

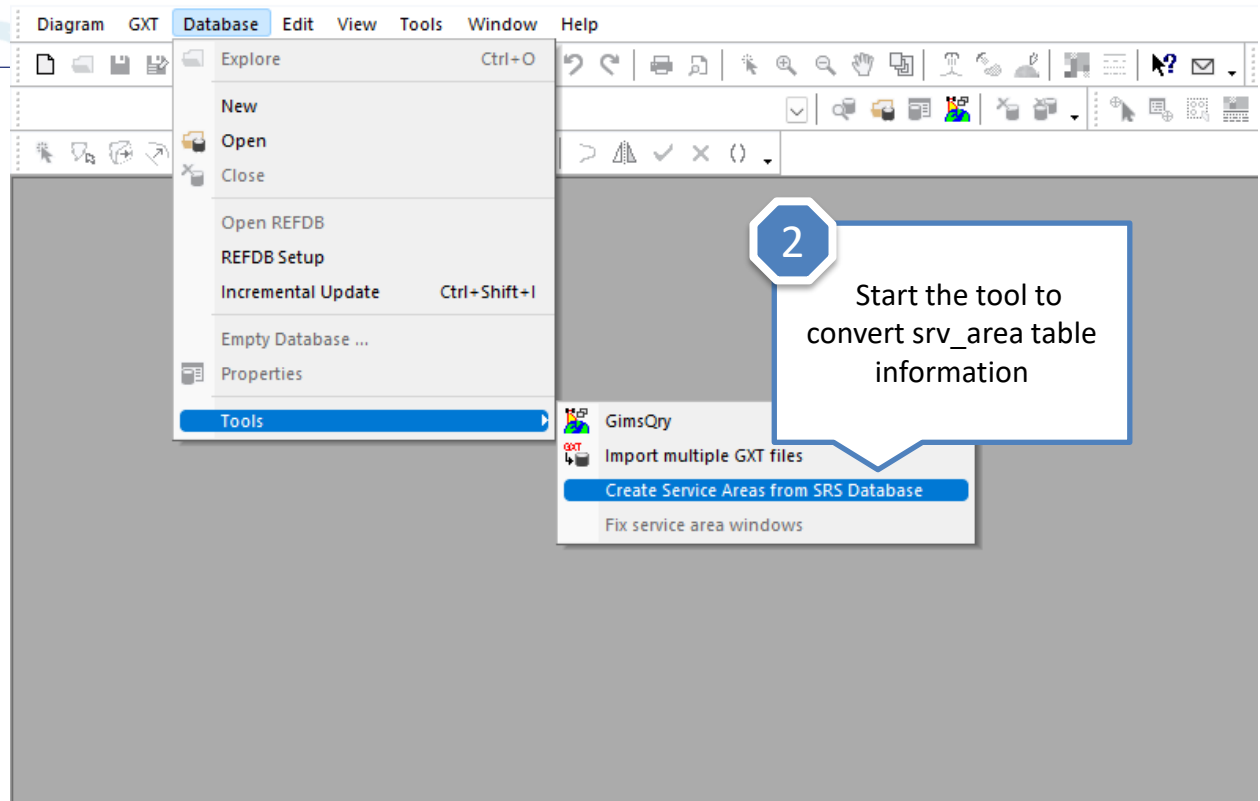
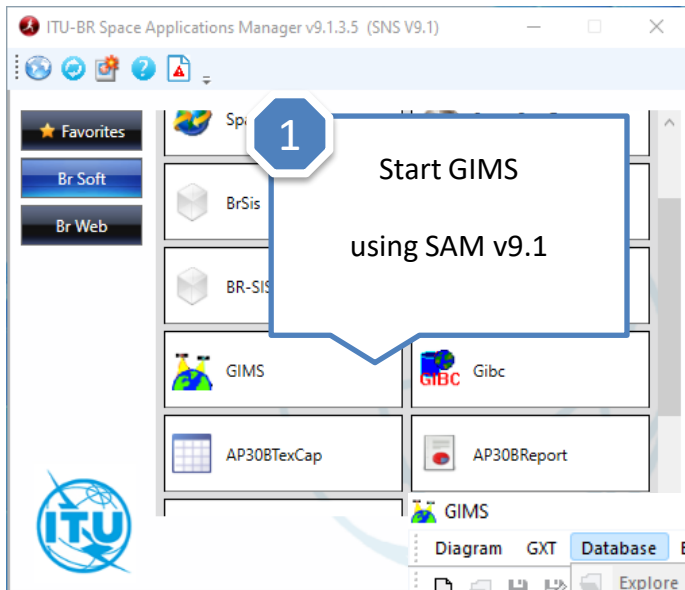


Conversion of Service Areas

from the `srv_area` table in the SRS notice database
to service area diagrams in the GIMS database

For submission of
Coordination Request and Notification
of Non-GSO satellite networks

ITU BR SSD
2022 12




1


Select the GIMS database where the service area diagrams will be saved

Create Service Areas from SRS

Select target GIMS database:




Select SRS database:



Choose a network :

Select the service areas to generate:



OK Cancel

2

Select the SRS-formatted database containing service area information (in the `srv_area` table)

As the tool will update that database, ensure that you can write into it. Clear the read-only flag in advance when necessary.

1

Once the SRS database is selected, the tool displays the list of networks containing data in the `srv_area` table that could be converted to service area diagrams. Should the selected database contain several relevant networks, choose the one you wish to process.

Select SRS database:

C:\Users\User\Desktop\srs.mdb

Choose a network :

322500131 / N / SI-SAT-KURUKURU

Select the service areas to generate:

322500131 N SI-SAT-KURUKURU	SLM UUL2B	R SA 1 1
322500131 N SI-SAT-KURUKURU	SLM UUL3	R SA 1 1
322500131 N SI-SAT-KURUKURU	SLM UUL3	R SA 2 1
322500131 N SI-SAT-KURUKURU	SLM UUL3	R SA 3 1
322500131 N SI-SAT-KURUKURU	SLM UUL3	R SA 4 1
322500131 N SI-SAT-KURUKURU	SLM UUL3B	R SA 1 1
322500131 N SI-SAT-KURUKURU	SLM UUL3B	R SA 2 1
322500131 N SI-SAT-KURUKURU	SLM UUL3B	R SA 3 1
322500131 N SI-SAT-KURUKURU	SLM UUL3B	R SA 4 1

Select All
 Select all 'E'
 Select all 'R'
 Unselect All
 Toggle Selection
 Remove All
 Remove Selected

OK

3

The contextual menu of the list can help you to select items in the list

2

Once a network is selected, the tool displays information about the service areas that it is going to create. **Only the selected service areas will be created.** By default, they are all selected.

Each line represents the key information that will be identifying a service area diagram in the GIMS database
 notice ID | notification reason | network name | admin. code | beam name | Emission/Reception flag | diagram type | **area number** | picture number (not relevant)

4

Click OK when you are ready to start the conversion.

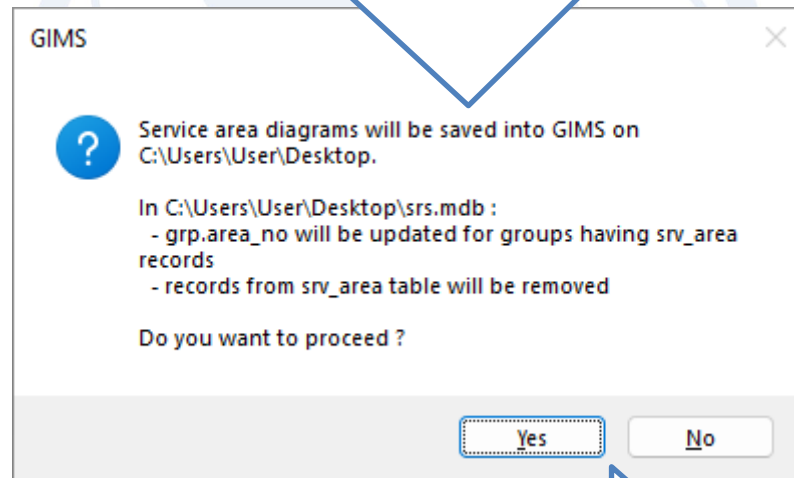


1

Before starting the conversion, a message summarizes the actions that the tool will perform.

It will update the SRS database by removing the content of the `srv_area` table. The geographical area codes that had been captured in this table will be used to create service area diagrams in the selected GIMS database.

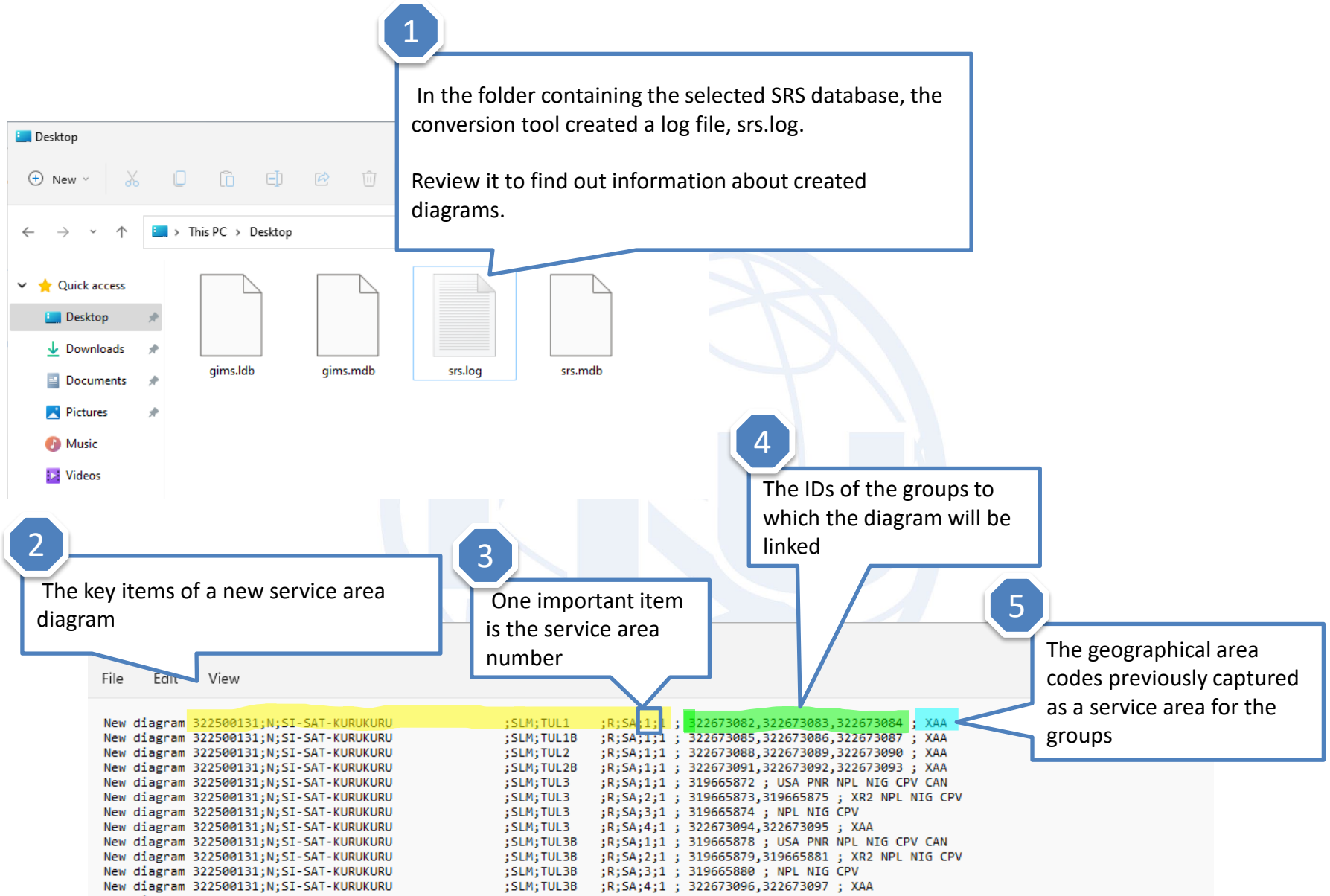
In GIMS, a service area number is identifying each service area diagram and this number will also be inserted in the area number field at the group level (`grp.area_no` database field)



2

Click Yes to proceed with the conversion.
Click No to cancel.





1

In the folder containing the selected SRS database, the conversion tool created a log file, srs.log.
Review it to find out information about created diagrams.

2

The key items of a new service area diagram

3

One important item is the service area number

4

The IDs of the groups to which the diagram will be linked

5

The geographical area codes previously captured as a service area for the groups

```

File Edit View
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL1 ;R;SA;1;1 ; 322673082,322673083,322673084 ; XAA
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL1B ;R;SA;1;1 ; 322673085,322673086,322673087 ; XAA
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL2 ;R;SA;1;1 ; 322673088,322673089,322673090 ; XAA
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL2B ;R;SA;1;1 ; 322673091,322673092,322673093 ; XAA
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3 ;R;SA;1;1 ; 319665872 ; USA PNR NPL NIG CPV CAN
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3 ;R;SA;2;1 ; 319665873,319665875 ; XR2 NPL NIG CPV
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3 ;R;SA;3;1 ; 319665874 ; NPL NIG CPV
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3 ;R;SA;4;1 ; 322673094,322673095 ; XAA
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;1;1 ; 319665878 ; USA PNR NPL NIG CPV CAN
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;2;1 ; 319665879,319665881 ; XR2 NPL NIG CPV
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;3;1 ; 319665880 ; NPL NIG CPV
New diagram 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;4;1 ; 322673096,322673097 ; XAA

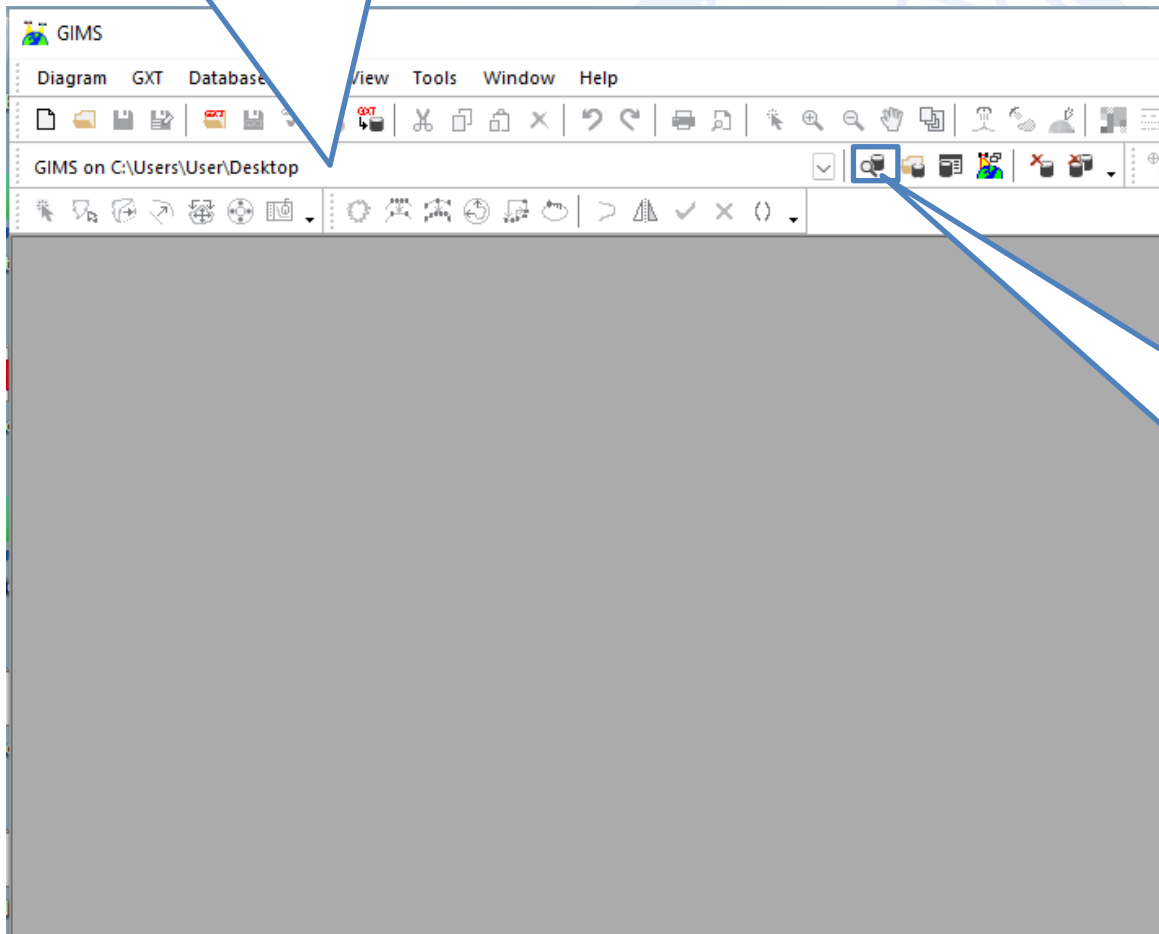
```



1

When the conversion is completed, the GIMS database containing the newly created service area diagrams is opened.

Let's see how to view the created diagrams



2

You can browse the database content by clicking on this icon.

Alternatively, you can select the menu item **Diagram | Open**.

This will open the Database Explorer.

1

Choose to view non-geostationary satellites diagrams

3

Check the "Service Area (C11a)" box.

This is the service area number



4

These are the "checked" diagrams that will be opened

2

Expand a beam until you see the service area diagrams

5

Click OK to open the selected diagrams

Desktop\gims.mdb

Browse for ...

Geostationary Satellites Non-geostationary Satellites

Notice ID: Filter by: Administration Filter Off

Apply last filters at startup

Select only:

- Antenna Gain vs Elevation Angle (B4b2)
- Spreading Loss vs Elevation Angle (B4b3)
- Earth Station Radiation Pattern (C10d5a)
- Spectrum Mask Diagram (C9a?)

Ignore:

- C (Co-polar) E (Emission = Down Link)
- X (Cross-polar) R (Reception = Up Link)

Notice	Reason	Admin.	Satellite Name
2500131	N	SLM	SI-SAT-KURUKURU
└ TUL1			
└ TUL1B			
└ TUL2			
└ TUL2B			
└ TUL3			
└ TUL3B			
└ Service Area (C11a)			
└ 1 / 1 - SERVICE AREA			
└ 2 / 1 - SERVICE AREA			
└ 3 / 1 - SERVICE AREA			
└ 4 / 1 - SERVICE AREA			
└ UUL1			
└ UUL1B			
└ UUL2			

322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;1;1
 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;2;1
 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;3;1
 322500131;N;SI-SAT-KURUKURU ;SLM;TUL3B ;R;SA;4;1

OK Cancel



Diagram GXT Database Info Points Edit View Capture Win

- New... Ctrl+N
- Open... Ctrl+O
- Close
- Save Ctrl+S
- Save As...
- Import GXT File Ctrl+Shift+O
- Export to GXT File Ctrl+Shift+S
- Validate
- View GXT Ctrl+G
- Show Key
- Show History
- Titles and Legends
- Print... Ctrl+P
- Print Multiple...
- Print Preview
- Page Setup...
- 1 322500131.SI-SAT-KURUKURU.TUL3B.4.1 (SA) - GIMS
- 2 322500131.SI-SAT-KURUKURU.TUL3B.3.1 (SA) - GIMS
- 3 322500131.SI-SAT-KURUKURU.TUL3B.2.1 (SA) - GIMS
- 4 322500131.SI-SAT-KURUKURU.TUL3B.1.1 (SA) - GIMS
- 5 121520204.IK-49.5W.KUT.C.0 (GSO) - GREFDB2985
- 6 121520204.IK-49.5W.KUT.C.1 (CO,SA) - GREFDB2985
- Exit

1
To view the key items identifying a diagram

Diagram Keys

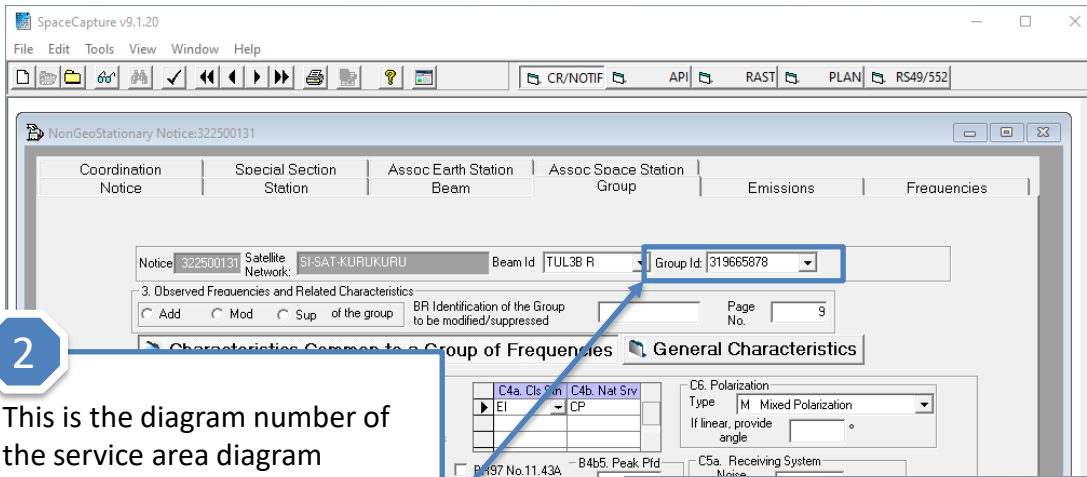
Service Area (C11a) keys

Notice ID	322500131
Notification Reason	N (Notification)
Administration	SLM
Satellite Name	SI-SAT-KURUKURU
Beam Name	TUL3B
Emission / Reception	R (Reception = Up Link)
Diagram Number	1
Diagram Type	Service Area (C11a)
Comment	

Close

2
The service area number





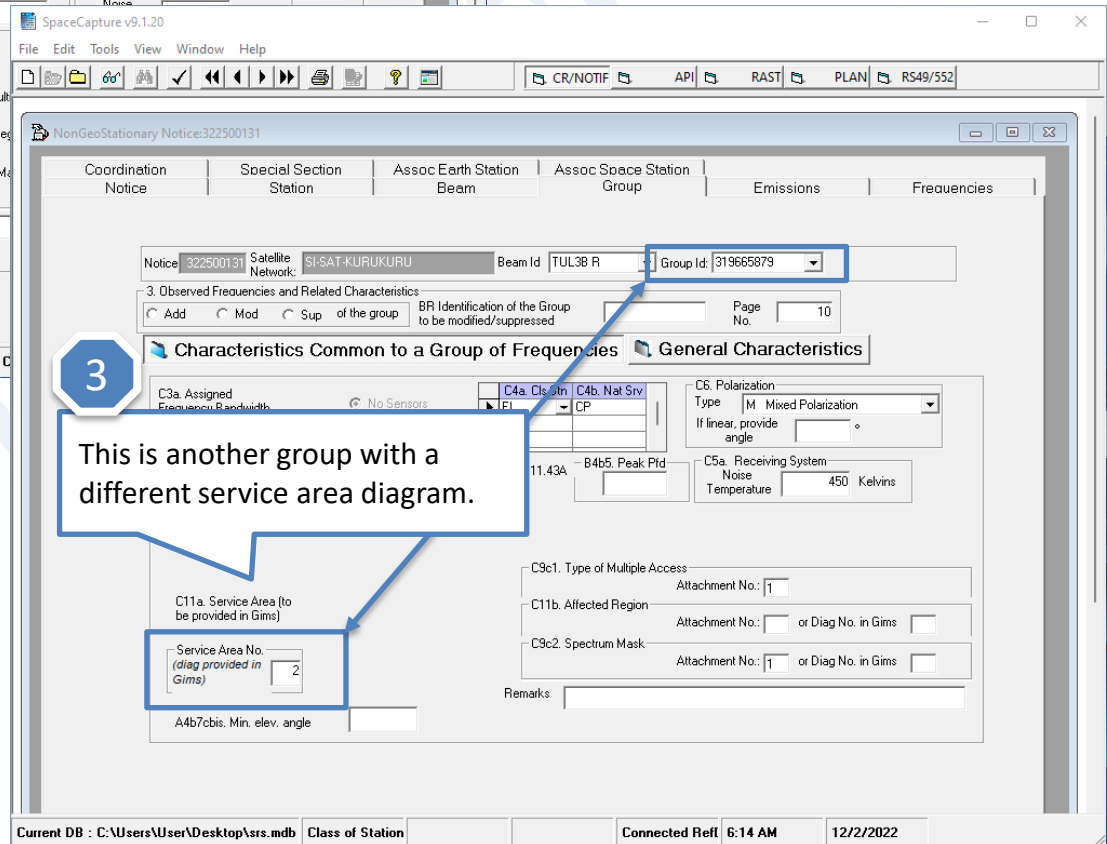
2
This is the diagram number of the service area diagram associated to this group.

11a. Service Area (to be provided in Gims)
Service Area No. (diag provided in Gims) 1

1
You can also open the converted SRS notice database with SpaceCap and review the group data.

Note:

- There may be different service areas with different service area numbers within the same beam, captured for different groups.
- One group can have only one service area.



3
This is another group with a different service area diagram.

11a. Service Area (to be provided in Gims)
Service Area No. (diag provided in Gims) 2

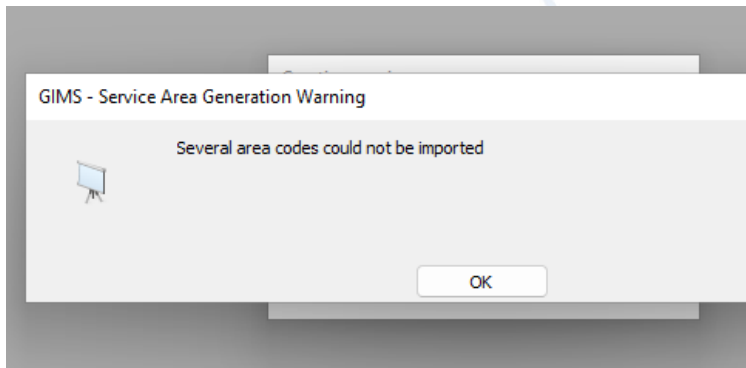


Invalid Codes ?

1

The most common problem is when the conversion tool encounters geographical codes with which it cannot be processed. They may be wrong codes not corresponding to any known countries or regulatory areas. For instance, some old country codes are no longer in use. They could also be valid codes, described in the Preface, but that cannot be converted to geographical areas.

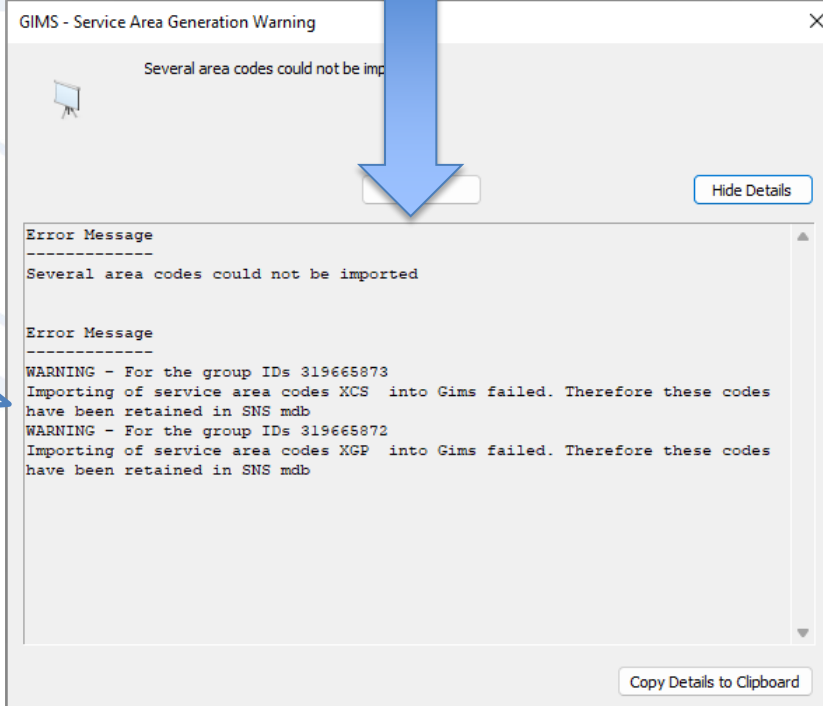
When this message is displayed at the end of the conversion process, click the **Show Details** button.



Show Details

2

For the groups with such erroneous codes, the conversion does not create any service area diagrams in GIMS and **all (valid as well as invalid)** codes are retained in the `srv_area` table in the SRS database.



Possible Solutions

The screenshot shows the Microsoft Access interface. The 'Tables' pane on the left lists various tables, with 'srv_area' highlighted in red. The main window displays the 'srv_area' table with the following data:

grp_id	ctry	f_excl_ap	Click to Add
319665872	CAN		
319665872	CPV		
319665872	NIG		
319665872	NPL		
319665872	PNR		
319665872	USA		
319665872	XGP		

The 'XGP' entry is highlighted in blue, and a red box is drawn around it. A callout bubble with the number '3' points to this entry.

1 For NGSO networks submitted for coordination or notification SpaceCap v9.1 does not show the service area information anymore Therefore, to solve the invalid codes issue you will have to resort to using MS Access and correct the srv_area table data.

2 Double-click the table named "srv_area".

3 Edit the invalid code or remove it.

4 Re-run the conversion using the same SRS and GIMS database.

The screenshot shows the GIMS software interface. The 'Tools' menu is open, and the option 'Create Service Areas from SRS Database' is highlighted. A callout bubble with the number '4' points to this option.





Thank you!



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