AN ABSTRACT OF THE THESIS OF

Patricia E. Hays for the degree of Master of Science

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Title: Paleoceanography of the Eastern Equatorial Pacific During the Pliocene: A High Resolution Radiolarian Study.

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Abstract Approved:

Nicklas G. Pisias

Pliocene sediments from Hydraulic Piston cores of Deep Sea Drilling sites 572 and 573 in the eastern equatorial Pacific provide material for a high resolution stratigraphic and paleo-oceonographic study during a period of time from 2.4-3.7 Ma. High resolution radiolarian stratigraphy of these two sites reveals two major faunal events. The older event involves equatorial surface dwelling species and occurs at the Gauss/Gilbert paleomagnetic reversal boundary which is coincident with time of the closing of the Isthmus of Panama around 3.5 Ma (Berggren and Hollister, 1974; Keigwin, 1978, 1982a, b). The younger event involves two subarctic species and occurs at 2.9 Ma, prior to the onset of northern hemisphere glaciation as dated in North Atlantic sections. The combination of paleomagnetic, quantitative radiolarian, and carbonate data provides three synchronous faunal datums in addition to a number of major carbonate features which can be used to provide a detailed stratigraphic framework for these two sites. Correlating these major features with equivalent sections from sites 504 and 503 reveals that the datum of *Theocalyptra davisiana*

is diachronous between the sites in the extreme eastern equatorial regions and the sites in this study.

Relationships between extant radiolarian species and oceanography of the region are used to examine the paleoceanography of the Pliocene. Analysis of quantitative radiolarian data for extant species divides the Pliocene fauna into the Central and Eastern Equatorial assemblages. These assemblages are inferred to represent the slope of the thermocline along the east-west productivity gradient of the eastern equatorial Pacific. The relationships between these assemblages and the positions of the sites indicate that the Pliocene productivity gradient was similar to the modern gradient. Downcore records of the first two of these assemblages reveal that the depth of the thermocline undergoes a stepwise decrease at the western site before the onset of northern hemisphere glaciation whereas the mean does not change significantly at the eastern most site.

Paleotemperature estimates from extant radiolarian data in two piston cores (RC10-65 and RC11-210) provide a means to compare Late Pleistocene paleoceanography with the Pliocene intervals of sites 572 and 573. Paleotemperatures are calculated for the month of February when the tradewinds are at their southernmost position and for August, the season in which lower temperatures are present in the region due to a more intensified South Equatorial Current. Compared to modern conditions, Pliocene seasonal differences in temperature were lower at site 573 but similar at site 572.

Currently, seasonal contrast similar to that inferred for the the Pliocene interval of site 573 occurs 10^{o} to the west of site 573 and thus we infer that the Pliocene gradient in seasonality was located farther east relative to modern conditions. Seasonality for the Late Pleistocene was similar to modern seasonality at both locations. We believe that the reduced Pliocene temperature gradient was caused by lower magnitudes and a less extensive gradient in wind stress in equatorial regions. No influence of the restriction of circulation across the Isthmus of Panama is seen in the data for extant radiolarian species is seen at sites 572 or 573.

PALEOCEANOGRAPHY OF THE EASTERN EQUATORIAL PACIFIC DURING THE PLIOCENE: A HIGH RESOLUTION RADIOLARIAN STUDY

by

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Professor of Oceanography in charge of major

Redacted for privacy

Dean of College of Oceanography

Redacted for privacy

Dean of Graduate School

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Typed by Patricia E. Hays

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TABLE OF CONTENTS

List of Figures

List of Tables

Paleoceanography of the Eastern Equatorial Pacific During the Pliocene: A High Resolution Radiolarian Study

INTRODUCTION:

Since the Swedish Deep Sea Expedition (Arrehenius, 1952) the equatorial Pacific has been the subject a number of paleoceanographic and paleoclimatic studies. Previous research in the eastern equatorial Pacific has concentrated on Quaternary paleoceanographic response to the large climate fluctuations which characterize this period (Luz and Shackleton, 1978; Adelseck and Anderson, 1978; Molina-Cruz, 1977a, b; Romine, 1980; Schramm, 1983, 1985). These large Quaternary climate fluctuations are best illustrated in large amplitude variations in foraminiferal oxygen isotope records associated with changing volumes of northern-hemisphere polar ice (Shackleton and Opdyke, 1973). The oceanic response of the eastern equatorial Pacific to many of the glacial/ interglacial climatic variations was an increase during glacials and decrease during interglacials of upwelling along the equator (Romine, 1980, 1982, Schramm, 1983, 1985).

Initial stratigraphic work in the equatorial Pacific concentrated on Pliocene and Pleistocene sections derived from the study of standard piston cores (Hays et al., 1969; Dunn and Moore, 1981), which had relatively continuous records but low accumulation rates. Earlier Deep Sea Drilling Project sites in the area were rotary drilled, making high-resolution work impossible because of drilling disturbance. More recently, relatively undisturbed Neogene sedimentary sections of moderate to high rates of accumulation have been recovered with the hydraulic piston cores (HPC) from four eastern equatorial Pacific sites (Prell and Gardner et al., 1982, Mayer and Theyer et al., 1985). These sites provide the first materials necessary to study detailed variability in Pliocene paleoceanography.

We have examined late Pliocene records (2.4 to 3.7 Ma) from the equatorial Pacific to determine the nature of oceanic variability during a period in earth's history when large northern-hemisphere ice sheets were not important. During this time, two events occurred that may be climatically significant. First, the closure of the Isthmus of Panama between 3.5 and 3.2 Ma (Berggren and Hollister, 1974, Keigwin, 1978, 1982a, b) ended equatorial circulation between the Pacific and Atlantic. Second, a major transition in variability of benthic oxygen isotope records occurred at 2.4 Ma. This time is suggested to mark the first major development of northern-hemisphere ice sheets (Prell, 1984; Shackleton et al., 1984; Rea and Schrader, 1985). Thus, a comparison between records from 3.4 to 2.4 Ma with Quaternary sections allows us to assess the nature of climate change with and without the presence of major changes in northern hemisphere ice sheets. Such comparisons will help determine the importance of the response of ice sheets in controlling the global climate system.

Quantitative radiolarian microfossil data are used here to characterize the oceanographic variability of the Pliocene. Dissolution of calcareous sediments in the equatorial Pacific affects the distribution of foraminifera (Parker and Berger, 1971) making their surface-sediment distribution in part reflect other factors unrelated to surface water masses. The relationship between radiolarian distributions and the position of currents and water masses has been demonstrated statistically and graphically for surface sediments of the Pacific Ocean (Moore, 1978; Lombari and Boden, 1985). Studies of Pleistocene sediments (Molina-Cruz, 1976a and b; Romine, 1980, 1982; Schramm, 1983, 1985) have used downcore fluctuations in radiolarian assemblages as a measure of variability of equatorial Pacific oceanic circulation.

Previous studies of Pliocene radiolaria have concentrated on biostratigraphy of equatorial Pacific sediments (Riedel and Sanfillipo, 1978, Riedel and Westberg, 1982; Nigrini, 1985), we have utilized the available data on the distribution of radiolaria in Recent sediments to infer paleoceanographic conditions in the equatorial Pacific during this important interval of development in the earth's climate.

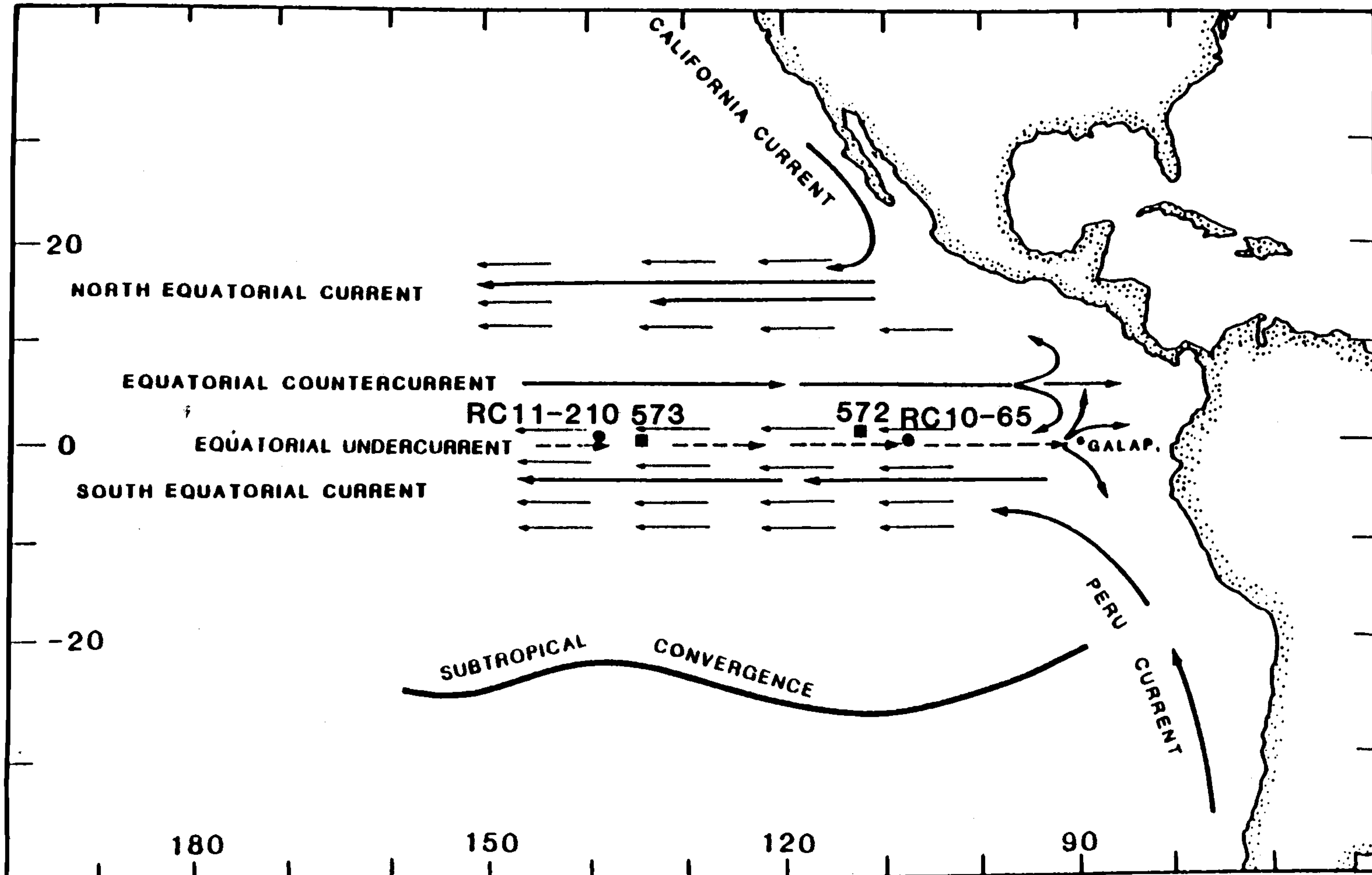
The results of this study are presented in two parts. The first presents a stratigraphic framework for studying late Pliocene sections from the equatorial Pacific. This framework provides the basis for completing future detailed time series studies at these sites. In the second, faunal analysis of late Pliocene radiolaria is used to infer oceanographic conditions in the Pliocene equatorial Pacific and to compare these conditions to the Late Pleistocene.

STUDY AREA

The surface circulation of the equatorial Pacific is shown in Figure 1. Situated between 5 $^{\circ}$ N and 15 $^{\circ}$ S, the westward- flowing South Equatorial Current (SEC) is driven primarily by the southeast trade winds (Wyrkti, 1966, 1982). North of 5° N, where wind stress weakens, the eastward flowing Equatorial Counter Current (ECC) brings western-Pacific waters into the eastern Pacific. This current is separated from the SEC by an oceanic convergence (Wyrkti, 1966). Between 10° and 20° N, the westward flowing North Equatorial Current (NEC) is driven by the northeast trades. It is partially supplied by waters from the California Current (Wyrkti, 1966). Seasonally, the strength of the ECC and the NEC vary synchronously and out of phase with the SEC. The NEC is influenced more by the position of the northeast trade winds than by their intensity. Thus, when the northeast trades are at a more northern position but weaker in magnitude, they intensify the NEC during November and January (Hayes, et al., 1983) Wyrkti, 1973, 1974a, b). The ECC is also stronger during this same season because it is not opposed by strong tradewinds (Wyrkti, 1973, 1974a, b). Strength of the SEC is influenced directly by the strength of the southeast tradewinds and is thus most intense during southern hemisphere winter (Wyrkti, 1973, 1974a, b).

Water from higher latitudes is transported into the eastern equatorial Pacific by the California Current and the Peru Current. Upwelling of subpolar water from below the thermocline occurs in these currents as they approach the equator (Cromwell, 1953; Knauss 1966).

Figure 1. Location of DSDP sites 572 and 573 and piston cores RC10-65 and RC11-210. Surface circulation of the eastern equatorial Pacific.



CALIFORNIA CURRENT
20
NORTH EQUATORIAL CURRENT
EQUATORIAL COUNTERCURRENT
RC11-210
573
572
RC10-65
0
EQUATORIAL UNDERCURRENT
GALAP.
SOUTH EQUATORIAL CURRENT
PERU CURRENT
-20
SUBTROPICAL CONVERGENCE
180
150
120
90

Figure 1

Effects of this coastal upwelling penetrate west of the Galapagos Islands, where it is secondary to equatorial upwelling (Pak and Zaneveld, 1974). Upwelling along the equator occurs as a result of wind-induced Ekman divergence and a change in sign of the Coriolis parameter (Wyrkti, 1966).

A fundamental feature of the equatorial Pacific is the eastward shoalling thermocline. This results in a marked gradient in surface productivity, which is reflected in the surface sediment distributions of radiolarian species (Koblentz-Mishke, et al., 1970; Lombari and Boden, 1985). The zonal slope of the thermocline varies seasonally, with a maximum occurring in October after the period of maximum westward southern tradewind stress (Meyers, 1979). A tongue-shaped body of cooler, nutrient rich water near South America is present and may be due to a combination of the westward flowing SEC and upwelling of water from beneath the thermocline (Wyrkti, 1966, 1981) or due to upwelling of the Equatorial Undercurrent (Bryden and Brady, 1985). This body of cooler water is best developed from August to October, when the southeast trades are at a maximum.

Associated closely with the thermocline and confined within 2° N and S of the equator is the eastward flowing subsurface Equatorial Undercurrent (EUC) (Knauss, 1960,1966; Wyrkti, 1966; Hisard et al., 1970). Theoretically, this current is maintained by an eastward pressure gradient which results from the long term effect of the predominantly westward winds in the region. Water piled higher on the western side of the Pacific causes the sea surface to slope in the opposite sense of the thermocline and the EUC (Moore and Philander, 1977). Seasonally, the EUC is strongest and its core shallowest when westward wind stress is at a minimum during the months of March and April (Moore and Philander, 1977). During October and September when the westward winds are most intense, the westward flow of surface water along the equator is strongest and the eastward velocity maximum in the undercurrent is deepest (Moore and Philander, 1977).

MATERIALS AND METHODS

This study used sediments from eastern equatorial Pacific HPC sites 572 and 573 from the Deep-Sea Drilling Project. Complete Pliocene sections of siliceous calcareous ooze and chalk units were recovered at these locations (Mayer and Theyer et al., 1985; Table 1, Figure 1). Sites 572 and 573 presently lie underneath the SEC and within the high productivity region of the eastern equatorial Pacific. Backtracking of these sites show that they have remained within 0° to 1° N and have not moved more than 2° east in the last 4 million years (van Andel et al., 1975). Radiolaria are abundant and well preserved in both sections and there is no evidence of hiatuses or reworking (Barron 1985, Nigrini, 1985).

Radiolarian faunal analysis was completed for both stratigraphic and paleoenvironmental studies. A total of 106 radiolarian species were counted in each sample. These species accounted for 60 to 70 % of the 800 to 1000 specimens counted. Species used for biostratigraphic analysis were those from the tropical Pacific zonation scheme of Riedel and Sanfillipo (1978). Additional radiolarian species used here were those used in previous Quaternary and Neogene studies of the equatorial Pacific (Moore, 1978; Moore and Lombari, 1981). With one exception, the taxonomy of these species may be found in Benson, (1966), Kling, (1973), Moore, (1974), Nigrini and Lombari (1984) and Nigrini and Moore (1979). The exception is that two subspecies of *Theocalyptra davisiana* were used in this study (*T. davisiana davisiana* and *T. davisiana cornutoides*); their taxonomy can be found in Morley (1980). Slides were

Table 1. Latitude and Longitude of sites 572 and 573, and piston cores RC10-65 and RC11-210.

Site 572	1° 26' N	113° 50' W
Site 573	0° 30' N	133° 19' W
RC10-65	0° 41' N	108° 37' W
RC11-210	1° 49' N	140 03' W

prepared using the random settling method of Roelofs and Pisias (1986). Samples for the faunal data were from 20 cm sample intervals in holes 572a and 573.

In past biostratigraphic studies, correlations based on radiolarian data often contained datums which were not consistently in sequence due to a variety of factors (see discussion in Westberg and Riedel, 1978, 1982). To avoid the problems caused by low abundance and intermittent occurrence of some stratigraphic radiolarian species, a datum was considered reliable for correlation only if the species was present continuously in the section and the datum could be located within $\pm$ 20cm.

Radiolarian assemblages were identified using an extended version of Q-mode factor analysis with varimax rotation (Klovan and Meisch, 1976) on a subset of 44 extant species from the total faunal analysis. Species compositions of each assemblage were given by the faunal description matrix. Downcore fluctuations of these assemblages at each site was described by the varimax matrix.

Paleotemperature equations for the Pliocene interval were calculated using the method developed by Imbrie and Kipp (1971) which was applied in the Miocene (Moore and Lombari, 1981). Multiple regression techniques were used to define relationships between surface sediment assemblages and modern August and February sea surface temperatures.

These Pliocene paleotemperature estimates were compared to Late Pleistocene estimated temperatures for two eastern equatorial Pacific piston cores from the eastern equatorial region. The Quaternary data is from Schramm (1983) for core RC10-65 and the data for RC11-210 is from Pisias (in prep.). Figure 1 shows the locations of these two piston cored sites. RC10-65 is close to site 572 and RC11-210 is near site 573. The paleotemperature equations used for these two Pleistocene data sets come from Moore (1980) and were developed using the same method as described above.

Carbonate concentrations were measured for stratigraphic purposes at 20 cm sampling intervals for 572A and 573 (Hays et al., 1984) using the method of Dunn (1980). Analytical precision is 1.0 %. Paleomagnetic data for site 573 are from Weinrich and Theyer (1985). Each reversal down to the lower Mammoth boundary (3.18 Ma) has been measured with a sampling resolution equivalent to 0.05 to 0.1 m.y. The position of the Gauss/Gilbert reversal (3.4 Ma) in site 573 comes from the correlation of Prell (Figure 2, Table 3, 1985). Ages of the paleomagnetic events are from Berggren et al., (1985).

STRATIGRAPHY

RESULTS

The stratigraphy presented in this study was constructed by combining paleomagnetic stratigraphy for site 573 with a high-resolution radiolarian biostratigraphy and carbonate stratigraphy. Additional carbonate and paleomagnetic stratigraphic data from sites 503 and 504 where used to evaluate the reliability of biostratigraphic horizons (Kent and Spariosu, 1979; Gardner, 1981; Prell, 1985; Alexandrovitch, 1985). The objective of this stratigraphic approach was to provide a high-resolution stratigraphic framework for the equatorial Pacific sites.

Ten species had datums in these two equatorial sites during the stratigraphic interval studied. The depths of these datums are in Table 2. Six radiolarian species had last appearance datums (LAD's): Spongaster pentas, Didymocyrtis penultima, Lychnodictyum audax, Phormostichoartus doliolum, P. fistula and Stichocorys peregrina. Four species with first appearance datums (FAD's) are Amphirhopalum ypsilon, Ptercanium praetextum, Lamprocyrtis neoheteroporus and T. davisiana davisiana. Two of the species (D. penultima and L. audax) were absent in the stratigraphic interval studied at site 572, but are found lower in the section at this site. Figure 2 illustrates the radiolarian stratigraphy for the two sites as well as the paleomagnetic stratigraphy for site 573. Near the Gauss/Gilbert boundary (3.4 Ma), a faunal turnover occurred in which five species (S. pentas, D. penultima, L. audax, P. doliolum and P. fistula) gradually disappeared

Table 2. Stratigraphic species of radiolaria used in this study, depth of datums and errors on these depths.

	573	572A
Theocalyptra davisiana var. davisiana	35.4 (35.2-35.6)	36.9 (36.9-36.5)
Stichocorys peregrina	38.6 (38.8-38.4)	40.7 (40.7-40.5)
Lamprocyrtis neoheteroporous	42.5 (42.5-45.2)	45.5 (45.5-45.7)
Amphirhopalum ypsilon	50.5 (50.5-53.1)	51.6 (51.6-57.7)
Phormostichoartus doliolum	51.6 (51.6-51.4)	55.8 (55.8-55.4)
P. fistula	55.5 rare	54.8 rare
Pterocanium praetextum	54.2 (54.2-55.9)	48.5 (48.51-55.8)
Spongaster tetras	51.8 (51.8-56.1)	55.6 (55.6-59.9)
S. pentas	58.4 rare	58.41 rare
Didymocyrtis penultima	59.5 rare	absent
Lychnodictyum audax	72.7 rare	absent

Figure 2. Summary of the radiolarian biostratigraphy and paleomagnetic stratigraphy for Pliocene sections of sites 572 and 573 used in this study. Solid lines indicate where species was continuously occurring (see methods section). Dashed lines indicate where species record contained gaps.

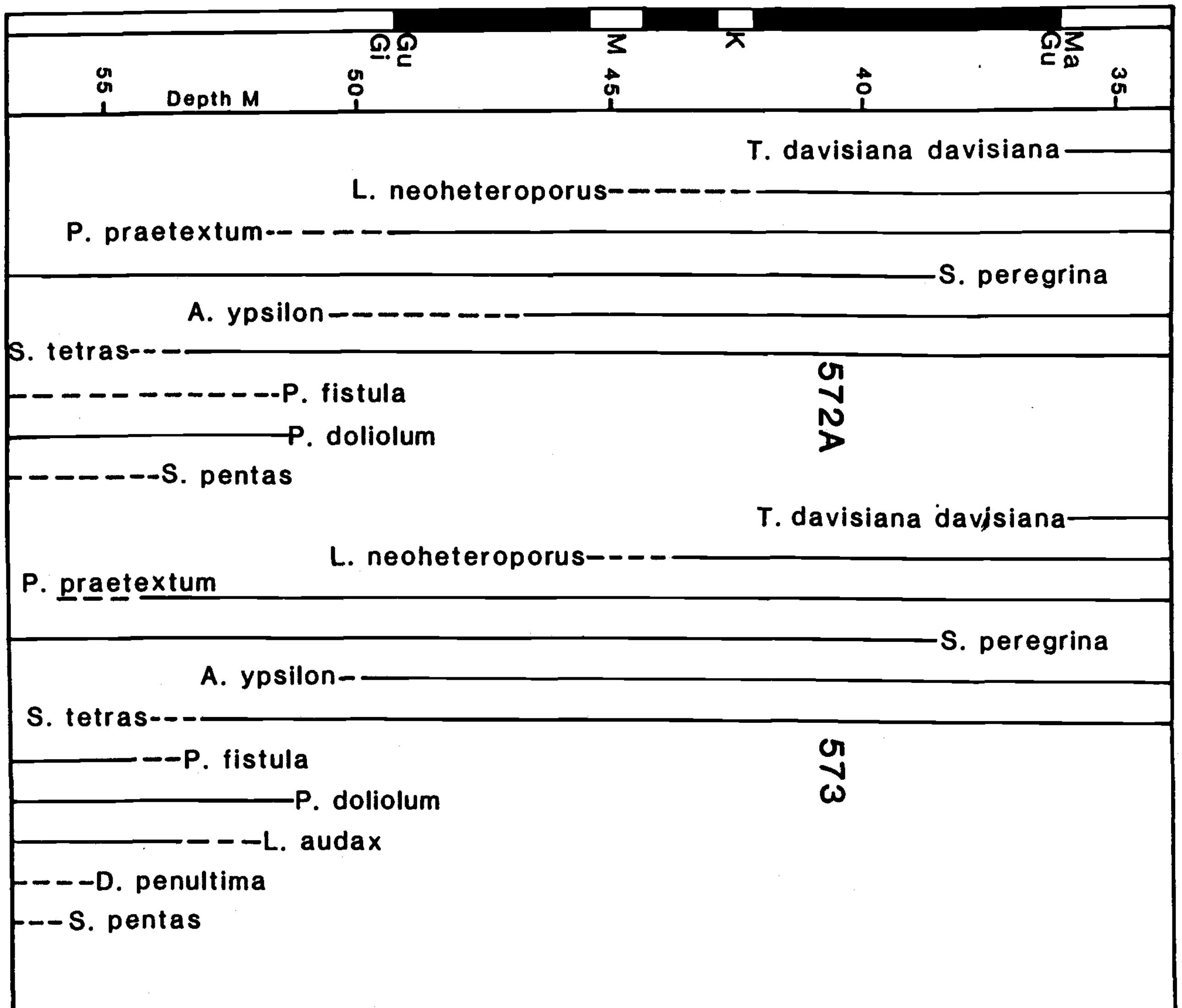

Gu
Gi
M
K
Ma
Gu
55
Depth M
50
45
40
35
T. davisiana davisiana
L. neoheteroporus
P. praetextum
S. peregrina
A. ypsilon
S. tetras
P. fistula
P. doliolum
S. pentas
572A
T. davisiana davisiana
L. neoheteroporus
P. praetextum
S. peregrina
A. ypsilon
S. tetras
P. fistula
P. doliolum
L. audax
D. penultima
S. pentas
573

Figure 2

and three species appeared (S. tetras, A. ypsilon, P. praetextum). Near the Matuyama/Gauss paleomagnetic reversal (2.4 Ma) a second change occurred where the (LAD) of S. peregrina was followed by the (FAD) of T. davisiana davisiana.

Of the ten stratigraphic species, only the datums of three (P. doliolum, S. peregrina and T. davisiana davisiana) could be located within ± 20 cm (Figure 3). The FAD of T. davisiana davisiana occurs in a carbonate minimum in both sections and just above the Matuyama/Gauss boundary. The LAD of S. peregrina occurs in a carbonate maximum between the Matuyama/Gauss and Upper Kaena boundaries. The LAD of P. doliolum is found near the base of the section in a carbonate minimum below the inferred position (Prell, 1985) of the Gauss/Gilbert reversal. Using these relationships between the magnetostratigraphy, carbonate stratigraphy and faunal stratigraphy in site 573, magnetostratigraphy for site 572 was inferred as shown in Figure 3.

Figure 3. Combined paleomagnetic, carbonate and faunal stratigraphy for holes 573 and 572A using same samples as those for the paleoceanographic studies. Arrows indicate positions of the three reliable datums from the biostratigraphic analysis. The LAD of P. doliolum is at the base of the section, the LAD of S. peregrina is in the middle and the FAD of T. davisiana davisiana is at the top. Bracketed section of 572A is an interval of significant drilling disturbance.

Combined Faunal, Paleomagnetic and Carbonate Stratigraphy

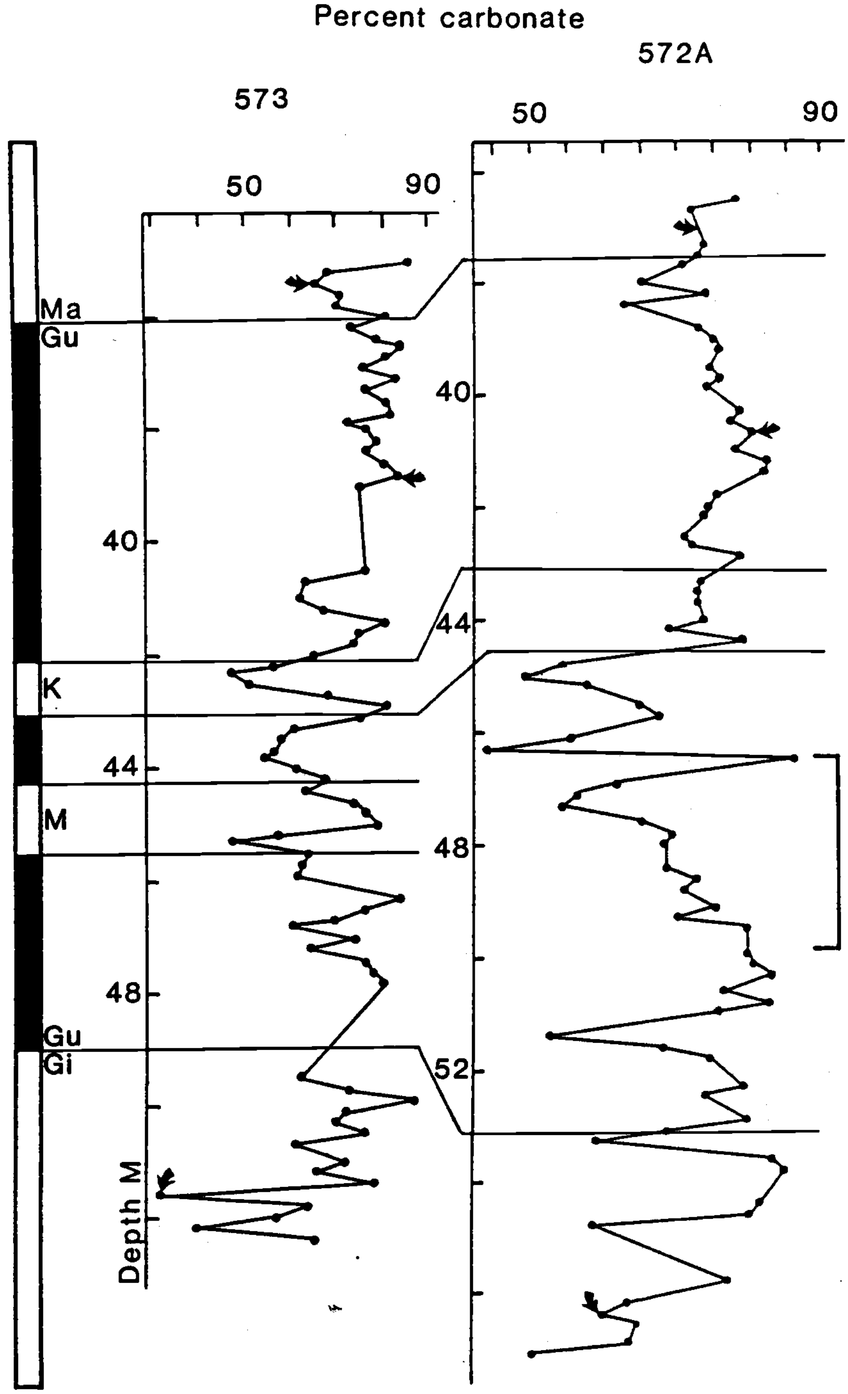


Figure 3

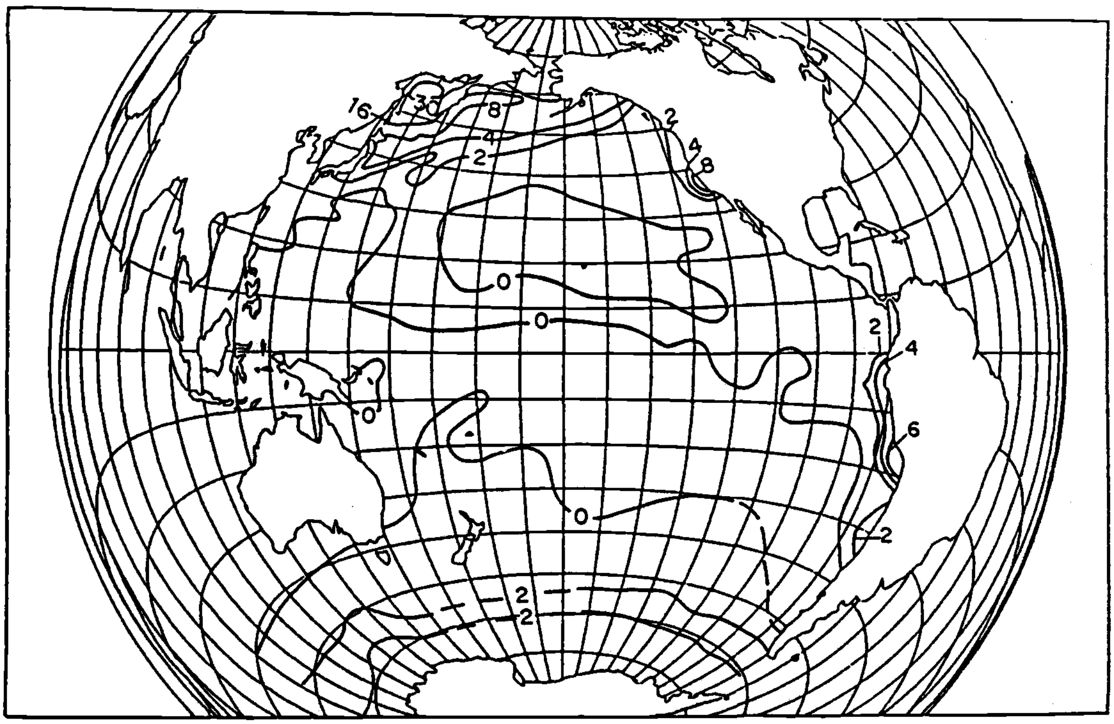
DISCUSSION

Biostratigraphic analysis of the radiolarian population at sites 572 and 573 has yielded eleven faunal datums. With the exception of the T. davisiana davisiana datum, all of the datums are in general agreement with the tropical Pacific zonation scheme (Riedel and Sanfillipo, 1978) and the original biostratigraphic study of these two DSDP sites (Nigrini, 1985).

During this interval the radiolarian fauna display two general biostratigraphic events. One of these events occurs lower in the section and involves a marked faunal turnover in which three species gradually replaced five species. The two species with FAD's (A. ypsilon and P. praetextum) are thought to be near-surface dwellers (Lombari and Boden, 1985; Casey, 1971). Assuming that the five species with last appearances were also surface dwellers, this faunal change would reflect changes in surface equatorial Pacific circulation. Stratigraphically, this faunal event is around 3.4 Ma and may be related to the final closure of the Isthmus of Panama (Berggren and Hollister, 1974; Keigwin, 1978; 1982a, b).

The second faunal event occurs higher in the section and involves the sharp disappearance of the highly abundant S. peregrina and the appearance of T. davisiana davisiana at 2.5 Ma. Figure 4 contains the recent surface-sediment distribution map for T. davisiana davisiana. This subspecies is presently most abundant in sediments of the western subarctic. S. peregrina was also a species most abundant in subpolar regions (Romine, 1985). Thus the FAD of T. davisiana davisiana and the

Figure 4. Surface sediment distribution map of _T. davisiana_ from Lombari and Boden (1985).



Theocalyptra davisiana

Figure 4

LAD of S. peregrina may reflect events at high latitudes which are stratigraphically near the major change in northern-hemisphere climate indicated by the changing character of ice volume seen in foraminiferal oxygen-isotope data (Shackleton et al., 1984; Prell, 1984).

The FAD of the subspecies T. davisiana davisisana has been reported in the North Pacific and at equatorial Pacific DSDP sites (503 and 504 which lie further east than sites 572 and 573) as occurring significantly below the M/G reversal (Alexandrovitch, 1985; Morley, 1985). T. davisiana is abundant in the sediments beneath areas of coastal upwelling along the South American continent and in the eastern equatorial Pacific where the thermocline is shallowest (Figure 4). At sites 572 and 573, the FAD of this subspecies occurred right at the Matuyama/Gauss boundary and is therefore diachronous between the eastern and central equatorial sites. This may suggest a change in structure of the thermocline at about this time.

Combining carbonate stratigraphy with the datums of P. doliolum, S. peregrina and T. davisiana davisiana has not only allowed approximation of magnetostratigraphy for site 572 but has also significantly increased the resolution of the stratigraphy. Consistency between the three reliable faunal datums and the carbonate data indicates that these datums are isochronous between sites 572 and 573 at the resolution of this study.

These datums combined with the magnetic and carbonate data can be used to correlate site 572 and 573 with sites 503 and 504 so that a more complete equatorial transect can be ultimately considered. Paleomagnetic data for site 503 is from Kent and Spariosu (1979) and the carbonate data is from Gardner (1981). Carbonate data for site 504 comes from Beiersdorf and Natland, (1981). For hole 573A and 572C of these DSDP sites, carbonate data comes from Prell (1985). Radiolarian biostratigraphy of site 503 and 504 is from Alexandrovitch (1985). The stratigraphy of sites 572 and 573 is in Figure 5 and that of sites 503 and 504 is in Figure 6.

Correlation of these four sections is based on identifying major carbonate features using paleomagnetic and faunal datums. At the base of all four sections is a carbonate minimum that coincides with the P. doliolum datum, between the Gauss/Gilbert transition and the Cochiti event. Shallower in the stratigraphic section (Figures 5 and 6) lie three carbonate minima that have been identified by Hays et al. (1969) and correlated into 572C and 573A by Prell (1985). In all four sections the GU3 carbonate feature is a double minimum event centered about the lower Kaena boundary (Figures 5 and 6). These carbonate minima are clearly visible in the carbonate stratigraphy for both holes at site 572 (Figure 5). Nearer the top of the section lies the M21 carbonate minimum, which occurs just above the Matuyama/Gauss reversal as measured in both sites 573 and 503. In 572A and 573, this minimum is also associated with the FAD of T. davisiana davisiana (Figure 5). In 503 and 504, the FAD of T. davisiana davisiana lies several minima below this carbonate feature confirming the diachroneity of this datum. Within the framework provided by these four principal carbonate minima, many more carbonate features can be correlated (see dashed lines in Figure 5). These stratigraphic sections, developed from hydraulic piston cores, represent high-resolution records sufficient to relate

Figure 5. Correlation of both holes at both sites 572 and 573 using principal faunal datums and carbonates. Bracketed area of 572A is area of significant drilling disturbance. Solid lines are principal correlations based on multistratigraphic features. Dashed lines are secondary carbonate features whose correlation relies on the principal correlations. _T_. _davisiana davisiana_ datum coincides with M21 minimum.

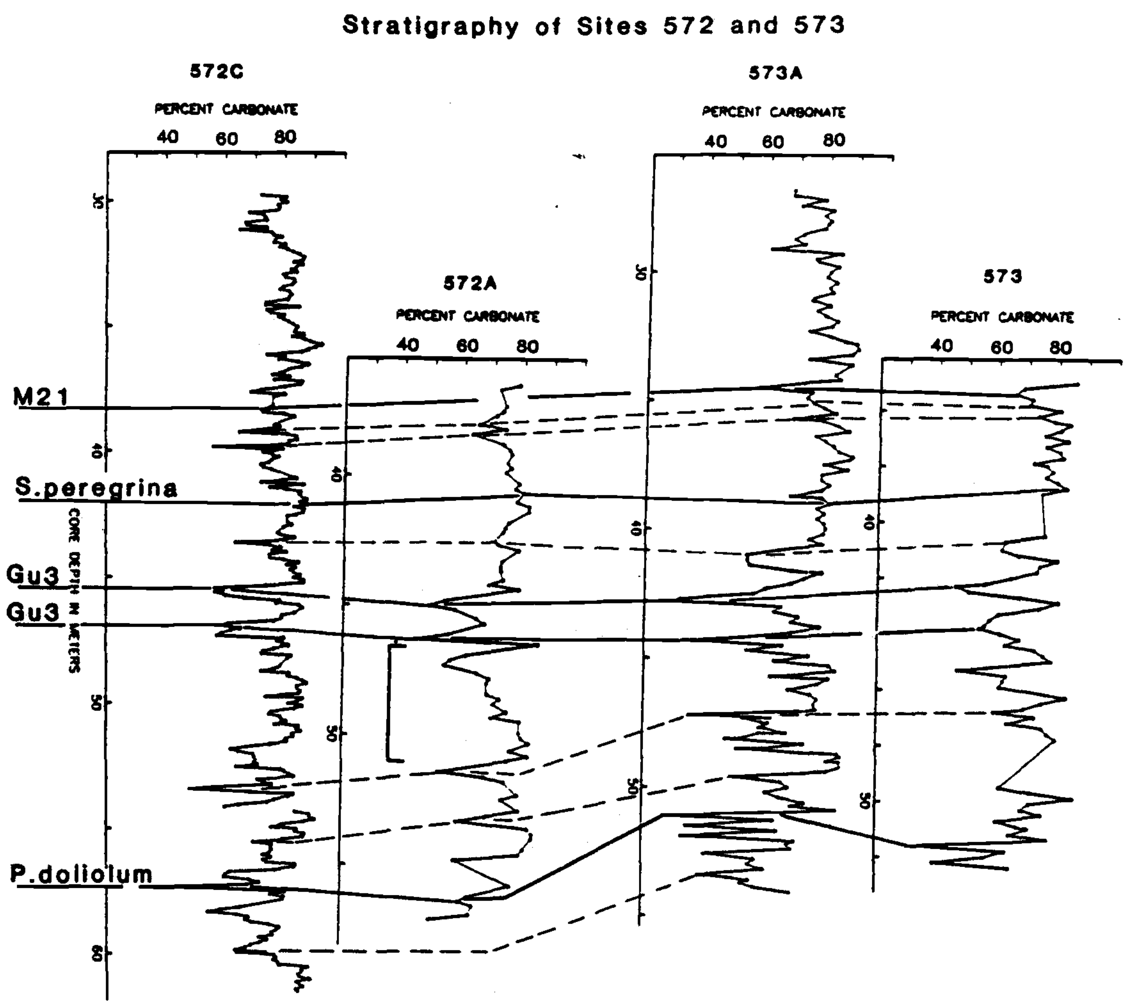
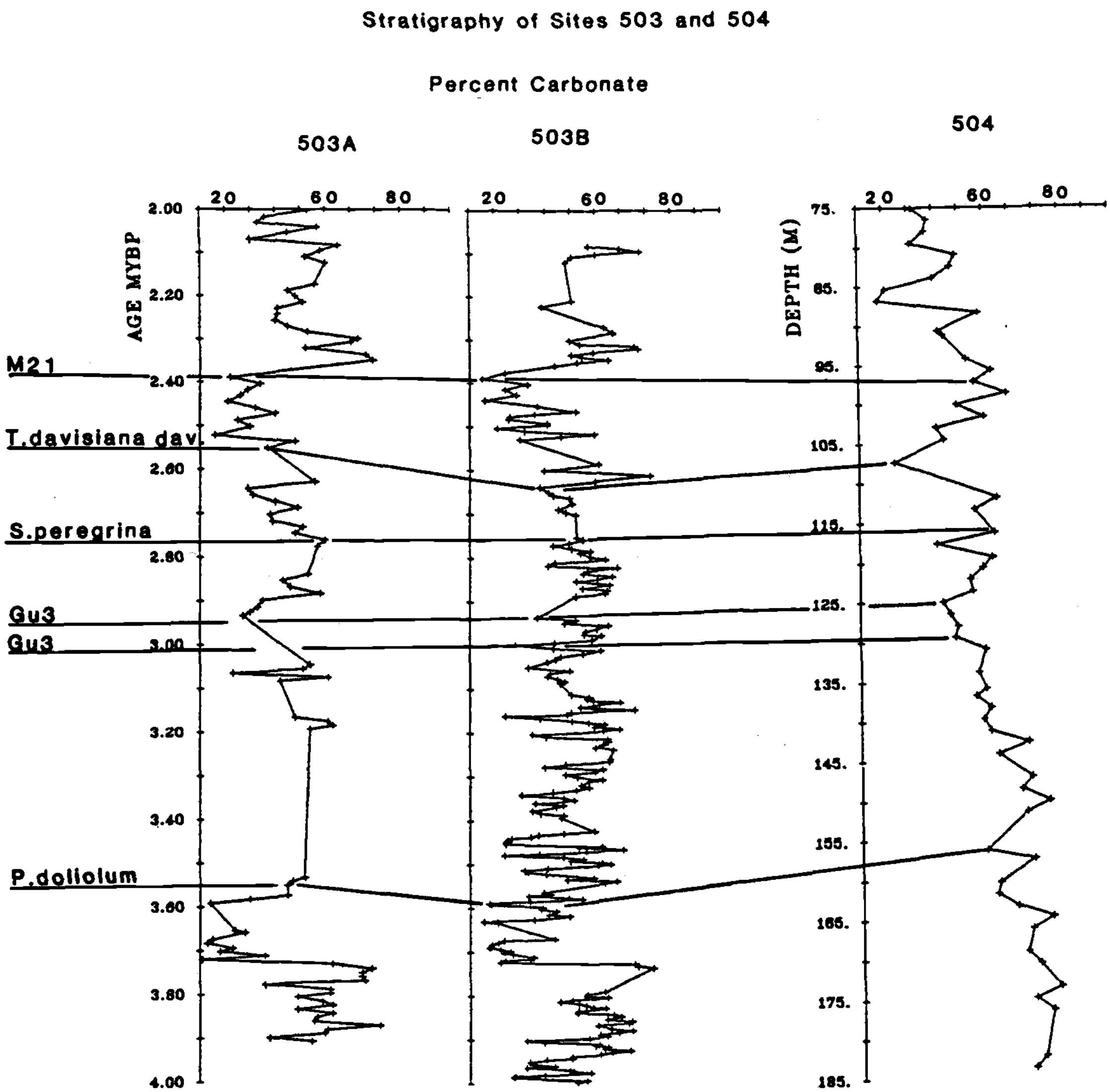

Stratigraphy of Sites 572 and 573
572C
PERCENT CARBONATE
40 60 80
572A
PERCENT CARBONATE
40 60 80
573A
PERCENT CARBONATE
40 60 80
573
PERCENT CARBONATE
40 60 80
CORE DEPTH IN METERS
30
40
50
60
M21
S.peregrina
Gu3
Gu3
P.doliolum

Figure 5

Figure 6. Correlation of principal stratigraphic features from sites 572 and 573 into sites 503 and 504.



Stratigraphy of Sites 503 and 504
Percent Carbonate
503A
503B
504
20
60
80
AGE MYBP
2.00
2.20
2.40
2.60
2.80
3.00
3.20
3.40
3.60
3.80
4.00
DEPTH (M)
75.
85.
95.
105.
115.
125.
135.
145.
155.
165.
175.
185.
M21
T.davisiana dav.
S.peregrina
Gu3
Gu3
P.doliolum

Figure 6

the general oceanographic trends observed in the equatorial Pacific to major climate events.

CONCLUSIONS:

1. During the interval studied, three radiolarian datums are considered reliable for correlation between sites 572 and 573.

2. Two faunal changes are observed, and are dated using the paleomagnetic stratigraphy. The older event involves the LAD's of five species and the FAD's of three species which are equatorial surface dwellers. This event occurs around the Gauss/Gilbert paleomagnetic boundary (3.4 Ma) which lies within the estimated period of the final closure of the Isthmus of Panama. The younger change involves the LAD and FAD of two subarctic radiolaria and occurs below the Matuyama/Gauss boundary (2.5 Ma) and thus prior to the first major accumulation of northern-hemisphere ice as indicated by oxygen-isotope records (Prell, 1984; Shackleton et al., 1984).

3. Comparison of the paleomagnetic and radiolarian stratigraphy for sites 572 and 573 with similar data for sites farther east in the equatorial region and in the North Pacific indicates that the FAD of the subspecies T. davisiana davisiana is diachronous between the sites in this study and the more eastern regions.

4. Adding the carbonate stratigraphy to the faunal and paleomagnetic stratigraphy increases the resolution and indicates that the three reliable faunal datums are isochronous between the central equatorial Pacific sites in this study. Paleomagnetic datums can be approximated in site 572 using the relationships between carbonate and faunal stratigraphy from site 573.

5. Using this combined stratigraphy, holes 573 and 572A are

correlated with holes 573A and 572C by identifying major carbonate features using multiple stratigraphic criteria. These major features are used to correlate sites 503 and 504 with the sites in this study. This provides the stratigraphy necessary to study the paleoceanography of a zonal transect of the equatorial Pacific.

PALEOCEANOGRAPHY

RESULTS

Of the 106 total radiolarian species counted in the Pliocene, 87 are extant and do not have first appearance datums within the stratigraphic interval. Among this group of 87 species, only six species averaged greater than 1 % of the total count. To describe the multivariate data set in a more concise manner, Q-mode factor analysis was used. Modeling the downcore faunal data set with factor analysis involved a reiterative process in which species were gradually eliminated producing a subset of extant species that best described Pliocene oceanic variability. Species which averaged less than 1 % were included in the model only if their variation was consistent with the more abundant species. These rarer species had maximuma between 0.2 % and 1%. The error of estimating abundances of the rarer species was minimized by basing the estimates on a total count of 800-1000. A group composed of forty four species resulted from this process (listed in Table 3). These species are among those not greatly affected by dissolution in equatorial sediments (Pisias et al., 1985).

Q-mode factor analysis of the data for the 44 radiolarian species listed in Table 3 provided a two factor model which explained 89 % of the information contained within the downcore faunal data set. Table 4 contains the assemblage description matrix for the Pliocene factors. Based on present day radiolarian distributions, these two factors can be identified as corresponding to radiolarian assemblages of the Central and Eastern equatorial regions. The Central Equatorial Factor

Table 3. Names of the forty four species used in the factor analysis.

S1	Spongurus sp.
S1A	S. cf. elliptica
S3	Actinomma medianum
S4	A. leptodermum
S5	Cenosphaera cristata
S7	Echinomma cf. leptodermum
S8	Prunopyle antarctica
S10	Echinomma delicatum
S12	Euchitonia furctata/elegans
S13	Polysolenia spinosa
S14	Heliodiscus asteriscus
S1717A	Hexacontium enthacanthum and H. laevigatum
S18	Hymeniastrum euclidis
S19	Larcospira quadrangula
S23	Didymocytris tetrathalamus
S24	Lithelius minor
S28	Spiremia melonia
S29	Larcopyle butchlii
S30	Stylochlamidium asteriscus
S30A	S. asteriscus var. a.
S36	Dictyocorne truncatum
S36A	D. profunda
S36C	Euchitonia triangulum
S40	Spongaster tetras
S44	Spongotrochus glacialis
S45	Porodiscus sp. A.
S47	Stylodicta validspina
S48	Porodiscus sp. B.
S53	Hexapyle spp.
S54	Tetrapyle octacantha/Octapyle stenozoa
N1	Liriospyris reticulata
N2	Anthocyrtidium ophirense
N4	Carpocanium spp.
N7	Pterocorys minithorax
N9	Giraffospyris angulata
N11	Eucyrtidium hexagonatum
N14	Phormospyris stabilis scaphipes
N18	Botryostrobus auritus/australis
N26	Pterocanuim korotnevi
N35A	Theocalyptra davisiana cornutoides
N36	T. bicornis var.
N38	T. bicornis
N40	Pterocorys zancleus

Table 4. Faunal description matrix (see methods section) for the Pliocene factor analysis. Key to species numbers is in Table 3. F1 and F2 are the Central and Eastern Factors, respectively.

	F1	F2
S1	-0.539	0.930
S1A	-0.144	0.268
S3	0.080	0.018
S4	0.001	-0.009
S5	-0.008	0.015
S7	-0.041	0.090
S8	-0.018	0.088
S10	-0.119	0.432
S12	0.026	0.422
S13	-0.001	0.032
S14	0.093	0.222
S1717A	-1.005	2.163
S18	-0.176	0.353
S19	0.660	1.240
S23	0.403	-0.006
S24	-0.536	1.495
S28	0.004	-0.003
S29	-0.095	0.445
S30	1.553	-1.312
S30A	0.325	-0.228
S36	0.231	-0.060
S36A	0.022	0.025
S36C	-0.044	0.278
S40	0.074	0.076
S44	-0.089	0.072
S45	-0.111	0.602
S47	-0.163	0.449
S48	-0.102	0.291
S53	0.112	0.803
S54	5.787	2.786
N1	0.066	-0.011
N1C	-1.211	2.527
N2	-0.706	1.258
N4	-0.252	1.016
N7	0.004	0.002
N9	0.136	0.195
N11	0.356	-0.257
N14	-0.402	1.273
N18	-0.869	1.724
N26	-0.007	0.015
N35A	-0.071	0.268
N36	0.070	0.003
N38	-0.197	0.399
N40	-1.565	3.001

explains 49 % of the variation in the downcore data set. It is characterized by the highest positive loading of Tetrapyle octacantha/Octapyle stenozoa (undifferentiated). These species reach highest abundances in surface sediments of equatorial regions of the Pacific ocean and have been observed to decrease in relative abundance with increasing productivity and decreasing temperature in sediment traps (Lombari and Boden, 1985; Pisias et al., 1985). This first factor thus represents an assemblage more abundant in warmer, less nutrient-rich waters.

The Eastern Equatorial Factor accounts for 40 % of the total variation and is characterized by the highest positive loadings of Pterocorys zancleus, Botryostrobus auritus/australis and Hexacontium enthacanthum/laevigatum. The sediment distribution map of B. auritus/australis is representative of these three species which are most abundant in eastern equatorial waters where the thermocline is shallowest and surface waters are cooler and more nutrient rich (Lombari and Boden, 1985). Relative abundances of B. auritus/australis in sediment-trap data were observed to increase with decreasing temperature and increasing productivity.

The almost equally weighted Central and Eastern Equatorial Factors are interpretted to reflect the slope of the thermocline and the productivity gradient between the two sites. Figure 7 contains the down-core plots of the Central and Eastern Equatorial Factors for site 572. At this eastern most site, the Eastern Equatorial Factor is higher and the Central Equatorial Factor is the most variable. Figure 8 illustrates the same two factors for site 573, where the Central

Figure 7. Downcore plots of the Central and Eastern Equatorial Factors at site 572, plotted against depth (m) relative to 573.

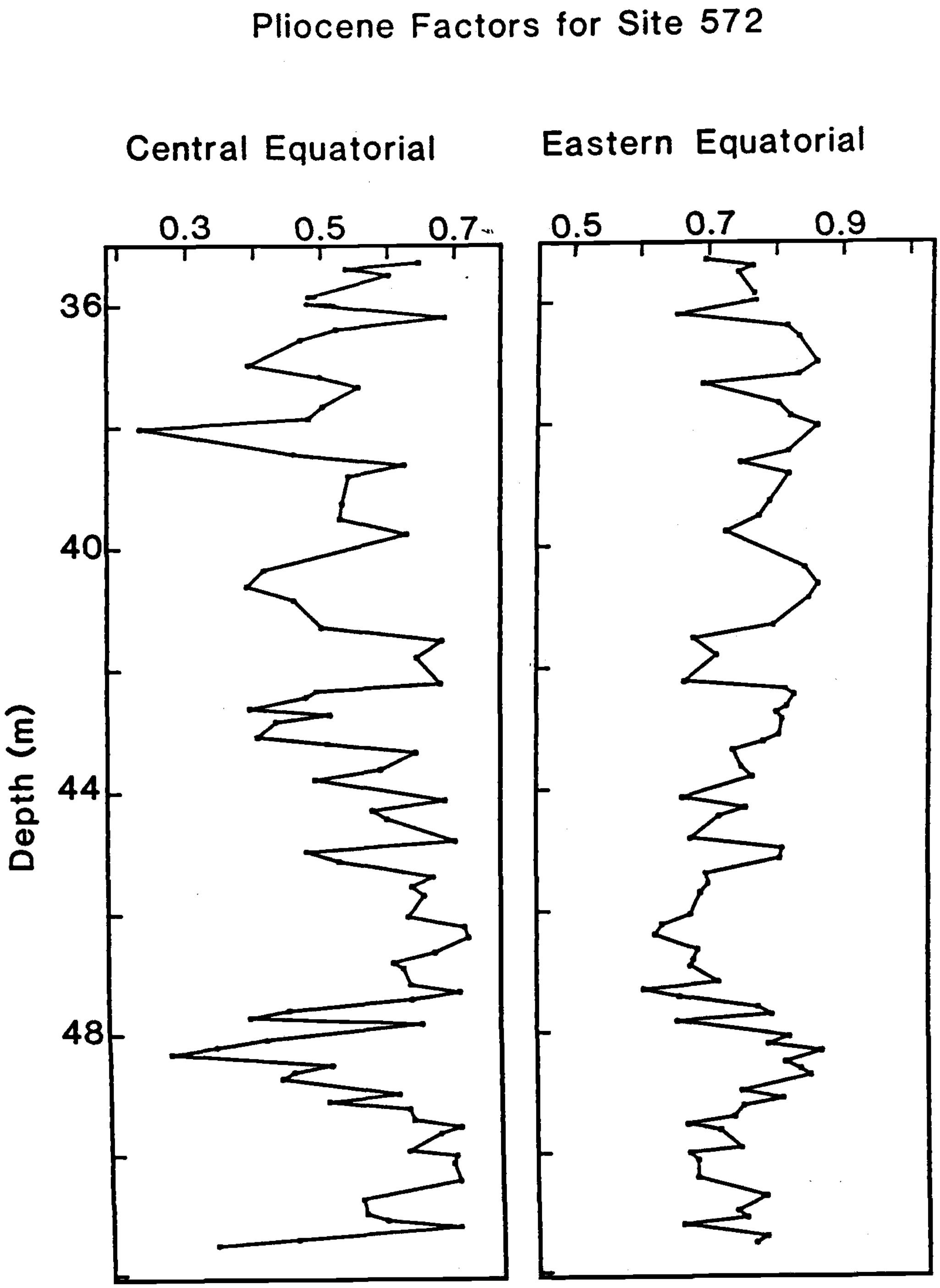

Pliocene Factors for Site 572
Central Equatorial
Eastern Equatorial
0.3
0.5
0.7
0.5
0.7
0.9
36
40
44
48
Depth (m)

Figure 7

Figure 8. Downcore plots of the Eastern and Central Equatorial Factors at site 573. Gaps in the plot are due to drilling disturbance.

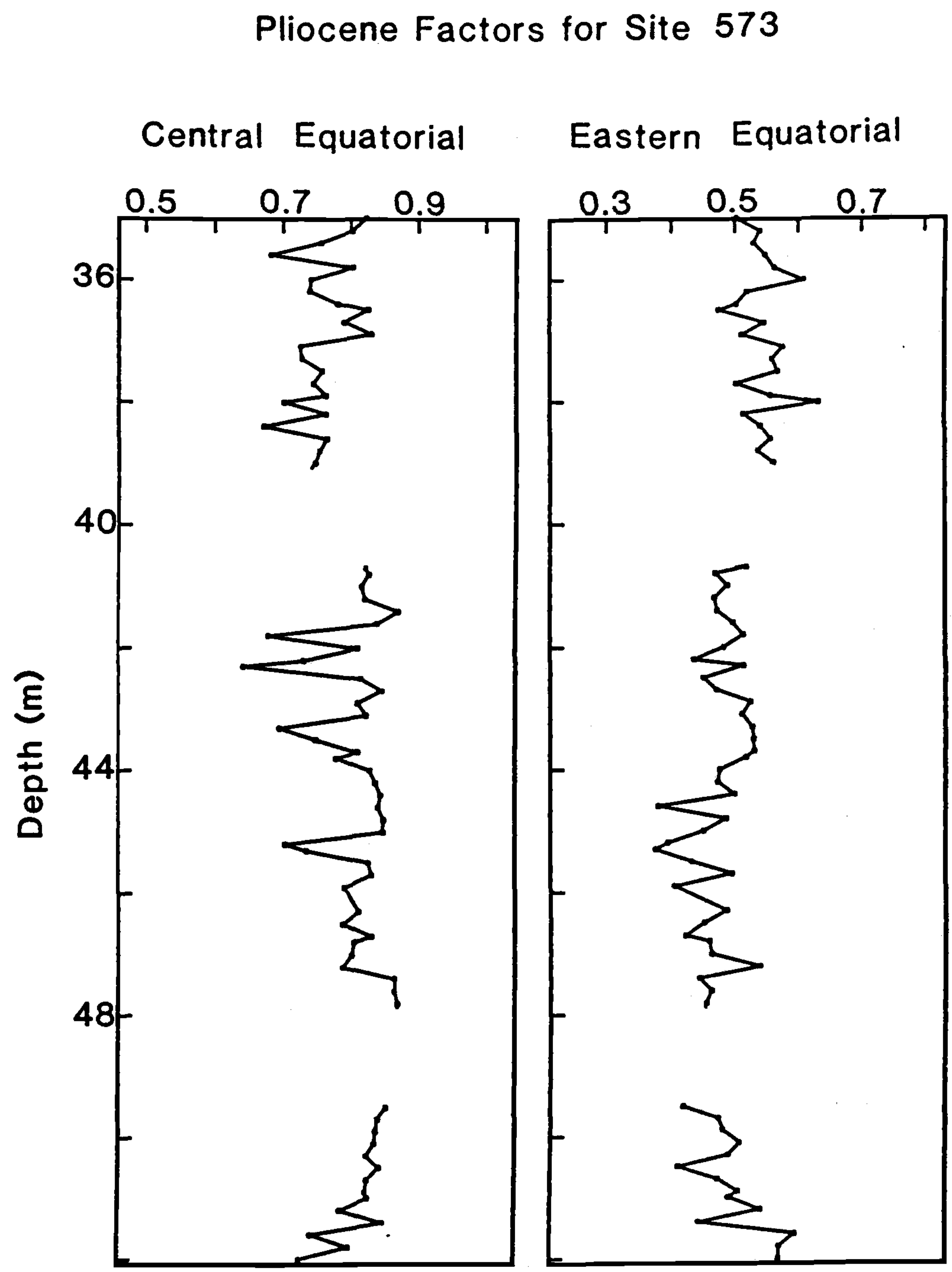

Pliocene Factors for Site 573
Central Equatorial
Eastern Equatorial
0.5
0.7
0.9
0.3
0.5
0.7
36
40
44
48
Depth (m)

Figure 8

Equatorial Factor is dominant. Consistent with the pattern in surface sediments, the eastern fauna is higher in abundance at the eastern most site, where the thermocline should have been shallower and the central fauna dominates in the western site where the thermocline should have been deeper.

A significant (alpha =5%) stepwise change in mean value of these first two factors occurred in the downcore record at site 573. This is most obvious in the Eastern Equatorial Factor (Figure 8). Prior to the S. peregrina datum (38.6 m in 573), the factor averaged 0.47 ($\pm$ 0.007, n=34) while above the datum the mean increased to 0.54 ($\pm$ 0.008, n=22). An increase in average value of this factor implies a decrease in depth of the thermocline at site 573. This change occurs at about 2.9 Ma, before the 2.4 Ma onset of northern-hemisphere glaciation, and approximated in 573 by the positions of the Matuyama/Gauss boundary and the T. davisiana davisiana datum.

Paleotemperature estimates based on the extant radiolarian species were used to provide a quantitative means of comparing the paleoceanography of the Pliocene to the Late Pleistocene. In the method of Imbrie and Kipp (1971), species used to write the equations must have a downcore record analogous to surface sediment distributions. For this reason, species were used from the Pliocene factor analysis whose maximum and minimum abundances did not exceed modern values (Table 5). Three species used in the previous factor analysis (Table 3) were excluded by this criterion (Table 5). All three of these species had abundances which were higher than in the Pleistocene data set for RC11-210. These species (Anthocyrtidium

Table 5. Minimum and maximum relative abundance values for radiolarian species used in the Pliocene paleotemperature equations. Key to species numbers is in Table 3.

	Surface Sediment (Minimum-Maximum)	Pliocene (Minimum-Maximum)
S1	0-4.6	0-2.5
S1A	0-12.54	0-1.2
S3	0-6.9	0-1.3
S4	0-5.1	0-0.5
S5	0-7.6	0-0.2
S7	0-3.4	0-0.5
S8	0-2.6	0-0.7
S10	0-17.7	0-4.1
S12	0-5.0	0-1.5
S13	0-9.4	0-0.4
S14	0-4.7	0-3.0
S1717A	0-5.6	0-3.4
S18	0-3.4	0-0.2
S23	0-12.3	0.1-2.6
S24	0-13.3	0.1-2.7
S28	0-3.4	0-0.2
S29	0-2.5	0-1.1
S30	0-12.2	0-6.4
S30A	0-10.0	0-1.3
S36	0-3.3	0-2.1
S36A	0-5.0	0-0.5
S36C	0-2.5	0-0.9
S40	0-11.0	0-1.0
S44	0-24.2	0-2.6
S45	0-7.4	0-2.3
S47	0-6.6	0-1.3
S48	0-3.5	0-1.1
S53	0-6.5	0-2.6
S54	0-26.4	0-18.0
N1	0-1.9	0-0.7
N4	0-3.1	0.3-2.5
N7	0-2.8	0-0.2
N9	0-6.7	0-1.4
N11	0-2.0	0-1.7
N14	0-3.9	0-3.1
N18	0-2.3	0-1.0
N26	0-2.1	0-0.2
N35A	0-4.9	0-1.1
N36	0-4.3	0-0.4
N38	0-3.9	0-1.1
N40	0-8.4	0.3-7.3

ophirense, Zygocircus productus, and Larcospira quadrangula) closely resemble Miocene species and subspecies in the same respective genera. Their increased abundance in the Pliocene data may be due to taxonomic difficulties. Thus, these species were not used in the paleotemperature equations developed here.

The Pliocene paleotemperature equations are based on the results of Q-mode factor analysis of a group of 41 extant species from 172 surface sediment samples (these data are from Moore, 1978). This factor analysis of surface samples produced an eight factor model similar to the seven factors used by Moore (1978) with the addition of the Western Subtropical Factor. Differences between the original factor analysis of Moore (1978) and the model produced here can be attributed to differences in faunal composition of both models. The eight factor model explained 95 % of the variation contained within the data set; the F-matrix for this model is in Table 6. The first four factors in Table 6 explain 46, 18, 17 and 6 % of the information in the surface sediment data set, respectively. The Tropical Factor is the same as that of Moore (1978) having the highest positive loading of T. octancantha/O. stenozoa (S54). The second factor resembles the Transitional Factor of Moore (1978), with Actinomma medianum (S3), Lithelius minor (S24) and Spiremia melonia (S28) being important in the assemblage. This factor also contains the highest positive loading of Echinomma delicatulum (S10) a species not used in the study of Moore (1978). In Molina-Cruz (1977a) this species was important in eastern boundary current assemblages along the South American continent. Thus, the second factor presented here is a Transitional/ Eastern Boundary

Table 6. F-matrix for the Pliocene paleotemperature equation. For discussion of factors see text. Key to species abbreviations are in Table 3.

	F1	F2	F3	F4	F5	F6	F7	F8
S1	0.000	0.153	0.550	-0.187	0.030	-0.307	-0.085	0.388
S1A	0.203	0.031	-0.128	0.269	-0.355	0.424	-0.068	1.833
S3	0.113	1.262	-0.295	-0.164	-0.312	0.969	-0.201	-2.302
S4	-0.048	0.712	0.648	-0.649	-0.115	1.550	0.645	-1.198
S5	-0.009	1.253	-0.360	-0.057	-0.078	0.454	-0.703	-1.057
S7	-0.088	0.381	0.269	-0.253	0.000	0.471	-0.056	-0.473
S8	-0.024	0.421	-0.039	-0.047	-0.055	0.257	-0.186	-0.541
S10	-0.029	5.067	-1.031	0.833	-0.084	-1.804	-1.410	1.496
S12	0.681	-0.212	-0.122	0.253	1.926	1.277	-0.738	-0.964
S13	0.140	-0.086	-0.091	-0.675	5.280	-0.682	-0.492	-0.124
S14	0.558	0.062	0.005	0.722	-0.964	0.305	0.541	0.458
S1717A	0.209	0.763	0.003	-0.307	-0.494	1.291	0.359	-0.752
S18	0.208	0.042	0.062	-0.191	0.472	0.362	-0.199	-0.013
S23	2.266	-0.045	-0.960	2.112	0.968	3.711	-1.567	2.134
S24	-0.221	2.469	0.087	-0.526	1.285	0.542	3.866	0.807
S28	-0.059	0.847	0.009	0.164	0.058	0.152	0.780	-0.170
S29	0.099	0.289	-0.008	0.130	-0.291	-0.027	0.102	0.115
S30	0.401	-0.364	-0.321	4.682	0.886	-1.108	2.377	-2.050
S30A	0.301	-0.128	0.092	-0.387	0.215	-0.102	0.420	1.621
S36	0.063	-0.044	-0.009	0.538	-0.046	-0.205	-0.099	-0.238
S36A	0.278	-0.093	0.022	0.914	0.513	0.075	-0.585	-0.001
S36C	0.089	-0.022	-0.011	0.329	0.152	-0.213	-0.001	-0.194
S40	0.338	-0.153	-0.042	2.409	-1.147	-0.554	-0.379	-0.050
S44	0.233	0.854	5.864	1.148	0.262	-0.155	-1.097	0.383
S45	0.285	-0.173	0.799	-0.039	-0.752	1.087	2.088	1.533
S47	-0.248	0.180	0.993	-0.400	0.390	1.683	1.585	0.171
S48	0.171	-0.037	0.297	-0.130	-0.406	0.401	0.792	0.245
S53	0.553	-0.049	0.064	0.016	-0.574	-0.280	0.442	0.241
S54	5.713	0.063	0.270	-1.563	-0.303	-1.786	0.776	-0.702
N1	0.115	0.044	-0.087	0.070	-0.176	0.152	0.012	0.013
N4	0.558	0.455	-0.405	0.219	-0.342	0.734	0.076	0.442
N7	0.204	0.105	0.020	-0.186	-0.300	0.214	-0.210	-0.206
N9	0.871	0.064	-0.315	0.388	-0.724	0.792	-0.929	-0.093
N11	0.126	0.086	0.106	-0.194	-0.318	0.552	0.448	-0.240
N14	0.045	-0.149	0.677	-0.080	0.034	-0.578	-0.647	-0.243
N18	0.058	0.068	0.147	-0.216	-0.121	0.908	0.596	-0.299
N26	-0.032	0.308	0.049	-0.051	-0.048	0.216	-0.179	-0.105
N35A	-0.135	0.571	0.231	-0.126	0.029	0.562	-0.377	-0.401
N36	0.056	0.185	0.817	-0.392	-0.109	0.081	-0.745	-1.193
N38	-0.050	0.632	0.363	-0.345	0.122	1.303	-0.111	-0.659
N40	0.237	1.297	-0.215	-0.249	-0.605	1.297	-0.543	-2.714

Current radiolarian assemblage. The third factor is dominated by Spongotrochus glacialus (S44), a species which is abundant in surface sediments of subarctic and especially Antarctic regions (unpublished data from Moore, 1978). The fourth, Western Pacific Factor is similar to that of Moore (1978) with high positive loadings of D. tetrathalumus (S23), S. asteriscus (S30) and L. minor (S24).

The final four factors in Table 6 explain 5, 3, 3, and 2 % of the variation in the surface sediment data set. Of these four, factors 5, 7 and 8, are similar to those of Moore (1978). The East Central Factor (factor 5) contains the highest positive loadings of Euchitonia furcata/elegans (S12) and Polysolenia spinosa (S13) and a relatively high value of Stylodicta validspina (S47). The seventh factor has a relatively high value of S. validspina (S47) and S. asteriscus (S30) making it similar to the Austral Factor of Moore (1978). However, the Austral Factor in this study also contains the highest positive loading of L. minor (unlike the factor of Moore, 1978). In surface sediments this species is abundant near the Australian region (Lombari and Boden, 1985) which is consistent with the distributions of other species in this factor. Factor eight, the New Guinea Factor, is characterized by the highest positive loadings of S. asteriscus var. A (S30A) and Spongurus cf. ellipticum (S1A) as in Moore (1978). This eighth factor has also relatively high values of Porodiscus sp. A. (S45) and E. delicatulum (S10), unlike Moore, (1978). These two species have surface sediment distributions which overlap with distributions of S30 and S1A in the area adjacent to New Guinea (Lombari and Boden, 1985).

The sixth factor (Western Subtropical) is unlike any of the factors of Moore (1978) and contains the highest positive loading of D. tetrathalumus (S23), Actinomma leptodermum (S4) and Pterocorys zancleus (N40). The surface sediment maps of these three species overlap in western subtropical regions (Lombari and Boden, 1985).

Regressing these eight factors against modern August and February sea surface temperature data produced two equations (Table 7) providing a warm and cool temperature for each downcore sample. Sites 572 and 573 have not moved significantly in the last 4 million years (see Introduction) and presently are well within the SEC (Figure 2). We assume that Pliocene seasonality in the equatorial regions was similar to current conditions with warmer temperatures reflecting "February" conditions and cooler temperatures equivalent to "August" conditions.

Q-mode factor analysis examines the proportionality between variables in each sample (Klovan and Meisch, 1976). Among the extant species used in the paleotemperature equations, the proportionality differs between the Pleistocene and Pliocene data sets. Table 8 contains the average relative abundance for the eight most important species in the paleotemperature equation. Comparing the ratios of each species with the most abundant species between these two time periods indicates that there is a difference between the proportional relationships of these species. The ratios of Tetrapyle octacantha/Octapyle stenozoa (S54) to almost all the other seven species important in the paleotemperature equation are lower in the Pliocene data meaning that this species was less abundant relative to the others. In the August paleotemperature equation (Table 7), S54 is important in the factors which raise the cool temperature estimates

Table 7. Pliocene paleotemperature equations for the August and February estimates. Tw is the warm temperature and Tc is the cold temperature.

February temperature equation:

Tw(°C) = -11.39(F2)**2 - 28.71(F3)**2- 16.42(F7)**2 +
13.01(F1*F3) 30.20(F3*F6) + 20.86(F3*F8)- 43.26(F4*F6) +
45.09(F7*F8) + 9.40(F4)+ 26.63

Range of modern temperature data used in calibration
2.1-29.3°C
Standard error of estimate 2.5

August temperature equation:

Tc(°C) = -23.50(F1**2) - 16.80(F3**2)+ -16.38(F1*F2)-
-17.83(F1*F4) + -19.39(F1*F6) - 33.46(F1*F7) + 15.67(F2*F6) +
16.86(F3*F6) + 23.29(F3*F8) - 18.41(F4*F5) + 44.40(F1) +
28.43(F4) + 8.490(F7) + 6.80

Range of modern temperatures used in calibration
1.3-29.3°C
Standard error of estimate 2.5

Table 8. Comparison of extant species average relative abundance between the Pleistocene and Pliocene data sets. Included in the list are only those species which were major contributors to the faunal matrix for the paleotemperature equation. Key to species numbers is in Table 4. The ratio is calculated by dividing the average relative abundance of each species by the average for S54.

	Pleistocene (RC11-210)		Pliocene (573)	
	Ave. %	Ratio	Ave. %	Ratio
S10	0.07	295.7	0.04	278.5
S13	0.3	69.0	0.03	37.1
S1717A	0.4	59.1	0.3	34.8
S23	4.5	5.9	1.0	11.0
S24	0.6	36.9	0.6	18.0
S30	5.7	3.6	3.6	3.1
S44	0.4	54.5	0.9	12.7
S54	20.7	1	11.1	1

especially Factor 1 (F1). For this reason, the magnitudes of the temperatures cannot be directly related between time periods. However, within the estimates for each set of equations, the magnitude of the temperature estimates are meaningful and have been used to determine the nature of the temperature gradient and seasonality for both time periods.

Averages and ranges for February and August estimated Pliocene paleotemperatures are in Table 9. Averages for the February estimates over the entire stratigraphic interval are 2.0 ^{o}C different for the eastern (572) and western (573) sites. Averages of the August paleotemperatures for both sites differ by 4.9 ^{o}C. For both equations, the eastern site is cooler and the gradient is, therefore, similar to the modern gradient. Modern February and August temperatures are also in Table 9 and fall within the range of Pliocene estimates for both eastern and western locations.

Downcore plots of the Pliocene February temperature estimates are in Figure 9. The fluctuations in estimated February temperatures do not greatly exceed $\pm$ one standard error (2.5 ^{o}C) of the equation (Table 9) at site 573 and were, therefore, mostly constant over this stratigraphic interval. For site 572, the fluctuations in February temperatures do exceed the range of the standard error and thus conditions did vary somewhat during the February season in the east. In the downcore plots of August temperatures (Figure 10), the estimates do vary more than $\pm$ 1 standard error (2.5 ^{o}C) for the equation and thus there is significant variation in temperatures for the cooler season at both sites. Seasonality (defined as the difference between August and

Table 9. Averages and ranges of estimated Pliocene August and February temperatures (^{o}C) for each site. Modern temperature estimates for the locations of site 572 and 573 are from Robinson (1976). Estimated August and February averages and ranges of paleotemperatures (^{o}C) for the Late Pleistocene of near 572 (RC10-65) and 573 (RC11-210).

Modern sea surface temperatures.

	August
Site 572	21.5
Site 573	24.5

	February
Site 572	24.5
Site 573	25.5

Pleistocene Sea Surface Temperatures

	Ave. August	Minimum-Maximum
RC10-65	23.6	21.3-25.8
RC11-210	25.6	23.0-29.0

	Ave. February	
RC10-65	26.4	24.4-27.8
RC11-210	27.0	25.7-29.8

Pliocene Sea Surface Temperatures:

	Ave. August.	Minimum-Maximum
Site 572	19.4	15.1-23.9
Site 573	24.3	21.1-26.8

	Ave. February	
Site 572	22.5	19.1-25.0
Site 573	24.5	22.2-26.8

Figure 9. Downcore plots of estimated Pliocene February paleotemperatures for sites 572 and 573. Depth scale for site 572 is relative to site 573. Gaps in plot for 573 are due to drilling disturbance. Gaps in plot for 572 are due to a discarded data point.

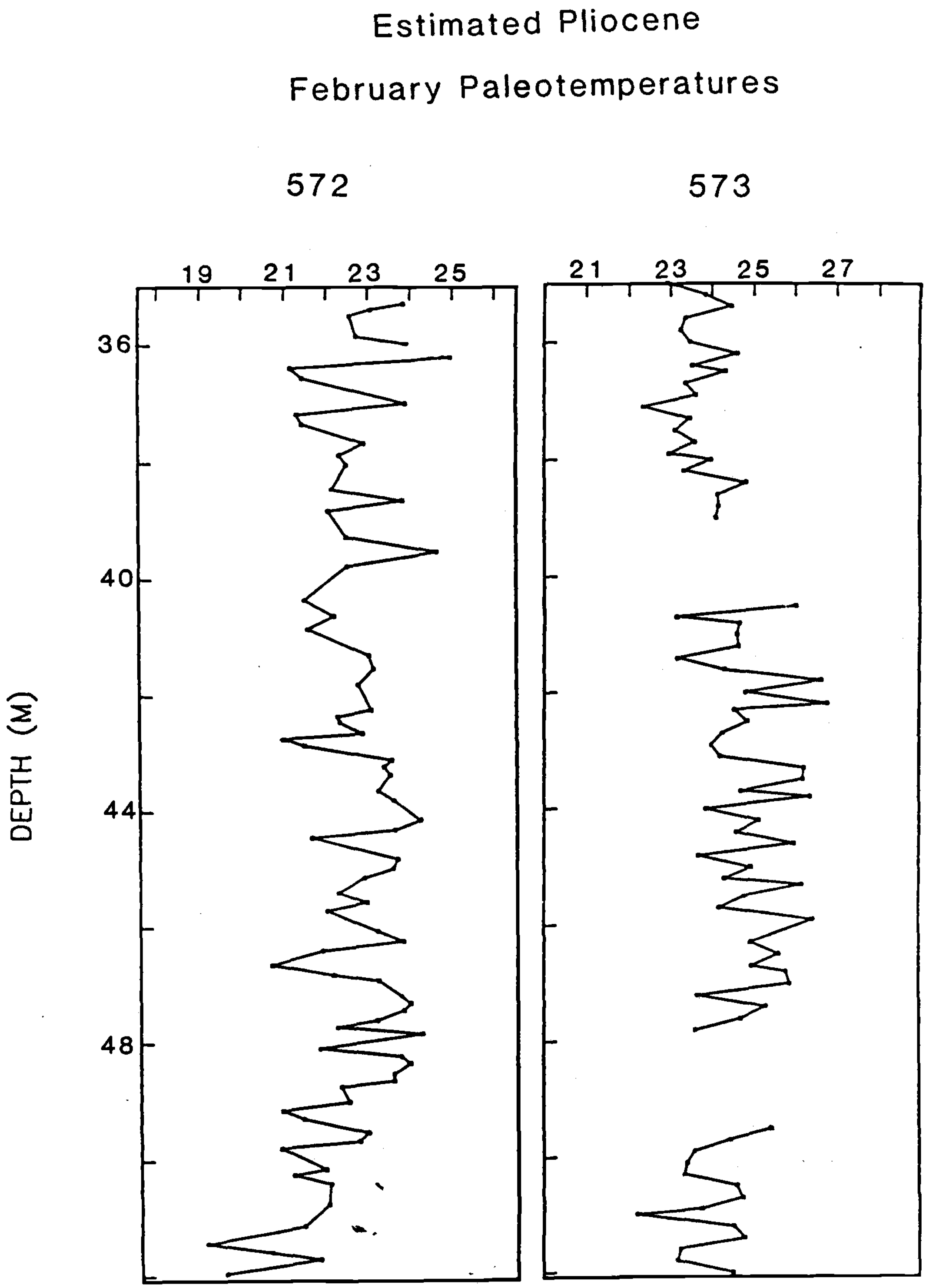

Estimated Pliocene
February Paleotemperatures
572
573
19 21 23 25
21 23 25 27
36
40
44
48
DEPTH (M)

Figure 9

Figure 10. Downcore plots of estimated Pliocene August paleotemperatures. Depth in 572 scaled relative to 573. For explanation of gaps see caption for Figure 9.

Estimated Pliocene

August Paleotemperatures

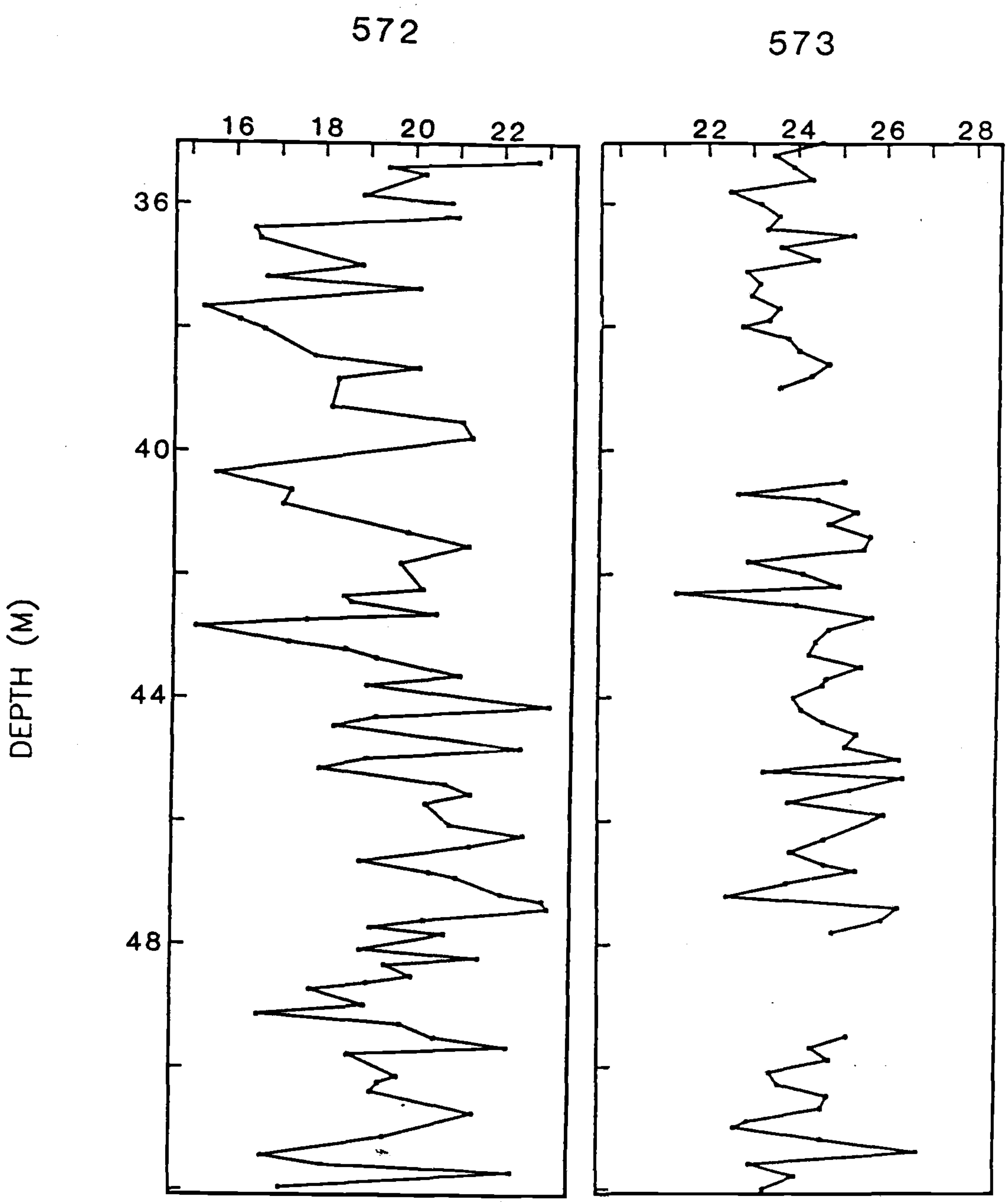


Figure 10

February temperatures at one site) varies from 2 to 6 °C at site 572, averaging 3 °C. The temperature averages are essentially identical for both seasons at site 573 making seasonality almost zero at the western site. Modern seasonality estimated from Robinson (1976) for August and February are 2 °C for the location of site 573 and 2.5 °C for 572. Compared to modern seasonality, Pliocene seasonality is about the same at site 572 but is lower at site 573.

A significant (alpha = 5%) stepwise decrease in mean temperature is seen near the top of the temperature records in site 573 at the same stratigraphic position as that observed in the faunal analysis results (Figure 8). The February temperature decreases from a mean of 24.9 ($\pm$0.17, n=34) to 23.7 ($\pm$0.13, n=22) and the August from 24.6 ($\pm$0.18, n=34) to 23.6 ($\pm$0.15, n=22). This drop in average temperature is consistent with our previous inferrence that the depth of the thermocline decreased at site 573.

Results of the paleotemperature estimation for the last 600 thousand years are given in Table 8 for the eastern location (RC10-65) and for the western location (RC11-210). Estimates were made using the Pleistocene equations of Moore, (1980) rather than the Pliocene equations because the taxonomy of the Pleistocene data was different. The 0.6 °C difference between locations in the Pleistocene February averages of the piston core records is 1.4 °C less than the difference between sites for the Pliocene February averages. August Pleistocene averages differ by 2.0 °C, this difference being 2.9 °C lower than the Pliocene August difference. Thus in the Late Pleistocene, the apparent temperature gradient was less than the Pliocene gradient for both seasons. Modern temperatures for both seasons fall within the lower range of Pleistocene estimates (Table 9).

Figure 11 shows the Pleistocene February paleotemperatures plotted versus time. The time scale for RC10-65 is from the age- depth correlation of Schramm (1983) using the method of Shaw (1964) and the time scale of Imbrie et al. (1984). For RC11-210, the oxygen isotope record was mapped into the stacked planktonic isotope record of Imbrie et al. (1984) using the technique of Martinson et al. (1982). The paleotemperature record has been degraded from the original high resolution record of these cores to a sample interval of 10,000 years which is close to that of the Pliocene record. Variability of the Pleistocene February temperatures is less than ±1 standard error (2.5 °C) and thus are essentially constant. Variability of the Pleistocene August temperature estimates (Figure 12) is greater than the standard error on the regression and as in the Pliocene, seasonality does vary in magnitude. However, Pleistocene seasonality averages 1.4 °C at the western location and 2.8 °C at the eastern site which is similar to modern seasonality. Pleistocene seasonality differs from Pliocene seasonality by being higher at the western site and lower at the eastern site.

Figure 11. Plots of estimated Pleistocene February paleotemperatures for piston cores RC10-65 and RC11-210 versus time in thousands of years (ky). Sample interval is 10ky.

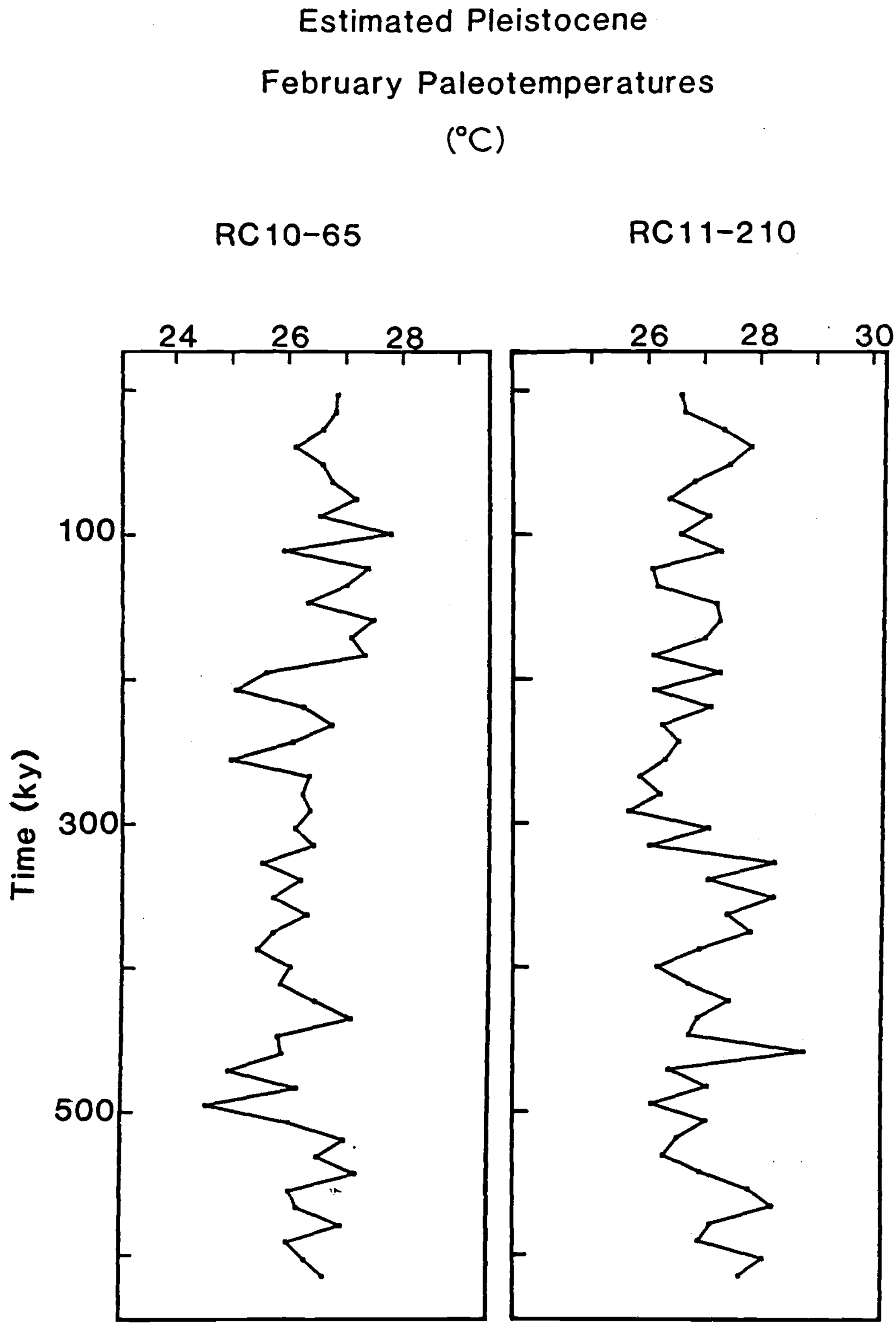

Estimated Pleistocene
February Paleotemperatures
(°C)
RC10-65
RC11-210
24
26
28
26
28
30
100
300
500
Time (ky)

Figure 11

Figure 12. Plots of estimated Pleistocene August paleotemperatures versus time in ky. Sample interval is 10ky.

Estimated Pleistocene

August Paleotemperatures

(°C)

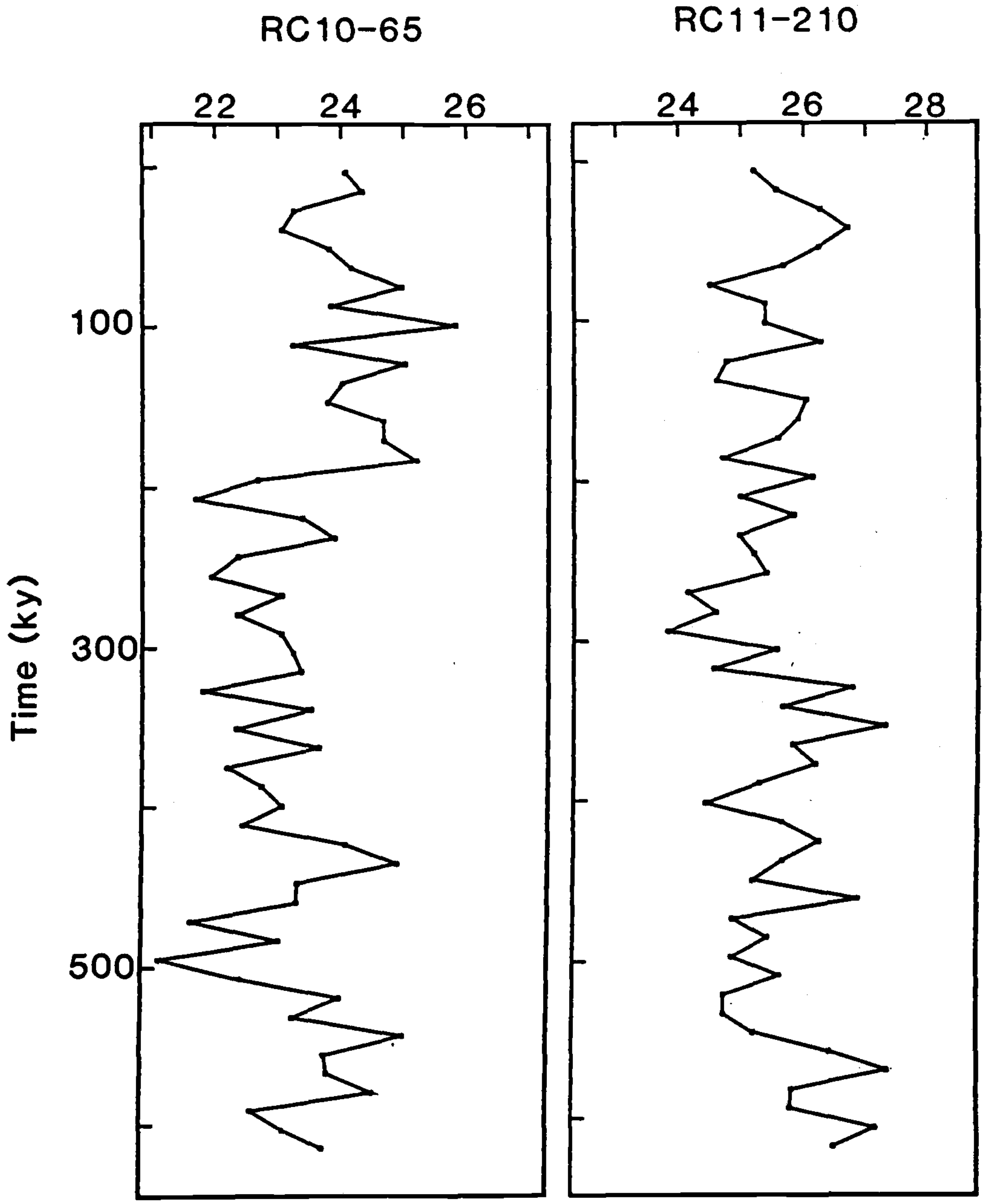


Figure 12

DISCUSSION

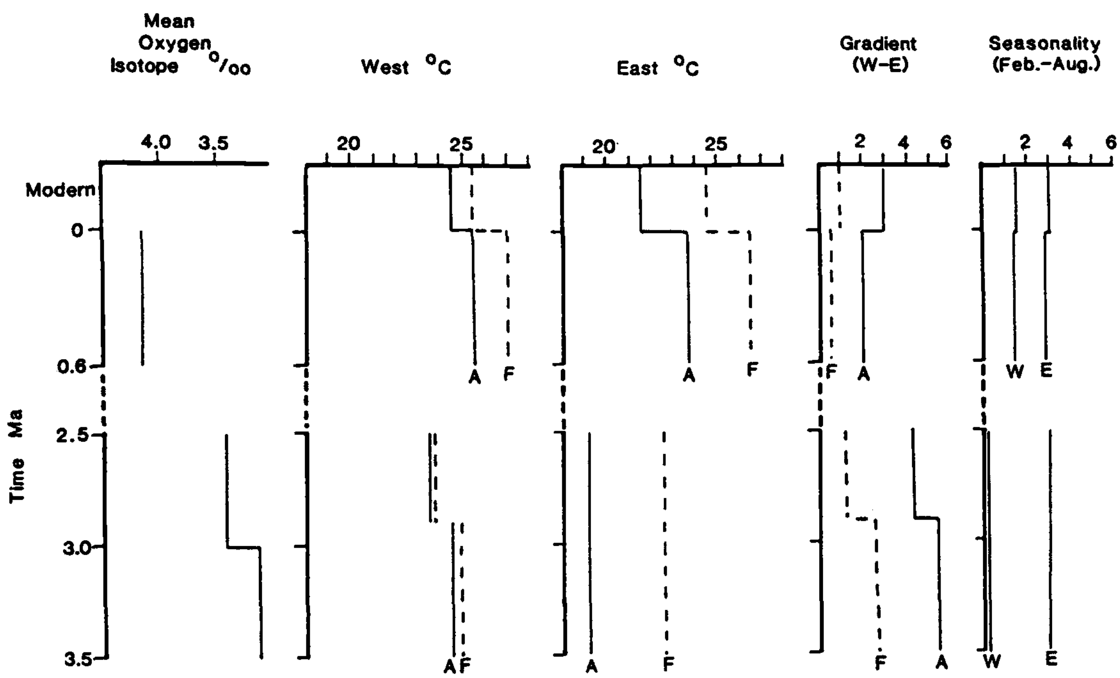
Q-mode factor analysis of the Pliocene radiolarian fauna of sites 572 and 573 has yielded a two factor model. The equatorial fauna has been divided into the Central and Eastern Pacific assemblages. The Central and Eastern assemblages represent oceanographic conditions along the equator where the thermocline slopes upward to the east.

Variations in slope of the thermocline can be used to infer regional climate variability of the eastern equatorial Pacific since seasonally, the slope of the thermocline is related to the magnitude of westward wind stress. The down core records of the Central and Eastern Equatorial Factors exhibit long-term variability during the Pliocene of sites 572 and 573 (Figures 7 and 8). This implies variability in the magnitude of westward wind stress prior to the onset of northern hemisphere glaciation. These first two factors vary through the same range of values during the interval studied at site 572 but at site 573 a stepwise change is seen in the mean value, especially in the Eastern Equatorial Factor indicating a mean decrease in depth of the thermocline occurring 2 m below the 2.4 Ma oxygen isotope event at approximately 2.9 Ma. This oceanographic event occurs during a period of change in polar water masses recorded in Antarctic radiolarian fauna and North Atlantic benthic foraminiferal isotope data (Keigwin, in press; Ciesielski and Grinstead, 1986). In the Pacific, change in the subpolar water mass at this time is marked by the evolution of _T. davisiana davisiana_ and the subspecies' migration and appearance farther east in the equatorial regions (Hays, 1986; Alexandrovitch, 1985).

Estimated sea surface temperatures for both of these stratigraphic intervals based on the radiolarian fauna were used to compare the paleoceanography of the two periods. Separate sets of equations were used for each period. The Pliocene equations were written using species whose Pliocene abundances were within the ranges exhibited by surface sediment distributions in the equatorial Pacific. The Pleistocene equations used were those of Moore (1982) because the taxonomy of the Pleistocene data was different. Figure 13 summarizes the modern, Pleistocene and Pliocene temperatures, and the mean benthic oxygen isotope values characterizing the climate of these periods. These isotope data come from DSDP site 552 in the North Atlantic (Shackleton and Hall, 1984). The Pliocene is characterized by less variability and lighter mean (less positive) benthic foraminiferal isotopic values. These data indicate that less continental ice was present and that fluctuations in ice volume were less (Shackleton and Opdyke, 1977).

At the western locality, modern seasonal averages differ by 2 ^{o}C. During the Pliocene, seasonal averages for February and August were identical and almost constant at site 573 (Figure 13). This situation of almost constant temperature and low seasonality presently occurs farther west along the equator in the Pacific near 140^{o}W, where temperatures for both seasons are 26.0 ^{o}C (Robinson, 1976). Thus the edge of the Pliocene temperature gradient and the tongue-shaped body of cooler water were located at least 10^{o} farther east than at present.

Figure 13. Summary of modern, Pleistocene and Pliocene temperatures, and climatic data as seen in oxygen isotope data from DSDP site 552 (Shackleton and Hall, 1984). Variance of oxygen isotope data is next to plot of mean value for each time period.



Mean
Oxygen
Isotope °/oo
West °C
East °C
Gradient
(W-E)
Seasonality
(Feb.-Aug.)
4.0
3.5
20
25
20
25
2
4
6
2
4
6
Modern
0
0.6
2.5
3.0
3.5
Time Ma
A
F
A
F
F
A
W
E
A
F
A
F
F
A
W
E

Figure 13

Pliocene seasonality is relatively high at the eastern site and is close to the modern value (Figure 13). According to this result, this site occupied a position in the Pliocene gradient similar to the modern one.

The Pliocene temperature difference between sites is apparently higher than the modern gradient. Part of this larger difference between the two sites in the Pliocene can be described in terms of the position of site 573 relative to the gradients in seasonality of the Pacific. During the Pliocene, site 573 shows little seasonality. In the present ocean, equivalent low seasonality is observed 10 ^{o} to the west of this site (Figure 14). The stepwise decrease in temperature observed at about 2.9 Ma, may represent the time when the present equatorial Pacific gradients became established with a westward shift in the slope of the thermocline and surface thermal gradients. Prior to this shift in gradients the tradewinds were such that temperatures still remained cool at site 572 and there was little seasonality at site 573.

Oxygen isotope data for the Late Pleistocene are characterized by high amplitude fluctuations and heavier mean values (Figure 13). Late Pleistocene seasonality at both the eastern and western site is similar to modern seasonality (Figure 13). During the last 600,000 years of climate, the gradient and slope of the thermocline have been on the average the same as modern conditions. Thus the western limit of the Pliocene wedge shaped body of cooler water extended 10 ^{o} less than that of the Late Pleistocene. The eastward location of the Pliocene gradient was probably caused by reduced upwelling along the equatorial divergence and a lower average intensity of the SEC. We infer from the

Figure 14. Pliocene and modern equatorial gradient in seasonality plotted versus longitude. For positions of DSDP sites see Table 1.

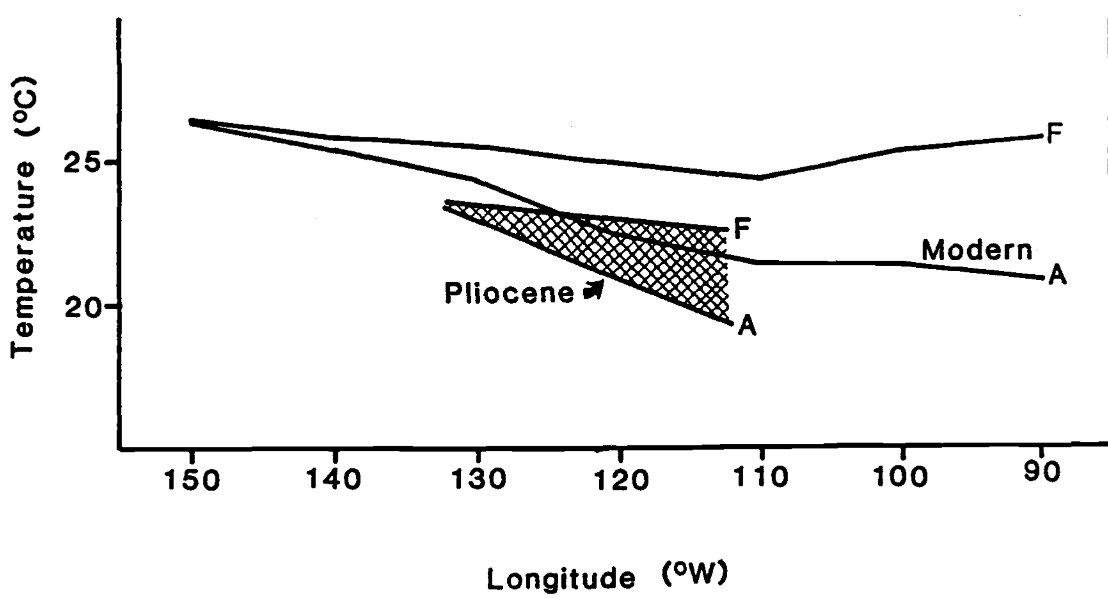

Temperature (°C)
25
20
F
F
Modern
A
Pliocene
A
150
140
130
120
110
100
90
Longitude (°W)

Figure 14

location of the Pliocene gradient between sites 572 and 573 that the average magnitude and extent of the gradient in wind stress were less in the Pliocene. This interpretation agrees with the increased intensity of winds observed in the north Pacific at the onset of northern hemisphere glaciation as indicated by an increase in grain size of eolian quartz (Rea and Janecek, 1982). At the site 573, Pliocene seasonality was low in contrast to modern and Late Pleistocene conditions. This low seasonality is in direct contrast to that for DSDP site 77 (which is near 573) for the Miocene (Moore and Lombari, 1981). This difference in apparent seasonality between the two studies may be due the inclusion of Miocene species in the equations of Moore and Lombari, (1981). At site 77 a cooling trend was seen in the paleotemperatures which the authors attributed to gradual reduction in circulation across the Panamanian Seaway. In this study there is no evidence of any influence of the closing of the Isthmus in the data for extant species at sites 572 and 573. One possible explanation is that the oceanographic effects of the closure of the Isthmus were felt much earlier than the timing of the final closure.

CONCLUSIONS:

1. Analysis of forty-four extant radiolarian species which do not have datums in the time interval between 2.4 and 3.7 Ma identifies the Central and Eastern Equatorial assemblages. These two assemblages are used to infer the slope of the thermocline. The relationships between the magnitudes of these assemblages and sites 572 and 573 indicate that the Pliocene productivity gradient is similar to the modern one.

2. Variability of the Central and Eastern Equatorial Factors reveal that the depth of the thermocline varied within the same range of values at site 572 but underwent a stepwise decrease at site 573. This change occurs at the same time as other important oceanographic changes in the worlds oceans (Keigwin, in press; Ciesielski and Grinstead, 1986; Hays, 1986; Alexandrovitch, 1985), which precede the onset of northern hemisphere glaciation inferred from oxygen isotope data (Prell, 1984; Shackleton et al., 1984).

3. Estimated sea surface temperatures are used to compare the paleoceanography of the Late Pleistocene and Pliocene time intervals. Pliocene seasonality is lower at site 573 but at 572 seasonality is similar to modern conditions. Along the modern equatorial gradient, low seasonality occurs west of site 573 and thus the Pliocene gradient was located farther east than at present. A stepwise change in paleotemperatures is observed in temperatures for both seasons at site 573 at about 2.9 Ma. This change may represent the time when the present equatorial gradients became established with a westward shift in slope of the thermocline and thermal gradients.

4. During Late Pleistocene climate, the gradient in seasonality was similar to modern conditions, reaching farther west than site 573. We infer from the eastward shift in the Pliocene gradient that the wind stress was characterized by lower magnitudes and a less extensive gradient.

5. No influence of the final closing of the Isthmus of Panama is seen in the extant radiolarian data for sites 572 and 573.

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APPENDIX

APPENDIX I. Key to data matrix and species taxonomy for total 106 species.

Core	Section	Depth in Section	Subottom Depth											
					S1	S1A	S3	S4	S5	S7	S8	S9	S10	S12
"	"	"	"	" "	S13	S14	S15	S17	S17A	S18	S19	S21	S23	S24
"	"	"	"	" "	S28	S29	S30	S30A	S33	S34	S36	S36A	S36C	S37
"	"	"	"	" "	S39	S40	S42	S44	S45	S47	S48	S50	S51	S53
"	"	"	"	" "	S54	SLB	N1C	GS5	S16	SA	S52	S43	S46	S23A
"	"	"	"	" "	N1	N2	N3	N3A	N4	N6	N7	N8	N9	NC
"	"	"	"	" "	N10	N11	N14	GN14	N14	N16	N17	N18	NO	GN8
"	"	"	"	" "	N23	GN13	N24	N25/27	N26	N28	N29	N32	N33	N34
"	"	"	"	" "	N35	N35A	N36	N38	N39	N40	N42	N46\48	N19	E1
"	"	"	"	" "	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11
"	"	"	"	" "	E12	E13	E14	E15	E16	E17				
"	"	"	"	" "	Total									

S1 Spongurus spp. Moore, 1974, Plate 1, Figure 1
S1A Spongurus cf. elliptica, Moore, 1974, Plate 1, Figure 2, Nigrini and Moore, 1979, Plate 8, Figure 2
S3 Actinomma medianum, Nigrini and Moore, 1979, Plate 3, Figure 5, 6
S3 A. arcadophorum, Nigrini and Moore, 1979, Plate 3, Figure 4
S4 A. leptodermum, Nigrini and Moore, 1979, Plate 3, Figure 7
S5 Cenosphaera cristata, Nigrini and Moore, 1979, Plate 4, Figure 2a, 2b
S7 Echinomma cf. leptodermum, Moore, 1974, Plate 2, Figure 1
S8 Prunopyle (Cromyechinus) antarctica, Nigrini and Moore, 1979, Plate 16, Figure 4
S9 Amphirhopalum ypsilon, Nigrini and Moore, 1979, Plate 10
S10 Echinomma delicatulum, Moore, 1974, Plate 2, Figure 5
S12 Euchitomia elegans + E. furcata, Nigrini and Moore, 1979, Plate 11
S13 Polysolenia spinosa, Nigrini and Moore, 1979, Plate 2, Figure 5
S14 Heliodiscus asteriscus, Nigrini and Moore, 1979, Plate 9
S15 Actinomma antarcticum, Nigrini and Moore, 1979, Plate 3, Figure 1, 2
S17 Hexacontium enthacanthum, Nigrini and Moore, 1979, Plate 5, Figure 1a, 1b
S17A H. laevigatum, Nigrini and Moore, 1979, Plate 5, Figure 2a, 2b
S18 Hymeniastrium euclidis, Nigrini and Moore, 1979, Plate 12 Figure 3
S19 Larcospira quadrangula + L. moschkovskii, Nigrini and Moore, 1979, Plate 17, Figure 2, Nigrini and Lombari, 1984, Plate 13, 2a, 2b, 3a, 3b, 3c
S21 Cenosphaera coronata, Nigrini and Moore, 1979, Plate 4, Figure 2a, 2b
S23 Didymocyrtis tetrathalamus, Nigrini and Moore, 1979, Plate 6
S24 Lithelius minor, Nigrini and Moore, 1979, Plate 17, Figure 3, 4a, 4b
S28 Spirema melonia, Nigrini and Moore, 1979, Plate 17, Figure 7
S29 Larcopyle butchlii, Nigrini and Moore, 1979, Plate 17, Figure 1a, 1b
S30 Stylochlamidium asteriscus, Nigrini and Moore, 1979, Plate 14, Figure 5
S30A S. asteriscus var. A, like S30 with center having clear concentric rings
S33 Polysolenia lappacea, Nigrini and Moore, 1979, Plate 2, Figure 3a, 3b
S34 P. murrayana, Nigrini and Moore, 1979, Plate 2, Figure 4a, 4b
S36 Dictyocorne truncatum, Nigrini and Moore, 1979, Plate 12, Figure 2a
S36A D. profunda, Nigrini and Moore, 1979, Plate 12, Figure 1
S36C Euchitonia triangulum, Nigrini and Moore, 1979, Plate 12, Figure 2b
S37 Siphonosphaera polysiphonia, Nigrini and Moore, 1979, Plate 1, Figure 6a, 6b

S39 Disolenia/Otosphaera spp., Nigrini and Moore, 1979, Plate 1, Figure 2, 3, 4, 5
S40 Spongaster tetras, Nigrini and Moore, 1979, Plate 13, Figure 1, 2
S42 Spongocore puella, Nigrini and Moore, 1979, Plate 8, Figure 5a, 5b, 5c
S44 Spongotrochus glacialis, Nigrini and Moore, 1979, Plate 15, Figure 2a, 2b, 2c, 2d
S45 Porodiscus sp. A, Nigrini and Moore, 1979, Plate 14, Figure 1, 2a, 2b
S46 Spongotrochus venustum, Nigrini and Moore, 1979, Plate 15, Figure 3a, 3b
S47 Stylodicta validispina, Nigrini and Moore, 1979, Plate 13, Figure 5a, 5b
S48 Porodiscus sp. B, Nigrini and Moore 1979, Plate 14, Figure 3, 4
S50 Axoprunum stauraxonium, Nigrini and Moore, 1979, Plate 7, Figure 2, 3
S51 Stylatractus spp., Nigrini and Moore, 1979, Plate 7, Figure 1a, 1b
S53 Hexapyle spp., Nigrini and Moore, 1979, Plate 16, Figure 1a, 1b, 1c
S54 Tetrapyle octacantha/Octapyle stenozoa, Nigrini and Moore, 1979, Plate 16, Figure 2a, 2b, 3a, 3b
SLB Lithopera bacca, Benson, 1966, Plate 33, Figure 10, 11
N1C Zygocircus productus, Benson, 1966, Plate 6, Figure 2, 3
S16 Anomalacantha dentata, Nigrini and Moore, 1979, Plate 4, Figure 4
SA Polysolenia arktios, Nigrini and Moore, 1979, Plate 2, Figure 1
S52 Styptosphaera spumacea, Nigrini and Moore, 1979, Plate 8, Figure 6a, 6b
S43 Spongopyle osculosa, Nigrini and Moore, 1979, Plate 15, Figure 1
S46 Spongotrochus venustum, Nigrini and Moore, 1979, Plate 15, Figure 3a, 3b
S23A Didymocyrtis spp., central sphere only
N1 Liriospyris reticulata, Nigrini and Moore, 1979, Plate 19, Figure 4a, 4b
N2 Anthocyrtidium ophirense, Nigrini and Moore, Plate 25, Figure 1
N3 A. zanguebaricum, Nigrini and Moore, 1979, Plate 25, Figure 2, Nigrini and Lombari, 1984, Plate 27, Figure 3
N3A A. ehrenbergi + A. ehrenbergi var. pliocenica, Nigrini and Lombari, 1984, Plate 27, Figure 1, 2a, 2b
N4 Carpocanium spp., Nigrini and Moore, 1979, Plate 21, Figure 1a, 1b
N6 Pterocanium grandiporus, Nigrini and Moore, 1979, Plate 23, Figure 5
N7 Pterocorys minithorax, Nigrini and Moore, 1979, Plate 25, Figure 10
N8 Dictyocephalus papillosus, Nigrini and Moore, 1979, Plate 21, Figure 3
N9 Giraffospyris angulata, Nigrini and Moore, 1979, Plate 19,

Figure 2a, 2b, 2c, 2d, 3a, 3b
NC G. circumflexa, Nigrini and Lombari, 1984, Plate 19, Figure 2
N10 Eucyrtidium acuminatum, Nigrini and Moore, 1979, Plate 24, Figure 3a, 3b
N11 E. hexagonatum, Nigrini and Moore, 1979, Plate 24, Figure 4a, 4b
N14 Phormospyris stabilis scaphipes, Nigrini and Moore, 1979, Plate 20, Figure 2a, 2b, 2c 2d
GN14 P. stabilis stabilis, Benson, 1966, Plate 23, Figure 6, 7, 8
N15 Lamprocyclas hannai, Nigrini and Lombari, 1984, Plate 30 Figure 2a, 2b
N16 L. maritalis var. polypora + L. maritalis var. ventricosa, Nigrini and Moore, 1979, Plate 25, Figure 5, 6
N17 L. maritalis maritalis, Nigrini and Moore 1979, Plate 25, Figure 4
N18 Botryostrobus auritus/australis group, Nigrini and Moore, 1979, Plate 27, Figure 2a, 2b, 2c, 2d
NO unamed Phormospyris
GN8 Lophophaena pentagona pentagona, Nigrini and Lombari, 1984, Plate 19, Figure 6a, 6b, 6c
N23 Peripyramis circumtexta/Plectopyramis dodecomma, Nigrini and Moore, 1979, Plate 21, Figure 4a, 4b, 5
GN13 Cornutella profunda, Benson, 1966, Plate 29, Figure 7, 8
N24 Pterocanium sp., Nigrini and Moore, 1979, Plate 23, Figure 6a, 6b
N25/27 Ptercanium praetextum + P. eucolpum, Nigrini and Moore, 1979, Plate 23, Figure 2, 3
N26 P. korotnevi, Nigrini and Moore, 1979, Plate 23, Figure 1a, 1b
N28 P. trilobum, Nigrini and Moore, 1979, Plate 23, Figure 4a, 4b
N29 Pterocorys hirundo, Nigrini and Moore, 1979, Plate 22 Figure 2, 3a, 3b, 4
N32 Phormostichoartus corbula, Nigrini and Lombari, 1984, Plate 31, Figure 4a, 4b
N33 Botryostrobus aquilonaris, Nigrini and Moore, 1979, Plate 27 Figure 1
N34 Stichopilium bicorne, Nigrini and Moore, 1979, plate 26, Figure 1a, 1b
N35 Theocalyptra davisiana davisiana, Morley, 1979, Plate I, Figure 1, 2, 3, 4, 5
N35A T. davisiana cornutoides, Morley, 1979, Plate I, Figure 7
N36 T. bicornis (var.), Moore 1974, Plate 15, Figure 4, 5
N38 T. bicornis, Moore, 1974, Plate 15, Figure 6
N39 Theoconus hertwigii, Nigrini and Moore, 1979, Plate 25, Figure 9
N40 Pterocorys zancleus, Nigrini and Moore, 1979, Plate 25, 11a, 11b
N42 Theocorythium trachelium, Nigrini and Moore, 1979, Plate 26, Figure 2, 3a, 3b
N46/48 Antarctissa denticula, Nigrini and Moore, 1979, Plate 18, Figure 1a, 1b, 2a, 2b
N19 Botryocyrtis scutum, Nigrini and Moore, 1979, Plate 28, Figure 1a, 1b
E1 Lamprocyrtis neoheteroporus, Kling, 1973, Plate 15, Figure 4,

5
E3 Theocorythium vetulum, Nigrini and Lombari, 1984, Plate 30, Figure 4a, 4b
E4 Didymocyrtis avita, Sanfilippo and Riedel, 1980, p. 1010
E5 D. penultima, Nigrini and Lombari, 1984, Plate 7, Figure 2b, 3a, 3b, 3c
E6 Stylatractus universus, Nigrini and Lombari, 1984, Plate 4, Figure 3a, 3b
E7 Pterocanium prismatium, Nigrini and Lombari, 1984, Plate 25, Figure 2
E8 Stichocorys peregrina, Riedel and Sanfilippo, 1971, Plate 1, Figure 2, 3, 4, 5
E9 Spongaster pentas, Nigrini and Lombari, 1984, Plate 9, Figure 2
E10 Phormostichoartus fistula, Nigrini and Lombari, 1984, Plate 31, Figure 6a, 6b, 6c
E11 P. doliolum, Nigrini and Lombari, 1984, Plate 31, Figure 5a, 5b
E13 Botryostrobus bramlettei, Nigrini and Lombari, 1984, Plate 2a, 2b, 2c
E14 Lychnodictyum audax, Nigrini and Lombari, 1984, Plate 25, Figure 1
E15 Solenosphaera omnitubus, Nigrini and Lombari, 1984, Plate 1, Figure 4, 5a, 5b, 5c
E16 Stichocorys delmontensis, Riedel and Sanfilippo, 1971, Plate 1, Figure 6, 7
E17 Stichocorys spp., fourth segment missing

APPENDIX II. Faunal data matrix. Site 573 is from pp. 85-100. Site 572 is from pp. 101-117.

1		4	1	35.0	0.60	0.24	0.12	0.00	0.00	0.00	0.00	0.00	0.00	1.32
2	5	4	1	35.0	0.00	0.12	0.00	0.48	0.00	0.12	1.32	0.00	0.36	0.84
3	5	4	1	35.0	0.00	0.00	5.29	0.48	0.00	0.12	0.24	0.00	0.00	0.00
4	5	4	1	35.0	0.36	0.48	0.36	0.96	0.96	0.24	0.00	0.00	0.12	0.60
5	5	4	1	35.0	17.31	0.00	1.32	0.00	0.24	0.12	0.12	0.60	0.24	0.00
6	5	4	1	35.0	0.12	0.00	0.00	1.56	1.32	0.00	0.00	0.00	0.00	0.00
7	5	4	1	35.0	0.12	0.72	0.48	0.72	0.00	0.00	0.00	1.56	0.72	0.36
8	5	4	1	35.0	0.48	0.24	0.00	0.36	0.00	0.36	0.00	0.36	0.48	0.00
9	5	4	1	35.0	0.48	0.12	0.00	0.24	0.00	2.16	0.00	0.00	0.24	0.00
10	5	4	1	35.0	0.00	0.00	0.48	0.00	0.12	0.24	0.00	0.00	0.00	0.00
11	5	4	1	35.0	0.00	0.00	0.00	0.00	0.00	0.00	50.24			
12	5	4	1	35.0	832.									
1	5	4	21	35.2	0.34	0.46	0.00	0.11	0.00	0.23	0.00	0.00	0.00	0.92
2	5	4	21	35.2	0.11	0.34	0.00	0.00	0.23	0.00	0.69	0.00	1.03	0.80
3	5	4	21	35.2	0.00	0.11	2.18	0.34	0.00	0.46	0.69	0.00	0.11	0.11
4	5	4	21	35.2	0.23	0.57	0.23	1.26	0.80	0.11	0.00	0.00	0.23	0.34
5	5	4	21	35.2	13.17	0.00	0.80	0.00	0.23	0.00	0.00	0.69	0.11	0.00
6	5	4	21	35.2	0.11	0.00	0.00	2.06	2.18	0.00	0.00	0.23	0.34	0.00
7	5	4	21	35.2	0.11	0.80	0.11	0.11	0.11	0.00	0.00	1.03	0.80	0.34
8	5	4	21	35.2	0.34	0.34	0.11	0.00	0.00	0.57	0.00	0.34	0.92	0.00
9	5	4	21	35.2	1.15	0.34	0.00	0.00	0.00	1.95	0.00	0.00	0.69	0.34
10	5	4	21	35.2	0.00	0.00	0.11	0.00	0.11	0.46	0.00	0.00	0.00	0.00
11	5	4	21	35.2	0.00	0.00	0.00	0.00	0.00	0.11	55.67			
12	5	4	21	35.2	873.									
1	5	4	41	35.4	0.00	0.20	0.10	0.00	0.00	0.20	0.00	0.10	0.00	0.60
2	5	4	41	35.4	0.10	0.30	0.00	0.00	0.00	0.20	1.50	0.00	0.70	0.50
3	5	4	41	35.4	0.00	0.00	3.31	0.00	0.00	0.20	0.20	0.00	0.40	0.00
4	5	4	41	35.4	0.60	0.30	0.10	1.70	0.60	0.10	0.10	0.00	0.00	0.30
5	5	4	41	35.4	10.92	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.40	0.00
6	5	4	41	35.4	0.50	0.00	0.00	1.50	3.41	0.00	0.00	0.10	0.70	0.00
7	5	4	41	35.4	0.00	1.20	0.20	0.30	0.10	0.00	0.00	0.50	0.20	0.70
8	5	4	41	35.4	0.60	0.00	0.00	0.00	0.00	0.30	0.00	0.40	0.50	0.00
9	5	4	41	35.4	0.30	0.10	0.00	0.00	0.00	2.61	0.00	0.00	0.40	0.00
10	5	4	41	35.4	0.00	0.10	0.10	0.00	0.40	0.30	0.00	0.00	0.00	0.00
11	5	4	41	35.4	0.00	0.00	0.00	0.00	0.00	0.00	59.92			
12	5	4	41	35.4	998.									
1	5	4	61	35.6	0.11	0.00	0.22	0.11	0.00	0.00	0.00	0.00	0.00	0.66
2	5	4	61	35.6	0.11	0.33	0.00	0.11	0.00	0.11	1.33	0.00	0.77	0.88
3	5	4	61	35.6	0.00	0.22	5.19	0.33	0.00	0.11	0.88	0.00	0.44	0.00
4	5	4	61	35.6	0.22	0.33	0.22	0.44	0.44	0.44	0.00	0.00	0.00	0.22
5	5	4	61	35.6	9.61	0.33	1.66	0.00	0.22	0.00	0.00	0.55	0.66	0.11
6	5	4	61	35.6	0.11	0.22	0.11	1.10	1.88	0.00	0.00	0.00	0.11	0.00
7	5	4	61	35.6	0.00	0.77	0.22	0.11	0.11	0.00	0.11	0.99	0.22	0.44
8	5	4	61	35.6	0.22	0.55	0.00	0.55	0.00	0.11	0.00	0.44	0.33	0.00
9	5	4	61	35.6	0.00	0.22	0.00	0.00	0.00	3.87	0.00	0.00	0.77	0.22
10	5	4	61	35.6	0.00	0.00	0.22	0.00	0.00	0.44	0.00	0.00	0.00	0.00
11	5	4	61	35.6	0.00	0.11	0.00	0.00	0.00	0.00	58.01			
12	5	4	61	35.6	905.									
1	5	4	81	35.8	0.22	0.33	0.33	0.00	0.00	0.33	0.11	0.44	0.33	0.44
2	5	4	81	35.8	0.00	0.33	0.00	0.44	0.11	0.00	2.94	0.00	1.31	1.09
3	5	4	81	35.8	0.00	0.44	3.27	0.11	0.00	0.11	0.76	0.00	0.22	0.00
4	5	4	81	35.8	0.76	0.33	0.11	0.76	2.07	0.76	0.22	0.11	0.11	1.53
5	5	4	81	35.8	16.67	0.54	0.65	0.11	0.00	0.00	0.00	0.11	1.31	0.00
6	5	4	81	35.8	0.22	1.42	0.65	0.33	1.42	0.00	0.00	0.44	1.42	0.33
7	5	4	81	35.8	0.11	1.09	0.65	0.54	0.33	0.00	0.11	0.76	0.44	0.76

8	5	4	81	35.8	0.22	0.00	0.11	0.54	0.00	0.22	0.11	0.00	0.44	0.11
9	5	4	81	35.8	0.00	0.22	0.00	0.54	0.11	2.51	0.00	5.12	0.65	0.22
10	5	4	81	35.8	0.00	0.11	0.44	0.00	0.00	0.87	0.00	0.00	0.00	0.00
11	5	4	81	35.8	0.00	0.11	0.00	0.00	0.00	0.00	36.60			
12	5	4	81	35.8	918.									
1	5	4	101	36.0	0.63	0.13	0.38	0.13	0.00	0.25	0.00	0.00	0.25	1.25
2	5	4	101	36.0	0.00	0.50	0.00	0.38	0.13	0.00	1.25	0.00	0.75	0.38
3	5	4	101	36.0	0.00	0.13	2.25	0.13	0.00	0.25	0.63	0.00	0.50	0.13
4	5	4	101	36.0	0.25	0.50	0.38	0.50	1.13	0.00	0.13	0.00	0.00	0.50
5	5	4	101	36.0	11.64	0.25	1.00	0.00	0.00	0.25	0.00	0.00	0.88	0.00
6	5	4	101	36.0	0.00	0.88	0.13	0.13	1.63	0.00	0.00	0.00	0.63	0.38
7	5	4	101	36.0	0.13	0.88	0.00	0.00	0.13	0.13	0.25	0.63	0.38	0.25
8	5	4	101	36.0	0.25	0.25	0.00	0.38	0.00	0.13	0.13	0.38	0.00	0.00
9	5	4	101	36.0	0.00	0.25	0.00	0.13	0.00	3.38	0.00	0.00	0.25	0.00
10	5	4	101	36.0	0.00	0.13	0.25	0.00	0.13	0.38	0.00	0.00	0.00	0.00
11	5	4	101	36.0	0.00	0.13	0.00	0.00	0.00	0.00	59.20			
12	5	4	101	36.0	799.									
1	5	4	121	36.2	0.20	0.00	0.41	0.31	0.00	0.51	0.20	0.31	0.20	4.09
2	5	4	121	36.2	0.00	0.51	0.00	0.82	0.20	0.10	1.33	0.00	1.12	0.61
3	5	4	121	36.2	0.00	0.41	4.29	0.20	0.00	0.31	0.92	0.00	0.20	0.00
4	5	4	121	36.2	0.31	0.31	0.20	1.23	0.82	0.20	0.10	0.00	0.10	0.61
5	5	4	121	36.2	11.13	0.20	0.41	0.31	0.00	0.10	0.00	0.51	1.43	0.10
6	5	4	121	36.2	0.10	0.92	0.00	0.10	1.12	0.00	0.00	0.10	0.51	0.10
7	5	4	121	36.2	0.10	0.82	0.20	0.00	0.31	0.00	0.10	1.12	0.10	0.10
8	5	4	121	36.2	0.41	0.10	0.00	0.41	0.20	0.51	0.00	0.20	0.31	0.00
9	5	4	121	36.2	0.00	0.20	0.00	0.31	0.00	2.25	0.00	0.00	0.20	0.10
10	5	4	121	36.2	0.00	0.10	0.72	0.00	0.00	0.41	0.00	0.00	0.00	0.00
11	5	4	121	36.2	0.00	0.00	0.00	0.00	0.00	0.00	52.40			
12	5	4	121	36.2	979.									
1	5	4	141	36.4	0.21	0.00	0.42	0.53	0.00	0.64	0.21	0.32	0.21	2.76
2	5	4	141	36.4	0.11	0.32	0.00	0.53	0.11	0.11	2.34	0.00	0.85	0.42
3	5	4	141	36.4	0.00	0.00	4.99	0.21	0.00	0.21	2.12	0.00	0.32	0.00
4	5	4	141	36.4	0.53	0.21	0.21	1.17	2.34	0.64	0.11	0.00	0.32	2.02
5	5	4	141	36.4	13.27	0.00	0.42	0.11	0.00	0.11	0.00	0.00	1.27	0.00
6	5	4	141	36.4	0.11	0.96	0.00	0.42	0.53	0.00	0.00	0.21	0.32	0.32
7	5	4	141	36.4	0.11	1.06	0.42	0.32	0.11	0.00	0.00	0.64	0.42	0.53
8	5	4	141	36.4	0.11	0.42	0.11	0.74	0.00	0.32	0.32	0.11	0.64	0.00
9	5	4	141	36.4	0.00	0.11	0.11	0.21	0.00	2.34	0.00	0.00	0.21	0.11
10	5	4	141	36.4	0.00	0.00	0.74	0.00	0.11	0.53	0.00	0.00	0.00	0.00
11	5	4	141	36.4	0.00	0.00	0.00	0.00	0.00	0.00	45.65			
12	5	4	141	36.4	942.									
1	5	5	1	36.5	0.46	0.12	0.23	0.23	0.00	0.23	0.00	0.23	0.12	0.46
2	5	5	1	36.5	0.12	0.69	0.12	0.23	0.12	0.00	2.19	0.00	0.81	0.23
3	5	5	1	36.5	0.00	0.00	4.73	0.12	0.00	0.46	0.81	0.00	0.58	0.12
4	5	5	1	36.5	0.23	0.35	0.12	0.35	1.04	0.23	0.23	0.00	0.58	0.58
5	5	5	1	36.5	12.23	0.00	0.58	0.12	0.00	0.12	0.00	0.23	0.58	0.12
6	5	5	1	36.5	0.00	0.23	0.12	0.46	1.61	0.00	0.12	0.23	0.35	0.23
7	5	5	1	36.5	0.00	1.50	0.58	0.12	0.35	0.00	0.00	0.46	0.00	0.58
8	5	5	1	36.5	0.00	0.00	0.00	1.15	0.00	0.46	0.00	0.35	0.23	0.00
9	5	5	1	36.5	0.00	0.12	0.00	0.12	0.00	1.61	0.00	0.00	0.35	0.23
10	5	5	1	36.5	0.00	0.12	0.58	0.00	0.23	0.35	0.00	0.00	0.00	0.00
11	5	5	1	36.5	0.00	0.00	0.00	0.00	0.00	0.00	56.17			
12	5	5	1	36.5	867.									
1	5	5	21	36.7	0.00	0.33	0.22	0.11	0.00	0.00	0.43	0.22	0.11	0.43
2	5	5	21	36.7	0.00	0.54	0.11	0.54	0.11	0.00	0.54	0.00	0.87	0.33

3	5	5	21	36.7	0.00	0.00	2.50	0.00	0.00	0.22	0.87	0.00	0.22	0.11
4	5	5	21	36.7	0.11	0.11	0.33	0.43	0.87	0.00	0.11	0.00	0.00	0.54
5	5	5	21	36.7	11.96	0.22	0.76	0.00	0.00	0.22	0.00	0.00	0.54	0.11
6	5	5	21	36.7	0.22	0.87	0.22	0.33	0.98	0.00	0.00	0.00	0.33	0.22
7	5	5	21	36.7	0.11	1.52	0.11	0.11	0.00	0.00	0.00	0.65	0.11	0.76
8	5	5	21	36.7	0.22	0.11	0.11	0.65	0.00	0.33	0.11	0.11	0.43	0.00
9	5	5	21	36.7	0.00	0.11	0.00	0.22	0.00	2.50	0.11	0.00	0.11	0.11
10	5	5	21	36.7	0.00	0.00	0.11	0.00	0.11	0.65	0.00	0.00	0.00	0.00
11	5	5	21	36.7	0.00	0.00	0.00	0.11	0.00	0.00	62.17			
12	5	5	21	36.7	920.									
1	5	5	41	36.9	0.71	0.12	0.35	0.00	0.00	0.00	0.12	0.35	0.12	1.77
2	5	5	41	36.9	0.12	0.82	0.12	0.24	0.00	0.12	2.12	0.00	1.06	0.82
3	5	5	41	36.9	0.00	0.24	4.71	0.12	0.00	0.12	0.47	0.00	0.35	0.00
4	5	5	41	36.9	0.12	0.12	0.12	0.71	1.53	0.59	0.24	0.00	0.12	0.94
5	5	5	41	36.9	17.67	0.12	0.94	0.12	0.00	0.00	0.00	0.12	0.24	0.12
6	5	5	41	36.9	0.47	0.94	0.00	0.24	1.53	0.00	0.00	0.35	0.59	0.24
7	5	5	41	36.9	0.35	0.24	0.82	0.12	0.00	0.35	0.12	0.24	0.59	0.47
8	5	5	41	36.9	0.24	0.35	0.00	0.47	0.12	0.59	0.82	0.24	0.00	0.24
9	5	5	41	36.9	0.00	0.00	0.00	0.12	0.00	2.12	0.00	0.00	0.35	0.00
10	5	5	41	36.9	0.00	0.00	0.24	0.00	0.24	0.59	0.00	0.00	0.00	0.00
11	5	5	41	36.9	0.00	0.12	0.00	0.00	0.00	0.00	46.76			
12	5	5	41	36.9	849.									
1	5	5	61	37.1	0.10	0.00	0.41	0.00	0.00	0.00	0.00	0.10	0.00	0.51
2	5	5	61	37.1	0.00	0.91	0.00	0.10	0.00	0.10	1.63	0.00	0.30	0.71
3	5	5	61	37.1	0.00	0.00	3.25	0.00	0.00	0.10	0.41	0.00	0.00	0.00
4	5	5	61	37.1	0.41	0.10	0.10	0.51	0.10	0.51	0.00	0.00	0.00	0.81
5	5	5	61	37.1	8.74	0.00	1.52	0.00	0.00	0.00	0.00	0.30	0.41	0.10
6	5	5	61	37.1	0.00	0.00	0.00	0.61	1.22	0.00	0.00	0.20	0.00	0.00
7	5	5	61	37.1	0.20	1.32	0.00	0.51	0.00	0.00	0.00	1.02	0.30	0.71
8	5	5	61	37.1	0.20	0.20	0.00	0.41	0.00	0.20	0.00	0.61	0.00	0.00
9	5	5	61	37.1	0.00	0.41	0.00	0.10	0.00	2.64	0.00	0.00	0.41	0.20
10	5	5	61	37.1	0.00	0.00	0.61	0.00	0.10	0.71	0.00	0.00	0.00	0.00
11	5	5	61	37.1	0.00	0.00	0.00	0.00	0.00	0.00	64.84			
12	5	5	61	37.1	984.									
1	5	5	81	37.3	0.52	0.13	0.00	0.00	0.00	0.13	0.00	0.26	0.00	1.31
2	5	5	81	37.3	0.13	0.65	0.13	0.26	0.00	0.13	1.31	0.00	0.92	1.18
3	5	5	81	37.3	0.00	0.00	4.18	0.00	0.00	0.13	0.65	0.00	0.52	0.00
4	5	5	81	37.3	0.52	0.39	0.00	0.78	0.26	0.39	0.00	0.00	0.39	0.78
5	5	5	81	37.3	9.80	0.13	0.92	0.00	0.00	0.00	0.00	0.39	0.92	0.00
6	5	5	81	37.3	0.13	0.26	0.39	0.65	1.57	0.00	0.00	0.39	0.13	0.00
7	5	5	81	37.3	0.13	1.18	0.39	0.13	0.26	0.00	0.00	1.57	0.78	0.65
8	5	5	81	37.3	0.52	0.13	0.00	0.13	0.00	0.00	0.00	0.78	0.26	0.00
9	5	5	81	37.3	0.00	0.39	0.00	0.13	0.00	2.61	0.00	0.00	0.52	0.00
10	5	5	81	37.3	0.00	0.00	0.65	0.00	0.13	0.39	0.00	0.00	0.00	0.00
11	5	5	81	37.3	0.00	0.00	0.00	0.00	0.00	0.00	56.47			
12	5	5	81	37.3	765.									
1	5	5	101	37.5	0.66	0.09	0.28	0.19	0.00	0.00	0.09	0.00	0.19	1.32
2	5	5	101	37.5	0.09	0.66	0.00	0.38	0.00	0.09	1.32	0.00	0.75	0.94
3	5	5	101	37.5	0.00	0.38	4.05	0.09	0.00	0.09	0.85	0.00	0.47	0.00
4	5	5	101	37.5	0.00	0.28	0.09	0.38	1.51	0.28	0.09	0.00	0.19	0.94
5	5	5	101	37.5	11.21	0.09	1.51	0.09	0.00	0.00	0.00	0.00	0.47	0.09
6	5	5	101	37.5	0.09	0.56	0.09	0.09	0.75	0.00	0.00	0.00	0.28	0.09
7	5	5	101	37.5	0.00	0.28	0.38	0.38	0.00	0.00	0.19	1.32	0.28	0.75
8	5	5	101	37.5	0.28	0.19	0.00	0.28	0.09	0.19	0.28	0.56	0.56	0.00
9	5	5	101	37.5	0.09	0.28	0.19	0.38	0.00	2.17	0.00	0.00	0.56	0.09

10	5	5	101	37.5	0.00	0.00	0.19	0.00	0.19	0.47	0.00	0.00	0.00	0.00
11	5	5	101	37.5	0.00	0.00	0.00	0.00	0.00	0.00	57.16			
12	5	5	101	37.5	1062.									
1	5	5	121	37.7	0.61	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.00	1.84
2	5	5	121	37.7	0.12	0.25	0.00	0.00	0.00	0.12	2.83	0.00	0.61	0.98
3	5	5	121	37.7	0.00	0.00	4.30	0.49	0.00	0.12	0.61	0.00	0.49	0.00
4	5	5	121	37.7	0.00	0.00	0.12	0.86	0.12	0.37	0.00	0.00	0.00	0.12
5	5	5	121	37.7	9.09	0.00	0.74	0.00	0.00	0.00	0.00	0.37	0.37	0.00
6	5	5	121	37.7	0.00	0.25	0.74	0.37	1.60	0.00	0.00	0.98	0.00	0.00
7	5	5	121	37.7	0.12	1.60	0.00	0.49	0.25	0.12	0.12	0.86	0.25	0.49
8	5	5	121	37.7	0.37	0.25	0.12	0.74	0.00	0.00	0.12	0.37	0.25	0.00
9	5	5	121	37.7	0.00	1.11	0.00	0.12	0.12	1.97	0.00	0.00	0.25	0.25
10	5	5	121	37.7	0.00	0.00	0.37	0.00	0.12	0.37	0.00	0.00	0.00	0.00
11	5	5	121	37.7	0.00	0.00	0.00	0.00	0.00	0.00	58.85			
12	5	5	121	37.7	814.									
1	5	5	141	37.9	0.41	0.00	0.41	0.00	0.00	0.00	0.00	0.51	0.00	1.85
2	5	5	141	37.9	0.00	0.10	0.00	0.21	0.00	0.21	1.13	0.00	0.72	1.03
3	5	5	141	37.9	0.00	0.10	3.40	0.10	0.00	0.31	0.62	0.00	0.51	0.00
4	5	5	141	37.9	0.41	0.00	0.10	0.31	0.51	0.21	0.10	0.00	0.00	0.41
5	5	5	141	37.9	11.64	0.00	1.13	0.00	0.00	0.00	0.00	0.31	0.10	0.10
6	5	5	141	37.9	0.00	0.00	0.51	0.82	1.75	0.00	0.00	0.72	0.10	0.00
7	5	5	141	37.9	0.31	0.51	0.00	0.10	0.00	0.00	0.41	0.31	0.41	0.51
8	5	5	141	37.9	0.00	0.62	0.10	0.41	0.00	0.51	0.00	0.41	0.51	0.00
9	5	5	141	37.9	0.00	0.82	0.21	0.00	0.00	3.09	0.00	0.00	0.51	0.00
10	5	5	141	37.9	0.00	0.10	0.51	0.00	0.31	0.10	0.00	0.00	0.00	0.10
11	5	5	141	37.9	0.00	0.00	0.00	0.00	0.00	0.00	58.19			
12	5	5	141	37.9	971.									
1	5	6	1	38.0	0.37	0.09	0.19	0.09	0.00	0.00	0.00	0.19	0.00	1.21
2	5	6	1	38.0	0.00	0.28	0.09	0.28	0.09	0.00	1.76	0.00	1.02	0.37
3	5	6	1	38.0	0.00	0.19	2.13	0.09	0.00	0.09	0.93	0.00	0.19	0.00
4	5	6	1	38.0	0.37	0.19	0.09	0.28	0.46	0.28	0.19	0.00	0.28	0.65
5	5	6	1	38.0	8.07	0.37	1.11	0.09	0.00	0.09	0.00	0.00	0.37	0.00
6	5	6	1	38.0	0.00	0.65	0.28	0.28	1.95	0.00	0.09	0.28	0.19	0.00
7	5	6	1	38.0	0.74	0.74	0.09	0.09	0.09	0.00	0.00	1.39	0.19	0.46
8	5	6	1	38.0	0.37	0.56	0.00	0.28	0.00	0.83	0.37	0.00	0.46	0.00
9	5	6	1	38.0	0.00	0.56	0.19	0.37	0.00	2.13	0.00	0.00	0.83	0.00
10	5	6	1	38.0	0.00	0.09	0.28	0.00	0.19	0.37	0.09	0.00	0.00	0.00
11	5	6	1	38.0	0.00	0.00	0.00	0.09	0.00	0.00	61.87			
12	5	6	1	38.0	1078.									
1	5	6	21	38.2	0.23	0.11	0.45	0.00	0.00	0.00	0.00	0.23	0.00	2.16
2	5	6	21	38.2	0.00	0.34	0.00	0.34	0.00	0.00	1.59	0.00	0.68	0.57
3	5	6	21	38.2	0.00	0.34	3.63	0.00	0.00	0.11	1.36	0.00	0.00	0.23
4	5	6	21	38.2	0.11	0.23	0.34	0.34	0.79	0.34	0.00	0.00	0.11	1.14
5	5	6	21	38.2	10.56	0.11	0.57	0.00	0.00	0.00	0.00	0.00	0.91	0.00
6	5	6	21	38.2	0.11	0.45	0.23	0.34	1.02	0.00	0.00	0.00	0.34	0.23
7	5	6	21	38.2	0.11	2.72	0.23	0.45	0.00	0.00	0.00	0.11	0.00	0.79
8	5	6	21	38.2	0.00	0.34	0.00	0.68	0.00	0.23	0.23	0.00	0.11	0.00
9	5	6	21	38.2	0.00	0.23	0.00	0.23	0.00	2.72	0.00	0.00	0.23	0.11
10	5	6	21	38.2	0.00	0.11	0.11	0.00	0.11	0.68	0.00	0.00	0.00	0.00
11	5	6	21	38.2	0.00	0.00	0.00	0.00	0.00	0.00	58.80			
12	5	6	21	38.2	881.									
1	5	6	41	38.4	0.33	0.11	0.55	0.11	0.00	0.11	0.00	0.33	0.11	2.52
2	5	6	41	38.4	0.00	0.55	0.00	0.22	0.00	0.00	0.99	0.00	1.75	0.44
3	5	6	41	38.4	0.00	0.22	3.84	0.11	0.00	0.44	1.64	0.00	0.33	0.00
4	5	6	41	38.4	0.33	0.44	0.00	0.33	0.99	0.22	0.11	0.00	0.22	1.21

5	5	6	41	38.4	8.77	0.22	0.66	0.11	0.00	0.11	0.00	0.11	0.44	0.11
6	5	6	41	38.4	0.00	0.77	0.22	0.22	2.52	0.00	0.00	0.11	0.00	0.00
7	5	6	41	38.4	0.22	1.43	0.00	0.00	0.22	0.00	0.11	0.55	0.11	0.66
8	5	6	41	38.4	0.33	0.00	0.00	0.44	0.11	0.22	0.00	0.22	0.66	0.00
9	5	6	41	38.4	0.00	0.22	0.00	0.11	0.00	3.29	0.00	0.00	0.11	0.44
10	5	6	41	38.4	0.00	0.00	0.22	0.00	0.11	0.66	0.11	0.00	0.00	0.00
11	5	6	41	38.4	0.00	0.00	0.00	0.00	0.00	0.00	56.58			
12	5	6	41	38.4	912.									
1	5	6	61	38.6	0.57	0.00	0.11	0.00	0.00	0.00	0.23	0.23	0.11	1.59
2	5	6	61	38.6	0.00	0.80	0.00	0.46	0.11	0.00	1.03	0.00	1.25	0.11
3	5	6	61	38.6	0.00	0.68	4.10	0.00	0.00	0.23	0.91	0.00	0.34	0.11
4	5	6	61	38.6	0.23	0.00	0.23	0.46	0.34	0.46	0.00	0.00	0.23	2.16
5	5	6	61	38.6	14.01	0.11	0.68	0.00	0.00	0.11	0.00	0.00	0.34	0.00
6	5	6	61	38.6	0.68	0.91	0.00	0.00	2.51	0.00	0.00	0.00	0.46	0.00
7	5	6	61	38.6	0.11	1.25	0.57	0.23	0.11	0.11	0.00	0.91	0.68	0.46
8	5	6	61	38.6	0.00	0.11	0.11	0.46	0.00	0.34	0.00	0.00	0.00	0.00
9	5	6	61	38.6	0.00	0.00	0.00	0.23	0.00	3.42	0.00	0.00	0.11	0.46
10	5	6	61	38.6	0.00	0.11	0.34	0.00	0.00	0.57	0.00	0.00	0.00	0.00
11	5	6	61	38.6	0.00	0.00	0.00	0.00	0.00	0.00	52.39			
12	5	6	61	38.6	878.									
1	5	6	81	38.8	0.24	0.12	0.12	0.00	0.00	0.00	0.00	0.48	0.00	1.08
2	5	6	81	38.8	0.00	0.60	0.00	0.24	0.00	0.00	1.08	0.00	1.08	0.36
3	5	6	81	38.8	0.00	0.00	3.84	0.00	0.00	0.00	0.96	0.00	0.12	0.00
4	5	6	81	38.8	0.36	0.00	0.12	0.24	0.60	0.36	0.00	0.00	0.12	0.60
5	5	6	81	38.8	10.31	0.24	1.20	0.00	0.00	0.00	0.00	0.36	0.72	0.12
6	5	6	81	38.8	0.12	0.00	0.24	0.36	2.40	0.00	0.00	0.12	0.12	0.00
7	5	6	81	38.8	0.00	1.08	0.24	0.12	0.00	0.00	0.00	0.36	0.24	0.48
8	5	6	81	38.8	0.12	0.36	0.12	0.24	0.00	0.72	0.00	0.36	0.00	0.00
9	5	6	81	38.8	0.00	0.36	0.12	0.48	0.00	2.76	0.00	0.00	0.00	0.12
10	5	6	81	38.8	0.00	0.00	0.00	0.00	0.12	0.24	1.68	0.00	0.00	0.00
11	5	6	81	38.8	0.00	0.00	0.00	0.00	0.00	0.60	60.07			
12	5	6	81	38.8	834.									
1	5	6	101	39.0	0.49	0.00	0.36	0.00	0.00	0.00	0.00	0.12	0.00	1.34
2	5	6	101	39.0	0.00	0.12	0.00	0.24	0.00	0.00	0.97	0.00	1.22	0.12
3	5	6	101	39.0	0.00	0.24	1.70	0.12	0.00	0.24	0.49	0.00	0.36	0.12
4	5	6	101	39.0	0.36	0.00	0.00	0.24	0.24	0.36	0.00	0.00	0.12	0.85
5	5	6	101	39.0	11.92	0.00	0.73	0.24	0.12	0.00	0.00	0.00	0.49	0.00
6	5	6	101	39.0	0.36	0.12	0.00	0.12	4.50	0.00	0.00	0.36	0.12	0.12
7	5	6	101	39.0	0.00	1.34	0.36	0.36	0.12	0.12	0.00	0.97	0.61	0.12
8	5	6	101	39.0	0.24	0.24	0.00	0.24	0.00	0.36	0.12	0.24	0.00	0.00
9	5	6	101	39.0	0.00	0.85	0.00	0.73	0.00	1.95	0.00	0.00	0.12	0.24
10	5	6	101	39.0	0.00	0.12	0.12	0.00	0.00	0.85	2.43	0.00	0.00	0.00
11	5	6	101	39.0	0.00	0.00	0.00	0.00	0.00	0.00	57.42			
12	5	6	101	39.0	822.									
1	6	1	121	40.5	0.11	0.11	0.33	0.00	0.00	0.00	0.00	0.22	0.00	1.54
2	6	1	121	40.5	0.11	1.10	0.00	0.11	0.00	0.00	1.21	0.00	1.21	0.55
3	6	1	121	40.5	0.00	0.00	5.18	0.00	0.00	0.77	1.21	0.00	0.33	0.00
4	6	1	121	40.5	0.55	0.33	0.33	2.64	0.00	0.55	0.11	0.00	0.44	0.44
5	6	1	121	40.5	6.28	0.00	0.11	0.22	0.00	0.00	0.00	0.55	0.11	0.00
6	6	1	121	40.5	0.11	0.11	0.11	1.10	2.42	0.00	0.00	0.11	0.66	0.11
7	6	1	121	40.5	0.22	0.55	0.33	0.55	0.11	0.11	0.00	0.44	0.44	0.33
8	6	1	121	40.5	0.22	0.33	0.00	0.22	0.00	0.00	0.00	0.55	0.66	0.00
9	6	1	121	40.5	0.00	0.22	0.00	0.33	0.00	2.20	0.00	0.00	0.00	0.11
10	6	1	121	40.5	0.00	0.00	0.33	0.00	0.22	0.55	5.07	0.00	0.00	0.00
11	6	1	121	40.5	0.00	0.00	0.00	0.00	0.00	0.00	54.41			

12	6	1	121	40.5	908.									
1	6	1	140	40.7	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.11	0.55
2	6	1	140	40.7	0.00	0.44	0.00	0.44	0.11	0.11	1.09	0.00	0.66	1.20
3	6	1	140	40.7	0.11	0.11	2.07	0.55	0.00	0.22	0.87	0.00	0.11	0.00
4	6	1	140	40.7	1.20	0.22	0.00	0.44	0.11	0.33	0.00	0.00	0.00	1.86
5	6	1	140	40.7	10.04	0.00	0.11	0.00	0.00	0.00	0.00	0.11	0.33	0.11
6	6	1	140	40.7	0.00	0.11	0.22	0.33	1.20	0.00	0.00	0.22	0.22	0.00
7	6	1	140	40.7	0.22	0.76	0.11	0.11	0.00	0.00	0.00	0.76	0.44	0.44
8	6	1	140	40.7	0.33	0.76	0.00	0.22	0.00	0.33	0.00	0.00	0.55	0.00
9	6	1	140	40.7	0.00	0.66	0.00	0.22	0.00	0.66	0.00	0.00	0.33	0.55
10	6	1	140	40.7	0.00	0.00	0.33	0.00	0.00	0.00	2.95	0.00	0.00	0.00
11	6	1	140	40.7	0.00	0.00	0.00	0.00	0.00	0.44	62.34			
12	6	1	140	40.7	916.									
1	6	2	1	40.8	0.31	0.00	0.00	0.21	0.00	0.00	0.00	0.31	0.00	1.55
2	6	2	1	40.8	0.00	0.72	0.00	0.21	0.00	0.00	0.52	0.00	0.72	0.41
3	6	2	1	40.8	0.00	0.21	2.99	0.52	0.00	0.00	0.21	0.00	0.10	0.00
4	6	2	1	40.8	0.83	0.21	0.00	0.83	0.00	0.52	0.00	0.00	0.10	1.03
5	6	2	1	40.8	10.42	0.00	0.41	0.00	0.21	0.21	0.00	0.10	0.10	0.31
6	6	2	1	40.8	0.10	0.00	0.21	0.41	1.96	0.00	0.00	0.52	0.10	0.00
7	6	2	1	40.8	0.31	0.93	0.00	0.21	0.52	0.00	0.00	0.83	0.31	0.21
8	6	2	1	40.8	0.41	0.31	0.00	0.00	0.00	0.52	0.00	0.41	0.41	0.00
9	6	2	1	40.8	0.00	0.62	0.00	0.00	0.00	0.72	0.00	0.00	0.10	0.21
10	6	2	1	40.8	0.00	0.00	0.21	0.00	0.00	0.31	3.72	0.00	0.00	0.00
11	6	2	1	40.8	0.00	0.10	0.00	0.00	0.00	0.41	60.68			
12	6	2	1	40.8	969.									
1	6	2	20	41.0	0.29	0.00	0.88	0.00	0.00	0.10	0.00	0.49	0.00	1.26
2	6	2	20	41.0	0.00	1.26	0.00	0.19	0.00	0.00	3.02	0.00	0.88	0.29
3	6	2	20	41.0	0.00	0.19	3.70	0.29	0.00	0.00	0.97	0.00	0.39	0.00
4	6	2	20	41.0	1.07	0.19	0.39	0.58	0.29	0.10	0.00	0.00	0.29	0.39
5	6	2	20	41.0	14.49	0.19	1.26	0.58	0.00	0.00	0.00	0.19	0.10	0.19
6	6	2	20	41.0	0.10	0.19	0.19	0.58	4.47	0.00	0.00	0.19	0.49	0.00
7	6	2	20	41.0	0.00	1.36	0.39	0.29	0.00	0.00	0.00	0.19	0.49	0.19
8	6	2	20	41.0	0.39	0.29	0.00	0.49	0.00	0.68	0.00	0.19	0.19	0.00
9	6	2	20	41.0	0.00	0.29	0.00	0.39	0.00	0.68	0.00	0.00	0.88	0.00
10	6	2	20	41.0	0.00	0.10	0.58	0.00	0.19	0.88	4.77	0.00	0.00	0.00
11	6	2	20	41.0	0.00	0.00	0.00	0.00	0.00	0.49	44.84			
12	6	2	20	41.0	1028.									
1	6	2	40	41.2	0.20	0.00	0.10	0.10	0.00	0.10	0.00	0.20	0.00	0.82
2	6	2	40	41.2	0.20	0.51	0.10	0.31	0.00	0.00	5.10	0.00	0.51	0.41
3	6	2	40	41.2	0.00	0.10	3.98	0.82	0.00	0.00	0.61	0.00	0.41	0.10
4	6	2	40	41.2	0.41	0.20	0.10	1.53	0.10	1.02	0.00	0.00	0.20	1.12
5	6	2	40	41.2	12.55	0.00	0.51	0.00	0.00	0.10	0.00	0.41	0.20	0.31
6	6	2	40	41.2	0.10	0.51	0.00	0.51	2.45	0.00	0.00	0.51	0.71	0.00
7	6	2	40	41.2	0.31	1.12	0.00	0.41	0.71	0.10	0.00	0.31	0.20	0.20
8	6	2	40	41.2	0.41	0.00	0.00	0.41	0.00	0.41	0.00	0.00	0.31	0.00
9	6	2	40	41.2	0.00	0.31	0.00	0.00	0.00	0.41	0.00	0.00	0.10	0.10
10	6	2	40	41.2	0.00	0.20	0.00	0.00	0.00	0.41	8.37	0.00	0.00	0.00
11	6	2	40	41.2	0.00	0.00	0.00	0.00	0.00	0.61	46.33			
12	6	2	40	41.2	980.									
1	6	2	61	41.4	0.00	0.13	0.25	0.00	0.00	0.00	0.00	0.25	0.13	1.14
2	6	2	61	41.4	0.00	0.13	0.00	0.00	0.38	0.25	2.15	0.00	0.76	0.25
3	6	2	61	41.4	0.00	0.00	2.53	0.38	0.00	0.00	0.38	0.00	0.00	0.00
4	6	2	61	41.4	1.01	0.25	0.13	0.89	0.00	0.25	0.00	0.00	0.00	0.89
5	6	2	61	41.4	16.86	0.00	0.51	0.00	0.00	0.00	0.00	0.25	0.76	0.00
6	6	2	61	41.4	0.00	0.00	0.13	0.89	1.77	0.00	0.00	0.00	0.13	0.00

7	6	2	61	41.4	0.13	0.63	0.00	0.25	0.25	0.00	0.00	0.13	0.63	0.13
8	6	2	61	41.4	0.13	0.13	0.00	0.00	0.00	0.13	0.00	0.13	0.25	0.00
9	6	2	61	41.4	0.00	0.25	0.00	0.13	0.00	0.76	0.00	0.00	0.63	0.00
10	6	2	61	41.4	0.00	0.00	0.00	0.00	0.38	0.51	9.89	0.00	0.00	0.00
11	6	2	61	41.4	0.00	0.00	0.00	0.00	0.00	0.25	50.44			
12	6	2	61	41.4	789.									
1	6	2	80	41.6	0.39	0.00	0.29	0.00	0.00	0.10	0.00	0.20	0.00	1.47
2	6	2	80	41.6	0.00	0.68	0.00	0.59	0.00	0.00	3.91	0.00	1.37	0.49
3	6	2	80	41.6	0.00	0.10	3.62	0.00	0.00	0.10	1.08	0.00	0.10	0.00
4	6	2	80	41.6	0.39	0.29	0.20	0.29	0.10	0.20	0.00	0.00	0.39	0.68
5	6	2	80	41.6	15.07	0.00	0.68	0.00	0.20	0.00	0.00	0.39	0.20	0.00
6	6	2	80	41.6	0.10	0.10	0.20	0.29	2.84	0.00	0.00	0.39	0.39	0.00
7	6	2	80	41.6	0.39	0.98	0.59	0.10	0.20	0.00	0.00	0.39	0.98	0.39
8	6	2	80	41.6	0.29	0.29	0.00	0.29	0.00	0.20	0.00	0.00	0.20	0.00
9	6	2	80	41.6	0.00	0.20	0.00	0.39	0.00	0.78	0.00	0.00	0.20	0.10
10	6	2	80	41.6	0.00	0.00	0.20	0.00	0.00	0.78	8.81	0.00	0.00	0.00
11	6	2	80	41.6	0.00	0.00	0.00	0.00	0.10	0.49	44.81			
12	6	2	80	41.6	1022.									
1	6	2	100	41.8	0.20	0.10	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.51
2	6	2	100	41.8	0.00	0.31	0.00	0.31	0.00	0.10	0.81	0.00	1.02	0.61
3	6	2	100	41.8	0.00	0.00	1.73	0.20	0.00	0.10	0.41	0.00	0.31	0.00
4	6	2	100	41.8	1.02	0.41	0.20	1.22	0.31	0.31	0.00	0.00	0.00	0.00
5	6	2	100	41.8	5.49	0.00	0.41	0.00	0.10	0.00	0.00	0.31	0.31	0.20
6	6	2	100	41.8	0.00	0.10	0.00	0.81	3.05	0.00	0.00	0.10	0.10	0.10
7	6	2	100	41.8	0.41	1.12	0.00	0.10	0.10	0.00	0.00	0.92	0.41	0.31
8	6	2	100	41.8	0.41	1.12	0.00	0.00	0.00	0.41	0.10	0.10	0.10	0.00
9	6	2	100	41.8	0.00	0.20	0.00	0.10	0.00	0.61	0.00	0.00	0.10	0.00
10	6	2	100	41.8	0.00	0.10	0.61	0.00	0.10	0.00	8.75	0.00	0.00	0.00
11	6	2	100	41.8	0.00	0.10	0.00	0.00	0.00	0.00	62.26			
12	6	2	100	41.8	983.									
1	6	2	121	42.0	0.25	0.00	0.50	0.00	0.00	0.00	0.00	0.37	0.00	0.12
2	6	2	121	42.0	0.00	0.50	0.00	0.12	0.25	0.12	2.37	0.00	1.00	0.12
3	6	2	121	42.0	0.00	0.12	3.49	0.75	0.00	0.37	0.25	0.00	0.62	0.00
4	6	2	121	42.0	1.00	0.25	0.25	1.62	0.00	0.87	0.00	0.00	0.12	1.00
5	6	2	121	42.0	10.21	0.12	0.25	0.00	0.00	0.12	0.00	0.00	0.62	0.12
6	6	2	121	42.0	0.12	0.12	0.25	1.37	1.62	0.00	0.00	0.00	0.37	0.00
7	6	2	121	42.0	0.12	1.25	0.12	0.25	0.25	0.00	0.00	1.12	0.25	0.50
8	6	2	121	42.0	0.12	0.37	0.25	0.37	0.00	0.25	0.00	0.37	0.12	0.00
9	6	2	121	42.0	0.00	0.62	0.25	0.00	0.00	1.12	0.00	0.00	0.12	0.00
10	6	2	121	42.0	0.00	0.00	0.12	0.00	0.00	0.25	7.10	0.00	0.00	0.00
11	6	2	121	42.0	0.00	0.00	0.00	0.00	0.25	1.00	51.68			
12	6	2	121	42.0	803.									
1	6	2	141	42.2	0.00	0.23	0.11	0.00	0.00	0.00	0.11	0.23	0.00	0.69
2	6	2	141	42.2	0.00	0.11	0.00	0.34	0.23	0.00	1.71	0.00	1.03	0.34
3	6	2	141	42.2	0.00	0.11	3.66	0.34	0.00	0.00	1.14	0.00	0.23	0.00
4	6	2	141	42.2	1.37	0.23	0.23	1.60	0.00	0.23	0.00	0.00	0.11	0.46
5	6	2	141	42.2	6.74	0.00	0.34	0.00	0.00	0.11	0.00	0.11	0.23	0.46
6	6	2	141	42.2	0.00	0.00	0.11	0.91	2.17	0.00	0.00	0.57	0.23	0.11
7	6	2	141	42.2	0.00	1.37	0.00	0.34	0.00	0.00	0.00	1.83	0.46	0.34
8	6	2	141	42.2	0.11	0.11	0.00	0.11	0.00	0.46	0.00	0.11	0.11	0.00
9	6	2	141	42.2	0.00	0.23	0.23	0.11	0.00	0.34	0.00	0.00	0.57	0.23
10	6	2	141	42.2	0.00	0.00	0.34	0.00	0.00	0.57	12.11	0.00	0.00	0.00
11	6	2	141	42.2	0.00	0.00	0.00	0.00	0.23	0.46	52.23			
12	6	2	141	42.2	875.									
1	6	3	1	42.3	0.11	0.00	0.96	0.32	0.00	0.00	0.00	0.32	0.11	0.64

2	6	3	1	42.3	0.00	0.00	0.00	0.11	0.11	0.11	1.82	0.00	1.39	0.96
3	6	3	1	42.3	0.00	0.11	2.67	0.64	0.00	0.11	0.32	0.00	0.11	0.21
4	6	3	1	42.3	0.96	0.21	0.11	0.96	0.21	0.53	0.00	0.00	0.00	0.21
5	6	3	1	42.3	4.81	0.00	0.86	0.00	0.11	0.00	0.00	0.21	0.00	0.11
6	6	3	1	42.3	0.00	0.21	0.21	1.28	1.82	0.00	0.00	0.64	0.21	0.00
7	6	3	1	42.3	0.11	1.07	0.00	0.11	0.11	0.00	0.00	1.18	0.53	0.21
8	6	3	1	42.3	0.21	1.18	0.11	0.11	0.00	0.00	0.00	0.43	0.43	0.00
9	6	3	1	42.3	0.00	0.96	0.00	0.00	0.00	0.75	0.00	0.00	0.53	0.00
10	6	3	1	42.3	0.00	0.00	0.11	0.00	0.11	0.64	13.48	0.00	0.00	0.00
11	6	3	1	42.3	0.00	0.00	0.00	0.00	0.43	0.32	52.09			
12	6	3	1	42.3	935.									
1	6	3	20	42.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
2	6	3	20	42.5	0.00	0.20	0.10	0.10	0.00	0.00	1.93	0.00	0.81	0.51
3	6	3	20	42.5	0.00	0.00	2.95	0.31	0.00	0.00	0.10	0.00	0.10	0.00
4	6	3	20	42.5	0.71	0.00	0.00	1.32	0.10	0.31	0.10	0.00	0.10	0.20
5	6	3	20	42.5	7.73	0.10	0.20	0.00	0.00	0.00	0.00	0.00	0.41	0.00
6	6	3	20	42.5	0.00	0.00	0.10	0.81	1.53	0.00	0.00	0.00	0.20	0.00
7	6	3	20	42.5	0.31	1.32	0.10	0.20	0.00	0.00	0.10	0.92	0.61	0.10
8	6	3	20	42.5	0.20	0.41	0.00	0.00	0.00	0.41	0.20	0.31	0.20	0.00
9	6	3	20	42.5	0.00	0.10	0.00	0.00	0.00	0.51	0.00	0.00	0.92	0.31
10	6	3	20	42.5	0.00	0.31	0.20	0.00	0.00	0.31	10.27	0.00	0.00	0.00
11	6	3	20	42.5	0.00	0.00	0.00	0.00	0.00	0.41	59.41			
12	6	3	20	42.5	983.									
1	6	3	40	42.7	0.35	0.12	0.12	0.00	0.00	0.00	0.00	0.47	0.00	0.47
2	6	3	40	42.7	0.00	0.82	0.00	0.12	0.35	0.12	3.04	0.00	0.70	0.70
3	6	3	40	42.7	0.00	0.00	4.10	0.12	0.00	0.23	1.05	0.00	0.35	0.00
4	6	3	40	42.7	0.23	0.12	0.35	0.47	0.23	0.35	0.00	0.00	0.12	0.23
5	6	3	40	42.7	12.30	0.12	0.94	0.00	0.00	0.00	0.00	0.47	0.82	0.00
6	6	3	40	42.7	0.23	0.23	0.00	0.35	1.17	0.00	0.00	0.12	1.05	0.00
7	6	3	40	42.7	0.00	0.47	0.35	0.23	0.00	0.12	0.00	0.23	0.70	0.82
8	6	3	40	42.7	0.00	0.47	0.00	0.12	0.00	0.23	0.00	0.23	0.23	0.00
9	6	3	40	42.7	0.00	0.00	0.12	0.00	0.00	0.59	0.00	0.00	0.59	0.00
10	6	3	40	42.7	0.00	0.00	0.12	0.00	0.35	0.35	7.38	0.00	0.00	0.00
11	6	3	40	42.7	0.00	0.00	0.00	0.00	0.23	0.70	52.22			
12	6	3	40	42.7	854.									
1	6	3	60	42.9	0.61	0.00	0.12	0.00	0.12	0.00	0.12	0.25	0.00	0.49
2	6	3	60	42.9	0.00	0.12	0.00	0.25	0.00	0.00	3.81	0.00	1.35	0.74
3	6	3	60	42.9	0.00	0.12	2.70	0.00	0.00	0.00	0.12	0.00	0.25	0.25
4	6	3	60	42.9	0.61	0.25	0.12	0.12	0.00	0.12	0.00	0.00	0.00	0.37
5	6	3	60	42.9	11.18	0.00	0.98	0.00	0.37	0.12	0.00	0.12	0.37	0.00
6	6	3	60	42.9	0.25	0.00	0.00	0.12	1.60	0.00	0.00	0.12	0.37	0.12
7	6	3	60	42.9	0.49	1.60	0.37	0.37	0.00	0.00	0.00	0.25	0.25	0.49
8	6	3	60	42.9	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.25	0.37	0.00
9	6	3	60	42.9	0.00	0.25	0.00	0.00	0.00	1.23	0.00	0.00	0.98	0.00
10	6	3	60	42.9	0.00	0.00	0.12	0.00	0.00	0.25	6.02	0.00	0.00	0.00
11	6	3	60	42.9	0.00	0.00	0.00	0.00	0.49	0.61	56.39			
12	6	3	60	42.9	814.									
1	6	3	80	43.1	0.10	0.21	0.83	0.00	0.00	0.00	0.00	0.62	0.00	0.93
2	6	3	80	43.1	0.00	0.62	0.00	0.62	0.10	0.00	3.41	0.00	1.03	0.31
3	6	3	80	43.1	0.00	0.31	3.20	0.10	0.00	0.00	0.41	0.00	0.21	0.00
4	6	3	80	43.1	0.72	0.10	0.10	0.52	0.83	0.21	0.10	0.00	0.21	1.03
5	6	3	80	43.1	12.38	0.00	0.93	0.21	0.10	0.00	0.00	0.00	0.83	0.00
6	6	3	80	43.1	0.10	0.31	0.00	0.62	2.58	0.00	0.00	0.41	0.72	0.00
7	6	3	80	43.1	0.10	1.03	0.21	0.21	0.00	0.00	0.10	0.52	0.52	0.52
8	6	3	80	43.1	0.00	0.21	0.00	0.21	0.00	0.10	0.00	0.21	0.52	0.00

9	6	3	80	43.1	0.00	0.10	0.00	0.10	0.00	0.52	0.00	0.00	1.03	0.00
10	6	3	80	43.1	0.00	0.10	0.21	0.00	0.10	0.10	5.06	0.00	0.00	0.00
11	6	3	80	43.1	0.00	0.10	0.00	0.00	0.10	1.14	50.88			
12	6	3	80	43.1	969.									
1	6	3	100	43.3	1.08	0.00	0.32	0.11	0.00	0.00	0.00	0.65	0.00	1.19
2	6	3	100	43.3	0.00	0.43	0.00	0.11	0.00	0.11	1.73	0.00	2.59	0.43
3	6	3	100	43.3	0.00	0.00	3.13	0.00	0.00	0.22	0.86	0.00	0.32	0.00
4	6	3	100	43.3	0.22	0.00	0.11	0.43	0.11	0.43	0.11	0.00	0.00	0.54
5	6	3	100	43.3	7.88	0.00	0.86	0.11	0.00	0.00	0.00	0.22	0.22	0.00
6	6	3	100	43.3	0.00	1.19	0.22	0.32	3.24	0.00	0.00	0.43	0.11	0.11
7	6	3	100	43.3	0.11	1.08	0.22	0.32	0.00	0.00	0.11	1.51	0.97	0.54
8	6	3	100	43.3	0.11	0.54	0.00	0.00	0.00	0.11	0.22	0.43	0.76	0.00
9	6	3	100	43.3	0.00	0.11	0.00	0.00	0.00	0.86	0.00	0.00	1.40	0.11
10	6	3	100	43.3	0.00	0.00	0.00	0.00	0.22	0.65	8.10	0.00	0.00	0.00
11	6	3	100	43.3	0.00	0.00	0.00	0.00	0.11	1.30	50.00			
12	6	3	100	43.3	926.									
1	6	3	120	43.5	0.36	0.00	0.27	0.00	0.00	0.00	0.09	0.00	0.00	0.64
2	6	3	120	43.5	0.00	0.45	0.00	0.45	0.09	0.00	2.00	0.00	1.27	0.27
3	6	3	120	43.5	0.00	0.09	2.36	0.00	0.00	0.18	0.73	0.00	0.64	0.00
4	6	3	120	43.5	0.18	0.36	0.09	0.54	0.00	0.00	0.09	0.00	0.00	0.27
5	6	3	120	43.5	7.54	0.00	1.18	0.27	0.00	0.00	0.00	0.27	0.36	0.09
6	6	3	120	43.5	0.36	0.36	0.00	0.09	2.82	0.00	0.00	0.27	0.54	0.00
7	6	3	120	43.5	0.00	1.18	0.36	0.09	0.18	0.00	0.00	0.82	1.09	0.18
8	6	3	120	43.5	0.45	0.91	0.00	0.18	0.00	0.27	0.00	0.27	0.64	0.00
9	6	3	120	43.5	0.00	0.09	0.00	0.00	0.00	0.27	0.00	0.00	0.64	0.09
10	6	3	120	43.5	0.00	0.18	0.00	0.00	0.00	0.54	6.54	0.00	0.00	0.00
11	6	3	120	43.5	0.00	0.00	0.00	0.00	0.00	0.64	58.76			
12	6	3	120	43.5	1101.									
1	6	3	140	43.7	0.51	0.00	0.41	0.10	0.00	0.00	0.10	0.21	0.00	1.75
2	6	3	140	43.7	0.00	0.51	0.21	0.51	0.00	0.00	2.06	0.00	1.34	0.51
3	6	3	140	43.7	0.00	0.10	2.27	0.10	0.00	0.21	0.41	0.00	0.41	0.21
4	6	3	140	43.7	0.51	0.31	0.10	0.21	0.21	0.00	0.00	0.00	0.10	0.62
5	6	3	140	43.7	10.50	0.00	0.51	0.00	0.00	0.10	0.00	0.21	0.51	0.10
6	6	3	140	43.7	0.00	0.31	0.31	0.31	1.75	0.00	0.00	0.21	1.13	0.21
7	6	3	140	43.7	0.00	0.93	0.21	0.31	0.00	0.00	0.00	0.41	0.51	1.03
8	6	3	140	43.7	0.21	0.62	0.21	0.21	0.00	0.21	0.10	0.10	0.41	0.00
9	6	3	140	43.7	0.00	0.41	0.00	0.10	0.00	1.13	0.00	0.00	0.72	0.10
10	6	3	140	43.7	0.00	0.00	0.21	0.00	0.00	0.51	8.03	0.00	0.00	0.00
11	6	3	140	43.7	0.00	0.00	0.00	0.00	0.10	2.37	50.67			
12	6	3	140	43.7	971.									
1	6	4	1	43.8	0.22	0.00	0.66	0.22	0.00	0.11	0.11	0.44	0.00	1.32
2	6	4	1	43.8	0.00	0.55	0.00	0.66	0.00	0.00	2.31	0.00	2.09	0.22
3	6	4	1	43.8	0.00	0.11	2.86	0.44	0.00	0.00	0.33	0.00	0.88	0.00
4	6	4	1	43.8	0.44	0.55	0.11	0.88	0.55	0.11	0.11	0.00	0.11	0.77
5	6	4	1	43.8	8.92	0.00	0.88	0.11	0.00	0.00	0.00	0.33	0.44	0.11
6	6	4	1	43.8	0.00	0.55	0.00	0.00	1.10	0.00	0.00	0.22	1.10	0.11
7	6	4	1	43.8	0.33	1.43	0.22	0.11	0.11	0.00	0.00	0.66	0.44	0.44
8	6	4	1	43.8	0.11	0.22	0.00	0.33	0.00	0.33	0.00	0.11	0.11	0.00
9	6	4	1	43.8	0.00	0.11	0.00	0.00	0.00	0.99	0.00	0.00	0.33	0.11
10	6	4	1	43.8	0.00	0.00	0.00	0.00	0.00	0.77	8.70	0.00	0.00	0.00
11	6	4	1	43.8	0.00	0.00	0.00	0.00	0.33	0.66	51.98			
12	6	4	1	43.8	908.									
1	6	4	20	44.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.60
2	6	4	20	44.0	0.00	0.36	0.00	0.24	0.00	0.00	1.32	0.00	0.60	0.96
3	6	4	20	44.0	0.00	0.00	3.12	0.72	0.00	0.12	0.48	0.00	0.24	0.00

4	6	4	20	44.0	0.48	0.24	0.12	0.24	0.48	0.12	0.00	0.00	0.12	0.12
5	6	4	20	44.0	8.52	0.00	0.48	0.00	0.00	0.00	0.00	0.24	0.36	0.12
6	6	4	20	44.0	0.12	0.00	0.12	0.12	1.20	0.00	0.00	0.12	0.36	0.00
7	6	4	20	44.0	0.24	0.36	0.00	0.12	0.36	0.00	0.00	0.36	0.60	0.12
8	6	4	20	44.0	0.00	0.24	0.00	0.12	0.00	0.12	0.00	0.00	0.00	0.00
9	6	4	20	44.0	0.00	0.24	0.00	0.24	0.00	0.96	0.00	0.00	0.36	0.00
10	6	4	20	44.0	0.00	0.00	0.00	0.00	0.00	0.12	8.40	0.00	0.00	0.00
11	6	4	20	44.0	0.00	0.00	0.00	0.00	0.12	0.96	63.15			
12	6	4	20	44.0	833.									
1	6	4	40	44.2	0.21	0.21	0.42	0.00	0.00	0.00	0.11	0.32	0.00	0.63
2	6	4	40	44.2	0.00	0.84	0.11	0.53	0.00	0.00	2.42	0.00	2.00	1.26
3	6	4	40	44.2	0.00	0.00	4.53	0.74	0.00	0.00	1.05	0.00	0.32	0.21
4	6	4	40	44.2	0.53	0.21	0.00	1.05	0.42	0.42	0.00	0.11	0.11	0.74
5	6	4	40	44.2	13.68	0.00	0.42	0.00	0.00	0.00	0.00	0.42	0.53	0.42
6	6	4	40	44.2	0.11	0.53	0.11	1.26	0.95	0.00	0.00	0.00	0.21	0.00
7	6	4	40	44.2	0.32	0.42	0.11	0.11	0.11	0.11	0.00	0.42	0.11	0.21
8	6	4	40	44.2	0.32	0.42	0.00	0.32	0.00	0.21	0.00	0.32	0.00	0.00
9	6	4	40	44.2	0.00	0.00	0.00	0.21	0.00	1.37	0.00	0.00	0.32	0.11
10	6	4	40	44.2	0.00	0.00	0.53	0.00	0.42	0.63	9.37	0.00	0.00	0.00
11	6	4	40	44.2	0.00	0.00	0.00	0.00	0.74	2.11	42.63			
12	6	4	40	44.2	950.									
1	6	4	61	44.4	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.11	0.00	1.15
2	6	4	61	44.4	0.00	0.34	0.00	0.11	0.00	0.00	2.99	0.00	1.61	1.15
3	6	4	61	44.4	0.00	0.00	2.53	0.23	0.00	0.46	0.80	0.00	0.23	0.00
4	6	4	61	44.4	0.00	0.46	0.34	0.69	0.11	0.11	0.11	0.00	0.23	0.23
5	6	4	61	44.4	13.78	0.00	0.11	0.00	0.23	0.23	0.00	0.11	0.69	0.46
6	6	4	61	44.4	0.00	0.00	0.00	0.69	1.49	0.00	0.00	0.23	0.34	0.00
7	6	4	61	44.4	0.34	0.57	0.46	0.34	0.00	0.00	0.00	0.80	0.34	0.34
8	6	4	61	44.4	0.57	0.00	0.00	0.34	0.00	0.00	0.23	0.00	0.11	0.00
9	6	4	61	44.4	0.00	0.23	0.00	0.00	0.00	1.15	0.00	0.00	0.23	0.00
10	6	4	61	44.4	0.00	0.00	0.11	0.00	0.00	0.11	9.30	0.00	0.00	0.00
11	6	4	61	44.4	0.00	0.00	0.00	0.00	0.34	0.92	50.52			
12	6	4	61	44.4	871.									
1	6	4	80	44.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	1.12
2	6	4	80	44.6	0.00	0.12	0.00	0.25	0.00	0.00	2.00	0.00	1.37	0.50
3	6	4	80	44.6	0.00	0.00	4.87	0.25	0.00	0.00	0.25	0.00	0.12	0.12
4	6	4	80	44.6	0.37	0.37	0.00	2.00	0.12	0.50	0.00	0.00	0.00	0.37
5	6	4	80	44.6	11.11	0.00	0.00	0.00	0.12	0.00	0.00	0.12	0.50	0.25
6	6	4	80	44.6	0.12	0.00	0.00	0.50	0.87	0.00	0.00	0.00	0.87	0.00
7	6	4	80	44.6	0.12	2.62	0.12	0.00	0.12	0.12	0.00	0.25	0.25	0.12
8	6	4	80	44.6	0.25	0.12	0.00	0.25	0.00	0.37	0.00	0.00	0.00	0.00
9	6	4	80	44.6	0.00	0.00	0.00	0.12	0.00	0.75	0.00	0.00	0.12	0.00
10	6	4	80	44.6	0.00	0.12	0.50	0.00	0.00	0.25	17.73	0.00	0.00	0.00
11	6	4	80	44.6	0.00	0.00	0.00	0.00	0.50	0.37	45.44			
12	6	4	80	44.6	801.									
1	6	4	100	44.8	0.00	0.12	0.71	0.00	0.00	0.00	0.00	0.24	0.00	1.53
2	6	4	100	44.8	0.00	0.94	0.00	0.00	0.00	0.35	3.54	0.00	0.71	0.24
3	6	4	100	44.8	0.00	0.35	2.72	0.12	0.00	0.12	0.83	0.00	0.24	0.12
4	6	4	100	44.8	0.47	0.00	0.71	0.83	0.24	0.24	0.00	0.00	0.00	1.06
5	6	4	100	44.8	14.52	0.00	1.06	0.35	0.12	0.00	0.00	0.12	0.12	0.12
6	6	4	100	44.8	0.00	0.12	0.12	0.83	1.53	0.00	0.00	0.35	0.71	0.12
7	6	4	100	44.8	0.00	2.24	0.12	0.12	0.00	0.00	0.00	0.24	0.47	0.47
8	6	4	100	44.8	0.35	0.00	0.00	0.47	0.00	0.24	0.00	0.12	0.35	0.00
9	6	4	100	44.8	0.00	0.35	0.00	0.12	0.00	0.71	0.00	0.00	0.24	0.00
10	6	4	100	44.8	0.00	0.12	0.24	0.00	0.12	0.47	14.76	0.00	0.00	0.00

11	6	4	100	44.8	0.00	0.00	0.00	0.00	0.00	0.59	40.50			
12	6	4	100	44.8	847.									
1	6	4	121	45.0	1.25	0.00	0.50	0.00	0.00	0.00	0.00	0.38	0.00	0.38
2	6	4	121	45.0	0.00	0.63	0.00	0.00	0.00	0.00	4.89	0.00	1.00	0.50
3	6	4	121	45.0	0.13	0.13	6.39	0.00	0.00	0.13	0.63	0.00	0.13	0.00
4	6	4	121	45.0	0.63	1.00	0.00	0.88	0.13	0.50	0.00	0.00	0.13	0.38
5	6	4	121	45.0	18.05	0.00	0.38	0.00	0.00	0.25	0.00	0.13	0.13	0.63
6	6	4	121	45.0	0.38	0.38	0.13	1.50	1.88	0.00	0.00	0.13	0.50	0.00
7	6	4	121	45.0	0.13	1.00	0.00	0.25	0.38	0.00	0.00	0.63	0.25	0.25
8	6	4	121	45.0	0.00	0.13	0.00	0.13	0.00	0.25	0.00	0.13	0.50	0.00
9	6	4	121	45.0	0.00	0.13	0.00	0.00	0.00	1.63	0.00	0.00	0.00	0.00
10	6	4	121	45.0	0.00	0.00	0.50	0.00	0.38	0.75	10.28	0.00	0.00	0.00
11	6	4	121	45.0	0.00	0.13	0.00	0.00	0.00	1.00	36.09			
12	6	4	121	45.0	798.									
1	6	4	140	45.2	0.86	0.24	0.37	0.00	0.00	0.00	0.00	0.61	0.00	0.73
2	6	4	140	45.2	0.24	0.12	0.12	0.37	0.00	0.24	2.32	0.00	0.98	1.22
3	6	4	140	45.2	0.00	0.00	5.26	0.37	0.00	0.00	0.73	0.00	0.37	0.00
4	6	4	140	45.2	0.73	0.12	0.12	1.59	0.24	1.34	0.00	0.00	0.00	0.00
5	6	4	140	45.2	6.72	0.00	0.00	0.12	0.12	0.24	0.00	0.37	0.61	0.00
6	6	4	140	45.2	0.12	0.12	0.12	1.10	1.96	0.00	0.00	0.61	0.37	0.00
7	6	4	140	45.2	0.00	0.98	0.12	0.37	0.12	0.00	0.00	0.61	0.24	0.61
8	6	4	140	45.2	0.12	0.73	0.00	0.00	0.00	0.12	0.12	0.12	0.24	0.00
9	6	4	140	45.2	0.00	0.12	0.00	0.12	0.00	0.86	0.00	0.00	0.12	0.12
10	6	4	140	45.2	0.00	0.00	0.61	0.00	0.12	1.71	10.64	0.00	0.00	0.00
11	6	4	140	45.2	0.00	0.00	0.00	0.00	0.00	0.12	49.02			
12	6	4	140	45.2	818.									
1	6	5	1	45.3	0.65	0.00	1.31	0.00	0.00	0.22	0.11	0.44	0.00	1.52
2	6	5	1	45.3	0.22	0.22	0.11	0.22	0.00	0.00	3.05	0.00	1.31	0.22
3	6	5	1	45.3	0.00	0.00	5.44	0.44	0.00	0.11	0.44	0.00	0.33	0.00
4	6	5	1	45.3	0.22	0.76	0.33	0.87	0.33	0.44	0.11	0.00	0.22	0.33
5	6	5	1	45.3	7.29	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.33	0.11
6	6	5	1	45.3	0.00	0.00	0.11	0.98	1.85	0.00	0.00	0.54	0.11	0.00
7	6	5	1	45.3	0.11	0.98	0.00	0.11	0.00	0.11	0.00	0.33	0.44	0.54
8	6	5	1	45.3	0.65	0.54	0.11	0.33	0.00	0.22	0.00	0.54	0.44	0.00
9	6	5	1	45.3	0.00	0.22	0.00	0.11	0.00	1.20	0.00	0.00	0.65	0.00
10	6	5	1	45.3	0.00	0.00	0.22	0.00	0.22	0.87	13.71	0.00	0.00	0.00
11	6	5	1	45.3	0.00	0.00	0.00	0.00	0.00	0.33	45.59			
12	6	5	1	45.3	919.									
1	6	5	20	45.5	0.45	0.00	0.45	0.00	0.00	0.00	0.00	0.45	0.11	0.78
2	6	5	20	45.5	0.11	0.22	0.11	0.00	0.00	0.22	3.36	0.00	0.56	0.34
3	6	5	20	45.5	0.00	0.00	5.27	0.67	0.00	0.00	0.56	0.00	0.00	0.00
4	6	5	20	45.5	0.78	0.11	0.22	1.79	0.00	0.45	0.00	0.00	0.11	0.22
5	6	5	20	45.5	12.11	0.22	0.45	0.00	0.00	0.00	0.00	0.34	0.45	0.22
6	6	5	20	45.5	0.00	0.00	0.00	0.78	1.68	0.00	0.00	0.78	0.45	0.00
7	6	5	20	45.5	0.11	1.79	0.34	0.22	0.22	0.00	0.00	0.78	0.45	0.56
8	6	5	20	45.5	0.22	0.45	0.00	0.56	0.00	0.22	0.00	0.22	0.22	0.00
9	6	5	20	45.5	0.00	0.22	0.11	0.22	0.00	1.12	0.00	0.00	0.67	0.00
10	6	5	20	45.5	0.00	0.34	0.45	0.00	0.00	0.78	17.94	0.00	0.00	0.00
11	6	5	20	45.5	0.00	0.00	0.00	0.00	0.11	0.67	36.10			
12	6	5	20	45.5	892.									
1	6	5	40	45.7	0.22	0.11	0.22	0.00	0.00	0.00	0.00	0.00	0.22	0.66
2	6	5	40	45.7	0.00	0.33	0.00	0.22	0.00	0.33	3.10	0.00	0.66	1.11
3	6	5	40	45.7	0.00	0.22	3.10	0.78	0.00	0.44	0.44	0.00	0.11	0.00
4	6	5	40	45.7	0.66	0.22	0.22	1.11	0.11	0.22	0.00	0.00	0.11	0.55
5	6	5	40	45.7	11.41	0.11	0.22	0.22	0.22	0.11	0.00	0.55	0.55	0.11

6	6 5	40	45.7	0.11	0.00	0.11	0.89	1.99	0.00	0.00	0.44	1.00	0.00
7	6 5	40	45.7	0.00	0.44	0.00	0.11	0.44	0.00	0.22	0.66	0.33	0.22
8	6 5	40	45.7	0.00	1.22	0.00	0.22	0.00	0.33	0.11	0.33	0.33	0.00
9	6 5	40	45.7	0.00	0.22	0.00	0.00	0.00	0.89	0.00	0.00	0.78	0.00
10	6 5	40	45.7	0.00	0.00	0.22	0.00	0.11	1.33	14.62	0.00	0.00	0.00
11	6 5	40	45.7	0.00	0.00	0.00	0.00	0.00	0.66	42.64			
12	6 5	40	45.7	903.									
1	6 5	62	45.9	0.39	0.00	0.00	0.00	0.00	0.10	0.00	0.59	0.00	1.87
2	6 5	62	45.9	0.00	0.39	0.00	0.29	0.00	0.00	2.06	0.00	0.98	0.39
3	6 5	62	45.9	0.00	0.00	4.22	0.20	0.00	0.00	1.47	0.00	0.29	0.00
4	6 5	62	45.9	0.39	0.98	0.20	1.28	0.00	0.29	0.20	0.00	0.00	0.49
5	6 5	62	45.9	8.64	0.00	0.00	0.10	0.00	0.00	0.00	0.10	0.00	0.10
6	6 5	62	45.9	0.10	0.00	0.00	1.08	1.87	0.00	0.00	0.29	0.10	0.00
7	6 5	62	45.9	0.00	1.87	0.10	0.20	0.29	0.00	0.00	1.08	0.20	0.29
8	6 5	62	45.9	0.39	0.49	0.00	0.10	0.00	0.10	0.10	0.29	0.10	0.00
9	6 5	62	45.9	0.00	0.49	0.00	0.10	0.00	0.39	0.00	0.00	0.10	0.00
10	6 5	62	45.9	0.00	0.10	0.39	0.00	0.00	0.49	19.84	0.00	0.00	0.00
11	6 5	62	45.9	0.00	0.00	0.00	0.00	0.00	0.10	42.93			
12	6 5	62	45.9	1018.									
1	6 5	100	46.3	0.32	0.21	0.11	0.00	0.00	0.11	0.11	0.11	0.00	0.64
2	6 5	100	46.3	0.00	0.64	0.00	0.43	0.00	0.11	1.92	0.00	1.07	0.53
3	6 5	100	46.3	0.00	0.00	4.58	0.53	0.00	0.11	0.43	0.00	0.21	0.00
4	6 5	100	46.3	0.43	0.21	0.43	1.07	0.32	0.43	0.00	0.00	0.11	1.81
5	6 5	100	46.3	12.26	0.00	0.21	0.00	0.00	0.11	0.00	0.11	0.00	0.43
6	6 5	100	46.3	0.11	0.00	0.11	0.64	2.03	0.00	0.11	0.32	0.43	0.00
7	6 5	100	46.3	0.21	1.07	0.43	0.11	0.11	0.00	0.00	0.53	0.11	0.21
8	6 5	100	46.3	0.21	0.21	0.11	0.21	0.00	0.53	0.11	0.64	0.32	0.00
9	6 5	100	46.3	0.00	0.32	0.11	0.21	0.00	2.03	0.00	0.00	0.53	0.00
10	6 5	100	46.3	0.00	0.00	0.11	0.00	0.11	0.11	11.30	0.00	0.11	0.00
11	6 5	100	46.3	0.00	0.00	0.00	0.00	0.00	0.32	45.84			
12	6 5	100	46.3	938.									
1	6 5	121	46.5	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.83
2	6 5	121	46.5	0.00	0.35	0.00	0.47	0.00	0.12	0.94	0.00	1.53	0.94
3	6 5	121	46.5	0.24	0.24	4.84	0.59	0.00	0.00	1.53	0.00	0.47	0.00
4	6 5	121	46.5	0.12	1.06	0.35	1.89	0.59	1.18	0.24	0.00	0.12	1.30
5	6 5	121	46.5	11.22	0.00	0.24	0.00	0.00	0.12	0.00	0.35	0.83	0.12
6	6 5	121	46.5	0.12	0.12	0.24	0.59	2.24	0.00	0.00	0.24	0.59	0.00
7	6 5	121	46.5	0.12	1.65	0.24	0.00	0.35	0.00	0.00	0.24	0.35	0.47
8	6 5	121	46.5	0.35	0.47	0.47	0.12	0.00	0.35	0.00	0.00	0.00	0.00
9	6 5	121	46.5	0.00	0.12	0.00	0.12	0.00	1.53	0.00	0.00	0.24	0.00
10	6 5	121	46.5	0.00	0.00	0.47	0.00	0.00	0.35	14.05	0.00	0.00	0.00
11	6 5	121	46.5	0.00	0.00	0.00	0.00	0.00	0.24	39.91			
12	6 5	121	46.5	847.									
1	6 5	140	46.7	0.11	0.11	0.00	0.00	0.00	0.22	0.22	0.44	0.00	0.77
2	6 5	140	46.7	0.00	0.00	0.00	0.11	0.00	0.00	2.31	0.00	1.21	1.10
3	6 5	140	46.7	0.00	0.00	5.60	0.33	0.00	0.11	0.33	0.11	0.11	0.00
4	6 5	140	46.7	0.99	0.22	0.11	1.54	0.22	0.88	0.11	0.00	0.00	2.63
5	6 5	140	46.7	12.40	0.00	0.66	0.22	0.11	0.11	0.00	0.44	0.22	0.11
6	6 5	140	46.7	0.11	0.00	0.33	1.65	1.54	0.00	0.00	0.00	0.33	0.00
7	6 5	140	46.7	0.77	1.54	0.22	0.22	0.00	0.11	0.00	0.33	0.22	0.33
8	6 5	140	46.7	0.11	0.44	0.22	0.11	0.00	0.66	0.00	0.11	0.00	0.00
9	6 5	140	46.7	0.00	0.22	0.11	0.00	0.00	0.55	0.00	0.00	0.55	0.00
10	6 5	140	46.7	0.00	0.00	0.00	0.00	0.00	1.10	11.42	0.00	0.00	0.00
11	6 5	140	46.7	0.00	0.11	0.00	0.00	0.00	0.22	42.26			
12	6 5	140	46.7	911.									

1	6	6	1	46.8	0.93	0.47	0.23	0.00	0.00	0.23	0.00	0.47	0.12	0.12
2	6	6	1	46.8	0.00	0.00	0.00	0.81	0.23	0.12	1.51	0.00	1.16	0.23
3	6	6	1	46.8	0.00	0.23	4.31	0.23	0.00	0.00	0.35	0.00	0.12	0.12
4	6	6	1	46.8	0.35	0.23	0.47	1.16	0.23	0.35	0.00	0.00	0.00	1.51
5	6	6	1	46.8	10.48	0.12	1.05	0.23	0.00	0.12	0.00	0.58	0.12	0.12
6	6	6	1	46.8	0.23	0.00	0.00	1.51	2.33	0.00	0.12	0.12	0.12	0.00
7	6	6	1	46.8	0.12	1.51	0.12	0.00	0.00	0.00	0.00	0.00	0.23	0.81
8	6	6	1	46.8	0.00	0.47	0.00	0.35	0.00	0.12	0.00	0.47	0.35	0.00
9	6	6	1	46.8	0.00	0.35	0.00	0.00	0.00	0.47	0.00	0.00	0.58	0.00
10	6	6	1	46.8	0.00	0.12	0.47	0.00	0.23	0.23	11.87	0.00	0.00	0.00
11	6	6	1	46.8	0.00	0.00	0.00	0.23	0.00	0.58	46.80			
12	6	6	1	46.8	859.									
1	6	6	20	47.0	0.24	0.00	0.35	0.12	0.00	0.00	0.12	0.47	0.24	0.24
2	6	6	20	47.0	0.12	0.59	0.00	0.00	0.00	0.12	0.71	0.00	2.01	0.59
3	6	6	20	47.0	0.00	0.47	3.43	1.30	0.00	0.00	0.35	0.00	0.35	0.00
4	6	6	20	47.0	0.12	0.24	0.24	1.65	0.12	0.47	0.24	0.00	0.00	0.35
5	6	6	20	47.0	10.64	0.00	0.12	0.24	0.00	0.00	0.00	0.12	0.24	0.12
6	6	6	20	47.0	0.12	0.00	0.00	0.95	1.77	0.00	0.00	0.00	0.35	0.00
7	6	6	20	47.0	0.12	1.54	0.12	0.12	0.12	0.24	0.00	0.95	0.24	0.59
8	6	6	20	47.0	0.24	0.59	0.24	0.00	0.00	0.71	0.00	0.12	0.12	0.00
9	6	6	20	47.0	0.00	0.00	0.00	0.00	0.00	1.77	0.00	0.00	0.12	0.00
10	6	6	20	47.0	0.00	0.00	0.12	0.00	0.35	0.83	12.65	0.00	0.00	0.00
11	6	6	20	47.0	0.00	0.00	0.00	0.00	0.00	0.71	47.52			
12	6	6	20	47.0	846.									
1	6	6	40	47.2	0.19	0.10	0.58	0.00	0.00	0.10	0.10	0.19	0.10	0.19
2	6	6	40	47.2	0.00	0.19	0.00	0.00	0.39	0.00	1.56	0.00	0.68	0.97
3	6	6	40	47.2	0.00	0.10	2.82	0.68	0.00	0.10	0.19	0.00	0.10	0.00
4	6	6	40	47.2	0.19	0.00	0.00	0.88	0.10	0.49	0.00	0.00	0.00	0.88
5	6	6	40	47.2	9.64	0.00	0.29	0.00	0.19	0.19	0.00	0.19	0.19	0.39
6	6	6	40	47.2	0.00	0.10	0.10	1.27	1.75	0.00	0.00	0.29	0.58	0.00
7	6	6	40	47.2	0.10	0.58	0.19	0.58	0.19	0.00	0.00	0.58	0.29	0.19
8	6	6	40	47.2	0.49	0.78	0.10	0.19	0.00	0.49	0.10	0.29	0.19	0.00
9	6	6	40	47.2	0.00	0.49	0.10	0.10	0.00	1.95	0.00	0.00	0.97	0.00
10	6	6	40	47.2	0.00	0.00	0.00	0.00	0.10	0.49	9.83	0.00	0.00	0.00
11	6	6	40	47.2	0.00	0.00	0.00	0.10	0.00	0.49	52.97			
12	6	6	40	47.2	1027.									
1	6	6	61	47.4	0.73	0.00	0.12	0.00	0.00	0.12	0.24	0.12	0.00	0.73
2	6	6	61	47.4	0.00	0.12	0.00	0.12	0.12	0.00	2.45	0.00	1.71	0.12
3	6	6	61	47.4	0.00	0.12	4.53	0.12	0.00	0.24	1.10	0.00	0.00	0.00
4	6	6	61	47.4	0.86	0.61	0.37	1.71	0.37	0.24	0.12	0.00	0.00	0.86
5	6	6	61	47.4	16.28	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	6	6	61	47.4	0.12	0.00	0.00	1.22	2.08	0.00	0.00	0.37	0.61	0.12
7	6	6	61	47.4	0.24	0.86	0.12	0.00	0.00	0.00	0.00	0.12	0.37	0.37
8	6	6	61	47.4	0.12	0.12	0.12	0.49	0.00	0.12	0.00	0.00	0.12	0.00
9	6	6	61	47.4	0.00	0.00	0.12	0.00	0.00	0.98	0.00	0.00	0.24	0.00
10	6	6	61	47.4	0.00	0.00	0.12	0.00	0.37	0.49	12.24	0.00	0.00	0.00
11	6	6	61	47.4	0.00	0.00	0.00	0.00	0.00	0.49	42.59			
12	6	6	61	47.4	817.									
1	6	6	80	47.6	0.43	0.00	0.11	0.00	0.00	0.11	0.00	0.11	0.11	0.76
2	6	6	80	47.6	0.11	0.43	0.00	0.00	0.22	0.22	2.50	0.00	1.09	0.43
3	6	6	80	47.6	0.00	0.00	3.47	0.54	0.00	0.11	0.98	0.00	0.11	0.11
4	6	6	80	47.6	1.09	0.33	0.33	1.09	0.11	0.00	0.11	0.00	0.00	1.09
5	6	6	80	47.6	15.31	0.00	0.33	0.11	0.11	0.00	0.00	0.22	0.22	0.33
6	6	6	80	47.6	0.00	0.22	0.22	2.17	1.74	0.00	0.00	0.11	1.41	0.00
7	6	6	80	47.6	0.00	1.63	0.43	0.22	0.22	0.00	0.00	0.33	0.33	0.65

8	6	6	80	47.6	0.22	0.22	0.11	0.22	0.00	0.22	0.11	0.22	0.00	0.00
9	6	6	80	47.6	0.00	0.11	0.11	0.00	0.00	0.76	0.00	0.00	0.22	0.00
10	6	6	80	47.6	0.00	0.11	0.11	0.00	0.22	0.43	10.75	0.00	0.00	0.00
11	6	6	80	47.6	0.00	0.00	0.00	0.00	0.00	0.65	42.89			
12	6	6	80	47.6	921.									
1	6	6	100	47.8	0.00	0.00	0.20	0.00	0.00	0.30	0.00	0.10	0.00	0.00
2	6	6	100	47.8	0.10	0.10	0.00	0.10	0.00	0.10	2.42	0.00	0.91	0.71
3	6	6	100	47.8	0.00	0.10	3.84	0.71	0.00	0.20	0.71	0.00	0.30	0.10
4	6	6	100	47.8	1.01	0.20	0.20	1.82	0.30	0.30	0.30	0.00	0.20	0.61
5	6	6	100	47.8	17.47	0.10	0.10	0.10	0.20	0.10	0.00	0.30	0.40	0.20
6	6	6	100	47.8	0.00	0.00	0.30	1.31	1.52	0.00	0.00	0.30	0.81	0.00
7	6	6	100	47.8	0.51	1.21	0.20	0.20	0.00	0.20	0.00	0.40	0.20	0.91
8	6	6	100	47.8	0.10	0.10	0.30	0.40	0.00	0.10	0.00	0.10	0.30	0.00
9	6	6	100	47.8	0.00	0.40	0.10	0.00	0.00	1.31	0.00	0.00	0.20	0.00
10	6	6	100	47.8	0.00	0.10	0.10	0.00	0.10	0.30	7.98	0.00	0.00	0.10
11	6	6	100	47.8	0.00	0.00	0.00	0.00	0.00	0.61	44.24			
12	6	6	100	47.8	990.									
1	7	2	1	49.5	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.35	0.00	0.92
2	7	2	1	49.5	0.00	0.92	0.12	0.00	0.12	0.12	2.89	0.00	1.50	0.69
3	7	2	1	49.5	0.00	0.00	5.43	0.23	0.00	0.23	1.16	0.00	0.35	0.00
4	7	2	1	49.5	0.12	0.35	0.23	2.43	0.00	0.58	0.00	0.00	0.12	0.35
5	7	2	1	49.5	14.91	0.23	0.12	0.12	0.12	0.00	0.00	0.46	0.46	0.35
6	7	2	1	49.5	0.23	0.00	0.00	0.81	0.81	0.00	0.00	0.23	0.81	0.12
7	7	2	1	49.5	0.00	1.62	0.00	0.46	0.12	0.12	0.00	1.04	0.23	0.23
8	7	2	1	49.5	0.35	0.35	0.23	0.12	0.00	0.00	0.12	0.00	0.00	0.00
9	7	2	1	49.5	0.00	0.23	0.00	0.12	0.00	1.04	0.00	0.00	0.58	0.00
10	7	2	1	49.5	0.00	0.12	0.35	0.00	0.12	0.35	6.01	0.00	0.00	0.00
11	7	2	1	49.5	0.00	0.00	0.00	0.00	0.00	0.46	46.47			
12	7	2	1	49.5	865.									
1	7	2	20	49.7	0.12	0.00	0.37	0.00	0.00	0.12	0.00	0.12	0.00	0.37
2	7	2	20	49.7	0.00	0.12	0.00	0.00	0.25	0.00	1.84	0.00	0.86	0.74
3	7	2	20	49.7	0.00	0.00	3.55	0.25	0.00	0.12	0.61	0.00	0.37	0.00
4	7	2	20	49.7	0.74	0.00	0.25	1.23	0.12	0.37	0.00	0.00	0.00	0.25
5	7	2	20	49.7	12.50	0.12	0.25	0.12	0.12	0.12	0.00	0.25	0.25	0.61
6	7	2	20	49.7	0.61	0.12	0.00	1.10	1.84	0.00	0.00	0.37	0.37	0.00
7	7	2	20	49.7	0.00	1.10	0.49	0.25	0.00	0.00	0.00	1.47	0.25	0.74
8	7	2	20	49.7	0.37	0.74	0.12	0.00	0.00	0.25	0.00	0.12	0.00	0.00
9	7	2	20	49.7	0.12	0.00	0.12	0.00	0.00	0.74	0.00	0.00	0.86	0.00
10	7	2	20	49.7	0.00	0.00	0.12	0.00	0.00	0.25	7.35	0.00	0.00	0.00
11	7	2	20	49.7	0.00	0.00	0.00	0.00	0.00	0.98	52.08			
12	7	2	20	49.7	816.									
1	7	2	40	49.9	0.22	0.00	0.44	0.00	0.00	0.00	0.00	0.22	0.00	1.10
2	7	2	40	49.9	0.00	0.00	0.00	0.11	0.11	0.11	0.88	0.00	0.44	0.33
3	7	2	40	49.9	0.00	0.00	3.08	0.11	0.00	0.11	0.66	0.00	0.22	0.00
4	7	2	40	49.9	0.44	0.11	0.11	0.66	0.11	0.22	0.11	0.00	0.22	0.77
5	7	2	40	49.9	13.30	0.33	0.44	0.00	0.00	0.00	0.00	0.11	0.55	0.55
6	7	2	40	49.9	0.11	0.00	0.00	1.10	1.10	0.00	0.00	0.22	0.44	0.00
7	7	2	40	49.9	0.33	2.09	0.44	0.33	0.11	0.00	0.00	0.22	0.11	0.77
8	7	2	40	49.9	0.22	0.33	0.00	0.11	0.00	0.33	0.00	0.11	0.00	0.00
9	7	2	40	49.9	0.00	0.55	0.00	0.55	0.00	1.87	0.00	0.00	0.33	0.00
10	7	2	40	49.9	0.00	0.00	0.00	0.00	0.33	0.77	7.14	0.00	0.00	0.00
11	7	2	40	49.9	0.00	0.00	0.00	0.00	0.11	0.33	53.41			
12	7	2	40	49.9	910.									
1	7	2	60	50.1	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.85
2	7	2	60	50.1	0.00	0.43	0.00	0.11	0.00	0.00	2.24	0.00	0.85	1.17

3	7	2	60	50.1	0.00	0.00	2.88	0.32	0.00	0.32	0.64	0.00	0.32	0.00
4	7	2	60	50.1	0.21	0.21	0.21	0.96	0.11	0.53	0.00	0.00	0.11	0.75
5	7	2	60	50.1	11.83	0.00	0.64	0.21	0.00	0.11	0.00	0.64	0.64	0.21
6	7	2	60	50.1	0.11	0.11	0.00	0.75	0.64	0.00	0.00	0.00	0.21	0.11
7	7	2	60	50.1	0.11	1.07	0.21	0.21	0.11	0.00	0.00	0.96	0.11	0.96
8	7	2	60	50.1	0.21	0.32	0.43	0.11	0.00	0.21	0.11	0.11	0.11	0.00
9	7	2	60	50.1	0.00	0.00	0.00	0.11	0.00	1.17	0.00	0.00	0.53	0.00
10	7	2	60	50.1	0.00	0.11	0.32	0.00	0.00	0.75	7.78	0.00	0.00	0.00
11	7	2	60	50.1	0.00	0.00	0.00	0.00	0.11	0.43	53.84			
12	7	2	60	50.1	938.									
1	7	2	80	50.3	0.12	0.12	0.35	0.00	0.00	0.00	0.00	0.35	0.00	0.23
2	7	2	80	50.3	0.12	0.35	0.12	0.12	0.00	0.12	0.82	0.00	0.35	0.23
3	7	2	80	50.3	0.00	0.00	1.88	0.70	0.00	0.35	0.23	0.00	0.23	0.00
4	7	2	80	50.3	0.35	0.12	0.35	0.82	0.47	0.12	0.00	0.00	0.00	0.23
5	7	2	80	50.3	9.50	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.23	0.23
6	7	2	80	50.3	0.35	0.00	0.00	1.06	1.17	0.00	0.00	0.23	0.23	0.00
7	7	2	80	50.3	0.12	1.99	0.00	0.00	0.12	0.00	0.12	0.70	0.23	0.47
8	7	2	80	50.3	0.12	0.47	0.00	0.35	0.00	0.00	0.00	0.12	0.00	0.00
9	7	2	80	50.3	0.00	0.12	0.00	0.12	0.00	1.29	0.00	0.00	0.59	0.00
10	7	2	80	50.3	0.00	0.00	0.59	0.00	0.00	0.59	7.39	0.00	0.00	0.12
11	7	2	80	50.3	0.00	0.00	0.00	0.00	0.12	0.35	61.31			
12	7	2	80	50.3	853.									
1	7	2	100	50.5	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.27
2	7	2	100	50.5	0.00	0.81	0.00	0.00	0.00	0.00	2.98	0.00	0.81	1.22
3	7	2	100	50.5	0.00	0.00	5.55	0.14	0.00	0.14	0.81	0.00	0.14	0.00
4	7	2	100	50.5	0.81	0.27	0.14	1.35	0.14	0.68	0.00	0.00	0.00	0.14
5	7	2	100	50.5	12.18	0.00	0.54	0.14	0.00	0.00	0.00	0.81	0.00	0.27
6	7	2	100	50.5	0.14	0.14	0.00	0.95	0.95	0.00	0.00	0.00	0.14	0.00
7	7	2	100	50.5	0.27	1.35	0.00	0.14	0.27	0.00	0.00	0.68	0.27	0.14
8	7	2	100	50.5	0.00	0.27	0.14	0.14	0.00	0.41	0.00	0.14	0.00	0.00
9	7	2	100	50.5	0.00	0.41	0.00	0.14	0.00	0.54	0.00	0.00	0.54	0.00
10	7	2	100	50.5	0.00	0.14	0.54	0.00	0.00	0.41	9.20	0.00	0.00	0.00
11	7	2	100	50.5	0.00	0.00	0.00	0.00	0.00	0.00	50.88			
12	7	2	100	50.5	739.									
1	7	2	120	50.7	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
2	7	2	120	50.7	0.00	0.84	0.00	0.21	0.00	0.11	1.68	0.00	0.63	0.53
3	7	2	120	50.7	0.00	0.00	2.52	0.21	0.00	0.21	0.53	0.00	0.21	0.00
4	7	2	120	50.7	0.74	0.53	0.00	0.63	0.11	0.11	0.11	0.11	0.21	0.32
5	7	2	120	50.7	8.41	0.11	0.42	0.11	0.00	0.00	0.00	0.21	0.00	0.21
6	7	2	120	50.7	0.11	0.00	0.11	0.53	1.16	0.00	0.00	0.21	0.42	0.00
7	7	2	120	50.7	0.00	2.00	0.00	0.42	0.00	0.00	0.00	0.74	0.00	0.11
8	7	2	120	50.7	0.32	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.11	0.00
9	7	2	120	50.7	0.00	0.32	0.00	0.00	0.00	0.63	0.00	0.00	0.21	0.00
10	7	2	120	50.7	0.00	0.11	0.53	0.00	0.11	0.63	10.20	0.00	0.00	0.00
11	7	2	120	50.7	0.00	0.00	0.00	0.00	0.00	0.53	59.20			
12	7	2	120	50.7	951.									
1	7	2	140	50.9	0.11	0.23	0.23	0.00	0.00	0.11	0.00	0.00	0.00	0.56
2	7	2	140	50.9	0.00	0.79	0.00	0.00	0.11	0.00	1.36	0.00	0.45	0.90
3	7	2	140	50.9	0.00	0.00	2.49	0.79	0.00	0.11	0.00	0.11	0.34	0.11
4	7	2	140	50.9	0.90	0.34	0.34	0.45	0.45	0.34	0.00	0.00	0.11	0.68
5	7	2	140	50.9	9.04	0.11	0.00	0.23	0.11	0.11	0.00	0.56	0.68	0.45
6	7	2	140	50.9	0.23	0.11	0.00	1.13	1.24	0.00	0.00	0.23	0.23	0.00
7	7	2	140	50.9	0.11	0.79	0.11	0.11	0.11	0.00	0.00	0.56	0.11	0.90
8	7	2	140	50.9	0.34	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	7	2	140	50.9	0.00	0.00	0.00	0.23	0.00	1.36	0.00	0.00	0.45	0.00

10	7	2	140	50.9	0.00	0.00	0.45	0.00	0.23	1.24	6.67	0.00	0.11	0.00
11	7	2	140	50.9	0.00	0.00	0.00	0.00	0.00	0.56	58.19			
12	7	2	140	50.9	885.									
1	7	3	1	51.0	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
2	7	3	1	51.0	0.00	0.41	0.10	0.20	0.00	0.00	2.25	0.00	0.20	1.53
3	7	3	1	51.0	0.00	0.00	3.47	0.92	0.00	0.00	0.41	0.00	0.41	0.00
4	7	3	1	51.0	0.51	0.00	0.00	0.41	0.20	0.51	0.10	0.00	0.31	0.20
5	7	3	1	51.0	11.34	0.10	0.10	0.00	0.00	0.00	0.00	0.51	0.31	0.31
6	7	3	1	51.0	0.00	0.10	0.10	1.94	1.02	0.00	0.00	0.41	0.41	0.00
7	7	3	1	51.0	0.51	1.53	0.00	0.41	0.10	0.00	0.00	0.72	0.31	0.20
8	7	3	1	51.0	0.20	0.20	0.00	0.10	0.00	0.00	0.10	0.00	0.00	0.00
9	7	3	1	51.0	0.00	0.20	0.00	0.00	0.00	1.63	0.00	0.00	0.92	0.00
10	7	3	1	51.0	0.00	0.00	0.41	0.00	0.00	1.12	9.50	0.00	0.00	0.00
11	7	3	1	51.0	0.00	0.00	0.00	0.00	0.00	0.10	52.09			
12	7	3	1	51.0	979.									
1	7	3	20	51.2	0.36	0.27	0.09	0.00	0.00	0.09	0.00	0.00	0.00	0.00
2	7	3	20	51.2	0.00	1.53	0.00	0.81	0.09	0.00	2.96	0.00	0.81	0.36
3	7	3	20	51.2	0.00	0.09	3.23	0.27	0.00	0.18	0.54	0.00	0.27	0.18
4	7	3	20	51.2	0.45	0.18	0.09	1.08	0.00	0.18	0.00	0.00	0.00	1.35
5	7	3	20	51.2	10.06	0.09	0.72	0.09	0.00	0.00	0.00	0.09	0.18	0.00
6	7	3	20	51.2	0.00	0.45	0.09	0.63	1.08	0.00	0.00	0.18	0.54	0.09
7	7	3	20	51.2	0.09	0.72	0.36	0.18	0.09	0.00	0.09	1.26	0.09	0.63
8	7	3	20	51.2	0.18	0.54	0.00	0.00	0.00	0.45	0.09	0.09	0.09	0.00
9	7	3	20	51.2	0.00	0.09	0.00	0.00	0.00	1.17	0.00	0.00	0.81	0.00
10	7	3	20	51.2	0.00	0.09	0.63	0.00	0.09	0.90	10.42	0.00	0.00	0.00
11	7	3	20	51.2	0.00	0.00	0.00	0.00	0.00	0.27	50.85			
12	7	3	20	51.2	1113.									
1	7	3	40	51.4	0.59	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	1.06
2	7	3	40	51.4	0.00	0.71	0.00	0.71	0.00	0.00	2.36	0.00	0.71	0.24
3	7	3	40	51.4	0.00	0.12	4.25	0.00	0.00	0.00	1.18	0.00	0.12	0.00
4	7	3	40	51.4	0.83	0.47	0.00	0.24	0.12	0.12	0.00	0.00	0.00	0.12
5	7	3	40	51.4	11.10	0.24	0.35	0.12	0.12	0.12	0.00	0.47	0.47	0.00
6	7	3	40	51.4	0.12	0.24	0.12	0.94	0.59	0.00	0.00	0.12	0.71	0.24
7	7	3	40	51.4	0.24	0.71	0.47	0.47	0.00	0.00	0.00	0.47	0.24	1.30
8	7	3	40	51.4	0.24	0.47	0.00	0.00	0.00	0.35	0.12	0.47	0.00	0.00
9	7	3	40	51.4	0.00	0.24	0.00	0.00	0.00	0.59	0.00	0.00	0.12	0.00
10	7	3	40	51.4	0.00	0.12	0.12	0.00	0.00	0.94	12.04	0.00	0.00	0.00
11	7	3	40	51.4	0.00	0.00	0.00	0.00	0.00	0.71	49.00			
12	7	3	40	51.4	847.									
1	7	3	60	51.6	0.32	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.11	0.53
2	7	3	60	51.6	0.00	0.21	0.11	0.74	0.00	0.11	1.49	0.00	0.53	0.85
3	7	3	60	51.6	0.00	0.11	2.34	0.00	0.00	0.00	0.32	0.00	0.21	0.21
4	7	3	60	51.6	0.32	0.64	0.32	0.32	0.11	0.11	0.11	0.00	0.00	0.42
5	7	3	60	51.6	6.90	0.00	0.85	0.11	0.00	0.00	0.00	0.11	0.00	0.00
6	7	3	60	51.6	0.00	0.11	0.11	0.74	0.96	0.00	0.00	0.42	0.32	0.11
7	7	3	60	51.6	0.00	0.85	0.53	0.21	0.00	0.00	0.32	1.17	0.00	0.85
8	7	3	60	51.6	0.32	0.53	0.00	0.32	0.00	0.00	0.00	0.11	0.00	0.00
9	7	3	60	51.6	0.11	0.32	0.00	0.00	0.00	1.17	0.00	0.00	0.21	0.00
10	7	3	60	51.6	0.00	0.11	0.32	0.00	0.00	0.42	8.70	0.00	0.00	0.32
11	7	3	60	51.6	0.00	0.00	0.00	0.00	0.00	0.21	61.36			
12	7	3	60	51.6	942.									
1	7	3	80	51.8	0.20	0.00	0.30	0.00	0.00	0.10	0.00	0.10	0.10	0.81
2	7	3	80	51.8	0.00	0.41	0.00	0.41	0.00	0.10	2.13	0.00	0.61	0.30
3	7	3	80	51.8	0.00	0.00	2.23	0.10	0.00	0.10	0.41	0.00	0.00	0.00
4	7	3	80	51.8	0.61	0.20	0.20	0.10	0.71	0.20	0.10	0.00	0.00	0.71

1	5	1	21	36.50	0.59	0.12	0.24	0.00	0.00	0.12	0.00	0.00	0.24	0.71
2	5	1	21	36.50	0.12	0.59	0.00	0.59	0.12	0.59	1.18	0.00	0.83	0.47
3	5	1	21	36.50	0.00	0.12	1.42	0.00	0.00	0.24	0.35	0.00	0.12	0.00
4	5	1	21	36.50	1.06	0.24	0.24	0.47	0.00	0.35	0.00	0.00	0.00	0.24
5	5	1	21	36.50	9.80	0.00	2.24	0.00	0.00	0.00	0.35	0.59	0.00	0.00
6	5	1	21	36.50	0.47	0.00	0.00	1.30	3.07	0.00	0.00	0.24	0.35	0.71
7	5	1	21	36.50	0.24	0.59	1.53	0.35	0.24	0.35	0.00	1.89	0.24	0.00
8	5	1	21	36.50	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.35	0.24
9	5	1	21	36.50	0.59	0.00	0.00	0.35	0.00	2.60	0.00	0.00	0.12	0.00
10	5	1	21	36.50	0.00	0.24	0.47	0.00	0.00	0.47	0.00	0.00	0.00	0.00
11	5	1	21	36.50	0.00	0.00	0.00	0.00	0.00	0.00	58.09			
1	5	1	21	36.50	0.59	0.12	0.24	0.00	0.00	0.12	0.00	0.00	0.24	0.71
2	5	1	21	36.50	0.12	0.59	0.00	0.59	0.12	0.59	1.18	0.00	0.83	0.47
3	5	1	21	36.50	0.00	0.12	1.42	0.00	0.00	0.24	0.35	0.00	0.12	0.00
4	5	1	21	36.50	1.06	0.24	0.24	0.47	0.00	0.35	0.00	0.00	0.00	0.24
5	5	1	21	36.50	9.80	0.00	2.24	0.00	0.00	0.00	0.35	0.59	0.00	0.00
6	5	1	21	36.50	0.47	0.00	0.00	1.30	3.07	0.00	0.00	0.24	0.35	0.71
7	5	1	21	36.50	0.24	0.59	1.53	0.35	0.24	0.35	0.00	1.89	0.24	0.00
8	5	1	21	36.50	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.35	0.24
9	5	1	21	36.50	0.59	0.00	0.00	0.35	0.00	2.60	0.00	0.00	0.12	0.00
10	5	1	21	36.50	0.00	0.24	0.47	0.00	0.00	0.47	0.00	0.00	0.00	0.00
11	5	1	21	36.50	0.00	0.00	0.00	0.00	0.00	0.00	58.09			
12	5	1	21	36.50	847.									
1	5	1	38	36.68	0.89	0.11	0.22	0.00	0.00	0.11	0.11	0.11	0.11	1.45
2	5	1	38	36.68	0.00	0.67	0.11	1.90	0.22	0.78	1.67	0.00	0.56	0.89
3	5	1	38	36.68	0.00	0.67	1.56	0.00	0.00	0.11	0.89	0.00	0.00	0.00
4	5	1	38	36.68	0.67	0.33	0.22	2.12	0.78	0.56	0.56	0.00	0.11	1.56
5	5	1	38	36.68	10.38	0.00	1.23	0.00	0.00	0.11	0.00	0.11	0.00	0.00
6	5	1	38	36.68	0.11	1.90	0.33	0.11	2.34	0.00	0.00	0.33	0.33	0.11
7	5	1	38	36.68	0.11	0.67	0.56	0.22	0.22	0.45	0.00	1.79	0.00	0.56
8	5	1	38	36.68	0.22	0.11	0.00	0.00	0.00	1.12	0.33	0.22	0.78	0.11
9	5	1	38	36.68	0.56	0.45	0.00	0.11	0.00	5.36	0.00	0.00	0.33	0.00
10	5	1	38	36.68	0.00	0.33	1.34	0.00	0.00	0.22	0.00	0.00	0.00	0.00
11	5	1	38	36.68	0.00	0.00	0.00	0.00	0.00	0.00	46.32			
12	5	1	38	36.68	896.									
1	5	1	58	36.86	0.50	0.13	0.13	0.00	0.00	0.38	0.00	0.00	0.75	1.50
2	5	1	58	36.86	0.25	1.00	0.00	1.13	0.00	0.38	2.26	0.00	0.50	1.00
3	5	1	58	36.86	0.00	0.63	1.13	0.00	0.00	0.00	0.13	0.00	0.13	0.25
4	5	1	58	36.86	1.25	0.00	0.88	2.01	0.25	0.63	0.50	0.00	0.13	1.00
5	5	1	58	36.86	12.03	0.00	1.75	0.00	0.00	0.00	0.00	0.63	0.50	0.00
6	5	1	58	36.86	0.13	3.01	0.00	0.13	0.88	0.00	0.00	0.00	0.50	0.25
7	5	1	58	36.86	0.13	0.38	1.25	0.25	0.00	0.25	0.00	1.63	0.13	0.50
8	5	1	58	36.86	0.00	0.00	0.13	0.38	0.00	1.38	0.38	0.13	0.25	0.13
9	5	1	58	36.86	0.25	0.13	0.13	0.50	0.00	4.76	0.00	0.00	0.25	0.00
10	5	1	58	36.86	0.00	0.13	1.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
11	5	1	58	36.86	0.00	0.00	0.00	0.00	0.00	0.00	46.37			
12	5	1	58	36.86	798.									
1	5	1	101	37.71	0.24	0.24	0.47	0.12	0.00	0.47	0.00	0.35	0.35	1.76
2	5	1	101	37.71	0.00	0.71	0.12	0.59	0.00	0.59	1.06	0.00	0.59	0.47
3	5	1	101	37.71	0.00	0.00	1.18	0.24	0.00	0.00	0.12	0.00	0.59	0.59
4	5	1	101	37.71	1.41	0.35	0.00	1.18	0.24	0.59	0.47	0.12	0.00	0.59
5	5	1	101	37.71	10.58	0.12	2.70	0.24	0.00	0.00	0.00	0.71	0.35	0.00
6	5	1	101	37.71	0.12	1.88	0.24	0.12	1.41	0.00	0.00	0.24	1.06	0.47
7	5	1	101	37.71	0.24	1.06	0.94	0.12	0.12	0.12	0.00	2.23	0.12	0.82
8	5	1	101	37.71	0.00	0.24	0.00	0.47	0.00	1.06	0.12	0.35	0.47	0.00
9	5	1	101	37.71	0.00	0.24	0.00	0.00	0.00	7.29	0.00	0.00	0.00	0.00
10	5	1	101	37.71	0.00	0.35	0.24	0.00	0.00	1.18	0.94	0.00	0.00	0.00
11	5	1	101	37.71	0.00	0.00	0.00	0.00	0.00	0.00	45.36			
12	5	1	101	37.71	851.									
1	5	1	121	37.51	0.12	0.24	0.48	0.00	0.24	0.71	0.00	0.00	0.71	1.55
2	5	1	121	37.51	0.00	0.71	0.00	0.59	0.00	0.59	0.48	0.00	0.48	1.07
3	5	1	121	37.51	0.00	0.12	1.31	0.00	0.00	0.00	0.59	0.00	0.36	0.00
4	5	1	121	37.51	1.19	0.12	0.59	1.43	0.48	0.48	0.71	0.00	0.00	0.71
5	5	1	121	37.51	7.49	0.00	2.26	0.24	0.00	0.24	0.00	0.24	0.36	0.00
6	5	1	121	37.51	0.00	1.90	0.12	0.00	1.07	0.00	0.00	0.00	0.12	0.59
7	5	1	121	37.51	0.36	0.48	0.12	0.12	0.00	0.24	0.00	1.43	0.24	0.48

8	5	1	121	37.51	0.48	0.36	0.24	0.24	0.00	0.95	0.71	0.59	0.12	0.48
9	5	1	121	37.51	0.24	0.24	0.00	0.36	0.00	4.40	0.00	0.00	0.12	0.36
10	5	1	121	37.51	0.00	0.48	1.31	0.00	0.00	0.71	0.00	0.00	0.00	0.00
11	5	1	121	37.51	0.00	0.00	0.00	0.00	0.00	0.00	53.51			
12	5	1	121	37.51	841.									
1	5	1	138	37.68	0.36	0.24	0.61	0.00	0.00	0.61	0.00	0.00	0.24	1.33
2	5	1	138	37.68	0.12	0.36	0.00	1.33	0.00	0.61	1.21	0.00	0.12	2.30
3	5	1	138	37.68	0.00	0.24	0.61	0.00	0.00	0.36	0.24	0.00	0.00	0.24
4	5	1	138	37.68	1.33	0.12	0.73	0.61	0.24	0.73	0.73	0.00	0.12	0.24
5	5	1	138	37.68	9.56	0.36	0.73	0.36	0.00	0.00	0.00	0.85	0.36	0.00
6	5	1	138	37.68	0.00	1.57	0.12	0.00	1.33	0.00	0.00	0.00	0.12	0.12
7	5	1	138	37.68	1.09	0.24	0.85	0.12	0.36	0.36	0.00	1.82	0.00	0.48
8	5	1	138	37.68	0.24	0.48	0.12	0.00	0.00	0.61	0.85	0.48	0.61	0.36
9	5	1	138	37.68	0.24	0.00	0.00	0.24	0.00	2.78	0.00	0.00	0.12	0.00
10	5	1	138	37.68	0.00	0.24	1.33	0.00	0.12	0.24	0.00	0.00	0.00	0.00
11	5	1	138	37.68	0.00	0.00	0.00	0.00	0.00	0.00	54.12			
12	5	1	138	37.68	826.									
1	5	2	21	38.01	1.38	0.43	0.32	0.21	0.00	1.17	0.00	0.43	0.43	0.53
2	5	2	21	38.01	0.11	0.43	0.11	1.06	0.11	0.11	1.28	0.00	1.60	0.32
3	5	2	21	38.01	0.00	0.43	0.85	0.11	0.00	0.00	0.75	0.21	0.75	0.21
4	5	2	21	38.01	1.38	0.11	0.43	1.17	1.92	0.64	0.00	0.00	0.11	1.17
5	5	2	21	38.01	10.54	0.00	0.32	0.00	0.00	0.00	0.00	0.21	1.38	0.21
6	5	2	21	38.01	0.00	0.43	0.43	1.28	2.02	0.00	0.21	0.11	0.64	0.00
7	5	2	21	38.01	0.11	0.43	0.64	0.00	0.21	0.11	0.11	0.53	0.21	0.53
8	5	2	21	38.01	0.43	0.43	0.32	0.64	0.00	0.75	0.11	0.21	0.11	0.21
9	5	2	21	38.01	0.00	0.32	0.11	0.32	0.00	3.09	0.00	0.00	0.11	0.00
10	5	2	21	38.01	0.00	0.64	0.21	0.00	0.11	0.43	0.00	0.00	0.00	0.00
11	5	2	21	38.01	0.00	0.00	0.00	0.21	0.00	0.00	50.37			
12	5	2	21	38.01	939.									
1	5	2	39	38.21	1.20	0.12	0.12	0.00	0.00	0.00	0.00	0.12	0.24	1.08
2	5	2	39	38.21	0.12	0.24	0.12	1.92	0.00	0.84	1.32	0.00	0.24	1.80
3	5	2	39	38.21	0.00	0.24	0.48	0.00	0.00	0.36	0.60	0.12	0.24	0.12
4	5	2	39	38.21	1.08	0.00	0.24	0.48	1.08	0.60	0.24	0.00	0.12	0.36
5	5	2	39	38.21	7.68	0.00	1.56	0.12	0.00	0.00	0.00	1.32	0.12	0.00
6	5	2	39	38.21	0.00	1.20	0.36	0.12	0.96	0.00	0.00	0.36	0.12	0.12
7	5	2	39	38.21	0.00	0.00	0.24	0.36	0.12	0.24	0.00	1.80	0.48	0.24
8	5	2	39	38.21	0.36	0.60	0.60	0.00	0.00	0.84	0.00	0.12	0.36	0.00
9	5	2	39	38.21	0.12	0.36	0.00	0.60	0.00	2.88	0.00	0.00	0.48	0.12
10	5	2	39	38.21	0.00	0.12	0.96	0.00	0.00	0.24	0.00	0.00	0.00	0.00
11	5	2	39	38.21	0.00	0.00	0.00	0.00	0.00	0.00	57.86			
12	5	2	39	38.21	833.									
1	5	2	58	38.38	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.37	0.24
2	5	2	58	38.38	0.00	0.73	0.00	0.73	0.00	0.61	0.85	0.00	0.37	1.83
3	5	2	58	38.38	0.00	0.24	0.37	0.00	0.00	0.24	0.12	0.00	0.00	0.00
4	5	2	58	38.38	2.07	0.24	0.49	0.24	0.61	0.61	0.12	0.00	0.12	0.49
5	5	2	58	38.38	6.59	0.00	1.95	0.12	0.00	0.00	0.00	0.73	0.00	0.00
6	5	2	58	38.38	0.00	0.49	0.00	0.00	1.71	0.00	0.00	0.37	0.00	0.12
7	5	2	58	38.38	0.00	0.37	1.10	0.00	0.00	0.24	0.00	1.95	0.61	0.73
8	5	2	58	38.38	0.24	0.49	0.12	0.12	0.00	0.24	0.37	0.73	0.00	0.24
9	5	2	58	38.38	0.00	0.61	0.00	0.61	0.12	3.05	0.00	0.00	0.37	0.00
10	5	2	58	38.38	0.00	0.73	0.49	0.00	0.00	0.24	0.00	0.00	0.00	0.00
11	5	2	58	38.38	0.00	0.00	0.00	0.00	0.00	0.00	61.10			
12	5	2	58	38.38	820.									
1	5	2	101	38.81	0.84	0.48	0.00	0.00	0.00	0.00	0.12	0.48	0.12	0.72
2	5	2	101	38.81	0.00	0.60	0.12	1.19	0.00	0.36	1.91	0.00	0.72	0.48

3	5	2	101	38.81	0.00	0.48	0.24	0.00	0.00	0.00	0.24	0.00	0.36	0.00	
4	5	2	101	38.81	1.08	0.24	0.60	0.36	0.36	0.72	0.12	0.00	0.24	0.72	
5	5	2	101	38.81	7.17	0.00	3.94	0.36	0.00	0.00	0.00	0.36	0.60	0.00	
6	5	2	101	38.81	0.12	1.08	0.24	0.12	1.79	0.00	0.00	0.00	0.12	0.36	
7	5	2	101	38.81	0.00	1.08	0.84	0.24	0.36	0.24	0.00	2.75	0.24	0.84	
8	5	2	101	38.81	0.48	0.24	0.24	0.12	0.00	0.96	0.12	0.36	0.12	0.24	
9	5	2	101	38.81	0.00	0.00	0.00	1.08	0.00	3.82	0.00	0.00	0.12	0.12	
10	5	2	101	38.81	0.00	0.12	0.36	0.00	0.00	0.36	0.00	0.00	0.00	0.00	
11	5	2	101	38.81	0.00	0.00	0.00	0.00	0.00	0.00	54.48				
12	5	2	101	38.81	837.										
1	5	2	121	39.01	1.67	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.79	0.59	
2	5	2	121	39.01	0.00	0.00	0.00	1.97	0.00	0.20	2.07	0.00	0.30	1.67	
3	5	2	121	39.01	0.00	0.69	0.10	0.00	0.00	0.00	0.20	0.00	0.00	0.00	
4	5	2	121	39.01	1.48	0.10	0.30	0.10	1.18	0.49	0.30	0.00	0.10	0.79	
5	5	2	121	39.01	8.76	0.00	1.67	0.10	0.00	0.00	0.00	0.89	0.59	0.00	
6	5	2	121	39.01	0.10	0.49	0.20	0.10	1.28	0.00	0.00	0.20	0.20	0.00	
7	5	2	121	39.01	0.00	0.59	0.69	0.10	0.30	0.49	0.00	1.87	0.20	0.69	
8	5	2	121	39.01	0.10	0.20	0.10	0.30	0.10	0.98	0.49	0.30	0.69	0.30	
9	5	2	121	39.01	0.00	0.49	0.00	0.59	0.00	4.43	0.00	0.00	0.79	0.20	
10	5	2	121	39.01	0.00	0.20	0.98	0.00	0.00	0.30	0.10	0.00	0.00	0.00	
11	5	2	121	39.01	0.00	0.00	0.00	0.00	0.00	0.00	53.64				
12	5	2	121	39.01	1016.										
1	5	2	138	39.18	1.00	0.12	0.00	0.00	0.00	0.00	0.37	0.00	0.50	1.00	
2	5	2	138	39.18	0.00	0.12	0.00	1.25	0.00	0.62	1.62	0.00	0.37	2.00	
3	5	2	138	39.18	0.00	0.25	3.74	0.00	0.00	0.00	0.12	0.00	0.12	0.00	
4	5	2	138	39.18	0.75	0.00	0.75	1.12	0.50	0.50	0.25	0.00	0.12	0.00	
5	5	2	138	39.18	7.86	0.00	1.75	0.12	0.00	0.00	0.00	0.62	0.75	0.00	
6	5	2	138	39.18	0.00	0.50	0.00	0.62	2.24	0.00	0.00	0.37	0.00	0.00	
7	5	2	138	39.18	0.87	0.37	1.37	0.25	0.37	0.37	0.00	0.87	0.00	0.62	
8	5	2	138	39.18	0.12	0.37	0.00	0.12	0.00	0.75	0.25	0.25	0.37	0.12	
9	5	2	138	39.18	0.00	0.37	0.00	0.12	0.00	3.62	0.00	0.00	0.00	0.12	
10	5	2	138	39.18	0.00	0.00	0.37	0.00	0.00	0.25	0.00	0.00	0.00	0.00	
11	5	2	138	39.18	0.00	0.00	0.00	0.00	0.00	0.00	55.61				
12	5	2	138	39.18	802.										
1	5	3	21	39.51	1.29	0.35	0.12	0.00	0.00	0.12	0.23	0.23	0.70	0.82	
2	5	3	21	39.51	0.00	0.23	0.12	1.99	0.00	0.23	0.93	0.00	1.17	2.22	
3	5	3	21	39.51	0.00	0.23	0.35	0.00	0.00	0.35	0.35	0.00	0.12	0.12	
4	5	3	21	39.51	0.58	0.12	0.00	0.47	1.40	0.58	0.23	0.00	0.12	0.70	
5	5	3	21	39.51	6.78	0.12	1.05	0.00	0.00	0.00	0.00	0.82	0.70	0.00	
6	5	3	21	39.51	0.00	0.23	0.47	0.12	1.17	0.00	0.00	0.58	0.12	0.00	
7	5	3	21	39.51	0.12	0.35	0.35	0.35	0.35	0.23	0.00	1.99	0.00	0.58	
8	5	3	21	39.51	0.70	0.35	0.12	0.12	0.00	0.58	0.12	0.70	0.00	0.23	
9	5	3	21	39.51	0.00	0.47	0.12	0.58	0.00	2.45	0.00	0.00	0.00	0.12	
10	5	3	21	39.51	0.00	0.35	0.70	0.00	0.12	0.12	0.00	0.00	0.00	0.00	
11	5	3	21	39.51	0.00	0.00	0.00	0.00	0.00	0.00	59.11				
12	5	3	21	39.51	856.										
1	5	3	39	39.71	1.77	0.24	0.00	0.00	0.12	0.12	0.12	0.12	0.71	1.06	
2	5	3	39	39.71	0.00	0.12	0.00	2.47	0.00	0.12	2.36	0.00	0.47	2.00	
3	5	3	39	39.71	0.00	0.59	0.24	0.00	0.00	0.00	0.12	0.00	0.12	0.35	
4	5	3	39	39.71	2.94	0.35	0.35	0.12	0.71	0.71	0.59	0.00	0.35	1.06	
5	5	3	39	39.71	6.83	0.00	1.88	0.35	0.00	0.00	0.00	0.94	0.00	0.00	
6	5	3	39	39.71	0.00	0.71	0.47	0.00	2.00	0.00	0.00	0.12	0.00	0.12	
7	5	3	39	39.71	0.12	0.71	0.82	0.00	0.24	0.47	0.00	2.12	0.00	1.53	
8	5	3	39	39.71	0.12	1.18	0.47	0.24	0.12	0.24	0.24	0.71	0.47	0.47	
9	5	3	39	39.71	0.00	0.82	0.00	0.35	0.00	1.18	0.00	0.00	0.35	0.12	

10	5	3	39	39.71	0.00	0.35	0.35	0.00	0.00	0.47	0.00	0.00	0.00	0.00
11	5	3	39	39.71	0.00	0.00	0.00	0.00	0.00	0.00	51.94			
12	5	3	39	39.71	849.									
1	5	3	58	39.88	0.73	0.36	0.24	0.00	0.12	0.24	0.00	0.36	0.48	1.57
2	5	3	58	39.88	0.00	0.36	0.00	2.91	0.12	0.36	1.45	0.00	0.48	1.45
3	5	3	58	39.88	0.00	0.12	0.61	0.00	0.00	0.12	0.24	0.48	0.24	0.24
4	5	3	58	39.88	1.33	0.24	0.48	0.12	1.09	0.36	0.00	0.00	0.12	0.85
5	5	3	58	39.88	3.63	0.12	0.97	0.61	0.00	0.00	0.00	0.61	0.48	0.00
6	5	3	58	39.88	0.00	1.21	0.48	0.00	1.82	0.00	0.00	0.12	0.36	0.12
7	5	3	58	39.88	0.24	0.48	0.24	0.00	0.36	0.24	0.00	1.94	0.12	0.73
8	5	3	58	39.88	0.12	0.12	0.61	0.36	0.00	0.97	0.61	0.24	0.00	0.48
9	5	3	58	39.88	0.00	0.24	0.00	0.24	0.00	2.42	0.00	0.00	0.00	0.00
10	5	3	58	39.88	0.00	0.73	0.48	0.00	0.00	0.12	0.00	0.00	0.00	0.00
11	5	3	58	39.88	0.00	0.00	0.00	0.00	0.00	0.00	59.44			
12	5	3	58	39.88	826.									
1	5	3	101	40.31	0.86	0.00	0.12	0.00	0.00	0.00	0.12	0.00	0.25	1.23
2	5	3	101	40.31	0.00	0.37	0.00	1.97	0.37	0.49	0.99	0.00	0.12	1.11
3	5	3	101	40.31	0.00	0.49	0.62	0.00	0.00	0.00	0.25	0.25	0.37	0.25
4	5	3	101	40.31	0.37	0.00	0.00	0.12	0.74	0.25	0.00	0.00	0.37	0.37
5	5	3	101	40.31	5.92	0.00	1.23	0.12	0.00	0.00	0.00	0.62	0.25	0.00
6	5	3	101	40.31	0.00	1.48	0.74	0.12	1.85	0.00	0.00	0.49	0.25	0.00
7	5	3	101	40.31	0.00	1.11	1.11	0.00	0.74	0.12	0.00	0.86	0.12	0.99
8	5	3	101	40.31	0.25	0.00	0.49	0.00	0.00	1.48	0.62	0.37	0.12	0.25
9	5	3	101	40.31	0.00	1.11	0.00	0.37	0.00	2.47	0.00	0.00	0.00	0.37
10	5	3	101	40.31	0.00	0.00	0.74	0.00	0.00	0.25	0.00	0.00	0.00	0.00
11	5	3	101	40.31	0.00	0.00	0.00	0.00	0.12	0.00	60.42			
12	5	3	101	40.31	811.									
1	5	3	120	40.50	0.67	0.00	0.11	0.00	0.11	0.00	0.11	0.33	0.22	1.56
2	5	3	120	40.50	0.00	1.00	0.00	1.45	0.11	0.22	2.46	0.00	1.67	1.45
3	5	3	120	40.50	0.00	0.45	0.56	0.00	0.00	0.00	0.56	0.11	0.11	0.45
4	5	3	120	40.50	1.00	0.33	0.22	0.22	1.12	0.33	0.11	0.00	0.11	1.67
5	5	3	120	40.50	10.60	0.00	1.34	0.22	0.00	0.00	0.00	1.34	0.11	0.00
6	5	3	120	40.50	0.11	0.67	0.22	0.11	2.12	0.00	0.00	0.33	0.78	0.22
7	5	3	120	40.50	0.22	0.22	1.45	0.11	0.22	0.33	0.00	0.89	0.22	0.33
8	5	3	120	40.50	0.33	0.45	0.11	0.00	0.00	0.78	0.56	0.78	0.00	0.11
9	5	3	120	40.50	0.00	0.11	0.00	0.67	0.00	3.68	0.00	0.00	0.11	0.22
10	5	3	120	40.50	0.00	0.22	0.56	0.00	0.00	0.11	0.00	0.00	0.00	0.00
11	5	3	120	40.50	0.00	0.00	0.00	0.00	0.00	0.00	50.11			
12	5	3	120	40.50	896.									
1	5	3	138	40.68	1.54	0.10	0.19	0.00	0.00	0.19	0.00	0.29	0.29	0.38
2	5	3	138	40.68	0.10	0.19	0.00	1.44	0.00	0.38	2.02	0.00	0.38	1.15
3	5	3	138	40.68	0.00	0.58	0.29	0.00	0.00	0.00	0.19	0.00	0.19	0.29
4	5	3	138	40.68	1.15	0.10	0.19	0.58	0.77	0.96	0.10	0.00	0.38	1.35
5	5	3	138	40.68	8.94	0.00	2.50	0.00	0.00	0.00	0.00	0.38	0.96	0.00
6	5	3	138	40.68	0.00	0.77	0.67	0.29	1.92	0.00	0.00	0.38	0.38	0.38
7	5	3	138	40.68	0.29	0.29	1.25	0.38	0.38	0.19	0.00	1.83	0.29	1.06
8	5	3	138	40.68	0.10	0.29	0.38	0.00	0.00	0.48	0.29	0.77	0.00	0.10
9	5	3	138	40.68	0.00	0.58	0.10	0.19	0.00	3.17	0.00	0.00	0.29	0.10
10	5	3	138	40.68	0.00	0.10	0.58	0.00	0.00	0.38	0.77	0.00	0.00	0.00
11	5	3	138	40.68	0.00	0.00	0.00	0.00	0.00	0.00	52.02			
12	5	3	138	40.68	1040.									
1	5	4	21	41.01	1.00	0.00	0.75	0.00	0.00	0.00	0.12	0.00	0.25	0.50
2	5	4	21	41.01	0.00	0.00	0.25	1.62	0.00	0.12	1.62	0.00	0.37	0.87
3	5	4	21	41.01	0.00	0.50	0.37	0.00	0.00	0.00	0.50	0.00	0.00	0.12
4	5	4	21	41.01	1.50	0.00	0.12	0.25	0.37	0.37	0.00	0.00	0.00	0.87

5	5	4	21	41.01	6.61	0.00	1.75	0.12	0.00	0.00	0.00	0.12	0.12	0.00
6	5	4	21	41.01	0.00	0.37	0.12	0.00	2.62	0.00	0.00	0.25	0.25	0.00
7	5	4	21	41.01	0.00	0.50	0.37	0.50	0.00	0.12	0.00	1.62	0.12	0.50
8	5	4	21	41.01	0.25	0.50	0.12	0.12	0.00	0.37	0.62	0.25	0.00	0.37
9	5	4	21	41.01	0.00	0.50	0.00	0.62	0.00	2.00	0.00	0.00	0.25	0.00
10	5	4	21	41.01	0.00	0.00	0.00	0.00	0.00	0.12	1.25	0.00	0.00	0.00
11	5	4	21	41.01	0.00	0.00	0.00	0.00	0.00	0.12	63.97			
12	5	4	21	41.01	802.									
1	5	4	39	41.19	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.13	0.63
2	5	4	39	41.19	0.38	0.13	0.13	1.50	0.00	0.38	1.38	0.00	1.25	0.13
3	5	4	39	41.19	0.00	0.38	0.75	0.00	0.00	0.25	0.25	0.00	0.00	0.13
4	5	4	39	41.19	1.25	0.00	0.00	0.88	0.75	0.50	0.13	0.00	0.00	1.75
5	5	4	39	41.19	9.65	0.13	2.13	0.38	0.00	0.00	0.00	0.25	0.25	0.00
6	5	4	39	41.19	0.00	1.13	0.75	0.25	2.63	0.00	0.00	0.00	1.38	0.25
7	5	4	39	41.19	0.63	0.25	0.63	0.25	0.25	0.00	0.00	1.63	0.50	0.75
8	5	4	39	41.19	0.38	0.50	0.50	0.25	0.00	0.75	0.63	0.25	0.75	0.13
9	5	4	39	41.19	0.00	0.25	0.00	0.75	0.00	5.14	0.00	0.00	0.25	0.25
10	5	4	39	41.19	0.00	0.13	0.25	0.00	0.13	0.63	1.00	0.00	0.00	0.00
11	5	4	39	41.19	0.00	0.00	0.00	0.00	0.13	0.00	49.12			
12	5	4	39	41.19	798.									
1	5	4	58	41.38	0.36	0.61	0.00	0.00	0.00	0.00	0.12	0.12	0.24	0.36
2	5	4	58	41.38	0.00	0.24	0.00	1.46	0.00	0.12	1.58	0.00	0.24	0.85
3	5	4	58	41.38	0.00	0.61	1.09	0.00	0.00	0.24	0.24	0.00	0.24	0.24
4	5	4	58	41.38	2.31	0.24	0.12	0.12	0.85	0.24	0.36	0.00	0.12	2.67
5	5	4	58	41.38	11.65	0.00	3.40	0.00	0.00	0.00	0.00	0.12	0.49	0.00
6	5	4	58	41.38	0.00	0.97	0.12	0.00	3.64	0.00	0.00	0.36	0.73	0.24
7	5	4	58	41.38	0.85	0.12	0.73	0.36	0.61	0.00	0.00	1.70	0.24	0.73
8	5	4	58	41.38	0.24	0.73	0.12	0.24	0.00	0.49	0.36	0.49	0.00	0.12
9	5	4	58	41.38	0.00	0.49	0.00	0.24	0.00	2.31	0.00	0.00	0.24	0.12
10	5	4	58	41.38	0.00	0.12	0.49	0.00	0.00	0.12	0.73	1.09	0.00	0.00
11	5	4	58	41.38	0.00	0.00	0.00	0.00	0.00	0.00	48.18			
12	5	4	58	41.38	824.									
1	5	4	101	41.81	1.03	0.92	0.11	0.00	0.00	0.00	0.00	0.00	0.46	0.23
2	5	4	101	41.81	0.00	0.11	0.00	1.15	0.11	0.11	1.03	0.00	0.11	1.95
3	5	4	101	41.81	0.00	0.00	0.34	0.00	0.00	0.34	0.23	0.00	0.23	0.23
4	5	4	101	41.81	2.06	0.00	0.23	0.11	0.69	0.34	0.00	0.00	0.11	1.03
5	5	4	101	41.81	5.61	0.11	1.95	0.00	0.00	0.00	0.00	1.03	0.46	0.00
6	5	4	101	41.81	0.00	0.92	0.23	1.03	2.41	0.00	0.00	0.11	0.00	0.00
7	5	4	101	41.81	0.57	0.34	0.57	0.11	0.23	0.00	0.00	2.29	0.34	1.26
8	5	4	101	41.81	0.00	0.46	0.46	0.11	0.00	0.69	0.11	0.69	0.23	0.00
9	5	4	101	41.81	0.00	0.23	0.00	0.57	0.00	1.95	0.00	0.00	0.23	0.11
10	5	4	101	41.81	0.00	0.11	0.34	0.00	0.00	0.00	0.23	0.00	0.00	0.00
11	5	4	101	41.81	0.00	0.00	0.00	0.00	0.00	0.11	60.48			
12	5	4	101	41.81	873.									
1	5	4	121	42.01	0.56	0.28	0.09	0.00	0.00	0.09	0.00	0.09	0.66	0.19
2	5	4	121	42.01	0.00	0.09	0.00	2.06	0.28	0.28	1.13	0.00	0.47	1.22
3	5	4	121	42.01	0.00	0.00	0.56	0.00	0.00	0.28	0.38	0.00	0.09	0.28
4	5	4	121	42.01	1.78	0.09	0.19	0.28	0.56	0.56	0.09	0.00	0.09	0.38
5	5	4	121	42.01	6.10	0.00	1.97	0.56	0.00	0.00	0.00	0.75	0.84	0.00
6	5	4	121	42.01	0.00	1.03	0.09	0.19	1.78	0.00	0.00	0.38	0.28	0.09
7	5	4	121	42.01	0.19	0.47	0.47	0.28	0.28	0.19	0.00	1.22	0.28	1.03
8	5	4	121	42.01	0.09	0.47	0.28	0.19	0.00	0.75	0.19	0.19	0.28	0.56
9	5	4	121	42.01	0.00	0.09	0.00	0.28	0.00	4.13	0.00	0.00	0.00	0.00
10	5	4	121	42.01	0.00	0.19	0.75	0.00	0.09	0.00	1.41	0.00	0.09	0.00
11	5	4	121	42.01	0.00	0.00	0.00	0.00	0.09	0.09	58.16			

12	5	4	121	42.01	1066.									
1	5	4	138	42.18	0.70	0.23	0.12	0.00	0.00	0.00	0.00	0.23	0.00	0.70
2	5	4	138	42.18	0.00	0.35	0.00	1.63	0.23	0.12	1.05	0.00	0.35	1.28
3	5	4	138	42.18	0.00	0.23	0.70	0.00	0.00	0.47	0.12	0.00	0.00	0.23
4	5	4	138	42.18	1.51	0.23	0.23	0.23	0.93	0.35	0.12	0.00	0.23	1.28
5	5	4	138	42.18	6.52	0.12	2.21	0.58	0.00	0.00	0.00	0.47	0.12	0.00
6	5	4	138	42.18	0.00	1.05	0.35	0.12	1.05	0.00	0.00	0.35	0.23	0.12
7	5	4	138	42.18	0.81	0.35	0.58	0.47	0.81	0.23	0.00	1.40	0.47	1.63
8	5	4	138	42.18	0.12	0.23	0.12	0.12	0.00	1.16	1.05	0.35	0.47	0.93
9	5	4	138	42.18	0.00	0.23	0.00	1.05	0.00	3.26	0.00	0.00	0.23	0.35
10	5	4	138	42.18	0.00	0.23	0.93	0.00	0.00	0.35	0.93	0.00	0.00	0.00
11	5	4	138	42.18	0.00	0.00	0.00	0.00	0.00	0.35	53.67			
12	5	4	138	42.18	859.									
1	5	5	21	42.51	0.37	0.00	0.00	0.00	0.00	0.25	0.00	0.12	0.25	0.62
2	5	5	21	42.51	0.00	0.75	0.12	0.62	0.00	0.50	1.12	0.00	0.50	0.87
3	5	5	21	42.51	0.00	1.00	0.50	0.00	0.00	0.50	1.00	0.00	0.00	0.37
4	5	5	21	42.51	2.12	0.00	0.37	0.50	0.50	0.37	0.12	0.00	0.12	0.37
5	5	5	21	42.51	7.47	0.00	2.49	0.87	0.00	0.00	0.00	1.25	0.50	0.00
6	5	5	21	42.51	0.00	1.00	0.37	0.00	2.24	0.00	0.00	0.00	0.00	0.25
7	5	5	21	42.51	0.37	0.25	1.25	0.00	0.50	0.50	0.00	0.87	0.25	0.62
8	5	5	21	42.51	0.37	0.50	0.12	0.00	0.00	0.87	0.50	0.37	0.12	0.87
9	5	5	21	42.51	0.00	0.12	0.37	0.37	0.00	3.86	0.00	0.00	0.12	0.12
10	5	5	21	42.51	0.00	0.25	0.37	0.00	0.00	0.37	2.86	0.00	0.00	0.00
11	5	5	21	42.51	0.00	0.00	0.00	0.00	0.12	0.50	51.81			
12	5	5	21	42.51	803.									
1	5	5	37	42.67	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.48
2	5	5	37	42.67	0.00	0.24	0.12	0.72	0.00	0.12	1.33	0.00	0.48	0.97
3	5	5	37	42.67	0.00	0.00	0.85	0.00	0.00	0.24	0.24	0.48	0.00	1.93
4	5	5	37	42.67	0.24	0.48	0.24	0.72	0.24	0.12	0.00	0.24	0.00	0.36
5	5	5	37	42.67	8.09	0.12	0.72	0.12	0.00	0.12	0.00	2.29	0.85	0.00
6	5	5	37	42.67	0.00	1.21	0.36	0.00	1.81	0.00	0.00	0.00	0.36	0.24
7	5	5	37	42.67	0.48	0.24	0.12	0.12	0.24	0.36	0.00	0.72	0.00	0.12
8	5	5	37	42.67	0.24	0.12	0.12	0.24	0.00	0.36	0.00	0.24	0.00	0.00
9	5	5	37	42.67	0.00	0.12	0.00	0.60	0.00	2.42	0.00	0.00	0.12	0.00
10	5	5	37	42.67	0.00	0.36	0.24	0.00	0.24	0.00	2.78	0.00	0.00	0.00
11	5	5	37	42.67	0.00	0.00	0.00	0.00	0.00	0.00	61.71			
12	5	5	37	42.67	828.									
1	5	5	58	42.88	0.73	0.00	0.00	0.00	0.00	0.12	0.00	0.36	0.73	1.09
2	5	5	58	42.88	0.12	1.09	0.00	1.21	0.36	0.49	1.33	0.00	0.73	1.21
3	5	5	58	42.88	0.00	0.36	1.09	0.00	0.00	0.00	0.61	0.00	0.61	0.12
4	5	5	58	42.88	2.06	0.36	0.61	0.36	1.33	1.09	0.12	0.00	0.00	0.12
5	5	5	58	42.88	10.44	0.00	1.21	0.24	0.00	0.00	0.00	1.46	0.12	0.00
6	5	5	58	42.88	0.00	2.43	0.24	0.00	2.06	0.00	0.00	0.36	0.36	0.36
7	5	5	58	42.88	0.97	0.24	0.61	0.24	0.12	0.12	0.00	1.09	0.00	0.36
8	5	5	58	42.88	0.24	0.36	0.36	0.12	0.00	0.61	0.12	0.24	0.00	0.24
9	5	5	58	42.88	0.00	0.24	0.12	0.00	0.00	2.67	0.00	0.00	0.24	0.24
10	5	5	58	42.88	0.00	0.00	0.49	0.00	0.49	0.00	7.28	0.00	0.00	0.00
11	5	5	58	42.88	0.00	0.00	0.00	0.00	0.49	0.00	43.93			
12	5	5	58	42.88	824.									
1	5	5	101	43.31	0.37	0.37	0.12	0.00	0.00	0.12	0.00	0.12	0.49	0.62
2	5	5	101	43.31	0.25	0.86	0.12	1.36	0.00	0.74	3.09	0.00	0.86	1.36
3	5	5	101	43.31	0.00	0.37	2.10	0.00	0.00	0.37	1.36	0.00	0.62	0.00
4	5	5	101	43.31	2.22	0.37	0.12	0.25	1.85	0.37	0.25	0.00	0.37	1.36
5	5	5	101	43.31	9.51	0.00	0.37	0.37	0.00	0.00	0.00	1.23	1.48	0.00
6	5	5	101	43.31	0.00	1.48	0.37	0.00	1.98	0.00	0.00	0.00	0.49	0.12

2	5	6	58	44.38	0.11	0.00	0.11	2.16	0.00	0.11	2.85	0.00	0.46	2.16
3	5	6	58	44.38	0.00	0.91	0.57	0.00	0.00	0.46	0.57	0.00	0.46	0.11
4	5	6	58	44.38	1.37	0.23	0.57	1.59	0.57	0.80	0.23	0.00	0.68	0.23
5	5	6	58	44.38	5.69	0.00	0.57	0.23	0.00	0.00	0.00	0.68	1.71	0.00
6	5	6	58	44.38	0.00	1.71	0.11	0.23	1.03	0.00	0.00	0.23	0.11	0.00
7	5	6	58	44.38	0.34	0.34	1.14	0.11	0.34	0.00	0.00	1.59	0.23	0.68
8	5	6	58	44.38	0.46	0.11	0.00	0.11	0.00	0.68	0.00	0.11	0.34	0.00
9	5	6	58	44.38	0.11	0.11	0.00	0.34	0.00	2.28	0.00	0.00	0.00	0.11
10	5	6	58	44.38	0.00	0.57	0.46	0.00	0.00	0.23	6.83	0.00	0.11	0.00
11	5	6	58	44.38	0.00	0.00	0.00	0.00	0.00	0.46	50.00			
12	5	6	58	44.38	878.									
1	5	6	101	44.81	0.74	1.28	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.32
2	5	6	101	44.81	0.00	0.21	0.00	1.17	0.00	0.21	2.02	0.00	0.53	1.70
3	5	6	101	44.81	0.00	0.11	0.53	0.00	0.00	0.00	0.11	0.00	0.43	0.00
4	5	6	101	44.81	1.28	0.00	0.32	0.85	0.21	0.64	0.11	0.00	0.11	0.11
5	5	6	101	44.81	4.89	0.11	0.74	0.11	0.00	0.00	0.00	0.32	0.53	0.00
6	5	6	101	44.81	0.11	2.02	0.32	0.32	2.34	0.00	0.00	0.32	0.00	0.11
7	5	6	101	44.81	0.74	0.00	1.06	0.11	0.00	0.11	0.00	1.28	0.21	0.74
8	5	6	101	44.81	0.00	0.64	0.21	0.11	0.00	0.00	0.53	0.11	0.21	0.21
9	5	6	101	44.81	0.00	0.00	0.11	0.00	0.00	2.23	0.00	0.00	0.43	0.11
10	5	6	101	44.81	0.00	0.21	0.53	0.00	0.00	0.11	6.70	0.00	0.00	0.00
11	5	6	101	44.81	0.00	0.00	0.00	0.00	0.64	0.96	55.85			
12	5	6	101	44.81	940.									
1	5	6	121	45.01	0.65	0.43	0.00	0.00	0.00	0.11	0.22	0.65	0.22	0.76
2	5	6	121	45.01	0.00	0.11	0.00	1.08	0.00	0.11	1.08	0.00	0.54	1.73
3	5	6	121	45.01	0.00	0.65	0.43	0.00	0.00	0.00	0.11	0.00	0.22	0.11
4	5	6	121	45.01	0.65	0.11	0.11	0.54	0.32	0.00	0.11	0.00	0.00	1.19
5	5	6	121	45.01	4.86	0.00	1.08	0.11	0.00	0.11	0.00	0.54	0.76	0.00
6	5	6	121	45.01	0.22	0.97	0.00	0.22	1.30	0.00	0.00	0.22	0.22	0.00
7	5	6	121	45.01	0.54	0.11	1.94	0.22	0.11	0.00	0.00	1.08	0.54	0.43
8	5	6	121	45.01	0.00	0.76	0.00	0.11	0.11	0.43	0.43	0.11	0.22	0.00
9	5	6	121	45.01	0.00	0.22	0.11	0.11	0.00	0.76	0.00	0.00	0.22	0.11
10	5	6	121	45.01	0.00	0.00	0.11	0.00	0.00	0.11	4.43	0.11	0.00	0.00
11	5	6	121	45.01	0.00	0.00	0.00	0.00	1.08	0.86	61.88			
12	5	6	121	45.01	926.									
1	5	6	138	45.18	0.30	0.30	0.07	0.00	0.00	0.00	0.00	0.00	0.30	0.90
2	5	6	138	45.18	0.00	0.37	0.00	1.49	0.00	0.30	2.17	0.00	0.75	1.27
3	5	6	138	45.18	0.00	0.37	0.22	0.00	0.00	0.07	0.15	0.00	0.37	0.00
4	5	6	138	45.18	1.05	0.37	0.22	0.67	1.12	0.82	0.45	0.07	0.30	0.67
5	5	6	138	45.18	8.36	0.00	1.64	0.00	0.00	0.00	0.00	1.19	0.00	0.00
6	5	6	138	45.18	0.07	0.90	0.22	0.00	1.79	0.00	0.00	0.00	0.37	0.15
7	5	6	138	45.18	0.15	0.22	1.72	0.22	0.45	0.15	0.00	0.90	0.07	0.45
8	5	6	138	45.18	0.07	0.22	0.15	0.15	0.07	0.45	0.30	0.15	0.15	0.15
9	5	6	138	45.18	0.00	0.22	0.07	0.22	0.00	1.05	0.00	0.00	0.30	0.00
10	5	6	138	45.18	0.00	0.45	0.15	0.00	0.15	0.30	4.33	0.00	0.00	0.00
11	5	6	138	45.18	0.00	0.00	0.00	0.00	0.45	0.22	56.01			
12	5	6	138	45.18	1339.									
1	5	7	21	45.51	0.64	0.11	0.11	0.00	0.00	0.11	0.00	0.64	0.32	0.21
2	5	7	21	45.51	0.11	0.53	0.11	0.43	0.11	0.00	3.83	0.00	0.75	0.96
3	5	7	21	45.51	0.00	0.64	0.96	0.00	0.00	0.21	0.11	0.00	0.43	0.11
4	5	7	21	45.51	1.49	0.11	0.11	0.21	0.43	0.43	0.21	0.00	0.00	1.17
5	5	7	21	45.51	8.31	0.00	2.56	0.11	0.00	0.00	0.00	0.00	0.11	0.00
6	5	7	21	45.51	0.00	0.75	0.00	0.11	2.45	0.00	0.00	0.00	0.85	0.43
7	5	7	21	45.51	0.53	0.00	1.38	0.43	0.21	0.00	0.00	1.70	0.21	0.85
8	5	7	21	45.51	0.11	0.32	0.21	0.00	0.11	0.75	0.21	0.21	0.00	0.21

9	5	7	21	45.51	0.00	0.32	0.43	0.21	0.00	2.02	0.00	0.00	0.43	0.11
10	5	7	21	45.51	0.00	0.11	0.21	0.00	0.11	0.00	4.05	0.00	0.00	0.00
11	5	7	21	45.51	0.00	0.00	0.00	0.00	0.21	0.75	52.40			
12	5	7	21	45.51	939.									
1	5	7	39	45.7	1.35	0.00	0.23	0.00	0.00	0.00	0.45	0.34	0.11	0.56
2	5	7	39	45.7	0.00	0.34	0.11	1.58	0.00	0.45	2.71	0.00	1.13	1.35
3	5	7	39	45.7	0.00	0.00	1.35	0.00	0.00	0.00	0.11	0.00	0.34	0.23
4	5	7	39	45.7	2.14	0.23	0.11	0.45	0.45	0.23	0.56	0.00	0.56	0.45
5	5	7	39	45.7	4.85	0.00	1.69	0.00	0.00	0.00	0.00	0.45	0.11	0.00
6	5	7	39	45.7	0.00	1.01	0.00	0.11	1.35	0.00	0.00	0.11	0.23	0.23
7	5	7	39	45.7	0.45	0.23	0.68	0.00	0.23	0.11	0.00	0.45	0.34	0.23
8	5	7	39	45.7	0.00	0.45	0.11	0.11	0.00	1.01	0.00	0.00	0.23	0.00
9	5	7	39	45.7	0.00	0.11	0.00	0.00	0.00	1.47	0.00	0.00	0.11	0.00
10	5	7	39	45.7	0.00	0.23	0.34	0.00	0.00	0.00	7.44	0.00	0.00	0.00
11	5	7	39	45.7	0.00	0.00	0.00	0.00	0.23	0.56	56.82			
12	5	7	39	45.7	887.									
1	6	1	21	46.11	0.75	0.21	0.00	0.00	0.00	0.11	0.00	0.21	0.21	1.71
2	6	1	21	46.11	0.00	0.21	0.00	0.86	0.11	0.21	1.39	0.00	0.75	0.64
3	6	1	21	46.11	0.00	0.00	2.03	0.00	0.00	0.11	0.11	0.00	0.21	0.00
4	6	1	21	46.11	1.50	0.21	0.75	1.28	0.32	0.11	0.43	0.00	0.32	0.00
5	6	1	21	46.11	9.53	0.00	2.25	0.00	0.00	0.00	0.00	0.86	0.64	0.00
6	6	1	21	46.11	0.00	1.18	0.00	0.11	1.71	0.00	0.00	0.11	0.54	0.11
7	6	1	21	46.11	0.32	0.11	1.18	0.32	0.21	0.21	0.00	1.28	0.11	0.21
8	6	1	21	46.11	0.11	0.21	0.00	0.11	0.00	0.11	0.11	0.43	0.11	0.11
9	6	1	21	46.11	0.00	0.11	0.00	0.21	0.00	1.50	0.00	0.00	0.21	0.00
10	6	1	21	46.11	0.00	0.11	0.64	0.00	0.00	0.43	6.10	0.00	0.11	0.00
11	6	1	21	46.11	0.11	0.00	0.00	0.00	0.21	0.43	52.78			
12	6	1	21	46.11	934.									
1	6	1	41	46.31	0.98	0.22	0.11	0.00	0.00	0.11	0.00	0.33	0.22	0.76
2	6	1	41	46.31	0.00	0.33	0.00	0.98	0.11	0.22	0.98	0.00	1.42	1.31
3	6	1	41	46.31	0.00	0.33	0.98	0.00	0.00	0.00	0.00	0.00	0.33	0.11
4	6	1	41	46.31	0.98	0.11	0.22	0.33	0.33	0.66	0.22	0.00	0.66	0.00
5	6	1	41	46.31	7.86	0.00	2.73	0.00	0.00	0.00	0.00	0.22	0.44	0.00
6	6	1	41	46.31	0.00	1.31	0.00	0.55	1.64	0.00	0.00	0.33	0.00	0.22
7	6	1	41	46.31	0.33	0.55	0.44	0.11	0.11	0.11	0.00	1.97	0.00	0.22
8	6	1	41	46.31	0.11	0.44	0.22	0.11	0.00	0.11	0.33	0.33	0.11	0.11
9	6	1	41	46.31	0.00	0.11	0.00	0.33	0.00	1.75	0.00	0.00	0.22	0.00
10	6	1	41	46.31	0.00	0.00	0.11	0.00	0.00	0.33	5.90	0.00	0.00	0.00
11	6	1	41	46.31	0.00	0.00	0.00	0.00	0.44	0.22	56.33			
12	6	1	41	46.31	916.									
1	6	1	58	46.48	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.36
2	6	1	58	46.48	0.00	0.00	0.00	0.47	0.00	0.00	1.07	0.00	0.71	2.02
3	6	1	58	46.48	0.00	0.24	1.54	0.00	0.00	0.00	0.00	0.00	0.12	0.00
4	6	1	58	46.48	1.90	0.24	0.47	0.47	0.47	0.59	0.12	0.00	0.00	0.12
5	6	1	58	46.48	7.24	0.00	1.19	0.12	0.00	0.00	0.00	0.83	0.36	0.00
6	6	1	58	46.48	0.00	1.07	0.00	0.36	1.78	0.00	0.00	0.00	0.24	0.12
7	6	1	58	46.48	0.47	0.36	0.47	0.12	0.24	0.00	0.00	2.25	0.00	0.47
8	6	1	58	46.48	0.12	0.95	0.12	0.12	0.00	0.83	0.00	0.47	0.47	0.12
9	6	1	58	46.48	0.00	0.36	0.00	0.12	0.00	2.02	0.00	0.00	0.12	0.00
10	6	1	58	46.48	0.00	0.00	0.95	0.00	0.00	0.24	7.12	0.00	0.12	0.00
11	6	1	58	46.48	0.00	0.00	0.00	0.00	0.83	0.83	54.09			
12	6	1	58	46.48	843.									
1	6	1	101	46.91	0.45	0.00	0.11	0.11	0.00	0.00	0.00	0.34	0.00	0.90
2	6	1	101	46.91	0.23	0.56	0.00	1.35	0.00	0.34	1.80	0.00	1.13	0.34
3	6	1	101	46.91	0.00	0.00	0.79	0.00	0.00	0.11	0.23	0.00	0.34	0.11

4	6	1	101	46.91	1.47	0.23	0.23	0.34	0.56	0.45	0.00	0.00	0.11	0.11
5	6	1	101	46.91	9.47	0.00	1.24	0.11	0.00	0.00	0.00	1.24	0.23	0.00
6	6	1	101	46.91	0.00	1.69	0.11	0.34	1.01	0.00	0.00	0.23	0.45	0.00
7	6	1	101	46.91	0.56	0.23	0.23	0.23	0.11	0.11	0.00	0.56	0.00	0.56
8	6	1	101	46.91	0.11	0.23	0.11	0.23	0.00	0.56	0.11	0.45	0.56	0.23
9	6	1	101	46.91	0.00	0.45	0.00	0.00	0.00	2.25	0.00	0.00	0.11	0.23
10	6	1	101	46.91	0.00	0.79	0.79	0.00	0.00	0.34	6.31	0.00	0.00	0.00
11	6	1	101	46.91	0.00	0.00	0.00	0.00	0.45	0.34	53.89			
12	6	1	101	46.91	887.									
1	6	1	121	47.11	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.11	0.79
2	6	1	121	47.11	0.34	0.34	0.00	0.90	0.00	0.11	1.24	0.00	0.68	0.68
3	6	1	121	47.11	0.00	0.34	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	6	1	121	47.11	1.13	0.00	0.23	0.45	0.00	0.68	0.34	0.00	0.00	0.00
5	6	1	121	47.11	5.07	0.00	1.80	0.00	0.00	0.00	0.00	0.56	0.11	0.00
6	6	1	121	47.11	0.00	0.11	0.00	0.34	0.90	0.00	0.00	0.23	0.34	0.00
7	6	1	121	47.11	0.23	0.34	0.45	0.23	0.11	0.11	0.00	1.13	0.11	0.56
8	6	1	121	47.11	0.23	0.45	0.00	0.11	0.00	0.45	0.34	0.00	0.00	0.11
9	6	1	121	47.11	0.00	0.34	0.00	0.45	0.00	2.82	0.00	0.00	0.34	0.00
10	6	1	121	47.11	0.00	0.11	0.56	0.00	0.00	0.11	5.29	0.00	0.00	0.00
11	6	1	121	47.11	0.00	0.00	0.00	0.00	0.11	0.79	64.75			
12	6	1	121	47.11	888.									
1	6	1	141	47.31	0.62	0.10	0.00	0.00	0.00	0.00	0.00	0.42	0.10	0.83
2	6	1	141	47.31	0.00	0.42	0.21	1.14	0.00	0.42	0.83	0.00	0.52	1.46
3	6	1	141	47.31	0.00	0.31	0.21	0.00	0.00	0.10	0.00	0.00	0.52	0.00
4	6	1	141	47.31	1.87	0.10	0.42	0.42	0.21	0.62	0.31	0.00	0.52	0.21
5	6	1	141	47.31	6.45	0.00	1.98	0.10	0.00	0.00	0.00	0.31	0.10	0.00
6	6	1	141	47.31	0.00	0.83	0.10	0.31	1.77	0.00	0.00	0.21	0.94	0.00
7	6	1	141	47.31	0.21	0.21	0.62	0.83	0.21	0.21	0.00	1.35	0.31	0.10
8	6	1	141	47.31	0.10	0.31	0.00	0.31	0.00	0.42	0.21	0.31	0.00	0.31
9	6	1	141	47.31	0.00	0.10	0.00	0.10	0.00	2.08	0.00	0.00	0.31	0.00
10	6	1	141	47.31	0.00	0.42	0.21	0.00	0.00	0.31	6.45	0.00	0.00	0.00
11	6	1	141	47.31	0.00	0.00	0.00	0.00	0.42	0.42	57.13			
12	6	1	141	47.31	961.									
1	6	2	21	47.61	0.66	0.22	0.33	0.00	0.00	0.00	0.22	0.11	0.11	1.00
2	6	2	21	47.61	0.11	0.66	0.11	1.44	0.00	0.33	1.11	0.00	0.44	1.00
3	6	2	21	47.61	0.00	0.33	1.44	0.00	0.00	0.00	0.33	0.00	0.88	0.00
4	6	2	21	47.61	1.55	0.33	0.22	0.66	0.33	0.44	0.44	0.00	0.22	0.33
5	6	2	21	47.61	8.74	0.00	1.55	0.00	0.00	0.00	0.00	0.22	0.66	0.00
6	6	2	21	47.61	0.00	1.11	0.33	0.44	0.55	0.00	0.00	0.33	0.33	0.33
7	6	2	21	47.61	0.11	0.33	0.22	0.11	0.00	0.22	0.00	0.66	0.11	0.00
8	6	2	21	47.61	0.66	0.11	0.11	0.00	0.00	0.44	0.00	0.44	0.33	0.33
9	6	2	21	47.61	0.00	0.22	0.00	0.11	0.00	2.54	0.00	0.00	0.11	0.00
10	6	2	21	47.61	0.00	0.33	0.77	0.00	0.00	0.00	9.18	0.00	0.00	0.00
11	6	2	21	47.61	0.00	0.00	0.00	0.00	0.88	1.33	50.33			
12	6	2	21	47.61	904.									
1	6	2	41	47.81	0.62	0.21	0.00	0.00	0.00	0.00	0.00	0.31	0.21	1.24
2	6	2	41	47.81	0.21	0.41	0.00	1.65	0.00	0.72	2.17	0.00	0.52	0.93
3	6	2	41	47.81	0.00	0.10	2.59	0.00	0.00	0.00	0.21	0.00	0.83	0.10
4	6	2	41	47.81	1.03	0.72	0.10	1.14	0.72	0.62	0.21	0.00	0.00	0.41
5	6	2	41	47.81	8.89	0.00	1.86	0.21	0.00	0.00	0.00	0.83	0.21	0.00
6	6	2	41	47.81	0.00	0.83	0.00	0.93	1.14	0.00	0.00	0.21	0.10	0.00
7	6	2	41	47.81	0.10	0.21	0.52	0.00	0.21	0.62	0.00	0.93	0.00	0.21
8	6	2	41	47.81	0.10	0.72	0.00	0.10	0.00	1.03	0.00	0.31	0.10	0.00
9	6	2	41	47.81	0.00	0.00	0.00	0.10	0.00	3.00	0.00	0.00	0.00	0.00
10	6	2	41	47.81	0.00	0.52	0.93	0.00	0.00	0.00	10.44	0.00	0.00	0.00

11	6	2	41	47.81	0.00	0.00	0.00	0.00	0.93	0.41	45.29			
12	6	2	41	47.81	967.									
1	6	2	58	47.98	0.84	0.00	0.60	0.00	0.00	0.00	0.12	0.00	0.36	0.72
2	6	2	58	47.98	0.36	0.36	0.12	2.05	0.00	0.36	1.81	0.00	0.36	0.72
3	6	2	58	47.98	0.00	0.24	2.17	0.00	0.00	0.00	0.00	0.00	0.36	0.00
4	6	2	58	47.98	0.72	0.00	0.24	0.72	0.24	0.72	0.60	0.00	0.24	0.24
5	6	2	58	47.98	7.82	0.00	0.96	0.36	0.00	0.00	0.00	0.48	0.36	0.00
6	6	2	58	47.98	0.00	0.72	0.00	0.60	0.96	0.00	0.00	0.12	0.36	0.12
7	6	2	58	47.98	0.12	0.12	0.48	0.12	0.12	0.60	0.00	0.84	0.12	0.24
8	6	2	58	47.98	0.36	0.12	0.12	0.24	0.00	0.84	0.00	0.12	0.00	0.00
9	6	2	58	47.98	0.00	0.12	0.00	0.36	0.00	2.29	0.00	0.00	0.00	0.00
10	6	2	58	47.98	0.00	0.00	1.20	0.00	0.00	0.12	12.39	0.00	0.00	0.00
11	6	2	58	47.98	0.00	0.00	0.00	0.00	0.72	0.60	49.46			
12	6	2	58	47.98	831.									
1	6	2	101	48.41	0.22	0.11	0.11	0.00	0.00	0.11	0.44	0.11	0.22	1.32
2	6	2	101	48.41	0.99	0.55	0.11	1.65	0.00	0.66	2.97	0.00	0.55	1.21
3	6	2	101	48.41	0.00	0.88	2.31	0.00	0.00	0.00	0.22	0.00	0.66	0.00
4	6	2	101	48.41	1.32	0.44	0.11	1.43	0.22	0.11	1.10	0.11	0.11	0.55
5	6	2	101	48.41	8.03	0.00	1.54	0.11	0.00	0.00	0.00	0.11	0.88	0.00
6	6	2	101	48.41	0.00	0.55	0.00	0.66	1.10	0.00	0.00	0.44	0.88	0.00
7	6	2	101	48.41	0.22	0.44	0.00	0.00	0.44	0.11	0.00	0.33	0.00	0.22
8	6	2	101	48.41	0.33	0.00	0.00	0.22	0.00	0.33	0.33	0.00	0.11	0.00
9	6	2	101	48.41	0.00	0.22	0.00	0.33	0.00	2.64	0.00	0.00	0.33	0.00
10	6	2	101	48.41	0.00	0.55	1.21	0.00	0.00	0.00	9.57	0.00	0.00	0.00
11	6	2	101	48.41	0.00	0.00	0.00	0.00	0.44	0.22	46.20			
12	6	2	101	48.41	909.									
1	6	2	121	48.61	0.49	0.37	0.12	0.00	0.00	0.00	0.12	0.37	0.00	0.85
2	6	2	121	48.61	0.37	0.73	0.12	1.59	0.00	0.98	1.34	0.00	0.98	0.61
3	6	2	121	48.61	0.00	0.37	2.32	0.00	0.00	0.00	0.12	0.00	0.61	0.12
4	6	2	121	48.61	0.98	0.12	0.49	0.61	0.24	0.49	0.49	0.00	0.24	0.37
5	6	2	121	48.61	8.55	0.00	1.22	0.37	0.00	0.00	0.00	0.61	0.61	0.00
6	6	2	121	48.61	0.00	1.22	0.12	0.61	0.98	0.00	0.00	0.00	0.00	0.00
7	6	2	121	48.61	0.12	0.24	0.49	0.00	0.37	0.24	0.00	0.37	0.00	0.12
8	6	2	121	48.61	0.37	0.12	0.24	0.24	0.00	0.73	0.24	0.12	0.24	0.00
9	6	2	121	48.61	0.00	0.37	0.00	0.12	0.00	1.59	0.00	0.00	0.24	0.00
10	6	2	121	48.61	0.00	0.61	0.85	0.00	0.00	0.12	9.52	0.00	0.00	0.00
11	6	2	121	48.61	0.00	0.00	0.00	0.00	0.24	0.37	50.79			
12	6	2	121	48.61	819.									
1	6	2	141	48.81	0.53	0.21	0.32	0.00	0.00	0.00	0.00	0.53	0.11	0.53
2	6	2	141	48.81	0.00	0.32	0.21	1.05	0.00	0.63	2.00	0.00	0.32	1.16
3	6	2	141	48.81	0.00	0.11	3.05	0.00	0.00	0.00	0.42	0.00	0.84	0.32
4	6	2	141	48.81	1.26	0.32	0.11	0.63	0.11	1.05	0.84	0.00	0.21	0.95
5	6	2	141	48.81	9.58	0.11	1.26	0.21	0.00	0.00	0.00	0.53	1.26	0.00
6	6	2	141	48.81	0.00	0.84	0.11	0.21	1.68	0.00	0.00	0.00	0.11	0.00
7	6	2	141	48.81	0.21	0.42	0.11	0.00	0.53	0.11	0.00	0.95	0.32	0.00
8	6	2	141	48.81	0.42	0.21	0.11	0.00	0.00	1.05	0.00	0.11	0.11	0.21
9	6	2	141	48.81	0.00	0.32	0.11	0.11	0.00	2.00	0.00	0.00	0.11	0.00
10	6	2	141	48.81	0.00	0.84	1.16	0.00	0.00	0.32	12.53	0.00	0.00	0.00
11	6	2	141	48.81	0.11	0.00	0.00	0.00	0.74	0.53	42.32			
12	6	2	141	48.81	950.									
1	6	3	21	49.11	0.22	0.00	0.11	0.00	0.00	0.00	0.00	0.22	0.00	0.77
2	6	3	21	49.11	0.00	0.22	0.00	0.66	0.22	0.22	2.08	0.22	0.33	1.97
3	6	3	21	49.11	0.00	0.44	1.64	0.00	0.00	0.00	0.00	0.00	0.44	0.00
4	6	3	21	49.11	0.55	0.33	0.11	0.77	0.22	0.66	0.11	0.22	0.00	0.33
5	6	3	21	49.11	7.35	0.00	1.75	0.11	0.00	0.11	0.00	0.11	0.22	0.00

6	6	3	21	49.11	0.00	0.88	0.00	0.33	0.33	0.00	0.00	0.33	0.11	0.11
7	6	3	21	49.11	0.22	0.44	0.66	0.55	0.00	0.00	0.00	0.66	0.11	0.55
8	6	3	21	49.11	0.11	0.11	0.11	0.00	0.00	0.33	0.22	0.11	0.22	0.11
9	6	3	21	49.11	0.00	0.11	0.00	0.00	0.00	1.43	0.00	0.00	0.66	0.00
10	6	3	21	49.11	0.00	0.11	1.32	0.00	0.00	0.44	5.48	0.00	0.00	0.00
11	6	3	21	49.11	0.44	0.00	0.00	0.00	0.77	0.66	59.32			
12	6	3	21	49.11	912.									
1	6	3	41	49.31	1.62	0.12	0.12	0.00	0.00	0.00	0.00	0.12	0.00	1.00
2	6	3	41	49.31	0.00	0.25	0.00	2.00	0.00	0.37	1.62	0.00	0.37	0.87
3	6	3	41	49.31	0.00	0.12	2.87	0.00	0.00	0.25	0.12	0.00	0.50	0.12
4	6	3	41	49.31	0.50	0.12	0.12	1.50	0.12	0.62	0.50	0.00	0.12	0.37
5	6	3	41	49.31	7.87	0.12	1.00	0.12	0.00	0.12	0.00	0.25	0.75	0.00
6	6	3	41	49.31	0.00	0.50	0.00	0.12	1.25	0.00	0.00	0.62	0.25	0.00
7	6	3	41	49.31	0.25	0.50	0.12	0.12	0.00	0.37	0.00	1.50	0.12	0.00
8	6	3	41	49.31	0.00	0.62	0.12	0.00	0.00	0.62	0.12	0.12	0.00	0.25
9	6	3	41	49.31	0.00	0.37	0.00	0.00	0.00	2.87	0.00	0.00	0.25	0.00
10	6	3	41	49.31	0.00	0.12	0.50	0.00	0.00	0.62	9.74	0.00	0.00	0.00
11	6	3	41	49.31	0.25	0.00	0.00	0.00	0.37	0.87	49.69			
12	6	3	41	49.31	801.									
1	6	3	58	49.48	2.58	0.00	0.00	0.00	0.00	0.11	0.11	0.22	0.22	0.90
2	6	3	58	49.48	0.00	0.79	0.00	1.35	0.11	0.11	1.23	0.00	0.56	1.01
3	6	3	58	49.48	0.00	0.11	2.02	0.11	0.00	0.00	0.22	0.00	0.22	0.22
4	6	3	58	49.48	0.79	0.00	0.22	0.90	0.00	0.45	0.22	0.00	0.00	0.11
5	6	3	58	49.48	7.18	0.00	2.02	0.00	0.00	0.00	0.00	0.79	0.34	0.00
6	6	3	58	49.48	0.00	0.34	0.00	0.00	0.79	0.00	0.00	0.11	0.34	0.00
7	6	3	58	49.48	0.11	0.22	0.34	0.45	0.45	0.34	0.00	0.79	0.22	0.11
8	6	3	58	49.48	0.34	1.12	0.00	0.00	0.00	0.34	0.11	0.34	0.00	0.11
9	6	3	58	49.48	0.00	0.22	0.00	0.56	0.00	1.35	0.00	0.00	0.34	0.00
10	6	3	58	49.48	0.00	0.11	0.00	0.00	0.11	0.34	6.40	0.00	0.00	0.00
11	6	3	58	49.48	0.11	0.00	0.00	0.00	0.45	1.35	56.45			
12	6	3	58	49.48	891.									
1	6	3	101	49.91	0.61	0.00	0.00	0.00	0.00	0.30	0.00	0.10	0.20	0.30
2	6	3	101	49.91	0.00	0.30	0.00	1.02	0.10	0.51	1.12	0.00	0.81	0.20
3	6	3	101	49.91	0.00	0.20	1.32	0.00	0.00	0.00	0.00	0.00	0.41	0.10
4	6	3	101	49.91	1.73	0.10	0.00	0.51	0.20	0.51	0.30	0.00	0.10	0.30
5	6	3	101	49.91	7.62	0.00	1.63	0.20	0.00	0.00	0.00	0.51	0.30	0.00
6	6	3	101	49.91	0.00	0.71	0.00	0.61	1.83	0.00	0.00	0.20	0.20	0.00
7	6	3	101	49.91	0.20	0.30	0.41	0.10	0.20	0.00	0.00	0.91	0.20	0.20
8	6	3	101	49.91	0.41	1.02	0.10	0.00	0.00	0.81	0.00	0.30	0.00	0.20
9	6	3	101	49.91	0.00	0.10	0.00	0.00	0.00	2.64	0.00	0.00	0.00	0.00
10	6	3	101	49.91	0.00	0.61	0.41	0.00	0.00	0.20	8.64	0.00	0.10	0.00
11	6	3	101	49.91	0.20	0.00	0.00	0.00	0.41	0.51	55.59			
12	6	3	101	49.91	984.									
1	6	3	121	50.11	0.43	0.21	0.21	0.00	0.11	0.00	0.00	0.11	0.21	0.64
2	6	3	121	50.11	0.00	1.17	0.00	1.17	0.00	0.32	1.07	0.00	0.85	0.21
3	6	3	121	50.11	0.00	0.43	2.88	0.00	0.00	0.11	0.11	0.00	0.43	0.21
4	6	3	121	50.11	1.39	0.11	0.21	0.96	0.32	0.53	0.64	0.11	0.43	0.85
5	6	3	121	50.11	8.86	0.00	0.85	0.11	0.00	0.00	0.00	0.32	0.53	0.00
6	6	3	121	50.11	0.00	0.32	0.00	0.43	1.07	0.00	0.00	0.11	0.11	0.11
7	6	3	121	50.11	0.32	0.43	0.43	0.43	0.53	0.21	0.00	0.11	0.43	0.75
8	6	3	121	50.11	0.53	0.11	0.11	0.11	0.11	0.85	0.32	0.64	0.00	0.21
9	6	3	121	50.11	0.00	0.43	0.00	0.21	0.00	3.09	0.00	0.00	0.11	0.00
10	6	3	121	50.11	0.00	0.43	0.32	0.00	0.00	0.11	6.40	0.00	0.00	0.00
11	6	3	121	50.11	0.00	0.00	0.00	0.00	0.64	0.64	51.76			
12	6	3	121	50.11	937.									

1	6	3	141	50.31	0.86	0.00	0.12	0.00	0.00	0.25	0.00	0.00	0.49	0.99
2	6	3	141	50.31	0.00	0.37	0.00	1.11	0.00	0.12	0.86	0.00	0.49	0.49
3	6	3	141	50.31	0.00	0.00	2.47	0.00	0.00	0.00	0.25	0.00	0.74	0.12
4	6	3	141	50.31	0.74	0.62	0.25	0.49	0.12	0.37	0.49	0.00	0.12	0.00
5	6	3	141	50.31	6.42	0.00	1.73	0.49	0.00	0.00	0.00	0.37	0.12	0.00
6	6	3	141	50.31	0.00	0.74	0.12	0.62	0.62	0.00	0.00	0.25	0.00	0.00
7	6	3	141	50.31	0.12	0.37	0.37	0.00	0.25	0.12	0.00	0.62	0.37	0.99
8	6	3	141	50.31	0.12	1.11	0.12	0.00	0.12	0.49	0.12	0.49	0.00	0.12
9	6	3	141	50.31	0.00	0.25	0.00	0.25	0.00	1.98	0.00	0.00	0.12	0.00
10	6	3	141	50.31	0.00	0.49	0.37	0.00	0.00	0.12	6.79	0.00	0.00	0.00
11	6	3	141	50.31	0.00	0.00	0.00	0.00	0.49	0.49	58.27			
12	6	3	141	50.31	810.									
1	6	4	21	50.61	1.24	0.34	0.00	0.00	0.00	0.00	0.11	0.22	0.00	1.12
2	6	4	21	50.61	0.00	0.45	0.00	1.69	0.00	0.11	1.12	0.00	0.67	1.24
3	6	4	21	50.61	0.00	0.11	1.80	0.00	0.00	0.11	0.22	0.00	0.34	0.11
4	6	4	21	50.61	0.90	0.22	0.34	0.56	0.22	0.11	0.00	0.00	0.34	0.45
5	6	4	21	50.61	4.72	0.00	2.47	0.67	0.00	0.00	0.00	0.11	0.34	0.00
6	6	4	21	50.61	0.11	1.01	0.00	0.67	0.90	0.00	0.00	0.45	0.56	0.11
7	6	4	21	50.61	1.01	0.45	0.67	0.34	0.34	0.22	0.00	0.22	0.00	0.56
8	6	4	21	50.61	0.34	0.67	0.00	0.11	0.00	0.67	0.11	0.56	0.00	0.11
9	6	4	21	50.61	0.00	0.34	0.00	0.34	0.00	1.91	0.00	0.00	0.34	0.00
10	6	4	21	50.61	0.00	0.11	0.00	0.00	0.00	0.34	4.27	0.00	0.00	0.00
11	6	4	21	50.61	0.00	0.00	0.00	0.00	0.34	1.01	58.27			
12	6	4	21	50.61	889.									
1	6	4	41	50.81	0.34	0.11	0.23	0.00	0.00	0.00	0.00	0.00	0.11	0.11
2	6	4	41	50.81	0.00	0.11	0.00	0.91	0.00	0.23	0.68	0.00	0.34	0.91
3	6	4	41	50.81	0.00	0.23	0.91	0.00	0.00	0.00	0.11	0.00	0.11	0.11
4	6	4	41	50.81	0.34	0.11	0.23	0.45	0.00	0.00	0.11	0.00	0.00	0.91
5	6	4	41	50.81	3.74	0.00	3.06	0.23	0.00	0.00	0.00	0.00	0.23	0.00
6	6	4	41	50.81	0.00	0.45	0.00	0.11	0.68	0.00	0.00	0.34	0.34	0.11
7	6	4	41	50.81	0.11	0.23	0.34	0.23	0.34	0.11	0.00	1.59	0.23	0.79
8	6	4	41	50.81	0.00	0.79	0.23	0.00	0.00	0.57	0.23	0.11	0.11	0.23
9	6	4	41	50.81	0.00	0.23	0.00	0.00	0.00	1.02	0.00	0.00	0.23	0.00
10	6	4	41	50.81	0.00	0.00	0.00	0.00	0.00	0.23	4.20	0.00	0.00	0.00
11	6	4	41	50.81	0.00	0.00	0.00	0.00	0.57	0.91	69.39			
12	6	4	41	50.81	882.									
1	6	4	58	50.98	0.65	0.22	0.11	0.00	0.00	0.00	0.00	0.22	0.65	0.65
2	6	4	58	50.98	0.00	0.44	0.11	0.98	0.00	0.33	1.85	0.00	0.98	1.42
3	6	4	58	50.98	0.00	0.11	2.72	0.00	0.00	0.00	0.11	0.00	0.22	0.22
4	6	4	58	50.98	0.98	0.44	0.00	1.63	0.22	0.33	0.33	0.00	0.65	0.87
5	6	4	58	50.98	7.41	0.00	1.63	0.76	0.00	0.00	0.00	0.65	0.44	0.00
6	6	4	58	50.98	0.00	0.22	0.00	0.33	1.53	0.00	0.00	0.00	0.65	0.22
7	6	4	58	50.98	0.11	0.33	0.22	0.22	0.54	0.11	0.00	0.98	0.22	0.76
8	6	4	58	50.98	0.11	0.44	0.00	0.00	0.00	0.76	0.00	0.11	0.00	0.11
9	6	4	58	50.98	0.00	0.44	0.00	0.11	0.00	1.96	0.00	0.00	0.22	0.00
10	6	4	58	50.98	0.00	0.00	0.22	0.00	0.00	0.22	7.19	0.00	0.00	0.00
11	6	4	58	50.98	0.11	0.00	0.00	0.00	0.76	0.76	51.74			
12	6	4	58	50.98	918.									
1	6	4	101	51.41	0.95	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.11	0.53
2	6	4	101	51.41	0.00	0.00	0.00	1.91	0.00	0.42	0.85	0.00	0.53	1.06
3	6	4	101	51.41	0.00	0.21	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	6	4	101	51.41	0.21	0.21	0.32	0.00	0.00	0.74	0.00	0.00	0.00	0.85
5	6	4	101	51.41	4.56	0.00	2.55	0.00	0.00	0.00	0.00	0.42	0.32	0.00
6	6	4	101	51.41	0.00	0.21	0.00	1.06	1.27	0.00	0.00	0.42	0.53	0.11
7	6	4	101	51.41	0.11	0.32	0.74	0.32	0.21	0.11	0.00	0.74	0.00	0.21

8	6	4	101	51.41	0.74	0.74	0.11	0.00	0.00	0.53	0.11	0.85	0.21	0.11
9	6	4	101	51.41	0.00	0.21	0.00	0.11	0.00	2.01	0.00	0.00	0.21	0.00
10	6	4	101	51.41	0.00	0.21	0.11	0.00	0.00	0.00	3.71	0.00	0.00	0.00
11	6	4	101	51.41	0.00	0.00	0.00	0.00	0.21	0.53	64.69			
12	6	4	101	51.41	943.									
1	6	4	121	51.61	1.72	0.22	0.11	0.00	0.00	0.11	0.22	0.11	0.32	0.75
2	6	4	121	51.61	0.00	0.54	0.11	1.83	0.11	0.22	1.18	0.00	0.97	0.75
3	6	4	121	51.61	0.00	0.43	2.37	0.11	0.00	0.11	0.11	0.00	0.43	0.00
4	6	4	121	51.61	0.65	0.11	0.65	0.65	0.00	0.32	0.00	0.00	0.11	0.32
5	6	4	121	51.61	4.41	0.00	1.51	0.11	0.00	0.11	0.00	0.43	0.32	0.00
6	6	4	121	51.61	0.00	0.75	0.00	0.86	1.40	0.00	0.00	0.22	0.32	0.00
7	6	4	121	51.61	0.65	0.11	1.08	0.32	0.11	0.11	0.00	1.83	0.54	0.97
8	6	4	121	51.61	0.22	1.29	0.22	0.00	0.00	0.43	0.11	0.32	0.00	0.43
9	6	4	121	51.61	0.00	0.32	0.00	0.43	0.00	3.23	0.00	0.00	0.54	0.00
10	6	4	121	51.61	0.00	0.22	0.32	0.00	0.00	0.11	2.80	0.00	0.00	0.00
11	6	4	121	51.61	0.11	0.00	0.00	0.00	0.22	0.54	56.45			
12	6	4	121	51.61	930.									
1	6	4	141	51.81	1.01	0.00	0.18	0.09	0.09	0.37	0.09	0.00	0.37	0.55
2	6	4	141	51.81	0.00	0.28	0.00	0.83	0.00	0.28	1.01	0.00	0.37	0.64
3	6	4	141	51.81	0.00	0.73	0.46	0.09	0.00	0.18	0.28	0.00	0.46	0.00
4	6	4	141	51.81	0.73	0.18	0.09	0.28	0.37	0.28	0.00	0.00	0.18	1.65
5	6	4	141	51.81	3.58	0.18	1.83	0.09	0.00	0.09	0.00	0.37	0.18	0.00
6	6	4	141	51.81	0.00	1.19	0.09	0.00	1.10	0.00	0.00	0.09	0.28	0.00
7	6	4	141	51.81	0.73	0.00	2.11	0.28	0.00	0.18	0.00	2.11	0.92	0.46
8	6	4	141	51.81	0.09	0.83	0.09	0.00	0.00	0.28	0.37	0.55	0.00	0.00
9	6	4	141	51.81	0.00	0.18	0.00	0.00	0.00	1.93	0.00	0.00	0.64	0.00
10	6	4	141	51.81	0.00	0.28	0.09	0.00	0.00	0.09	2.29	0.00	0.00	0.00
11	6	4	141	51.81	0.00	0.00	0.00	0.00	0.18	0.18	63.94			
12	6	4	141	51.81	1090.									
1	6	5	21	52.11	0.98	0.00	0.11	0.00	0.00	0.11	0.00	0.00	0.87	0.76
2	6	5	21	52.11	0.00	0.22	0.00	0.87	0.00	0.22	1.08	0.00	0.98	0.98
3	6	5	21	52.11	0.00	0.54	0.43	0.00	0.00	0.11	0.43	0.00	0.33	0.00
4	6	5	21	52.11	0.76	0.22	0.22	0.43	0.65	0.22	0.22	0.22	0.22	1.19
5	6	5	21	52.11	7.80	0.11	2.93	0.00	0.00	0.00	0.00	0.43	0.00	0.00
6	6	5	21	52.11	0.76	0.87	0.11	0.33	1.41	0.00	0.00	0.33	0.65	0.22
7	6	5	21	52.11	0.76	0.11	0.98	0.33	0.54	0.00	0.00	2.06	0.33	0.22
8	6	5	21	52.11	0.11	0.33	0.11	0.11	0.11	1.30	0.33	0.22	0.11	0.43
9	6	5	21	52.11	0.00	0.11	0.00	0.11	0.00	3.03	0.00	0.00	0.33	0.00
10	6	5	21	52.11	0.00	0.65	0.00	0.00	0.11	0.33	5.63	0.00	0.00	0.00
11	6	5	21	52.11	0.00	0.00	0.00	0.00	0.00	0.43	51.57			
12	6	5	21	52.11	923.									
1	6	5	41	52.31	0.00	0.59	0.00	0.00	0.00	0.35	0.12	0.00	0.24	0.83
2	6	5	41	52.31	0.00	0.24	0.12	1.65	0.24	0.00	2.12	0.00	0.71	0.71
3	6	5	41	52.31	0.00	0.71	1.06	0.00	0.00	0.00	0.35	0.00	0.12	0.12
4	6	5	41	52.31	0.94	0.12	0.12	0.71	0.47	1.30	0.83	0.00	0.00	1.06
5	6	5	41	52.31	7.43	0.00	2.83	0.00	0.00	0.00	0.00	0.94	0.12	0.00
6	6	5	41	52.31	0.00	1.30	0.00	0.35	1.77	0.00	0.00	0.12	0.83	0.12
7	6	5	41	52.31	0.35	0.35	1.89	0.12	0.71	0.24	0.00	2.12	0.00	1.30
8	6	5	41	52.31	0.35	0.00	0.35	0.12	0.00	0.71	0.00	0.35	0.00	0.12
9	6	5	41	52.31	0.00	0.24	0.12	0.24	0.12	3.42	0.00	0.00	0.12	0.00
10	6	5	41	52.31	0.00	0.24	0.59	0.00	0.12	0.00	5.90	0.00	0.00	0.00
11	6	5	41	52.31	0.00	0.00	0.00	0.00	0.35	0.12	47.76			
12	6	5	41	52.31	848.									
1	6	5	58	52.48	0.65	0.55	0.18	0.00	0.00	0.09	0.09	0.09	0.65	0.46
2	6	5	58	52.48	0.00	0.18	0.37	1.66	0.09	0.09	0.92	0.00	0.46	1.48

3	6	5	58	52.48	0.00	0.18	0.65	0.00	0.00	0.09	0.37	0.18	0.28	0.37
4	6	5	58	52.48	0.92	0.18	0.09	0.37	0.09	0.65	0.55	0.00	0.18	0.37
5	6	5	58	52.48	5.81	0.28	1.66	0.28	0.00	0.00	0.00	0.55	0.18	0.00
6	6	5	58	52.48	0.00	0.65	0.09	0.28	1.01	0.00	0.00	0.00	0.74	0.18
7	6	5	58	52.48	0.46	0.09	1.29	0.74	0.55	0.28	0.00	1.48	0.18	0.37
8	6	5	58	52.48	0.00	0.28	0.37	0.00	0.00	1.01	0.18	0.18	0.18	0.18
9	6	5	58	52.48	0.00	0.28	0.00	0.18	0.00	3.14	0.00	0.00	0.28	0.00
10	6	5	58	52.48	0.00	0.37	0.18	0.00	0.00	0.18	5.17	0.00	0.00	0.00
11	6	5	58	52.48	0.00	0.00	0.00	0.00	0.18	0.18	56.73			
12	6	5	58	52.48	1084.									
1	6	5	101	52.91	0.47	0.00	0.12	0.00	0.00	0.12	0.12	0.00	0.81	0.47
2	6	5	101	52.91	0.00	0.58	0.00	3.03	0.00	0.12	3.14	0.00	0.58	1.05
3	6	5	101	52.91	0.00	0.23	0.58	0.12	0.00	0.12	0.23	0.12	0.47	0.00
4	6	5	101	52.91	0.70	0.12	0.00	0.47	0.70	0.81	0.47	0.00	0.00	1.98
5	6	5	101	52.91	8.96	0.00	1.16	0.00	0.00	0.12	0.00	0.58	0.35	0.00
6	6	5	101	52.91	0.00	0.70	0.12	0.23	1.75	0.00	0.00	0.00	0.12	0.12
7	6	5	101	52.91	0.47	0.47	1.40	0.23	0.12	0.12	0.00	0.93	0.23	0.35
8	6	5	101	52.91	0.12	0.12	0.35	0.00	0.00	0.47	0.00	0.00	0.00	0.23
9	6	5	101	52.91	0.00	0.12	0.12	0.12	0.00	1.86	0.00	0.00	0.47	0.00
10	6	5	101	52.91	0.00	0.12	0.35	0.00	0.12	0.23	7.80	0.00	0.00	0.00
11	6	5	101	52.91	0.00	0.00	0.00	0.00	0.58	0.12	50.52			
12	6	5	101	52.91	859.									
1	6	5	121	53.11	0.46	0.09	0.27	0.00	0.00	0.18	0.37	0.09	0.55	0.46
2	6	5	121	53.11	0.00	0.82	0.00	2.57	0.00	0.27	2.38	0.00	0.18	2.75
3	6	5	121	53.11	0.00	0.37	0.18	0.00	0.00	0.18	0.00	0.09	0.46	0.09
4	6	5	121	53.11	0.92	0.00	0.09	1.28	0.18	0.73	0.55	0.00	0.37	2.47
5	6	5	121	53.11	8.80	0.09	1.92	0.64	0.00	0.00	0.00	0.92	0.00	0.00
6	6	5	121	53.11	0.09	0.73	0.27	0.27	1.28	0.00	0.09	0.00	0.46	0.09
7	6	5	121	53.11	0.46	0.00	3.12	0.18	0.00	0.18	0.00	1.10	0.27	0.46
8	6	5	121	53.11	0.18	0.46	0.09	0.00	0.00	0.82	0.55	0.55	0.00	0.00
9	6	5	121	53.11	0.00	0.27	0.00	0.09	0.00	2.66	0.00	0.00	0.64	0.00
10	6	5	121	53.11	0.00	0.82	0.37	0.00	0.09	0.00	6.23	0.00	0.18	0.00
11	6	5	121	53.11	0.00	0.00	0.00	0.00	0.18	0.55	44.36			
12	6	5	121	53.11	1091.									
1	6	5	141	53.31	0.49	0.00	0.00	0.12	0.00	0.12	0.49	0.00	0.49	0.61
2	6	5	141	53.31	0.00	0.24	0.00	1.09	0.00	0.49	3.40	0.00	0.24	1.46
3	6	5	141	53.31	0.00	0.73	0.61	0.12	0.00	0.73	0.00	0.00	0.36	0.00
4	6	5	141	53.31	0.97	0.36	0.49	0.49	0.49	0.49	0.24	0.00	0.24	0.85
5	6	5	141	53.31	11.54	0.00	1.70	0.12	0.00	0.00	0.00	0.12	0.12	0.00
6	6	5	141	53.31	0.00	0.85	0.00	0.24	1.70	0.00	0.00	0.12	0.12	0.00
7	6	5	141	53.31	0.36	0.12	1.46	0.36	0.61	0.12	0.00	2.07	0.12	0.24
8	6	5	141	53.31	0.12	0.85	0.12	0.12	0.00	0.49	0.00	0.12	0.00	0.00
9	6	5	141	53.31	0.00	0.36	0.00	0.12	0.00	3.89	0.00	0.00	0.12	0.00
10	6	5	141	53.31	0.00	0.00	0.61	0.00	0.00	0.00	7.17	0.00	0.12	0.00
11	6	5	141	53.31	0.00	0.00	0.00	0.00	0.12	0.36	46.78			
12	6	5	141	53.31	823.									
1	6	6	21	53.61	0.33	0.11	0.43	0.00	0.00	0.00	0.43	0.00	0.98	0.43
2	6	6	21	53.61	0.00	0.87	0.22	2.06	0.11	0.43	1.30	0.00	0.65	0.54
3	6	6	21	53.61	0.00	0.65	0.76	0.11	0.00	0.00	0.22	0.00	0.43	0.11
4	6	6	21	53.61	1.85	0.22	0.22	0.76	0.98	0.33	0.00	0.00	0.33	1.74
5	6	6	21	53.61	9.55	0.11	1.95	0.33	0.00	0.00	0.00	1.09	0.11	0.00
6	6	6	21	53.61	0.00	0.98	0.00	0.54	0.33	0.00	0.00	0.00	0.54	0.11
7	6	6	21	53.61	0.76	0.11	0.87	0.33	0.00	0.22	0.00	1.63	0.00	0.76
8	6	6	21	53.61	0.33	0.11	0.00	0.00	0.00	0.65	0.11	0.11	0.22	0.11
9	6	6	21	53.61	0.00	0.22	0.11	0.11	0.00	2.28	0.00	0.00	0.54	0.00

10	6	6	21	53.61	0.00	0.22	0.22	0.00	0.00	0.22	7.93	0.11	0.00	0.00
11	6	6	21	53.61	0.00	0.00	0.00	0.00	0.33	0.33	47.88			
12	6	6	21	53.61	921.									
1	6	6	41	53.81	0.35	0.12	0.12	0.00	0.00	0.00	0.12	0.00	1.16	0.35
2	6	6	41	53.81	0.12	0.46	0.00	1.28	0.12	0.12	1.97	0.00	0.12	0.46
3	6	6	41	53.81	0.00	0.46	0.58	0.00	0.00	0.12	0.00	0.00	0.81	0.12
4	6	6	41	53.81	1.39	0.58	0.12	0.93	0.81	0.46	0.12	0.00	0.35	1.51
5	6	6	41	53.81	9.06	0.00	0.70	0.35	0.00	0.00	0.00	0.58	0.23	0.00
6	6	6	41	53.81	0.23	1.28	0.35	0.35	0.81	0.00	0.00	0.00	0.81	0.12
7	6	6	41	53.81	0.12	0.12	1.63	0.12	0.00	0.12	0.00	0.46	0.23	0.58
8	6	6	41	53.81	0.23	0.12	0.23	0.00	0.00	0.23	0.00	0.46	0.12	0.12
9	6	6	41	53.81	0.00	0.23	0.00	0.00	0.00	1.28	0.00	0.00	0.12	0.00
10	6	6	41	53.81	0.00	0.35	1.05	0.00	0.00	0.00	6.27	0.00	0.00	0.00
11	6	6	41	53.81	0.00	0.00	0.00	0.00	0.35	0.23	55.17			
12	6	6	41	53.81	861.									
1	6	6	58	53.98	0.47	0.12	0.12	0.00	0.00	0.24	0.36	0.00	0.83	0.47
2	6	6	58	53.98	0.00	0.47	0.00	1.78	0.12	0.12	1.90	0.00	0.24	2.14
3	6	6	58	53.98	0.00	0.71	0.36	0.00	0.00	0.24	0.24	0.00	0.71	0.59
4	6	6	58	53.98	0.59	0.00	0.00	1.07	0.83	0.59	0.24	0.00	0.36	1.07
5	6	6	58	53.98	11.74	0.00	2.25	0.00	0.00	0.12	0.00	1.07	0.36	0.00
6	6	6	58	53.98	0.00	0.95	0.00	0.24	0.59	0.00	0.00	0.00	0.36	0.00
7	6	6	58	53.98	0.59	0.24	1.66	0.36	0.36	0.00	0.00	0.95	0.24	0.12
8	6	6	58	53.98	0.00	0.71	0.47	0.00	0.00	0.59	0.24	0.24	0.00	0.00
9	6	6	58	53.98	0.00	0.47	0.12	0.47	0.00	1.78	0.00	0.00	0.24	0.00
10	6	6	58	53.98	0.00	0.00	0.36	0.00	0.12	0.12	2.97	0.00	0.00	0.00
11	6	6	58	53.98	0.00	0.00	0.00	0.00	0.12	0.12	51.72			
12	6	6	58	53.98	843.									
1	6	6	102	54.47	0.21	0.11	0.11	0.00	0.00	0.00	0.11	0.00	0.86	0.86
2	6	6	102	54.47	0.00	0.21	0.00	1.50	0.00	0.54	1.83	0.00	0.43	1.29
3	6	6	102	54.47	0.00	1.07	0.32	0.00	0.00	0.00	0.00	0.00	0.75	0.32
4	6	6	102	54.47	0.75	0.11	0.21	0.75	0.43	0.54	0.54	0.00	0.43	1.18
5	6	6	102	54.47	9.77	0.00	1.29	0.43	0.00	0.11	0.00	1.18	0.75	0.00
6	6	6	102	54.47	0.21	1.50	0.11	0.43	0.97	0.00	0.00	0.00	0.21	0.11
7	6	6	102	54.47	0.75	0.64	2.15	0.21	0.11	0.00	0.00	0.75	0.11	0.64
8	6	6	102	54.47	0.32	0.32	0.21	0.00	0.00	0.11	0.11	0.43	0.00	0.11
9	6	6	102	54.47	0.00	0.11	0.11	0.32	0.00	2.79	0.00	0.00	0.32	0.00
10	6	6	102	54.47	0.00	0.11	0.32	0.00	0.00	0.00	5.69	0.00	0.21	0.00
11	6	6	102	54.47	0.00	0.00	0.00	0.00	0.00	0.11	50.38			
12	6	6	102	54.47	931.									
1	6	6	121	54.61	0.24	0.00	0.12	0.00	0.00	0.00	0.00	0.12	0.24	0.36
2	6	6	121	54.61	0.00	0.36	0.00	2.76	0.12	0.48	1.44	0.00	0.24	1.56
3	6	6	121	54.61	0.00	0.36	1.44	0.00	0.00	0.00	0.00	0.00	0.24	0.12
4	6	6	121	54.61	1.44	0.00	0.36	0.96	1.20	0.12	0.72	0.00	0.72	0.84
5	6	6	121	54.61	11.03	0.12	0.96	0.24	0.00	0.00	0.00	1.20	0.96	0.00
6	6	6	121	54.61	0.00	0.36	0.36	0.36	1.20	0.00	0.12	0.00	0.12	0.00
7	6	6	121	54.61	0.48	0.72	1.44	0.12	0.12	0.12	0.00	0.48	0.00	0.12
8	6	6	121	54.61	0.24	0.36	0.24	0.00	0.00	0.24	0.00	0.24	0.00	0.00
9	6	6	121	54.61	0.00	0.00	0.00	0.24	0.00	2.16	0.00	0.00	0.24	0.00
10	6	6	121	54.61	0.00	0.24	0.48	0.00	0.12	0.00	4.68	0.00	0.00	0.00
11	6	6	121	54.61	0.00	0.00	0.00	0.00	0.12	0.60	52.64			
12	6	6	121	54.61	834.									
1	6	6	141	54.81	0.62	0.00	0.16	0.00	0.00	0.08	0.16	0.00	0.31	0.55
2	6	6	141	54.81	0.08	0.23	0.00	1.71	0.00	0.16	1.40	0.00	0.39	1.32
3	6	6	141	54.81	0.00	0.23	0.47	0.00	0.00	0.08	0.16	0.00	0.31	0.23
4	6	6	141	54.81	0.70	0.16	0.39	1.01	0.86	0.31	0.08	0.00	0.08	1.48

5	6	6	141	54.81	9.03	0.00	0.47	0.16	0.00	0.00	0.00	0.23	0.23	0.00
6	6	6	141	54.81	0.00	0.39	0.00	0.23	1.71	0.00	0.00	0.00	0.16	0.08
7	6	6	141	54.81	0.55	0.08	0.55	0.08	0.08	0.00	0.00	1.32	0.08	0.39
8	6	6	141	54.81	0.23	0.47	0.08	0.00	0.00	0.31	0.31	0.08	0.00	0.39
9	6	6	141	54.81	0.00	0.16	0.00	0.08	0.00	1.40	0.00	0.00	0.62	0.00
10	6	6	141	54.81	0.00	0.16	0.47	0.00	0.08	0.00	4.13	0.00	0.16	0.00
11	6	6	141	54.81	0.08	0.00	0.00	0.00	0.23	0.55	60.51			
12	6	6	141	54.81	1284.									
1	7	1	39	55.29	0.60	0.20	0.20	0.00	0.00	0.00	0.40	0.10	0.50	0.50
2	7	1	39	55.29	0.00	0.70	0.00	1.71	0.00	0.40	1.71	0.00	0.30	0.50
3	7	1	39	55.29	0.00	0.40	0.00	0.00	0.00	0.20	0.30	0.00	0.70	0.20
4	7	1	39	55.29	1.71	0.20	0.60	0.80	0.30	0.50	0.30	0.00	0.30	1.51
5	7	1	39	55.29	12.16	0.10	1.01	0.20	0.00	0.00	0.00	0.00	1.01	0.00
6	7	1	39	55.29	0.00	0.40	0.10	0.60	0.80	0.00	0.00	0.00	0.60	0.00
7	7	1	39	55.29	0.10	0.20	0.80	0.30	0.20	0.20	0.00	0.90	0.40	0.70
8	7	1	39	55.29	0.30	0.10	0.10	0.10	0.00	0.60	0.30	0.10	0.00	0.00
9	7	1	39	55.29	0.00	0.20	0.10	0.30	0.00	3.12	0.00	0.00	0.30	0.00
10	7	1	39	55.29	0.00	0.10	0.20	0.00	0.00	0.00	4.62	0.00	0.00	0.00
11	7	1	39	55.29	0.20	0.00	0.00	0.00	0.10	0.30	52.16			
12	7	1	39	55.29	995.									
1	7	1	61	55.80	0.22	0.00	0.33	0.00	0.00	0.11	0.00	0.00	0.11	0.22
2	7	1	61	55.80	0.11	0.11	0.00	1.31	0.22	0.22	1.53	0.00	0.44	1.20
3	7	1	61	55.80	0.00	0.22	0.77	0.00	0.00	0.11	0.11	0.00	0.33	0.00
4	7	1	61	55.80	1.10	0.00	0.22	0.55	0.00	0.22	0.00	0.00	0.00	0.66
5	7	1	61	55.80	7.89	0.00	2.74	0.11	0.00	0.00	0.00	0.22	0.55	0.00
6	7	1	61	55.80	0.11	0.44	0.11	0.11	0.77	0.00	0.00	0.22	0.00	0.11
7	7	1	61	55.80	0.11	0.44	0.77	0.33	0.33	0.00	0.00	0.88	0.11	0.66
8	7	1	61	55.80	0.11	0.33	0.00	0.00	0.00	0.33	0.11	0.22	0.11	0.11
9	7	1	61	55.80	0.00	0.22	0.00	0.11	0.00	3.40	0.00	0.00	0.55	0.00
10	7	1	61	55.80	0.00	0.33	0.44	0.00	0.00	0.33	5.04	0.00	0.00	0.11
11	7	1	61	55.80	0.44	0.00	0.00	0.00	0.22	0.33	59.80			
12	7	1	61	55.80	913.									
1	7	1	101	56.21	0.00	0.11	0.34	0.00	0.00	0.11	0.00	0.00	0.23	0.90
2	7	1	101	56.21	0.00	0.23	0.00	1.58	0.00	0.23	2.03	0.00	0.23	2.59
3	7	1	101	56.21	0.00	0.23	2.03	0.00	0.00	0.00	0.11	0.00	0.79	0.23
4	7	1	101	56.21	0.45	0.11	0.11	0.34	0.79	0.45	0.23	0.00	0.00	0.68
5	7	1	101	56.21	6.53	0.23	1.91	0.11	0.00	0.00	0.00	0.90	0.34	0.00
6	7	1	101	56.21	0.23	0.45	0.34	0.45	1.35	0.00	0.00	0.45	0.34	0.23
7	7	1	101	56.21	0.11	0.56	0.68	0.23	0.11	0.00	0.00	1.01	0.23	0.00
8	7	1	101	56.21	0.34	0.34	0.00	0.00	0.00	0.23	0.00	0.23	0.00	0.11
9	7	1	101	56.21	0.00	0.34	0.00	0.11	0.00	1.91	0.00	0.00	0.00	0.00
10	7	1	101	56.21	0.00	0.11	0.68	0.00	0.00	0.00	9.68	0.00	0.23	0.23
11	7	1	101	56.21	0.23	0.00	0.00	0.00	0.45	0.90	52.03			
12	7	1	101	56.21	888.									
1	7	1	121	56.41	0.85	0.21	0.32	0.00	0.00	0.00	0.00	0.11	0.32	0.32
2	7	1	121	56.41	0.00	0.64	0.00	2.01	0.00	0.00	1.06	0.00	0.21	2.01
3	7	1	121	56.41	0.00	0.21	1.27	0.00	0.00	0.00	0.00	0.00	0.74	0.42
4	7	1	121	56.41	0.64	0.00	0.42	0.64	0.21	0.42	0.00	0.00	0.00	0.42
5	7	1	121	56.41	9.11	0.11	2.44	0.00	0.00	0.00	0.00	0.32	0.11	0.00
6	7	1	121	56.41	0.00	0.11	0.32	0.32	1.48	0.00	0.00	0.21	0.11	0.11
7	7	1	121	56.41	0.11	0.42	0.64	0.42	0.11	0.42	0.00	0.95	0.42	0.32
8	7	1	121	56.41	0.00	0.95	0.11	0.00	0.00	0.53	0.00	0.64	0.00	0.00
9	7	1	121	56.41	0.00	0.74	0.00	0.32	0.00	3.07	0.00	0.00	0.42	0.00
10	7	1	121	56.41	0.00	0.21	0.85	0.00	0.11	0.21	8.69	0.00	0.00	0.53
11	7	1	121	56.41	0.11	0.00	0.00	0.00	0.42	0.42	49.68			

12	7 1	121	56.41	944.									
1	7 1	137	56.58	0.12	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.36	0.36
2	7 1	137	56.58	0.00	0.84	0.00	2.41	0.00	0.12	1.33	0.00	0.12	0.48
3	7 1	137	56.58	0.00	0.12	2.17	0.00	0.00	0.00	0.00	0.12	0.60	0.12
4	7 1	137	56.58	1.08	0.48	0.12	0.00	0.36	0.60	0.36	0.00	0.12	0.48
5	7 1	137	56.58	11.69	0.00	1.93	0.00	0.00	0.00	0.00	0.12	0.12	0.00
6	7 1	137	56.58	0.00	0.36	0.00	0.96	0.60	0.00	0.00	0.12	0.24	0.24
7	7 1	137	56.58	0.48	0.60	0.84	0.24	0.00	0.24	0.00	0.60	0.00	0.12
8	7 1	137	56.58	0.24	0.48	0.00	0.00	0.00	0.48	0.12	0.48	0.12	0.36
9	7 1	137	56.58	0.00	0.36	0.00	0.48	0.00	3.25	0.00	0.00	0.60	0.00
10	7 1	137	56.58	0.00	0.24	0.48	0.00	0.00	0.12	9.88	0.00	0.00	1.81
11	7 1	137	56.58	0.12	0.00	0.00	0.00	0.36	0.96	46.39			
12	7 1	137	56.58	830.									
1	7 2	21	56.92	0.51	0.10	0.00	0.00	0.00	0.00	0.00	0.10	0.31	0.31
2	7 2	21	56.92	0.00	1.13	0.00	2.37	0.10	0.21	1.13	0.00	0.21	2.27
3	7 2	21	56.92	0.00	0.00	1.85	0.10	0.00	0.00	0.10	0.00	0.72	0.00
4	7 2	21	56.92	0.82	0.00	0.51	0.62	0.10	0.21	0.31	0.00	0.00	0.72
5	7 2	21	56.92	6.49	0.31	1.85	0.10	0.00	0.00	0.00	0.41	0.31	0.00
6	7 2	21	56.92	0.10	0.41	0.10	1.03	0.82	0.00	0.00	0.21	0.21	0.31
7	7 2	21	56.92	0.10	0.72	0.21	0.10	0.21	0.10	0.00	1.03	0.21	0.31
8	7 2	21	56.92	0.10	0.51	0.10	0.00	0.00	0.62	0.10	0.31	0.00	0.10
9	7 2	21	56.92	0.00	0.21	0.00	0.72	0.00	3.81	0.00	0.00	0.10	0.00
10	7 2	21	56.92	0.00	0.00	1.13	0.00	0.00	0.31	7.00	0.00	0.00	2.06
11	7 2	21	56.92	0.00	0.00	0.00	0.00	0.21	0.93	51.18			
12	7 2	21	56.92	971.									
1	7 2	40	57.10	2.10	0.55	0.00	0.00	0.00	0.00	0.00	0.11	0.33	0.44
2	7 2	40	57.10	0.00	0.44	0.00	2.54	0.00	0.66	0.44	0.00	0.66	1.66
3	7 2	40	57.10	0.00	0.22	1.88	0.00	0.00	0.11	0.00	0.00	0.11	0.00
4	7 2	40	57.10	1.55	0.00	0.22	0.11	0.33	0.33	0.33	0.00	0.11	0.22
5	7 2	40	57.10	4.76	0.11	1.33	0.11	0.00	0.00	0.00	0.55	0.11	0.00
6	7 2	40	57.10	0.00	1.00	0.55	1.00	1.88	0.00	0.00	0.44	0.22	0.00
7	7 2	40	57.10	0.77	2.10	0.77	0.00	0.11	0.11	0.11	1.22	0.22	0.22
8	7 2	40	57.10	0.11	0.77	0.00	0.00	0.00	0.66	0.11	0.33	0.00	0.00
9	7 2	40	57.10	0.00	0.00	0.00	0.22	0.00	2.99	0.00	0.00	0.55	0.00
10	7 2	40	57.10	0.00	0.11	1.44	0.00	0.11	0.11	8.08	0.00	0.00	0.11
11	7 2	40	57.10	0.00	0.00	0.00	0.00	0.44	0.77	49.89			
12	7 2	40	57.10	904.									