

Sat-Coord

**For Visual Browsing of ITU Space Database
Files, Intersystem Interference Calculation,
IFIC Processing and Satellite Frequency
Coordination Support**

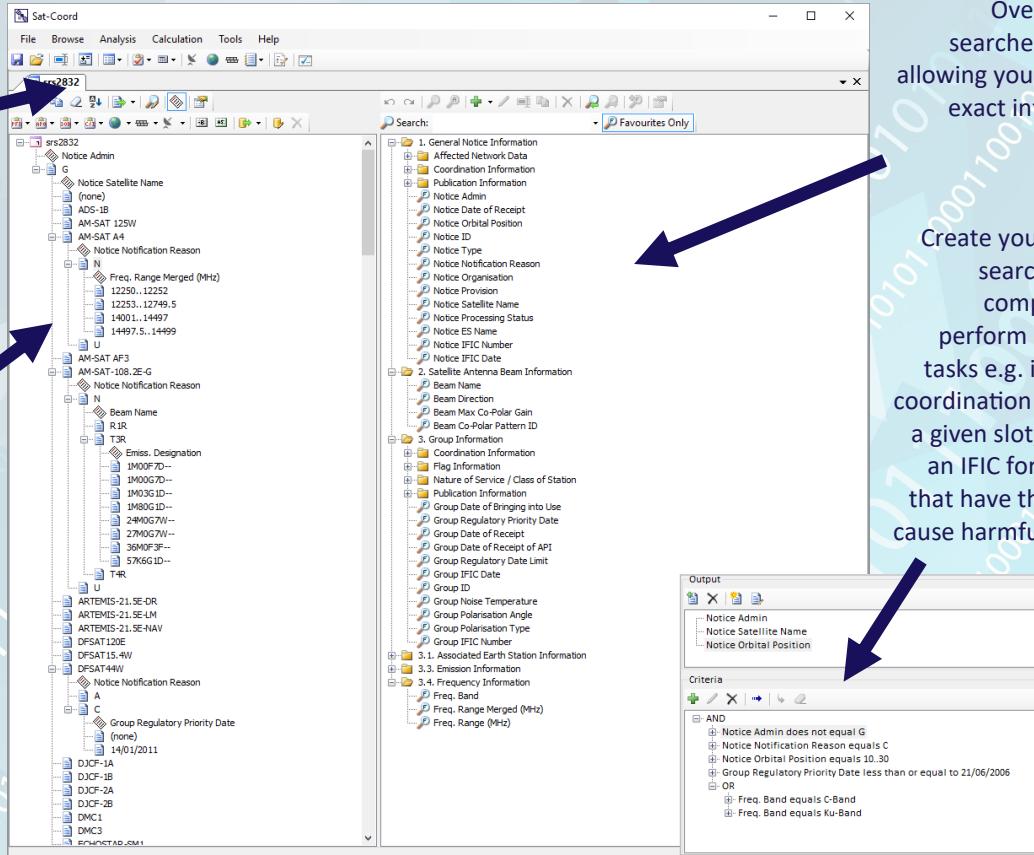


Browse and Interrogate ITU Database Files

Interrogate and retrieve information from ITU SNS Database Files (including the SRS, IFIC, SPS and AP30B database files) as well as the Space Network List (including Part-B and Part-C) and Article 5 quickly and accurately

A completely freeform approach to searching, allowing you to find the information you need quickly and efficiently

Output can be sorted and output in either text or CSV format for ease of processing



Over five hundred searches are available allowing you to extract the exact information you require

Create your own custom searches specifying complex criteria to perform a vast array of tasks e.g. identifying the coordination issues around a given slot, or examining an IFIC for the networks that have the potential to cause harmful interference

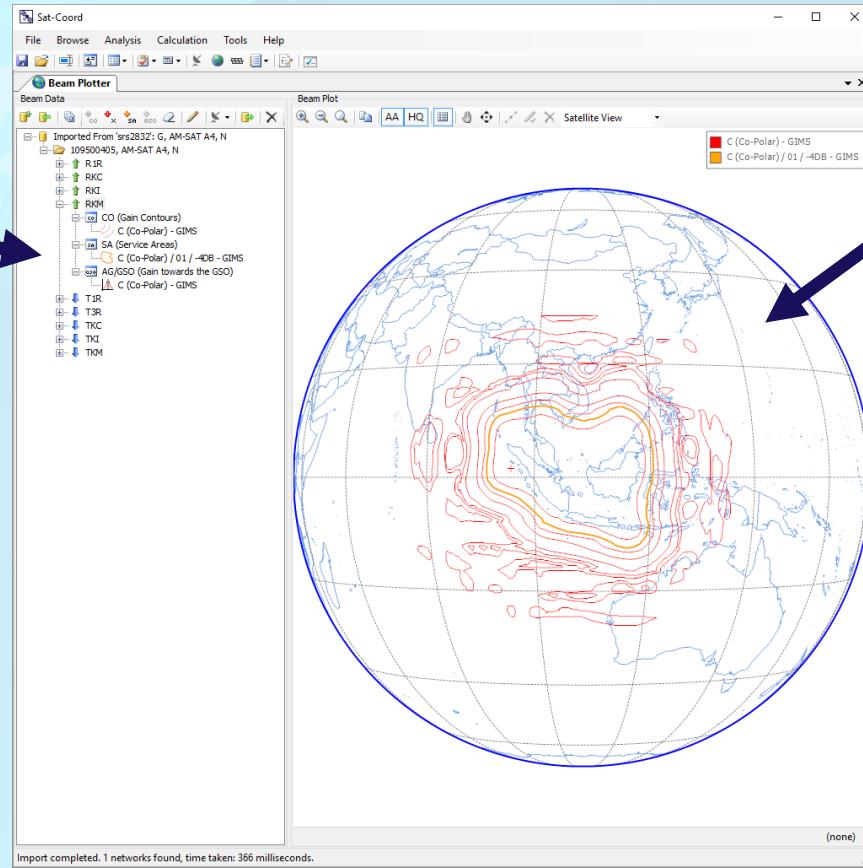
View and Edit Beam Data

Import and edit gain contour, service area and gain toward the GSO diagram data from ITU GIMS database files

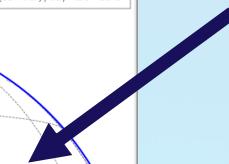


Create and edit your own custom gain contour, service area and gain toward the GSO diagrams and save them into GIMS database format

Graphically compare gain contour diagrams by overlaying multiple diagrams



View Beam data using various projections, with zoom, pan and rotation functionality



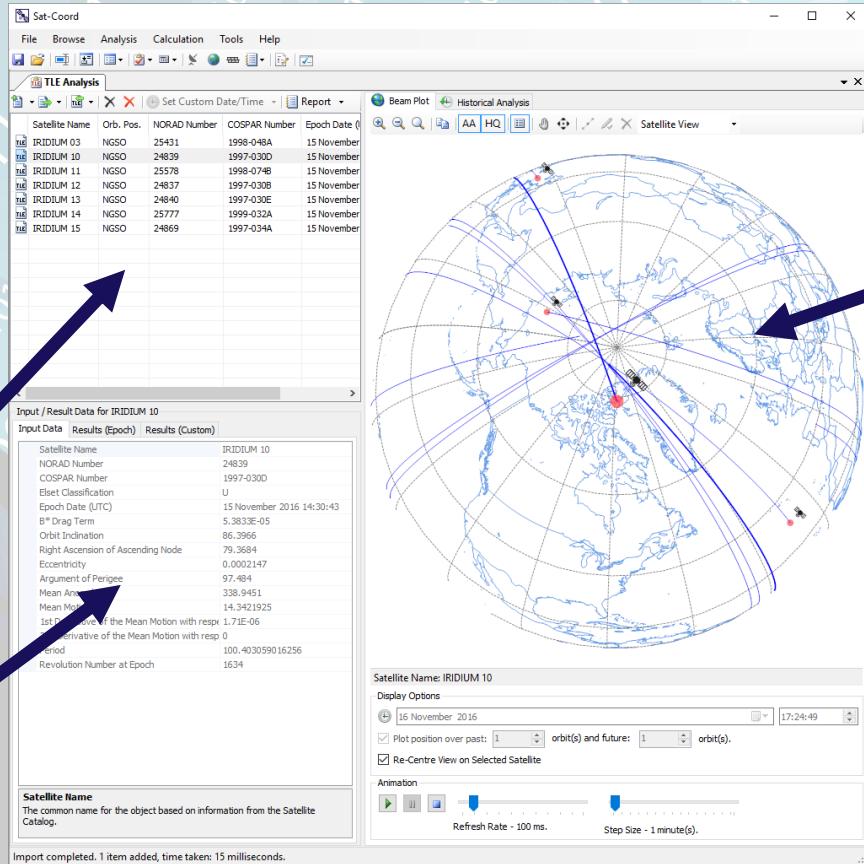
Generate contours automatically using the ITU Antenna Pattern Library from a baseline contour allowing you to quickly and easily create custom gain contour diagrams

Real World Satellite Data

Download and then browse information from Union of Concerned Scientists Satellite Database as well as Space-Track data (account required)

Import two-line-element (TLE) data from Space-Track or other sources

Analyse TLE data including retrieving location data at the associated epoch date, or a prediction at any other custom date and time



Visually display satellite ground track data and simulate satellite movement over time on the basis of TLE data

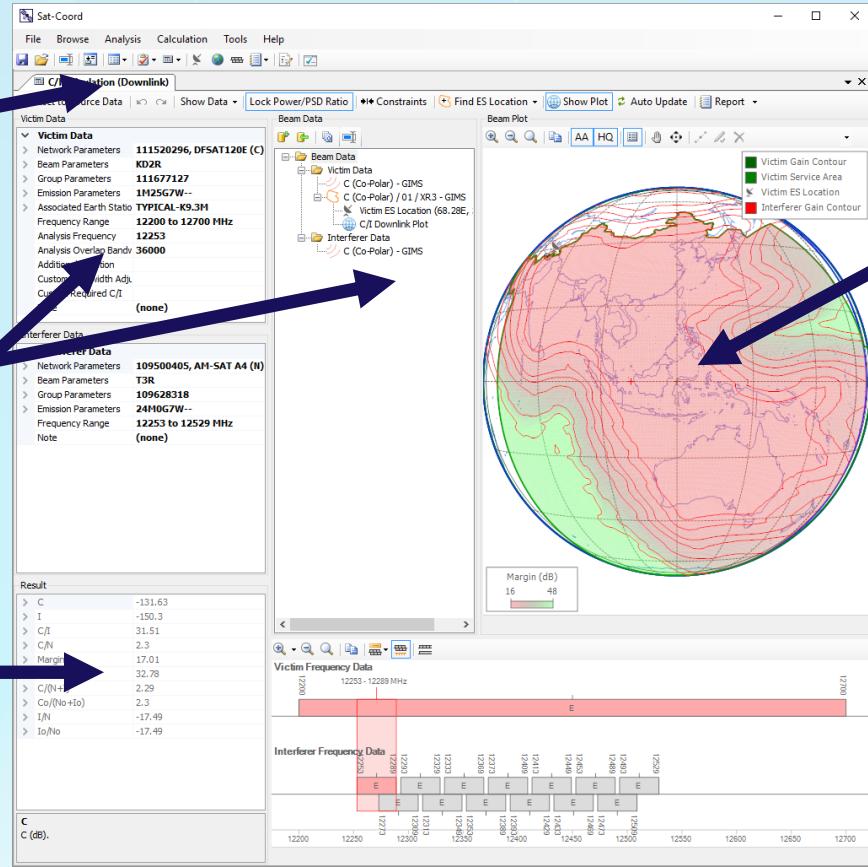
Plot position data over time, such as the longitude or altitude to understand when and how satellites are moving

Coordination Analysis

Perform downlink PFD,
C/I, $\Delta T/T$ (Appendix 8) and
Appendix 30B Annex 4
analysis

Import data from ITU SNS
database files or create
your own data including
full control over beam gain
contour, service area and
test point data

C/I analysis including
calculation of Margin, C/I,
 C_0/I_0 , $C/(N+I)$, $C_0/(N_0+I_0)$, I/N
and I_0/N_0



View graphical plots
showing interference over
the Earth's surface (or
inside the relevant service
area)

Modify input victim and
interferer data as well as
beam contours and earth
station locations with real
time re-calculation to
understand and overcome
interference issues

Add coordination
constraints into a C/I
Analysis to see their
impact in real time

IFIC Processing

Automate the processing of the bi-weekly IFIC databases to identify new filings which have the potential to cause interference to your filings

The screenshot shows the Sat-Coord software interface. At the top, there's a menu bar with File, Browse, Analysis, Calculation, Tools, and Help. Below the menu is a toolbar with icons for Export, Import, IFIC Contents, Results Data, Message List, Start, Stop, Perform Analysis, Sort, and Browse To Data. The main window displays a table of notices. A large blue arrow points from the text above to the table header. Another blue arrow points from the text below to the 'Perform Analysis' button.

Notice ID	Admin	Satellite Name	Orb. Pos.	Date Received	Reference	Number	IFIC	IFIC Date	ITU (Processed)	SC (Processed)	Comment	Check	SpaceCom Applies
116505231	RUS	KUPON-1M	55 E	15/08/2016	PART 1-S	2832	08/11/2016	x	-	-	-	-	-
116505231	RUS	KUPON-1M	55 E	15/08/2016	PART 1-S	2832	08/11/2016	x	-	-	-	-	-
116505231	RUS	KUPON-1M	55 E	15/08/2016	PART 1-S	2832	08/11/2016	x	-	-	-	-	-
116505232	RUS	EUTELSAT-310E	10 E	15/08/2016	PART 1-S	2832	08/11/2016	x	-	-	-	-	-
116505236	RUS	EXPRESS-10P	140 E	18/08/2016	PART 1-S	2832	08/11/2016	x	-	-	-	-	-
116512001	JP	HIMAWARI-10E	140.7 E	15/01/2016	PART III-S	2832	08/11/2016	x	-	-	-	x	-
116520002	IRN	IRANDES5-KAFL	34 E	16/05/2016	CR/C	4092	2832	08/11/2016	x	x	x	x	x
116520005	CНН	ITS-AR-64.5E	64.5 E	17/05/2016	CR/C	4093	2832	08/11/2016	x	x	x	x	x
116520006	CНН	ITS-AR-82.5E	83.5 E	17/05/2016	CR/C	4094	2832	08/11/2016	x	x	x	x	x
116520115	G	GIBSAT-G-14.2	129 W	03/05/2016	CR/C	4088	2832	08/11/2016	x	x	x	x	x
116520119	IND	GSAT-16(74E)	74 E	12/05/2016	CR/C	4089	2832	08/11/2016	x	x	x	x	x
116520120	IND	GSAT-16(93.5E)	83 E	12/05/2016	CR/C	4090	2832	08/11/2016	x	x	x	x	x
116520121	IND	GSAT-16(93.5E)	93.5 E	12/05/2016	CR/C	4091	2832	08/11/2016	x	x	x	x	x
116520136	QAT	QATAR-SAT-G-19.7E	19.7 E	20/05/2016	CR/C	4097	2832	08/11/2016	x	x	x	x	x

Coordination Summary for: 116520136, QATARSAT-G-19.7E, C
Summary: 9.7 Affected Networks | 9.7 Group Analysis | AP30#7.1 Affected Networks | AP30#7.1 Group Analysis | AP30#7.1 Affected Networks | AP30#7.1 Group Analysis | 9.13 Affected Networks

Export | Browse To Data | Send to Analysis | Causing Interference | Receiving Interference | Optional | Show Services | Show Frequency | Open Result | Report | Downlink Appendix8 Result

Victim vs Interferer Service

Applicable Frequency Range

AT Calculated ΔT (K)

Quickly retrieve and view the ITU findings as well as perform independent analysis of many of the ITU coordination triggers to validate the ITU's findings

Supports ITU Appendix 5, Appendix 8, Appendix 30/30A Annex 1 and Annex 4, PFD downlink and Appendix 30B Annex 4 coordination triggers

Examine in depth the reason for identification on an individual network-by-network or group-by-group basis and, where applicable, launch a detailed analysis of the worst case identified

About Sat-Coord

Sat-Coord is a modular software suite which supports the processing of satellite network information filed with the ITU, intersystem interference calculation (including ΔT/T and C/I), IFIC processing and frequency coordination support.

The software has undergone significant testing and development over a period of more than twelve years and has been used extensively to support the satellite coordination activities of RPC Telecom's clients including Intelsat, YahSat, VINASAT, THURAYA, TONGASAT, SingTel, HELLAS-SAT, SUPARCO, ETISALAT, SES Americom, ICO, Hughes Network Systems, O3B, JRANSA, DirecTV, the Cyprus Ministry of Communications, the Nigerian Communications Commission, INDOSAT, Es'hailSat, ANGKASA, Paradigm, BRIsat, KACST and the Government of Australia.

Sat-Coord can be downloaded and registered for a free, fully featured, 30 day trial.

RPC Telecommunications Ltd.

RPC Telecom specialises in satellite and radio communications engineering, software and training, with a particular emphasis on ITU satellite filing, coordination and radio-regulatory matters.

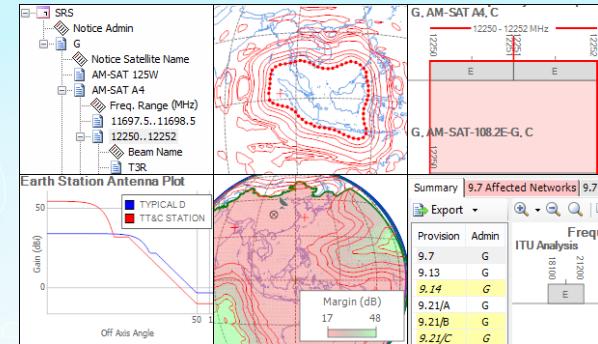
Since 1993 we have supported our clients to secure the orbit and spectrum resources needed to implement their satellite projects, attending more than 120 frequency coordination meetings and making in excess of 90 ITU satellite filings.

T: +44 (0)1473 487040

F: +44 (0)1473 357888

↗ www.sat-coord.com

@ info@sat-coord.com



RPC
TELECOMMUNICATIONS



T: +44 (0)1473 487040

F: +44 (0)1473 357888

 www.sat-coord.com

@ info@sat-coord.com