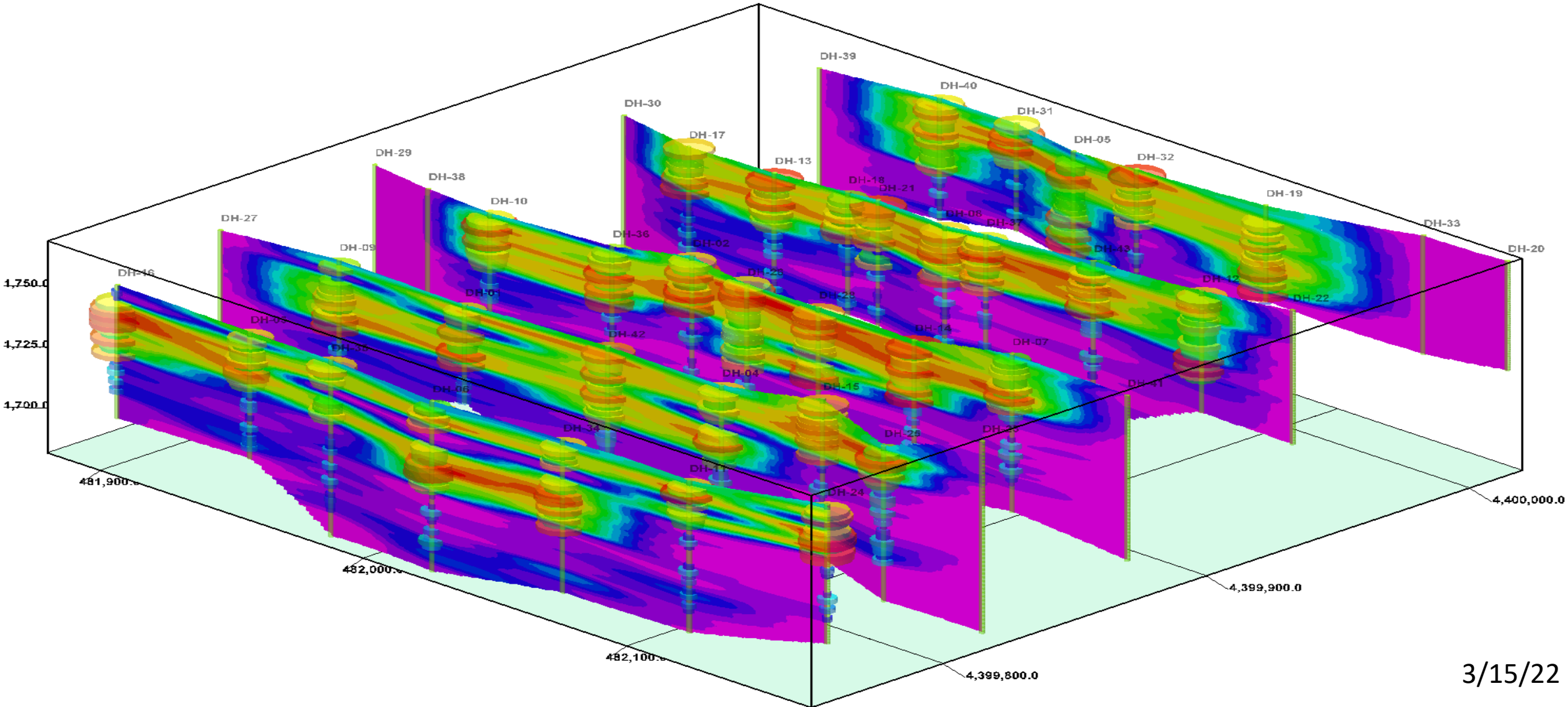
A RockWorks2022 Playlist for Creating Mass Flux Transects Based on Direct Push Data



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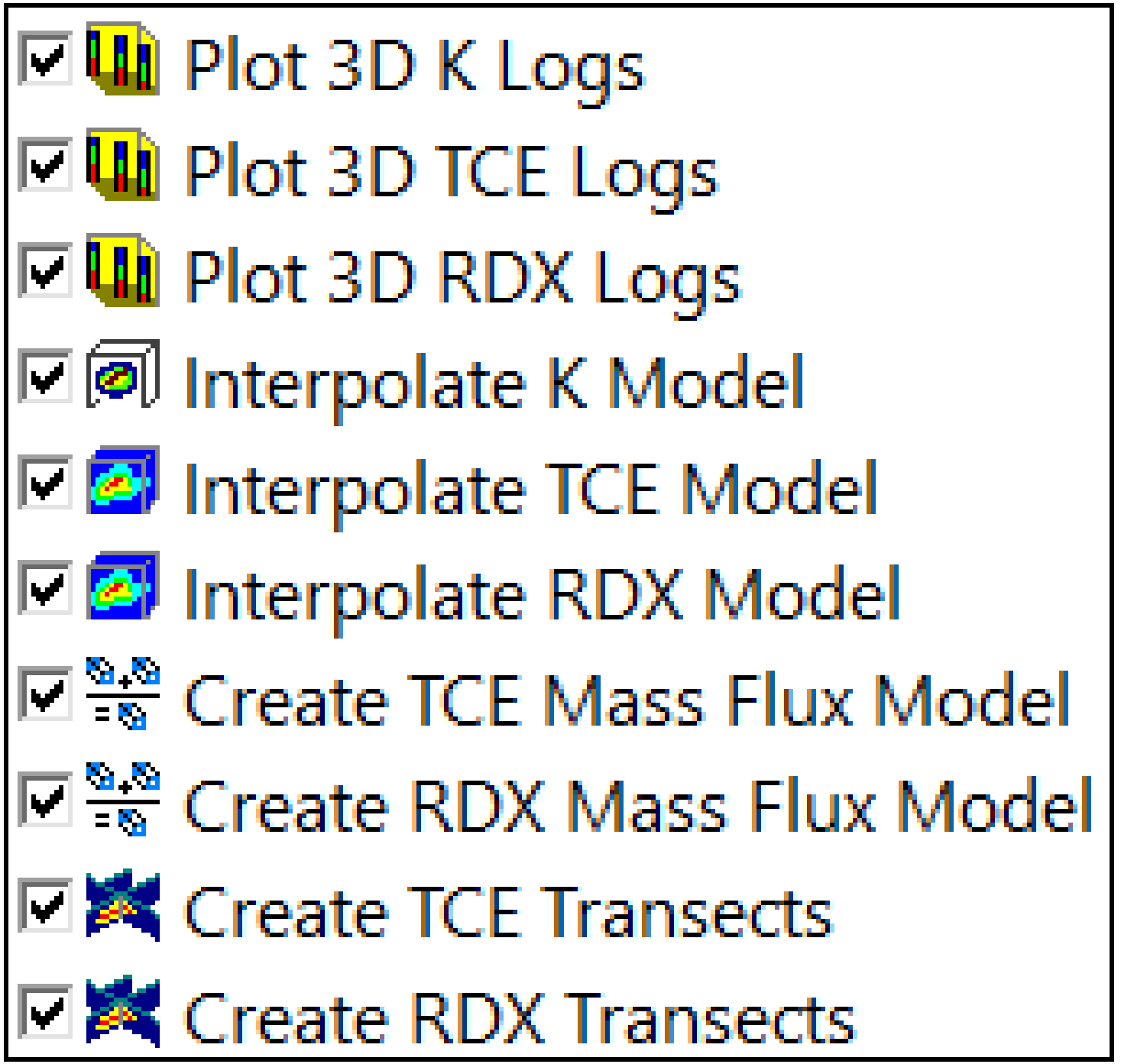
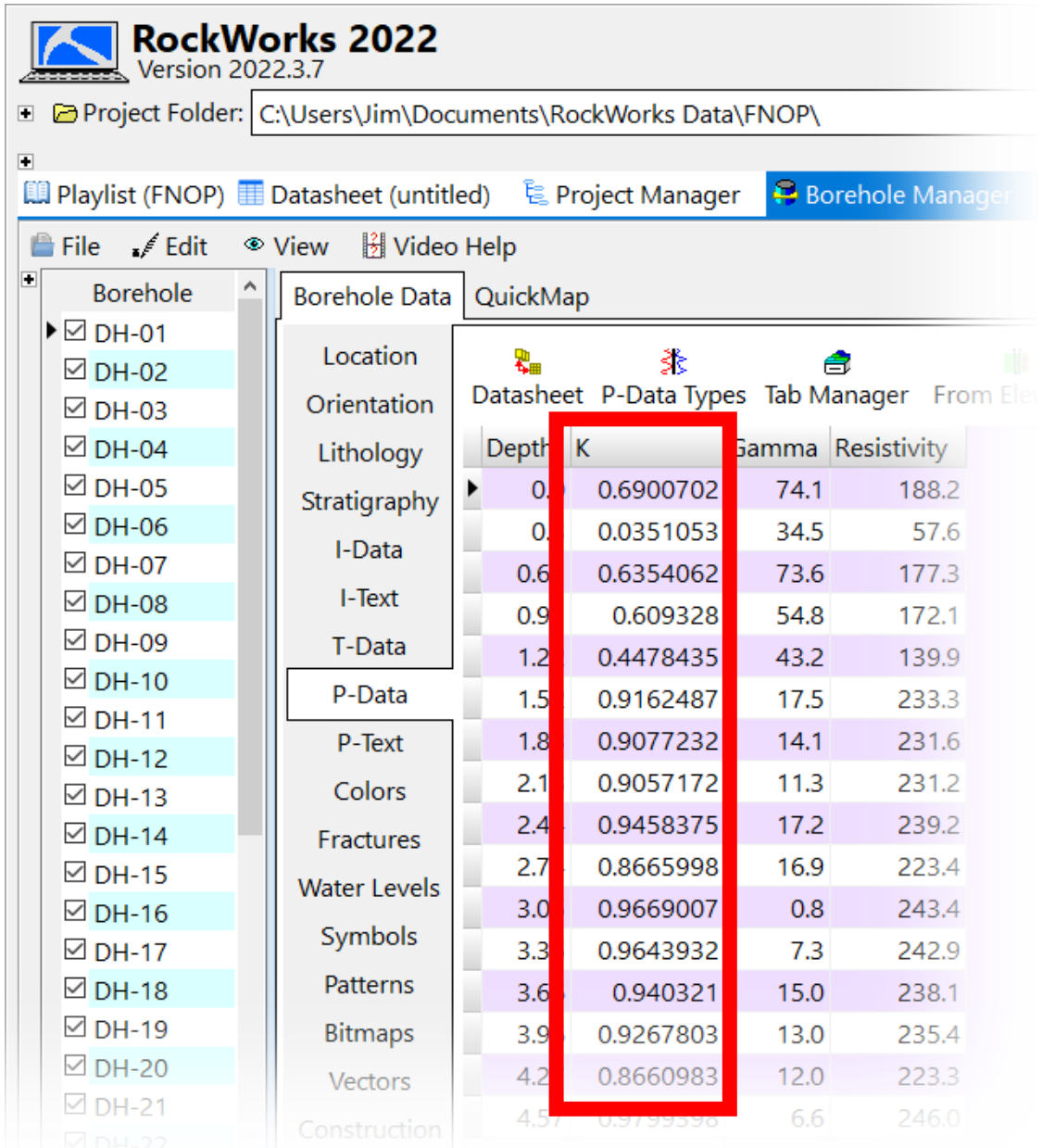
The strategy shown within this Playlist was used to create mass flux transects for TCE and RDX groundwater contaminants.

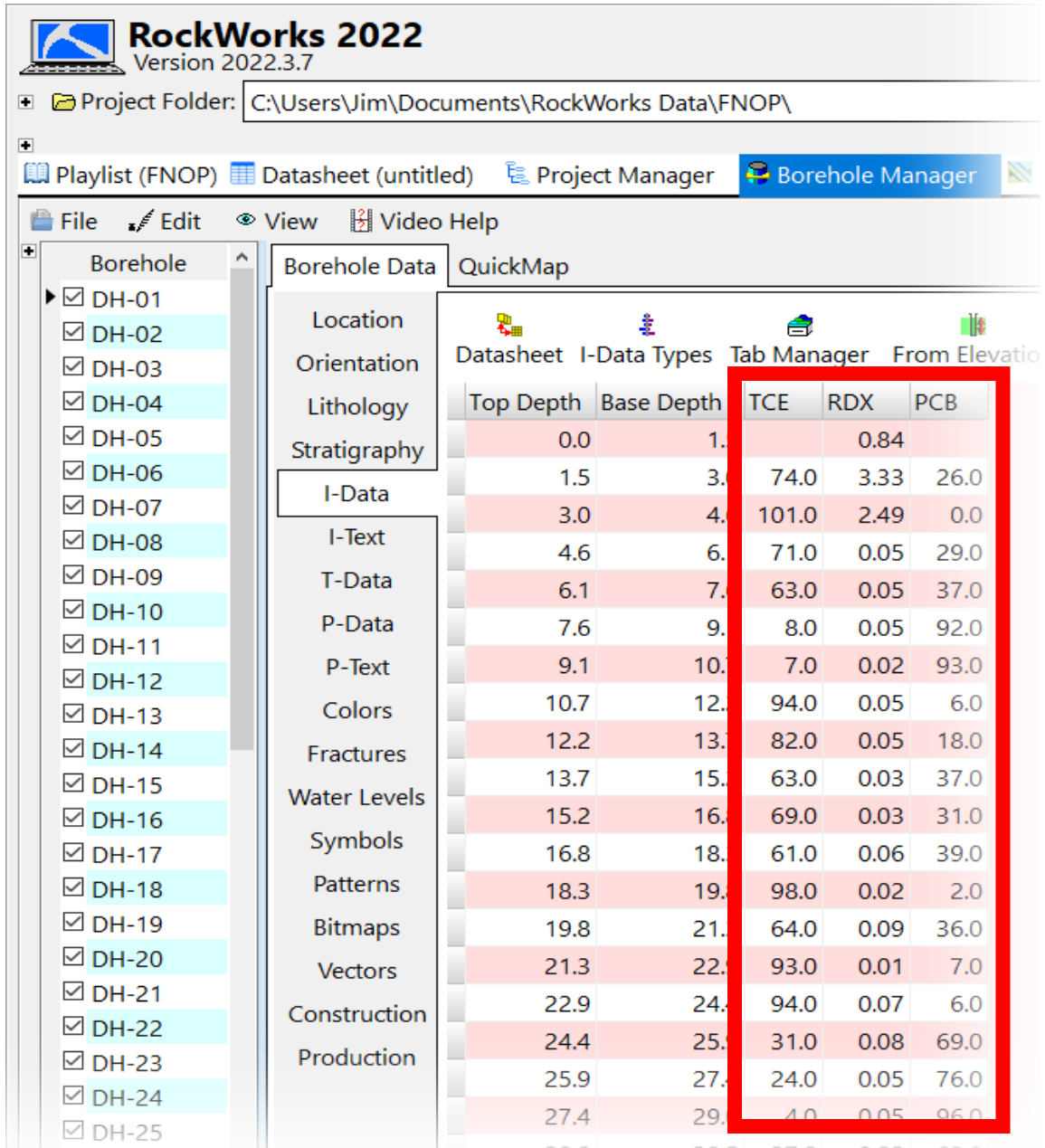


Before executing the playlist, hydraulic conductivities (K) from direct push boreholes were saved within the Borehole Manager P-Data table.



The hydraulic conductivity (K) data can be typed directly into the RockWorks Borehole Manager, pasted from the Windows clipboard, imported from Excel files, or imported in a batch fashion using the RockWorks ***Geoprobe DI (Direct Image) Import*** option.

Next, the geochemical analyses were saved within the Borehole Manager / I-Data table.

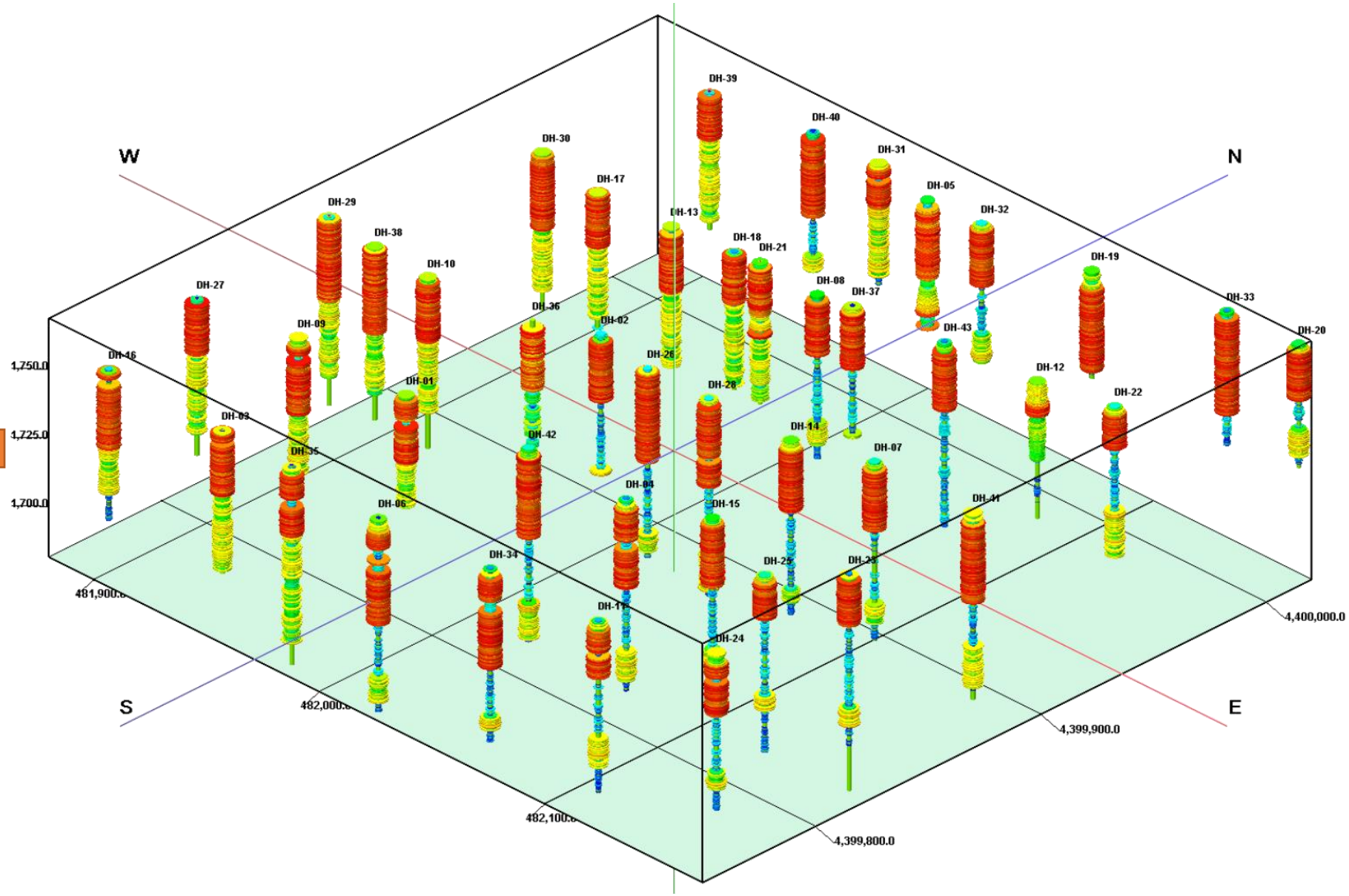


Top Depth	Base Depth	TCE	RDX	PCB
0.0	1.		0.84	
1.5	3.	74.0	3.33	26.0
3.0	4.	101.0	2.49	0.0
4.6	6.	71.0	0.05	29.0
6.1	7.	63.0	0.05	37.0
7.6	9.	8.0	0.05	92.0
9.1	10.	7.0	0.02	93.0
10.7	12.	94.0	0.05	6.0
12.2	13.	82.0	0.05	18.0
13.7	15.	63.0	0.03	37.0
15.2	16.	69.0	0.03	31.0
16.8	18.	61.0	0.06	39.0
18.3	19.	98.0	0.02	2.0
19.8	21.	64.0	0.09	36.0
21.3	22.	93.0	0.01	7.0
22.9	24.	94.0	0.07	6.0
24.4	25.	31.0	0.08	69.0
25.9	27.	24.0	0.05	76.0
27.4	29.	4.0	0.05	96.0

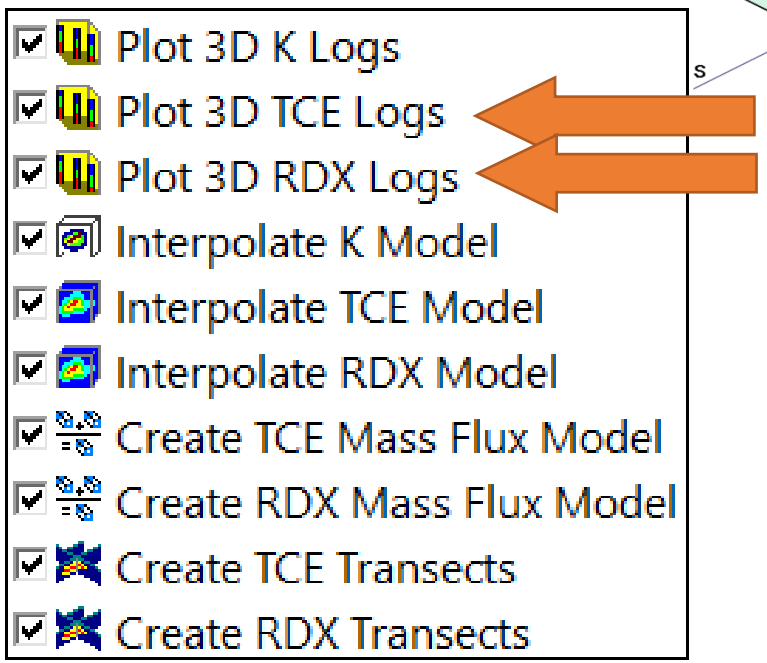
This data can be typed directly into the RockWorks Borehole Manager, pasted from the Windows clipboard, or imported from Excel files.

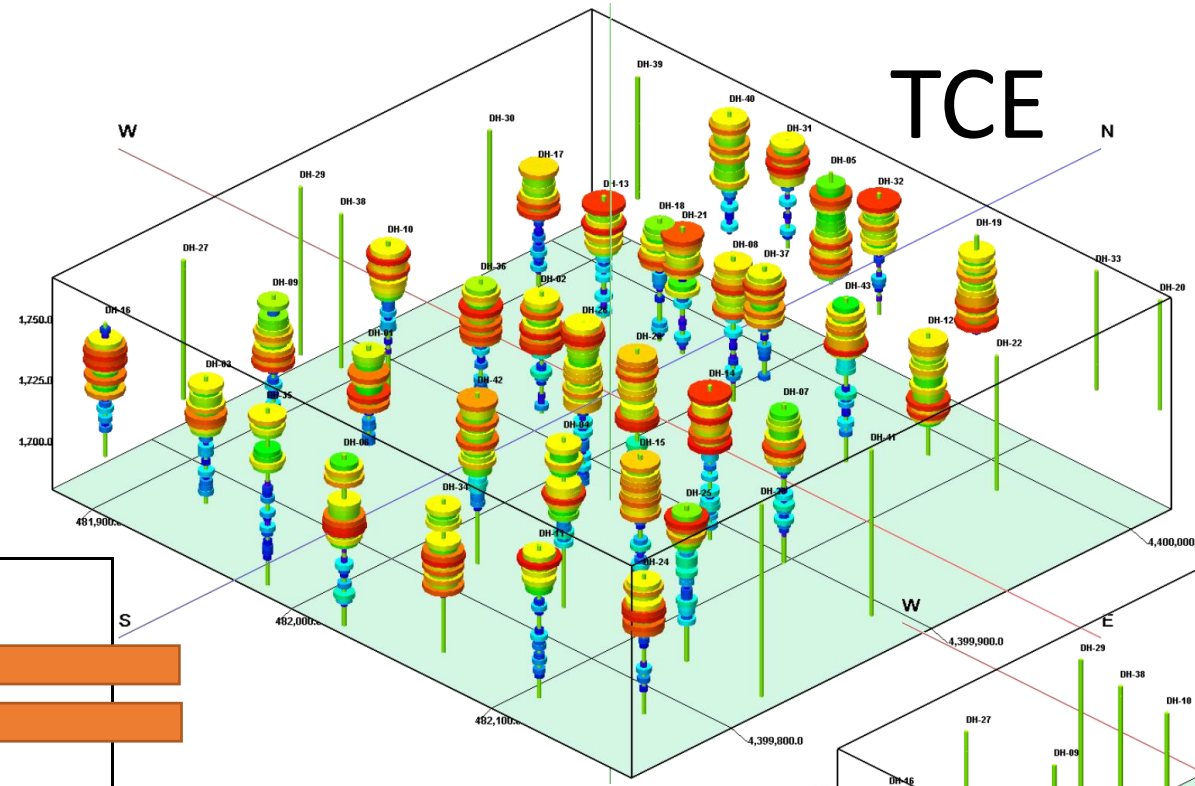
The ***Borehole Operations / Striplogs / 3D Striplogs*** program was then used to plot the K data as color-coded spindles.

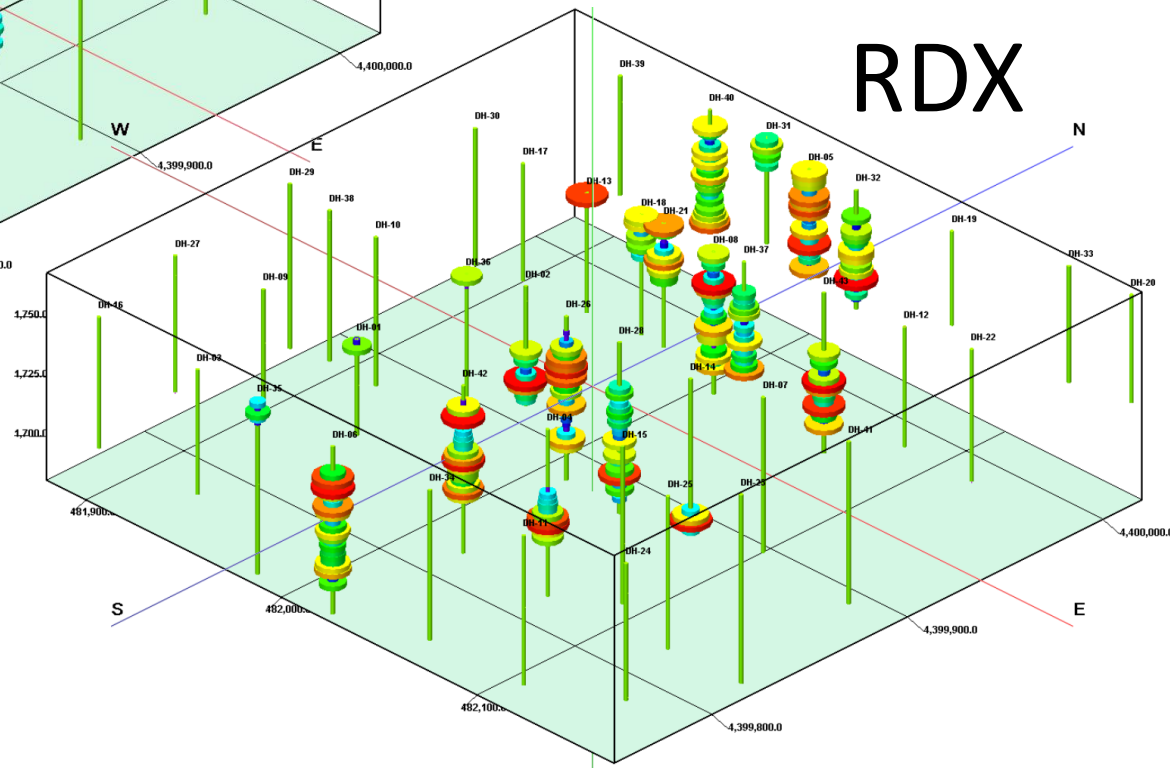
- Plot 3D K Logs
- Plot 3D TCE Logs
- Plot 3D RDX Logs
- Interpolate K Model
- Interpolate TCE Model
- Interpolate RDX Model
- Create TCE Mass Flux Model
- Create RDX Mass Flux Model
- Create TCE Transects
- Create RDX Transects



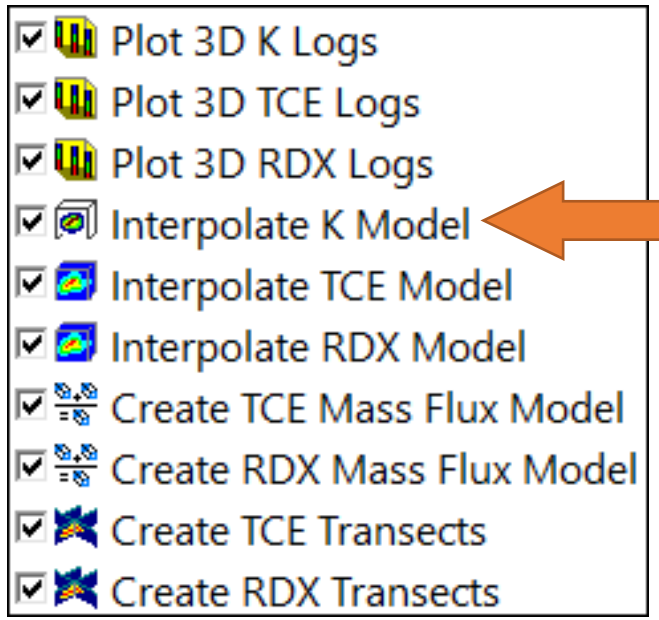
Next, the ***Borehole Operations / Striplogs / 3D Striplogs*** program was used to plot the TCE & RDX data as color-coded spindles.

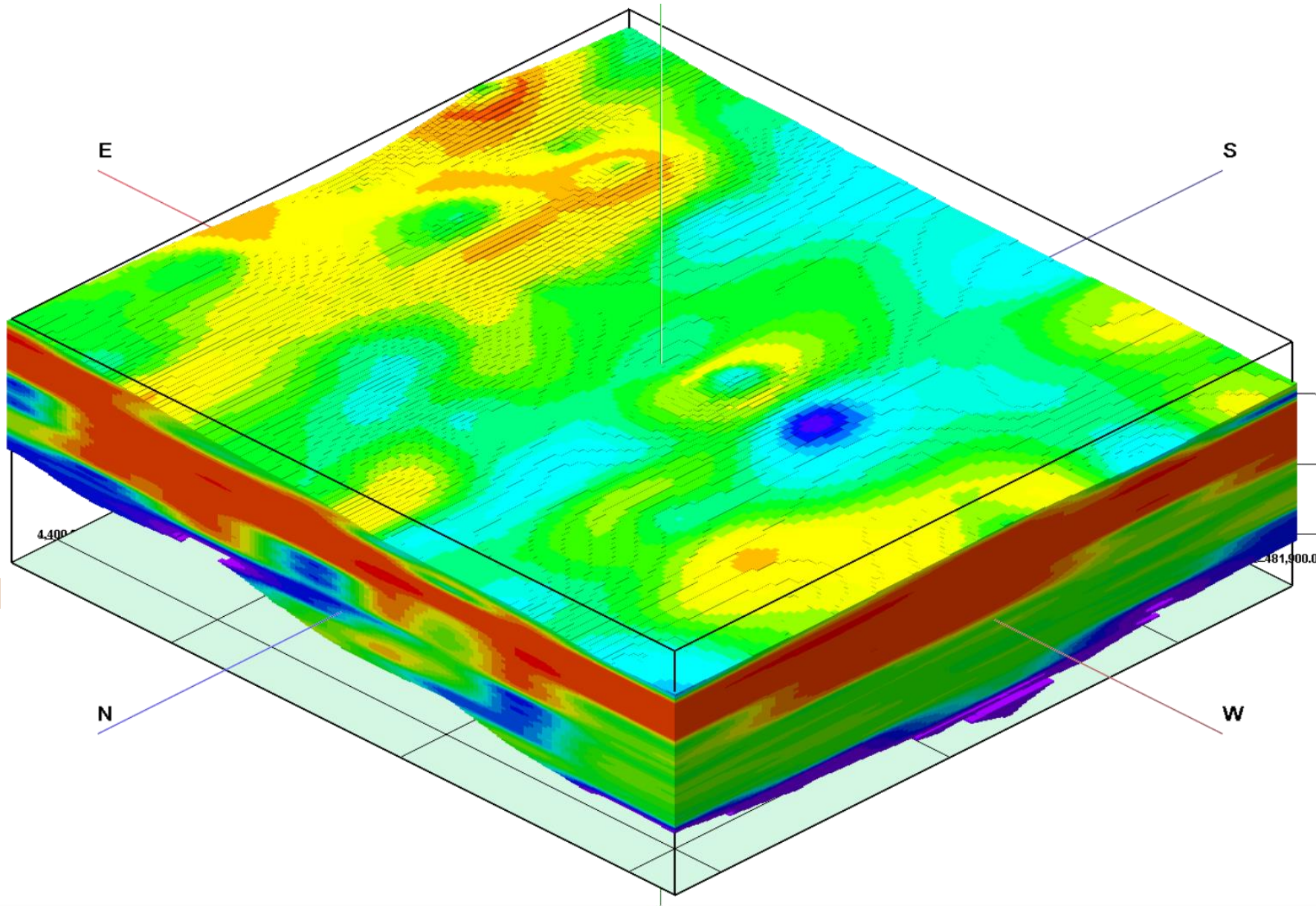




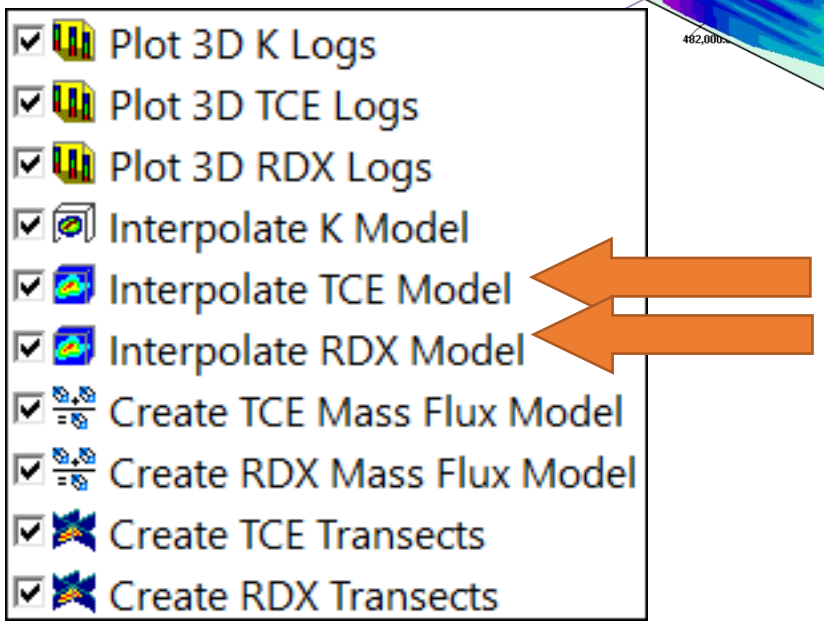


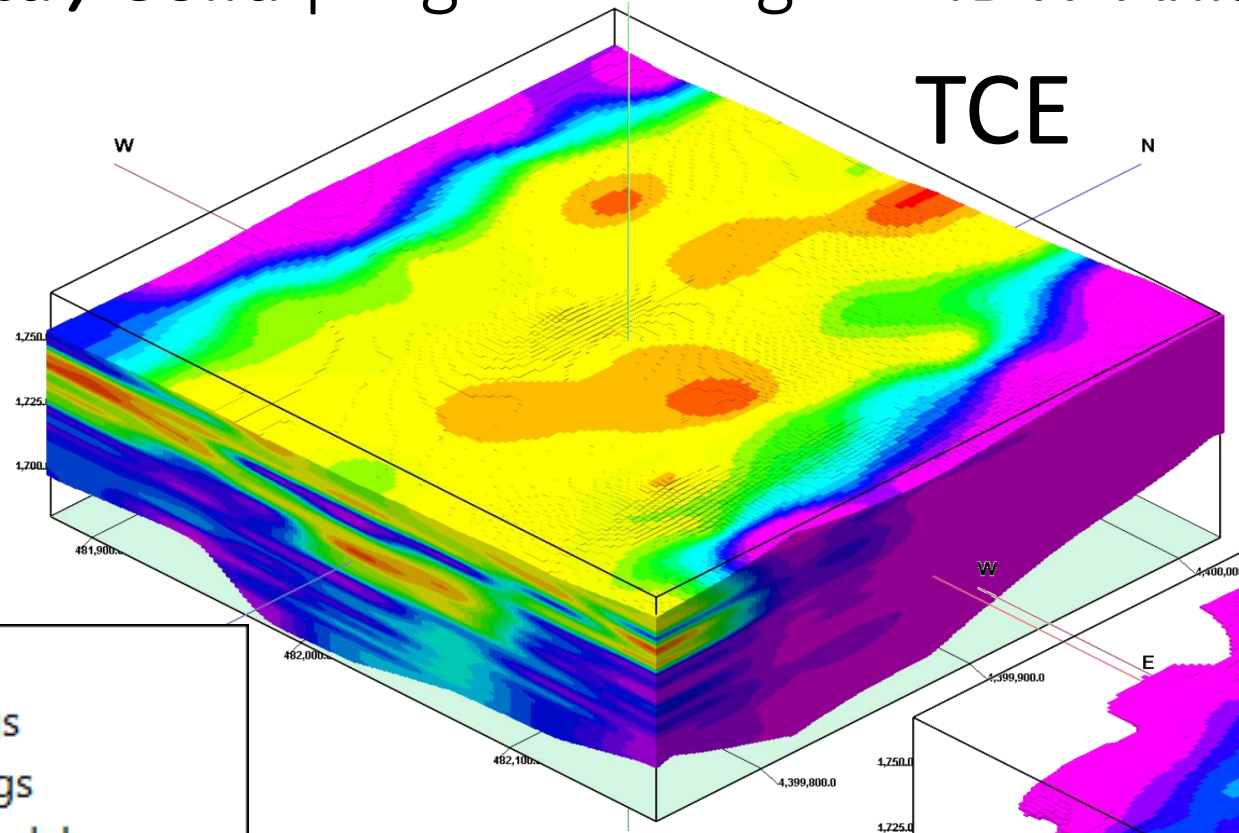
The K data was then modeled with the ***Borehole Operations / P-Data / Solid*** program using the ***IDW-Anisotropic*** algorithm.

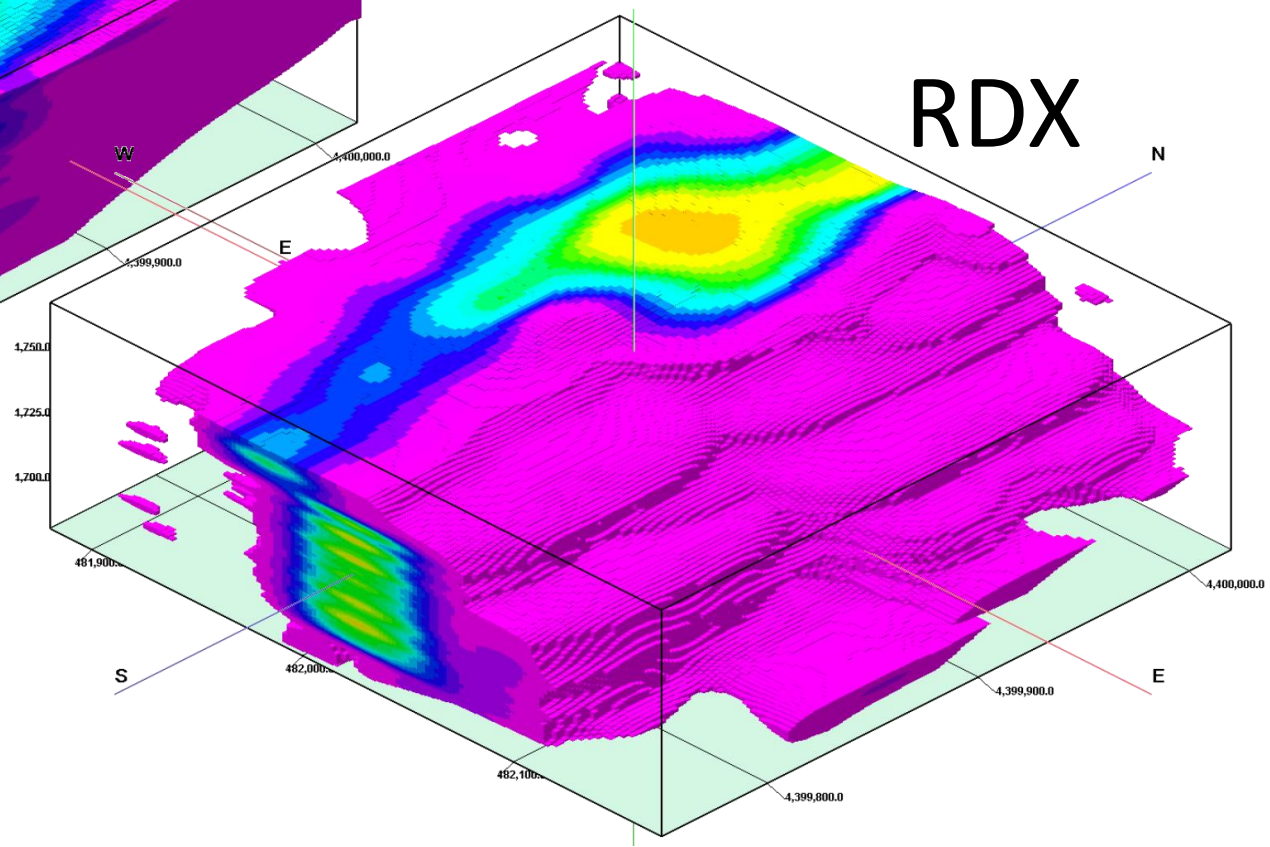




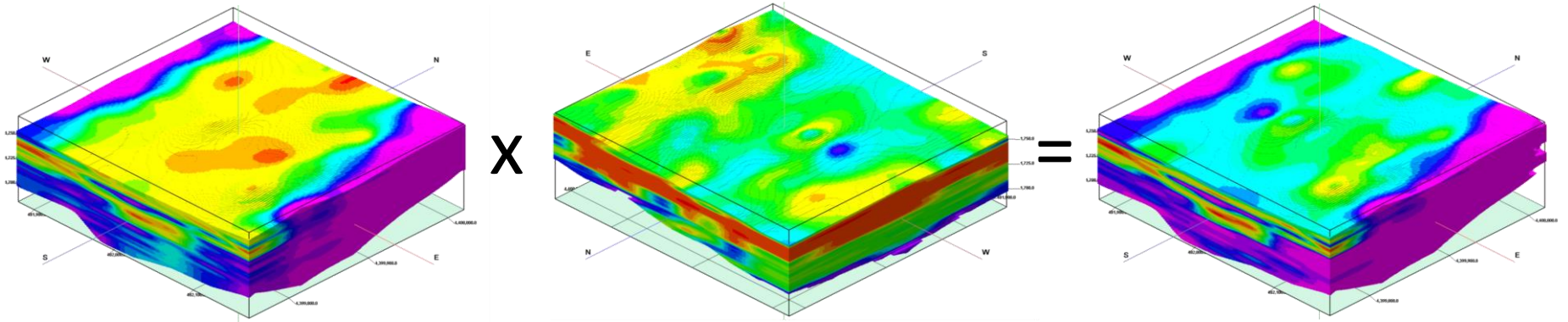
Next, the TCE & RDX data were modeled with the ***Borehole Operations / I-Data / Solid*** program using the ***IDW-Anisotropic*** algorithm.



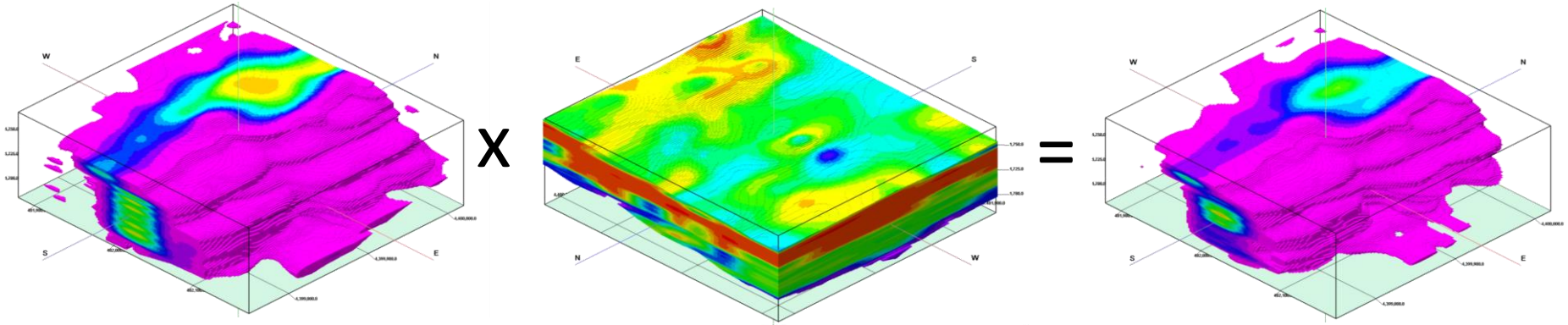




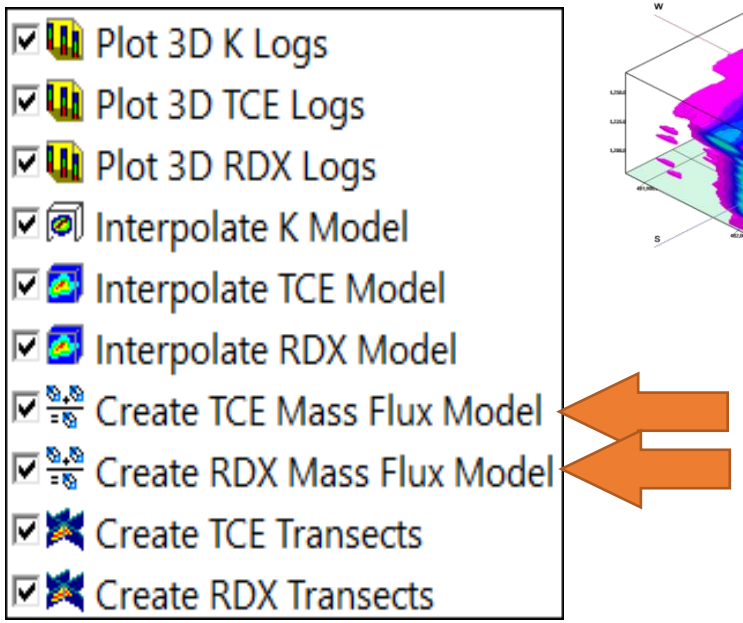
The ***ModOps / Solid / Math / Solid Math*** program was then used to independently multiply the TCE & RDX models by the K model to produce TCE & RDX mass flux models.



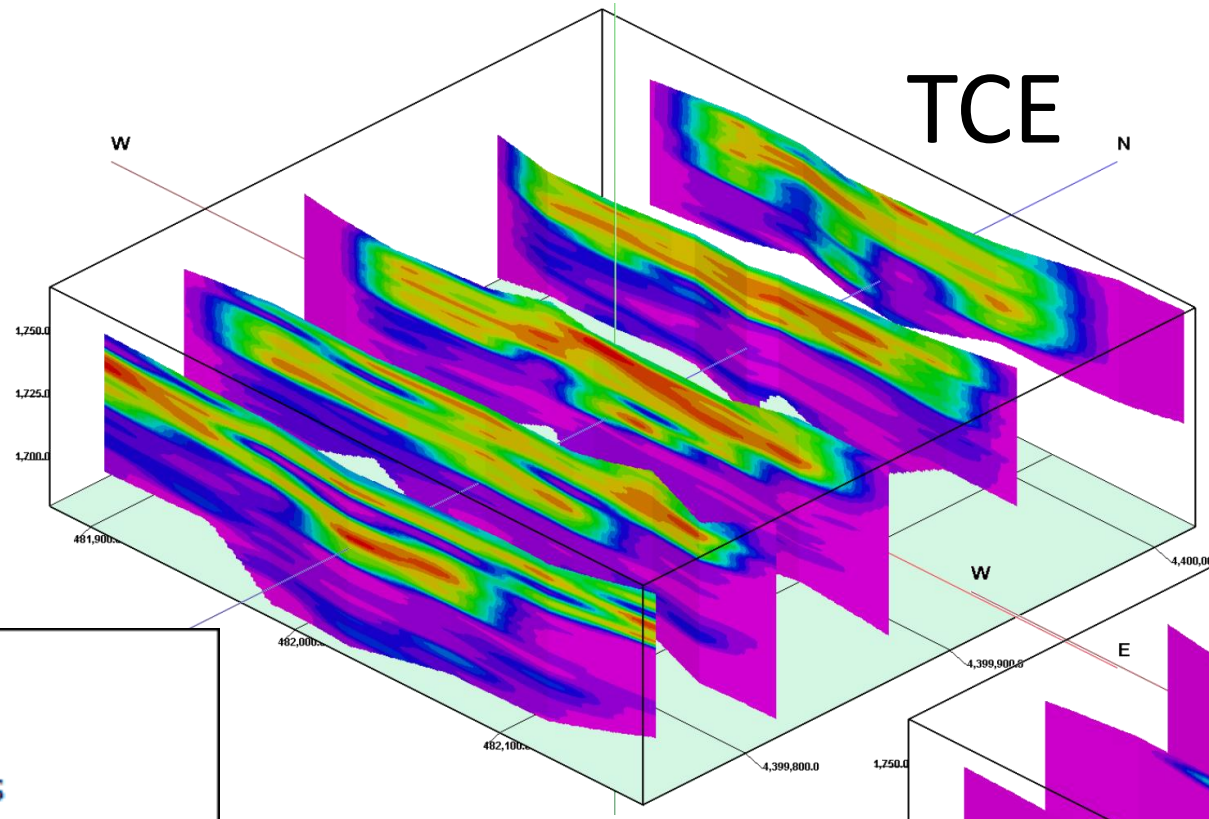
TCE Model K Model TCE Mass Flux Model

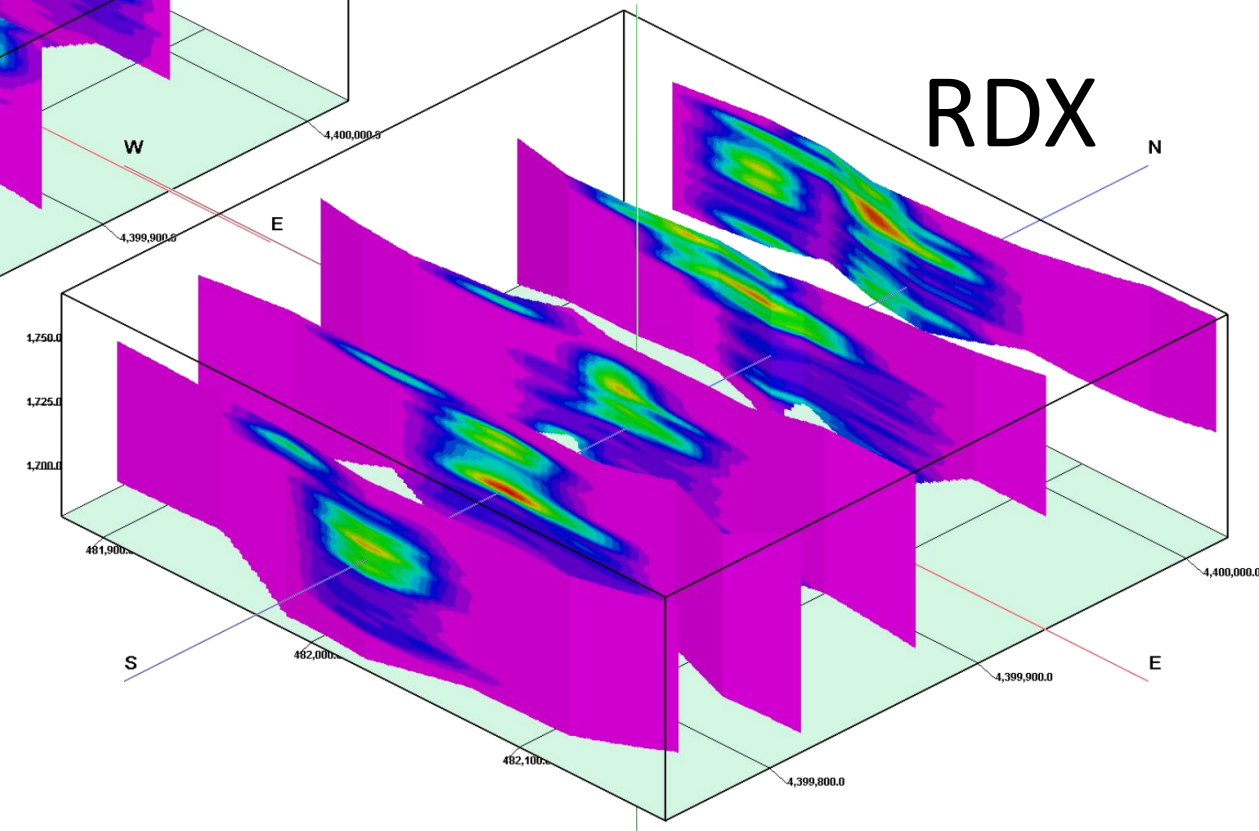


RDX Model K Model RDX Mass Flux Model



Finally, the ***ModOps / Solid / Fence*** program was used to create TCE & RDX mass flux transects based on the TCE & RDX mass flux models.





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