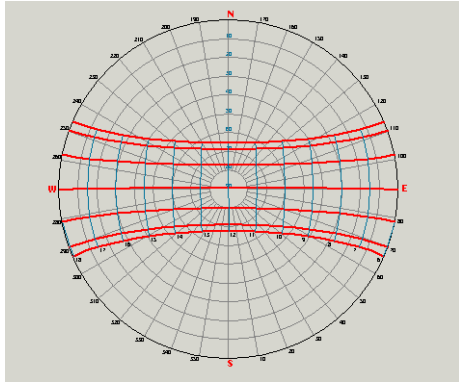
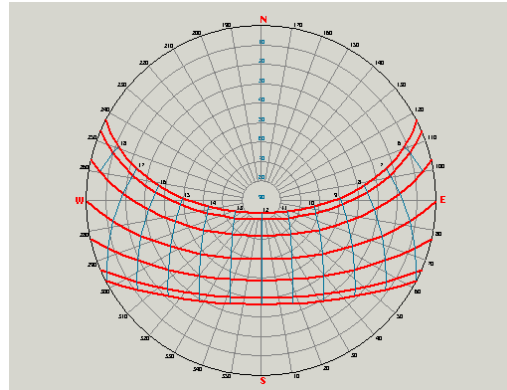


Appendix-1: Sun Paths Diagrams

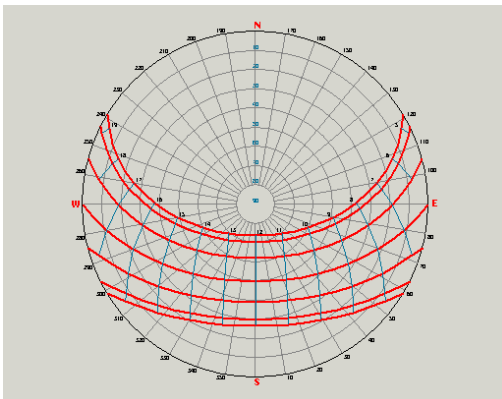
The sun elevation above the horizon for different latitudes through the year is shown in the following figures:



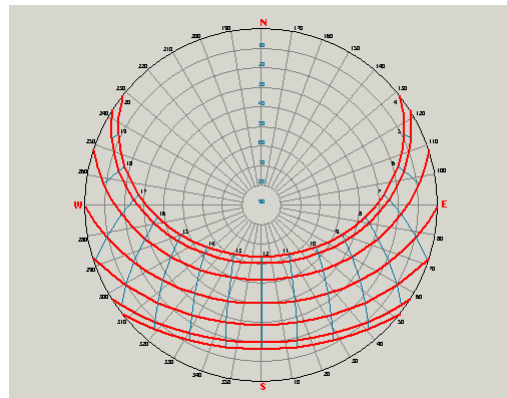
Sun Path diagram
(Latitude 0° N)



Sun Path diagram
(Latitude 20° N)



Sun Path diagram
(Latitude 40° N)



Sun Path diagram
(Latitude 50° N)

Appendix-2: Geometrical Modelling Description

The geometry of each model is illustrated in the following figures. Totally there has been created ten variants of storehouses with different roof and glazing surfaces arrangements. Particularly, there are three models for shed roof shape, four models for flat roof type, two models for sawtooth roof type and one for monitor roof type. It should be mentioned that all models have same glazing surface area which is equal to 40m^2 .

Shed Roof:

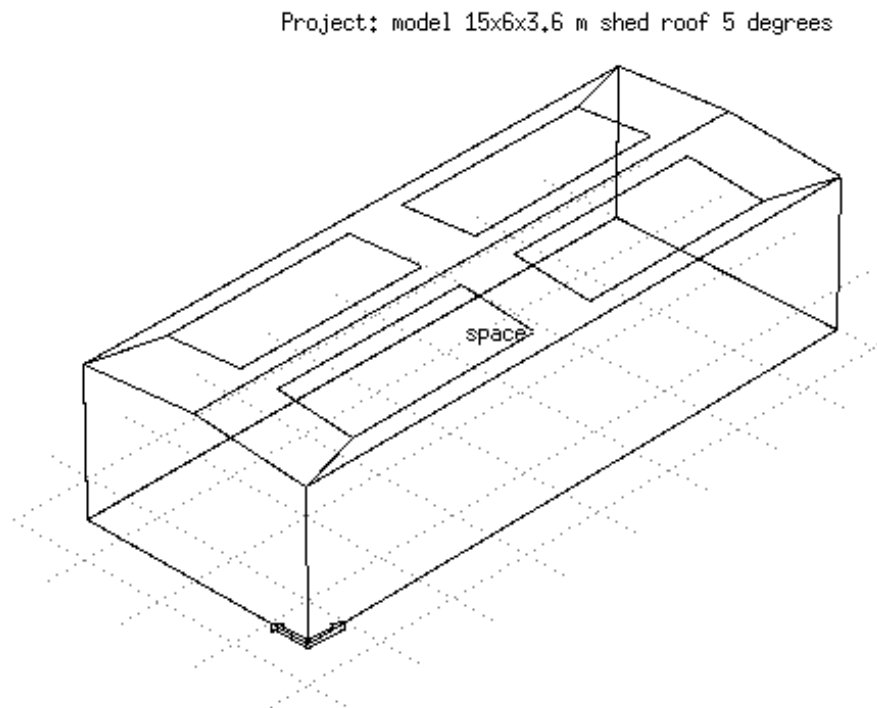


Figure 1: Shed roof with 5 degrees slope

Project: space 15x6x3,6 shed roof 15 degrees

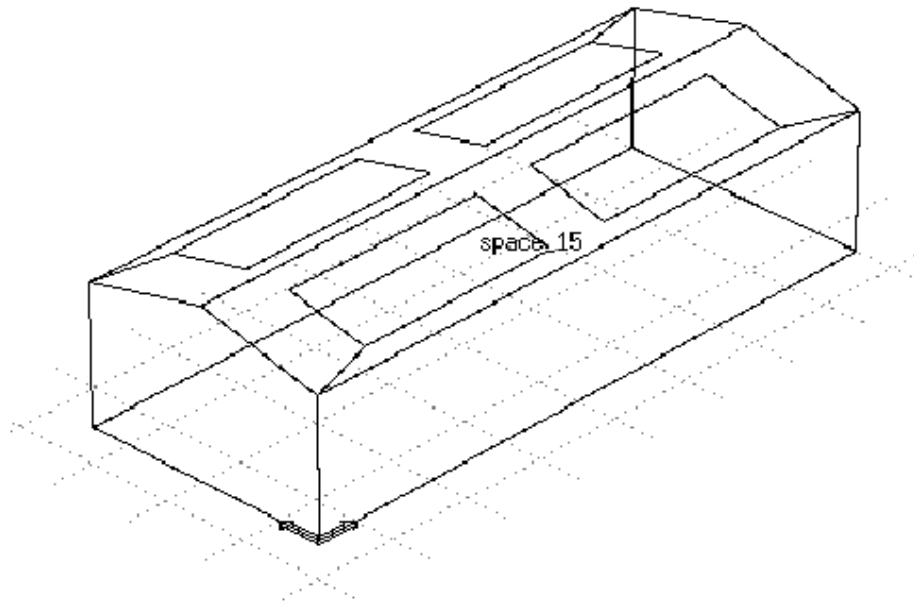


Figure 2: Shed roof with 15 degrees slope

Project: space 15x6x3,6

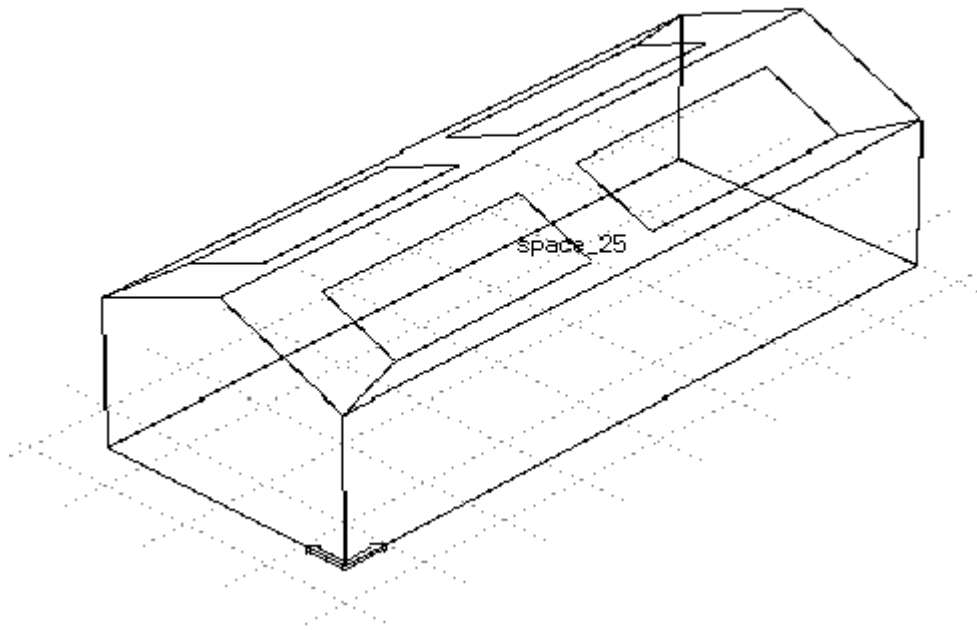


Figure 3: Shed roof with 25 degrees slope

Flat roof:

Project: space 15x6x3,6 flat roof 2 windows 20x2

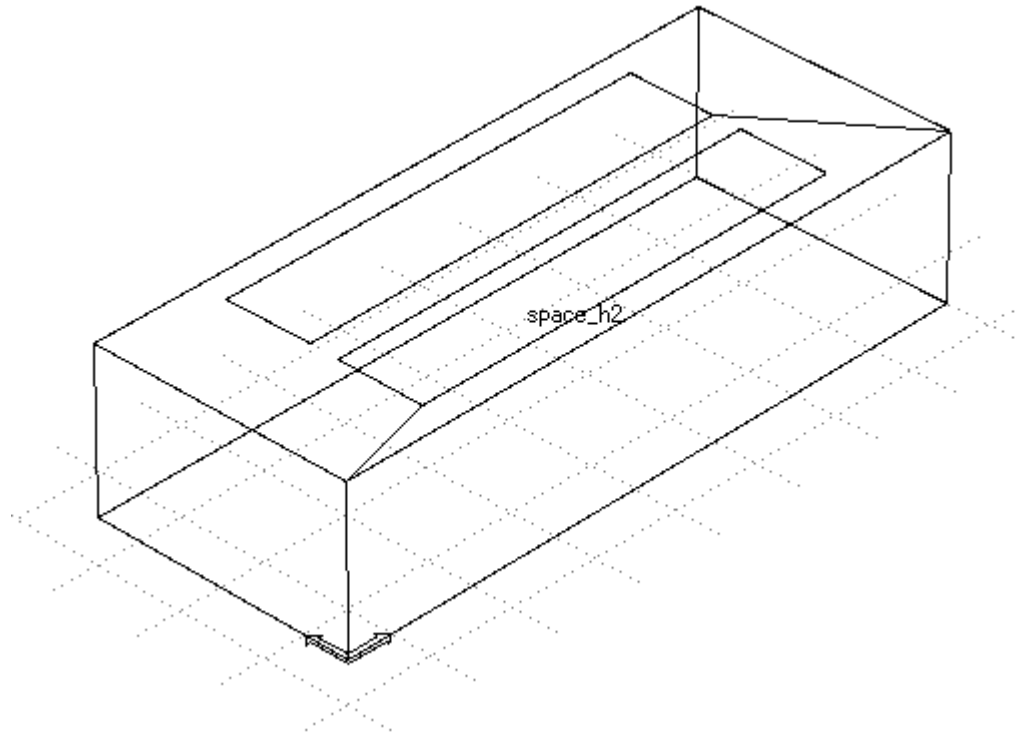


Figure 4: Flat roof with two horizontal windows

Project: space 15x6x3,6 four windows 2x5 horizontal arrangement

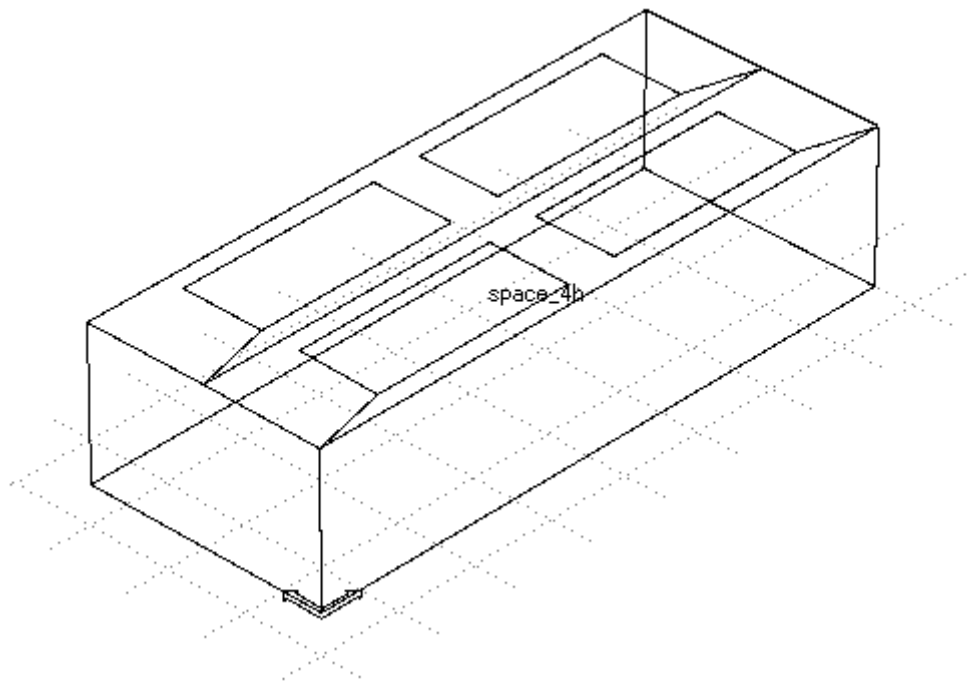


Figure 5: Flat roof with four horizontal windows

Project: 8 horizontal windows 3x1,6667

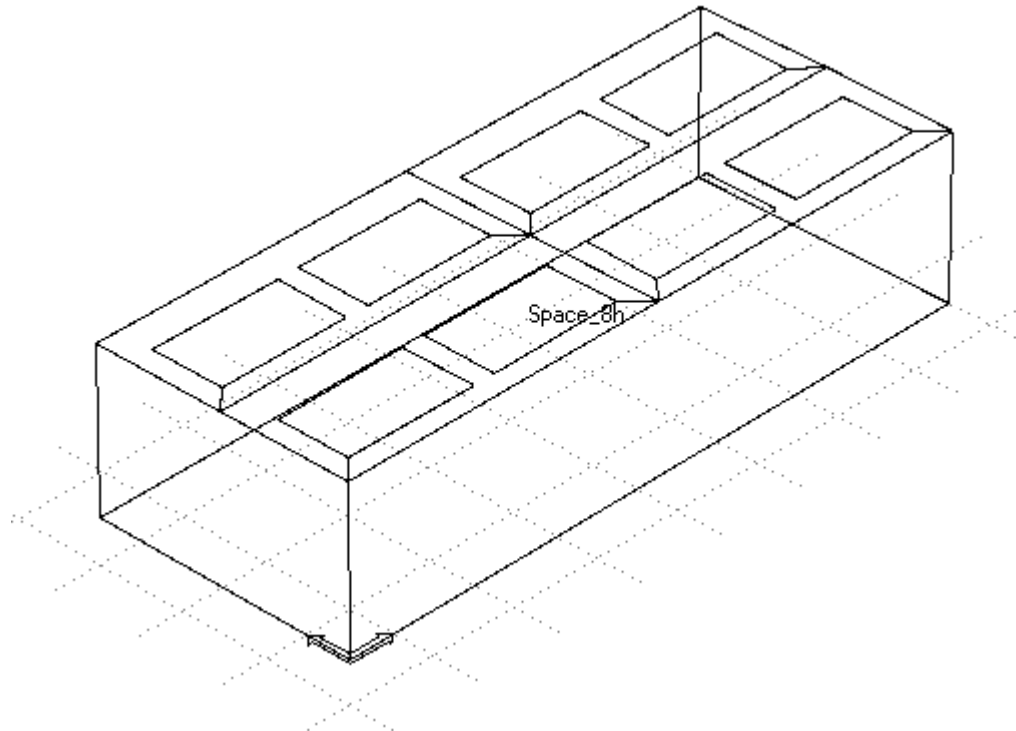


Figure 6: Flat roof with eight horizontal windows

Project: 16 horizontal windows 2,5x1

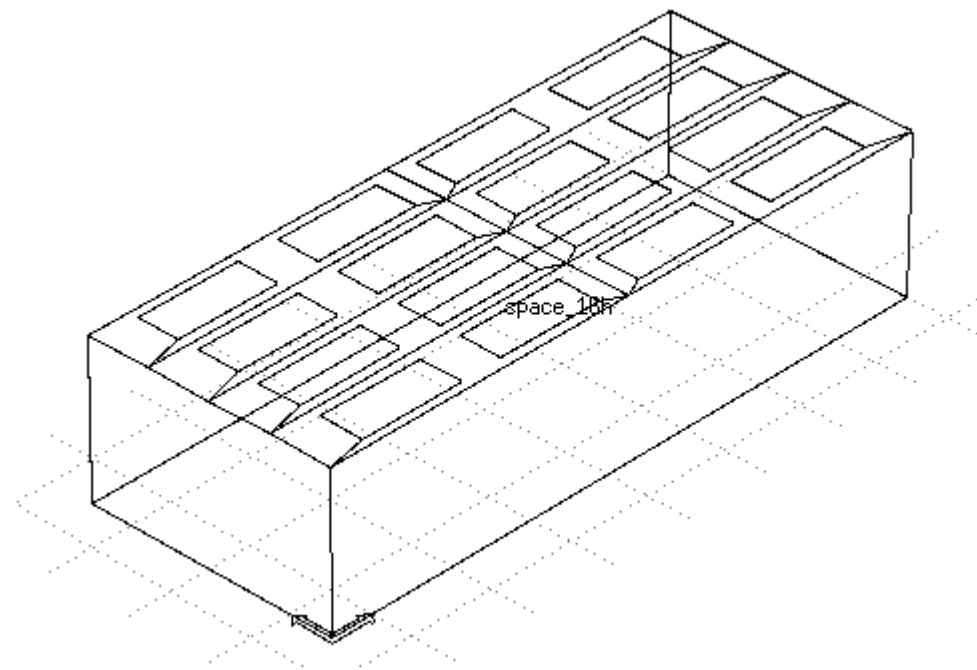


Figure 7: Flat roof with sixteen horizontal windows

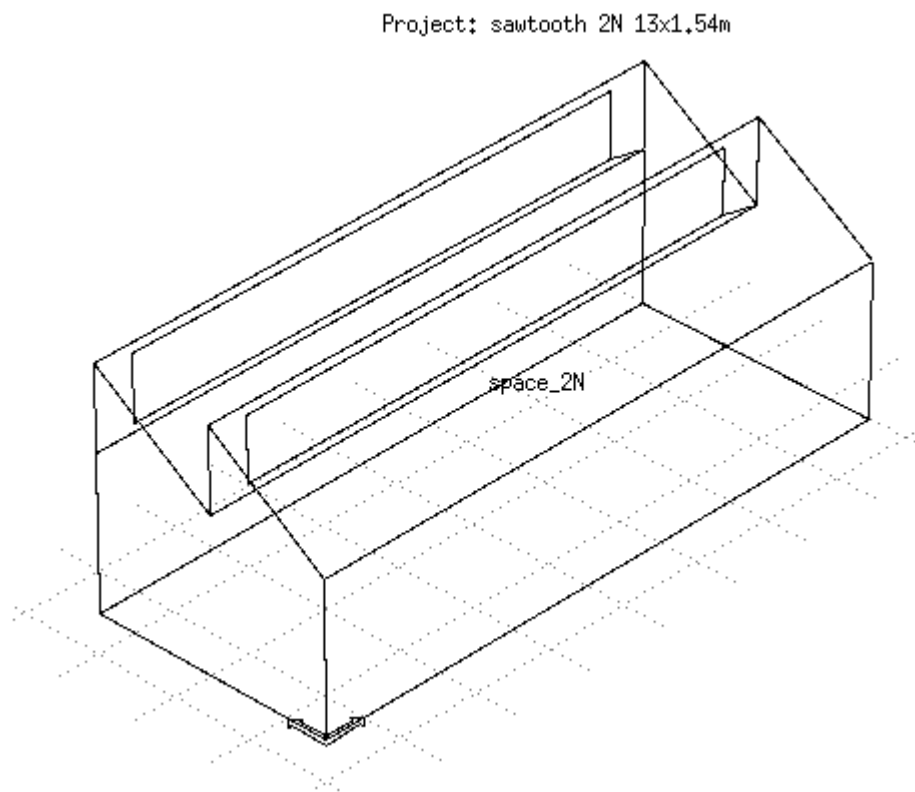
Sawtooth Roof:

Figure 8: Sawtooth roof with two horizontal windows facing North and roof slope 45 degrees

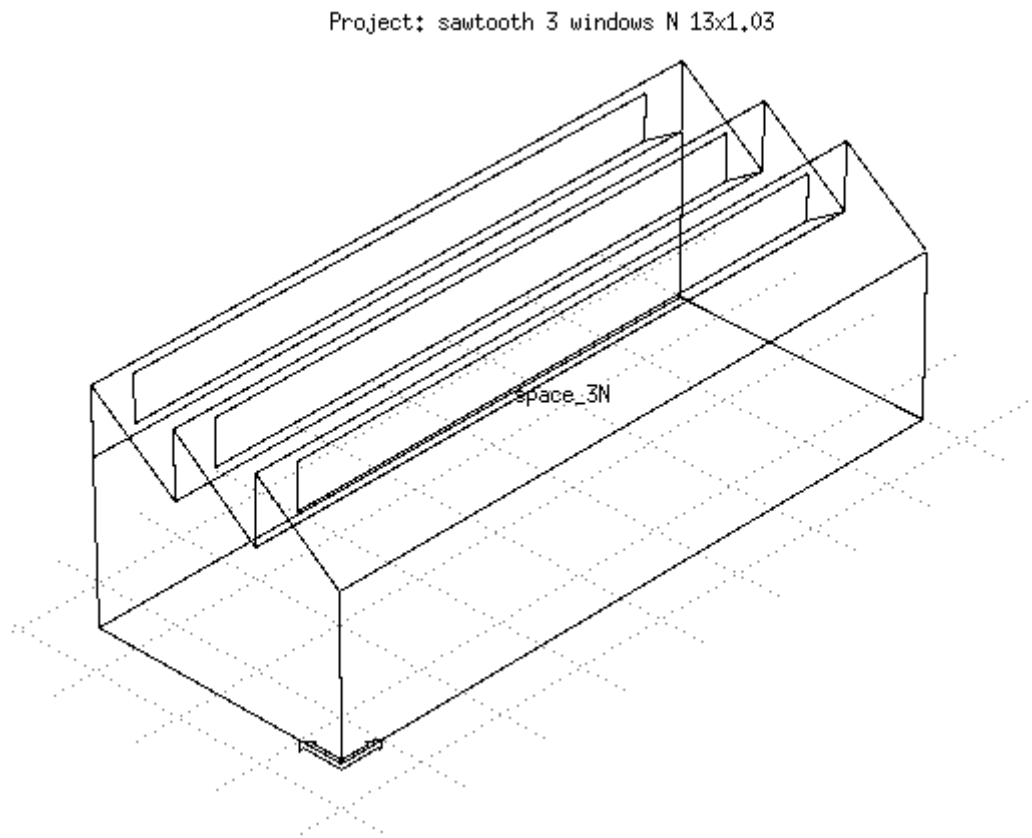


Figure 9: Sawtooth roof with three horizontal windows facing North and roof slope 45 degrees

Monitor Roof:

Project: monitor 2V

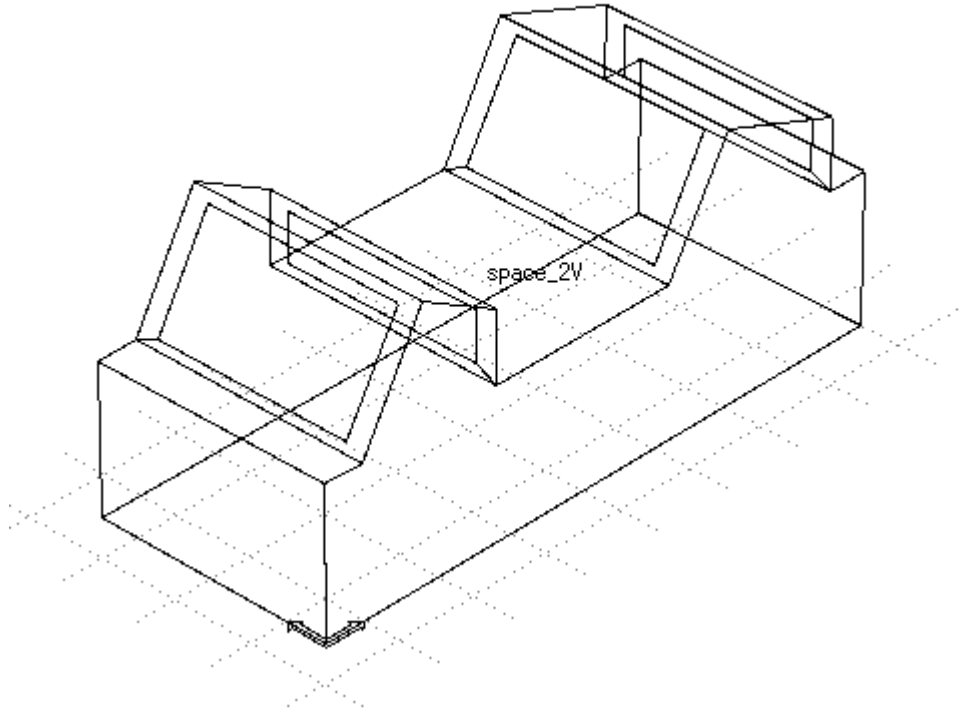


Figure 10: Monitor roof with two vertical windows facing East and West respectively

Appendix-3: General Daylight Factor (GDF) Graphs

The graphs that are presented in the present Appendix show the variation of the general daylight factor along the middle points of the space under overcast CIE sky and Intermediate sky day throughout a year at 09:00, 13:00 and 17:00.

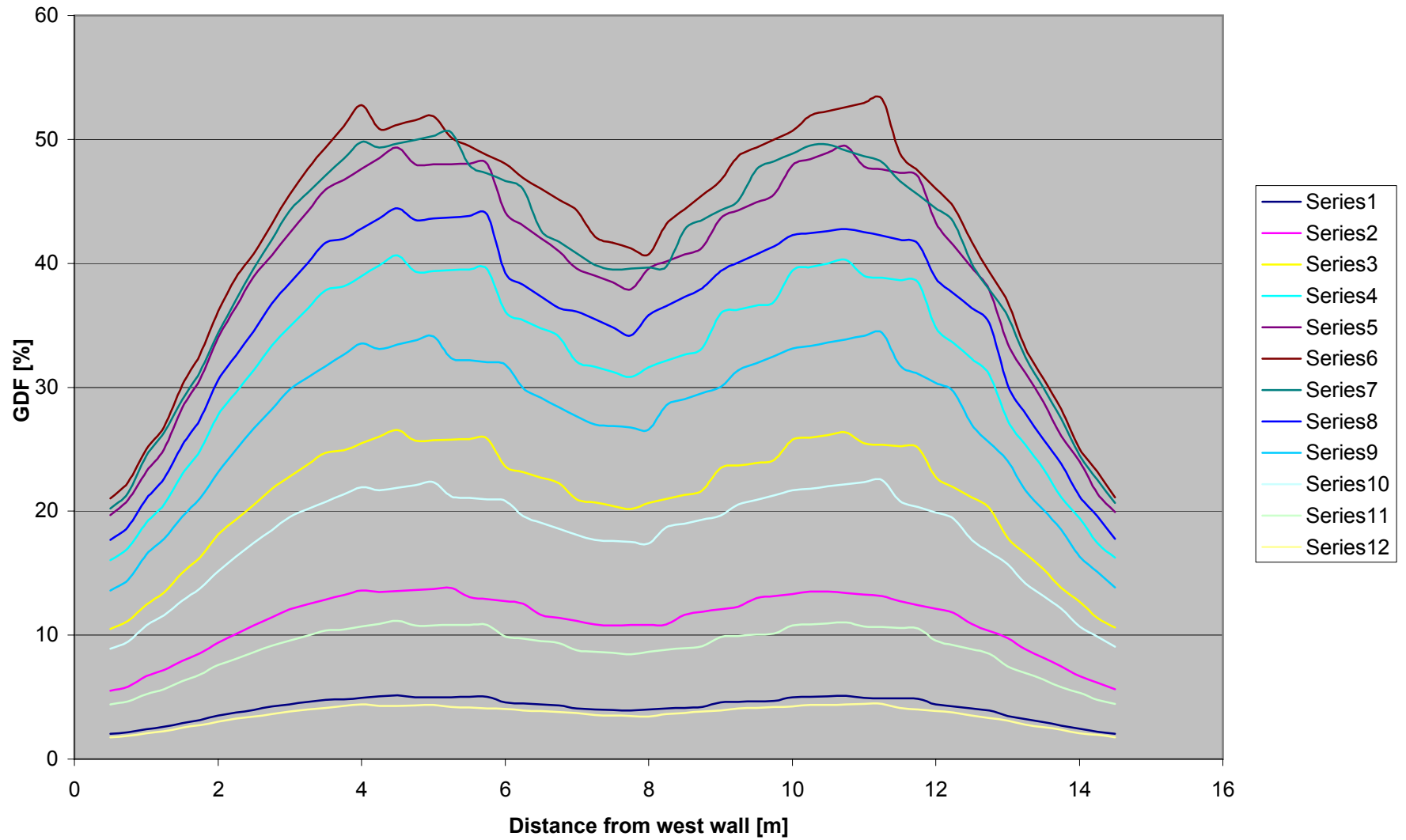
The abbreviations shed5 09_cDF and shed5 09_iDF refer to shed roof with 5 degrees slope at 09:00 under overcast and intermediate sky condition respectively. The series one to twelve represent months of the year.

The abbreviations flat2h 09_cDF and flat2h 09_iDF refer to flat roof with two horizontal windows at 09:00 under overcast and intermediate sky condition respectively. The series one to twelve represent months of the year.

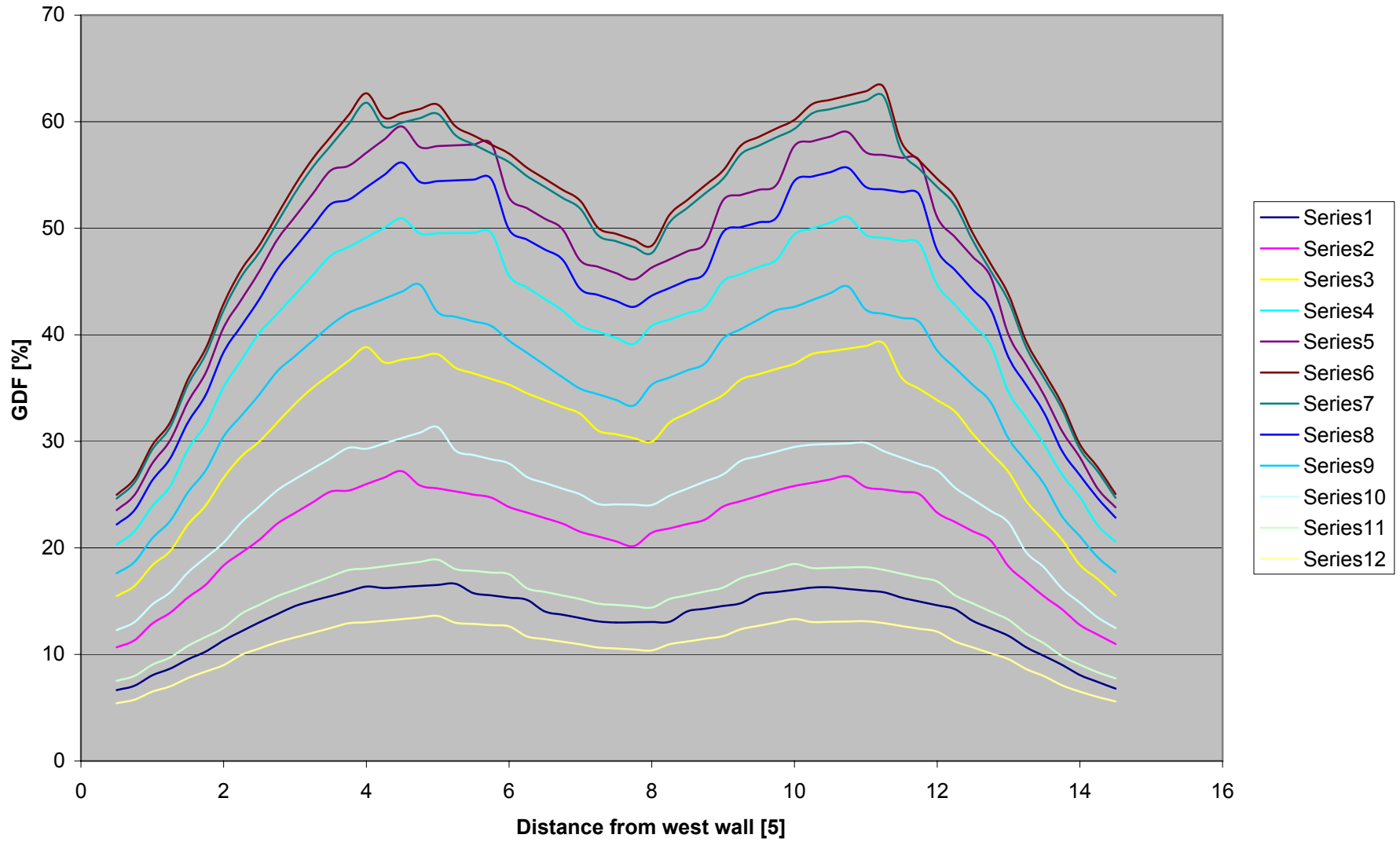
The abbreviations Saw3N 09_cDF and Saw3N 09_iDF refer to sawtooth roof with two 'saws' that faces north at 09:00 under overcast and intermediate sky condition respectively. The series one to twelve represent months of the year.

Finally the abbreviations Monitor 09_cDF and Monitor 09_iDF refer to monitor roof at 09:00 under overcast and intermediate sky condition respectively. The series one to twelve represent months of the year.

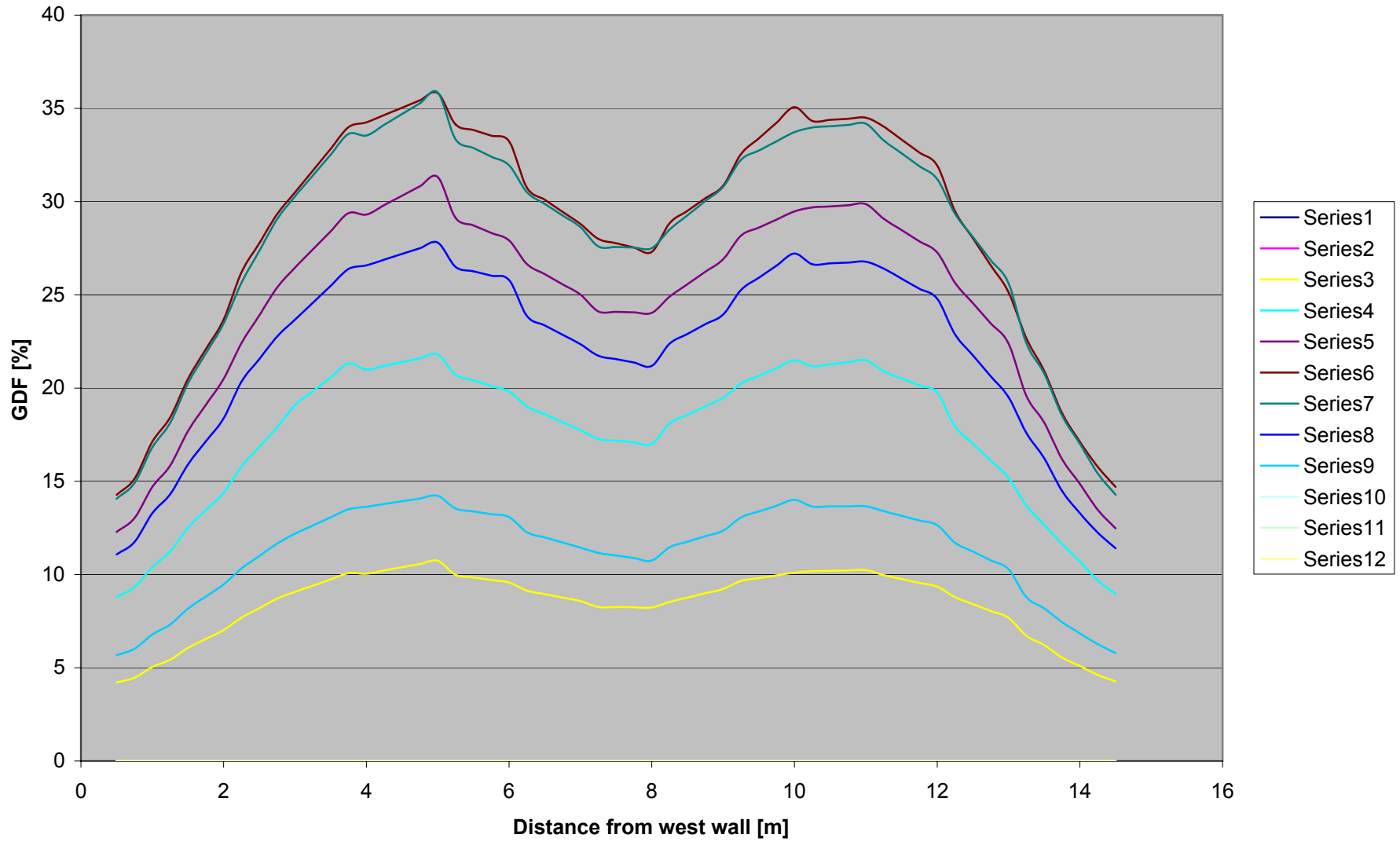
shed5 09_cDF



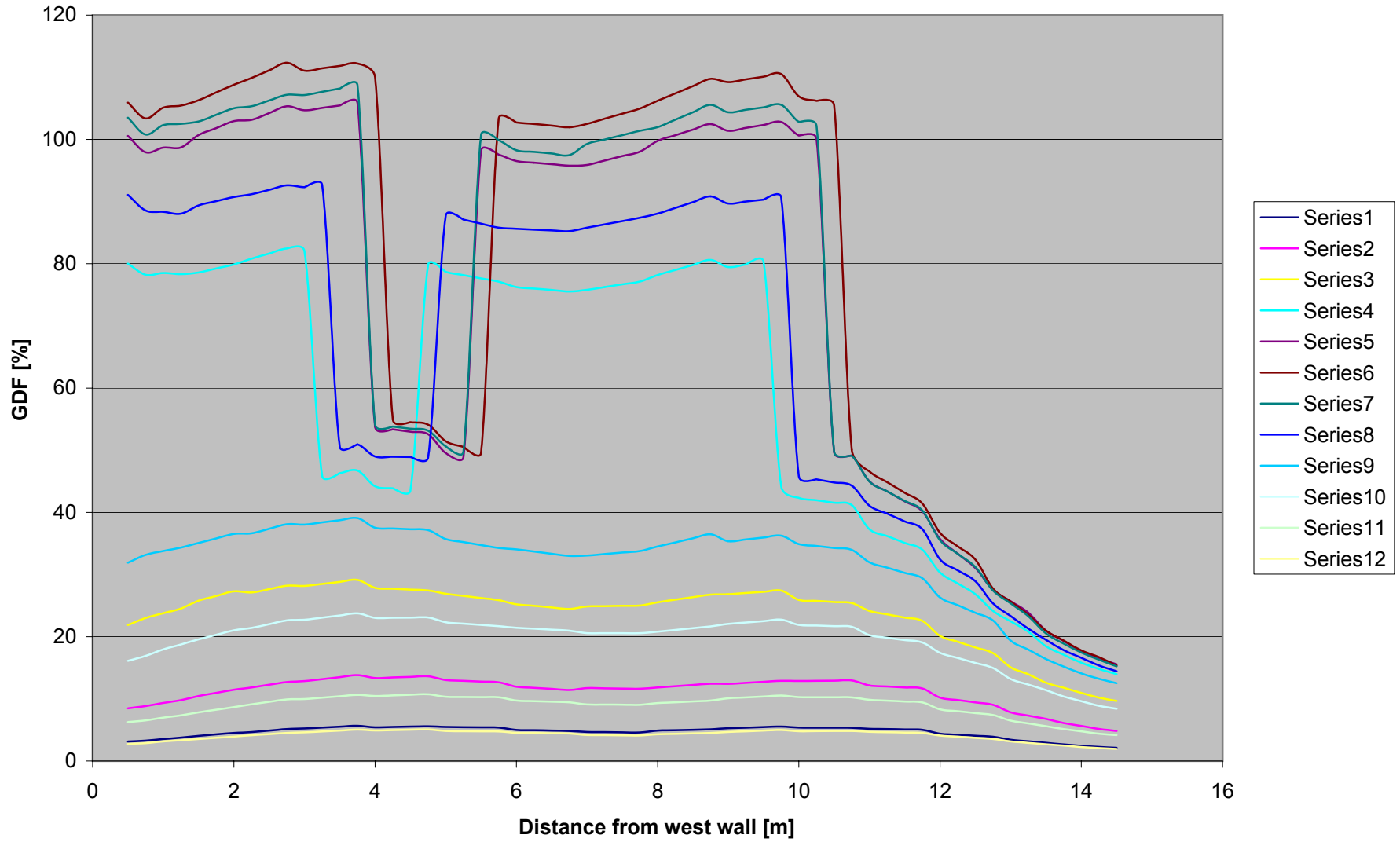
shed5 13_cDF



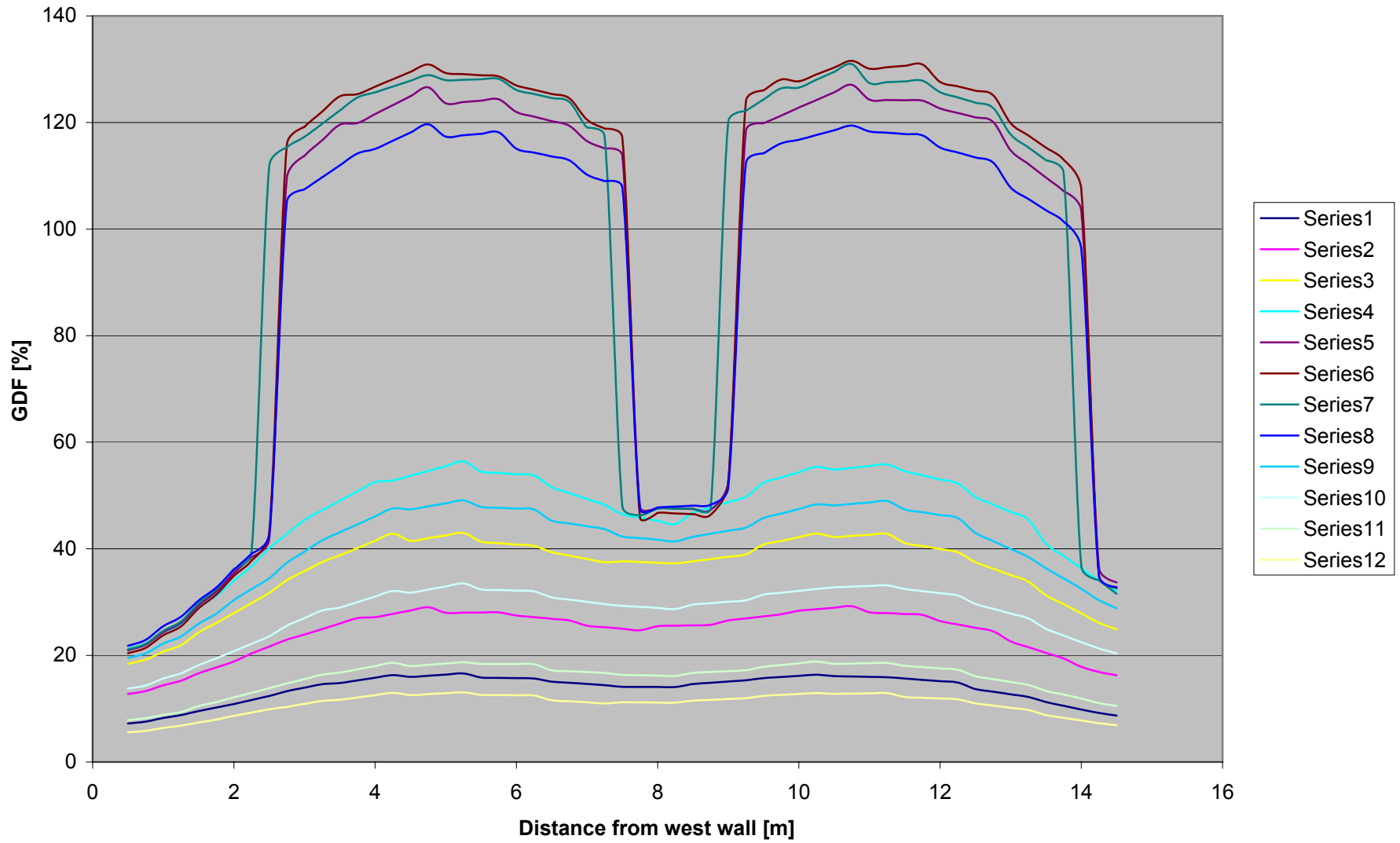
Shed5 17_cDF



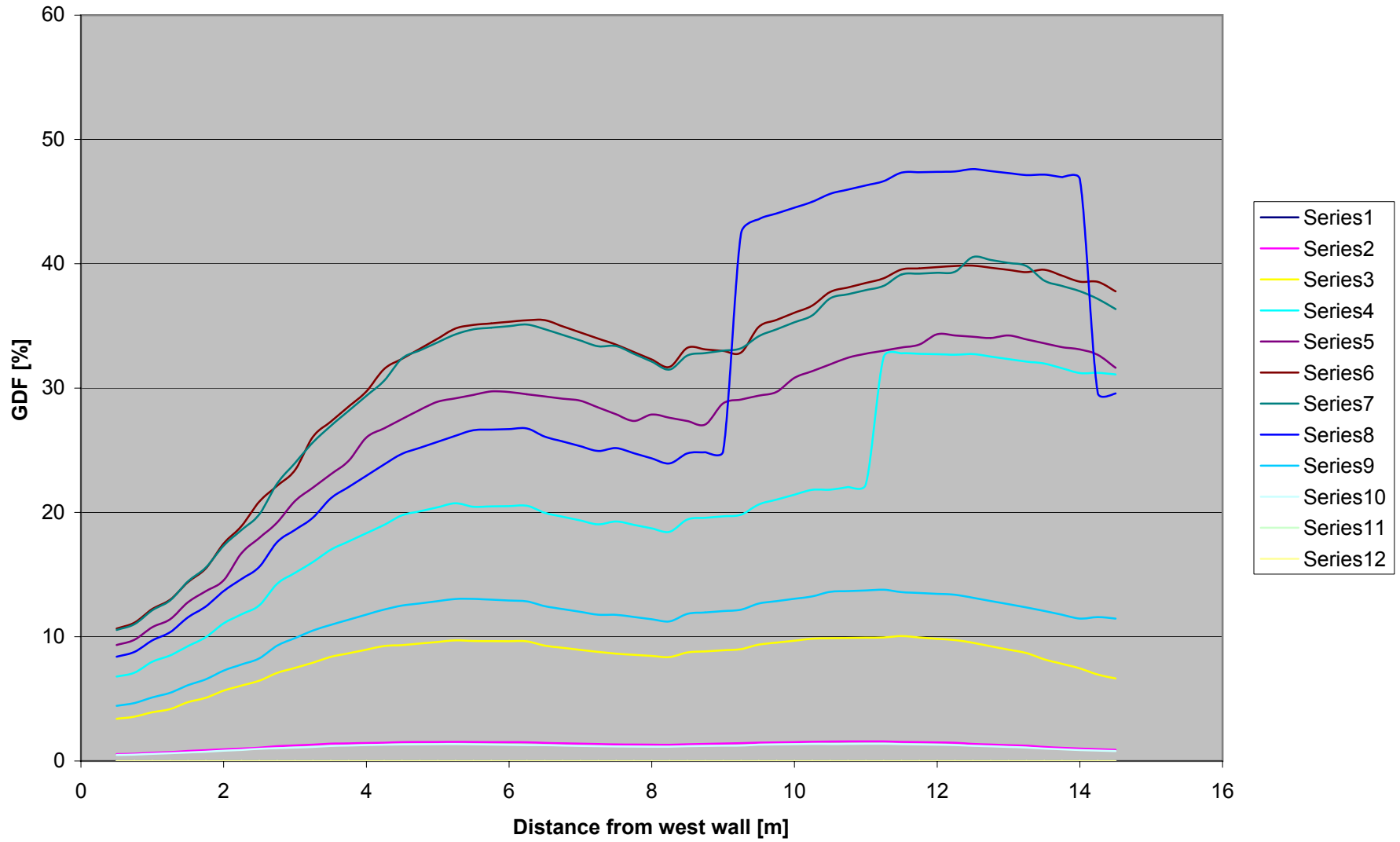
Shed5 09_iDF



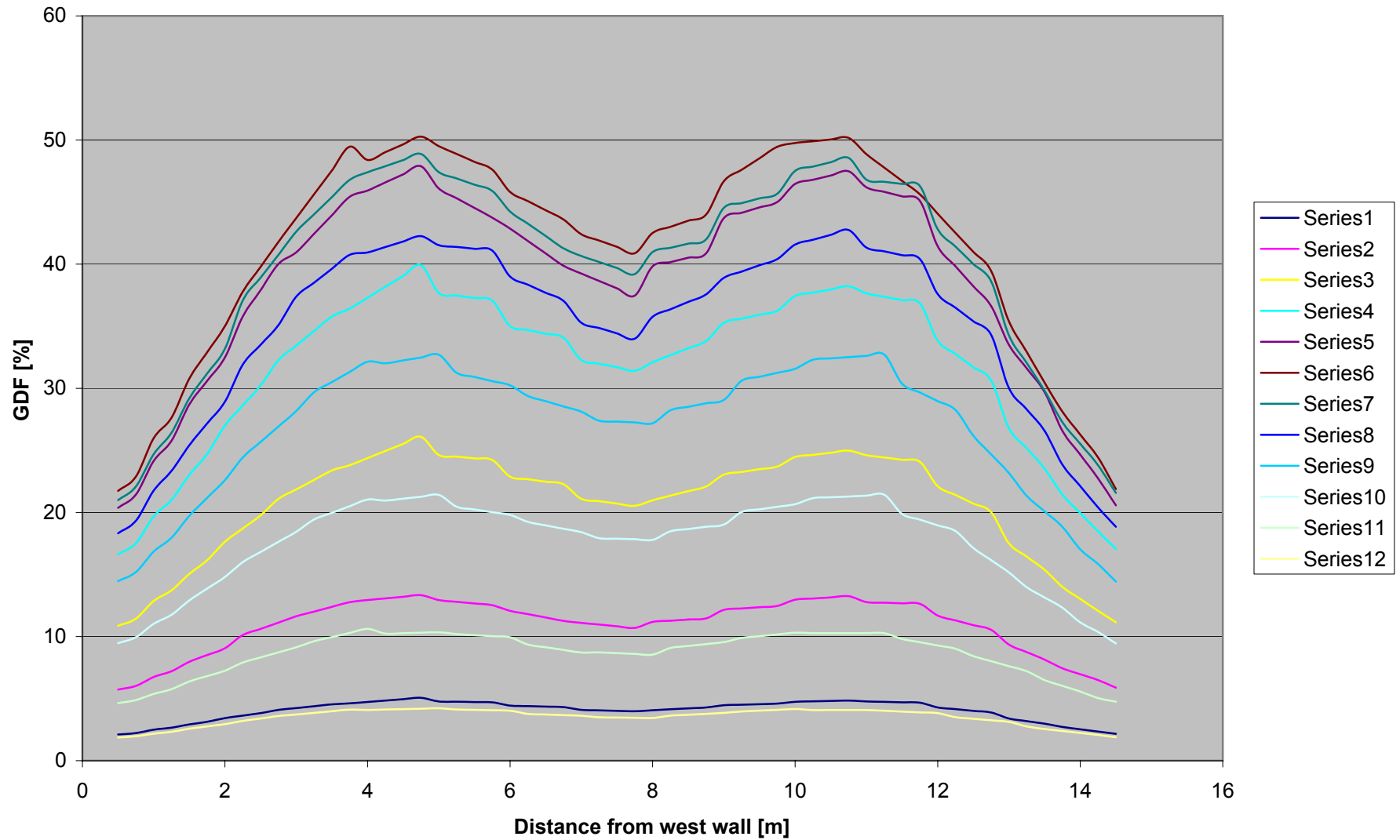
Shed5 13_iDF



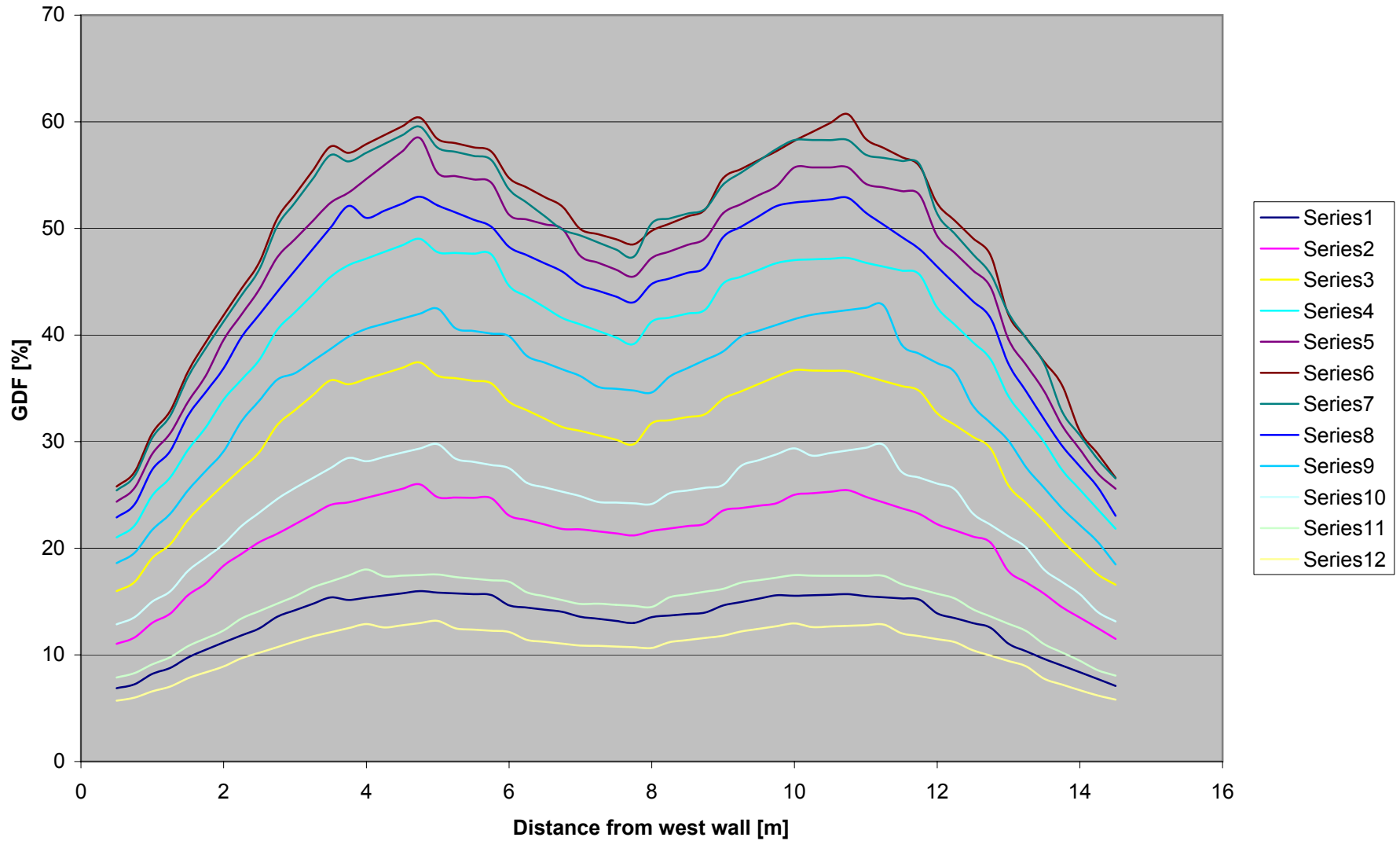
Shed5 17_iDF



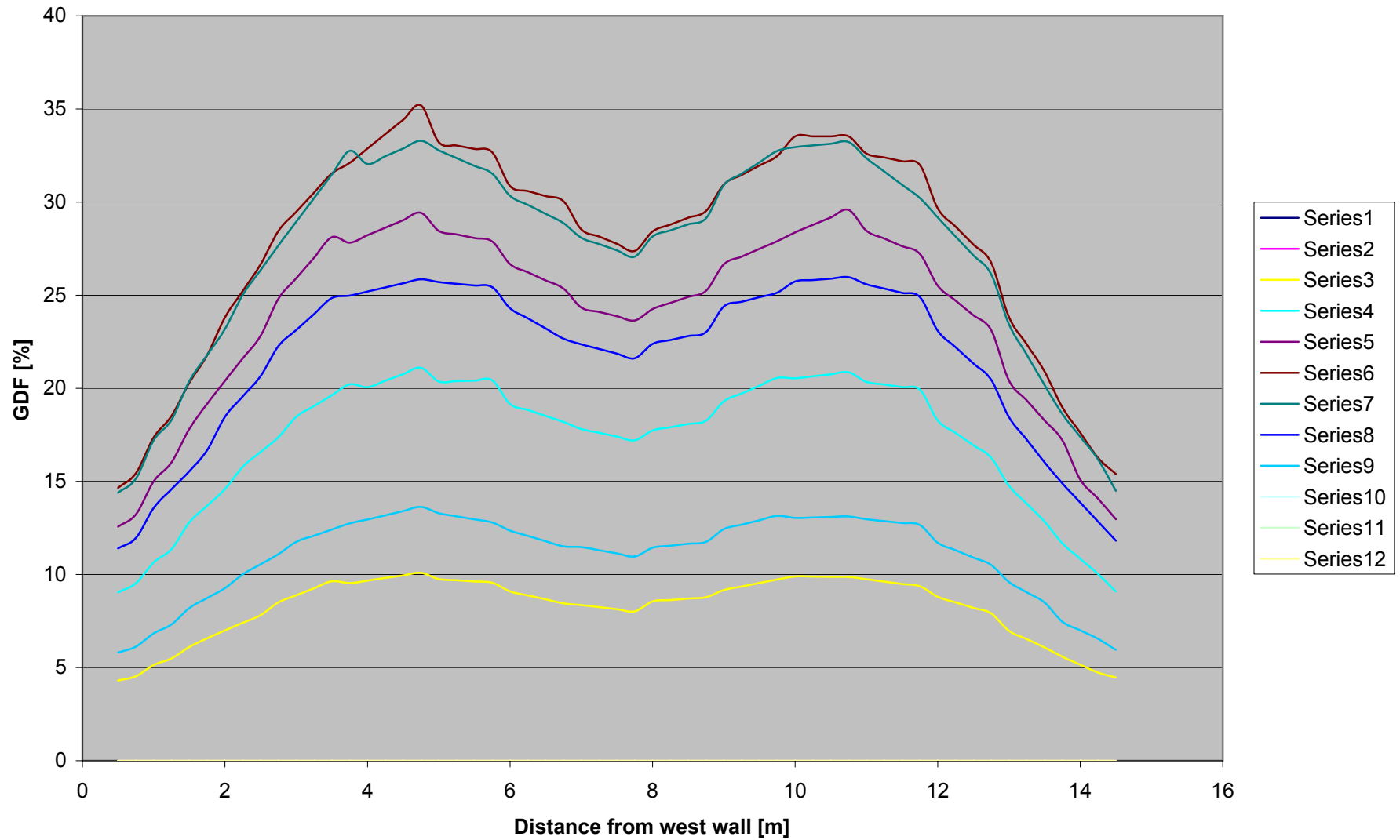
Shed15 09_cDF



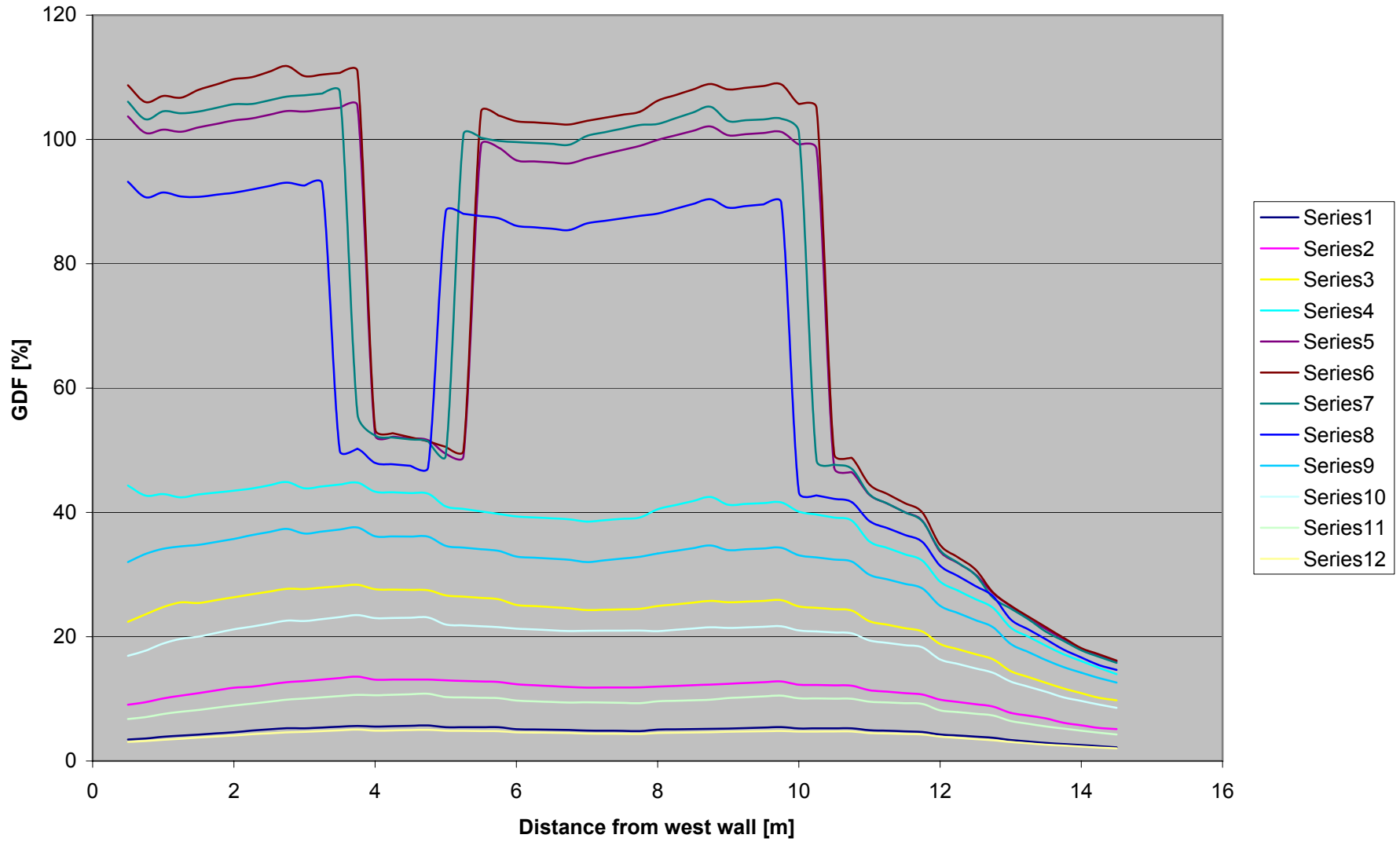
Shed15 13_cDF



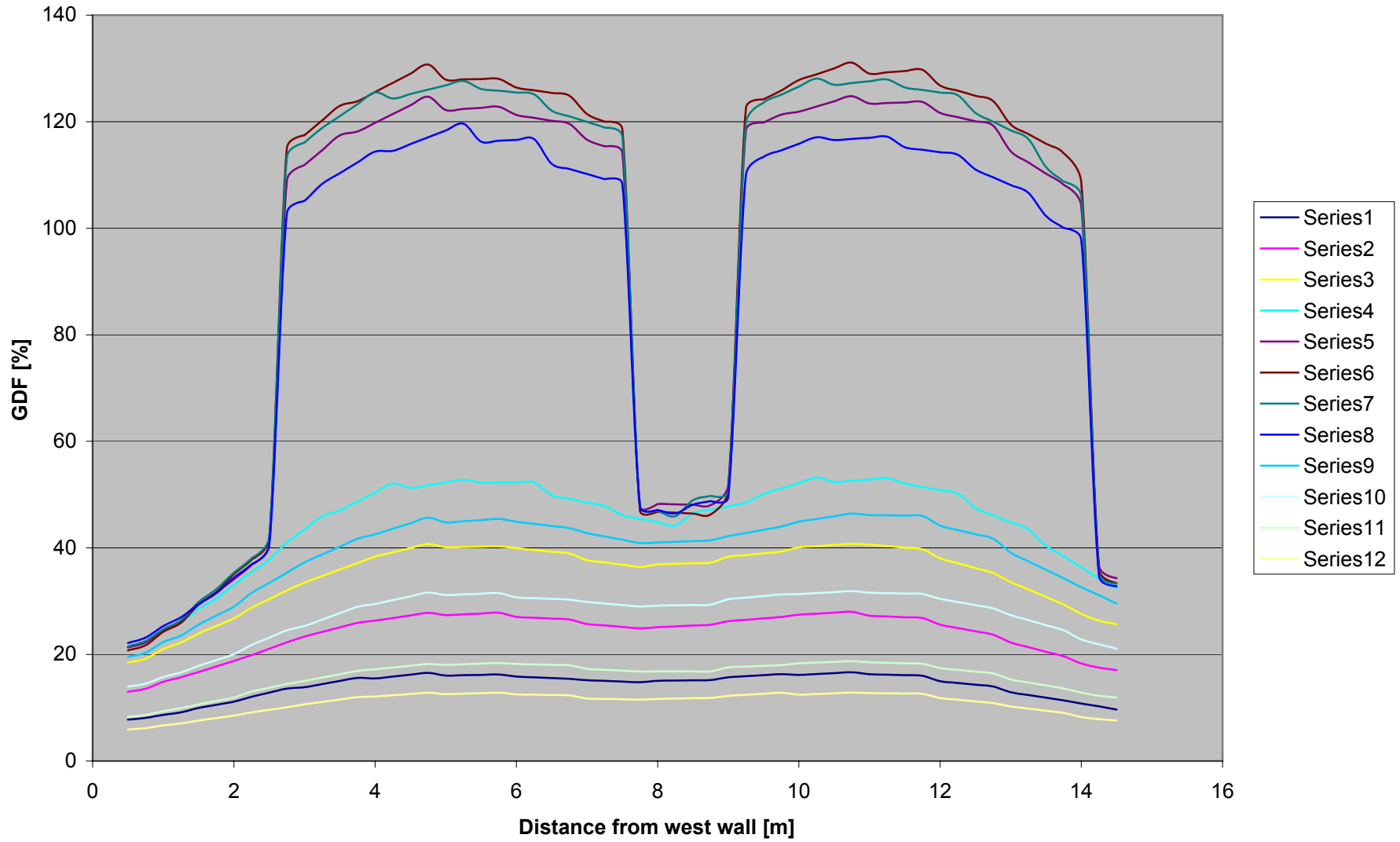
Shed15 17_cDF



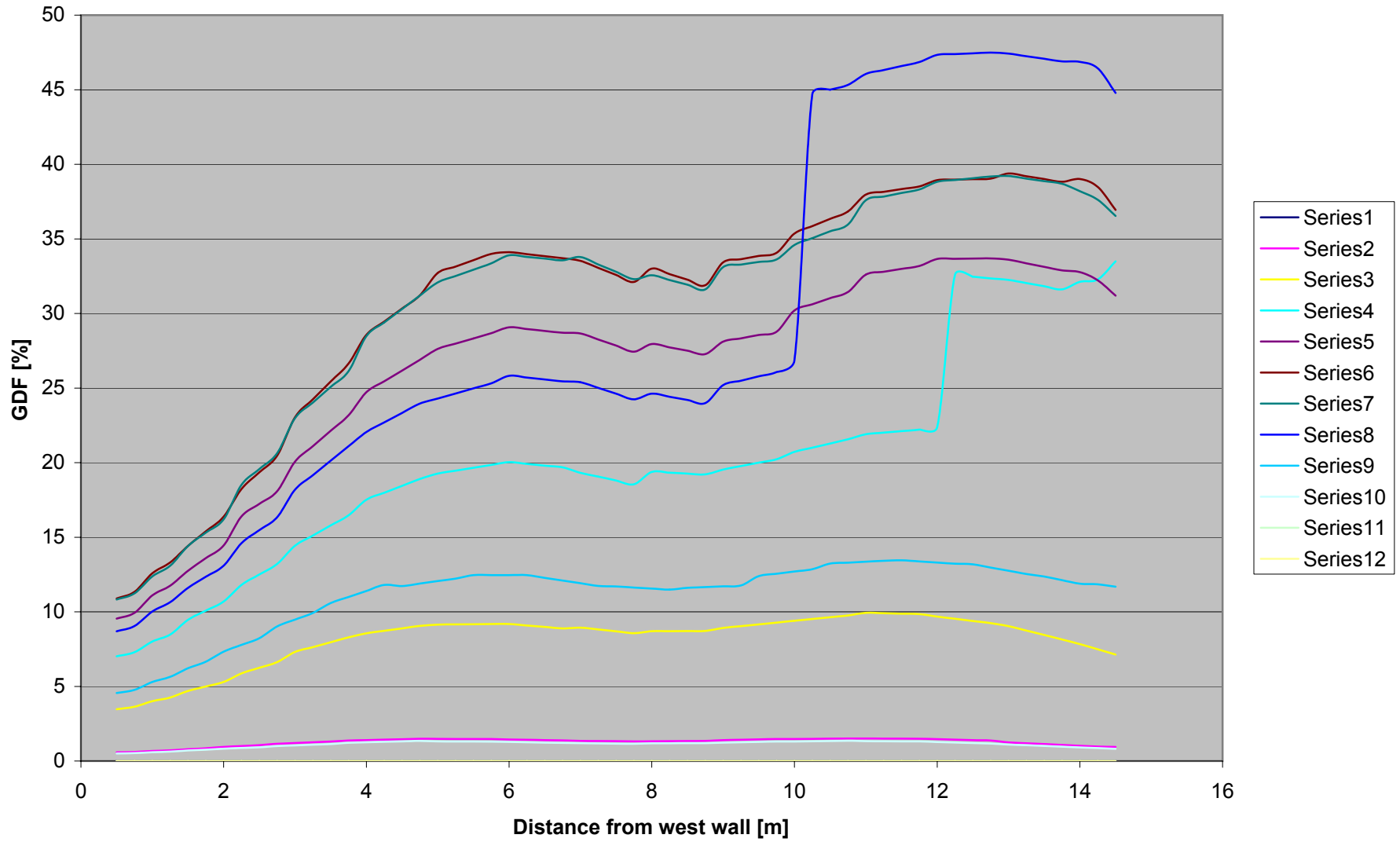
Shed5 09_iDF



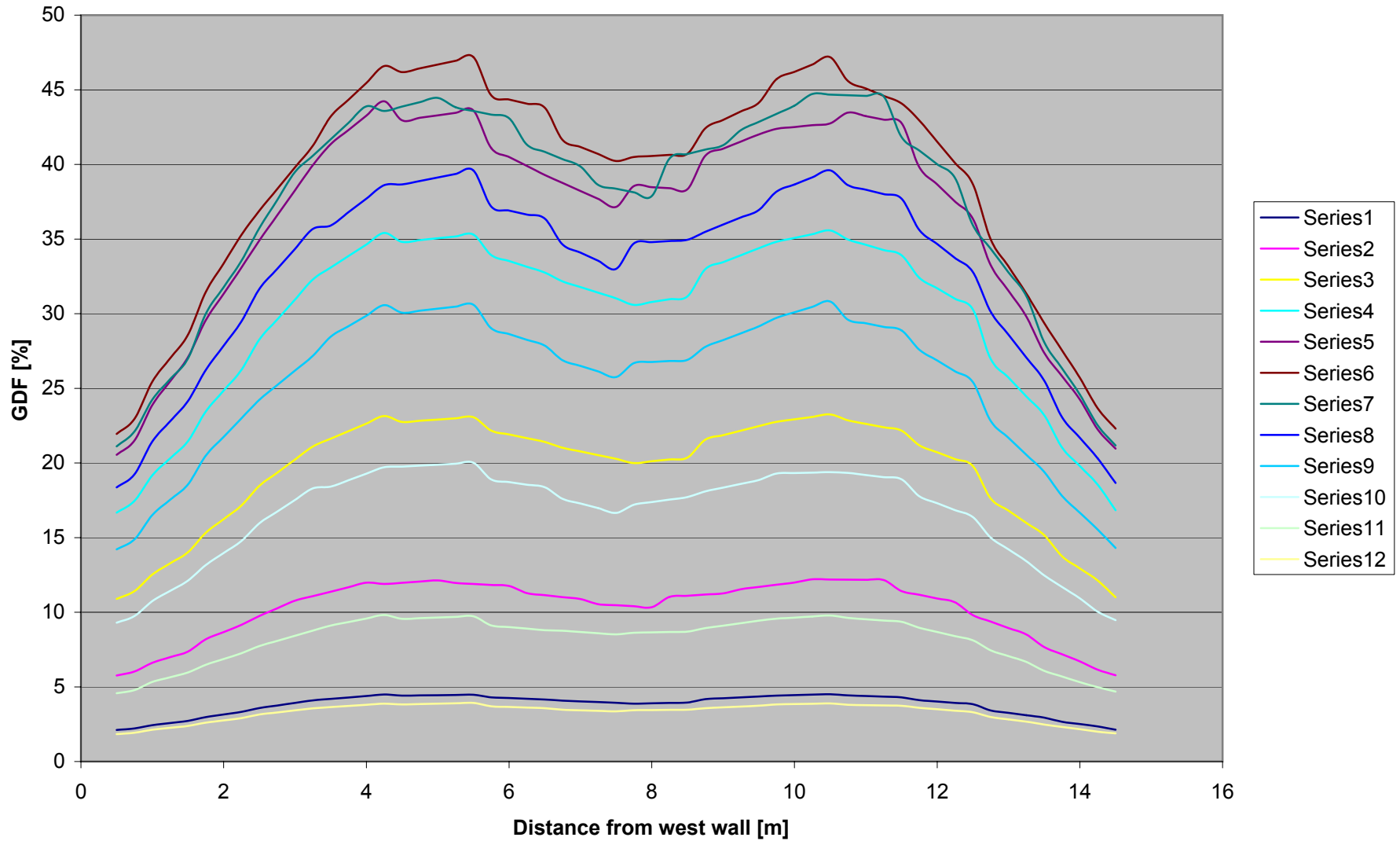
Shed15 13_IDF



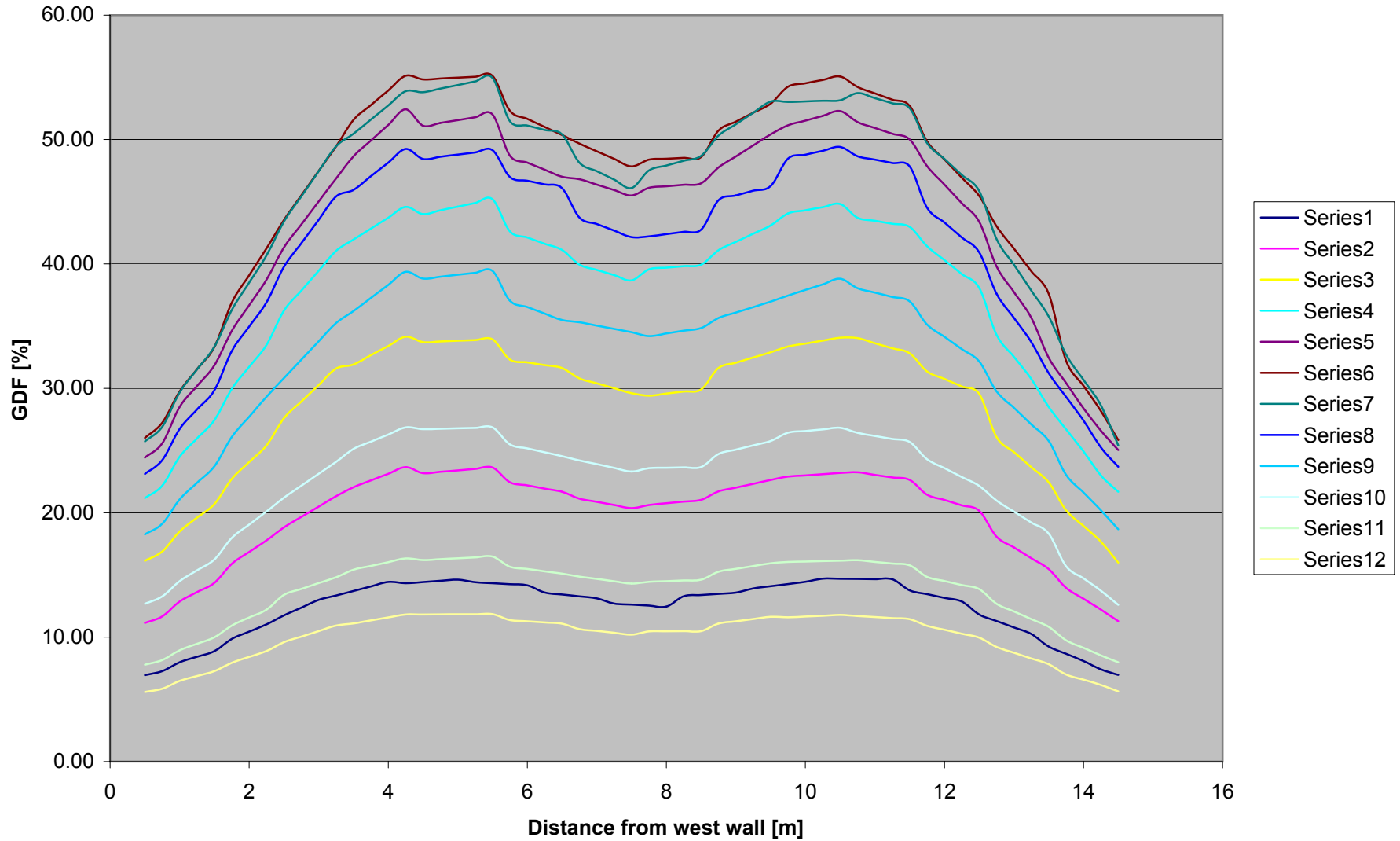
Shed15 17_IDF



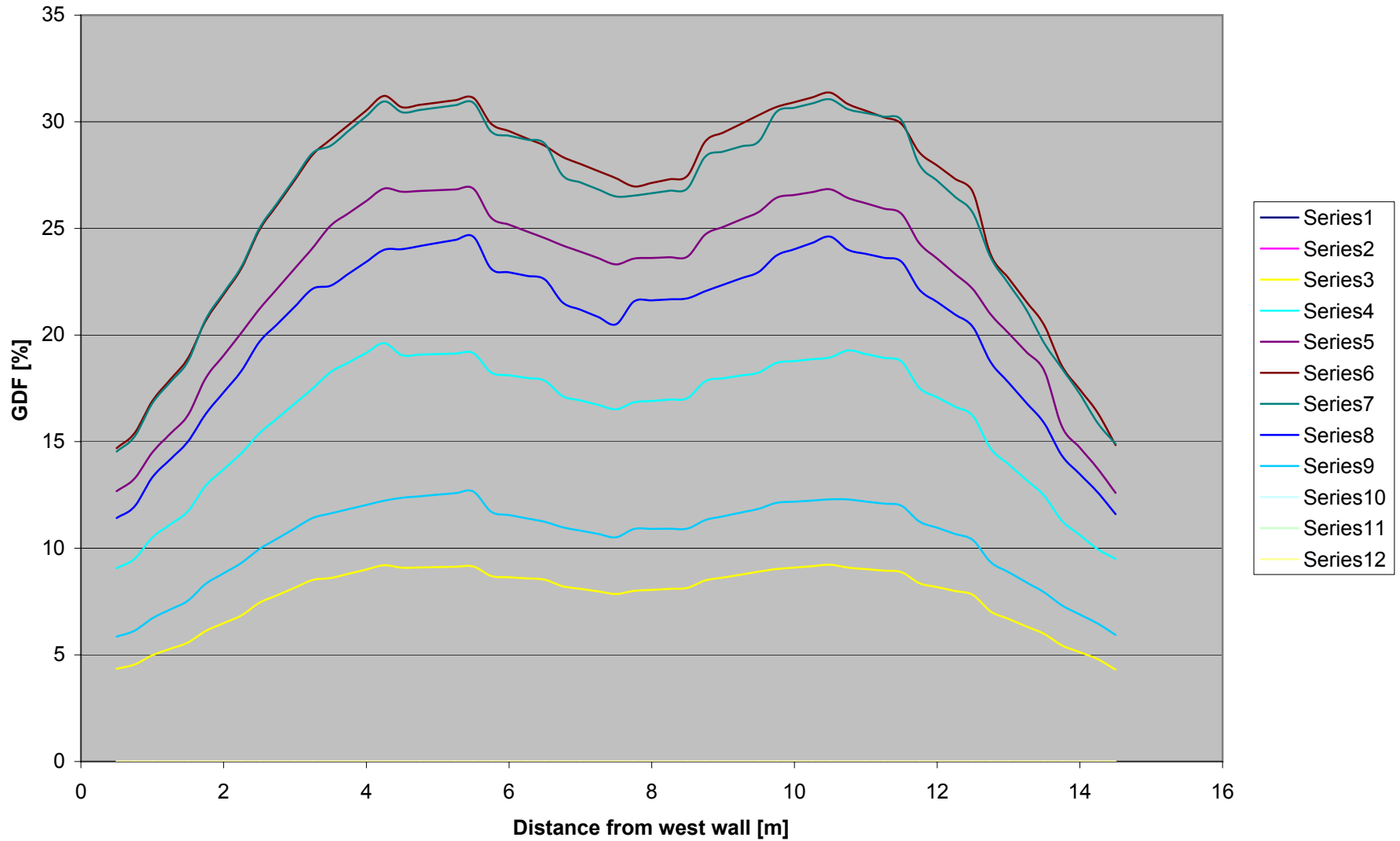
Shed25 09_cDF



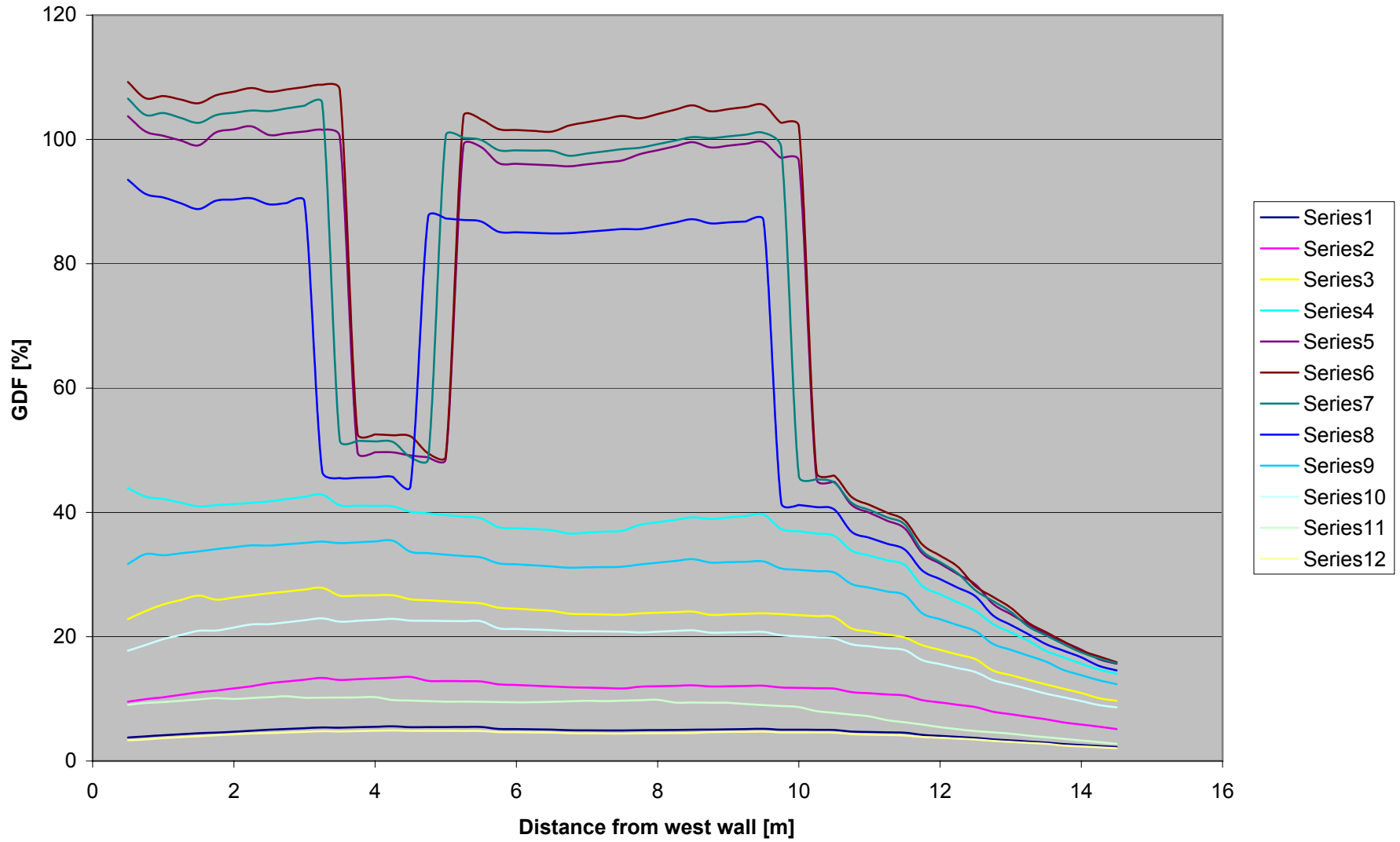
Shed25 13_cDF



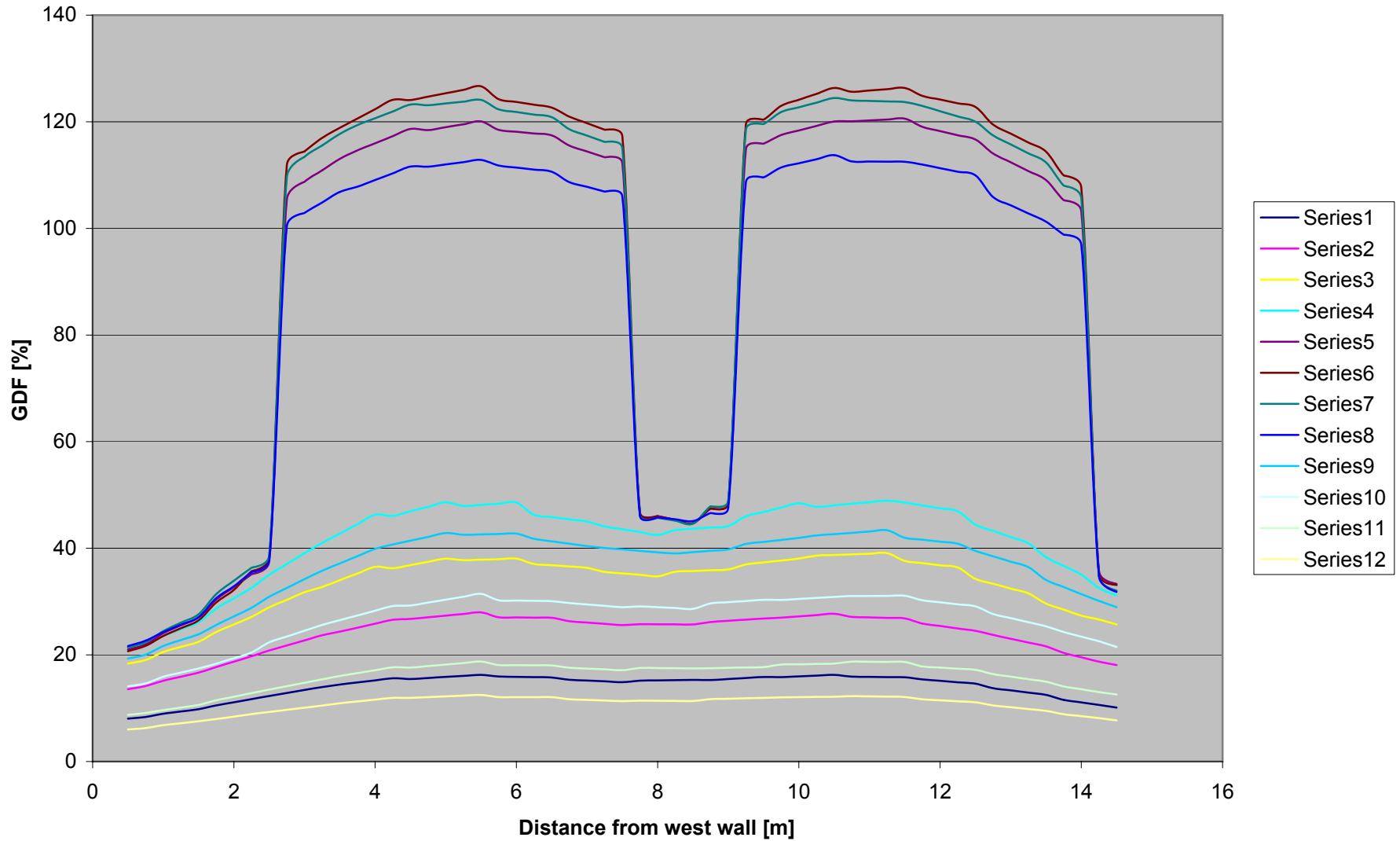
Shed25 17_cDF



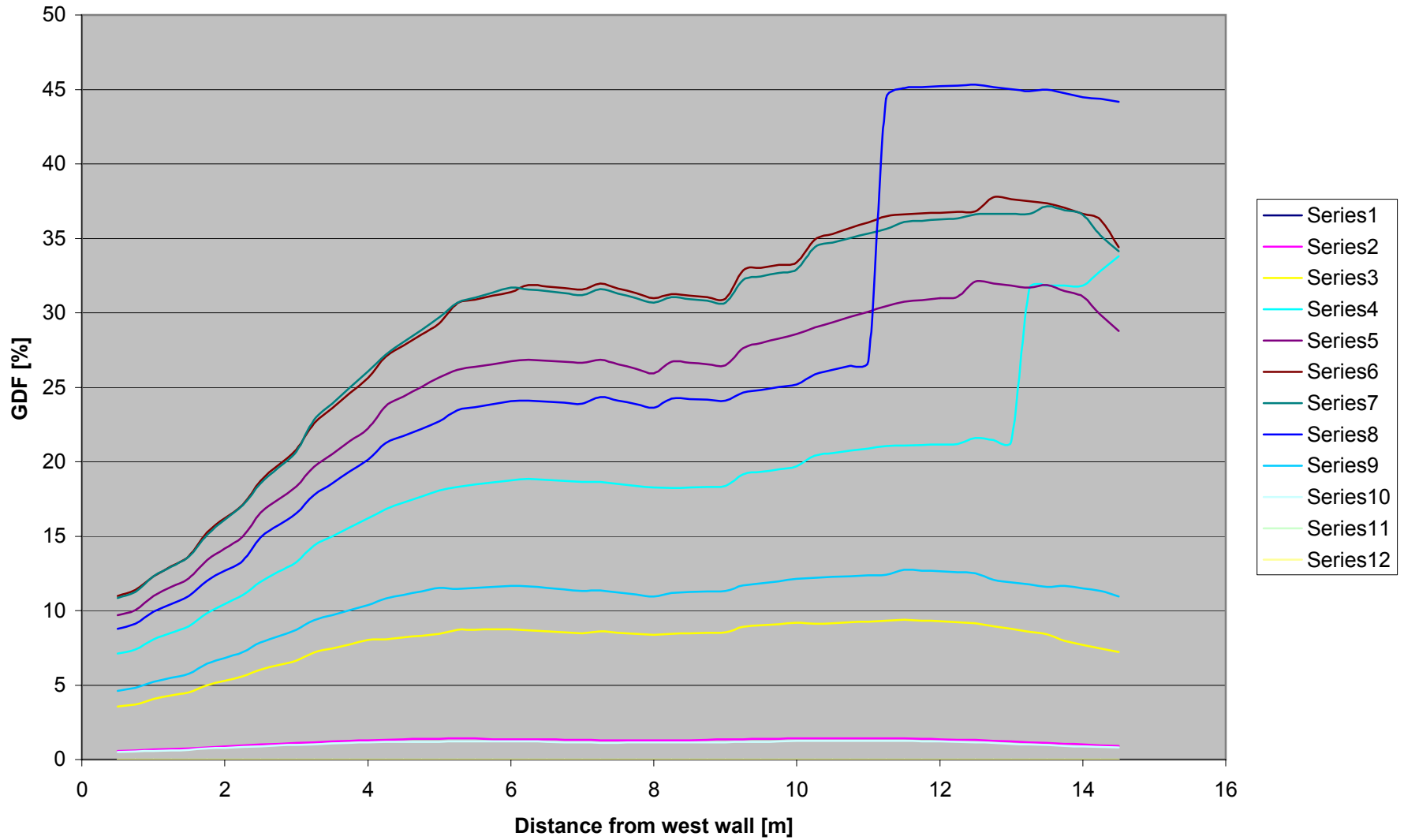
Shed25 09_iDF



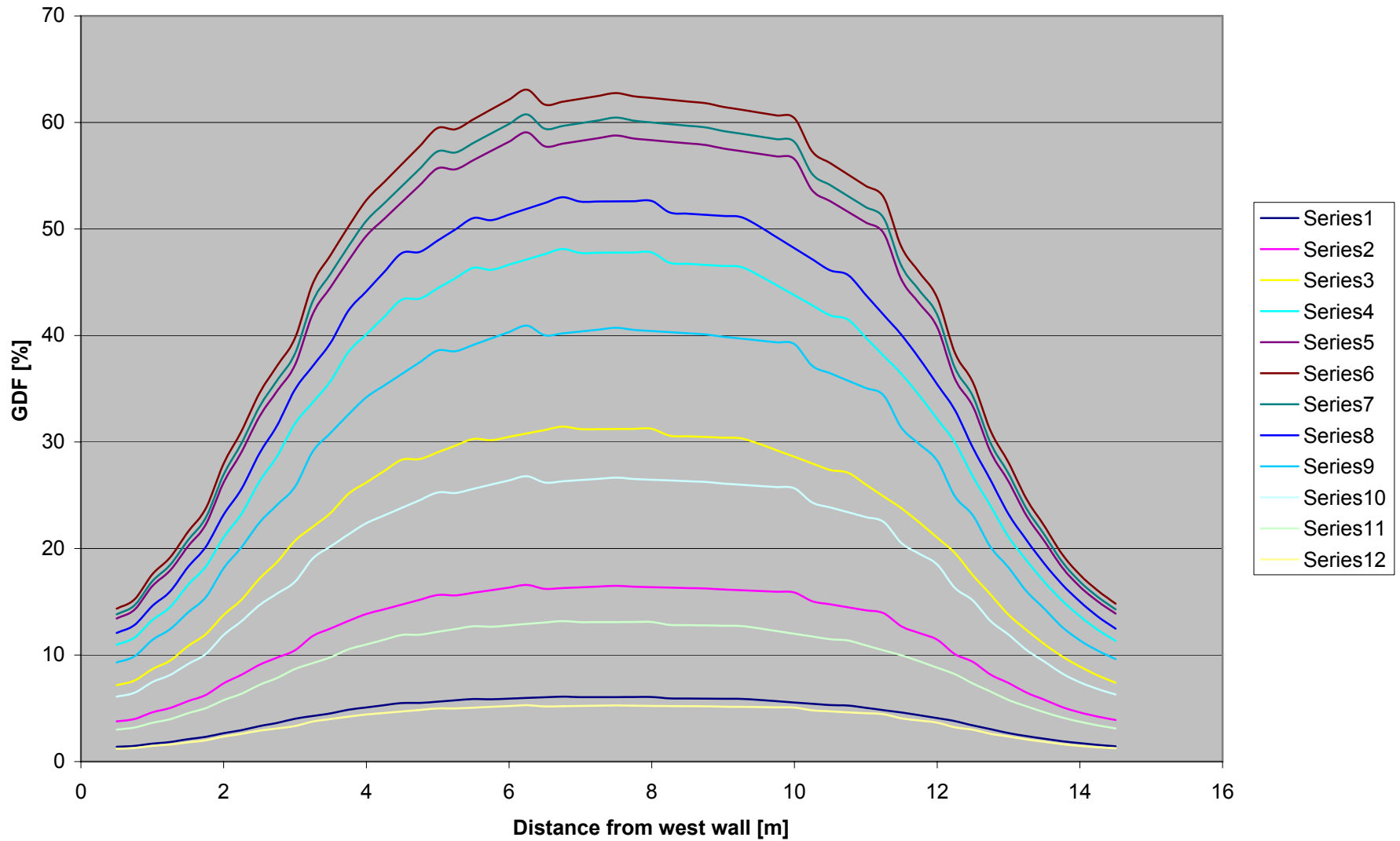
Shed25 13_IDF



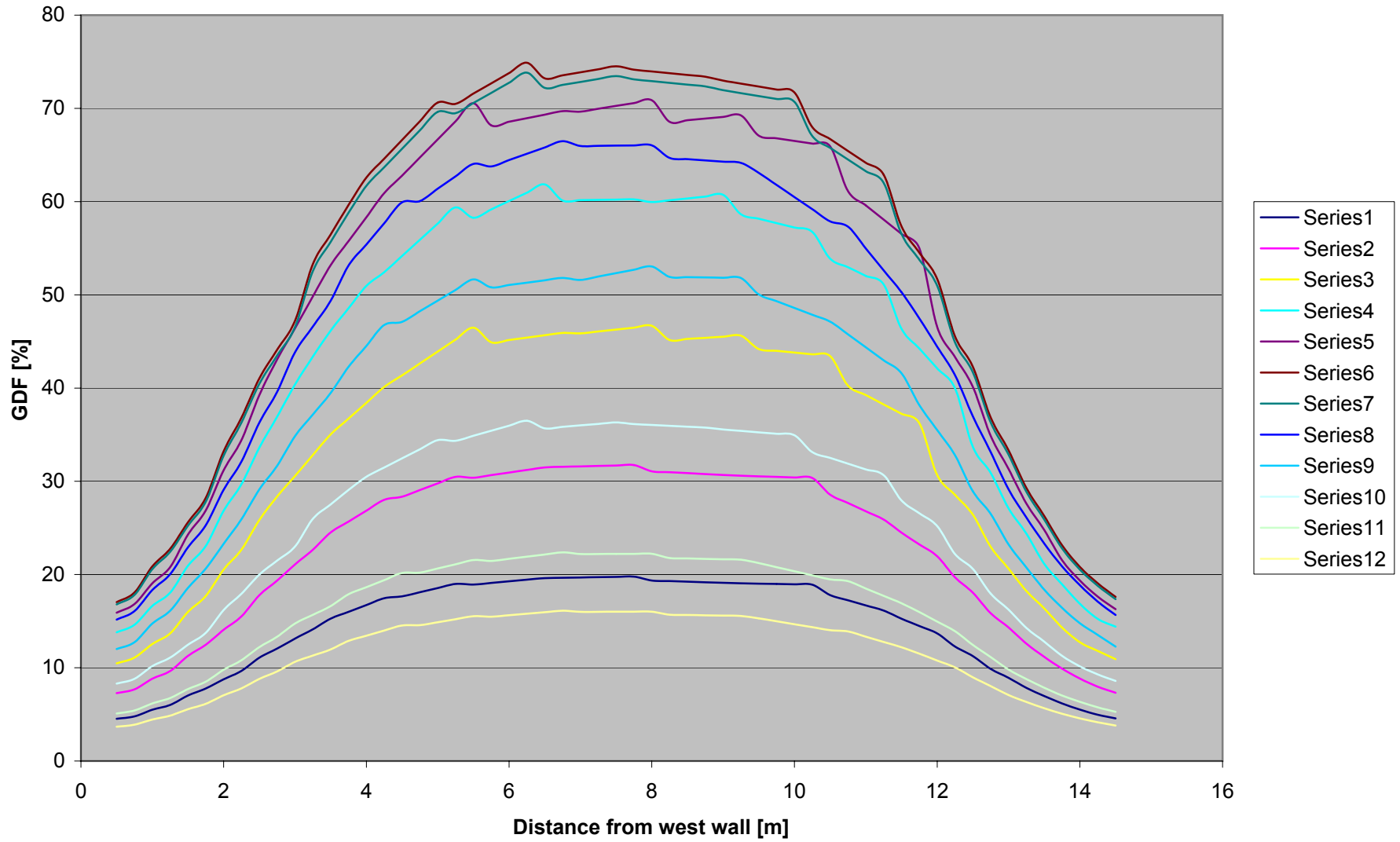
Shed25 17_iDF



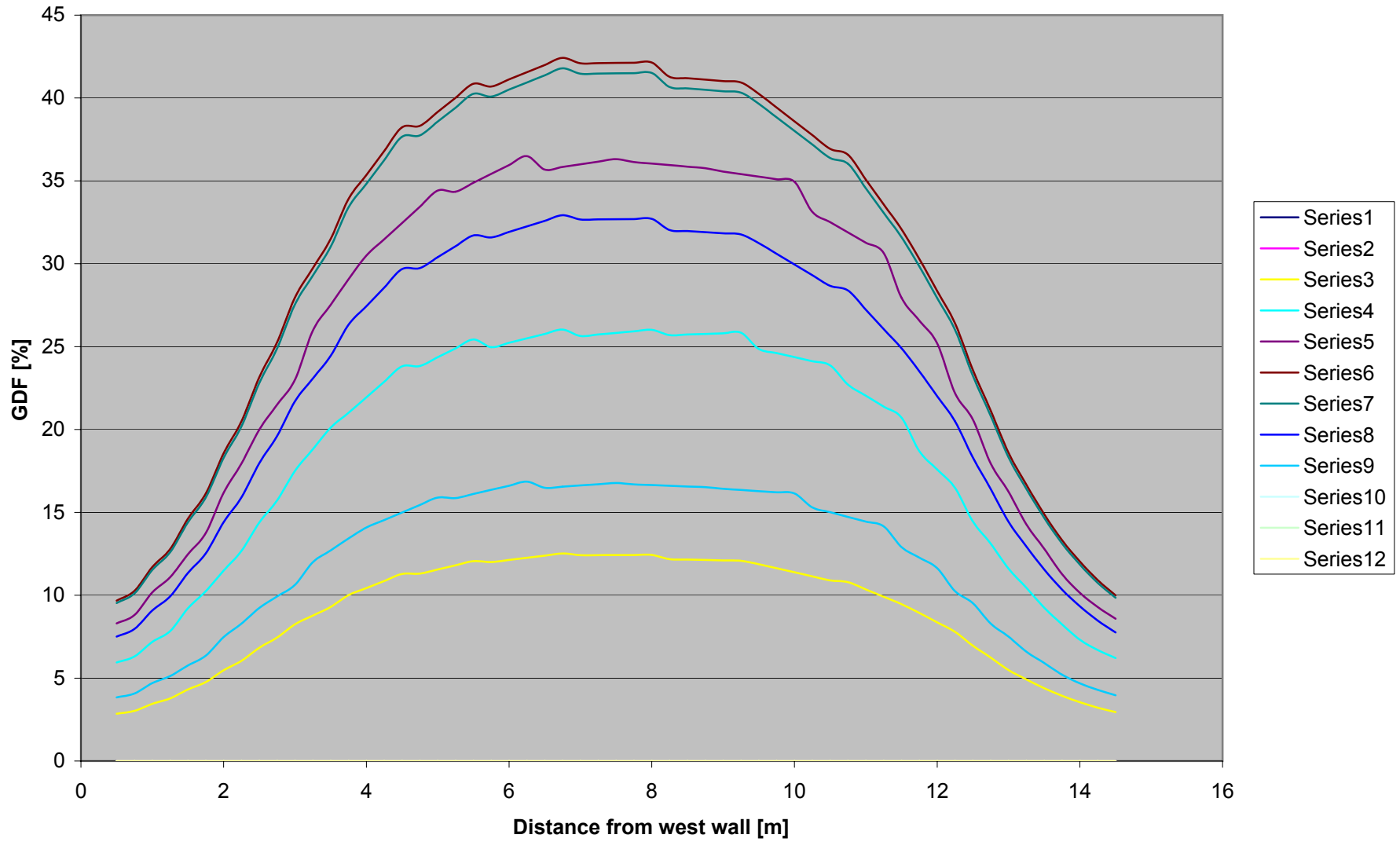
Flat2h 09_cDF



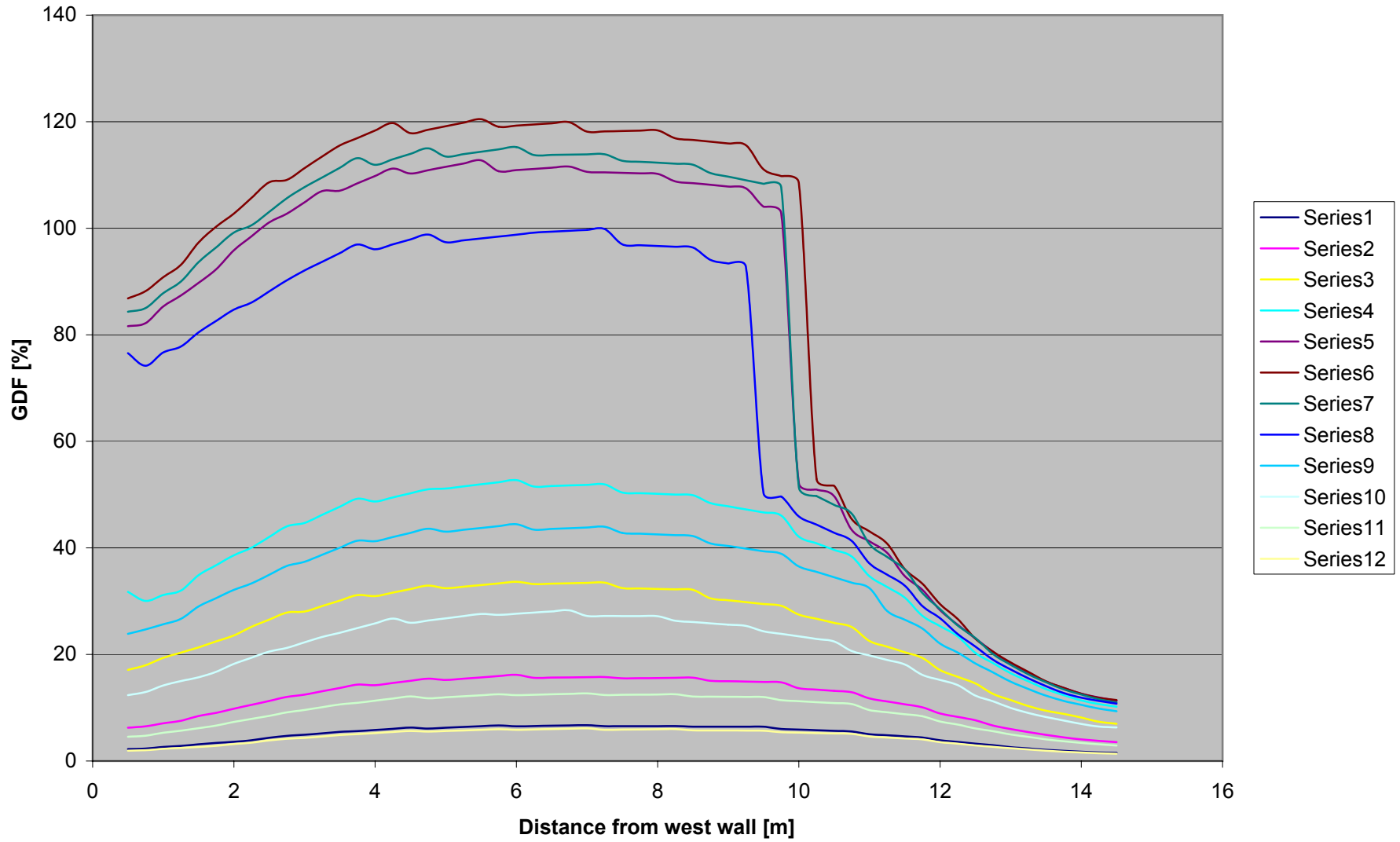
Flat2h 13_cDF



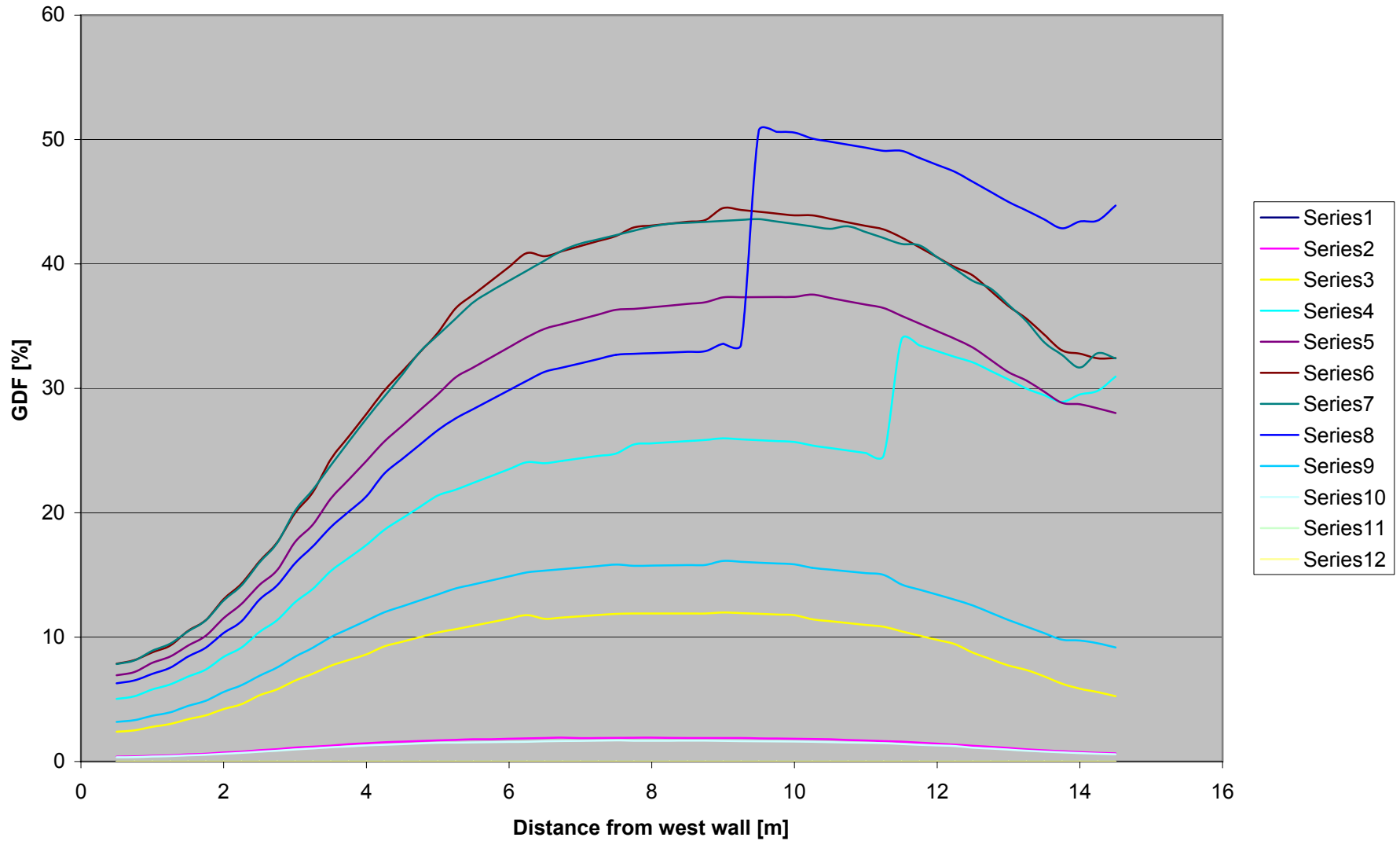
Flat2h 17_cDF



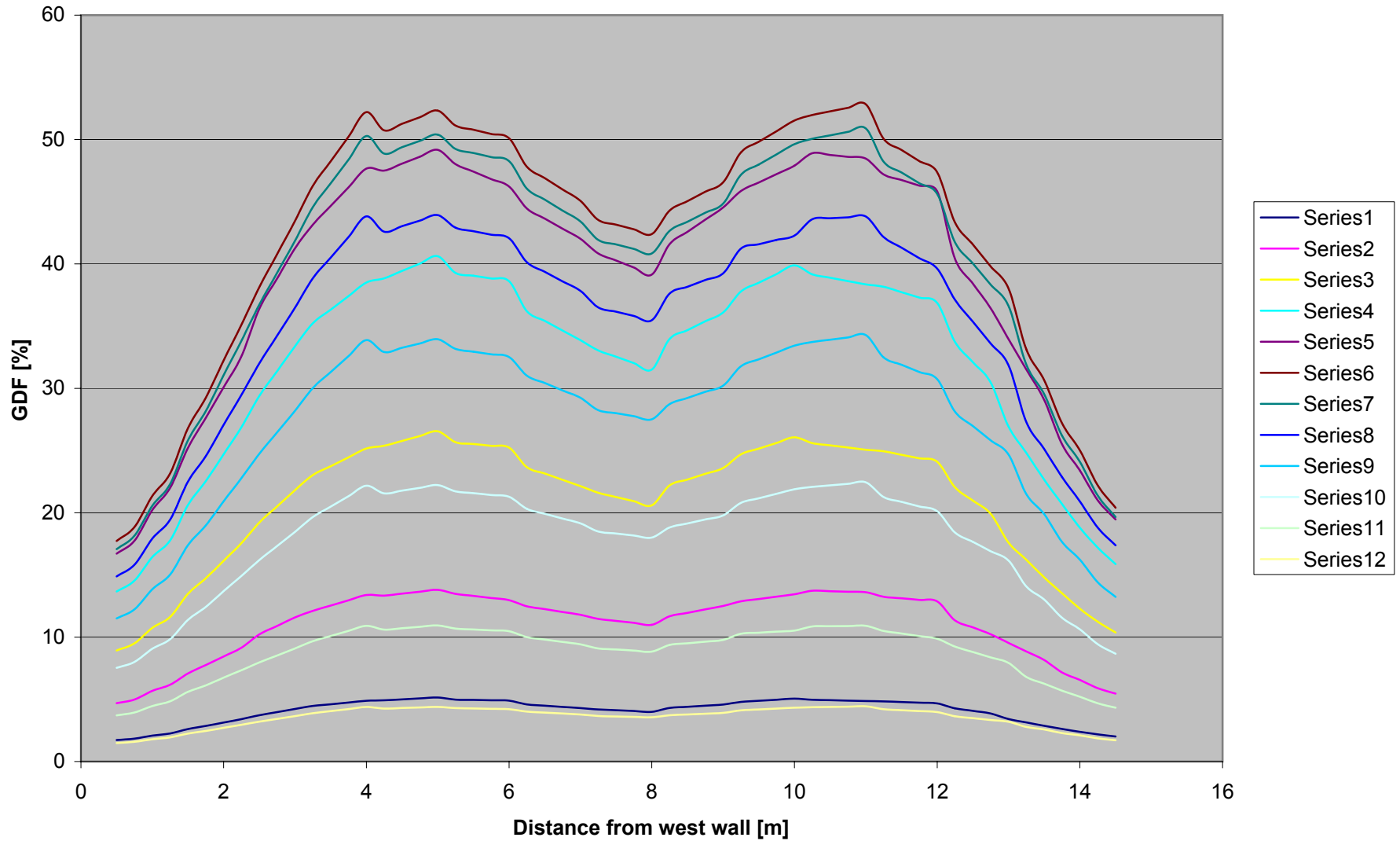
Flat2h 09_iDF



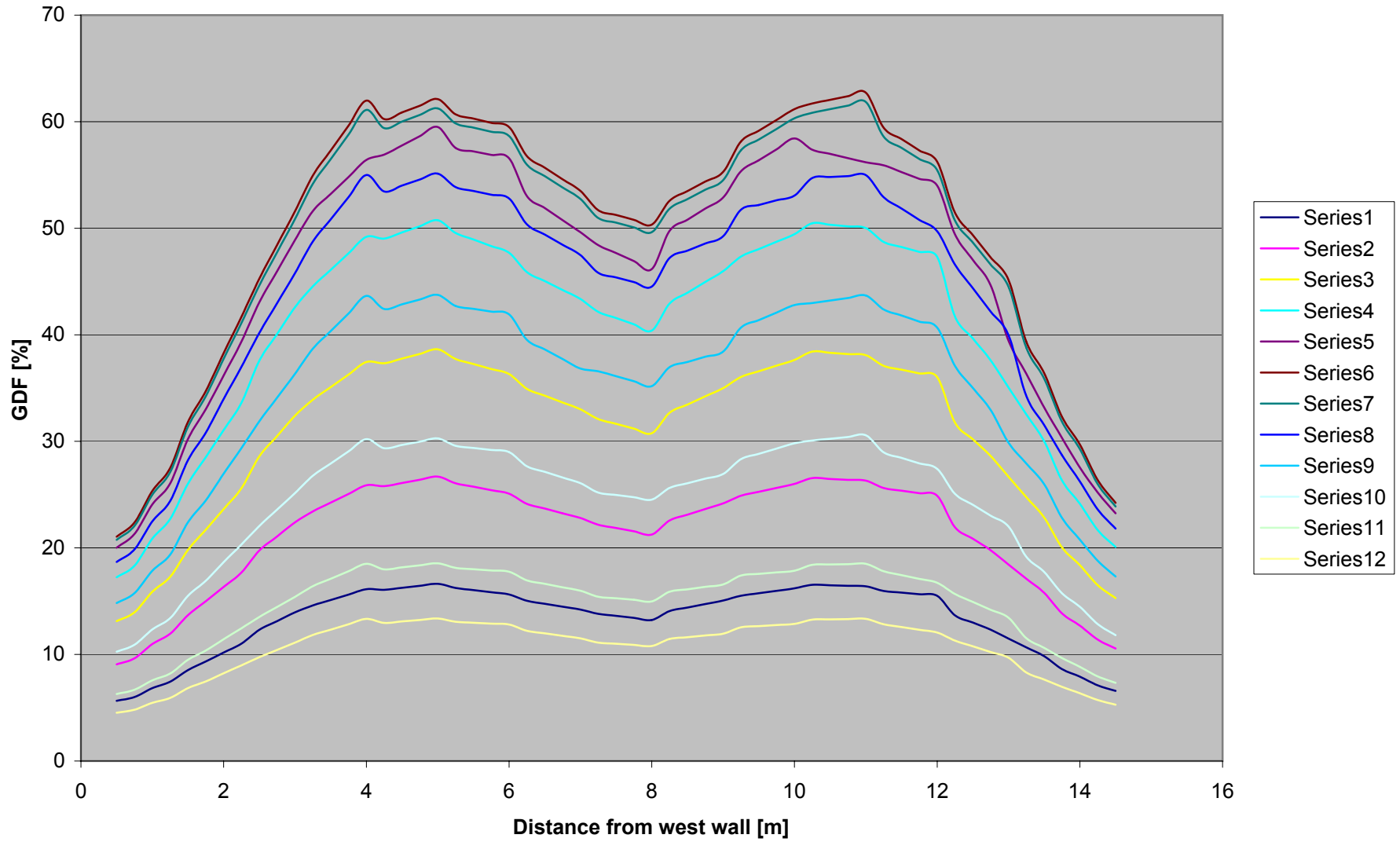
Flat2h 17_iDF



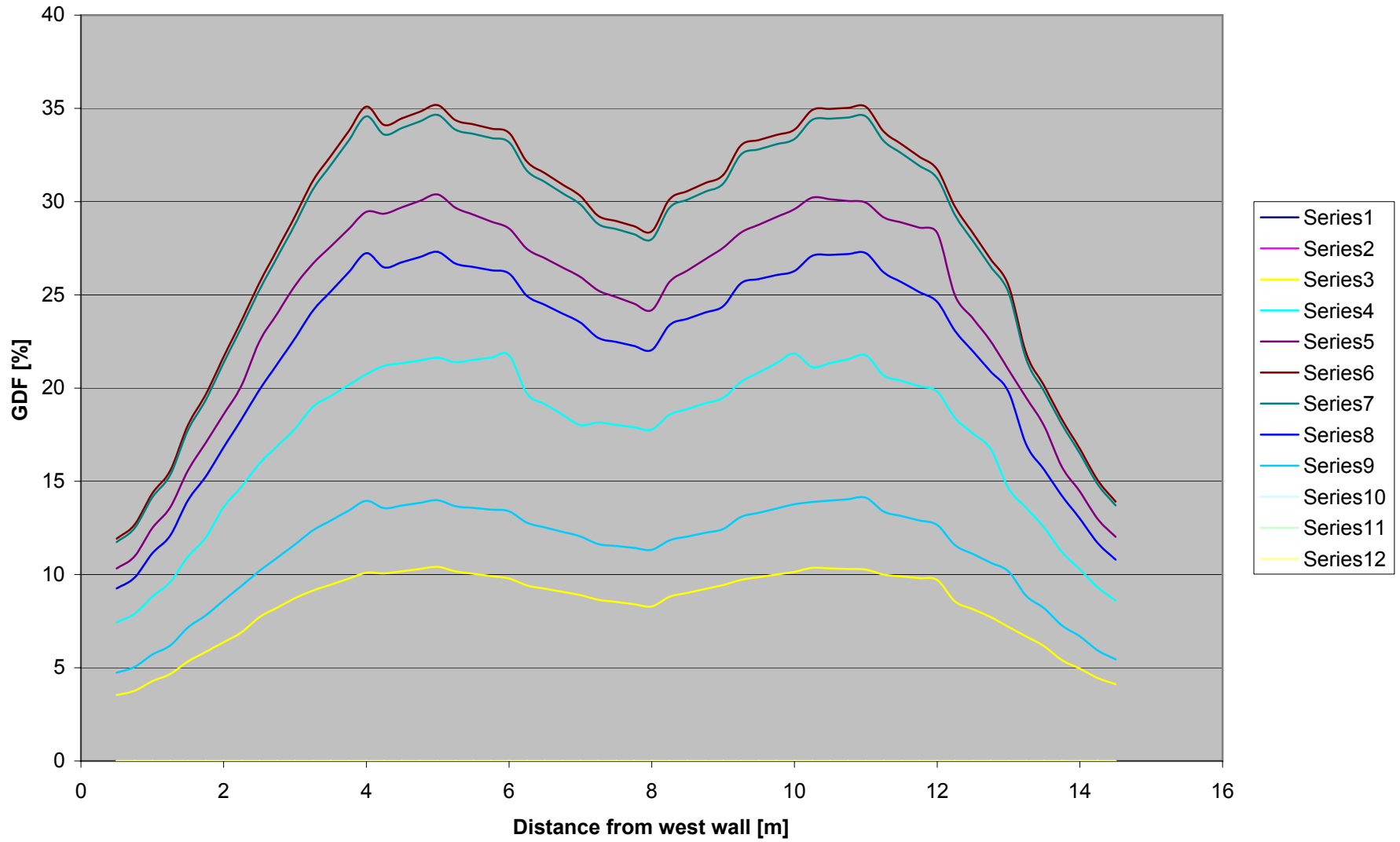
Flat4h 09_cDF



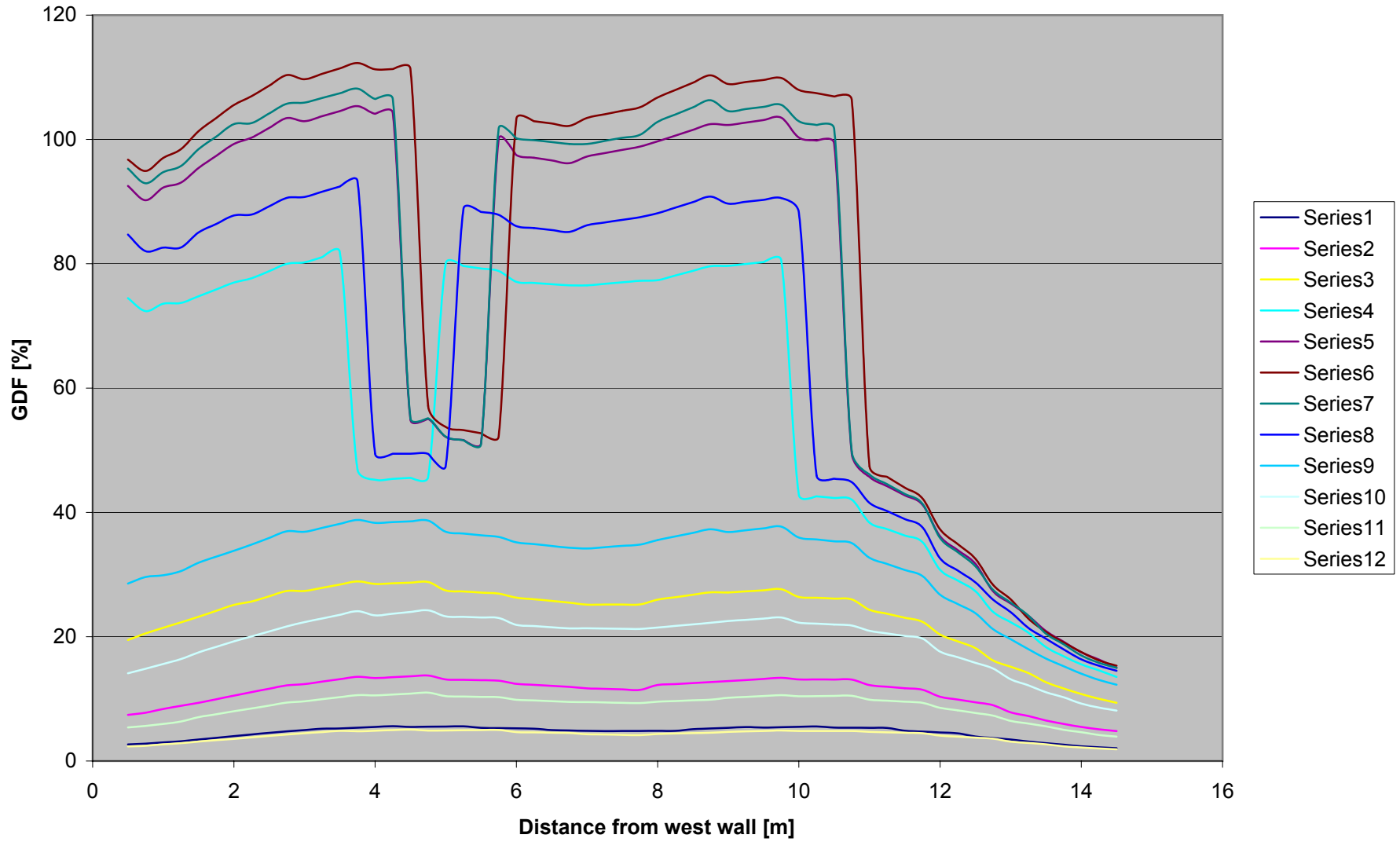
Flat4h 13_cDF



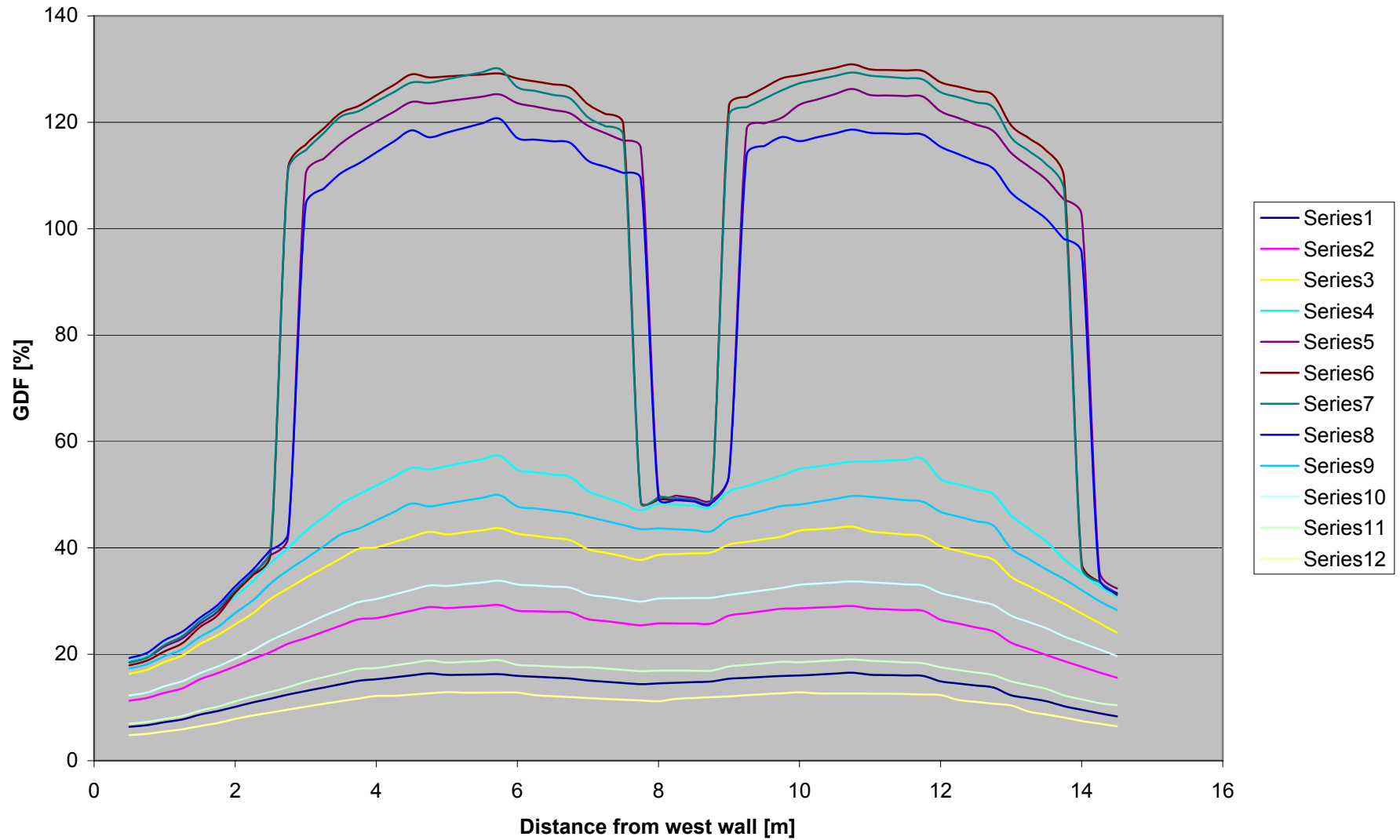
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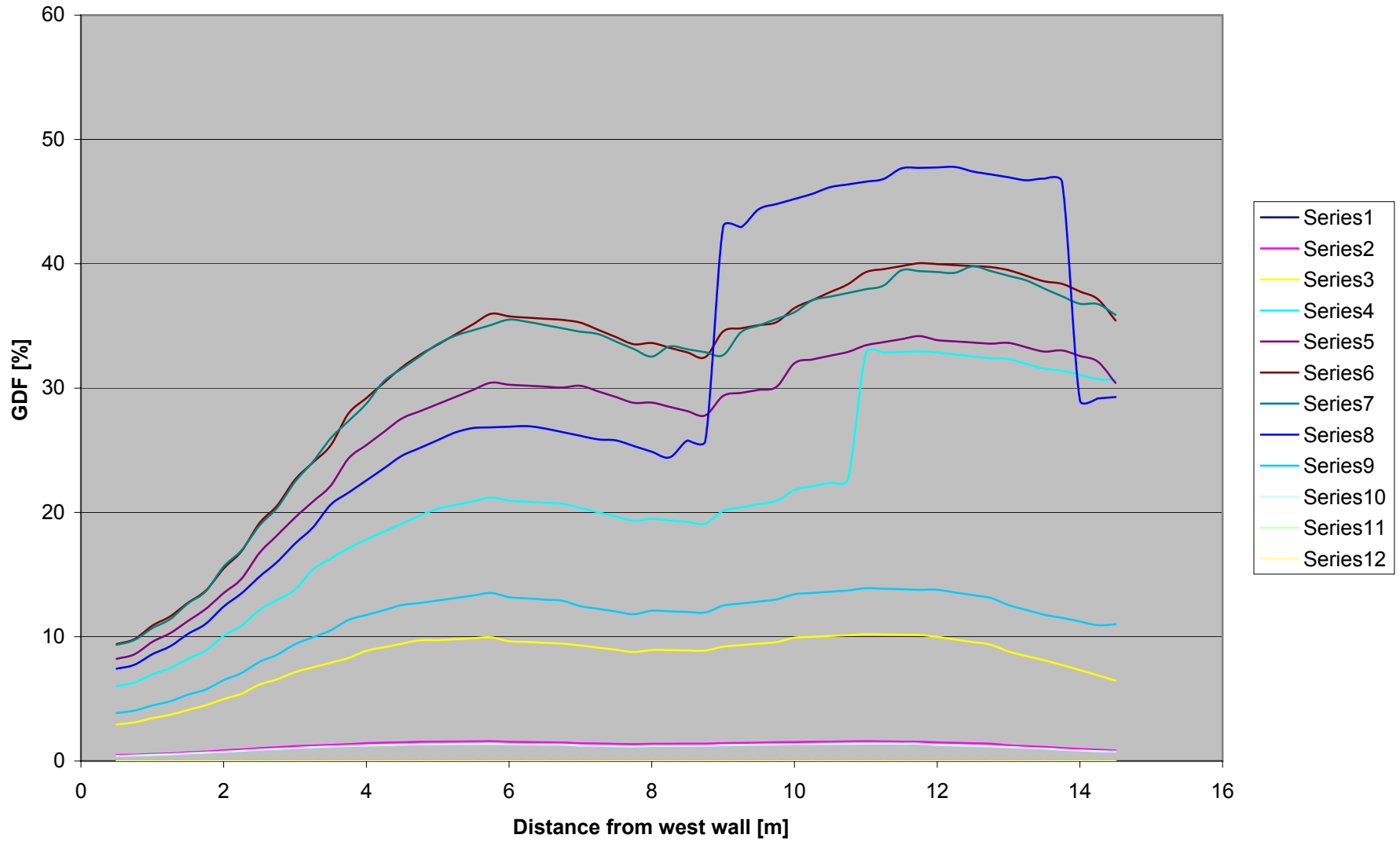
Flat4h 09_iDF



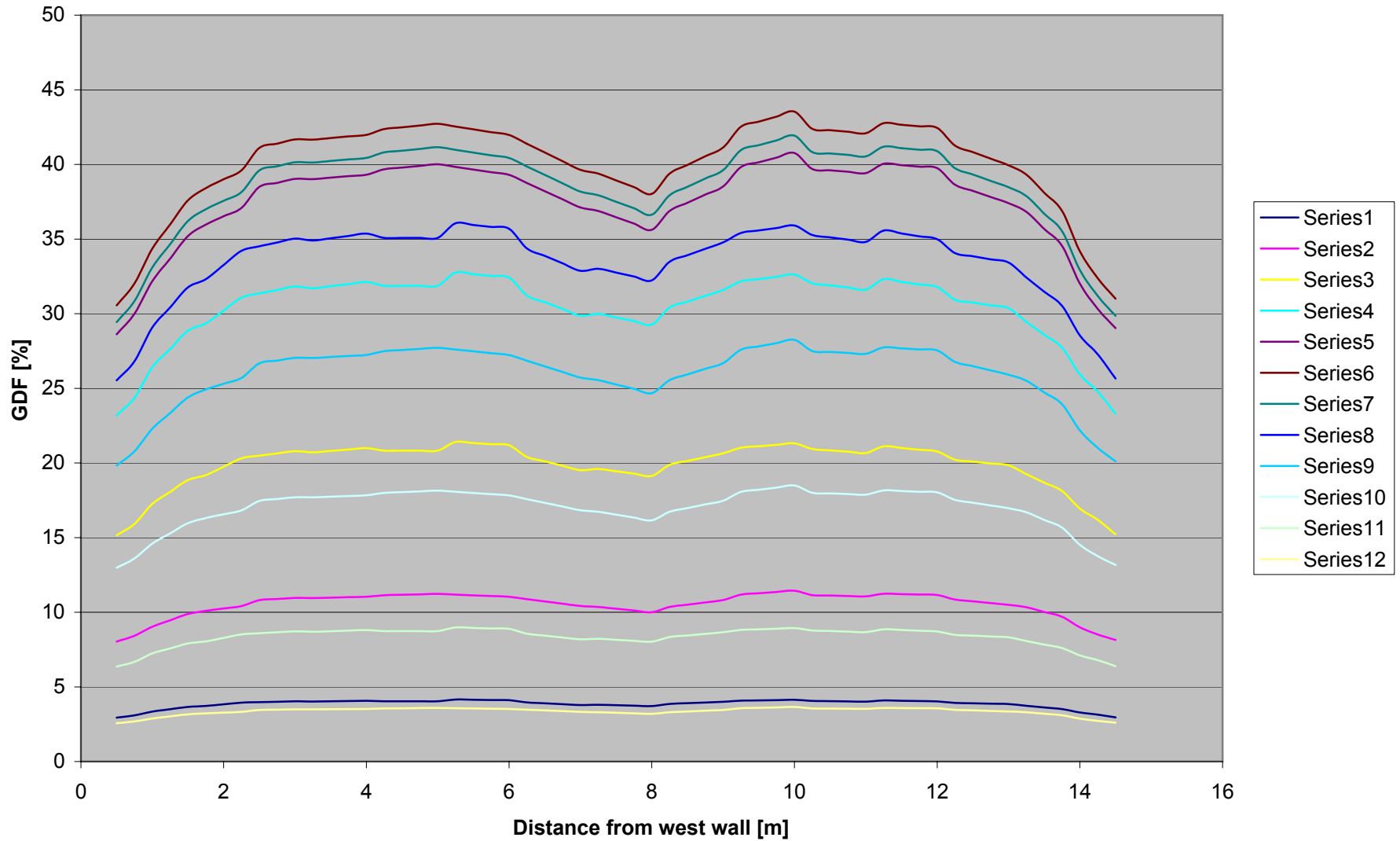
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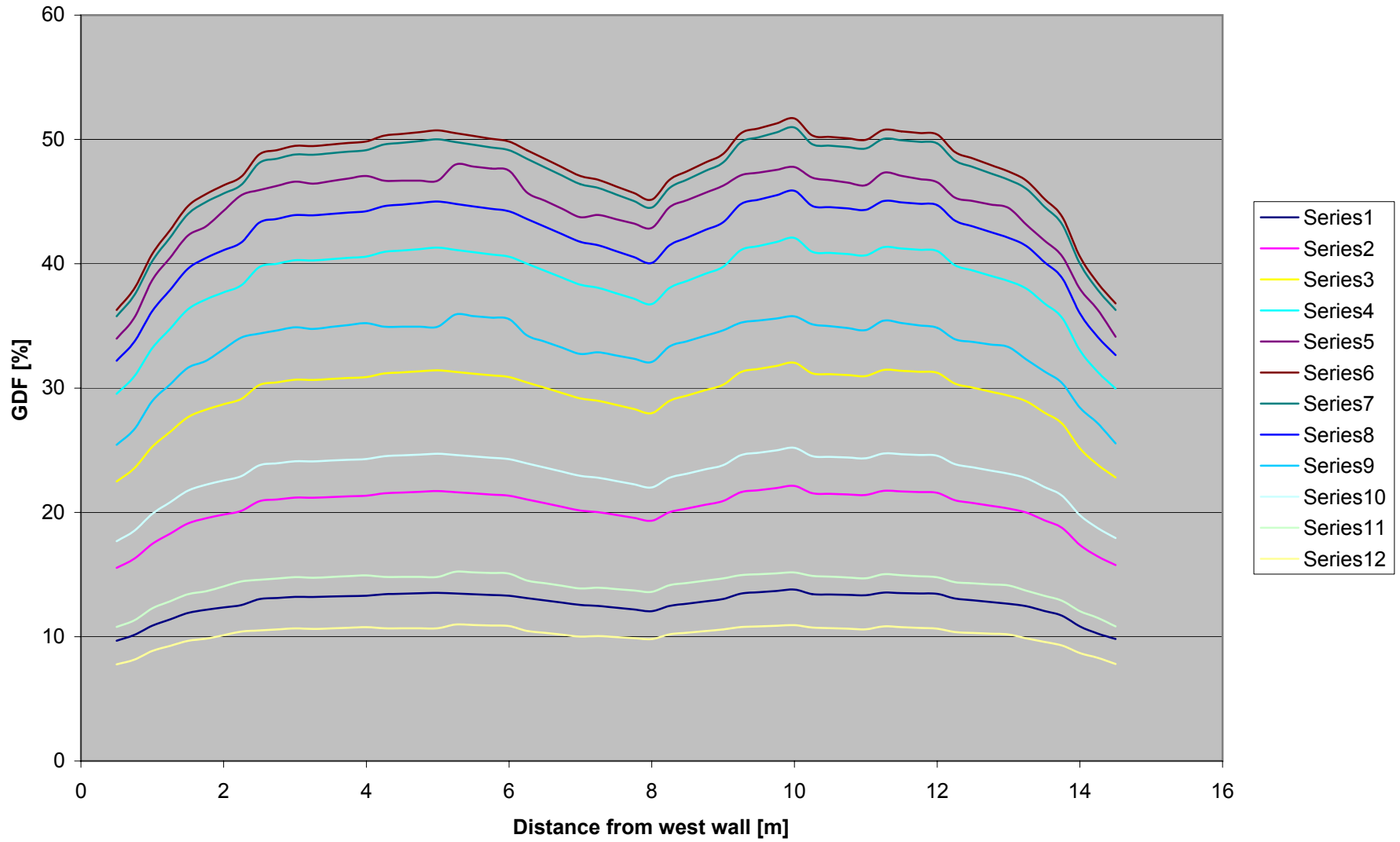
Flat4h 17_iDF



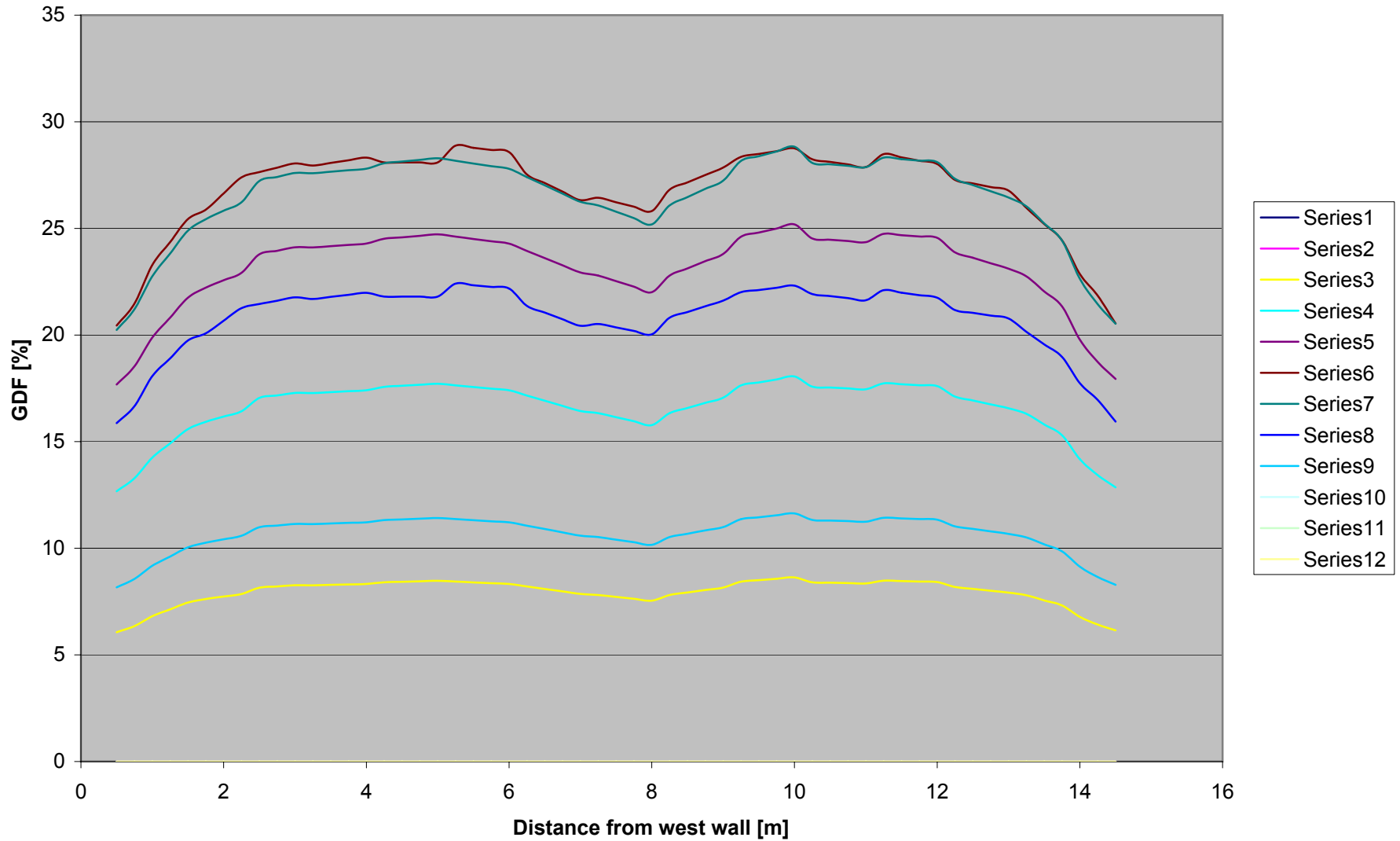
Flat8h 09_cDF



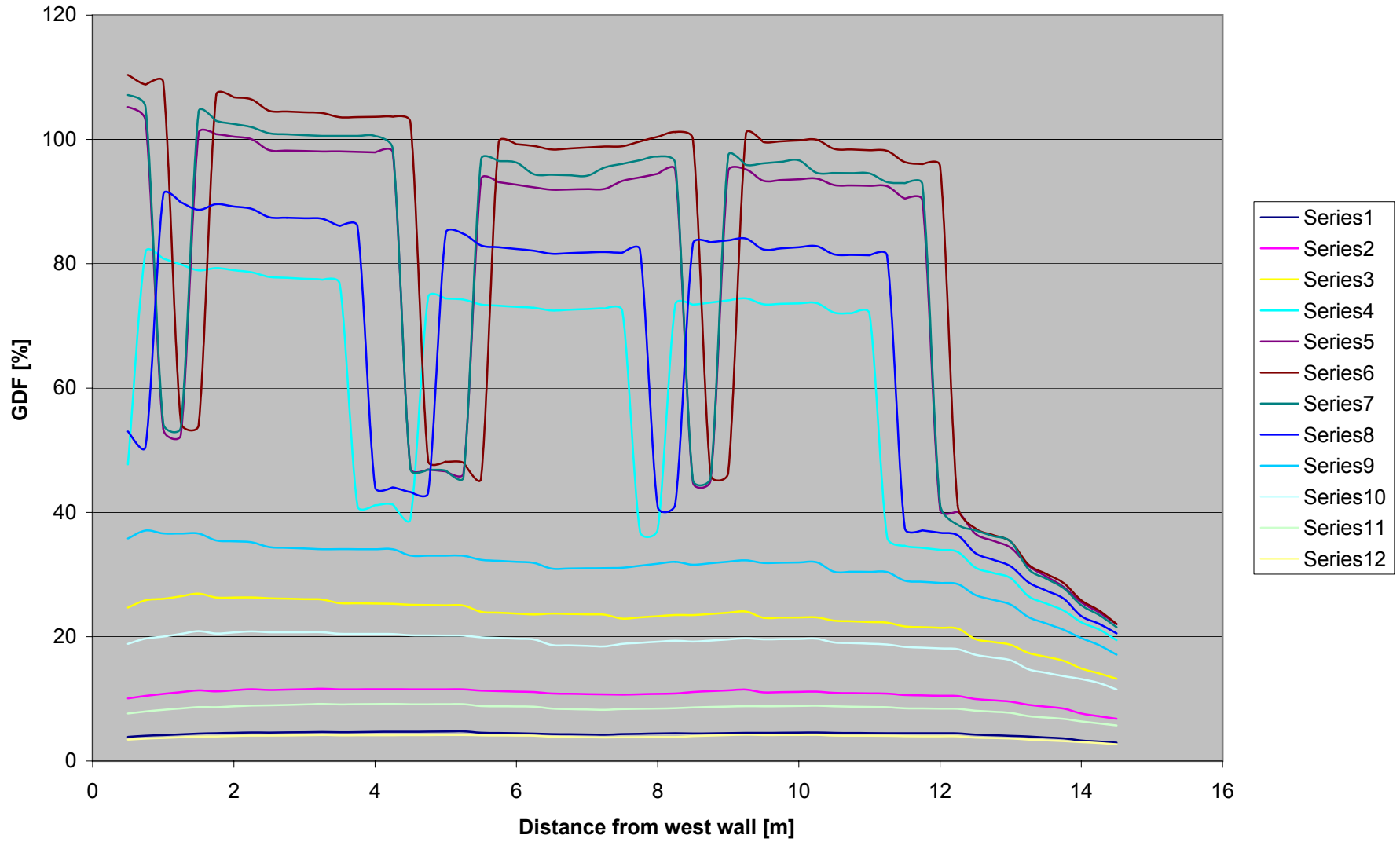
Flat8h 13_cDF



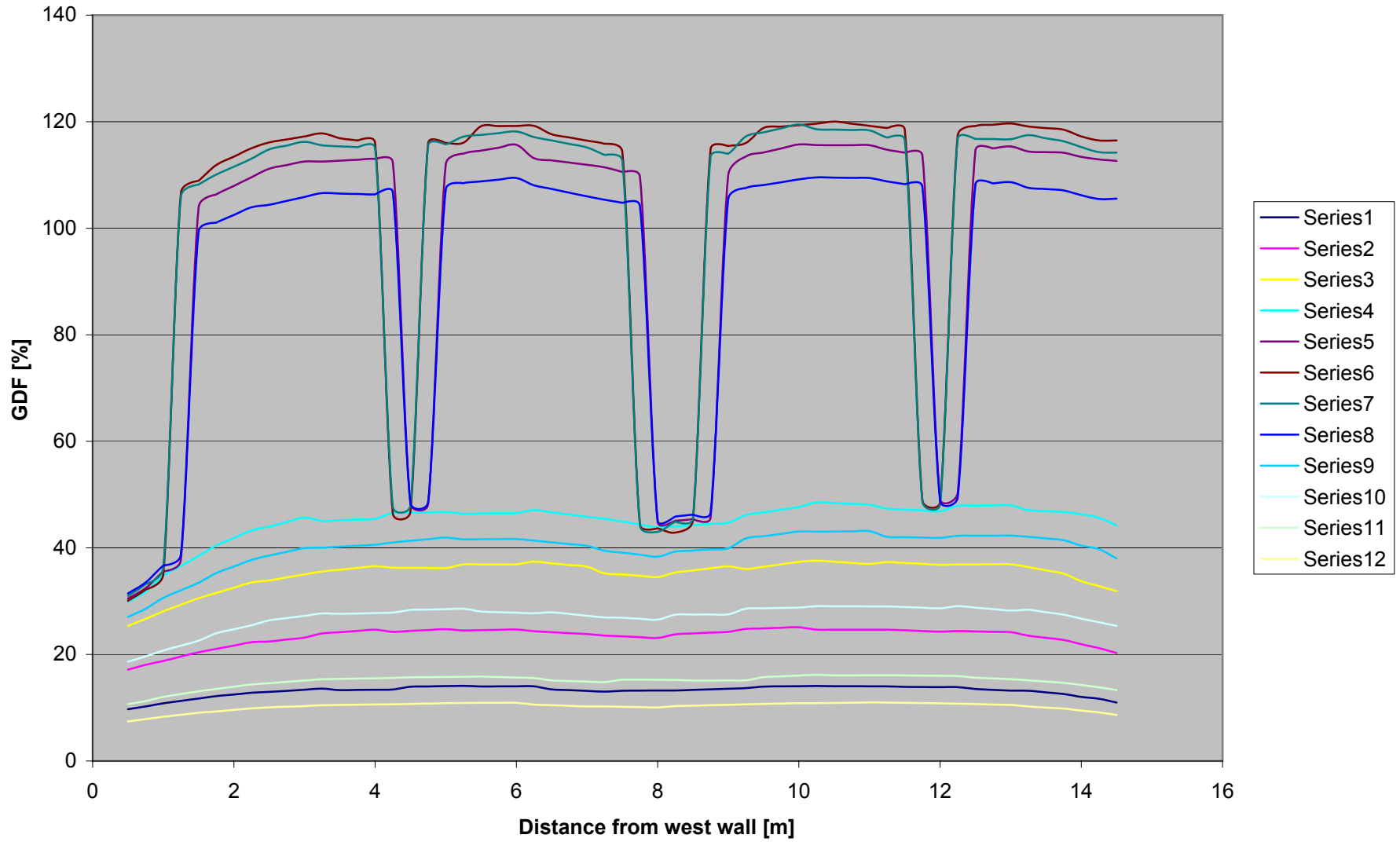
Flat8h 17_cDF



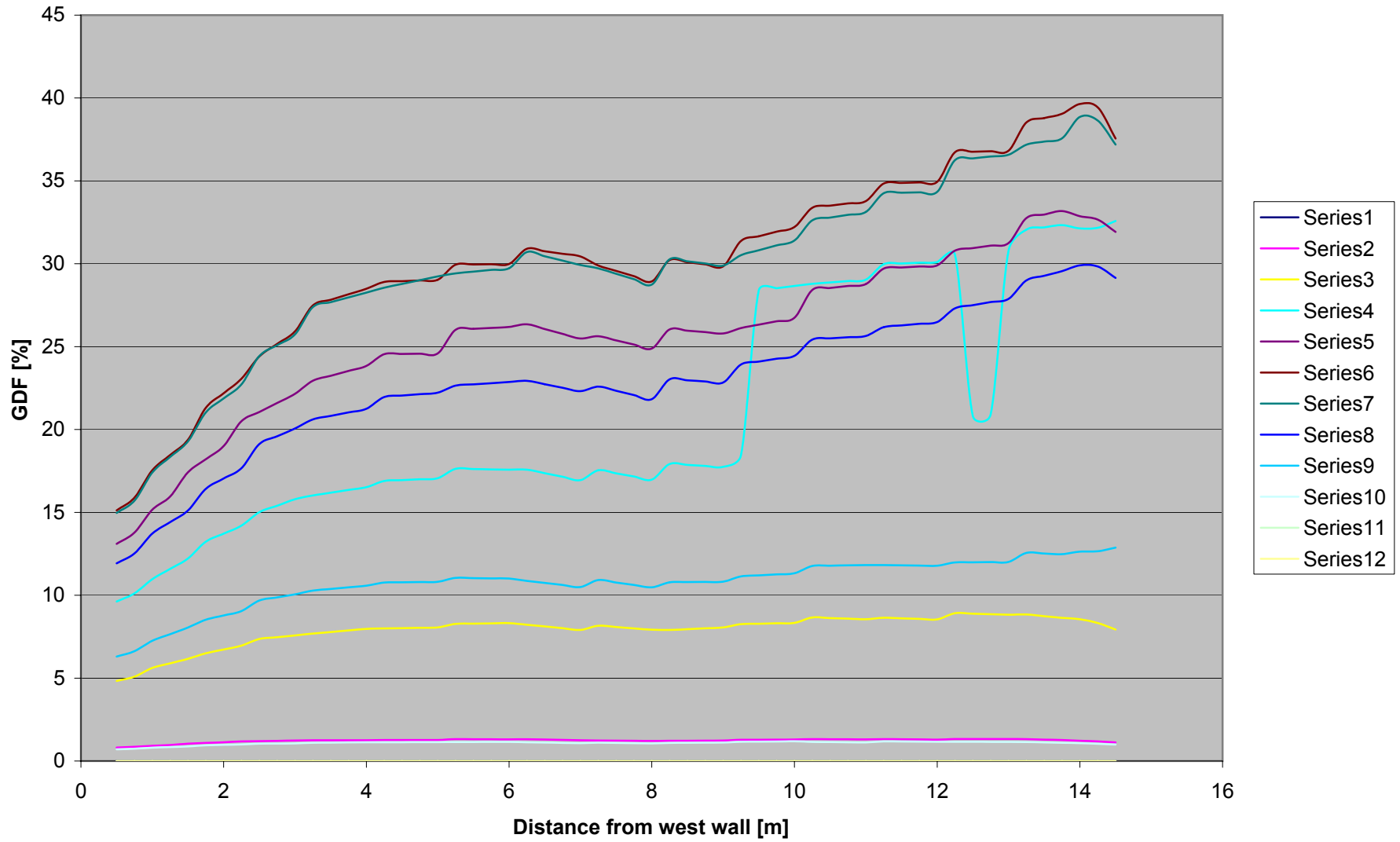
Flat8h 09_iDF



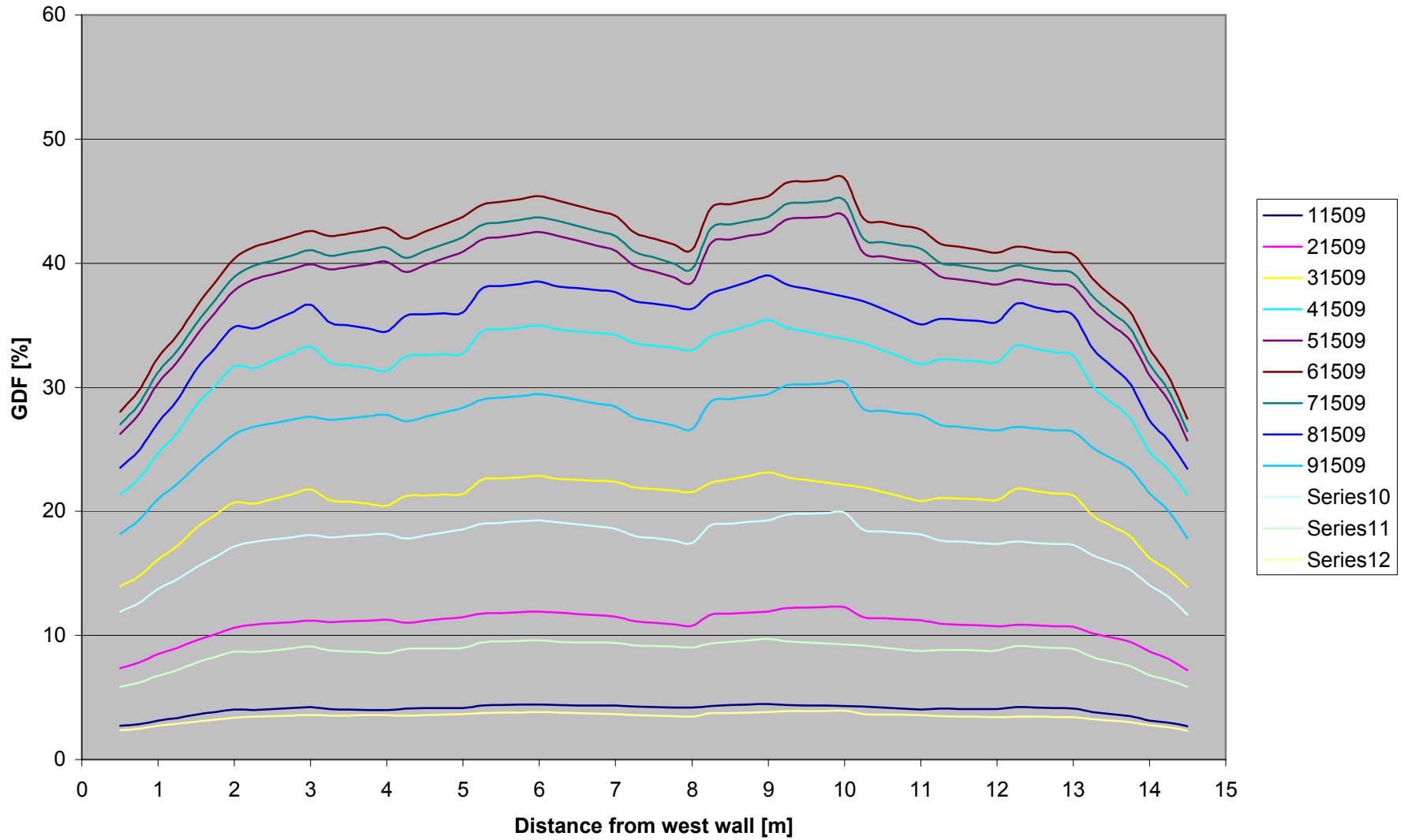
Flat8h 13_IDF



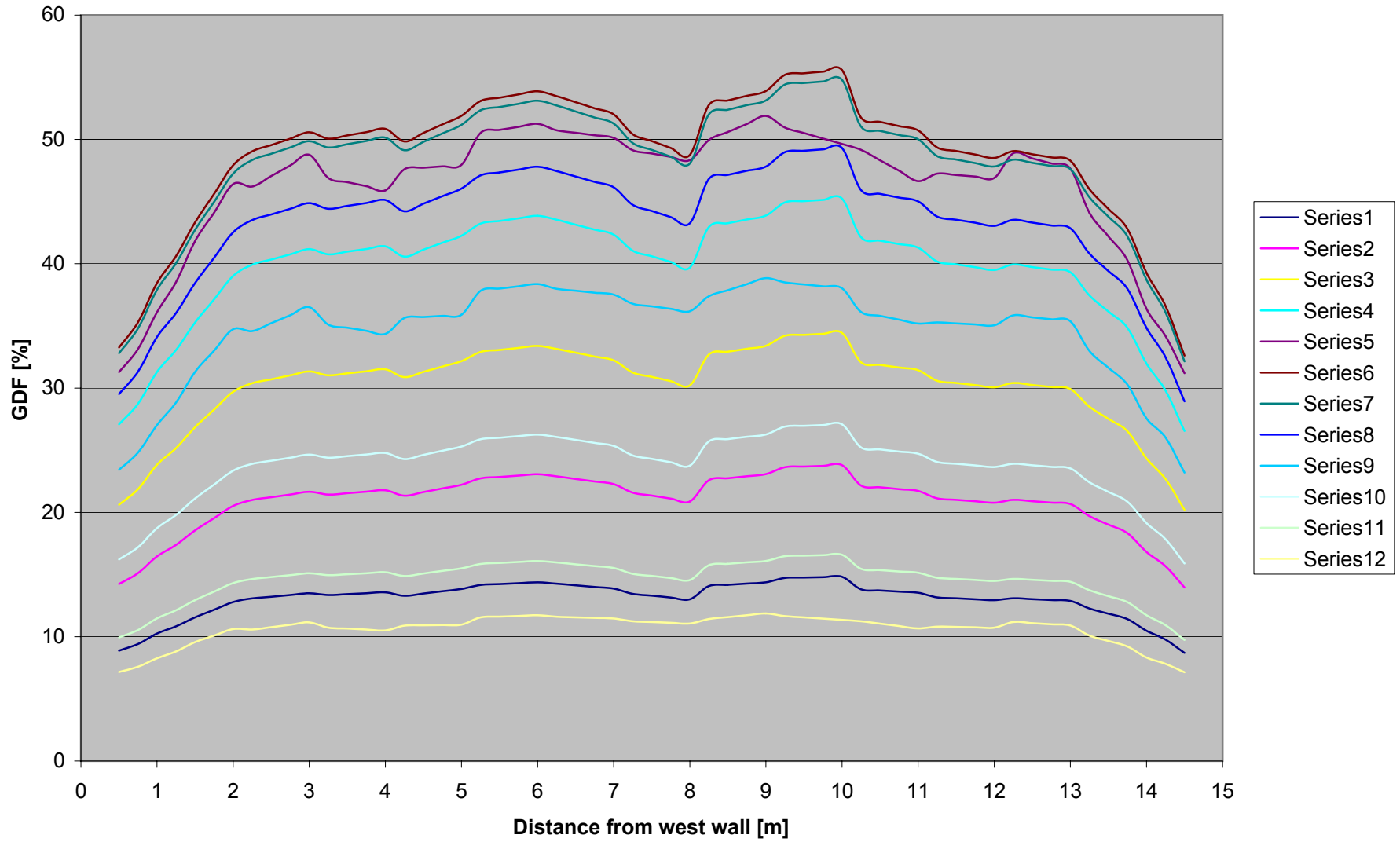
Flat8h 17_iDF



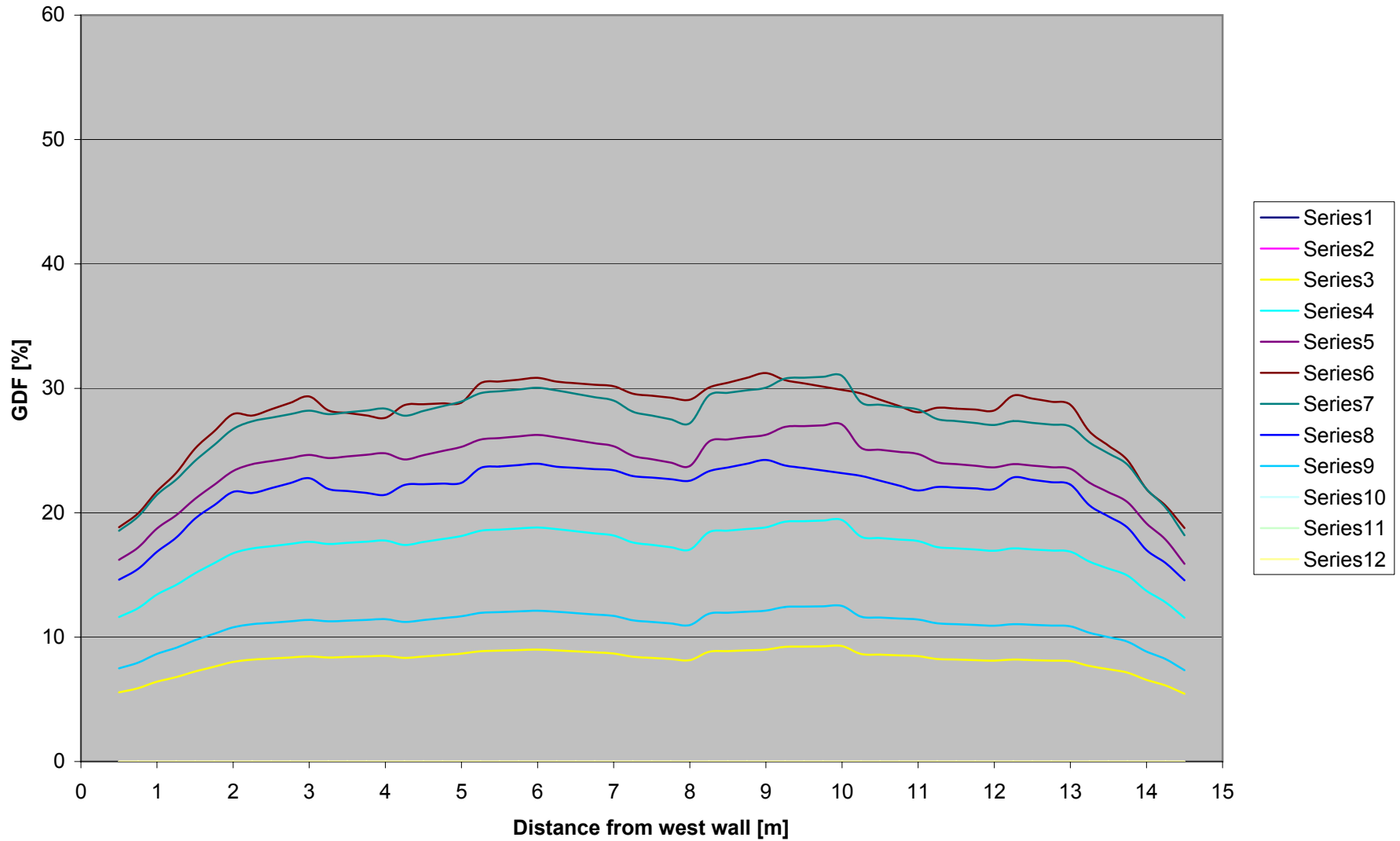
Flat16h 09_cDF



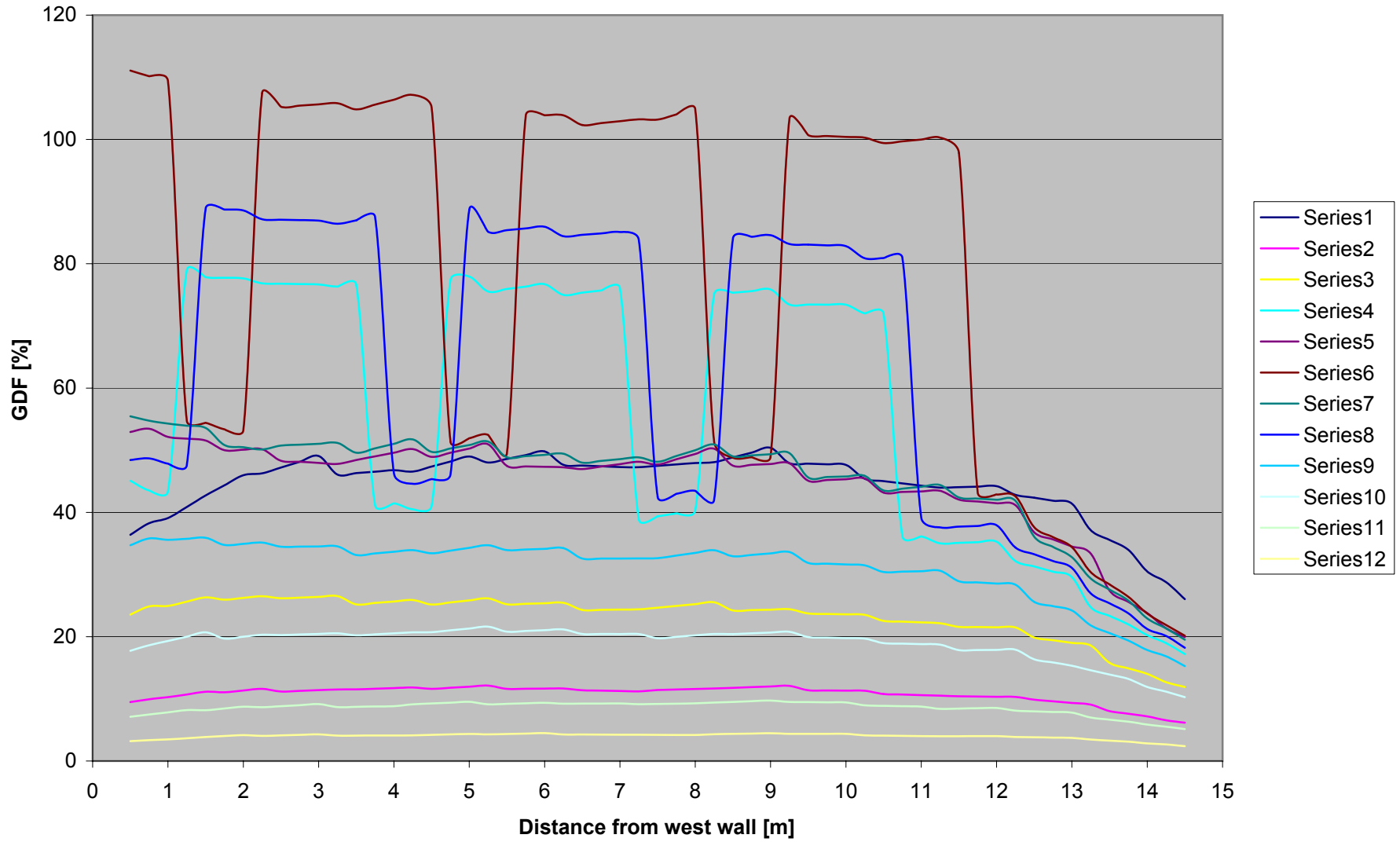
Flat16h 13_cDF



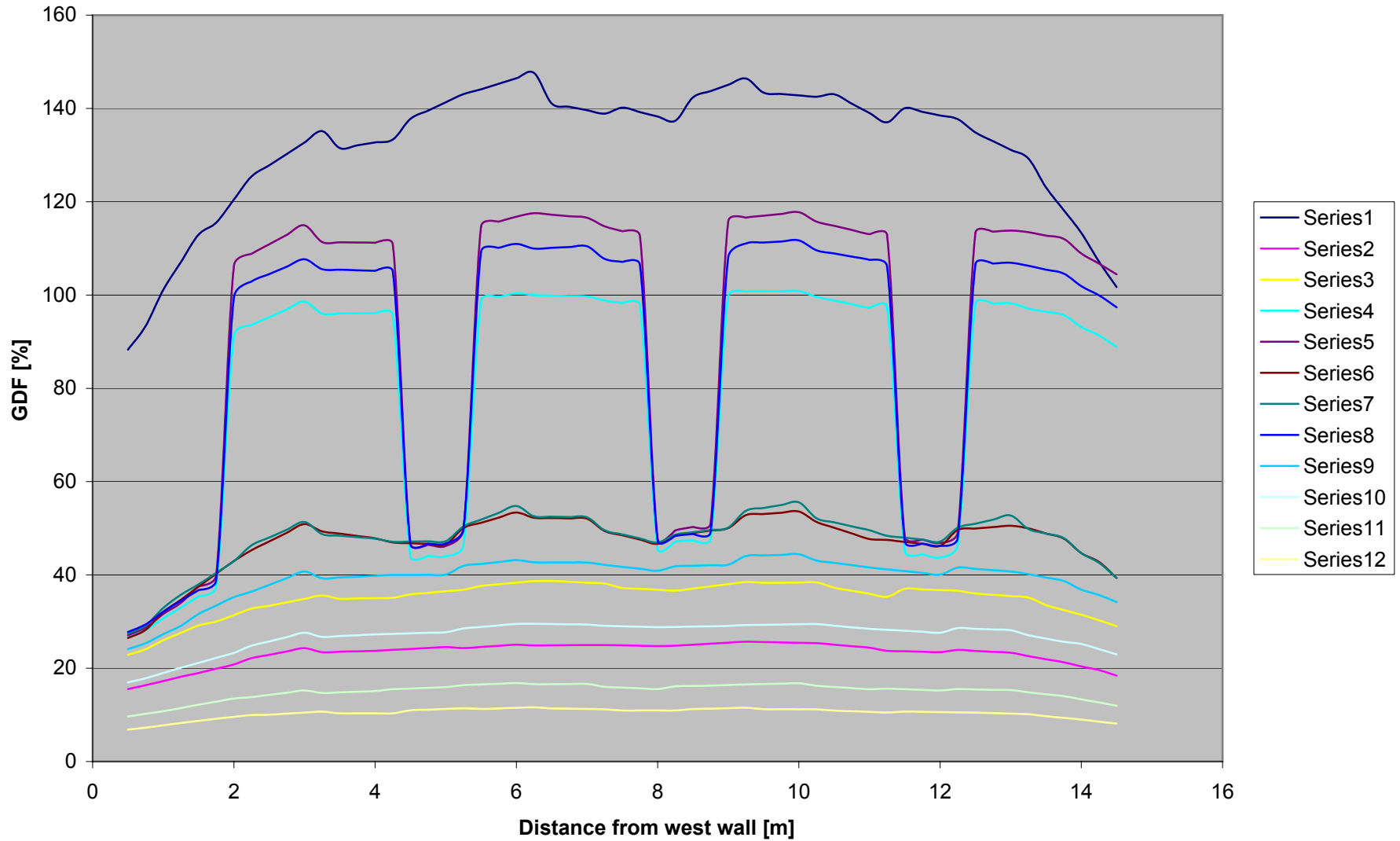
Flat16h 17_cDF



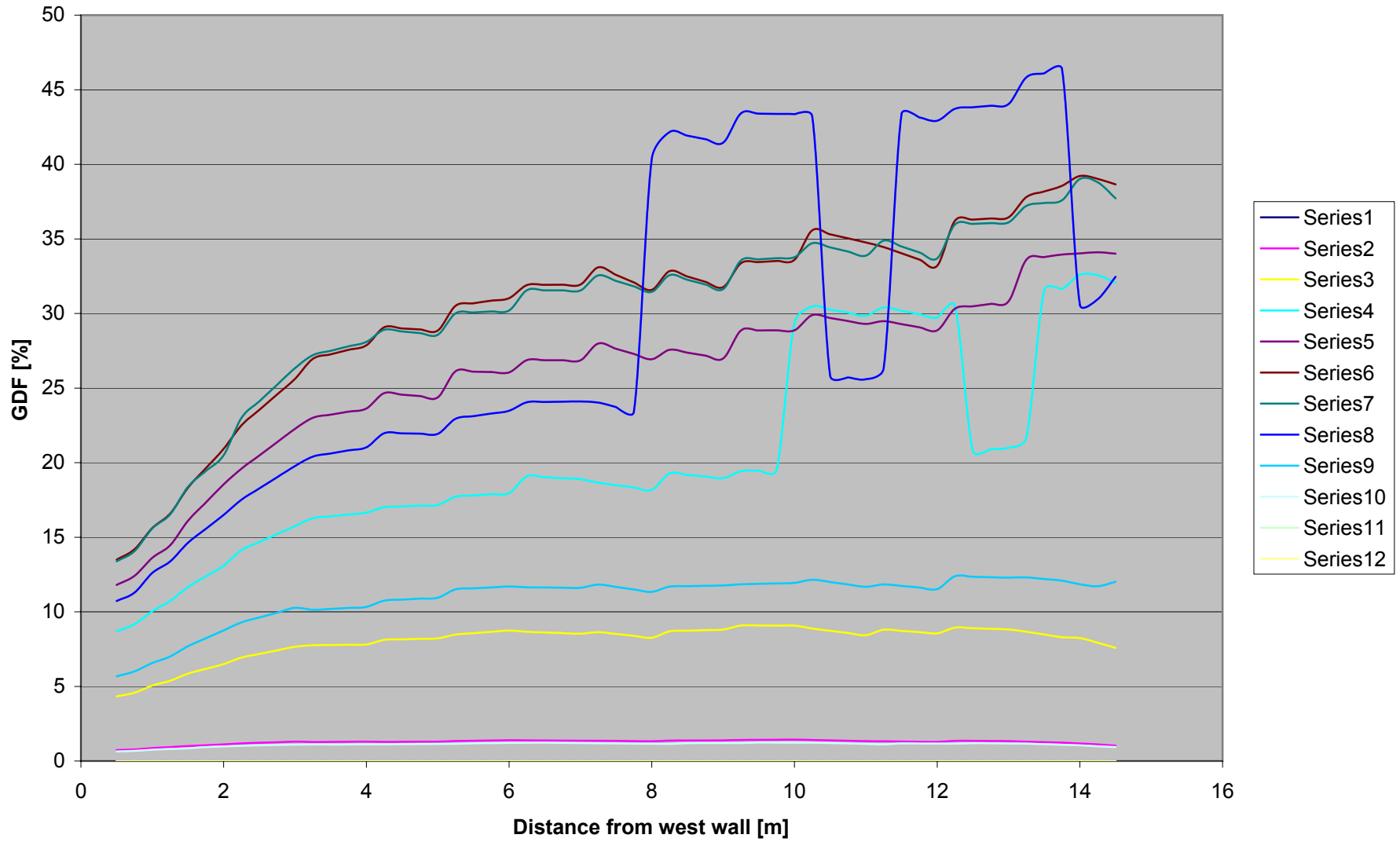
Flat16h 09_iDF



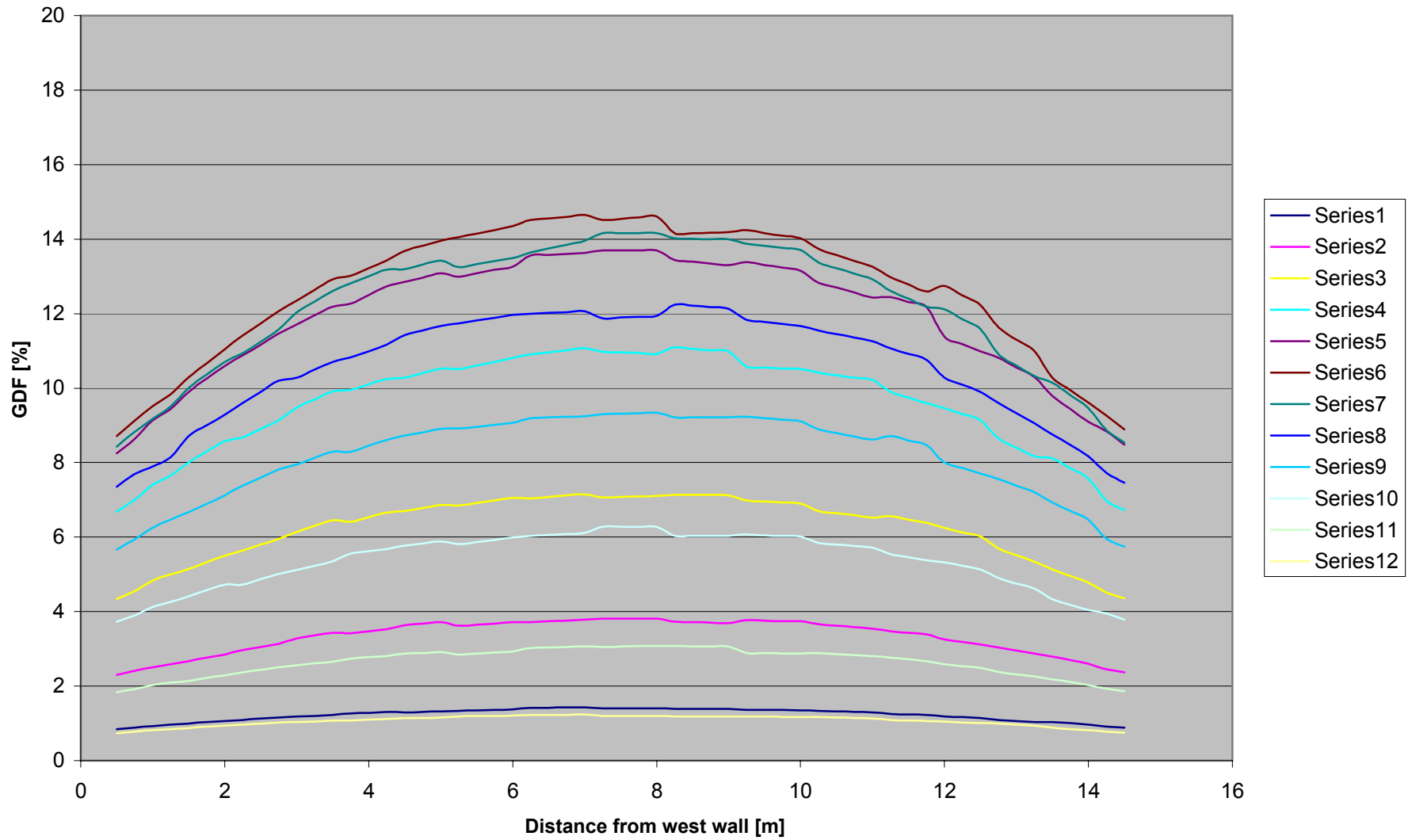
Flat16h 13_iDF



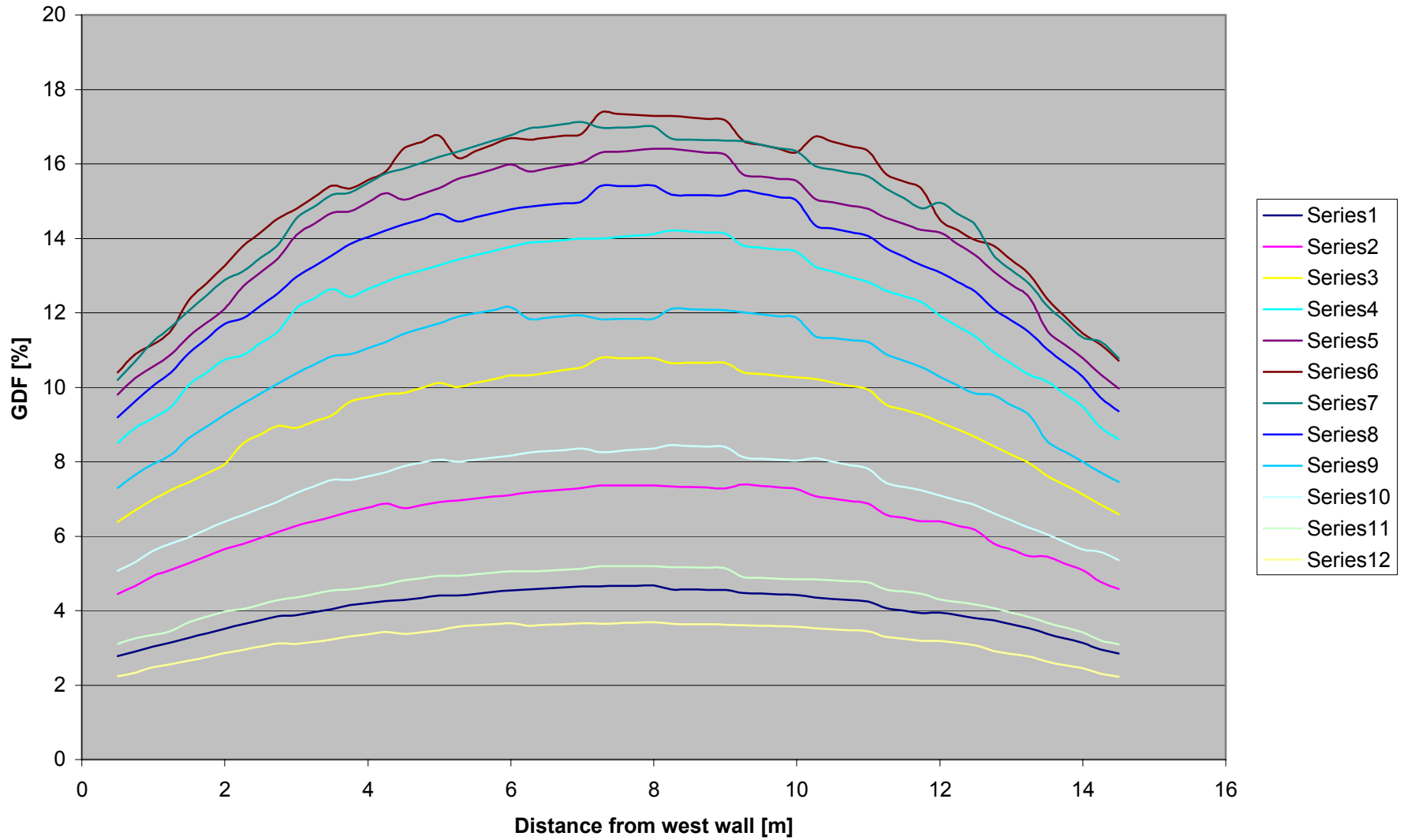
Flat16h 17_iDF



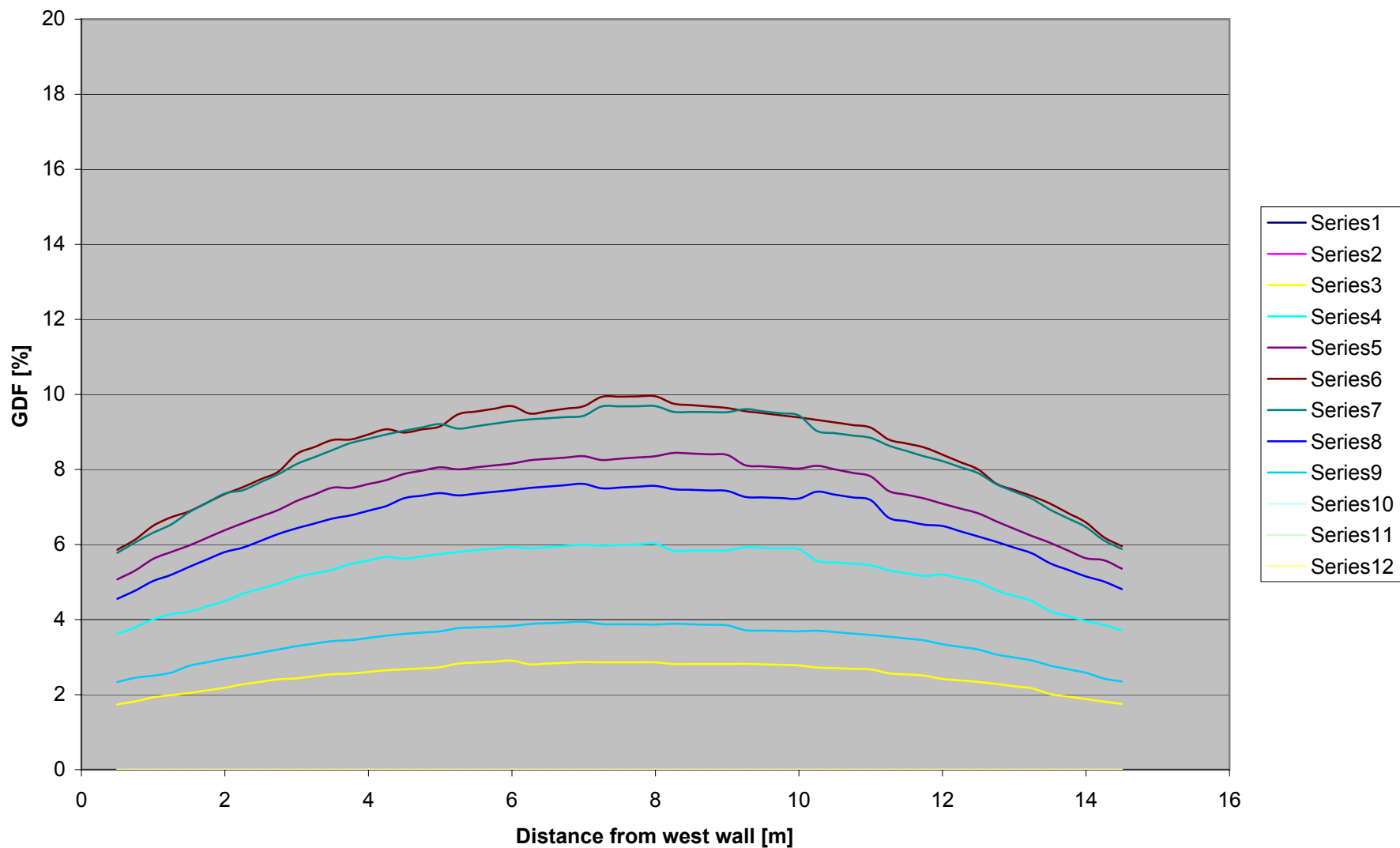
Saw2N_09_cDF



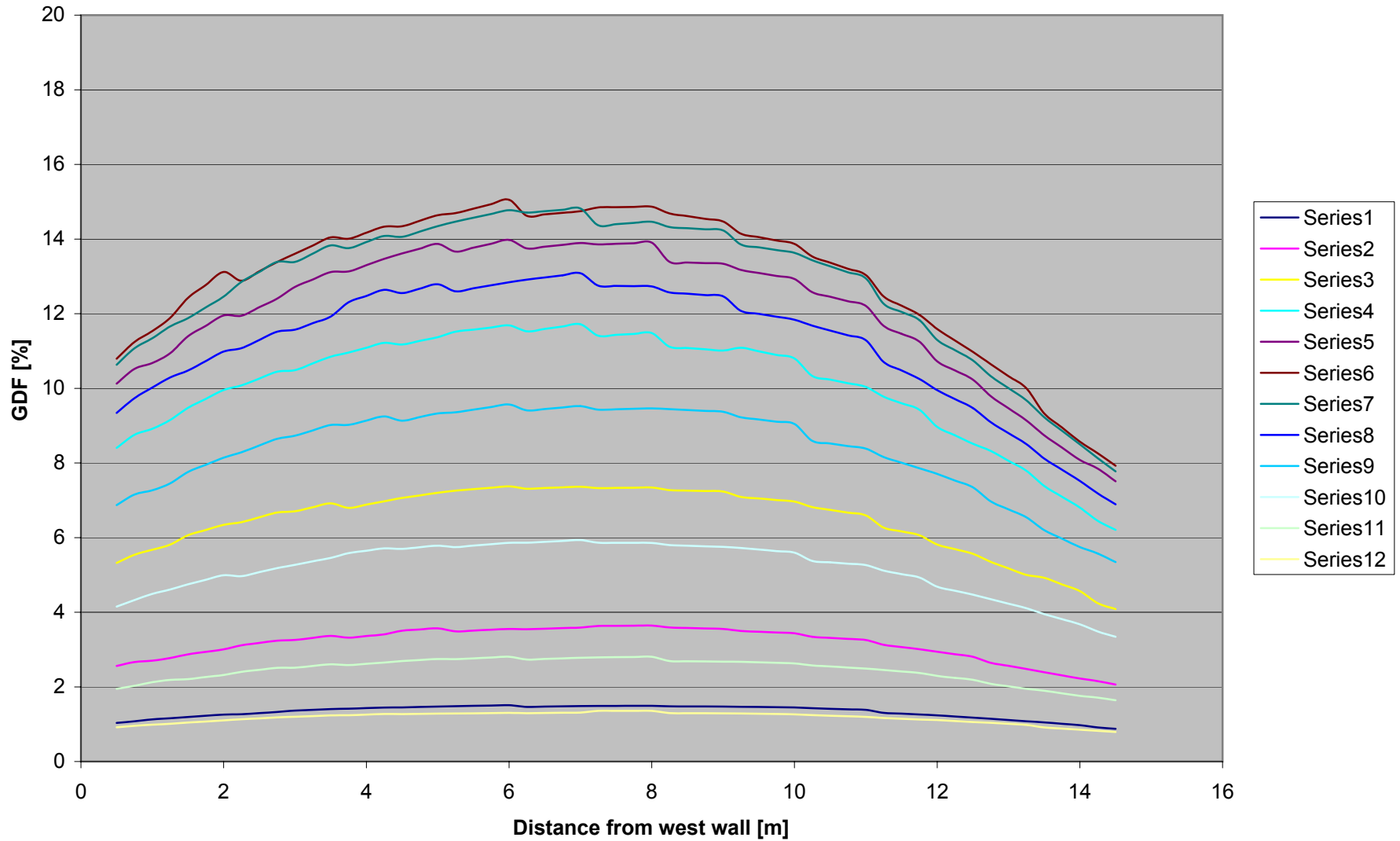
Saw2N 13_cDF



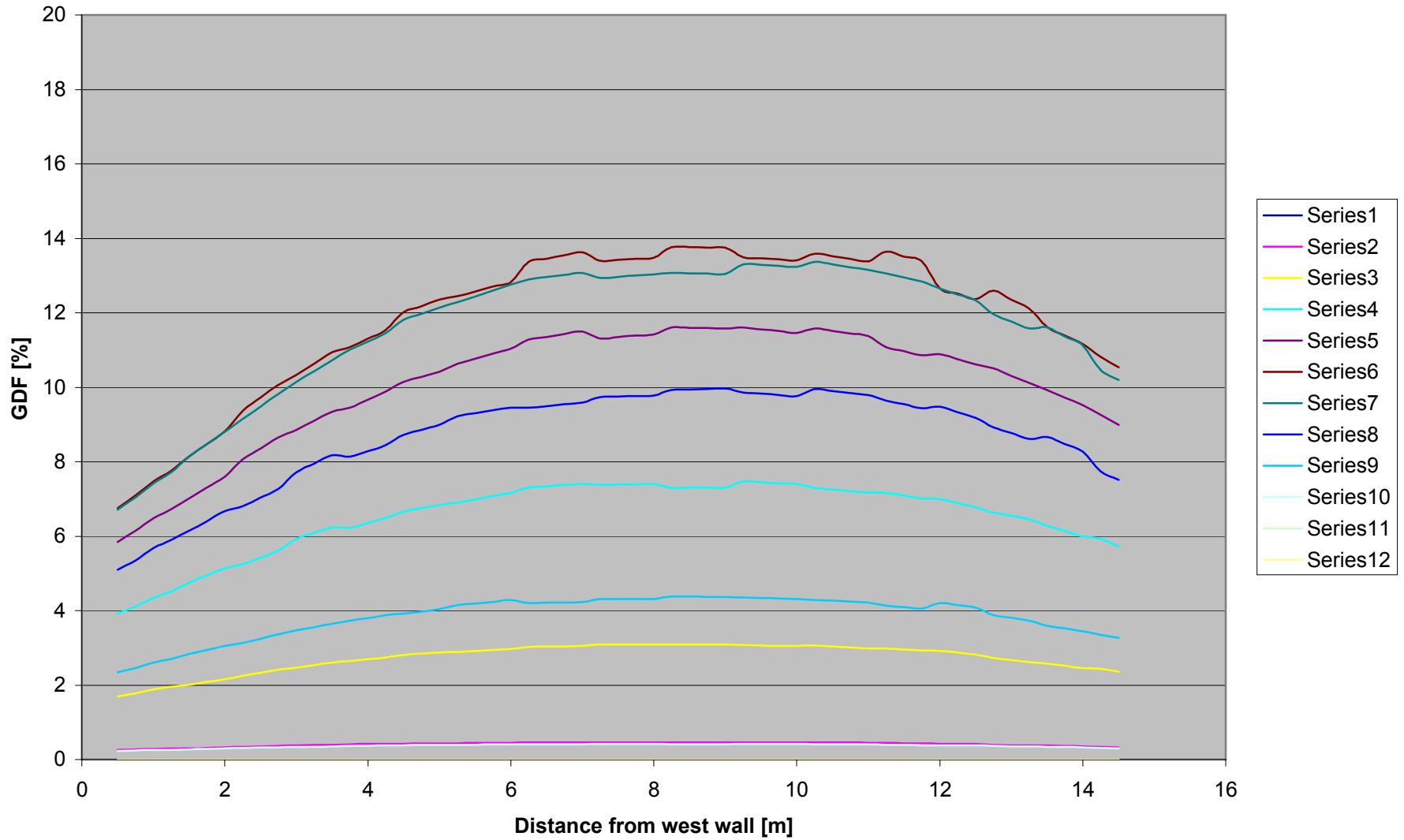
Saw2N 17_cDF



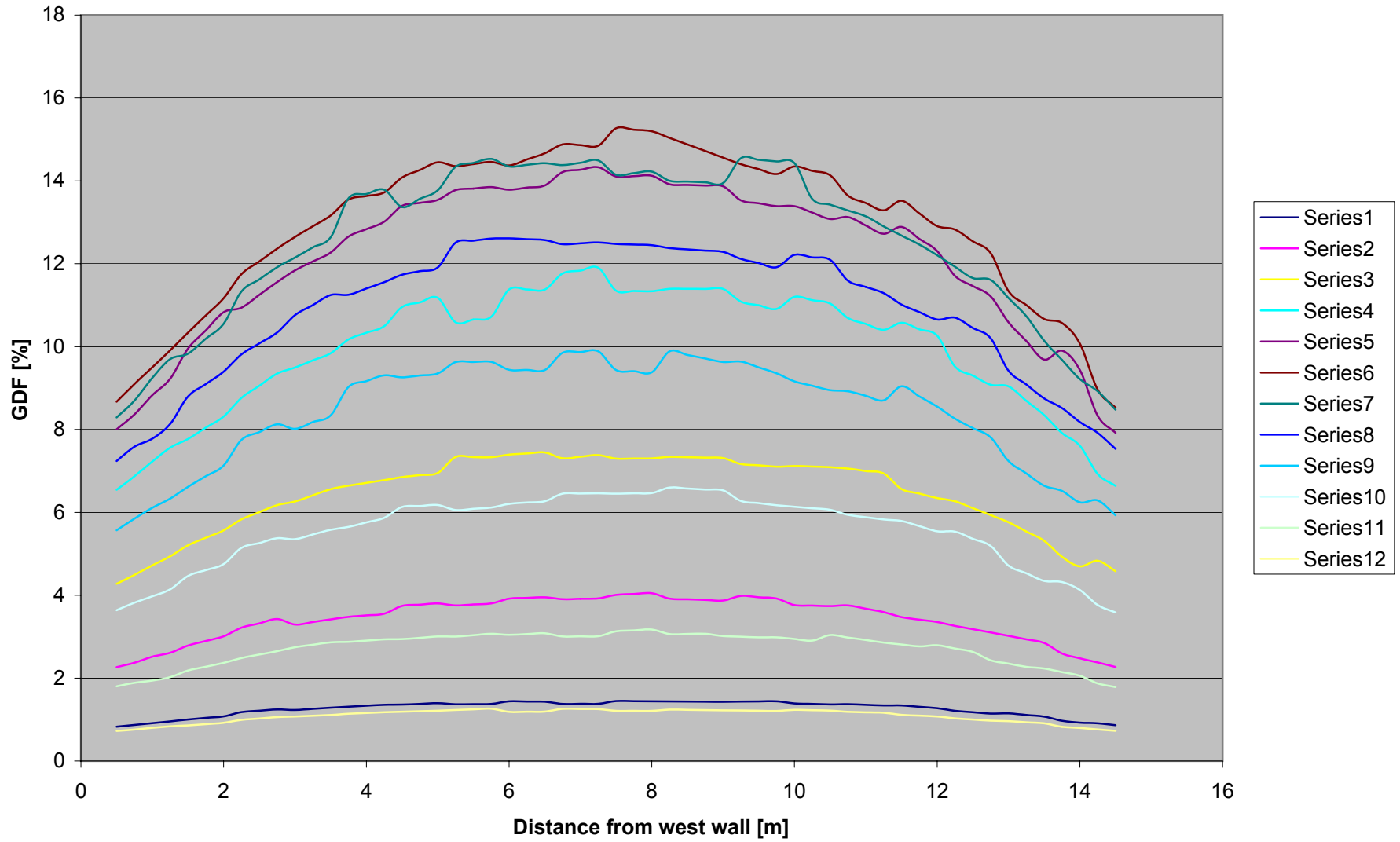
Saw2N 09_iDF



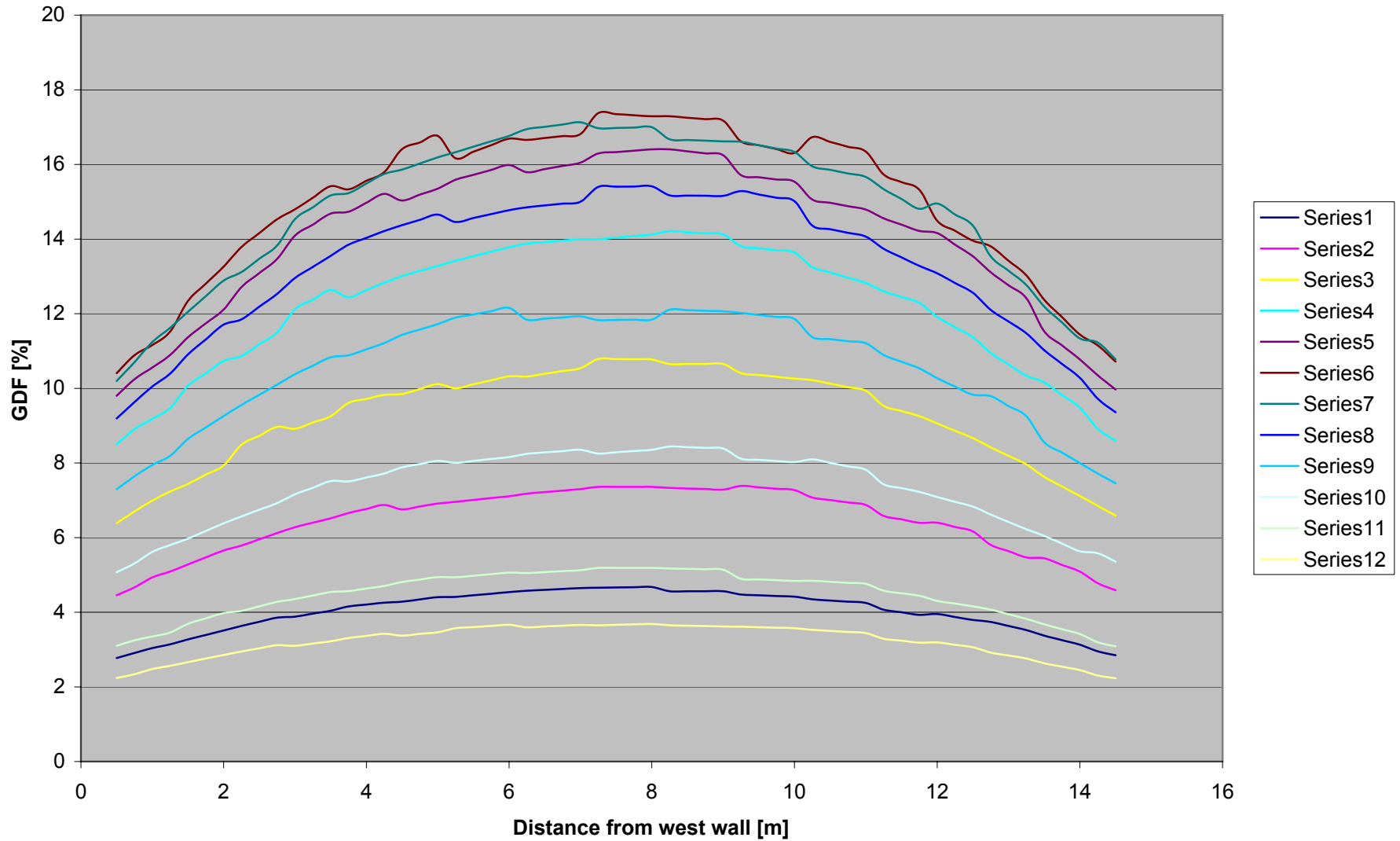
Saw2N 17_cDF



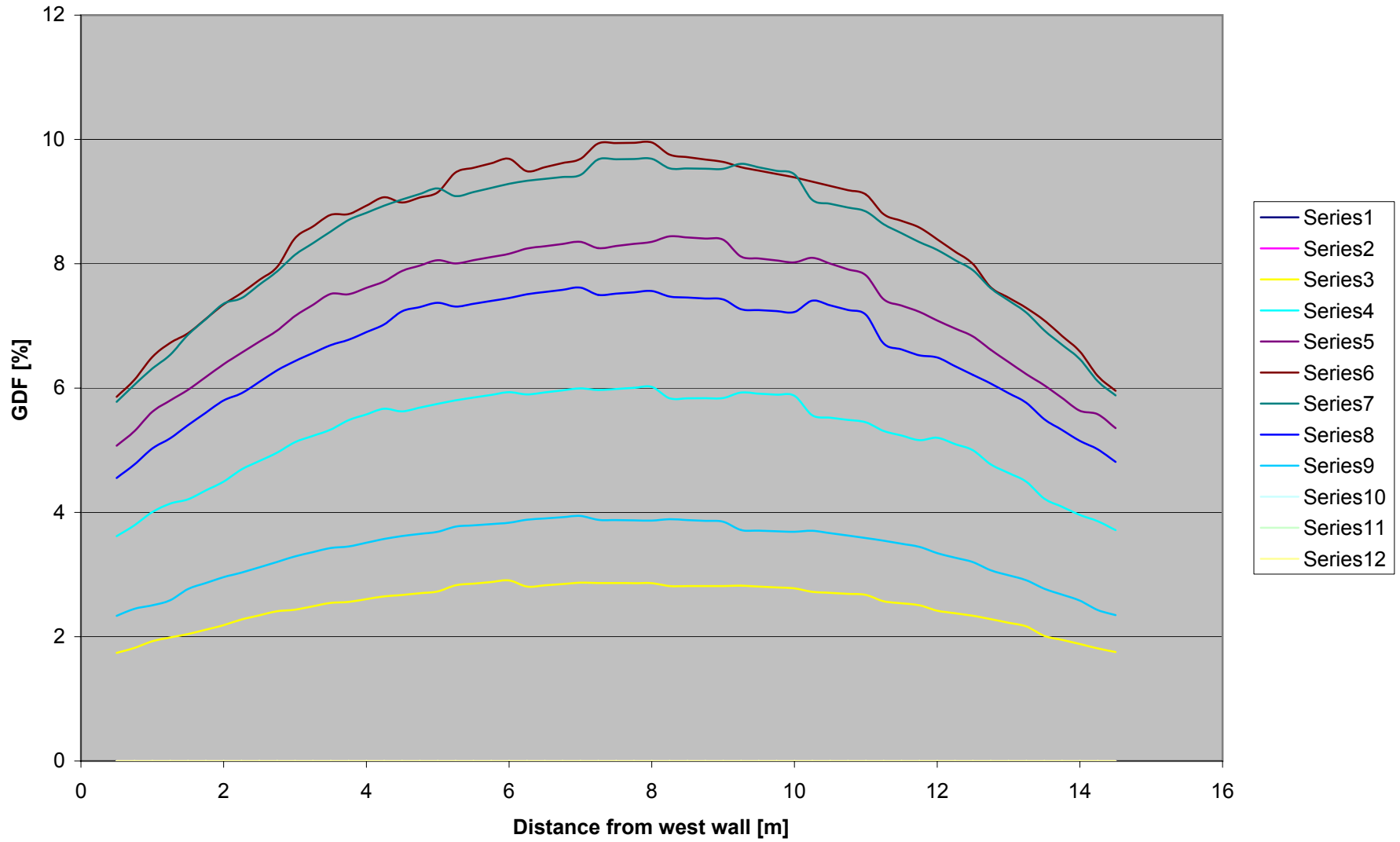
Saw3N 09_cDF



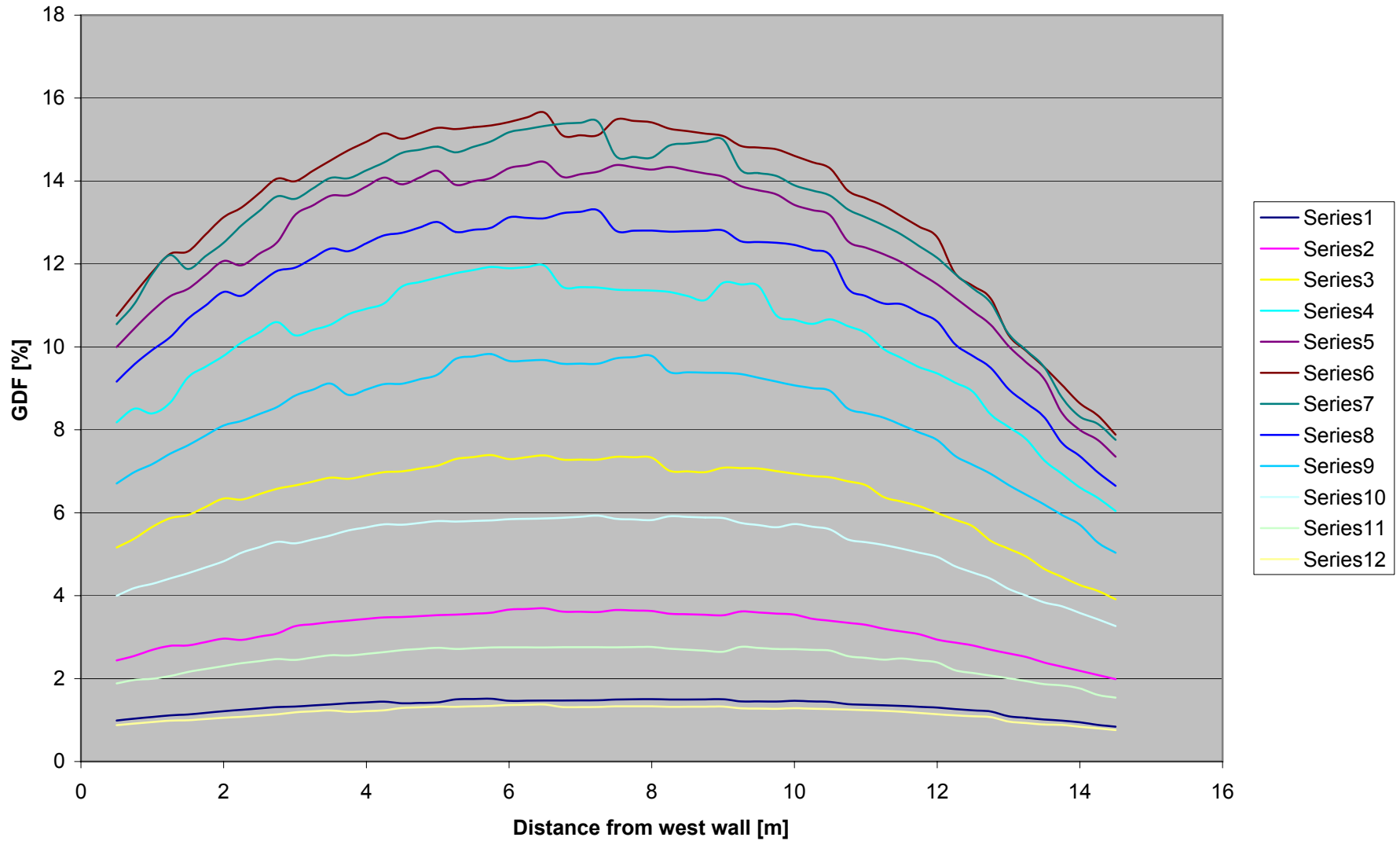
Saw3N 13_cDF



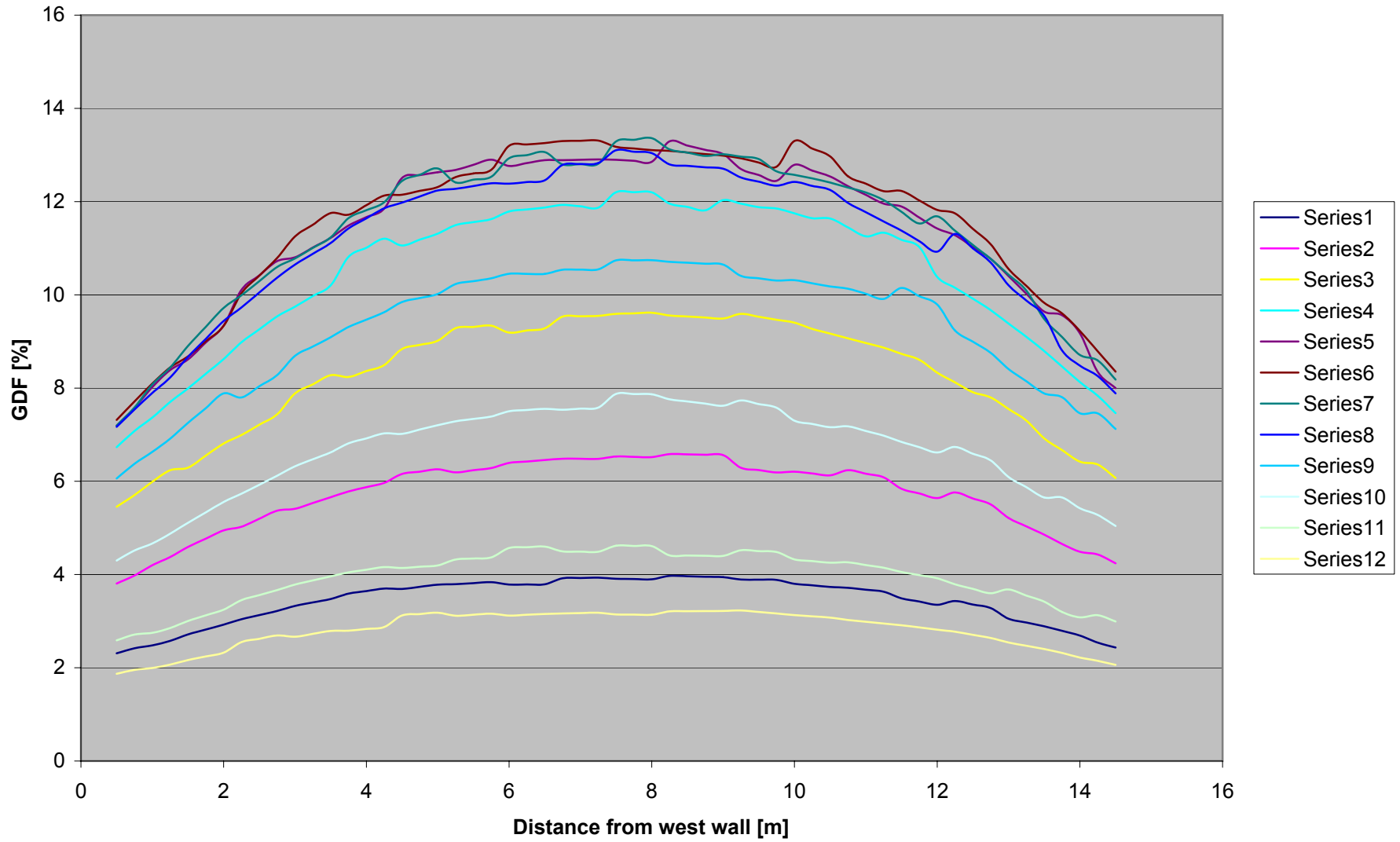
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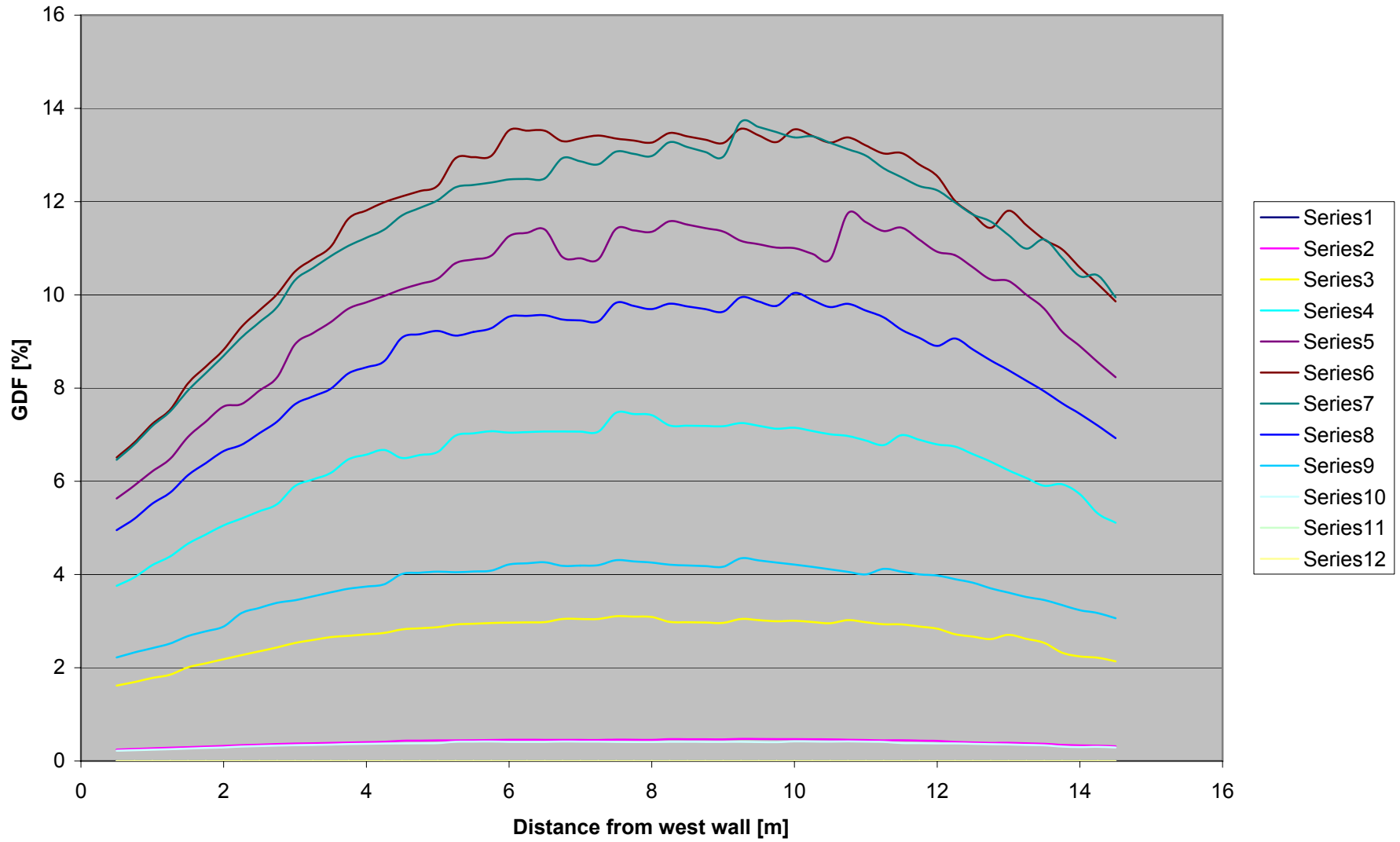
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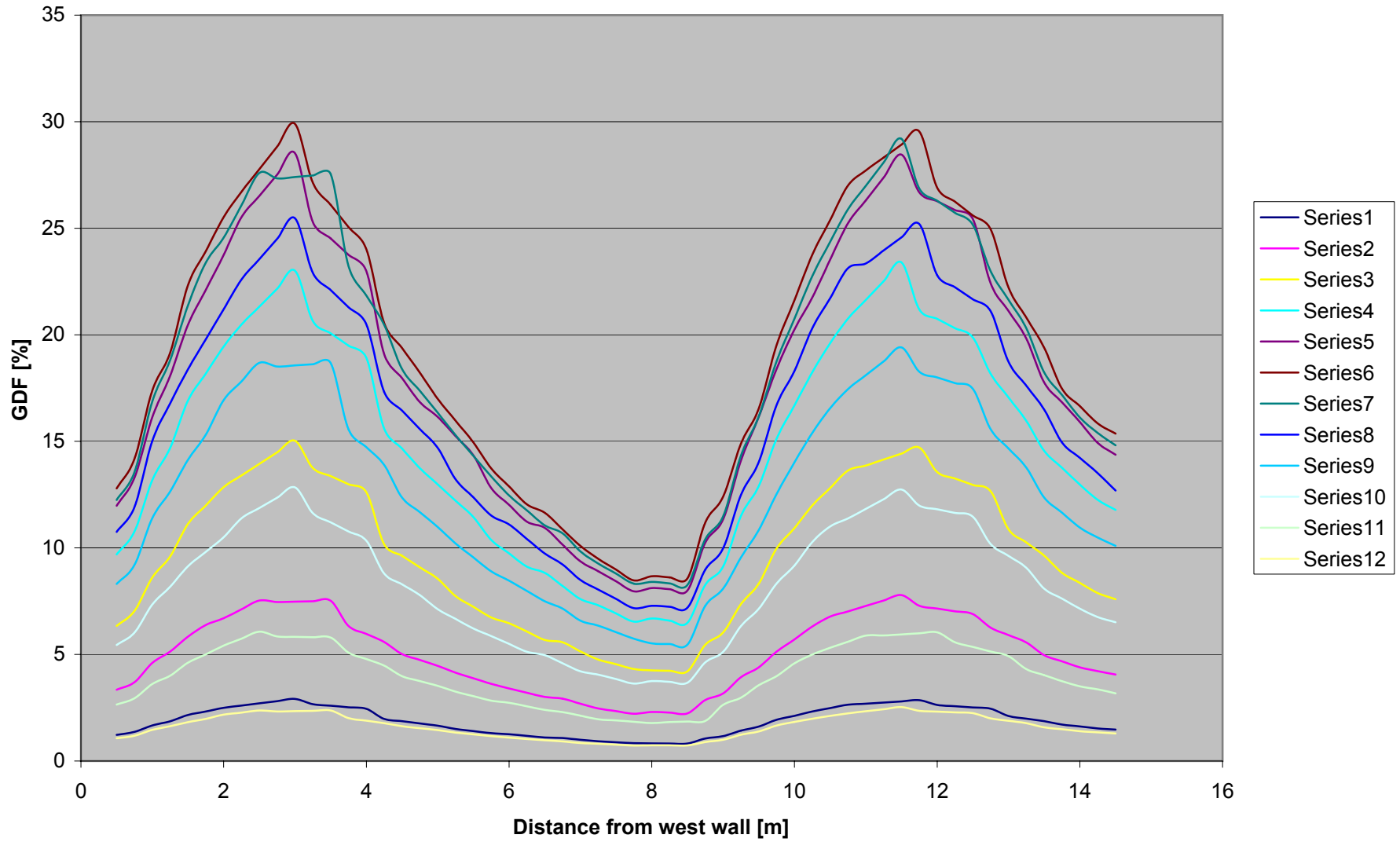
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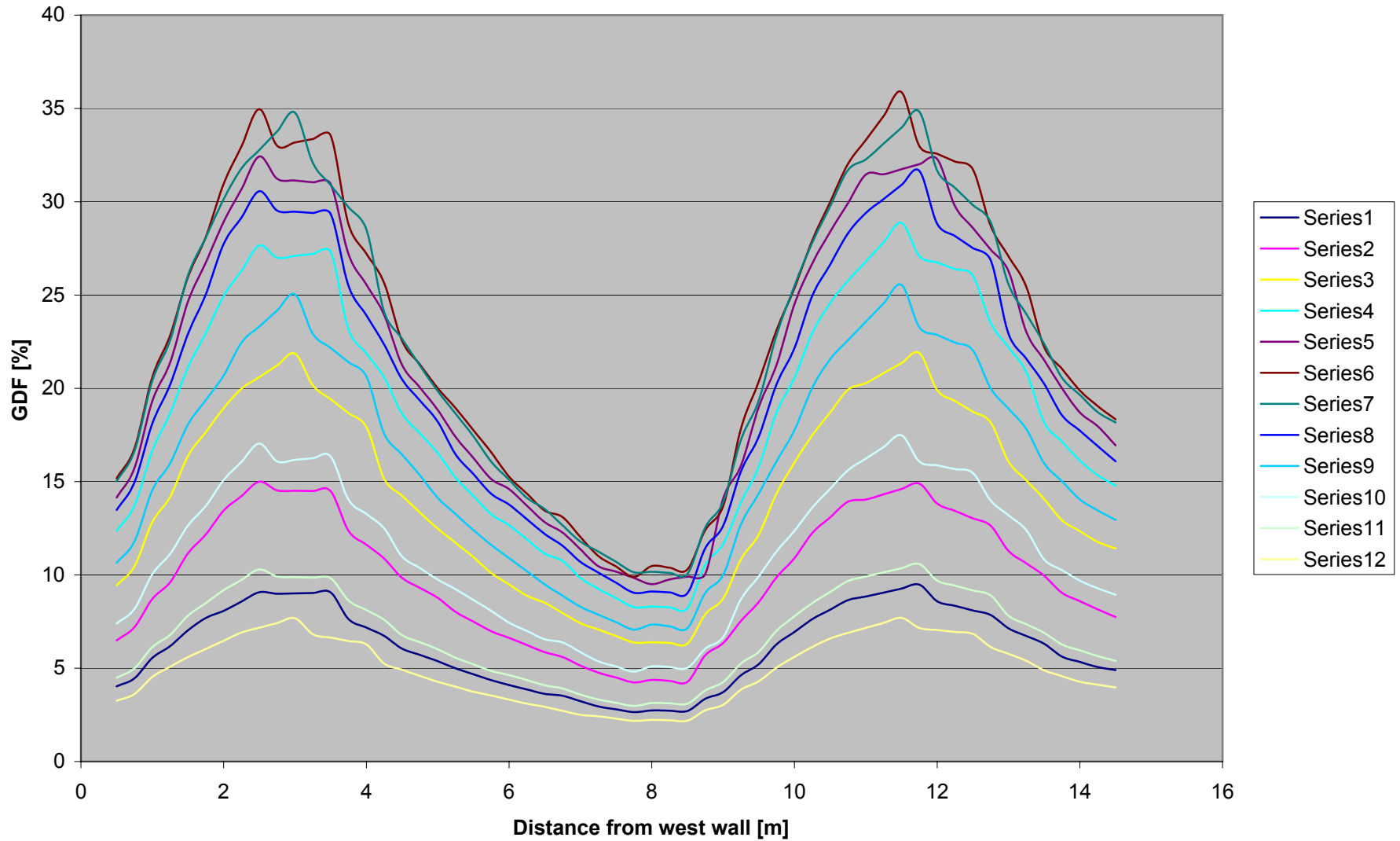
Saw3N 17_iDF



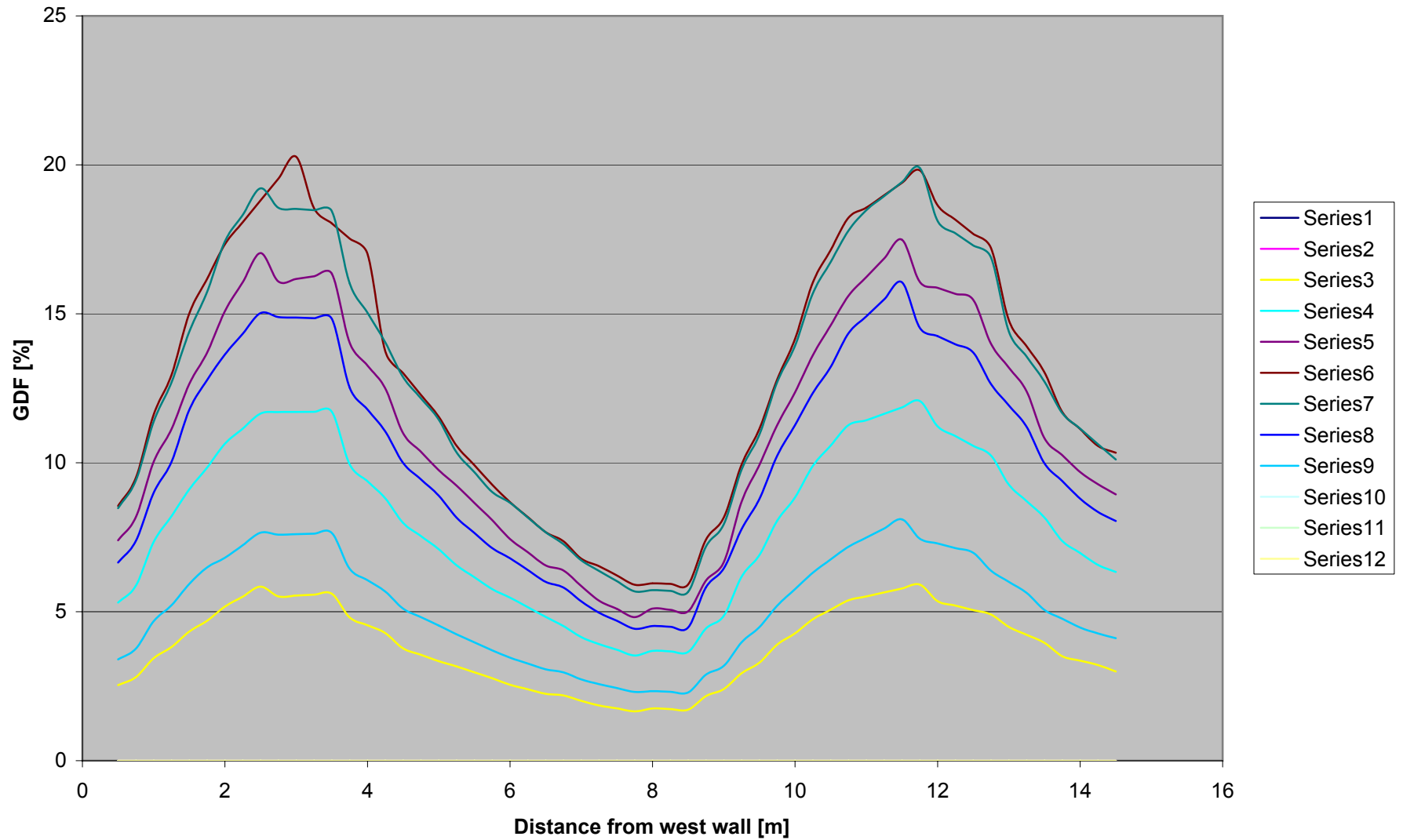
Monitor 09_cDF



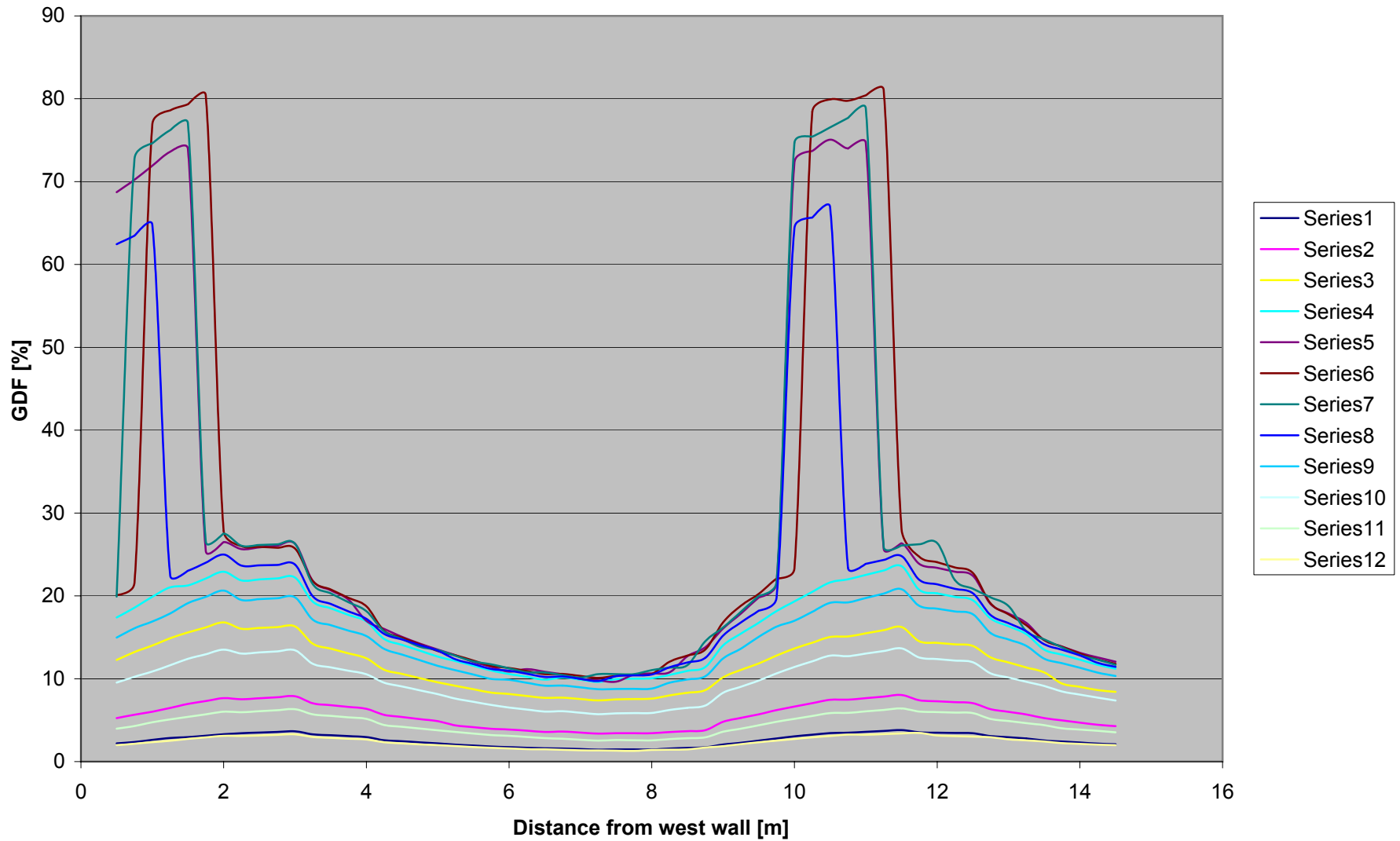
Monitor 13_cDF



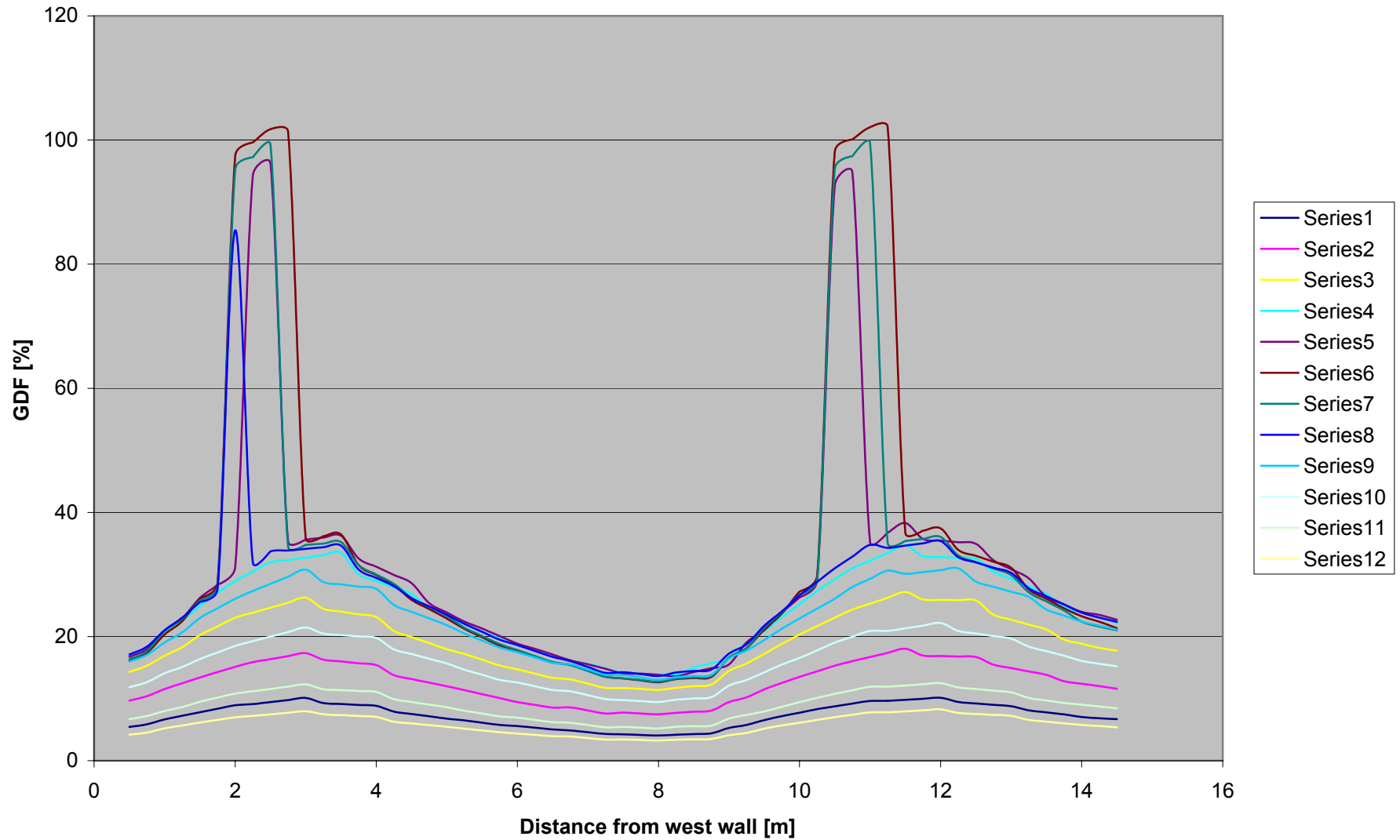
Monitor 17_cDF



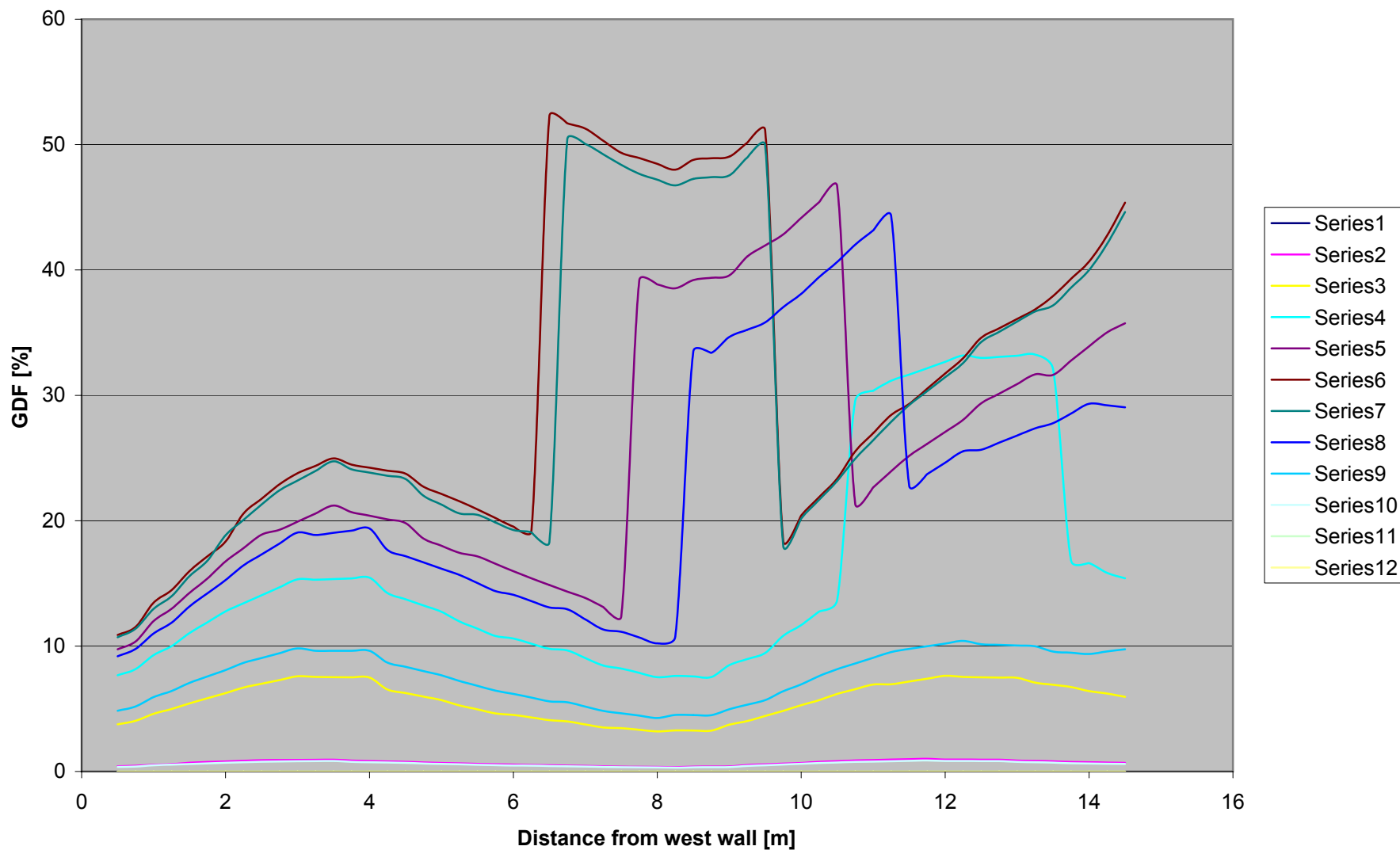
Monitor 09_iDF



Monitor 13_iDF



Monitor 17_IDF



Appendix-4: Radiance Files

The below files are recommended for the automated calculations of a model. At the present study we have generated totally ten series of such files.

```
# Radiance opaque material definitions {Model.mat}
```

```
# adobe texture function
void texfunc ad
6 cdx cdy cdz adobe.cal -s .1
0
1 .02
```

```
#wall adobe material
ad plastic rc_in_extern_wall
0
0
5 .8 .7 .5 0 0
```

```
# External MLC Colours...
void plastic rc_ex_roof_1
0
0
5 0.10 0.10 0.10 0 0
```

```
# Internal MLC Colours...
ad plastic rc_in_roof_1
0
0
5 0.80 0.70 0.50 0 0
```

```
# External MLC Colours...
void plastic rc_ex_floor_1
0
0
5 0.15 0.15 0.15 0 0
```

```
# Internal MLC Colours...
void plastic rc_in_floor_1
0
0
5 0.35 0.35 0.35 0 0
```

```
# Radiance interior composition file {Model_in.rad}
```

```
# Space Surface definition
```

```
rc_in_extern_wall polygon space:South_f
0
0
12
  0.00000    0.00300    3.60000
 15.00000    0.00300    3.60000
 15.00000    0.00300    0.00000
  0.00000    0.00300    0.00000
```

```
rc_in_extern_wall polygon space:North_f
0
0
12
 15.00000    5.99700    3.60000
  0.00000    5.99700    3.60000
  0.00000    5.99700    0.00000
 15.00000    5.99700    0.00000
```

```
rc_in_floor_1 polygon space:Floor
0
0
12
 15.00000    0.00000    0.010000
 15.00000    6.00000    0.010000
  0.00000    6.00000    0.010000
  0.00000    0.00000    0.010000
```

```
rc_in_extern_wall polygon space:West_f
0
0
15
  0.00300    6.00000    3.60000
  0.00300    3.00000    3.86200
  0.00300    0.00000    3.60000
  0.00300    0.00000    0.00000
  0.00300    6.00000    0.00000
```

```
rc_in_extern_wall polygon space:East_f
0
0
15
 14.99700    0.00000    3.60000
 14.99700    3.00000    3.86200
 14.99700    6.00000    3.60000
 14.99700    6.00000    0.00000
 14.99700    0.00000    0.00000
```

```
rc_in_roof_1 polygon space:Roof_S
0
0
48
  1.75000    0.49836    3.64051
  6.75000    0.49836    3.64051
  6.75000    2.49078    3.81452
  1.75000    2.49078    3.81452
```

1.75000	0.49836	3.64051
0.00000	0.00026	3.59701
0.00000	3.00026	3.85901
15.00000	3.00026	3.85901
15.00000	0.00026	3.59701
13.25000	0.49836	3.64051
13.25000	2.49078	3.81452
8.25000	2.49078	3.81452
8.25000	0.49836	3.64051
13.25000	0.49836	3.64051
15.00000	0.00026	3.59701
0.00000	0.00026	3.59701

```
rc_in_roof_1 polygon space:Roof_N
0
0
48
13.25000 5.50164 3.64051
8.25000 5.50164 3.64051
8.25000 3.50922 3.81452
13.25000 3.50922 3.81452
13.25000 5.50164 3.64051
15.00000 5.99974 3.59701
15.00000 2.99974 3.85901
0.00000 2.99974 3.85901
0.00000 5.99974 3.59701
1.75000 5.50164 3.64051
1.75000 3.50922 3.81452
6.75000 3.50922 3.81452
6.75000 5.50164 3.64051
1.75000 5.50164 3.64051
0.00000 5.99974 3.59701
15.00000 5.99974 3.59701
```



```
# Radiance exterior composition file {Model_out.rad}
```

```
# Space Surface definition
```

```
rc_in_extern_wall polygon space:South_f
```

```
0
```

```
0
```

```
12
```

```
0.00000 -0.00300 0.00000
15.00000 -0.00300 0.00000
15.00000 -0.00300 3.60000
0.00000 -0.00300 3.60000
```

```
rc_in_extern_wall polygon space:North_f
```

```
0
```

```
0
```

```
12
```

```
15.00000 6.00300 0.00000
0.00000 6.00300 0.00000
0.00000 6.00300 3.60000
15.00000 6.00300 3.60000
```

```
rc_in_extern_wall polygon space:West_f
```

```
0
```

```
0
```

```
15
```

```
-0.00300 6.00000 0.00000
-0.00300 0.00000 0.00000
-0.00300 0.00000 3.60000
-0.00300 3.00000 3.86200
-0.00300 6.00000 3.60000
```

```
rc_in_extern_wall polygon space:East_f
```

```
0
```

```
0
```

```
15
```

```
15.00300 0.00000 0.00000
15.00300 6.00000 0.00000
15.00300 6.00000 3.60000
15.00300 3.00000 3.86200
15.00300 0.00000 3.60000
```

```
rc_in_roof_1 polygon space:Roof_S
```

```
0
```

```
0
```

```
48
```

```
0.00000 -0.00026 3.60299
15.00000 -0.00026 3.60299
13.25000 0.49784 3.64649
8.25000 0.49784 3.64649
8.25000 2.49026 3.82050
13.25000 2.49026 3.82050
13.25000 0.49784 3.64649
15.00000 -0.00026 3.60299
15.00000 2.99974 3.86499
0.00000 2.99974 3.86499
```

0.00000	-0.00026	3.60299
1.75000	0.49784	3.64649
1.75000	2.49026	3.82050
6.75000	2.49026	3.82050
6.75000	0.49784	3.64649
1.75000	0.49784	3.64649

```
rc_in_roof_1 polygon space:Roof_N
0
0
48
15.00000 6.00026 3.60299
0.00000 6.00026 3.60299
1.75000 5.50216 3.64649
6.75000 5.50216 3.64649
6.75000 3.50974 3.82050
1.75000 3.50974 3.82050
1.75000 5.50216 3.64649
0.00000 6.00026 3.60299
0.00000 3.00026 3.86499
15.00000 3.00026 3.86499
15.00000 6.00026 3.60299
13.25000 5.50216 3.64649
13.25000 3.50974 3.82050
8.25000 3.50974 3.82050
8.25000 5.50216 3.64649
13.25000 5.50216 3.64649
```

```
# Define material of sky {Ground.rad}
skyfunc glow sky_glow
0
0
4 1 1 1 0

sky_glow source sky
0
0
4 0 0 1 180

# Define ground

skyfunc glow ground_glow
0
0
4 1.276 .957 .319 0

ground_glow source ground
0
0
4 0 0 -1 180

void plastic ground_mat
0
0
5 0.26 0.19 0.06 0 0

ground_mat ring groundplane
0
0
8 7.5 3.0 -0.01 0. 0. 1. 0. 32.3
```

The following file is the Gen_script_DF

```
#!/bin/csh -f

# Calculate the general daylight factor DF and illuminance for different skies
and different ab

# Define day and hour variables
set hr = 09
set day = 15

#Define sky type
set sky = -c

# Define site
set coord = ($sky -g .2 -a 56 -o 0 -m 0)

#Set ambient values
set ambpar = (-ad 1024 -as 64 -ar 16 -ds 0.2 -aa .15 )

#Set months
foreach mon (01 02 03 04 05 06 07 08 09 10 11 12)

set skypar = ($mon $day $hr $coord)

set gambv = `gensky $skypar | rcalc -i '# Ground ambient level: ${ga}' -e
'$1=ga'`

#echo "gambv:" $gambv

mkdir ./result/$mon$day$hr

#if ($gambv == 0) goto NIGHT

#Create the scene.oct for different months
  oconv -w -i frozen.oct '!gensky "$skypar" ground.rad > \
  result/$mon$day$hr/$mon$day$hr$sky.oct

#Set the ambient bounces start of the second loop
foreach ab (5)

  #Write the skypar and illum in the begining of the DF file
  echo "Sky:" $skypar > result/$mon$day$hr/$mon$day$hr$sky'_DF_'$ab.txt
  echo "Horizontal Illuminance:" "10000 LUX" >>
result/$mon$day$hr/$mon$day$hr$sky'_DF_'$ab.txt
  echo "Ambient Bounces:" $ab >>
result/$mon$day$hr/$mon$day$hr$sky'_DF_'$ab.txt

  # Write the skypar and illum in the illuminance file for inside the building
  echo "Sky:" $skypar > result/$mon$day$hr/$mon$day$hr$sky'_illum_'$ab.txt
```

```
    echo "Horizontal Illuminance:" "10000 LUX" >>
result/$mon$day$hr/$mon$day$hr$sky'_illum_'$ab.txt
    echo "Ambient Bounces:" $ab >>
result/$mon$day$hr/$mon$day$hr$sky'_illum_'$ab.txt
    echo "Ambient Bounces:" $mon$day$hr'_'$ab

if ($gambv == 0) goto NIGHT

# Calculate the illuminance for different points in the scene The samp.inp
# contains the points of interest
rtrace -w -h -I+ -ab $ab $ambpar \
    result/$mon$day$hr/$mon$day$hr$sky.oct < samp.txt | rcalc -e \
    '$1=($1*.265+$2*.67+$3*.065)*179' >> \
result/$mon$day$hr/$mon$day$hr$sky'_illum_'$ab.txt

# Calculate the daylight factor
cat result/$mon$day$hr/$mon$day$hr$sky'_illum_'$ab.txt | sed -n '4,60p' | \
rcalc -e '$1=$1*100/10000' >> result/$mon$day$hr/$mon$day$hr$sky'_DF_'$ab.txt

#end of second loop
end

NIGHT:

end
```

The following file is the Script_rpict

```
#!/bin/csh -f
#
# Render image , filter images for different months time and sky conditions
#
# Define day and hour variables
set hr = 09
set day = 15

# Set Views
set view_da = (-vp 7.5 3 20 -vd 0 0 -1 -vu 0 1 0 -vh 48 -vv 21 -vo 16.5 )
set view_db = (-vp 15 3 .5 -vd -1 0 0 -vu 0 0 1 -vh 60 -vv 60 -vo 0.5 )
set view_dc = (-vp 14.5 .5 .5 -vd -.92 .32 .21 -vu 0 0 1 -vh 50 -vv 50 )

# Set pic dimenssions
set dim = 600
set res = (-x $dim -y $dim)

#Define sky type
set sky = -c

# Define site
set coord = ($sky -g .2 -a 56 -o 0 -m 0)

#Set months
foreach mon (01 02 03 04 05 06 07 08 09 10 11 12)

rm -f result/$mon$day$hr/$mon$day$hr$sky.amb
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky.amb

set abml = (-af result/$mon$day$hr/$mon$day$hr$sky.amb)
set iabml = ( -af result/$mon$day$hr/'i_'$mon$day$hr$sky.amb )

set skypar = ($mon $day $hr $coord)

set gambv = `gensky $skypar | rcalc -i '# Ground ambient level: ${ga}' -e
'$l=ga'`
#echo "gambv:" $gambv

mkdir ./result/$mon$day$hr

if ($gambv == 0) goto NIGHT

#Create the scene.oct for different months
oconv -w -i frozen.oct '\!gensky "$skypar" ground.rad > \
result/$mon$day$hr/$mon$day$hr$sky.oct

#Create the view_da
rpict $view_da $abml @rpict.opt $res result/$mon$day$hr/$mon$day$hr$sky.oct > \
result/$mon$day$hr/$mon$day$hr$sky'_da'.unf
```

```
#Create the illuminance view_da
rpict -i $view_da $iabml @rpict.opt $res result/$mon$day$hr/$mon$day$hr$sky.oct
> \
    result/$mon$day$hr/'i_'$mon$day$hr$sky'_da'.unf

rm -f result/$mon$day$hr/$mon$day$hr$sky'_da'.pic
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky'_da'.pic

#Filter the picture with pfilt
pfilt -1 -e 1 -r .6 result/$mon$day$hr/$mon$day$hr$sky'_da'.unf > \
    result/$mon$day$hr/$mon$day$hr$sky'_da'.pic

#Filter the illuminance picture with pfilt
pfilt -1 -e 1 -r .6 result/$mon$day$hr/'i_'$mon$day$hr$sky'_da'.unf > \
    result/$mon$day$hr/'i_'$mon$day$hr$sky'_da'.pic

rm -f result/$mon$day$hr/$mon$day$hr$sky'_da'.unf
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky'_da'.unf

# Filter the picture for a person with excellent visibility skills
pcond -h- result/$mon$day$hr/$mon$day$hr$sky'_da'.pic > \
    result/$mon$day$hr/$mon$day$hr$sky'_da_h'.pic

#Create the view_db
rpict $view_db $abml @rpict.opt $res result/$mon$day$hr/$mon$day$hr$sky.oct > \
    result/$mon$day$hr/$mon$day$hr$sky'_db'.unf

rpict -i $view_db $iabml @rpict.opt $res result/$mon$day$hr/$mon$day$hr$sky.oct
> \
    result/$mon$day$hr/'i_'$mon$day$hr$sky'_db'.unf

rm -f result/$mon$day$hr/$mon$day$hr$sky'_db'.pic
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky'_db'.pic

#Filter the picture with pfilt
pfilt -1 -e 1 -r .6 -x /2 -y /2 result/$mon$day$hr/$mon$day$hr$sky'_db'.unf >
result/$mon$day$hr/$mon$day$hr$sky'_db'.pic

pfilt -1 -e 1 -r .6 -x /2 -y /2 result/$mon$day$hr/'i_'$mon$day$hr$sky'_db'.unf
> result/$mon$day$hr/'i_'$mon$day$hr$sky'_db'.pic

rm -f result/$mon$day$hr/$mon$day$hr$sky'_db'.unf
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky'_db'.unf

# Filter the picture for a person with excellent visibility skills
pcond -h- result/$mon$day$hr/$mon$day$hr$sky'_db'.pic > \
    result/$mon$day$hr/$mon$day$hr$sky'_db_h'.pic

rm -f result/$mon$day$hr/$mon$day$hr$sky'_dc'.pic
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky'_dc'.pic

#Create the view_dc
rpict $view_dc $abml @rpict.opt $res result/$mon$day$hr/$mon$day$hr$sky.oct > \
    result/$mon$day$hr/$mon$day$hr$sky'_dc'.unf
```

```
rpict -i $view_dc $iabml @rpict.opt $res result/$mon$day$hr/$mon$day$hr$sky.oct
> result/$mon$day$hr/'i_'$mon$day$hr$sky'_dc'.unf

#Filter the piixture with pfilt
pfilt -1 -e 1 -r .6 -x /2 -y /2 result/$mon$day$hr/$mon$day$hr$sky'_dc'.unf >
result/$mon$day$hr/$mon$day$hr$sky'_dc'.pic

pfilt -1 -e 1 -r .6 -x /2 -y /2
result/$mon$day$hr/'i_'$mon$day$hr$sky'_dc'.unf >
result/$mon$day$hr/'i_'$mon$day$hr$sky'_dc'.pic

rm -f result/$mon$day$hr/$mon$day$hr$sky'_dc'.unf
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky'_dc'.unf

# Filter the pixture for a person with excellent visibility skills
pcond -h- result/$mon$day$hr/$mon$day$hr$sky'_dc'.pic > \
result/$mon$day$hr/$mon$day$hr$sky'_dc_h'.pic

rm -f result/$mon$day$hr/$mon$day$hr$sky.amb
rm -f result/$mon$day$hr/'i_'$mon$day$hr$sky.amb

NIGHT:

end
```


The following file summarizes the results of the general daylight factor for the hole year to one file for different hours and sky conditions

```
#!/bin/csh -f

# Define day and hour variables
set day = 15
foreach hr (09 13 17)

#Define sky type
foreach sky (-c +i)

lam \
  result/01$day$hr/01$day$hr$sky'_DF_5'.txt \
  result/02$day$hr/02$day$hr$sky'_DF_5'.txt \
  result/03$day$hr/03$day$hr$sky'_DF_5'.txt \
  result/04$day$hr/04$day$hr$sky'_DF_5'.txt \
  result/05$day$hr/05$day$hr$sky'_DF_5'.txt \
  result/06$day$hr/06$day$hr$sky'_DF_5'.txt \
  result/07$day$hr/07$day$hr$sky'_DF_5'.txt \
  result/08$day$hr/08$day$hr$sky'_DF_5'.txt \
  result/09$day$hr/09$day$hr$sky'_DF_5'.txt \
  result/10$day$hr/10$day$hr$sky'_DF_5'.txt \
  result/11$day$hr/11$day$hr$sky'_DF_5'.txt \
  result/12$day$hr/12$day$hr$sky'_DF_5'.txt \
> result/'sum_'$hr$sky'DF'.txt

end

end
```

The following file is the Rview_pic and automates the display of the generated pictures.

```
#!/bin/csh -f

set hr = 17
set day = 15

set sky = +i

#Set months
foreach mon (01 02 03 04 05 06 07 08 09 10 11 12 )

cd ./result/$mon$day$hr/

ximage $mon$day$hr$sky'_db'.pic &
#ximage $mon$day$hr$sky'_db_h'.pic &
#ximage 'i_'$mon$day$hr$sky'_da'.pic &

cd ../../

end
```

The following file is the samp.txt

```
0.5 3 1.7 0 0 1
0.75 3 1.7 0 0 1
1 3 1.7 0 0 1
1.25 3 1.7 0 0 1
1.5 3 1.7 0 0 1
1.75 3 1.7 0 0 1
2 3 1.7 0 0 1
2.25 3 1.7 0 0 1
2.5 3 1.7 0 0 1
2.75 3 1.7 0 0 1
3 3 1.7 0 0 1
3.25 3 1.7 0 0 1
3.5 3 1.7 0 0 1
3.75 3 1.7 0 0 1
4 3 1.7 0 0 1
4.25 3 1.7 0 0 1
4.5 3 1.7 0 0 1
4.75 3 1.7 0 0 1
5 3 1.7 0 0 1
5.25 3 1.7 0 0 1
5.5 3 1.7 0 0 1
5.75 3 1.7 0 0 1
6 3 1.7 0 0 1
6.25 3 1.7 0 0 1
6.5 3 1.7 0 0 1
6.75 3 1.7 0 0 1
7 3 1.7 0 0 1
7.25 3 1.7 0 0 1
7.5 3 1.7 0 0 1
7.75 3 1.7 0 0 1
8 3 1.7 0 0 1
8.25 3 1.7 0 0 1
8.5 3 1.7 0 0 1
8.75 3 1.7 0 0 1
9 3 1.7 0 0 1
9.25 3 1.7 0 0 1
9.5 3 1.7 0 0 1
9.75 3 1.7 0 0 1
10 3 1.7 0 0 1
10.25 3 1.7 0 0 1
10.5 3 1.7 0 0 1
10.75 3 1.7 0 0 1
11 3 1.7 0 0 1
11.25 3 1.7 0 0 1
11.5 3 1.7 0 0 1
11.75 3 1.7 0 0 1
12 3 1.7 0 0 1
12.25 3 1.7 0 0 1
12.5 3 1.7 0 0 1
12.75 3 1.7 0 0 1
13 3 1.7 0 0 1
13.25 3 1.7 0 0 1
13.5 3 1.7 0 0 1
13.75 3 1.7 0 0 1
14 3 1.7 0 0 1
```

```
14.25 3      1.7  0      0      1
14.5  3      1.7  0      0      1
```

The following file is the Rpict.opt

```
-t 30
-ps 8
-pt .16
-dp 128
-dt .2
-dc .25
-dr 0
-sj 0
-st .5
-lr 3
-aw 0
-lw .02
-ab 5
-av 0 0 0
-ad 1024
-as 64
-ar 16
-ds 0.2
-aa .15
```