



ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office

WORKING PAPER

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**Twenty-ninth MEVA Technical Management Group Meeting (MEVA/TMG/29)**  
Mexico City, Mexico, 9 to 12 December 2014

**Agenda Item 5: World Radiocommunication Conference (2015) (WRC-2015) Activities**

**COORDINATION AND NOTIFICATION OF EARTH STATIONS IN C BAND IN ORDER TO  
BE RECORDED IN THE ITU MASTER REGISTER (MIFR)**

(Presented by Radiocommunication Bureau, ITU)

**EXECUTIVE SUMMARY**

ICAO has initiated consultations with ITU with the aim to notify and record in the ITU Master International Frequency Register (MIFR) the Earth Stations of the MEVA Network located in the Caribbean and Central American region, in order to obtain an international recognition and protection of these frequency assignments operating in C- band.

Based on the information provided, the ITU Radiocommunication Bureau carried out a study to identify the coordination area and potentially affected Administrations for each MEVA earth stations.

Results of this study together with suggested follow-up steps to facilitate the process of coordination and notification of the involved earth stations are presented in this paper.

<b>Action:</b>	Suggested actions are given in Section 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• 2015 ITU World Radiocommunication Conference</li></ul>

**1. Introduction**

1.1 Under the ITU Radio Regulations, any frequency assignment to a transmitting station and to its associated receiving station shall be notified to the Bureau:

- if the use of that assignment is capable of causing harmful interference to any service of another administration, or
- if that assignment is subject to the coordination procedure of Article 9 or is involved in such a case, or
- if it is desired to obtain international recognition for that assignment.

1.2 In ITU Region 2, hence in the Caribbean region, the band 3 400 - 4 200 MHz is allocated on an equal primary basis to the Fixed and Fixed-Satellite (space-to-Earth) services. The band 3 500- 4 200 MHz is also allocated to the Mobile (except aeronautical mobile) service on an equal primary basis. The band 5 925- 6425 MHz is allocated on an equal primary basis to the Fixed, Mobile and Fixed-Satellite (Earth-to-space) services. In this context, the international recognition and protection of a frequency assignment associated to an Earth Station communicating with a satellite network is achieved by the successful application of the Coordination and Notification procedures included in Articles 9 and 11 of the Radio Regulation.

1.3 The upcoming ITU World Radiocommunication Conference (WRC-15), to be held in November 2015, will consider, under its Agenda Item 1.1, additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial broadband applications. Among the candidate frequency bands that have been considered in ITU-R preparatory studies and would be addressed by WRC-15, are the bands 3 400-4 200 MHz and 5 925 - 6 425 MHz. In taking its decisions on any of these bands, or part thereof, WRC-15 should consider the actual use of this part of the spectrum.

1.4 Irrespective of WRC-15 decisions, the international recognition and protection of any frequency assignment associated to an Earth Station is derived from its recording in the ITU Master International Frequency Register (MIFR), which is the final goal of the coordination and notification procedures as mentioned in the paragraph 1.1 above.

1.5 In view of the concerns to ensure an adequate protection of the Fixed Satellite Service, and its associated Earth Stations in the frequency bands above-mentioned, expressed to the Bureau by Administrations, Satellite Operators and specialised Agencies during ITU Regional Seminars, as well as the current situation showing that only a few C-band earth stations are recorded in the MIFR, the Radiocommunication Bureau sent two letters on 29 and 30 July 2014 to Administrations in the Caribbean and Central America Region with the aim to provide special assistance under Article 7 of the Radio Regulations to those Administrations facing difficulties to proceed with the coordination and notification of their earth stations.

## 2. **Discussion: Analysis carried out by ITU**

2.1 In this regard and with the goal to record the earth stations of the MEVA III network in the C-band, ICAO has contacted the Radiocommunication Bureau of ITU requesting assistance on the best practice which could be followed in order to coordinate and to record in the MIFR its earth stations through the respective Notifying Administrations having jurisdiction over them, in accordance with the ITU Radio Regulations.

2.2 ICAO has provided ITU with a set of minimum parameters required to coordinate the earth stations, as described in BR letters of 29 and 30 July 2014.

2.3 Based on this information, the Bureau has carried out a preliminary analysis to initiate the earth-station coordination and follow-up notification procedure. This analysis is based on the criteria and methodology described in Appendix 7 to the ITU Radio Regulations for the determination of the coordination area around an earth station and the identification of potentially affected countries which should be involved in the coordination process between transmitting or receiving earth stations in the Fixed Satellite Service sharing the frequency band with fixed or mobile terrestrial services with equal rights in terms of frequency allocation.

2.4 Detailed results of this analysis are shown under the **Appendix** to this paper.

2.5 A consolidation of the results, mainly in terms of coordination requirements per earth station, is summarized in the following table, (details of country codes or geographical areas can be found in the Preface (<http://www.itu.int/ITU-R/go/space-preface/en>)) :

**Summary of Administrations with which Coordination is Required:**

EARTH STATION NAME	COUNTRY NAME OR GEOGRAPICAL AREA / NOTIFYING ADMINISTRATION	ITU COUNTRY CODE / NOTIFYING ADMINISTRATION	COORDINATION UNDER 9.17 REQUIRED WITH		REMARKS
			UPLINK	DOWNLINK	
MEVAIII-WILLEMSTAD	CURACAO / HOLLAND	CUW/HOL	ABW BES CLM VEN	ABW BES CLM DOM GRD HTI KNA MSR PTR TRD VCT VEN VIR VRG	
MEVAIII-BOGOT@	COLOMBIA	CLM	null	VEN	
MEVAIII-SANTO DOMINGO	DOMINICAN REPUBLIC	DOM	PTR	ABW BES CLM CUW HTI KNA MSR PTR TCA VEN VIR VRG	
MEVAIII-SAN JUAN	PUERTO RICO / USA	PTR/USA	VIR VRG	AIA ATG BAH BES BLM DOM GLP KNA MAF MSR SXM TCA VIR VRG	
MEVAIII-PORT-AU-PRIN	HAITI	HTI	DOM	BAH CUB CYM DOM TCA USA	
MEVAIII-PHILLIPSBURG	ANTIGUA AND BARBUDA	ATG	AIA BES BLM KNA MAF MSR PTR SXM VIR VRG	AIA BES BLM DMA DOM GLP GRD KNA LCA MAF MRT MSR PTR SXM TRD VCT VEN VIR VRG	
MEVAIII-PANAMA CITY	PANAMA	PNR	null	CLM CTR EQA NCG	
MEVAIII-ORANJESTAD	ARUBA / HOLLAND	ABW/HOL	BES CLM CUW VEN	BES CLM CUW DOM HTI PTR VEN VIR	
MEVAIII-MERIDA	MEXICO	MEX	null	BLZ CUB GTM	
MEVAIII-KINGSTON	JAMAICA	JMC	null	CLM CUB CYM HND HTI NCG USA	
MEVAIII-HAVANA	CUBA	CUB	USA	BAH BLZ CYM HND MEX SWN USA	
MEVAIII-GEORGETOWN	CAYMAN ISLANDS / UK	CYM/G	null	BAH BLZ CLM CUB GTM HND HTI JMC MEX NCG SWN USA	
MEVAIII-NASSAU	BAHAMAS	BAH	null	CUB DOM HTI TCA USA	
MEVAIII-FREEPORT	BAHAMAS	BAH	USA	CUB TCA USA	
MEVAIII-COCESNA	HONDURAS	HND	NCG SLV	BLZ CTR GTM NCG SLV	coordinates to be confirmed by ICAO
MEVAIII-CARACAS	VENEZUELA	VEN	BES	ABW BES BRB CLM CUW DMA DOM GLP GRD KNA LCA MRT MSR PTR TRD VCT VIR	
MEVAIII-ATLANTA	USA	USA	null	null	

### 3. Suggested Actions

3.1 The process for recording earth stations could be described by the following steps:

- a) collect all the necessary parameters associated to the earth stations and associated satellite networks based on Appendix 4 of the Radio Regulations;
- b) identify coordination requirements and to complete coordination among concerned Administrations; and
- c) for Administrations having jurisdiction over the earth stations, to notify the earth stations to ITU.

For all three above steps, administrations may request the assistance of the Radiocommunication Bureau.

#### *Current Situation and suggested follow-up steps:*

- ICAO has kindly provided ITU with the minimum set of parameters required to proceed with the step b) above. Additional parameters may be required at the notification stage (step c) in accordance with Appendix 4 of RR. However, based on the available information and the preliminary analysis carried out by ITU/BR, coordination requirements have been identified. At this stage, the follow-up step would be for responsible notifying administrations to undertake coordination among the concerned administrations for each earth station as described in the above table;
- To complete step b), a possible meeting where most of the parties involved in the coordination procedure would be present may be an excellent and efficient opportunity to assess the situation, to reach mutual coordination agreements and speed-up the notification process.
- For any E/S notifying Administration having possible difficulty to reach coordination agreement with neighbouring countries, a request for assistance to complete the coordination could be addressed to the Bureau.

3.2 Once the coordination agreements have been obtained, the Notifying Administration having jurisdiction over the specific earth station shall submit the complete information in Appendix 4 format to the Bureau, with Bureau's assistance if necessary.

3.3 In any instance, the guidance and assistance from the Bureau may be requested at any time in the process.

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## APPENDIX

### EARTH STATIONS COORDINATION CONTOURS ASSOCIATED TO ICAO MEVA III VSATs NETWORK LOCATED IN THE CARIBBEAN AND CENTRAL AMERICAN REGION

This annex contains the analysis carried out by the Radiocommunication Bureau based on the criteria and methodology described in the Appendix 7 to the ITU Radio Regulations for the determination of the coordination area around an earth station and the identification of potentially affected countries which shall be involved in the coordination process between transmitting or receiving earth stations in the Fixed Satellite Service sharing the frequency band with fixed or mobile terrestrial services with equal rights in terms of frequency allocation.

The list of earth stations included in this annex associated to the Satellite Network USASAT-60I located at 45 degrees west and its assigned frequencies 6064.75 MHz in the uplink and 3839.75 MHz in the downlink is described below:

Earth Station Name	Country Name or Geographical Area / Notifying Administration	ITU Country Code / Notifying Administration
MEVAIII-WILLEMSTAD	CURACAO / HOLLAND	CUW/HOL
MEVAIII-BOGOT@	COLOMBIA	CLM
MEVAIII-SANTO DOMINGO	DOMINICAN REPUBLIC	DOM
MEVAIII-SAN JUAN	PUERTO RICO / USA	PTR/USA
MEVAIII-PORT-AU-PRIN	HAITI	HTI
MEVAIII-PHILLIPSBURG	ANTIGUA AND BARBUDA	ATG
MEVAIII-PANAMA CITY	PANAMA	PNR
MEVAIII-ORANJESTAD	ARUBA / HOLLAND	ABW/HOL
MEVAIII-MERIDA	MEXICO	MEX
MEVAIII-KINGSTON	JAMAICA	JMC
MEVAIII-HAVANA	CUBA	CUB
MEVAIII-GEORGETOWN	CAYMAN ISLANDS / UK	CYM/G
MEVAIII-NASSAU	BAHAMAS	BAH
MEVAIII-FREEPORT	BAHAMAS	BAH
MEVAIII-COCESNA	HONDURAS	HND
MEVAIII-CARACAS	VENEZUELA	VEN
MEVAIII-ATLANTA	USA	USA

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 19

Administration/Geographical area: CUW/HOL

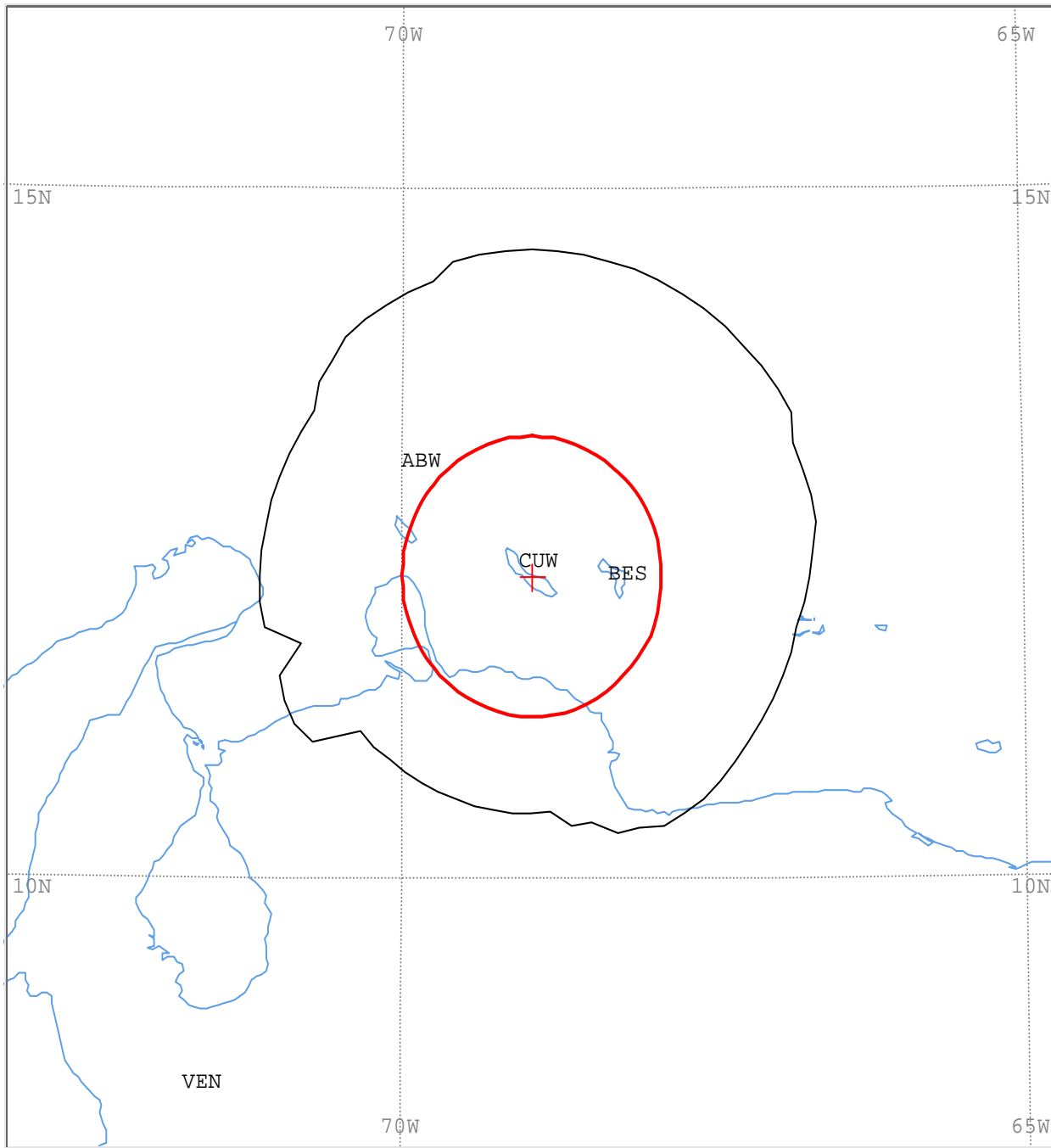
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-WILLEMSTAD

Earth station position: 068W573512N1120

Satellite name: USASAT-60I



Scale: 463.00 Km (default)

- + ES position
- Main Mode1
- Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:19:13

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 19 EARTH STATION NAME: MEVAIII-WILLEMSTAD EARTH STATION POSITION: 068W573512N1120 PHASE: D  
 ADM/GEO\_AREA: CUW/HOL RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 115.41 DEG ANTENNA ELEVATION: 58.79 DEG  
 FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
 MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -50.8 DBW/HZ NOISE TEMPERATURE: - K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 162.2 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 116.2 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	
OFF-AXIS	102.8	100.4	97.9	95.4	92.8	90.2	87.6	85.0	82.5	80.0	77.6	75.2	72.9	70.7	68.7	66.8	65.0	63.5	62.1	60.9	60.0	59.4	58.9	58.8	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	263	263	263	263	263	263	263	263	263	263	263	263	263	253	253	253	253	247	244	240	235	235	234	234	
MODE 2																									
0.0 DEG	113	113	113	113	113	113	113	113	113	113	114	114	114	114	114	114	114	114	114	114	114	114	115	115	
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	
OFF-AXIS	58.9	59.3	59.9	60.8	61.9	63.2	64.8	66.5	68.3	70.4	72.5	74.8	77.2	79.6	82.1	84.6	87.2	89.8	92.4	95.0	97.5	100.0	102.4	104.8	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	233	232	233	233	234	234	232	224	220	205	205	191	192	192	192	192	192	192	192	193	193	196	195	233	
MODE 2																									
0.0 DEG	115	114	114	114	114	114	114	114	114	114	114	114	114	114	113	113	113	113	113	113	113	113	113	113	
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	
OFF-AXIS	107.1	109.3	111.3	113.2	115.0	116.5	117.9	119.1	120.0	120.6	121.1	121.2	121.1	120.7	120.1	119.2	118.1	116.8	115.2	113.5	111.7	109.6	107.5	105.2	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	239	238	234	209	237	238	238	237	235	235	234	233	233	232	243	247	252	253	253	253	253	263	263	263	
MODE 2																									
0.0 DEG	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	

PROBABLY AFFECTED COUNTRIES: ABW BES CLM VEN



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 19

Administration/Geographical area: CUW/HOL

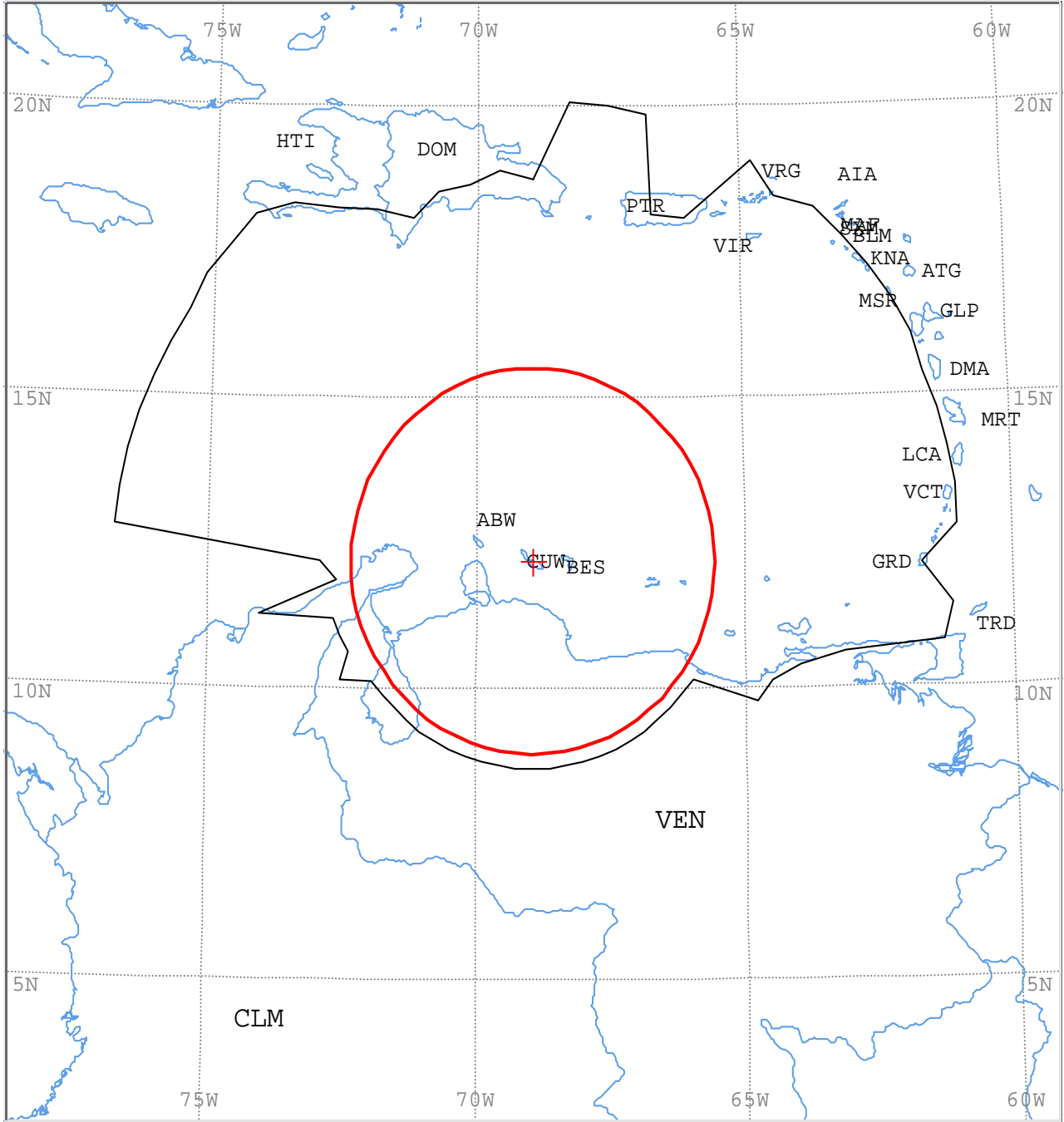
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-WILLEMSTAD

Earth station position: 068W573512N1120

Satellite name: USASAT-60I



Scale: 1084.00 Km (default)

- + ES position
- Main Model
- Main Mode2

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 19 EARTH STATION NAME: MEVAIII-WILLEMSTAD EARTH STATION POSITION: 068W573512N1120 PHASE: D  
 ADM/GEO\_AREA: CUW/HOL RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 115.41 DEG ANTENNA ELEVATION: 58.79 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	102.8	100.4	97.9	95.4	92.8	90.2	87.6	85.0	82.5	80.0	77.6	75.2	72.9	70.7	68.7	66.8	65.0	63.5	62.1	60.9	60.0	59.4	58.9	58.8
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	728	881	883	882	703	724	883	853	884	883	884	884	884	871	871	871	870	863	790	855	848	657	578	539
MODE 2																								
0.0 DEG	368	368	368	369	369	369	369	369	369	369	369	370	370	370	370	370	370	370	370	370	370	370	370	370
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	58.9	59.3	59.9	60.8	61.9	63.2	64.8	66.5	68.3	70.4	72.5	74.8	77.2	79.6	82.1	84.6	87.2	89.8	92.4	95.0	97.5	100.0	102.4	104.8
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	530	397	396	396	396	397	397	397	397	397	397	398	398	398	398	398	398	398	398	398	398	398	398	400
MODE 2																								
0.0 DEG	370	370	370	370	370	370	370	370	370	370	370	370	370	369	369	369	369	369	369	369	369	368	368	368
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	107.1	109.3	111.3	113.2	115.0	116.5	117.9	119.1	120.0	120.6	121.1	121.2	121.1	120.7	120.1	119.2	118.1	116.8	115.2	113.5	111.7	109.6	107.5	105.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	452	412	415	419	564	399	432	849	848	848	847	845	844	844	858	862	870	836	781	743	698	731	729	748
MODE 2																								
0.0 DEG	368	368	368	368	368	367	367	367	367	367	367	367	367	367	367	367	367	367	368	368	368	368	368	368

PROBABLY AFFECTED COUNTRIES: ABW BES CLM DOM GRD HTI KNA MSR PTR TRD VCT VEN VIR VRG

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 2

Administration/Geographical area: CLM/CLM

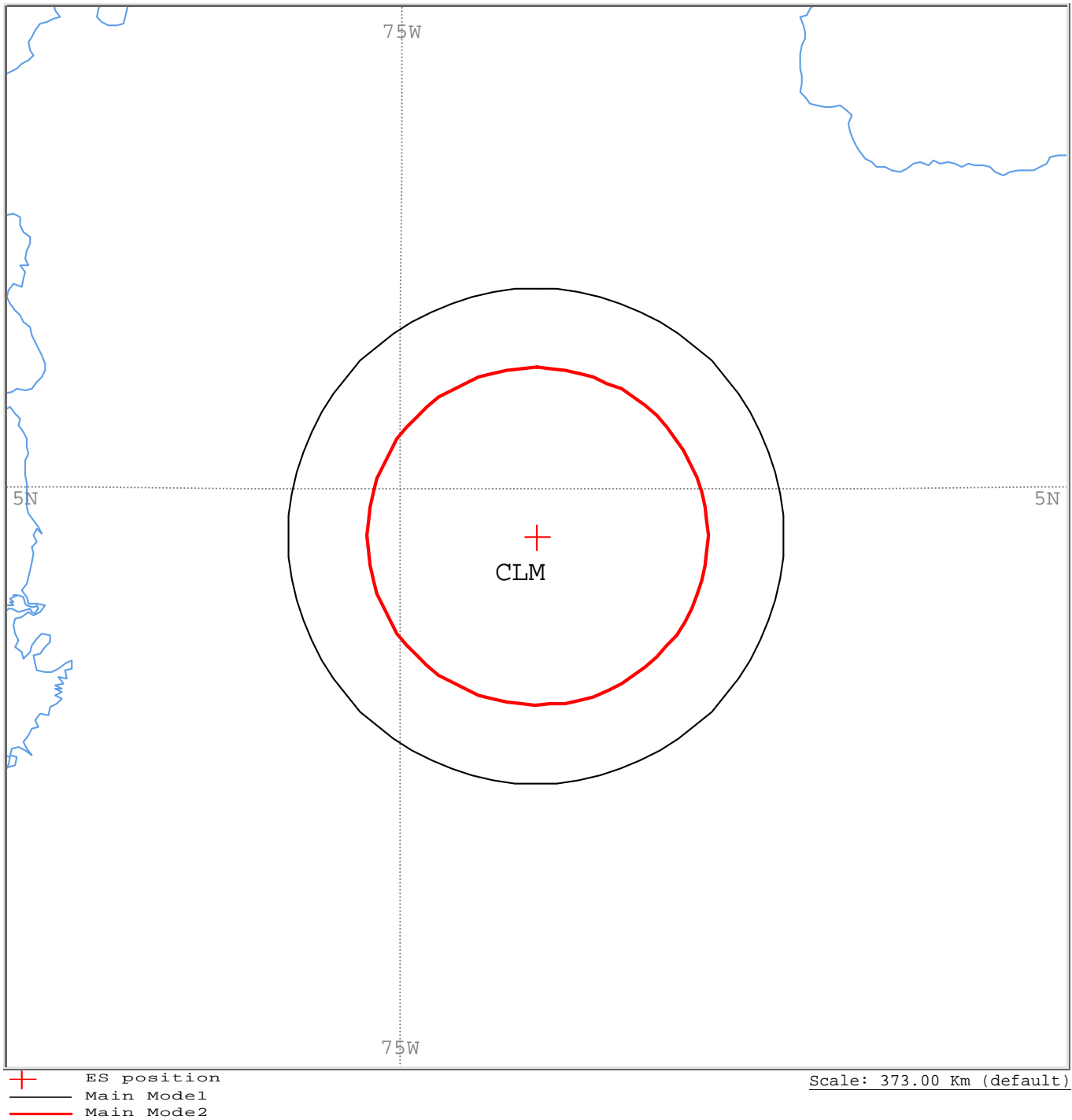
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-BOGOT@

Earth station position: 074W084904N4206

Satellite name: USASAT-60I



ANALYSIS DATE AND TIME: 2014-11-27 12:21:39

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 2 EARTH STATION NAME: MEVAIII-BOGOT@ EARTH STATION POSITION: 074W084904N4206 PHASE: D  
ADM/GEO\_AREA: CLM/CLM RAIN CLIMATICAL\_ZONE: N  
SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
ANTENNA\_AZIMUTH: 98.36 DEG ANTENNA\_ELEVATION: 55.62 DEG  
FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -53.6 DBW/HZ NOISE\_TEMPERATURE: - K  
ANTENNA\_PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 159.4 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 113.4 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	94.7	91.9	89.1	86.3	83.5	80.7	78.0	75.3	72.8	70.3	68.0	65.8	63.7	61.9	60.2	58.8	57.6	56.7	56.0	55.7	55.6	55.9	56.4	57.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
MODE 2																								
0.0 DEG	118	118	118	118	118	118	119	119	119	119	119	119	119	119	120	120	120	120	120	120	120	120	120	120
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	58.3	59.7	61.3	63.1	65.0	67.2	69.5	71.9	74.4	77.1	79.8	82.5	85.3	88.1	90.9	93.7	96.5	99.3	102.0	104.7	107.2	109.7	112.0	114.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
MODE 2																								
0.0 DEG	120	120	119	119	119	119	119	119	119	119	119	118	118	118	118	118	118	118	118	118	118	118	118	118
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	116.3	118.1	119.8	121.2	122.4	123.3	124.0	124.3	124.4	124.1	123.6	122.8	121.7	120.3	118.7	116.9	115.0	112.8	110.5	108.1	105.6	102.9	100.2	97.5
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
MODE 2																								
0.0 DEG	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118

PROBABLY AFFECTED COUNTRIES:

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 2

Administration/Geographical area: CLM/CLM

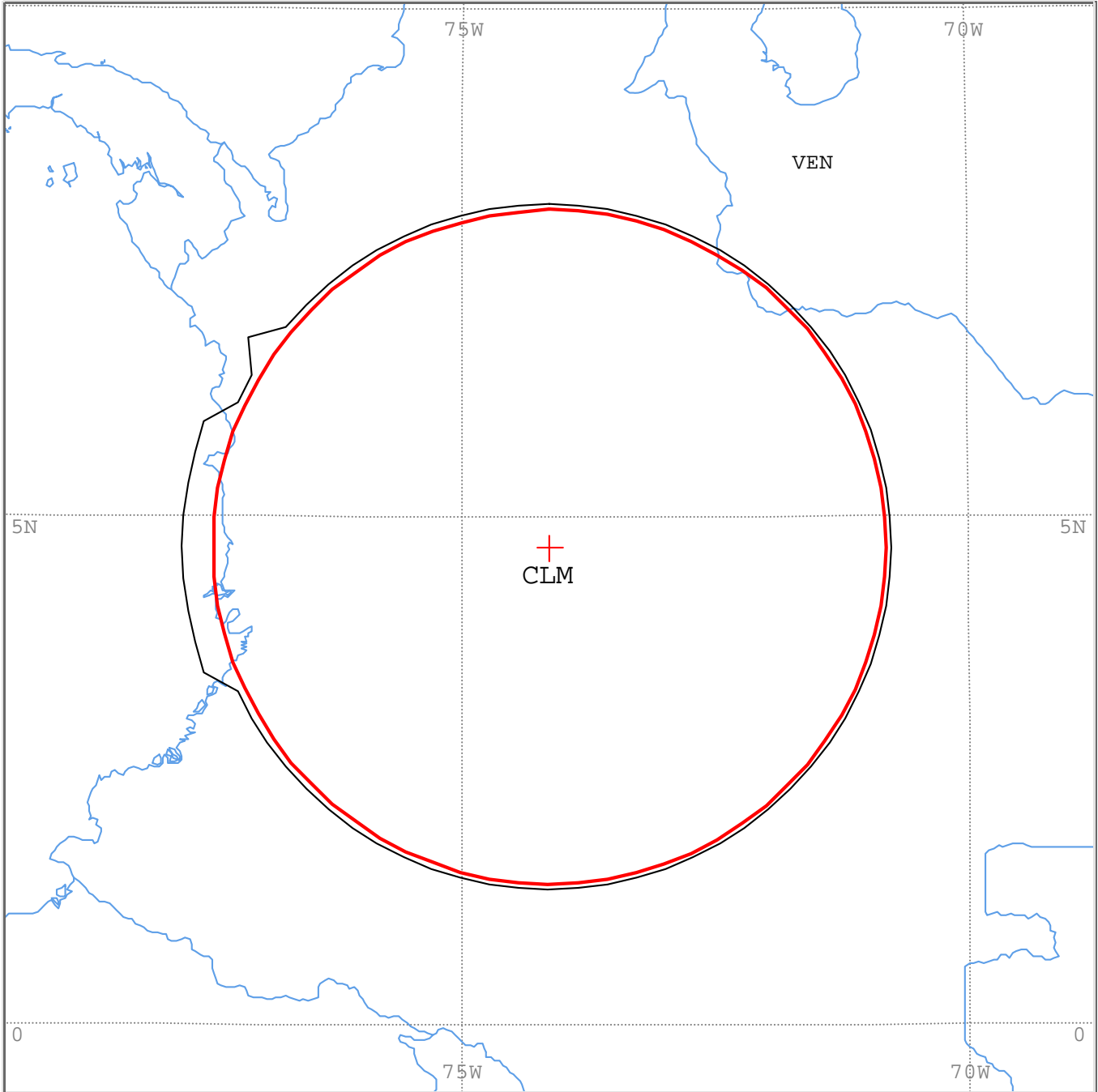
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-BOGOT@

Earth station position: 074W084904N4206

Satellite name: USASAT-60I



Scale: 601.00 Km (default)

- + ES position
- Main Model
- Main Mode2

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 2 EARTH STATION NAME: MEVAIII-BOGOT@ EARTH STATION POSITION: 074W084904N4206 PHASE: D  
 ADM/GEO\_AREA: CLM/CLM RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 98.36 DEG ANTENNA ELEVATION: 55.62 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	94.7	91.9	89.1	86.3	83.5	80.7	78.0	75.3	72.8	70.3	68.0	65.8	63.7	61.9	60.2	58.8	57.6	56.7	56.0	55.7	55.6	55.9	56.4	57.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9

COORDINATION DISTANCE (KM)

MODE 1	0.0 DB	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375
MODE 2	0.0 DEG	369	369	369	369	369	369	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370

AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	58.3	59.7	61.3	63.1	65.0	67.2	69.5	71.9	74.4	77.1	79.8	82.5	85.3	88.1	90.9	93.7	96.5	99.3	102.0	104.7	107.2	109.7	112.0	114.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9

COORDINATION DISTANCE (KM)

MODE 1	0.0 DB	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375
MODE 2	0.0 DEG	370	370	370	370	370	370	370	370	369	369	369	369	369	369	369	368	368	368	368	368	368	368	368

AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	116.3	118.1	119.8	121.2	122.4	123.3	124.0	124.3	124.4	124.1	123.6	122.8	121.7	120.3	118.7	116.9	115.0	112.8	110.5	108.1	105.6	102.9	100.2	97.5
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9

COORDINATION DISTANCE (KM)

MODE 1	0.0 DB	375	375	401	401	401	401	401	401	401	401	375	375	401	375	375	375	375	375	375	375	375	375	375
MODE 2	0.0 DEG	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	368	368	368	368	368	368	368	368

PROBABLY AFFECTED COUNTRIES: VEN

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 18

Administration/Geographical area: DOM/DOM

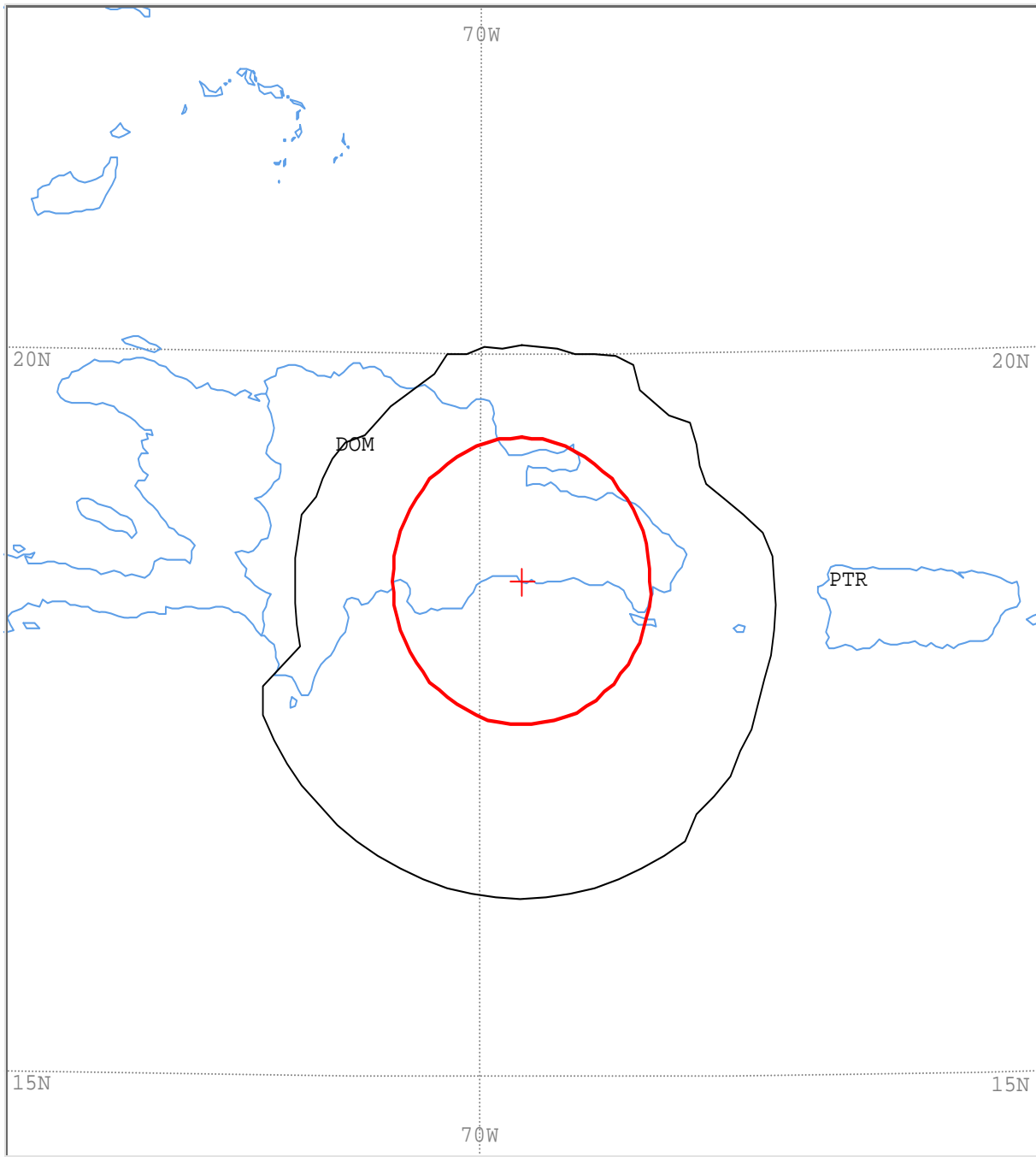
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-SANTO DOMING

Earth station position: 069W400818N2546

Satellite name: USASAT-60I



Scale: 445.00 Km (default)

- + ES position
- Main Model1
- Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:18:40

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 18 EARTH STATION NAME: MEVAIII-SANTO DOMING EARTH STATION POSITION: 069W400818N2546 PHASE: D  
ADM/GEO\_AREA: DOM/DOM RAIN CLIMATICAL\_ZONE: N  
SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
ANTENNA\_AZIMUTH: 124.54 DEG ANTENNA\_ELEVATION: 54.53 DEG  
FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -52.3 DBW/HZ NOISE\_TEMPERATURE: - K  
ANTENNA\_PATTERN: APRECO15V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 160.7 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 114.7 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	109.2	106.6	103.9	101.2	98.4	95.5	92.6	89.7	86.8	84.0	81.1	78.3	75.6	72.9	70.3	67.9	65.6	63.4	61.4	59.7	58.1	56.8	55.8	55.1
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	181	180	181	180	185	191	192	179	178	179	190	183	177	176	185	197	211	217	217	219	221	222	222	224
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	111	111	111	111	111	111	111	111	112	112	112	112	112
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	54.7	54.5	54.7	55.2	56.0	57.1	58.4	60.0	61.8	63.8	66.0	68.3	70.8	73.4	76.1	78.8	81.6	84.5	87.4	90.3	93.2	96.0	98.9	101.7
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	229	229	235	235	235	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245	245
MODE 2																								
0.0 DEG	112	112	112	112	112	112	112	112	111	111	111	111	111	111	111	111	110	110	110	110	110	110	110	110
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	104.4	107.1	109.7	112.1	114.4	116.6	118.6	120.3	121.9	123.2	124.2	124.9	125.3	125.5	125.3	124.8	124.0	122.9	121.6	120.0	118.2	116.2	114.0	111.7
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	245	244	236	196	195	194	194	194	194	194	187	187	187	184	174	174	174	174	174	175	185	180	183	179
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110

PROBABLY AFFECTED COUNTRIES: PTR



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 18

Administration/Geographical area: DOM/DOM

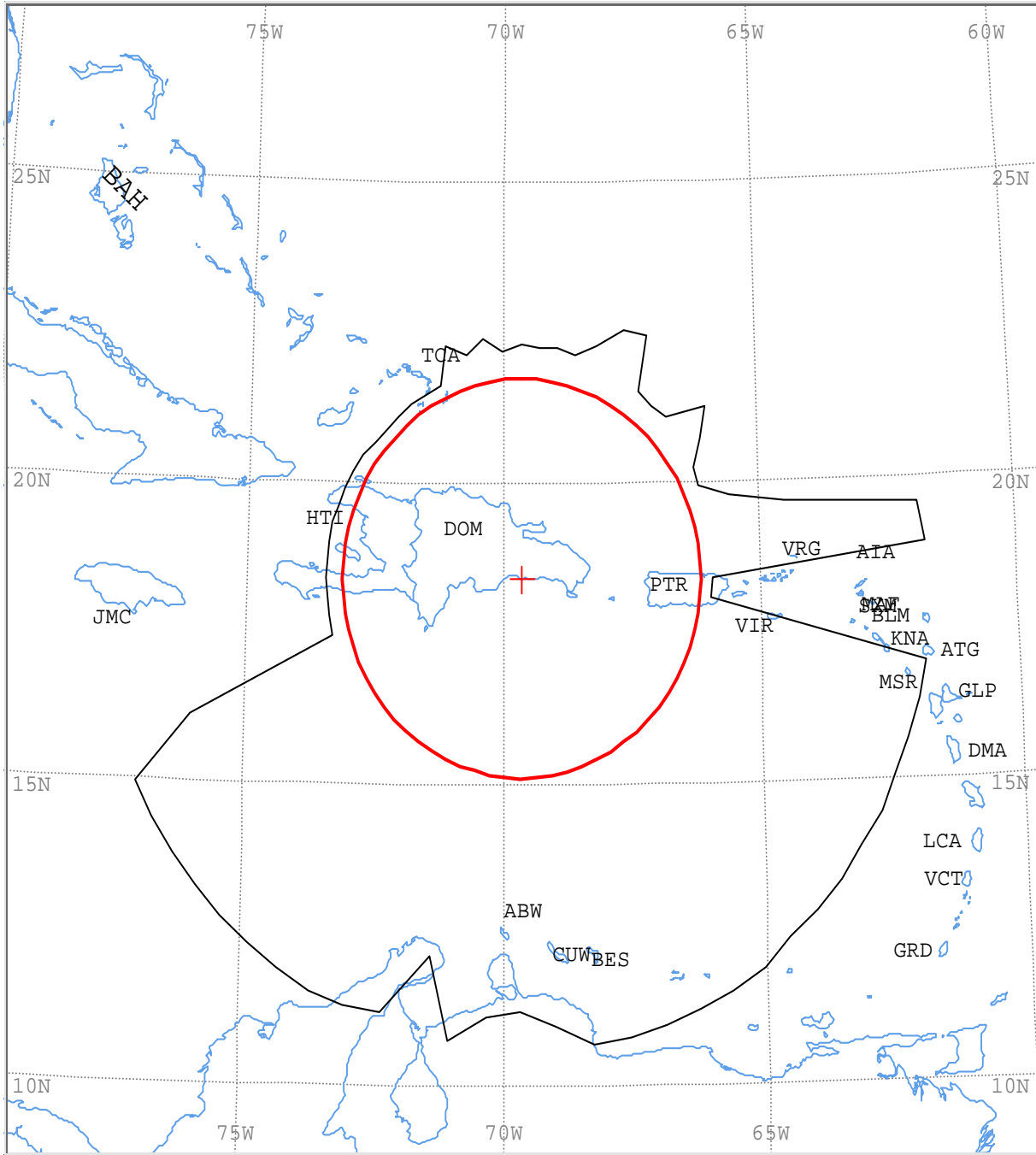
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-SANTO DOMINGO

Earth station position: 069W400818N2546

Satellite name: USASAT-60I



- + ES position
- Main Model1
- Main Mode2

Scale: 1078.00 Km (default)

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 18 EARTH STATION NAME: MEVAIII-SANTO DOMING EARTH STATION POSITION: 069W400818N2546 PHASE: D  
 ADM/GEO\_AREA: DOM/DOM RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 124.54 DEG ANTENNA ELEVATION: 54.53 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		
OFF-AXIS	109.2	106.6	103.9	101.2	98.4	95.5	92.6	89.7	86.8	84.0	81.1	78.3	75.6	72.9	70.3	67.9	65.6	63.4	61.4	59.7	58.1	56.8	55.8	55.1		
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	430	425	430	425	456	504	517	421	417	421	493	448	410	403	456	560	828	835	395	393	846	849	849	851		
MODE 2																										
0.0 DEG	368	368	368	368	368	368	369	369	369	369	369	369	370	370	370	370	370	370	370	370	370	370	371	371		
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235		
OFF-AXIS	54.7	54.5	54.7	55.2	56.0	57.1	58.4	60.0	61.8	63.8	66.0	68.3	70.8	73.4	76.1	78.8	81.6	84.5	87.4	90.3	93.2	96.0	98.9	101.7		
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	858	858	865	865	865	878	878	878	878	878	873	830	800	814	866	722	852	869	878	878	878	878	878	878		
MODE 2																										
0.0 DEG	371	371	371	371	370	370	370	370	370	370	370	370	370	370	370	369	369	369	369	369	369	368	368	368		
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355		
OFF-AXIS	104.4	107.1	109.7	112.1	114.4	116.6	118.6	120.3	121.9	123.2	124.2	124.9	125.3	125.5	125.3	124.8	124.0	122.9	121.6	120.0	118.2	116.2	114.0	111.7		
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	878	875	724	401	401	401	401	401	401	401	398	398	398	396	391	391	391	391	392	393	456	425	448	421		
MODE 2																										
0.0 DEG	368	368	368	368	368	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	368	368		

PROBABLY AFFECTED COUNTRIES: ABW BES CLM CUW HTI KNA MSR PTR TCA VEN VIR VRG

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 17

Administration/Geographical area: PTR/USA

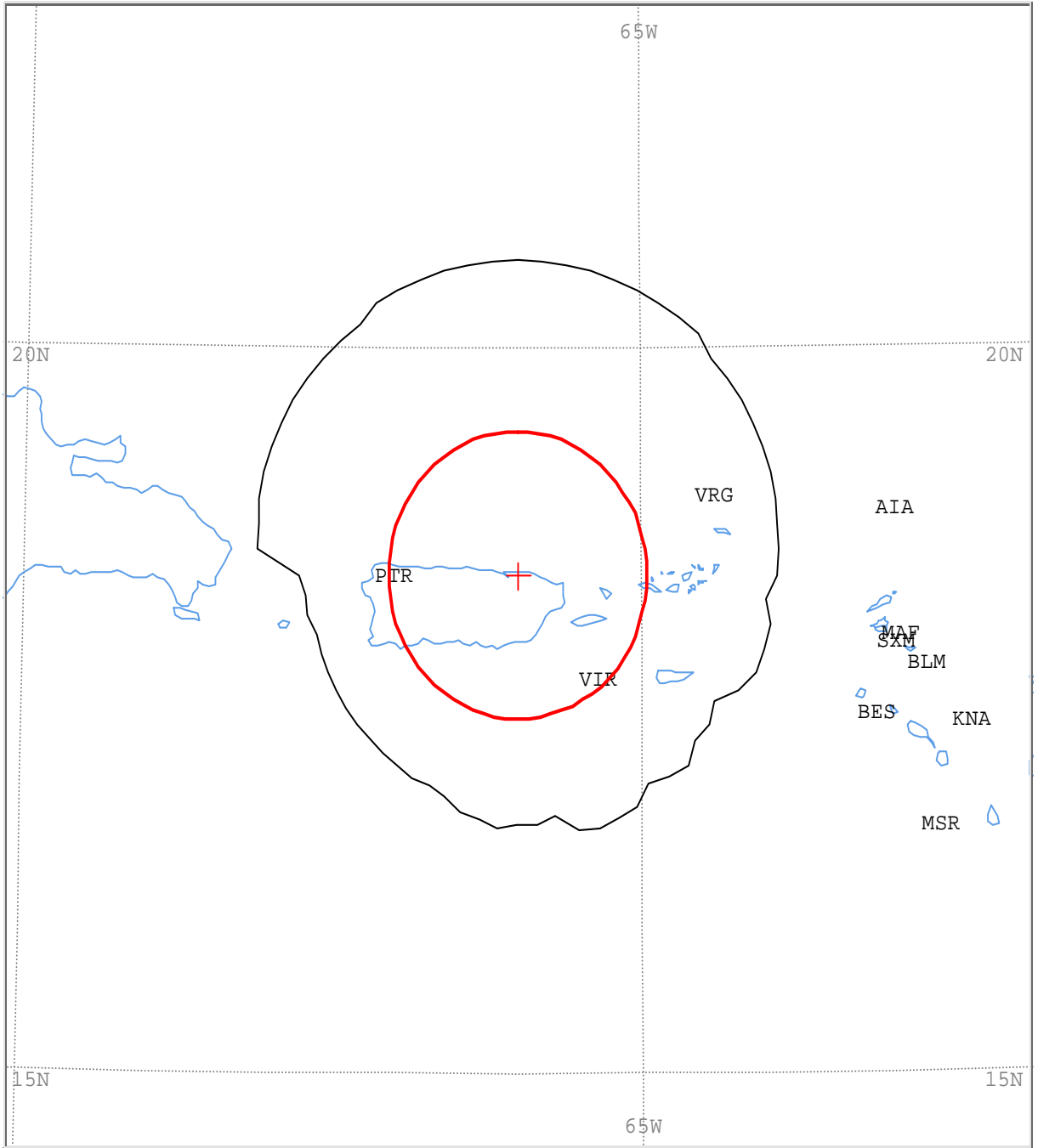
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-SAN JUAN

Earth station position: 066W000618N2622

Satellite name: USASAT-60I



Scale: 441.00 Km (default)

- + ES position
- Main Model1
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 17 EARTH STATION NAME: MEVAIII-SAN JUAN EARTH STATION POSITION: 066W000618N2622 PHASE: D  
ADM/GEO\_AREA: PTR/USA RAIN CLIMATICAL ZONE: N  
SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
ANTENNA AZIMUTH: 129.49 DEG ANTENNA ELEVATION: 57.70 DEG  
FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -51.7 DBW/HZ NOISE TEMPERATURE: - K  
ANTENNA PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 161.3 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 115.3 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	109.9	107.6	105.2	102.8	100.3	97.7	95.1	92.4	89.7	87.1	84.4	81.8	79.2	76.7	74.3	71.9	69.7	67.6	65.6	63.9	62.3	60.9	59.8	58.8
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	241	241	241	241	241	241	241	241	241	235	235	235	232	232	230	228	225	224	222	214	220	218	218	209
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	111	111	111	111	111	111	111	111	111	111	111	112
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	58.2	57.8	57.7	57.9	58.3	59.0	60.0	61.2	62.6	64.2	66.0	68.0	70.1	72.4	74.8	77.2	79.7	82.3	84.9	87.6	90.3	92.9	95.6	98.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	195	200	198	208	202	195	205	206	207	203	188	193	192	196	190	189	181	179	180	178	178	178	178	178
MODE 2																								
0.0 DEG	112	112	112	112	112	112	111	111	111	111	111	111	111	111	111	111	111	110	110	110	110	110	110	110
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	100.8	103.3	105.7	108.1	110.3	112.4	114.4	116.1	117.7	119.1	120.2	121.2	121.8	122.2	122.3	122.1	121.7	121.0	120.0	118.8	117.4	115.8	114.0	112.0
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	178	178	178	178	182	182	186	223	224	228	230	232	232	235	235	235	235	235	241	241	241	241	241	241
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110

PROBABLY AFFECTED COUNTRIES: VIR VRG

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 17

Administration/Geographical area: PTR/USA

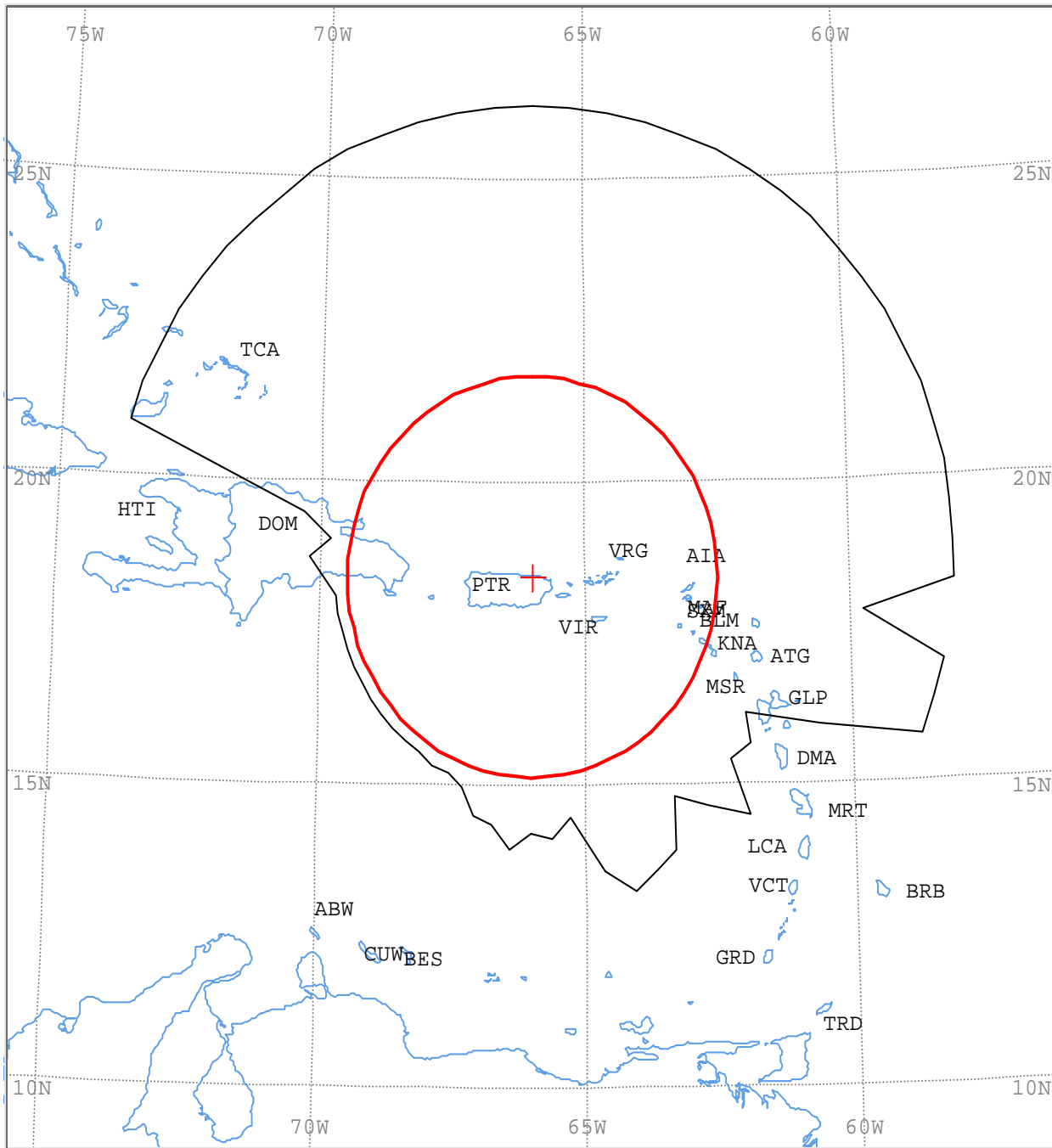
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-SAN JUAN

Earth station position: 066W000618N2622

Satellite name: USASAT-60I



Scale: 1065.00 Km (default)

- + ES position
- Main Model
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 17 EARTH STATION NAME: MEVAIII-SAN JUAN EARTH STATION POSITION: 066W000618N2622 PHASE: D  
 ADM/GEO\_AREA: PTR/USA RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 129.49 DEG ANTENNA ELEVATION: 57.70 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	109.9	107.6	105.2	102.8	100.3	97.7	95.1	92.4	89.7	87.1	84.4	81.8	79.2	76.7	74.3	71.9	69.7	67.6	65.6	63.9	62.3	60.9	59.8	58.8
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	865	865	865	865	865	865	865	865	865	858	858	858	854	854	851	849	844	842	840	662	835	831	829	635
MODE 2																								
0.0 DEG	368	368	368	368	368	368	369	369	369	369	369	369	369	369	370	370	370	370	370	370	370	370	370	370
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	58.2	57.8	57.7	57.9	58.3	59.0	60.0	61.2	62.6	64.2	66.0	68.0	70.1	72.4	74.8	77.2	79.7	82.3	84.9	87.6	90.3	92.9	95.6	98.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	494	531	518	615	546	494	578	595	614	560	449	483	473	505	464	456	410	396	401	393	392	392	392	391
MODE 2																								
0.0 DEG	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	369	369	369	369	369	369	369	368	368
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	100.8	103.3	105.7	108.1	110.3	112.4	114.4	116.1	117.7	119.1	120.2	121.2	121.8	122.2	122.3	122.1	121.7	121.0	120.0	118.8	117.4	115.8	114.0	112.0
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	391	391	391	391	393	393	415	444	405	470	851	854	854	858	858	858	858	858	865	865	865	865	865	865
MODE 2																								
0.0 DEG	368	368	368	368	368	368	368	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	368	368

PROBABLY AFFECTED COUNTRIES: AIA ATG BAH BES BLM DOM GLP KNA MAF MSR SXM TCA VIR VRG

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 16

Administration/Geographical area: HTI/HTI

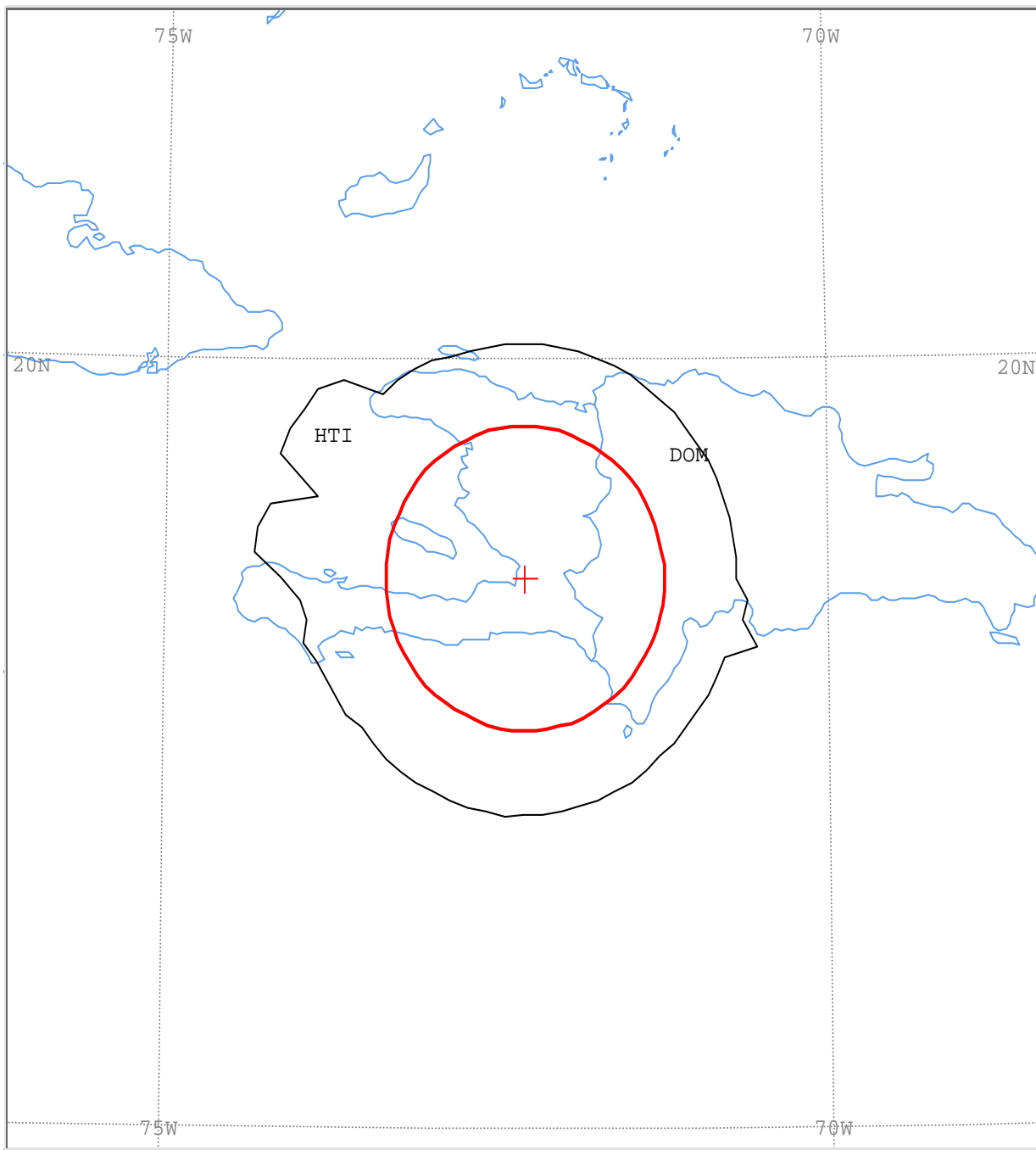
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-PORT-AU-PRIN

Earth station position: 072W173318N3448

Satellite name: USASAT-60I



Scale: 415.00 Km (default)

- + ES position
- Main Mode1
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 16 EARTH STATION NAME: MEVAIII-PORT-AU-PRIN EARTH STATION POSITION: 072W173318N3448 PHASE: D  
ADM/GEO\_AREA: HTI/HTI RAIN CLIMATICAL ZONE: N  
SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
ANTENNA AZIMUTH: 121.70 DEG ANTENNA ELEVATION: 52.06 DEG  
FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -53.0 DBW/HZ NOISE TEMPERATURE: - K  
ANTENNA PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 160.0 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 114.0 DB

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	108.8	106.0	103.1	100.2	97.2	94.1	91.0	88.0	84.9	81.9	78.9	75.9	73.1	70.3	67.6	65.1	62.7	60.5	58.5	56.7	55.2	53.9	53.0	52.4
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	179	177	192	170	169
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	111	111	111	111	111	111	111	112	112	112	112	112	112	112
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	52.1	52.1	52.5	53.3	54.3	55.6	57.2	59.1	61.2	63.4	65.9	68.4	71.2	74.0	76.9	79.8	82.8	85.9	89.0	92.0	95.1	98.1	101.1	104.1
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	169	169	169	169	169	170	171	171	171	171	172	172	172	173	172	172	172	171	171	171	171	169	169	173
MODE 2																								
0.0 DEG	112	112	112	112	112	112	112	112	112	111	111	111	111	111	111	111	110	110	110	110	110	110	110	110
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	106.9	109.7	112.4	114.9	117.3	119.5	121.5	123.3	124.8	126.1	127.0	127.6	127.9	127.9	127.5	126.7	125.7	124.4	122.8	120.9	118.8	116.6	114.1	111.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	174	175	181	175	179	194	215	215	209	174	214	215	213	213	202	174	174	174	173	170	169	169	169
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110

PROBABLY AFFECTED COUNTRIES: DOM



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 16

Administration/Geographical area: HTI/HTI

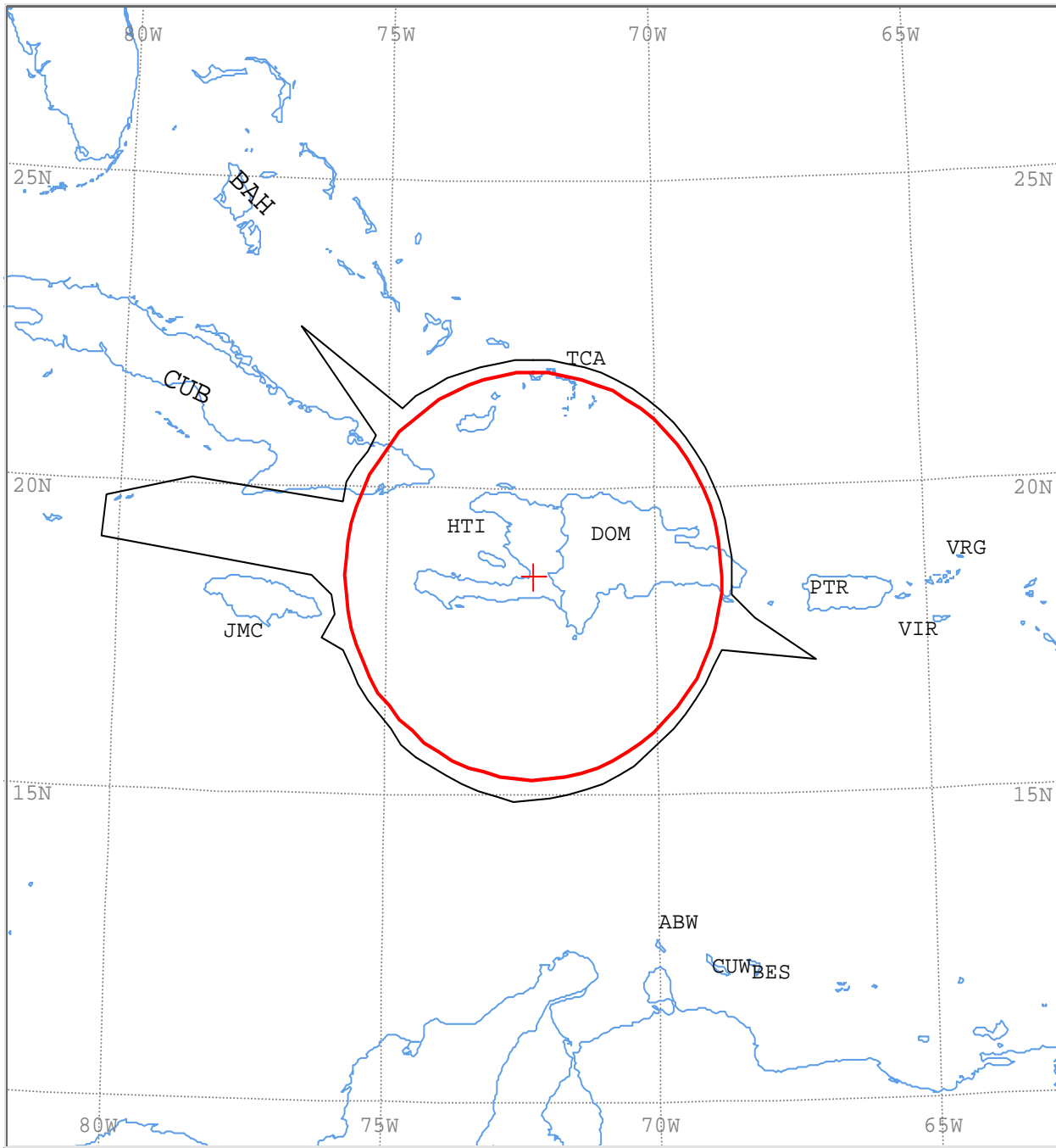
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-PORT-AU-PRIN

Earth station position: 072W173318N3448

Satellite name: USASAT-60I



+ ES position  
Main Model1  
Main Mode2

Scale: 1048.00 Km (default)

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 16 EARTH STATION NAME: MEVAIII-PORT-AU-PRIN EARTH STATION POSITION: 072W173318N3448 PHASE: D  
ADM/GEO\_AREA: HTI/HTI RAIN CLIMATICAL ZONE: N  
SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
ANTENNA AZIMUTH: 121.70 DEG ANTENNA ELEVATION: 52.06 DEG  
FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
ANTENNA PATTERN: APEREC015V01  
2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		
OFF-AXIS	108.8	106.0	103.1	100.2	97.2	94.1	91.0	88.0	84.9	81.9	78.9	75.9	73.1	70.3	67.6	65.1	62.7	60.5	58.5	56.7	55.2	53.9	53.0	52.4		
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	391	393	442	576	395	391		
MODE 2																										
0.0 DEG	368	368	368	368	368	369	369	369	369	369	369	370	370	370	370	370	370	370	370	371	371	371	371	371		
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235		
OFF-AXIS	52.1	52.1	52.5	53.3	54.3	55.6	57.2	59.1	61.2	63.4	65.9	68.4	71.2	74.0	76.9	79.8	82.8	85.9	89.0	92.0	95.1	98.1	101.1	104.1		
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	391	391	391	391	391	394	399	400	401	401	403	406	408	411	408	405	403	400	398	401	399	391	391	393		
MODE 2																										
0.0 DEG	371	371	371	371	371	371	370	370	370	370	370	370	370	370	370	369	369	369	369	369	369	368	368	368		
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355		
OFF-AXIS	106.9	109.7	112.4	114.9	117.3	119.5	121.5	123.3	124.8	126.1	127.0	127.6	127.9	127.9	127.5	126.7	125.7	124.4	122.8	120.9	118.8	116.6	114.1	111.6		
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	393	393	394	428	394	394	433	848	848	689	394	404	399	393	398	638	397	397	393	394	392	391	391	391		
MODE 2																										
0.0 DEG	368	368	368	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367		

PROBABLY AFFECTED COUNTRIES: BAH CUB CYM DOM TCA USA

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 15

Administration/Geographical area: ATG/ATG

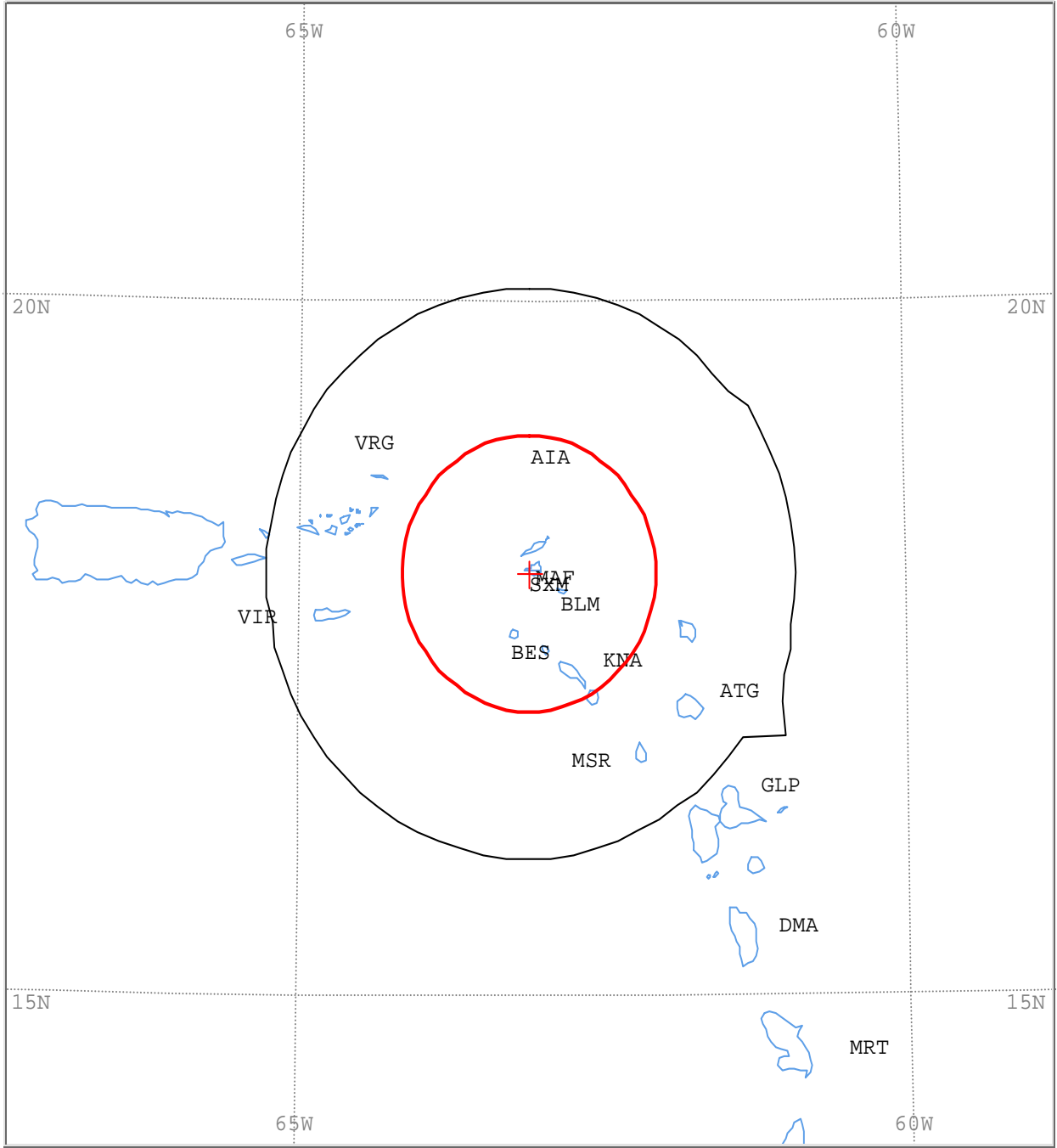
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-PHILLIPSBURG

Earth station position: 063W063218N0227

Satellite name: USASAT-60I



Scale: 460.00 Km (default)

- + ES position
- Main Model1
- Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:16:40

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 15 EARTH STATION NAME: MEVAIII-PHILLIPSBURG EARTH STATION POSITION: 063W063218N0227 PHASE: D  
ADM/GEO\_AREA: ATG/ATG RAIN CLIMATICAL ZONE: N  
SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
ANTENNA AZIMUTH: 133.44 DEG ANTENNA ELEVATION: 60.37 DEG  
FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -50.9 DBW/HZ NOISE TEMPERATURE: - K  
ANTENNA PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 162.1 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 116.1 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	109.9	107.9	105.8	103.6	101.3	99.0	96.6	94.2	91.7	89.2	86.8	84.3	81.9	79.5	77.2	75.0	72.9	70.9	69.0	67.2	65.6	64.2	63.0	62.0
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	228	228	228	228	228	228	228	228	228	227	227	233	232	232	233	233	233	233	233	233	233	237	238	244
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	110	111	111	111	111	111	111	111	111	111	111	111
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	61.3	60.7	60.4	60.4	60.6	61.0	61.7	62.6	63.8	65.1	66.6	68.3	70.1	72.1	74.2	76.4	78.7	81.0	83.4	85.8	88.3	90.8	93.2	95.7
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	260	228	228	229	229	226	227	227	228	228	229	229	229	229	229	228	229	229	229	229	229	229	229	229
MODE 2																								
0.0 DEG	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	110	110	110	110	110	110	110	110
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	98.1	100.5	102.8	105.0	107.1	109.1	111.0	112.8	114.4	115.8	117.0	118.0	118.7	119.3	119.6	119.6	119.4	119.0	118.3	117.4	116.2	114.9	113.4	111.7
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	229	229	229	229	227	229	229	229	228	228	229	228	228	229	229	228	228	228	228	228	228	228	228	228
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110

PROBABLY AFFECTED COUNTRIES: AIA BES BLM KNA MAF MSR PTR SXM VIR VRG

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 15

Administration/Geographical area: ATG/ATG

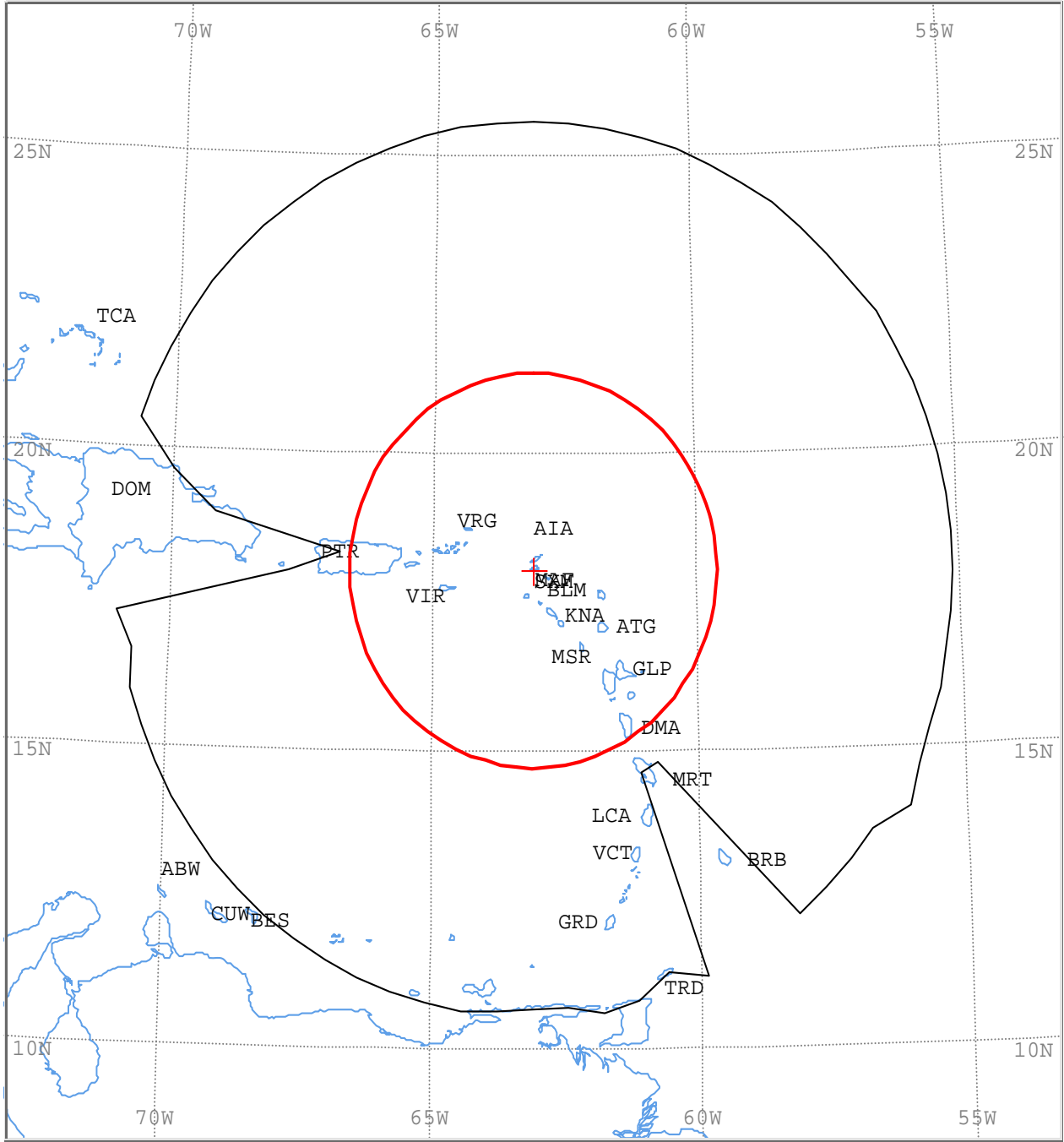
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-PHILLIPSBURG

Earth station position: 063W063218N0227

Satellite name: USASAT-60I



+ ES position  
— Main Model  
— Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 15 EARTH STATION NAME: MEVAIII-PHILLIPSBURG EARTH STATION POSITION: 063W063218N0227 PHASE: D  
 ADM/GEO\_AREA: ATG/ATG RAIN CLIMATICAL\_ZONE: N  
 SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
 ANTENNA\_AZIMUTH: 133.44 DEG ANTENNA\_ELEVATION: 60.37 DEG  
 FREQUENCY\_BAND: 3838.20-3841.30 MHZ ASSIGNED\_FREQUENCY: 3839.75 MHZ PERCENTAGE\_OF\_TIME: 0.0017 %  
 MAXIMUM\_ANTENNA\_GAIN: 42.1 DBI MAXIMUM\_POWER\_DENSITY: - DBW/HZ NOISE\_TEMPERATURE: 400.0 K  
 ANTENNA\_PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	109.9	107.9	105.8	103.6	101.3	99.0	96.6	94.2	91.7	89.2	86.8	84.3	81.9	79.5	77.2	75.0	72.9	70.9	69.0	67.2	65.6	64.2	63.0	62.0
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	839	839	838	838	838	838	838	838	837	837	837	843	842	842	843	843	844	844	844	844	844	849	849	858
MODE 2																								
0.0 DEG	368	368	368	368	368	368	368	369	369	369	369	369	369	369	369	370	370	370	370	370	370	370	370	370
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	61.3	60.7	60.4	60.4	60.6	61.0	61.7	62.6	63.8	65.1	66.6	68.3	70.1	72.1	74.2	76.4	78.7	81.0	83.4	85.8	88.3	90.8	93.2	95.7
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	878	837	837	835	836	438	438	836	799	834	840	820	820	828	837	838	840	840	839	840	840	840	840	840
MODE 2																								
0.0 DEG	370	370	370	370	370	370	370	370	370	370	370	370	370	370	370	369	369	369	369	369	369	369	369	368
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	98.1	100.5	102.8	105.0	107.1	109.1	111.0	112.8	114.4	115.8	117.0	118.0	118.7	119.3	119.6	119.6	119.4	119.0	118.3	117.4	116.2	114.9	113.4	111.7
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	840	840	840	840	822	840	493	391	647	746	839	840	839	840	840	840	840	840	840	840	839	839	839	839
MODE 2																								
0.0 DEG	368	368	368	368	368	368	368	368	368	368	367	367	367	367	367	367	367	367	367	367	368	368	368	368

PROBABLY AFFECTED COUNTRIES: AIA BES BLM DMA DOM GLP GRD KNA LCA MAF MRT MSR PTR SXM TRD VCT VEN VIR VRG

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 14

Administration/Geographical area: PNR/PNR

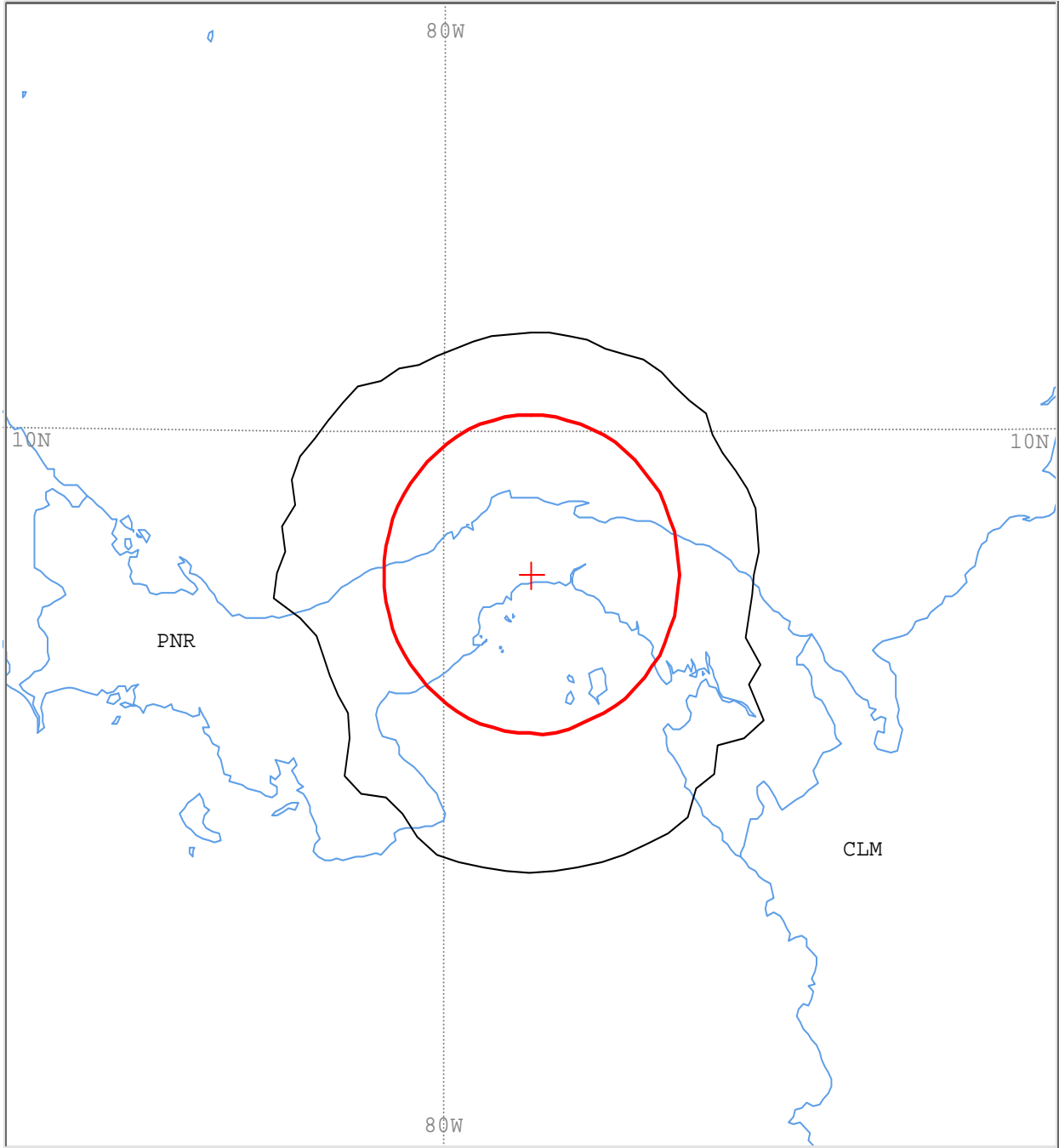
Satellite orbital position: -45.00




Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-PANAMA CITY

Earth station position: 079W230109N0417

Satellite name: USASAT-60I



-  ES position
-  Main Model1
-  Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:16:08

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 14 EARTH STATION NAME: MEVAIII-PANAMA CITY EARTH STATION POSITION: 079W230109N0417 PHASE: D  
ADM/GEO\_AREA: PNR/PNR RAIN CLIMATICAL\_ZONE: P  
SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
ANTENNA\_AZIMUTH: 102.97 DEG ANTENNA\_ELEVATION: 48.88 DEG  
FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -53.1 DBW/HZ NOISE\_TEMPERATURE: - K  
ANTENNA\_PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 159.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 113.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	98.5	95.2	92.0	88.7	85.4	82.1	78.9	75.7	72.6	69.6	66.7	63.9	61.2	58.8	56.5	54.5	52.7	51.3	50.1	49.4	48.9	48.9	49.3	50.0
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	174	175	175	175	174	175	179	179	177	177	180	175	174	178	182	183	181	181	176	175	174	176	193	190
MODE 2																								
0.0 DEG	115	115	115	115	115	115	116	116	116	116	116	116	117	117	117	117	117	117	117	117	117	117	117	117
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	51.0	52.4	54.1	56.1	58.3	60.8	63.4	66.1	69.0	72.0	75.1	78.3	81.5	84.8	88.0	91.3	94.6	97.9	101.1	104.3	107.4	110.4	113.3	116.1
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	212	206	192	205	203	215	216	216	216	216	216	216	216	216	216	216	216	210	200	198	208	206	185	175
MODE 2																								
0.0 DEG	117	117	117	117	117	117	116	116	116	116	116	116	115	115	115	115	115	115	115	115	115	115	115	115
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	118.8	121.2	123.5	125.5	127.3	128.7	129.9	130.6	131.1	131.1	130.7	130.0	129.0	127.6	125.9	123.9	121.7	119.2	116.6	113.9	111.0	108.0	104.9	101.7
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	174	174	174	174	184	202	199	193	198	192	199	200	196	194	192	191	182	181	174	174	174	174	174	174
MODE 2																								
0.0 DEG	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

PROBABLY AFFECTED COUNTRIES:



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 14

Administration/Geographical area: PNR/PNR

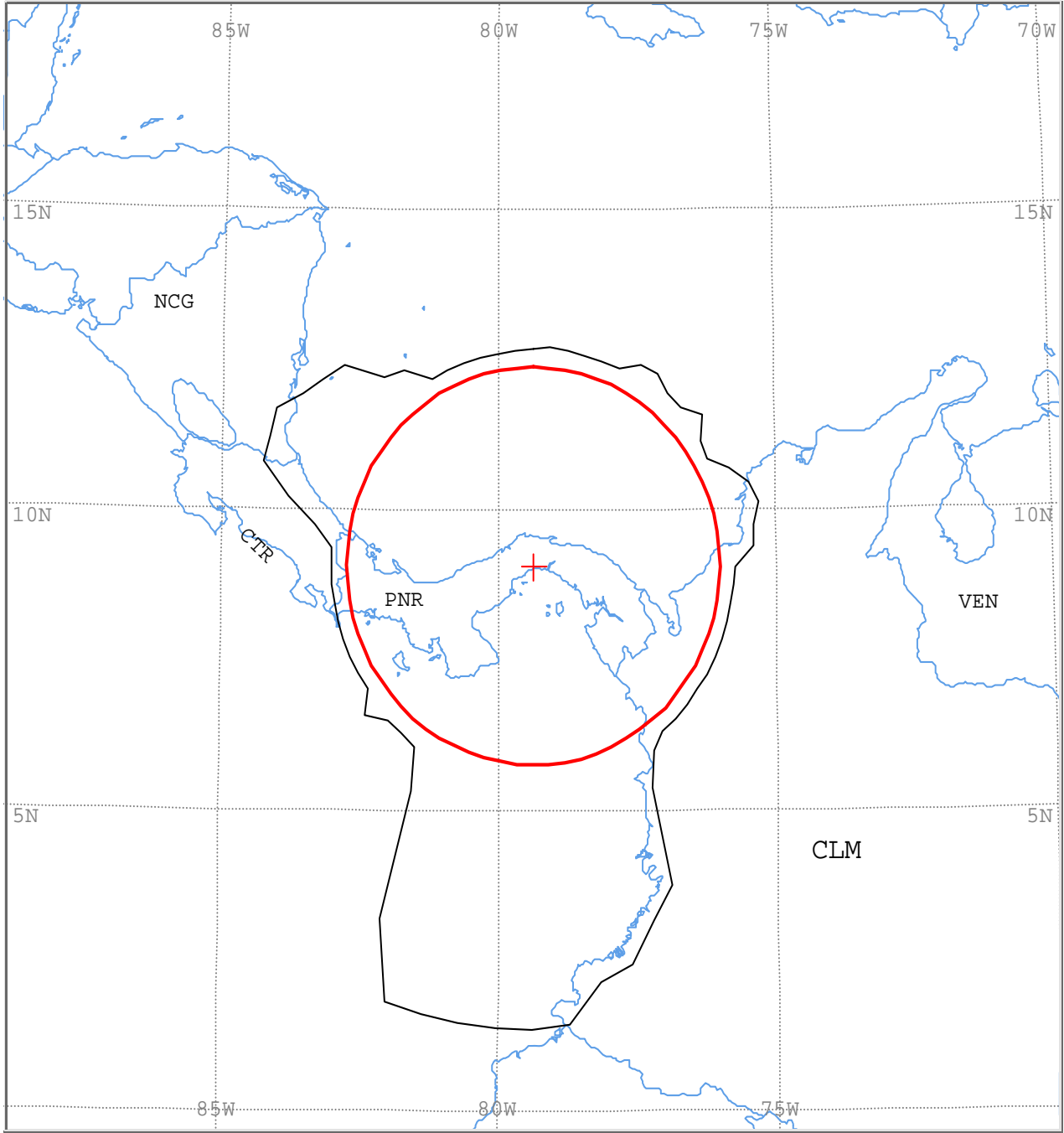
Satellite orbital position: -45.00




Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-PANAMA CITY

Earth station position: 079W230109N0417

Satellite name: USASAT-60I



-  ES position
-  Main Model
-  Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 14 EARTH STATION NAME: MEVAIII-PANAMA CITY EARTH STATION POSITION: 079W230109N0417 PHASE: D  
ADM/GEO\_AREA: PNR/PNR RAIN CLIMATICAL ZONE: P  
SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
ANTENNA AZIMUTH: 102.97 DEG ANTENNA ELEVATION: 48.88 DEG  
FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
ANTENNA PATTERN: APEREC015V01  
2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		
OFF-AXIS	98.5	95.2	92.0	88.7	85.4	82.1	78.9	75.7	72.6	69.6	66.7	63.9	61.2	58.8	56.5	54.5	52.7	51.3	50.1	49.4	48.9	48.9	49.3	50.0		
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	400	405	405	402	401	403	428	432	417	414	437	405	398	428	456	463	443	438	401	398	398	399	399	399		
MODE 2																										
0.0 DEG	368	368	369	369	369	369	369	370	370	370	370	370	370	370	371	371	371	371	371	371	371	371	371	371		
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235		
OFF-AXIS	51.0	52.4	54.1	56.1	58.3	60.8	63.4	66.1	69.0	72.0	75.1	78.3	81.5	84.8	88.0	91.3	94.6	97.9	101.1	104.3	107.4	110.4	113.3	116.1		
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	400	399	399	400	400	418	475	653	700	765	783	853	858	858	858	858	858	719	483	408	403	403	433	398		
MODE 2																										
0.0 DEG	371	371	371	371	371	370	370	370	370	370	370	369	369	369	369	369	369	368	368	368	368	368	367	367		
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355		
OFF-AXIS	118.8	121.2	123.5	125.5	127.3	128.7	129.9	130.6	131.1	131.1	130.7	130.0	129.0	127.6	125.9	123.9	121.7	119.2	116.6	113.9	111.0	108.0	104.9	101.7		
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9		
COORDINATION DISTANCE (KM)																										
MODE 1																										
0.0 DB	398	398	398	398	398	398	398	399	436	499	566	573	586	554	539	525	456	443	398	398	398	400	399	399		
MODE 2																										
0.0 DEG	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	368	368	368	368		

PROBABLY AFFECTED COUNTRIES: CLM CTR EQA NCG

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 13

Administration/Geographical area: ABW/HOL

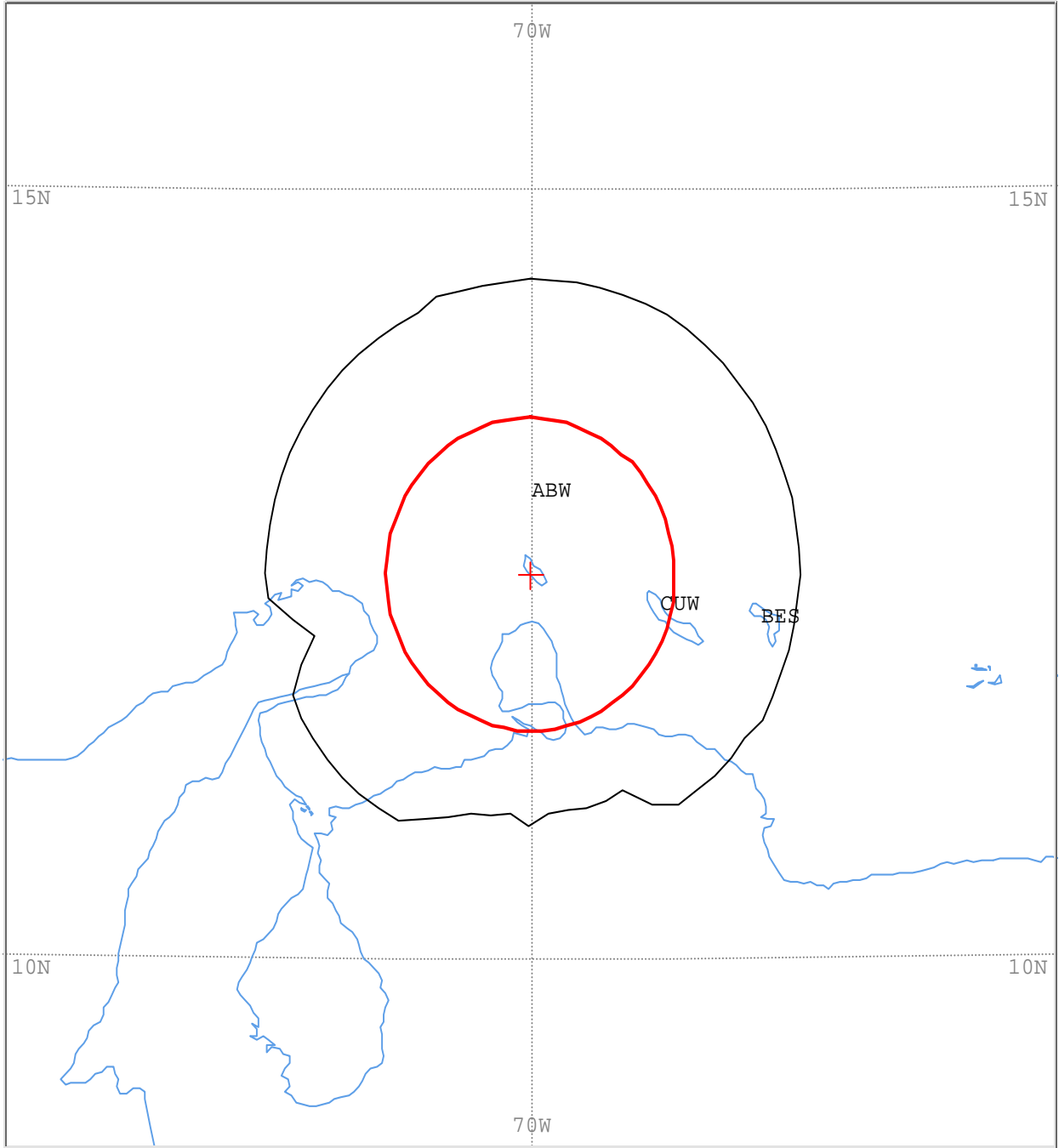
Satellite orbital position: -45.00




Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-ORANJESTAD

Earth station position: 070W005512N3005

Satellite name: USASAT-60I



-  ES position
-  Main Model1
-  Main Mode2

Scale: 416.00 Km (default)

ANALYSIS DATE AND TIME: 2014-11-27 12:15:31

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 13 EARTH STATION NAME: MEVAIII-ORANJESTAD EARTH STATION POSITION: 070W005512N3005 PHASE: D  
 ADM/GEO\_AREA: ABW/HOL RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 114.89 DEG ANTENNA ELEVATION: 57.57 DEG  
 FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
 MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -53.0 DBW/HZ NOISE TEMPERATURE: - K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 160.0 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 114.0 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	103.0	100.5	97.9	95.3	92.6	89.9	87.3	84.6	82.0	79.4	76.8	74.4	72.0	69.8	67.7	65.7	63.9	62.3	60.9	59.7	58.8	58.1	57.7	57.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	213	213	214	214	215	215	216	216	216	215	215	215	215	214	214	214	213	213	213	212	212	212	211	211
MODE 2																								
0.0 DEG	113	113	113	113	113	113	113	113	113	114	114	114	114	114	114	114	114	114	114	114	115	115	115	115
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	57.7	58.1	58.8	59.8	60.9	62.4	64.0	65.8	67.8	69.9	72.1	74.5	77.0	79.5	82.1	84.7	87.4	90.1	92.7	95.4	98.0	100.6	103.2	105.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	212	207	207	206	205	204	193	173	175	175	173	174	182	174	177	180	187	196	206	207	208	208	208	208
MODE 2																								
0.0 DEG	115	115	115	114	114	114	114	114	114	114	114	114	114	114	113	113	113	113	113	113	113	113	113	113
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	108.0	110.2	112.3	114.3	116.1	117.7	119.1	120.3	121.2	121.9	122.3	122.4	122.3	121.9	121.2	120.2	119.1	117.6	116.0	114.2	112.2	110.1	107.9	105.5
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	208	206	191	175	189	206	208	208	208	208	208	208	208	208	208	208	208	208	208	208	213	212	212	212
MODE 2																								
0.0 DEG	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113

PROBABLY AFFECTED COUNTRIES: BES CLM CUW VEN

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 13

Administration/Geographical area: ABW/HOL

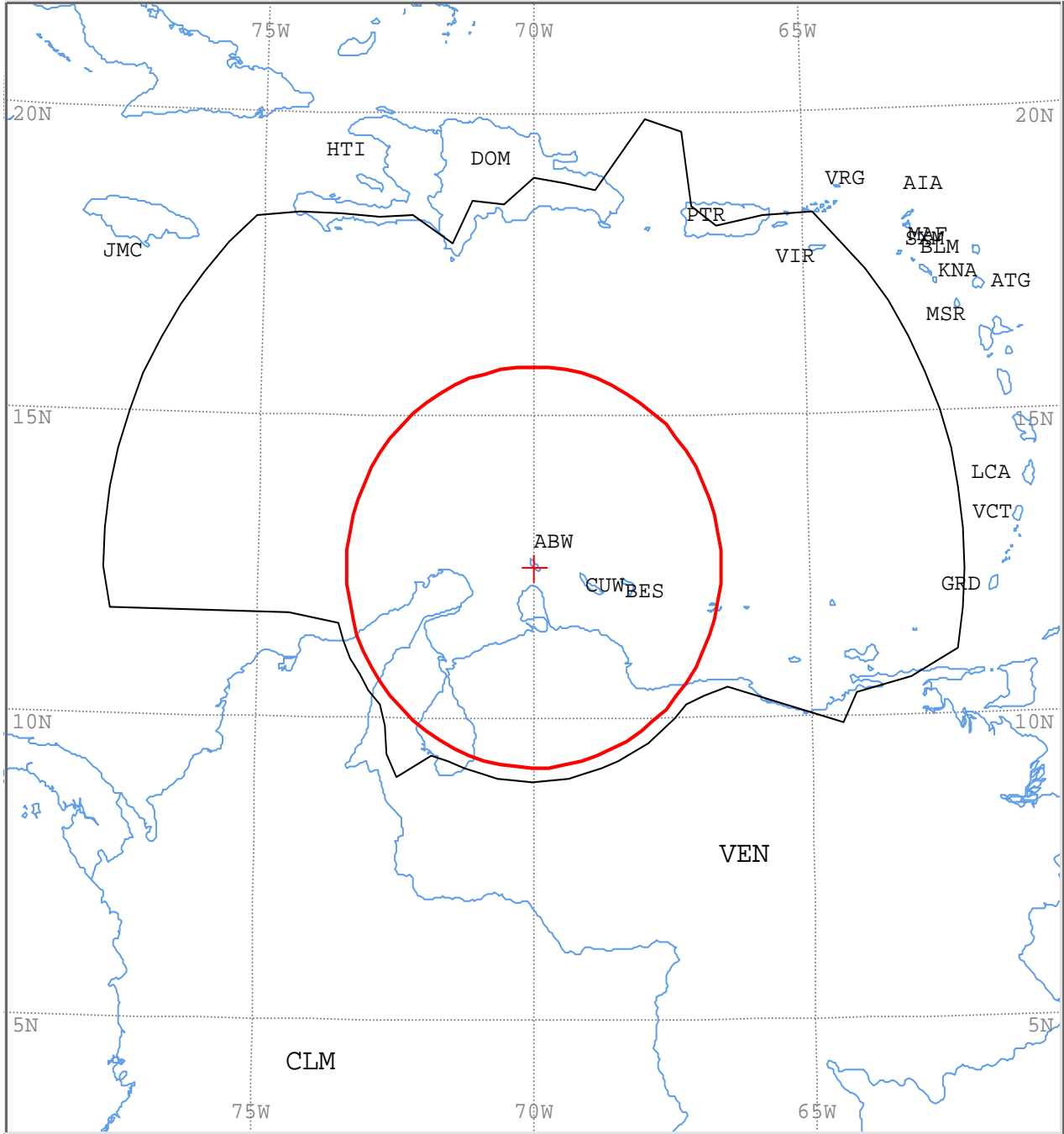
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-ORANJESTAD

Earth station position: 070W005512N3005

Satellite name: USASAT-60I



Scale: 1054.00 Km (default)

- + ES position
- Main Model1
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 13 EARTH STATION NAME: MEVAIII-ORANJESTAD EARTH STATION POSITION: 070W005512N3005 PHASE: D  
 ADM/GEO\_AREA: ABW/HOL RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 114.89 DEG ANTENNA ELEVATION: 57.57 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	103.0	100.5	97.9	95.3	92.6	89.9	87.3	84.6	82.0	79.4	76.8	74.4	72.0	69.8	67.7	65.7	63.9	62.3	60.9	59.7	58.8	58.1	57.7	57.6
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	717	710	703	851	853	734	724	789	854	853	853	853	853	851	851	851	851	851	850	849	849	771	677	675
MODE 2																								
0.0 DEG	368	368	368	369	369	369	369	369	369	369	369	369	370	370	370	370	370	370	370	370	370	370	370	370

AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	57.7	58.1	58.8	59.8	60.9	62.4	64.0	65.8	67.8	69.9	72.1	74.5	77.0	79.5	82.1	84.7	87.4	90.1	92.7	95.4	98.0	100.6	103.2	105.6
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	443	411	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395	402	470	450	411	395	395
MODE 2																								
0.0 DEG	370	370	370	370	370	370	370	370	370	370	370	370	370	369	369	369	369	369	369	369	368	368	368	368

AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	108.0	110.2	112.3	114.3	116.1	117.7	119.1	120.3	121.2	121.9	122.3	122.4	122.3	121.9	121.2	120.2	119.1	117.6	116.0	114.2	112.2	110.1	107.9	105.5
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	395	396	398	396	487	838	846	846	846	846	846	846	846	846	846	846	846	799	752	710	689	615	684	671
MODE 2																								
0.0 DEG	368	368	368	368	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	368	368	368	368

PROBABLY AFFECTED COUNTRIES: BES CLM CUW DOM HTI PTR VEN VIR

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 12

Administration/Geographical area: MEX/MEX

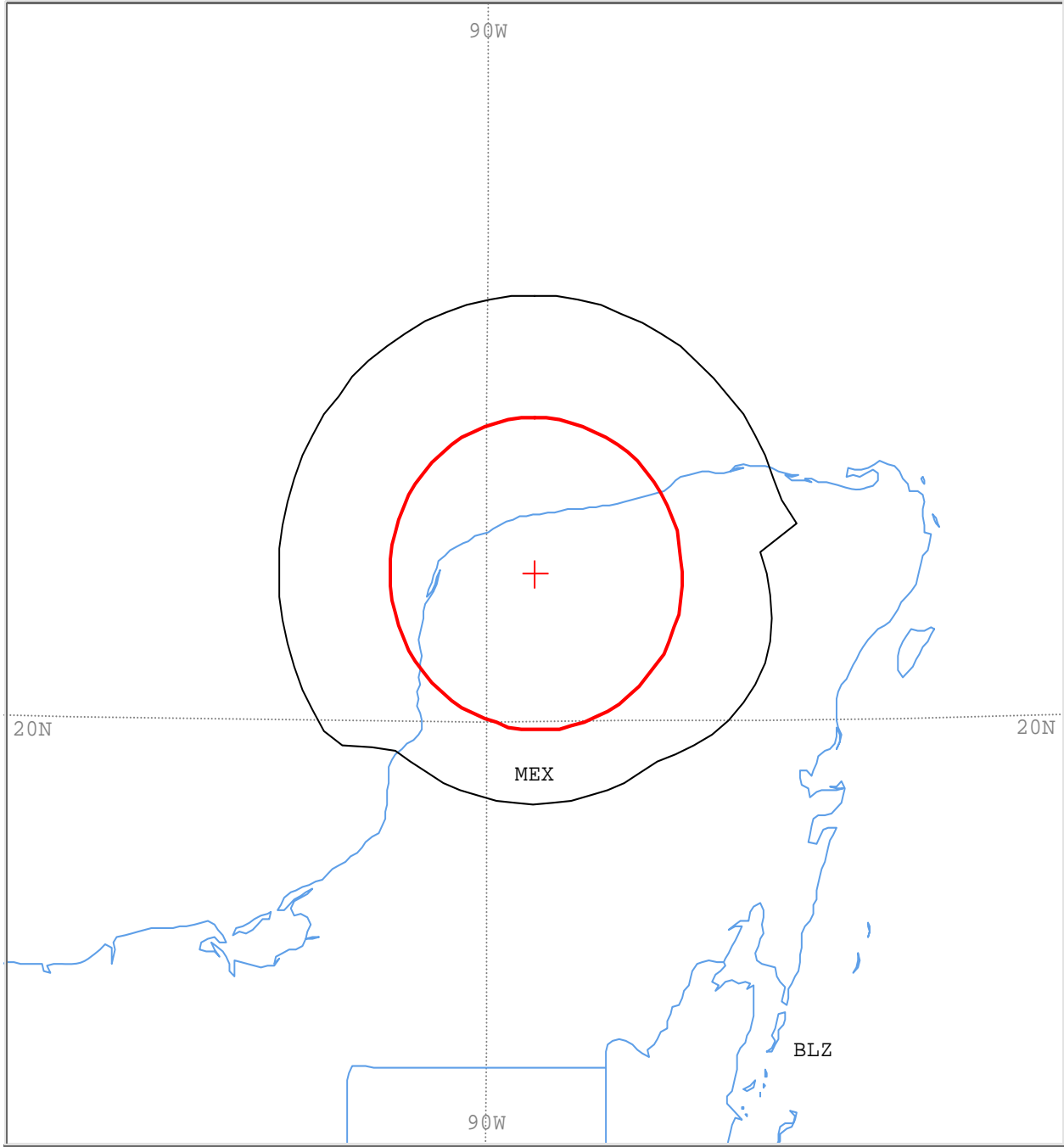
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-MERIDA

Earth station position: 089W392820N5613

Satellite name: USASAT-60I



- + ES position
- Main Model1
- Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:14:06

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 12 EARTH STATION NAME: MEVAIII-MERIDA EARTH STATION POSITION: 089W392820N5613 PHASE: D  
 ADM/GEO\_AREA: MEX/MEX RAIN CLIMATICAL\_ZONE: N  
 SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
 ANTENNA\_AZIMUTH: 109.88 DEG ANTENNA\_ELEVATION: 34.48 DEG  
 FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
 MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -53.9 DBW/HZ NOISE\_TEMPERATURE: - K  
 ANTENNA\_PATTERN: APEREC015V01  
 2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION\_LOSS\_MODE\_1: 159.1 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION\_LOSS\_MODE\_2: 113.1 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	106.3	102.2	98.1	94.0	89.9	85.8	81.7	77.6	73.5	69.5	65.6	61.7	57.9	54.3	50.8	47.5	44.4	41.6	39.2	37.2	35.7	34.8	34.5	34.8
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-9.9	-9.2	-8.5	-7.8	-7.3	-6.8	-6.5	-6.4	-6.5
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	194	194	194	194	193	193	193	193	193	193	193	193	193	193	193	194	202	172	176	180	183	185	186	185
MODE 2																								
0.0 DEG	109	109	109	109	109	109	110	110	110	110	111	111	111	112	112	112	112	112	112	113	113	113	113	113
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	35.8	37.3	39.3	41.7	44.5	47.6	50.9	54.4	58.1	61.9	65.8	69.7	73.7	77.8	81.9	86.0	90.1	94.2	98.3	102.4	106.5	110.5	114.4	118.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.8	-7.3	-7.9	-8.5	-9.2	-9.9	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	183	180	176	172	167	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	163	173	189	193
MODE 2																								
0.0 DEG	113	113	112	112	112	112	112	112	111	111	111	110	110	110	110	109	109	109	109	109	109	109	109	109
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	122.1	125.7	129.2	132.5	135.6	138.4	140.8	142.8	144.3	145.2	145.5	145.2	144.2	142.7	140.7	138.3	135.5	132.4	129.1	125.6	121.9	118.1	114.2	110.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	193	193	193	193	193	193	193	193	193	193	193	193	193	193	193	194	194	194	194	194	194	194	194	194
MODE 2																								
0.0 DEG	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109

PROBABLY AFFECTED COUNTRIES:



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 12

Administration/Geographical area: MEX/MEX

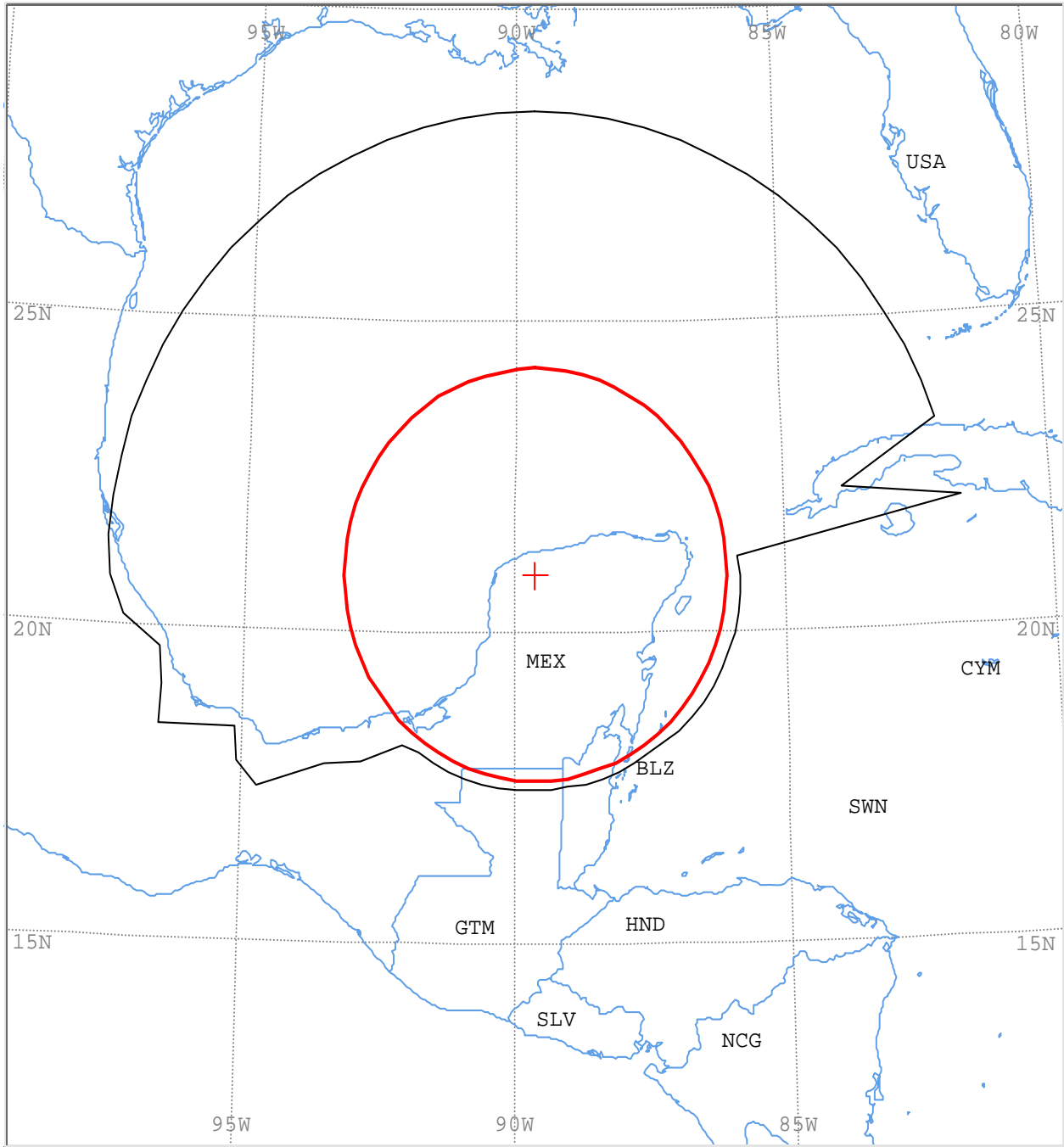
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-MERIDA

Earth station position: 089W392820N5613

Satellite name: USASAT-60I



- + ES position
- Main Model
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 12 EARTH STATION NAME: MEVAIII-MERIDA EARTH STATION POSITION: 089W392820N5613 PHASE: D  
 ADM/GEO\_AREA: MEX/MEX RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 109.88 DEG ANTENNA ELEVATION: 34.48 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	106.3	102.2	98.1	94.0	89.9	85.8	81.7	77.6	73.5	69.5	65.6	61.7	57.9	54.3	50.8	47.5	44.4	41.6	39.2	37.2	35.7	34.8	34.5	34.8
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.8	-6.0	-5.3	-4.7	-4.1	-3.7	-3.4	-3.3	-3.4
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	827	827	826	826	825	825	825	825	825	824	824	824	824	824	824	613	835	394	397	399	400	401	401	401
MODE 2																								
0.0 DEG	368	368	368	368	369	369	369	370	370	370	371	371	371	371	372	372	372	372	372	372	372	372	372	372

AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	35.8	37.3	39.3	41.7	44.5	47.6	50.9	54.4	58.1	61.9	65.8	69.7	73.7	77.8	81.9	86.0	90.1	94.2	98.3	102.4	106.5	110.5	114.4	118.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-3.7	-4.1	-4.7	-5.4	-6.1	-6.8	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	400	399	397	394	392	389	389	389	389	389	386	386	387	387	387	388	389	389	389	390	397	471	527	654
MODE 2																								
0.0 DEG	372	372	372	372	372	372	372	371	371	371	371	370	370	370	369	369	369	368	368	368	368	367	367	367

AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	122.1	125.7	129.2	132.5	135.6	138.4	140.8	142.8	144.3	145.2	145.5	145.2	144.2	142.7	140.7	138.3	135.5	132.4	129.1	125.6	121.9	118.1	114.2	110.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	663	637	771	744	732	794	819	824	824	824	825	825	825	825	825	826	826	826	826	826	826	827	827	827
MODE 2																								
0.0 DEG	366	366	366	366	366	365	365	365	365	365	365	365	365	365	365	366	366	366	366	366	366	367	367	367

PROBABLY AFFECTED COUNTRIES: BLZ CUB GTM

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 11

Administration/Geographical area: JMC/JMC

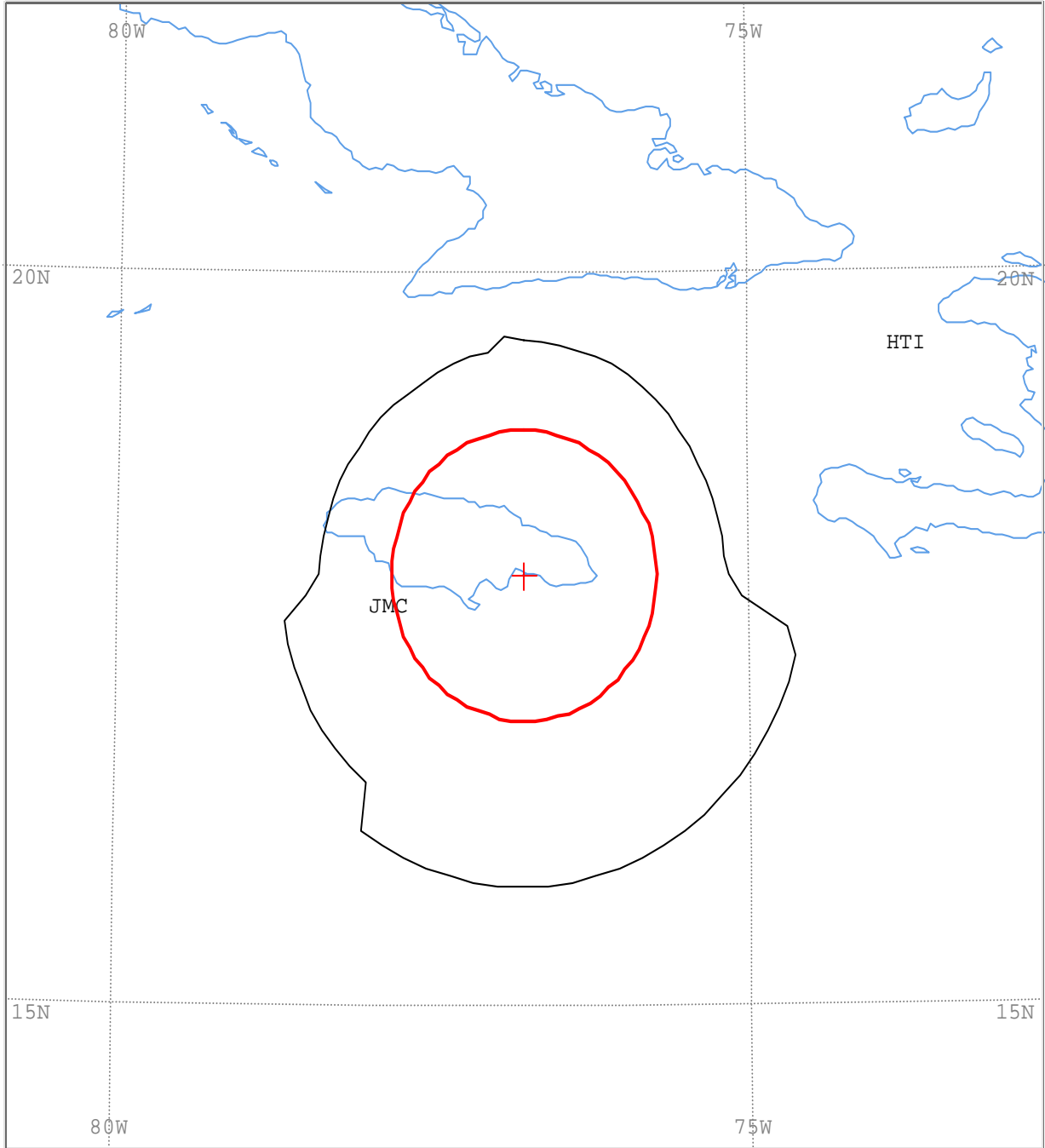
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz




Earth station name: MEVAIII-KINGSTON

Earth station position: 076W471517N5608

Satellite name: USASAT-60I



Scale: 437.00 Km (default)

-  ES position
-  Main Model
-  Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:13:31

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 11 EARTH STATION NAME: MEVAIII-KINGSTON EARTH STATION POSITION: 076W471517N5608 PHASE: D  
ADM/GEO\_AREA: JMC/JMC RAIN CLIMATICAL ZONE: N  
SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
ANTENNA AZIMUTH: 116.42 DEG ANTENNA ELEVATION: 48.19 DEG  
FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -53.1 DBW/HZ NOISE TEMPERATURE: - K  
ANTENNA PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 159.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 113.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	107.3	104.1	100.9	97.6	94.3	90.9	87.6	84.3	81.0	77.7	74.5	71.4	68.4	65.4	62.6	60.0	57.6	55.3	53.3	51.6	50.2	49.2	48.5	48.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	178	177	176	175	176	176	175	174	173	172	170	170	169	169	169	169	169	169	173	184	225	236	237	237
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	111	111	111	111	111	111	112	112	112	112	112	112	112	112	112	112
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	48.3	48.8	49.6	50.8	52.3	54.2	56.3	58.6	61.1	63.8	66.7	69.7	72.7	75.9	79.1	82.4	85.7	89.1	92.4	95.7	99.0	102.3	105.5	108.6
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	205	205	205	205
MODE 2																								
0.0 DEG	112	112	112	112	112	112	112	112	112	111	111	111	111	111	111	110	110	110	110	110	110	110	110	110
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	111.6	114.6	117.4	120.0	122.4	124.7	126.7	128.4	129.8	130.8	131.5	131.8	131.7	131.2	130.4	129.2	127.7	125.8	123.7	121.4	118.9	116.2	113.3	110.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	205	204	204	204	203	183	171	170	169	169	169	169	169	168	168	168	168	168	168	169	170	172	171	181
MODE 2																								
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110

PROBABLY AFFECTED COUNTRIES:

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 11

Administration/Geographical area: JMC/JMC

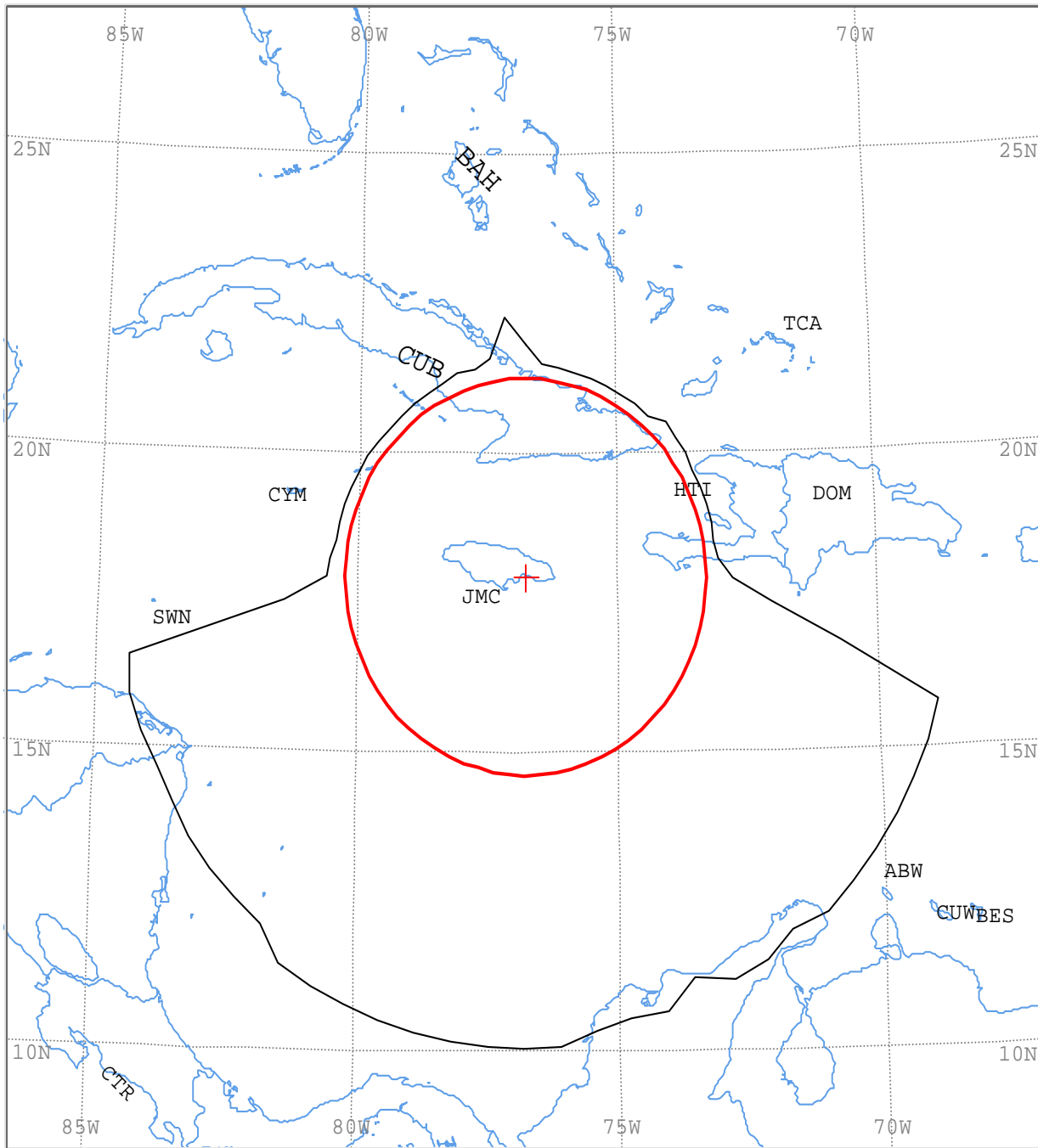
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-KINGSTON

Earth station position: 076W471517N5608

Satellite name: USASAT-60I



Scale: 1078.00 Km (default)

- + ES position
- Main Model
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 11 EARTH STATION NAME: MEVAIII-KINGSTON EARTH STATION POSITION: 076W471517N5608 PHASE: D  
 ADM/GEO\_AREA: JMC/JMC RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 116.42 DEG ANTENNA ELEVATION: 48.19 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	107.3	104.1	100.9	97.6	94.3	90.9	87.6	84.3	81.0	77.7	74.5	71.4	68.4	65.4	62.6	60.0	57.6	55.3	53.3	51.6	50.2	49.2	48.5	48.2
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9

COORDINATION DISTANCE (KM)

MODE 1	0.0 DB	430	396	393	392	391	391	391	391	391	408	403	401	395	396	394	394	391	397	425	505	656	873	878	878
MODE 2	0.0 DEG	368	368	368	368	369	369	369	369	369	369	370	370	370	370	370	370	371	371	371	371	371	371	371	371

AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	48.3	48.8	49.6	50.8	52.3	54.2	56.3	58.6	61.1	63.8	66.7	69.7	72.7	75.9	79.1	82.4	85.7	89.1	92.4	95.7	99.0	102.3	105.5	108.6
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9

COORDINATION DISTANCE (KM)

MODE 1	0.0 DB	878	878	878	878	853	867	865	822	859	849	859	878	878	878	878	878	878	878	878	878	840	840	840	840
MODE 2	0.0 DEG	371	371	371	371	371	371	371	371	370	370	370	370	370	370	369	369	369	369	369	369	368	368	368	368

AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	111.6	114.6	117.4	120.0	122.4	124.7	126.7	128.4	129.8	130.8	131.5	131.8	131.7	131.2	130.4	129.2	127.7	125.8	123.7	121.4	118.9	116.2	113.3	110.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9

COORDINATION DISTANCE (KM)

MODE 1	0.0 DB	832	829	836	835	819	493	405	399	391	391	391	391	391	391	391	391	391	391	392	393	395	401	399	410	483
MODE 2	0.0 DEG	368	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	367	368

PROBABLY AFFECTED COUNTRIES: CLM CUB CYM HND HTI NCG USA

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 9

Administration/Geographical area: CUB/CUB

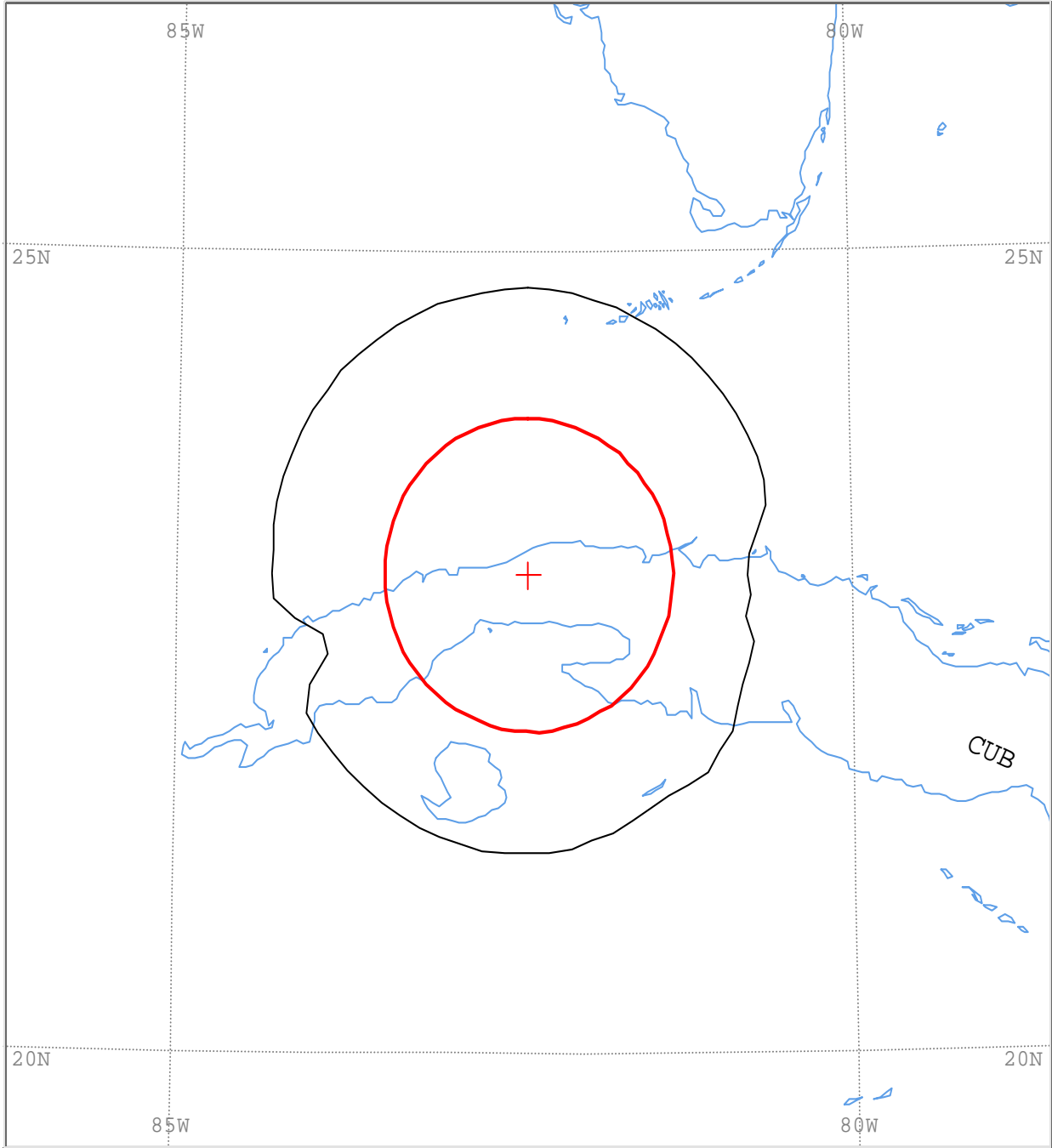
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-HAVANA

Earth station position: 082W243322N5921

Satellite name: USASAT-60I



- + ES position
- Main Model1
- Main Mode2

Scale: 399.00 Km (default)

ANALYSIS DATE AND TIME: 2014-11-27 12:11:54

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 9 EARTH STATION NAME: MEVAIII-HAVANA EARTH STATION POSITION: 082W243322N5921 PHASE: D  
 ADM/GEO\_AREA: CUB/CUB RAIN CLIMATICAL\_ZONE: N  
 SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
 ANTENNA\_AZIMUTH: 117.05 DEG ANTENNA\_ELEVATION: 40.38 DEG  
 FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
 MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -53.8 DBW/HZ NOISE\_TEMPERATURE: - K  
 ANTENNA\_PATTERN: APEREC015V01  
 2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 159.2 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 113.2 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	
OFF-AXIS	110.3	106.6	102.9	99.2	95.4	91.6	87.8	84.0	80.2	76.4	72.7	69.1	65.5	62.1	58.7	55.6	52.6	49.8	47.3	45.1	43.3	41.8	40.9	40.4	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-9.9	-9.4	-8.9	-8.5	-8.3	-8.2	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	198	198	198	197	197	196	196	196	195	195	194	194	193	193	191	187	177	169	168	170	169	178	179	181	
MODE 2																									
0.0 DEG	108	108	108	108	108	108	108	108	109	109	109	109	110	110	110	110	110	110	111	111	111	111	111	111	
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	
OFF-AXIS	40.5	41.0	42.1	43.6	45.5	47.7	50.3	53.1	56.1	59.3	62.7	66.2	69.7	73.4	77.1	80.8	84.6	88.4	92.2	96.0	99.8	103.6	107.3	110.9	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-8.2	-8.3	-8.6	-9.0	-9.4	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	184	190	191	194	191	187	188	189	191	192	194	194	194	194	195	194	194	194	194	193	193	193	193	193	
MODE 2																									
0.0 DEG	111	111	111	111	111	111	110	110	110	110	110	110	109	109	109	109	108	108	108	108	108	108	108	108	
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	
OFF-AXIS	114.5	117.9	121.3	124.4	127.4	130.2	132.7	134.9	136.7	138.2	139.1	139.6	139.5	139.0	137.9	136.4	134.5	132.3	129.7	126.9	123.9	120.7	117.3	113.8	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	193	182	161	161	179	193	193	193	195	196	197	197	198	198	198	199	199	199	199	199	199	198	198	198	
MODE 2																									
0.0 DEG	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	108	

PROBABLY AFFECTED COUNTRIES: USA



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 9

Administration/Geographical area: CUB/CUB

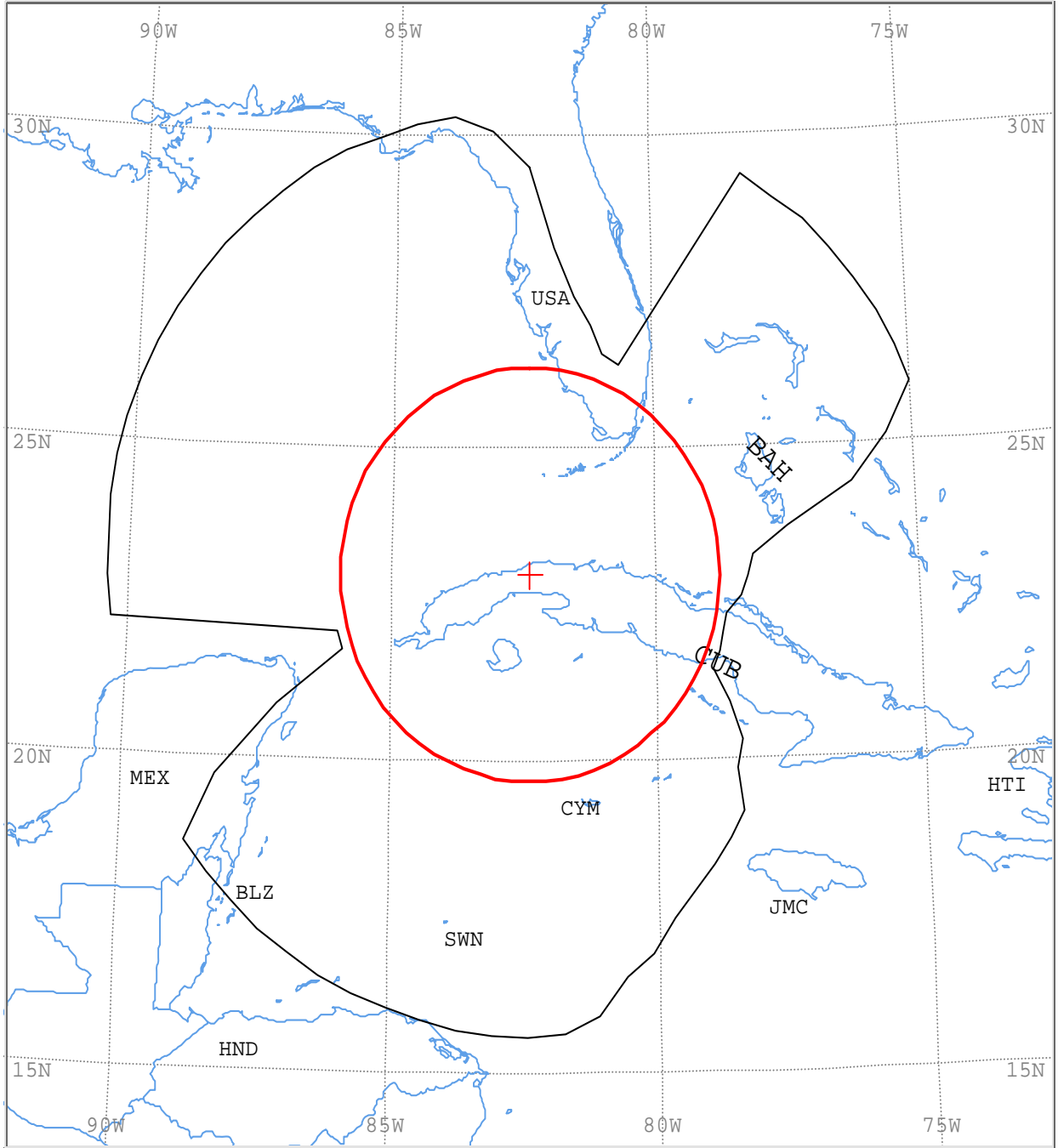
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-HAVANA

Earth station position: 082W243322N5921

Satellite name: USASAT-60I



- + ES position
- Main Model
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 9 EARTH STATION NAME: MEVAIII-HAVANA EARTH STATION POSITION: 082W243322N5921 PHASE: D  
 ADM/GEO\_AREA: CUB/CUB RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 117.05 DEG ANTENNA ELEVATION: 40.38 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	110.3	106.6	102.9	99.2	95.4	91.6	87.8	84.0	80.2	76.4	72.7	69.1	65.5	62.1	58.7	55.6	52.6	49.8	47.3	45.1	43.3	41.8	40.9	40.4
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.7	-6.2	-5.8	-5.4	-5.1	-5.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	723	582	501	458	416	410	823	822	826	826	825	824	822	817	739	649	512	438	427	416	391	393	395	398
MODE 2																								
0.0 DEG	367	368	368	368	368	369	369	369	369	370	370	370	370	371	371	371	371	371	371	372	372	372	372	372
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	40.5	41.0	42.1	43.6	45.5	47.7	50.3	53.1	56.1	59.3	62.7	66.2	69.7	73.4	77.1	80.8	84.6	88.4	92.2	96.0	99.8	103.6	107.3	110.9
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-5.0	-5.2	-5.5	-5.8	-6.3	-6.8	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	452	508	533	596	613	630	651	674	719	742	799	824	825	825	825	822	822	824	823	823	822	822	821	821
MODE 2																								
0.0 DEG	372	372	372	372	371	371	371	371	371	371	371	370	370	370	370	369	369	369	369	368	368	368	368	367
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	114.5	117.9	121.3	124.4	127.4	130.2	132.7	134.9	136.7	138.2	139.1	139.6	139.5	139.0	137.9	136.4	134.5	132.3	129.7	126.9	123.9	120.7	117.3	113.8
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	706	540	387	387	526	815	821	821	826	829	831	832	833	833	834	834	834	834	834	834	828	828	827	790
MODE 2																								
0.0 DEG	367	367	367	367	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	367	367	367	367

PROBABLY AFFECTED COUNTRIES: BAH BLZ CYM HND MEX SWN USA

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 8

Administration/Geographical area: CYM/CYM

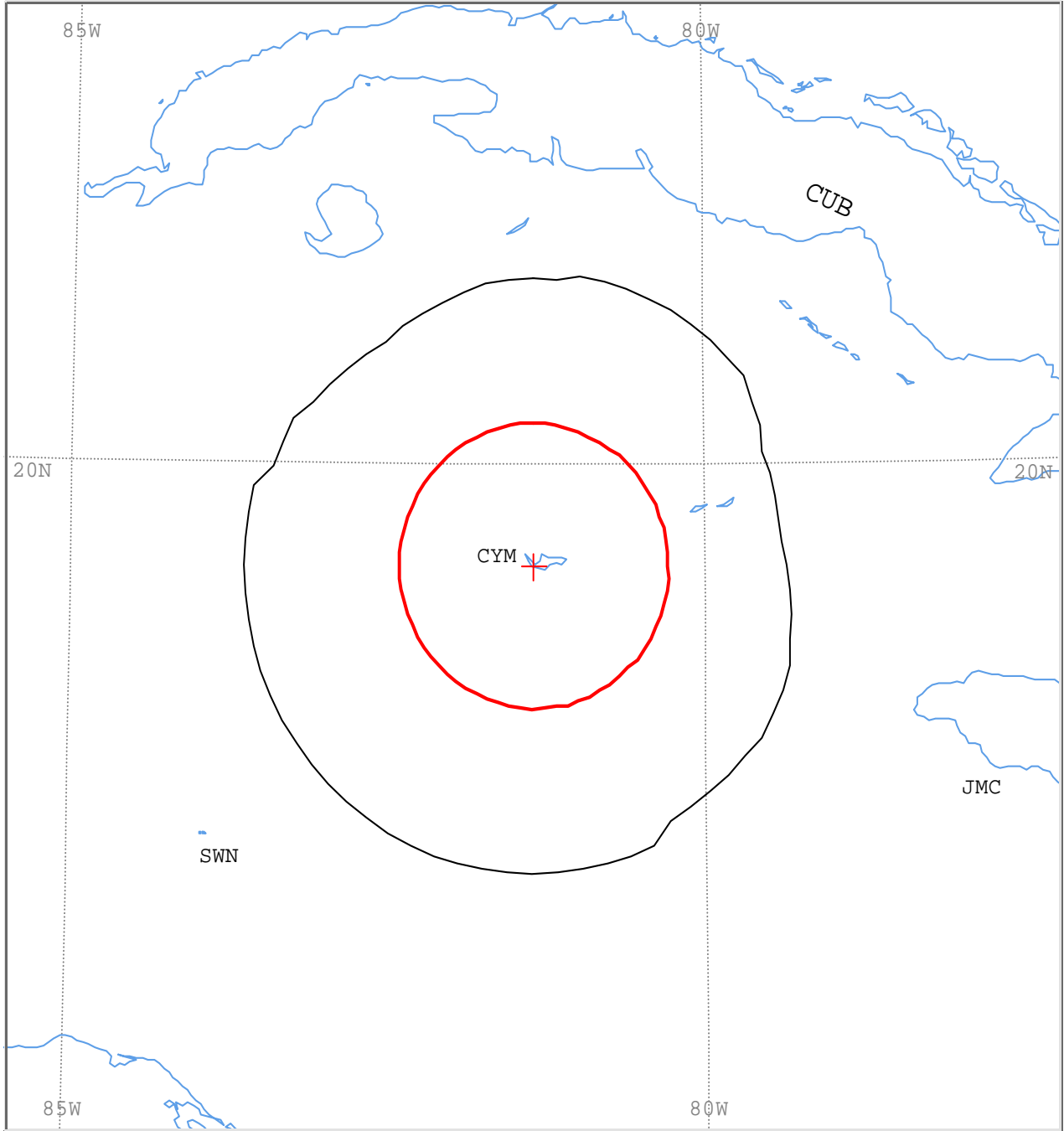
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-GEORGETOWN

Earth station position: 081W212819N1734

Satellite name: USASAT-60I



- + ES position
- Main Model
- Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:11:17

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 8 EARTH STATION NAME: MEVAIII-GEORGETOWN EARTH STATION POSITION: 081W212819N1734 PHASE: D  
ADM/GEO\_AREA: CYM/CYM RAIN CLIMATICAL ZONE: N  
SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
ANTENNA AZIMUTH: 114.17 DEG ANTENNA ELEVATION: 43.15 DEG  
FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -52.9 DBW/HZ NOISE TEMPERATURE: - K  
ANTENNA PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 160.1 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 114.1 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	
OFF-AXIS	107.4	103.9	100.3	96.7	93.0	89.4	85.8	82.1	78.5	75.0	71.5	68.0	64.7	61.5	58.4	55.6	52.9	50.4	48.3	46.4	45.0	43.9	43.3	43.2	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-9.7	-9.3	-9.1	-8.9	-8.9	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	222	222	228	228	228	228	228	228	228	228	228	222	217	209	209	207	207	207	210	214	218	221	226	229	
MODE 2																									
0.0 DEG	110	110	110	110	110	110	110	110	111	111	111	111	112	112	112	112	112	112	112	113	113	113	113	113	
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	
OFF-AXIS	43.5	44.2	45.4	47.0	48.9	51.2	53.7	56.5	59.4	62.6	65.8	69.2	72.6	76.1	79.7	83.3	87.0	90.6	94.2	97.9	101.5	105.0	108.5	112.0	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-9.0	-9.1	-9.4	-9.8	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	230	232	229	230	228	228	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	
MODE 2																									
0.0 DEG	113	113	113	112	112	112	112	112	112	112	111	111	111	111	111	110	110	110	110	110	110	110	110	110	
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	
OFF-AXIS	115.3	118.5	121.6	124.4	127.1	129.6	131.7	133.6	135.0	136.1	136.7	136.8	136.5	135.8	134.6	133.0	131.1	128.8	126.3	123.5	120.6	117.4	114.2	110.8	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	239	239	239	239	239	239	239	239	239	239	239	228	228	228	222	219	215	214	212	214	215	217	219	222	222
MODE 2																									
0.0 DEG	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	

PROBABLY AFFECTED COUNTRIES:

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 8

Administration/Geographical area: CYM/CYM

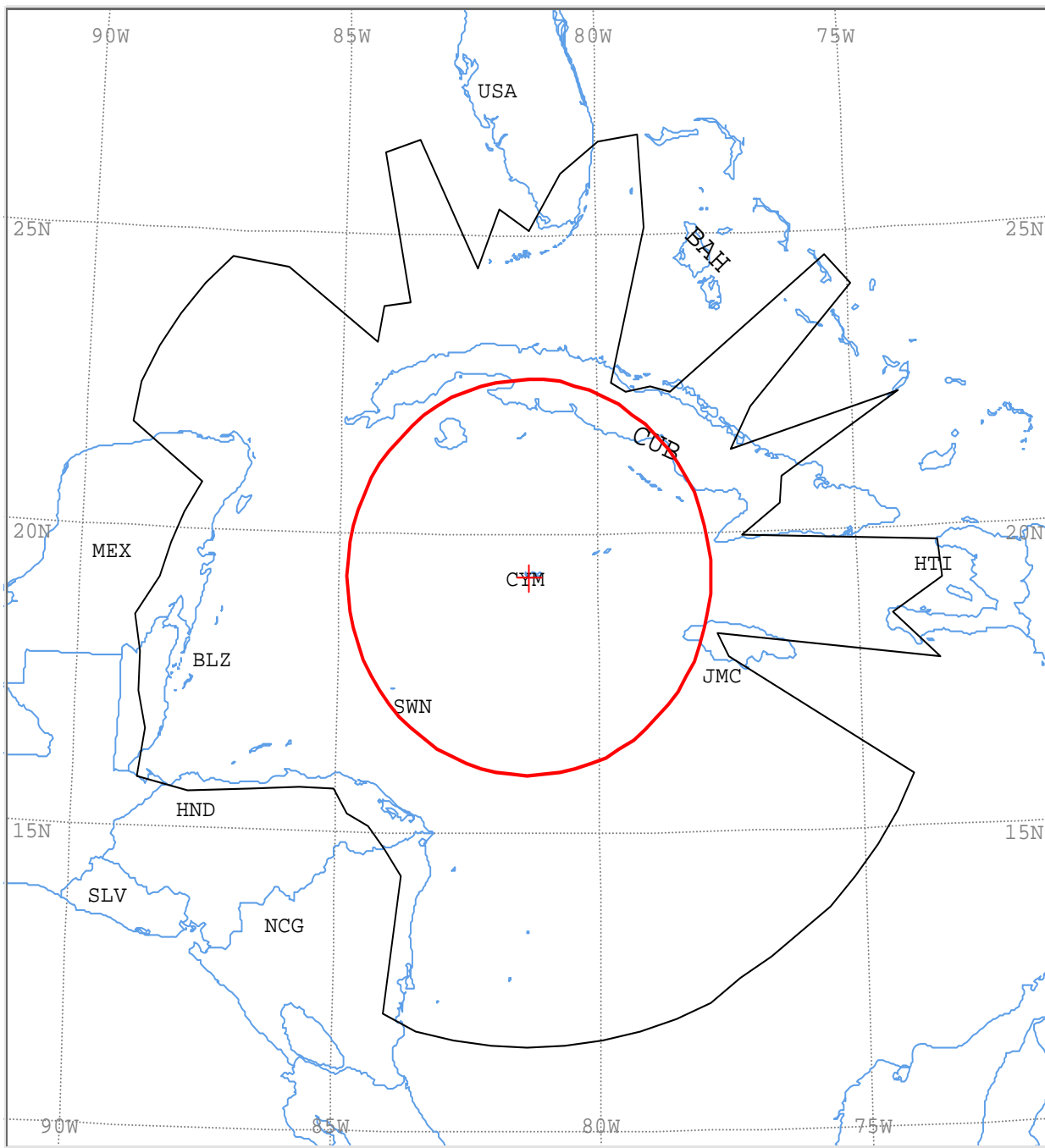
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-GEORGETOWN

Earth station position: 081W212819N1734

Satellite name: USASAT-60I



- + ES position
- Main Model
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 8 EARTH STATION NAME: MEVAIII-GEORGETOWN EARTH STATION POSITION: 081W212819N1734 PHASE: D  
 ADM/GEO\_AREA: CYM/CYM RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 114.17 DEG ANTENNA ELEVATION: 43.15 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	107.4	103.9	100.3	96.7	93.0	89.4	85.8	82.1	78.5	75.0	71.5	68.0	64.7	61.5	58.4	55.6	52.9	50.4	48.3	46.4	45.0	43.9	43.3	43.2
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.5	-6.2	-5.9	-5.8	-5.7
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	642	752	823	851	690	397	397	432	449	851	851	551	476	826	546	529	442	833	840	743	849	399	435	864
MODE 2																								
0.0 DEG	368	368	368	368	369	369	369	369	370	370	370	370	370	371	371	371	371	371	371	371	371	371	371	371
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	43.5	44.2	45.4	47.0	48.9	51.2	53.7	56.5	59.4	62.6	65.8	69.2	72.6	76.1	79.7	83.3	87.0	90.6	94.2	97.9	101.5	105.0	108.5	112.0
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-5.8	-6.0	-6.3	-6.7	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	866	868	864	866	863	863	863	876	876	876	876	876	876	876	876	876	864	613	584	568	574	555	606	686
MODE 2																								
0.0 DEG	371	371	371	371	371	371	371	371	371	370	370	370	370	370	369	369	369	369	369	368	368	368	368	367
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	115.3	118.5	121.6	124.4	127.1	129.6	131.7	133.6	135.0	136.1	136.7	136.8	136.5	135.8	134.6	133.0	131.1	128.8	126.3	123.5	120.6	117.4	114.2	110.8
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	796	876	826	818	799	798	746	726	707	683	852	863	863	857	852	844	751	532	580	563	839	842	584	686
MODE 2																								
0.0 DEG	367	367	367	367	367	366	366	366	366	366	366	366	366	366	366	366	366	366	367	367	367	367	367	367

PROBABLY AFFECTED COUNTRIES: BAH BLZ CLM CUB GTM HND HTI JMC MEX NCG SWN USA

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 7

Administration/Geographical area: BAH/BAH

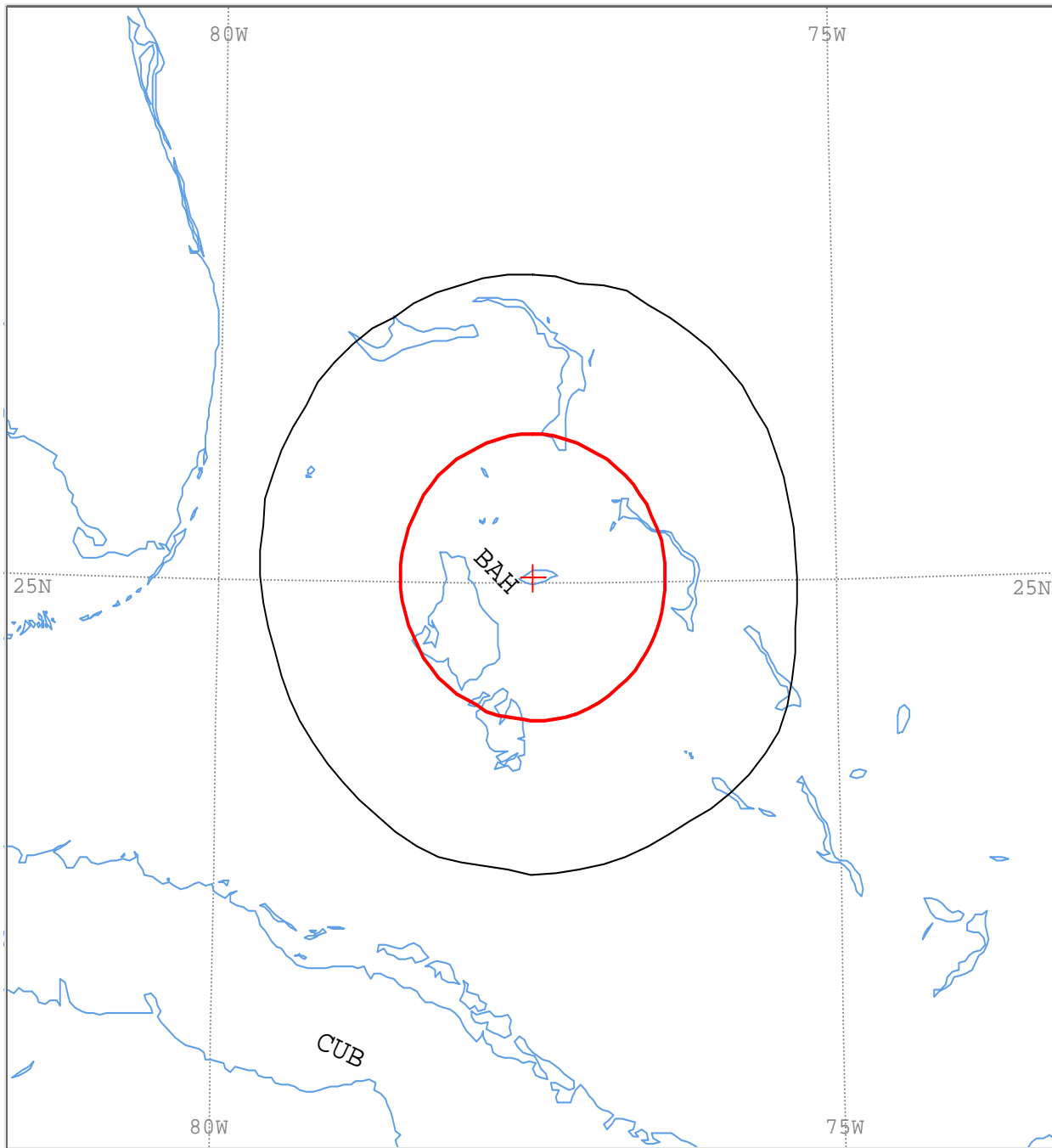
Satellite orbital position: -45.00




Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-NASSAU

Earth station position: 077W275825N0220

Satellite name: USASAT-60I



-  ES position
-  Main Model
-  Main Mode2

ANALYSIS DATE AND TIME: 2014-11-27 12:10:43

VERSION: 2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 7 EARTH STATION NAME: MEVAIII-NASSAU EARTH STATION POSITION: 077W275825N0220 PHASE: D  
 ADM/GEO\_AREA: BAH/BAH RAIN CLIMATICAL\_ZONE: N  
 SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
 ANTENNA\_AZIMUTH: 123.63 DEG ANTENNA\_ELEVATION: 43.57 DEG  
 FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
 MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -51.9 DBW/HZ NOISE\_TEMPERATURE: - K  
 ANTENNA\_PATTERN: APEREC015V01  
 2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 161.1 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 115.1 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	
OFF-AXIS	113.7	110.3	106.9	103.4	99.8	96.2	92.6	89.0	85.4	81.8	78.2	74.7	71.2	67.8	64.6	61.4	58.4	55.5	52.9	50.5	48.4	46.6	45.2	44.3	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-9.7	-9.4	-9.1	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	227	227	224	226	228	225	225	225	225	224	224	222	221	220	218	217	217	216	216	217	218	222	226	230	
MODE 2																									
0.0 DEG	107	107	107	107	107	107	107	107	107	107	108	108	108	108	108	109	109	109	109	109	109	109	109	109	110
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	
OFF-AXIS	43.7	43.6	43.9	44.7	46.0	47.6	49.5	51.8	54.3	57.1	60.0	63.1	66.3	69.7	73.1	76.6	80.2	83.8	87.4	91.0	94.6	98.2	101.8	105.3	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-9.0	-9.0	-9.1	-9.3	-9.6	-9.9	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	232	232	232	229	227	224	224	224	224	224	224	224	224	221	221	222	224	223	221	219	219	219	218	218	
MODE 2																									
0.0 DEG	110	110	110	109	109	109	109	109	109	109	109	109	109	108	108	108	108	108	107	107	107	107	107	107	107
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	
OFF-AXIS	108.8	112.2	115.4	118.6	121.6	124.5	127.1	129.5	131.6	133.4	134.8	135.7	136.3	136.4	136.1	135.3	134.0	132.4	130.5	128.2	125.7	122.9	120.0	116.9	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	218	218	217	217	218	220	221	222	222	225	225	225	225	225	228	228	228	227	225	227	227	227	228	228	
MODE 2																									
0.0 DEG	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107

PROBABLY AFFECTED COUNTRIES:



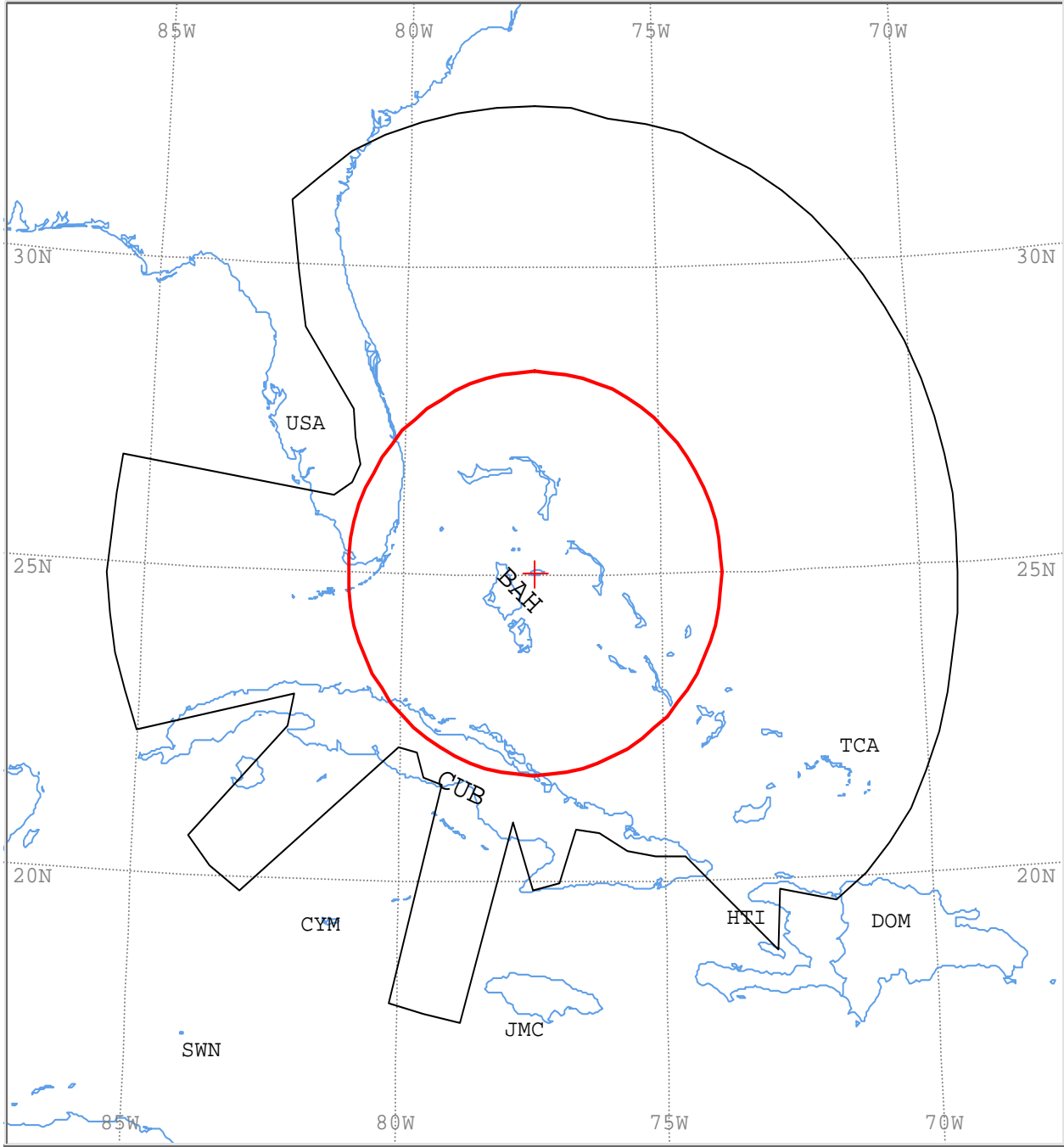
Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 7

Administration/Geographical area: BAH/BAH  
Satellite orbital position: -45.00  
Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-NASSAU

Earth station position: 077W275825N0220  
Satellite name: USASAT-60I



- + ES position
- Main Model
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 7 EARTH STATION NAME: MEVAIII-NASSAU EARTH STATION POSITION: 077W275825N0220 PHASE: D  
 ADM/GEO\_AREA: BAH/BAH RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 123.63 DEG ANTENNA ELEVATION: 43.57 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	113.7	110.3	106.9	103.4	99.8	96.2	92.6	89.0	85.4	81.8	78.2	74.7	71.2	67.8	64.6	61.4	58.4	55.5	52.9	50.5	48.4	46.6	45.2	44.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.6	-6.2	-6.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	846	843	835	842	846	843	843	843	843	841	841	839	838	836	833	831	830	829	829	830	832	837	842	847
MODE 2																								
0.0 DEG	364	364	364	364	365	365	365	365	366	366	366	366	366	367	367	367	367	367	367	367	368	368	368	368

AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	43.7	43.6	43.9	44.7	46.0	47.6	49.5	51.8	54.3	57.1	60.0	63.1	66.3	69.7	73.1	76.6	80.2	83.8	87.4	91.0	94.6	98.2	101.8	105.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-5.9	-5.8	-5.9	-6.1	-6.4	-6.8	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	850	850	847	837	749	835	594	567	538	489	474	566	574	454	829	828	828	423	428	399	413	813	826	826
MODE 2																								
0.0 DEG	368	368	368	368	368	368	368	367	367	367	367	367	367	366	366	366	366	366	365	365	365	365	365	364

AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	108.8	112.2	115.4	118.6	121.6	124.5	127.1	129.5	131.6	133.4	134.8	135.7	136.3	136.4	136.1	135.3	134.0	132.4	130.5	128.2	125.7	122.9	120.0	116.9
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	557	517	825	826	830	832	835	827	827	829	415	390	393	426	459	632	712	825	831	842	845	844	846	846
MODE 2																								
0.0 DEG	364	364	364	364	363	363	363	363	363	363	363	363	363	363	363	363	363	363	363	363	363	363	363	364

PROBABLY AFFECTED COUNTRIES: CUB DOM HTI TCA USA

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 6

Administration/Geographical area: BAH/BAH

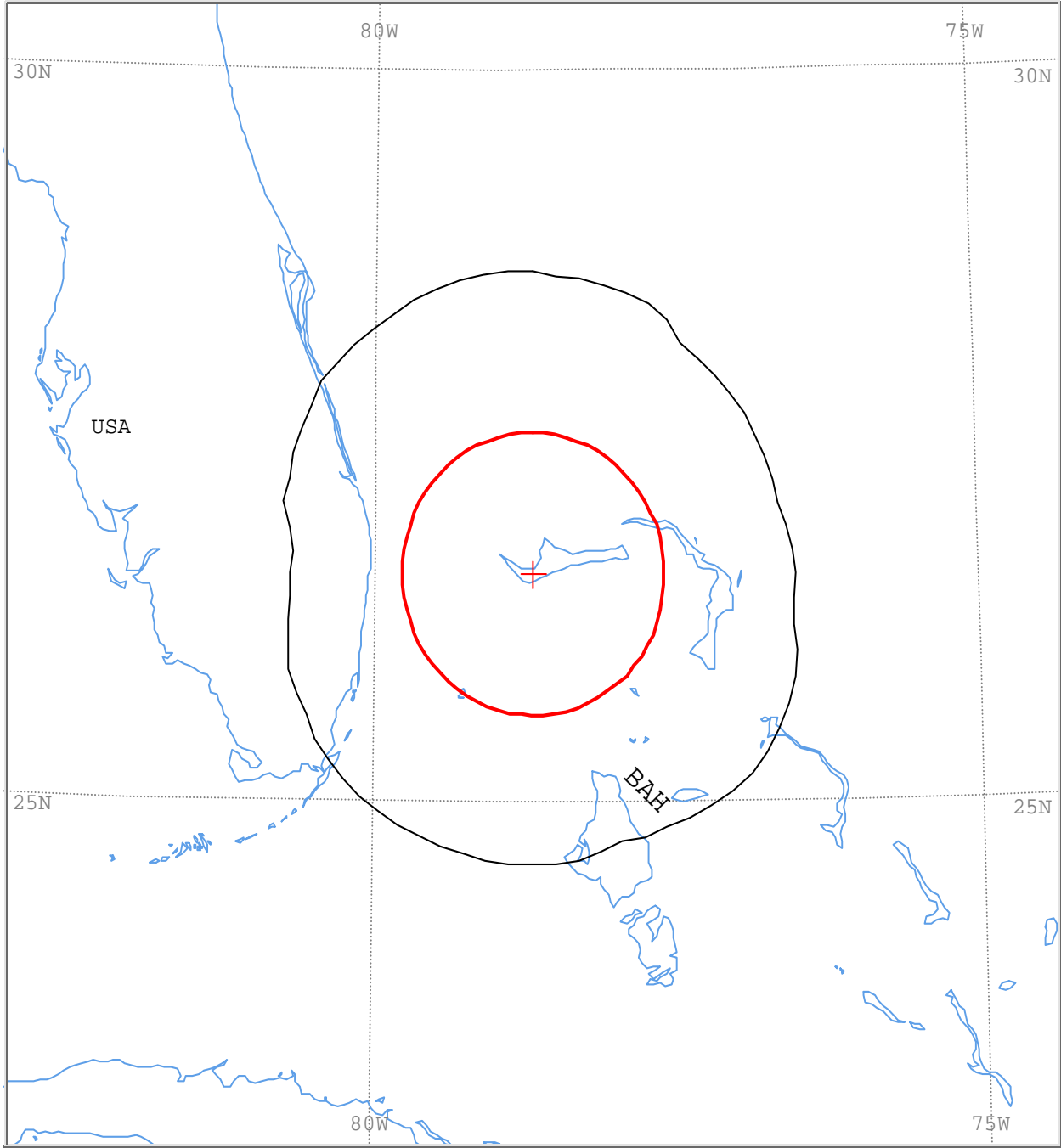
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz




Earth station name: MEVAIII-FREEPORT

Earth station position: 078W414426N3331

Satellite name: USASAT-60I



Scale: 437.00 Km (default)

-  ES position
-  Main Model1
-  Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 6 EARTH STATION NAME: MEVAIII-FREEPORT EARTH STATION POSITION: 078W414426N3331 PHASE: D  
ADM/GEO\_AREA: BAH/BAH RAIN CLIMATICAL\_ZONE: N  
SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
ANTENNA\_AZIMUTH: 123.84 DEG ANTENNA\_ELEVATION: 41.61 DEG  
FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -51.9 DBW/HZ NOISE\_TEMPERATURE: - K  
ANTENNA\_PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 161.1 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 115.1 DB

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	
AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	
OFF-AXIS	114.6	111.1	107.6	104.0	100.3	96.6	92.9	89.1	85.4	81.7	78.0	74.3	70.8	67.2	63.8	60.5	57.4	54.4	51.6	49.1	46.8	45.0	43.4	42.4	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-9.8	-9.3	-8.9	-8.7
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	230	227	227	227	227	226	222	213	213	213	213	213	212	212	211	210	213	215	217	217	220	226	231	234	
MODE 2																									
0.0 DEG	107	107	107	107	107	107	107	107	107	107	108	108	108	108	109	109	109	109	109	109	109	110	110	110	
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235	
OFF-AXIS	41.8	41.6	42.0	42.8	44.1	45.8	47.8	50.2	52.9	55.7	58.8	62.0	65.4	68.9	72.4	76.0	79.7	83.4	87.1	90.9	94.6	98.3	102.0	105.7	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-8.5	-8.5	-8.6	-8.8	-9.1	-9.5	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	236	237	237	234	231	227	222	222	217	219	222	222	222	222	222	221	221	221	221	221	221	220	220	219	
MODE 2																									
0.0 DEG	110	110	110	110	110	109	109	109	109	109	109	109	108	108	108	108	108	107	107	107	107	107	107	107	
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	
OFF-AXIS	109.2	112.8	116.2	119.5	122.6	125.6	128.4	130.9	133.2	135.0	136.6	137.6	138.2	138.4	138.0	137.2	135.9	134.2	132.2	129.8	127.1	124.3	121.2	118.0	
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	
COORDINATION DISTANCE (KM)																									
MODE 1																									
0.0 DB	215	215	214	208	204	200	199	198	203	212	212	217	219	222	227	227	227	227	227	230	230	230	230	230	
MODE 2																									
0.0 DEG	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	

PROBABLY AFFECTED COUNTRIES: USA

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 6

Administration/Geographical area: BAH/BAH

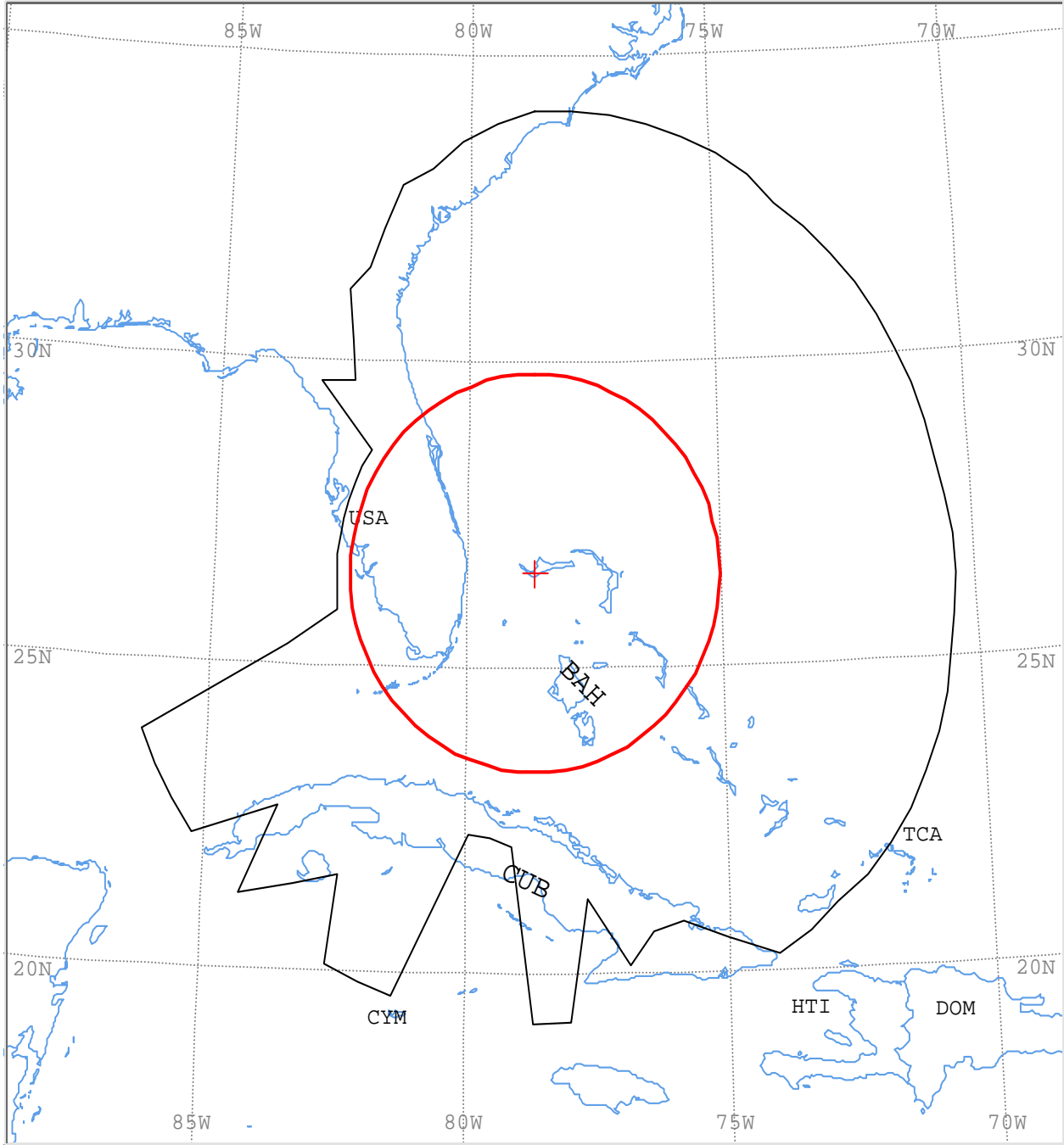
Satellite orbital position: -45.00




Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-FREEPORT

Earth station position: 078W414426N3331

Satellite name: USASAT-60I



-  ES position
-  Main Model
-  Main Mode2

Scale: 1055.00 Km (default)

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 6 EARTH STATION NAME: MEVAIII-FREEPORT EARTH STATION POSITION: 078W414426N3331 PHASE: D  
 ADM/GEO\_AREA: BAH/BAH RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 123.84 DEG ANTENNA ELEVATION: 41.61 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	114.6	111.1	107.6	104.0	100.3	96.6	92.9	89.1	85.4	81.7	78.0	74.3	70.8	67.2	63.8	60.5	57.4	54.4	51.6	49.1	46.8	45.0	43.4	42.4
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.6	-6.2	-5.8	-5.5
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	837	840	845	845	845	841	836	822	822	822	821	820	819	818	815	814	819	826	829	830	833	841	847	851
MODE 2																								
0.0 DEG	361	361	361	362	362	362	362	363	363	363	363	364	364	364	364	364	364	365	365	365	365	365	365	365
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	41.8	41.6	42.0	42.8	44.1	45.8	47.8	50.2	52.9	55.7	58.8	62.0	65.4	68.9	72.4	76.0	79.7	83.4	87.1	90.9	94.6	98.3	102.0	105.7
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-5.4	-5.3	-5.4	-5.6	-6.0	-6.4	-6.8	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	854	855	855	846	849	843	764	698	693	741	603	823	822	503	491	495	821	821	821	670	738	821	657	821
MODE 2																								
0.0 DEG	365	365	365	365	365	365	365	365	365	365	364	364	364	364	364	363	363	363	363	363	362	362	362	362
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	109.2	112.8	116.2	119.5	122.6	125.6	128.4	130.9	133.2	135.0	136.6	137.6	138.2	138.4	138.0	137.2	135.9	134.2	132.2	129.8	127.1	124.3	121.2	118.0
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	820	820	819	499	392	386	386	386	386	386	386	387	388	388	542	497	549	629	642	693	751	761	795	819
MODE 2																								
0.0 DEG	361	361	361	361	361	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	361	361	361

PROBABLY AFFECTED COUNTRIES: CUB TCA USA

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 5

Administration/Geographical area: HND/HND

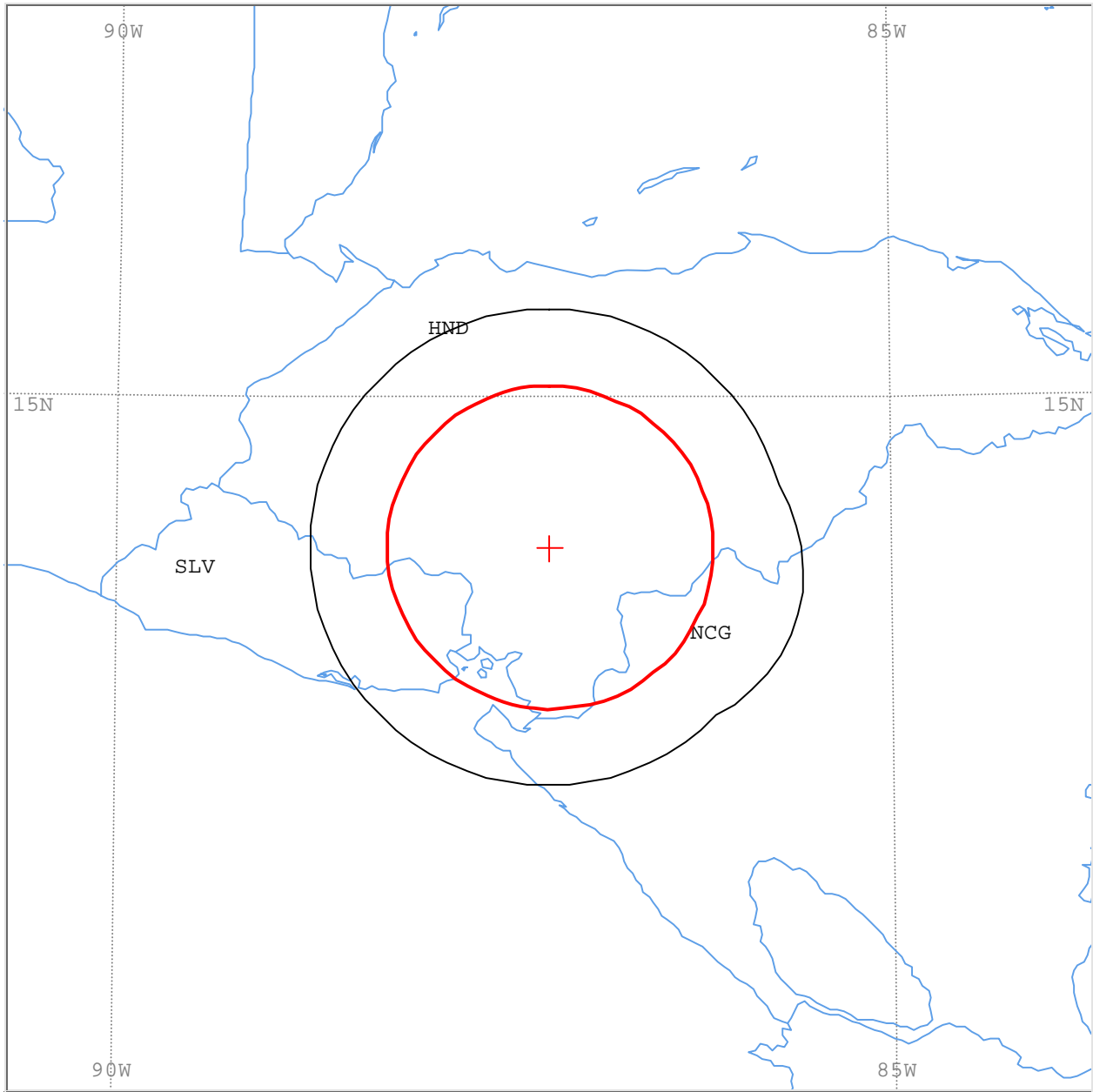
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-COCESNA

Earth station position: 087W130114N0342

Satellite name: USASAT-60I



Scale: 380.00 Km (default)

- + ES position
- Main Mode1
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 5 EARTH STATION NAME: MEVAIII-COCESNA EARTH STATION POSITION: 087W130114N0342 PHASE: D  
 ADM/GEO\_AREA: HND/HND RAIN CLIMATICAL\_ZONE: P  
 SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
 ANTENNA\_AZIMUTH: 104.99 DEG ANTENNA\_ELEVATION: 39.20 DEG  
 FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
 MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -53.9 DBW/HZ NOISE\_TEMPERATURE: - K  
 ANTENNA\_PATTERN: APEREC015V01  
 2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 159.1 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 113.1 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	101.6	97.7	93.9	90.0	86.1	82.3	78.4	74.6	70.9	67.2	63.6	60.1	56.8	53.6	50.6	47.8	45.4	43.3	41.5	40.3	39.5	39.2	39.5	40.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-9.4	-8.9	-8.5	-8.1	-7.9	-7.8	-7.9	-8.1
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	170	173	176	178	180	180	180	178
MODE 2																								
0.0 DEG	112	112	112	112	112	112	113	113	113	114	114	114	114	114	114	115	115	115	115	115	115	115	115	115

AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	41.5	43.3	45.4	47.9	50.6	53.6	56.8	60.1	63.6	67.2	70.9	74.6	78.4	82.3	86.1	90.0	93.9	97.7	101.6	105.4	109.1	112.8	116.4	119.9
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-8.5	-8.9	-9.4	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	176	173	170	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166
MODE 2																								
0.0 DEG	115	115	115	115	114	114	114	114	114	114	113	113	113	112	112	112	112	112	112	112	112	112	112	112

AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	123.2	126.4	129.4	132.2	134.6	136.7	138.5	139.7	140.5	140.8	140.5	139.7	138.5	136.7	134.6	132.1	129.4	126.4	123.2	119.9	116.4	112.8	109.1	105.4
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166
MODE 2																								
0.0 DEG	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112

PROBABLY AFFECTED COUNTRIES: NCG SLV



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 5

Administration/Geographical area: HND/HND

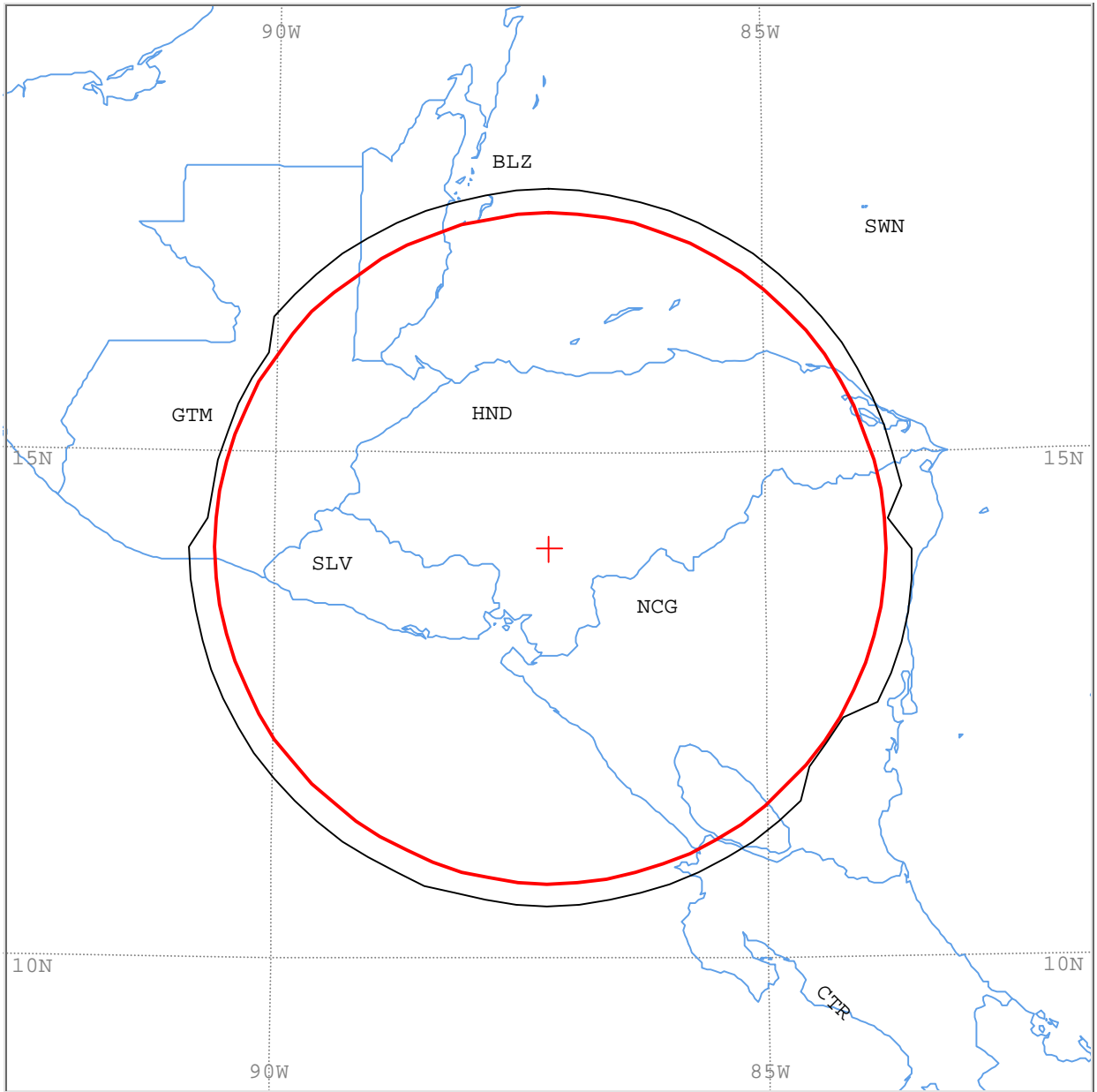
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-COCESNA

Earth station position: 087W130114N0342

Satellite name: USASAT-60I



Scale: 602.00 Km (default)

- + ES position
- Main Model1
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 5 EARTH STATION NAME: MEVAIII-COCESNA EARTH STATION POSITION: 087W130114N0342 PHASE: D  
 ADM/GEO\_AREA: HND/HND RAIN CLIMATICAL ZONE: P  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 104.99 DEG ANTENNA ELEVATION: 39.20 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	101.6	97.7	93.9	90.0	86.1	82.3	78.4	74.6	70.9	67.2	63.6	60.1	56.8	53.6	50.6	47.8	45.4	43.3	41.5	40.3	39.5	39.2	39.5	40.3
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.8	-6.3	-5.8	-5.3	-5.0	-4.8	-4.7	-4.8	-5.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394	396	375	400	401	402	402	402	401
MODE 2																								
0.0 DEG	368	368	369	369	369	369	370	370	370	370	371	371	371	371	371	371	372	372	372	372	372	372	372	372

AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	41.5	43.3	45.4	47.9	50.6	53.6	56.8	60.1	63.6	67.2	70.9	74.6	78.4	82.3	86.1	90.0	93.9	97.7	101.6	105.4	109.1	112.8	116.4	119.9
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-5.3	-5.8	-6.3	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	375	375	375	394	394	394	394	394	394	394	394	394	394	394	394	394	396	394	394	394	394	394	394	394
MODE 2																								
0.0 DEG	372	372	372	371	371	371	371	371	371	371	370	370	370	370	369	369	369	369	368	368	368	367	367	367

AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	123.2	126.4	129.4	132.2	134.6	136.7	138.5	139.7	140.5	140.8	140.5	139.7	138.5	136.7	134.6	132.1	129.4	126.4	123.2	119.9	116.4	112.8	109.1	105.4
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	394	394	394	394	394	394	394	375	375	375	375	375	375	375	394	394	394	394	394	394	394	394	394	394
MODE 2																								
0.0 DEG	367	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	367	367	367	367	367	368

PROBABLY AFFECTED COUNTRIES: BLZ CTR GTM NCG SLV

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 3

Administration/Geographical area: VEN/VEN

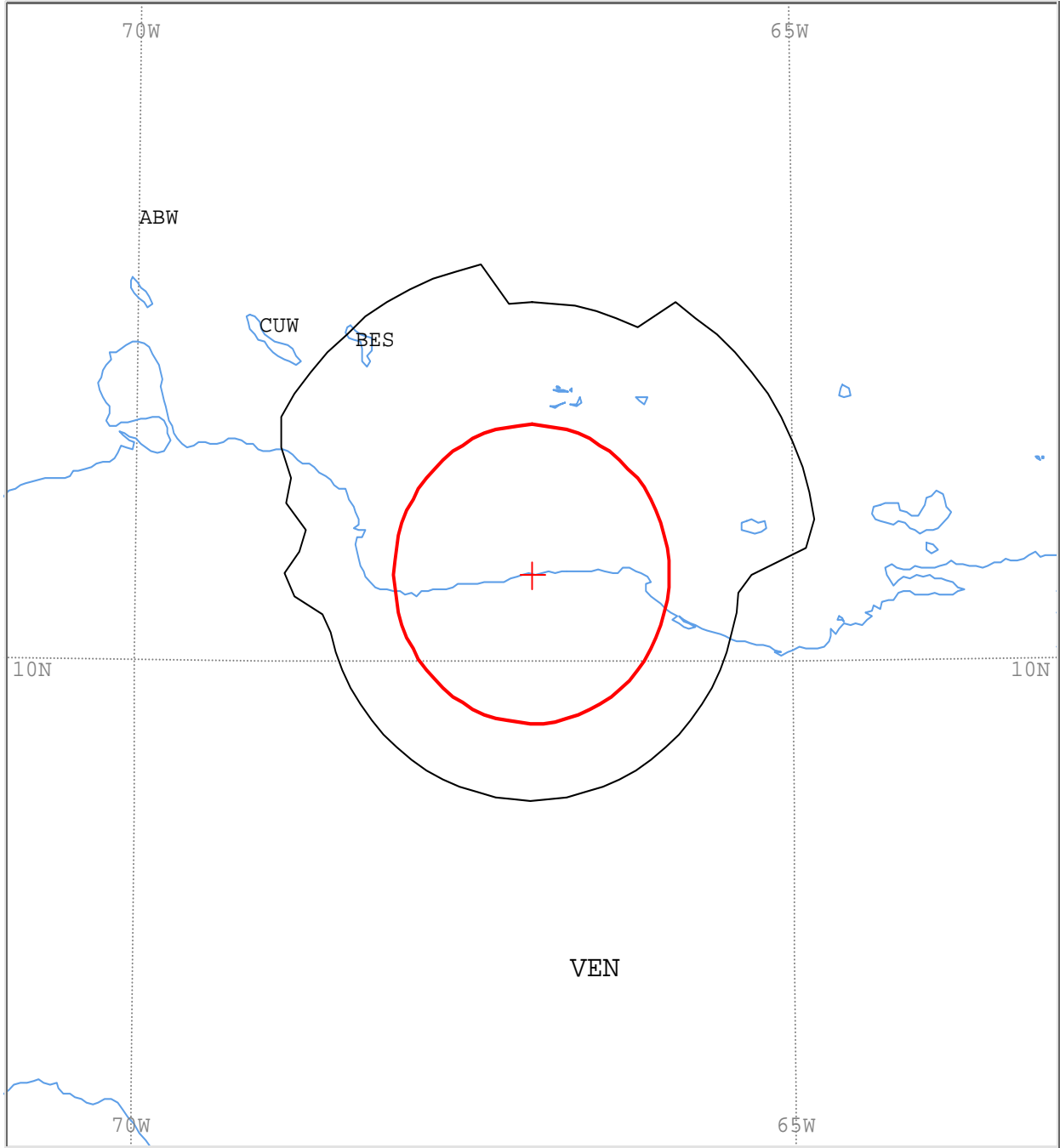
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-CARACAS

Earth station position: 066W592610N3611

Satellite name: USASAT-60I



Scale: 440.00 Km (default)

- + ES position
- Main Model
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 3 EARTH STATION NAME: MEVAIII-CARACAS EARTH STATION POSITION: 066W592610N3611 PHASE: D  
 ADM/GEO\_AREA: VEN/VEN RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 114.50 DEG ANTENNA ELEVATION: 61.58 DEG  
 FREQUENCY BAND: 6063.20-6066.30 MHZ ASSIGNED FREQUENCY: 6064.75 MHZ PERCENTAGE OF TIME: 0.0050 %  
 MAXIMUM ANTENNA GAIN: 49.0 DBI MAXIMUM POWER DENSITY: -53.1 DBW/HZ NOISE TEMPERATURE: - K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 159.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 113.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	101.4	99.1	96.8	94.5	92.1	89.8	87.4	85.0	82.7	80.4	78.2	76.0	74.0	72.0	70.2	68.5	66.9	65.5	64.3	63.3	62.6	62.0	61.7	61.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	208	208	208	208	208	208	240	239	240	240	240	240	240	240	240	240	239	229	183	173	173	173	173	173
MODE 2																								
0.0 DEG	114	114	114	114	114	114	114	114	114	114	115	115	115	115	115	115	115	115	115	115	115	115	115	115
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	61.7	62.1	62.7	63.5	64.6	65.8	67.2	68.8	70.5	72.4	74.4	76.4	78.6	80.9	83.2	85.5	87.9	90.2	92.6	95.0	97.3	99.6	101.8	104.0
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
MODE 2																								
0.0 DEG	115	115	115	115	115	115	115	115	115	115	115	115	115	114	114	114	114	114	114	114	114	114	114	114
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	106.0	108.0	109.8	111.5	113.1	114.5	115.7	116.7	117.4	118.0	118.3	118.4	118.3	117.9	117.3	116.5	115.4	114.2	112.8	111.2	109.5	107.6	105.6	103.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	173	173	173	176	198	205	193	190	211	213	229	240	240	240	240	239	240	240	240	240	240	240	208
MODE 2																								
0.0 DEG	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114

PROBABLY AFFECTED COUNTRIES: BES

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 3

Administration/Geographical area: VEN/VEN

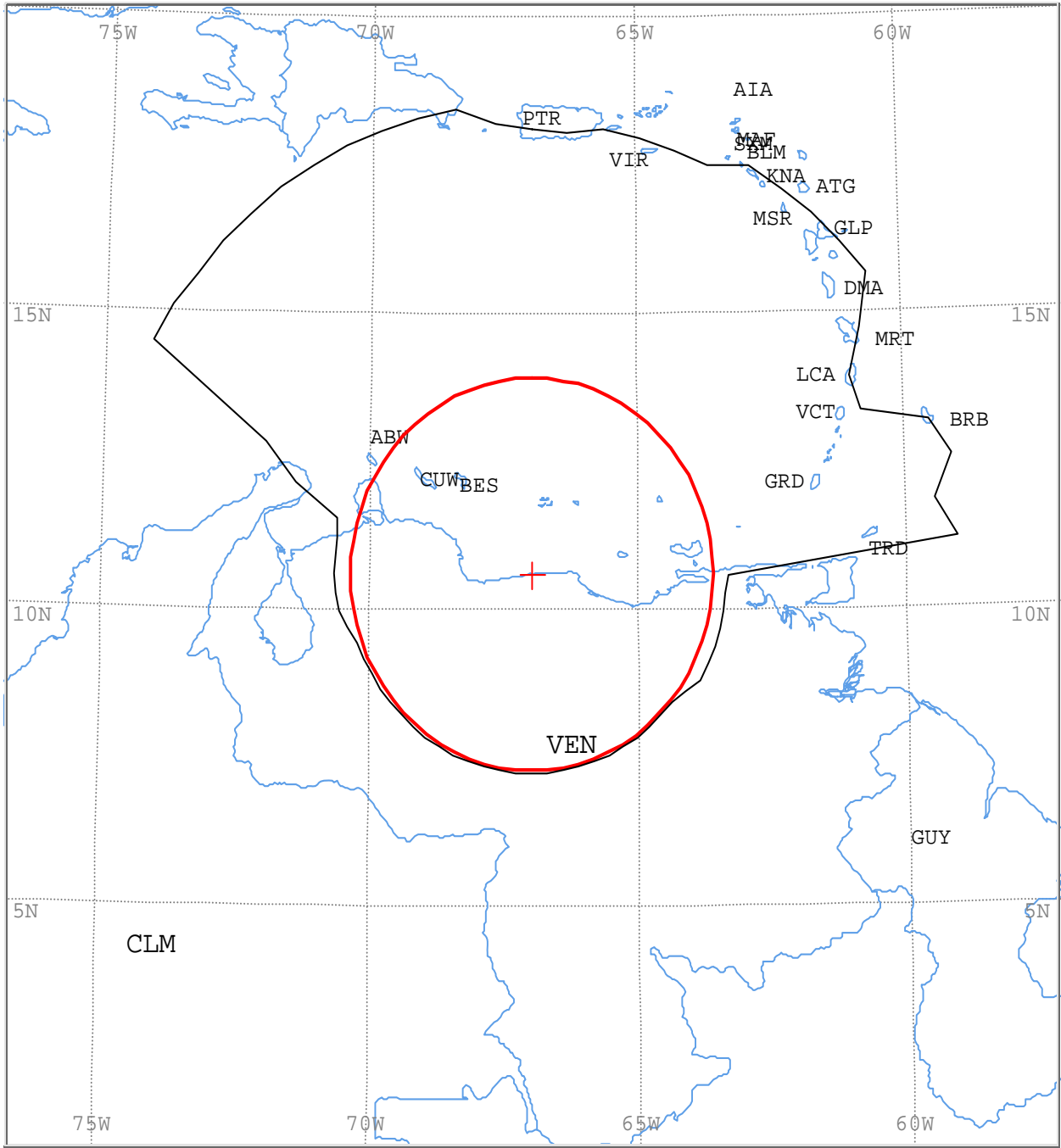
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-CARACAS

Earth station position: 066W592610N3611

Satellite name: USASAT-60I



- + ES position
- Main Model1
- Main Mode2

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 3 EARTH STATION NAME: MEVAIII-CARACAS EARTH STATION POSITION: 066W592610N3611 PHASE: D  
 ADM/GEO\_AREA: VEN/VEN RAIN CLIMATICAL ZONE: N  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 114.50 DEG ANTENNA ELEVATION: 61.58 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	101.4	99.1	96.8	94.5	92.1	89.8	87.4	85.0	82.7	80.4	78.2	76.0	74.0	72.0	70.2	68.5	66.9	65.5	64.3	63.3	62.6	62.0	61.7	61.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	835	831	847	847	847	847	886	885	886	886	886	813	747	738	859	886	834	872	402	397	397	397	397	397
MODE 2																								
0.0 DEG	368	368	368	369	369	369	369	369	369	369	369	369	370	370	370	370	370	370	370	370	370	370	370	370
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	61.7	62.1	62.7	63.5	64.6	65.8	67.2	68.8	70.5	72.4	74.4	76.4	78.6	80.9	83.2	85.5	87.9	90.2	92.6	95.0	97.3	99.6	101.8	104.0
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	397	383	376	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	376	376
MODE 2																								
0.0 DEG	370	370	370	370	370	370	370	370	370	370	370	369	369	369	369	369	369	369	369	369	368	368	368	368
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	106.0	108.0	109.8	111.5	113.1	114.5	115.7	116.7	117.4	118.0	118.3	118.4	118.3	117.9	117.3	116.5	115.4	114.2	112.8	111.2	109.5	107.6	105.6	103.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	376	376	376	388	398	399	400	401	402	410	510	595	886	886	882	886	885	886	886	886	886	886	886	847
MODE 2																								
0.0 DEG	368	368	368	368	368	368	368	368	367	367	367	367	367	367	367	368	368	368	368	368	368	368	368	368

PROBABLY AFFECTED COUNTRIES: ABW BES BRB CLM CUW DMA DOM GLP GRD KNA LCA MRT MSR PTR TRD VCT VIR

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 1

Administration/Geographical area: USA/USA

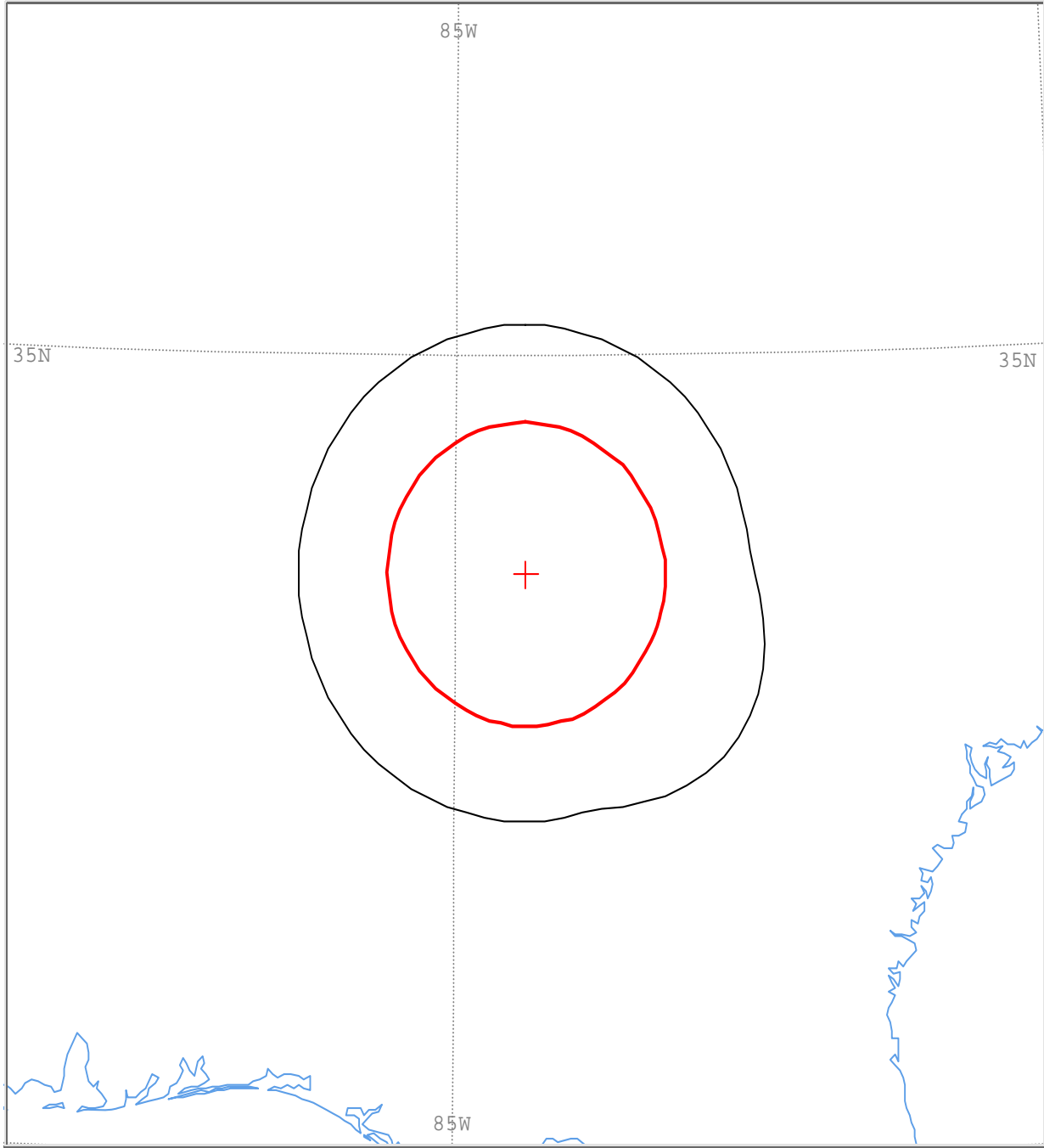
Satellite orbital position: -45.00

Frequency band: 6063.20-6066.30 MHz

Earth station name: MEVAIII-ATLANTA

Earth station position: 084W254033N3821

Satellite name: USASAT-60I



+ ES position  
— Main Model1  
— Main Mode2

Scale: 400.00 Km (default)

VERSION:2.1.0.1Appendix 7 Pack/Plt-2.0.0.4/Frm-2.0.0.1/Clc-2.0.0.0/Prp-1.2.0.0/SNS-2.0.0.0/AP7F-2.0.0.0/Ref-2.0.0.1

Diagram 1: 2.1\_TABLE7. TRANSMITTING GSO ES in FIXED-SATELLITE SERVICE W.R.T. RECEIVING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 1 EARTH STATION NAME: MEVAIII-ATLANTA EARTH STATION POSITION: 084W254033N3821 PHASE: D  
ADM/GEO\_AREA: USA/USA RAIN CLIMATICAL\_ZONE: M  
SATELLITE\_NAME: USASAT-60I SATELLITE\_ORBITAL\_POSITION: -45.00 DEG  
ANTENNA\_AZIMUTH: 123.97 DEG ANTENNA\_ELEVATION: 32.72 DEG  
FREQUENCY\_BAND: 6063.20-6066.30 MHZ ASSIGNED\_FREQUENCY: 6064.75 MHZ PERCENTAGE\_OF\_TIME: 0.0050 %  
MAXIMUM\_ANTENNA\_GAIN: 49.0 DBI MAXIMUM\_POWER\_DENSITY: -50.9 DBW/HZ NOISE\_TEMPERATURE: - K  
ANTENNA\_PATTERN: APEREC015V01  
2.1\_TABLE7 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 162.1 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
TRANSMISSION LOSS MODE 2: 116.1 DB

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	118.0	114.0	110.0	105.9	101.7	97.5	93.3	89.1	84.9	80.7	76.6	72.4	68.3	64.3	60.3	56.5	52.7	49.1	45.8	42.6	39.8	37.3	35.3	33.8
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-9.5	-8.7	-8.0	-7.3	-6.7	-6.2
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	177	181	186	191	195	198
MODE 2																								
0.0 DEG	105	105	105	105	105	105	105	105	105	106	106	106	106	107	107	107	107	108	108	108	108	108	108	108
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	32.9	32.7	33.2	34.3	36.0	38.3	40.9	43.9	47.1	50.6	54.3	58.1	62.0	66.0	70.0	74.1	78.3	82.5	86.7	90.9	95.1	99.3	103.4	107.6
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-5.9	-5.9	-6.0	-6.4	-6.9	-7.6	-8.3	-9.1	-9.8	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	199	200	199	196	193	189	184	179	174	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
MODE 2																								
0.0 DEG	108	108	108	108	108	108	108	108	108	107	107	107	107	107	106	106	106	105	105	105	105	105	105	105
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	111.7	115.7	119.7	123.5	127.3	130.9	134.2	137.4	140.2	142.7	144.7	146.2	147.1	147.3	146.8	145.7	144.0	141.7	139.1	136.1	132.9	129.4	125.7	121.9
HOR.ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR.CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT.GAIN	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
MODE 2																								
0.0 DEG	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105

PROBABLY AFFECTED COUNTRIES:



Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

Notice ID: 1

Administration/Geographical area: USA/USA

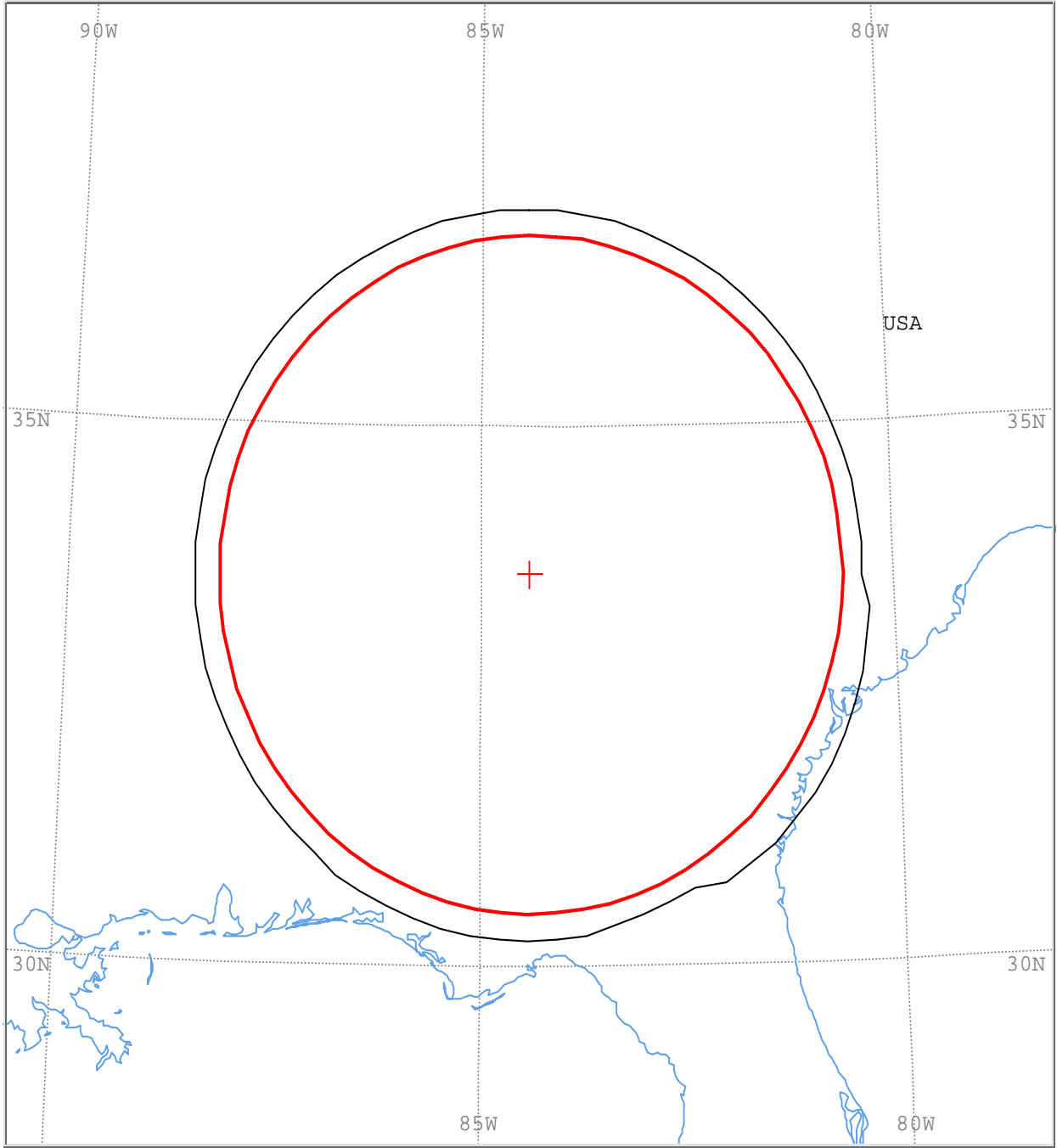
Satellite orbital position: -45.00

Frequency band: 3838.20-3841.30 MHz

Earth station name: MEVAIII-ATLANTA

Earth station position: 084W254033N3821

Satellite name: USASAT-60I



- + ES position
- Main Model1
- Main Mode2

Diagram 2: 2.1\_TABLE8. RECEIVING GSO ES in FIXED-SATELLITE SERVICE W.R.T. TRANSMITTING TERRESTRIAL STATIONS. TS: fixed, mobile

NOTICE ID: 1 EARTH STATION NAME: MEVAIII-ATLANTA EARTH STATION POSITION: 084W254033N3821 PHASE: D  
 ADM/GEO\_AREA: USA/USA RAIN CLIMATICAL ZONE: M  
 SATELLITE NAME: USASAT-60I SATELLITE ORBITAL POSITION: -45.00 DEG  
 ANTENNA AZIMUTH: 123.97 DEG ANTENNA ELEVATION: 32.72 DEG  
 FREQUENCY BAND: 3838.20-3841.30 MHZ ASSIGNED FREQUENCY: 3839.75 MHZ PERCENTAGE OF TIME: 0.0017 %  
 MAXIMUM ANTENNA GAIN: 42.1 DBI MAXIMUM POWER DENSITY: - DBW/HZ NOISE TEMPERATURE: 400.0 K  
 ANTENNA PATTERN: APEREC015V01  
 2.1\_TABLE8 Model: PLM\_DUCTING

TRANSMISSION LOSS MODE 1: 198.9 DB (DOES NOT INCLUDE HOR. CORR. AND ANT. GAIN)  
 TRANSMISSION LOSS MODE 2: 156.9 DB

AZIMUTH	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
OFF-AXIS	118.0	114.0	110.0	105.9	101.7	97.5	93.3	89.1	84.9	80.7	76.6	72.4	68.3	64.3	60.3	56.5	52.7	49.1	45.8	42.6	39.8	37.3	35.3	33.8
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.4	-5.6	-4.8	-4.1	-3.5	-3.1
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	384	386	389	391	393
MODE 2																								
0.0 DEG	348	348	349	349	349	349	350	350	350	351	351	351	351	352	352	352	352	352	353	353	353	353	353	353
AZIMUTH	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230	235
OFF-AXIS	32.9	32.7	33.2	34.3	36.0	38.3	40.9	43.9	47.1	50.6	54.3	58.1	62.0	66.0	70.0	74.1	78.3	82.5	86.7	90.9	95.1	99.3	103.4	107.6
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-2.8	-2.7	-2.9	-3.2	-3.8	-4.4	-5.1	-5.9	-6.7	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	393	394	393	392	390	388	375	375	375	375	379	379	379	379	379	379	379	379	379	379	375	375	375	375
MODE 2																								
0.0 DEG	353	353	353	353	353	353	353	353	353	352	352	352	352	351	351	351	351	350	350	350	350	349	349	349
AZIMUTH	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355
OFF-AXIS	111.7	115.7	119.7	123.5	127.3	130.9	134.2	137.4	140.2	142.7	144.7	146.2	147.1	147.3	146.8	145.7	144.0	141.7	139.1	136.1	132.9	129.4	125.7	121.9
HOR. ELEV.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOR. CORR.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT. GAIN	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9	-6.9
COORDINATION DISTANCE (KM)																								
MODE 1																								
0.0 DB	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375	375
MODE 2																								
0.0 DEG	348	348	348	348	348	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	347	348	348

PROBABLY AFFECTED COUNTRIES:

— END —