

(A1)

3NN ES

ABCDEFGHIJK

A BDF BCDEFGHIJK
B ACD CDEFGHIJK
C BEI DEFGHIJK
D GEF DEFGHIJK
E HDI DFGHIJK
F GJD DFGHIJK
G FDH DFGHIJK
H EDG DFGHIJK
I EHC DFGHJK
J FGK DFGHK
K JGD DFGHK

(A2)

1NN CS

K K
J K KJ
I K KJI
H I KJIH
G H KJIH
F J KJIHF
E H KJIHFE
D E KJIHFED
C I KJIHFEDC
B C KJIHFEDCB
A B KJIHFEDCB

(A3)

Q=(6,7)

3NN σ_{to} TS: HEI => white

3NN σ_{to} ES: HDG => black

3NN σ_{to} CS: HEI => white

(B1)

BHMA	1:	a(0)	b(4)	c(5)	d(8)	e(12)	f(14)	g(16)	h(17)	i(18)	j(20)
BHMA	2:	a(0)	bc(4,5)		d(8)	e(12)	f(14)	g(16)	h(17)	i(18)	j(20)
BHMA	3:	a(0)	bc(4,5)		d(8)	e(12)	f(14)	gh(16,17)		i(18)	j(20)
BHMA	4:	a(0)	bc(4,5)		d(8)	e(12)	f(14)	ghi(16,17,18)			j(20)
BHMA	5:	a(0)	bc(4,5)		d(8)	ef(12,14)		ghi(16,17,18)			j(20)
BHMA	6:	a(0)	bc(4,5)		d(8)	efghi(12,14,16,17,18)					j(20)
BHMA	7:	a(0)	bc(4,5)		d(8)	efghij(12,14,16,17,18,20)					
BHMA	8:	a(0)	bcd(4,5,8)			efghij(12,14,16,17,18,20)					
BHMA	9:	abcd(0,4,5,8)				efghij(12,14,16,17,18,20)					
BHMA	10:	abcdefghij	(0,4,5,8)	12,14,16,17,18,20)							

(B2)

BHMA 1:	a(0)	b(4)	c(5)	d(8)	e(12)	f(14)	g(16)	h(17)	i(18)	j(20)
BHMA 2:	a(0)	bc(4,5)		d(8)	e(12)	f(14)	g(16)	h(17)	i(18)	j(20)
BHMA 3:	a(0)	bc(4,5)		d(8)	e(12)	f(14)	gh(16,17)		i(18)	j(20)
BHMA 4:	a(0)	bc(4,5)		d(8)	ef(12,14)		gh(16,17)		i(18)	j(20)
BHMA 5:	a(0)	bc(4,5)		d(8)	ef(12,14)		ghi(16,17,18)			j(20)
BHMA 6:	a(0)	bcd(4,5,8)			ef(12,14)		ghi(16,17,18)			j(20)
BHMA 7:	a(0)	bcd(4,5,8)			ef(12,14)		ghij(16,17,18,20)			
BHMA 8:		abcd(0,4,5,8)			ef(12,14)		ghij(16,17,18,20)			
BHMA 9:		abcd(0,4,5,8)			efghij(12,14,16,17,18,20)					
BHMA 10:		abcdefghij(0,4,5,8,12,14,16,17,18,20)								

(B3)

BHMA 1:	C1Centroid=15	C2Centroid=17	C3Centroid=19
ανάθεση σημείων:	C1(abcdefg)	C2(hi)	C3(j)
BHMA 2:	C1Centroid=8.43	C2Centroid=17.5	C3Centroid=20
ανάθεση σημείων:	C1(abcde)	C2(fghi)	C3(j)
BHMA 3:	C1Centroid=5.8	C2Centroid=16.25	C3Centroid=20
ανάθεση σημείων:	C1(abcd)	C2(efghi)	C3(j)
BHMA 4:	C1Centroid=4.25	C2Centroid=15.4	C3Centroid=20
ανάθεση σημείων:	C1(abcd)	C2(efgh)	C3(ij)
BHMA 5:	C1Centroid=4.25	C2Centroid=14.75	C3Centroid=19
ανάθεση σημείων:	C1(abcd)	C2(efg)	C3(hij)
BHMA 6:	C1Centroid=4.25	C2Centroid=14	C3Centroid=18.33
ανάθεση σημείων:	C1(abcd)	C2(efg)	C3(hij) ΔΕΝ ΥΠΑΡΧΕΙ ΑΛΛΑΓΗ

(B4)

eps=3, minpts=3

eps-neighborhood

a	a
b	bc
c	bcd
d	cd
e	ef
f	efgh
g	fghi
h	fghij
i	ghij
j	hij

%pa

CORE	cfghij
BORDER	bde
NOISE	a

Clusters

C1	= {bcd}
C2	= {efghij}