Correlation coefficients when k= 2 For topic 1 1.0000 0.0136 0.0136 1.0000 For topic 2 1.0000 0.0200 0.0200 1.0000 Correlation coefficients when k= 3 For topic 1 1.0000 0.0311 0.0311 1.0000 For topic 2 1.0000 -0.0334 -0.0334 1.0000 For topic 3 1.0000 0.0040 0.0040 1.0000 Correlation coefficients when k= 4 For topic 1 1.0000 0.0308 0.0308 1.0000 For topic 2 1.0000 0.0078 0.0078 1.0000

```
For topic 3

1.0000 -0.0095
-0.0095 1.0000

For topic 4
```

1.0000 -0.0050 -0.0050 1.0000

Correlation coefficients when k= 5

For topic 1

1.0000 0.0133

0.0133 1.0000

For topic 2

1.0000 -0.0186

-0.0186 1.0000

For topic 3

1.0000 0.0240

0.0240 1.0000

For topic 4

1.0000 0.0187

0.0187 1.0000

For topic 5

1.0000 -0.0184

-0.0184 1.0000

Correlation coefficients when k= 6

```
For topic 1
  1.0000 -0.0074
 -0.0074 1.0000
For topic 2
  1.0000 -0.0047
 -0.0047 1.0000
For topic 3
  1.0000 -0.0126
 -0.0126 1.0000
For topic 4
  1.0000 0.0297
  0.0297 1.0000
For topic 5
  1.0000 -0.0090
 -0.0090 1.0000
For topic 6
  1.0000 -0.0146
 -0.0146 1.0000
Correlation coefficients when k= 7
For topic 1
  1.0000 -0.0050
 -0.0050 1.0000
For topic 2
```

1.0000 0.0017

0.0017 1.0000

For topic 3

1.0000 0.0423

0.0423 1.0000

For topic 4

1.0000 0.0238

0.0238 1.0000

For topic 5

1.0000 0.0486

0.0486 1.0000

For topic 6

1.0000 0.0268

0.0268 1.0000

For topic 7

1.0000 -0.0170

-0.0170 1.0000

Correlation coefficients when k= 8

For topic 1

1.0000 -0.0301

-0.0301 1.0000

For topic 2

1.0000 0.0007

0.0007 1.0000

```
For topic 3
```

1.0000 0.0075

0.0075 1.0000

For topic 4

1.0000 0.0034

0.0034 1.0000

For topic 5

1.0000 -0.0117

-0.0117 1.0000

For topic 6

1.0000 -0.0036

-0.0036 1.0000

For topic 7

1.0000 -0.0109

-0.0109 1.0000

For topic 8

1.0000 -0.0159

-0.0159 1.0000

Warning: Algorithm converged to a solution of rank 8 rather than 9 as specified.

Correlation coefficients when k= 9

For topic 1

1.0000 -0.0061

-0.0061 1.0000

For topic 2

```
1.0000 -0.0205
```

-0.0205 1.0000

For topic 3

1.0000 -0.0052

-0.0052 1.0000

For topic 4

1.0000 -0.0006

-0.0006 1.0000

For topic 5

1.0000 -0.0294

-0.0294 1.0000

For topic 6

1.0000 -0.0056

-0.0056 1.0000

For topic 7

1.0000 -0.0163

-0.0163 1.0000

For topic 8

1.0000 -0.0160

-0.0160 1.0000

For topic 9

NaN NaN

NaN 1

Correlation coefficients when k= 10

For topic 1

1.0000 0.0456

0.0456 1.0000

For topic 2

1.0000 0.0422

0.0422 1.0000

For topic 3

1.0000 -0.0098

-0.0098 1.0000

For topic 4

1.0000 0.0030

0.0030 1.0000

For topic 5

1.0000 0.0084

0.0084 1.0000

For topic 6

1.0000 0.0136

0.0136 1.0000

For topic 7

1.0000 -0.0123

-0.0123 1.0000

For topic 8

1.0000 -0.0133

-0.0133 1.0000

For topic 9

1.0000 -0.0095

-0.0095 1.0000

For topic 10

1.0000 -0.0161

-0.0161 1.0000