E133WA – Modified Service Areas

This document illustrates the currently planned service areas of EUTELSAT 133WA uplink and downlink beams and their potential coverage areas.

Figures 1, 2 and 3 depict the updated service areas for the Fixed and S1 Beams. Figure 1 reflects the service area for Fixed downlink beams F1H5, F1H6, F1H7, F1V5, F1V6 and F1V7. Figure 2 reflects the service area for Fixed uplink beams F1H1, F1H2, F1H3, F1V1, F1V2 and F1V3. Figure 3 reflects the service area for S1 uplink beams S1H3 and S1V3 and downlink beams S1H7 and S1V7.

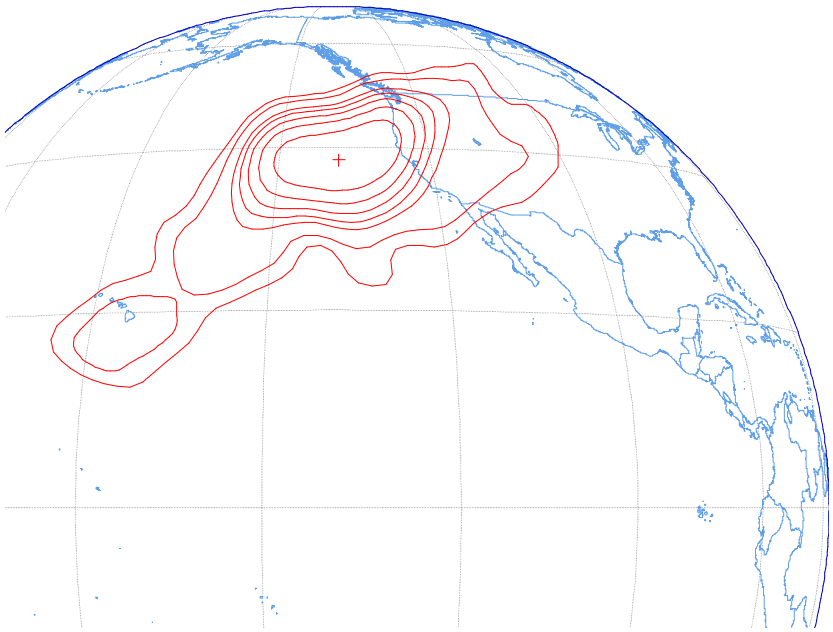

Figure 1 – Ku-band Fixed Beam Downlink Service Area from 132.85°W

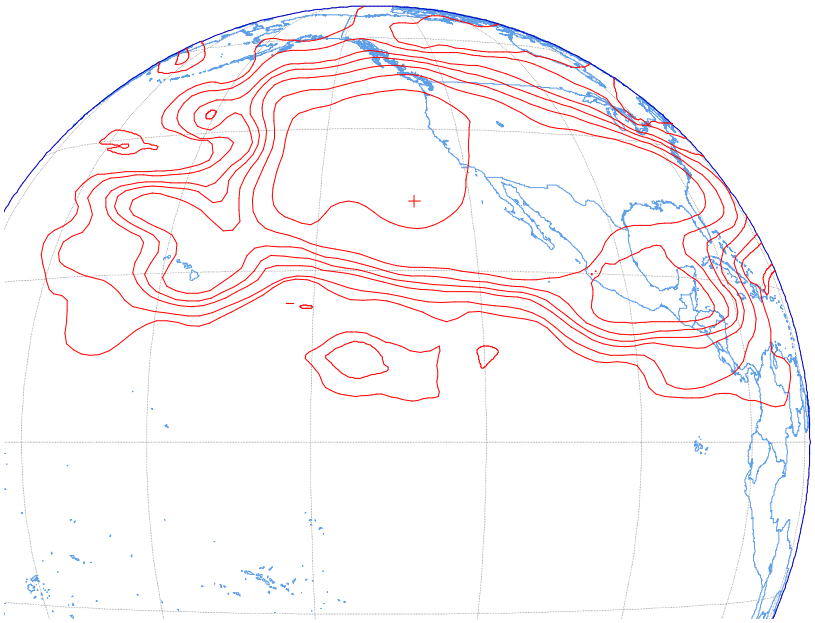

Figure 2 – Ku-band Fixed Beam Uplink Service Area from 132.85°W

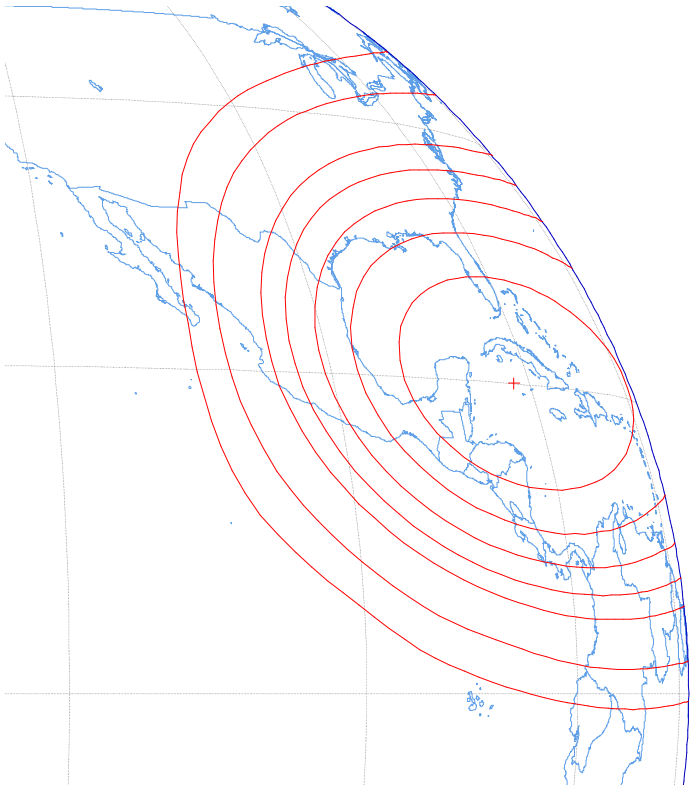

Figure 3 – Ku-band S1 Beam Downlink & Uplink Service Area from 132.85°W

Since the S1 Beam can be steered anywhere within the satellite footprint, the maximum coverage area for the S1 uplink and downlink beams is the visible Earth from the 132.85˚ W.L. orbital position. Figure 4 depicts the coverage area for the S1 Beam's uplink and downlink beams. Because the S1 Beam includes Ku-band frequencies that can be directed throughout U.S. territory and are eligible for Permitted List operations, the FCC can be assured of spectrum compatibility of U.S. operations regardless of the orientation of the S1 Beam.

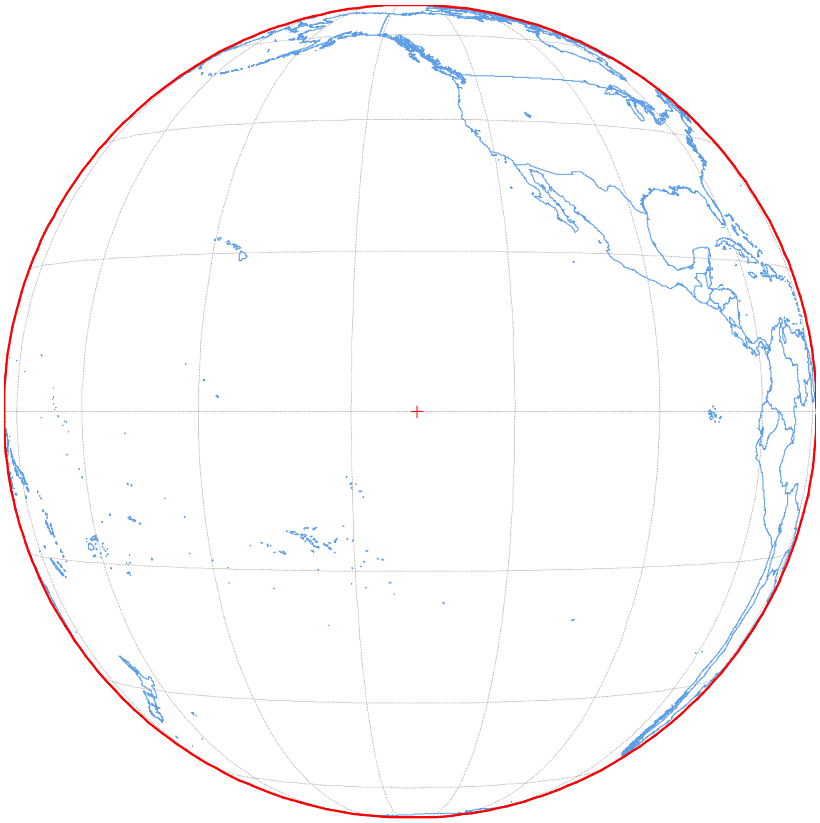

Figure 4 Ku-Band S1 Beam Coverage Area from 132.85°W

The S2 Beam uplink and downlink service area includes Hawaii and the surrounding Pacific Ocean. Figure 5 reflects the service area for S2 uplink beams S2H3 and S2V3, and for the downlink beams S2H8 and S2V8. This illustration reflects the currently planned pointing of S2 Beam.

Since the S2 Beam can be steered anywhere within the satellite footprint, subject to the limitation that the -20dB and -22 dB contours do not overlap with the -10 dB contours of the Ciel-2 CONUS and Canada beams, respectively. As a result, the coverage area for this beam is the satellite coverage footprint from the 132.85˚ W.L. orbital position with the exclusion of the area overlapping and near the Canada and CONUS coverage of Ciel-2. For example, the S2 Beam service area could be adjusted over Hawaii to cover different parts of the Pacific Ocean or could potential be repointed to the Aleutian Islands or elsewhere in response to customer needs, so long as there is no contour overlap as described herein. Figure 6 provides an illustration of the coverage area for the S2 Beam.

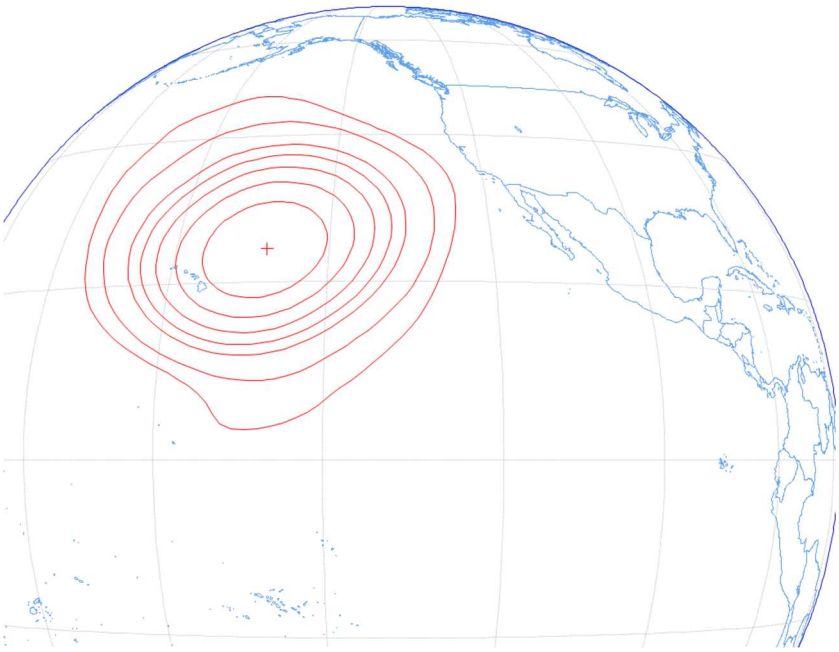

Figure 5 Ku-band S2 Downlink & Uplink Service Area from 132.85°W

Figure 6 Ku-Band S2 Coverage Area from 132.85°W