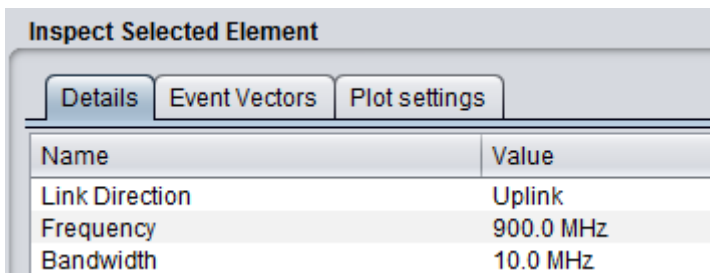


12.8.3 Inspect selected element

12.8.3.1 Detail

When an element of the main plot is selected, its detailed information is shown in a table. Further detailed are presented in Annex A15.1 with respect to CDMA network, Detailed of voice users, cell.



Name	Value
Link Direction	Uplink
Frequency	900.0 MHz
Bandwidth	10.0 MHz

Figure 269: Detailed information of each element of the main plot

12.8.3.2 Event Vectors

You are able to investigate some intermediary output vectors resulting from the cellular simulation.

For the position information (x,y) of the active UE details, all coordinates are always shown in the SEAMCAT coordinate system which by definition either the VLT or the victim reference cell in (0,0). Therefore, the position of the elements of an interfering CDMA or OFDMA system is based on the victim reference cell and not its "internal" reference cell.

Table 55: CDMA UL (a) and DL (b) snapshot vector for the last event

Details	Event Vectors	Plot settings	Details	Event Vectors	Plot settings
Calculated Pathloss, active links (all cells)			Calculated Pathloss, active links (all cells)		
Distance to first basestation in active list, active users (all cells)			Distance to first basestation in active list, active users (all cells)		
Effective Pathloss to Ext. Interferer (ref cell, all interferers)			Effective Pathloss to Ext. Interferer (ref cell, all interferers)		
Effective Pathloss, active links (all cells)			Effective Pathloss, active links (all cells)		
External Interference, all cells			External Interference, active users (Ref Cell)		
Geometry, active users (all cells)			External Interference, active users (all cells)		
Inter System Interference, base stations			External Interference, dropped users (Ref Cell)		
Noise Rise over Noise Floor			External Interference, dropped users (all cells)		
Number of dropped users per BS			Geometry, active users (all cells)		
RX Power, active links (all cells)			Number of dropped users per BS		
Size of activelist, active users (all cells)			RX Power, active links (all cells)		
TX Power External Interferers			Size of activelist, active users (all cells)		
TX Power, active users (all cells)			TX Power External Interferers		
			TX Power, basestations		

Table 56: Output vector results for CDMA UL

Name	Description
Calculated pathloss	Raw pathloss for all the active links (i.e. active UE to its serving BS)
Distance to first BS	Distance from UE to its serving BS (first refer to cases where tri-sector is active)
Effective Pathloss to Ext. interferer (all victims, all interefers)	Effective pathloss between all the victims and all the external interferers
Effective pathloss, active links	Effective pathloss between all the victims and their respective serving BSs. Results of the below equation for all the active links
External interference, all cells	Sum of the iRSSblocking and iRSSunwanted at each victim cell
Geometry	Evaluate the Geometry for the active users for the all network
Inter System Interference	Evaluate the interference from your own network
Noise rise over the noise floor	Evaluate the Noise rise over the noise floor
Number of dropped users per BS	Evaluate the Number of dropped users per BS
Rx power, active links	Received power at the victim serving BS (UL) or active UE (DL) from its own system (used for investigating the inter-system interference from other cells)

Size of active list	Size of active list
Tx power external interferers	Tx power from the interferer
Tx power, active users	Tx power from its own system

Table 57: Output vector results for CDMA DL (the rest of the vectors are like for the UL)

Name	Description
External interference, active users (all cells)	Evaluate the external interference on all the active users for the whole network
External interference, active users (ref cell)	Evaluate the external interference on all the active users for the reference cell only
External interference, dropped users (all cells)	Evaluate the external interference on all the dropped users for the whole network
External interference, dropped users (ref cell)	Evaluate the external interference on all the dropped users for the reference cell only

Table 58: OFDMA UL (a) and DL (b) snapshot vector for the last event

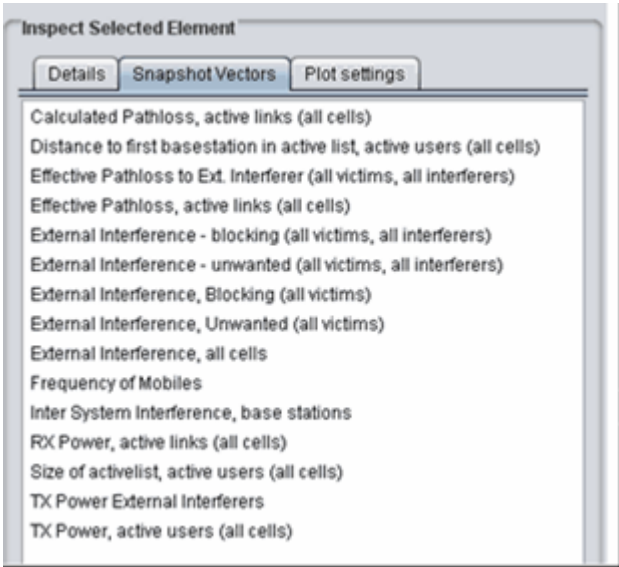
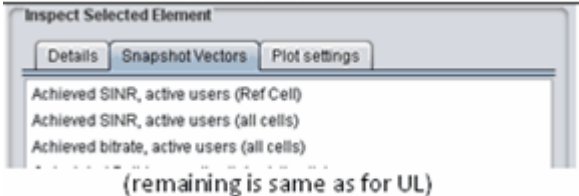
	
(a)	(b)

Table 59: Output vector results for OFDMA UL

Name	Description
Calculated pathloss	Raw pathloss for all the active links (i.e. active UE to its serving BS)
Distance to first BS	Distance from UE to its serving BS (first refer to cases where tri-sector is active)
Effective Pathloss to Ext. interferer (all victims, all interferers)	Effective pathloss between all the victims and all the external interferers
Effective pathloss, active links	Effective pathloss between all the victims and their respective serving BSs. Results of the below equation for all the active links
External interference -blocking (all victims - all interferers)	iRSSblocking for each of the victim UE interfered by each interferer
External interference -unwanted (all victims - all interferers)	iRSSunwanted for each of the victim UE interfered by each interferer
External interference -blocking (all victims)	Aggregate external interference iRSSblocking for each of the victim UE. Sum over all the interferers
External interference -unwanted (all victims)	Aggregate external interference iRSSunwanted for each of the victim UE. Sum over all the interferers
External interference, all cells	Sum of the iRSSblocking and iRSSunwanted at each victim cell
Frequency mobiles	Vector of the frequency of the UE (in UL) for each active link
Inter System Interference	Evaluate the interference from your own network
Rx power, active links	Received power at the victim serving BS (UL) or active UE (DL) from its own system (used for investigating the inter-system interference from other cells)
Size of active list	Size of active list
Tx power external interferers	Tx power from the interferer
Tx power, active users	Tx power from its own system

Table 60: Output vector results for OFDMA DL (the rest of the vectors are like for the UL)

Name	Description
Achieved SINR, active users (ref cell)	Achieved SINR in the ref cell only

Achieved SINR, active users (all cells)	Achieved SINR for the all system
Achieved bitrate, active users (all cells)	Achieved bit rate for the all system

12.8.3.3 Plot settings

The plotting options control how the system is shown in the main plot area and how you select elements from the system. This plotting option can be seen on the overview page Figure 270.

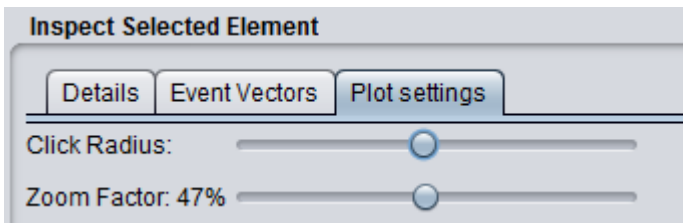


Figure 270: Plot settings

You can zoom in and out by using either the mouse wheel or the Zoom Factor slider. When clicking on a displayed item SEAMCAT tries to match the coordinates of the click to a cellular element - selecting the first matched item.

When SEAMCAT tries to match the click to an element it allows for a certain amount of uncertainty when matching the coordinates. This uncertainty is also called click radius to illustrate the effect of the actual click point being in the centre of a circle used to search for CDMA elements. You can adjust the "click radius" and in combination with the zoom this allows for all elements to be selected using the algorithm supplied above.

It is often the case that an element different than desired or no element at all is selected when clicking the plot. This problem is resolved by zooming in and possibly changing the click radius.

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