

LEAPFROG GEO



leapfrog<sup>®</sup>

FAST, DYNAMIC GEOLOGICAL MODELLING

# SURFACE TYPES

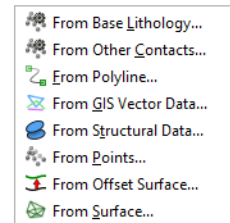
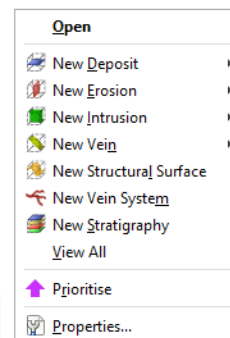
Leapfrog Geo 5.0

# LEAPFROG GEO 5.0 SURFACES

## CORE CONTACT SURFACE TYPES

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Deposit  
Erosion  
Intrusion  
Vein




## SPECIFIC FUNCTION SURFACES

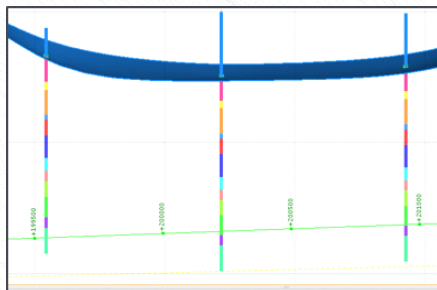
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Structural  
Offset  
Vein System  
Stratigraphy


## CORE CONTACT SURFACE TYPES

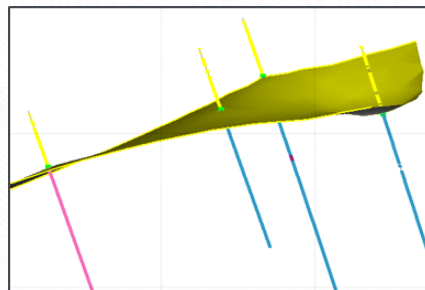
### Deposit

 Shale - Gravel Contacts




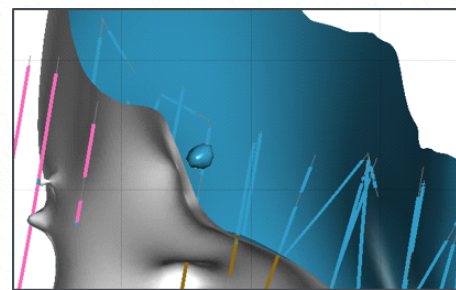
### Erosion

 Recent contacts



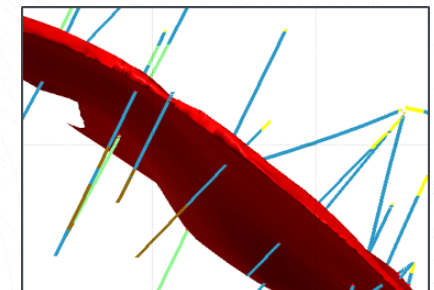
### Intrusion

 Early Diorite



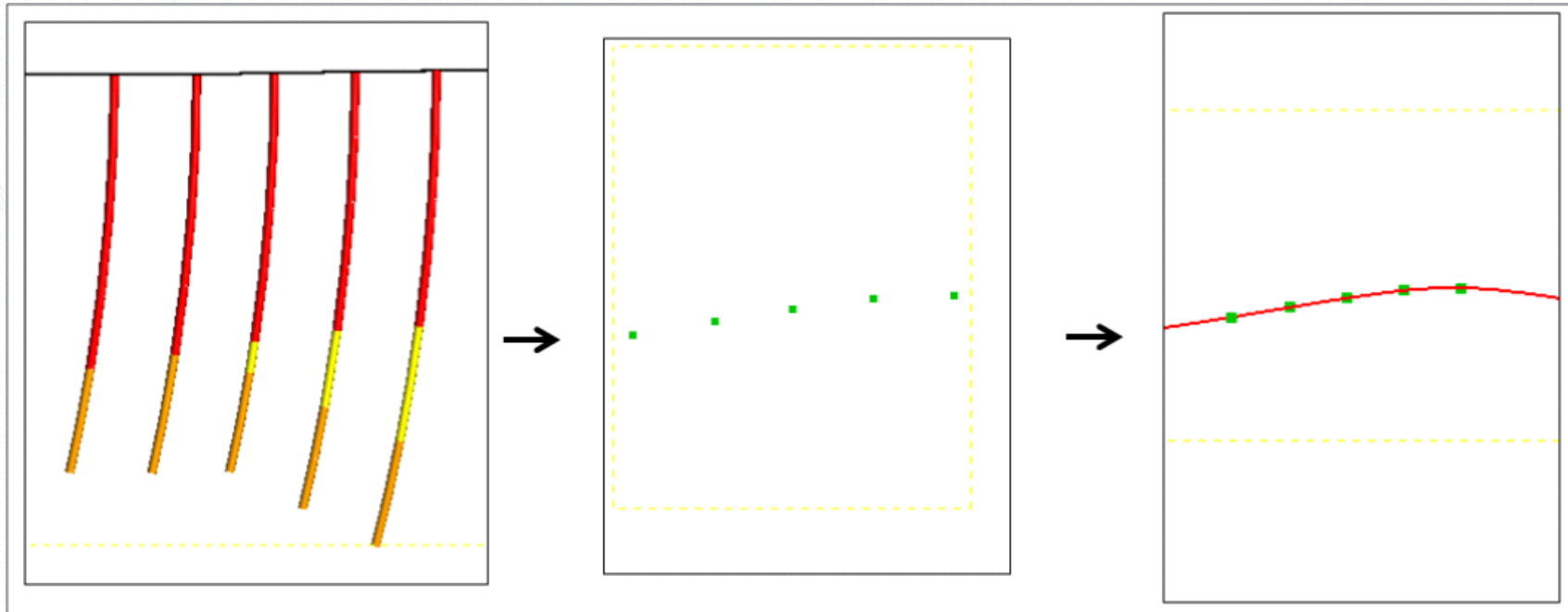
### Vein

 Dyke 1



# DEPOSIT AND EROSION SURFACE

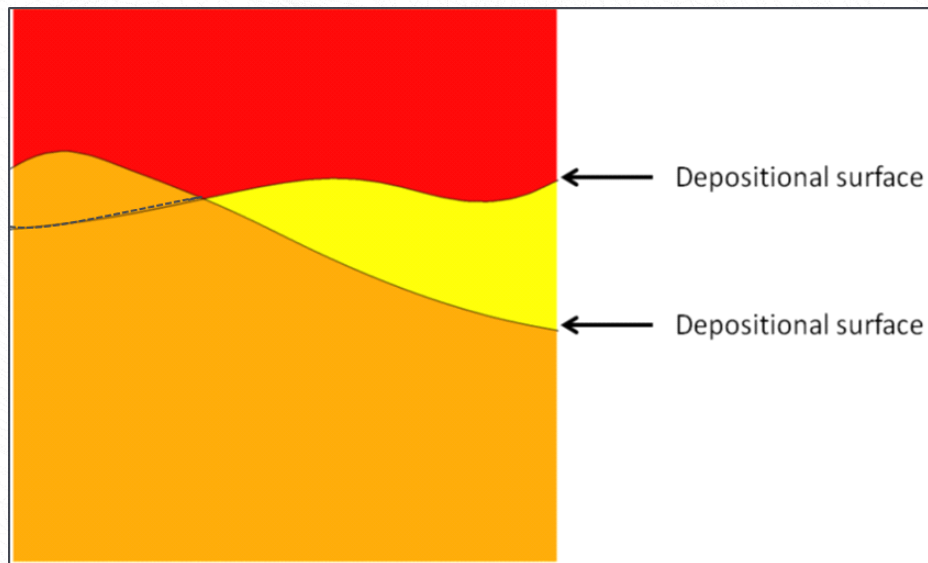
One set of contact points – above OR below the unit of interest



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

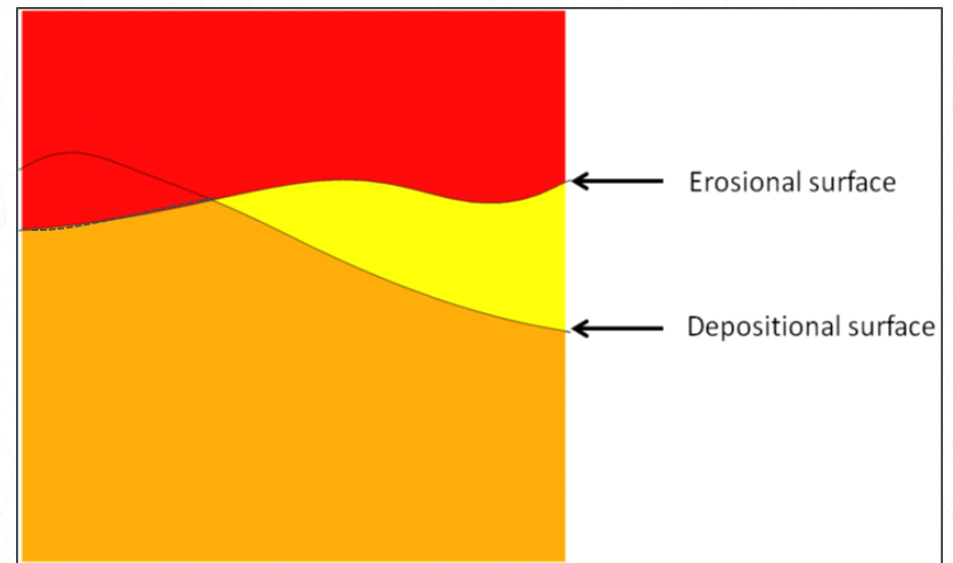
# DEPOSIT AND EROSION VOLUMES

## Deposit Surface



Cannot cut into an underlying older unit

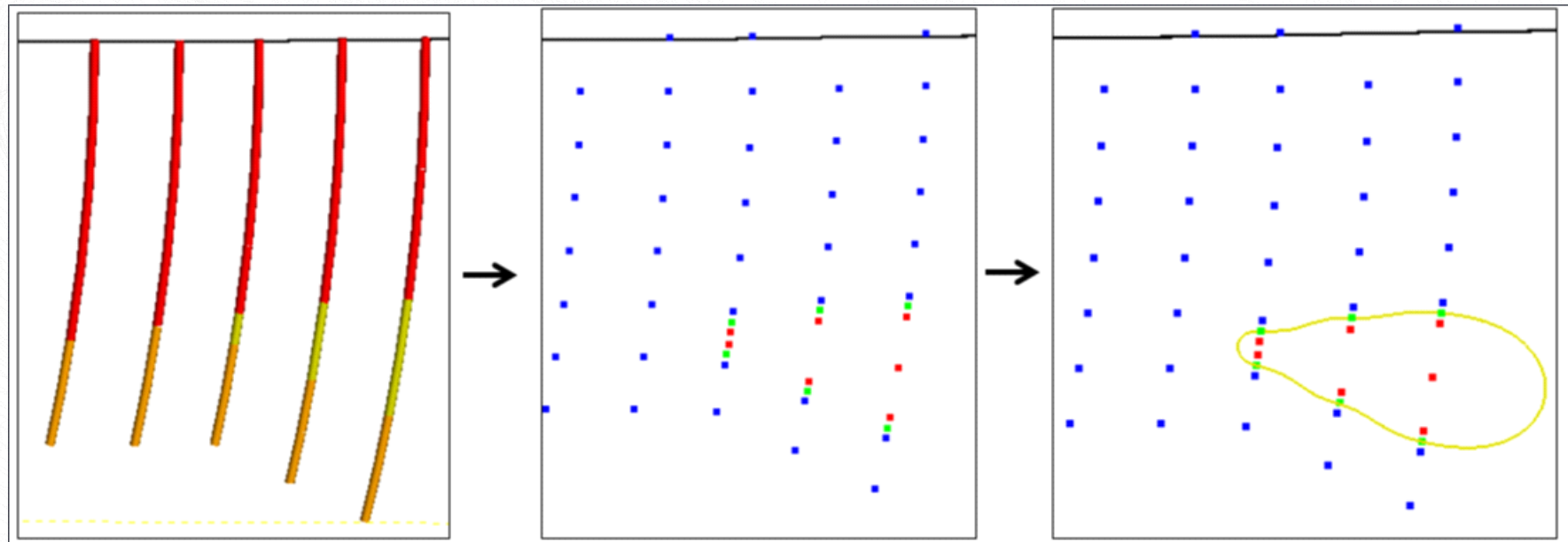
## Erosion Surface



Can cut into an underlying older unit

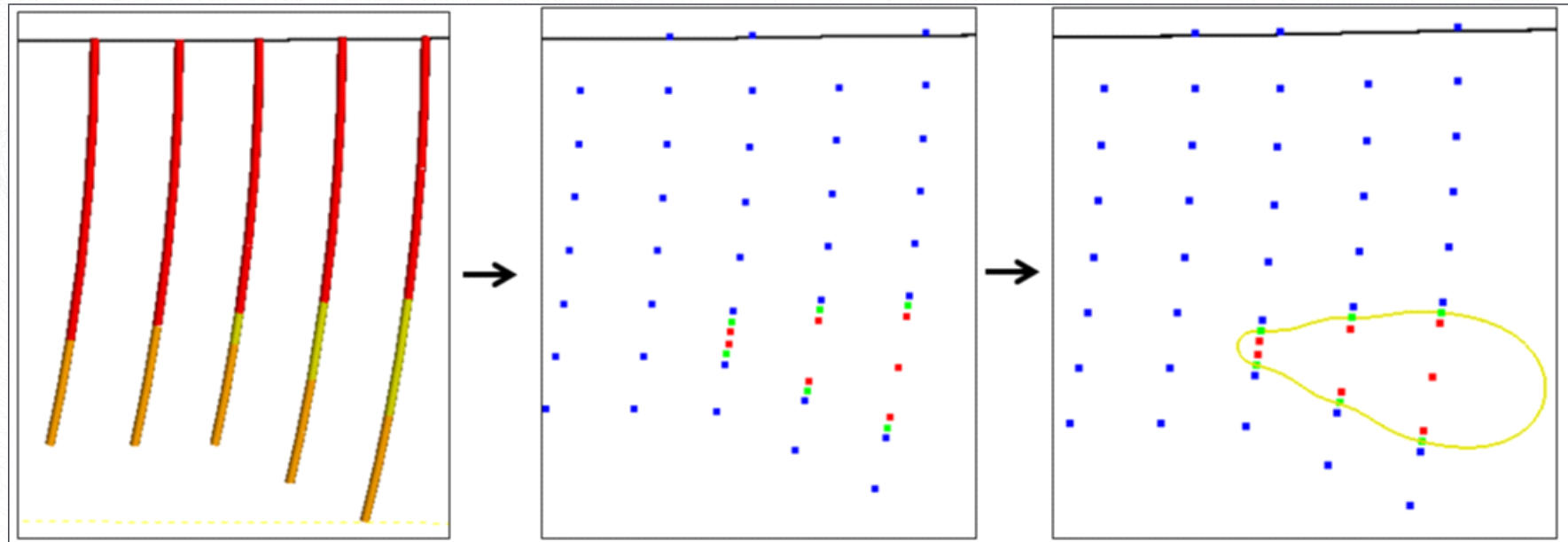
# INTRUSION SURFACE

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



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

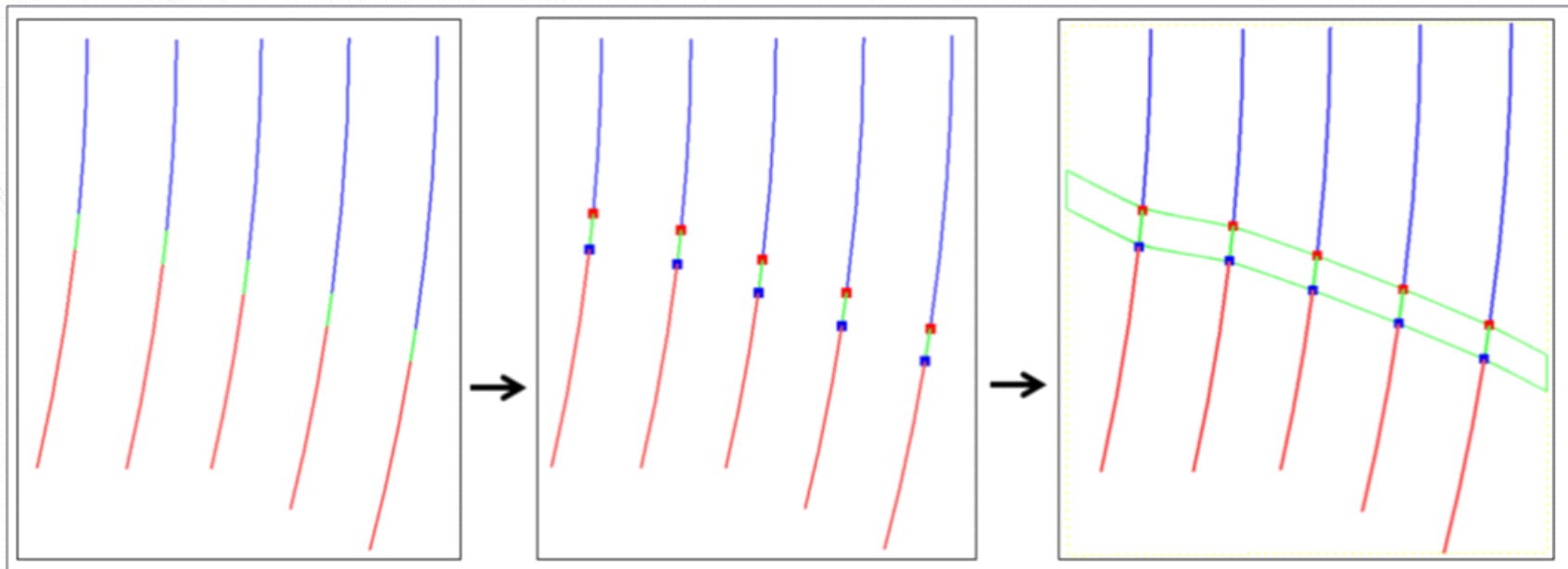
# INTRUSION VOLUMES



Encloses the unit of interest

# VEIN SURFACE

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



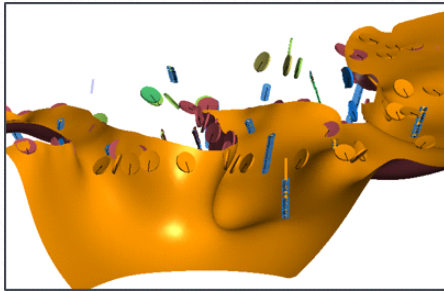
Creates a Hanging wall (HW) set **AND** Footwall (FW) set of contact points



# SPECIFIC FUNCTION SURFACES

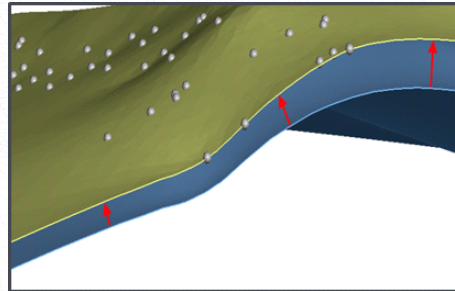
## Structural

Amuri - Enys Contacts



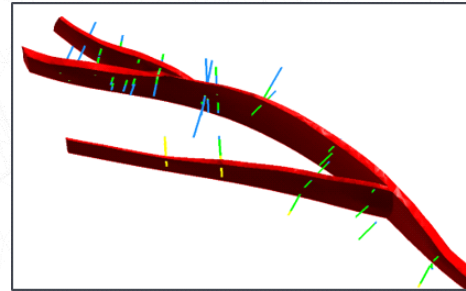
## Offset

From Offset Surface...



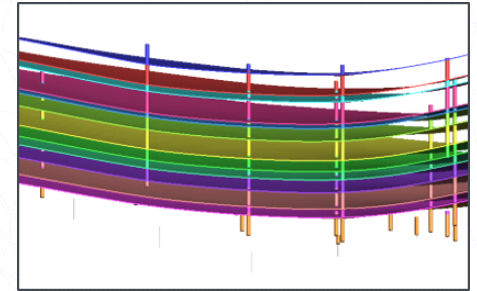
## Vein System

Quartz Vein System



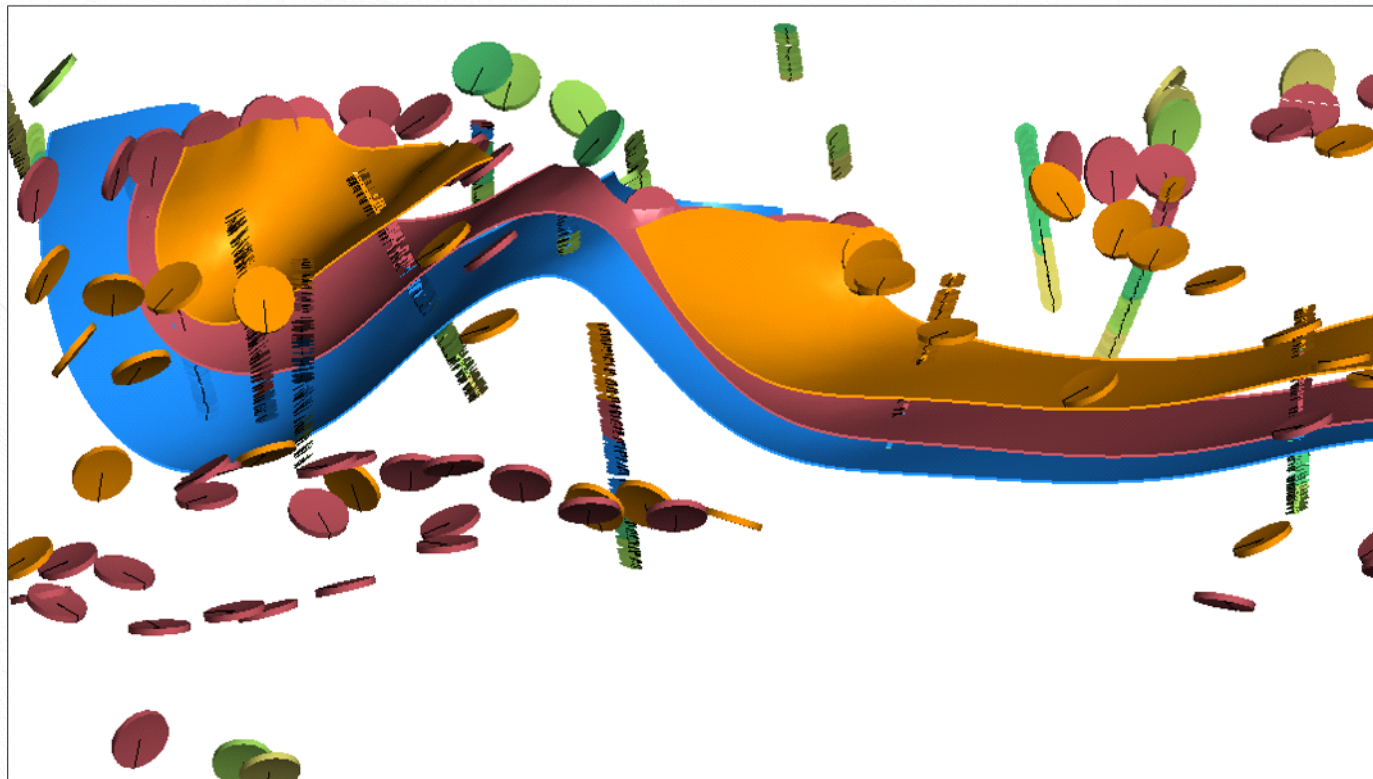
## Stratigraphy

Stratigraphic Sequence



# STRUCTURAL SURFACE

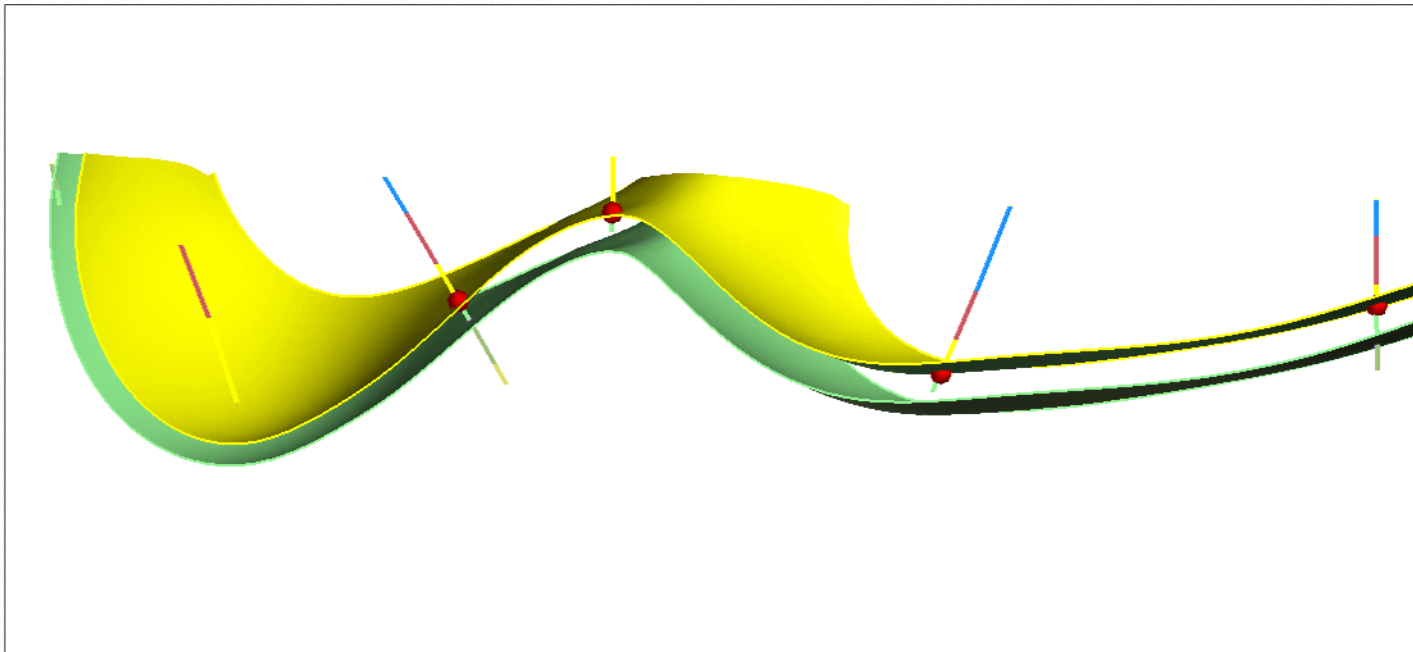
Incorporates **non-contact** structural data with on-contact data  
(drillholes, surface mapping)



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

# OFFSET SURFACE

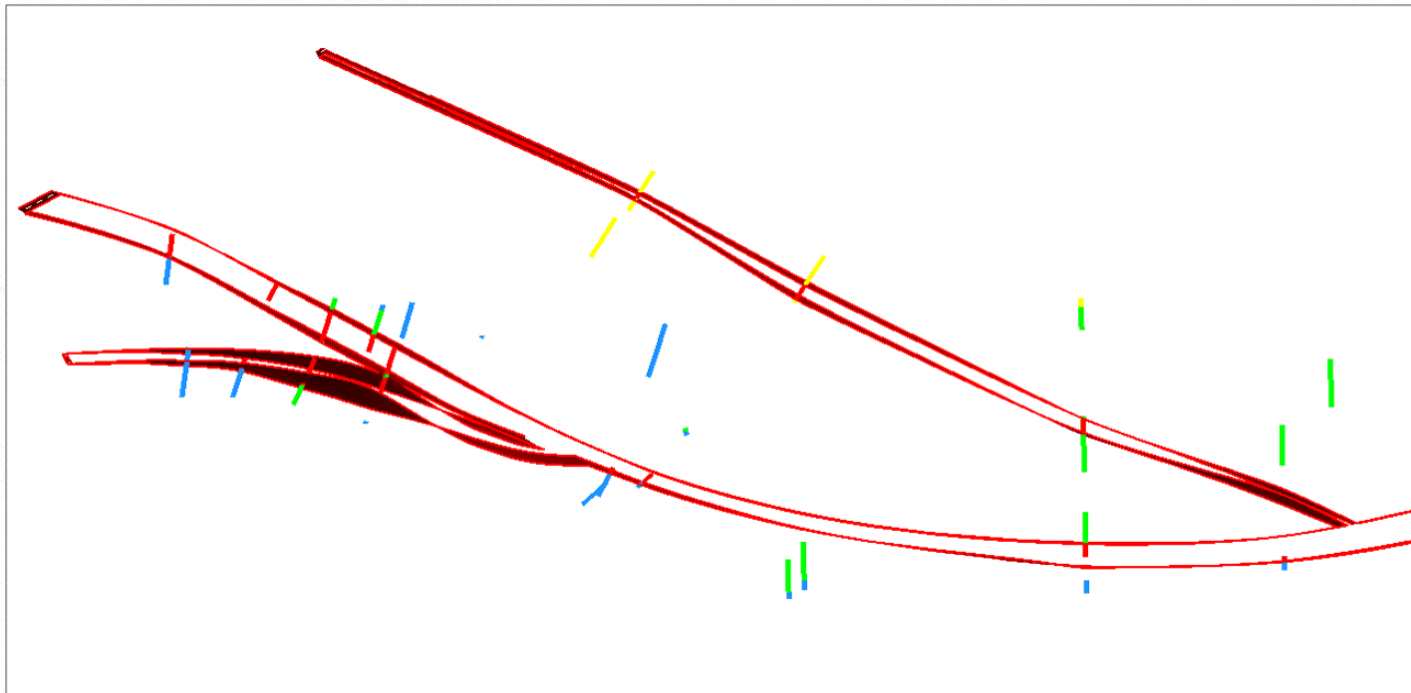
Maintains **consistent offset** while **honouring** contact points – for stratigraphy with common deformation



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

# VEIN SYSTEM SURFACE

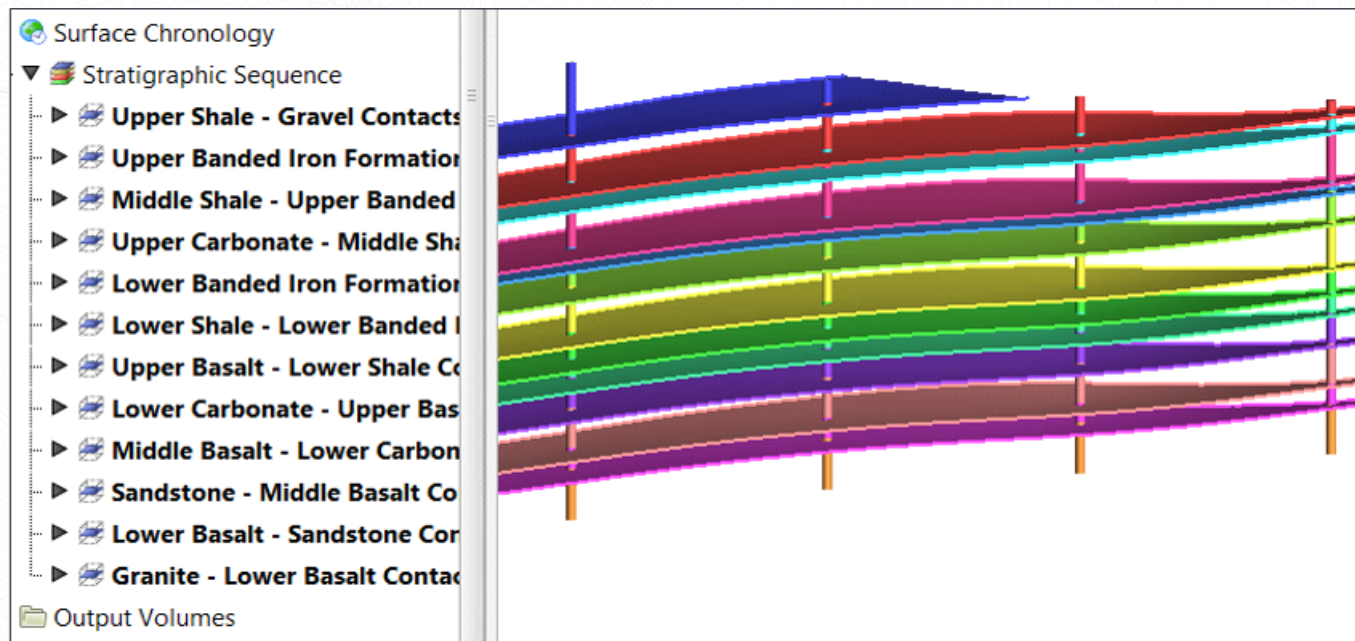
Combines individual veins into a **single interconnected system** of veins



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