

%BEG proc04\_7data\_FLVGF

%END proc04\_7data\_FLVGF

%BEG proc02\_Visev\_FLVGF

%END proc02\_Visev\_FLVGF

%BEG proc00\_FF\_LM\_FLVGF

%END proc00\_FF\_LM\_FLVGF

%BEG proc00\_FF\_LM\_FLVFL

%END proc00\_FF\_LM\_FLVFL

%Example: combined procedure

```
*****  
/proc04_7data_FLVGF {  
  %BEG proc04_7data_FLVGF  
  %The procedure proc04_7data_FLVGF is used only once in Global File  
  %VisevEi 07 array def %for real data (i=0,6) of visual evaluation  
  %0,e08 1,e24 2,e48 3,e02 4,e24 5,e46 6,e68 %indexG  
  [0,500 0,500 0,500 0,500 0,500 0,500 0,500] %data, for manuel change  
  /al VisevEx 0 get def %BEG calculation VisevFi (i=0,8) from 7data  
  /bl al VisevEx 1 get mul def %b1  
  /b2 al def %b2  
  /b3 1 b2 sub VisevEx 2 get mul b2 add def %b3  
  /VisevGi 09 array def %for real data (i=0,8) of visual evaluation  
  VisevGi 0 0 put  
  VisevGi 1 b1 0 sub VisevEi 3 get mul put %c1  
  VisevGi 2 b1 put %c2  
  VisevGi 3 b2 b1 sub VisevEi 4 get mul b1 add put %c3  
  VisevGi 4 b2 put %c4  
  VisevGi 5 b3 b2 sub VisevEi 5 get mul b2 add put %c5  
  VisevGi 6 b3 put %c6  
  VisevGi 7 1 b3 sub VisevEi 6 get mul b3 add put %c7  
  VisevGi 8 1 put  
  %def %END proc04_7data_FLVGF  
*****  
/proc02_Visev_FLVGF {  
  %BEG proc02_Visev_FLVGF  
  %for visual data with Fast Linear Visual Local File (FLVGF)  
  %The procedure proc01_7data_FLVGF is used only once in Local File  
  /xrehj 10 array def /yreh8 10 array def %re=reall, j=0,8  
  /xinhj 10 array def /yinh8 10 array def %in=invers, j=0,8  
  /xrehj 1025 array def /yrehj 1025 array def  
  /xinhj 1025 array def /yinhj 1025 array def  
  /xred8 10 array def /yred8 10 array def %re=reall, j=0,8  
  /xind8 10 array def /yind8 10 array def %in=invers, j=0,8  
  /xredj 1025 array def /yredj 1025 array def  
  /xindj 1025 array def /yindj 1025 array def  
  0 1 8 {/j exch def %j=0,8  
    xred8 j 0,125 mul put  
    yred8 j,VisevFi j get put  
    xind8 j,yred8 j get put  
    yind8 j,xred8 j get put  
    xreh8 j,xred8 j get 255 mul put  
    yreh8 j,yred8 j get 255 mul put  
    xinh8 j,yreh8 j get put  
    yinh8 j,xreh8 j get put  
  } for %j=0,8  
  xred8 9 1 put yred8 9 1 put  
  xind8 9 1 put yind8 9 1 put  
  xreh8 9 255 put yreh8 9 255 put  
  xind8 9 255 put yind8 9 255 put  
  %j=0,1023  
  0 1 7 {/k exch def %k=0,8  
  0 1 127 {/n exch def %n=0,127  
    /j k 128 mul n add def  
    xredj j 1023 div put  
    yredj j,yred8 k 1 add get yred8 k get sub  
    n 128 div mul yred8 k get add put  
    xindj j,yredj j get put  
    yindj j,xredj j get put  
  } for %n=0,127  
  } for %k=1,8  
  0 1 1023 {/j exch def %j=0,1023  
    xrehj j,xredj j get 1023 mul put  
    yrehj j,yredj j get 1023 mul put  
    xinhj j,yredj j get put  
    yinhj j,xredj j get put  
  } for %j=0,1023  
  xredj 1024 1 put yredj 1024 1 put  
  xindj 1024 1 put yindj 1024 1 put  
  xrehj 1024 1023 put yrehj 1024 1023 put  
  xinhj 1024 1023 put yinhj 1024 1023 put  
  %def %END proc01_Visev_FLVGF  
*****  
/proc00_FF_LM_FLVGF {  
  %BEG proc00_FF_LM_FLVGF  
  %This procedure is used for any rgb data in proc00_1MR_FLVGF  
  /yed exch def  
  /yeh yed 1023 mul cvi def  
  /xinh yrehj yeh get def  
  /xinh 1023 div  
} def
```

```
%END proc00_FF_LM_FLVFL  
*****  
%default experimental, no gammaG value  
/iproc1MR 1 def %optional application example  
iproc1MR 1 eq {  
  %main Frame_File.Linearisation_Method (FF_LM)  
  proc00_1MR_FLVGF proc04_7data_FLVGF proc02_Visev_FLVGF}  
  if
```

```
*****  
/proc05_gammaG_xyreh {  
  %BEG proc05_gammaG_xyreh  
  %BEG Global (G) gamma and calculation of xyreh_1024  
  /gammaGi 21 array def  
  /gammaGi %rel. gamma according to ISO 9240-706:2018  
  %0 1 2 3 4 5 6 7  
  [0,475 0,550 0,625 0,700 0,775 0,849 0,924 1,000  
  %8 9 10 11 12 13 14 15  
  1,000 1,081 1,176 1,290 1,428 1,600 1,818 2,105  
  %16 17 18 19 20  
  2,000 0,500 1,500 0,666 1,000] def  
  
/gamma gammaGi indexGi get def  
/xrehj 1024 array def /yrehj 1024 array def  
/xinhj 1024 array def /yinhj 1024 array def  
  
%calculation of the table xyreh_1024 (h=hex) of real values (reh) with gamma  
0 1 1023 {/j exch def %j=0,1023  
  xrehj j j put  
  yrehj j,j 1023 div gamma exp 1023 mul cvi put  
} for %j=0,1023  
*****  
/proc06_FF_LM_FLVGF {  
  %BEG proc06_FF_LM_FLVGF  
  /yed exch def  
  /yeh yed 1023 mul cvi def  
  /xinh yrehj yeh get def  
  xinh 1023 div  
} def %END proc06_FF_LM_FLVGF  
*****  
} def %END proc05_gammaG_xyreh  
*****  
/proc00_1MR_FLVGF {  
  %BEG proc00_1MR_FLVGF  
  %main procedure Fast Linear Visual Local File (FLVGF)  
  
/FF_LM_SetgrayFLVGF0 {  
  setgray bind def  
  /FF_LM_SetrgbcolorFLVGF0 {setrgbcolor} bind def  
  /FF_LM_SetCMYKColorFLVGF0 {setcmykcolor} bind def  
  /FF_LM_TransferFLVGF0 {settransfer} bind def  
  /FF_LM_SetColorTransferFLVGF0 {setcolortransfer} bind def  
  
/Setgray {  
  %BEG procedure setgrayFLVGF  
  dup dup FF_LM_SetrgbcolorFLVGF  
} def %END procedure setgrayFLVGF  
  
/SetCMYKColor {  
  %BEG procedure setCMYKColorFLVGF  
  /FF_LM_kFLVGF exch def /FF_LM_yFLVGF exch def  
  /FF_LM_mFLVGF exch def /FF_LM_cFLVGF exch def  
  FF_LM_kFLVGF 0 eq {  
    1 FF_LM_cFLVGF sub 1 FF_LM_mFLVGF sub  
    1 FF_LM_yFLVGF sub FF_LM_SetrgbcolorFLVGF  
    {1 FF_LM_kFLVGF sub dup dup  
      FF_LM_SetrgbcolorFLVGF} ifelse  
  } def %END procedure setCMYKColorFLVGF  
  
/SetRGBColor {  
  %BEG procedure setrgbcolorFLVGF  
  /FF_LM_bFLVGF exch def /FF_LM_gFLVGF exch def  
  /FF_LM_rFLVGF exch def  
  FF_LM_rFLVGF FF_LM_gFLVGF FF_LM_bFLVGF  
  FF_LM_SetrgbcolorFLVGF  
} def %BEG procedure setrgbcolorFLVGF  
  
/FF_LM_SetrgbColorFLVGF {  
  %BEG FF_LM_SetrgbcolorFLVGF  
  /FF_LM_bFLVGF exch def /FF_LM_gFLVGF exch def  
  /FF_LM_rFLVGF exch def  
  FF_LM_rFLVGF 0 le{/FF_LM_rFLVGF 0,0001 def} if  
  FF_LM_gFLVGF 0 le{/FF_LM_gFLVGF 0,0001 def} if  
  FF_LM_bFLVGF 0 le{/FF_LM_bFLVGF 0,0001 def} if  
  /FF_LM_r1FLVGF FF_LM_r0FLVGF proc06_FF_LM_FLVGF def  
  /FF_LM_g1FLVGF FF_LM_g0FLVGF proc06_FF_LM_FLVGF def  
  /FF_LM_b1FLVGF FF_LM_b0FLVGF proc06_FF_LM_FLVGF def  
  FF_LM_rFLVGF FF_LM_gFLVGF FF_LM_bFLVGF  
  FF_LM_SetrgbColorFLVGF0} def %END FF_LM_SetrgbcolorFLVGF  
  
/FF_LM_TransferFLVGF {  
  %BEG FF_LM_TransferFLVGF  
  {proc06_FF_LM_FLVGF}  
  FF_LM_TransferFLVGF0 def %END FF_LM_TransferFLVGF  
  /SetTransfer {FF_LM_TransferFLVGF} def  
  
/FF_LM_ColorTransferFLVGF {  
  %BEG FF_LM_ColorTransferFLVGF  
  {proc06_FF_LM_FLVGF}  
  {proc06_FF_LM_FLVGF}  
  FF_LM_ColorTransferFLVGF0 def  
  /SetColorTransfer {FF_LM_ColorTransferFLVGF} def  
} def %END proc00_1MR_FLVGF  
*****  
0 1 20{/indexGi exch def %loop for 21 Global gammaG values  
/iproc1MR 1 def %optional application example  
iproc1MR 1 eq {  
  %main Frame_File.Linearisation_Method (FF_LM)  
  proc00_1MR_FLVGF proc05_gammaG_xyreh}  
  if  
*****
```

hec20-7n

http://farbe.li.tu-berlin.de/hec2/hec2l0na.txt /ps; only vector graphic VG; start output  
see separate images of this page: http://farbe.li.tu-berlin.de/hec2.htm

TUB-test chart hec2; EPS-example code of eps images, see EPS code FLVGF within  
http://color.li.tu-berlin.de/hec0/hec010np.txt and in images http://color.li.tu-berlin.de/hecs.htm