```
1     /***********************************************/
2     /*    Visual X windows Programming Interface    */
3     /*    ======================================    */
4     /*              Beta version 2.0                */
5     /*    Copyright (C) 1994,1995  by  Yong Chen    */
6     /*            All Rights Reserved               */
7     /*          stdyxc05@pip.shsu.edu               */
8     /***********************************************/
9
10    Application:    visu2
11    Code Style: ANSI
12    Objects Global Access Array name: vxpOBJ
13    Compiler: CC =
14     cc
15
16    Compiler option: CFLAGS =
17
18
19    Include file library option: IFLAGS =
20
21
22    Link library option: LIBS =
23     -lXm -lXt -lX11
24
25    Application's general include source code:
26    /* application's include part */
27    #include <stdlib.h>
28    #include "struct.h"
29
30
31    Application's global definitions source code:
32    /* application's global definitions */
33
34    /* Pointer on active managed DialogBox */
35    Widget   ActiveManagedChild;
36
37    int      ChangeValue;
38    RwV3d    Point3D, PtLookUp, PtLookAt;
39
40    int PosScroll;
41
42    float R,G,B;
43
44
45
46    Application's initial routine source code:
47    /* application's initial routine */
48    void vxpInitial()
49    {
50     /* On garde un pointeur sur chaque display */
51     Front_XY_Window = XtWindowOfObject (vxpOBJ.Front_XY);
52     Left_ZY_Window = XtWindowOfObject (vxpOBJ.Left_ZY);
53     Top_XZ_Window = XtWindowOfObject (vxpOBJ.Top_XZ);
54     Camera_Window = XtWindowOfObject (vxpOBJ.Camera);
55
56     /* First Active Window is Top_XZ */
57     EtatApplication.CurWidget = vxpOBJ.Top_XZ;
58     EtatApplication.ActiveWnd = DrawingToCsteWnd (vxpOBJ.Top_XZ);
59     ActiveWindow (DrawingToFrame (EtatApplication.CurWidget), True);
60
61     /* Default is mode creation */
62     ActiveManagedChild = vxpOBJ.DBCreation;
63     EtatApplication.Mode = MODE_CREATION;
64     EtatApplication.TypeObject = OBJ_SPHERE;
65     XtManageChild (ActiveManagedChild);
66
67     /* Zoom state */
68     StateZoom = 0;
69     XtUnmanageChild (vxpOBJ.FrameZoom);
70     XtUnmanageChild (vxpOBJ.Zoom);
71
```



```
72     EtatApplication.Full = OBJ_FULL;
73
74     EtatApplication.Video = vxpOBJ.DrawingAreaVideo;
75
76     NbShots = 100;
77
78     strcpy (EtatApplication.FileObject, "");
79     strcpy (EtatApplication.Texture, "");
80
81     /* RGB initialisation */
82     EtatApplication.R = 0.8;
83     EtatApplication.G = 0.5;
84     EtatApplication.B = 0.9;
85
86
87     XtManageChild (vxpOBJ.BBAbout);
88    }
89
90
91
92
93    Application's functions source code:
94    #include "create_cb.h"
95    #include "animation_cb.h"
96
97    /* application's functions */
98
99    /* We leave application properly */
100   void Exit ()
101   {
102    exit (0);
103   }
104
105
106   /* Change Border Color of the Widget */
107   void ActiveWindow (Widget w, int Actif)
108   {
109    if (Actif)
110       {
111        Arg TabArg [1];
112        XtSetArg (TabArg [0], XmNtopShadowColor, COL_ACTIF_BORDER);
113        XtSetValues (w, TabArg, 1);
114       }
115    else
116       {
117        Arg TabArg [1];
118        XtSetArg (TabArg [0], XmNtopShadowColor, COL_INACTIF_BORDER);
119        XtSetValues (w, TabArg, 1);
120       }
121   }
122
123
124   Widget DrawingToFrame (Widget DrawingArea)
125   {
126    if (DrawingArea == vxpOBJ.Front_XY) return vxpOBJ.FrameFront;
127    if (DrawingArea == vxpOBJ.Top_XZ) return vxpOBJ.FrameTop;
128    if (DrawingArea == vxpOBJ.Left_ZY) return vxpOBJ.FrameLeft;
129    if (DrawingArea == vxpOBJ.Camera) return vxpOBJ.FrameCamera;
130   }
131
132
133   int DrawingToCsteWnd (Widget DrawingArea)
134   {
135    if (DrawingArea == vxpOBJ.Front_XY) return WND_FRONT;
136    if (DrawingArea == vxpOBJ.Top_XZ) return WND_TOP;
137    if (DrawingArea == vxpOBJ.Left_ZY) return WND_LEFT;
138    if (DrawingArea == vxpOBJ.Camera) return WND_CAMERA;
139   }
140
141
142   Widget CsteWndToDrawing (Widget DrawingArea)
```

```
143   {
144    switch (EtatApplication.ActiveWnd)
145       {
146        case WND_FRONT  : return vxpOBJ.Front_XY;
147        case WND_TOP    : return vxpOBJ.Top_XZ;
148        case WND_LEFT   : return vxpOBJ.Left_ZY;
149        case WND_CAMERA : return vxpOBJ.Camera;
150       }
151   }
152
153
154
155   void DrawingArea_input_cb(Widget w, XEvent * event, String *argv, int argc)
156   {
157     printf(" DrawingArea1_input_cb\n");
158   }
159
160
161   void DrawingArea_expose_cb (Widget w, XEvent * event, String *argv, int argc)
162   {
163    Animation_expose_cb(w, event, argv, argc);
164    if (EtatApplication.Mode == MODE_CREATION)
165       Creation_expose_cb(w, event, argv, argc);
166   }
167
168
169   void ImageScroll_expose_cb (Widget w, XEvent * event, String *argv, int argc)
170   {
171    XtVaSetValues(vxpOBJ.ImagesScroll, XmNmaximum, NbShots, XmNminimum, 1, NULL );
172   }
173
174
175   void DrawingAreaKeyPress(Widget w, XEvent * event, String *argv, int argc)
176   {
177    if (EtatApplication.Mode == MODE_CREATION)
178       CreationKeyPress(EtatApplication.CurWidget, event, argv, argc);
179    else
180       AnimationKeyPressed(EtatApplication.CurWidget, event, argv, argc);
181   }
182
183
184   void DrawingAreaButton1Down(Widget w, XEvent * event, String *argv, int argc)
185   {
186    if (EtatApplication.Mode == MODE_ANIMATION)
187       AnimationButton1Down (w, event, argv, argc);
188   }
189
190
191   void DrawingAreaButton1Motion(Widget w, XEvent * event, String *argv, int argc)
192   {
193    if (EtatApplication.Mode == MODE_ANIMATION)
194       AnimationButton1Motion(w, event, argv, argc);
195   }
196
197
198   void DrawingAreaButton1Up(Widget w, XEvent * event, String *argv, int argc)
199   {
200     /* If Active Window is not the same as w, w become active Window else we translate
      message */
201     if (EtatApplication.CurWidget != w)
202        {
203          ActiveWindow (DrawingToFrame (EtatApplication.CurWidget), False);
204          EtatApplication.CurWidget = w;
205          EtatApplication.ActiveWnd = DrawingToCsteWnd (w);
206          if (EtatApplication.Mode == MODE_CREATION)
207             {
208             CreationButton1Up (w, event, argv, argc);
209             CreationMouseMove (w, event, argv, argc);
210             }
211          ActiveWindow (DrawingToFrame (w), True);
212        }
```



```
213      else
214        {
215         if (EtatApplication.Mode == MODE_CREATION)
216            {
217             /* no message from camera are translate */
218             if (EtatApplication.ActiveWnd == WND_CAMERA) return;
219             CreationButton1Up (w, event, argv, argc);
220            }
221         else
222            AnimationButton1Up (w, event, argv, argc);
223        }
224   }
225
226
227   void DrawingAreaButton2Down(Widget w, XEvent * event, String *argv, int argc)
228   {
229    if (EtatApplication.Mode == MODE_ANIMATION)
230        AnimationButton2Down (w, event, argv, argc);
231    else
232       {
233        if (EtatApplication.ActiveWnd == WND_CAMERA) return;
234        CreationButton2Down (w, event, argv, argc);
235       }
236   }
237
238
239   void DrawingAreaButton2Motion(Widget w, XEvent * event, String *argv, int argc)
240   {
241     if (EtatApplication.Mode == MODE_ANIMATION)
242        AnimationButton2Motion (w, event, argv, argc);
243
244     /* no message from camera are translate */
245     if (EtatApplication.ActiveWnd == WND_CAMERA) return;
246   }
247
248
249   void DrawingAreaButton2Up(Widget w, XEvent * event, String *argv, int argc)
250   {
251    if (EtatApplication.Mode == MODE_ANIMATION)
252       AnimationButton2Up (w, event, argv, argc);
253
254    /* no message from camera are translate */
255    if (EtatApplication.ActiveWnd == WND_CAMERA) return;
256   }
257
258
259   void DrawingAreaButton3Down(Widget w, XEvent * event, String *argv, int argc)
260   {
261    /* no message from camera are translate */
262    if (EtatApplication.ActiveWnd == WND_CAMERA) return;
263   }
264
265
266   void DrawingAreaButton3Motion(Widget w, XEvent * event, String *argv, int argc)
267   {
268    /* no message from camera are translate */
269    if (EtatApplication.ActiveWnd == WND_CAMERA && EtatApplication.Mode == MODE_CREATION
      ) return;
270    if (EtatApplication.Mode == MODE_ANIMATION)
271       AnimationButton3Motion (w, event, argv, argc);
272   }
273
274
275   void DrawingAreaButton3Up(Widget w, XEvent * event, String *argv, int argc)
276   {
277    if (EtatApplication.CurWidget == w)
278       {
279        if (EtatApplication.Mode == MODE_CREATION)
280           {
281            /* no message from camera are translate */
282            if (EtatApplication.ActiveWnd == WND_CAMERA) return;
```

```
283             CreationButton3Up (w, event, argv, argc);
284            }
285         else
286            AnimationButton3Up (w, event, argv, argc);
287       }
288   }
289
290
291   void DrawingAreaMouseMove(Widget w, XEvent * event, String *argv, int argc)
292   {
293    /* no message from camera are translate */
294    if (EtatApplication.ActiveWnd == WND_CAMERA) return;
295
296    if (EtatApplication.Mode != MODE_ANIMATION)
297      {
298         if (EtatApplication.CurWidget == w)
299            CreationMouseMove (w, event, argv, argc);
300      }
301      else
302         AnimationMouseMove(w, event, argv, argc);
303   }
304
305
306   void SetTranslation (XtAppContext AppContext)
307   {
308
309    XtActionsRec actions[11];
310
311    String translations =
312              "<Btn1Down>: DrawingAreaButton1Down() \n\
313   <Btn1Motion>: DrawingAreaButton1Motion() \n\
314   <Btn1Up>: DrawingAreaButton1Up() \n\
315   <Btn2Down>: DrawingAreaButton2Down() \n\
316   <Btn2Motion>: DrawingAreaButton2Motion() \n\
317   <Btn2Up>: DrawingAreaButton2Up() \n\
318   <Btn3Down>: DrawingAreaButton3Down() \n\
319   <Btn3Motion>: DrawingAreaButton3Motion() \n\
320   <Btn3Up>: DrawingAreaButton3Up() \n\
321   <Motion>: DrawingAreaMouseMove() \n\
322   <KeyPress>: DrawingAreaKeyPress()";
323
324
325    /* widgets creation et translation */
326
327    actions[0].string = "DrawingAreaButton1Down";
328    actions[0].proc   =  (XtActionProc) DrawingAreaButton1Down;
329    actions[1].string = "DrawingAreaButton1Motion";
330    actions[1].proc   =  (XtActionProc) DrawingAreaButton1Motion;
331    actions[2].string = "DrawingAreaButton1Up";
332    actions[2].proc   =  (XtActionProc) DrawingAreaButton1Up;
333
334    actions[3].string = "DrawingAreaButton2Down";
335    actions[3].proc   =  (XtActionProc) DrawingAreaButton2Down;
336    actions[4].string = "DrawingAreaButton2Motion";
337    actions[4].proc   =  (XtActionProc) DrawingAreaButton2Motion;
338    actions[5].string = "DrawingAreaButton2Up";
339    actions[5].proc   =  (XtActionProc) DrawingAreaButton2Up;
340
341    actions[6].string = "DrawingAreaButton3Down";
342    actions[6].proc   =  (XtActionProc) DrawingAreaButton3Down;
343    actions[7].string = "DrawingAreaButton3Motion";
344    actions[7].proc   =  (XtActionProc) DrawingAreaButton3Motion;
345    actions[8].string = "DrawingAreaButton3Up";
346    actions[8].proc   =  (XtActionProc) DrawingAreaButton3Up;
347
348    actions[9].string = "DrawingAreaMouseMove";
349    actions[9].proc   =  (XtActionProc) DrawingAreaMouseMove;
350
351    actions[10].string = "DrawingAreaKeyPress";
352    actions[10].proc   =  (XtActionProc) DrawingAreaKeyPress;
353
```



```
354    XtAppAddActions(AppContext, actions, 11);
355
356    XtVaSetValues(vxpOBJ.Top_XZ, XmNtranslations,XtParseTranslationTable(translations),
       NULL);
357    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Do
       wn, (XtPointer) NULL);
358    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Mo
       tion, (XtPointer) NULL);
359    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Up
       , (XtPointer) NULL);
360    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Do
       wn, (XtPointer) NULL);
361    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Mo
       tion, (XtPointer) NULL);
362    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Up
       , (XtPointer) NULL);
363    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Do
       wn, (XtPointer) NULL);
364    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Mo
       tion, (XtPointer) NULL);
365    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Up
       , (XtPointer) NULL);
366    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaMouseMove
       , (XtPointer) NULL);
367    XtAddCallback(vxpOBJ.Top_XZ, XmNinputCallback, (XtCallbackProc) DrawingAreaKeyPress,
       (XtPointer) NULL);
368    XtAddCallback(vxpOBJ.Top_XZ, XmNexposeCallback,(XtCallbackProc) DrawingArea_expose_c
       b, (XtPointer) NULL);
369
370    XtVaSetValues(vxpOBJ.Front_XY, XmNtranslations,XtParseTranslationTable(translations)
       , NULL);
371    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1
       Down, (XtPointer) NULL);
372    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1
       Motion, (XtPointer) NULL);
373    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1
       Up, (XtPointer) NULL);
374    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2
       Down, (XtPointer) NULL);
375    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2
       Motion, (XtPointer) NULL);
376    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2
       Up, (XtPointer) NULL);
377    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3
       Down, (XtPointer) NULL);
378    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3
       Motion, (XtPointer) NULL);
379    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3
       Up, (XtPointer) NULL);
380    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaMouseMo
       ve, (XtPointer) NULL);
381    XtAddCallback(vxpOBJ.Front_XY, XmNexposeCallback,(XtCallbackProc) DrawingArea_expose
       _cb, (XtPointer) NULL);
382    XtAddCallback(vxpOBJ.Front_XY, XmNinputCallback, (XtCallbackProc) DrawingAreaKeyPres
       s, (XtPointer) NULL);
383
384    XtVaSetValues(vxpOBJ.Left_ZY, XmNtranslations,XtParseTranslationTable(translations),
       NULL);
385    XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1D
       own, (XtPointer) NULL);
386    XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1M
       otion, (XtPointer) NULL);
387    XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1U
       p, (XtPointer) NULL);
388    XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2D
       own, (XtPointer) NULL);
389    XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2M
       otion, (XtPointer) NULL);
390    XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2U
       p, (XtPointer) NULL);
391    XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3D
```

```
     own, (XtPointer) NULL);
392   XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3M
     otion, (XtPointer) NULL);
393   XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3U
     p, (XtPointer) NULL);
394   XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaMouseMov
     e, (XtPointer) NULL);
395   XtAddCallback(vxpOBJ.Left_ZY, XmNexposeCallback,(XtCallbackProc) DrawingArea_expose_
     cb, (XtPointer) NULL);
396   XtAddCallback(vxpOBJ.Left_ZY, XmNinputCallback, (XtCallbackProc) DrawingAreaKeyPress
     , (XtPointer) NULL);
397
398   XtVaSetValues(vxpOBJ.Camera, XmNtranslations,XtParseTranslationTable(translations),
     NULL);
399   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Do
     wn, (XtPointer) NULL);
400   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Mo
     tion, (XtPointer) NULL);
401   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Up
     , (XtPointer) NULL);
402   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Do
     wn, (XtPointer) NULL);
403   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Mo
     tion, (XtPointer) NULL);
404   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Up
     , (XtPointer) NULL);
405   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Do
     wn, (XtPointer) NULL);
406   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Mo
     tion, (XtPointer) NULL);
407   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Up
     , (XtPointer) NULL);
408   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaMouseMove
     , (XtPointer) NULL);
409   XtAddCallback(vxpOBJ.Camera, XmNexposeCallback,(XtCallbackProc) DrawingArea_expose_c
     b, (XtPointer) NULL);
410   XtAddCallback(vxpOBJ.Camera, XmNinputCallback, (XtCallbackProc) DrawingAreaKeyPress,
      (XtPointer) NULL);
411
412   XtVaSetValues(vxpOBJ.Zoom, XmNtranslations,XtParseTranslationTable(translations), NU
     LL);
413   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Down
     , (XtPointer) NULL);
414   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Moti
     on, (XtPointer) NULL);
415   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton1Up,
     (XtPointer) NULL);
416   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Down
     , (XtPointer) NULL);
417   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Moti
     on, (XtPointer) NULL);
418   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton2Up,
     (XtPointer) NULL);
419   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Down
     , (XtPointer) NULL);
420   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Moti
     on, (XtPointer) NULL);
421   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaButton3Up,
     (XtPointer) NULL);
422   XtAddCallback(vxpOBJ.Zoom, XmNinputCallback, (XtCallbackProc) DrawingAreaMouseMove,
     (XtPointer) NULL);
423   XtAddCallback(vxpOBJ.Zoom, XmNexposeCallback,(XtCallbackProc) DrawingArea_expose_cb,
      (XtPointer) NULL);
424
425   }
426
427   /* This function is call from main, it initialize some stuff */
428   int InitMain (XtAppContext AppContext)
429   {
430    SetTranslation (AppContext);
431    ApContext = AppContext;
```



```
432    return 0;
433   }
434
435
436
437
438
439
440
441   !VXP! begin-object
442   applicationShell : visu2 ( 0 )
443   ( 111 , 116 )    ( 615 , 484 )   visu2
444   !VXP! begin-resources
445   minAspectX : 300
446   minAspectY : 480
447   !VXP! end-resources
448   !VXP! end-object
449
450   !VXP! begin-object
451   Form : Form2 ( 2 )
452   ( 107 , 184 )    ( 615 , 484 )   visu2
453   !VXP! begin-resources
454   background : gainsboro
455   !VXP! end-resources
456   !VXP! end-object
457
458   !VXP! begin-object
459   Frame : FrameTop ( 21 )
460   ( 10 , 10 )      ( 236 , 232 )   Form2
461   !VXP! begin-resources
462   rightAttachment : XmATTACH_POSITION
463   rightPosition : 40
464   bottomAttachment : XmATTACH_POSITION
465   bottomPosition : 50
466   leftOffset : 10
467   topOffset : 10
468   background : white
469   leftAttachment : XmATTACH_FORM
470   topAttachment : XmATTACH_FORM
471   borderColor : black
472   bottomShadowColor : gray
473   topShadowColor : WhiteSmoke
474   !VXP! end-resources
475   !VXP! end-object
476
477   !VXP! begin-object
478   DrawingArea : Top_XZ ( 4 )
479   ( 2 , 2 )        ( 232 , 228 )   FrameTop
480   !VXP! begin-resources
481   background : white
482   !VXP! end-resources
483   !VXP! begin-callback
484   resize :        client_data( XtPointer client_data NULL )
485   void Top_XZ_resize_cb
486   (Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
487   {
488    DrawingArea_expose_cb (w, 0, 0, 0);
489   }
490
491
492
493   !VXP! end-callback
494   !VXP! begin-callback
495   expose :        client_data( XtPointer client_data NULL )
496   void Top_XZ_expose_cb
497   (Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
498   {
499   }
500
501
502   !VXP! end-callback
```

```
503   !VXP! end-object
504
505   !VXP! begin-object
506   Frame : FrameLeft ( 21 )
507   ( 10 , 242 )     ( 236 , 232 )   Form2
508   !VXP! begin-resources
509   rightAttachment : XmATTACH_POSITION
510   rightPosition : 40
511   bottomAttachment : XmATTACH_FORM
512   bottomPosition : 0
513   leftOffset : 10
514   topOffset : 0
515   background : white
516   bottomOffset : 10
517   leftAttachment : XmATTACH_FORM
518   topAttachment : XmATTACH_POSITION
519   topPosition : 50
520   bottomShadowColor : gray
521   topShadowColor : WhiteSmoke
522   !VXP! end-resources
523   !VXP! end-object
524
525   !VXP! begin-object
526   DrawingArea : Left_ZY ( 4 )
527   ( 2 , 2 )        ( 232 , 228 )   FrameLeft
528   !VXP! begin-resources
529   background : white
530   foreground : gray
531   !VXP! end-resources
532   !VXP! begin-callback
533   resize :        client_data( XtPointer client_data NULL )
534   void Left_ZY_resize_cb
535   (Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
536   {
537    DrawingArea_expose_cb (w, 0, 0, 0);
538   }
539
540
541
542   !VXP! end-callback
543   !VXP! end-object
544
545   !VXP! begin-object
546   Frame : FrameCamera ( 21 )
547   ( 246 , 242 )    ( 236 , 232 )   Form2
548   !VXP! begin-resources
549   rightAttachment : XmATTACH_POSITION
550   rightPosition : 80
551   bottomAttachment : XmATTACH_FORM
552   bottomPosition : 0
553   leftOffset : 0
554   topOffset : 0
555   background : white
556   bottomOffset : 10
557   leftAttachment : XmATTACH_POSITION
558   topAttachment : XmATTACH_POSITION
559   topPosition : 50
560   leftPosition : 40
561   rightOffset : 10
562   bottomShadowColor : gray
563   topShadowColor : WhiteSmoke
564   !VXP! end-resources
565   !VXP! end-object
566
567   !VXP! begin-object
568   DrawingArea : Camera ( 4 )
569   ( 2 , 2 )        ( 232 , 228 )   FrameCamera
570   !VXP! begin-resources
571   background : white
572   !VXP! end-resources
573   !VXP! begin-callback
```



```
574   resize :        client_data( XtPointer client_data NULL )
575   void Camera_resize_cb
576   (Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
577   {
578    DrawingArea_expose_cb (w, 0, 0, 0);
579   }
580
581
582
583   !VXP! end-callback
584   !VXP! end-object
585
586   !VXP! begin-object
587   Frame : FrameFront ( 21 )
588   ( 246 , 10 )     ( 236 , 232 )   Form2
589   !VXP! begin-resources
590   rightAttachment : XmATTACH_POSITION
591   rightPosition : 80
592   bottomAttachment : XmATTACH_POSITION
593   bottomPosition : 50
594   leftOffset : 0
595   topOffset : 10
596   background : white
597   leftAttachment : XmATTACH_POSITION
598   leftPosition : 40
599   rightOffset : 10
600   topAttachment : XmATTACH_FORM
601   borderColor : red
602   bottomShadowColor : gray
603   topShadowColor : WhiteSmoke
604   !VXP! end-resources
605   !VXP! end-object
606
607   !VXP! begin-object
608   DrawingArea : Front_XY ( 4 )
609   ( 2 , 2 )        ( 232 , 228 )   FrameFront
610   !VXP! begin-resources
611   background : white
612   !VXP! end-resources
613   !VXP! begin-callback
614   resize :        client_data( XtPointer client_data NULL )
615   void Front_XY_resize_cb
616   (Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
617   {
618    DrawingArea_expose_cb (w, 0, 0, 0);
619   }
620
621
622
623   !VXP! end-callback
624   !VXP! end-object
625
626   !VXP! begin-object
627   Frame : FrameButton ( 21 )
628   ( 492 , 10 )     ( 113 , 79 )    Form2
629   !VXP! begin-resources
630   leftAttachment : XmATTACH_POSITION
631   leftOffset : 0
632   leftPosition : 80
633   rightAttachment : XmATTACH_FORM
634   rightOffset : 10
635   bottomAttachment : XmATTACH_NONE
636   bottomOffset : 10
637   borderColor : snow
638   topAttachment : XmATTACH_FORM
639   topOffset : 10
640   background : gainsboro
641   foreground : black
642   bottomShadowColor : gray
643   topShadowColor : GhostWhite
644   bottomPosition : 50
```

```
645   borderWidth : 0
646   highlightColor : red
647   !VXP! end-resources
648   !VXP! end-object
649
650   !VXP! begin-object
651   RowColumn : RowColumn2 ( 17 )
652   ( 2 , 2 )        ( 109 , 75 )    FrameButton
653   !VXP! begin-resources
654   labelString : Quit
655   background : gainsboro
656   borderWidth : 0
657   bottomShadowColor : gray
658   topShadowColor : WhiteSmoke
659   !VXP! end-resources
660   !VXP! end-object
661
662   !VXP! begin-object
663   PushButton : PBCreation ( 29 )
664   ( 3 , 3 )        ( 103 , 21 )    RowColumn2
665   !VXP! begin-resources
666   labelString : Creation
667   background : gainsboro
668   topShadowColor : WhiteSmoke
669   bottomShadowColor : gray
670   !VXP! end-resources
671   !VXP! begin-callback
672   activate :      client_data( XtPointer client_data NULL )
673   void PBCreation_activate_cb
674   (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
675   {
676    /* if Creation dialog Box was close, we need to manage it, even if curent mode is CR
      EATION */
677
678    /* Close active child */
679    XtUnmanageChild (ActiveManagedChild);
680    XtManageChild (vxpOBJ.DBCreation);
681    ActiveManagedChild = vxpOBJ.DBCreation;
682    EtatApplication.Mode = MODE_CREATION;
683   }
684
685
686   !VXP! end-callback
687   !VXP! end-object
688
689   !VXP! begin-object
690   BulletinBoardDialog : DBCreation ( 5 )
691   ( 0 , 0 )        ( 202 , 217 )   PBCreation
692   !VXP! begin-resources
693   dialogTitle : Creation
694   bottomShadowColor : gray
695   background : gainsboro
696   noResize : True
697   autoUnmanage : False
698   !VXP! end-resources
699   !VXP! end-object
700
701   !VXP! begin-object
702   Frame : FrameCreation1 ( 21 )
703   ( 10 , 10 )      ( 181 , 128 )   DBCreation
704   !VXP! begin-resources
705   bottomShadowColor : gray
706   topShadowColor : white
707   bottomPosition : 0
708   leftPosition : 0
709   topPosition : 0
710   topAttachment : XmATTACH_NONE
711   marginHeight : 0
712   y : 10
713   x : 10
714   background : gainsboro
```



```
715   height : 128
716   foreground : gainsboro
717   !VXP! end-resources
718   !VXP! end-object
719
720   !VXP! begin-object
721   RowColumn : RowColumnObjectChoice ( 17 )
722   ( 2 , 2 )        ( 177 , 124 )   FrameCreation1
723   !VXP! begin-resources
724   packing : XmPACK_COLUMN
725   numColumns : 2
726   marginHeight : 0
727   radioBehavior : True
728   resizeHeight : False
729   resizeWidth : False
730   rowColumnType : XmWORK_AREA
731   bottomShadowColor : gray
732   topShadowColor : WhiteSmoke
733   background : gainsboro
734   !VXP! end-resources
735   !VXP! end-object
736
737   !VXP! begin-object
738   ToggleButton : sphere ( 17 )
739   ( 3 , 0 )        ( 87 , 21 )     RowColumnObjectChoice
740   !VXP! begin-resources
741   labelString : Sphere
742   topShadowColor : WhiteSmoke
743   bottomShadowColor : gray
744   background : gainsboro
745   indicatorOn : True
746   set : True
747   foreground : black
748   !VXP! end-resources
749   !VXP! begin-callback
750   arm :   client_data( XtPointer client_data NULL )
751   void sphere_arm_cb
752   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
753   {
754    EtatApplication.TypeObject = OBJ_SPHERE;
755    phase = profondeur = 0;
756   }
757
758
759
760   !VXP! end-callback
761   !VXP! end-object
762
763   !VXP! begin-object
764   ToggleButton : hemisphere ( 17 )
765   ( 3 , 24 )       ( 87 , 21 )     RowColumnObjectChoice
766   !VXP! begin-resources
767   labelString : Hemisphere
768   topShadowColor : WhiteSmoke
769   bottomShadowColor : gray
770   background : gainsboro
771   indicatorOn : True
772   !VXP! end-resources
773   !VXP! begin-callback
774   arm :   client_data( XtPointer client_data NULL )
775   void hemisphere_arm_cb
776   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
777   {
778    EtatApplication.TypeObject = OBJ_HEMISPHERE;
779    phase = profondeur = 0;
780   }
781
782
783
784   !VXP! end-callback
785   !VXP! end-object
```

```
786
787   !VXP! begin-object
788   ToggleButton : quad ( 17 )
789   ( 3 , 48 )       ( 87 , 21 )     RowColumnObjectChoice
790   !VXP! begin-resources
791   labelString : Quad
792   topShadowColor : WhiteSmoke
793   bottomShadowColor : gray
794   background : gainsboro
795   indicatorOn : True
796   !VXP! end-resources
797   !VXP! begin-callback
798   arm :   client_data( XtPointer client_data NULL )
799   void quad_arm_cb
800   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
801   {
802    EtatApplication.TypeObject = OBJ_QUAD;
803    phase = profondeur = 0;
804   }
805
806
807
808   !VXP! end-callback
809   !VXP! end-object
810
811   !VXP! begin-object
812   ToggleButton : disk ( 17 )
813   ( 3 , 72 )       ( 87 , 21 )     RowColumnObjectChoice
814   !VXP! begin-resources
815   labelString : Disk
816   topShadowColor : WhiteSmoke
817   bottomShadowColor : gray
818   background : gainsboro
819   indicatorOn : True
820   fillOnSelect : True
821   set : False
822   !VXP! end-resources
823   !VXP! begin-callback
824   arm :   client_data( XtPointer client_data NULL )
825   void disk_arm_cb
826   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
827   {
828    EtatApplication.TypeObject = OBJ_DISK;
829    phase = profondeur = 0;
830   }
831
832
833   !VXP! end-callback
834   !VXP! end-object
835
836   !VXP! begin-object
837   ToggleButton : triangle ( 17 )
838   ( 3 , 96 )       ( 87 , 21 )     RowColumnObjectChoice
839   !VXP! begin-resources
840   labelString : Triangle
841   topShadowColor : WhiteSmoke
842   bottomShadowColor : gray
843   background : gainsboro
844   indicatorOn : True
845   !VXP! end-resources
846   !VXP! begin-callback
847   arm :   client_data( XtPointer client_data NULL )
848   void triangle_arm_cb
849   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
850   {
851    EtatApplication.TypeObject = OBJ_TRIANGLE;
852    phase = profondeur = 0;
853   }
854
855
856   !VXP! end-callback
```



```
857   !VXP! end-object
858
859   !VXP! begin-object
860   ToggleButton : cone ( 17 )
861   ( 93 , 0 )       ( 81 , 21 )     RowColumnObjectChoice
862   !VXP! begin-resources
863   labelString : Cone
864   topShadowColor : WhiteSmoke
865   bottomShadowColor : gray
866   background : gainsboro
867   indicatorOn : True
868   !VXP! end-resources
869   !VXP! begin-callback
870   arm :   client_data( XtPointer client_data NULL )
871   void cone_arm_cb
872   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
873   {
874    EtatApplication.TypeObject = OBJ_CONE;
875    phase = profondeur = 0;
876   }
877
878
879
880   !VXP! end-callback
881   !VXP! end-object
882
883   !VXP! begin-object
884   ToggleButton : cylinder ( 17 )
885   ( 93 , 24 )      ( 81 , 21 )     RowColumnObjectChoice
886   !VXP! begin-resources
887   labelString : Cylinder
888   topShadowColor : WhiteSmoke
889   bottomShadowColor : gray
890   background : gainsboro
891   indicatorOn : True
892   !VXP! end-resources
893   !VXP! begin-callback
894   arm :   client_data( XtPointer client_data NULL )
895   void cylinder_arm_cb
896   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
897   {
898    EtatApplication.TypeObject = OBJ_CYLINDER;
899    phase = profondeur = 0;
900   }
901
902
903
904   !VXP! end-callback
905   !VXP! end-object
906
907   !VXP! begin-object
908   ToggleButton : object ( 17 )
909   ( 93 , 48 )      ( 81 , 21 )     RowColumnObjectChoice
910   !VXP! begin-resources
911   labelString : Your Object
912   topShadowColor : WhiteSmoke
913   bottomShadowColor : gray
914   background : gainsboro
915   indicatorOn : True
916   !VXP! end-resources
917   !VXP! begin-callback
918   arm :   client_data( XtPointer client_data NULL )
919   void object_arm_cb
920   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
921   {
922    EtatApplication.TypeObject = OBJ_OBJECT;
923    phase = profondeur = 0;
924    XtManageChild (vxpOBJ.FSObject);
925   }
926
927
```

```
928
929   !VXP! end-callback
930   !VXP! end-object
931
932   !VXP! begin-object
933   FileSelectionDialog : FSObject ( 4 )
934   ( 212 , 102 )    ( 262 , 333 )   object
935   !VXP! begin-resources
936   directory : /opt/net1/renderware/demo/scripts/
937   dialogTitle : Select your object
938   autoUnmanage : True
939   dialogStyle : XmDIALOG_WORK_AREA
940   !VXP! end-resources
941   !VXP! begin-callback
942   ok :    client_data( XtPointer client_data NULL )
943   void FSObject_ok_cb
944   (Widget w, XtPointer client_data, XmFileSelectionBoxCallbackStruct *cbs)
945   {
946     char *dirname, *name;
947
948      if (!XmStringGetLtoR (cbs->value, XmSTRING_DEFAULT_CHARSET, &name))
949         return; /* must be an internal error */
950
951      XmStringGetLtoR(cbs->dir, XmSTRING_DEFAULT_CHARSET, &dirname);
952      if (strcmp(name, dirname)==0)
953      {
954         XtFree(dirname); XtFree(name);
955         return ;
956      }
957
958      strcpy (EtatApplication.FileObject, dirname);
959      strcpy (EtatApplication.FileObject, name);
960      printf (EtatApplication.FileObject);
961
962      XtFree(dirname);
963      XtFree(name);
964      XtUnmanageChild(vxpOBJ.FSObject);
965   }
966
967
968
969   !VXP! end-callback
970   !VXP! end-object
971
972   !VXP! begin-object
973   ToggleButton : polygone ( 17 )
974   ( 93 , 72 )      ( 81 , 21 )     RowColumnObjectChoice
975   !VXP! begin-resources
976   labelString : Polygone
977   topShadowColor : WhiteSmoke
978   bottomShadowColor : gray
979   background : gainsboro
980   indicatorOn : True
981   !VXP! end-resources
982   !VXP! begin-callback
983   activate :      client_data( XtPointer client_data NULL )
984   void polygone_activate_cb
985   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
986   {
987
988   }
989
990
991
992   !VXP! end-callback
993   !VXP! begin-callback
994   arm :   client_data( XtPointer client_data NULL )
995   void polygone_arm_cb
996   (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
997   {
998    EtatApplication.TypeObject = OBJ_POLYGONE;
```



```
999    phase = profondeur = 0;
1000  }
1001
1002
1003  !VXP! end-callback
1004  !VXP! end-object
1005
1006  !VXP! begin-object
1007  ToggleButton : block ( 17 )
1008  ( 93 , 96 )      ( 81 , 21 )     RowColumnObjectChoice
1009  !VXP! begin-resources
1010  labelString : Block
1011  topShadowColor : WhiteSmoke
1012  bottomShadowColor : gray
1013  background : gainsboro
1014  indicatorOn : True
1015  !VXP! end-resources
1016  !VXP! begin-callback
1017  activate :      client_data( XtPointer client_data NULL )
1018  void block_activate_cb
1019  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
1020  {
1021
1022  }
1023
1024
1025  !VXP! end-callback
1026  !VXP! begin-callback
1027  arm :   client_data( XtPointer client_data NULL )
1028  void block_arm_cb
1029  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
1030  {
1031   EtatApplication.TypeObject = OBJ_BLOCK;
1032   phase = profondeur = 0;
1033  }
1034
1035
1036  !VXP! end-callback
1037  !VXP! end-object
1038
1039  !VXP! begin-object
1040  Frame : FrameEmptyFull ( 21 )
1041  ( 11 , 143 )     ( 109 , 31 )    DBCreation
1042  !VXP! end-object
1043
1044  !VXP! begin-object
1045  RowColumn : RowColumnEmptyFull ( 17 )
1046  ( 2 , 2 )        ( 105 , 27 )    FrameEmptyFull
1047  !VXP! begin-resources
1048  orientation : XmHORIZONTAL
1049  packing : XmPACK_TIGHT
1050  radioBehavior : True
1051  !VXP! end-resources
1052  !VXP! end-object
1053
1054  !VXP! begin-object
1055  ToggleButton : full ( 17 )
1056  ( 3 , 3 )        ( 45 , 21 )     RowColumnEmptyFull
1057  !VXP! begin-resources
1058  labelString : Full
1059  set : True
1060  !VXP! end-resources
1061  !VXP! begin-callback
1062  arm :   client_data( XtPointer client_data NULL )
1063  void full_arm_cb
1064  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
1065  {
1066   EtatApplication.Full = OBJ_FULL;
1067  }
1068
1069
```

```
1070  !VXP! end-callback
1071  !VXP! end-object
1072
1073  !VXP! begin-object
1074  ToggleButton : empty ( 17 )
1075  ( 51 , 3 )       ( 51 , 21 )     RowColumnEmptyFull
1076  !VXP! begin-resources
1077  labelString : Empty
1078  !VXP! end-resources
1079  !VXP! begin-callback
1080  arm :   client_data( XtPointer client_data NULL )
1081  void empty_arm_cb
1082  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
1083  {
1084   EtatApplication.Full = OBJ_EMPTY;
1085  }
1086
1087
1088  !VXP! end-callback
1089  !VXP! end-object
1090
1091  !VXP! begin-object
1092  PushButton : PBTextures ( 29 )
1093  ( 124 , 145 )    ( 67 , 29 )     DBCreation
1094  !VXP! begin-resources
1095  labelString : Textures
1096  !VXP! end-resources
1097  !VXP! begin-callback
1098  activate :      client_data( XtPointer client_data NULL )
1099  void PBTextures_activate_cb
1100  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1101  {
1102   XtManageChild (vxpOBJ.FSTextures);
1103  }
1104
1105
1106
1107
1108
1109  !VXP! end-callback
1110  !VXP! end-object
1111
1112  !VXP! begin-object
1113  FileSelectionDialog : FSTextures ( 4 )
1114  ( 116 , 158 )    ( 262 , 333 )   PBTextures
1115  !VXP! begin-resources
1116  directory : /opt/net1/renderware/demo/textures
1117  dialogTitle : Select your texture
1118  autoUnmanage : True
1119  dialogStyle : XmDIALOG_SYSTEM_MODAL
1120  !VXP! end-resources
1121  !VXP! begin-callback
1122  ok :    client_data( XtPointer client_data NULL )
1123  void FSTextures_ok_cb
1124  (Widget w, XtPointer client_data, XmFileSelectionBoxCallbackStruct *cbs)
1125  {
1126     char *dirname, *name;
1127
1128     if (!XmStringGetLtoR (cbs->value, XmSTRING_DEFAULT_CHARSET, &name))
1129        return; /* must be an internal error */
1130
1131     XmStringGetLtoR(cbs->dir, XmSTRING_DEFAULT_CHARSET, &dirname);
1132     if (strcmp(name, dirname)==0)
1133     {
1134        XtFree(dirname); XtFree(name);
1135        return ;
1136     }
1137
1138     if (strcmp (name, ""))
1139        {
1140         strcpy (EtatApplication.Texture, dirname);
```



```
1141         strcpy (EtatApplication.Texture, name);
1142        }
1143     else
1144         strcpy (EtatApplication.Texture, "");
1145
1146     XtFree(dirname);
1147     XtFree(name);
1148     XtUnmanageChild(vxpOBJ.FSTextures);
1149  }
1150
1151
1152
1153
1154
1155  !VXP! end-callback
1156  !VXP! end-object
1157
1158  !VXP! begin-object
1159  PushButton : PBColors ( 29 )
1160  ( 13 , 181 )     ( 177 , 28 )    DBCreation
1161  !VXP! begin-resources
1162  labelString : Color editor
1163  !VXP! end-resources
1164  !VXP! begin-callback
1165  activate :      client_data( XtPointer client_data NULL )
1166  void PBColors_activate_cb
1167  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1168  {
1169   /* initialization of scroll bar */
1170   XtVaSetValues(vxpOBJ.RScroll, XmNmaximum, 1, XmNminimum, 110, XmNvalue, (int) (EtatA
      pplication.R*100.0), NULL );
1171   XtVaSetValues(vxpOBJ.GScroll, XmNmaximum, 1, XmNminimum, 110, XmNvalue, (int) (EtatA
      pplication.G*100.0), NULL );
1172   XtVaSetValues(vxpOBJ.BScroll, XmNmaximum, 1, XmNminimum, 110, XmNvalue, (int) (EtatA
      pplication.B*100.0), NULL );
1173   XtManageChild (vxpOBJ.BBColors);
1174  }
1175
1176
1177
1178
1179
1180  !VXP! end-callback
1181  !VXP! end-object
1182
1183  !VXP! begin-object
1184  BulletinBoardDialog : BBColors ( 5 )
1185  ( 0 , 0 )        ( 396 , 128 )   PBColors
1186  !VXP! begin-resources
1187  noResize : False
1188  dialogTitle : Colors Editor
1189  autoUnmanage : False
1190  !VXP! end-resources
1191  !VXP! end-object
1192
1193  !VXP! begin-object
1194  ScrollBar : RScroll ( 3 )
1195  ( 10 , 12 )      ( 237 , 15 )    BBColors
1196  !VXP! begin-resources
1197  orientation : XmHORIZONTAL
1198  value : 80
1199  maximum : 110
1200  !VXP! end-resources
1201  !VXP! begin-callback
1202  valueChanged :  client_data( XtPointer client_data NULL )
1203  void RScroll_valueChanged_cb
1204  (Widget w, XtPointer client_data, XmScrollBarCallbackStruct *cbs)
1205  {
1206   char Sz [20];
1207
1208   R = cbs->value/100.0;
```

```
1209   sprintf (Sz, "Red : %.2f", R);
1210   XtVaSetValues(vxpOBJ.LAR, XtVaTypedArg, XmNlabelString, XmRString, Sz, sizeof (Sz),
     NULL);
1211  }
1212
1213
1214
1215
1216
1217  !VXP! end-callback
1218  !VXP! begin-callback
1219  drag :  client_data( XtPointer client_data NULL )
1220  void RScroll_drag_cb
1221  (Widget w, XtPointer client_data, XmScrollBarCallbackStruct *cbs)
1222  {
1223   RScroll_valueChanged_cb (w, client_data, cbs);
1224  }
1225
1226
1227
1228
1229
1230  !VXP! end-callback
1231  !VXP! end-object
1232
1233  !VXP! begin-object
1234  ScrollBar : BScroll ( 3 )
1235  ( 10 , 64 )      ( 237 , 15 )    BBColors
1236  !VXP! begin-resources
1237  orientation : XmHORIZONTAL
1238  value : 90
1239  maximum : 110
1240  !VXP! end-resources
1241  !VXP! begin-callback
1242  valueChanged :  client_data( XtPointer client_data NULL )
1243  void BScroll_valueChanged_cb
1244  (Widget w, XtPointer client_data, XmScrollBarCallbackStruct *cbs)
1245  {
1246   char Sz [20];
1247
1248   B = cbs->value/100.0;
1249   sprintf (Sz, "Bleue : %.2f", B);
1250   XtVaSetValues(vxpOBJ.LAB, XtVaTypedArg, XmNlabelString, XmRString, Sz, sizeof (Sz),
     NULL);
1251  }
1252
1253
1254
1255
1256
1257  !VXP! end-callback
1258  !VXP! begin-callback
1259  drag :  client_data( XtPointer client_data NULL )
1260  void BScroll_drag_cb
1261  (Widget w, XtPointer client_data, XmScrollBarCallbackStruct *cbs)
1262  {
1263   BScroll_valueChanged_cb (w, client_data, cbs);
1264  }
1265
1266
1267
1268
1269
1270  !VXP! end-callback
1271  !VXP! end-object
1272
1273  !VXP! begin-object
1274  ScrollBar : GScroll ( 3 )
1275  ( 10 , 37 )      ( 237 , 15 )    BBColors
1276  !VXP! begin-resources
1277  orientation : XmHORIZONTAL
```



```
1278  value : 50
1279  maximum : 110
1280  !VXP! end-resources
1281  !VXP! begin-callback
1282  valueChanged :  client_data( XtPointer client_data NULL )
1283  void GScroll_valueChanged_cb
1284  (Widget w, XtPointer client_data, XmScrollBarCallbackStruct *cbs)
1285  {
1286   char Sz [20];
1287
1288   G = cbs->value/100.0;
1289   sprintf (Sz, "Green : %.2f", G);
1290   XtVaSetValues(vxpOBJ.LAG, XtVaTypedArg, XmNlabelString, XmRString, Sz, sizeof (Sz),
     NULL);
1291  }
1292
1293
1294
1295
1296
1297  !VXP! end-callback
1298  !VXP! begin-callback
1299  drag :  client_data( XtPointer client_data NULL )
1300  void GScroll_drag_cb
1301  (Widget w, XtPointer client_data, XmScrollBarCallbackStruct *cbs)
1302  {
1303   GScroll_valueChanged_cb (w, client_data, cbs);
1304  }
1305
1306
1307
1308
1309
1310  !VXP! end-callback
1311  !VXP! end-object
1312
1313  !VXP! begin-object
1314  PushButton : PBColorOK ( 29 )
1315  ( 12 , 93 )      ( 62 , 23 )     BBColors
1316  !VXP! begin-resources
1317  labelString : Ok
1318  width : 62
1319  !VXP! end-resources
1320  !VXP! begin-callback
1321  activate :      client_data( XtPointer client_data NULL )
1322  void PBColorOK_activate_cb
1323  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1324  {
1325   EtatApplication.R = R;
1326   EtatApplication.G = G;
1327   EtatApplication.B = B;
1328   XtUnmanageChild (vxpOBJ.BBColors);
1329  }
1330
1331
1332
1333
1334
1335  !VXP! end-callback
1336  !VXP! end-object
1337
1338  !VXP! begin-object
1339  PushButton : PBColorCancel ( 29 )
1340  ( 87 , 93 )      ( 62 , 23 )     BBColors
1341  !VXP! begin-resources
1342  labelString : Cancel
1343  width : 62
1344  height : 23
1345  !VXP! end-resources
1346  !VXP! begin-callback
1347  activate :      client_data( XtPointer client_data NULL )
```

```
1348  void PBColorCancel_activate_cb
1349  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1350  {
1351   XtUnmanageChild (vxpOBJ.BBColors);
1352  }
1353
1354
1355
1356
1357
1358  !VXP! end-callback
1359  !VXP! end-object
1360
1361  !VXP! begin-object
1362  Label : LAR ( 14 )
1363  ( 257 , 13 )     ( 128 , 17 )    BBColors
1364  !VXP! begin-resources
1365  alignment : XmALIGNMENT_BEGINNING
1366  labelString : Red : 0.80
1367  !VXP! end-resources
1368  !VXP! end-object
1369
1370  !VXP! begin-object
1371  Label : LAG ( 14 )
1372  ( 257 , 39 )     ( 125 , 15 )    BBColors
1373  !VXP! begin-resources
1374  alignment : XmALIGNMENT_BEGINNING
1375  labelString : Green : 0.50
1376  !VXP! end-resources
1377  !VXP! end-object
1378
1379  !VXP! begin-object
1380  Label : LAB ( 14 )
1381  ( 257 , 64 )     ( 120 , 15 )    BBColors
1382  !VXP! begin-resources
1383  alignment : XmALIGNMENT_BEGINNING
1384  labelString : Blue : 0.90
1385  !VXP! end-resources
1386  !VXP! end-object
1387
1388  !VXP! begin-object
1389  Label : LAPreview ( 14 )
1390  ( 183 , 95 )     ( 62 , 19 )     BBColors
1391  !VXP! begin-resources
1392  labelString : Preview
1393  !VXP! end-resources
1394  !VXP! end-object
1395
1396  !VXP! begin-object
1397  DrawingArea : DrawingAreaPreviewColor ( 4 )
1398  ( 247 , 92 )     ( 138 , 25 )    BBColors
1399  !VXP! begin-resources
1400  background : white
1401  !VXP! end-resources
1402  !VXP! end-object
1403
1404  !VXP! begin-object
1405  PushButton : PBAnimation ( 29 )
1406  ( 3 , 27 )       ( 103 , 21 )    RowColumn2
1407  !VXP! begin-resources
1408  labelString : Animation
1409  background : gainsboro
1410  bottomShadowColor : gray
1411  topShadowColor : WhiteSmoke
1412  !VXP! end-resources
1413  !VXP! begin-callback
1414  activate :      client_data( XtPointer client_data NULL )
1415  void PBAnimation_activate_cb
1416  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1417  {
1418    /* if Creation dialog Box was close, we need to manage it, even if curent mode is C
```



```
      REATION */
1419
1420   /* Close active child */
1421   XtUnmanageChild (ActiveManagedChild);
1422   XtManageChild (vxpOBJ.DBAnimation);
1423   ActiveManagedChild = vxpOBJ.DBAnimation;
1424   EtatApplication.Mode = MODE_ANIMATION;
1425
1426   /* iniatialize Camera */
1427   VideoCreateCamera ();
1428  }
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442  !VXP! end-callback
1443  !VXP! end-object
1444
1445  !VXP! begin-object
1446  FormDialog : DBScope ( 2 )
1447  ( 0 , 0 )        ( 300 , 300 )   PBAnimation
1448  !VXP! begin-resources
1449  dialogTitle : Video Player
1450  fractionBase : 6
1451  width : 300
1452  height : 300
1453  noResize : False
1454  resizePolicy : XmRESIZE_GROW
1455  autoUnmanage : False
1456  !VXP! end-resources
1457  !VXP! end-object
1458
1459  !VXP! begin-object
1460  PushButton : PBPlayBoucle ( 29 )
1461  ( 3 , 330 )      ( 47 , 25 )     DBScope
1462  !VXP! begin-resources
1463  labelString : Full Screen
1464  bottomShadowColor : gray
1465  topShadowColor : WhiteSmoke
1466  background : gainsboro
1467  labelType : XmPIXMAP
1468  labelPixmap : PlayBoucle.xbm
1469  alignment : XmALIGNMENT_CENTER
1470  bottomAttachment : XmATTACH_NONE
1471  rightAttachment : XmATTACH_POSITION
1472  rightPosition : 1
1473  leftAttachment : XmATTACH_FORM
1474  x : 50
1475  topAttachment : XmATTACH_WIDGET
1476  topPosition : 2
1477  height : 25
1478  topWidget : ImagesScroll
1479  !VXP! end-resources
1480  !VXP! begin-callback
1481  activate :      client_data( XtPointer client_data NULL )
1482  void PBPlayBoucle_activate_cb
1483  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1484  {
1485
1486  }
1487
1488
```

```
1489
1490
1491
1492
1493
1494
1495  !VXP! end-callback
1496  !VXP! end-object
1497
1498  !VXP! begin-object
1499  PushButton : PBPlayForward ( 29 )
1500  ( 790 , 199 )    ( 1 , 25 )      DBScope
1501  !VXP! begin-resources
1502  labelString : Full Screen
1503  bottomShadowColor : gray
1504  topShadowColor : WhiteSmoke
1505  background : gainsboro
1506  labelType : XmPIXMAP
1507  labelPixmap : PlayAvt.xbm
1508  alignment : XmALIGNMENT_CENTER
1509  bottomAttachment : XmATTACH_NONE
1510  leftAttachment : XmATTACH_POSITION
1511  leftPosition : 1
1512  rightAttachment : XmATTACH_POSITION
1513  rightPosition : 2
1514  topAttachment : XmATTACH_WIDGET
1515  topPosition : 2
1516  height : 25
1517  topWidget : ImagesScroll
1518  !VXP! end-resources
1519  !VXP! begin-callback
1520  activate :      client_data( XtPointer client_data NULL )
1521  void PBPlayForward_activate_cb
1522  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1523  {
1524   VideoForward (PosScroll);
1525  }
1526
1527
1528
1529  !VXP! end-callback
1530  !VXP! end-object
1531
1532  !VXP! begin-object
1533  PushButton : PBPlayBackward ( 29 )
1534  ( 1577 , 199 )   ( 1 , 25 )      DBScope
1535  !VXP! begin-resources
1536  labelString : Full Screen
1537  bottomShadowColor : gray
1538  topShadowColor : WhiteSmoke
1539  background : gainsboro
1540  labelType : XmPIXMAP
1541  labelPixmap : PlayArr.xbm
1542  alignment : XmALIGNMENT_CENTER
1543  leftAttachment : XmATTACH_POSITION
1544  leftPosition : 2
1545  rightAttachment : XmATTACH_POSITION
1546  rightPosition : 3
1547  bottomAttachment : XmATTACH_NONE
1548  topAttachment : XmATTACH_WIDGET
1549  topPosition : 2
1550  height : 25
1551  topWidget : ImagesScroll
1552  !VXP! end-resources
1553  !VXP! begin-callback
1554  activate :      client_data( XtPointer client_data NULL )
1555  void PBPlayBackward_activate_cb
1556  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1557  {
1558   VideoBackward (PosScroll);
1559  }
```



```
1560
1561
1562  !VXP! end-callback
1563  !VXP! end-object
1564
1565  !VXP! begin-object
1566  PushButton : PBPlayForwardBackward ( 29 )
1567  ( 2364 , 199 )   ( 1 , 25 )      DBScope
1568  !VXP! begin-resources
1569  labelString : Full Screen
1570  bottomShadowColor : gray
1571  topShadowColor : WhiteSmoke
1572  background : gainsboro
1573  labelType : XmPIXMAP
1574  labelPixmap : PlayAvtArr.xbm
1575  alignment : XmALIGNMENT_CENTER
1576  bottomAttachment : XmATTACH_NONE
1577  leftAttachment : XmATTACH_POSITION
1578  leftPosition : 3
1579  rightAttachment : XmATTACH_POSITION
1580  rightPosition : 4
1581  topAttachment : XmATTACH_WIDGET
1582  topPosition : 2
1583  height : 25
1584  topWidget : ImagesScroll
1585  !VXP! end-resources
1586  !VXP! begin-callback
1587  activate :      client_data( XtPointer client_data NULL )
1588  void PBPlayForwardBackward_activate_cb
1589  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1590  {
1591   VideoForwardBackward (PosScroll);
1592  }
1593
1594
1595
1596  !VXP! end-callback
1597  !VXP! end-object
1598
1599  !VXP! begin-object
1600  PushButton : PBStop ( 29 )
1601  ( 3151 , 199 )   ( 1 , 25 )      DBScope
1602  !VXP! begin-resources
1603  labelString : Full Screen
1604  bottomShadowColor : gray
1605  topShadowColor : WhiteSmoke
1606  background : gainsboro
1607  labelType : XmPIXMAP
1608  labelPixmap : Stop.xbm
1609  alignment : XmALIGNMENT_CENTER
1610  leftAttachment : XmATTACH_POSITION
1611  leftPosition : 4
1612  rightAttachment : XmATTACH_POSITION
1613  rightPosition : 5
1614  bottomAttachment : XmATTACH_NONE
1615  topAttachment : XmATTACH_WIDGET
1616  topPosition : 2
1617  height : 25
1618  topWidget : ImagesScroll
1619  !VXP! end-resources
1620  !VXP! begin-callback
1621  activate :      client_data( XtPointer client_data NULL )
1622  void PBStop_activate_cb
1623  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1624  {
1625   if (EtatApplication.AnimationState & ANIM_STOP)
1626      EtatApplication.AnimationState &= ~ANIM_STOP;
1627   else
1628       EtatApplication.AnimationState |= ANIM_STOP;
1629  }
1630
```

```
1631
1632
1633  !VXP! end-callback
1634  !VXP! end-object
1635
1636  !VXP! begin-object
1637  ScrollBar : ImagesScroll ( 3 )
1638  ( 0 , 2 )        ( 300 , 15 )    DBScope
1639  !VXP! begin-resources
1640  traversalOn : True
1641  orientation : XmHORIZONTAL
1642  topAttachment : XmATTACH_FORM
1643  leftAttachment : XmATTACH_FORM
1644  rightAttachment : XmATTACH_FORM
1645  bottomAttachment : XmATTACH_NONE
1646  bottomWidget : PBPlayBoucle
1647  height : 15
1648  maximum : 100
1649  minimum : 1
1650  pageIncrement : 10
1651  value : 1
1652  !VXP! end-resources
1653  !VXP! begin-callback
1654  valueChanged :  client_data( XtPointer client_data NULL )
1655  void ImagesScroll_valueChanged_cb
1656  (Widget w, XtPointer client_data, XmScrollBarCallbackStruct *cbs)
1657  {
1658   char Str[30];
1659
1660   VideoOneFrame (cbs->value);
1661   PosScroll = cbs->value;
1662
1663   sprintf (Str, "%i//%i", PosScroll, ListePts->NbrePts);
1664   XtVaSetValues(vxpOBJ.TxTNbImages, XtVaTypedArg, XmNlabelString, XmRString, Str, size
     of(Str), NULL);
1665  }
1666
1667
1668
1669  !VXP! end-callback
1670  !VXP! end-object
1671
1672  !VXP! begin-object
1673  Text : TxTNbImages ( 4 )
1674  ( 2267 , 216 )   ( 1 , 25 )      DBScope
1675  !VXP! begin-resources
1676  bottomAttachment : XmATTACH_NONE
1677  topAttachment : XmATTACH_WIDGET
1678  topPosition : 2
1679  rightAttachment : XmATTACH_POSITION
1680  rightPosition : 6
1681  leftPosition : 5
1682  leftAttachment : XmATTACH_POSITION
1683  editable : False
1684  height : 25
1685  topWidget : ImagesScroll
1686  !VXP! end-resources
1687  !VXP! end-object
1688
1689  !VXP! begin-object
1690  Frame : FrameVideo ( 21 )
1691  ( 5 , 2914 )     ( 295 , 1 )     DBScope
1692  !VXP! begin-resources
1693  bottomAttachment : XmATTACH_FORM
1694  leftAttachment : XmATTACH_FORM
1695  rightAttachment : XmATTACH_FORM
1696  topAttachment : XmATTACH_WIDGET
1697  topWidget : PBPlayBoucle
1698  !VXP! end-resources
1699  !VXP! end-object
1700
```



```
1701  !VXP! begin-object
1702  DrawingArea : DrawingAreaVideo ( 4 )
1703  ( 2 , 2 )        ( 291 , 1 )     FrameVideo
1704  !VXP! begin-resources
1705  background : white
1706  !VXP! end-resources
1707  !VXP! begin-callback
1708  expose :         client_data( XtPointer client_data NULL )
1709  void DrawingAreaVideo_expose_cb
1710  (Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
1711  {
1712   VideoOneFrame (PosScroll);
1713  }
1714
1715
1716
1717
1718  !VXP! end-callback
1719  !VXP! begin-callback
1720  resize :         client_data( XtPointer client_data NULL )
1721  void DrawingAreaVideo_resize_cb
1722  (Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
1723  {
1724   VideoOneFrame (PosScroll);
1725  }
1726
1727
1728
1729  !VXP! end-callback
1730  !VXP! end-object
1731
1732  !VXP! begin-object
1733  FormDialog : DBAnimation ( 2 )
1734  ( 0 , 0 )        ( 149 , 80 )    PBAnimation
1735  !VXP! begin-resources
1736  dialogTitle : Animation
1737  !VXP! end-resources
1738  !VXP! end-object
1739
1740  !VXP! begin-object
1741  Frame : FrameAnimation ( 21 )
1742  ( 1 , 1 )        ( 148 , 79 )    DBAnimation
1743  !VXP! begin-resources
1744  leftOffset : 1
1745  topOffset : 1
1746  topAttachment : XmATTACH_FORM
1747  rightAttachment : XmATTACH_FORM
1748  bottomAttachment : XmATTACH_FORM
1749  !VXP! end-resources
1750  !VXP! end-object
1751
1752  !VXP! begin-object
1753  RowColumn : RowColumnAnimation ( 17 )
1754  ( 2 , 2 )        ( 144 , 75 )    FrameAnimation
1755  !VXP! end-object
1756
1757  !VXP! begin-object
1758  PushButton : PBPath ( 29 )
1759  ( 3 , 3 )        ( 138 , 21 )    RowColumnAnimation
1760  !VXP! begin-resources
1761  labelString : Path’s Camera
1762  !VXP! end-resources
1763  !VXP! begin-callback
1764  activate :       client_data( XtPointer client_data NULL )
1765  void PBPath_activate_cb
1766  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1767  {
1768   /* if video mode turn on, we can’t go to Path parameters */
1769   if (EtatApplication.AnimationState & ANIM_VIDEO_ON) return;
1770   else
1771      {
```

```
1772       ChangeValue = False;
1773       Point3D.x = 0;
1774       Point3D.y = 0;
1775       Point3D.z = 0;
1776       VideoAddCamera ();
1777       XtManageChild (vxpOBJ.BBType);
1778      }
1779  }
1780
1781
1782
1783  !VXP! end-callback
1784  !VXP! end-object
1785
1786  !VXP! begin-object
1787  PushButton : PBCameraParam ( 29 )
1788  ( 3 , 27 )       ( 138 , 21 )    RowColumnAnimation
1789  !VXP! begin-resources
1790  labelString : Camera Parameters
1791  !VXP! end-resources
1792  !VXP! begin-callback
1793  activate :      client_data( XtPointer client_data NULL )
1794  void PBCameraParam_activate_cb
1795  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1796  {
1797   PtLookUp.x = 0;
1798   PtLookUp.y = 1;
1799   PtLookUp.z = 0;
1800   XtManageChild (vxpOBJ.BBAnim);
1801  }
1802
1803
1804
1805  !VXP! end-callback
1806  !VXP! end-object
1807
1808  !VXP! begin-object
1809  PushButton : PBVideoON_OFF ( 29 )
1810  ( 3 , 51 )       ( 138 , 21 )    RowColumnAnimation
1811  !VXP! begin-resources
1812  labelString : Video OFF
1813  !VXP! end-resources
1814  !VXP! begin-callback
1815  activate :      client_data( XtPointer client_data NULL )
1816  void PBVideoON_OFF_activate_cb
1817  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1818  {
1819   /* if video turn ON we turn OFF */
1820   if (EtatApplication.AnimationState & ANIM_VIDEO_ON)
1821      {
1822       char Str [30];
1823
1824       /* Close active child */
1825       XtUnmanageChild (vxpOBJ.DBScope);
1826       EtatApplication.AnimationState &= ~ANIM_VIDEO_ON;
1827       XtVaSetValues(vxpOBJ.PBVideoON_OFF, XtVaTypedArg, XmNlabelString, XmRString, "Vi
     deo OFF", 9, NULL);
1828       XtVaSetValues(vxpOBJ.PBPath, XtVaTypedArg, XmNlabelString, XmRString, "Path' Cam
     era", 13, NULL);
1829
1830       sprintf (Str, "%i//%i", PosScroll, ListePts->NbrePts);
1831       XtVaSetValues(vxpOBJ.TxTNbImages, XtVaTypedArg, XmNlabelString, XmRString, Str,
     sizeof(Str), NULL);
1832      }
1833    else
1834      {
1835       if (EtatApplication.AnimationState & ANIM_PATH_OK)
1836          {
1837           /* Close active child */
1838           XtManageChild (vxpOBJ.DBScope);
1839           EtatApplication.AnimationState |= ANIM_VIDEO_ON;
```



```
1840           XtVaSetValues(vxpOBJ.PBVideoON_OFF, XtVaTypedArg, XmNlabelString, XmRString,
      "Video ON", 8, NULL);
1841           XtVaSetValues(vxpOBJ.PBPath, XtVaTypedArg, XmNlabelString, XmRString, "Path
     disable", 12, NULL);
1842           Video (w, client_data, cbs);
1843          }
1844      }
1845  }
1846
1847
1848
1849  !VXP! end-callback
1850  !VXP! end-object
1851
1852  !VXP! begin-object
1853  BulletinBoardDialog : BBType ( 5 )
1854  ( 0 , 0 )        ( 357 , 193 )   DBAnimation
1855  !VXP! begin-resources
1856  dialogTitle : Path's camera
1857  autoUnmanage : False
1858  defaultButton : PushBAdd
1859  noResize : True
1860  dialogStyle : XmDIALOG_SYSTEM_MODAL
1861  !VXP! end-resources
1862  !VXP! begin-callback
1863  focus : client_data( XtPointer client_data NULL )
1864  void BBType_focus_cb
1865  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
1866  {
1867   char Str [30];
1868
1869   if (ListePts)
1870      {
1871       sprintf (Str, "Number of points = %i", ListePts->NbrePts);
1872       XtVaSetValues(vxpOBJ.LANumPoint, XtVaTypedArg, XmNlabelString, XmRString, Str, s
     izeof (Str), NULL);
1873      }
1874   else
1875       XtVaSetValues(vxpOBJ.LANumPoint, XtVaTypedArg, XmNlabelString, XmRString, "Pas d
     e points entre", 19, NULL);
1876  }
1877
1878
1879
1880  !VXP! end-callback
1881  !VXP! end-object
1882
1883  !VXP! begin-object
1884  PushButton : PushBCreate ( 29 )
1885  ( 10 , 145 )     ( 84 , 49 )     BBType
1886  !VXP! begin-resources
1887  labelString : Create
1888  width : 60
1889  height : 25
1890  !VXP! end-resources
1891  !VXP! begin-callback
1892  activate :      client_data( XtPointer client_data NULL )
1893  void PushBCreate_activate_cb
1894  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1895  {
1896   /* if Number of points is less than 4, we can't create the spline */
1897  /* if (NumPoint*/
1898
1899   VideoCreatePath (w, client_data, (XmToggleButtonGetState(vxpOBJ.TogBOpen))?rwOPENLOO
     P:rwCLOSEDLOOP, cbs);
1900   XtUnmanageChild (vxpOBJ.BBType);
1901   EtatApplication.AnimationState |= ANIM_PATH_OK;
1902   XtVaSetValues(vxpOBJ.ImagesScroll, XmNmaximum, NbShots+10, XmNminimum, 1, NULL );
1903  }
1904
1905
```

```
1906
1907  !VXP! end-callback
1908  !VXP! end-object
1909
1910  !VXP! begin-object
1911  PushButton : PushBCancel ( 29 )
1912  ( 73 , 145 )     ( 84 , 49 )     BBType
1913  !VXP! begin-resources
1914  labelString : Cancel
1915  width : 60
1916  height : 25
1917  !VXP! end-resources
1918  !VXP! begin-callback
1919  activate :      client_data( XtPointer client_data NULL )
1920  void PushBCancel_activate_cb
1921  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1922  {
1923   XtUnmanageChild (vxpOBJ.BBType);
1924  }
1925
1926
1927
1928  !VXP! end-callback
1929  !VXP! end-object
1930
1931  !VXP! begin-object
1932  PushButton : PushBDestroy ( 29 )
1933  ( 137 , 145 )    ( 84 , 49 )     BBType
1934  !VXP! begin-resources
1935  labelString : New
1936  width : 60
1937  height : 25
1938  !VXP! end-resources
1939  !VXP! begin-callback
1940  activate :      client_data( XtPointer client_data NULL )
1941  void PushBDestroy_activate_cb
1942  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
1943  {
1944   char Str [50];
1945
1946   /* we destroy path */
1947   VideoDestroyPath (w, client_data, cbs);
1948
1949   /* and we refresh Nb points */
1950   if (ListePts)
1951      {
1952       sprintf (Str, "Number of points = %i", ListePts->NbrePts);
1953       XtVaSetValues(vxpOBJ.LANumPoint, XtVaTypedArg, XmNlabelString, XmRString, Str, 9
      , NULL);
1954      }
1955   else
1956       XtVaSetValues(vxpOBJ.LANumPoint, XtVaTypedArg, XmNlabelString, XmRString, "Pas d
      e points entre", 9, NULL);
1957
1958  }
1959
1960
1961
1962  !VXP! end-callback
1963  !VXP! end-object
1964
1965  !VXP! begin-object
1966  Separator : Separator1 ( 10 )
1967  ( 205 , 10 )     ( 12 , 172 )    BBType
1968  !VXP! begin-resources
1969  orientation : XmVERTICAL
1970  !VXP! end-resources
1971  !VXP! end-object
1972
1973  !VXP! begin-object
1974  Label : LAbelX ( 14 )
```



```
1975  ( 230 , 18 )     ( 22 , 20 )     BBType
1976  !VXP! begin-resources
1977  labelString : X :
1978  !VXP! end-resources
1979  !VXP! end-object
1980
1981  !VXP! begin-object
1982  TextField : TextFX ( 6 )
1983  ( 256 , 14 )     ( 73 , 26 )     BBType
1984  !VXP! begin-callback
1985  losingFocus :   client_data( XtPointer client_data NULL )
1986  void TextFX_losingFocus_cb
1987  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
1988  {
1989   char*  St;
1990
1991   if (St = XmTextGetString (vxpOBJ.TextFX))
1992      {
1993       Point3D.x = (float) atof (St);
1994       XtFree (St);
1995      }
1996  }
1997
1998
1999
2000  !VXP! end-callback
2001  !VXP! begin-callback
2002  valueChanged :  client_data( XtPointer client_data NULL )
2003  void TextFX_valueChanged_cb
2004  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2005  {
2006   char*  St;
2007
2008   ChangeValue = True;
2009   if (St = XmTextGetString (vxpOBJ.TextFX))
2010      {
2011       Point3D.x = (float) atof (St);
2012       XtFree (St);
2013      }
2014  }
2015
2016
2017
2018
2019  !VXP! end-callback
2020  !VXP! end-object
2021
2022  !VXP! begin-object
2023  Label : LAbelY ( 14 )
2024  ( 232 , 52 )     ( 20 , 20 )     BBType
2025  !VXP! begin-resources
2026  labelString : Y :
2027  !VXP! end-resources
2028  !VXP! end-object
2029
2030  !VXP! begin-object
2031  TextField : TextFY ( 6 )
2032  ( 255 , 49 )     ( 73 , 26 )     BBType
2033  !VXP! begin-callback
2034  losingFocus :   client_data( XtPointer client_data NULL )
2035  void TextFY_losingFocus_cb
2036  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2037  {
2038   char*  St;
2039
2040   if (St = XmTextGetString (vxpOBJ.TextFY))
2041      {
2042       Point3D.y = atof (St);
2043       XtFree (St);
2044      }
2045  }
```

```
2046
2047
2048
2049  !VXP! end-callback
2050  !VXP! begin-callback
2051  valueChanged :  client_data( XtPointer client_data NULL )
2052  void TextFY_valueChanged_cb
2053  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2054  {
2055   char*  St;
2056
2057   ChangeValue = True;
2058   if (St = XmTextGetString (vxpOBJ.TextFY))
2059      {
2060       Point3D.y = (float) atof (St);
2061       XtFree (St);
2062      }
2063  }
2064
2065
2066
2067  !VXP! end-callback
2068  !VXP! end-object
2069
2070  !VXP! begin-object
2071  Label : LAbelZ ( 14 )
2072  ( 232 , 86 )     ( 20 , 19 )     BBType
2073  !VXP! begin-resources
2074  labelString : Z :
2075  !VXP! end-resources
2076  !VXP! end-object
2077
2078  !VXP! begin-object
2079  TextField : TextFZ ( 6 )
2080  ( 255 , 84 )     ( 73 , 26 )     BBType
2081  !VXP! begin-callback
2082  losingFocus :   client_data( XtPointer client_data NULL )
2083  void TextFZ_losingFocus_cb
2084  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2085  {
2086   char*  St;
2087
2088   if (St = XmTextGetString (vxpOBJ.TextFZ))
2089      {
2090       Point3D.z = atof (St);
2091       XtFree (St);
2092      }
2093  }
2094
2095
2096
2097  !VXP! end-callback
2098  !VXP! begin-callback
2099  valueChanged :  client_data( XtPointer client_data NULL )
2100  void TextFZ_valueChanged_cb
2101  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2102  {
2103   char*  St;
2104
2105   ChangeValue = True;
2106   if (St = XmTextGetString (vxpOBJ.TextFZ))
2107      {
2108       Point3D.z = (float) atof (St);
2109       XtFree (St);
2110      }
2111  }
2112
2113
2114
2115  !VXP! end-callback
2116  !VXP! end-object
```



```
2117
2118  !VXP! begin-object
2119  PushButton : PushBAdd ( 29 )
2120  ( 226 , 130 )    ( 144 , 59 )    BBType
2121  !VXP! begin-resources
2122  labelString : Add point
2123  width : 120
2124  height : 35
2125  !VXP! end-resources
2126  !VXP! begin-callback
2127  activate :      client_data( XtPointer client_data NULL )
2128  void PushBAdd_activate_cb
2129  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
2130  {
2131   if (ChangeValue)
2132      {
2133       char Str [20];
2134
2135       if (ListePts)
2136          {
2137           sprintf (Str, "Number of points = %i", ListePts->NbrePts);
2138           XtVaSetValues(vxpOBJ.LANumPoint, XtVaTypedArg, XmNlabelString, XmRString, St
     r, 9, NULL);
2139          }
2140       printf ("(%.4f, %.4f, %.4f) ajoute \n", Point3D.x, Point3D.y, Point3D.z);
2141       VideoAddPoint (w, client_data, Point3D, cbs);
2142       ChangeValue = False;
2143      }
2144  }
2145
2146
2147
2148  !VXP! end-callback
2149  !VXP! end-object
2150
2151  !VXP! begin-object
2152  Label : LANumPoint ( 14 )
2153  ( 17 , 97 )      ( 164 , 22 )    BBType
2154  !VXP! begin-resources
2155  labelString : Number of point = 0
2156  !VXP! end-resources
2157  !VXP! end-object
2158
2159  !VXP! begin-object
2160  Separator : Separator3 ( 10 )
2161  ( 17 , 123 )     ( 181 , 10 )    BBType
2162  !VXP! end-object
2163
2164  !VXP! begin-object
2165  Frame : Frame14 ( 21 )
2166  ( 10 , 10 )      ( 171 , 33 )    BBType
2167  !VXP! end-object
2168
2169  !VXP! begin-object
2170  ToggleButton : TogBOpen ( 17 )
2171  ( 2 , 2 )        ( 167 , 29 )    Frame14
2172  !VXP! begin-resources
2173  labelString : Spline open
2174  alignment : XmALIGNMENT_BEGINNING
2175  !VXP! end-resources
2176  !VXP! begin-callback
2177  arm :   client_data( XtPointer client_data NULL )
2178  void TogBOpen_arm_cb
2179  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
2180  {
2181
2182  }
2183
2184
2185
2186  !VXP! end-callback
```

```
2187  !VXP! begin-callback
2188  valueChanged :  client_data( XtPointer client_data NULL )
2189  void TogBOpen_valueChanged_cb
2190  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
2191  {
2192
2193  }
2194
2195
2196
2197  !VXP! end-callback
2198  !VXP! end-object
2199
2200  !VXP! begin-object
2201  Frame : Frame15 ( 21 )
2202  ( 11 , 49 )      ( 170 , 40 )    BBType
2203  !VXP! begin-resources
2204  width : 170
2205  height : 40
2206  !VXP! end-resources
2207  !VXP! end-object
2208
2209  !VXP! begin-object
2210  RowColumn : RowColumn12 ( 17 )
2211  ( 2 , 2 )        ( 166 , 36 )    Frame15
2212  !VXP! end-object
2213
2214  !VXP! begin-object
2215  Label : LANumShot ( 14 )
2216  ( 3 , 3 )        ( 94 , 29 )     RowColumn12
2217  !VXP! begin-resources
2218  labelString : Number of shots
2219  marginHeight : 8
2220  !VXP! end-resources
2221  !VXP! end-object
2222
2223  !VXP! begin-object
2224  TextField : TextFShot ( 6 )
2225  ( 100 , 3 )      ( 63 , 27 )     RowColumn12
2226  !VXP! begin-resources
2227  x : 100
2228  marginHeight : 5
2229  !VXP! end-resources
2230  !VXP! begin-callback
2231  losingFocus :   client_data( XtPointer client_data NULL )
2232  void TextFShot_losingFocus_cb
2233  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2234  {
2235   char*  St;
2236
2237   if (St = XmTextGetString (vxpOBJ.TextFShot))
2238      {
2239       NbShots = atof (St);
2240       XtFree (St);
2241      }
2242  }
2243
2244
2245
2246  !VXP! end-callback
2247  !VXP! end-object
2248
2249  !VXP! begin-object
2250  BulletinBoardDialog : BBAnim ( 5 )
2251  ( 392 , 303 )    ( 284 , 218 )   DBAnimation
2252  !VXP! begin-resources
2253  mappedWhenManaged : True
2254  autoUnmanage : False
2255  dialogTitle : Parameters of Camera
2256  noResize : True
2257  dialogStyle : XmDIALOG_SYSTEM_MODAL
```



```
2258  !VXP! end-resources
2259  !VXP! end-object
2260
2261  !VXP! begin-object
2262  Label : Label1 ( 14 )
2263  ( 10 , 10 )      ( 110 , 25 )    BBAnim
2264  !VXP! begin-resources
2265  labelString : Look At Vector
2266  !VXP! end-resources
2267  !VXP! end-object
2268
2269  !VXP! begin-object
2270  Label : Label2 ( 14 )
2271  ( 161 , 10 )     ( 112 , 26 )    BBAnim
2272  !VXP! begin-resources
2273  labelString : Look Up Vector
2274  alignment : XmALIGNMENT_BEGINNING
2275  !VXP! end-resources
2276  !VXP! end-object
2277
2278  !VXP! begin-object
2279  ToggleButton : TogButAt ( 17 )
2280  ( 27 , 48 )      ( 102 , 26 )    BBAnim
2281  !VXP! begin-resources
2282  labelString : Pointed Area
2283  alignment : XmALIGNMENT_BEGINNING
2284  set : True
2285  !VXP! end-resources
2286  !VXP! begin-callback
2287  valueChanged :  client_data( XtPointer client_data NULL )
2288  void TogButAt_valueChanged_cb
2289  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
2290  {
2291          if (XmToggleButtonGetState(vxpOBJ.TogButAt) == True) {
2292                  XtVaSetValues (vxpOBJ.TogButAt, XtVaTypedArg, XmNlabelString, XmRStri
      ng, "Pointed area", 9, NULL);
2293                  XtManageChild (vxpOBJ.LabelX_At);
2294                  XtManageChild (vxpOBJ.LabelY_At);
2295                  XtManageChild (vxpOBJ.LabelZ_At);
2296                  XtManageChild (vxpOBJ.TextFX_At);
2297                  XtManageChild (vxpOBJ.TextFY_At);
2298                  XtManageChild (vxpOBJ.TextFZ_At);
2299          }
2300          else {
2301                  XtVaSetValues (vxpOBJ.TogButAt, XtVaTypedArg, XmNlabelString, XmRStri
      ng, "Forward tangent", 9, NULL);
2302                  XtUnmanageChild (vxpOBJ.LabelX_At);
2303                  XtUnmanageChild (vxpOBJ.LabelY_At);
2304                  XtUnmanageChild (vxpOBJ.LabelZ_At);
2305                  XtUnmanageChild (vxpOBJ.TextFX_At);
2306                  XtUnmanageChild (vxpOBJ.TextFY_At);
2307                  XtUnmanageChild (vxpOBJ.TextFZ_At);
2308          }
2309  }
2310
2311
2312
2313  !VXP! end-callback
2314  !VXP! begin-callback
2315  activate :      client_data( XtPointer client_data NULL )
2316  void TogButAt_activate_cb
2317  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
2318  {
2319
2320  }
2321
2322
2323  !VXP! end-callback
2324  !VXP! begin-callback
2325  arm :   client_data( XtPointer client_data NULL )
2326  void TogButAt_arm_cb
```

```
2327  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
2328  {
2329          if (XmToggleButtonGetState(vxpOBJ.TogButAt) == True) {
2330                  XtVaSetValues (vxpOBJ.TogButAt, XtVaTypedArg, XmNlabelString, XmRStri
      ng, "Pointed area", 9, NULL);
2331                  XtManageChild (vxpOBJ.LabelX_At);
2332                  XtManageChild (vxpOBJ.LabelY_At);
2333                  XtManageChild (vxpOBJ.LabelZ_At);
2334                  XtManageChild (vxpOBJ.TextFX_At);
2335                  XtManageChild (vxpOBJ.TextFY_At);
2336                  XtManageChild (vxpOBJ.TextFZ_At);
2337          }
2338  }
2339
2340
2341  !VXP! end-callback
2342  !VXP! end-object
2343
2344  !VXP! begin-object
2345  Label : LabelX_At ( 14 )
2346  ( 58 , 78 )      ( 21 , 26 )     BBAnim
2347  !VXP! begin-resources
2348  labelString : X :
2349  !VXP! end-resources
2350  !VXP! end-object
2351
2352  !VXP! begin-object
2353  Label : LabelY_At ( 14 )
2354  ( 58 , 107 )     ( 21 , 26 )     BBAnim
2355  !VXP! begin-resources
2356  labelString : Y :
2357  !VXP! end-resources
2358  !VXP! end-object
2359
2360  !VXP! begin-object
2361  Label : LabelZ_At ( 14 )
2362  ( 57 , 135 )     ( 22 , 26 )     BBAnim
2363  !VXP! begin-resources
2364  labelString : Z :
2365  !VXP! end-resources
2366  !VXP! end-object
2367
2368  !VXP! begin-object
2369  TextField : TextFX_At ( 6 )
2370  ( 81 , 78 )      ( 37 , 26 )     BBAnim
2371  !VXP! begin-callback
2372  valueChanged :  client_data( XtPointer client_data NULL )
2373  void TextFX_At_valueChanged_cb
2374  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2375  {
2376    char*  St;
2377
2378   if (St = XmTextGetString (vxpOBJ.TextFX_At))
2379      {
2380       PtLookAt.x = atof (St);
2381       XtFree (St);
2382      }
2383  }
2384
2385
2386  !VXP! end-callback
2387  !VXP! begin-callback
2388  losingFocus :   client_data( XtPointer client_data NULL )
2389  void TextFX_At_losingFocus_cb
2390  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2391  {
2392   char*  St;
2393
2394   if (St = XmTextGetString (vxpOBJ.TextFX_At))
2395      {
2396       PtLookAt.x = atof (St);
```



```
2397       XtFree (St);
2398      }
2399  }
2400
2401
2402  !VXP! end-callback
2403  !VXP! end-object
2404
2405  !VXP! begin-object
2406  TextField : TextFY_At ( 6 )
2407  ( 81 , 107 )     ( 37 , 26 )     BBAnim
2408  !VXP! begin-callback
2409  valueChanged :  client_data( XtPointer client_data NULL )
2410  void TextFY_At_valueChanged_cb
2411  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2412  {
2413    char*  St;
2414
2415   if (St = XmTextGetString (vxpOBJ.TextFY_At))
2416      {
2417       PtLookAt.y = atof (St);
2418       XtFree (St);
2419      }
2420  }
2421
2422
2423  !VXP! end-callback
2424  !VXP! begin-callback
2425  losingFocus :   client_data( XtPointer client_data NULL )
2426  void TextFY_At_losingFocus_cb
2427  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2428  {
2429   char*  St;
2430
2431   if (St = XmTextGetString (vxpOBJ.TextFY_At))
2432      {
2433       PtLookAt.y = atof (St);
2434       XtFree (St);
2435      }
2436  }
2437
2438
2439  !VXP! end-callback
2440  !VXP! end-object
2441
2442  !VXP! begin-object
2443  TextField : TextFZ_At ( 6 )
2444  ( 81 , 136 )     ( 37 , 26 )     BBAnim
2445  !VXP! begin-callback
2446  valueChanged :  client_data( XtPointer client_data NULL )
2447  void TextFZ_At_valueChanged_cb
2448  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2449  {
2450    char*  St;
2451
2452   if (St = XmTextGetString (vxpOBJ.TextFZ_At))
2453      {
2454       PtLookAt.z = atof (St);
2455       XtFree (St);
2456      }
2457  }
2458
2459
2460  !VXP! end-callback
2461  !VXP! begin-callback
2462  losingFocus :   client_data( XtPointer client_data NULL )
2463  void TextFZ_At_losingFocus_cb
2464  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2465  {
2466   char*  St;
2467
```

```
2468   if (St = XmTextGetString (vxpOBJ.TextFZ_At))
2469      {
2470       PtLookAt.z = atof (St);
2471       XtFree (St);
2472      }
2473  }
2474
2475
2476  !VXP! end-callback
2477  !VXP! end-object
2478
2479  !VXP! begin-object
2480  ToggleButton : TogButUp ( 17 )
2481  ( 172 , 50 )     ( 87 , 23 )     BBAnim
2482  !VXP! begin-resources
2483  labelString : Default
2484  alignment : XmALIGNMENT_BEGINNING
2485  set : False
2486  mappedWhenManaged : True
2487  !VXP! end-resources
2488  !VXP! begin-callback
2489  arm :   client_data( XtPointer client_data NULL )
2490  void TogButUp_arm_cb
2491  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
2492  {
2493          if (XmToggleButtonGetState(vxpOBJ.TogButUp) == True) {
2494                  XtVaSetValues (vxpOBJ.TogButUp, XtVaTypedArg, XmNlabelString, XmRStri
     ng, "Fixed", 9, NULL);
2495                  XtManageChild (vxpOBJ.LabelX_Up);
2496                  XtManageChild (vxpOBJ.LabelY_Up);
2497                  XtManageChild (vxpOBJ.LabelZ_Up);
2498                  XtManageChild (vxpOBJ.TextFX_Up);
2499                  XtManageChild (vxpOBJ.TextFY_Up);
2500                  XtManageChild (vxpOBJ.TextFZ_Up);
2501          }
2502          else
2503          {
2504          PtLookUp.x = 0;
2505          PtLookUp.y = 1;
2506          PtLookUp.z = 0;
2507          }
2508  }
2509
2510
2511
2512
2513
2514  !VXP! end-callback
2515  !VXP! begin-callback
2516  valueChanged :  client_data( XtPointer client_data NULL )
2517  void TogButUp_valueChanged_cb
2518  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
2519  {
2520          Arg TabArg [1];
2521          if (XmToggleButtonGetState(vxpOBJ.TogButUp) == True) {
2522                  XtVaSetValues (vxpOBJ.TogButUp, XtVaTypedArg, XmNlabelString, XmRStri
     ng, "Fixed", 9, NULL);
2523
2524                  XtSetArg (TabArg[0], XmNmappedWhenManaged, True);
2525                  XtSetValues (vxpOBJ.LabelX_Up, TabArg, 1);
2526                  XtSetValues (vxpOBJ.LabelY_Up, TabArg, 1);
2527                  XtSetValues (vxpOBJ.LabelZ_Up, TabArg, 1);
2528                  XtSetValues (vxpOBJ.TextFX_Up, TabArg, 1);
2529                  XtSetValues (vxpOBJ.TextFY_Up, TabArg, 1);
2530                  XtSetValues (vxpOBJ.TextFZ_Up, TabArg, 1);
2531
2532                  XtManageChild (vxpOBJ.LabelX_Up);
2533                  XtManageChild (vxpOBJ.LabelY_Up);
2534                  XtManageChild (vxpOBJ.LabelZ_Up);
2535                  XtManageChild (vxpOBJ.TextFX_Up);
2536                  XtManageChild (vxpOBJ.TextFY_Up);
```



```
2537                  XtManageChild (vxpOBJ.TextFZ_Up);
2538          }
2539          else {
2540                  XtVaSetValues (vxpOBJ.TogButUp, XtVaTypedArg, XmNlabelString, XmRStri
     ng, "Default", 9, NULL);
2541                  XtUnmanageChild (vxpOBJ.LabelX_Up);
2542                  XtUnmanageChild (vxpOBJ.LabelY_Up);
2543                  XtUnmanageChild (vxpOBJ.LabelZ_Up);
2544                  XtUnmanageChild (vxpOBJ.TextFX_Up);
2545                  XtUnmanageChild (vxpOBJ.TextFY_Up);
2546                  XtUnmanageChild (vxpOBJ.TextFZ_Up);
2547                  PtLookUp.x = 0;
2548                  PtLookUp.y = 1;
2549                  PtLookUp.z = 0;
2550          }
2551  }
2552
2553
2554
2555
2556
2557  !VXP! end-callback
2558  !VXP! end-object
2559
2560  !VXP! begin-object
2561  Label : LabelX_Up ( 14 )
2562  ( 197 , 79 )     ( 21 , 26 )     BBAnim
2563  !VXP! begin-resources
2564  labelString : X :
2565  initialResourcesPersistent : True
2566  mappedWhenManaged : False
2567  !VXP! end-resources
2568  !VXP! end-object
2569
2570  !VXP! begin-object
2571  Label : LabelY_Up ( 14 )
2572  ( 197 , 109 )    ( 21 , 26 )     BBAnim
2573  !VXP! begin-resources
2574  labelString : Y :
2575  mappedWhenManaged : False
2576  !VXP! end-resources
2577  !VXP! end-object
2578
2579  !VXP! begin-object
2580  Label : LabelZ_Up ( 14 )
2581  ( 198 , 134 )    ( 21 , 26 )     BBAnim
2582  !VXP! begin-resources
2583  labelString : Z :
2584  mappedWhenManaged : False
2585  !VXP! end-resources
2586  !VXP! end-object
2587
2588  !VXP! begin-object
2589  TextField : TextFX_Up ( 6 )
2590  ( 220 , 79 )     ( 37 , 26 )     BBAnim
2591  !VXP! begin-resources
2592  mappedWhenManaged : False
2593  !VXP! end-resources
2594  !VXP! begin-callback
2595  valueChanged :  client_data( XtPointer client_data NULL )
2596  void TextFX_Up_valueChanged_cb
2597  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2598  {
2599   char*  St;
2600
2601   if (St = XmTextGetString (vxpOBJ.TextFX_Up))
2602      {
2603       PtLookUp.x = atof (St);
2604       XtFree (St);
2605      }
2606  }
```

```
2607
2608
2609  !VXP! end-callback
2610  !VXP! begin-callback
2611  losingFocus :   client_data( XtPointer client_data NULL )
2612  void TextFX_Up_losingFocus_cb
2613  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2614  {
2615   char*  St;
2616
2617   if (St = XmTextGetString (vxpOBJ.TextFX_Up))
2618      {
2619       PtLookUp.x = atof (St);
2620       XtFree (St);
2621      }
2622  }
2623
2624
2625  !VXP! end-callback
2626  !VXP! end-object
2627
2628  !VXP! begin-object
2629  TextField : TextFY_Up ( 6 )
2630  ( 220 , 108 )    ( 37 , 26 )     BBAnim
2631  !VXP! begin-resources
2632  mappedWhenManaged : False
2633  !VXP! end-resources
2634  !VXP! begin-callback
2635  valueChanged :  client_data( XtPointer client_data NULL )
2636  void TextFY_Up_valueChanged_cb
2637  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
2638  {
2639   char*  St;
2640
2641   if (St = XmTextGetString (vxpOBJ.TextFY_Up))
2642      {
2643       PtLookUp.y = atof (St);
2644       XtFree (St);
2645      }
2646  }
2647
2648
2649  !VXP! end-callback
2650  !VXP! begin-callback
2651  losingFocus :   client_data( XtPointer client_data NULL )
2652  void TextFY_Up_losingFocus_cb
2653  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2654  {
2655   char*  St;
2656
2657   if (St = XmTextGetString (vxpOBJ.TextFY_Up))
2658      {
2659       PtLookUp.y = atof (St);
2660       XtFree (St);
2661      }
2662  }
2663
2664
2665  !VXP! end-callback
2666  !VXP! end-object
2667
2668  !VXP! begin-object
2669  TextField : TextFZ_Up ( 6 )
2670  ( 221 , 136 )    ( 37 , 26 )     BBAnim
2671  !VXP! begin-resources
2672  mappedWhenManaged : False
2673  !VXP! end-resources
2674  !VXP! begin-callback
2675  valueChanged :  client_data( XtPointer client_data NULL )
2676  void TextFZ_Up_valueChanged_cb
2677  (Widget w, XtPointer client_data, XmAnyCallbackStruct *cbs)
```



```
2678  {
2679   char*  St;
2680
2681   if (St = XmTextGetString (vxpOBJ.TextFZ_Up))
2682      {
2683       PtLookUp.z = atof (St);
2684       XtFree (St);
2685      }
2686  }
2687
2688
2689  !VXP! end-callback
2690  !VXP! begin-callback
2691  losingFocus :   client_data( XtPointer client_data NULL )
2692  void TextFZ_Up_losingFocus_cb
2693  (Widget w, XtPointer client_data, XmTextVerifyCallbackStruct *cbs)
2694  {
2695   char*  St;
2696
2697   if (St = XmTextGetString (vxpOBJ.TextFZ_Up))
2698      {
2699       PtLookUp.z = atof (St);
2700       XtFree (St);
2701      }
2702  }
2703
2704
2705  !VXP! end-callback
2706  !VXP! end-object
2707
2708  !VXP! begin-object
2709  Separator : Separator2 ( 10 )
2710  ( 132 , 10 )     ( 24 , 160 )    BBAnim
2711  !VXP! begin-resources
2712  orientation : XmVERTICAL
2713  !VXP! end-resources
2714  !VXP! end-object
2715
2716  !VXP! begin-object
2717  Separator : Separator3_1 ( 10 )
2718  ( 19 , 27 )      ( 88 , 17 )     BBAnim
2719  !VXP! end-object
2720
2721  !VXP! begin-object
2722  Separator : Separator4 ( 10 )
2723  ( 163 , 29 )     ( 85 , 16 )     BBAnim
2724  !VXP! end-object
2725
2726  !VXP! begin-object
2727  PushButton : PBok ( 29 )
2728  ( 23 , 178 )     ( 68 , 24 )     BBAnim
2729  !VXP! begin-resources
2730  labelString : OK
2731  showAsDefault : 1
2732  width : 68
2733  height : 24
2734  !VXP! end-resources
2735  !VXP! begin-callback
2736  activate :      client_data( XtPointer client_data NULL )
2737  void PBok_activate_cb
2738  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
2739  {
2740   printf ("LookUp : (%.2f, %.2f, %.2f)\n", PtLookUp.x, PtLookUp.y, PtLookUp.z);
2741   printf ("LookAt : (%.2f, %.2f, %.2f)\n", PtLookAt.x, PtLookAt.y, PtLookAt.z);
2742   VideoChangeCamParam(PtLookUp, XmToggleButtonGetState(vxpOBJ.TogButAt), PtLookAt);
2743   XtUnmanageChild (vxpOBJ.BBAnim);
2744  }
2745
2746
2747
2748  !VXP! end-callback
```

```
!VXP! end-object

!VXP! begin-object
PushButton : PBhelp ( 29 )
( 195 , 183 )    ( 78 , 23 )     BBAnim
!VXP! begin-resources
labelString : Help
!VXP! end-resources
!VXP! begin-callback
activate :      client_data( XtPointer client_data NULL )
void PBhelp_activate_cb
(Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
{
 XtManageChild (vxpOBJ.BBhelp);
}



!VXP! end-callback
!VXP! end-object

!VXP! begin-object
BulletinBoardDialog : BBhelp ( 5 )
( 0 , 0 )        ( 296 , 226 )   BBAnim
!VXP! end-object

!VXP! begin-object
Text : Text1 ( 4 )
( 10 , 10 )      ( 275 , 161 )   BBhelp
!VXP! end-object

!VXP! begin-object
PushButton : PBokHelp ( 29 )
( 113 , 187 )    ( 73 , 28 )     BBhelp
!VXP! begin-resources
labelString : OK
!VXP! end-resources
!VXP! begin-callback
activate :      client_data( XtPointer client_data NULL )
void PBokHelp_activate_cb
(Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
{
        XtUnmanageChild (vxpOBJ.BBhelp);
}



!VXP! end-callback
!VXP! end-object

!VXP! begin-object
PushButton : PBAnimCancel ( 29 )
( 110 , 183 )    ( 68 , 24 )     BBAnim
!VXP! begin-resources
labelString : Cancel
!VXP! end-resources
!VXP! begin-callback
activate :      client_data( XtPointer client_data NULL )
void PBAnimCancel_activate_cb
(Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
{
 XtUnmanageChild (vxpOBJ.BBAnim);
}


!VXP! end-callback
!VXP! end-object

!VXP! begin-object
```



```
PushButton : PBQuit ( 29 )
( 3 , 51 )       ( 103 , 21 )    RowColumn2
!VXP! begin-resources
labelString : Quit
bottomShadowColor : gray
topShadowColor : WhiteSmoke
background : gainsboro
!VXP! end-resources
!VXP! begin-callback
activate :      client_data( XtPointer client_data NULL )
void PBQuit_activate_cb
(Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
{
 Exit ();
}



!VXP! end-callback
!VXP! end-object

!VXP! begin-object
Frame : FrameZoom ( 21 )
( 10 , 10 )      ( 472 , 464 )   Form2
!VXP! begin-resources
bottomAttachment : XmATTACH_FORM
bottomOffset : 10
leftAttachment : XmATTACH_FORM
leftOffset : 10
rightAttachment : XmATTACH_POSITION
rightPosition : 80
topAttachment : XmATTACH_FORM
topOffset : 10
rightOffset : 10
mappedWhenManaged : True
bottomShadowColor : gray
topShadowColor : WhiteSmoke
!VXP! end-resources
!VXP! end-object

!VXP! begin-object
DrawingArea : Zoom ( 4 )
( 2 , 2 )        ( 468 , 460 )   FrameZoom
!VXP! begin-resources
background : white
mappedWhenManaged : True
!VXP! end-resources
!VXP! begin-callback
resize :        client_data( XtPointer client_data NULL )
void Zoom_resize_cb
(Widget w, XtPointer client_data, XmDrawingAreaCallbackStruct *cbs)
{
 DrawingArea_expose_cb (w, 0, 0, 0);
}



!VXP! end-callback
!VXP! end-object

!VXP! begin-object
Frame : Frame10 ( 21 )
( 492 , 412 )    ( 113 , 62 )    Form2
!VXP! begin-resources
bottomAttachment : XmATTACH_FORM
bottomOffset : 10
leftAttachment : XmATTACH_POSITION
rightOffset : 10
rightAttachment : XmATTACH_FORM
topAttachment : XmATTACH_NONE
topPosition : 78
```

```
2891  leftPosition : 80
2892  borderWidth : 0
2893  topShadowColor : WhiteSmoke
2894  bottomShadowColor : gray
2895  shadowType : XmSHADOW_ETCHED_IN
2896  height : 62
2897  !VXP! end-resources
2898  !VXP! end-object
2899
2900  !VXP! begin-object
2901  RowColumn : RowColumn5 ( 17 )
2902  ( 2 , 2 )        ( 109 , 58 )    Frame10
2903  !VXP! begin-resources
2904  background : gainsboro
2905  numColumns : 2
2906  packing : XmPACK_COLUMN
2907  orientation : XmHORIZONTAL
2908  !VXP! end-resources
2909  !VXP! end-object
2910
2911  !VXP! begin-object
2912  PushButton : PBFullScreen ( 29 )
2913  ( 3 , 3 )        ( 24 , 24 )     RowColumn5
2914  !VXP! begin-resources
2915  labelString : Full Screen
2916  bottomShadowColor : gray
2917  topShadowColor : WhiteSmoke
2918  background : gainsboro
2919  labelType : XmPIXMAP
2920  labelPixmap : FullScrOn.xbm
2921  alignment : XmALIGNMENT_CENTER
2922  !VXP! end-resources
2923  !VXP! begin-callback
2924  activate :      client_data( XtPointer client_data NULL )
2925  void PBFullScreen_activate_cb
2926  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
2927  {
2928   Arg TabArg [1];
2929
2930   if (StateZoom)
2931      {
2932       StateZoom = 0;
2933       XtVaSetValues(vxpOBJ.PBFullScreen,
2934                     XtVaTypedArg, XmNlabelPixmap, XmRString,
2935                     "FullScrOff.xbm", 15, NULL);
2936       /* we change bitmap */
2937       XtVaSetValues(vxpOBJ.PBFullScreen, XtVaTypedArg, XmNlabelPixmap, XmRString, "Ful
      lScrOn.xbm", 15, NULL);
2938
2939
2940       /* Manage all Windows */
2941       XtManageChild (vxpOBJ.FrameTop);
2942       XtManageChild (vxpOBJ.Top_XZ);
2943       XtManageChild (vxpOBJ.FrameFront);
2944       XtManageChild (vxpOBJ.Front_XY);
2945       XtManageChild (vxpOBJ.FrameLeft);
2946       XtManageChild (vxpOBJ.Left_ZY);
2947       XtManageChild (vxpOBJ.FrameCamera);
2948       XtManageChild (vxpOBJ.Camera);
2949
2950       /* ActiveWnd becomme CurWidget */
2951       EtatApplication.CurWidget = CsteWndToDrawing (EtatApplication.ActiveWnd);
2952     }
2953    else
2954      {
2955       StateZoom = 1;
2956
2957
2958       /* we change bitmap */
2959       XtVaSetValues(vxpOBJ.PBFullScreen, XtVaTypedArg, XmNlabelPixmap, XmRString, "Ful
      lScrOff.xbm", 15, NULL);
```



```
2960
2961
2962        /* Manage all Windows */
2963       XtUnmanageChild (vxpOBJ.FrameTop);
2964       XtUnmanageChild (vxpOBJ.Top_XZ);
2965       XtUnmanageChild (vxpOBJ.FrameFront);
2966       XtUnmanageChild (vxpOBJ.Front_XY);
2967       XtUnmanageChild (vxpOBJ.FrameLeft);
2968       XtUnmanageChild (vxpOBJ.Left_ZY);
2969       XtUnmanageChild (vxpOBJ.FrameCamera);
2970       XtUnmanageChild (vxpOBJ.Camera);
2971
2972       /* Unmanage Zoom */
2973       XtManageChild (vxpOBJ.FrameZoom);
2974       XtManageChild (vxpOBJ.Zoom);
2975
2976       /* CurWidget becomme Zoom */
2977       EtatApplication.CurWidget = vxpOBJ.Zoom;
2978
2979       /* we refresh screen */
2980       Raffraichissement(vxpOBJ.Zoom, client_data, cbs);
2981     }
2982  }
2983
2984
2985
2986  !VXP! end-callback
2987  !VXP! end-object
2988
2989  !VXP! begin-object
2990  PushButton : PBZoom ( 29 )
2991  ( 30 , 3 )       ( 24 , 24 )     RowColumn5
2992  !VXP! begin-resources
2993  labelString : Zoom
2994  bottomShadowColor : gray
2995  topShadowColor : WhiteSmoke
2996  background : gainsboro
2997  labelType : XmPIXMAP
2998  labelPixmap : Zoom.xbm
2999  alignment : XmALIGNMENT_CENTER
3000  !VXP! end-resources
3001  !VXP! begin-callback
3002  activate :      client_data( XtPointer client_data NULL )
3003  void PBZoom_activate_cb
3004  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
3005  {
3006   Gestion_ZoomOn_cb (w, client_data, cbs);
3007   CreationZoom (w, client_data, cbs);
3008  }
3009
3010
3011
3012  !VXP! end-callback
3013  !VXP! end-object
3014
3015  !VXP! begin-object
3016  PushButton : PBUnZoom ( 29 )
3017  ( 57 , 3 )       ( 24 , 24 )     RowColumn5
3018  !VXP! begin-resources
3019  labelString : Full Screen
3020  bottomShadowColor : gray
3021  topShadowColor : WhiteSmoke
3022  background : gainsboro
3023  labelType : XmPIXMAP
3024  labelPixmap : Dezoom2.xbm
3025  alignment : XmALIGNMENT_CENTER
3026  !VXP! end-resources
3027  !VXP! begin-callback
3028  activate :      client_data( XtPointer client_data NULL )
3029  void PBUnZoom_activate_cb
3030  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
```

```
3031  {
3032   Gestion_ZoomOff_cb (w, client_data, cbs);
3033   CreationZoom (w, client_data, cbs);
3034  }
3035
3036
3037
3038
3039  !VXP! end-callback
3040  !VXP! end-object
3041
3042  !VXP! begin-object
3043  PushButton : PBBoundingBox ( 29 )
3044  ( 3 , 30 )       ( 24 , 25 )     RowColumn5
3045  !VXP! begin-resources
3046  labelString : Full Screen
3047  bottomShadowColor : gray
3048  topShadowColor : WhiteSmoke
3049  background : gainsboro
3050  labelType : XmPIXMAP
3051  labelPixmap : BoxPif2.xbm
3052  alignment : XmALIGNMENT_CENTER
3053  !VXP! end-resources
3054  !VXP! begin-callback
3055  activate :      client_data( XtPointer client_data NULL )
3056  void PBBoundingBox_activate_cb
3057  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
3058  {
3059  }
3060
3061
3062
3063  !VXP! end-callback
3064  !VXP! end-object
3065
3066  !VXP! begin-object
3067  PushButton : PBTranslation ( 29 )
3068  ( 30 , 30 )      ( 24 , 25 )     RowColumn5
3069  !VXP! begin-resources
3070  labelString : Full Screen
3071  bottomShadowColor : gray
3072  topShadowColor : WhiteSmoke
3073  background : gainsboro
3074  labelType : XmPIXMAP
3075  labelPixmap : transl2.xbm
3076  alignment : XmALIGNMENT_CENTER
3077  !VXP! end-resources
3078  !VXP! begin-callback
3079  activate :      client_data( XtPointer client_data NULL )
3080  void PBTranslation_activate_cb
3081  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
3082  {
3083   /*Anim_Translation (w, client_data, cbs);*/
3084  }
3085
3086
3087
3088
3089
3090
3091
3092
3093
3094
3095
3096
3097
3098
3099
3100
3101
```



```
3102
3103  !VXP! end-callback
3104  !VXP! end-object
3105
3106  !VXP! begin-object
3107  Frame : FrameOpenSave ( 21 )
3108  ( 492 , 89 )      ( 113 , 79 )    Form2
3109  !VXP! begin-resources
3110  rightAttachment : XmATTACH_FORM
3111  rightOffset : 10
3112  leftAttachment : XmATTACH_POSITION
3113  leftPosition : 80
3114  topAttachment : XmATTACH_WIDGET
3115  topWidget : FrameButton
3116  !VXP! end-resources
3117  !VXP! end-object
3118
3119  !VXP! begin-object
3120  RowColumn : RowOpenScene ( 17 )
3121  ( 2 , 2 )        ( 109 , 75 )    FrameOpenSave
3122  !VXP! end-object
3123
3124  !VXP! begin-object
3125  PushButton : PBOpenScene ( 29 )
3126  ( 3 , 3 )        ( 103 , 21 )    RowOpenScene
3127  !VXP! begin-resources
3128  labelString : Open Scene
3129  !VXP! end-resources
3130  !VXP! begin-callback
3131  activate :      client_data( XtPointer client_data NULL )
3132  void PBOpenScene_activate_cb
3133  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
3134  {
3135   XtManageChild (vxpOBJ.FSOpen);
3136  }
3137
3138
3139  !VXP! end-callback
3140  !VXP! end-object
3141
3142  !VXP! begin-object
3143  FileSelectionDialog : FSOpen ( 4 )
3144  ( 535 , 125 )    ( 262 , 333 )   PBOpenScene
3145  !VXP! begin-resources
3146  dialogStyle : XmDIALOG_SYSTEM_MODAL
3147  dialogTitle : Open File
3148  !VXP! end-resources
3149  !VXP! end-object
3150
3151  !VXP! begin-object
3152  PushButton : PBSaveScene ( 29 )
3153  ( 3 , 27 )       ( 103 , 21 )    RowOpenScene
3154  !VXP! begin-resources
3155  labelString : Save Scene
3156  !VXP! end-resources
3157  !VXP! begin-callback
3158  activate :      client_data( XtPointer client_data NULL )
3159  void PBSaveScene_activate_cb
3160  (Widget w, XtPointer client_data, XmPushButtonCallbackStruct *cbs)
3161  {
3162   XtManageChild (vxpOBJ.FSSave);
3163  }
3164
3165
3166  !VXP! end-callback
3167  !VXP! end-object
3168
3169  !VXP! begin-object
3170  FileSelectionDialog : FSSave ( 4 )
3171  ( 535 , 149 )    ( 262 , 333 )   PBSaveScene
3172  !VXP! begin-resources
```

```
3173  dialogStyle : XmDIALOG_SYSTEM_MODAL
3174  dialogTitle : Save File
3175  !VXP! end-resources
3176  !VXP! end-object
3177
3178  !VXP! begin-object
3179  PushButton : PBNewScene ( 29 )
3180  ( 3 , 51 )       ( 103 , 21 )    RowOpenScene
3181  !VXP! begin-resources
3182  labelString : New Scene
3183  !VXP! end-resources
3184  !VXP! end-object
3185
3186  !VXP! begin-object
3187  Frame : FrameRenduCreation ( 21 )
3188  ( 492 , 190 )    ( 113 , 79 )    Form2
3189  !VXP! begin-resources
3190  rightAttachment : XmATTACH_FORM
3191  rightOffset : 10
3192  leftAttachment : XmATTACH_POSITION
3193  leftPosition : 80
3194  y : 0
3195  topAttachment : XmATTACH_WIDGET
3196  topWidget : LACreationView
3197  !VXP! end-resources
3198  !VXP! end-object
3199
3200  !VXP! begin-object
3201  RowColumn : RCRenduCreation ( 17 )
3202  ( 2 , 2 )        ( 109 , 75 )    FrameRenduCreation
3203  !VXP! begin-resources
3204  radioBehavior : True
3205  orientation : XmVERTICAL
3206  !VXP! end-resources
3207  !VXP! end-object
3208
3209  !VXP! begin-object
3210  ToggleButton : TBWireFrame ( 17 )
3211  ( 3 , 3 )        ( 103 , 21 )    RCRenduCreation
3212  !VXP! begin-resources
3213  labelString : Wireframe
3214  set : True
3215  !VXP! end-resources
3216  !VXP! begin-callback
3217  activate :      client_data( XtPointer client_data NULL )
3218  void TBWireFrame_activate_cb
3219  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3220  {
3221  }
3222
3223  !VXP! end-callback
3224  !VXP! begin-callback
3225  arm :   client_data( XtPointer client_data NULL )
3226  void TBWireFrame_arm_cb
3227  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3228  {
3229   EtatApplication.CurOthersScenes = Wireframe;
3230   RefreshRender (w, client_data, cbs);
3231  }
3232
3233  !VXP! end-callback
3234  !VXP! end-object
3235
3236  !VXP! begin-object
3237  ToggleButton : TBFlat ( 17 )
3238  ( 3 , 27 )       ( 103 , 21 )    RCRenduCreation
3239  !VXP! begin-resources
3240  labelString : Flat
3241  !VXP! end-resources
3242  !VXP! begin-callback
3243  activate :      client_data( XtPointer client_data NULL )
```



```
3244  void TBFlat_activate_cb
3245  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3246  {
3247  }
3248
3249  !VXP! end-callback
3250  !VXP! begin-callback
3251  arm :   client_data( XtPointer client_data NULL )
3252  void TBFlat_arm_cb
3253  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3254  {
3255   EtatApplication.CurOthersScenes = FlatShading;
3256   RefreshRender (w, client_data, cbs);
3257  }
3258
3259  !VXP! end-callback
3260  !VXP! end-object
3261
3262  !VXP! begin-object
3263  ToggleButton : TBSmooth ( 17 )
3264  ( 3 , 51 )       ( 103 , 21 )    RCRenduCreation
3265  !VXP! begin-resources
3266  labelString : Smooth
3267  !VXP! end-resources
3268  !VXP! begin-callback
3269  activate :      client_data( XtPointer client_data NULL )
3270  void TBSmooth_activate_cb
3271  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3272  {
3273  }
3274
3275  !VXP! end-callback
3276  !VXP! begin-callback
3277  arm :   client_data( XtPointer client_data NULL )
3278  void TBSmooth_arm_cb
3279  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3280  {
3281   EtatApplication.CurOthersScenes = Gouraud;
3282   RefreshRender (w, client_data, cbs);
3283  }
3284
3285  !VXP! end-callback
3286  !VXP! end-object
3287
3288  !VXP! begin-object
3289  Frame : FrameSpline ( 21 )
3290  ( 492 , 373 )    ( 113 , 31 )    Form2
3291  !VXP! begin-resources
3292  rightAttachment : XmATTACH_FORM
3293  rightOffset : 10
3294  leftAttachment : XmATTACH_POSITION
3295  leftPosition : 80
3296  y : 0
3297  rightWidget : FrameRenduCreation
3298  topAttachment : XmATTACH_WIDGET
3299  topWidget : FrameRenduCamera
3300  topOffset : 3
3301  !VXP! end-resources
3302  !VXP! end-object
3303
3304  !VXP! begin-object
3305  RowColumn : RowSpline ( 17 )
3306  ( 2 , 2 )        ( 109 , 27 )    FrameSpline
3307  !VXP! end-object
3308
3309  !VXP! begin-object
3310  ToggleButton : TBSpline ( 17 )
3311  ( 3 , 3 )        ( 103 , 21 )    RowSpline
3312  !VXP! begin-resources
3313  labelString : Trajectory
3314  !VXP! end-resources
```

```
3315  !VXP! begin-callback
3316  valueChanged :  client_data( XtPointer client_data NULL )
3317  void TBSpline_valueChanged_cb
3318  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3319  {
3320   if (XmToggleButtonGetState(vxpOBJ.TBSpline) == True)
3321       VideoTrajectoryOn ();
3322   else
3323       VideoTrajectoryOff ();
3324  }
3325
3326  !VXP! end-callback
3327  !VXP! end-object
3328
3329  !VXP! begin-object
3330  BulletinBoardDialog : BBAbout ( 5 )
3331  ( 0 , 0 )        ( 308 , 511 )   Form2
3332  !VXP! begin-resources
3333  dialogStyle : XmDIALOG_SYSTEM_MODAL
3334  autoUnmanage : True
3335  noResize : True
3336  dialogTitle : About
3337  !VXP! end-resources
3338  !VXP! end-object
3339
3340  !VXP! begin-object
3341  Label : LAAboutCopy ( 14 )
3342  ( 67 , 51 )      ( 177 , 19 )    BBAbout
3343  !VXP! begin-resources
3344  labelString : Copyright 1995
3345  fontList : -*-avantgarde-*-o-*-*-15-*-0-*-*-*-*-*-*-*-*-narrow-sans-13-*-*-*-*-*-*-
     *-*-*-*-*-narrow-sans-24-*-*-*-*-*-*-*
3346  !VXP! end-resources
3347  !VXP! end-object
3348
3349  !VXP! begin-object
3350  Label : LAAboutComment ( 14 )
3351  ( 27 , 95 )      ( 251 , 31 )    BBAbout
3352  !VXP! begin-resources
3353  labelString : The fabulous 3D vision's software !
3354  fontList : -*-*-*-*-narrow-sans-15-*-*-*-*-*-*-*
3355  !VXP! end-resources
3356  !VXP! end-object
3357
3358  !VXP! begin-object
3359  Label : LAAboutAut1 ( 14 )
3360  ( 28 , 158 )     ( 257 , 16 )    BBAbout
3361  !VXP! begin-resources
3362  labelString : Fabrice Bouvier & Jerome Bremond
3363  fontList : -*-avantgarde-*-o-*-*-14-*-0-*-*-*-*-*
3364  !VXP! end-resources
3365  !VXP! end-object
3366
3367  !VXP! begin-object
3368  Label : LAAboutAut2 ( 14 )
3369  ( 29 , 179 )     ( 250 , 19 )    BBAbout
3370  !VXP! begin-resources
3371  labelString : Laurent DereM- & Laurent Dirat
3372  fontList : -*-avantgarde-*-o-*-*-14-*-0-*-*-*-*-*
3373  !VXP! end-resources
3374  !VXP! end-object
3375
3376  !VXP! begin-object
3377  Label : LAAboutAut3 ( 14 )
3378  ( 10 , 199 )     ( 287 , 20 )    BBAbout
3379  !VXP! begin-resources
3380  labelString : Pierre-Francois Filet & Christophe Lafolet
3381  fontList : -*-avantgarde-*-o-*-*-14-*-0-*-*-*-*-*
3382  !VXP! end-resources
3383  !VXP! end-object
3384
```



```
3385  !VXP! begin-object
3386  Label : LAAboutCindy ( 14 )
3387  ( 42 , 428 )     ( 231 , 24 )    BBAbout
3388  !VXP! begin-resources
3389  labelString : Soon a demonstration with 3D-Cindy ...
3390  !VXP! end-resources
3391  !VXP! end-object
3392
3393  !VXP! begin-object
3394  Label : LAAboutEssi ( 14 )
3395  ( 47 , 230 )     ( 221 , 29 )    BBAbout
3396  !VXP! begin-resources
3397  labelString : Made in ESSI, salle 226
3398  fontList : -*-avantgarde-*-o-*-*-12-*-0-*-*-*-*-*
3399  !VXP! end-resources
3400  !VXP! end-object
3401
3402  !VXP! begin-object
3403  DrawnButton : DBAboutCindy ( 1 )
3404  ( 48 , 275 )     ( 216 , 148 )   BBAbout
3405  !VXP! begin-resources
3406  labelType : XmPIXMAP
3407  labelPixmap : cindy1.xbm
3408  !VXP! end-resources
3409  !VXP! end-object
3410
3411  !VXP! begin-object
3412  PushButton : PBAboutOk ( 29 )
3413  ( 85 , 469 )     ( 141 , 31 )    BBAbout
3414  !VXP! begin-resources
3415  labelString : OK
3416  !VXP! end-resources
3417  !VXP! end-object
3418
3419  !VXP! begin-object
3420  Label : LAAboutTitre ( 14 )
3421  ( 44 , 14 )      ( 229 , 34 )    BBAbout
3422  !VXP! begin-resources
3423  labelString : 3D Sun
3424  fontList : -*-helvetica-*-o-*-*-25-*-0-*-*-*-*-*
3425  !VXP! end-resources
3426  !VXP! end-object
3427
3428  !VXP! begin-object
3429  Separator : LAAboutSeparator ( 10 )
3430  ( 94 , 137 )     ( 116 , 13 )    BBAbout
3431  !VXP! end-object
3432
3433  !VXP! begin-object
3434  Label : LACameraView ( 14 )
3435  ( 492 , 274 )    ( 70 , 17 )     Form2
3436  !VXP! begin-resources
3437  labelString : Camera View
3438  y : 170
3439  topAttachment : XmATTACH_WIDGET
3440  topWidget : FrameRenduCreation
3441  leftAttachment : XmATTACH_POSITION
3442  leftPosition : 80
3443  topOffset : 5
3444  !VXP! end-resources
3445  !VXP! end-object
3446
3447  !VXP! begin-object
3448  Label : LACreationView ( 14 )
3449  ( 492 , 173 )    ( 82 , 17 )     Form2
3450  !VXP! begin-resources
3451  labelString : Creation view
3452  y : 170
3453  topAttachment : XmATTACH_WIDGET
3454  topWidget : FrameOpenSave
3455  leftAttachment : XmATTACH_POSITION
```

```
3456  leftPosition : 80
3457  topOffset : 5
3458  !VXP! end-resources
3459  !VXP! end-object
3460
3461  !VXP! begin-object
3462  Frame : FrameRenduCamera ( 21 )
3463  ( 492 , 291 )    ( 113 , 79 )    Form2
3464  !VXP! begin-resources
3465  leftAttachment : XmATTACH_POSITION
3466  leftPosition : 80
3467  rightAttachment : XmATTACH_FORM
3468  rightOffset : 10
3469  topAttachment : XmATTACH_WIDGET
3470  topWidget : LACameraView
3471  !VXP! end-resources
3472  !VXP! end-object
3473
3474  !VXP! begin-object
3475  RowColumn : RCRenduCamera ( 17 )
3476  ( 2 , 2 )        ( 109 , 75 )    FrameRenduCamera
3477  !VXP! begin-resources
3478  radioBehavior : True
3479  !VXP! end-resources
3480  !VXP! end-object
3481
3482  !VXP! begin-object
3483  ToggleButton : TGWireCamera ( 17 )
3484  ( 3 , 3 )        ( 103 , 21 )    RCRenduCamera
3485  !VXP! begin-resources
3486  labelString : Wireframe
3487  !VXP! end-resources
3488  !VXP! begin-callback
3489  activate :      client_data( XtPointer client_data NULL )
3490  void TGWireCamera_activate_cb
3491  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3492  {
3493  }
3494
3495  !VXP! end-callback
3496  !VXP! begin-callback
3497  arm :   client_data( XtPointer client_data NULL )
3498  void TGWireCamera_arm_cb
3499  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3500  {
3501   EtatApplication.CurSceneCamera = Wireframe;
3502   RefreshRender (w, client_data, cbs);
3503  }
3504
3505  !VXP! end-callback
3506  !VXP! end-object
3507
3508  !VXP! begin-object
3509  ToggleButton : TGFlatCamera ( 17 )
3510  ( 3 , 27 )       ( 103 , 21 )    RCRenduCamera
3511  !VXP! begin-resources
3512  labelString : Flat
3513  !VXP! end-resources
3514  !VXP! begin-callback
3515  activate :      client_data( XtPointer client_data NULL )
3516  void TGFlatCamera_activate_cb
3517  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3518  {
3519  }
3520
3521  !VXP! end-callback
3522  !VXP! begin-callback
3523  arm :   client_data( XtPointer client_data NULL )
3524  void TGFlatCamera_arm_cb
3525  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3526  {
```



```
3527   EtatApplication.CurSceneCamera = FlatShading;
3528   RefreshRender (w, client_data, cbs);
3529  }
3530
3531  !VXP! end-callback
3532  !VXP! end-object
3533
3534  !VXP! begin-object
3535  ToggleButton : TGSmoothCamera ( 17 )
3536  ( 3 , 51 )       ( 103 , 21 )    RCRenduCamera
3537  !VXP! begin-resources
3538  labelString : Smooth
3539  set : True
3540  !VXP! end-resources
3541  !VXP! begin-callback
3542  activate :      client_data( XtPointer client_data NULL )
3543  void TGSmoothCamera_activate_cb
3544  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3545  {
3546  }
3547
3548  !VXP! end-callback
3549  !VXP! begin-callback
3550  arm :   client_data( XtPointer client_data NULL )
3551  void TGSmoothCamera_arm_cb
3552  (Widget w, XtPointer client_data, XmToggleButtonCallbackStruct *cbs)
3553  {
3554   EtatApplication.CurSceneCamera = Gouraud;
3555   RefreshRender (w, client_data, cbs);
3556  }
3557
3558  !VXP! end-callback
3559  !VXP! end-object
```