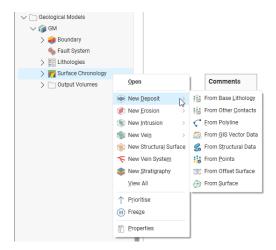
# **Leapfrog Geothermal Surface Types**

For Leapfrog Geothermal Version 5.0



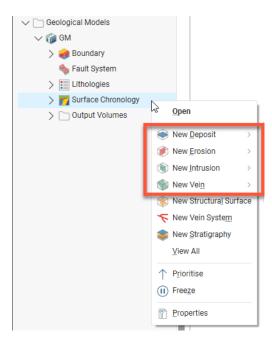
#### Core Contact Surface Types

- Deposit and Erosion Surfaces
- Intrusion Surfaces
- Vein Surfaces

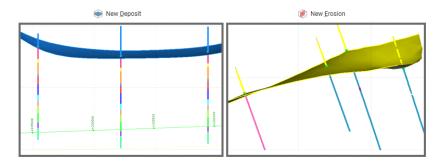
#### Specific Function Surfaces

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

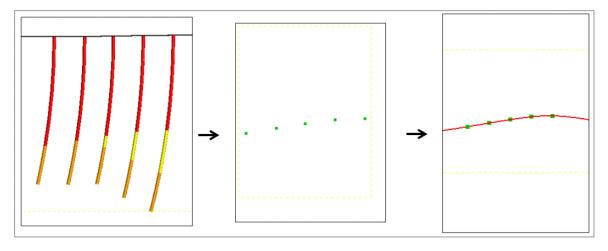
### **Core Contact Surface Types**



# **Deposit and Erosion Surfaces**

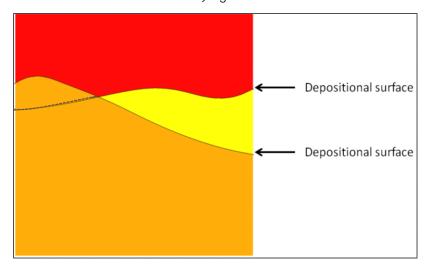


One set of contact points – above **OR** below the unit of interest

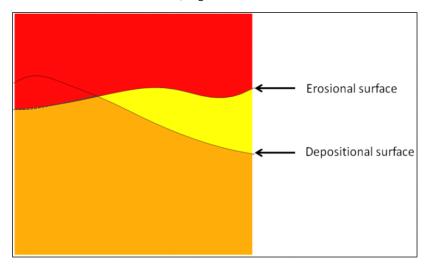


Only **ONE** contact point per unit per well

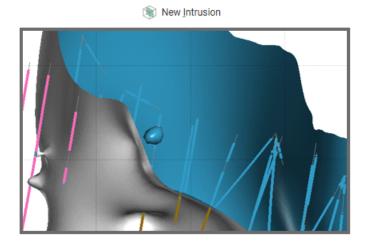
Deposit surface volumes **cannot** cut into an underlying older unit



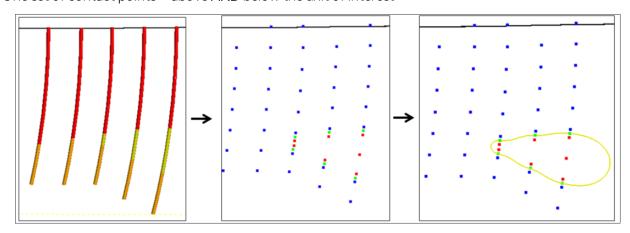
Erosion surface volumes can cut into an underlying older unit



### **Intrusion Surfaces**

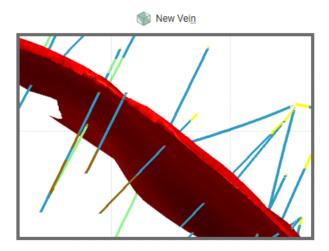


One set of contact points – above **AND** below the unit of interest

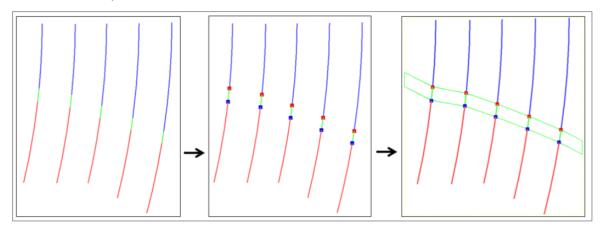


Can have **MULTIPLE** contact points per unit per well Intrusion volumes **enclose** the unit of interest

### **Vein Surfaces**



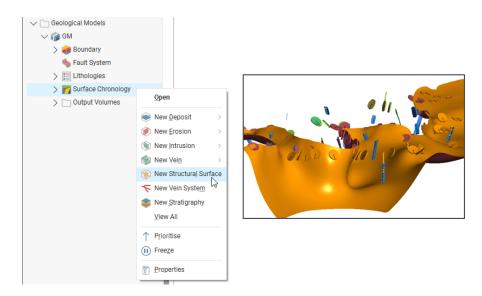
Two sets of contact points – above AND below the unit of interest



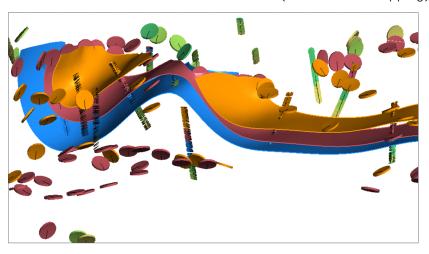
Creates a Hanging wall (HW) set AND Footwall (FW) set of contact points

# **Specific Function Surfaces**

#### Structural Surfaces

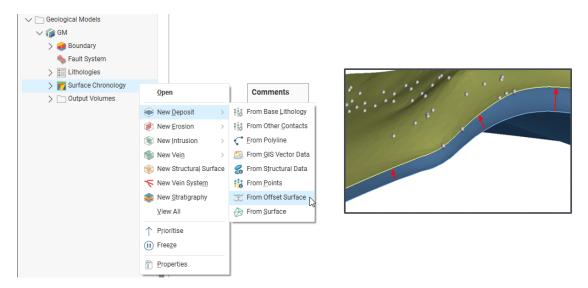


Incorporates non-contact structural data with on-contact data (wells, surface mapping)

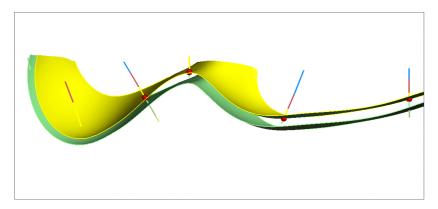


Can be used for a **Deposit**, **Erosion** or **Intrusion** contact type

### **Offset Surfaces**

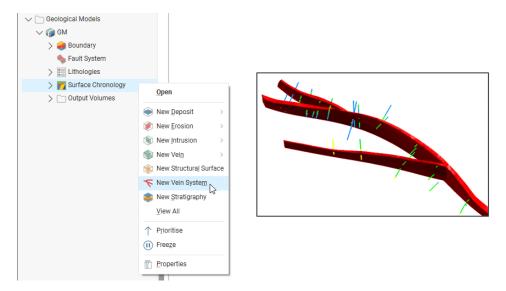


Maintains **consistent offset** while **honouring** contact points – for stratigraphy with common deformation

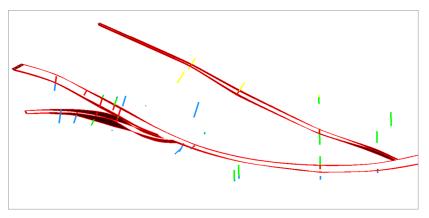


Can be used for a **Deposit** or **Erosion** contact type

## **Vein System Surfaces**

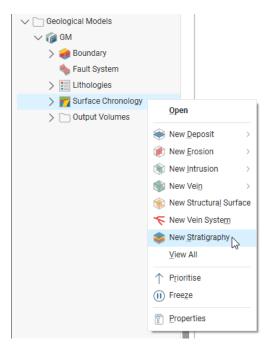


Combines individual veins into a single interconnected system of veins

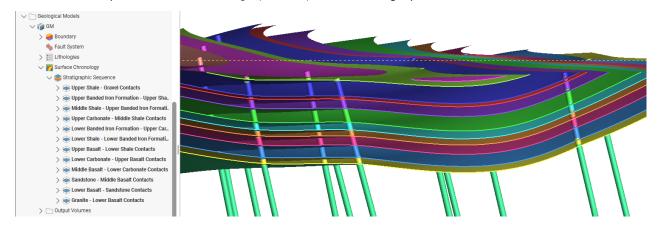


Can be used for a **Vein** contact type

## Stratigraphic Sequences



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



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