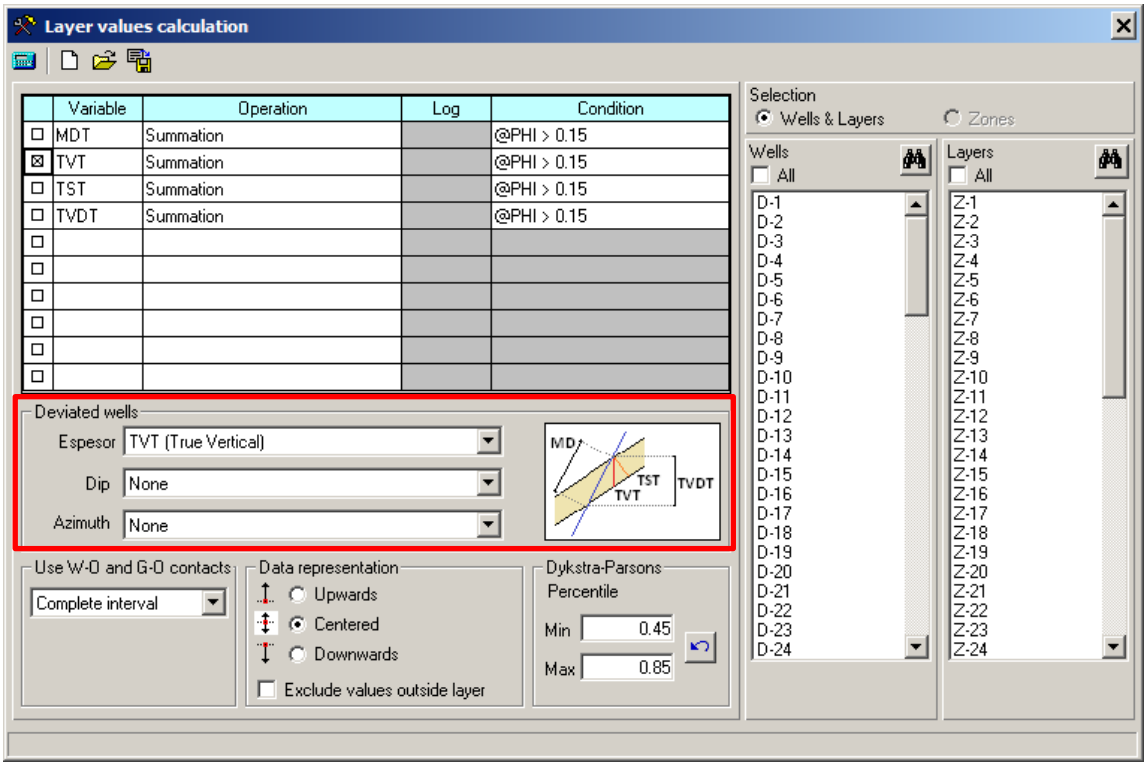
Sahara NEWS

Available since version 3.2.505

interfaces

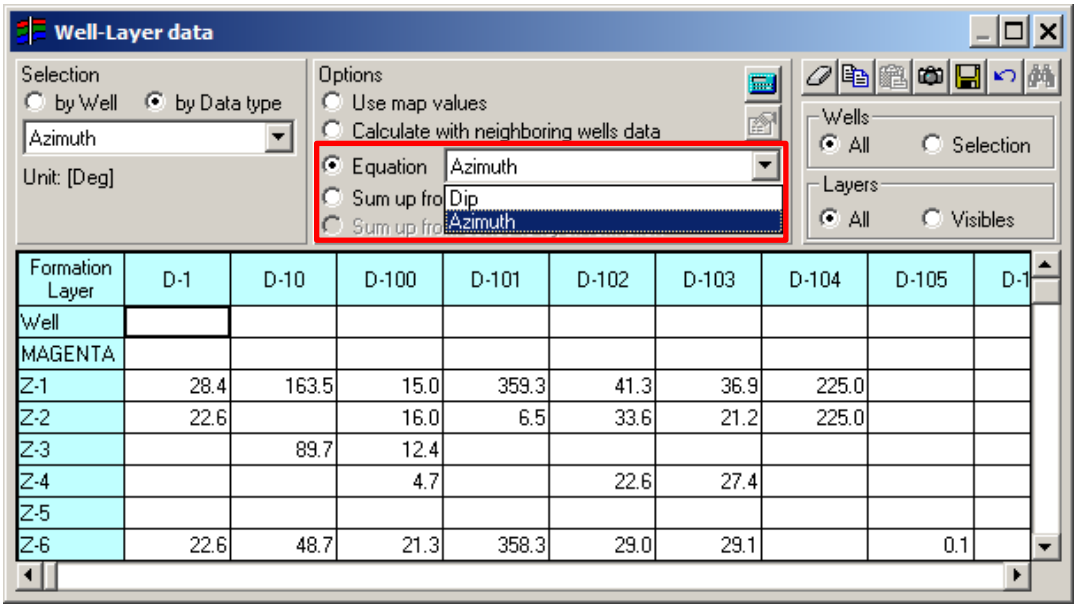
Summations – Thickness calculation

The new option, available in **Tools > Petrophysical tools > Summations**, allows calculating thickness for deviated wells.
The new tool allows calculating independently: True Vertical Thickness (TVT), True Stratigraphic Thickness (TST), Measured Depth Thickness (MDT) and True Vertical Depth Thickness (TVDT).
The correct thickness estimation takes an important place when calculating reserves.



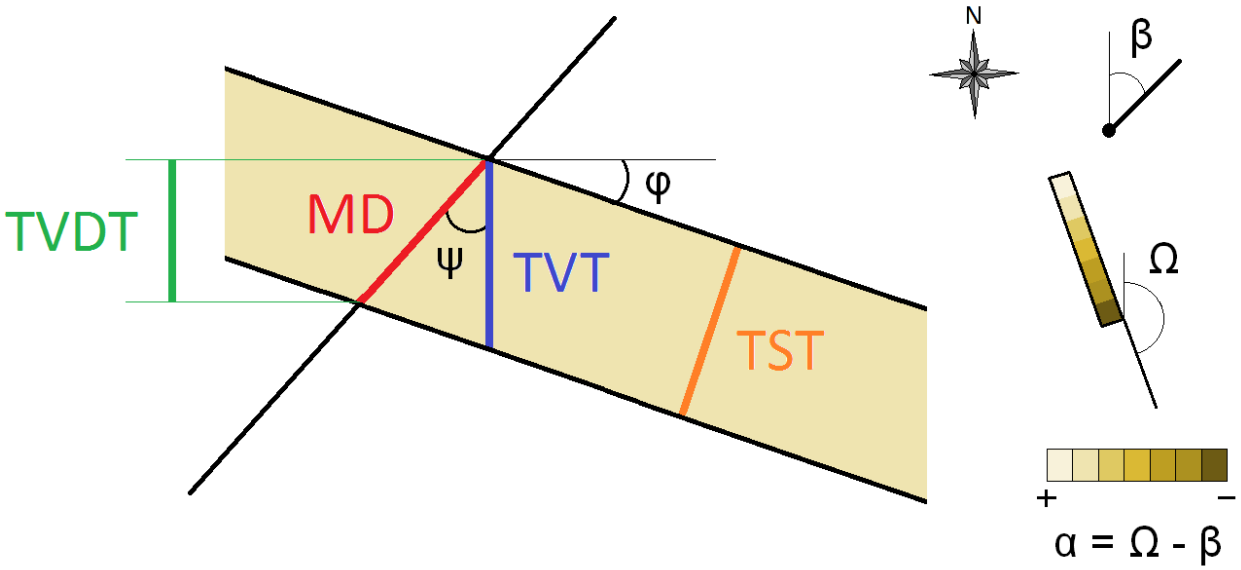
Azimuth and layer inclination

Additionally, two equations to calculate layer dip and azimuth were added in the Well-Layer data window:



Formation Layer	D-1	D-10	D-100	D-101	D-102	D-103	D-104	D-105	D-1
Well									
MAGENTA									
Z-1	28.4	163.5	15.0	359.3	41.3	36.9	225.0		
Z-2	22.6		16.0	6.5	33.6	21.2	225.0		
Z-3		89.7	12.4						
Z-4			4.7		22.6	27.4			
Z-5									
Z-6	22.6	48.7	21.3	358.3	29.0	29.1		0.1	

Ecuations



TVT = MDT (cos ψ – (sen ψ * cos α * tan φ))

TVDT = MDT * cos ψ

TST = TVT * cos φ

MDT = Measured Depth Thickness

TST = True Stratigraphic Thickness

TVT = True Vertical Thickness

TVDT = Layer True Vertical Depth Thickness

φ = Layer dip relative to the horizon

β = Well azimuth (North relative)

Ω = Layer azimuth (North relative)

α = Difference between layer azimuth and well azimuth

ψ = Well inclination (North relative)