Subject: Frame format for Digital Video?
Posted by Matt Wood on Thu, 18 Dec 2003 13:20:14 GMT
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I'm generating some scientific animations that will be edited for digital video (NTSC standard). Can anyone please help me on what the pixel format should be? I know NTSC uses interlaced video of 480x720, but am confused about what format I should use for my IDL generated frames. I did a quck google search, but didn't find anything (perhaps didn't chose key words well).

Thanks for any help or pointers!

Matt Wood (">wood@fit.edu) www.astro.fit.edu/wood

Subject: Re: Frame format for Digital Video?
Posted by Rick Towler on Mon, 29 Dec 2003 05:43:03 GMT
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"Matt Wood" wrote in message ...

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- > video (NTSC standard). Can anyone please help me on what the pixel format
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- > well).

It all depends on your editing package. In general you would do best with a full frame (uncompressed) source file which you could edit in say Premier and then encode to whatever your target requires. Your target of "Digital Video" is a little vague (unless you literally mean DV).

The size of your frame depends on your target. 352x240 (VCD), 480x480 (SVCD), 720x480 (DVD), 640x480 (WMV, TV)... You'll probably want to set the size of your frame in IDL based on your target. Most editing/encoding programs allow you to crop/scale your output so you have a bit of wiggle room but in general it is easier to get it right from the beginning.

How you choose to encode it also depends on your target. VCD uses the MPEG-1 format, 1.15 mbits/sec fixed, SVCD uses MPEG-2 at 2.6 mbits/sec variable. DVD 3-9 mbits/sec variable. I would guess that if it was for broadcast that the encoded format wouldn't matter and full frame would be best.

How to generate this source file? If you are using IDL on windows pick up IDL2AVI (a windows only .dlm) from Ronn Kling's site: www.kilvarock.com. Use it to output an uncompressed AVI. If you aren't using IDL on windows but have access to a PC you can generate the frames as .png files and then use a program like VideoMach (shareware) on the PC to stitch them together as an uncompressed AVI. I'm sure there are similar programs available for Mac. If you only have access to a unix box... go buy a cheap pc.

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