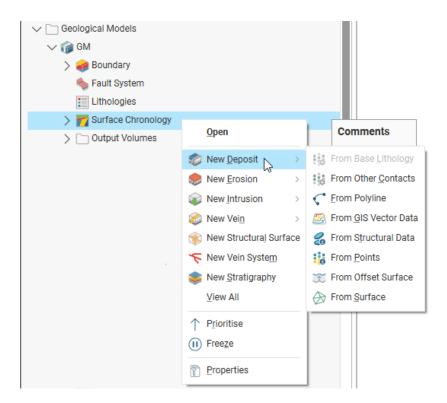
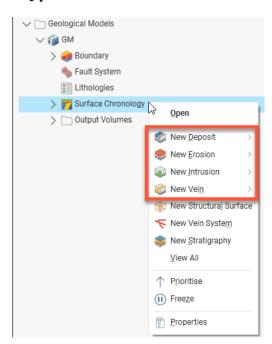
## **Leapfrog Energy Surface Types**

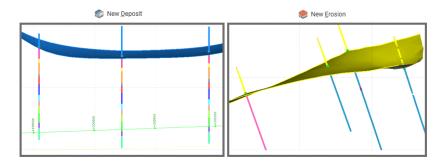
For Leapfrog Energy Version 2025.1



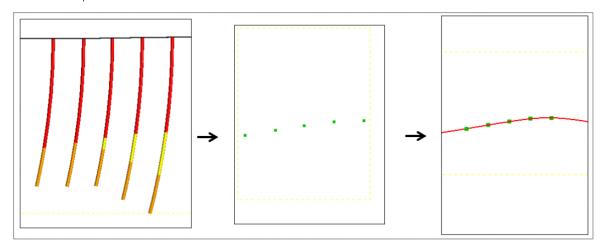
### **Core Contact Surface Types**



## **Deposit and Erosion Surfaces**

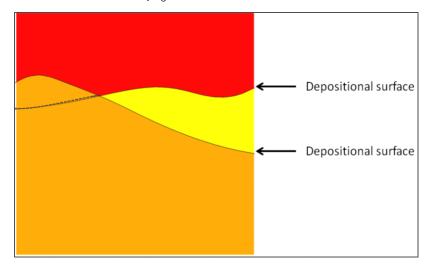


One set of contact points – above **OR** below the unit of interest

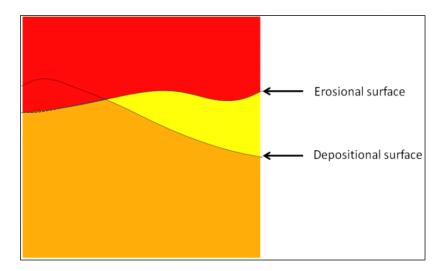


Only **ONE** contact point per unit per well

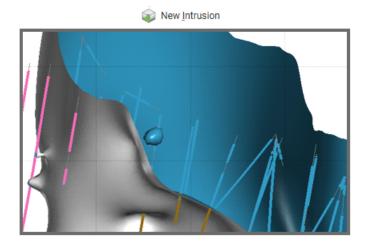
Deposit surface volumes **cannot** cut into an underlying older unit



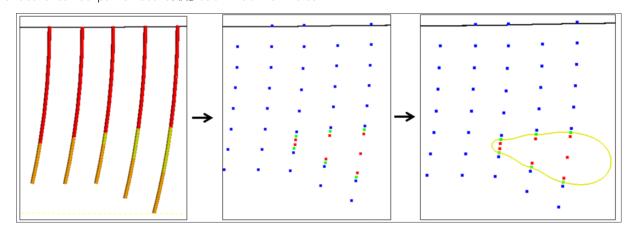
Erosion surface volumes **can** cut into an underlying older unit



## **Intrusion Surfaces**



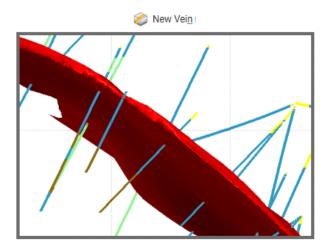
One set of contact points – above **AND** below the unit of interest



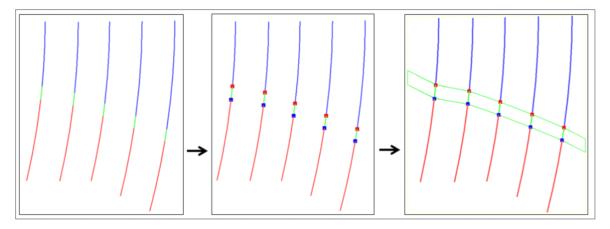
Can have **MULTIPLE** contact points per unit per well

Intrusion volumes **enclose** the unit of interest

## **Vein Surfaces**



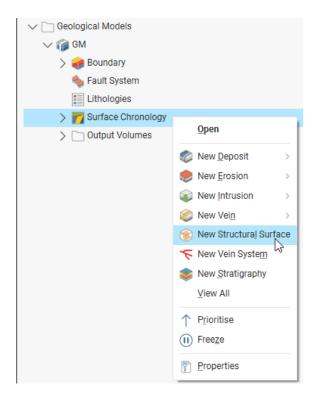
 $\textbf{Two}\, \text{sets of contact points} - \text{above}\, \textbf{AND}\, \text{below the unit of interest}$ 

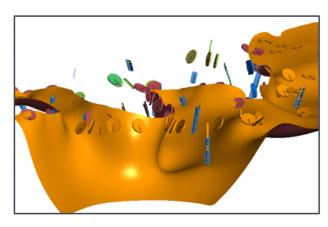


Creates a Hanging wall (HW) set AND Footwall (FW) set of contact points

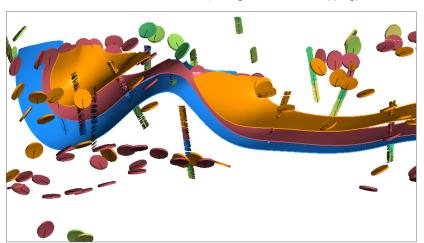
# **Specific Function Surfaces**

#### **Structural Surfaces**



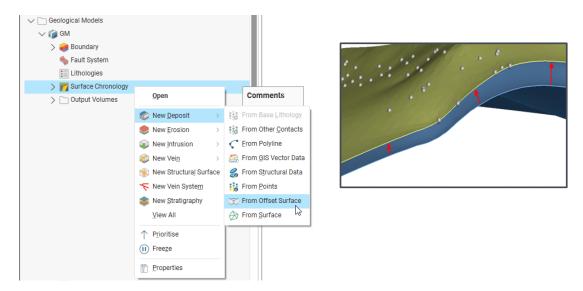


Incorporates **non-contact** structural data with on-contact data (drilling data, surface mapping)

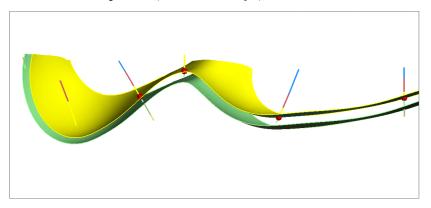


Can be used for a **Deposit**, **Erosion** or **Intrusion** contact type

#### **Offset Surfaces**

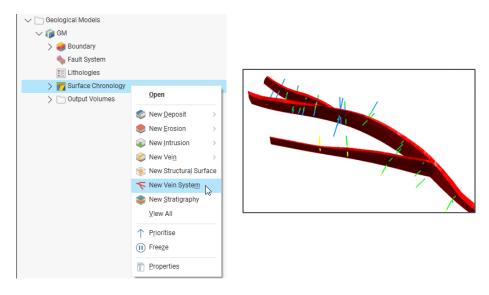


Maintains consistent offset while honouring contact points – for stratigraphy with common deformation

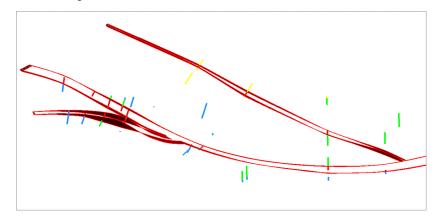


Can be used for a **Deposit** or **Erosion** contact type

## **Vein System Surfaces**

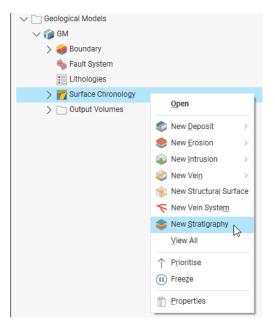


#### Combines individual veins into a **single interconnected system** of veins

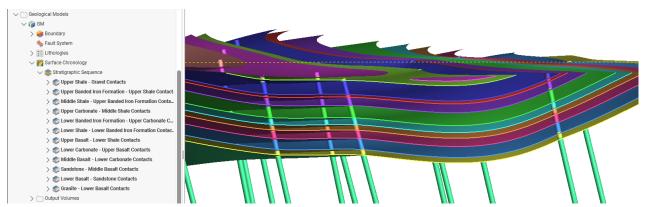


Can be used for a Vein contact type

## Stratigraphic Sequences



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



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