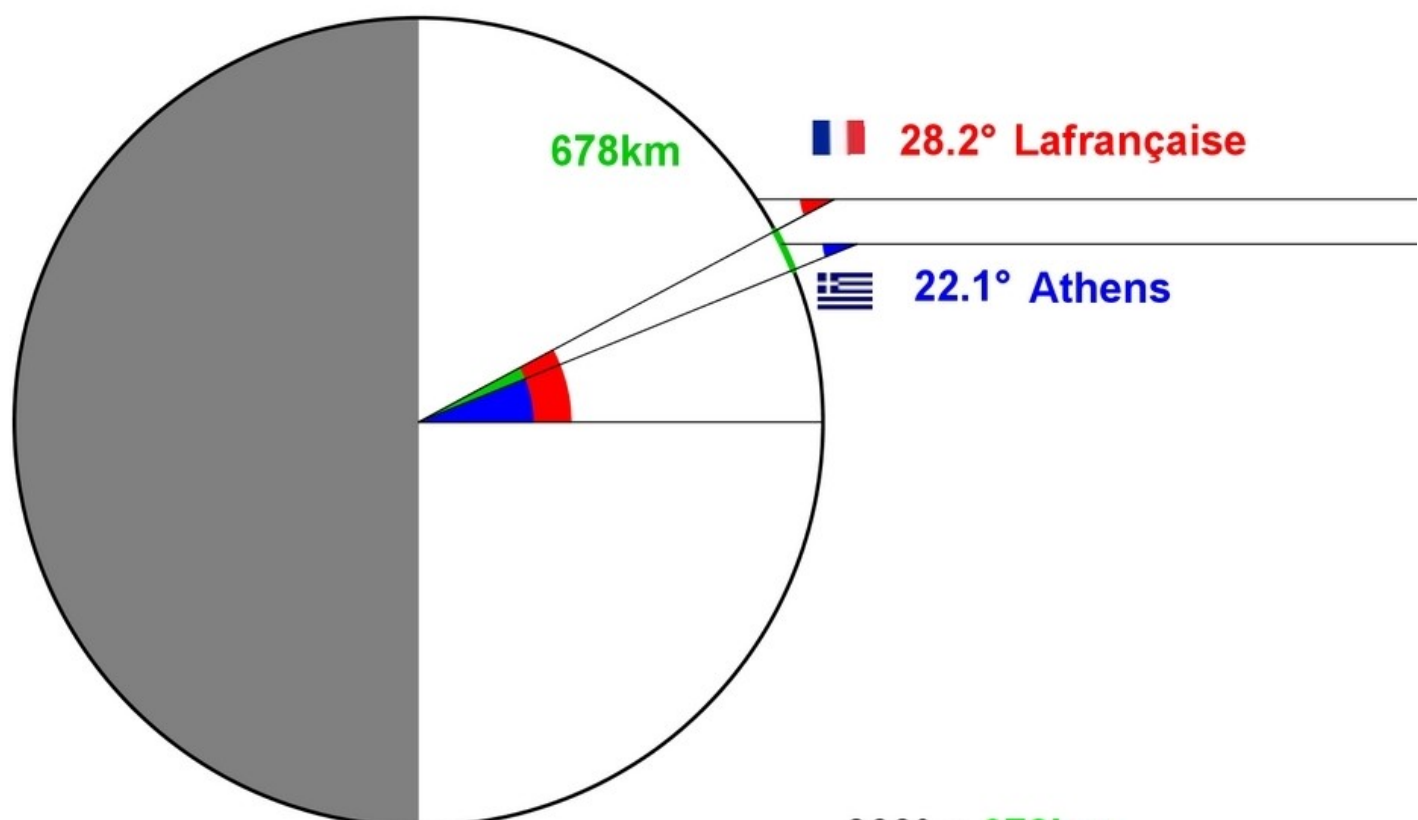


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Athens	Greece	Experimental College Agion Anargyron	38.027	23.726

Date	Gnomon	Shadow	Angle
01 May 2020	50.0cm	20.6cm	22.4°
02 May 2020	50.0cm	20.3cm	22.1°
03 May 2020	50.0cm	20.1cm	21.9°
04 May 2020	30.0cm	11.3cm	20.6°
05 May 2020	50.0cm	19.5cm	21.3°
06 May 2020	39.3cm	15.2cm	21.1°
08 May 2020	50.0cm	18.6cm	20.4°
09 May 2020	50.0cm	18.4cm	20.2°
10 May 2020	50.0cm	18.1cm	19.9°
11 May 2020	50cm	17.8cm	19.6°
13 May 2020	50.0cm	17.4cm	19.2°
14 May 2020	19.0cm	6.6cm	19.2°
15 May 2020	40cm	13.6cm	18.8°
16 May 2020	40.0cm	13.5cm	18.6°
17 May 2020	40.0cm	13.2cm	18.3°
18 May 2020	248cm	81cm	18.1°

02/05/2020 (Lafrançaise-France) Latitude: 44.127°

02/05/2020 (Athens-Greece) Latitude: 38.027°



Distance	Angle
circumference	360°
678km	28.2° - 22.1°

$$\text{circumference} = \frac{360^\circ \times 678\text{km}}{28.2^\circ - 22.1^\circ} = 40013 \text{ km}$$



Biên Hòa NQ, Vietnam

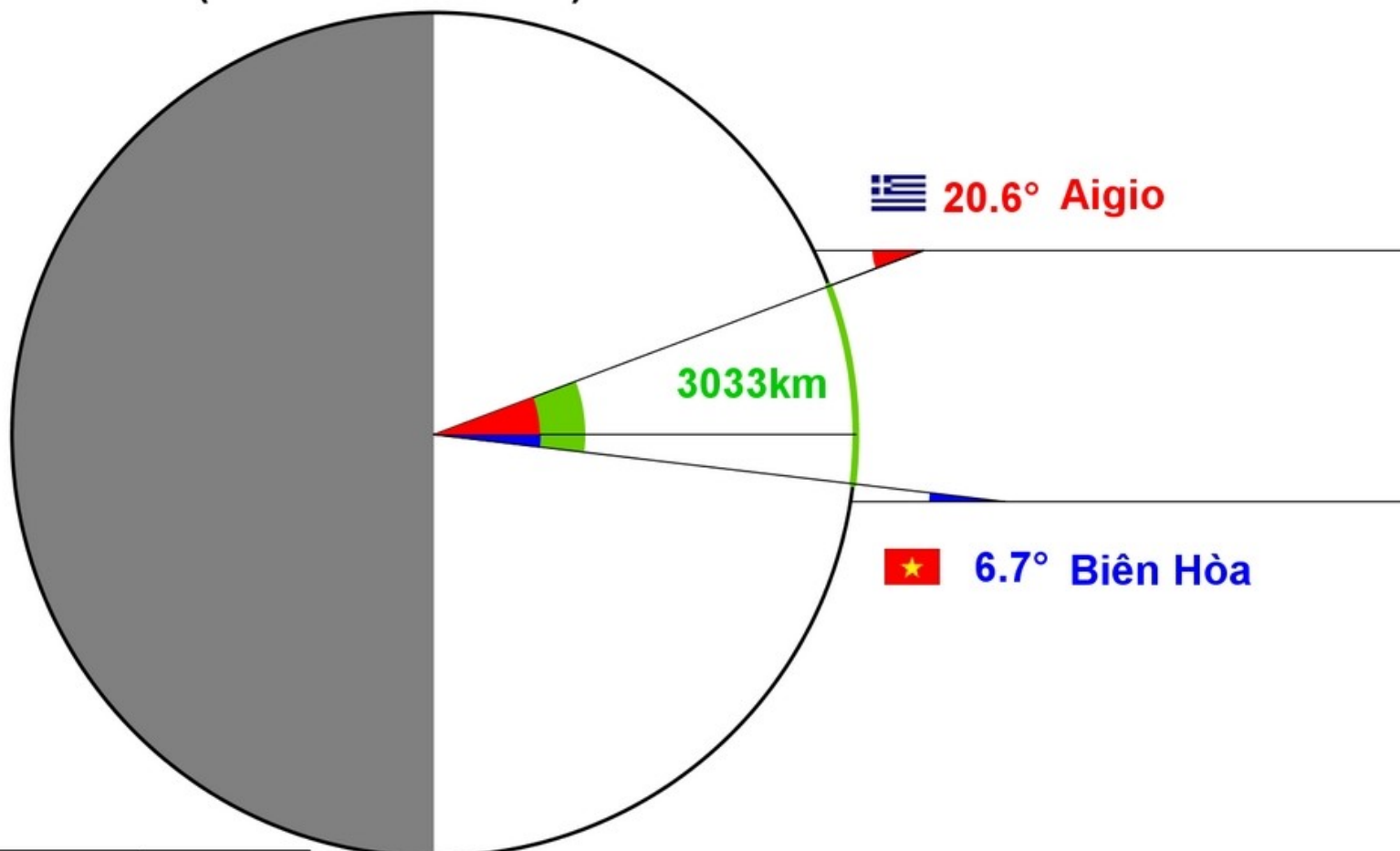


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Biên Hòa NQ	Việt Nam	Ngo Quyen High School	10.955	106.826

Date	Gnomon	Shadow	Angle
09 May 2020	75.5cm	-8.9cm	-6.7°
10 May 2020	75.5cm	-9.2cm	-6.9°
11 May 2020	72cm	-9.1cm	-7.2°
12 May 2020	72cm	-9.4cm	-7.4°
13 May 2020	75.0cm	-10.4cm	-7.9°
17 May 2020	75.0cm	-11.4cm	-8.6°
18 May 2020	36cm	-5.7cm	-9°
21 May 2020	75cm	-12.6cm	-9.5°
27 May 2020	36cm	-11.2cm	26.2°

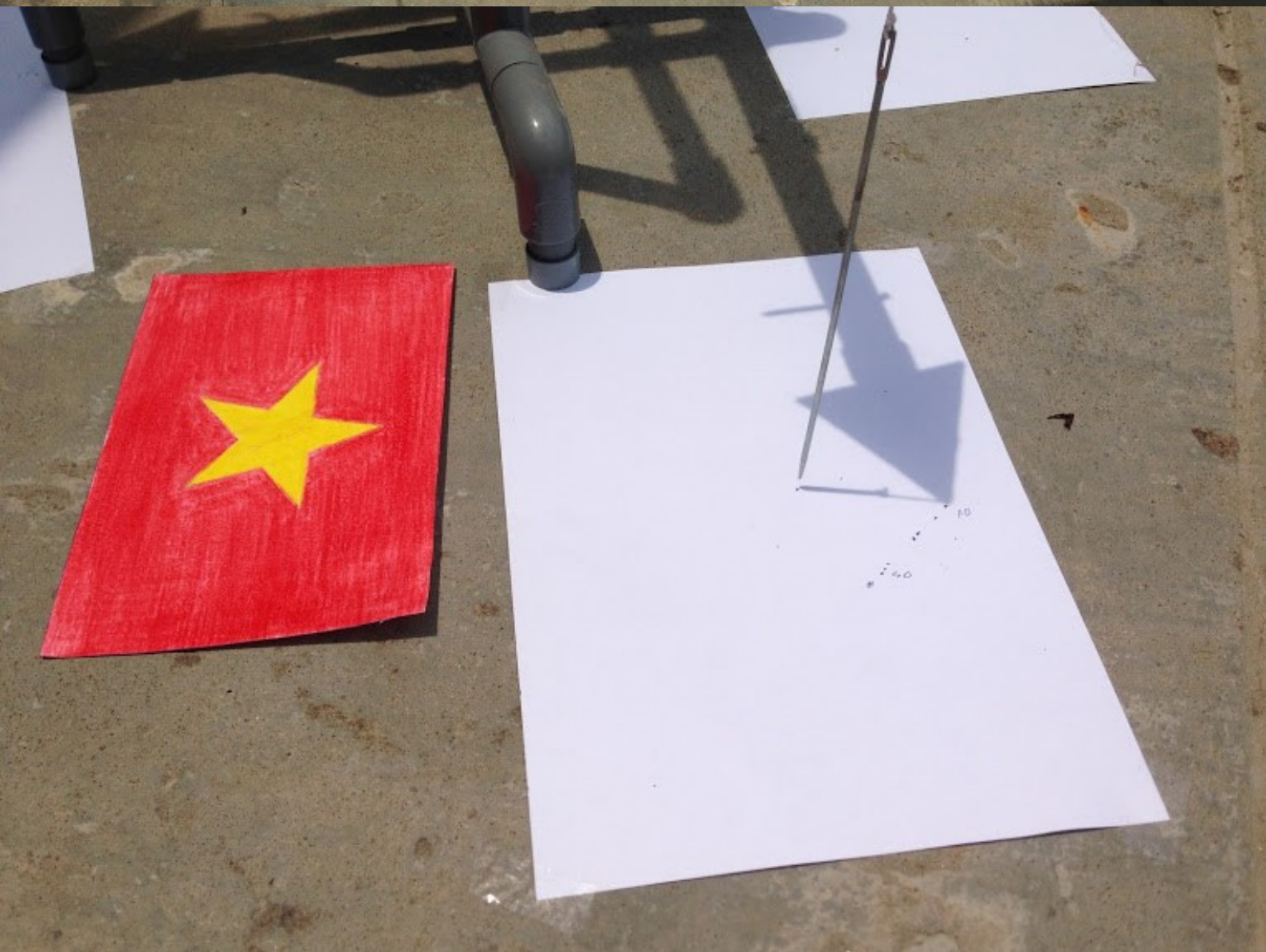
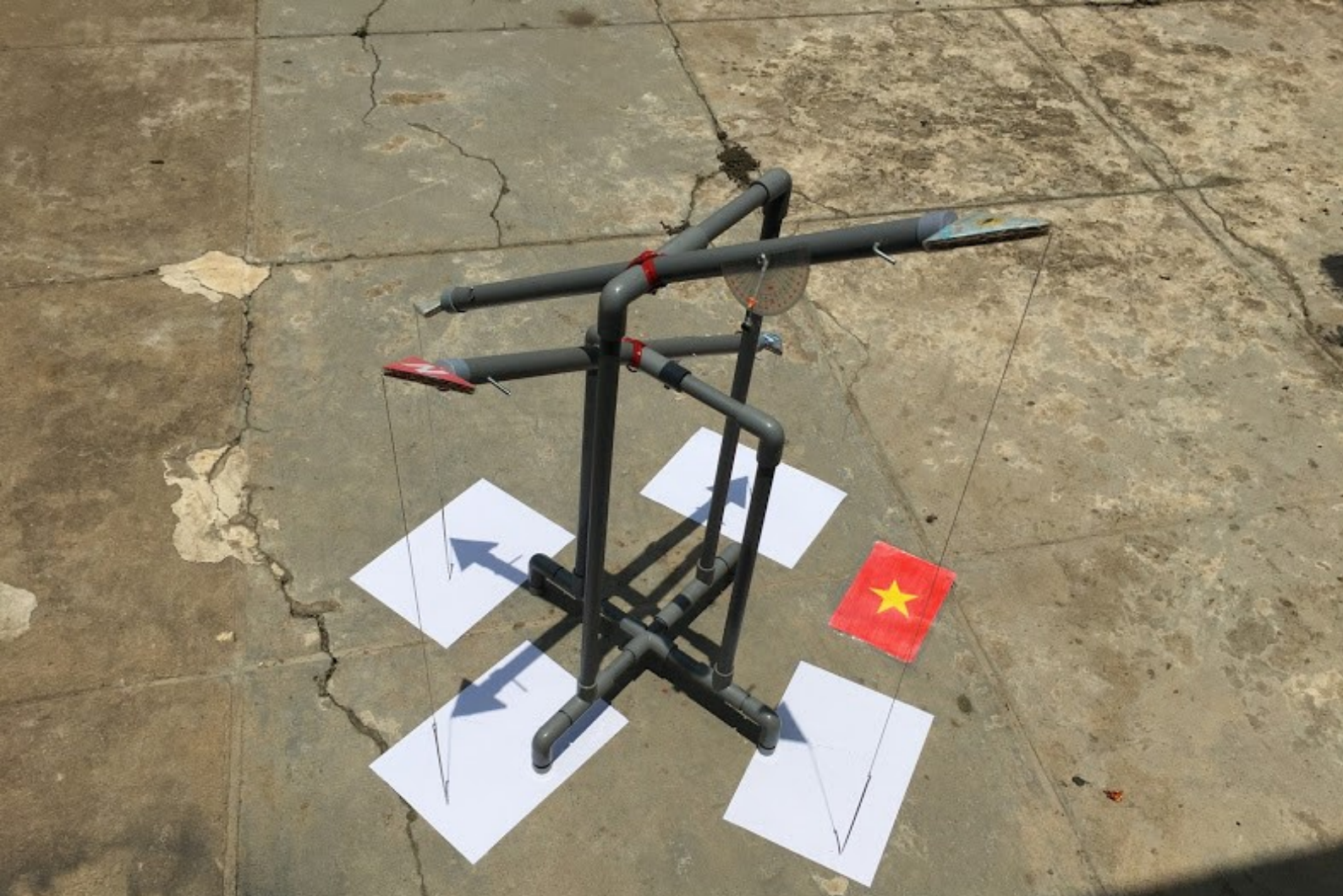
09/05/2020 (Aigio-Greece) Latitude: 38.252°

09/05/2020 (Biên Hòa-Vietnam) Latitude: 10.955°



Distance	Angle
circumference	360°
3033km	20.6° + 6.7°

$$\text{circumference} = \frac{360^\circ \times 3033\text{km}}{20.6^\circ + 6.7^\circ} = 39996 \text{ km}$$



Buenos Aires, Argentina

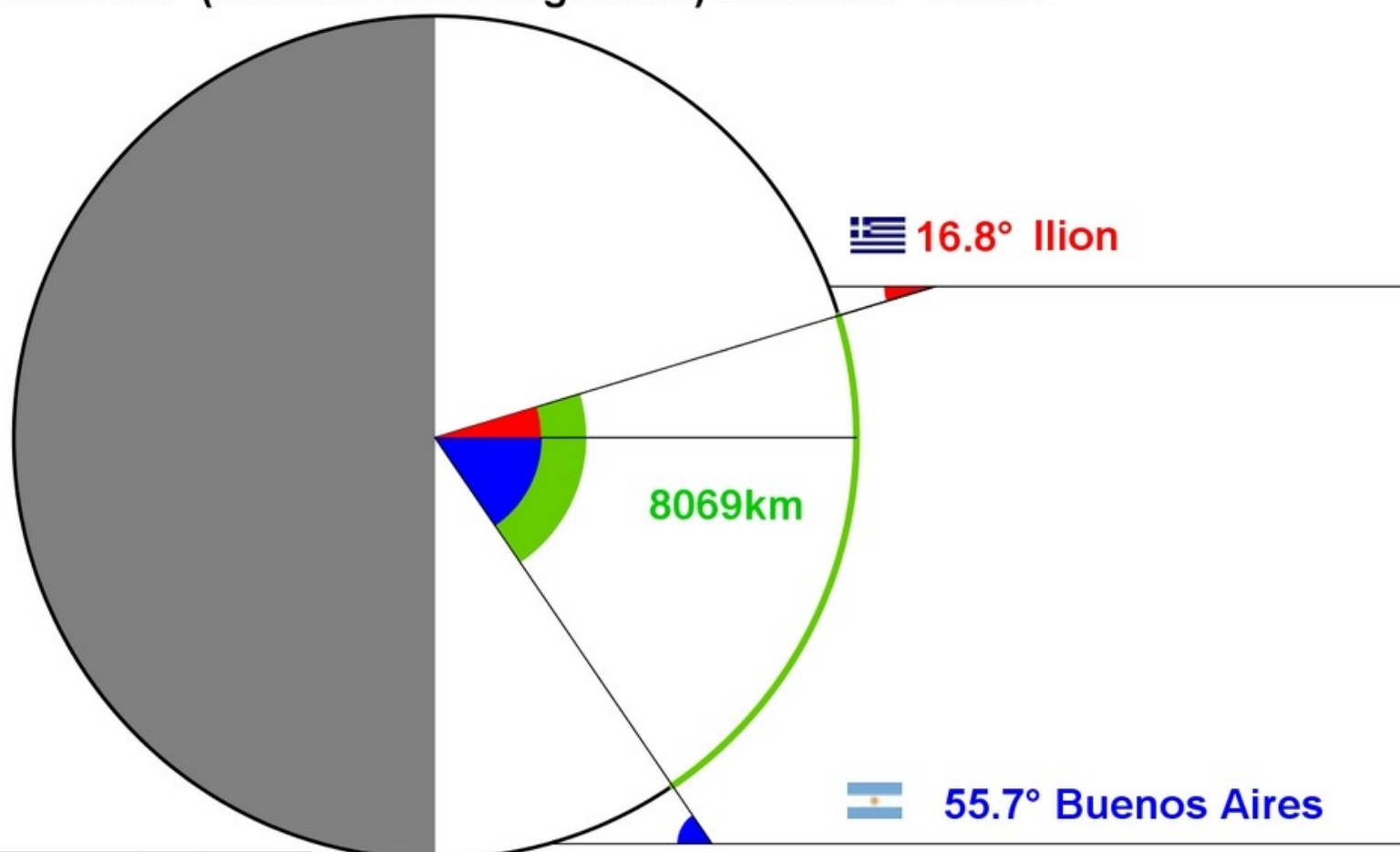


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Buenos Aires ENS1	Argentina	ENS N° 1	-34.455	-58.544

Date	Gnomon	Shadow	Angle
01 May 2020	8.0cm	-8.5cm	-46.7°
09 May 2020	7.3cm	-9.0cm	-51.0°
10 May 2020	9.5cm	-10.5cm	-47.9°
27 May 2020	7.5cm	-11cm	-55.7°

27/05/2020 (Ilion-Greece) Latitude: 38.033°

27/05/2020 (Buenos Aires-Argentina) Latitude: -34.599°



Distance	Angle
circumference	360°
8069km	16.8°+55.7°

$$\text{circumference} = \frac{360^\circ \times 8069\text{km}}{16.8^\circ + 55.7^\circ} = 40067 \text{ km}$$



Busteni, Romania

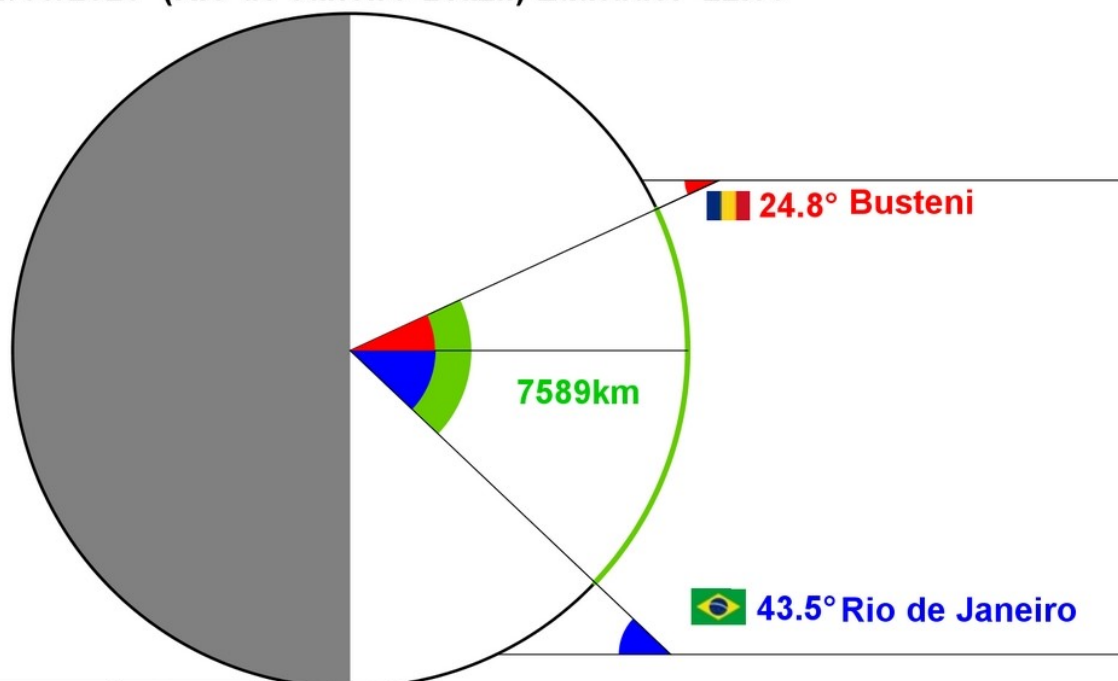


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535

Date	Gnomon	Shadow	Angle
01 May 2020	26.2cm	15.0cm	29.8°
02 May 2020	26.5cm	15.0cm	29.5°
03 May 2020	30.4cm	17cm	29.2°
05 May 2020	60.0cm	32.8cm	28.7°
06 May 2020	81.5cm	44.0cm	28.4°
08 May 2020	142.0cm	75.0cm	27.8°
09 May 2020	38.3cm	20.0cm	27.6°
10 May 2020	135.6cm	70.0cm	27.3°
11 May 2020	285.7cm	149.0cm	27.5°
12 May 2020	67.3cm	34.0cm	26.8°
13 May 2020	220.0cm	110.0cm	26.6°
15 May 2020	142.8cm	70cm	26.1°
19 May 2020	106cm	50cm	25.3°
21 May 2020	43.2cm	20cm	24.8°
22 May 2020	87cm	40cm	24.7°
23 May 2020	44cm	20cm	24.4°
25 May 2020	223.2cm	100cm	24.1°
26 May 2020	74.5cm	33cm	23.9°
27 May 2020	113.4cm	50cm	23.8°
30 May 2020	162cm	70cm	23.4°
31 May 2020	25.6cm	11cm	23.3°

21/05/2020 (Busteni-Romania) Latitude: 45.416°

21/05/2020 (Rio de Janeiro-Brazil) Latitude: -22.89°



Distance	Angle
circumference	360°
7589km	24.8° + 43.5°

$$\text{circumference} = \frac{360^\circ \times 7589\text{km}}{24.8^\circ + 43.5^\circ} = 40001 \text{ km}$$



Chivilcoy, Argentina

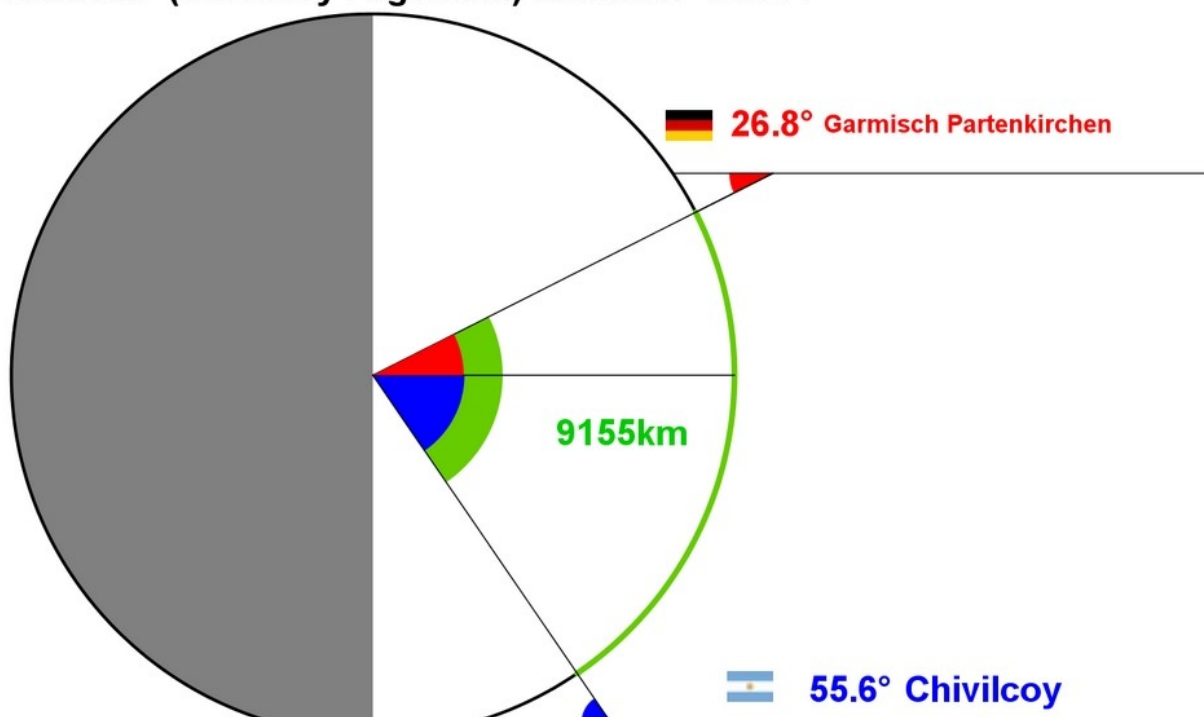


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Chivilcoy	Argentina	Parque Cielos del Sur	-34.911	-60.014

Date	Gnomon	Shadow	Angle
01 May 2020	38.7cm	-46.4cm	-50.2°
02 May 2020	36.3cm	-44cm	-50.5°
07 May 2020	38.3cm	-49.0cm	-52.0°
08 May 2020	38.4cm	-49.5cm	-52.2°
09 May 2020	38.2cm	-49.8cm	-52.5°
10 May 2020	38.2cm	-50.1cm	-52.7°
11 May 2020	18.1cm	-24cm	-53°
12 May 2020	17.2cm	-23.2cm	-53.4°
13 May 2020	18.6cm	-25.2cm	-53.6°
14 May 2020	18.7cm	-25.4cm	-53.6°
16 May 2020	18.5cm	-25.7cm	-54.3°
17 May 2020	37.5cm	-52.8cm	-54.6°
18 May 2020	38.1cm	-53.6cm	-54.6°
19 May 2020	38.1cm	-53.6cm	-54.6°
23 May 2020	18.8cm	-27.5cm	-55.6°
24 May 2020	17cm	-25cm	-55.8°
25 May 2020	20.1cm	-29.8cm	-56°
26 May 2020	200cm	-299cm	-56.2°
27 May 2020	19.5cm	-29.2cm	-56.3°
28 May 2020	19.3cm	-29.1cm	-56.4°
29 May 2020	39.6cm	-60.5cm	-56.8°
31 May 2020	37.3cm	-57.2cm	-56.9

23/05/2020 (Garmisch Partenkirchen-Germany) Latitude: 47.493°

23/05/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
9155km	26.8° + 55.6°

$$\text{circumference} = \frac{360^\circ \times 9155\text{km}}{26.8^\circ + 55.6^\circ} = 39998 \text{ km}$$



Duque de Caxias, Brazil

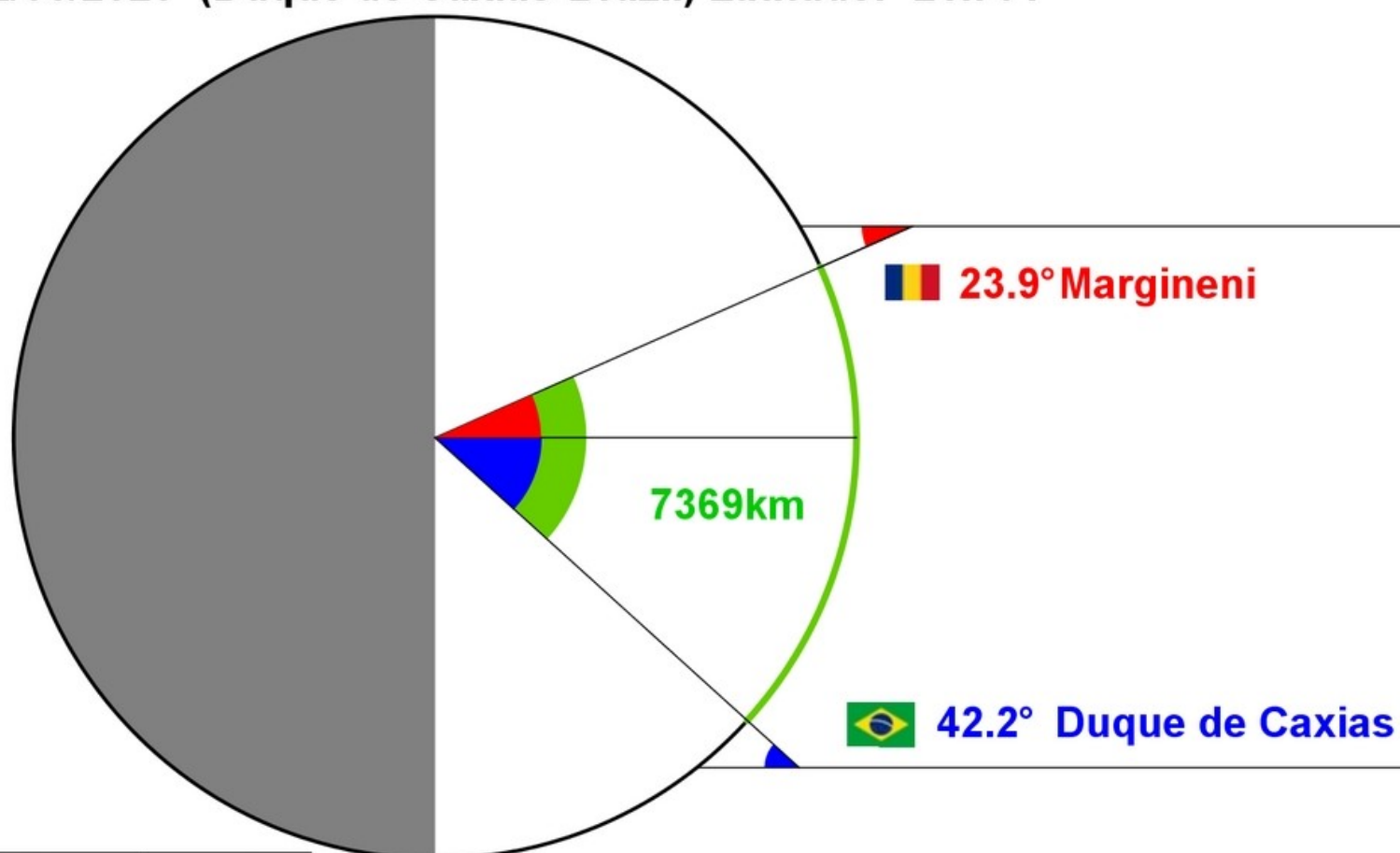


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Duque de Caxias	Brazil	Complexo Cultural Caça Talentos	-21.791	-43.327

Date	Gnomon	Shadow	Angle
09 May 2020	16.0cm	-12.0cm	-36.9°
10 May 2020	28.0cm	-27.0cm	-44.0°
12 May 2020	13.0cm	-9.0cm	-34.7°
13 May 2020	8.0cm	-5.0cm	-32.0°
14 May 2020	12cm	-9.5cm	-38.4°
17 May 2020	7.5cm	-6.5cm	-40.9°
19 May 2020	7.50cm	-7cm	-43°
20 May 2020	7.5cm	-7.5cm	-45°
22 May 2020	16cm	-14.5cm	-42.2°
23 May 2020	16cm	-14.5cm	-42.2°

22/05/2020 (Margineni-Romania) Latitude: 44.533°

22/05/2020 (Duque de Caxias-Brazil) Latitude: -21.791°



Distance	Angle
circumference	360°
7369km	23.9° + 42.2°

$$\text{circumference} = \frac{360^\circ \times 7369\text{km}}{23.9^\circ + 42.2^\circ} = 40134 \text{ km}$$



Garmisch Partenkirchen, Germany

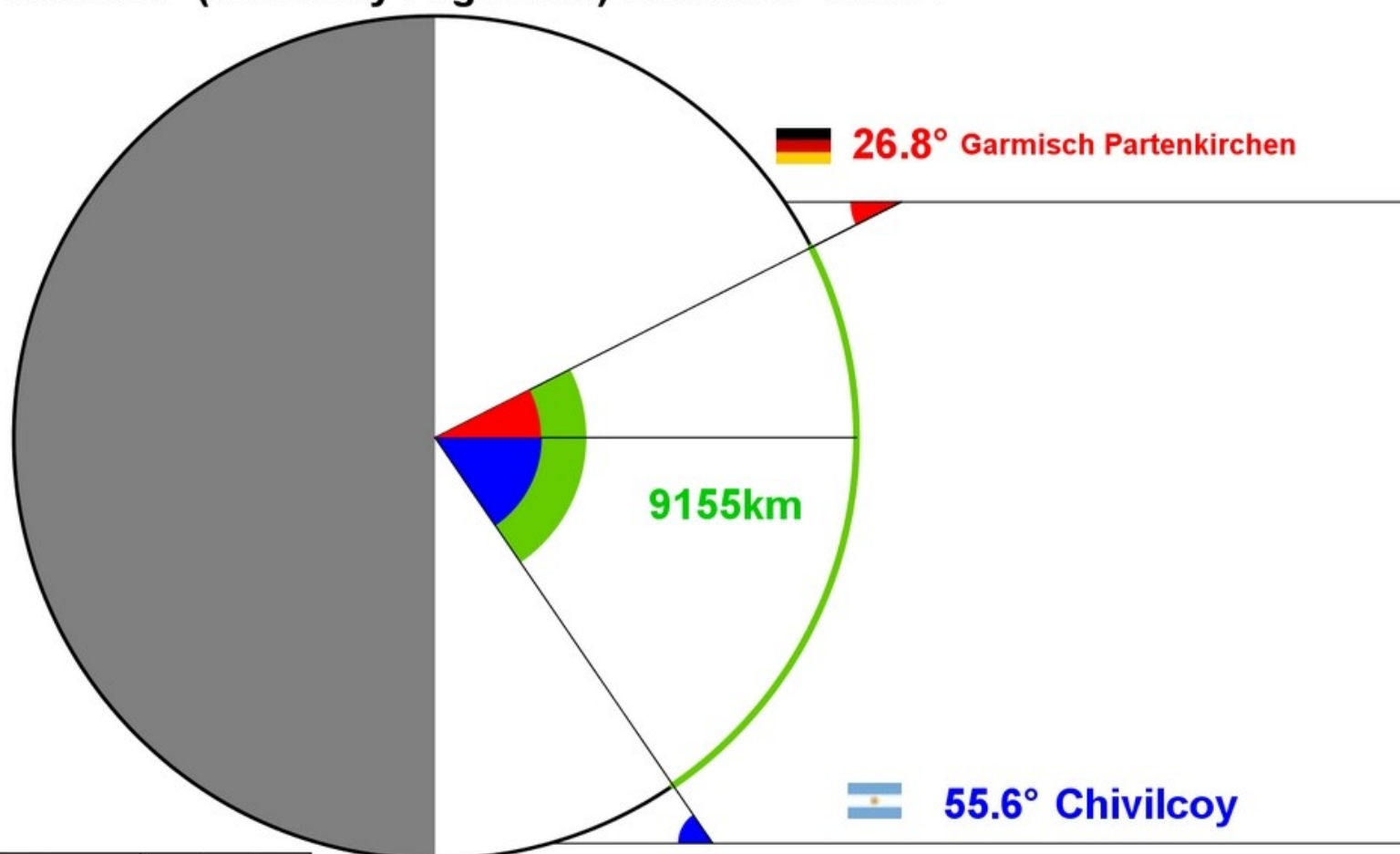


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Garmisch Partenkirchen	Germany	St.-Irmengard-Gymnasium	47.493	11.102

Date	Gnomon	Shadow	Angle
18 May 2020	115.0cm	59.0cm	27.2°
19 May 2020	93.0cm	50.7cm	28.6°
21 May 2020	107cm	56cm	27.6°
22 May 2020	31cm	17.2cm	29°
23 May 2020	225cm	113.5cm	26.8°
24 May 2020	36cm	18.5cm	27.2°
25 May 2020	21cm	10.7cm	27°
26 May 2020	180cm	89.5cm	26.4°
29 May 2020	21.3cm	10.8cm	26.9°
30 May 2020	93cm	44.7cm	25.7°
31 May 2020	93cm	44.4cm	25.5°

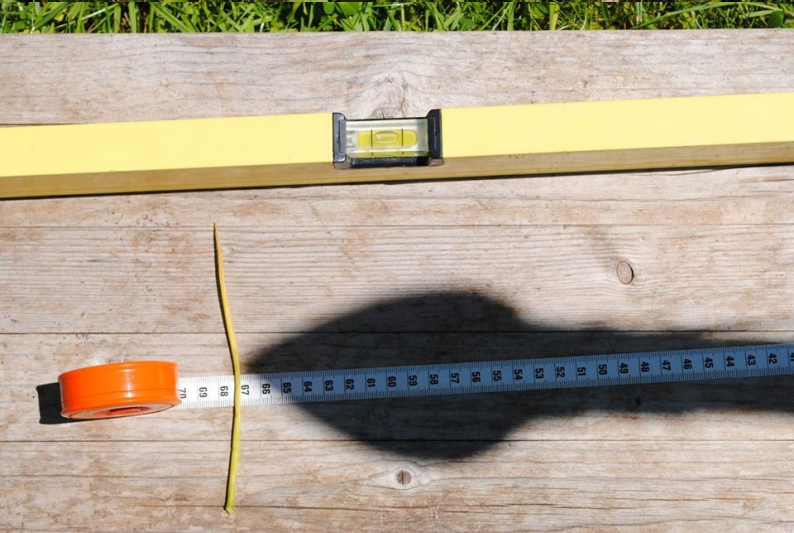
23/05/2020 (Garmisch Partenkirchen-Germany) Latitude: 47.493°

23/05/2020 (Chivilcoy-Argentina) Latitude: -34.911°



$$\text{circumference} = \frac{360^\circ \times 9155\text{km}}{26.8^\circ + 55.6^\circ} = 39998 \text{ km}$$

Distance	Angle
circumference	360°
9155km	26.8° + 55.6°



Guarne, Colombia

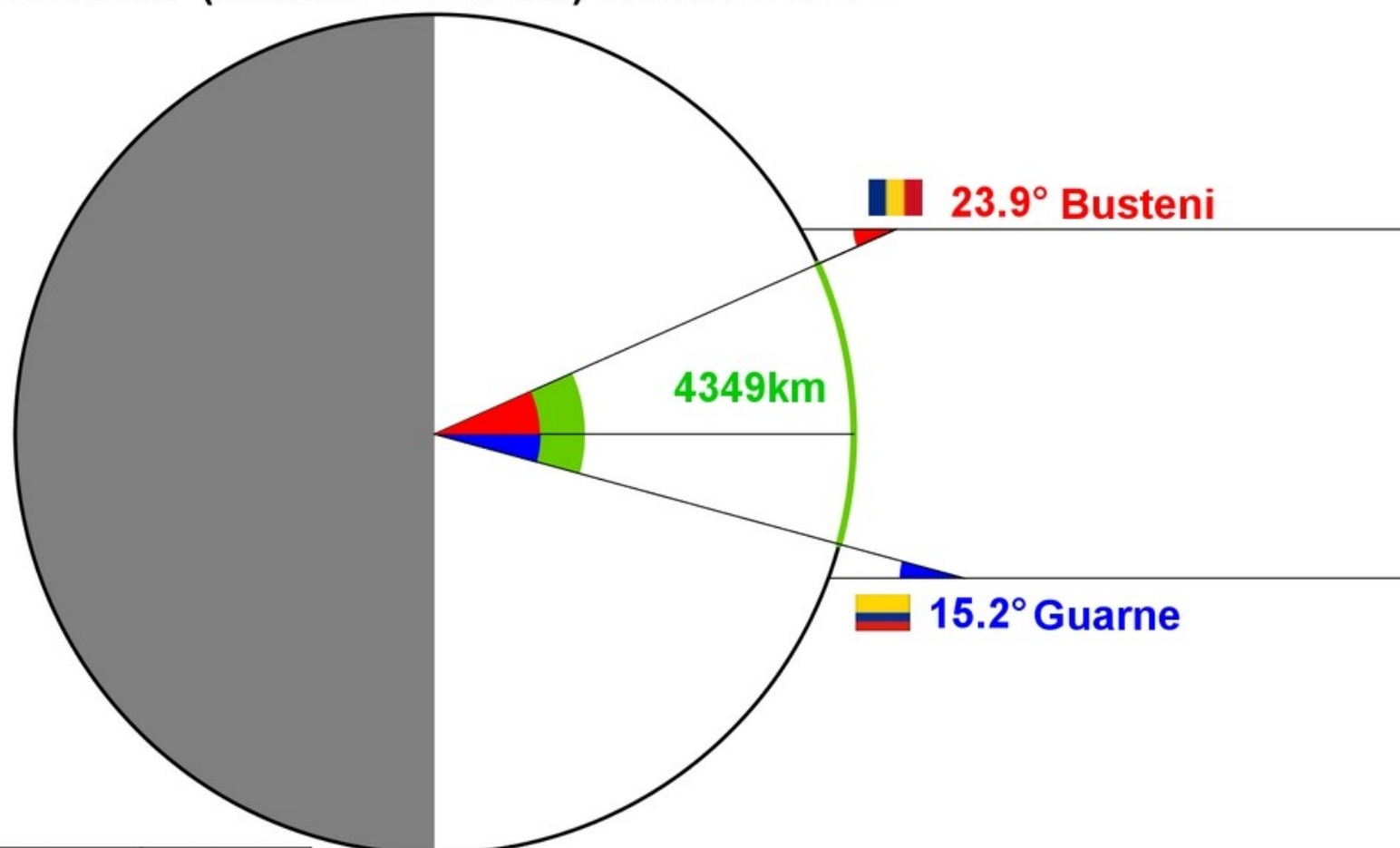


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449

Date	Gnomon	Shadow	Angle
04 May 2020	30.5cm	-5.2cm	-9.7°
06 May 2020	30.5cm	-5.6cm	-10.4°
08 May 2020	30.5cm	-5.8cm	-10.8°
12 May 2020	30.5cm	-6.4cm	-11.9°
14 May 2020	30.5cm	-6.7cm	-12.4°
18 May 2020	30.5cm	-7.4cm	-13.6°
20 May 2020	30.5cm	-7.5cm	-13.8°
21 May 2020	30.5cm	-7.6cm	-14°
26 May 2020	12.9cm	-3.5cm	-15.2°
27 May 2020	12.9cm	-3.6cm	-15.6°

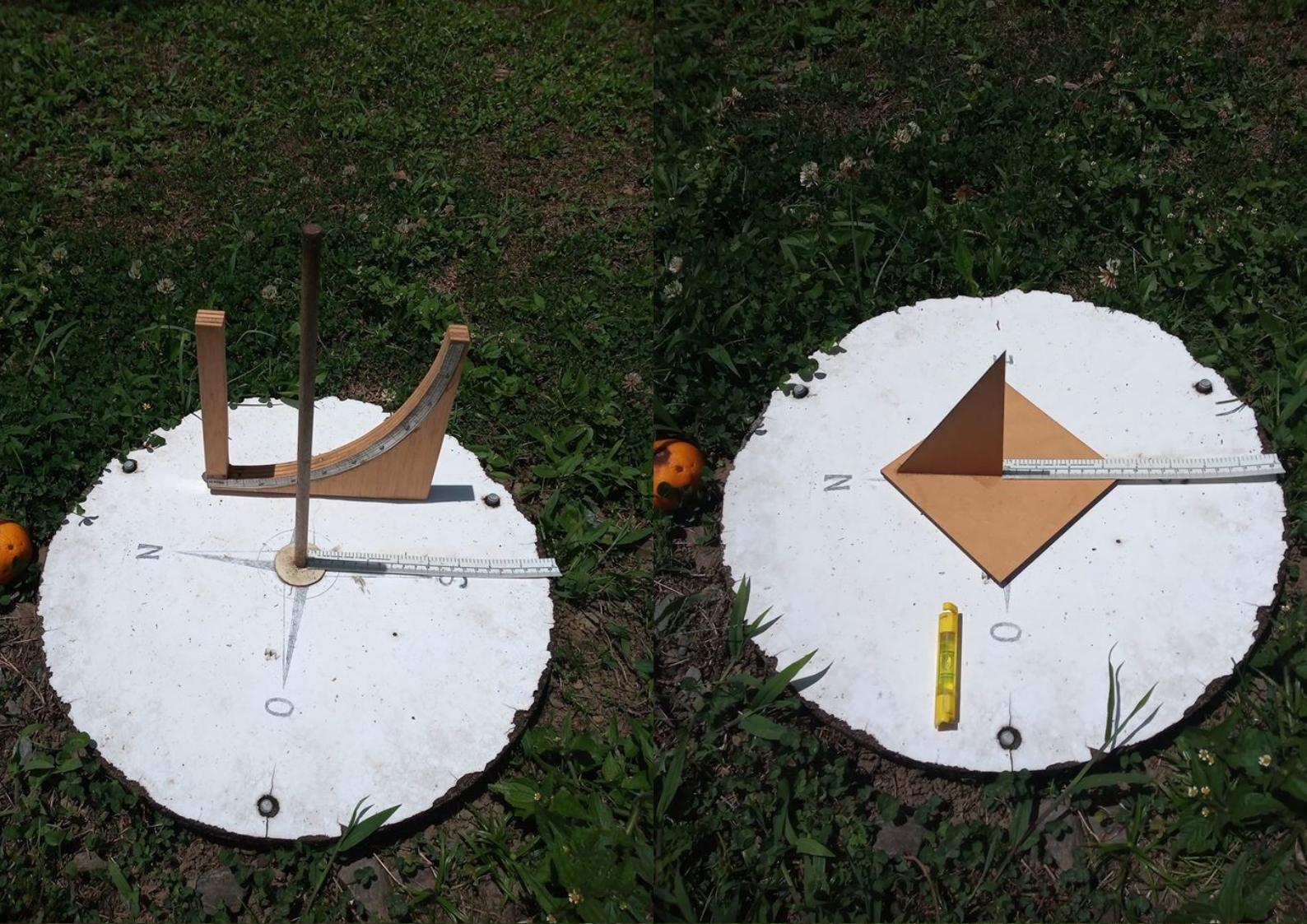
26/05/2020 (Busteni-Romania) Latitude: 45.416°

26/05/2020 (Guarne-Colombia) Latitude: 6.274°



Distance	Angle
circumference	360°
4349km	23.9° + 15.2°

$$\text{circumference} = \frac{360^\circ \times 4349\text{km}}{23.9^\circ + 15.2^\circ} = 40042 \text{ km}$$



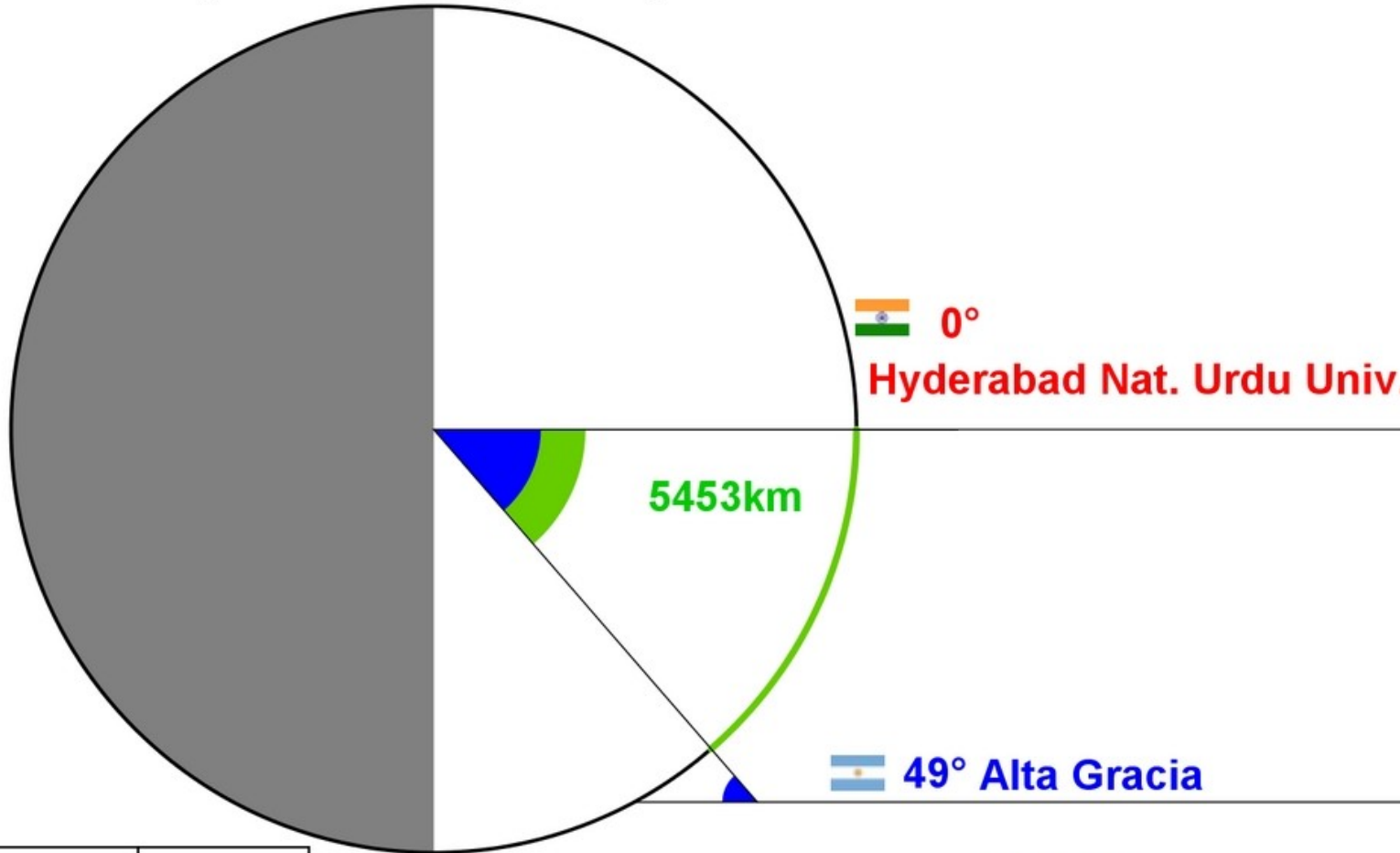
Hyderabad, India



Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Hyderabad	India	Maulana Azad Nat. Urdu University	17.427	78.360

Date	Gnomon	Shadow	Angle
09 May 2020	30.0cm	0.0cm	0.0°

09/05/2020 (Hyderabad Nat. Urdu Univ.-India) Latitude: 17.427°
09/05/2020 (Alta Gracia-Argentina) Latitude: -31.659°



Distance	Angle
circumference	360°
5453km	0° + 49°

circumference = $\frac{360^\circ \times 5453\text{km}}{0^\circ + 49^\circ} = 40063 \text{ km}$



Hyderabad, India

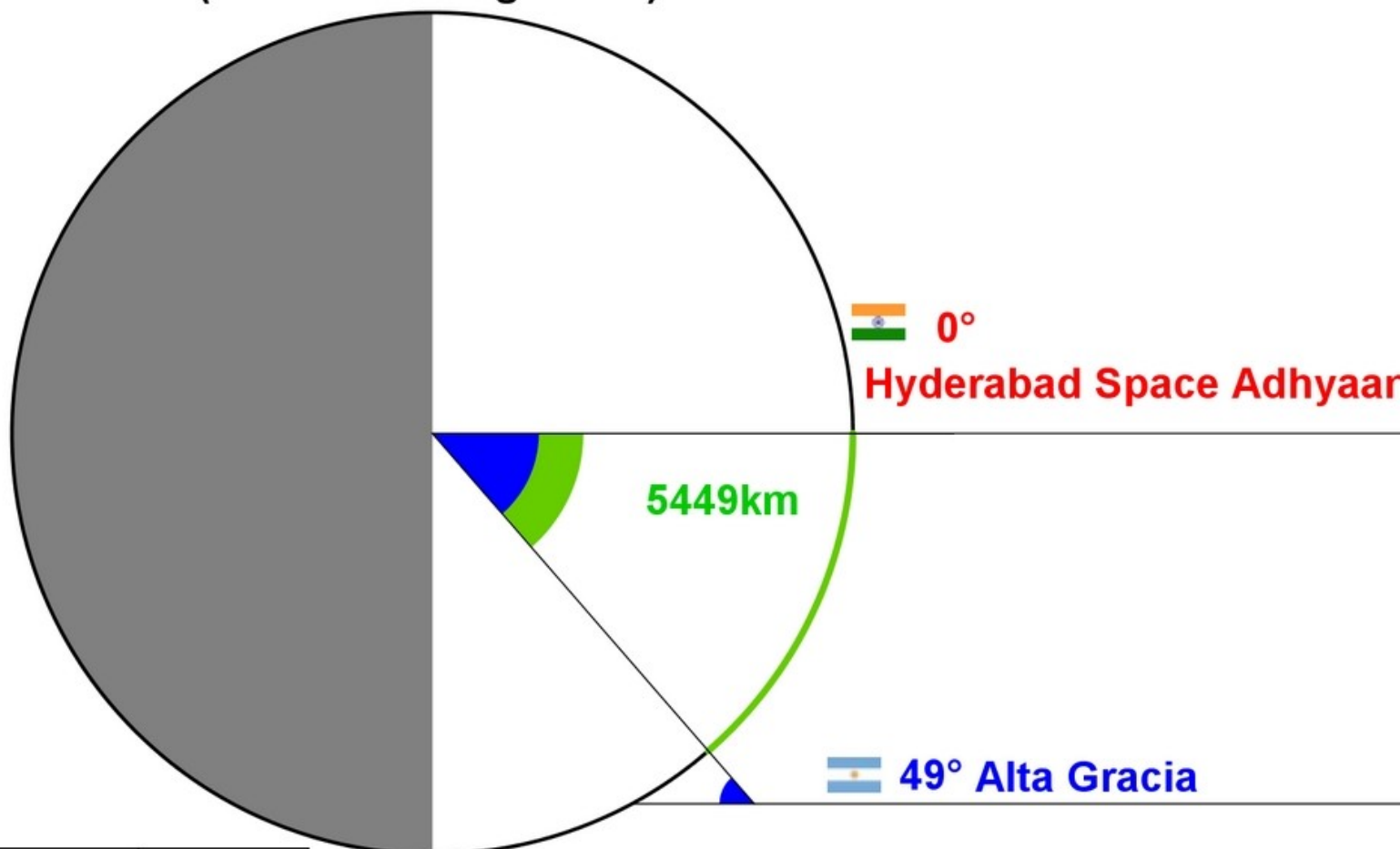


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Hyderabad	India	Space Adhyaan	17.385	78.487

Date	Gnomon	Shadow	Angle
09 May 2020	10.0cm	0.0cm	0.0°

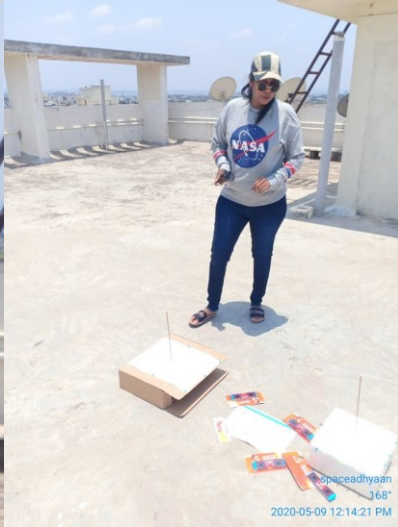
09/05/2020 (Hyderabad Space Adhyaan-India) Latitude: 17.385°

09/05/2020 (Alta Gracia-Argentina) Latitude: -31.659°



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

Distance	Angle
circumference	360°
5449km	0° + 49°



Ilion, Greece

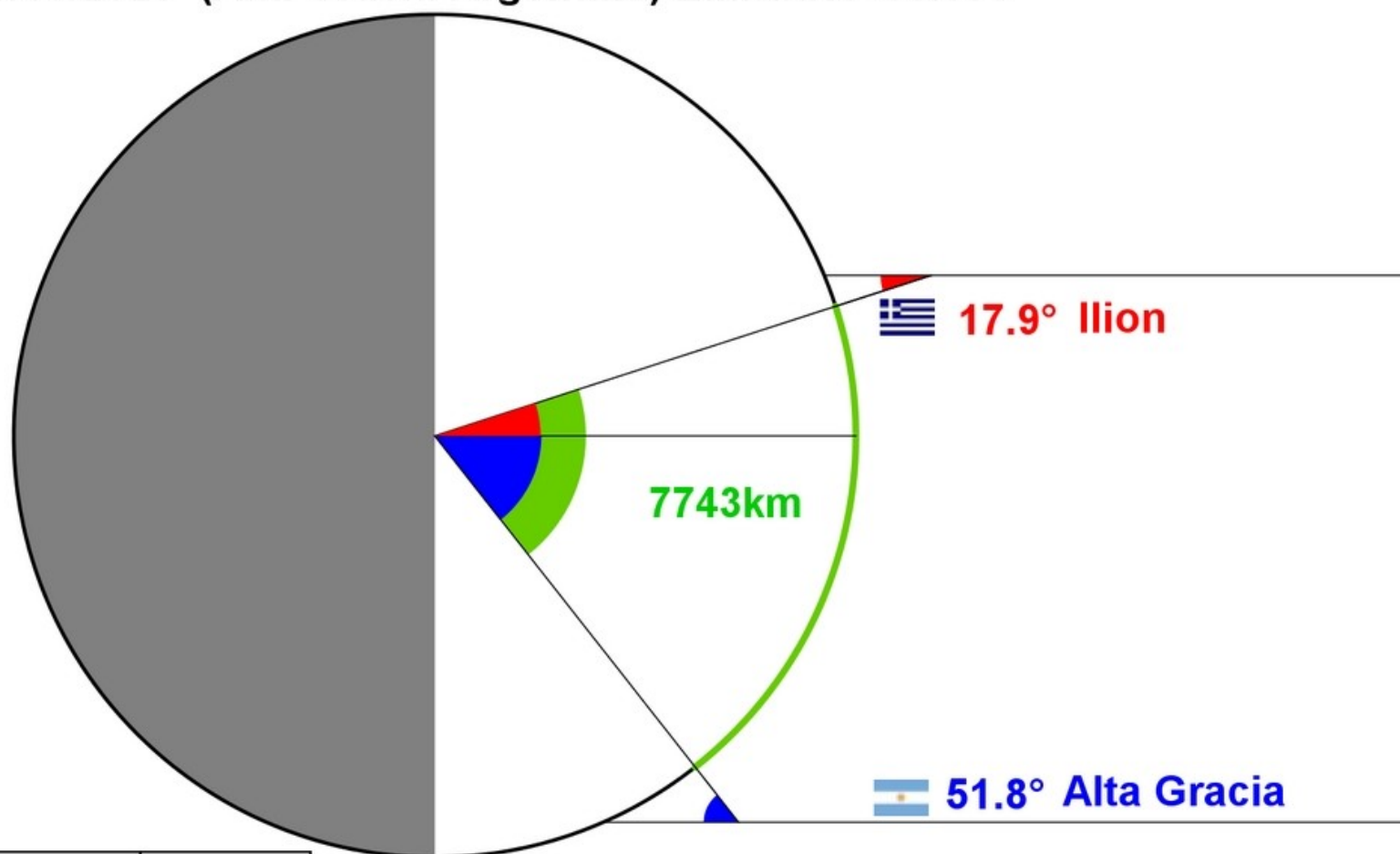


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697

Date	Gnomon	Shadow	Angle
20 May 2020	40cm	12.9cm	17.9°
27 May 2020	41.5cm	12.5cm	16.8°

20/05/2020 (Ilion-Greece) Latitude: 38.033°

20/05/2020 (Alta Gracia-Argentina) Latitude: -31.659°



$$\text{circumference} = \frac{360^\circ \times 7743\text{km}}{17.9^\circ + 51.8^\circ} = 39993 \text{ km}$$

Distance	Angle
circumference	360°
7743km	17.9° + 51.8°



Lafrançaise, France

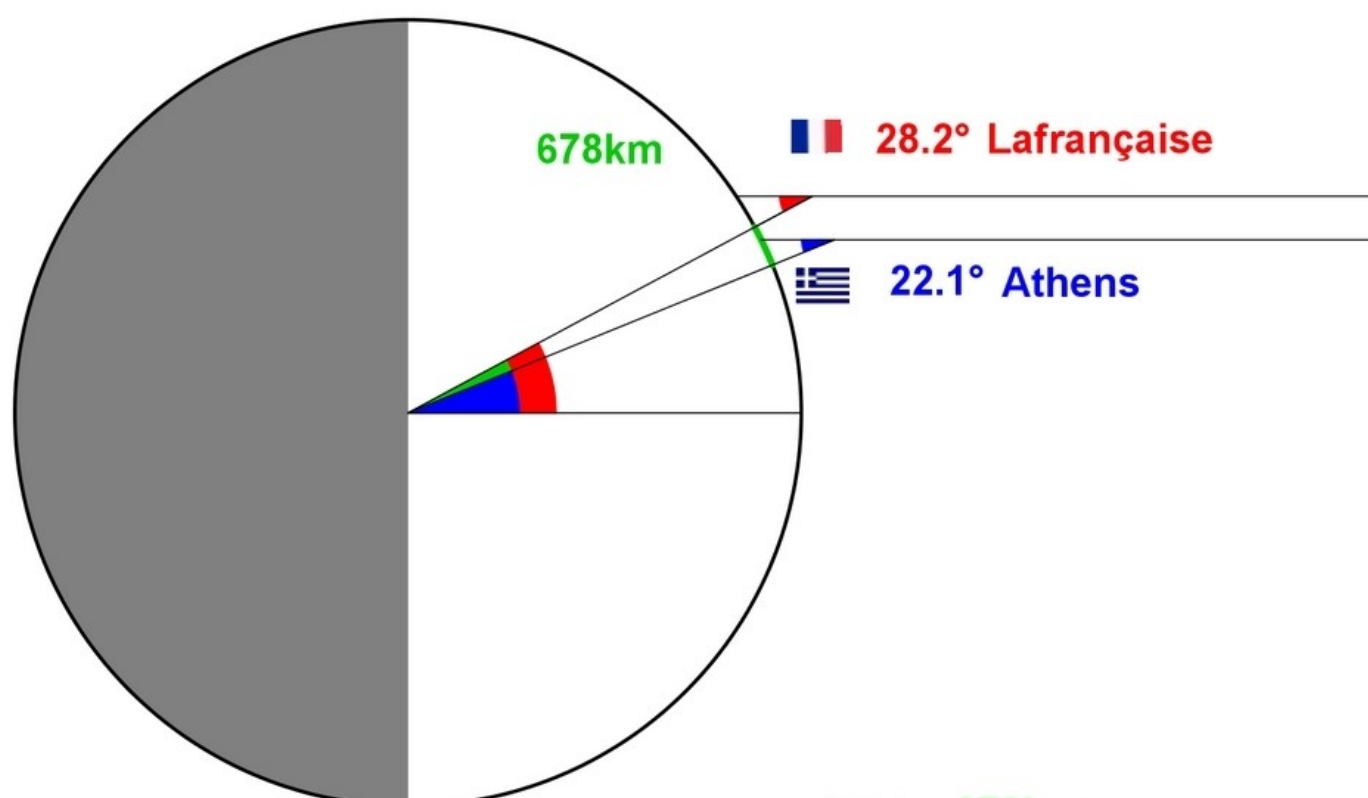


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Lafrançaise	France	Collège Antonin Perbosc	44.127	1.237

Date	Gnomon	Shadow	Angle
02 May 2020	12.5cm	6.7cm	28.2°
03 May 2020	12.5cm	6.6cm	27.8°
04 May 2020	12.5cm	6.6cm	27.8°
05 May 2020	12.5cm	6.5cm	27.5°
06 May 2020	12.5cm	6.4cm	27.1°
07 May 2020	12.5cm	6.3cm	26.7°
08 May 2020	12.5cm	6.3cm	26.7°
09 May 2020	12.5cm	6.2cm	26.4°
11 May 2020	12.5cm	6.0cm	25.6°
13 May 2020	12.5cm	5.9cm	25.3°
14 May 2020	12.5cm	5.8cm	24.9°
15 May 2020	12.5cm	5.8cm	24.9°
16 May 2020	12.5cm	5.7cm	24.5°
17 May 2020	12.5cm	5.7cm	24.5°
28 May 2020	12.5cm	5cm	21.8°
29 May 2020	100cm	39cm	21.3°

02/05/2020 (Lafrançaise-France) Latitude: 44.127°

02/05/2020 (Athens-Greece) Latitude: 38.027°



Distance	Angle
circumference	360°
678km	28.2° - 22.1°

$$\text{circumference} = \frac{360^\circ \times 678\text{km}}{28.2^\circ - 22.1^\circ} = 40013 \text{ km}$$



France: Lafrançaise
Vendredi 29 Mai
Gnomon = 100cm
Longueur = 29cm
Photo prise à 13h55

Margineni, Romania

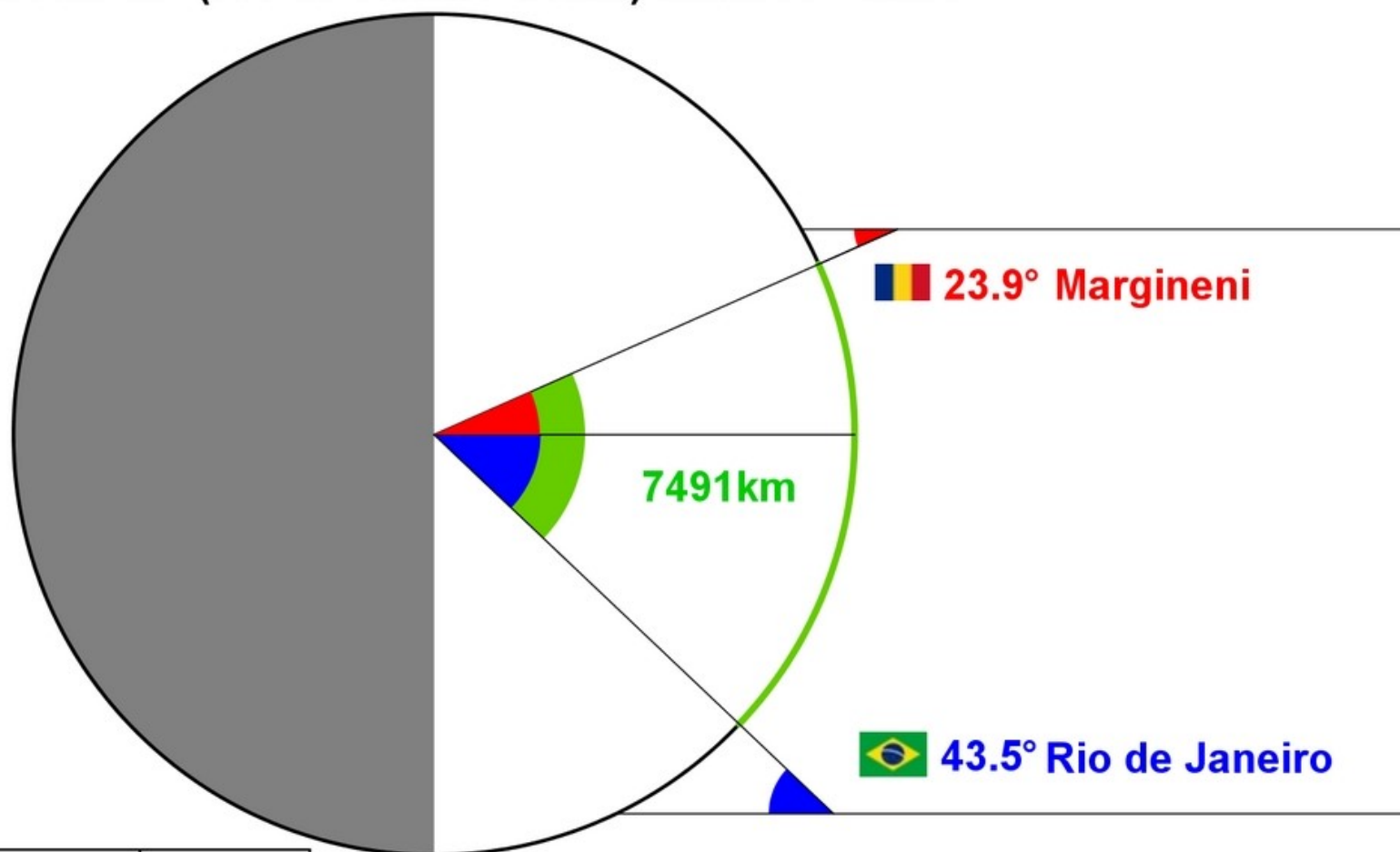


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Mărgineni	Romania	Gh. Popescu School	44.533	24.554

Date	Gnomon	Shadow	Angle
21 May 2020	100cm	48cm	25.6°
22 May 2020	100cm	44.4cm	23.9°
24 May 2010	100cm	44cm	23.7°
26 May 2020	100cm	42.8cm	23.2°
27 May 2020	100cm	44.3cm	23.9°
28 May 2020	100cm	42.9cm	23.2°

22/05/2020 (Margineni-Romania) Latitude: 44.533°

22/05/2020 (Rio de Janeiro-Brazil) Latitude: -22.89°



Distance	Angle
circumference	360°
7491km	23.9° + 43.5°

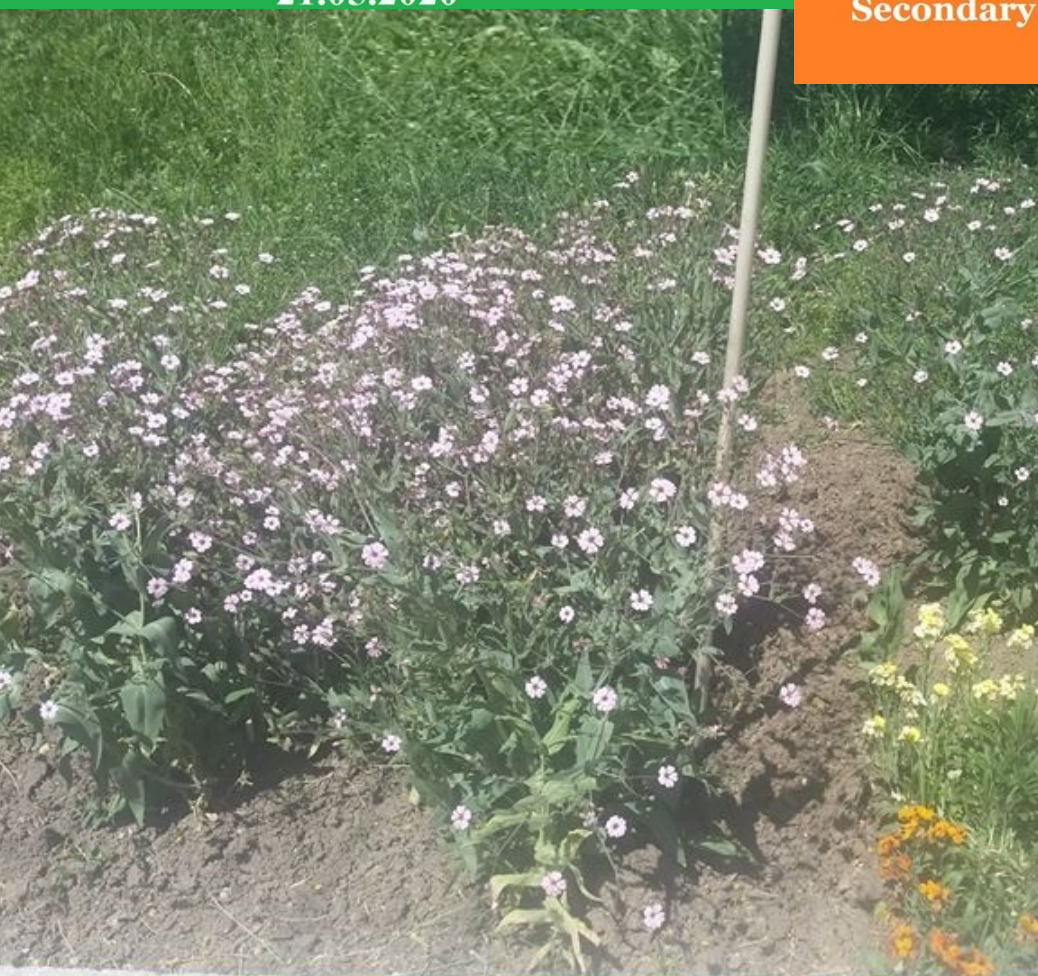
$$\text{circumference} = \frac{360^\circ \times 7491\text{km}}{23.9^\circ + 43.5^\circ} = 40011 \text{ km}$$



Secondary School Gh. Popescu, ROMANIA
21.05.2020



Secondary School Gh. Popescu, Romania
27.05.2020



Secondary School Gh. Popescu, ROMANIA
22.05.2020



Secondary School Gh. Popescu, Romania
24.05.2020

Marina di Carrara, Italy

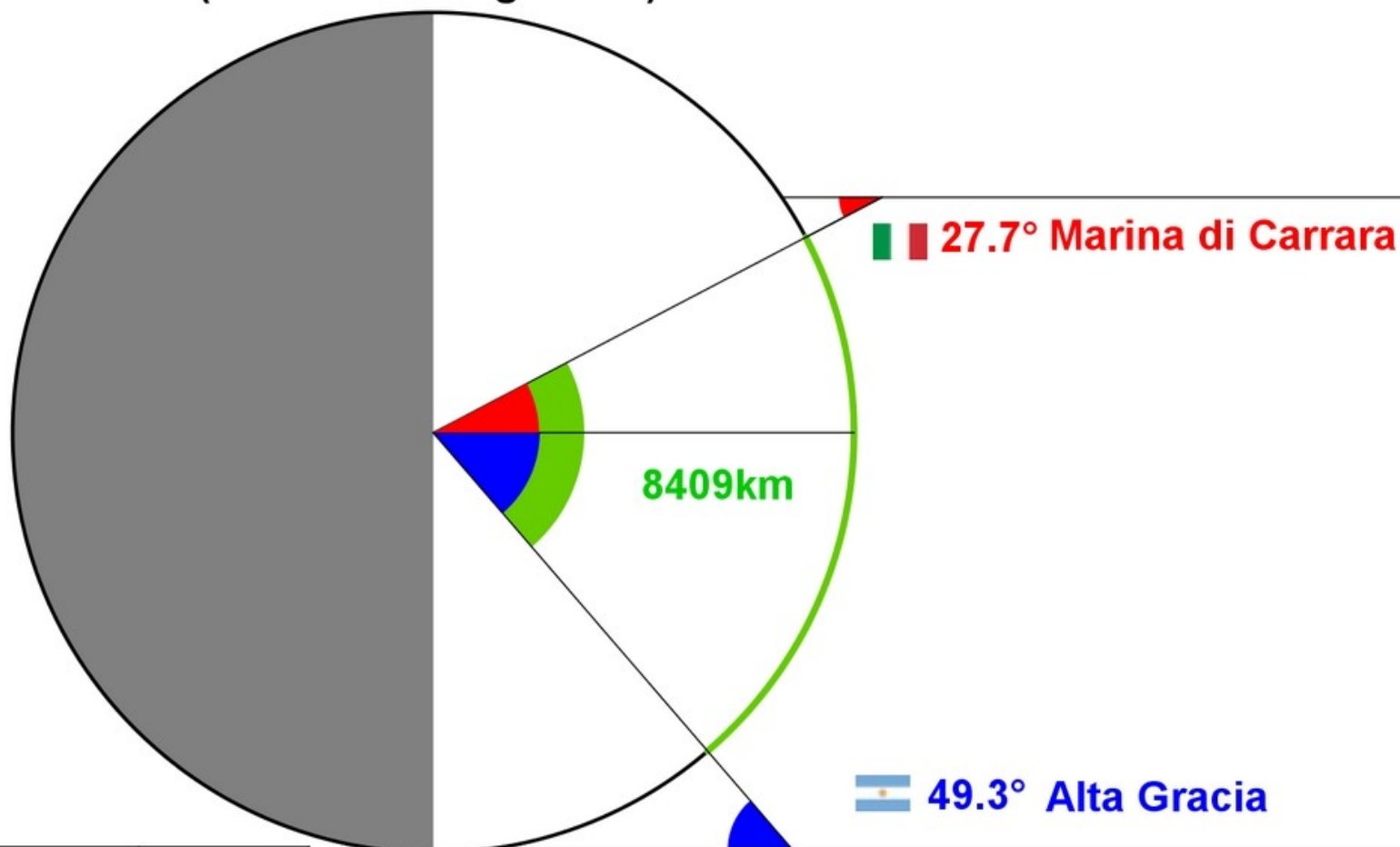


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Marina di Carrara	Italy	M Buonarroti primary school	44.033	10.033

Date	Gnomon	Shadow	Angle
10 May 2020	80.0cm	42.0cm	27.7°

10/05/2020 (Marina di Carrara-Italy) Latitude: 44.033°

10/05/2020 (Alta Gracia-Argentina) Latitude: -31.659°



Distance	Angle
circumference	360°
8409km	27.7° + 49.3°

$$\text{circumference} = \frac{360^\circ \times 8409\text{km}}{27.7^\circ + 49.3^\circ} = 39315 \text{ km}$$



Méier, Brazil

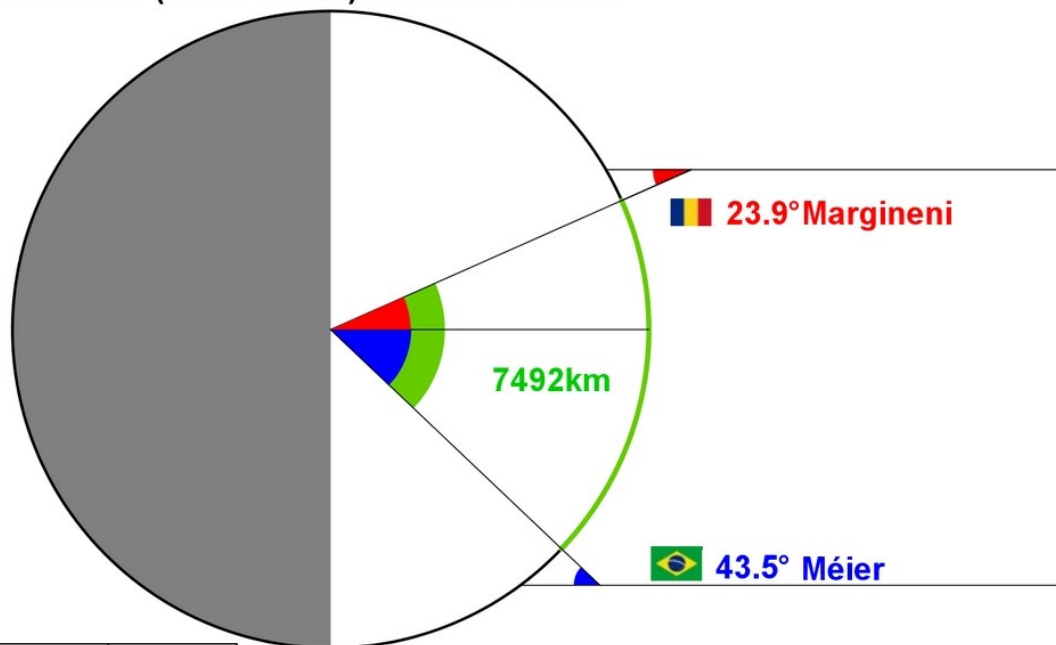


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Méier	Brazil	Escola Municipal Bento Ribeiro	-22.904	-43.280

Date	Gnomon	Shadow	Angle
01 May 2020	40.0cm	-35.0cm	-41.2°
02 May 2020	142cm	-132cm	-42.9°
04 May 2020	30.0cm	-17.0cm	-29.5°
05 May 2020	15.0cm	-12.0cm	-38.7°
08 May 2020	20.0cm	-14.0cm	-35.0°
09 May 2020	26.0cm	-20.0cm	-37.6°
10 May 2020	56.0cm	-48.0cm	-40.6°
11 May 2020	24cm	-18cm	-36.9°
12 May 2020	74.0cm	-68.0cm	-42.6°
13 May 2020	22.0cm	-16.0cm	-36.0°
14 May 2020	12cm	-8cm	-33.7°
16 May 2020	18cm	-10cm	-29.1°
17 May 2020	84cm	-76cm	-42.1°
18 May 2020	77cm	-63cm	-39.3°
19 May 2020	8cm	-6cm	-36.9°
20 May 2020	43cm	-42cm	-44.3°
21 May 2020	27cm	-24cm	-41.6°
22 May 2020	14cm	-12cm	-40.6°
23 May 2020	50cm	-39cm	-38°
25 May 2020	27cm	-28cm	-46°
26 May 2020	10cm	-10cm	-45°
27 May 2020	20cm	-19cm	-43.5°
28 May 2020	38cm	-37cm	-44.2°
29 May 2020	11cm	-10cm	-42.3°
30 May 2020	42cm	-37cm	-41.4°
31 May 2020	17cm	-16cm	-43.3°

27/05/2020 (Margineni-Romania) Latitude: 44.533°

27/05/2020 (Méier-Brazil) Latitude: -22.904°



Distance	Angle
circumference	360°
7492km	23.9° + 43.5°

$$\text{circumference} = \frac{360^\circ \times 7492\text{km}}{23.9^\circ + 43.5^\circ} = 40017 \text{ km}$$



Mohammedia, Tunisia

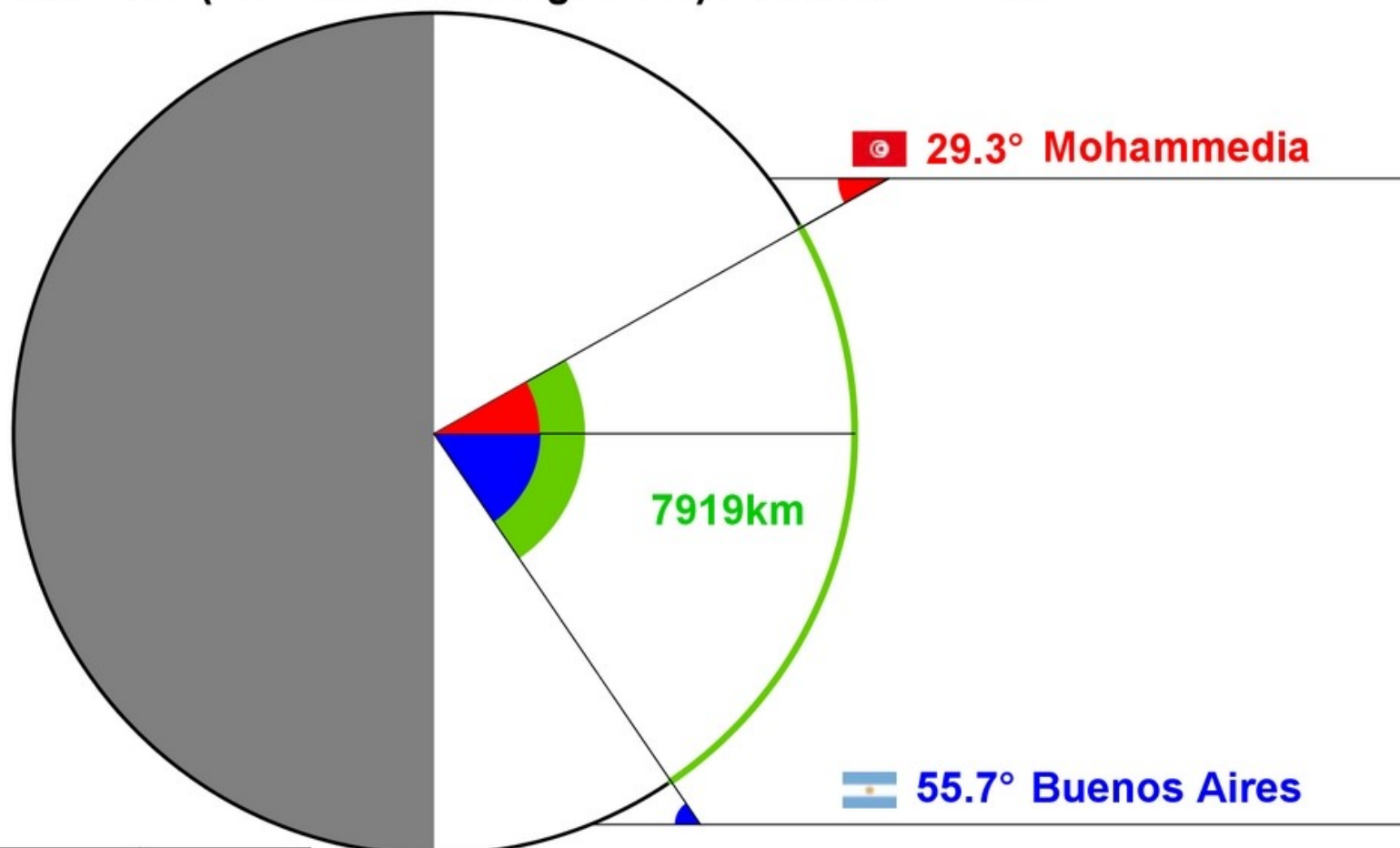


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Mohammedia	Tunisia	Lycée M'hamdia	36.678	10.152

Date	Gnomon	Shadow	Angle
27 May 2020	103.3cm	58cm	29.3°

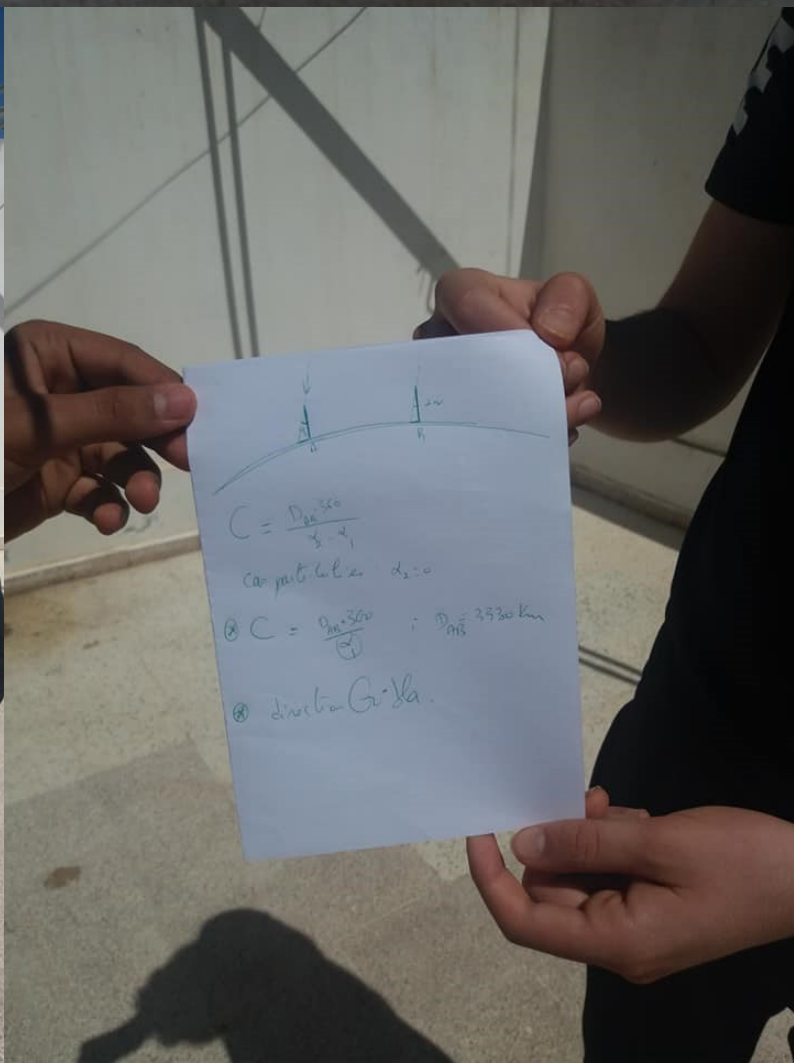
27/05/2020 (Mohammedia-Tunisia) Latitude: 36.678°

27/05/2020 (Buenos Aires-Argentina) Latitude: -34.599°



Distance	Angle
circumference	360°
7919km	29.3° + 55.7°

$$\text{circumference} = \frac{360^\circ \times 7919\text{km}}{29.3^\circ + 55.7^\circ} = 33539 \text{ km}$$



Petroupoli, Greece

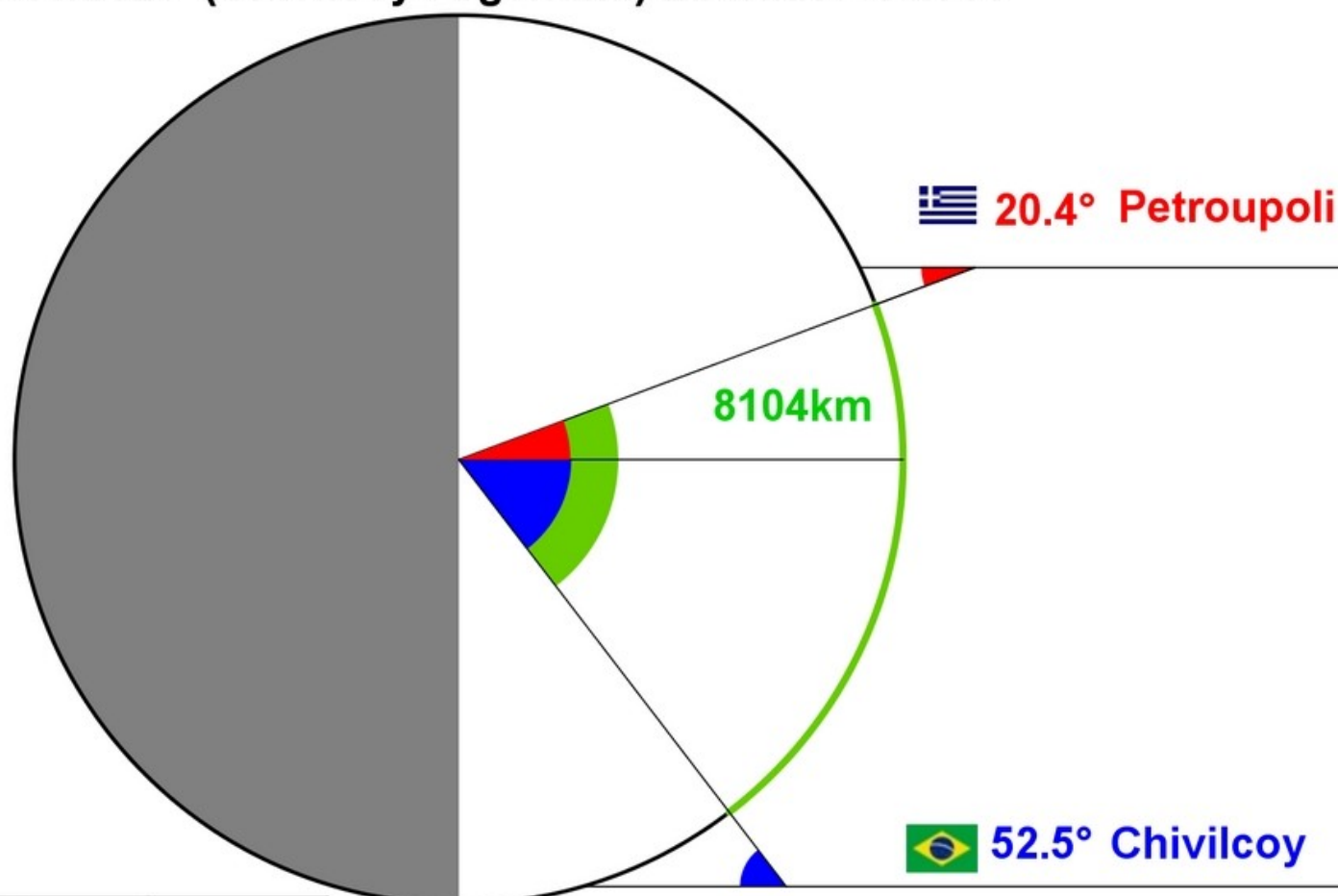


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Petroupoli	Greece	4o Junior High School	38.036	23.674

Date	Gnomon	Shadow	Angle
01 May 2020	30.4cm	12.5cm	22.4°
08 May 2020	85.0cm	34.5cm	22.1°
09 May 2020	30.4cm	11.3cm	20.4°
10 May 2020	30.4cm	11.1cm	20.1°
18 May 2020	52.3cm	17.4cm	18.4°
21 May 2020	52.3cm	16.7cm	17.7°

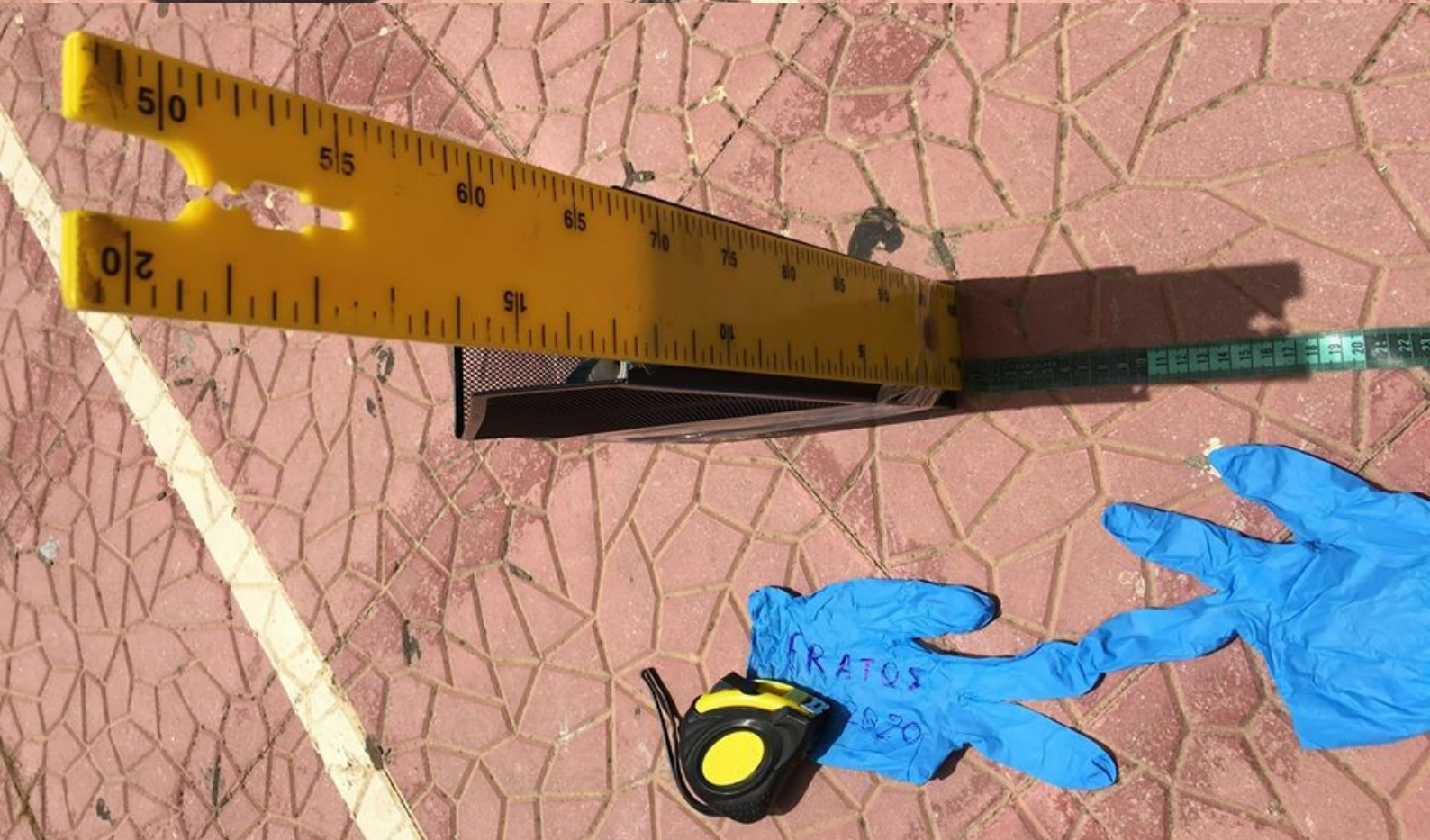
09/05/2020 (Petroupoli-Greece) Latitude: 38.036°

09/05/2020 (Chivilcoy-Argentina) Latitude: -34.911°

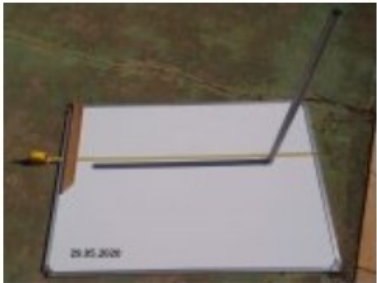


$$\text{circumference} = \frac{360^\circ \times 8104\text{km}}{20.4^\circ + 52.5^\circ} = 40020 \text{ km}$$

Distance	Angle
circumference	360°
8104km	20.4° + 52.5°



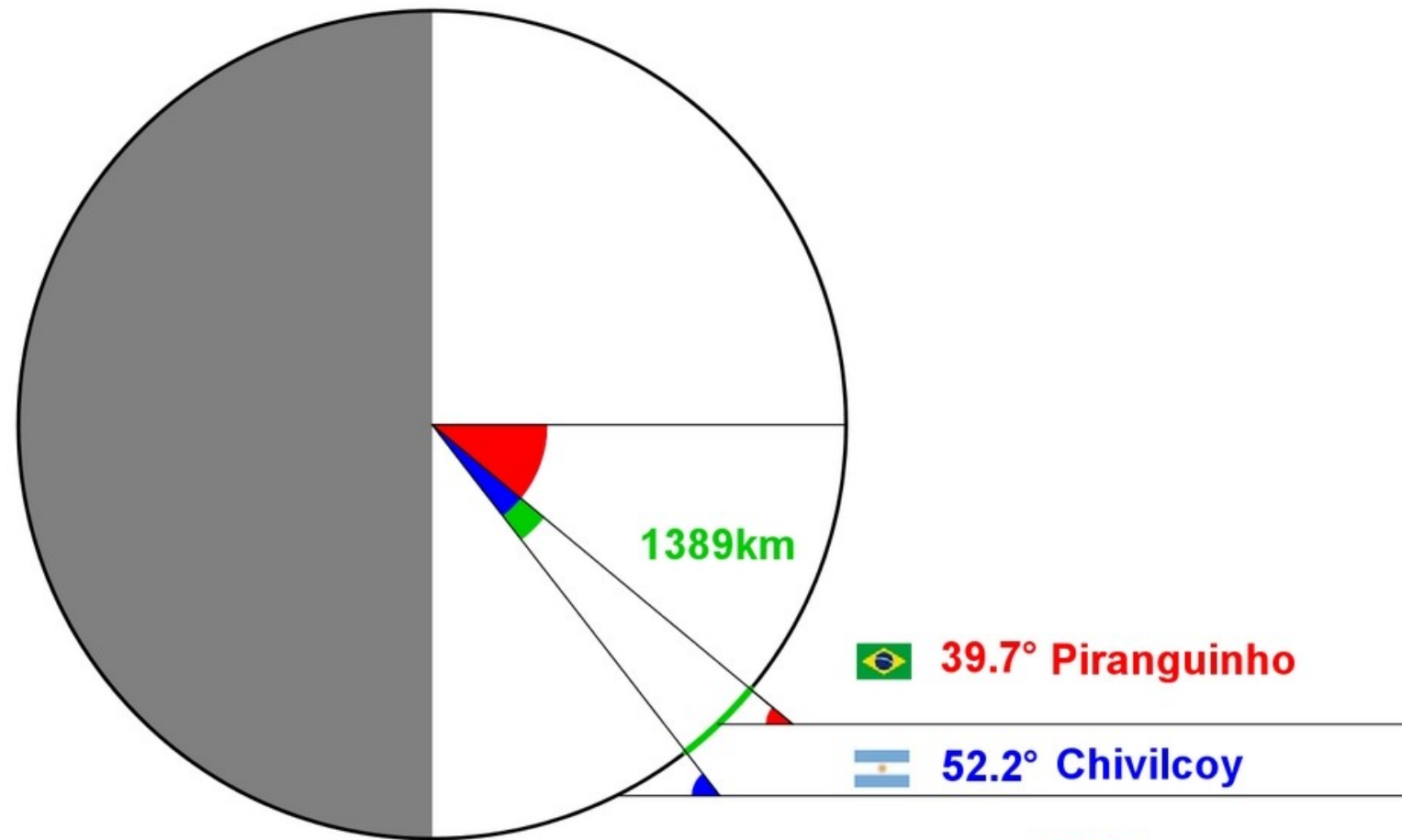
Piranguinho, Brazil



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

Date	Gnomon	Shadow	Angle
08 May 2020	70.0cm	-58.2cm	-39.7°
18 May 2020	70.0cm	-63.0cm	-42.0°
25 May 2020	70cm	-66.7cm	-43.6°
29 May 2020	70cm	-68.3cm	-44.3°

08/05/2020 (Piranguinho-Brazil) Latitude: -22.411°
08/05/2020 (Chivilcoy-Argentina) Latitude: -34.911°



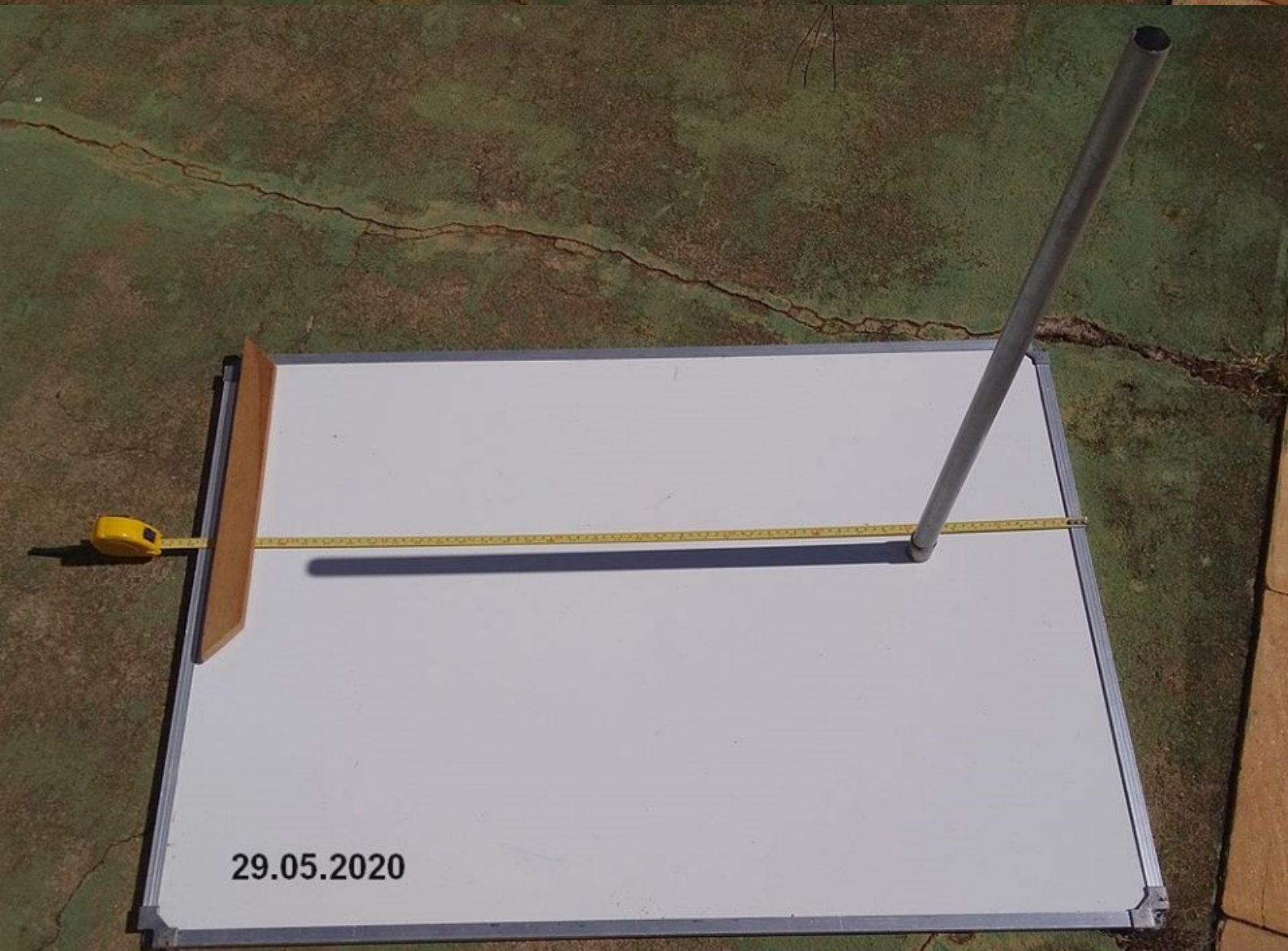
Distance	Angle
circumference	360°
1389km	52.2° - 39.7°

circumference = $\frac{360^\circ \times 1389\text{km}}{52.2^\circ - 39.7^\circ} = 40003 \text{ km}$



A photograph of a whiteboard with a silver metal frame, positioned outdoors on a green and brown textured surface. A yellow measuring tape is stretched horizontally across the board, held by a wooden block on the left and a vertical metal pole on the right. The date '08.05.2020' is printed in the bottom left corner.

08.05.2020



A photograph of a whiteboard with a silver metal frame, positioned outdoors on a green and brown textured surface. A yellow measuring tape is stretched horizontally across the board, held by a wooden block on the left and a vertical metal pole on the right. The date '29.05.2020' is printed in the bottom left corner.

29.05.2020

Rio de Janeiro CENOM, Brazil

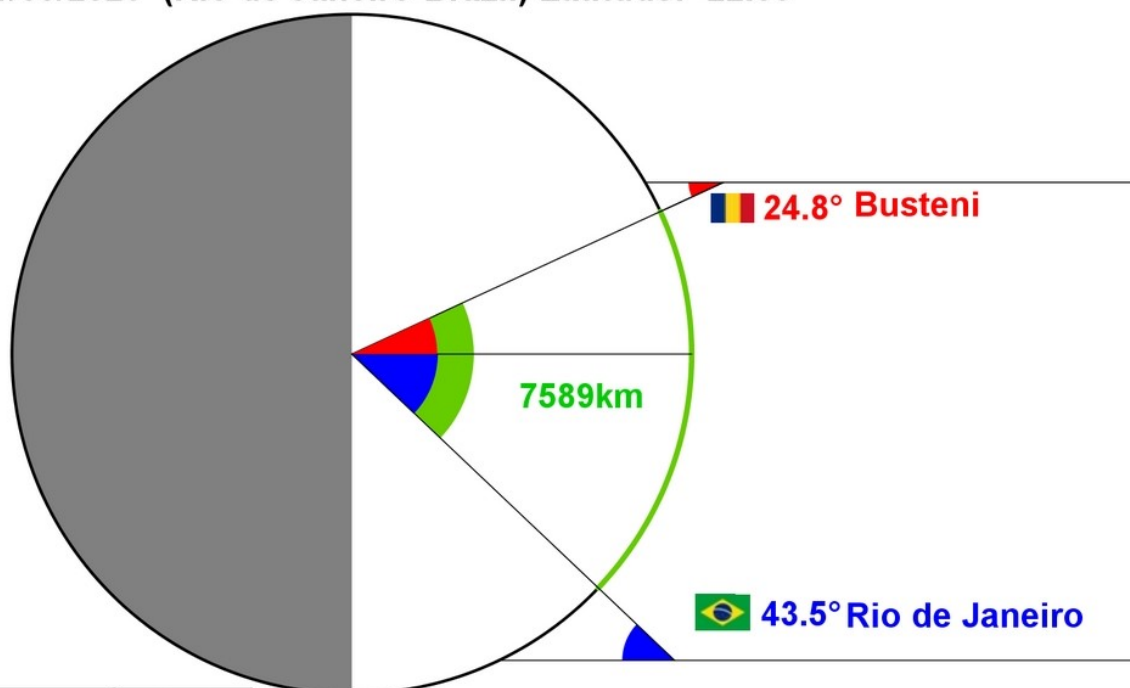


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
01 May 2020	10.0cm	-8.0cm	-38.7°
02 May 2020	10cm	-8cm	-38.7°
04 May 2020	20.0cm	-16.0cm	-38.7°
05 May 2020	180cm	-120cm	-33.7°
06 May 2020	10.0cm	-9.0cm	-42.0°
09 May 2020	10.0cm	-9.0cm	-42.0°
10 May 2020	10.0cm	-9.0cm	-42.0°
11 May 2020	10cm	-9cm	-42°
12 May 2020	10.0cm	-9.0cm	-42.0°
13 May 2020	10.0cm	-9.0cm	-42.0°
14 May 2020	10cm	-9cm	-42°
16 May 2020	10cm	-9cm	-42°
17 May 2020	20cm	-19cm	-43.5°
18 May 2020	20.0cm	-19.0cm	-43.5°
19 May 2020	20cm	-19cm	-43.5°
20 May 2020	20cm	-19cm	-43.5°
21 May 2020	20cm	-19cm	-43.5°
22 May 2020	20cm	-19cm	-43.5°
23 May 2020	20cm	-19cm	-43.5°
25 May 2020	20cm	-21cm	-46.4°
26 May 2020	20cm	-21cm	-46.4°
27 May 2020	20cm	-21cm	-46.4°
29 May 2020	20cm	-21cm	-46.4°
30 May 2020	20cm	-21cm	-46.4°
31 May 2020	10cm	-10cm	-45.0°

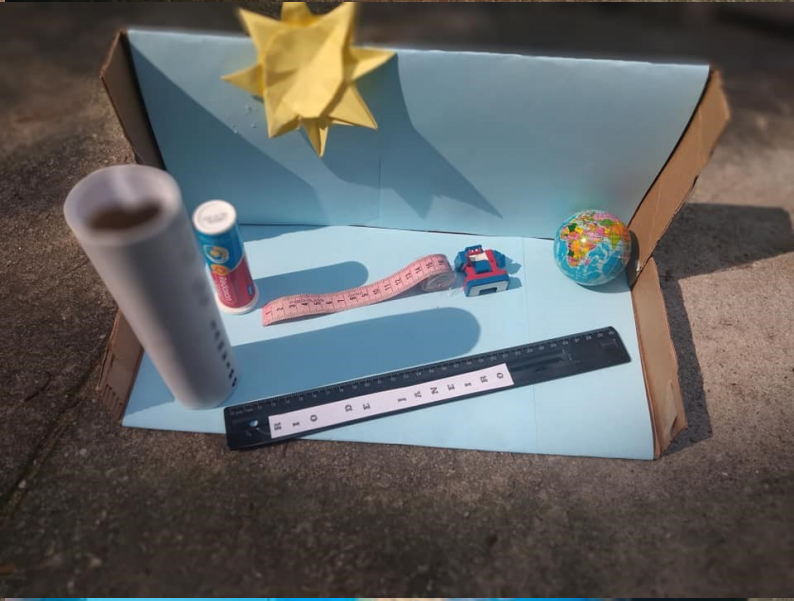
21/05/2020 (Busteni-Romania) Latitude: 45.416°

21/05/2020 (Rio de Janeiro-Brazil) Latitude: -22.89°



Distance	Angle
circumference	360°
7589km	24.8° + 43.5°

$$\text{circumference} = \frac{360^\circ \times 7589\text{km}}{24.8^\circ + 43.5^\circ} = 40001 \text{ km}$$



São Mateus, Brazil

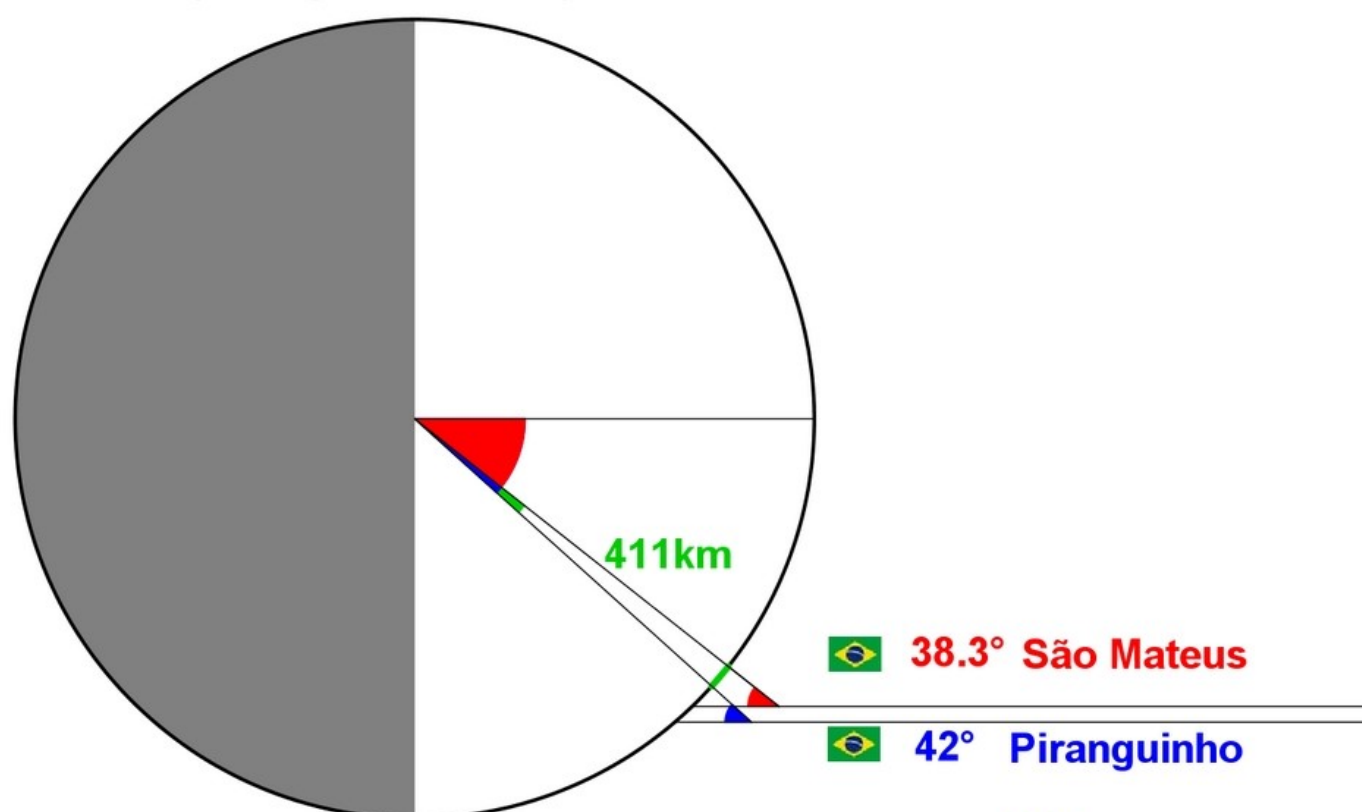


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	São Mateus	Brazil	Escola Estadual de Ensino Médio Nestor Gomes	-18.716	-39.856

Date	Gnomon	Shadow	Angle
09 May 2020	19.5cm	-14.5cm	-36.6°
10 May 2020	12.5cm	-9.9cm	-38.4°
11 May 2020	9.0cm	-6.5cm	-35.8°
12 May 2020	10.0cm	-8.0cm	-38.7°
14 May 2020	14.5cm	-11cm	-37.2°
15 May 2020	14.5cm	-10.5cm	-35.9°
18 May 2020	19cm	-15cm	-38.3°
19 May 2020	14.5cm	-11.8cm	-39.1°
20 May 2020	14.5cm	-11.7cm	-38.9°
21 May 2020	14.5cm	-12cm	-39.6°
23 May 2020	14.5cm	-11.5cm	-38.4°
26 May 2020	14.5cm	-13cm	-41.9°
27 May 2020	19.5cm	-16.1cm	-39.5°
28 May 2020	19.5cm	-16.2cm	-39.7°
29 May 2020	19.5cm	-16.5cm	-40.2°

18/05/2020 (São Mateus-Brazil) Latitude: -18.716°

18/05/2020 (Piranguinho-Brazil) Latitude: -22.411°



Distance	Angle
circumference	360°
411km	42° - 38.3°

$$\text{circumference} = \frac{360^\circ \times 411\text{km}}{42^\circ - 38.3^\circ} = 39989 \text{ km}$$



Úbeda, Spain

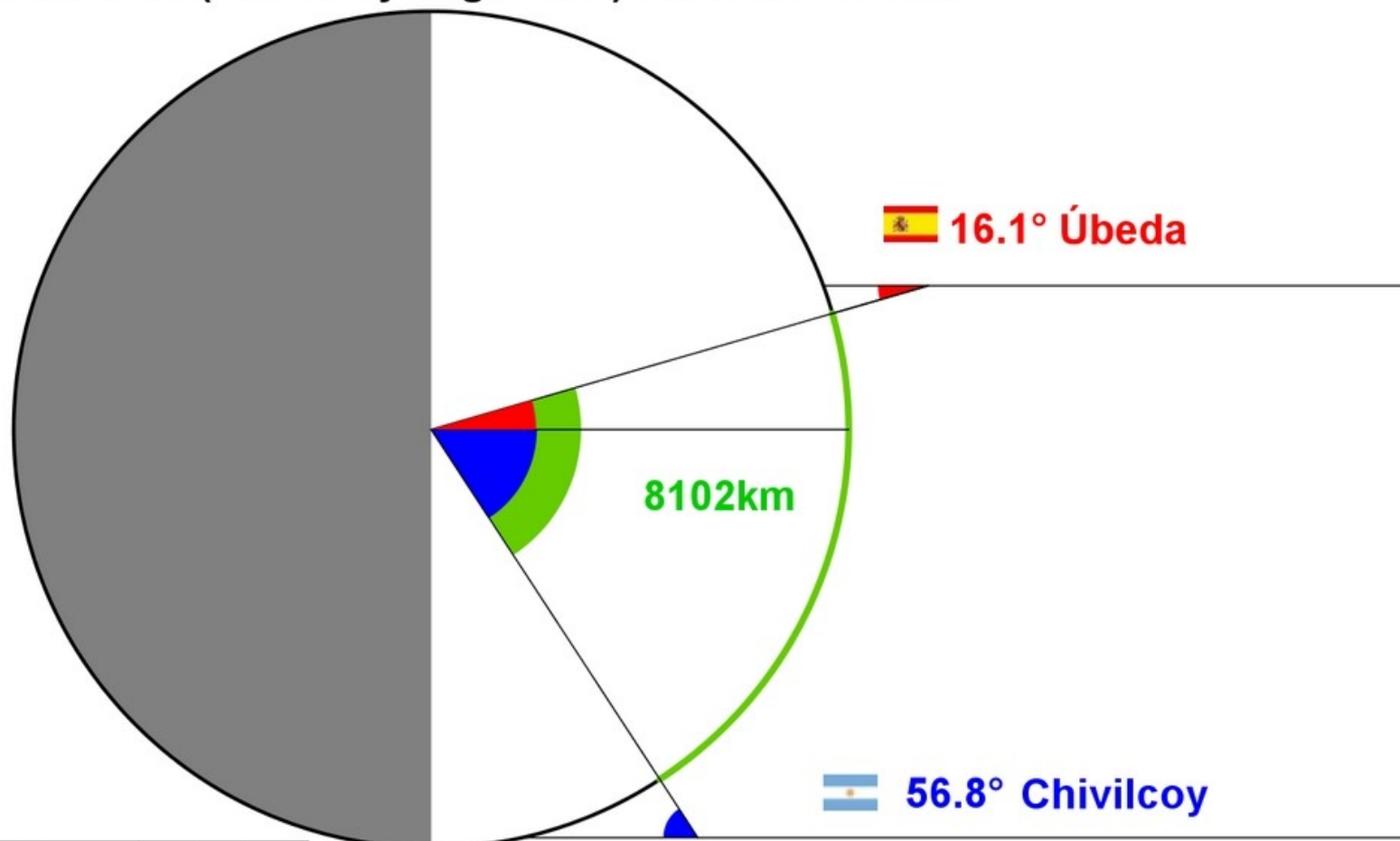


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Úbeda	Spain	Colegio Salesiano Santo Domingo Savio	38.017	-3.367

Date	Gnomon	Shadow	Angle
01 May 2020	66.2cm	26.7cm	22.0°
03 May 2020	66.2cm	25.0cm	20.7°
13 May 2020	81.2cm	28.1cm	19.1°
19 May 2020	81.2cm	26cm	17.8°
23 May 2020	77.8cm	23.6cm	16.9°
27 May 2020	80.5cm	23.3cm	16.1°
29 May 2020	80.6cm	23.2cm	16.1°

29/05/2020 (Úbeda-Spain) Latitude: 38.017°

29/05/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
8102km	16.1° + 56.8°

$$\text{circumference} = \frac{360^\circ \times 8102\text{km}}{16.1^\circ + 56.8^\circ} = 40010 \text{ km}$$



