

Dynamic Analysis - [C:\DOCUMENTS AND SETTINGS\MAHESH\DESKTOP\PALANI\0354 - DKW - PS1\2738-1410 REV.A\PS-4 AKILA TLN...]

Analysis Type: Time History

Time History Definitions Force Sets Time History Load Cases Static/Dynamic Combinations Lumped Masses Snubbers Control Parameters Advanced

	Cmt	Force	Direction	Node	Force Set #
0	<input checked="" type="checkbox"/>	EXAMPLE --> 832.9 X 50 2 .832.9	LOAD AT 50 IN X, SET #2.		
1	<input type="checkbox"/>	1.0000	X	3140	1
2	<input type="checkbox"/>	-1.0000	Z	510	2
3	<input type="checkbox"/>	1.0000	X	360	3
4	<input type="checkbox"/>	1.0000	Z	110	4

COADE, Inc. Help Facility

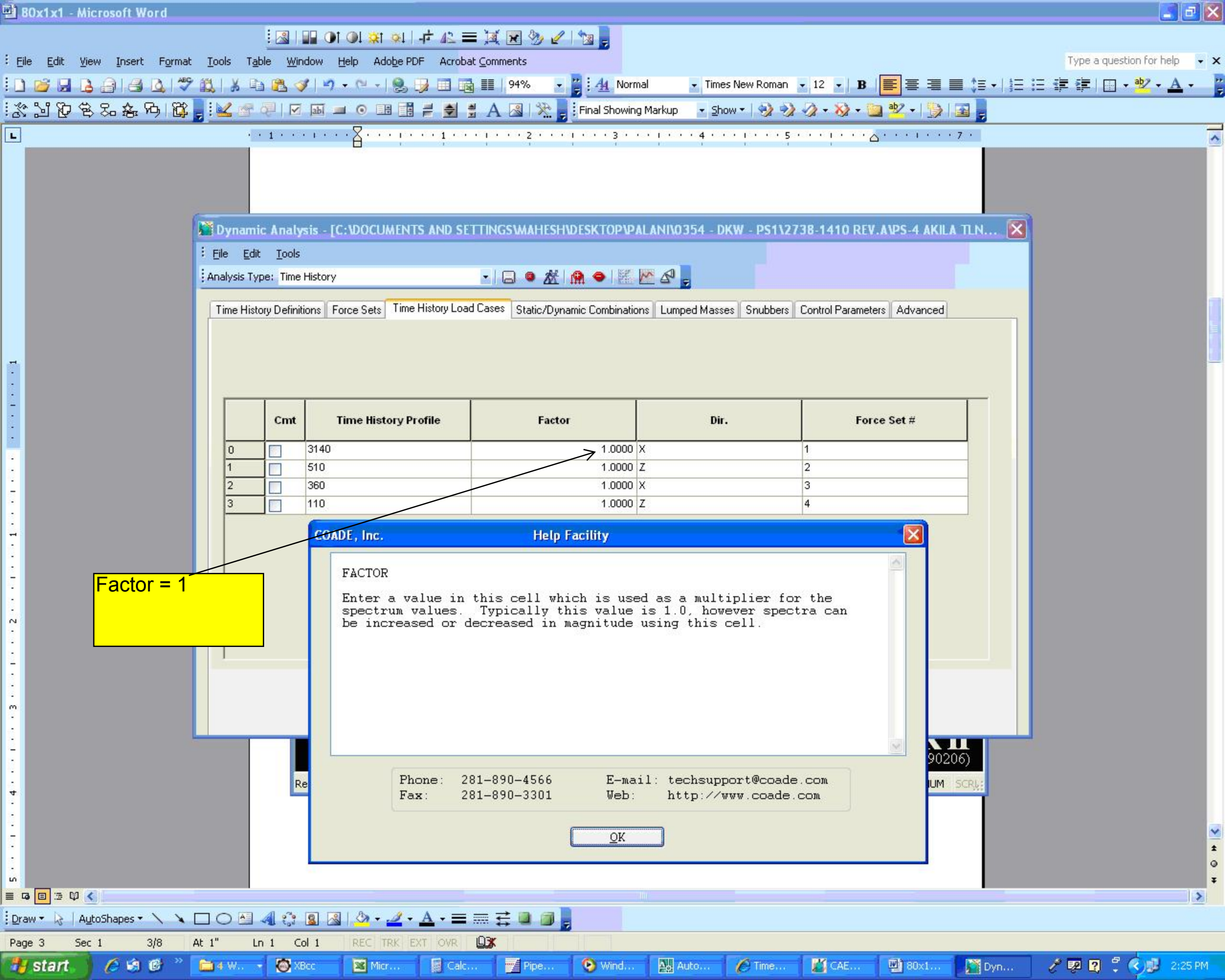
IMPULSE (FORCE) MAGNITUDE (kN)

Enter the magnitude of the impulse force. This is a signed value according to the CAESAR II global coordinate system.

Phone: 281-890-4566 E-mail: techsupport@coade.com
Fax: 281-890-3301 Web: http://www.coade.com

OK

Force Set Magnitude
1 kN



Factor = 1

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Help Facility

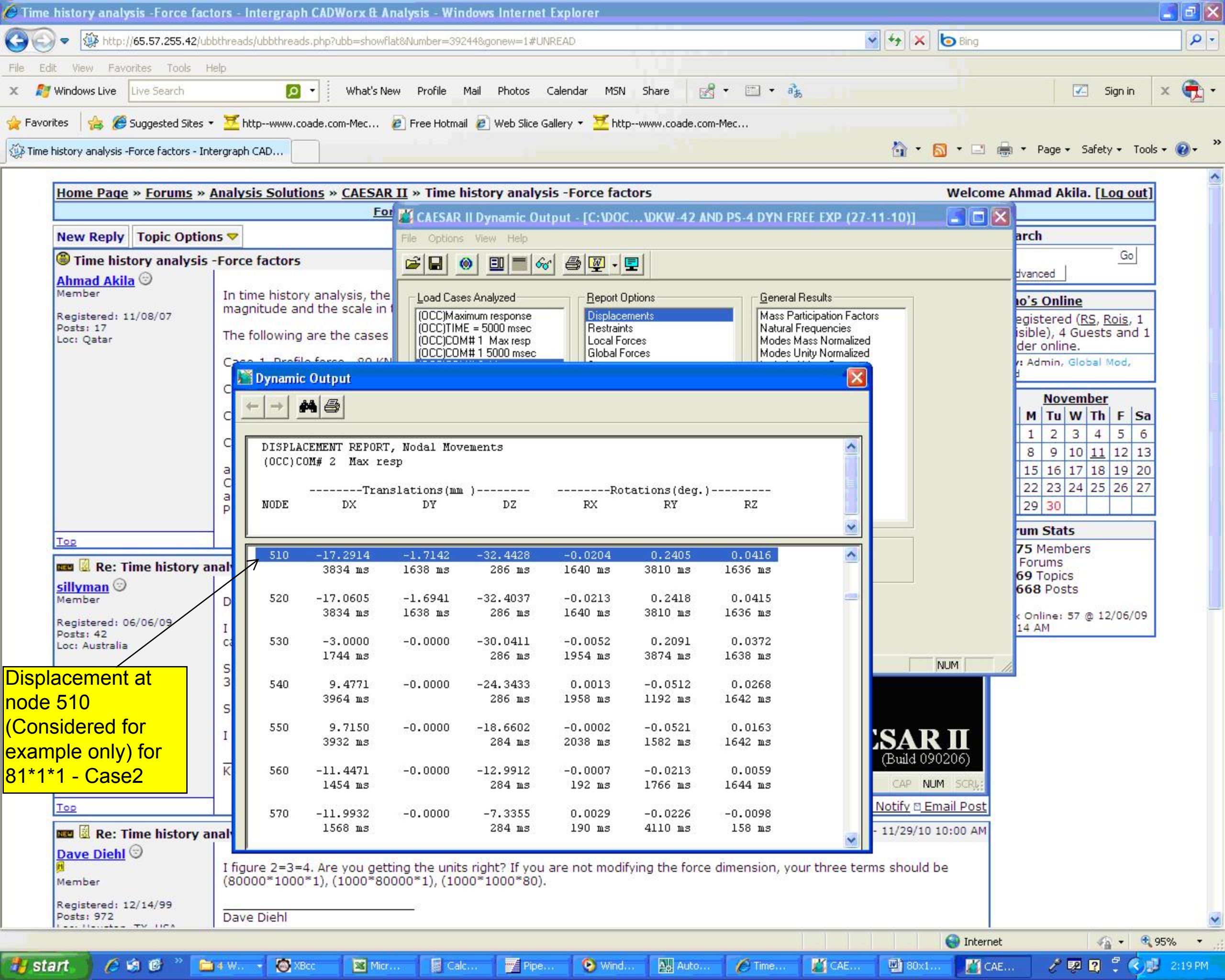
FACTOR

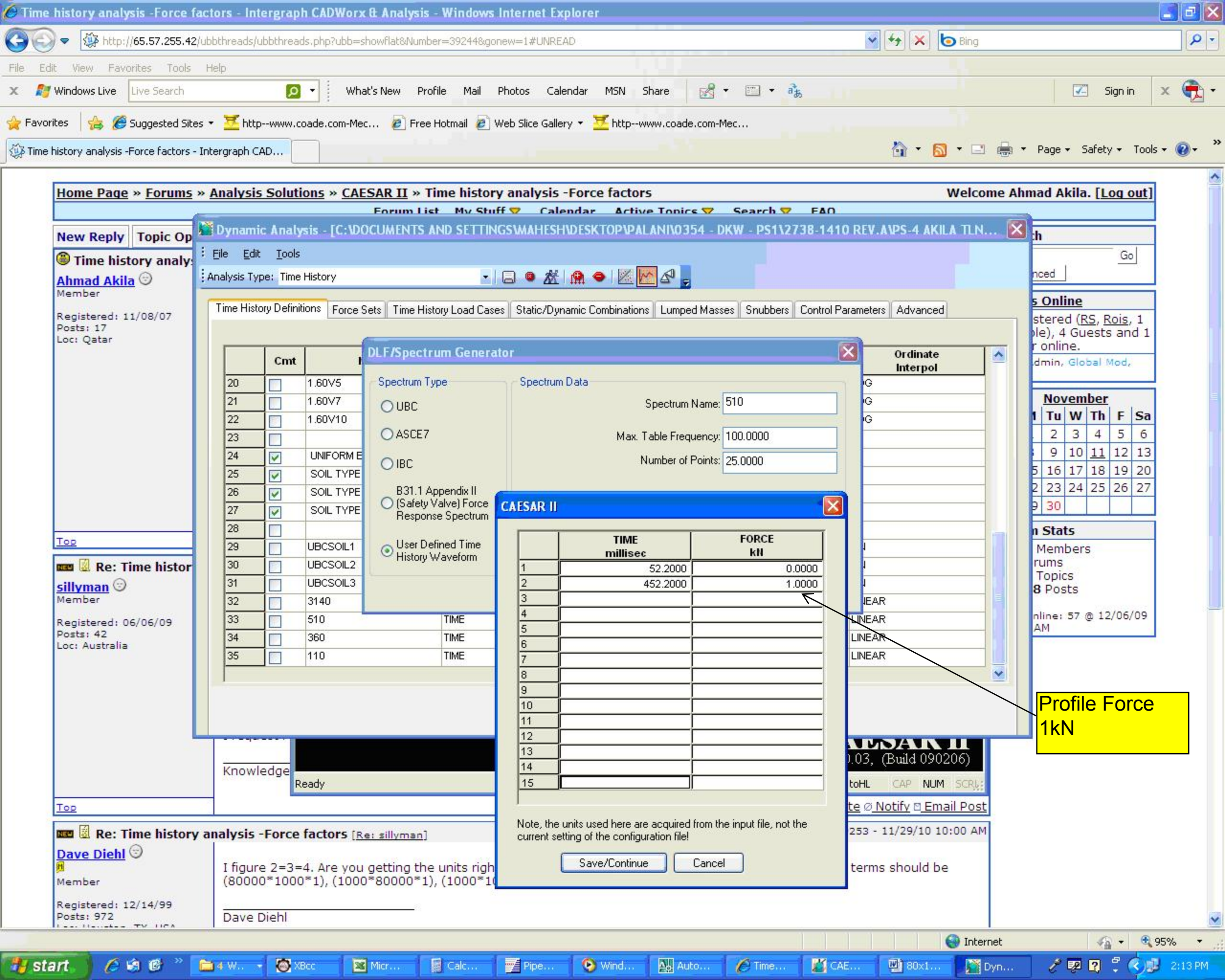
Enter a value in this cell which is used as a multiplier for the spectrum values. Typically this value is 1.0, however spectra can be increased or decreased in magnitude using this cell.

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OK





Home Page » Forums » Analysis Solutions » CAESAR II » Time history analysis -Force factors

Welcome Ahmad Akila. [Log out]

New Reply Topic Op

Time history analy

Ahmad Akila

Member

Registered: 11/08/07

Posts: 17

Loc: Qatar

Top

Re: Time histor

sillyman

Member

Registered: 06/06/09

Posts: 42

Loc: Australia

Top

Re: Time history analysis -Force factors [Re: sillyman]

Dave Diehl

Member

Registered: 12/14/99

Posts: 972

Loc: Houston, TX, USA

I figure 2=3=4. Are you getting the units right
(80000*1000*1), (1000*80000*1), (1000*1000*1)

Dave Diehl

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File Edit Tools

Analysis Type: Time History

Time History Definitions

Force Sets

Time History Load Cases

Static/Dynamic Combinations

Lumped Masses

Snubbers

Control Parameters

Advanced

	Cmt	
20	<input type="checkbox"/>	1.60V5
21	<input type="checkbox"/>	1.60V7
22	<input type="checkbox"/>	1.60V10
23	<input type="checkbox"/>	
24	<input checked="" type="checkbox"/>	UNIFORM E
25	<input checked="" type="checkbox"/>	SOIL TYPE
26	<input checked="" type="checkbox"/>	SOIL TYPE
27	<input checked="" type="checkbox"/>	SOIL TYPE
28	<input type="checkbox"/>	
29	<input type="checkbox"/>	UBCSOIL1
30	<input type="checkbox"/>	UBCSOIL2
31	<input type="checkbox"/>	UBCSOIL3
32	<input type="checkbox"/>	3140
33	<input type="checkbox"/>	510
34	<input type="checkbox"/>	360
35	<input type="checkbox"/>	110

DLF/Spectrum Generator

Spectrum Type

☐ UBC

☐ ASCE7

☐ IBC

☐ B31.1 Appendix II
(Safety Valve) Force
Response Spectrum

☒ User Defined Time
History Waveform

Spectrum Data

Spectrum Name: 510

Max. Table Frequency: 100.0000

Number of Points: 25.0000

CAESAR II

	TIME millisec	FORCE kN
1	52.2000	0.0000
2	452.2000	1.0000
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Note, the units used here are acquired from the input file, not the
current setting of the configuration file!

Save/Continue

Cancel

Profile Force
1kN

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	Cmt	Force	Direction	Node	Force Set #
0	<input checked="" type="checkbox"/>	EXAMPLE --> 832.9 X 50 2 .832.9 LOAD AT 50 IN X, SET #2.			
1	<input type="checkbox"/>	81.0000	X	3140	1
2	<input type="checkbox"/>	-81.0000	Z	510	2
3	<input type="checkbox"/>	81.0000	X	360	3
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IMPULSE (FORCE) MAGNITUDE (kN)

Enter the magnitude of the impulse force. This is a signed value according to the CAESAR II global coordinate system.

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Knowledge

Top

Re: Time history analysis -Force factors [Re: sillyman]

#39253 - 11/29/10 10:00 AM

Dave Diehl

Member

Registered: 12/14/99

Posts: 972

Loc: Houston, TX, USA

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Dave Diehl

Go

Online

Registered (RS, Rois, 1
ole), 4 Guests and 1
online.

Admin, Global Mod,

November

	Tu	W	Th	F	Sa
1	2	3	4	5	6
8	9	10	11	12	13
5	16	17	18	19	20
2	23	24	25	26	27
9	30				

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Time History Definitions Force Sets Time History Load Cases Static/Dynamic Combinations Lumped Masses Snubbers Control Parameters Advanced

	Cmt	Time History Profile	Factor	Dir.	Force Set #
0	<input type="checkbox"/>	3140	1.0000	X	1
1	<input type="checkbox"/>	510	1.0000	Z	2
2	<input type="checkbox"/>	360	1.0000	X	3
3	<input type="checkbox"/>	110	1.0000	Z	4

COADE, inc. Help Facility

FACTOR

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OK

Factor = 1

Knowledge is n

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Dave Diehl

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Admin, Global Mod,

November

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8	9	10	11	12	13
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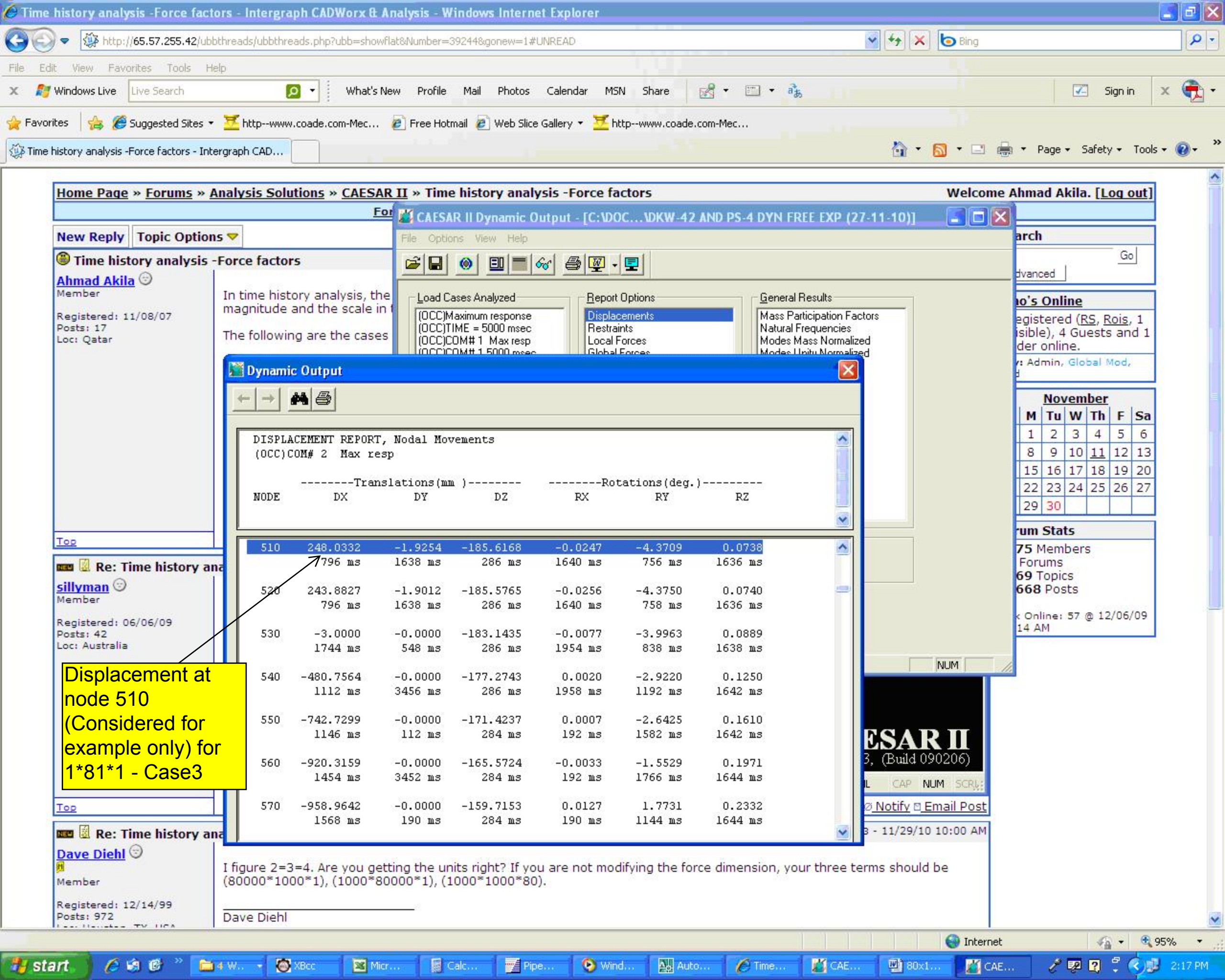
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New Reply Topic Options

Time history analysis -Force factors

Ahmad Akila

Member

Registered: 11/08/07

Posts: 17

Loc: Qatar

In time history analysis, the magnitude and the scale in

The following are the cases

CAESAR II Dynamic Output - [C:\DOC...DKW-42 AND PS-4 DYN FREE EXP (27-11-10)]

File Options View Help

Load Cases Analyzed

(OCC)Maximum response
(OCC)TIME = 5000 msec
(OCC)COM# 1 Max resp
(OCC)COM# 1 5000 msec

Report Options

Displacements
Restraints
Local Forces
Global Forces

General Results

Mass Participation Factors
Natural Frequencies
Modes Mass Normalized
Modes Unity Normalized

Dynamic Output

DISPLACEMENT REPORT, Nodal Movements
(OCC)COM# 2 Max resp

NODE	-----Translations(mm)-----			-----Rotations(deg.)-----		
	DX	DY	DZ	RX	RY	RZ
510	248.0332	-1.9254	-185.6168	-0.0247	-4.3709	0.0738
	796 ms	1638 ms	286 ms	1640 ms	756 ms	1636 ms
520	243.8827	-1.9012	-185.5765	-0.0256	-4.3750	0.0740
	796 ms	1638 ms	286 ms	1640 ms	758 ms	1636 ms
530	-3.0000	-0.0000	-183.1435	-0.0077	-3.9963	0.0889
	1744 ms	548 ms	286 ms	1954 ms	838 ms	1638 ms
540	-480.7564	-0.0000	-177.2743	0.0020	-2.9220	0.1250
	1112 ms	3456 ms	286 ms	1958 ms	1192 ms	1642 ms
550	-742.7299	-0.0000	-171.4237	0.0007	-2.6425	0.1610
	1146 ms	112 ms	284 ms	192 ms	1582 ms	1642 ms
560	-920.3159	-0.0000	-165.5724	-0.0033	-1.5529	0.1971
	1454 ms	3452 ms	284 ms	192 ms	1766 ms	1644 ms
570	-958.9642	-0.0000	-159.7153	0.0127	1.7731	0.2332
	1568 ms	190 ms	284 ms	190 ms	1144 ms	1644 ms

Displacement at node 510
(Considered for example only) for 1*81*1 - Case3

Top

Re: Time history analysis

sillyman

Member

Registered: 06/06/09

Posts: 42

Loc: Australia

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Re: Time history analysis

Dave Diehl

Member

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Dave Diehl

Search

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Advanced

Who's Online

Registered (RS, Rois, 1 visible), 4 Guests and 1 user online.

Admin, Global Mod, etc.

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CAESAR II
3, (Build 090206)

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2:17 PM