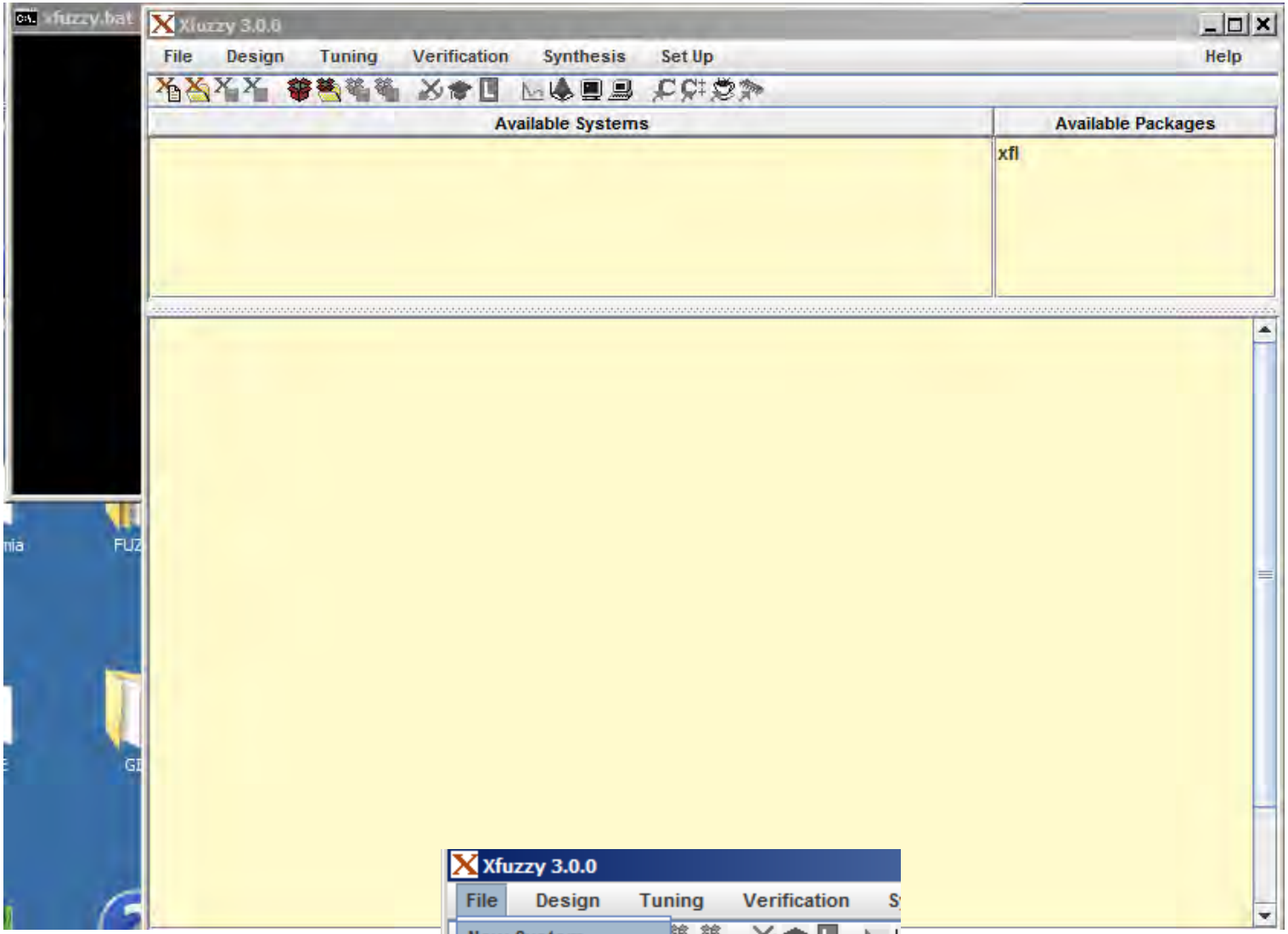
LABORATORIO DE ANATOMÍA ANIMAL

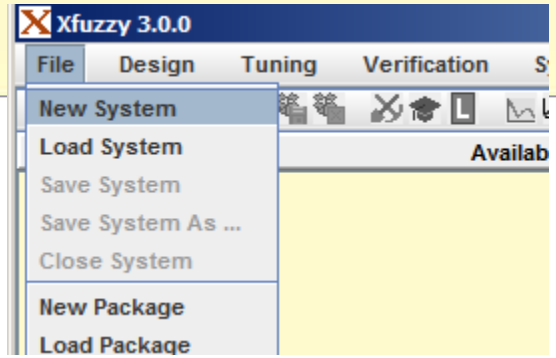
INGENIERIA INVERSA APLICADA A LA ANATOMÍA ANIMAL

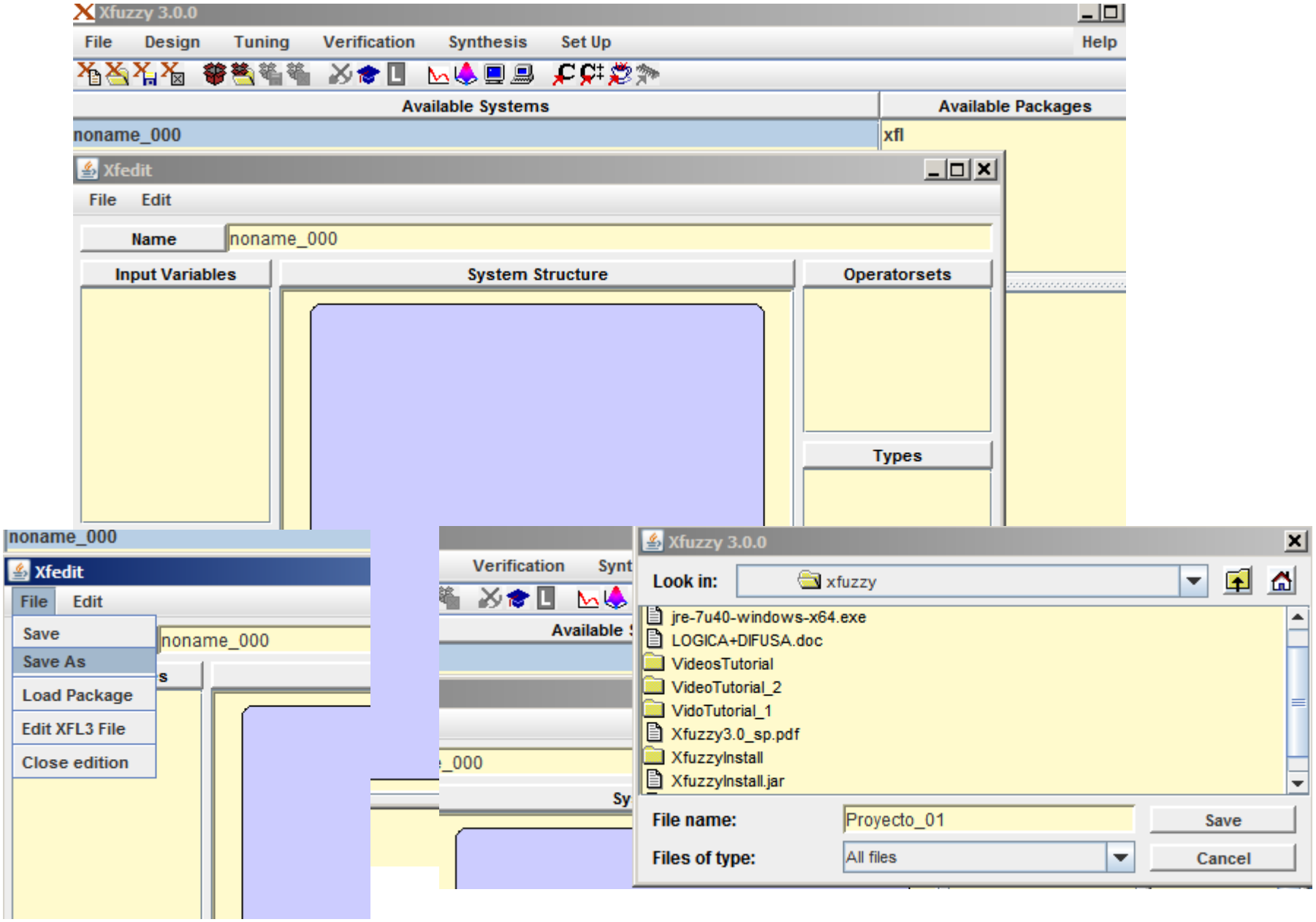
M O O C

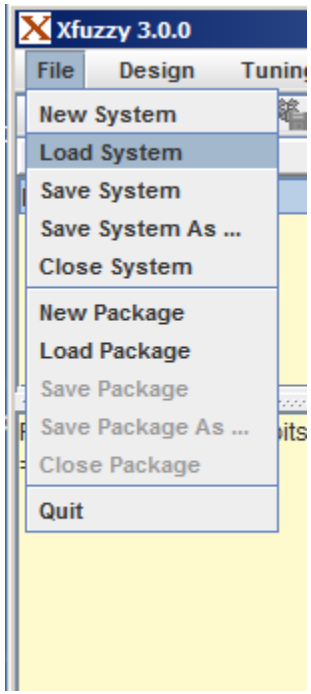
11.-Lógica fuzzy

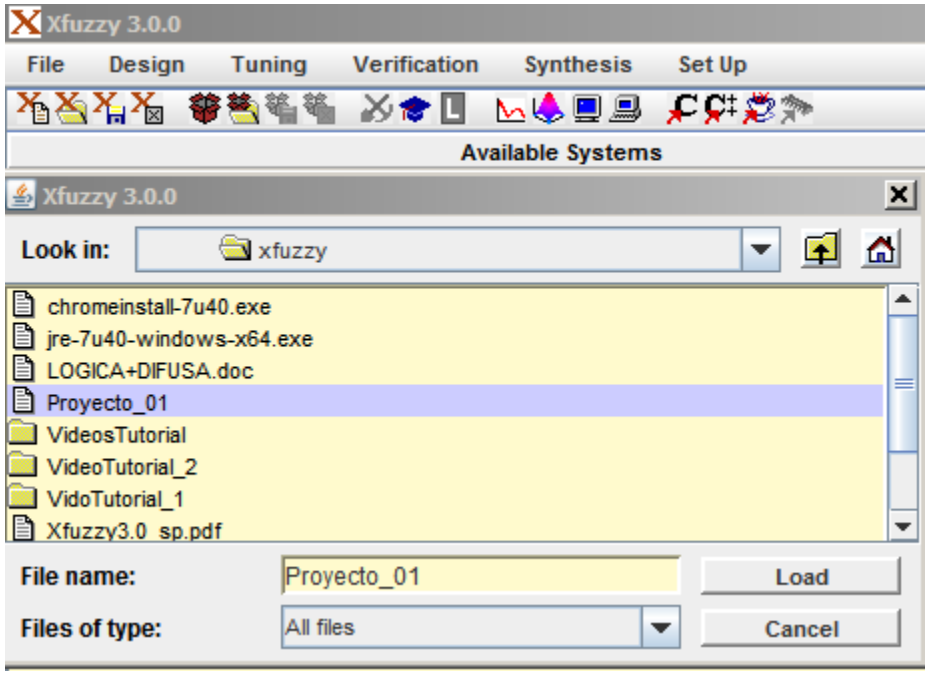
http://www2.imse-cnm.csic.es/Xfuzzy/Xfuzzy_3.0/download_sp.html

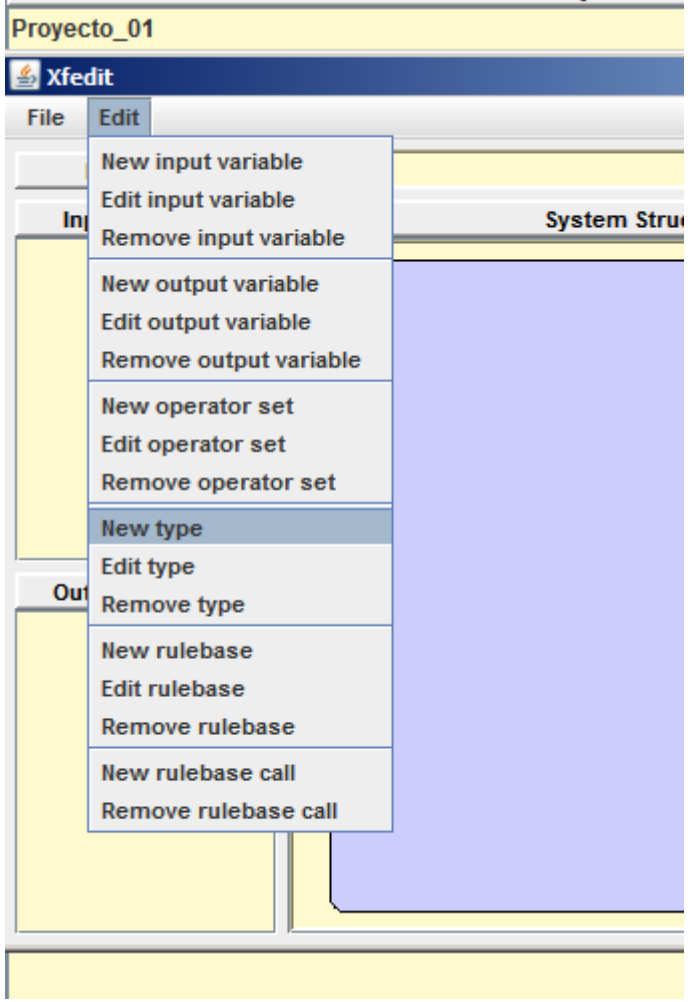

xfuzzy.bat
Xfuzzy 3.0.0
File
Design
Tuning
Verification
Synthesis
Set Up
Help
Available Systems
Available Packages
xfl

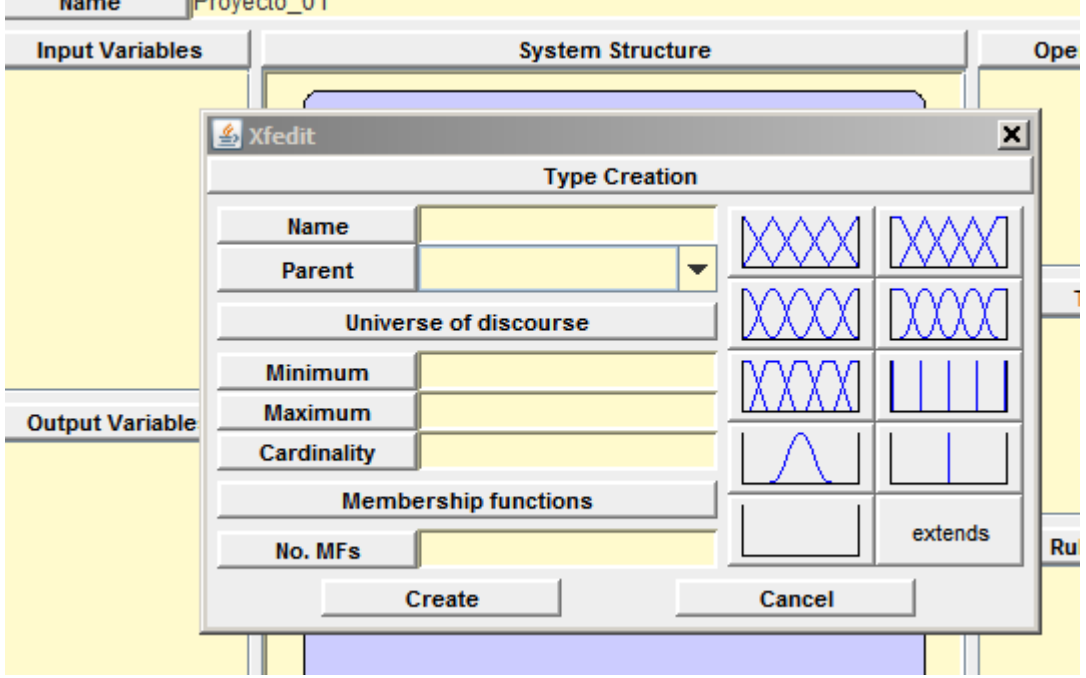

Xfuzzy 3.0.0
File
Design
Tuning
Verification
New System
Load System
Save System
Save System As ...
Close System
New Package
Load Package

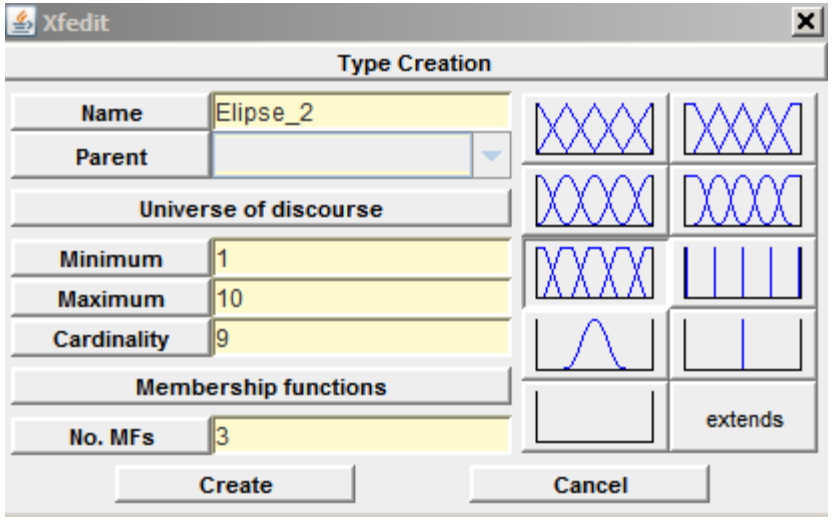

Xfuzzy 3.0.0
File
Design
Tuning
Verification
Synthesis
Set Up
Help
Available Systems
Available Packages
noname_000
xfl
Xfedit
File
Edit
Name
noname_000
Input Variables
System Structure
Operatorsets
Types
noname_000
Xfedit
File
Edit
Save
Save As
Load Package
Edit XFL3 File
Close edition
noname_000
Verification
Synt
Available
Xfuzzy 3.0.0
Look in:
xfuzzy
jre-7u40-windows-x64.exe
LOGICA+DIFUSA.doc
VideosTutorial
VideoTutorial_2
VidoTutorial_1
Xfuzzy3.0_sp.pdf
XfuzzyInstall
XfuzzyInstall.jar
File name:
Proyecto_01
Save
Files of type:
All files
Cancel

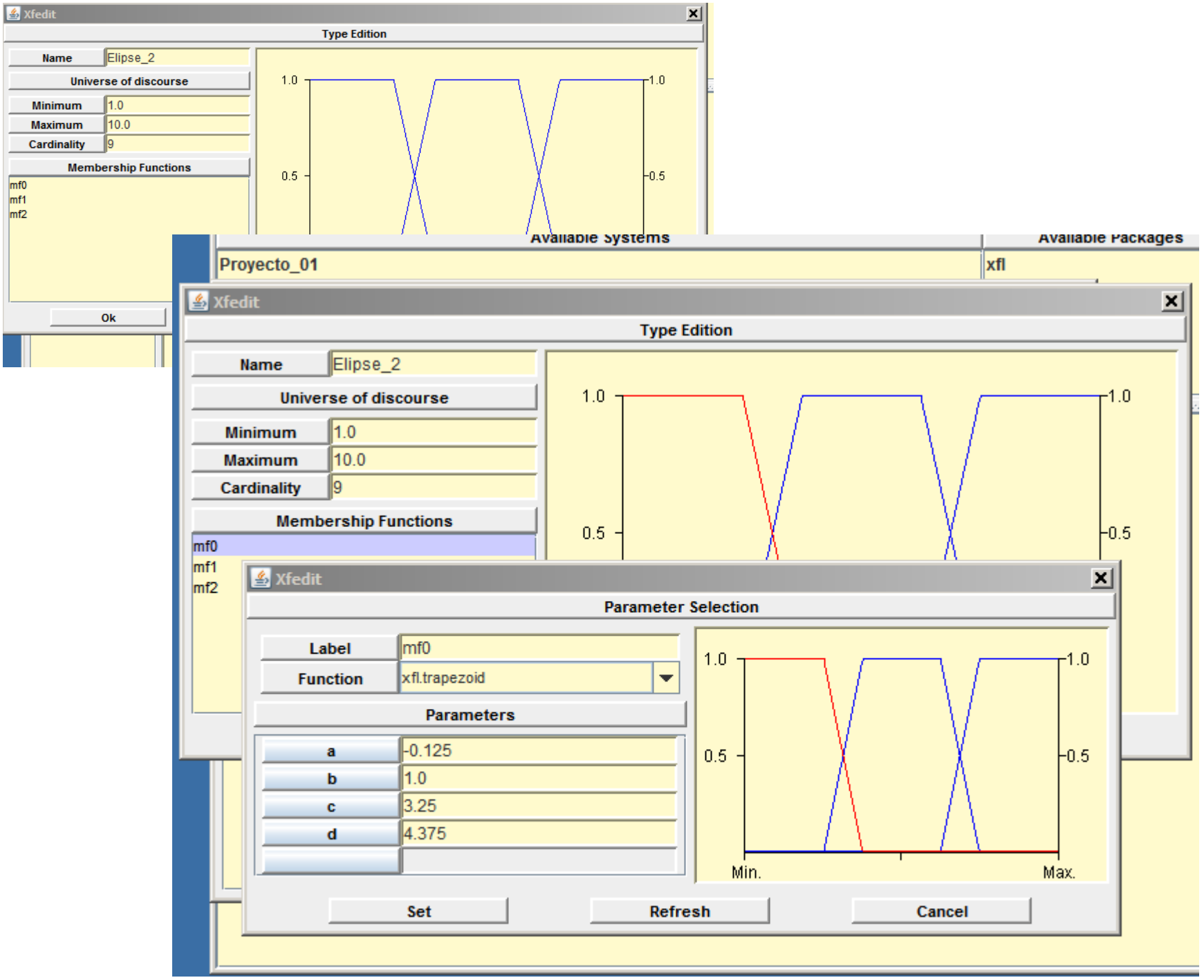

Xfuzzy 3.0.0
File
Design
New System
Load System
Save System
Save System As ...
Close System
New Package
Load Package
Save Package
Save Package As ...
Close Package
Quit

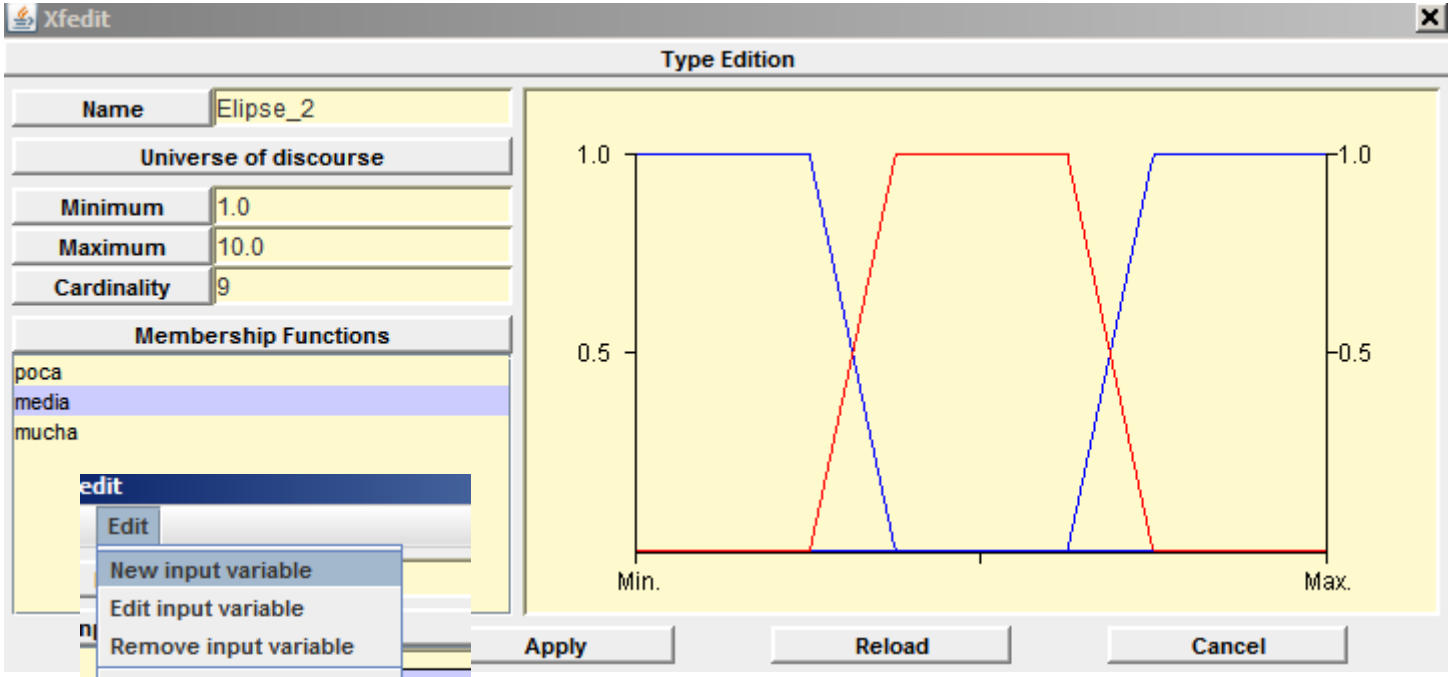

Xfuzzy 3.0.0
File
Design
Tuning
Verification
Synthesis
Set Up
Available Systems
Xfuzzy 3.0.0
Look in:
xfuzzy
chromeinstall-7u40.exe
jre-7u40-windows-x64.exe
LOGICA+DIFUSA.doc
Proyecto_01
VideosTutorial
VideoTutorial_2
VidoTutorial_1
Xfuzzy3.0_sp.pdf
File name:
Proyecto_01
Load
Files of type:
All files
Cancel

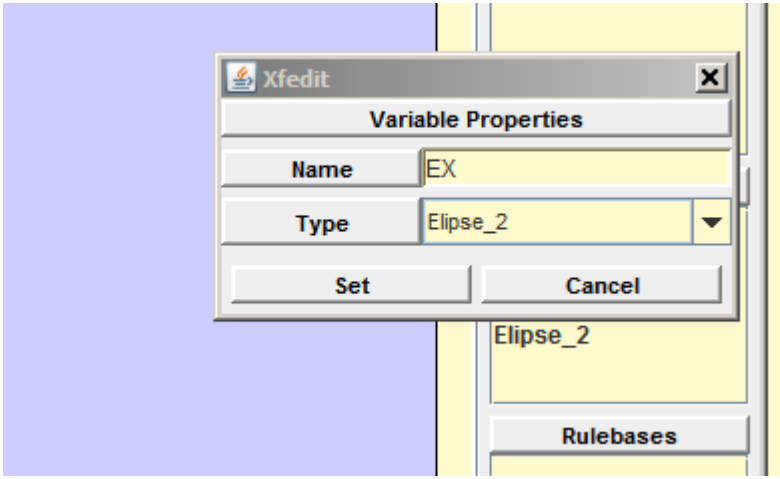

Proyecto_01
Xfedit
File
Edit
New input variable
Edit input variable
Remove input variable
New output variable
Edit output variable
Remove output variable
New operator set
Edit operator set
Remove operator set
New type
Edit type
Remove type
New rulebase
Edit rulebase
Remove rulebase
New rulebase call
Remove rulebase call

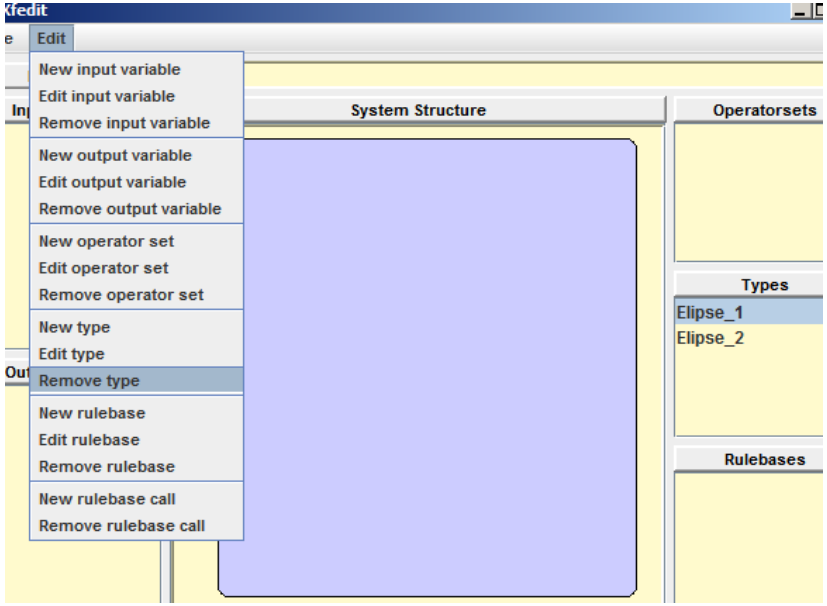

Input Variables
System Structure
Output Variable
Xfedit
Type Creation
Name
Parent
Universe of discourse
Minimum
Maximum
Cardinality
Membership functions
No. MFs
extends
Create
Cancel

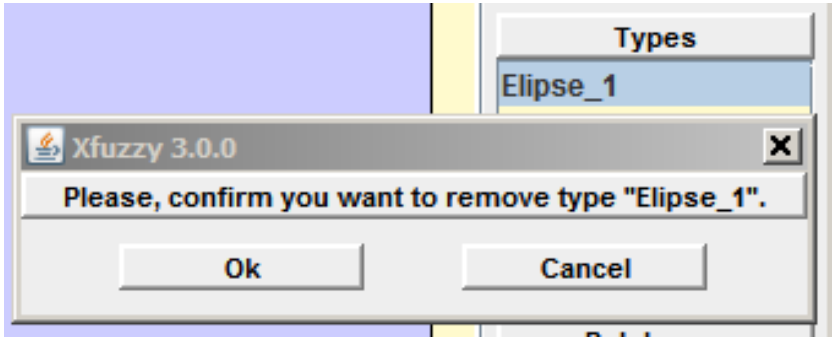

Xfedit
Type Creation
Name
Elipse_2
Parent
Universe of discourse
Minimum
1
Maximum
10
Cardinality
9
Membership functions
No. MFs
3
extends
Create
Cancel

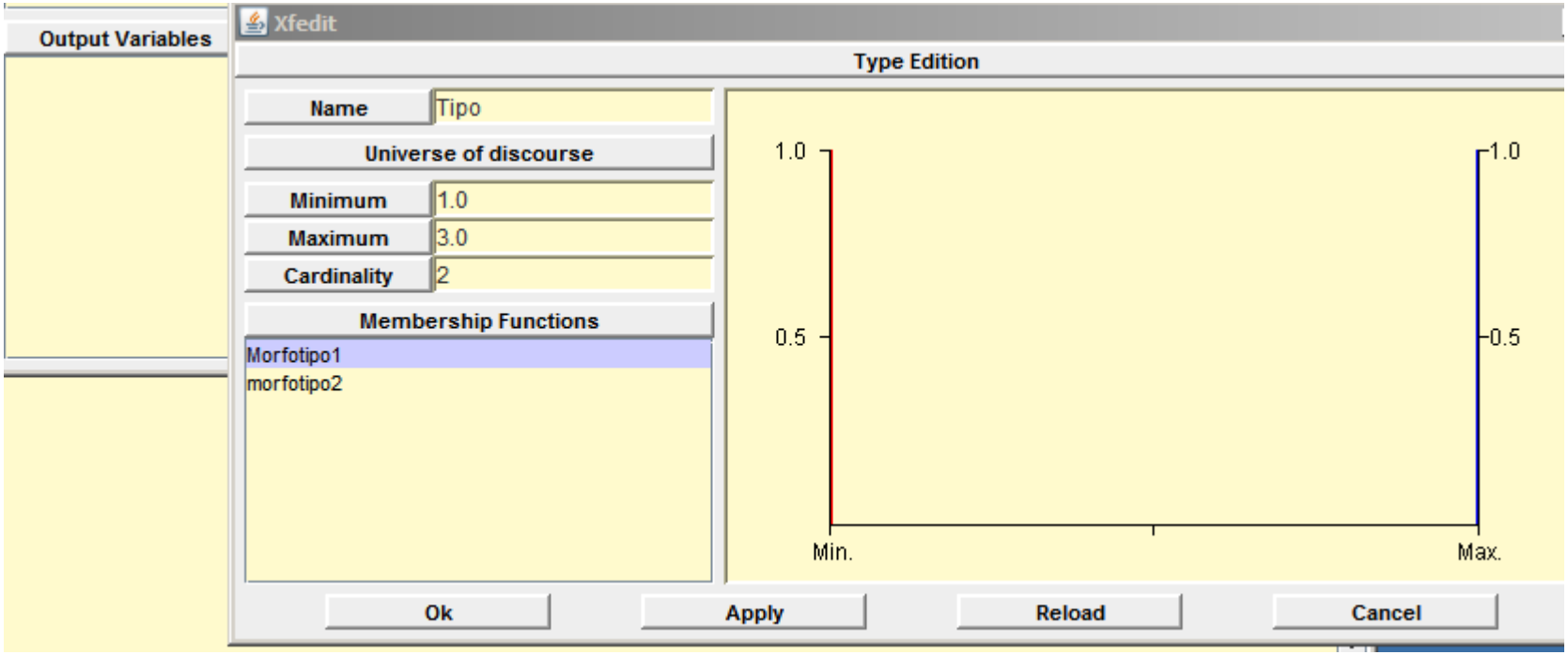

Xfedit
Type Edition
Name
Elipse_2
Universe of discourse
Minimum
1.0
Maximum
10.0
Cardinality
9
Membership Functions
mf0
mf1
mf2
Ok
1.0
0.5
Available Systems
Available Packages
Proyecto_01
xfl
Xfedit
Type Edition
Name
Elipse_2
Universe of discourse
Minimum
1.0
Maximum
10.0
Cardinality
9
Membership Functions
mf0
mf1
mf2
Xfedit
Parameter Selection
Label
mf0
Function
xfl.trapezoid
Parameters
a
-0.125
b
1.0
c
3.25
d
4.375
Min.
Max.
Set
Refresh
Cancel

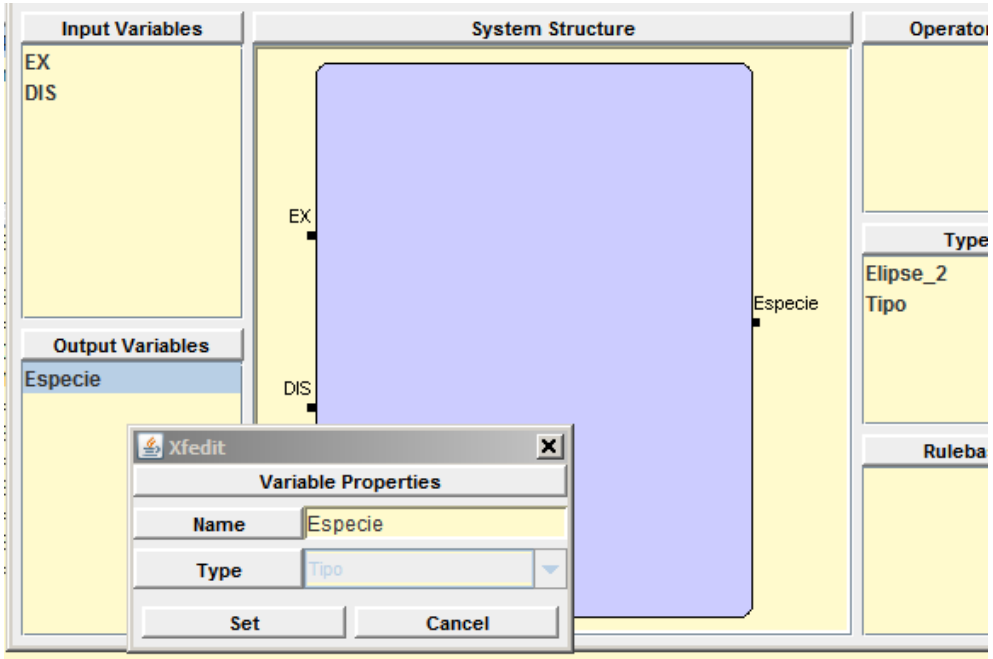

Xfedit
Type Edition
Name
Elipse_2
Universe of discourse
Minimum
1.0
Maximum
10.0
Cardinality
9
Membership Functions
poca
media
mucha
1.0
0.5
1.0
0.5
Min.
Max.
Apply
Reload
Cancel
edit
Edit
New input variable
Edit input variable
Remove input variable
New output variable
Edit output variable
Remove output variable
New operator set
Edit operator set
Remove operator set
New type
Edit type
Remove type
New rulebase
Edit rulebase
Remove rulebase
New rulebase call
Remove rulebase call

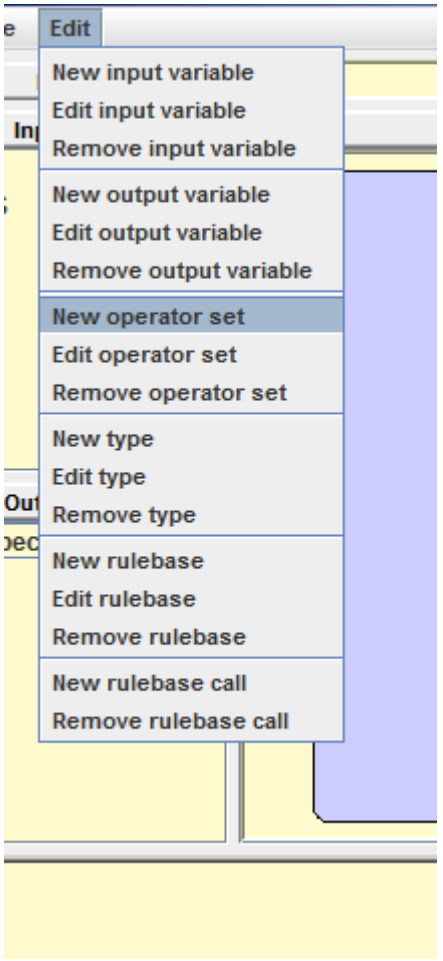

Xfedit
Variable Properties
Name
EX
Type
Elipse_2
Set
Cancel
Elipse_2
Rulebases

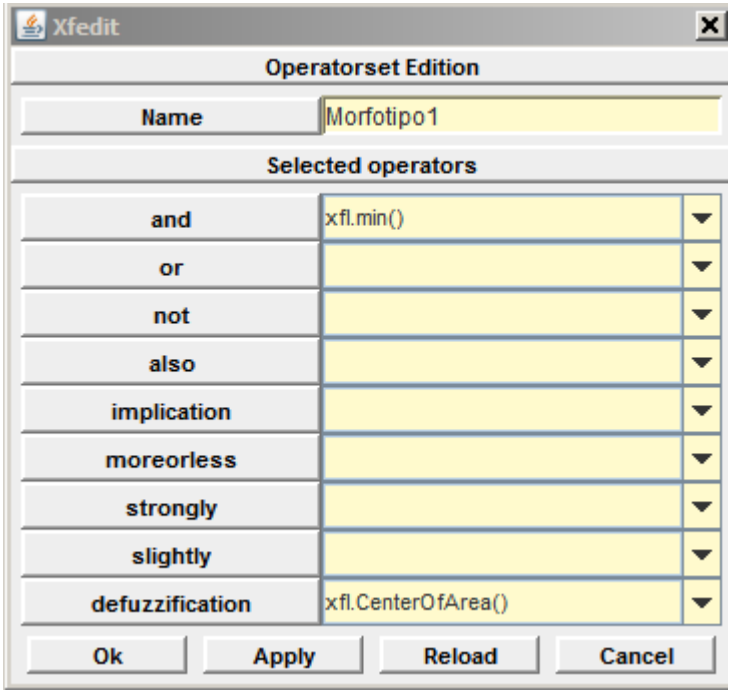

Edit
New input variable
Edit input variable
Remove input variable
New output variable
Edit output variable
Remove output variable
New operator set
Edit operator set
Remove operator set
New type
Edit type
Remove type
New rulebase
Edit rulebase
Remove rulebase
New rulebase call
Remove rulebase call
System Structure
Operatorsets
Types
Elipse_1
Elipse_2
Rulebases

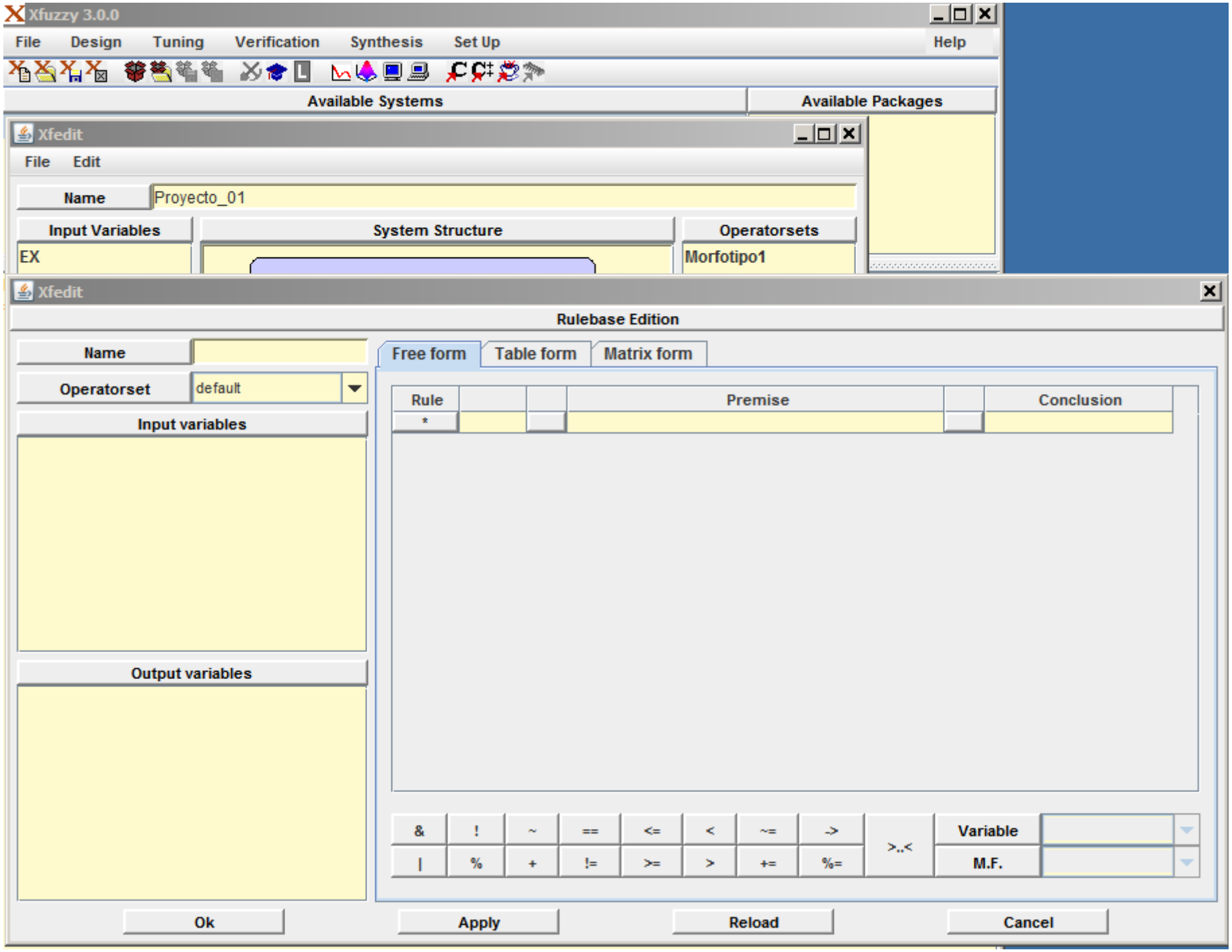

Types
Elipse_1
Xfuzzy 3.0.0
Please, confirm you want to remove type "Elipse_1".
Ok
Cancel

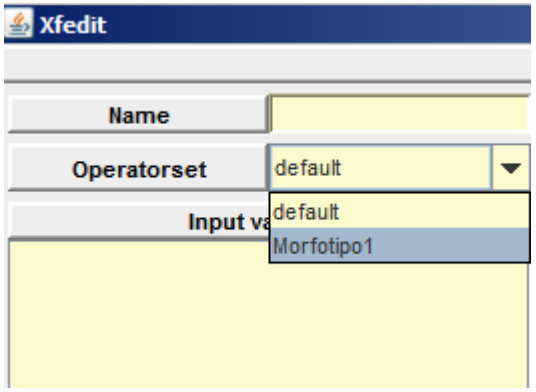

Output Variables
Xfedit
Type Edition
Name
Tipo
Universe of discourse
Minimum
1.0
Maximum
3.0
Cardinality
2
Membership Functions
Morfotipo1
morfotipo2
1.0
0.5
1.0
0.5
Min.
Max.
Ok
Apply
Reload
Cancel

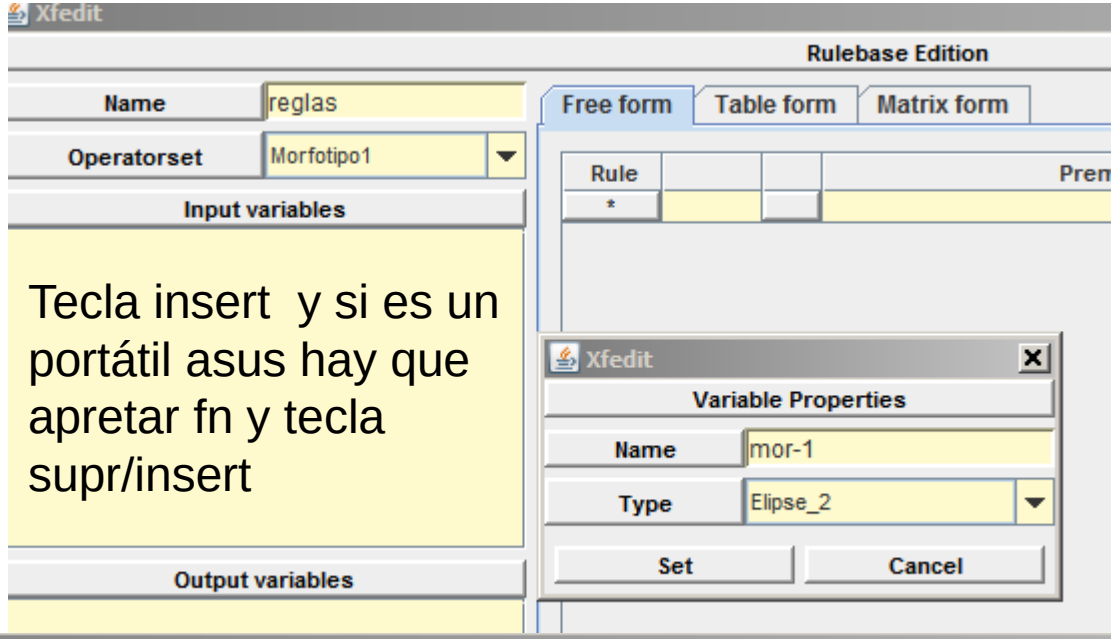

Input Variables
EX
DIS
Output Variables
Especie
System Structure
EX
DIS
Especie
Operator
Type
Elipse_2
Tipo
Ruleba
Xfedit
Variable Properties
Name
Especie
Type
Tipo
Set
Cancel

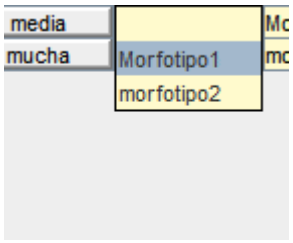

Edit
New input variable
Edit input variable
Remove input variable
New output variable
Edit output variable
Remove output variable
New operator set
Edit operator set
Remove operator set
New type
Edit type
Remove type
New rulebase
Edit rulebase
Remove rulebase
New rulebase call
Remove rulebase call

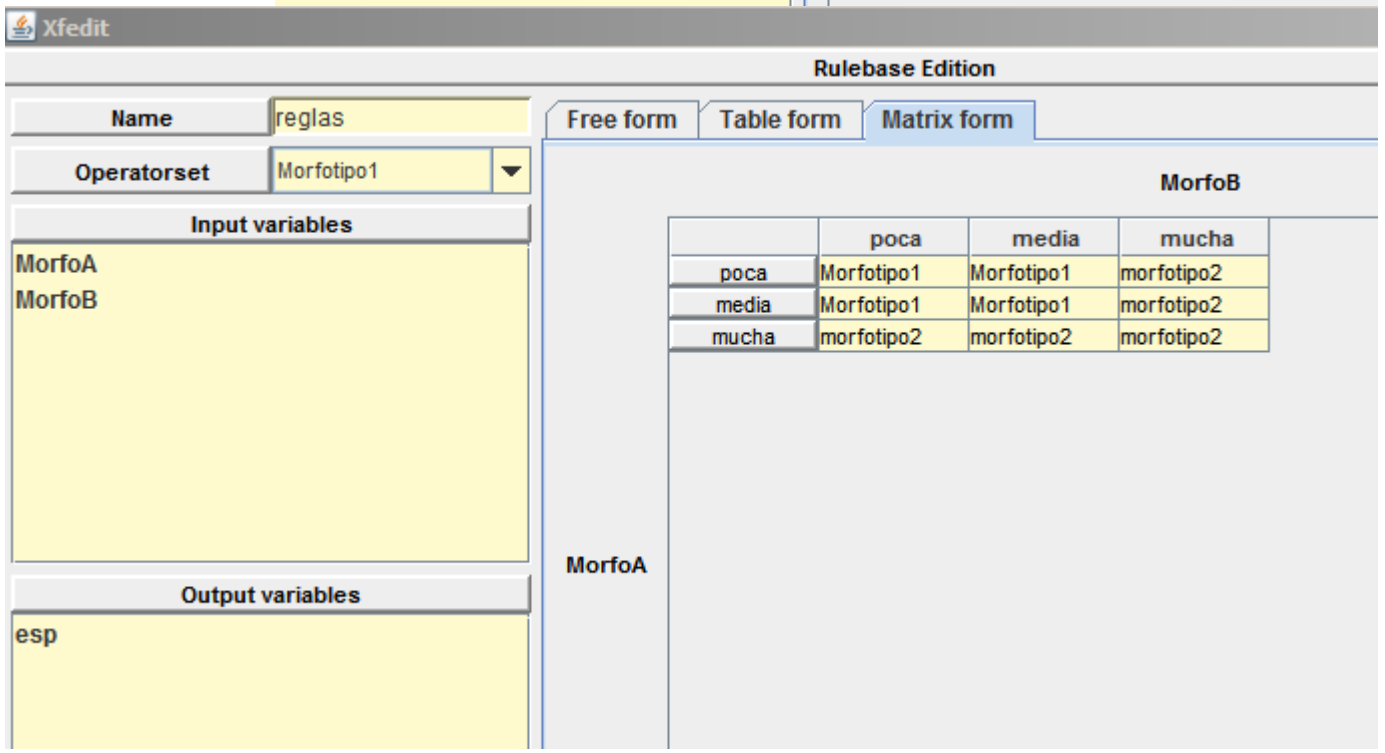

Xfedit
Operatorset Edition
Name
Morfotipo1
Selected operators
and
xfl.min()
or
not
also
implication
moreorless
strongly
slightly
defuzzification
xfl.CenterOfArea()
Ok
Apply
Reload
Cancel


Xfuzzy 3.0.0
File
Design
Tuning
Verification
Synthesis
Set Up
Help
Available Systems
Available Packages
Xfedit
File
Edit
Name
Proyecto_01
Input Variables
System Structure
Operatorsets
EX
Morfotipo1
Xfedit
Rulebase Edition
Name
Operatorset
default
Input variables
Output variables
Free form
Table form
Matrix form
Rule
Premise
Conclusion
*
&
!
~
==
<=
<
~=
->
|
%
+
!=
>=
>
+=
%=
>..<
Variable
M.F.
Ok
Apply
Reload
Cancel


Xfedit
Name
Operatorset
default
Input va
default
Morfotipo1


Xfedit
Rulebase Edition
Name
reglas
Operatorset
Morfotipo1
Input variables
Free form
Table form
Matrix form
Rule
Pren
*
Tecla insert y si es un portátil asus hay que apretar fn y tecla supr/insert
Xfedit
Variable Properties
Name
mor-1
Type
Elipse_2
Set
Cancel
Output variables


media
mucha
Morfotipo1
morfotipo2


Xfedit
Rulebase Edition
Name
reglas
Operatorset
Morfotipo1
Input variables
MorfoA
MorfoB
Output variables
esp
Free form
Table form
Matrix form
MorfoB
poca
media
mucha
Morfotipo1
morfotipo2
MorfoA

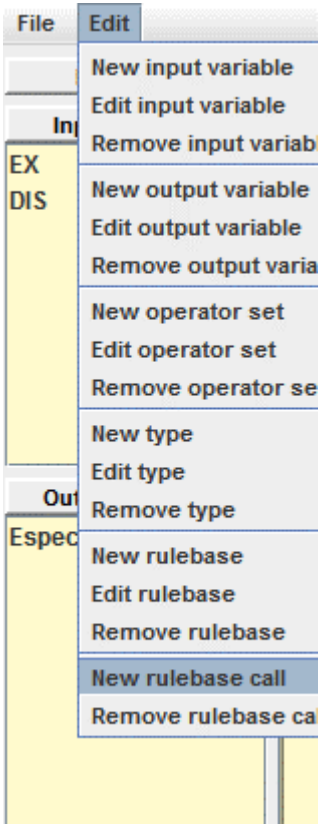
Se rellenan automáticamente

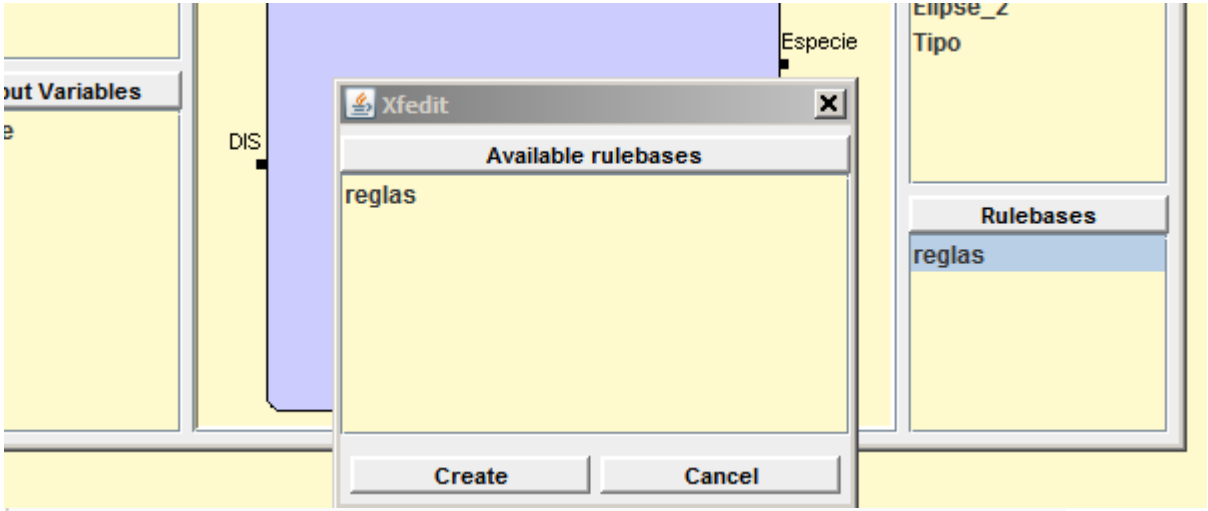
Free form | Table form | Matrix form

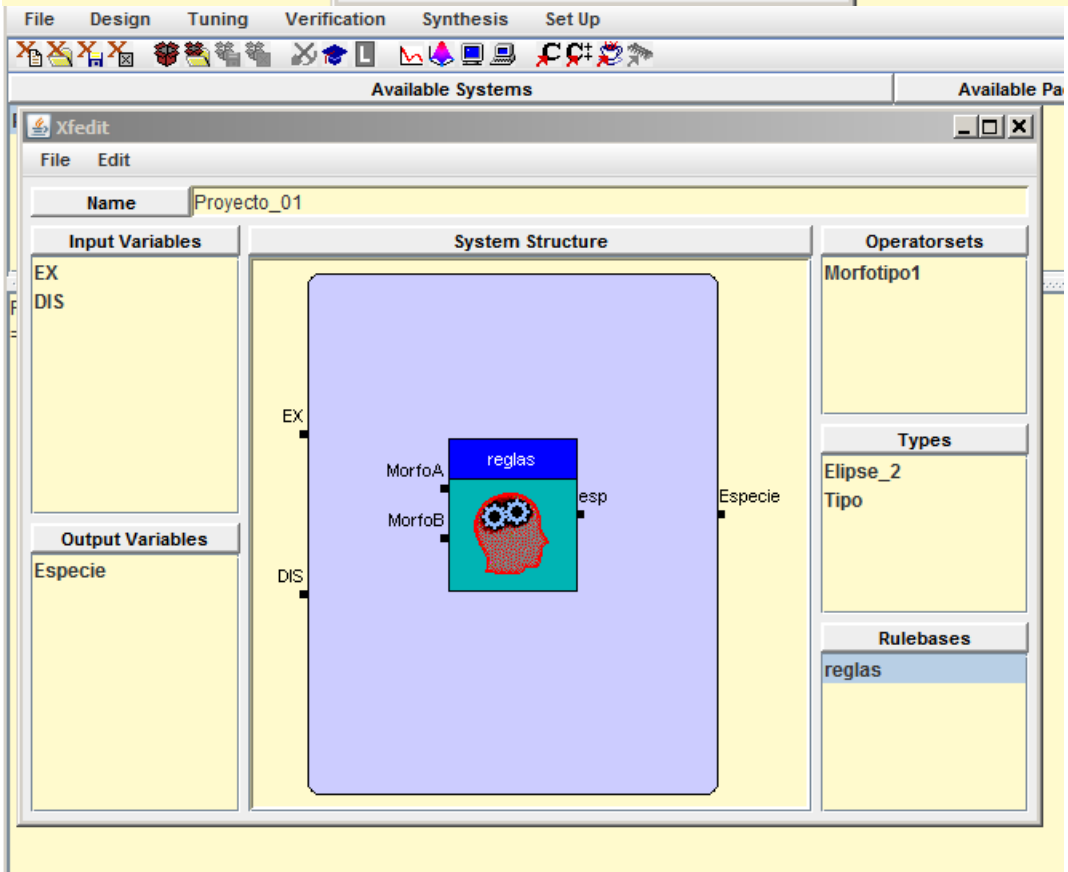
Rule			MorfoA		MorfoB		esp
0	1.0	if	MorfoA == poca	&	MorfoB == poca	->	esp = Morfotipo1
1	1.0	if	MorfoA == poca	&	MorfoB == media	->	esp = Morfotipo1
2	1.0	if	MorfoA == poca	&	MorfoB == mucha	->	esp = morfotipo2
3	1.0	if	MorfoA == media	&	MorfoB == poca	->	esp = Morfotipo1
4	1.0	if	MorfoA == media	&	MorfoB == media	->	esp = Morfotipo1
5	1.0	if	MorfoA == media	&	MorfoB == mucha	->	esp = morfotipo2
6	1.0	if	MorfoA == mucha	&	MorfoB == poca	->	esp = morfotipo2
7	1.0	if	MorfoA == mucha	&	MorfoB == media	->	esp = morfotipo2
8	1.0	if	MorfoA == mucha	&	MorfoB == mucha	->	esp = morfotipo2
*							

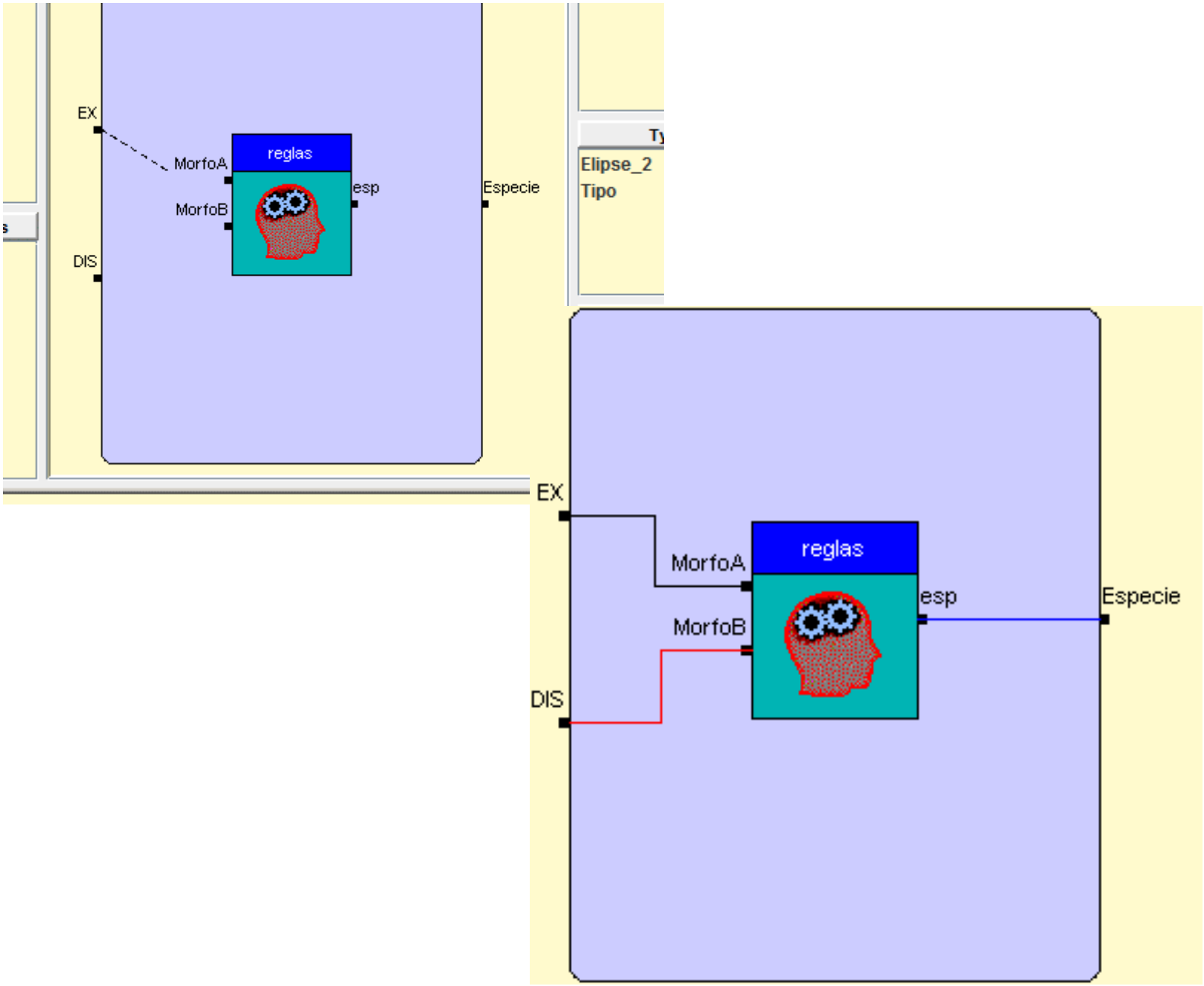
Free form | Table form | Matrix form

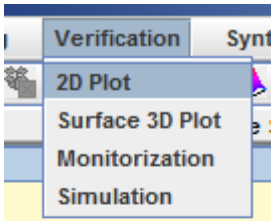
Rule			Premise		Conclusion
0	1.0	if	(MorfoA == poca & MorfoB == poca)	->	esp = Morfotipo1
1	1.0	if	(MorfoA == poca & MorfoB == media)	->	esp = Morfotipo1
2	1.0	if	(MorfoA == poca & MorfoB == mucha)	->	esp = morfotipo2
3	1.0	if	(MorfoA == media & MorfoB == poca)	->	esp = Morfotipo1
4	1.0	if	(MorfoA == media & MorfoB == media)	->	esp = Morfotipo1
5	1.0	if	(MorfoA == media & MorfoB == mucha)	->	esp = morfotipo2
6	1.0	if	(MorfoA == mucha & MorfoB == poca)	->	esp = morfotipo2
7	1.0	if	(MorfoA == mucha & MorfoB == media)	->	esp = morfotipo2
8	1.0	if	(MorfoA == mucha & MorfoB == mucha)	->	esp = morfotipo2
*					

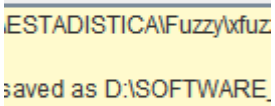

File
Edit
New input variable
Edit input variable
Remove input variab
New output variable
Edit output variable
Remove output varia
New operator set
Edit operator set
Remove operator se
New type
Edit type
Remove type
New rulebase
Edit rulebase
Remove rulebase
New rulebase call
Remove rulebase ca
EX
DIS

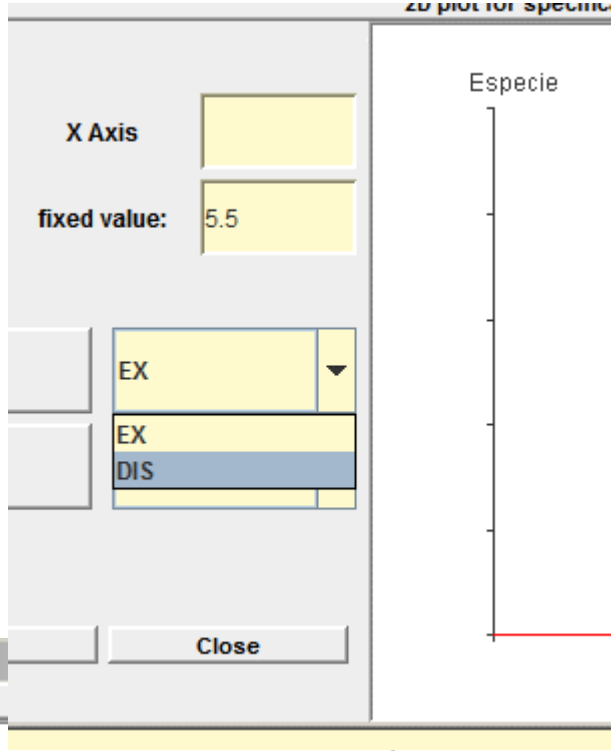

Xfedit
Available rulebases
reglas
Create
Cancel
Especie
Elipse_2
Tipo
Rulebases
reglas
DIS

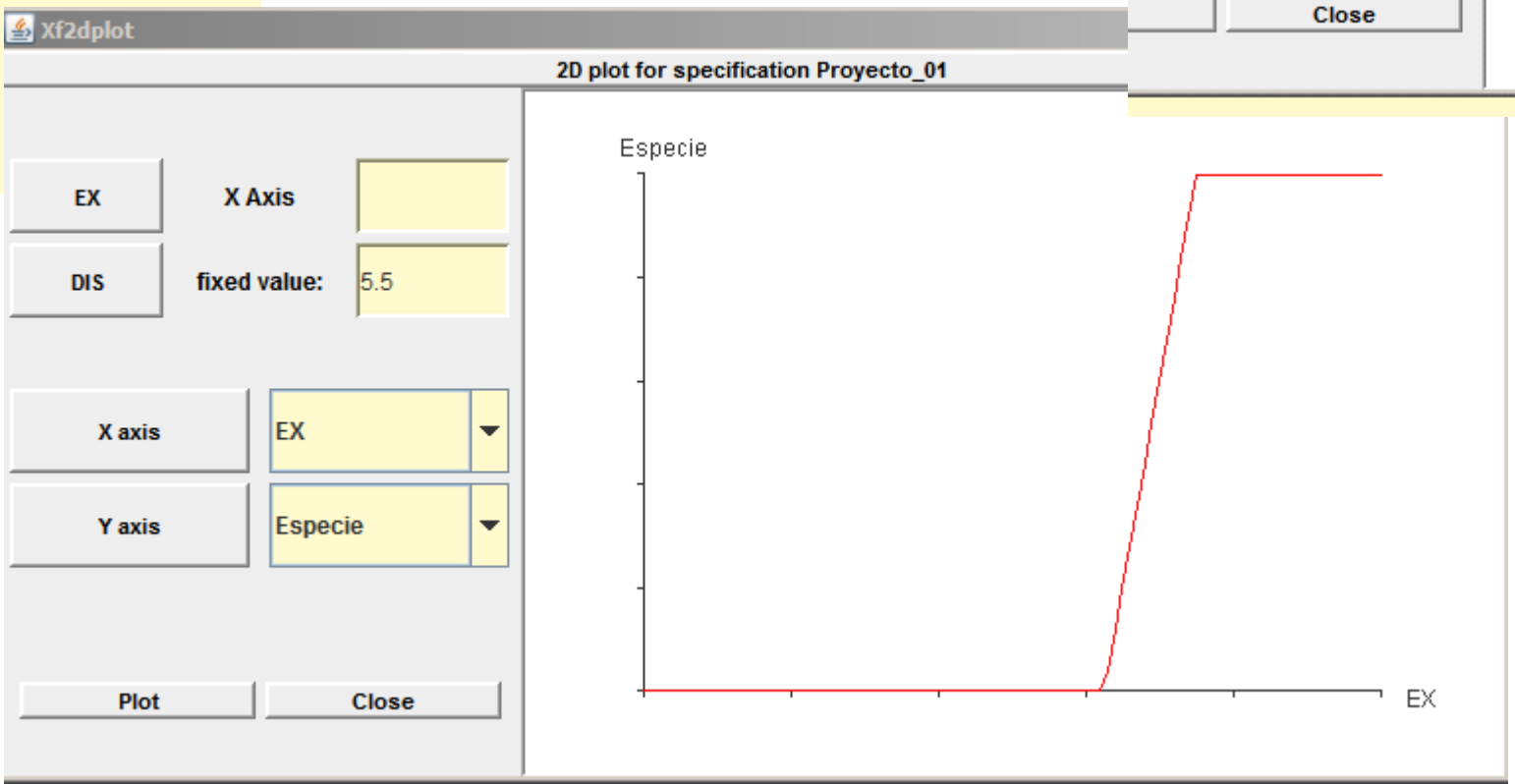

File
Design
Tuning
Verification
Synthesis
Set Up
Available Systems
Xfedit
File
Edit
Name
Proyecto_01
Input Variables
EX
DIS
Output Variables
Especie
System Structure
EX
DIS
MorfoA
MorfoB
reglas
esp
Especie
Operatorsets
Morfotipo1
Types
Elipse_2
Tipo
Rulebases
reglas

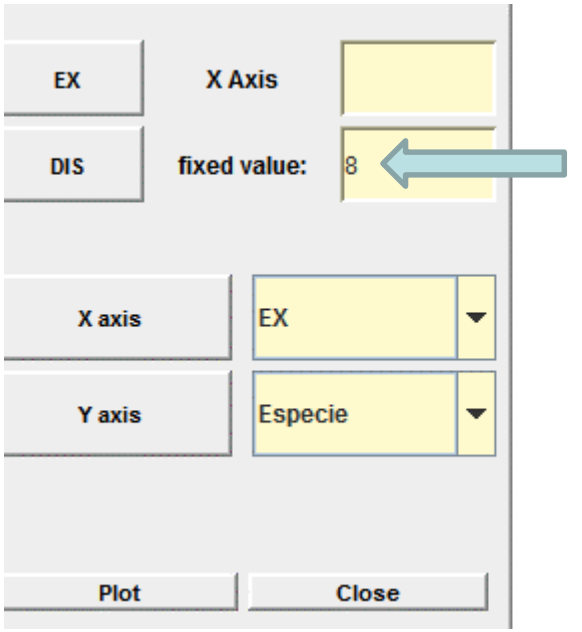

EX
MorfoA
MorfoB
DIS
reglas
esp
Especie
Elipse_2
Tipo
EX
MorfoA
MorfoB
DIS
reglas
esp
Especie

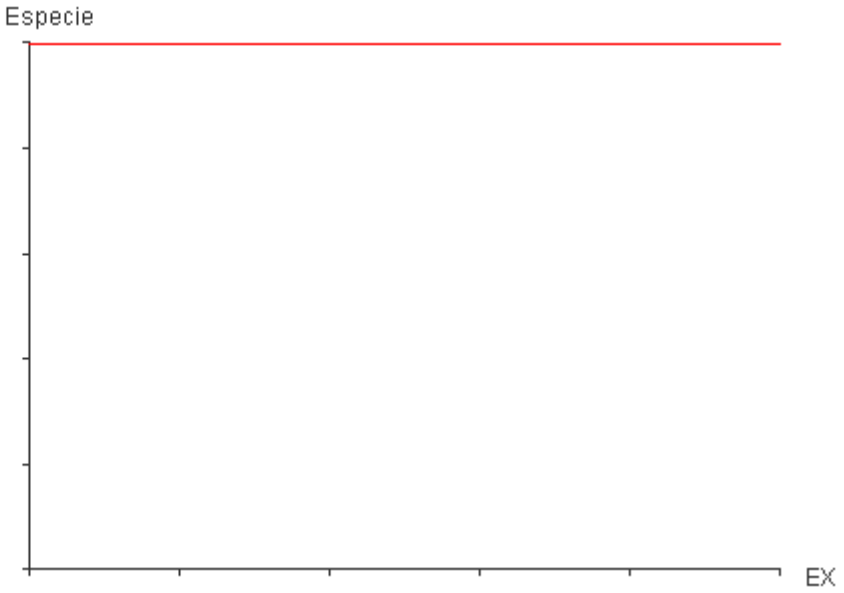

Verification
Synt
2D Plot
Surface 3D Plot
Monitorization
Simulation

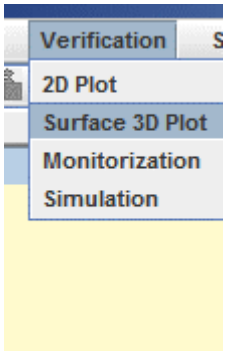

ESTADISTICA\Fuzzy\xfuz
saved as D:\SOFTWARE_

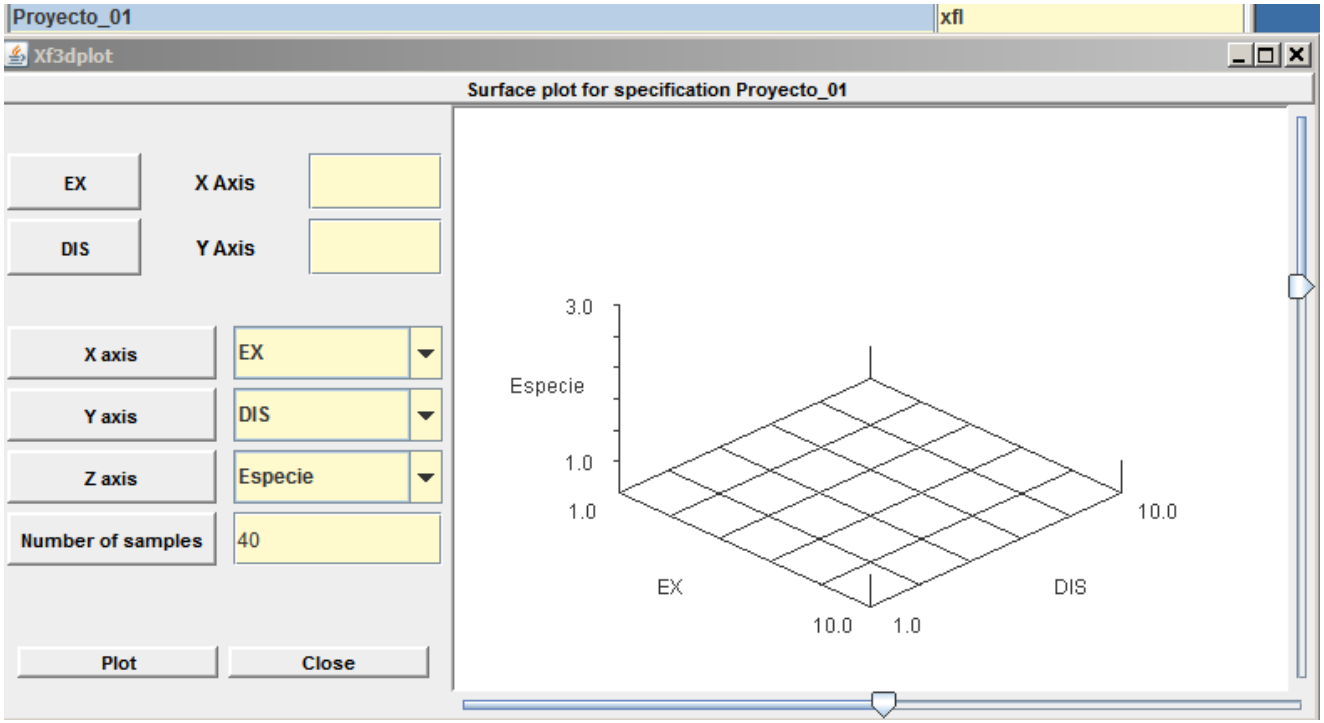

X Axis
fixed value:
5.5
EX
EX
DIS
Close
Especie

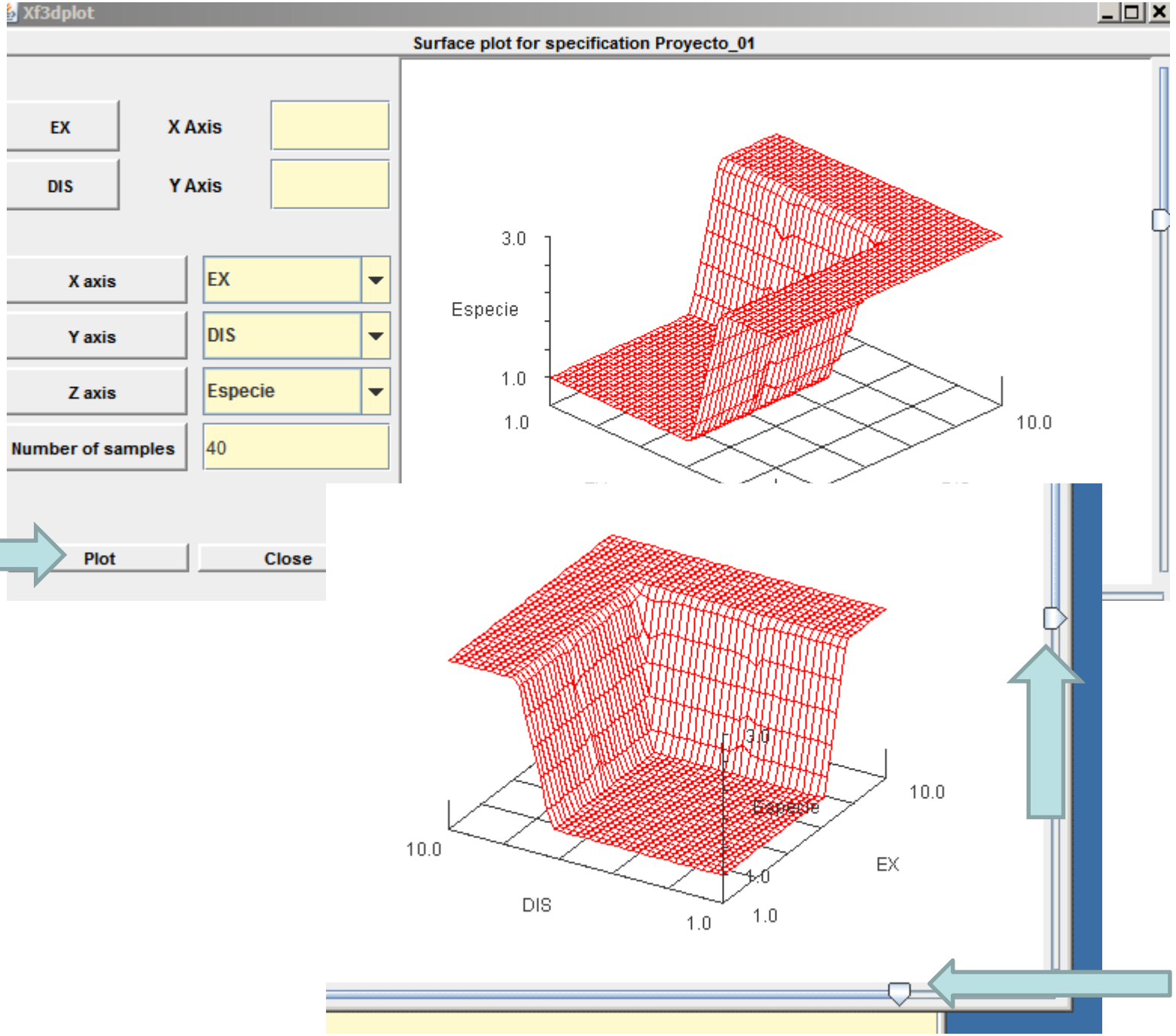

Xf2dplot
2D plot for specification Proyecto_01
EX
DIS
X Axis
fixed value:
5.5
X axis
EX
Y axis
Especie
Plot
Close
Especie
EX

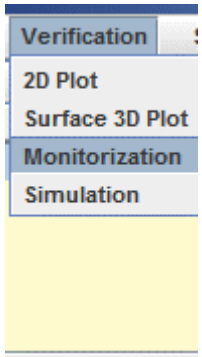

EX
X Axis
DIS
fixed value:
8
X axis
EX
Y axis
Especie
Plot
Close

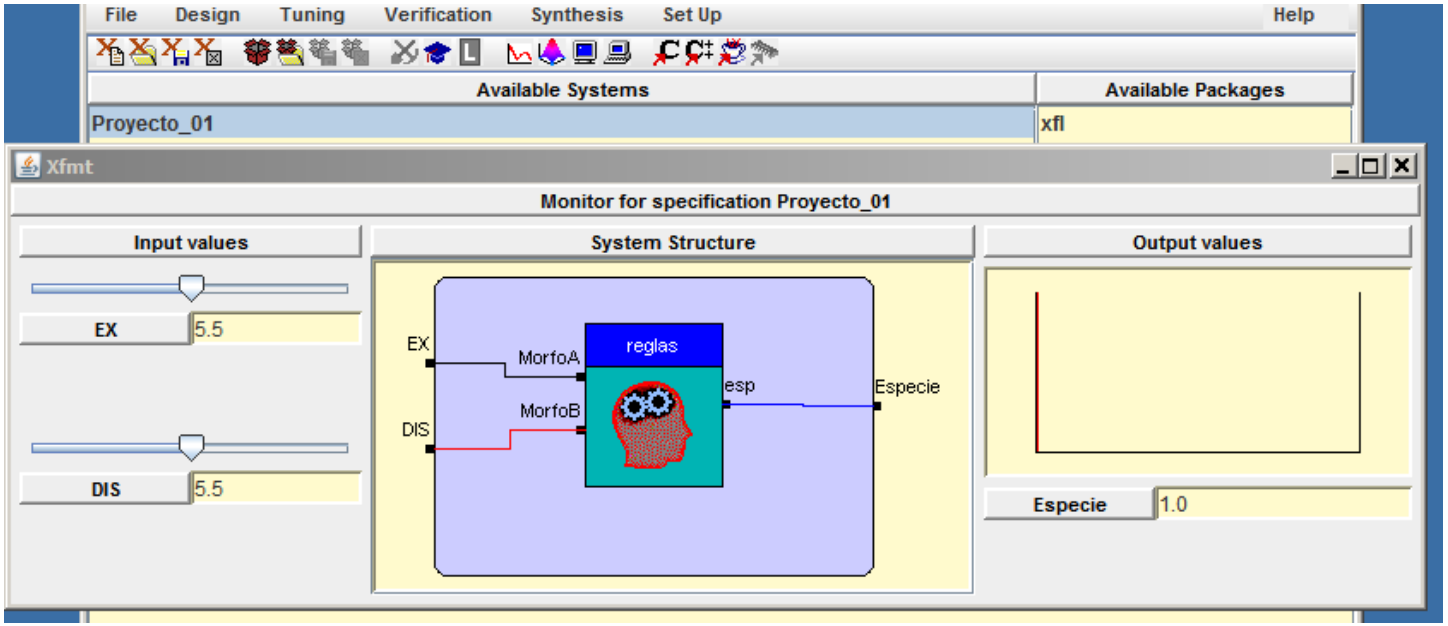

Especie
EX

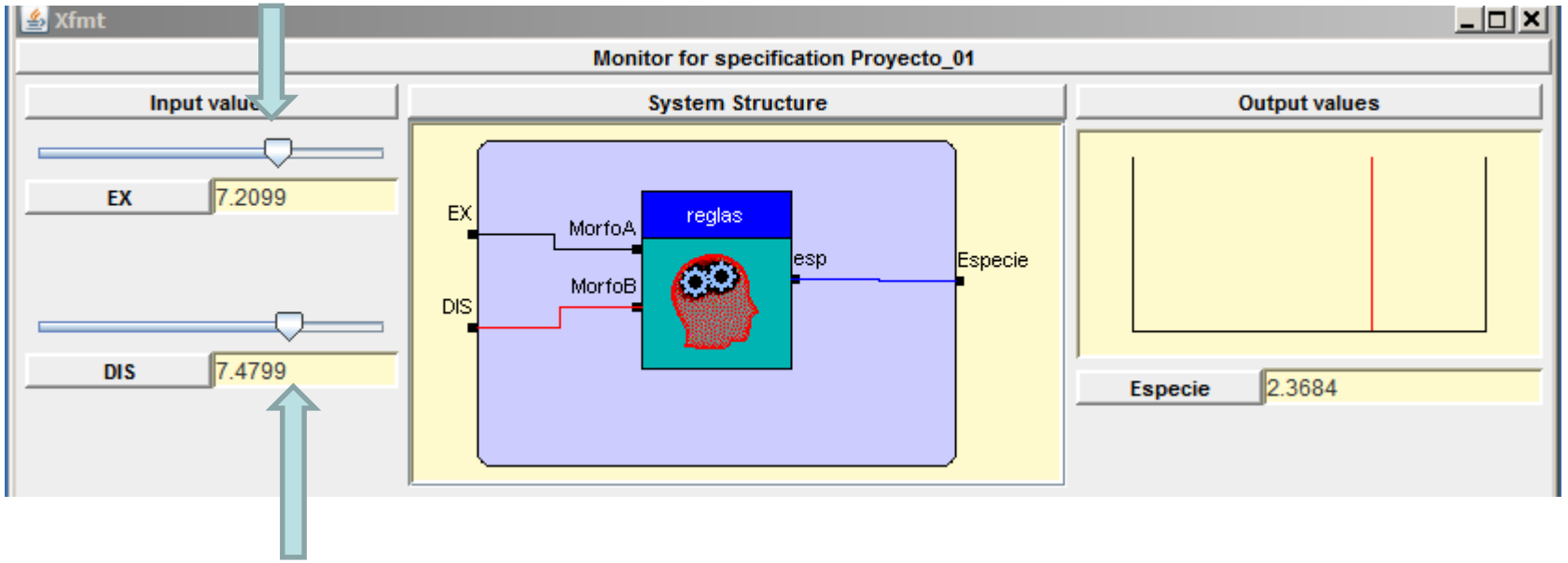

Verification
2D Plot
Surface 3D Plot
Monitorization
Simulation


Proyecto_01
xfl
Xf3dplot
Surface plot for specification Proyecto_01
EX
X Axis
DIS
Y Axis
X axis
EX
Y axis
DIS
Z axis
Especie
Number of samples
40
Plot
Close
3.0
Especie
1.0
1.0
10.0
EX
DIS
10.0
1.0

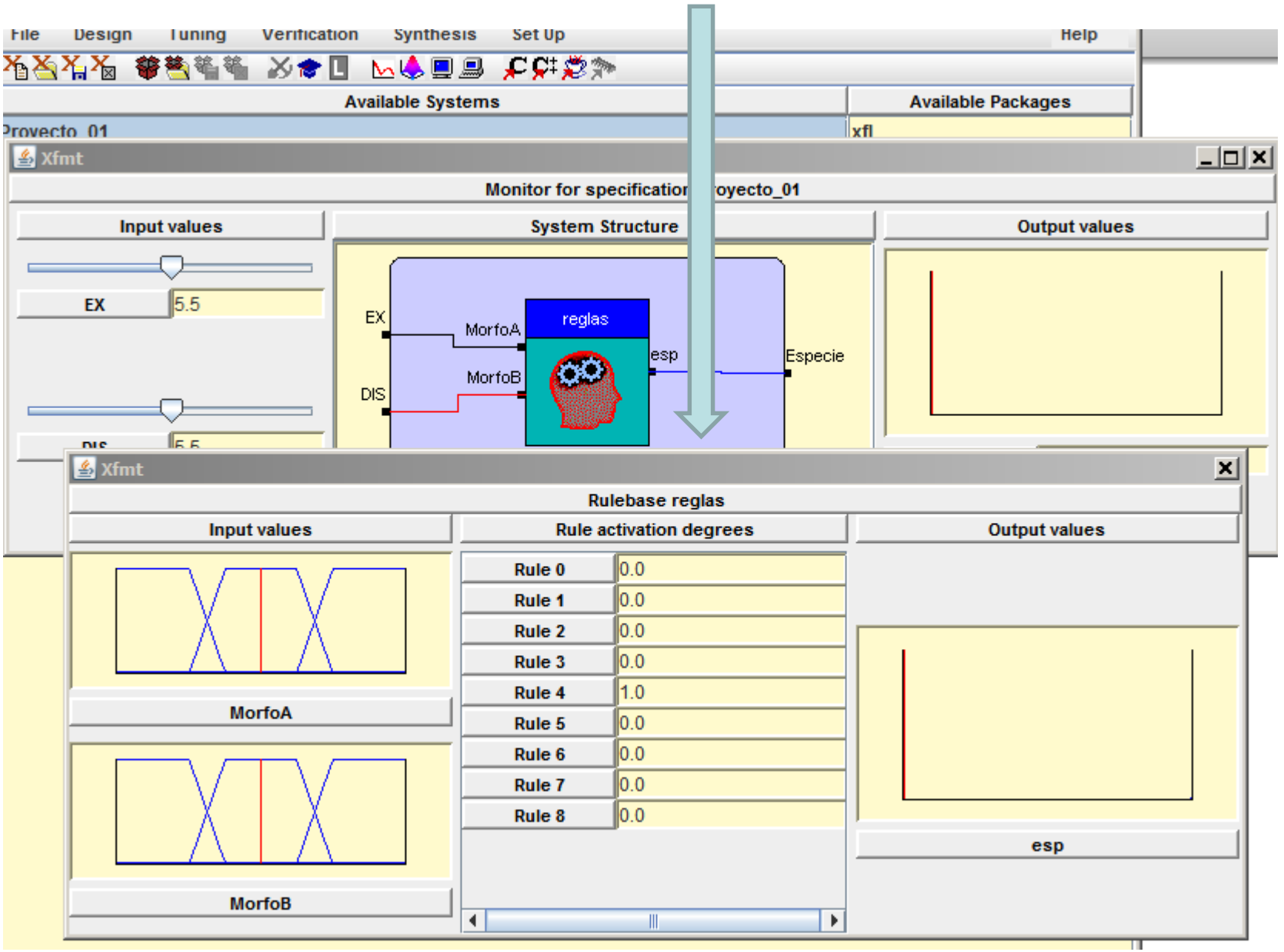

Xf3dplot
Surface plot for specification Proyecto_01
EX
X Axis
DIS
Y Axis
X axis
EX
Y axis
DIS
Z axis
Especie
Number of samples
40
Plot
Close
3.0
Especie
1.0
1.0
10.0
10.0
DIS
EX
1.0
1.0


Verification
2D Plot
Surface 3D Plot
Monitorization
Simulation


File
Design
Tuning
Verification
Synthesis
Set Up
Help
Available Systems
Available Packages
Proyecto_01
xfl
Xfmt
Monitor for specification Proyecto_01
Input values
System Structure
Output values
EX
5.5
DIS
5.5
EX
MorfoA
MorfoB
DIS
reglas
esp
Especie
Especie
1.0


Xfmt
Monitor for specification Proyecto_01
Input valu
System Structure
Output values
EX
7.2099
DIS
7.4799
EX
MorfoA
MorfoB
DIS
reglas
esp
Especie
Especie
2.3684

Doble clik


File
Design
Tuning
Verification
Synthesis
Set Up
Help
Available Systems
Available Packages
Proyecto_01
xfl
Xfmt
Monitor for specification
oyecto_01
Input values
System Structure
Output values
EX
5.5
EX
MorfoA
MorfoB
DIS
reglas
esp
Especie
Xfmt
Rulebase reglas
Input values
Rule activation degrees
Output values
Rule 0
0.0
Rule 1
0.0
Rule 2
0.0
Rule 3
0.0
Rule 4
1.0
Rule 5
0.0
Rule 6
0.0
Rule 7
0.0
Rule 8
0.0
MorfoA
MorfoB
esp