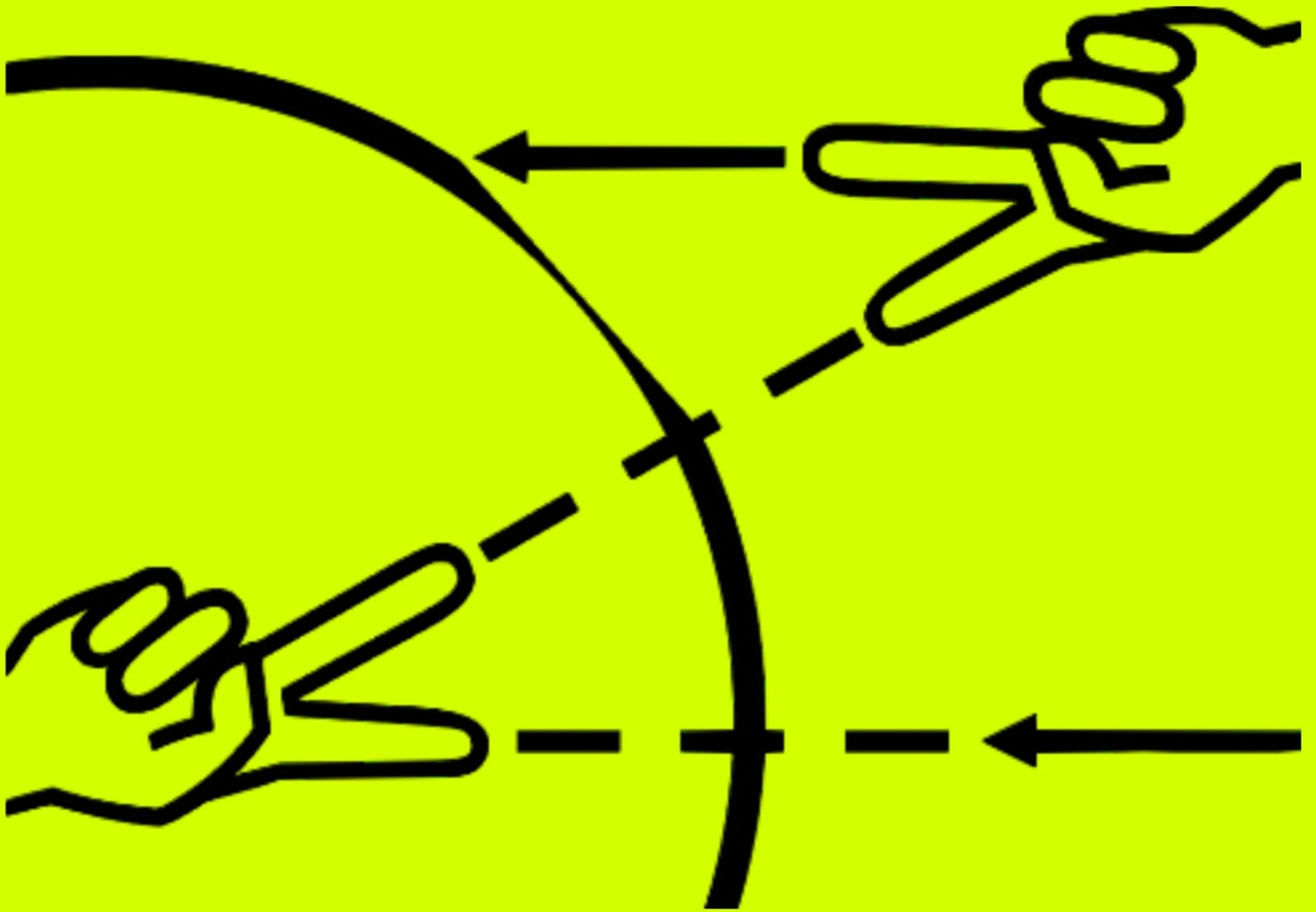


Eratosthenes



4 Continents

10 Countries

21 Schools

203 Measures

4 Continents

10 Countries

21 Schools

203 Measures

ARGENTINA (4)

Alta Gracia, Buenos Aires, Chivilcoy, Rio Cuarto

BRAZIL (5)

Piranguinho, Rio de Janeiro, Andaraí, Méier, Maricá

COLOMBIA (1)

Guarne

FRANCE (1)

Lafrançaise

GREECE (4)

Aigio, Athens, Ilion, Petroupoli

INDIA (1)

Meerut Narahara

ITALY(1)

Marina di Carrara

ROMANIA (2)

Busteni, Margineni

SPAIN (1)

Úbeda


TUNISIA (1)

Mohammedia

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
	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
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449
	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
	Maricá	Brazil	Escola Municipal Carlos Magno	-22.919	-42.819
	Marina di Carrara	Italy	M Buonarroti primary school	44.033	10.033
	Meerut Narhara	India	Upper primary school Narahara	28.903	77.725
	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 Cuarto	Argentina	Colegio Concordia	-33.149	-64.351
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317
	Úbeda	Spain	Colegio Salesiano Santo Domingo Savio	38.017	-3.367

Aigio, Greece

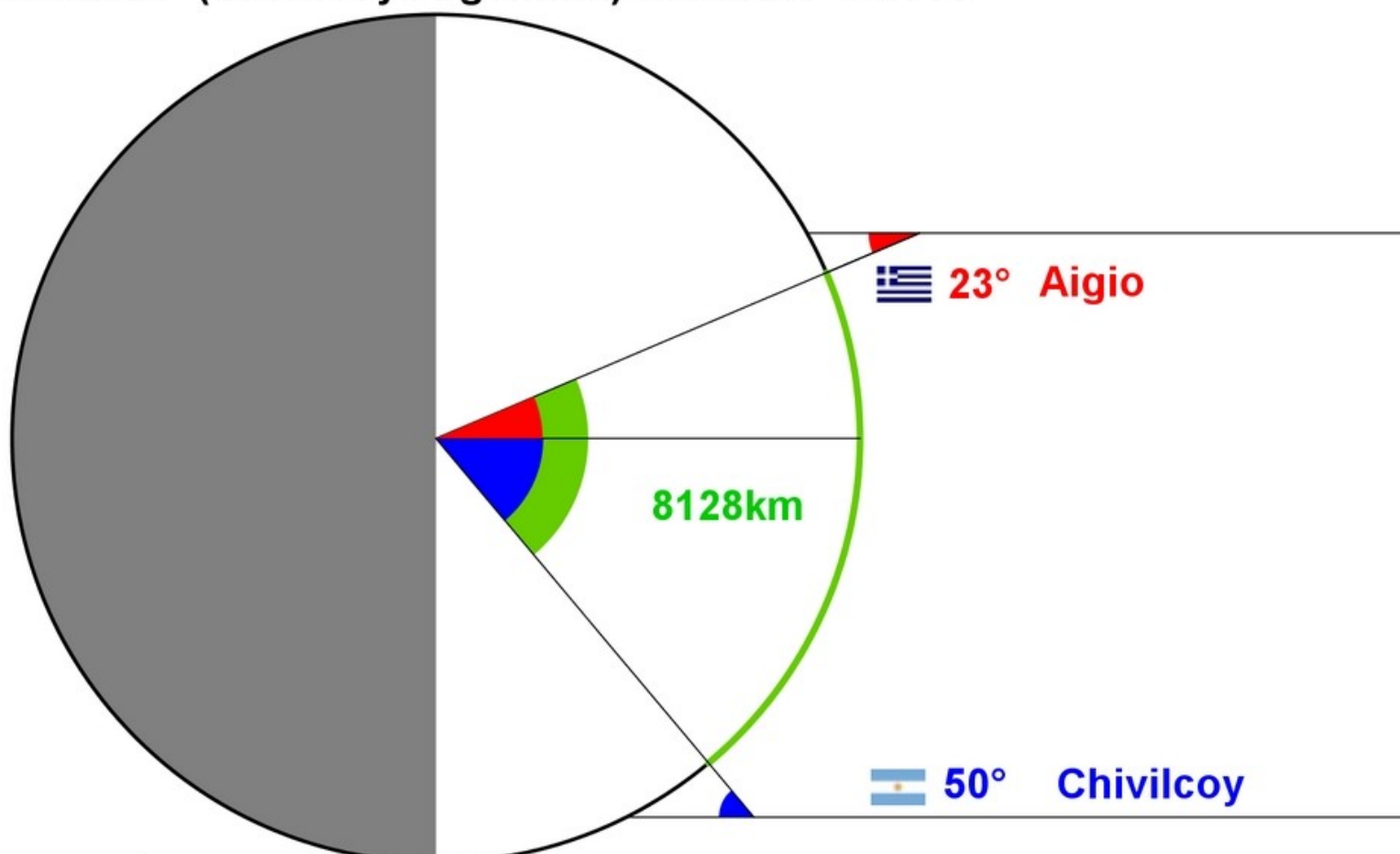


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Aigio	Greece	1st High School of Aigio	38.252	22.079

Date	Gnomon	Shadow	Angle
15 April 2020	46.8cm	25.5cm	28.6°
28 April 2020	46.8cm	17.8cm	20.8°
30 April 2020	16.5cm	7.0cm	23°

30/04/2020 (Aigio-Greece) Latitude: 38.252°

30/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°



$$\text{circumference} = \frac{360^\circ \times 8128\text{km}}{23^\circ + 50^\circ} = 40083 \text{ km}$$

Distance	Angle
circumference	360°
8128km	23° + 50°



46.8 cm

25.5 cm

Alta Gracia, Argentina

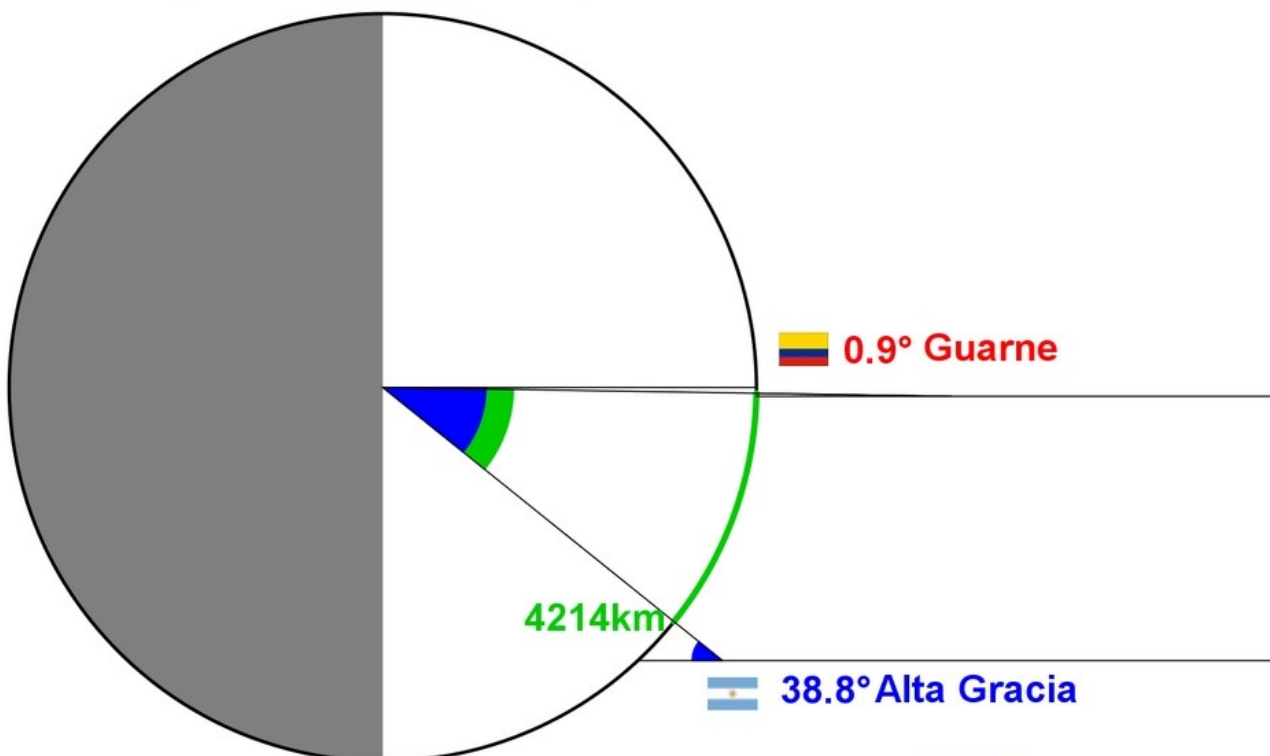


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Alta Gracia	Argentina	Fundación Caminos de Anisacate	-31.659	-64.417

Date	Gnomon	Shadow	Angle
02 April 2020	25.0cm	-18.0cm	-35.8°
03 April 2020	25cm	-18.5cm	-36.5°
04 April 2020	25.0cm	-19.0cm	-37.2°
05 April 2020	25.0cm	-19.5cm	-38.0°
06 April 2020	25.5cm	-20.0cm	-38.1°
08 April 2020	25.5cm	-20.5cm	-38.8°
10 April 2020	25.5cm	-21.0cm	-39.5°
11 April 2020	25.5cm	-20.5cm	-38.8°
13 April 2020	27cm	-23cm	-40.4°
14 April 2020	27.0cm	-23.0cm	-40.4°
15 April 2020	36cm	-31cm	-40.7°
16 April 2020	36.0cm	-31.5cm	-41.2°
17 April 2020	36cm	-32.4cm	-42°
18 April 2020	36cm	-33cm	-42.5°
20 April 2020	36cm	-33.7cm	-43.1°
21 April 2020	36.0cm	-33.0cm	-42.5°
22 April 2020	36cm	-35.5cm	-44.6°
24 April 2020	24.0cm	-23.0cm	-43.8°
28 April 2020	36cm	-36.6cm	-45.5°
29 April 2020	35cm	-36.8cm	-46.4°
30 April 2020	35cm	-37cm	-46.6°

08/04/2020 (Guarne-Colombia) Latitude: 6.274°

08/04/2020 (Alta Gracia-Argentina) Latitude: -31.659°




Distance	Angle
circumference	360°
4214km	38.8° - 0.9°

$$\text{circumference} = \frac{360^\circ \times 4214\text{km}}{38.8^\circ - 0.9^\circ} = 40027 \text{ km}$$



Andaraí, Brazil

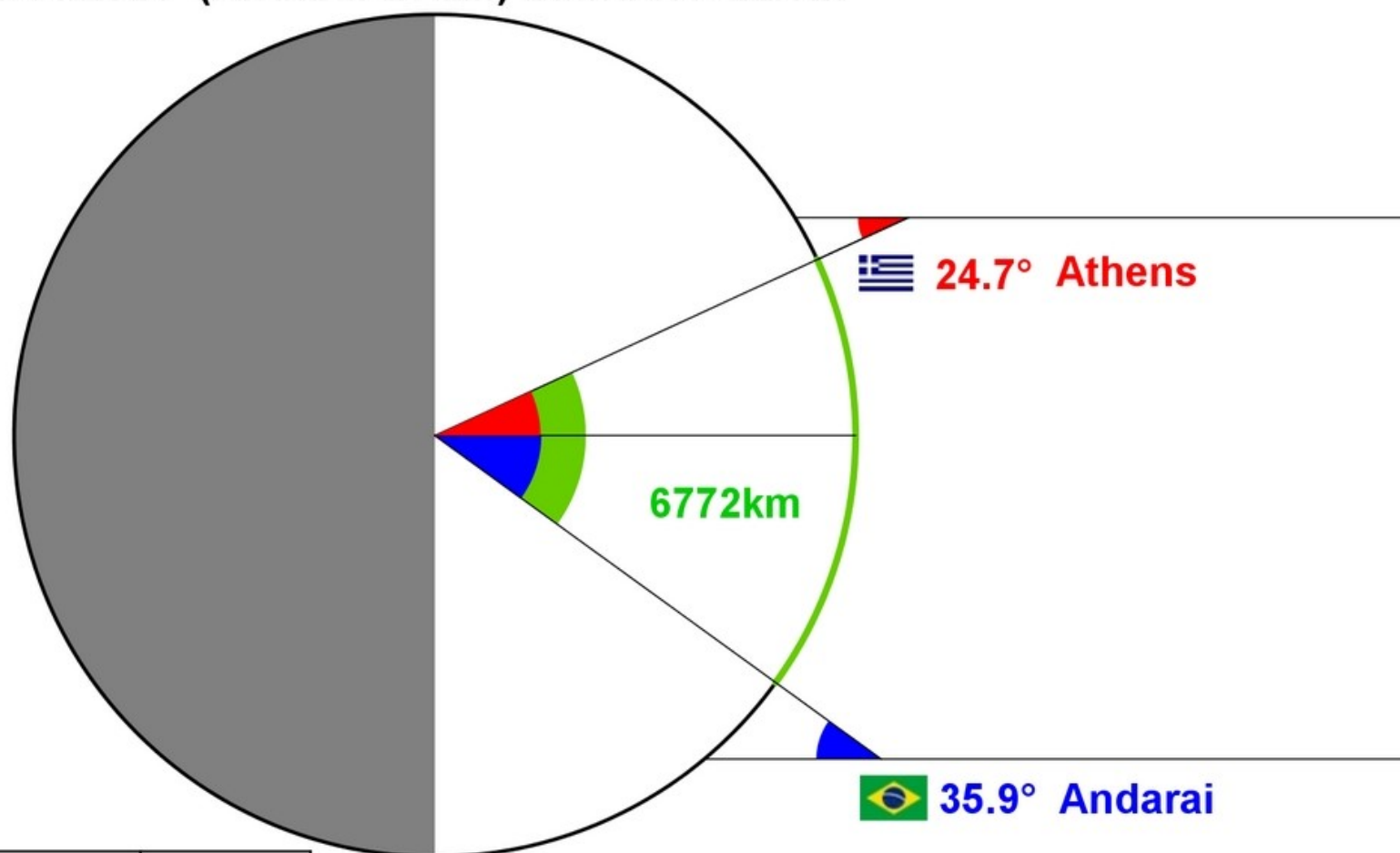


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Andaraí	Brazil	Clube de Astronomia do Rio de Janeiro	-22.928	-43.258

Date	Gnomon	Shadow	Angle
22 April 2020	21cm	-15.5cm	-36.4°
24 April 2020	21cm	-15.2cm	-35.9°
27 April 2020	18.5cm	-14.5cm	-38.1°
29 April 2020	30cm	-24cm	-38.7°

24/04/2020 (Athens-Greece) Latitude: 38.027°

24/04/2020 (Andarai-Brazil) Latitude: -22.927°



Distance	Angle
circumference	360°
6772km	24.7° + 35.9°

$$\text{circumference} = \frac{360^\circ \times 6772\text{km}}{24.7^\circ + 35.9^\circ} = 40230 \text{ km}$$



Athens, Greece

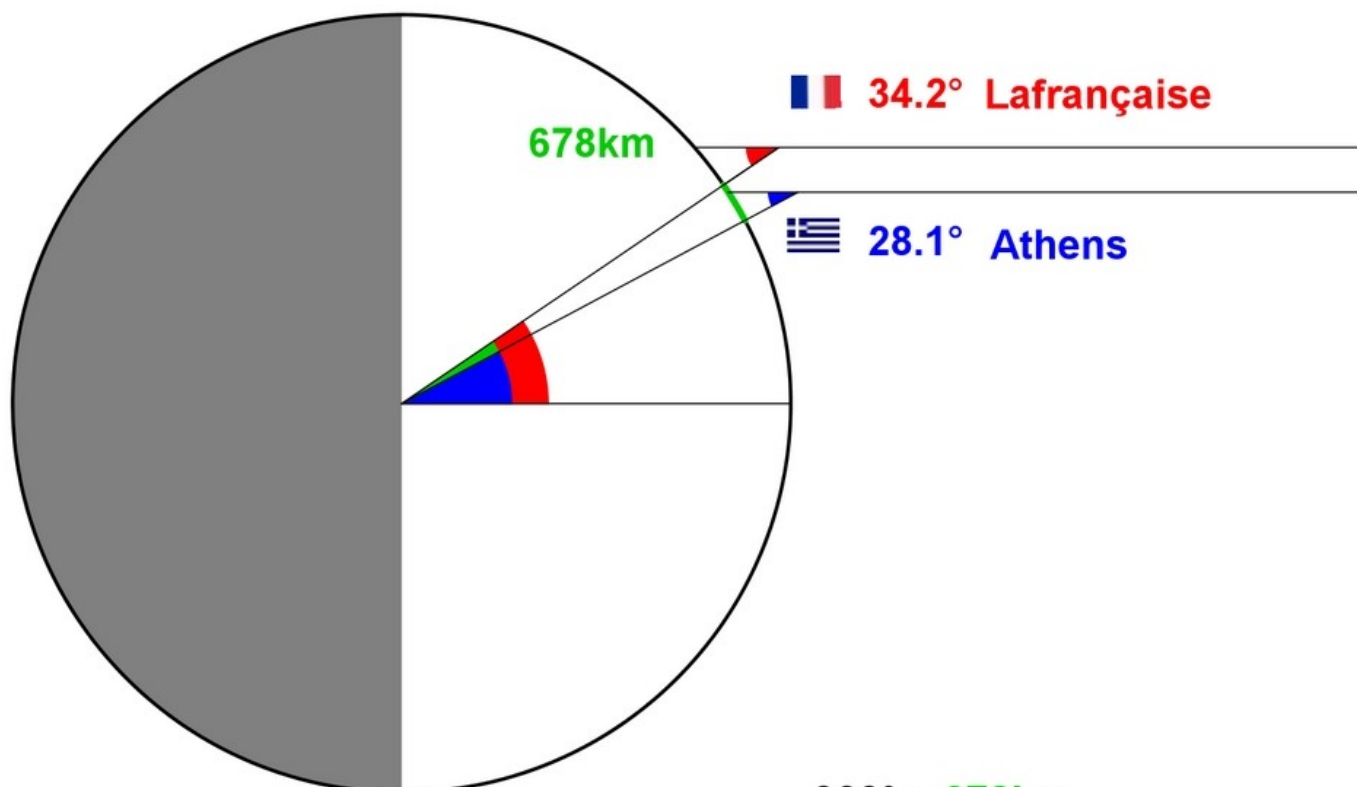


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Athens	Greece	Experimental College Agion Anargyron	38.027	23.726

Date	Gnomon	Shadow	Angle
02 April 2020	30.5cm	18.3cm	31.0°
08 April 2020	26.0cm	15.0cm	30.0°
09 April 2020	31.0cm	17.0cm	28.7°
10 April 2020	38.0cm	21.6cm	29.6°
11 April 2020	38.0cm	21.5cm	29.5°
12 April 2020	38.0cm	21.0cm	28.9°
13 April 2020	38.0cm	20.6cm	28.5°
14 April 2020	45.0cm	24.0cm	28.1°
15 April 2020	50cm	26.2cm	27.7°
16 April 2020	31.0cm	16.0cm	27.3°
17 April 2020	50cm	25.5cm	27°
23 April 2020	31cm	14.5cm	25.1°
24 April 2020	50cm	23cm	24.7°
25 April 2020	50cm	22.6cm	24.3°
26 April 2020	50cm	22.3cm	24°
27 April 2020	50cm	22cm	23.7°
28 April 2020	31cm	13.5cm	23.5°
29 April 2020	50cm	21.4cm	23.2°
30 April 2020	21cm	8.5cm	22°

14/04/2020 (Lafrançaise-France) Latitude: 44.127°

14/04/2020 (Athens-Greece) Latitude: 38.028°




Distance	Angle
circumference	360°
678km	34.2° - 28.1°

$$\text{circumference} = \frac{360^\circ \times 678\text{km}}{34.2^\circ - 28.1^\circ} = 40013 \text{ km}$$



Buenos Aires, Argentina

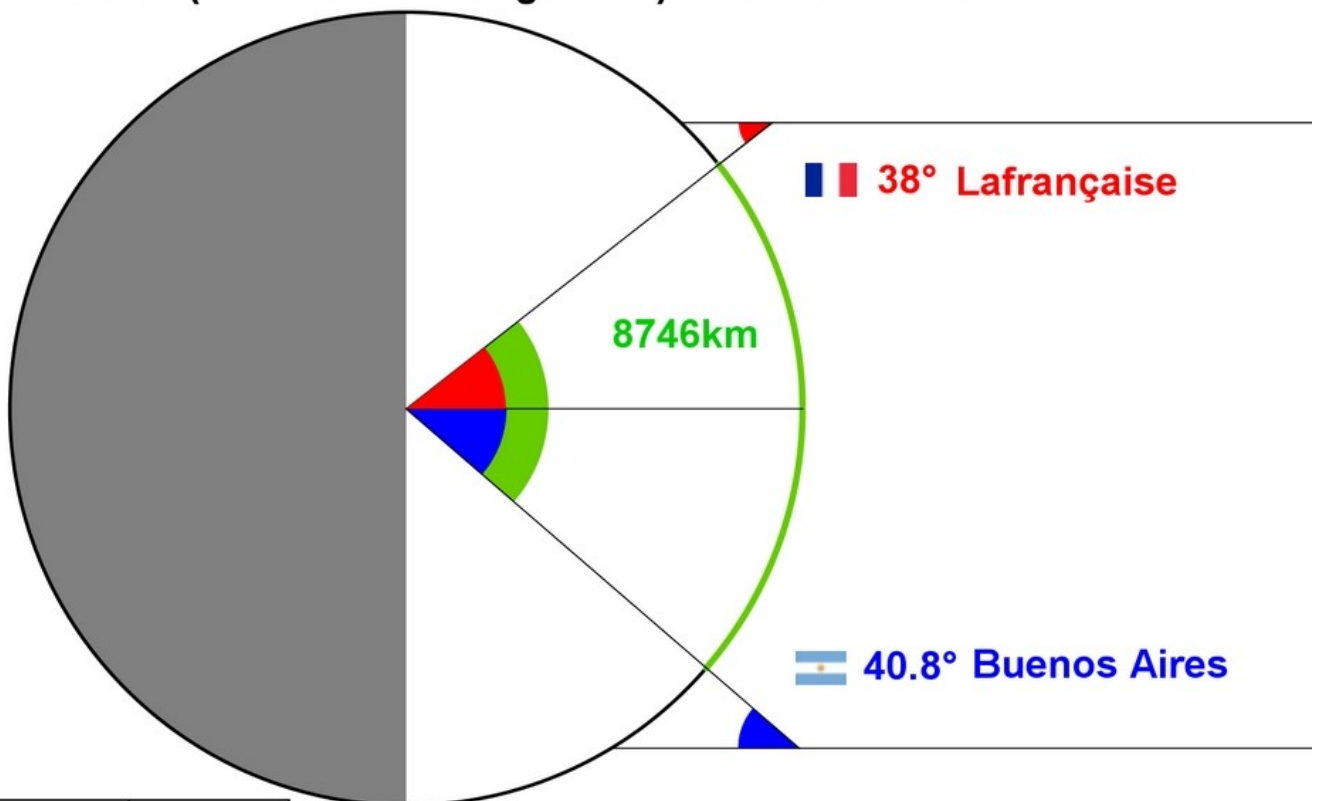


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Buenos Aires ENS1	Argentina	ENS N° 1	-34.455	-58.544

Date	Gnomon	Shadow	Angle
01 April 2020	8.0cm	-6.4cm	-38.7°
02 April 2020	8.0cm	-6.8cm	-40.4°
03 April 2020	8cm	-6.9cm	-40.8°
04 April 2020	8.0cm	-6.8cm	-40.4°
05 April 2020	8cm	-6.5cm	-39.1°
06 April 2020	8.0cm	-7.0cm	-41.2°
08 April 2020	8.0cm	-8.7cm	-47.4°
09 April 2020	8.0cm	-7.9cm	-44.6°
10 April 2020	8.0cm	-8.0cm	-45.0°
11 April 2020	8.0cm	-9.7cm	-50.5°
12 April 2020	8.0cm	-9.1cm	-48.7°
14 April 2020	8.0cm	-10.5cm	-52.7°
15 April 2020	8.0cm	-7.9cm	-44.6°
17 April 2020	8cm	-9.4cm	-49.6°
21 April 2020	8cm	-10.4cm	-52.4°
22 April 2020	8.0cm	-5.9cm	-36.4°
23 April 2020	8cm	-9.3cm	-49.3°
29 April 2020	8cm	-10.9cm	-53.7°
30 April 2020	8cm	-9cm	-48.4°

03/04/2020 (Lafrançaise-France) Latitude: 44.127°

03/04/2020 (Buenos Aires-Argentina) Latitude: -34.599°




Distance	Angle
circumference	360°
8746km	38° + 40.8°

$$\text{circumference} = \frac{360^\circ \times 8746\text{km}}{38^\circ + 40.8^\circ} = 39956 \text{ km}$$



Busteni, Romania

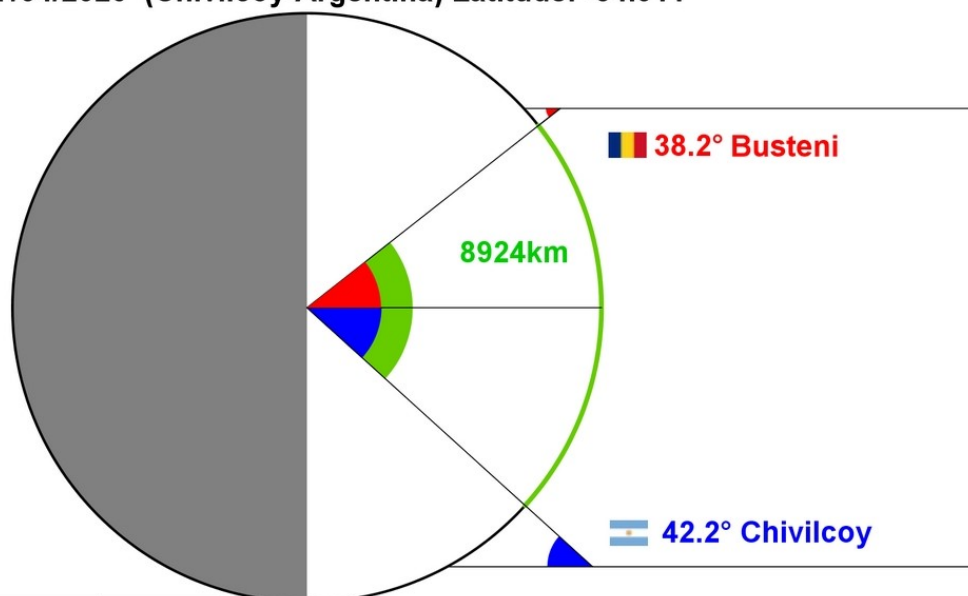


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Busteni	Romania	Colegiul Ion Kalinderu	45.416	25.535

Date	Gnomon	Shadow	Angle
01 April 2020	82.0cm	70.0cm	40.5°
02 April 2020	213.8cm	180.0cm	40.1°
04 April 2020	30.5cm	25.0cm	39.3°
06 April 2020	113.0cm	90.0cm	38.5°
07 April 2020	16.0cm	12.6cm	38.2°
08 April 2020	45.2cm	35.0cm	37.8°
09 April 2020	39.2cm	30.0cm	37.4°
10 April 2020	66.3cm	50.0cm	37.0°
11 April 2020	175.0cm	130.0cm	36.6°
12 April 2020	47.7cm	35.0cm	36.3°
13 April 2020	27.6cm	20.0cm	35.9°
14 April 2020	14.0cm	10cm	35.5°
15 April 2020	195.7cm	138cm	35.2°
16 April 2020	216.0cm	150.0cm	34.8°
17 April 2020	18.9cm	13cm	34.5°
18 April 2020	10cm	6.8cm	34.2°
20 April 2020	42.0cm	27.7cm	33.4°
21 April 2020	38.5cm	25cm	33°
22 April 2020	75cm	45cm	31°
23 April 2020	126.2cm	80.0cm	32.4°
24 April 2020	1,437.70cm	900cm	32°
25 April 2020	145.3cm	90cm	31.8°
26 April 2020	90.2cm	55cm	31.4°
27 April 2020	156cm	94cm	31.1°
28 April 2020	125cm	74.4cm	30.8°
29 April 2020	221cm	130cm	30.5°
30 April 2020	25.9cm	15cm	30.1°

07/04/2020 (Busteni-Romania) Latitude: 45.416°

07/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
8924km	38.2° + 42.2°

$$\text{circumference} = \frac{360^\circ \times 8924\text{km}}{38.2^\circ + 42.2^\circ} = 39958 \text{ km}$$



Chivilcoy, Argentina

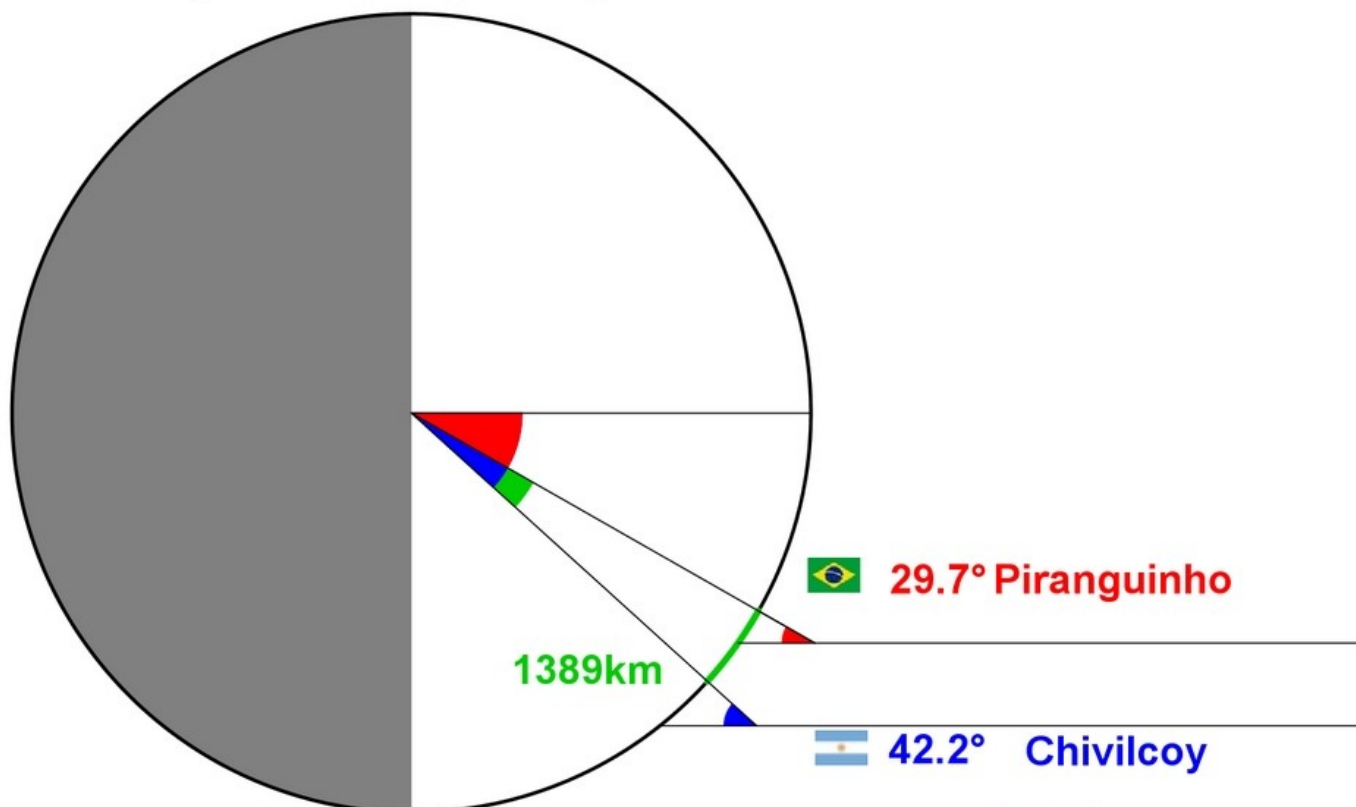


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Chivilcoy	Argentina	Parque Cielos del Sur	-34.911	-60.014

Date	Gnomon	Shadow	Angle
02 April 2020	37.8cm	-31.8cm	-40.1°
04 April 2020	30.0cm	-26.3cm	-41.2°
06 April 2020	290.0cm	-261.0cm	-42.0°
07 April 2020	38.0cm	-34.5cm	-42.2°
08 April 2020	38.0cm	-34.5cm	-42.2°
09 April 2020	44.2cm	-40.9cm	-42.8°
10 April 2020	44.1cm	-41.4cm	-43.2°
11 April 2020	43.2cm	-41.0cm	-43.5°
14 April 2020	42.0cm	-42.0cm	-45.0°
15 April 2020	38.5cm	-38.5cm	-45.0°
16 April 2020	12.5cm	-12.4cm	-44.8°
17 April 2020	33.4cm	-34.2cm	-45.7°
18 April 2020	33.3cm	-34.5cm	-46°
19 April 2020	35.2cm	-36.9cm	-46.4°
21 April 2020	44.3cm	-47cm	-46.7°
23 April 2020	44.4cm	-48.8cm	-47.7°
29 April 2020	46cm	-54.6cm	-49.9°
30 April 2020	37.8cm	-45cm	-50.0°

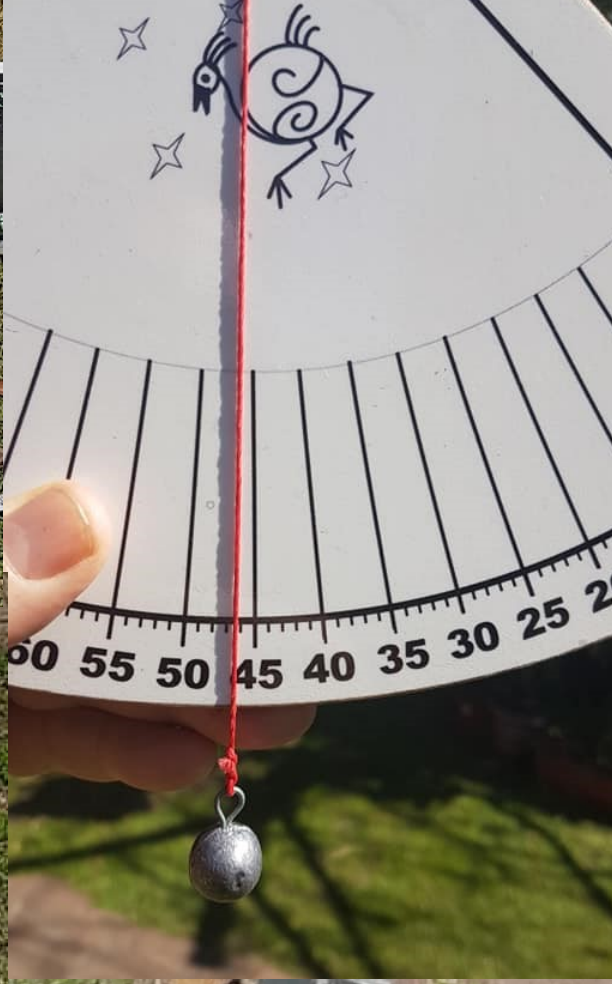
08/04/2020 (Piranguinho-Brazil) Latitude: -22.411°

08/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°




Distance	Angle
circumference	360°
1389km	42.2° - 29.7°

$$\text{circumference} = \frac{360^\circ \times 1389\text{km}}{42.2^\circ - 29.7^\circ} = 40003 \text{ km}$$



Guarne, Colombia

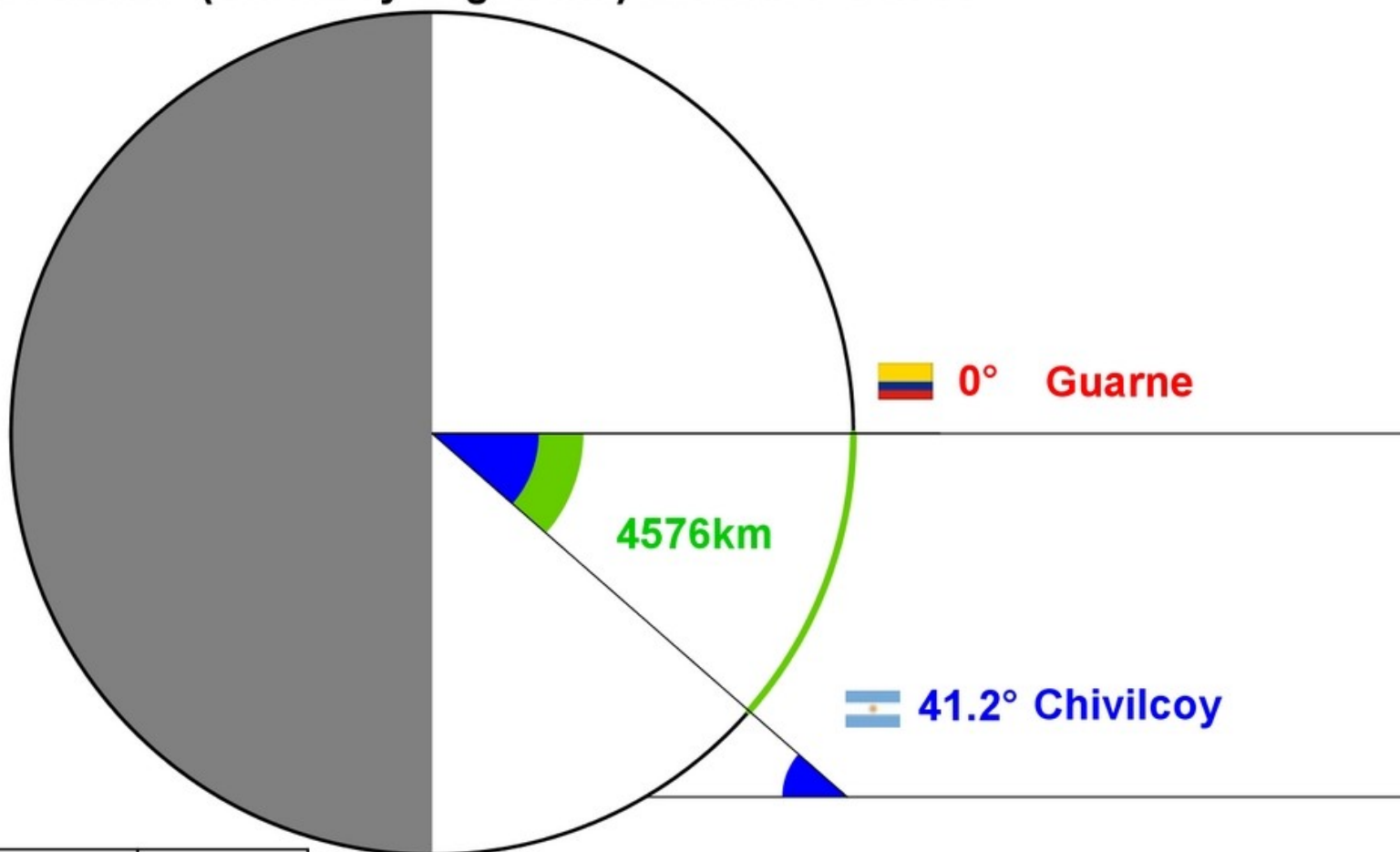


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Guarne	Colombia	Grupo Astrofanáticos	6.274	-75.449

Date	Gnomon	Shadow	Angle
04 April 2020	30.0cm	0.0cm	0.0°
08 April 2020	30.5cm	-0.5cm	-0.9°
10 April 2020	30.5cm	-1.0cm	-1.9°
13 April 2020	30.5cm	-1.6cm	-3°
28 April 2020	30.5cm	-4.4cm	-8.2°

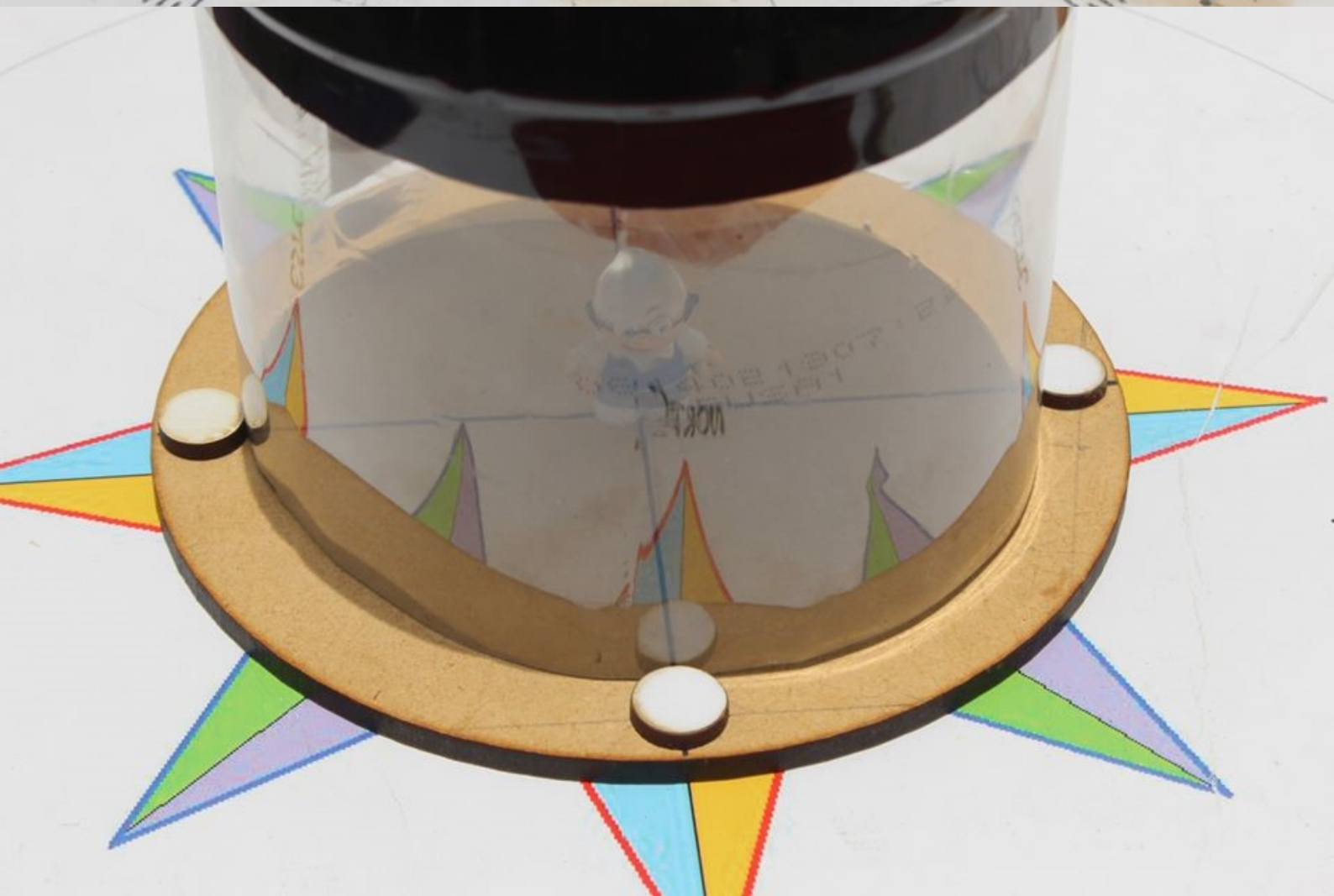
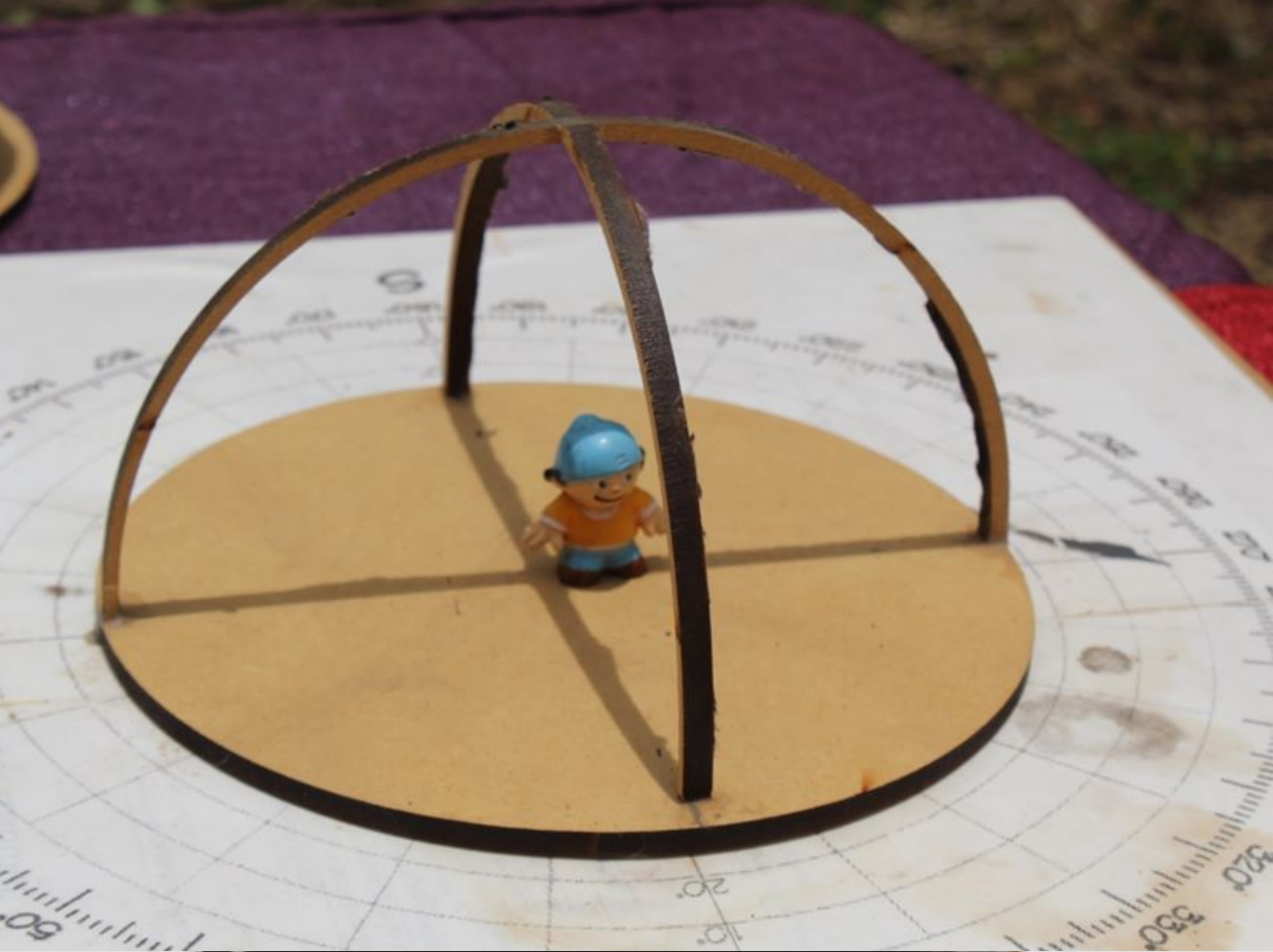
04/04/2020 (Guarne-Colombia) Latitude: 6.274°

04/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°



$$\text{circumference} = \frac{360^\circ \times 4576\text{km}}{0^\circ + 41.2^\circ} = 39984 \text{ km}$$

Distance	Angle
circumference	360°
4576km	0° + 41.2°



Ilion, Greece

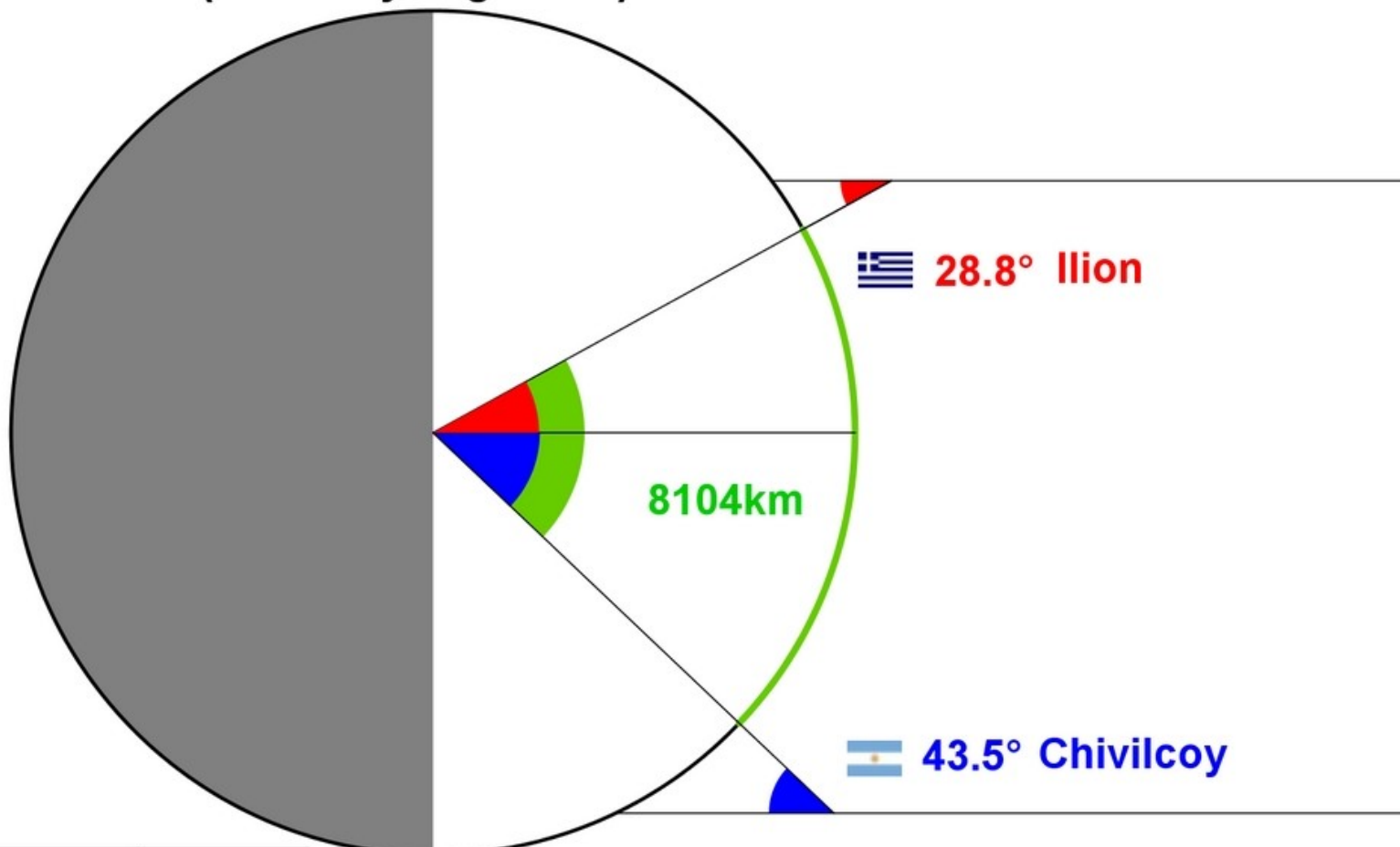


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Ilion	Greece	11th JuniorHigh School of Ilion	38.033	23.697

Date	Gnomon	Shadow	Angle
11 April 2020	20.0cm	11.0cm	28.8°
13 April 2020	163cm	83cm	27°
29 April 2020	24.5cm	10.4cm	23°

11/04/2020 (Ilion-Greece) Latitude: 38.033°

11/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°



$$\text{circumference} = \frac{360^\circ \times 8104\text{km}}{28.8^\circ + 43.5^\circ} = 40352 \text{ km}$$

Distance	Angle
circumference	360°
8104km	28.8° + 43.5°

13 April 2020



Lafrançaise, France



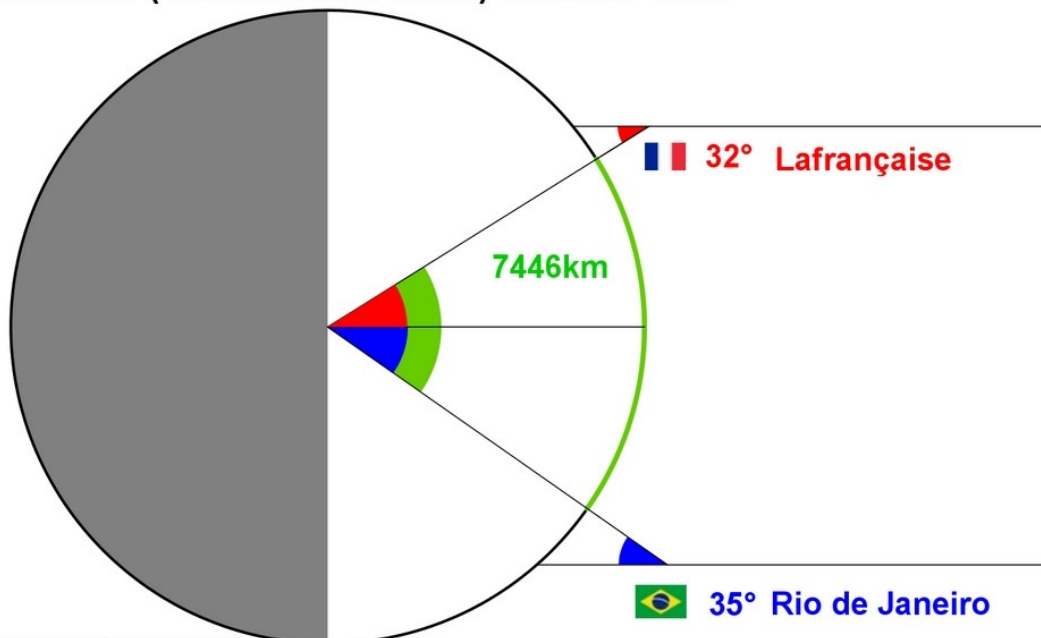
France : Lafrançaise
Vendredi 3 Avril
Gnomon = 100cm
Longueur = 78cm
Photo prise à 13h46min

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

Date	Gnomon	Shadow	Angle
01 April 2020	12.5cm	10.2cm	39.2°
02 April 2020	100.0cm	81.5cm	39.2°
03 April 2020	100cm	78cm	38°
04 April 2020	100.0cm	77.5cm	37.8°
05 April 2020	12.5cm	9.6cm	37.5°
06 April 2020	12.5cm	9.5cm	37.2°
07 April 2020	100.0cm	74.0cm	36.5°
08 April 2020	100.0cm	74.0cm	36.5°
09 April 2020	100.0cm	72.5cm	35.9°
10 April 2020	12.5cm	9.0cm	35.8°
11 April 2020	12.5cm	8.9cm	35.5°
12 April 2020	12.5cm	8.7cm	34.8°
13 April 2020	12.5cm	8.6cm	34.5°
14 April 2020	12.5cm	8.5cm	34.2°
15 April 2020	12.5cm	8.4cm	33.9°
16 April 2020	12.5cm	8.3cm	33.6°
17 April 2020	100cm	64.5cm	32.8°
18 April 2020	12.5cm	8.1cm	32.9°
21 April 2020	12.5cm	7.8cm	32°
23 April 2020	12.5cm	7.5cm	31°
24 April 2020	100cm	58cm	30.1°
25 April 2020	12.5cm	7.3cm	30.3°
26 April 2020	12.5cm	7.2cm	29.9°
28 April 2020	12.5cm	7.1cm	29.6°
29 April 2020	12.5cm	7cm	29.2°
30 April 2020	12.5cm	6.9cm	28.9°

21/04/2020 (Lafrançaise-France) Latitude: 44.127°

21/04/2020 (Rio de Janeiro-Brazil) Latitude: -22.89°



Distance	Angle
circumference	360°
7446km	32° + 35°

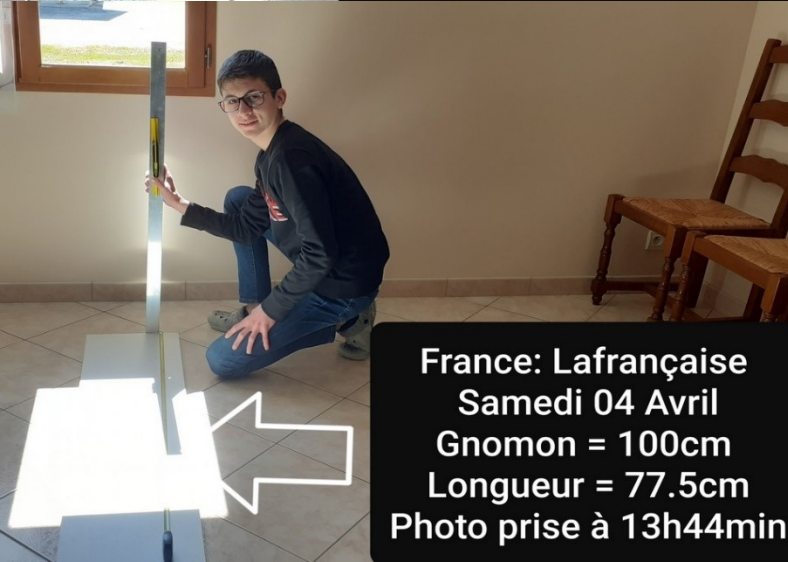
$$\text{circumference} = \frac{360^\circ \times 7446\text{km}}{32^\circ + 35^\circ} = 40008 \text{ km}$$



France: Lafrançaise
Gnomon = 100cm
Longueur = 81.5cm
Photo prise à 13h25min



France : Lafrançaise
Vendredi 3 Avril
Gnomon = 100cm
Longueur = 78cm
Photo prise à 13h46min



France: Lafrançaise
Samedi 04 Avril
Gnomon = 100cm
Longueur = 77.5cm
Photo prise à 13h44min



France : Lafrançaise
Mardi 7 Avril
Gnomon = 100cm
Longueur = 74cm
Photo prise à 13h30min



France : Lafrançaise
Mercredi 8 Avril
Gnomon = 100cm
Longueur = 74cm
Photo prise à 13h30min



France: Lafrançaise
Jeudi 9 Avril
Gnomon = 100cm
Longueur = 72.5cm
Photo prise à 13h28min



France : Lafrançaise
Vendredi 17 Avril
Gnomon = 100cm
longueur = 64.5cm
Photo prise a 14h30



France: Lafrançaise
vendredi 24 Avril
Gnomon = 100cm
Longueur = 58cm
Photo prise à 13h50

Margineni, Romania

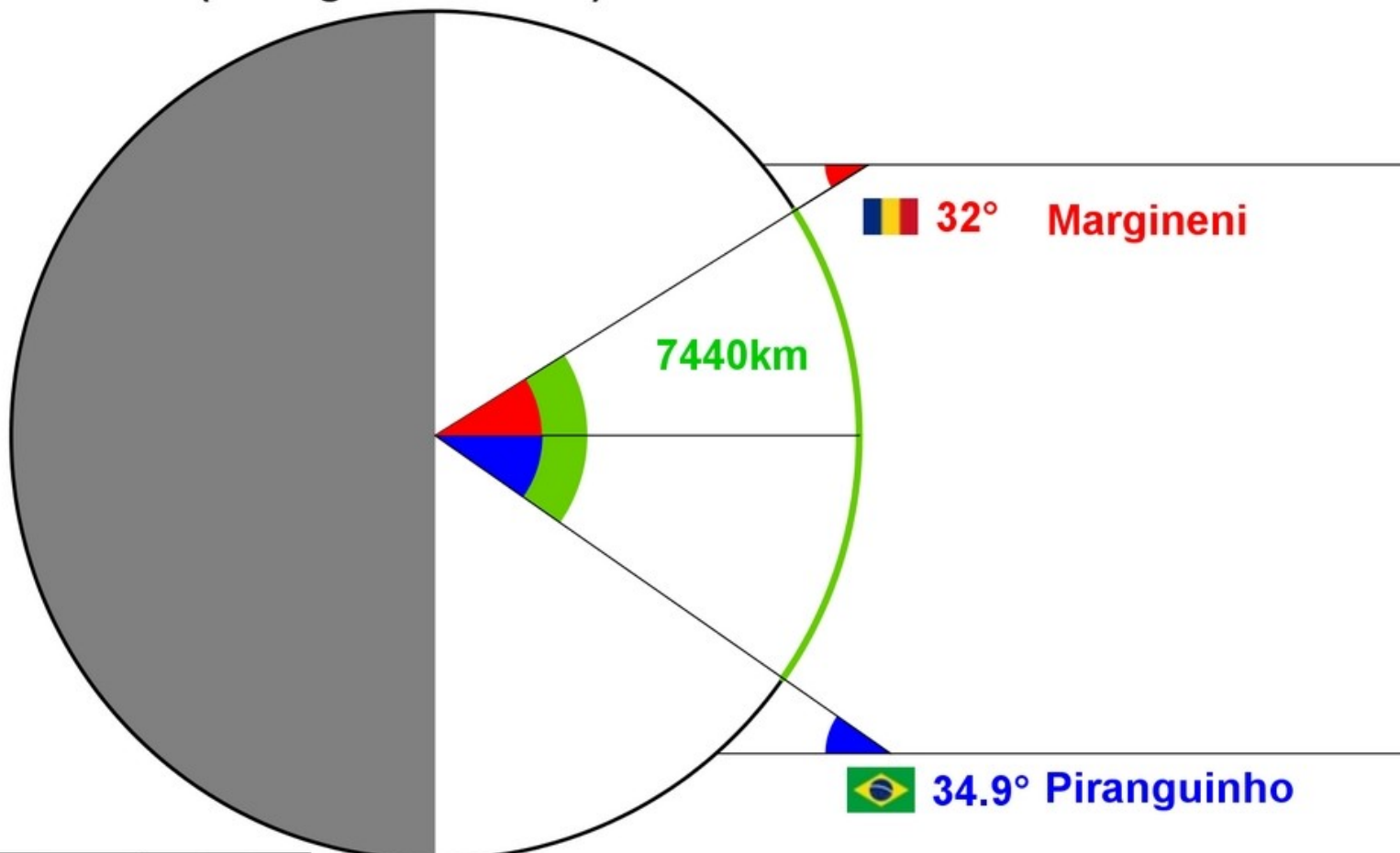


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Mărgineni	Romania	Gh. Popescu School	44.533	24.554

Date	Gnomon	Shadow	Angle
20 April 2020	100cm	65cm	33°
22 April 2020	100cm	62.5cm	32°

22/04/2020 (Margineni-Romania) Latitude: 44.553°

22/04/2020 (Piranguinho-Brazil) Latitude: -22.411°



$$\text{circumference} = \frac{360^\circ \times 7440\text{km}}{32^\circ + 34.9^\circ} = 40036 \text{ km}$$

Distance	Angle
circumference	360°
7440km	32° + 34.9°



Secondary School Gh. Popescu, Margineni, ROMANIA

20.03.2020



Meerut Jani, India

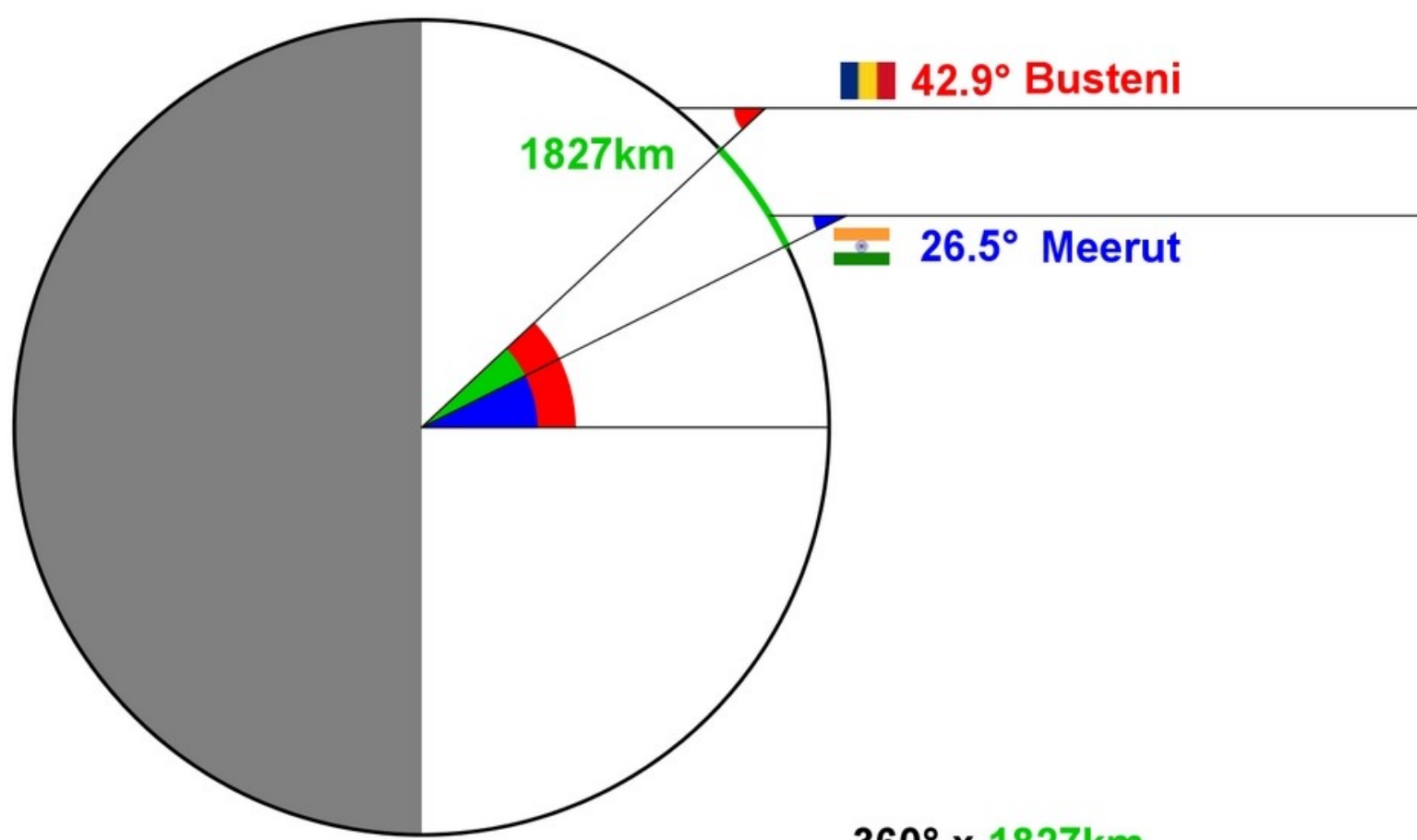


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Meerut	India	UPS Sisola Kalan Jani	28.982	77.568

Date	Gnomon	Shadow	Angle
26 March 2020	90.2cm	45.0cm	26.5°

26/03/2020 (Busteni-Romania) Latitude: 45.416°

26/03/2020 (Meerut-India) Latitude: 28.967°



Distance	Angle
circumference	360°
1827km	42.9° - 26.5°

$$\text{circumference} = \frac{360^\circ \times 1827\text{km}}{42.9^\circ - 26.5^\circ} = 40105 \text{ km}$$



Maricá, Brazil

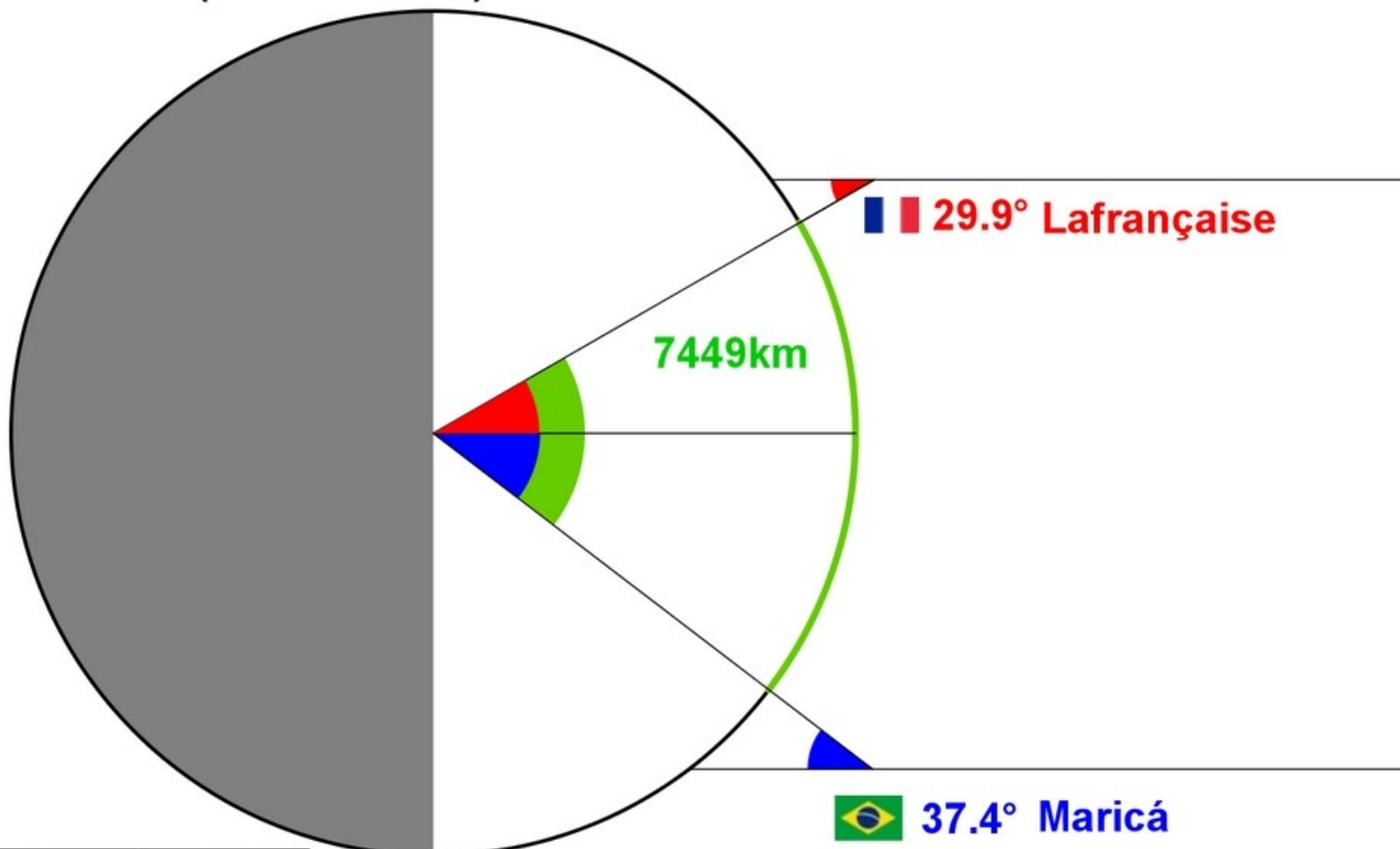


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Maricá	Brazil	Escola Municipal Carlos Magno	-22.919	-42.819

Date	Gnomon	Shadow	Angle
26 April 2020	17cm	-13cm	-37.4°
27 April 2020	20cm	-17cm	-40.4°

26/04/2020 (Lafrançaise-France) Latitude: 44.127°

26/04/2020 (Maricá-Brazil) Latitude: -22.919°



$$\text{circumference} = \frac{360^\circ \times 7449\text{km}}{29.9^\circ + 37.4^\circ} = 39846 \text{ km}$$

Distance	Angle
circumference	360°
7449km	29.9° + 37.4°



Marina di Carrara, Italy

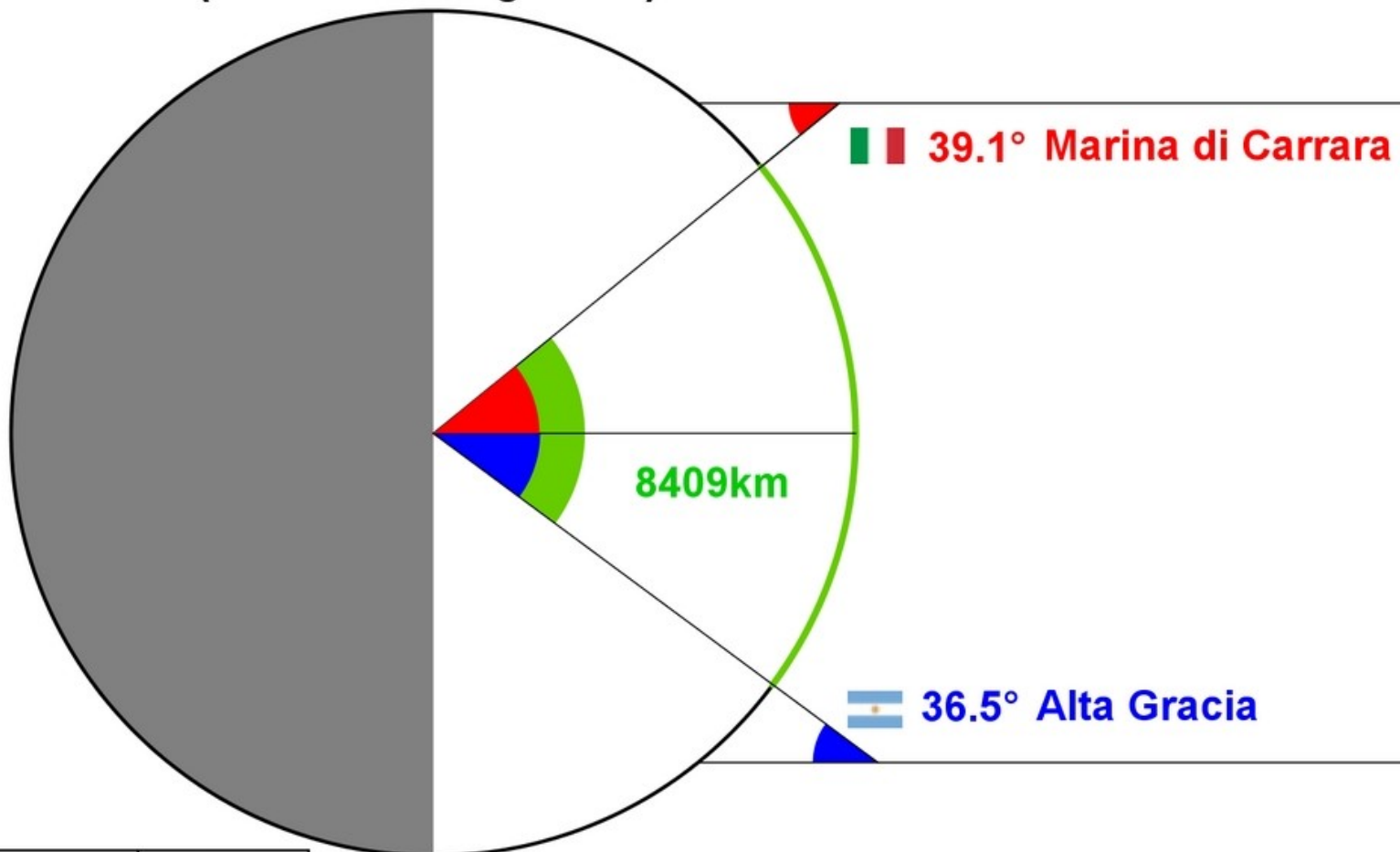


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Marina di Carrara	Italy	M Buonarroti primary school	44.033	10.033

Date	Gnomon	Shadow	Angle
03 April 2020	80cm	65cm	39.1°
06 April 2020	151.0cm	115.0cm	37.3°
09 April 2020	23.0cm	17.0cm	36.5°
23 April 2020	19.0cm	13.0cm	34.4°
27 April 2020	80cm	46.5cm	30.2°

03/04/2020 (Marina di Carrara-Italy) Latitude: 44.033°

03/04/2020 (Alta Gracia-Argentina) Latitude: -31.659°




$$\text{circumference} = \frac{360^\circ \times 8409\text{km}}{39.1^\circ + 36.5^\circ} = 40043 \text{ km}$$

Distance	Angle
circumference	360°
8409km	39.1° + 36.5°



Meerut Narahara, India

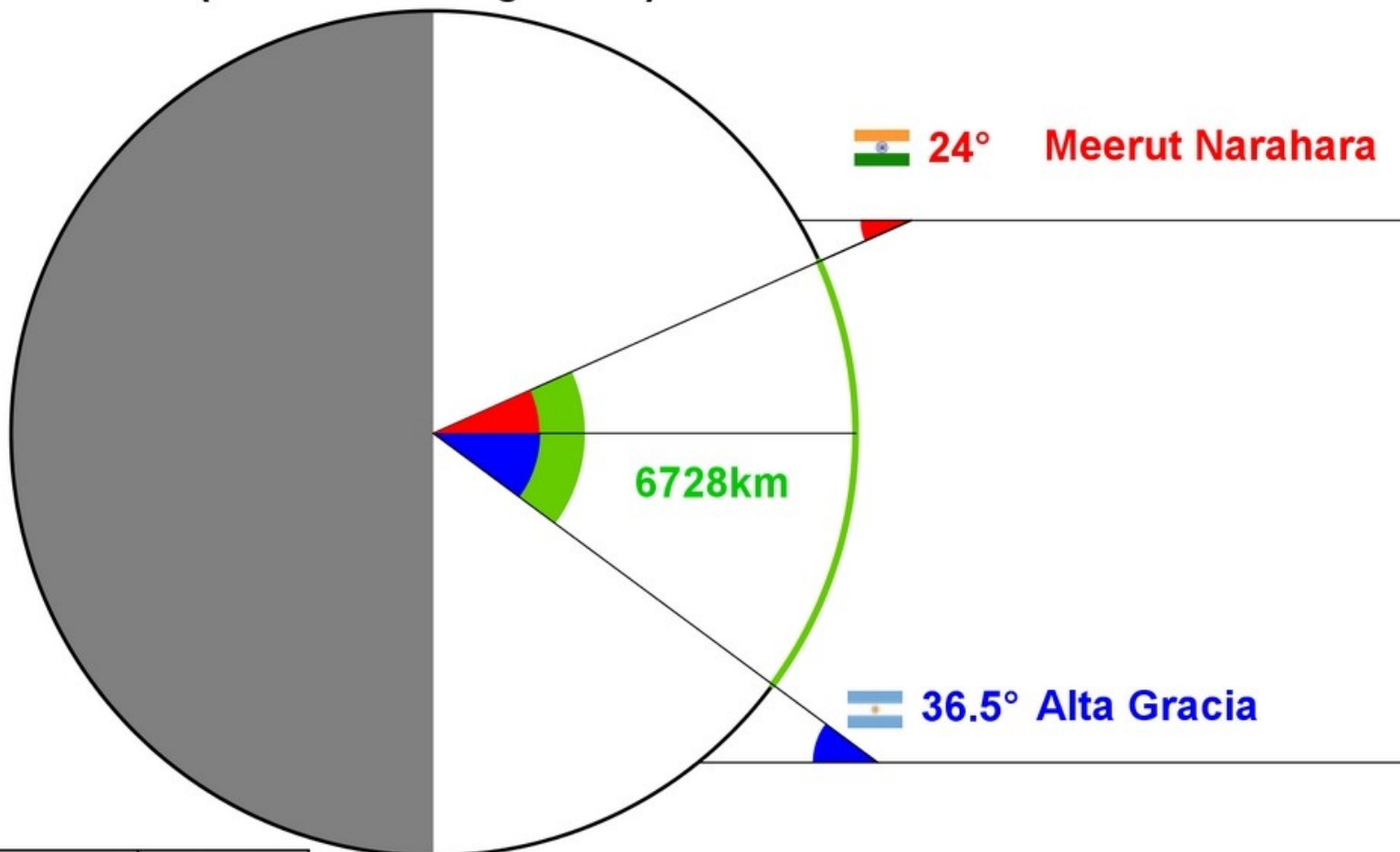


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Meerut Narhara	India	Upper primary school Narahara	28.903	77.725

Date	Gnomon	Shadow	Angle
03 April 2020	19.5cm	8.7cm	24°

03/04/2020 (Meerut Narahara-India) Latitude: 28.903°

03/04/2020 (Alta Gracia-Argentina) Latitude: -31.659°



Distance	Angle
circumference	360°
6728km	24° + 36.5°


$$\text{circumference} = \frac{360^\circ \times 6728\text{km}}{24^\circ + 36.5^\circ} = 40034 \text{ km}$$



2020.04.03 11:59

Méier, Brazil

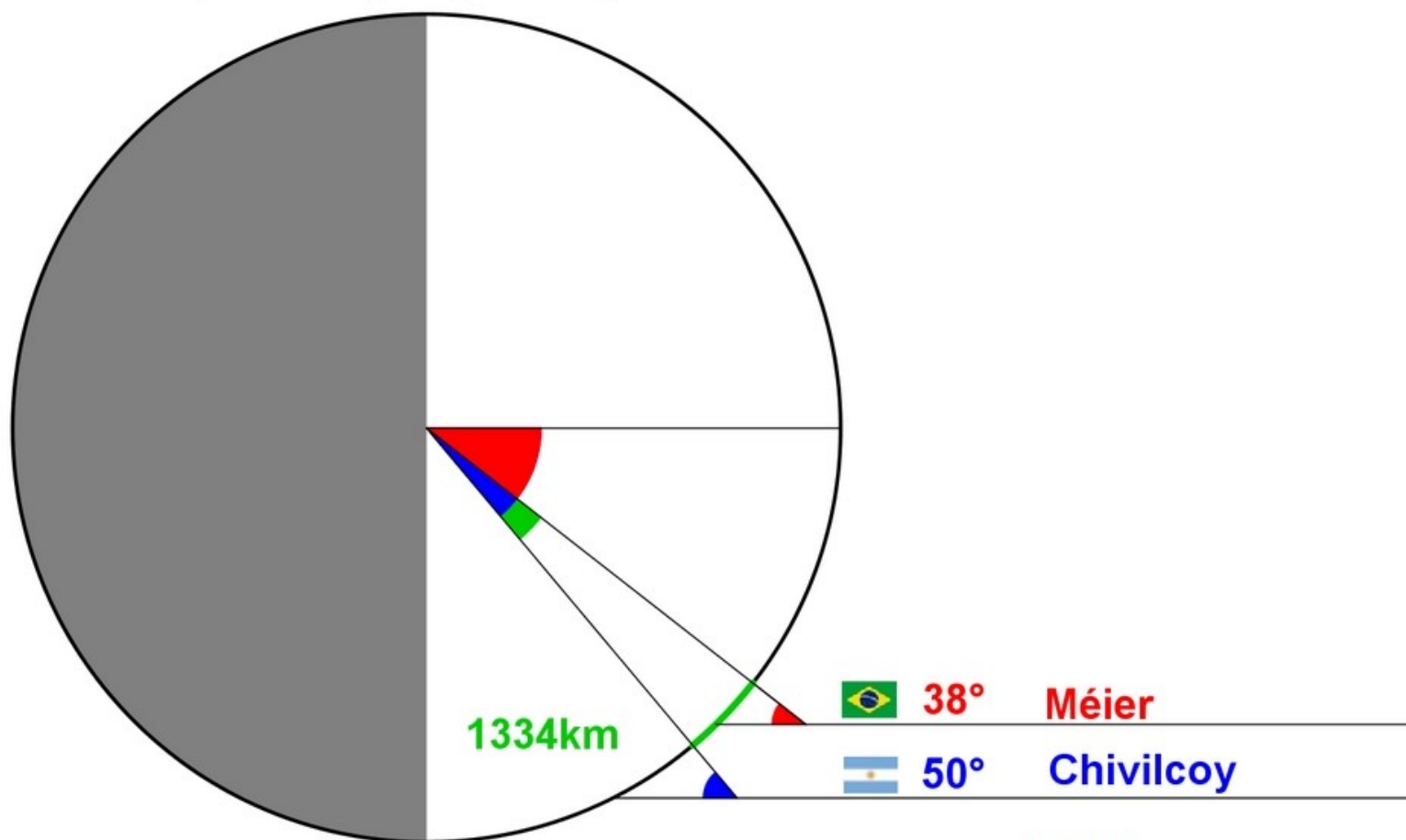


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Méier	Brazil	Escola Municipal Bento Ribeiro	-22.904	-43.280

Date	Gnomon	Shadow	Angle
22 April 2020	15cm	-10cm	-33.7°
23 April 2020	24cm	-18cm	-36.9°
24 April 2020	35cm	-30cm	-40.6°
25 April 2020	29cm	-24cm	-39.6°
26 April 2020	30cm	-24cm	-38.7°
27 April 2020	30cm	-24cm	-38.7°
28 April 2020	25cm	-19cm	-37.2°
29 April 2020	35cm	-32cm	-42.4°
30 April 2020	142cm	-111cm	-38.0°

30/04/2020 (Méier-Brazil) Latitude: -22.904°

30/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°

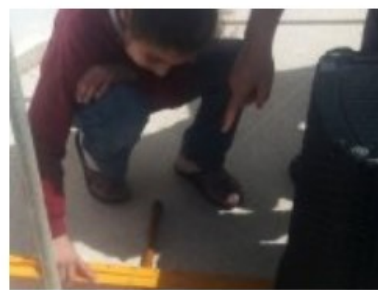


Distance	Angle
circumference	360°
1334km	50° - 38°

$$\text{circumference} = \frac{360^\circ \times 1334\text{km}}{50^\circ - 38^\circ} = 40020 \text{ km}$$



Mohammedia, Tunisia

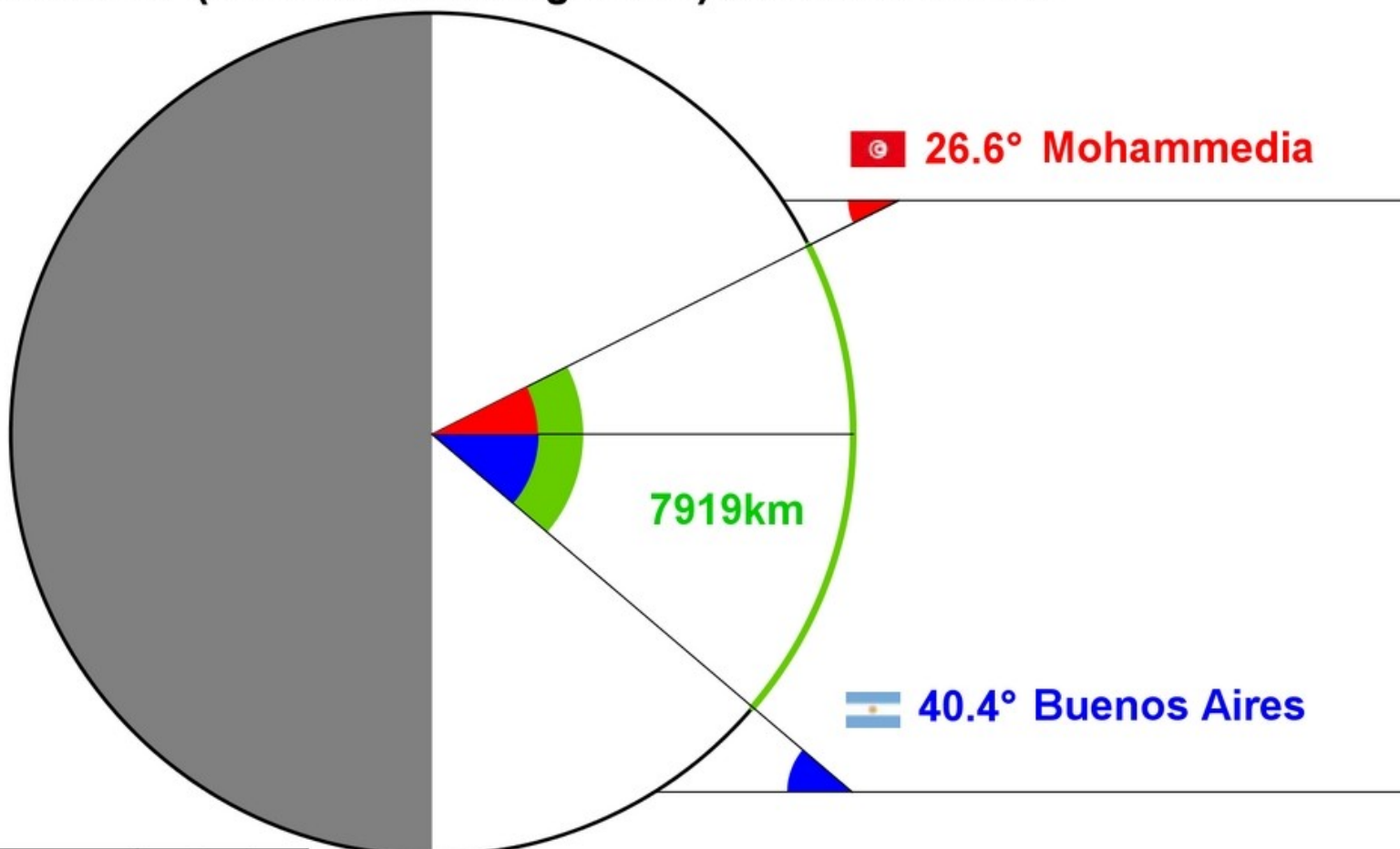


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Mohammedia	Tunisia	Lycée M'hamdia	36.678	10.152

Date	Gnomon	Shadow	Angle
02 April 2020	52.0cm	26.0cm	26.6°

02/04/2020 (Mohammedia-Tunisia) Latitude: 36.678°

02/04/2020 (Buenos Aires-Argentina) Latitude: -34.599°



Distance	Angle
circumference	360°
7919km	26.6°+40.4°

$$\text{circumference} = \frac{360^\circ \times 7919\text{km}}{26.6^\circ + 40.4^\circ} = 42550 \text{ km}$$



Petroupoli, Greece

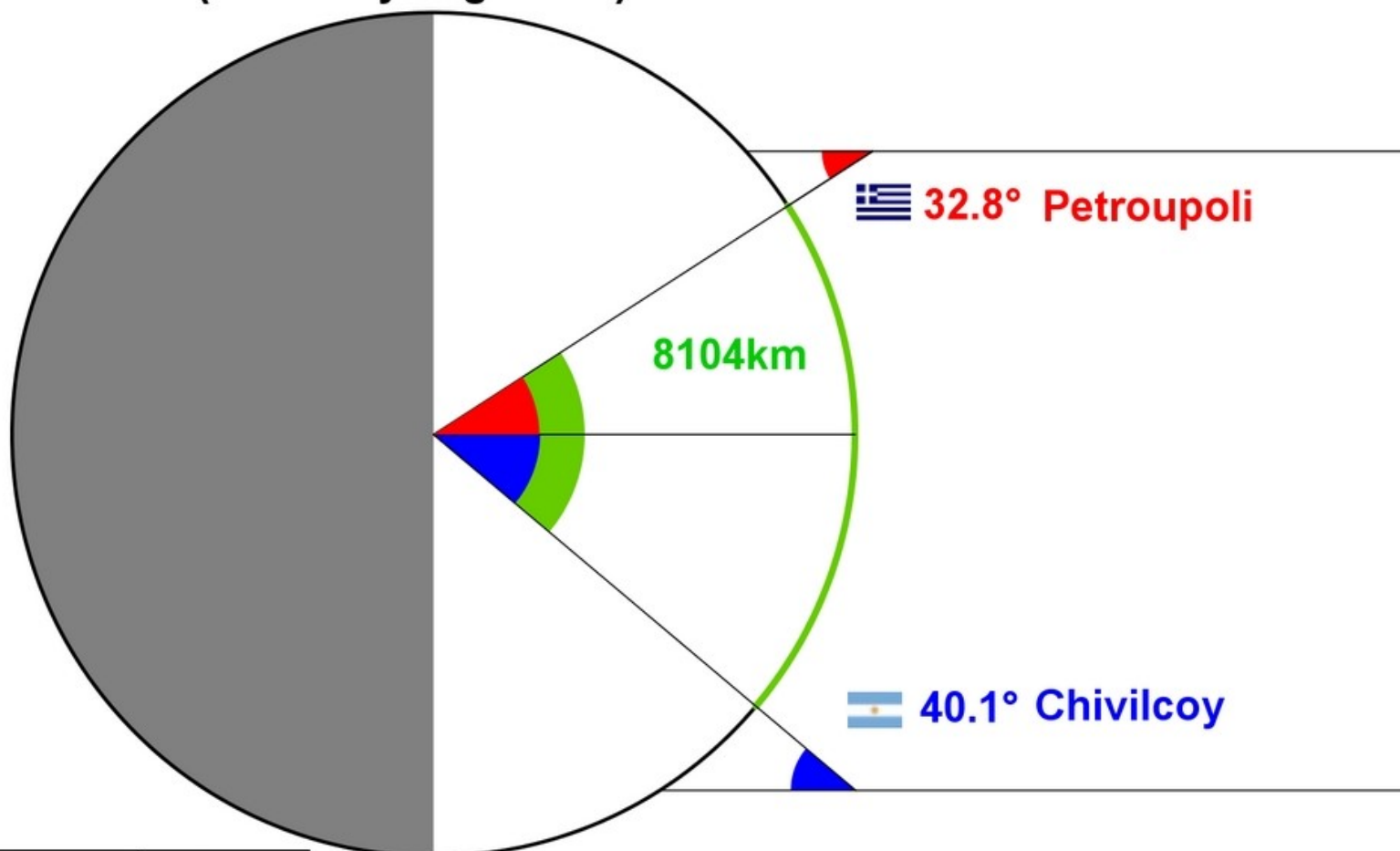


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Petroupoli	Greece	4o Junior High School	38.036	23.674

Date	Gnomon	Shadow	Angle
02 April 2020	100.0cm	64.4cm	32.8°
10 April 2020	120.0cm	67.0cm	29.2°
13 April 2020	30.4cm	16.5cm	28.5°
16 April 2020	47.0cm	26.0cm	29.0°
18 April 2020	30.4cm	15.5cm	27°
21 April 2020	30.4cm	14.8cm	26.0°
27 April 2020	30.4cm	13.4cm	23.8°

02/04/2020 (Petroupoli-Greece) Latitude: 38.036°

02/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°



$$\text{circumference} = \frac{360^\circ \times 8104\text{km}}{32.8^\circ + 40.1^\circ} = 40020 \text{ km}$$

Distance	Angle
circumference	360°
8104km	32.8°+40.1°



Piranguinho, Brazil

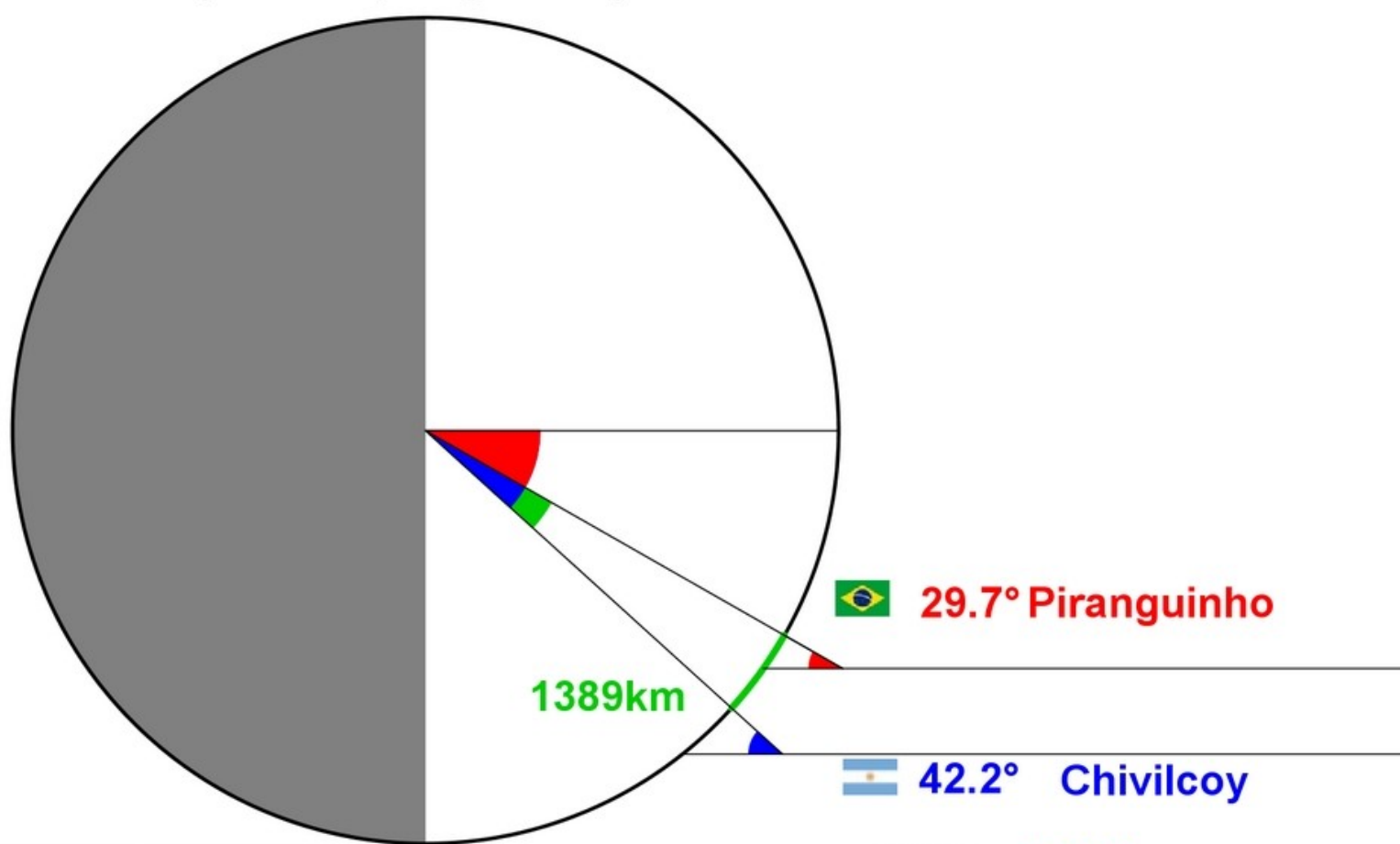


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Piranguinho	Brazil	Universidade Federal de Itajubá	-22.411	-45.535

Date	Gnomon	Shadow	Angle
08 April 2020	70.0cm	-40.0cm	-29.7°
10 April 2020	70.0cm	-41.4cm	-30.6°
13 April 2020	70cm	-43.4cm	-31.8°
22 April 2020	70.0cm	-48.9cm	-34.9°
27 April 2020	70cm	-52cm	-36.6°
29 April 2020	70cm	-52.7cm	-37°

08/04/2020 (Piranguinho-Brazil) Latitude: -22.411°

08/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°



Distance	Angle
circumference	360°
1389km	42.2° - 29.7°

$$\text{circumference} = \frac{360^\circ \times 1389\text{km}}{42.2^\circ - 29.7^\circ} = 40003 \text{ km}$$

Piranguinho-Brazil

Long = -45.535165

Lat = -22.410516

$h = 70.0 \text{ cm}$

$s = 40.0 \text{ cm}$

$\text{ang} = \text{atan}(s/h) = 29.7 \text{ degrees}$



Rio Cuarto, Argentina

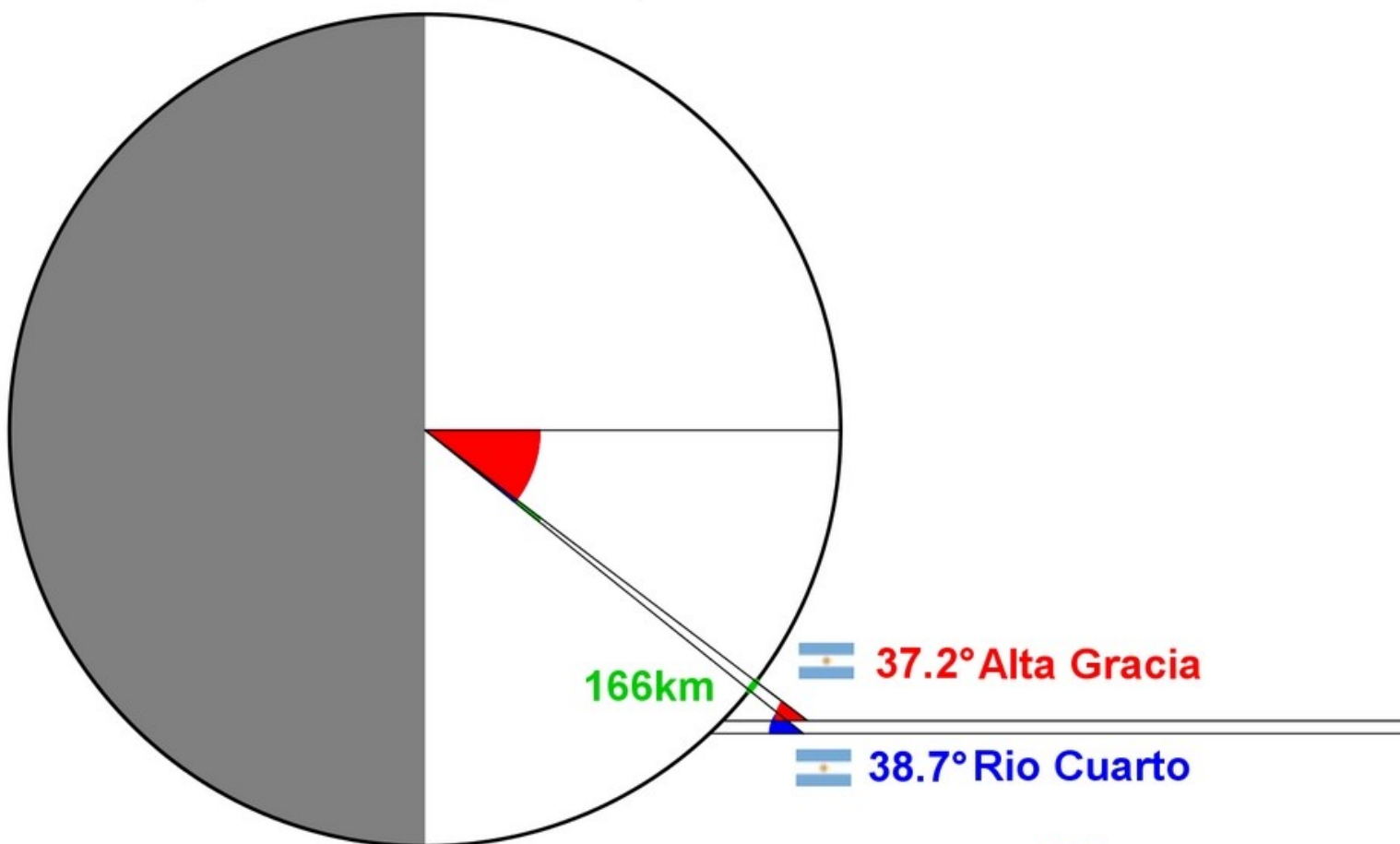


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio Cuarto	Argentina	Colegio Concordia	-33.149	-64.351

Date	Gnomon	Shadow	Angle
04 April 2020	52.5cm	-42.0cm	-38.7°

04/04/2020 (Alta Gracia-Argentina) Latitude: -31.659°

04/04/2020 (Rio Cuarto-Argentina) Latitude: -33.149°



Distance	Angle
circumference	360°
166km	38.7° - 37.2°

$$\text{circumference} = \frac{360^\circ \times 166\text{km}}{38.7^\circ - 37.2^\circ} = 39840 \text{ km}$$



#Eratos At Home

#Proyecto Eratóstenes


#Colegio Concordia

#YoMeQuedoEnCasa



Rio de Janeiro CENOM, Brazil

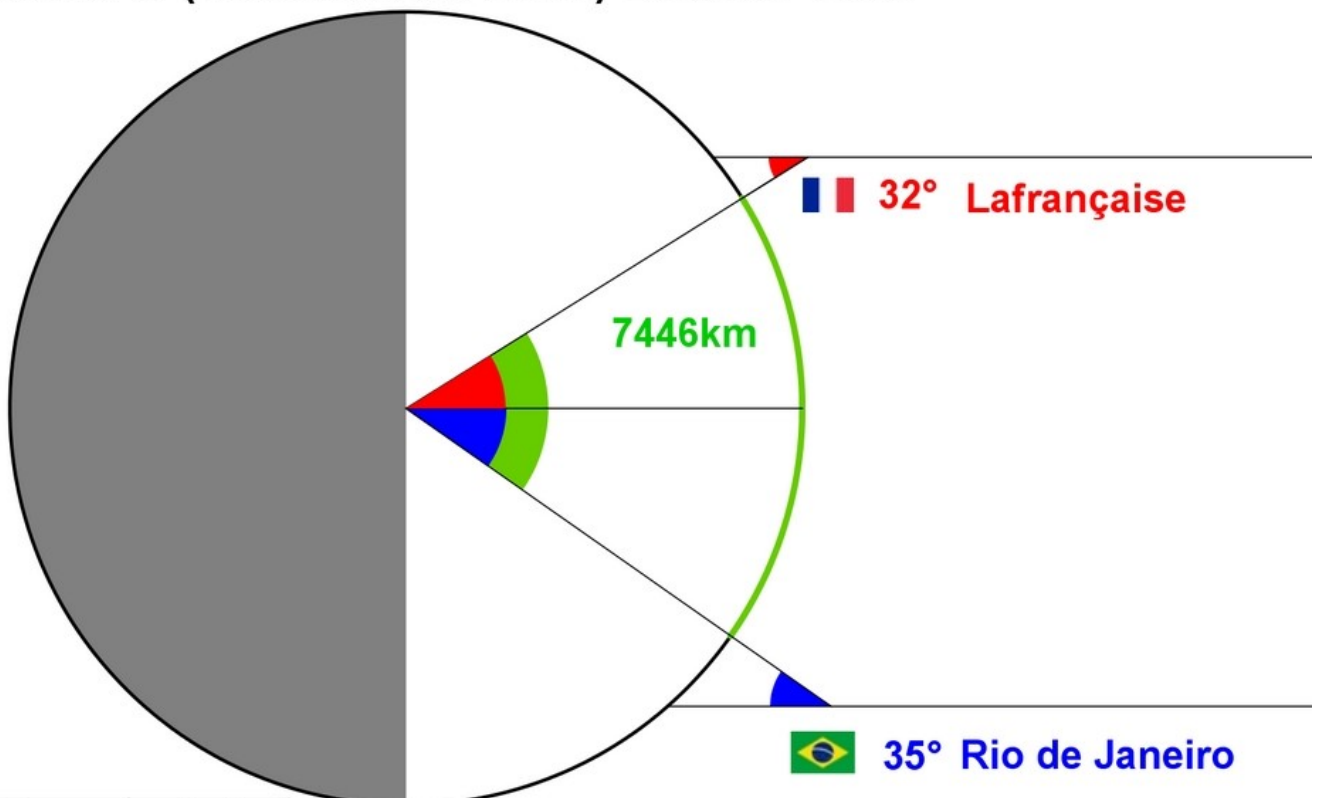


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Rio de Janeiro	Brazil	Centro Educacional Nosso Mundo	-22.890	-43.317

Date	Gnomon	Shadow	Angle
01 April 2020	10.0cm	-4.5cm	-24.2°
02 April 2020	10.0cm	-4.5cm	-24.2°
03 April 2020	20cm	-10cm	-26.6°
04 April 2020	10.0cm	-4.5cm	-24.2°
06 April 2020	10.0cm	-6.0cm	-31.0°
08 April 2020	20.0cm	-10.0cm	-26.6°
13 April 2020	20cm	-12cm	-31°
14 April 2020	20.0cm	-12.0cm	-31.0°
15 April 2020	20.0cm	-12.0cm	-31.0°
20 April 2020	10cm	-8cm	-38.7°
21 April 2020	10.0cm	-7.0cm	-35.0°
22 April 2020	10.0cm	-8.0cm	-38.7°
23 April 2020	10.0cm	-8.0cm	-38.7°
24 April 2020	10.00cm	-8cm	-38.7°
25 April 2020	10cm	-8cm	-38.7°
26 April 2020	10cm	-8cm	-38.7°
27 April 2020	10cm	-8cm	-38.7°
28 April 2020	10cm	-8cm	-38.7°
29 April 2020	10cm	-8cm	-38.7°
30 April 2020	10cm	-8cm	-38.7°

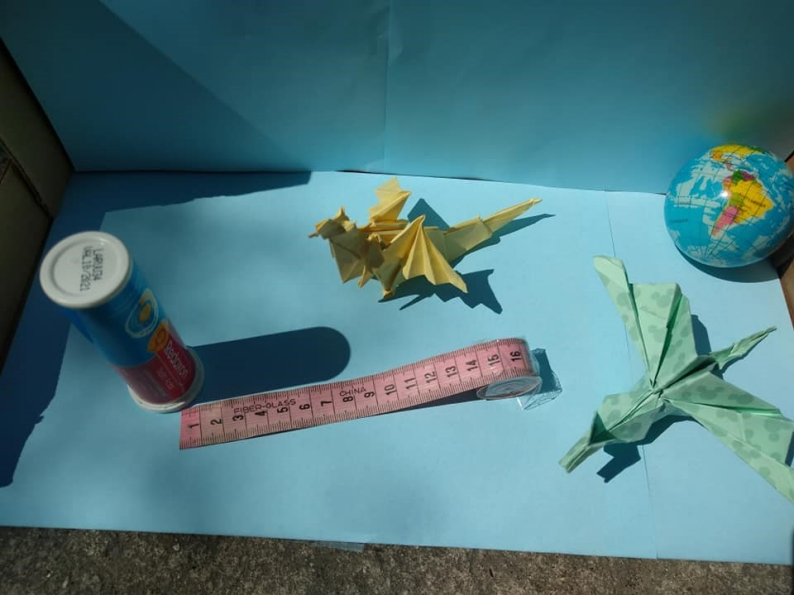
21/04/2020 (Lafrançaise-France) Latitude: 44.127°

21/04/2020 (Rio de Janeiro-Brazil) Latitude: -22.89°




Distance	Angle
circumference	360°
7446km	32° + 35°

$$\text{circumference} = \frac{360^\circ \times 7446\text{km}}{32^\circ + 35^\circ} = 40008 \text{ km}$$



Úbeda, Spain

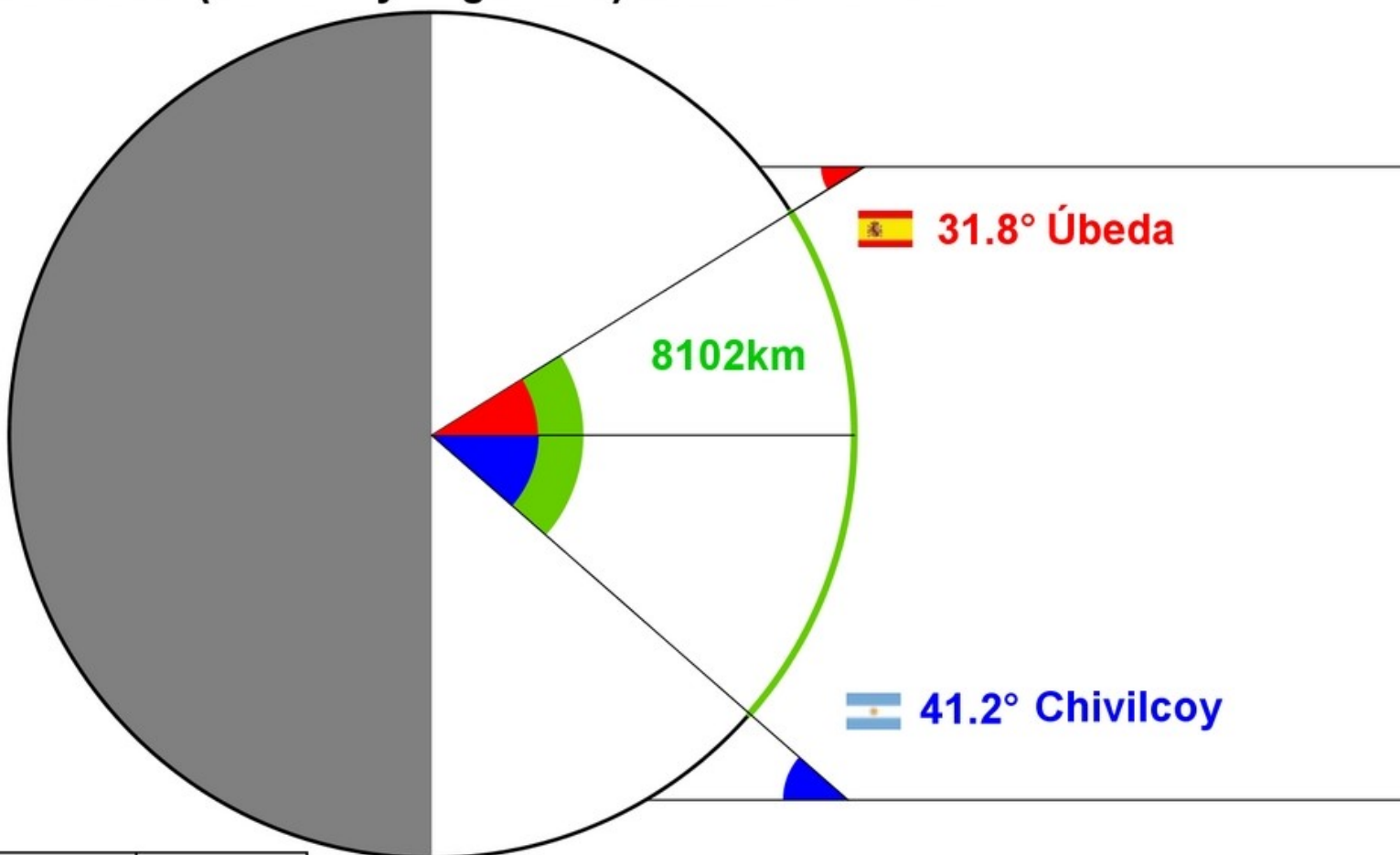


Flag	City	Country	School	Latitude (°) +N/-S	Longitude (°) +E/-W
	Úbeda	Spain	Colegio Salesiano Santo Domingo Savio	38.017	-3.367

Date	Gnomon	Shadow	Angle
04 April 2020	55.1cm	34.1cm	31.8°
08 April 2020	55.9cm	31.4cm	29.3°
29 April 2020	67.5cm	28.2cm	22.7°
30 April 2020	67.6cm	26.2cm	21.2°

04/04/2020 (Úbeda-Spain) Latitude: 38.017°

04/04/2020 (Chivilcoy-Argentina) Latitude: -34.911°



$$\text{circumference} = \frac{360^\circ \times 8102\text{km}}{31.8^\circ + 41.2^\circ} = 39955 \text{ km}$$

Distance	Angle
circumference	360°
8102km	31.8° + 41.2°



