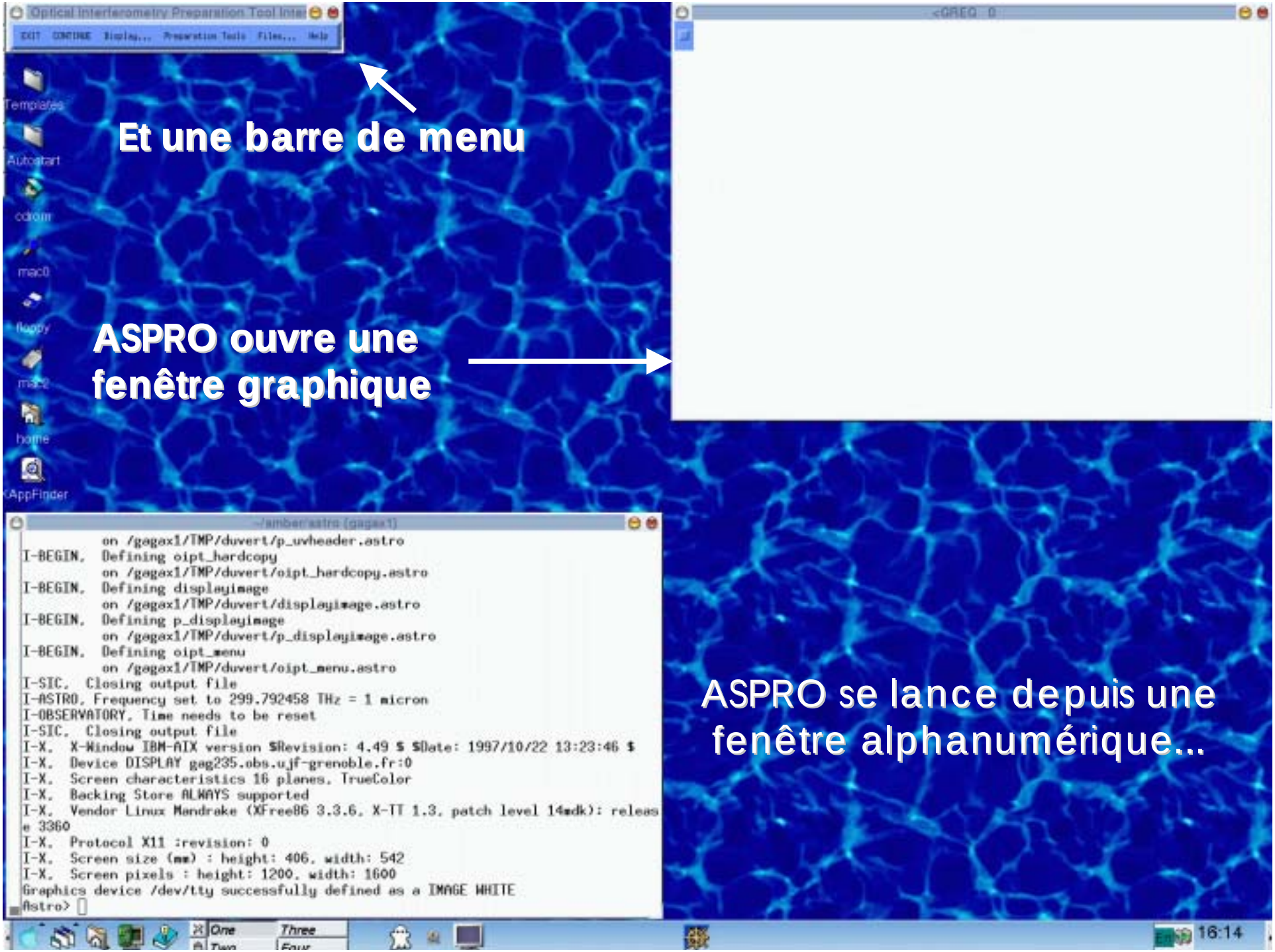
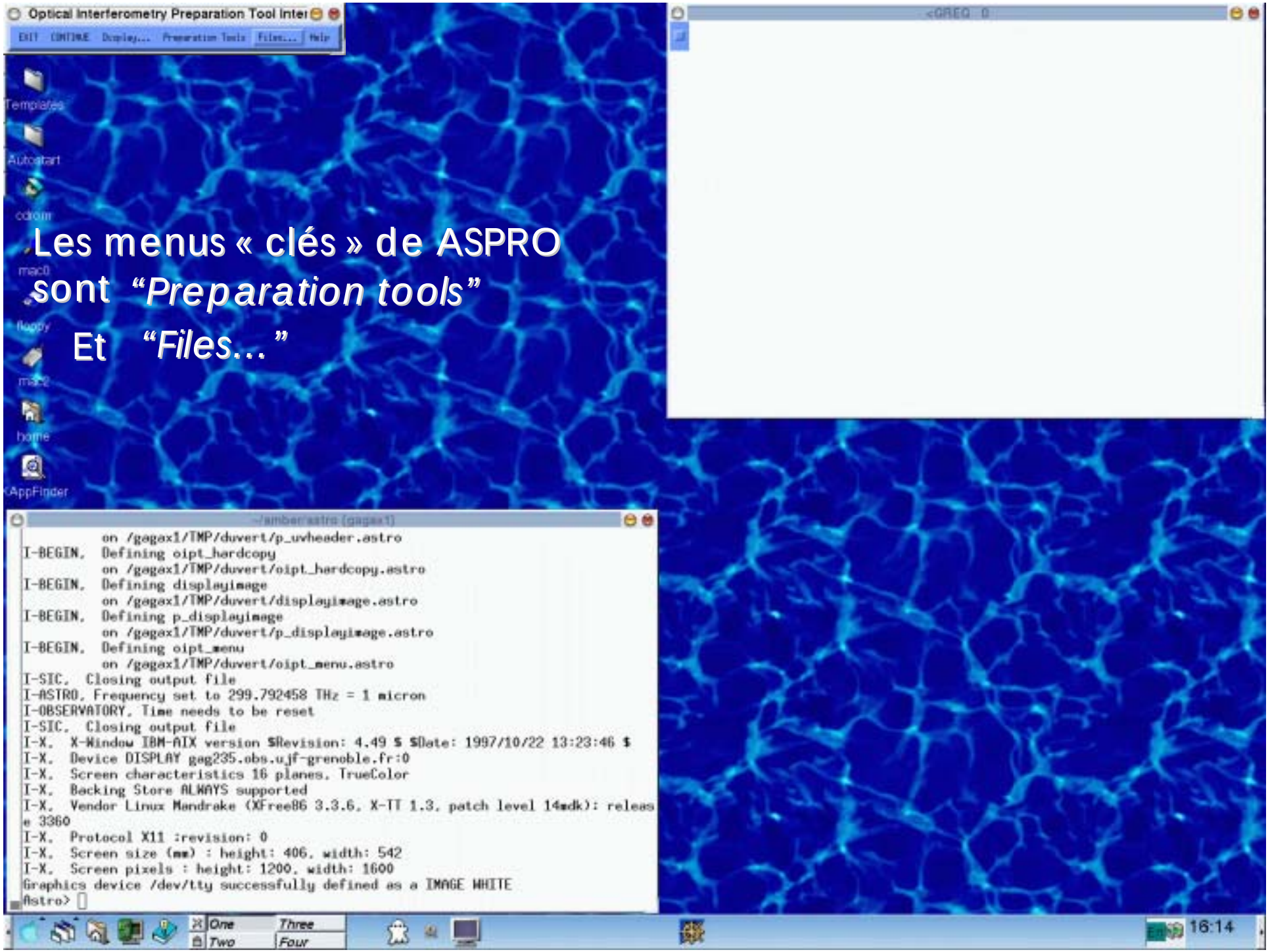
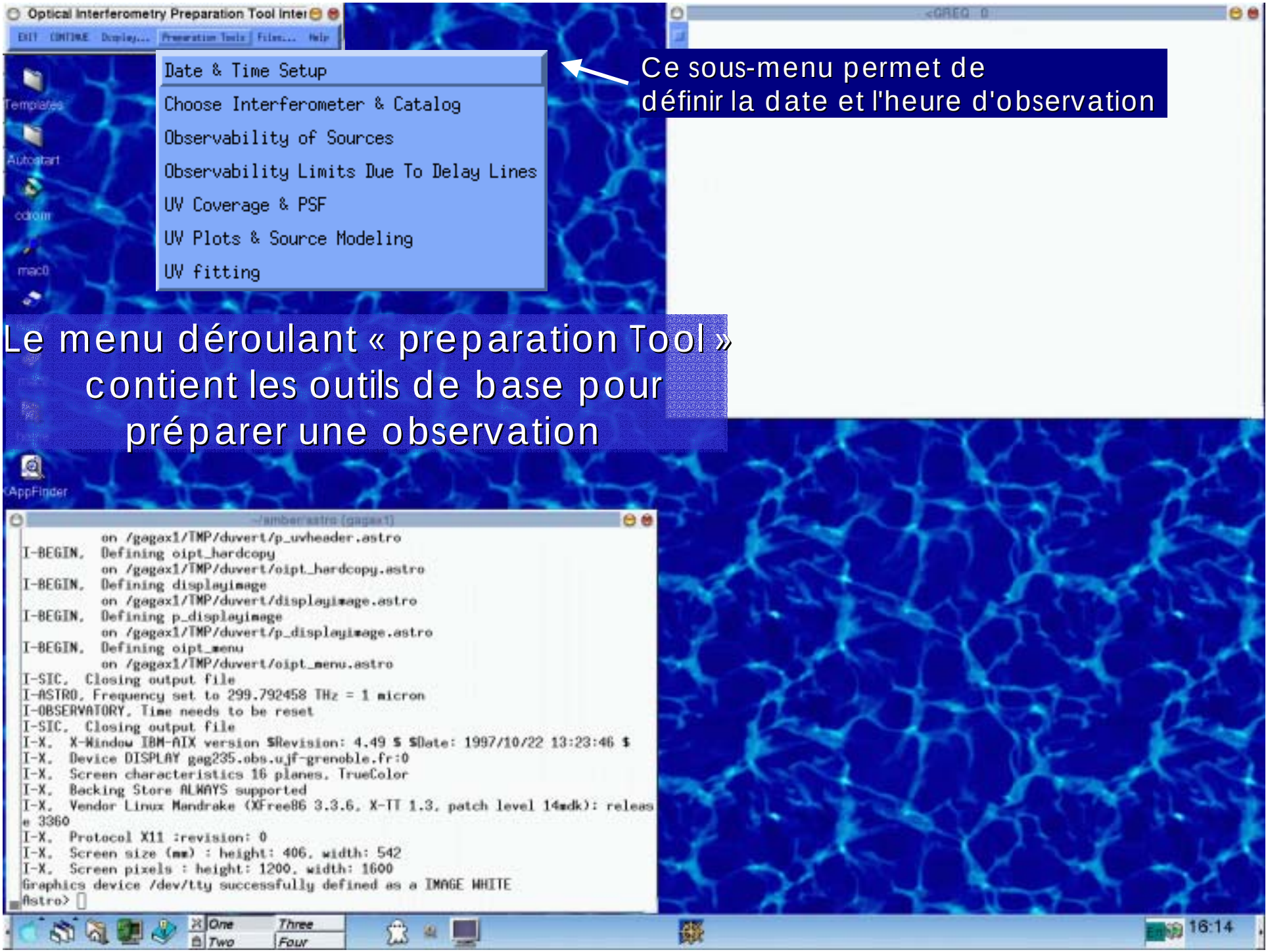
ASPRO

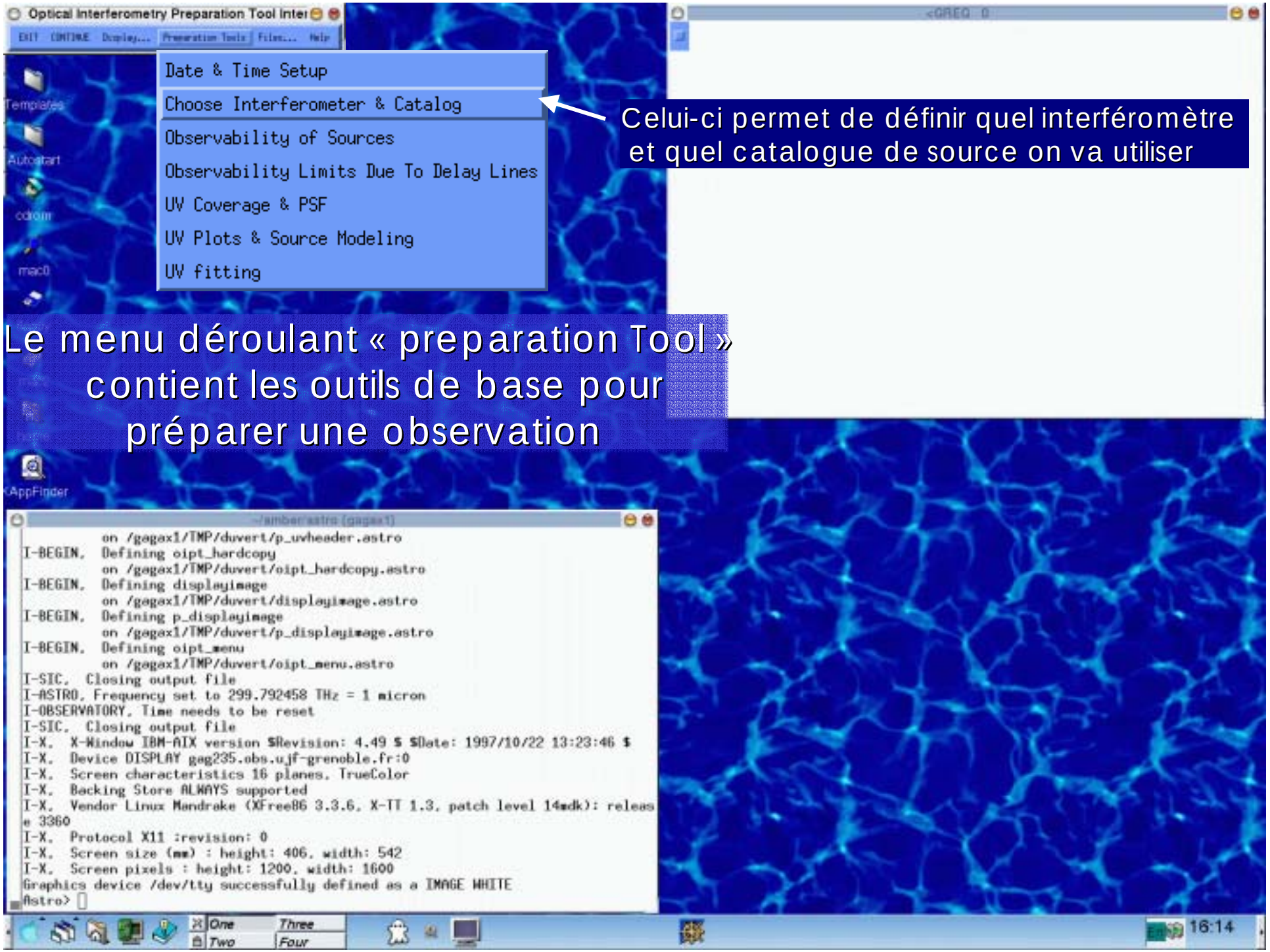
A Software to PRepare Observations

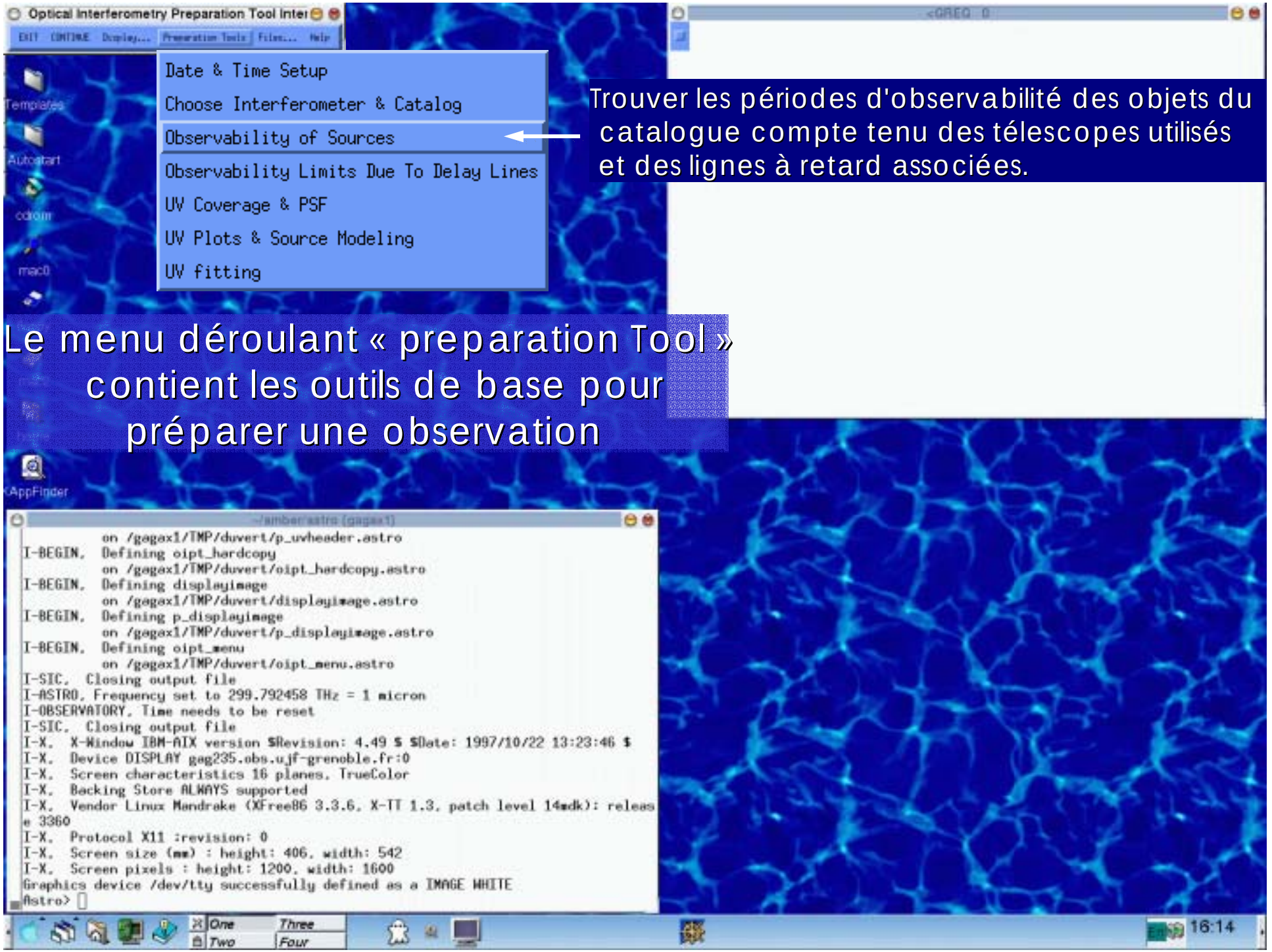
ASPRO est un logiciel d 'aide à la préparation d'observations avec un interféromètre optique ou radio. Il permet d'évaluer les contraintes dues à la géométrie et aux particularités de l'interféromètre considéré, de simuler des observations avec un instrument focal et de caractériser le Rapport Signal à Bruit des observations à venir.

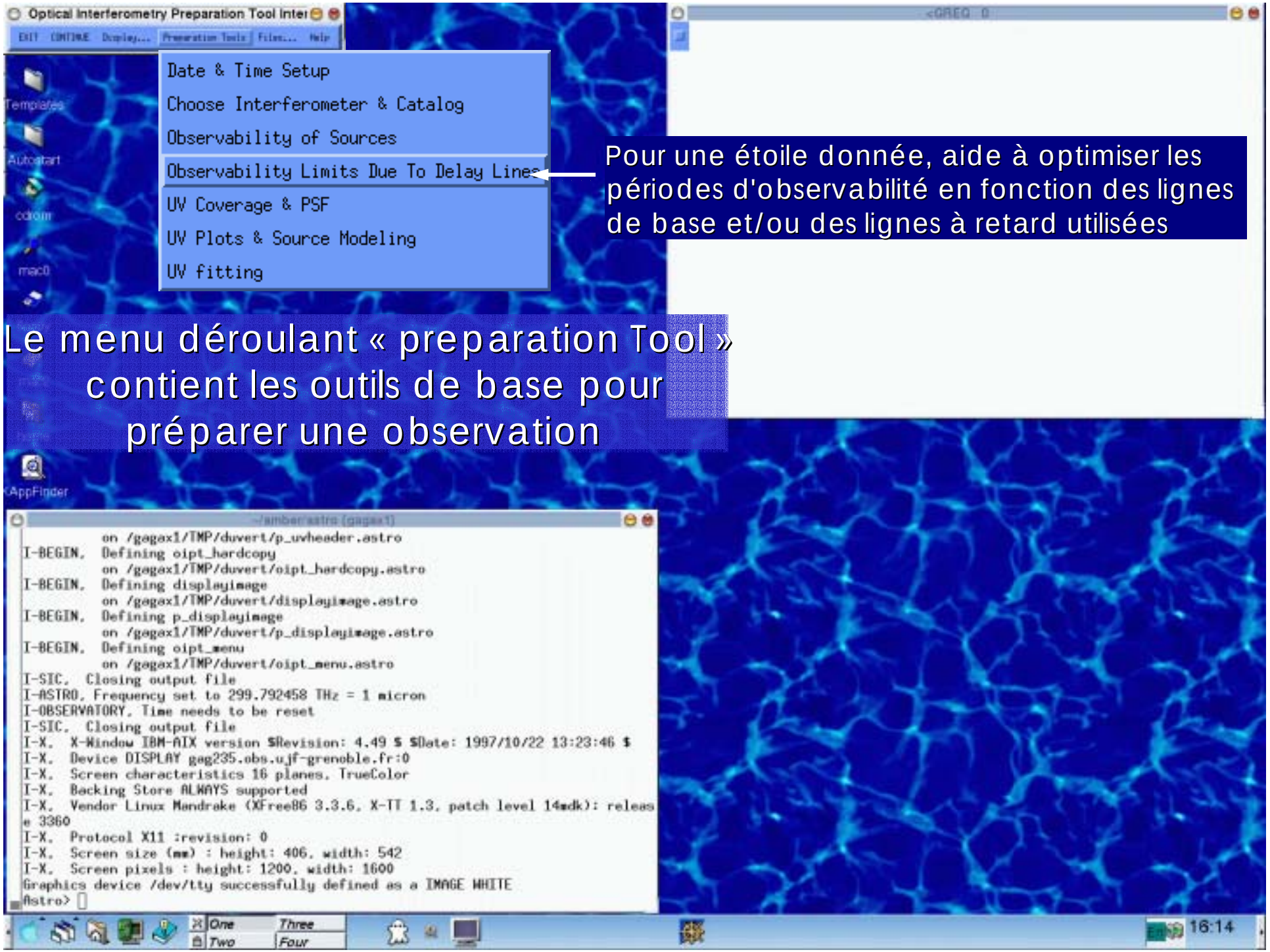

Et une barre de menu
ASPRO ouvre une fenêtre graphique
ASPRO se lance depuis une fenêtre alphanumérique...
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
16:14


Optical Interferometry Preparation Tool Inter
EXIT CONTINUE Display... Preparation Tools Files... Help
Templates
Autostart
cdrom
mac0
floppy
mac2
home
AppFinder
Les menus « clés » de ASPRO
sont "Preparation tools"
Et "Files..."
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
One
Two
Three
Four
16:14


Optical Interferometry Preparation Tool
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Ce sous-menu permet de définir la date et l'heure d'observation
Le menu déroulant « preparation Tool » contient les outils de base pour préparer une observation
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
16:14

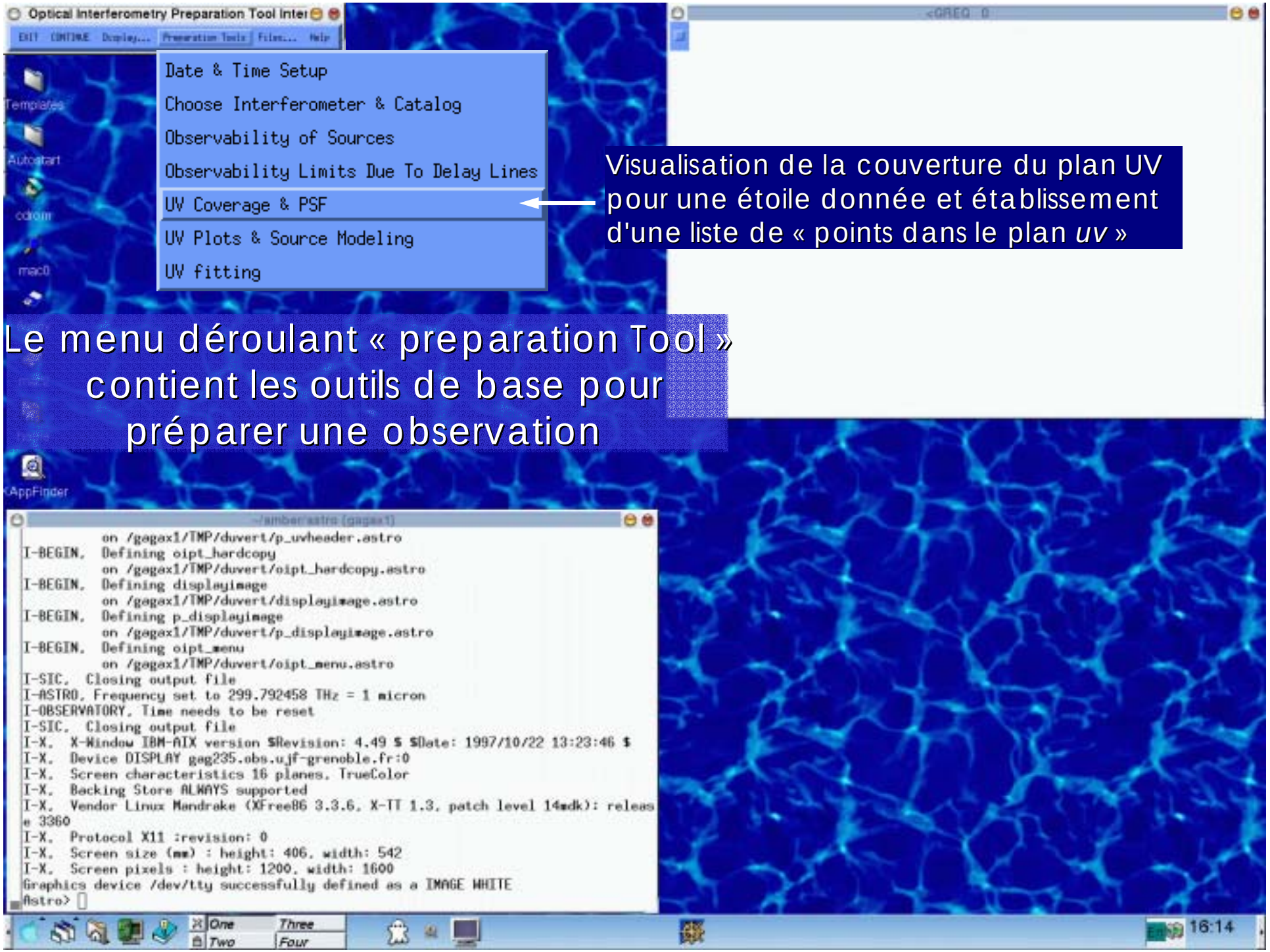

Optical Interferometry Preparation Tool
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Celui-ci permet de définir quel interféromètre et quel catalogue de source on va utiliser
Le menu déroulant « preparation Tool » contient les outils de base pour préparer une observation
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
16:14

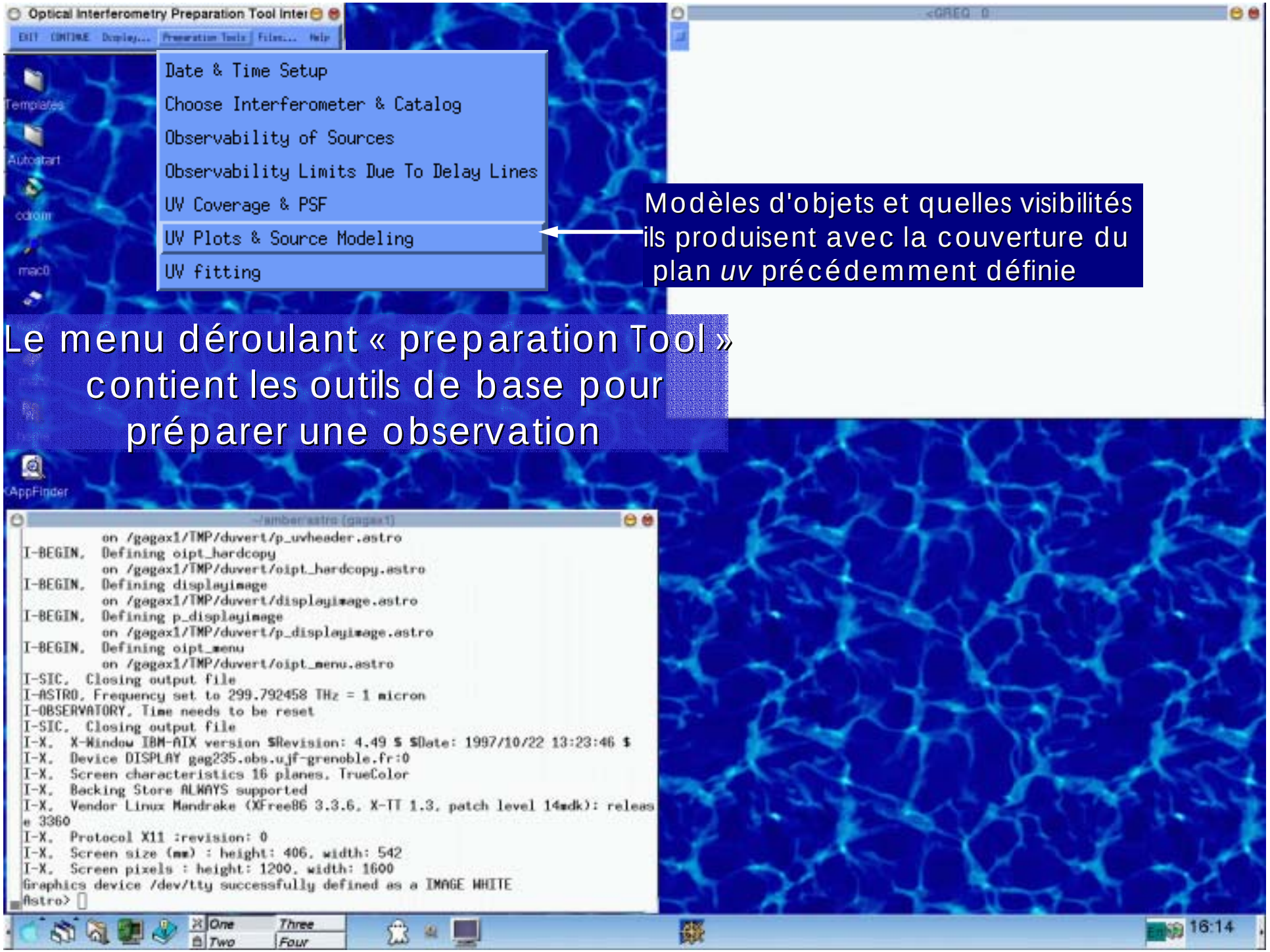

Optical Interferometry Preparation Tool Inter
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Templates
Autostart
cdrom
mac0
AppFinder
Trouver les périodes d'observabilité des objets du catalogue compte tenu des télescopes utilisés et des lignes à retard associées.
Le menu déroulant « preparation Tool » contient les outils de base pour préparer une observation
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
One
Two
Three
Four
16:14



Pour une étoile donnée, aide à optimiser les périodes d'observabilité en fonction des lignes de base et/ou des lignes à retard utilisées

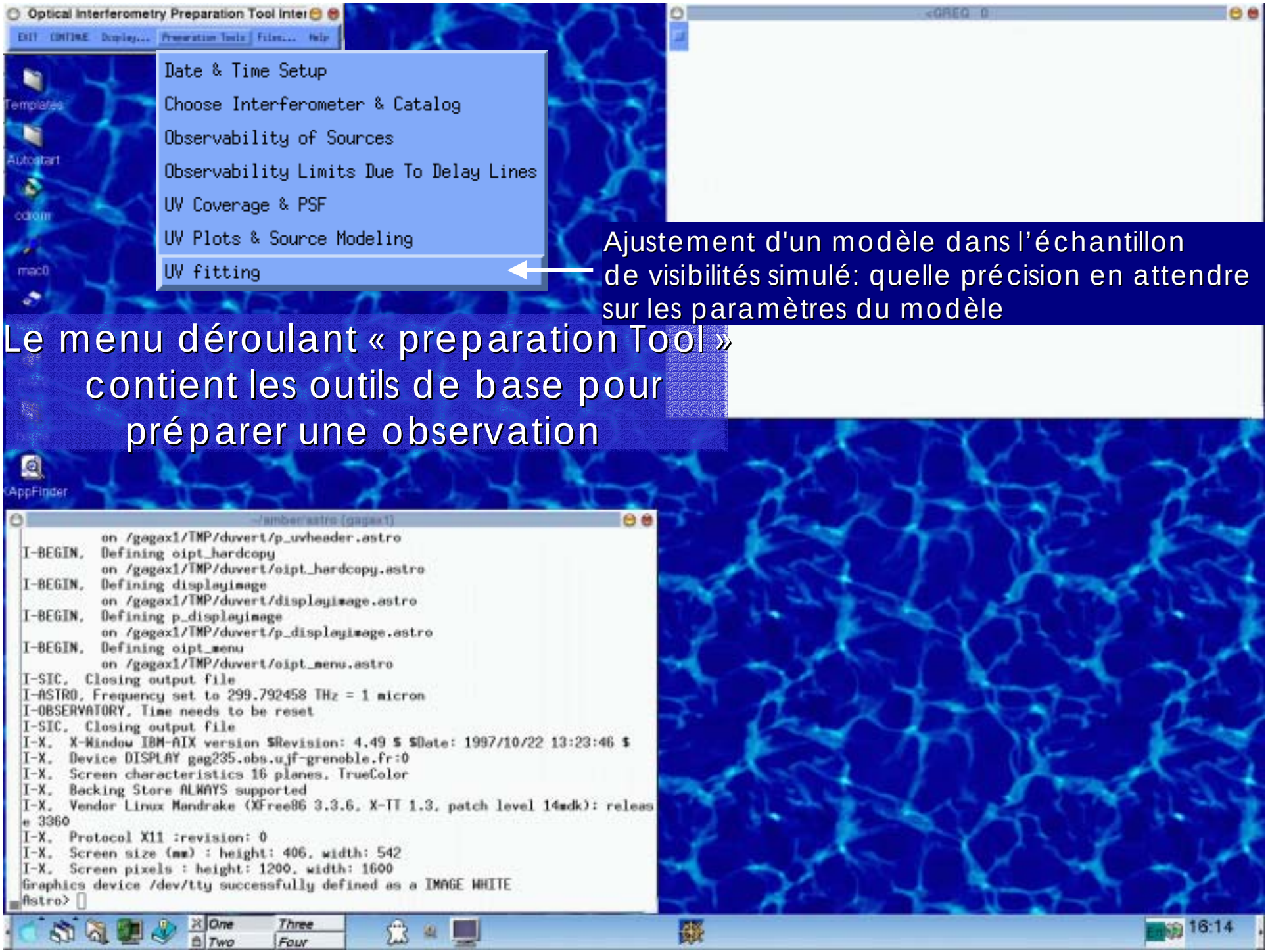
Le menu déroulant « preparation Tool » contient les outils de base pour préparer une observation

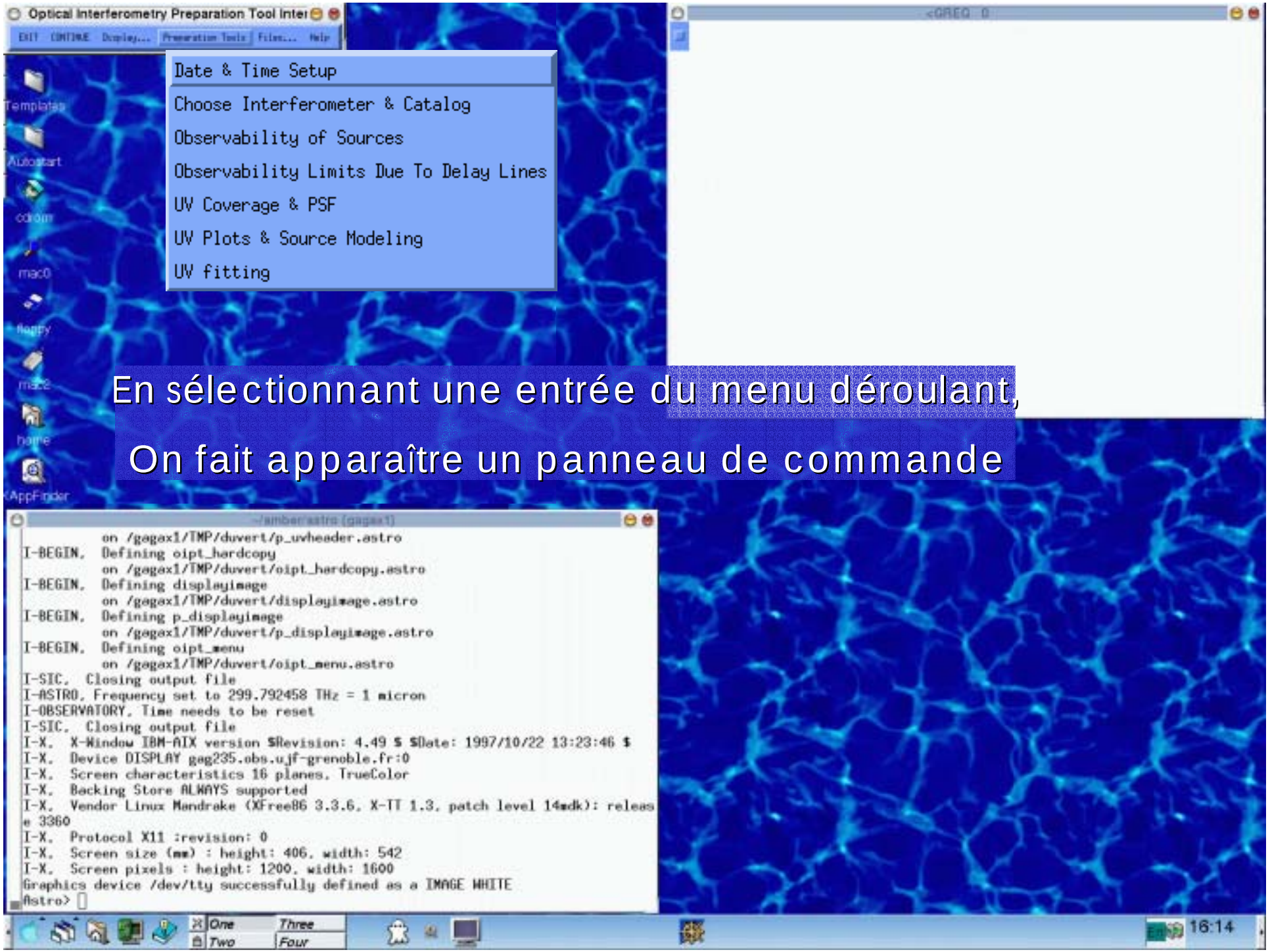

Optical Interferometry Preparation Tool Inter
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Visualisation de la couverture du plan UV pour une étoile donnée et établissement d'une liste de « points dans le plan *uv* »
Le menu déroulant « preparation Tool » contient les outils de base pour préparer une observation
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
16:14



Modèles d'objets et quelles visibilités ils produisent avec la couverture du plan *uv* précédemment définie

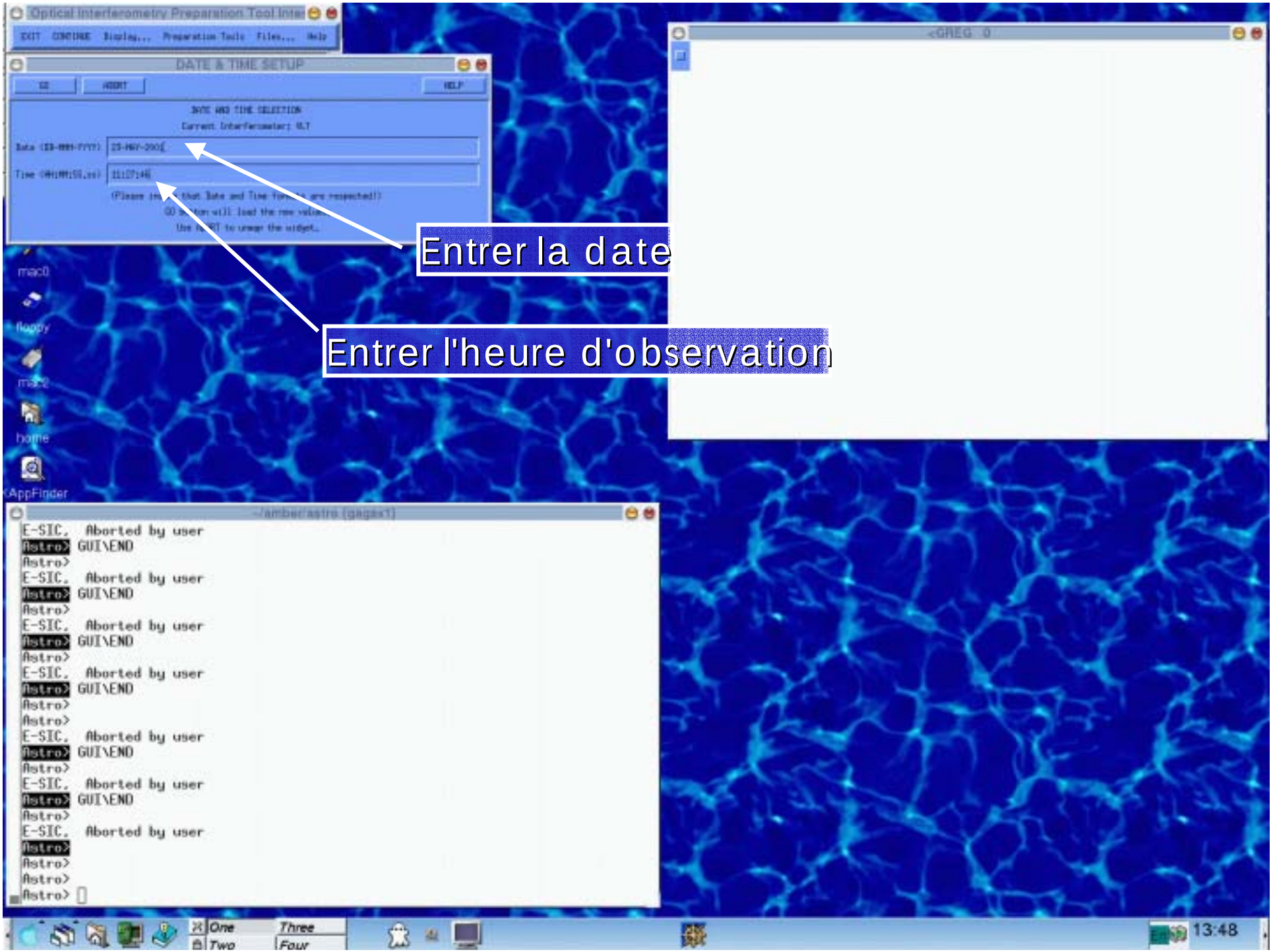
Le menu déroulant « preparation Tool » contient les outils de base pour préparer une observation

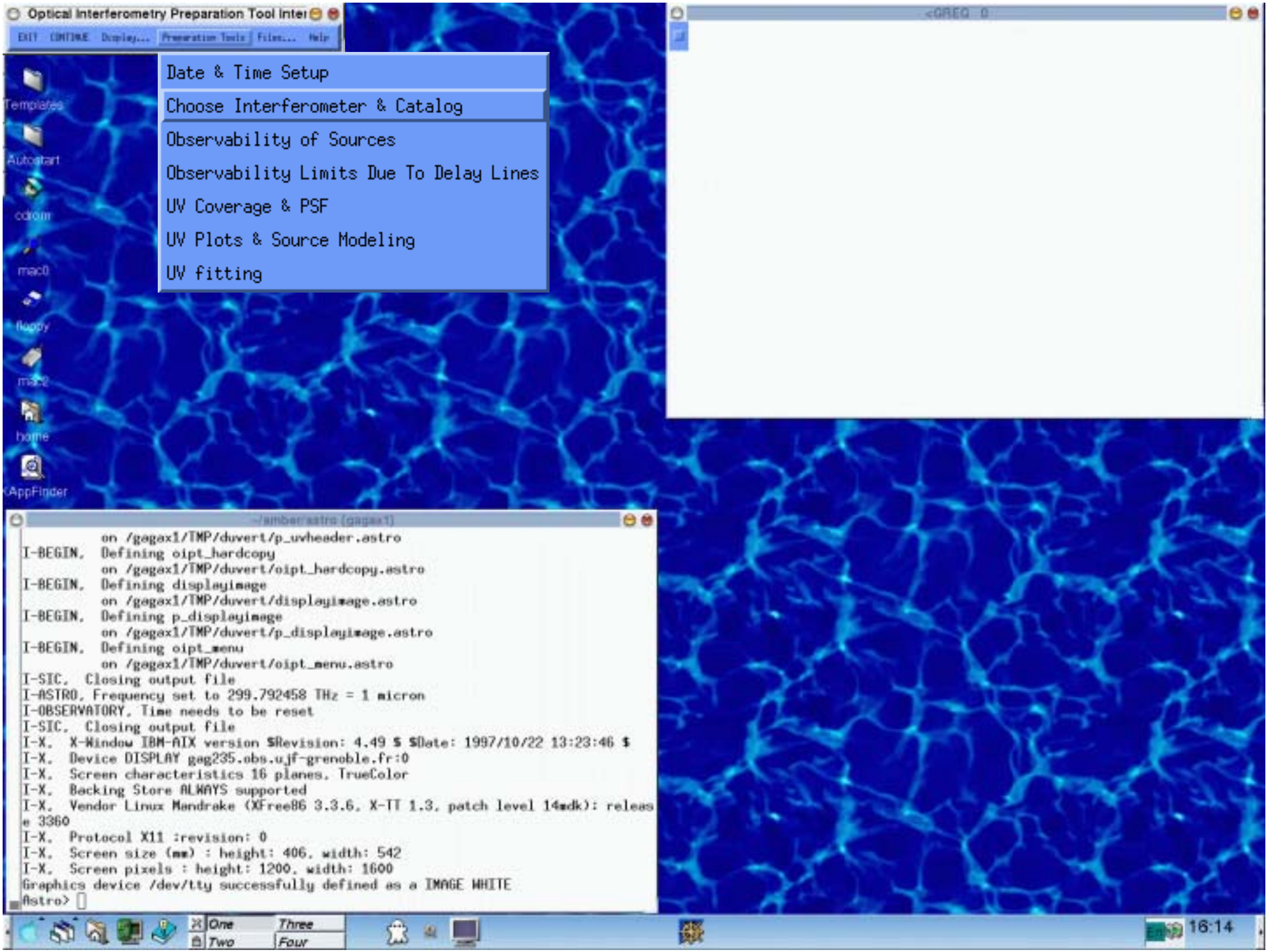

Optical Interferometry Preparation Tool
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Templates
Autostart
cdrom
mac0
AppFinder
Ajustement d'un modèle dans l'échantillon de visibilités simulé: quelle précision en attendre sur les paramètres du modèle
Le menu déroulant « preparation Tool » contient les outils de base pour préparer une observation
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
One
Two
Three
Four
16:14

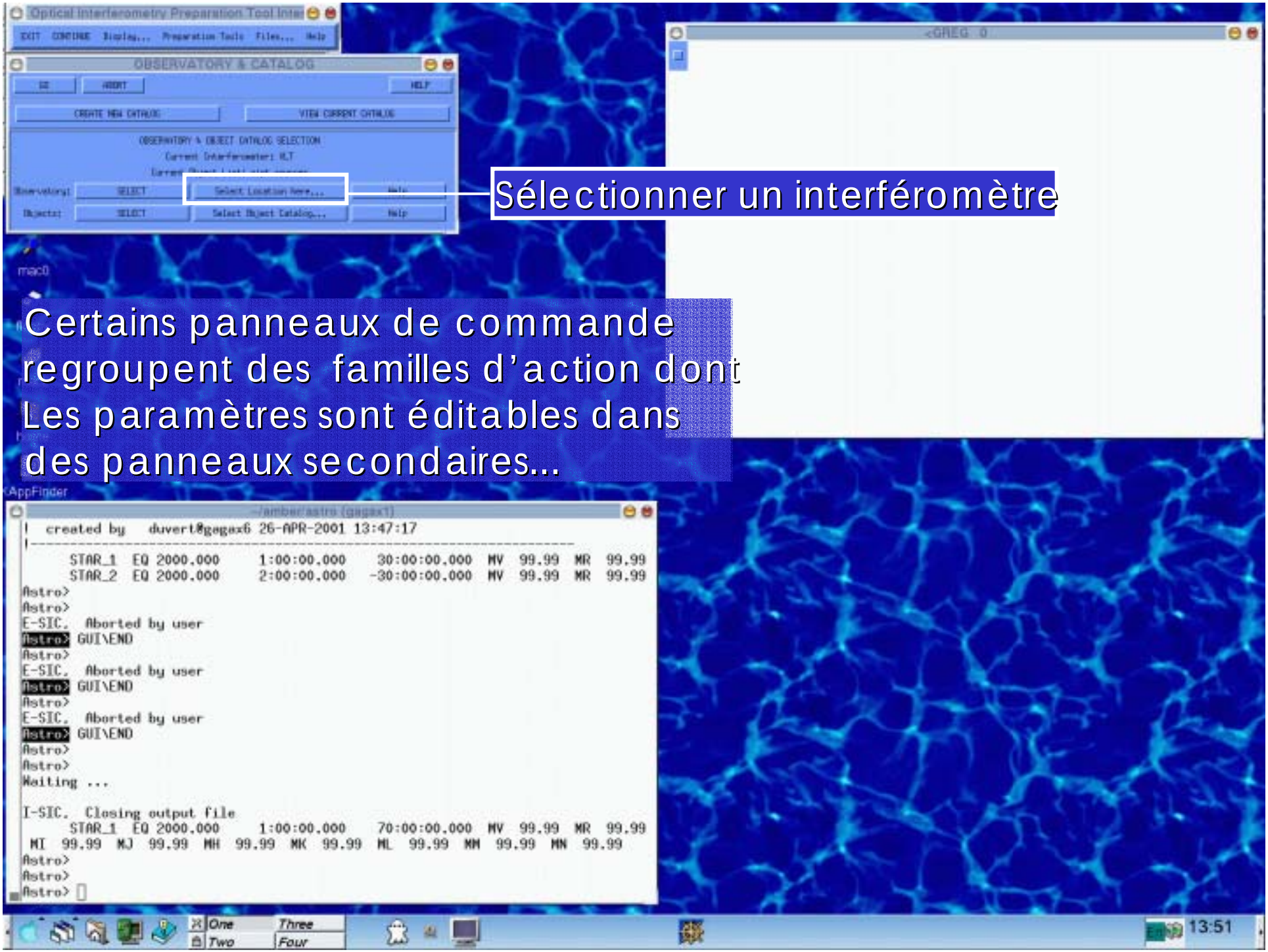


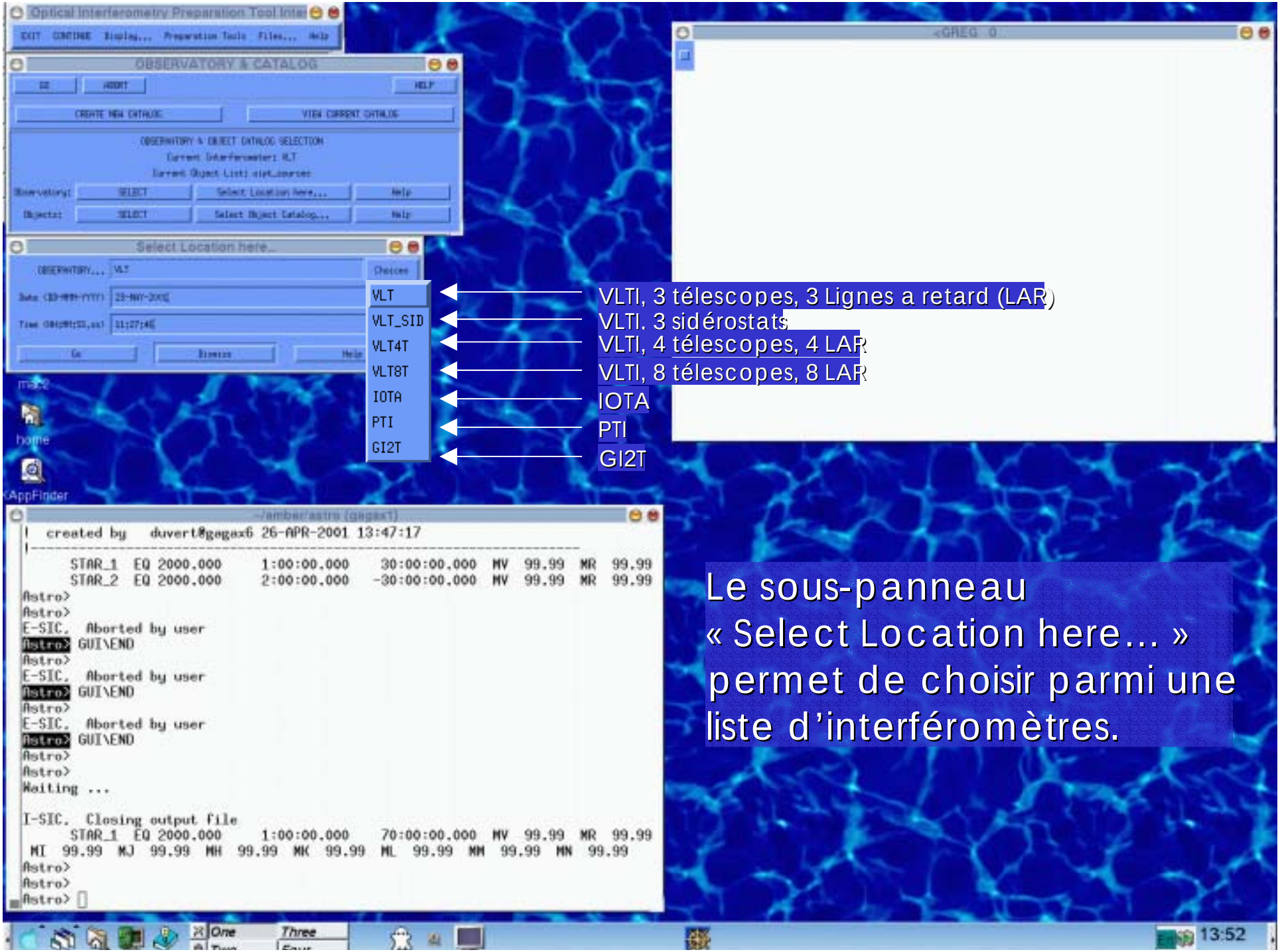
En sélectionnant une entrée du menu déroulant,

On fait apparaître un panneau de commande

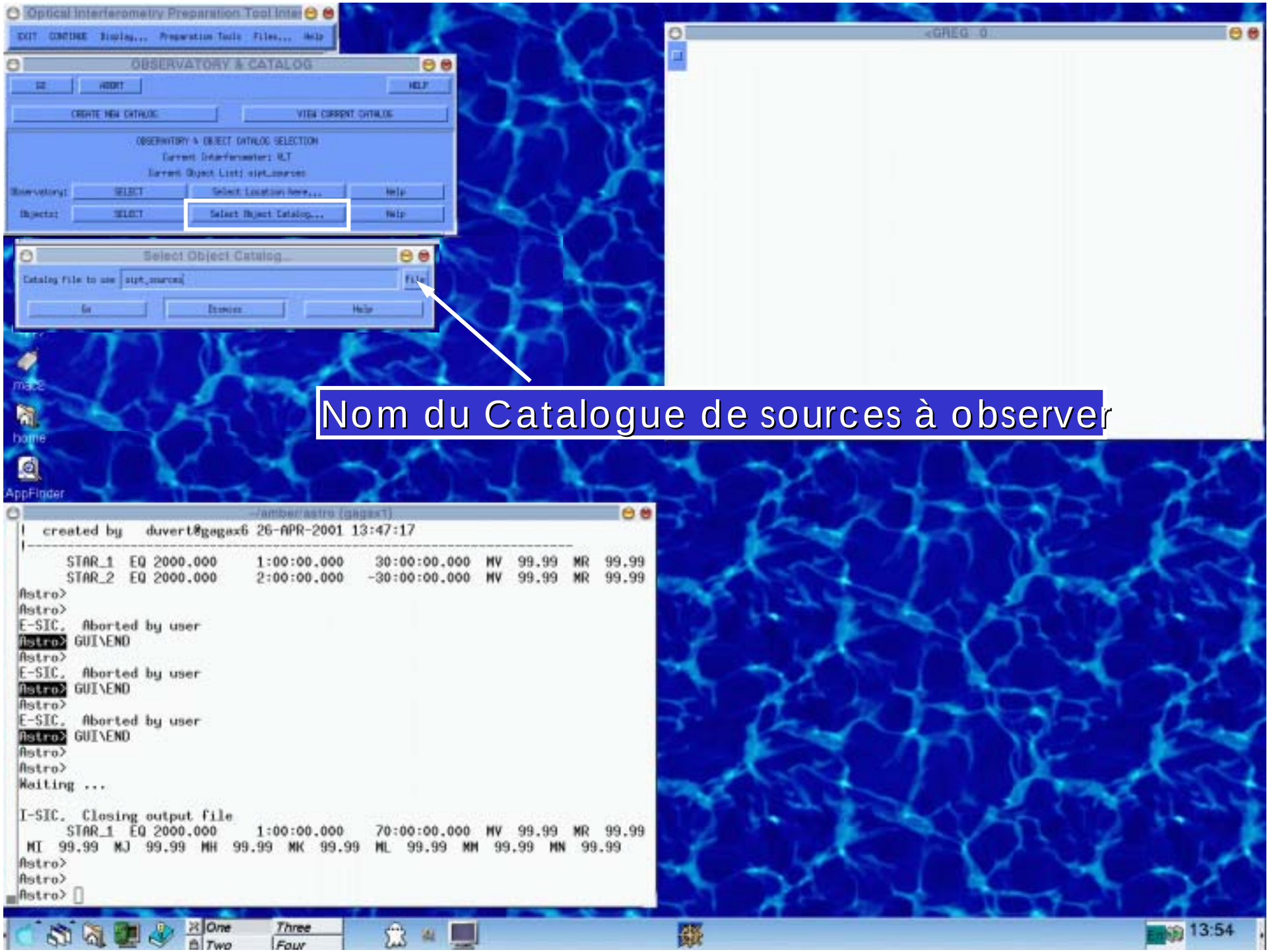

Optical Interferometry Preparation Tool Inter
EXIT CONTINUE Display... Preparation Tools Files... Help
DATE & TIME SETUP
GO
ABORT
HELP
DATE AND TIME SELECTION
Current Interferometer: VLT
Date (DD-MMM-YYYY): 25-MAY-2005
Time (HH:MM:SS.ss): 11:27:46
(Please make sure that Date and Time formats are respected!)
GO button will load the new values
Use ABORT to unmap the widget.
<GREG 0
mac0
floppy
mac2
home
AppFinder
~/amber/astro (gagax1)
E-SIC. Aborted by user
Astro> GUI\END
Astro>
E-SIC. Aborted by user
Astro> GUI\END
Astro>
E-SIC. Aborted by user
Astro> GUI\END
Astro>
E-SIC. Aborted by user
Astro> GUI\END
Astro>
Astro>
E-SIC. Aborted by user
Astro> GUI\END
Astro>
E-SIC. Aborted by user
Astro> GUI\END
Astro>
E-SIC. Aborted by user
Astro>
Astro>
Astro>
Astro>
One
Two
Three
Four
13:48
Entrer la date
Entrer l'heure d'observation

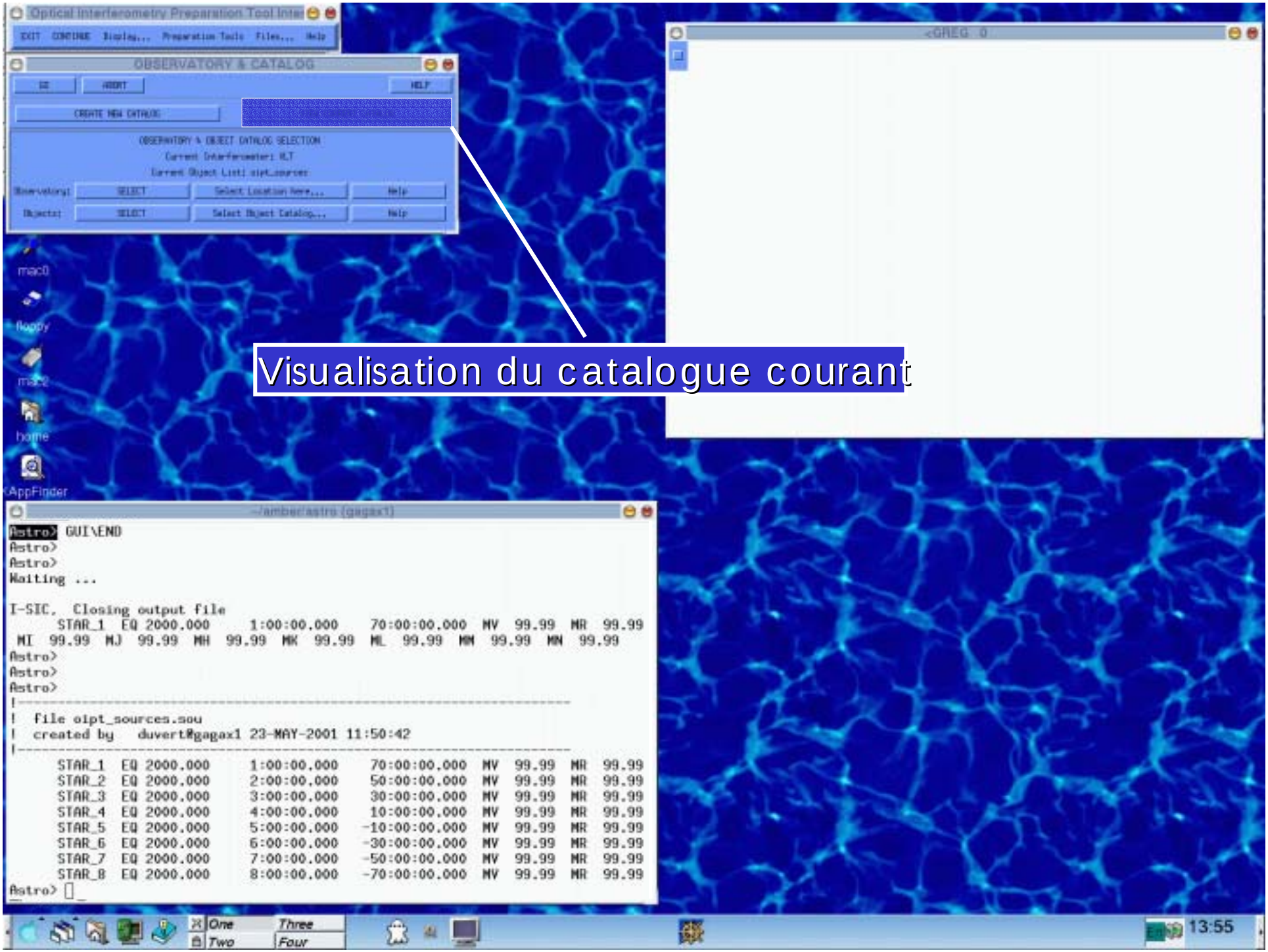

Optical Interferometry Preparation Tool Inter
EXIT CONTINUE Display... Preparation Tools Files... Help
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Templates
Autostart
cdrom
mac0
floppy
mac2
home
AppFinder
on /gagax1/TMP/duvert/p_uvheader.astro
I-BEGIN, Defining oipt_hardcopy
on /gagax1/TMP/duvert/oipt_hardcopy.astro
I-BEGIN, Defining displayimage
on /gagax1/TMP/duvert/displayimage.astro
I-BEGIN, Defining p_displayimage
on /gagax1/TMP/duvert/p_displayimage.astro
I-BEGIN, Defining oipt_menu
on /gagax1/TMP/duvert/oipt_menu.astro
I-SIC, Closing output file
I-ASTRO, Frequency set to 299.792458 THz = 1 micron
I-OBSERVATORY, Time needs to be reset
I-SIC, Closing output file
I-X, X-Window IBM-AIX version $Revision: 4.49 $ $Date: 1997/10/22 13:23:46 $
I-X, Device DISPLAY gag235.obs.ujf-grenoble.fr:0
I-X, Screen characteristics 16 planes, TrueColor
I-X, Backing Store ALWAYS supported
I-X, Vendor Linux Mandrake (XFree86 3.3.6, X-TT 1.3, patch level 14mdk): releas
e 3360
I-X, Protocol X11 :revision: 0
I-X, Screen size (mm) : height: 406, width: 542
I-X, Screen pixels : height: 1200, width: 1600
Graphics device /dev/tty successfully defined as a IMAGE WHITE
Astro>
One
Two
Three
Four
16:14


Optical Interferometry Preparation Tool Intel
EXIT CONTINUE Display... Preparation Tools Files... Help
OBSERVATORY & CATALOG
EXIT ABORT HELP
CREATE NEW CATALOG VIEW CURRENT CATALOG
OBSERVATORY & OBJECT CATALOG SELECTION
Current Interferometer: VLT
Observatory: SELECT Select Location Here... Help
Objects: SELECT Select Object Catalog... Help
Sélectionner un interféromètre
Certains panneaux de commande regroupent des familles d'action dont Les paramètres sont éditables dans des panneaux secondaires...
created by duvert@gagax6 26-APR-2001 13:47:17
STAR_1 EQ 2000.000 1:00:00.000 30:00:00.000 MV 99.99 MR 99.99
STAR_2 EQ 2000.000 2:00:00.000 -30:00:00.000 MV 99.99 MR 99.99
Astro>
E-SIC. Aborted by user
Astro> GUI\END
E-SIC. Aborted by user
Astro> GUI\END
E-SIC. Aborted by user
Astro> GUI\END
Waiting ...
I-SIC. Closing output file
STAR_1 EQ 2000.000 1:00:00.000 70:00:00.000 MV 99.99 MR 99.99
MI 99.99 MJ 99.99 MH 99.99 MK 99.99 ML 99.99 MM 99.99 MN 99.99
One Two Three Four
13:51

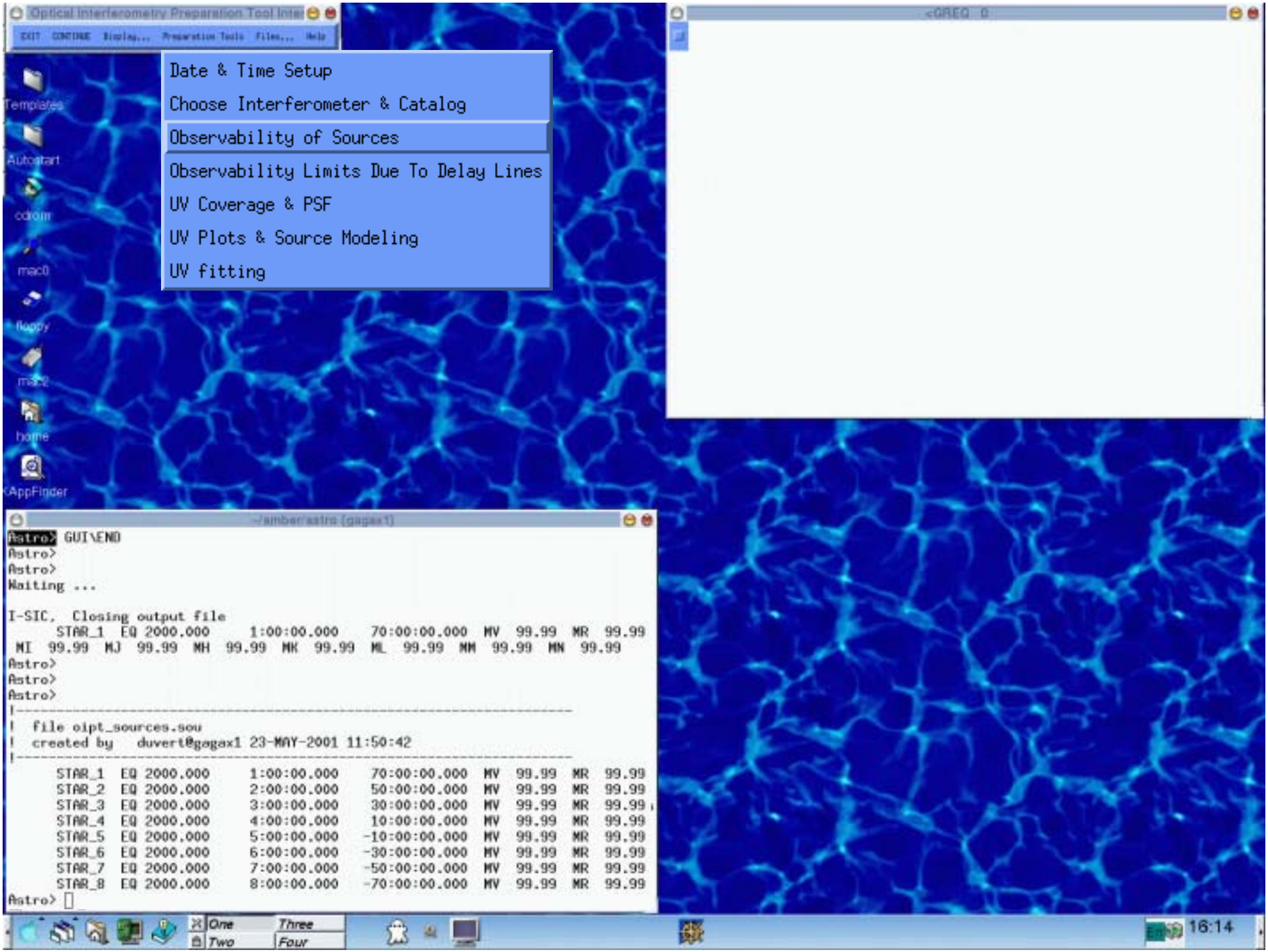


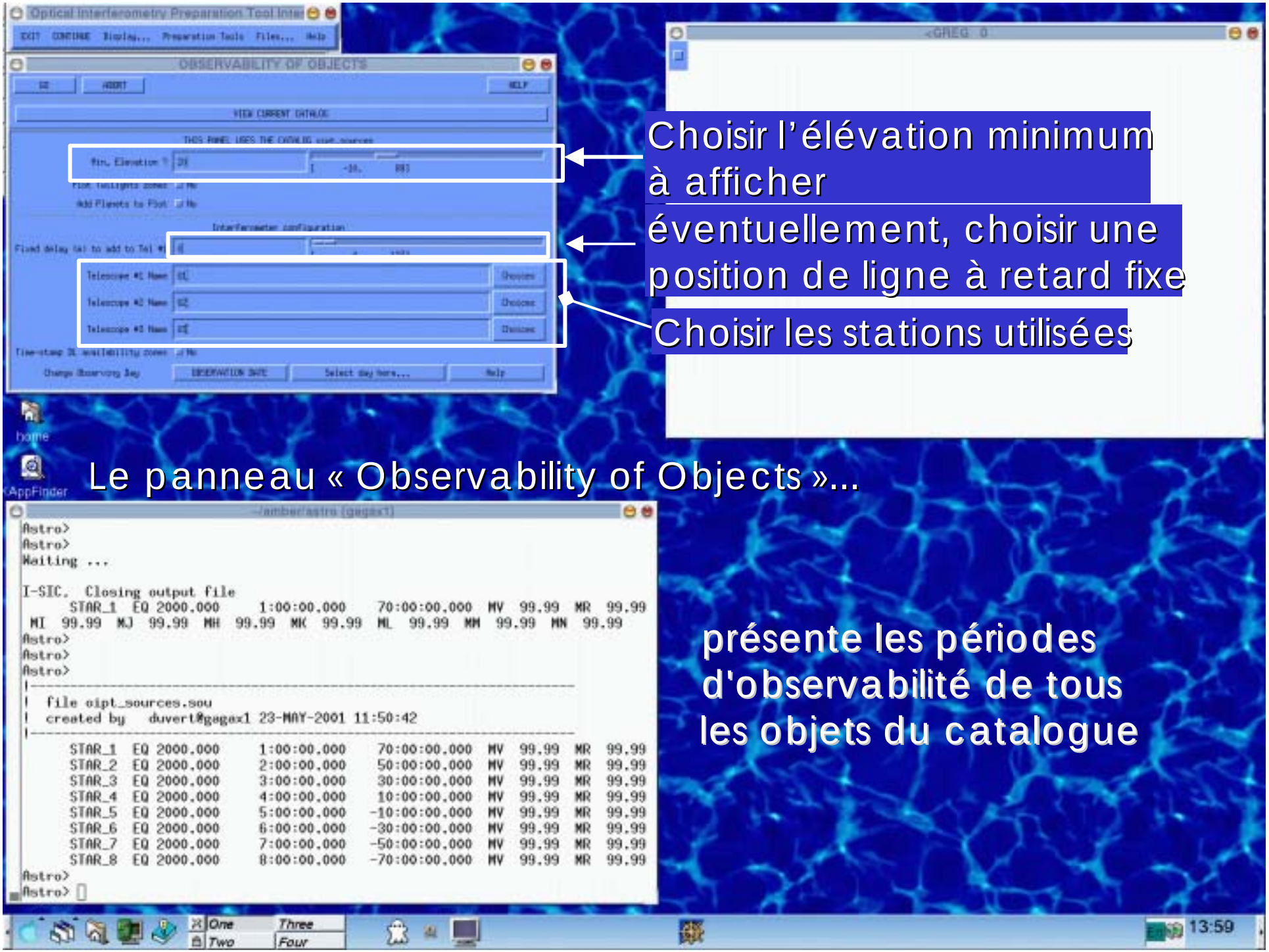
Le sous-panneau « Select Location here... » permet de choisir parmi une liste d'interféromètres.

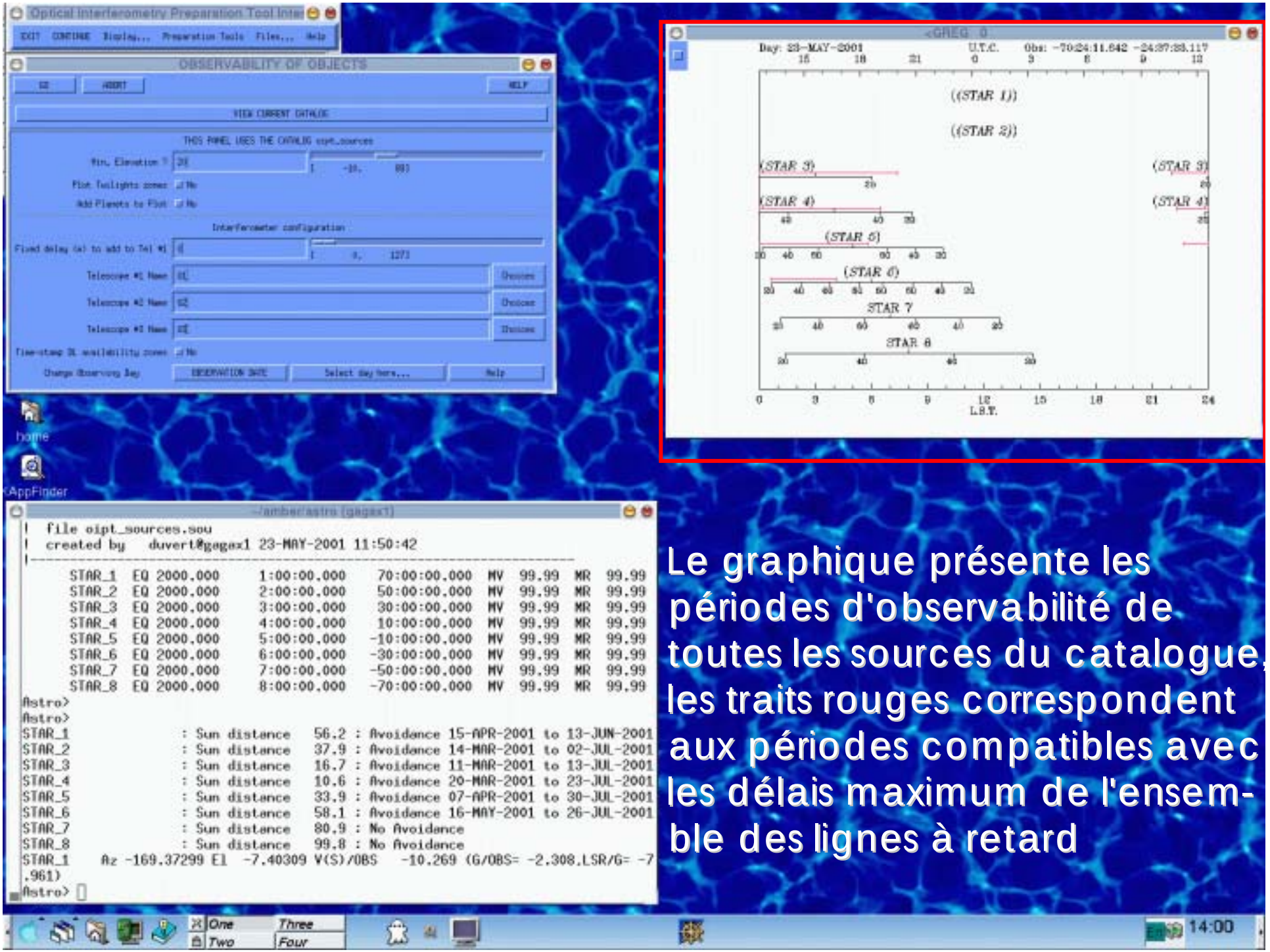

Optical Interferometry Preparation Tool Inter
EXIT CONTINUE Display... Preparation Tools Files... Help
OBSERVATORY & CATALOG
EXIT ABORT HELP
CREATE NEW CATALOG VIEW CURRENT CATALOG
OBSERVATORY & OBJECT CATALOG SELECTION
Current Interferometer: VLT
Current Object List: sipt_sources
Observatory: SELECT Select Location Here... Help
Objects: SELECT Select Object Catalog... Help
Select Object Catalog...
Catalog file to use: sipt_sources
File
Go Browse Help
<GREG 0
Nom du Catalogue de sources à observer
~/amber/astro (gagax1)
! created by duvert@gagax6 26-APR-2001 13:47:17
STAR_1 EQ 2000.000 1:00:00.000 30:00:00.000 MV 99.99 MR 99.99
STAR_2 EQ 2000.000 2:00:00.000 -30:00:00.000 MV 99.99 MR 99.99
Astro>
Astro>
E-SIC, Aborted by user
Astro> GUI\END
Astro>
E-SIC, Aborted by user
Astro> GUI\END
Astro>
E-SIC, Aborted by user
Astro> GUI\END
Astro>
Astro>
Waiting ...
I-SIC, Closing output file
STAR_1 EQ 2000.000 1:00:00.000 70:00:00.000 MV 99.99 MR 99.99
MI 99.99 MJ 99.99 MH 99.99 MK 99.99 ML 99.99 MM 99.99 MN 99.99
Astro>
Astro>
Astro>
One Three
Two Four
13:54



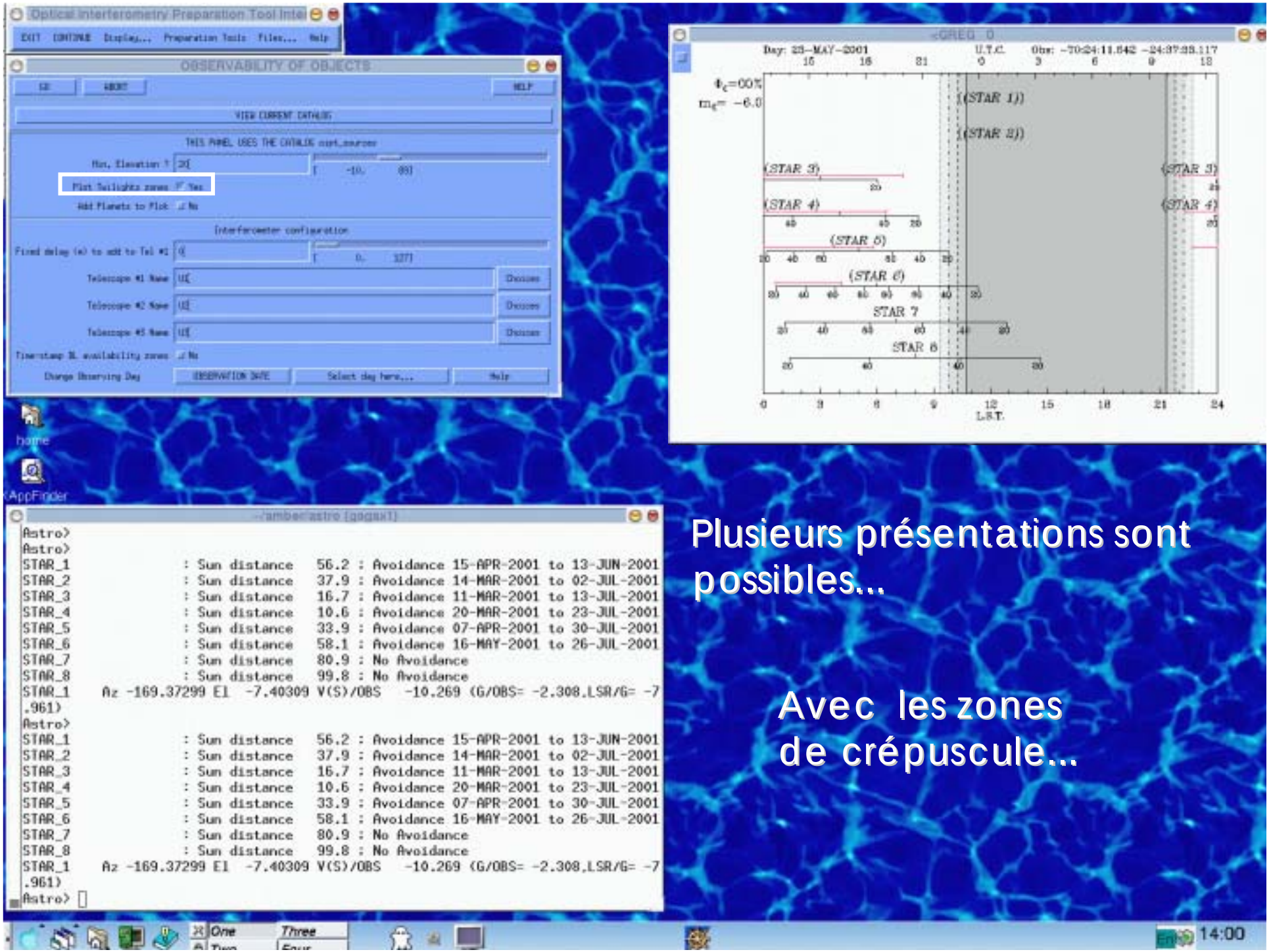
Visualisation du catalogue courant

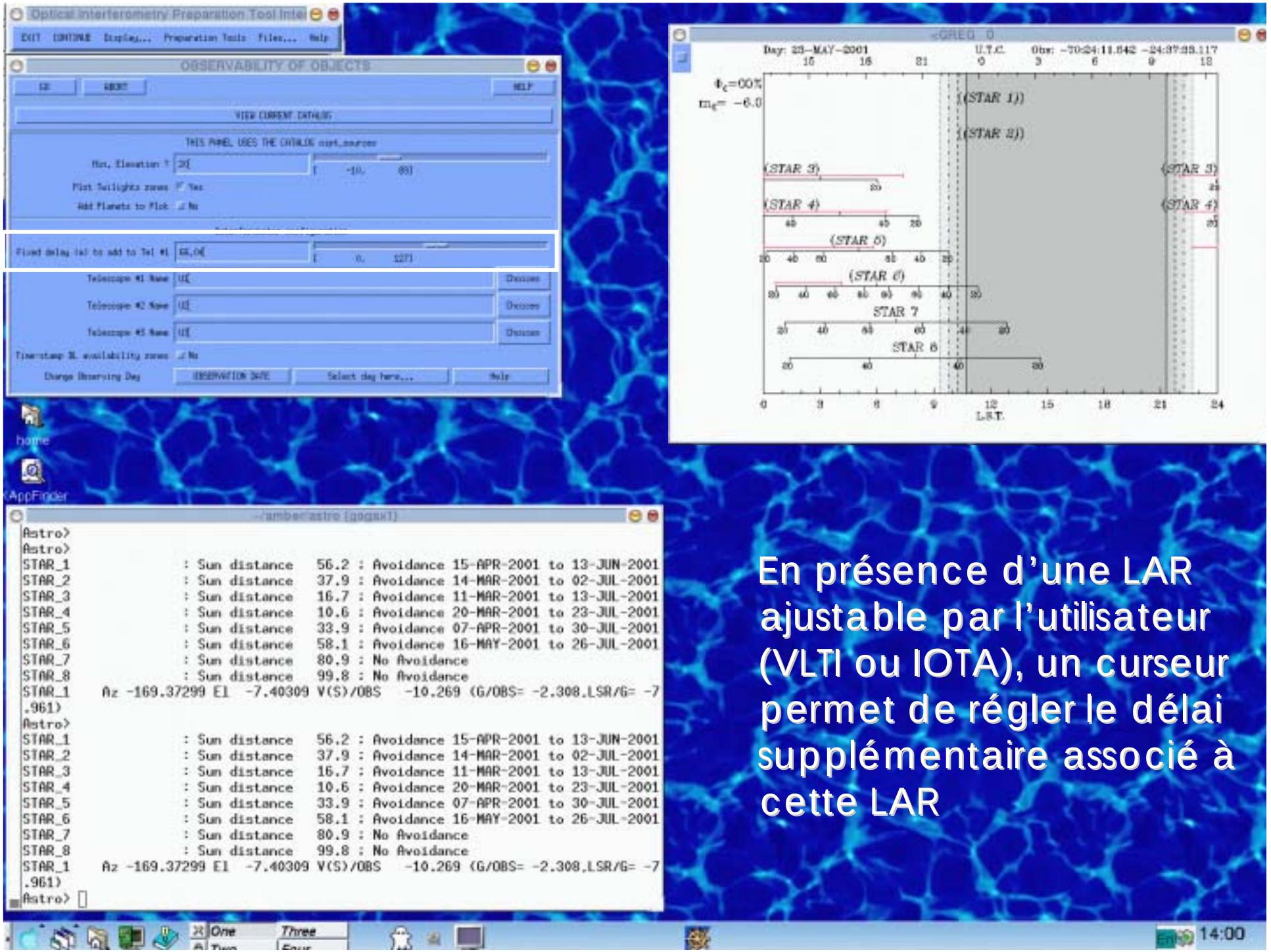

Optical Interferometry Preparation Tool Inter
EXIT CONTINUE Display... Preparation Tools Files... Help
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Templates
Autostart
cdrom
mac0
floppy
mac2
home
AppFinder
~/amber/astro (gagax1)
Astro> GUI\END
Astro>
Astro>
Waiting ...
I-SIC, Closing output file
STAR_1 EQ 2000.000 1:00:00.000 70:00:00.000 MV 99.99 MR 99.99
MI 99.99 MJ 99.99 MH 99.99 MK 99.99 ML 99.99 MM 99.99 MN 99.99
Astro>
Astro>
Astro>
! file oipt_sources.sou
! created by duvert@gagax1 23-MAY-2001 11:50:42
STAR_1 EQ 2000.000 1:00:00.000 70:00:00.000 MV 99.99 MR 99.99
STAR_2 EQ 2000.000 2:00:00.000 50:00:00.000 MV 99.99 MR 99.99
STAR_3 EQ 2000.000 3:00:00.000 30:00:00.000 MV 99.99 MR 99.99
STAR_4 EQ 2000.000 4:00:00.000 10:00:00.000 MV 99.99 MR 99.99
STAR_5 EQ 2000.000 5:00:00.000 -10:00:00.000 MV 99.99 MR 99.99
STAR_6 EQ 2000.000 6:00:00.000 -30:00:00.000 MV 99.99 MR 99.99
STAR_7 EQ 2000.000 7:00:00.000 -50:00:00.000 MV 99.99 MR 99.99
STAR_8 EQ 2000.000 8:00:00.000 -70:00:00.000 MV 99.99 MR 99.99
Astro>
One
Two
Three
Four
16:14


Optical Interferometry Preparation Tool
OBSERVABILITY OF OBJECTS
ABORT
HELP
VIEW CURRENT CATALOG
Choisir l'élévation minimum à afficher
éventuellement, choisir une position de ligne à retard fixe
Choisir les stations utilisées
home
AppFinder
Le panneau « Observability of Objects »...
Astro>
Astro>
Waiting ...
I-SIC. Closing output file
STAR_1 EQ 2000.000 1:00:00.000 70:00:00.000 MV 99.99 MR 99.99
MI 99.99 MJ 99.99 MH 99.99 MK 99.99 ML 99.99 MM 99.99 MN 99.99
Astro>
Astro>
Astro>
file oipt_sources.sou
created by duvert@gagax1 23-MAY-2001 11:50:42
STAR_1 EQ 2000.000 1:00:00.000 70:00:00.000 MV 99.99 MR 99.99
STAR_2 EQ 2000.000 2:00:00.000 50:00:00.000 MV 99.99 MR 99.99
STAR_3 EQ 2000.000 3:00:00.000 30:00:00.000 MV 99.99 MR 99.99
STAR_4 EQ 2000.000 4:00:00.000 10:00:00.000 MV 99.99 MR 99.99
STAR_5 EQ 2000.000 5:00:00.000 -10:00:00.000 MV 99.99 MR 99.99
STAR_6 EQ 2000.000 6:00:00.000 -30:00:00.000 MV 99.99 MR 99.99
STAR_7 EQ 2000.000 7:00:00.000 -50:00:00.000 MV 99.99 MR 99.99
STAR_8 EQ 2000.000 8:00:00.000 -70:00:00.000 MV 99.99 MR 99.99
Astro>
Astro>
présente les périodes d'observabilité de tous les objets du catalogue
One
Two
Three
Four
13:59

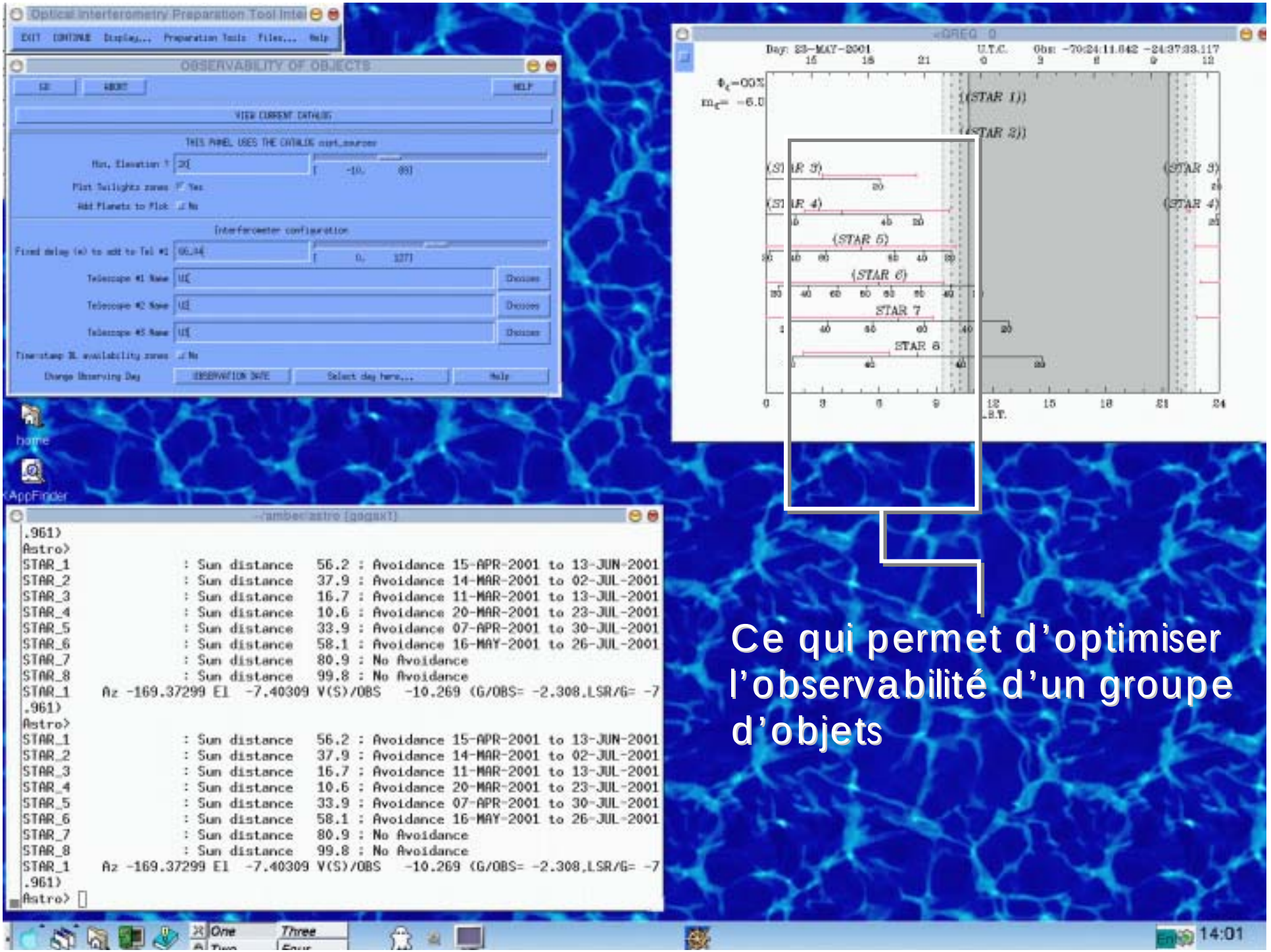


Le graphique présente les périodes d'observabilité de toutes les sources du catalogue, les traits rouges correspondent aux périodes compatibles avec les délais maximum de l'ensemble des lignes à retard

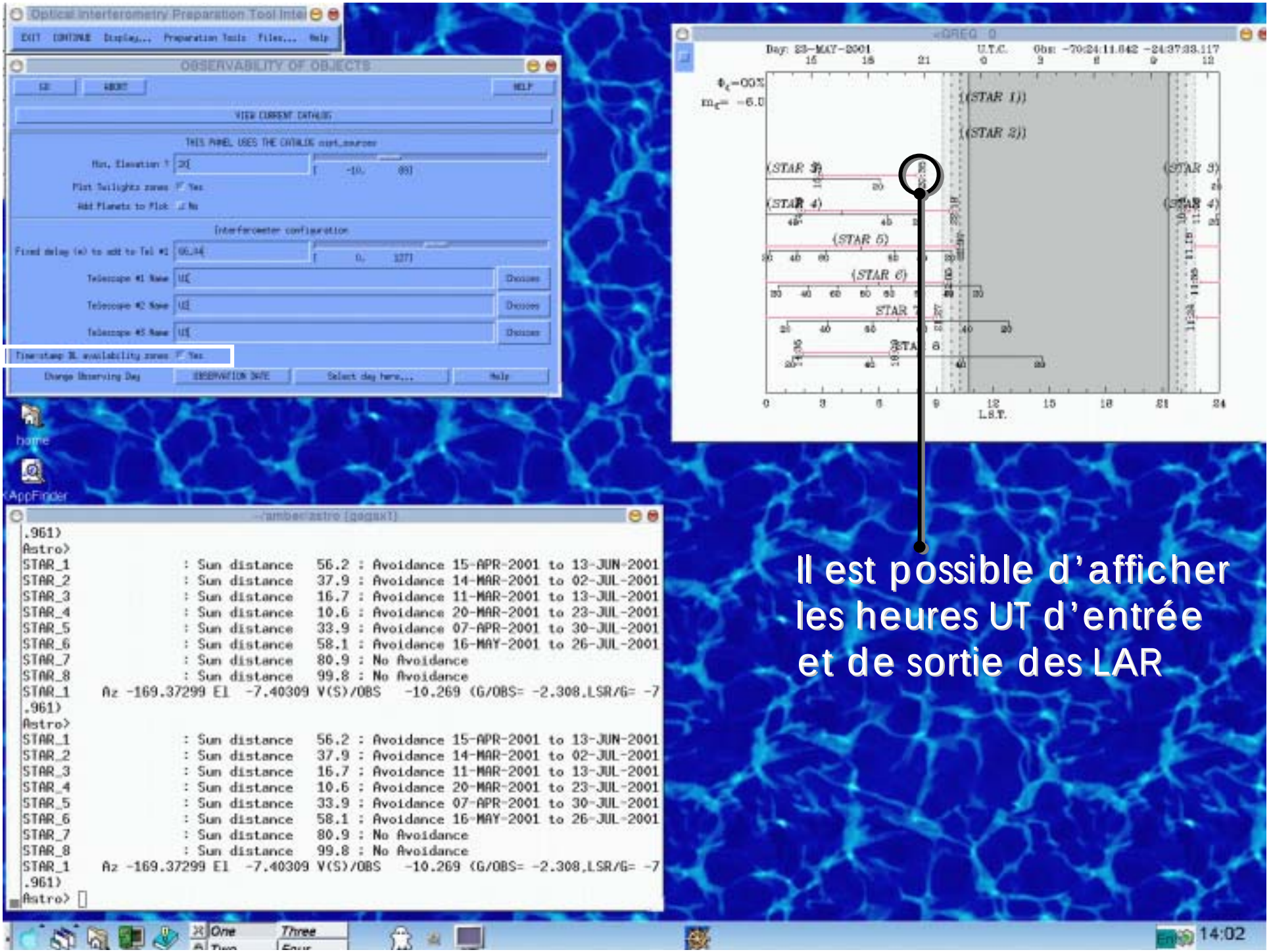

Optical Interferometry Preparation Tool
OBSERVABILITY OF OBJECTS
Day: 23-MAY-2001
(STAR 1)
(STAR 2)
(STAR 3)
(STAR 4)
(STAR 5)
(STAR 6)
STAR 7
STAR 8
L.S.T.
Astro>
STAR_1 : Sun distance 56.2 : Avoidance 15-APR-2001 to 13-JUN-2001
STAR_2 : Sun distance 37.9 : Avoidance 14-MAR-2001 to 02-JUL-2001
STAR_3 : Sun distance 16.7 : Avoidance 11-MAR-2001 to 13-JUL-2001
STAR_4 : Sun distance 10.6 : Avoidance 20-MAR-2001 to 23-JUL-2001
STAR_5 : Sun distance 33.9 : Avoidance 07-APR-2001 to 30-JUL-2001
STAR_6 : Sun distance 58.1 : Avoidance 16-MAY-2001 to 26-JUL-2001
STAR_7 : Sun distance 80.9 : No Avoidance
STAR_8 : Sun distance 99.8 : No Avoidance
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7.961)
Plusieurs présentations sont possibles...
Avec les zones de crépuscule...
14:00



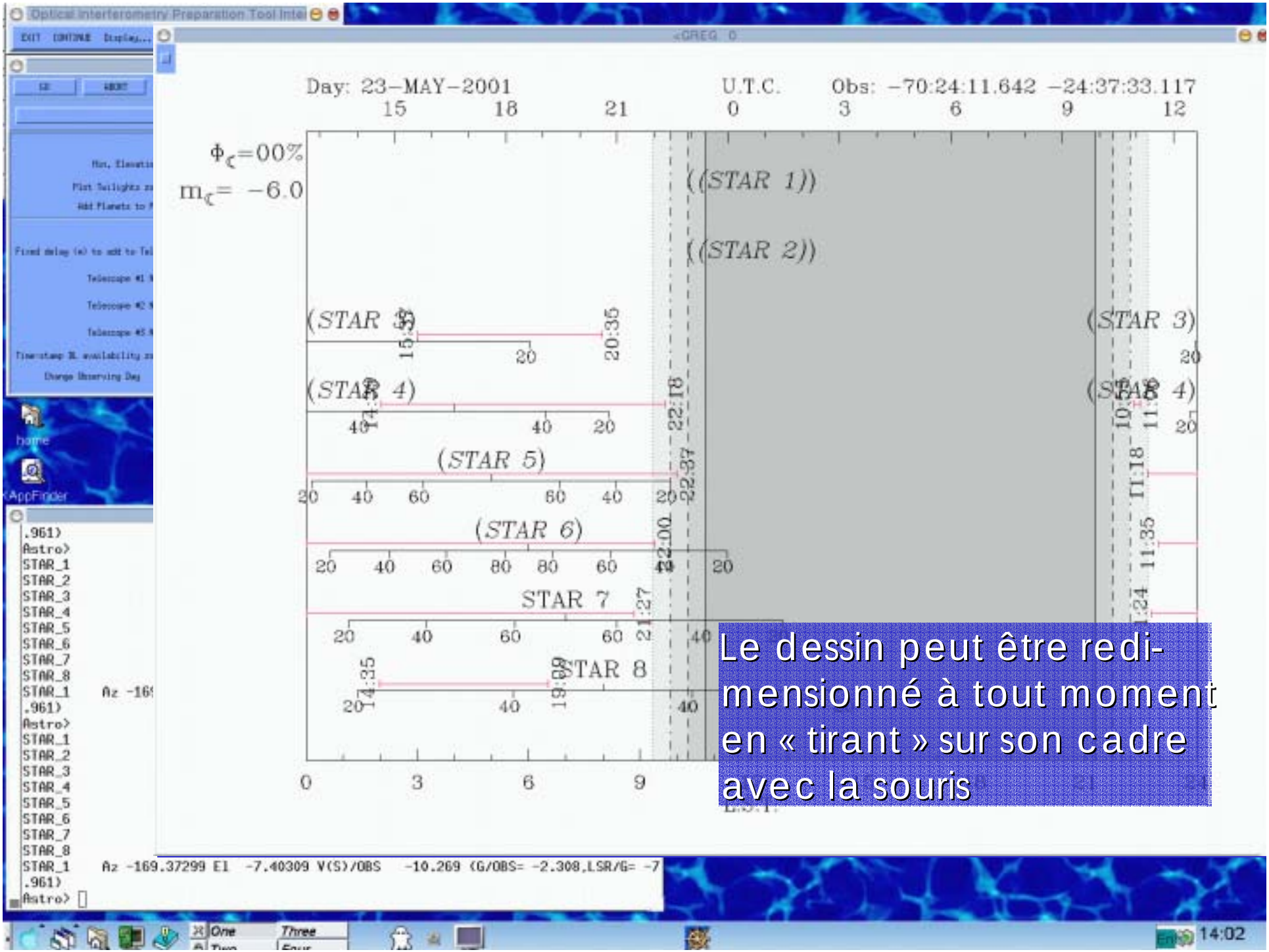
En présence d'une LAR ajustable par l'utilisateur (VLTI ou IOTA), un curseur permet de régler le délai supplémentaire associé à cette LAR

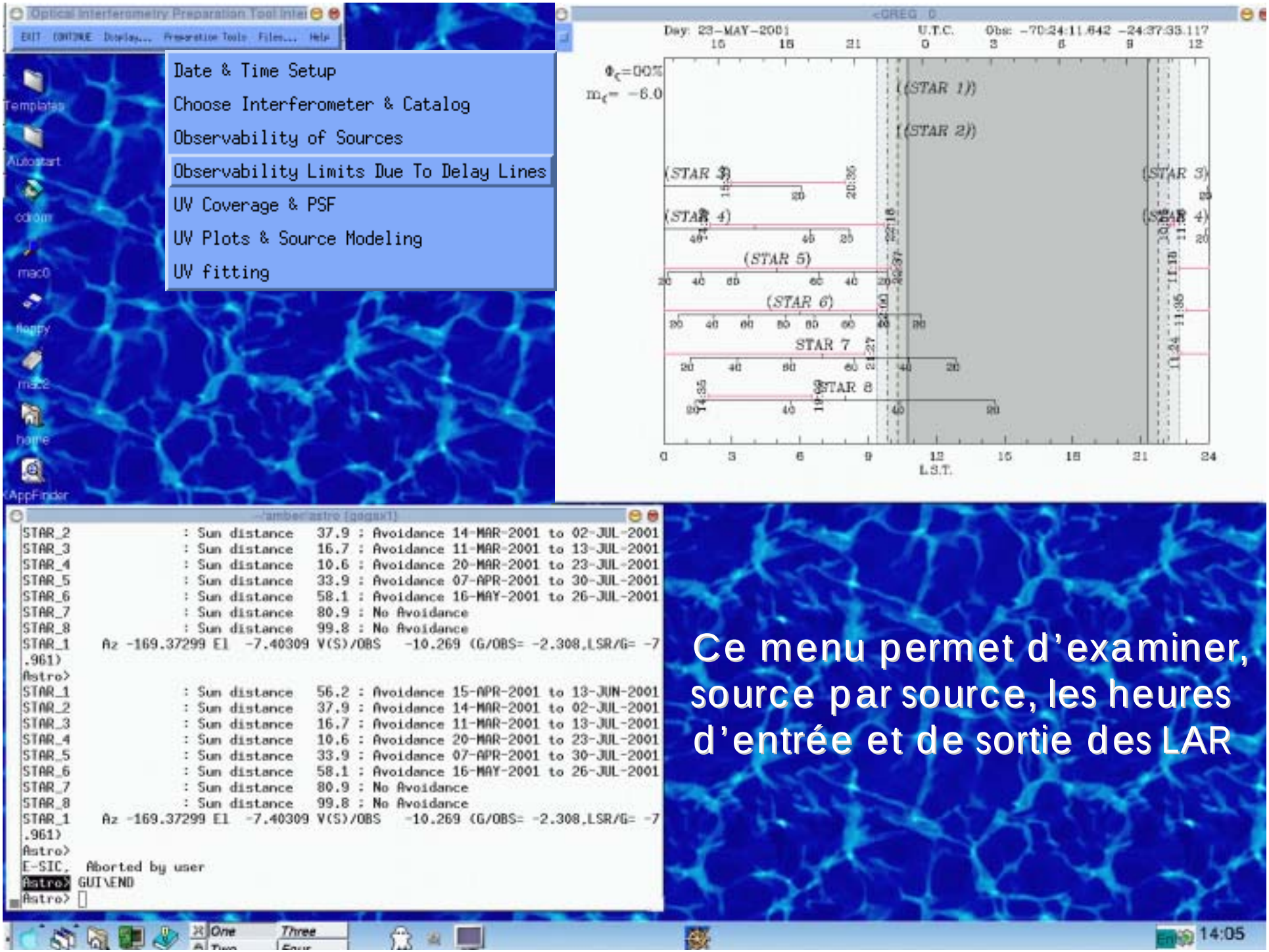


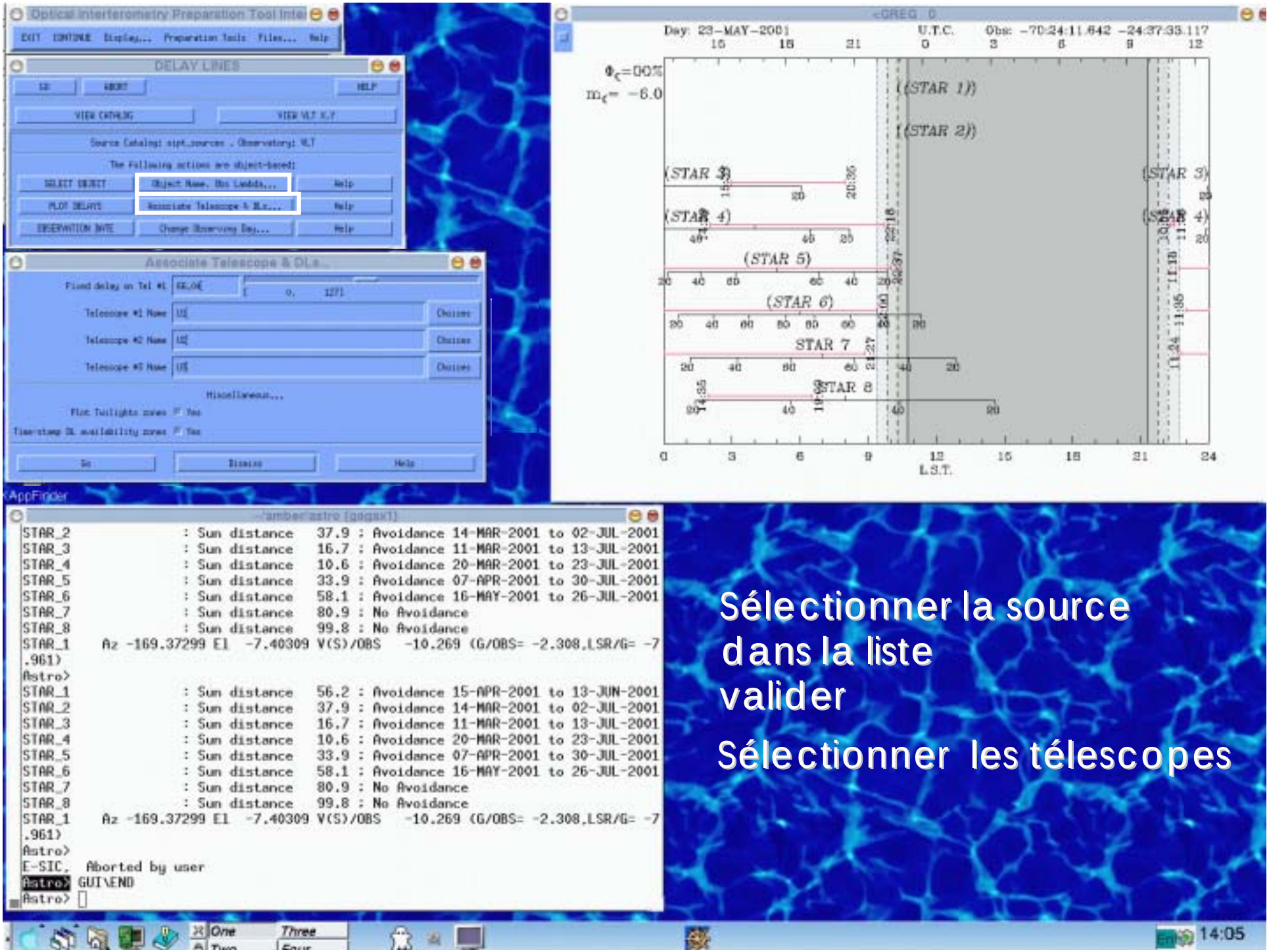
Ce qui permet d'optimiser l'observabilité d'un groupe d'objets

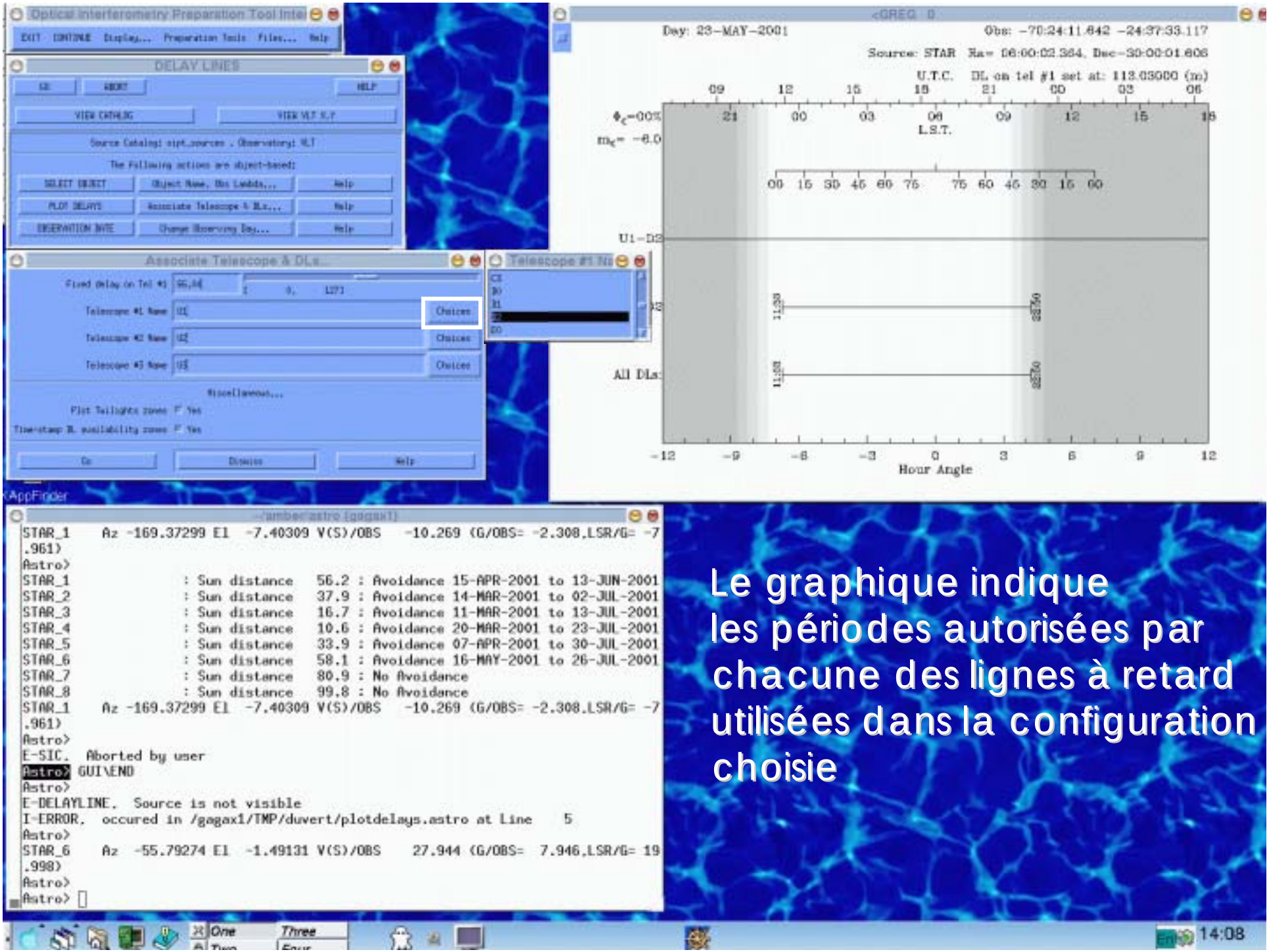


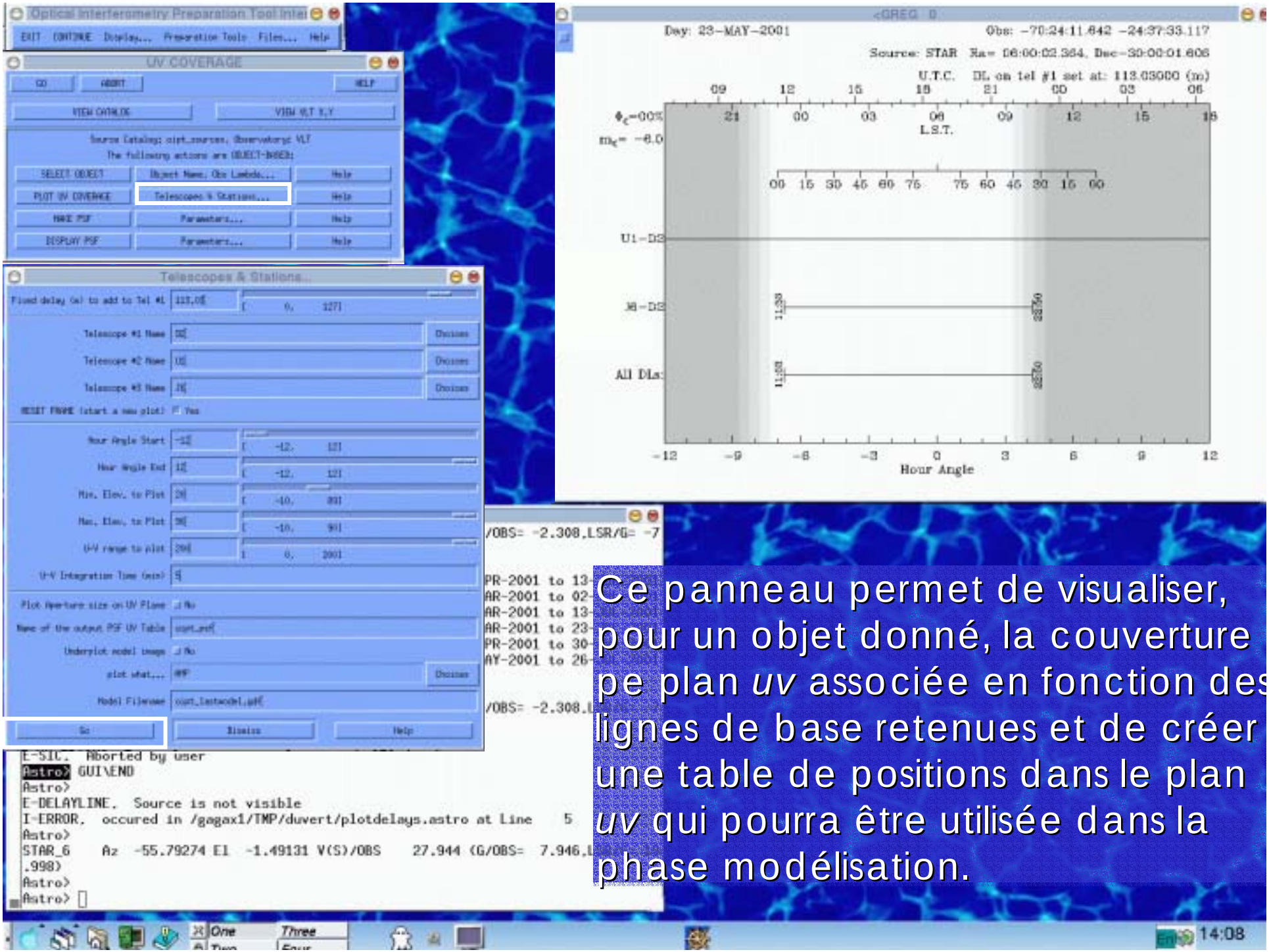
Il est possible d'afficher les heures UT d'entrée et de sortie des LAR


Day: 23-MAY-2001
U.T.C.
Obs: -70:24:11.642 -24:37:33.117
15 18 21 0 3 6 9 12
Φ_ζ=00%
m_ζ= -6.0
((STAR 1))
((STAR 2))
(STAR 3)
(STAR 4)
(STAR 5)
(STAR 6)
STAR 7
STAR 8
0 3 6 9
Le dessin peut être redimensionné à tout moment en « tirant » sur son cadre avec la souris
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7
14:02

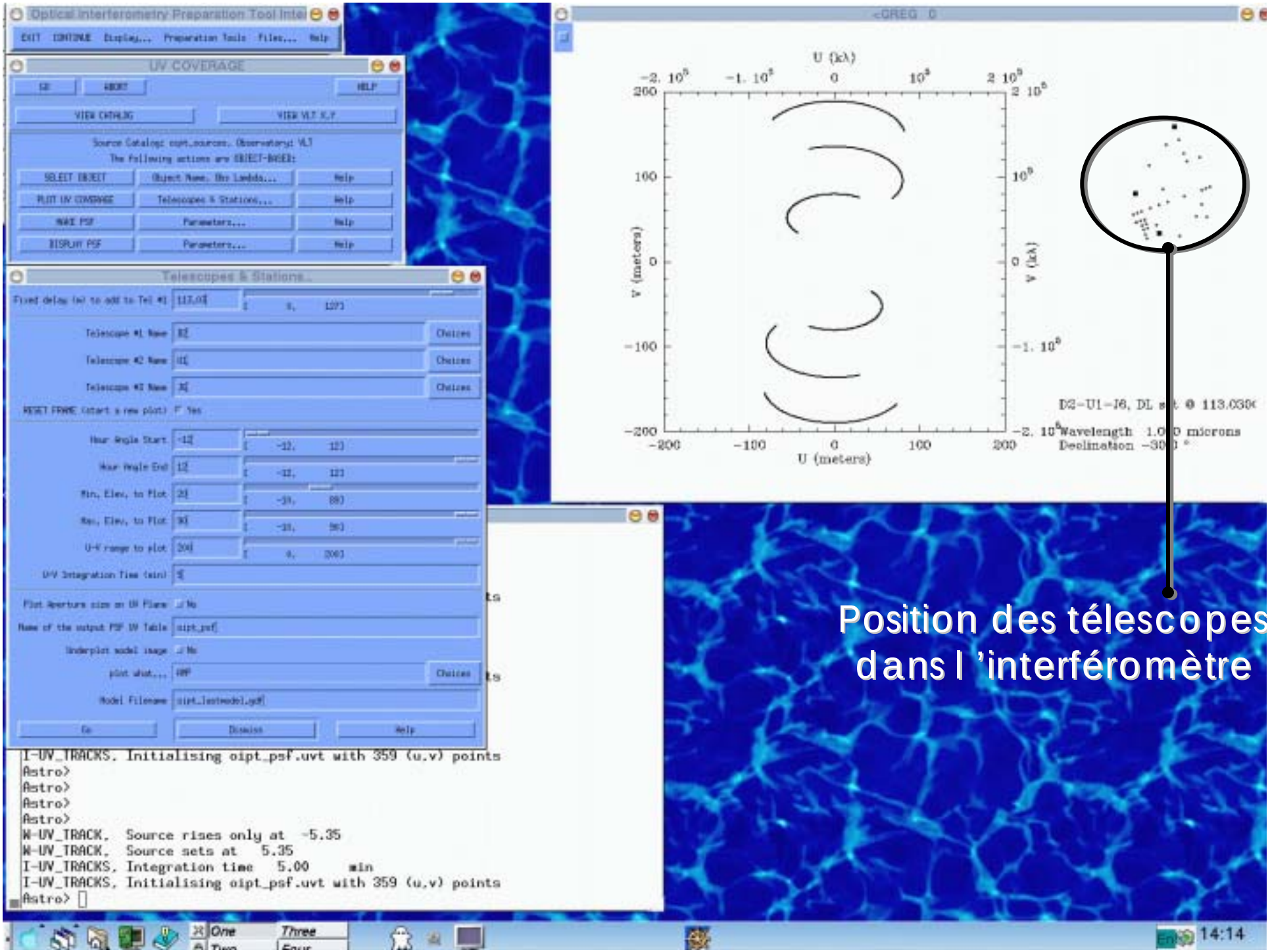

Optical Interferometry Preparation Tool
EXIT CONTINUE Display... Preparation Tools Files... Help
Date & Time Setup
Choose Interferometer & Catalog
Observability of Sources
Observability Limits Due To Delay Lines
UV Coverage & PSF
UV Plots & Source Modeling
UV fitting
Templates
Autostart
cdrom
mac0
floppy
mac2
home
AppFinder
Day: 23-MAY-2001
U.T.C.
(STAR 1)
(STAR 2)
(STAR 3)
(STAR 4)
(STAR 5)
(STAR 6)
STAR 7
STAR 8
L.S.T.
STAR_2 : Sun distance 37.9 : Avoidance 14-MAR-2001 to 02-JUL-2001
STAR_3 : Sun distance 16.7 : Avoidance 11-MAR-2001 to 13-JUL-2001
STAR_4 : Sun distance 10.6 : Avoidance 20-MAR-2001 to 23-JUL-2001
STAR_5 : Sun distance 33.9 : Avoidance 07-APR-2001 to 30-JUL-2001
STAR_6 : Sun distance 58.1 : Avoidance 16-MAY-2001 to 26-JUL-2001
STAR_7 : Sun distance 80.9 : No Avoidance
STAR_8 : Sun distance 99.8 : No Avoidance
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7.961)
Astro>
STAR_1 : Sun distance 56.2 : Avoidance 15-APR-2001 to 13-JUN-2001
STAR_2 : Sun distance 37.9 : Avoidance 14-MAR-2001 to 02-JUL-2001
STAR_3 : Sun distance 16.7 : Avoidance 11-MAR-2001 to 13-JUL-2001
STAR_4 : Sun distance 10.6 : Avoidance 20-MAR-2001 to 23-JUL-2001
STAR_5 : Sun distance 33.9 : Avoidance 07-APR-2001 to 30-JUL-2001
STAR_6 : Sun distance 58.1 : Avoidance 16-MAY-2001 to 26-JUL-2001
STAR_7 : Sun distance 80.9 : No Avoidance
STAR_8 : Sun distance 99.8 : No Avoidance
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7.961)
Astro>
E-SIC, Aborted by user
Astro> GUI\END
Astro>
Ce menu permet d'examiner, source par source, les heures d'entrée et de sortie des LAR
One
Three
14:05

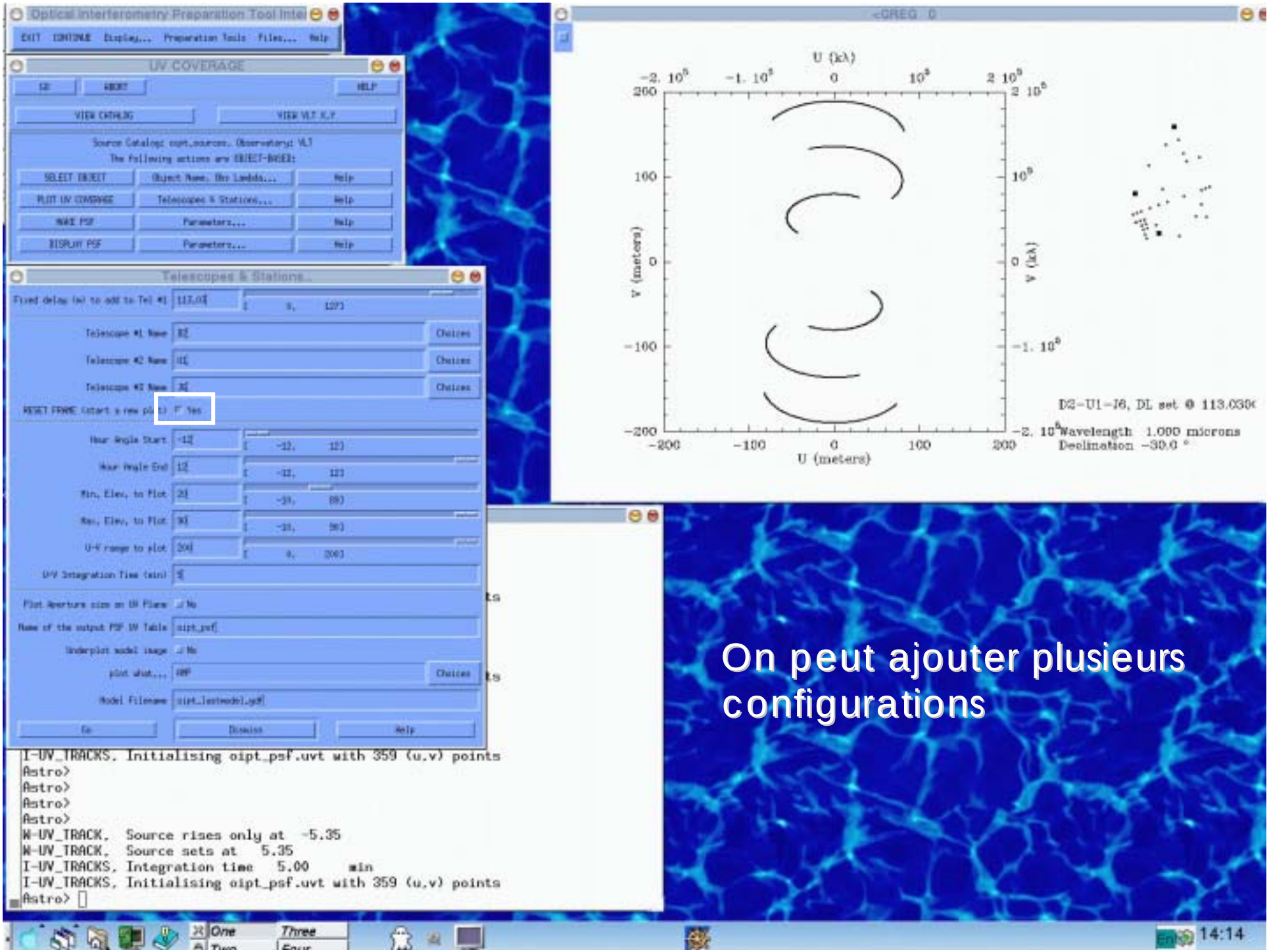

Optical Interferometry Preparation Tool
DELAY LINES
Associate Telescope & DLs...
AppFinder
Day: 23-MAY-2001
U.T.C.
(STAR 1)
(STAR 2)
(STAR 3)
(STAR 4)
(STAR 5)
(STAR 6)
STAR 7
STAR 8
L.S.T.
STAR_2 : Sun distance 37.9 : Avoidance 14-MAR-2001 to 02-JUL-2001
STAR_3 : Sun distance 16.7 : Avoidance 11-MAR-2001 to 13-JUL-2001
STAR_4 : Sun distance 10.6 : Avoidance 20-MAR-2001 to 23-JUL-2001
STAR_5 : Sun distance 33.9 : Avoidance 07-APR-2001 to 30-JUL-2001
STAR_6 : Sun distance 58.1 : Avoidance 16-MAY-2001 to 26-JUL-2001
STAR_7 : Sun distance 80.9 : No Avoidance
STAR_8 : Sun distance 99.8 : No Avoidance
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7.961)
Astro>
STAR_1 : Sun distance 56.2 : Avoidance 15-APR-2001 to 13-JUN-2001
STAR_2 : Sun distance 37.9 : Avoidance 14-MAR-2001 to 02-JUL-2001
STAR_3 : Sun distance 16.7 : Avoidance 11-MAR-2001 to 13-JUL-2001
STAR_4 : Sun distance 10.6 : Avoidance 20-MAR-2001 to 23-JUL-2001
STAR_5 : Sun distance 33.9 : Avoidance 07-APR-2001 to 30-JUL-2001
STAR_6 : Sun distance 58.1 : Avoidance 16-MAY-2001 to 26-JUL-2001
STAR_7 : Sun distance 80.9 : No Avoidance
STAR_8 : Sun distance 99.8 : No Avoidance
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7.961)
Astro>
E-SIC, Aborted by user
Astro> GUI\END
Astro>
Sélectionner la source
dans la liste
valider
Sélectionner les télescopes
14:05

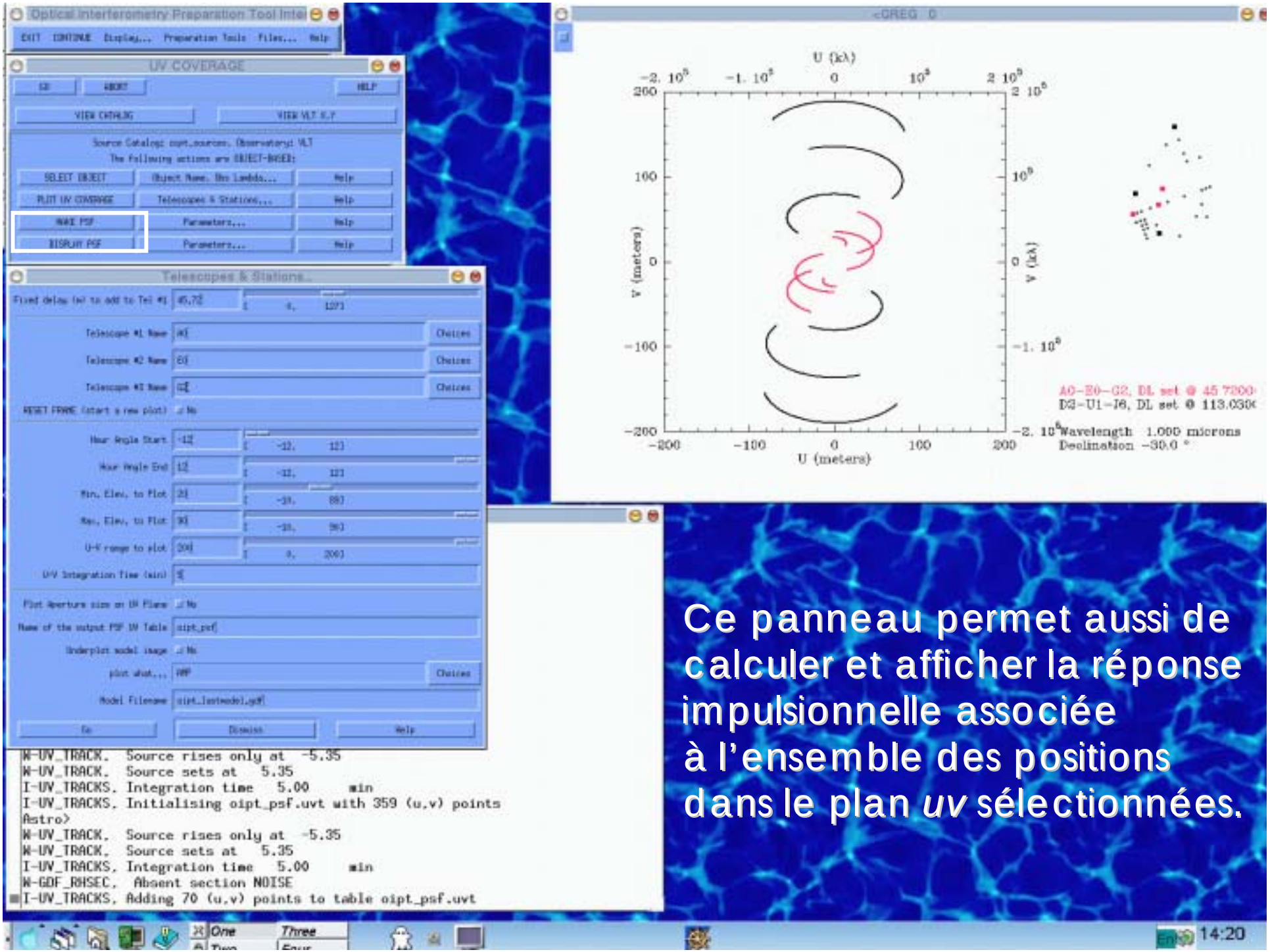

Optical Interferometry Preparation Tool Inte
DELAY LINES
Associate Telescope & DLs...
Day: 23-MAY-2001
Source: STAR
U.T.C.
L.S.T.
Hour Angle
All DLs:
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7
.961)
Astro>
STAR_1 : Sun distance 56.2 : Avoidance 15-APR-2001 to 13-JUN-2001
STAR_2 : Sun distance 37.9 : Avoidance 14-MAR-2001 to 02-JUL-2001
STAR_3 : Sun distance 16.7 : Avoidance 11-MAR-2001 to 13-JUL-2001
STAR_4 : Sun distance 10.6 : Avoidance 20-MAR-2001 to 23-JUL-2001
STAR_5 : Sun distance 33.9 : Avoidance 07-APR-2001 to 30-JUL-2001
STAR_6 : Sun distance 58.1 : Avoidance 16-MAY-2001 to 26-JUL-2001
STAR_7 : Sun distance 80.9 : No Avoidance
STAR_8 : Sun distance 99.8 : No Avoidance
STAR_1 Az -169.37299 El -7.40309 V(S)/OBS -10.269 (G/OBS= -2.308,LSR/G= -7
.961)
Astro>
E-SIC, Aborted by user
Astro> GUI\END
Astro>
E-DELAYLINE, Source is not visible
I-ERROR, occured in /gagax1/TMP/duvert/plotdelays.astro at Line 5
Astro>
STAR_6 Az -55.79274 El -1.49131 V(S)/OBS 27.944 (G/OBS= 7.946,LSR/G= 19
.998)
Astro>
Astro>
Le graphique indique
les périodes autorisées par
chacune des lignes à retard
utilisées dans la configuration
choisie
14:08



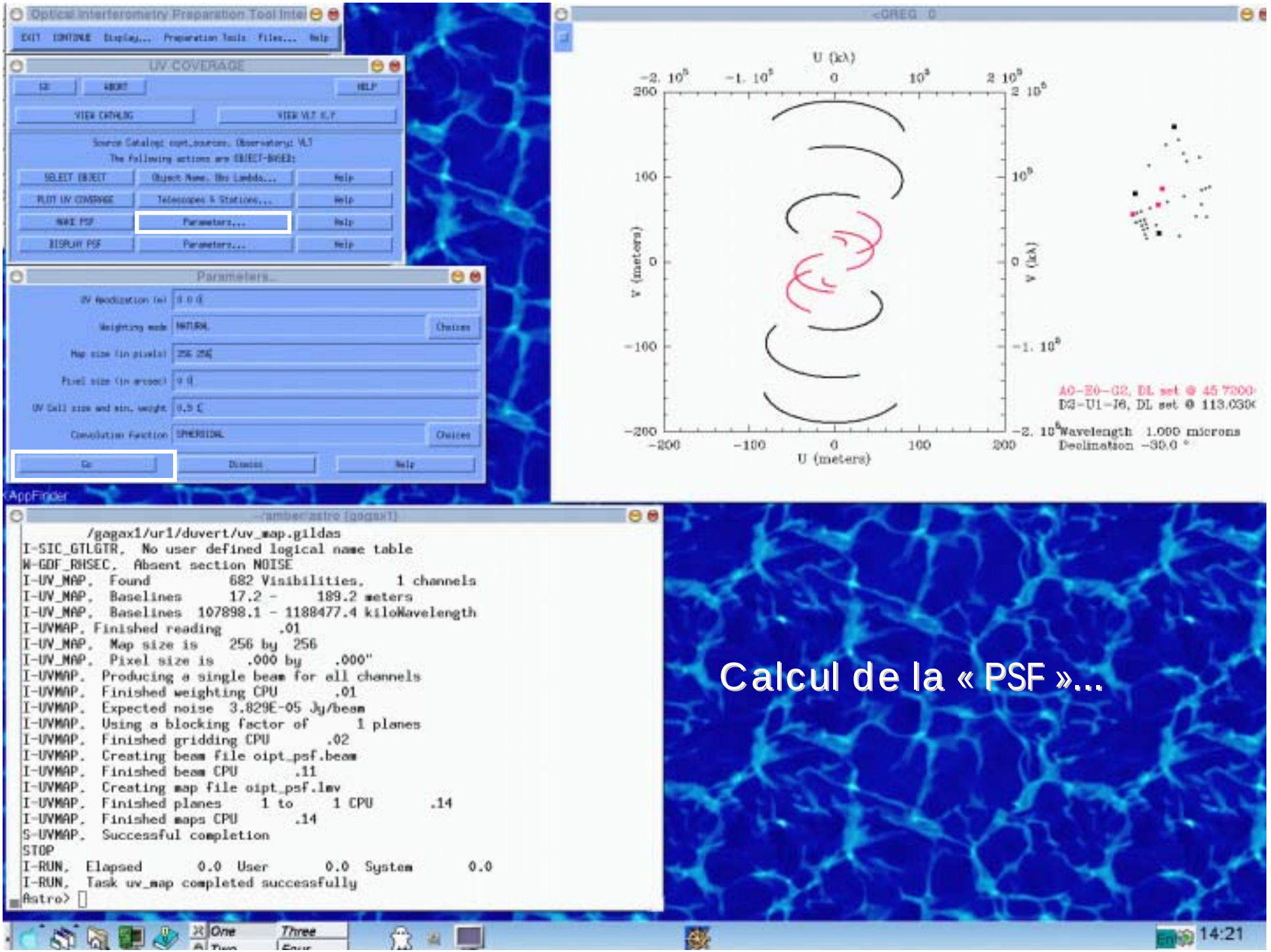
Ce panneau permet de visualiser, pour un objet donné, la couverture pe plan *uv* associée en fonction des lignes de base retenues et de créer une table de positions dans le plan *uv* qui pourra être utilisée dans la phase modélisation.

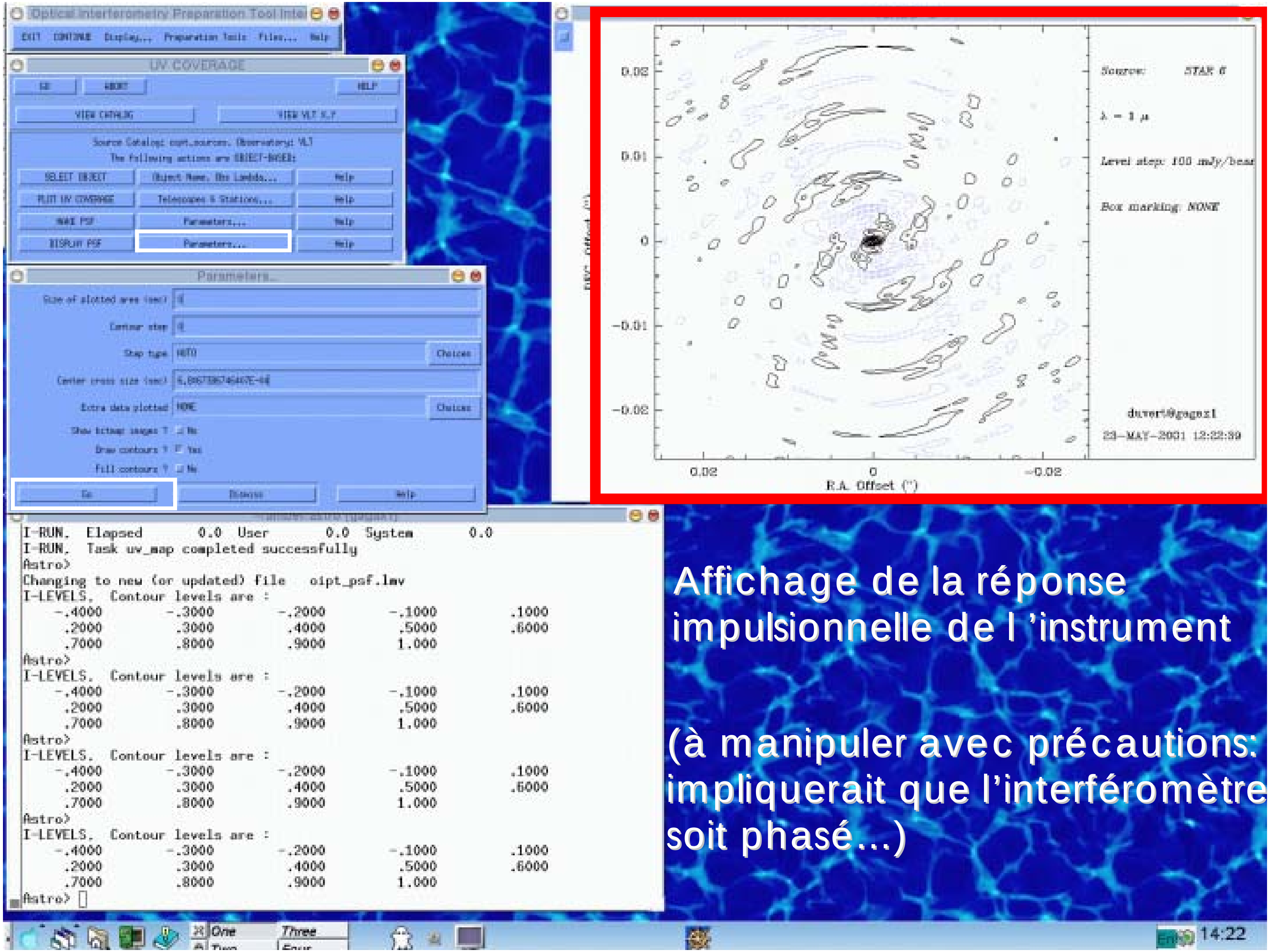

Optical Interferometry Preparation Tool Inte
EXIT CONTINUE Display... Preparation Tools Files... Help
UV COVERAGE
EXIT ABORT HELP
VIEW CATALOG VIEW VLT X,Y
Source Catalog: oipt_sources, Observatory: VLT
The following actions are OBJECT-BASED:
SELECT OBJECT Object Name, Obs Lambda... Help
PLOT UV COVERAGE Telescopes & Stations... Help
MAKE PSF Parameters... Help
DISPLAY PSF Parameters... Help
Telescopes & Stations...
Fixed delay (s) to add to Tel #1
Telescope #1 Name
Telescope #2 Name
Telescope #3 Name
RESET FRAME (start a new plot)
Hour Angle Start
Hour Angle End
Min. Elev. to Plot
Max. Elev. to Plot
U-V range to plot
U-V Integration Time (min)
Plot Aperture size on UV Plane
Name of the output PSF UV Table
Underplot model image
plot what...
Model Filename
Go
Dismiss
Help
Choices
I-UV_TRACKS, Initialising oipt_psf.uvt with 359 (u,v) points
Astro>
Astro>
Astro>
Astro>
W-UV_TRACK, Source rises only at -5.35
W-UV_TRACK, Source sets at 5.35
I-UV_TRACKS, Integration time 5.00 min
I-UV_TRACKS, Initialising oipt_psf.uvt with 359 (u,v) points
Astro>
U (kλ)
V (meters)
U (meters)
V (kλ)
D2-U1-J6, DL
Wavelength 1.0 microns
Declination -30
Position des télescopes
dans l 'interféromètre
One
Three
14:14

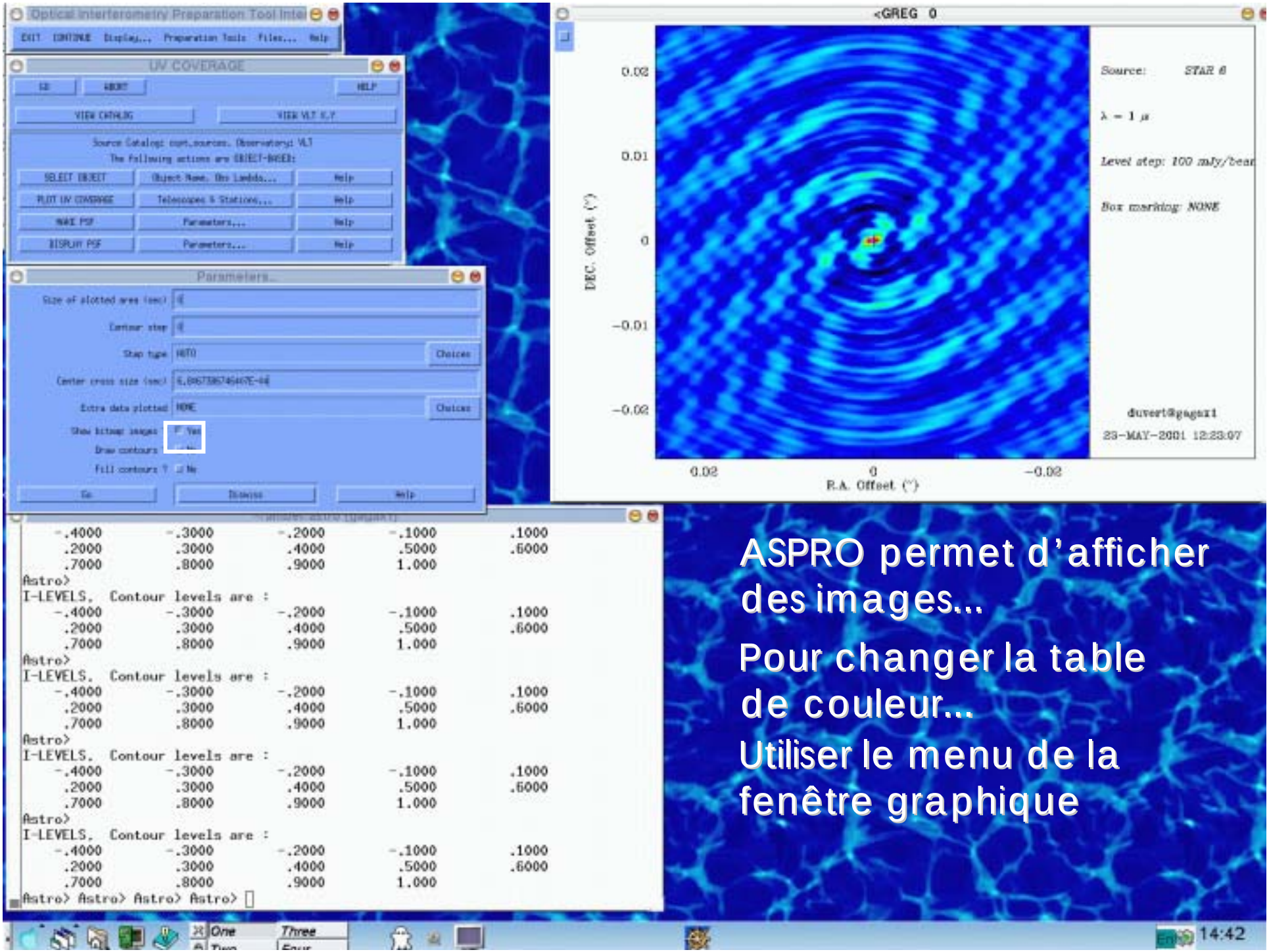

Optical Interferometry Preparation Tool Inte
EXIT CONTINUE Display... Preparation Tools Files... Help
UV COVERAGE
EXIT ABORT HELP
VIEW CATALOG VIEW VLT X,Y
SELECT OBJECT Object Name, Obs Lambda... Help
PLOT UV COVERAGE Telescopes & Stations... Help
MAKE PSF Parameters... Help
DISPLAY PSF Parameters... Help
Telescopes & Stations...
Choices
Dismiss
U (kλ)
V (meters)
U (meters)
V (kλ)
D2-U1-J6, DL set @ 113.030
Wavelength 1.000 microns
Declination -30.0 °
I-UV_TRACKS, Initialising oipt_psf.uvt with 359 (u,v) points
Astro>
Astro>
Astro>
Astro>
W-UV_TRACK, Source rises only at -5.35
W-UV_TRACK, Source sets at 5.35
I-UV_TRACKS, Integration time 5.00 min
I-UV_TRACKS, Initialising oipt_psf.uvt with 359 (u,v) points
Astro>
On peut ajouter plusieurs configurations
One
Three
14:14

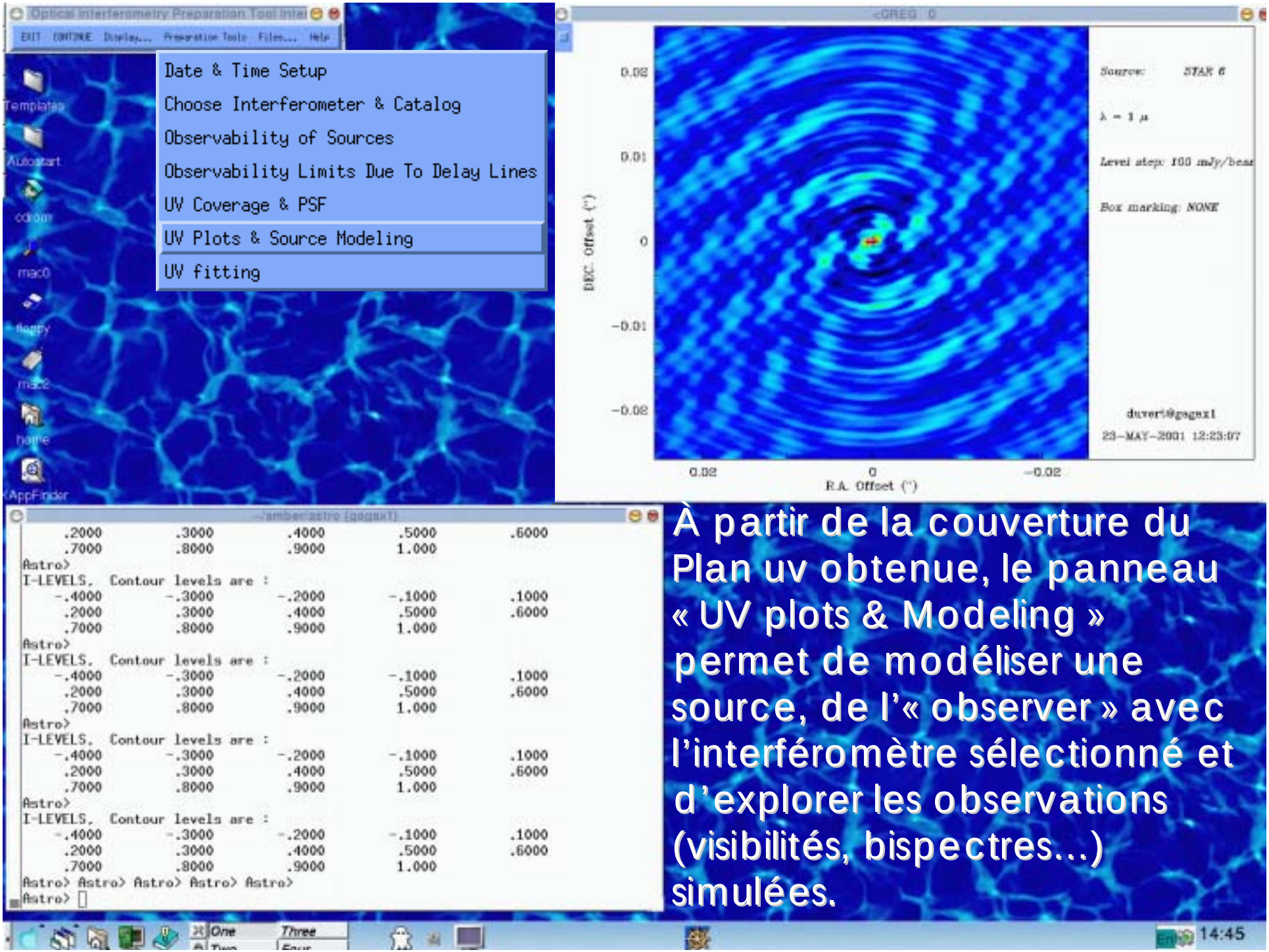


Ce panneau permet aussi de calculer et afficher la réponse impulsionnelle associée à l'ensemble des positions dans le plan *uv* sélectionnées.

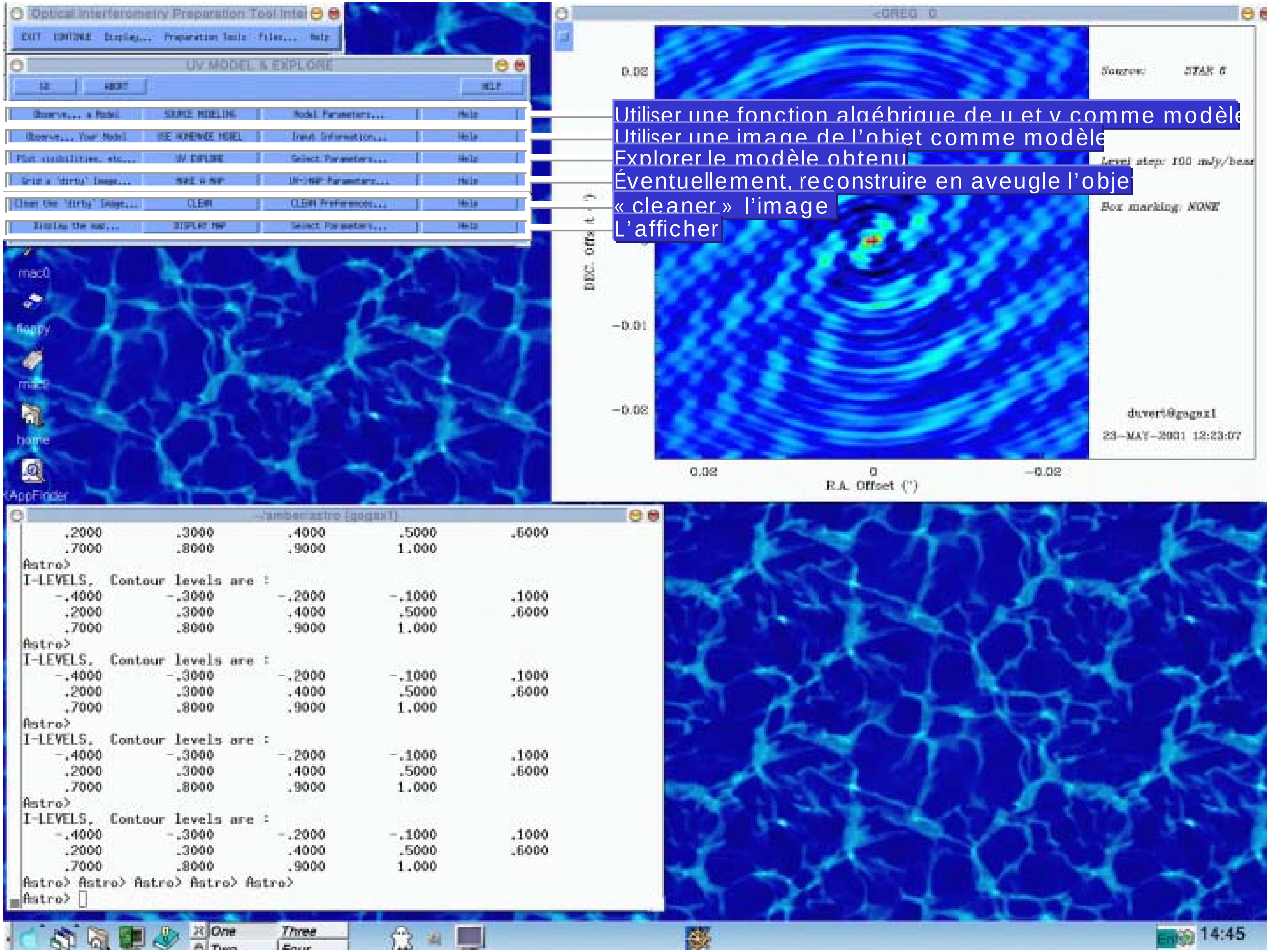

Optical Interferometry Preparation Tool Inte
UV COVERAGE
VIEW CATALOG
Parameters...
U (kλ)
V (meters)
U (meters)
V (kλ)
Wavelength 1.000 microns
Declination -30.0 °
/gagax1/ur1/duvert/uv_map.gildas
I-SIC_GTLGTR, No user defined logical name table
W-GDF_RHSEC, Absent section NOISE
I-UV_MAP, Found 682 Visibilities, 1 channels
I-UV_MAP, Baselines 17.2 - 189.2 meters
I-UV_MAP, Baselines 107898.1 - 1188477.4 kiloWavelength
I-UVMAP, Finished reading .01
I-UV_MAP, Map size is 256 by 256
I-UV_MAP, Pixel size is .000 by .000"
I-UVMAP, Producing a single beam for all channels
I-UVMAP, Finished weighting CPU .01
I-UVMAP, Expected noise 3.829E-05 Jy/beam
I-UVMAP, Using a blocking factor of 1 planes
I-UVMAP, Finished gridding CPU .02
I-UVMAP, Creating beam file oipt_psf.beam
I-UVMAP, Finished beam CPU .11
I-UVMAP, Creating map file oipt_psf.lmv
I-UVMAP, Finished planes 1 to 1 CPU .14
I-UVMAP, Finished maps CPU .14
S-UVMAP, Successful completion
STOP
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task uv_map completed successfully
Astro>
Calcul de la « PSF »...
14:21

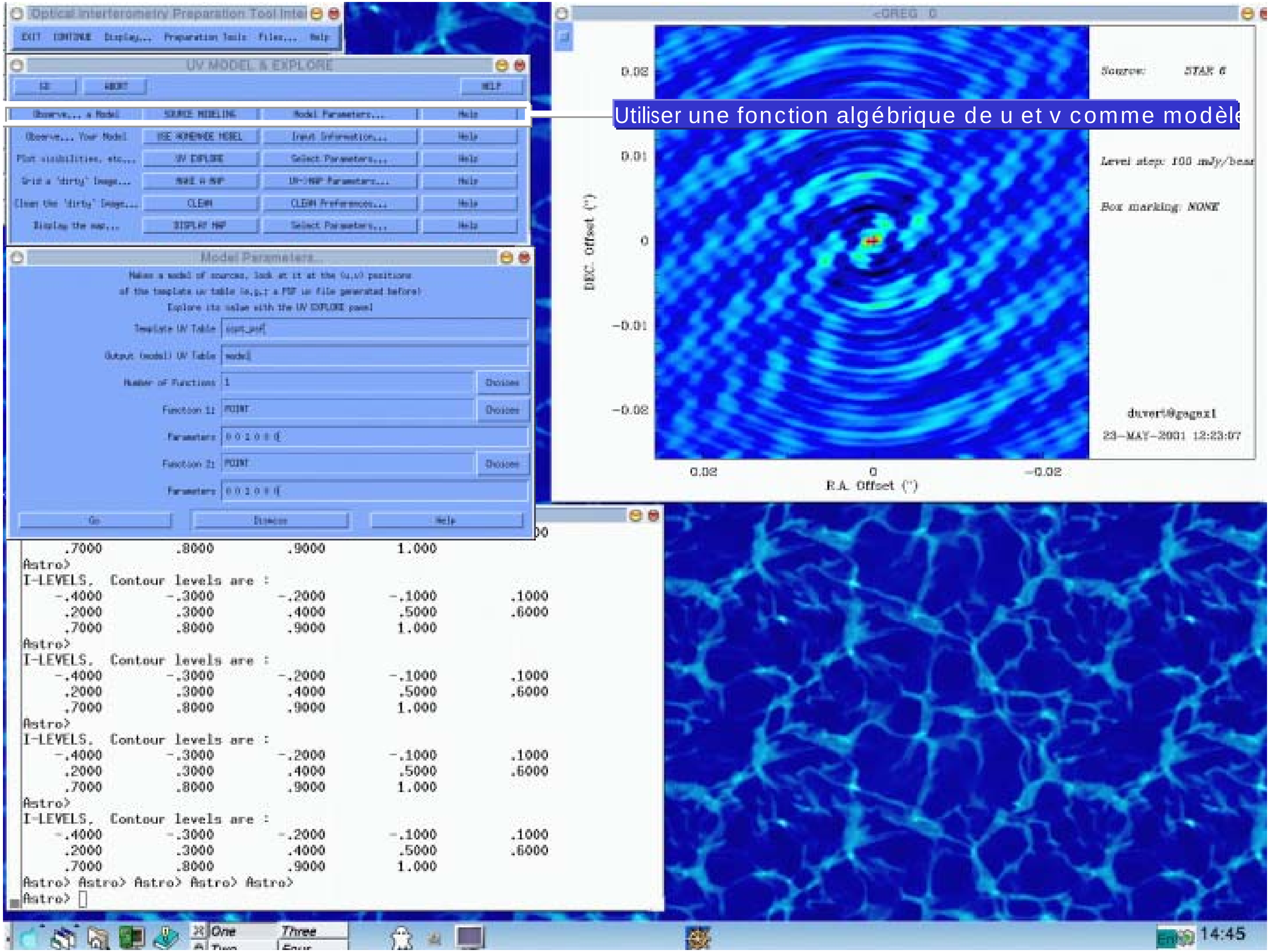

Optical Interferometry Preparation Tool
EXIT CONTINUE Display... Preparation Tools Files... Help
UV COVERAGE
GO ABORT HELP
VIEW CATALOG VIEW VLT X,Y
SELECT OBJECT
PLOT UV COVERAGE
MAKE PSF
DISPLAY PSF
Parameters...
Help
Parameters
Choices
Go
Dismiss
Help
0.02
0.01
0
−0.01
−0.02
R.A. Offset (")
Source: STAR 6
λ = 1 μ
Level step: 100 mJy/beam
Box marking: NONE
duvert@gaspr1
23-MAY-2001 12:22:39
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task uv_map completed successfully
Astro>
Changing to new (or updated) file oipt_psf.lmv
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
Affichage de la réponse impulsionnelle de l 'instrument
(à manipuler avec précautions: impliquerait que l'interféromètre soit phasé...)
One Three
14:22

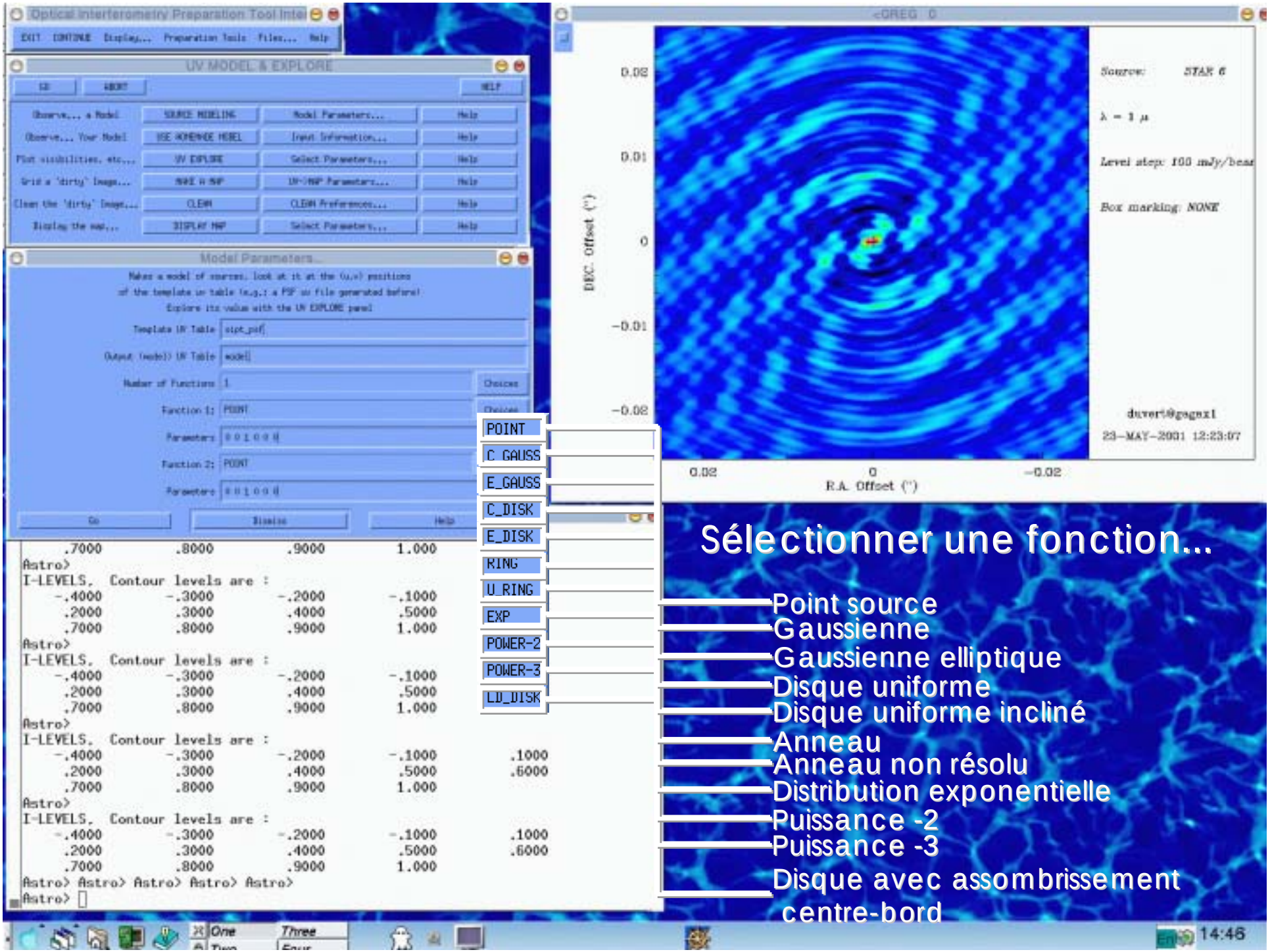

Optical Interferometry Preparation Tool
UV COVERAGE
Parameters...
<GREG 0
Source: STAR 6
λ = 1 μs
Level step: 100 mJy/bea
Box marking: NONE
duvert@gagarl
23-MAY-2001 12:23:07
DEC. Offset (")
R.A. Offset (")
0.02
0.01
0
-0.01
-0.02
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
Astro> Astro> Astro> Astro>
ASPRO permet d'afficher des images...
Pour changer la table de couleur...
Utiliser le menu de la fenêtre graphique
One
Three
14:42

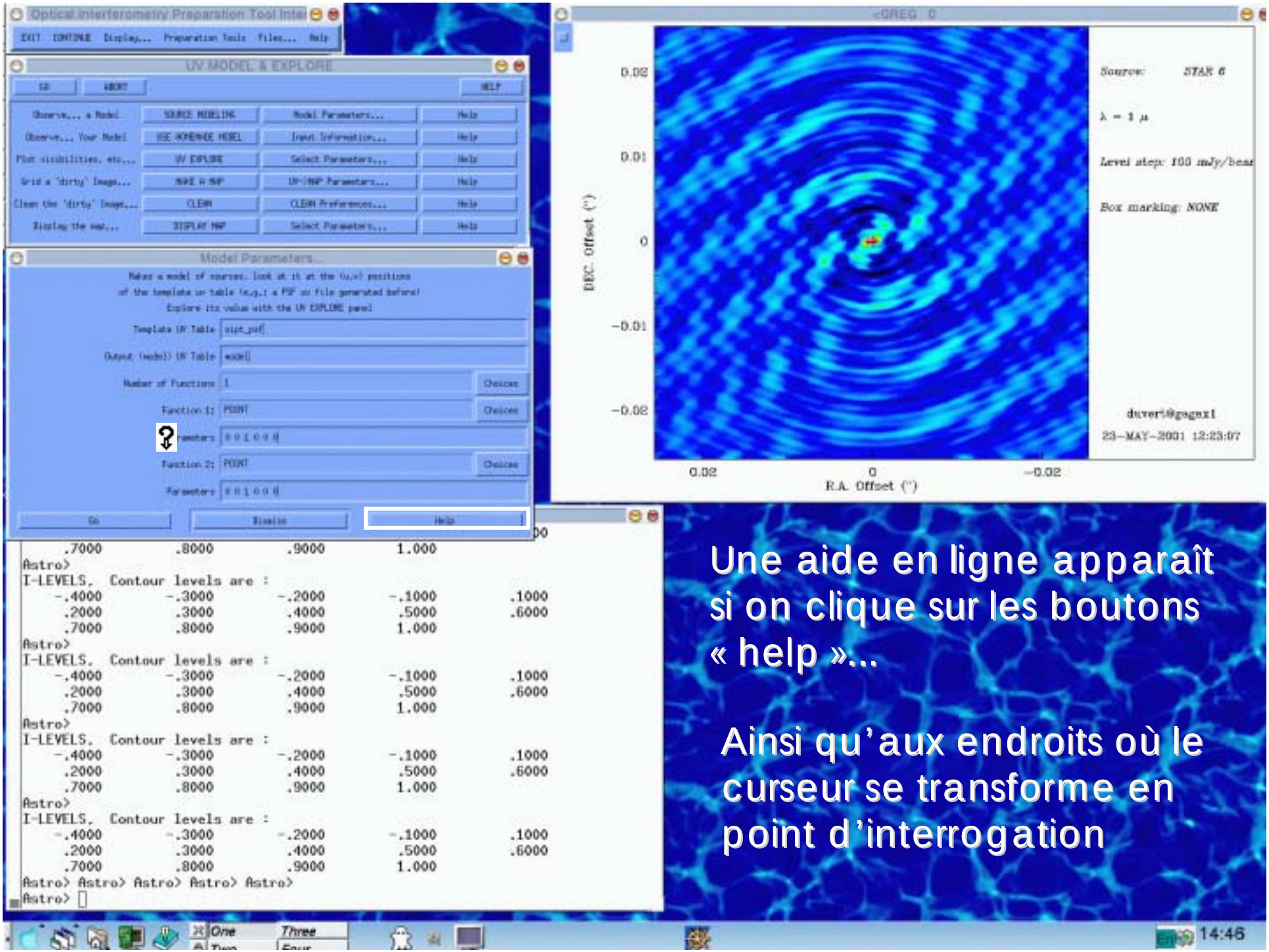


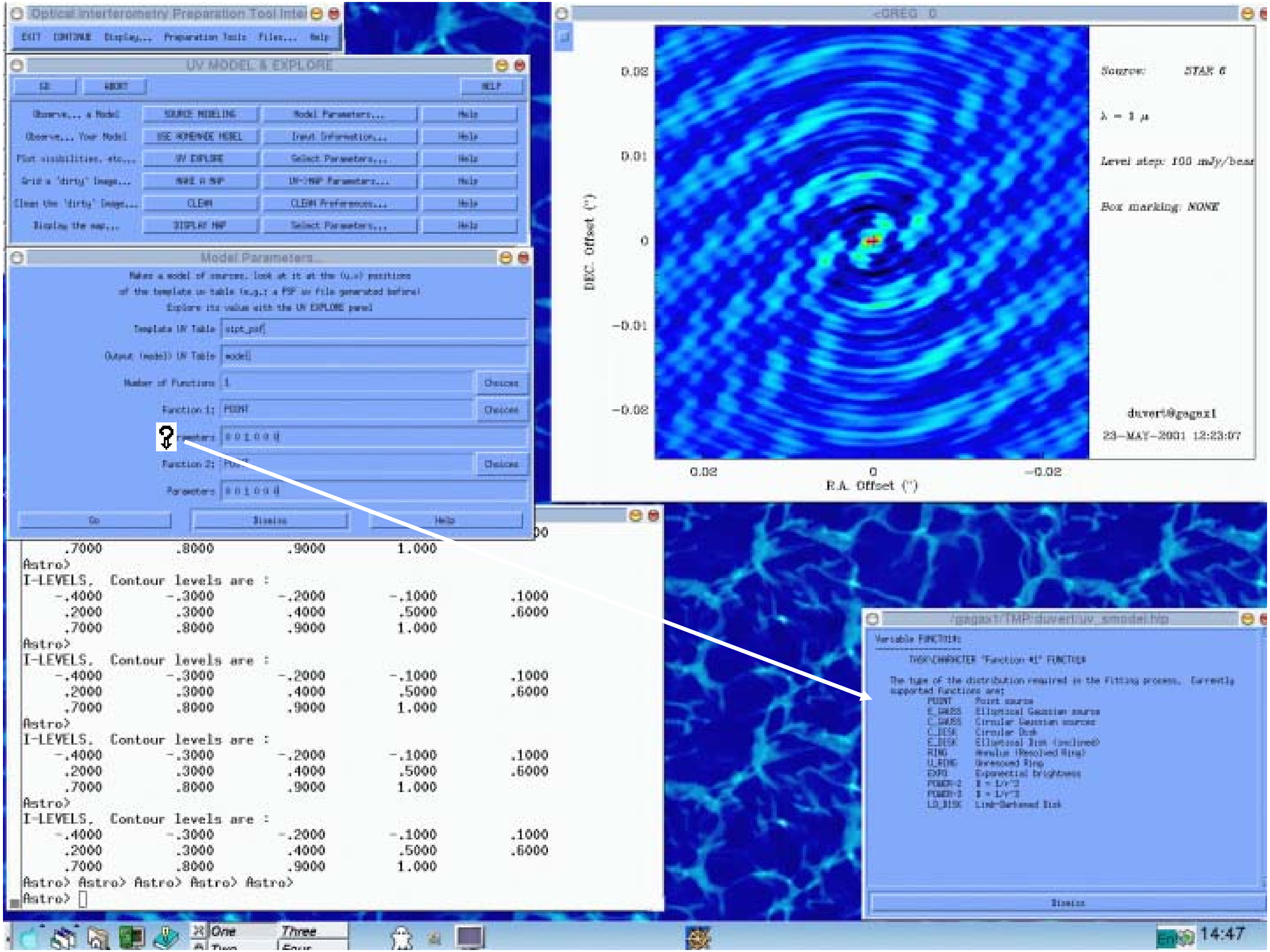
À partir de la couverture du Plan uv obtenue, le panneau « UV plots & Modeling » permet de modéliser une source, de l'« observer » avec l'interféromètre sélectionné et d'explorer les observations (visibilités, bispectres...) simulées.

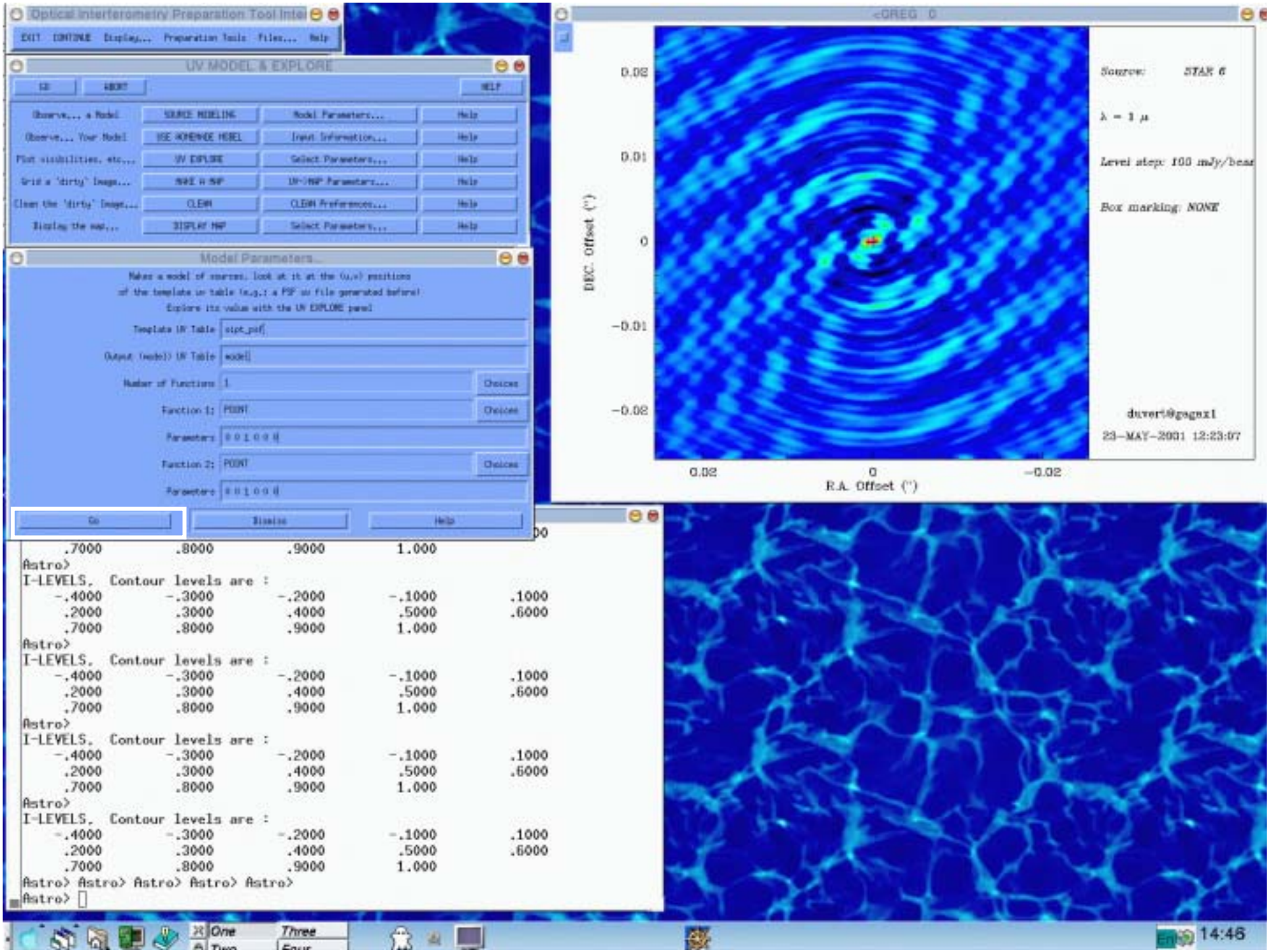

Utiliser une fonction algébrique de u et v comme modèle
Utiliser une image de l'objet comme modèle
Explorer le modèle obtenu
Éventuellement, reconstruire en aveugle l'objet
« cleaner » l'image
L'afficher

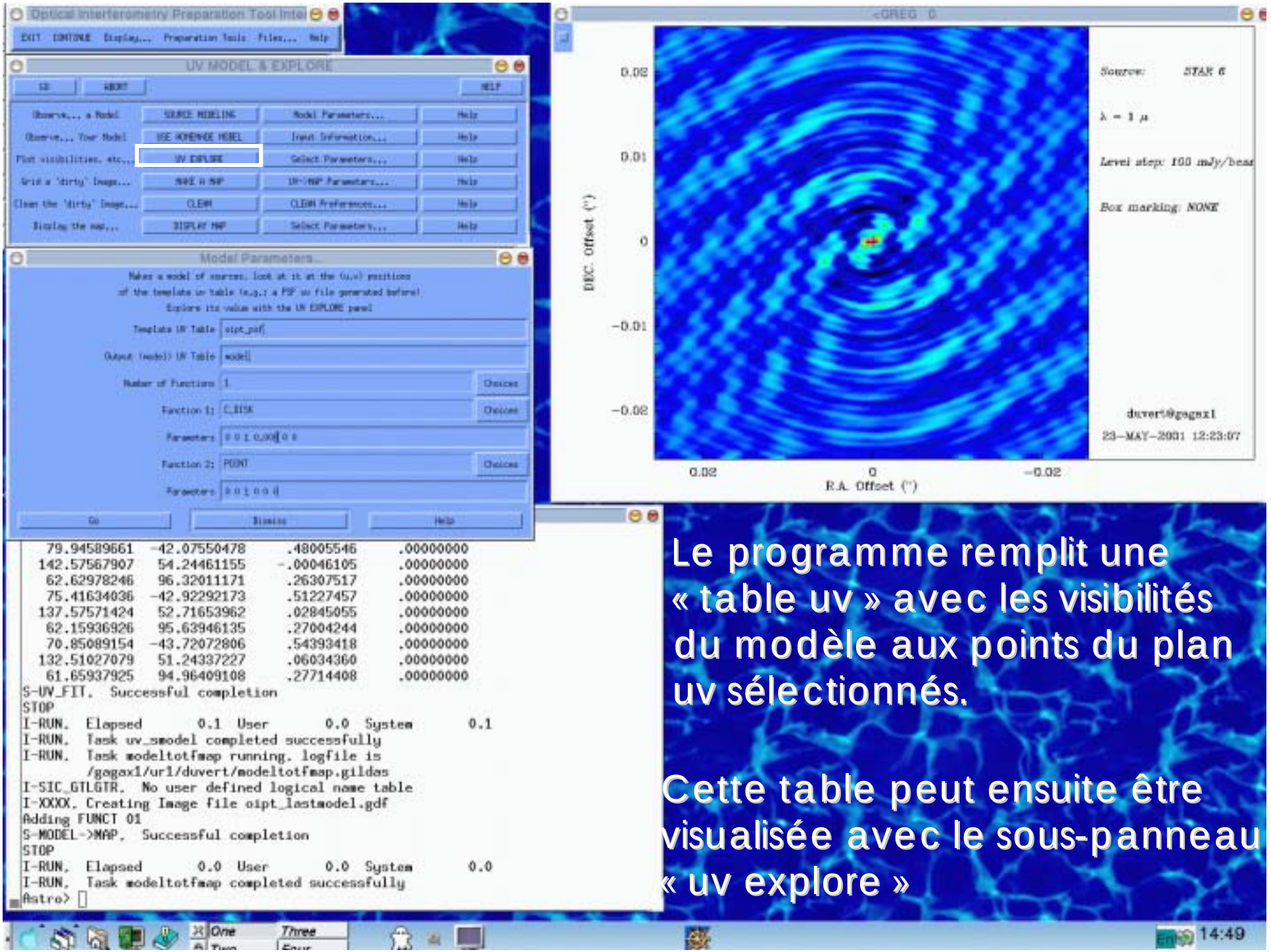

Utiliser une fonction algébrique de u et v comme modèle
UV MODEL & EXPLORE
Model Parameters
Source: STAR 6
Level step: 100 mJy/beam
Box marking: NONE
23-MAY-2001 12:23:07
R.A. Offset (")
DEC. Offset (")
0.02
0.01
0
-0.01
-0.02
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro> Astro> Astro> Astro> Astro>
Astro>
14:45

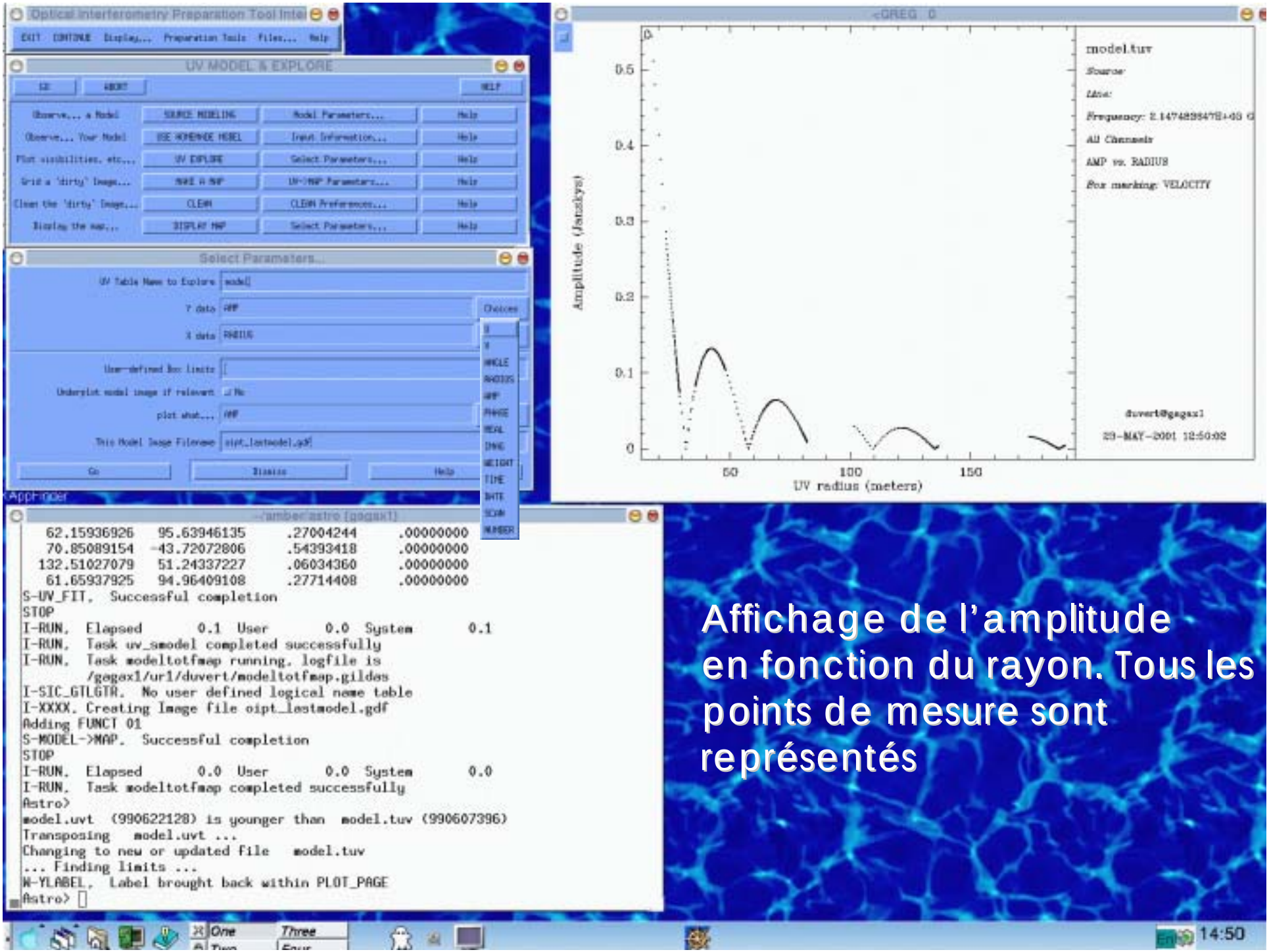

Optical Interferometry Preparation Tool Inte
EXIT CONTINUE Display... Preparation Tools Files... Help
UV MODEL & EXPLORE
EXIT ABORT HELP
Observe... a Model SOURCE MODELING Model Parameters... Help
Observe... Your Model USE KOMBINE MODEL Input Information... Help
Plot visibilities, etc... UV EXPLORE Select Parameters... Help
Grid a 'dirty' Image... MAKE A MAP UV-MAP Parameters... Help
Clean the 'dirty' Image... CLEAN CLEAN Preferences... Help
Display the map... DISPLAY MAP Select Parameters... Help
Model Parameters...
Makes a model of sources, look at it at the (u,v) positions
of the template uv table (e.g.: a PSF or file generated before!
Explore its value with the UV EXPLORE panel
Template UV Table sipt_psf
(Output (model)) UV Table model
Number of Functions 1 Choices
Function 1: POINT Choices
Parameters 0 0 1 0 0 0
Function 2: POINT
Parameters 0 0 1 0 0 0
Go Dismiss Help
POINT
C_GAUSS
E_GAUSS
C_DISK
E_DISK
RING
U_RING
EXP
POWER-2
POWER-3
LD_DISK
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000
.2000 .3000 .4000 .5000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000
.2000 .3000 .4000 .5000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro> Astro> Astro> Astro> Astro>
Astro>
0.02
0.01
0
-0.01
-0.02
DEC. Offset (")
Source: STAR 6
λ = 1 μ
Level step: 100 mJy/beam
Box marking: NONE
duvert@gagnx1
23-MAY-2001 12:23:07
0.02
0
-0.02
R.A. Offset (")
Sélectionner une fonction...
Point source
Gaussienne
Gaussienne elliptique
Disque uniforme
Disque uniforme incliné
Anneau
Anneau non résolu
Distribution exponentielle
Puissance -2
Puissance -3
Disque avec assombrissement centre-bord
One
Three
14:46

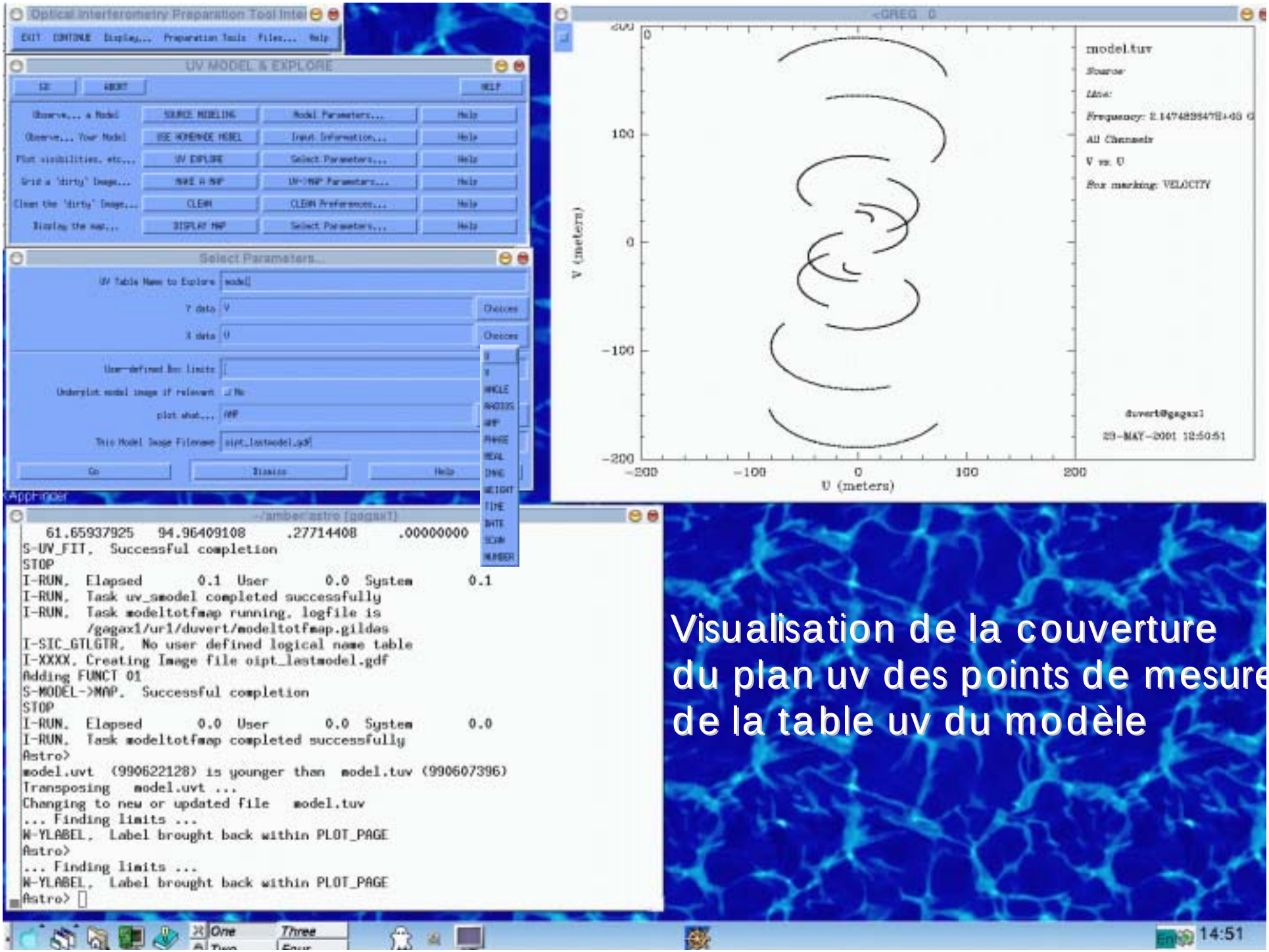

Optical Interferometry Preparation Tool
UV MODEL & EXPLORE
Model Parameters...
Source: STAR 6
λ = 1 μ
Box marking: NONE
DEC. Offset (")
R.A. Offset (")
Astro>
I-LEVELS, Contour levels are :
Une aide en ligne apparaît si on clique sur les boutons « help »...
Ainsi qu'aux endroits où le curseur se transforme en point d'interrogation


Optical Interferometry Preparation Tool Inte
UV MODEL & EXPLORE
SOURCE MODELING
USE HOMEMADE MODEL
UV EXPLORE
MAKE A MAP
CLEAN
DISPLAY MAP
Model Parameters
GREG 0
0.02
0.01
0
−0.01
−0.02
DEC. Offset (")
R.A. Offset (")
Source: STAR 6
λ = 1 μ
Level step: 100 mJy/beam
Box marking: NONE
duvert@gagax1
23−MAY−2001 12:23:07
Astro>
I-LEVELS, Contour levels are :
−.4000 −.3000 −.2000 −.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro> Astro> Astro> Astro> Astro>
Astro>
POINT Point source
One
Three
14:47

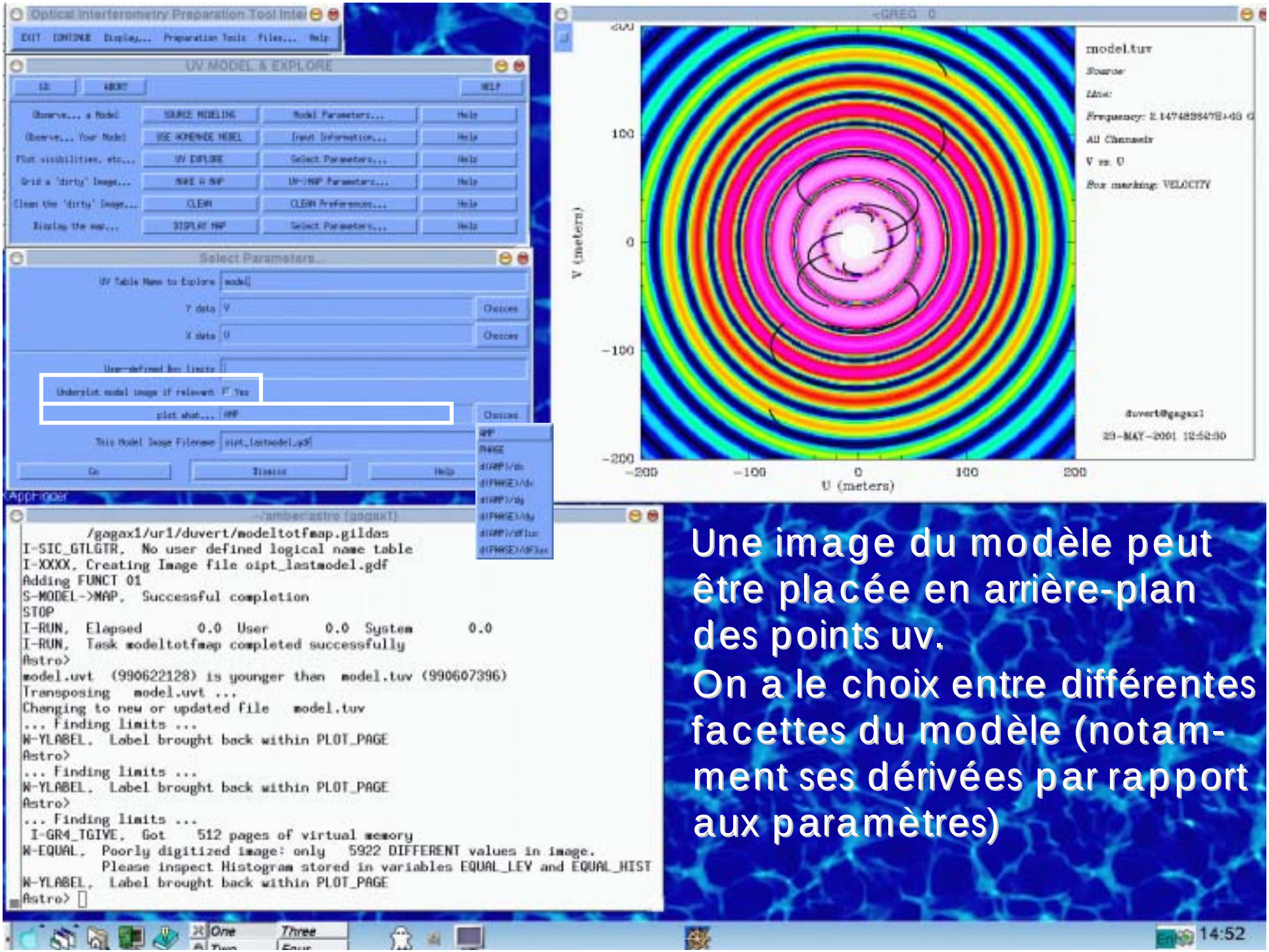

Optical Interferometry Preparation Tool Inte
EXIT CONTINUE Display... Preparation Tools Files... Help
UV MODEL & EXPLORE
EXIT ABORT HELP
Observe... a Model SOURCE MODELING Model Parameters... Help
Observe... Your Model USE KERNRADE MODEL Input Information... Help
Plot visibilities, etc... UV EXPLORE Select Parameters... Help
Grid a 'dirty' Image... MAKE A MAP UV-MAP Parameters... Help
Clean the 'dirty' Image... CLEAN CLEAN Preferences... Help
Display the map... DISPLAY MAP Select Parameters... Help
Model Parameters...
Makes a model of sources, look at it at the (u,v) positions
of the template uv table (e.g.: a PSF or file generated before!
Explore its value with the UV EXPLORE panel
Template UV Table sipt_psf
(Output (model)) UV Table model
Number of Functions 1 Choices
Function 1: POINT Choices
Parameters 0 0 1 0 0 0
Function 2: POINT Choices
Parameters 0 0 1 0 0 0
Go Dismiss Help
.7000 .8000 .9000 1.000
Astro>
I-LEVELS, Contour levels are :
-.4000 -.3000 -.2000 -.1000 .1000
.2000 .3000 .4000 .5000 .6000
.7000 .8000 .9000 1.000
Astro> Astro> Astro> Astro> Astro>
Astro>
0.02
0.01
0
-0.01
-0.02
DEC. Offset (°)
0.02
0
-0.02
R.A. Offset (°)
Source: STAR 6
λ = 1 μ
Level step: 100 mJy/beam
Box marking: NONE
duver\@gagnxl
23-MAY-2001 12:23:07
One
Three
14:46

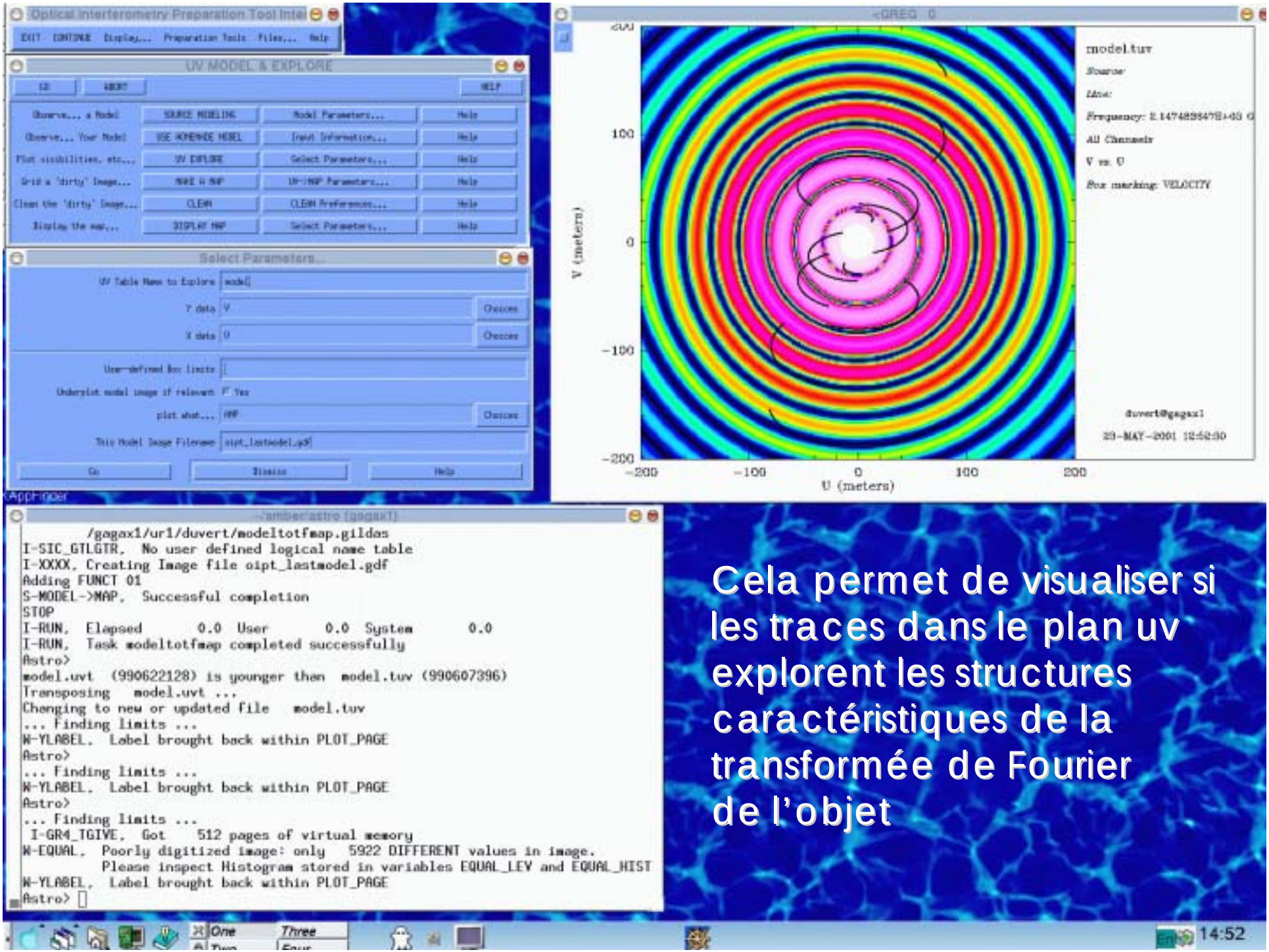

UV MODEL & EXPLORE
Model Parameters...
0.02
0.01
0
-0.01
-0.02
DEC. Offset (")
R.A. Offset (")
Source: STAR 6
λ = 1 μ
Box marking: NONE
duvert@gagnx1
23-MAY-2001 12:23:07
79.94589661 -42.07550478 .48005546 .00000000
142.57567907 54.24461155 -.00046105 .00000000
62.62978246 96.32011171 .26307517 .00000000
75.41634036 -42.92292173 .51227457 .00000000
137.57571424 52.71653962 .02845055 .00000000
62.15936926 95.63946135 .27004244 .00000000
70.85089154 -43.72072806 .54393418 .00000000
132.51027079 51.24337227 .06034360 .00000000
61.65937925 94.96409108 .27714408 .00000000
S-UV_FIT, Successful completion
STOP
I-RUN, Elapsed 0.1 User 0.0 System 0.1
I-RUN, Task uv_smodel completed successfully
I-RUN, Task modeltotfmap running, logfile is
/gagax1/ur1/duvert/modeltotfmap.gildas
I-SIC_GTLGTR, No user defined logical name table
I-XXXX, Creating Image file oipt_lastmodel.gdf
Adding FUNCT 01
S-MODEL->MAP, Successful completion
STOP
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task modeltotfmap completed successfully
Astro>
Le programme remplit une « table uv » avec les visibilités du modèle aux points du plan uv sélectionnés.
Cette table peut ensuite être visualisée avec le sous-panneau « uv explore »
14:49

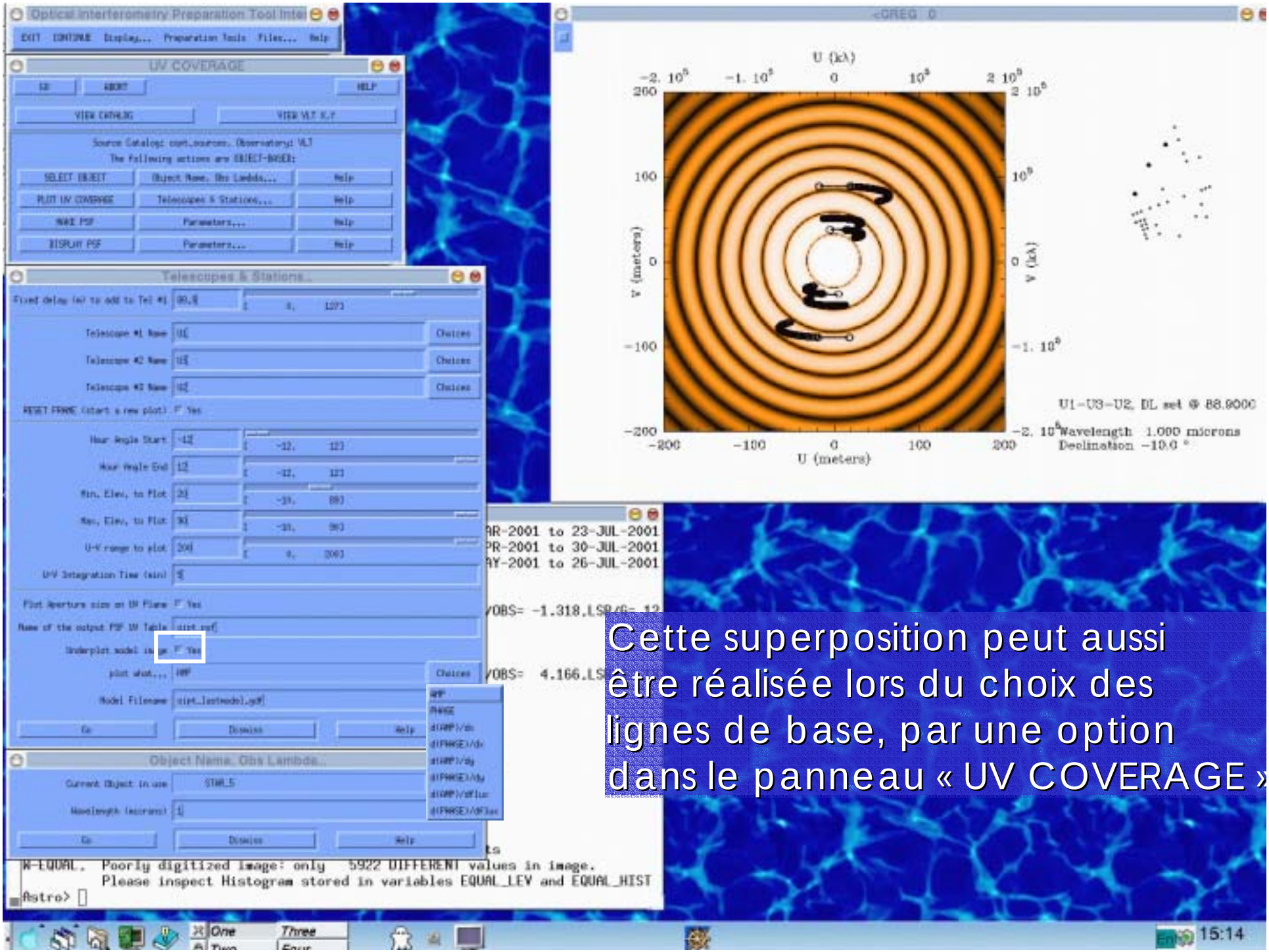

Optical Interferometry Preparation Tool
UV MODEL & EXPLORE
Select Parameters...
model.tuv
Amplitude (Janskys)
UV radius (meters)
0.5
0.4
0.3
0.2
0.1
0
50
100
150
62.15936926 95.63946135 .27004244 .00000000
70.85089154 -43.72072806 .54393418 .00000000
132.51027079 51.24337227 .06034360 .00000000
61.65937925 94.96409108 .27714408 .00000000
S-UV_FIT, Successful completion
STOP
I-RUN, Elapsed 0.1 User 0.0 System 0.1
I-RUN, Task uv_smodel completed successfully
I-RUN, Task modeltotfmap running, logfile is
/gagax1/ur1/duvert/modeltotfmap.gildas
I-SIC_GTLGTR, No user defined logical name table
I-XXXX, Creating Image file oipt_lastmodel.gdf
Adding FUNCT 01
S-MODEL->MAP, Successful completion
STOP
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task modeltotfmap completed successfully
Astro>
model.uvt (990622128) is younger than model.tuv (990607396)
Transposing model.uvt ...
Changing to new or updated file model.tuv
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
Affichage de l'amplitude en fonction du rayon. Tous les points de mesure sont représentés
14:50



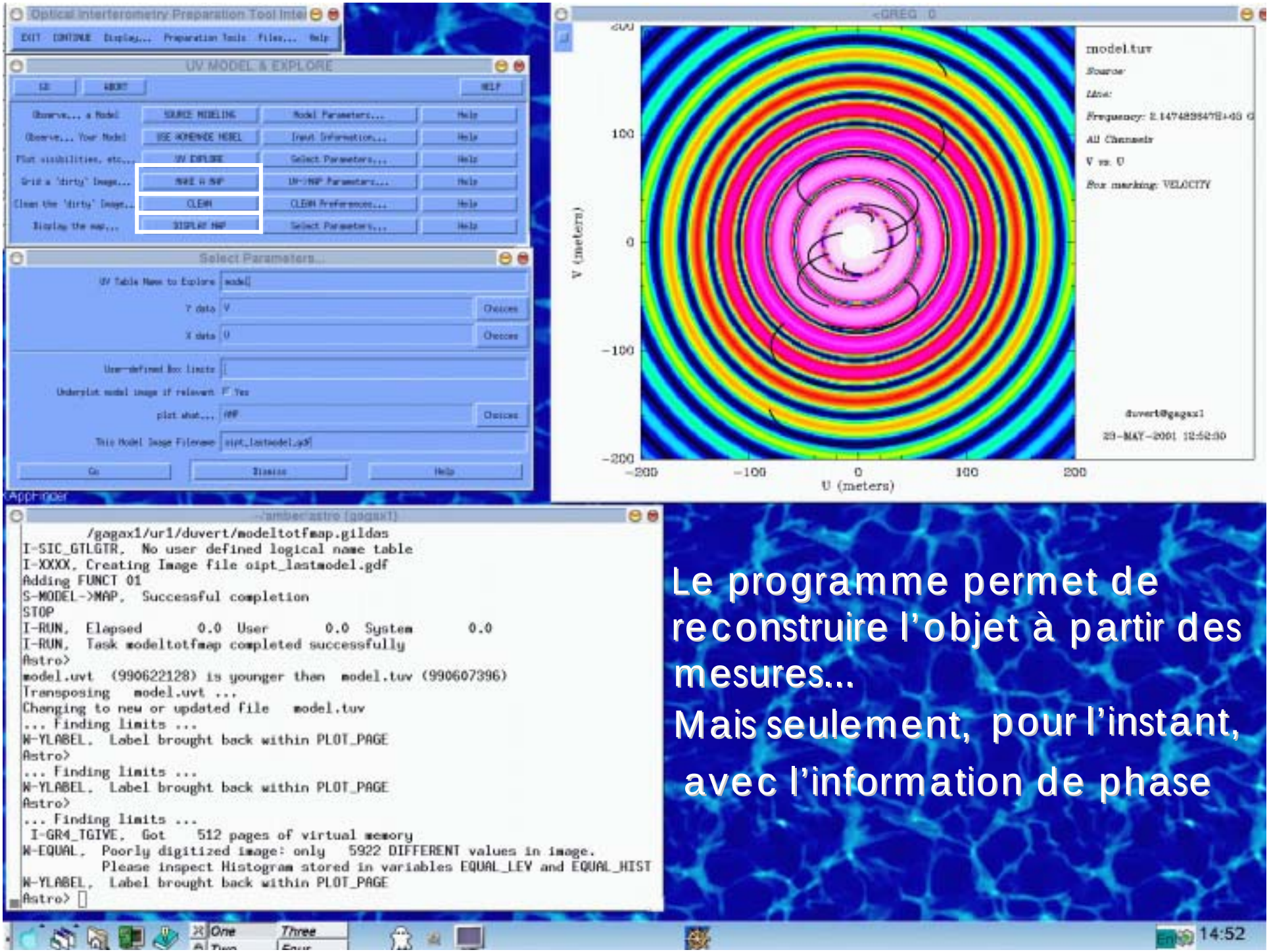
Visualisation de la couverture du plan uv des points de mesure de la table uv du modèle

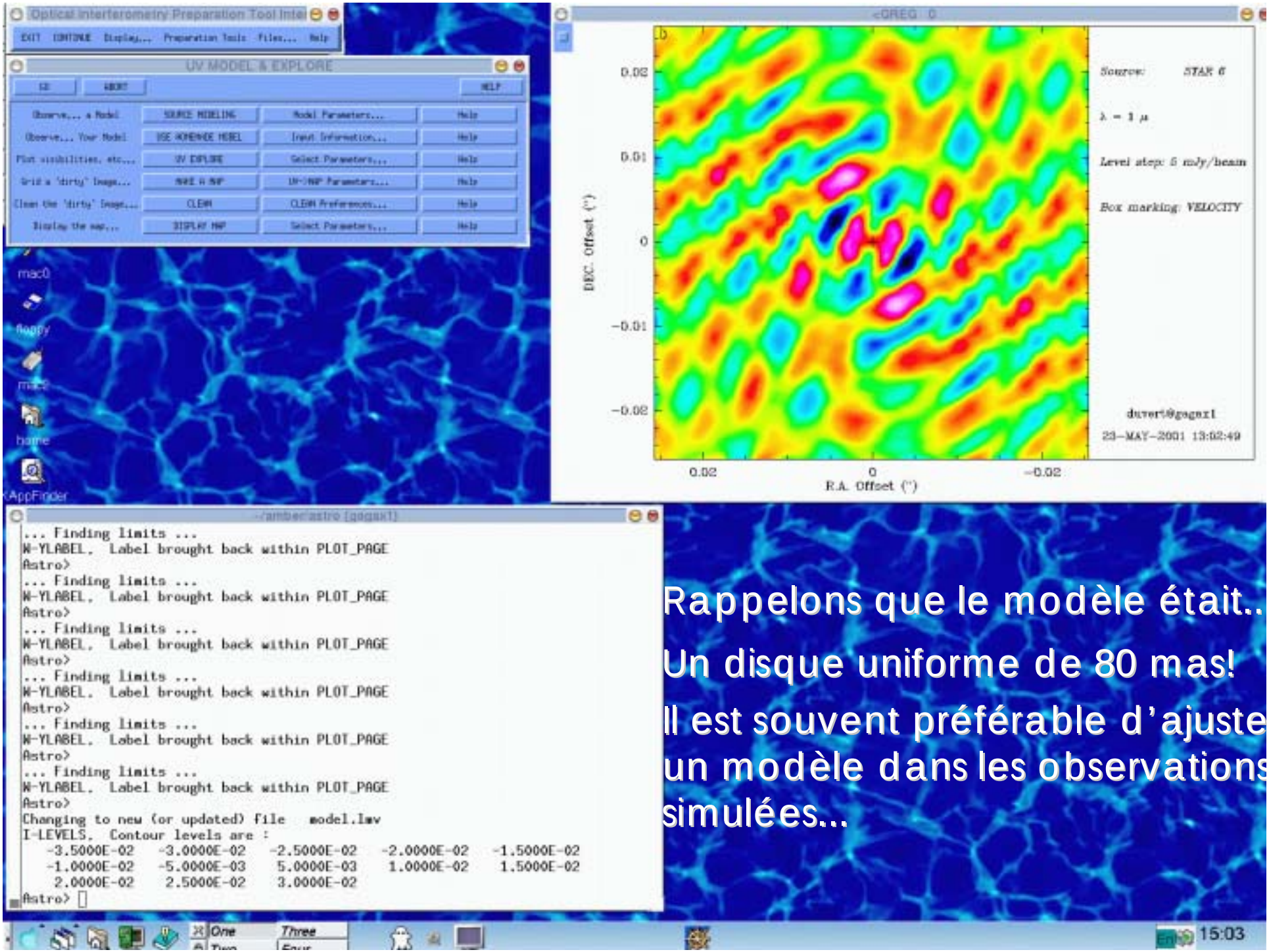

Optical Interferometry Preparation Tool
UV MODEL & EXPLORE
Select Parameters...
model.tuv
U (meters)
V (meters)
/gagax1/ur1/duvert/modeltotfmap.gildas
I-SIC_GTLGTR, No user defined logical name table
I-XXXX, Creating Image file oipt_lastmodel.gdf
Adding FUNCT 01
S-MODEL->MAP, Successful completion
STOP
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task modeltotfmap completed successfully
Astro>
model.uvt (990622128) is younger than model.tuv (990607396)
Transposing model.uvt ...
Changing to new or updated file model.tuv
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
I-GR4_TGIVE, Got 512 pages of virtual memory
W-EQUAL, Poorly digitized image: only 5922 DIFFERENT values in image.
Please inspect Histogram stored in variables EQUAL_LEV and EQUAL_HIST
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
Une image du modèle peut être placée en arrière-plan des points uv.
On a le choix entre différentes facettes du modèle (notamment ses dérivées par rapport aux paramètres)
14:52

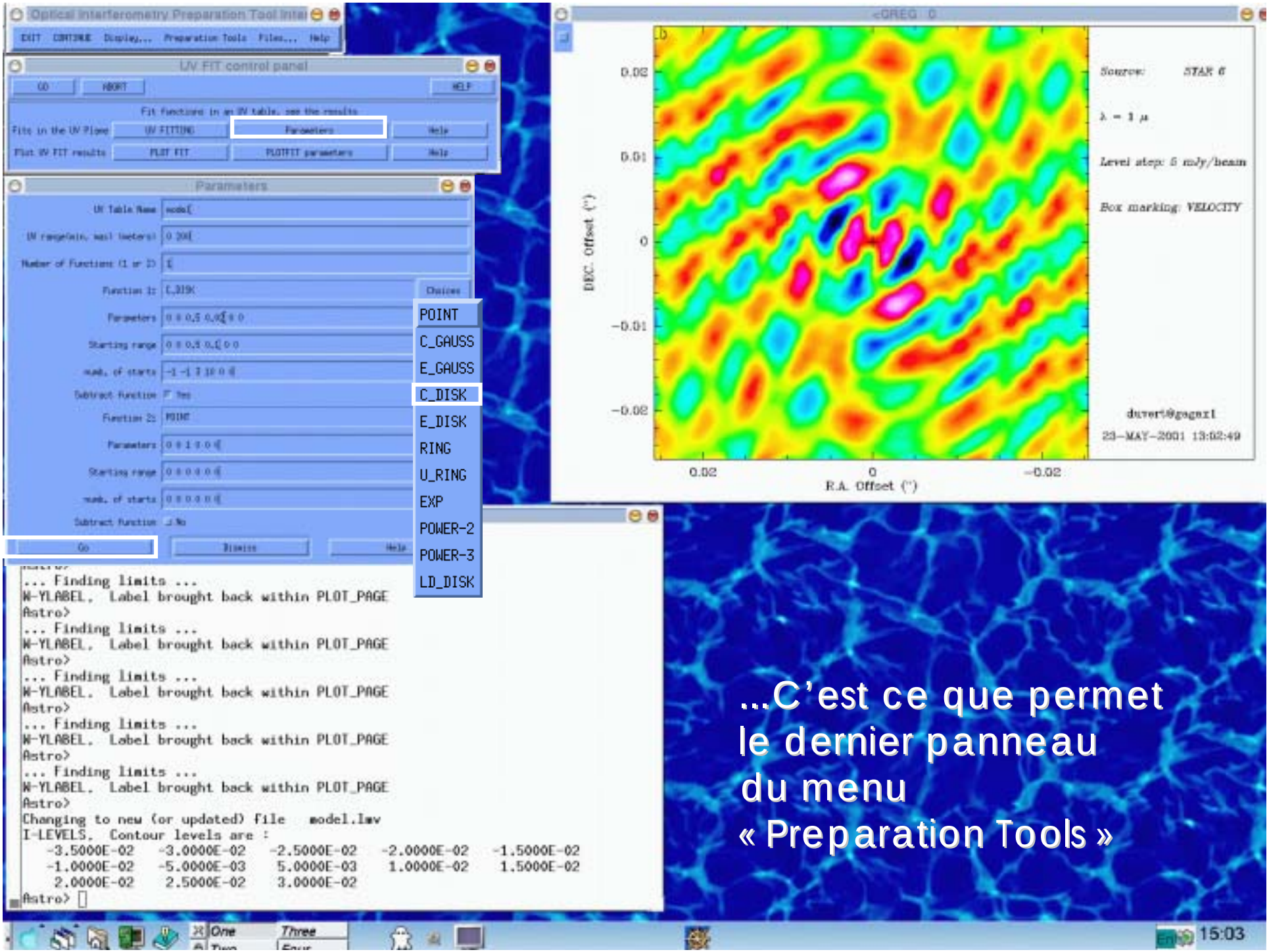

Optical Interferometry Preparation Tool
UV MODEL & EXPLORE
Select Parameters...
model.tuv
V (meters)
U (meters)
100
0
-100
-200
/gagax1/ur1/duvert/modeltotfmap.gildas
I-SIC_GTLGTR, No user defined logical name table
I-XXXX, Creating Image file oipt_lastmodel.gdf
Adding FUNCT 01
S-MODEL->MAP, Successful completion
STOP
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task modeltotfmap completed successfully
Astro>
model.uvt (990622128) is younger than model.tuv (990607396)
Transposing model.uvt ...
Changing to new or updated file model.tuv
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
I-GR4_TGIVE, Got 512 pages of virtual memory
W-EQUAL, Poorly digitized image: only 5922 DIFFERENT values in image.
Please inspect Histogram stored in variables EQUAL_LEV and EQUAL_HIST
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
Cela permet de visualiser si les traces dans le plan uv explorent les structures caractéristiques de la transformée de Fourier de l'objet
14:52

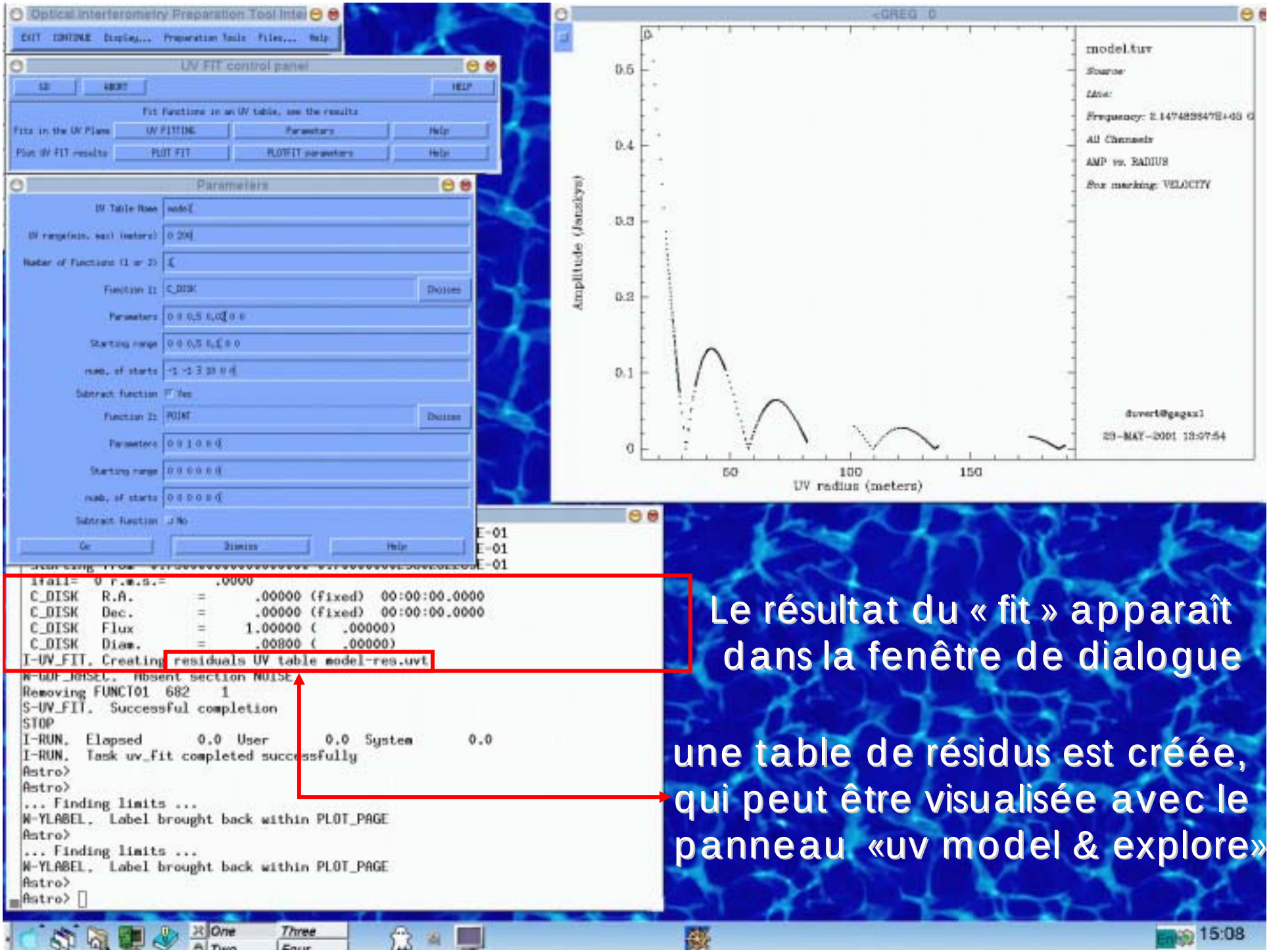


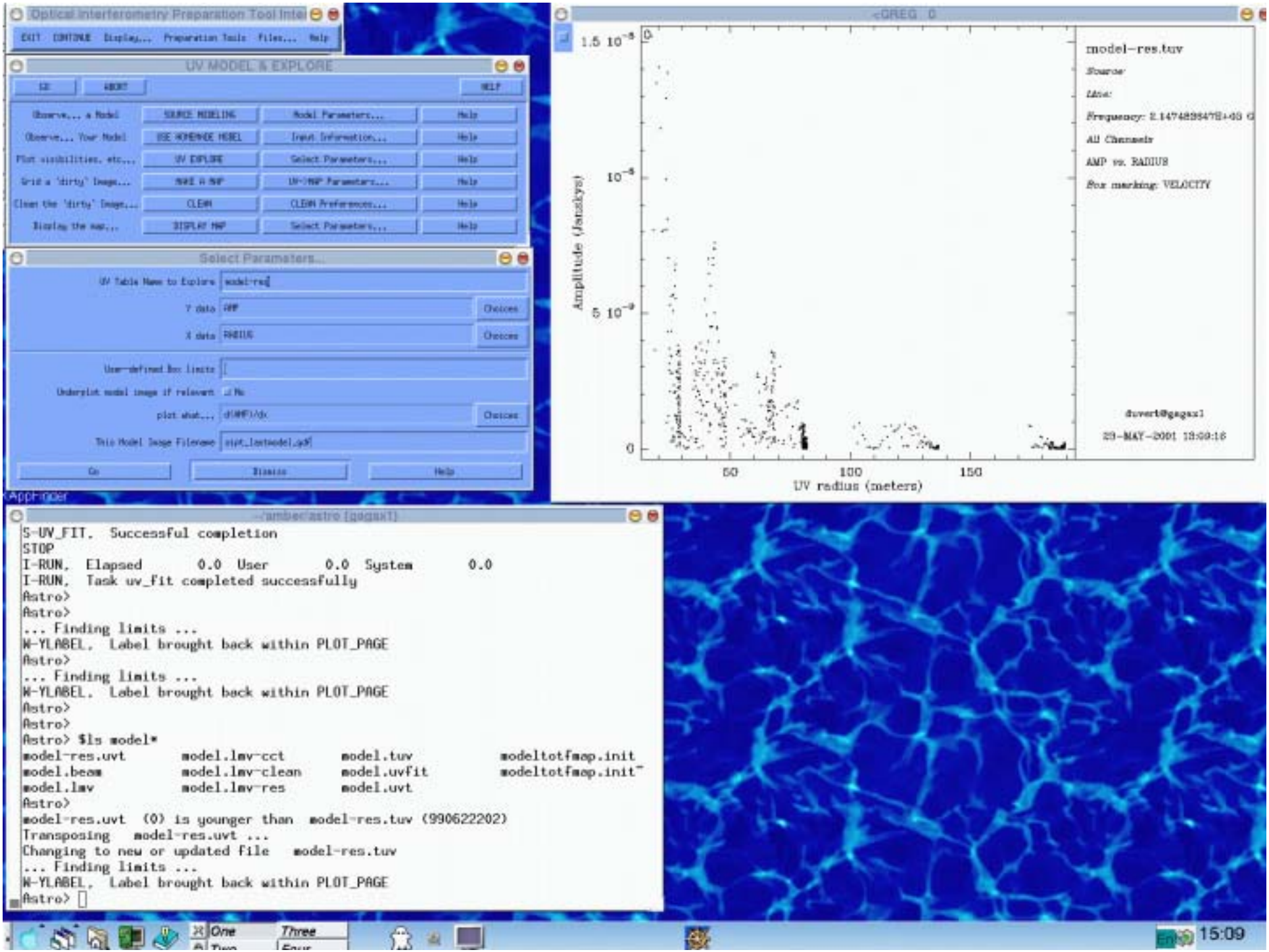
Cette superposition peut aussi être réalisée lors du choix des lignes de base, par une option dans le panneau « UV COVERAGE »


Optical Interferometry Preparation Tool
UV MODEL & EXPLORE
Select Parameters...
model.tuv
V (meters)
U (meters)
100
0
-100
-200
-200
-100
0
100
200
/gagax1/ur1/duvert/modeltotfmap.gildas
I-SIC_GTLGTR, No user defined logical name table
I-XXXX, Creating Image file oipt_lastmodel.gdf
Adding FUNCT 01
S-MODEL->MAP, Successful completion
STOP
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task modeltotfmap completed successfully
Astro>
model.uvt (990622128) is younger than model.tuv (990607396)
Transposing model.uvt ...
Changing to new or updated file model.tuv
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
I-GR4_TGIVE, Got 512 pages of virtual memory
W-EQUAL, Poorly digitized image: only 5922 DIFFERENT values in image.
Please inspect Histogram stored in variables EQUAL_LEV and EQUAL_HIST
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
Le programme permet de reconstruire l'objet à partir des mesures...
Mais seulement, pour l'instant,
avec l'information de phase
14:52


Optical Interferometry Preparation Tool Inte
EXIT CONTINUE Display... Preparation tools Files... Help
UV MODEL & EXPLORE
EXIT ABORT HELP
Observe... a Model SOURCE MODELING Model Parameters... Help
Observe... Your Model USE KNOWNDE MODEL Input Information... Help
Plot visibilities, etc... UV EXPLORE Select Parameters... Help
Grid a 'dirty' Image... MAKE A MAP UV-MAP Parameters... Help
Clean the 'dirty' Image... CLEAN CLEAN Preferences... Help
Display the map... DISPLAY MAP Select Parameters... Help
mac0
floppy
mac2
home
KAppFinder
Source: STAR 6
λ = 1 μ
Level step: 5 mJy/beam
Box marking: VELOCITY
duvert@gagnx1
23-MAY-2001 13:02:49
DEC. Offset (")
R.A. Offset (")
0.02
0.01
0
-0.01
-0.02
... Finding limits ...
W-YLABEL. Label brought back within PLOT_PAGE
Astro>
Changing to new (or updated) file model.lmv
I-LEVELS. Contour levels are :
-3.5000E-02 -3.0000E-02 -2.5000E-02 -2.0000E-02 -1.5000E-02
-1.0000E-02 -5.0000E-03 5.0000E-03 1.0000E-02 1.5000E-02
2.0000E-02 2.5000E-02 3.0000E-02
Rappelons que le modèle était..
Un disque uniforme de 80 mas!
Il est souvent préférable d'ajuste
un modèle dans les observations
simulées...
One
Three
15:03


Optical Interferometry Preparation Tool
EXIT CONTINUE Display... Preparation Tools Files... Help
UV FIT control panel
GO ABORT HELP
Fit functions in an UV table, see the results
Fits in the UV Plane
UV FITTING
Parameters
Help
Plot UV FIT results
PLOT FIT
PLOTFIT parameters
Help
Parameters
UV Table Name
UV range(min, max) (meters)
Number of Functions (1 or 2)
Function 1:
Choices
Parameters
Starting range
nomb. of starts
Subtract function
Function 2:
Parameters
Starting range
nomb. of starts
Subtract function
Go
Dismiss
Help
POINT
C_GAUSS
E_GAUSS
C_DISK
E_DISK
RING
U_RING
EXP
POWER-2
POWER-3
LD_DISK
... Finding limits ...
W-YLABEL. Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL. Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL. Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL. Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL. Label brought back within PLOT_PAGE
Astro>
Changing to new (or updated) file model.lmv
I-LEVELS. Contour levels are :
-3.5000E-02 -3.0000E-02 -2.5000E-02 -2.0000E-02 -1.5000E-02
-1.0000E-02 -5.0000E-03 5.0000E-03 1.0000E-02 1.5000E-02
2.0000E-02 2.5000E-02 3.0000E-02
Astro>
0.02
0.01
0
-0.01
-0.02
DEC. Offset (°)
0.02
0
-0.02
R.A. Offset (°)
Source: STAR 6
λ = 1 μ
Level step: 5 mJy/beam
Box marking: VELOCITY
duvert@gagnxl
23-MAY-2001 13:02:49
...C'est ce que permet
le dernier panneau
du menu
« Preparation Tools »
One
Three
15:03


Optical Interferometry Preparation Tool
UV FIT control panel
Parameters
model.uvt
Amplitude (Janskys)
UV radius (meters)
I-UV_FIT. Creating residuals UV table model-res.uvt
Le résultat du « fit » apparaît dans la fenêtre de dialogue
une table de résidus est créée, qui peut être visualisée avec le panneau «uv model & explore»


Optical Interferometry Preparation Tool Inte
EXIT CONTINUE Display... Preparation Tools Files... Help
UV MODEL & EXPLORE
EXIT ABORT HELP
Observe... a Model SOURCE MODELING Model Parameters... Help
Observe... Your Model USE HOMEMADE MODEL Input Information... Help
Plot visibilities, etc... UV EXPLORE Select Parameters... Help
Grid a 'dirty' Image... MAKE A MAP UV-MAP Parameters... Help
Clean the 'dirty' Image... CLEAN CLEAN Preferences... Help
Display the map... DISPLAY MAP Select Parameters... Help
Select Parameters...
UV Table Name to Explore model-res
Y data AMP
X data RADIUS
Choices
User-defined Box Limits
Underplot model image if relevant No
plot what... d(AMP)/dx
This Model Image Filename plot_lastmodel.ps
Go Dismiss Help
AppFinder
<GREG 0
model-res.tuv
Source:
Line:
Frequency: 2.14748384781+09 G
All Channels
AMP vs. RADIUS
Box marking: VELOCITY
duvert@gagaxl
23-MAY-2001 15:09:16
Amplitude (Janskys)
1.5 10-5
10-5
5 10-9
0
50
100
150
UV radius (meters)
~/amber/astro (gagaxl)
S-UV_FIT, Successful completion
STOP
I-RUN, Elapsed 0.0 User 0.0 System 0.0
I-RUN, Task uv_fit completed successfully
Astro>
Astro>
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
Astro>
Astro> $ls model*
model-res.uvt model.lmv-cct model.tuv modeltotfmap.init
model.beam model.lmv-clean model.uvfit modeltotfmap.init~
model.lmv model.lmv-res model.uvt
Astro>
model-res.uvt (0) is younger than model-res.tuv (990622202)
Transposing model-res.uvt ...
Changing to new or updated file model-res.tuv
... Finding limits ...
W-YLABEL, Label brought back within PLOT_PAGE
Astro>
One Three
15:09

Le logiciel ASPRO qui vous a été présenté est développé dans l'environnement

Grenoble Image and GILDAS Data Analysis System

la version actuelle est disponible sur unix et linux. Il s'agit d'une maquette complètement opérationelle qui préfigure le logiciel final mis à disposition de la communauté d'ici 2002.