VSL graphics

April 2, 2024

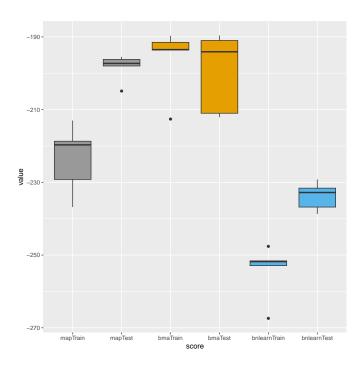
1 Asia network

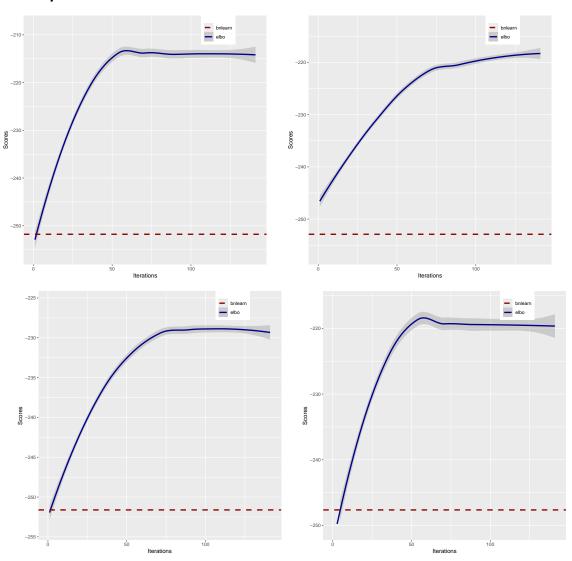
Configuration for asia:

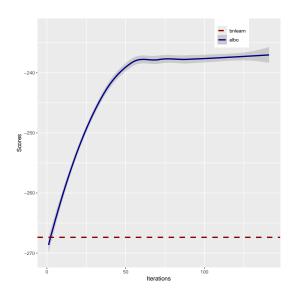
- number of nodes: 8
- number of arcs: 8
- number of parameters: 18
- ullet average degree: 2
- maximum in-degree: 2
- number of samples of train dataset: 100
- number of samples of test dataset: 10000
- number of iterations: 140
- parent sets size: {100}

Summary data:

- map train: -223.48 ± 9.45
- map test: -198.38 ± 3.77
- bma train: -196.18 ± 9.32
- bma test: -199.56 ± 11.07
- bnlearn train: -254.26 ± 7.62
- bnlearn test: -233.82 ± 3.87







2 Alarm network

Configuration for **alarm**:

• number of nodes: 37

• number of arcs: 46

• number of parameters: 509

• average degree: 2.49

• maximum in-degree: 4

• number of samples of train dataset: 600

• number of samples of test dataset: 10000

• number of iterations: 3330

• parent sets size: {100}

Summary data:

• map train: -5719.40 ± 86.26

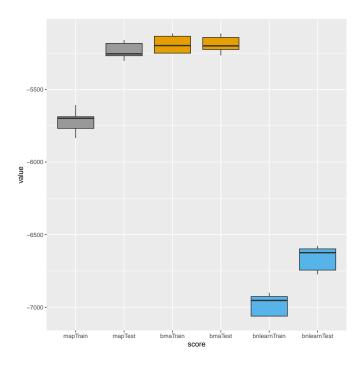
• map test: -5233.80 ± 60.67

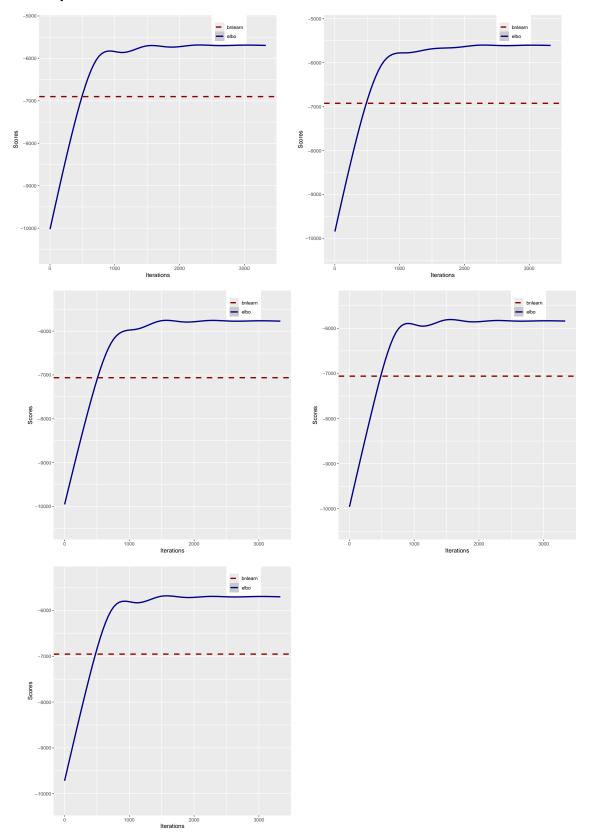
• bma train: -5189.80 ± 63.77

• bma test: -5189.60 ± 61.30

• bnlearn train: -6980.60 ± 76.64

• bnlearn test: -6663.20 ± 89.17





3 Hepar2

Configuration for **hepar2**:

• number of nodes: 70

• number of arcs: 123

• number of parameters: 1453

• average degree: 3.51

• maximum in-degree: 6

• number of samples of train dataset: 3000

• number of samples of test dataset: 10000

• number of iterations: 12075

• parent sets size: {100}

Summary data:

• map train: -98121.80 ± 200.92

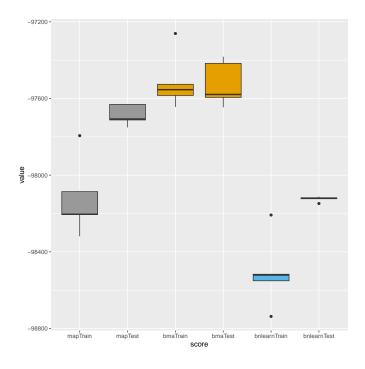
• map test: -97686.00 ± 53.89

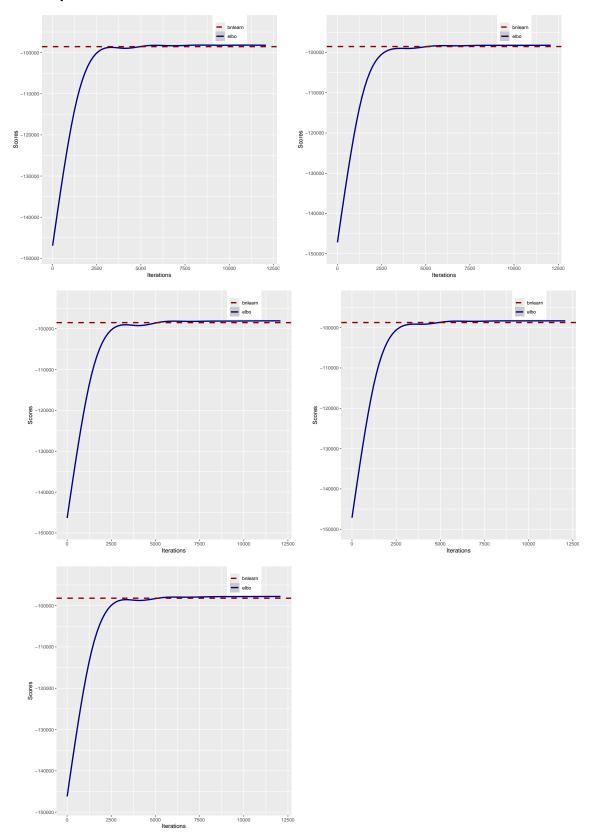
• bma train: -97513.80 ± 147.95

• bma test: -97523.60 ± 116.64

• bnlearn train: -98506.80 ± 190.09

• bnlearn test: -98124.20 ± 13.90





4 Win95pts

Configuration for ${\bf win95pts}$:

• number of nodes: 76

• number of arcs: 112

• number of parameters: 574

 \bullet average degree: 2.95

• maximum in-degree: 7

• number of samples of train dataset: 2500

• number of samples of test dataset: 10000

• number of iterations: 14250

• parent sets size: {100}

Summary data:

• map train: -16576.40 ± 75.91

• map test: -15991.40 ± 55.58

 $\bullet\,$ bma train: -16165.40 ± 67.25

• bma test: -16156.00 ± 46.21

 \bullet b
nlearn train: -23436.40 ± 100.75

• bnlearn test: -23167.00 ± 123.16

