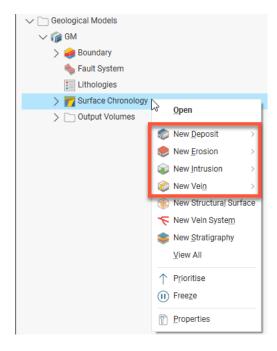
Leapfrog Works Surface Types

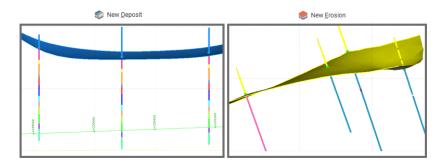
For Leapfrog Works Version 2025.1

 Geological Models GM GB Boundary Fault System Lithologies 		
 > 7 Surface Chronology > Output Volumes 	<u>O</u> pen	Comments
		From Base Lithology
	Rew Erosion	From Other Contacts
	i New Intrusion →	From Polyline
	诊 New Vei <u>n</u> >	From GIS Vector Data
	🛞 New Structura <u>l</u> Surface	🔏 From S <u>t</u> ructural Data
	✓ New Vein System	From Points
	New Stratigraphy	🛒 From Offset Surface
	<u>V</u> iew All	\bigotimes From Surface
	↑ Prioritise	
	II Freeze	
	Properties	

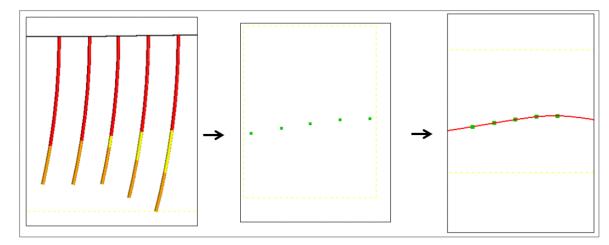
Core Contact Surface Types



Deposit and Erosion Surfaces

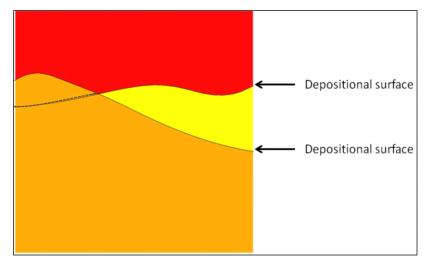


One set of contact points - above OR below the unit of interest

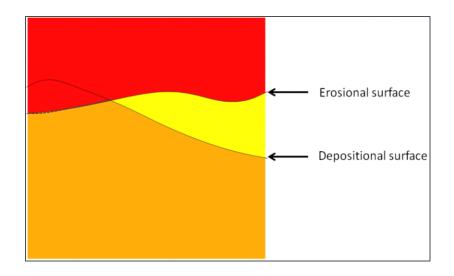


Only ONE contact point per unit per borehole

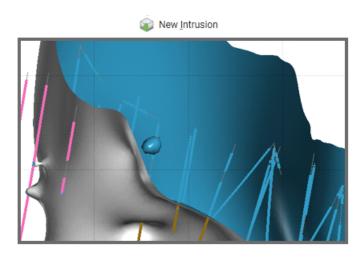
Deposit surface volumes **cannot** cut into an underlying older unit



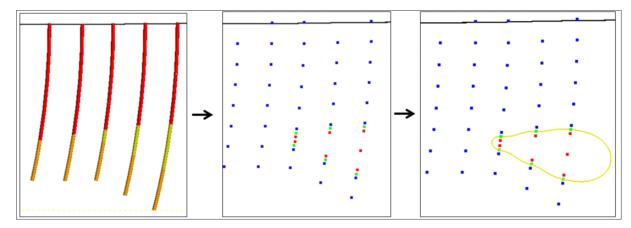
Erosion surface volumes **can** cut into an underlying older unit



Intrusion Surfaces

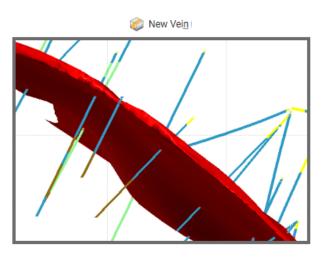


One set of contact points – above AND below the unit of interest

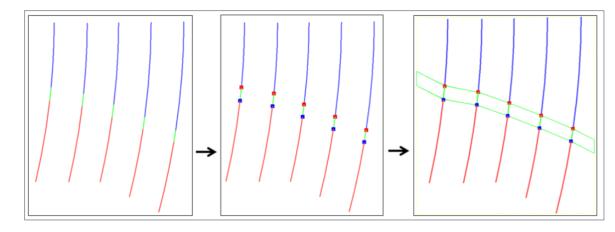


Can have **MULTIPLE** contact points per unit per borehole Intrusion volumes **enclose** the unit of interest

Vein Surfaces



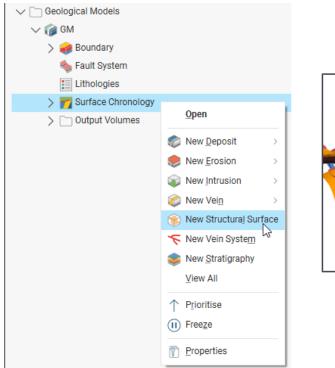
 $\textbf{Two}\ \text{sets}\ \text{of}\ \text{contact}\ \text{points}\ -\ \text{above}\ \textbf{AND}\ \text{below}\ \text{the}\ \text{unit}\ \text{of}\ \text{interest}$

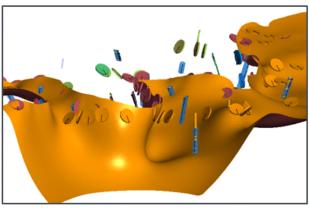


Creates a Hanging wall (HW) set AND Footwall (FW) set of contact points

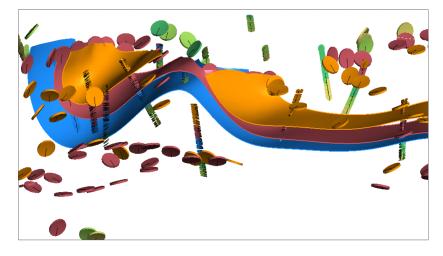
Specific Function Surfaces

Structural Surfaces



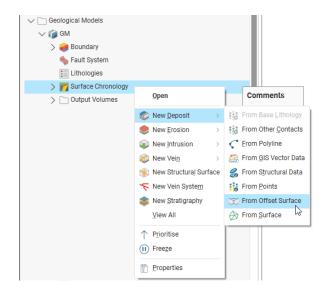


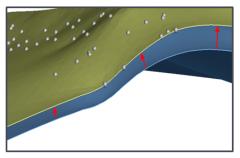
Incorporates non-contact structural data with on-contact data (drilling data, surface mapping)



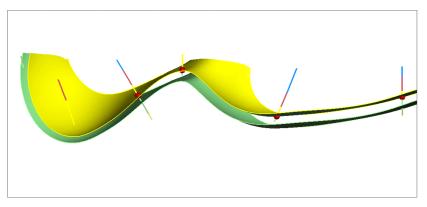
Can be used for a Deposit, Erosion or Intrusion contact type

Offset Surfaces



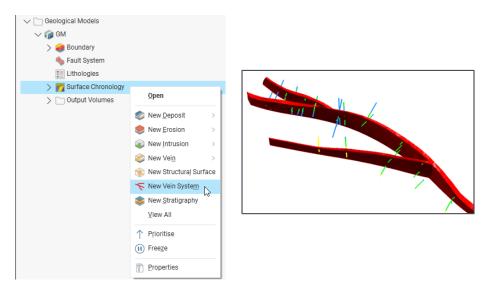


Maintains **consistent offset** while **honouring** contact points – for stratigraphy with common deformation

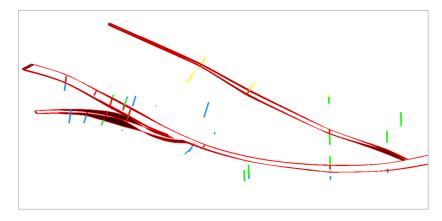


Can be used for a **Deposit** or **Erosion** contact type

Vein System Surfaces

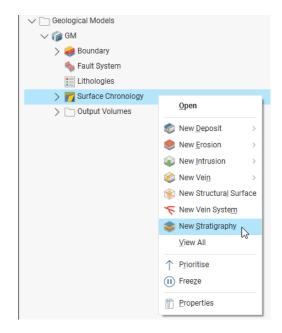


Combines individual veins into a **single interconnected system** of veins

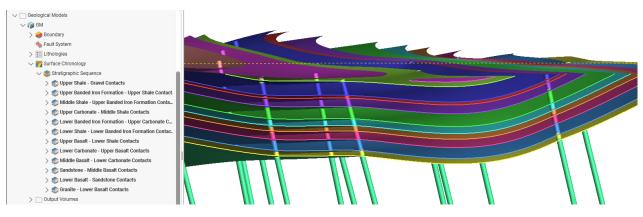


Can be used for a Vein contact type

Stratigraphic Sequences



Generates **multiple** surfaces in a stratigraphic sequence in a **single pass**



Can be used for a **Deposit** or **Erosion** contact type