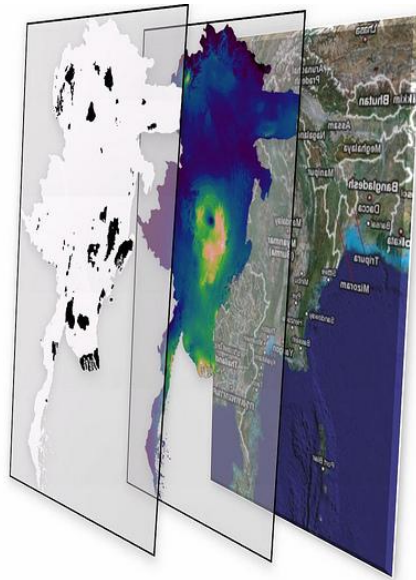


Ejercicio Consnet



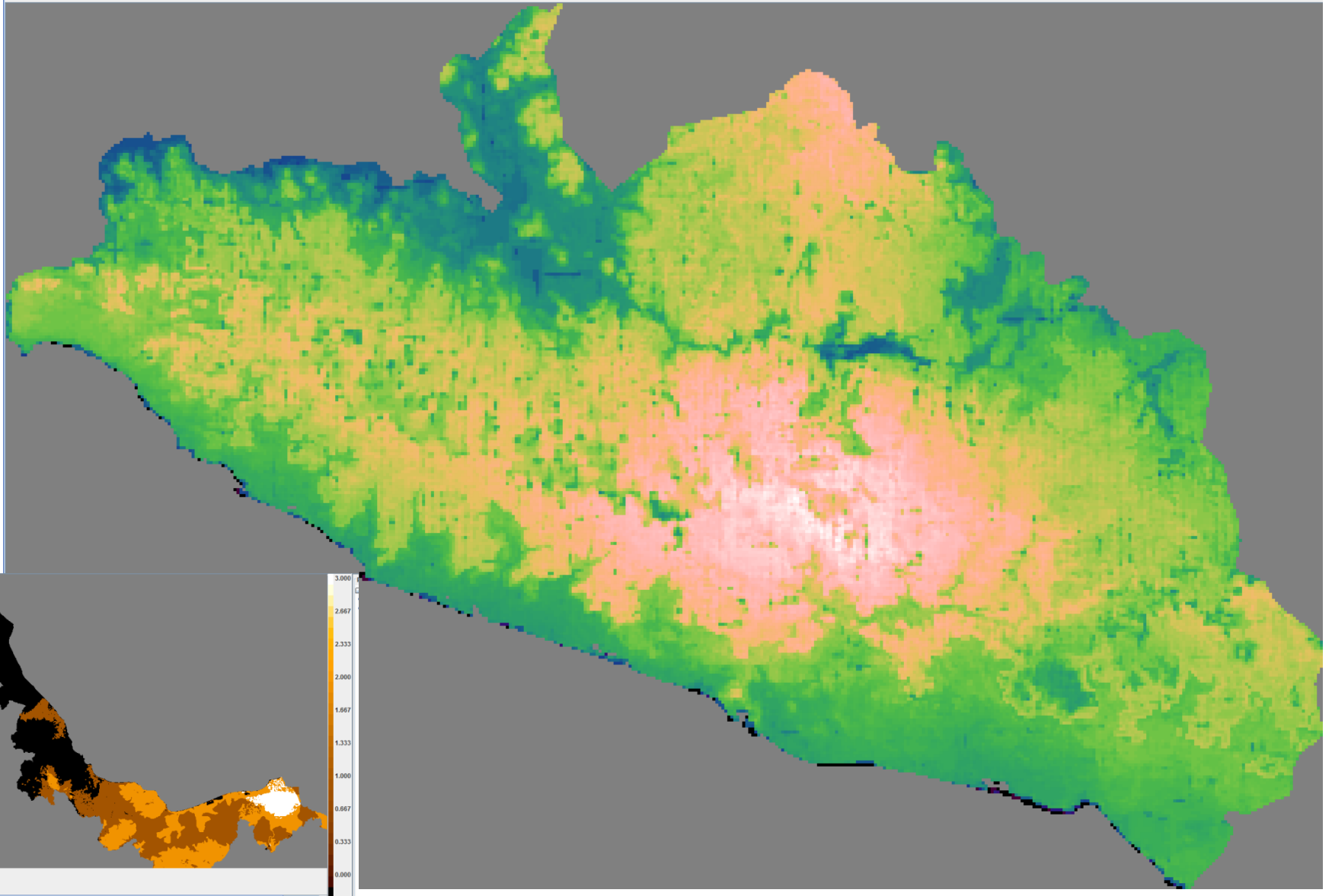
Rep file: Bloc de notas		Archivo	Edición	Formato	Ver	Ayuda	
316,1000,1000,0,0,amoretis_s,bcycladen_s,bgemmifer_s,bmarmoreus_s,bperplexus_s,ctruxi_s,cola_aura_s,coli_thal_s,coli_virg_s,colu_pass_s,crot_sulc_s,cyan_mira_s,cyan_sanb_exic_a_s,coemxic_a_s,cormexic_a_s,cryaltic_a_s,crygoldm_a_s,cynmexic_a_s,dipphill_a_s,s_crusav_s,crisreriatus_s,cvittatus_s,fruspator_s,gincomptus_s,gliccephalus_s,gomil							
1	2371680.125	1867336.125	0	0	0	0	0
2	2372680.125	1867336.125	0	0	0	0	0
3	2373680.125	1867336.125	0	0	0	1	0
4	2374680.125	1867336.125	0	0	0	1	0
5	2375680.125	1867336.125	0	1	0	1	0
6	2368680.125	1868336.125	0	0	0	0	0
7	2369680.125	1868336.125	0	0	0	0	0
8	2370680.125	1868336.125	0	0	0	1	0
9	2371680.125	1868336.125	0	0	0	1	1
10	2372680.125	1868336.125	0	0	0	1	1
11	2373680.125	1868336.125	0	0	1	0	1
12	2374680.125	1868336.125	0	0	1	0	1
13	2375680.125	1868336.125	0	0	1	0	1
14	2376680.125	1868336.125	0	0	1	0	1
15	2367680.125	1869336.125	0	0	0	0	0
16	2368680.125	1869336.125	0	0	0	0	0
17	2369680.125	1869336.125	0	0	1	0	1
18	2370680.125	1869336.125	0	0	1	0	1
19	2371680.125	1869336.125	0	0	1	0	1
20	2372680.125	1869336.125	0	0	1	0	1

Costos2: Bloc de notas										
Archivo	Edición	Formato	Ver	Ayuda						
FellID	Zonas_apf	veg_prim	veg_sec	Carreteras	ANP	ZU	SPT	EPI	Veg_inducida	
1	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	
3	1	0	1	0	0	0	0	0	0	
4	1	0	0	0	0	0	0	0	0	
5	1	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	
8	0	0	1	0	0	0	0	0	0	
9	0	0	1	0	0	0	0	0	0	
10	0	0	1	0	0	0	0	0	0	
11	1	0	1	0	0	0	0	0	0	
12	1	0	1	0	0	0	0	0	0	
13	1	0	1	0	0	0	0	0	0	
14	1	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	
16	1	0	0	0	0	0	0	0	0	
17	1	0	1	0	0	0	0	0	0	
18	0	0	1	0	0	0	0	0	0	
19	0	0	1	0	0	0	0	0	0	
20	0	0	1	0	0	0	0	0	0	
21	0	0	1	0	0	0	0	0	0	

Metas_I38: Bloc de notas				
Archivo	Edición	Formato	Ver	Ayuda
Surrogate	Alta	Baja	Criterios	
amoretli	652.8	81.6	81.6	
bocyladeni	351.6	43.95	43.95	
bsc	301.6	43.95	43.95	
bmarmore	25840.4	3230.05	3230.05	
bperplexus	20679.6	2584.95	5169.9	
ctrxus	76.8	9.6	19.2	
doaxaceas	4276	534.5	534.5	
dsantori	6580.8	822.6	822.6	
edictatus	913.4	128.3		
edixonii	1.6	0.2	1.2	
egguerreroensis	1.6	0.2	0.4	
ehobartsmithi	9463.6	1182.95	1182.95	
ejuantiane	385.2	48.15	96.3	
enannema	322.2	55.3	55.3	
emexicanus	575.8	71.1	71.1	
enitidus	21998.4	2749.8	2749.8	
eccidentalis	4.8	0.6	1.2	
eoimilemanus	315.2	39.4	39.4	
epinorum	45.6	5.7	34.2	
epitiosus	1640.5	1640.5	1640.65	
esmaragdina	360	45		
esumichrastii	501.6	62.7	62.7	
evocalis	58	7.25	7.25	
harbolicola	57.6	7.2	7.2	
heximia	872.8	109.1	109.1	
pamgus	2.4	3.96		
phelli	8645.2	1080.65	1080.65	
pshinctica	10174.4	1271.8	1271.8	
pcephalica	228	28.5	57	
pchryses	1.6	0.2	1.2	
pdancicolus	24286.4	3035.8	3035.8	
pergandus	24286.4	3035.8	3035.8	
pleonhardschu	1080.8	135.1	270.2	
pmkyter	23.2	2.9	23.2	

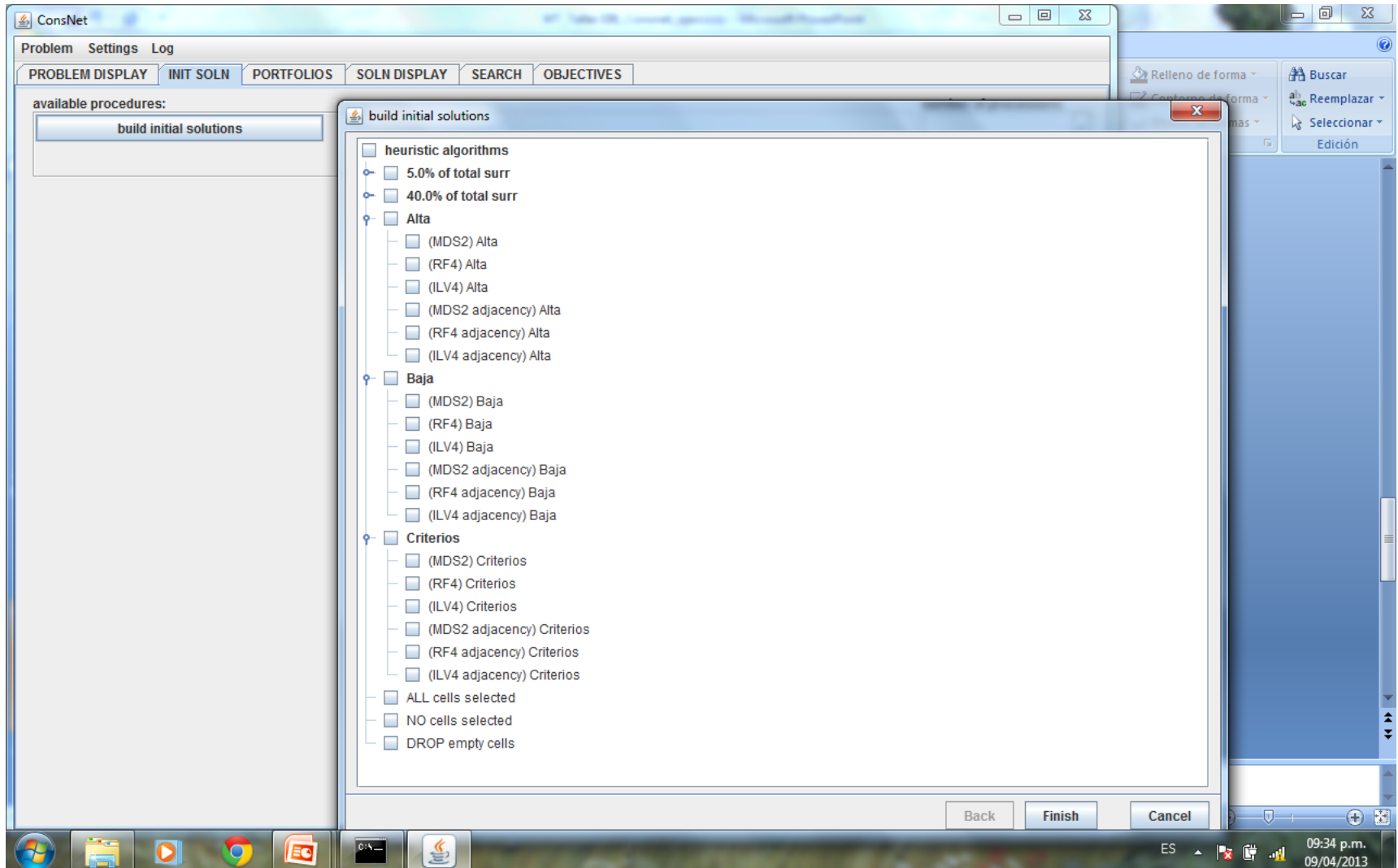
Sobreposición de modelos de distribución

“Mapa de riquezas”



1

Selección del algoritmo configuración inicial



Construcción del objetivo

The screenshot displays the ConsNet software interface. The main window has a menu bar with 'Problem', 'Settings', and 'Log'. Below the menu bar is a tabbed interface with 'PROBLEM DISPLAY', 'INIT SOLN', 'PORTFOLIOS', 'SOLN DISPLAY', 'SEARCH', and 'OBJECTIVES'. The 'OBJECTIVES' tab is active, showing a table with columns: save, rank, ID, nDeficientTargets, nCells, shape, totalPopulation, and nClusters. A 'new objective' dialog box is open in the center, titled 'new objective' with a close button (X). The dialog contains a section 'select a type of objective to build:' with four options: 'minimum area problem' (minimize the area subject to the constraint that the solution must satisfy a specific representation target), 'multi-criteria minimum area problem' (minimize area (and other criteria) subject to the constraint that the solution must satisfy a specific representation target), 'maximum representation problem' (maximize biodiversity representation given a set of cost or area constraints), and 'multi-criteria maximum representation problem' (maximize biodiversity representation (and other criteria) subject to one or more cost constraints). The 'OK' button is highlighted. On the right side of the main window, there is a panel for the selected objective: 'min area (and shape) - Alta'. It includes a 'show top: 50' field, an 'update' button, and buttons for 'clear scores', 'new objective', 'purge scores', and 'delete objective'. Below these buttons, it states '0 scores for this objective' and '3 solutions in archive'. At the bottom of the window, there is a 'LOG' tab with an error message: 'SearchException: cannot start from last visited (solution not on record)'. A 'clear warning' button is visible, and a 'clear error' button is highlighted in red.

ConsNet

Problem Settings Log

PROBLEM DISPLAY INIT SOLN PORTFOLIOS SOLN DISPLAY SEARCH OBJECTIVES

save rank ID nDeficientTargets nCells shape totalPopulation nClusters

new objective

select a type of objective to build:

- minimum area problem
minimize the area subject to the constraint that the solution must satisfy a specific representation target
- multi-criteria minimum area problem
minimize area (and other criteria) subject to the constraint that the solution must satisfy a specific representation target
- maximum representation problem
maximize biodiversity representation given a set of cost or area constraints
- multi-criteria maximum representation problem
maximize biodiversity representation (and other criteria) subject to one or more cost constraints

OK Cancel

objective:
min area (and shape) - Alta

show top:
50

update

clear scores new objective

purge scores delete objective

sync scores

0 scores for this objective
3 solutions in archive

LOG ERROR TASKS

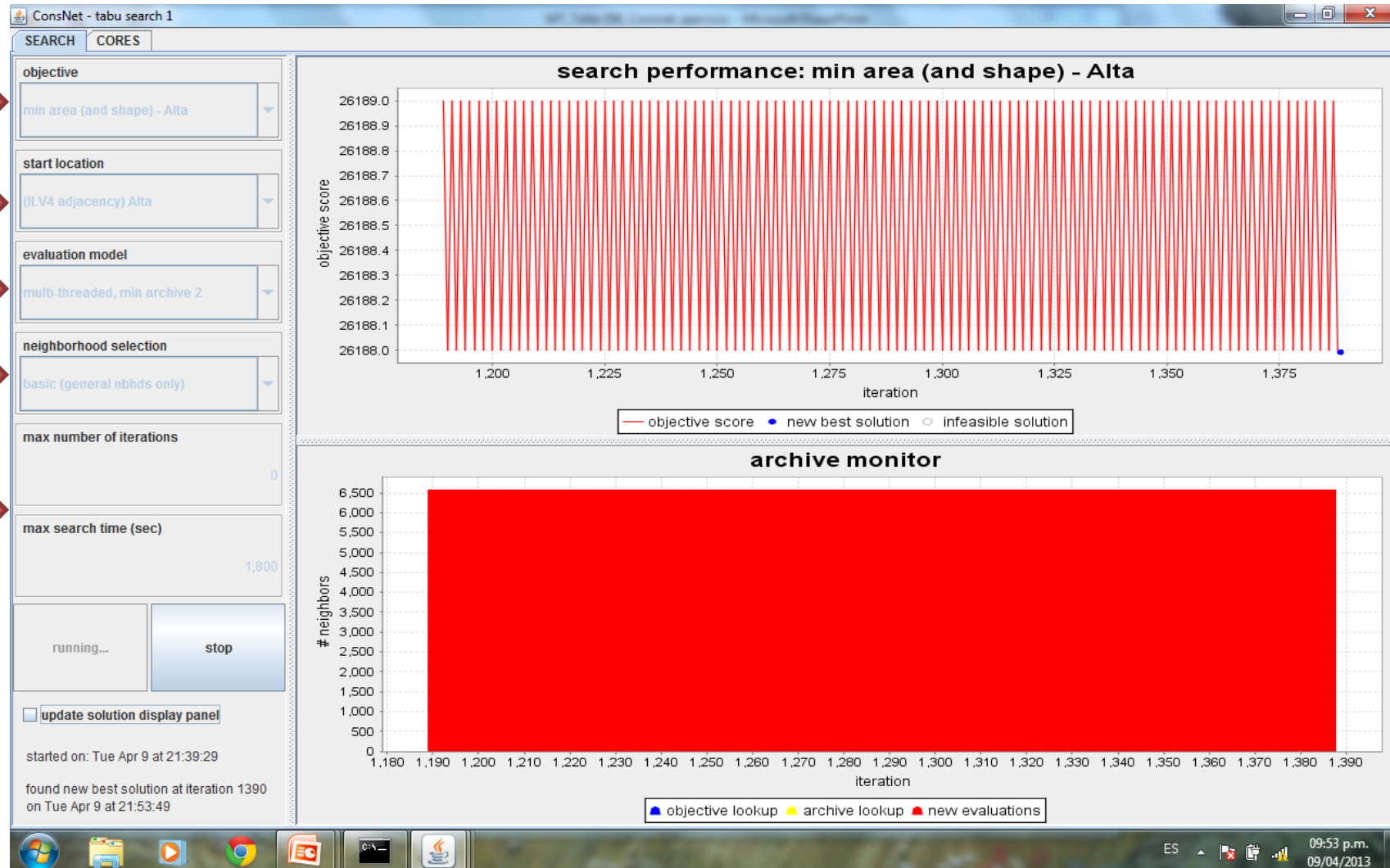
SearchException: cannot start from last visited (solution not on record)

clear warning

clear error

3

“Running the search”



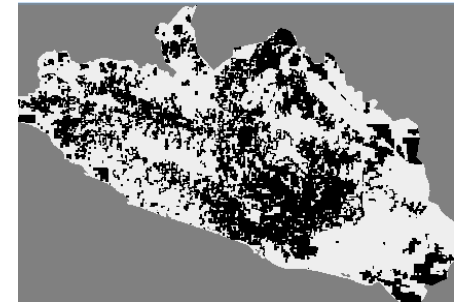
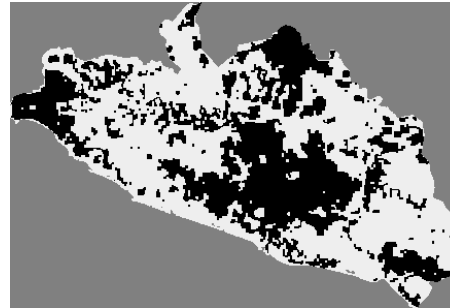
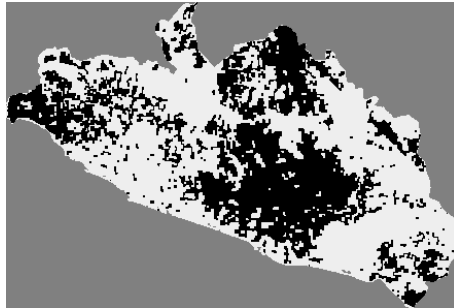
Escenarios “minimum area problem”: minimizar área + shape

MDS2

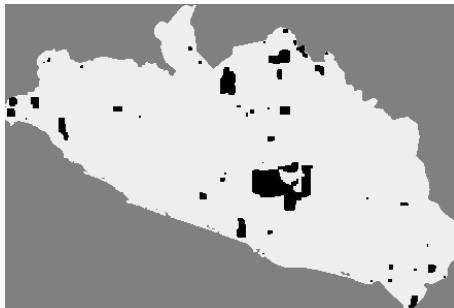
RF4

ILV4

Metas 40%

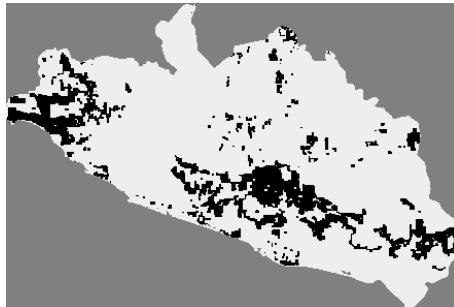


Metas 5%



1. ¿Cómo afectan las metas en la selección de área?

Metas 5-40%



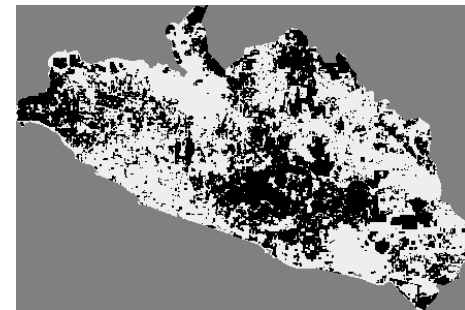
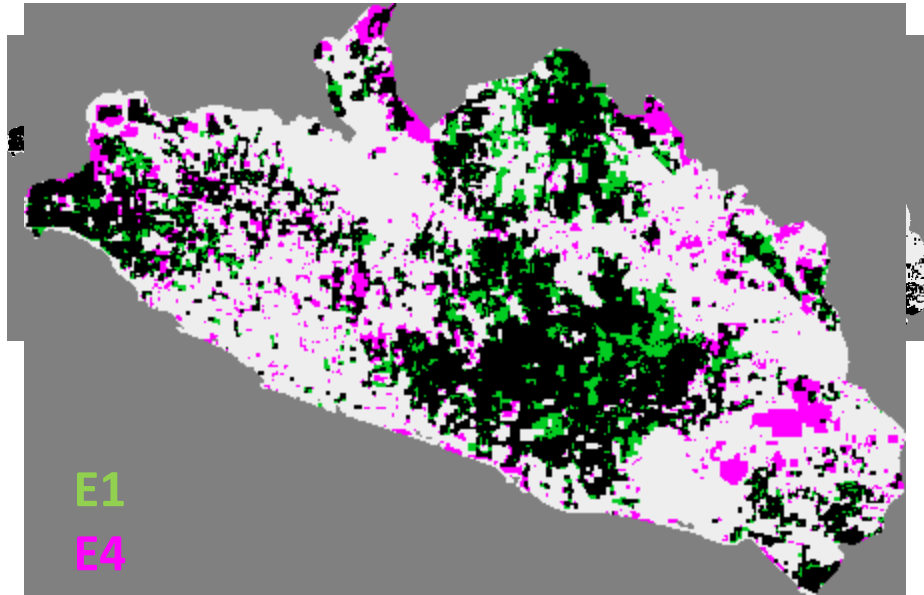
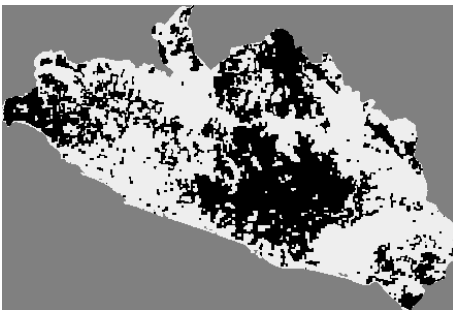
2. ¿Cómo afecta la Neighborhood Selection Strategy?

Escenarios “multicriteria minimum area problem”

¿Cómo afectan los criterios la selección de área?

Escenario 1	Escenario 2	Escenario 3	Escenario 4
min. área	min. área	min. área	min. área
min. shape	min. shape	min. shape	min. shape
	max. veg. primaria	max. veg. primaria	max. veg. primaria
		max. ANP	max. ANP
			min. zonas apf

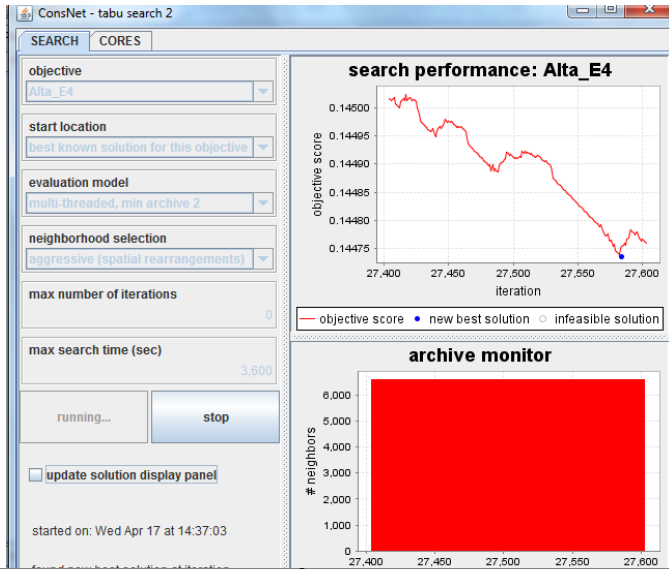
Metas 40%



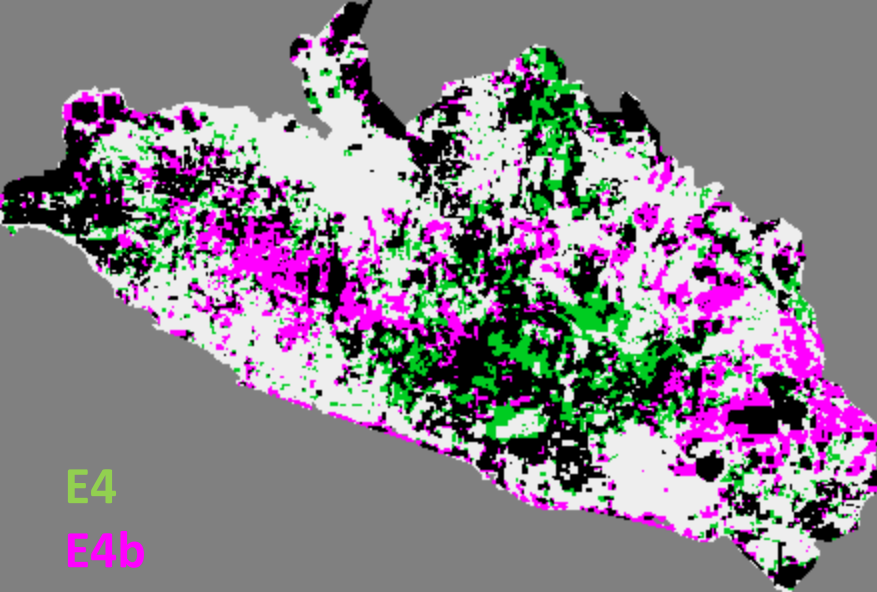
Escenario 1	Escenario 2	Escenario 3	Escenario 4
min. área	min. área	min. área	min. área
min. shape	min. shape	min. shape	min. shape
	max. veg. primaria	max. veg. primaria	max. veg. primaria
		max. ANP	max. ANP
			min. zonas apf

	Escenario 1	Escenario 2	Escenario 3	Escenario 4
Área (km ²)	26 188	33 368	32 121	26 599
Shape	0.000341	0.000518	0.000541	0.00073
Veg. primaria (km ²)	10 277	16 868	15 321	13 157
ANP (km ²)	522	618	1 392	1 392
Zonas apf (km ²)	9 969	10 758	10 611	6 316
Número clusters	105	472	499	723
Número de especies con meta alcanzada	316	316	316	316
Veg. secundaria (km ²)	7 260	8 525	8 400	7 202

Soluciones refinadas



	Escenario 4	Escenario 4 b
Área (km ²)	26 599	29 511
Shape	0.00073	0.000623
Veg. primaria (km ²)	13 157	21 105
ANP (km ²)	1 392	1 392
Zonas apf (km ²)	6 316	4 002
Número clusters	723	360
Número de especies con meta alcanzada	316	316
secundaria (km ²)	7 202	6 520



E4

E4b

Criterios

Nombre	Descripción
Veg_prim	Vegetación primaria
Veg_sec	Vegetación secundaria
Veg_inducida	Vegetación inducida
ANP	Área Natural Protegida
ZU	Zona urbana
SPT	Sitio Prioritario Terrestre
EPI	Sitio Prioritario Acuático Epicontinental
Zonas_apf	Zonas agrícola-pecuaria-forestal