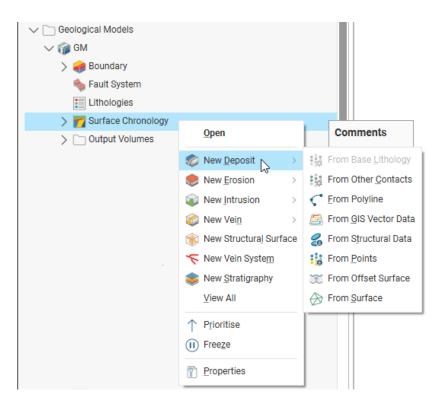
Leapfrog Energy Surface Types

For Leapfrog Energy Version 2024.1



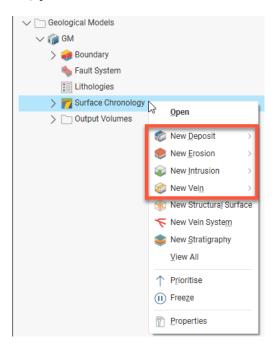
Core Contact Surface Types

- Deposit and Erosion Surfaces
- Intrusion Surfaces
- Vein Surfaces

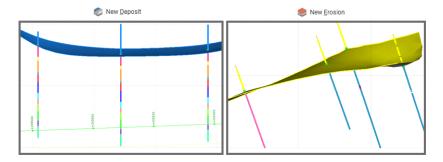
Specific Function Surfaces

- Structural Surfaces
- Offset Surfaces
- Vein System Surfaces
- Stratigraphic Sequences

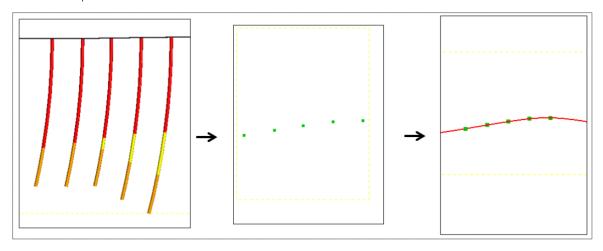
Core Contact Surface Types



Deposit and Erosion Surfaces

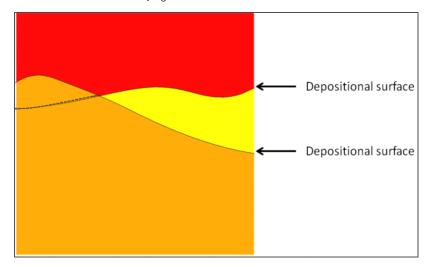


One set of contact points – above **OR** below the unit of interest

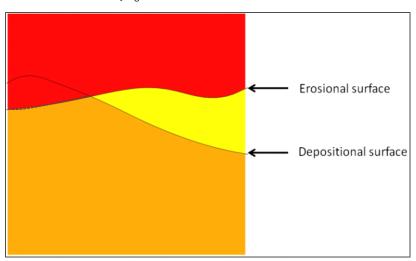


Only **ONE** contact point per unit per well

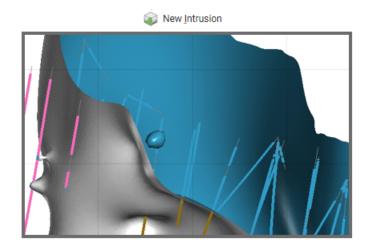
Deposit surface volumes ${\bf cannot}$ cut into an underlying older unit



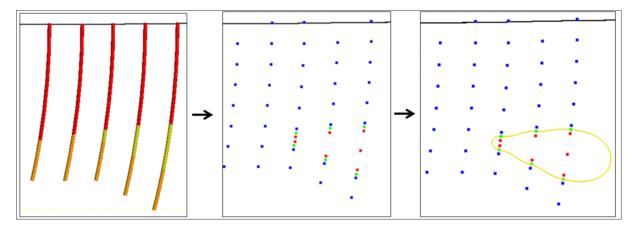
Erosion surface volumes **can** cut into an underlying older unit



Intrusion Surfaces

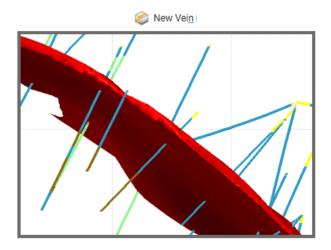


One set of contact points – above **AND** below the unit of interest

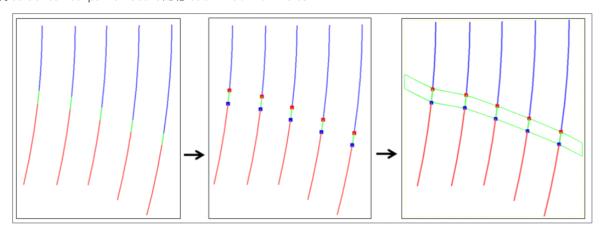


Can have **MULTIPLE** contact points per unit per well Intrusion volumes **enclose** the unit of interest

Vein Surfaces



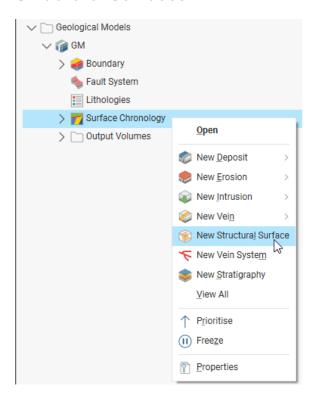
Two sets of contact points – above AND below the unit of interest

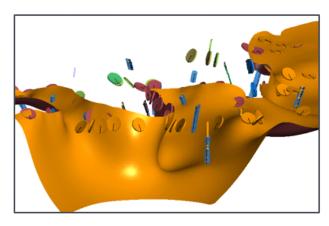


Creates a Hanging wall (HW) set AND Footwall (FW) set of contact points

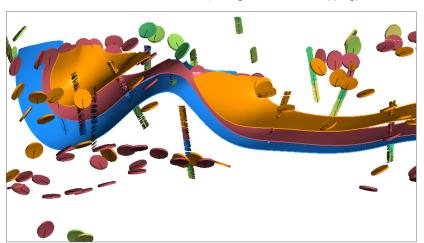
Specific Function Surfaces

Structural Surfaces



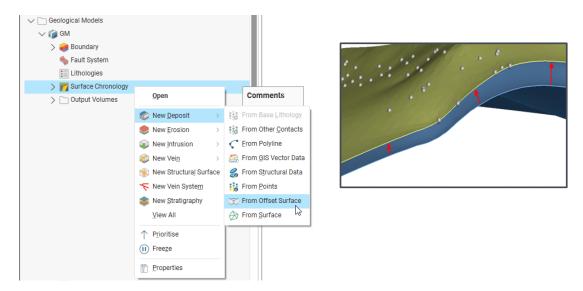


Incorporates **non-contact** structural data with on-contact data (drilling data, surface mapping)

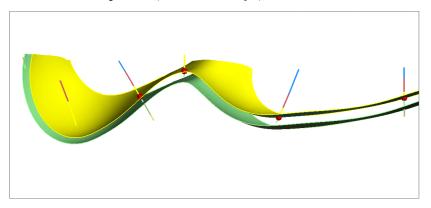


Can be used for a **Deposit**, **Erosion** or **Intrusion** contact type

Offset Surfaces

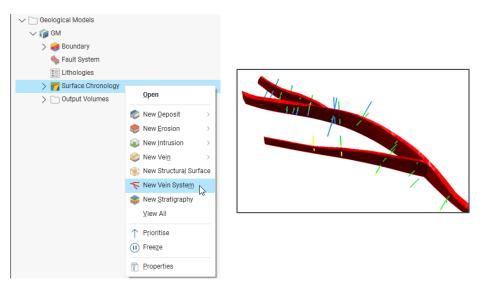


Maintains consistent offset while honouring contact points – for stratigraphy with common deformation

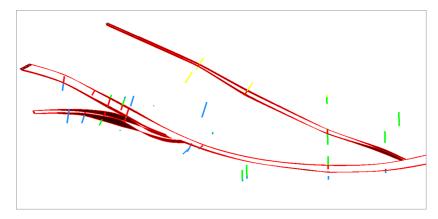


Can be used for a **Deposit** or **Erosion** contact type

Vein System Surfaces

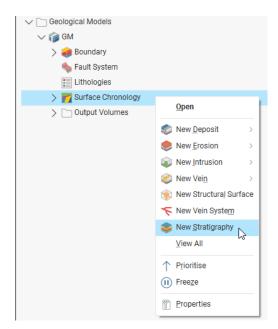


Combines individual veins into a **single interconnected system** of veins

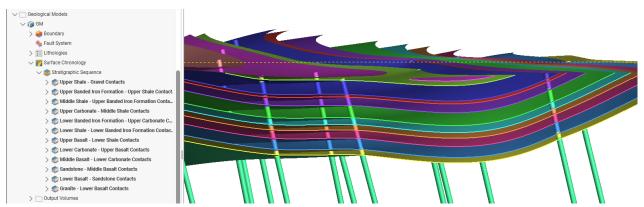


Can be used for a Vein contact type

Stratigraphic Sequences



Generates multiple surfaces in a stratigraphic sequence in a single pass



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