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機材サイズ・運航便数に関するエアライン戦略のモデル化
―国内線を対象とした同時方程式モデルによるアプローチ―

井上岳・川西和幸

A simultaneous Equations Model for Strategic Determination of Aircraft Size and Frequency by Airlines in Japan

Gaku INOUE, Kazuyuki KAWANISHI

国土交通省　国土技術政策総合研究所

National Institute for Land and Infrastructure Management
Ministry of Land, Infrastructure, Transport and Tourism, Japan

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機材サイズ・運航便数に関するエアライン戦略のモデル化
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井上岳*・川西和幸**

要　旨

長期的に必要となる空港基本施設（空港法第六条に掲げる「滑走路等」をいう．）の規模を適切に見積もるためには，旅客数や貨物量の見積のみならず，路線別の機材サイズ・運航便数の適正な見積が不可欠である．本稿ではエアライン間の競合関係を考慮し，かつ，路線別航空需要を所与とした場合における機材サイズ・運航便数を，同時方程式モデル（３段階最小二乗法(3SLS)）により，内生的に同時に推定するためのモデル化を行った．

キーワード：空港計画，航空需要推計，同時方程式

*空港研究部空港計画研究室長
**空港研究部空港計画研究室研究員
〒239-0826　横須賀市長瀬3-1-1　国土交通省国土技術政策総合研究所
電話：046-844-5032　　e-mail：ysk.nil-kikaku@ml.mlit.go.jp

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Gaku INOUE＊
Kazuyuki KAWANISHI＊＊

Synopsis

Forecasting aircraft size and frequency for traffic on domestic routes is necessary to determine a long-term/short-term facility provision of runways, taxiways, aprons, and so on. In this regard, this research paper provides a model for determination of aircraft size and frequency for domestic trunk routes. This model is formulated based on the Two-Stage/Three-Stage Least Squares (2SLS/3SLS), given estimated future traffic on each domestic route.

Key Words : Airport Planning, Air Traffic Forecasts, Simultaneous Equations

＊ Head of Airport planning Division, Airport Department
＊＊ Research Engineer of Airport planning Division, Airport Department
National Institute for Land and Infrastructure Management
Ministry of Land, Infrastructure, Transport and Tourism
3-1-1 Nagase, Yokosuka, 239-0826 Japan
Phone : +81-46-844-5032 e-mail : ysk.nil-kikaku@ml.mlit.go.jp

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１．はじめに

1.1 背景と目的

国総研航空需要推計モデル（国土交通省国土技術政策総合研究所(2007)）では，旅客数が変化した場合，エアラインが提供座席数を調整するにあたって機材サイズを変更することで対応するのか，運航便数を調整することで対応するのかについての考察が十分になされていない．結果として，予測値にはある程度の整合性を保つことができるものの，個別の路線単位で見た場合にそれらの影響が強く現れる路線（特に需要変動が大きいと考えられる路線）について，運航便数や旅客数の推計値が実績と乖離する可能性があると考えられる．

そこで本研究では，旅客数変動が生じた際の機材サイズ及び運航便数の変化を表現するモデルを構築することによりこの課題に対処することを検討した．

1.2 既往研究

航空会社の使用機材と運航便数のモデル化に関連する研究はこれまでにも複数の研究者によってなされている．

Pitfield et al.(2010)は，空港のエアサイドの施設整備のために，旅客需要，機材サイズ，運航便数を変数としたモデル式を 3 段階最小二乗法（3SLS）により構築し，旅客増加は機材サイズよりも運航便数に対して大きな影響を与えるとの結論を得ている．Givonai and Piet(2009)は便あたりの旅客数を機材サイズの代替指標とみなし，路線の提供座席数，大圏距離，滑走路数，ハーフィンダール・ハーシュマン指数[1]などを説明変数として最小二乗法および提供座席数に内生性が認められる可能性を考慮して 2 段階最小二乗法（2SLS）によりモデル式を作成している．作成したモデルから機材サイズはノードである空港の特性（ハブ空港か否か，スロット調整がなされているか）ではなく，飛行距離や需要等の経路の特性に大きく依存するとしている．Pai(2010)による研究では，航空機のサイズと運航便数について空港周辺地域の統計データや空港，経路，エアラインの特性値などを使用する事により特定することを試みている．管理職の増加や 25 歳以下人口の増加が小型機による高頻度運航に結びつく傾向や路線距離と大型機による運航との関連が示されている．欠航が相次ぐ空港においてはリスクヘッジのため，機材の大型化，高頻度化が認められるとしている．

本研究は既往の航空需要予測モデルとの連接の容易さなどを考慮し，Pitfield et al.(2010)の研究をベースにしてモデル構築を試みることとする．

[1]市場の集中度を測る指標

２．方法

2.1 モデル

本研究は，Pitfield et al.(2010)と同様の考え方でモデルを式(1)および式(2)のとおり構築する．式(1)では右辺第 5 項、式(2)では右辺第 4 項を加えた．前者は路線距離が運航便数に与える影響を考慮するため，後者は機材の入れ替えが頻繁に生じない本邦航空市場の状況を鑑みると，機材構成は過去の構成に大きく影響することが考えられためである．国総研航空需要推計モデルのサブモジュールとして利用するため，旅客数は外生的に与える．

この結果，航空需要，使用機材及び運航便数のモデルは以下のとおり定式化した：

$$\ln F_{it} = \alpha_F + \beta_p \ln P_{it} + \beta_s \ln S_{it} + \beta_1 \ln F_{i,t-1} + \beta_1 \ln Dis_i + \beta_2 \ln C_{it} + \beta_3 \ln T_{it} + u_{it1} \quad (1)$$

$$\ln S_{it} = \alpha_s + \beta_F \ln F_{it} + \beta_p \ln P_{it} + \beta_s \ln S_{i,t-1} + \beta_1 \ln Dis_i + \beta_2 \ln C_{it} + \beta_3 \ln T_{it} + u_{it2}. \quad (2)$$

ただし，

F_{it} ：t 年における経路 i の運航便数
F_{it-1} ：t-1 年における経路 i の運航便数
P_{it} ：t 年における経路 i の旅客数
S_{it} ：t 年における経路 i の機材サイズ
S_{it-1} ：t-1 年における経路 i の機材サイズ
C_{it} ：t 年における経路 i のエアライン間の競合状態
DIS_i ：経路の路線距離
T_{it} ：トレンド
u_{it1}, u_{it2} ：誤差項
α, β, γ ：モデルパラメータ

である．

なお，国総研航空需要推計モデル（例えば,国土交通省国土技術政策総合研究所（2007））による推計は 5 年毎に行っている．このため，式(1)及び式(2)のとおり 1 年毎のラグ変数によるモデル（「1 年モデル」：5 年後を推計するために 1 年毎の推計を逐次 5 回実施する）におけるラグ変数F_{it-1}, S_{it-1}をそれぞれ

F_{it-5} ：t-5 年における経路 i の運航便数
S_{it-5} ：t-5 年における経路 i の機材サイズ

に置換するモデル（「5 年モデル」）を検討する．また，ラグ変数を用いないモデル（「ラグなしモデル」）も検

表-1 使用データ

変数	データ元	1年モデル	5年毎モデル
路線別運航便数（回／日）	国土交通省「航空輸送統計調査」	H23-27 年度	H19-22，24-27 年度
路線別年間旅客数（人／年）	国土交通省「航空輸送統計調査」	H23-27 年度	H19-22，24-27 年度
路線別機材サイズ（席／便）	国土交通省「航空輸送統計調査」	H23-27 年度	H19-22，24-27 年度
路線別競合状況（会社数）	JTB パブリッシング「JTB 時刻表」	H23-27 年度	H19-22，24-27 年度
路線距離（ｋｍ）	国土交通省「航空輸送統計調査」	H23-27 年度	H19-22，24-27 年度

表-2 符号条件

被説明変数	説明変数							
	運航便数	機材サイズ	旅客数	航空会社数	路線距離	運航便数（ラグ項）	機材サイズ（ラグ項）	トレンド
運航便数		－	＋			＋		
機材サイズ	－		＋		＋		＋	

表-3 パラメタを推計したケース

番号	被説明変数	運航便数	機材ｻｲｽﾞ	旅客数	航空会社数	路線距離	運航便数（ラグ）	機材ｻｲｽﾞ（ラグ）	トレンド
(1)	運航便数		○	○	○	○	○		○
	機材ｻｲｽﾞ	○		○	○	○		○	○
(2)	運航便数		○	○	○		○		
	機材ｻｲｽﾞ	○		○	○	○		○	
(3)	運航便数		○	○	○	○			○
	機材ｻｲｽﾞ	○			○	○		○	○
(4)	運航便数		○	○	○	○			
	機材ｻｲｽﾞ	○			○	○		○	
(5)	運航便数		○	○	○	○			
	機材ｻｲｽﾞ	○		○	○	○		○	
(6)	運航便数		○	○	○	○			
	機材ｻｲｽﾞ	○		○	○			○	
(7)	運航便数		○	○	○	○			
	機材ｻｲｽﾞ	○		○				○	

討する．

また，Pitfield et.al（2010)においては、エアライン間の競合状態をハーフィンダール・ハーシュマン指数と参入航空会社数の２通り検討しているが，本研究は参入航空会社数のみ検討した．

式(1)及び式(2)は，一方の式の説明変数が別の式の被説明変数として使用されている．説明変数の内生性を考慮する必要があると考えられることから，Pitfield et al.(2010)と同様の理由により，三段階最小二乗法（3SLS）により推計した．詳細はWooldridge(2002)を参照されたい．

2.2 使用データおよびプログラム

モデルの作成に使用したデータは**表-1** のとおり．1年モデルは H23-27 年度に渡って継続して運航がなされてきた路線に限定して推計する（151 路線，サンプル数 604）．5 年モデルは H18-27 年度に渡って 10 年間継続的に運航がなされてきた路線に限定して推計する（127 路線，サンプル数 508）．いずれのモデルも航空会社の別を区別せず推計する．

推計は，Stata12 を使用した．

使用データならびに Stata12 の実行コマンドおよび出力結果は**付録**に示す．

2.3 符号条件

モデルの符号条件は**表-2**のとおり設定した．旅客数を所与（固定）とした場合，運航便数と機材サイズは，ほぼ反比例の関係にあるものと思料される．このため，運航便数を説明するモデルにあっては機材サイズ，機材サイズを説明するモデルにあっては運航便数の符号条件を「－」と設定した．

モデルの推計は，**表-3**の説明変数の組み合わせを試行し，背反するモデルは採用の候補から落とす．

３．結果

3.1　1 年モデル

説明変数の複数の組み合わせによるモデルの推計を行ったところ，符号条件を満たすモデルは以下となった．

(1)推計結果

説明変数の複数の組み合わせによるモデルの推計を行ったところ,符号条件を満たしたのは**表-4**, **表-5**である．なお，Hausman検定[2]の帰無仮説は棄却された．

表-4　1年モデル推計結果（運航便数）

説明変数	推計値		
	パラメタ	標準誤差	z 値
切片	-3.830448	0.0885999	-43.23
機材サイズ	-0.8163909	0.0177537	-45.98
年間旅客数	0.8867887	0.0082026	108.11
参入航空会社数	0.1148641	0.0159522	7.20
路線距離	-0.1696625	0.013284	-12.77

表-5　1年モデル推計結果（機材サイズ）

説明変数	推計値		
	パラメタ	標準誤差	z 値
切片	-0.8073095	0.2520099	-3.20
運航便数	-0.1926745	0.0508726	-3.79
年間旅客数	0.1840159	0.0475837	3.87
機材サイズ（1 年前）	0.7815384	0.0483453	16.17

運航便数（50 回/日以下を拡大）

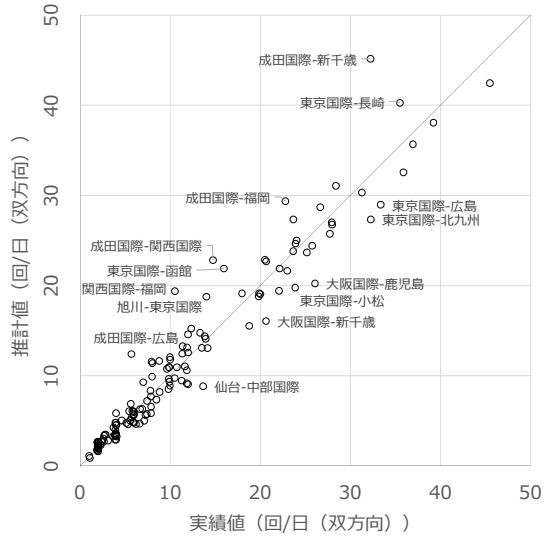

図-2　1 年モデル再現性（運航便数:50 回/日以下）

(2)現況再現性

H23 年度実績値→H24 年度推計値→H25 年度推計値→H26 年度推計値→H27 年度推計値と順に推計し,推計値と実績値との比較を行った．実績値の入力を H23 年度に限り繰り返し適用することで，予測としての活用可能性を検証した（**図-1～図-3**）．

細かいところにフォーカスすると多少のズレが見られる部分も存在するが，概ね良い結果が得られていると考

運航便数

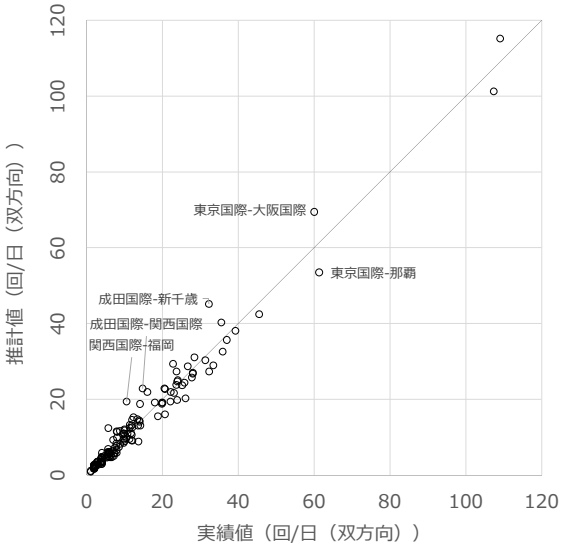

図-1　1 年モデル再現性（運航便数）

機材サイズ

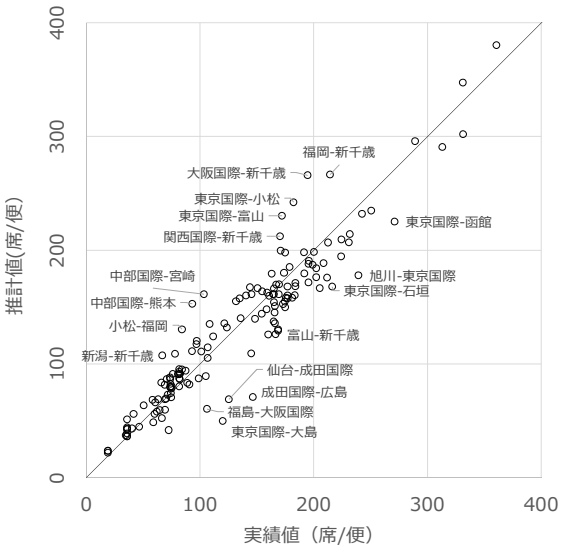

図-3　1年モデル再現性（機材サイズ）

[2]「最小二乗推定と同時方程式による推定に差がない」を帰無仮説とする検定.

えられる．座席数で比較的乖離の大きい，東京国際―大島，成田国際―広島などはH23年度からH27年度にかけて機材サイズの変動が大きかった路線（前者は，56席→120席，後者は59席→146席）である．1年のラグ項に大きく依存する本モデルでは初期値依存性が非常に高く，予測への適用に留意が必要である．

3.2　5年モデル

(1)推計結果

説明変数の複数の組み合わせによるモデルの推計を行ったところ,符号条件を満たしたのは**表-6**, **表-7**である．

なお，Hausman検定の帰無仮説は棄却された．

(2)現況再現性

H12 年度実績値→H17 年度推計値→H22 年度推計値→H27 年度推計値と順に推計し，推計値と実績値との比較を行った．実績値の入力を H12 年度に限ることで，長期予測としての活用可能性を検証した（**図-4～図-7**）．

LCCが参入した路線（関西～福岡）や北海道新幹線開通などの影響を受ける路線（羽田～函館）については，再現が不十分であり，長期予測を実施する上では，別途の考慮が必要であると判断される．

表-6　5年モデル推計結果（運航便数）

説明変数	推計値		
	パラメタ	標準誤差	z 値
切片	-3.759713	0.1245686	-30.18
機材サイズ	-0.8097245	0.0350581	-23.10
年間旅客数	0.873807	0.0137695	63.46
参入航空会社数	0.1304208	0.0202801	6.43
路線距離	-0.1606353	0.0198306	-8.10

表-7　5年モデル推計結果（機材サイズ）

説明変数	推計値		
	パラメタ	標準誤差	z 値
切片	-3.387019	0.1835625	-18.45
運航便数	-0.7367297	0.0349949	-21.05
年間旅客数	0.7213166	0.0299508	24.08
機材サイズ（5 年前）	0.1756232	0.0267375	6.57

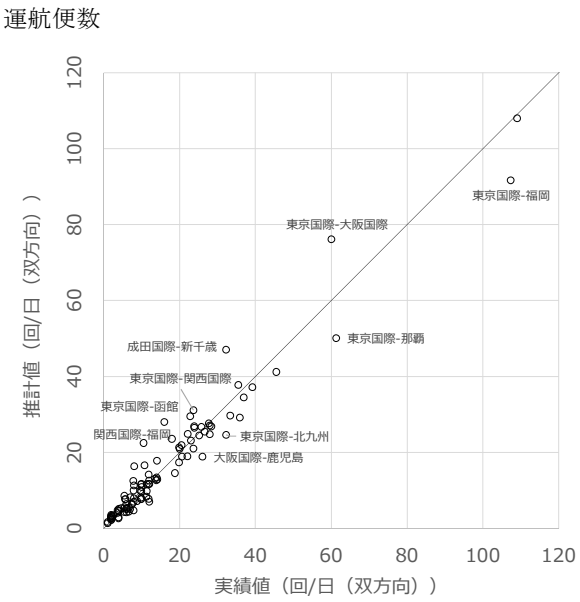

図-4　5年モデル再現性（運航便数）

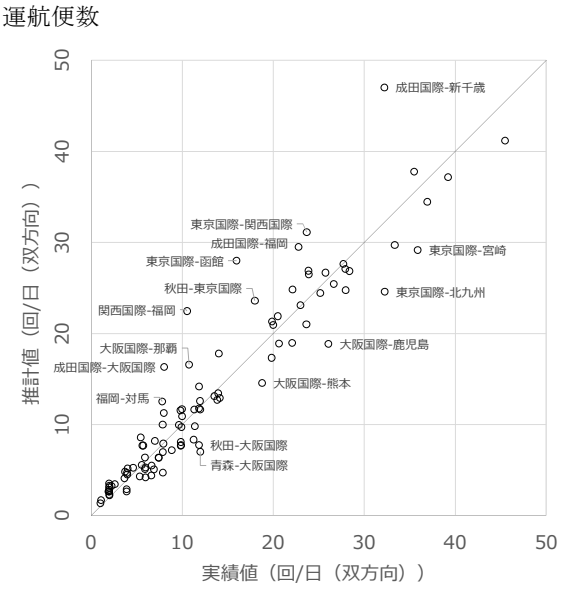

図-5　5年モデル再現性（運航便数50回/日以下）

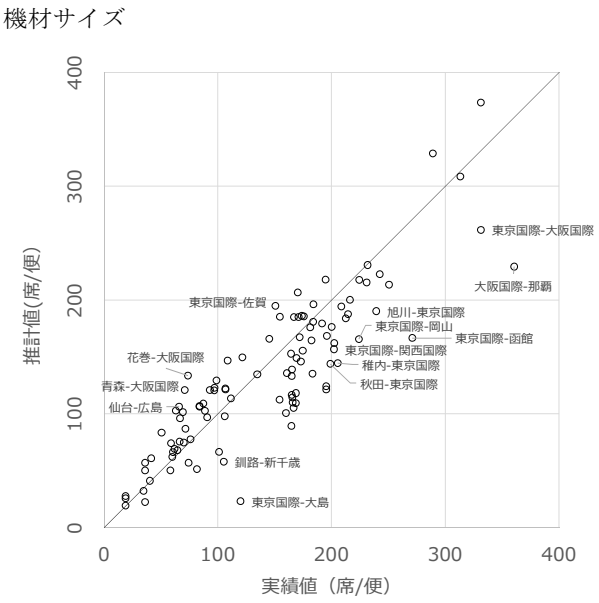

図-6 5年モデル再現性（座席数）

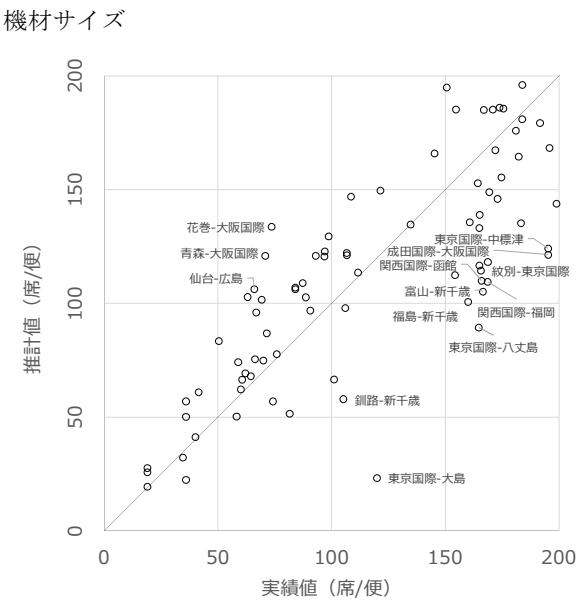

図-7 5年モデル再現性（座席数200席以下）

4．おわりに

寡占下のエアライン間の競合関係を考慮し，かつ，路線別航空需要を所与とした場合における機材サイズ・運航便数を，内生的に同時推定するためのモデル化を行った．その結果，1年モデル，5年モデルとも概ね現況を再現可能なモデルを構築した．ただし，5 年モデルでは，LCC 参入や新幹線開通などの影響を受ける路線については，再現が不十分であり，長期予測を実施する上では，別途の考慮が必要であると判断される．

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付録Ａ．入力データ

A.1　1年モデルの入力データ

データはすべて対数表示である．

Distance	CurrentNum OfAL	CurrentNum OfOps	CurrentNum OfPsg	CurrentFleet Size	PreviousNum OfAL	PreviousNum OfOps	PreviousNum OfPsg	PreviousFleet Size	Trend
7.0859	0.0000	0.9256	11.5181	5.2349	0.0000	0.9513	11.4881	5.1017	0.0000
5.8777	0.0000	1.2771	10.5373	4.3059	0.0000	1.3102	10.4598	4.3074	0.0000
6.9584	0.6931	2.6300	13.4692	5.2987	1.0986	2.6396	13.4019	5.1544	0.0000
7.1082	0.0000	0.6849	11.0190	5.1280	0.0000	0.6877	10.9032	5.0985	0.0000
5.4723	0.0000	0.6118	9.4948	3.5835	0.0000	-0.0888	8.4608	3.5835	0.0000
7.1172	0.0000	0.3786	10.6363	5.1276	0.0000	0.3935	10.5071	4.9641	0.0000
7.0527	0.6931	2.2982	12.9409	5.1426	0.6931	2.3080	12.8752	5.0224	0.0000
7.2211	0.0000	0.6863	10.9317	4.9660	0.0000	0.6877	10.7941	4.8214	0.0000
5.8693	0.6931	2.4674	11.9163	4.2676	0.6931	2.3565	11.8186	4.1377	0.0000
6.5367	0.0000	2.4757	13.0927	5.2514	0.0000	2.4824	13.1801	5.1175	0.0000
6.6657	0.0000	1.2748	11.1281	4.4142	0.0000	0.4263	10.2474	4.3823	0.0000
6.8522	0.0000	1.8699	11.5955	4.2201	0.0000	1.5159	11.5130	4.2924	0.0000
5.7268	0.0000	1.8559	11.3425	3.9229	0.0000	1.8139	11.3741	3.9375	0.0000
6.5294	0.0000	1.7766	12.2734	5.0931	0.0000	1.7904	12.4181	5.0879	0.0000
6.5568	0.0000	1.3739	11.2793	4.4262	0.0000	0.5070	10.3431	4.3838	0.0000
6.7685	0.0000	1.8610	11.7326	4.3272	0.0000	1.9100	11.8926	4.2885	0.0000
6.1463	0.0000	1.8695	11.3728	3.9140	0.0000	1.6772	11.3102	3.9913	0.0000
6.0753	0.6931	1.3655	11.3154	4.5057	0.6931	1.0018	10.6225	4.1369	0.0000
6.3986	0.0000	0.6640	10.1869	3.9120	0.0000	0.2822	9.7128	3.9120	0.0000
6.4877	0.6931	2.4679	12.4080	4.6782	0.6931	2.0410	12.0302	4.6719	0.0000
6.6884	1.0986	3.3705	13.8032	4.8608	1.0986	3.0969	13.5212	4.8774	0.0000
6.9098	0.0000	0.6724	10.6187	4.2485	0.0000	0.3006	10.1546	4.2485	0.0000
7.1357	1.0986	2.4001	12.4140	4.5201	0.6931	1.7564	11.7369	4.2998	0.0000
6.4983	1.0986	3.2097	13.3704	4.6071	1.3863	2.9496	13.0565	4.6145	0.0000
6.3190	0.6931	2.8794	13.5413	5.4126	0.6931	2.7518	13.5780	5.3442	0.0000
6.5806	0.0000	1.3697	11.0740	4.3047	0.0000	1.3725	11.1217	4.3568	0.0000
6.6758	0.6931	2.2857	11.8388	4.2052	0.0000	1.9653	11.4481	4.0435	0.0000
6.0936	0.0000	1.7286	11.2097	3.9989	0.0000	1.7383	11.2508	3.9455	0.0000
6.0890	0.0000	0.6794	10.1527	3.9978	0.0000	0.9877	11.0571	4.5378	0.0000
6.5930	0.0000	1.7830	11.3380	4.1767	0.0000	1.8421	11.3670	4.0182	0.0000
6.1924	0.0000	2.0639	12.7197	5.2833	0.0000	2.1318	12.7320	5.1327	0.0000
6.4953	0.6931	2.2030	11.6826	3.9960	0.0000	2.2213	11.6259	3.9120	0.0000
6.5793	0.0000	1.3767	11.5088	4.8363	0.0000	1.2500	11.3592	4.8363	0.0000
6.6201	0.0000	1.3794	11.8767	5.1761	0.0000	0.7465	11.3463	5.1761	0.0000
6.6933	0.0000	1.3753	11.9073	5.1761	0.0000	1.2900	11.8894	5.1761	0.0000
6.4693	0.0000	1.3641	10.7272	3.9120	0.0000	1.3739	10.5744	3.9173	0.0000
6.2146	0.6931	2.2941	12.8485	5.1996	0.6931	2.4760	12.7092	5.0393	0.0000
6.3784	0.6931	2.0739	13.0529	5.3572	0.6931	2.0815	12.9866	5.3780	0.0000
6.6227	0.0000	1.2326	11.8950	5.1632	0.0000	0.5070	10.6047	4.9833	0.0000
6.8002	0.0000	1.3669	10.8066	4.0898	0.0000	1.2026	10.5748	4.0748	0.0000
7.0094	1.6094	3.1612	13.5806	5.1007	0.6931	2.4425	12.5213	5.0385	0.0000
7.5427	1.6094	2.6557	13.2159	5.1810	0.6931	1.6617	12.2051	5.2981	0.0000
6.7935	1.6094	3.1564	13.6956	5.1489	0.6931	2.4090	12.6714	5.0612	0.0000
5.0876	0.0000	0.5801	9.1734	4.0253	0.0000	0.5954	9.0858	4.0328	0.0000
5.8665	0.0000	1.6879	12.1234	5.1126	0.0000	1.6920	12.0779	5.0359	0.0000
6.3456	0.0000	2.4676	13.5427	5.6071	0.0000	2.4674	13.4801	5.5435	0.0000
6.2691	0.6931	3.0991	14.2676	5.7683	0.6931	3.1094	14.1899	5.6569	0.0000
6.2729	0.0000	1.3801	11.9075	5.1263	0.0000	1.3842	11.8119	5.1004	0.0000
6.2422	0.6931	4.0866	15.4220	5.8831	0.6931	4.0929	15.3853	5.8623	0.0000
6.5191	1.0986	3.0356	13.8644	5.3240	1.0986	3.1801	13.8560	5.3097	0.0000
6.5439	0.6931	2.7164	13.5856	5.2404	0.6931	2.7614	13.6134	5.2449	0.0000

6.4520	0.0000	1.7747	11.5141	4.4183	0.0000	1.7663	11.3332	4.2913	0.0000
6.5028	0.0000	2.0618	12.5693	5.1251	0.0000	2.0534	12.4835	5.0880	0.0000
6.6542	0.0000	2.3336	12.9356	5.2303	0.0000	2.2979	12.8213	5.1058	0.0000
6.6859	0.0000	2.3588	13.1174	5.2995	0.0000	2.2924	13.0205	5.2246	0.0000
6.8101	0.0000	0.6794	11.0426	5.1336	0.0000	0.6849	10.9734	4.9756	0.0000
6.5294	0.6931	2.9773	13.7218	5.3940	0.6931	2.9334	13.6428	5.3424	0.0000
6.6720	0.6931	3.4903	14.4146	5.5259	0.6931	3.5222	14.3893	5.5070	0.0000
6.8405	0.6931	2.8787	13.5674	5.3736	0.6931	2.8905	13.4773	5.2826	0.0000
6.5554	0.6931	2.9862	13.5934	5.2527	0.6931	2.9292	13.4603	5.2109	0.0000
6.5667	0.6931	3.1639	13.9635	5.4337	0.6931	3.1707	13.8783	5.4008	0.0000
6.7558	0.6931	3.1669	14.1729	5.5516	0.6931	3.1757	14.0789	5.5240	0.0000
6.7142	0.6931	2.8821	13.6240	5.3456	0.6931	2.8869	13.5436	5.3405	0.0000
6.8648	0.6931	3.5201	13.9191	4.9688	1.0986	3.4585	13.8813	5.0308	0.0000
6.9479	1.3863	4.5972	15.8390	5.7539	1.3863	4.5850	15.8096	5.7580	0.0000
7.0300	0.0000	2.1524	12.5918	5.0672	0.0000	2.1584	12.5308	5.0268	0.0000
7.0414	1.3863	3.3274	14.1631	5.4366	1.3863	3.3289	14.0769	5.3971	0.0000
6.9903	1.3863	3.6771	14.4615	5.3596	1.3863	3.6356	14.3938	5.3540	0.0000
6.8330	1.0986	3.2534	13.9319	5.3804	1.0986	3.2565	13.8625	5.2136	0.0000
6.9305	1.0986	3.5695	14.0966	5.1391	1.0986	3.5687	14.0214	5.1169	0.0000
7.0130	1.3863	3.7368	14.6089	5.4293	1.3863	3.7373	14.5484	5.3746	0.0000
7.2696	0.0000	0.6724	11.2844	5.0428	0.0000	0.6835	11.1798	5.0560	0.0000
7.4307	1.3863	4.0087	15.4292	5.8984	1.3863	4.0140	15.4046	5.8904	0.0000
7.6109	0.0000	0.7121	11.1850	4.9932	0.0000	0.7268	11.1711	4.9880	0.0000
7.6829	0.0000	1.0986	11.7500	4.9976	0.0000	1.0894	11.6709	4.9959	0.0000
6.9393	0.6931	2.2941	13.0165	5.2734	0.6931	2.3015	12.9342	5.1041	0.0000
6.9068	0.6931	2.6284	13.1313	5.0816	0.6931	2.6359	13.1088	5.0350	0.0000
7.0193	0.0000	0.6821	11.3303	5.2871	0.0000	0.6959	11.2732	5.1753	0.0000
6.7957	1.3863	4.6928	15.9767	5.7741	1.3863	4.6718	15.9590	5.7542	0.0000
6.6670	1.0986	2.7267	13.8496	5.6428	1.0986	2.7179	13.7819	5.5552	0.0000
4.6444	0.0000	1.7291	9.8913	2.9444	0.0000	1.6343	9.8470	2.9443	0.0000
4.9904	0.0000	1.9607	10.2330	2.9444	0.0000	1.7369	10.0902	2.9444	0.0000
5.1475	0.0000	1.6591	9.8933	2.9450	0.0000	1.5062	9.7630	2.9444	0.0000
6.3716	0.0000	1.3655	10.8653	4.3052	0.0000	1.3592	11.0044	4.3040	0.0000
6.4151	0.6931	2.8744	12.7653	4.4467	0.6931	2.8388	12.7554	4.4925	0.0000
7.0527	0.6931	1.7583	11.7017	4.7444	0.0000	1.0432	11.0640	4.7885	0.0000
6.6267	1.0986	2.2349	11.9288	4.5324	0.6931	1.8355	11.8097	4.6991	0.0000
6.7742	0.0000	0.6794	10.9061	4.8363	0.0000	0.6877	10.8615	4.8363	0.0000
6.6871	0.0000	1.3856	11.7537	5.0392	0.0000	1.3877	11.6493	4.8743	0.0000
6.8659	0.0000	0.6835	11.1346	4.8363	0.0000	0.6931	11.1237	4.8363	0.0000
6.8090	0.0000	0.6752	10.5277	4.3359	0.0000	0.6821	10.4455	4.3454	0.0000
6.7901	0.0000	0.6807	10.5604	4.3360	0.0000	0.6766	10.5131	4.3446	0.0000
6.7754	0.0000	1.5617	11.3740	4.3475	0.0000	1.6306	11.3729	4.3744	0.0000
7.0361	0.0000	0.9702	11.1537	4.7624	0.0000	1.2398	11.2605	4.6385	0.0000
6.2989	0.0000	1.7844	11.4913	4.3046	0.0000	1.7830	11.4273	4.3035	0.0000
6.6120	0.6931	2.9352	13.2943	4.9560	0.0000	3.0643	13.2971	4.9697	0.0000
6.7214	0.0000	1.3801	11.7254	5.0034	0.0000	1.3829	11.6662	4.9946	0.0000
6.6201	0.0000	1.7715	11.9133	4.9567	0.0000	1.7853	11.8551	5.0718	0.0000
6.4167	0.0000	1.3704	11.0455	4.2485	0.0000	1.4033	11.0933	4.3068	0.0000
6.5396	0.0000	1.7803	12.0702	4.9569	0.0000	1.7780	12.0649	5.1298	0.0000
6.6921	0.0000	2.0753	12.5509	5.1371	0.0000	2.0774	12.5334	5.0594	0.0000
7.2930	1.0986	3.0189	13.7630	5.1900	1.0986	2.9716	13.6604	5.2001	0.0000
6.9884	1.0986	3.3397	13.8849	5.1471	1.0986	3.2954	13.8503	5.1418	0.0000
6.8669	0.0000	1.0480	11.4325	4.8814	0.0000	1.0296	11.4664	5.1252	0.0000
6.6201	0.0000	2.3681	12.3116	4.4109	0.0000	2.3140	12.1635	4.3844	0.0000
6.6783	0.0000	1.4331	11.2058	4.3543	0.0000	1.3780	11.0336	4.3782	0.0000
5.1648	0.0000	1.2555	10.1630	3.5260	0.0000	1.2278	10.1764	3.5424	0.0000
5.9026	0.0000	0.6766	10.5152	4.4021	0.0000	0.6766	10.4654	4.4214	0.0000
5.8916	0.0000	2.4634	11.6229	3.8556	0.0000	2.4639	11.5516	3.7479	0.0000

5.9349	0.0000	3.0852	13.0843	4.5540	0.0000	3.0858	13.0649	4.5003	0.0000
5.7038	0.0000	2.8764	12.5504	4.4014	0.0000	2.8884	12.5192	4.3333	0.0000
6.3596	1.0986	3.2631	13.3202	4.6347	0.6931	3.1571	13.3955	4.7396	0.0000
6.5117	0.6931	2.4767	12.5448	4.7039	0.6931	2.5030	12.6431	4.7753	0.0000
6.4313	1.0986	2.9112	12.9675	4.5619	1.0986	2.8823	12.9835	4.7039	0.0000
6.1356	0.6931	2.4810	12.1010	4.2591	0.6931	2.3494	12.0486	4.1710	0.0000
6.3421	0.6931	2.9592	13.1478	4.6119	0.6931	2.8961	13.1754	4.7601	0.0000
6.4846	0.6931	3.1735	13.4095	4.8527	0.6931	3.1883	13.4909	4.8836	0.0000
6.5610	0.0000	0.6668	10.4509	4.3033	0.0000	0.6569	10.3050	4.2841	0.0000
6.8967	0.0000	0.7822	11.3097	5.1251	0.0000	0.7934	11.2514	5.1587	0.0000
7.1732	0.6931	1.5379	13.3000	6.1230	0.6931	1.5484	13.3133	6.1410	0.0000
7.0570	0.6931	1.8937	13.0166	5.5495	0.6931	1.9007	13.1739	5.7024	0.0000
6.3154	1.0986	2.3376	13.0779	5.1252	0.0000	1.5261	11.7375	4.9345	0.0000
7.1397	1.3863	3.2658	13.9431	5.1801	1.0986	2.9480	13.7609	5.3353	0.0000
7.4085	0.0000	1.2461	11.7757	4.9267	0.0000	0.6931	11.3432	4.9992	0.0000
7.1770	1.6094	3.5352	14.2633	5.2627	0.6931	3.0217	13.8430	5.4054	0.0000
7.0876	0.0000	1.0959	11.4256	5.0751	0.0000	1.0345	11.3503	4.8673	0.0000
6.4489	0.0000	1.3493	11.7984	5.1761	0.0000	1.3732	12.0740	5.1761	0.0000
7.1763	0.6931	2.4208	13.0218	5.2664	0.6931	2.2929	13.1227	5.3145	0.0000
7.1317	0.6931	2.2918	12.9571	5.3411	0.6931	2.2612	13.0464	5.2267	0.0000
6.0283	0.0000	1.3760	10.4176	3.5864	0.0000	1.3774	10.3865	3.5893	0.0000
7.1436	0.0000	0.0136	10.8118	5.6329	0.0000	-0.0055	10.6511	5.1397	0.0000
7.2160	0.0000	0.9492	11.4645	5.1161	0.0000	0.6863	11.2501	5.0796	0.0000
6.2422	0.0000	1.3780	10.2995	3.5835	0.0000	1.3739	10.2908	3.5835	0.0000
5.7652	0.0000	2.4147	11.5870	3.7369	0.0000	2.4792	11.5844	3.6796	0.0000
6.0379	0.6931	1.7738	10.8740	3.8157	0.0000	1.7803	10.9153	3.9160	0.0000
5.5607	0.6931	2.0852	11.4447	4.0676	0.6931	2.0446	11.4305	4.2841	0.0000
5.2470	0.0000	2.0555	12.1017	4.8560	0.0000	2.0545	12.1417	4.8600	0.0000
5.3982	0.0000	1.7154	10.5590	3.6636	0.0000	1.6945	10.5147	3.6636	0.0000
5.7268	1.0986	3.3192	12.9625	4.3913	0.0000	2.8901	12.6580	4.2770	0.0000
5.6131	0.0000	1.6023	10.4643	3.7873	0.0000	1.7908	10.7707	3.8891	0.0000
6.0113	0.0000	0.6411	9.5540	3.5836	0.0000	0.6654	9.3910	3.5725	0.0000
6.5103	0.0000	0.6710	10.3324	4.3033	0.0000	0.6821	10.2042	4.3041	0.0000
6.9157	1.0986	3.5095	14.1890	5.2113	1.0986	3.5681	14.1744	5.1983	0.0000
7.3865	0.6931	1.8416	12.9546	5.6644	0.6931	1.7931	12.8629	5.6992	0.0000
5.6419	0.0000	1.6056	10.3910	3.5835	0.0000	1.7517	10.5111	3.5835	0.0000
5.6204	0.0000	1.7507	11.4567	4.5980	0.0000	1.8063	11.4706	4.5458	0.0000
5.9243	0.0000	1.7644	11.4660	4.5721	0.0000	1.7835	11.3838	4.3126	0.0000
5.5491	0.0000	2.2982	11.1916	3.5835	0.0000	2.0920	11.0408	3.5835	0.0000
5.3799	0.0000	1.3500	10.6985	4.3058	0.0000	1.7208	10.9373	4.3097	0.0000
5.1705	0.0000	0.5908	9.1356	3.5835	0.0000	0.5724	9.0549	3.5835	0.0000
5.1705	0.0000	0.5908	9.1356	3.5835	0.0000	0.5724	9.0549	3.5835	0.0000
7.0859	0.0000	0.9439	11.6806	5.3141	0.0000	0.9256	11.5181	5.2349	0.6931
5.8777	0.0000	1.3256	10.7985	4.4735	0.0000	1.2771	10.5373	4.3059	0.6931
6.9584	0.6931	2.7308	13.6075	5.3395	0.6931	2.6300	13.4692	5.2987	0.6931
7.1082	0.0000	0.6794	10.8601	4.8547	0.0000	0.6849	11.0190	5.1280	0.6931
5.4723	0.0000	0.6440	9.7650	3.5835	0.0000	0.6118	9.4948	3.5835	0.6931
7.1172	0.0000	0.3616	10.7032	5.1199	0.0000	0.3786	10.6363	5.1276	0.6931
7.0527	0.6931	2.2932	12.9670	5.1406	0.6931	2.2982	12.9409	5.1426	0.6931
7.2211	0.0000	0.6863	10.8207	4.8616	0.0000	0.6863	10.9317	4.9660	0.6931
5.8693	0.6931	2.4776	12.0582	4.2275	0.6931	2.4674	11.9163	4.2676	0.6931
6.5367	0.0000	2.4690	13.1203	5.2110	0.0000	2.4757	13.0927	5.2514	0.6931
6.6657	0.0000	1.4659	11.3939	4.4121	0.0000	1.2748	11.1281	4.4142	0.6931
6.8522	0.0000	1.8009	11.5134	4.2143	0.0000	1.8699	11.5955	4.2201	0.6931
5.7268	0.0000	1.7826	11.4002	4.2108	0.0000	1.8559	11.3425	3.9229	0.6931
6.5294	0.0000	1.7687	12.2243	5.1038	0.0000	1.7766	12.2734	5.0931	0.6931
6.5568	0.0000	1.5968	11.6040	4.4183	0.0000	1.3739	11.2793	4.4262	0.6931
6.7685	0.0000	2.0722	11.7853	4.3193	0.0000	1.8610	11.7326	4.3272	0.6931

6.1463	0.0000	1.9514	11.4293	4.1002	0.0000	1.8695	11.3728	3.9140	0.6931
6.0753	0.0000	1.3718	11.3920	4.8291	0.6931	1.3655	11.3154	4.5057	0.6931
6.3986	0.0000	1.3697	10.7489	3.9449	0.0000	0.6640	10.1869	3.9120	0.6931
6.4877	0.6931	2.6201	12.3836	4.3944	0.6931	2.4679	12.4080	4.6782	0.6931
6.6884	1.0986	3.5413	13.7795	4.8873	1.0986	3.3705	13.8032	4.8608	0.6931
6.9098	0.0000	1.3578	11.0276	4.2174	0.0000	0.6724	10.6187	4.2485	0.6931
7.1357	1.3863	2.7446	12.7651	4.6750	1.0986	2.4001	12.4140	4.5201	0.6931
6.4983	1.3863	3.5219	13.5024	4.7367	1.0986	3.2097	13.3704	4.6071	0.6931
6.3190	0.6931	2.8750	13.5595	5.3922	0.6931	2.8794	13.5413	5.4126	0.6931
6.5806	0.0000	1.3931	11.0922	4.3176	0.0000	1.3697	11.0740	4.3047	0.6931
6.6758	0.6931	2.3788	11.9800	4.1955	0.6931	2.2857	11.8388	4.2052	0.6931
6.0936	0.6931	2.2672	11.4982	4.1171	0.0000	1.7286	11.2097	3.9989	0.6931
6.0890	0.0000	0.6807	10.2586	4.3307	0.0000	0.6794	10.1527	3.9978	0.6931
6.5930	0.0000	1.7830	11.3237	4.0774	0.0000	1.7830	11.3380	4.1767	0.6931
6.1924	0.0000	2.0695	12.7373	5.3090	0.0000	2.0639	12.7197	5.2833	0.6931
6.4953	0.6931	2.2782	11.8026	4.0074	0.6931	2.2030	11.6826	3.9960	0.6931
6.5793	0.0000	1.3725	11.4940	4.8690	0.0000	1.3767	11.5088	4.8363	0.6931
6.6201	0.0000	0.7281	11.1635	5.1761	0.0000	1.3794	11.8767	5.1761	0.6931
6.6933	0.0000	1.2042	11.6404	5.1761	0.0000	1.3753	11.9073	5.1761	0.6931
6.4693	0.0000	1.3697	10.9001	4.2461	0.0000	1.3641	10.7272	3.9120	0.6931
6.2146	1.0986	2.3637	12.9069	5.1143	0.6931	2.2941	12.8485	5.1996	0.6931
6.3784	0.6931	2.0750	13.0774	5.3165	0.6931	2.0739	13.0529	5.3572	0.6931
6.6227	0.0000	2.0968	12.9397	5.1930	0.0000	1.2326	11.8950	5.1632	0.6931
6.8002	0.6931	1.3690	10.9652	4.7613	0.0000	1.3669	10.8066	4.0898	0.6931
7.0094	1.6094	3.2396	13.7254	5.1175	1.6094	3.1612	13.5806	5.1007	0.6931
7.5427	1.6094	2.8259	13.5052	5.1966	1.6094	2.6557	13.2159	5.1810	0.6931
6.7935	1.6094	3.3466	13.9810	5.1437	1.6094	3.1564	13.6956	5.1489	0.6931
5.0876	0.0000	0.5678	9.3376	4.0324	0.0000	0.5801	9.1734	4.0253	0.6931
5.8665	0.0000	1.7252	12.1026	5.1190	0.0000	1.6879	12.1234	5.1126	0.6931
6.3456	0.0000	2.4709	13.5777	5.6580	0.0000	2.4676	13.5427	5.6071	0.6931
6.2691	0.6931	3.1674	14.3066	5.6929	0.6931	3.0991	14.2676	5.7683	0.6931
6.2729	0.0000	1.3753	11.8976	5.1431	0.0000	1.3801	11.9075	5.1263	0.6931
6.2422	0.6931	4.1009	15.4784	5.8777	0.6931	4.0866	15.4220	5.8831	0.6931
6.5191	1.0986	3.1233	13.9245	5.3042	1.0986	3.0356	13.8644	5.3240	0.6931
6.5439	0.6931	2.0615	12.8945	5.4365	0.6931	2.7164	13.5856	5.2404	0.6931
6.4520	0.0000	1.7701	11.5255	4.4022	0.0000	1.7747	11.5141	4.4183	0.6931
6.5028	0.0000	2.0705	12.6608	5.1338	0.0000	2.0618	12.5693	5.1251	0.6931
6.6542	0.0000	2.3874	13.1487	5.2312	0.0000	2.3336	12.9356	5.2303	0.6931
6.6859	0.0000	2.3770	13.3110	5.3517	0.0000	2.3588	13.1174	5.2995	0.6931
6.8101	0.0000	0.6863	11.1695	5.1255	0.0000	0.6794	11.0426	5.1336	0.6931
6.5294	0.6931	2.9861	13.7693	5.4561	0.6931	2.9773	13.7218	5.3940	0.6931
6.6720	0.6931	3.4801	14.3993	5.5395	0.6931	3.4903	14.4146	5.5259	0.6931
6.8405	0.6931	2.8993	13.5849	5.4211	0.6931	2.8787	13.5674	5.3736	0.6931
6.5554	0.6931	3.0286	13.6732	5.2881	0.6931	2.9862	13.5934	5.2527	0.6931
6.5667	0.6931	3.1655	14.0048	5.4746	0.6931	3.1639	13.9635	5.4337	0.6931
6.7558	0.6931	3.1677	14.1659	5.6036	0.6931	3.1669	14.1729	5.5516	0.6931
6.7142	0.6931	2.9879	13.6878	5.3503	0.6931	2.8821	13.6240	5.3456	0.6931
6.8648	0.6931	3.5049	13.9729	5.0150	0.6931	3.5201	13.9191	4.9688	0.6931
6.9479	1.3863	4.7092	15.8864	5.6922	1.3863	4.5972	15.8390	5.7539	0.6931
7.0300	0.0000	2.1610	12.6271	5.0411	0.0000	2.1524	12.5918	5.0672	0.6931
7.0414	1.3863	3.5756	14.5829	5.4352	1.3863	3.3274	14.1631	5.4366	0.6931
6.9903	1.3863	3.7282	14.5200	5.3704	1.3863	3.6771	14.4615	5.3596	0.6931
6.8330	1.0986	3.3222	13.9491	5.2602	1.0986	3.2534	13.9319	5.3804	0.6931
6.9305	1.0986	3.5746	14.1417	5.2132	1.0986	3.5695	14.0966	5.1391	0.6931
7.0130	1.3863	3.8305	14.6414	5.4505	1.3863	3.7368	14.6089	5.4293	0.6931
7.2696	0.0000	0.6849	11.3273	5.1045	0.0000	0.6724	11.2844	5.0428	0.6931
7.4307	1.0986	4.0314	15.4439	5.9145	1.3863	4.0087	15.4292	5.8984	0.6931
7.6109	0.0000	0.6752	11.1927	5.0021	0.0000	0.7121	11.1850	4.9932	0.6931

7.6829	0.6931	1.7455	12.5887	5.2452	0.0000	1.0986	11.7500	4.9976	0.6931
6.9393	1.0986	2.5616	13.0705	5.0762	0.6931	2.2941	13.0165	5.2734	0.6931
6.9068	0.6931	2.6249	13.1723	5.0318	0.6931	2.6284	13.1313	5.0816	0.6931
7.0193	0.0000	0.6682	11.3344	5.3088	0.0000	0.6821	11.3303	5.2871	0.6931
6.7957	1.3863	4.6828	16.0072	5.7845	1.3863	4.6928	15.9767	5.7741	0.6931
6.6670	1.0986	2.7101	13.9070	5.6791	1.0986	2.7267	13.8496	5.6428	0.6931
4.6444	0.0000	1.7223	9.9530	2.9460	0.0000	1.7291	9.8913	2.9444	0.6931
4.9904	0.0000	1.9680	10.2934	2.9504	0.0000	1.9607	10.2330	2.9444	0.6931
5.1475	0.0000	1.6327	9.9209	2.9150	0.0000	1.6591	9.8933	2.9450	0.6931
6.3716	0.0000	1.3774	10.9632	4.3049	0.0000	1.3655	10.8653	4.3052	0.6931
6.4151	0.6931	2.9853	12.8606	4.4536	0.6931	2.8744	12.7653	4.4467	0.6931
7.0527	0.6931	1.7710	11.7763	4.7087	0.6931	1.7583	11.7017	4.7444	0.6931
6.6267	1.0986	2.3515	11.9393	4.4772	1.0986	2.2349	11.9288	4.5324	0.6931
6.7742	0.0000	0.6821	10.9227	4.8584	0.0000	0.6794	10.9061	4.8363	0.6931
6.6871	0.0000	2.0597	11.8361	4.4605	0.0000	1.3856	11.7537	5.0392	0.6931
6.8659	0.0000	0.6752	11.0982	4.8389	0.0000	0.6835	11.1346	4.8363	0.6931
6.8090	0.0000	0.6625	10.6445	4.3497	0.0000	0.6752	10.5277	4.3359	0.6931
6.7901	0.0000	0.6668	10.6162	4.3467	0.0000	0.6807	10.5604	4.3360	0.6931
6.7754	0.0000	1.7738	11.6238	4.3618	0.0000	1.5617	11.3740	4.3475	0.6931
7.0361	0.6931	0.9691	11.2463	5.0164	0.0000	0.9702	11.1537	4.7624	0.6931
6.2989	0.0000	1.7872	11.5386	4.3037	0.0000	1.7844	11.4913	4.3046	0.6931
6.6120	1.3863	3.2071	13.6340	4.9574	0.6931	2.9352	13.2943	4.9560	0.6931
6.7214	0.0000	1.3931	11.8051	5.0366	0.0000	1.3801	11.7254	5.0034	0.6931
6.6201	0.0000	1.7881	11.8837	4.8641	0.0000	1.7715	11.9133	4.9567	0.6931
6.4167	0.0000	1.3669	11.1060	4.2485	0.0000	1.3704	11.0455	4.2485	0.6931
6.5396	0.0000	1.7999	12.0977	4.9998	0.0000	1.7803	12.0702	4.9569	0.6931
6.6921	0.6931	2.3660	12.8442	5.1620	0.0000	2.0753	12.5509	5.1371	0.6931
7.2930	1.0986	2.9691	13.7575	5.2320	1.0986	3.0189	13.7630	5.1900	0.6931
6.9884	1.6094	3.4215	14.0544	5.2028	1.0986	3.3397	13.8849	5.1471	0.6931
6.8669	0.0000	0.9702	11.4309	5.1127	0.0000	1.0480	11.4325	4.8814	0.6931
6.6201	0.0000	2.2946	12.3081	4.4130	0.0000	2.3681	12.3116	4.4109	0.6931
6.6783	0.0000	1.7085	11.5881	4.4280	0.0000	1.4331	11.2058	4.3543	0.6931
5.1648	0.0000	1.2945	10.2558	3.5460	0.0000	1.2555	10.1630	3.5260	0.6931
5.9026	0.0000	0.6611	10.4753	4.4058	0.0000	0.6766	10.5152	4.4021	0.6931
5.8916	0.0000	2.4676	11.8088	3.8884	0.0000	2.4634	11.6229	3.8556	0.6931
5.9349	0.6931	3.1681	13.1477	4.6560	0.0000	3.0852	13.0843	4.5540	0.6931
5.7038	0.0000	2.4838	12.5368	4.8022	0.0000	2.8764	12.5504	4.4014	0.6931
6.3596	1.0986	3.4446	13.4416	4.7075	1.0986	3.2631	13.3202	4.6347	0.6931
6.5117	0.6931	2.5102	12.6606	4.6875	0.6931	2.4767	12.5448	4.7039	0.6931
6.4313	1.0986	2.9976	12.9910	4.5882	1.0986	2.9112	12.9675	4.5619	0.6931
6.1356	0.6931	2.6503	12.1717	4.1904	0.6931	2.4810	12.1010	4.2591	0.6931
6.3421	1.3863	3.1978	13.2067	4.6422	0.6931	2.9592	13.1478	4.6119	0.6931
6.4846	0.6931	3.2574	13.4302	4.8629	0.6931	3.1735	13.4095	4.8527	0.6931
6.5610	0.0000	0.6766	10.4570	4.3041	0.0000	0.6668	10.4509	4.3033	0.6931
6.8967	0.0000	0.7996	11.3153	5.1059	0.0000	0.7822	11.3097	5.1251	0.6931
7.1732	0.6931	2.0019	13.4839	5.8574	0.6931	1.5379	13.3000	6.1230	0.6931
7.0570	0.6931	2.1131	13.2254	5.4448	0.6931	1.8937	13.0166	5.5495	0.6931
6.3154	1.0986	2.7290	13.3962	5.1136	1.0986	2.3376	13.0779	5.1252	0.6931
7.1397	1.3863	3.2193	13.9434	5.0847	1.3863	3.2658	13.9431	5.1801	0.6931
7.4085	1.0986	1.7085	12.2951	5.1027	0.0000	1.2461	11.7757	4.9267	0.6931
7.1770	1.3863	3.3448	14.1748	5.1786	1.6094	3.5352	14.2633	5.2627	0.6931
7.0876	0.0000	1.0913	11.3340	4.9175	0.0000	1.0959	11.4256	5.0751	0.6931
6.4489	0.0000	1.1597	11.5568	5.1761	0.0000	1.3493	11.7984	5.1761	0.6931
7.1763	0.6931	2.3601	12.9378	5.2746	0.6931	2.4208	13.0218	5.2664	0.6931
7.1317	1.0986	2.1942	12.8433	5.0894	0.6931	2.2918	12.9571	5.3411	0.6931
6.0283	0.0000	1.3760	10.4758	3.5864	0.0000	1.3760	10.4176	3.5864	0.6931
7.1436	0.0000	0.6794	11.1357	4.9178	0.0000	0.0136	10.8118	5.6329	0.6931
7.2160	0.6931	1.3808	11.8484	5.1127	0.0000	0.9492	11.4645	5.1161	0.6931

6.2422	0.0000	1.3774	10.3522	3.5835	0.0000	1.3780	10.2995	3.5835	0.6931
5.7652	0.0000	2.6389	11.6649	3.6688	0.0000	2.4147	11.5870	3.7369	0.6931
6.0379	0.6931	1.7840	10.9426	3.8124	0.6931	1.7738	10.8740	3.8157	0.6931
5.5607	0.6931	2.0812	11.5185	4.0542	0.6931	2.0852	11.4447	4.0676	0.6931
5.2470	0.0000	2.0552	12.1447	4.8422	0.0000	2.0555	12.1017	4.8560	0.6931
5.3982	0.0000	1.7015	10.7308	3.6636	0.0000	1.7154	10.5590	3.6636	0.6931
5.7268	1.3863	3.3924	13.0659	4.3945	1.0986	3.3192	12.9625	4.3913	0.6931
5.6131	0.0000	1.3794	10.1687	3.5850	0.0000	1.6023	10.4643	3.7873	0.6931
6.0113	0.0000	0.6540	9.5978	3.5788	0.0000	0.6411	9.5540	3.5836	0.6931
6.5103	0.0000	0.6904	10.4348	4.3041	0.0000	0.6710	10.3324	4.3033	0.6931
6.9157	1.0986	3.5045	14.2285	5.1950	1.0986	3.5095	14.1890	5.2113	0.6931
7.3865	1.0986	2.0757	13.0893	5.5537	0.6931	1.8416	12.9546	5.6644	0.6931
5.6419	0.0000	1.9011	10.7802	3.5835	0.0000	1.6056	10.3910	3.5835	0.6931
5.6204	0.0000	1.7649	11.4956	4.6625	0.0000	1.7507	11.4567	4.5980	0.6931
5.9243	0.0000	1.7649	11.4998	4.3116	0.0000	1.7644	11.4660	4.5721	0.6931
5.5491	0.0000	2.1797	11.2775	3.5835	0.0000	2.2982	11.1916	3.5835	0.6931
5.3799	0.0000	1.3683	11.0030	4.3074	0.0000	1.3500	10.6985	4.3058	0.6931
5.1705	0.0000	0.6295	9.2360	3.5835	0.0000	0.5908	9.1356	3.5835	0.6931
5.1705	0.0000	0.6295	9.2360	3.5835	0.0000	0.5908	9.1356	3.5835	0.6931
7.0859	0.0000	0.9460	11.6910	5.2957	0.0000	0.9439	11.6806	5.3141	1.0986
5.8777	0.0000	1.2870	10.7685	4.4706	0.0000	1.3256	10.7985	4.4735	1.0986
6.9584	0.6931	2.6345	13.6081	5.3706	0.6931	2.7308	13.6075	5.3395	1.0986
7.1082	0.0000	0.6821	10.8681	4.9359	0.0000	0.6794	10.8601	4.8547	1.0986
5.4723	0.0000	0.6738	9.7452	3.5835	0.0000	0.6440	9.7650	3.5835	1.0986
7.1172	0.0000	0.6625	11.0848	5.1170	0.0000	0.3616	10.7032	5.1199	1.0986
7.0527	0.6931	2.2860	12.9630	5.1391	0.6931	2.2932	12.9670	5.1406	1.0986
7.2211	0.0000	0.6724	10.8052	4.8381	0.0000	0.6863	10.8207	4.8616	1.0986
5.8693	0.6931	2.5946	12.0780	4.1343	0.6931	2.4776	12.0582	4.2275	1.0986
6.5367	0.0000	2.4716	13.0836	5.1175	0.0000	2.4690	13.1203	5.2110	1.0986
6.6657	0.0000	1.5098	11.4088	4.3953	0.0000	1.4659	11.3939	4.4121	1.0986
6.8522	0.6931	2.3192	11.9924	4.2921	0.0000	1.8009	11.5134	4.2143	1.0986
5.7268	0.6931	2.1483	11.6131	4.2212	0.0000	1.7826	11.4002	4.2108	1.0986
6.5294	0.0000	1.7272	12.0836	4.9088	0.0000	1.7687	12.2243	5.1038	1.0986
6.5568	0.0000	1.7733	11.6922	4.3740	0.0000	1.5968	11.6040	4.4183	1.0986
6.7685	0.0000	2.0552	11.7783	4.1784	0.0000	2.0722	11.7853	4.3193	1.0986
6.1463	0.0000	1.9388	11.4026	4.0679	0.0000	1.9514	11.4293	4.1002	1.0986
6.0753	0.0000	1.3767	11.3146	4.8284	0.0000	1.3718	11.3920	4.8291	1.0986
6.3986	0.0000	1.3620	10.9040	4.2076	0.0000	1.3697	10.7489	3.9449	1.0986
6.4877	0.6931	2.6125	12.3078	4.3610	0.6931	2.6201	12.3836	4.3944	1.0986
6.6884	1.0986	3.3539	13.7045	4.8522	1.0986	3.5413	13.7795	4.8873	1.0986
6.9098	0.0000	1.3662	11.1474	4.2171	0.0000	1.3578	11.0276	4.2174	1.0986
7.1357	1.3863	2.6215	12.7516	4.7740	1.3863	2.7446	12.7651	4.6750	1.0986
6.4983	1.6094	3.5172	13.5247	4.7132	1.3863	3.5219	13.5024	4.7367	1.0986
6.3190	0.6931	2.8795	13.5624	5.3343	0.6931	2.8750	13.5595	5.3922	1.0986
6.5806	0.0000	1.3746	11.0366	4.3040	0.0000	1.3931	11.0922	4.3176	1.0986
6.6758	0.6931	2.4801	12.0340	4.1550	0.6931	2.3788	11.9800	4.1955	1.0986
6.0936	0.6931	2.2287	11.4752	4.0963	0.6931	2.2672	11.4982	4.1171	1.0986
6.0890	0.0000	1.3767	11.2211	4.3307	0.0000	0.6807	10.2586	4.3307	1.0986
6.5930	0.0000	1.7867	11.3541	4.1917	0.0000	1.7830	11.3237	4.0774	1.0986
6.1924	0.0000	2.0674	12.7705	5.2494	0.0000	2.0695	12.7373	5.3090	1.0986
6.4953	0.6931	2.0625	11.8953	4.3846	0.6931	2.2782	11.8026	4.0074	1.0986
6.5793	0.0000	1.3571	11.4235	4.8959	0.0000	1.3725	11.4940	4.8690	1.0986
6.6201	0.0000	-1.1637	8.9813	5.1761	0.0000	0.7281	11.1635	5.1761	1.0986
6.6933	0.0000	1.2915	11.8332	5.1761	0.0000	1.2042	11.6404	5.1761	1.0986
6.4693	0.0000	0.6752	10.2367	4.1860	0.0000	1.3697	10.9001	4.2461	1.0986
6.2146	0.6931	2.1622	12.7362	5.0468	1.0986	2.3637	12.9069	5.1143	1.0986
6.3784	0.6931	2.0764	13.0721	5.3512	0.6931	2.0750	13.0774	5.3165	1.0986
6.6227	0.6931	2.7636	13.6157	5.1926	0.0000	2.0968	12.9397	5.1930	1.0986

6.8002	0.6931	1.5261	11.8680	4.9130	0.6931	1.3690	10.9652	4.7613	1.0986
7.0094	1.0986	3.0151	13.6249	5.1128	1.6094	3.2396	13.7254	5.1175	1.0986
7.5427	1.6094	2.8026	13.5785	5.2553	1.6094	2.8259	13.5052	5.1966	1.0986
6.7935	1.6094	3.3237	14.0591	5.1654	1.6094	3.3466	13.9810	5.1437	1.0986
5.0876	0.0000	0.5801	9.3086	4.7872	0.0000	0.5678	9.3376	4.0324	1.0986
5.8665	0.0000	1.7286	12.0260	5.1113	0.0000	1.7252	12.1026	5.1190	1.0986
6.3456	0.0000	2.4637	13.5680	5.6731	0.0000	2.4709	13.5777	5.6580	1.0986
6.2691	0.6931	3.1697	14.3091	5.6798	0.6931	3.1674	14.3066	5.6929	1.0986
6.2729	0.0000	1.3822	11.8622	5.1300	0.0000	1.3753	11.8976	5.1431	1.0986
6.2422	0.6931	4.1188	15.4784	5.8375	0.6931	4.1009	15.4784	5.8777	1.0986
6.5191	1.0986	3.1444	13.9170	5.3056	1.0986	3.1233	13.9245	5.3042	1.0986
6.5439	0.6931	2.3397	13.0626	5.3193	0.6931	2.0615	12.8945	5.4365	1.0986
6.4520	0.0000	1.7729	11.4827	4.3435	0.0000	1.7701	11.5255	4.4022	1.0986
6.5028	0.0000	2.2924	12.6962	5.0998	0.0000	2.0705	12.6608	5.1338	1.0986
6.6542	0.6931	2.5850	13.2210	5.1903	0.0000	2.3874	13.1487	5.2312	1.0986
6.6859	0.0000	2.3732	13.2284	5.3753	0.0000	2.3770	13.3110	5.3517	1.0986
6.8101	0.0000	1.3815	11.5636	4.9799	0.0000	0.6863	11.1695	5.1255	1.0986
6.5294	0.6931	3.1222	13.7844	5.4063	0.6931	2.9861	13.7693	5.4561	1.0986
6.6720	0.6931	3.5193	14.4007	5.4892	0.6931	3.4801	14.3993	5.5395	1.0986
6.8405	0.6931	2.9337	13.6162	5.3323	0.6931	2.8993	13.5849	5.4211	1.0986
6.5554	0.6931	3.1669	13.7181	5.3447	0.6931	3.0286	13.6732	5.2881	1.0986
6.5667	0.6931	3.2475	13.9829	5.3948	0.6931	3.1655	14.0048	5.4746	1.0986
6.7558	0.6931	3.1729	14.1650	5.5467	0.6931	3.1677	14.1659	5.6036	1.0986
6.7142	0.6931	2.9890	13.6988	5.3220	0.6931	2.9879	13.6878	5.3503	1.0986
6.8648	0.6931	3.5653	13.9767	5.0409	0.6931	3.5049	13.9729	5.0150	1.0986
6.9479	1.3863	4.6782	15.9225	5.7132	1.3863	4.7092	15.8864	5.6922	1.0986
7.0300	0.0000	2.3770	12.8250	5.0048	0.0000	2.1610	12.6271	5.0411	1.0986
7.0414	1.3863	3.5793	14.6105	5.4226	1.3863	3.5756	14.5829	5.4352	1.0986
6.9903	1.0986	3.6006	14.4744	5.4183	1.3863	3.7282	14.5200	5.3704	1.0986
6.8330	1.0986	3.3250	13.9553	5.2087	1.0986	3.3222	13.9491	5.2602	1.0986
6.9305	1.0986	3.5690	14.1340	5.2136	1.0986	3.5746	14.1417	5.2132	1.0986
7.0130	1.3863	3.8180	14.6250	5.4204	1.3863	3.8305	14.6414	5.4505	1.0986
7.2696	0.0000	0.6668	11.0770	5.1059	0.0000	0.6849	11.3273	5.1045	1.0986
7.4307	1.0986	3.9892	15.4057	5.8941	1.0986	4.0314	15.4439	5.9145	1.0986
7.6109	0.0000	0.6835	11.2485	4.9768	0.0000	0.6752	11.1927	5.0021	1.0986
7.6829	1.0986	2.6028	13.6497	5.2237	0.6931	1.7455	12.5887	5.2452	1.0986
6.9393	1.0986	2.4637	13.0517	5.1028	1.0986	2.5616	13.0705	5.0762	1.0986
6.9068	0.6931	2.6269	13.1864	5.0928	0.6931	2.6249	13.1723	5.0318	1.0986
7.0193	0.0000	0.6569	11.3583	5.3269	0.0000	0.6682	11.3344	5.3088	1.0986
6.7957	1.3863	4.6651	16.0025	5.7682	1.3863	4.6828	16.0072	5.7845	1.0986
6.6670	1.0986	2.7671	13.9042	5.6367	1.0986	2.7101	13.9070	5.6791	1.0986
4.6444	0.0000	1.7203	9.9534	2.9444	0.0000	1.7223	9.9530	2.9460	1.0986
4.9904	0.0000	1.9832	10.3291	2.9444	0.0000	1.9680	10.2934	2.9504	1.0986
5.1475	0.0000	1.6550	9.9376	2.9444	0.0000	1.6327	9.9209	2.9150	1.0986
6.3716	0.0000	1.3641	10.8498	4.3041	0.0000	1.3774	10.9632	4.3049	1.0986
6.4151	1.0986	2.9787	12.9018	4.4495	0.6931	2.9853	12.8606	4.4536	1.0986
7.0527	0.6931	1.7715	11.7969	4.7383	0.6931	1.7710	11.7763	4.7087	1.0986
6.6267	1.0986	2.3392	11.9371	4.5484	1.0986	2.3515	11.9393	4.4772	1.0986
6.7742	0.0000	0.6668	10.9459	4.8951	0.0000	0.6821	10.9227	4.8584	1.0986
6.6871	0.6931	2.0695	11.8840	4.4432	0.0000	2.0597	11.8361	4.4605	1.0986
6.8659	0.0000	0.7108	11.1721	4.9670	0.0000	0.6752	11.0982	4.8389	1.0986
6.8090	0.0000	0.6849	10.6636	4.4278	0.0000	0.6625	10.6445	4.3497	1.0986
6.7901	0.0000	0.6526	10.6624	4.4281	0.0000	0.6668	10.6162	4.3467	1.0986
6.7754	0.0000	1.7807	11.6669	4.4103	0.0000	1.7738	11.6238	4.3618	1.0986
7.0361	0.6931	0.9660	11.2732	5.0191	0.6931	0.9691	11.2463	5.0164	1.0986
6.2989	0.0000	1.7794	11.5664	4.3047	0.0000	1.7872	11.5386	4.3037	1.0986
6.6120	1.3863	3.1381	13.5743	4.9561	1.3863	3.2071	13.6340	4.9574	1.0986
6.7214	0.0000	1.3863	11.8496	5.0409	0.0000	1.3931	11.8051	5.0366	1.0986

6.6201	0.0000	2.0249	12.0617	4.9806	0.0000	1.7881	11.8837	4.8641	1.0986
6.4167	0.0000	1.3613	11.0774	4.2065	0.0000	1.3669	11.1060	4.2485	1.0986
6.5396	0.0000	1.7780	12.0223	4.9280	0.0000	1.7999	12.0977	4.9998	1.0986
6.6921	0.6931	2.4249	12.8925	5.1123	0.6931	2.3660	12.8442	5.1620	1.0986
7.2930	1.0986	2.9502	13.7758	5.2259	1.0986	2.9691	13.7575	5.2320	1.0986
6.9884	1.3863	3.3522	14.0155	5.1688	1.6094	3.4215	14.0544	5.2028	1.0986
6.8669	0.0000	0.9650	11.4146	5.1165	0.0000	0.9702	11.4309	5.1127	1.0986
6.6201	0.0000	2.2974	12.3018	4.4188	0.0000	2.2946	12.3081	4.4130	1.0986
6.6783	0.0000	1.7654	11.5411	4.3833	0.0000	1.7085	11.5881	4.4280	1.0986
5.1648	0.0000	1.2847	10.2637	3.5449	0.0000	1.2945	10.2558	3.5460	1.0986
5.9026	0.0000	0.6766	10.4548	4.3988	0.0000	0.6611	10.4753	4.4058	1.0986
5.8916	0.0000	2.2734	11.6947	4.1272	0.0000	2.4676	11.8088	3.8884	1.0986
5.9349	0.6931	3.1700	13.1580	4.6402	0.6931	3.1681	13.1477	4.6560	1.0986
5.7038	0.0000	2.4767	12.5284	4.5821	0.0000	2.4838	12.5368	4.8022	1.0986
6.3596	1.0986	3.2283	13.4162	4.6392	1.0986	3.4446	13.4416	4.7075	1.0986
6.5117	0.6931	2.6385	12.7697	4.6800	0.6931	2.5102	12.6606	4.6875	1.0986
6.4313	1.0986	2.9944	12.9543	4.5178	1.0986	2.9976	12.9910	4.5882	1.0986
6.1356	1.0986	2.6338	12.1893	4.2131	0.6931	2.6503	12.1717	4.1904	1.0986
6.3421	0.6931	3.0884	13.1971	4.6165	1.3863	3.1978	13.2067	4.6422	1.0986
6.4846	0.6931	3.2531	13.4606	4.8903	0.6931	3.2574	13.4302	4.8629	1.0986
6.5610	0.0000	0.6512	10.4187	4.3041	0.0000	0.6766	10.4570	4.3041	1.0986
6.8967	0.0000	0.7797	11.2621	5.1059	0.0000	0.7996	11.3153	5.1059	1.0986
7.1732	0.6931	2.2535	13.7362	5.9322	0.6931	2.0019	13.4839	5.8574	1.0986
7.0570	1.0986	2.8269	13.6138	5.1239	0.6931	2.1131	13.2254	5.4448	1.0986
6.3154	1.0986	2.4560	13.2138	5.1343	1.0986	2.7290	13.3962	5.1136	1.0986
7.1397	1.3863	3.2380	13.9615	5.1102	1.3863	3.2193	13.9434	5.0847	1.0986
7.4085	1.0986	1.7863	12.4164	5.1231	1.0986	1.7085	12.2951	5.1027	1.0986
7.1770	1.3863	3.3000	14.0878	5.1435	1.3863	3.3448	14.1748	5.1786	1.0986
7.0876	0.0000	1.0876	11.3149	4.9335	0.0000	1.0913	11.3340	4.9175	1.0986
6.4489	0.0000	0.6821	11.0992	5.1761	0.0000	1.1597	11.5568	5.1761	1.0986
7.1763	0.6931	2.0253	12.6942	5.1625	0.6931	2.3601	12.9378	5.2746	1.0986
7.1317	1.0986	2.2506	12.8357	5.0485	1.0986	2.1942	12.8433	5.0894	1.0986
6.0283	0.0000	1.6257	10.5098	3.5835	0.0000	1.3760	10.4758	3.5864	1.0986
7.1436	0.0000	0.6724	11.1224	4.9698	0.0000	0.6794	11.1357	4.9178	1.0986
7.2160	0.6931	1.3739	11.8326	5.1084	0.6931	1.3808	11.8484	5.1127	1.0986
6.2422	0.0000	1.3669	10.3314	3.5835	0.0000	1.3774	10.3522	3.5835	1.0986
5.7652	0.0000	2.3994	11.7347	4.0349	0.0000	2.6389	11.6649	3.6688	1.0986
6.0379	0.0000	2.0681	10.9967	3.5835	0.6931	1.7840	10.9426	3.8124	1.0986
5.5607	0.6931	2.0839	11.5207	4.0461	0.6931	2.0812	11.5185	4.0542	1.0986
5.2470	0.0000	2.0677	12.1310	4.6007	0.0000	2.0552	12.1447	4.8422	1.0986
5.3982	0.0000	1.7179	10.7649	3.6636	0.0000	1.7015	10.7308	3.6636	1.0986
5.7268	1.0986	3.3474	13.0818	4.2811	1.3863	3.3924	13.0659	4.3945	1.0986
5.6131	0.0000	1.3767	10.1075	3.5857	0.0000	1.3794	10.1687	3.5850	1.0986
6.0113	0.0000	0.6469	9.9469	4.3041	0.0000	0.6540	9.5978	3.5788	1.0986
6.5103	0.0000	1.1265	10.6389	4.3041	0.0000	0.6904	10.4348	4.3041	1.0986
6.9157	1.3863	3.5864	14.2699	5.1549	1.0986	3.5045	14.2285	5.1950	1.0986
7.3865	1.0986	2.0715	13.0560	5.4134	1.0986	2.0757	13.0893	5.5537	1.0986
5.6419	0.0000	1.9161	10.8884	3.5835	0.0000	1.9011	10.7802	3.5835	1.0986
5.6204	0.0000	1.7325	11.5062	4.6752	0.0000	1.7649	11.4956	4.6625	1.0986
5.9243	0.0000	1.7296	11.5026	4.3095	0.0000	1.7649	11.4998	4.3116	1.0986
5.5491	0.0000	2.2448	11.3705	3.5835	0.0000	2.1797	11.2775	3.5835	1.0986
5.3799	0.0000	1.3543	11.0487	4.3054	0.0000	1.3683	11.0030	4.3074	1.0986
5.1705	0.0000	0.6483	9.3142	3.5835	0.0000	0.6295	9.2360	3.5835	1.0986
5.1705	0.0000	0.6483	9.3142	3.5835	0.0000	0.6295	9.2360	3.5835	1.0986
7.0859	0.0000	0.9492	11.6315	5.3252	0.0000	0.9460	11.6910	5.2957	1.3863
5.8777	0.0000	1.2960	10.7420	4.3083	0.0000	1.2870	10.7685	4.4706	1.3863
6.9584	0.6931	2.6400	13.6367	5.4776	0.6931	2.6345	13.6081	5.3706	1.3863
7.1082	0.0000	0.6780	10.9031	4.9446	0.0000	0.6821	10.8681	4.9359	1.3863

5.4723	0.0000	0.6411	9.8104	3.5835	0.0000	0.6738	9.7452	3.5835	1.3863
7.1172	0.0000	0.6766	11.1175	5.1101	0.0000	0.6625	11.0848	5.1170	1.3863
7.0527	0.6931	2.3009	13.0218	5.1991	0.6931	2.2860	12.9630	5.1391	1.3863
7.2211	0.0000	0.6849	10.7580	4.8173	0.0000	0.6724	10.8052	4.8381	1.3863
5.8693	0.6931	2.6032	12.1120	4.1049	0.6931	2.5946	12.0780	4.1343	1.3863
6.5367	0.0000	2.4833	13.1521	5.1177	0.0000	2.4716	13.0836	5.1175	1.3863
6.6657	0.0000	1.6333	11.5092	4.3905	0.0000	1.5098	11.4088	4.3953	1.3863
6.8522	0.6931	2.4840	12.1317	4.2609	0.6931	2.3192	11.9924	4.2921	1.3863
5.7268	0.6931	2.2649	11.7100	4.0954	0.6931	2.1483	11.6131	4.2212	1.3863
6.5294	0.0000	1.7775	12.1696	4.9036	0.0000	1.7272	12.0836	4.9088	1.3863
6.5568	0.0000	1.7872	11.6893	4.4057	0.0000	1.7733	11.6922	4.3740	1.3863
6.7685	0.0000	2.0622	11.8588	4.2995	0.0000	2.0552	11.7783	4.1784	1.3863
6.1463	0.0000	1.9305	11.3941	3.9223	0.0000	1.9388	11.4026	4.0679	1.3863
6.0753	0.0000	1.3842	11.3667	4.8315	0.0000	1.3767	11.3146	4.8284	1.3863
6.3986	0.0000	1.3578	10.5095	4.1678	0.0000	1.3620	10.9040	4.2076	1.3863
6.4877	0.6931	2.6137	12.2436	4.3572	0.6931	2.6125	12.3078	4.3610	1.3863
6.6884	1.0986	3.3308	13.6823	4.8001	1.0986	3.3539	13.7045	4.8522	1.3863
6.9098	0.0000	1.3564	11.1149	4.1900	0.0000	1.3662	11.1474	4.2171	1.3863
7.1357	1.0986	2.4312	12.5710	4.5931	1.3863	2.6215	12.7516	4.7740	1.3863
6.4983	1.0986	3.2828	13.4906	4.6697	1.6094	3.5172	13.5247	4.7132	1.3863
6.3190	0.6931	2.8888	13.5828	5.2932	0.6931	2.8795	13.5624	5.3343	1.3863
6.5806	0.0000	1.3965	11.0223	4.3038	0.0000	1.3746	11.0366	4.3040	1.3863
6.6758	0.6931	2.4718	12.0638	4.1455	0.6931	2.4801	12.0340	4.1550	1.3863
6.0936	0.6931	2.1782	11.5044	4.1281	0.6931	2.2287	11.4752	4.0963	1.3863
6.0890	0.0000	1.3808	11.3358	4.3307	0.0000	1.3767	11.2211	4.3307	1.3863
6.5930	0.0000	1.7858	11.4401	4.2386	0.0000	1.7867	11.3541	4.1917	1.3863
6.1924	0.0000	2.0767	12.7626	5.2112	0.0000	2.0674	12.7705	5.2494	1.3863
6.4953	0.6931	2.0691	12.0074	4.6642	0.6931	2.0625	11.8953	4.3846	1.3863
6.5793	0.0000	0.6877	11.1422	5.0753	0.0000	1.3571	11.4235	4.8959	1.3863
6.6201	0.0000	0.8924	11.3664	5.1761	0.0000	-1.1637	8.9813	5.1761	1.3863
6.6933	0.0000	1.0059	11.7143	5.1761	0.0000	1.2915	11.8332	5.1761	1.3863
6.4693	0.0000	0.6724	10.1254	4.2381	0.0000	0.6752	10.2367	4.1860	1.3863
6.2146	0.6931	2.1707	12.7322	4.9998	0.6931	2.1622	12.7362	5.0468	1.3863
6.3784	0.6931	2.0808	13.0146	5.2745	0.6931	2.0764	13.0721	5.3512	1.3863
6.6227	0.6931	2.6902	13.6355	5.1641	0.6931	2.7636	13.6157	5.1926	1.3863
6.8002	0.6931	1.7383	12.2926	4.9866	0.6931	1.5261	11.8680	4.9130	1.3863
7.0094	1.3863	3.1257	13.9339	5.1628	1.0986	3.0151	13.6249	5.1128	1.3863
7.5427	1.0986	2.5887	13.5243	5.2544	1.6094	2.8026	13.5785	5.2553	1.3863
6.7935	1.6094	3.4727	14.3360	5.1533	1.6094	3.3237	14.0591	5.1654	1.3863
5.0876	0.0000	0.0714	8.7564	4.7874	0.0000	0.5801	9.3086	4.7872	1.3863
5.8665	0.0000	1.6940	12.0050	5.1045	0.0000	1.7286	12.0260	5.1113	1.3863
6.3456	0.0000	2.4718	13.0360	5.1475	0.0000	2.4637	13.5680	5.6731	1.3863
6.2691	0.6931	3.1719	13.8475	5.2056	0.6931	3.1697	14.3091	5.6798	1.3863
6.2729	0.0000	1.3794	11.9041	5.1115	0.0000	1.3822	11.8622	5.1300	1.3863
6.2422	0.6931	4.0944	15.4631	5.8030	0.6931	4.1188	15.4784	5.8375	1.3863
6.5191	1.0986	3.1644	13.9560	5.3095	1.0986	3.1444	13.9170	5.3056	1.3863
6.5439	0.6931	2.5124	13.3120	5.3550	0.6931	2.3397	13.0626	5.3193	1.3863
6.4520	0.0000	1.7761	11.6491	4.4854	0.0000	1.7729	11.4827	4.3435	1.3863
6.5028	0.0000	2.2946	12.7620	5.1020	0.0000	2.2924	12.6962	5.0998	1.3863
6.6542	0.0000	2.4276	13.1538	5.2140	0.6931	2.5850	13.2210	5.1903	1.3863
6.6859	0.0000	2.2990	13.2296	5.3406	0.0000	2.3732	13.2284	5.3753	1.3863
6.8101	0.0000	1.3718	11.6595	5.0387	0.0000	1.3815	11.5636	4.9799	1.3863
6.5294	0.6931	3.0971	13.8109	5.4117	0.6931	3.1222	13.7844	5.4063	1.3863
6.6720	0.6931	3.5072	14.3165	5.4908	0.6931	3.5193	14.4007	5.4892	1.3863
6.8405	1.0986	2.9891	13.6484	5.2772	0.6931	2.9337	13.6162	5.3323	1.3863
6.5554	0.6931	3.1355	13.7125	5.3096	0.6931	3.1669	13.7181	5.3447	1.3863
6.5667	0.6931	3.2484	13.9966	5.3591	0.6931	3.2475	13.9829	5.3948	1.3863
6.7558	0.6931	3.1737	14.1622	5.5238	0.6931	3.1729	14.1650	5.5467	1.3863

6.7142	0.6931	2.9952	13.7084	5.2989	0.6931	2.9890	13.6988	5.3220	1.3863
6.8648	0.6931	3.4738	13.9657	5.0414	0.6931	3.5653	13.9767	5.0409	1.3863
6.9479	1.3863	4.6757	15.9146	5.6666	1.3863	4.6782	15.9225	5.7132	1.3863
7.0300	0.0000	2.4206	12.9073	5.0149	0.0000	2.3770	12.8250	5.0048	1.3863
7.0414	1.0986	3.5690	14.6315	5.4456	1.3863	3.5793	14.6105	5.4226	1.3863
6.9903	1.0986	3.6091	14.4543	5.4419	1.0986	3.6006	14.4744	5.4183	1.3863
6.8330	1.0986	3.3300	13.9796	5.2556	1.0986	3.3250	13.9553	5.2087	1.3863
6.9305	1.0986	3.5801	14.1648	5.2146	1.0986	3.5690	14.1340	5.2136	1.3863
7.0130	1.3863	3.8171	14.6287	5.4130	1.3863	3.8180	14.6250	5.4204	1.3863
7.2696	0.0000	0.6863	11.1317	5.1059	0.0000	0.6668	11.0770	5.1059	1.3863
7.4307	1.0986	4.1159	15.4730	5.8027	1.0986	3.9892	15.4057	5.8941	1.3863
7.6109	0.0000	0.6959	11.3527	4.9789	0.0000	0.6835	11.2485	4.9768	1.3863
7.6829	0.6931	1.9459	12.9285	5.3763	1.0986	2.6028	13.6497	5.2237	1.3863
6.9393	1.0986	2.4734	13.0862	5.1319	1.0986	2.4637	13.0517	5.1028	1.3863
6.9068	0.6931	2.6276	13.2189	5.1683	0.6931	2.6269	13.1864	5.0928	1.3863
7.0193	0.0000	0.6807	11.3519	5.2745	0.0000	0.6569	11.3583	5.3269	1.3863
6.7957	1.3863	4.6917	16.0145	5.7467	1.3863	4.6651	16.0025	5.7682	1.3863
6.6670	1.0986	2.7702	13.9186	5.6021	1.0986	2.7671	13.9042	5.6367	1.3863
4.6444	0.0000	1.7134	9.8688	2.9444	0.0000	1.7203	9.9534	2.9444	1.3863
4.9904	0.0000	2.0044	10.4091	2.9444	0.0000	1.9832	10.3291	2.9444	1.3863
5.1475	0.0000	1.6716	9.9294	2.9444	0.0000	1.6550	9.9376	2.9444	1.3863
6.3716	0.0000	1.3739	10.9204	4.3179	0.0000	1.3641	10.8498	4.3041	1.3863
6.4151	1.0986	2.9864	12.9064	4.4317	1.0986	2.9787	12.9018	4.4495	1.3863
7.0527	0.6931	1.7853	11.7865	4.7149	0.6931	1.7715	11.7969	4.7383	1.3863
6.6267	0.6931	2.0022	11.7725	4.2025	1.0986	2.3392	11.9371	4.5484	1.3863
6.7742	0.0000	0.6835	10.9817	5.1156	0.0000	0.6668	10.9459	4.8951	1.3863
6.6871	0.6931	2.0636	11.9846	4.4318	0.6931	2.0695	11.8840	4.4432	1.3863
6.8659	0.0000	0.6738	11.1679	5.1284	0.0000	0.7108	11.1721	4.9670	1.3863
6.8090	0.0000	1.3550	11.0987	4.4055	0.0000	0.6849	10.6636	4.4278	1.3863
6.7901	0.0000	0.6780	10.5913	4.4117	0.0000	0.6526	10.6624	4.4281	1.3863
6.7754	0.0000	1.9809	11.7426	4.4045	0.0000	1.7807	11.6669	4.4103	1.3863
7.0361	0.6931	0.9733	11.2574	4.9778	0.6931	0.9660	11.2732	5.0191	1.3863
6.2989	0.0000	1.7867	11.5966	4.3057	0.0000	1.7794	11.5664	4.3047	1.3863
6.6120	1.3863	3.1791	13.5850	4.9110	1.3863	3.1381	13.5743	4.9561	1.3863
6.7214	0.0000	1.3938	11.9142	5.0668	0.0000	1.3863	11.8496	5.0409	1.3863
6.6201	0.6931	1.9618	11.9419	4.5338	0.0000	2.0249	12.0617	4.9806	1.3863
6.4167	0.0000	1.3704	11.0451	4.2345	0.0000	1.3613	11.0774	4.2065	1.3863
6.5396	0.0000	1.8250	11.9827	4.6390	0.0000	1.7780	12.0223	4.9280	1.3863
6.6921	0.6931	2.4538	12.8603	4.8799	0.6931	2.4249	12.8925	5.1123	1.3863
7.2930	1.6094	3.0275	13.8324	5.1855	1.0986	2.9502	13.7758	5.2259	1.3863
6.9884	1.3863	3.4427	14.0520	5.1332	1.3863	3.3522	14.0155	5.1688	1.3863
6.8669	0.0000	0.9753	11.4455	5.0694	0.0000	0.9650	11.4146	5.1165	1.3863
6.6201	0.0000	2.2990	12.2451	4.4028	0.0000	2.2974	12.3018	4.4188	1.3863
6.6783	0.0000	1.7687	11.5403	4.4134	0.0000	1.7654	11.5411	4.3833	1.3863
5.1648	0.0000	1.3087	10.2709	3.5470	0.0000	1.2847	10.2637	3.5449	1.3863
5.9026	0.0000	0.6710	10.4845	4.4024	0.0000	0.6766	10.4548	4.3988	1.3863
5.8916	0.0000	2.2866	11.7845	4.1958	0.0000	2.2734	11.6947	4.1272	1.3863
5.9349	0.6931	3.1630	13.1232	4.4696	0.6931	3.1700	13.1580	4.6402	1.3863
5.7038	0.0000	2.4819	12.4875	4.5070	0.0000	2.4767	12.5284	4.5821	1.3863
6.3596	1.0986	3.0208	13.2867	4.6708	1.0986	3.2283	13.4162	4.6392	1.3863
6.5117	0.6931	2.6486	12.7830	4.5756	0.6931	2.6385	12.7697	4.6800	1.3863
6.4313	0.6931	2.9325	12.8901	4.5331	1.0986	2.9944	12.9543	4.5178	1.3863
6.1356	1.0986	2.6342	12.2390	4.2496	1.0986	2.6338	12.1893	4.2131	1.3863
6.3421	0.6931	3.0945	13.1745	4.5732	0.6931	3.0884	13.1971	4.6165	1.3863
6.4846	0.6931	3.2606	13.3775	4.6875	0.6931	3.2531	13.4606	4.8903	1.3863
6.5610	0.0000	0.6611	10.4633	4.3041	0.0000	0.6512	10.4187	4.3041	1.3863
6.8967	0.0000	0.8033	11.3307	5.1059	0.0000	0.7797	11.2621	5.1059	1.3863
7.1732	0.6931	2.3745	13.7692	5.8878	0.6931	2.2535	13.7362	5.9322	1.3863

7.0570	0.6931	3.0269	13.8499	5.2715	1.0986	2.8269	13.6138	5.1239	1.3863
6.3154	1.0986	2.3539	13.2123	5.1278	1.0986	2.4560	13.2138	5.1343	1.3863
7.1397	1.3863	3.3217	14.0454	5.1412	1.3863	3.2380	13.9615	5.1102	1.3863
7.4085	1.0986	1.7267	12.4091	5.1069	1.0986	1.7863	12.4164	5.1231	1.3863
7.1770	1.3863	3.2254	14.0134	5.1378	1.3863	3.3000	14.0878	5.1435	1.3863
7.0876	0.0000	0.0082	10.3113	5.1119	0.0000	1.0876	11.3149	4.9335	1.3863
6.4489	0.0000	1.0326	11.6348	5.1761	0.0000	0.6821	11.0992	5.1761	1.3863
7.1763	0.6931	2.1364	12.7226	5.1642	0.6931	2.0253	12.6942	5.1625	1.3863
7.1317	1.0986	2.3492	12.8850	5.0942	1.0986	2.2506	12.8357	5.0485	1.3863
6.0283	0.0000	1.3794	10.3661	3.5835	0.0000	1.6257	10.5098	3.5835	1.3863
7.1436	0.0000	0.6849	11.1586	4.9698	0.0000	0.6724	11.1224	4.9698	1.3863
7.2160	0.6931	1.3655	11.8476	5.0797	0.6931	1.3739	11.8326	5.1084	1.3863
6.2422	0.0000	1.1354	10.1677	3.8410	0.0000	1.3669	10.3314	3.5835	1.3863
5.7652	0.0000	2.2882	11.6947	4.0767	0.0000	2.3994	11.7347	4.0349	1.3863
6.0379	0.0000	1.8879	10.9169	3.7279	0.0000	2.0681	10.9967	3.5835	1.3863
5.5607	0.6931	2.0611	11.4859	4.0654	0.6931	2.0839	11.5207	4.0461	1.3863
5.2470	0.0000	2.0545	12.0505	4.6169	0.0000	2.0677	12.1310	4.6007	1.3863
5.3982	0.0000	1.5261	10.6412	3.6943	0.0000	1.7179	10.7649	3.6636	1.3863
5.7268	1.0986	3.3455	13.0936	4.2703	1.0986	3.3474	13.0818	4.2811	1.3863
5.6131	0.0000	1.3815	10.2161	3.5842	0.0000	1.3767	10.1075	3.5857	1.3863
6.0113	0.0000	0.6469	10.0021	4.2832	0.0000	0.6469	9.9469	4.3041	1.3863
6.5103	0.0000	0.8227	10.5312	4.3041	0.0000	1.1265	10.6389	4.3041	1.3863
6.9157	1.3863	3.6691	14.3477	5.1582	1.3863	3.5864	14.2699	5.1549	1.3863
7.3865	1.0986	2.2821	13.1483	5.3681	1.0986	2.0715	13.0560	5.4134	1.3863
5.6419	0.0000	1.8929	10.9194	3.5835	0.0000	1.9161	10.8884	3.5835	1.3863
5.6204	0.0000	1.7441	11.4328	4.6559	0.0000	1.7325	11.5062	4.6752	1.3863
5.9243	0.0000	1.7555	11.5070	4.3189	0.0000	1.7296	11.5026	4.3095	1.3863
5.5491	0.0000	2.2852	11.4015	3.5843	0.0000	2.2448	11.3705	3.5835	1.3863
5.3799	0.0000	1.3592	11.0307	4.3125	0.0000	1.3543	11.0487	4.3054	1.3863
5.1705	0.0000	0.6324	9.2548	3.5835	0.0000	0.6483	9.3142	3.5835	1.3863
5.1705	0.0000	0.6324	9.2548	3.5835	0.0000	0.6483	9.3142	3.5835	1.3863

A.2 5年モデルの入力データ

データはすべて対数表示である.

Distance	CurrentNum OfAL	CurrentNum OfOps	CurrentNum OfPsg	CurrentFleet Size	PreviousNum OfAL	PreviousNum OfOps	PreviousNum OfPsg	PreviousFleet Size	Trend
7.0859	0.0000	0.9256	11.5181	5.2349	0.0000	0.9639	11.7938	5.4208	0.0000
5.8777	0.0000	1.2771	10.5373	4.3059	0.0000	0.6310	10.0881	5.0135	0.0000
6.9584	0.6931	2.6300	13.4692	5.2987	0.6931	2.6276	13.7200	5.5383	0.0000
7.1082	0.0000	0.6849	11.0190	5.1280	0.0000	0.6931	11.2439	4.9836	0.0000
7.1172	0.0000	0.3786	10.6363	5.1276	0.0000	0.6959	10.7348	4.8363	0.0000
7.0527	0.6931	2.2982	12.9409	5.1426	0.6931	2.3523	13.1257	5.3561	0.0000
7.2211	0.0000	0.6863	10.9317	4.9660	0.0000	0.6877	11.0065	4.8532	0.0000
5.8693	0.6931	2.4674	11.9163	4.2676	0.0000	1.7807	11.9424	5.0131	0.0000
6.5367	0.0000	2.4757	13.0927	5.2514	0.0000	2.4790	13.5160	5.6674	0.0000
6.8522	0.0000	1.8699	11.5955	4.2201	0.0000	1.4080	11.9371	5.0116	0.0000
5.7268	0.0000	1.8559	11.3425	3.9229	0.0000	1.3131	11.6093	4.9610	0.0000
6.5294	0.0000	1.7766	12.2734	5.0931	0.0000	1.7830	12.2428	4.9862	0.0000
6.7685	0.0000	1.8610	11.7326	4.3272	0.0000	1.3979	11.5638	4.6380	0.0000
6.1463	0.0000	1.8695	11.3728	3.9140	0.0000	1.3183	11.4995	5.0229	0.0000
6.0753	0.6931	1.3655	11.3154	4.5057	0.6931	1.3801	10.7620	3.9121	0.0000
6.3986	0.0000	0.6640	10.1869	3.9120	0.0000	0.6863	10.6599	4.8635	0.0000
6.4877	0.6931	2.4679	12.4080	4.6782	0.6931	2.4510	12.7483	4.8778	0.0000
6.6884	1.0986	3.3705	13.8032	4.8608	1.0986	3.1859	13.9191	5.2575	0.0000
6.9098	0.0000	0.6724	10.6187	4.2485	0.0000	0.6780	11.1347	5.1119	0.0000
7.1357	1.0986	2.4001	12.4140	4.5201	0.6931	2.1908	12.6391	4.9780	0.0000
6.4983	1.0986	3.2097	13.3704	4.6071	1.0986	2.9907	13.5258	5.2022	0.0000
6.3190	0.6931	2.8794	13.5413	5.4126	0.6931	2.6371	13.6545	5.5489	0.0000
6.5806	0.0000	1.3697	11.0740	4.3047	0.0000	0.6807	10.7929	4.6734	0.0000
6.6758	0.6931	2.2857	11.8388	4.2052	0.6931	1.6864	11.5273	4.4301	0.0000
6.0936	0.0000	1.7286	11.2097	3.9989	0.0000	1.3599	11.4858	4.9756	0.0000
6.0890	0.0000	0.6794	10.1527	3.9978	0.0000	0.6877	10.9545	4.9368	0.0000
6.5930	0.0000	1.7830	11.3380	4.1767	0.0000	2.0743	11.4336	3.9120	0.0000
6.1924	0.0000	2.0639	12.7197	5.2833	0.0000	2.0674	12.8501	5.3858	0.0000
6.4953	0.6931	2.2030	11.6826	3.9960	1.0986	2.2419	11.9567	4.3334	0.0000
6.5793	0.0000	1.3767	11.5088	4.8363	0.0000	1.3641	11.6191	4.9428	0.0000
6.4693	0.0000	1.3641	10.7272	3.9120	0.0000	0.6625	10.0559	3.9120	0.0000
6.2146	0.6931	2.2941	12.8485	5.1996	0.6931	1.7922	12.0592	4.8585	0.0000
6.3784	0.6931	2.0739	13.0529	5.3572	1.0986	2.0140	12.8102	5.1205	0.0000
6.8002	0.0000	1.3669	10.8066	4.0898	0.0000	0.6668	10.2020	3.9120	0.0000
7.0094	1.6094	3.1612	13.5806	5.1007	0.6931	1.7922	12.2231	5.1486	0.0000
6.7935	1.6094	3.1564	13.6956	5.1489	1.0986	1.7770	12.3039	5.0862	0.0000
5.0876	0.0000	0.5801	9.1734	4.0253	0.0000	1.3314	10.9475	4.7132	0.0000
5.8665	0.0000	1.6879	12.1234	5.1126	0.0000	1.7635	12.1807	5.0126	0.0000
6.3456	0.0000	2.4676	13.5427	5.6071	0.0000	2.4815	13.7626	5.7713	0.0000
6.2691	0.6931	3.0991	14.2676	5.7683	0.6931	3.0900	14.4329	5.8950	0.0000
6.2729	0.0000	1.3801	11.9075	5.1263	0.0000	1.3870	11.9405	5.1110	0.0000
6.2422	0.6931	4.0866	15.4220	5.8831	0.6931	4.0366	15.5787	6.0776	0.0000
6.5191	1.0986	3.0356	13.8644	5.3240	1.0986	3.5970	14.3456	5.3907	0.0000
6.5439	0.6931	2.7164	13.5856	5.2404	1.0986	3.1661	14.1825	5.4720	0.0000
6.4520	0.0000	1.7747	11.5141	4.4183	0.0000	1.6284	11.8328	4.9397	0.0000
6.5028	0.0000	2.0618	12.5693	5.1251	0.0000	2.0677	12.6634	5.1203	0.0000
6.6542	0.0000	2.3336	12.9356	5.2303	0.0000	2.2996	12.8997	5.1401	0.0000
6.6859	0.0000	2.3588	13.1174	5.2995	0.0000	2.2960	13.1683	5.4673	0.0000
6.8101	0.0000	0.6794	11.0426	5.1336	0.0000	0.6849	10.7120	4.8386	0.0000
6.5294	0.6931	2.9773	13.7218	5.3940	0.6931	2.8887	13.8143	5.3355	0.0000
6.6720	0.6931	3.4903	14.4146	5.5259	0.6931	3.3958	14.6551	5.8748	0.0000
6.8405	0.6931	2.8787	13.5674	5.3736	0.6931	2.7707	13.6451	5.4263	0.0000
6.5554	0.6931	2.9862	13.5934	5.2527	0.0000	2.4824	13.5099	5.6251	0.0000

6.5667	0.6931	3.1639	13.9635	5.4337	0.6931	2.9934	14.0564	5.6524	0.0000
6.7558	0.6931	3.1669	14.1729	5.5516	0.6931	2.9955	14.1814	5.7062	0.0000
6.7142	0.6931	2.8821	13.6240	5.3456	0.6931	2.7698	13.6063	5.3741	0.0000
6.8648	0.6931	3.5201	13.9191	4.9688	0.6931	3.4377	13.8404	4.9367	0.0000
6.9479	1.3863	4.5972	15.8390	5.7539	1.0986	4.5086	15.9117	5.9413	0.0000
7.0300	0.0000	2.1524	12.5918	5.0672	0.0000	2.0733	12.2814	4.8307	0.0000
7.0414	1.3863	3.3274	14.1631	5.4366	1.0986	3.2449	14.2140	5.5120	0.0000
6.9903	1.3863	3.6771	14.4615	5.3596	1.0986	3.5064	14.4459	5.4839	0.0000
6.8330	1.0986	3.2534	13.9319	5.3804	0.6931	3.0327	14.0346	5.5355	0.0000
6.9305	1.0986	3.5695	14.0966	5.1391	1.0986	3.4406	14.1756	5.2329	0.0000
7.0130	1.3863	3.7368	14.6089	5.4293	1.0986	3.3869	14.6245	5.8112	0.0000
7.2696	0.0000	0.6724	11.2844	5.0428	0.0000	0.6766	11.3075	5.0926	0.0000
7.4307	1.3863	4.0087	15.4292	5.8984	1.3863	3.9060	15.4971	6.0532	0.0000
7.6109	0.0000	0.7121	11.1850	4.9932	0.0000	0.6835	11.3598	5.1071	0.0000
7.6829	0.0000	1.0986	11.7500	4.9976	0.0000	1.0557	11.8561	5.0072	0.0000
6.9393	0.6931	2.2941	13.0165	5.2734	0.6931	2.2996	13.2030	5.4542	0.0000
6.9068	0.6931	2.6284	13.1313	5.0816	0.0000	2.0736	13.1705	5.6298	0.0000
7.0193	0.0000	0.6821	11.3303	5.2871	0.0000	0.6918	11.3867	5.2941	0.0000
6.7957	1.3863	4.6928	15.9767	5.7741	1.3863	4.6447	16.0899	5.9385	0.0000
6.6670	1.0986	2.7267	13.8496	5.6428	1.0986	2.6351	13.9828	5.8353	0.0000
4.6444	0.0000	1.7291	9.8913	2.9444	0.0000	1.6910	9.6565	2.7757	0.0000
4.9904	0.0000	1.9607	10.2330	2.9444	0.0000	1.9533	10.0959	2.8747	0.0000
5.1475	0.0000	1.6591	9.8933	2.9450	0.0000	1.6423	9.7140	2.8354	0.0000
6.3716	0.0000	1.3655	10.8653	4.3052	0.0000	1.6370	11.3734	4.6144	0.0000
6.4151	0.6931	2.8744	12.7653	4.4467	0.6931	2.8800	13.0001	4.7875	0.0000
7.0527	0.6931	1.7583	11.7017	4.7444	0.0000	1.3829	11.8027	5.0731	0.0000
6.6267	1.0986	2.2349	11.9288	4.5324	0.0000	1.5344	12.0299	5.1117	0.0000
6.7742	0.0000	0.6794	10.9061	4.8363	0.0000	0.6904	11.5480	5.6289	0.0000
6.6871	0.0000	1.3856	11.7537	5.0392	0.0000	1.6067	11.9327	4.9083	0.0000
6.8659	0.0000	0.6835	11.1346	4.8363	0.0000	0.6890	11.5470	5.6324	0.0000
6.2989	0.0000	1.7844	11.4913	4.3046	0.0000	1.7881	11.2787	4.2495	0.0000
6.6120	0.6931	2.9352	13.2943	4.9560	0.6931	3.5447	13.9572	4.9880	0.0000
6.7214	0.0000	1.3801	11.7254	5.0034	0.0000	1.3836	11.6991	4.8634	0.0000
6.6201	0.0000	1.7715	11.9133	4.9567	0.6931	2.0719	12.3832	4.9743	0.0000
6.4167	0.0000	1.3704	11.0455	4.2485	0.0000	1.3815	11.6687	4.9218	0.0000
6.5396	0.0000	1.7803	12.0702	4.9569	0.0000	1.7968	12.2592	5.2136	0.0000
6.6921	0.0000	2.0753	12.5509	5.1371	0.6931	2.7013	13.0684	4.9604	0.0000
7.2930	1.0986	3.0189	13.7630	5.1900	0.6931	2.3976	13.9094	6.0227	0.0000
6.9884	1.0986	3.3397	13.8849	5.1471	0.6931	3.2591	14.0463	5.3349	0.0000
6.8669	0.0000	1.0480	11.4325	4.8814	0.0000	1.0374	11.6809	4.9805	0.0000
6.6783	0.0000	1.4331	11.2058	4.3543	0.0000	1.3704	10.5439	3.9120	0.0000
5.1648	0.0000	1.2555	10.1630	3.5260	0.0000	1.2524	10.1531	3.5431	0.0000
5.9026	0.0000	0.6766	10.5152	4.4021	0.0000	0.6668	10.4657	4.3544	0.0000
5.8916	0.0000	2.4634	11.6229	3.8556	0.0000	2.6556	11.8008	3.7324	0.0000
5.9349	0.0000	3.0852	13.0843	4.5540	0.6931	3.3481	13.3332	4.6308	0.0000
5.7038	0.0000	2.8764	12.5504	4.4014	0.0000	3.0147	12.6924	4.3041	0.0000
6.3596	1.0986	3.2631	13.3202	4.6347	1.0986	2.9395	13.6505	5.3379	0.0000
6.5117	0.6931	2.4767	12.5448	4.7039	0.6931	2.6511	13.1489	5.2851	0.0000
6.4313	1.0986	2.9112	12.9675	4.5619	0.6931	2.7400	13.4311	5.2364	0.0000
6.1356	0.6931	2.4810	12.1010	4.2591	0.6931	2.5012	12.7053	4.7964	0.0000
6.3421	0.6931	2.9592	13.1478	4.6119	0.6931	2.8949	13.4202	5.0138	0.0000
6.4846	0.6931	3.1735	13.4095	4.8527	1.3863	3.1360	13.8255	5.2740	0.0000
6.8967	0.0000	0.7822	11.3097	5.1251	0.0000	0.8524	11.4051	5.0827	0.0000
7.1732	0.6931	1.5379	13.3000	6.1230	0.6931	1.5508	13.2613	6.0950	0.0000
7.0570	0.6931	1.8937	13.0166	5.5495	0.6931	1.9035	13.3679	5.8504	0.0000
6.3154	1.0986	2.3376	13.0779	5.1252	0.6931	2.7884	12.9120	5.0401	0.0000
7.1397	1.3863	3.2658	13.9431	5.1801	1.0986	2.9453	13.8656	5.5702	0.0000
7.4085	0.0000	1.2461	11.7757	4.9267	0.0000	0.6918	11.3795	5.0098	0.0000

7.1770	1.6094	3.5352	14.2633	5.2627	0.6931	3.0794	13.9632	5.4094	0.0000
7.0876	0.0000	1.0959	11.4256	5.0751	0.6931	1.4909	12.2818	5.2773	0.0000
7.1763	0.6931	2.4208	13.0218	5.2664	1.3863	2.3722	13.2646	5.4170	0.0000
7.1317	0.6931	2.2918	12.9571	5.3411	0.6931	2.4465	13.3505	5.5043	0.0000
7.2160	0.0000	0.9492	11.4645	5.1161	0.6931	1.3801	12.3205	5.6456	0.0000
5.7652	0.0000	2.4147	11.5870	3.7369	0.6931	1.7872	11.7881	4.6883	0.0000
6.0379	0.6931	1.7738	10.8740	3.8157	0.0000	1.7895	11.0877	3.9120	0.0000
5.5607	0.6931	2.0852	11.4447	4.0676	0.0000	1.9056	11.6495	4.5780	0.0000
5.2470	0.0000	2.0555	12.1017	4.8560	0.0000	2.3067	12.2687	4.6763	0.0000
5.3982	0.0000	1.7154	10.5590	3.6636	0.0000	2.0292	10.9954	3.6636	0.0000
5.7268	1.0986	3.3192	12.9625	4.3913	0.0000	2.6288	13.0214	5.0410	0.0000
6.9157	1.0986	3.5095	14.1890	5.2113	1.0986	3.3324	14.1200	5.3526	0.0000
7.3865	0.6931	1.8416	12.9546	5.6644	0.6931	1.9229	13.1587	5.7916	0.0000
5.6419	0.0000	1.6056	10.3910	3.5835	0.6931	2.2168	11.3927	3.8847	0.0000
5.6204	0.0000	1.7507	11.4567	4.5980	0.0000	1.9133	10.9047	3.5835	0.0000
5.5491	0.0000	2.2982	11.1916	3.5835	0.6931	2.3413	11.8145	3.9606	0.0000
5.1705	0.0000	0.5908	9.1356	3.5835	0.0000	0.6368	9.2467	3.5835	0.0000
7.0859	0.0000	0.9439	11.6806	5.3141	0.0000	0.9470	11.5760	5.1933	0.6931
5.8777	0.0000	1.3256	10.7985	4.4735	0.0000	0.5999	10.1284	4.8363	0.6931
6.9584	0.6931	2.7308	13.6075	5.3395	1.0986	2.9599	13.8333	5.4242	0.6931
7.1082	0.0000	0.6794	10.8601	4.8547	0.0000	0.6918	11.0028	4.8832	0.6931
7.1172	0.0000	0.3616	10.7032	5.1199	0.0000	0.6877	10.7136	4.8366	0.6931
7.0527	0.6931	2.2932	12.9670	5.1406	0.6931	2.3678	13.0848	5.2903	0.6931
7.2211	0.0000	0.6863	10.8207	4.8616	0.0000	0.6849	10.9757	4.8321	0.6931
5.8693	0.6931	2.4776	12.0582	4.2275	0.0000	1.7644	11.8369	5.0465	0.6931
6.5367	0.0000	2.4690	13.1203	5.2110	0.0000	2.4817	13.4485	5.6321	0.6931
6.8522	0.0000	1.8009	11.5134	4.2143	0.0000	1.4153	11.8705	5.0108	0.6931
5.7268	0.0000	1.7826	11.4002	4.2108	0.0000	1.3065	11.5363	5.0425	0.6931
6.5294	0.0000	1.7687	12.2243	5.1038	0.0000	1.7789	12.2299	5.0782	0.6931
6.7685	0.0000	2.0722	11.7853	4.3193	0.6931	1.3739	11.4904	4.6655	0.6931
6.1463	0.0000	1.9514	11.4293	4.1002	0.0000	1.3043	11.5053	5.0478	0.6931
6.0753	0.0000	1.3718	11.3920	4.8291	0.6931	1.3774	10.6677	4.1268	0.6931
6.3986	0.0000	1.3697	10.7489	3.9449	0.0000	0.6835	10.5921	4.9110	0.6931
6.4877	0.6931	2.6201	12.3836	4.3944	0.6931	2.6326	12.7248	4.7344	0.6931
6.6884	1.0986	3.5413	13.7795	4.8873	1.0986	3.2355	13.8450	5.1498	0.6931
6.9098	0.0000	1.3578	11.0276	4.2174	0.0000	0.6904	11.0673	5.1119	0.6931
7.1357	1.3863	2.7446	12.7651	4.6750	0.0000	1.3815	12.0899	5.0328	0.6931
6.4983	1.3863	3.5219	13.5024	4.7367	0.6931	3.0192	13.4523	5.0827	0.6931
6.3190	0.6931	2.8750	13.5595	5.3922	0.6931	2.6369	13.5736	5.5629	0.6931
6.5806	0.0000	1.3931	11.0922	4.3176	0.0000	1.1494	10.6765	4.3065	0.6931
6.6758	0.6931	2.3788	11.9800	4.1955	0.6931	1.7383	11.4852	4.4465	0.6931
6.0936	0.6931	2.2672	11.4982	4.1171	0.0000	1.3035	11.3571	5.0540	0.6931
6.0890	0.0000	0.6807	10.2586	4.3307	0.0000	0.6877	10.8949	5.0524	0.6931
6.5930	0.0000	1.7830	11.3237	4.0774	0.0000	2.0691	11.3385	3.9120	0.6931
6.1924	0.0000	2.0695	12.7373	5.3090	0.0000	2.0719	12.8128	5.4507	0.6931
6.4953	0.6931	2.2782	11.8026	4.0074	0.6931	2.0209	11.7396	4.2915	0.6931
6.5793	0.0000	1.3725	11.4940	4.8690	0.0000	1.3690	11.5600	4.9977	0.6931
6.4693	0.0000	1.3697	10.9001	4.2461	0.0000	0.6696	9.9311	3.9120	0.6931
6.2146	1.0986	2.3637	12.9069	5.1143	0.6931	1.7886	11.8101	4.6968	0.6931
6.3784	0.6931	2.0750	13.0774	5.3165	1.0986	2.0503	12.7130	5.0835	0.6931
6.8002	0.6931	1.3690	10.9652	4.7613	0.0000	0.6821	10.1868	3.9120	0.6931
7.0094	1.6094	3.2396	13.7254	5.1175	0.6931	1.9201	12.2077	5.0268	0.6931
6.7935	1.6094	3.3466	13.9810	5.1437	1.0986	1.7803	12.1780	5.0955	0.6931
5.0876	0.0000	0.5678	9.3376	4.0324	0.0000	1.0736	10.4753	4.6706	0.6931
5.8665	0.0000	1.7252	12.1026	5.1190	0.0000	1.7262	12.1002	5.0146	0.6931
6.3456	0.0000	2.4709	13.5777	5.6580	0.0000	2.4773	13.6748	5.6830	0.6931
6.2691	0.6931	3.1674	14.3066	5.6929	0.6931	3.0899	14.3782	5.8646	0.6931
6.2729	0.0000	1.3753	11.8976	5.1431	0.0000	1.3836	11.9553	5.1113	0.6931

6.2422	0.6931	4.1009	15.4784	5.8777	0.6931	4.0583	15.5594	6.0060	0.6931
6.5191	1.0986	3.1233	13.9245	5.3042	1.0986	3.5994	14.2326	5.2083	0.6931
6.5439	0.6931	2.0615	12.8945	5.4365	1.0986	2.9879	13.9221	5.3765	0.6931
6.4520	0.0000	1.7701	11.5255	4.4022	0.0000	1.6263	11.8428	5.0592	0.6931
6.5028	0.0000	2.0705	12.6608	5.1338	0.0000	2.0667	12.5917	5.1244	0.6931
6.6542	0.0000	2.3874	13.1487	5.2312	0.0000	2.2982	12.8603	5.1172	0.6931
6.6859	0.0000	2.3770	13.3110	5.3517	0.0000	2.2960	13.1889	5.5266	0.6931
6.8101	0.0000	0.6863	11.1695	5.1255	0.0000	0.6904	10.6972	4.8495	0.6931
6.5294	0.6931	2.9861	13.7693	5.4561	0.6931	2.8873	13.7640	5.3884	0.6931
6.6720	0.6931	3.4801	14.3993	5.5395	0.6931	3.3990	14.6200	5.8323	0.6931
6.8405	0.6931	2.8993	13.5849	5.4211	0.6931	2.7707	13.6004	5.4202	0.6931
6.5554	0.6931	3.0286	13.6732	5.2881	0.0000	2.4819	13.4560	5.5711	0.6931
6.5667	0.6931	3.1655	14.0048	5.4746	0.6931	2.9933	14.0265	5.6137	0.6931
6.7558	0.6931	3.1677	14.1659	5.6036	0.6931	3.0353	14.1668	5.6883	0.6931
6.7142	0.6931	2.9879	13.6878	5.3503	0.6931	2.7709	13.5788	5.3695	0.6931
6.8648	0.6931	3.5049	13.9729	5.0150	0.6931	3.3849	13.8651	4.9667	0.6931
6.9479	1.3863	4.7092	15.8864	5.6922	1.0986	4.4994	15.8994	5.9093	0.6931
7.0300	0.0000	2.1610	12.6271	5.0411	0.0000	2.0859	12.3499	4.9463	0.6931
7.0414	1.3863	3.5756	14.5829	5.4352	1.0986	3.1638	14.1797	5.5776	0.6931
6.9903	1.3863	3.7282	14.5200	5.3704	1.0986	3.4508	14.4184	5.4881	0.6931
6.8330	1.0986	3.3222	13.9491	5.2602	0.6931	3.0900	13.9825	5.5082	0.6931
6.9305	1.0986	3.5746	14.1417	5.2132	1.0986	3.4777	14.1470	5.2204	0.6931
7.0130	1.3863	3.8305	14.6414	5.4505	1.0986	3.4665	14.6370	5.7153	0.6931
7.2696	0.0000	0.6849	11.3273	5.1045	0.0000	0.6890	11.2829	5.0938	0.6931
7.4307	1.0986	4.0314	15.4439	5.9145	1.3863	3.8972	15.5099	6.0688	0.6931
7.6109	0.0000	0.6752	11.1927	5.0021	0.0000	0.6849	11.3509	5.1043	0.6931
7.6829	0.6931	1.7455	12.5887	5.2452	0.0000	1.0614	11.8251	5.0074	0.6931
6.9393	1.0986	2.5616	13.0705	5.0762	0.6931	2.2902	13.1275	5.4537	0.6931
6.9068	0.6931	2.6249	13.1723	5.0318	0.0000	2.0650	13.1263	5.6522	0.6931
7.0193	0.0000	0.6682	11.3344	5.3088	0.0000	0.6807	11.3746	5.3227	0.6931
6.7957	1.3863	4.6828	16.0072	5.7845	1.3863	4.6462	16.0624	5.9168	0.6931
6.6670	1.0986	2.7101	13.9070	5.6791	1.0986	2.6322	13.9249	5.7812	0.6931
4.6444	0.0000	1.7223	9.9530	2.9460	0.0000	1.6747	9.7095	2.8139	0.6931
4.9904	0.0000	1.9680	10.2934	2.9504	0.0000	1.9388	10.1141	2.8330	0.6931
5.1475	0.0000	1.6327	9.9209	2.9150	0.0000	1.6017	9.7242	2.8430	0.6931
6.3716	0.0000	1.3774	10.9632	4.3049	0.0000	1.3808	11.1732	4.7850	0.6931
6.4151	0.6931	2.9853	12.8606	4.4536	1.0986	2.8864	12.9759	4.7525	0.6931
7.0527	0.6931	1.7710	11.7763	4.7087	0.0000	0.6904	11.0318	4.8552	0.6931
6.6267	1.0986	2.3515	11.9393	4.4772	0.0000	1.5284	11.9903	5.1116	0.6931
6.7742	0.0000	0.6821	10.9227	4.8584	0.0000	0.6794	11.4665	5.5927	0.6931
6.6871	0.0000	2.0597	11.8361	4.4605	0.0000	1.3849	11.8426	4.9527	0.6931
6.8659	0.0000	0.6752	11.0982	4.8389	0.0000	0.6821	11.4930	5.6144	0.6931
6.2989	0.0000	1.7872	11.5386	4.3037	0.0000	1.7373	11.3012	4.2746	0.6931
6.6120	1.3863	3.2071	13.6340	4.9574	0.6931	3.4551	13.7910	4.8537	0.6931
6.7214	0.0000	1.3931	11.8051	5.0366	0.0000	1.3836	11.6350	4.8811	0.6931
6.6201	0.0000	1.7881	11.8837	4.8641	0.6931	2.0743	12.3507	4.9323	0.6931
6.4167	0.0000	1.3669	11.1060	4.2485	0.0000	1.3801	11.5252	4.8550	0.6931
6.5396	0.0000	1.7999	12.0977	4.9998	0.0000	1.8009	12.1858	5.1863	0.6931
6.6921	0.6931	2.3660	12.8442	5.1620	0.6931	2.6393	13.0241	4.9232	0.6931
7.2930	1.0986	2.9691	13.7575	5.2320	0.6931	2.4942	13.9169	5.9526	0.6931
6.9884	1.6094	3.4215	14.0544	5.2028	0.6931	3.1882	13.9860	5.3281	0.6931
6.8669	0.0000	0.9702	11.4309	5.1127	0.0000	1.0403	11.6122	4.9487	0.6931
6.6783	0.0000	1.7085	11.5881	4.4280	0.0000	1.0894	10.3166	3.9120	0.6931
5.1648	0.0000	1.2945	10.2558	3.5460	0.0000	1.2885	10.2724	3.5200	0.6931
5.9026	0.0000	0.6611	10.4753	4.4058	0.0000	0.6766	10.4143	4.3507	0.6931
5.8916	0.0000	2.4676	11.8088	3.8884	0.0000	2.6818	11.7620	3.7818	0.6931
5.9349	0.6931	3.1681	13.1477	4.6560	0.6931	3.3710	13.2424	4.4458	0.6931
5.7038	0.0000	2.4838	12.5368	4.8022	0.0000	2.4808	12.5330	4.6516	0.6931

6.3596	1.0986	3.4446	13.4416	4.7075	1.0986	3.0761	13.6544	4.9751	0.6931
6.5117	0.6931	2.5102	12.6606	4.6875	0.6931	2.4938	13.0555	5.1645	0.6931
6.4313	1.0986	2.9976	12.9910	4.5882	0.6931	2.7823	13.3963	5.2109	0.6931
6.1356	0.6931	2.6503	12.1717	4.1904	0.6931	2.6320	12.6097	4.6878	0.6931
6.3421	1.3863	3.1978	13.2067	4.6422	1.0986	3.0101	13.3878	5.0114	0.6931
6.4846	0.6931	3.2574	13.4302	4.8629	1.0986	3.1883	13.8030	5.2387	0.6931
6.8967	0.0000	0.7996	11.3153	5.1059	0.0000	0.8512	11.3677	5.0904	0.6931
7.1732	0.6931	2.0019	13.4839	5.8574	0.6931	1.5449	13.2765	6.1566	0.6931
7.0570	0.6931	2.1131	13.2254	5.4448	0.6931	1.8887	13.1876	5.6234	0.6931
6.3154	1.0986	2.7290	13.3962	5.1136	0.6931	2.7211	12.7563	4.7271	0.6931
7.1397	1.3863	3.2193	13.9434	5.0847	1.0986	2.9254	13.8754	5.5978	0.6931
7.4085	1.0986	1.7085	12.2951	5.1027	0.0000	0.6945	11.2665	5.0059	0.6931
7.1770	1.3863	3.3448	14.1748	5.1786	0.6931	3.0042	13.8849	5.3862	0.6931
7.0876	0.0000	1.0913	11.3340	4.9175	0.6931	1.2748	11.8497	4.9301	0.6931
7.1763	0.6931	2.3601	12.9378	5.2746	0.6931	2.3004	13.1246	5.4357	0.6931
7.1317	1.0986	2.1942	12.8433	5.0894	0.6931	2.4730	13.3922	5.4230	0.6931
7.2160	0.6931	1.3808	11.8484	5.1127	0.6931	1.3767	12.2026	5.4675	0.6931
5.7652	0.0000	2.6389	11.6649	3.6688	0.0000	1.7840	11.7508	4.7973	0.6931
6.0379	0.6931	1.7840	10.9426	3.8124	0.0000	1.7895	10.9858	3.9120	0.6931
5.5607	0.6931	2.0812	11.5185	4.0542	0.0000	1.7729	11.5980	4.8556	0.6931
5.2470	0.0000	2.0552	12.1447	4.8422	0.0000	2.0573	12.2337	4.8612	0.6931
5.3982	0.0000	1.7015	10.7308	3.6636	0.0000	1.7729	10.6923	3.6636	0.6931
5.7268	1.3863	3.3924	13.0659	4.3945	0.0000	2.6272	12.9501	5.0549	0.6931
6.9157	1.0986	3.5045	14.2285	5.1950	1.0986	3.3453	14.1063	5.3187	0.6931
7.3865	1.0986	2.0757	13.0893	5.5537	0.6931	1.7817	13.0569	5.7833	0.6931
5.6419	0.0000	1.9011	10.7802	3.5835	0.6931	2.0978	11.1809	3.8570	0.6931
5.6204	0.0000	1.7649	11.4956	4.6625	0.0000	2.1647	11.1277	3.5835	0.6931
5.5491	0.0000	2.1797	11.2775	3.5835	0.6931	2.5095	11.7872	3.8886	0.6931
5.1705	0.0000	0.6295	9.2360	3.5835	0.0000	0.6074	9.2674	3.5835	0.6931
7.0859	0.0000	0.9460	11.6910	5.2957	0.0000	0.9439	11.4322	5.1406	1.0986
5.8777	0.0000	1.2870	10.7685	4.4706	0.0000	0.6163	10.1061	4.8490	1.0986
6.9584	0.6931	2.6345	13.6081	5.3706	1.0986	2.8715	13.7493	5.4026	1.0986
7.1082	0.0000	0.6821	10.8681	4.9359	0.0000	0.6904	10.9676	4.9541	1.0986
7.1172	0.0000	0.6625	11.0848	5.1170	0.0000	0.6904	10.7009	4.8362	1.0986
7.0527	0.6931	2.2860	12.9630	5.1391	0.6931	2.3518	13.0408	5.2364	1.0986
7.2211	0.0000	0.6724	10.8052	4.8381	0.0000	0.6877	10.8707	4.8341	1.0986
5.8693	0.6931	2.5946	12.0780	4.1343	0.0000	1.7752	11.8131	5.0494	1.0986
6.5367	0.0000	2.4716	13.0836	5.1175	0.0000	2.4762	13.3479	5.6059	1.0986
6.8522	0.6931	2.3192	11.9924	4.2921	0.0000	1.4086	11.8253	5.0142	1.0986
5.7268	0.6931	2.1483	11.6131	4.2212	0.0000	1.3094	11.4420	5.0102	1.0986
6.5294	0.0000	1.7272	12.0836	4.9088	0.0000	1.7766	12.1699	5.0852	1.0986
6.7685	0.0000	2.0552	11.7783	4.1784	0.6931	1.7807	11.8694	4.8310	1.0986
6.1463	0.0000	1.9388	11.4026	4.0679	0.0000	1.5243	11.5272	4.7195	1.0986
6.0753	0.0000	1.3767	11.3146	4.8284	0.6931	1.3774	10.7122	4.1280	1.0986
6.3986	0.0000	1.3620	10.9040	4.2076	0.0000	0.6835	10.3173	4.5403	1.0986
6.4877	0.6931	2.6125	12.3078	4.3610	0.6931	2.6298	12.5933	4.7437	1.0986
6.6884	1.0986	3.3539	13.7045	4.8522	1.0986	3.2802	13.8121	5.1297	1.0986
6.9098	0.0000	1.3662	11.1474	4.2171	0.0000	0.6877	10.7796	4.7046	1.0986
7.1357	1.3863	2.6215	12.7516	4.7740	0.6931	2.2141	12.3995	4.8822	1.0986
6.4983	1.6094	3.5172	13.5247	4.7132	1.0986	3.0820	13.3994	4.9654	1.0986
6.3190	0.6931	2.8795	13.5624	5.3343	0.6931	2.6322	13.4604	5.5404	1.0986
6.5806	0.0000	1.3746	11.0366	4.3040	0.0000	0.6849	10.3351	4.6487	1.0986
6.6758	0.6931	2.4801	12.0340	4.1550	0.6931	1.7876	11.7862	4.7712	1.0986
6.0936	0.6931	2.2287	11.4752	4.0963	0.0000	1.5845	11.3081	4.6704	1.0986
6.0890	0.0000	1.3767	11.2211	4.3307	0.0000	0.6904	10.9440	5.0734	1.0986
6.5930	0.0000	1.7867	11.3541	4.1917	0.0000	1.9576	11.1945	3.9120	1.0986
6.1924	0.0000	2.0674	12.7705	5.2494	0.0000	2.0677	12.6990	5.4073	1.0986
6.4953	0.6931	2.0625	11.8953	4.3846	0.0000	2.2457	11.5517	3.9129	1.0986

6.5793	0.0000	1.3571	11.4235	4.8959	0.0000	1.3829	11.5070	4.9269	1.0986
6.4693	0.0000	0.6752	10.2367	4.1860	0.0000	0.6780	9.8907	3.9120	1.0986
6.2146	0.6931	2.1622	12.7362	5.0468	0.0000	1.7354	11.6942	4.7007	1.0986
6.3784	0.6931	2.0764	13.0721	5.3512	0.6931	2.0774	12.9514	5.3433	1.0986
6.8002	0.6931	1.5261	11.8680	4.9130	0.0000	0.6849	10.1738	3.9120	1.0986
7.0094	1.0986	3.0151	13.6249	5.1128	0.6931	2.1763	12.4667	4.9179	1.0986
6.7935	1.6094	3.3237	14.0591	5.1654	1.0986	2.0760	12.3429	4.9189	1.0986
5.0876	0.0000	0.5801	9.3086	4.7872	0.0000	0.5863	9.7193	4.5688	1.0986
5.8665	0.0000	1.7286	12.0260	5.1113	0.0000	1.7188	12.0590	5.0070	1.0986
6.3456	0.0000	2.4637	13.5680	5.6731	0.0000	2.4644	13.4990	5.6282	1.0986
6.2691	0.6931	3.1697	14.3091	5.6798	0.6931	3.0875	14.2283	5.8387	1.0986
6.2729	0.0000	1.3822	11.8622	5.1300	0.0000	1.3767	11.8889	5.1089	1.0986
6.2422	0.6931	4.1188	15.4784	5.8375	0.6931	4.0564	15.4669	5.9828	1.0986
6.5191	1.0986	3.1444	13.9170	5.3056	1.0986	3.3651	14.0475	5.1874	1.0986
6.5439	0.6931	2.3397	13.0626	5.3193	1.0986	2.9287	13.8196	5.3140	1.0986
6.4520	0.0000	1.7729	11.4827	4.3435	0.0000	1.6209	11.8085	5.0620	1.0986
6.5028	0.0000	2.2924	12.6962	5.0998	0.0000	2.0632	12.5579	5.1238	1.0986
6.6542	0.6931	2.5850	13.2210	5.1903	0.0000	2.2996	12.8088	5.1138	1.0986
6.6859	0.0000	2.3732	13.2284	5.3753	0.0000	2.2985	13.1052	5.4862	1.0986
6.8101	0.0000	1.3815	11.5636	4.9799	0.0000	0.6835	10.6883	4.8370	1.0986
6.5294	0.6931	3.1222	13.7844	5.4063	0.6931	2.8873	13.6844	5.3337	1.0986
6.6720	0.6931	3.5193	14.4007	5.4892	0.6931	3.4274	14.5208	5.7279	1.0986
6.8405	0.6931	2.9337	13.6162	5.3323	0.6931	2.7700	13.4933	5.3608	1.0986
6.5554	0.6931	3.1669	13.7181	5.3447	0.0000	2.4803	13.3888	5.5851	1.0986
6.5667	0.6931	3.2475	13.9829	5.3948	0.6931	2.9931	13.9536	5.6063	1.0986
6.7558	0.6931	3.1729	14.1650	5.5467	0.6931	3.0892	14.1267	5.6820	1.0986
6.7142	0.6931	2.9890	13.6988	5.3220	0.6931	2.7707	13.5469	5.3696	1.0986
6.8648	0.6931	3.5653	13.9767	5.0409	0.6931	3.3631	13.8316	5.0091	1.0986
6.9479	1.3863	4.6782	15.9225	5.7132	1.0986	4.5240	15.8309	5.8642	1.0986
7.0300	0.0000	2.3770	12.8250	5.0048	0.0000	2.1978	12.4594	4.9932	1.0986
7.0414	1.3863	3.5793	14.6105	5.4226	1.0986	3.1661	14.1426	5.5773	1.0986
6.9903	1.0986	3.6006	14.4744	5.4183	1.0986	3.4548	14.3594	5.4929	1.0986
6.8330	1.0986	3.3250	13.9553	5.2087	0.6931	3.0888	13.8899	5.4980	1.0986
6.9305	1.0986	3.5690	14.1340	5.2136	1.0986	3.4490	14.0894	5.1938	1.0986
7.0130	1.3863	3.8180	14.6250	5.4204	1.0986	3.4891	14.5858	5.7000	1.0986
7.2696	0.0000	0.6668	11.0770	5.1059	0.0000	0.6890	11.2787	5.0938	1.0986
7.4307	1.0986	3.9892	15.4057	5.8941	1.3863	3.9147	15.4489	6.0565	1.0986
7.6109	0.0000	0.6835	11.2485	4.9768	0.0000	0.6890	11.3246	5.0956	1.0986
7.6829	1.0986	2.6028	13.6497	5.2237	0.0000	1.0680	11.8045	5.0080	1.0986
6.9393	1.0986	2.4637	13.0517	5.1028	0.6931	2.2932	13.0881	5.3973	1.0986
6.9068	0.6931	2.6269	13.1864	5.0928	0.0000	2.0698	13.1080	5.6549	1.0986
7.0193	0.0000	0.6569	11.3583	5.3269	0.0000	0.6849	11.3041	5.2239	1.0986
6.7957	1.3863	4.6651	16.0025	5.7682	1.3863	4.6437	16.0168	5.9061	1.0986
6.6670	1.0986	2.7671	13.9042	5.6367	1.0986	2.6347	13.8662	5.7053	1.0986
4.6444	0.0000	1.7203	9.9534	2.9444	0.0000	1.6985	9.7509	2.7905	1.0986
4.9904	0.0000	1.9832	10.3291	2.9444	0.0000	1.9771	10.1266	2.8040	1.0986
5.1475	0.0000	1.6550	9.9376	2.9444	0.0000	1.5686	9.7014	2.8350	1.0986
6.3716	0.0000	1.3641	10.8498	4.3041	0.0000	1.3655	10.7881	4.3058	1.0986
6.4151	1.0986	2.9787	12.9018	4.4495	1.0986	2.9460	12.8706	4.6854	1.0986
7.0527	0.6931	1.7715	11.7969	4.7383	0.0000	0.6766	10.9502	4.8788	1.0986
6.6267	1.0986	2.3392	11.9371	4.5484	0.0000	1.5225	11.8661	4.8815	1.0986
6.7742	0.0000	0.6668	10.9459	4.8951	0.0000	0.6807	11.3455	5.3503	1.0986
6.6871	0.6931	2.0695	11.8840	4.4432	0.0000	1.3808	11.7136	4.8946	1.0986
6.8659	0.0000	0.7108	11.1721	4.9670	0.0000	0.6890	11.3208	5.2840	1.0986
6.2989	0.0000	1.7794	11.5664	4.3047	0.0000	1.3787	10.9574	4.3058	1.0986
6.6120	1.3863	3.1381	13.5743	4.9561	0.0000	3.1683	13.3807	4.7799	1.0986
6.7214	0.0000	1.3863	11.8496	5.0409	0.0000	1.3787	11.5184	4.8711	1.0986
6.6201	0.0000	2.0249	12.0617	4.9806	0.6931	1.9970	12.1843	4.9114	1.0986

6.4167	0.0000	1.3613	11.0774	4.2065	0.0000	1.3794	11.3770	4.8405	1.0986
6.5396	0.0000	1.7780	12.0223	4.9280	0.0000	1.7940	12.0853	5.2233	1.0986
6.6921	0.6931	2.4249	12.8925	5.1123	0.6931	2.6369	12.8861	4.9760	1.0986
7.2930	1.0986	2.9502	13.7758	5.2259	1.0986	2.5609	13.7545	5.8336	1.0986
6.9884	1.3863	3.3522	14.0155	5.1688	0.6931	3.2370	13.8838	5.2240	1.0986
6.8669	0.0000	0.9650	11.4146	5.1165	0.0000	1.0452	11.5552	5.0000	1.0986
6.6783	0.0000	1.7654	11.5411	4.3833	0.0000	1.0480	10.2566	3.9120	1.0986
5.1648	0.0000	1.2847	10.2637	3.5449	0.0000	1.2756	10.2207	3.5442	1.0986
5.9026	0.0000	0.6766	10.4548	4.3988	0.0000	0.7162	10.4210	4.3290	1.0986
5.8916	0.0000	2.2734	11.6947	4.1272	0.0000	2.7233	11.6020	3.6863	1.0986
5.9349	0.6931	3.1700	13.1580	4.6402	0.6931	3.3526	13.1628	4.4854	1.0986
5.7038	0.0000	2.4767	12.5284	4.5821	0.0000	2.6598	12.4818	4.4641	1.0986
6.3596	1.0986	3.2283	13.4162	4.6392	1.0986	3.1681	13.6208	4.9386	1.0986
6.5117	0.6931	2.6385	12.7697	4.6800	0.6931	2.4940	12.9349	4.9859	1.0986
6.4313	1.0986	2.9944	12.9543	4.5178	1.0986	2.7733	13.2666	5.1066	1.0986
6.1356	1.0986	2.6338	12.1893	4.2131	0.6931	2.6322	12.4581	4.6809	1.0986
6.3421	0.6931	3.0884	13.1971	4.6165	1.0986	3.0101	13.2756	4.9285	1.0986
6.4846	0.6931	3.2531	13.4606	4.8903	1.0986	3.1870	13.7668	5.1850	1.0986
6.8967	0.0000	0.7797	11.2621	5.1059	0.0000	0.8570	11.3467	5.0934	1.0986
7.1732	0.6931	2.2535	13.7362	5.9322	0.6931	1.5397	13.2608	6.1552	1.0986
7.0570	1.0986	2.8269	13.6138	5.1239	0.6931	1.8929	13.1823	5.6718	1.0986
6.3154	1.0986	2.4560	13.2138	5.1343	0.6931	2.5115	12.2018	4.2358	1.0986
7.1397	1.3863	3.2380	13.9615	5.1102	0.6931	2.8521	13.7148	5.4023	1.0986
7.4085	1.0986	1.7863	12.4164	5.1231	0.0000	0.7000	11.2379	5.0036	1.0986
7.1770	1.3863	3.3000	14.0878	5.1435	0.6931	2.7872	13.7633	5.4164	1.0986
7.0876	0.0000	1.0876	11.3149	4.9335	0.0000	0.6890	11.1861	4.7959	1.0986
7.1763	0.6931	2.0253	12.6942	5.1625	0.6931	2.3719	13.1782	5.3804	1.0986
7.1317	1.0986	2.2506	12.8357	5.0485	0.6931	2.4672	13.3318	5.3384	1.0986
7.2160	0.6931	1.3739	11.8326	5.1084	0.0000	0.9795	11.7386	5.1957	1.0986
5.7652	0.0000	2.3994	11.7347	4.0349	0.0000	2.0314	11.5359	4.1758	1.0986
6.0379	0.0000	2.0681	10.9967	3.5835	0.0000	1.7886	10.9398	3.9120	1.0986
5.5607	0.6931	2.0839	11.5207	4.0461	0.0000	1.8999	11.5859	4.6616	1.0986
5.2470	0.0000	2.0677	12.1310	4.6007	0.0000	2.0460	12.1683	4.8493	1.0986
5.3982	0.0000	1.7179	10.7649	3.6636	0.0000	1.7373	10.6785	3.6655	1.0986
5.7268	1.0986	3.3474	13.0818	4.2811	0.6931	2.6243	12.8213	4.8635	1.0986
6.9157	1.3863	3.5864	14.2699	5.1549	1.3863	3.4611	14.1041	5.2754	1.0986
7.3865	1.0986	2.0715	13.0560	5.4134	0.6931	1.8290	12.9991	5.5995	1.0986
5.6419	0.0000	1.9161	10.8884	3.5835	0.6931	2.0656	11.0374	3.8737	1.0986
5.6204	0.0000	1.7325	11.5062	4.6752	0.0000	2.1679	11.0895	3.5835	1.0986
5.5491	0.0000	2.2448	11.3705	3.5835	0.6931	2.5298	11.6901	3.8931	1.0986
5.1705	0.0000	0.6483	9.3142	3.5835	0.0000	0.6324	9.1890	3.5835	1.0986
7.0859	0.0000	0.9492	11.6315	5.3252	0.0000	0.9629	11.4519	5.1911	1.3863
5.8777	0.0000	1.2960	10.7420	4.3083	0.0000	1.2010	10.3841	4.4094	1.3863
6.9584	0.6931	2.6400	13.6367	5.4776	1.0986	2.8063	13.6855	5.3841	1.3863
7.1082	0.0000	0.6780	10.9031	4.9446	0.0000	0.6877	11.0101	4.9270	1.3863
7.1172	0.0000	0.6766	11.1175	5.1101	0.0000	0.6849	10.7651	4.9029	1.3863
7.0527	0.6931	2.3009	13.0218	5.1991	0.6931	2.2985	12.9462	5.0887	1.3863
7.2211	0.0000	0.6849	10.7580	4.8173	0.0000	0.6904	10.9012	4.8376	1.3863
5.8693	0.6931	2.6032	12.1120	4.1049	1.0986	2.2796	11.8578	4.2759	1.3863
6.5367	0.0000	2.4833	13.1521	5.1177	0.0000	2.4790	13.2982	5.4373	1.3863
6.8522	0.6931	2.4840	12.1317	4.2609	0.0000	1.4220	11.8243	4.9983	1.3863
5.7268	0.6931	2.2649	11.7100	4.0954	0.0000	1.5414	11.3890	4.5744	1.3863
6.5294	0.0000	1.7775	12.1696	4.9036	0.0000	1.7789	12.2849	5.0855	1.3863
6.7685	0.0000	2.0622	11.8588	4.2995	0.0000	1.7830	11.7981	4.6855	1.3863
6.1463	0.0000	1.9305	11.3941	3.9223	0.0000	1.6230	11.3013	4.1501	1.3863
6.0753	0.0000	1.3842	11.3667	4.8315	0.6931	1.3219	10.8825	4.1286	1.3863
6.3986	0.0000	1.3578	10.5095	4.1678	0.0000	0.6148	10.0890	4.0128	1.3863
6.4877	0.6931	2.6137	12.2436	4.3572	0.0000	2.3280	12.4995	4.7955	1.3863

6.6884	1.0986	3.3308	13.6823	4.8001	1.0986	3.1680	13.7623	5.1034	1.3863
6.9098	0.0000	1.3564	11.1149	4.1900	0.0000	0.6324	10.5033	4.2485	1.3863
7.1357	1.0986	2.4312	12.5710	4.5931	0.6931	2.1237	12.2081	4.6032	1.3863
6.4983	1.0986	3.2828	13.4906	4.6697	1.3863	3.1745	13.3225	4.6953	1.3863
6.3190	0.6931	2.8888	13.5828	5.2932	0.6931	2.6340	13.4756	5.3775	1.3863
6.5806	0.0000	1.3965	11.0223	4.3038	0.0000	1.1554	10.6873	4.3243	1.3863
6.6758	0.6931	2.4718	12.0638	4.1455	0.0000	1.5726	11.6023	4.6405	1.3863
6.0936	0.6931	2.1782	11.5044	4.1281	0.0000	1.7844	11.3008	4.1758	1.3863
6.0890	0.0000	1.3808	11.3358	4.3307	0.0000	0.9917	11.1967	4.8385	1.3863
6.5930	0.0000	1.7858	11.4401	4.2386	0.0000	1.8090	11.2011	4.0583	1.3863
6.1924	0.0000	2.0767	12.7626	5.2112	0.0000	2.0767	12.7473	5.1903	1.3863
6.4953	0.6931	2.0691	12.0074	4.6642	0.0000	2.2186	11.5986	3.9120	1.3863
6.5793	0.0000	0.6877	11.1422	5.0753	0.0000	1.4147	11.4265	4.8363	1.3863
6.4693	0.0000	0.6724	10.1254	4.2381	0.0000	1.1606	10.3099	3.9124	1.3863
6.2146	0.6931	2.1707	12.7322	4.9998	0.6931	2.3154	12.4298	4.8530	1.3863
6.3784	0.6931	2.0808	13.0146	5.2745	0.6931	2.0767	13.0289	5.3514	1.3863
6.8002	0.6931	1.7383	12.2926	4.9866	0.0000	1.1810	10.5444	4.0698	1.3863
7.0094	1.3863	3.1257	13.9339	5.1628	0.6931	2.2993	12.5637	4.9401	1.3863
6.7935	1.6094	3.4727	14.3360	5.1533	0.6931	2.2996	12.6070	5.0537	1.3863
5.0876	0.0000	0.0714	8.7564	4.7874	0.0000	0.6353	9.2712	4.0322	1.3863
5.8665	0.0000	1.6940	12.0050	5.1045	0.0000	1.7149	12.0943	5.0325	1.3863
6.3456	0.0000	2.4718	13.0360	5.1475	0.0000	2.4734	13.5259	5.5756	1.3863
6.2691	0.6931	3.1719	13.8475	5.2056	0.6931	3.0840	14.2186	5.7183	1.3863
6.2729	0.0000	1.3794	11.9041	5.1115	0.0000	1.3808	11.8513	5.1121	1.3863
6.2422	0.6931	4.0944	15.4631	5.8030	0.6931	4.0587	15.4529	5.9730	1.3863
6.5191	1.0986	3.1644	13.9560	5.3095	1.0986	3.3155	13.9548	5.2063	1.3863
6.5439	0.6931	2.5124	13.3120	5.3550	0.6931	2.6939	13.6129	5.2739	1.3863
6.4520	0.0000	1.7761	11.6491	4.4854	0.0000	1.7798	11.5453	4.3510	1.3863
6.5028	0.0000	2.2946	12.7620	5.1020	0.0000	2.0636	12.5612	5.1235	1.3863
6.6542	0.0000	2.4276	13.1538	5.2140	0.0000	2.2882	12.8451	5.1228	1.3863
6.6859	0.0000	2.2990	13.2296	5.3406	0.0000	2.2960	13.0988	5.3796	1.3863
6.8101	0.0000	1.3718	11.6595	5.0387	0.0000	0.6821	10.7771	4.8162	1.3863
6.5294	0.6931	3.0971	13.8109	5.4117	0.6931	2.8892	13.6589	5.3725	1.3863
6.6720	0.6931	3.5072	14.3165	5.4908	0.6931	3.3722	14.4706	5.6791	1.3863
6.8405	1.0986	2.9891	13.6484	5.2772	0.6931	2.7712	13.5075	5.3433	1.3863
6.5554	0.6931	3.1355	13.7125	5.3096	0.6931	2.6710	13.4481	5.3511	1.3863
6.5667	0.6931	3.2484	13.9966	5.3591	0.6931	3.0702	13.9522	5.4801	1.3863
6.7558	0.6931	3.1737	14.1622	5.5238	0.6931	3.1254	14.1441	5.6453	1.3863
6.7142	0.6931	2.9952	13.7084	5.2989	0.6931	2.8220	13.6056	5.3653	1.3863
6.8648	0.6931	3.4738	13.9657	5.0414	1.0986	3.4070	13.8688	5.0153	1.3863
6.9479	1.3863	4.6757	15.9146	5.6666	1.0986	4.5230	15.8135	5.8276	1.3863
7.0300	0.0000	2.4206	12.9073	5.0149	0.0000	2.1840	12.5341	5.0045	1.3863
7.0414	1.0986	3.5690	14.6315	5.4456	1.0986	3.2006	14.1328	5.4845	1.3863
6.9903	1.0986	3.6091	14.4543	5.4419	1.3863	3.5287	14.3770	5.4204	1.3863
6.8330	1.0986	3.3300	13.9796	5.2556	1.0986	3.1595	13.8823	5.3300	1.3863
6.9305	1.0986	3.5801	14.1648	5.2146	1.0986	3.4172	14.0212	5.1843	1.3863
7.0130	1.3863	3.8171	14.6287	5.4130	1.3863	3.5965	14.5650	5.5934	1.3863
7.2696	0.0000	0.6863	11.1317	5.1059	0.0000	0.6877	11.2164	5.1120	1.3863
7.4307	1.0986	4.1159	15.4730	5.8027	1.3863	3.9862	15.4494	5.9526	1.3863
7.6109	0.0000	0.6959	11.3527	4.9789	0.0000	0.7268	11.3414	5.0913	1.3863
7.6829	0.6931	1.9459	12.9285	5.3763	0.0000	1.0940	11.7537	5.0016	1.3863
6.9393	1.0986	2.4734	13.0862	5.1319	0.6931	2.2979	13.0694	5.2788	1.3863
6.9068	0.6931	2.6276	13.2189	5.1683	0.0000	2.0832	13.0605	5.5383	1.3863
7.0193	0.0000	0.6807	11.3519	5.2745	0.0000	0.6904	11.2758	5.1768	1.3863
6.7957	1.3863	4.6917	16.0145	5.7467	1.3863	4.6522	15.9932	5.8434	1.3863
6.6670	1.0986	2.7702	13.9186	5.6021	1.0986	2.6367	13.8621	5.7014	1.3863
4.6444	0.0000	1.7134	9.8688	2.9444	0.0000	1.7213	9.8873	2.8382	1.3863
4.9904	0.0000	2.0044	10.4091	2.9444	0.0000	1.9993	10.1858	2.8707	1.3863

5.1475	0.0000	1.6716	9.9294	2.9444	0.0000	1.5973	9.7615	2.8774	1.3863
6.3716	0.0000	1.3739	10.9204	4.3179	0.0000	1.3704	10.8945	4.3055	1.3863
6.4151	1.0986	2.9864	12.9064	4.4317	0.6931	2.8930	12.8489	4.5726	1.3863
7.0527	0.6931	1.7853	11.7865	4.7149	0.0000	0.6849	10.9174	4.8437	1.3863
6.6267	0.6931	2.0022	11.7725	4.2025	0.6931	1.8090	11.8793	4.7262	1.3863
6.7742	0.0000	0.6835	10.9817	5.1156	0.0000	0.6877	10.9159	4.8363	1.3863
6.6871	0.6931	2.0636	11.9846	4.4318	0.0000	1.3808	11.6742	4.9242	1.3863
6.8659	0.0000	0.6738	11.1679	5.1284	0.0000	0.6849	11.1057	4.8363	1.3863
6.2989	0.0000	1.7867	11.5966	4.3057	0.0000	1.4940	11.0200	4.1478	1.3863
6.6120	1.3863	3.1791	13.5850	4.9110	0.0000	3.1746	13.3352	4.7617	1.3863
6.7214	0.0000	1.3938	11.9142	5.0668	0.0000	1.3863	11.6742	4.9425	1.3863
6.6201	0.6931	1.9618	11.9419	4.5338	0.0000	1.3931	11.7130	4.9729	1.3863
6.4167	0.0000	1.3704	11.0451	4.2345	0.0000	1.3829	11.3158	4.7241	1.3863
6.5396	0.0000	1.8250	11.9827	4.6390	0.0000	1.7881	12.0456	5.1575	1.3863
6.6921	0.6931	2.4538	12.8603	4.8799	0.0000	2.4174	12.7578	4.9981	1.3863
7.2930	1.6094	3.0275	13.8324	5.1855	1.0986	2.5635	13.6927	5.6189	1.3863
6.9884	1.3863	3.4427	14.0520	5.1332	0.6931	3.2542	13.8503	5.0921	1.3863
6.8669	0.0000	0.9753	11.4455	5.0694	0.0000	1.0384	11.5290	5.0147	1.3863
6.6783	0.0000	1.7687	11.5403	4.4134	0.0000	1.7484	10.9747	4.0557	1.3863
5.1648	0.0000	1.3087	10.2709	3.5470	0.0000	1.2547	10.2283	3.5142	1.3863
5.9026	0.0000	0.6710	10.4845	4.4024	0.0000	0.6724	10.5000	4.3359	1.3863
5.8916	0.0000	2.2866	11.7845	4.1958	0.0000	2.4906	11.5782	3.6514	1.3863
5.9349	0.6931	3.1630	13.1232	4.4696	0.0000	3.2175	13.1178	4.4323	1.3863
5.7038	0.0000	2.4819	12.4875	4.5070	0.0000	2.8604	12.5274	4.3663	1.3863
6.3596	1.0986	3.0208	13.2867	4.6708	1.0986	3.1963	13.5352	4.9146	1.3863
6.5117	0.6931	2.6486	12.7830	4.5756	0.6931	2.4954	12.8150	4.8264	1.3863
6.4313	0.6931	2.9325	12.8901	4.5331	1.0986	2.7638	13.1780	5.0492	1.3863
6.1356	1.0986	2.6342	12.2390	4.2496	1.0986	2.3640	12.2746	4.5145	1.3863
6.3421	0.6931	3.0945	13.1745	4.5732	1.0986	2.8964	13.2191	4.9410	1.3863
6.4846	0.6931	3.2606	13.3775	4.6875	0.6931	3.1757	13.6998	5.1128	1.3863
6.8967	0.0000	0.8033	11.3307	5.1059	0.0000	0.8335	11.2473	5.1250	1.3863
7.1732	0.6931	2.3745	13.7692	5.8878	0.6931	1.5426	13.3246	6.1490	1.3863
7.0570	0.6931	3.0269	13.8499	5.2715	0.6931	1.8953	13.2224	5.7430	1.3863
6.3154	1.0986	2.3539	13.2123	5.1278	0.0000	1.8206	11.8528	4.6859	1.3863
7.1397	1.3863	3.3217	14.0454	5.1412	1.0986	2.9385	13.7609	5.3118	1.3863
7.4085	1.0986	1.7267	12.4091	5.1069	0.0000	0.6959	11.3466	5.0047	1.3863
7.1770	1.3863	3.2254	14.0134	5.1378	0.6931	2.8744	13.8102	5.4518	1.3863
7.0876	0.0000	0.0082	10.3113	5.1119	0.0000	0.9795	11.3780	4.8495	1.3863
7.1763	0.6931	2.1364	12.7226	5.1642	0.6931	2.3640	13.1661	5.3201	1.3863
7.1317	1.0986	2.3492	12.8850	5.0942	0.6931	2.1622	13.1087	5.4615	1.3863
7.2160	0.6931	1.3655	11.8476	5.0797	0.0000	0.6931	11.5222	5.3373	1.3863
5.7652	0.0000	2.2882	11.6947	4.0767	0.0000	2.1772	11.5376	4.0264	1.3863
6.0379	0.0000	1.8879	10.9169	3.7279	0.0000	1.7840	10.9710	3.9188	1.3863
5.5607	0.6931	2.0611	11.4859	4.0654	0.6931	2.0360	11.4515	4.4273	1.3863
5.2470	0.0000	2.0545	12.0505	4.6169	0.0000	2.0573	12.1505	4.8533	1.3863
5.3982	0.0000	1.5261	10.6412	3.6943	0.0000	1.6581	10.5411	3.6636	1.3863
5.7268	1.0986	3.3455	13.0936	4.2703	0.0000	2.7911	12.7542	4.6139	1.3863
6.9157	1.3863	3.6691	14.3477	5.1582	1.0986	3.4426	14.1673	5.2354	1.3863
7.3865	1.0986	2.2821	13.1483	5.3681	0.6931	1.8143	12.8969	5.4986	1.3863
5.6419	0.0000	1.8929	10.9194	3.5835	0.0000	1.6290	10.5747	3.7210	1.3863
5.6204	0.0000	1.7441	11.4328	4.6559	0.6931	2.3431	11.4819	4.3569	1.3863
5.5491	0.0000	2.2852	11.4015	3.5843	0.0000	2.2150	11.2925	3.7093	1.3863
5.1705	0.0000	0.6324	9.2548	3.5835	0.0000	0.6411	9.1902	3.5835	1.3863

付録Ｂ．Stata の実行コードおよび出力結果

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  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   12.0   Copyright 1985-2011 StataCorp LP
  Statistics/Data Analysis            StataCorp
                                      4905 Lakeway Drive
      MP - Parallel Edition           College Station, Texas 77845 USA
                                      800-STATA-PC        http://www.stata.com
                                      979-696-4600        stata@stata.com
                                      979-696-4601 (fax)

Single-user 2-core Stata perpetual license:
       Serial number:
         Licensed to:  Gaku Inoue
                       NILIM

Notes:
      1.  (/v# option or -set maxvar-) 5000 maximum variables

1 . do "C:\Users\gakuinoue\Desktop\al_strategy\al_strategy.do"

2 . insheet using "C:\Users\gakuinoue\Desktop\al_strategy\1year.csv",clear
(10 vars, 604 obs)

3 . reg3 (  currentnumofops currentfleetsize currentnumofpsg currentnumofal distanc
> e )( currentfleetsize  currentnumofops  previousfleetsize  currentnumofpsg ), 3
> sls

Three-stage least-squares regression
```

Equation	Obs	Parms	RMSE	"R-sq"	chi2	P
currentnum~s	604	4	.1293522	0.9823	33411.03	0.0000
currentfle~e	604	3	.1062273	0.9711	20185.39	0.0000

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
currentnumof~s						
currentfleet~e	-.8163909	.0177537	-45.98	0.000	-.8511876	-.7815942
currentnumof~g	.8867887	.0082026	108.11	0.000	.8707119	.9028655
currentnumofal	.1148641	.0159522	7.20	0.000	.0835984	.1461298
distance	-.1696625	.013284	-12.77	0.000	-.1956986	-.1436264
_cons	-3.830448	.0885999	-43.23	0.000	-4.004101	-3.656796
currentfleet~e						
currentnumof~s	-.1926745	.0508726	-3.79	0.000	-.2923831	-.092966
previousflee~e	.7815384	.0483453	16.17	0.000	.6867833	.8762936
currentnumof~g	.1840159	.0475837	3.87	0.000	.0907536	.2772782
_cons	-.8073095	.2520099	-3.20	0.001	-1.30124	-.3133792

```
Endogenous variables:  currentnumofops currentfleetsize
Exogenous variables:   currentnumofpsg currentnumofal distance
     previousfleetsize

4 . est store result_3sls

5 . quietly reg3 (  currentnumofops currentfleetsize currentnumofpsg currentnumofal
>  distance )( currentfleetsize  currentnumofops  previousfleetsize  currentnumof
> psg ), ols
```

```
6 . est store result_ols

7 . hausman result_ols result_3sls, alleqs constant
```

	Coefficients (b) result_ols	(B) result_3sls	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
currentnumofops				
currentfle~e	-.7821294	-.8163909	.0342615	.
currentnum~g	.8745349	.8867887	-.0122538	.0006326
currentnum~l	.1296364	.1148641	.0147723	.00628
distance	-.1856526	-.1696625	-.0159901	.
_cons	-3.745756	-3.830448	.0846917	.
currentfleetsize				
currentnum~s	-.3264847	-.1926745	-.1338102	.
previousfl~e	.6573118	.7815384	-.1242267	.
currentnum~g	.3085825	.1840159	.1245666	.
_cons	-1.462552	-.8073095	-.6552428	.

b = consistent under Ho and Ha; obtained from reg3
B = inconsistent under Ha, efficient under Ho; obtained from reg3

Test: Ho: difference in coefficients not systematic

chi2(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 29.21
Prob>chi2 = 0.0006
(V_b-V_B is not positive definite)

```
8 .
9 . insheet using "C:\Users\gakuinoue\Desktop\al_strategy\5year.csv",clear
  (10 vars, 512 obs)

10. reg3 (  currentnumofops currentfleetsize currentnumofpsg currentnumofal distanc
  > e )( currentfleetsize  currentnumofops  previousfleetsize  currentnumofpsg ), 3
  > sls

  Three-stage least-squares regression
```

Equation	Obs	Parms	RMSE	"R-sq"	chi2	P
currentnum~s	512	4	.1294875	0.9811	25494.13	0.0000
currentfle~e	512	3	.1481303	0.9421	7228.00	0.0000

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
currentnumof~s						
currentfleet~e	-.8097245	.0350581	-23.10	0.000	-.8784371	-.7410118
currentnumof~g	.873807	.0137695	63.46	0.000	.8468193	.9007948
currentnumofal	.1304208	.0202801	6.43	0.000	.0906724	.1701691
distance	-.1606353	.0198306	-8.10	0.000	-.1995026	-.121768
_cons	-3.759713	.1245686	-30.18	0.000	-4.003863	-3.515563
currentfleet~e						
currentnumof~s	-.7367297	.0349949	-21.05	0.000	-.8053185	-.6681409
previousflee~e	.1756232	.0267375	6.57	0.000	.1232187	.2280276
currentnumof~g	.7213166	.0299508	24.08	0.000	.6626142	.780019
_cons	-3.387019	.1835625	-18.45	0.000	-3.746795	-3.027244

Endogenous variables: currentnumofops currentfleetsize
Exogenous variables: currentnumofpsg currentnumofal distance
previousfleetsize

```
11. est store result_3sls

12. quietly reg3 (  currentnumofops currentfleetsize currentnumofpsg currentnumofal
  >  distance )( currentfleetsize  currentnumofops  previousfleetsize  currentnumof
  > psg ), ols

13. est store result_ols

14. hausman result_ols result_3sls, alleqs constant
```

	Coefficients			
	(b) result_ols	(B) result_3sls	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
currentnumofops				
currentfle~e	-.7828089	-.8097245	.0269156	.
currentnum~g	.8707945	.873807	-.0030125	.
currentnum~l	.1228001	.1304208	-.0076207	.
distance	-.1802384	-.1606353	-.0196032	.
_cons	-3.719893	-3.759713	.0398198	.
currentfleetsize				
currentnum~s	-.8523876	-.7367297	-.1156579	.
previousfl~e	.10126	.1756232	-.0743631	.
currentnum~g	.8176774	.7213166	.0963608	.
_cons	-3.959886	-3.387019	-.5728666	.

```
                b = consistent under Ho and Ha; obtained from reg3
     B = inconsistent under Ha, efficient under Ho; obtained from reg3

    Test:  Ho:  difference in coefficients not systematic

                  chi2(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       20.17
                Prob>chi2 =      0.0169
                (V_b-V_B is not positive definite)
```

国土技術政策総合研究所資料

TECHNICAL NOTE of ＮＩＬＩＭ

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本資料の転載・複写のお問い合わせは
〒239-0826 神奈川県横須賀市長瀬 3-1-1
管理調整部企画調整課　電話：046-844-5019
E-mail：ysk.nil-kikaku@ml.mlit.go.jp