Additional File 2:

Transcriptional profiling of Arabidopsis heat shock proteins and transcription factors reveals extensive overlap between heat and non−heat stress response pathways

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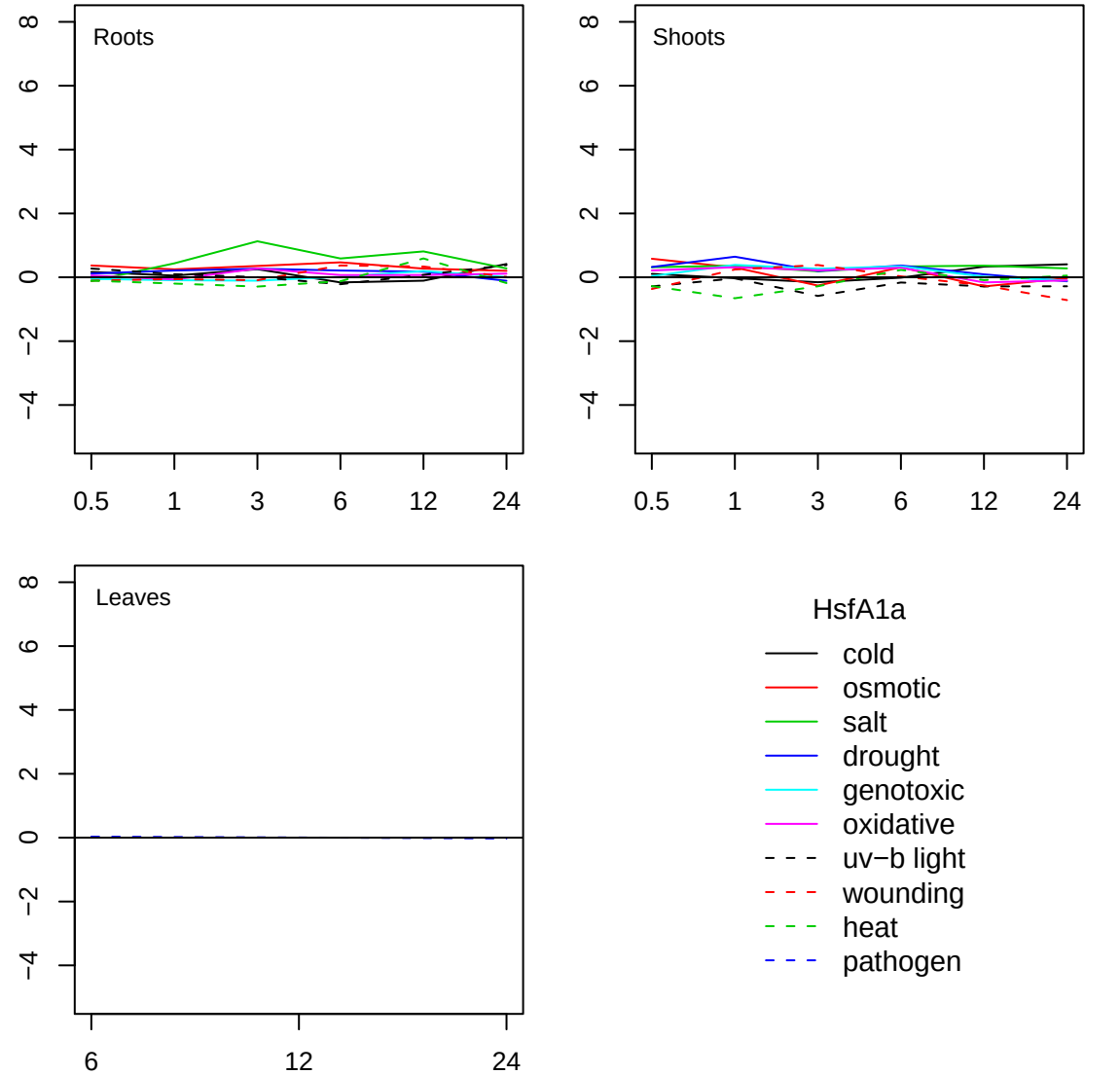
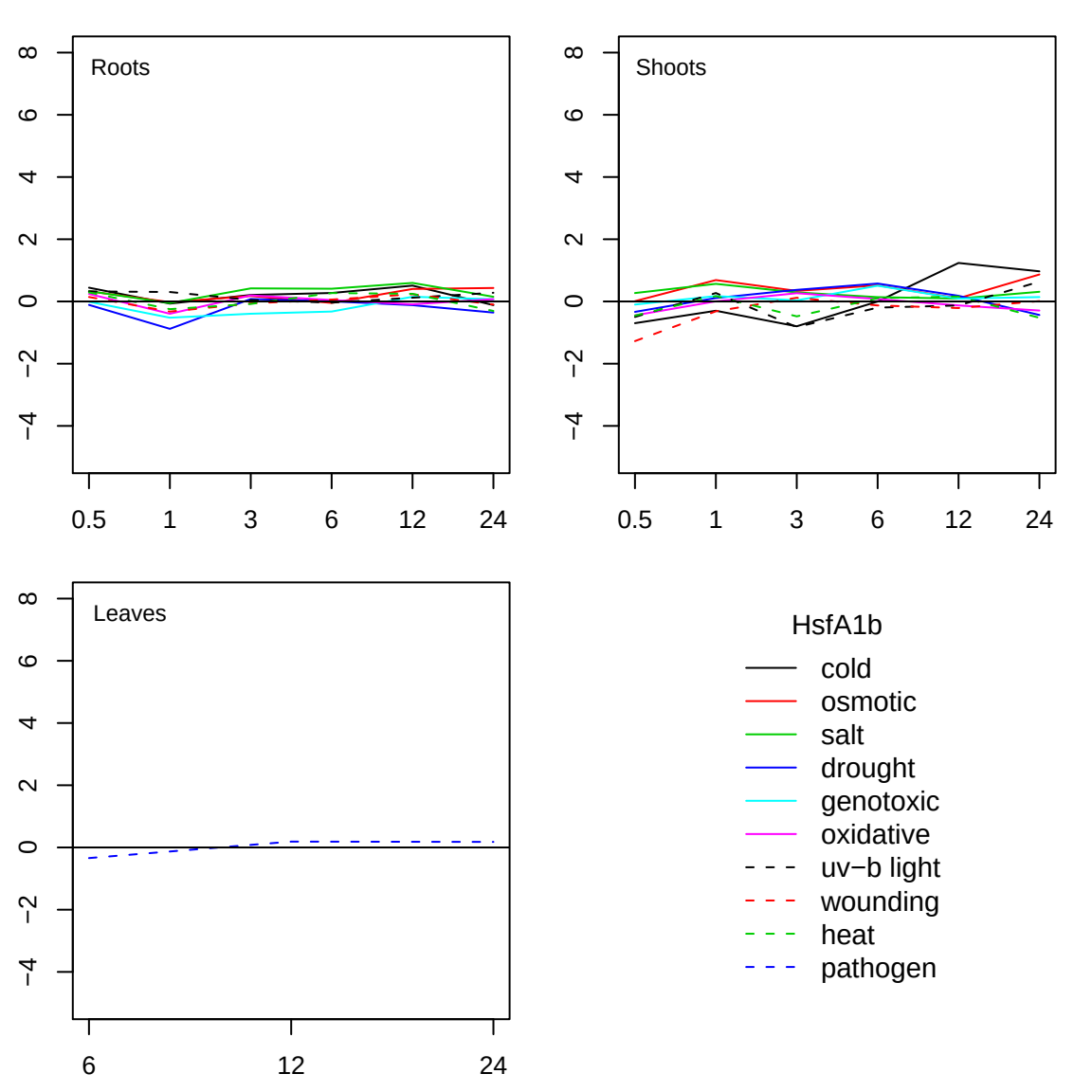
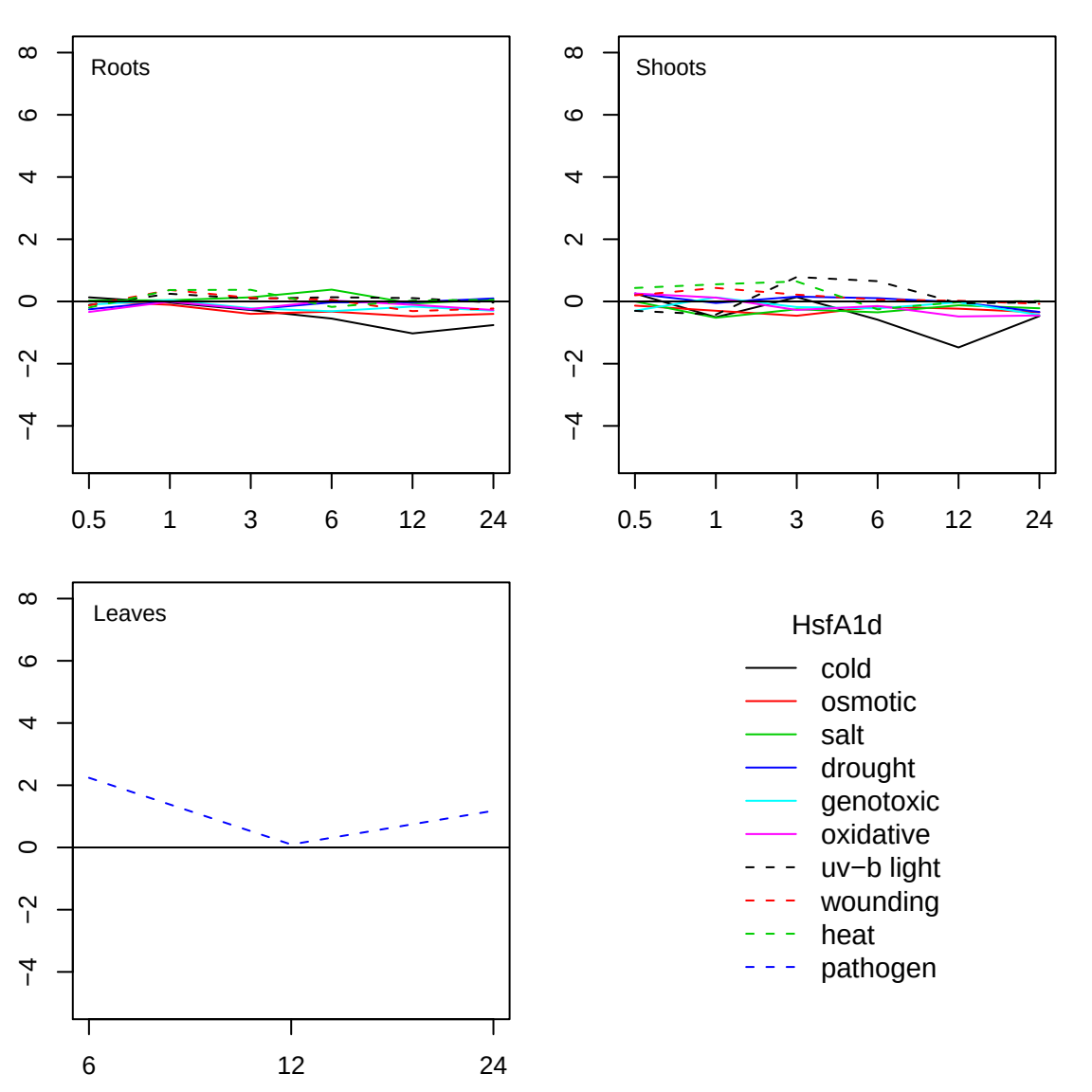
This file displays stress−response profile plots for each individual heat shock protein and transcription factor analyzed in this study. Expression response profiles are shown for all abiotic stress treatments applied to roots and shoots, and for the pathogen treatment applied to leaves. The horizontal axis of each plot corresponds to time (hours), while the vertical axis corresponds to the log2 fold−change associated with a given stress treatment.

Contact: William R. Swindell, swindel5@msu.edu


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
HsfA1a
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
HsfA1b
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
HsfA1d
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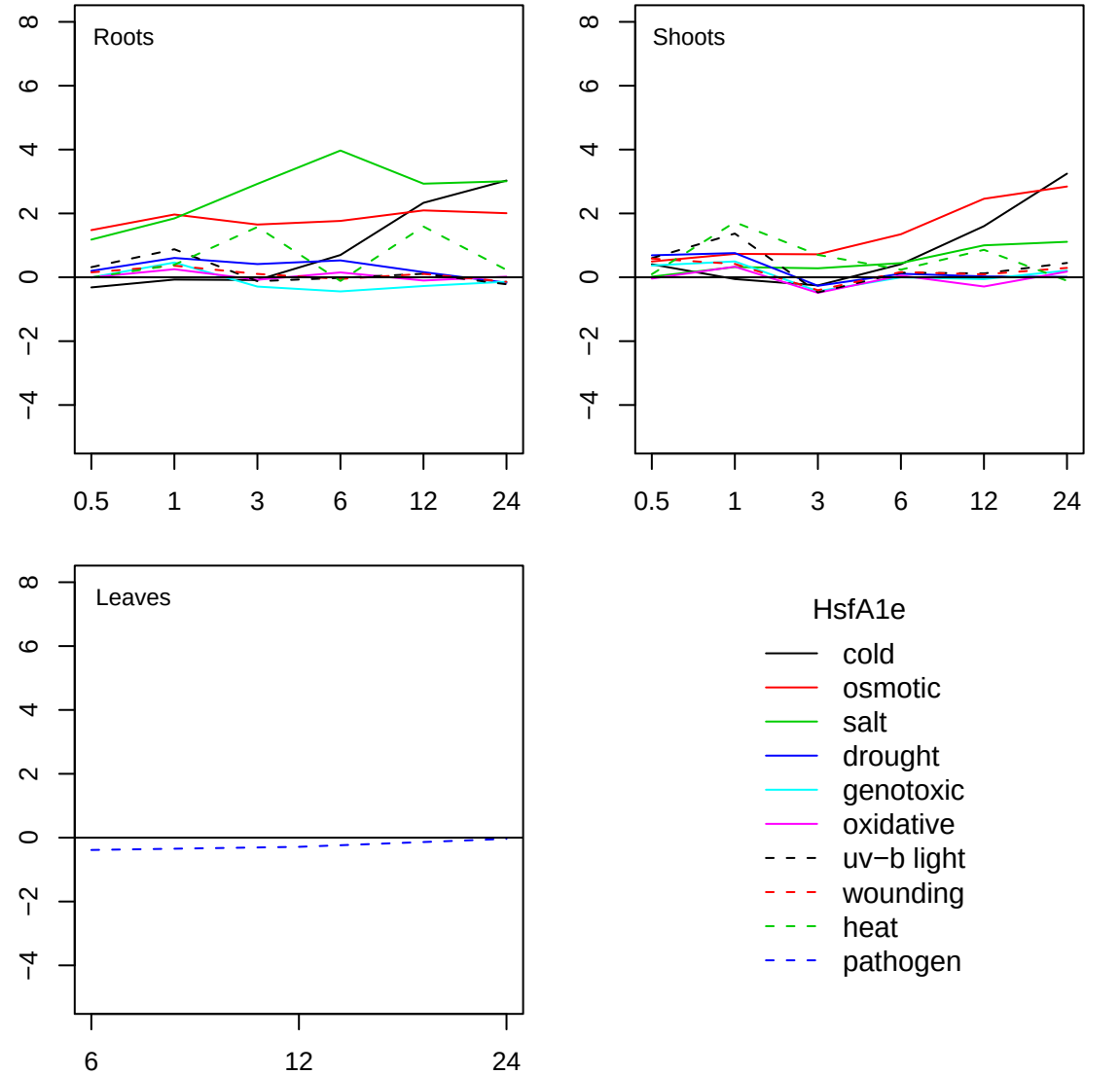
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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6
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2
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−2
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0.5
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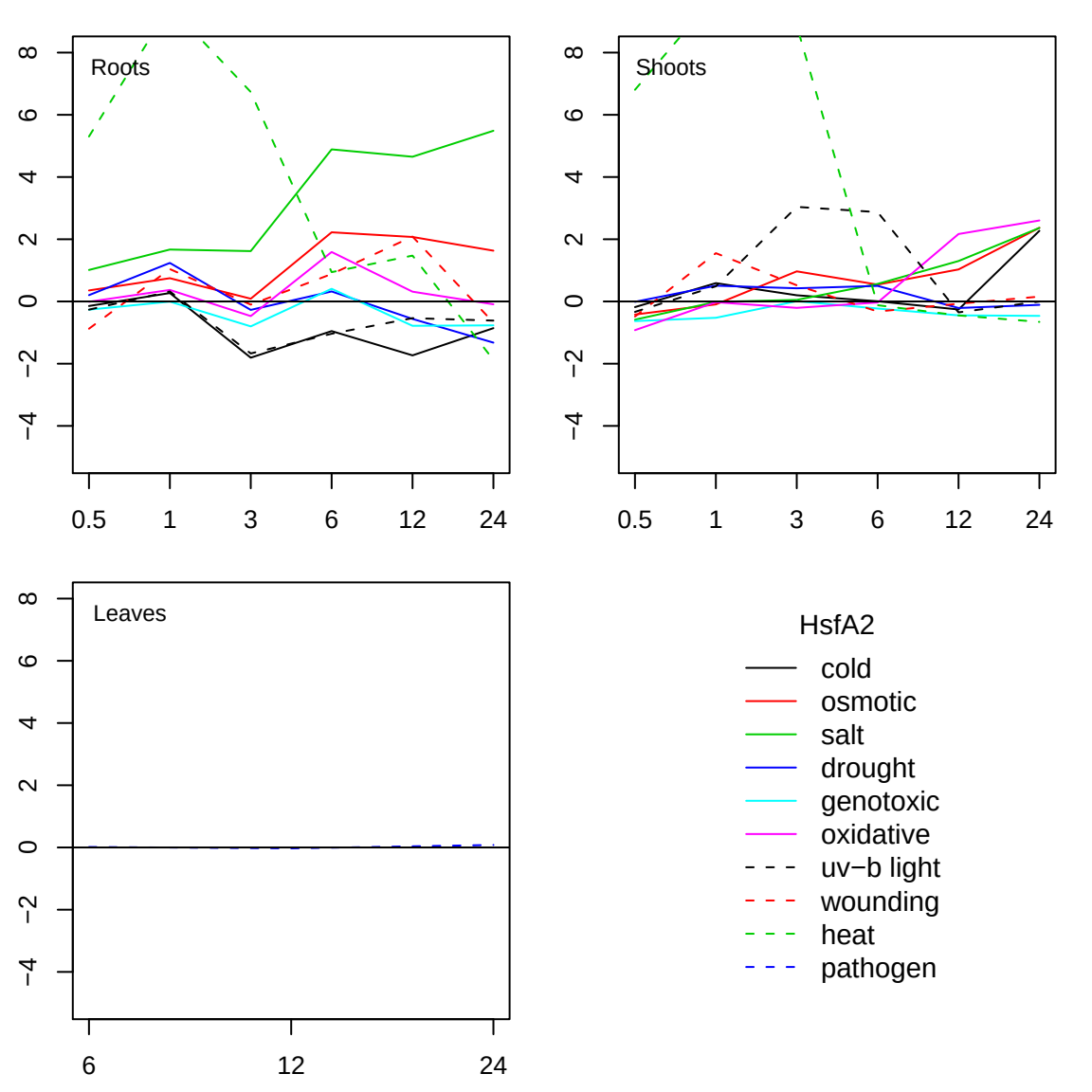
6
12
24
HsfA1e
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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−2
−4
0.5
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6
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24
HsfA2
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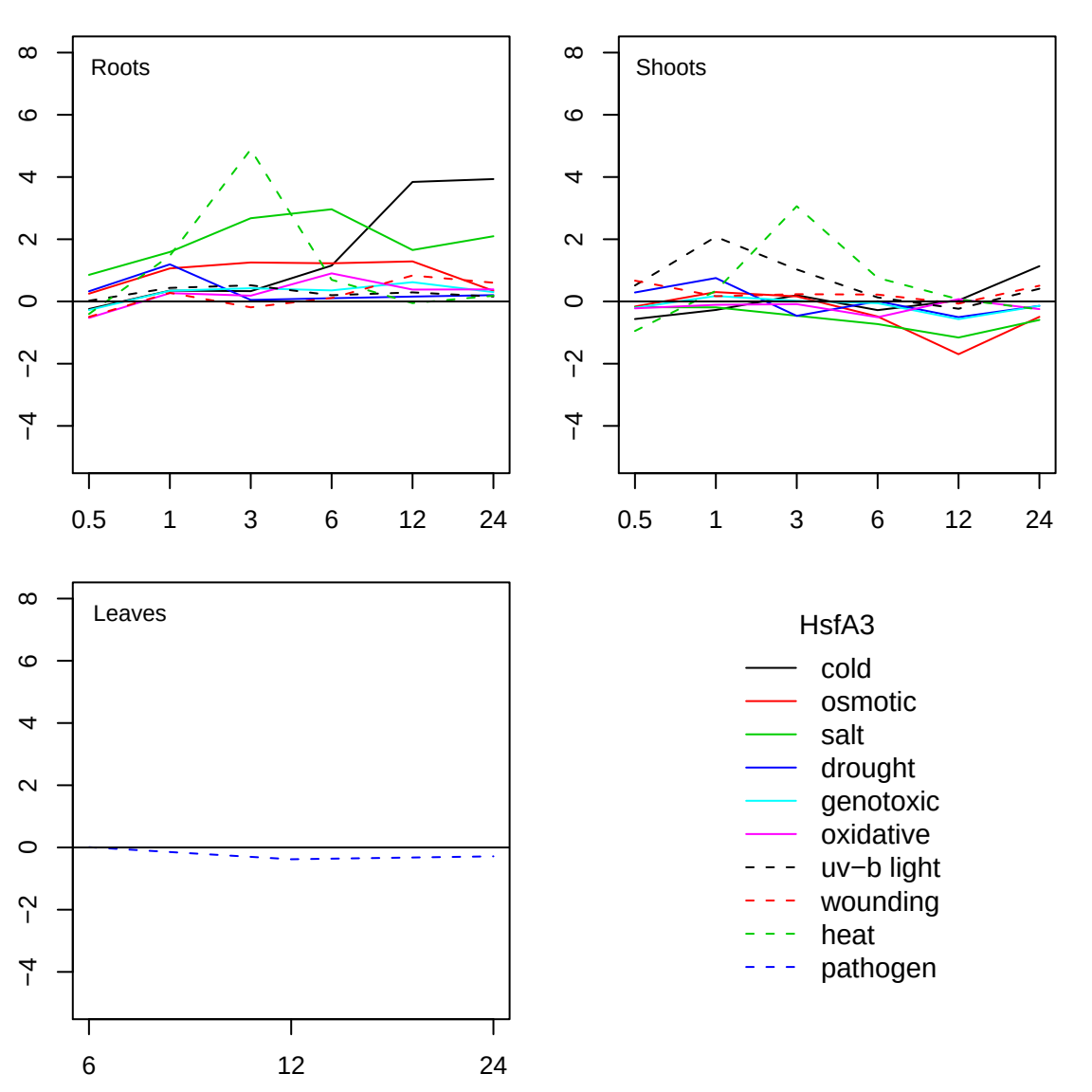
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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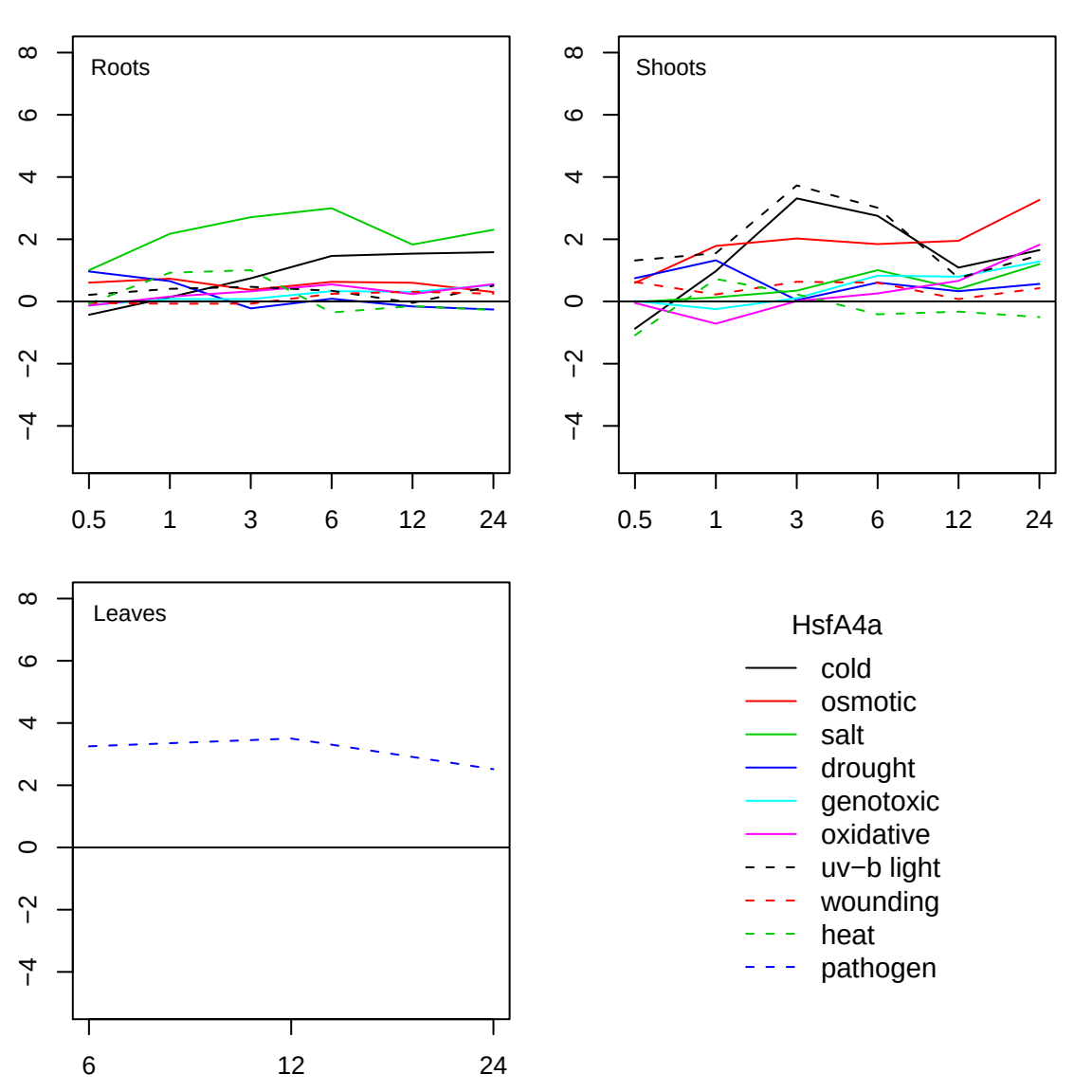
6
12
24
HsfA3
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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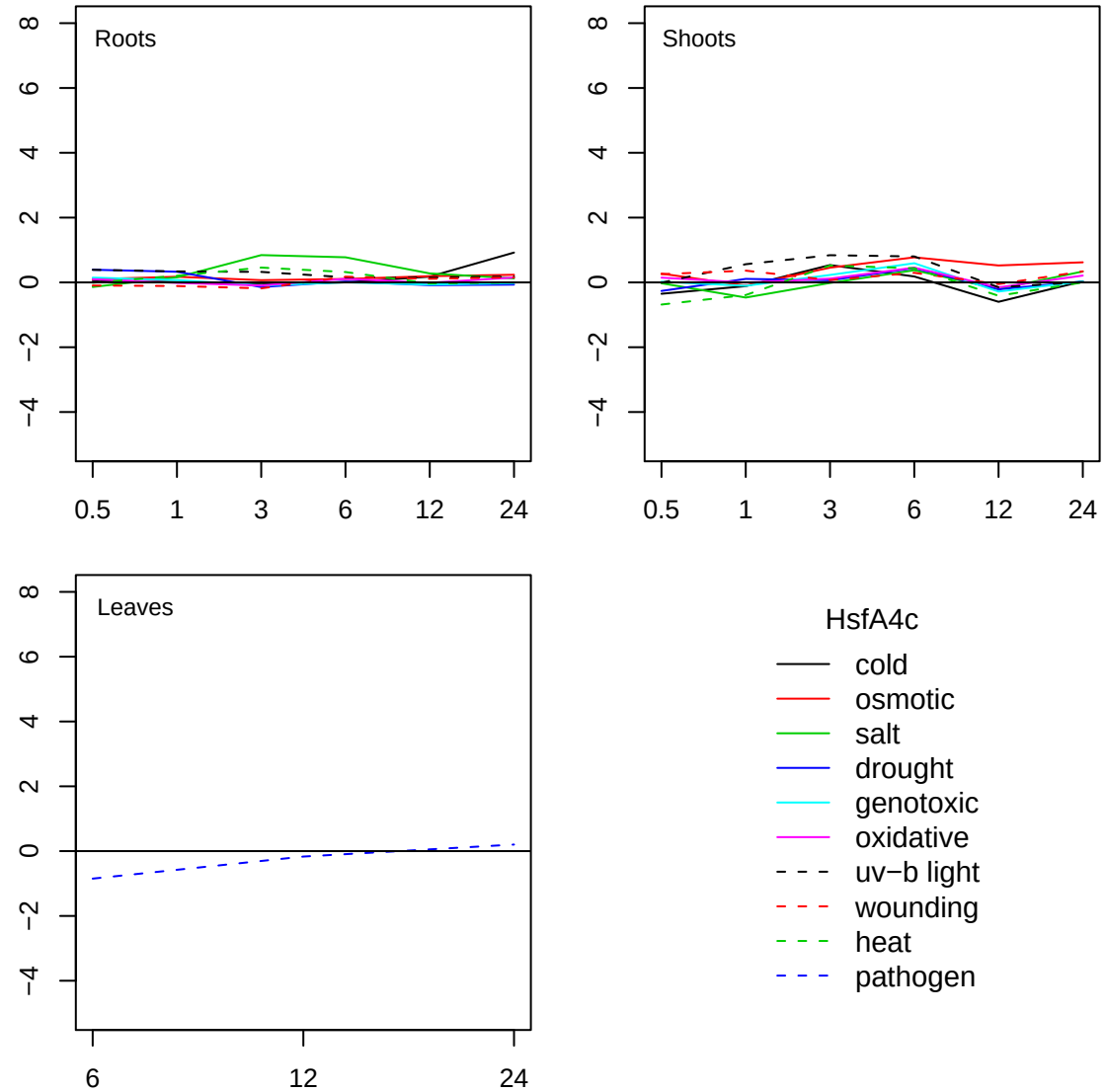
6
12
24
HsfA4a
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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2
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−2
−4
0.5
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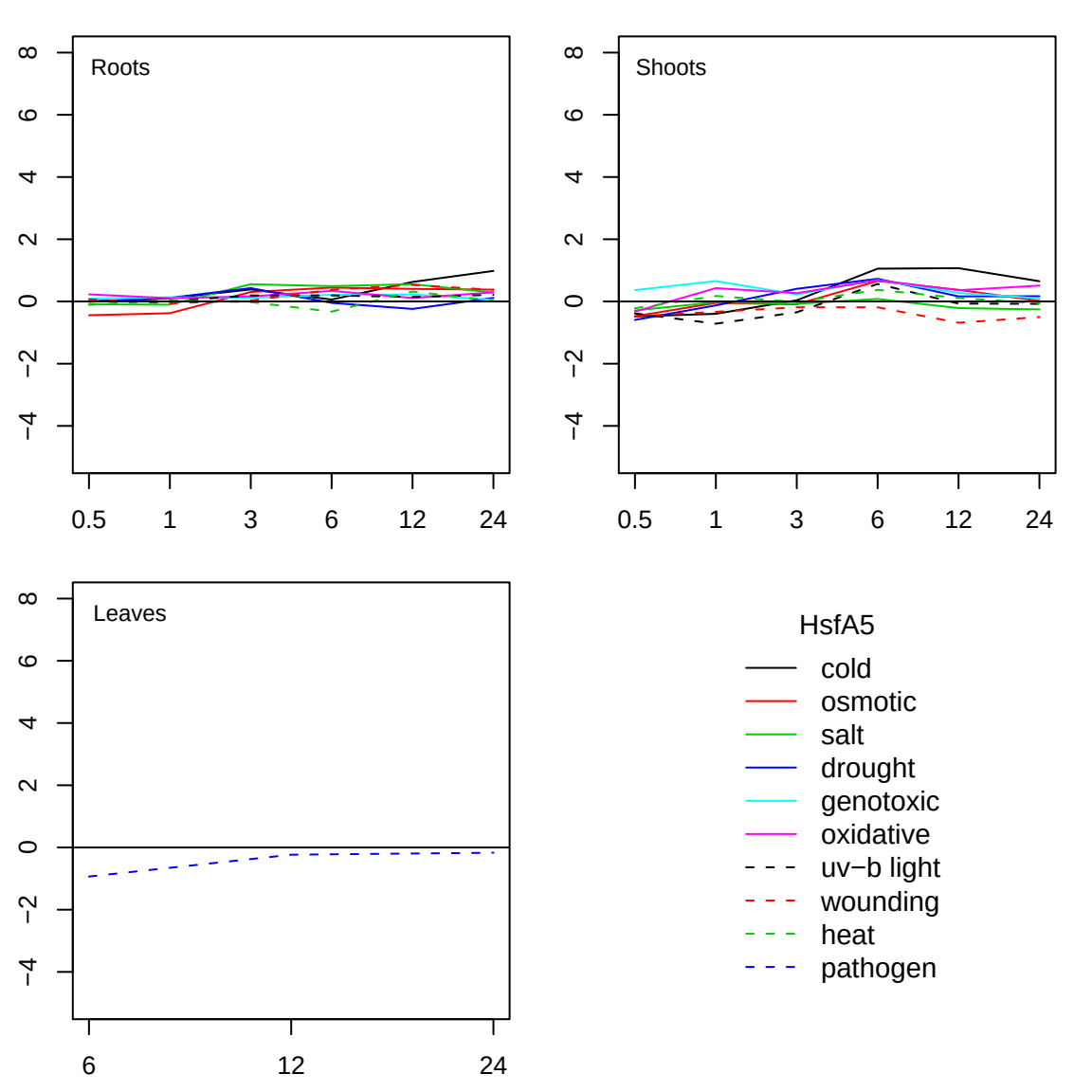
6
12
24
HsfA4c
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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6
4
2
0
−2
−4
0.5
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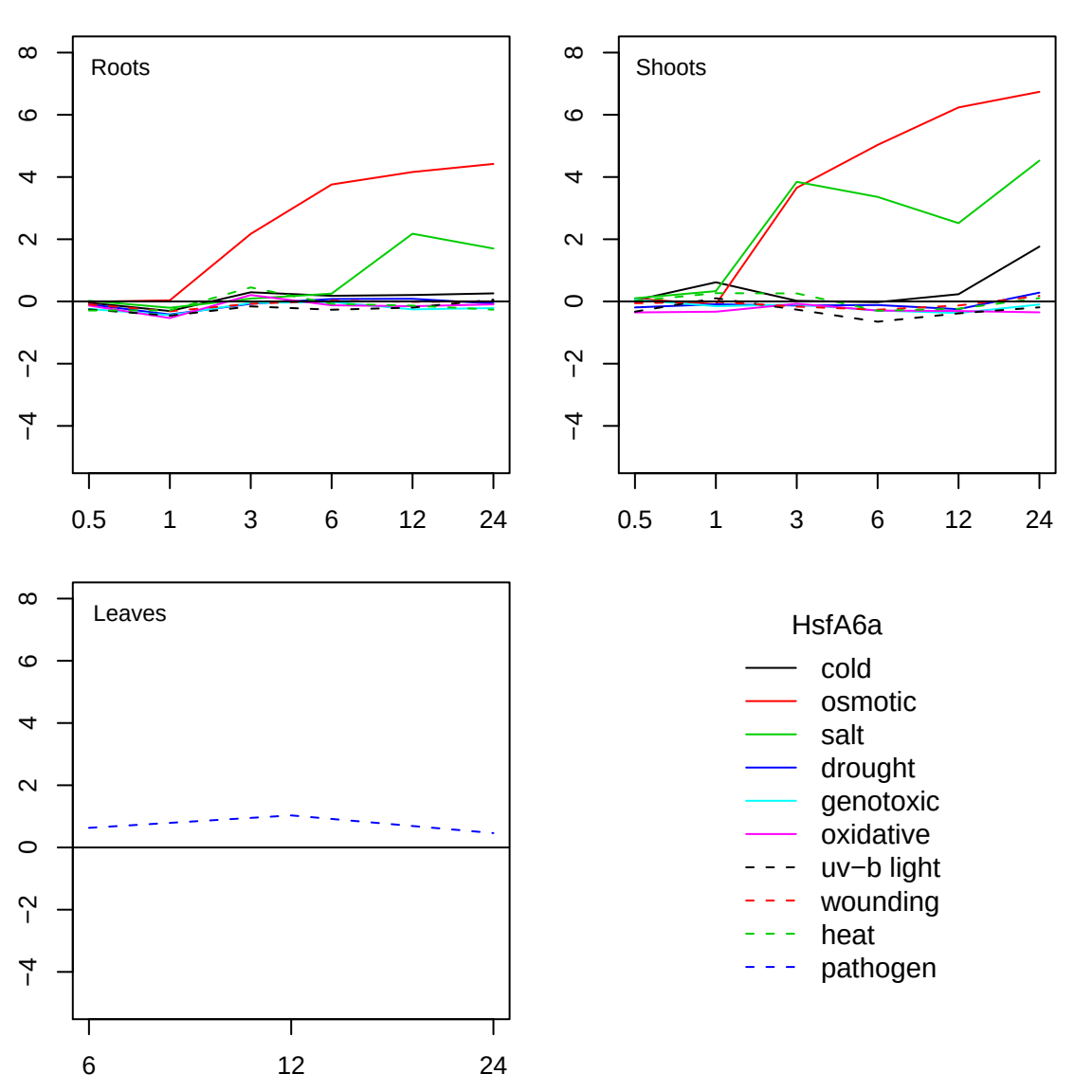
24
HsfA5
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
8
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−2
−4
0.5
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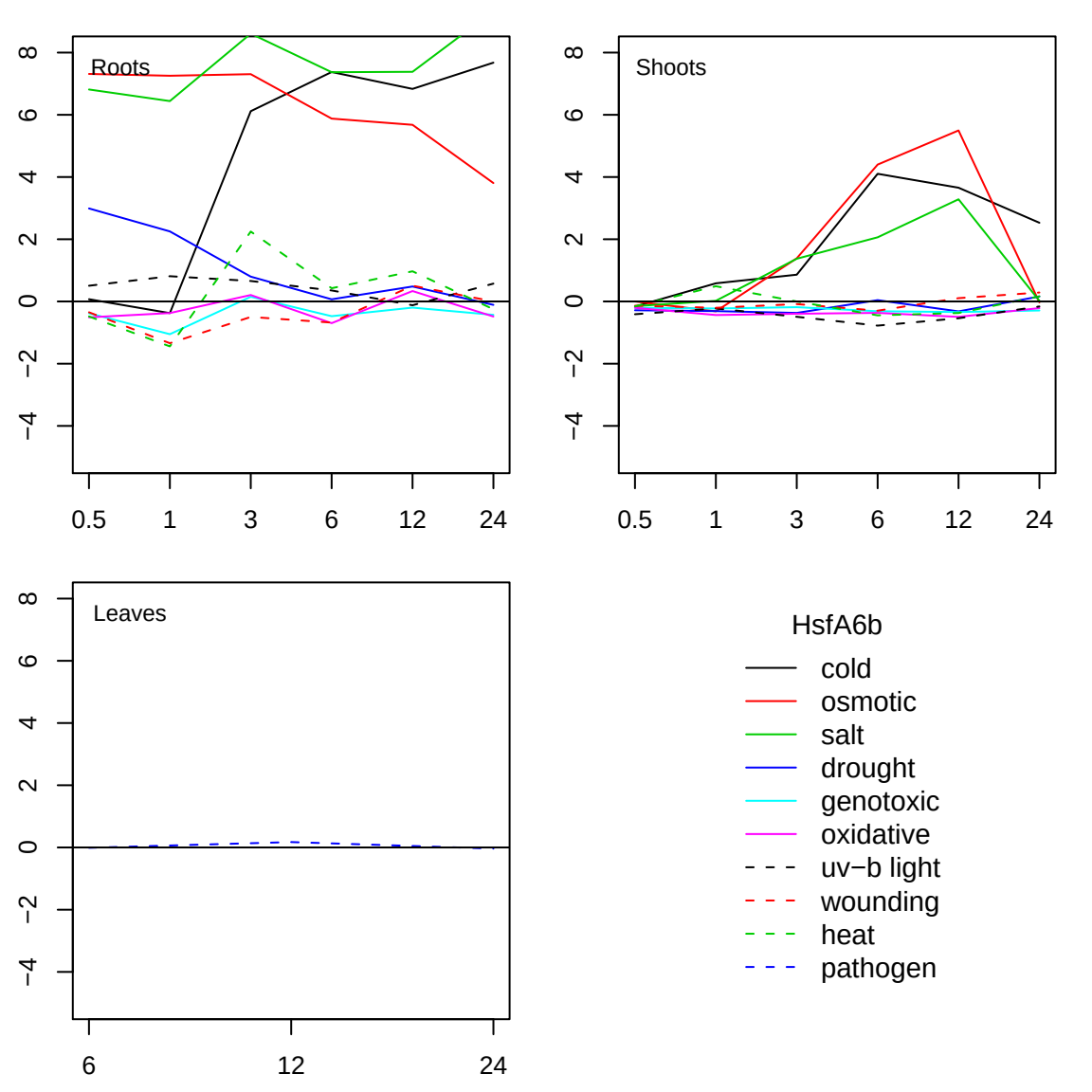
HsfA6a
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
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2
0
−2
−4
0.5
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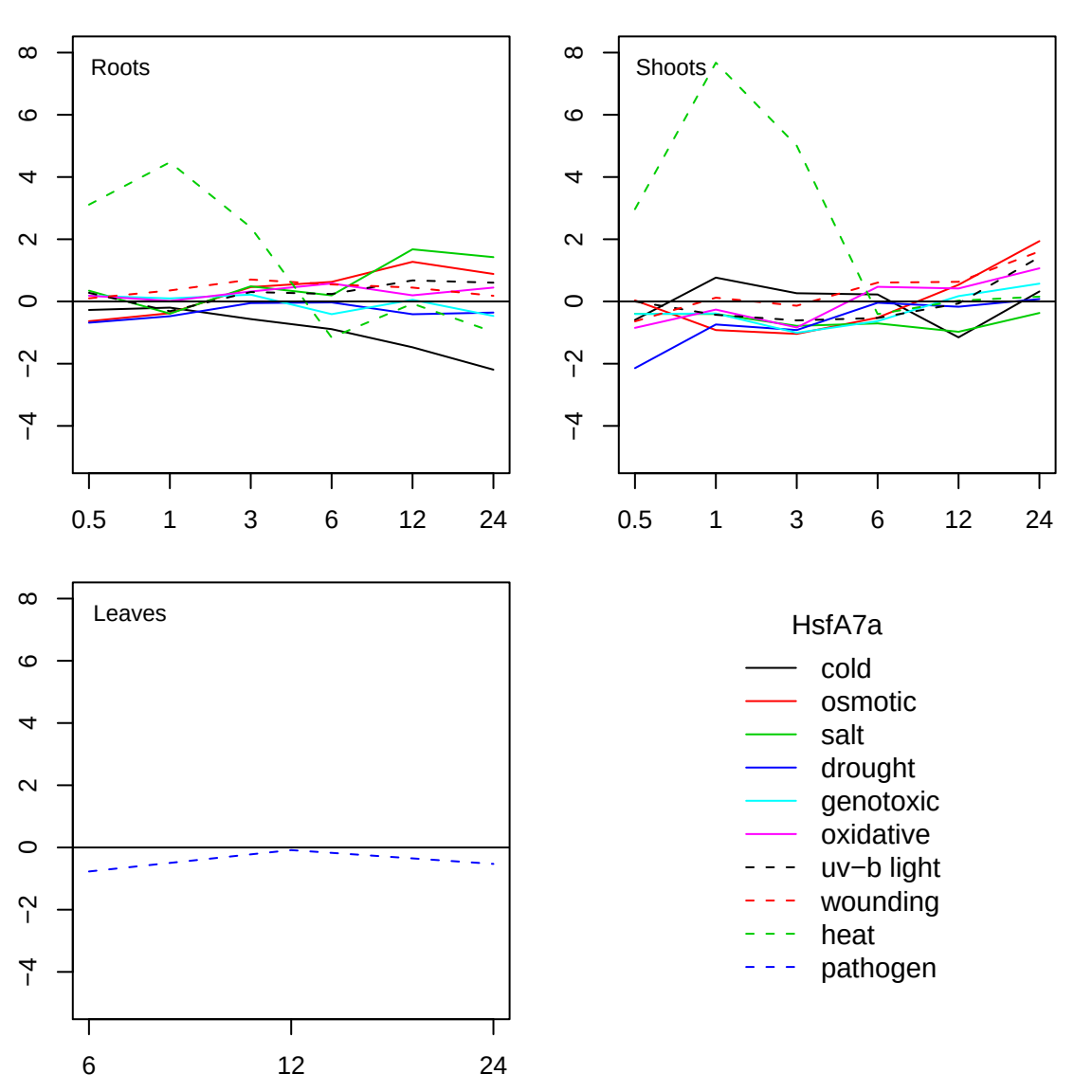
HsfA6b
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
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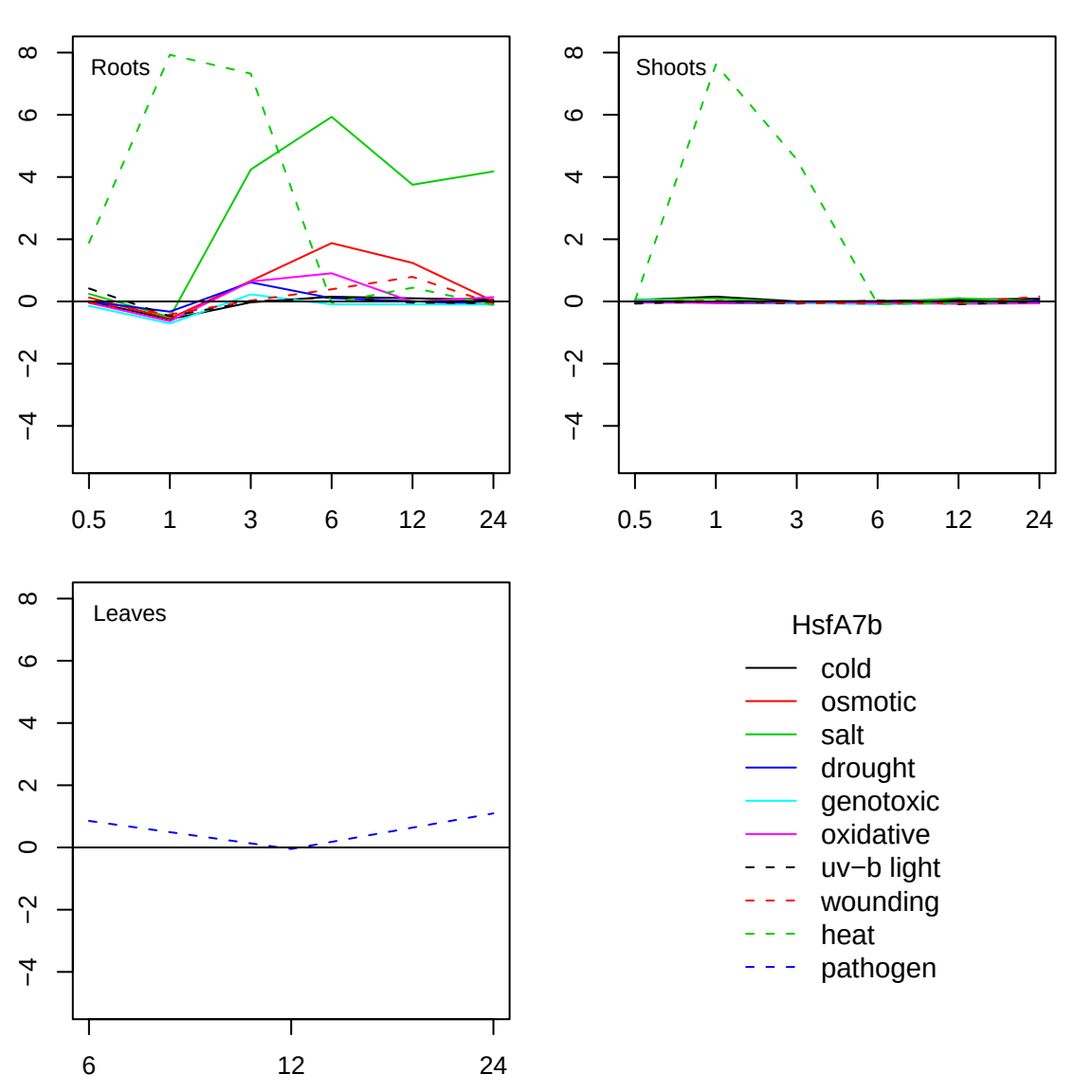
HsfA7a
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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HsfA7b
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osmotic
salt
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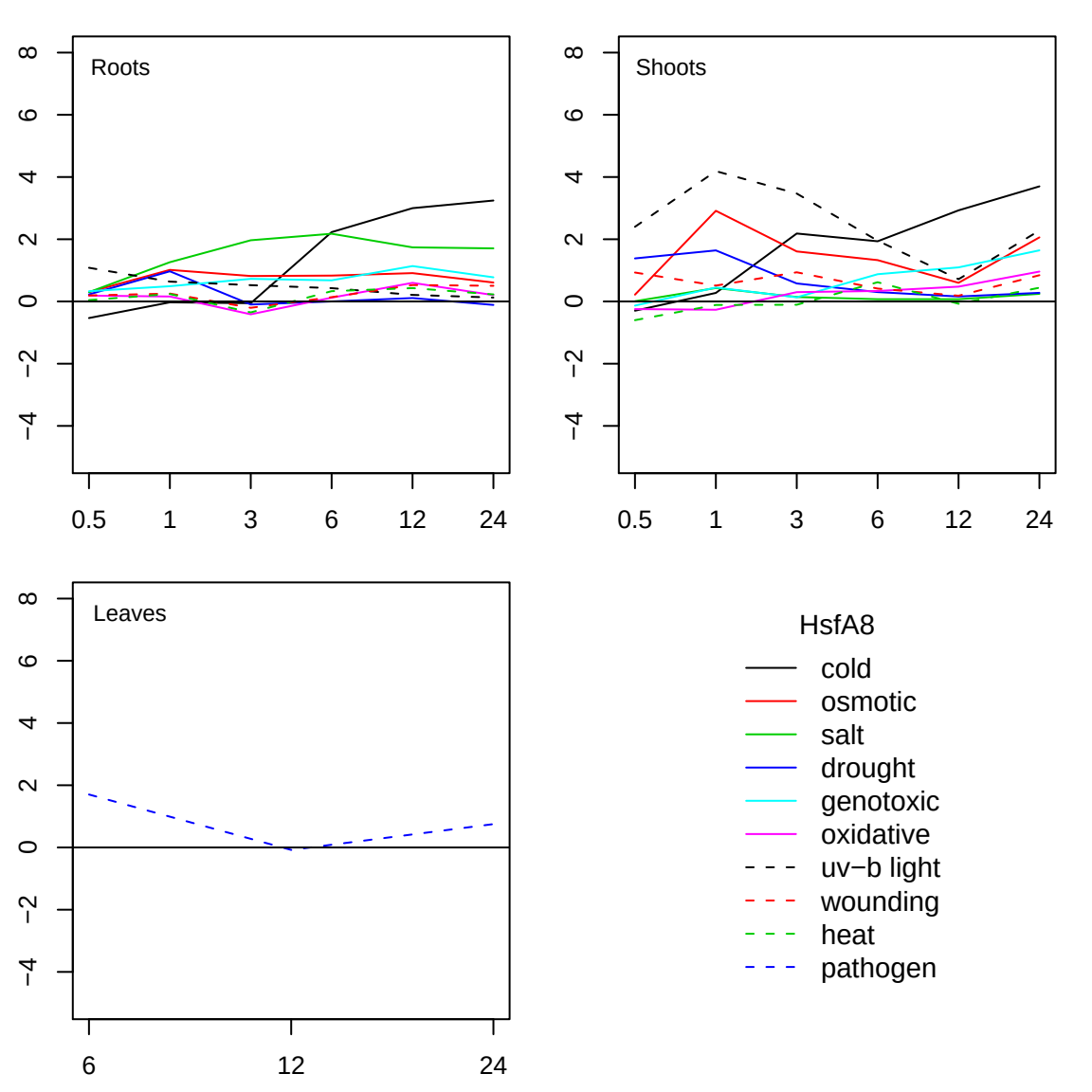
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
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6
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2
0
−2
−4
0.5
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6
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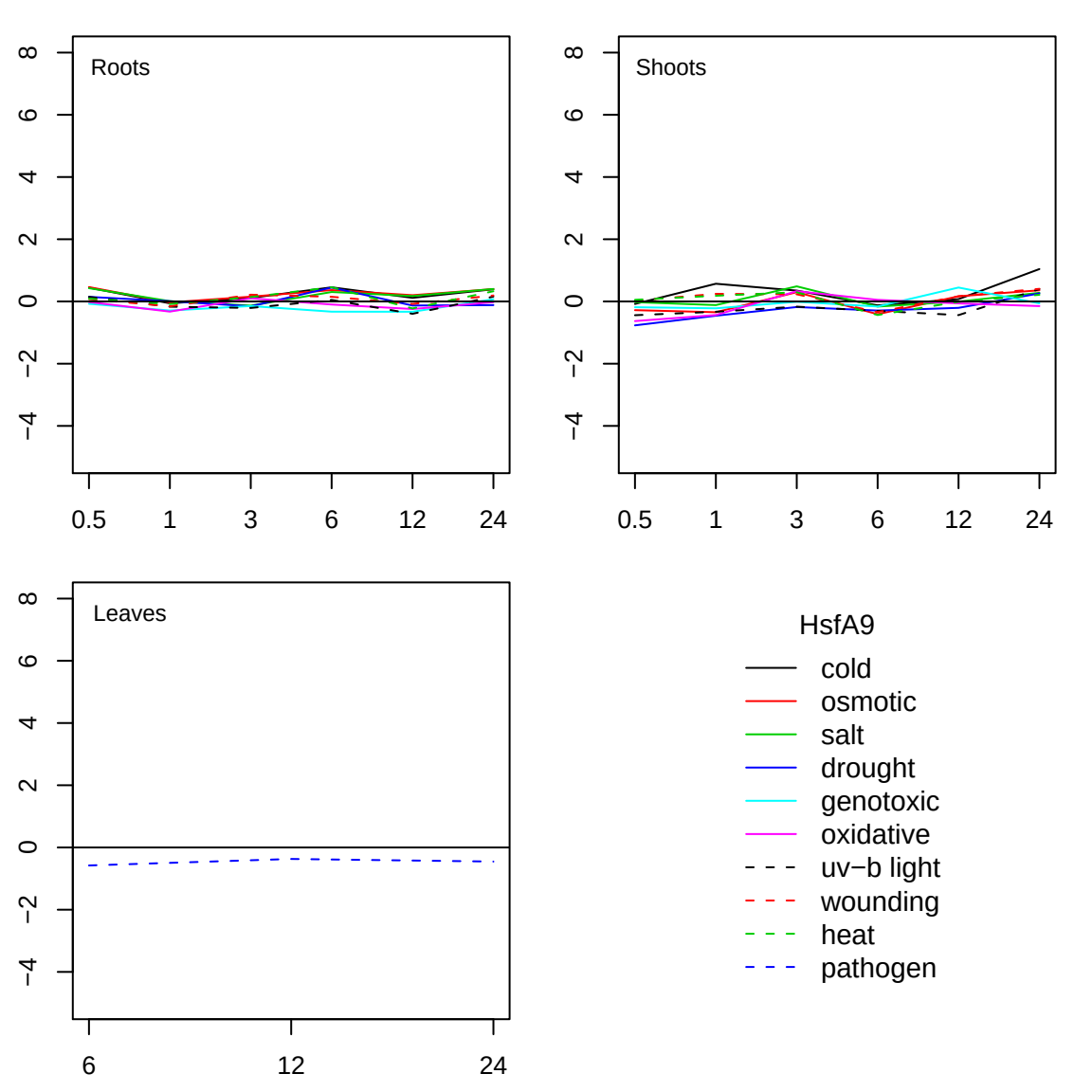
24
HsfA8
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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−2
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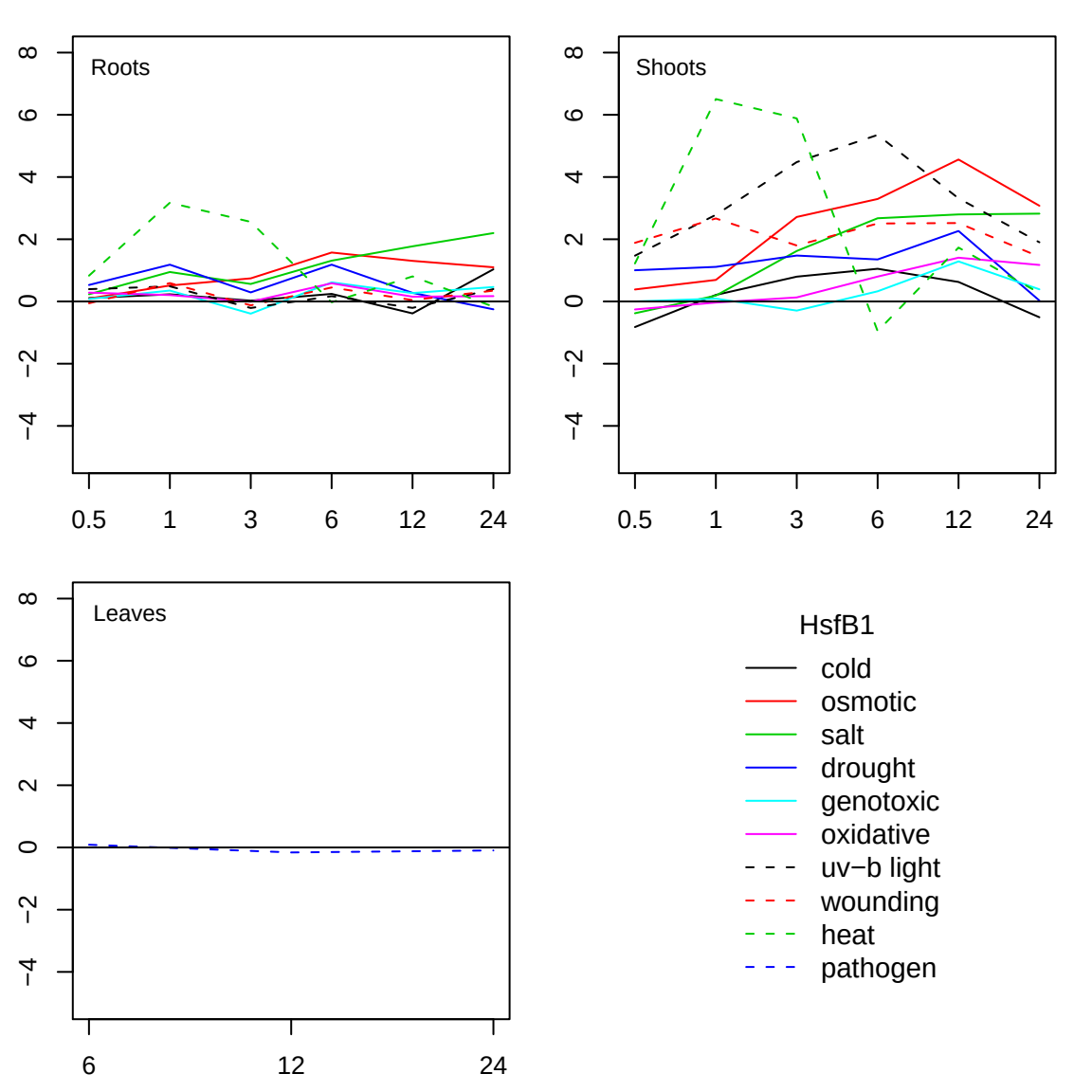
HsfA9
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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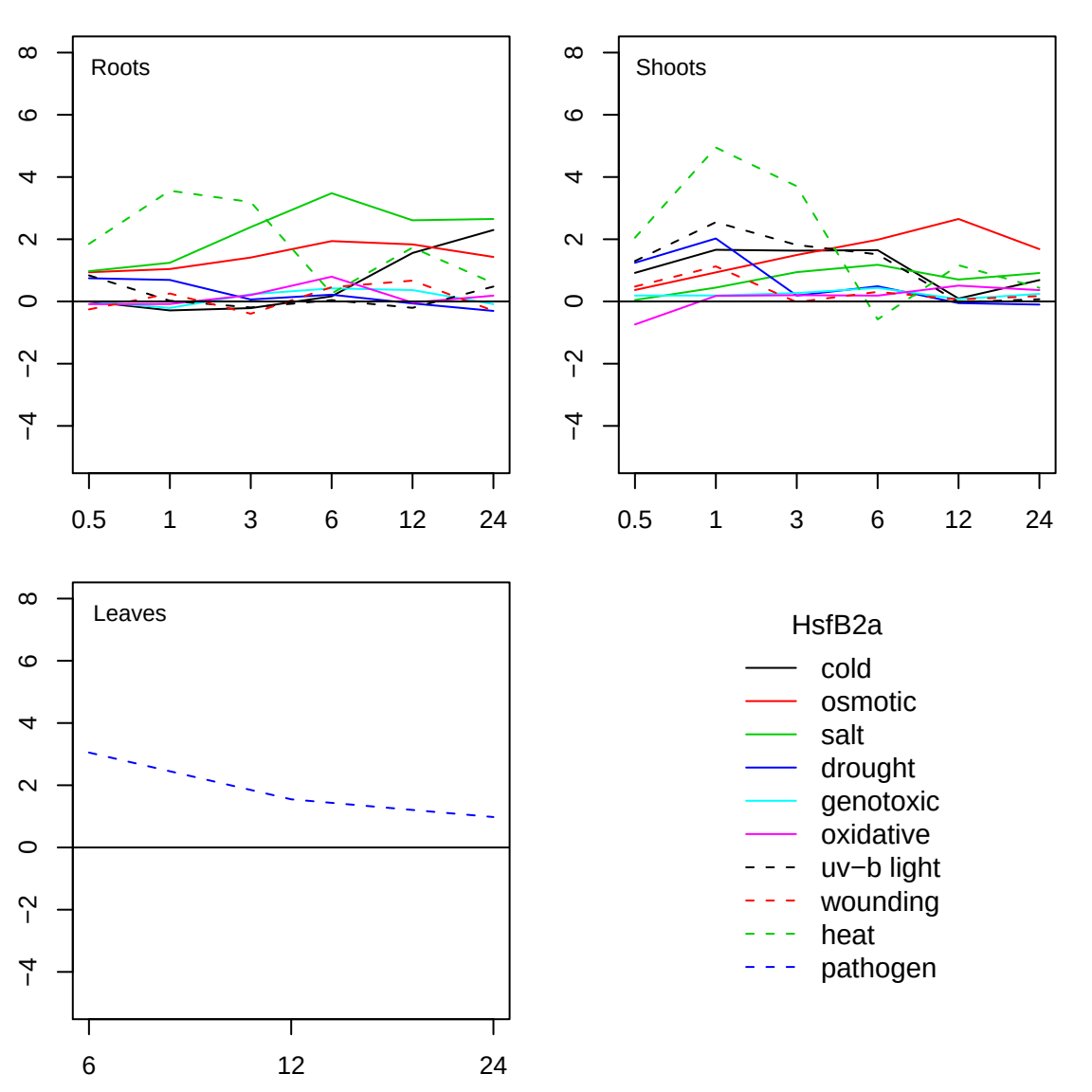
24
HsfB1
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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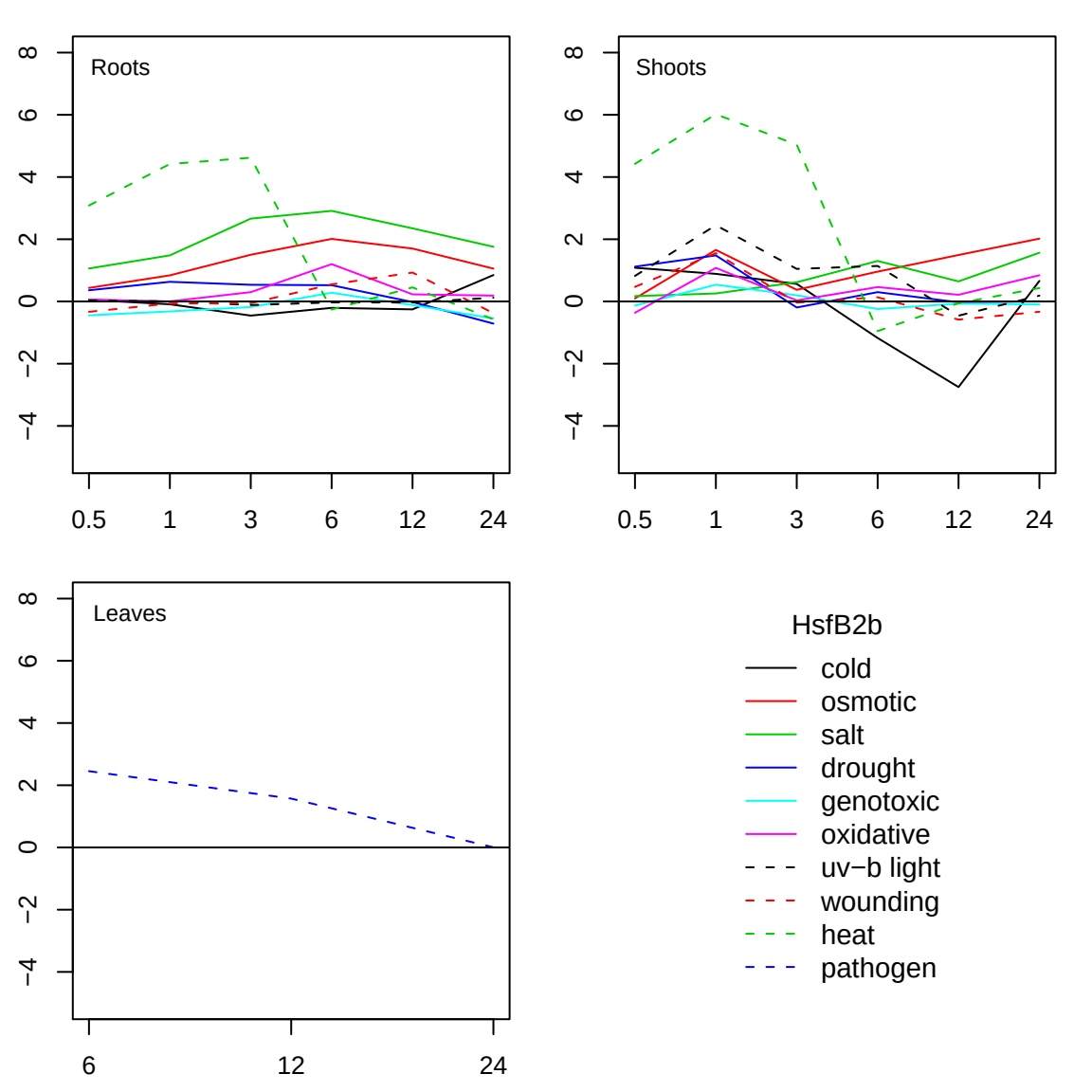
HsfB2a
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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HsfB2b
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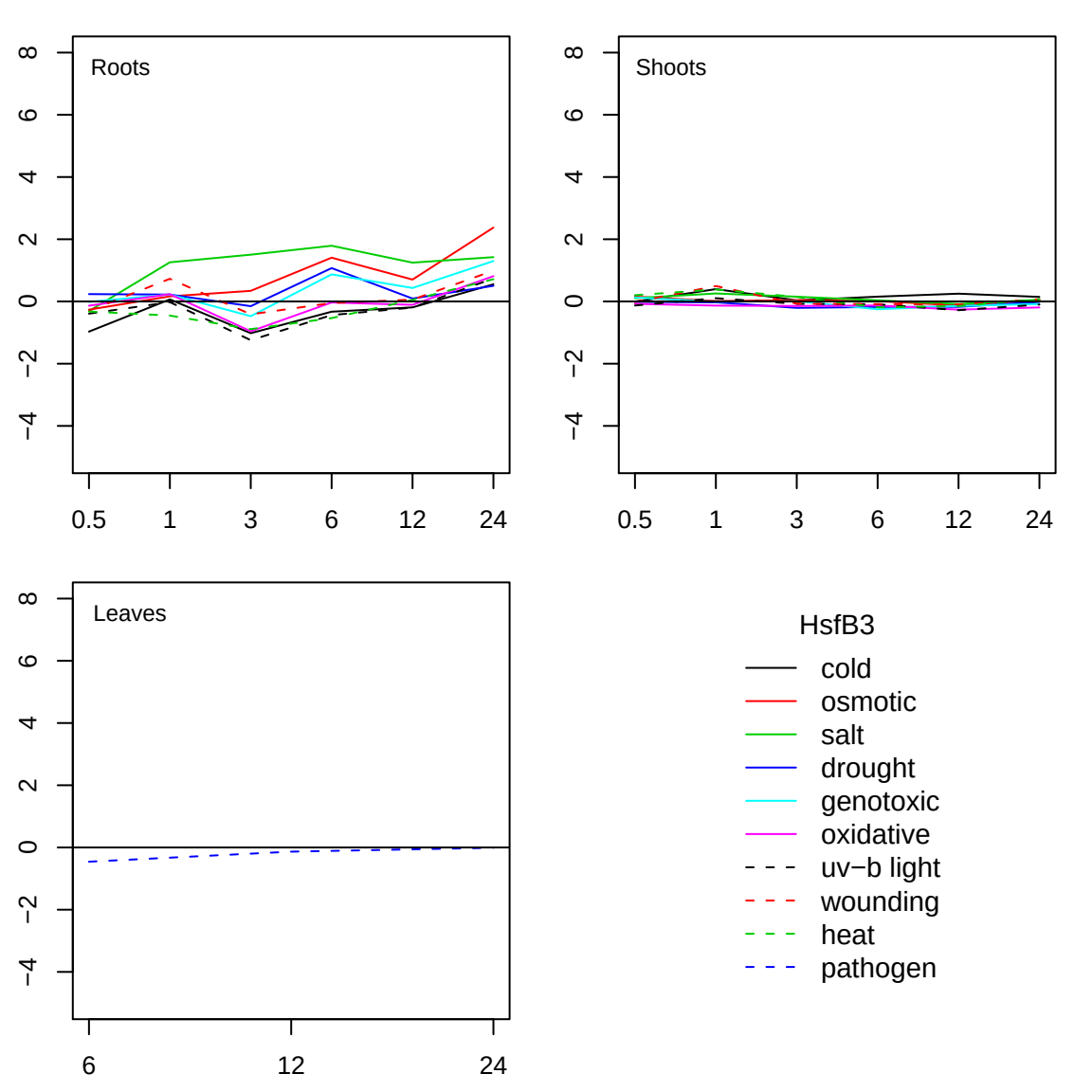
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
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6
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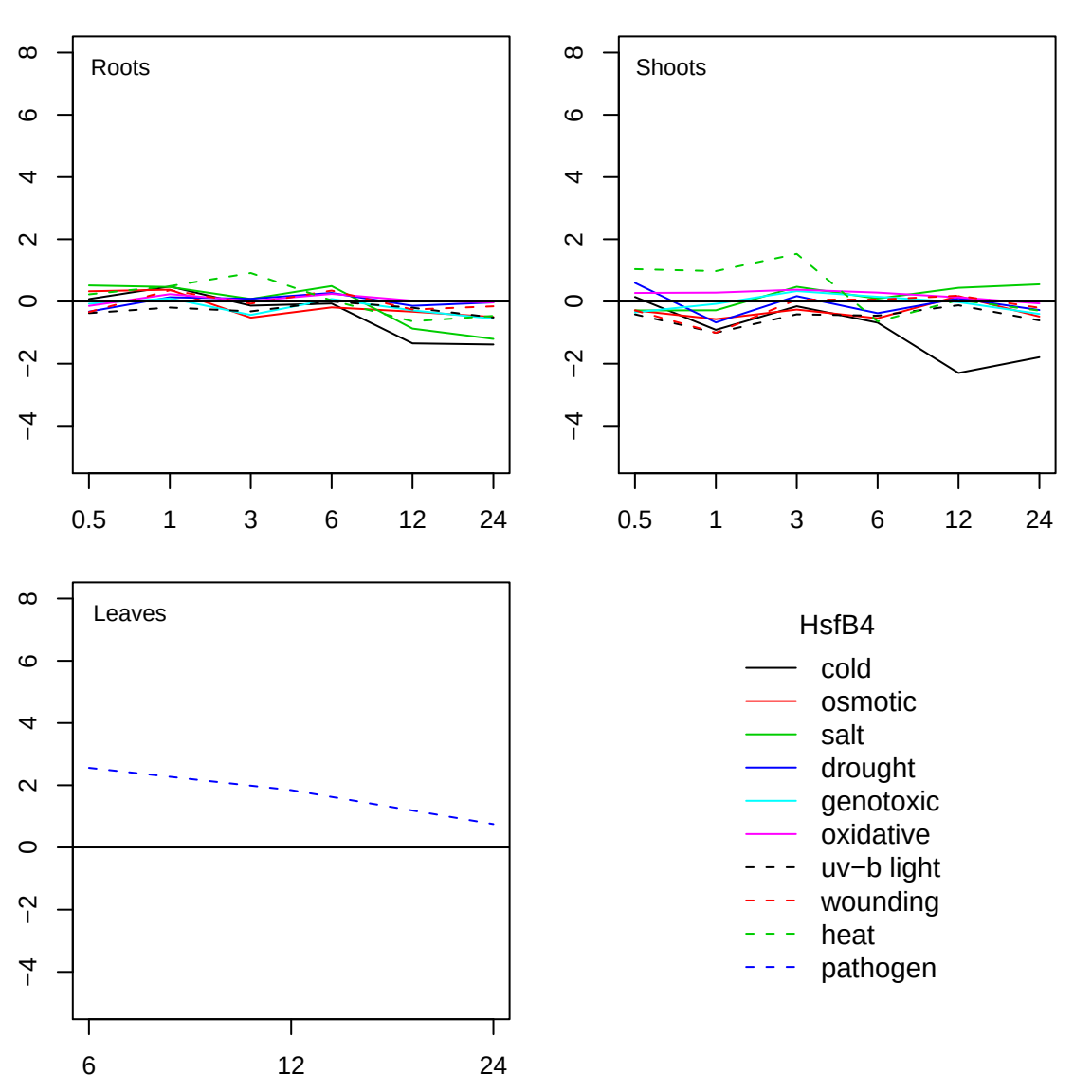
24
HsfB3
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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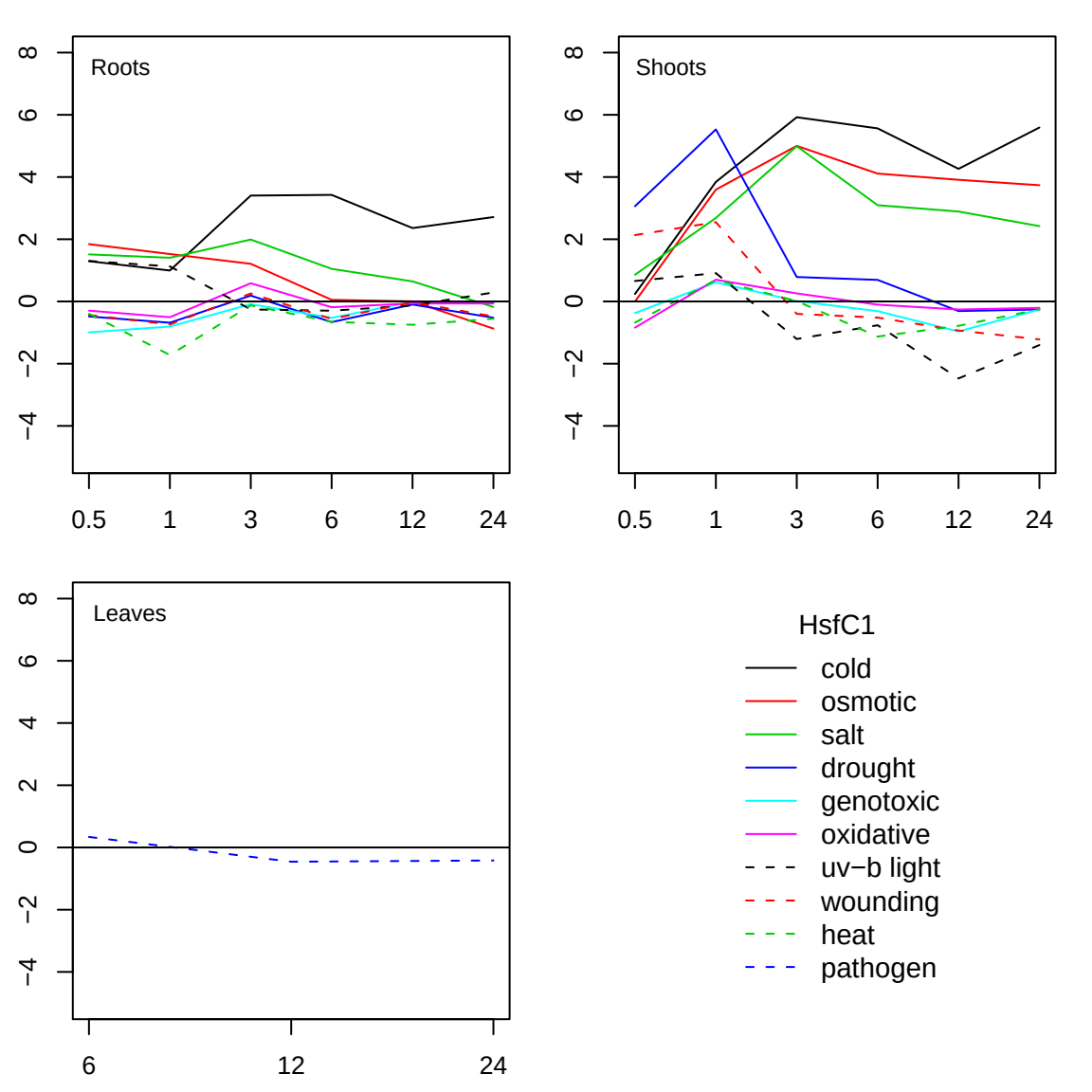
6
12
24
HsfB4
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
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2
0
−2
−4
0.5
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6
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24
HsfC1
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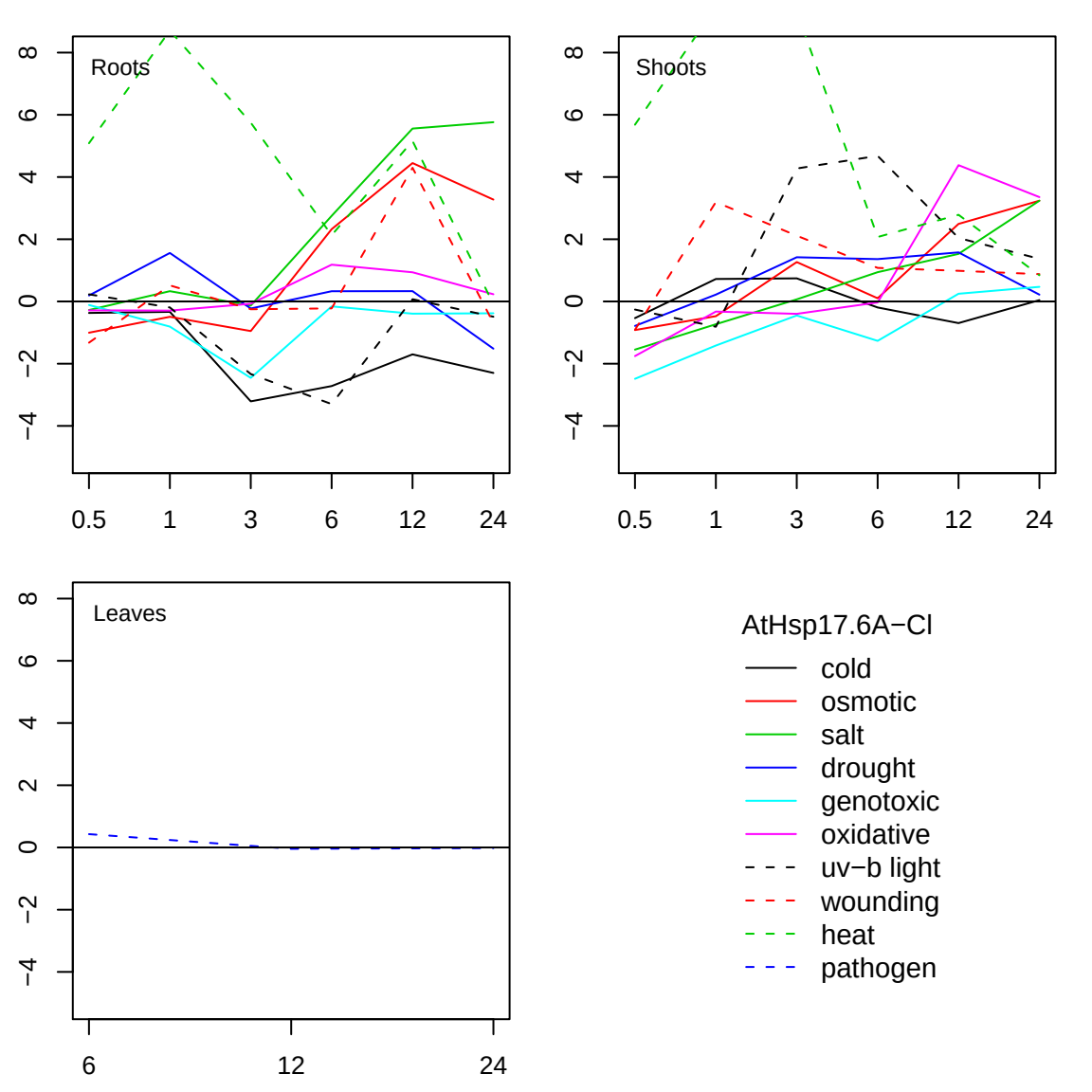
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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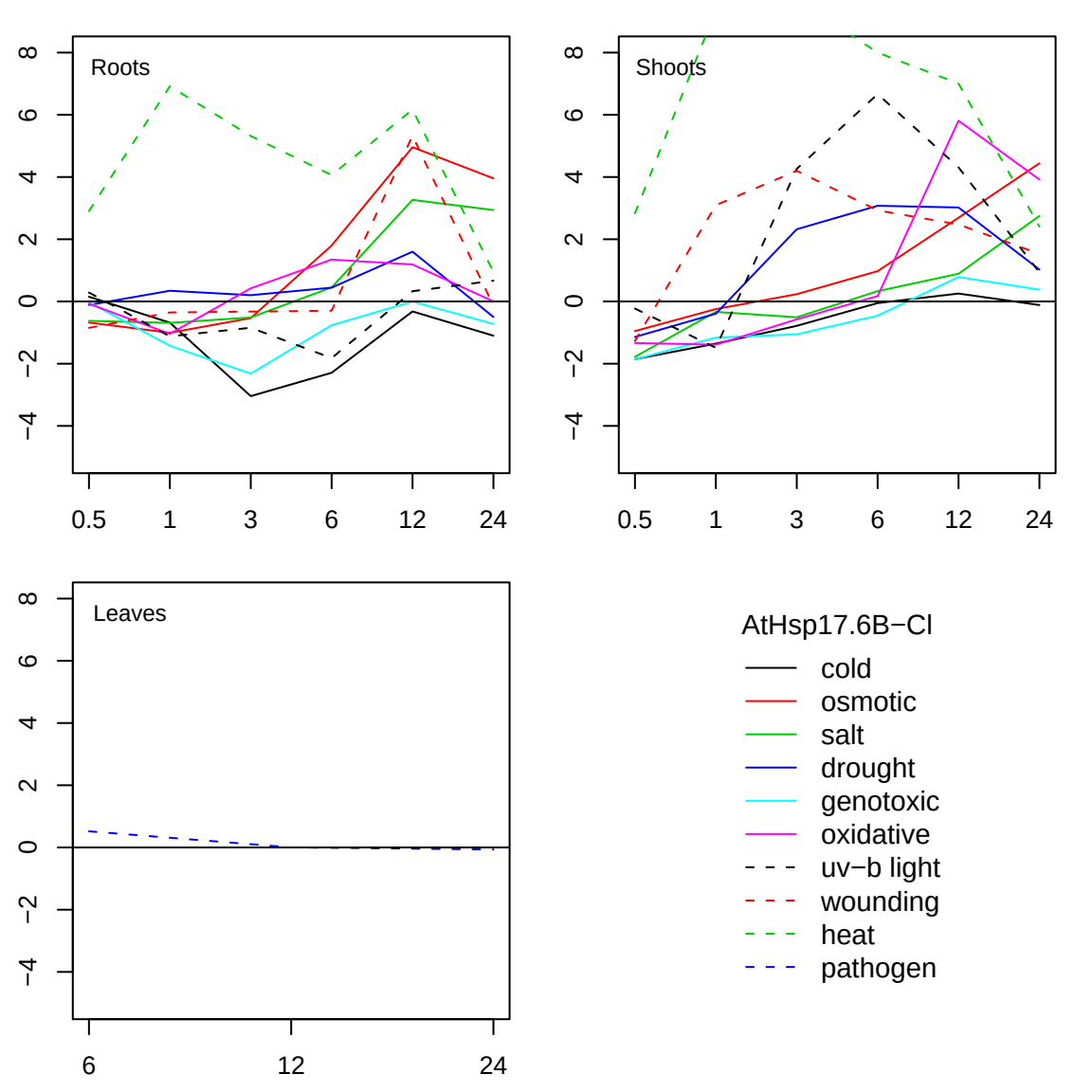
0
−2
−4
0.5
1
3
6
12
24
AtHsp17.6A−Cl
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
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12
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AtHsp17.6B−Cl
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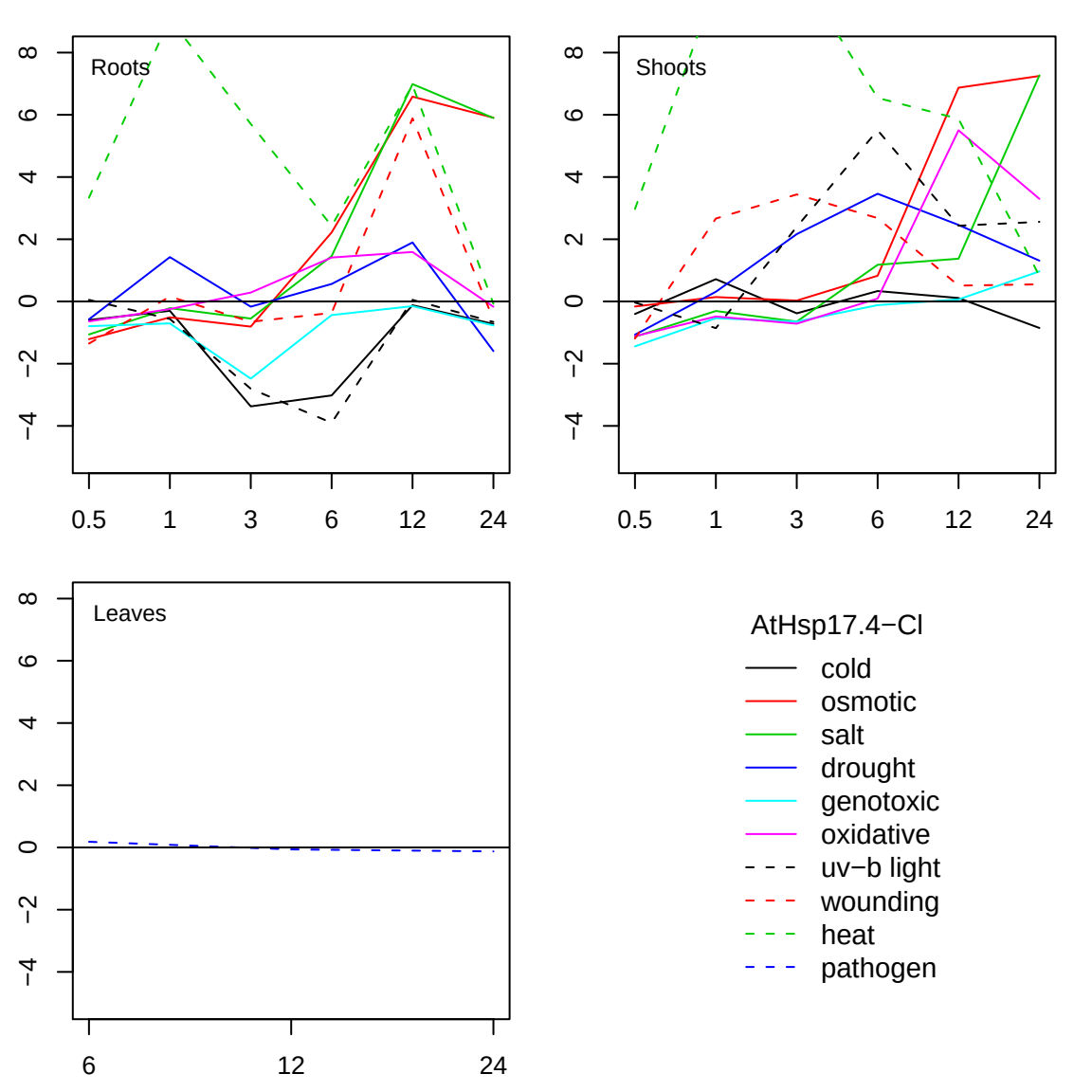
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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−2
−4
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AtHsp17.4−Cl
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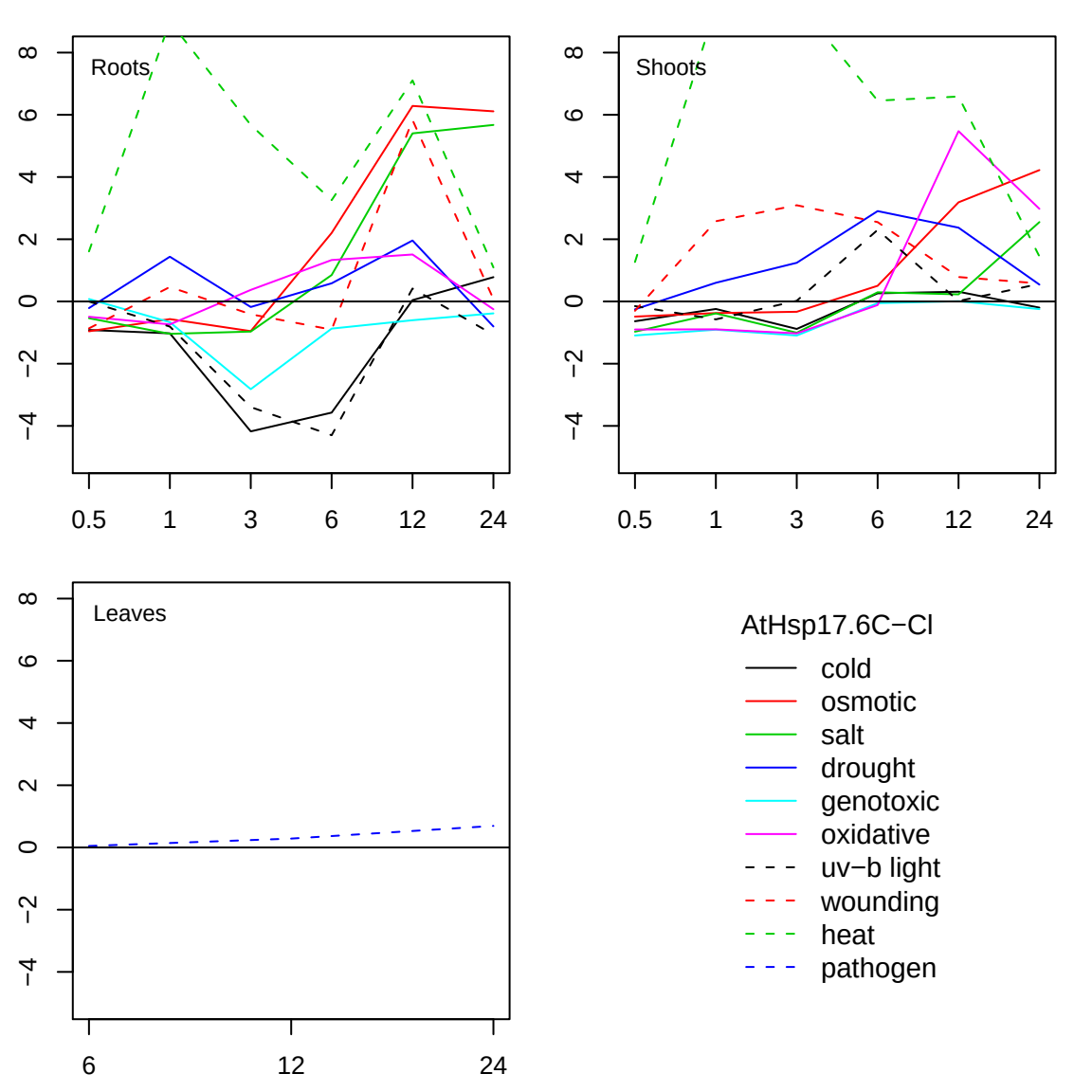
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen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Shoots
Leaves
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−2
−4
0.5
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12
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AtHsp17.6C−Cl
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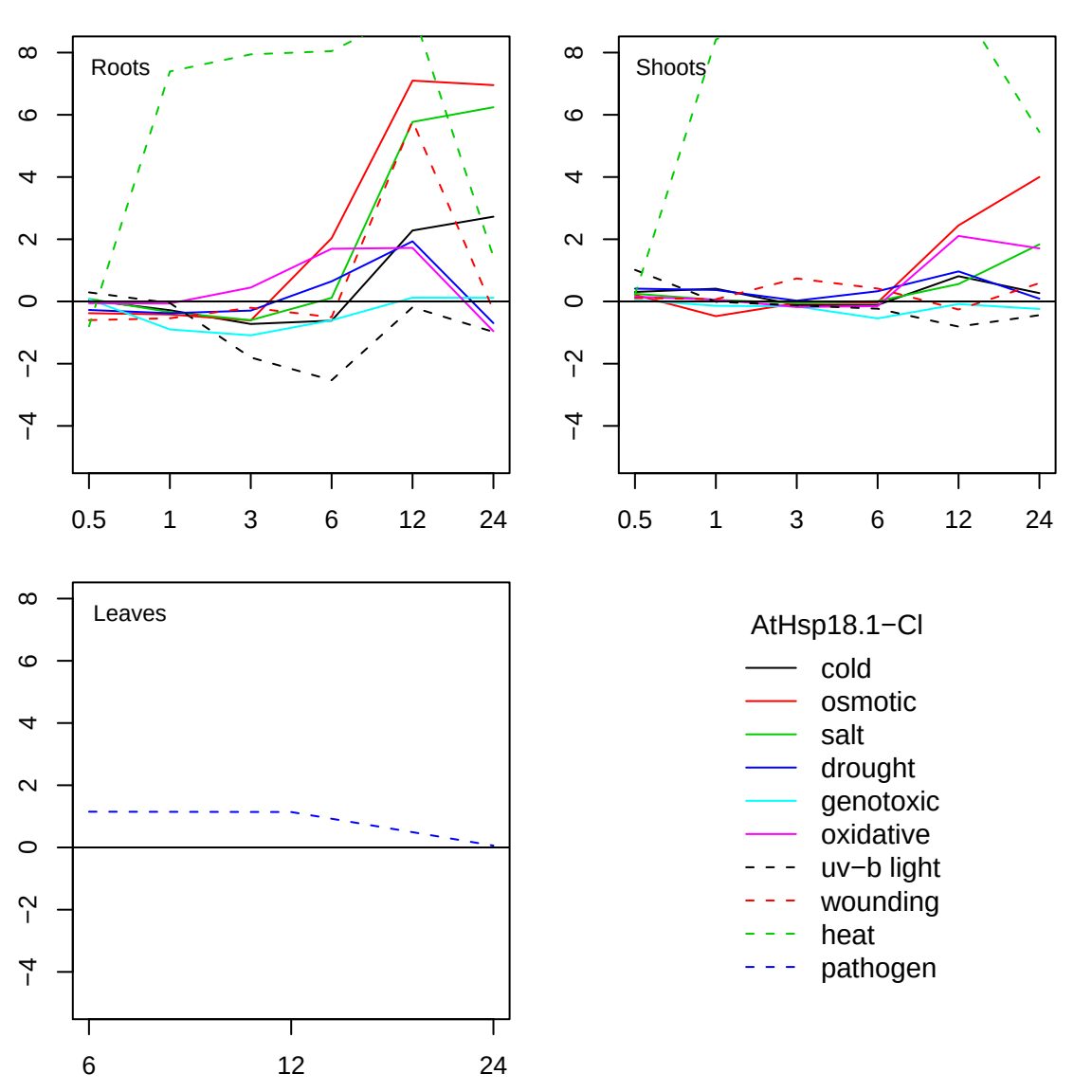
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
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6
4
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0
−2
−4
0.5
1
3
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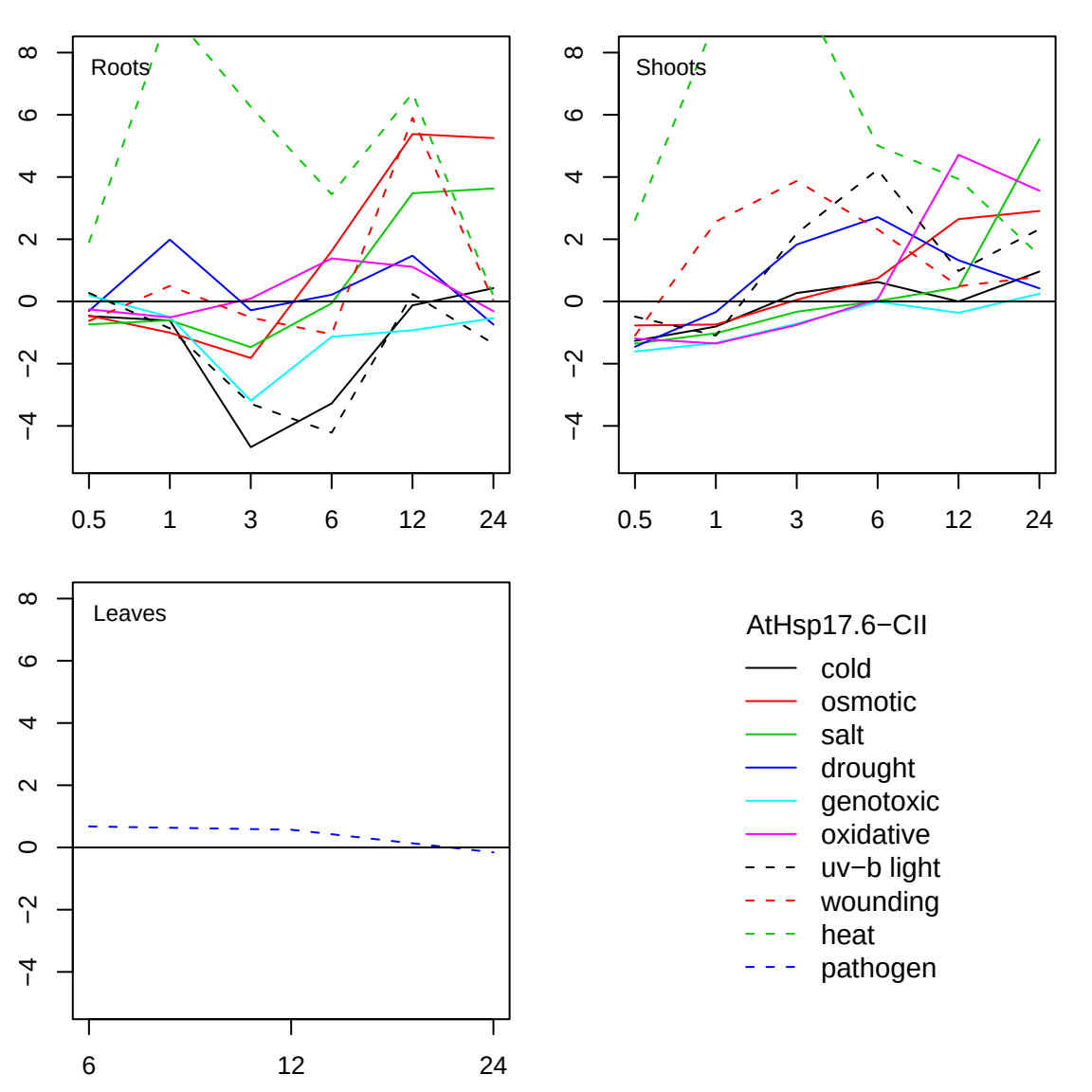
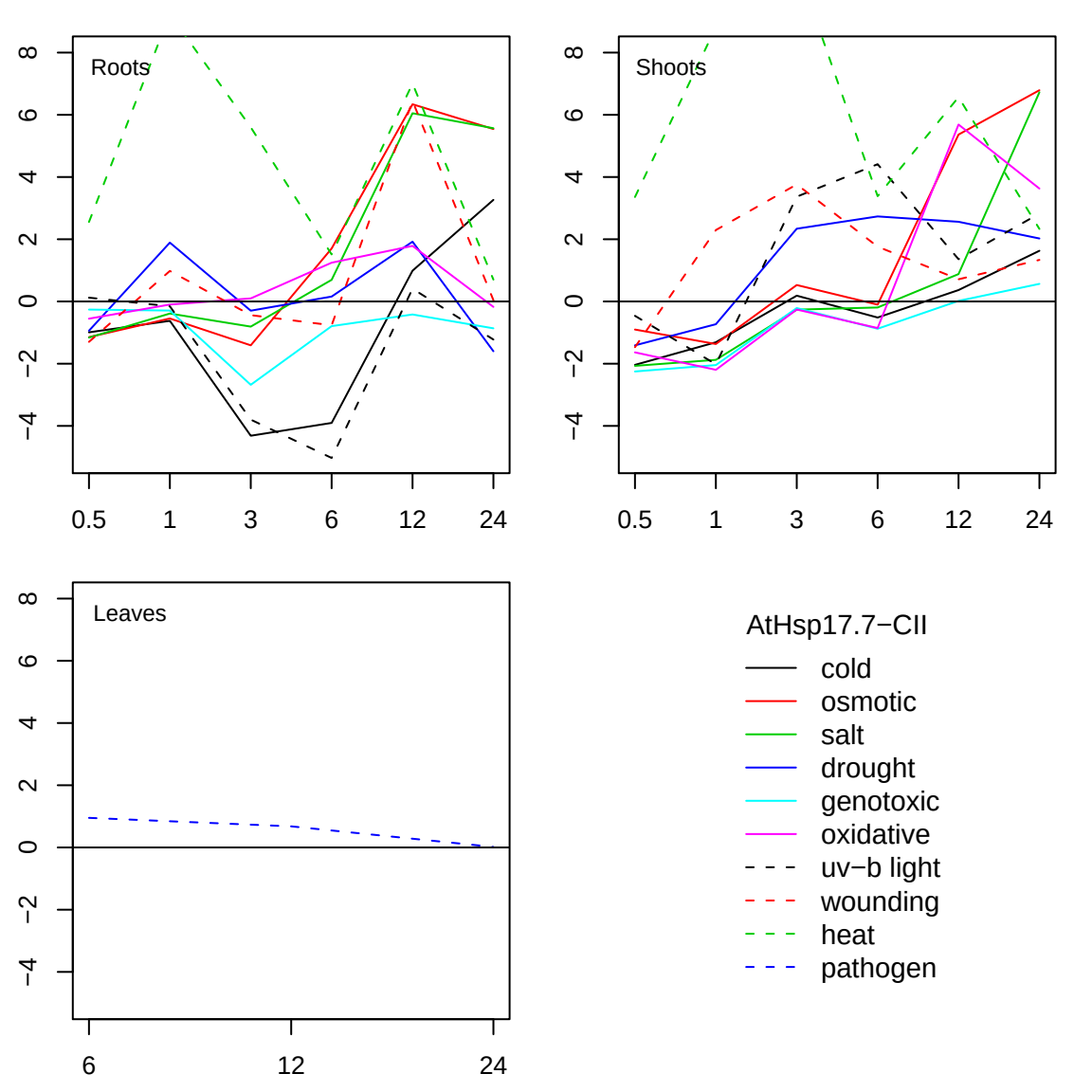
12
24
AtHsp18.1−Cl
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp17.6−CII
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
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4
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0
−2
−4
0.5
1
3
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12
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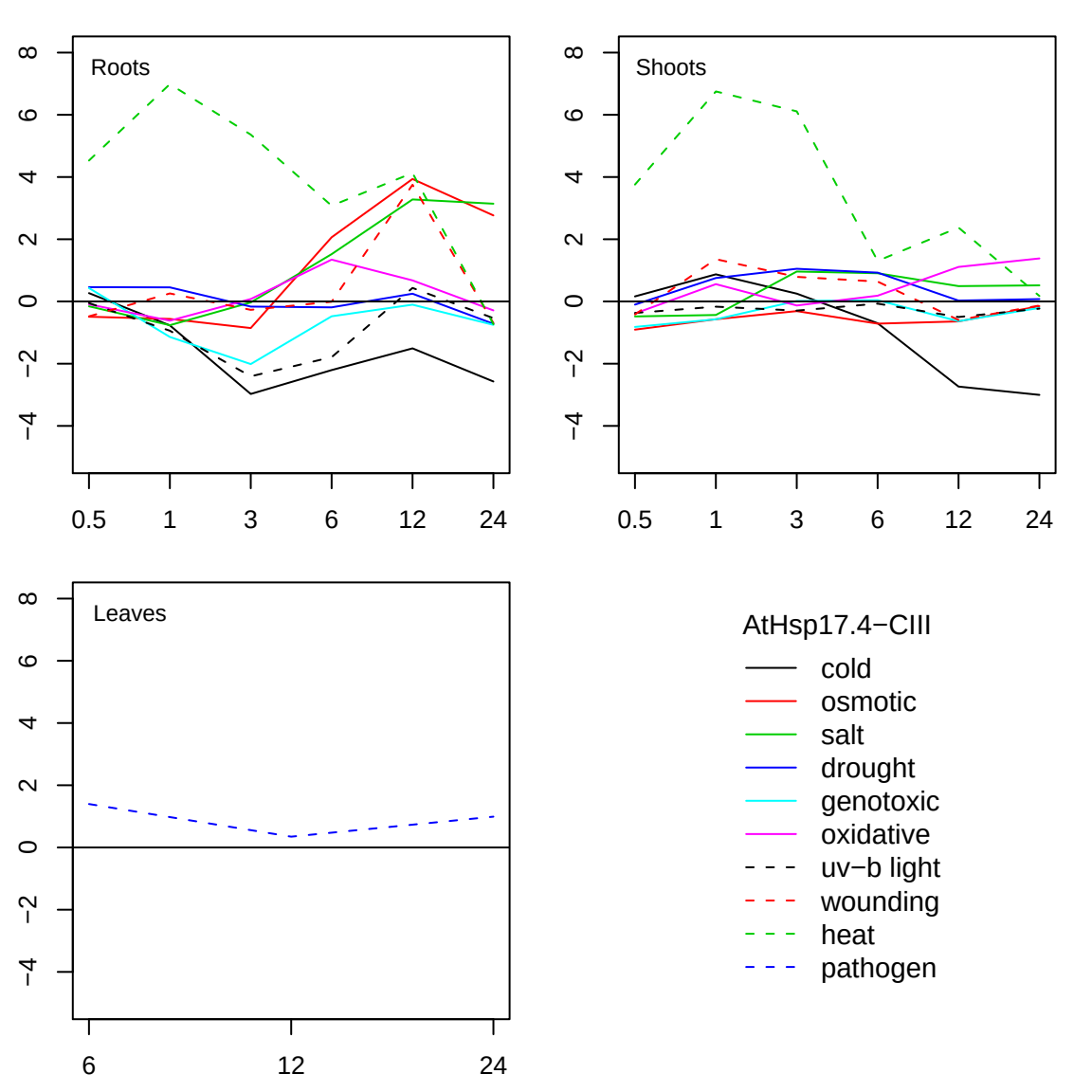
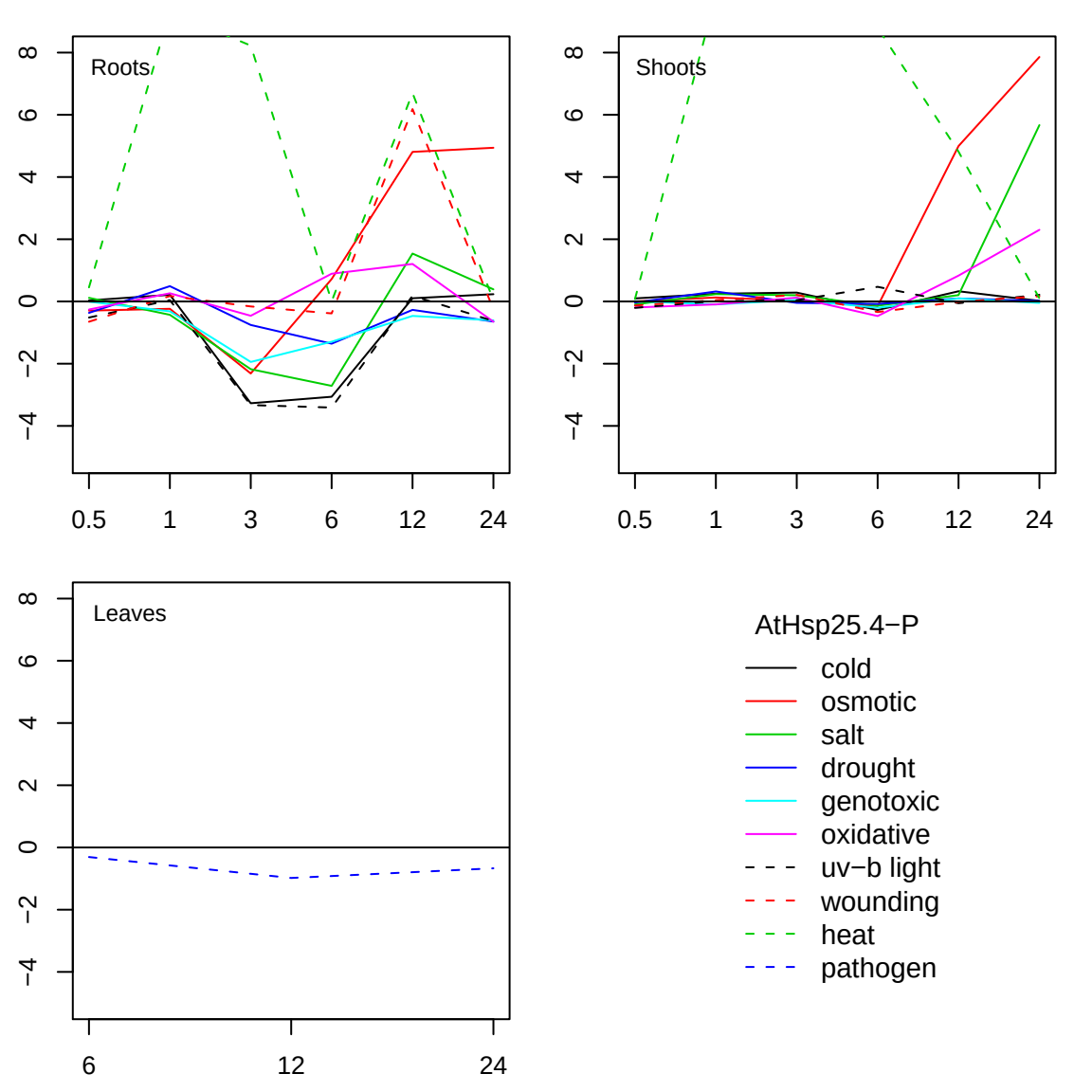
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp17.4−CIII
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
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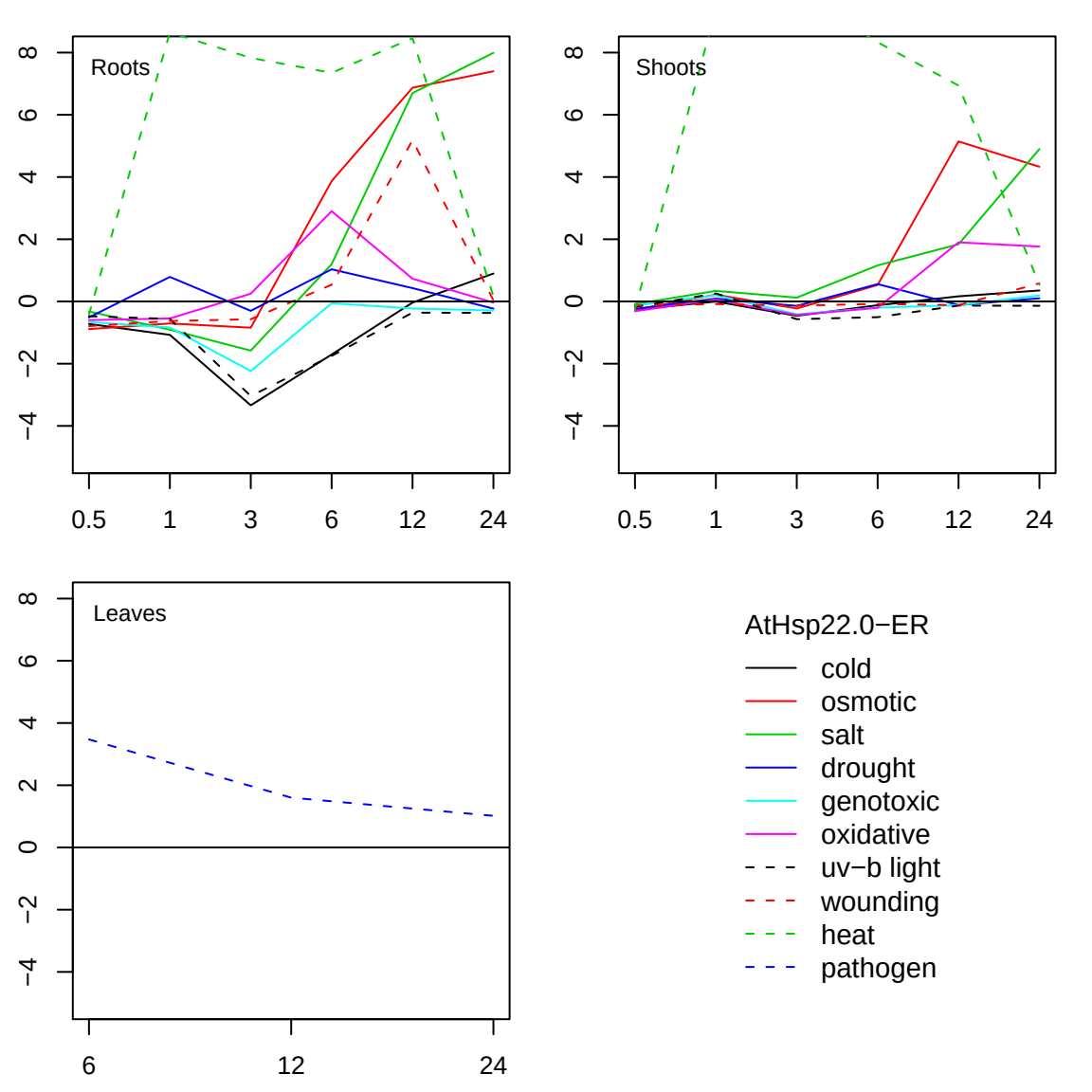
6
12
24
AtHsp25.4−P
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
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12
24
AtHsp22.0−ER
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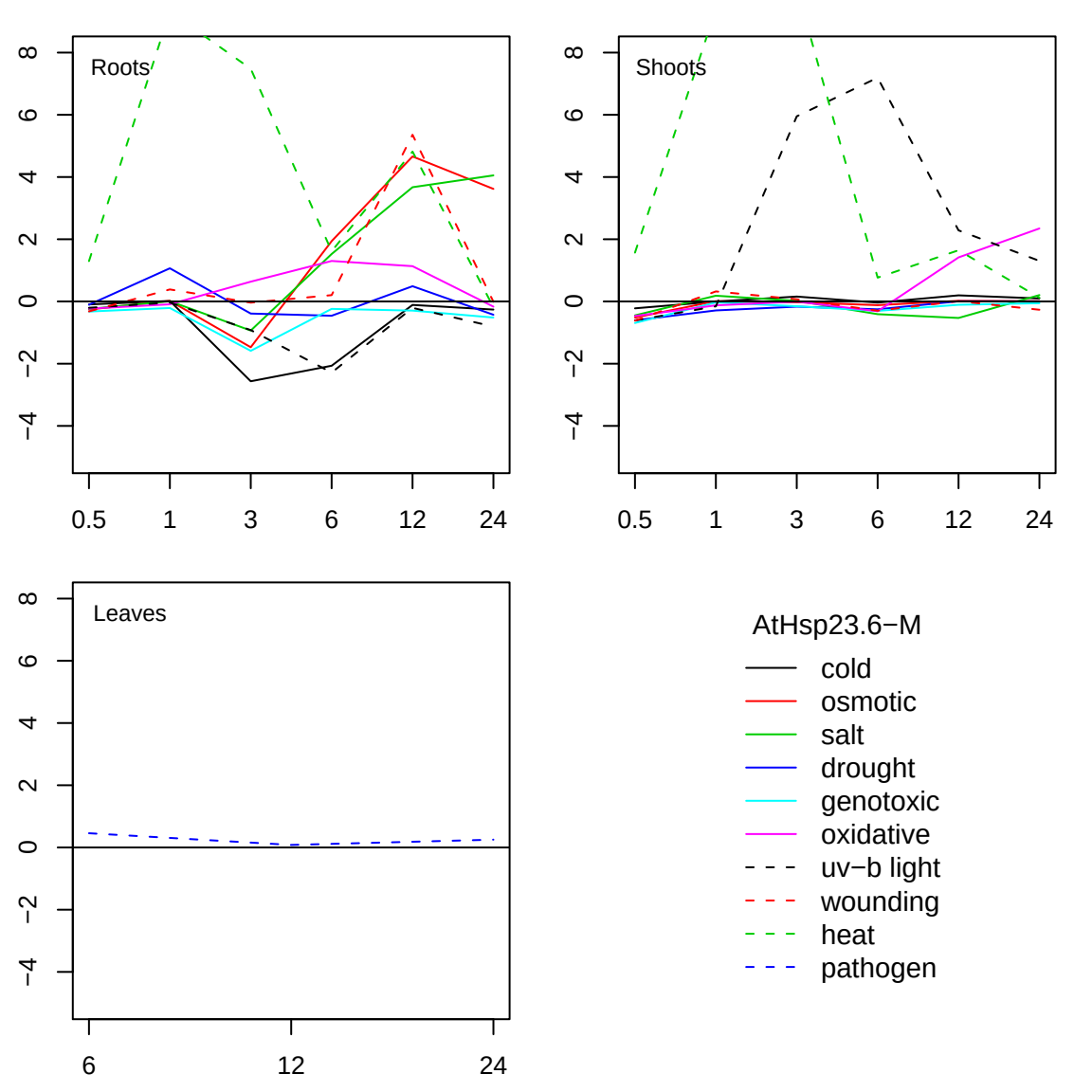
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
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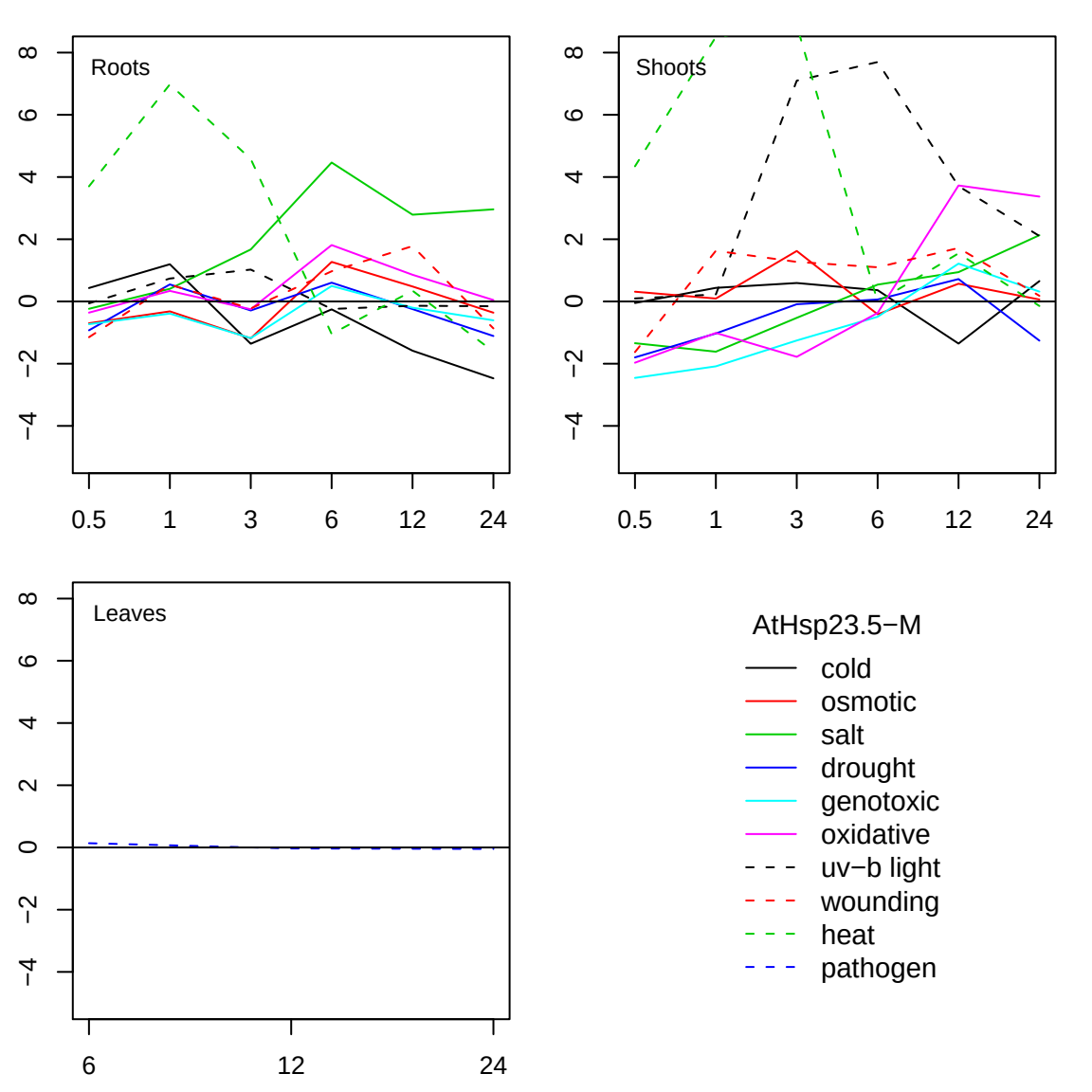
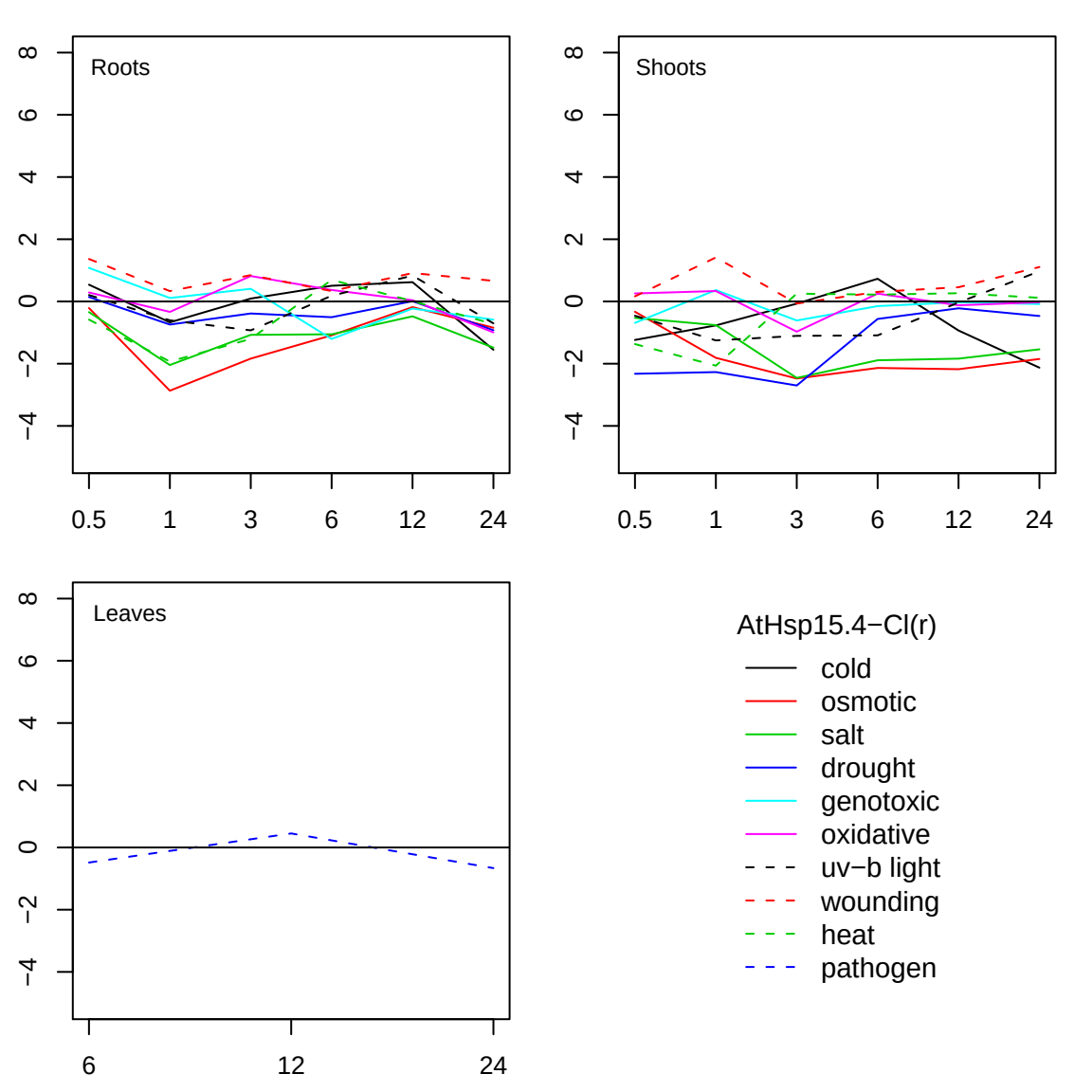
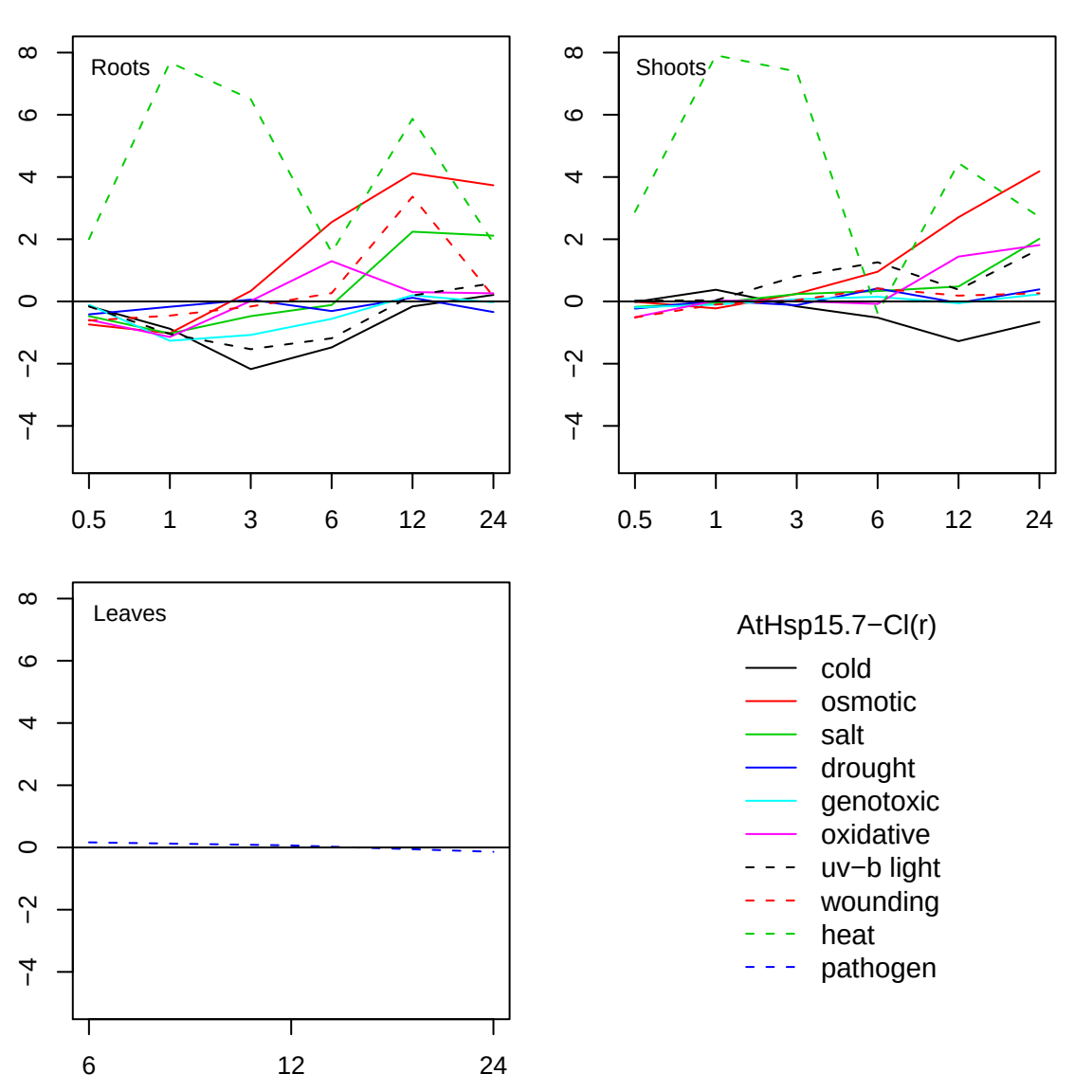
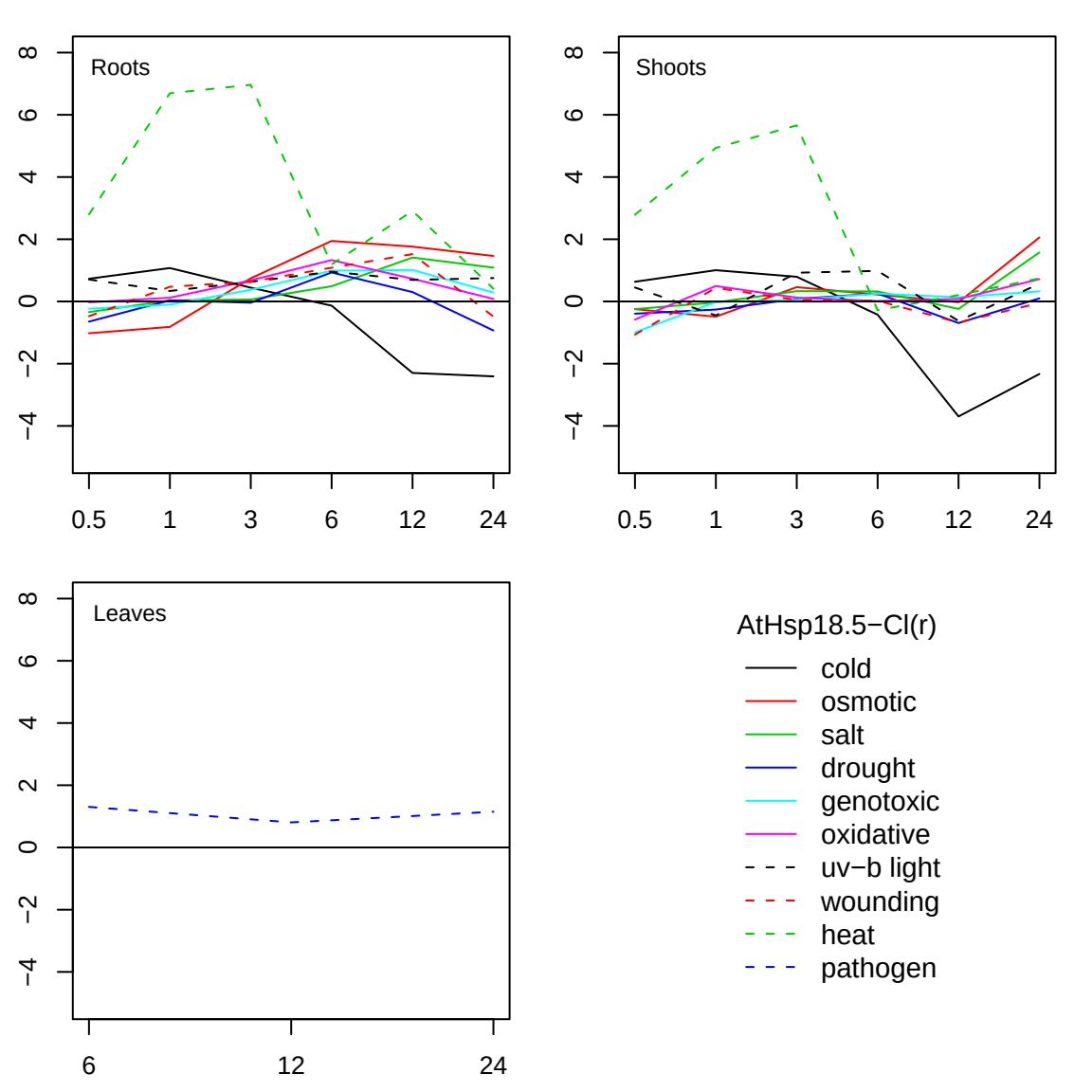
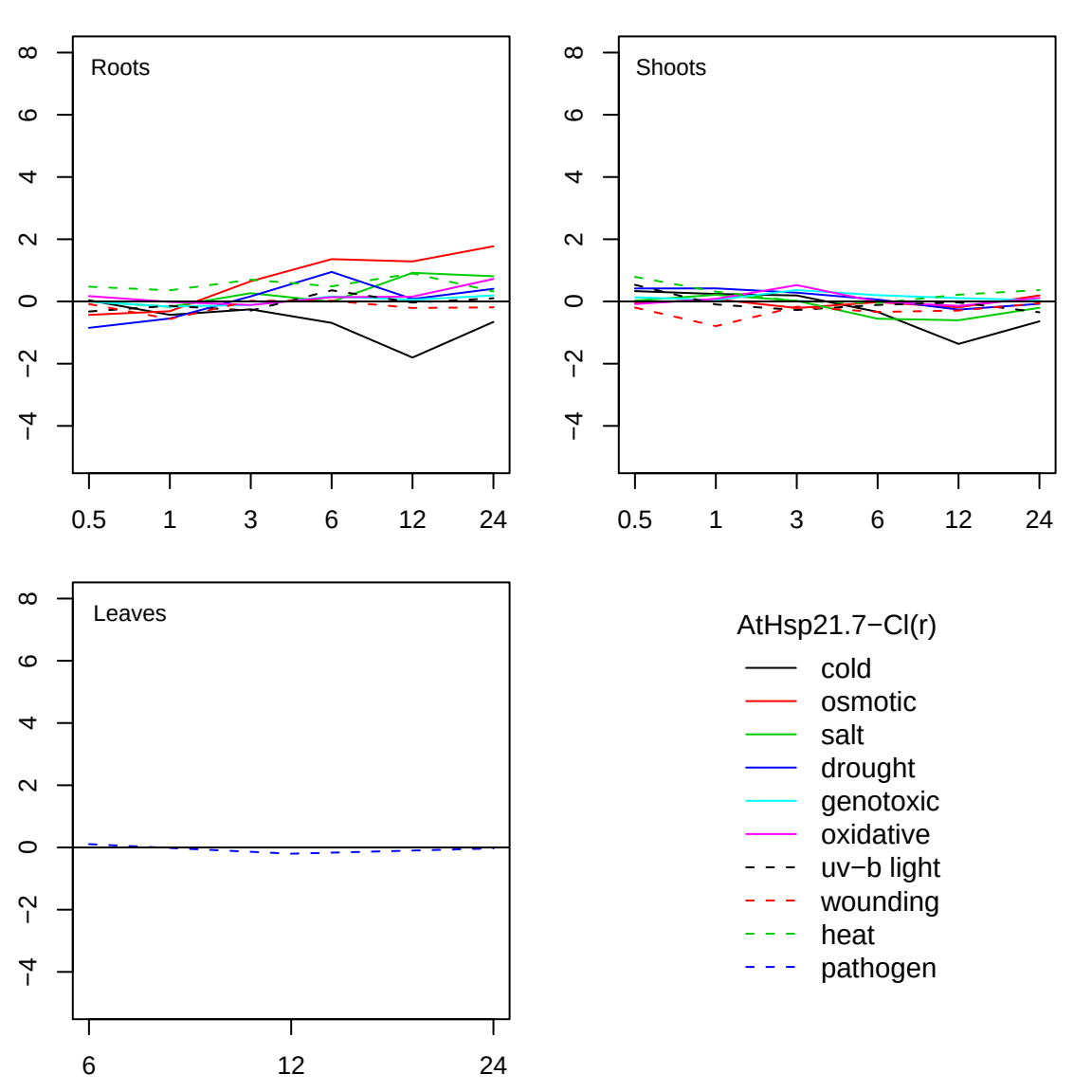
12
24
AtHsp23.6−M
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

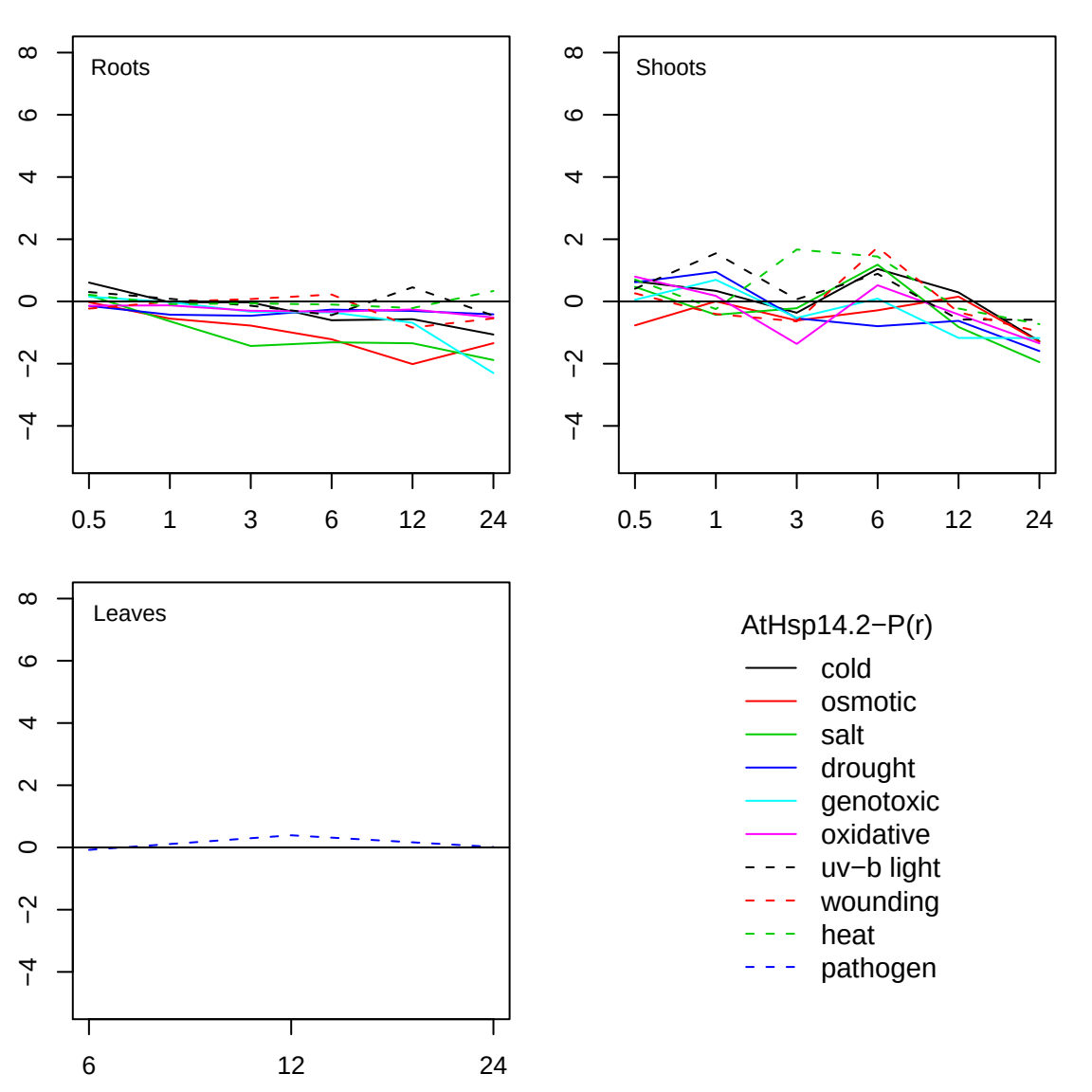

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp23.5−M
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

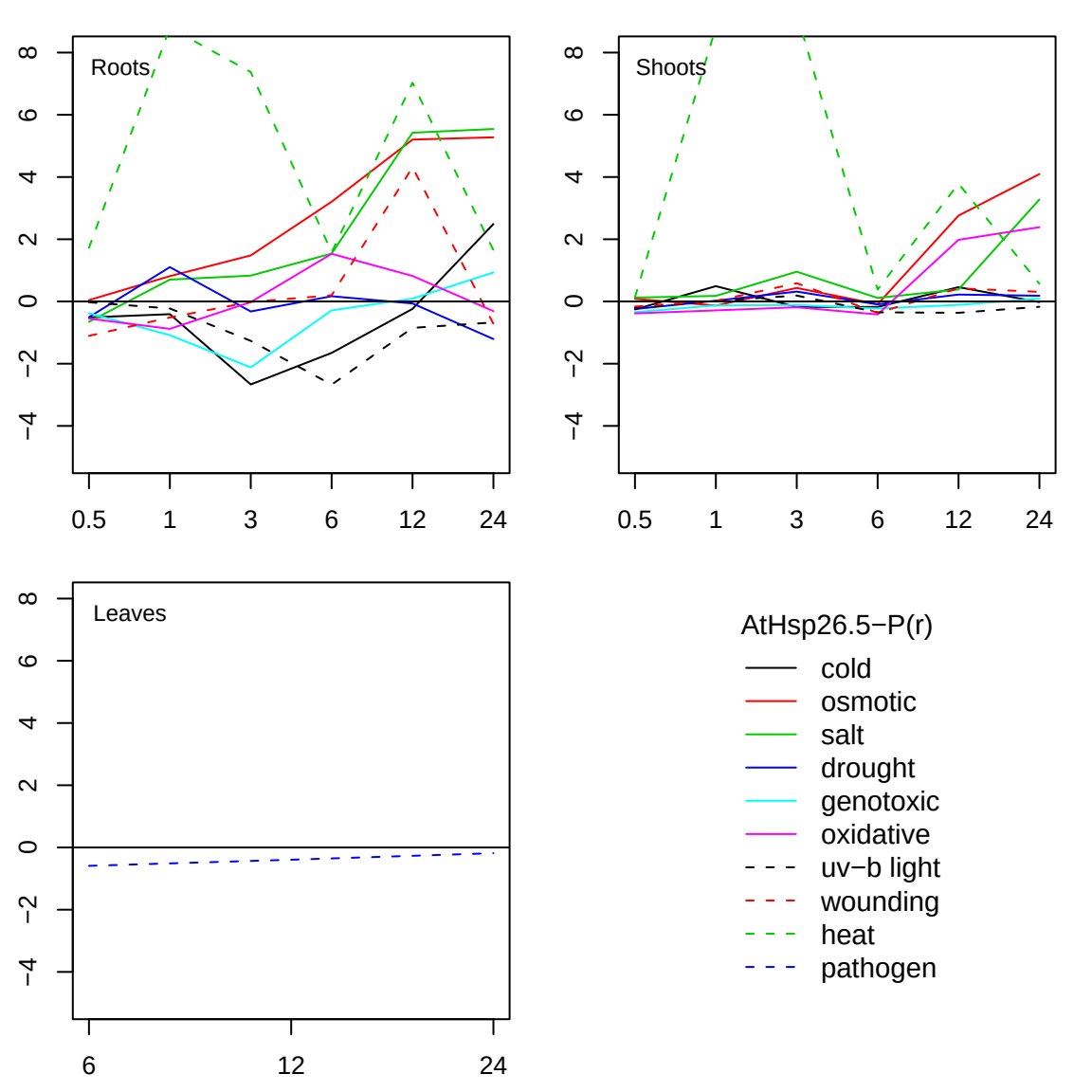

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp15.4−Cl(r)
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

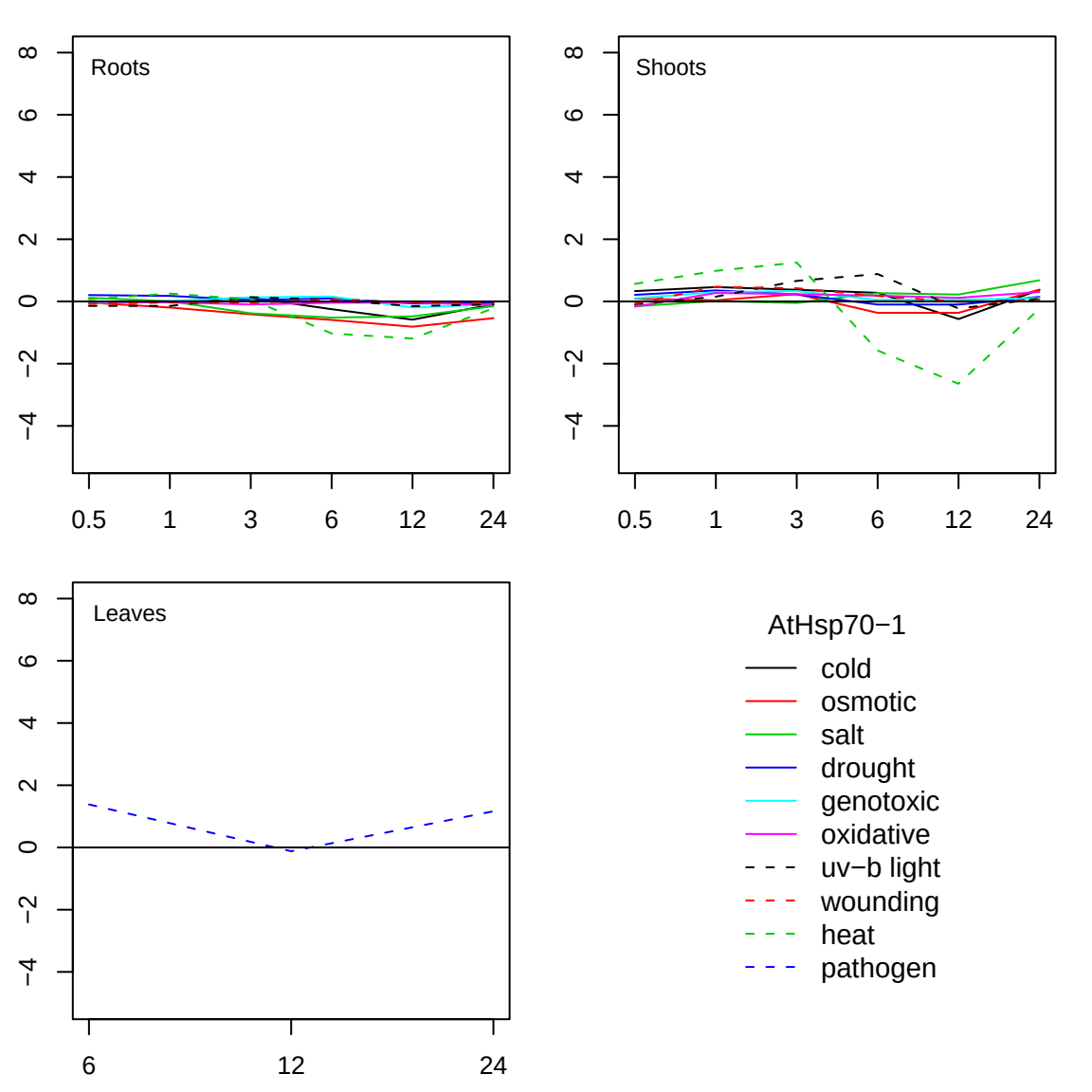

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp15.7−Cl(r)
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

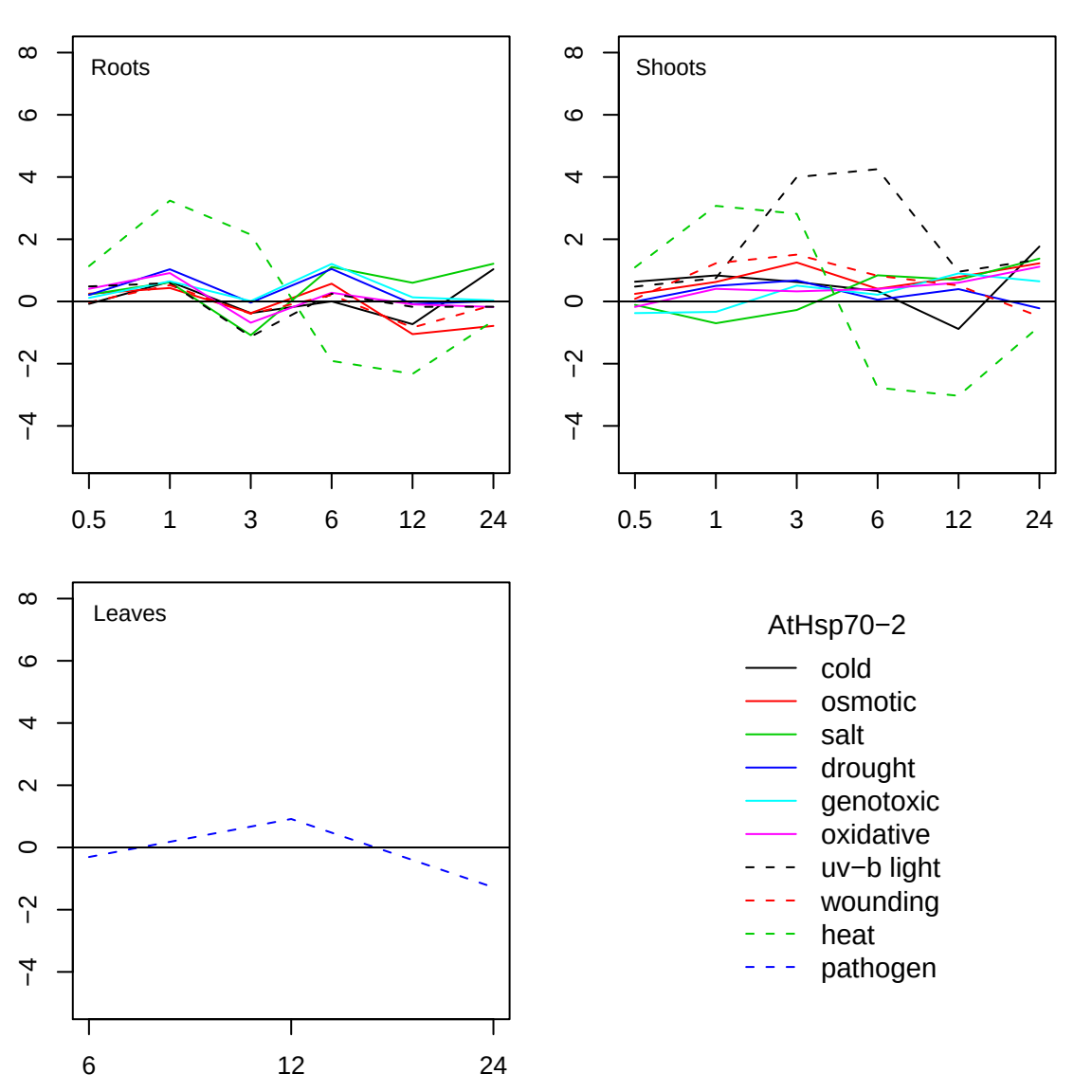

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp18.5−Cl(r)
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

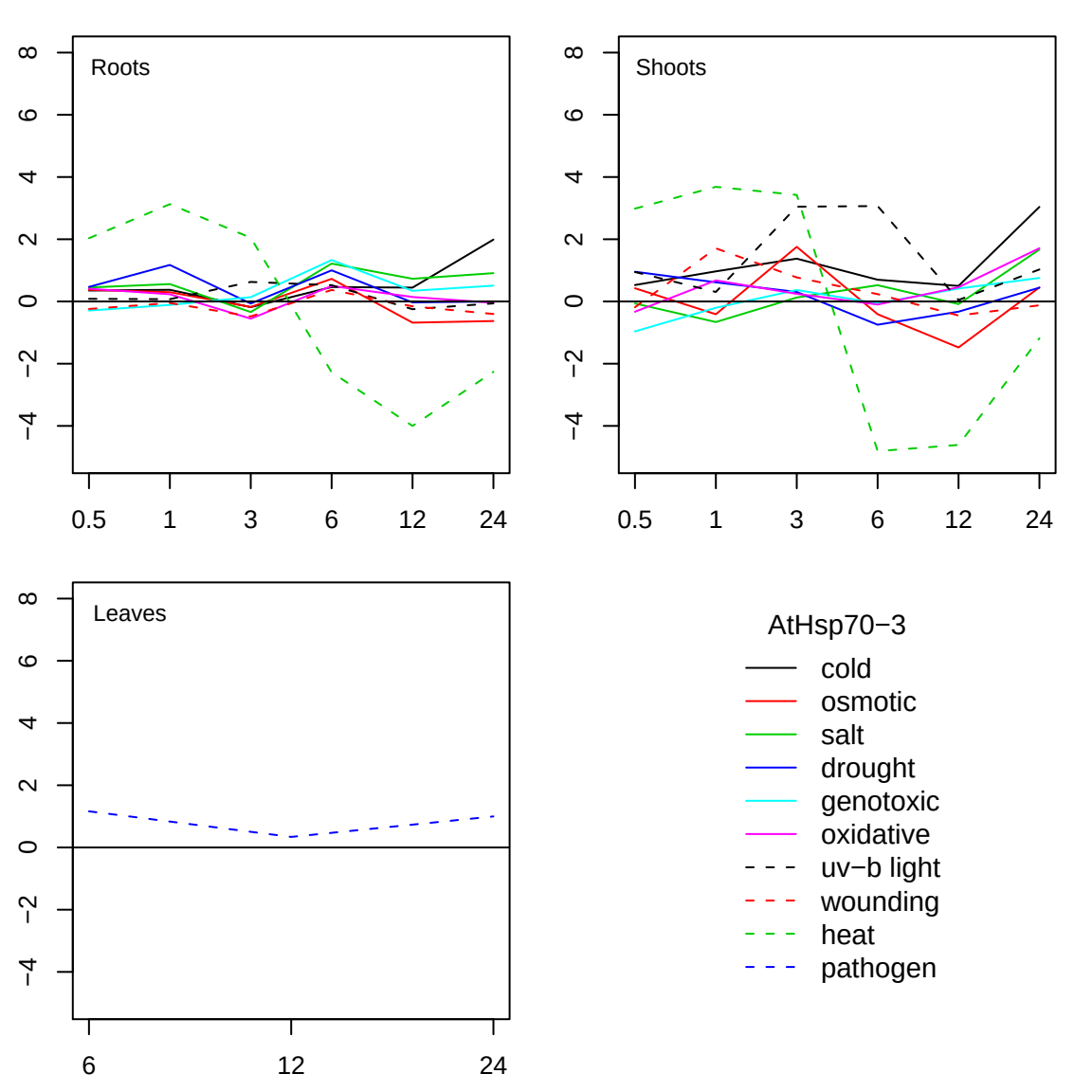

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp21.7−Cl(r)
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

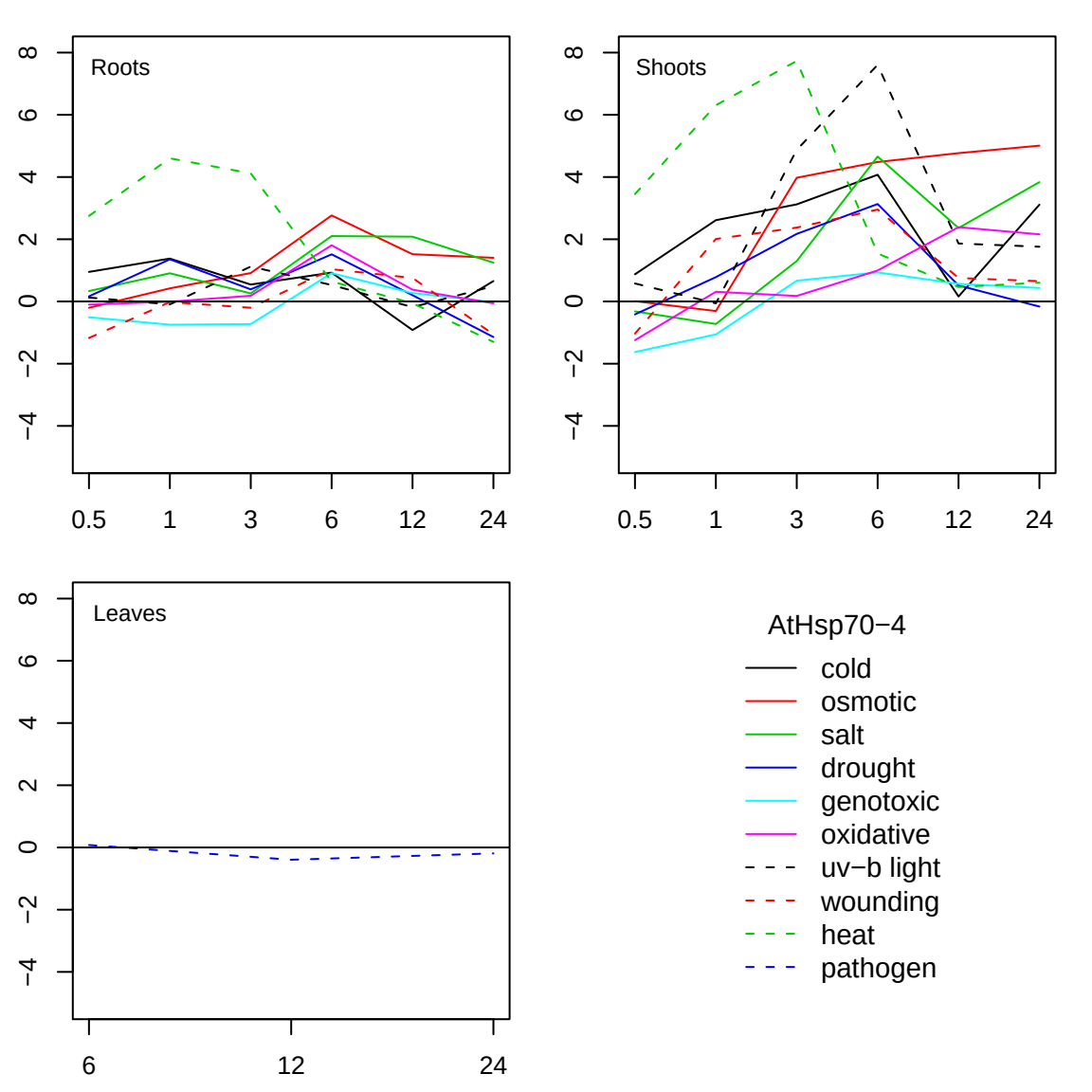

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp14.2−P(r)
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

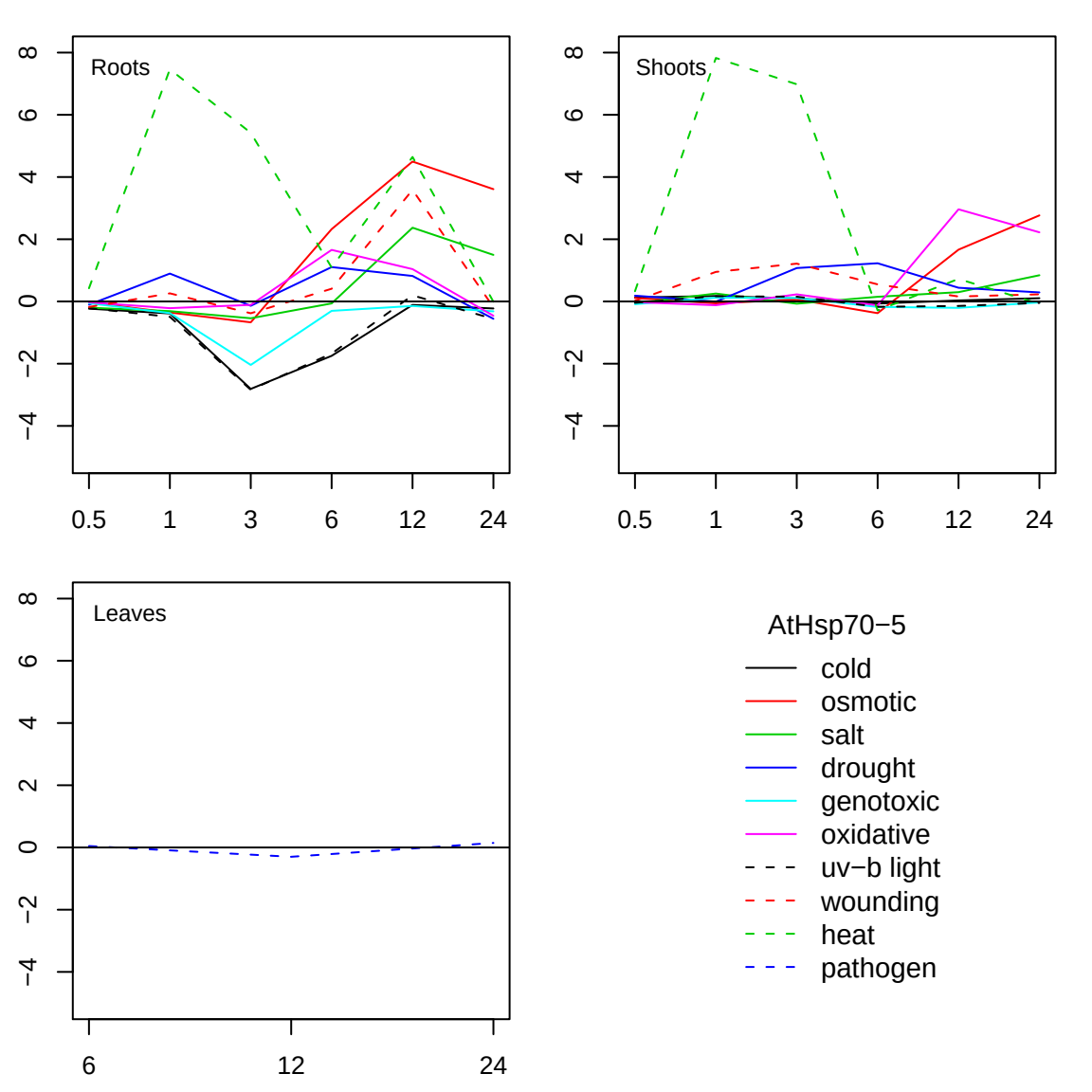

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp26.5−P(r)
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

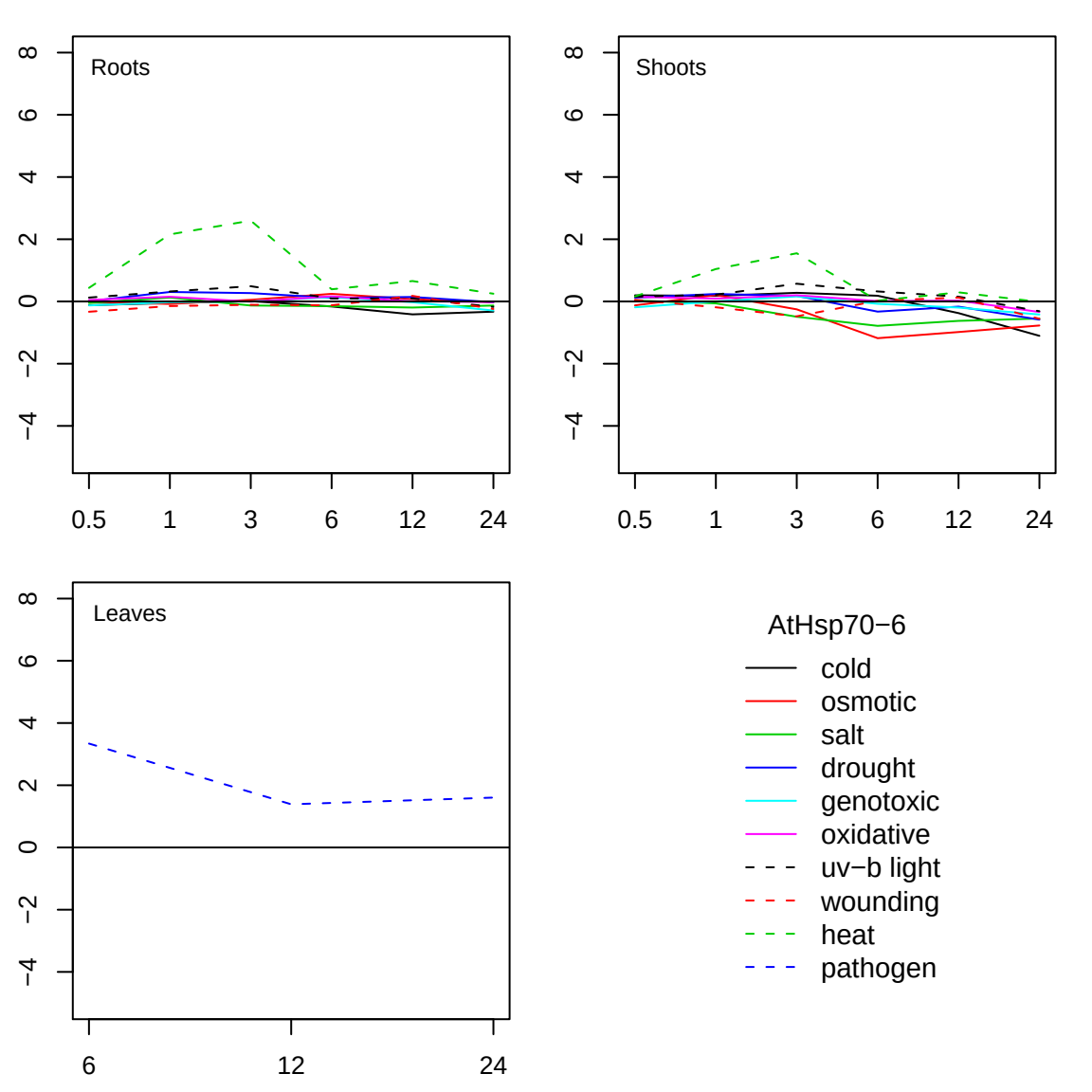

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−1
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

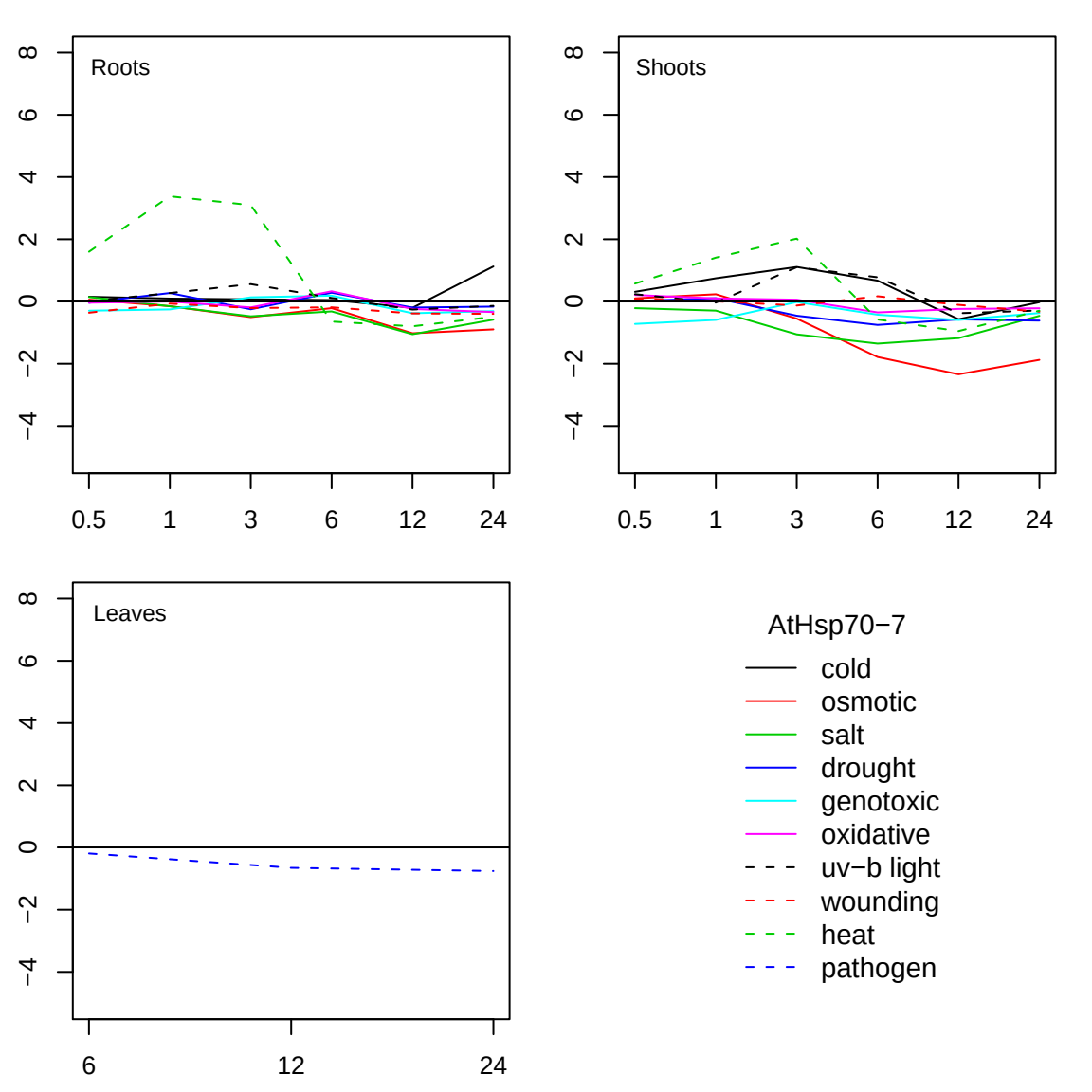

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−2
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

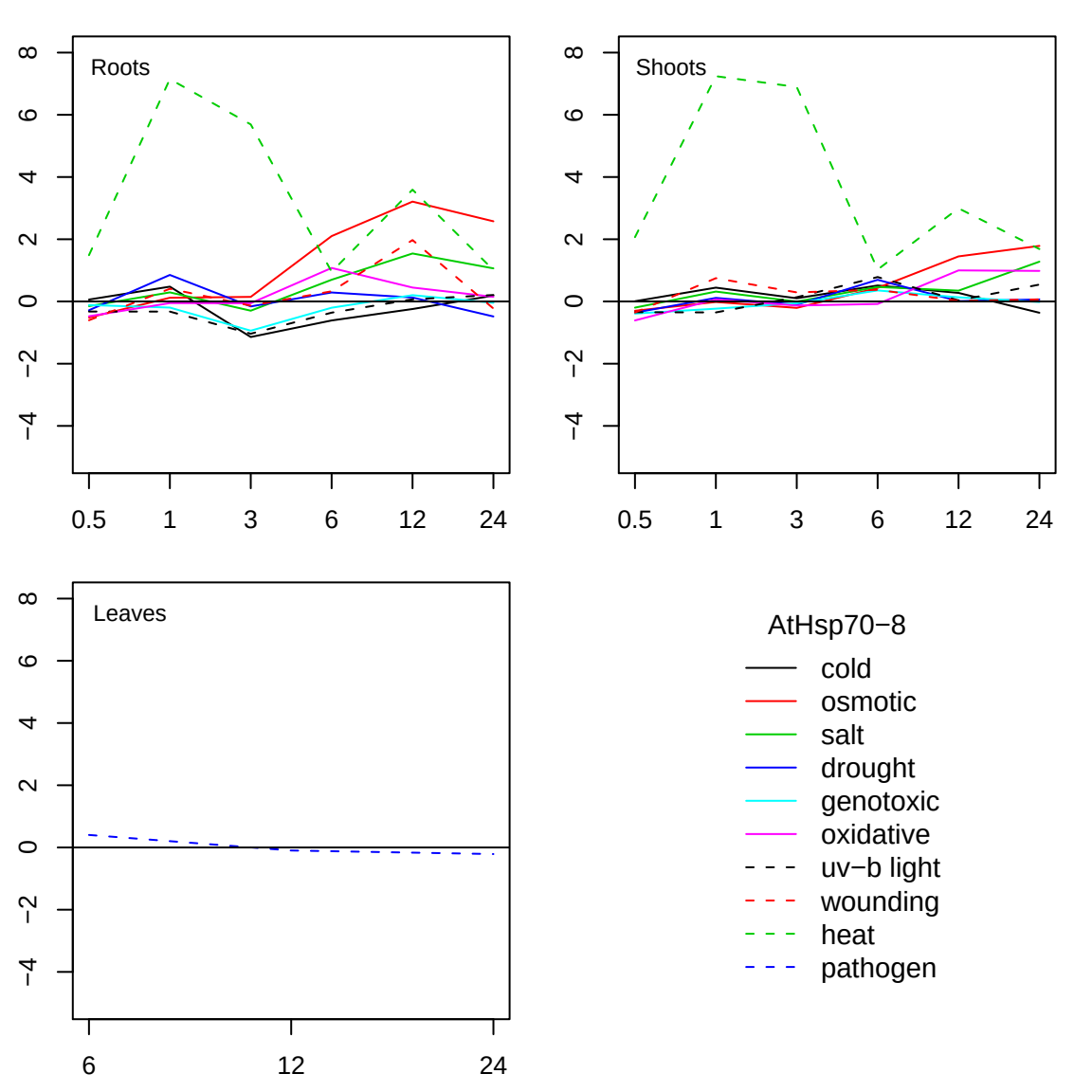

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−3
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

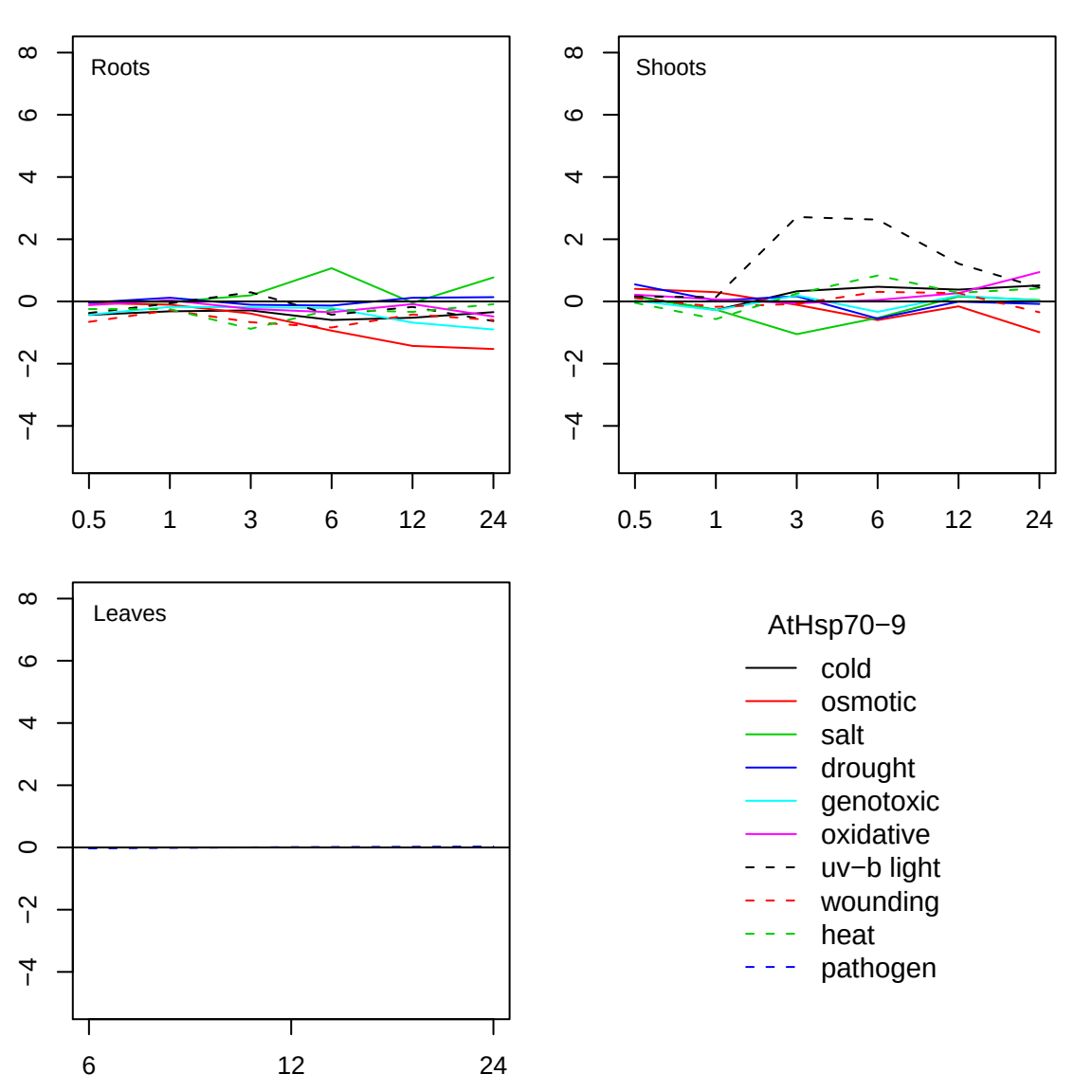

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−4
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

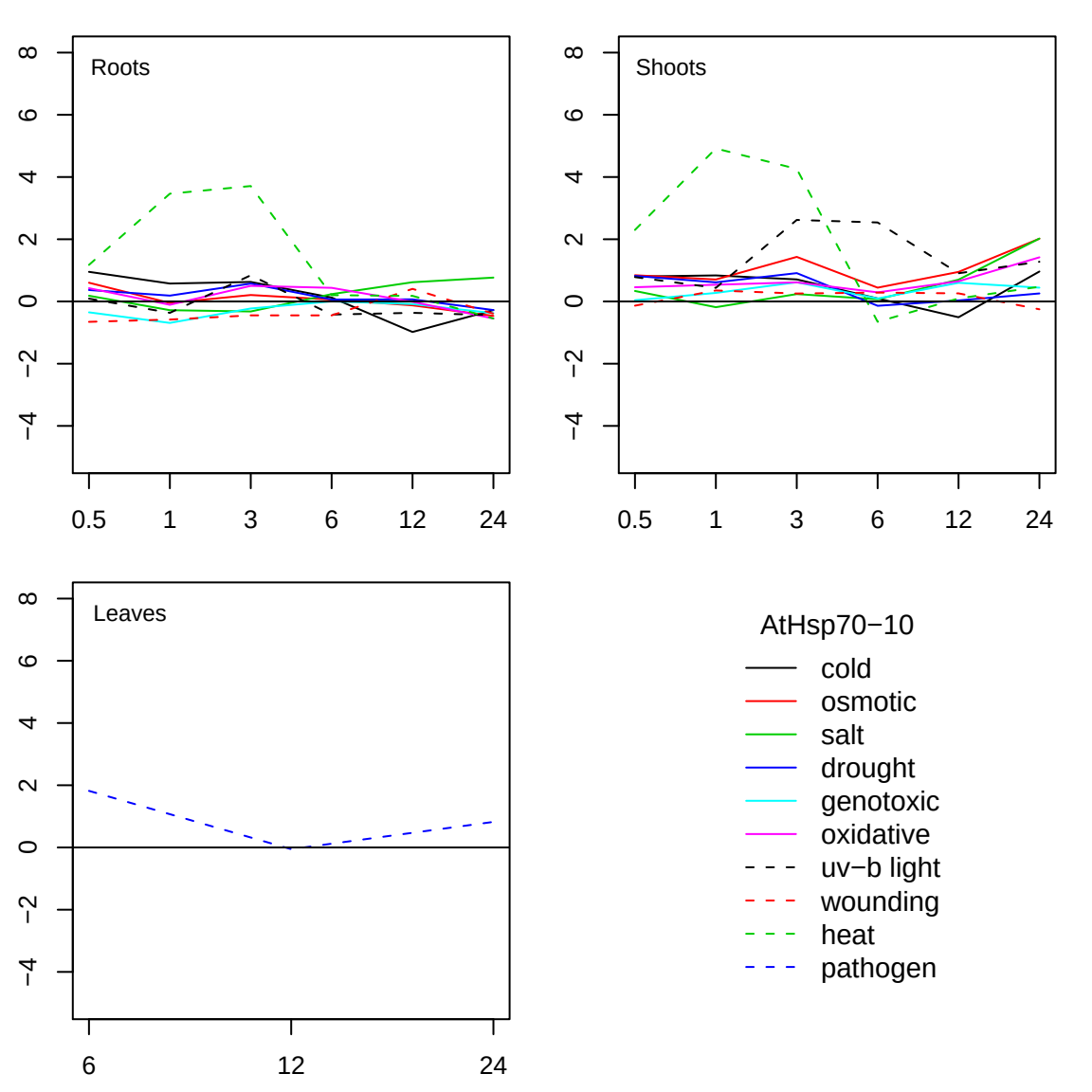

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−5
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

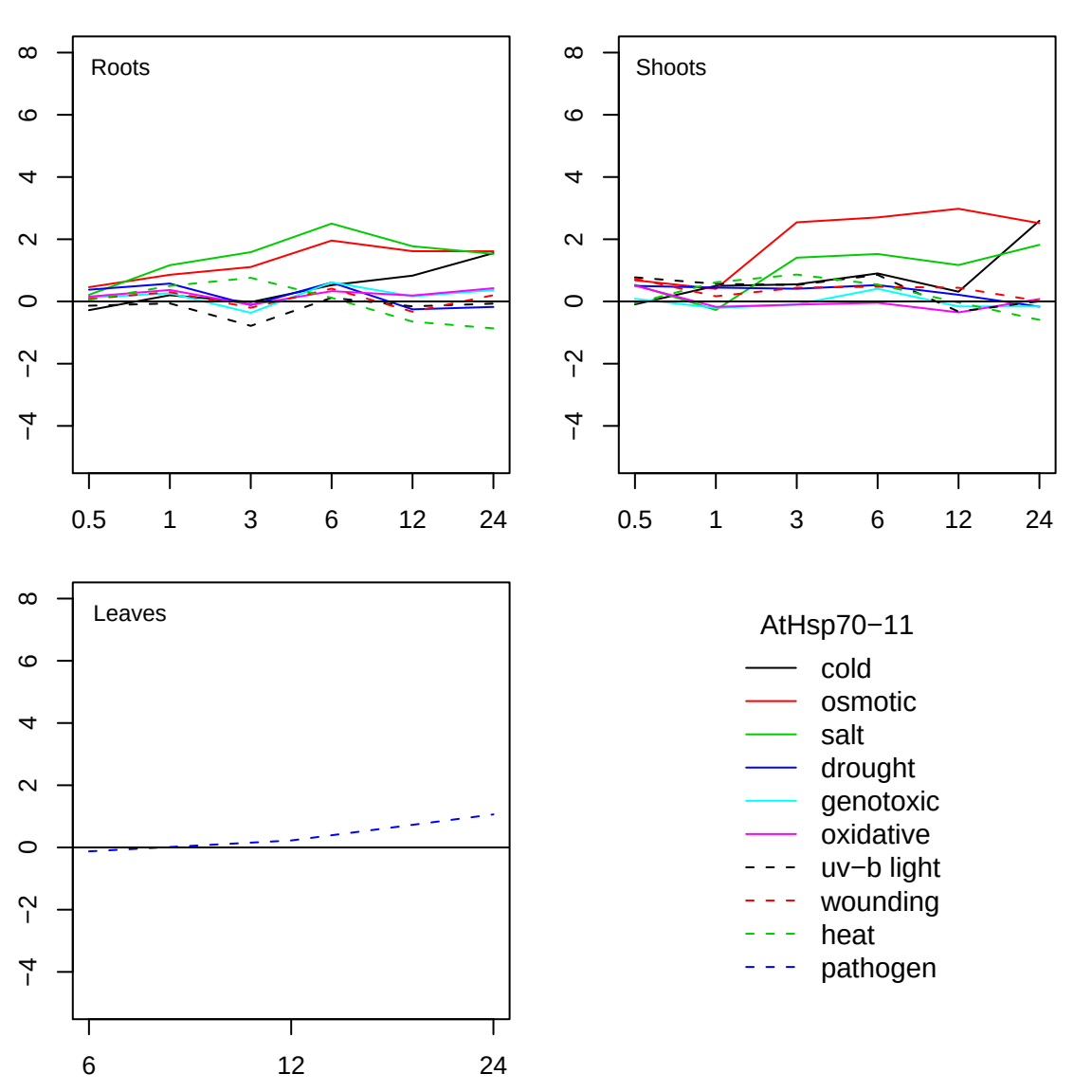

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−6
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

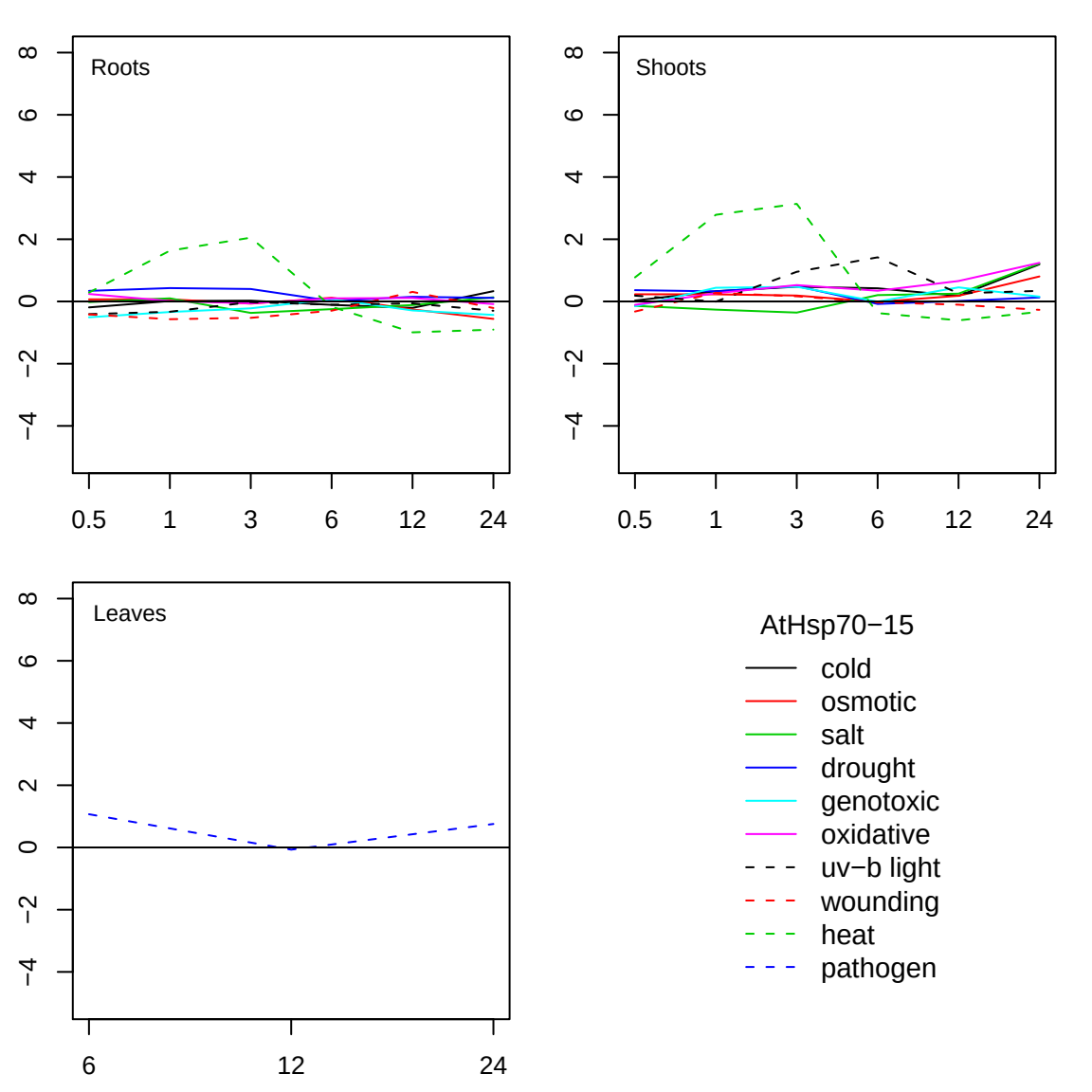

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−7
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

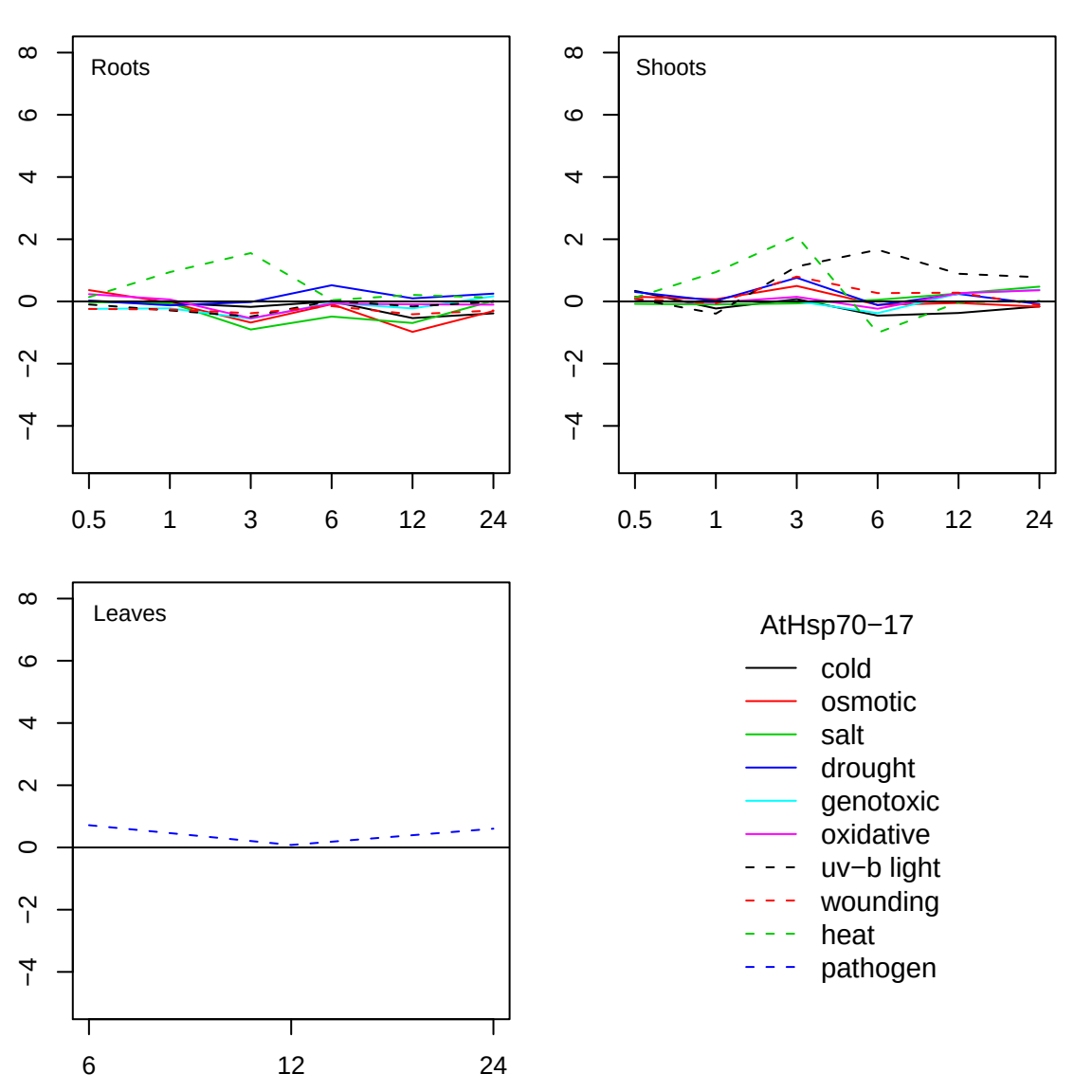

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−8
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

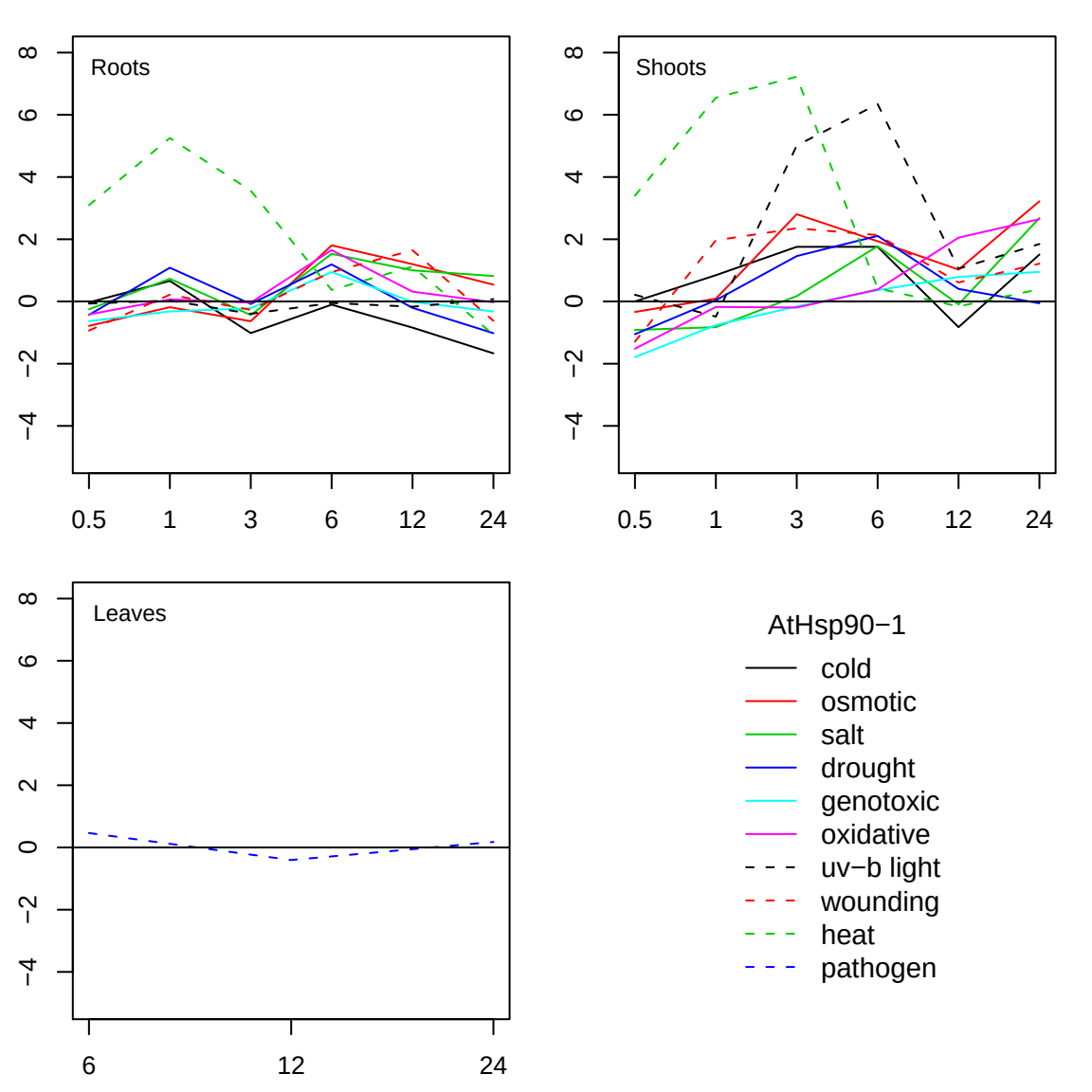

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−9
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

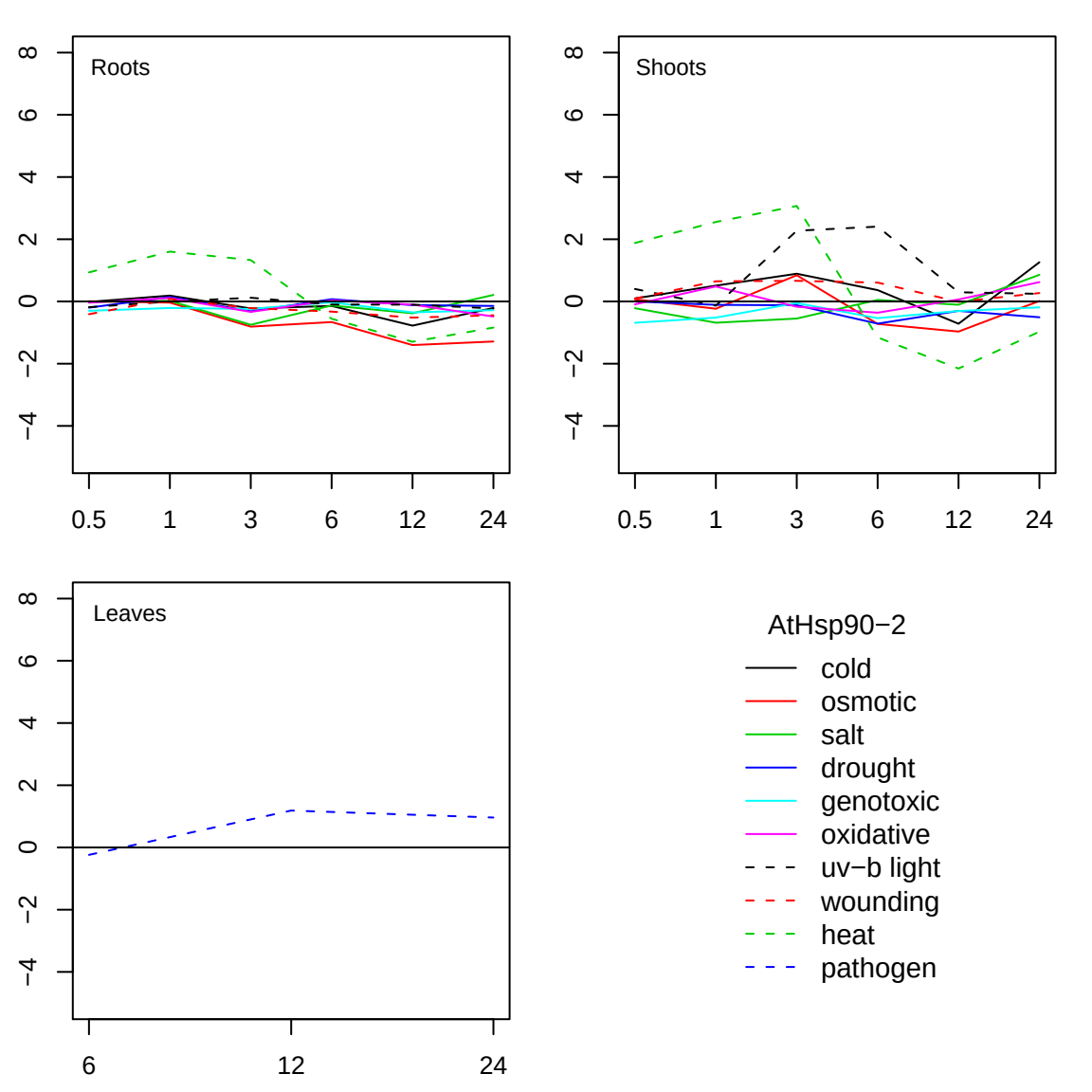

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−10
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

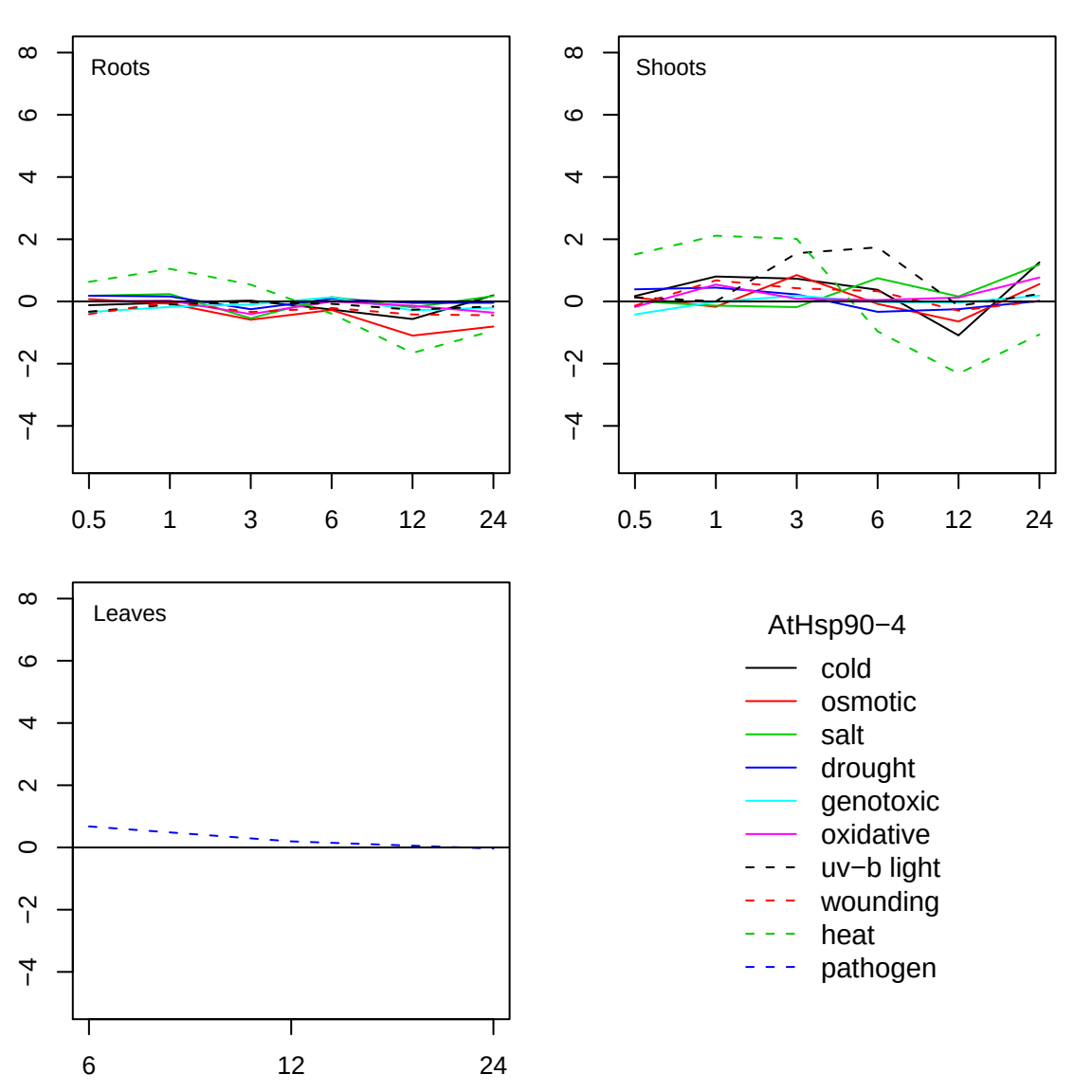

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−11
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

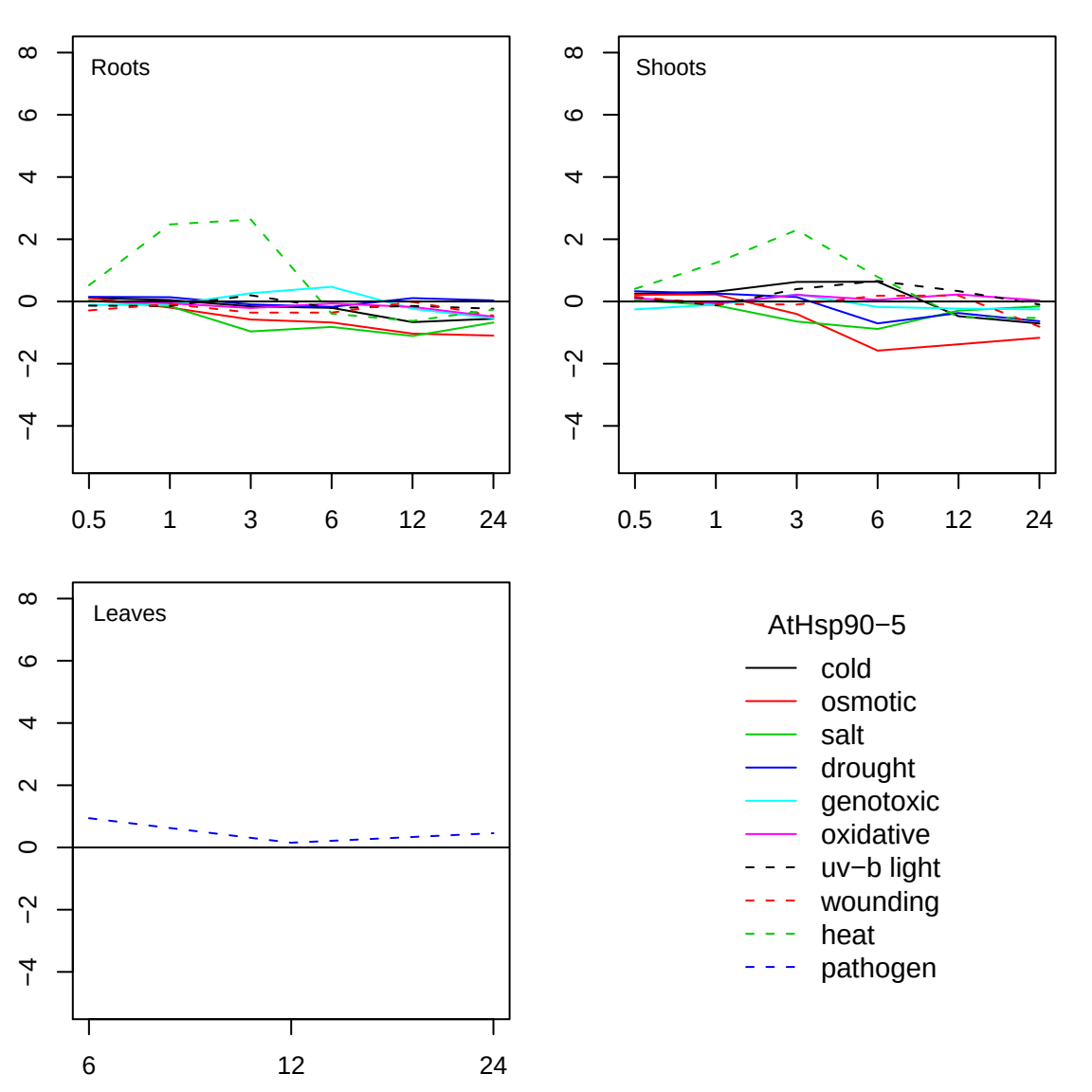

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−15
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

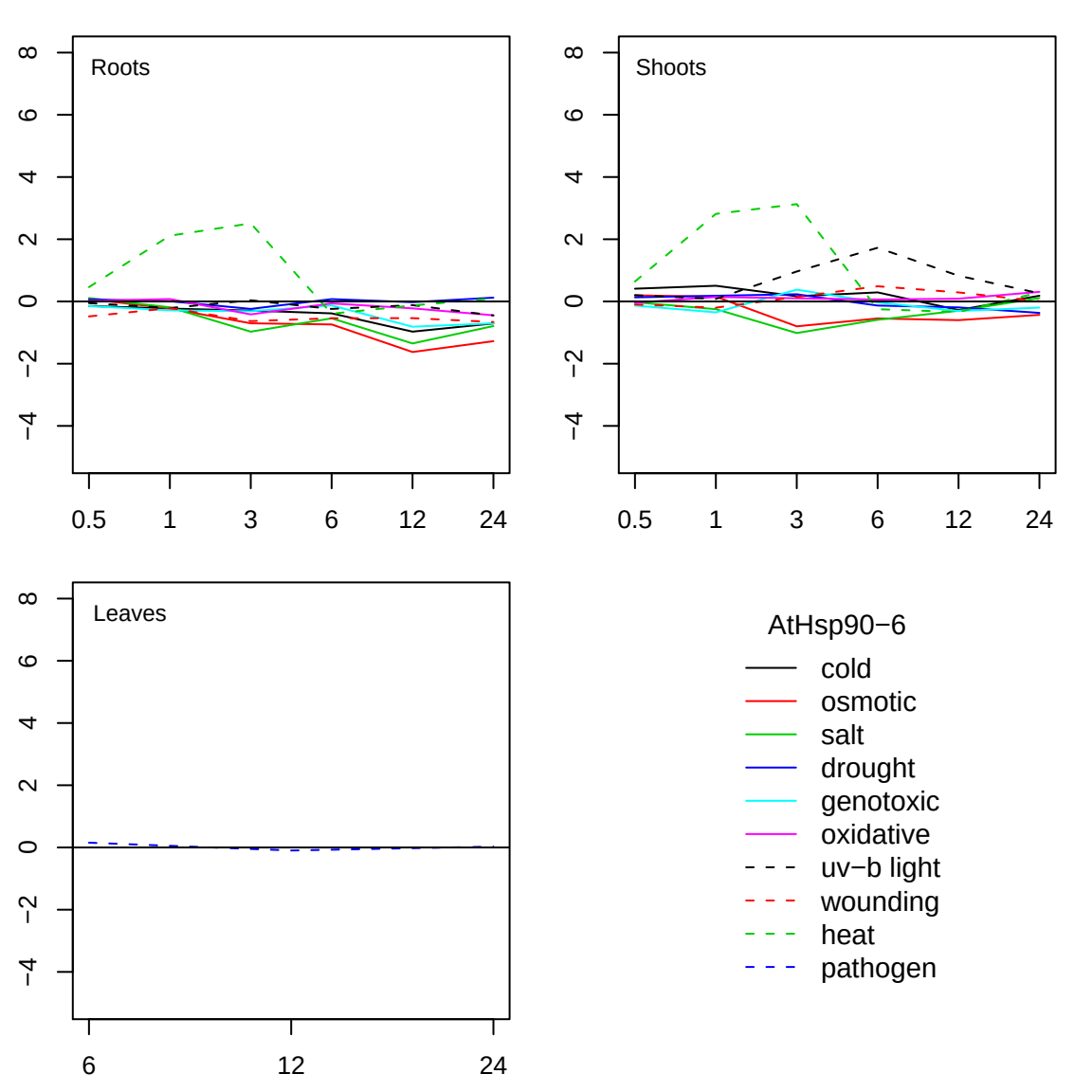

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp70−17
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen

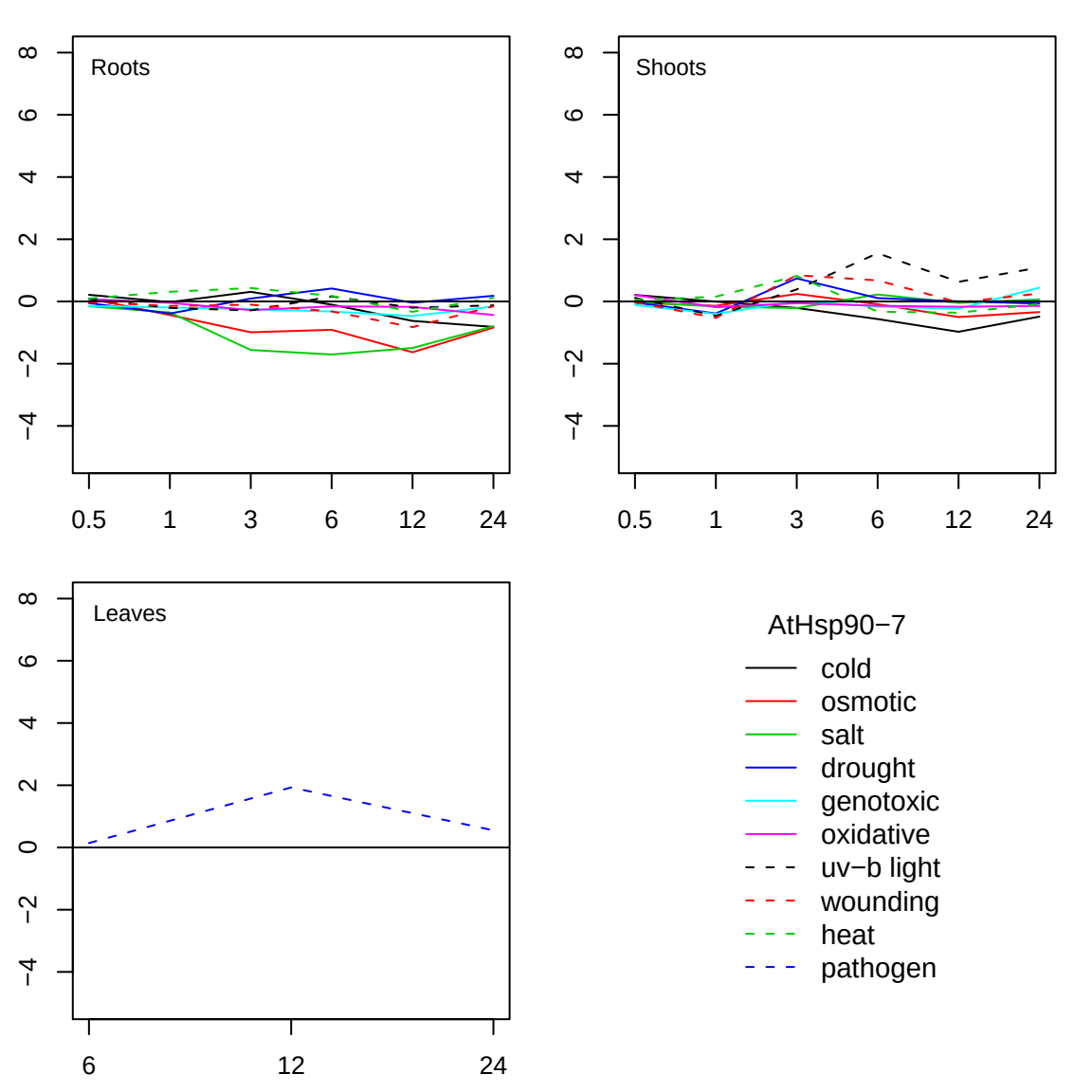

Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp90−1
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp90−2
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp90−4
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp90−5
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp90−6
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
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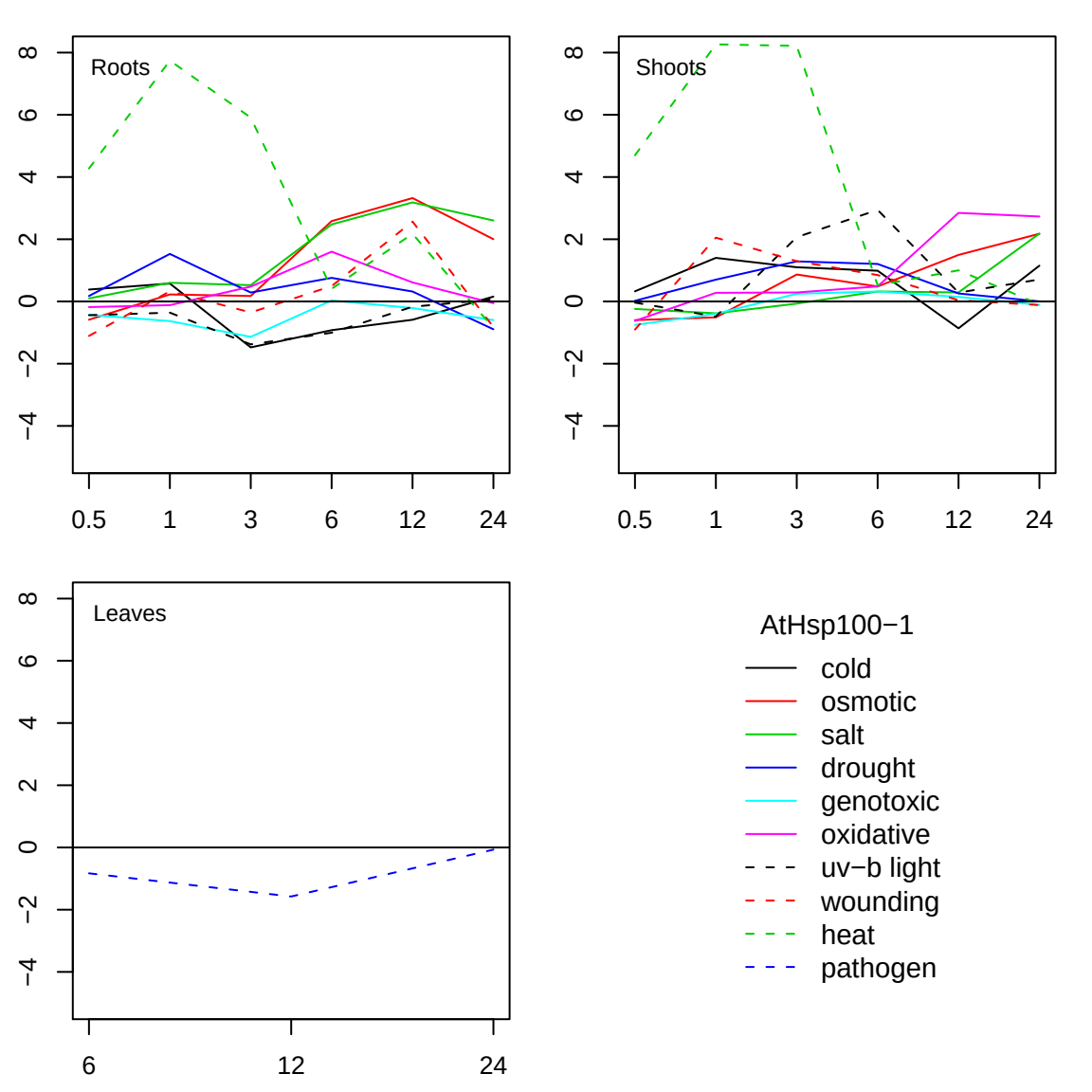
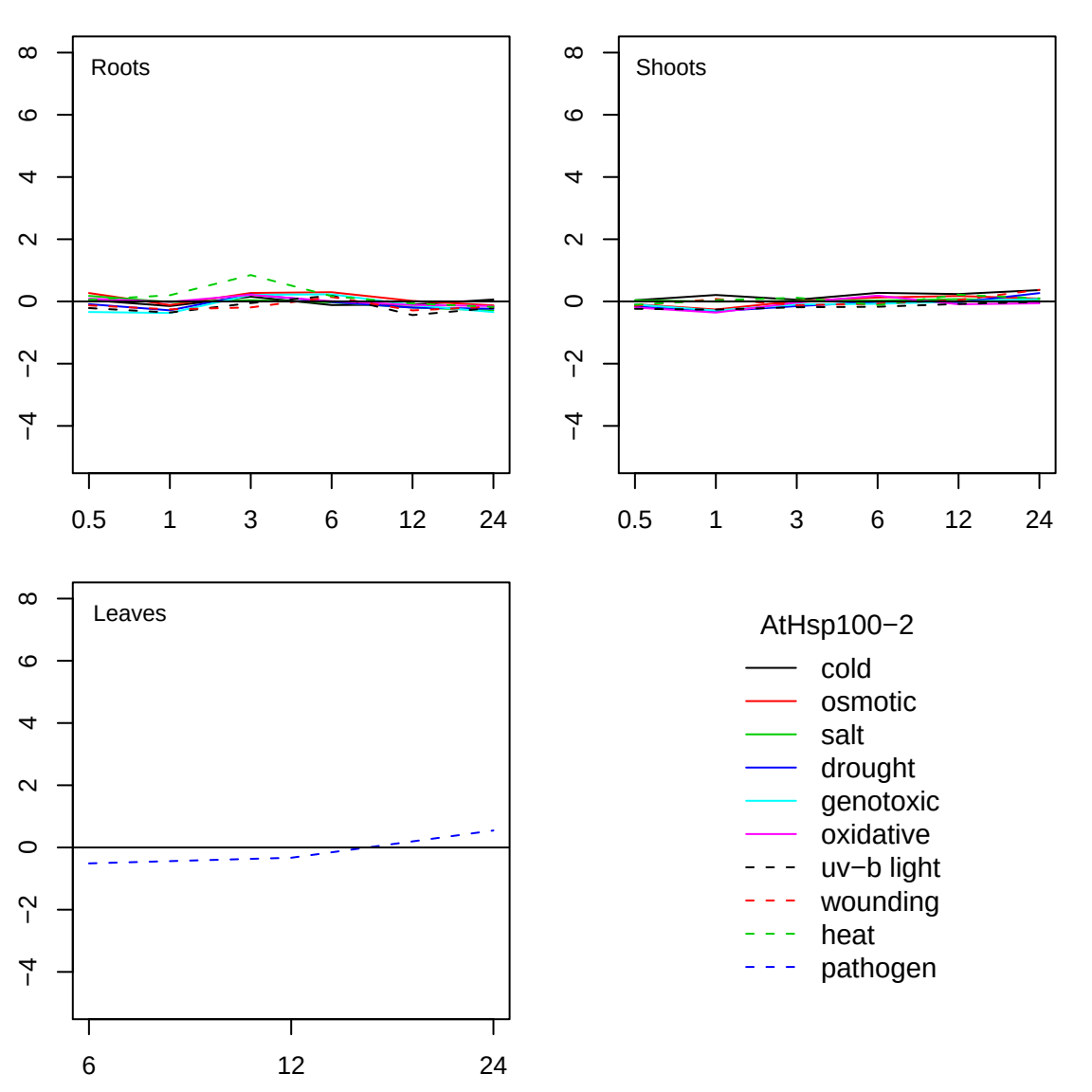
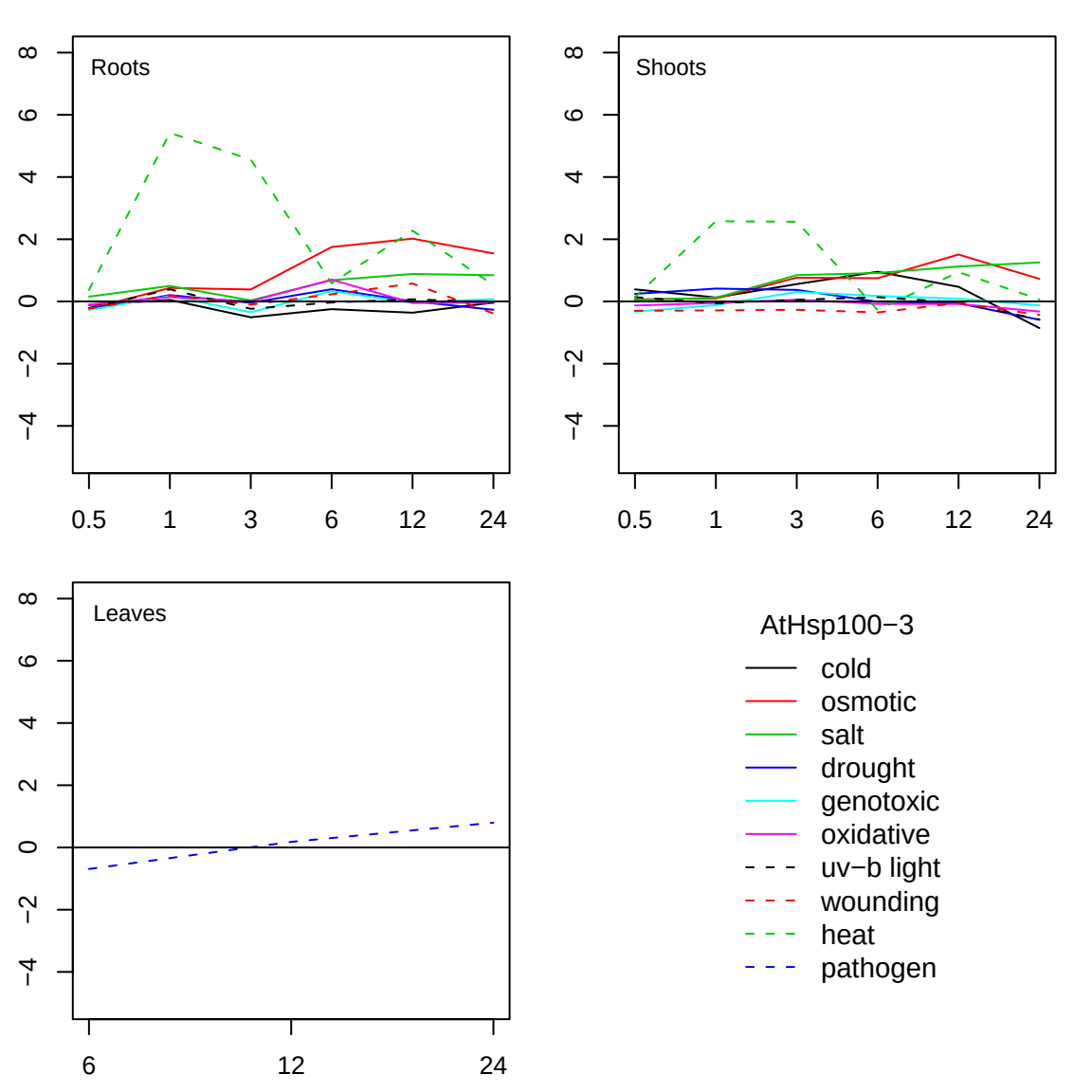
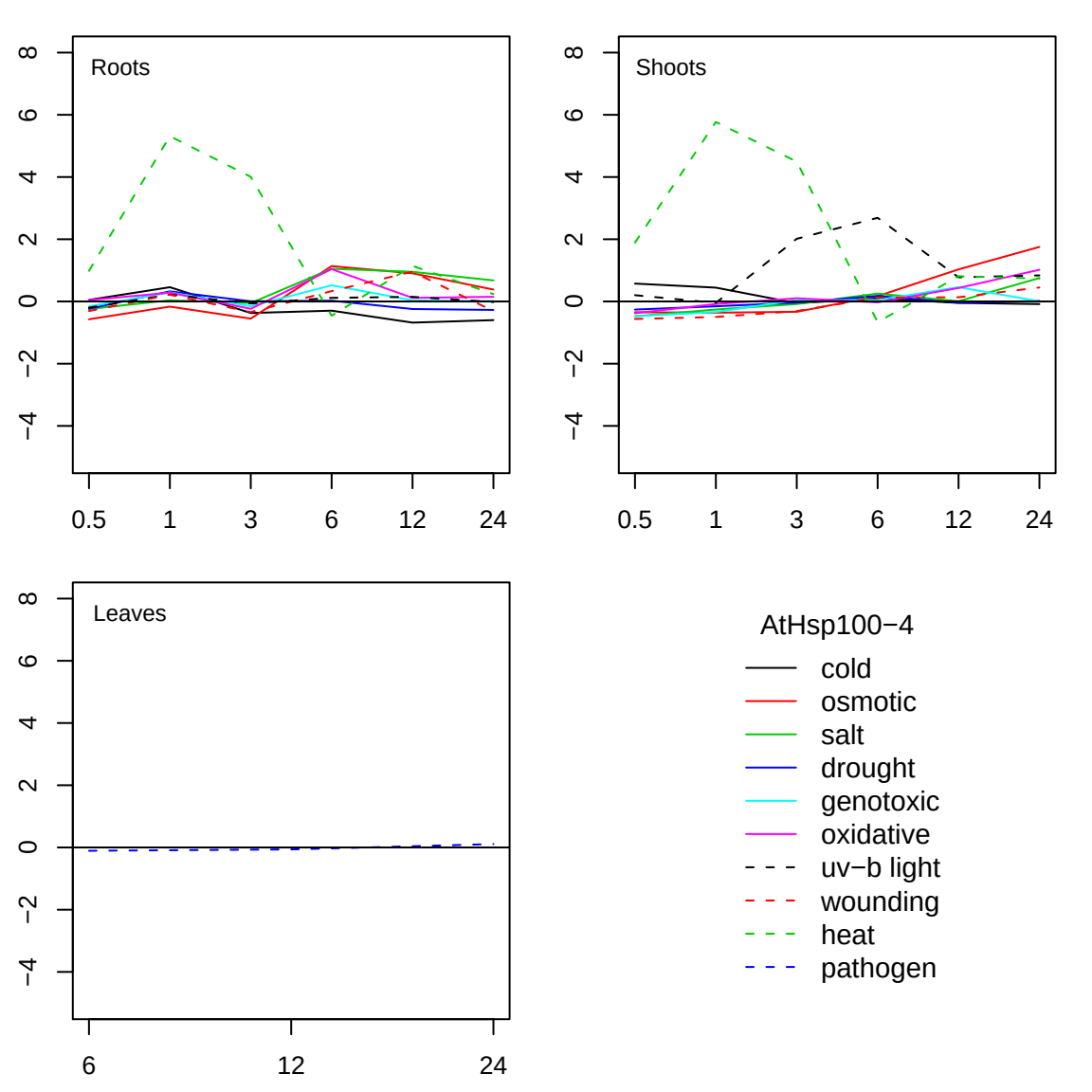
6
12
24
AtHsp90−7
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp100−1
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp100−2
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp100−3
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
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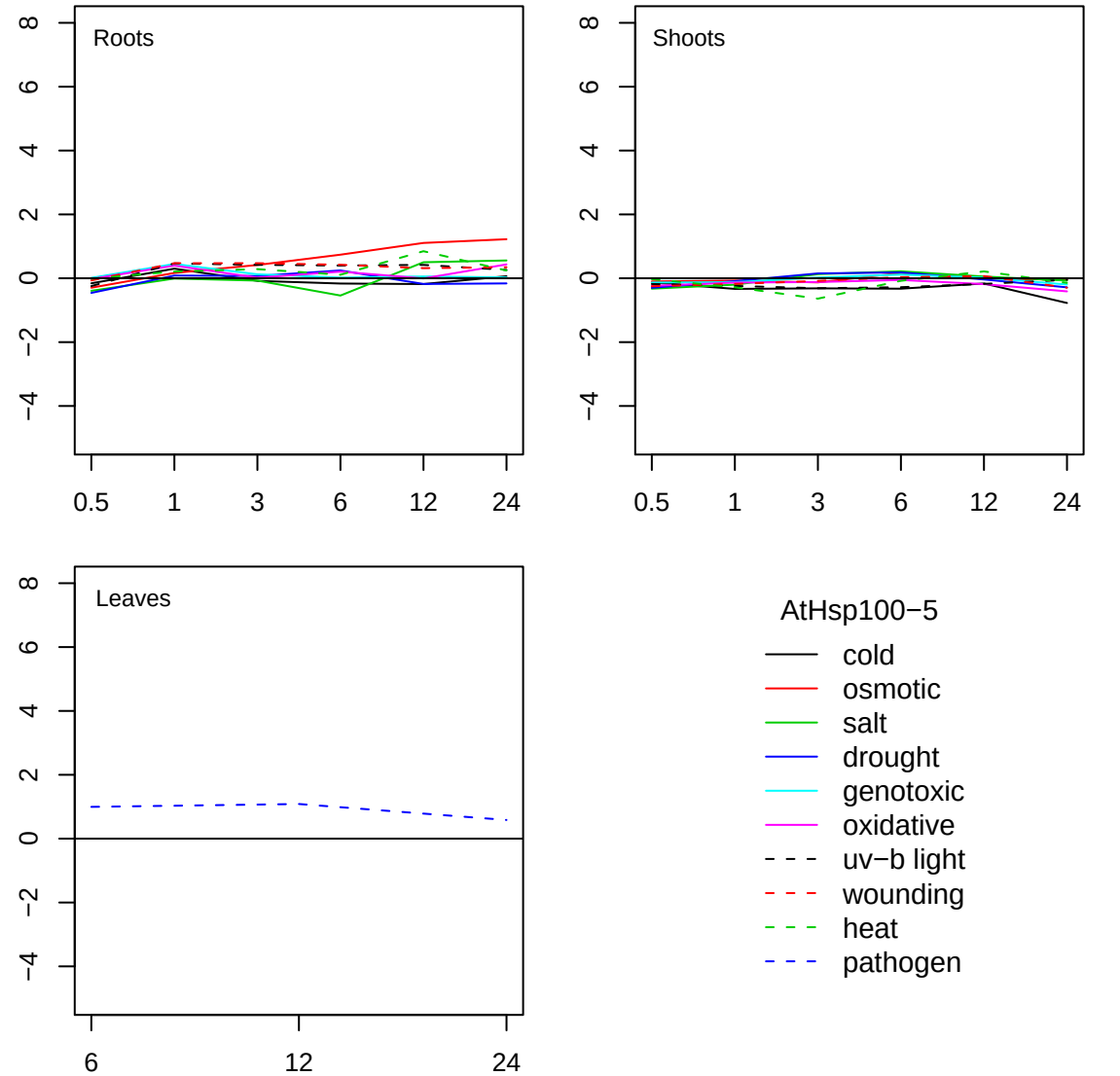
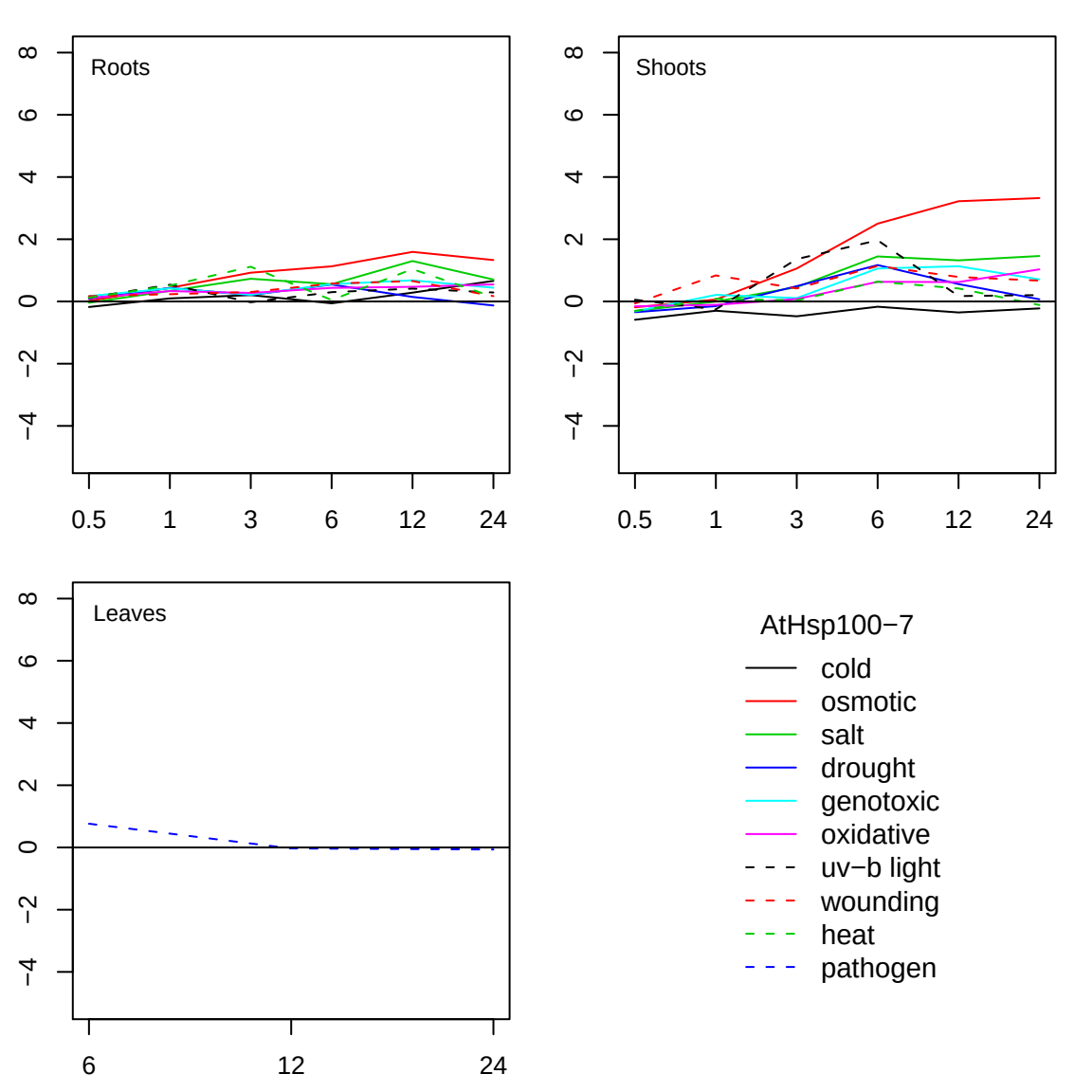
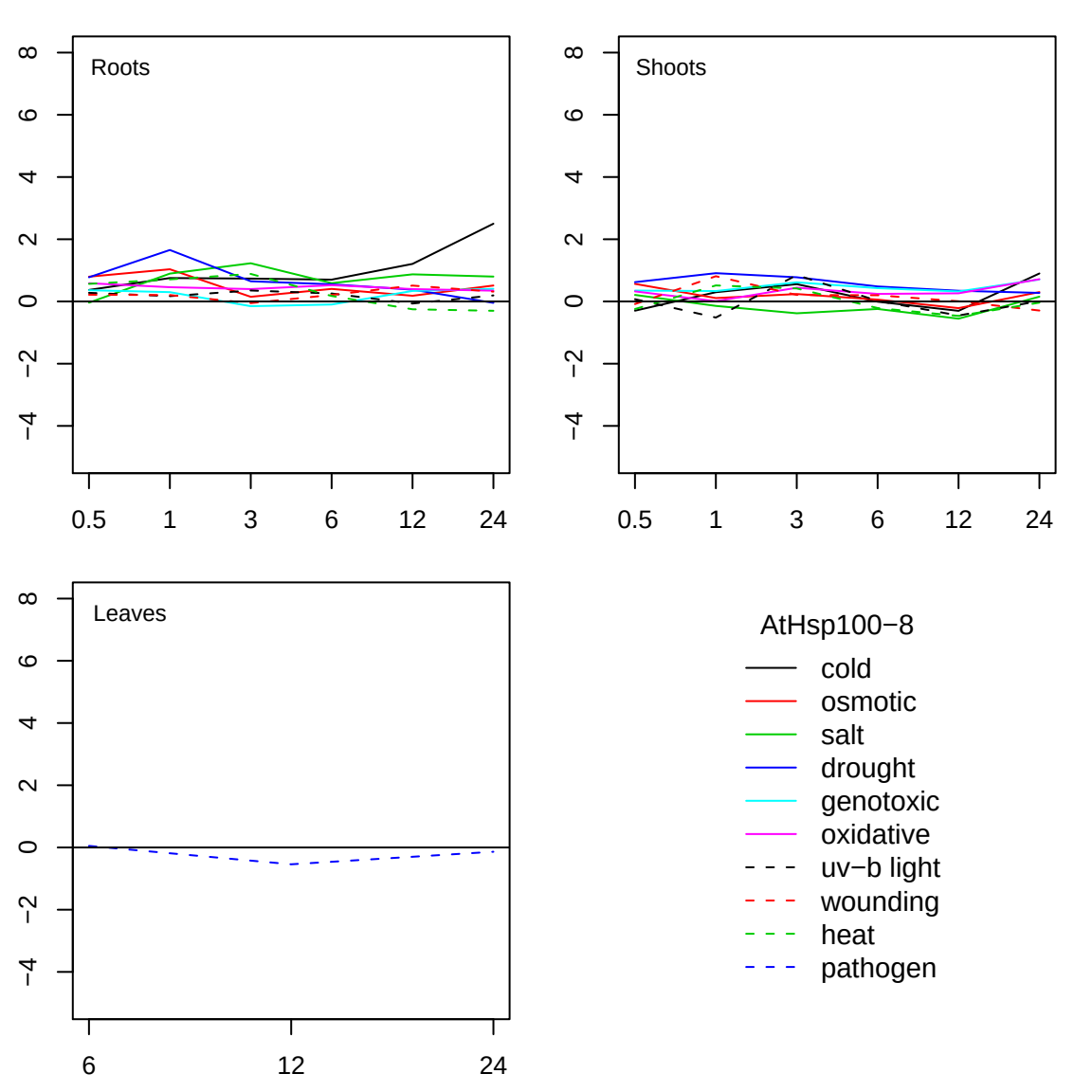
6
12
24
AtHsp100−4
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp100−5
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp100−7
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen


Roots
Shoots
Leaves
8
6
4
2
0
−2
−4
0.5
1
3
6
12
24
AtHsp100−8
cold
osmotic
salt
drought
genotoxic
oxidative
uv−b light
wounding
heat
pathogen