Satellite Antenna with integrated Single LNB SlimSat SA61 Satellite Antenna with integrated Twin LNB SlimSat SA62







































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1.0 WHAT IS SLIMSAT?

SLIMSAT is a Horn Array Type Satellite Antenna with integrated LNB. It can receive signals from major Satellites and would replace a 65 cm parabolic dish. Small, discreet and easy to use, it can be installed in a few minutes and used as a portable antenna for all satellite receptions. SLIMSAT can be used for both Free-to-Air and encrypted (requiring a subscription with an operator) channel reception; it can also receive all High Definition channels with a superior image quality. For the use and installation, please read the following instructions and installation materials carefully.

SlimSat SA61 with integrated Single LNB to connect to 1 satellite receiver



SlimSat SA62 with integrated Twin LNB to connect to 2 satellite receivers



2.0 SAFETY INSTRUCTIONS

- Before using this product please read this manual carefully and follow exactly all installation, mounting & orientation instructions.
- All the instructions should be followed in order to avoid any technical problems.
- Any electric or magnetic field close to the SLIMSAT may cause a bad reception or even cut off the signal completely.
- Do not drill the plastic cover of the antenna, which seals the antenna from moisture.
- Handle the antenna with care as any impact will cause damage to the electronics.
- Do not open the cover, any attempt to repair by a non-qualified person can be dangerous and void the warranty.
- Any obstacle (buildings, trees, etc.) will block the reception of the signal from the satellite to the antenna.
- Do not paint or add any substance on the antenna cover, this will block the reception of the signal from the satellite.
- The cable between the antenna and the Satellite receiver should not exceed 30m as it will decrease the quality of the signal.
- The use non- isolated jacks will result in a loss of the signal level.
- Do not forget to adjust the antenna and the bracket to the cross-polarity (skew angle please refer to chapter 3.4 step 4).
- Tighten all the screws of the antenna once you have finished the adjustments.
- This product contains the LNB, it is forbidden to add, change or modify the LNB.
- For more precise details on the above points or for any information, please ask your retailer or customer service

Warning!!!



Antennas improperly installed to an inadequate structure are very susceptible to wind damage. This Damage can be very serious or even life threatening. The owner and installer assumes full responsibility that the installation is structurally sound to support all loads (weight, wind & ice) and properly sealed against leaks. The manufacturer will not accept liability for any damage caused by a satellite system due to the many unknown variable applications.

3.0 HOW TO INSTALL?

By following the instructions step by step you can proceed easily to install SLIMSAT by yourself or with the help of a professional antenna installer.

Before installing your antenna check that the SLIMSAT box contains all items listed in the chapter 'Box Content'. In the event of any missing parts, please contact your distributor.

3.1 Step 1: Where to Install?

In order to receive a signal from the Satellite, SLIMSAT is to be installed in an open loop space (outside the house or the apartment), in the direction of the satellite towards the equator, for which, you will need a compass to exactly orient SLIMSAT toward the satellite (Note; please take reference to the table of the Azimuth angles specified in the back pages of this manual)



Note

To ensure accurate compass reading, stay away from large metal objects, specifically electrical cables and then make multiple readings

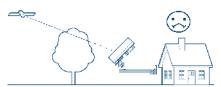


Make sure that there are no obstacles in front of SLIMSAT which can decrease the signal reception quality, such as buildings, or trees (you may keep in mind that trees will grow and may block the signal).

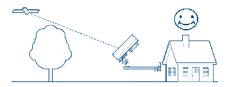
In order to be able to fix and install your antenna easily you might choose an easily accessible place without any potential danger for installation.

Think about the way you might pass your cable in a discreet way from the SLIMSAT to your Set top Box. The antenna should not be too distant from your satellite receiver; a cable longer than 30 meters can decrease the quality of the signal.

Bad Quality Signal Reception



Good Quality Signal Reception



3.2 Step 2: Installation

In order to install your new antenna, you need to find the skew, elevation and azimuth angle by referring to the table in the appendix of this manual. If you can't find your location, please refer to the information of the place nearest to your location. This manual will show you the installation example for the reception of ASTRA1 satellite in Brest region of France.

The angle information for Brest region is Skew: -19.7°

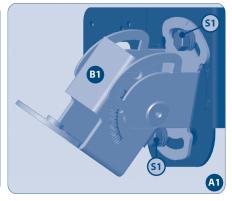
El: 30° Az: 149.6°

Part Assembly

1. Fixing the Skew (Joint of Angle Bracket and Antenna Body)

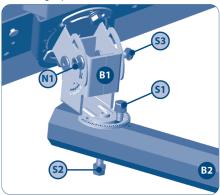
Join the Angle Bracket and Antenna Body with the supplied screw and adjust the skew angle to -19.7

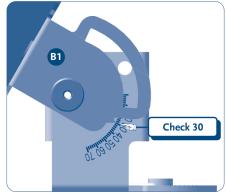




2. Fixing the Elevation (Joint of Antenna Body and Main Support)

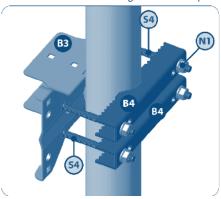
For the purpose of delicate adjustment of the elevation and azimuth angle, please don't fix the bolt and nut tightly.

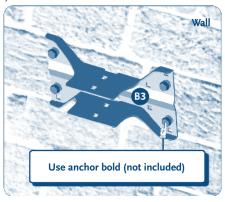




3. Installation of Fixing Bracket A

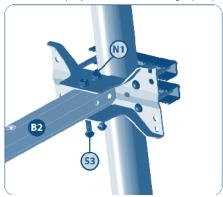
When installing Fixing Bracket A (B3), please consider the place of installation (clamp type, wall mounting type). Make sure that the direction of the bracket is towards satellite. In order to support the weight of the antenna, nut (N1) should be fixed as tightly as possible. Please purchase the anchor bolt for wall mounting installation separately.

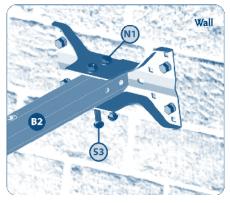




4. Joining of the Antenna Body and Fixing Bracket A (B3)

Join the assembled Antenna Body and Fixing Bracket A. In order to support the weight of the antenna, nut (N1) should be fixed as tightly as possible.





3.3 Step 3: Connecting the Antenna and the Set top box

Once you have installed the antenna in an open loop space and mounted the way you want it to be the next step is to connect it all together.

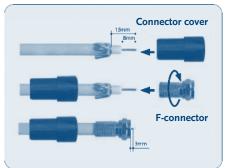
In order to be able to watch your favourite satellite programs, you need to connect your satellite antenna to a receiver by a cable.

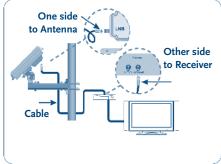
The cable between the antenna and the Satellite receiver should not exceed 30m as it will decrease the quality of the signal.

The use of a long or bad quality cable and not isolated jacks can cause a loss of the signal level, it would be preferable to use an RG6 Coaxial cable (HF 17VATC or 19VATC cable), in order to minimise a signal loss.

How to prepare the cable?

How to connect the cable to the antenna and the set top box?





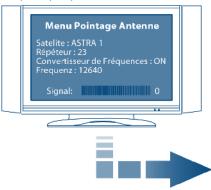
It is important that the coaxial cable does not become damaged or kinked during the installation procedure.

3.4 Step 4: Fine Tuning and Fixing the Bracket

Once fine tuning for signal reception is completed, please tighten all bolts and nuts.

Once all connections are made, turn on the TV and the satellite receiver, select the Antenna Pointing Menu on your receiver and check the signal level on your TV. Do not forget to choose "LNB: ON". Someone will need to stay in front of the TV to tell you when the signal is "good" while you're outside adjusting the antenna the best way possible.

The signal level and quality is indicated on the TV screen and will fluctuate and change colour according to the adjustment & movement of the antenna while you are pointing & finding (azimuth, elevation angle). The level indicates the power of the signal and the colour indicates the signal reception quality from the chosen satellite.





4.0 TROUBLESHOOTING CHECK LIST FOR INITIAL INSTALLATION

If the signal is not found, be sure the receiver user manual and the antenna user manual have been followed closely, check the following:

- Make sure all cable connections are correct and each connection is seated / tightened properly.
- Inspect the inside of each cable connector for dirt or possible connector to case / shield short.
- Verify the Azimuth, Elevation and Tilt angles for your location by ZIP code.
- Make sure the Tilt and Elevation pointers are aligned correctly to the scales. Do not use washer or bolt as reference.
- Make sure the Tilt adjustment is not changed from the recommended settings for the antenna location.
- Remove existing TV-specific components, such as TV splitter, etc; reduce the installation to the basic connections called out in this guide. Such components may not work with the satellite signal and they may be in the wall where you can't see them. When in doubt, run RG6 cable directly to you receiver.
- Make sure there are no obstructions (trees, buildings, windows, corner or overhang of you roof, your body or hands) – the signal does not pass leaves, branches, glass, etc.
- RG6 cable with solid copper center conductor is highly recommended because it has much lower DC voltage drop compared to RG 6 cable with a copper-coated, steel center conductor.
- Standard RG 59 cable cases too much DC drop and signal drop; it can not be used to pass the satellite signal. RG 6 coaxial cable must be used.
- Some after market, off-the-shelf add-on components may not be as advertised. They might not work or could cause additional DC drops and signal amplitude attenuation. Remove such components, go back to the basic connections called out in this manual and re-verify.
- Make sure the satellite cable is connected to the "SAT IN" jack, not the "ANTENNA IN" jack. The "ANTENNA IN" jack at the back of the receiver is for all off-air antenna input or cable TV input.
- If all are done correctly but the signal is still not found change the Elevation adjustment of the antenna slightly (± 2°, then ± 4° from the called-for setting) and repeat the procedure.
- Make sure the Access Card from your receiver is fully inserted into the Access Card slot and oriented correctly.

5.0 LOSS OF SIGNAL / RAIN FADE

The satellite signal may be lost temporarily due to unusual heavy rainfall. An optimal alighted antenna, along with the shortest possible cable run, minimizes the chances of "rain fade".

Make sure the antenna is mounted securely to prevent it from being blown out of alignment in a heavy wind.

Heavy snow accumulation on the antenna may reduce the satellite signal strength; snow should be swept away as soon as possible.

Tree foliage growth into antenna's line-of-sight to the satellite may result in gradual loss of picture.



6.0 INSTALLATION USING LONG CABLE

For installations where the RG 6 cables run from the receiver(s) to the LNB far exceeds 100 feet (150 feet or more), as encountered in a commercial or multi-dwelling building, you need to use an AC power booster module to bias the LNB.

You will also need an additional RF signal amplifier to compensate the signal amplitude loss. Otherwise, your antenna and receiver may not work properly and be subject to frequent outages in adverse weather. Contact a professional concerning such installations.

7.0 TECHNICAL SPECIFICATION

Input Satellite Frequency: 10.7 ~ 12.75 GHz

Polarisation: Dual Linear (Horizontal & Vertical)

Antenna Gain: 33.7 dBi at 12.7 GHz
Dimensions (W x H x D): 54.7 x 27.7 x 9.5 cm

LNB: Model SA61: Single LNB integrated

Model SA62: Twin LNB integrated

LNB Output Frequency: 950 – 1,950 / 1,100 – 2,150 MHz LNB voltage: Vertical 9 – 14.5 V (typ. 13 V)

Horizontal 15.5 - 24 V (typ. 18 V)

Operating Temperature: $-30 \sim +60 \,^{\circ}\text{C}$ Gross weight: $4.5 \,\text{kg}$ Net weight: $2.7 \,\text{kg}$

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A.1 BOX CONTENT

No	Symbol	Part name	Image	Quantity
1	A1	Antenna Body		1
2	B1	Skew Bracket		1
3	B2	Main Support	<u> </u>	1
4	В3	Fix Bracket A		1
5	B4	Fix Bracket B	melala mus malala	2
6	B5	Spanner	200	1

No	Symbol	Part name	Image	Quantity
7	C1	Compass	The state of the s	1
8	S1	Screw M6x18 SEMS2		3
9	S2	Screw M6x50 SEMS2		1
10	S3	Round Head Square Neck Bolt M6x50		3
11	S4	Round Head Square Neck Bolt M6x75		4
12	N1	Flanged Nut M6	e	7

A.2 APPENDIX

Great Britain

eL=East Longitude wL=West Longitude B=Latitude Az=Azimuth El=Elevation Sk : Skew

		Turk	Astra	Astra	Hot	Atlant	Hispa			Turk	Astra	Astra	Hot	Atlant	Hispa
		sat	2A/2B/ 2D	1E-1H /1KR/	bird 2/8/7A	lebird	sat			sat	2A/2B/ 2D	1E-1H /1KR/	bird 2/8/7A	lebird	sat
		1C,2A	Euro bird 1	2C	/8	3	1C,ID			1C,2A	Euro bird 1	2C	/8	3	1C,ID
		42.0	28.2	19.2	13.0	5.0	30.0			42.0	28.2	19.2	13.0	5.0	30.0
		E	E	E	E	W	W			E	E	E	E	W	w
Aberdeen	Az	130.9	145.2	155.1	162.2	183.5	212.2	Iverness	Az	129.0	143.0	152.8	159.8	180.9	209.8
wL 2.1	El	14.6	19.8	22.4	23.7	25.0	20.6	wL 4.2	El	13.4	18.8	21.5	22.9	24.6	20.8
B + 57.1	Sk	-24.2	-18.1	-13.2	-9.6	1.9	16.8	B + 57.5	Sk	-24.7	-18.9	-14.2	-10.7	0.5	15.5
Belfast	Az	126.3	140.2	150.1	157.2	178.9	208.7	Kingston	Az	131.5	146.0	156.3	163.6	185.8	215.2
wL 5.9	EI	14.4	20.5	23.7	25.4	27.7	24.0	upon hul	EI	17.6	23.4	26.1	27.4	28.5	22.9
B + 54.6	Sk	-27.8	-21.7	-16.8	-13.0	-0.6	16.2	wL:0.33 B:+53.75	Sk	-26.3	-19.3	-13.8	-9.6	3.4	20.0
Binningham	Az	129.6	143.9	154.1	161.5	184.0	214.0	Leeds	Az	130.3	144.7	154.8	162.1	184.2	213.8
wL 1.8 B + 52.5	El	17.8	23.9	26.9	28.4	29.9	24.6	wL 1.6	El	17.0	22.8	25.7	27.1	28.5	23.3
B + 52.5	Sk	-28.0	-21.0	-15.4	-11.1	2.5	19.9	B + 53.8	Sk	-26.B	-20.0	-14.6	-10.5	2.5	19.2
Bradford	Az	130.1	144.5	154.6	161.9	184.0	213.7	Liverpool	Az	128.8	143.1	153.2	160.4	182.6	212.5
wL 1.8	El	16.9	22.8	25.7	27.1	28.5	23.4	WL 2.9	EI	16.6	22.7	25.7	27.3	29.0	24.1
B + 53.8	Sk	-26.9	-20.1	-14.7	-10.6	2.3	19.1	B + 53.4	Sk	-27.7	-21.0	-15.6	-11.5	1.6	18.7
Bristol	Az	128.4	142.7	152.9	160.4	183.1	213.6	Leicester	Az	130.4	144.8	155.1	162.5	184.9	214.8
wL 2.6	EI	18.1	24.5	27.7	29.3	31.1	25.8	wL:1.08	EI	18.1	24.1	27.0	28.4	29.7	24.2
B + 51.5	Sk	-29.2	-22.2	-16.5	-12.1	1.9	20.1	B:+52.63	Sk	-27.6	-20.5	-14.8	-10.5	3.0	20.3
Card T	Az	127.9	142.1	152.3	159.7	182.4	212.9	<u>London</u>	Az	130.6	145.4	155.8	163.4	186.2	218.2
wt 3.16	El	17.8	24.3	27.5	29.2	31.1	25.9	wt 0.2	EI	19.3	25.4	28.3	29.8	30.9	24.8
B + 51.48	Sk	-29.4 130.0	-22.5 144.5	-16.9 154.9	-12.5 162.4	1.5 185.4	19.8 215.8	B + 51.5	Sk	-28.1 129.5	-20.7 143.8	-14.8 154.0	-10.3 161.3	3.8 183.4	21.6 213.2
Chichester	Az		_					Mar offester	Az						
WL:0.778 B:+50.83	EI	19.4	25.8	28.9	30.4	31.6	25.6	wL 2.3 B + 53.5	EI	16.9	22.9	25.8	27.3	28.9	23.8
D.+30.63	Sk	-29.0	-21.5	-15.6	-11.0	3.4	21.7		Sk	-27.3	-20.6	-15.2	-11.1	2.0	19.0
Coven iy	Az	129.9	144.3	154.5	161.9	184.4	214.4	Nawcast e uponTyne	Az	130.7	145.0	155.1	162.4	184.1	213.4
wL:1.5 B:+52.42	EI	18.0	21.1	27.0	28.6	30.0	24.5	wL 1.6	EI	16.2	21.8	24.5	25.9	27.2	22.3
B.102.12	Sk	-27.9	-20.9	-15.2	-10.9	2.7	20.2	B + 55.0	Sk	-25.8	-19.2	-14.0	-10.0	2.4	18.4
<u>Dover</u>	Az	132.1	146.9	157.5	165.1	188.1	218.0	<u>Norwich</u>	Az	132.7	147.4	157.9	165.4	187.9	217.4
eL 1.3	EI	20.3	26.3	29.1	30.5	31.2	24.6	eL 1.3	El	19.2	24.9	27.6	28.9	29.6	23.3
B + 51.1	Sk	-27.8	-20.1	-13.9	-9.3	5.1	22.7	B + 52.6	Sk	-26.5	-19.1	-13.2	-8.8	4.8	21.7
Edinburgh	Az	129.4	143.6	153.6	160.7	182.2	211.4	Nottingham	Az	130.2	144.6	154.9	162.3	184.6	214.5
wL 3.2 B + 56.0	EI	14.8	20.4	23.2	24.6	28.2	21.9	wL 1.3 B + 52.9	EI	17.8	23.7	26.6	28.1	29.5	24.0
D T 30.0	Sk	-25.6	-19.4	-14.4	-10.7	1.2	16.9	D + 32.3	Sk	-27.4	-20.4	-14.8	-10.6	2.8	20.0
Glasgow	Az	128.4	142.5	152.4	159.5	180.9	210.2	Playmouth Playmouth	Az	126.5	140.5	150.7	158.1	181.0	212.1
wL 4.2 B + 55.9	El Sk	14.4 -26.0	20.1 -19.9	23.0 -15.1	24.5 -11.3	26.4 0.5	22.3 16.4	wL 4.2; B + 50.4	El Sk	17.9 -30.8	24.7 -23.9	28.2 -18.2	30.0 -13.8	32.3 0.7	27.3 19.8
	Az	131.0	145.6	158.0	156.0	186.4	216.4		Az	129.6	144.1	154.5	162.0	185.0	215.5
Greenwich eL:0	EI	19.4	25.5	28.4	28.4	30.9	24.7	Portsmout wL 1.1	EI	19.3	25.6	28.7	30.3	31.7	25.8
B:+51.48	Sk	-28.0	-20.6	-14 7	-14.7	4.0	21.7	B + 50.8	Sk	-29.1	-21.8		-11.2	3.2	
	Az	127.1	141.2	151.3	158.7	181.3	211.9		Az	130.2	144.6	-15.8 154.8	162.1	184.4	21.5 214.1
Swansea wL 4.0	EI	17.3	23.B	27.1	28.8	31.0	26.1	Shettield wL 1.5	EI	17.3	23.2	26.1	27.6	28.9	23.7
B + 51.6	Sk	-29.7	-22.9	-17.3	-13.1	0.8	19.2	B + 53.4	Sk	-27.1	-20.2	-14.7	-10.5	2.6	19.5
Wolverha		-	_	-				Southamp						-	
mpton	Az	129.2	143.6	153.7	161.1	183.5	213.6	eton	Az	129.4	143.8	154.2	161.7	184.7	215.1
wL 2.2	EI	17.5	23.6	26.7	28.2	29.8	24.6	wL:1.38	EI	19.1	25.5	28.6	30.1	31.6	25.8
B + 52.6	Sk	-28.1	-21.2	-15.6	-11.3	2.1	19.6	B:+50.9	Sk	-29.2	-21.9	-15.9	-11.4	2.9	21.3
York	Az	130.9	145.3	155.4	162.6	184.8	214.4								
wL:1.08 B:+53.95	EI	17.2	22.9	25.7	27.1	28.3	23.0								
D.+33.83	Sk	-26.4	-19.6	-14.2	-10.0	2.9	19.4								

*Note: If you are missing the city you are living in, please visit http://www.lyngsat.com/

1

Germany

eL=East Longitude wL=West Longitude B=Latitude Az=Azimuth El=Elevation Sk: Skew

					ast Long		vL=vves		ude B=La	unuu		Azimuth		evation	SK:SK	
			Turk sat				Atlant lebird	Hispa sat			Turk sat				Atlant lebird	Hispa sat
Part			1C,2A	Euro			3	1C,1D			IC,2A	Euro			3	IC,1D
Act 186.0 182.2 183.2 181.1 191.2 232.2 Employer 18.4 18.5 18.5 20.5 20.5 31.5 30.0 27.7 27.5 28.5 28.5 31.5 30.0 27.7 27.5 28.5 28.5 31.5 30.0 27.7 27.5 28.5 28.5 28.5 31.5 27.9 28.5				28.2								28.2				
B + 60.8 B 22.8 26.2 30.5 31.5 30.9 22.7 8					_				Frankfurt							
Heart Hear		AZ														
Asien Alen Alen Alen Alen Alen Alen Alen Al		EI	22.8	28.2	30.5	31.5	30.9	22.7	eL 8.7	El	24.5	29.6	31.7	32.4	31.1	22.0
All	B + 50.8	Sk	-25.6	-17.1	-10.5	-5.6	8.9	25.7	B + 50.1	Sk	-24.7	-15.6	-8.7	-3.6	11.2	27.6
B-1 B-1 B-2 B-2 B-2 B-3 B-3 B-3 B-3 B-3 B-3 B-48 B-48	Aalen	Az	140.4	156.5	168.0	176.2	199.7	228.2		Az	142.1	158.5	170.1	178.3	201.9	230.0
B+484 Sk.		EL	26.2	31.3	33.3	33.9	32.1	22.2		EI	27.3	32.2	34.0	34.4	32.1	21.6
Second Property of the Color																
Property Property	Aschaffenh															
Bart																
Az 1411 157.4 169.0 177.2 200.9 289.2 Hambarg et 10.9 El 26.9 32.0 389.3 34.4 32.4 221. Hambarg et 10.9 El 26.9 32.0 389.3 34.4 32.4 221. Hambarg et 10.9 El 26.9 32.0 389.3 34.4 32.4 221. Hambarg et 10.0 El 22.2 26.6 28.3 28.8 273 18.8 26.4 14.8 273. H. 19. 13.7 30.2 H. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19		$\overline{}$					31.2								29.4	20.4
El 269 320 339 344 32.4 22.1 54.100 54.401 54.	B + 50.0	Sk							D+51.5	Sk						
El 269 320 33.9 34.4 32.4 22.1 8.6 10.0 El 22.2 26.5 28.3 28.8 27.3 18.8 Badd Az 140.6 156.7 167.8 175.8 198.7 20.2 El Estelad El 24.3 29.2 31.1 31.7 30.1 20.9 Badd Az 139.4 155.2 168.3 174.3 197.5 226.1 Badd Az 139.4 155.2 168.3 174.3 197.5 226.1 Badd Az 139.4 155.2 168.3 174.3 197.5 226.1 Badd Baden Az 139.7 153.5 164.5 172.4 195.5 224.4 Badd Baden Baden	Augsburg	Az	141.1	157.4		177.2	200.9	229.2	Hamburg	Az		157.8	168.7	176.3	198.5	226.2
Bell Az 140.8 156.7 157.8 175.8 198.7 227.0 Helde Helde	eL 10.9	EI	26.9	32.0	33.9	34.4	32.4	22.1		El	22.2	26.6	28.3	28.8	27.3	18.8
Bade Herseled He	B + 48.4	Sk	-24.6	-14.8	-7.3	-1.9	13.7	30.2	B + 53.6	Sk	-21.3	-13.0	-6.7	-2.2	10.B	25.4
Heritard et	Bad	Az	140.8	156.7	187.8	175.8	198.7	227.0	Heide	Az	141.4	156.9	167.6	175.2	197.2	225.1
Bernom Az 135.4 15.2 15.5 16.5 17.5	Hersfeld								eL 9.1							
Bade Ray Ray		-							B + 54.2							
Horburg El 244 29.5 31.6 32.3 31.0 21.9 21.8 21.8 32.5 32.5 33.2 31.9 22.5 Baston Az 137.9 135.5 184.5 172.4 105.5 224.4 Batter El 23.5 28.8 31.0 31.8 31.0 22.4 Batter El 25.4 30.8 33.1 33.9 32.6 32.2 Batter Batter El 25.4 30.8 33.1 33.9 32.6 23.2 Batter El 25.4 30.8 33.1 33.9 32.6 32.2 Batter El 25.4 30.8 33.1 33.9 32.6 32.2 Batter El 25.4 30.8 33.1 33.9 32.6 30.8 21.0 Batter El 25.4 30.8 33.1 33.9 32.6 30.8 21.0 Batter El 25.4 30.8 33.1 33.9 32.6 30.8 21.0 Batter El 25.4 30.8 33.1 33.9 32.6 30.8 21.0 Batter El 25.4 30.8 33.1 33.9 32.6 30.8 21.0 Batter El 25.4 30.8 33.1 33.9 32.6 30.8 21.0 Batter El 25.4 30.8 33.8 30.8 21.0 Batter El 25.4 30.8 33.8 32.3 30.8 21.0 Batter El 25.4 30.8 32.3 32.3 30.8 21.0 Batter El 25.4 30.8 30.8 32.3 30.8 21.0 Batter El 25.4 30.8 30.8 32.3 30.8 21.0 Batter El 25.4 30.8 30.8 32.3 30.8 21.0 Batter El 25.5 30.5 32.3 32.3 30.8 22.5 Batter El 25.5 30.5 32.3 32.8 30.8 21.0 Batter El 25.5 30.5 32.3 32.8 30.8 21.0 Batter El 25.4 30.8 30.8 21.0 Batter El 25.4 30.8 30.8 21.0 Batter El 25.5 30.5 30.8 30.8 30.8 21.0 Batter El 25.5 30.8 30.8 30.8 30.8 30.8 30.		Az	139.4	155.2	186.3	174.3	197.5	226.1	Heidelber	Az	139.1	155.0	166.3	174.3	197.B	226.5
B + 50																
Bard Az 137.9 153.5 184.5 172.4 105.5 224.4		-							eL 8.7							
Percent Perc									B + 49.4							
El 23.5 28.8 31.0 31.8 31.0 22.4 et 1.5 El 25.7 30.3 31.9 32.3 30.2 20.2		Az		_					Hof	Az						
Baseling Baseling		EI	23.5	28.8	31.0	31.8	31.0	22.4	eL 11.9	El	25.7	30.3	31.9	32.3	30.2	20.2
Barbarg El 25.4 30.8 33.1 33.9 32.6 23.2 El 7.0 El 23.1 28.3 30.5 31.4 30.6 22.2 28.4 48.8 Sk 226.0 16.7 9.5 4.2 11.3 28.4 B+51.0 Sk 24.9 -16.3 9.7 4.8 9.6 22.0 22.8 28.0 28.5 25.6 30.5 32.3 32.8 30.8 21.0 El 23.1 28.3 30.5 177.1 199.2 226.8 28.0 28.5 28.6 18.3 28.6 28.0 28.5 28.6 18.3 28.6 2		Şk	-25.2		-9.8	-4.8	9.8	26.4	B + 50.3	Şk		-13.1	-6.0		13.6	29.0
Bambard File 25.4 30.8 33.1 33.9 32.6 23.2 el. 7.0 El. 23.1 28.3 30.5 31.4 30.6 22.2		Az	138.4	154.2	165.6	173.7	197.4	226.3	Köln	Az	137.9	153.4	164.4	172.2	195.2	224.1
Barbarg All All		EI	25.4	30.8	33.1	33.9	32.6	23.2		El	23.1	28.3	30.5	31.4	30.6	22.2
B		Sk	-26.0	-16.7	-9.5	-4.2	11.3	28.4		Sk	-24.9	-16.3	-9.7	-4.8	9.6	26.0
B + 10.9	Bambero	Az	141.7	157.8	169.2	177.2	200.4	228.5	Lübeck	Az	143.0	158.7	169.5	177.1	199.2	226.B
Bergin Az 146.2 162.0 172.9 180.5 202.3 229.3 229.3 4.141.7 185.1 189.8 178.1 201.8 239.0 4.141.4 4.14 4.68 4.15 4.14 4.68 4.15 4.14 4.15 4.1		El	25.6	30.5	32.3	32.8	30.8	21.0		El	22.2	26.4	28.0	28.5	26.8	18.3
Bergin R 146.2 146.2 146.5 172.9 180.5 202.3 229.3 München R 141.7 158.1 169.8 178.1 201.8 202.0 R 54.4 Sk 149.9 110.4 4-11 0.3 12.7 26.2 8 48.1 Sk 24.4 14.4 6.8 1.3 14.4 30.8 R 14.5 Sk 149.5 161.6 172.7 180.5 202.8 230.0 Münster E 24.4 24.4 24.4 24.4 24.7 24.5 24.5 24.5 24.4 24.4 24.4 24.7 24.5	B + 49.9	Sk	-23.5	-14.1	-6.9	-1.8	13.0	28.9	B + 53.9	Sk	-20.8	-12.4	-6.2	-1.7	11.2	25.4
B F F F F F F F F F	Bernen	Az		162.0	172.9	180.5	202.3	229.3	München	Az	141.7	158.1	169.8		201.8	230.D
Berlin RZ 145.5 161.6 172.7 180.15 202.8 230.0 B + 52.5 5k 2-0.2 -111.1 -14.4 0.3 13.6 27.8 Bingen RZ 139.2 155.3 166.8 175.0 193.9 227.7 Bingen RZ 139.2 155.3 166.8 175.0 193.9 227.7 Berlin RZ 143.0 153.5 184.5 172.4 195.5 224.8 B + 50.7 5k -22.1 164.4 -9.7 -4.8 9.7 263.8 B + 53.1 5k -22.1 164.9 -9.7 -4.8 197.1 225.2 B + 50.8 B + 53.1 5k -22.4 140.0 -7.7 -3.2 10.2 252.5 B + 50.8 5k -22.4 140.0 -7.7 -3.2 10.2 252.5 B + 50.8 5k -22.4 140.0 -7.7 -3.2 10.2 252.5 B + 50.8 5k -22.4 140.0 -7.7 -3.2 10.2 252.5 B + 50.8 5k -22.8 27.9 30.0 31.5 31.8 29.4 19.4 B + 60.8 5k -22.8 -7.8 30.0 31.5 31.8 29.4 19.4 B + 50.8 5k -23.0 -12.9 -5.4 0.0 15.1 30.8 B + 48.8 5k -23.0 -12.9 -5.4 0.0 31.5 31.8 29.4 19.4 B + 60.8 5k -23.0 -12.9 -5.4 0.0 30.8 29.9 21.5 B + 51.5 5k -24.3 15.7 -9.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 31.1 30.3 22.1 B + 60.8 5k -22.8 27.9 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 B + 63.5 5k -22.8 -2.8 -2.8 -2.8 -2.8 -2.8 B + 51.5 5k -24.3 -15.7 -9.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 9.8 25.8 B + 51.5 5k -22.8 26.0 30.2 -4.4 -4.4 -4.4 -4.4 -4.4 -4.4 -4.4 -4.4 -4.4 -4.4 B - 2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 B - 51.5 5k -2.5 -2.5		EI	22.7	26.5	27.7	27.9	25.7	16.7		EI	27.4	32.4	34.2	34.7	32.4	21.9
Berlin el 13.4 El 24.4 28.4 29.7 30.0 27.6 18.0 El 24.7 29.9 31.9 32.6 31.3 22.0	B + 54.4	Sk	-18.9	-10.4	-41	0.8	12.7	26.2	B + 48.1	Sk	-24.4	-14 4	-6.8	-13	14.4	30.8
Bingen Az 192, 195, 3 186, 8 175, 0 196, 9 277, 7 196, 0 278, 8 186, 1 175, 0 196, 9 277, 8 186, 1	Redin								Müneter							
B + 62.5 Sk						30 D	27.6				24.7	29.9	31.9	32.6	31.3	
Bingen Rz 139.2 155.3 166.8 175.0 198.9 227.7 Rz 143.5 159.4 170.6 178.4 201.0 228.6 Rz Rz Rz Rz Rz Rz Rz R										Sk		1 1				
eL 9.3 El 26.4 31.8 33.9 34.6 33.0 23.1 eL 11.8 EL 24.4 28.7 30.3 30.7 28.7 19.2 B + 44.1 Sk 25.9 16.2 -8.8 -3.3 12.5 29.6 Sk -21.6 -12.5 -5.8 -0.9 12.8 27.7 B - 50.7 El 23.3 28.6 30.8 31.6 30.8 22.3 84.8 153.5 18.1 173.3 197.1 22.6 88.9 -23.3 28.6 30.8 31.6 30.8 22.3 84.8 153.5 18.1 173.3 197.1 22.6 88.9 -28.3 185.1 173.3 197.1 22.6 88.9 23.3 88.9 -3.3 18.8 22.3 88.9 23.0 88.9 23.3 88.9 -3.3 38.2 23.3 88.9 23.2 88.9 23.3 88.9 23.3 48.8 44.4 11.3 28.6 88.9 48.9 79.8 48.0 48.9 48.9 <td>Dingon</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Mionburg</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Dingon								Mionburg							
B + 48.1 Sk -25.9 -16.2 -8.8 -3.3 12.5 29.6 29.																
Berner Az 136.0 153.5 164.5 172.4 195.5 224.3 Offenburg Az 137.9 153.8 165.1 173.3 197.1 225.2																
Second Column																
B+50.7		-						_								
Remement Az 140.7 158.2 167.1 174.8 197.1 225.2 Passal Az 144.1 160.7 172.4 180.6 204.0 231.7																
B B C C C C C C C C																
B + 53.1 Sk																
Chemnitz Az 144.5 160.8 171.9 179.9 202.6 230.2 230.																
Character Char																
B + 60.8 Sk -21.6 -12.2 -5.1 -0.1 14.1 29.0 B + 64.1 Sk -19.8 -11.4 -5.1 -0.7 12.0 25.9																
Description Az 143.6 160.1 171.7 180.0 203.3 231.1																
El 13.0 El 27.4 32.1 33.7 34.0 31.4 20.7 El 27.4 32.1 33.7 34.0 31.4 20.7 El 27.4 32.1 33.7 34.0 31.5 El 27.4 32.1 33.7 34.0 31.5 El 27.4 32.1 33.6 32.4 21.5 El 27.5 El 2																
B + 48.8 Sk -23.0 -12.9 -5.4 0.0 15.1 30.8 B + 47.9 Sk -23.9 -13.6 -5.8 -0.3 15.4 31.5 Dottmund eL 7.5 El 22.8 27.9 30.0 30.8 29.9 21.5 eL 10.0 El 26.5 31.7 39.7 34.4 32.6 22.6 B + 51.5 Sk -24.3 -15.7 -9.2 -4.4 9.8 25.8 Düsseldorf Az 137.8 153.3 184.2 172.0 195.0 223.8 Wesel eL 6.8 El 22.8 27.5 29.7 30.6 29.9 21.8 Düsseldorf 22.8 28.0 30.2 31.1 30.3 22.1 81.8 El 22.3 27.5 29.7 30.6 29.9 21.8	<u>Deggendorf</u>	-														
Dortmund Az 138.7 154.2 185.1 172.9 195.8 224.4																
al.7.5 El 22.8 27.9 30.0 30.8 29.9 21.5 el.10.0 El 26.5 31.7 33.7 34.4 32.6 22.6 B+51.5 Sk -24.3 -15.7 -9.2 -4.4 9.8 25.8 B+48.4 Sk -25.2 -15.5 -9.1 -2.7 12.9 29.7 Düsseldorf al.6.8 El 22.8 184.2 172.0 195.0 223.8 22.8 22.2 137.8 153.2 164.1 171.9 194.7 223.5 al.6.8 El 22.8 28.0 30.2 31.1 30.3 22.1 al.6.8 El 22.3 27.5 29.7 30.6 29.9 21.8																
B+51.5 Sk -24.3 -15.7 -9.2 -4.4 9.8 25.8 B+48.4 Sk -25.2 -15.5 -8.1 -2.7 12.9 29.7 Düsseldorf el.6.8 El. 22.8 28.0 30.2 31.1 30.3 22.1 el.6.6 El. 22.3 27.5 29.7 30.6 29.9 21.8									Ulm							
Düsseldorf Az 137.8 183.3 184.2 172.0 195.0 223.8 Wesel Az 137.8 183.2 164.1 171.9 194.7 223.5 eL 6.8 El 22.8 28.0 30.2 31.1 30.3 22.1 eL 6.8 El 22.3 27.5 29.7 30.6 29.9 21.8																
el 6.8 El 22.8 28.0 30.2 31.1 30.3 22.1 el 6.8 El 22.3 27.5 29.7 30.6 29.9 21.8																
SK -24.9 -10.4 -9.8 -5.0 9.3 25.7 5 T 5 1 5 K -24.6 -16.2 -9.8 -5.0 9.0 25.2																
	a+91.2	Sk	-24.9	-16.4	-9.8	-5.0	9.3	25.7	3 T 01.7	Sk	-24.6	-16.2	-9.8	-5.0	9.0	25.2

^{*}Note: If you are missing the city you are living in, please visit http://www.lyngsat.com/

France

eL=East Longitude wL=West Longitude B=Latitude Az=Azimuth El=Elevation Sk: Skew

			eL=E			wL=vve:		tude B=La	unue		Azımıtı		evalion	SK : SK	
		Turk sat	Astra 2A/2B/ 2D	Astra 1E-1H /1KR/	Hot bird 2/6/7A	Atlant icbird	Hispa sat			Turk sat	Astra 2A/2B/ 2D	Astra 1E-1H /1KR/	Hot bird 2/6/7A	Atlant icbird	Hispa sat
		1C,2A	Euro bird 1	2C	/8	3	10,1D			1C,2A	Euro bird 1	2C	/8	3	1C,1D
		42.0 E	28.2 E	19.2 E	13.0 E	5.0 W	30.0 W			42.0 E	28.2 E	19.2 E	13.0 E	5.0 W	30.0 W
Amiono	Az	132.6	147.6	158.3	166.1	189.5	219.5	Mulhouse	Az	136.9	152.7	164.1	172.4	198.5	225.9
Amiens eL 2.3	EI	21.6	27.7	30.6	31.9	32.4	25.1	eL 7.8	EI	25.8	31.6	34.1	35.0	33.9	24.5
B + 49.9	Sk	-28.3	-20.2	-13.8	-8.9	6.1	24.2	B + 4/./	Sk	-27.4	-18.0	-10.6	-5.1	11.0	28.9
Angers	Az	128.7	143.3	154.0	161.9	186.0	217.4	Nancy	Az	136.2	151.7	162.9	171.0	194.8	224.3
wl 0.6	FI	21.8	28.7	32.2	33.8	35.3	28.4	el 6.2; B+	FI	24.5	30.2	32.8	33.7	33.1	24.3
B + 47.5	Sk	-31.8	-23.8	-17.2	-12.1	4.0	24.2	48.7	Sk	-27.2	-18.2	-11.2	-5.9	9.7	27.4
Angouleme	Λz	128.6	143.3	154.3	162.3	187.2	219.1	Nantos	Λz	127.6	142.1	152.7	160.5	184.6	216.4
eL 0.2	El	23.4	30.6	34.2	35.9	37.2	29.6	WL 1.6	El	21.4	28.5	32.1	33.9	35.6	29.1
B + 45.7	Sk	-33.1	-24.7	-17.7	-12.3	5.1	26.2	B i 47.2	Sk	-32.5	-24.7	-18.2	-13.1	3.1	23.8
Arras	Az	133.3	148.3	159.0	166.8	190.1	219.9	Nizza	Az	135.0	151.0	163.0	171.7	197.5	227.8
eL 2.8 B + 50.3	El	21.6	27.6	30.4	31.6	31.9	24.6	eL 7.3 B + 43.7	EI	28.9	35.4	38.3	39.3	38.1	27.4 32.4
	Sk	-27.7 128.8	-19.6	-13.2	-8.4	6.4 189.4	24.2 221.8		Sk	-30.8	-20.5 146.3	-12.2 157.2	-6.0	12.6 189.2	
Bayonne eL 1.5	Az El	25.8	143.7 33.3	155.1 37.0	163.5 38.7	39.6	30.9	Orleans eL 1.9	Az El	131.4 22.8	29.4	32.5	165.1 33.9	34.6	220.0 27.0
B + 43.3	Sk	-34.6	-25.5	-17.9	-12.0	6.9	29.0	B + 47.9	Sk	-30.2	-21.8	-15.1	-9.9	6.2	25.5
Belfort	Az	136.4	152.1	163.5	171.7	195.8	225.4	Paris	Az	132.2	147.2	15B.1	166.0	189.7	220.0
eL 6.8	EI	25.6	31.5	34.0	35.D	34.1	24.8	eL 2.3	EI	22.4	28.7	31.7	33.1	33.5	26.0
B + 47.6	Sk	-27.7	-18.4	-11.1	-5.B	10.6	28.7	B + 48.9	Sk	-29.2	-20.9	-14.2	-9.2	6.3	25.0
Bordeaux	Az	127.5	142.1	153.0	161.1	186.3	218.7	Quimper	Az	125.5	139.6	149.9	157.4	181.1	213.1
wL 0.6	El	23.5	31.0	34.8	36.6	38.2	30.7	wL 4.2; B	El	19.4	26.7	30.5	32.4	34.9	29.5
B + 44.8	Sk	-34.2	-25.8	-18.8	-13.3	4.4	26.3	+ 48.0	Sk	-33.0	-25.7	-19.6	-14.9	0.7	21.4
<u>Boulogne</u>	Az	132.3	147.1	157.7	165.4	184.4	214.9	Reims	Az	134.1	149.3	160.3	168.2	191.8	221.7
wL 1.6	EI	20.8	26.8	29.6	31.0	31.8	26.1	eL 4.0	EI	23.0	29.0	31.7	32.9	32.9	24.9
B + 50.7	Sk	-27.9	-20.1	-13.9	-9.2	2.8	21.3	B + 49.3	Sk	-27.9	-19.4	-12.7	-7.7	7.7	25.7
Brest wL 4.5	Az El	125.3	139.3	149.6 30.0	157.1 31.9	180.6	212.5	Rennes wL 1.7	Az El	127.9 20.8	142.3	152.9	160.6 32.9	184.5 34.7	215.9
B + 48.4	Sk	19.0 -32.8	26.2 -25.6	-19.7	-15.0	34.4 0.4	20.9	B + 48.1	Sk	-31.8	27.7 -24.1	31.2 -17.7	-12.8	3.0	28.4
Caen	Az	129.7	144.3	154.8	162.6	186.1	216.9	Rouen	Az	131.2	146.0	156.7	164.5	188.0	218.4
WL D.4	EI	20.8	27.3	30.6	32.2	33.4	26.9	eL 1.1	EI	21.3	27.7	30.7	32.2	33.0	26.0
B + 49.2	Sk	-30.2	-22.5	-16.1	-11.3	4.0	23.1	B + 49.5	Sk	-29.3	-21.3	-14.9	-10.0	5.2	23.8
Onlain	Az	132.7	147.6	158.2	165.9	188.9	218.7	St	Az	132.8	148.2	159.6	168.0	193.1	223.8
Calais eL 1.9	EI	20.7	26.6	29.5	30.7	31.3	24.4	Etienne	EI	28.0	32.6	35.7	37.0	36.9	27.7
B + 51.0	Sk	-27.6	-19.8	-13.5	-8.9	5.6	23.2	eL 4.4	Sk	-31.0	-21.7	-14.1	-8.4	9.2	29.1
								B + 45.4							
Chalons-	Az	134.3	149.6	160.6	168.6	192.3	222.2	<u>St</u>	Az	127.1	141.4	151.9	159.7	183.8	215.7
sur-Mame eL 4.3	EI	23.3	29.3	32.1	33.2	33.1	25.0	Nazaire wL 2.2	EI	21.0	28.2	31.8	33.7	35.6	29.3
B + 49.0	Sk	-28.0 135.0	-19.4 150.3	-12.6 161.2	-7.5 169.1	8.0 192.6	26.1 222.2	B + 47.3	Sk	-32.8 133.6	-25.1 148.7	-18.6 159.5	-13.6 167.3	2.6 190.8	23.3 220.6
Charleville- Mezleres	EI	22.9	28.7	31.4	32.5	32.2	24.2	St Quentin	EI	22.2	28.1	30.9	32.1	32.3	24.8
eL 4.7								eL 3.3							
B + 49.7	Sk	-27.2	-18.7	-12.0	-7.D	8.1	25.8	B + 49.8	Sk	-27.8	-19.6	-13.0	-8.1	7.0	24.9
Clermont-	Λz	131.6	146.8	158.0	166.3	191.2	222.3	Straßburg	Λz	137.8	153.6	164.9	173.0	195.8	225.9
Ferranc	EI	25.0	31.8	35.0	36.4	36.7	28.1	eL 7.8	El	25.3	30.9	33.2	34.0	32.9	23.6
eL 3.1 B + 45.8	Sk	-31.5	-22.5	-15.1	-9.5	7.8	28.0	B + 48.6	Sk	-26.4	-17.1	-9.9	-4.6	11.1	28.4
Colmar	Az	137.1	152.9	164.2	172.4	196.4	225.7	Toulouse	Az	128.9	143.8	155.1	163.5	189.3	221.6
eL 7.3	El	25.5	31.2	33.7	34.5	33.5	24.2	eL 1.5	El	25.5	33.0	36.7	38.4	39.3	30.7
B + 48.1	Sk	-27.1	-17.7	-10.5	-5.1	10.8	28.5	B + 43.6	Sk	-34.3	-25.3	-17.8	-11.9	6.8	28.8
Epinal	Az	136.2	151.8	163.1	171.2	195.2	224.7	Tours	Az	129.9	144.7	155.5	163.4	187.7	218.9
eL 6.5 B + 48.2	El Sk	25.0 -27.5	30.8 -18.4	33.4 -11.2	34.3 -5.B	33.6 10.1	24.6 28.0	eL 0.7 B + 47.4	El Sk	22.6 -31.3	29.3 -13.0	32.7 -16.3	34.3	35.3 5.2	28.0 25.2
	Az	130.3	144.9	155.5	163.2	186.7	217.3	Verdun	Az	135.5	150.9	162.0	-11.1 170.0	193.6	223.2
Le Havre eL 0.1	EI	20.8	27.2	30.4	31.9	33.0	26.4	eL 5.4	EI	23.7	29.5	32.1	33.2	32.7	24.3
B + 49.5	Sk	-29.7	-21.9	-15.6	-10.8	4.3	23.2	B + 49.2	Sk	-27.3	-18.5	-11.7	-6.5	8.9	26.6
Limoges	Az	129.8	144.7	155.7	163.8	188.7	220.2	Marseille	Az	132.7	148.5	160.3	166.9	194.9	226.0
eL 1.3	EI	23.9	31.0	34.4	36.0	36.9	29.0	eL 5.4	EI	28.1	35.0	38.2	39.5	39.0	28.8
B + 45.8	Sk	-32.4	-23.6	-16.7	-11.2	6.1	26.8	B + 43.3	Sk	-32.3	-22.4	-14.2	-8.0	10.8	31.6
Lorient	Λz	126.1	140.3	150.7	158.3	182.2	214.1	<u>Metz</u>	Λz	136.3	151.8	163.0	171.0	194.6	224.0
wL 3.4	El	20.0	27.2	31.0	32.9	35.1	29.4	eL 6.2	El	24.1	29.8	32.3	33.3	32.6	24.0
B + 47.8	Sk	-32.9	-25.4	-19.2	-14.4	1.5	22.1	B i 49.1	Sk	-26.9	-18.0	-11.0	-5.9	9.6	27.1
Lyon	A2	133.4	148.9	160.4	168.7	193.6	224.2	Montpe lier	A2	131.3	146.8	158.3	166.9	192.8	224.2
eL 4.8	EI	26.0	32.5	35.5	36.7	36.4	27.2	eL 3.9	EI	27.0	34.1	37.5	38.9	38.9	29.4
B + 45.8	Sk	-30.5	-21.1	-13.6	-7.9	9.4	29.0	B + 43.6	Sk	-33.0	-23.4	-15.5	-9.5	9.2	30.4

*Note: If you are missing the city you are living in, please visit http://www.lyngsat.com/

Italy

eL=East Longitude wL=West Longitude B=Latitude Az=Azimuth El=Elevation Sk : Skew

				ist Long		vr=wes		tude B=La	unuu		Azimutn		evation		ew
		Turk sat	Astra 2A/2B/	Astra 1E-1H	Hot bird	Atlanti cbird	Hispa sat			Turk sat	Astra 2A/2B/2	Astra 1E-1H	Hot bird	Atlant icbird	Hispa sat
		1C,2A	2D Euro	/1KR/ 2C	2/6/7A /8	3	1C,1D			1C,2A	D Euro	/1KR/ 2C	2/6/7 A /8	3	1C,1D
		42.0	bird 1 28.2	19.2	13.0	5.0	30.0			42.0	bird 1 28.2	19.2	13.0	5.0	30.0
		E	E	E	E 400 7	W	W	1 2		E	E	E	E	W	W
Ancona	Az	141.8	159.2	171.8	180.7	205.9	294.0	La Spezia	Az	137.9	154.5	166.7	175.5	200.8	230.1
eL 13.5	且	32.2	37.6	39.4	39.8	36.4	23.7	eL 9.8	EI	29.9	35.9	38.3	39.0	37.0	25.6
B + 43.6	Sk	-21.6	-14.9	-6.0	0.5	18.4	35.9	B + 44.1	Sk	-28.8	-18.0	-9.5	-3.3	14.8	33.5
Arezzo	Az	139.8	156.9	169.4	178.3	203.7	292.5	<u>Lecce</u>	Az	145.7	164.7	178.4	188.0	213.5	239.9
eL 11.8	且	31.5	37.2	39.3	39.9	37.1	24.9	eL 18.2	EI	37.3	42.2	43.4	43.1	37.6	22.5
B + 43.5	Sk	-27.9	-16.6	-7.7	-1.2	16.9	35.1	B + 40.3	Sk	-25.5	-11.6	-1.2	6.1	24.9	41.3
Asciano eL 11.5	Az	139.3	156.4	168.9	177.9	203.4 37.4	232.3	Livorno	Az	136.1	154.9	167.2	175.1	201.7	230.9
B + 43.2	且	31.5	37.4	39.5	40.1		25.2	eL 10.3 B + 43.5	EI	30.6	36.7	39.1	39.8	37.5	25.8
	Sk	-28.4	-17.0 159.0	-8.1	-1.6 180.8	16.8 206.3	35.2		Sk	-29.0	-18.0	-9.3 166.1	-2.8 174.7	15.5 199.5	34.3
Ascoli Piceno eL 13.6	Az El	141.5 32.9	38.4	171.7 40.2	40.6	37.1	234.4	Milano eL 9.2	Az El	137.9	154.2 34.4		37.5		228.8
B + 42.9	Sk		-15.2			18.9		B + 45.5	Sk	28.5 -28.0		36.8 +9.7	-2.8	35.8	25.1
Ascoli	Az	-27.1 142.9	161.2	-6.0 174.4	0.6 183.8	209.6	36.6 237.1	D + 40.0	Az	141.2	-17.8 159.2	172.5	181.9	13.6	31.8 236.1
Satriano	E		40.7	42.3				Napoli	EI		40.7		42.8		
eL 15.5		35.3			42.3	38.0	23.9	eL 14.3		34.9	40.7	42.6		38.8	24.9
B + 41.2	Sk	-27.0	-14.1	-4.2	2.9	21.8	39.2	B + 40.8	Sk	-28.3	-15.6	-5.7	1.5	21.0	39.0
Bari	Az	144.5	163.1	176.5	185.9	211.4	238.4	Padova	Az	140.5	157.2	169.4	178.0	202.8	231.3
eL 16.9	E	36.0	41.1	42.4	42.3	37.5	23.0	eL 11.6	EI	29.8	35.3	37.3	37.8	35.3	23.8
B + 41.1	Sk	-25.9	-12.7	-2.7	4.4	23.2	39.9	B + 45.3	Sk	-26.6	-15.8	-7.5	-1.4	15.8	33.3
Barletta	Az	143.9	162.3	175.6	185.0	210.5	237.7	Palermo	Az	138.5	156.8	170.6	180.6	208.3	236.8
eL 16.3	E	35.5	40.7	42.2	42.1	37.5	23.3	eL 13.4	El	36.7	43.2	45.4	45.8	41.8	27.1
B + 41.3	Sk	-26.3	-13.2	-3.3	3.7	22.5	39.5	B + 38.1	Sk	-31.4	-18.1	-7.4	0.5	21.9	41.2
Bergamo	Az	138.5	154.9	166.8	175.3	200.1	229.2	Parma	Az	138.8	155.4	167.5	178.2	201.3	230.3
eL 9.7	E	28.5	34.3	36.6	37.3	35.4	24.6	eL 10.3	EI	29.6	35.4	37.7	38.3	36.1	24.8
B + 45.7	Sk	-27.5	-17.2	-9.2	-3.2	13.9	31.9	B + 44.8	Sk	-27.9	-17.2	-8.8	-2.7	14.9	33.1
Bologna	Az	139.8	156.6	16B.B	177.6	202.7	231.4	Pavia	Az	137.7	154.1	166.0	174.6	199.6	229.0
eL 11.3	E	30.4	36.0	38.1	38.7	36.2	24.5	eL 9.2	EI	28.7	34.7	37.1	37.9	36.1	25.3
B + 44.5	Sk	-27.5	-16.5	-7.9	-1.7	15.9	33.9	B + 45.2	Sk	-28.3	-18.0	-9.8	-3.8	13.7	32.1
Bolzano	Az	140.7	157.3	169.2	177.7	202.0	230.5	Pesaro	Az	141.2	15B.5	170.9	179.8	204.9	233.2
eL 11.3	ы	28.7	34.0	36.0	36.5	34.2	23.1	eL 12.9	El	31.6	37.1	39.0	39.4	36.3	23.9
B + 46.5	Sk	-25.9	-15.4	-7.4	-1.6	14.9	32.1	B + 43.9	Sk	-26.8	-15.3	-6.5	-0.1	17.7	35.3
Brescia	Az	139.1	155.6	167.6	176.2	201.0	229.9	Pescara	Az	142.0	159.8	172.6	181.8	207.3	235.2
eL 10.3	Ħ	29.0	34.7	36.9	37.6	35.5	24.4	eL 14.2	El	33.5	39.0	40.7	41.0	37.2	24.0
B + 45.5	Sk	-27.3	-16.8	-8.6	-2.6	14.5	32.4	B + 42.5	Sk	-27.0	-14.8	-5.4	1.3	19.7	37.3
Cagliari	Az	134.4	151.3	164.3	173.9	201.7	232.1	<u>Piacenza</u>	Az	138.1	154.5	166.5	175.2	200.2	229.5
eL 9.1	E	33.3	40.4	43.4	44.4	42.3	29.4	eL 9.6	El	29.1	35.0	37.3	38.1	36.2	25.2
B + 39.3	Sk	-33.6	-21.8	-12.1	-4.7	16.6	37.6	B + 45.0	Sk	-28.2	-17.7	-9.5	-3.4	14.2	32.5
<u>Carpi</u>	Az	139.4	156.1	168.3	177.0	202.0	230.8	<u>Pisa</u>	Az	138.3	155.1	167.3	176.2	201.7	230.9
eL 10.9	Ð	29.9	35.6	37.8	38.4	36.0	24.6	eL 10.4	El	30.5	36.5	38.8	39.5	37.3	25.6
B + 44.8	Sk	-27.5	-15.8	-5.8	1.4	15.4	33.4	B + 43.7	Sk	-28.7	-17.7	-9.1	-2.7	15.5	34.2
Carrara	Az	138.2	154.9	167.1	175.9	201.2	230.5	<u>Roma</u>	Az	139.7	157.2	170.0	179.3	205.3	233.9
eL 10.1	E	30.1	36.1	38.4	39.1	37.0	25.5	eL 12.5	EI	33.1	39.1	41.2	41.6	38.4	25.5
B + 44.1	Sk	-28.6	-17.8	-9.3	-3.0	15.1	33.6	B + 41.9	Sk	-28.8	-16.8	-7.4	-0.6	18.5	37.0
Catania	Az	140.2	159.0	173.2	183.4	211.0	238.7	<u>Taranto</u>	Az	144.5	163.3	176.9	185.4	212.1	239.0
eL 15.1	E	38.2	44.4	46.3	46.5	41.7	26.3	eL 17.2	El	36.7	41.8	43.1	43.0	37.9	23.1
B + 37.5	Sk	-30.5	-16.5	-5.4	2.7	24.1	42.7	B + 40.5	Sk	-26.2	-12.6	-2.4	4.9	23.9	40.7
Catanzaro	Λz	142.9	161.9	175.9	185.8	212.3	239.3	Torino	Λz	136.0	152.1	163.9	172.5	197.6	227.5
eL 16.6	EI	37.8	43.4	44.9	44.8	39.7	24.4	eL 7.7	EI	28.0	34.2	36.9	37.8	36.6	26.2
B + 38.9	Sk	-28.0	-14.0	-3.2	4.5	24.5	42.0	B + 45.1	Sk	-29.3	-19.3	-11.3	-5.3	12.4	31.4
Cesaro	Λz	139.8	158.5	172.6	182.7	210.2	238.1	Trento	Λz	140.3	156.9	168.9	177.4	201.9	230.5
eL 14.6	EI	37.7	43.9	45.9	46.1	41.6	26.4	eL 11.1	EI	28.9	34.4	36.4	37.0	34.6	23.5
B + 37.8	Sk	-30.7	-16.8	-5.9	2.1	23.4	42.2	B + 46.1	Sk	-26.3	-15.8	-7.7	-1.8	14.9	32.3
Cesena	Az	140.6	157.7	170.0	178.9	204.0	232.5	Trieste	Az	143.0	160.1	172.3	181.0	205.3	233.2
eL 12.2	EI	31.1	36.7	38.6	39.1	36.3	24.2	eL 13.7	EI	30.6	35.6	37.2	37.5	34.3	22.4
B + 44.2	Sk	-27.1	-15.8	-7.1	-0.8	16.9	34.6	B + 45.6	Sk	-24.9	-13.8	+5.4	0.7	17.4	34.1
Casenza	Az	142.7	161.5	175.3	185.1	211.5	238.8	<u>Venezia</u>	Az	141.4	158.2	170.4	179.1	203.7	232.0
eL 16.2	EI	37.3	42.9	44.4	44.4	39.5	24.5	eL 12.3	EI	30.1	35.4	37.3	37.7	34.9	23.3
B + 39.3	Sk	-28.0	-14.2	-3.6	3.9	23.8	41.4	B + 45.4	Sk	-26.0	15.1	-6.7	-0.6	16.3	33.6
Ferrara	Az	140.2	157.1	169.3	178.0	202.9	231.6	<u>Verona</u>	Az	139.8	156.5	168.5	177.2	202.0	230.7
eL II.6	EI	30.2	35.8	37.B	38.4	35.8	24.1	eL 11.0	EI	29.5	35.1	37.2	37.8	35.5	24.1
B + 44.8	Sk	-27.0	-16.1	-7.6	-1.4	16.1	33.8	B + 45.3	Sk	-27.0	-16.3	-8.0	-2.0	11.6	33.0
Firenze	Az	139.3	156.2	168.6	177.5	202.8	231.7	Venise	Az	141.1	158.0	170.2	178.9	203.5	231.9
eL 11.3	E	30.9	36.7	38.9	39.5	36.9	25.0	eL 12.2	EI	30.1	35.5	37.4	37.8	35.1	23.4
B + 43.8	Sk	-28.0	-16.9	-8.2	-1.8	16.3	34.5	B + 45.3	Sk	-26.2	-15.3	-6.9	-0.8	16.3	33.6

^{*}Note: If you are missing the city you are living in, please visit http://www.lyngsat.com/

Spain

eL=East Longitude wL=West Longitude B=Latitude Az=Azimuth El=Elevation Sk : Skew

		Turk sat	Astra 2A/2B/ 2D	Astra 1E-1H /1KR/	Hot bird 2/6/7A	Atlanti cbird	Hisp asat			Turk sat	Astra 2A/2B/2 D	Astra 1E-1H /1KR/	Hot bird 2/6/7A	Atlant icbird	Hispa sat
		1C,2A	Euro bird 1	2C	/8	3	1C,1D			1C,2A	Euro bird 1	2C	/8	3	10,10
		42.0 E	28.2 E	19.2 E	13.0 E	5.0 W	30.0 W			42.0 E	28.2 E	19.2 E	13.0 E	5.0 W	30.0 W
Albacete	Az	123.2	137.4	148.6	157.2	185.0	220.4	La Coruna	Az	119.8	132.7	142.7	150.3	175.0	210.0
wL 1.8	E	26.3	35.2	39.8	42.3	44.7	36.3	wL 8.4	El	19.5	28.1	32.9	35.6	39.9	35.5
B + 39.0	Sk	-40.5	-31.7	-23.9	-17.5	3.9	30.3	B + 43.3	Sk	-39.3	-32.3	-26.2	-21.2	-3.6	21.3
Algeciras	Az	118.4	-37.2	142.1	150.5	179.2	217.7	Las Palmas	Az	106.8	116.3	124.3	131.0	158.7	208.9
wL 5.5	E	25.2	35.1	40.6	43.7	48.1	40.7	WL 15.4	EI	20.2	32.3	39.9	44.7	55.2	53.5
B + 36.2	Sk	-45.2	-37.2	-29.7	-23.4	-0.7	29.5	B + 28.1	Sk	-57.6	-52.3	-46.8	-41.8	-18.7	25.3
Alicante wL 0.5	Az El	124.1 27.6	138.6	150.0 41.0	158.9 43.4	187.2 45.3	222.3 36.0	Madrid wL 3.7	Az El	122.3	136.2 33.0	146.9 37.7	155.1 40.2	182.0 43.3	217.3 36.0
B + 38.4	Sk	-40.4	-31.2	-23.1	-16.4	5.7	31.9	B + 40.4	Sk	-40.1	-31.8	-24.6	-18.6	1.5	27.5
Almeria	Az	121.4	135.4	146.5	155.3	184.2	221.0	Malaga	Az	119.6	133.1	143.8	152.3	181.0	218.7
wL 2.5	FI	27.1	36.5	41.6	44.2	47.2	38.4	WL 4.4	FI	25.7	35.4	40.7	43.6	47.4	39.6
B + 36.9	Sk	-43.0	-34.2	-26.2	-19.6	3.3	31.6	B + 36.7	Sk	-44.2	-35.9	-28.2	-21.9	0.8	30.1
	Az	121.5	135.2	145.8	153.9	180.4	215.9	Palma de	Az	127.9	143.1	155.0	164.0	191.9	225.2
Avila wL 4.7	FI	23.4	32.2	37.0	39.6	43.0	36.3	Mallorca	FI	29.0	37.1	41.1	43.0	43.5	33.2
B + 40.7	Sk	-40.2	-32.3	-25.3	-19.5	0.4	26.4	eL 2.7 B + 39.6	Sk	-37.4	-27.6	-19.0	-12.3	9.2	33.2
Badajoz	Az	118.6	131.7	141.9	149.9	176.8	214.1	Salamanca	Az	120.9	134.3	144.8	152.8	179.0	214.6
wL 7.0	E	22.7	32.2	37.5	40.5	45.0	39.1	wl 5.7	EI	22.6	31.4	36.3	38.9	42.7	36.5
B + 38.8	Sk	-43.2	-35.6	-28.7	-23.0	-2.5	25.9	B + 41.0	Sk	-40.4	-32.7	-25.8	-20.2	-0.8	25.3
Barcelona	Az	128.4	143.6	155.2	163.9	190.8	223.6	San Sebastian	Az	125.4	139.7	150.5	158.7	184.4	217.8
eL 2.2 B + 41.4	EI	27.5	35.3	39.1	40.9	41.6	32.1	wL 2.0 B + 43.3	El	23.6	31.6	35.7	37.8	40.0	32.7
	Sk	-36.0	-26.5	-18.4	-12.3	8.1	31.2		Sk	-36.4	-28.1	-21.0	-15.3	3.2	26.5
Bilbao	Az	124.5	138.6	149.3	157.4	183.0	216.7	Santa Cruz	Az	105.6	114.9	122.5	128.9	154.7	204.3
WL 2.9	E	23.1	31.1	35.4	37.6	40.1	33.2	de la Palma wL 17.8	EI	18.0	30.1	37.6	42.5	53.7	53.9
B + 43.3	Sk	-36.8	-28.8	-21.8	-16.3	2.2	25.8	B + 28.7	Sk	-57.7	-52.7	-47.7	-43.1	-22.0	21.1
Burgos	Az	123.3	137.3	147.9	156.0	182.0	216.3	Santa Cruz	Az	106.4	115.9	123.8	130.4	157.3	207.2
wL 3.7	E	23.1	31.5	35.9	38.3	41.1	34.3	de Tenerife wL 16.3	EI	19.4	31.5	39.0	43.8	54.5	53.5
B + 42.4	Sk	-38.1	-30.1	-23.1	-17.5	1.4	25.9	B + 26.5	Sk	-57.5	-52.3	-46.9	-42.0	-19.8	23.6
Cadiz	Az	117.9	130.8	141.2	149.5	177.8	216.4	Santander	Az	123.7	137.7	148.3	156.2	181.7	215.5
wL 6.3 B + 36.5	E	24.4	34.3	39.8	43.0	47.6	40.9	wL 3.9	EI	22.3	30.5	34.8	37.1	39.9	33.4
	Sk	-45.3 123.2	-37.5 137.6	-30.2 149.0	-24.1	-1.8 186.6	28.5	B + 43.5	Sk Az	-37.1 118.7	-29.3 131.8	-22.5 142.2	-17.0 150.4	1.2	24.9 216.3
Cartagena wL 1.0	Az El	27.7	36.8	41.5	157.8 44.0	46.2	222.3 36.9	Sevilla wL 5.0	EI	24.2	33.9	39.3	42.3	46.7	39.9
B + 37.6	Sk	-41.5	-32.3	-24.1	-17.4	5.2	32.2	B + 37.4	Sk	-44.2	-36.3	-29.1	-23.1	-1.3	28.0
Cordoba	Az	119.9	133.3	144.0	152.3	180.3	217.5	Valencia	Az	124.5	139.0	150.3	159.5	186.8	221.6
wL 4.8	FI	24.8	34.3	39.5	42.3	46.2	38.9	wL 0.7	EI	26.9	35.6	40.0	42.3	44.3	35.3
B + 37.8	Sk	-43.2	-35.1	-27.7	-21.5	0.3	28.8	B + 39.3	Sk	-39.6	-30.2	-22.1	-15.7	5.2	30.9
Gijon	Az	122.1	135.7	146.0	153.8	179.0	213.2	Valladolid	Az	122.0	135.7	146.3	154.3	180.4	215.4
wL 5.7	E	21.1	29.4	33.9	36.4	39.8	34.2	wL 4.7	EI	22.8	31.5	36.1	38.6	41.9	35.5
B + 43.5	Sk	-37.9	-30.4	-23.9	-18.7	-0.7	-0.7	B + 41.6	Sk	-39.3	-31.5	-24.5	-18.9	0.3	25.7
Granada	Az	120.6	134.3	145.2	153.8	182.3	219.4	Vigo	Az	118.8	131.8	141.8	149.4	174.5	210.2
wL 3.6	E	26.1	35.6	40.7	43.5	46.9	38.8	wL 8.7	_EI_	19.8	28.7	33.7	36.5	41.1	36.7
B + 37.2	Sk	-43.3	-34.B	-27.1	-20.6	1.B	30.4	B + 42.2	Sk	-40.5	-33.5	-27.3	-22.4	-4.1	21.8
Hospitalet de Llobregat	Az	128.3 27.5	143.4 35.3	155.0 39.1	163.7 40.9	190.7 41.7	223.5 32.1	Zaragoza wL 1.0	Az El	125.4 25.3	139.9 33.5	151.0 37.7	159.4 39.9	186.0 41.8	219.9 33.6
el 2.1		- 1					- 1	B + 41.6						-	
B + 41.4	Sk	-36.0	-26.6	-18.5	-12.1	B.0	31.1	2.40	Sk	-37.5	-28.7	-51.7	-15.1	4.5	28.6
<u>lbiza</u>	Az	126.3	141.2	153.0	161.9	190.2	224.2								
eL 1.4	E	28.6	37.1	41.3	43.4	44.5	34.5								
B + 38.9	Sk	-38.9	-29.1	-20.7	-13.9	7.9	32.9								

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Switzerland

eL=East Longitude wL=West Longitude B=Latitude Az=Azimuth El=Elevation Sk : Skew Turk Astra 2A/2B/2D Astra Hot Atlanticbird Hispasat bird 2/6/7A 1E-1H sat /1KR/ 2C 1C,1D Euro 1C,2A bird 1 42.0 28.2 19.2 13.0 5.0 30.0 F W F F 172.7 Αz 137.1 153.0 164.5 196.9 226.2 Basel FI 35.1 eL 7.6 26.0 31.8 34.2 34.0 24.4 B + 47.6Sk -27.3 -17.8 -10.4 -4.9 11.3 29.1 Αz 136.7 152.6 164.1 172.4 196.8 226.3 Bern Εl 26.4 32.3 34.8 35.8 34.7 25.0 eL 7.4 B + 47.0-27.9 -18.3 -10.8 -5.2 11.3 29.5 Az 137.3 153.4 165.0 173.4 198.0 227.4 eL 8.2 27.2 33.1 35.5 36.4 35.0 24.9 B + 46.5Sk -27.8 -16.0 -10.3 -4.5 12.2 30.4 162.2 170.6 195.3 225.3 Αz 135.0 150.7 Genf eL 6.2 ΕI 26.3 32.6 35.3 36.4 35.7 26.2 B + 46.2Sk -29.3 -19.8 -12.2 -6.5 10.6 29.5 152.5 172.4 Az 136.7 164.1 196.8 226.3 Köniz eL 7.4 El 26.4 32.3 34.8 35.8 34.7 25.0 B + 46.9 Sk -18.4 29.6 Αz 135.7 151.4 162.9 171.3 195.9 225.7 Lausanne 32.5 35.3 25.7 eL 6.7 El B + 46.5Sk -28.7 -19.2 -11.6 -6.0 10.9 29.6 Αz 137.8 154.0 165.7 198.8 228.1 Locarno eL 8.8 El 27.7 33.6 35.9 36.7 35.2 24.8 B + 46.2Sk -27.7 -17.7 -9.8 -4.0 12.9 31.0 Αz 137.2 153.2 164.7 173.1 197.4 226.8 Luzern eL 7.9 El 26.6 32.4 34.8 35.7 34.5 24.6 B + 47.0-27 B -17.9 -10.4 11.8 29.8 Sk -47 166.8 Αz 139.0 155.2 175.1 199.2 228.1 Sankt Gallen eL 9.4 El 27.0 32.5 34.7 35.4 33.7 23.6 B + 47.4Sk -26.4 -16.5 -3.3 30.3 -8.9 Αz 136.8 152.8 164.3 172.7 197.1 226.6 <u>Thun</u> 25.0 el 7.6 FI 26.7 32.6 35.0 36.0 34.8 B + 46.8Sk -10.7 -28.0 -18.3 -5.1 11.6 29.8 Αz 138.4 154.4 166.0 174.2 198.4 227.4 Winterthun FI 26.6 32.2 34.5 35.3 23.9 eL 8.8 33.8 B + 47.5Sk -26.7 -16.9 -9.4 -3.8 12.3 29.9 Αz 138.1 154.1 165.7 174.0 198.1 227.3 Zürich El 26.6 32.3 34.6 35.4 34.0 24.0 eL 8.6 B + 47.4Sk 29.8 -17.1 -9.6 -4.0 12.2 29.8

*Note: If you are missing the city you are living in, please visit http://www.lyngsat.com/

Norway

eL=East Longitude wL=West Longitude B=Latitude Az=Az muth El=Elevation

		Tuerksat	ASTRA	ASTRA	ASTRA 1E	Eutelsat	Hotbird	Eutelsat	Eutelsat	Intelsa:	Atlantic	HISPASA
		1C.2A	Eurobird 1	1D/3A	-	W2	2/6/7A/8	W1	W3A	Thor 2 - 3	Bird 3	T 10,1D
		42.0 East	28.2 East	23.5 East	19.2 East	16.0 East	13.0 East	10.0 East	7.0 East	1.0 West	5.0 West	30.0 West
Bergen	Az:	139.4	154.1	159.3	164.1	167.8	171.2	174.6	178.1	187.3	191.8	219.2
eL 5.3; B + 60.4	El:	15.0	18.9	19.8	20.5	20.9	21.2	21.4	21.5	21.3	21.0	15.4
	Sk:	-18.8	-12.5	-10.1	-7.8	-6.0	-4.4	-2.7	-1.0	3.6	5.8	18.2
<u>Drammen</u>	Az:	144.4	159.4	164.8	169.7	173.4	176.8	180.3	183.8	193.0	197.5	224.4
eL 10.3; B + 59.8	El:	17.0	20.5	21.2	21.8	22.0	22.2	22.2	22.2	21.5	21.0	14.2
	Sk:	-17.0	-10.1	-7.6	-5.2	-3.3	-1.6	0.2	1.9	6.5	8.7	20.6
Kriet ansand	Az:	141.6	156.6	161.9	166.9	170.6	174.1	177.7	181.2	190.6	195.2	222.6
eL 8.0; B + 58.1	El:	17.7	21.6	22.6	23.2	23.6	23.8	23.9	23.9	23.5	23.0	16.2
	Sk:	-19.2	-12.1	-9.4	-6.9	-6.0	-3.1	-1.2	0.6	5.6	8.0	21.0
Cslo	Az:	145.0	160.0	165.4	170.3	173.9	177.4	180.9	184.3	193.5	198.1	224.9
eL 10.8; B + 59.9	El:	17.1	20.4	21.2	21.7	21.9	22.0	22.0	22.0	21.3	20.7	13.9
	Sk:	-16.7	-9.8	-7.3	-4.8	-3.0	-1.3	0.5	2.2	8.8	9.0	20.8
Stavanger	Az:	139.4	154.3	159.6	164.4	16B.1	171.6	175.0	17B.5	197.9	192.5	220.0
eL 5.8; B + 59.0	El:	16.2	20.3	21.3	22.0	22.5	22.8	22.9	23.0	22.8	22.4	16.4
	Sk:	-19.5	-12.9	-10.4	-7.9	-6.1	-4.3	-2.5	-0.7	4.1	6.4	19.4
Trondhe m	Az:	145.5	160.3	165.4	170.2	173.7	177.1	180.4	183.8	192.7	197.1	223.5
eL 10.4; B + 63.6	El:	13.8	16.7	17.4	17.8	18.0	18.1	18.1	18.1	17.6	17.1	11.3
	Sk:	-14.6	-8.6	-6.4	-4.3	-2.8	-1.3	0.2	1.7	5.6	7.5	17.8

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Denmark

eL-East Longitude wL-West Longitude B-Latitude Az-Azimuth El-Elevation

		Tuerksat	ASTRA	ASTRA	ASTRA 1E	Eutelsat	Hotbird	Eutelsat	Eutalsat	Intelsat	Atlantic	HISPASAT
		1C,2A	Eurobird 1	1D/3A		W2	2/6/7A/8	Wt	W3A	Ther 2 - 3	Bird 3	1C,1D
		42.0 East	28.2 East	23.5 East	19.2 East	16.0 East	13.0 East	10.0 East	7.0 Eas.	1.0 West	5.0 West	30.0 West
Alborg	Az:	143.3	158.5	163.9	169.0	172.8	176.3	179.9	183.5	193.0	197.6	224.9
eL 9.9; B + 57.1	El:	19.3	23.1	23.9	24.6	24.9	25.0	25.1	25.0	24.4	23.8	16.3
	Sk:	-19.0	-11.5	-8.7	-6.0	-3.9	-2.0	-0.1	1.9	7.0	9.4	22.5
Arhus	Az:	143.3	158.7	164.1	169.2	173.0	176.7	180.3	183.9	193.4	198.1	225.5
eL 10.2; B + 56.2	EI:	20.1	24.1	24.9	25.5	25.8	26.0	26.0	26.0	25.3	24.6	16.9
	Sk:	-19.4	-11.7	-8.8	-6.0	-3.9	-1.9	0.1	2.1	7.4	10.0	23.4
Esbjerg	Az:	141.2	156.5	162.0	167.0	170.9	174.5	178.1	181.8	191.4	196.2	224.0
eL 8.5; B + 55.5	EI:	20.0	24.3	25.3	26.0	26.4	26.7	26.8	26.8	26.2	25.6	18.1
	Sk:	-20.8	-13.0	-10.1	-7.3	-5.1	-3.1	-1.0	1.0	6.5	9.1	23.2
Helsingor	Az:	145.8	161.4	166.9	172.1	175.9	179.6	183.2	186.8	196.3	201.0	228.0
eL 12.6; B + 56.1	El:	21.0	24.7	25.4	25.9	26.1	26.2	26.1	26.0	25.0	24.2	15.9
	Sk:	-18.3	-10.2	-7.2	-4.4	-2.3	-0.3	1.8	3.8	9.0	11.5	24.5
Horsens	Az:	143.5	158.8	164.2	169.2	173.0	176.6	190.1	183.7	193.2	197.8	225.1
eL 10.1; B + 57.1	El:	19.3	23.1	24.0	24.5	24.8	25.0	25.0	25.0	24.3	23.7	16.2
	Sk:	-18.9	-11.4	-8.5	-5.8	-3.8	-1.9	0.1	2.0	7.1	9.6	22.6
Kacenhavn	Az:	145.7	161.3	166.9	172.0	175.8	179.5	183.1	186.7	196.3	201.0	228.0
eL 12.6; B + 55.7	El:	21.3	25.0	25.8	26.3	26.5	26.6	26.5	26.4	25.4	24.6	16.2
	Sk:	-18.5	-10.4	-7.4	-4.5	-2.3	-0.3	1.8	3.8	9.1	11.7	24.8
Ka ding	Az:	142.3	157.7	163.2	168.3	172.1	175.8	179.4	183.0	192.7	197.4	225.0
eL 9.5; B + 55.5	El:	20.4	24.6	25.5	26.2	26.5	26.7	26.8	26.7	26.1	25.4	17.7
	Sk:	-20.3	-12.4	-9.4	-6.6	-4.5	-2.4	-0.3	1.7	7.1	9.8	23.6
Odense	Az:	143.2	158.7	164.2	169.4	173.2	176.9	180.5	184.1	193.B	19B.5	226.0
el 10.4; B + 55.4	FI:	20.8	24.9	25.8	26.4	26.7	26.8	26.9	26.8	26.0	25.3	17.3
	Sk:	-19.9	-11.9	-8.9	-6.0	-3.9	-1.8	0.3	2.3	7.8	10.4	24.1
Fanders	Az:	143.2	158.5	164.1	169.1	172.9	176.5	180.1	183.7	193.2	197.9	225.2
eL 10.1; B + 56.5	El:	19.8	23.7	24.8	25.2	25.5	25.7	25.7	25.7	25.0	24.3	16.7
	Sk:	-19.3	-11.6	-8.7	-6.0	-3.9	-1.9	0.1	2.1	7.3	9.8	23.1
<u>Ficakilde</u>	Az:	145.2	160.8	166.3	171.4	175.3	178.9	182.6	186.2	195.8	200.5	227.6
eL 12.1; B + 55.7	El:	21.2	25.0	25.7	26.3	26.5	26.6	26.6	26.4	25.5	24.8	16.4

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Austria

eL=East Longitude wL=West Longitude B=Latitude Az=Azimuth El=Elevation

						eL=East Lo		= West Longi		itude AZ=A		Elevation
		Tuerksat	ASTRA	ASTRA	ASTRA 1E	Eutelsat	Hotbird	Eutelsat	Eutelsat	Intelsat	Atlantic	HISPASAT
		1C,2A	Eurobird 1	1D/3A	40 B E - 4	W2	2/6/7A/8	WI	W3A	Thor 2 - 3	Bird 3	1C,1D
A	0.71	42.0 East 145.4	28.2 East 162.3	23.5 East 168.5	19.2 East 174.2	16.0 East	13.0 East	10.0 East 186.5	7.0 East 190.5	1.0 West 200.9	5.0 West 205.9	30.0 West 233.2
Amstetten eL 14.9; B + 48.1	Az:	28.8	33.3	34.1	34.6	178.5 34.7	182.5 34.7	34.6	34.2	32.7	31.5	20.1
CL 14,5, D + 40,1	Sk:	-22.2	-11.7	-7.6	-3.9	-1.0	1.7	4.4	7.0	13.8	17.0	32.4
Attorsoo	Az:	143.8	160.6	166.6	172.4	176.7	180.7	184.8	188.8	199.3	204.3	232.0
eL 13.5; B + 47.9	El:	28.5	33.2	34.1	34.7	34.9	35.0	34.9	34.6	33.2	32.1	21.0
	Sk:	-23.3	-12.9	-8.9	-5.1	-2.3	0.5	3.2	5.8	12.8	16.0	31.9
Bad lacht	Az:	143.9	160.7	166.7	172.5	176.8	180.9	184.9	188.9	199.4	204.5	232.2
eL 13.6; B + 47.7	El:	28.7	33.4	34.4	34.9	35.1	35.2	35.1	34.8	33.4	32.3	21.0
	Sk:	-23.4	-12.9	-8.9	-5.1	-2.2	0.6	3.3	6.0	12.9	16.2	32.1
Baden	Az:	147.0	164.1	170.2	176.0	180.3	184.3	188.3	192.3	202.6	207.6	234.5
eL 16.2; B + 48.0	El:	29.5	33.6	34.4	34.8	34.9	34.8	34.5	34.1	32.4	31.2	19.4
	Sk:	21.4	10.6	6.5	2.7	0.2	2.9	5.6	8.2	14.9	18.0	33.0
Bludenz	Az:	139.4	155.6	161.6	167.3	171.6	175.7	179.8	183.9	194.6	199.9	228.7
eL 9.8; B + 47.2	El:	27.4	32.9	34.1	35.0	35.5	35.7	35.8	35.7	34.8	33.9	23.5
D	Sk:	-26.3	-16.3	-12.4	-B.6	-5.7	-3.0	-0.2	2.6	9.8	13.3	30.7
Braunau eL 13.1; B + 48.3	Az:	143.4 28.0	160.1 32.7	166.2 33.6	171.8 34.3	176.0 34.5	180.1 34.6	184.1 34.5	188.1 34.3	198.5 33.0	203.6	231.4
BL 13.1, D + 40.3	Sk:	-23.3	-13.1	-9.1	-5.4	-2.6	0.1	2.8	5.4	12.3	15.5	31.3
Bredenz	Az:	139.4	155.6	161.6	167.2	171.5	175.5	179.6	183.7	194.4	199.6	228.4
eL 9.7; B + 47.5	El:	27.1	32.5	33.8	34.6	35.1	35.3	35.4	35.4	34.4	33.6	23.3
	Sk:	-26.1	-16.2	-12.3	-8.6	-5.7	-3.0	-0.3	2.5	9.7	13.1	30.3
Bruck	Az:	147.6	164.8	171.0	176.8	181.1	185.1	189.1	193.1	203.3	208.3	235.1
eL 16.8; B + 48.0	El:	29.7	33.B	34.5	34.8	34.9	34.7	34.5	34.1	32.2	31.0	19.1
	Sk:	-21.0	-10.1	-6.0	-2.2	0.7	3.4	6.1	8.7	15.4	18.5	33.3
Daulschlandsbarg	Az:	145.3	162.5	168.7	174.6	178.9	183.1	187.2	191.2	201.8	206.8	234.1
eL 15.2; B + 46.8	El:	30.2	34.7	35.6	36.0	36.2	36.1	35.9	35.6	33.9	32.6	20.7
	Sk:	-23.0	-11.9	-7.7	-3.8	-0.8	2.1	4.9	7.6	14.7	18.0	33.7
<u>Donawitz</u>	Az:	145.4	162.4	168.7	174.4	178.7	182.9	186.9	190.9	201.4	206.4	233.7
eL 15.1; B + 47.4	El:	29.6	34.1	34.9	35.4	35.6	35.5	35.4	35.0	83.4	32.2	20.4
	Sk:	-22.G	-11.8	-7.7	-3.8	-0.8	1.9	4.7	7.4	14.3	17.5	33.1
Dombirn	Az:	139.4	155.6	161.7	167.3	171.5	175.8	179.7	183.7	194.5	199.7	228.5
eL 9.8; B + 47.4	El:	27.2	32.6	33.9	34./	35.2	35.4	35.5	35.5	34.5	33.6	23.4
E1	Sk:	-26.1 144.1	-16.2 180.8	-12.3 167.0	-8.5 172.7	-5.7 177.0	-2.8 181.0	-0.2 185.1	2.6 189.1	9.8 199.6	13.2 204.6	30.5 232.3
Ebonsoo eL 13.8; B + 47.8	El:	28.7	33.3	34.3	34.8	35.1	35.1	35.0	34.7	33.3	32.1	20.9
GE 18.0, B + 41.0	Sk:	-23.2	-12.7	-8.7	-4.9	-2.0	0.7	3.4	6.1	13.0	16.8	32.1
Eisenarz	Az:	145.3	162.2	168.4	174.2	178.5	182.6	186.6	190.7	201.1	206.1	233.5
eL 14.9; B + 47.5	El:	29.4	33.9	34.8	35.2	35.4	35.4	35.2	34.9	33.2	32.1	20.4
	Sk:	-22.7	-11.9	-7.8	-3.9	-1.0	1.7	4.5	7.2	14.1	17.3	32.9
Eisensladl	Az:	147.1	164.3	170.5	176.3	180.7	184.7	188.8	192.8	203.2	208.1	235.0
eL 16.5; B + 47.5	El:	30.1	34.2	35.0	35.4	35.4	35.3	35.1	34.6	32.8	31.6	19.5
	Sk:	-21.5	-10.5	-6.4	-2.5	0.5	3.2	5.9	8.6	15.4	18.6	33.6
<u>Feldbach</u>	Az:	146.1	163.3	169.7	175.4	179.8	183.9	188.0	192.1	202.5	207.5	234.7
eL 15.9; B + 47.0	El:	30.3	34.7	35.5	35.9	36.0	36.0	35.7	35.3	33.6	32.8	20.2
	Sk:	-22.3	-11.2	-7.0	-3.1	-0.1	2.7	5.5	8.2	15.2	18.4	33.8
Fohnsdorf	Az:	144.8 29.6	181.8 34.2	168.1 35.1	173.8 35.6	178.2 35.7	182.3	186.3 35.6	190.4 35.2	200.9 33.6	206.0 32.5	233.4
eL 14.7; B + 47.2	Sk:	-23.0	-12.2	-8.1	-4.2	-1.2	35.7 1.6	4.3	7.1	14.1	17.3	33.1
Fürstenfeld	Az:	148.4	163.6	170.0	175.7	180.1	184.2	18B.2	192.3	202.7	207.7	234.8
eL 16.1; B + 47.1	El:	30.3	34.6	35.4	35.8	35.9	35.8	35.6	35.2	33.4	32.1	20.1
	Sk:	-22.1	-11.0	-6.8	-2.9	0.1	2.9	5.6	8.4	15.3	18.5	33.8
Gmunden	Az:	144.2	160.9	167.0	172.7	177.0	181.1	185.1	189.1	199.6	204.6	232.3
eL 13.8; B + 47.9	El:	28.6	33.2	34.2	34.7	34.9	35.0	34.9	34.6	33.1	32.0	20.8
	Sk:	-23.1	-12.7	-8.7	-4.9	-2.0	0.7	3.4	6.1	13.0	16.2	32.0
<u>Graz</u>	Az:	145.6	162.7	169.0	174.8	179.1	183.2	187.3	191.4	201.9	206.9	234.1
eL 15.4; B + 47.1	El:	30.0	34.4	35.3	35.8	35.9	35.8	35.6	35.3	33.6	32.3	20.4
	Sk:	-22.6	-11.6	-7.5	-3.5	-0.6	2.2	5.0	7.7	14.7	18.0	33.5
Güssing	Az:	146.7	164.0	170.2	176.1	180.5	184.5	188.6	192.7	203.1	208.1	235.1
eL 16.3; B + 47.1	El:	30.4	34.7	35.4	35.9	35.9	35.8	35.6	35.2	33.3	32.0	19.9
lanaka a	Sk:	-22.0	-10.9	-6.6 163.7	-2.7 169.5	0.3 173.8	3.1	5.8 181.9	8.5 188.0	15.5 196.7	18.7 201.9	33.9 230.2
Innsbruck eL 11.4; B + 47.3	Az:	141.2 28.1	157.7 33.2	163.7 34.4	169.5 35.1	173.8 35.5	177.9 35.6	35.7	186.0 35.5	196.7 34.3	33.3	230.2
CL 11.4, D + 47.3	Sk:	-25.2	-14.9	-11.0	-7.1	-4.2	-1.5	1.3	4.1	11.2	14.6	31.4
Judenoure	Az:	144.8	161.8	168.0	173.8	178.1	182.2	186.3	190.4	200.9	205.9	233.4
eL 14.6; B + 47.2	El:	29.6	34.2	35.1	35.6	35.7	35.7	35.6	35.2	33.6	32.5	20.8
	Sk;	-23.1	-12.3	-8.2	-4.3	-1.3	1.5	4.3	7.0	14.0	17.8	33.0
Kaplenberg	Az:	145.7	162.7	168.9	174.7	179.0	183.1	187.2	191.2	201.7	206.7	233.9
- may the market see			1,000.	10010			1,000.1	1001.00	10.10			

lot 45 2. D . 47 4	El:	29.6	34.1	34.9	35.4	35.5	35.5	35.3	34.9	33.2	32.0	20.3
eL 15.3; B + 47.4	Sk:	-22.5	-11.6	-7.5	-3.6	-0.6	2.1	4.9	7.6	14.5	17.7	33.2
Kirchschlag	Az:	146.9	164.1	170.3	178.1	180.4	184.5	188.5	192.5	202.9	207.9	234.8
eL 16.3; B + 47.5	El:	30.0	34.2	35.0	35.4	35.4	35.3	35.1	34.7	32.9	31.6	19.6
02 10.0, 0 + 41.0	Sk:	-21.7	-10.7	-6.6	-2.7	0.3	3.0	5.7	B.4	15.2	18.4	33.5
Kitzbühel	Az:	142.4	159.0	165.1	170.8	175.1	179.2	183.3	187.3	197.9	203.0	231.1
eL 12.4; B + 47.5	El:	28.4	33.3	34.4	35.1	35.4	35.5	35.4	35.2	33.9	32.9	21.9
	Sk:	-24.4	-14.0	-10.0	-6.2	-3.3	-0.6	2.2	1.9	12.0	15.3	31.7
Klager furt	Az:	143.9	161.0	167.3	173.1	177.5	181.7	185.8	189.9	200.6	205.7	233.3
eL 14.2; B + 46.4	El:	30.1	34.9	35.7	36.4	36.6	36.6	36.5	36.2	34.6	33.4	21.6
	Sk:	-23.9	-12.9	-8.7	-4.7	-1.7	1.1	4.0	6.8	14.0	17.8	33.5
Knittelfeld	Az:	145.1	162.1	168.4	174.1	178.4	182.5	186.6	190.6	201.1	206.2	233.6
eL 14.9; B + 47.2	El:	29.6	34.2	35.1	35.6	35.7	35.7	35.5	35.2	33.6	32.4	20.7
	Sk:	-22.9	-12.0	-7.9	-4.0	-1.0	1.8	4.5	7.3	14.2	17.5	33.2
Krema	Az:	146.4	163.4	169.5	175.2	179.5	183.5	187.5	191.4	201.7	206.7	233.8
eL 15.6; B + 48.4	El:	28.9	33.1	33.9	34.3	34.4	34.4	34.2	33.8	32.2	31.0	19.5
	Sk:	-21.5	-11.0	-7.0	-3.2	-0.4	2.3	5.0	7.6	14.2	17.4	32.4
Krimml	Az:	142.0	158.6	164.7	170.5	174.8	178.9	183.0	187.1	197.8	202.9	231.1
eL 12.2; B + 47.1	El:	28.6	33.6	34.7	35.4	35.7	35.9	35.8	35.6	34.3	33.3	22.2
	Sk:	-24.B	-14.4	-10.3	-6.5	-3.5	-0.7	2.0	4.8	12.0	15.4	32.0
Kufstein	Az:	142.2	158.8	164.9	170.5	174.8	178.9	183.0	187.0	197.6	202.7	230.8
eL 12.2; B + 47.6	El:	28.2	33.2	34.2	34.9	35.2	35.3	35.3	35.1	33.8	32.8	21.9
I/e fleeb	Sk:	-24.4 145.3	-14.1 182.3	-10.1 168.6	-6.4 174.4	-3.5 178.7	-0.7	2.0 186.9	4.7 191.0	11.8 201.5	15.1 206.5	31.5 233.9
Köflach eL 15.1; B + 47.1	Az:	29.9	162.3 34.4	35.2	174.4 35.8	35.9	182.9 35.9	186.9 35.7	191.0 35.3	201.5 33.7	32.5	233.9
GL 10.1; D + 47.1	Ski	-22.8	-11.9	-7.7	-9.8	-0.8	20	4.7	7.5	14.5	17.7	33.4
Lancock	Az:	140.2	156.6	162.7	168.3	172.6	176.7	180.8	184.9	195.6	200.8	229.4
eL 10.6; B + 47.2	El:	27.8	33.1	34.3	35.2	35.6	35.8	35.8	35.7	34.6	33.7	23.1
CC 10.0, B + 47.2	Sk:	-25.8	-15.6	-11.7	-7.9	-5.0	-2.2	0.6	3.3	10.6	14.0	30.8
Laibuitz	Az:	145.7	162.9	169.2	175.0	179.4	183.5	187.6	191.7	202.2	207.2	234.5
eL 15.6; B + 46.8	El:	30.3	34.8	35.6	36.1	36.2	36.2	35.9	35.6	33.8	32.6	20.5
	Sic	-22.7	-11.6	-7.4	-3.4	-0.4	2.4	5.2	B.0	15.0	18.3	33.9
Lienz	Az:	142.5	159.8	165.5	171.2	175.6	1/9./	183.8	187.9	198.6	203.7	231./
eL 12.8; B + 46.8	El:	29.1	34.1	35.2	35.8	36.1	36.2	36.1	35.9	34.5	33.4	22.1
	Sk:	-24.6	-14.0	-9.9	-6.0	-3.0	-0.2	2.6	5.4	12.6	16.0	32.5
Liezen	Az:	144.5	161.4	167.6	173.3	177.6	181.7	185.7	189.8	200.3	205.3	232.9
eL 14.3; B + 47.6	El:	29.1	33.7	34.6	35.1	35.3	35.3	35.2	6.6	33.4	32.2	20.8
	Sk:	-23.0	-12.4	-8.3	-4.5	-1.6	1.2	3.9	6.6	13.6	16.8	32.5
Linz	Az:	144.9	161.7	167.8	173.5	177.7	181.7	185.7	189.7	200.1	205.1	232.6
eL 14.3; B + 48.3	El:	28.4	32.9	33.8	34.3	34.5	34.5	34.4	34.1	32.6	31.5	20.3
	Skt	-22.5	-12.1	-8.1	-4.4	-1.5	1.2	3.8	6.5	13.2	16.4	31.9
Loacen	Az:	145.4	162.4	168.7	174.4	178.8	182.8	186.9	190.9	201.4	206.4	233.7
eL 15.1; B + 47.4	El:	29.6	34.1	34.9	35.4	35.6	35.5	35.4	35.0	33.4	32.2	20.4
	Sk:	-22.6	-11.8	-7.7	-3.8	-0.8	1.9	4.7	7.4	14.3	17.5	33.1
Loler	Az:	142.7	159.4	165.5	171.2	175.5	179.8	183.6	187.7	198.3	203.4	231.3
eL 12.7; B + 47.6	El:	28.4	33.3	34.3	35.0	35.2	35.3	35.3	35.1	33.7	32.7	21.7
	Sk:	-24.1	-13.7	-9.7	-5.9	-3.0	-0.3	2.5	5.2	12.2	15.5	31.8
Mariaze I eL 15.3; B + 47.8	Az:	145.8 29.3	162.8 33.7	169.0 34.5	174.8 35.0	179.1 35.1	183.1 35.1	187.2 34.9	191.2 34.5	201.6 32.9	206.6	233.8
EL 15.5; D + 47.6	Sk	-22.2	-11.4	-7.4	-3.5	-0.6	2.1	4.8	7.5	14.3	17.5	32.8
Mattersburg	Az:	147.1	164.2	170.4	176.2	180.5	184.5	188.6	192.6	203.0	207.9	234.8
eL 16.4; B + 47.7	El:	29.8	34.0	34.8	35.1	35.2	35.1	34.8	34.4	32.6	31.4	19.4
22 101110 1 4111	Sk:	-21.5	-10.5	-6.4	-2.6	0.4	3.1	5.8	8.5	15.2	18.4	33.4
Mürzzuschlag	Az:	146.2	163.3	169.5	175.2	179.6	183.5	187.7	191.7	202.1	207.1	234.2
eL 15.7; B + 47.6	El:	29.6	34.0	34.8	35.2	35.3	35.3	35.0	34.7	33.0	31.7	19.9
.= :•	Sk:	-22.0	-11.2	-7.1	-3.2	-0.3	2.5	5.2	7.9	14.7	17.9	33.2
Ried	Az:	143.9	160.6	166.7	172.4	176.6	180.7	184.7	188.7	199.1	204.2	231.8
	El:	28.2	32.B	33.8	34.4	34.6	34.6	34.5	34.3	32.9	31.8	20.8
eL 13.5; B + 48.2	E1.]			0.0	-5.1	-2.2	0.5	3.1	5.8	12.6	15.8	31.6
	Sk:	-23.1	-12.8	-8.8								233.0
eL 13.5; B + 48.2 <u>Rollenmann</u>	Sk: Az:	-23.1 144.6	161.5	167.7	178.5	177.8	181.9	185.9	189.9	200.4	205.5	
eL 13.5; B + 48.2	Sk: Az: El:	-23.1 144.6 29.2	161.5 33.8	167.7 34.7	179.5 35.2	35.4	35.4	35.2	34.9	33.4	32.2	20.8
eL 13.5; B + 48.2 <u>Rollenmann</u> eL 14.4; B + 47.5	Sk: Az: El: Sk:	-23.1 144.6 29.2 -23.0	161.5 33.8 -12.3	167.7 34.7 -8.3	179.5 35.2 -4.4	35.4 -1.5	35.4 1.3	35.2 4.0	34.9 6.7	33.4 13.7	32.2 16.9	20.8 32.7
eL 13.5; B + 48.2 Rollenmann eL 14.4; B + 47.5 Sasifelden	Sk: Az: El: Sk: Az:	-23.1 144.6 29.2 -23.0 142.9	161.5 33.8 -12.3 159.6	167.7 34.7 -8.3 165.7	178.5 35.2 -4.4 171.4	35.4 -1.5 175.7	35.4 1.3 179.8	35.2 4.0 183.9	34.9 6.7 187.9	33.4 13.7 198.5	32.2 16.9 203.6	20.8 32.7 231.6
eL 13.5; B + 48.2 <u>Rollenmann</u> eL 14.4; B + 47.5	Sk: Az: El: Sk: Az: El:	-23.1 144.6 29.2 -23.0 142.9 28.6	161.5 33.8 -12.3 159.6 33.5	167.7 34.7 -8.3 165.7 34.6	179.5 35.2 -4.4 171.4 35.2	35.4 -1.5 175.7 35.4	35.4 1.3 179.8 35.5	35.2 4.0 183.9 35.5	34.9 6.7 187.9 35.2	33.4 13.7 198.5 33.9	32.2 16.9 203.6 32.8	20.8 32.7 231.6 21.7
Bollenmann eL 14.4; B + 47.5 Saalfelden eL 12.9; B + 47.4	Sk: Az: El: Sk: Az: El: Sk:	-23.1 144.6 29.2 -23.0 142.9 28.6 -24.1	161.5 33.8 -12.3 159.6 33.5 -13.6	167.7 34.7 -8.3 165.7 34.6 -9.0	178.5 35.2 -4.4 171.4 35.2 -5.8	35.4 -1.5 175.7 35.4 -2.9	35.4 1.3 179.8 35.5 -0.1	35.2 4.0 183.9 35.5 2.7	34.9 6.7 187.9 35.2 5.4	33.4 13.7 198.5 33.9 12.5	32.2 16.9 203.6 32.8 15.8	20.8 32.7 231.6 21.7 32.0
eL 13.5; B + 48.2 Rollenmann eL 14.4; B + 47.5 Sasifielden eL 12.9; B + 47.4 Salzburg	Sk: Az: El: Sk: Az: El: Sk: Az:	-23.1 144.6 29.2 -23.0 142.9 28.6 -24.1 143.3	161.5 33.8 -12.3 159.6 33.5 -13.0 159.9	167.7 34.7 -8.3 165.7 34.6 -9.0 166.1	178.5 35.2 -4.4 171.4 35.2 -5.8 171.7	35.4 -1.5 175.7 35.4 -2.9 176.0	35.4 1.3 179.8 35.5 -0.1 180.1	35.2 4.0 163.9 35.5 2.7 184.1	34.9 6.7 187.9 35.2 5.4 188.1	33.4 13.7 198.5 33.9 12.5 198.7	32.2 16.9 203.6 32.8 15.8 203.7	20.8 32.7 231.6 21.7 32.0 231.6
Bollenmann eL 14.4; B + 47.5 Saalfelden eL 12.9; B + 47.4	Sk: Az: El: Sk: Az: El: Az: El: Sk: Az:	-23.1 144.6 29.2 -23.0 142.9 28.6 -24.1 143.3 28.4	161.5 33.8 -12.3 159.6 33.5 -13.6 159.8 33.2	167.7 34.7 -8.3 165.7 34.6 -9.0 166.1 34.2	179.5 35.2 -4.4 171.4 35.2 -5.8 171.7 34.8	35.4 -1.5 175.7 35.4 -2.9 176.0 35.0	35.4 1.3 179.8 35.5 -0.1 180.1 35.1	35.2 4.0 183.9 35.5 2.7 184.1 35.0	34.9 6.7 187.9 35.2 5.4 188.1 34.8	33.4 13.7 198.5 33.9 12.5 198.7 33.4	32.2 16.9 203.6 32.8 15.8 203.7 32.4	20.8 32.7 231.6 21.7 32.0 231.6 21.3
eL 13.5; B + 48.2 <u>Rollenmann</u> eL 14.4; B + 47.5 <u>Saalfeldan</u> eL 12.9; B + 47.4 <u>Saizburg</u> eL 13.1; B + 47.8	Sk: Az: El: Sk: Az: El: Sk: El: Sk: Az:	-23.1 144.6 29.2 -23.0 142.9 28.6 -24.1 143.3 28.4 -23.7	161.5 33.8 -12.3 159.6 33.5 -13.0 159.9 33.2 -13.3	167.7 34.7 -8.3 165.7 34.6 -9.6 166.1 34.2 -9.3	179.5 35.2 -4.4 171.4 35.2 -5.8 171.7 34.8 -5.5	35.4 -1.5 175.7 35.4 -2.9 176.0 35.0 -2.6	35.4 1.3 179.8 35.5 -0.1 180.1 35.1 0.1	35.2 4.0 183.9 35.5 2.7 184.1 35.0 2.8	34.9 6.7 187.9 35.2 5.4 188.1 34.6 5.5	33.4 13.7 198.5 33.9 12.5 198.7 33.4 12.5	32.2 16.9 203.6 32.8 15.8 203.7 32.4 15.7	20.8 32.7 231.6 21.7 32.0 231.6 21.3 31.8
eL 13.5; B + 48.2 Rollenmann eL 14.4; B + 47.5 Saalfelden eL 12.9; B + 47.4 Saizburg eL 13.1; B + 47.8 San4t Politon	Sk: Az: El: Sk: Az: El: Sk: Az: El: Az: Az: Az:	-23.1 144.6 29.2 -23.0 142.9 28.6 -24.1 143.3 28.4 -23.7 146.4	161.5 33.8 -12.3 159.6 33.5 -13.0 159.9 33.2 -13.3	167.7 34.7 -8.3 165.7 34.6 -9.6 166.1 34.2 -9.3 169.5	178.5 35.2 -4.4 171.4 35.2 -5.8 171.7 34.6 -5.5 175.2	35.4 -1.5 175.7 35.4 -2.9 176.0 35.0 -2.6 179.5	35.4 1.3 179.8 35.5 -0.1 180.1 35.1 0.1 183.5	35.2 4.0 163.9 35.5 2.7 184.1 35.0 2.8 187.5	34.9 6.7 187.9 35.2 5.4 188.1 34.8 5.5	33.4 13.7 198.5 33.9 12.5 198.7 33.4 12.5 201.8	32.2 16.9 203.6 32.8 15.8 203.7 32.4 15.7 206.8	20.8 32.7 231.6 21.7 32.0 231.6 21.3 31.8 233.9
eL 13.5; B + 48.2 <u>Rollenmann</u> eL 14.4; B + 47.5 <u>Saalfeldan</u> eL 12.9; B + 47.4 <u>Saizburg</u> eL 13.1; B + 47.8	Sk: Az: El: Sk: Az: El: Sk: Az: El: Az: El: El: Sk:	-23.1 144.6 29.2 -23.0 142.9 28.6 -24.1 143.3 28.4 -23.7 146.4 29.1	161.5 33.8 -12.3 159.6 33.5 -13.0 159.9 33.2 -13.3 163.3 33.3	167.7 34.7 -8.3 165.7 34.6 -9.6 166.1 34.2 -9.3 169.5 34.1	179.5 35.2 -4.4 171.4 35.2 -5.8 171.7 34.8 -5.5 175.2 34.5	35.4 -1.5 175.7 35.4 -2.9 176.0 35.0 -2.6 179.5 34.6	35.4 1.3 179.8 35.5 -0.1 180.1 35.1 0.1 183.5 34.6	35.2 4.0 183.9 35.5 2.7 184.1 35.0 2.8 187.5 34.4	34.9 6.7 187.9 35.2 5.4 188.1 34.8 5.5 191.5	33.4 13.7 198.5 33.9 12.5 198.7 33.4 12.5 201.8 32.4	32.2 16.9 203.6 32.8 15.8 203.7 32.4 15.7 206.8 31.2	20.8 32.7 231.6 21.7 32.0 231.6 21.3 31.8 233.9 19.6
eL 13.5; B + 48.2 Rollenmann eL 14.4; B + 47.5 Saalfelden eL 12.9; B + 47.4 Saizburg eL 13.1; B + 47.8 San4t Politon	Sk: Az: El: Sk: Az: El: Sk: Az: El: Az: Az: Az:	-23.1 144.6 29.2 -23.0 142.9 28.6 -24.1 143.3 28.4 -23.7 146.4	161.5 33.8 -12.3 159.6 33.5 -13.0 159.9 33.2 -13.3	167.7 34.7 -8.3 165.7 34.6 -9.6 166.1 34.2 -9.3 169.5	178.5 35.2 -4.4 171.4 35.2 -5.8 171.7 34.6 -5.5 175.2	35.4 -1.5 175.7 35.4 -2.9 176.0 35.0 -2.6 179.5	35.4 1.3 179.8 35.5 -0.1 180.1 35.1 0.1 183.5	35.2 4.0 163.9 35.5 2.7 184.1 35.0 2.8 187.5	34.9 6.7 187.9 35.2 5.4 188.1 34.8 5.5	33.4 13.7 198.5 33.9 12.5 198.7 33.4 12.5 201.8	32.2 16.9 203.6 32.8 15.8 203.7 32.4 15.7 206.8	20.8 32.7 231.6 21.7 32.0 231.6 21.3 31.8 233.9

Scheilling	El: Sk: Az: El: Sk:	29.1 -22.1 144.4 29.5	33.4 -11.5 161.3	34.3 -7.4 167.5	34.7 -3.6	34.9 -0.7	34.B 2.0	34.6 4.7	34.3 7.3	32.7 14.1	31.5 17.3	20.0
Scheilling	Az: El:	144.4	161.3		-3.6	-0.7	9.0	4.2	7.0	4.4.4	47.0	00.0
eL 14.3; B + 47.1 E S Spirta A el 13.5; B + 46.8 F	El:			407 E			2.0	4.7		14.1		32.6
Spirts A el 13.5; B + 46.8 F	_	29.5		107.0	179.3	177.7	181.8	185.9	189.9	200.5	205.6	233.1
Spitta A el 13.5; B + 46.8 E	3k:		34.2	35.1	35.7	35.8	35.9	35.7	35.4	33.8	32.7	21.1
el 13.5; B + 46.8 F		-23.4	-12.6	-B.5	-4.5	-1.6	1.2	4.0	6.7	13.8	17.1	33.0
	Az:	143.3	160.2	166.4	172.2	176.6	180.7	184.8	188.9	199.6	204.7	232.5
9	FI:	29.4	34.3	35.3	35.9	36.1	36.2	36.1	35.8	34.3	33.2	21.7
	šk:	-24.1	-13.4	-9.3	-5.3	-2.4	0.5	3.3	6.1	13.2	16.6	32.9
St. Voit (a. d. A	Az:	144.4	161.4	167.6	173.4	177.8	181.9	186.0	190.0	200.6	205.7	233.3
eL 14.4; B + 46.9 E	El:	29.7	34.4	35.3	35.9	36.1	36.1	35.9	35.6	34.0	32.8	21.1
5	Sk:	-23.4	-12.6	-8.4	-4.5	-1.5	1.3	4.1	6.9	14.0	17.8	33.2
Stoyr A	Az:	144.9	161.8	167.9	173.6	177.9	181.9	185.9	189.9	200.3	205.4	232.8
eL 14.4; B + 48.1 [El:	28.7	33.2	34.1	34.6	34.8	34.8	34.6	34.3	32.8	31.7	20.4
5	3k;	-22.6	-12.1	-8.1	-4.3	-1.4	1.3	3.9	6.6	13.4	16.6	32.1
Slockeran A	Az:	147.2	164.2	170.4	176.1	180.4	184.4	188.4	192.4	202.6	207.6	234.5
eL 16.3; B + 48.3 B	El:	29.3	33.4	34.1	34.5	34.6	34.5	34.2	33.8	32.1	30.9	19.2
8	Sk:	-21.1	-10.4	-6.4	-2.6	0.3	2.9	5.6	8.2	14.8	17.9	32.8
Tauern A	Az:	142.6	159.8	165.5	171.1	175.5	1/9.5	183.6	187.7	198.3	203.4	231.5
eL 12.7; B + 47.3 B	El:	28.7	33.6	34.6	35.3	35.6	35.7	35.6	35.4	34.1	33.0	21.9
9	šk:	-24.3	-13.9	-9.8	-6.0	-3.0	-0.3	2.5	5.2	12.3	15.7	32.0
Villach A	Az:	143.6	160.6	166.9	172.7	177.0	181.2	185.3	189.4	200.0	205.2	232.9
eL 13.9; B + 46.6 E	El:	29.7	34.6	35.6	36.1	36.4	36.4	36.3	36.0	94.4	33.3	21.6
5	šk:	-24.0	-13.2	-9.0	-5.0	-2.0	0.9	3.7	6.5	13.7	17.0	33.3
Voitsberg A	Az:	145.3	162.4	16B.7	174.5	178.8	182.9	187.0	191.1	201.6	206.6	233.9
eL 15.2; B + 47.1 E	El:	29.9	34.4	35.3	35.8	35.9	35.9	35.7	35.3	33.7	32.4	20.6
5	Sk:	-22.7	-11.8	-7.6	-3.7	-0.7	2.0	4.8	7.6	14.5	17.8	33.4
Waichofen A	Az:	146.2	163.1	169.2	174.8	179.0	183.0	187.0	190.9	201.2	206.2	233.3
eL 15.3; B + 48.8 B	El:	28.4	32.6	33.4	33.9	34.0	33.9	33.8	33.4	31.8	30.7	19.4
8	3k:	-21.5	-11.1	-7.1	-3.4	-0.6	2.0	4.6	7.2	13.8	16.9	31.9
Weiz A	Az:	145.6	162.8	169.0	174.8	179.2	183.3	187.4	191.4	201.9	206.9	234.2
eL 15.4; B + 47.1 B	El:	30.0	34.4	35.3	35.7	35.9	35.8	35.6	35.2	33.5	32.3	20.4
9	Sk:	-22.6	-11.6	-7.5	-3.5	-0.6	2.2	5.0	7.7	14.7	18.0	33.5
Wels A	Az:	144.5	161.3	167.4	179.1	177.3	181.4	185.4	189.4	199.8	204.8	232.4
eL 14.0; B + 48.2 B	El:	28.5	33.0	33.9	34.5	34.7	34.7	34.6	34.3	32.8	31.7	20.5
5	šk:	-22.8	-12.4	-8.4	-4.6	-1.8	0.9	3.6	6.2	13.0	16.2	31.8
Wien A	Az:	147.2	164.3	170.5	176.2	180.5	184.5	188.5	192.5	202.8	207.7	234.6
eL 16.4; B + 48.2 E	El:	29.4	33.5	34.2	34.6	34.6	34.6	34.3	39.9	32.1	30.9	19.2
	Sk:	-21.1	-10.4	-6.3	-2.5	0.4	3.0	5.7	8.3	15.0	18.1	32.9
We facers A	Az:	144.9	162.0	168.3	174.1	178.4	182.6	186.7	190.7	201.3	206.4	233.8
	El:	30.0	34.6	35.5	36.0	36.2	36.1	36.0	35.6	34.0	32.8	20.9
	Sk:	-23.2	-12.2	-8.0	-4.0	-1.0	1.8	4.6	7.4	14.4	17.7	33.5
	Az:	142.0	158.6	164.7	170.3	174.6	178.7	182.8	186.8	197.5	202.6	230.7
	EI:	28.2	33.2	34.3	35.0	35.3	35.4	35.4	35.2	34.0	33.0	22.1
	Sk:	-24.6	-14.3	-10.3	-6.5	-3.6	-0.8	1.9	4.7	11.7	15.1	31.6

^{*}Note: If you are missing the city you are living in, please visit http://www.lyngsat.com/