

## Simcenter Flotherm 有效數值與小數位數變更



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## Introduction

#### • Challenge:

- 1.在FLOTHERM後處理呈現的Table、Color bar中,超過99.9的數值缺少小數位。
- 2.大於或等於100的數值缺少小數位。
- 3. Table、Color bar未能以所需的精確度顯示數值。

#### • Solution:

可透過Flotherm選單Project Manager select Edit/User Preference進行設定。

Solid Cond	uctor Flux	es Solid Conduct	tor Temperatures	Solid Conductors Su	mmary
	Face	Min S-F Surface Temperature (°C)	Max S-F Surface Temperature (°C)	Mean S-F Surface Temperature (°C)	Min S-S Tempera
Cuboid	X High	109	109	109	-
Cuboid	X Low	109	109	109	-
Cuboid	Y High	109	109	109	-
Cuboid	Y Low	109	109	109	-
Cuboid	Z High	109	109	109	-
Cuboid	Z Low	109	109	109	-









# 1.選取Edit/User Preference 2.選擇 "Analyze Mode" 您會找到選項 "Number of Significant Figures"



roject Manager Drawing Board	Summary Analyze Mode	0	Project Manager Drawing Board S	Summary Analyze Mode	0
Display Positions in	Absolute Coordinates	•	Ambient Light Louis	✓ Output Snapshot use Screen Resolution	
Number Of Processors To Use	2		Legend Font Size	8	÷
			Title Font Size	16	÷
On Object Creation	Do Not Select Item			Show Title	
On Object Deletion	Do Not Select Neighbor Item	•	Animation		
	Automatic Application Window Open		Number of Frames	18	÷
	✓ Tables Velocity View Stagger		Frames per Second	30	\$
	Show Ignored Geometry			Swing	
	Configure IDF			Display Subdomains	
				Display Solution Domain	
				Gradient Background	
			Background Color		
			Number of Significant Figures	3	÷
			Marginal Temperature Range	5	
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## 設定方式

Restore Defaults

roject Manager Drawing Board Summary Analyze Mode	User Pr	eterences		X
Output Snapshot use Screen Resolution   Ambient Light Level   Legend Font Size   8   Title Font Size   16   Immation   Number of Frames   18   Frames per Second   30   Swing   Display Subdomains   Display Subdomains   Display Solution Domain   Display Solution Domain   Background Color   Number of Significant Figures   3   Marginal Temperature Range     Solution Color	Project Mar	nager Drawing Board S	iummary Analyze Mode	0
Ambient Light Level			✓ Output Snapshot use Screen Resolution	
Legend Font Size 8		Ambient Light Level		
Title Font Size 16   Immation     Number of Frames   18   Frames per Second   30   Swing   Display Subdomains   Display Subdomains   Display Geometry Without Expanding Tree   Gradient Background   Background Color   Number of Significant Figures   3     Yes		Legend Font Size	8	-
Immation         Number of Frames         I8         Frames per Second         30         Swing         Display Subdomains         Display Solution Domain         Display Geometry Without Expanding Tree         Gradient Background         Background Color         Number of Significant Figures         3         Yes         Marginal Temperature Range		Title Font Size	16	\$
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Frames per Second       30         30       \$         Swing       Display Subdomains         Display Solution Domain       Display Geometry Without Expanding Tree         Gradient Background       Gradient Background         Background Color       Image: Color Significant Figures         Marginal Temperature Range       5		Number of Frames	18	\$
Swing         Display Subdomains         Display Solution Domain         Display Geometry Without Expanding Tree         Gradient Background         Background Color         Number of Significant Figures         3         Marginal Temperature Range         5		Frames per Second	30	\$
Display Subdomains Display Solution Domain Display Geometry Without Expanding Tree Gradient Background Background Color Number of Significant Figures 3 Marginal Temperature Range 5  C			Swing	
Display Solution Domain Display Geometry Without Expanding Tree Gradient Background Background Color Number of Significant Figures 3 Marginal Temperature Range 5			Display Subdomains	
□ Display Geometry Without Expanding Tree □ Gradient Background Background Color Number of Significant Figures 3 Marginal Temperature Range 5 • C			Display Solution Domain	
Gradient Background Background Color Number of Significant Figures 3 Marginal Temperature Range 5			Display Geometry Without Expanding Tree	
Background Color       Number of Significant Figures     3       Marginal Temperature Range     5			Gradient Background	
Number of Significant Figures 3 C		Background Color		
Marginal Temperature Range 5 C		Number of Significant Figures	3	÷
		Marginal Temperature Range	5 C	

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更改此值以增加或減少有效數字的總數 (以及小數位數)。點擊"OK"後,更 改將立即應用於所有圖表中,即Table、 Color bar。

注意:

如果有效數字的位數增加到4,則任何大 於或等於100的值將顯示一位小數,而任 何較小的值將顯示兩位小數,以此類推。



## 測試結果

#### 將數值輸入"6"可顯示出6個位數值,超過的數值會自動四捨五入

Project Manager Drawing Board S Ambient Light Level Legend Font Size Title Font Size Animation Number of Frames Frames per Second	ummary Analyze Mode	Speed (om/s) 1000.5 800.4 - 600.3 - 400.2 - 200.1 -	<ul> <li>Particles</li> <li>Particle Source</li> <li>Particle Source</li> <li>Particle Source</li> <li>Particle Source</li> <li>Isosurface</li> <li>Animation</li> <li>Annotation</li> <li>Saved Tables</li> <li>Viewpoint</li> </ul>	1 2 3		
	Gradient Background	C.000216495 -				_ 30.
Background Color			Total Range Min Value	0.06555595	cm/s	
Number of Significant Figures	6		Total Range Max Value	62.00756	cm/s	-
	P		Davas	Herr Bener		-
Marginal Temperature Range			Kange	0.3e1 Kange		•
Marginal Temperature Range			Kange Legend Min Value	0.0002164949	cm/s	
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### 測試結果



#### 具有3位有效數字的表格 - 值四捨五 入:

## 具有4位有效數字的表格-等於或大於 100 的值保留一位小數:

Tables												
Solid Conductor Fluxes Solid Conductor Temperatures		Solid Conductors Summary Solid Conductor Fluxes		es Solid Conduct	tor Temperatures	Solid Conductors Summ						
		Face	Min S-F Surface Temperature (°C)	Max S-F Surface Temperature (°C)	Mean S-F Surface Temperature (°C)	Min S-S Tempera		Face	Min S-F Surface Temperature (°C)	Max S-F Surface Temperature (°C)	Mean S-F Surface Temperature (°C)	Min S Tempe
	😪 Cuboid	X High	109	109	109	-	Cuboid	X High	108.5	108.5	108.5	-
	😪 Cubold	X Low	109	109	109	-	Cuboid	X Low	108.5	108.5	108.5	-
	😪 Cuboid	Y High	109	109	109	-	Cuboid	Y High	108.5	108.5	108.5	-
	😪 Cuboid	Y Low	109	109	109	-	Cuboid	Y Low	108.5	108.5	108.5	-
	😪 Cuboid	Z High	109	109	109	-	Cuboid	Z High	108.5	108.5	108.5	-
	Cubold 🥪	Z Low	109	109	109	-	Cubold	Z Low	108.5	108.5	108.5	-







1. 在安裝完成後,預設情況下數字將以「3個有效數字」顯示。這是由 Edit/User Preference中Number of Significant Figures所定義的,並且會影響軟體 呈現的Table、Color bar數值。

2. 當Number of Significant Figures 設定為「3」,代表「3個有效數字」也就是 數值顯示總共包含3個數字,無論是否有小數點分隔。例如100和99.9都滿足這 個條件,但對於99.9,會顯示一位小數位,而對於100,已滿足3個位數的條 件,所以不會顯示小數位。但是數值並不是截斷,而是四捨五入,例如100.12 的值會變為100,而100.89的值變為101。

3.為了增加有效數字的位數,從而確保大於100的數值顯示小數位,您可以更改Number of Significant Figures。





# The End

謝謝

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