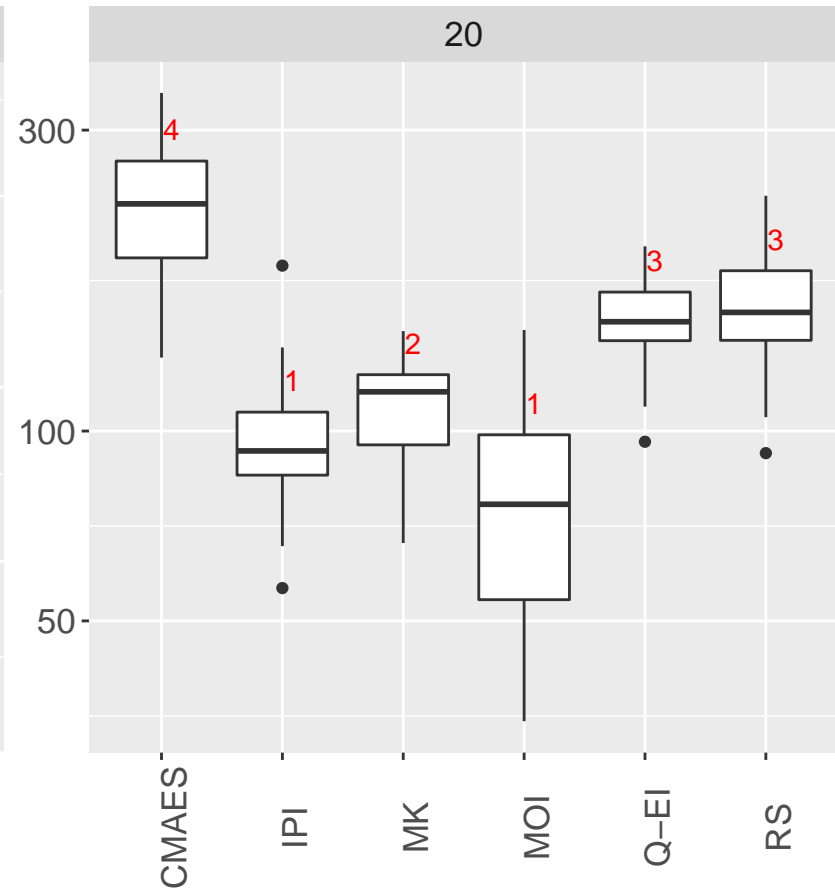
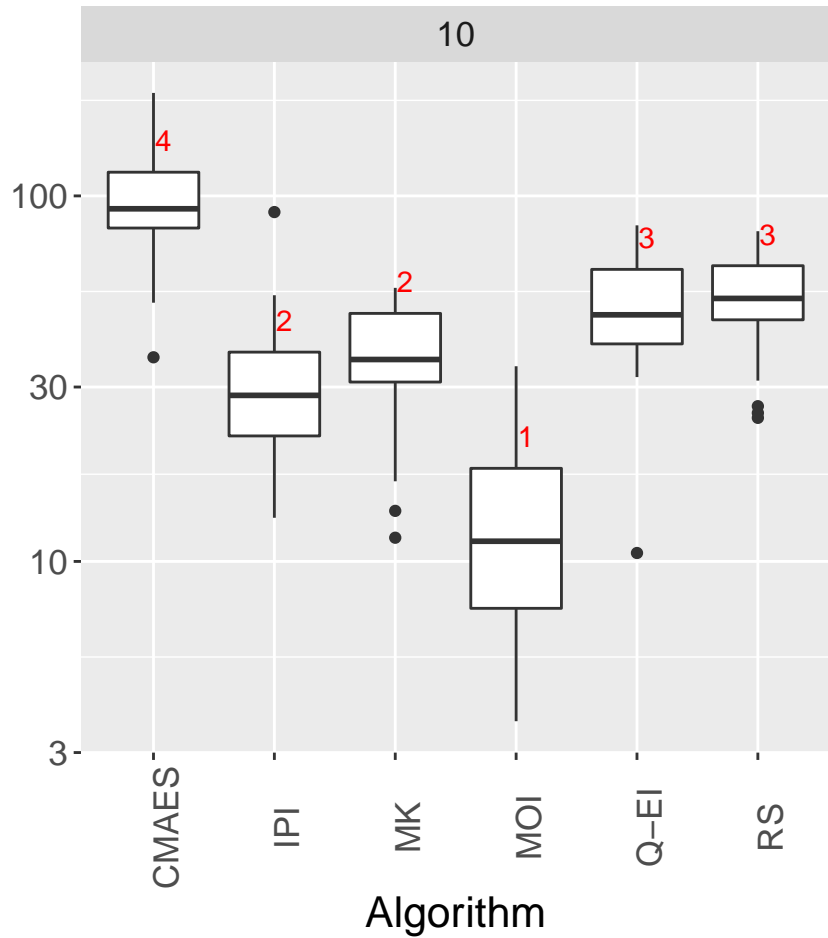
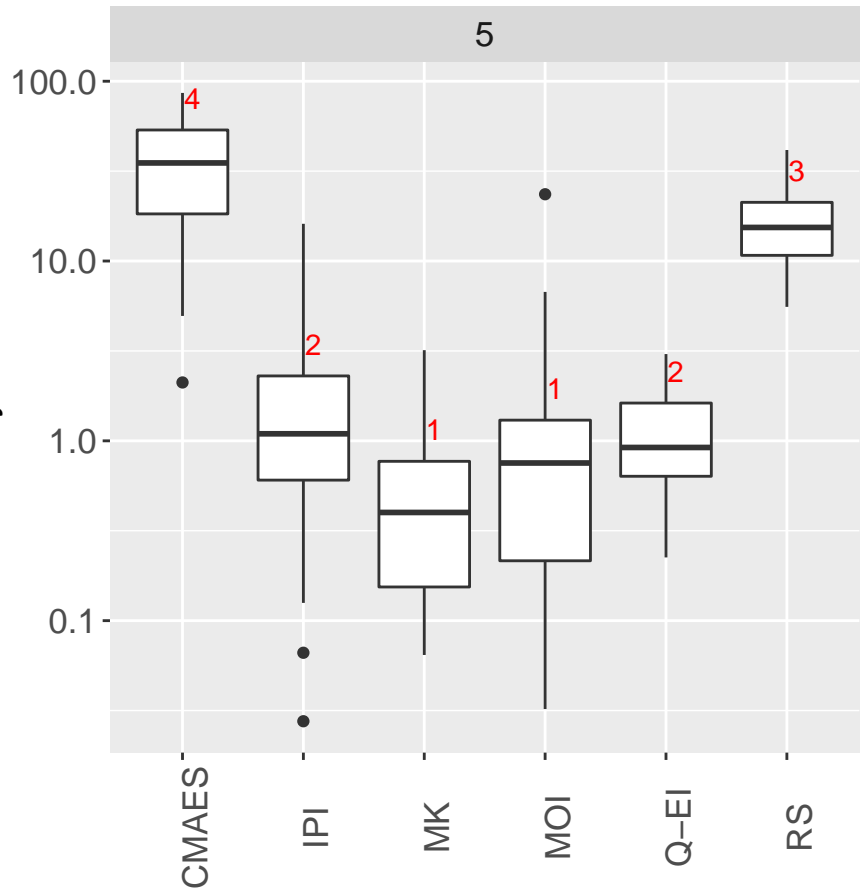
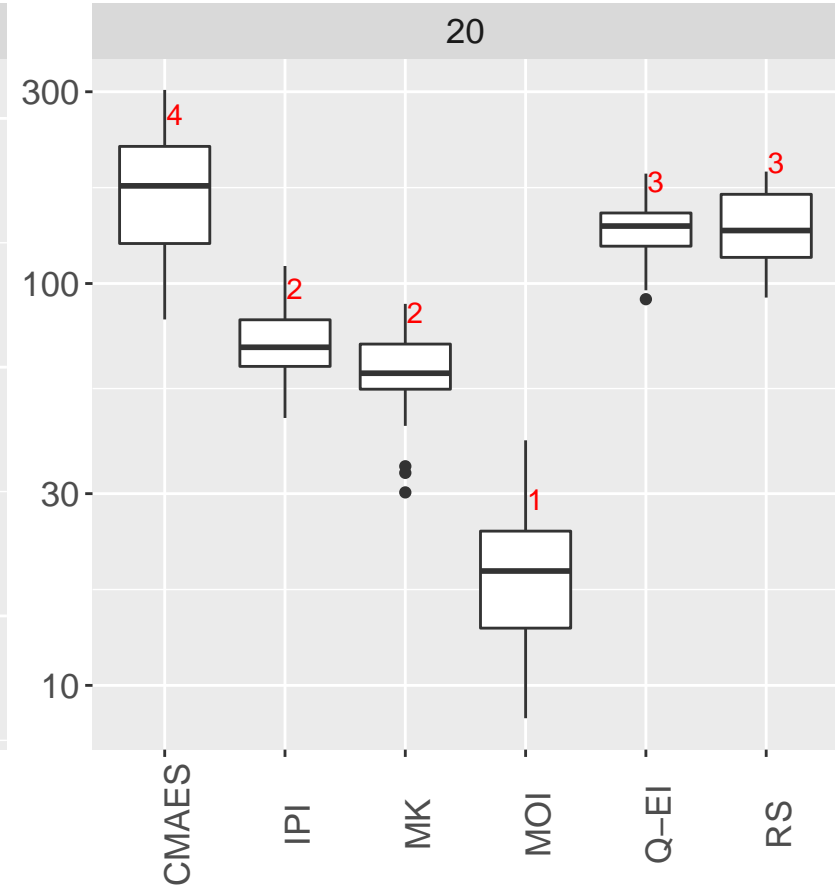
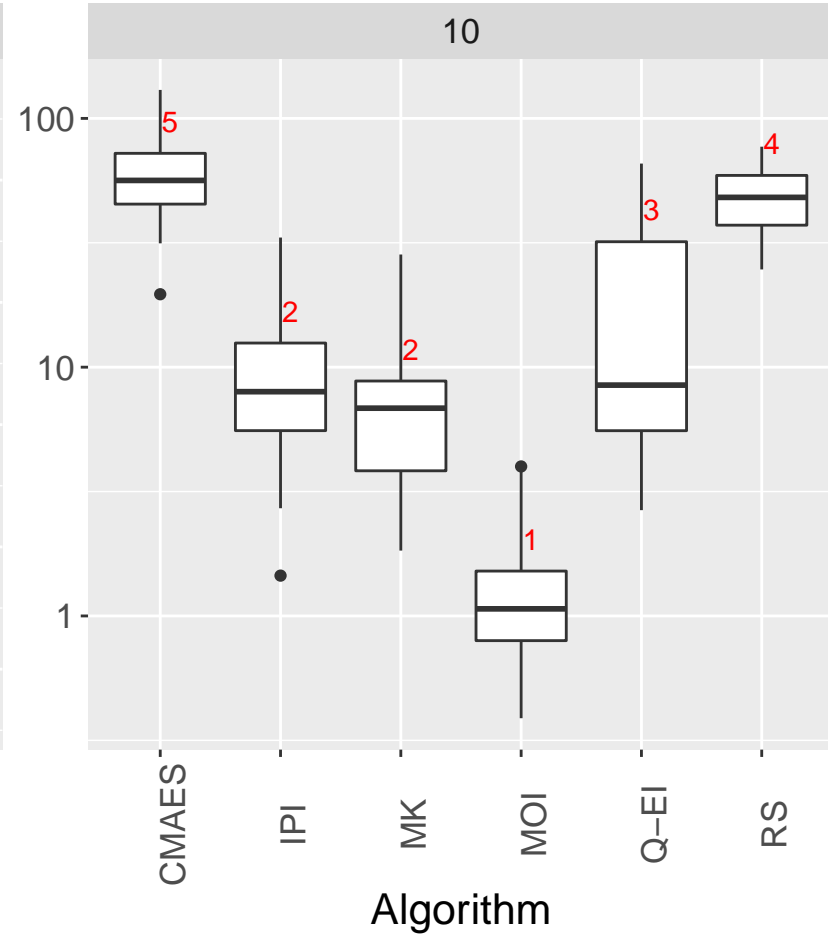
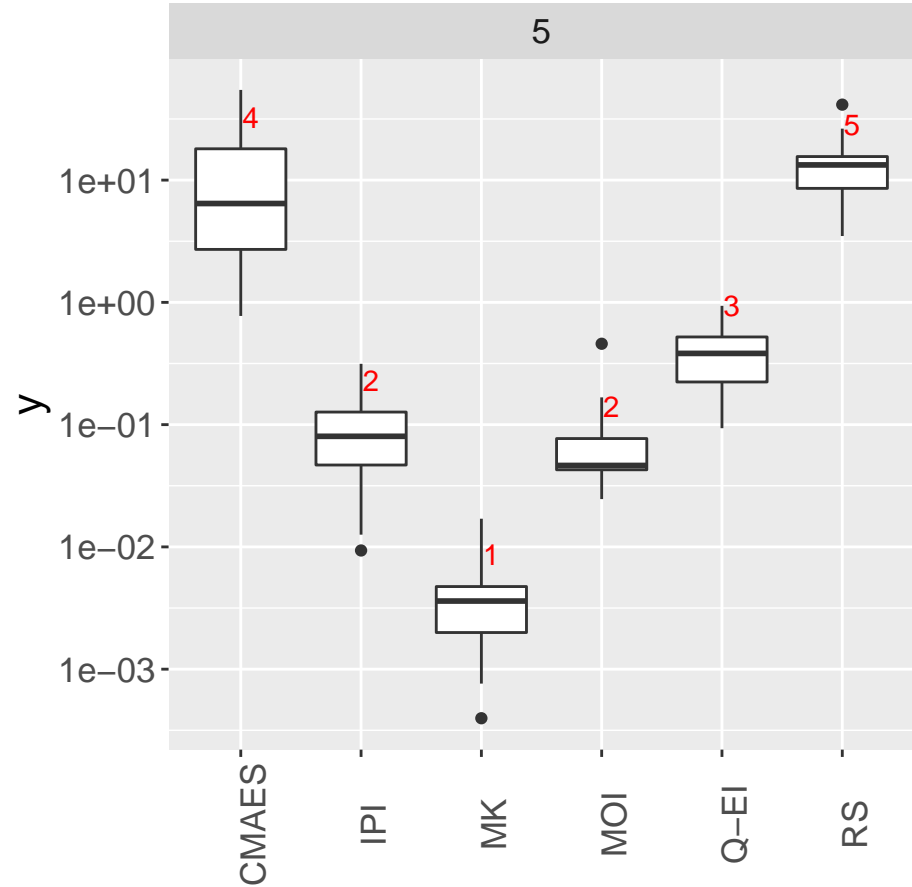


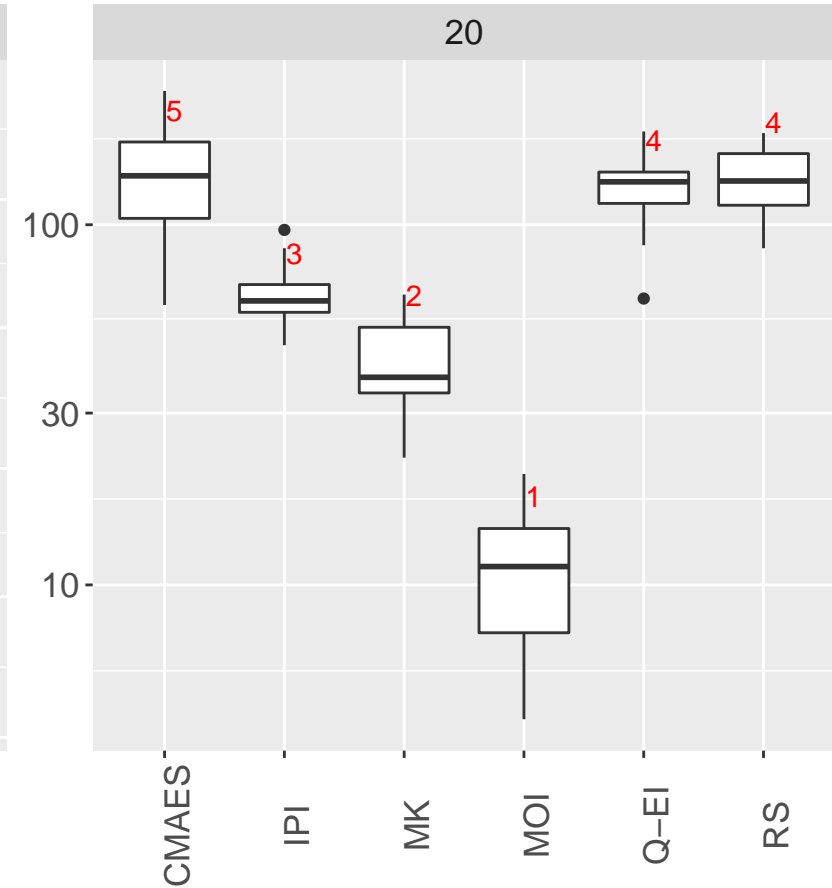
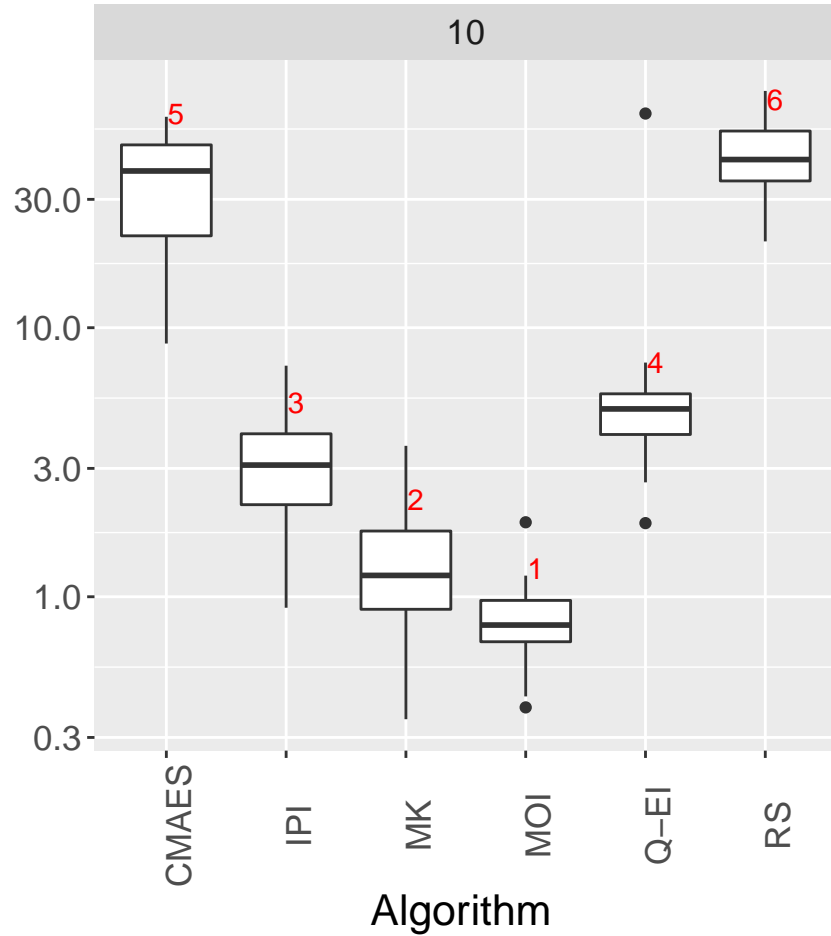
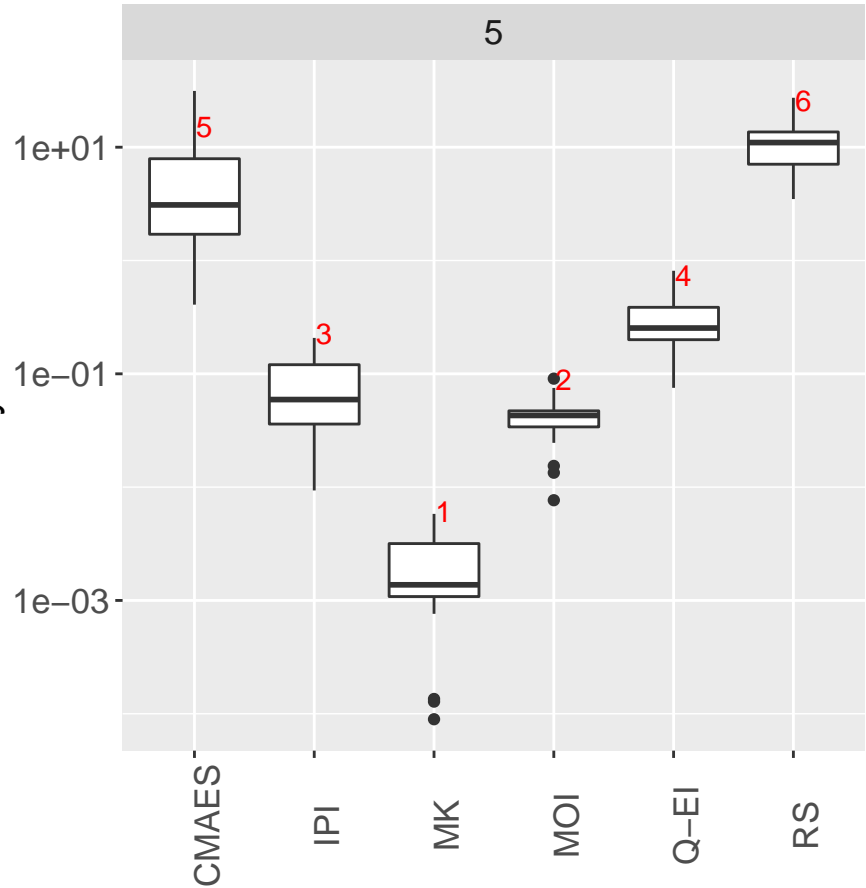
Sphere
Evaluation: 25
y



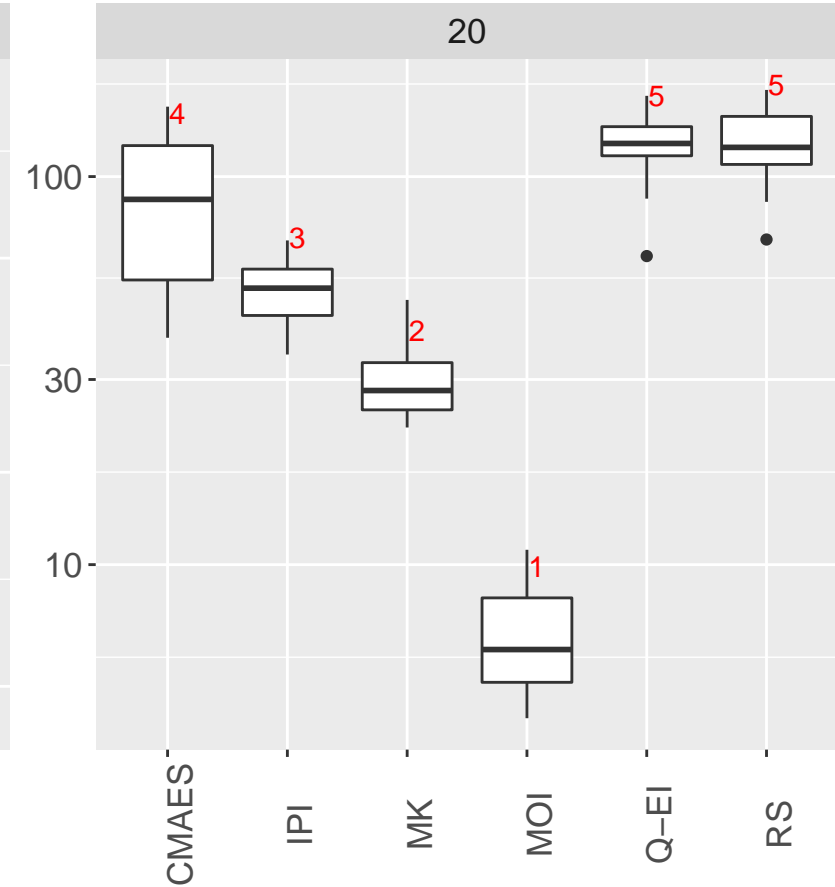
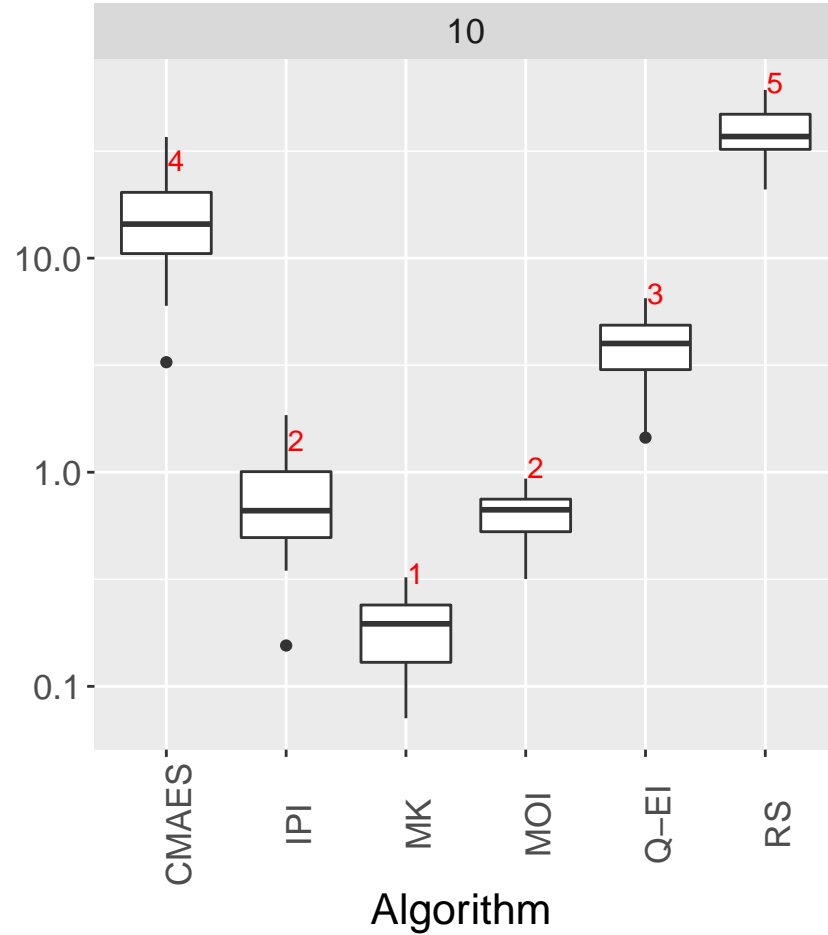
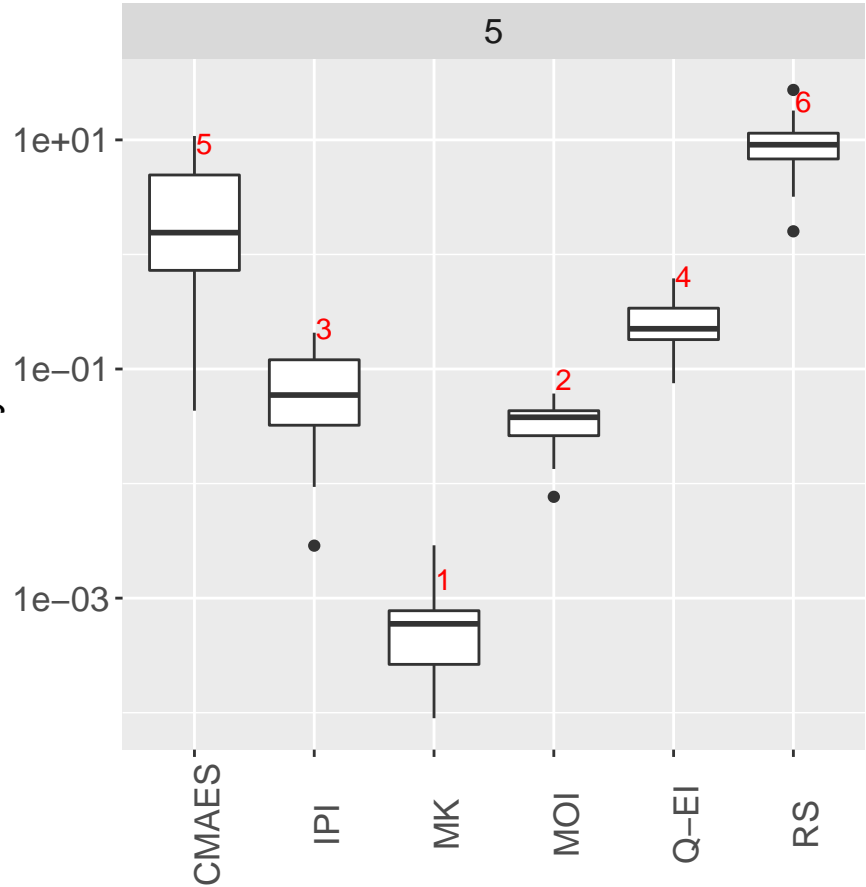
Sphere
Evaluation: 50



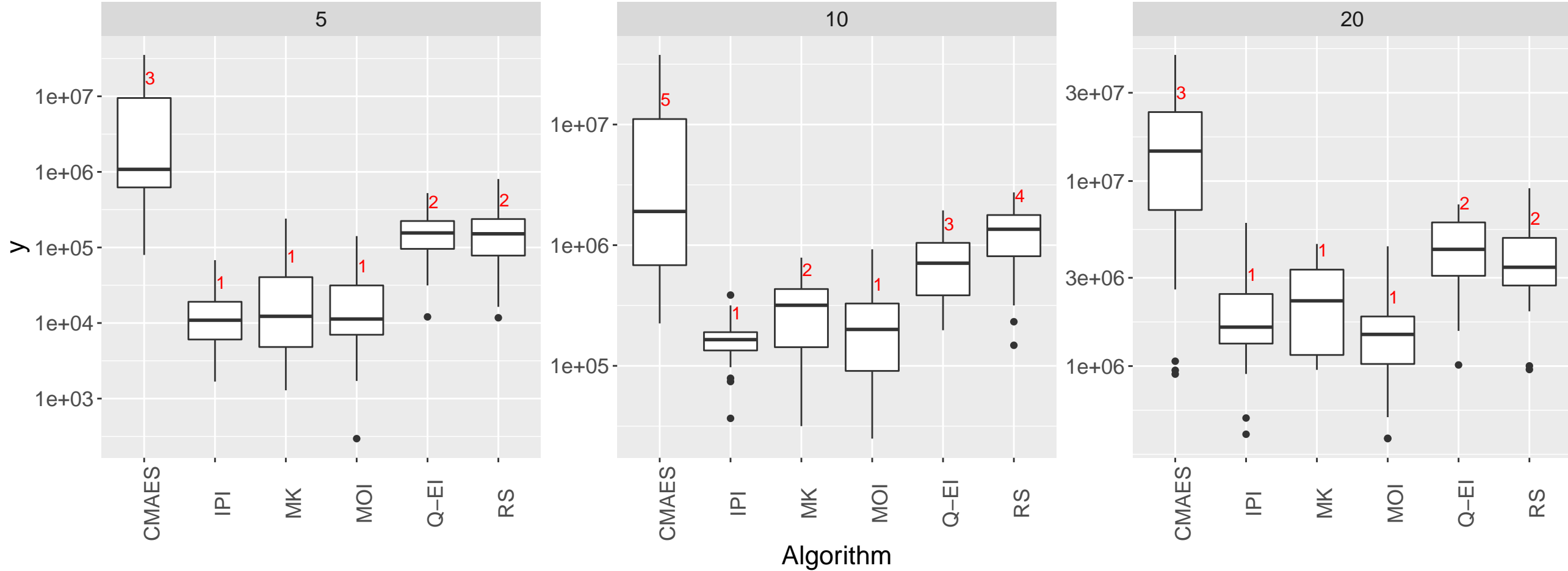
Sphere
Evaluation: 70



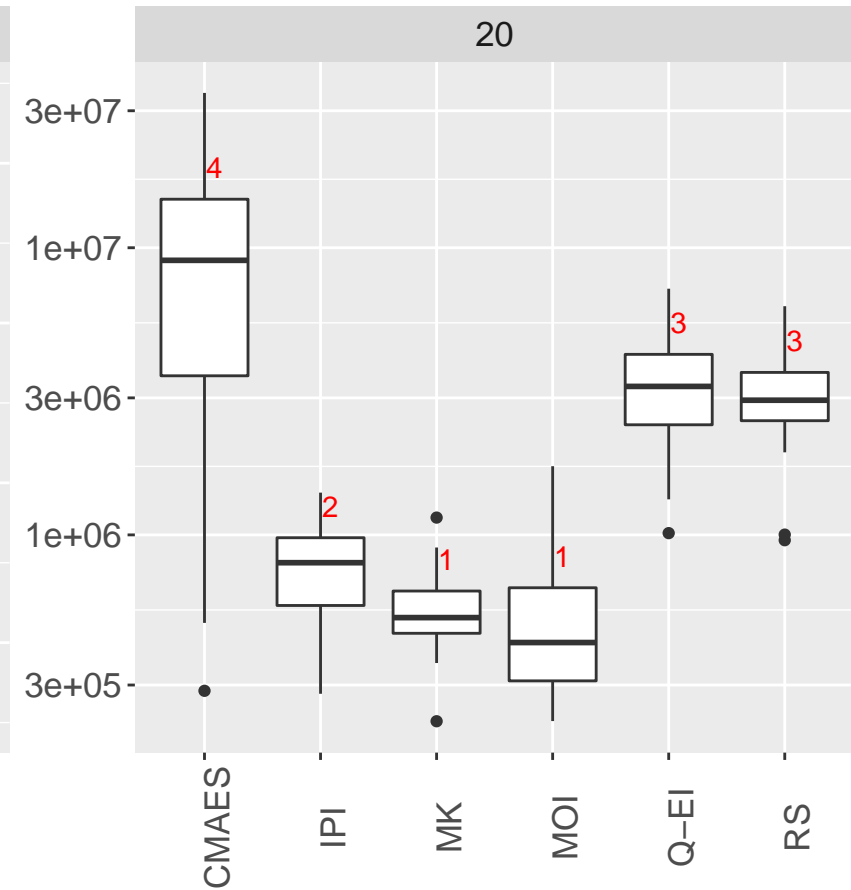
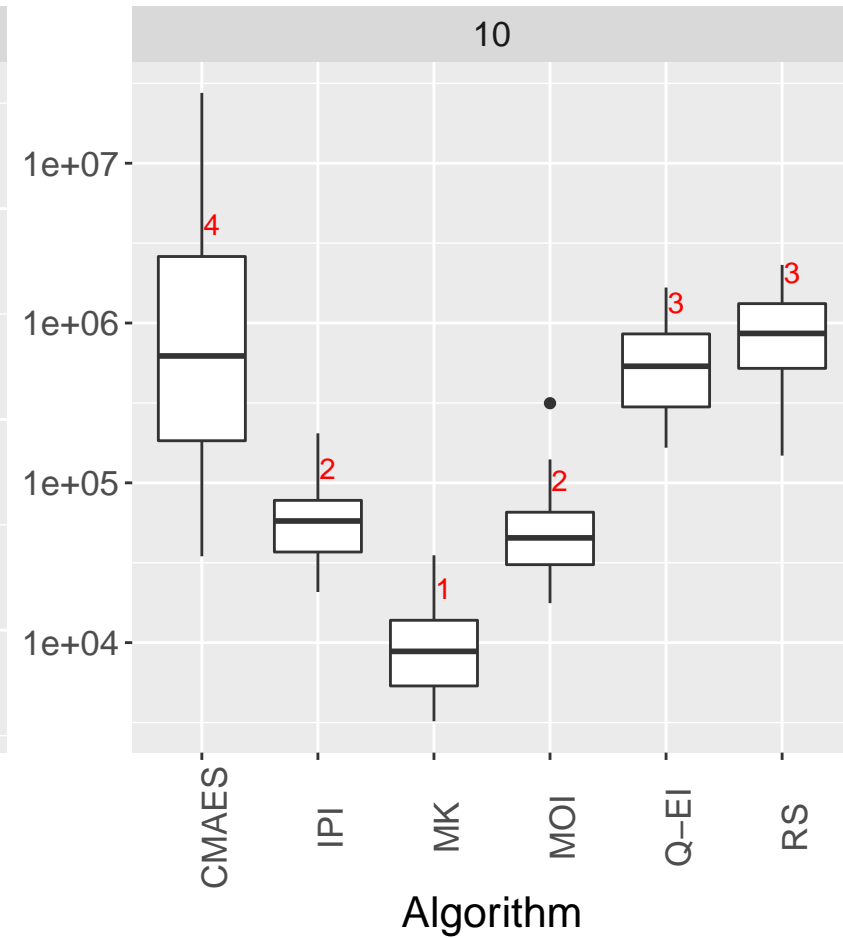
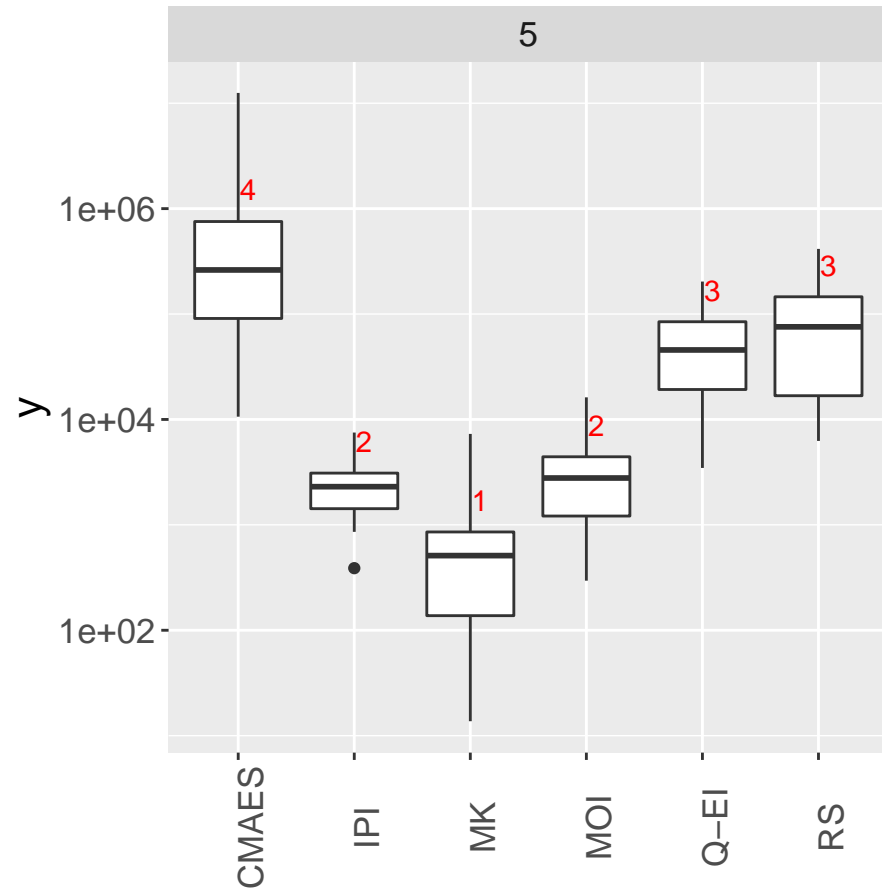
Sphere
Evaluation: 100
y



Ellipsoidal
Evaluation: 25

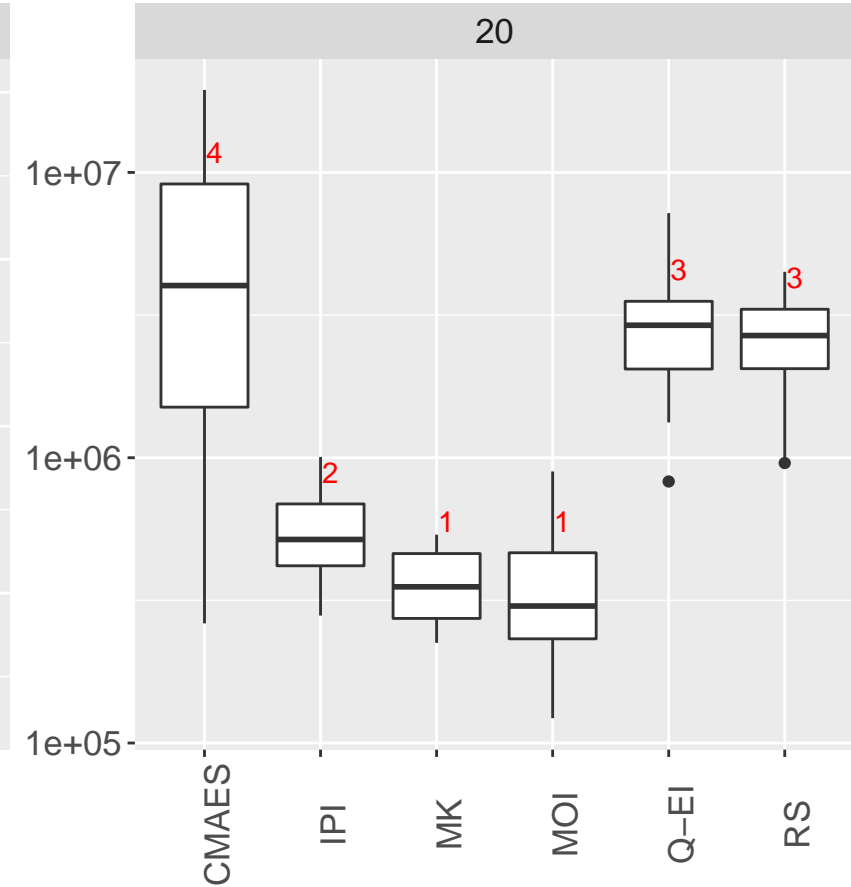
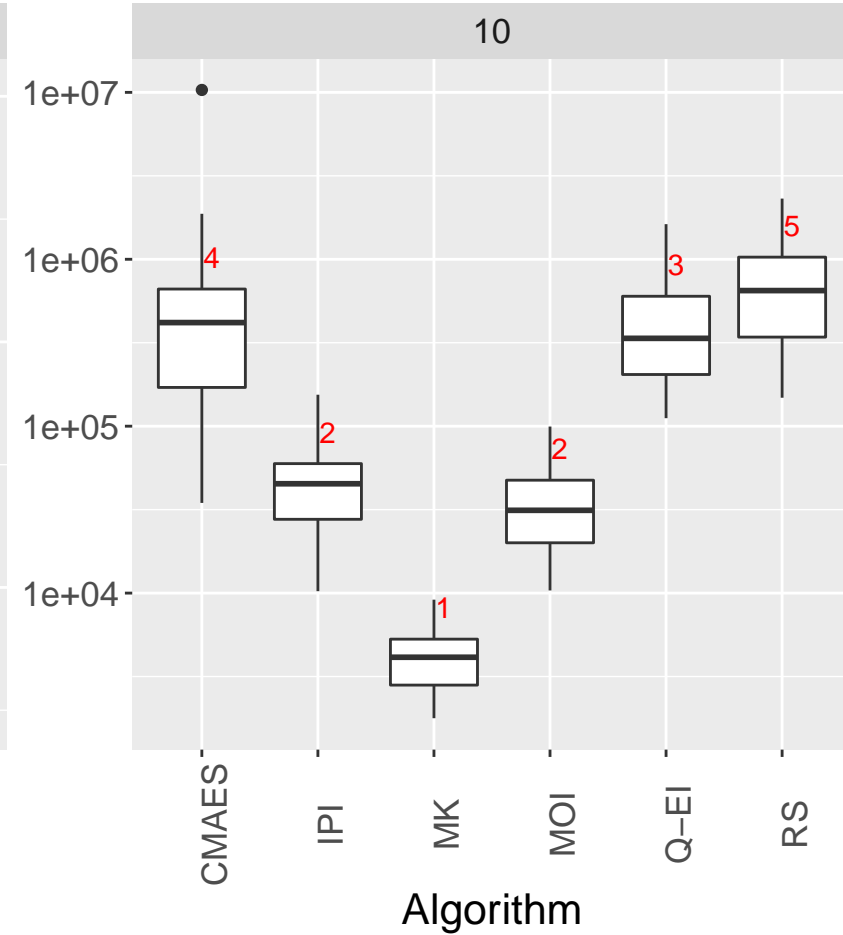
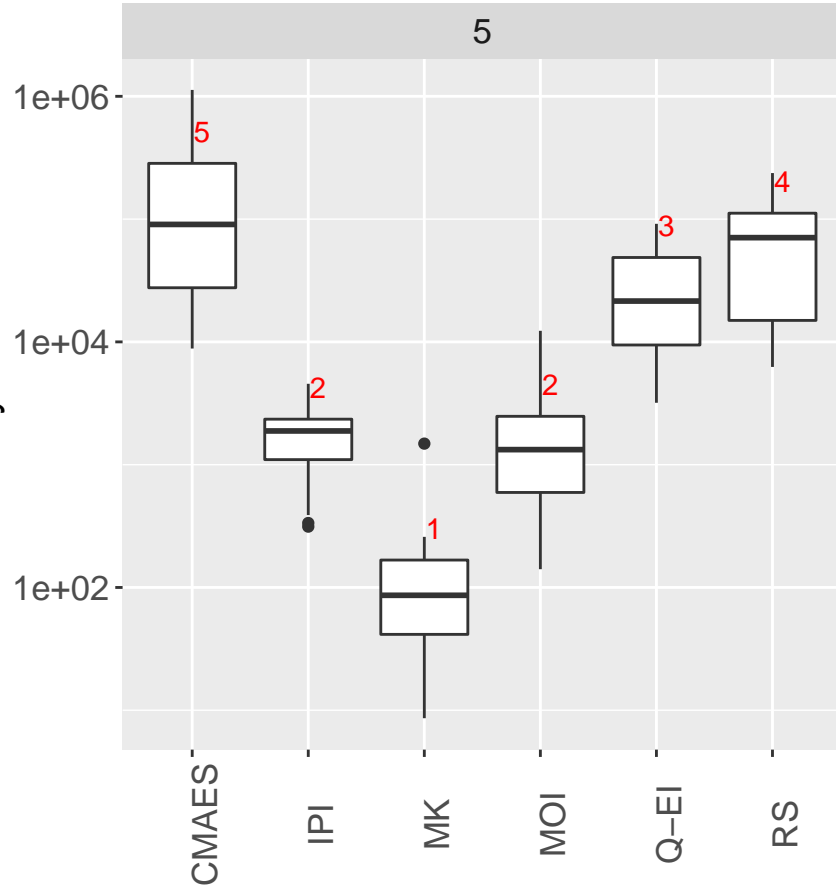


Ellipsoidal
Evaluation: 50



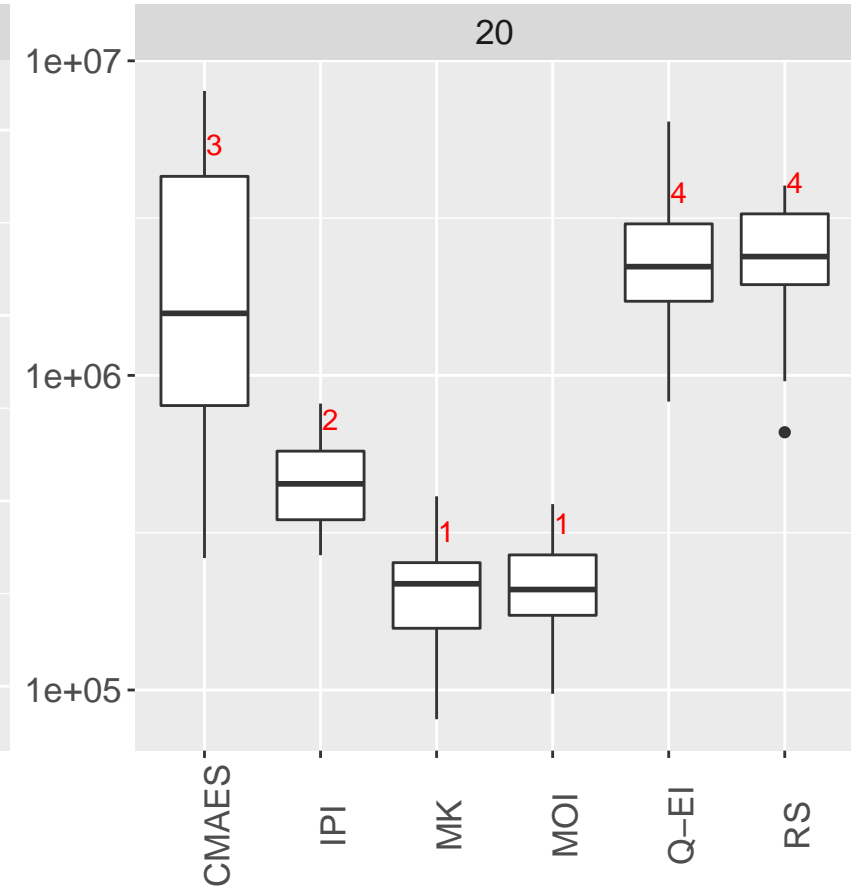
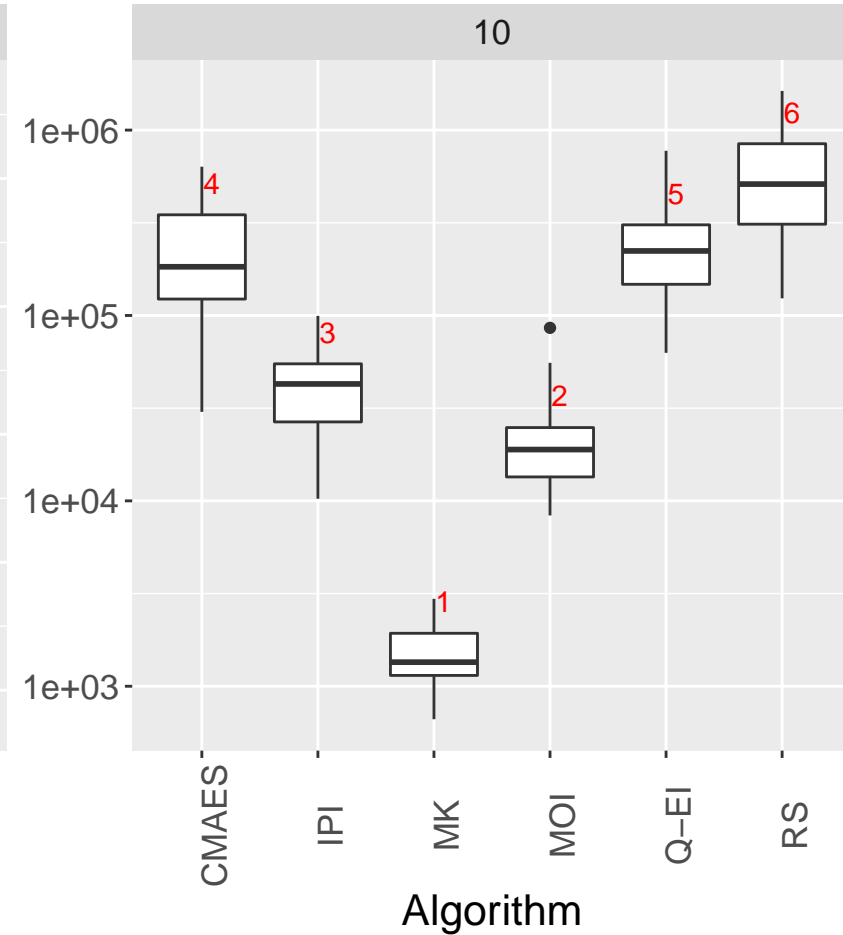
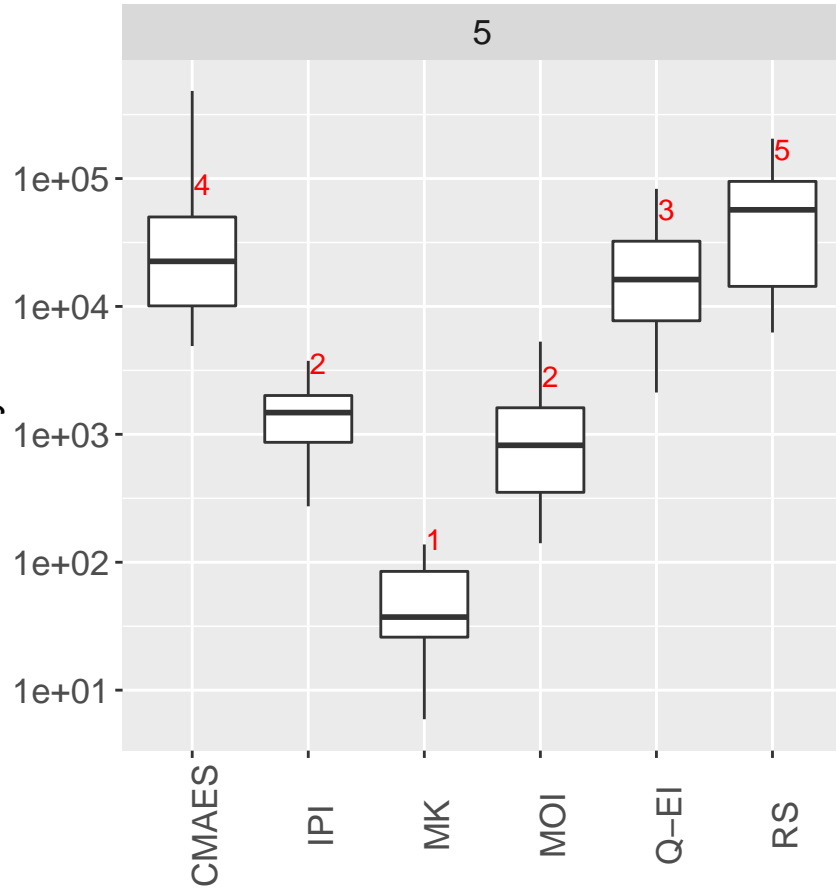
Ellipsoidal
Evaluation: 70

y

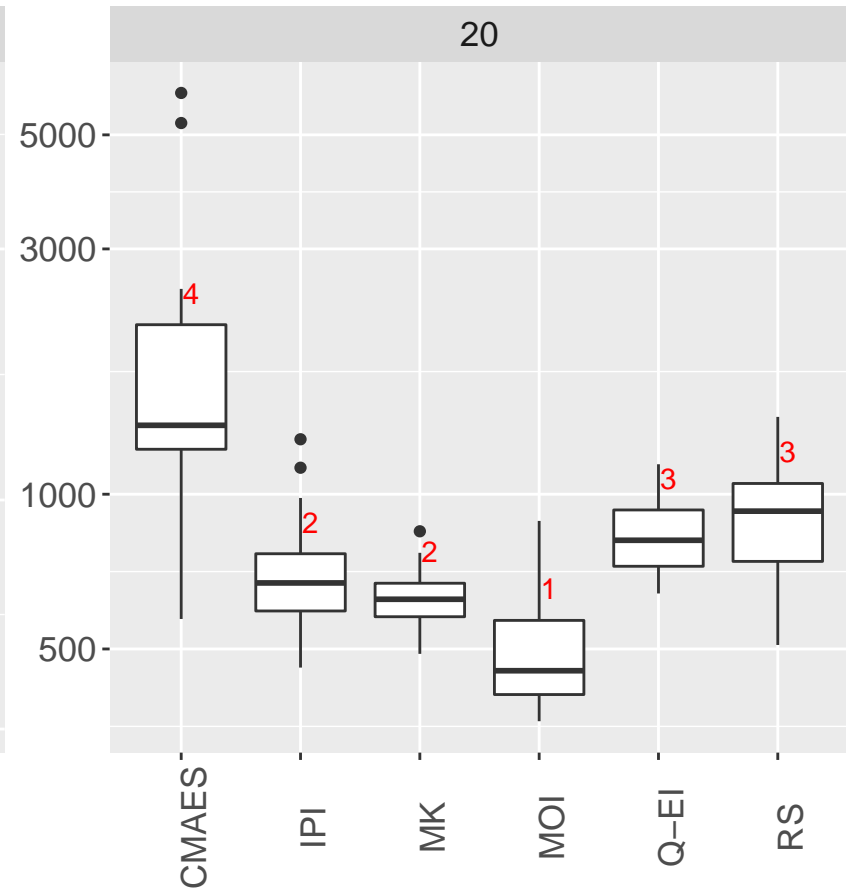
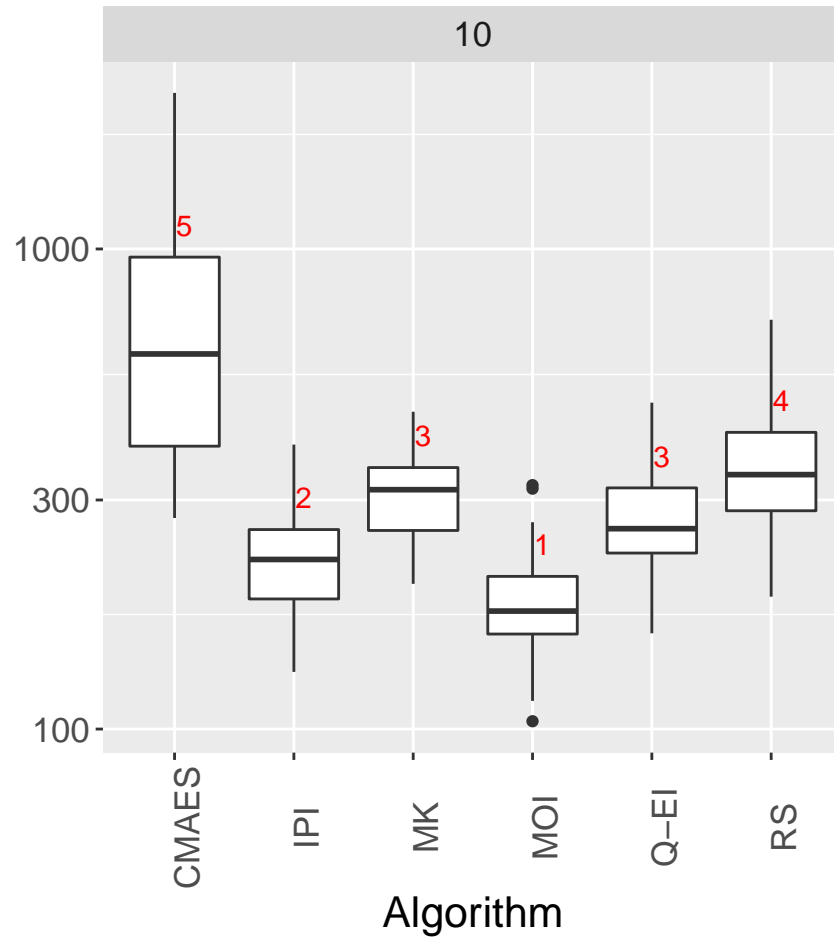
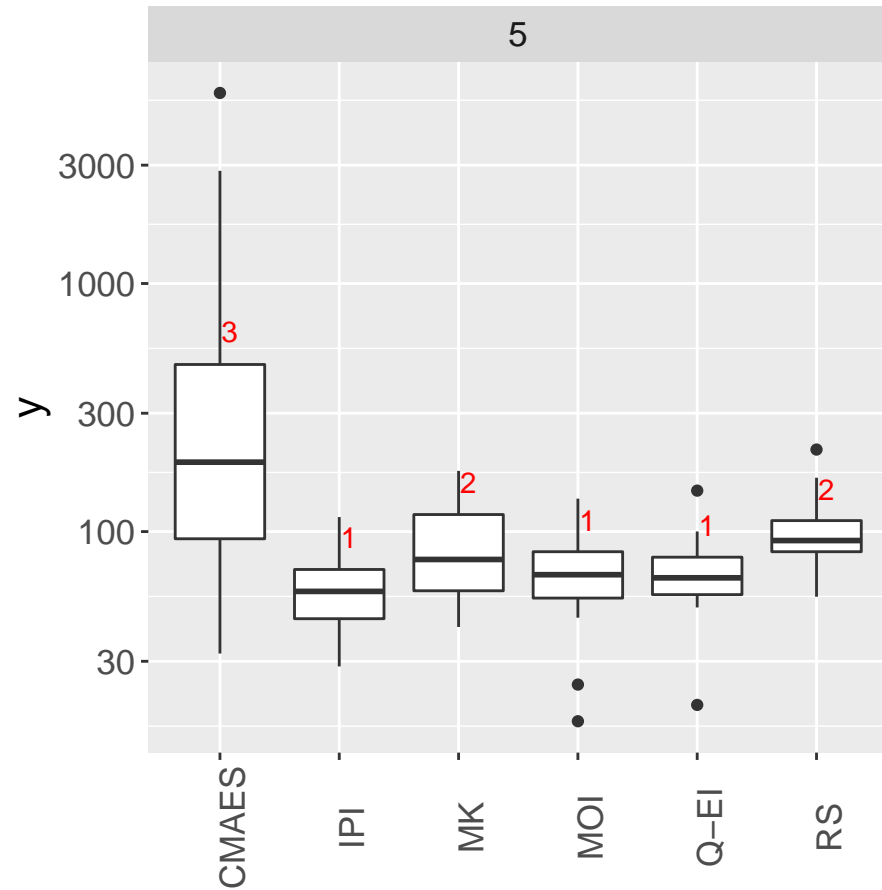


Ellipsoidal
Evaluation: 100

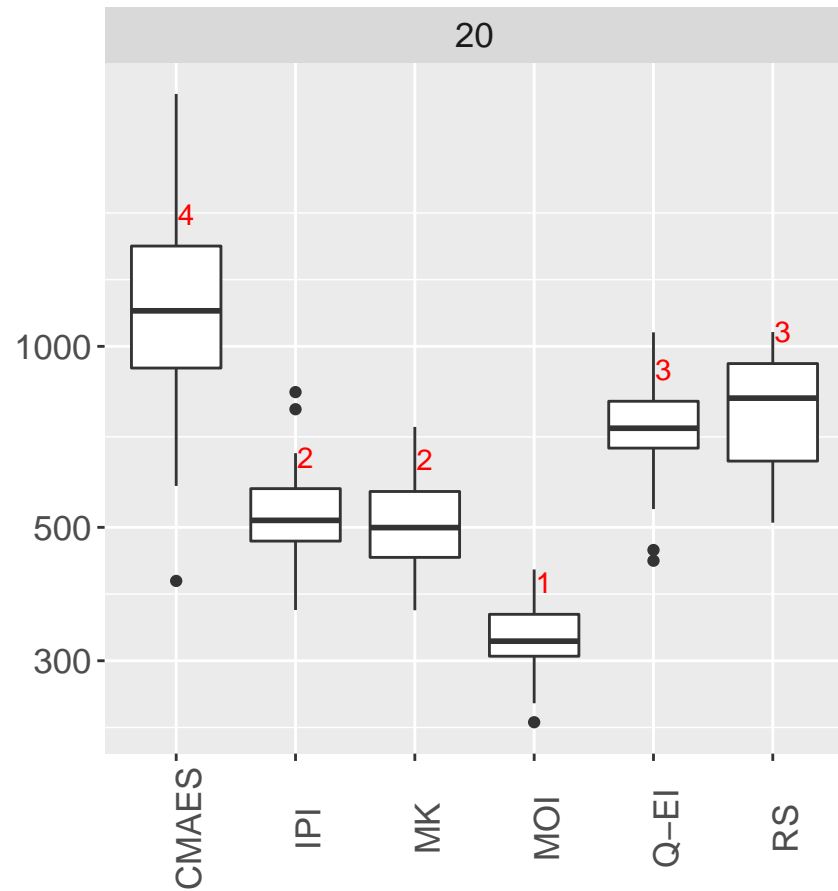
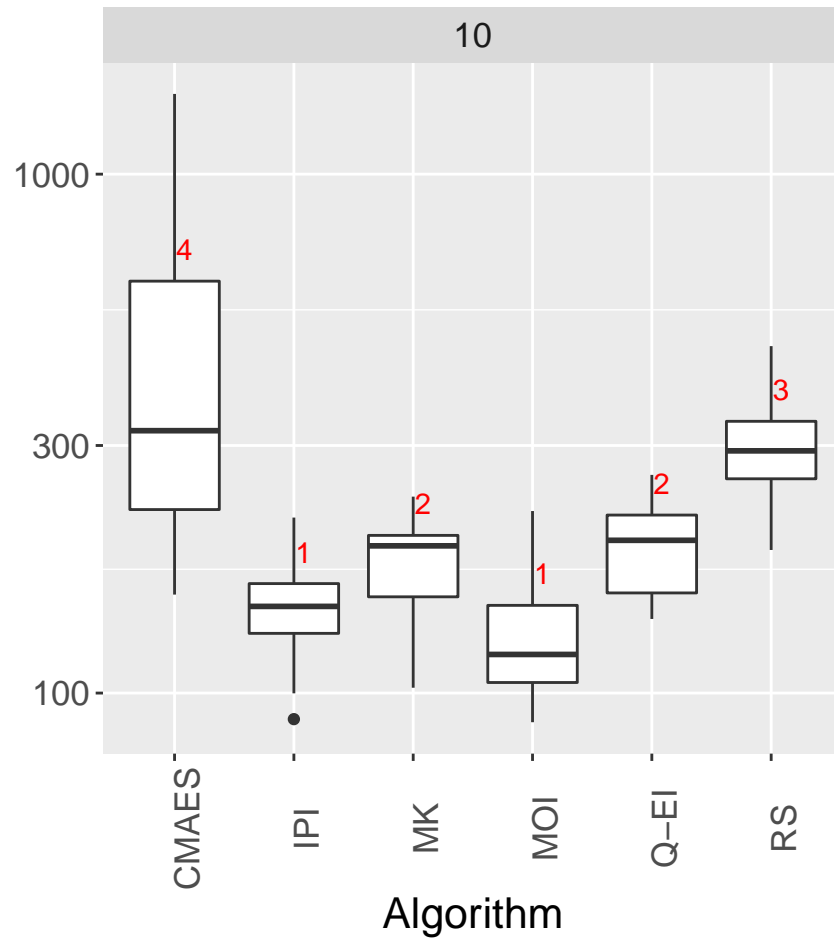
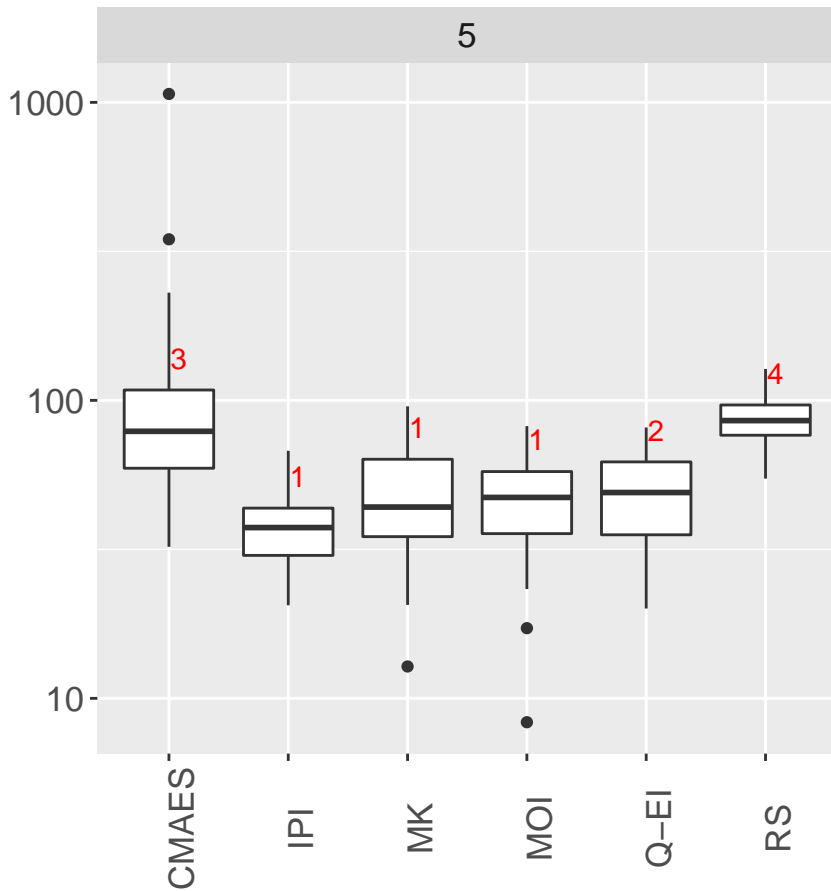
y

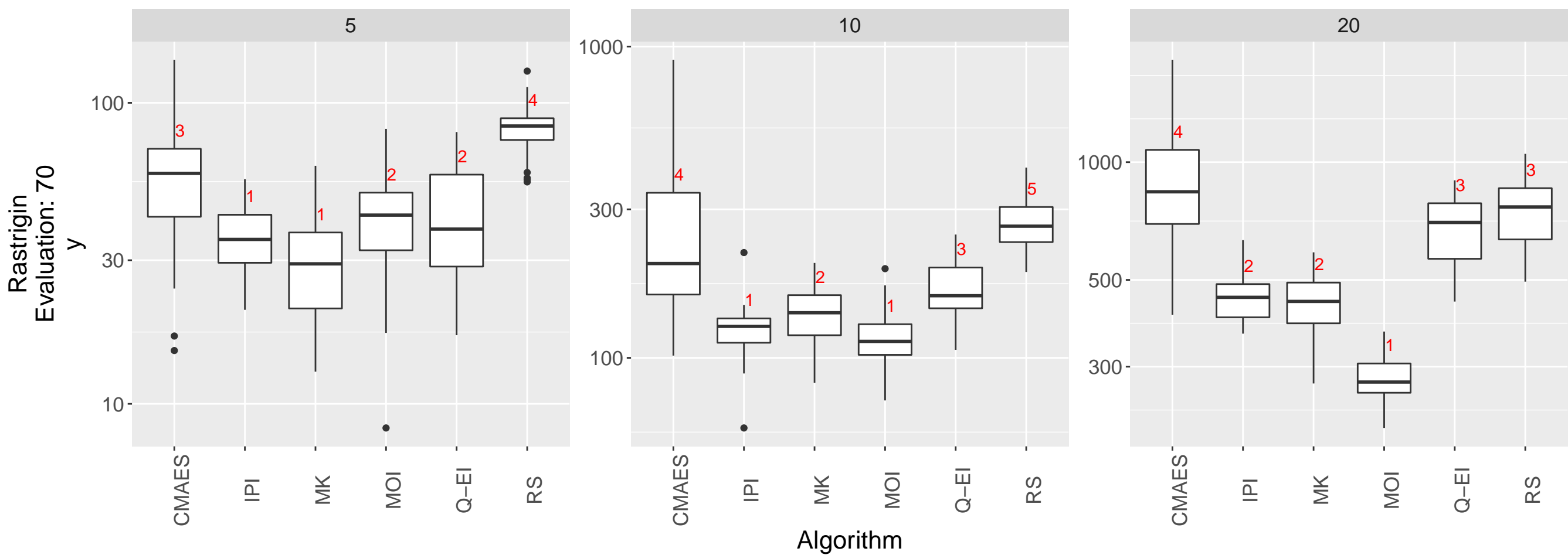


Rastrigin
Evaluation: 25



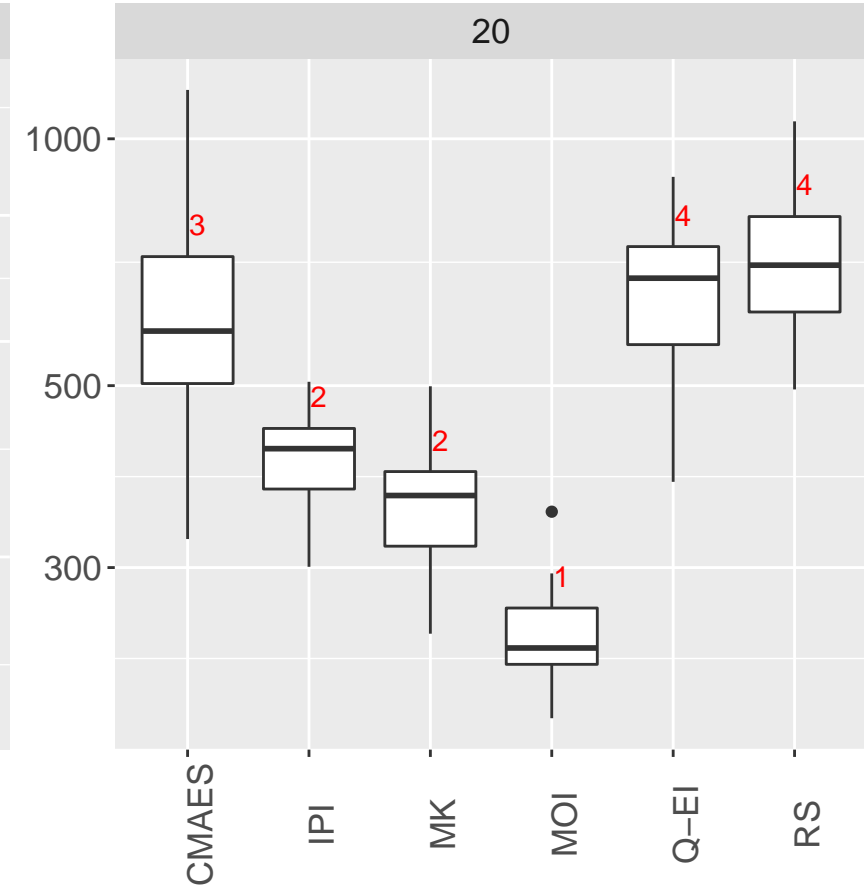
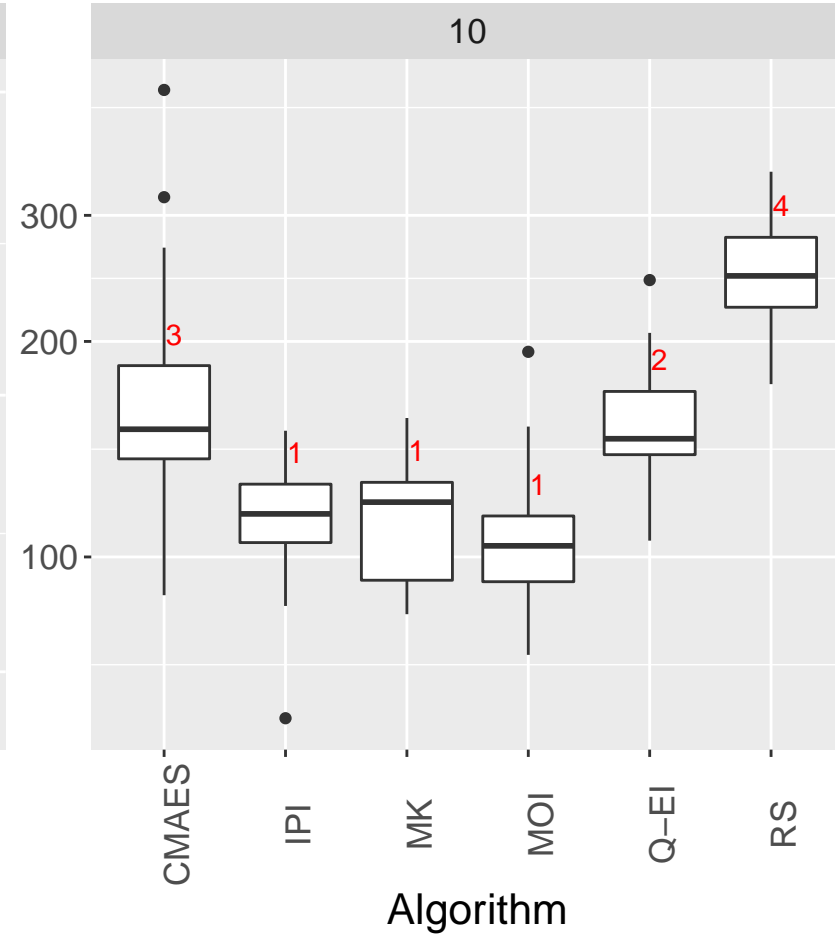
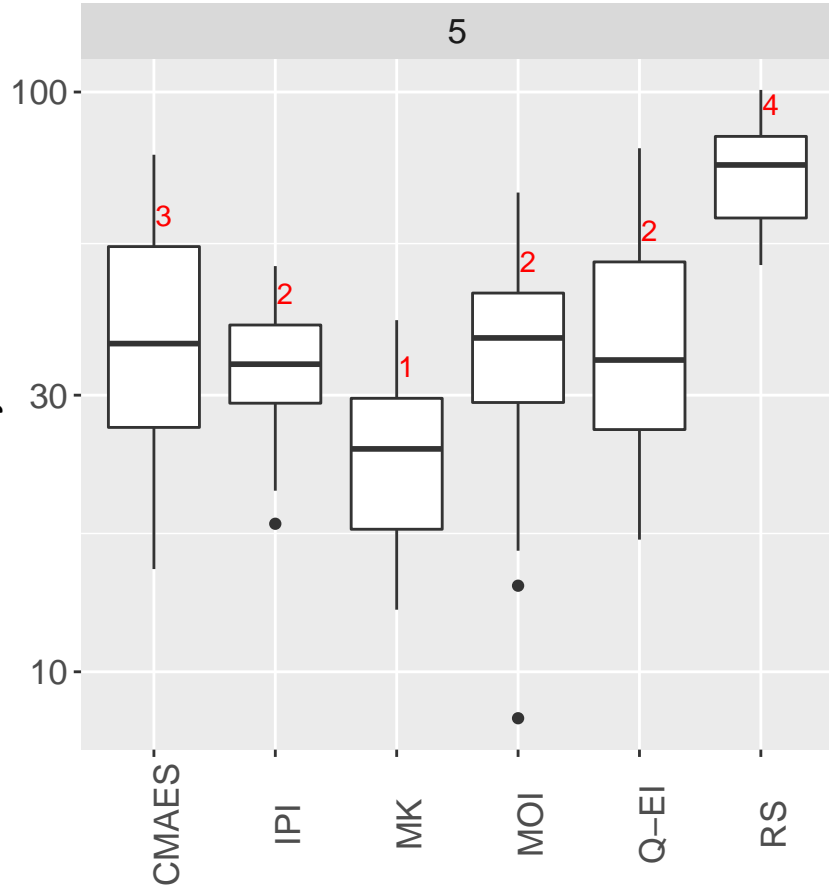
Rastrigin
Evaluation: 50



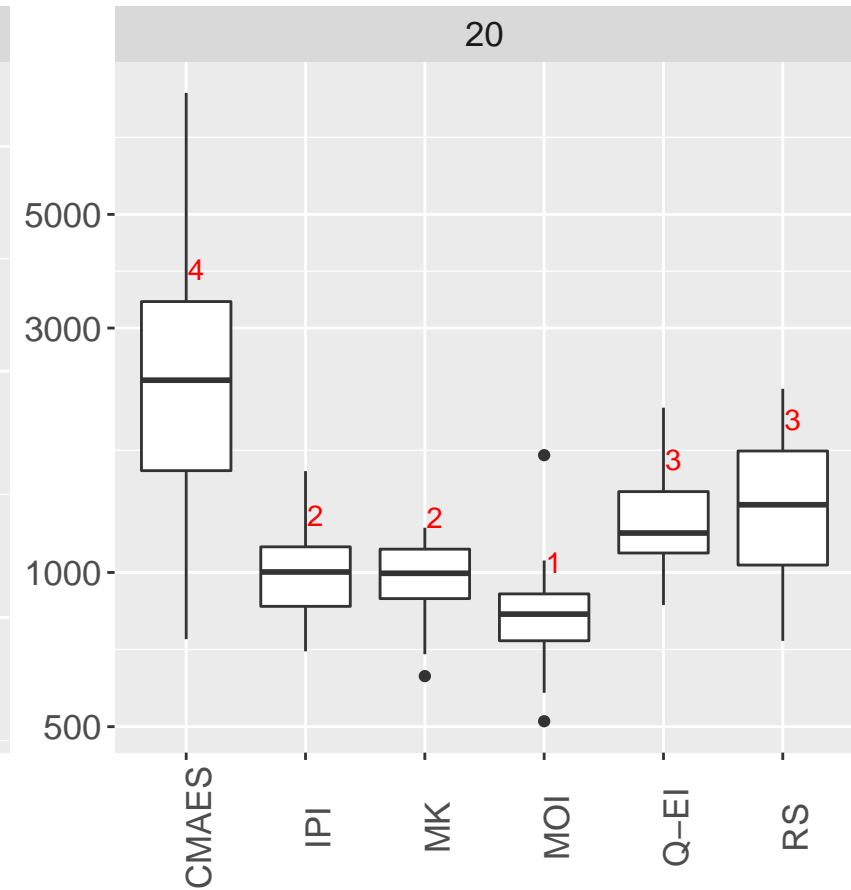
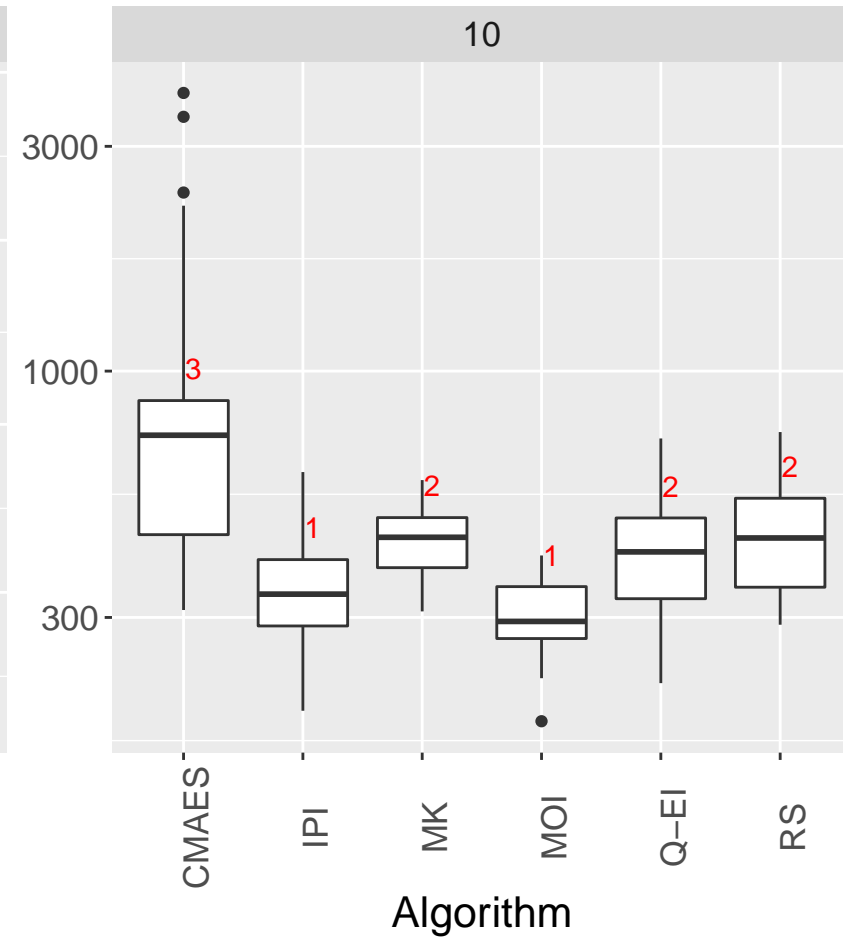
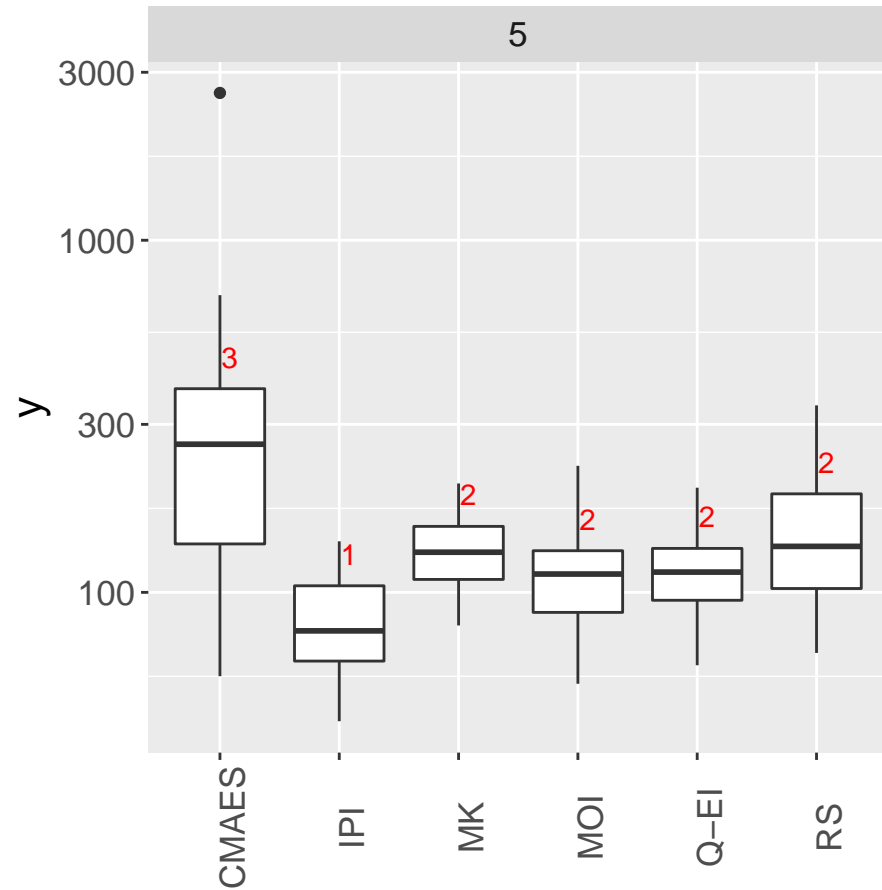


Rastrigin
Evaluation: 100

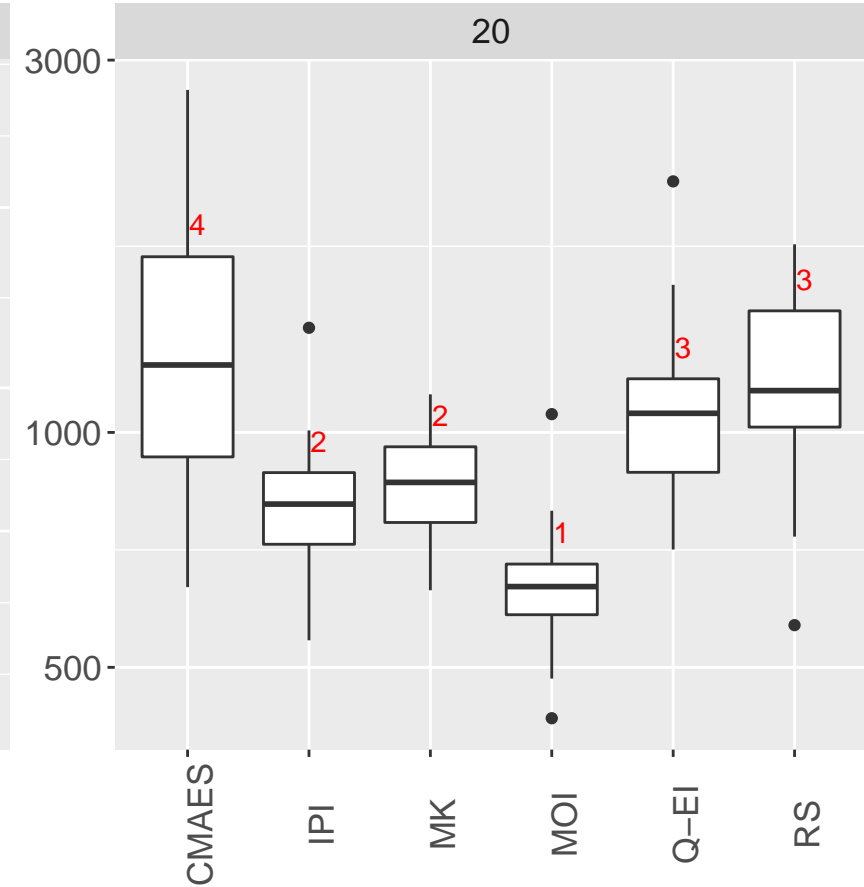
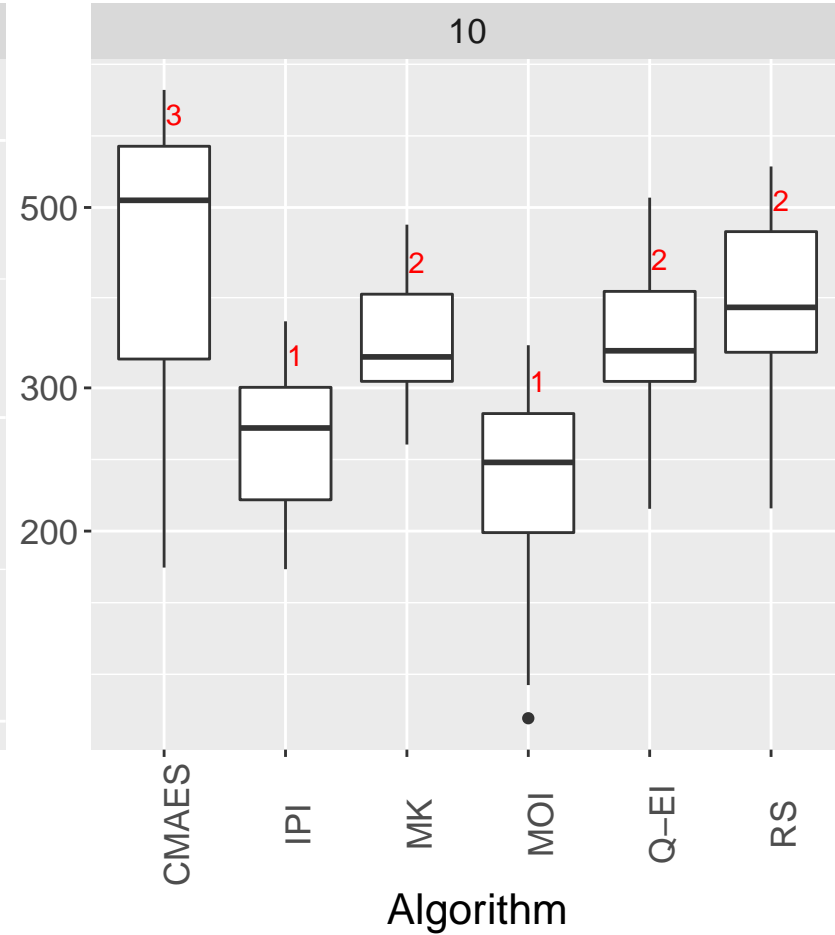
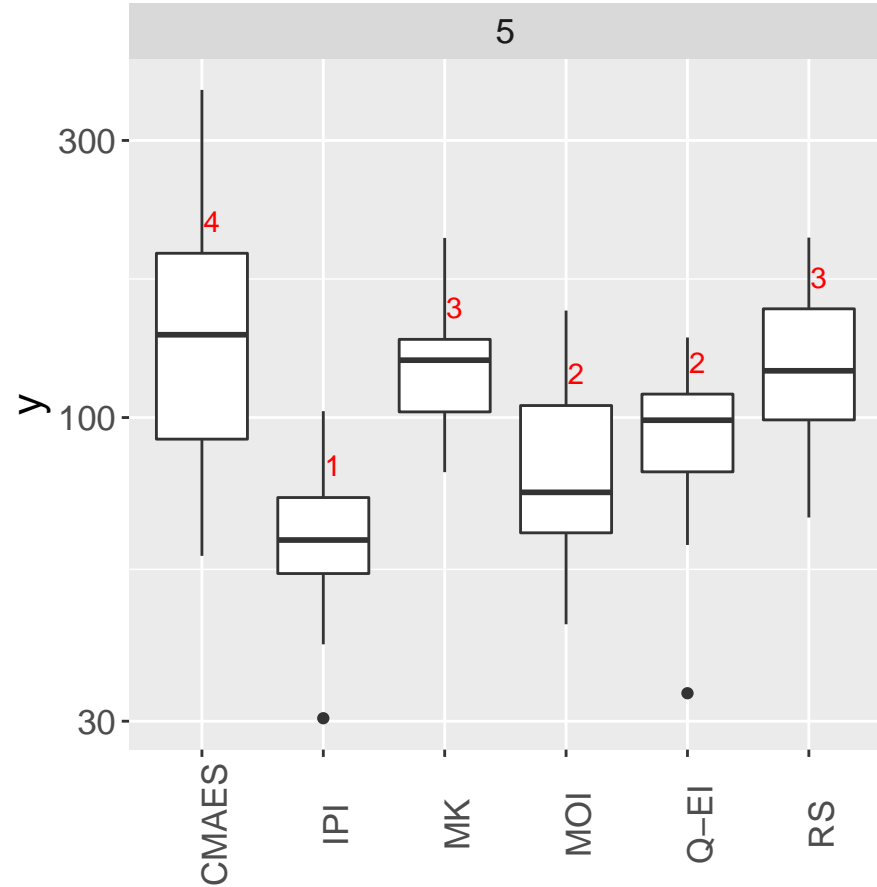
y



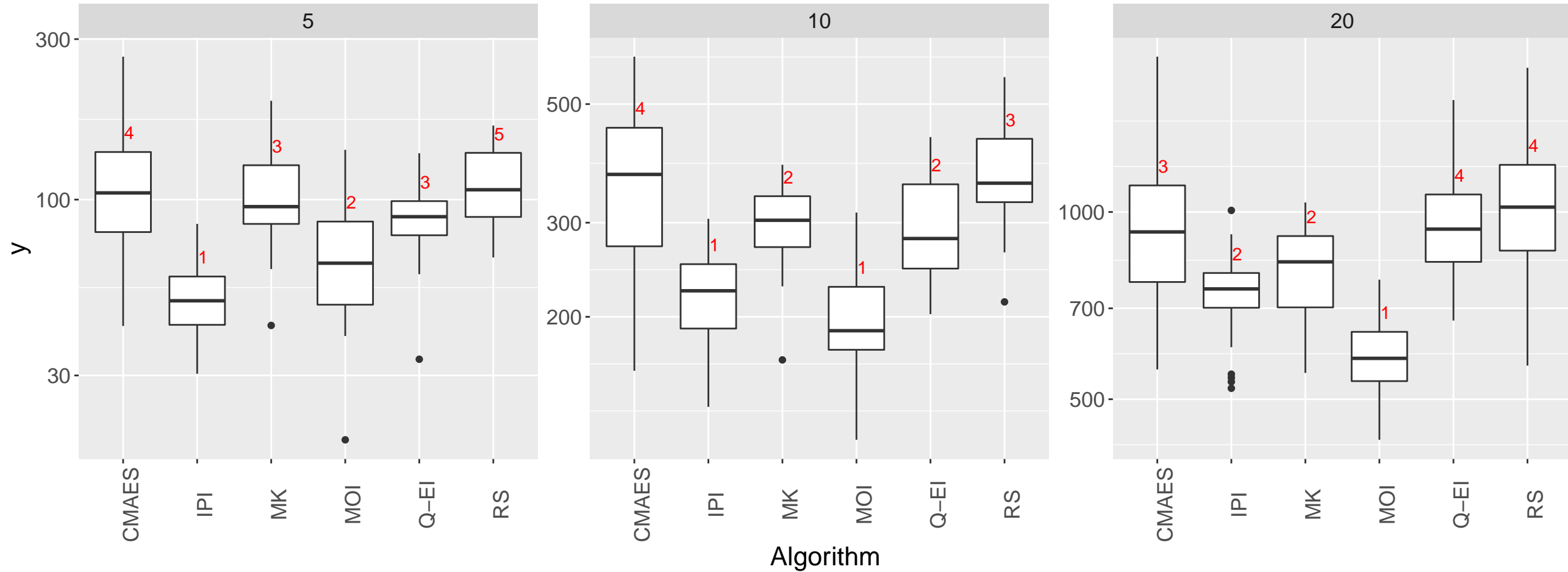
Büche-Rastrigin
Evaluation: 25



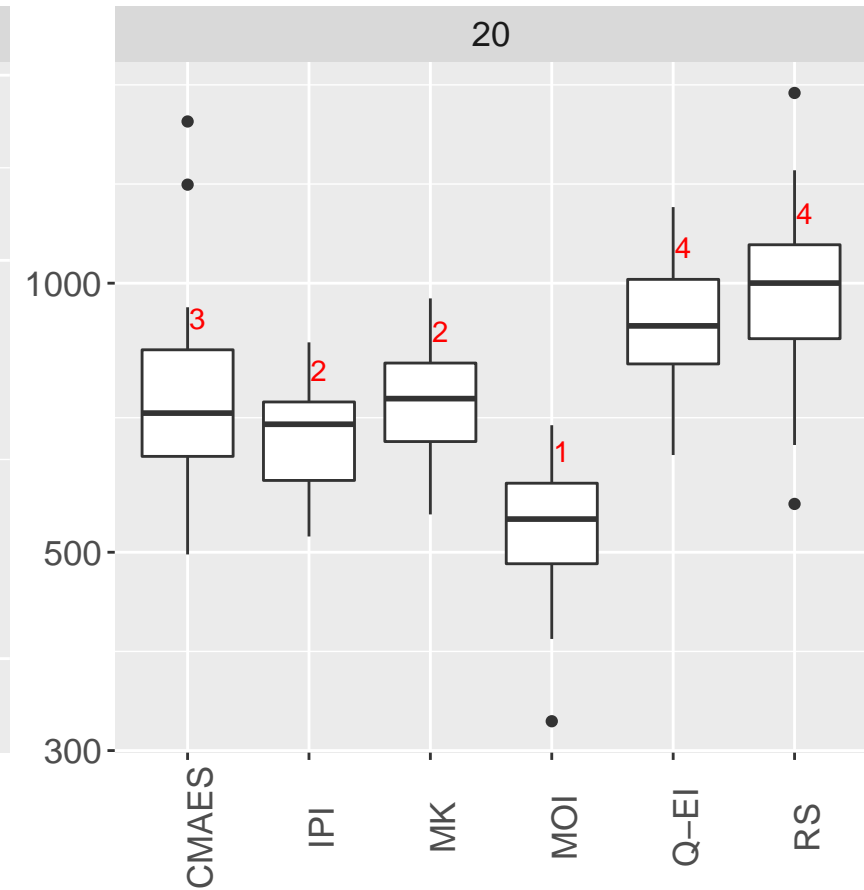
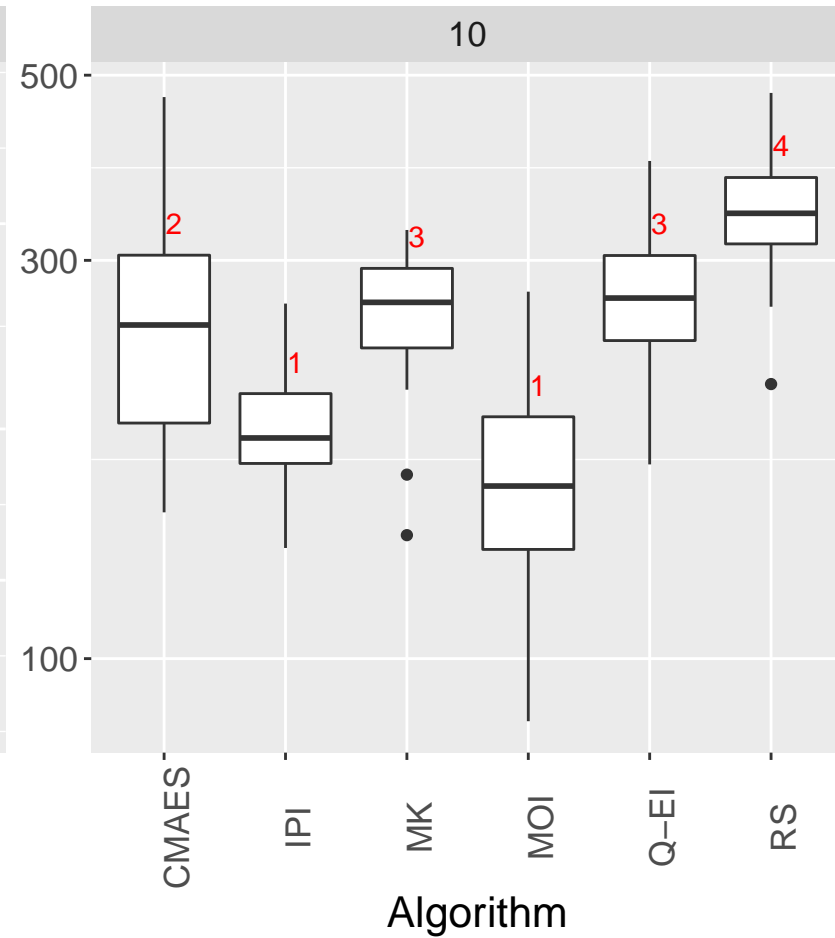
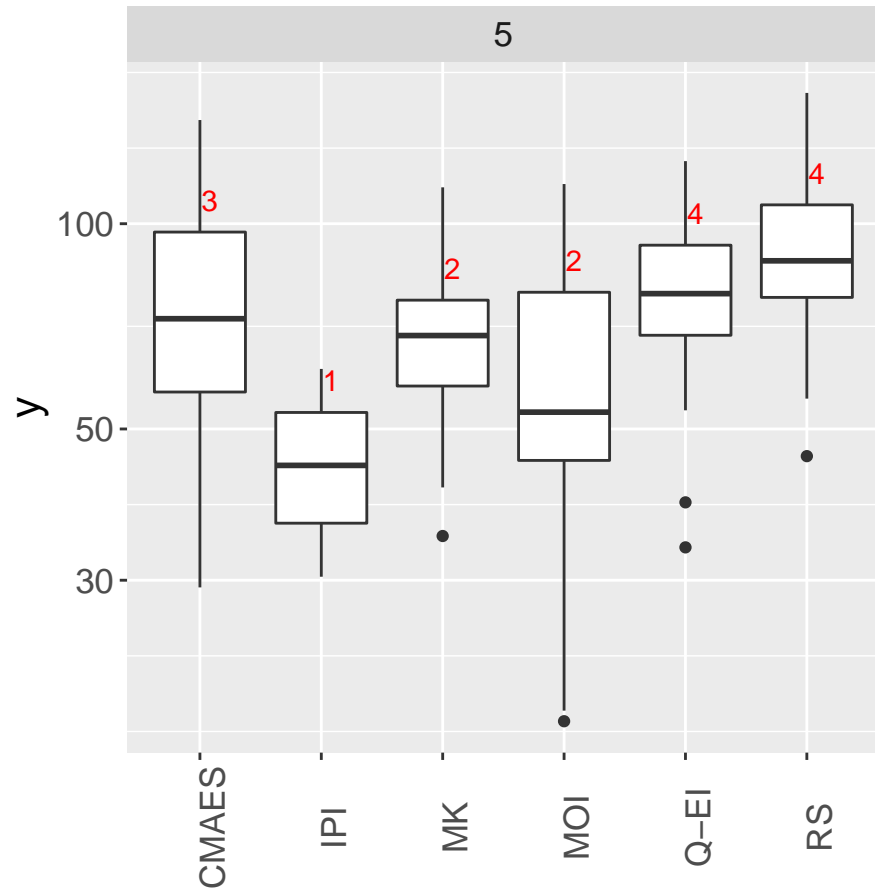
Büche-Rastrigin
Evaluation: 50



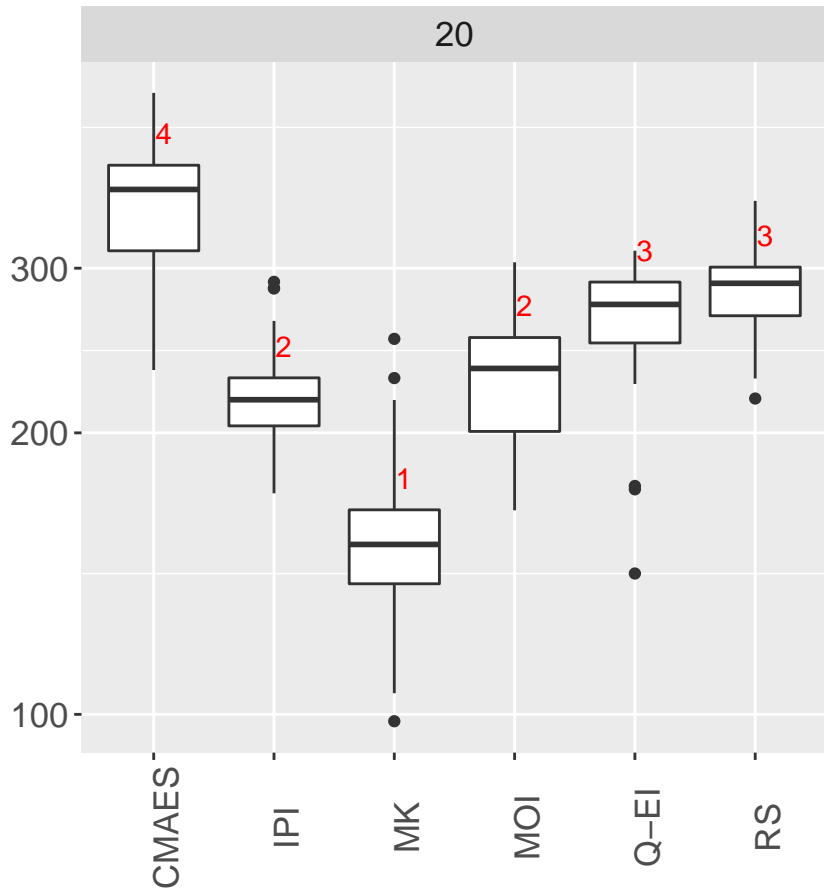
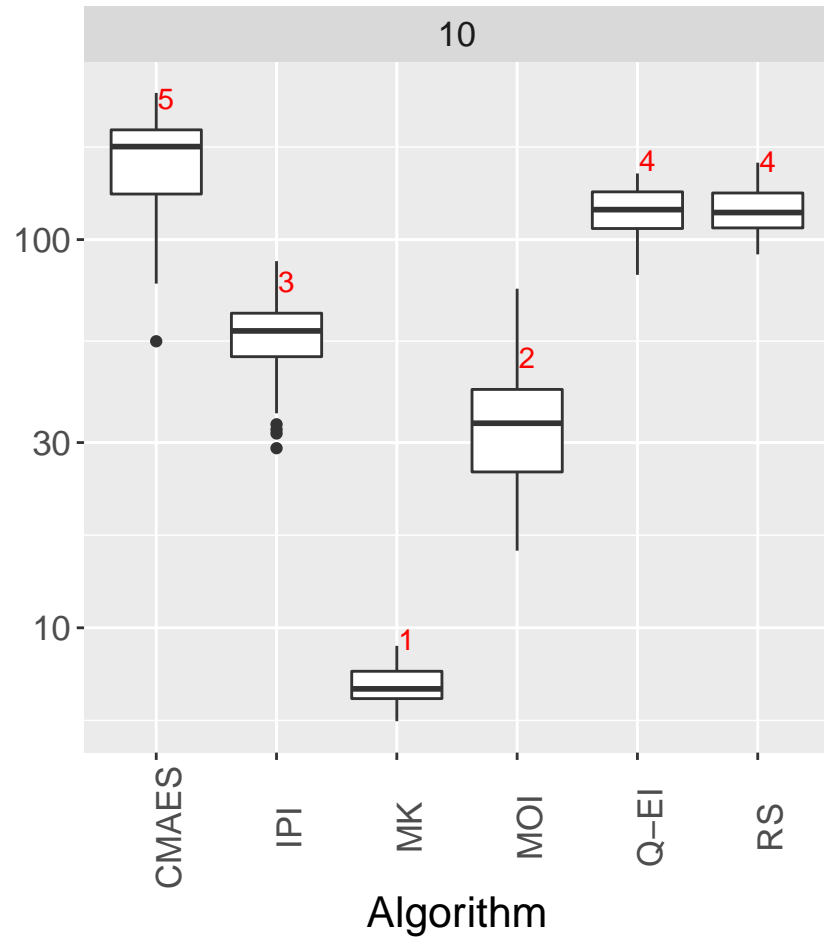
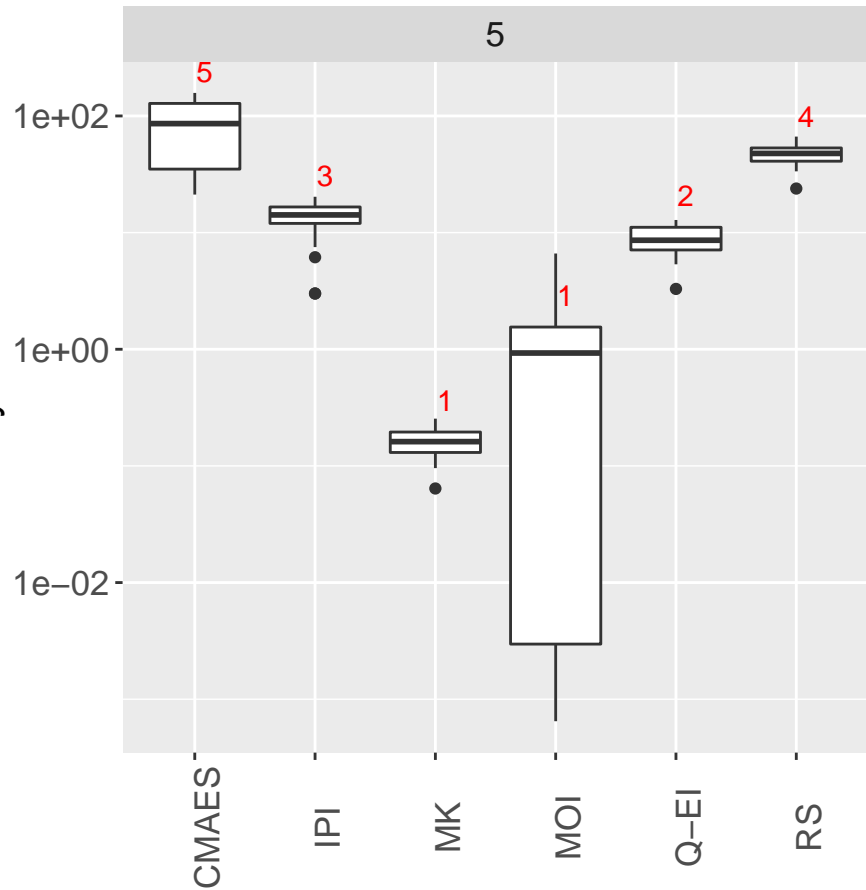
Büche-Rastrigin
Evaluation: 70



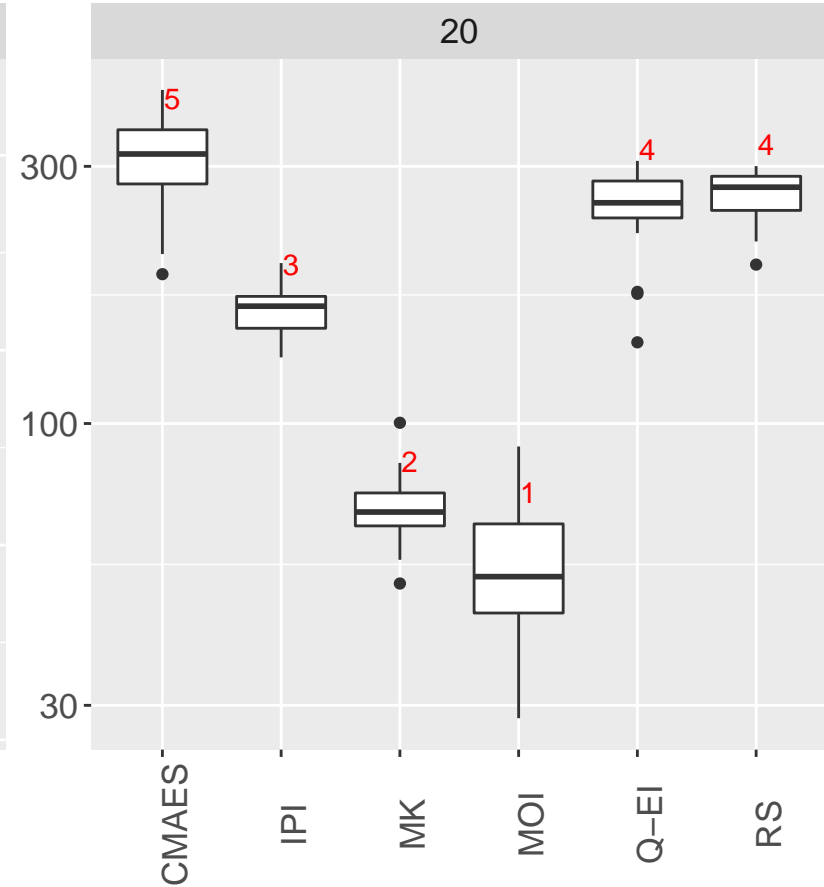
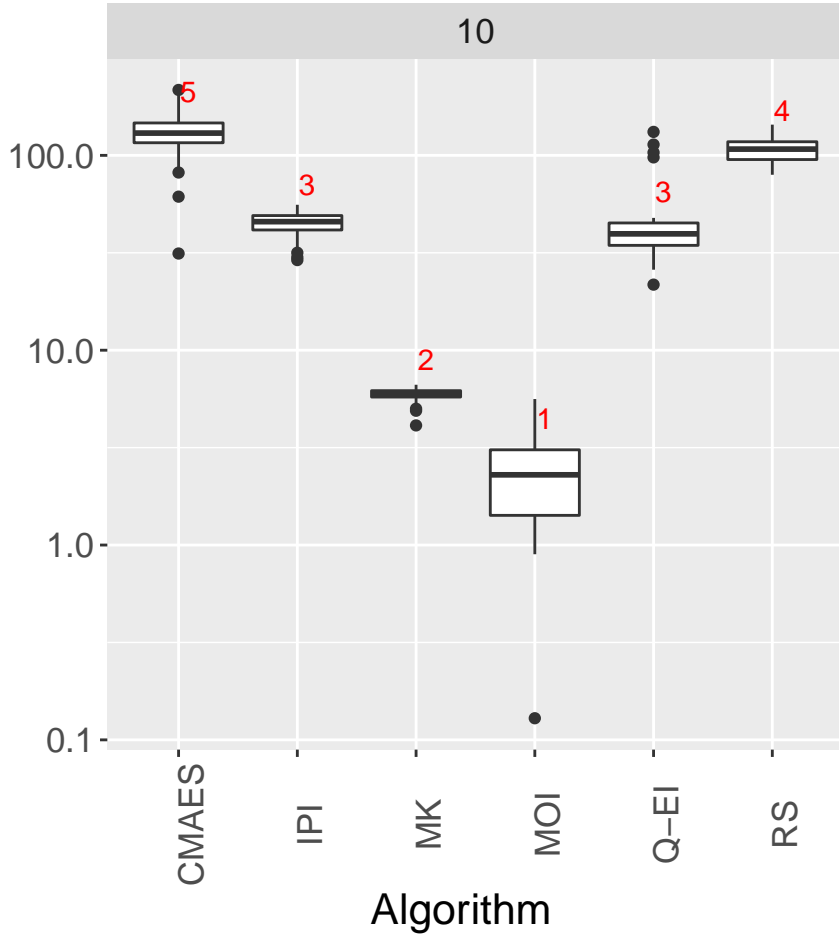
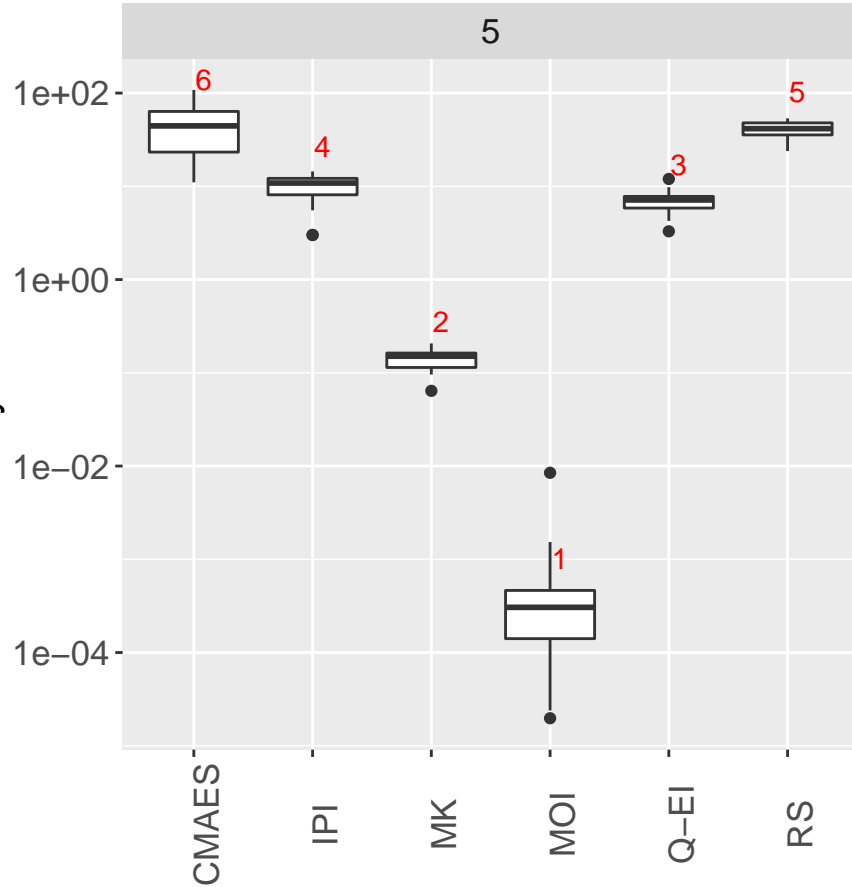
Büche-Rastrigin
Evaluation: 100



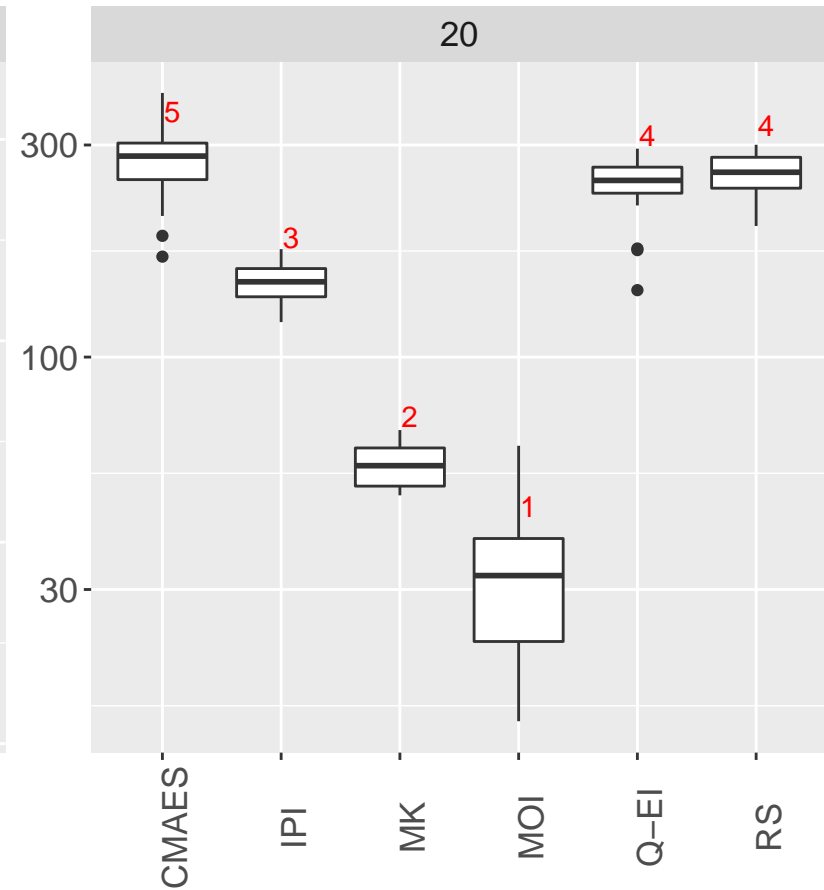
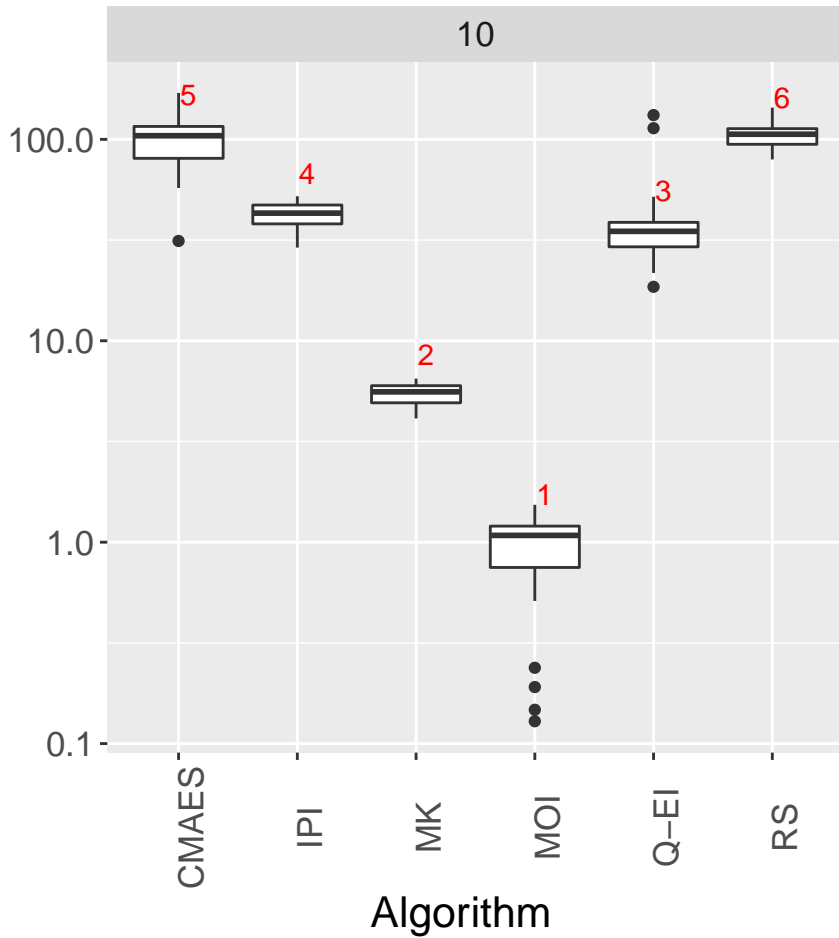
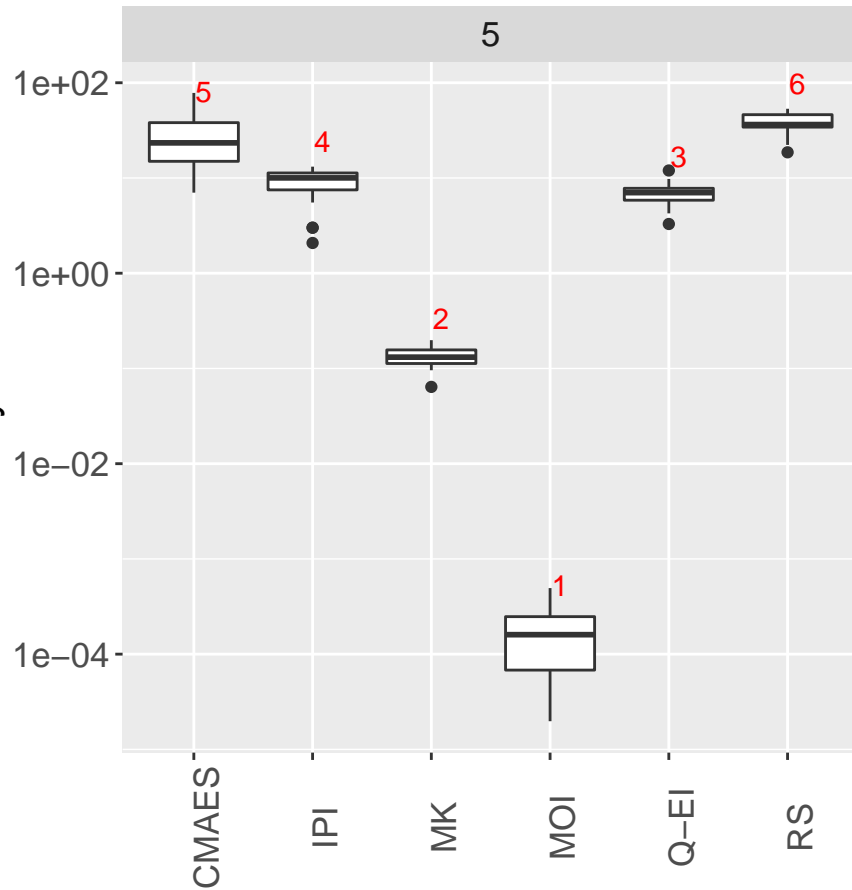
Linear Slope
Evaluation: 25
y



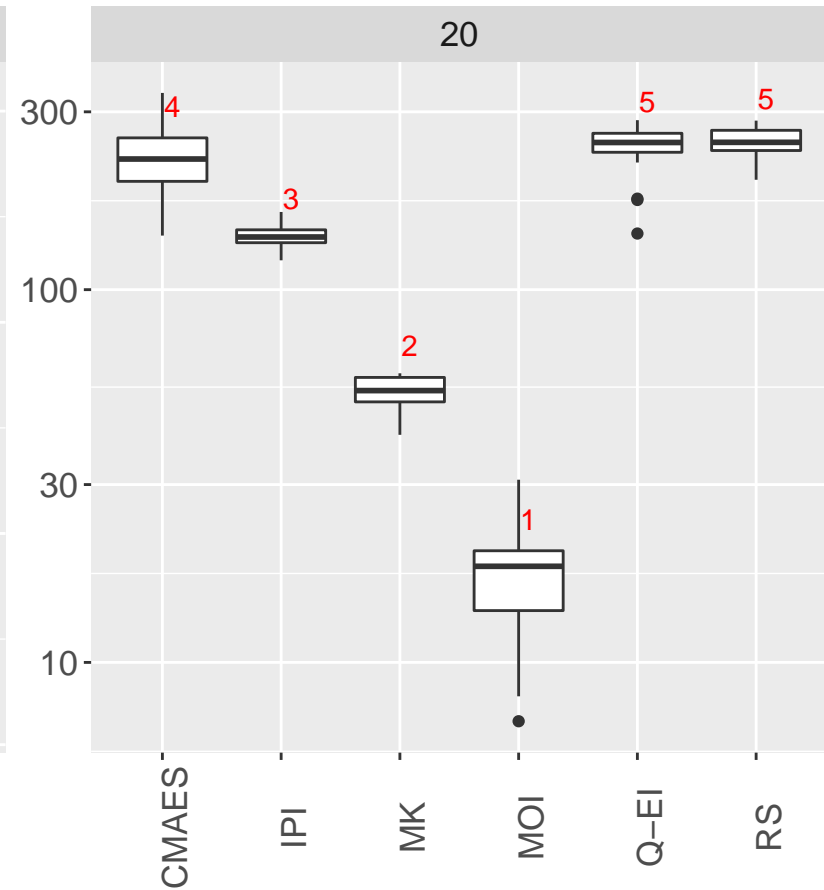
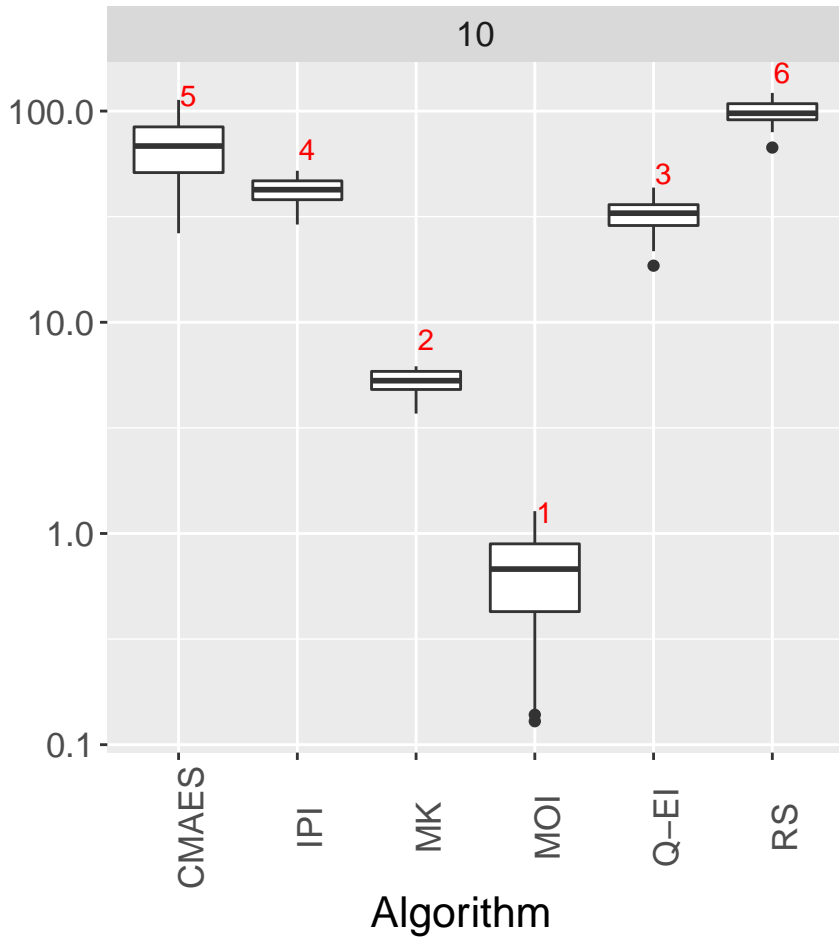
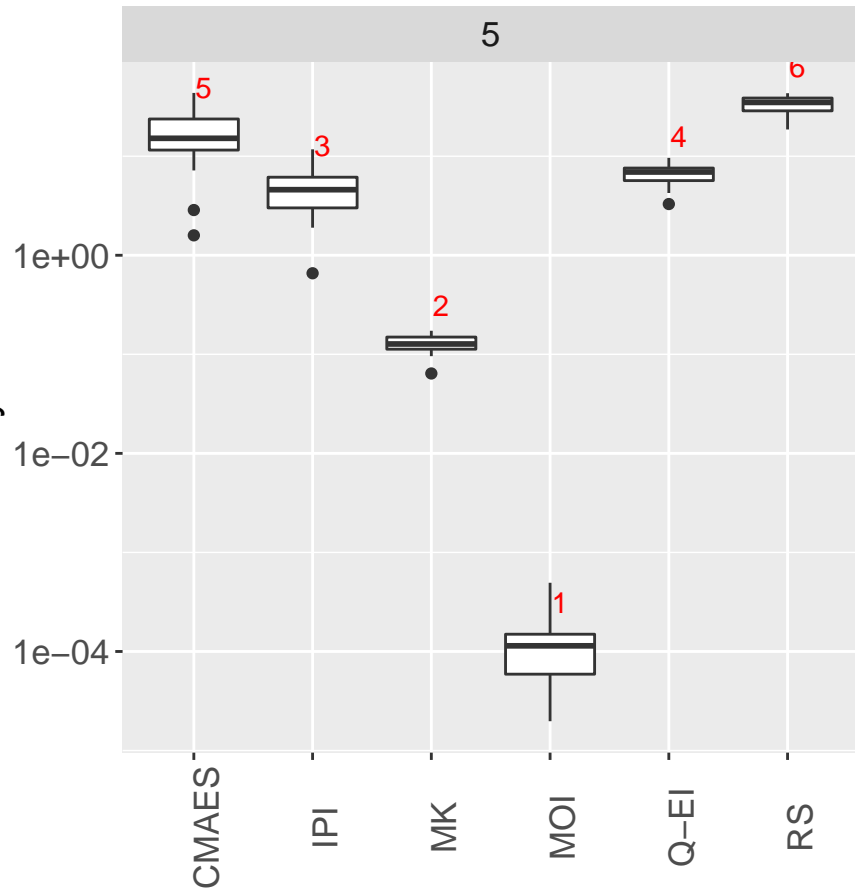
Linear Slope
Evaluation: 50



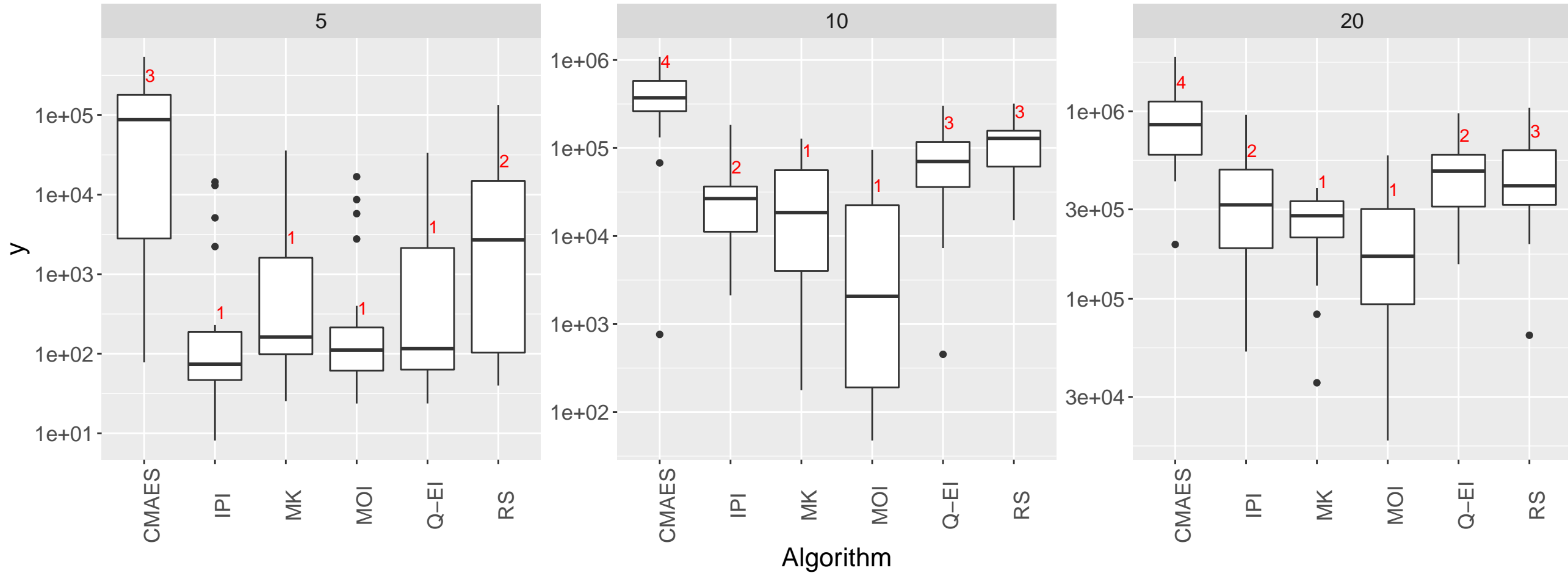
Linear Slope
Evaluation: 70



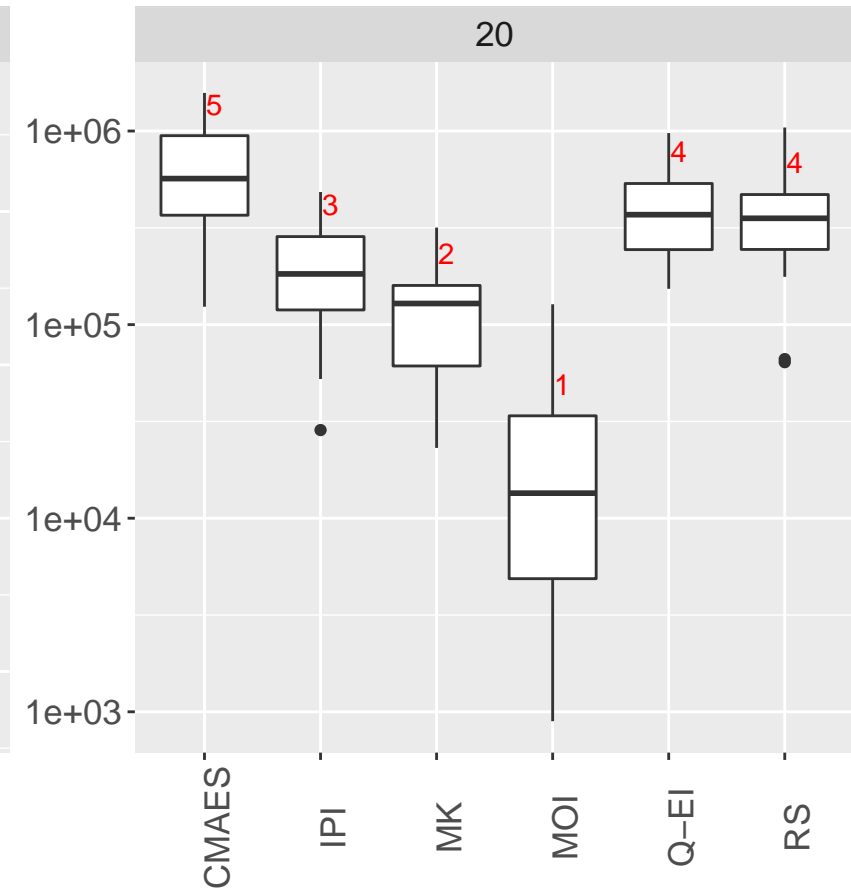
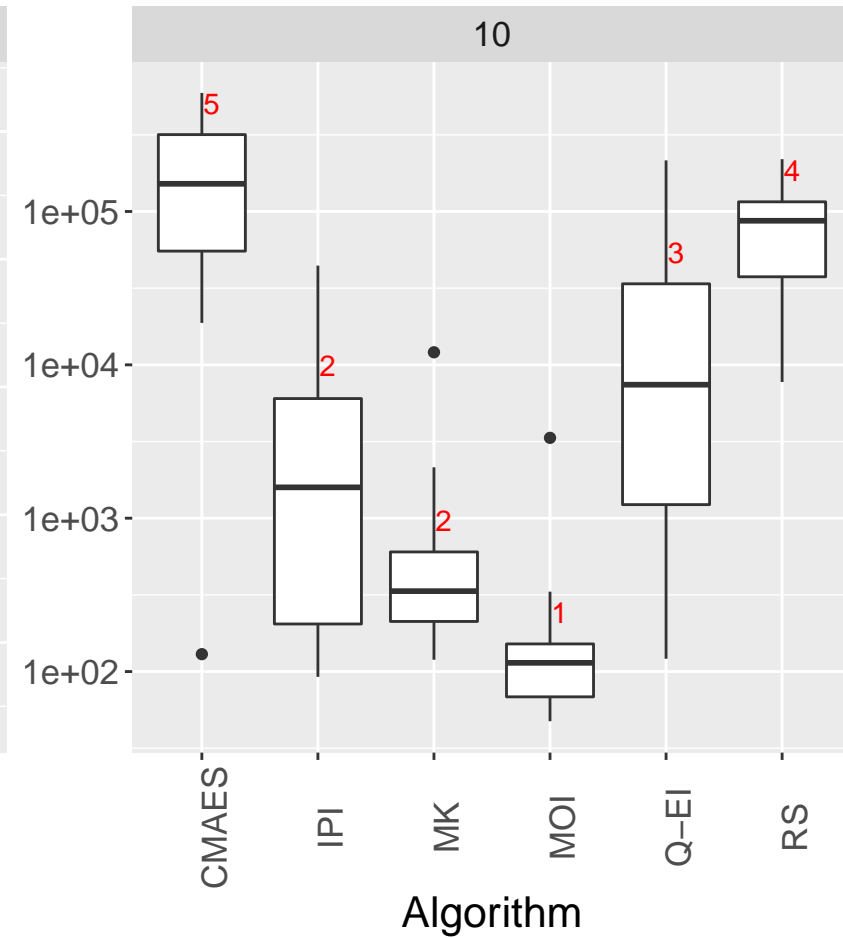
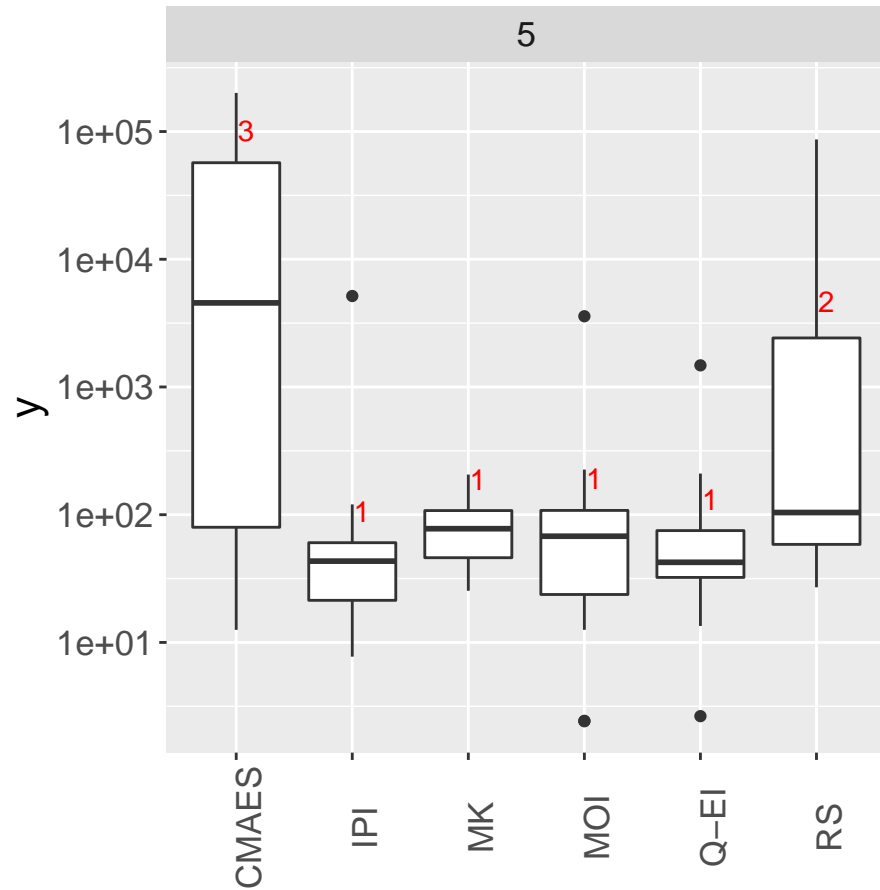
Linear Slope
Evaluation: 100
y



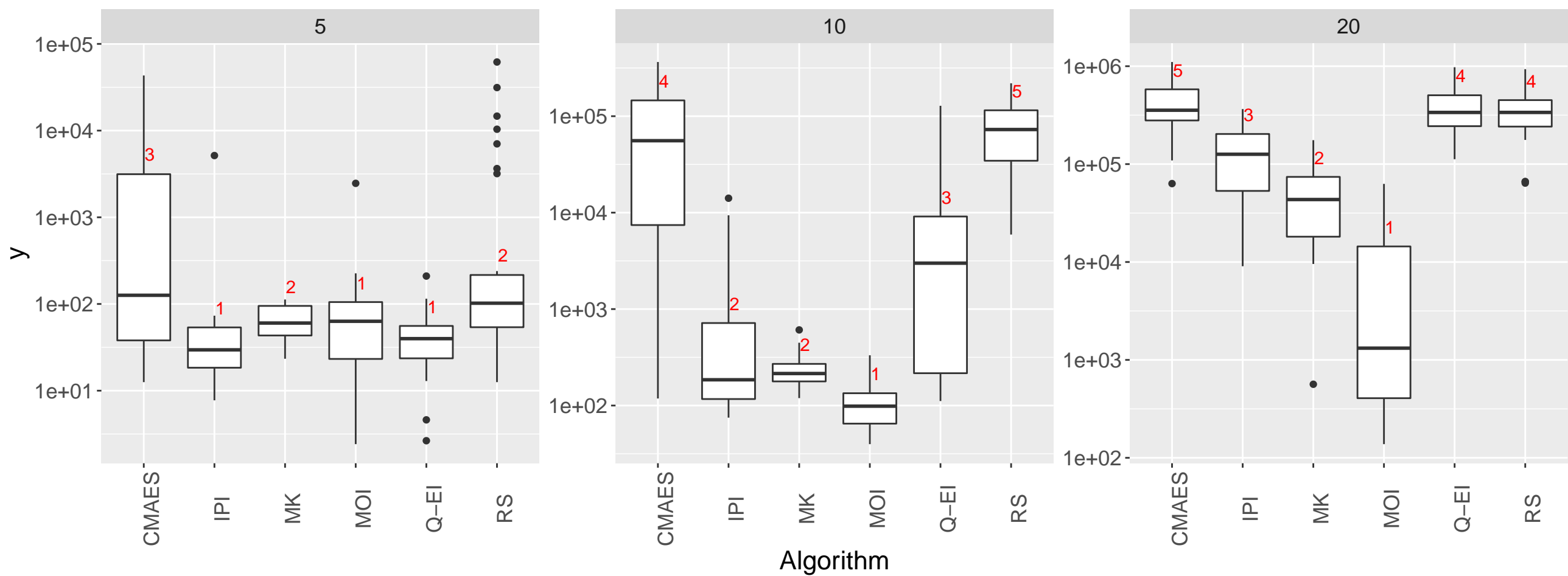
Attractive Sector
Evaluation: 25



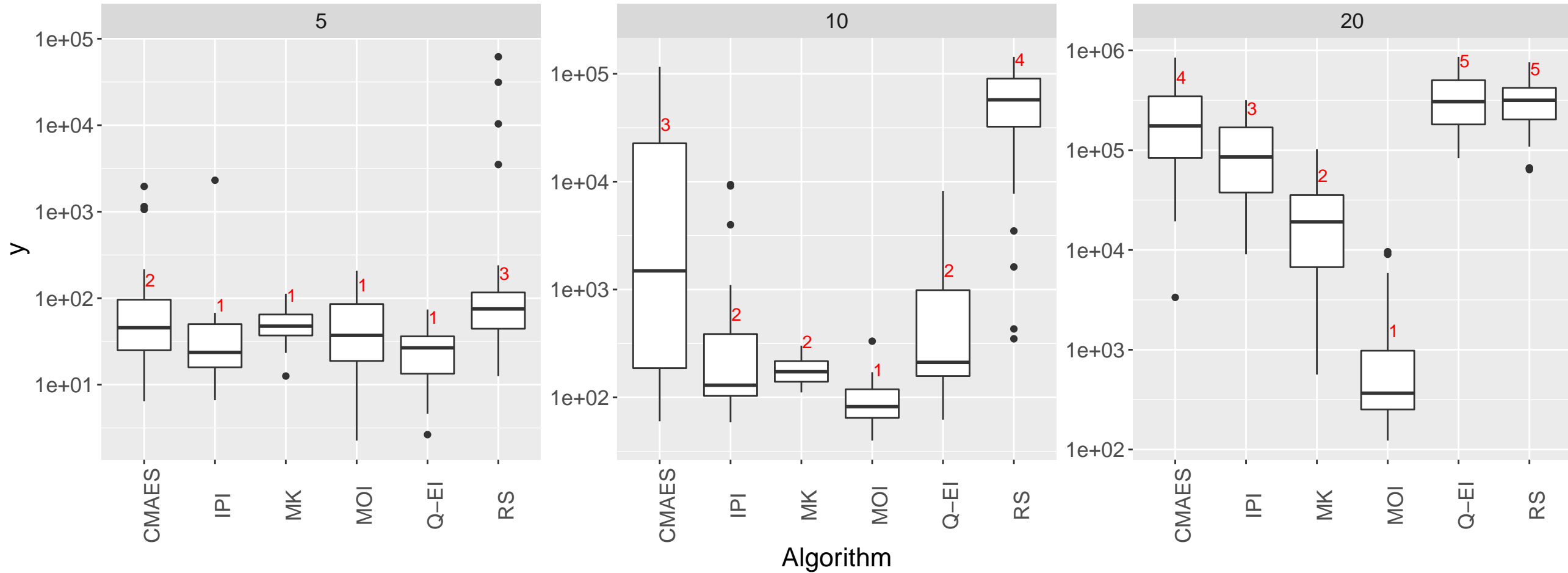
Attractive Sector
Evaluation: 50



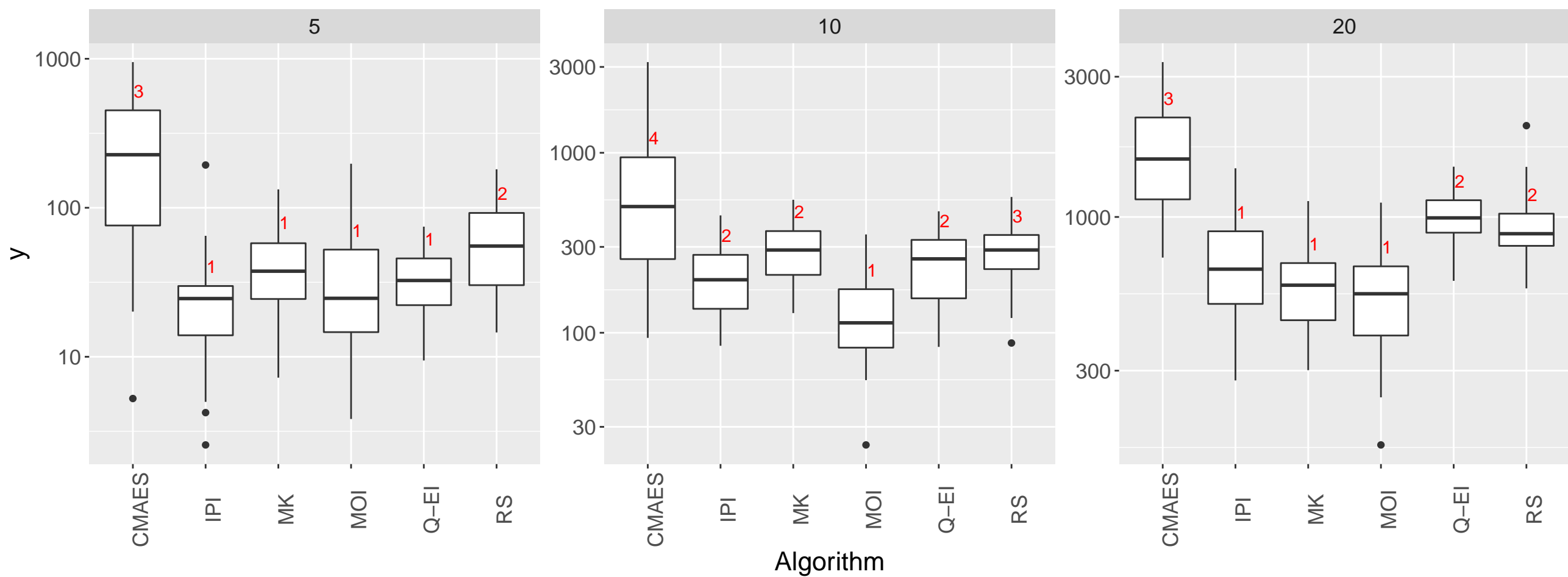
Attractive Sector
Evaluation: 70



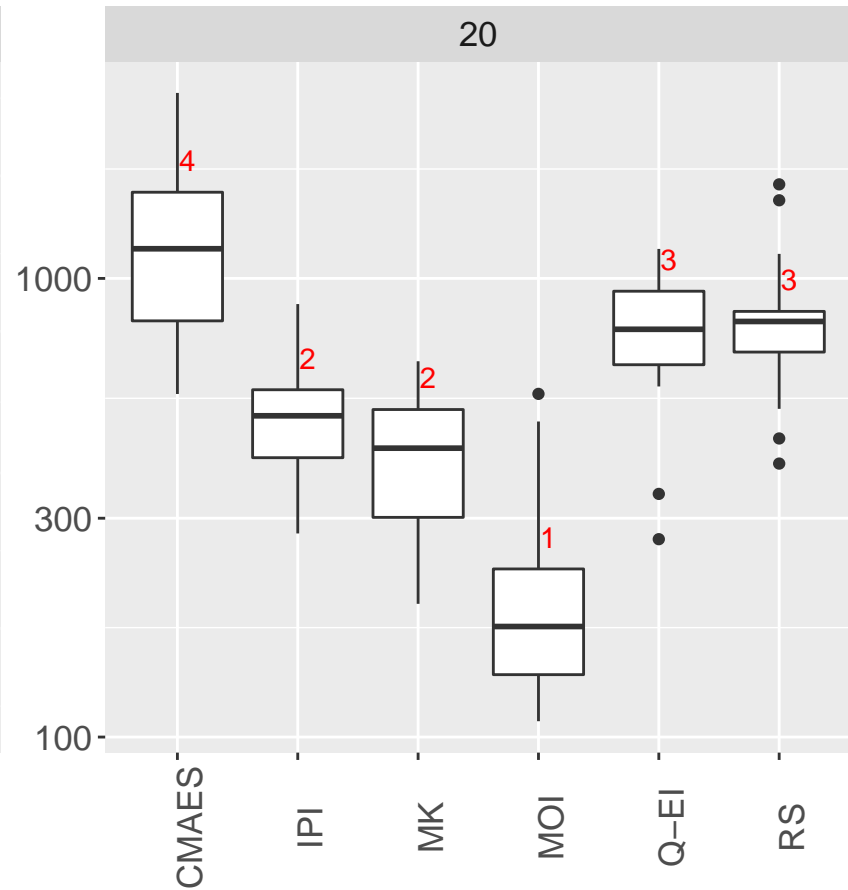
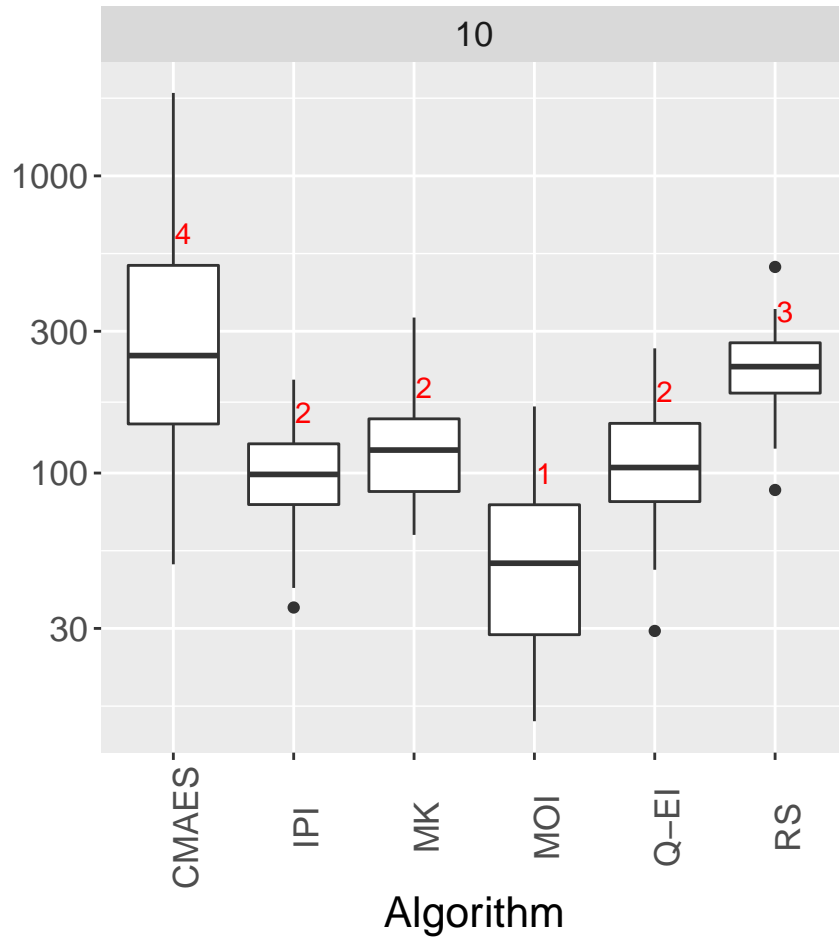
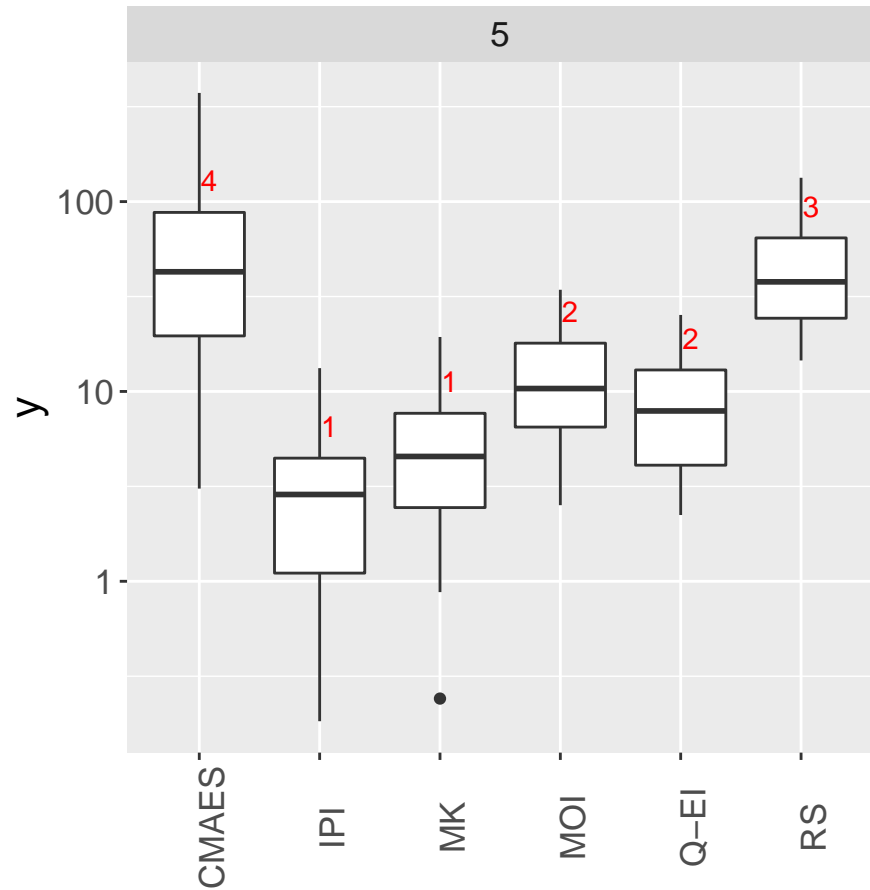
Attractive Sector
Evaluation: 100



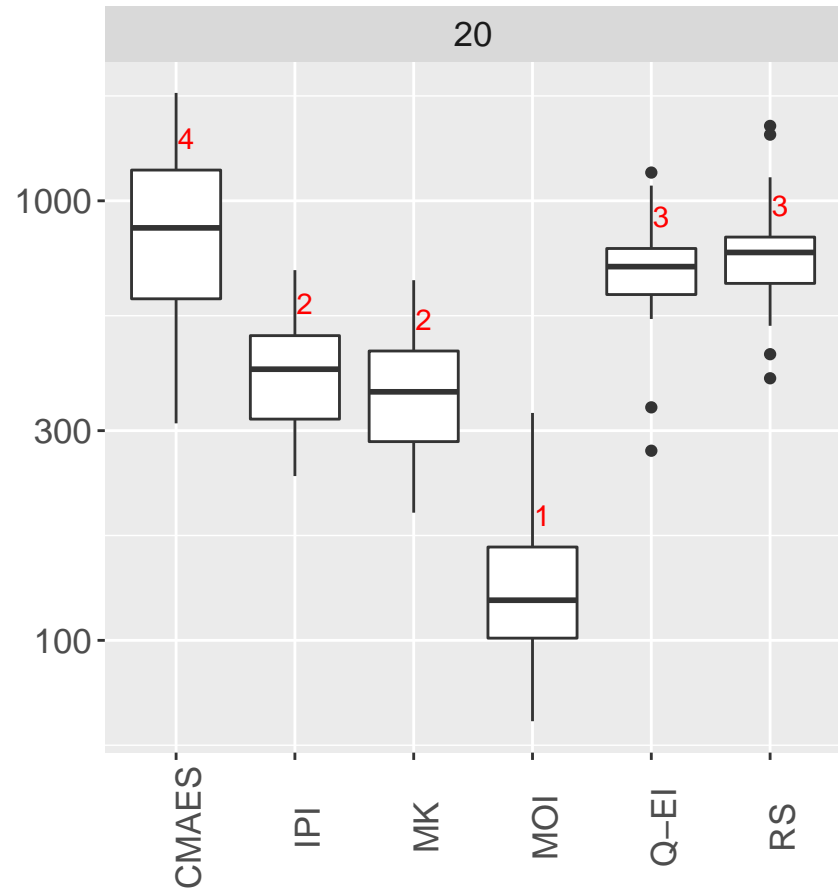
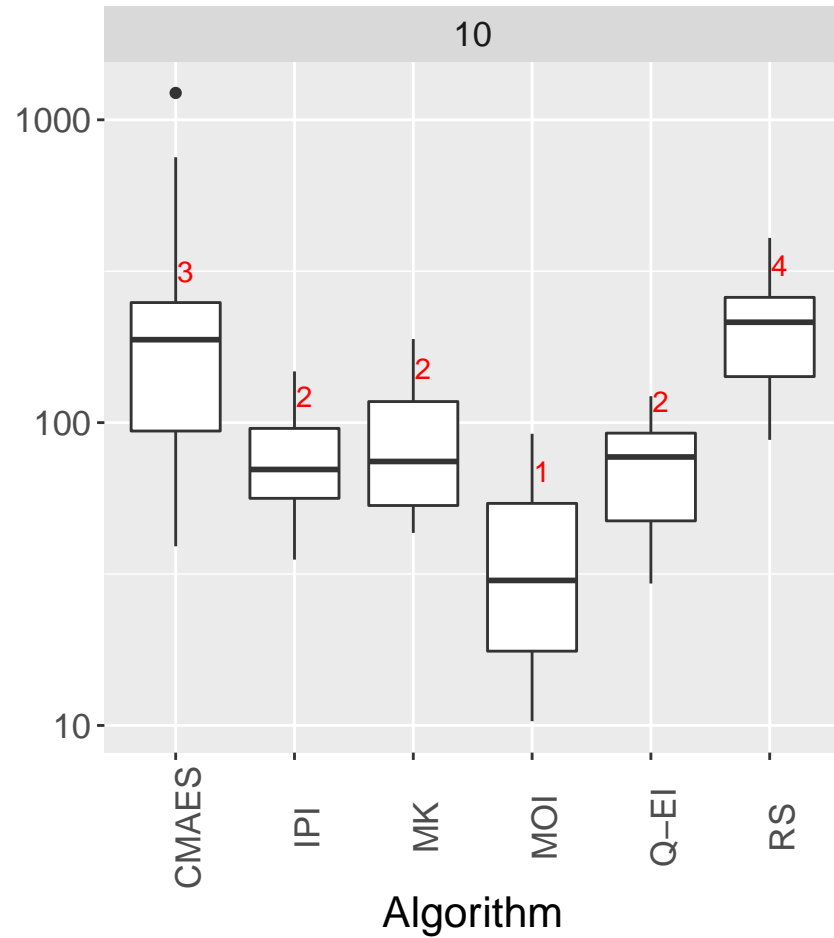
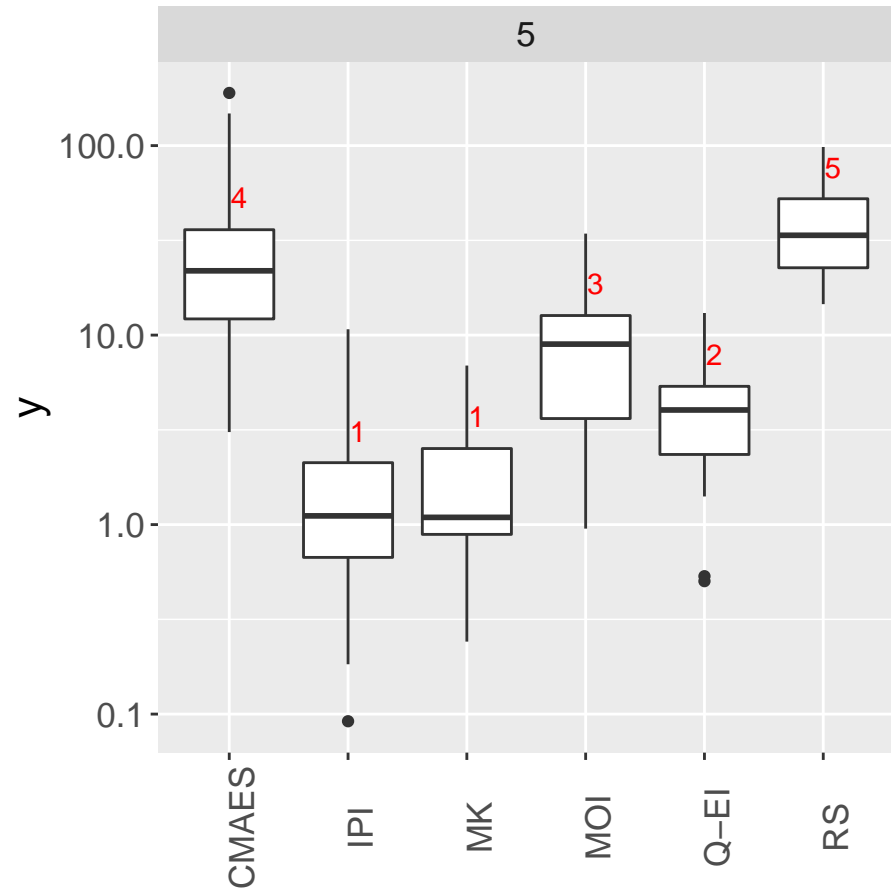
Step Ellipsoidal
Evaluation: 25



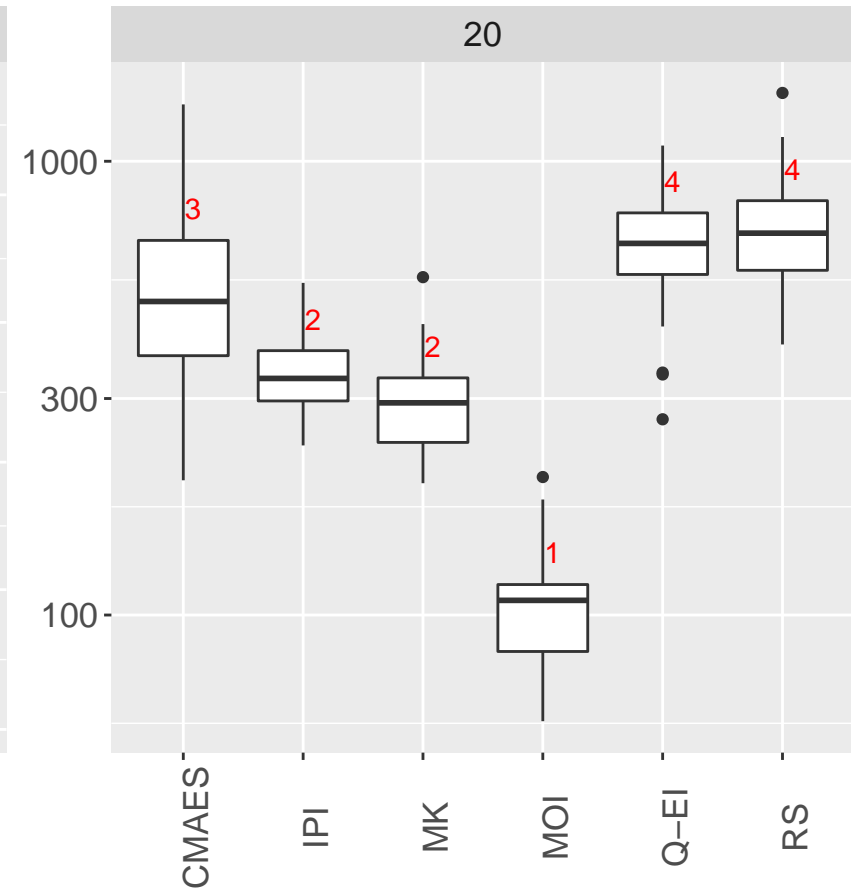
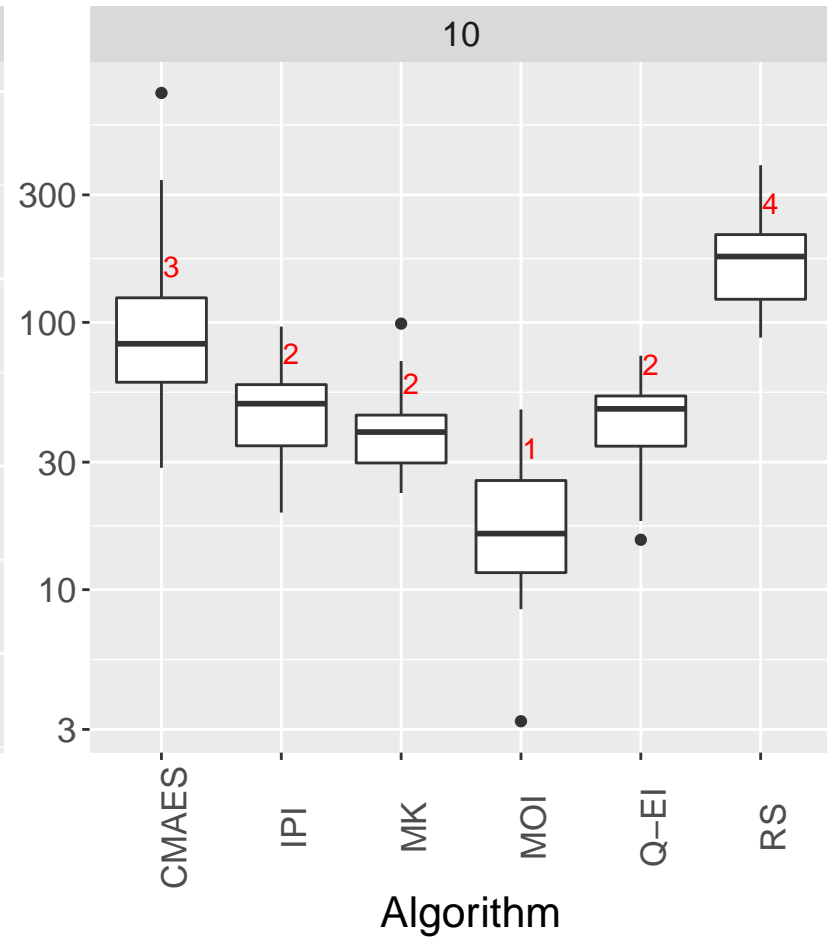
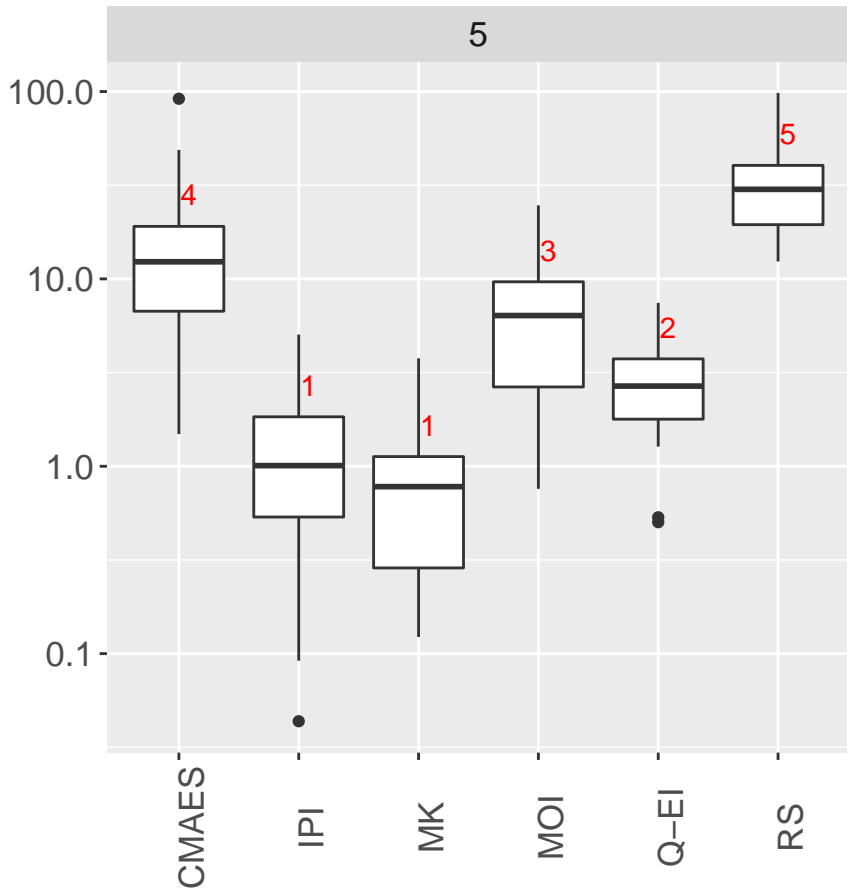
Step Ellipsoidal
Evaluation: 50



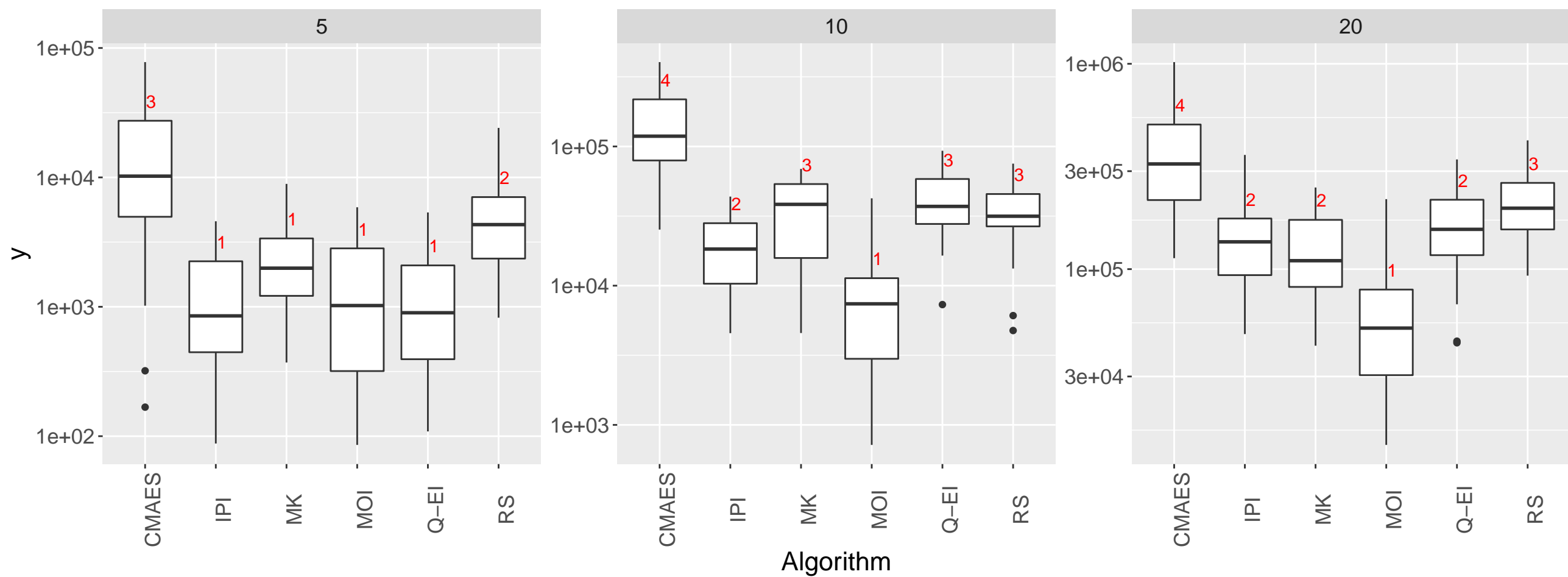
Step Ellipsoidal
Evaluation: 70



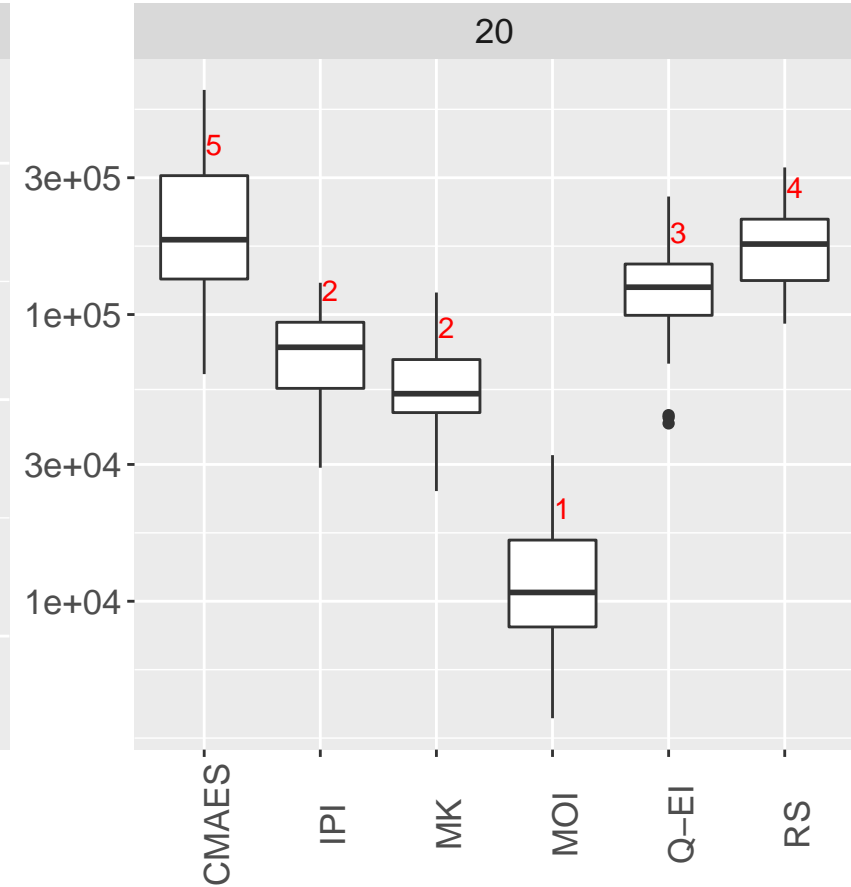
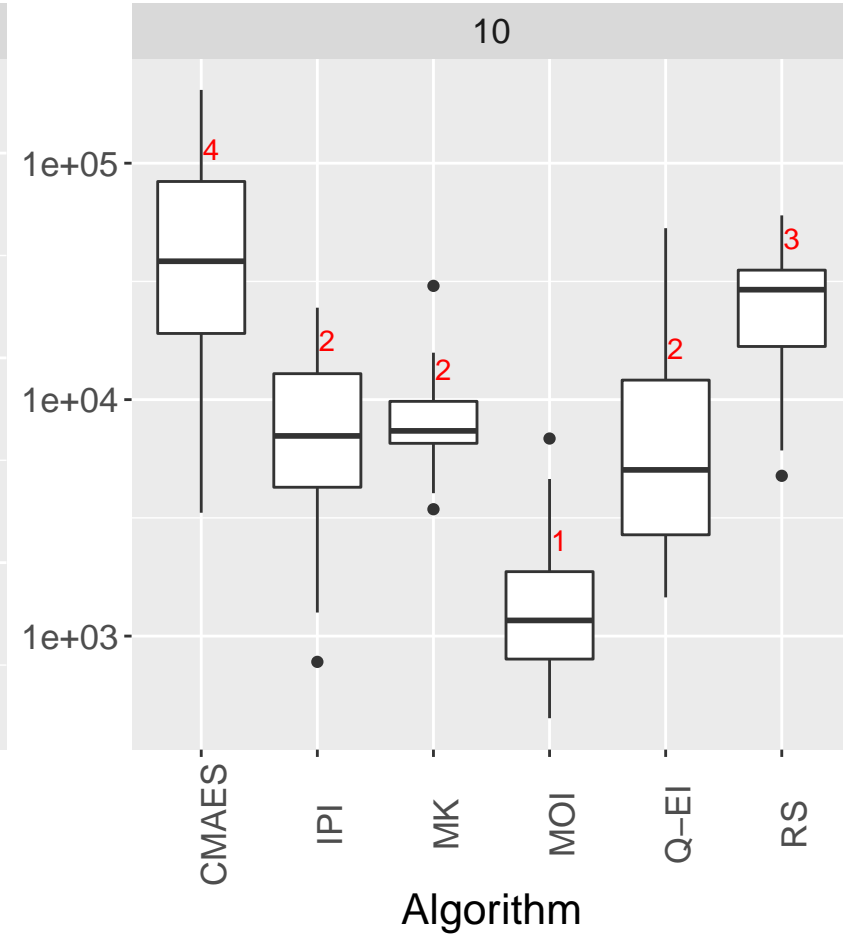
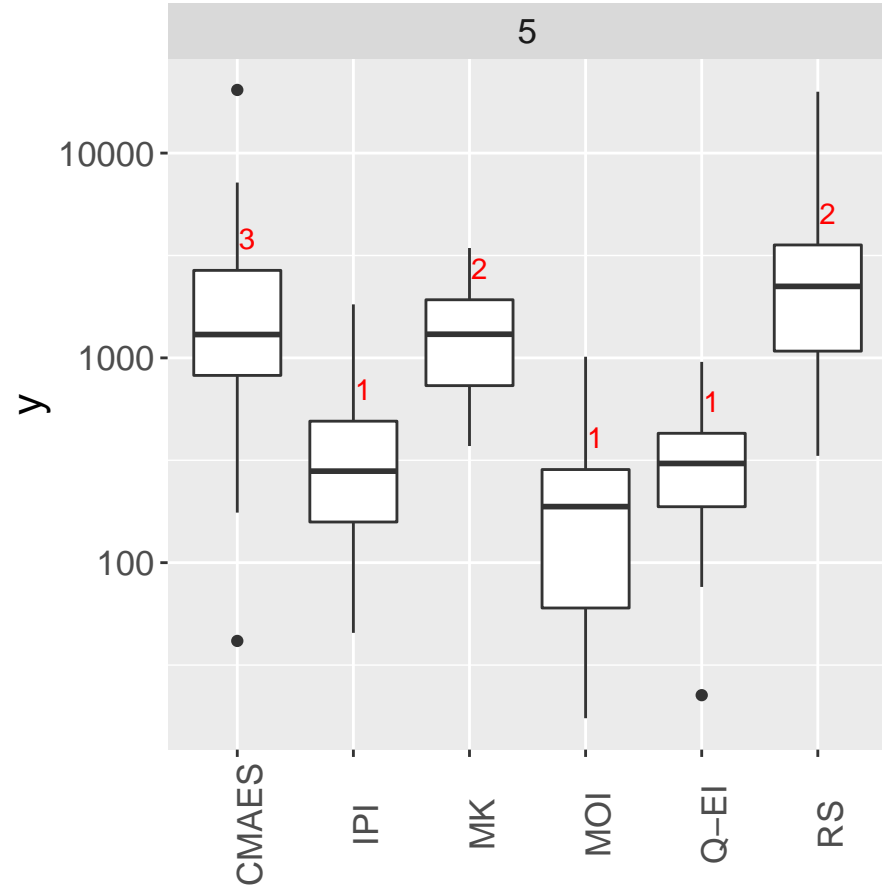
Step Ellipsoidal
Evaluation: 100



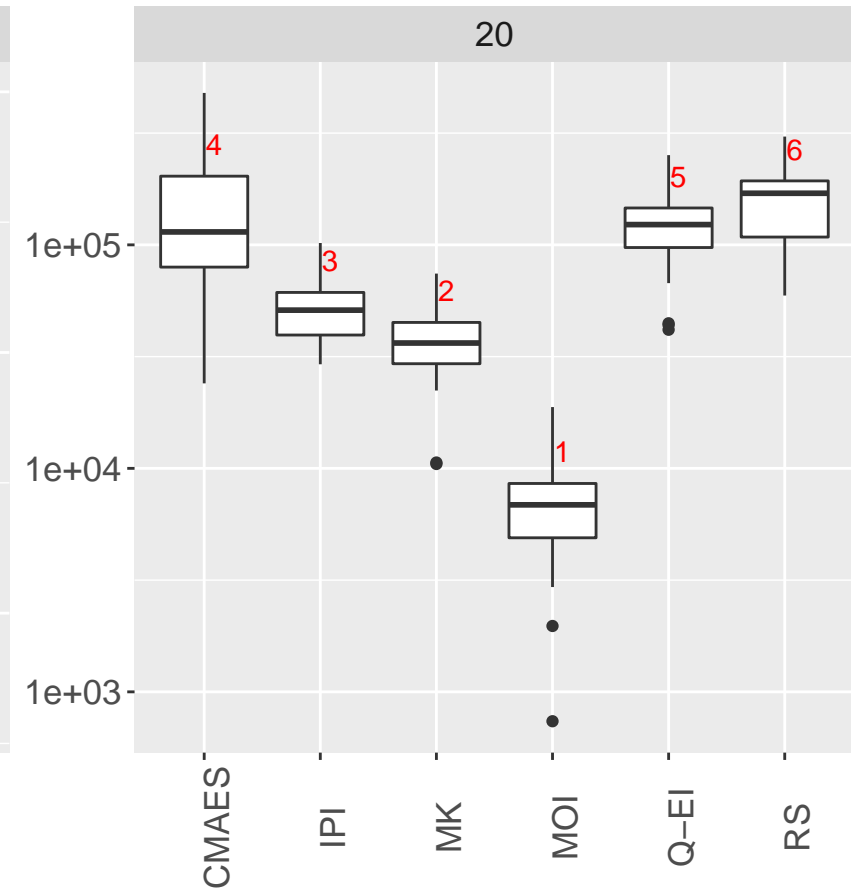
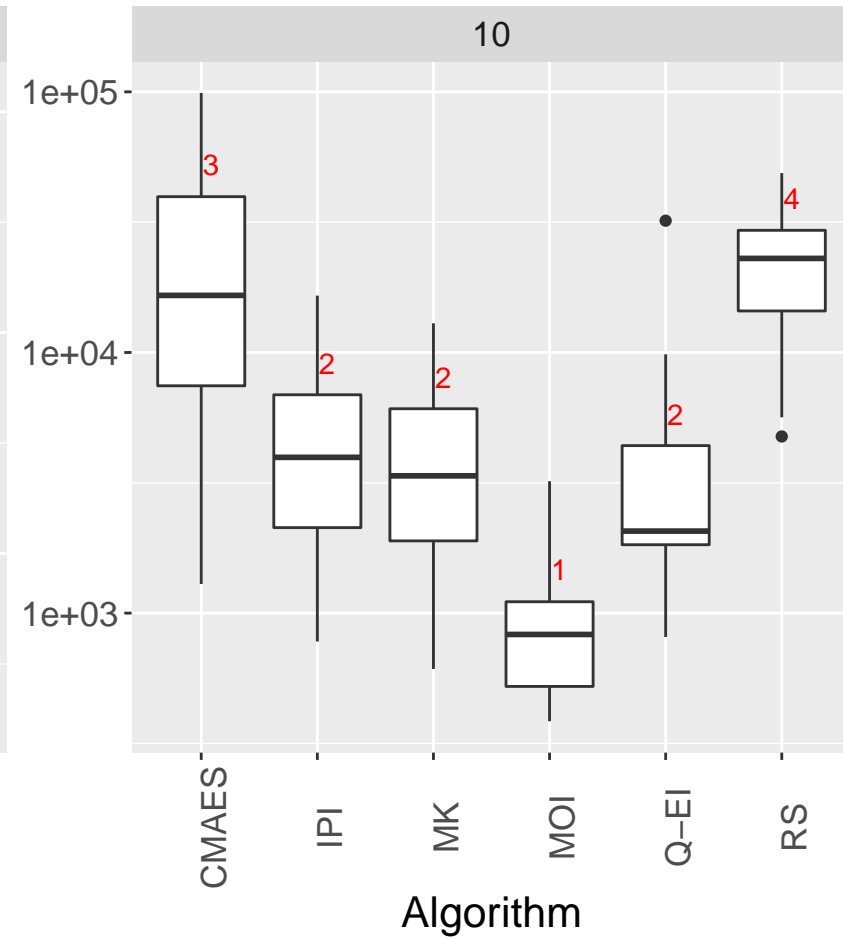
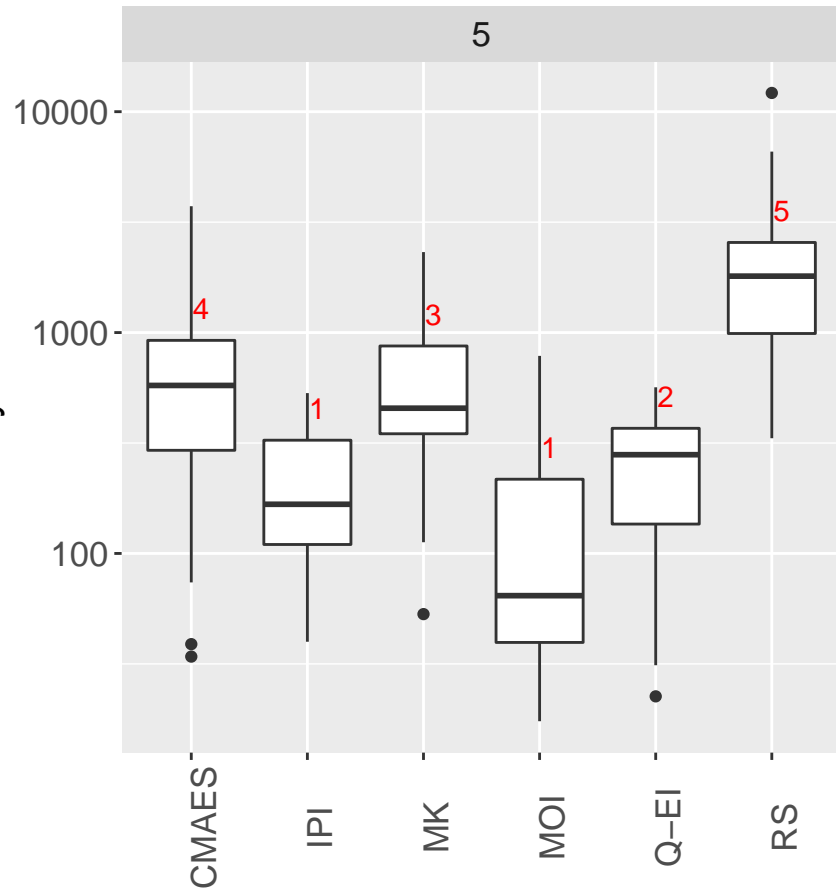
Rosenbrock
Evaluation: 25



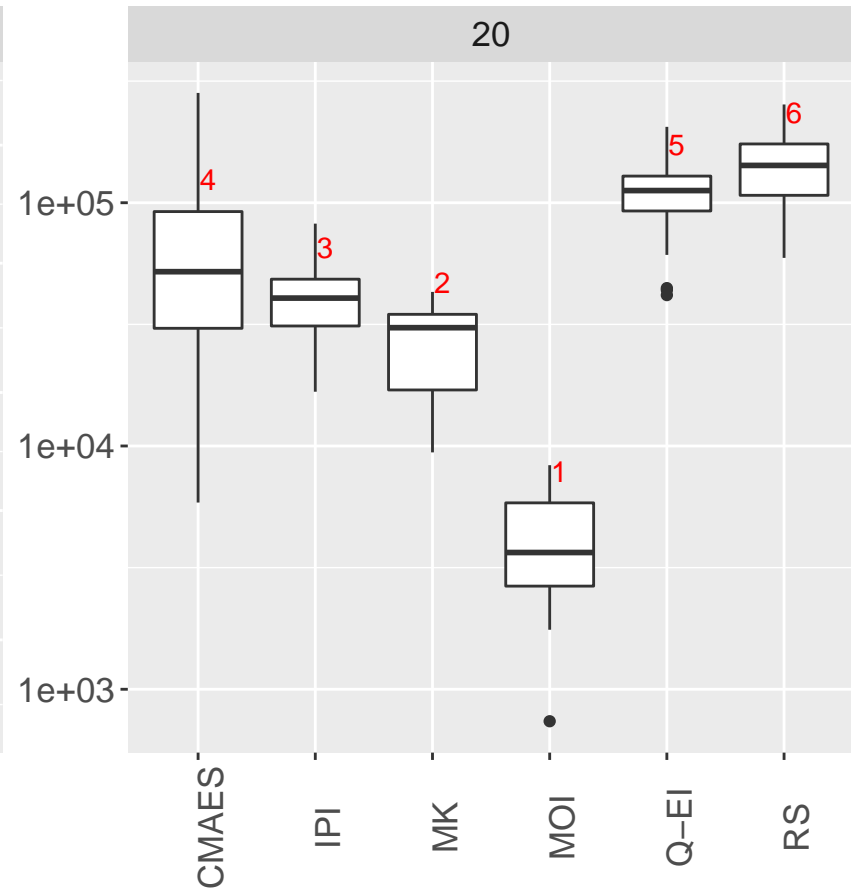
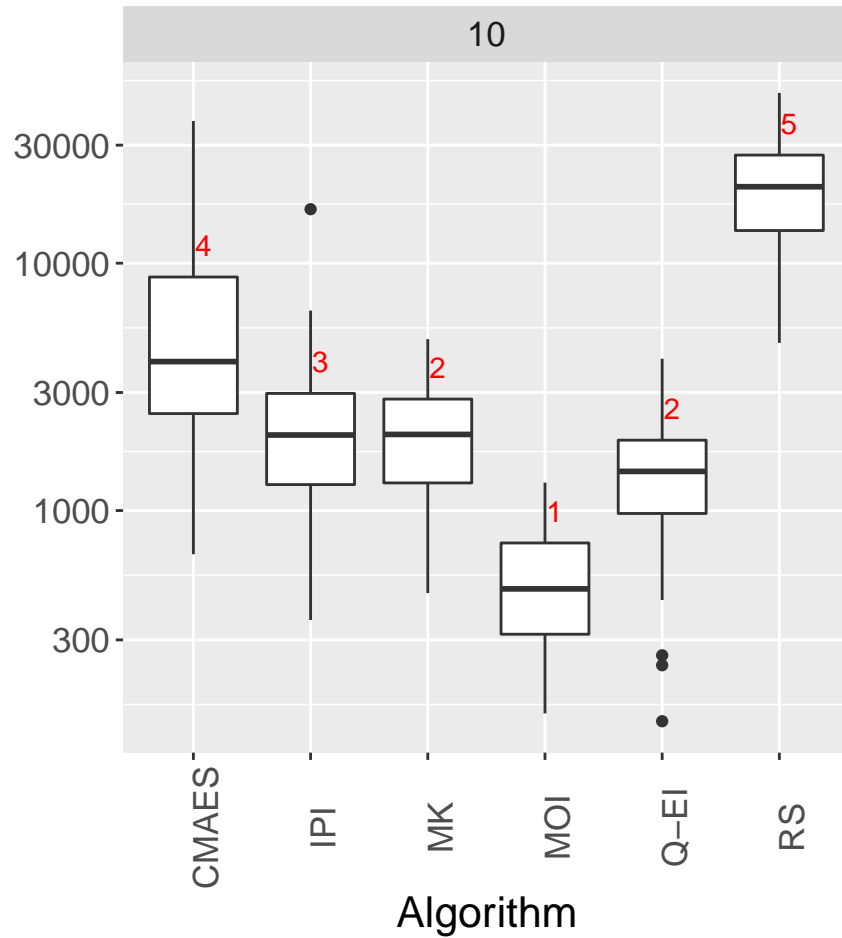
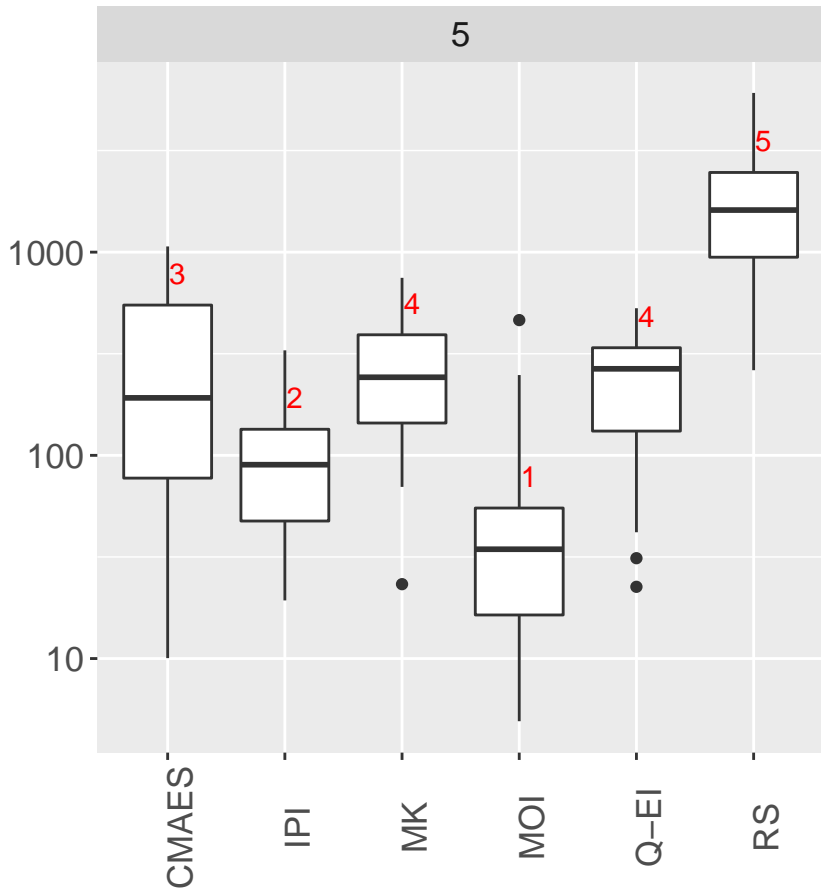
Rosenbrock
Evaluation: 50



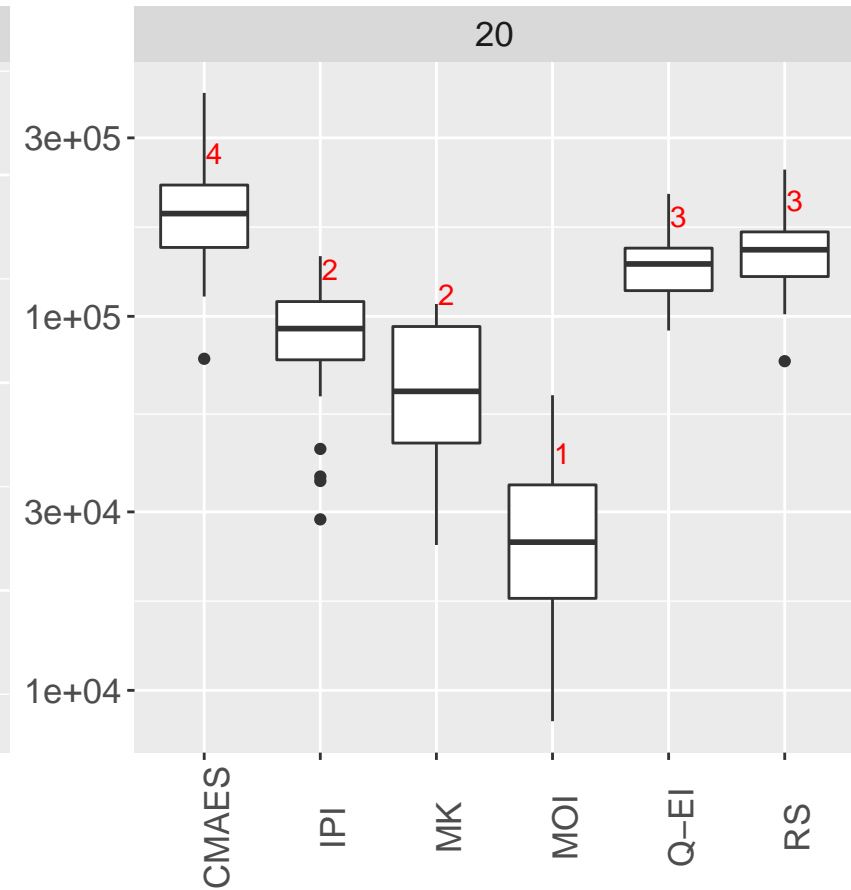
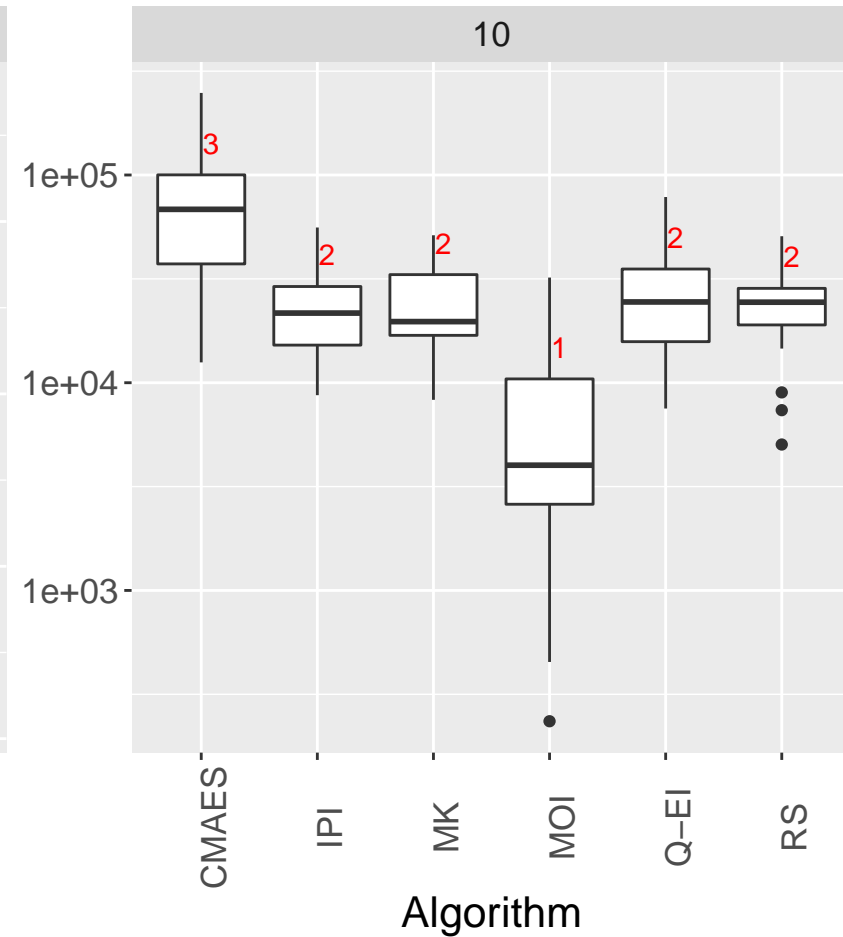
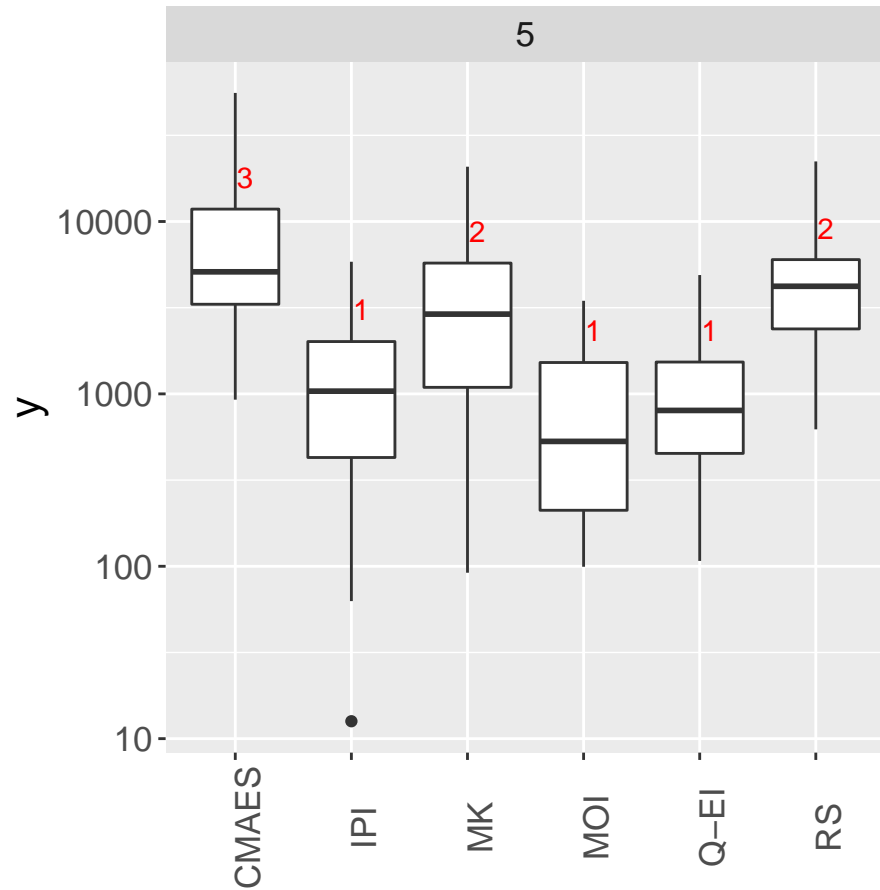
Rosenbrock
Evaluation: 70



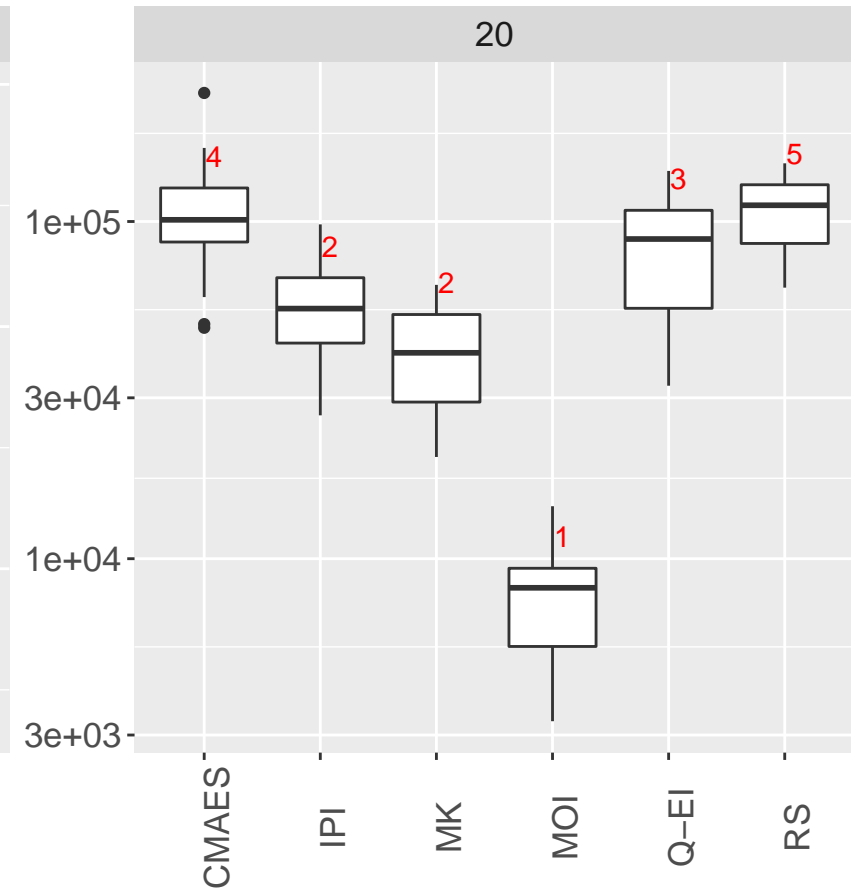
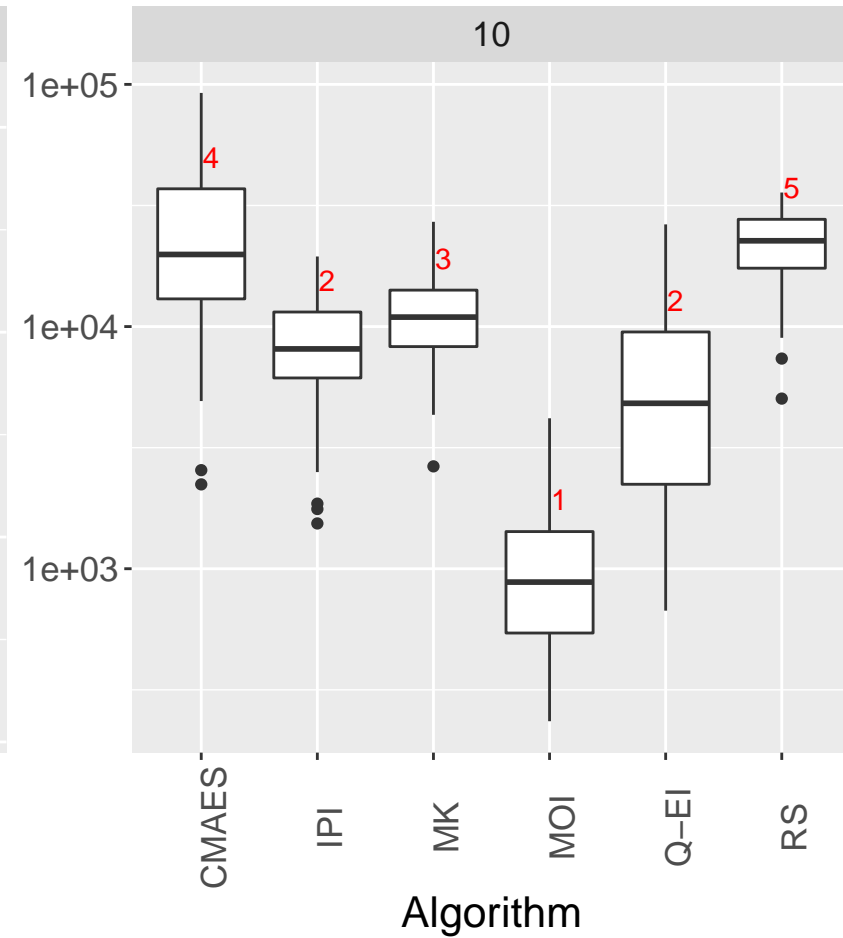
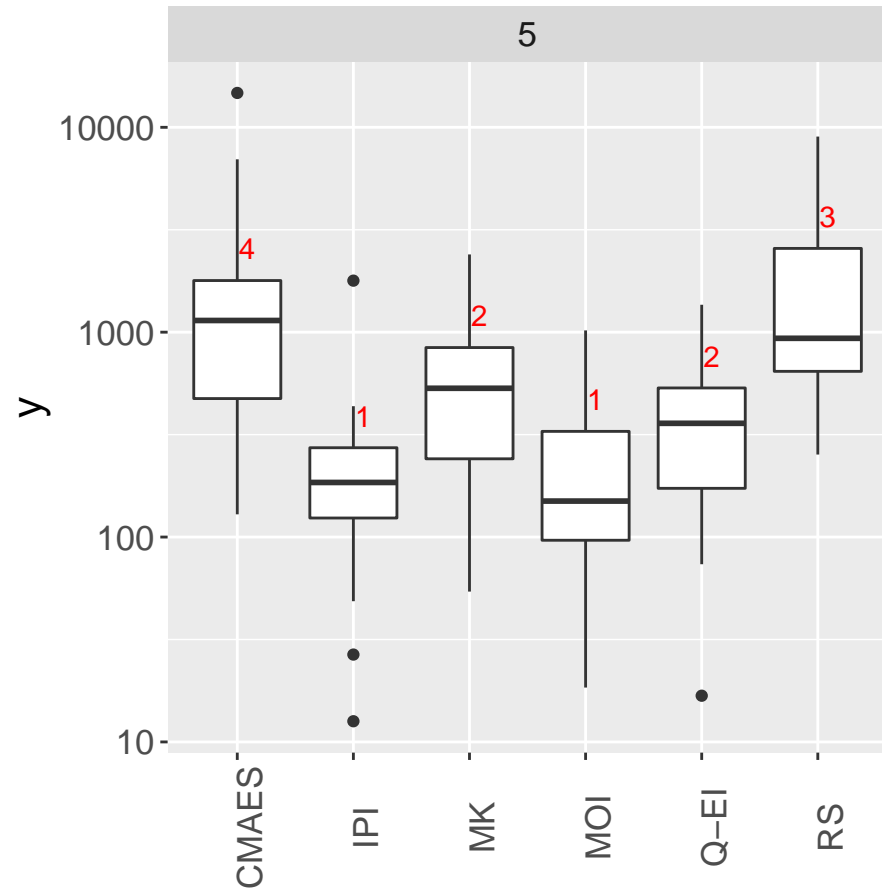
Rosenbrock
Evaluation: 100



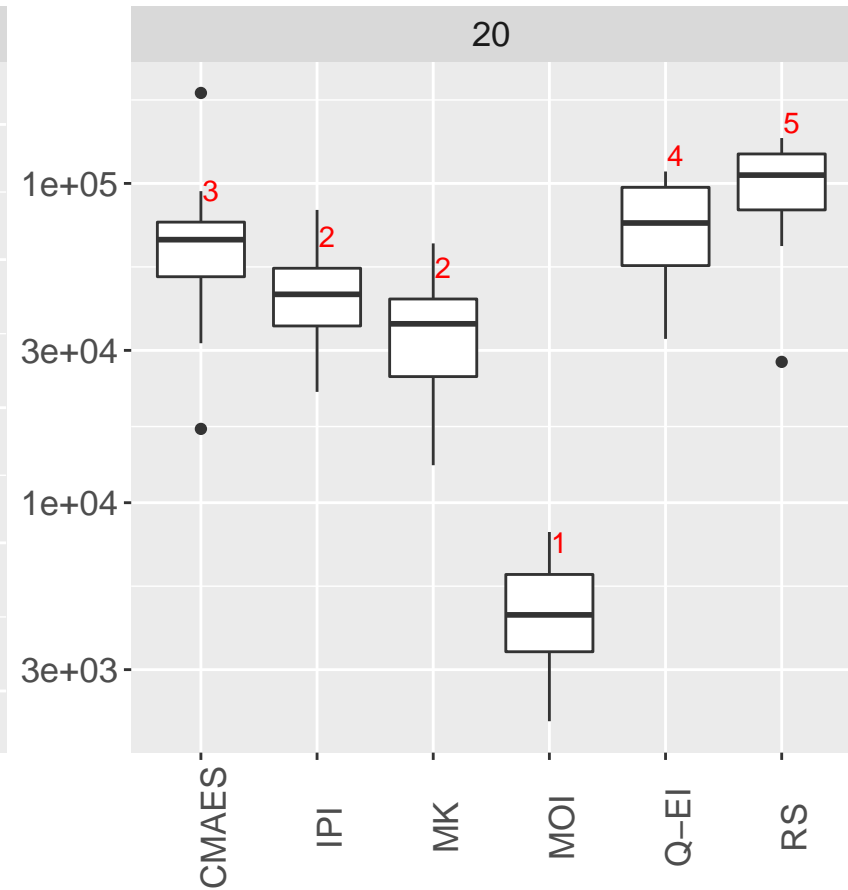
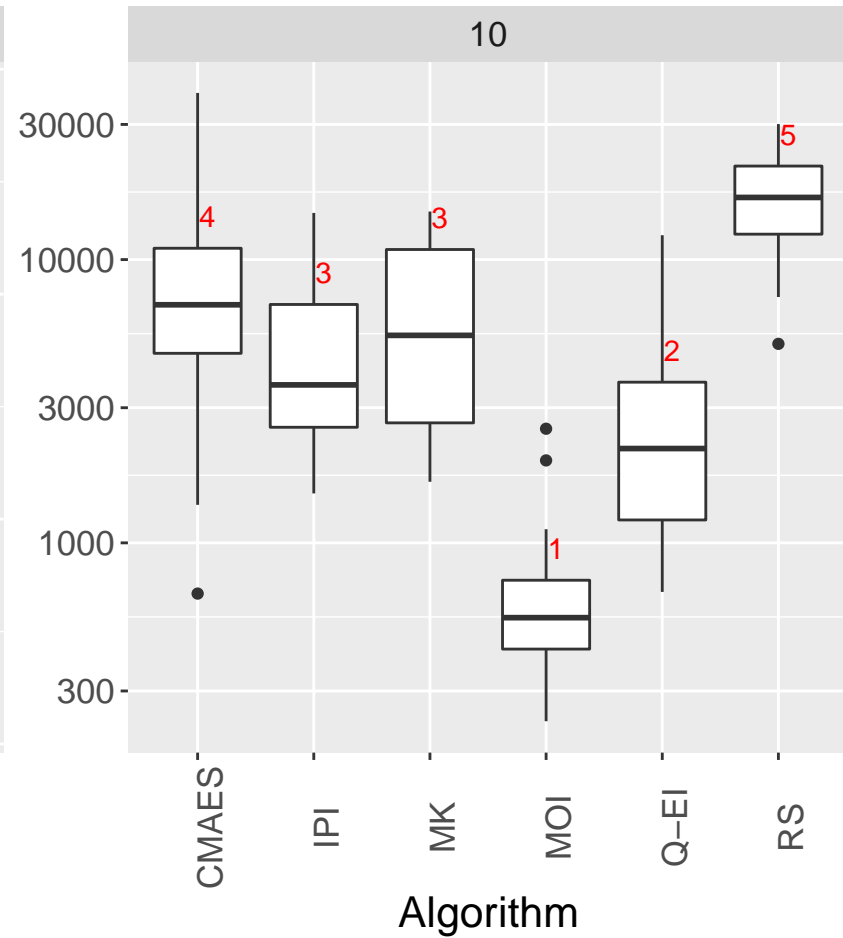
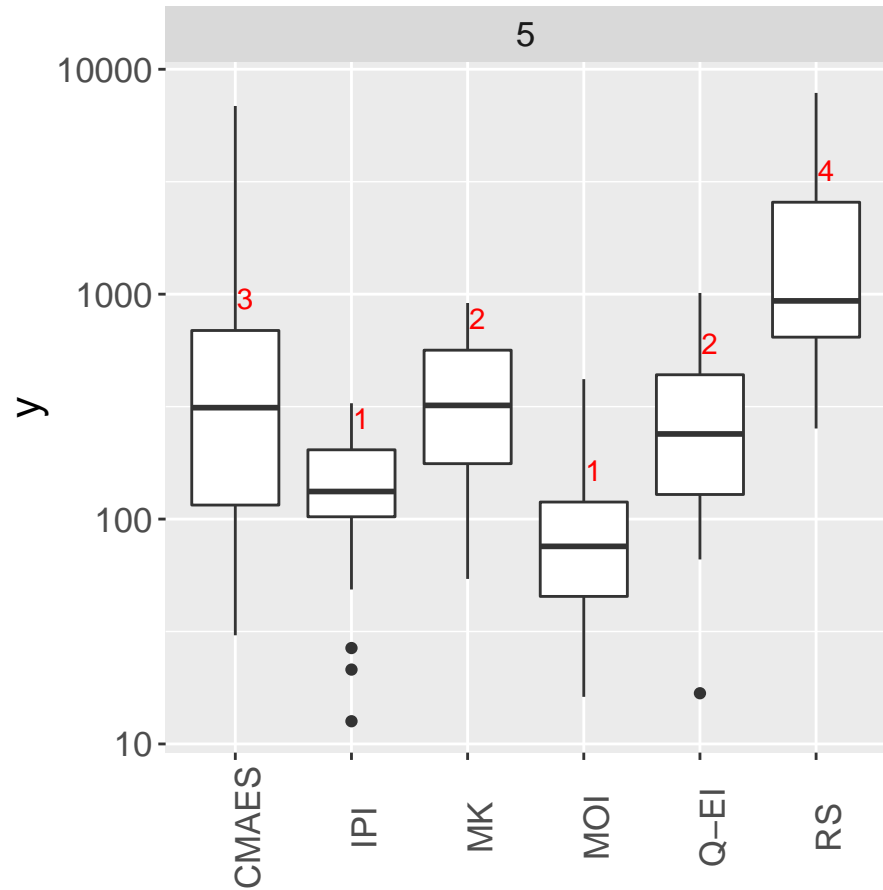
Rosenbrock, rotated
Evaluation: 25



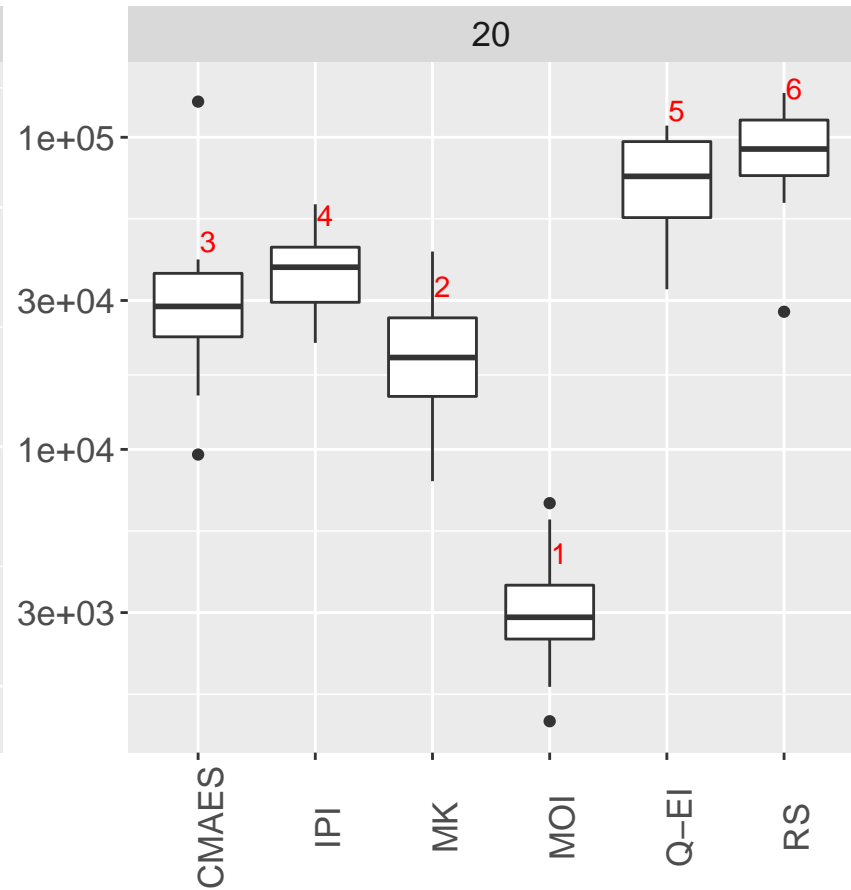
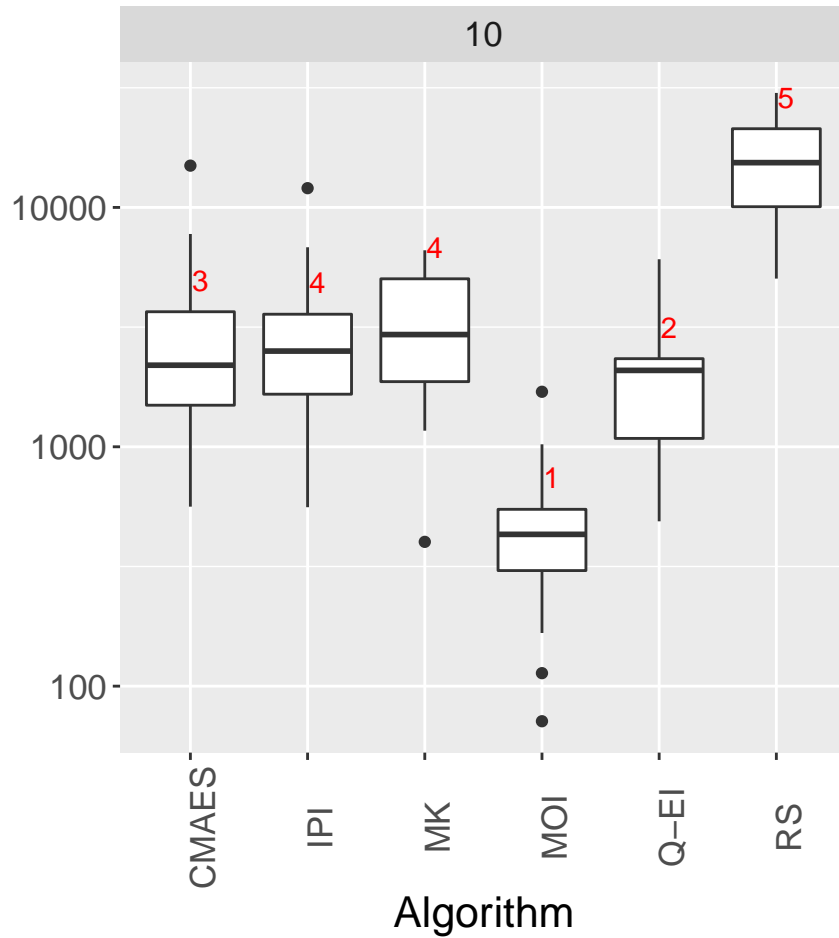
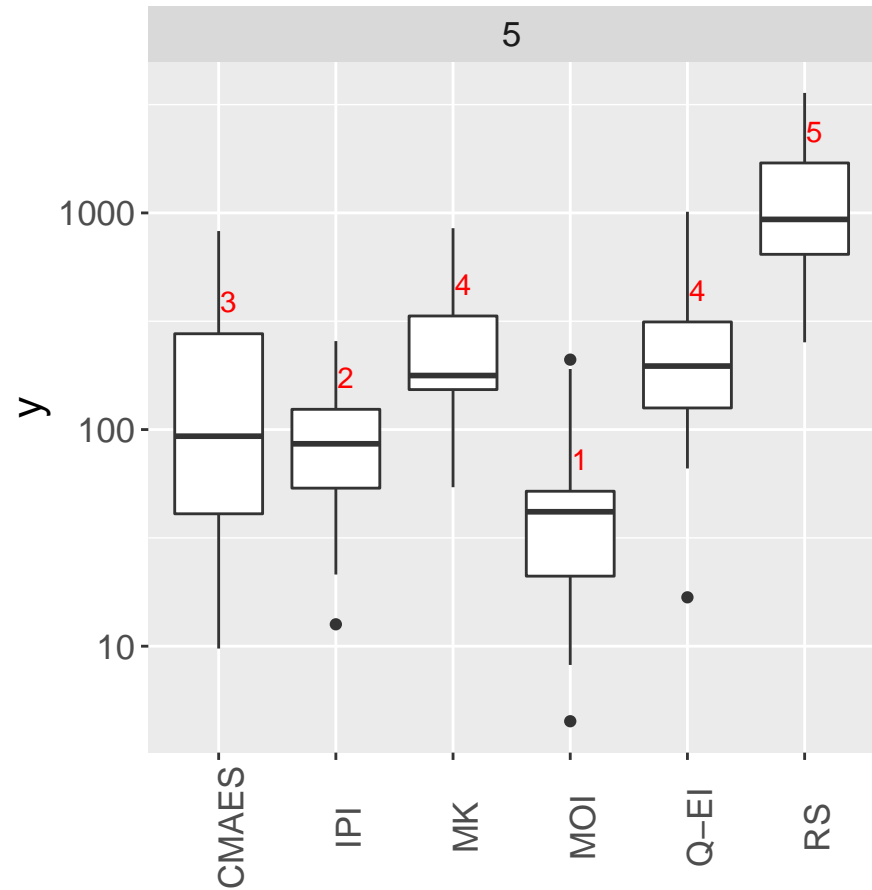
Rosenbrock, rotated
Evaluation: 50



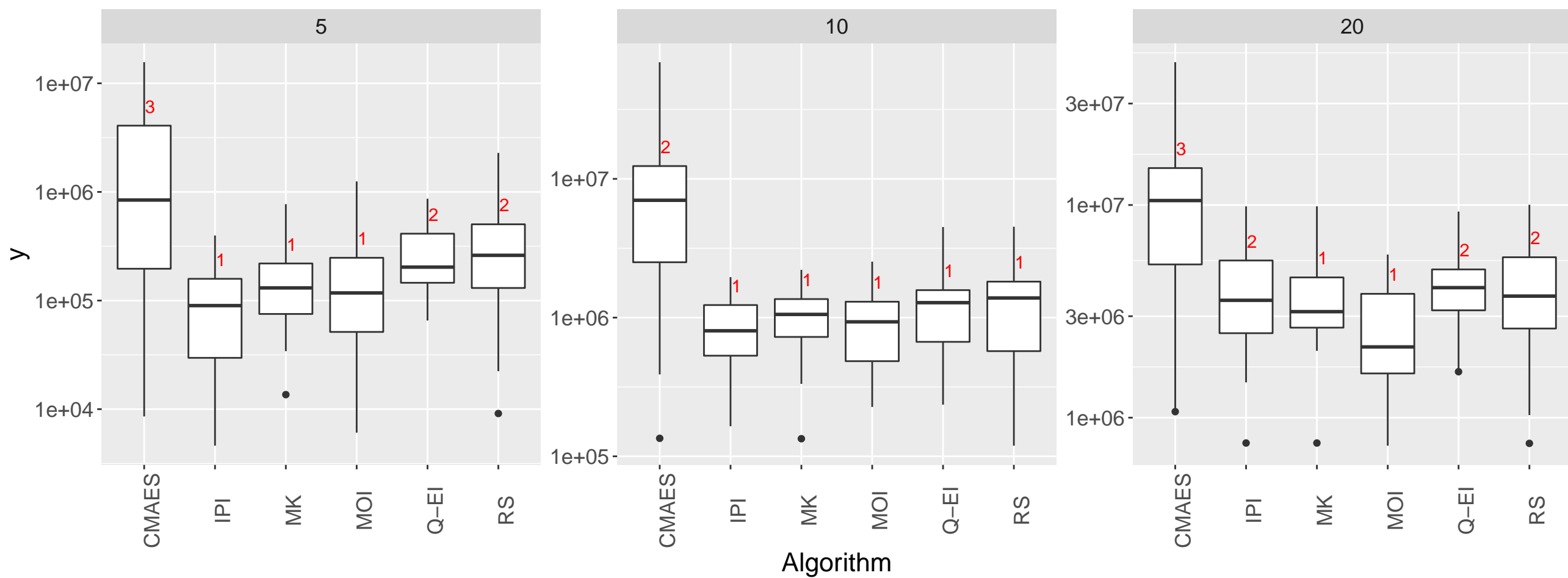
Rosenbrock, rotated
Evaluation: 70



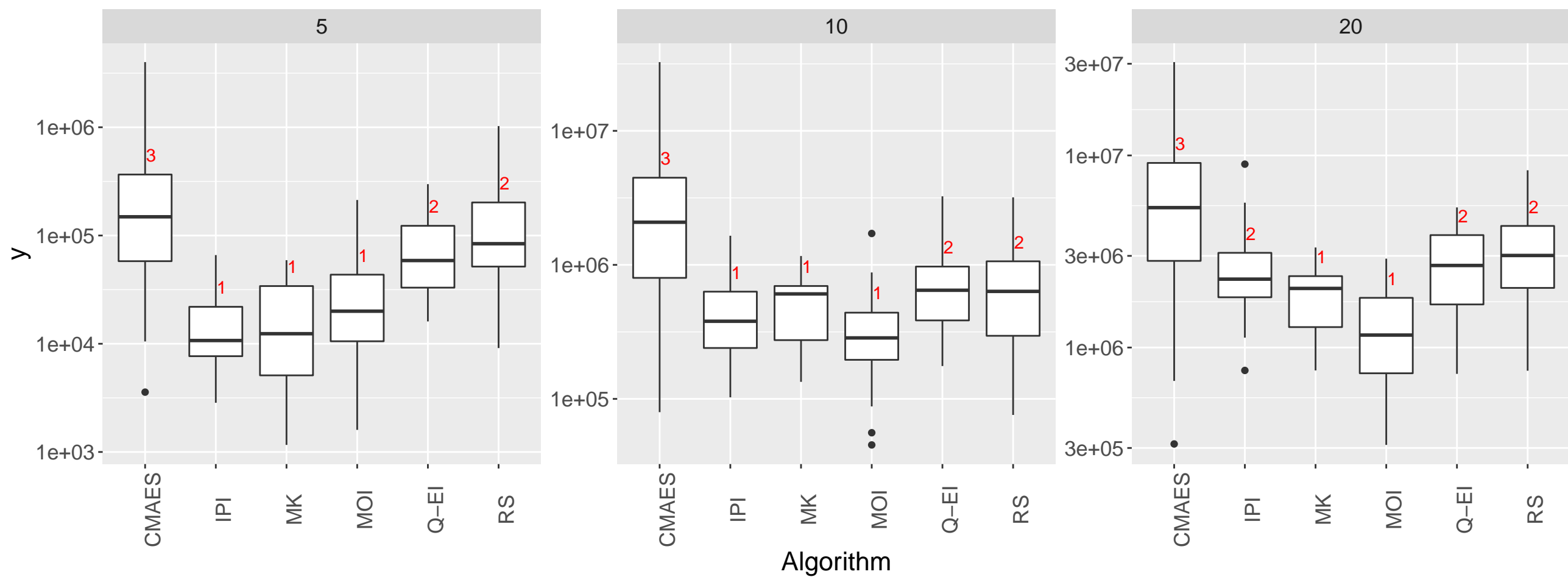
Rosenbrock, rotated
Evaluation: 100



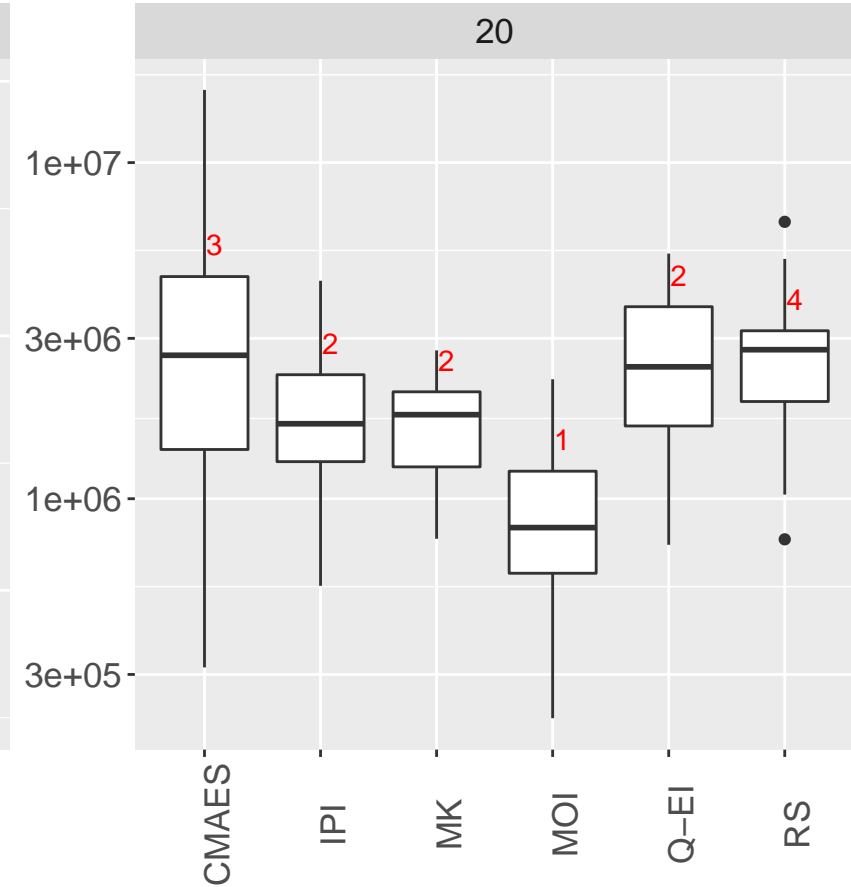
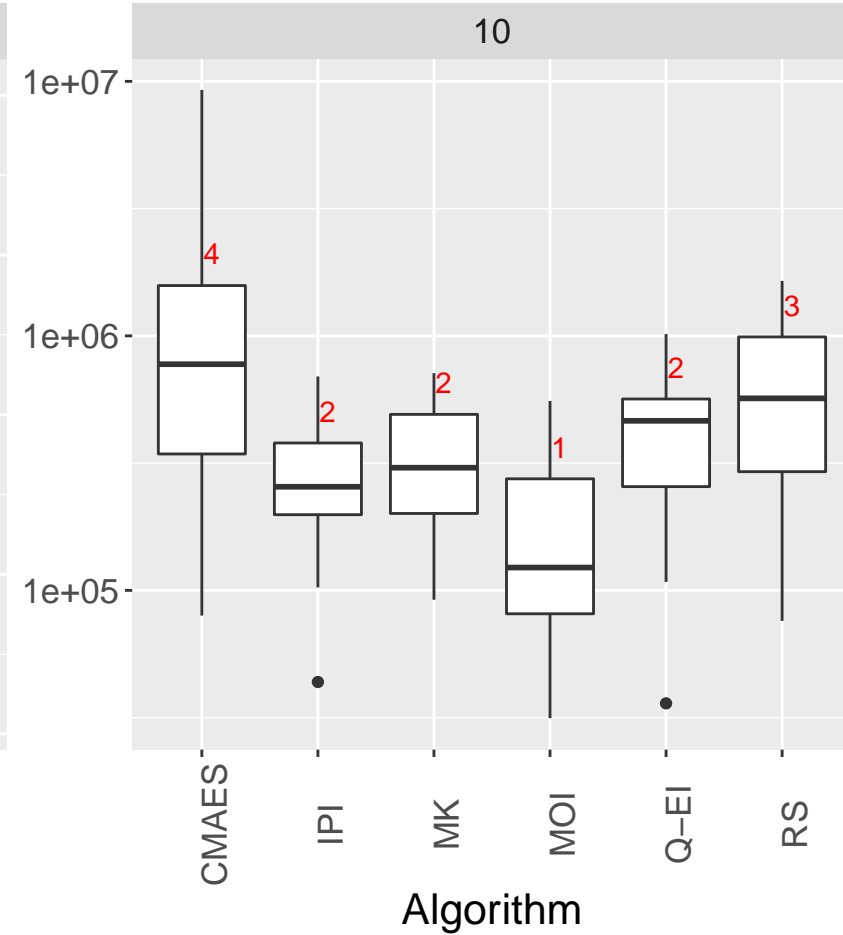
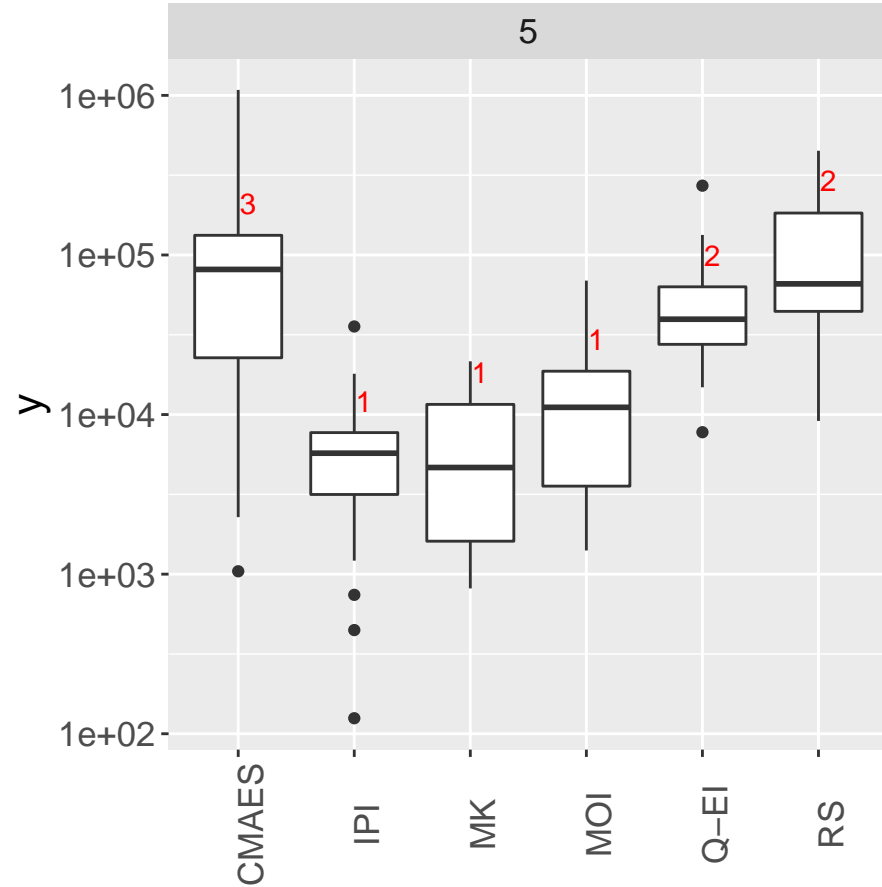
Ellipsoidal
Evaluation: 25

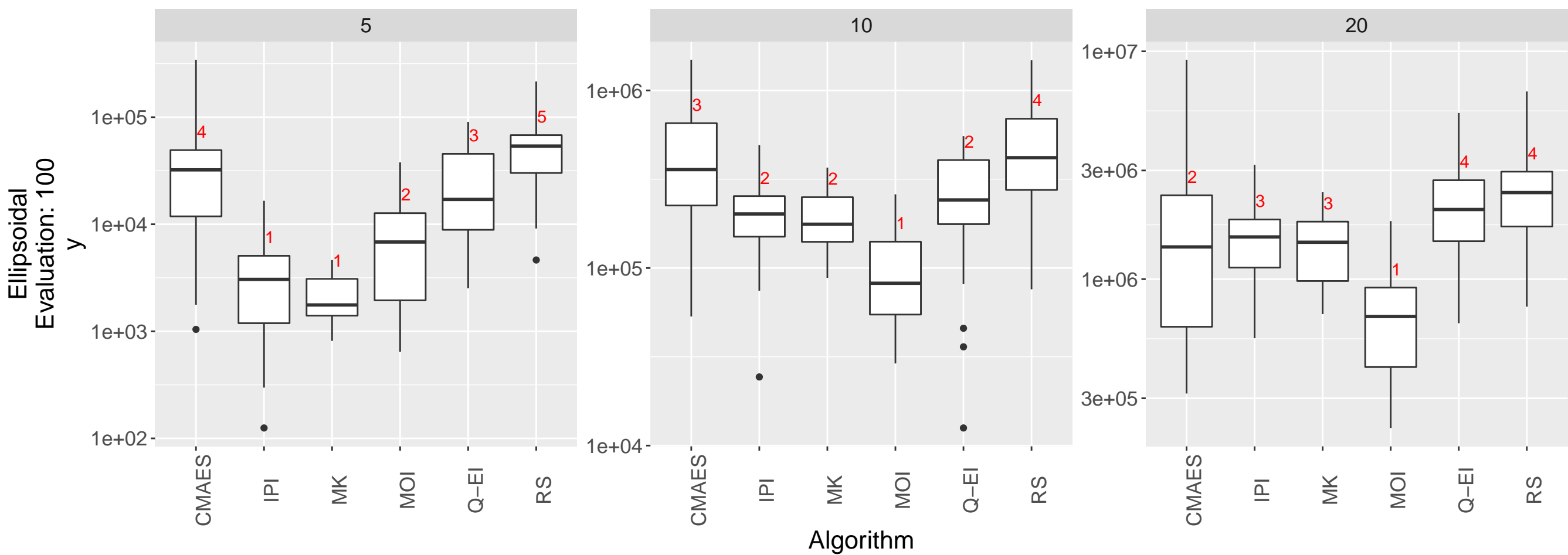


Ellipsoidal
Evaluation: 50

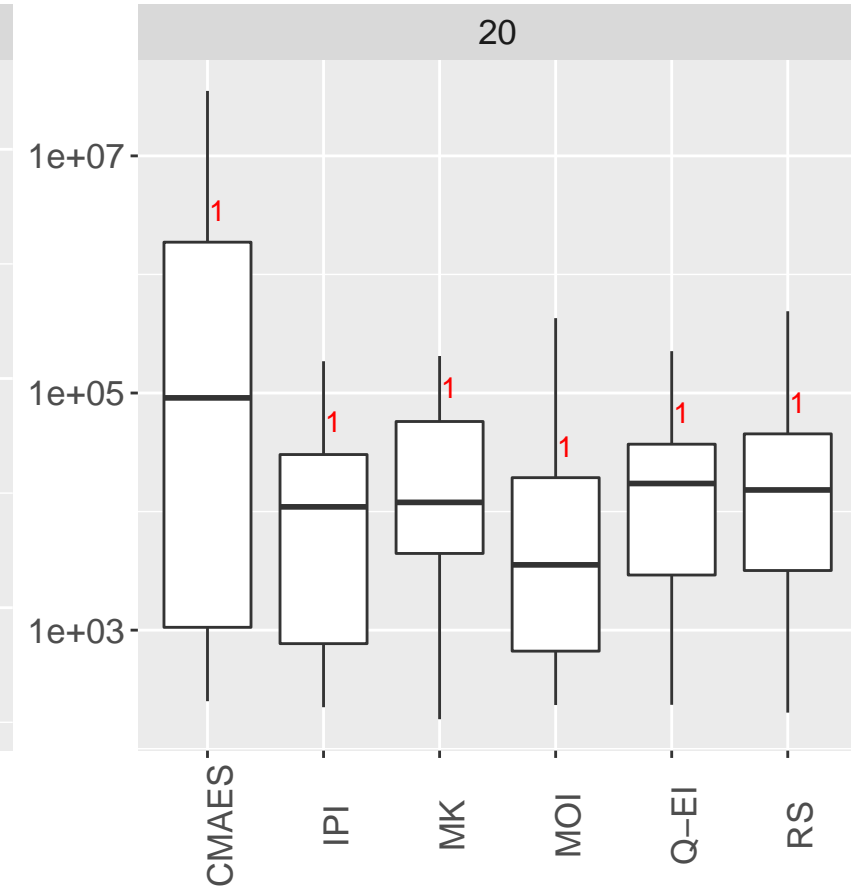
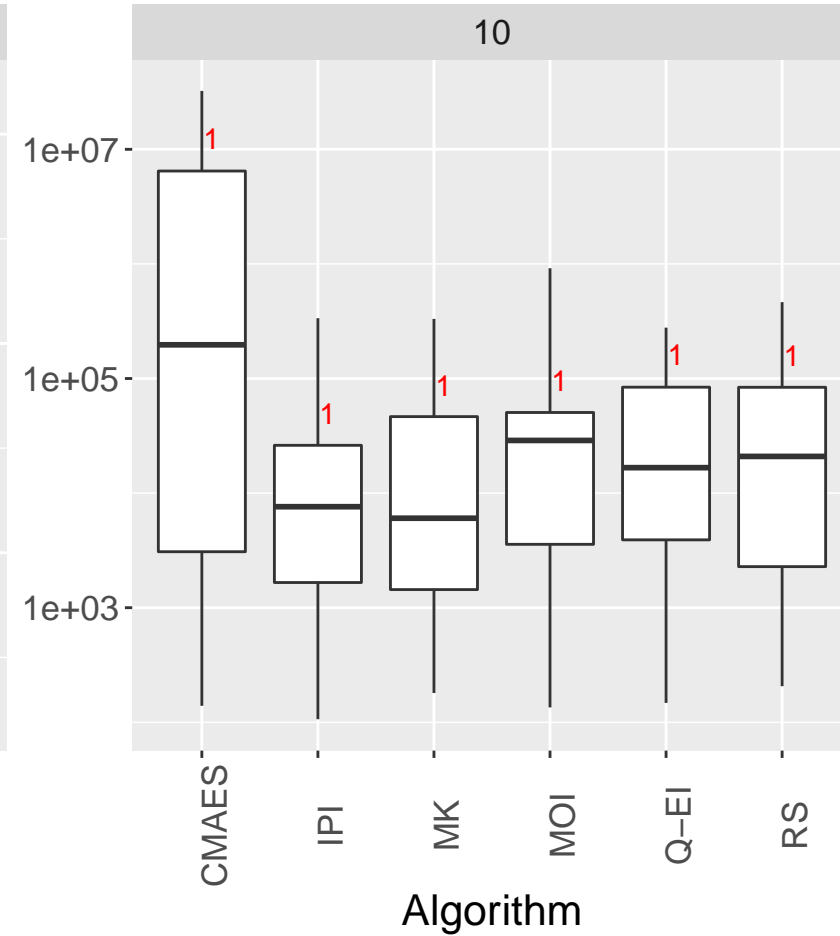
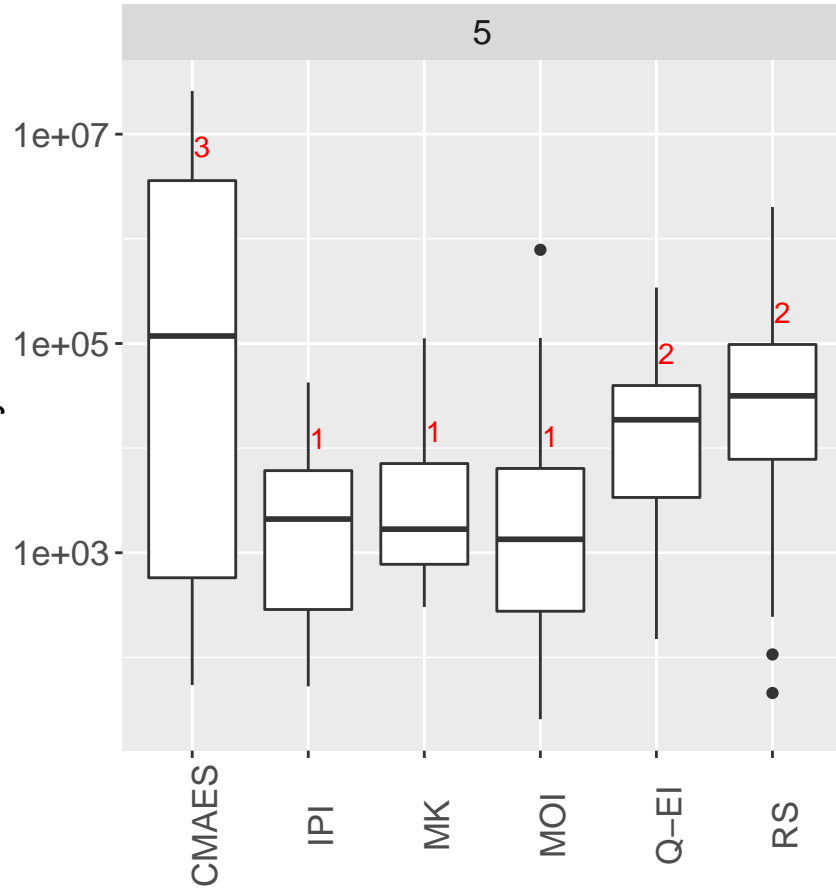


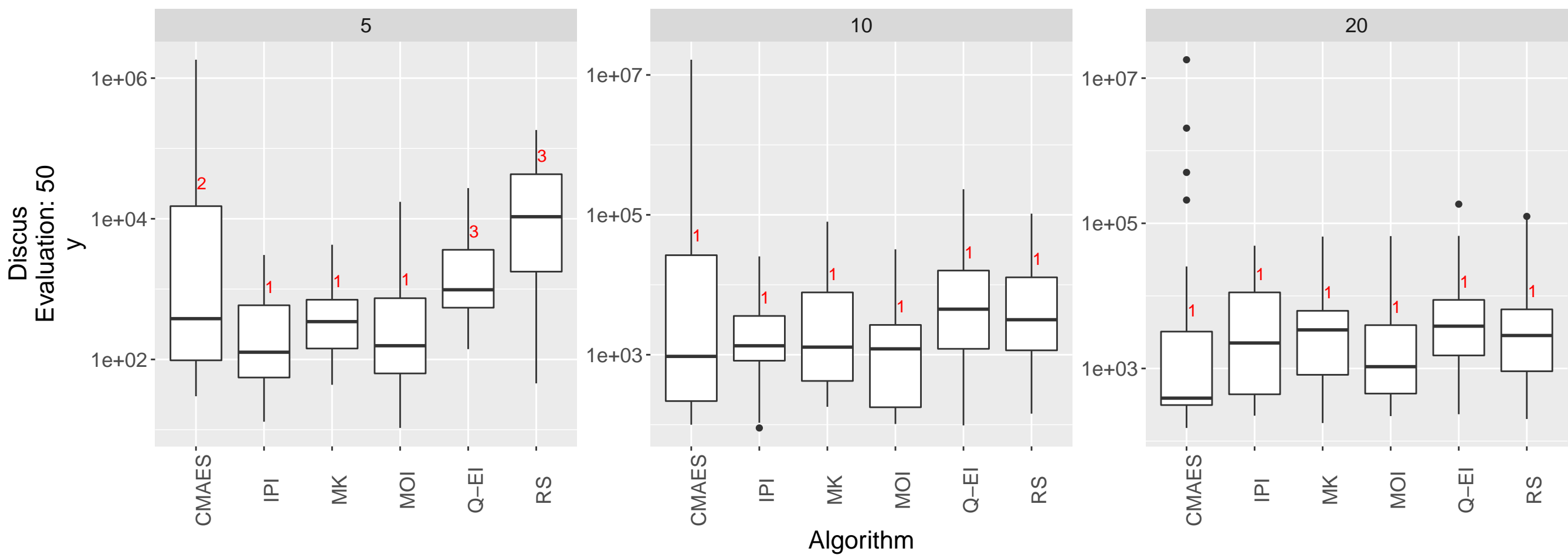
Ellipsoidal
Evaluation: 70



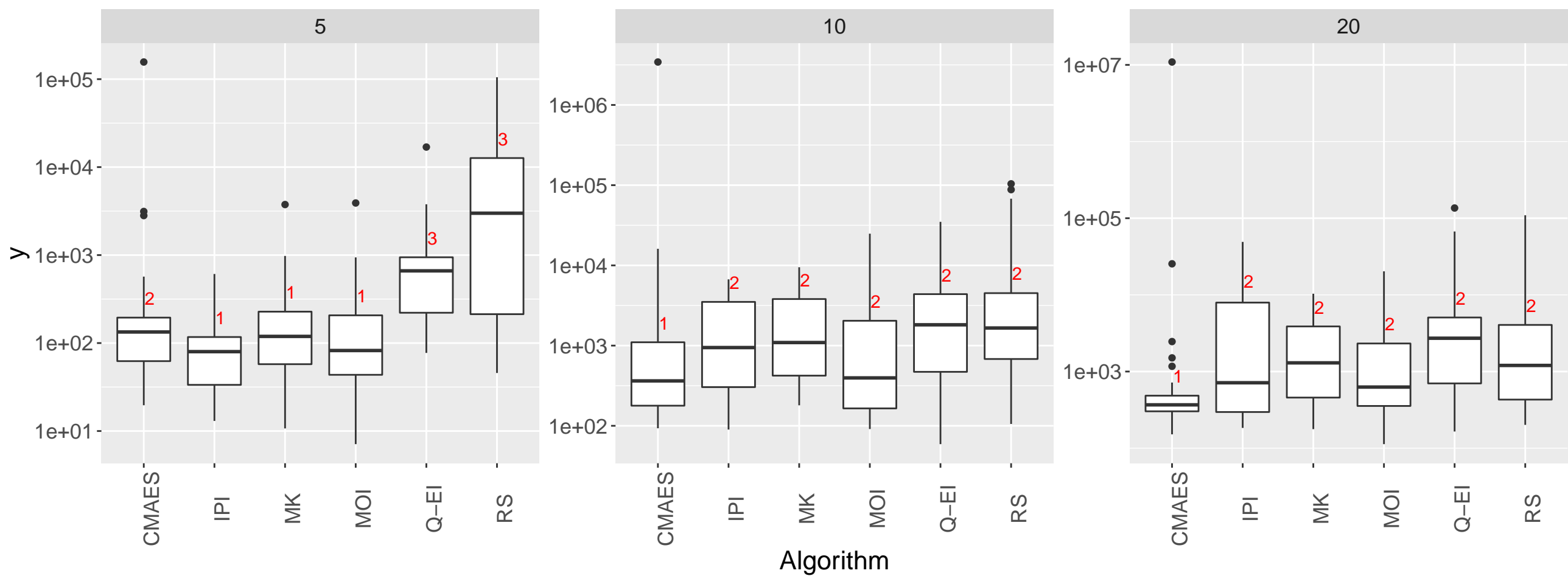


Discus
Evaluation: 25

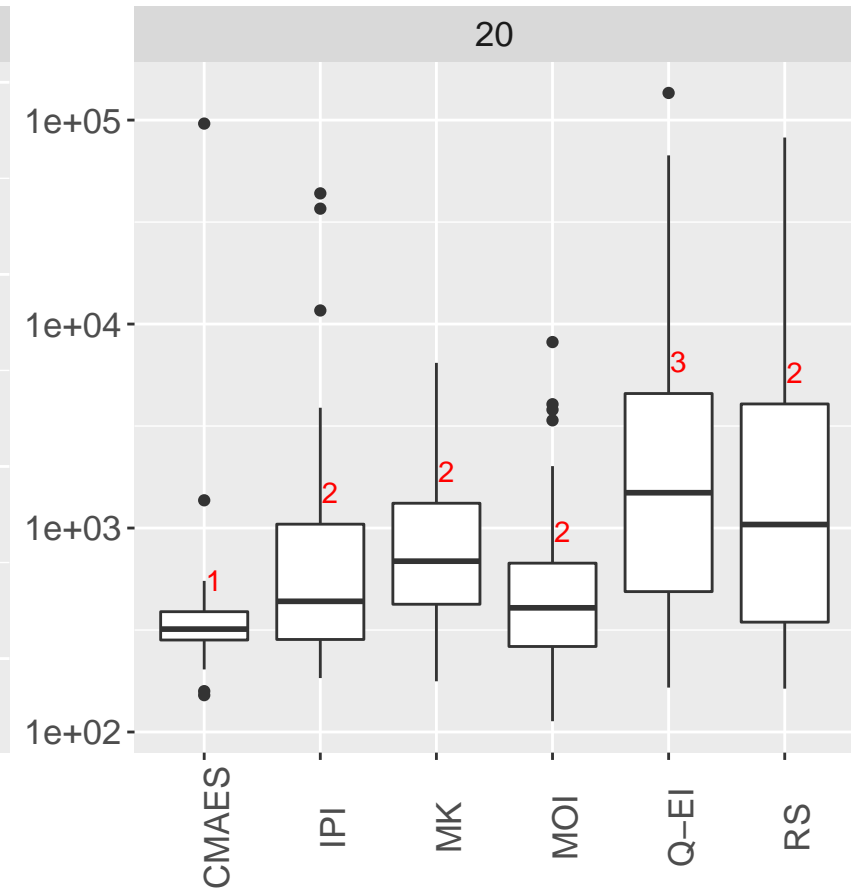
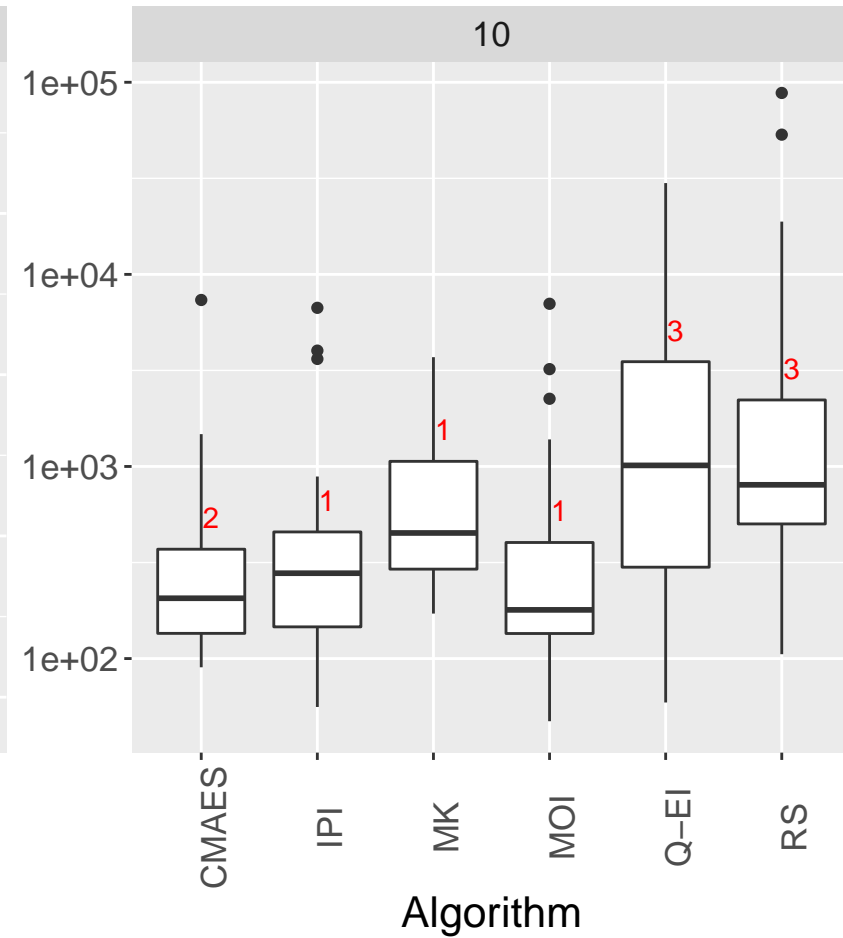
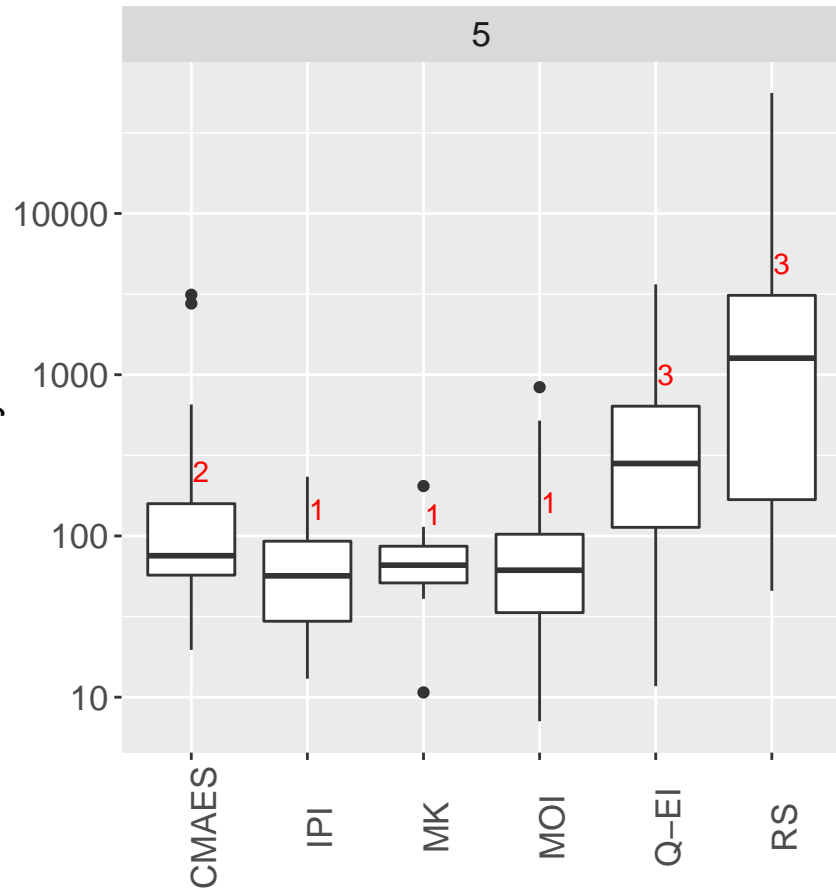




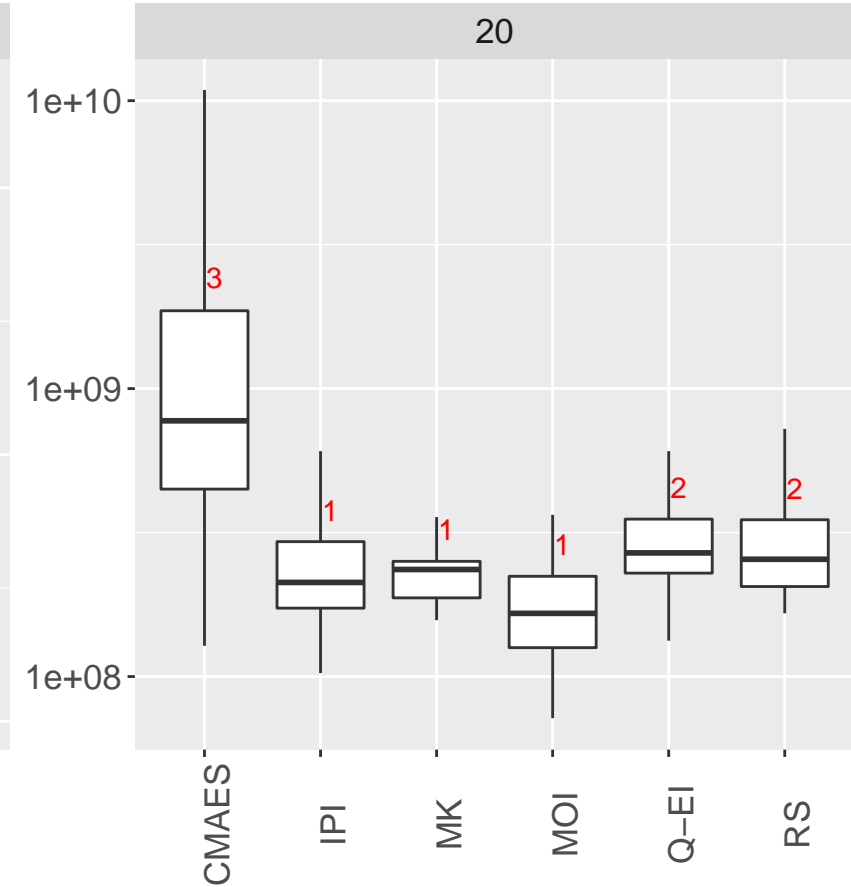
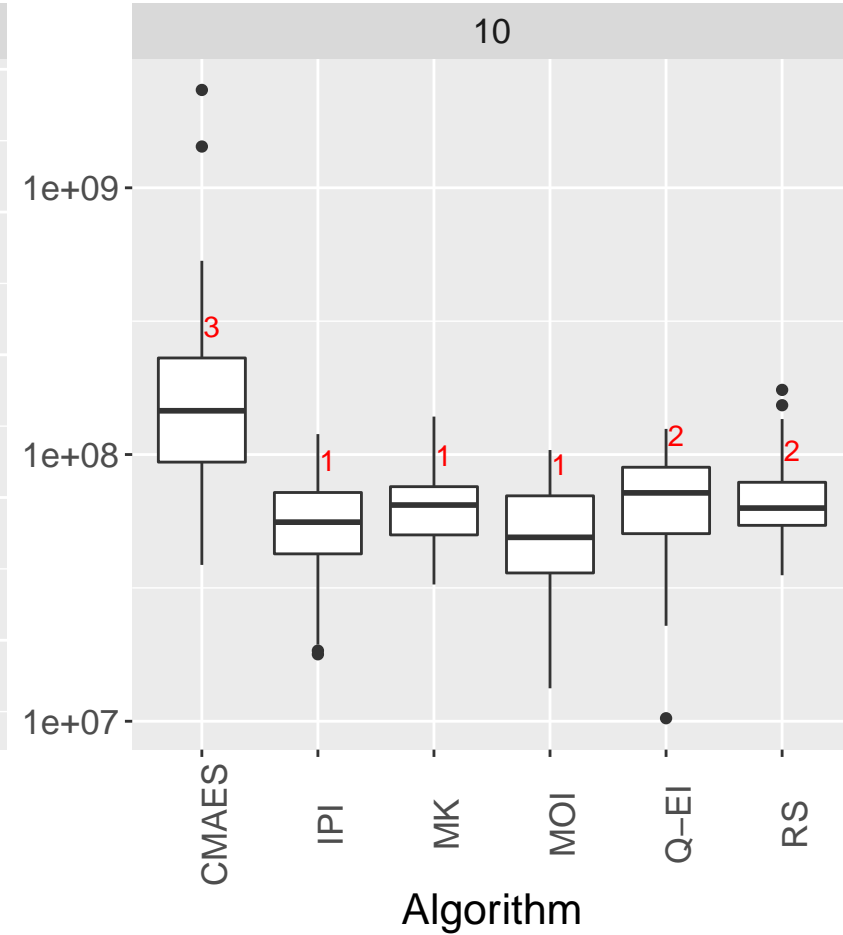
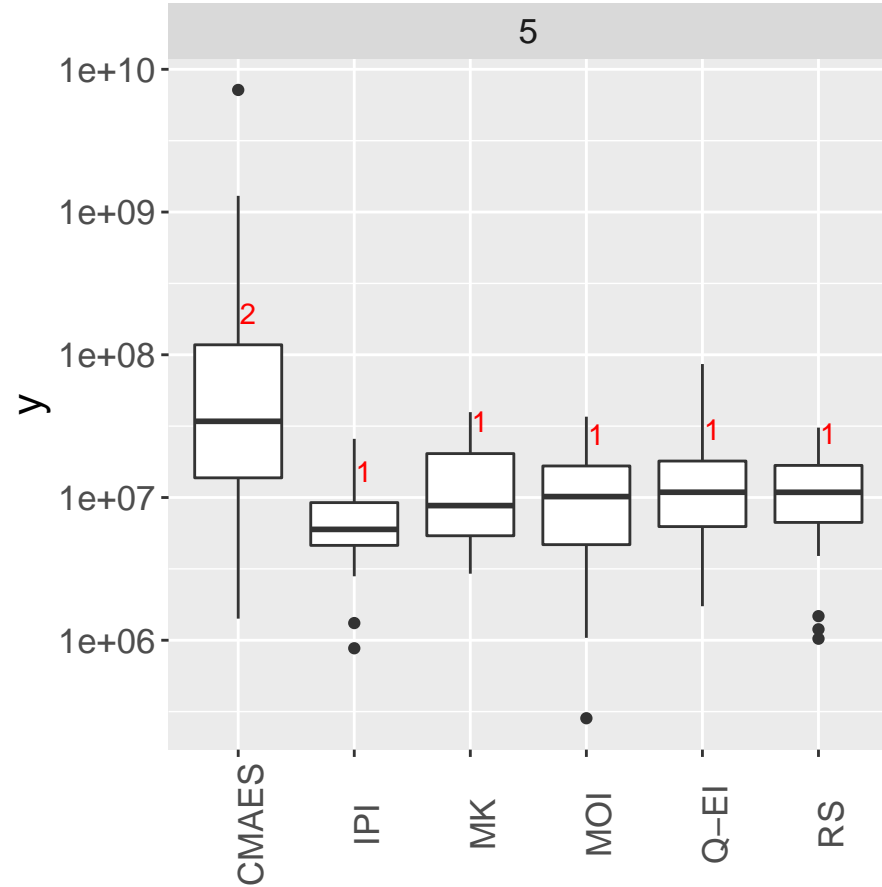
Discus
Evaluation: 70



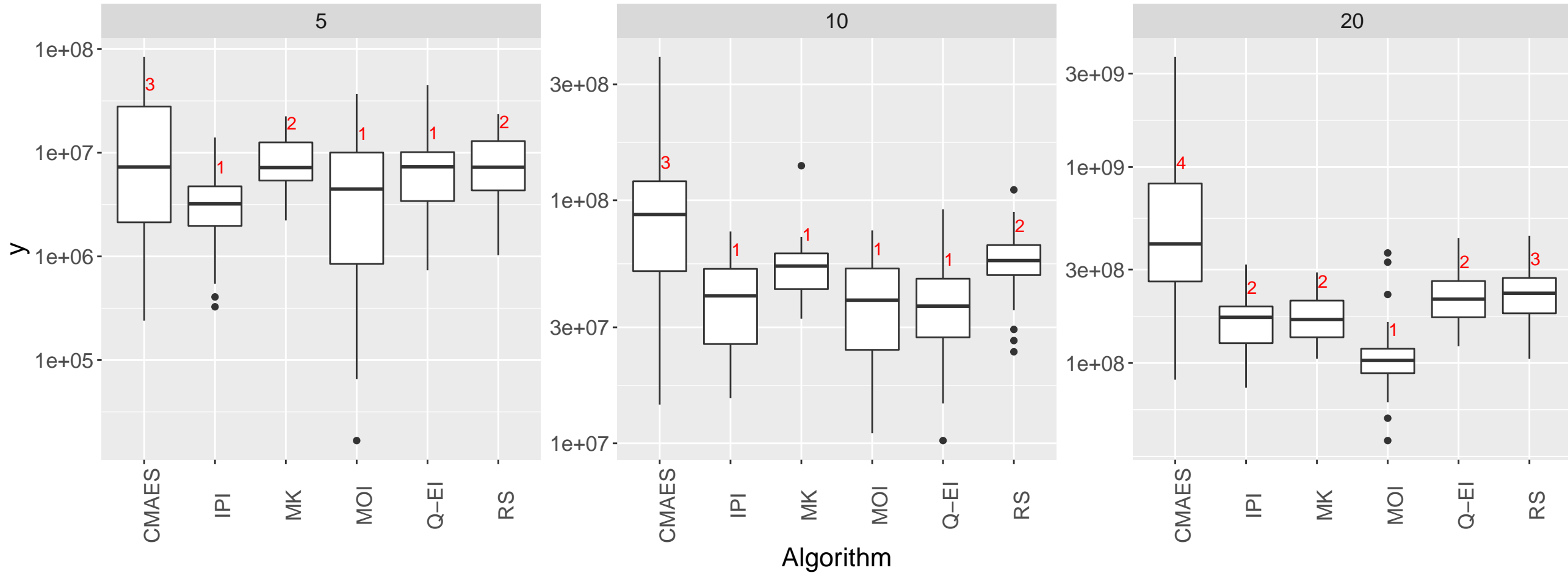
Discus
Evaluation: 100
y



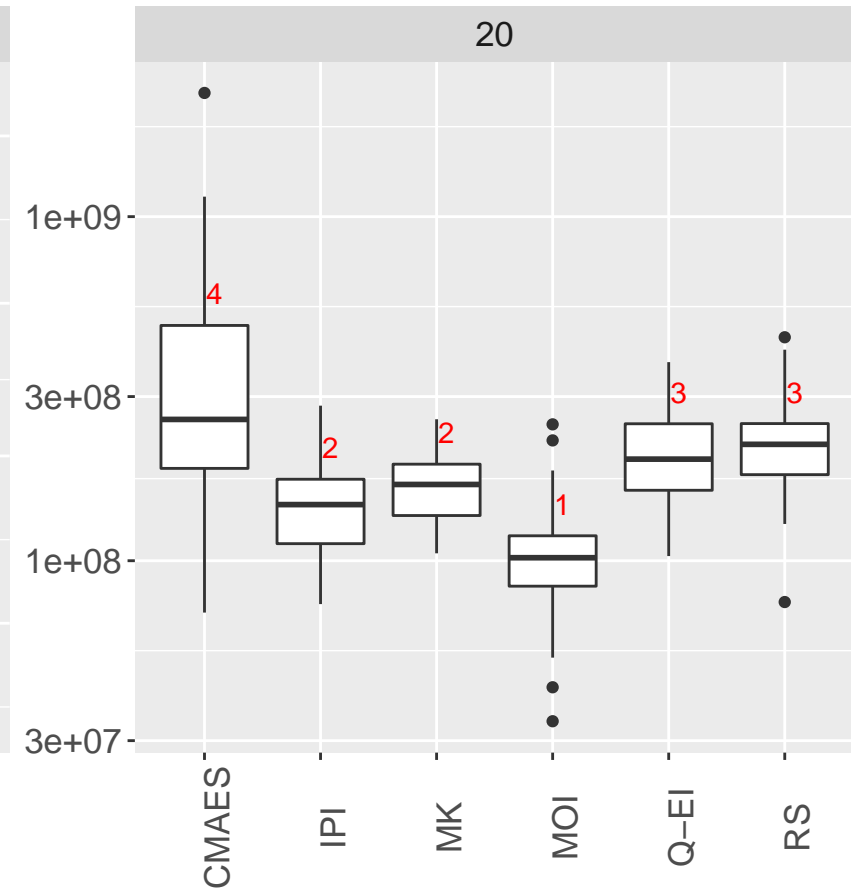
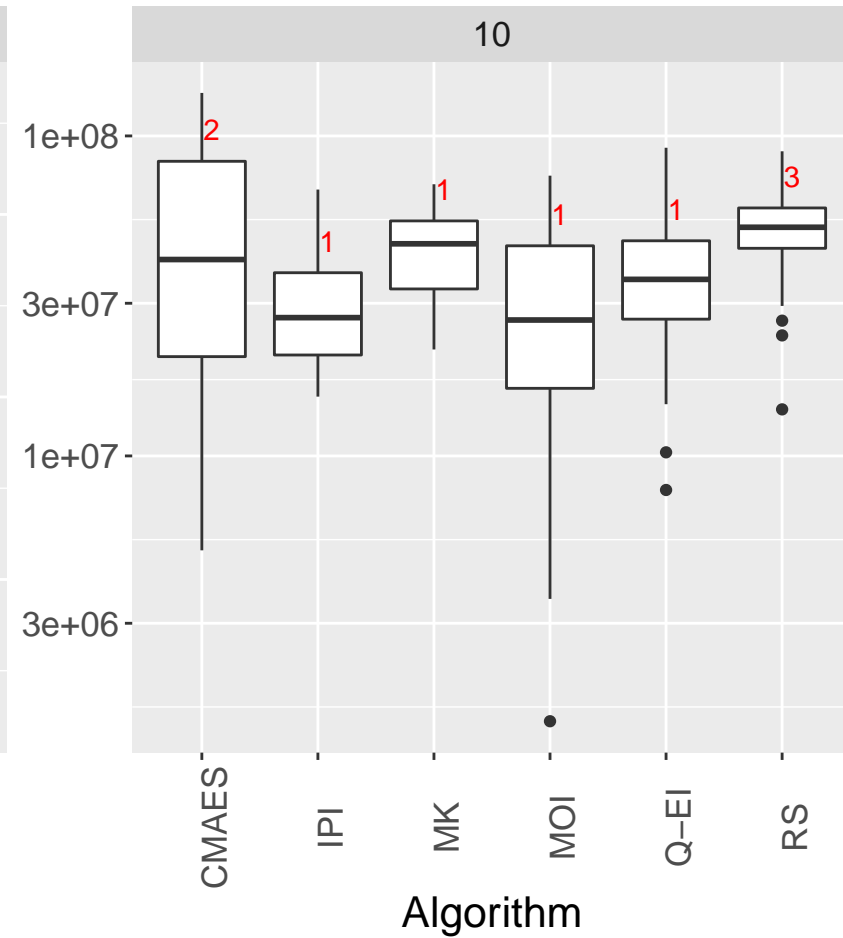
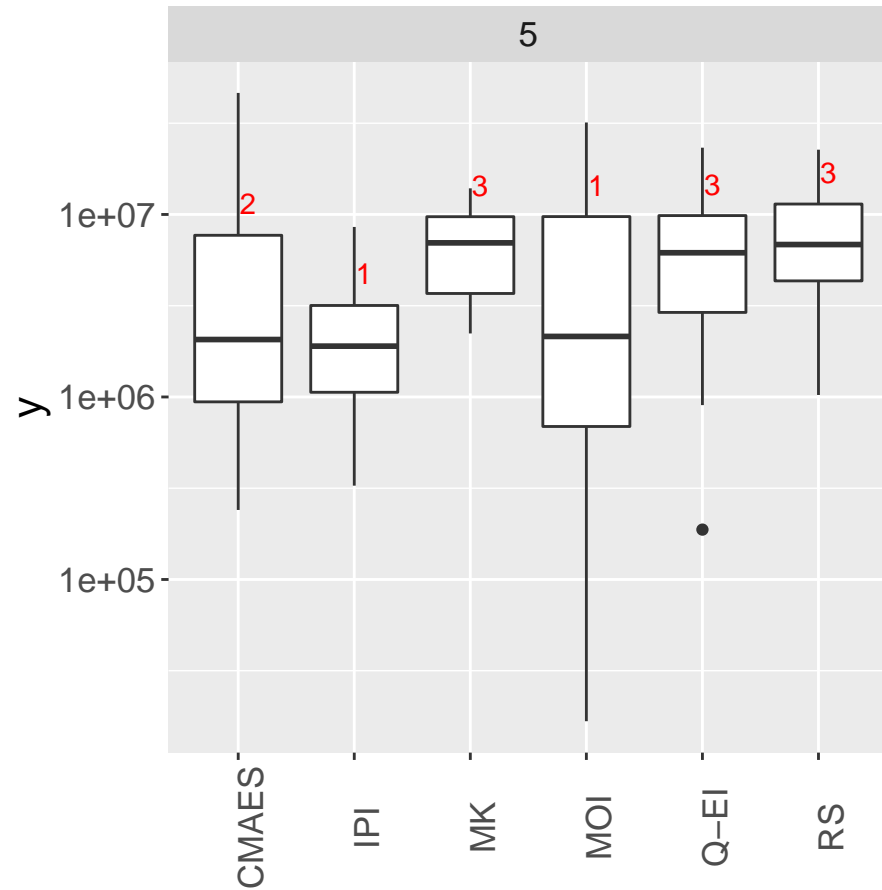
Bent Cigar
Evaluation: 25



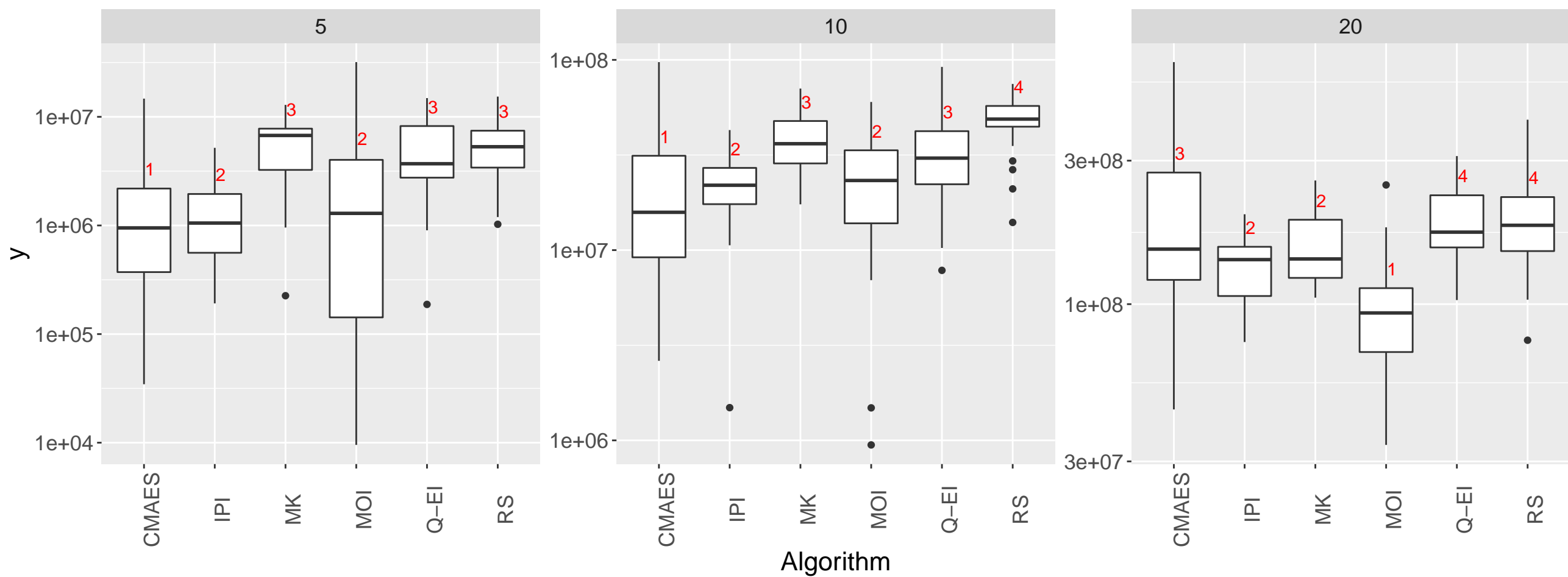
Bent Cigar
Evaluation: 50



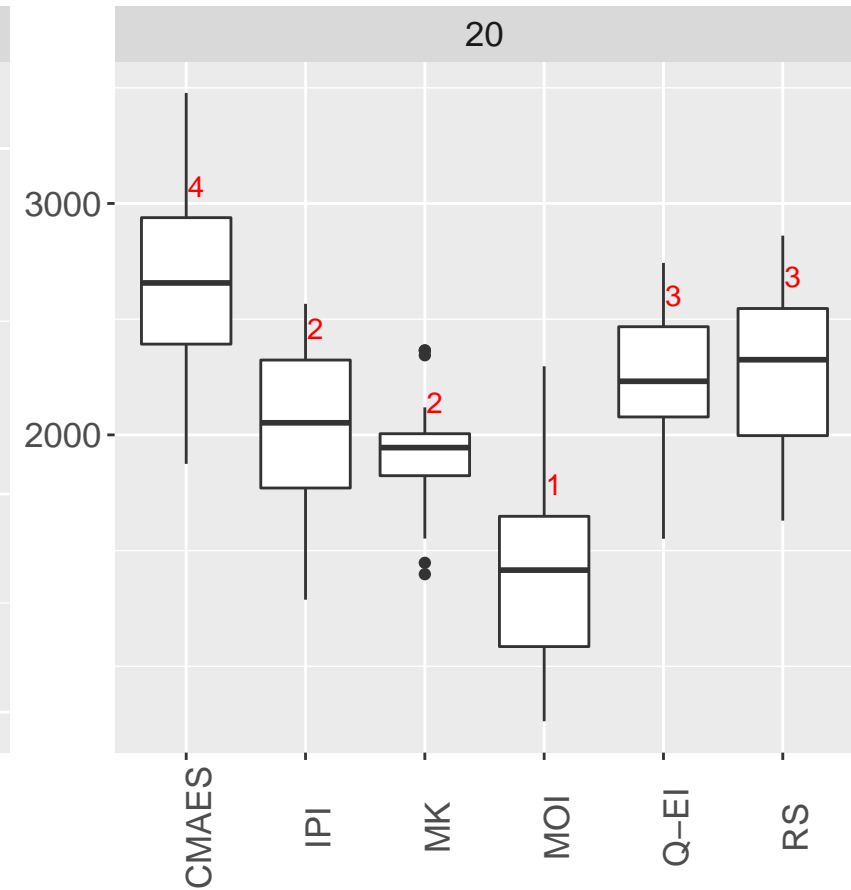
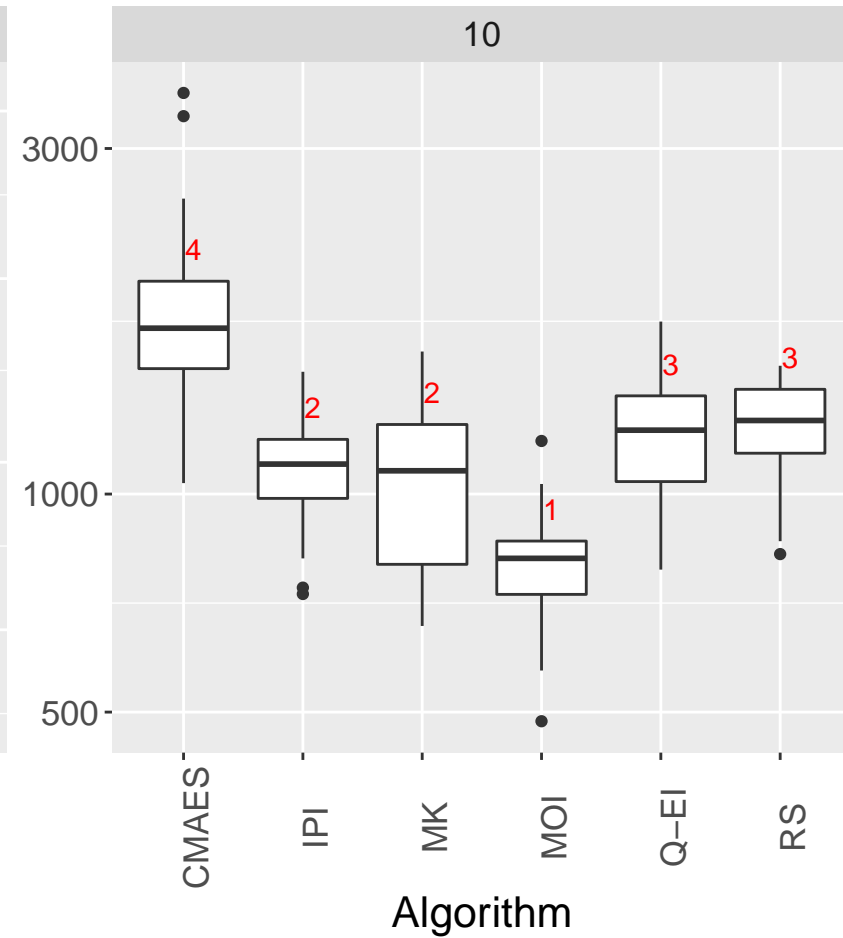
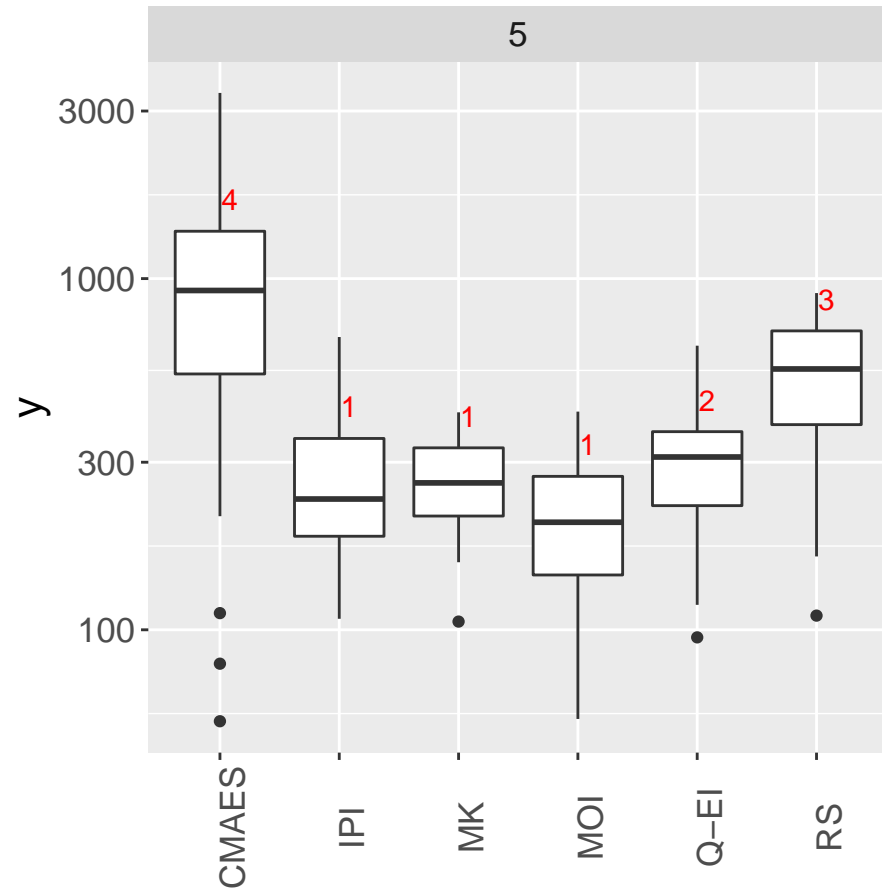
Bent Cigar
Evaluation: 70



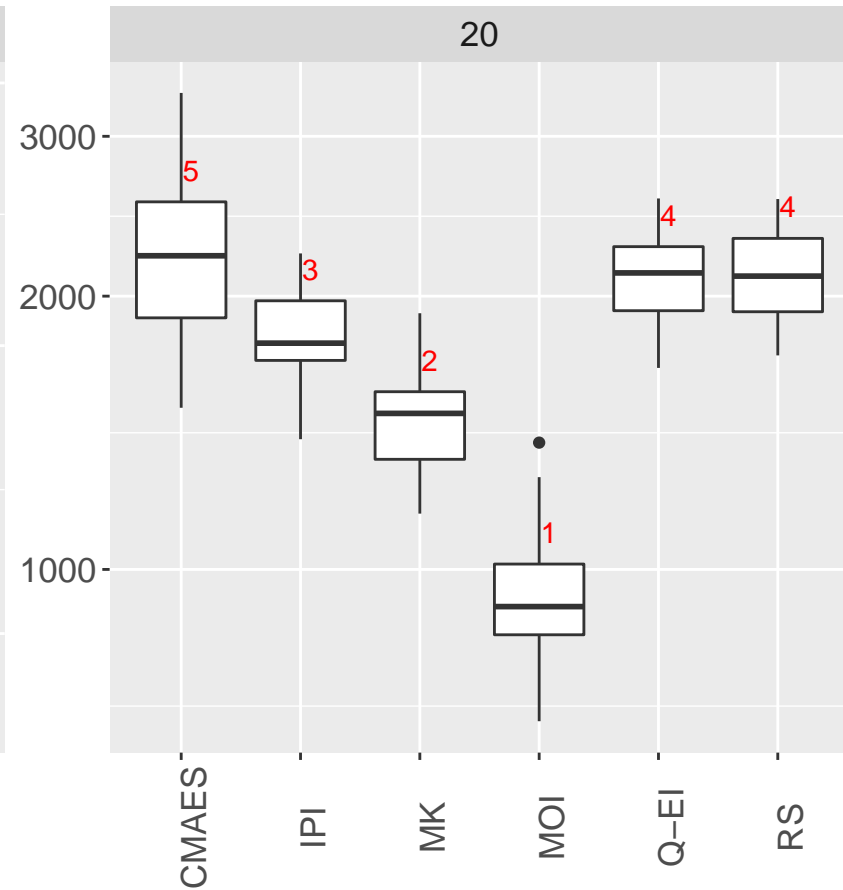
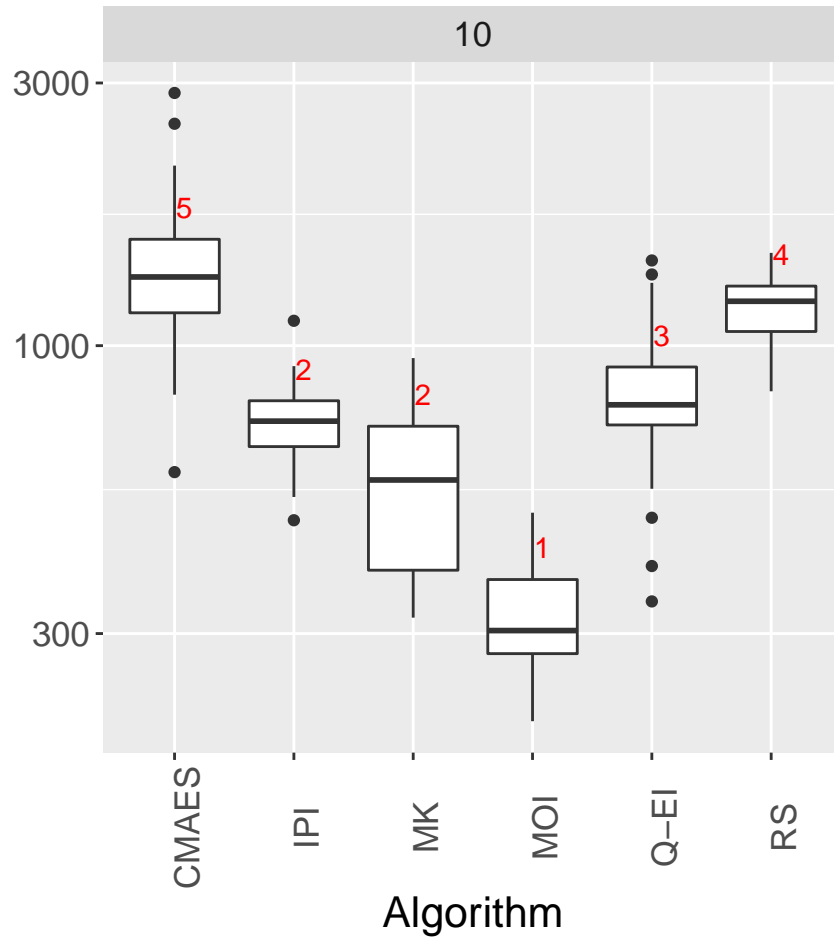
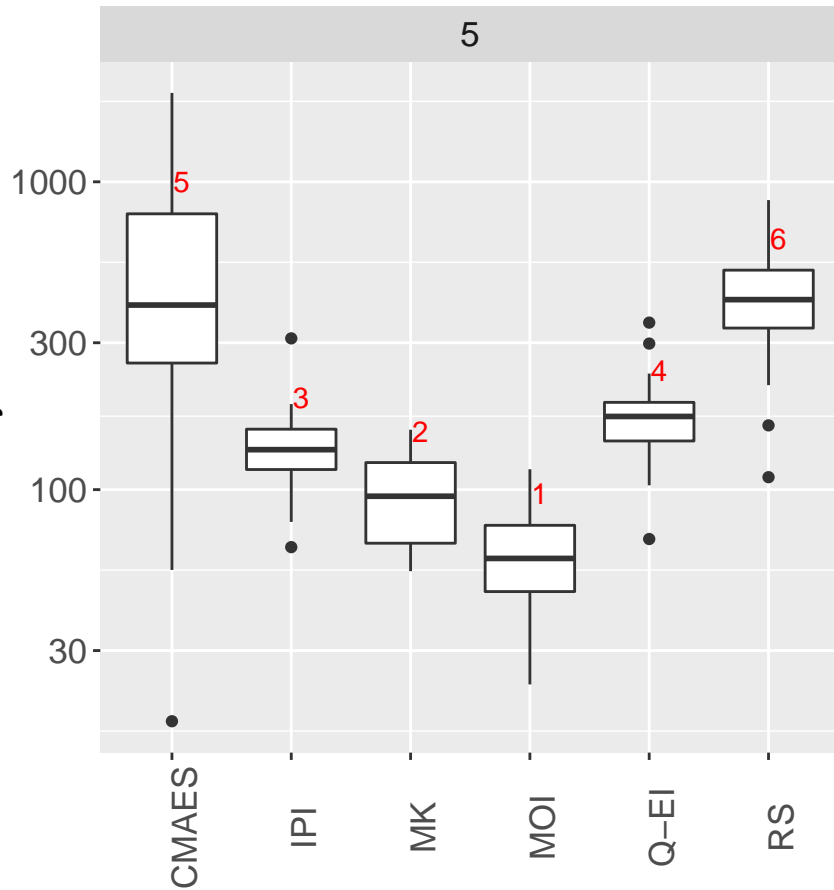
Bent Cigar
Evaluation: 100



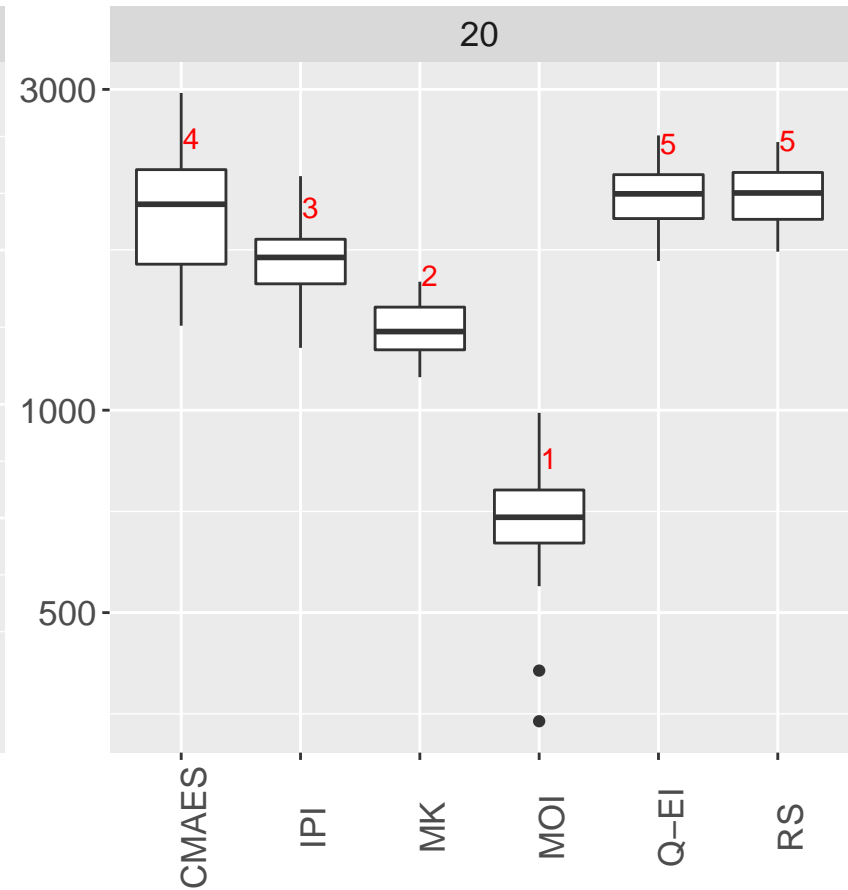
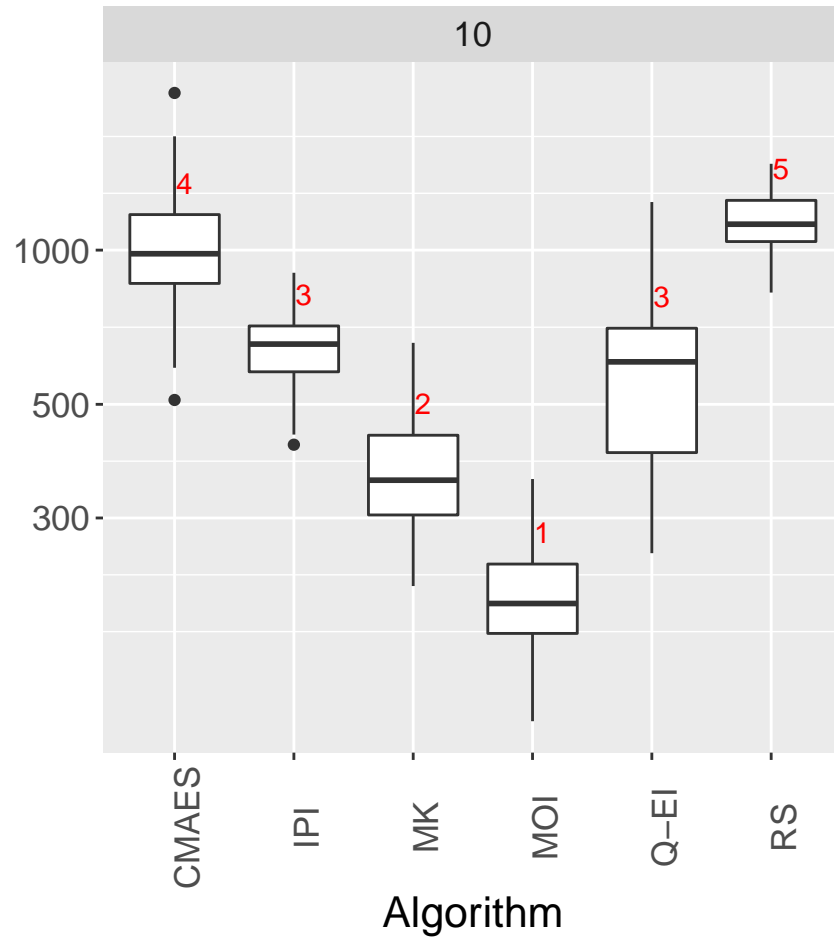
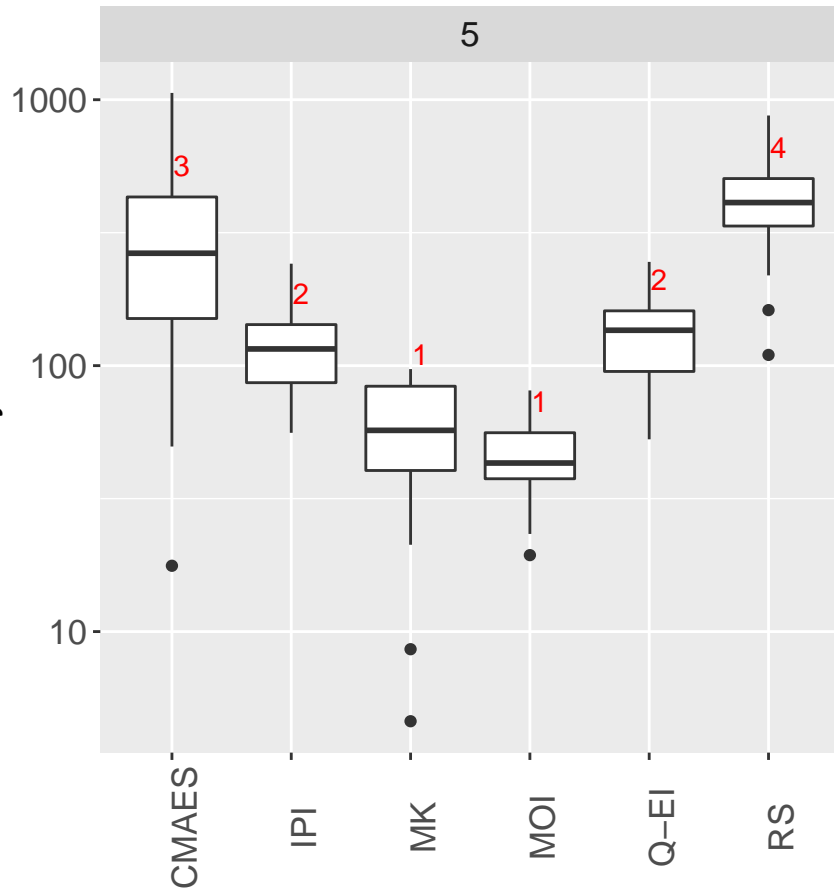
Sharp Ridge
Evaluation: 25



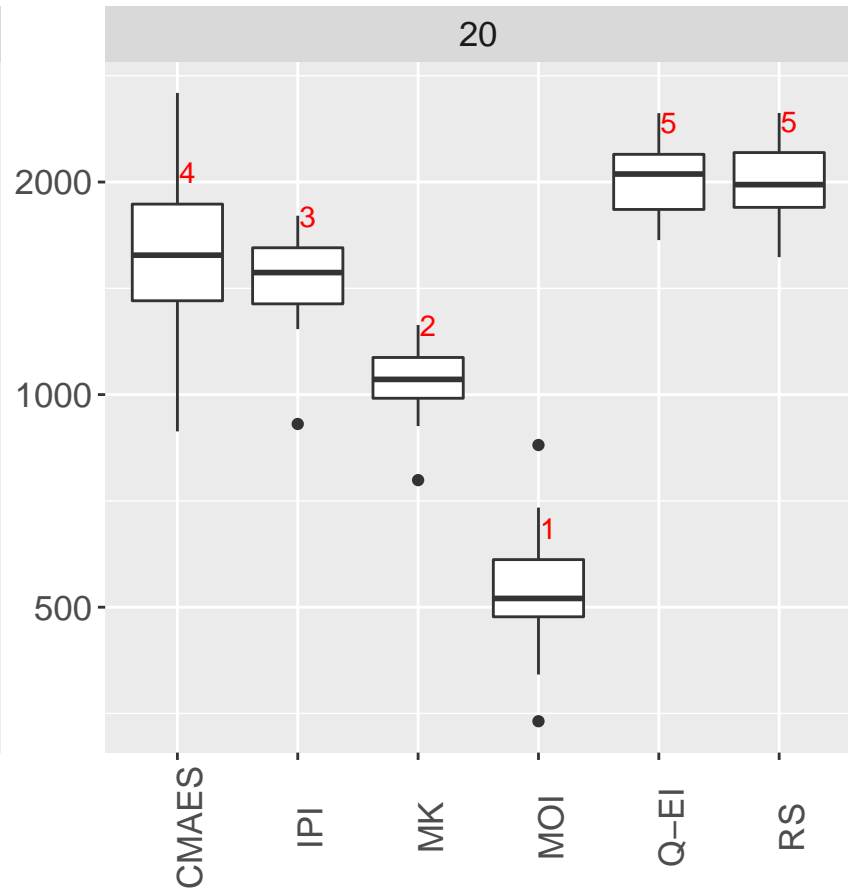
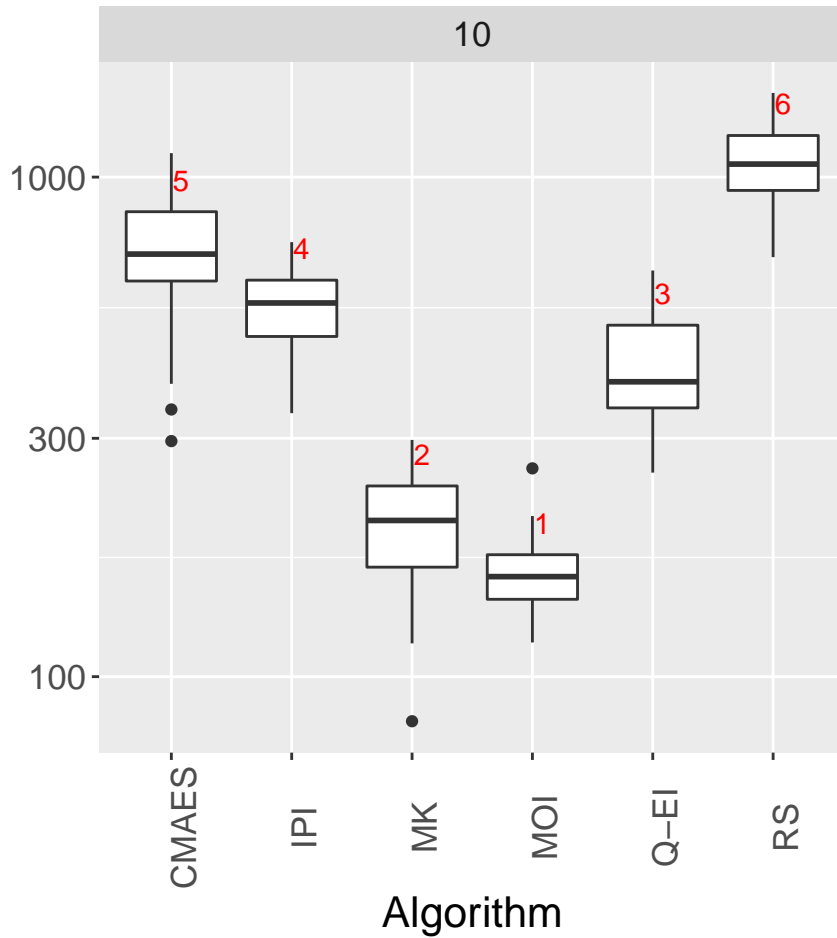
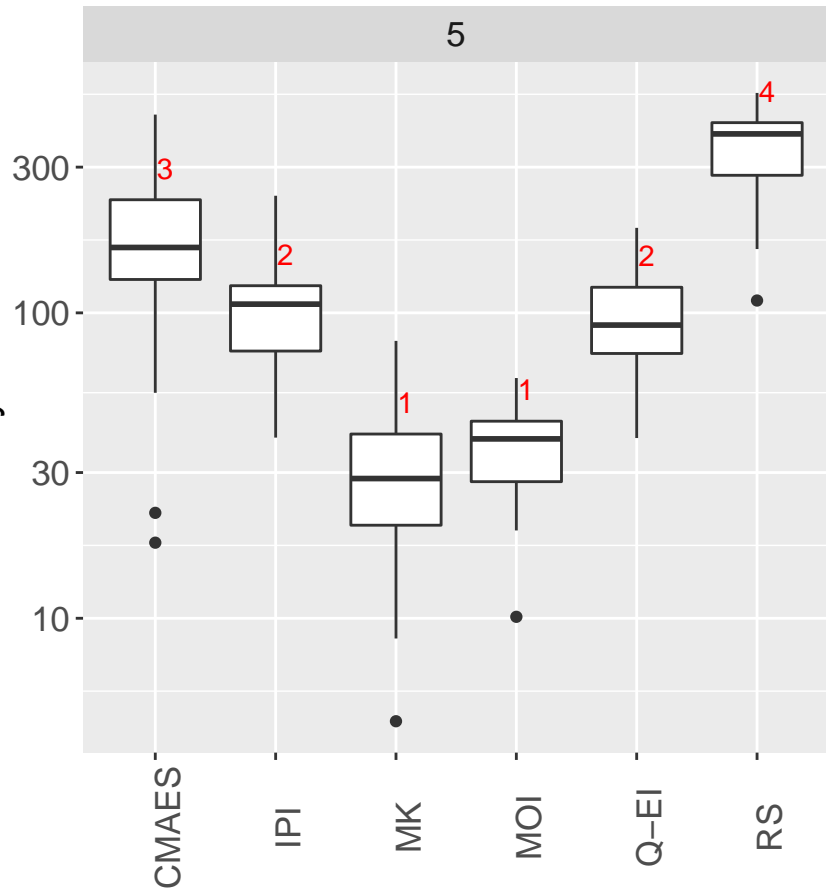
Sharp Ridge
Evaluation: 50
y



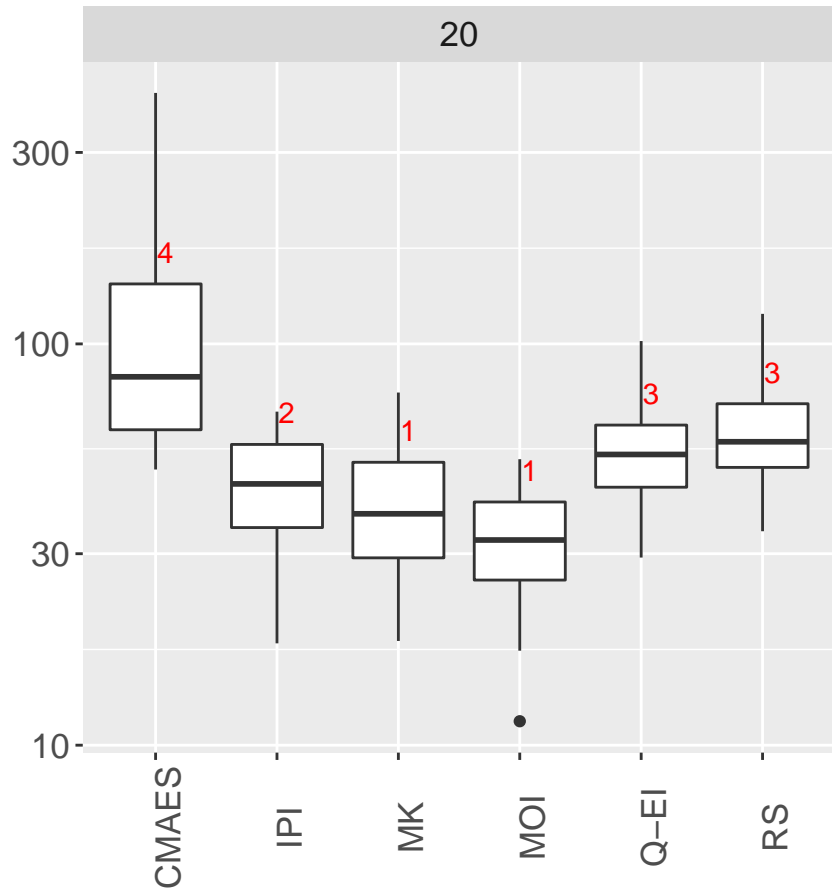
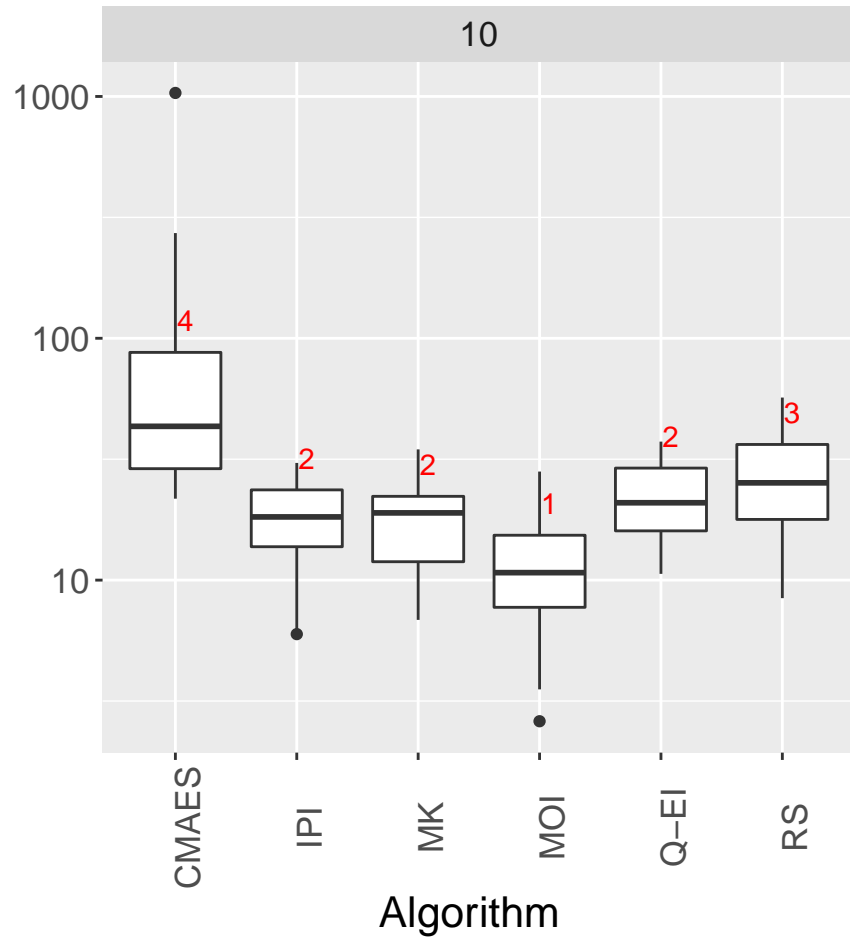
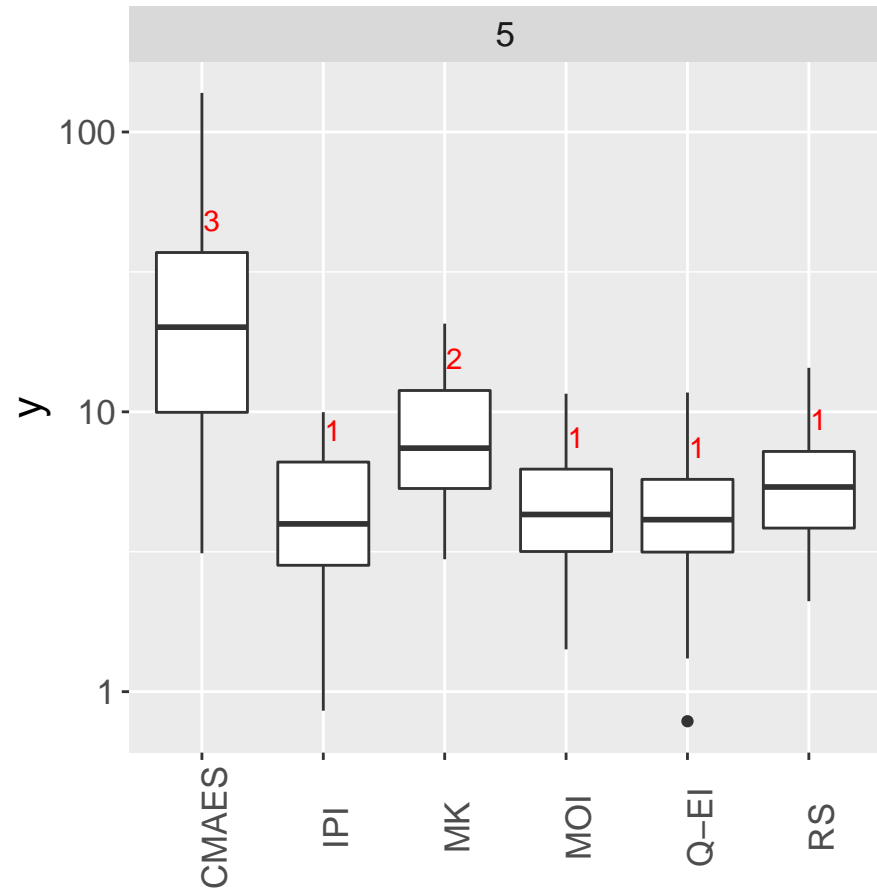
Sharp Ridge
Evaluation: 70
y



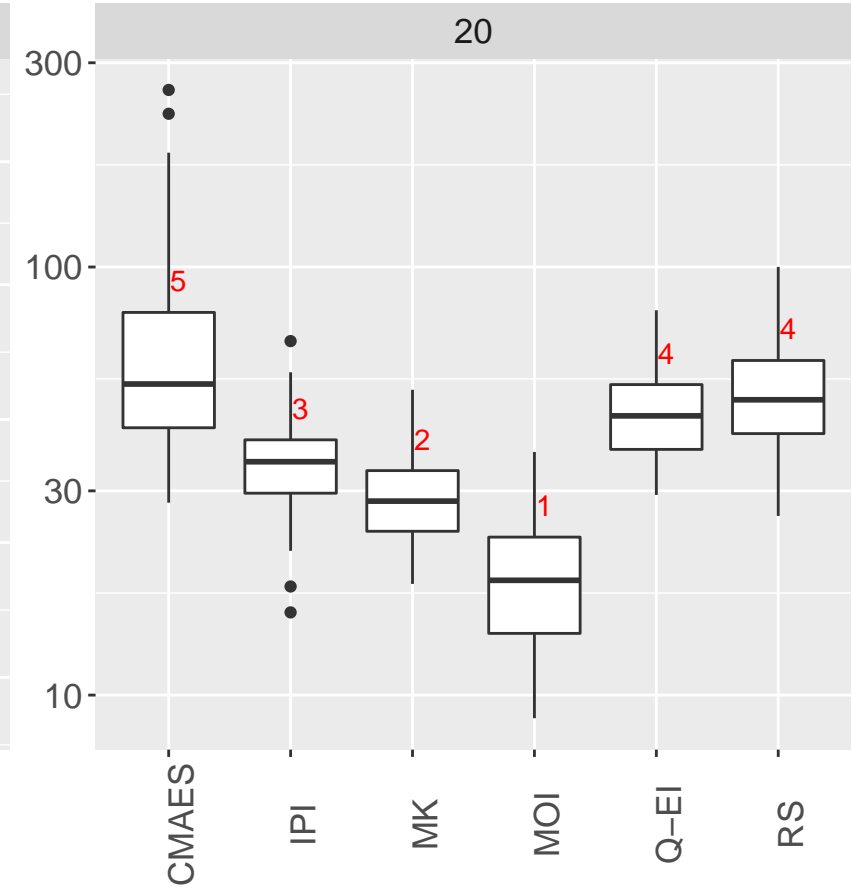
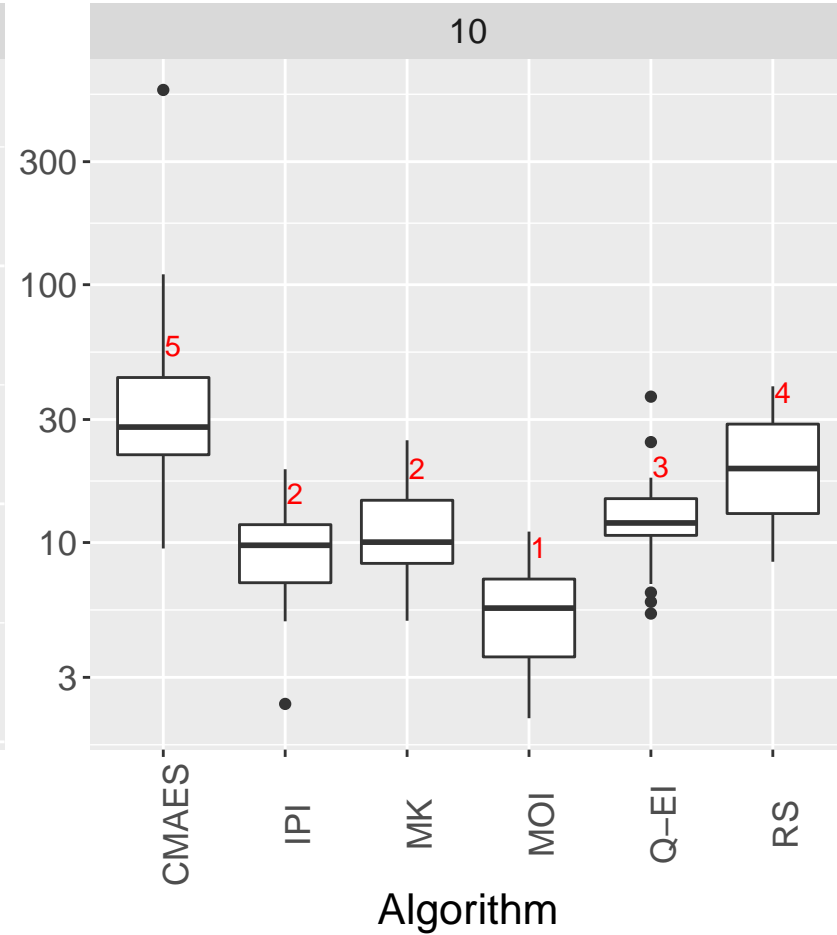
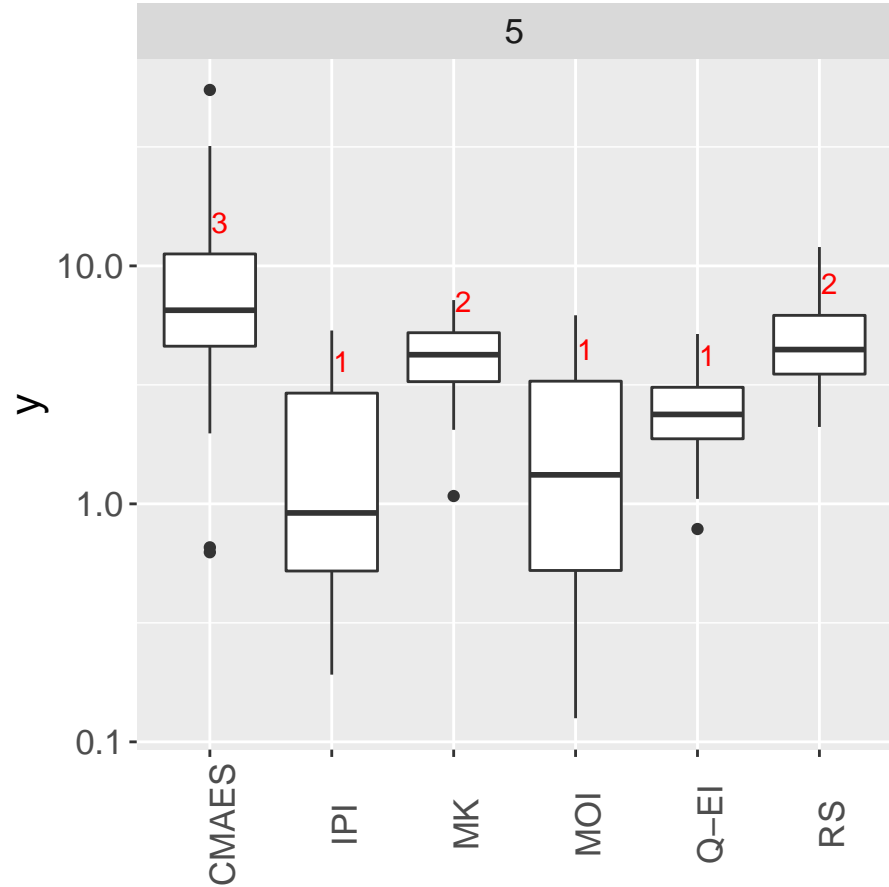
Sharp Ridge
Evaluation: 100
y



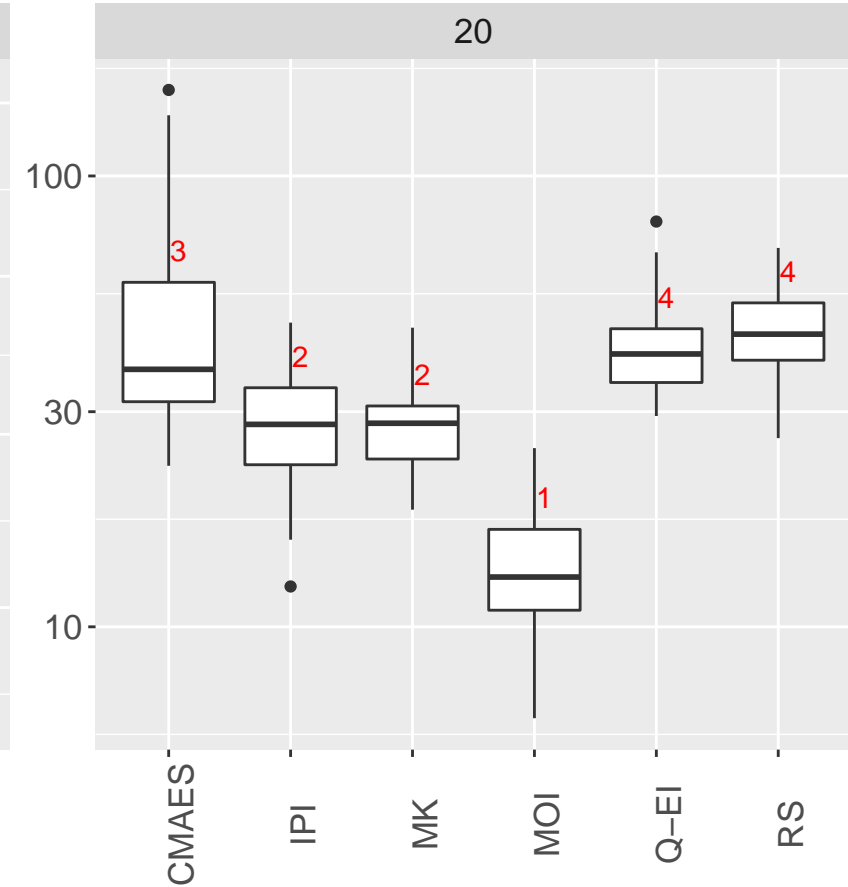
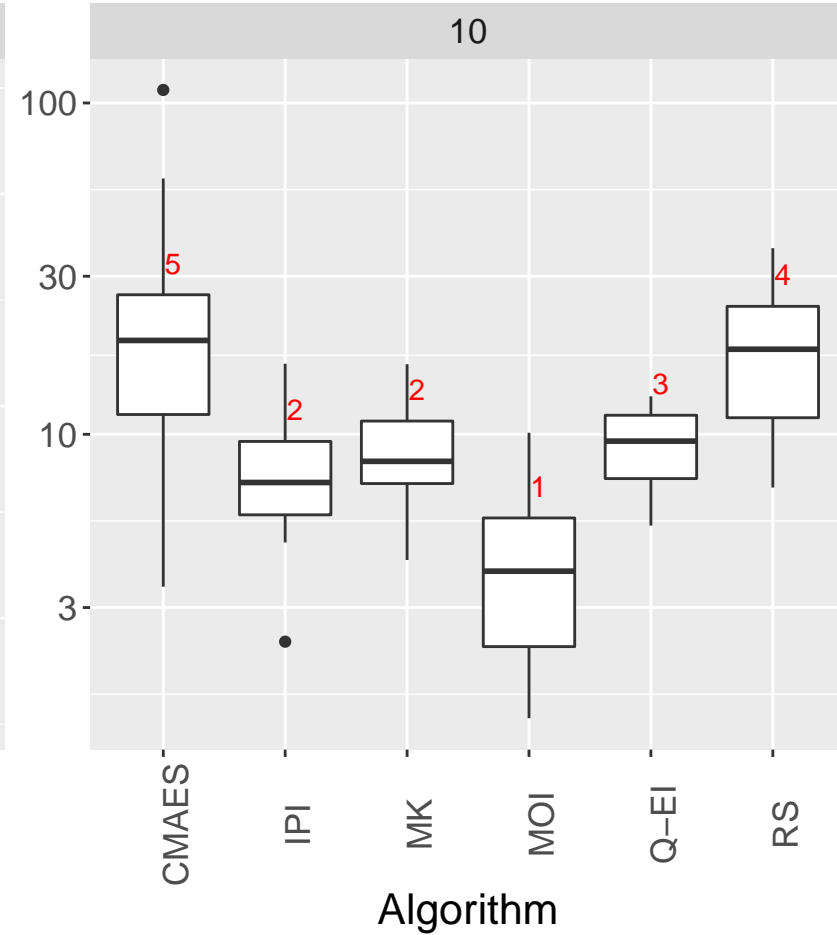
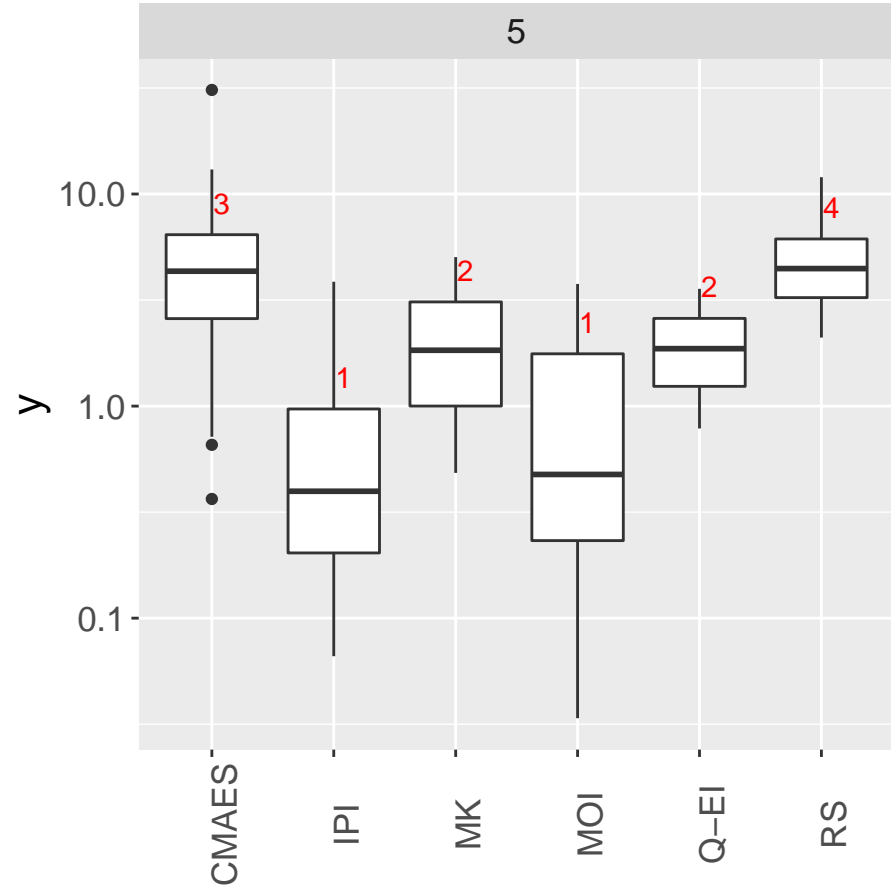
Different Powers
Evaluation: 25



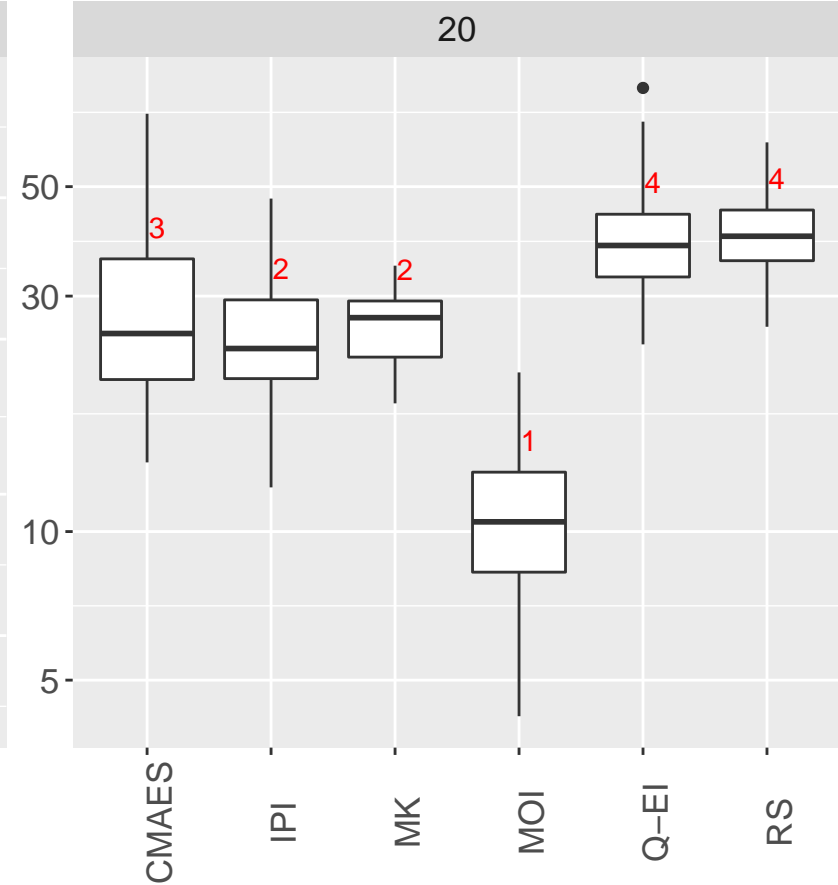
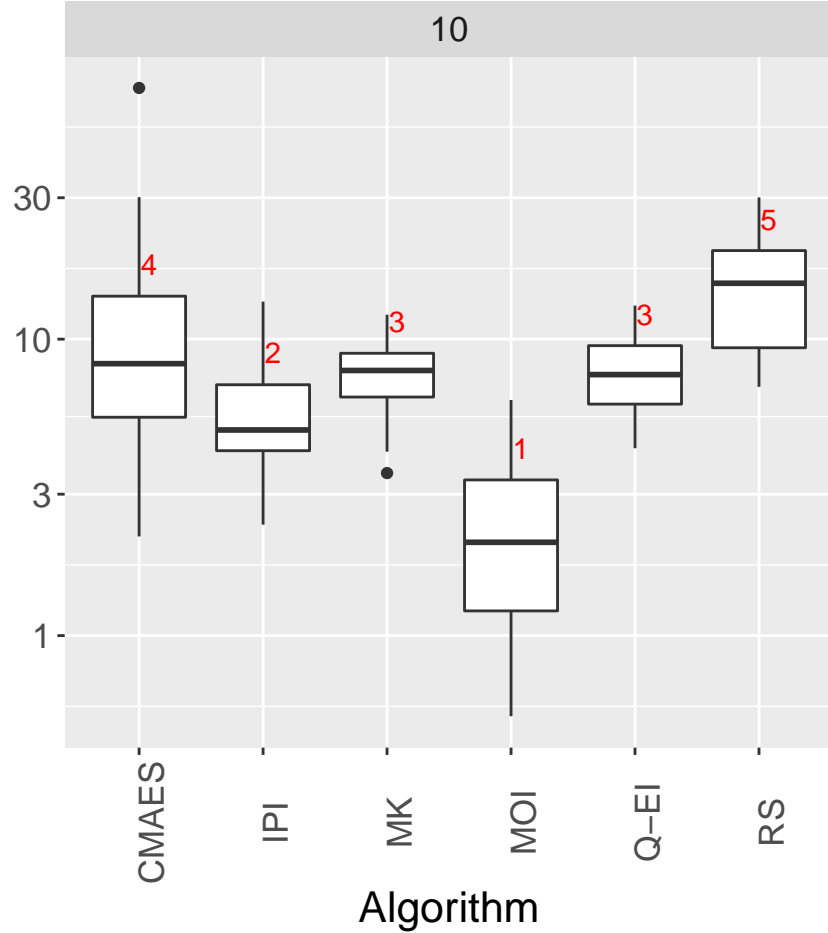
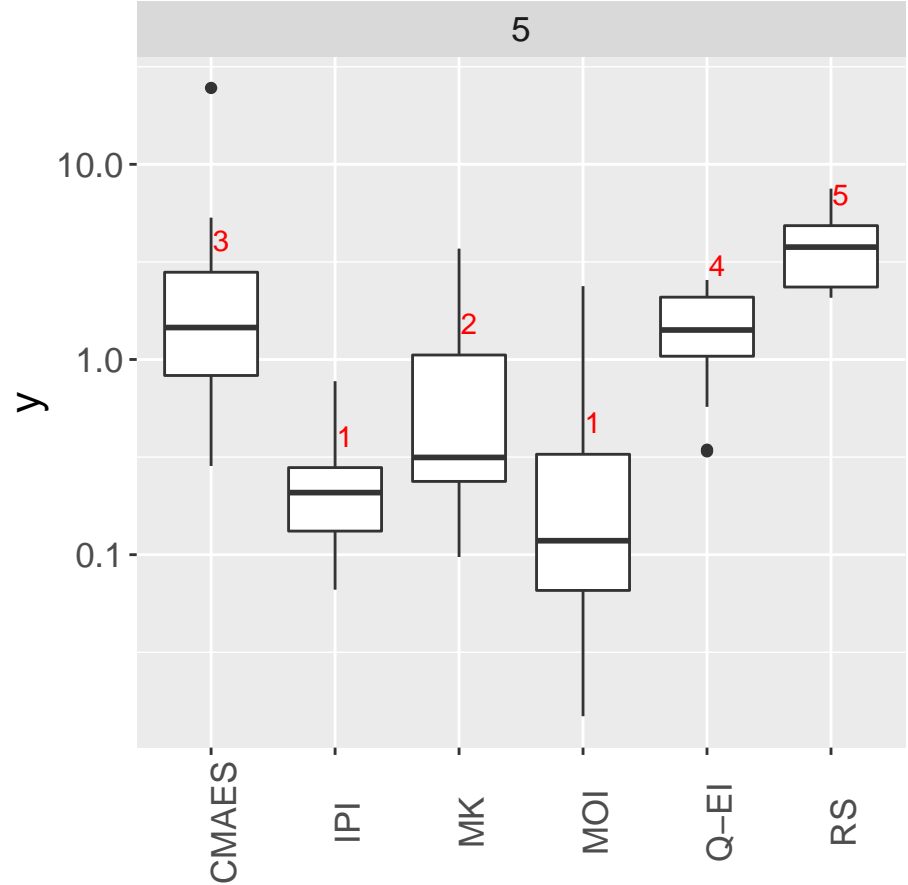
Different Powers
Evaluation: 50



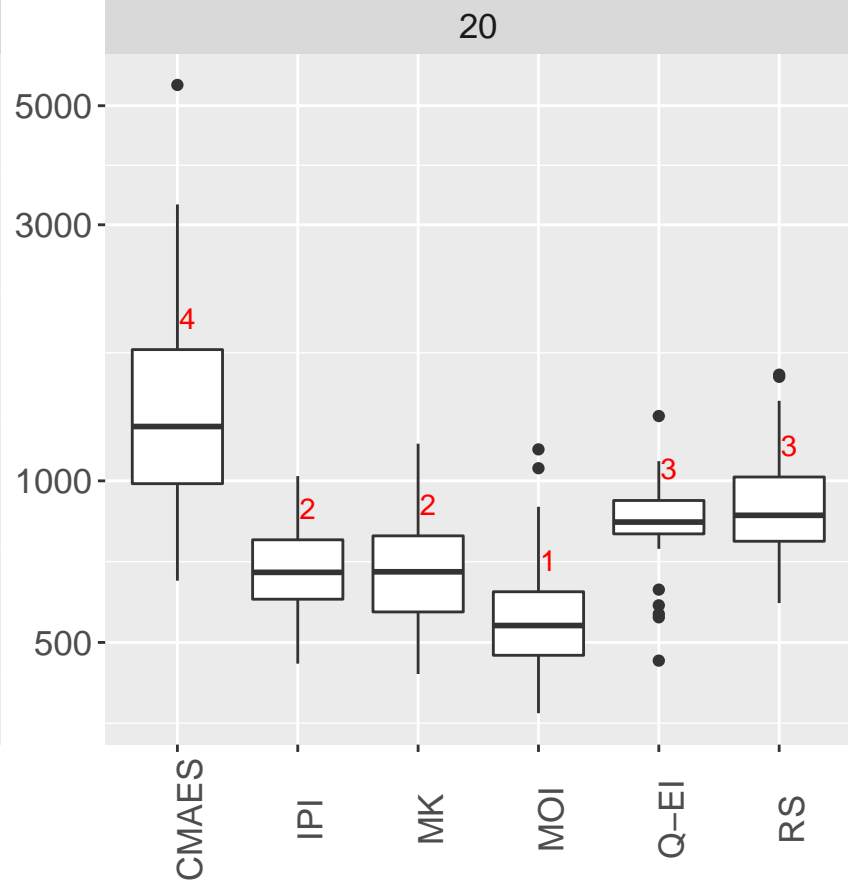
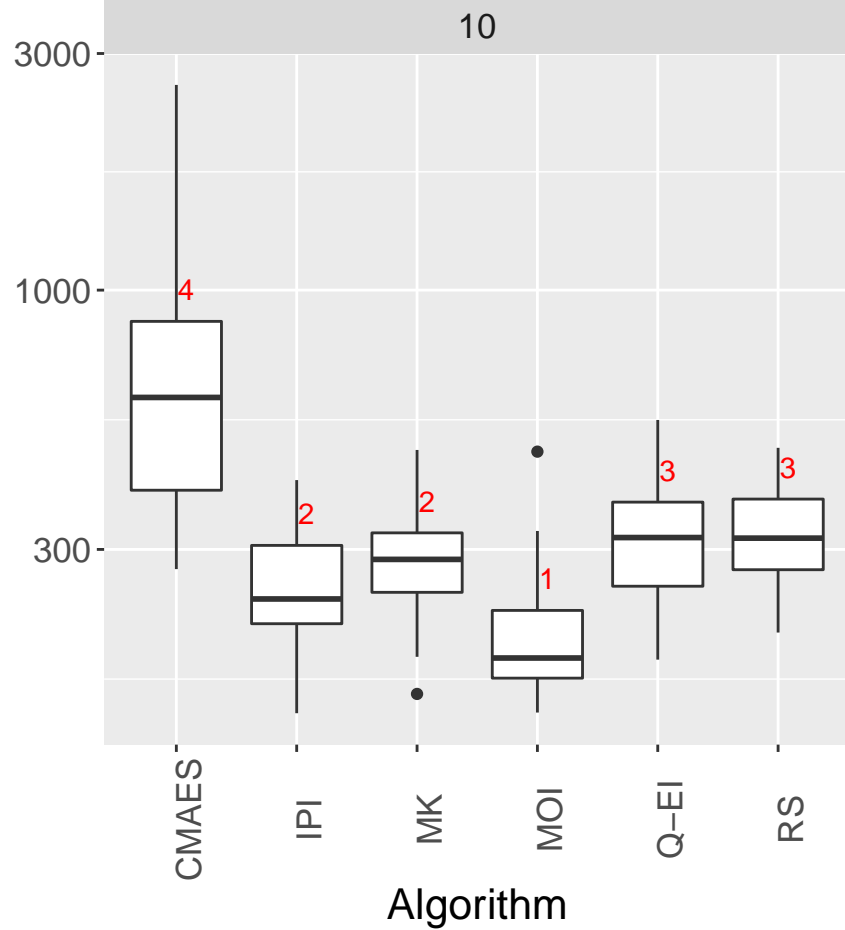
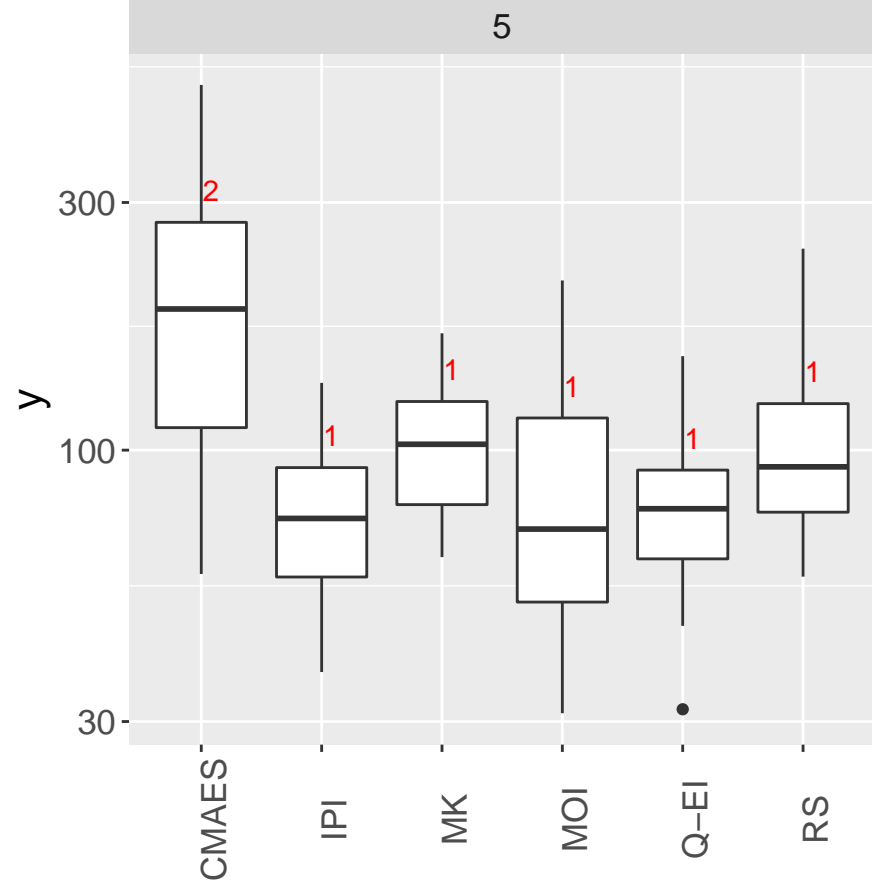
Different Powers
Evaluation: 70



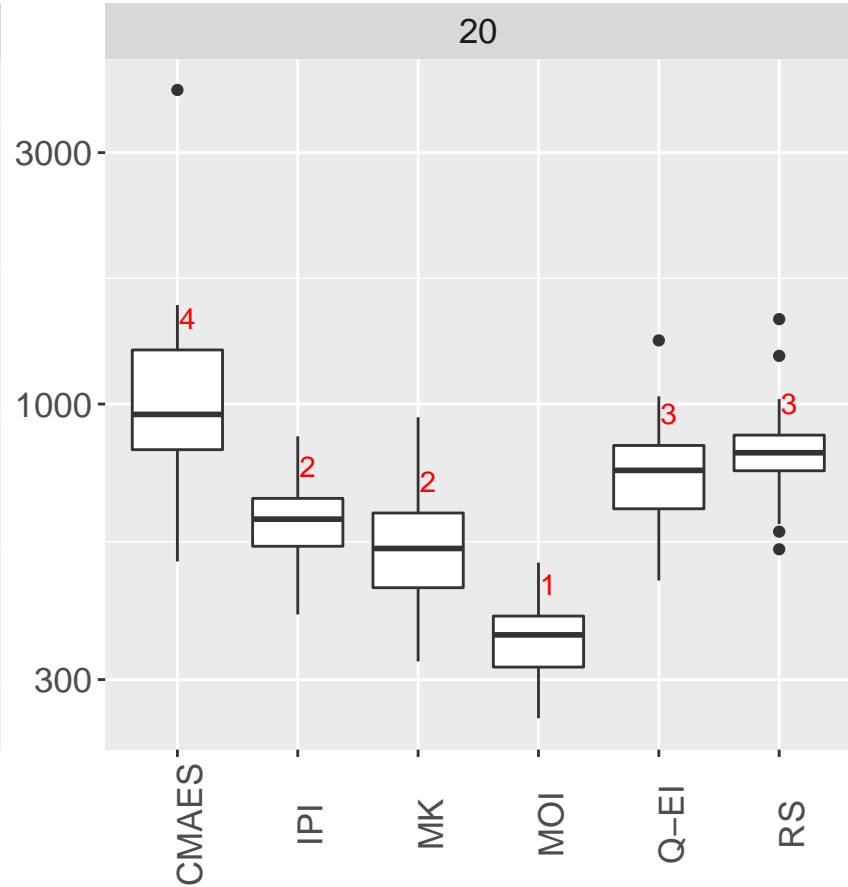
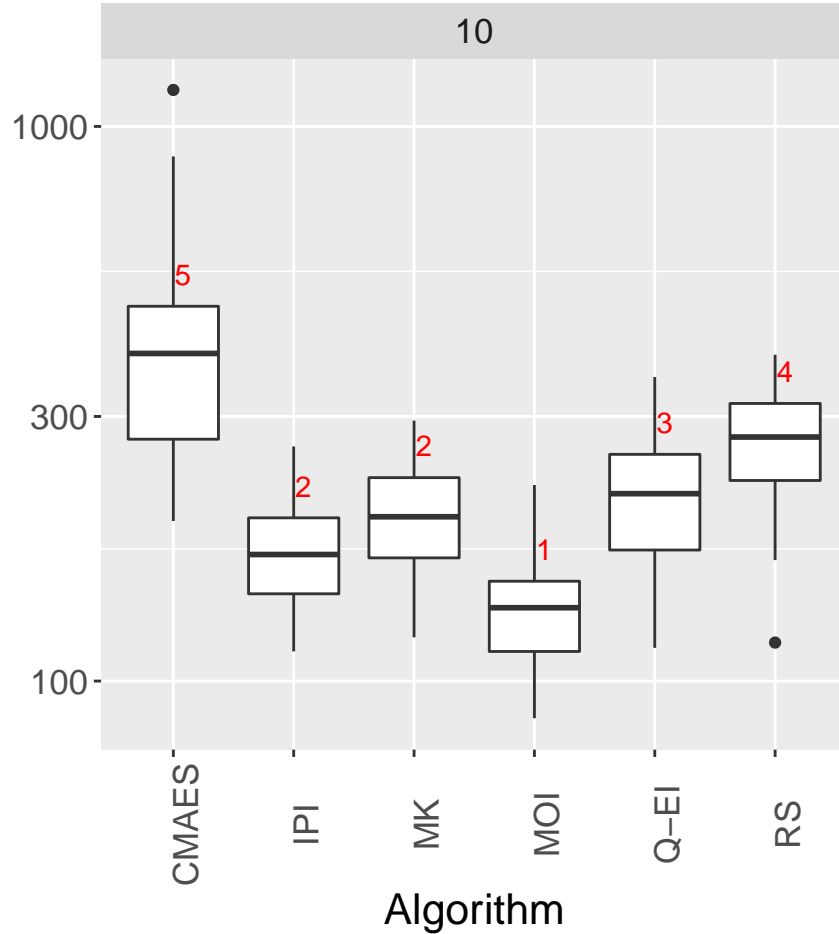
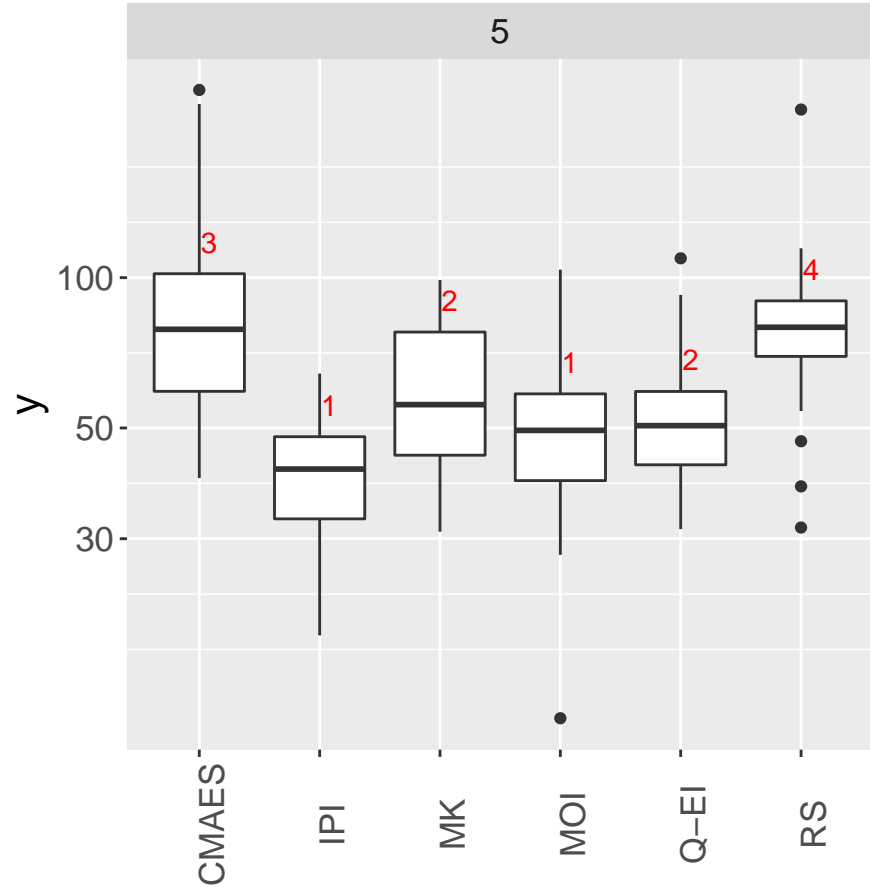
Different Powers
Evaluation: 100



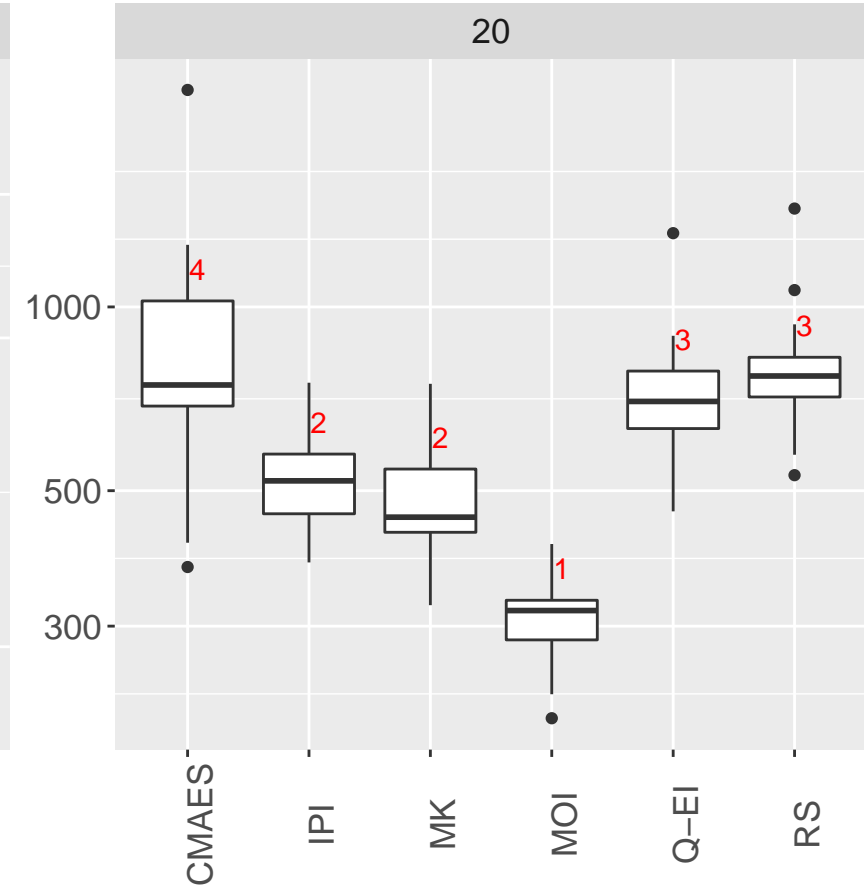
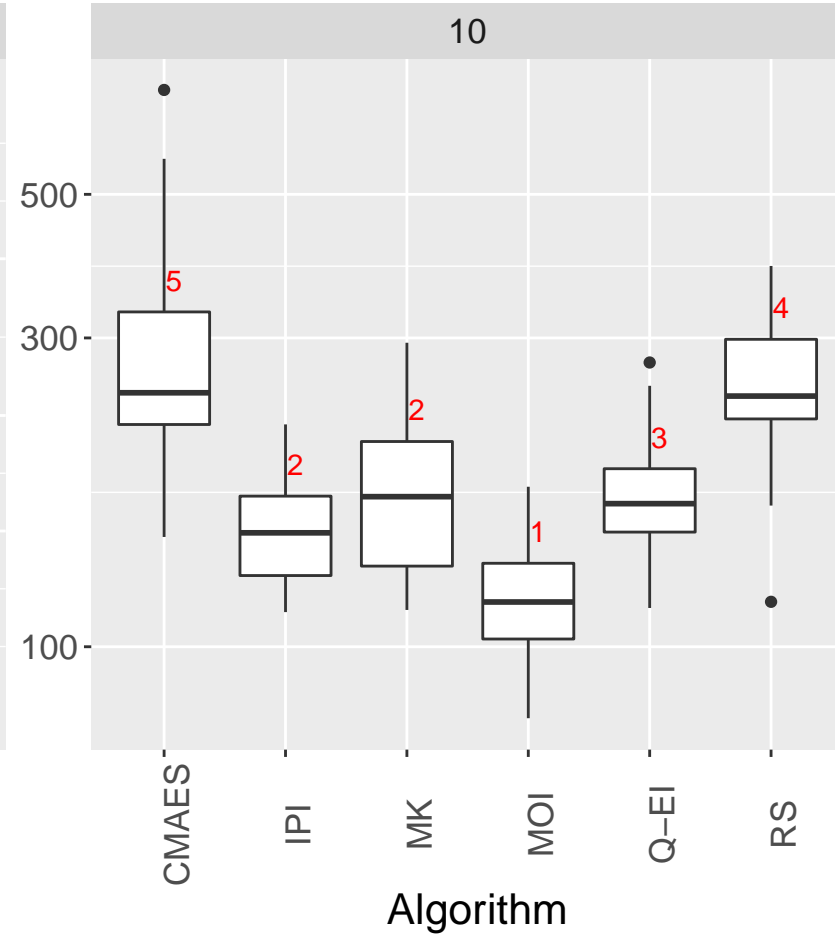
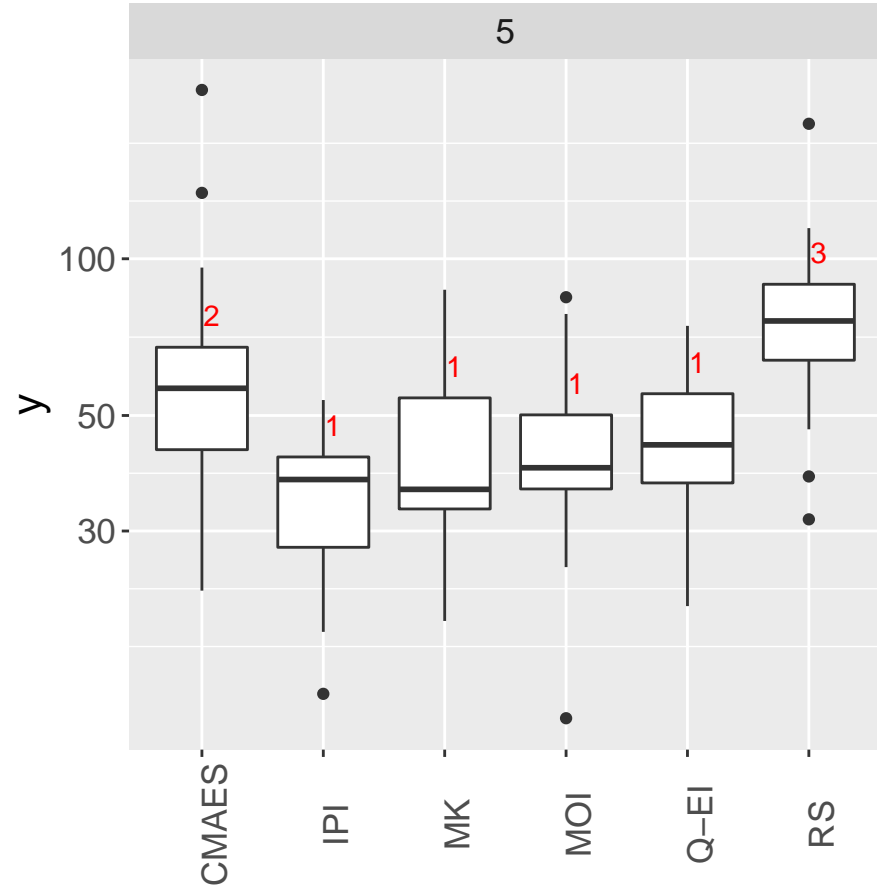
Rastrigin
Evaluation: 25



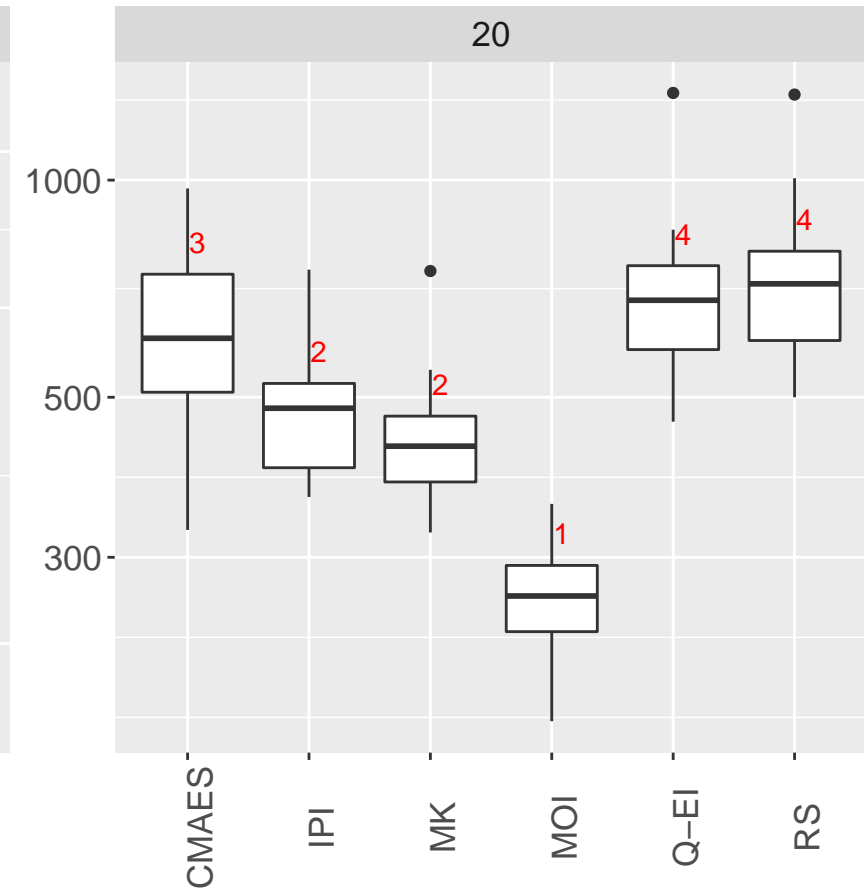
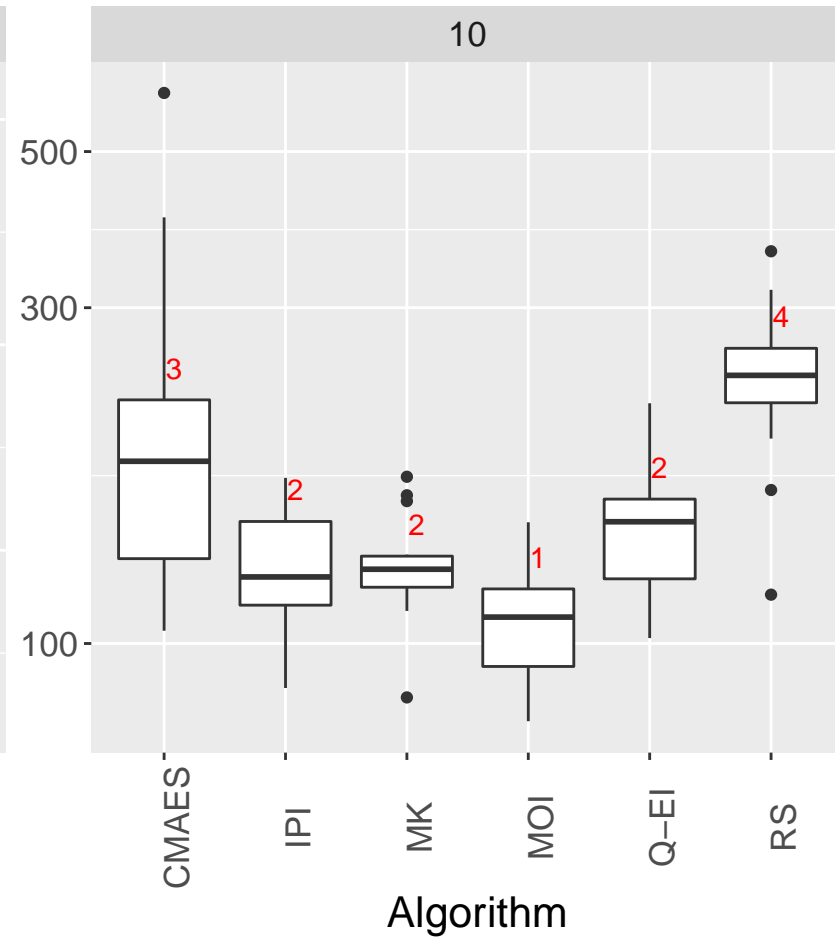
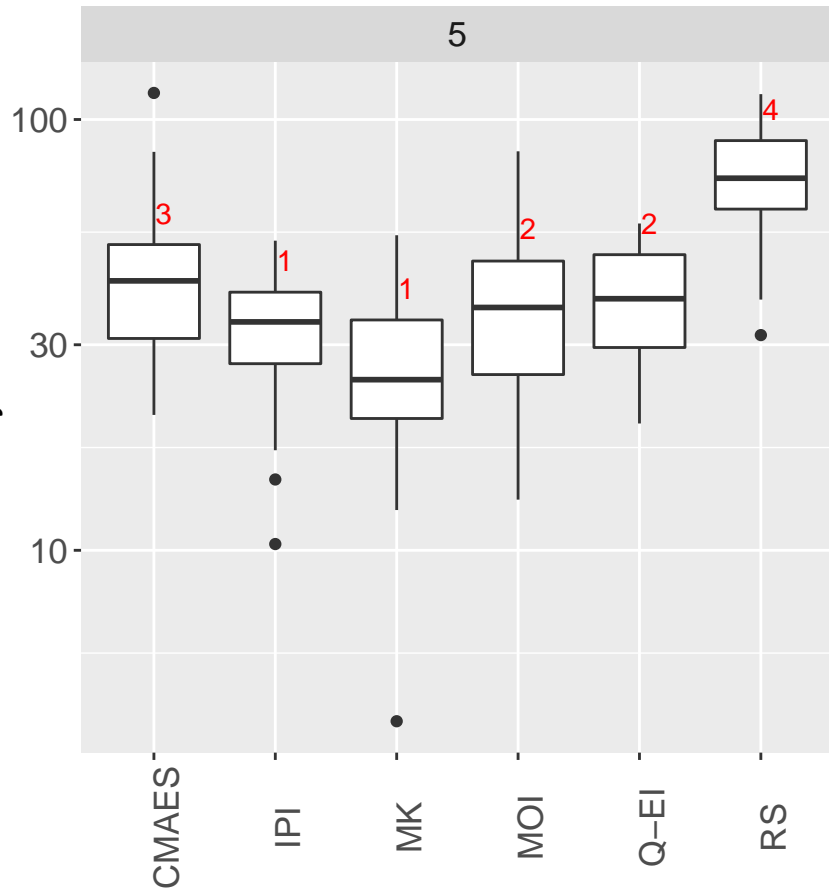
Rastrigin
Evaluation: 50



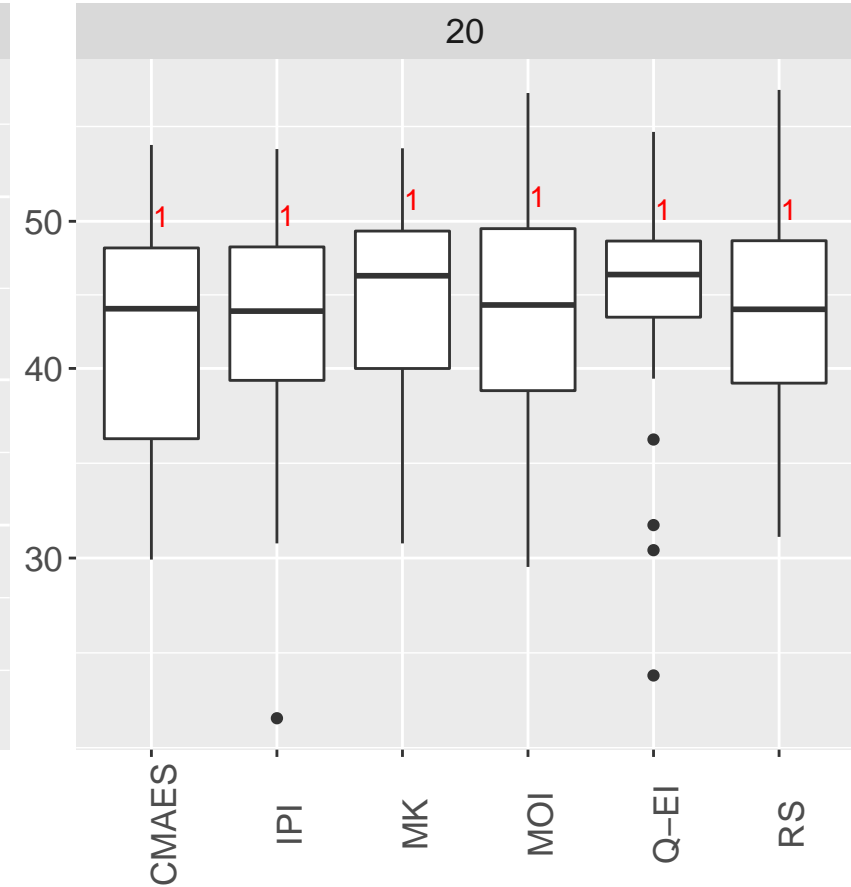
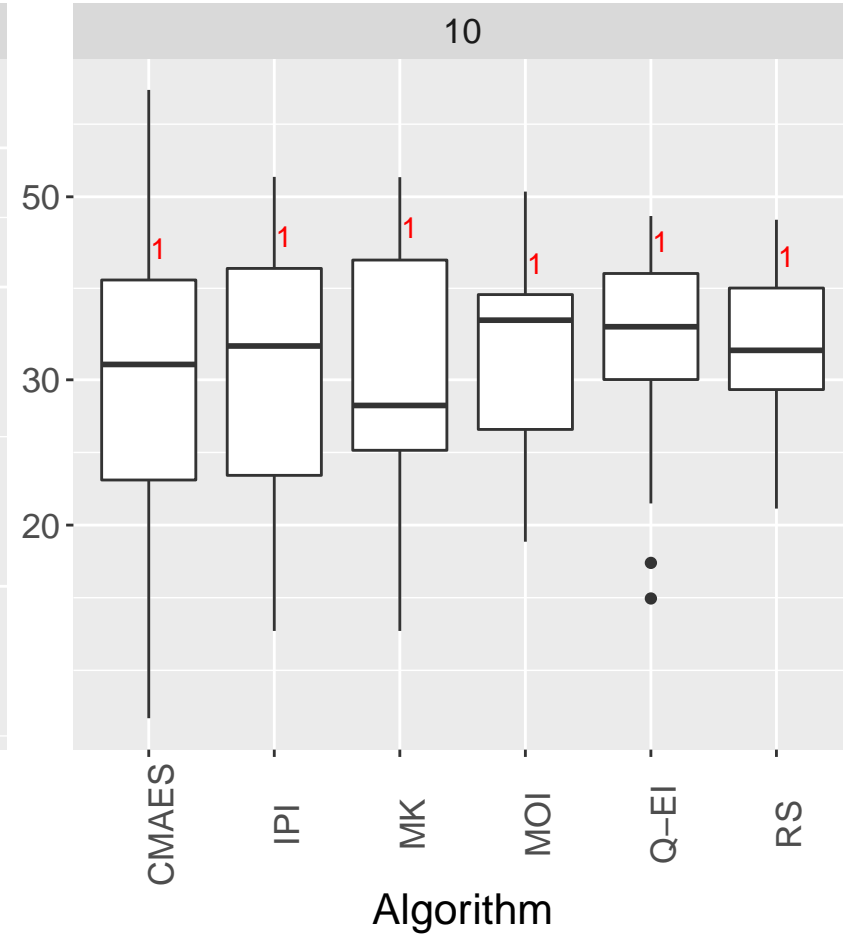
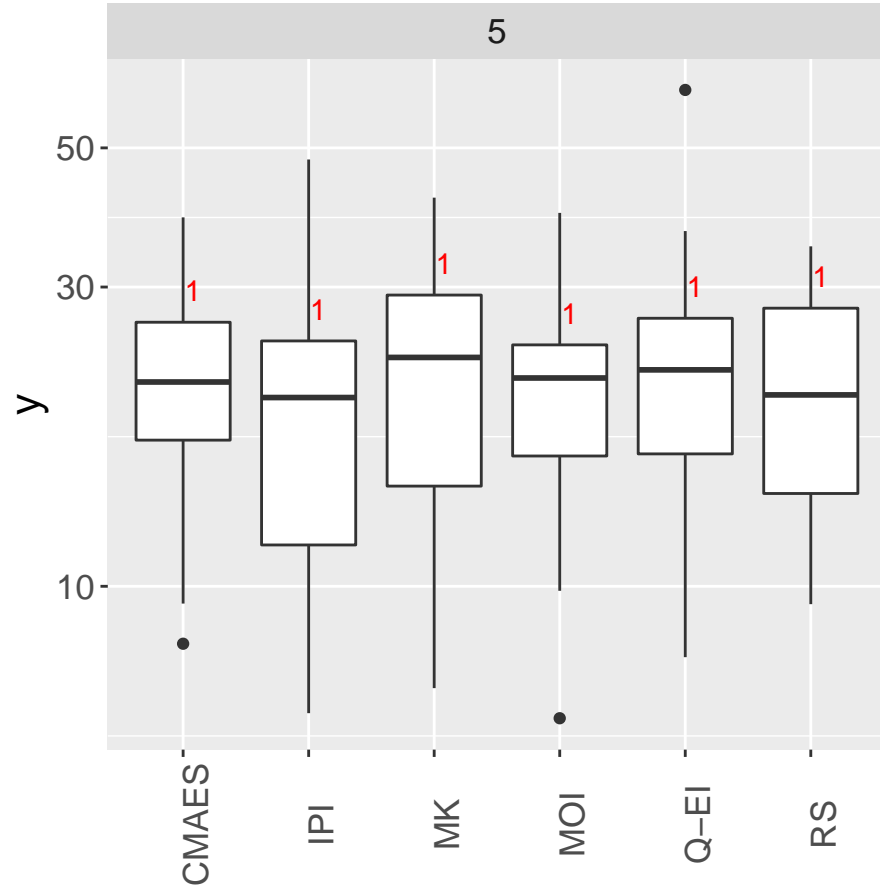
Rastrigin
Evaluation: 70



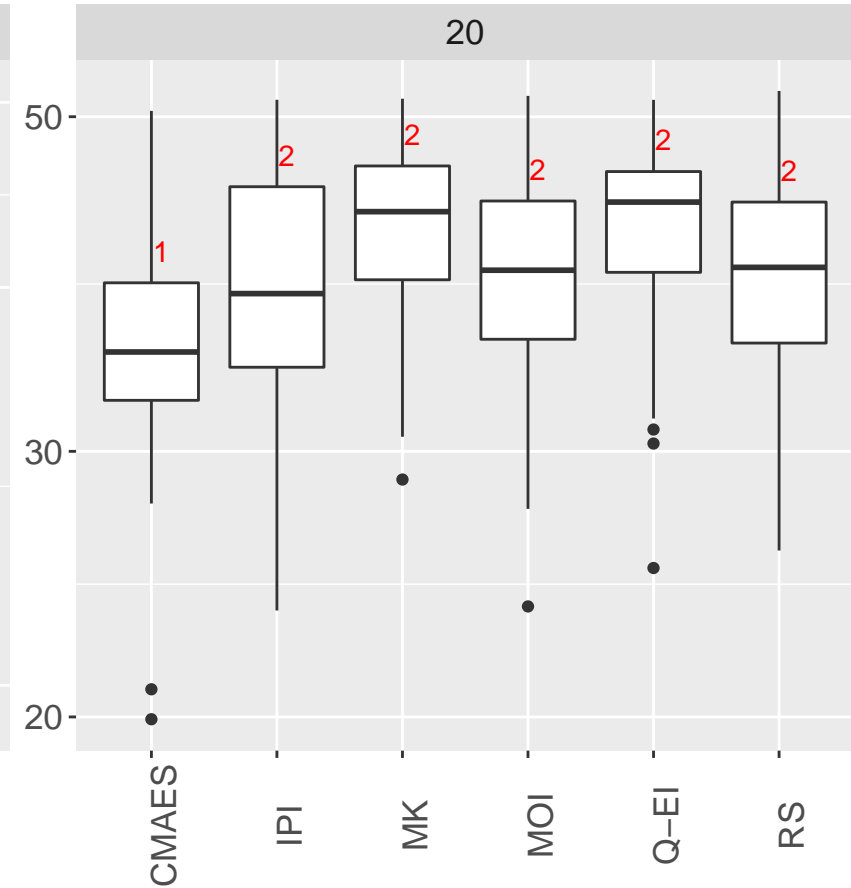
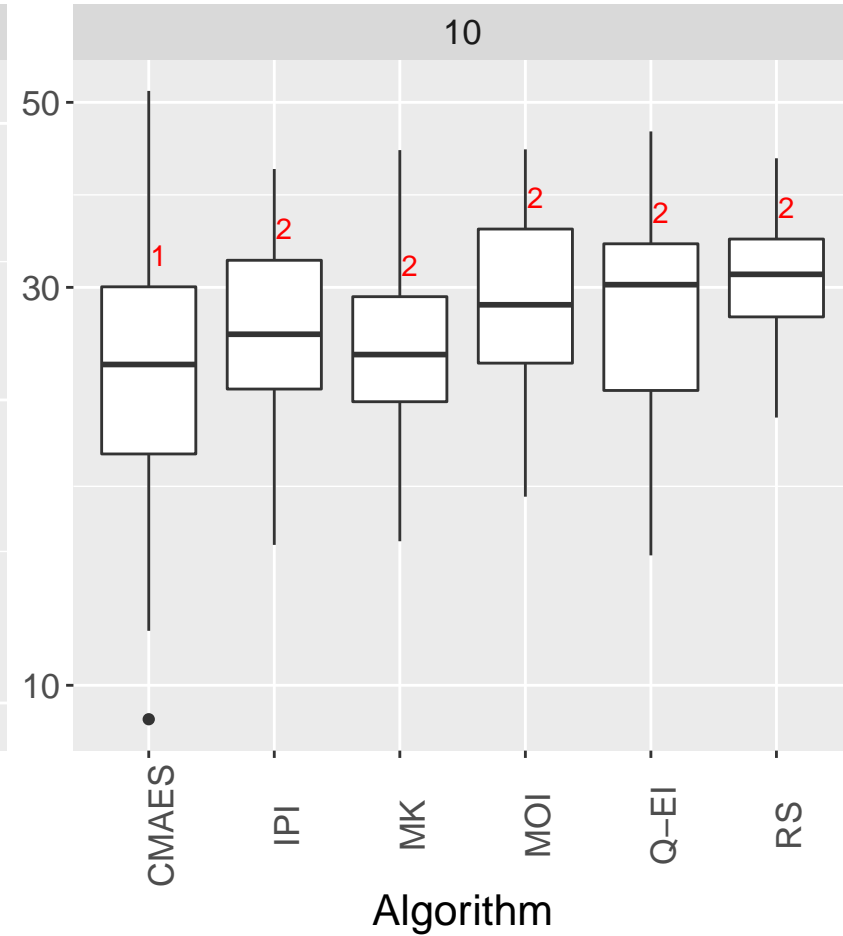
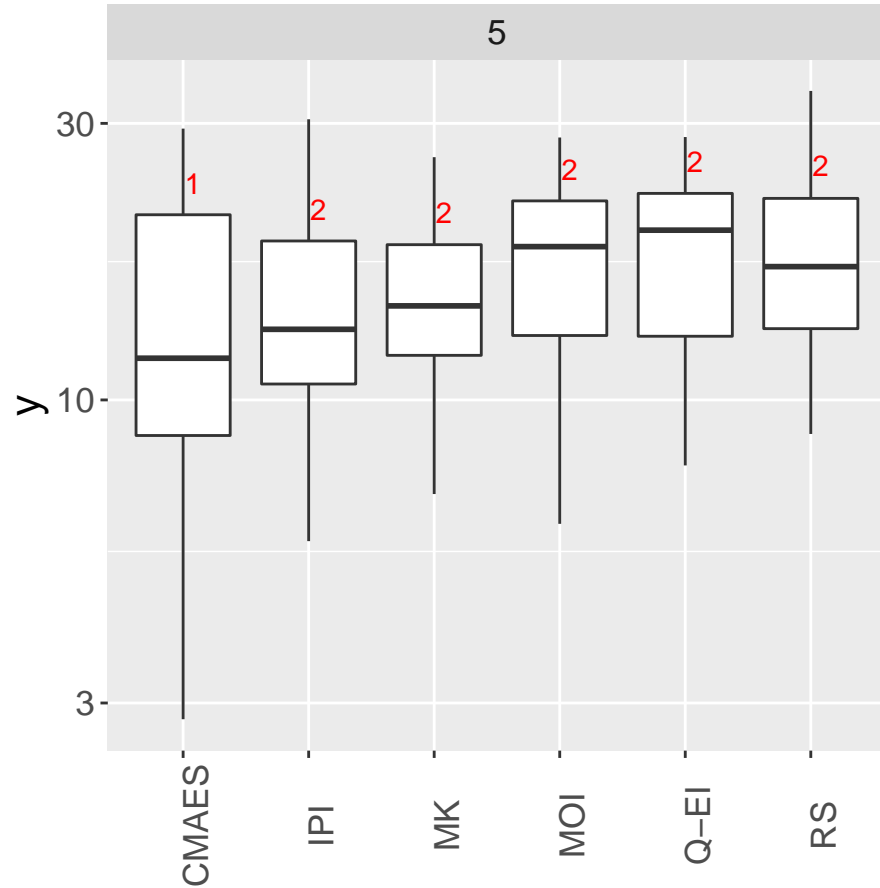
Rastrigin
Evaluation: 100
y



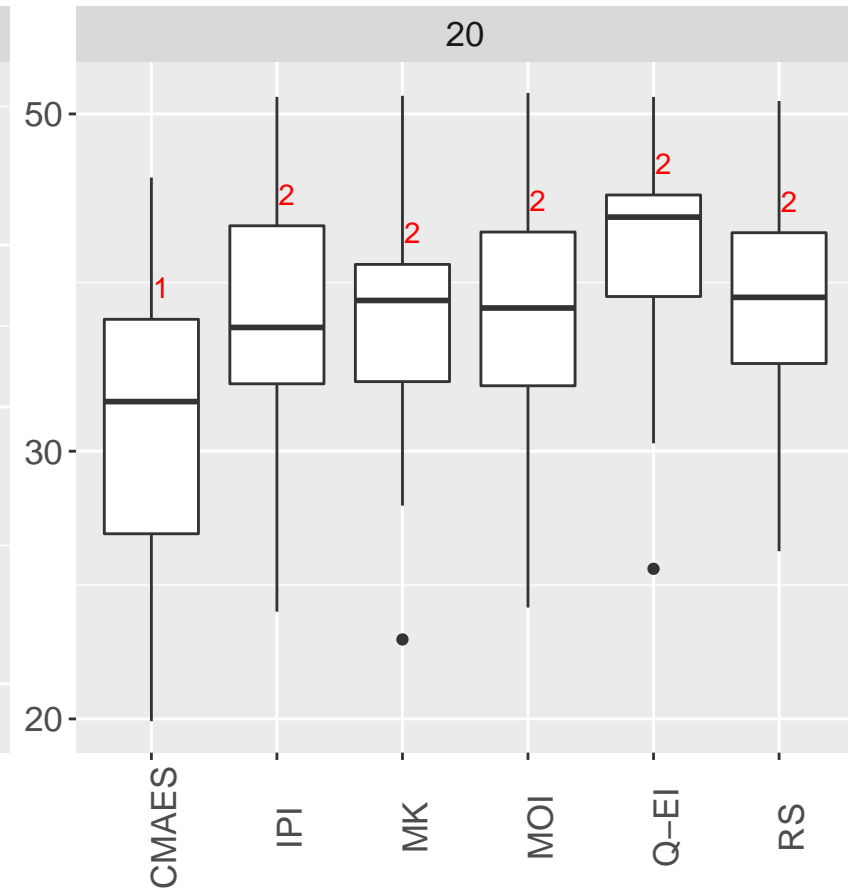
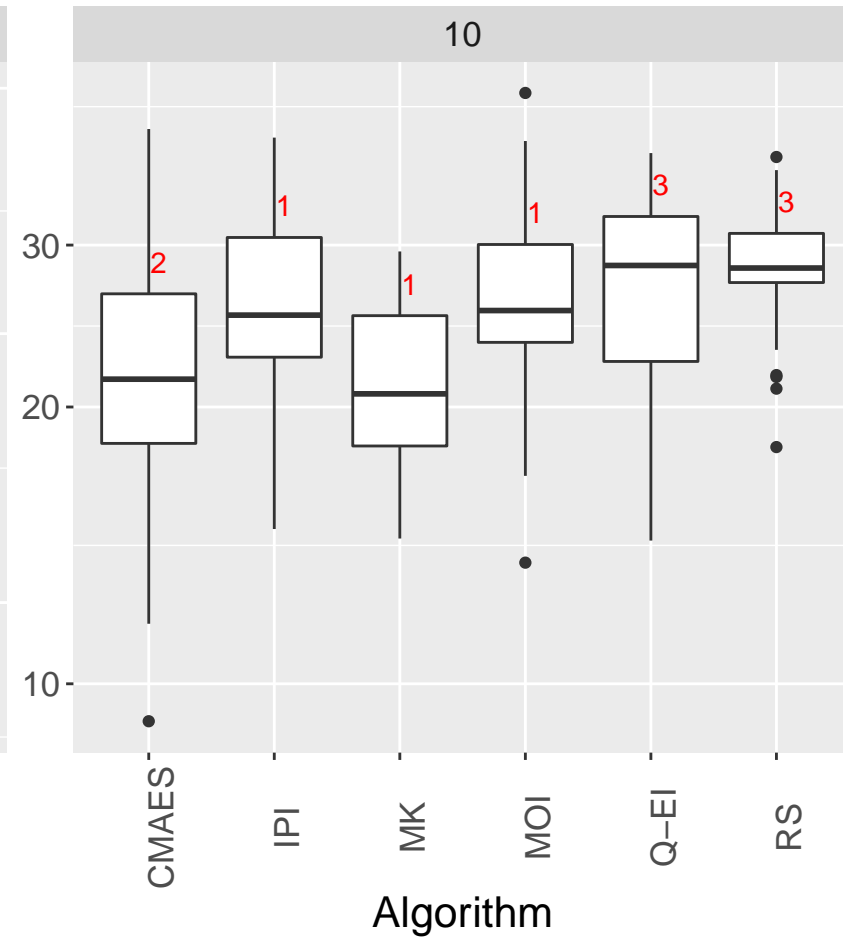
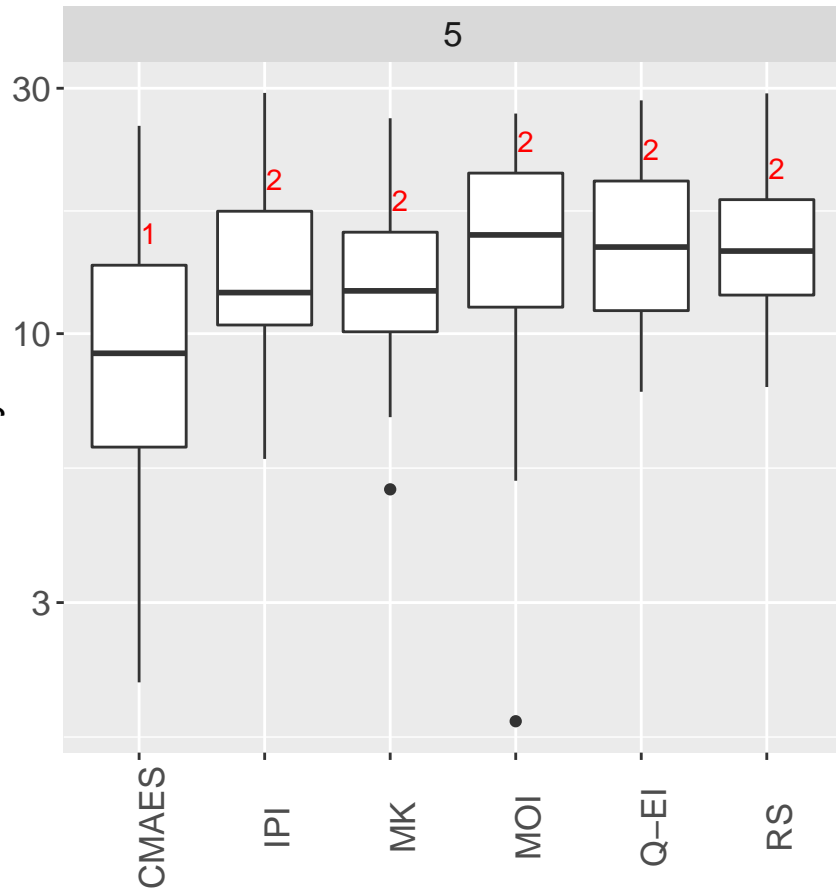
Weierstrass
Evaluation: 25



Weierstrass
Evaluation: 50

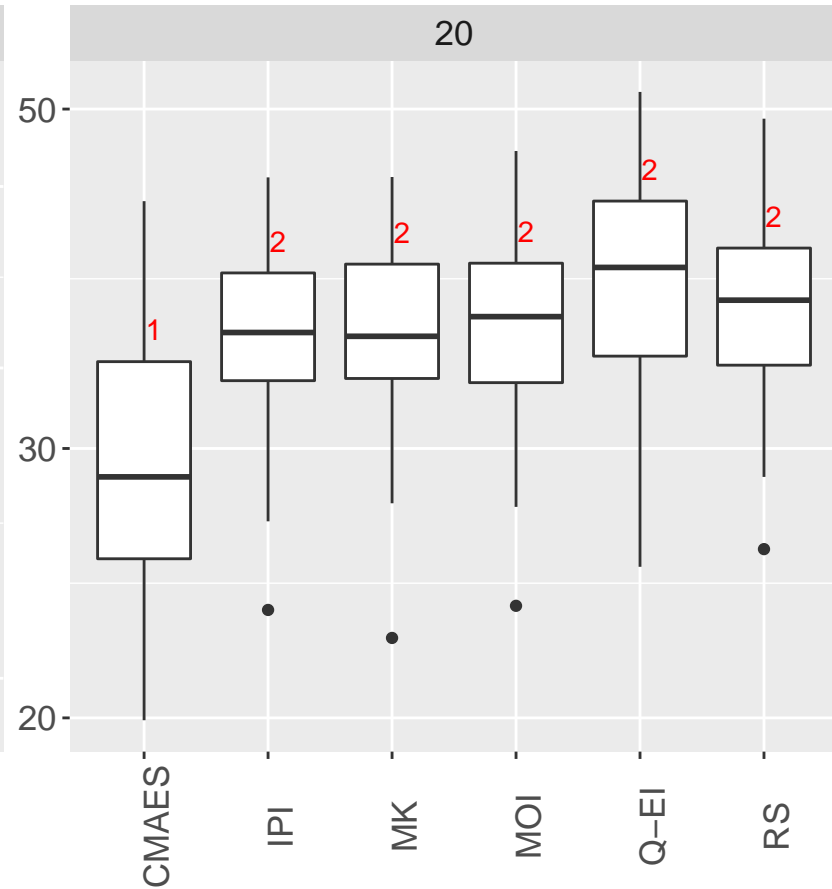
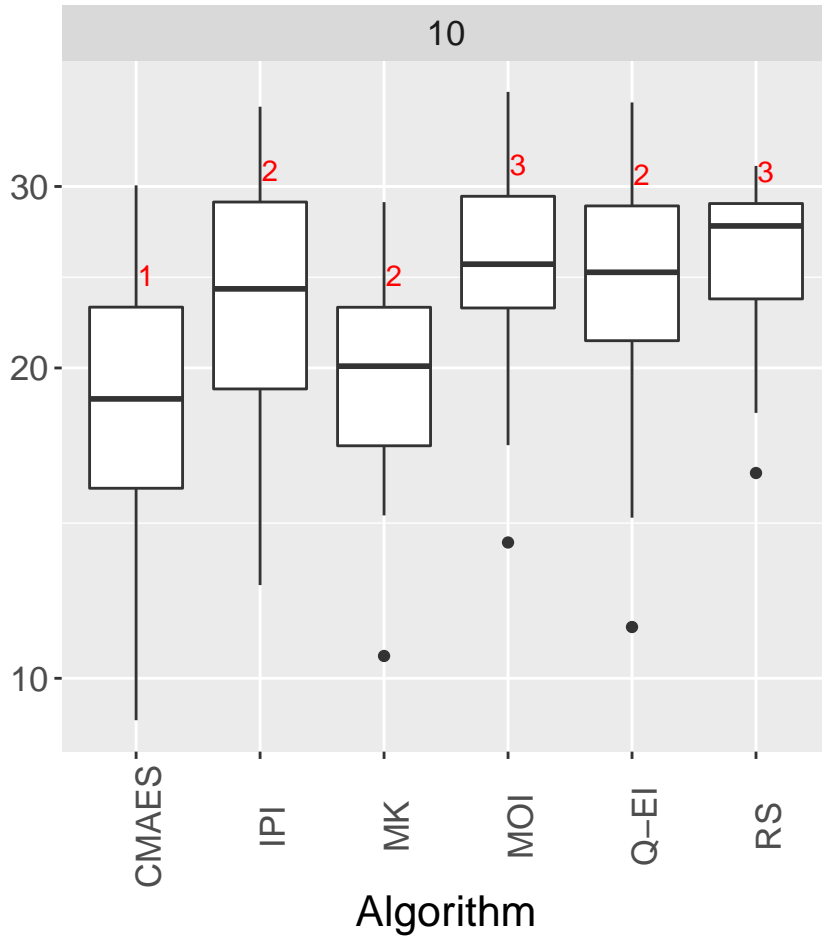
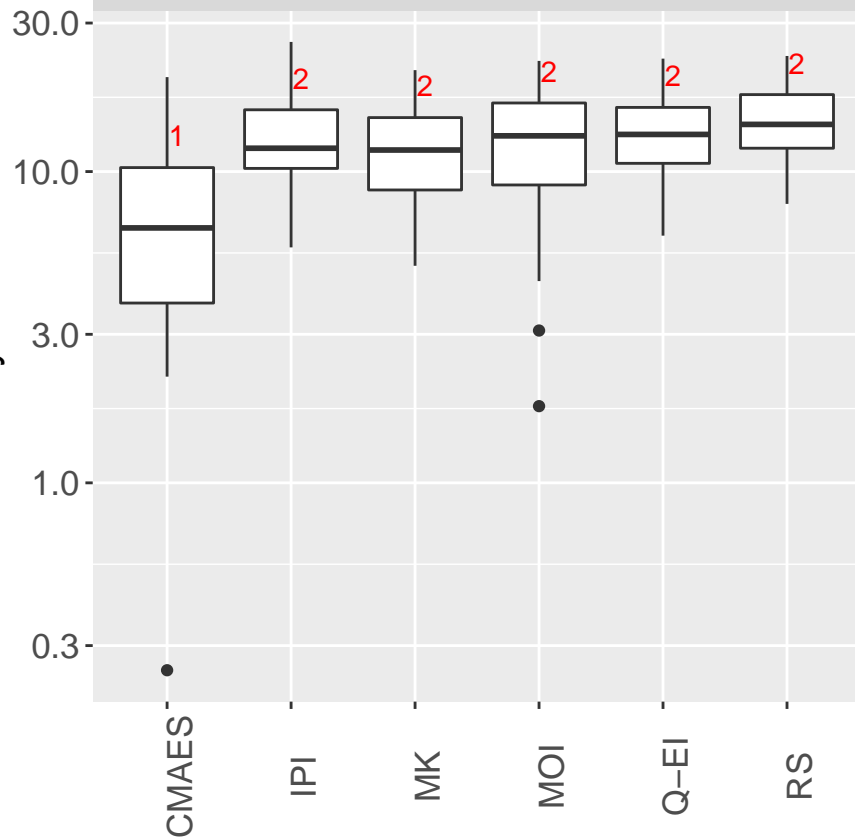


Weierstrass
Evaluation: 70
y

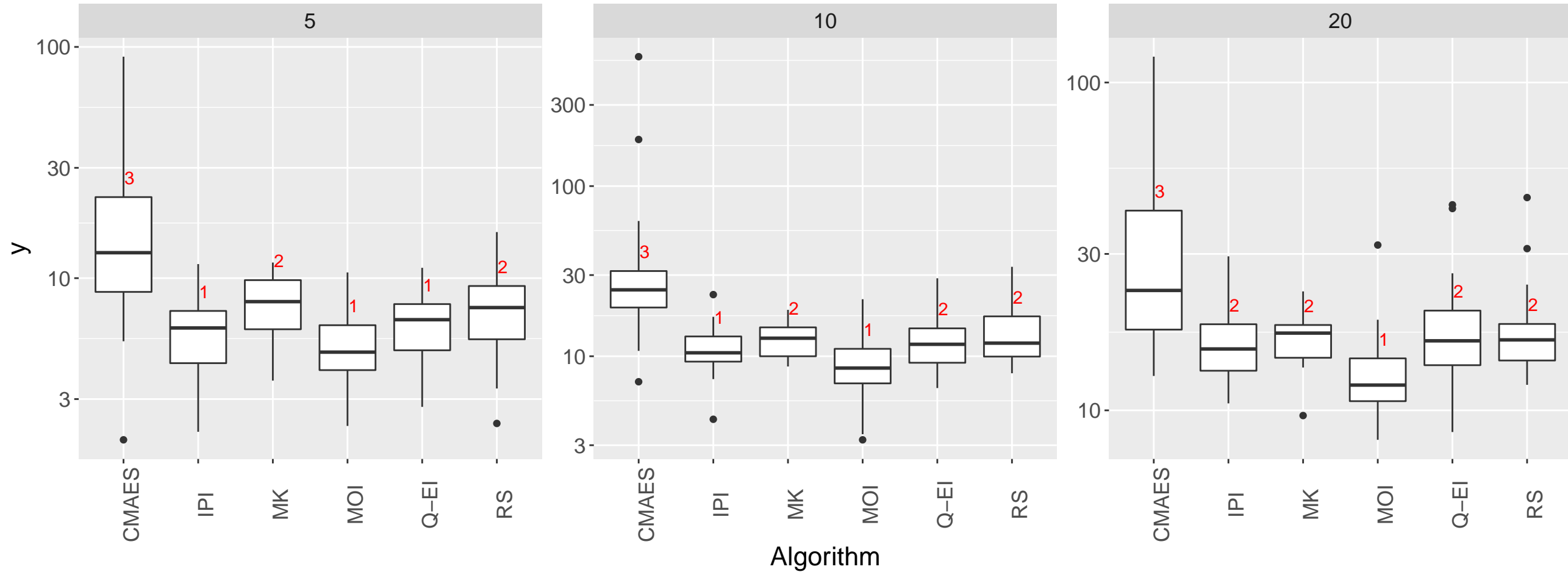


Weierstrass
Evaluation: 100

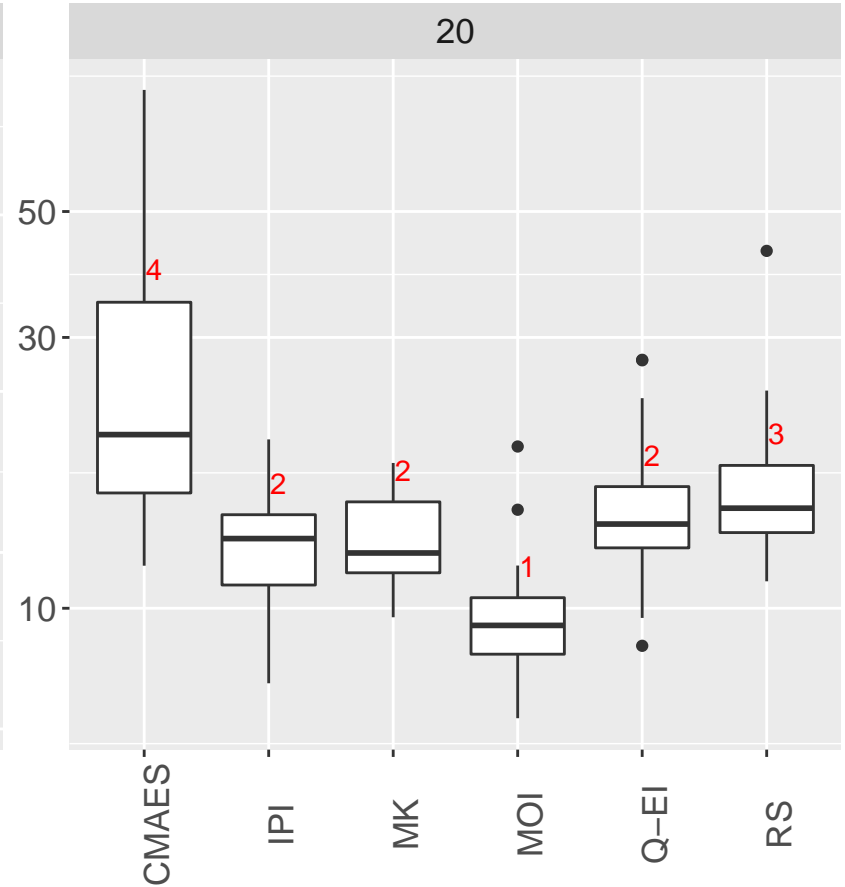
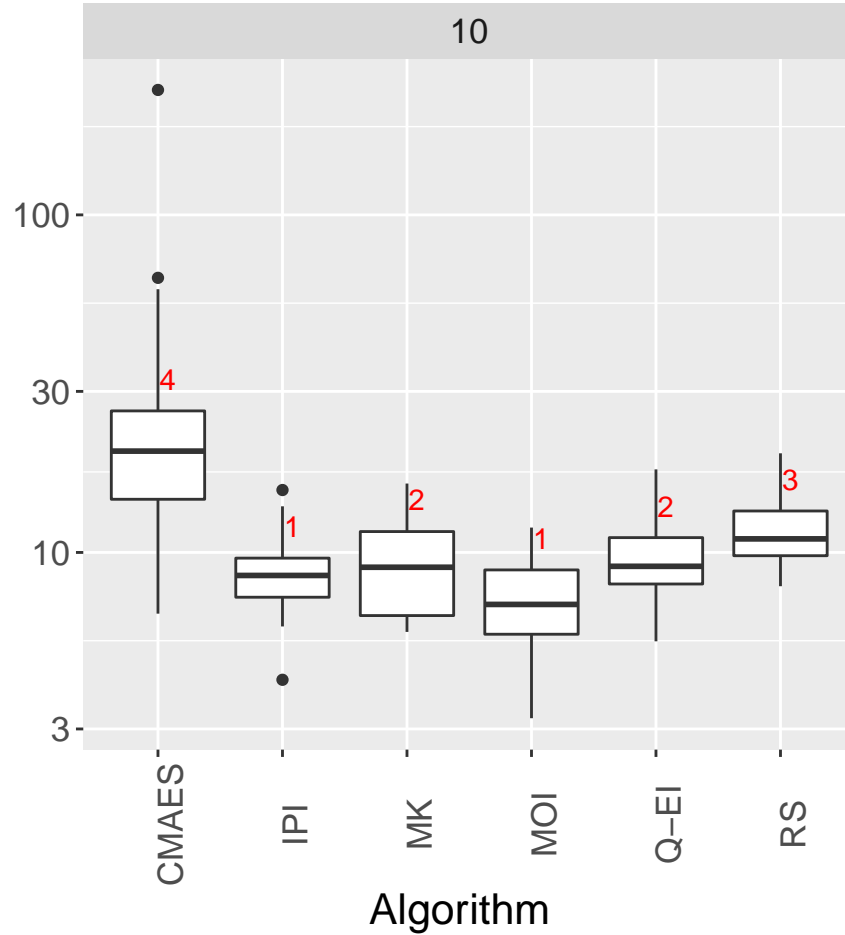
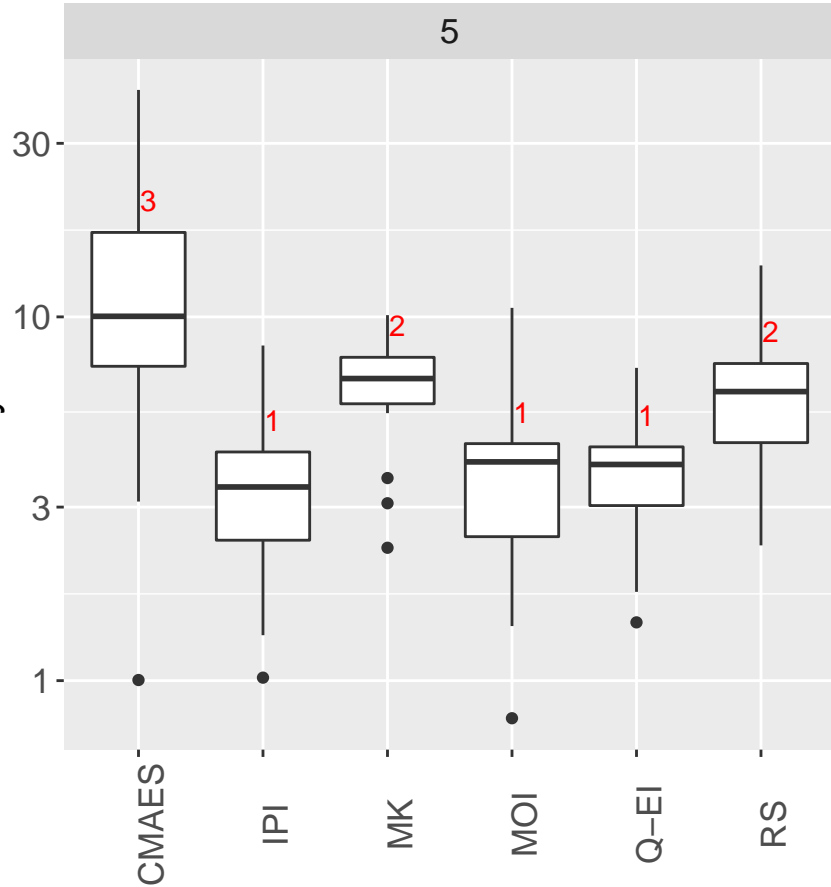
y



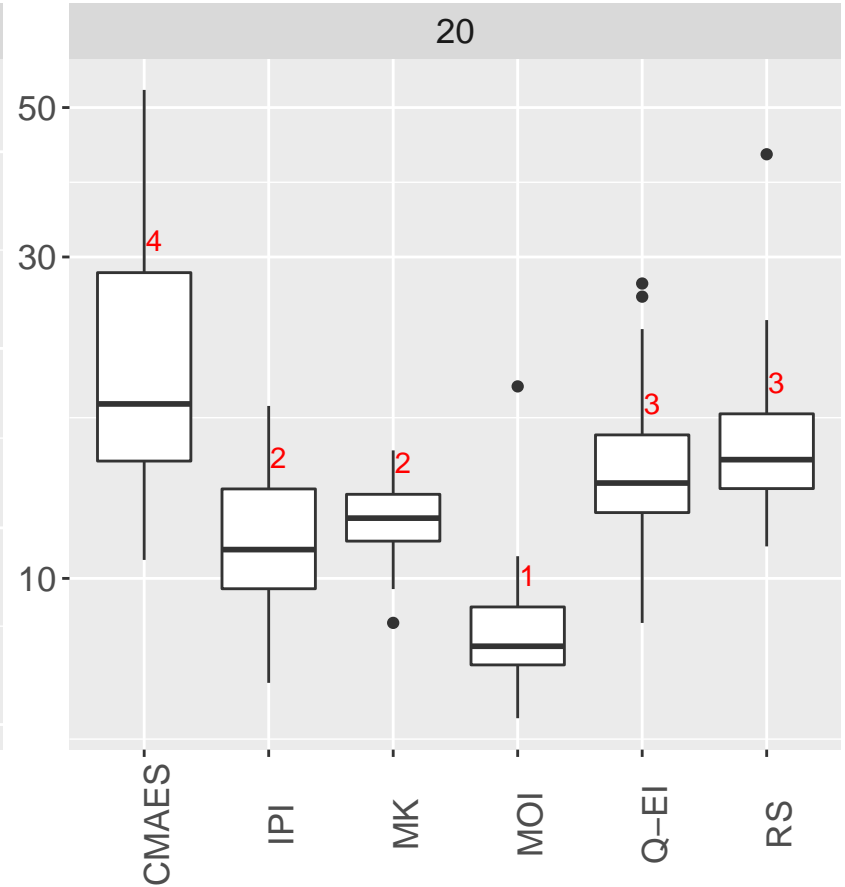
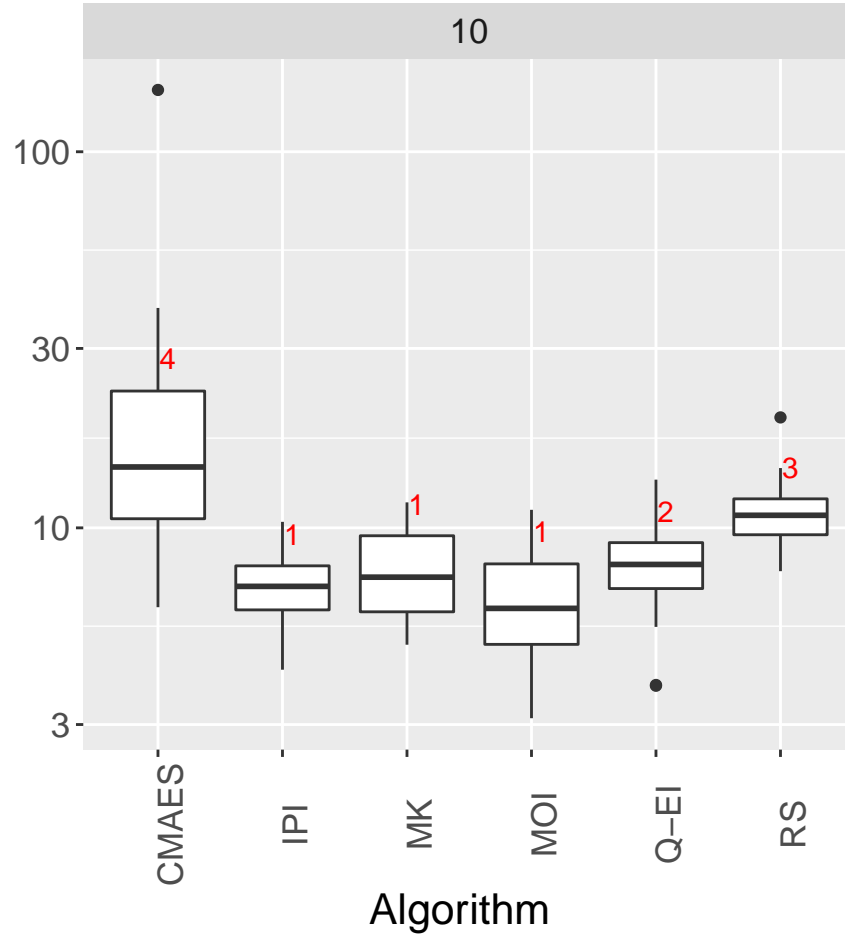
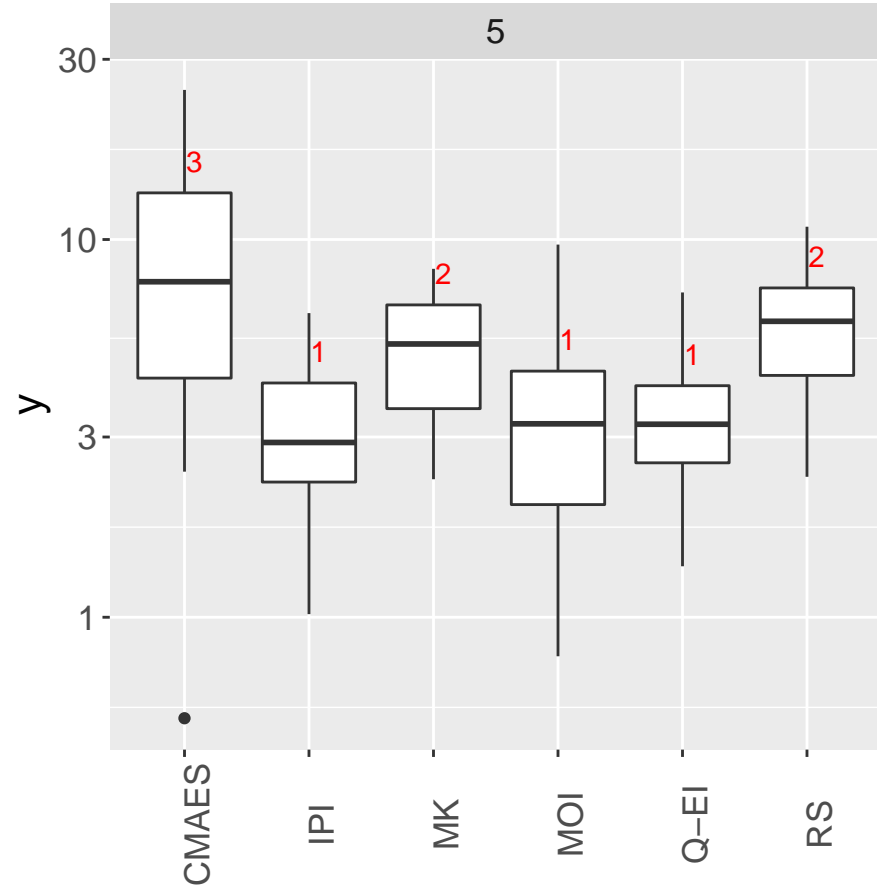
Schaffers F7
Evaluation: 25



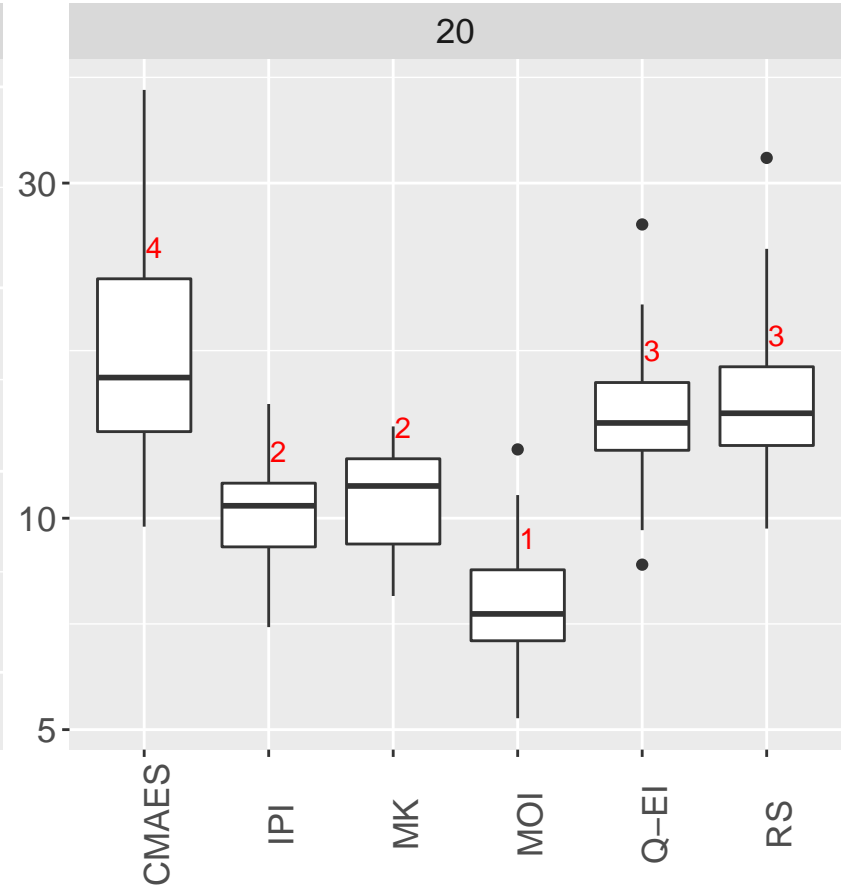
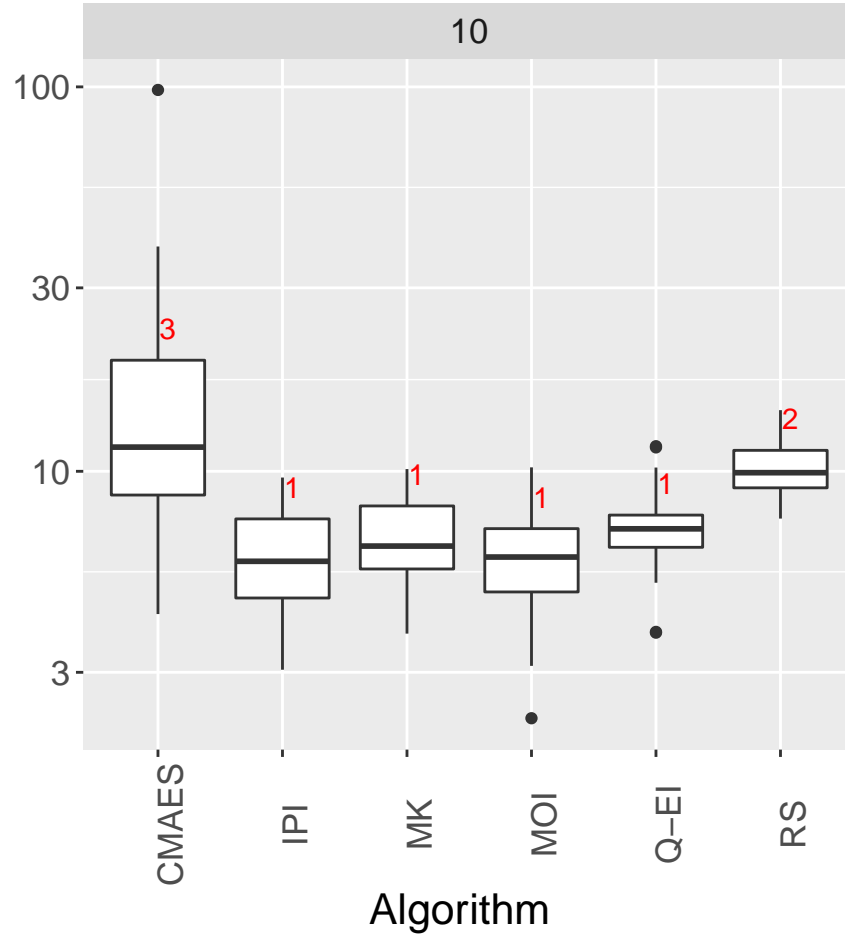
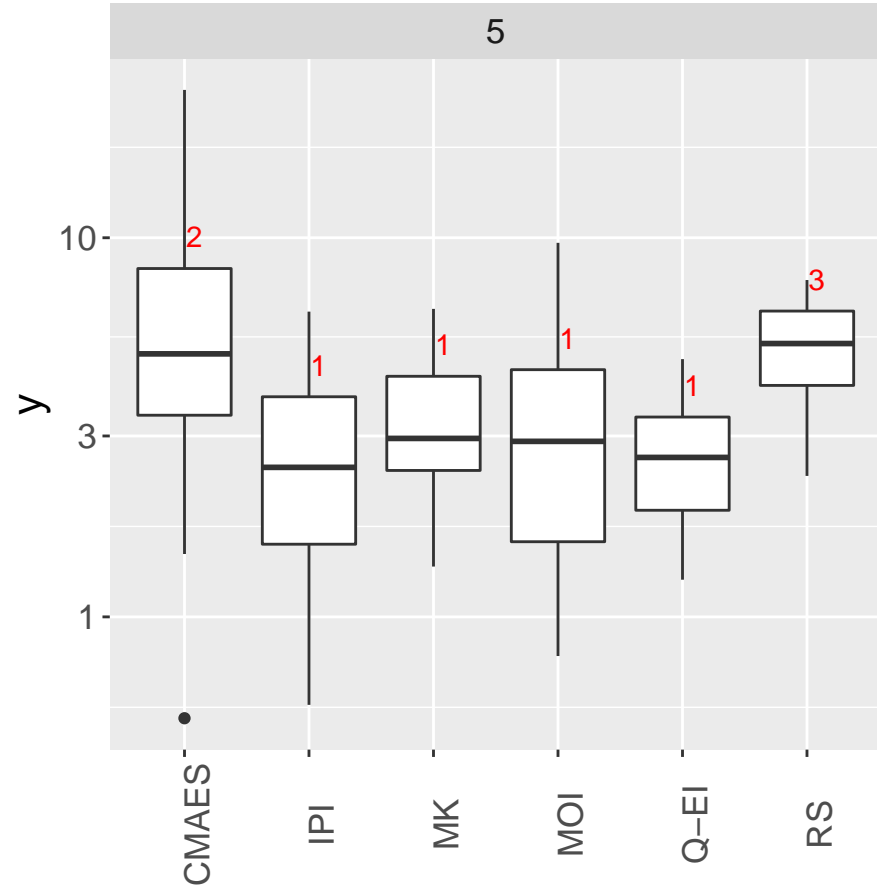
Schaffers F7
Evaluation: 50



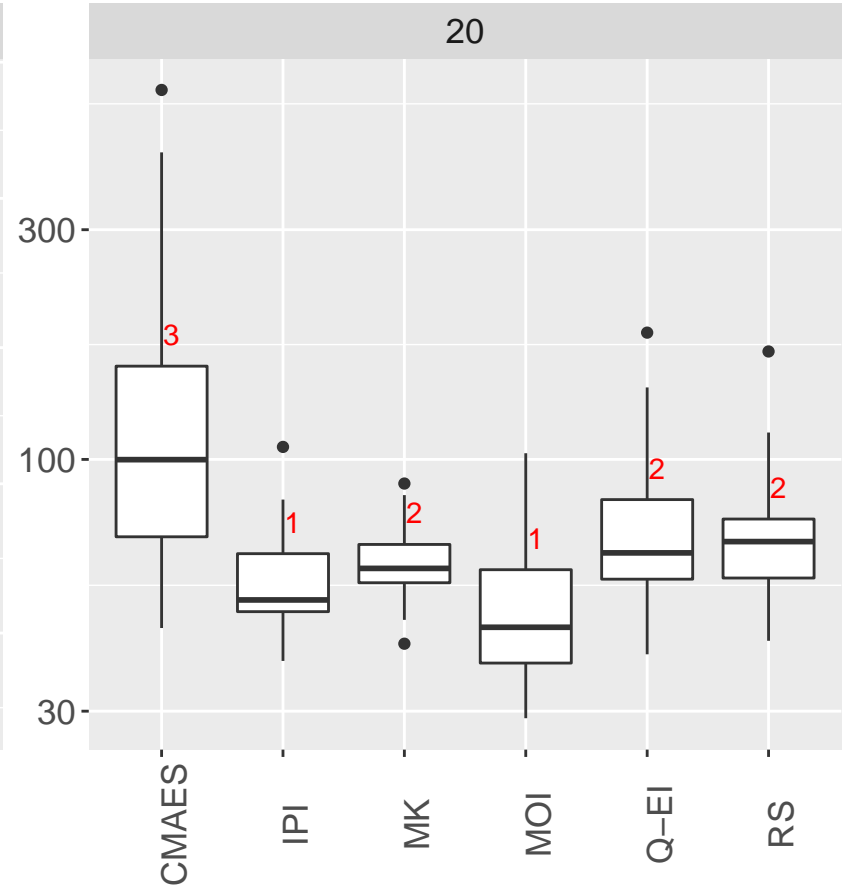
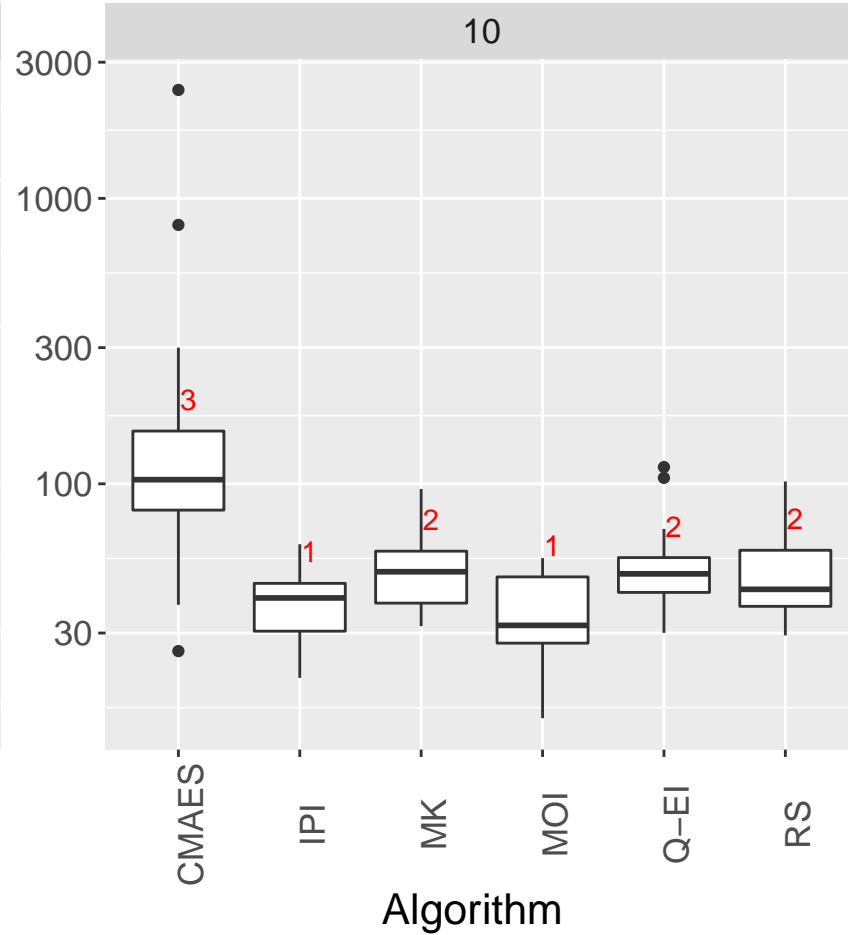
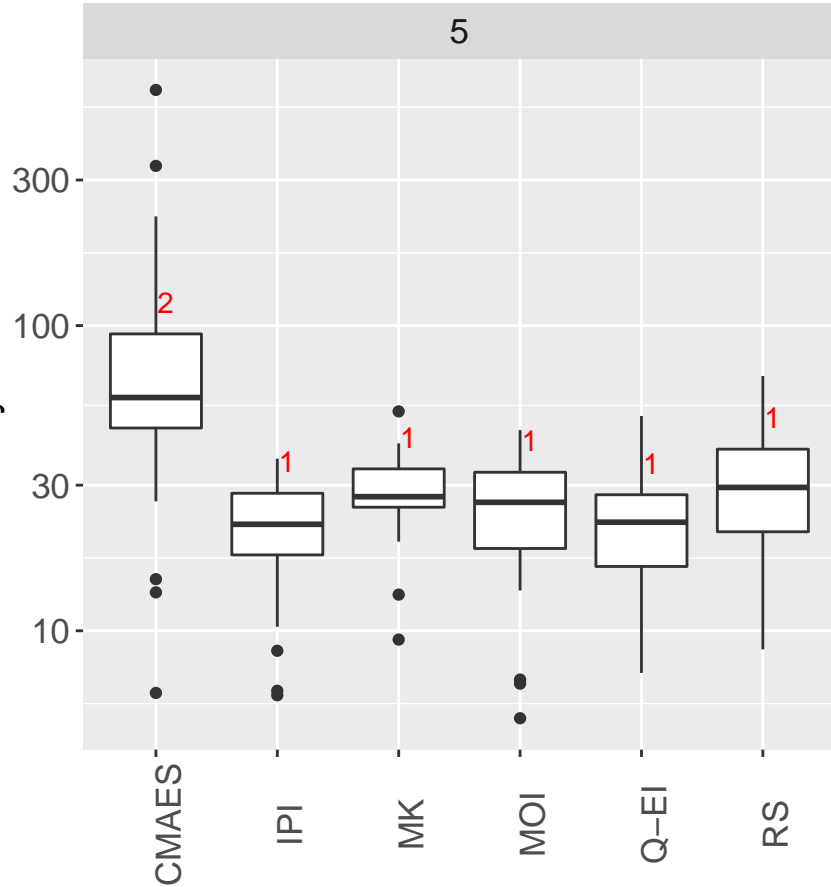
Schaffers F7
Evaluation: 70



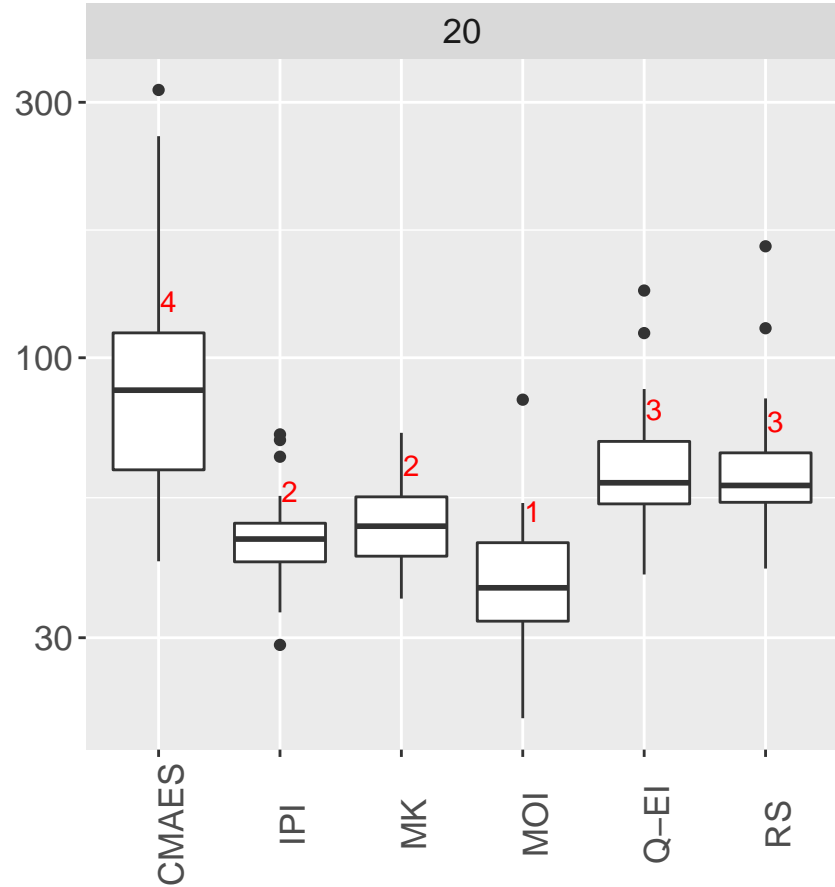
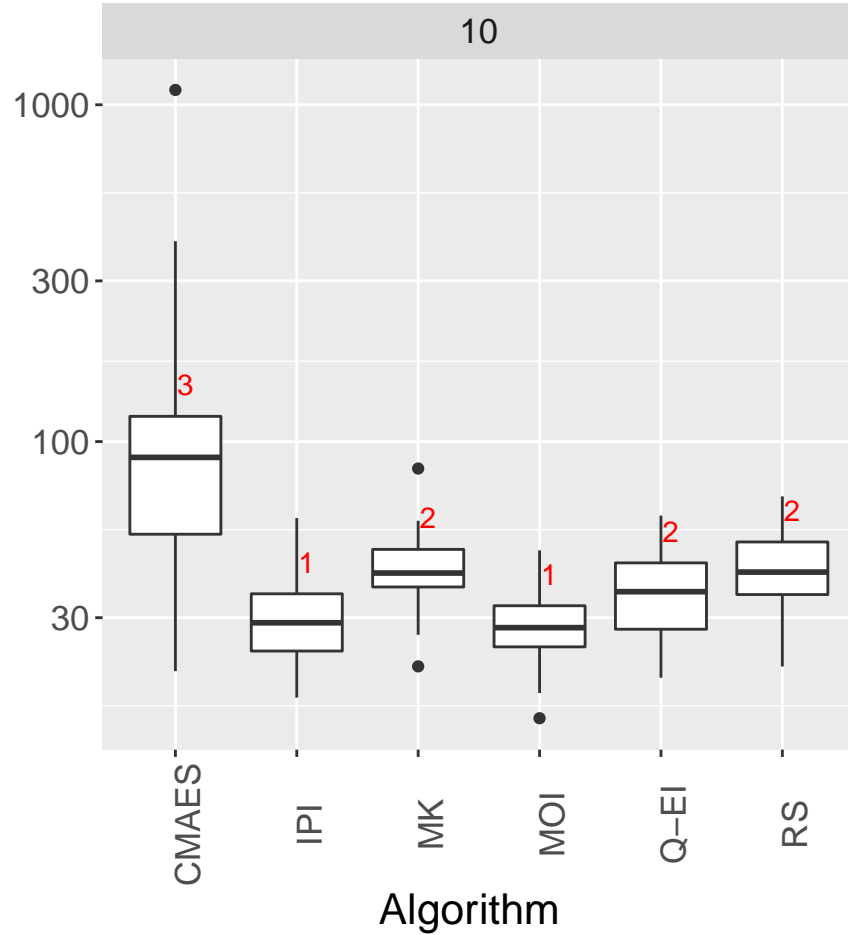
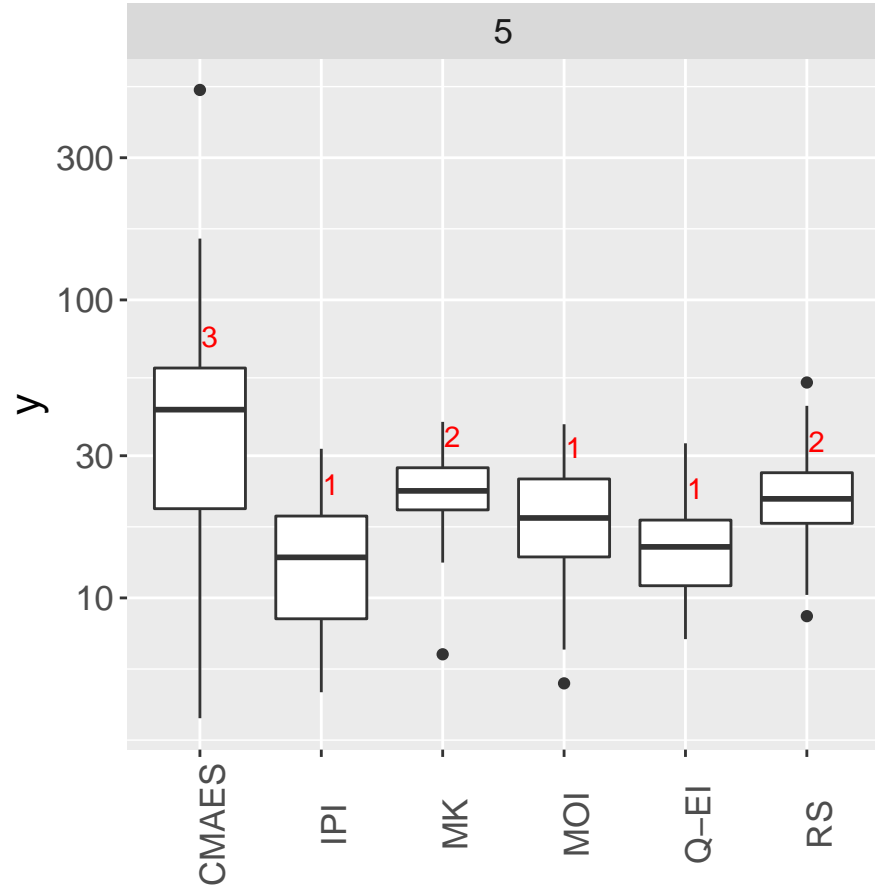
Schaffers F7
Evaluation: 100



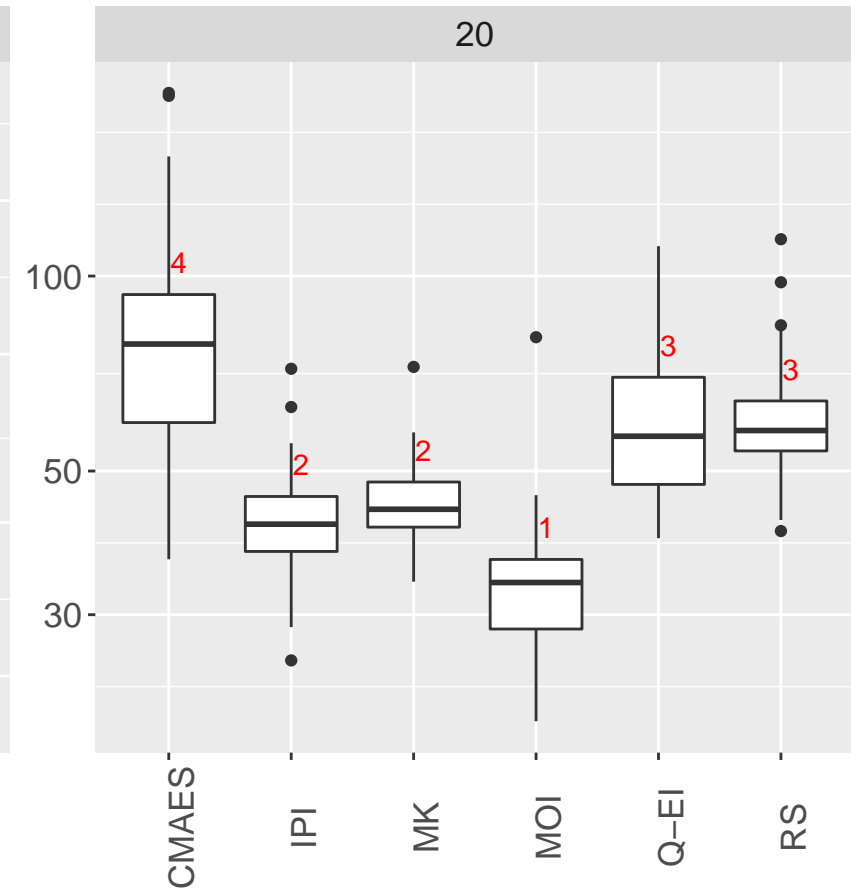
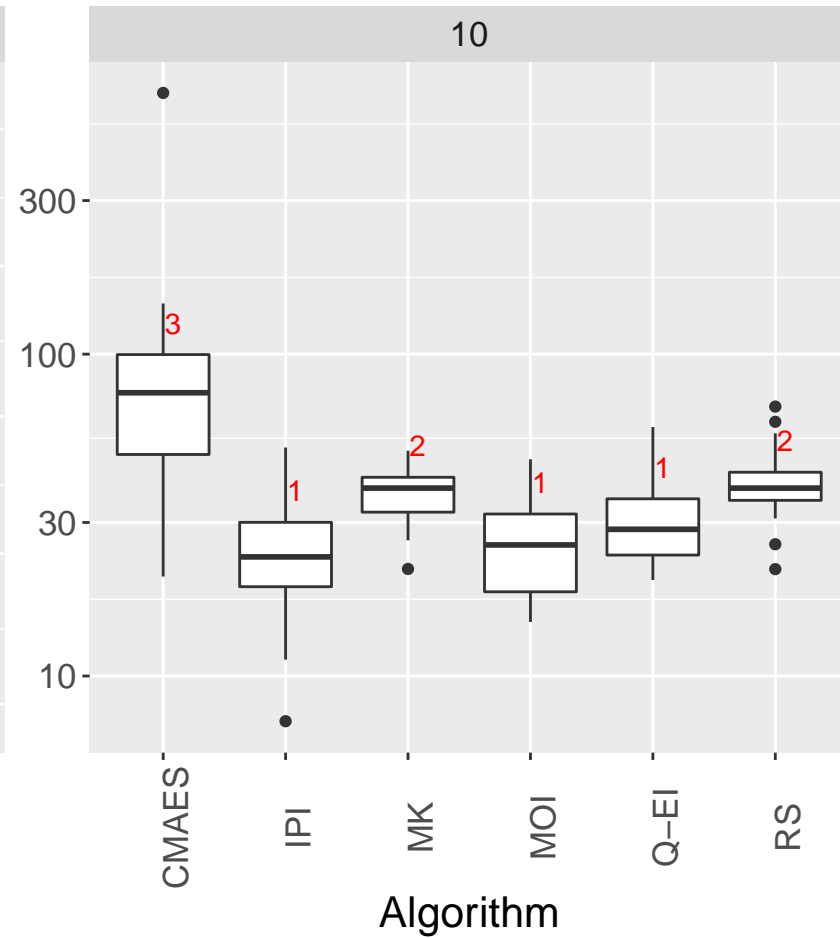
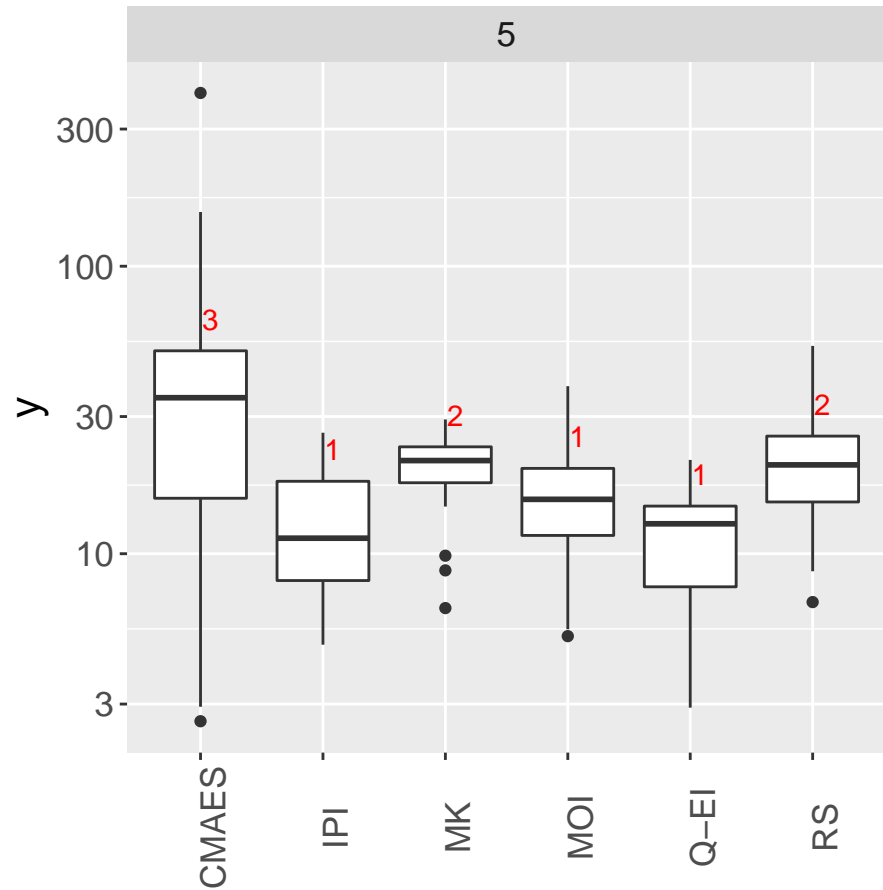
Schaffers F7
Evaluation: 25



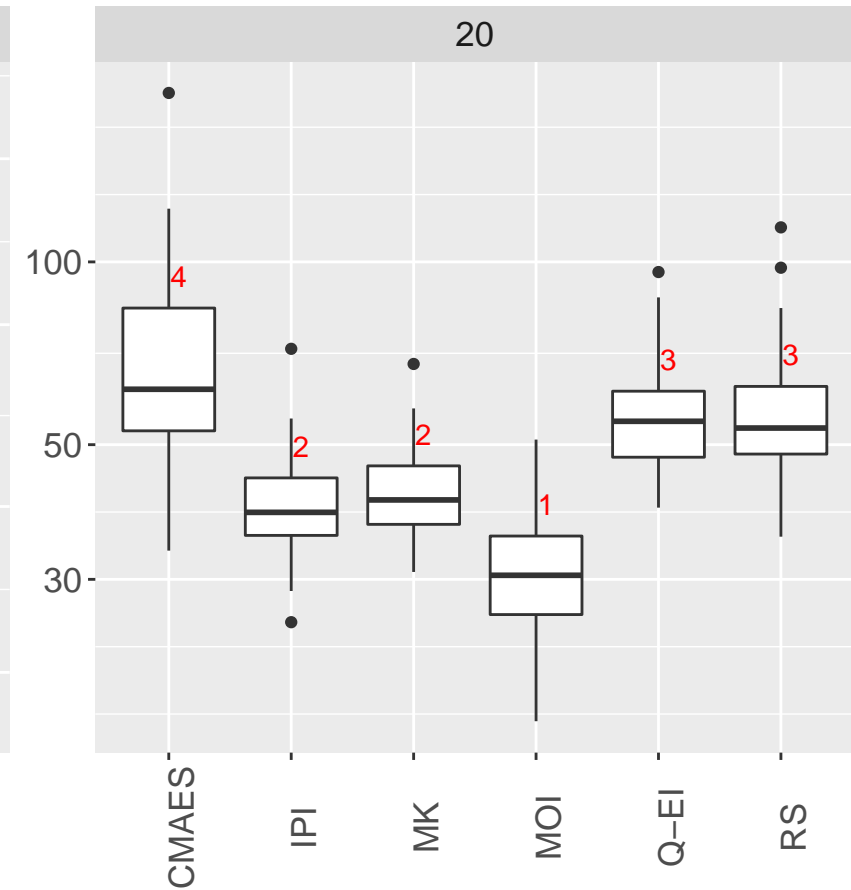
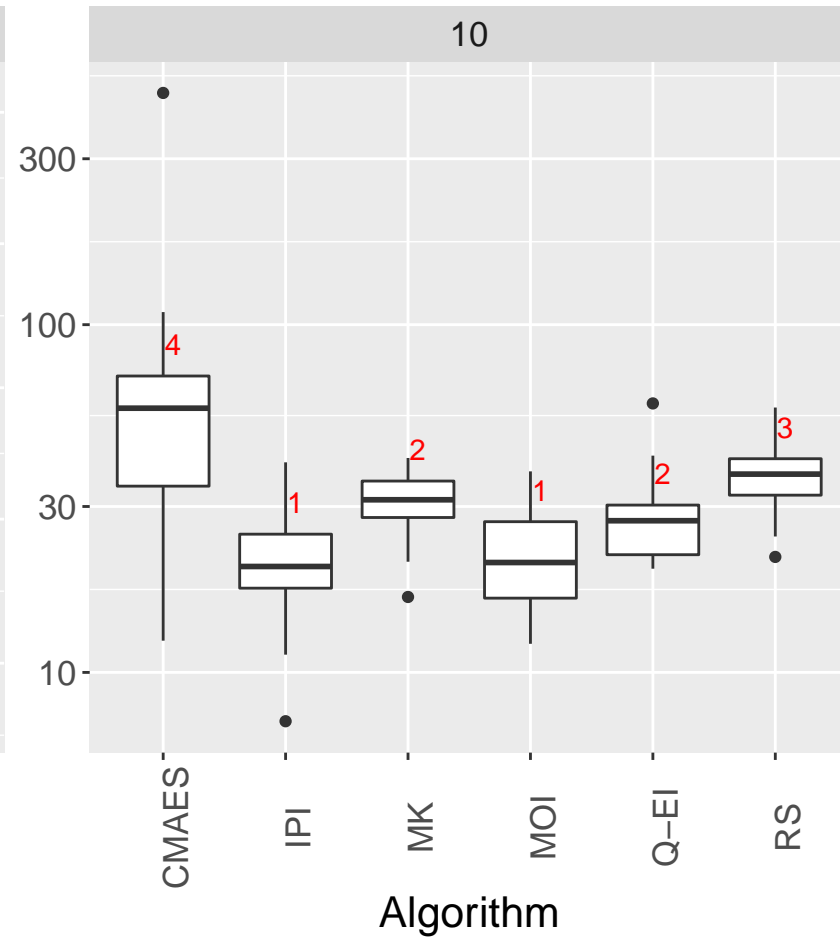
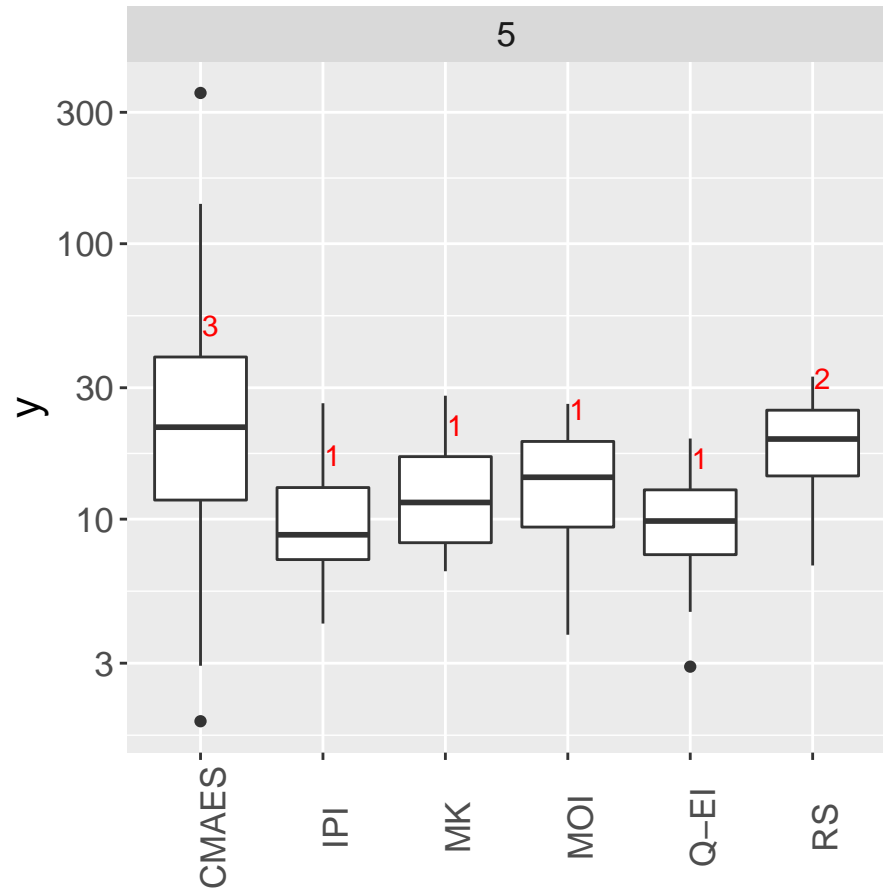
Schaffers F7
Evaluation: 50

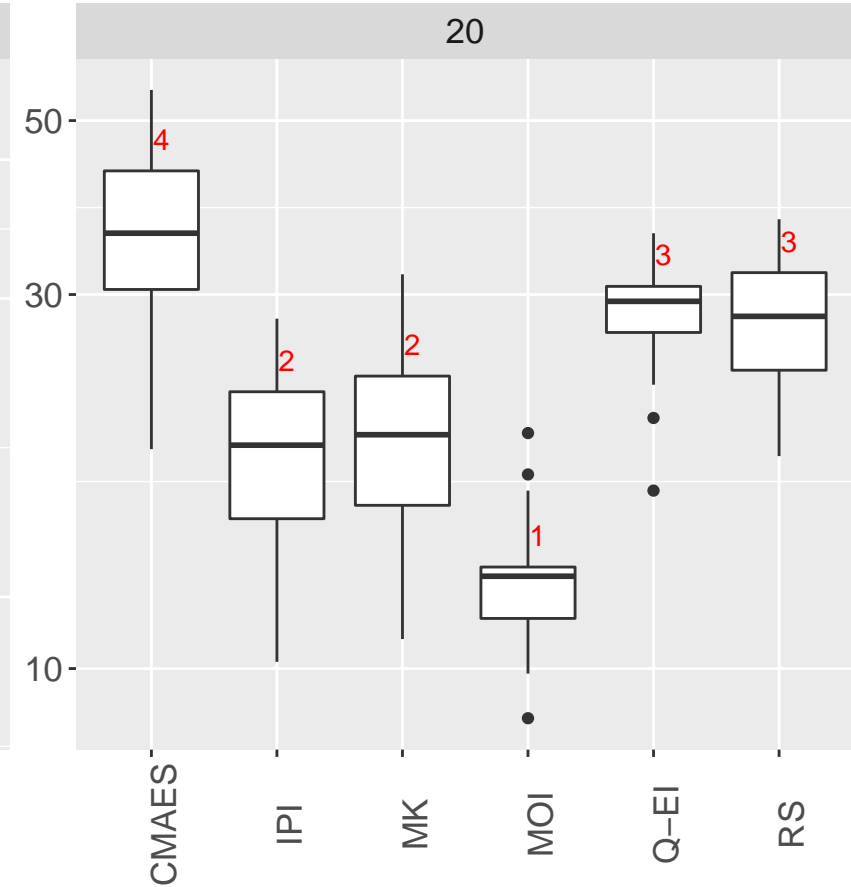
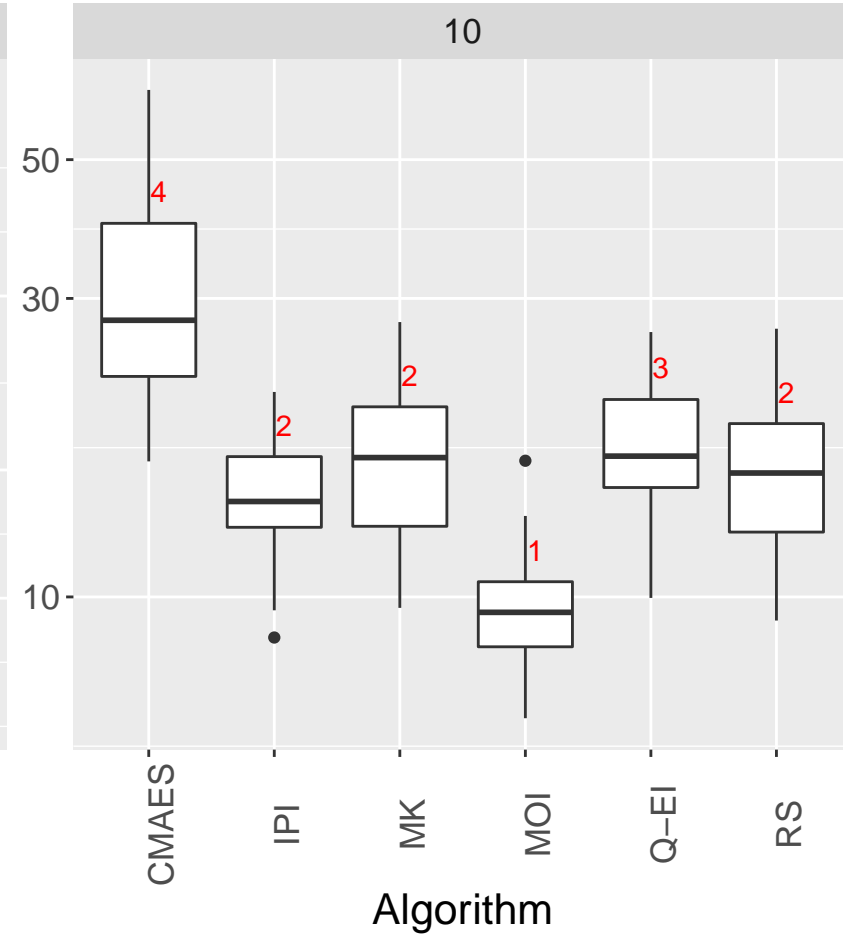
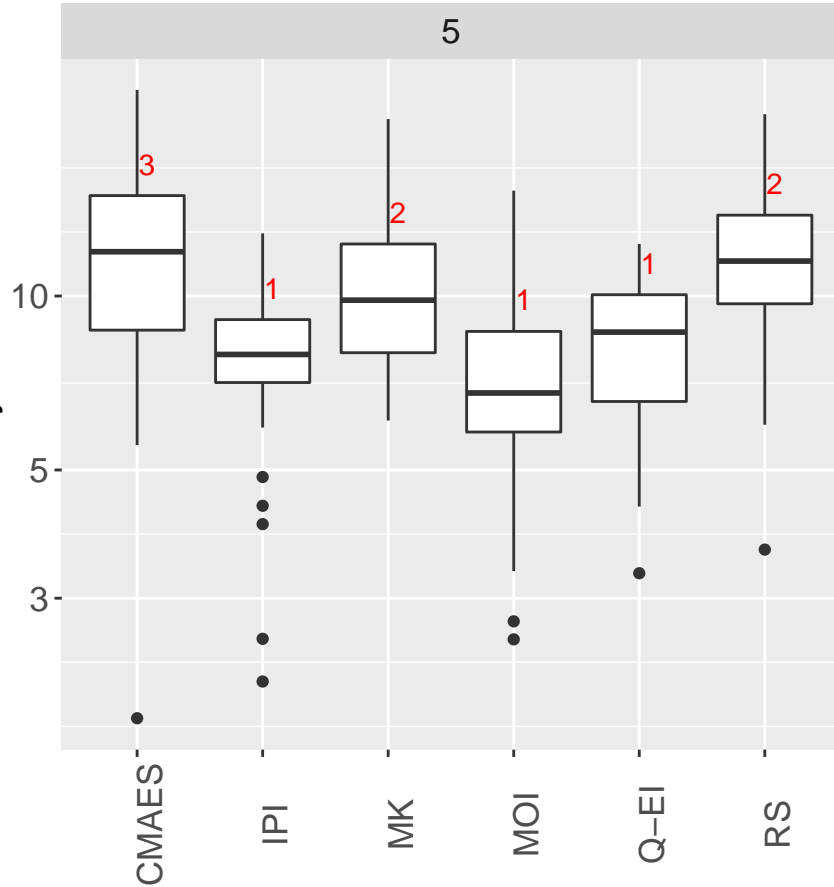


Schaffers F7
Evaluation: 70

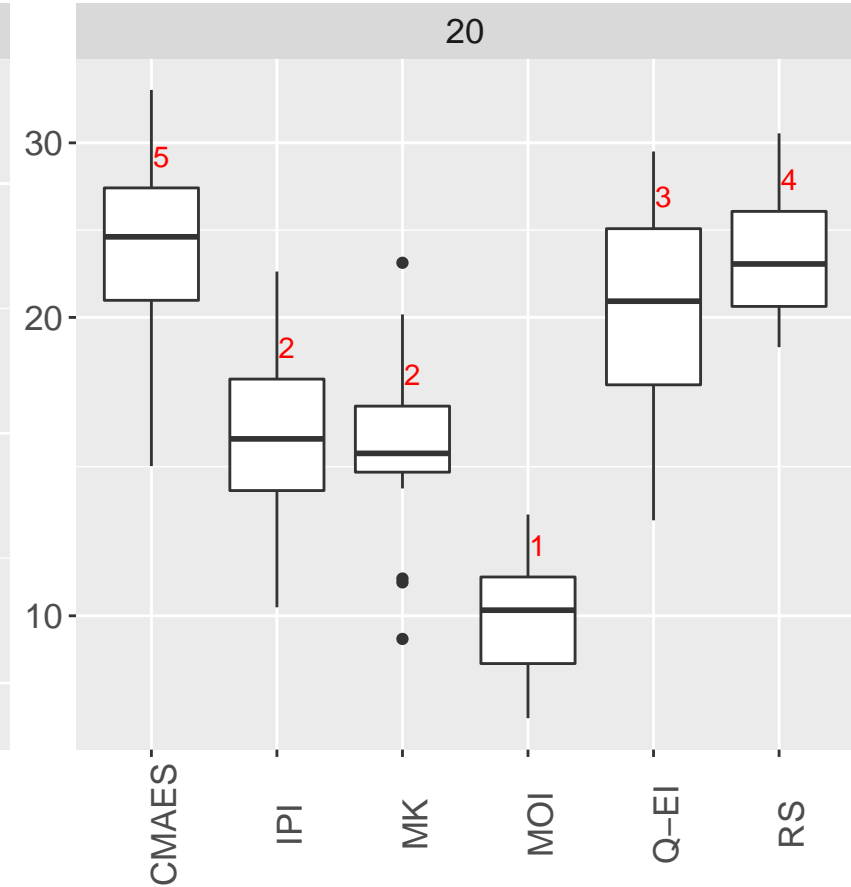
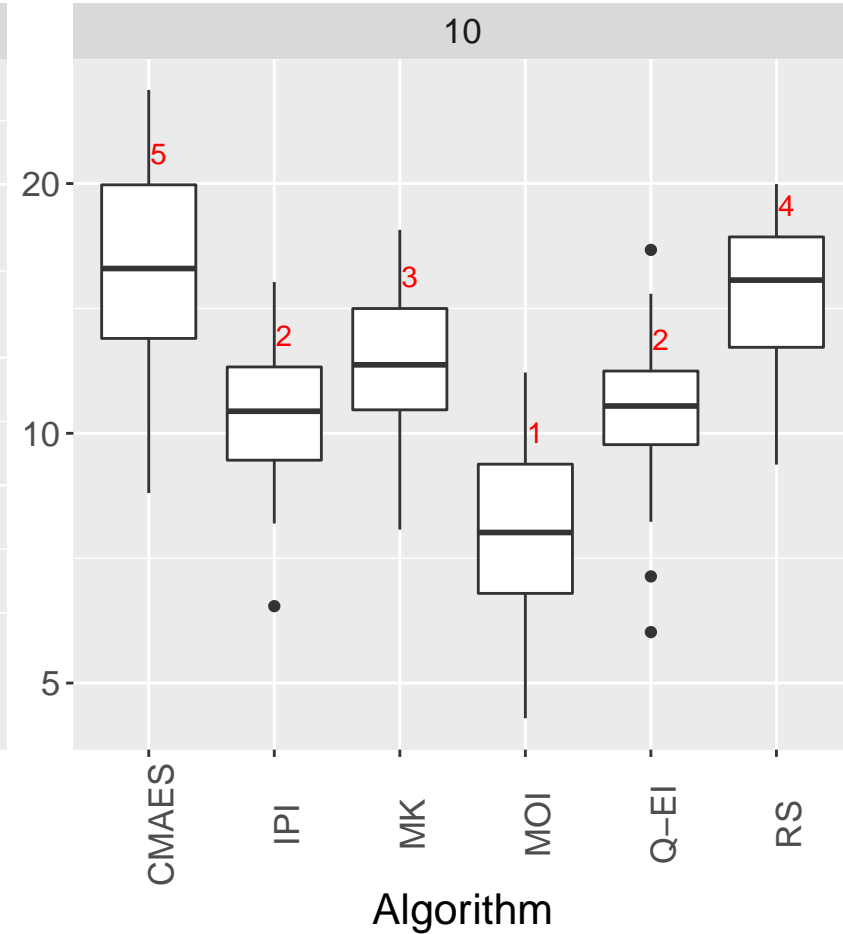
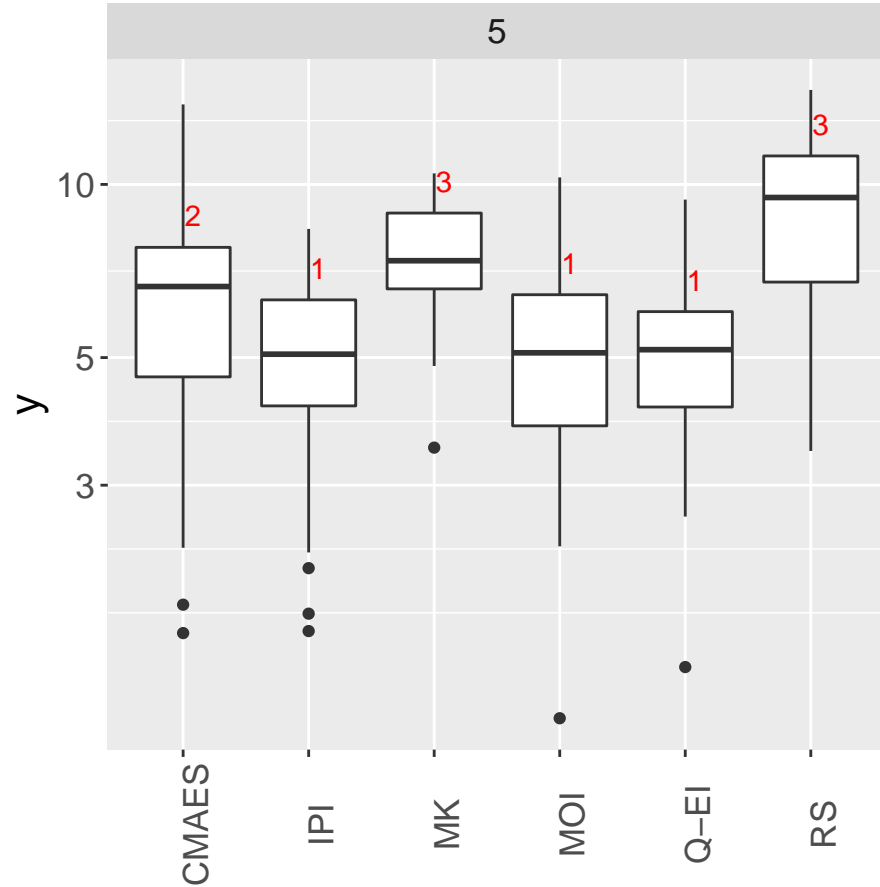


Schaffers F7
Evaluation: 100

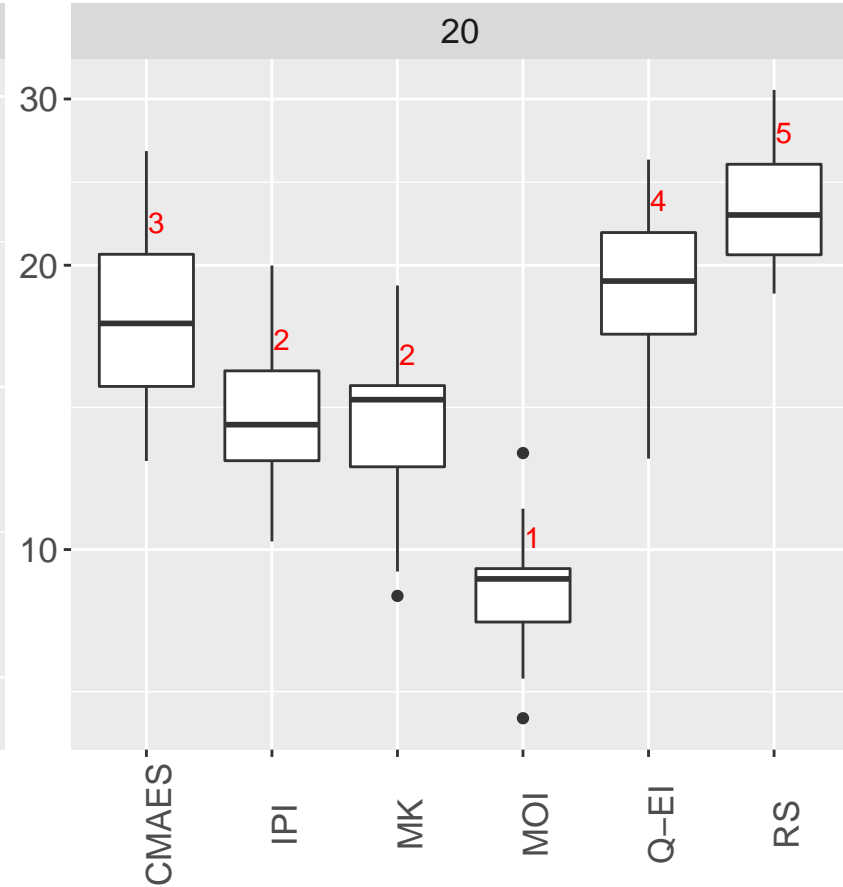
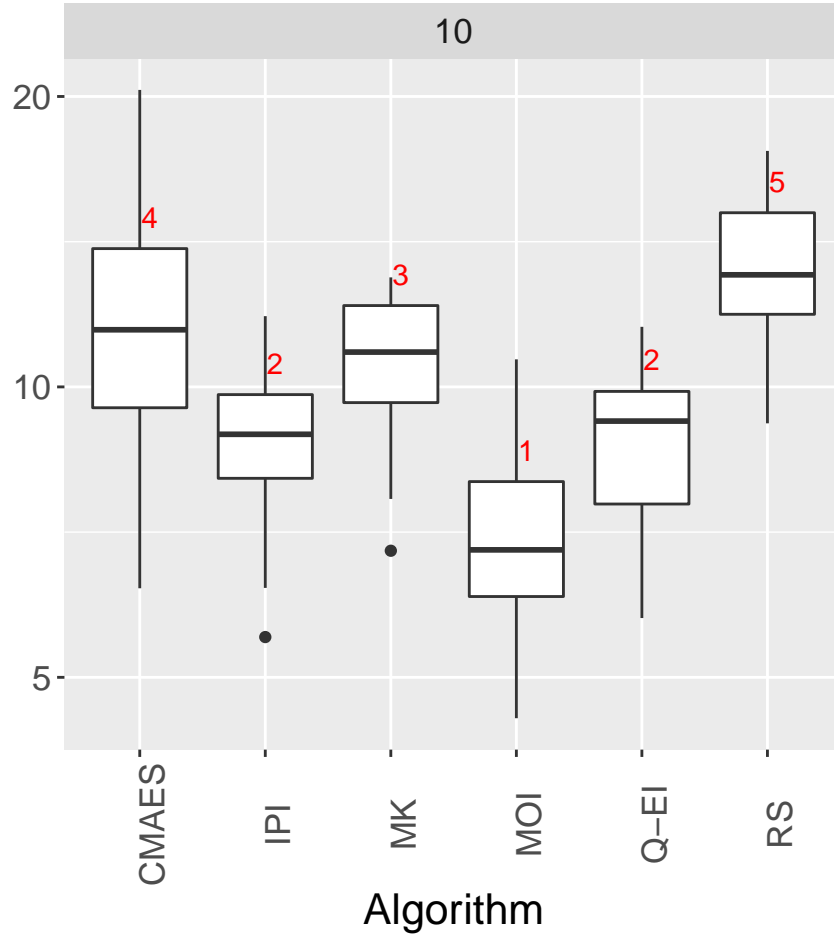
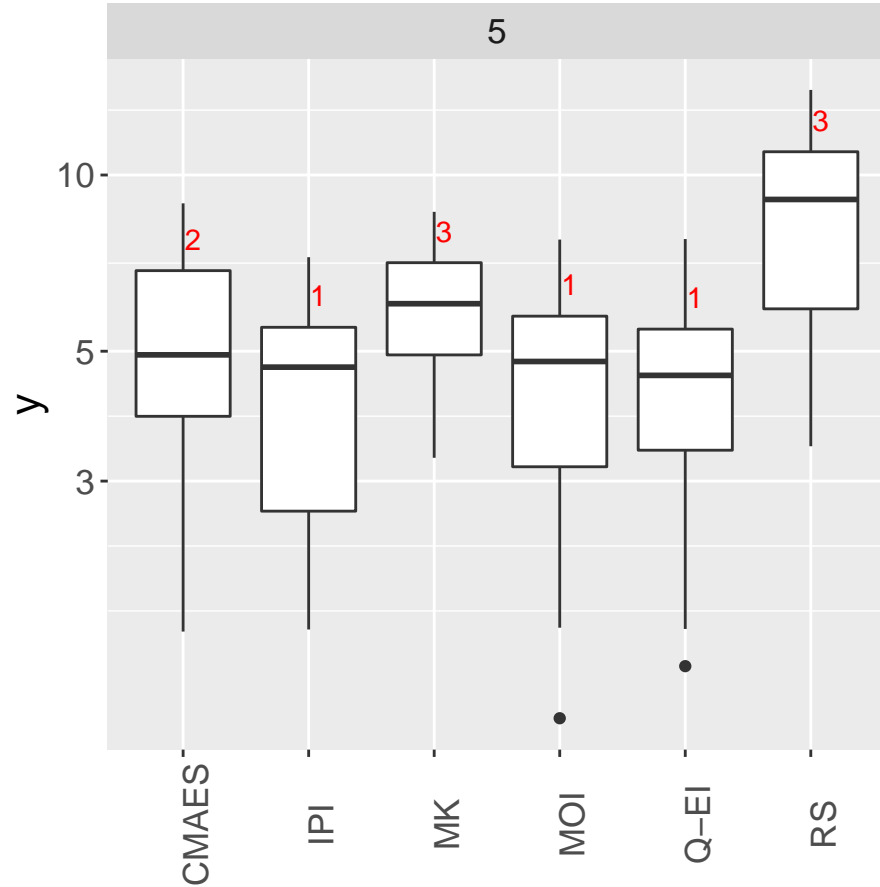




Griwank-Rosenbrock
Evaluation: 50



Griwank-Rosenbrock
Evaluation: 70



5

CMAES

IPI

MK

MOI

Q-EI

RS

10

CMAES

IPI

MK

MOI

Q-EI

RS

Algorithm

20

CMAES

IPI

MK

MOI

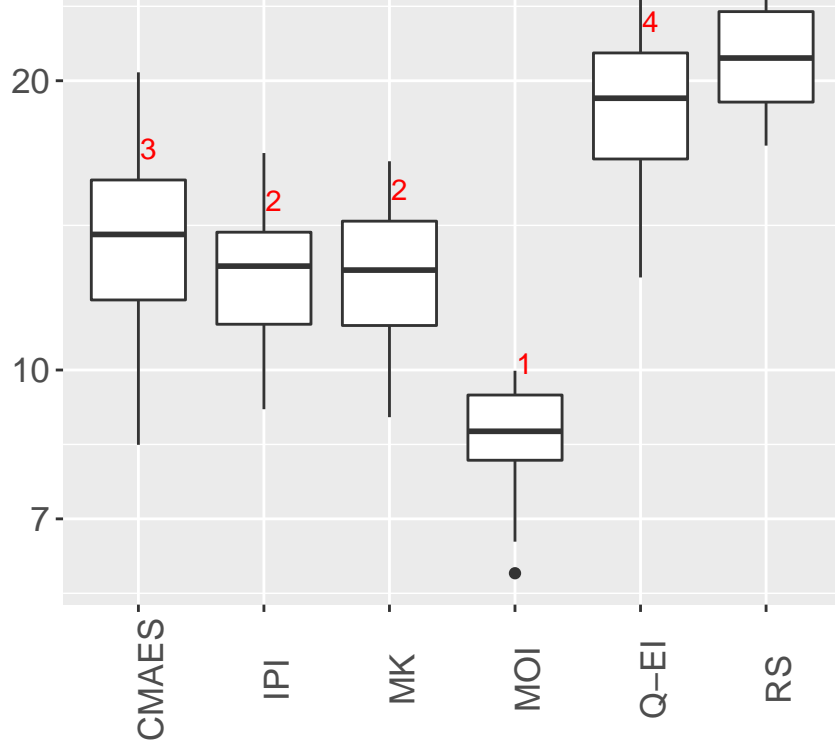
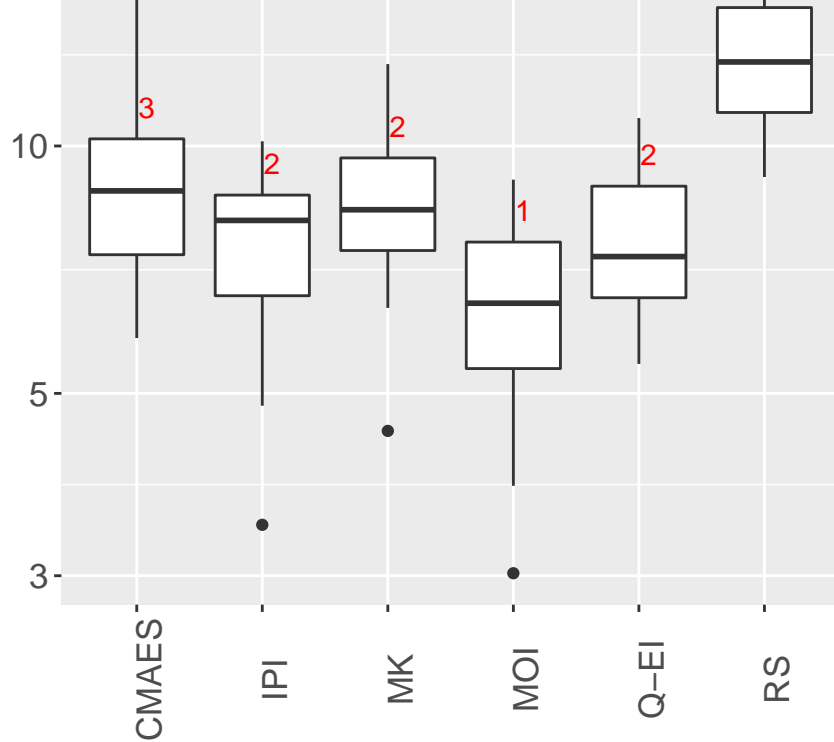
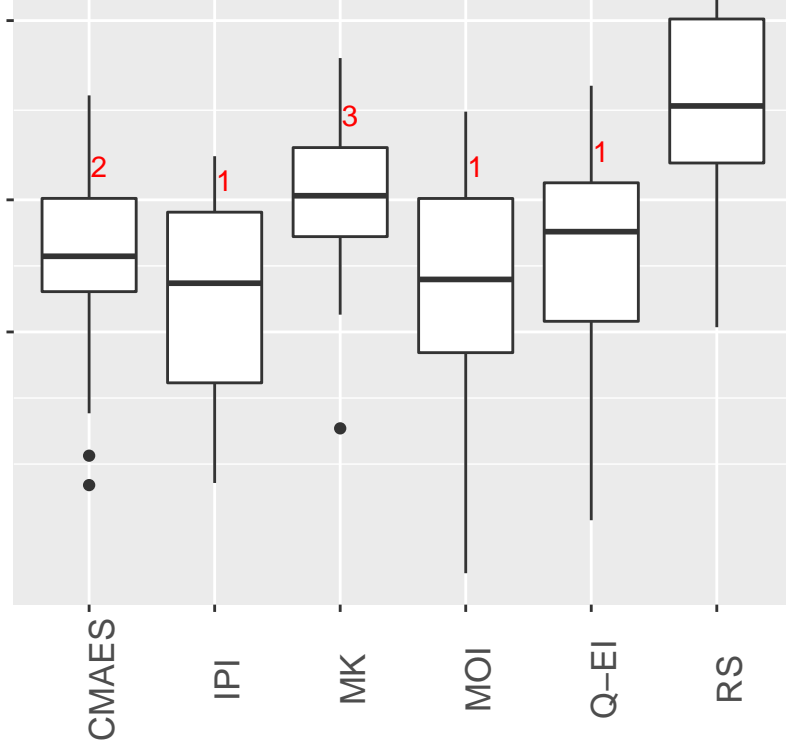
Q-EI

RS

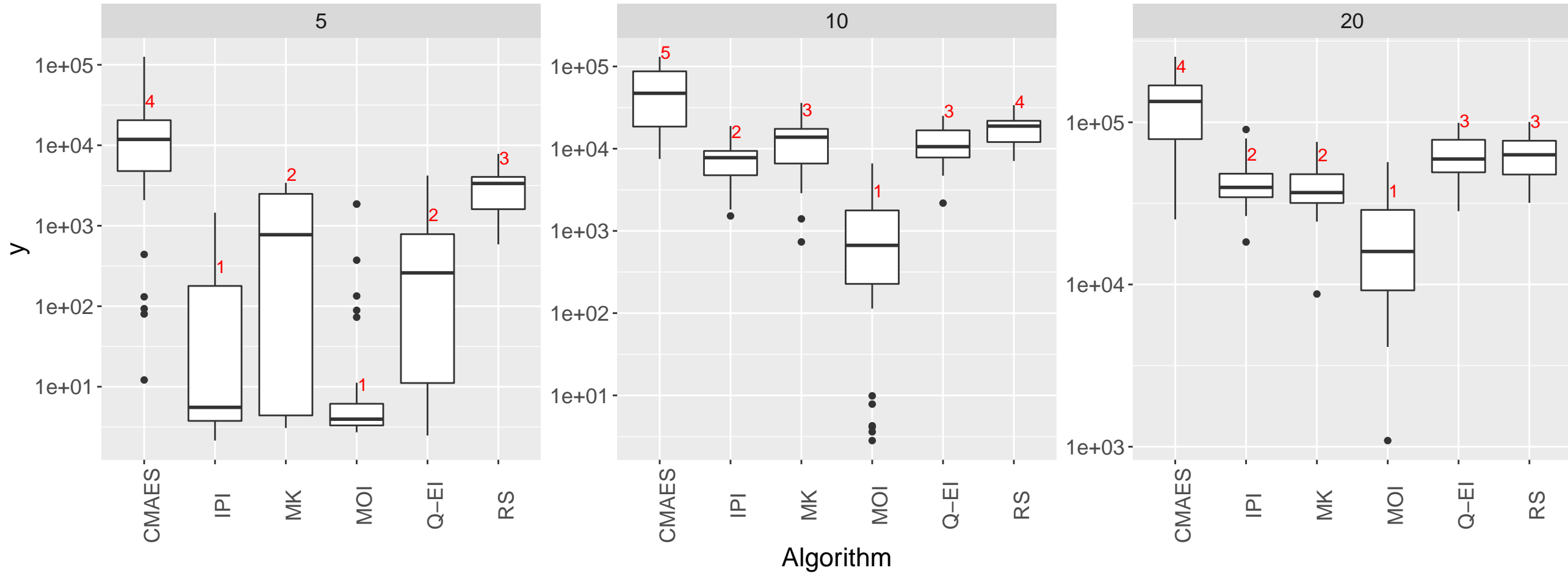
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10

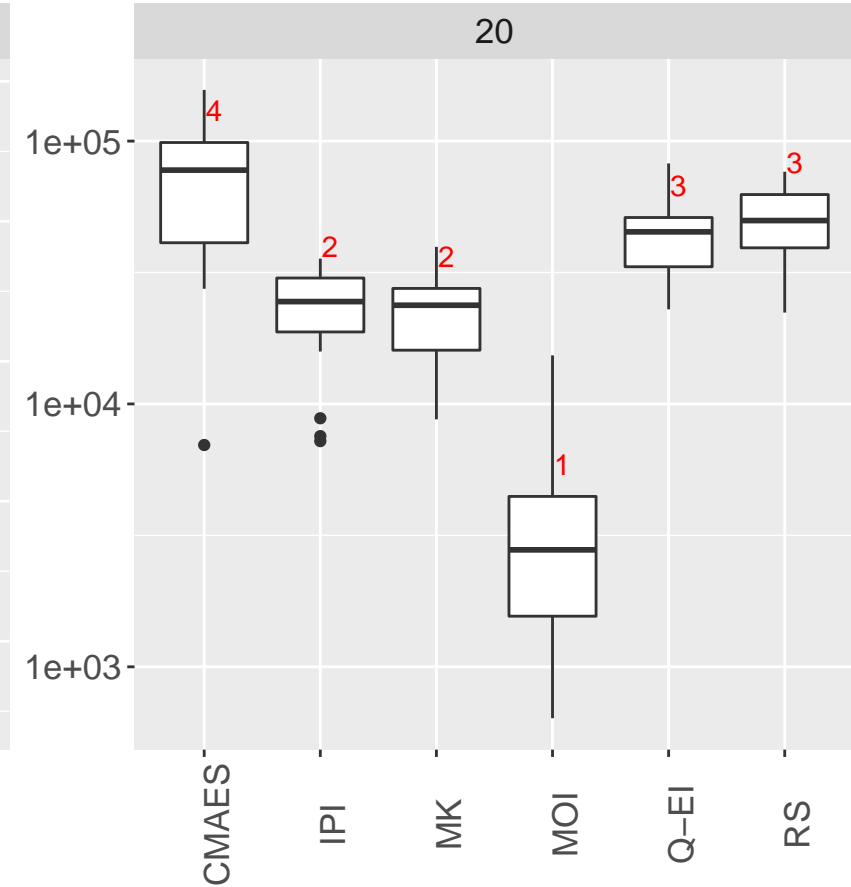
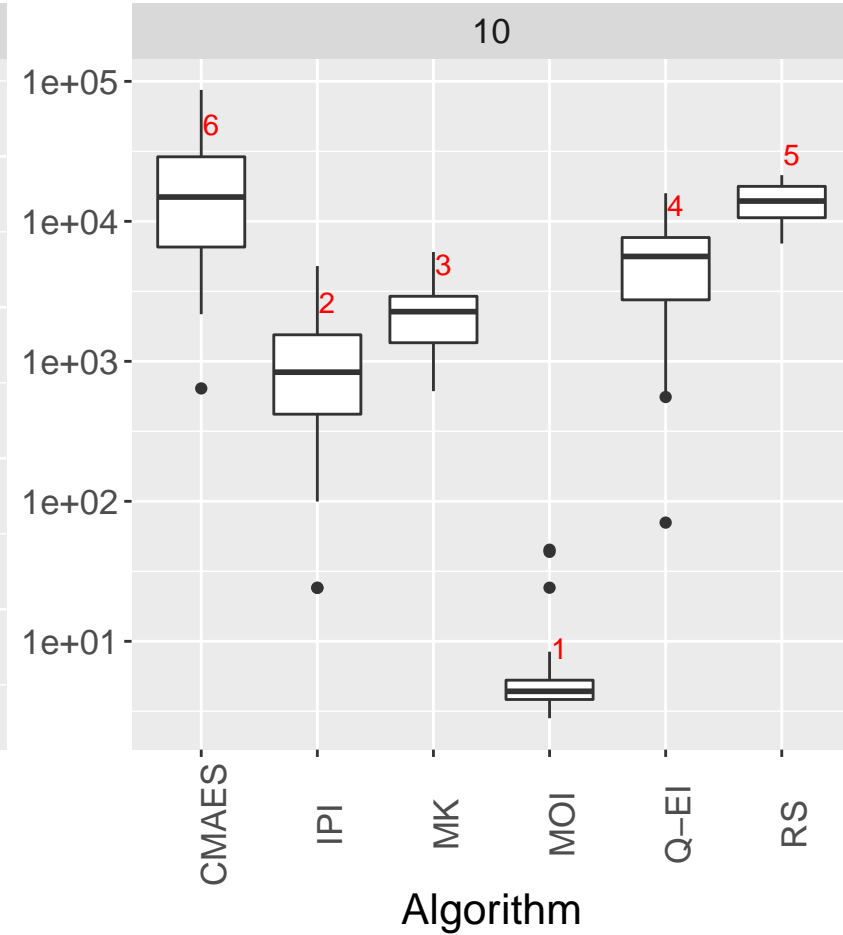
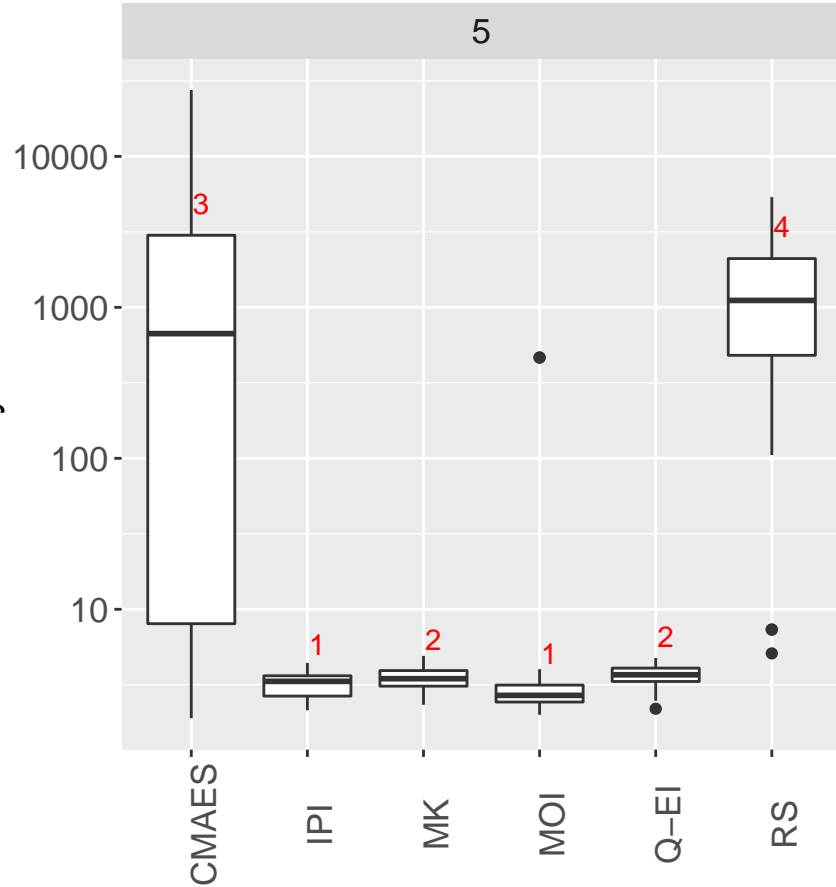
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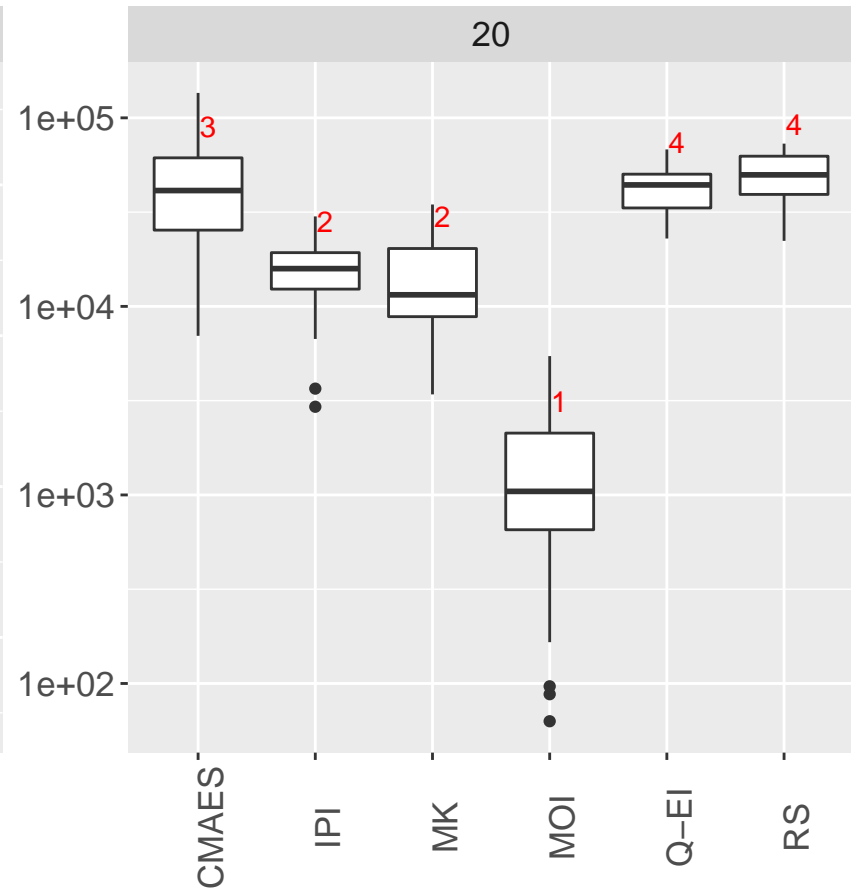
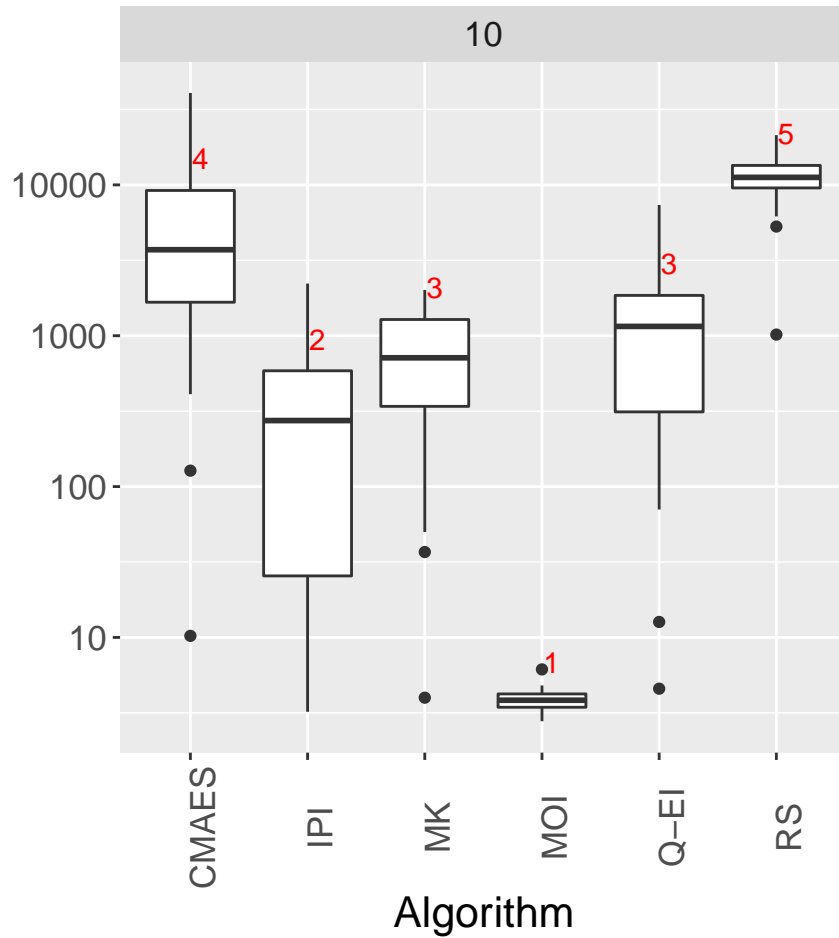
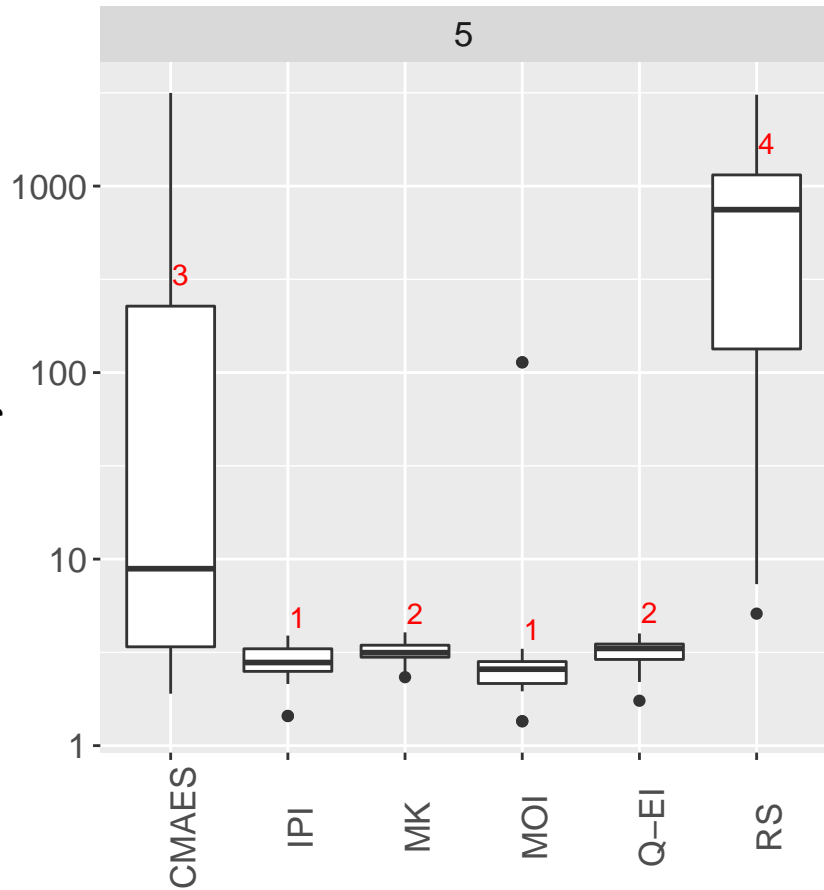
Schwefel
Evaluation: 25



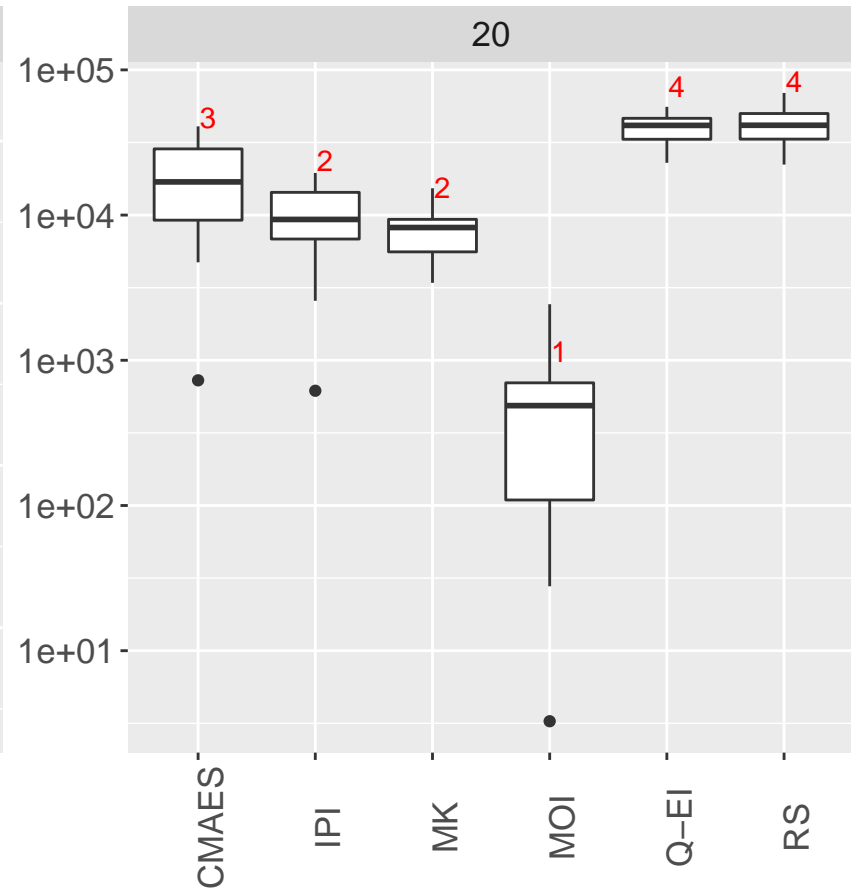
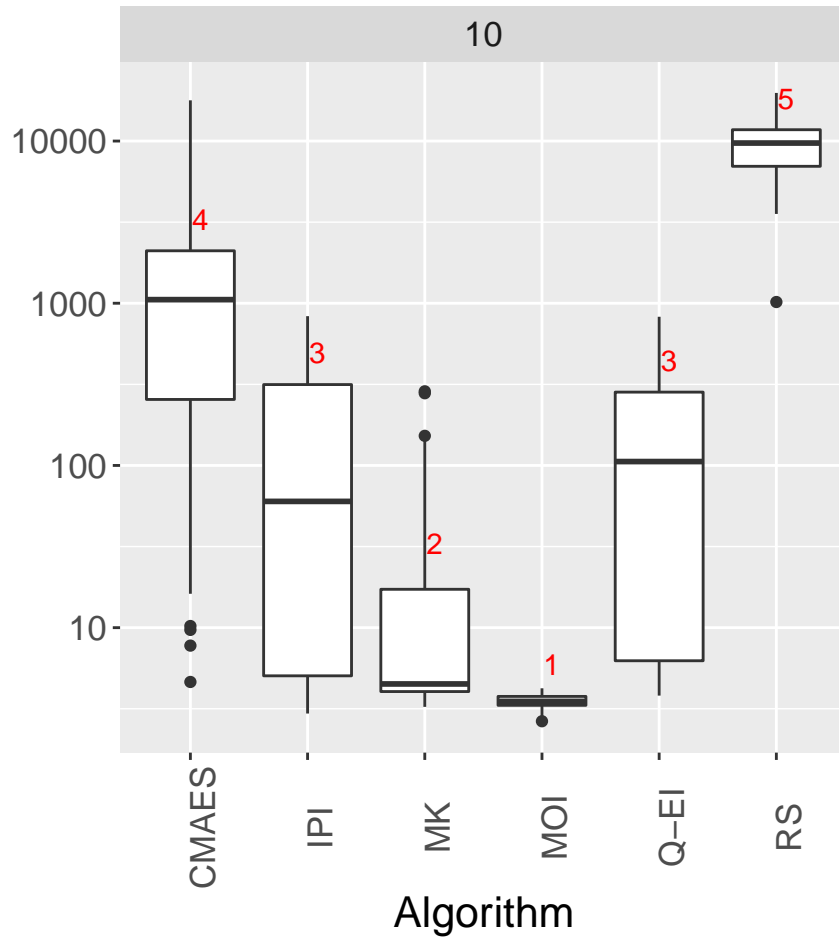
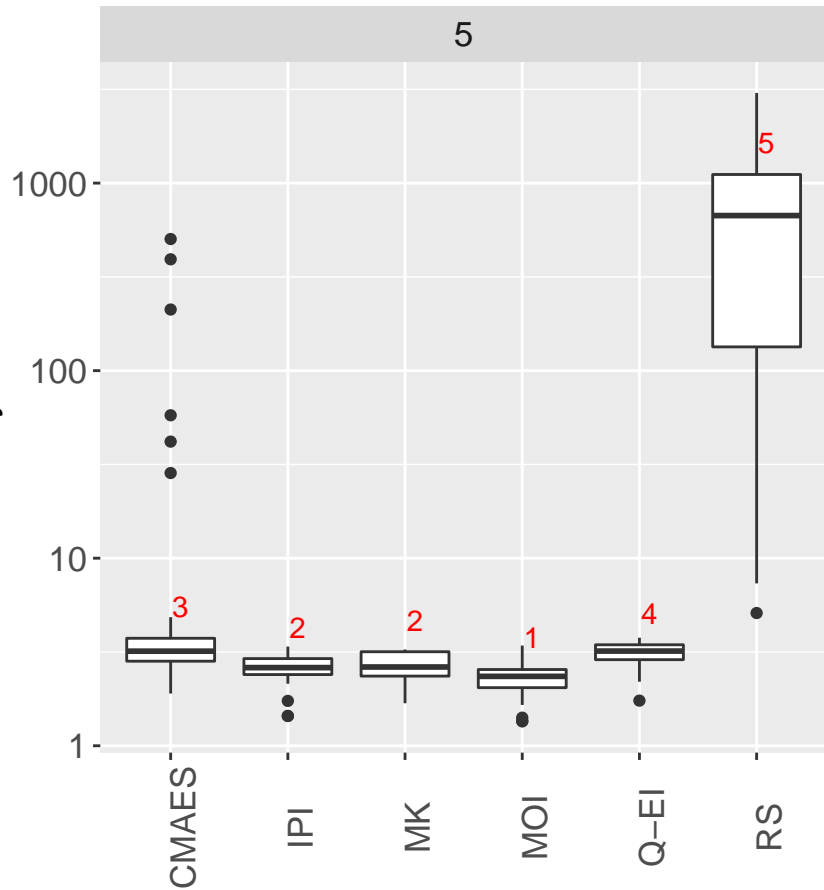
Schwefel
Evaluation: 50
y



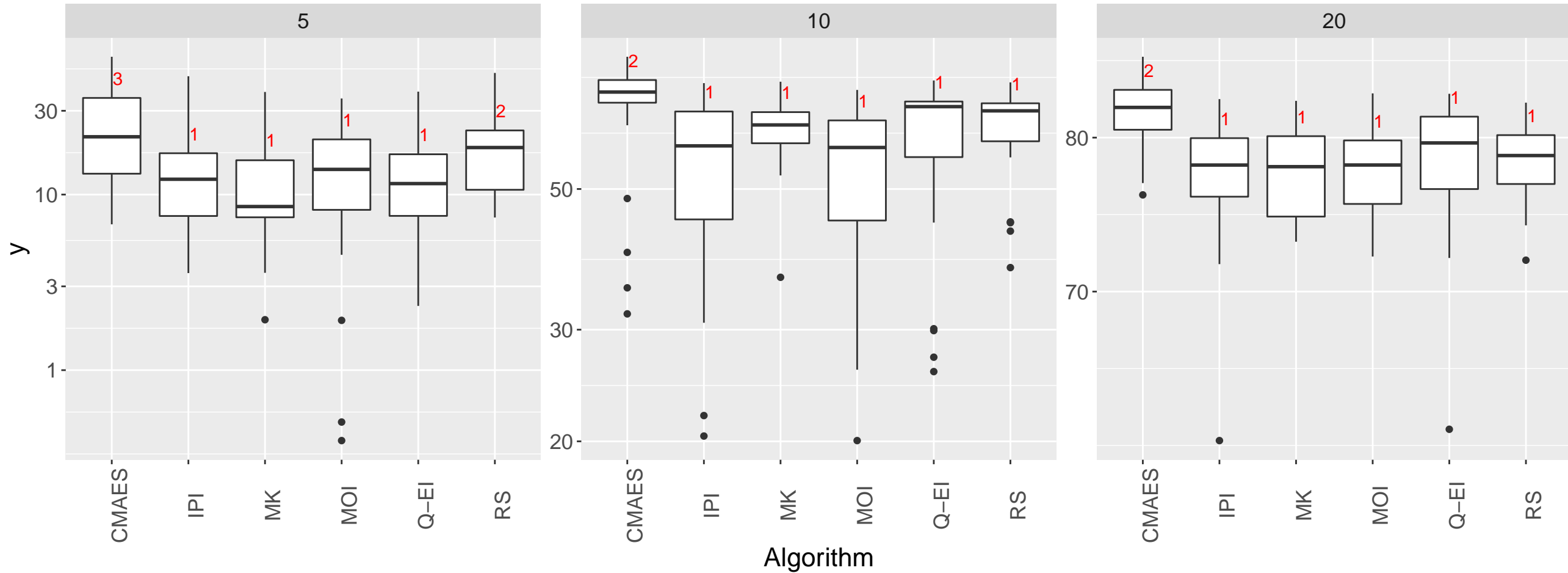
Schwefel
Evaluation: 70
y



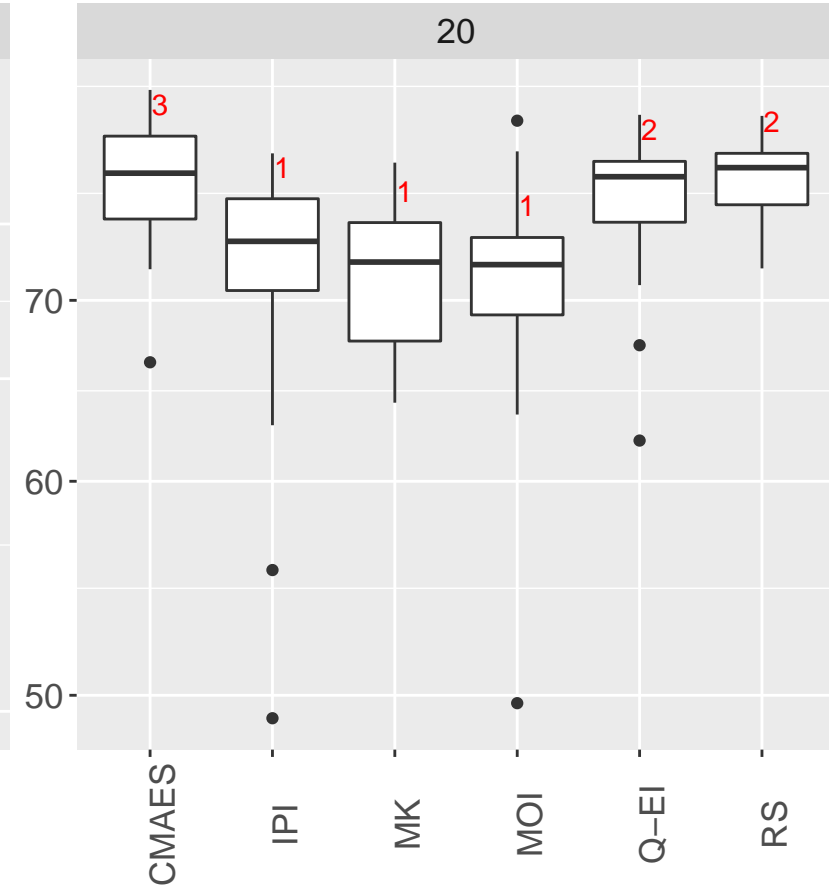
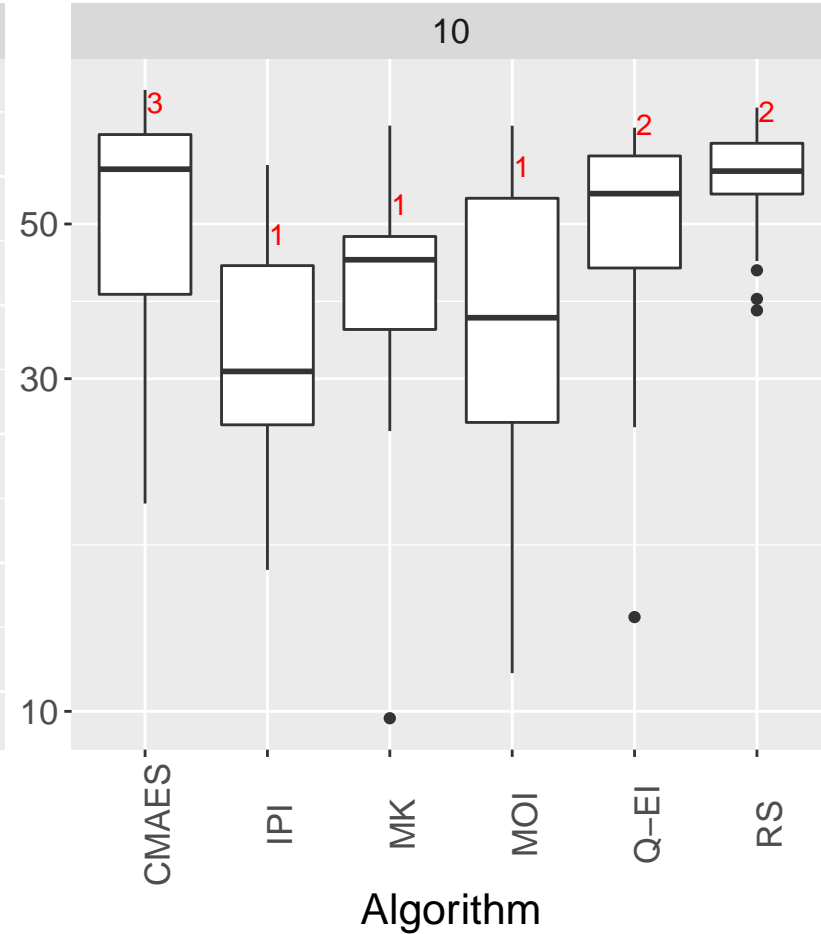
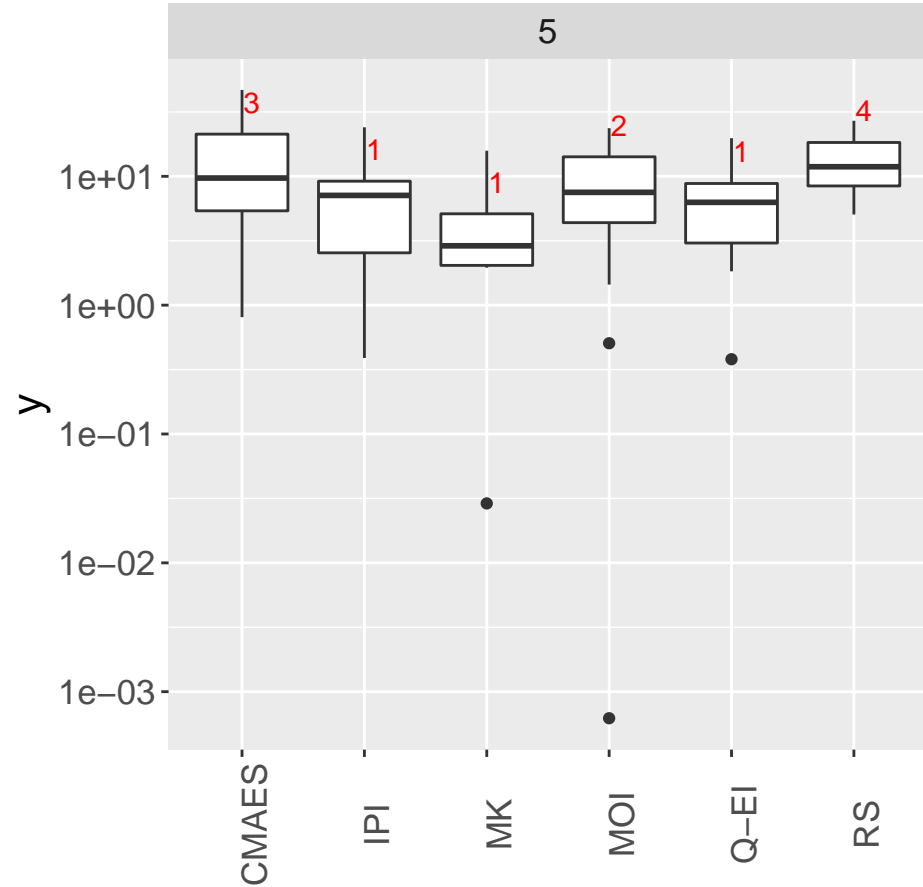
Schwefel
Evaluation: 100
y



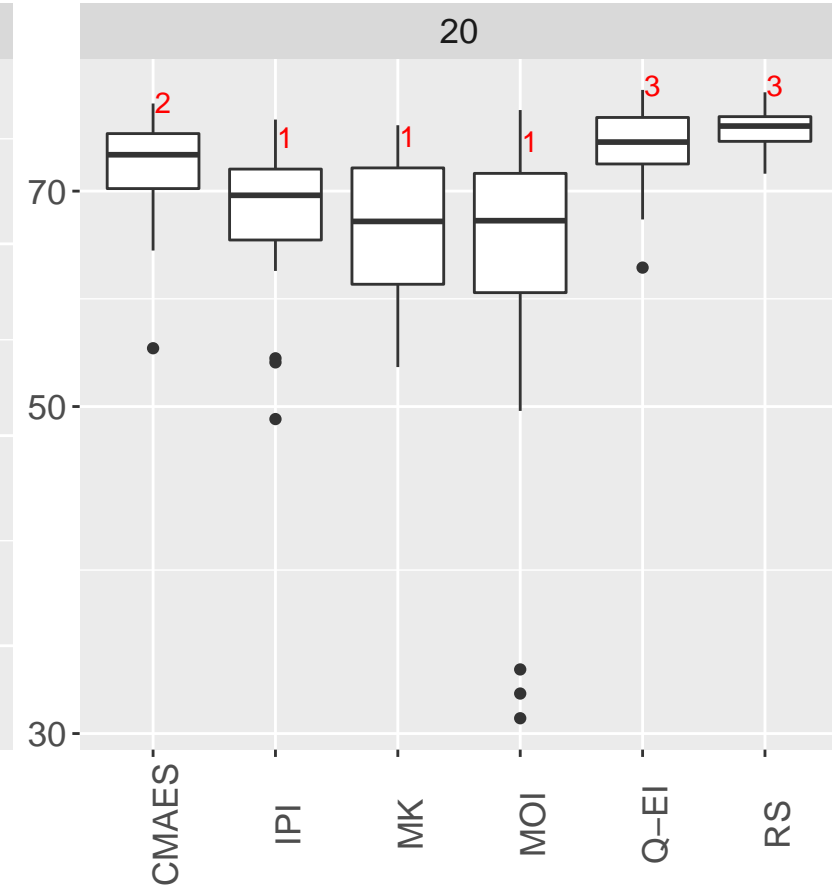
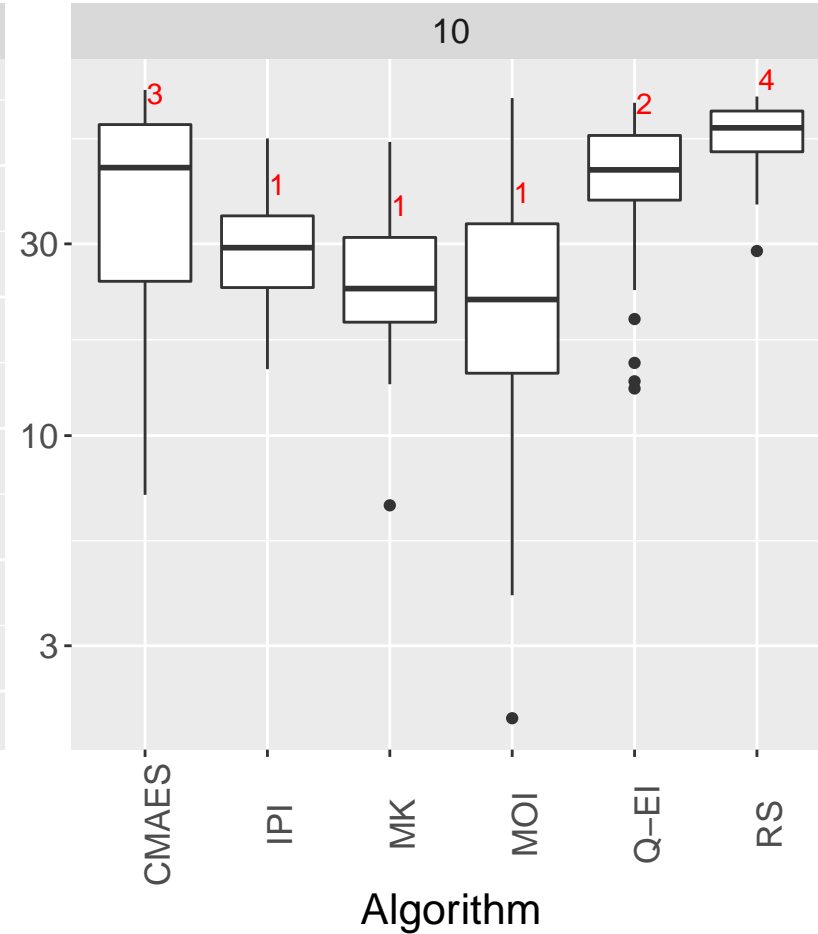
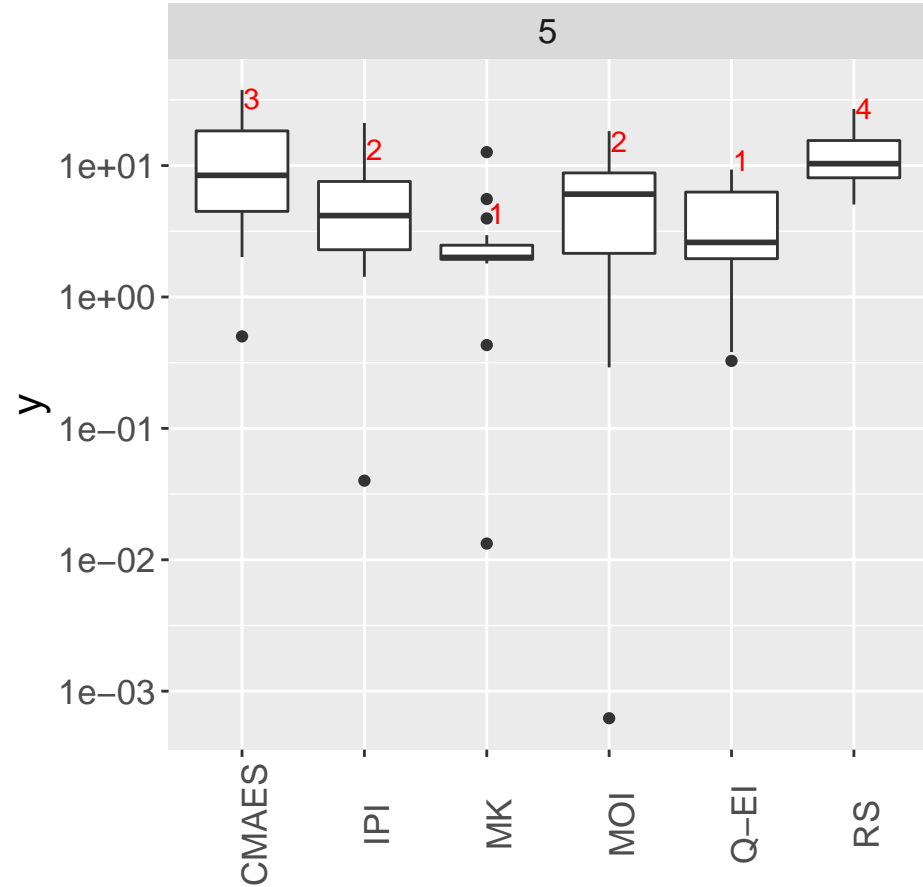
Gallagher Gaussian 101-me Peaks
Evaluation: 25



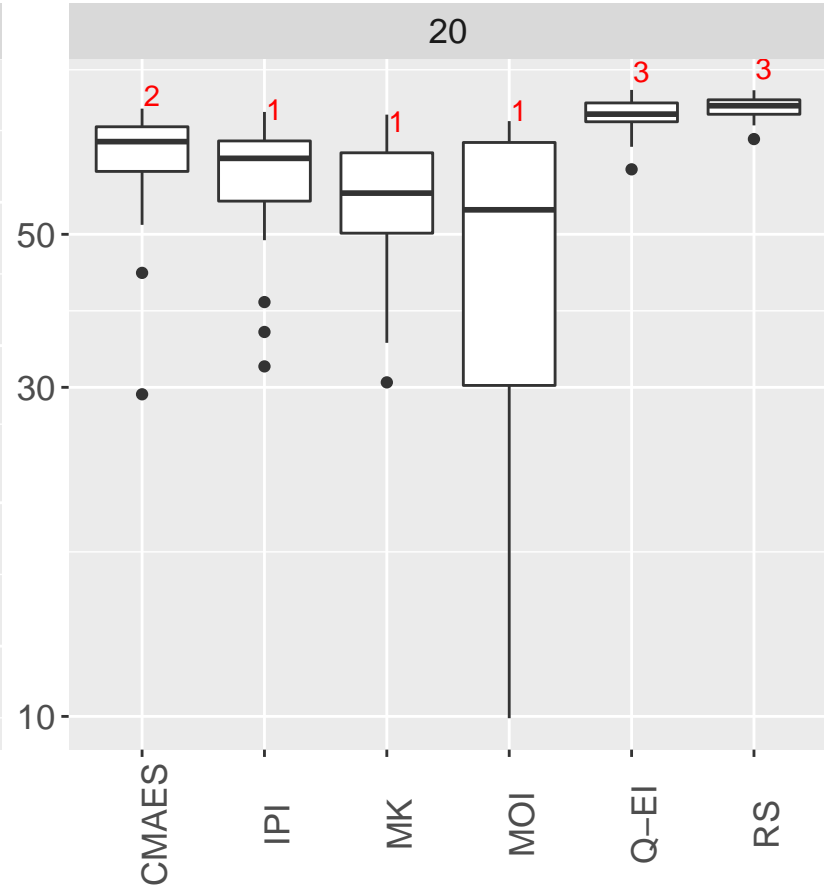
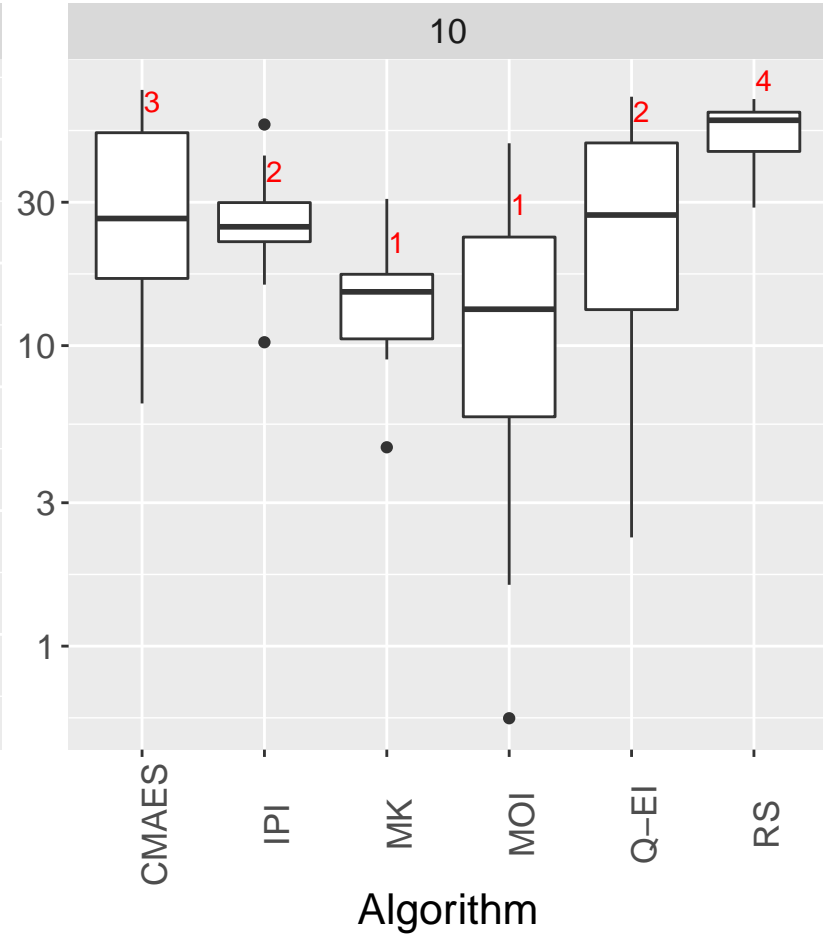
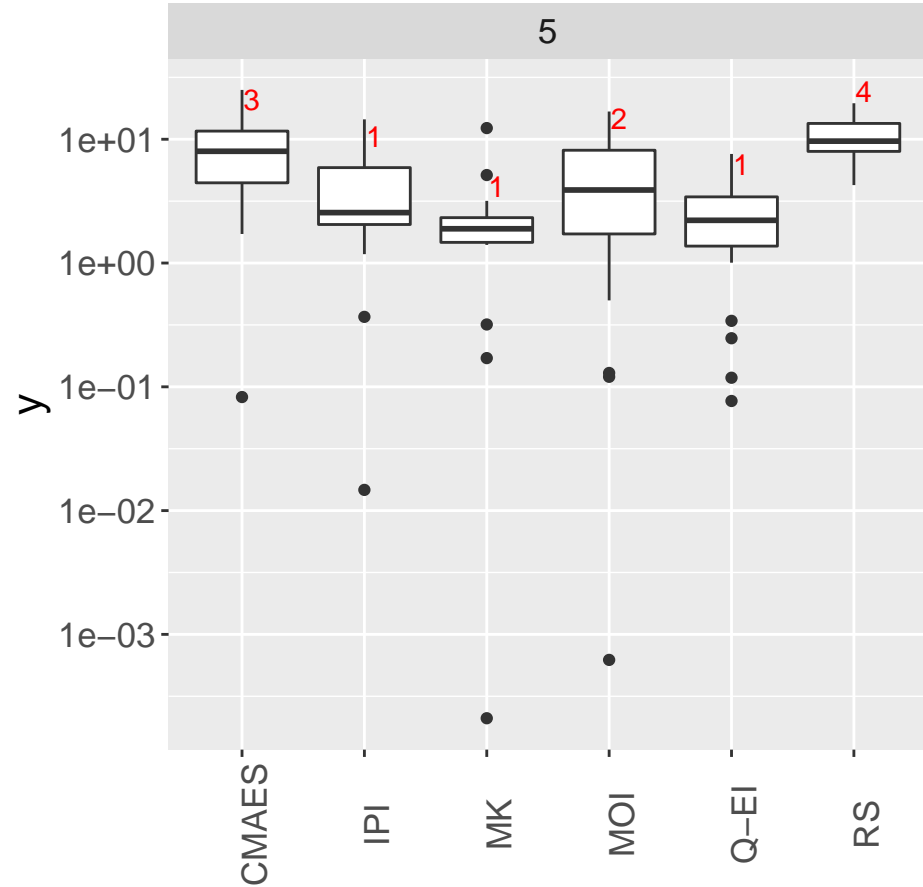
Gallagher Gaussian 101-me Peaks
Evaluation: 50



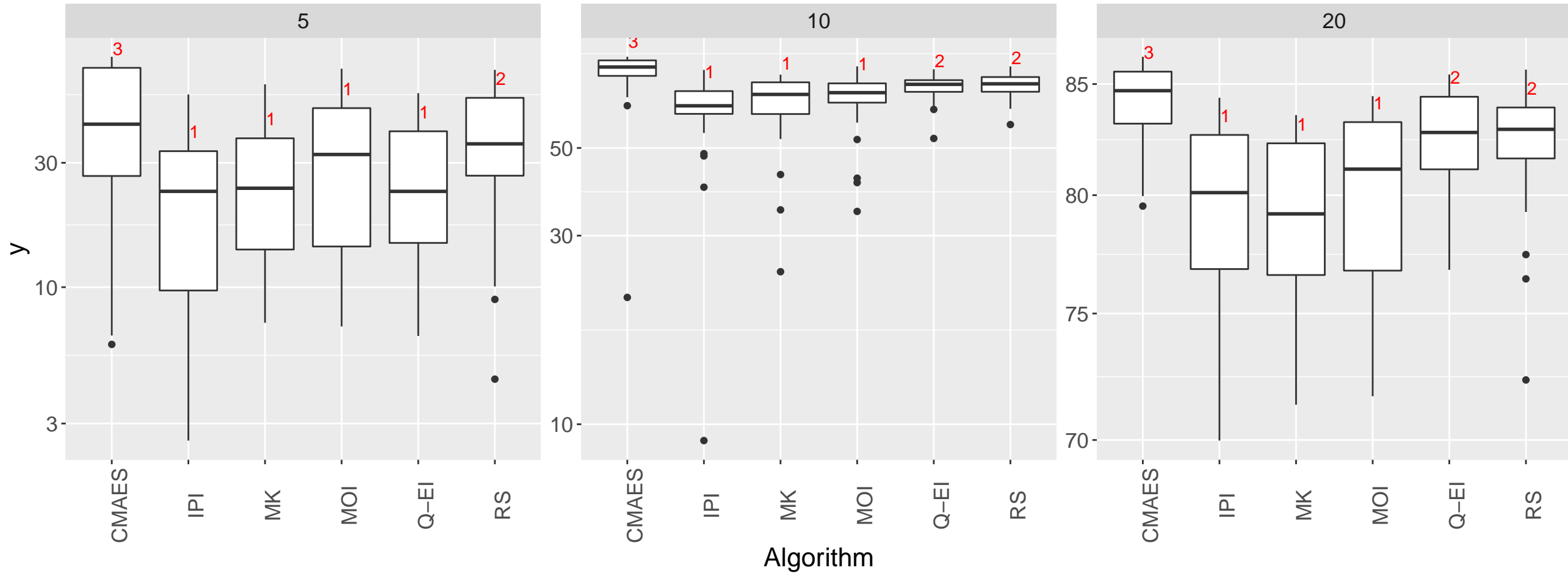
Gallagher Gaussian 101-me Peaks
Evaluation: 70



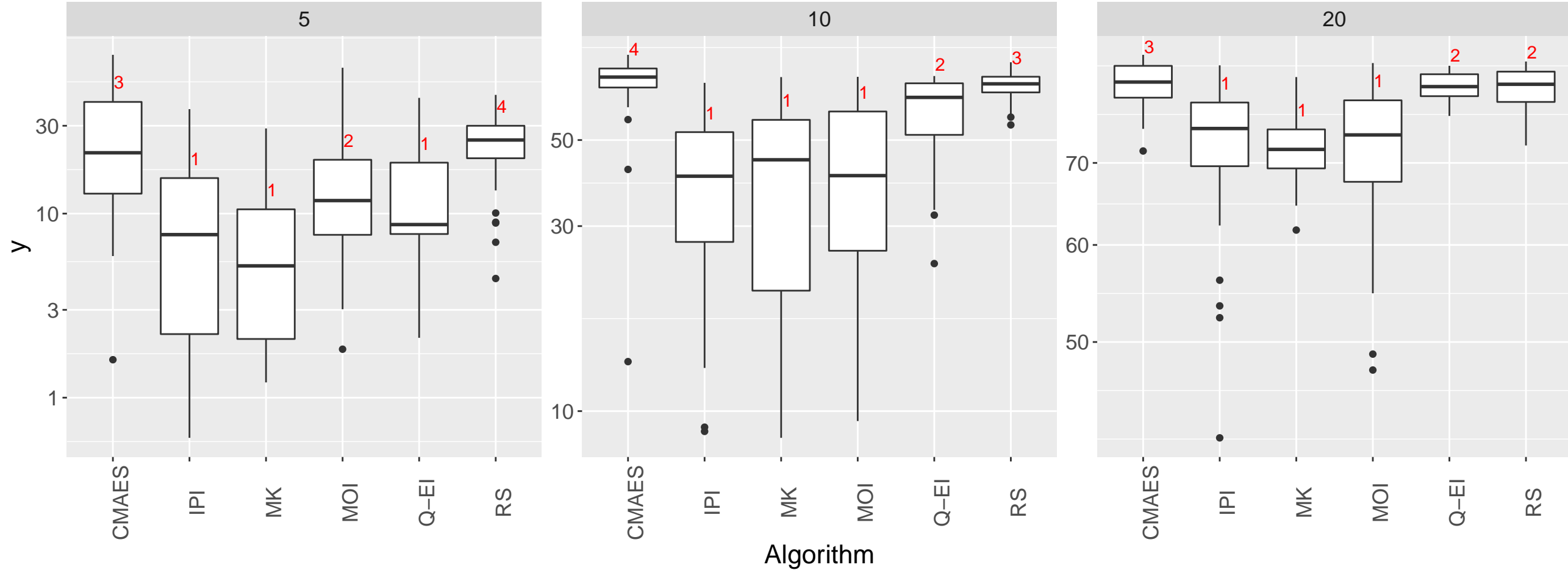
Gallagher Gaussian 101-me Peaks
Evaluation: 100



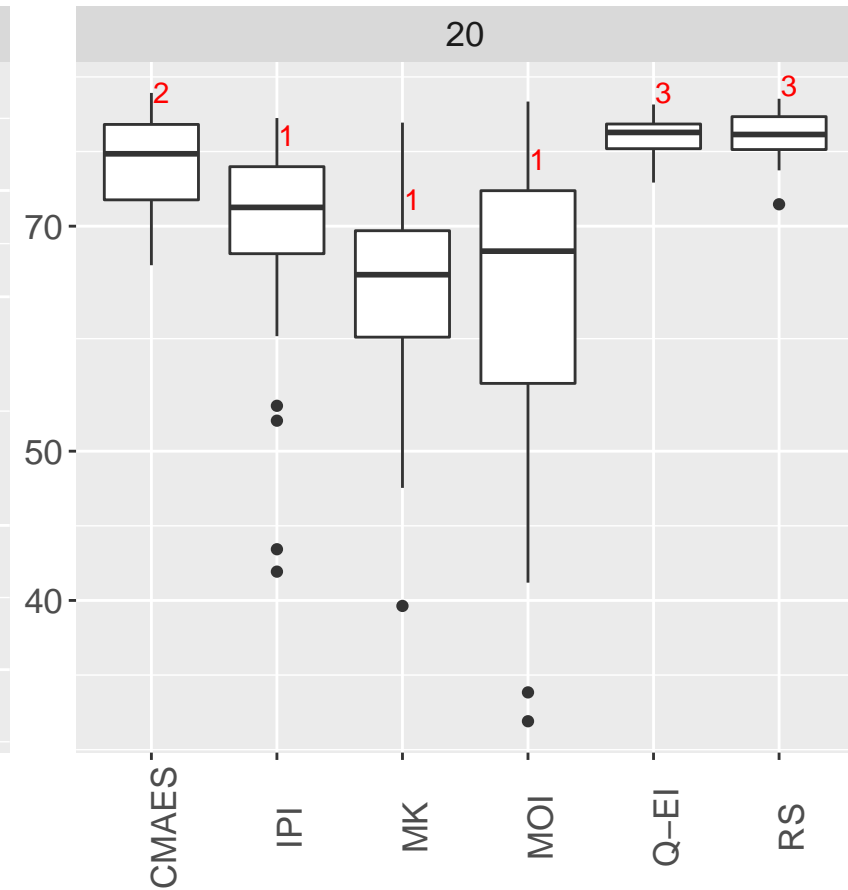
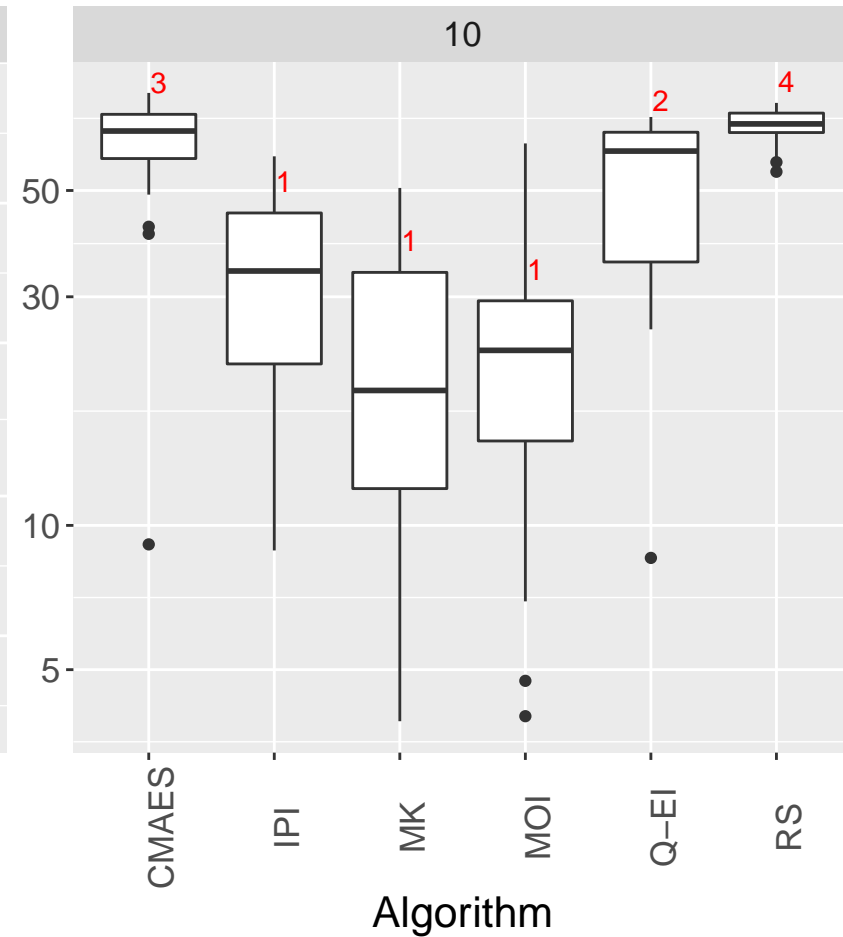
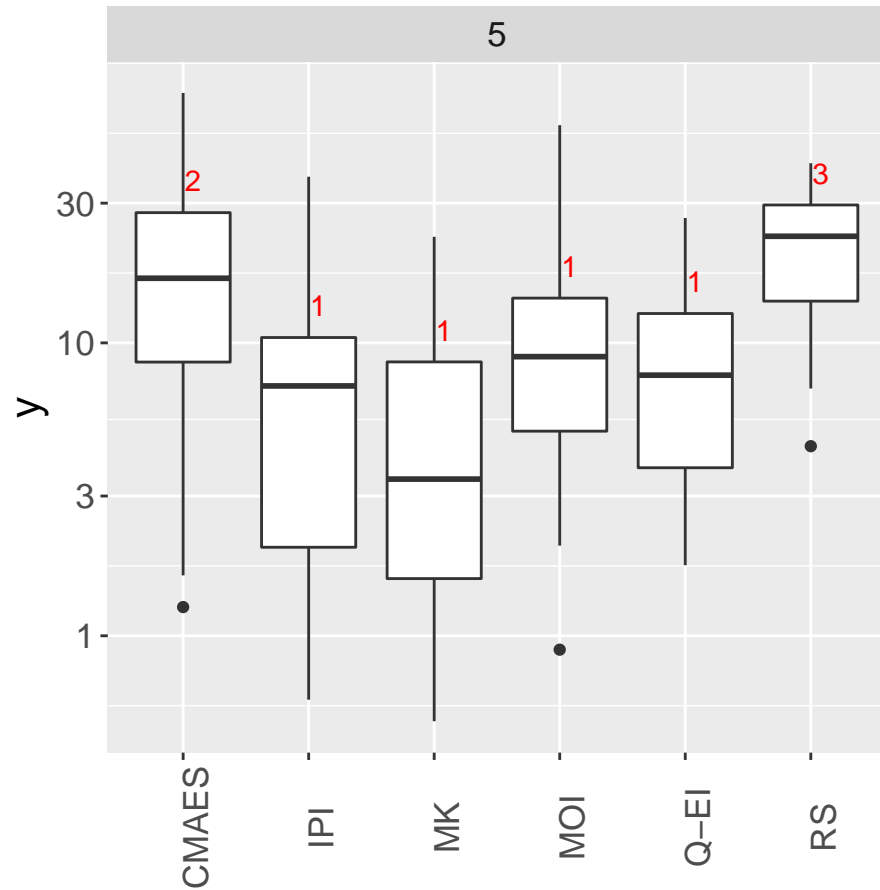
Gallagher Gaussian 21-hi Peaks
Evaluation: 25



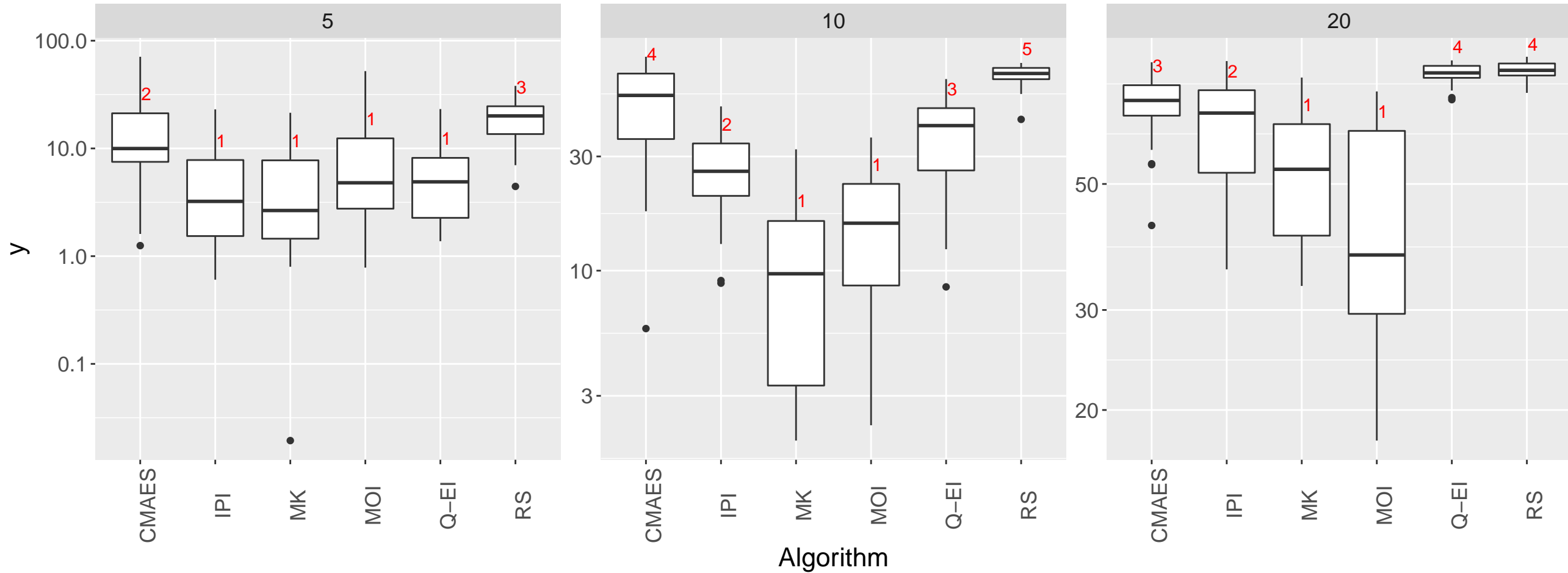
Gallagher Gaussian 21-hi Peaks
Evaluation: 50



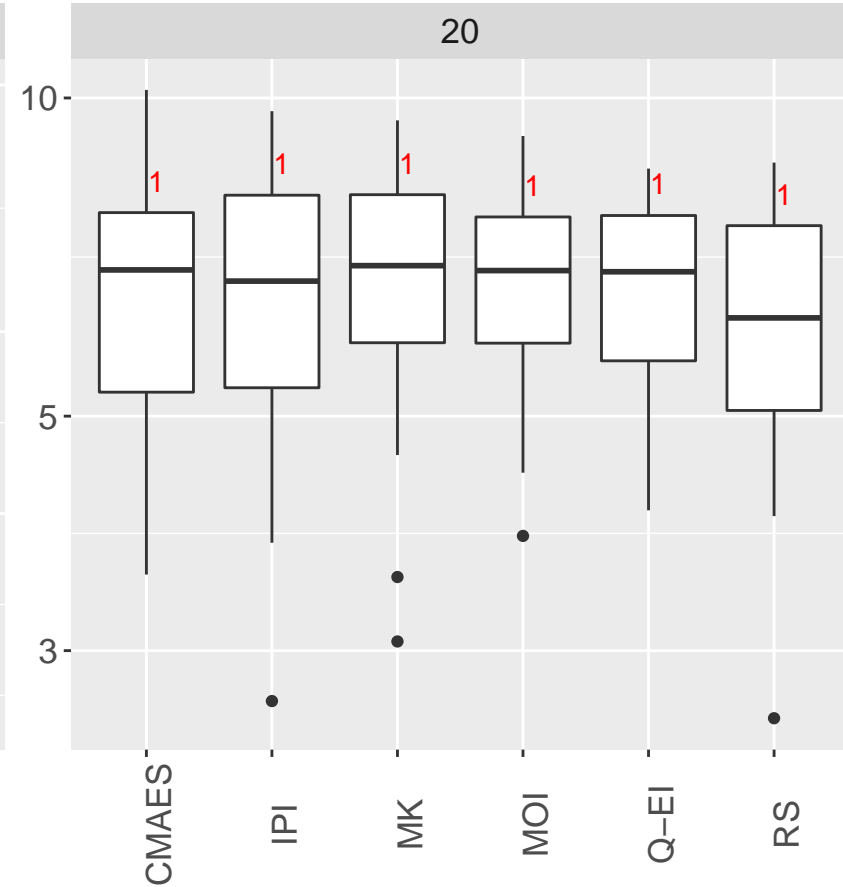
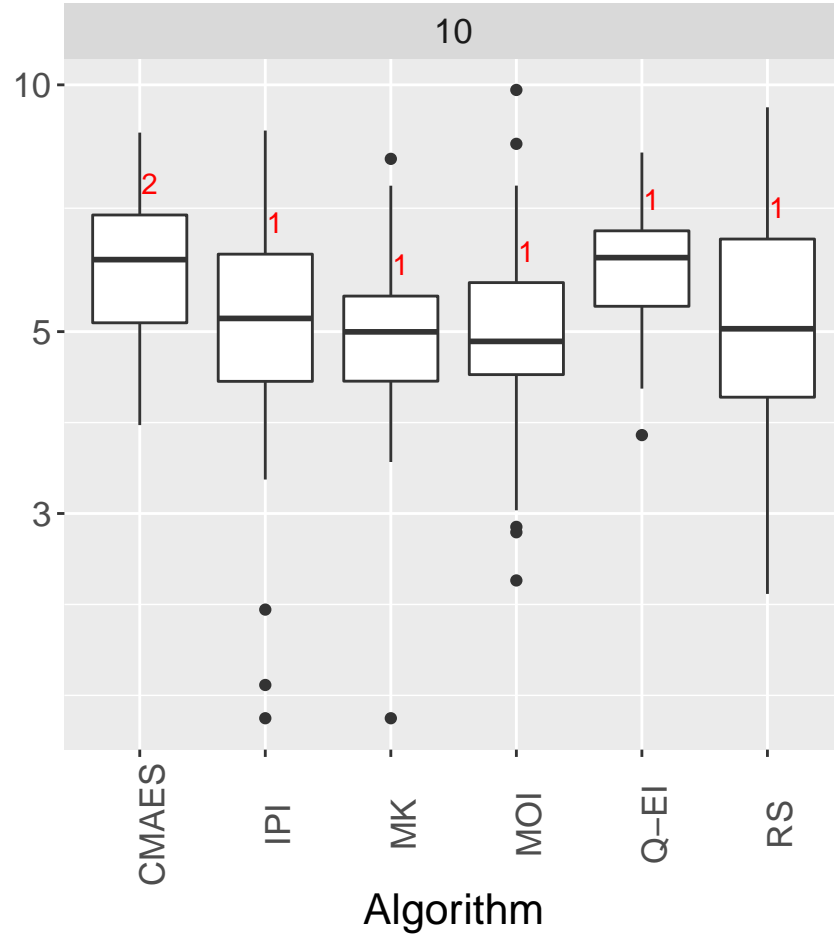
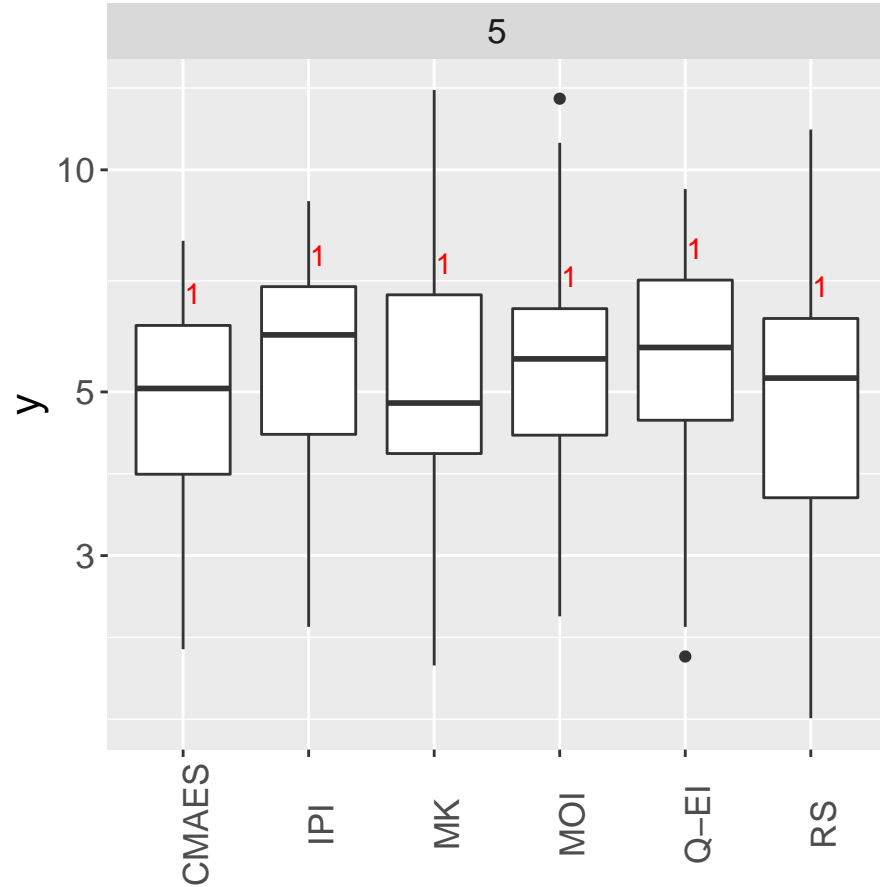
Gallagher Gaussian 21-hi Peaks
Evaluation: 70



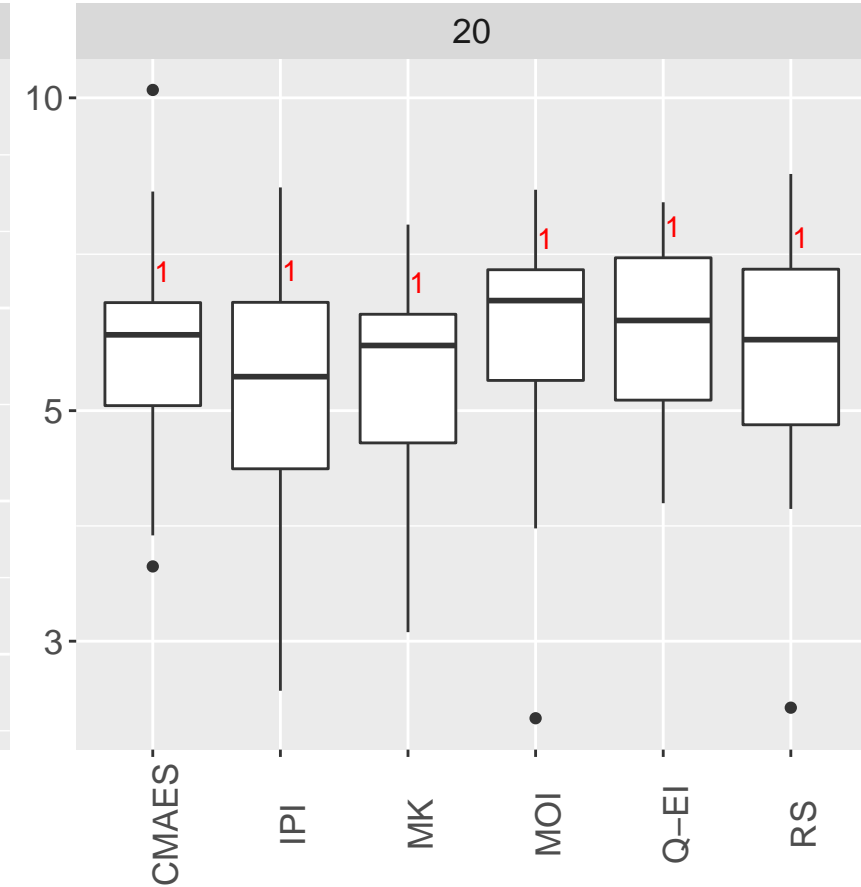
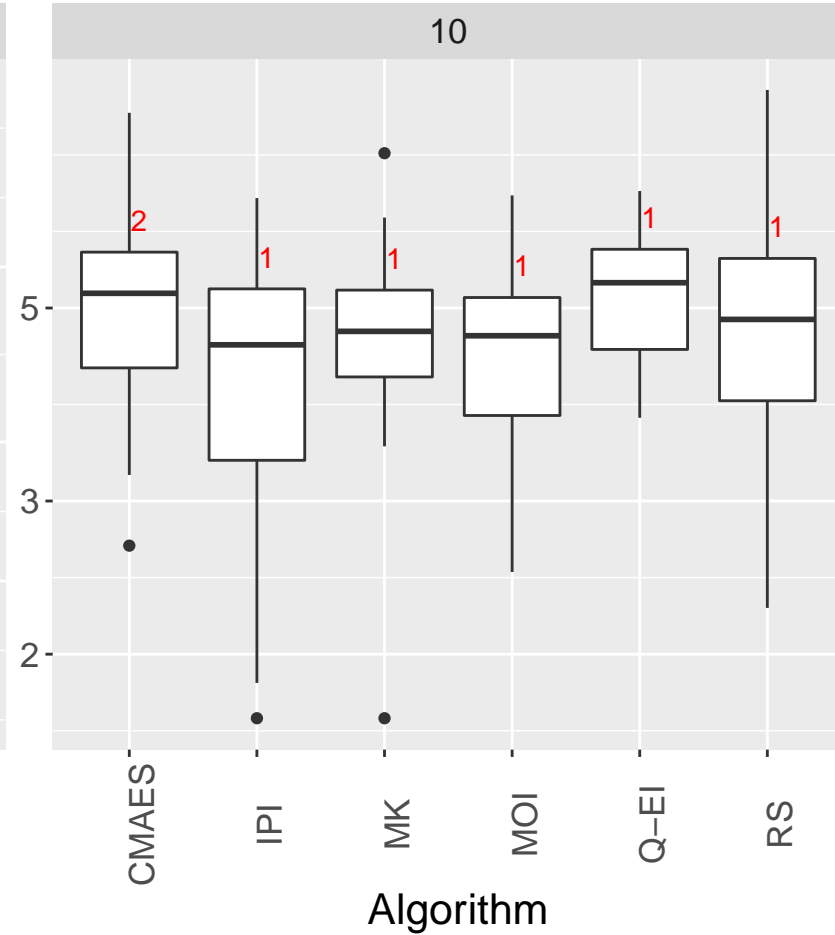
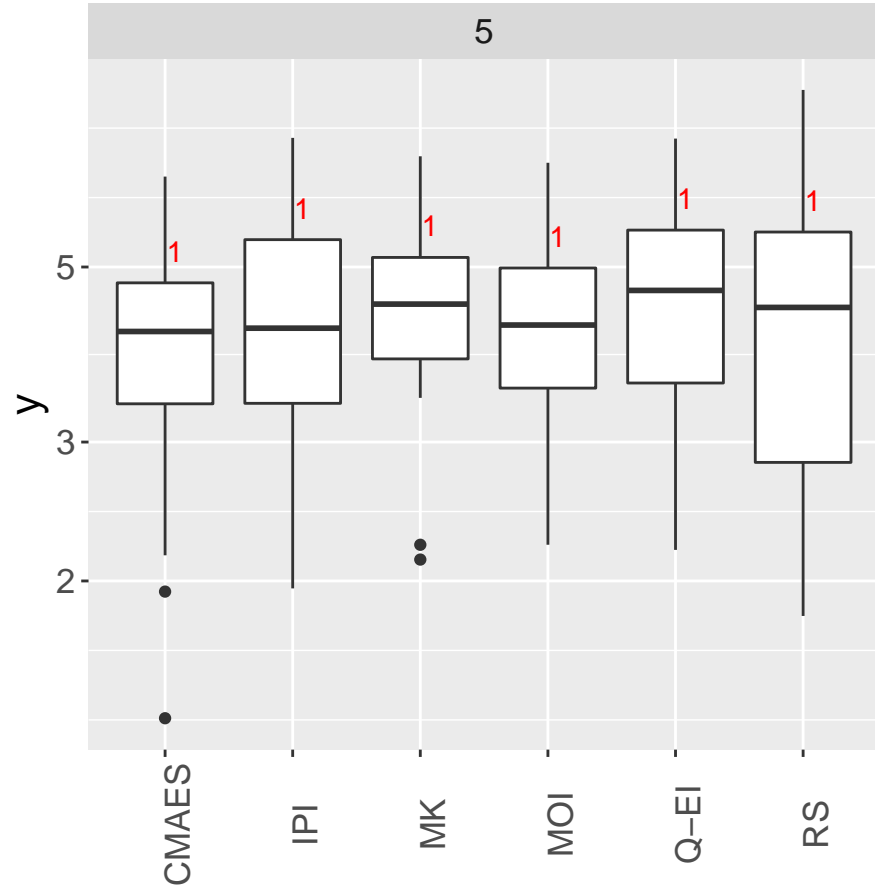
Gallagher Gaussian 21-hi Peaks
Evaluation: 100



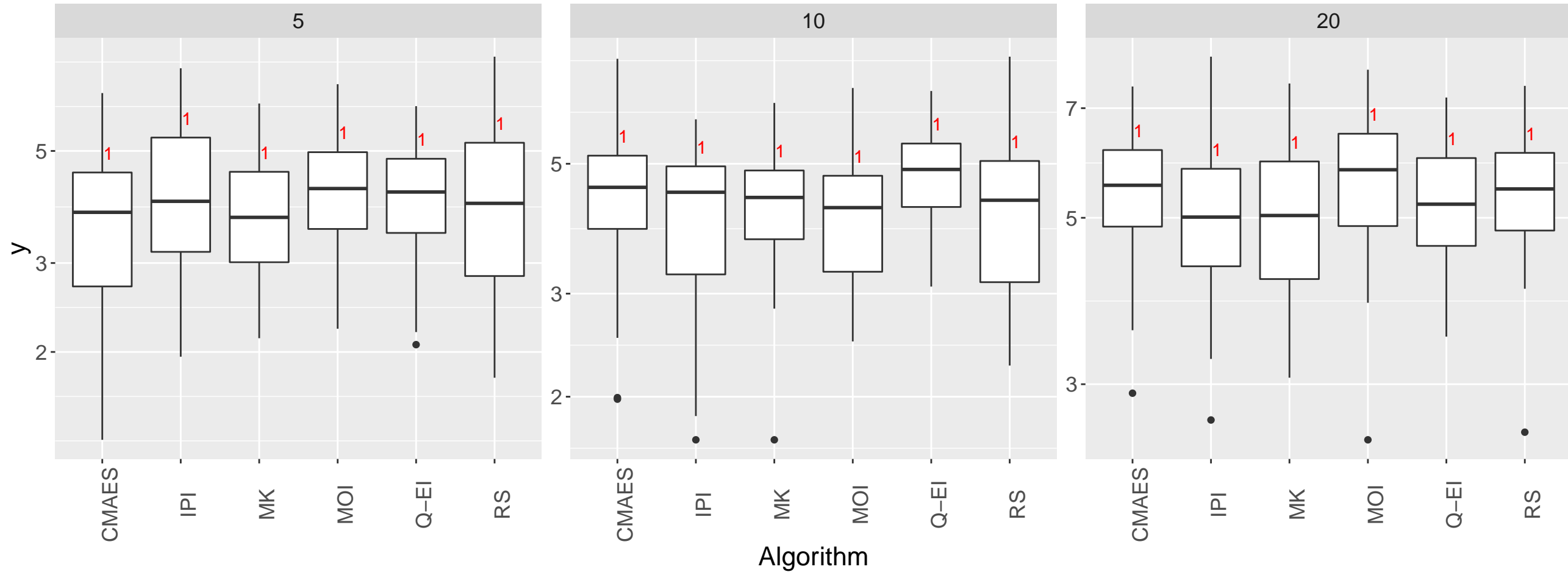
Katsuura
Evaluation: 25



Katsuura
Evaluation: 50



Katsuura
Evaluation: 70



Katsuura
Evaluation: 100

y

5

5

3

2

CMAES

IPI

MK

MOI

Q-EI

RS

10

5

3

2

CMAES

IPI

MK

MOI

Q-EI

RS

Algorithm

20

7

5

3

CMAES

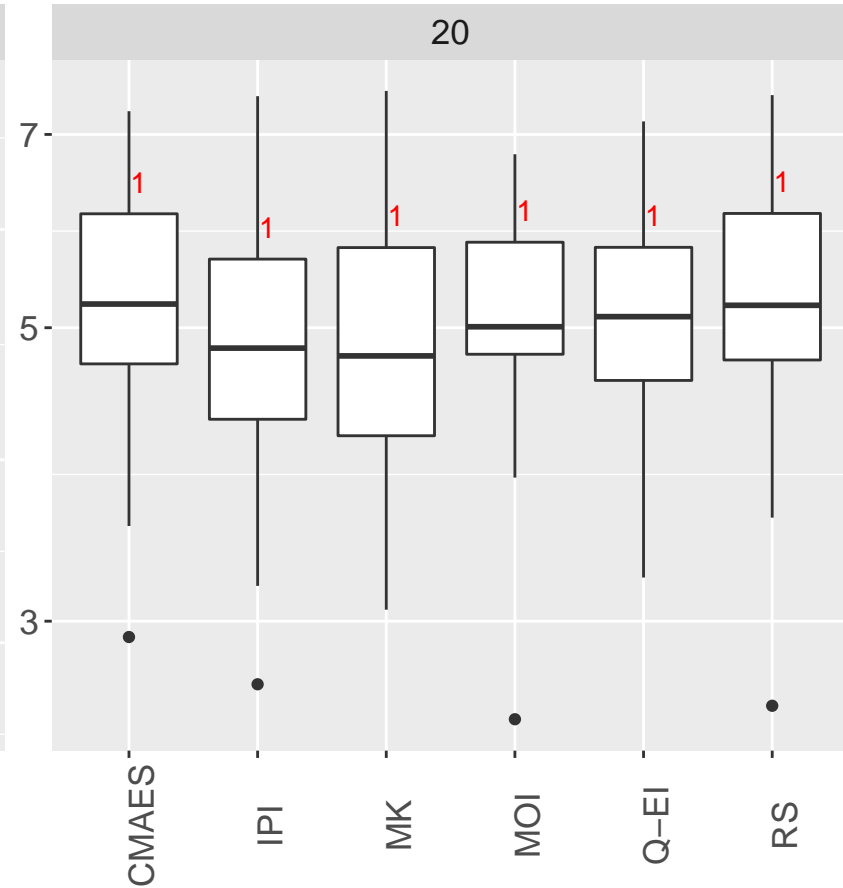
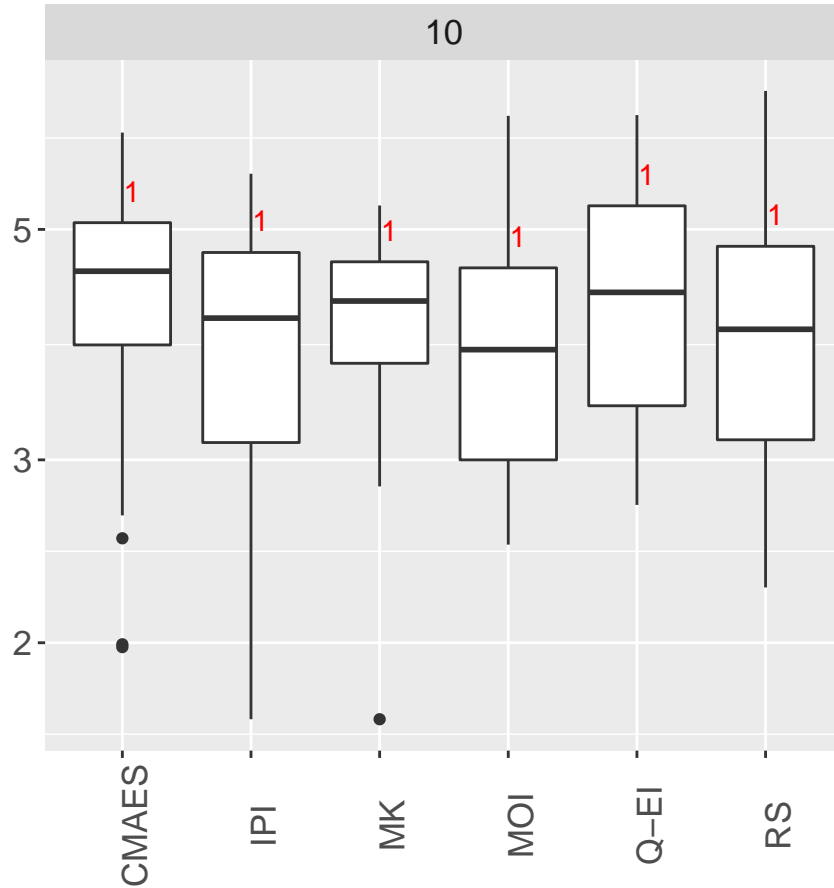
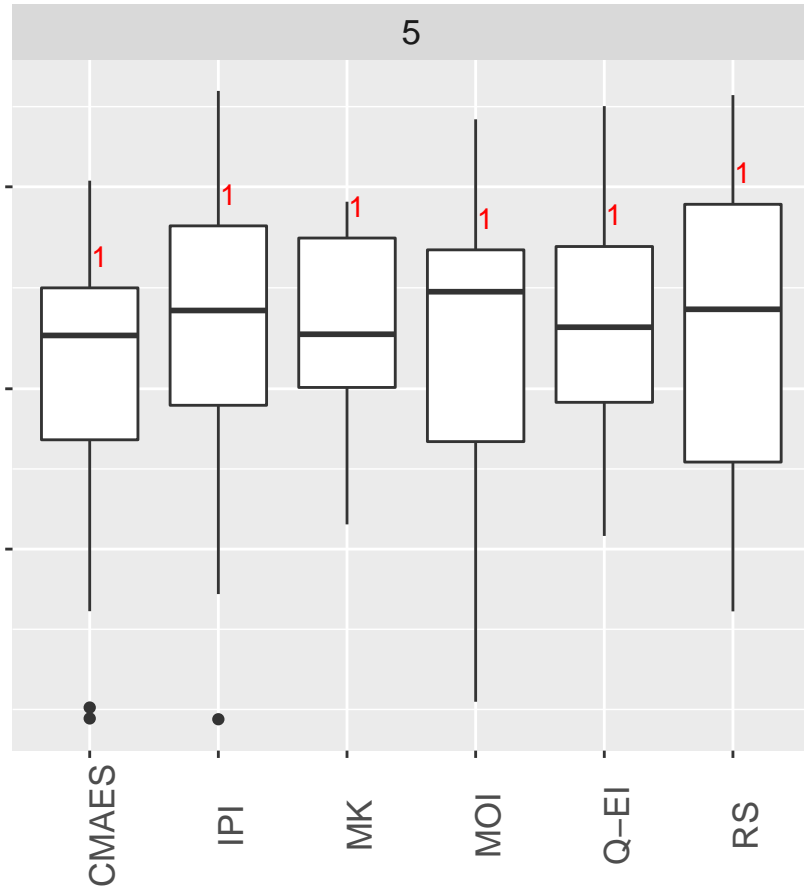
IPI

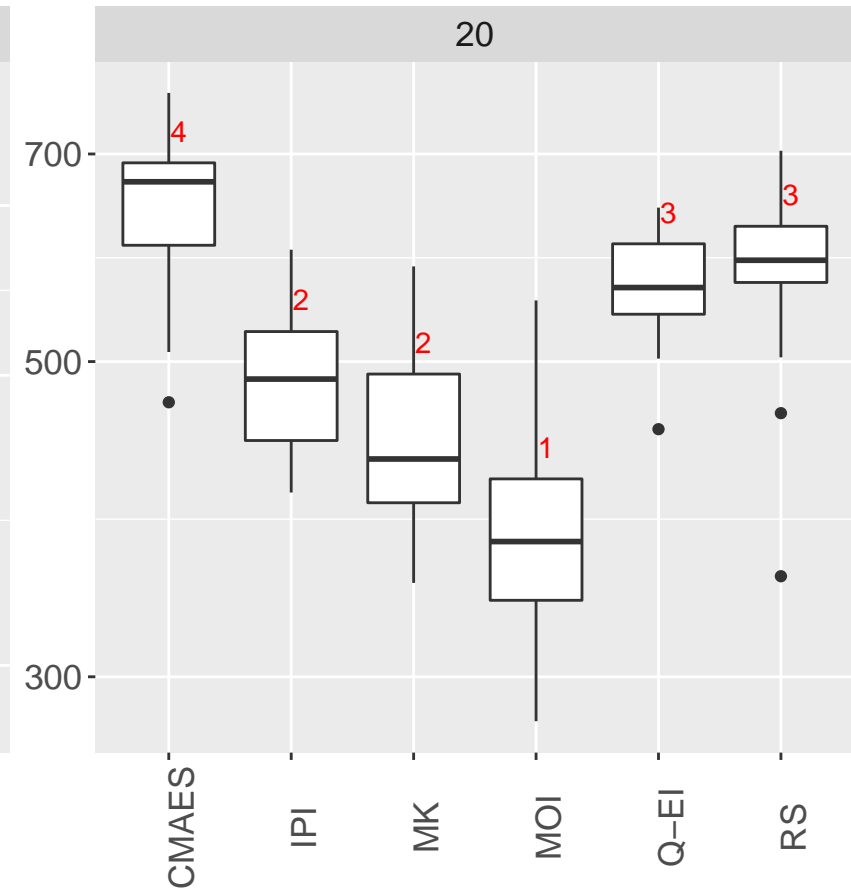
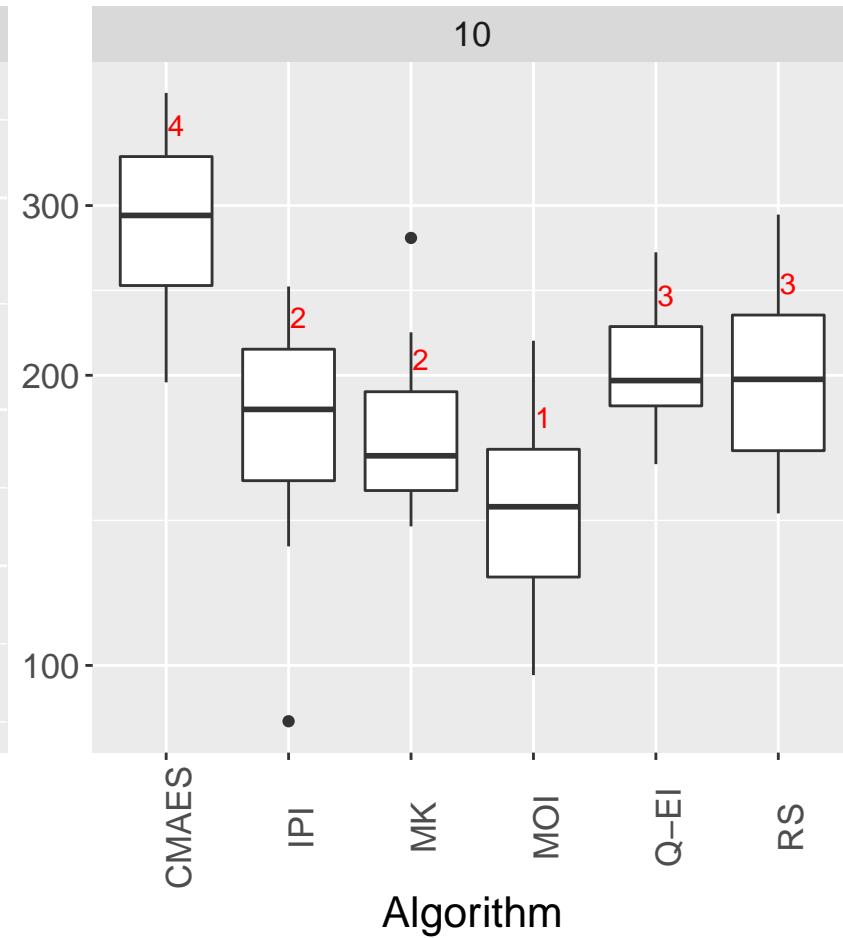
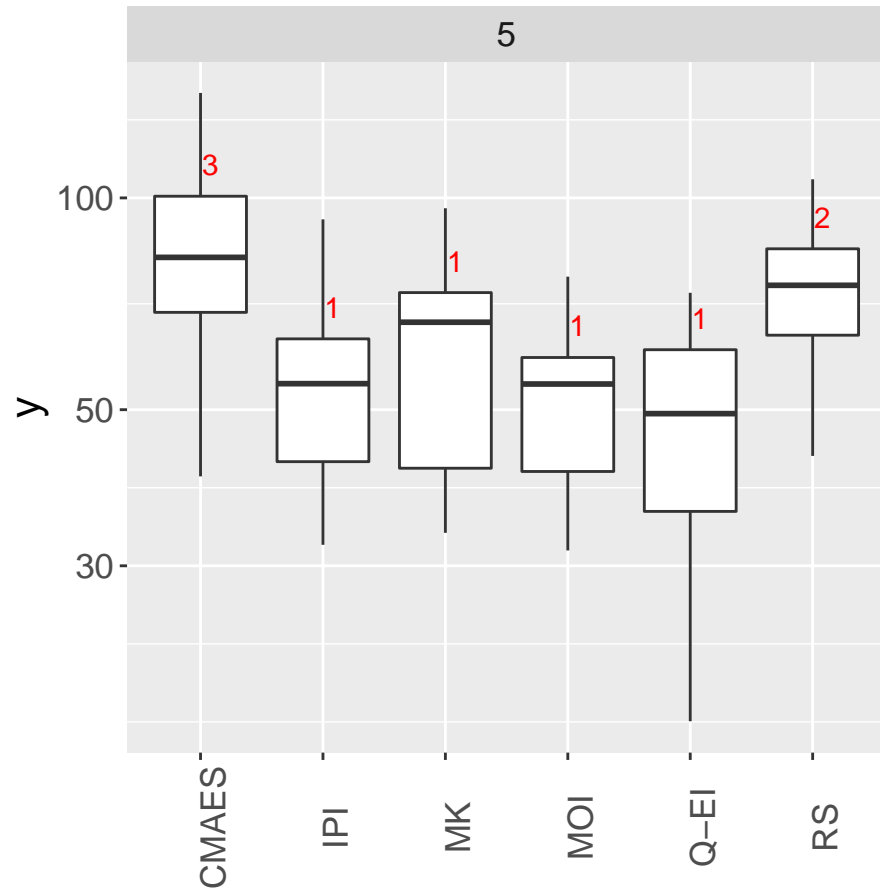
MK

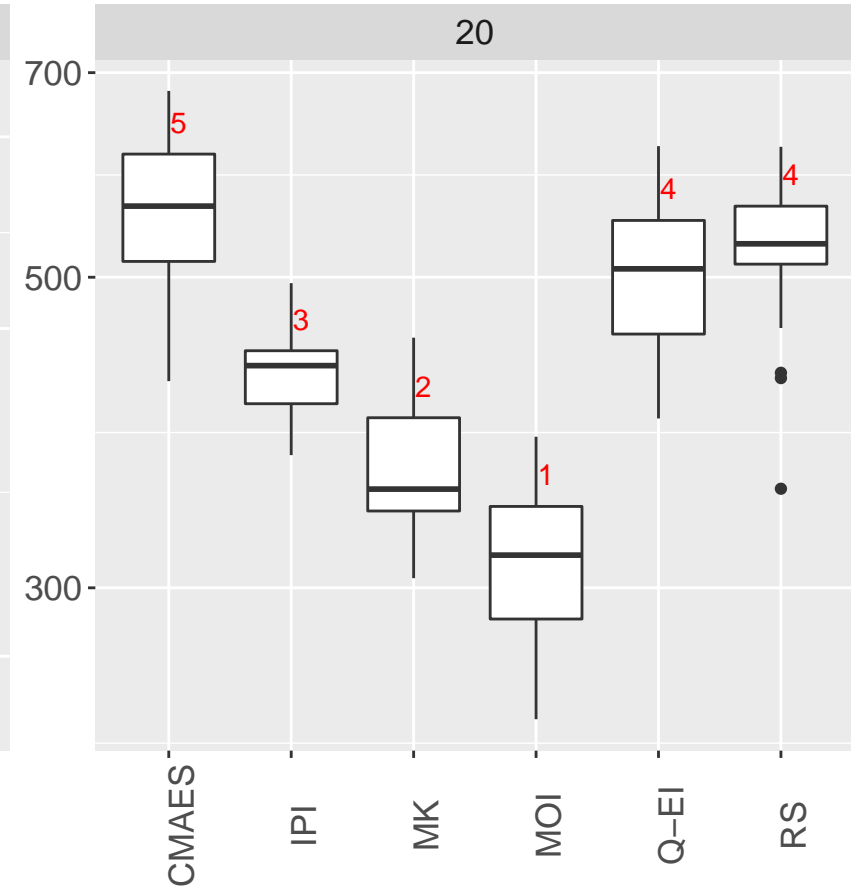
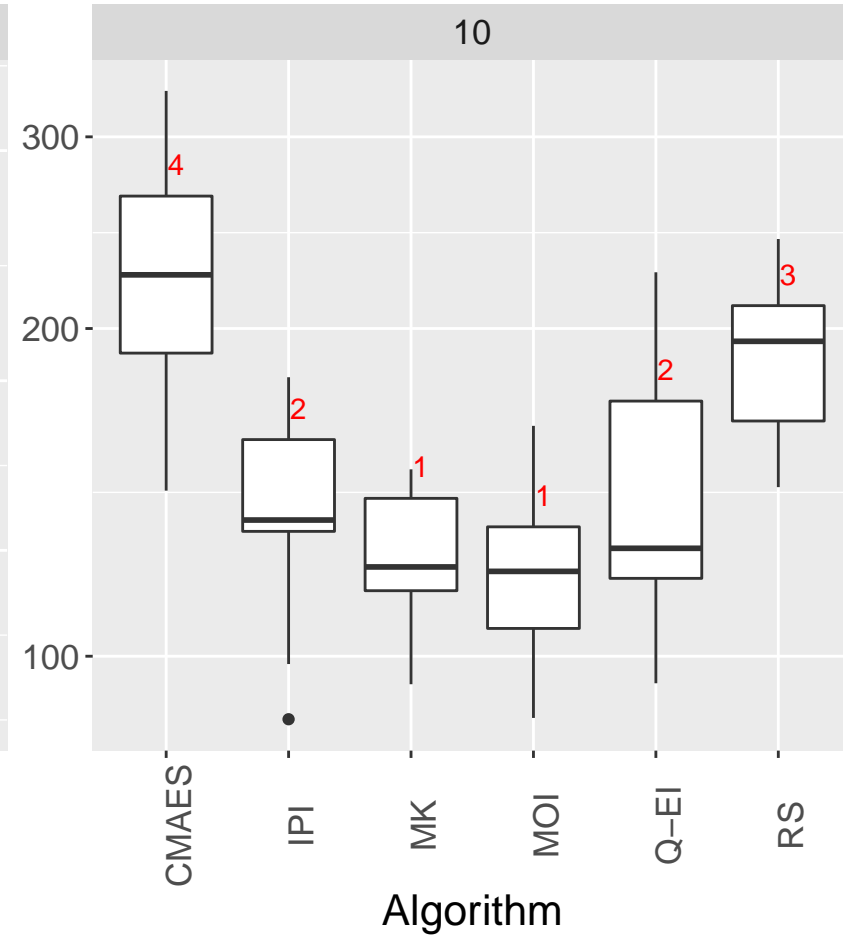
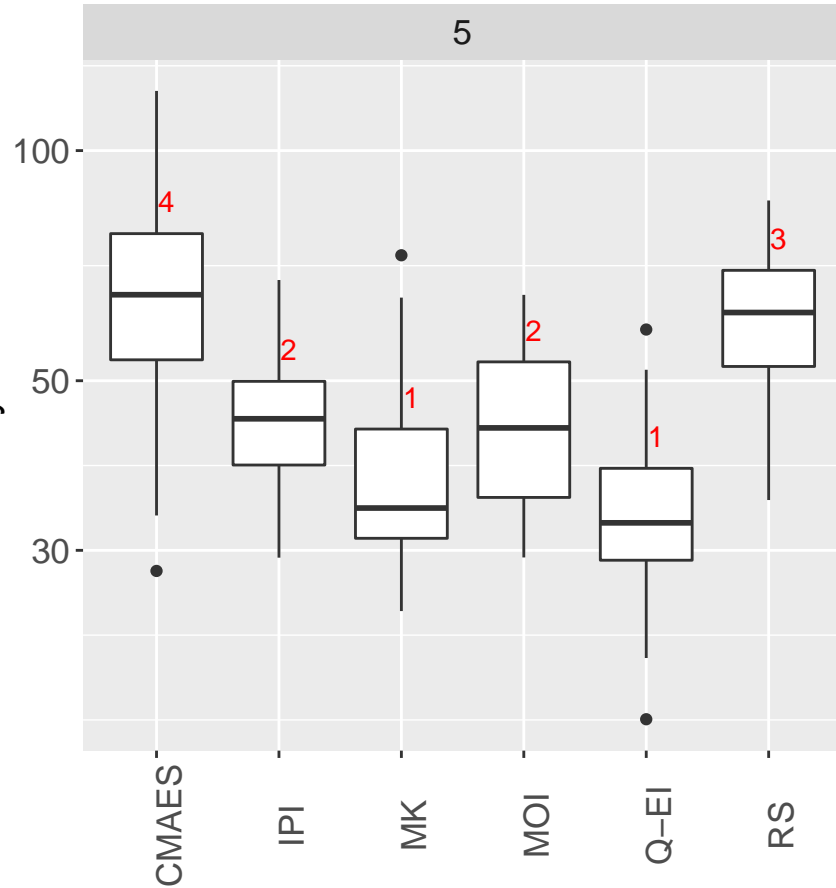
MOI

Q-EI

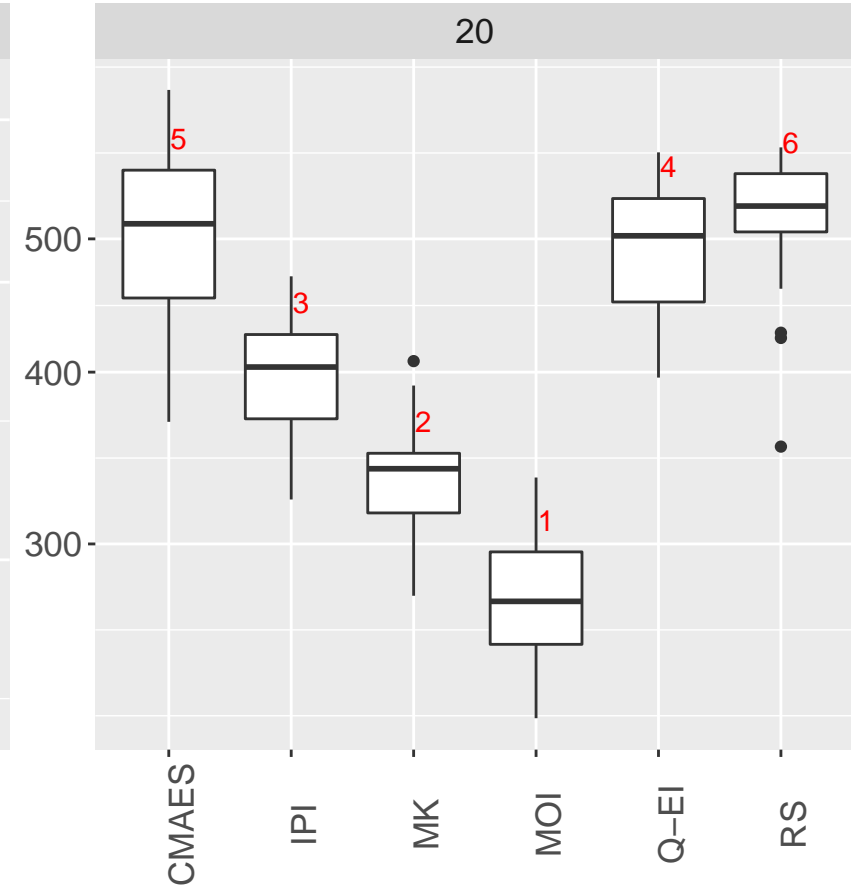
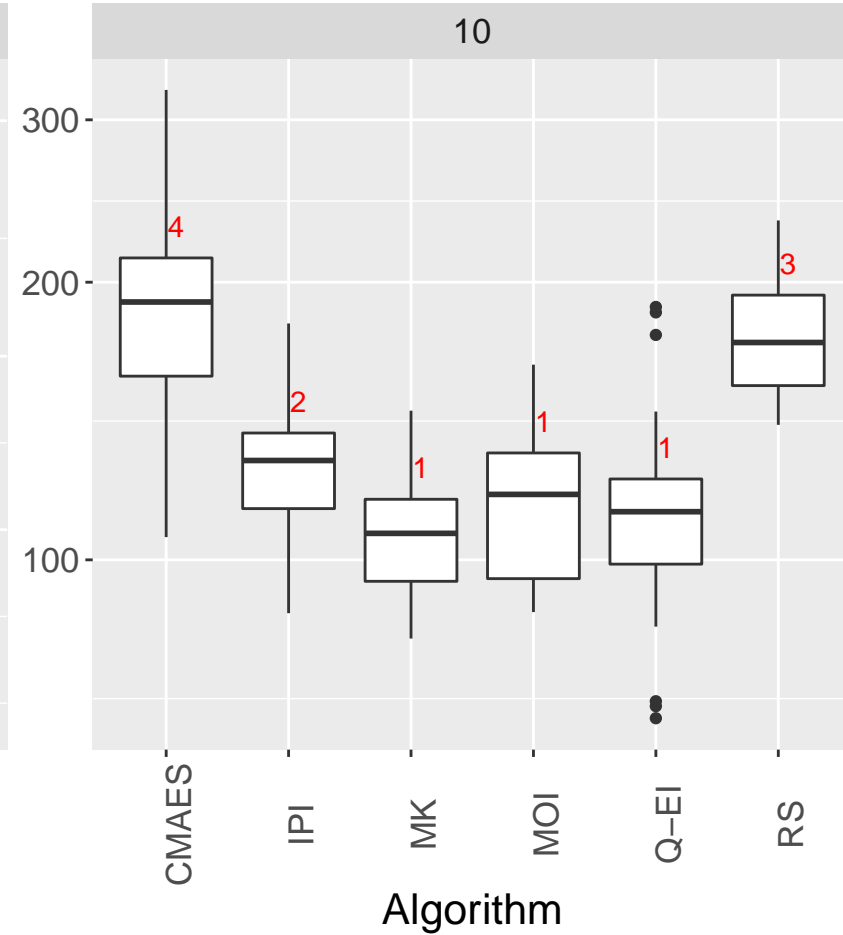
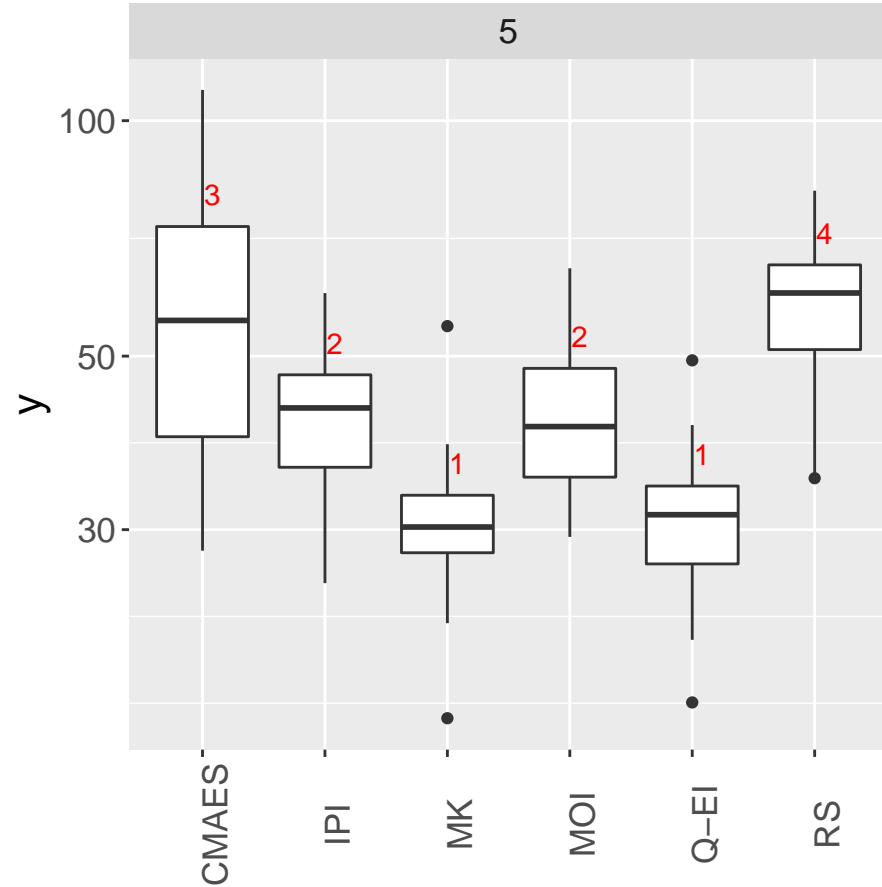
RS



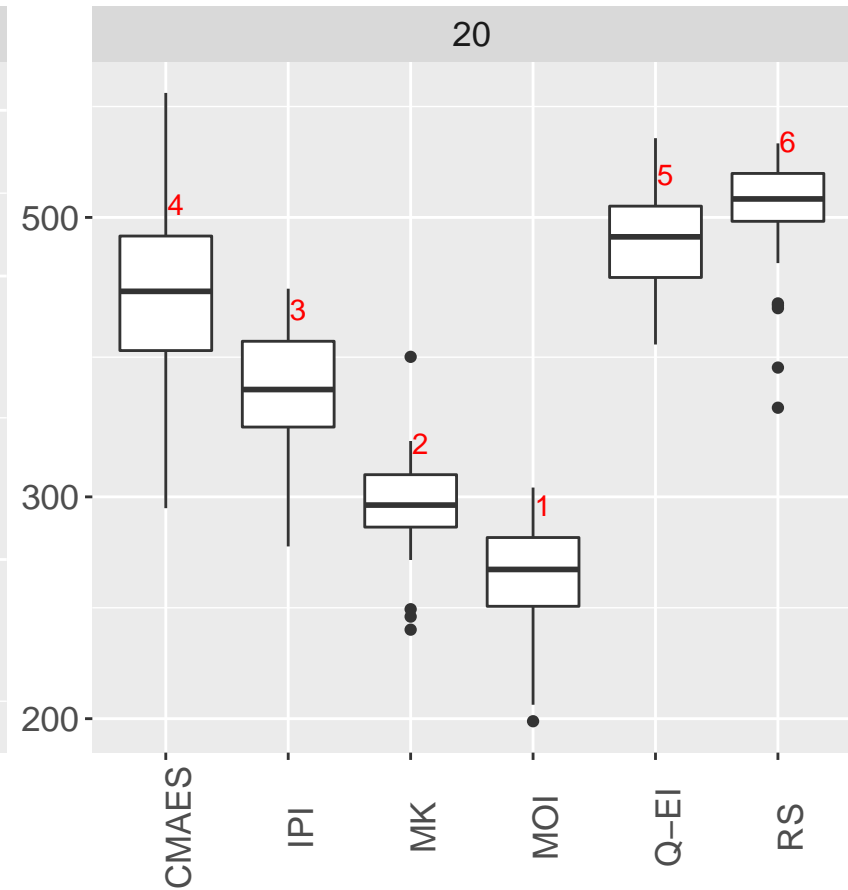
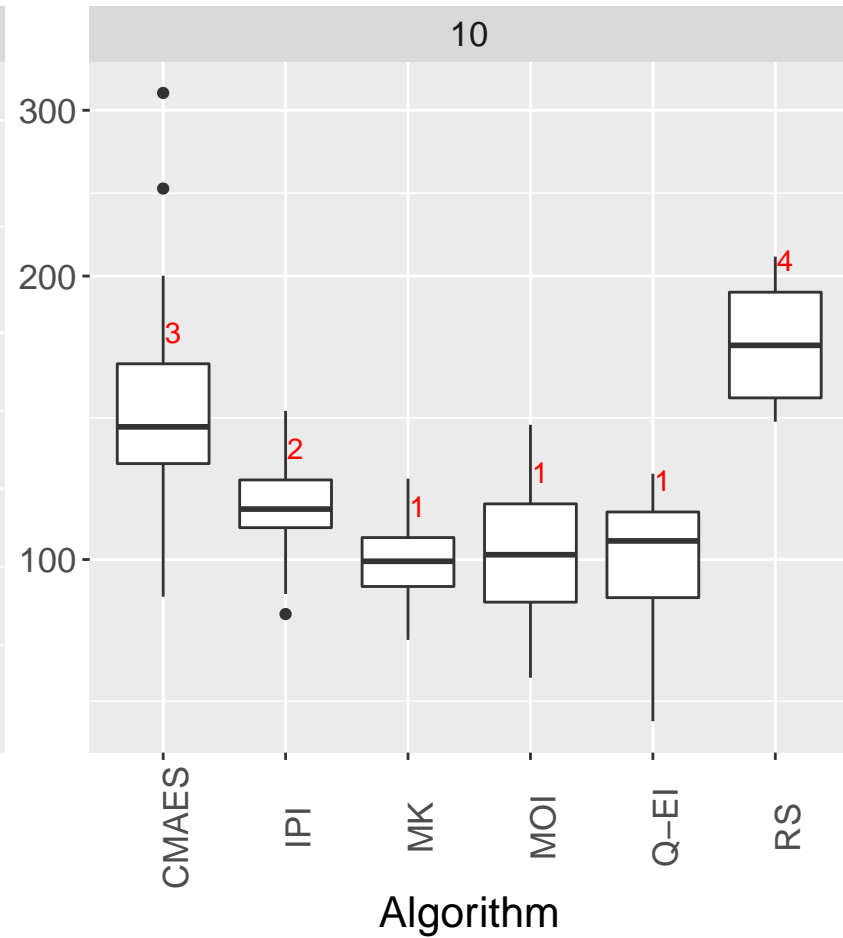
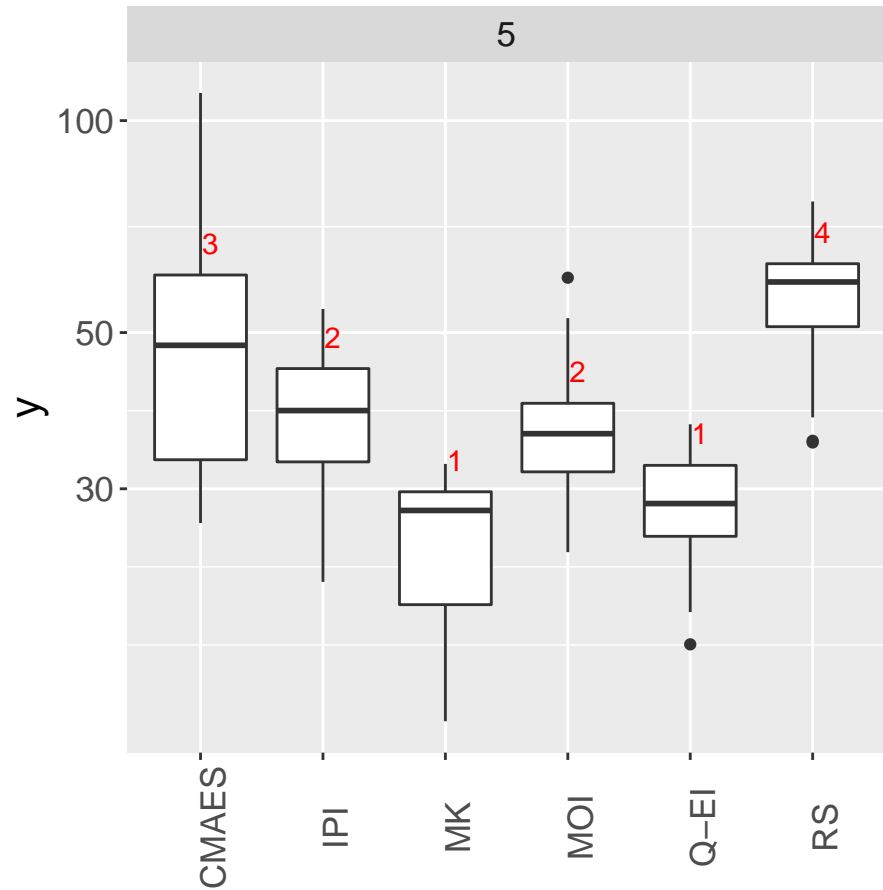


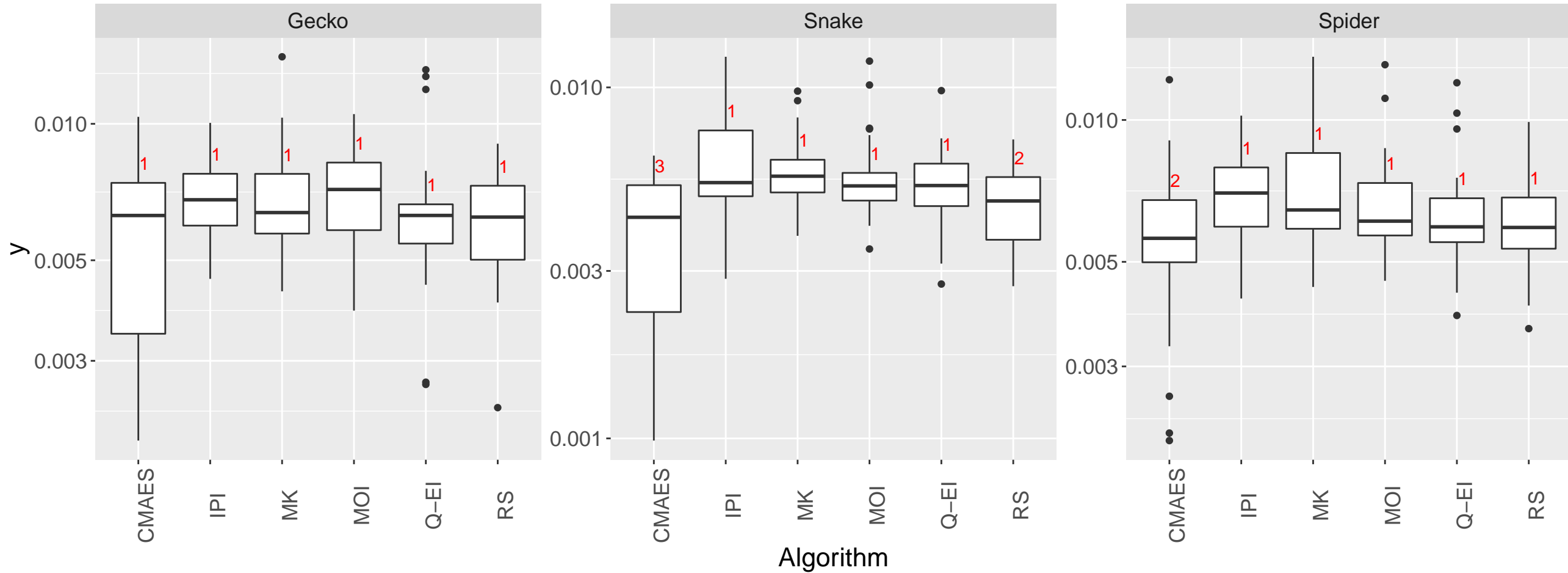


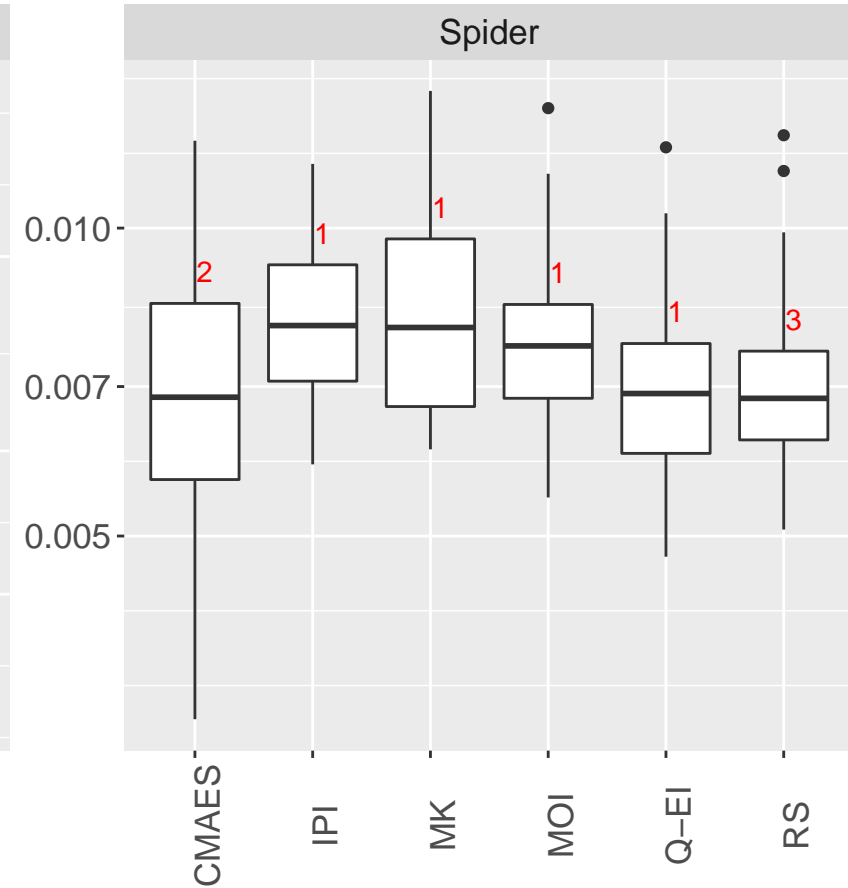
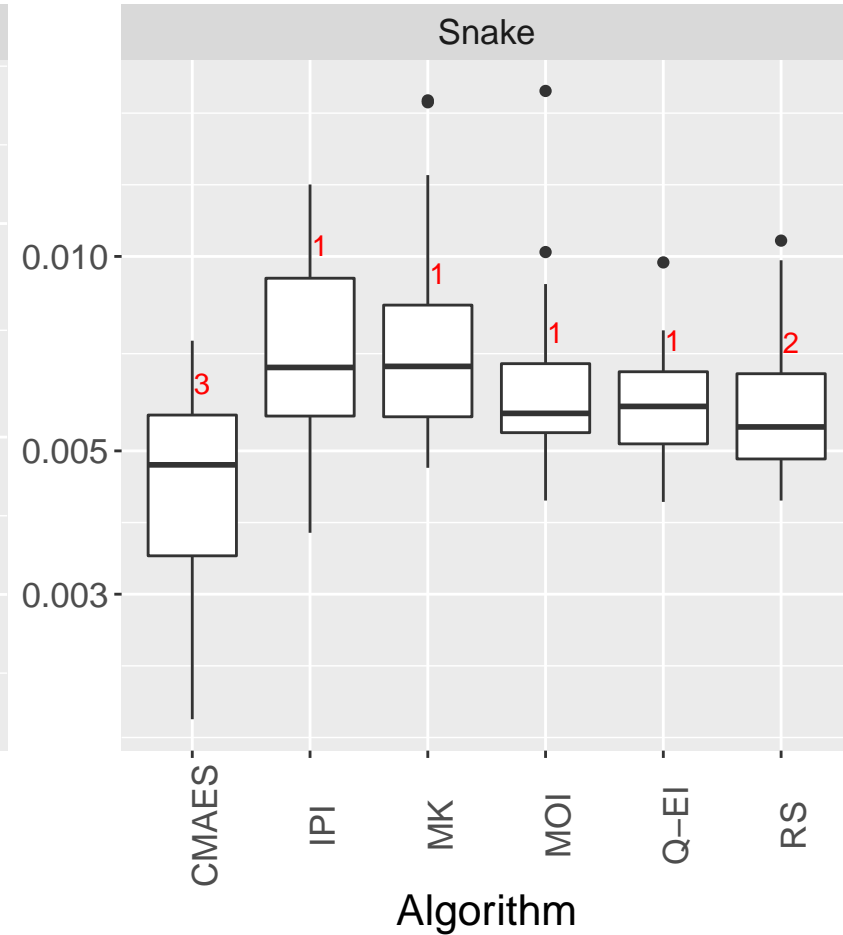
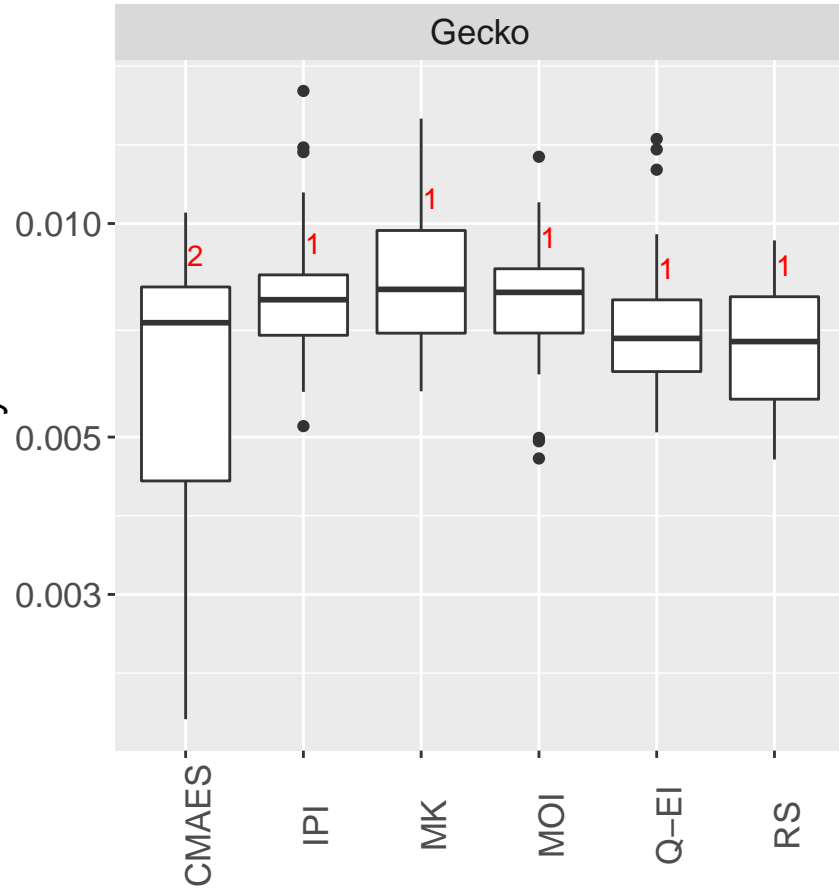
Lunacek bi-Rastrigin
Evaluation: 70



Lunacek bi-Rastrigin
Evaluation: 100



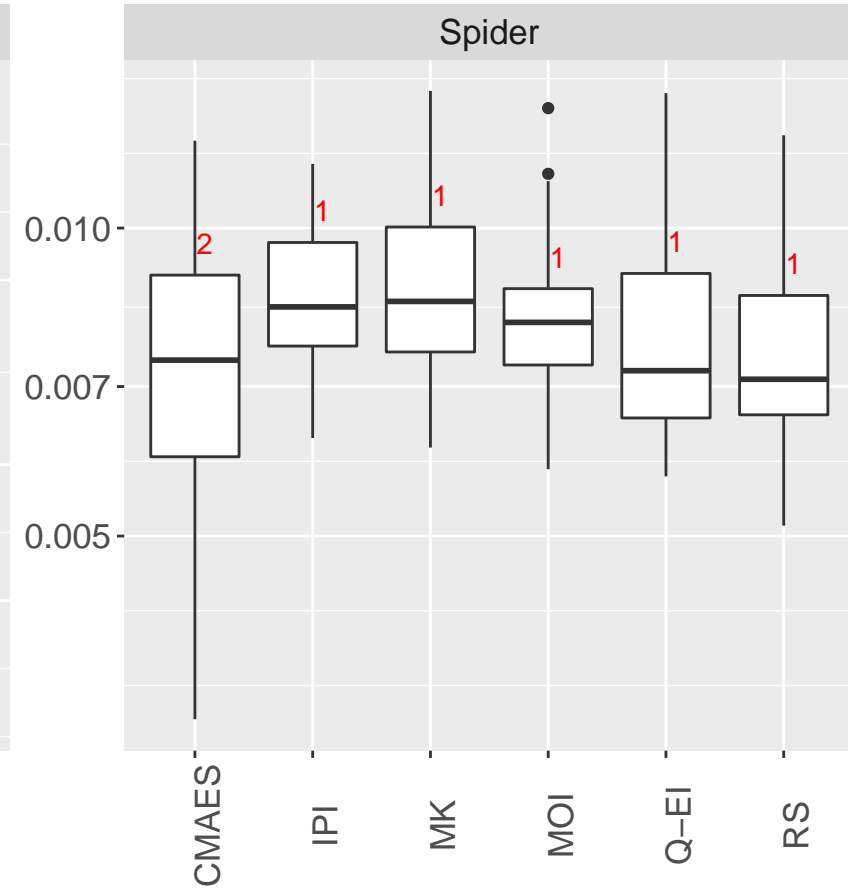
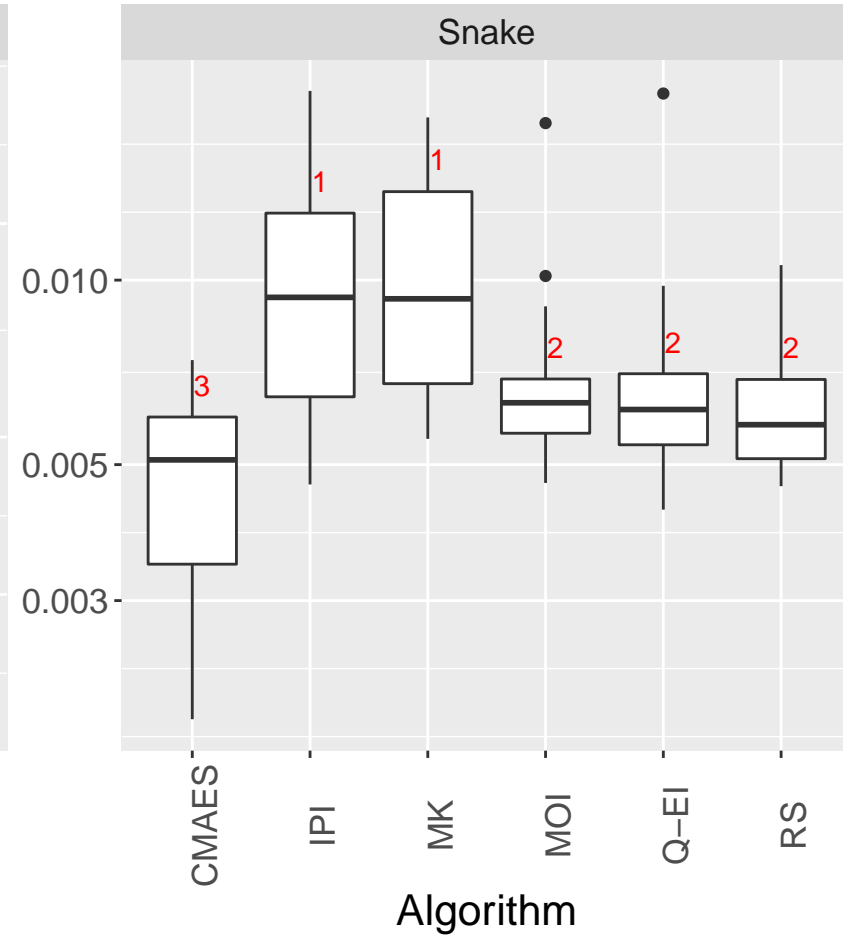
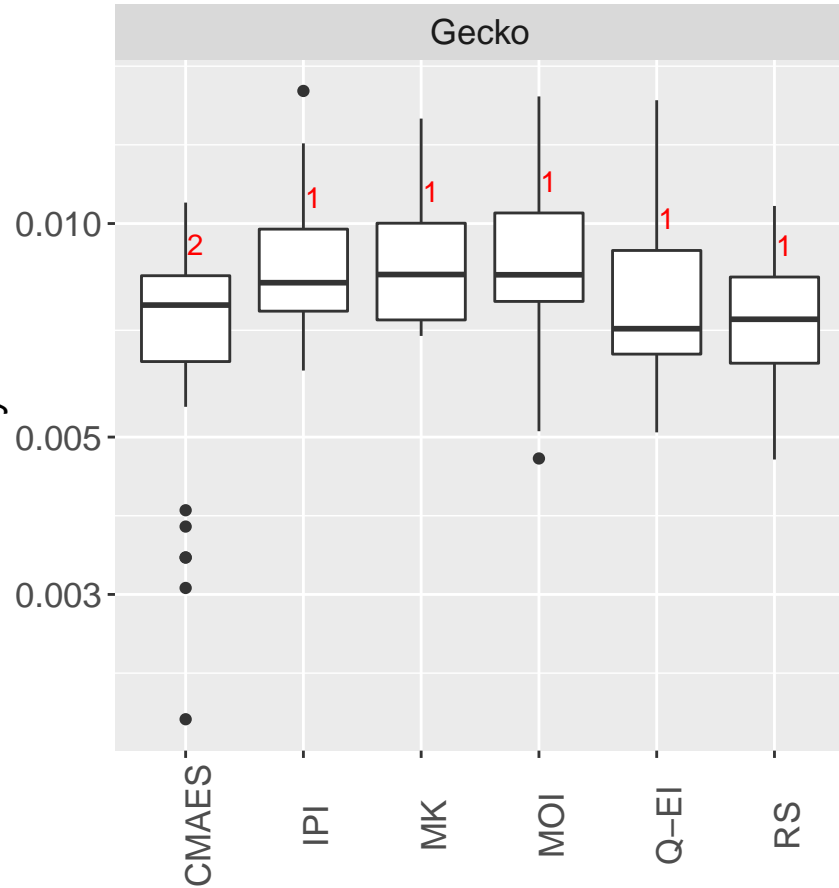


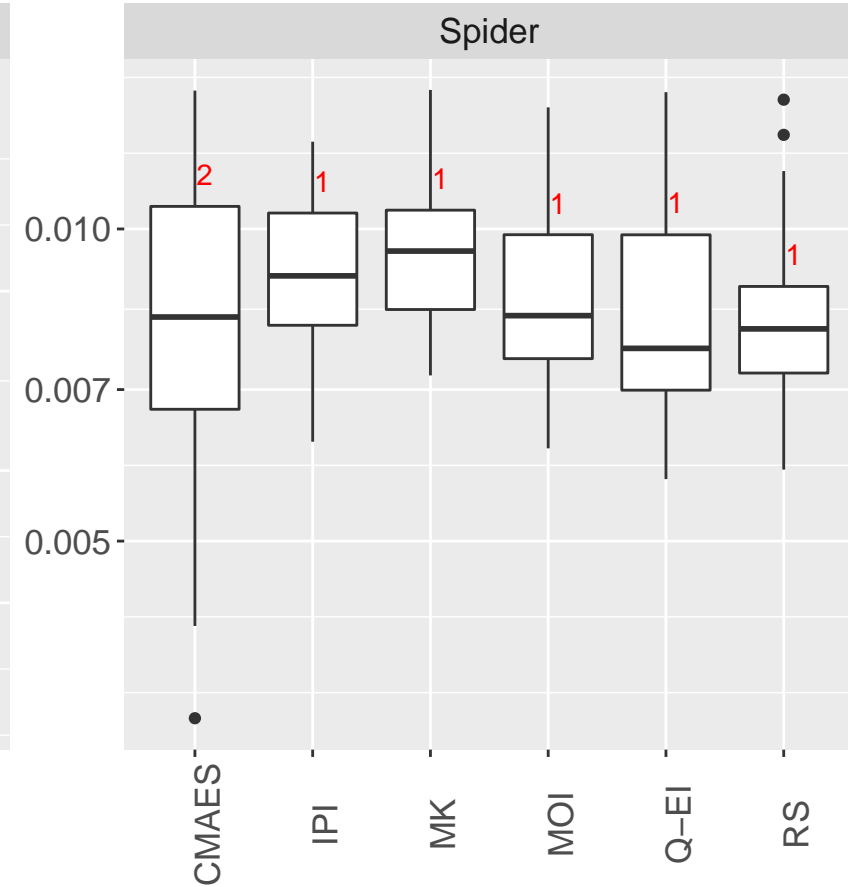
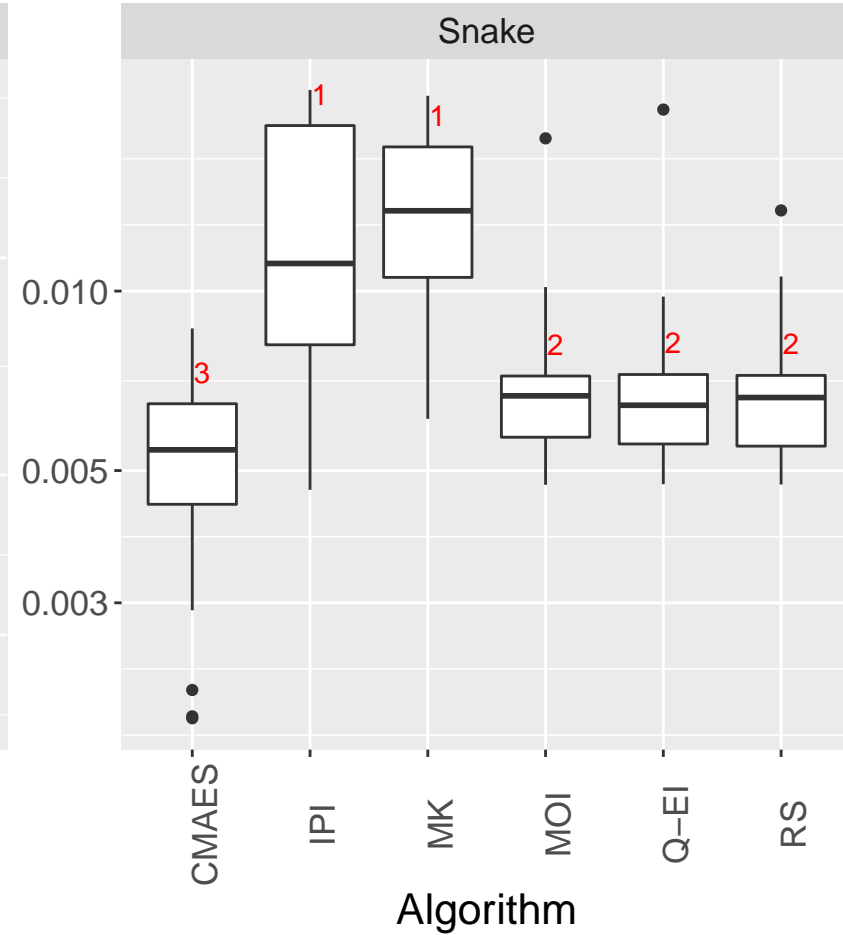
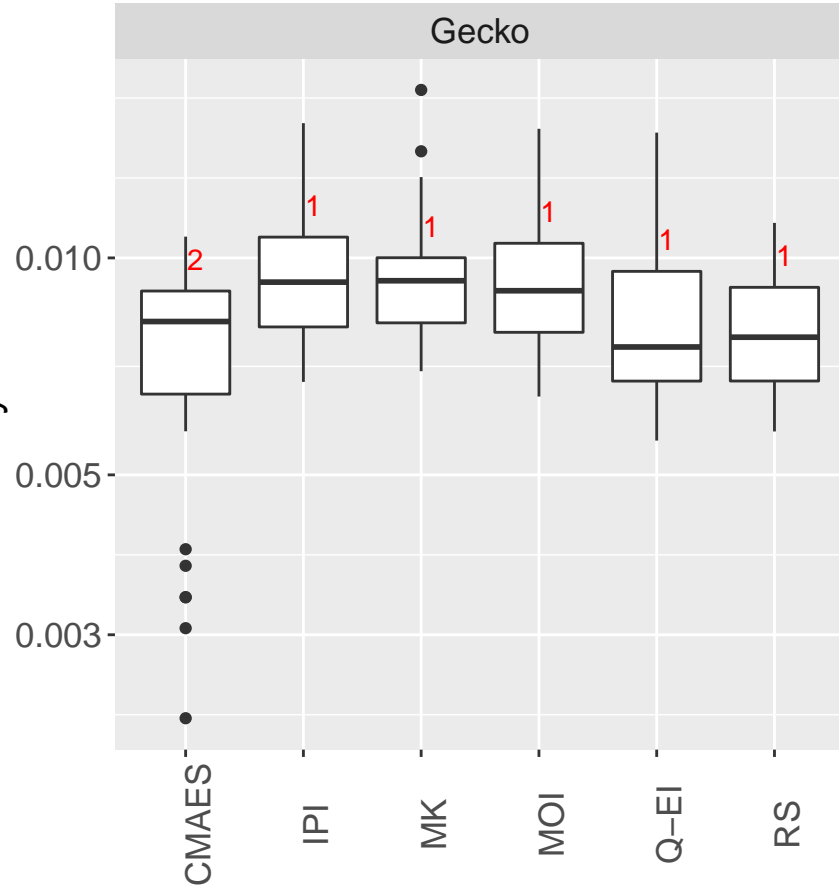


Robot-Gait Learning

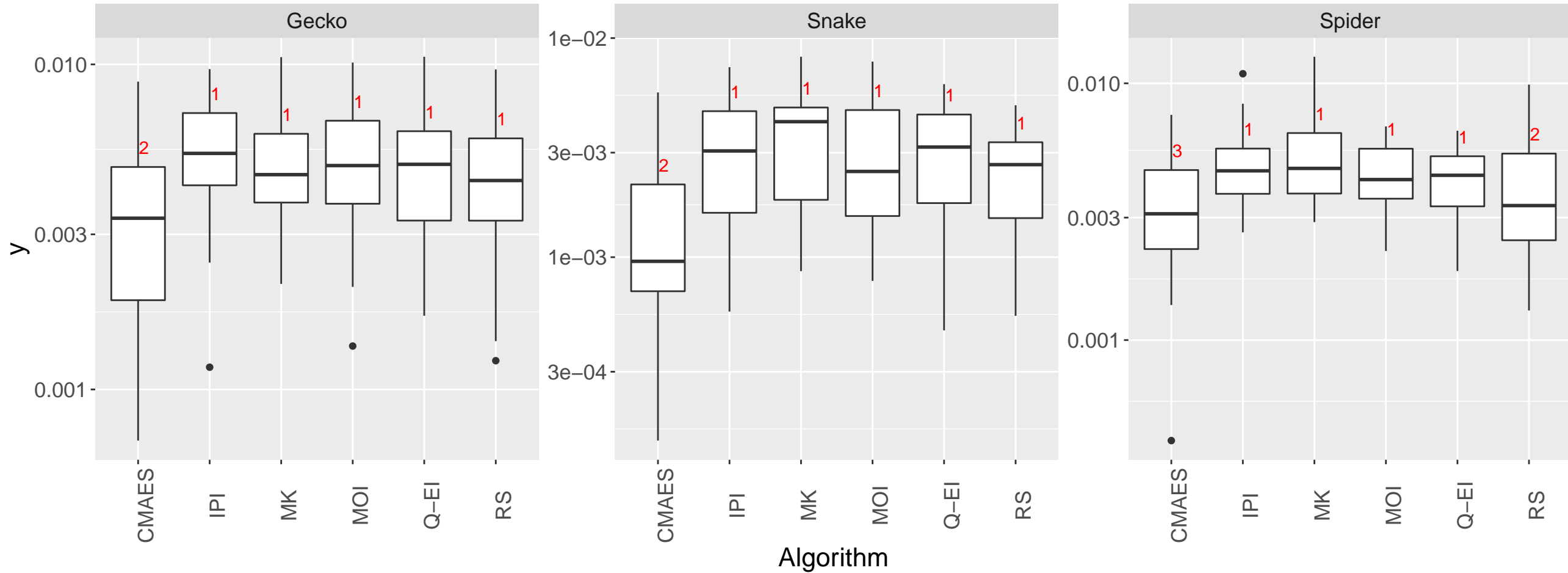
Evaluation: 70

y

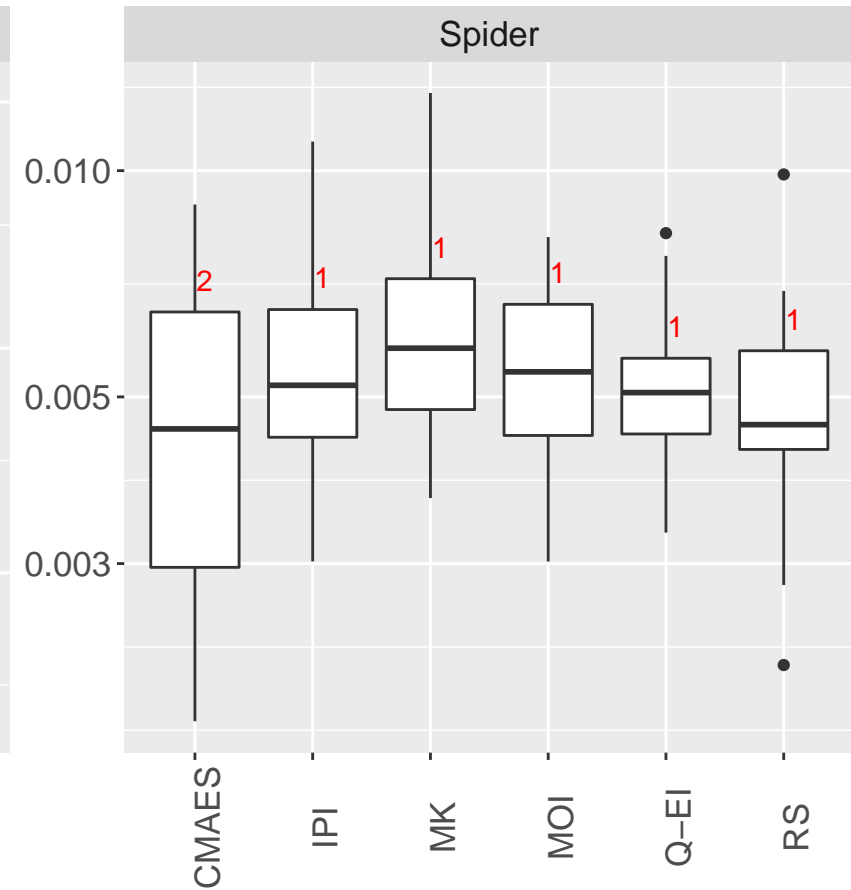
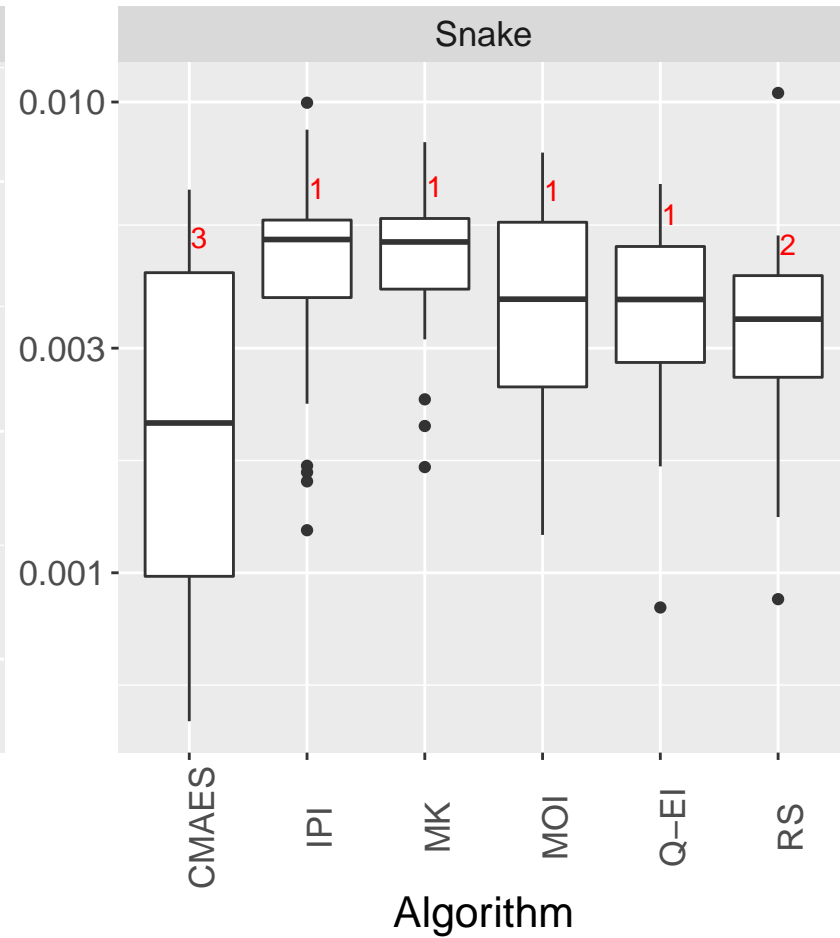
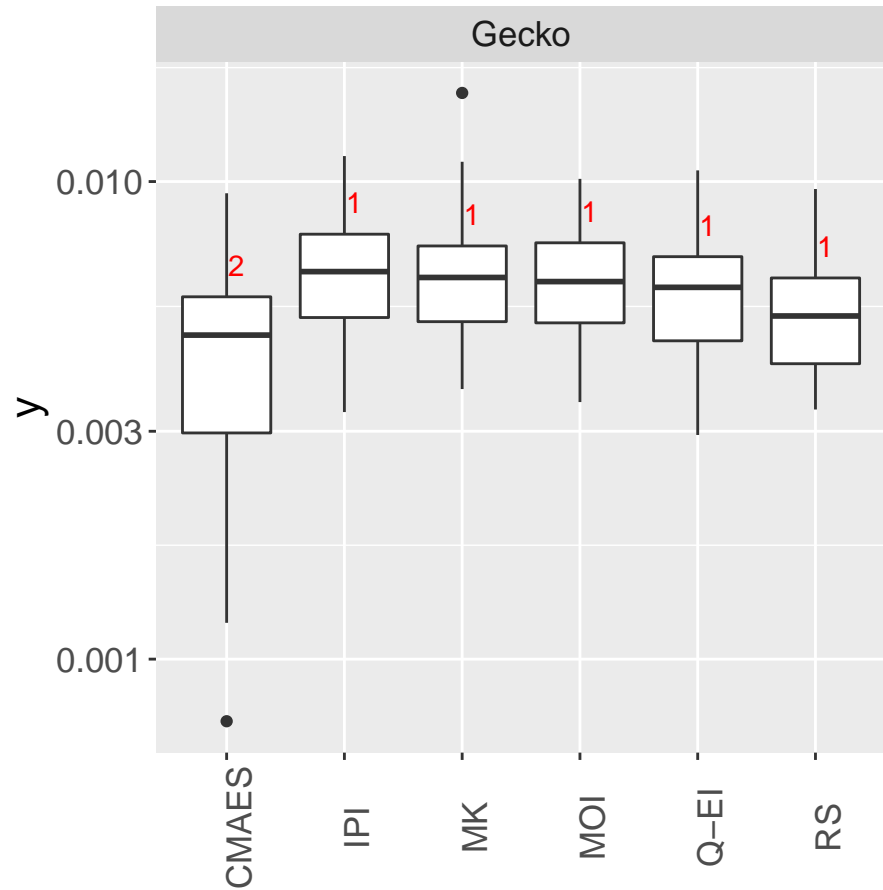




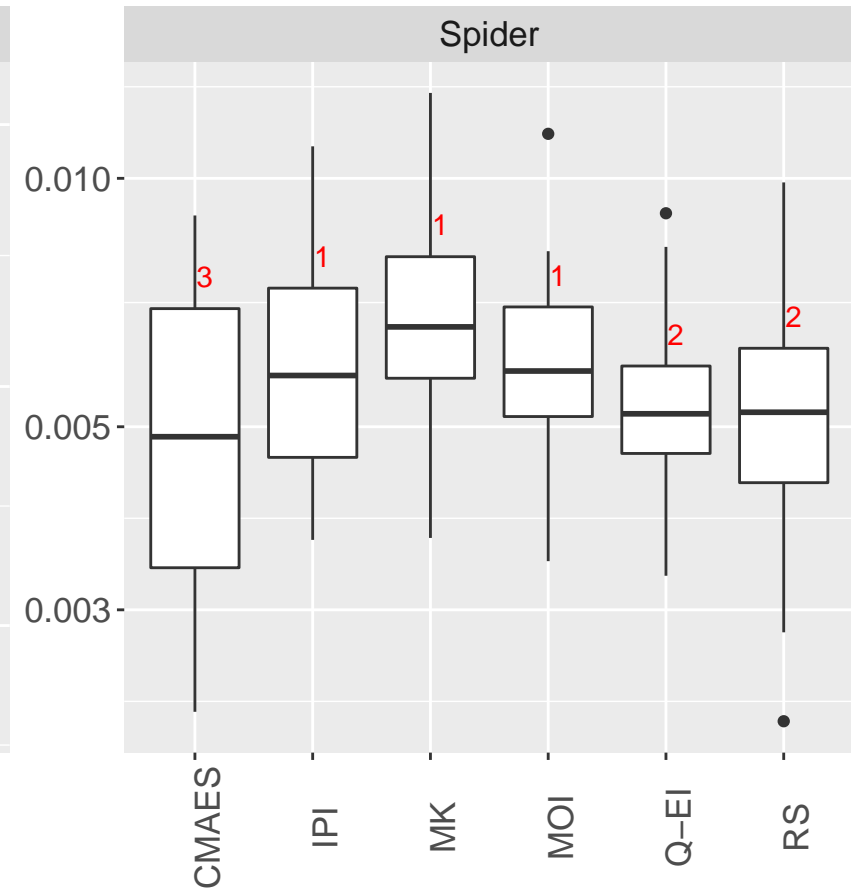
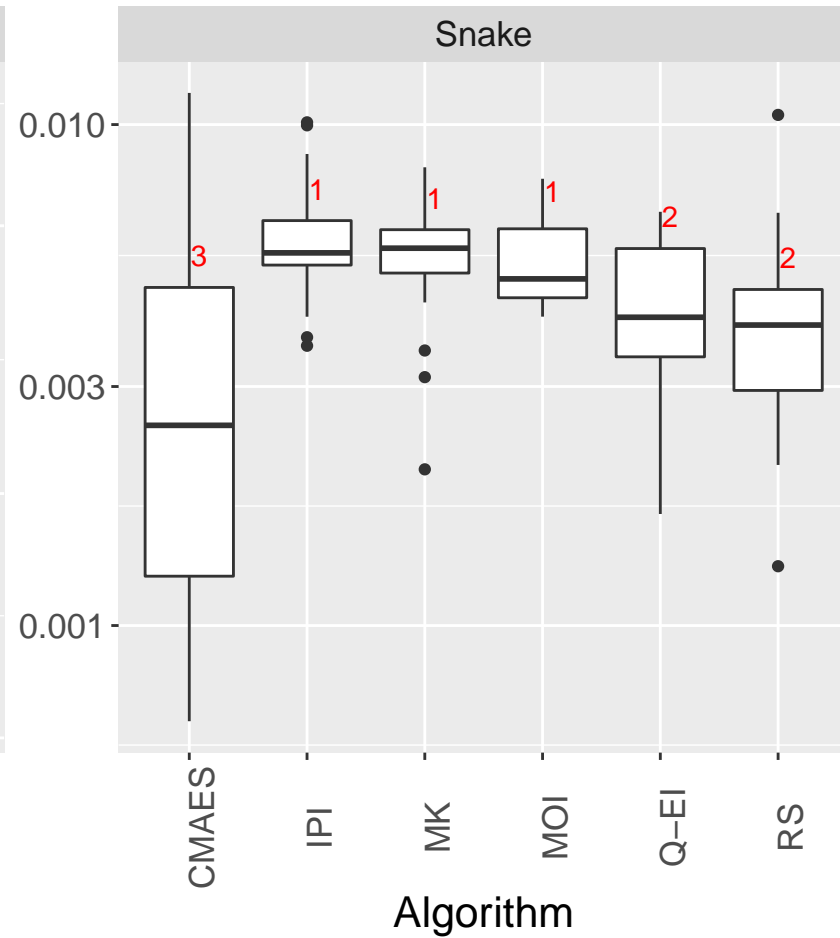
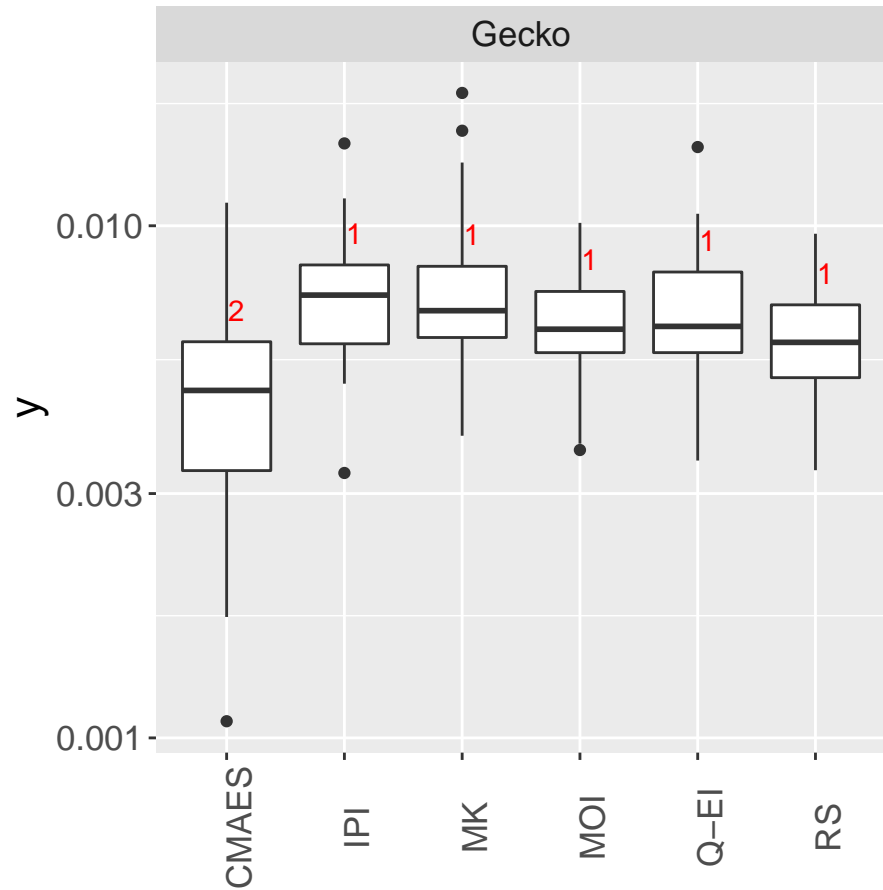
Robot-Directed Locomotion
Evaluation: 25



Robot-Directed Locomotion
Evaluation: 50



Robot-Directed Locomotion
Evaluation: 70



Robot-Directed Locomotion
Evaluation: 100

