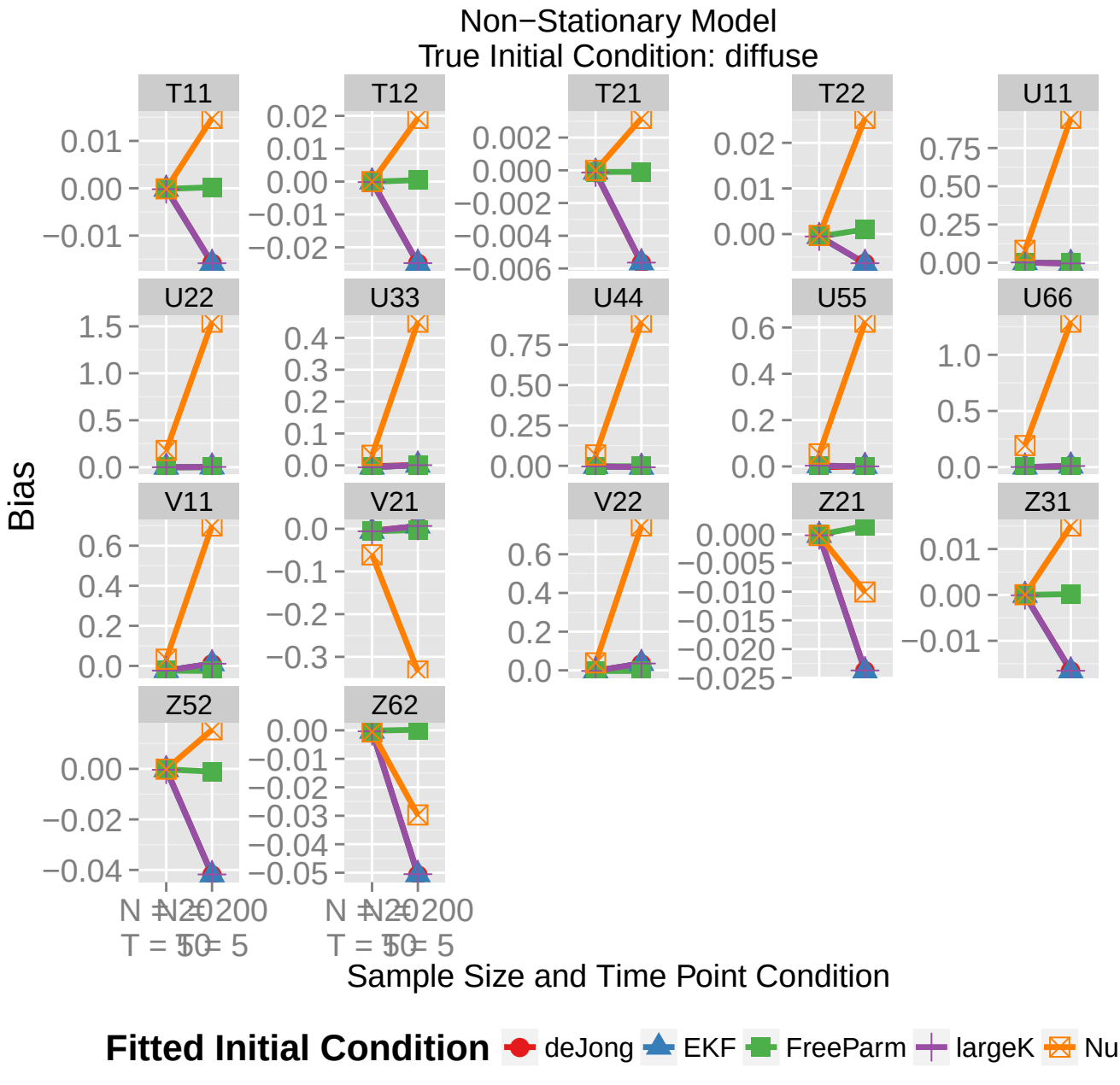
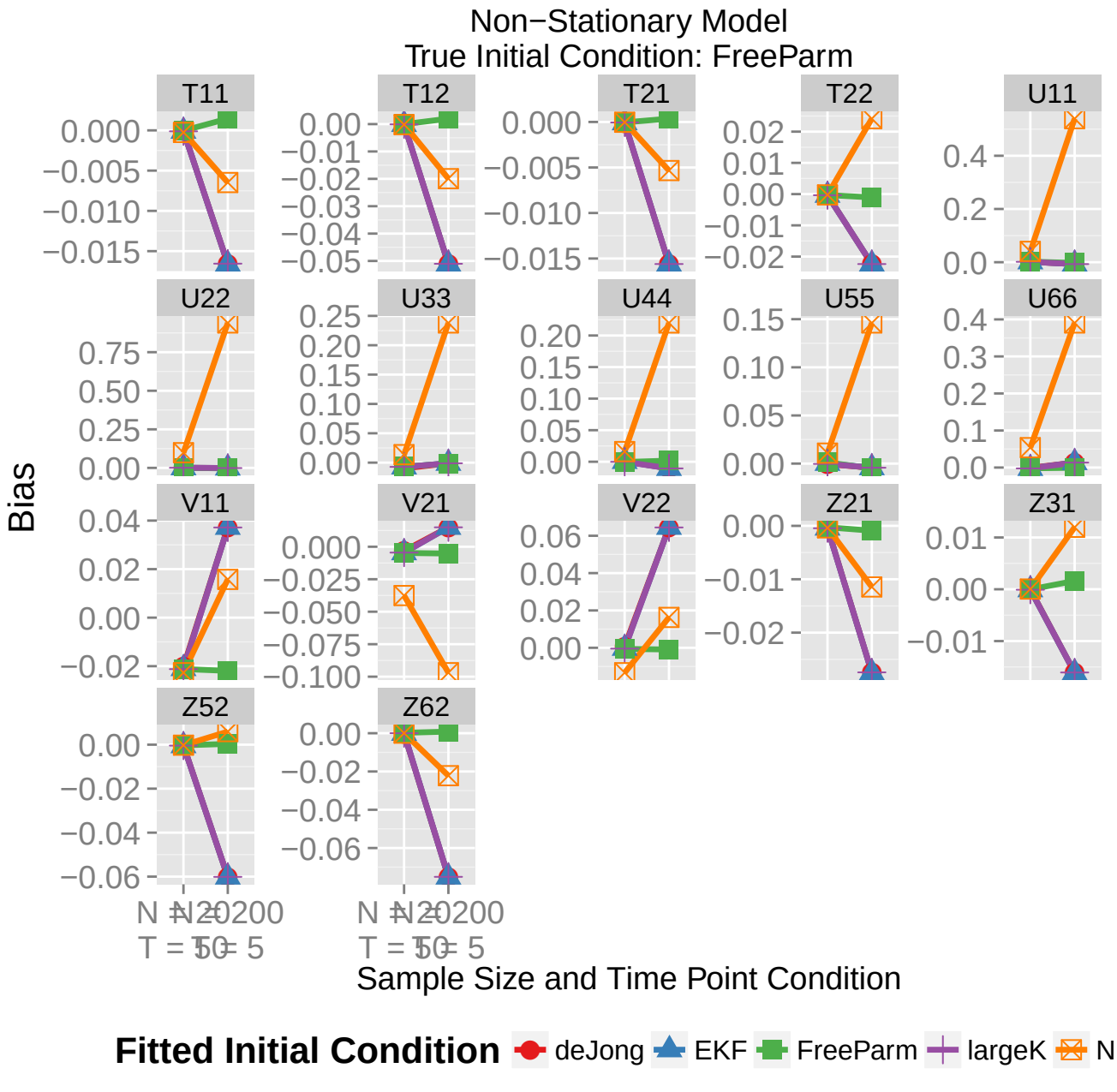

Non−Stationary Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Bias
N = 20
N = 200
T = 5
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Bias
N = 20
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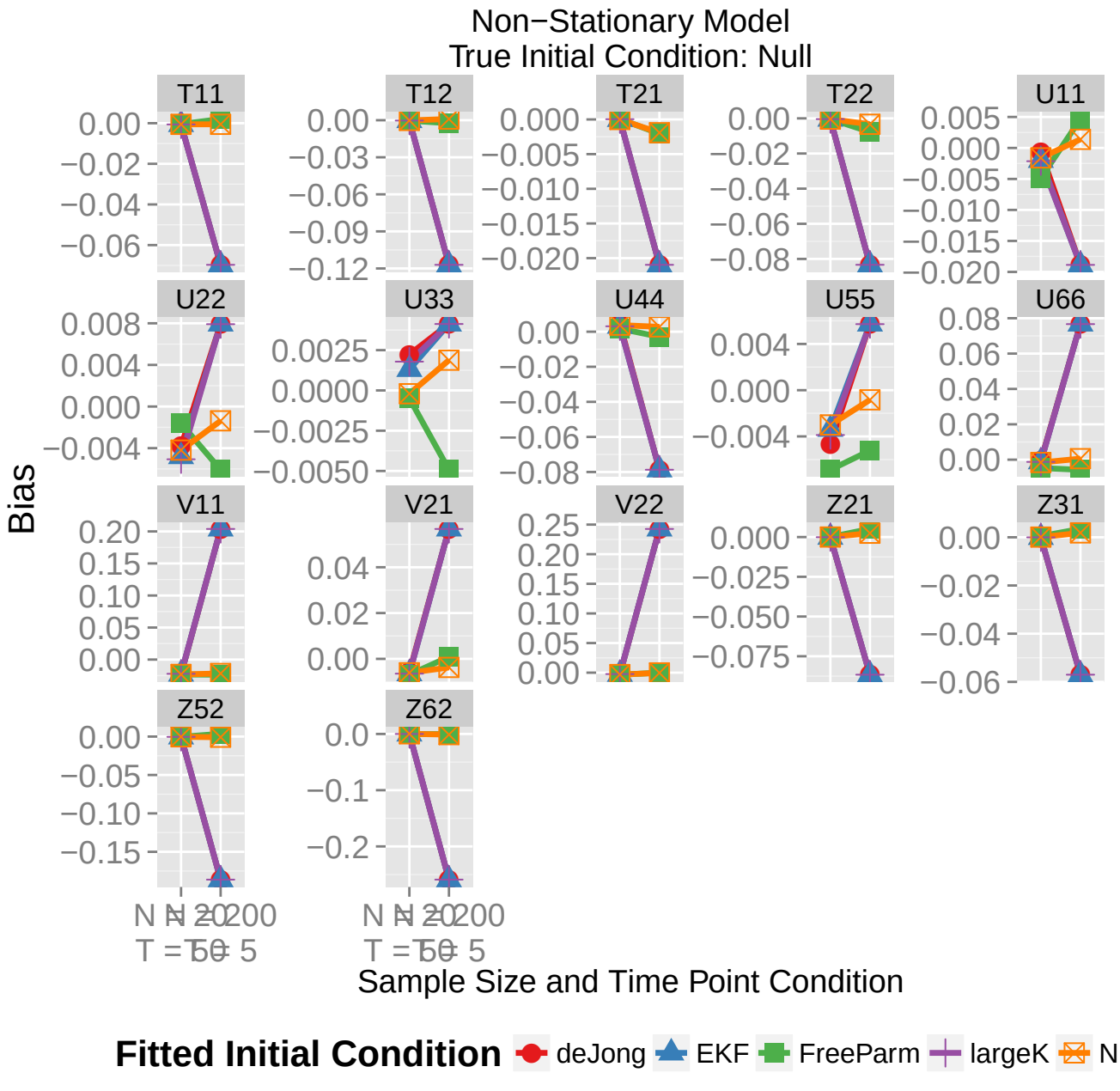
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Non−Stationary Model
True Initial Condition: Null
T11
T12
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T22
U11
U22
U33
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U66
V11
V21
V22
Z21
Z31
Z52
Z62
Bias
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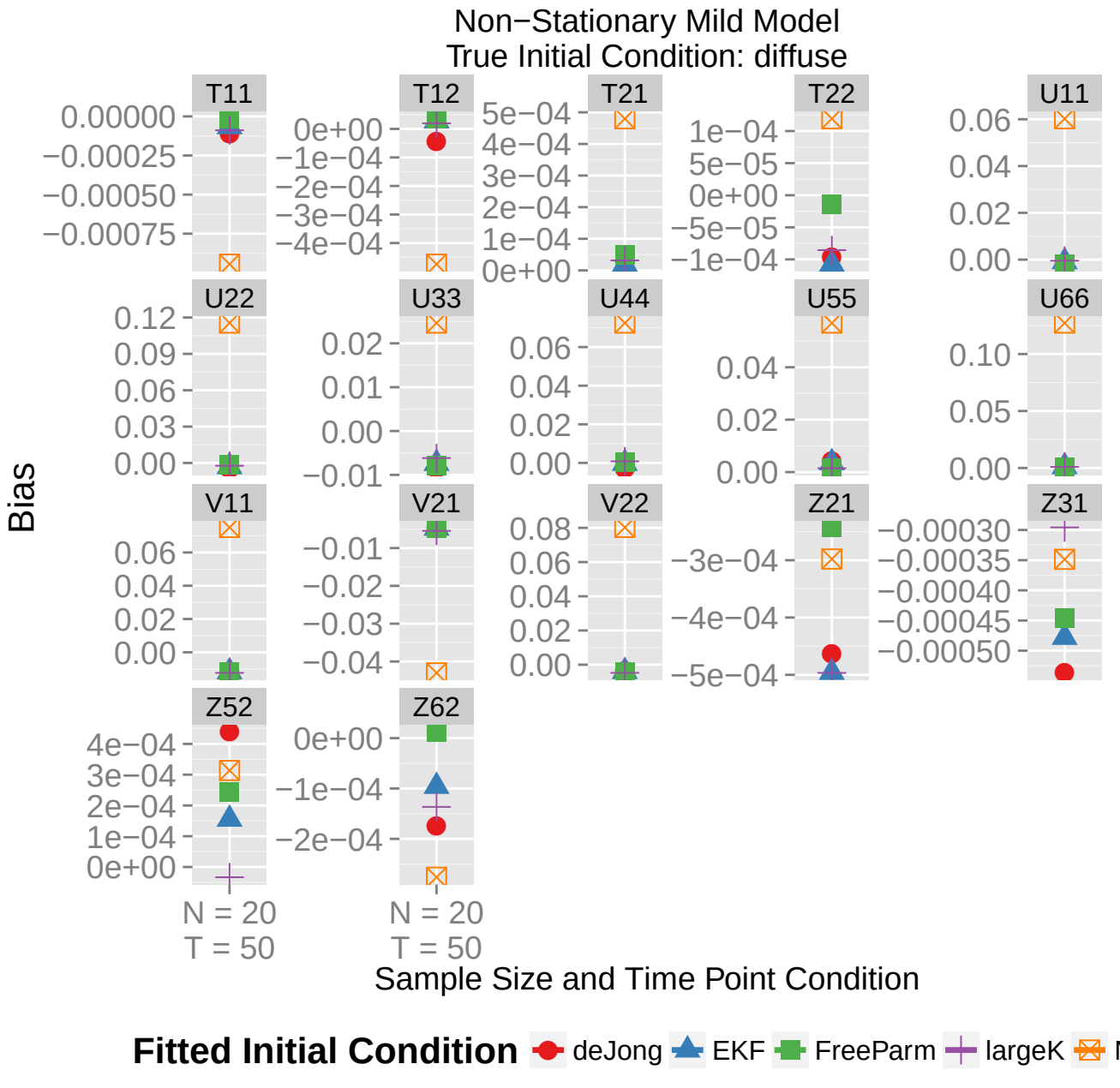
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Non−Stationary Mild Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Bias
N = 20
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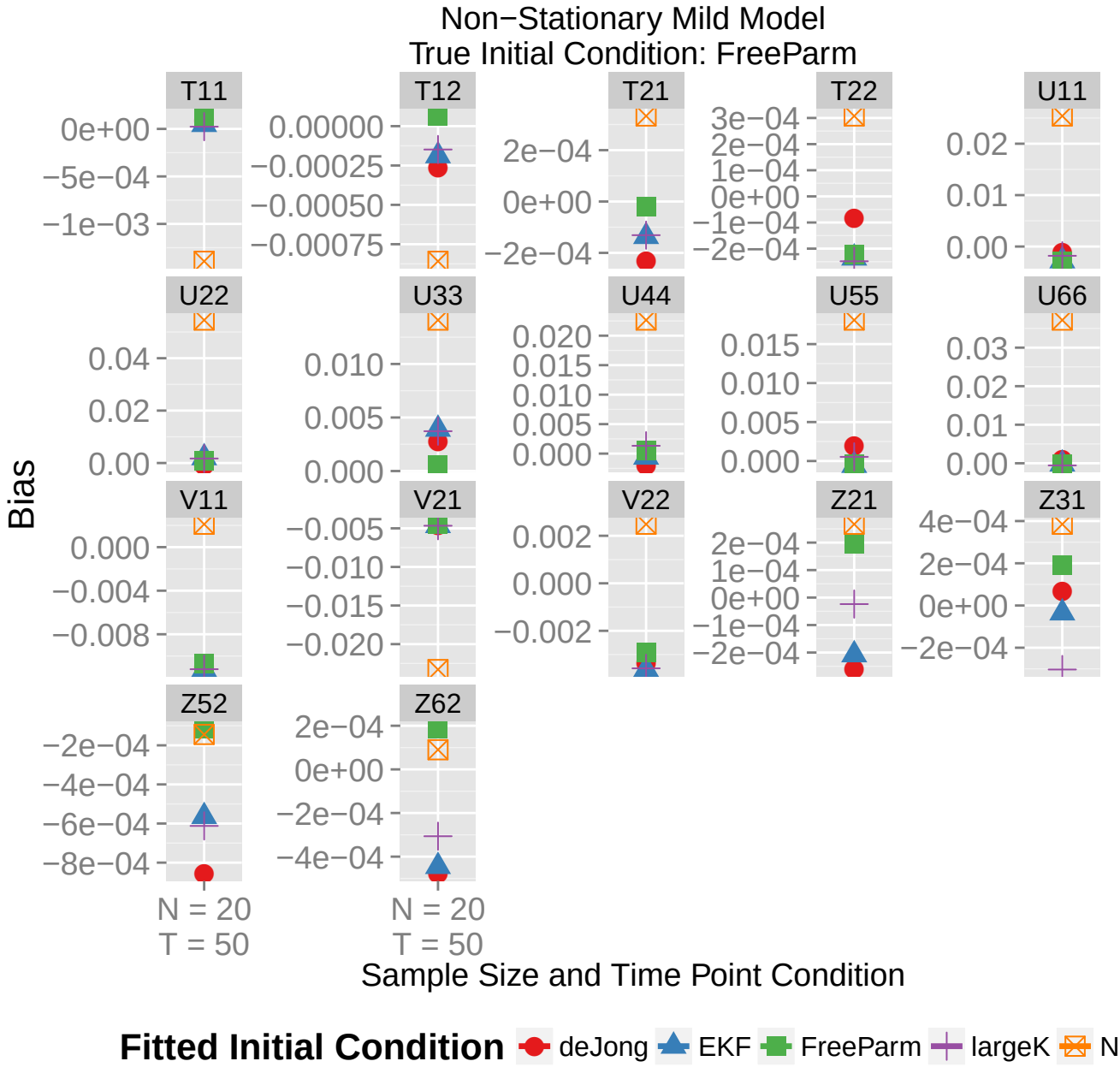
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
N


Non−Stationary Mild Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
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U66
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V21
V22
Z21
Z31
Z52
Z62
Bias
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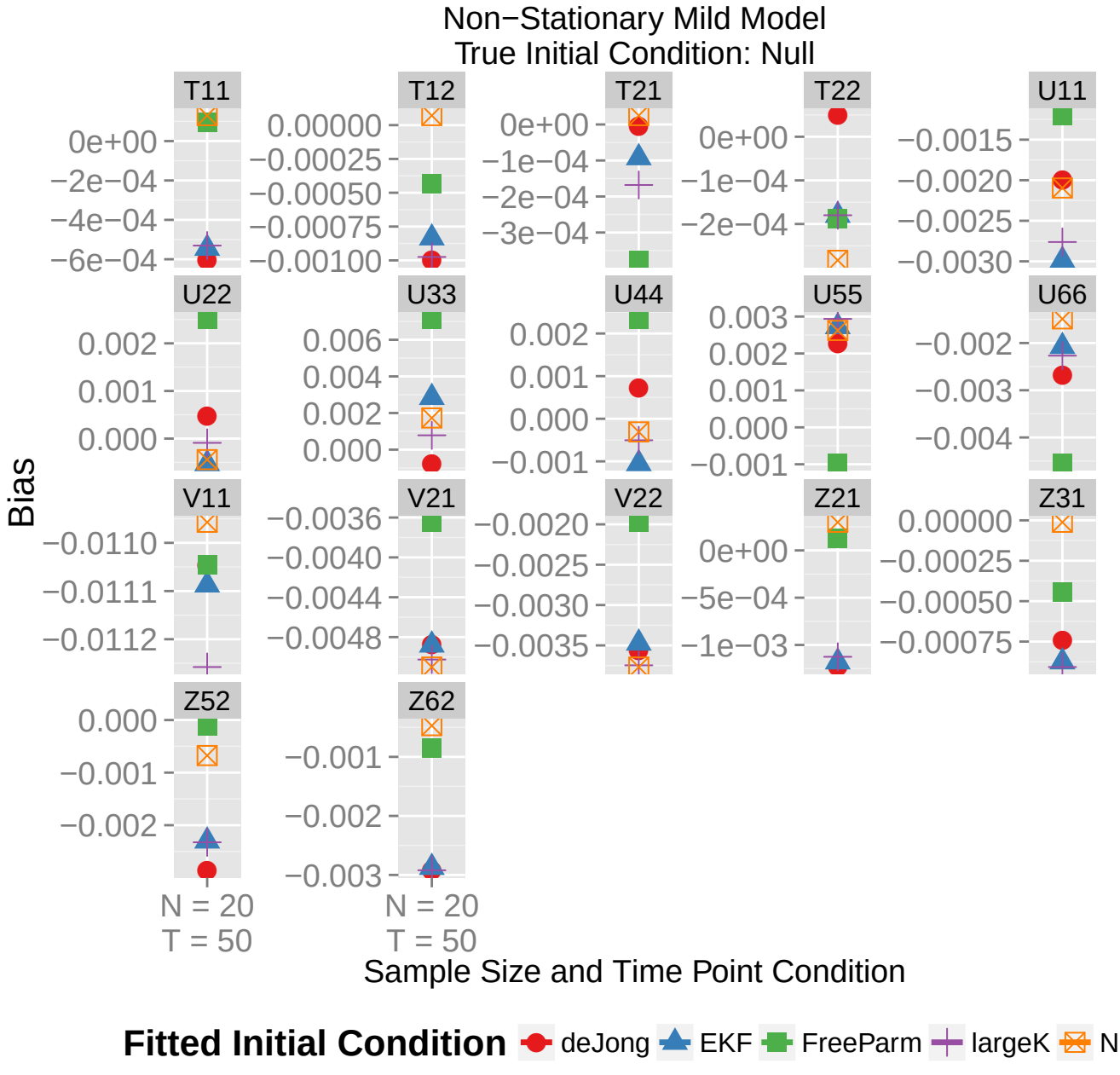
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Non−Stationary Mild Model
True Initial Condition: Null
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T12
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U11
U22
U33
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U66
V11
V21
V22
Z21
Z31
Z52
Z62
Bias
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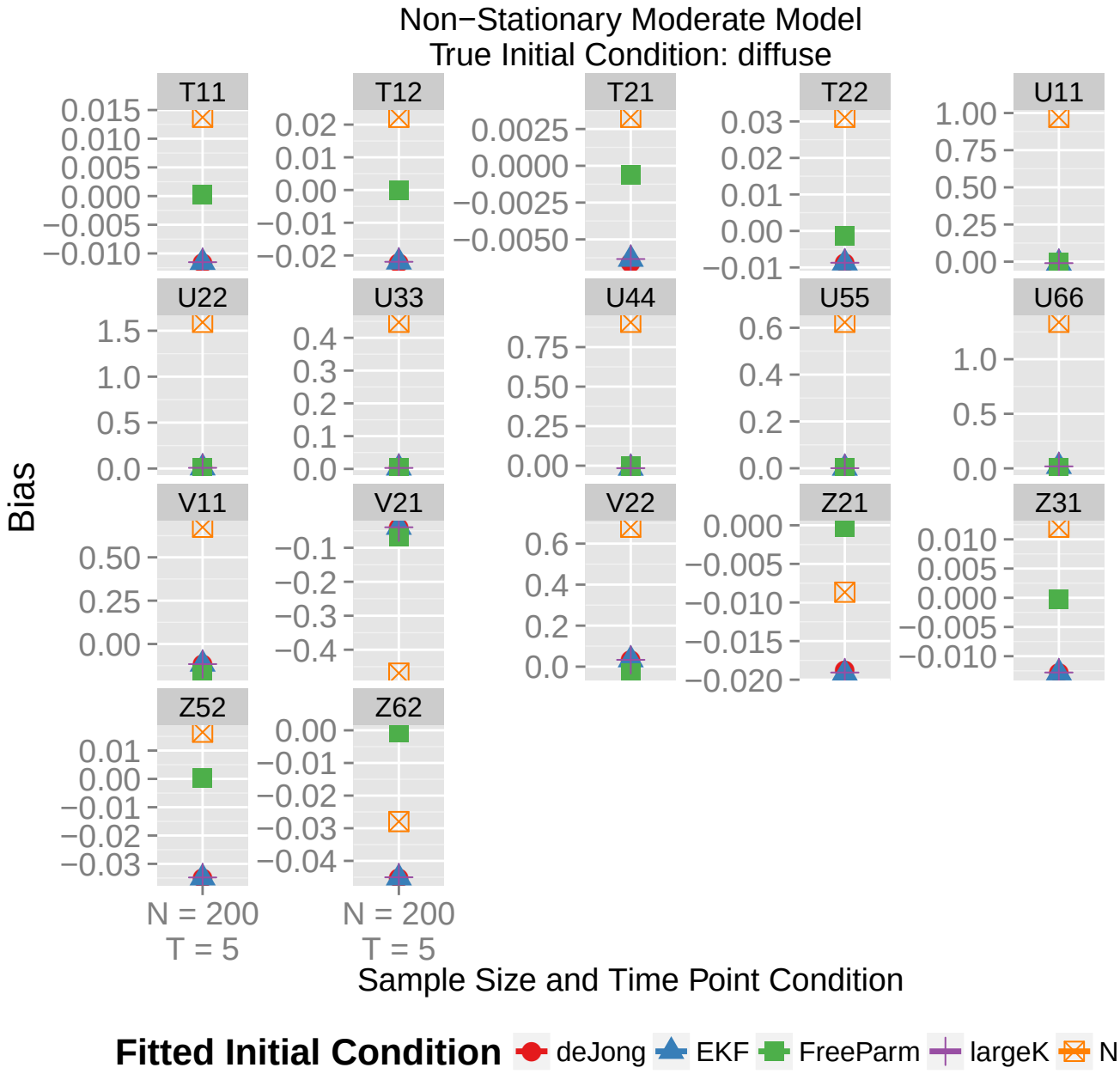
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Non−Stationary Moderate Model
True Initial Condition: diffuse
T11
T12
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U22
U33
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U55
U66
V11
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V22
Z21
Z31
Z52
Z62
Bias
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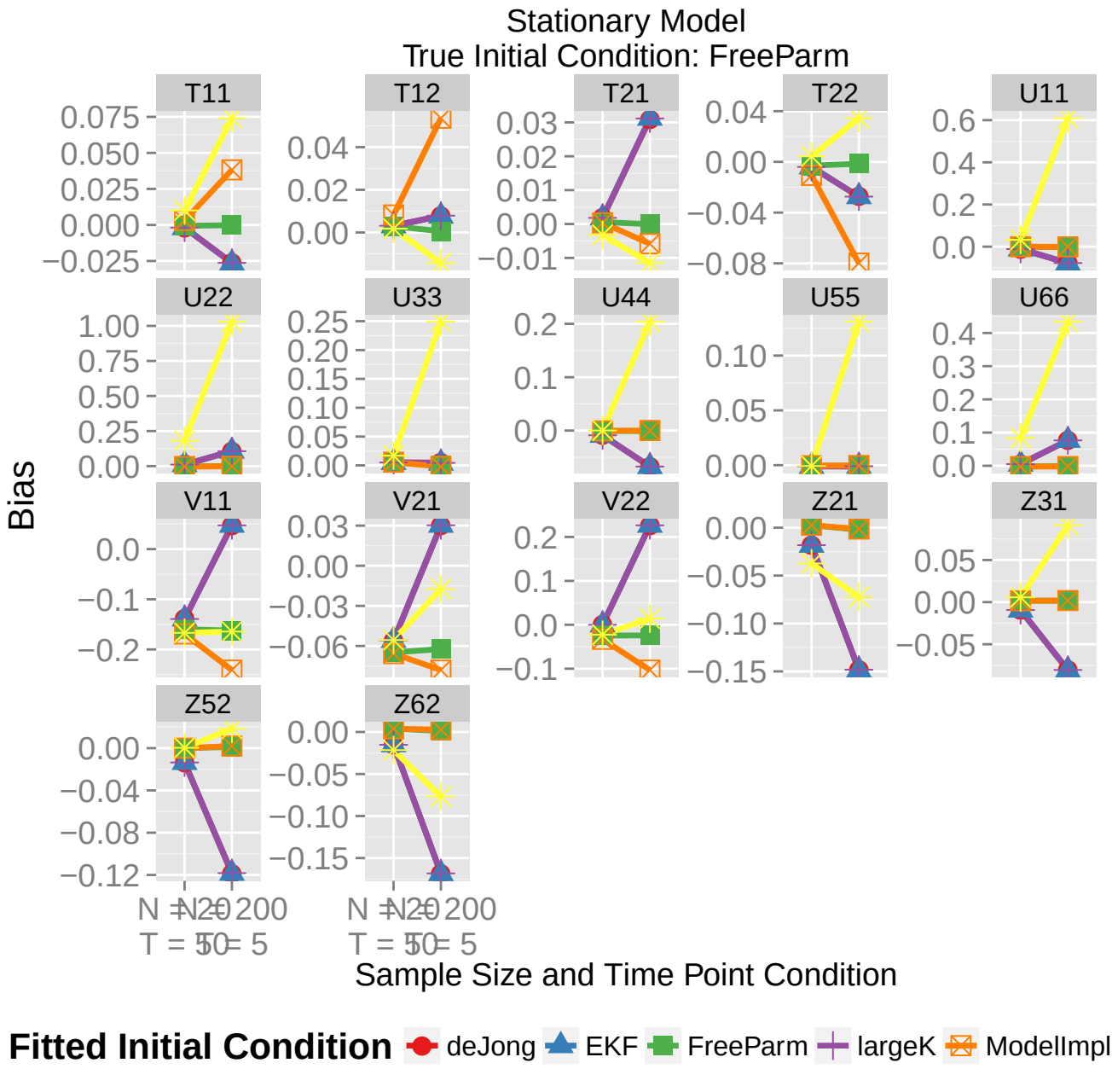
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Stationary Model
True Initial Condition: FreeParm
T11
T12
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T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Bias
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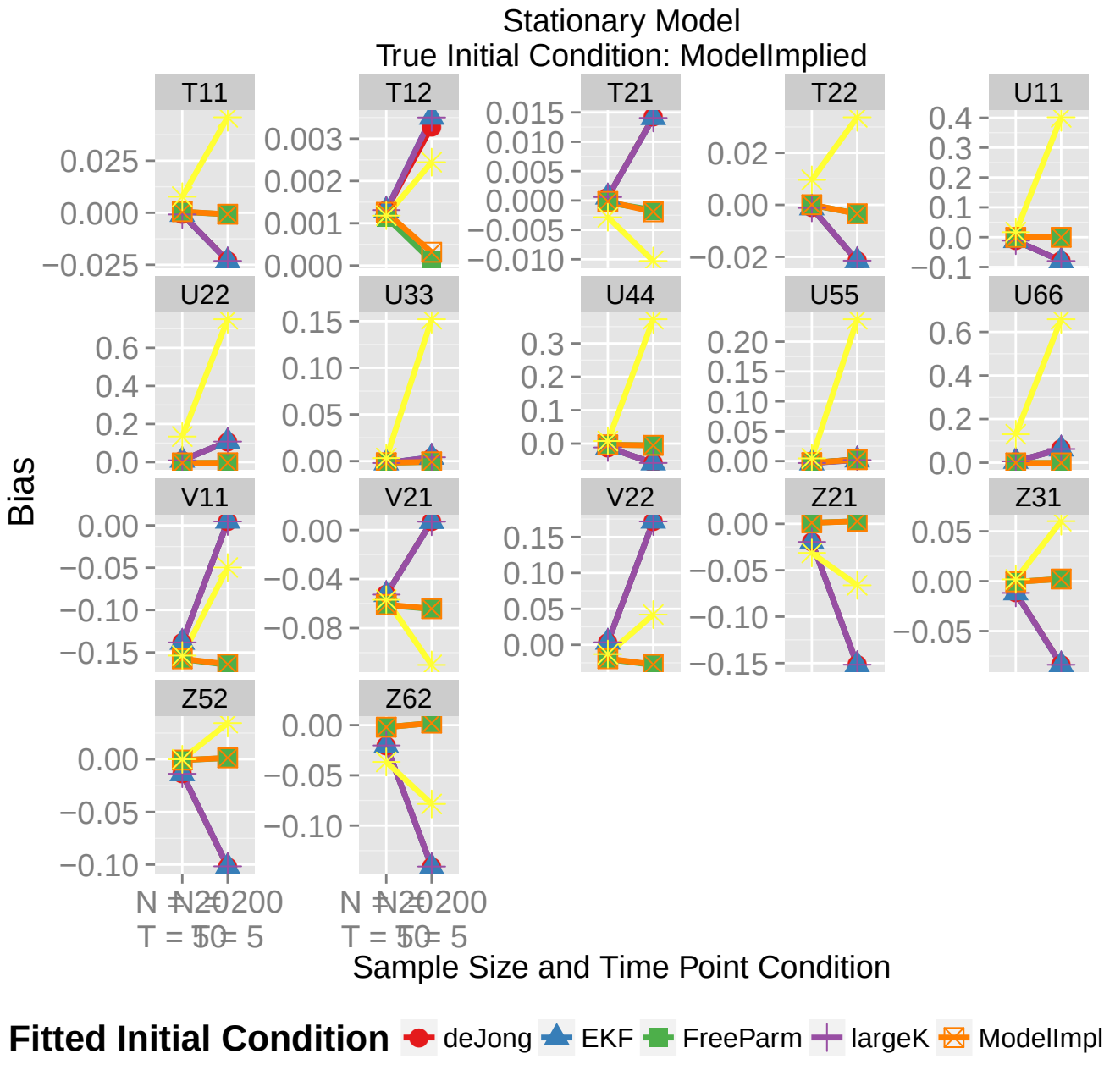
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplie


Stationary Model
True Initial Condition: ModelImplied
T11
T12
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T22
U11
U22
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U66
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V21
V22
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Z31
Z52
Z62
Bias
N = 20
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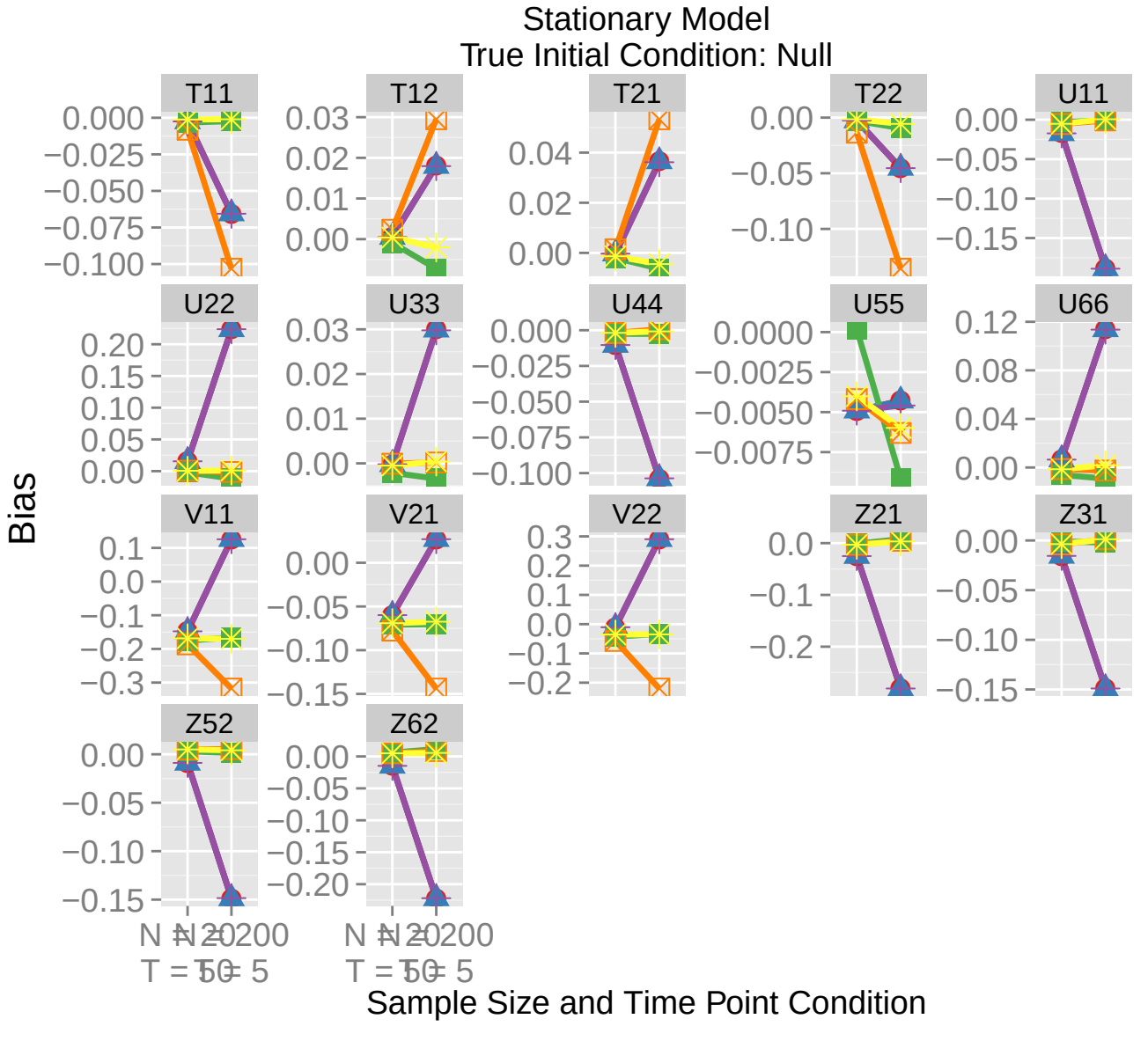
T = 5
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplie


Stationary Model
True Initial Condition: Null
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U22
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Z31
Z52
Z62
Bias
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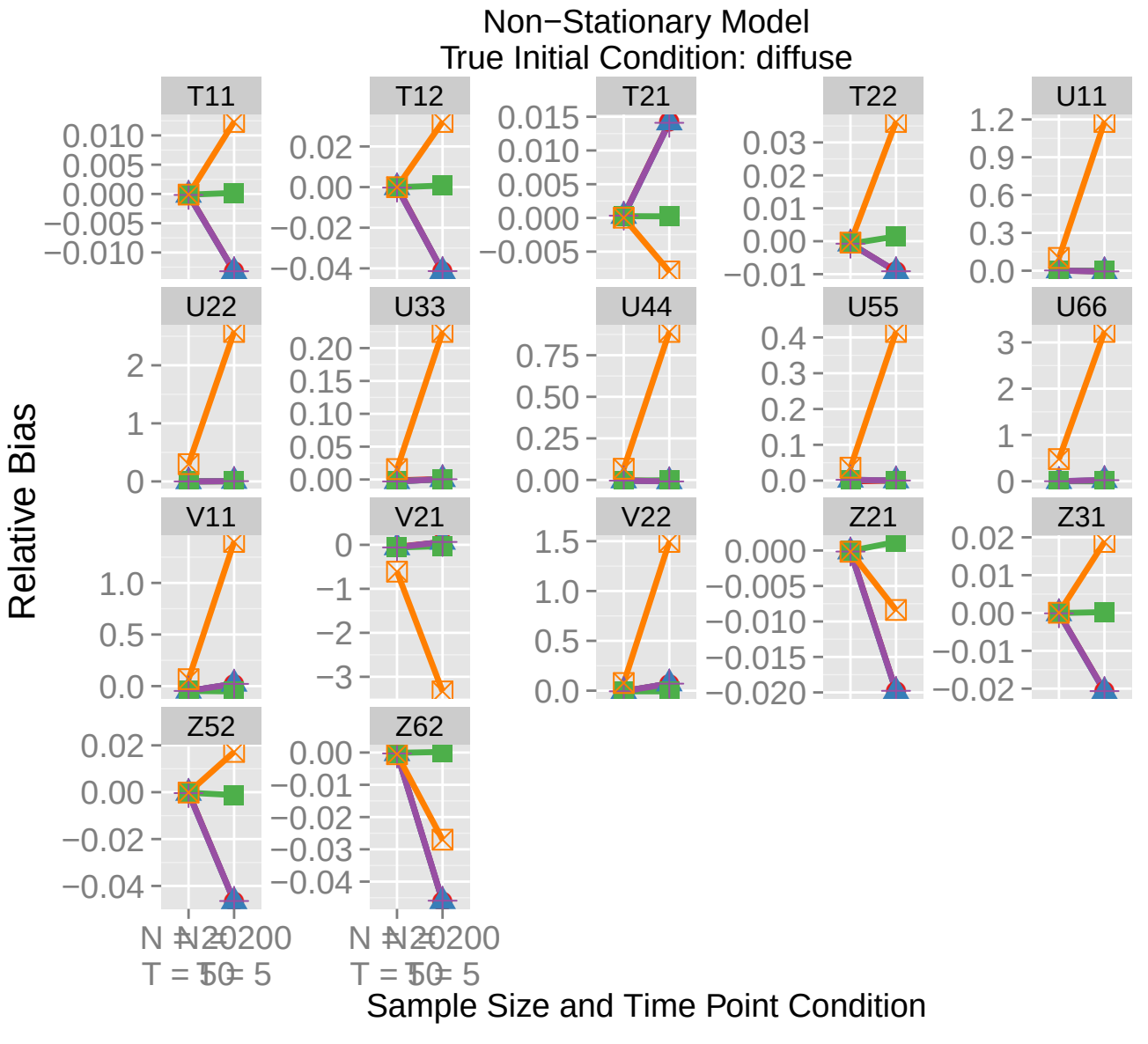
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplie


Non−Stationary Model
True Initial Condition: diffuse
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T12
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T22
U11
U22
U33
U44
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U66
V11
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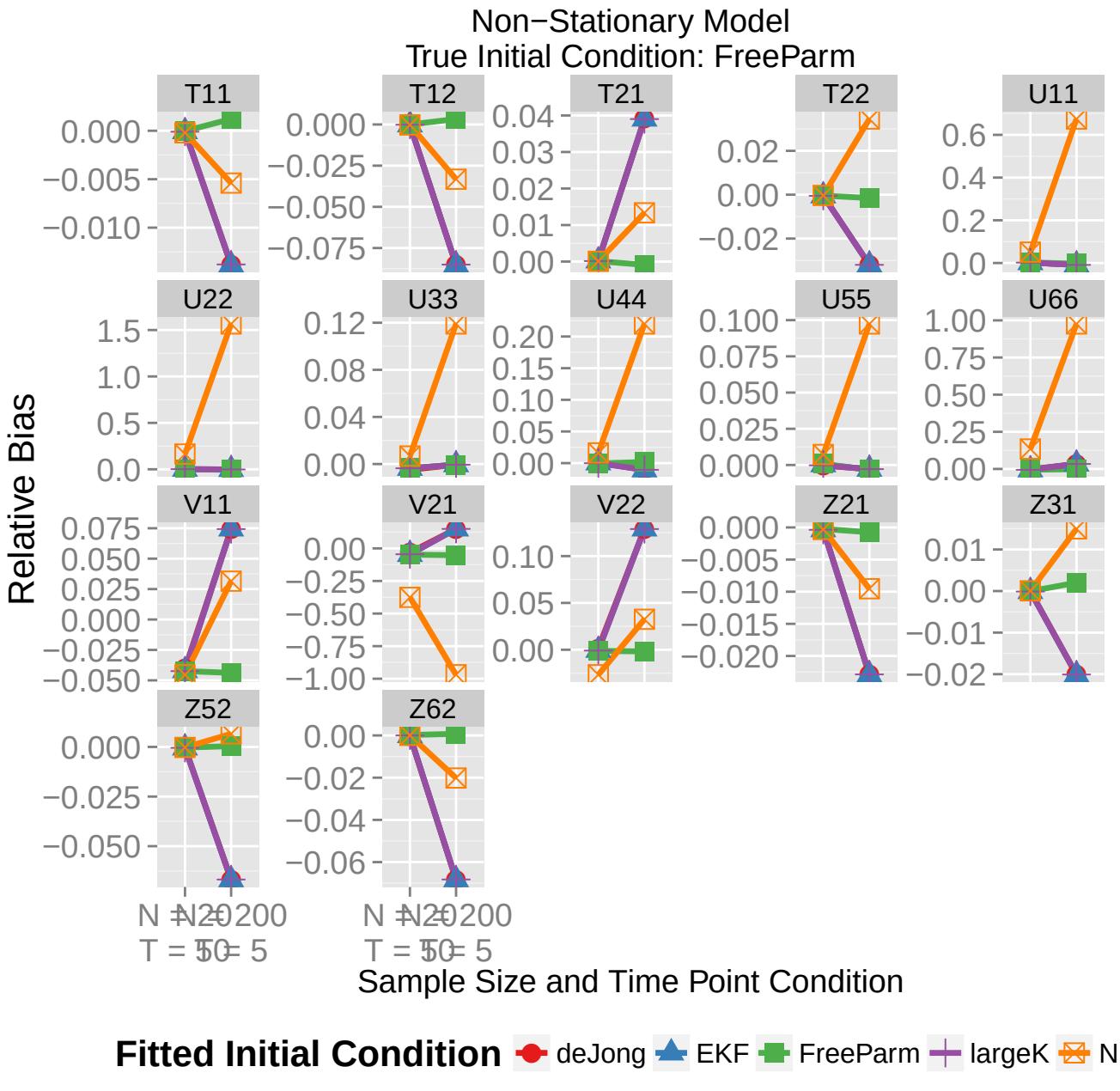
Z21
Z31
Z52
Z62
Relative Bias
N = 20
T = 5
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Non−Stationary Model
True Initial Condition: FreeParm
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T12
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Z52
Z62
Relative Bias
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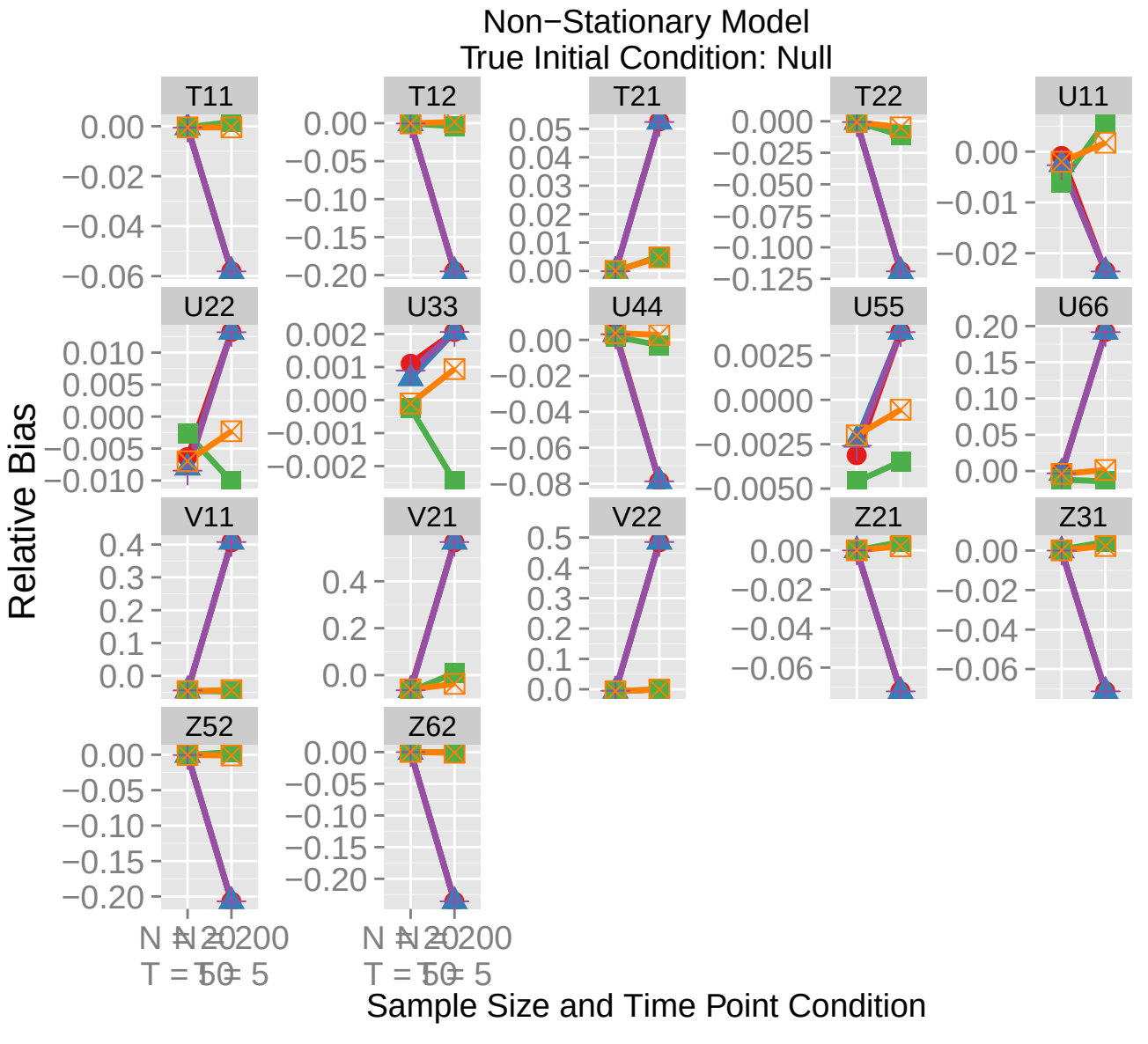
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Non−Stationary Model
True Initial Condition: Null
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Z62
Relative Bias
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N = 200
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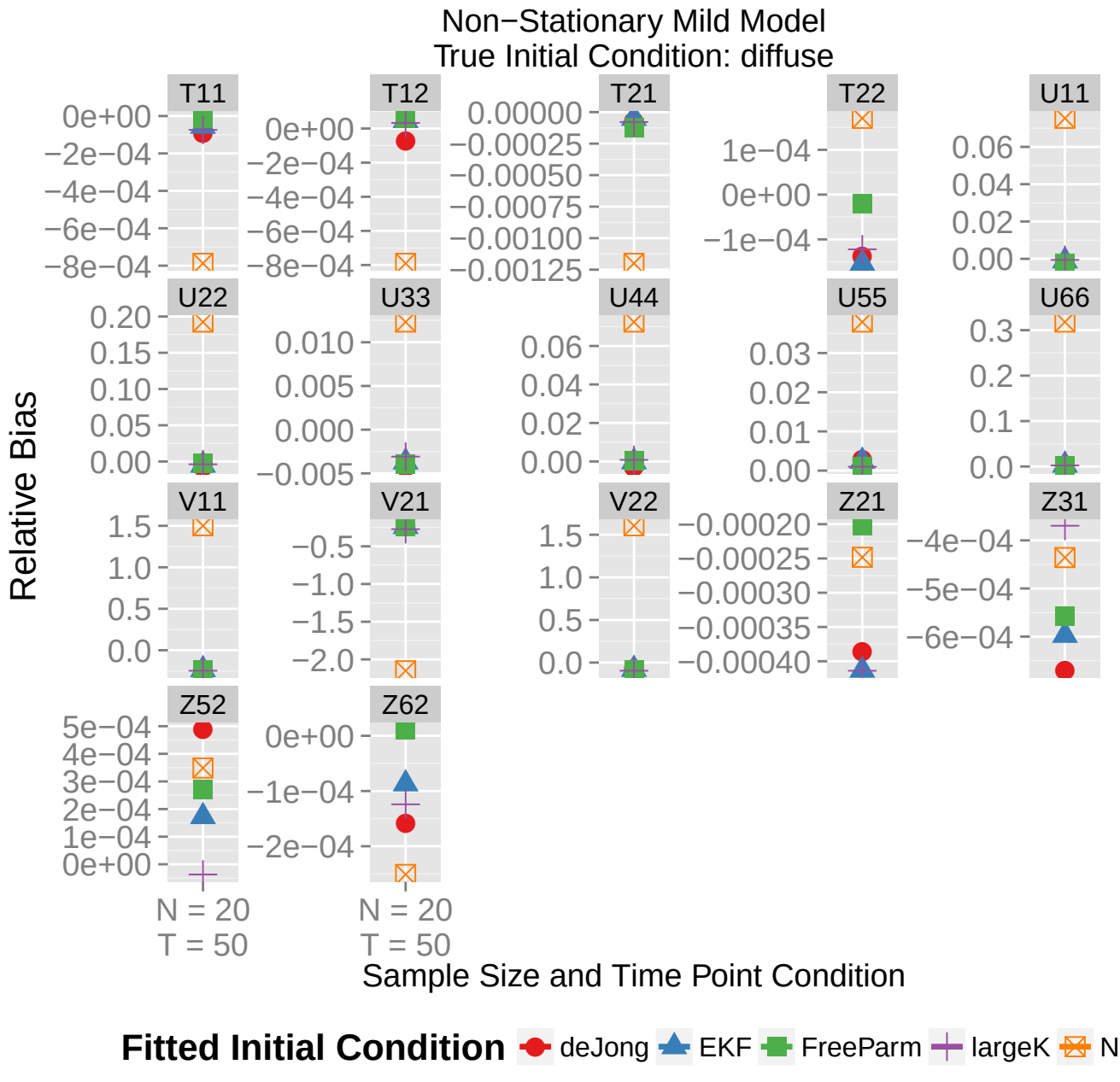
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Non−Stationary Mild Model
True Initial Condition: diffuse
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T12
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V21
V22
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Z31
Z52
Z62
Relative Bias
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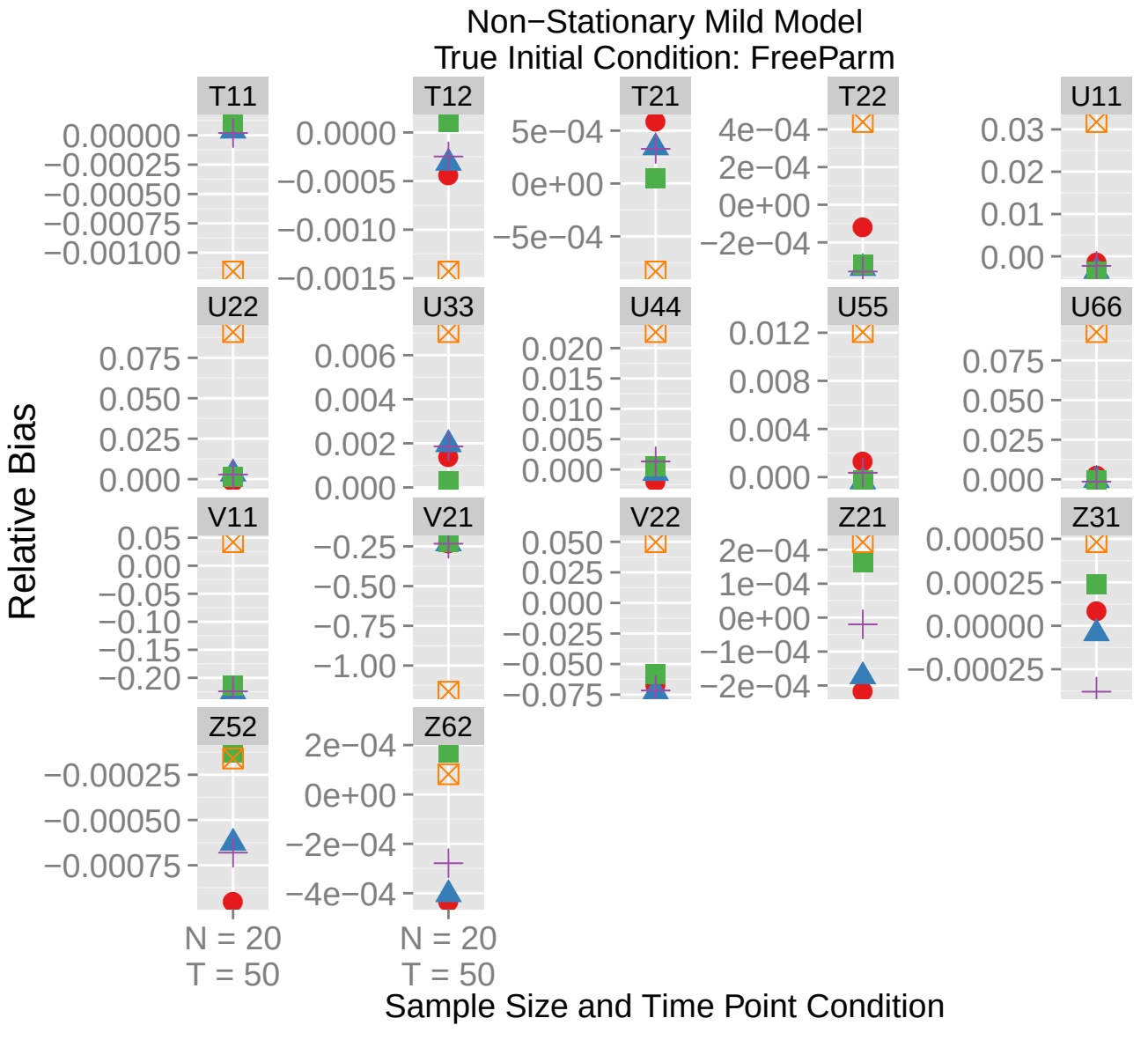
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Non−Stationary Mild Model
True Initial Condition: FreeParm
T11
T12
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U11
U22
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U66
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V21
V22
Z21
Z31
Z52
Z62
Relative Bias
N = 20
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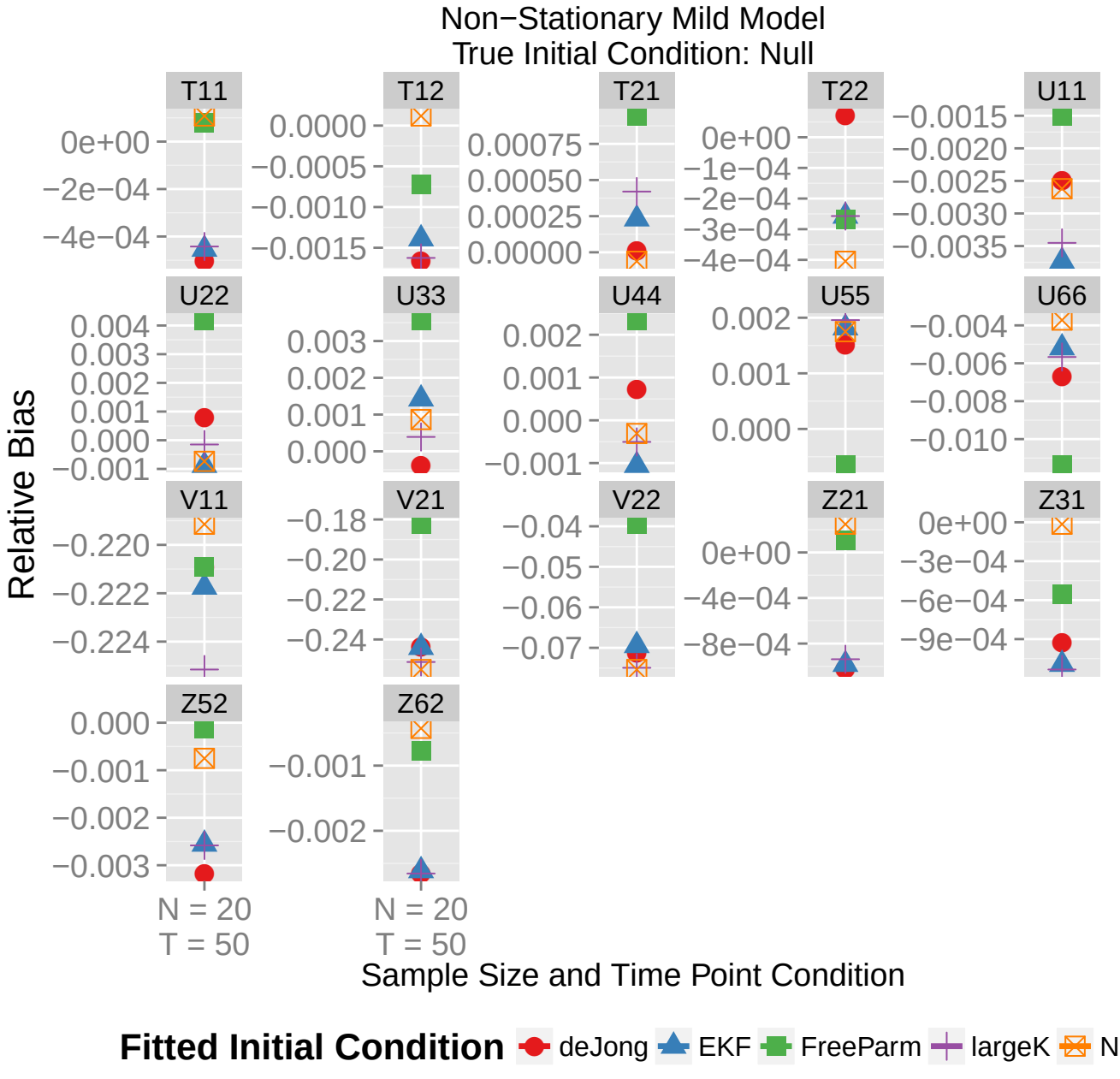
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
N


Non−Stationary Mild Model
True Initial Condition: Null
Relative Bias
T11
T12
T21
T22
U11
U22
U33
U44
U55
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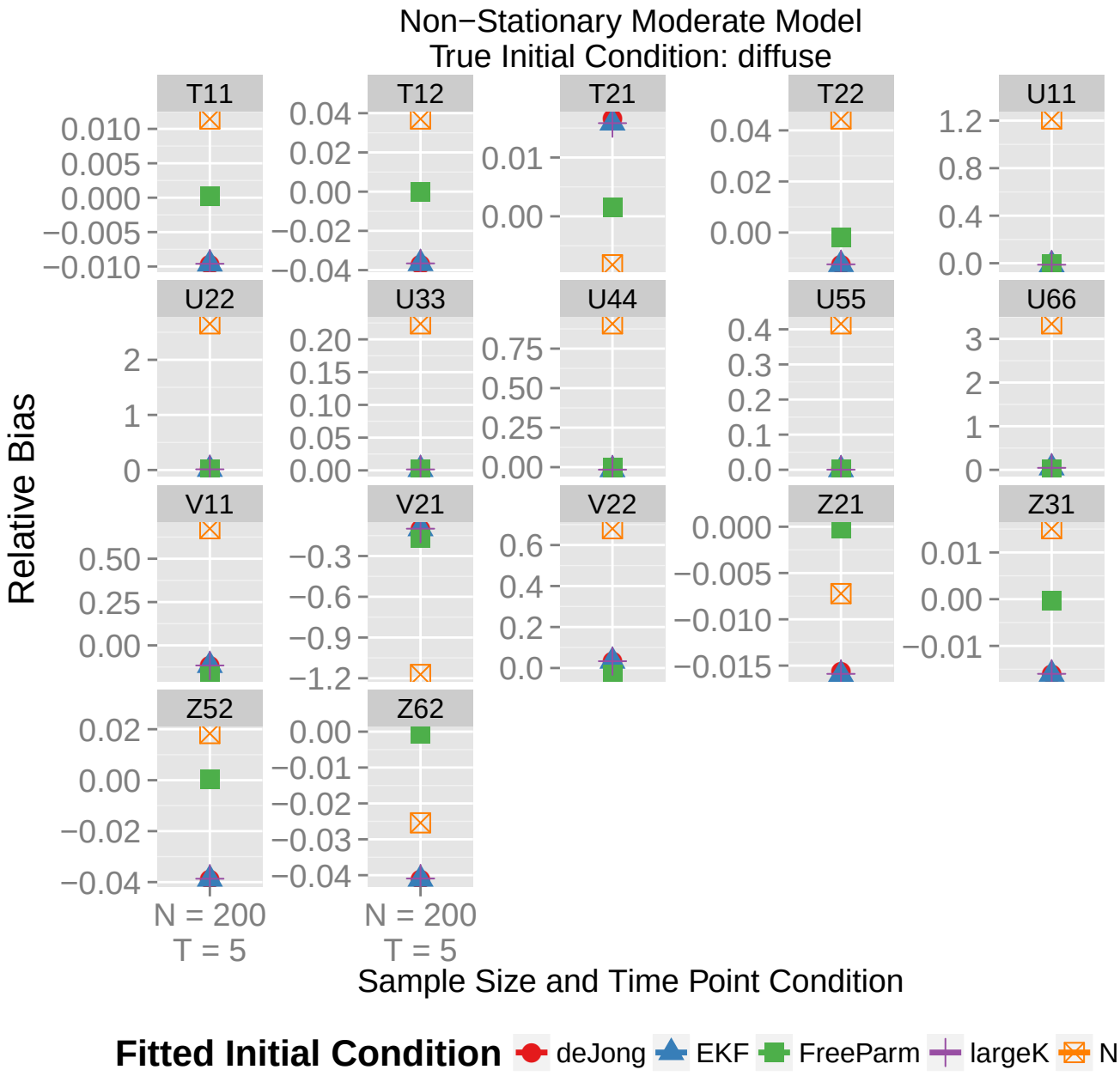
V11
V21
V22
Z21
Z31
Z52
Z62
N = 20
T = 50
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Non−Stationary Moderate Model
True Initial Condition: diffuse
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T12
T21
T22
U11
U22
U33
U44
U55
U66
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V21
V22
Z21
Z31
Z52
Z62
Relative Bias
N = 200
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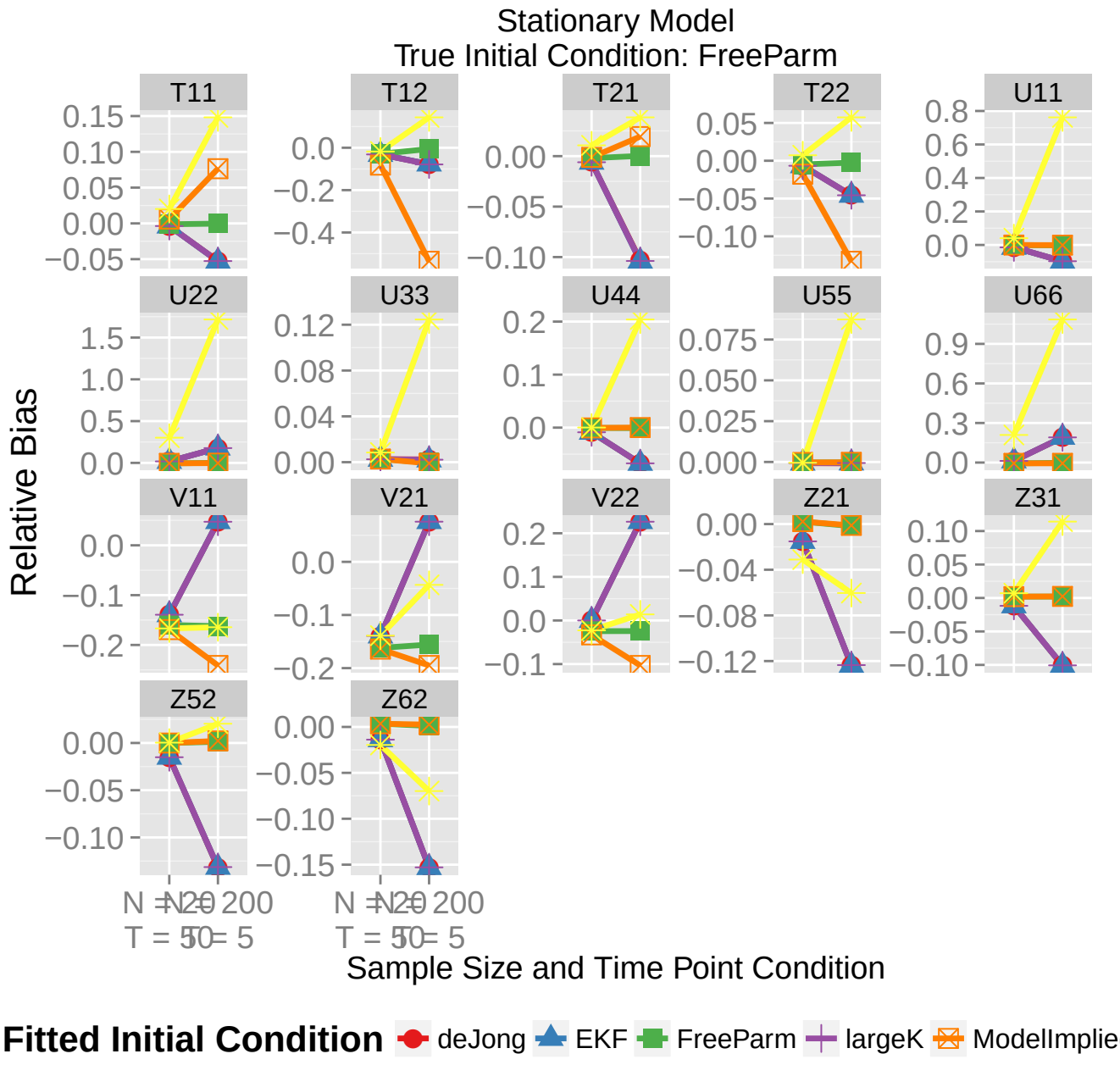
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Stationary Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
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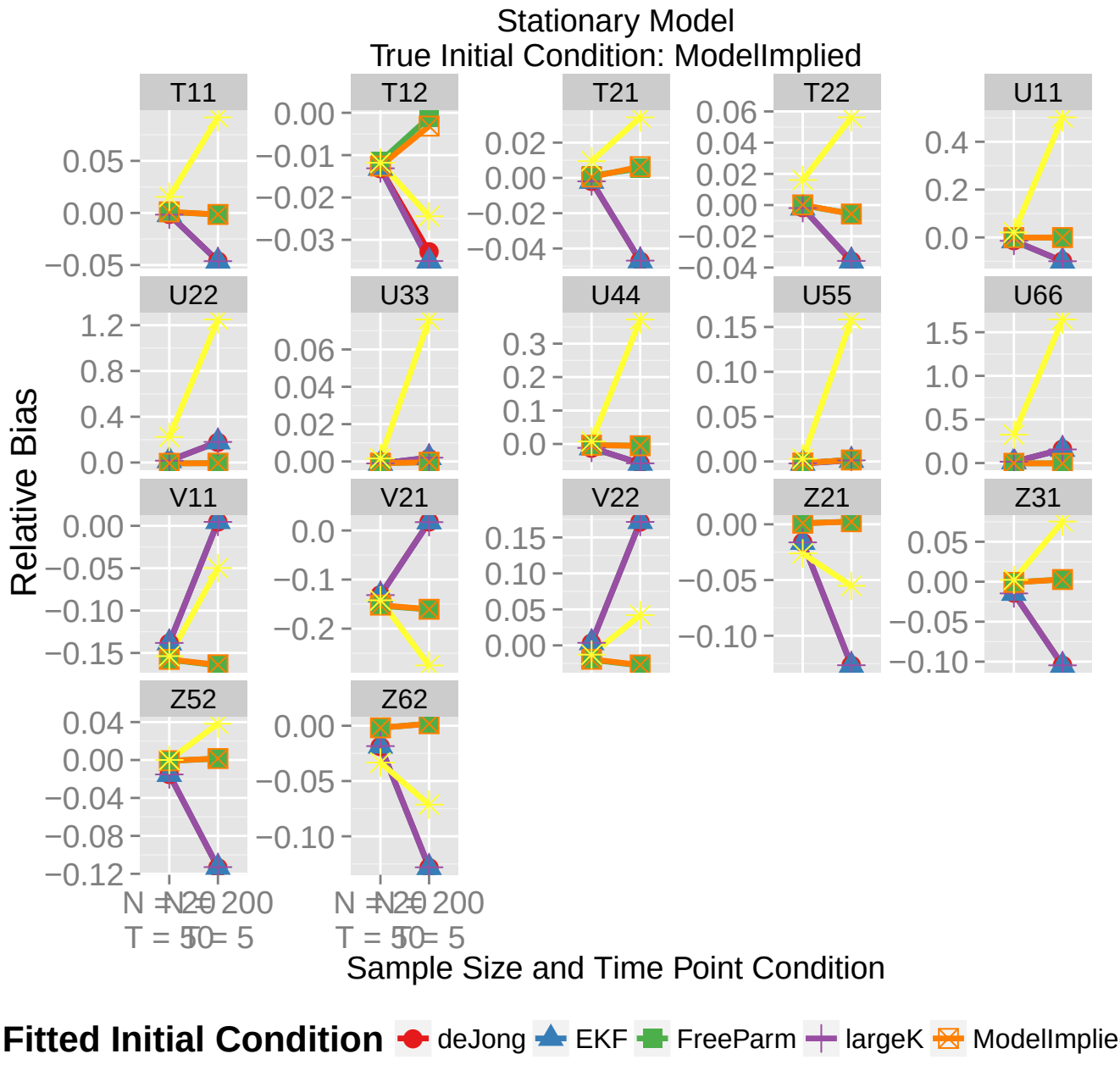
Relative Bias
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied


Stationary Model
True Initial Condition: ModelImplied
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T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Relative Bias
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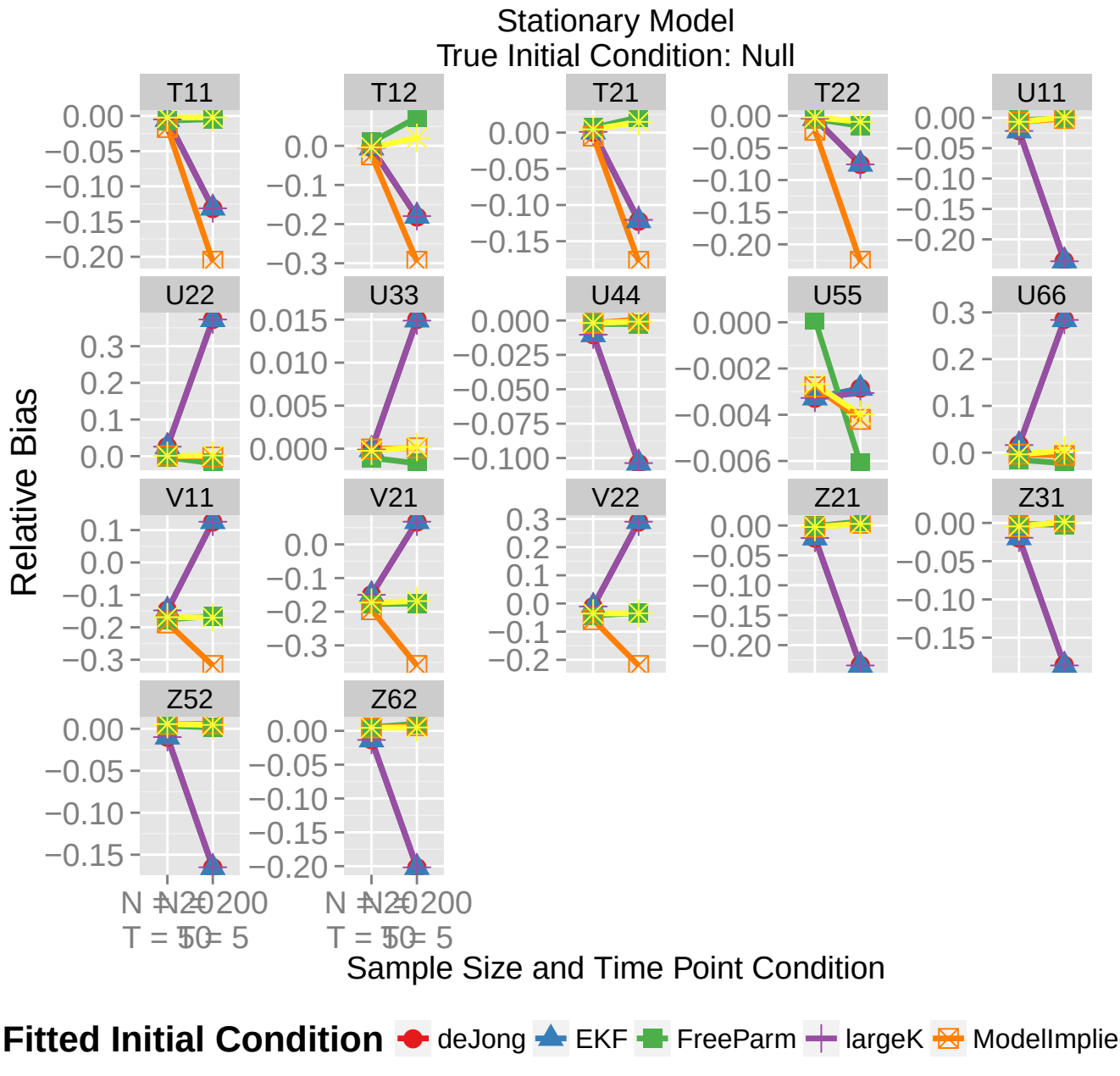
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied


Stationary Model
True Initial Condition: Null
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U22
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U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Relative Bias
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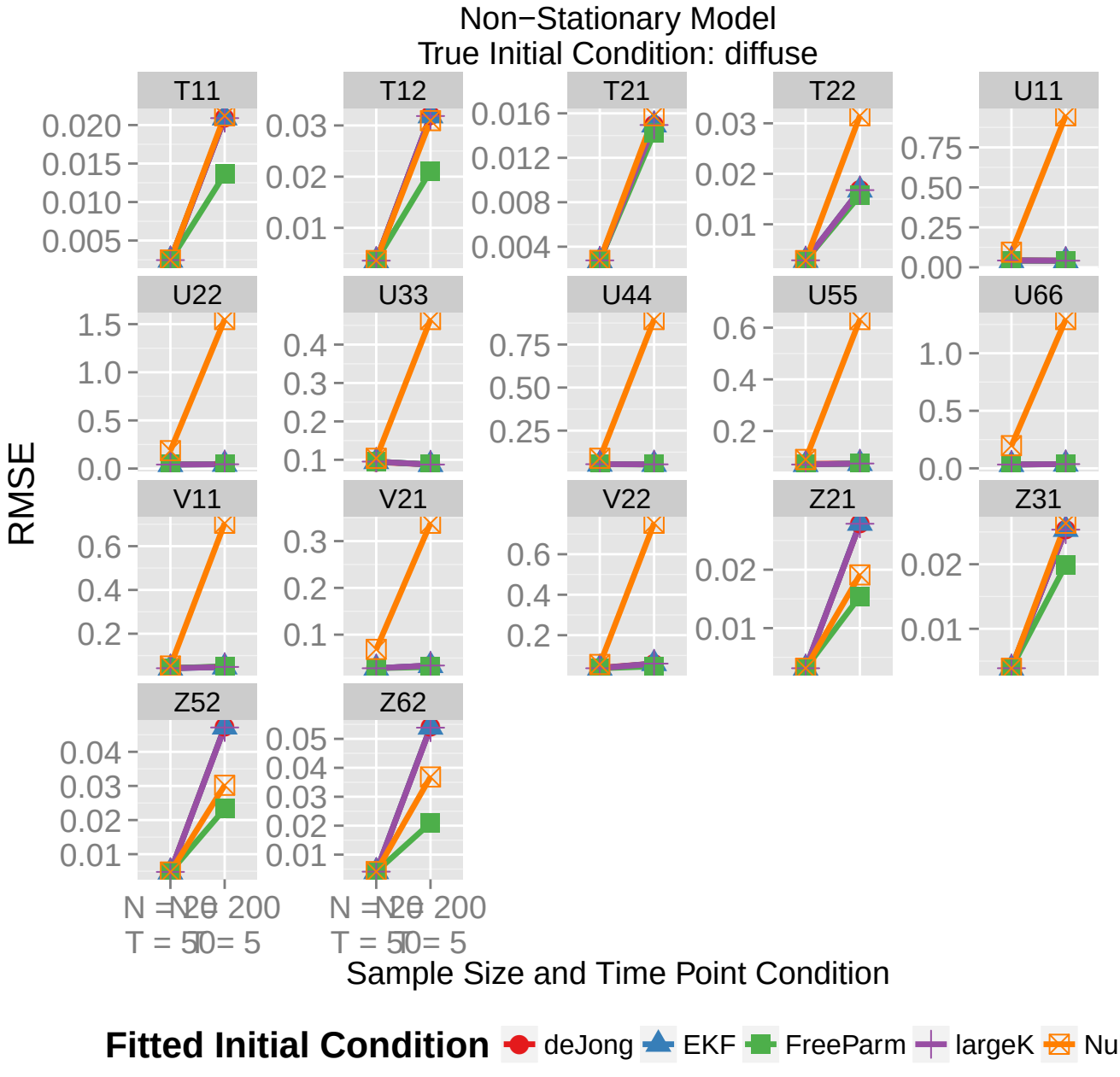
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied


Non−Stationary Model
True Initial Condition: diffuse
T11
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U22
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U66
V11
V21
V22
Z21
Z31
Z52
Z62
RMSE
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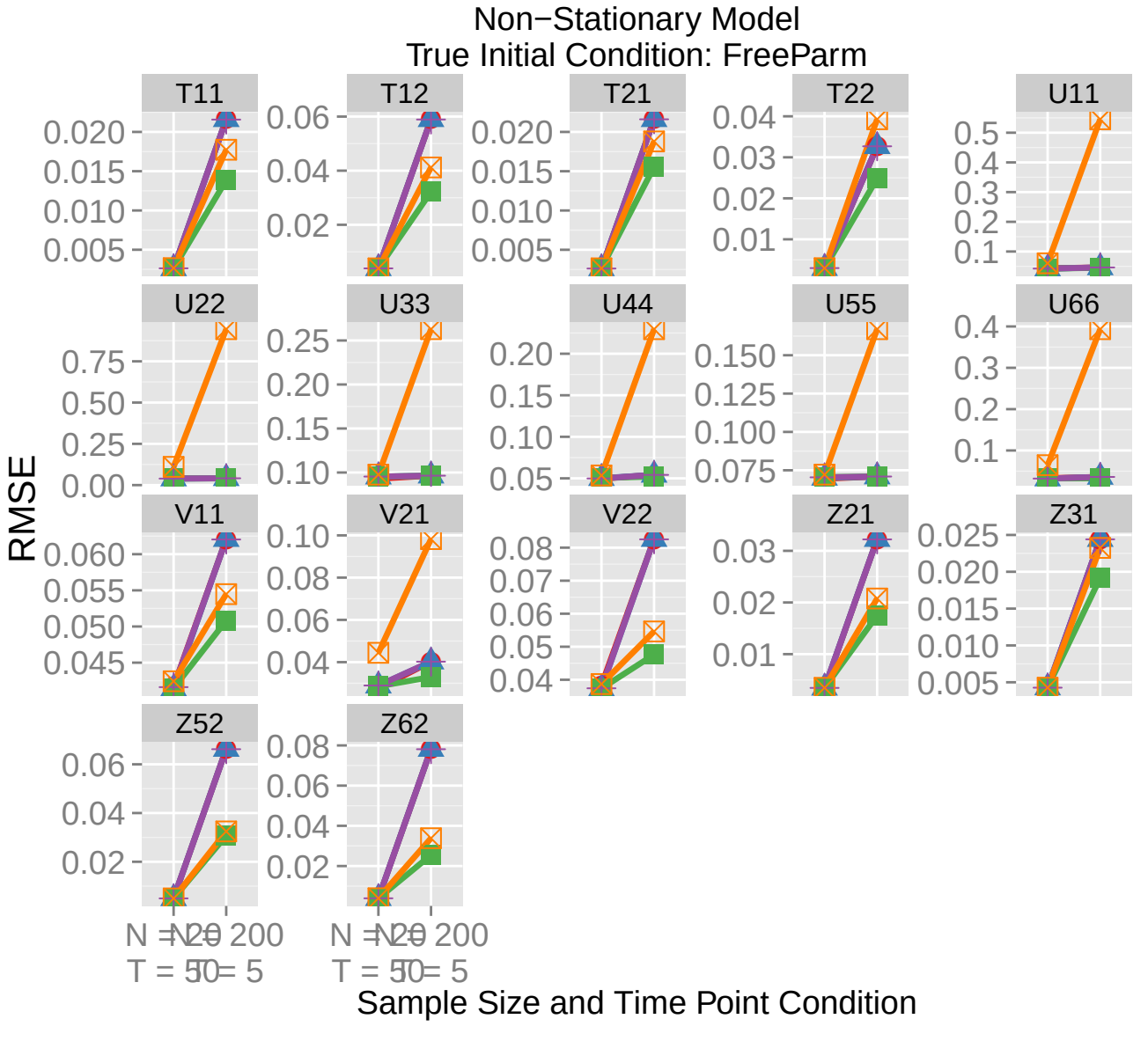
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Model
True Initial Condition: FreeParm
T11
T12
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T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
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RMSE
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N = 200 T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
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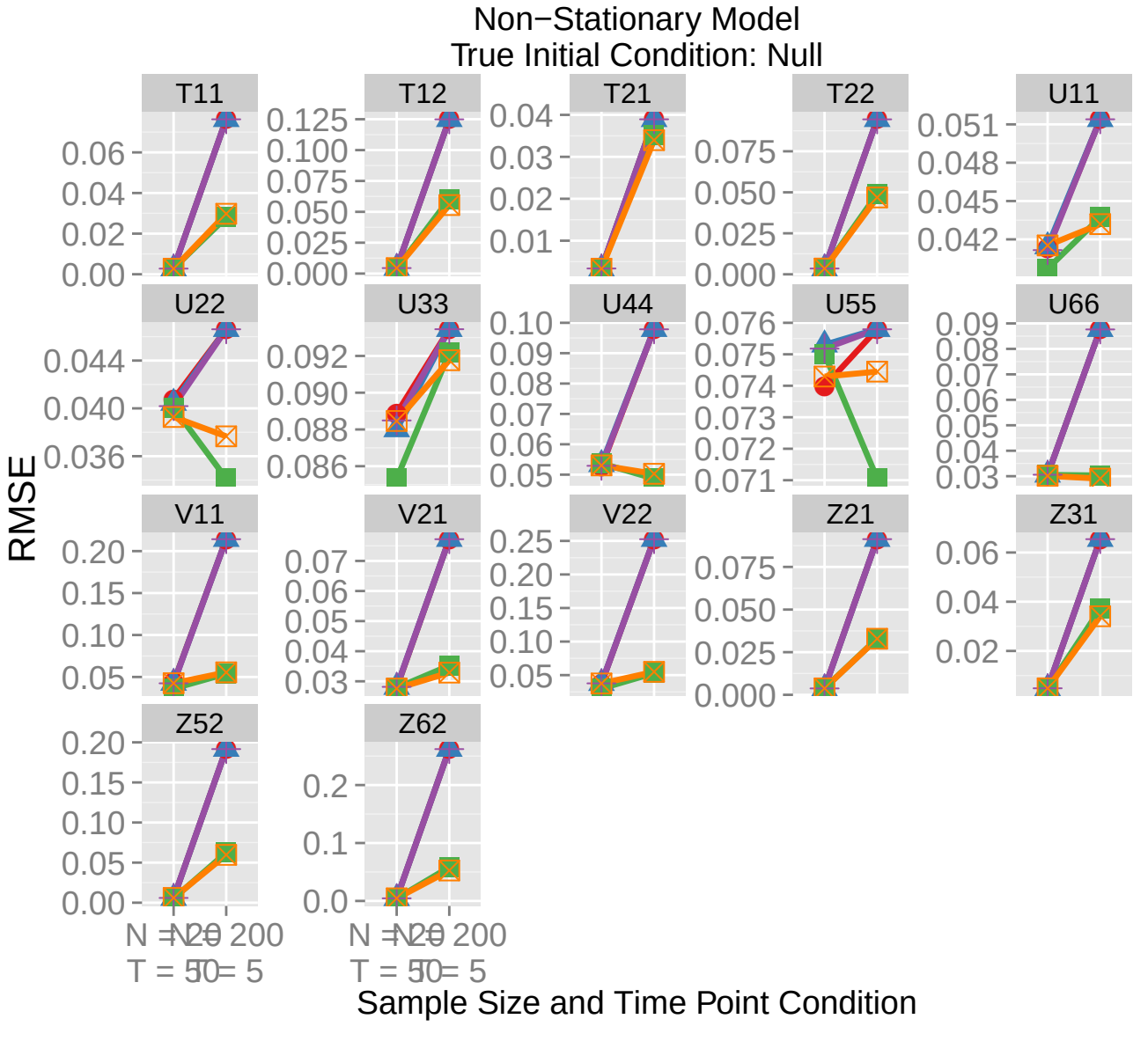
EKF
FreeParm
largeK
Null


Non−Stationary Model
True Initial Condition: Null
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T12
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U11
U22
U33
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U66
V11
V21
V22
Z21
Z31
Z52
Z62
RMSE
N = 20 T = 5
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N = 200 T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
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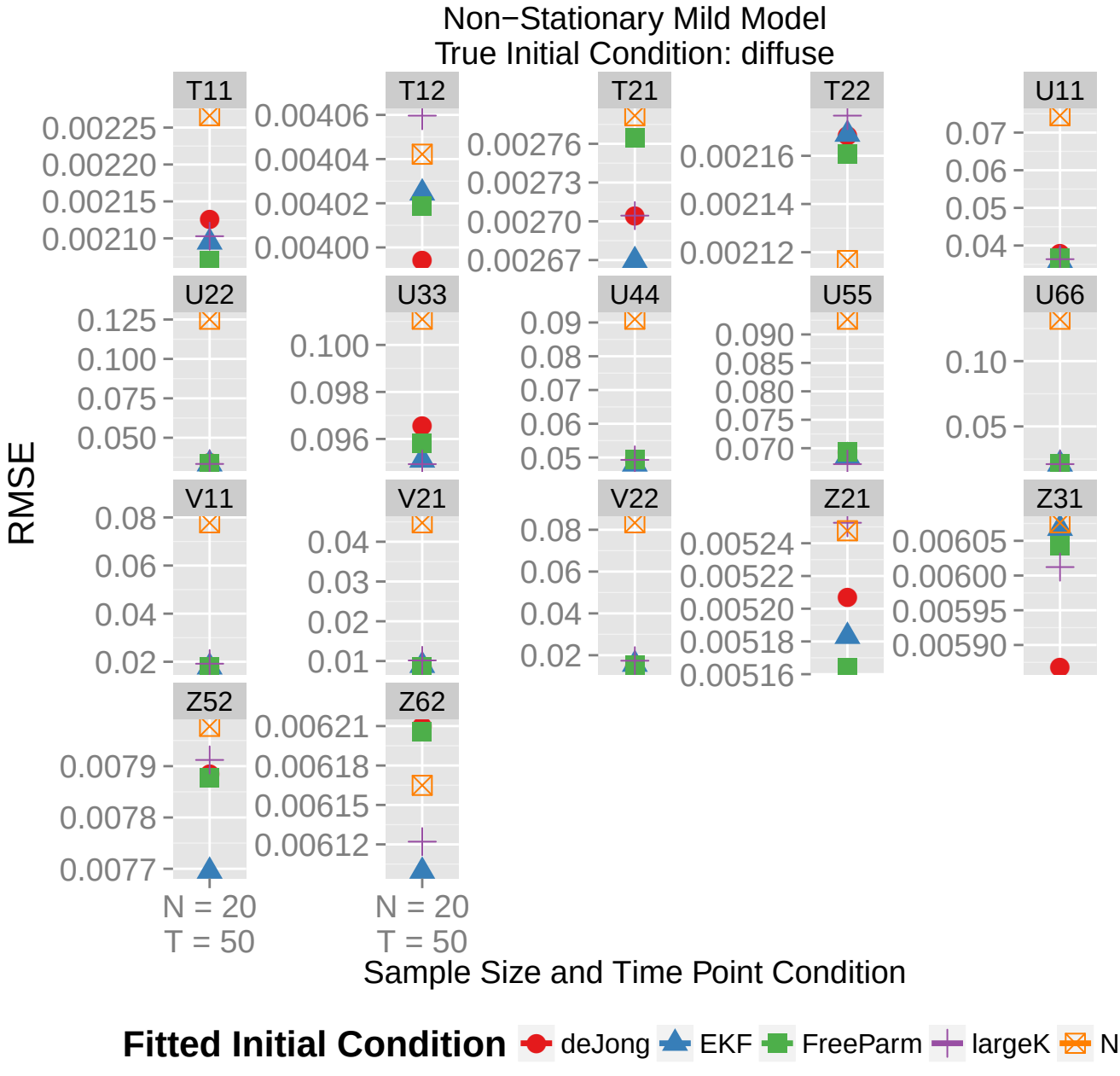
FreeParm
largeK
Null


Non−Stationary Mild Model
True Initial Condition: diffuse
T11
T12
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T22
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U33
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V11
V21
V22
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Z31
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Z62
RMSE
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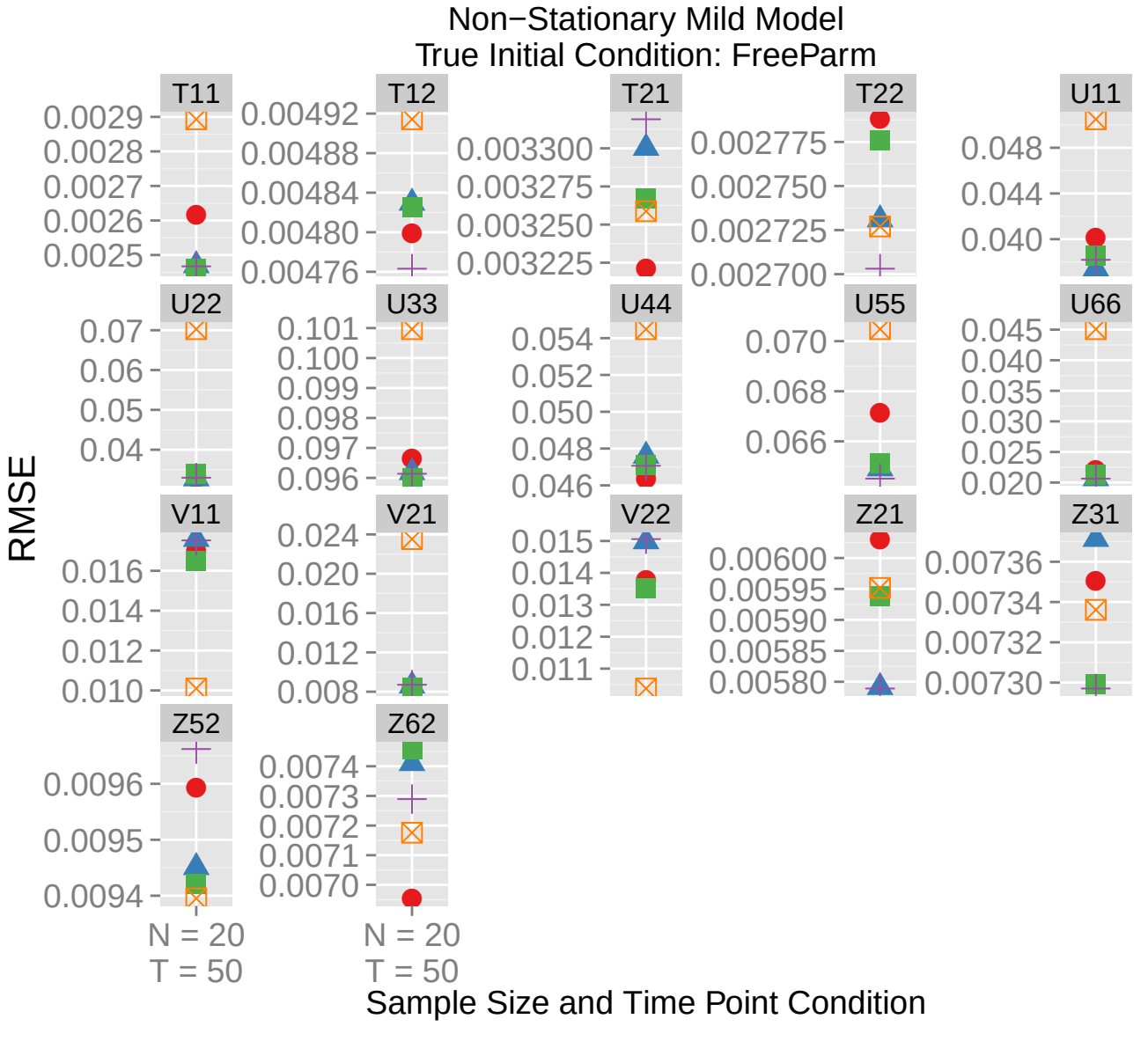
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Non−Stationary Mild Model
True Initial Condition: FreeParm
RMSE
T11
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V11
V21
V22
Z21
Z31
Z52
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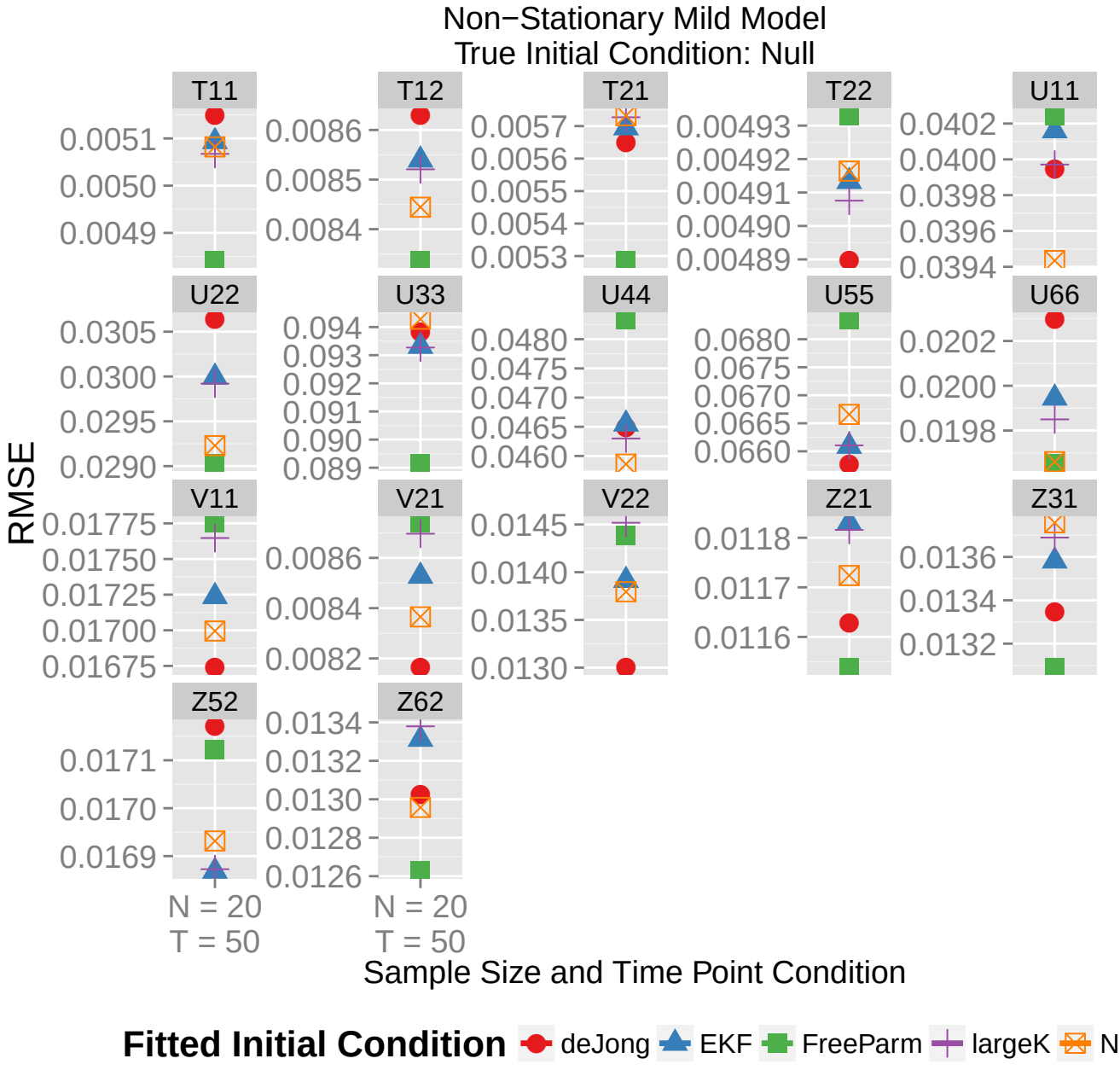
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul


Non−Stationary Mild Model
True Initial Condition: Null
T11
T12
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U66
V11
V21
V22
Z21
Z31
Z52
Z62
RMSE
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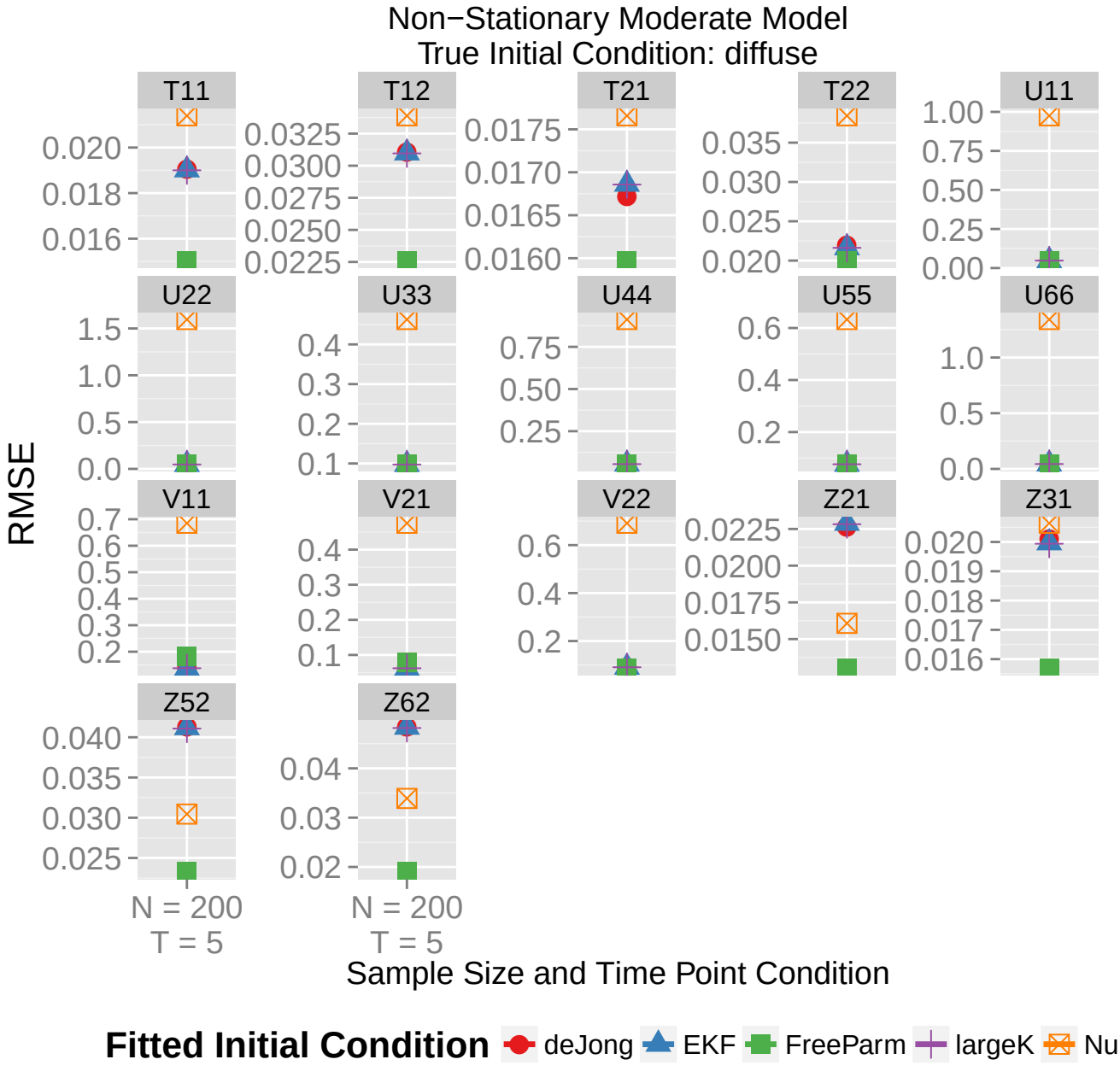
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Non−Stationary Moderate Model
True Initial Condition: diffuse
T11
T12
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T22
U11
U22
U33
U44
U55
U66
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V21
V22
Z21
Z31
Z52
Z62
RMSE
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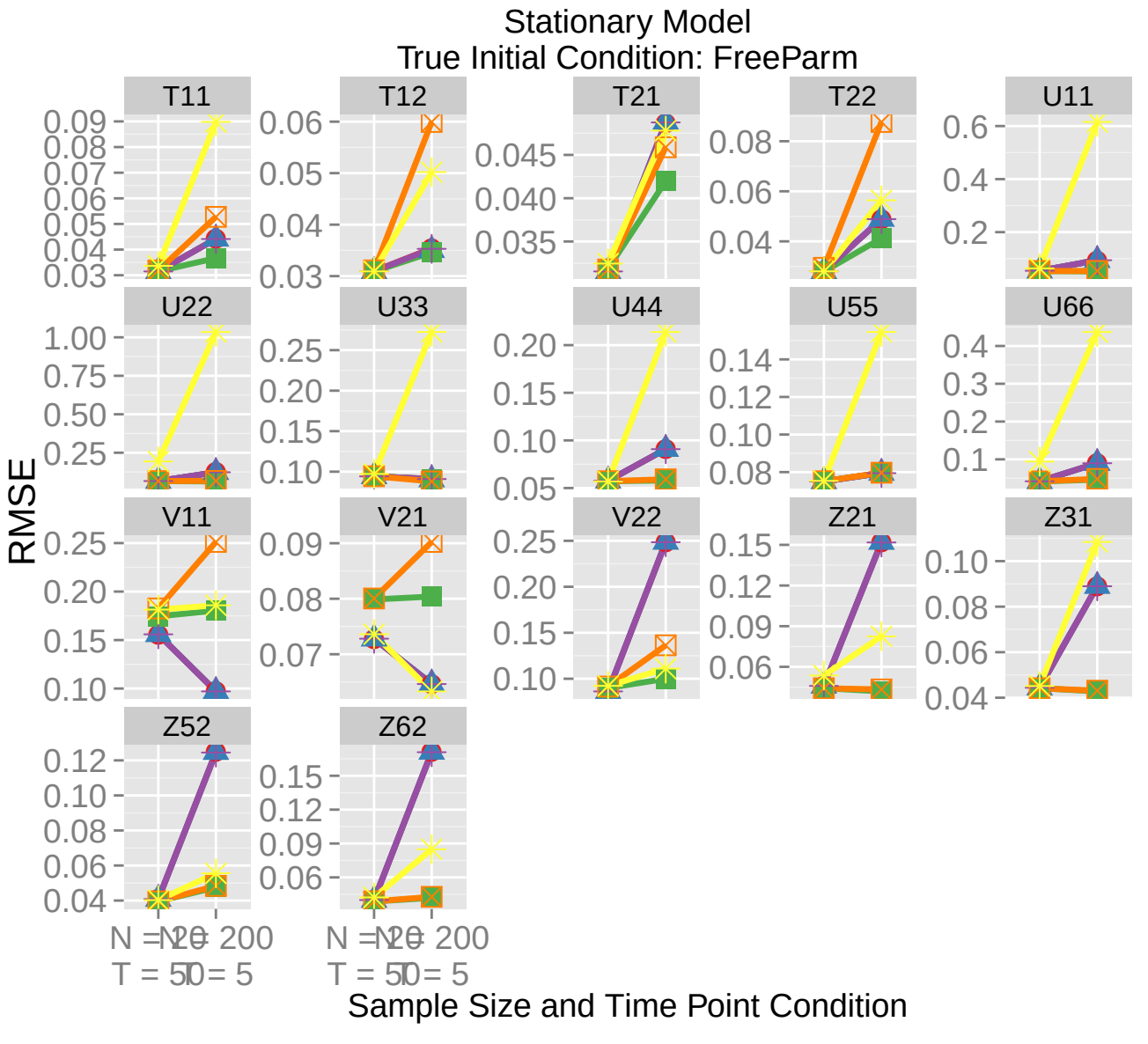
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Stationary Model
True Initial Condition: FreeParm
T11
T12
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T22
U11
U22
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U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
RMSE
N = 100 N = 200
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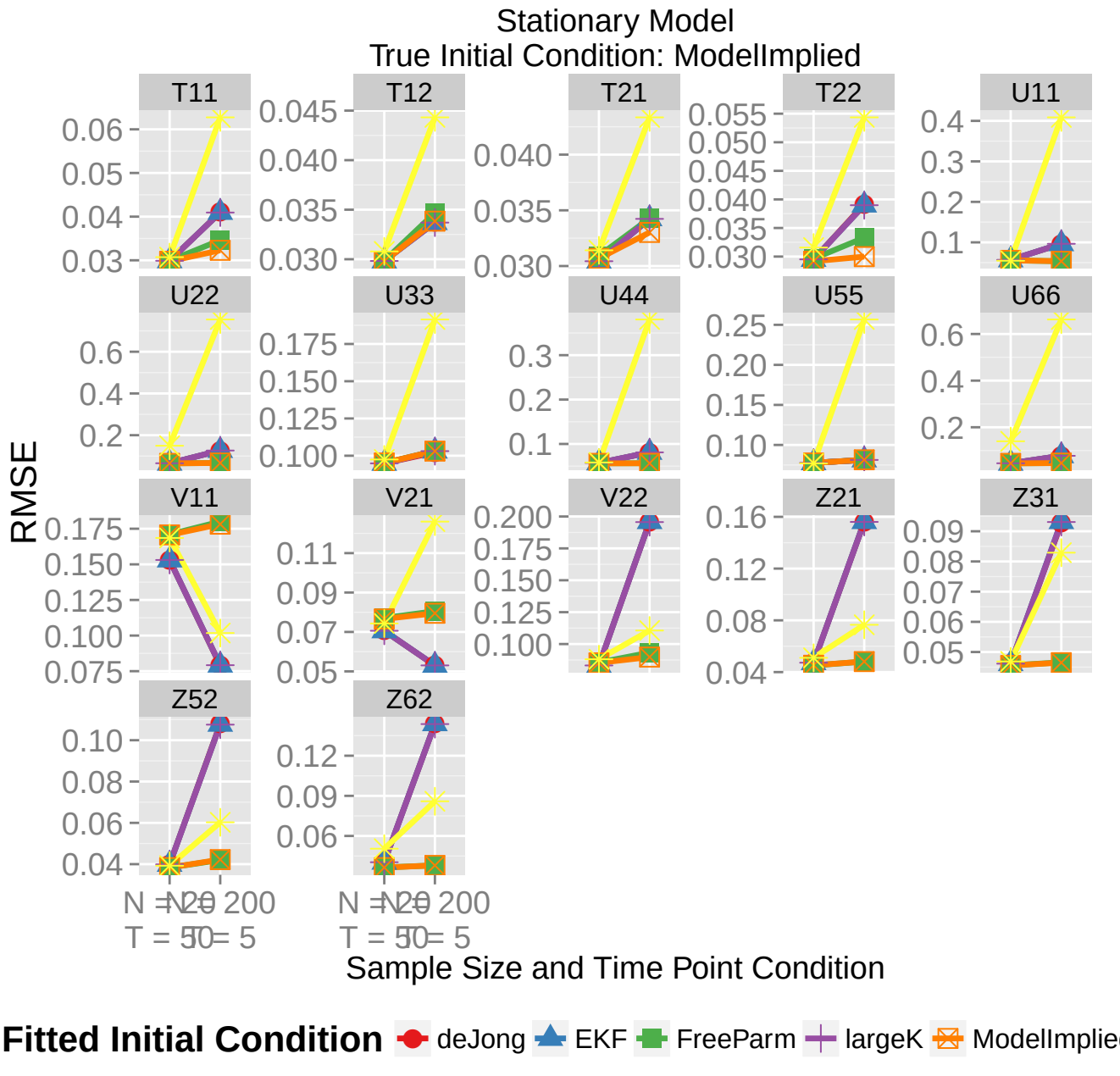
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied


Stationary Model
True Initial Condition: ModelImplied
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U11
U22
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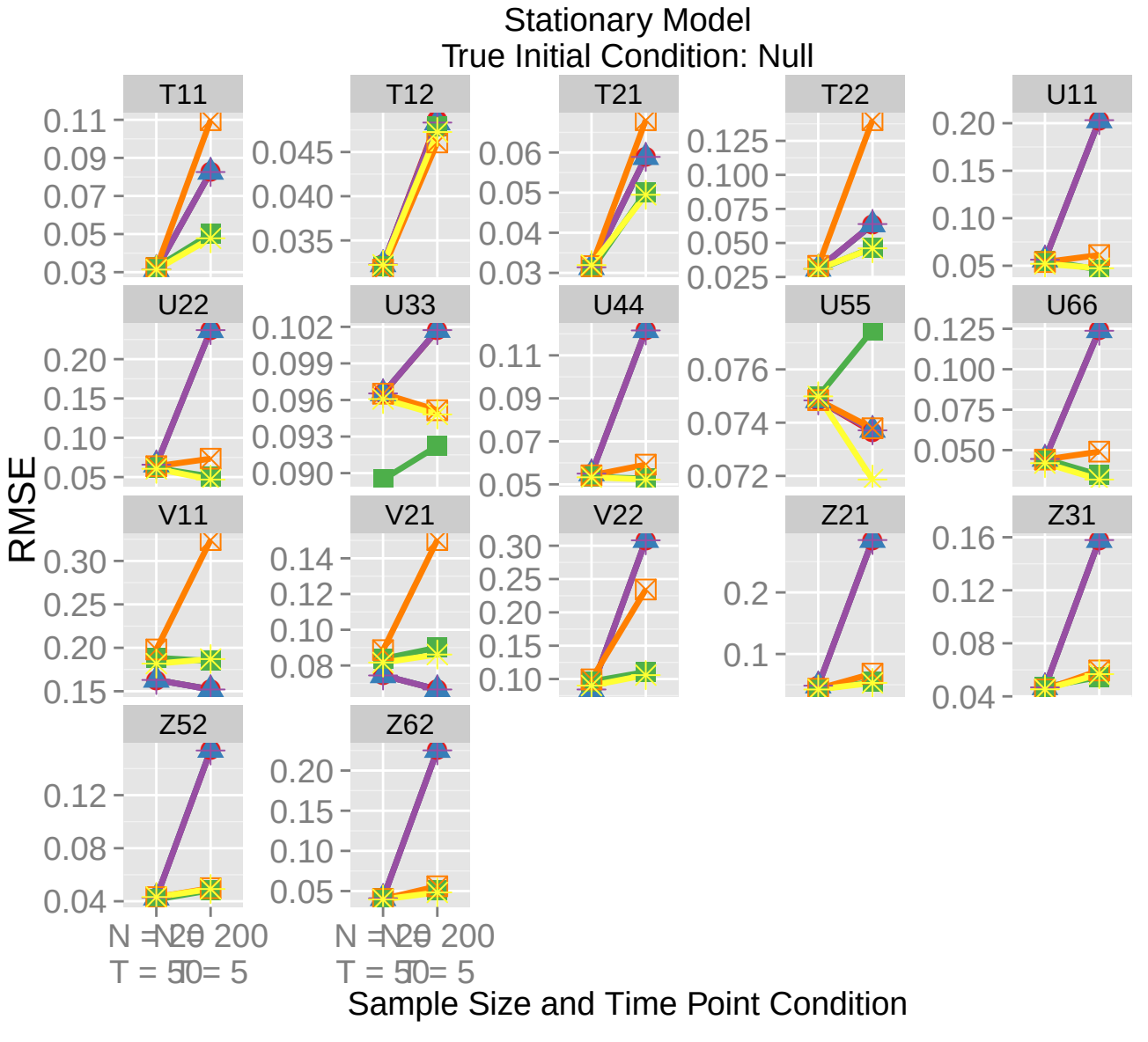
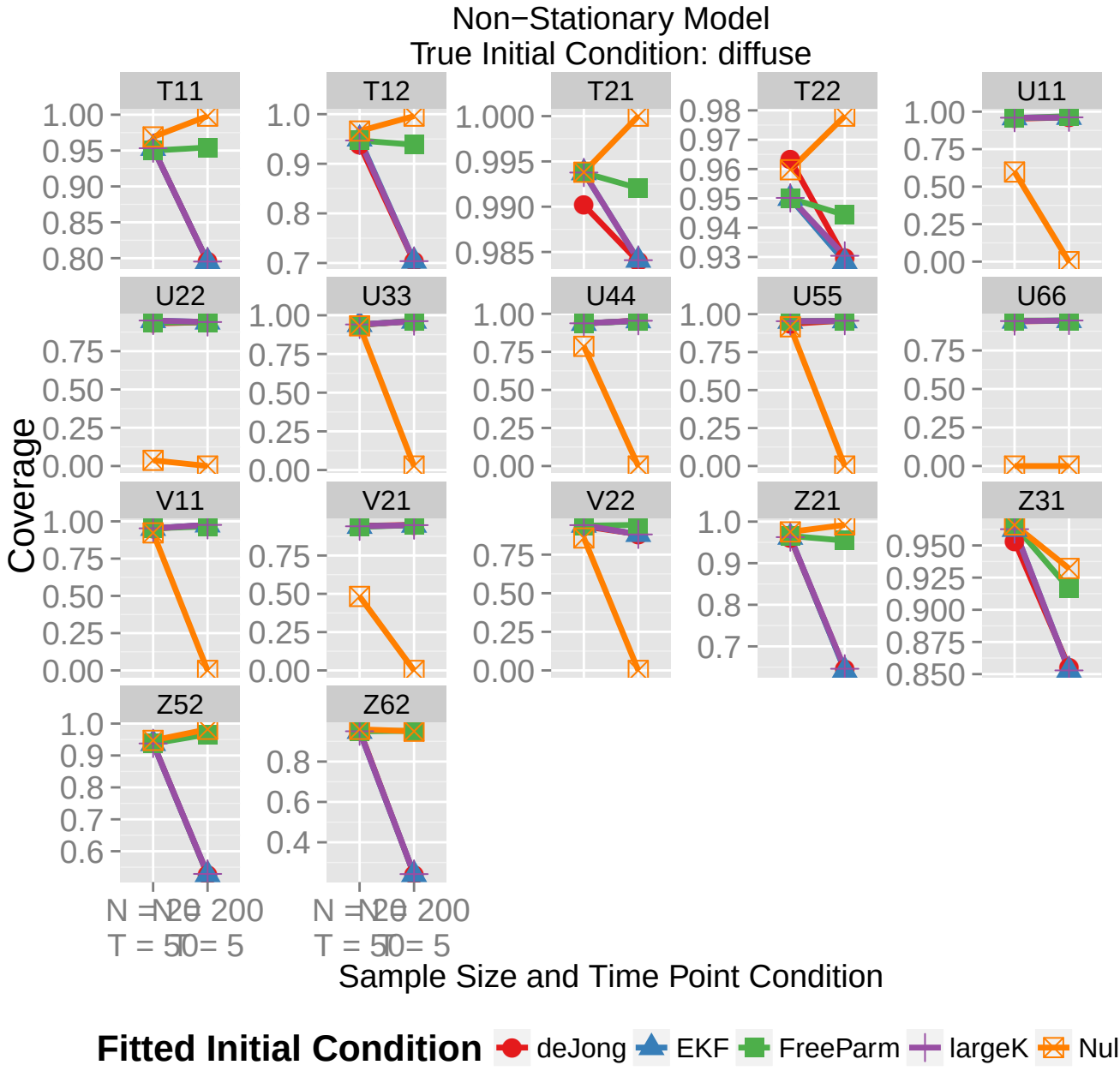
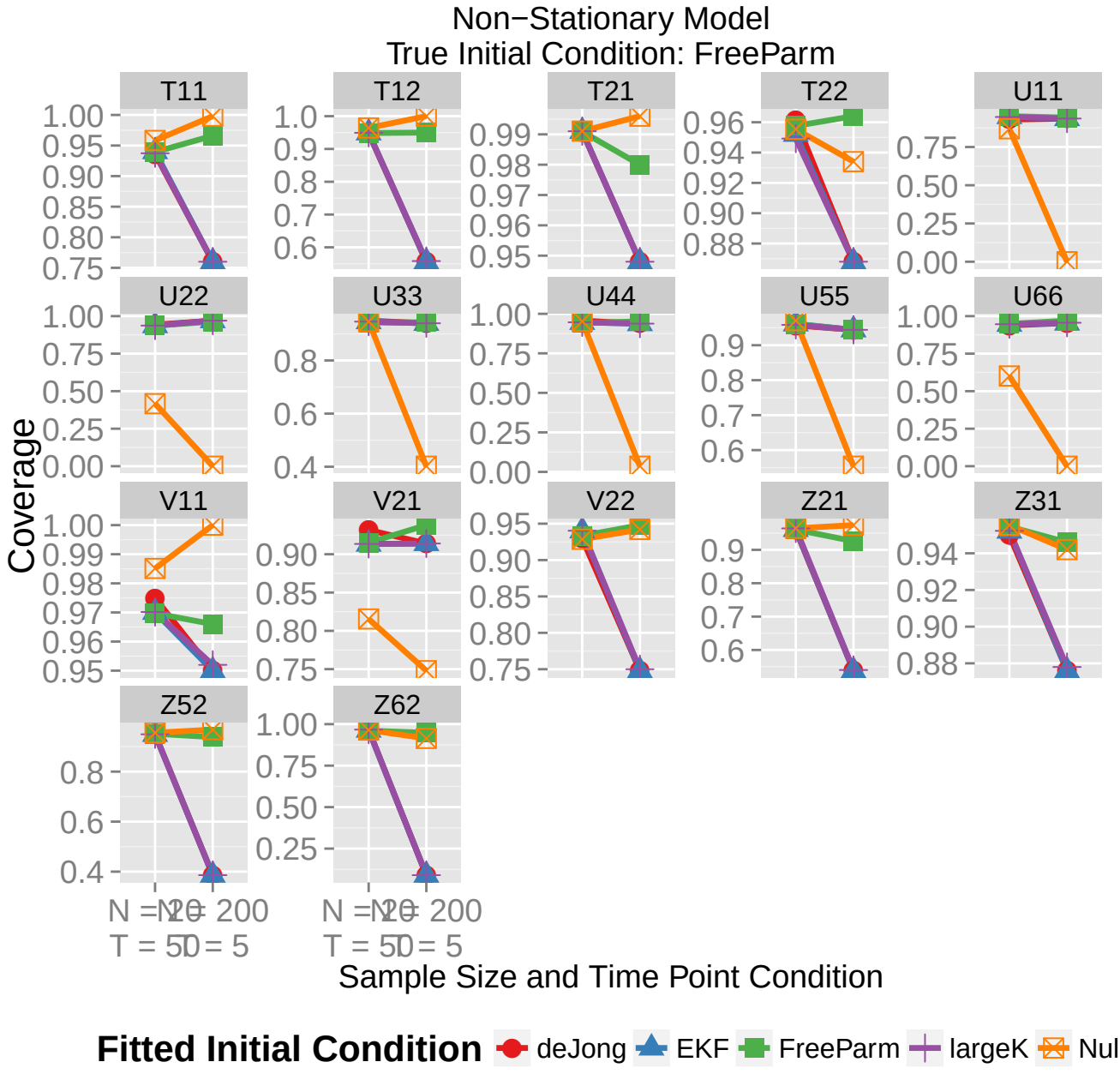
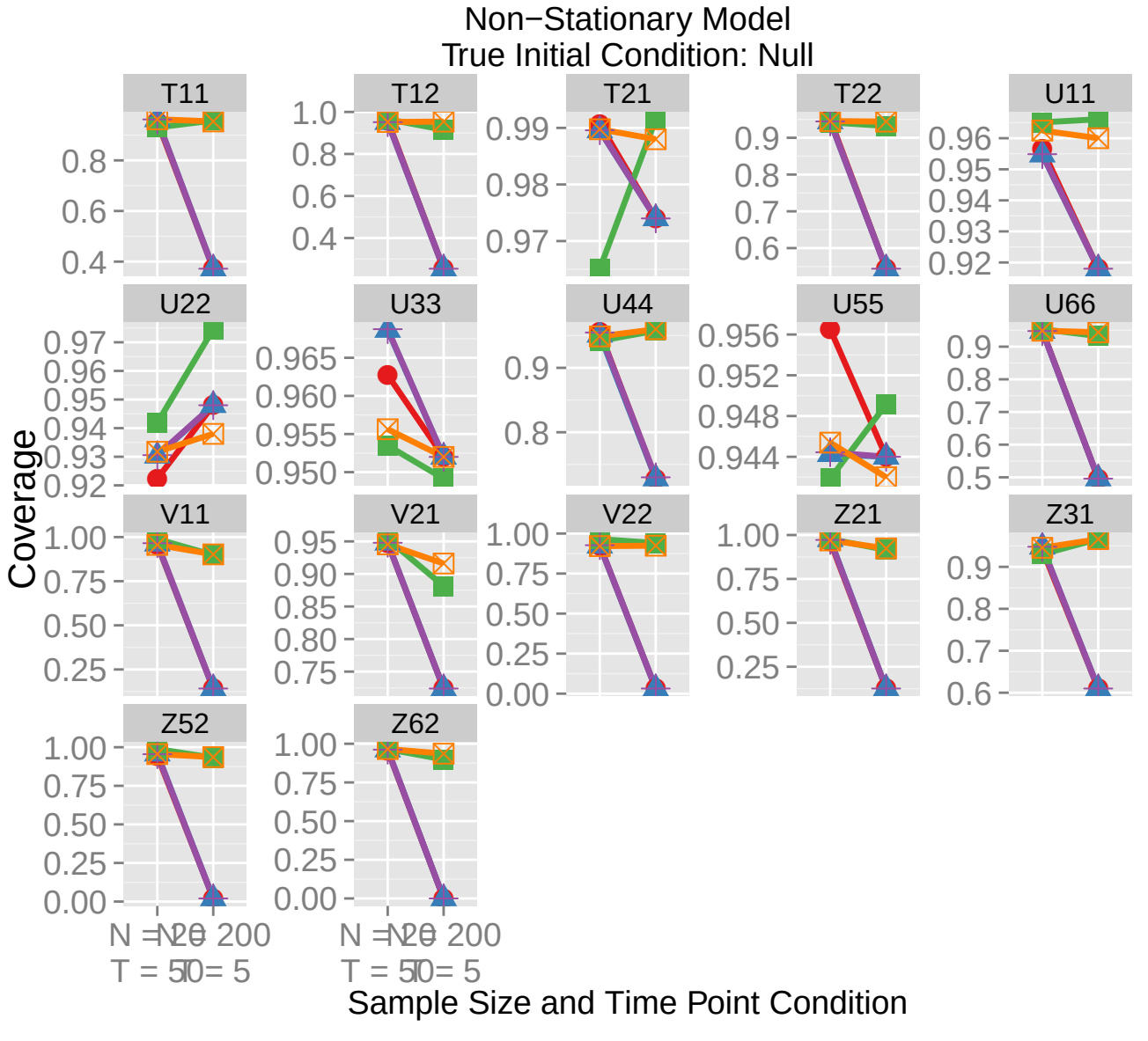
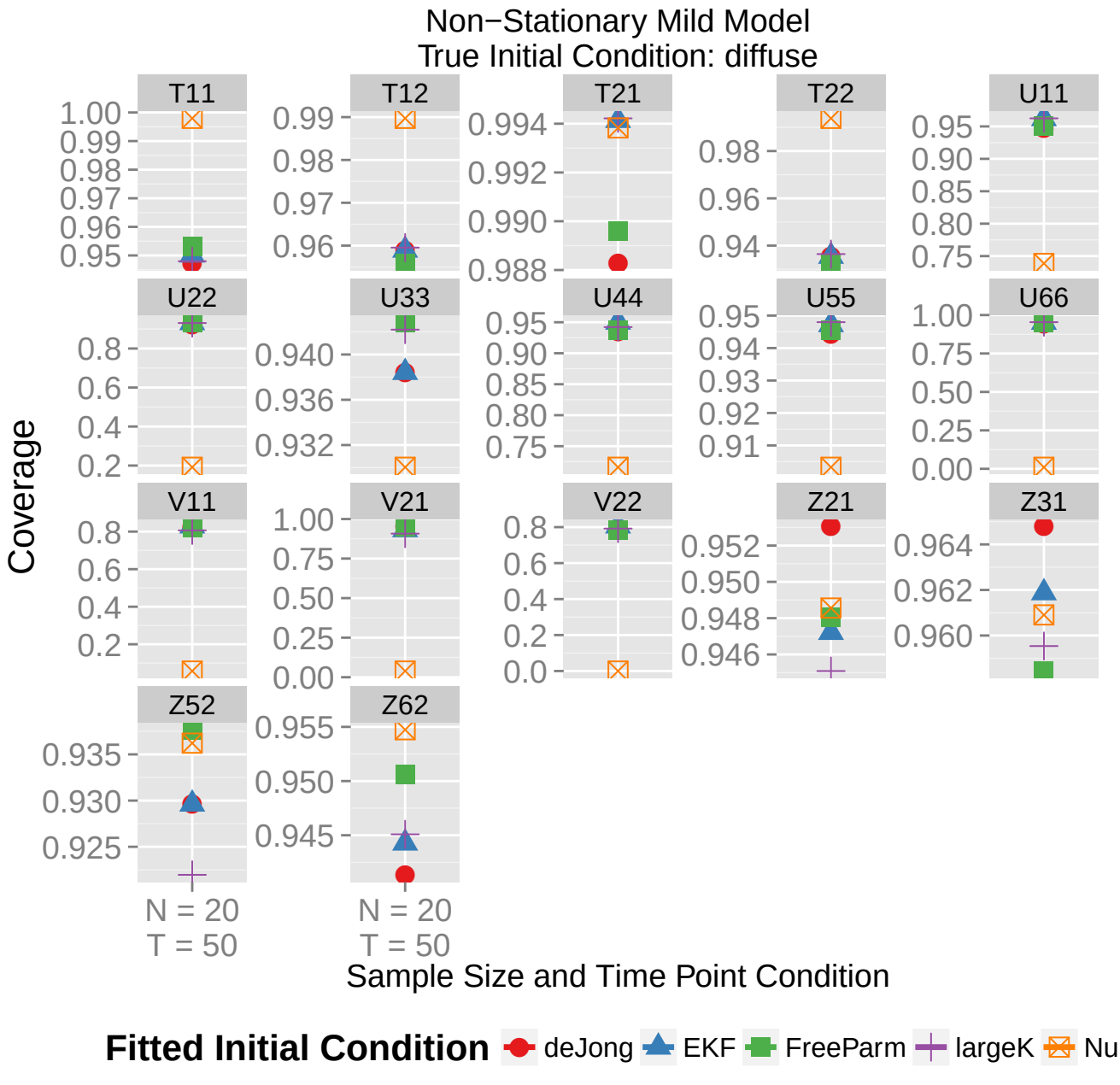
V21
V22
Z21
Z31
Z52
Z62
RMSE
N = 100 200
T = 50 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied

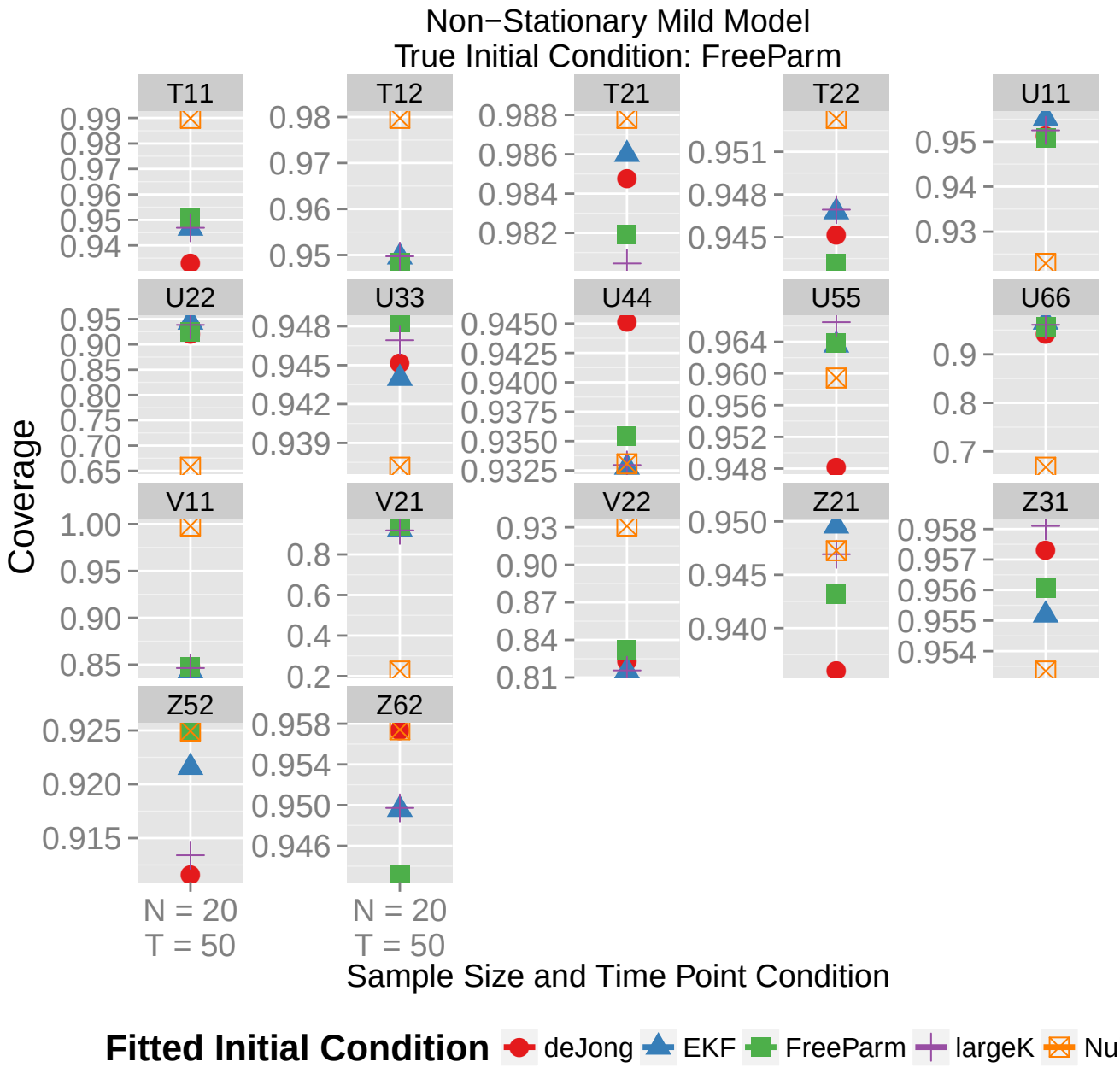

Stationary Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
RMSE
N = 20 T = 5
N = 200 T = 5
N = 20 T = 50
N = 200 T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied

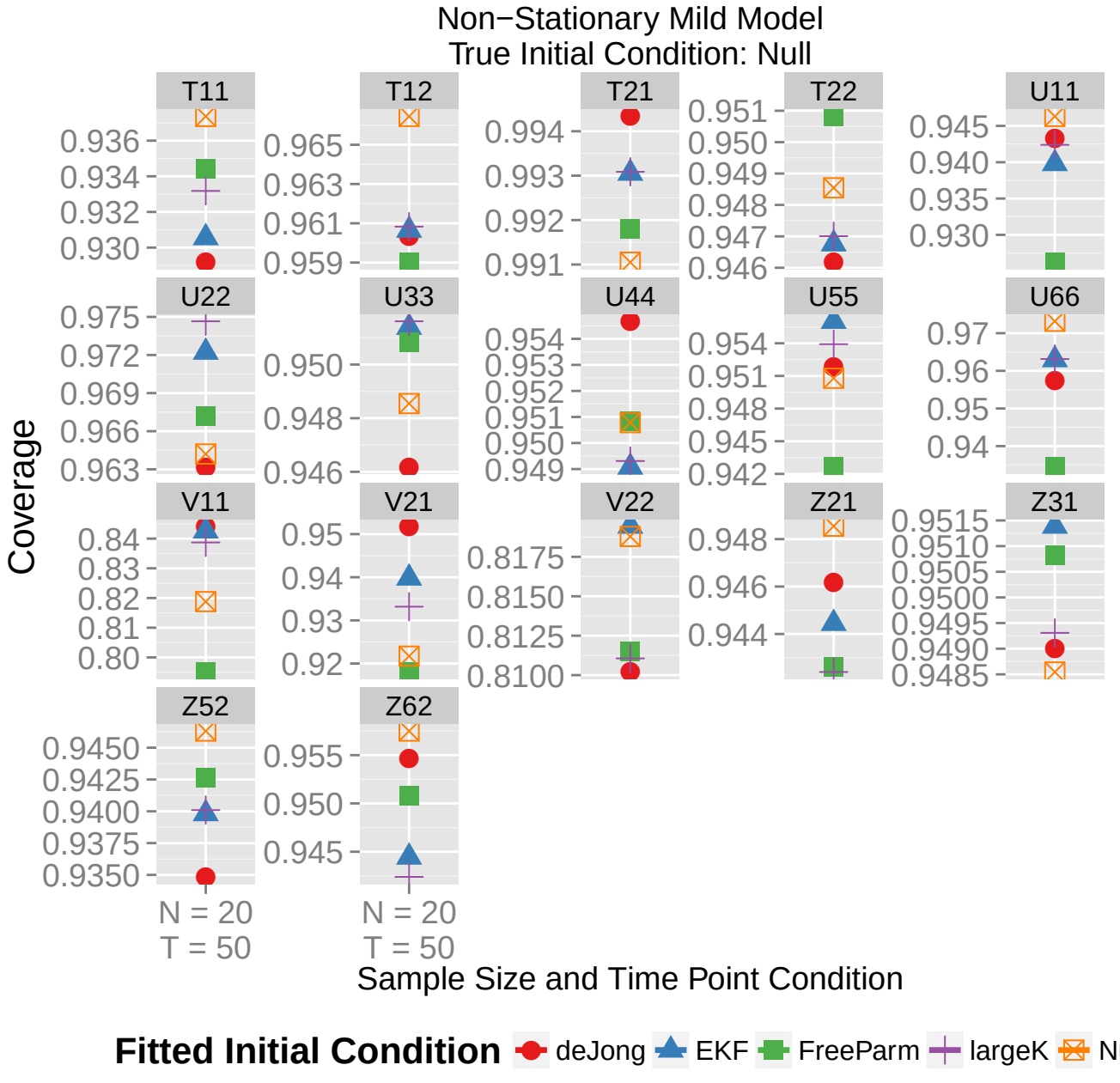

Non−Stationary Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 20 200
T = 50 = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null

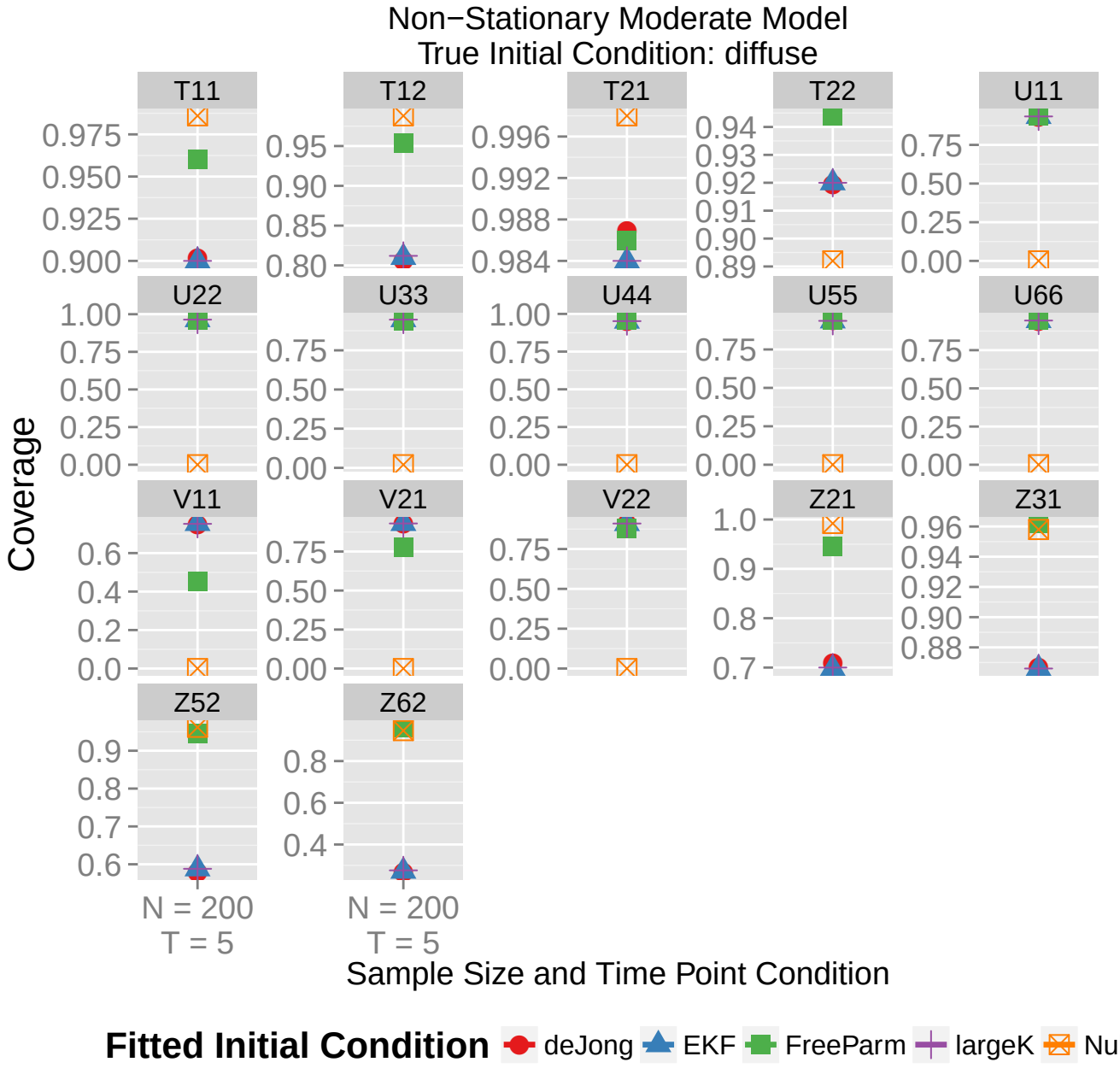

Non−Stationary Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null

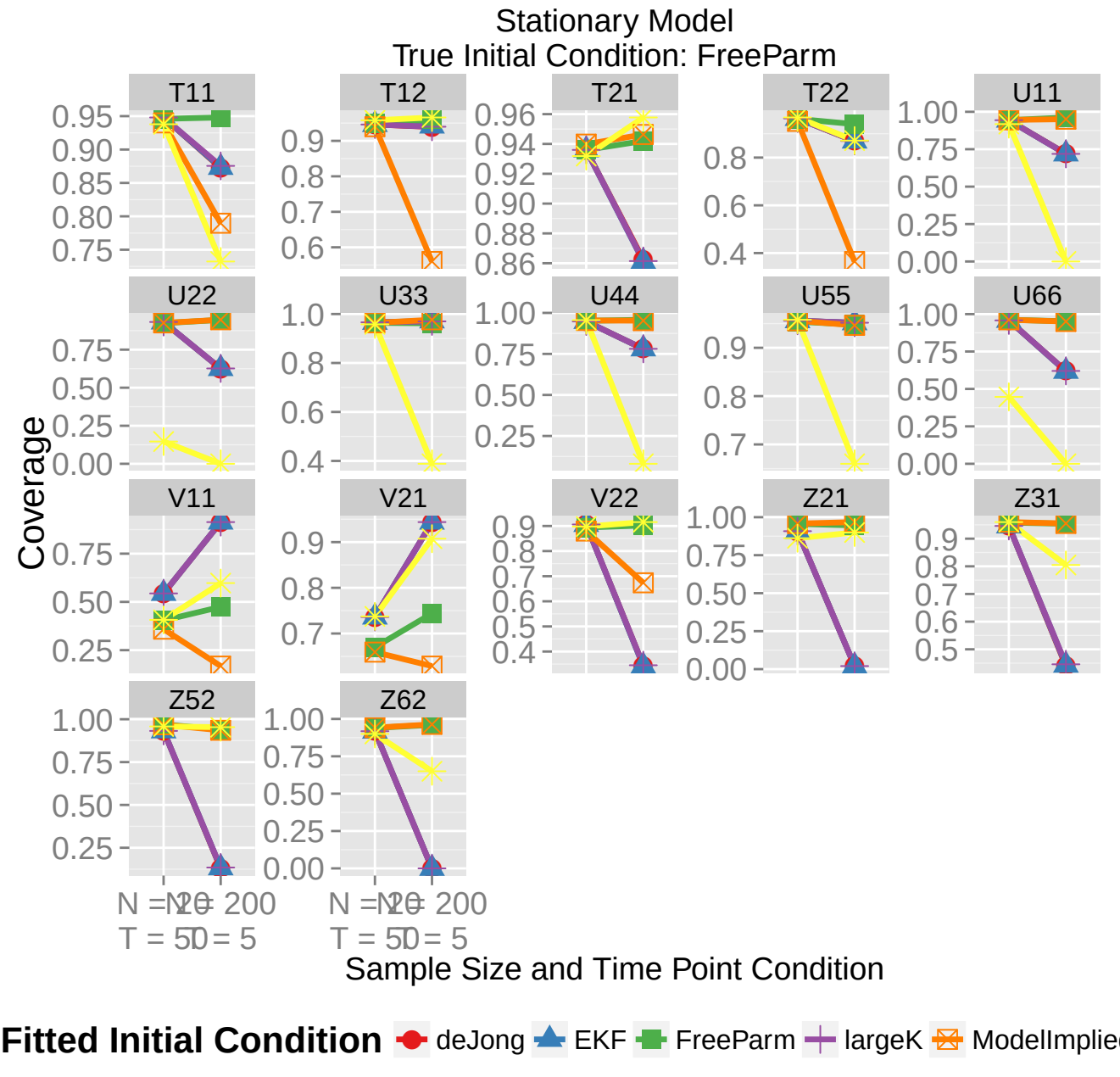

Non−Stationary Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 20 50 200
T = 5 10 = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null

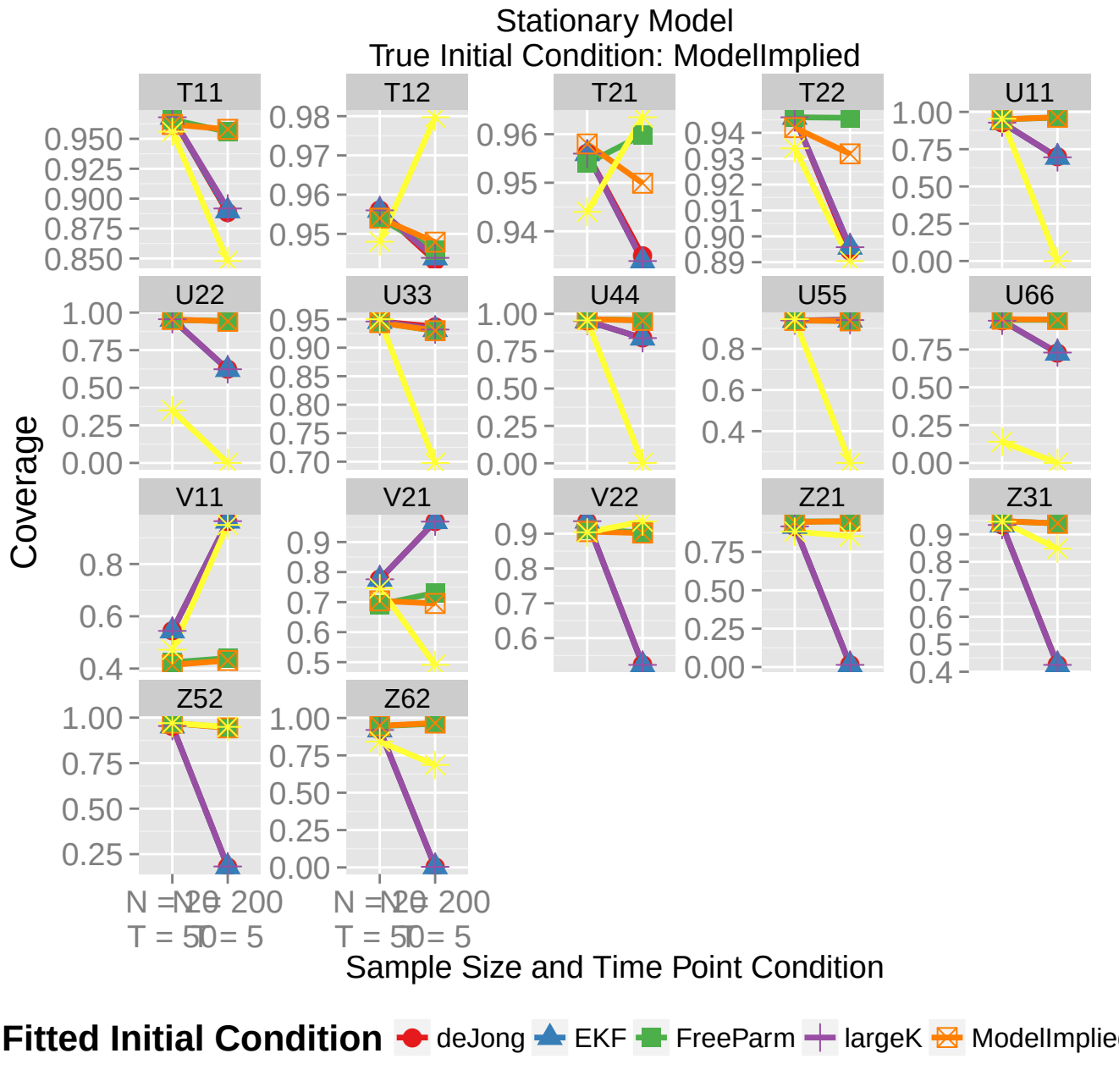

Non−Stationary Mild Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 20
T = 50
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null

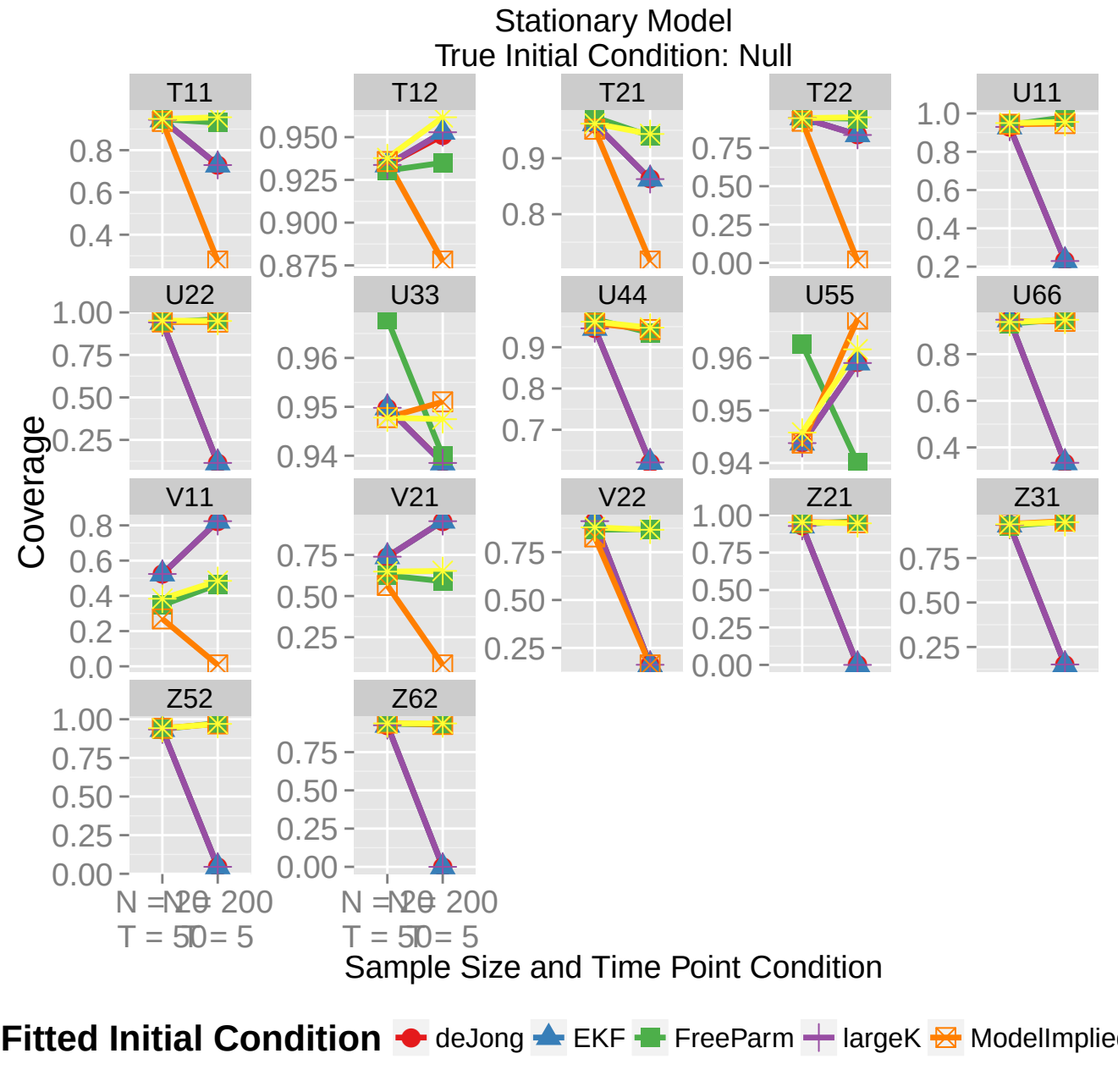

Non−Stationary Mild Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 20
T = 50
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null

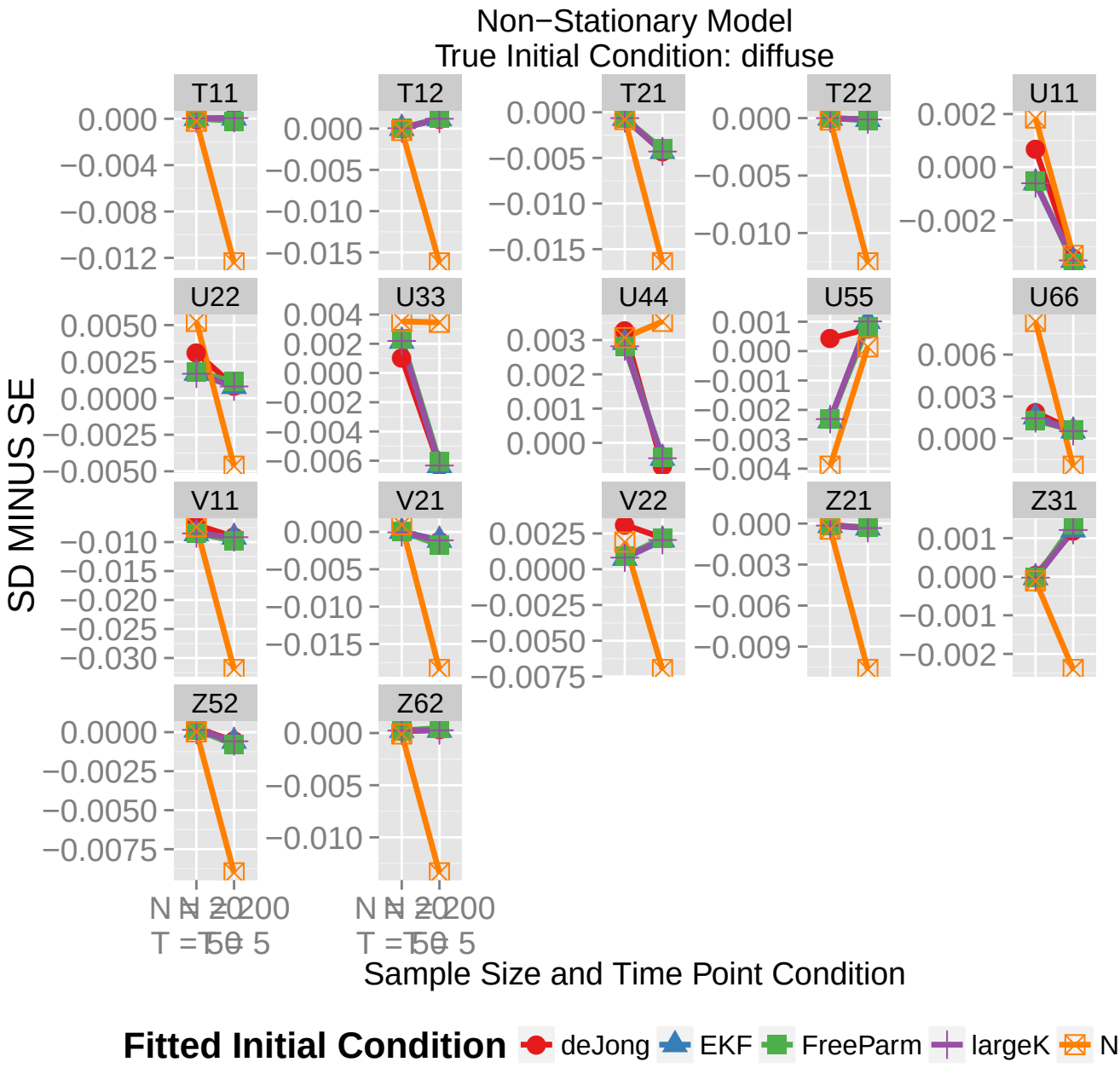

Non−Stationary Mild Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul

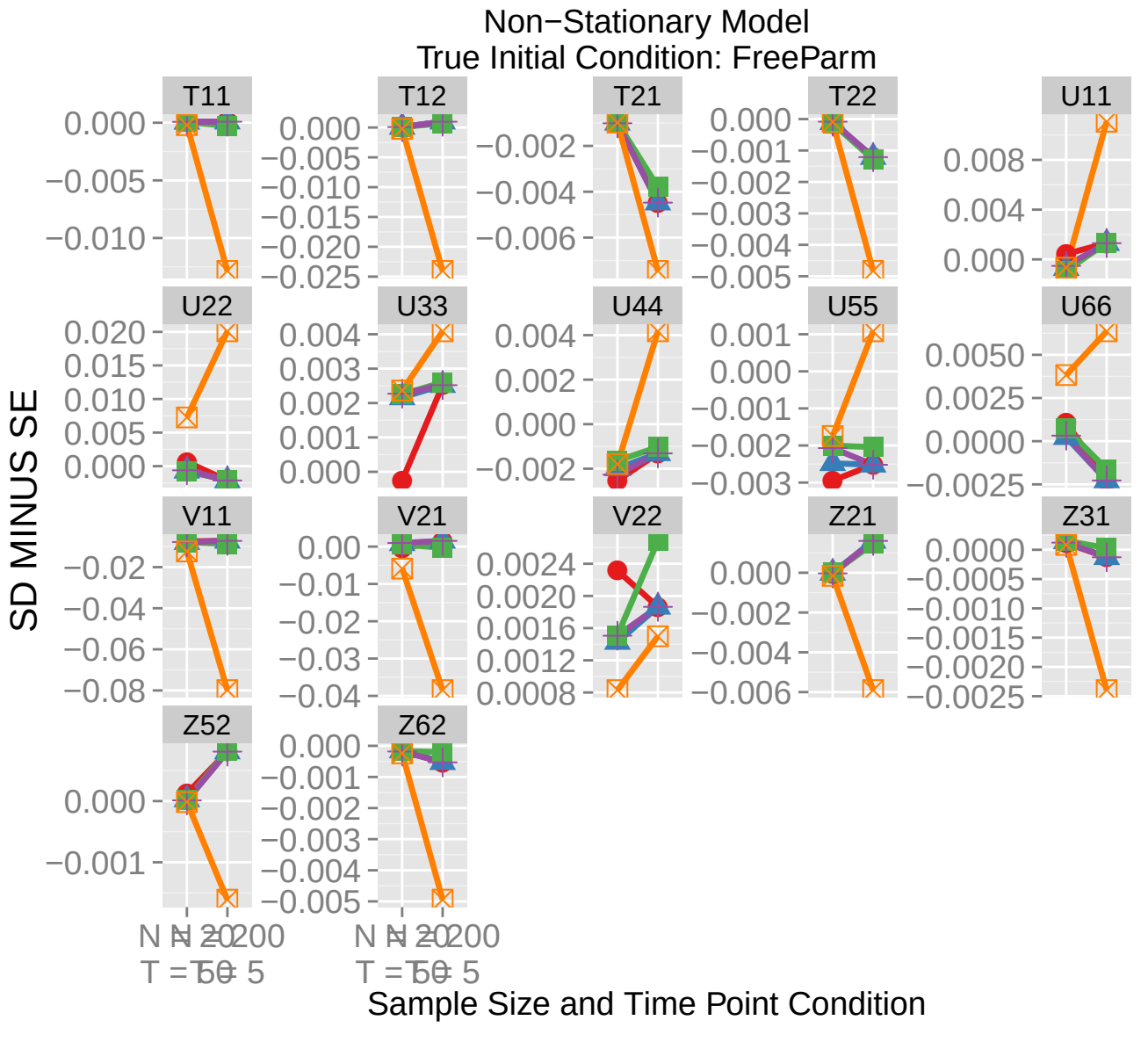

Non−Stationary Moderate Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 200
T = 5
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null

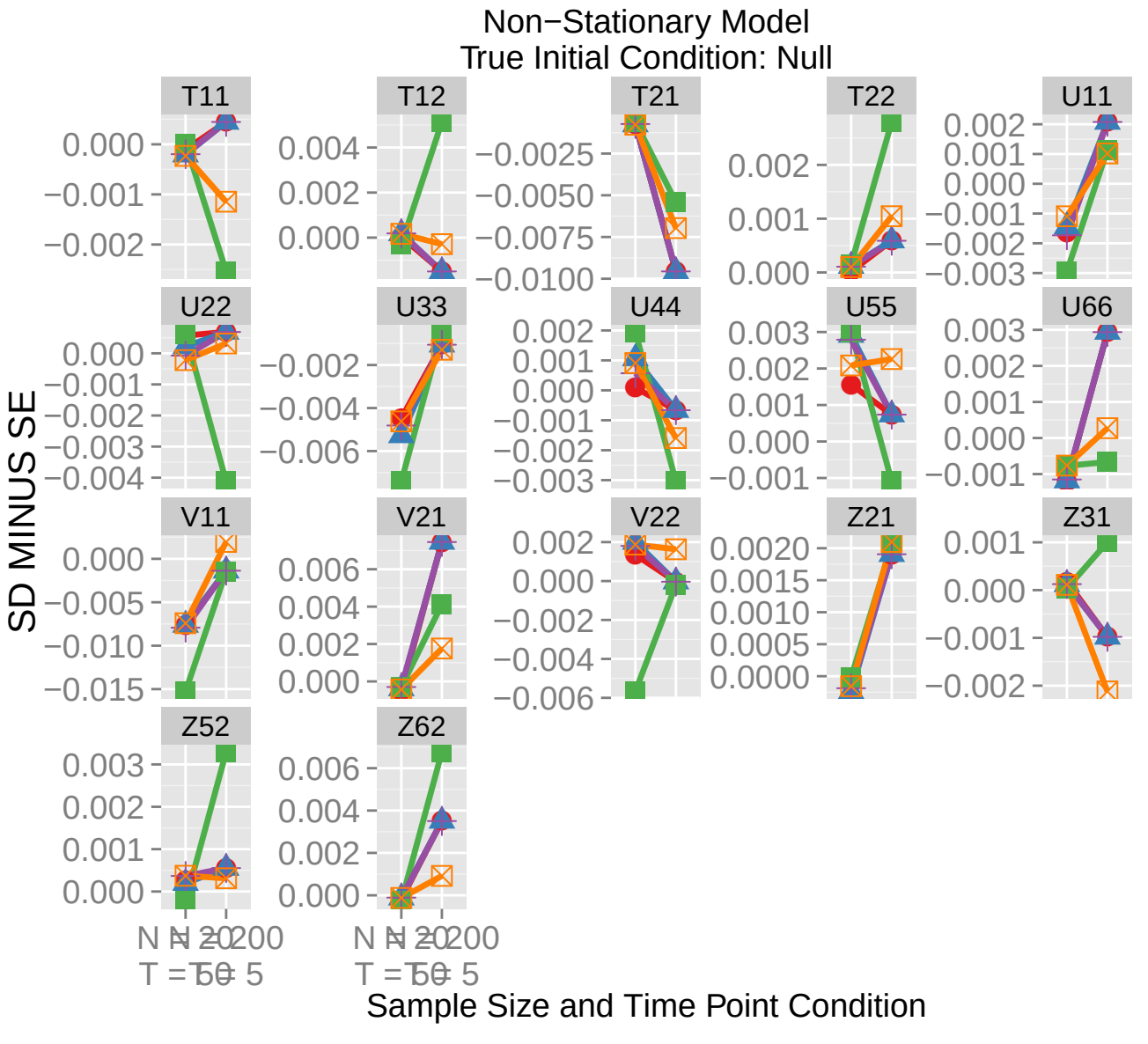

Stationary Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 100
T = 5
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied

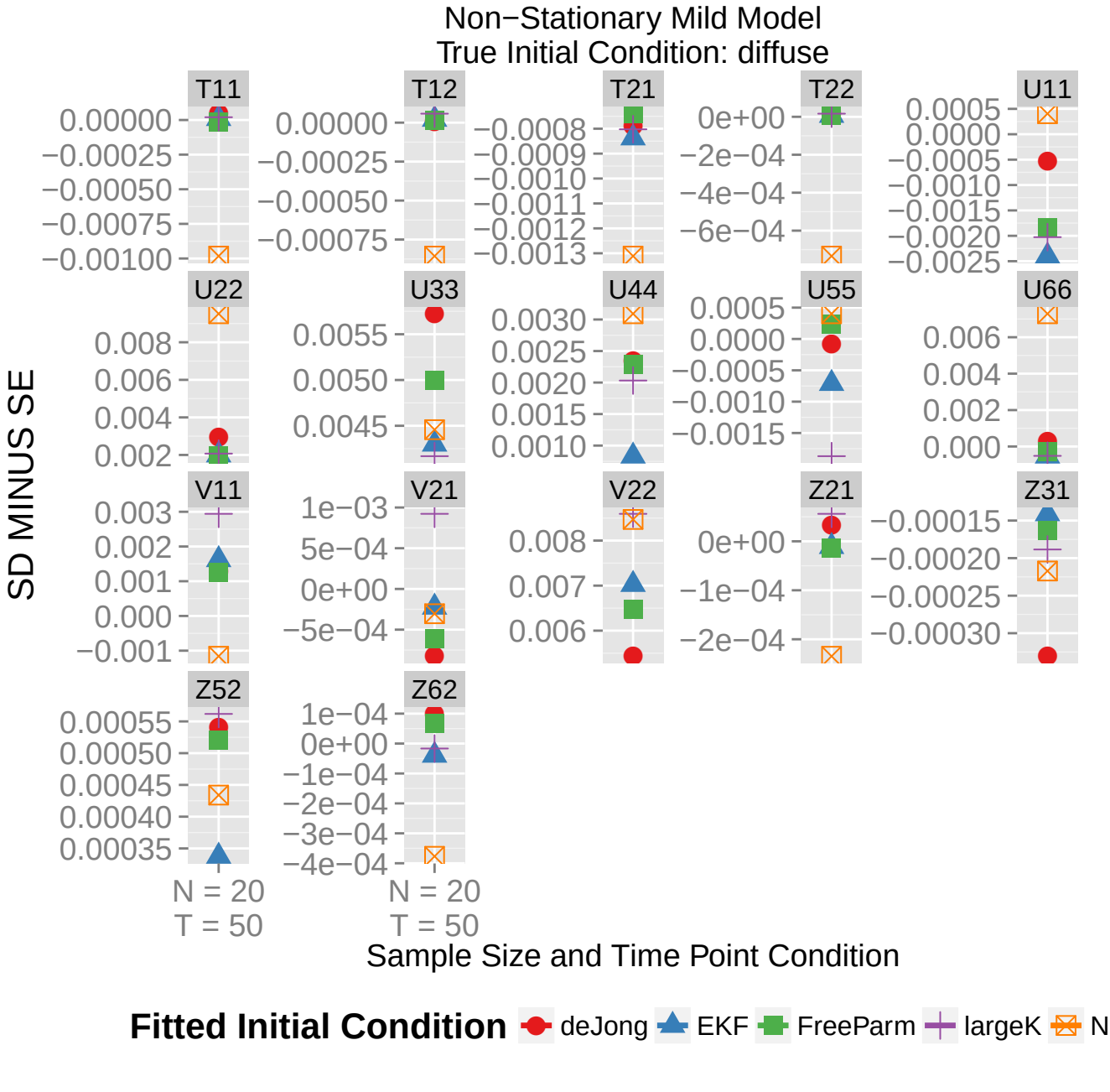

Stationary Model
True Initial Condition: ModelImplied
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied

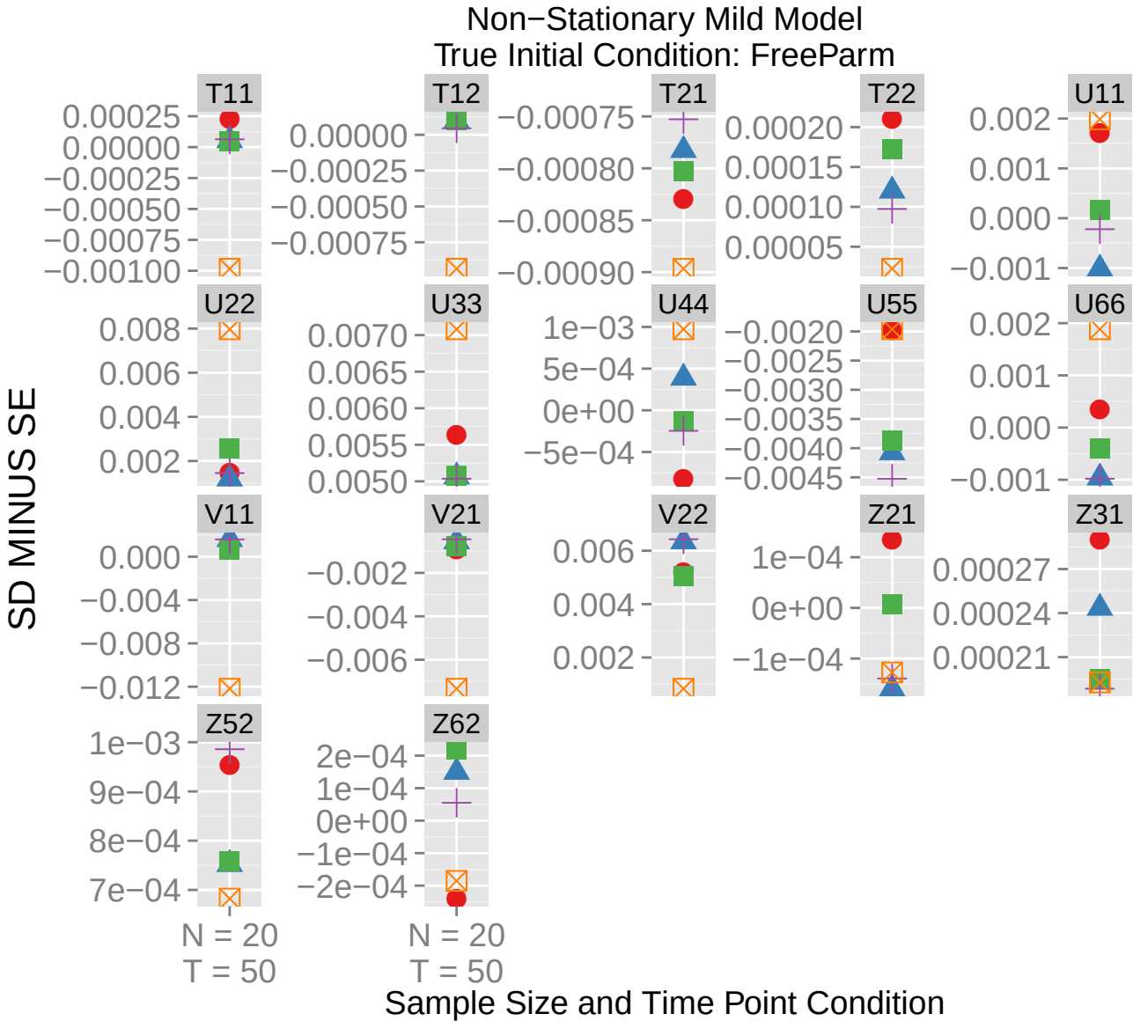

Stationary Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Coverage
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied

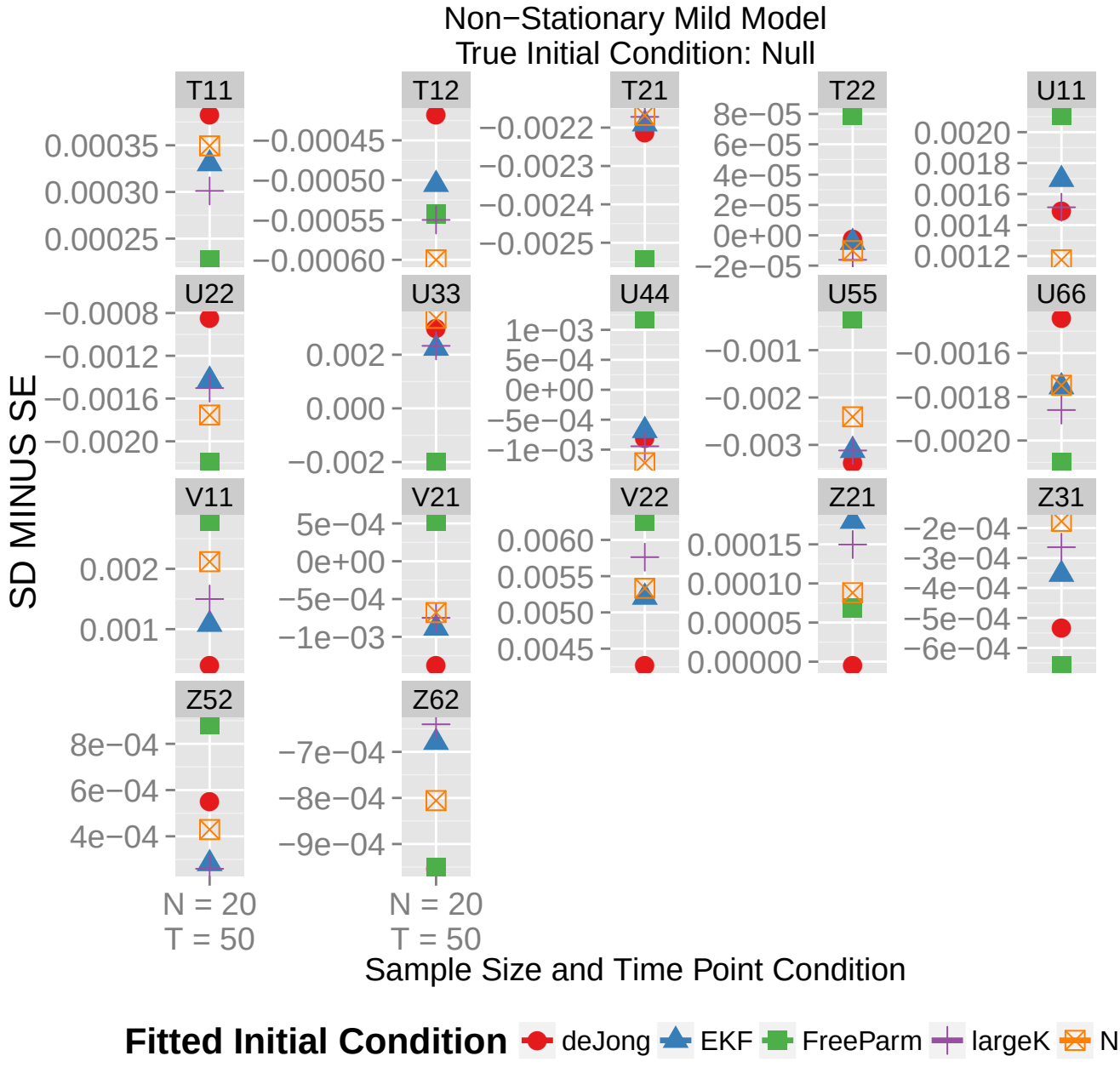

Non−Stationary Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 200
T = 50
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu

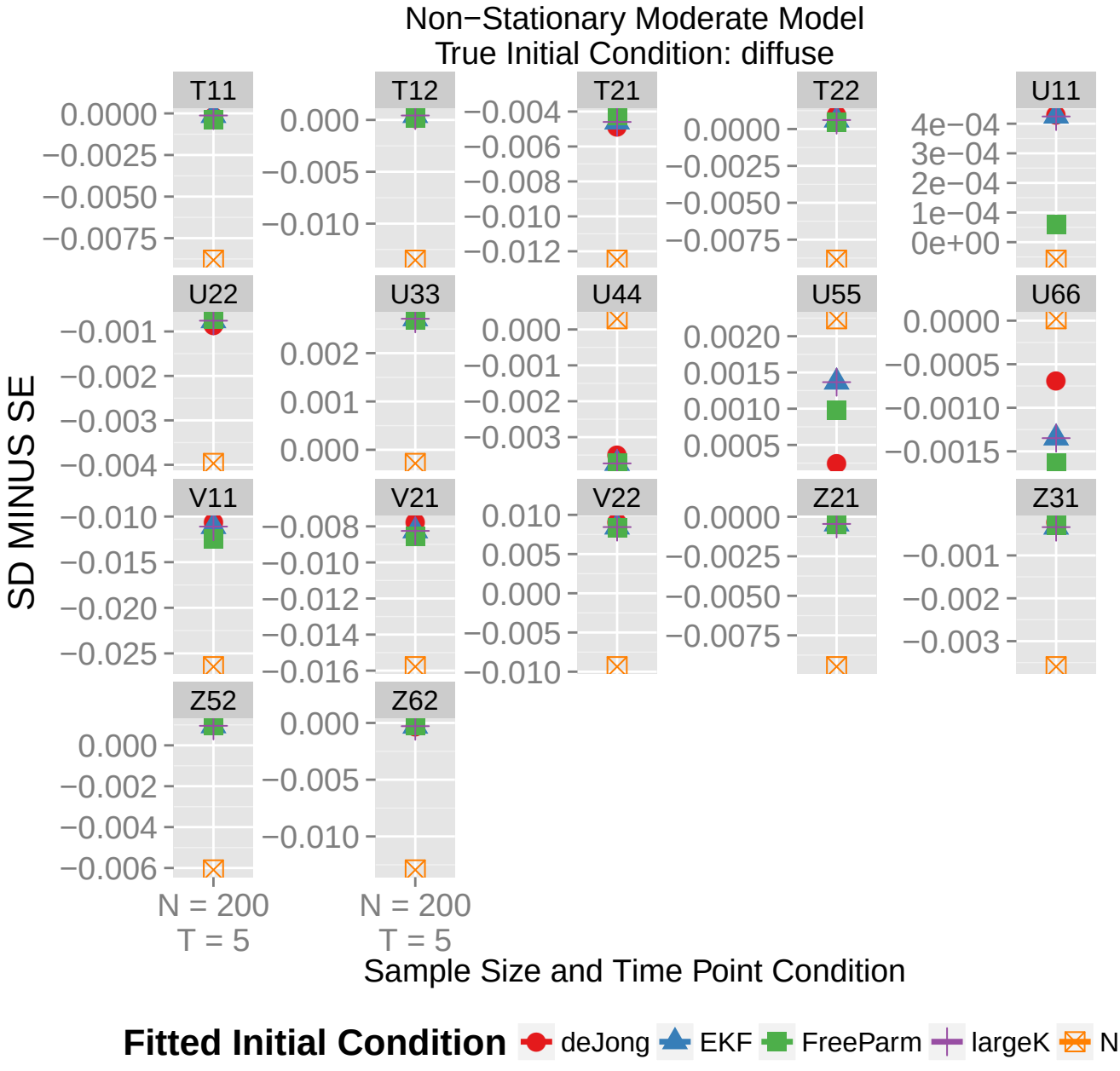

Non−Stationary Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 200
T = 50
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul

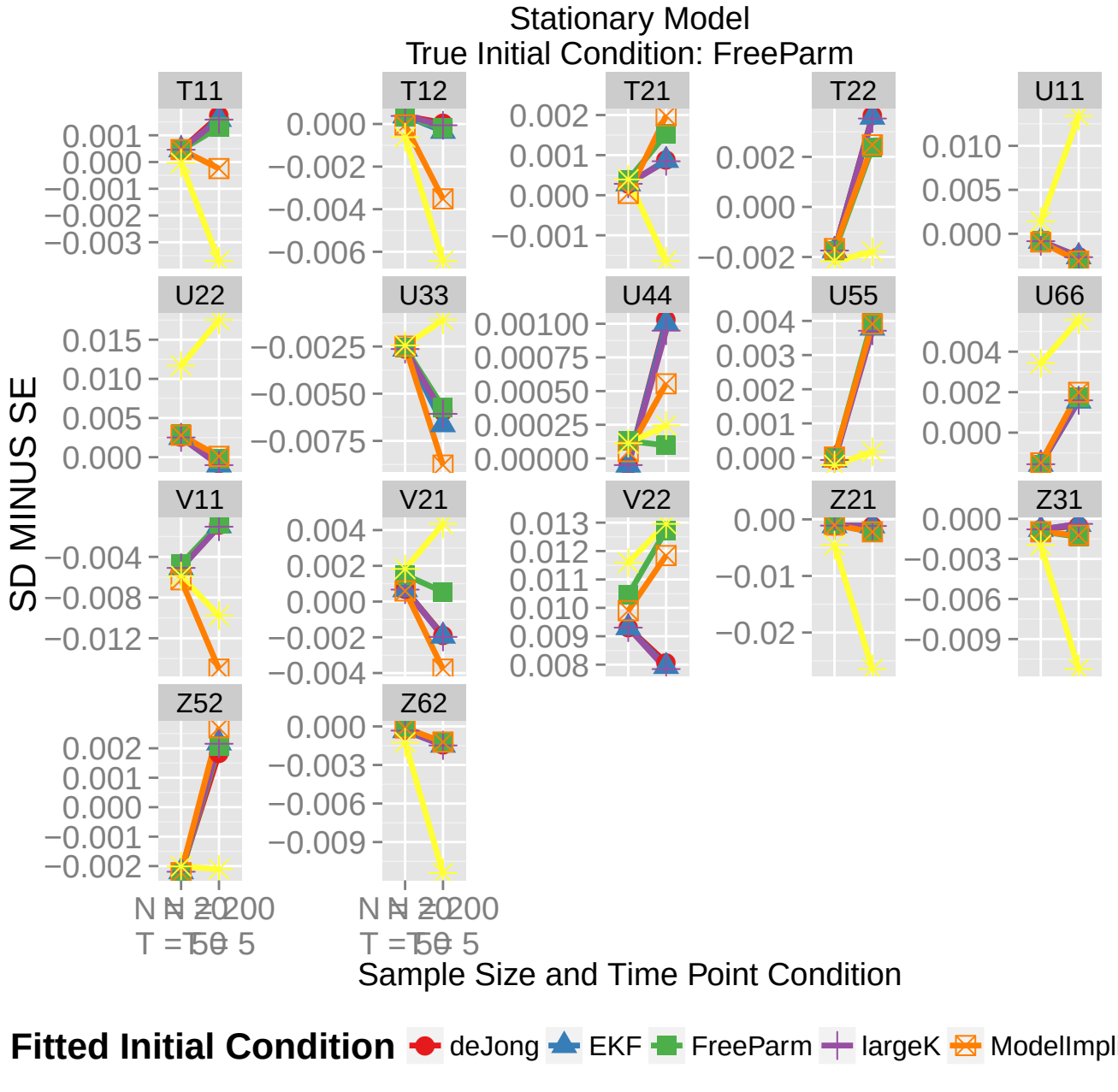

Non−Stationary Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 200
T = 50
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nul

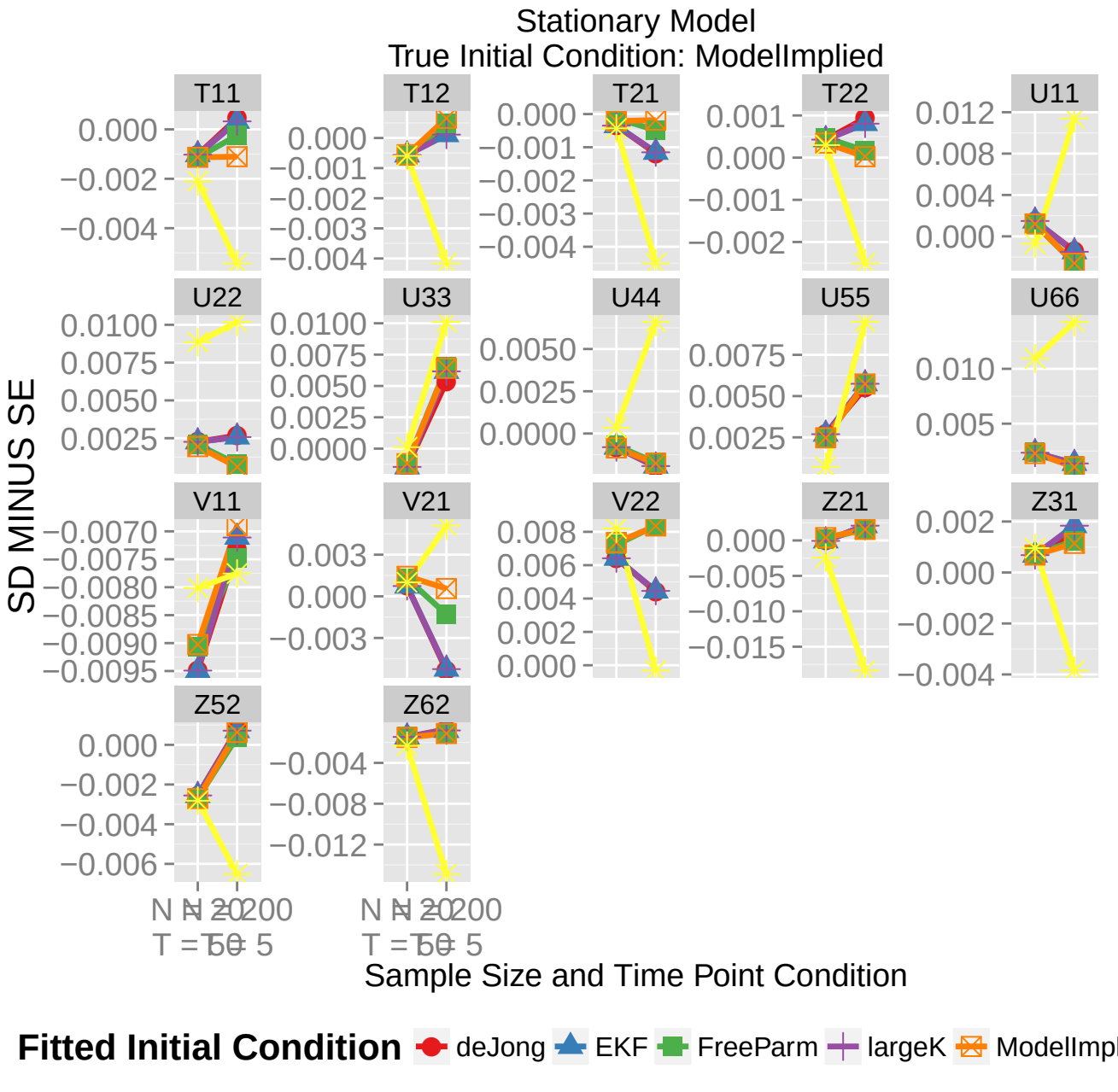

Non−Stationary Mild Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 20
T = 50
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
N

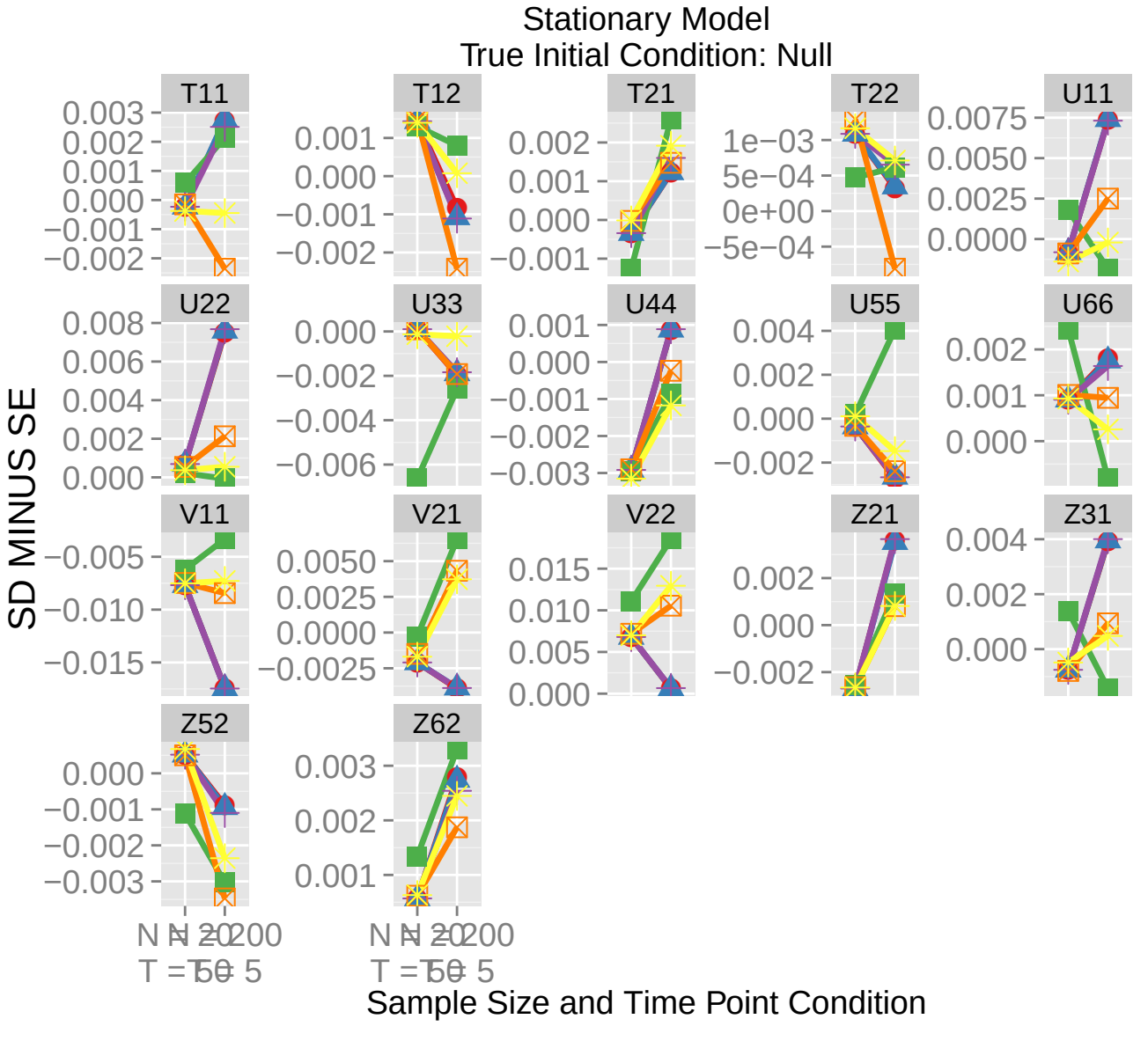

Non−Stationary Mild Model
True Initial Condition: FreeParm
SD MINUS SE
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK

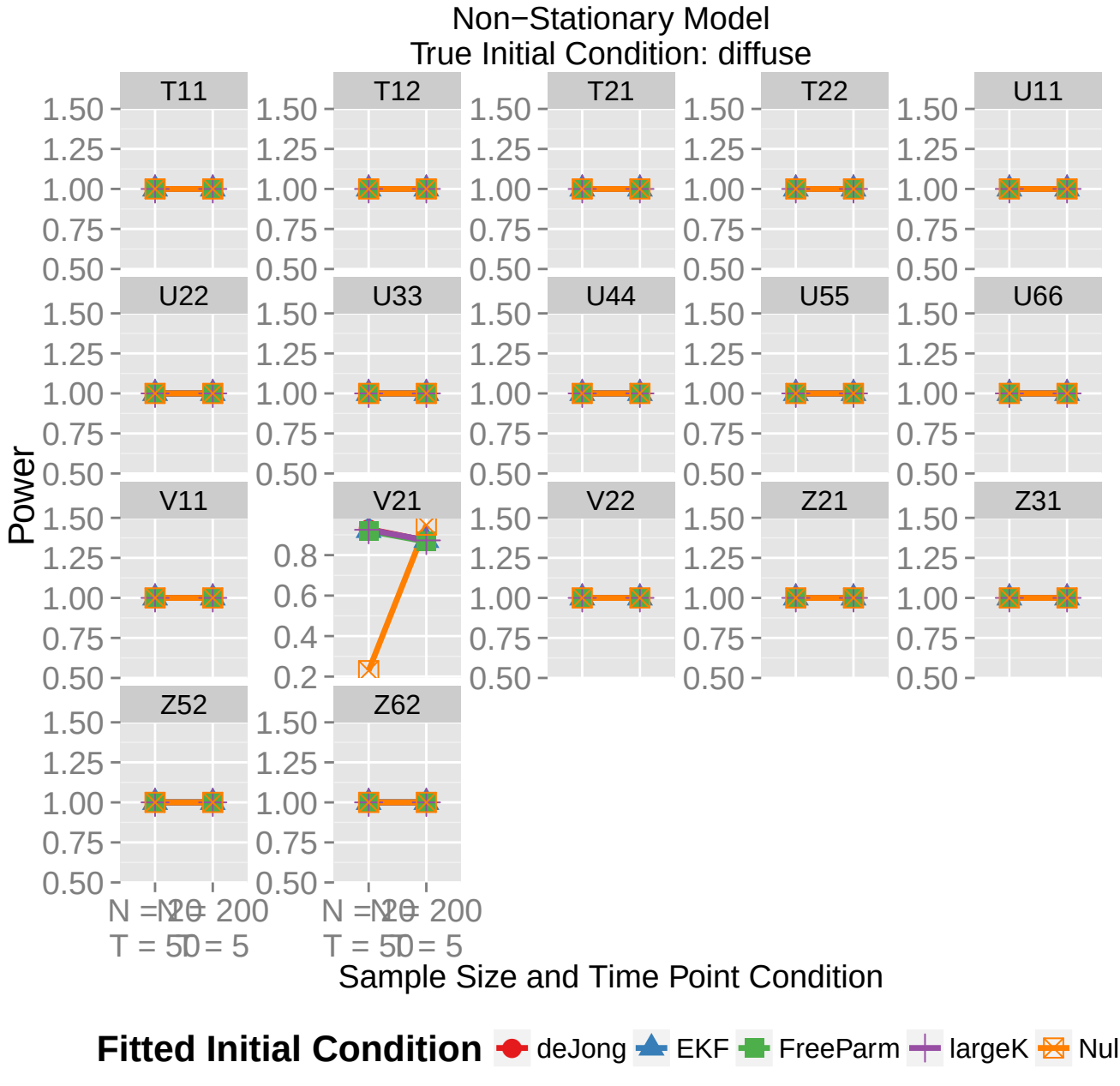

Non−Stationary Mild Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 20
T = 50
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Non−Stationary Moderate Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 200
T = 5
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Nu


Stationary Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 200
T = 5
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplie


Stationary Model
True Initial Condition: ModelImplied
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 200
T = 50
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImpli


Stationary Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
SD MINUS SE
N = 200
T = 5
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplie


Non−Stationary Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.8
0.6
0.4
0.2
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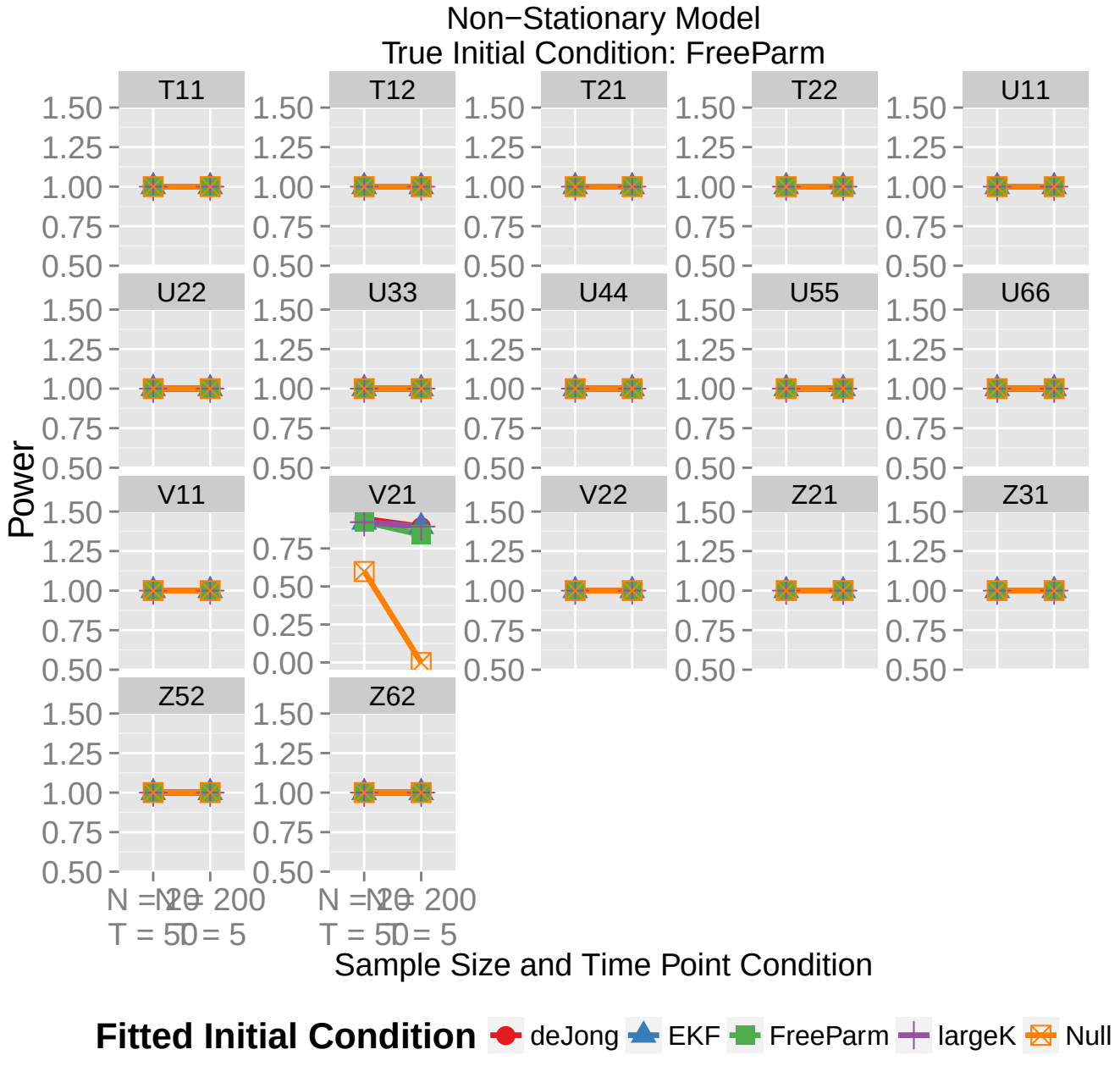
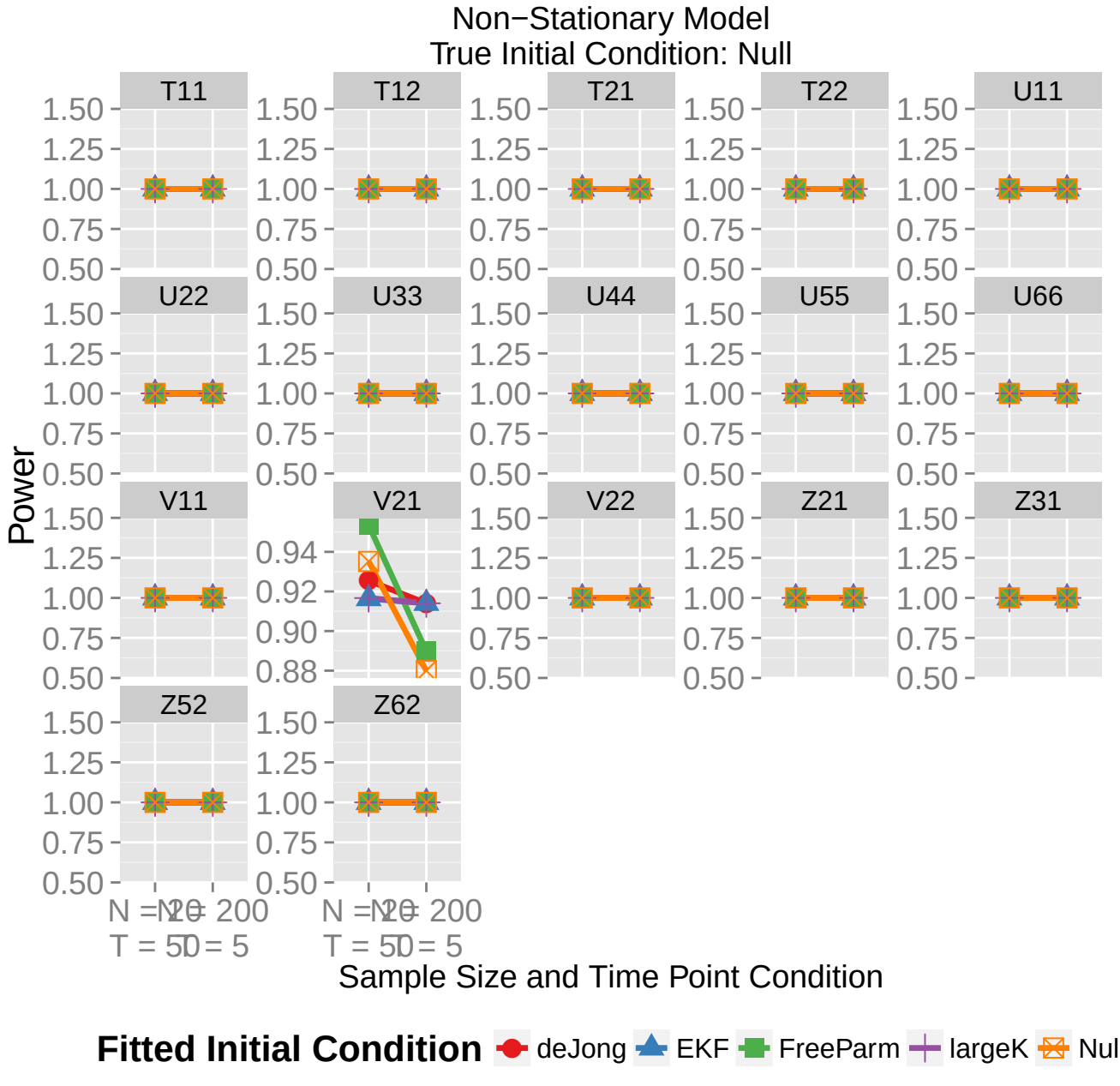
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Model
True Initial Condition: FreePar
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.25
0.00
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.94
0.92
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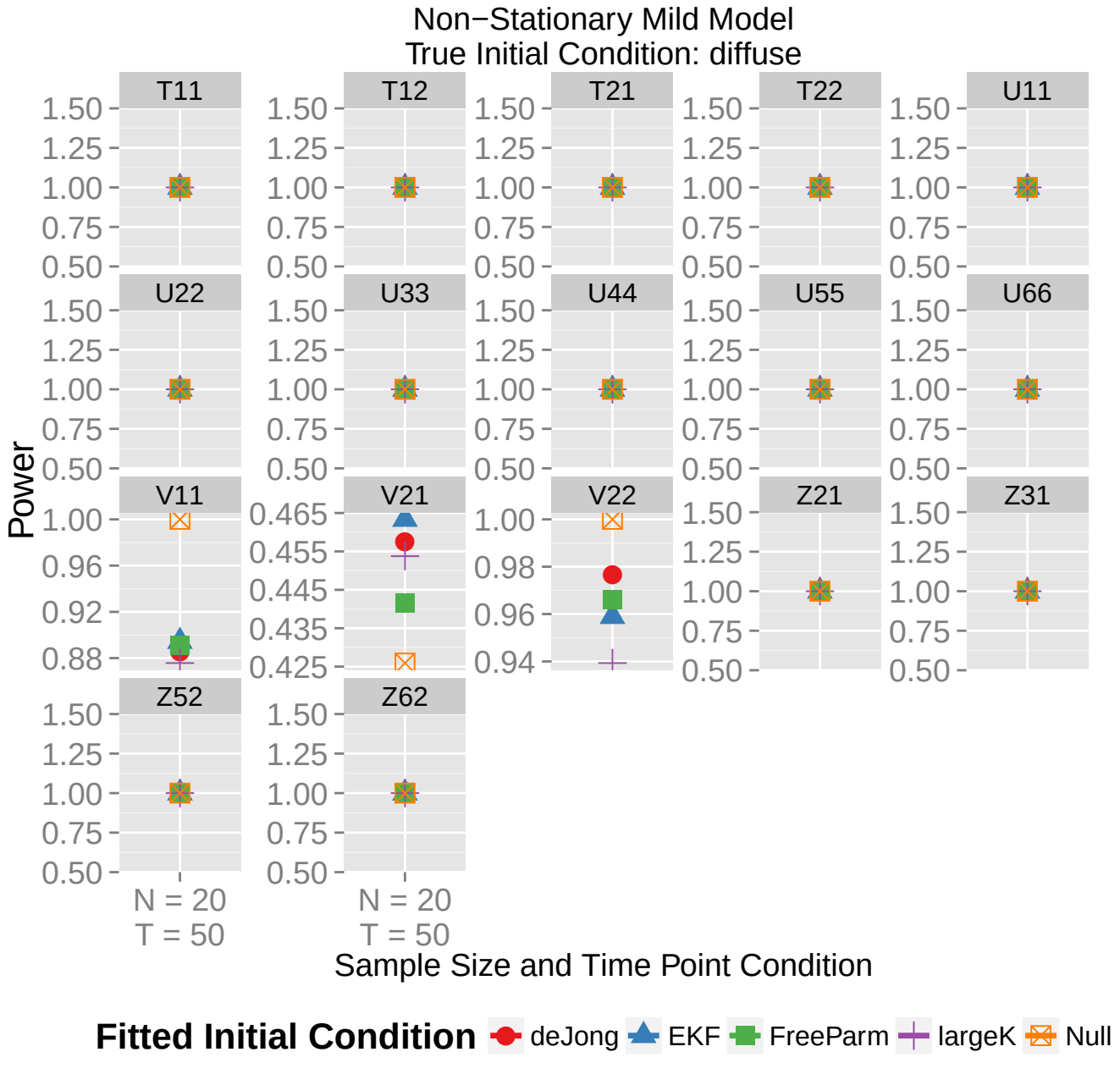
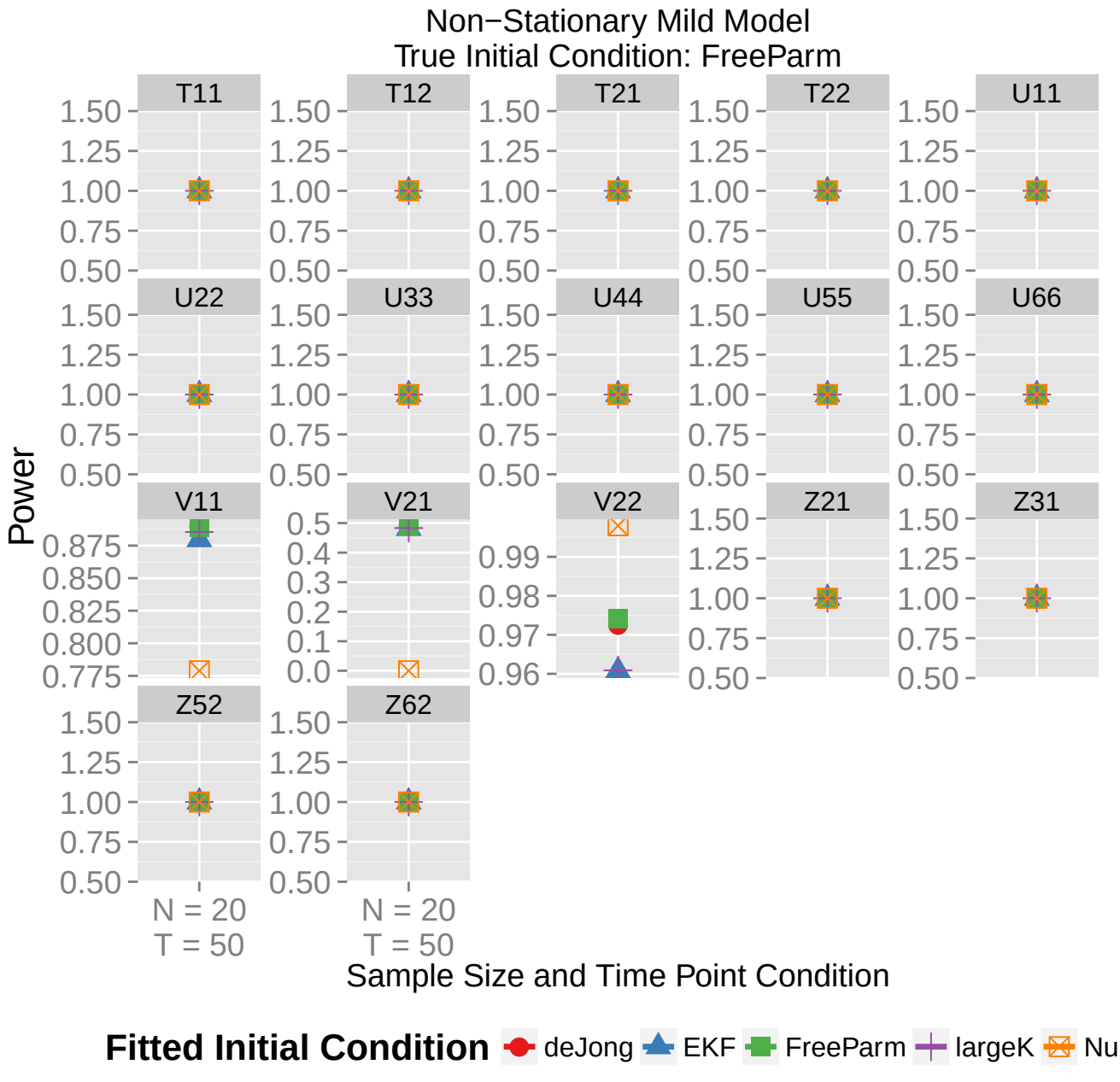
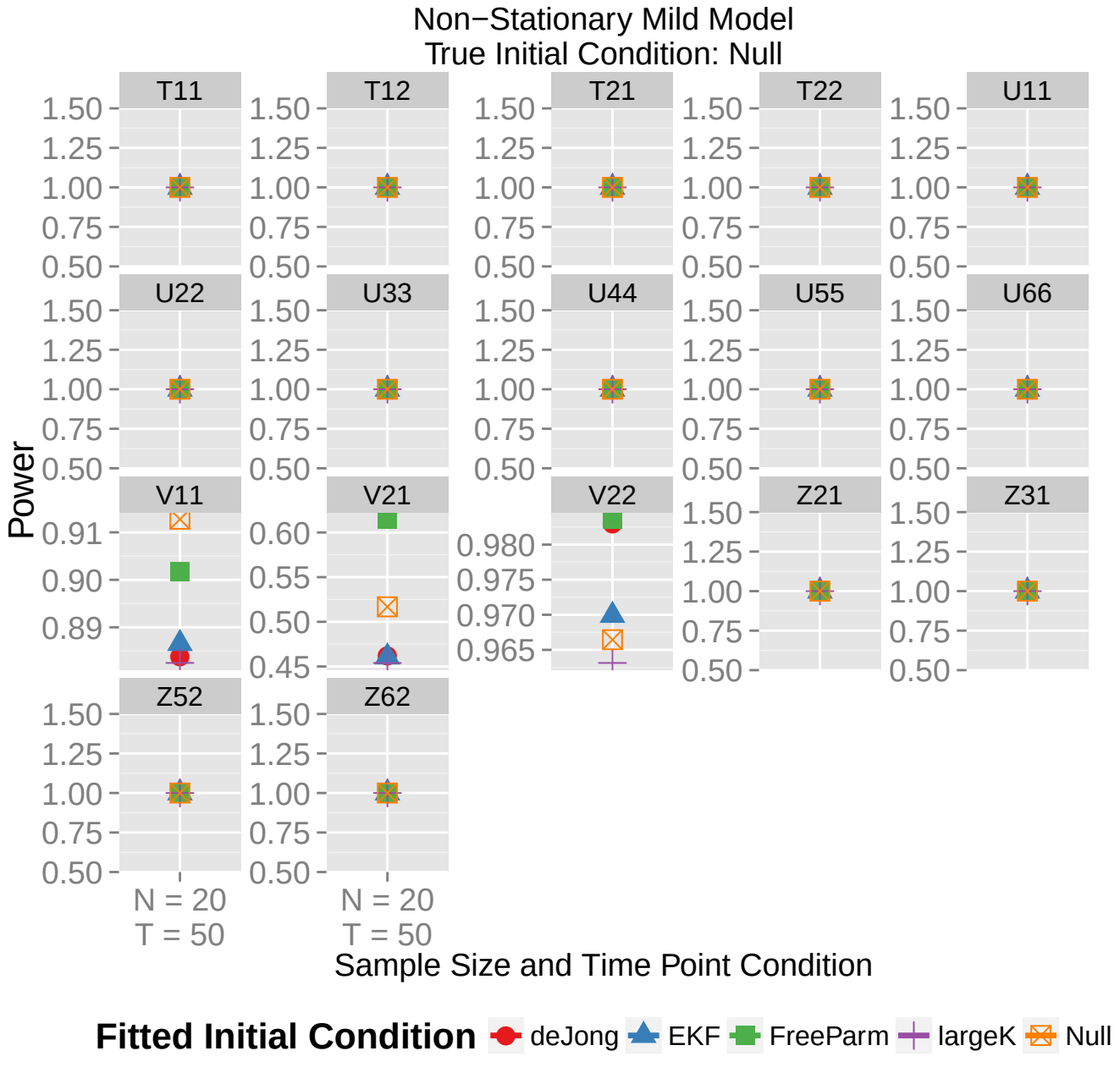
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Mild Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Mild Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Mild Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.91
0.90
0.89
0.60
0.55
0.50
0.45
0.980
0.975
0.970
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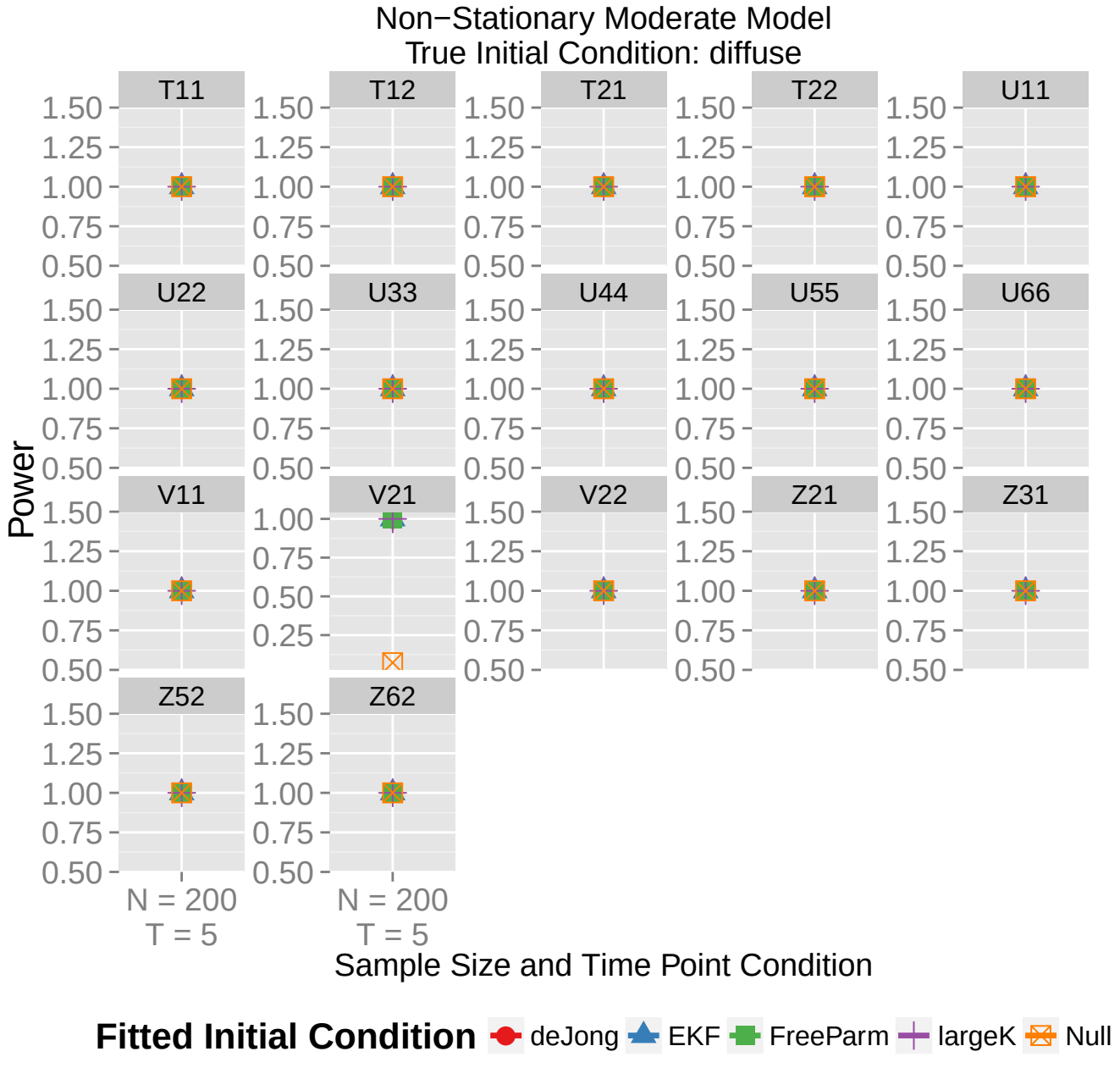
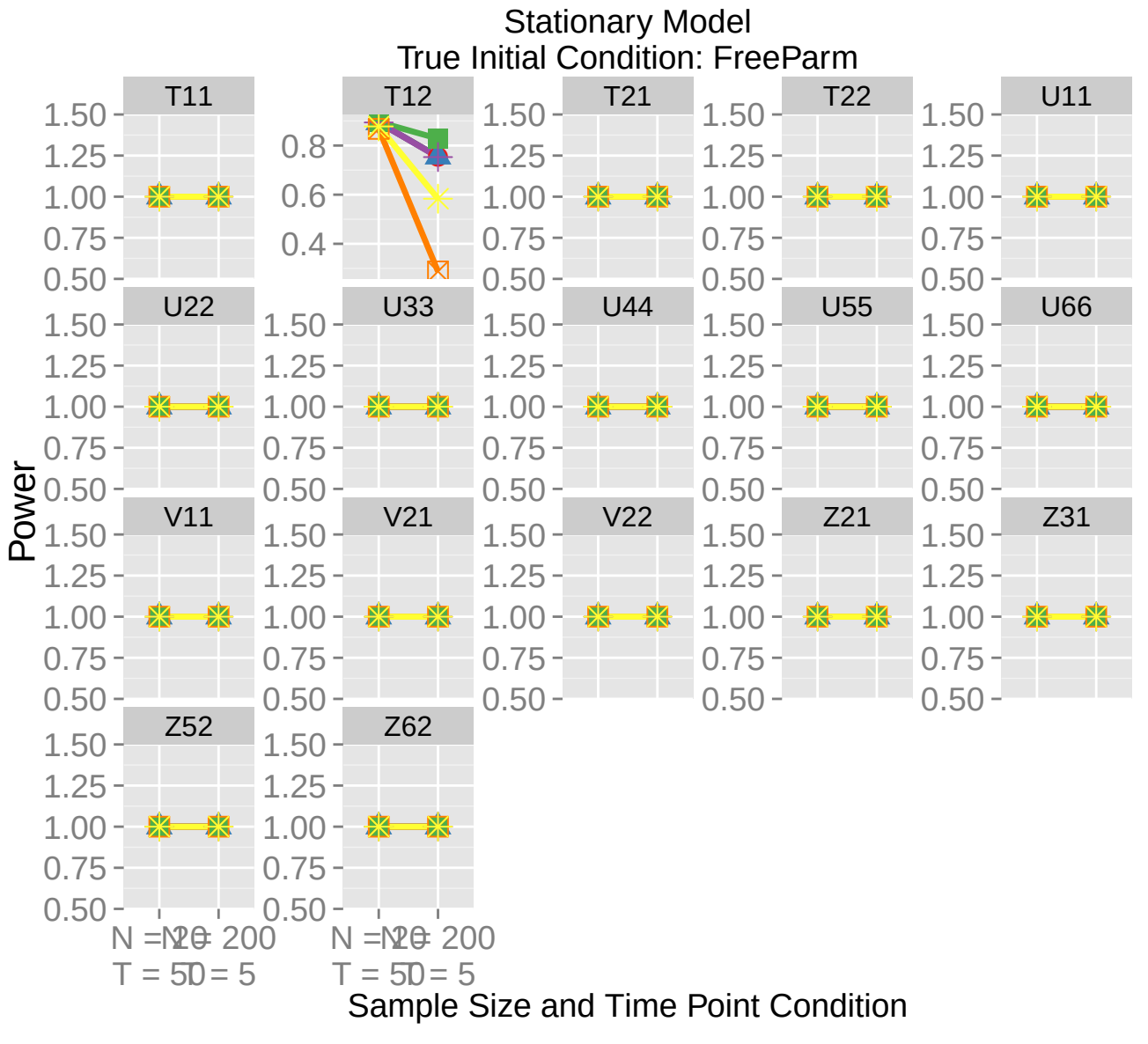
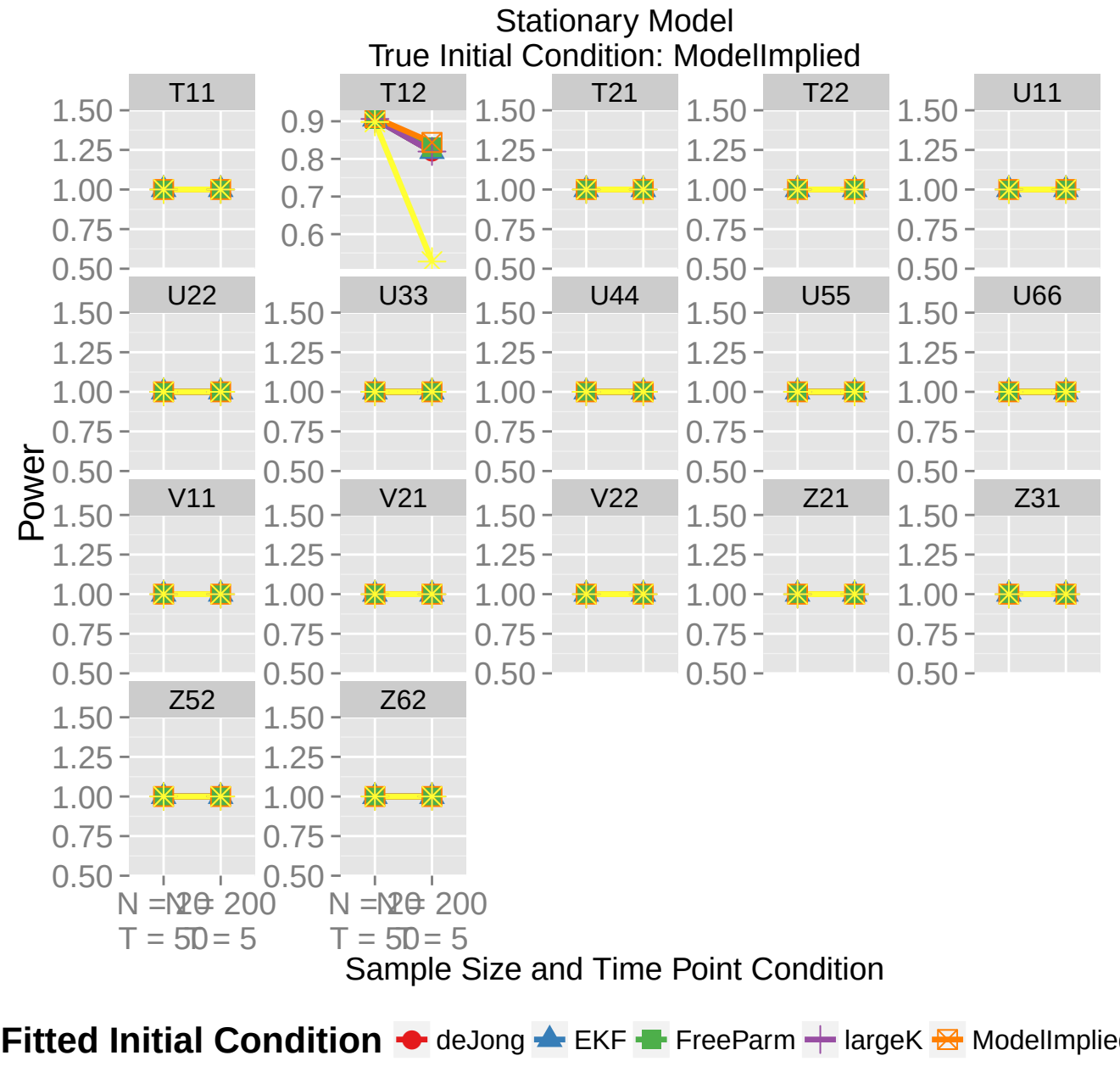
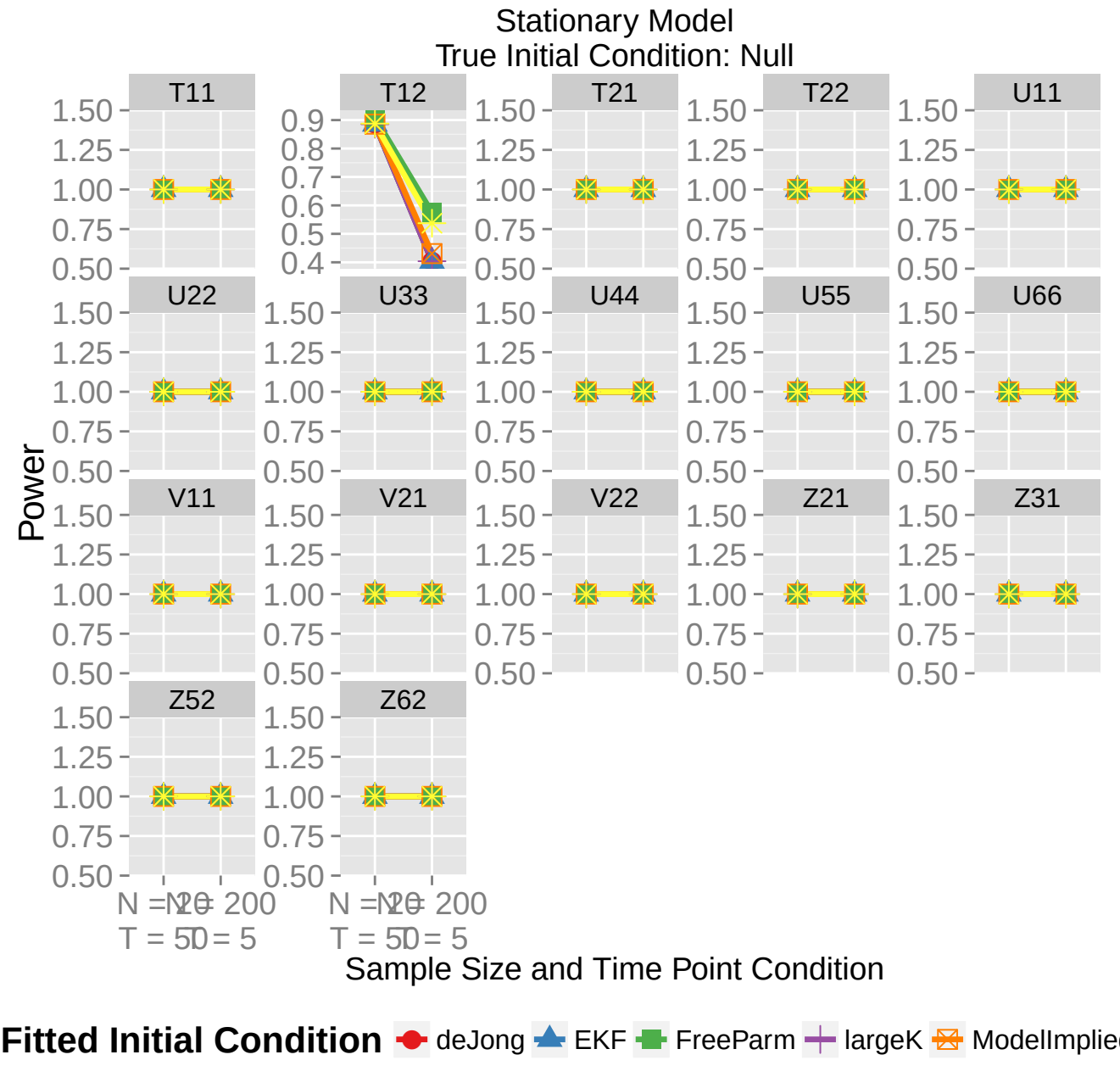
N = 20
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Non−Stationary Moderate Model
True Initial Condition: diffuse
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.25
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
Null


Stationary Model
True Initial Condition: FreeParm
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.8
0.6
0.4
N = 20
T = 5
N = 200
T = 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied


Stationary Model
True Initial Condition: ModelImplied
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.9
0.8
0.7
0.6
N = 100
T = 50
N = 200
T = 50
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied


Stationary Model
True Initial Condition: Null
T11
T12
T21
T22
U11
U22
U33
U44
U55
U66
V11
V21
V22
Z21
Z31
Z52
Z62
Power
1.50
1.25
1.00
0.75
0.50
0.9
0.8
0.7
0.6
0.5
0.4
N = 100 200
T = 5 5
Sample Size and Time Point Condition
Fitted Initial Condition
deJong
EKF
FreeParm
largeK
ModelImplied