Subject: Re: write_gif problem: Garbled Image
Posted by David Foster on Tue, 15 Jun 1999 07:00:00 GMT
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Chris McCarthy wrote:
>
> Hi Folks,
>
>   I'm making .gifs of my data using write_gif
> after grabing the display using tvrd() (data are
> displayed using the "display.pro", similar to "tv",
> then annotated)
>
> With a single program I generate 8 images, and occasionally
> one of the .gifs comes out 80% garbled. Top 20% is
> ok. I get the error message:
>
> % TVRD: Unable to create X windows Window completely
> off screen, nothing read.

<http references to example images snipped>

>
> In all cases I am watching the displayed images and they
> look fine. Seems that tvrd() is having a problem with them
> but why?   Any ideas would be great. Thanks a lot
>
> Chris McCarthy
> UCLA Astronomy

Chris -

TVRD has problems reading a scrollable draw widget, and can have
problems reading a window if it is iconified or obscured, at least
under X windows. I believe David Fanning has an article on this
at his website: www.dfanning.com .

You might try an approach I've used in a SAFE_TVRD(), which creates
a new pixmap window, uses DISPLAY, COPY=[] to copy the window into
the pixmap, and then uses TVRD() to read from the pixmap. Seems to
work in all situations. If there is a more straightforward approach
to this problem I'd love to see it. Here's the code:

```
;------- Cut here ------------------------------------------------
;   SAFE_TVRD.PRO  6-11-97   DSFoster
;
; This function is a safer version of IDL's TVRD() function. First,
; there was a bug related to the reading from a scrollable draw. Also,
```

```
; the TVRD() function uses an X routine that has problems if the
; window is obscured or iconified. This routine uses the DEVICE, COPY=
; command to first copy the window contents to a new window pixmap,
; and then reads from this pixmap into the array.
;
; Modifications
;
;  6-11-97 DSF Check validity of draw widget.

FUNCTION safe_tvrd, draw_widget, xsize, ysize

on_error, 2

if (widget_info(draw_widget, /valid_id) eq 0) then begin
   return, -1
endif else if (widget_info(draw_widget, /name) ne 'DRAW') then begin
   return, -1
endif else begin
   old_window = !d.window
   window, xsize=xsize, ysize=ysize, /free, /pixmap  ; Create new
window

   widget_control, draw_widget, get_value=window
   device, copy=[0,0, xsize,ysize, 0,0, window]     ; Copy into new
window

   image = tvrd()                           ; Read into array
   wdelete, !d.window
   if (old_window ne -1) then wset, old_window
   return, image
endelse

END
;--------- Cut here ------------------------------------------------
```

Dave Foster
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