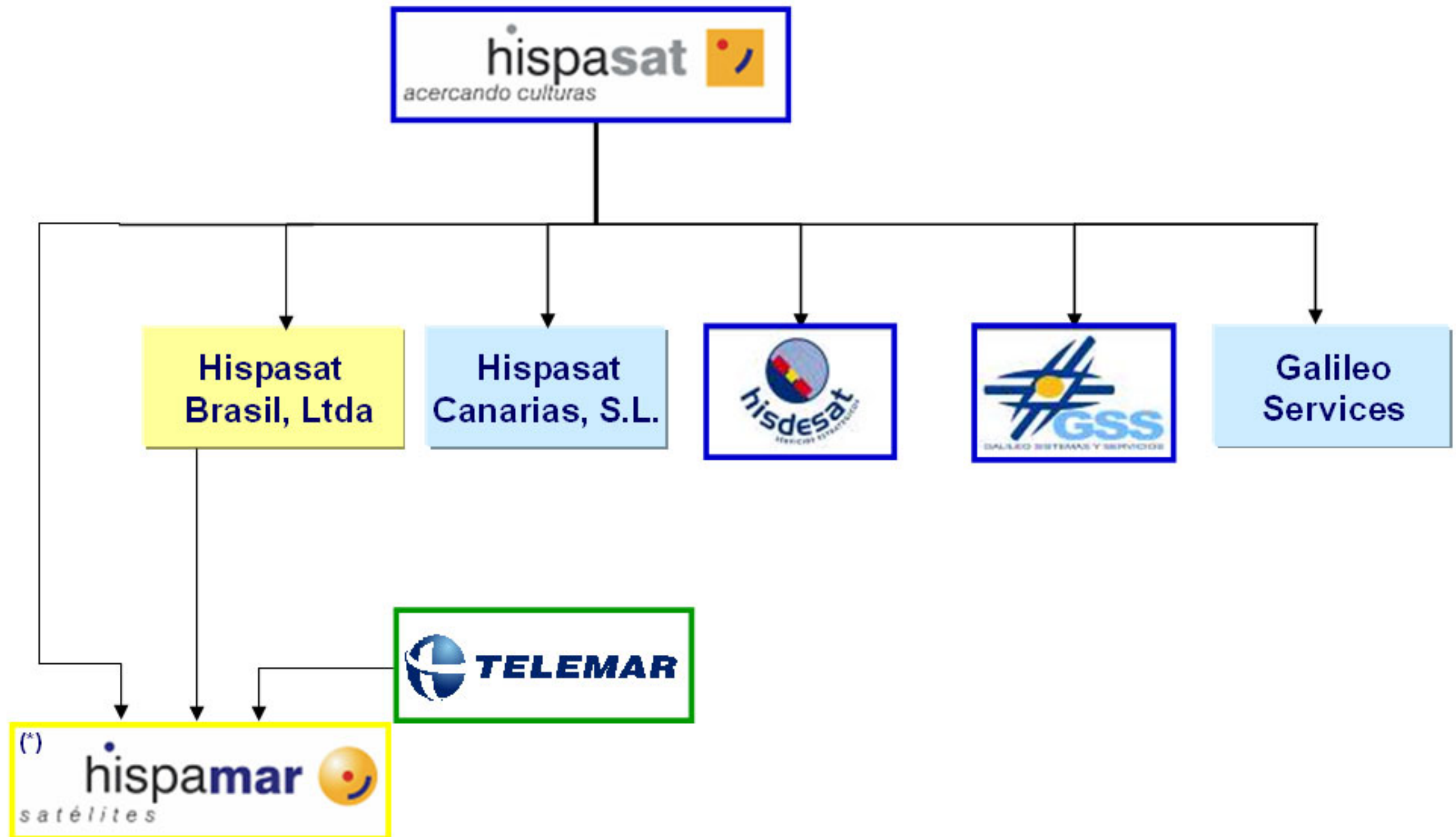


HISPAMAR AND THE AMAZONAS SYSTEM



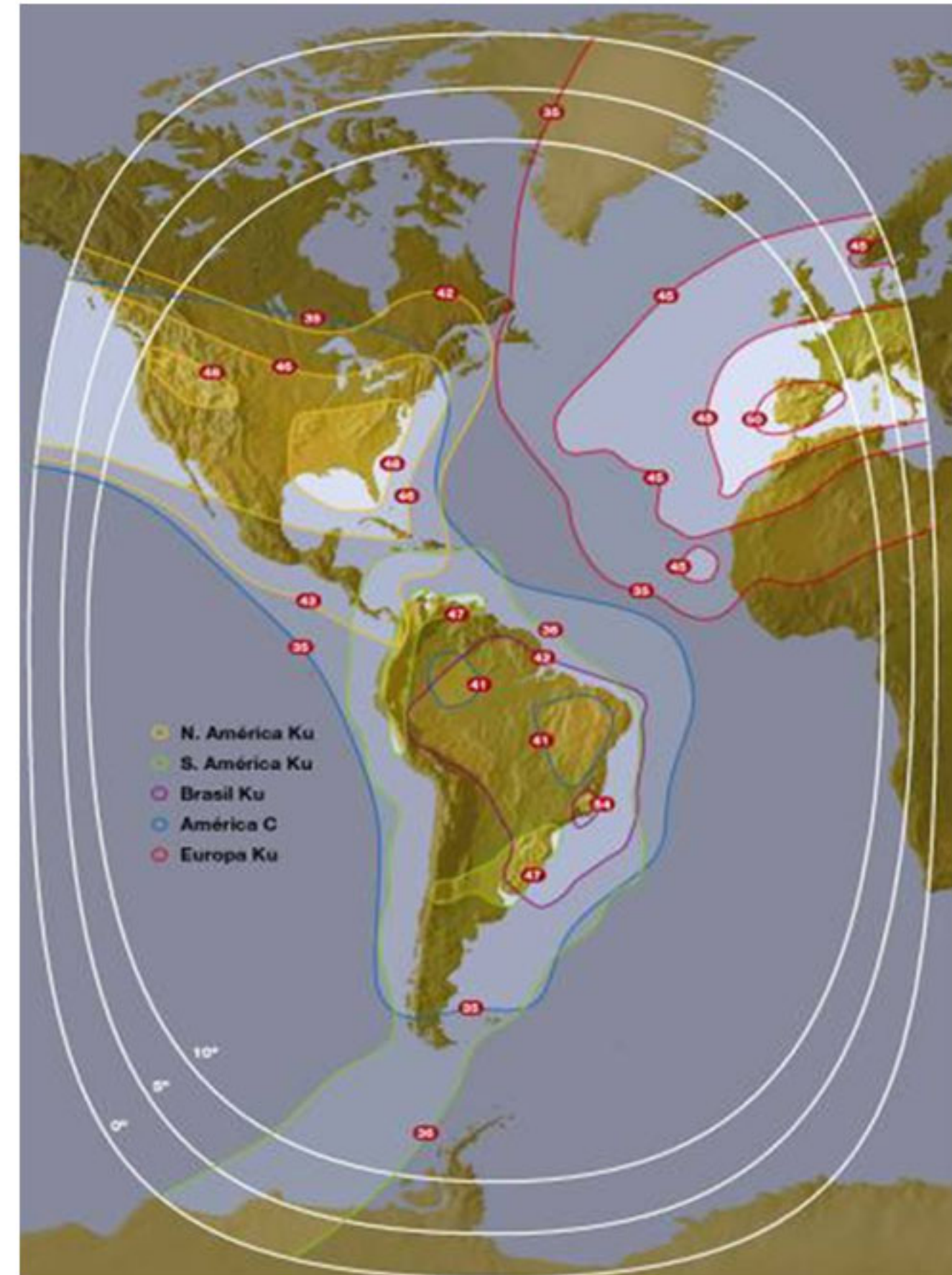
- **HISPASAT GROUP**
- **HISPAMAR AND THE AMAZONAS SYSTEM**
- **FREQUENCY PLAN C-Band**
- **FREQUENCY PLAN Ku-Band**
- **COVERAGE MAPS**
- **SATELLITE CONTROL CENTER (SCC)**
- **MONITORING CENTER**
- **MONITORING NETWORK**



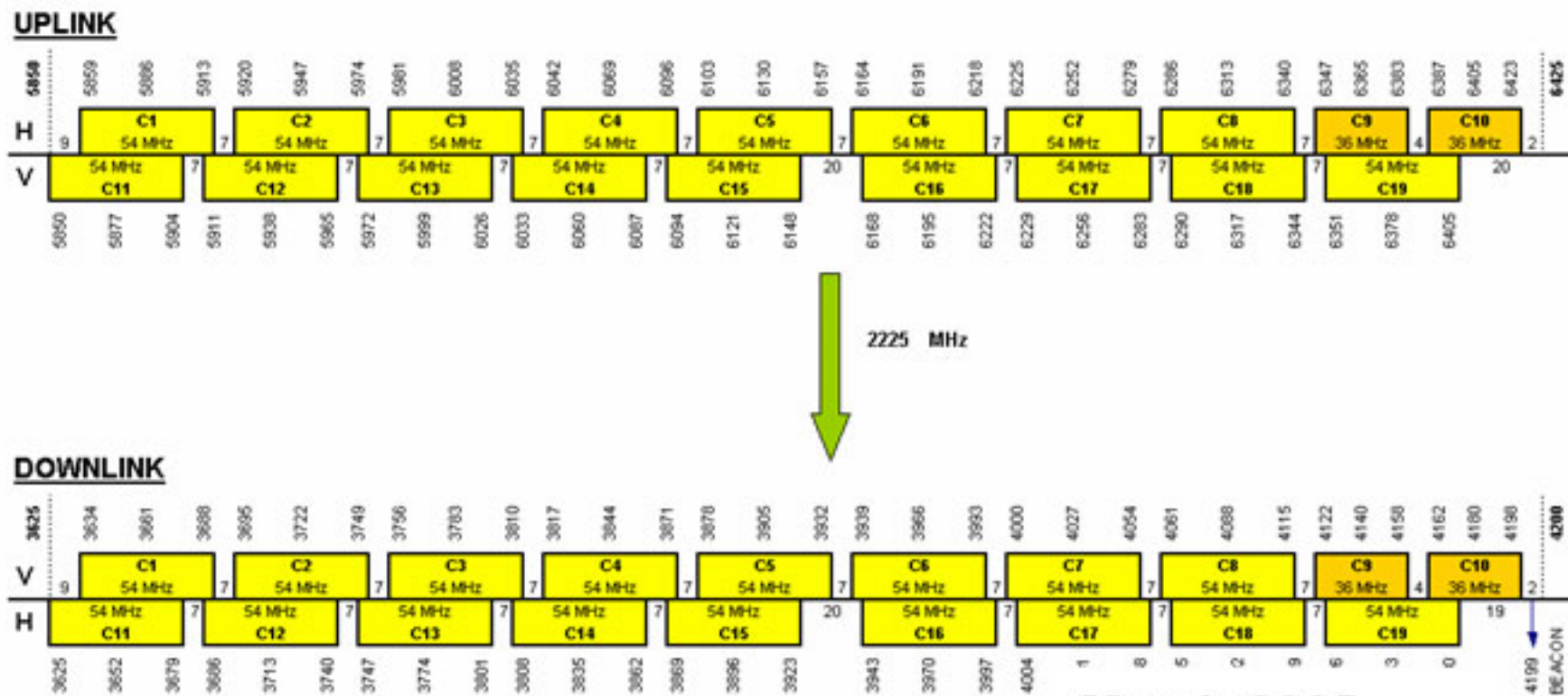
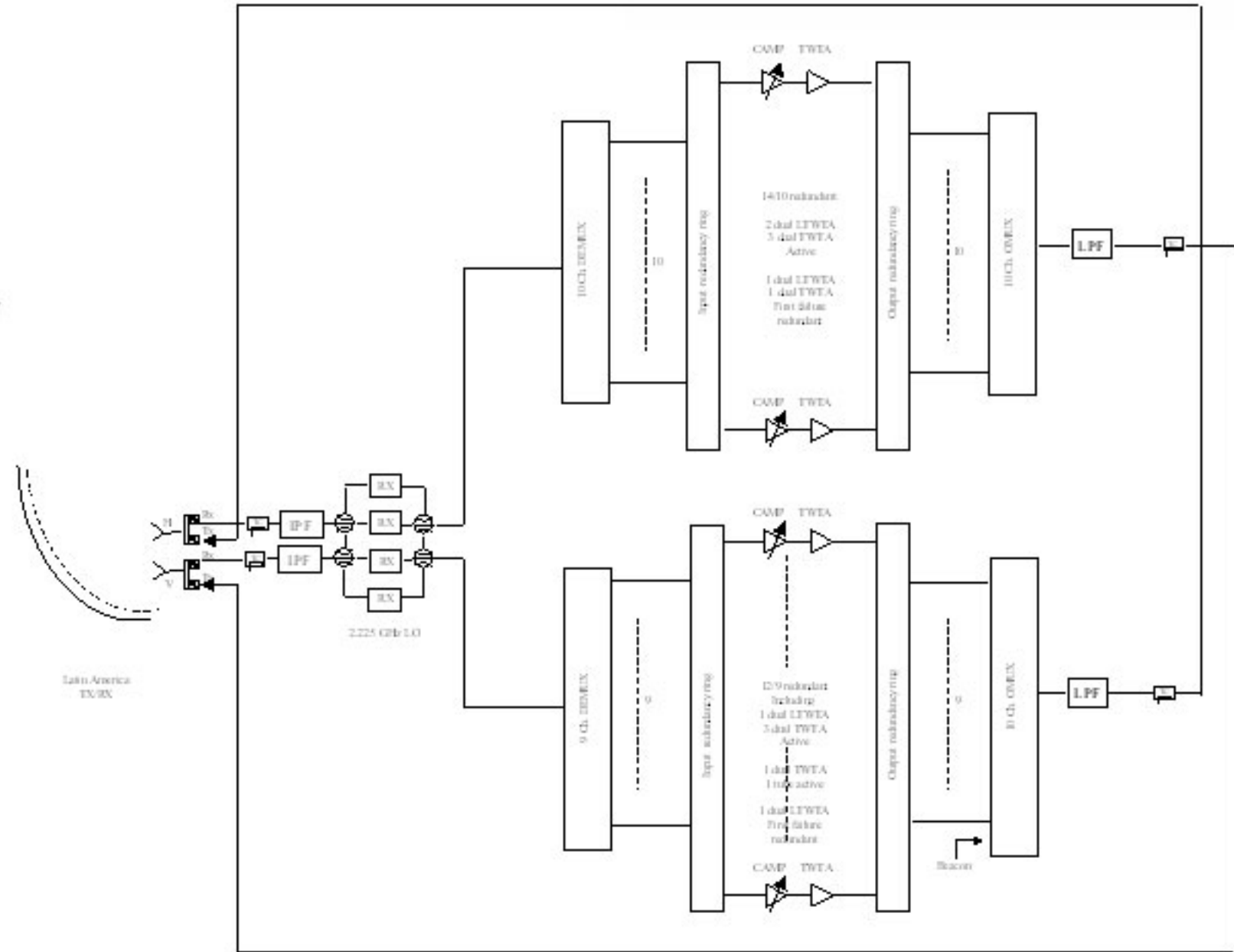
(*) Holder of license at 61°W

- ❑ **HISPAMAR is a Brazilian corporation established in 2000 as part of the HISPASAT Group's international strategy.**
- ❑ **Its purpose is to carry out the Group's activities in the Americas.**
- ❑ **The company conducts all its operations for the region from its headquarters in Rio de Janeiro (Praia do Flamengo, 200 – 17º andar).**
- ❑ **HISPAMAR is licensed to operate the Ku-band at Brazil's 61ºW orbital location.**
- ❑ **In late 2001, HISPAMAR and HISPASAT entered into an agreement with the largest local Brazilian Telephony Operator TELEMAR, that brought its C-band license at 61ºW to the project, and leased a significant portion of the satellite C-band capacity.**
- ❑ **On 3 January 2002, a contract was signed with Astrium (EADS Group) to build the Amazonas satellite, which was launched on August 4th 2004.**
- ❑ **Amazonas has landing rights and also holds authorization for DTH services in US.**

- **Hispamar, the leading Brazilian satellite operator, will be introducing its new Amazonas satellite at Satellite 2005.**
- **Amazonas spacecraft is a hybrid Ku/C-Band satellite with high power connectivity over the Americas and Europe.**
- **Come see the Hispamar staff at the Washington Convention Center at Booth 368 March 23-25, 2005 at Satellite 2005.**

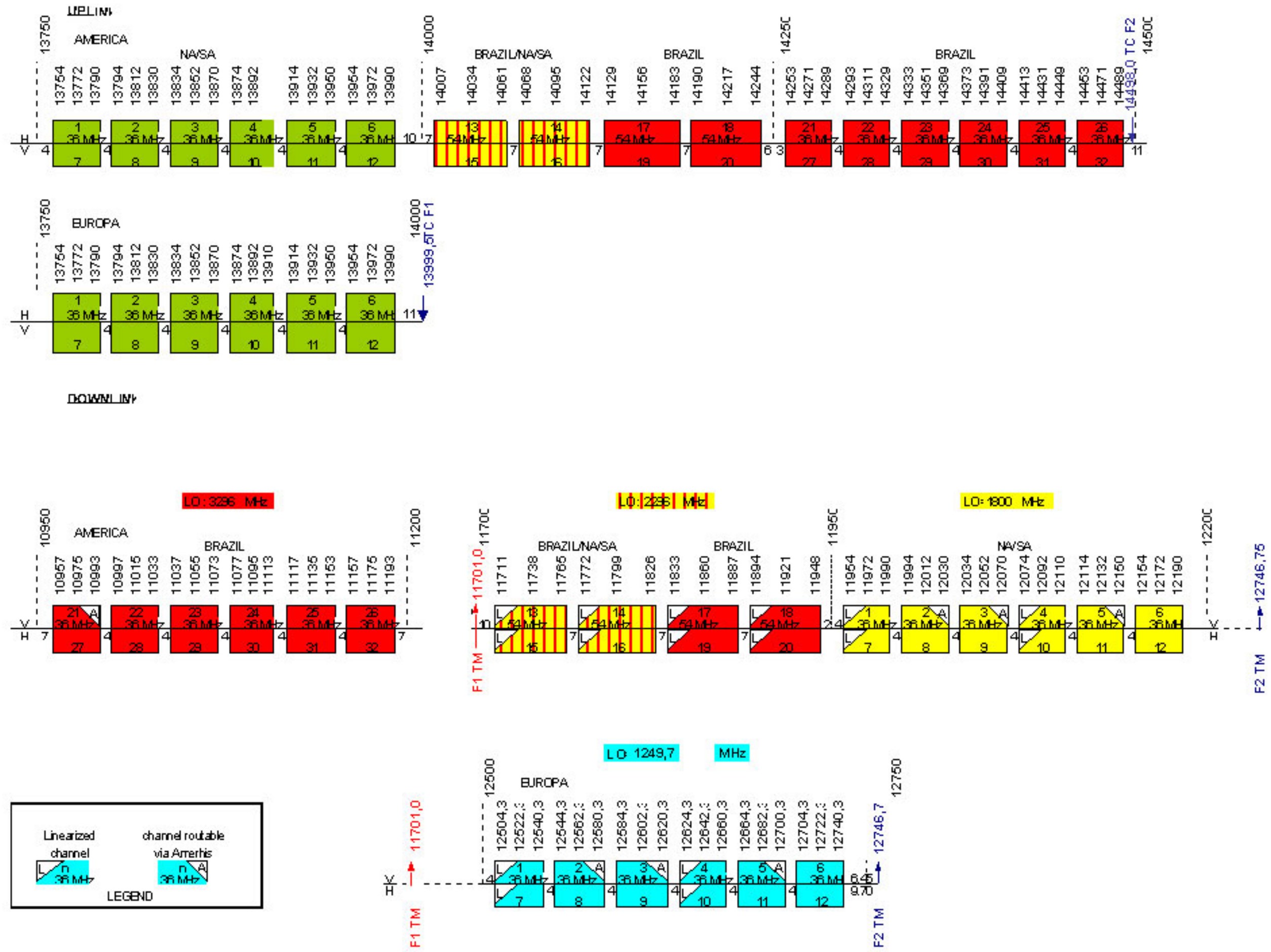


- C-Band: 19 active transponders, with EIRP of up to 41 dBW.

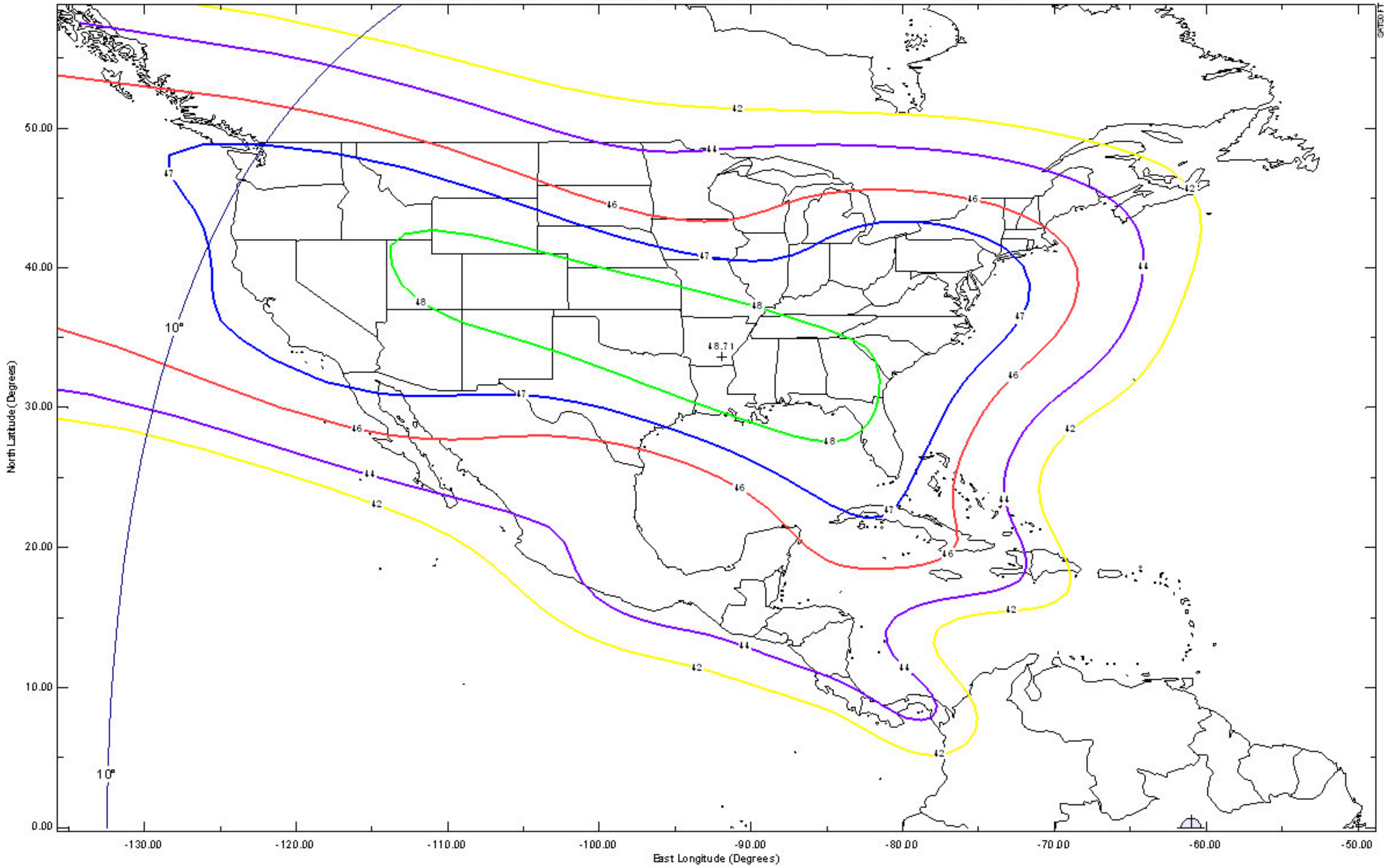


March 2005

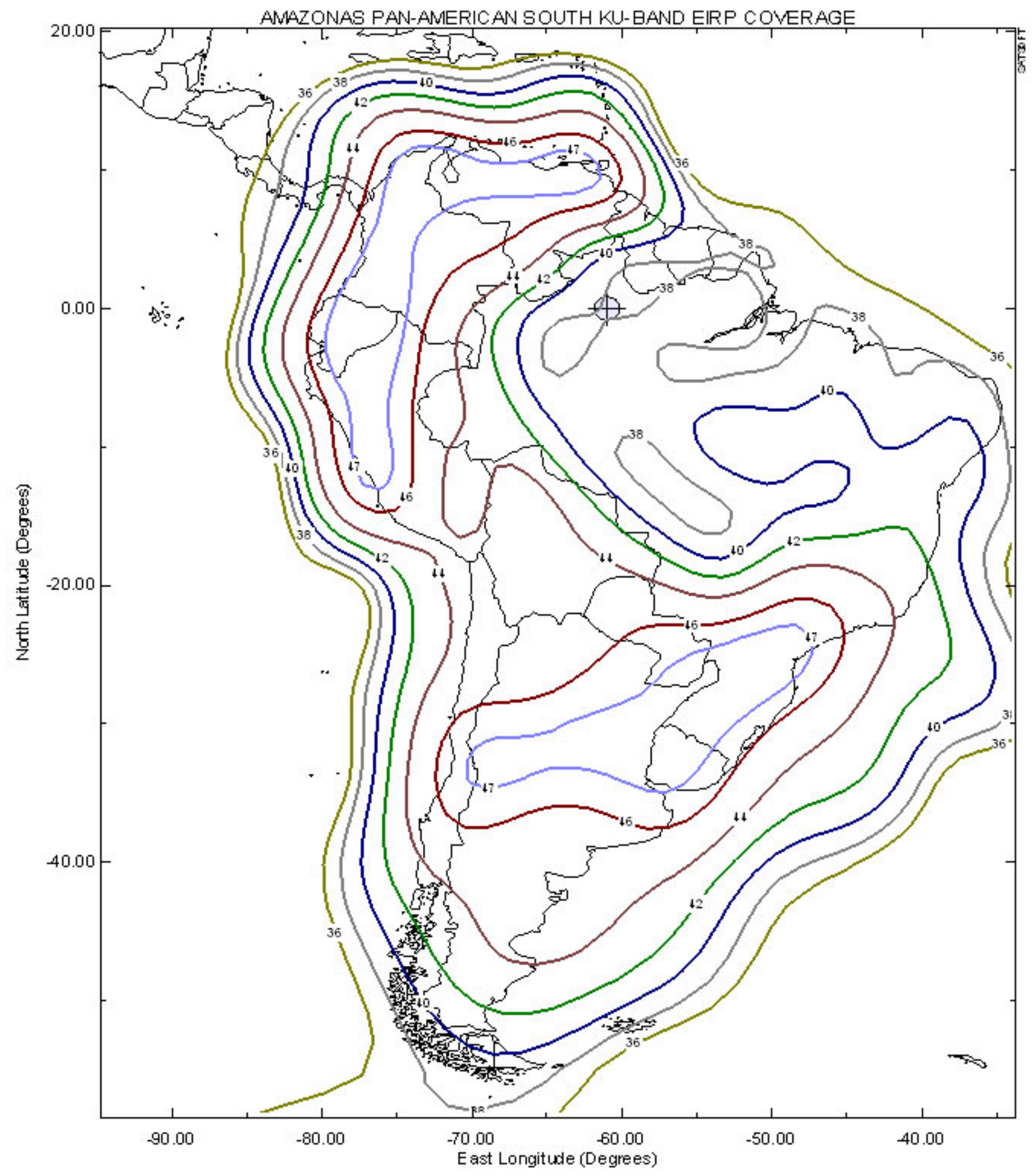
Ku-Band



AMAZONAS PAN-AMERICAN NORTH KU-BAND EIRP COVERAGE

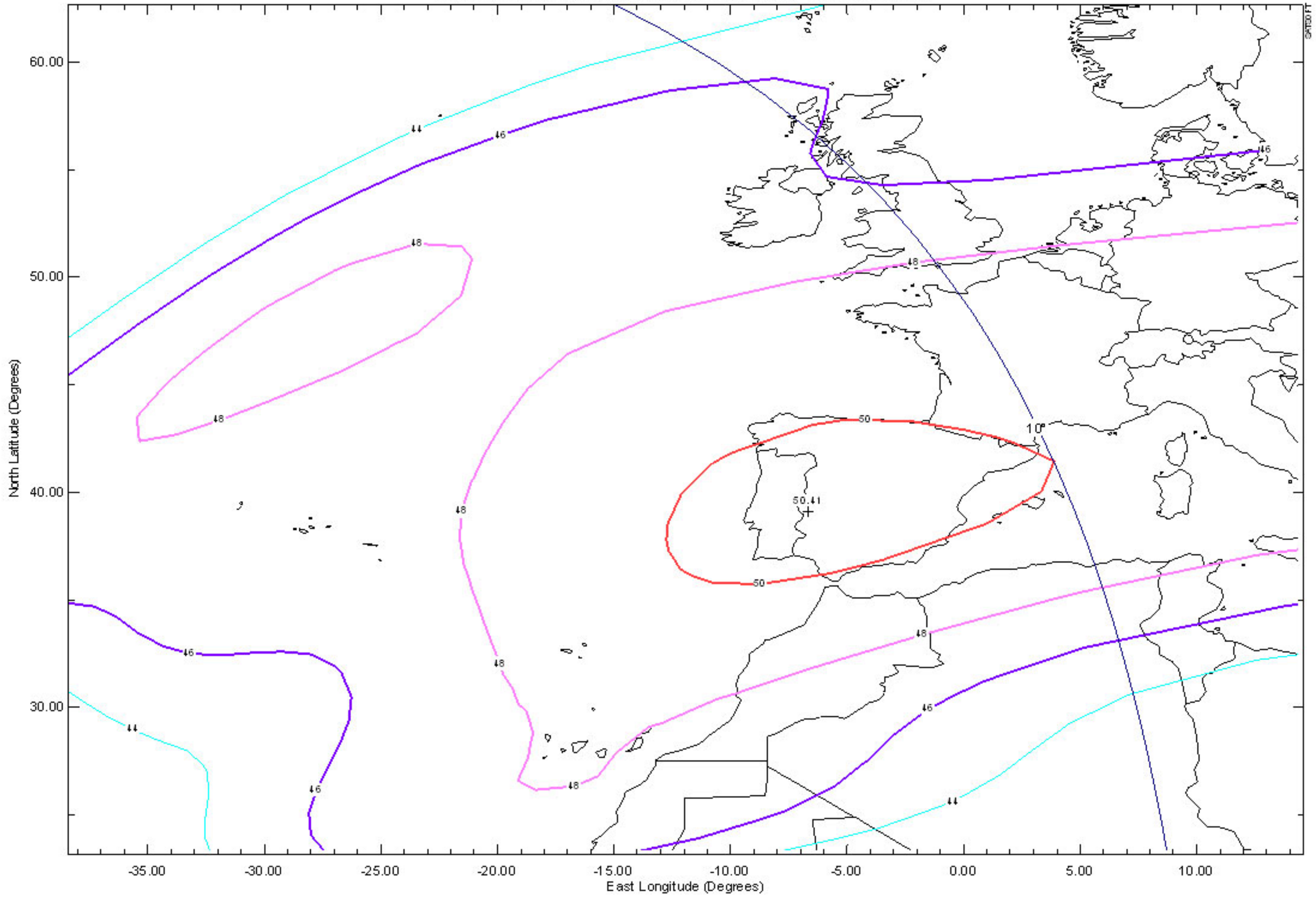


March 2005



March 2005

AMAZONAS EUROPE KU-BAND EIRP COVERAGE



March 2005

Satellite Control Center (SCC)

- Maintains the Amazonas satellite in orbit and in stable operational conditions.
- Divided in 2 sites:
 - Flamengo: data processing equipment and operators.
 - Guaratiba: antennas (8,1m) and ground equipment for TCR functions.
 - Linked through satellite, having a back-up RDSI connection.
 - Back-Up Control Center in Spain, also connected to the Brazilian SCC.



FLAMENGO

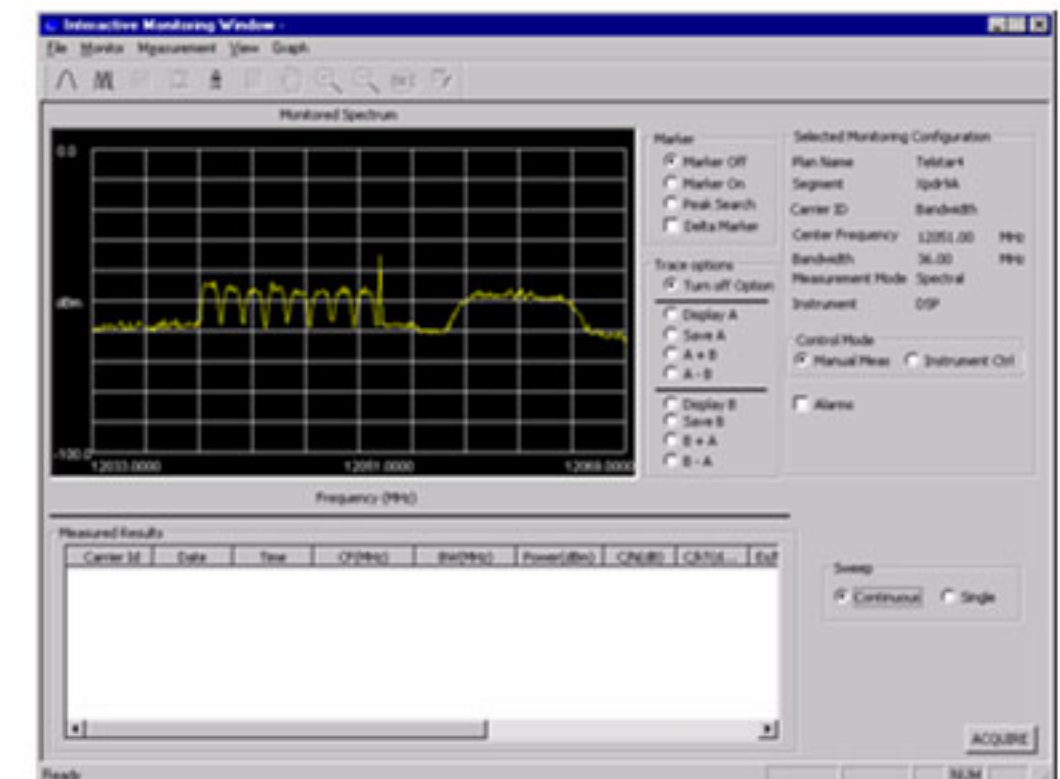


GUARATIBA

March 2005

Monitoring Center

- **Monitors the transponders of Amazonas, minimizing the possibilities of interference and optimizing the satellite capacity utilization. Provides direct support to customers.**
- **Also called PMC (Payload Monitoring Center)**
- **It is comprised of:**
 - **CMS (Carrier Monitoring System)**
 - **Vídeo Wall**
 - **Telemetry Monitoring (SCC)**



MONITORING NETWORK

MONITORING NETWORK



March 2005