```
()
Prgm
DispG
Local cx1,cy1,cx2,cy2,cxs,cys,asp,k,o,prevpic,redraw,t,tmpzoom,slots
{0,0}→k
{0,0}→o
StoPic prevpic
(xmax-xmin)/158→cxs
(ymax-ymin)/76→cys
158/76→asp
xmin→cx1
ymax→cy1
xmax→cx2
ymin→cy2

misc\statline("idle")

If not isVar(ωprgmvrs\zooms) Then
 newMat(10,6)→ωprgmvrs\zooms
EndIf
If string(ωprgmvrs\zooms[10])="[[0,0,0,0,0,0]]" Then
 [[xmin,xmax,ymin,ymax,xscl,yscl]]→ωprgmvrs\zooms[10]
EndIf

misc\statline("msg:Move the box to pan/zoom…")
true→redraw
Lbl drawbox
If redraw Then
 RplcPic prevpic
 Line cx1,cy1,cx2,cy1
 Line cx2,cy1,cx2,cy2
 Line cx2,cy2,cx1,cy2
 Line cx1,cy2,cx1,cy1
 false→redraw
EndIf
Goto finishbx


getKey()→k[1]
While k[1]≠13 ©[ENTER]
 rotate(k)→k
 getKey()→k[1]

 If k[1]=337 Then  ©←
  If k[1]=k[2] Then
   {¯5,0}→o
  Else
   {¯1,0}→o
  EndIf

 ElseIf k[1]-4096=337 Then  ©[2nd]+[←]
  {¯20,0}→o

 ElseIf k[1]=340 Then  ©→
  If k[1]=k[2] Then
   {5,0}→o
  Else
   {1,0}→o
  EndIf

 ElseIf k[1]-4096=340 Then  ©[2nd]+[→]
```

```
  {20,0}→o

 ElseIf k[1]=344 Then  ©↓
  If k[1]=k[2] Then
   {0,¯5}→o
  Else
   {0,¯1}→o
  EndIf

 ElseIf k[1]-4096=344 Then  ©[2nd]+[↓]
  {0,¯20}→o

 ElseIf k[1]=338 Then  ©↑
  If k[1]=k[2] Then
   {0,5}→o
  Else
   {0,1}→o
  EndIf

 ElseIf k[1]-4096=338 Then  ©[2nd]+[↑]
  {0,20}→o

 ElseIf k[1]=339 Then  ©↑←
  If k[1]=k[2] Then
   {¯5,5}→o
  Else
   {¯1,1}→o
  EndIf

 ElseIf k[1]=342 Then  ©↑→
  If k[1]=k[2] Then
   {5,5}→o
  Else
   {1,1}→o
  EndIf

 ElseIf k[1]=345 Then  ©↓←
  If k[1]=k[2] Then
   {¯5,¯5}→o
  Else
   {¯1,¯1}→o
  EndIf

 ElseIf k[1]=348 Then  ©↓→
  If k[1]=k[2] Then
   {5,¯5}→o
  Else
   {1,¯1}→o
  EndIf

 ElseIf k[1]=43 Then  ©[+]
  cx1-asp*cxs*5→cx1
  cx2+asp*cxs*5→cx2
  cy1+cys*5→cy1
  cy2-cys*5→cy2
  true→redraw

 ElseIf k[1]-4096=43 Then  ©[2nd]+[+]
  cx1-asp*cxs→cx1
  cx2+asp*cxs→cx2
  cy1+cys→cy1
  cy2-cys→cy2
  true→redraw

 ElseIf k[1]=45 Then  ©[-]
  cx1+asp*cxs*5→cx1
  cx2-asp*cxs*5→cx2
  cy1-cys*5→cy1
  cy2+cys*5→cy2
  true→redraw

 ElseIf k[1]-4096=45 Then  ©[2nd]+[-]
  cx1+asp*cxs→cx1
  cx2-asp*cxs→cx2
  cy1-cys→cy1
  cy2+cys→cy2
  true→redraw

 ElseIf k[1]=48 Then  ©0
  [[xmin,xmax,ymin,ymax,xscl,yscl]]→tmpzoom
  ωprgmvrs\zooms[10,1]→xmin
  ωprgmvrs\zooms[10,2]→xmax
  ωprgmvrs\zooms[10,3]→ymin
  ωprgmvrs\zooms[10,4]→ymax
  ωprgmvrs\zooms[10,5]→xscl
  ωprgmvrs\zooms[10,6]→yscl
  tmpzoom→ωprgmvrs\zooms[10]
  true→redraw
  Goto quit

 ElseIf k[1]=49 Then  ©1
  xmin→cx1
  ymax→cy1
  xmax→cx2
  ymin→cy2
  true→redraw

 ElseIf k[1]=258 Then  ©[STO▶]
  misc\statline("busy")
  misc\statline("msg:Loading…")
  ""→slots
  For t,1,9
   If string(ωprgmvrs\zooms[t])="[[0,0,0,0,0,0]]" Then
    slots&","&"   Slot "&string(t)→slots
   Else
    slots&","&" ◆ Slot "&string(t)→slots
   EndIf
  EndFor

  misc\flib2("menu:Save current window"&slots)
  misc\statline("idle")
  If fl[1]≠0 Then
   [[xmin,xmax,ymin,ymax,xscl,yscl]]→ωprgmvrs\zooms[fl[1]]
   misc\statline("msg:✓ Saved to slot "&string(fl[1]))
  EndIf

 ElseIf k[1]=4354 Then  ©[RCL]
  misc\statline("busy")
  misc\statline("msg:Loading…")
  ""→slots
  For t,1,9
   If string(ωprgmvrs\zooms[t])="[[0,0,0,0,0,0]]" Then
```

```
    slots&","&"   Slot "&string(t)→slots
   Else
    slots&","&" ◆ Slot "&string(t)→slots
   EndIf
  EndFor

  misc\flib2("menu:Recall window"&slots)
  misc\statline("idle")
  If fl[1]≠0 Then
   If ωprgmvrs\zooms[fl[1],1]≥ωprgmvrs\zooms[fl[1],2] or ωprgmvrs\zooms[fl[1],3]≥ωprgmvrs\zooms[fl[1],4] Then
    misc\statline("msg:▪ ERROR: Invalid or blank slot.")
   Else
    [[xmin,xmax,ymin,ymax,xscl,yscl]]→ωprgmvrs\zooms[10]
    ωprgmvrs\zooms[fl[1],1]→xmin
    ωprgmvrs\zooms[fl[1],2]→xmax
    ωprgmvrs\zooms[fl[1],3]→ymin
    ωprgmvrs\zooms[fl[1],4]→ymax
    ωprgmvrs\zooms[fl[1],5]→xscl
    ωprgmvrs\zooms[fl[1],6]→yscl
    true→redraw
    Goto quit
   EndIf
  EndIf

 ElseIf k[1]=257 Then  ©[BKSPC]
  misc\statline("busy")
  misc\statline("msg:Loading…")
  ""→slots
  For t,1,9
   If string(ωprgmvrs\zooms[t])="[[0,0,0,0,0,0]]" Then
    slots&","&"   Slot "&string(t)→slots
   Else
    slots&","&" ◆ Slot "&string(t)→slots
   EndIf
  EndFor
  misc\statline("idle")
  misc\flib2("menu:Slot to delete"&slots&",All Slots")
  If fl[1]≠0 and fl[1]≠10 Then
   [[0,0,0,0,0,0]]→ωprgmvrs\zooms[fl[1]]
   misc\statline("idle")
   misc\statline("msg:✓ Erased slot "&string(fl[1]))
  EndIf
  If fl[1]=10 Then
   newMat(10,6)→ωprgmvrs\zooms
   [[xmin,xmax,ymin,ymax,xscl,yscl]]→ωprgmvrs\zooms[10]
   misc\statline("idle")
   misc\statline("msg:✓ Erased all zoom slots.")
  EndIf
  If fl[1]=0 Then
   misc\statline("idle")
  EndIf

 ElseIf k[1]=4353 Then  ©[INS]
  Dialog
   Title "Restore Backup Zooms"
   Text "Restoring backup zooms will overwrite"
   Text "all current slots."
   Text ""
   Text "This cannot be undone."
  EndDlog
  misc\statline("idle")
  If ok=1 Then
   Try
    ωprgmvrs\zoomsbak→ωprgmvrs\zooms
    misc\statline("msg:✓ Restored backup zooms.")
   Else
    ClrErr
    misc\statline("msg:▪ ERROR: Backup zooms not found.")
   EndTry
  EndIf

 ElseIf k[1]=264 or k[1]=263 Then  ©[ESC] or [CLEAR]
  RplcPic prevpic
  Goto quit

 ElseIf k[1]=277 Then  ©[HOME]
  RplcPic prevpic
  DispHome
  Goto quit
 EndIf

 If string(o)≠"{0,0}" Then
  cx1+o[1]*cxs→cx1
  cx2+o[1]*cxs→cx2
  cy1+o[2]*cys→cy1
  cy2+o[2]*cys→cy2
  {0,0}→o
  true→redraw
 EndIf

 Goto drawbox
 Lbl finishbx
EndWhile:true→redraw


If xmin=cx1 and ymax=cy1 and xmax=cx2 and ymin=cy2 Then
 false→redraw
 RplcPic prevpic
 Goto quit
EndIf

If cx2<cx1 or cy1<cy2 Then
 DelVar fl
 RplcPic prevpic
 misc\statline("msg:▪ ERROR: Invalid zoom window. Try again")
 Goto abort
Else
 [[xmin,xmax,ymin,ymax,xscl,yscl]]→ωprgmvrs\zooms[10]
 cx1→xmin
 cx2→xmax
 cy1→ymax
 cy2→ymin
EndIf

Lbl quit
DelVar fl
If redraw Then
 misc\statline("busy")
 ClrDraw
 DispG
Else
```

```
 misc\statline("clr")
EndIf

Lbl abort
EndPrgm
```