

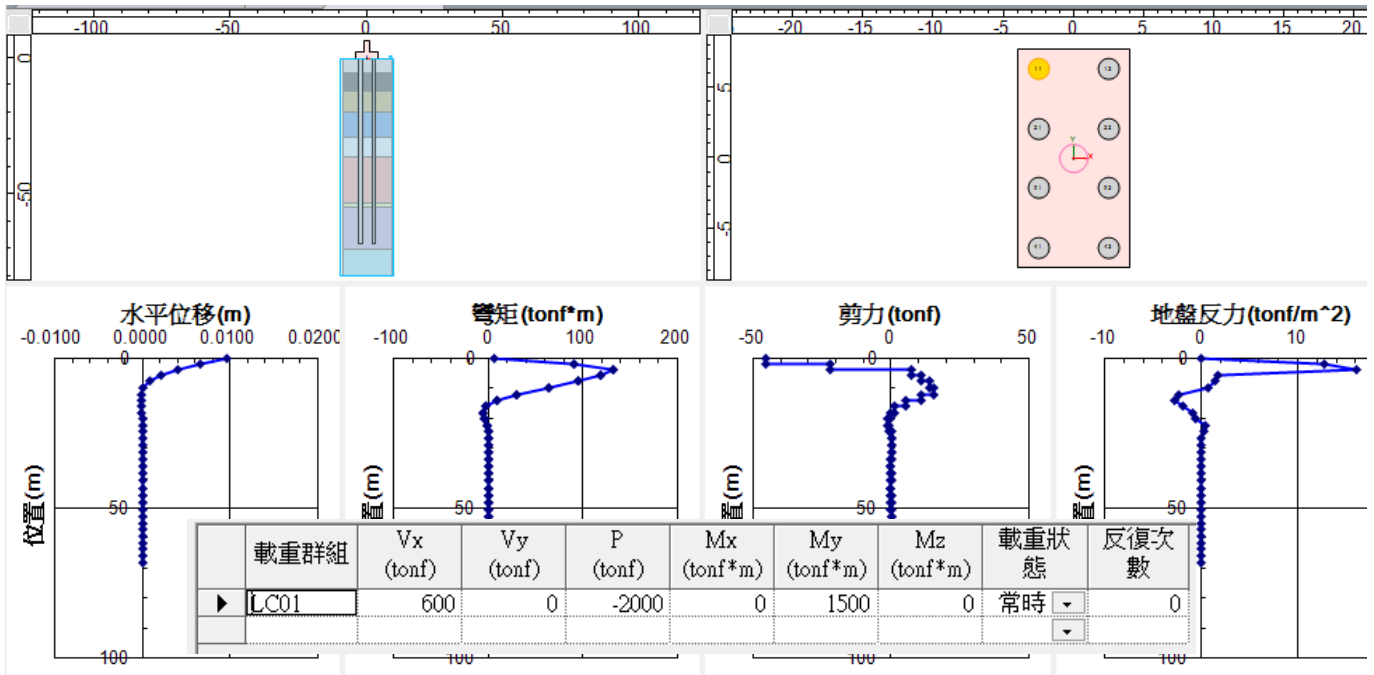


## 樁基礎模組分析結果不正確原因排除



樁頂只輸入My 和 Vx，但分析結果各樁皆有My Mz之結果？

這是因為求解器沒有正確調整至分析結果收斂之結果。



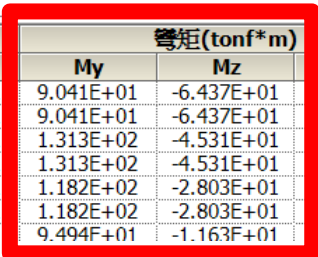
Post Dialog

基礎版最大變位 樁位移及內力 樁最大位移和最大內力 樁頭變位&反力

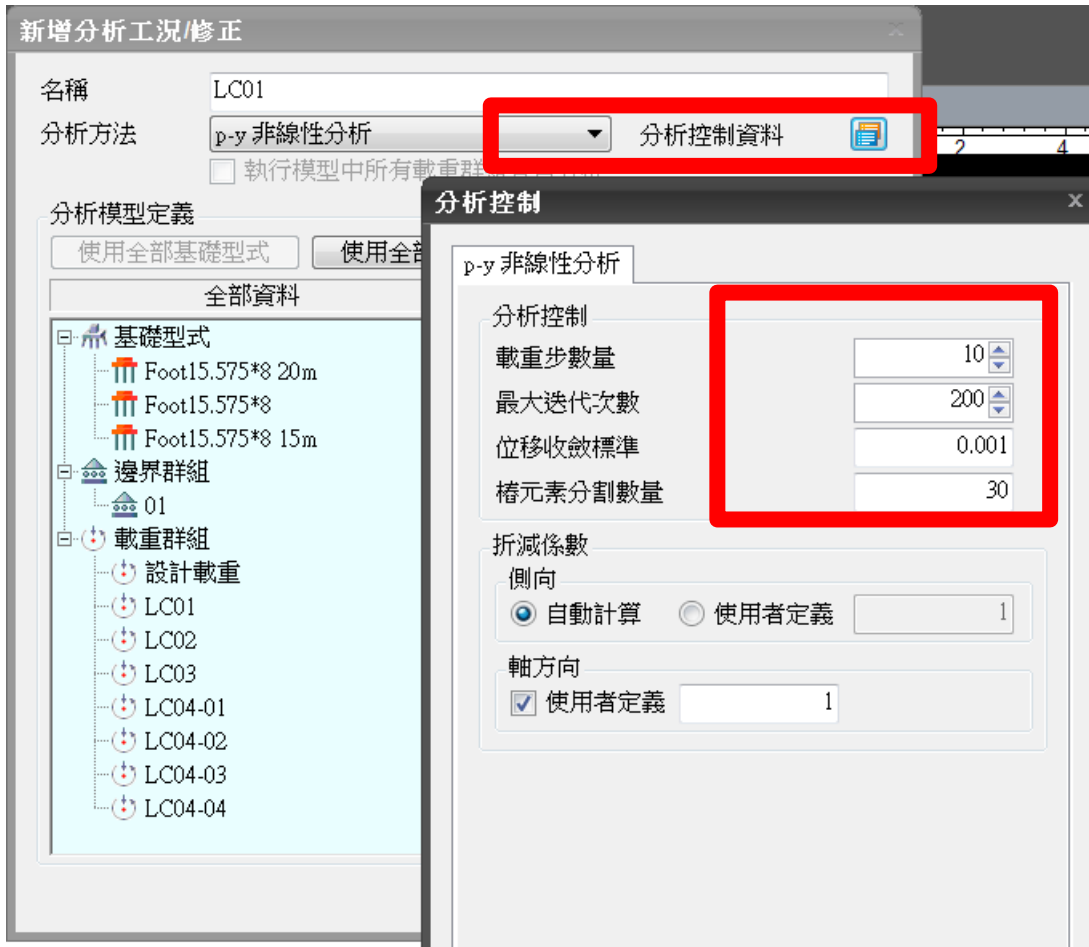
樁編號 1-1

節點 元素

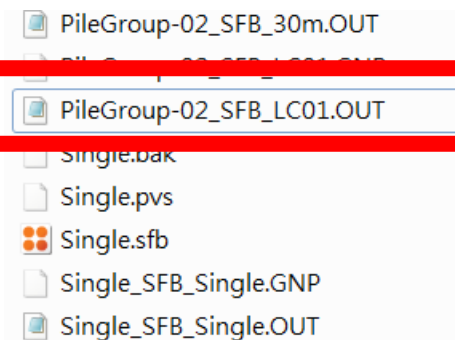
元素	位置(m)	垂直力		剪力(tonf)		彎矩(tonf*m)			
		Fx	Fz	Fy	Fyz	My	Mz	Myz	
1033	頂部	1.833	-5.725E+01	-4.564E+01	-9.349E+00	4.658E+01	9.041E+01	-6.437E+01	1.11E+02
	底部	1.833	-5.191E+01	-2.231E+01	-1.04E+01	2.461E+01	9.041E+01	-6.437E+01	1.11E+02
1034	頂部	3.667	-5.191E+01	-2.231E+01	-1.04E+01	2.461E+01	1.313E+02	-4.531E+01	3.389E+02
	底部	3.667	-4.69E+01	7.135E+00	-9.423E+00	1.182E+01	1.313E+02	-4.531E+01	3.389E+02
1035	頂部	5.500	-4.69E+01	7.135E+00	-9.423E+00	1.182E+01	1.182E+02	-2.803E+01	2.215E+02
	底部	5.500	-4.472E+01	1.075E+01	-7.569E+00	1.315E+01	1.182E+02	-2.803E+01	2.215E+02
1036	頂部	7.667	-4.472E+01	1.075E+01	-7.569E+00	1.315E+01	9.494E+01	-1.163E+01	5.565E+01
	底部	7.667	-4.472E+01	1.075E+01	-7.569E+00	1.315E+01	9.494E+01	-1.163E+01	5.565E+01



調整分析控制選項，載重步、迭代次數和樁元素分割數量如不夠多，分析結果將不收斂！



開啟分析檔案同一目錄下的OUT檔可檢核計算結果是否收斂。



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PileGroup-02_SFB_LC01.OUT - 記事本
檔案(F) 編輯(E) 格式(O) 檢視(V) 說明(H)
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.42154E-03
> SYMMETRIC MULTI-FRONTAL SOLVER
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 29 ITERATION NO. : 1
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.17214E+00
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 29 ITERATION NO. : 2
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.31578E-01
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 29 ITERATION NO. : 3
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.70591E-02
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 29 ITERATION NO. : 4
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.16948E-02
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 29 ITERATION NO. : 5
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.43040E-03
> SYMMETRIC MULTI-FRONTAL SOLVER
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 30 ITERATION NO. : 1
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.17797E+00
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 30 ITERATION NO. : 2
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.33853E-01
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 30 ITERATION NO. : 3
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.79982E-02
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 30 ITERATION NO. : 4
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.20578E-02
> SYMMETRIC MULTI-FRONTAL SOLVER
STEP NO. : 30 ITERATION NO. : 5
ALLOWABLE DISPLACEMENT NORM : 0.10000E-02 CALCULATED NORM : 0.56087E-03
WRITING STAGE I[RESULT]

ANALYSIS IS FINISHED
TOTAL ELAPSED TIME IS 9.92 SECONDS
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每次分析後請確認上頁.Out檔中之各Step最後一步迭代中 calculated NORM < 所設定的 Displacement Norm(0.001) 位移收斂標準 即表示計算的結果收斂可信！

如不收斂可回到分析控制之設定，加大載重步及最大迭代次數。

樁編號	最大垂直位移	最大水平變位(m)				最大垂直力	最大剪力(tonf)			最大彎矩(tonf*m)		
	Dz	Dx	Dy	Dxy	Fx	Fz	Fy	Fyz	My	Mz	M	
1-1	-3.983E-04	8.209E-03	-6.366E-05	8.209E-03	-7.574E+01	-6.874E+01	-1.516E+00	6.875E+01	-1.757E+02	-9.247E+00	1.75	
1-2	-2.104E-03	8.184E-03	4.019E-04	8.184E-03	-3.418E+02	-8.337E+01	-1.215E+01	8.425E+01	-2.209E+02	-6.208E+01	2.29	
2-1	-5.832E-04	8.354E-03	-2.03E-05	8.354E-03	-1.084E+02	-6.575E+01	-2.517E-01	6.575E+01	-1.718E+02	-1.591E+00	1.71	
2-2	-2.966E-03	8.351E-03	1.202E-04	8.351E-03	-4.491E+02	-8.214E+01	-4.648E+00	8.228E+01	-2.206E+02	-2.315E+01	2.21	
3-1	-5.832E-04	8.354E-03	2.03E-05	8.354E-03	-1.084E+02	-6.575E+01	2.517E-01	6.575E+01	-1.718E+02	1.591E+00	1.71	
3-2	-2.966E-03	8.351E-03	-1.202E-04	8.351E-03	-4.491E+02	-8.214E+01	4.648E+00	8.228E+01	-2.206E+02	2.315E+01	2.21	
4-1	-3.983E-04	8.209E-03	6.366E-05	8.209E-03	-7.574E+01	-6.874E+01	1.516E+00	6.875E+01	-1.757E+02	9.247E+00	1.75	
4-2	-2.104E-03	8.184E-03	-4.019E-04	8.184E-03	-3.418E+02	-8.337E+01	1.215E+01	8.425E+01	-2.209E+02	6.208E+01	2.29	

最後分析結果Dy 及MZ皆小於Dx 或My甚多，已無前述情形。之前會出現該結果乃因為計算結果步收斂>0.001位移收斂標準。