

ASTRA 1C FOOTPRINTS



Typical dish sizes:

60 cm

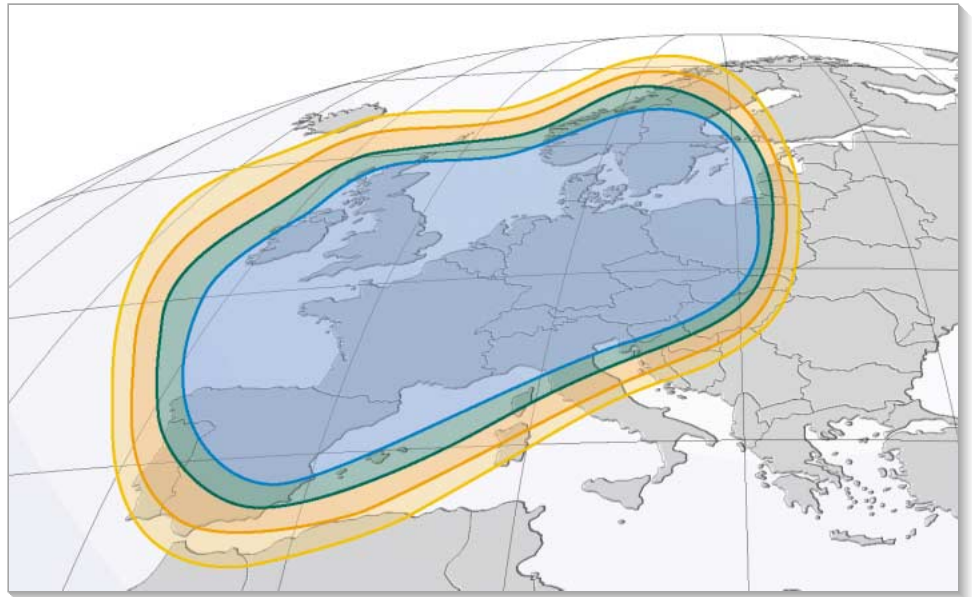
75 cm

90 cm

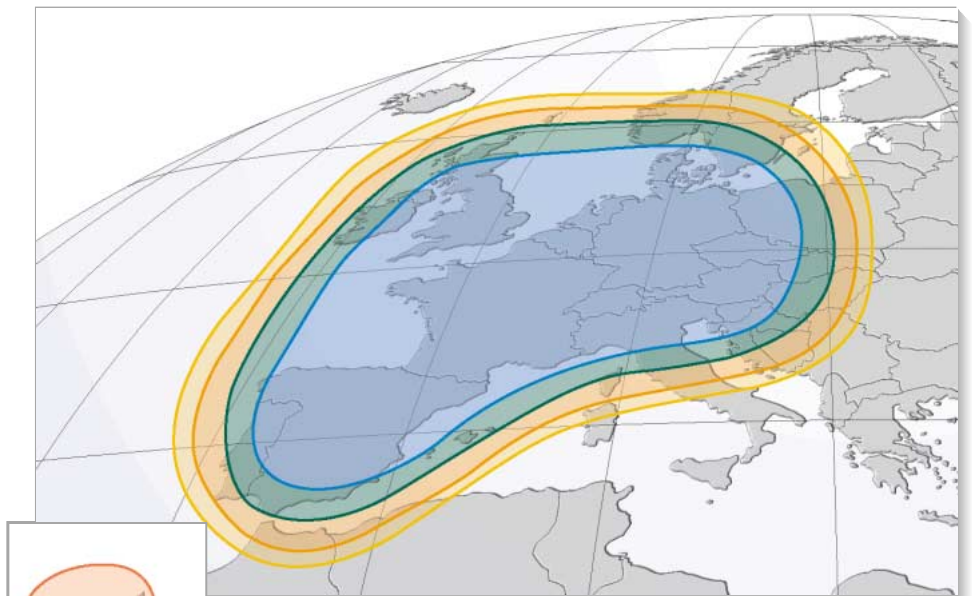
100 cm

120 cm

**Horizontal Polarization
Mode positive**



**Vertical Polarization
Mode positive**



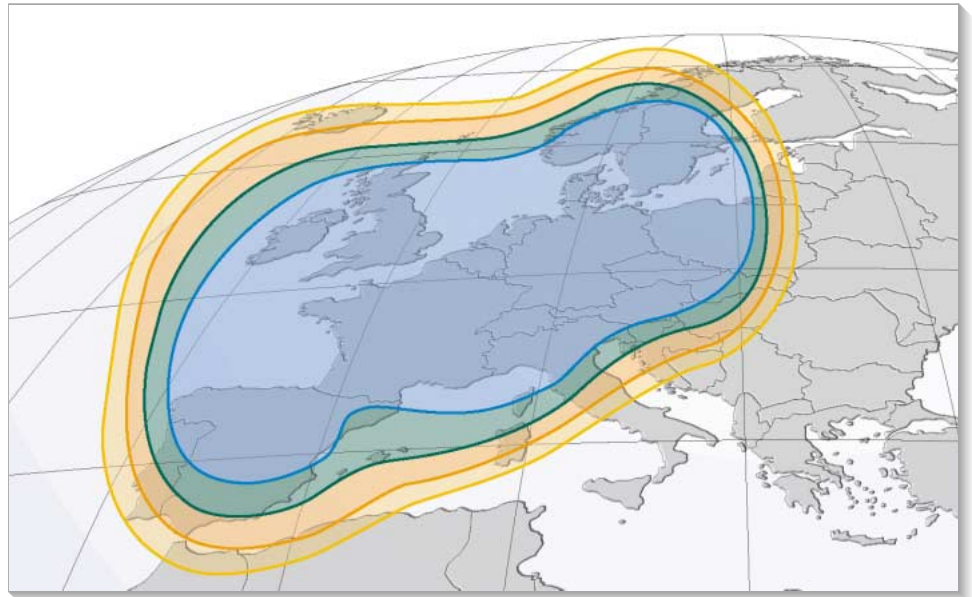
Canary Islands Beam

ASTRA 1C FOOTPRINTS

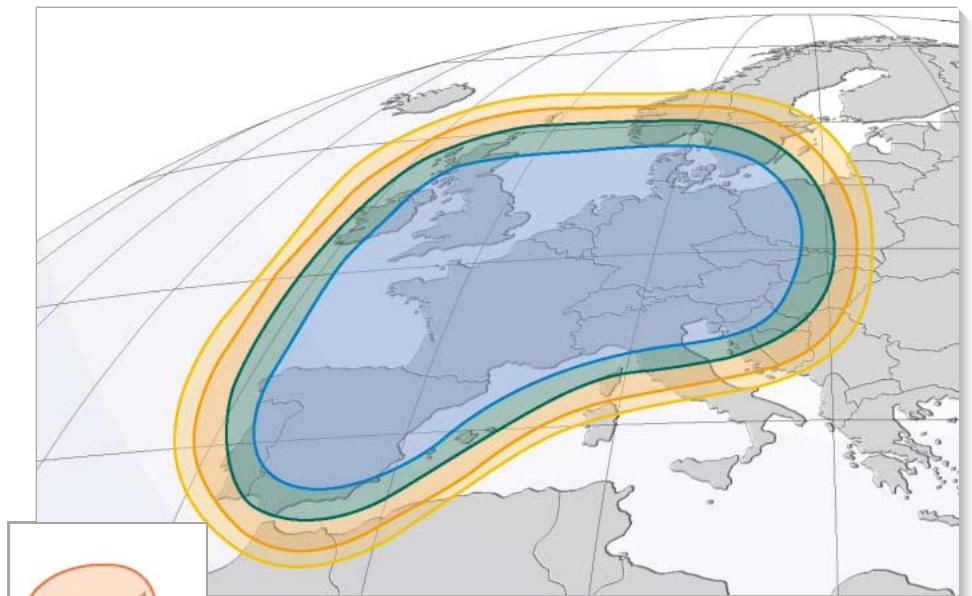


The size of the satellite dish required to receive transmissions from the ASTRA satellites depends on the transponder polarization and the mode (positive or negative) as well as on the geographical location of the dish. The ASTRA 1C satellite uses various antenna modes and two polarizations, resulting in a number of footprints for each satellite.

Horizontal Polarization
Mode negative



Vertical Polarization
Mode negative



Canary Islands Beam

ASTRA ORBITAL POSITIONS AND BACK-UP – SAFEGUARDING REVENUE

By co-locating satellites at one orbital position, ASTRA can offer easy ways of expanding service ranges and highest transmission security.

The key advantage is that audiences can use the same direct-to-home reception equipment when broadcasters and broadband service providers extend their services at the same orbital position.

The ASTRA satellite system through its co-located satellites at prime orbital positions also has the strength to

provide a unique form of in-orbit back-up. If for any reason, a transponder is switched off, a back-up transponder on the same satellite or a co-located satellite can be immediately activated. The back-up system can therefore guarantee high operational security and continuity of service for both our customers and the end consumer.

| Freq. (GHz) | 10.70 | 10.95 | 11.20 | 11.45 | 11.70 | 12.10 | 12.50 | 12.75 | 29.50 | 30.00 |
|-------------|-------------------------------|--------|--------|--------|--------------------------------|--------|--------|-----------------------------|---------|-------|
| | Band D | Band C | Band A | Band B | Band E | Band F | Band G | | Ka Band | |
| ASTRA 1B | | | | ✓ | | | | | | |
| ASTRA 1C | | ✓ | ✓ | | | | | | | |
| ASTRA 1E | ✓ | ✓ | | ✓ | ✓ | | | | | |
| ASTRA 1F | | | ✓ | | ✓ | ✓ | | | | |
| ASTRA 1G | | | | | ✓ | ✓ | ✓ | ✓ | | |
| ASTRA 1H | | | | | ✓ | ✓ | ✓ | ✓ | | |
| ASTRA 2C | ✓ | ✓ | | | ✓ | ✓ | | | ✓ | |
| | Low Band (64 transponders) | | | | High Band (56 transponders) | | | Ka Band (2 transponders) | | |

Updates of footprints, transponder lists and frequency plans, the complete ASTRA channel line-up and more information about SES ASTRA, the ASTRA Satellite System and ASTRA products and services can be found on www.ses-astra.com or contact us:

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