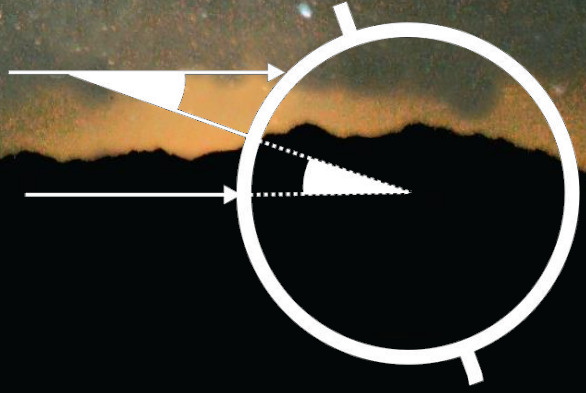
Eratosthenes

world space week 2015

During the World Space Week,
4 Indian schools,
4 Greek schools,
1 Italian school
1 French school
Calculated the circumference of the

Aigio GREECE
Dholpur INDIA
Kozani GREECE
Ioannina GREECE
Petroupoli GREECE
Yamunanagar INDIA
Lafrançaise FRANCE
Pont Saint Martin ITALY



world space week
4-10 October 2015
www.worldspaceweek.org

Yamunanagar India

Govt. Senior Secondary School, Alahar

Swami Vivekanand Public School

Holy Mother Public School

Space Design

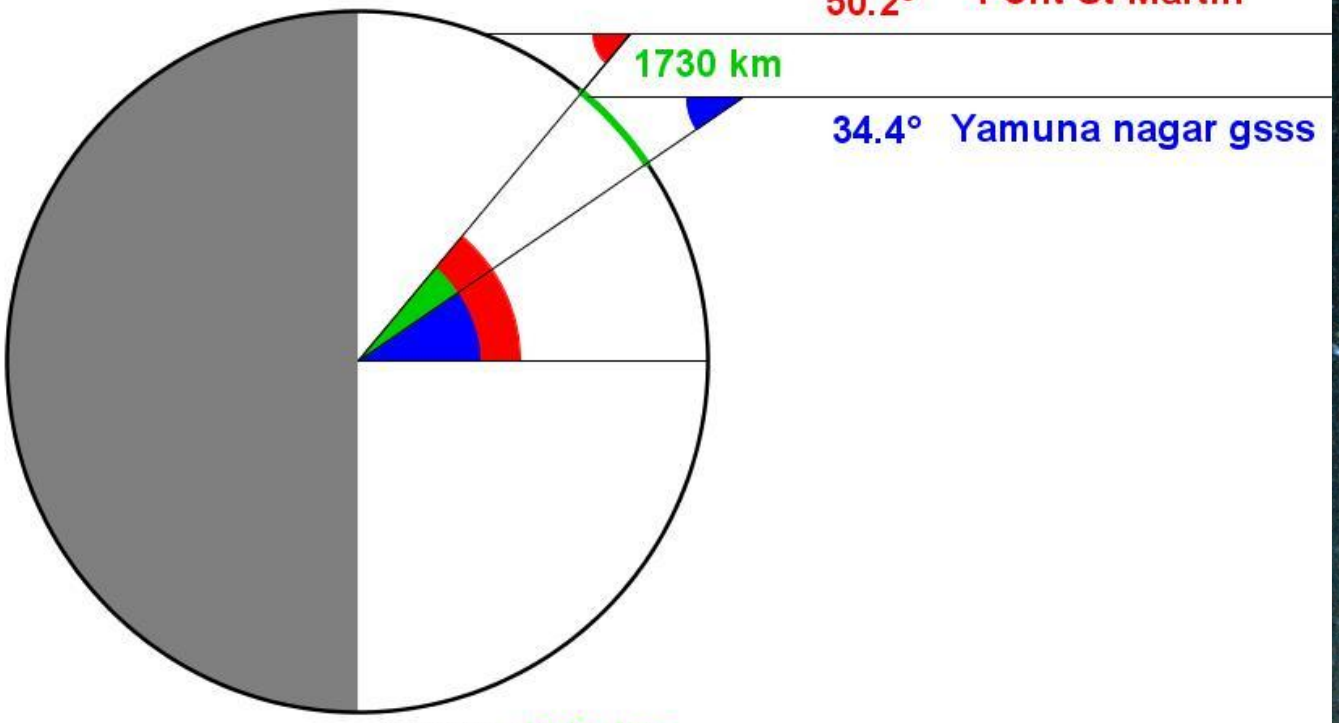
Swami Vivekanand Public School

Swami Vivekanand Public School

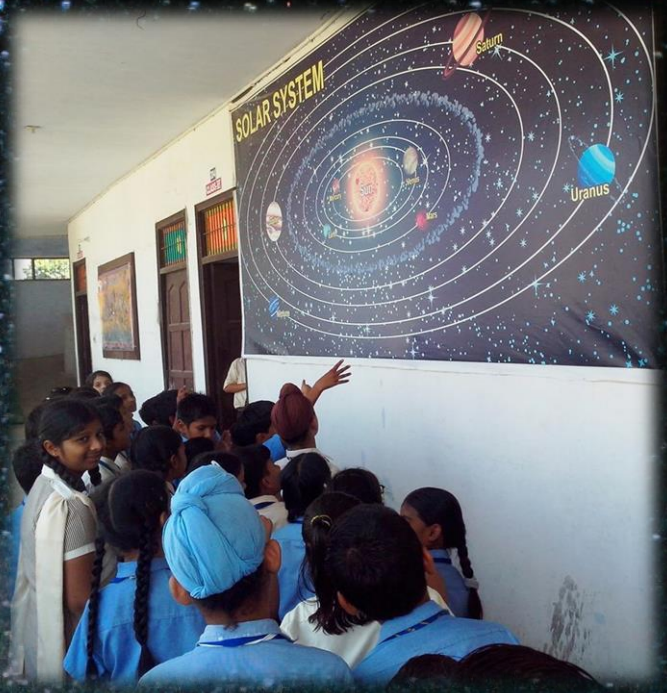
Govt. Senior Secondary School, Alahar

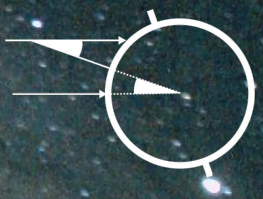
6 October 2015 (Pont St Martin-ITALY 45.6)

6 October 2015 (Yamuna nagar gsss INDIA 30.03)

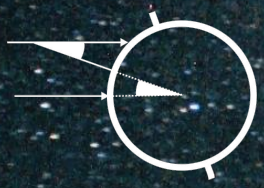


$$\text{circumference} = \frac{360° \times 1730\ \text{km}}{50.2° - 34.4°} = 39418\ \text{km}$$



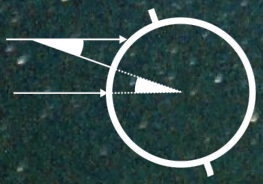


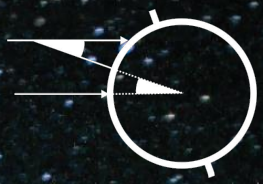
Holy Mother Public School



Holy Mother Public School

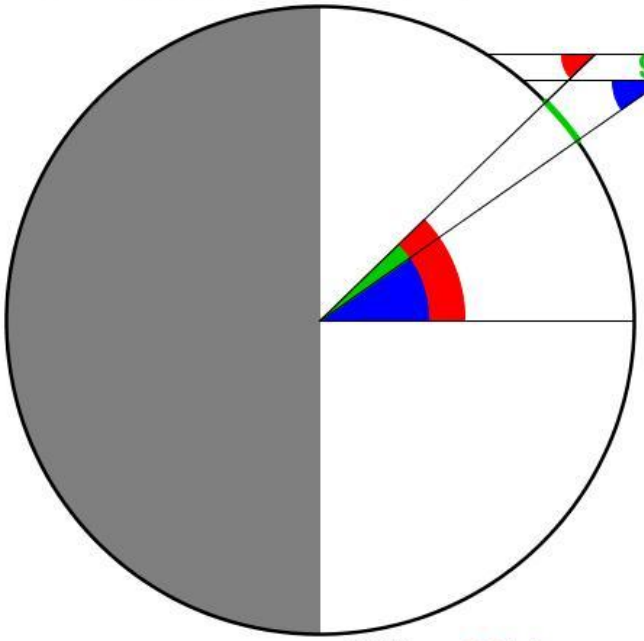
Holy Mother Public School





8 October 2015 (Aigio-GREECE 38.25)

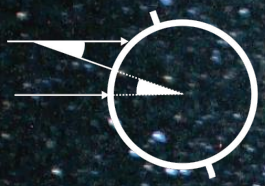
8 October 2015 (Kansapur, Yamuna Nagar INDIA 30.15)



$$\text{circumference} = \frac{360° \times 901\ \text{km}}{44.1° - 35°} = 35644\ \text{km}$$

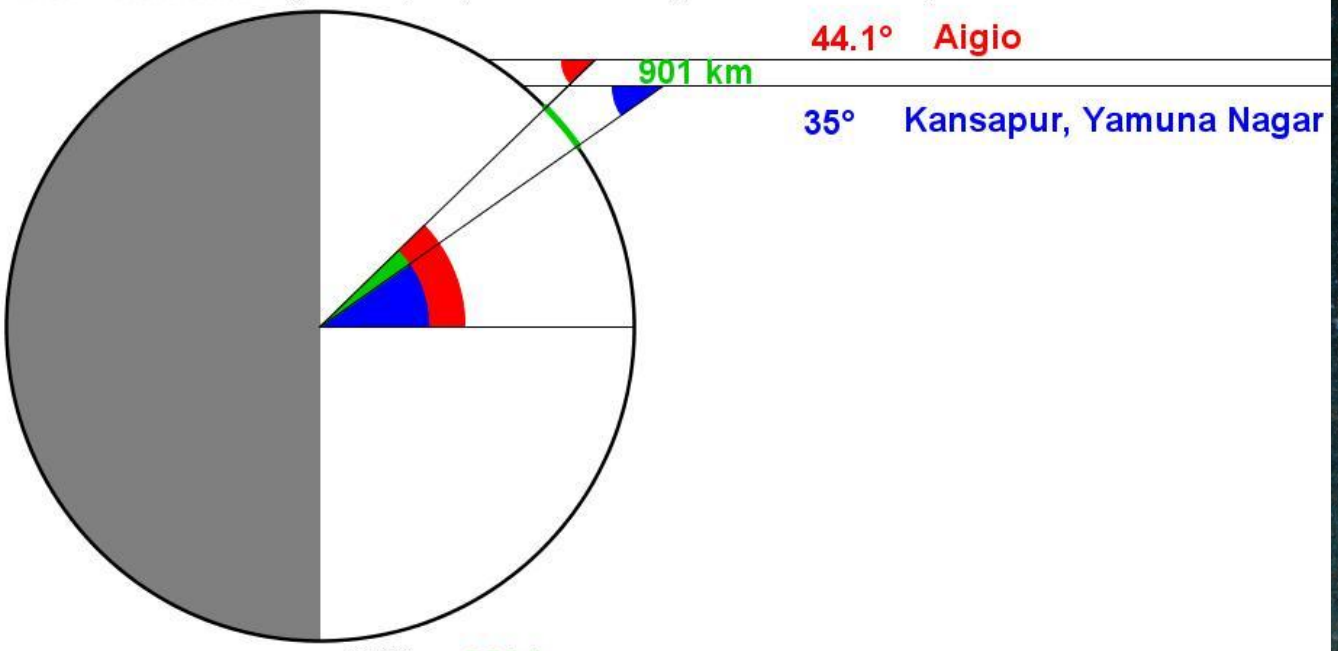
Holy Mother Public School

Dholpur India



8 October 2015 (Aigio-GREECE 38.25)

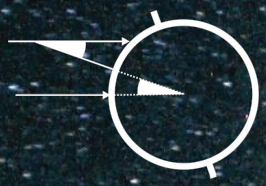
8 October 2015 (Kansapur, Yamuna Nagar INDIA 30.15)



$$\text{circumference} = \frac{360° \times 901\ \text{km}}{44.1° - 35°} = 35644\ \text{km}$$

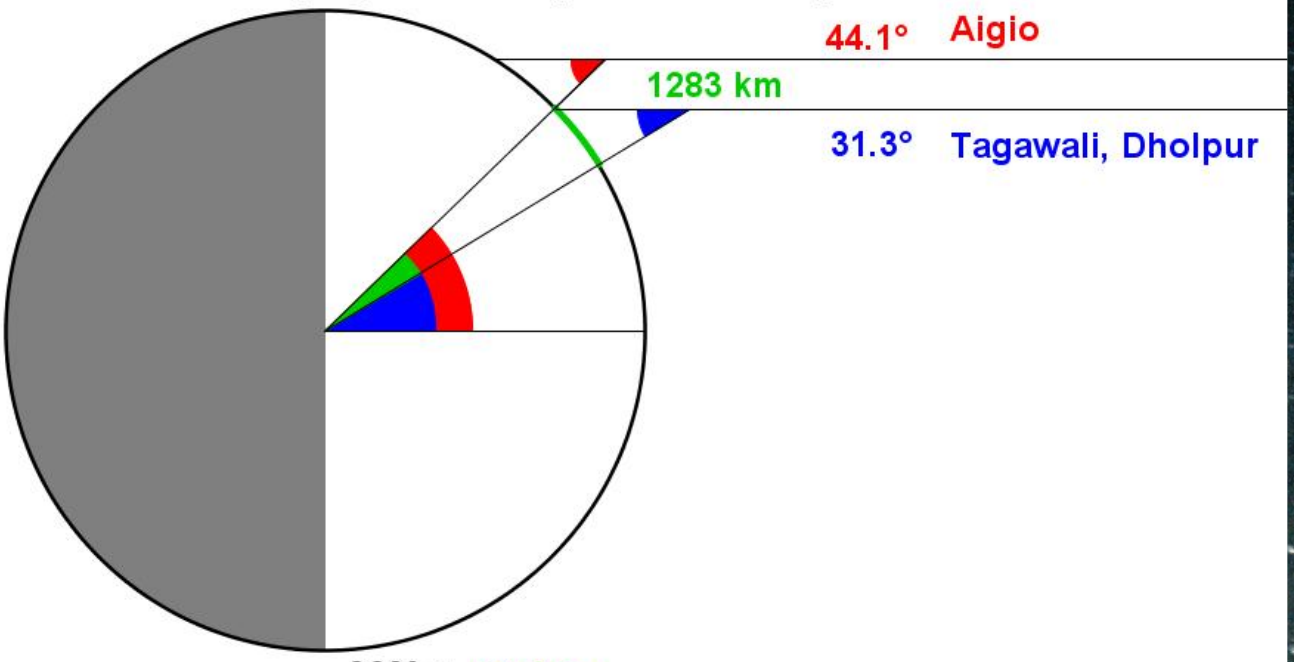
Govt. Senior Secondary School

Aigio Greece

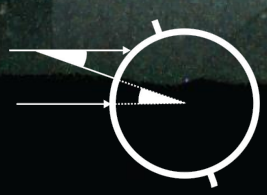


8 October 2015 (Aigio-GREECE 38.25)

9 October 2015 (Tagawali, Dholpur INDIA 26.71)

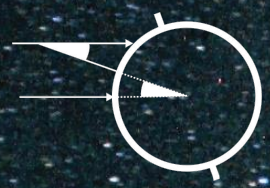


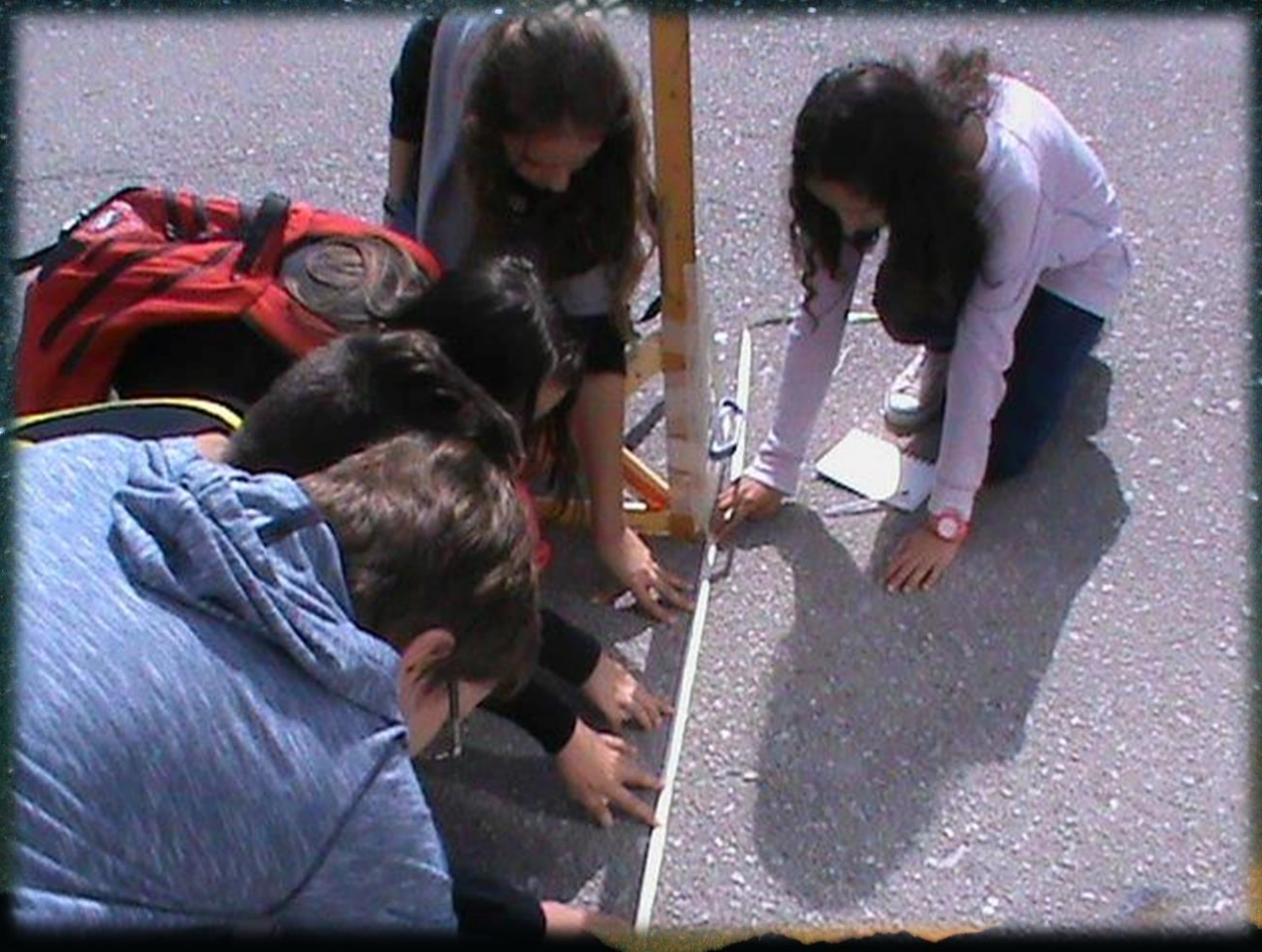
$$\text{circumference} = \frac{360° \times 1283\ \text{km}}{44.1° - 31.3°} = 36084\ \text{km}$$

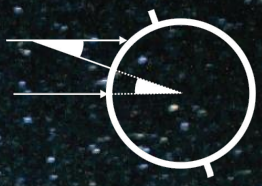


1st High School of Aigio

Kozani Greece

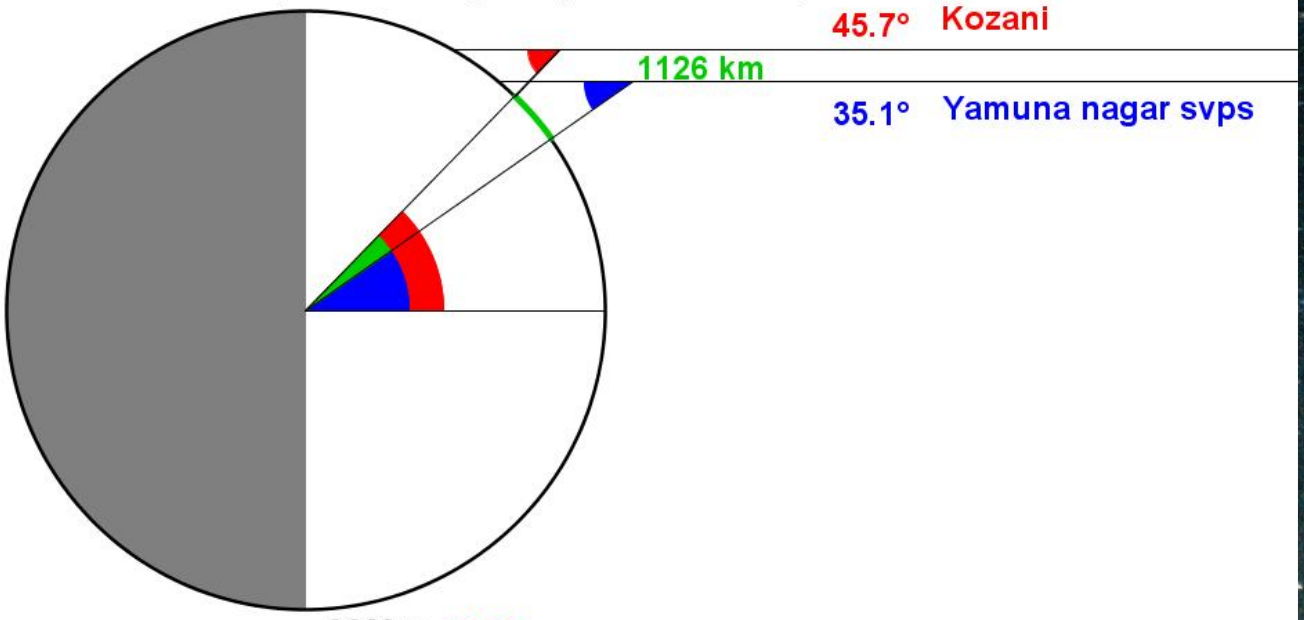






6 October 2015 (Kozani-GREECE 40.27)

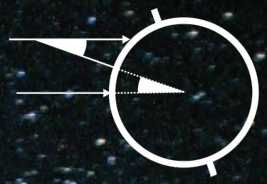
6 October 2015 (Yamuna nagar svps- INDIA 30.13)



$$\text{circumference} = \frac{360° \times 1126\ \text{km}}{45.7° - 35.1°} = 38242\ \text{km}$$

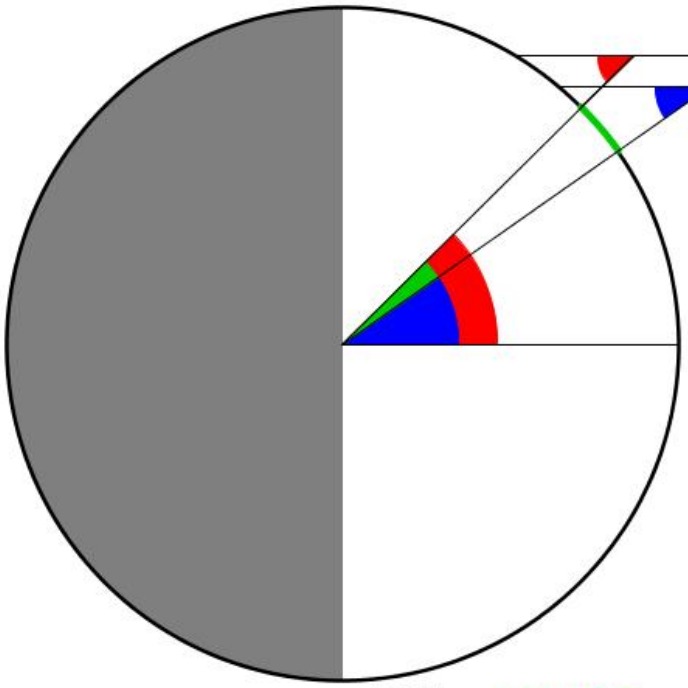
1st Junior High School in Krokos

Ioannina Greece



6 October 2015 (Ioannina-GREECE 39.67)

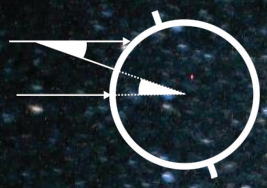
6 October 2015 (Yamuna nagar svps- INDIA 30.13)



$$\text{circumference} = \frac{360° \times 1059\ \text{km}}{44.7° - 35.1°} = 39712\ \text{km}$$

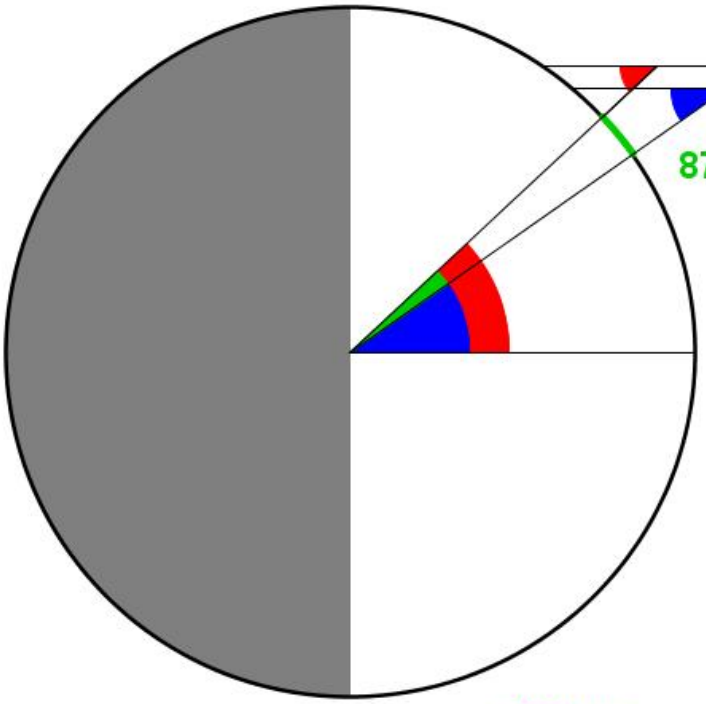
Collège Pilote Expérimental Zosimaias Scholis Ioannina

Petroupoli Greece



6 October 2015 (Petroupoli-GREECE 38.04)

6 October 2015 (Yamuna nagar svps- INDIA 30.13)

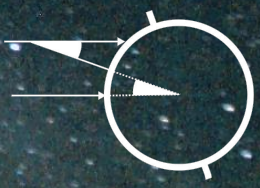


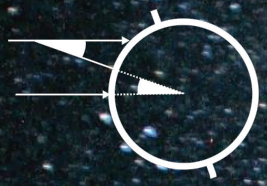
$$\text{circumference} = \frac{360° \times 878\ \text{km}}{43° - 35.1°} = 40010\ \text{km}$$

4th Junior High School of Petroupoli

Pont St Martin

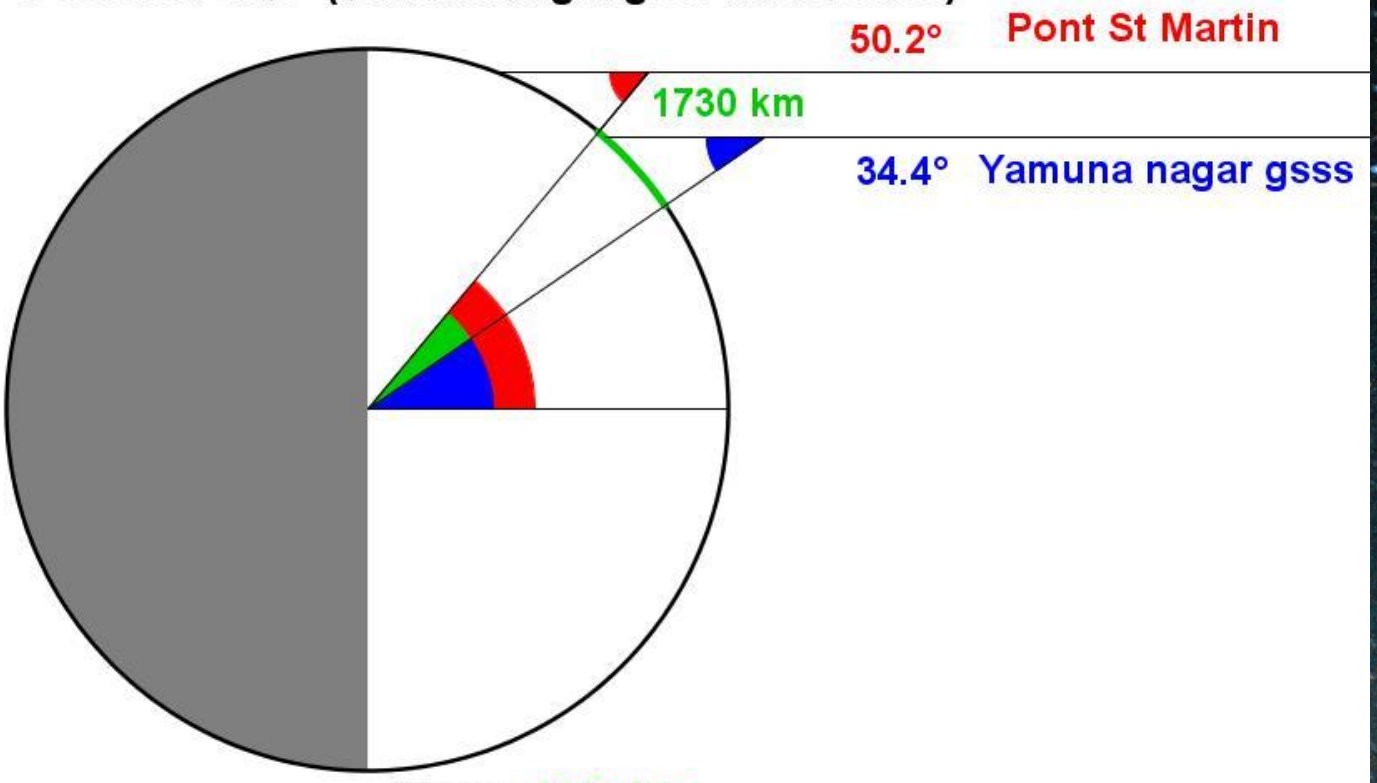
Italy





6 October 2015 (Pont St Martin-ITALY 45.6)

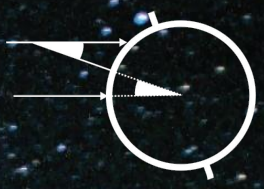
6 October 2015 (Yamuna nagar gsss INDIA 30.03)



$$\text{circumference} = \frac{360° \times 1730\ \text{km}}{50.2° - 34.4°} = 39418\ \text{km}$$

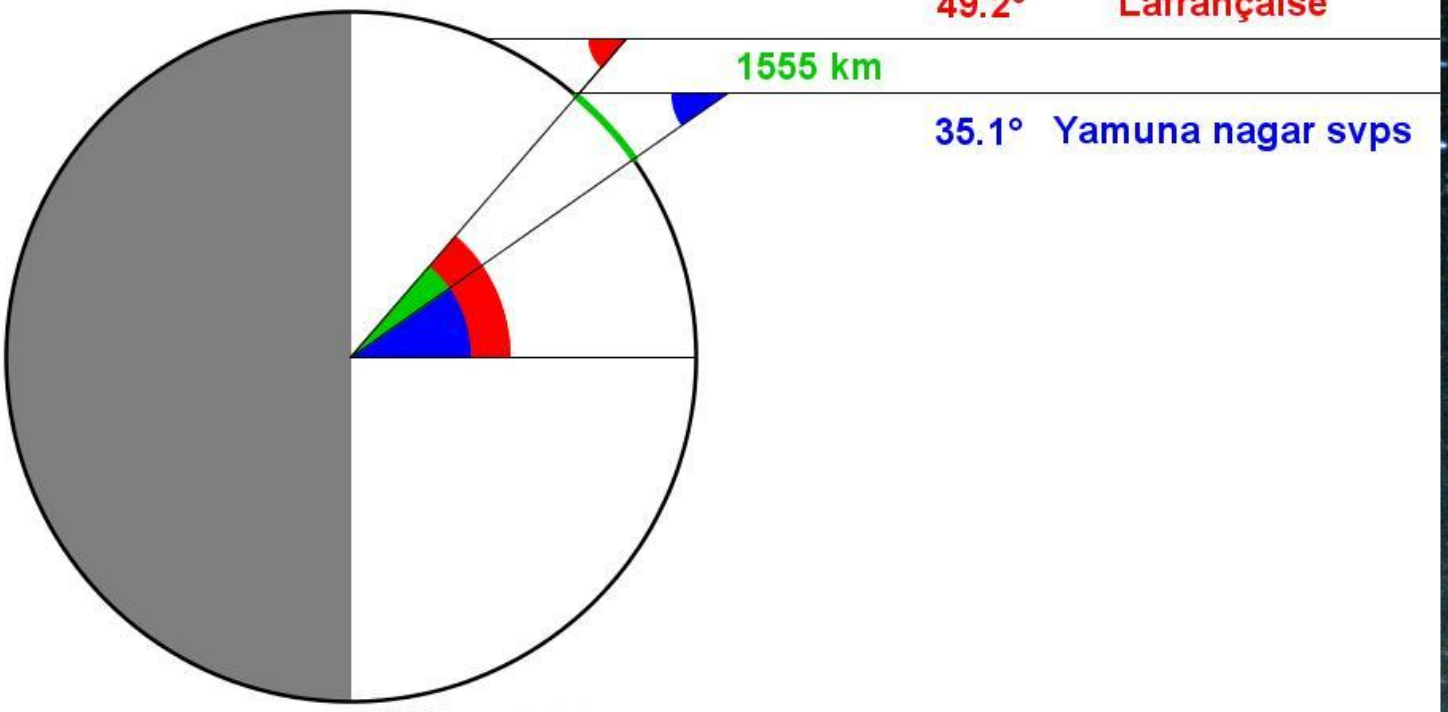
Istituzione Scolastica Monte Rosa A

Lafrançaise France



6 October 2015 (Lafrançaise-FRANCE 44.13)

6 October 2015 (Yamuna nagar svps INDIA 30.13)



$$\text{circumference} = \frac{360° \times 1555\ \text{km}}{49.2° - 35.1°} = 39702\ \text{km}$$

Collège Antonin Perbosc

Results

City	Country	School	Latitude (+N/-S) decimal(°)	Longitude	Date	Gnomon height [cm]	Shadow length [cm]	Angle (°)
Pont St Martin	Italy	Istituzione Scolastica Monte Rosa A	45.601	7.795	5/10/2015	100.0	120.0	50.2
Lafrançaise	France	Collège Perbosc	44.127	1.237	6/10/2015	100.0	116.0	49.2
Kozani	Greece	Junior High School of Krokos	40.265	21.815	6/10/2015	100.0	102.4	45.7
Ioannina	Greece	Collège Modèle de "Zosimaias Scholis"	39.667	20.850	6/10/2015	100.0	99.0	44.7
Petroupoli	Greece	4th Junior High School	38.036	23.674	6/10/2015	119.0	111.0	43.0
Yamuna nagar svps	India	Swami Vivekanand Public School	30.133	77.283	6/10/2015	62.0	43.5	35.1
Yamuna nagar gsss	India	Govt. Senior Secondary School, Alahar	30.033	77.200	6/10/2015	62.0	42.5	34.4

5-6/10/2015		Pont St Martin	Lafrançaise	Kozani	Ioannina	Petroupoli	Yamuna nagar svps	Yamuna nagar gsss	
	Angle >	50.2	49.2	45.7	44.7	43.0	35.1	34.4	
	Latitude V								
Pont St Martin	45.601		59040	47440	43135	42000	40959	39418	C
Lafrançaise	44.127	164		44126	39680	39310	39702	38092	I
Kozani	40.265	593	429		23760	33067	38242	36223	R
Ioannina	39.667	659	496	66		38329	39713	37398	C
Petroupoli	38.036	840	677	248	181		40010	37214	U
Yamuna nagar svps	30.133	1718	1555	1126	1059	878		5657	M
Yamuna nagar gsss	30.033	1730	1566	1137	1070	889	11		F
				DISTANCE					

City	Country	School	Latitude (+N/-S) decimal(°)	Longitude	Date	Gnomon height [cm]	Shadow length [cm]	Angle (°)
Petroupoli	Greece	4th Junior High School	38.036	23.674	9/10/2015	119.0	115.5	44.1
Aigio	Greece	1st Junior High School	38.252	22.079	8/10/2015	86.0	83.3	44.1
Dholpur	India	Govt. senior secondary school Tagawali	26.708	77.908	9/10/2015	74.0	45.0	31.3
Yamunanagar	India	C V RAMAN SCIENCE CLUB	30.145	77.268	8/10/2015	51.0	35.7	35.0

8-9/10/2015		Petroupoli	Aigio	Dholpur	Yamunanagar	
	Angle >	44.1	44.1	31.3	35.0	
	Latitude V					
Petroupoli	38.036		#DIV/0!	35409	34695	C
Aigio	38.252	-24		36084	35644	I
Dholpur	26.708	1259	1283		37168	R
Yamunanagar	30.145	877	901	-382		C
			DISTANCE			