

LEAPFROG GEO



leapfrog®

FAST, DYNAMIC GEOLOGICAL MODELLING

# SURFACE TYPES

Leapfrog Geo 4.3

# LEAPFROG GEO 4.3 SURFACES

## CORE CONTACT SURFACE TYPES

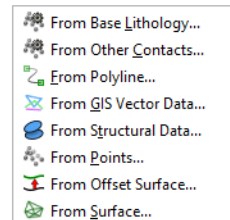
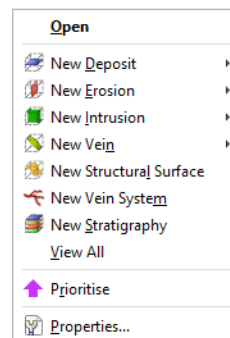
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Deposit

Erosion

Intrusion

Vein



## SPECIFIC FUNCTION SURFACES

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Structural

Offset

Vein System

Stratigraphy

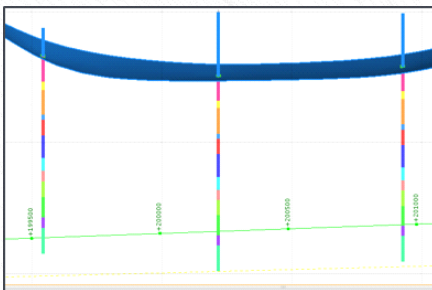


# LEAPFROG GEO 4.3 SURFACES

## CORE CONTACT SURFACE TYPES

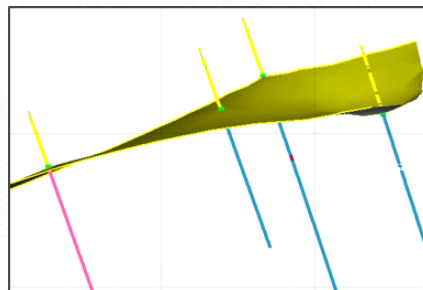
### Deposit

Shale - Gravel Contacts



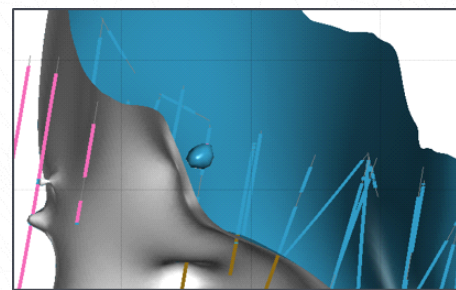
### Erosion

Recent contacts



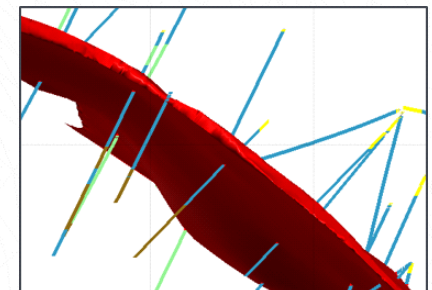
### Intrusion

Early Diorite



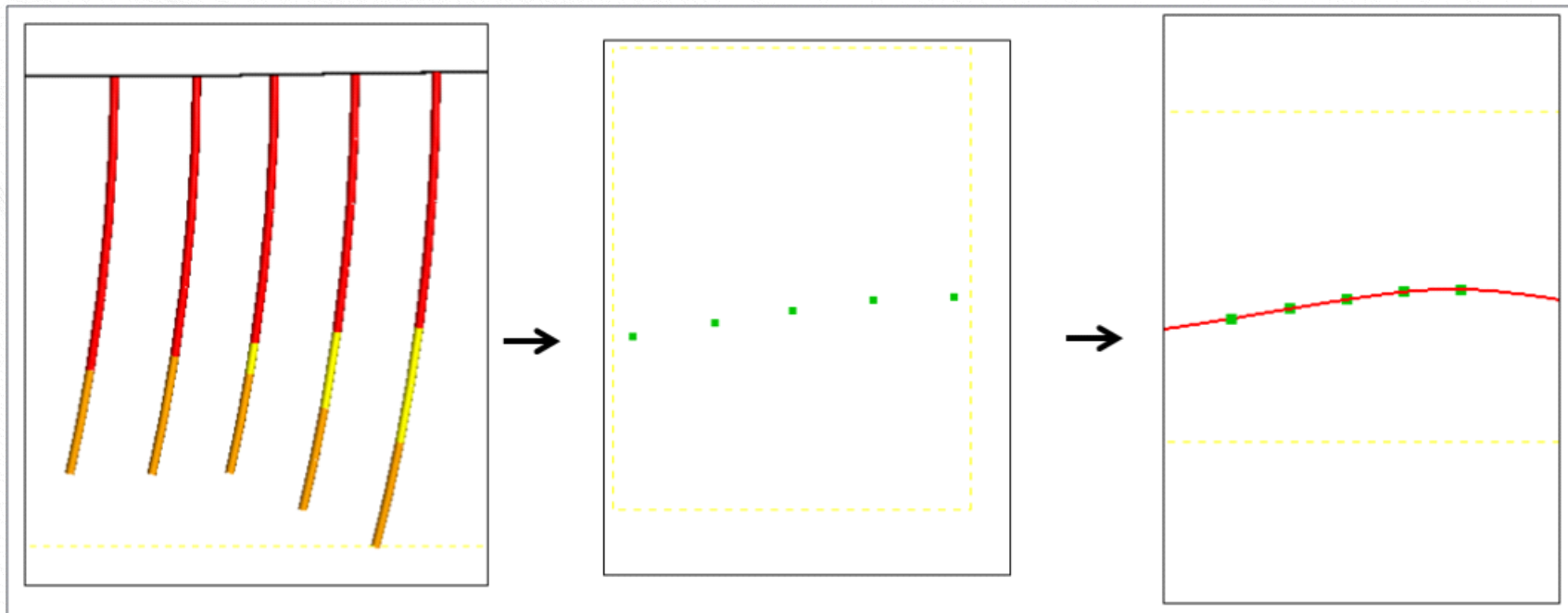
### Vein

Dyke 1



# DEPOSIT AND EROSION SURFACE

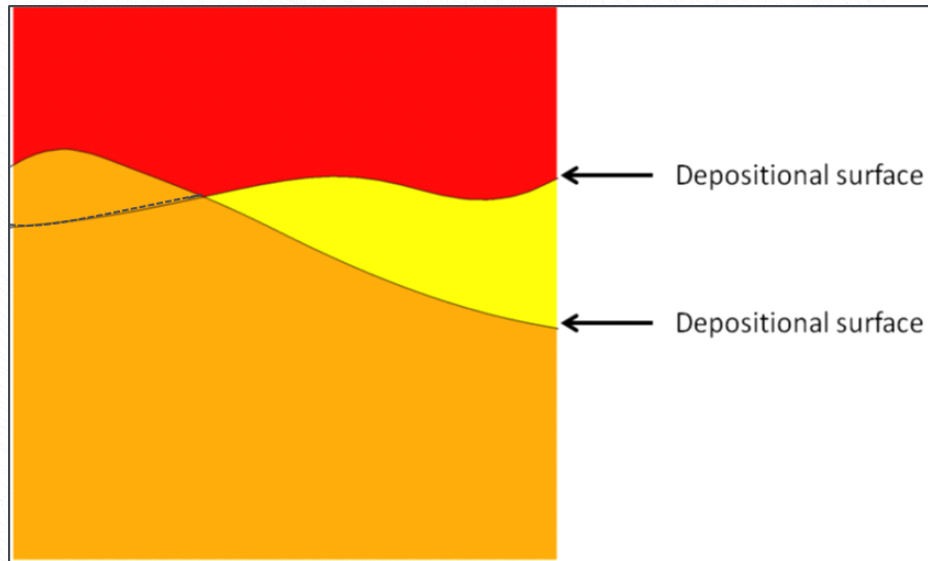
One set of contact points – above **OR** below the unit of interest



Only **ONE** contact point per unit per drillhole

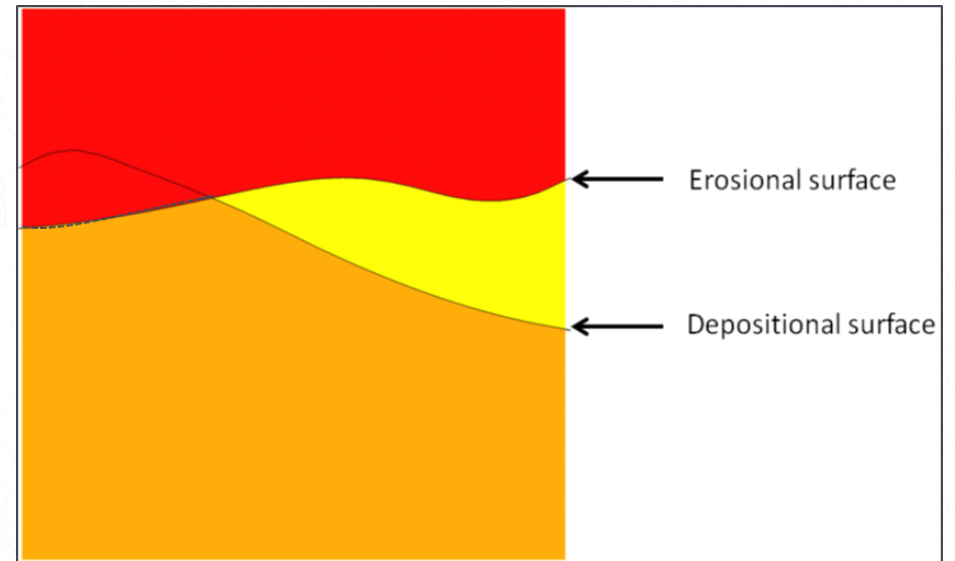
# DEPOSIT AND EROSION VOLUMES

## Deposit Surface



**Cannot** cut into an underlying older unit

## Erosion Surface

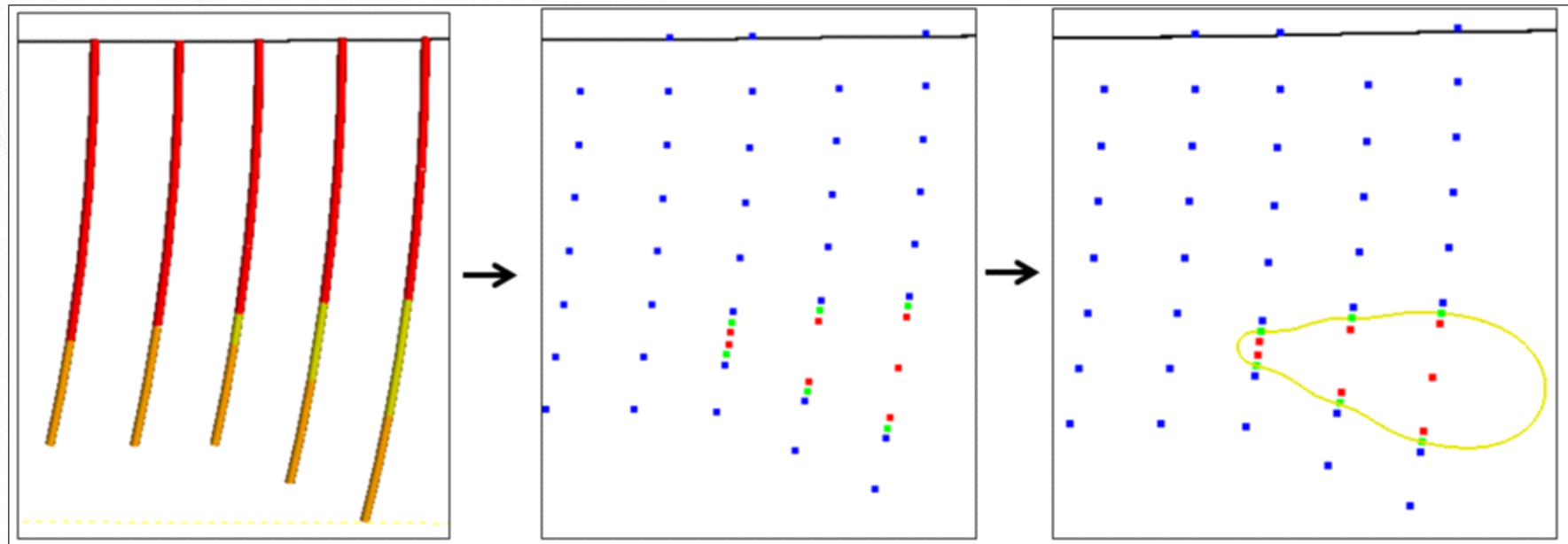


**Can** cut into an underlying older unit



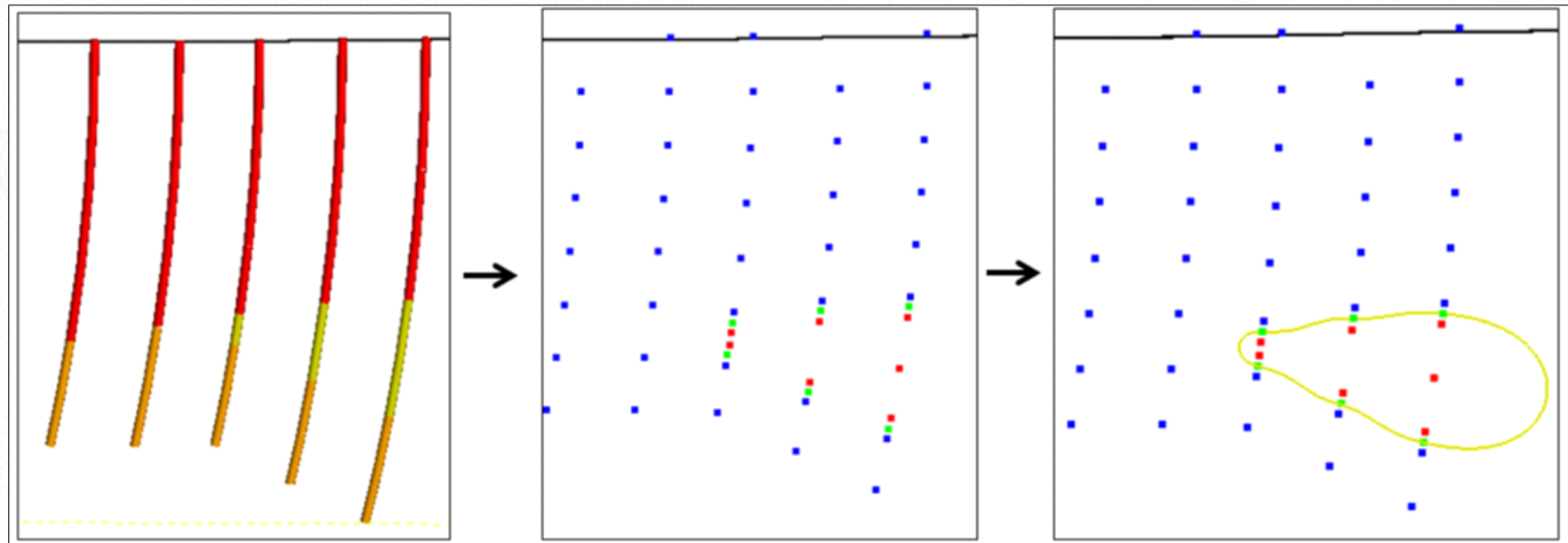
# INTRUSION SURFACE

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



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

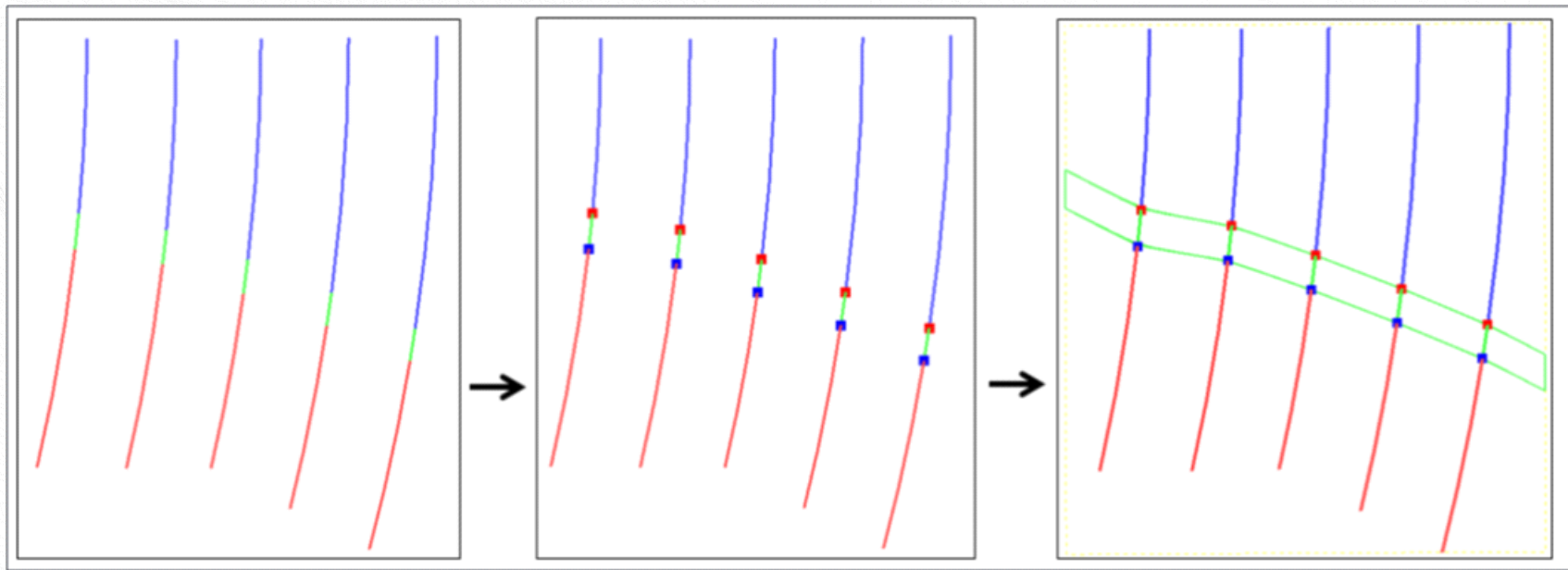
# INTRUSION VOLUMES



Encloses the unit of interest

# VEIN SURFACE

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

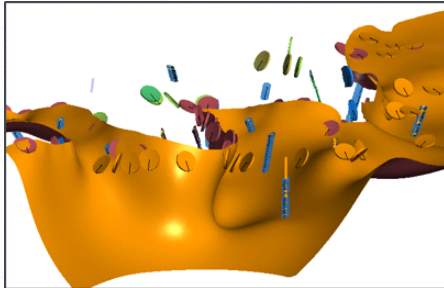


# SPECIFIC FUNCTION SURFACES


## SPECIFIC FUNCTION SURFACES

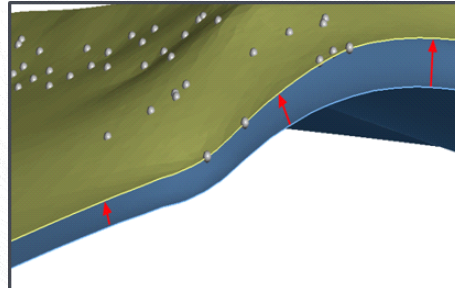
### Structural

 Amuri - Enys Contacts




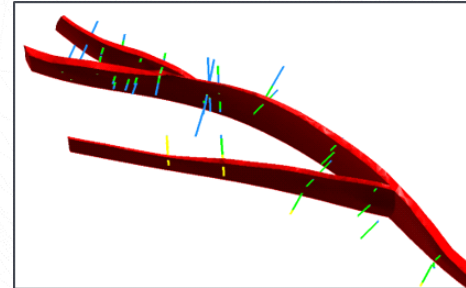
### Offset

 From Offset Surface...




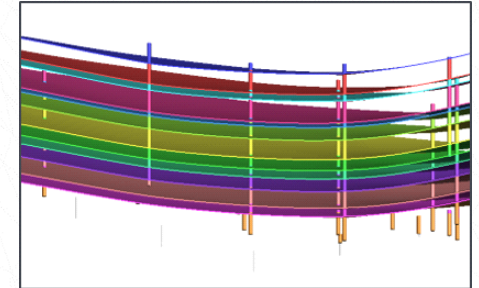
### Vein System

 Quartz Vein System



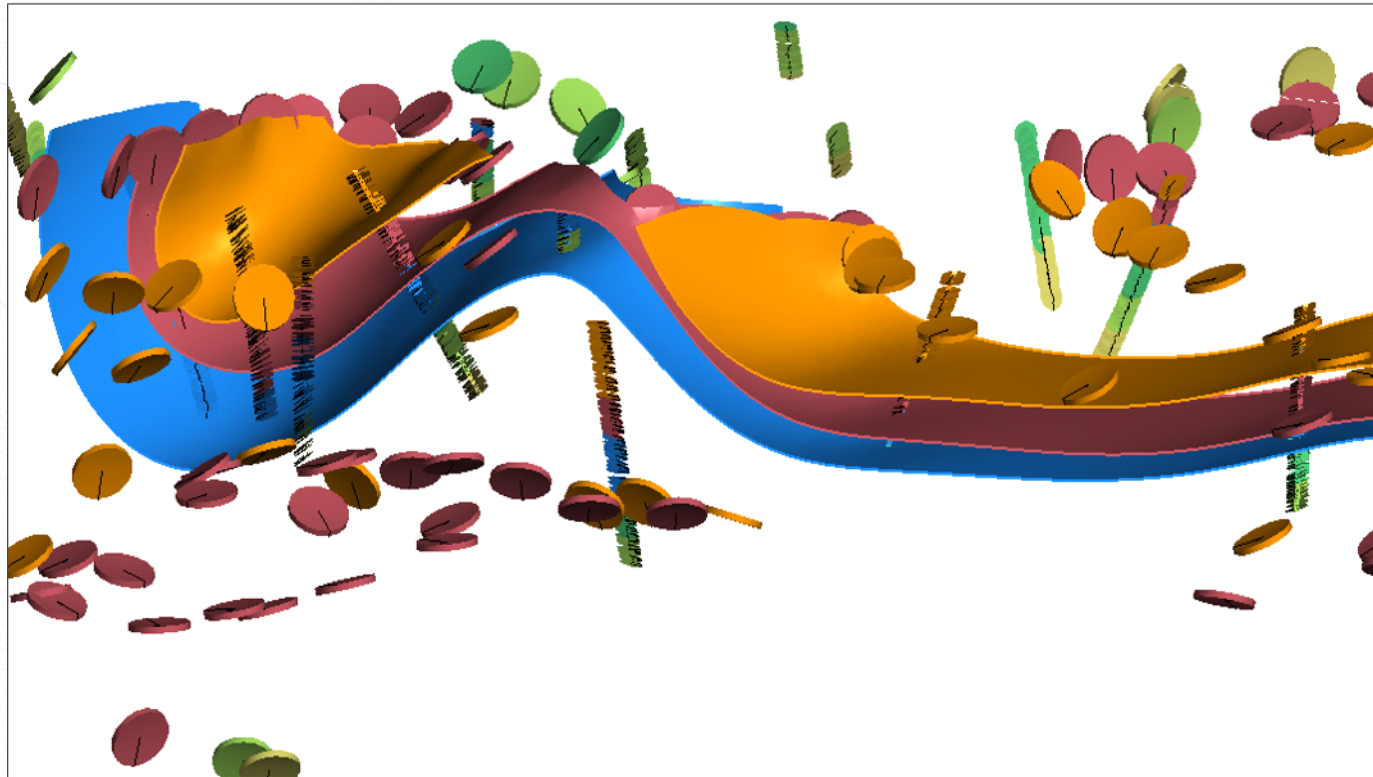
### Stratigraphy

 Stratigraphic Sequence



# STRUCTURAL SURFACE

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

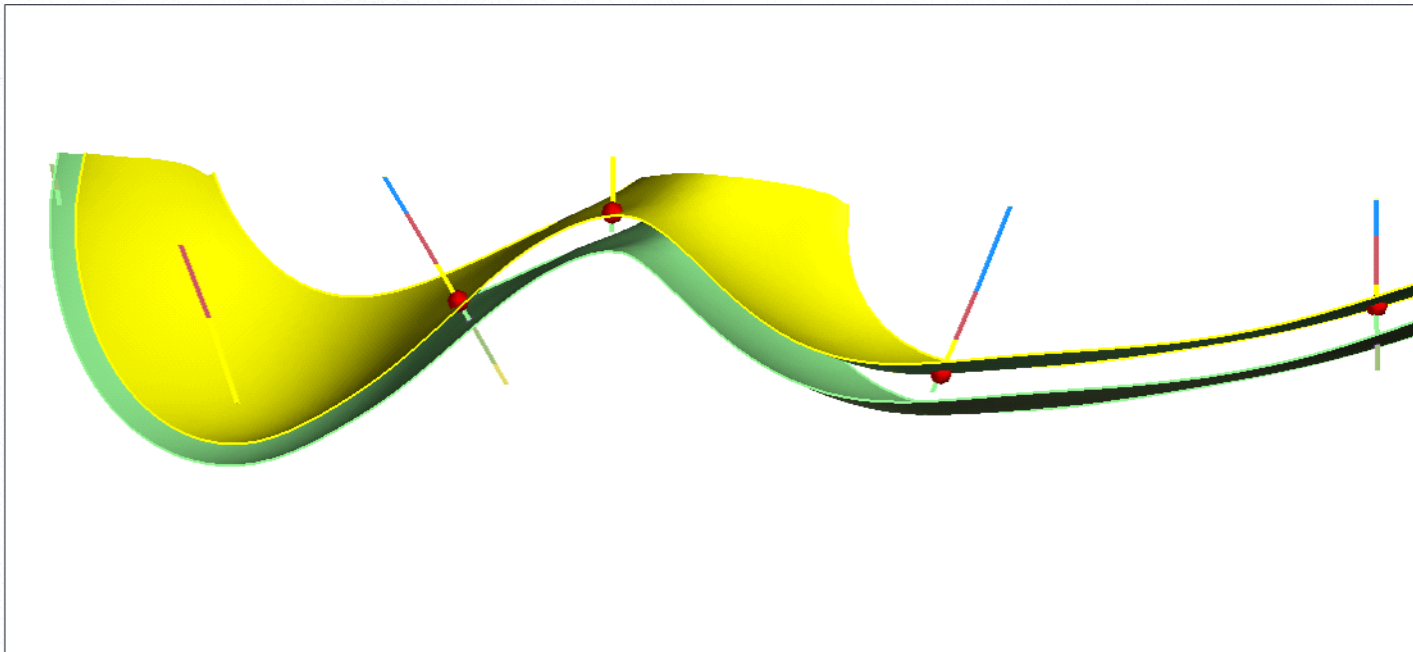


Can be used for a **Deposit**, **Erosion** or **Intrusion** contact type



# OFFSET SURFACE

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

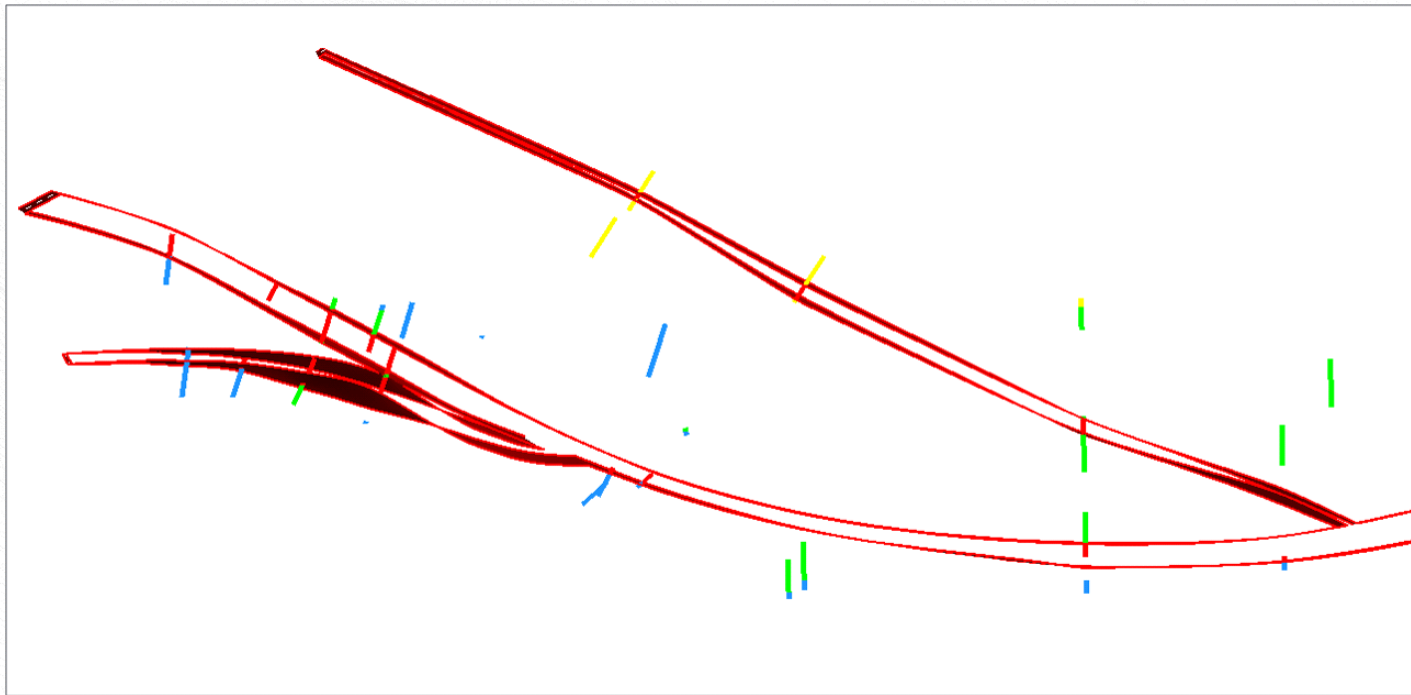


Can be used for a **Deposit** or **Erosion** contact type



# VEIN SYSTEM SURFACE

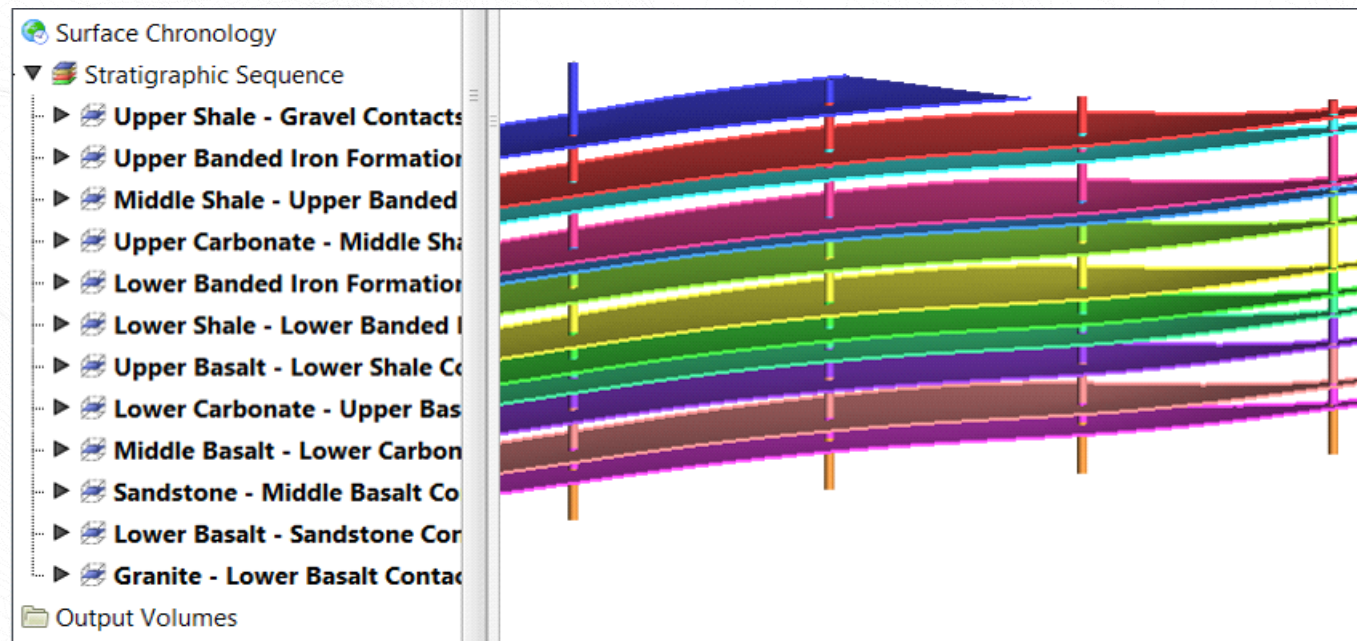
Combines individual veins into a **single interconnected system** of veins



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

# STRATIGRAPHIC SEQUENCE

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



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