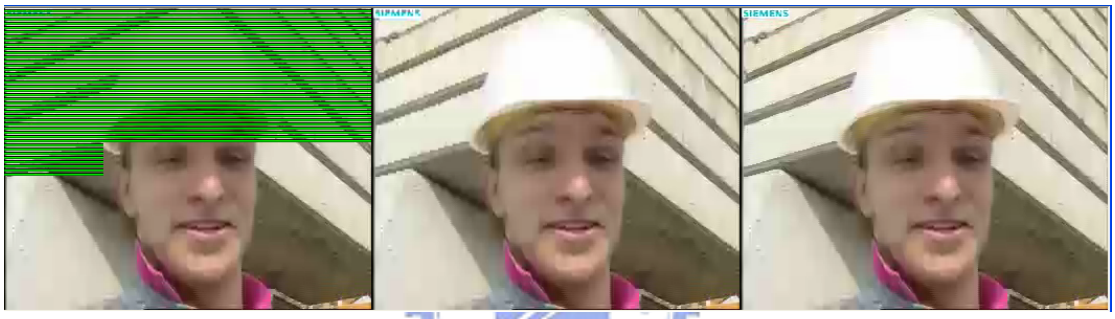
Chapter 5

Experiment Results

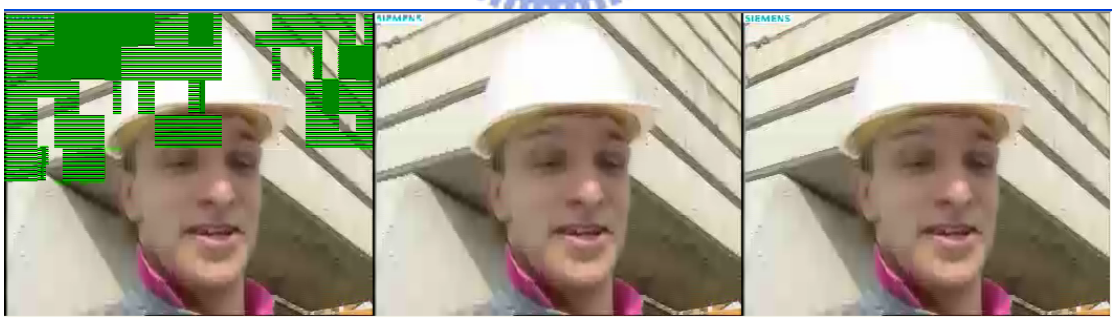
5.1 On Base Layer

In this section, base layer results are shown and their comparisons with frame coding are given.

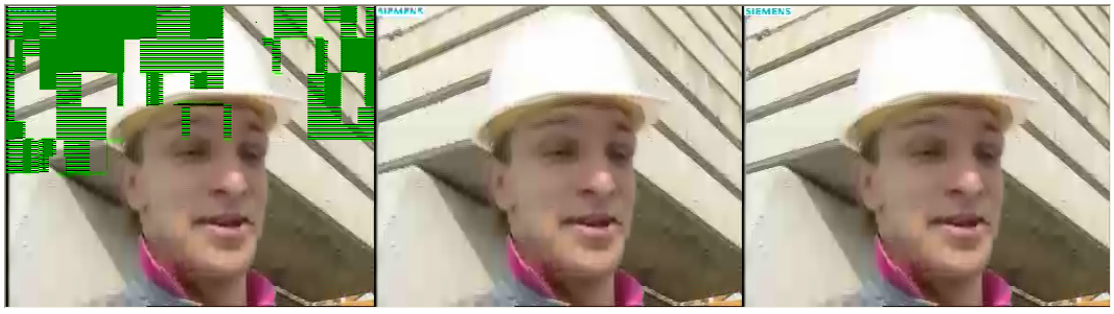
FrameNo. 0



FrameNo. 1

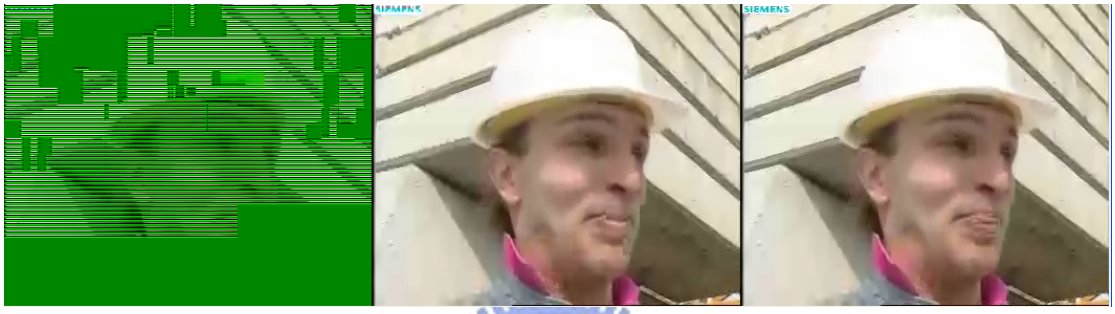


FrameNo. 2



FrameNo. 5

FrameNo. 6



FrameNo. 46

FrameNo. 47

FrameNo. 184

FrameNo. 185

FrameNo. 186

FrameNo. 187

FrameNo. 219

FrameNo. 220

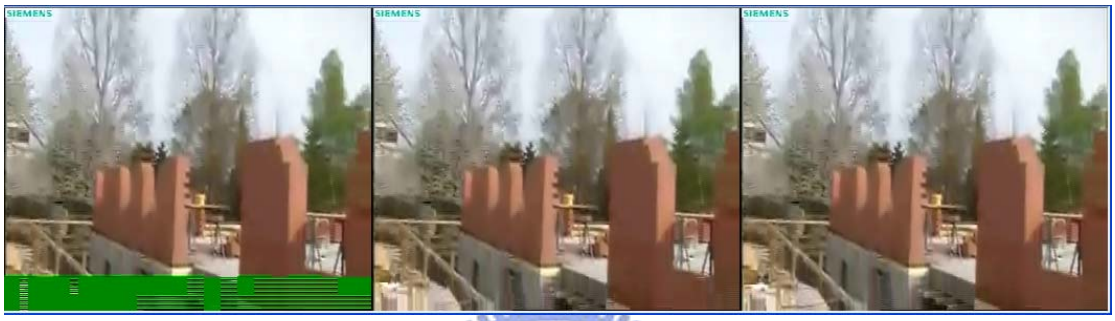


Fig 5.1 Base layer experiment results with the FSPFC structure (Foreman)

PLR= 0.016

Left: loss without post processing

Middle: loss with the proposed post processing method

Right: no loss

FrameNo. 6

FrameNo. 7

FrameNo. 8

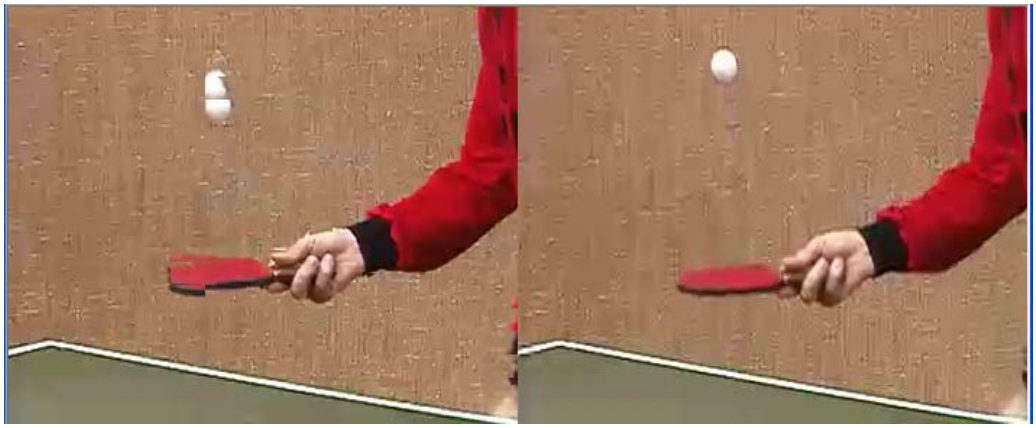
FrameNo. 10

FrameNo. 11

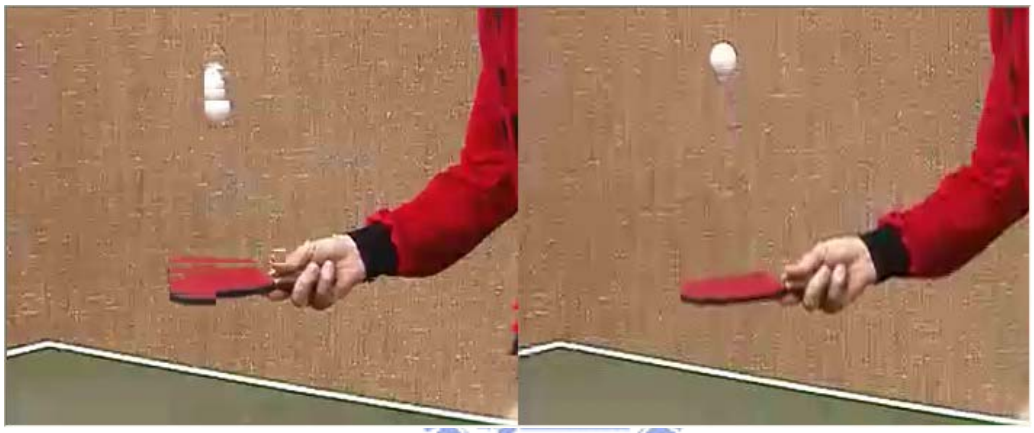
FrameNo. 12

Fig 5.2 Base layer experiment results. Comparison between the FSPFC structure and the frame coding structure
(Test sequence: Foreman). PLR= 0.016
Top-Left: loss without post processing with frame coding
Top-Right: loss with post processing with frame coding
Bottom-Left: loss without post processing with FSPFC
Bottom-Middle: loss with the proposed post processing method with FSPFC
Bottom-Right: reconstructed video without loss

FrameNo. 2



FrameNo. 3



FrameNo. 4

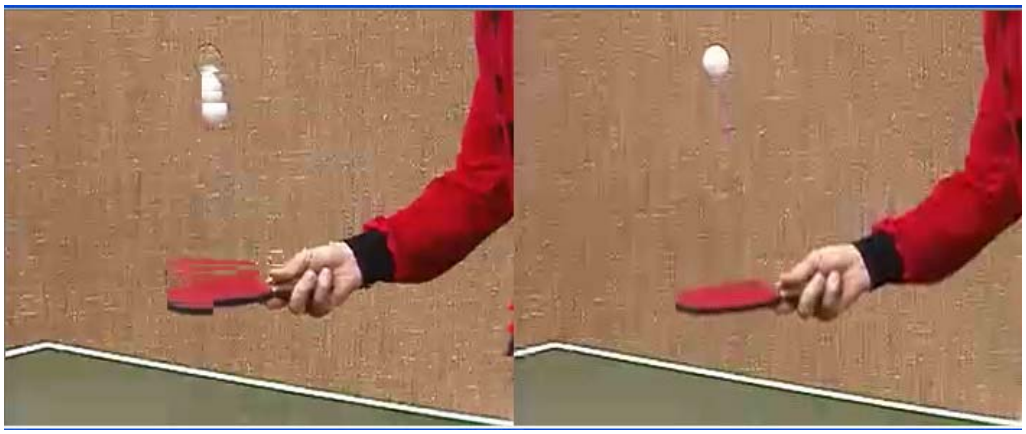


Fig 5.3 Base layer experiment results. Comparison between the FSPFC structure and the frame coding structure
(Test sequence: Stephan). PLR= 0.049
Left: loss with post processing with frame coding
Right: loss with the proposed post processing method with FSPFC

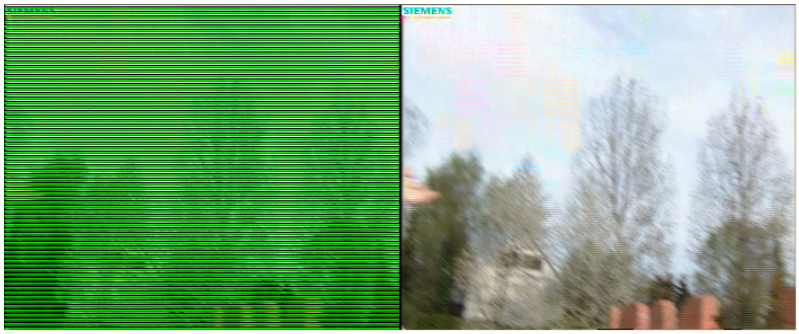
5.2 On Enhancement Layer

In this section, enhancement layer results are shown and comparisons with frame coding are given.

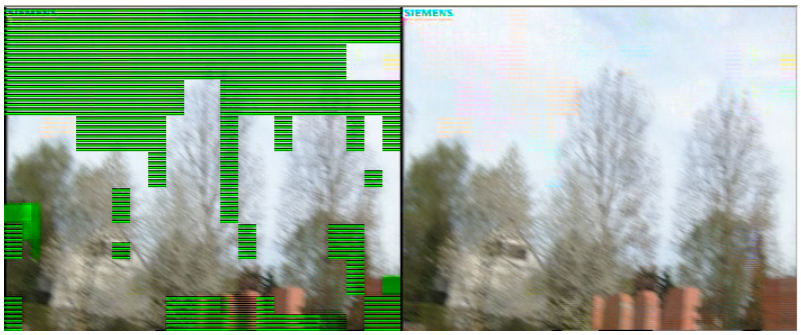
FrameNo. 0 (enhancement bit-planes= 6)

FrameNo. 1 (enhancement bit-planes= 6)

FrameNo. 206 (enhancement bit-planes= 6)

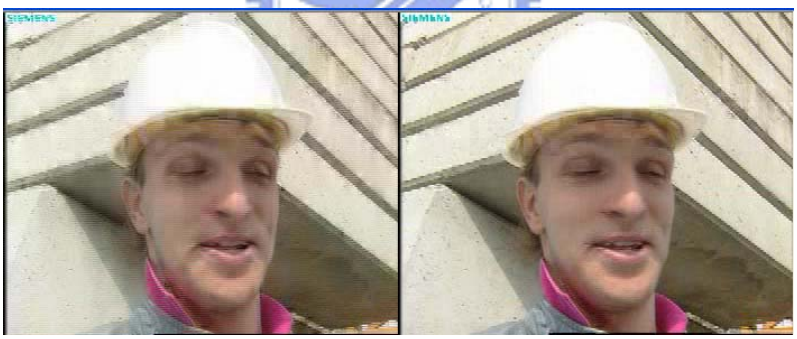


FrameNo. 207 (enhancement bit-planes= 6)



FrameNo. 0 (enhancement bit-planes= 5)

FrameNo. 1 (enhancement bit-planes= 5)

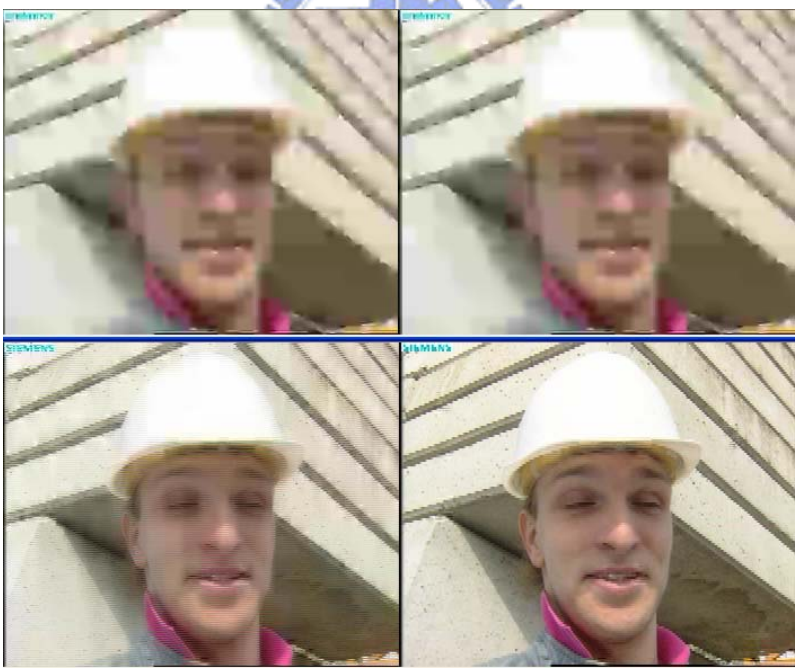


FrameNo. 0 (enhancement bit-planes= 4)

FrameNo. 1 (enhancement bit-planes= 4)

Fig 5.4 Enhancement layer experiment results with the fld_fld coding
(Test sequence: Foreman)
PLR= 0.016, α= 1
Left: loss without post processing
Right: loss with the proposed post processing method

FrameNo. 0 (enhancement bit-planes= 6)



FrameNo. 1 (enhancement bit-planes= 6)

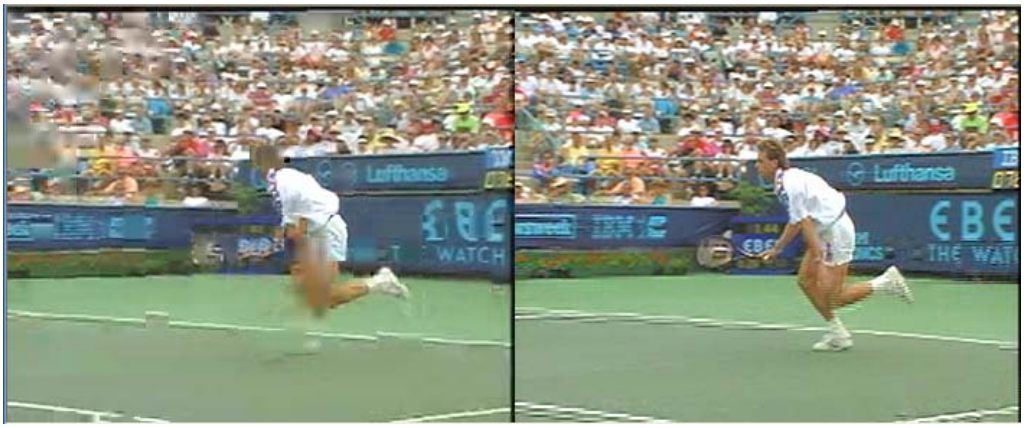
FrameNo. 2 (enhancement bit-planes= 6)

Fig 5.5 Enhancement layer experiment results. Comparison between the fld_fld coding and the frm_frm coding
(Test sequence: Foreman). PLR=0.016
Top-Left: loss without post processing with frm_frm coding
Top-Right: loss with post processing with frm_frm coding
Bottom-Left: loss without post processing with fld_fld coding
Bottom-Middle: loss with the proposed post processing method with fld_fld coding

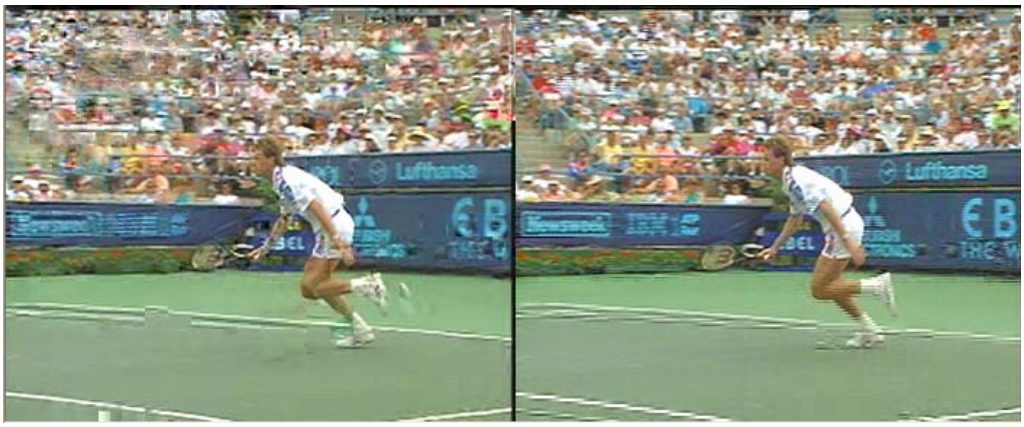
FrameNo. 0 (enhancement bit-planes=2)

FrameNo. 1 (enhancement bit-planes=2)

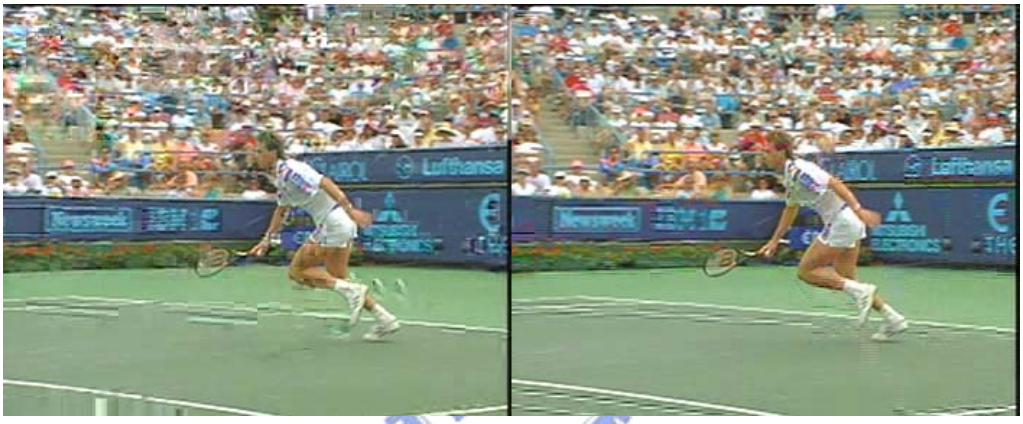
FrameNo. 242 (enhancement bit-planes=2)



FrameNo. 243 (enhancement bit-planes=2)



FrameNo. 244 (enhancement bit-planes=2)



FrameNo. 245 (enhancement bit-planes=2)

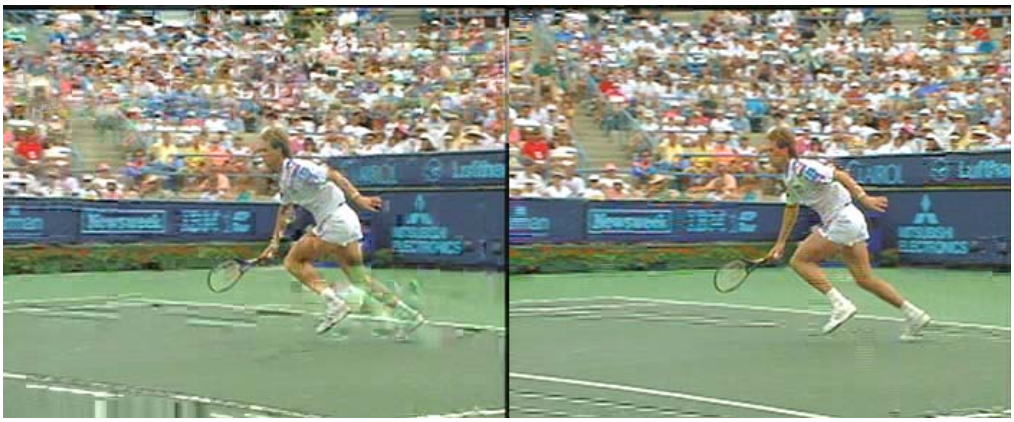


Fig 5.6 Enhancement layer experiment results. Comparison between the fld_fld coding and the frm_frm coding
(Test sequence: Stefan). PLR=0.049
Left: loss with post processing with frm_frm coding
Right: loss with the proposed post processing method with fld_fld coding