

KuStream 5000 Terminal Areas of Operations:

We are requesting operation within CONUS excluding 125 km (or line of sight) around NASA and NSF sites.

Following are operational areas that are currently planned:

Brunswick, ME Operations Area

- 2 Pegasus St., Brunswick, ME 04011, USA
- 43d 54m 3s N, 69d 55m 48s W
- Radius of operation = 100 n. miles (115 miles, 185 km)
- IS-29e beam U39

Jacksonville, FL Operations Area

- 30d 13m 41s N, 81d 41m 41s W
- Radius of operation = 200 n. miles (230 miles, 370 km)
- IS-29e beam U04

Flight from Brunswick, ME to Jacksonville, FL

- IS-29e beams U39, U02 and U04

For the above listed operational areas, Intelsat IS-29e satellite is to be used. IS-29e is a multi-spot satellite. For these areas of operations, the terminal will be transmitting and receiving RF signal from beams U39, U02 and U04. Frequencies for those beams are:

<u>Uplink</u>	<u>Downlink</u>	<u>Nominal Area</u>
U39KH 14.069 - 14.119 GHz	U39KV 11.706 - 11.819 GHz	New England
U02KH 14.381 - 14.431 GHz	U02KV 12.081 - 12.194 GHz	Mid Atlantic
U04KV 14.131 - 14.181 GHz	U04KH 12.081 - 12.194 GHz	Southeast US

NASA Coordination

Operations of ESAAs in the 14.0-14.2 GHz (Earth-to-space) frequency band in the radio line-of-sight of the NASA TDRSS facilities on Guam (13d 36m 55s N, 144d 51m 22s E) or White Sands, NM (32n 20m 59s N, 106d 36m 31s W) and Blossom Point, MD (32d 32m 40s N, 106d 36m 48s W) are subject to coordination with the National Aeronautics and Space Administration (NASA) through the National Telecommunications and Information Administration (NTIA) Inter-department Radio Advisory Committee (IRAC).

The terminal will be within RF line of sight (LOS) of the NASA TDRSS facility at Blossom Point, MD (32d 32m 40s N, 106d 36m 48s W) when flying from Brunswick, ME to Jacksonville, FL. When within RF LOS of the NASA facility, the terminal will be operating on IS-29e spot beam U02. Beam U02 does not operate in the 14.0 to 14.2 GHz frequency band so, the terminal can not and will not be operating in that frequency band.

Hence, a waiver is requested to not perform coordination unless operation is planned within a specified coordination zone and on the shared frequencies.

NSF Coordination

Operations of ESAA in the 14.47-14.5 GHz (Earth-to-space) frequency band in the radio line-of-sight of radio astronomy service (RAS) observatories observing in the 14.47-14.5 GHz band are subject to coordination with the National Science Foundation (NSF).

None of the IS-29e beams to be used operate in the 14.470 -14.500 GHz range.

A waiver is requested to not perform coordination unless operation is planned within the specified coordination zones and on the shared frequencies.