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Normally, image data have an important detail only in some regions. One feature of JPEG2000 still image coding standard is the ability to code region of interest (ROI) with higher quality. The standard defines two methods for ROI coding, General Shift and Maximum bit-plane shift (Maxshift). General Shift can select the shifting value of ROI, but the ROI mask needs to be sent to decoder whereas Maxshift does not need to. However, Maxshift does not allow the selection of shifting value to define the relative importance between ROI and background (BG) coefficients. Later Bit-plane by Bit-plane Shift (BbBShift) and Generalized Bit-plane by Bit-plane Shift (GBbBShift) were proposed. These two methods can select the scaling value without the need to send shape information, but these two methods are not applicable for multiple ROIs coding. Lately, the Partial Significant Bit-plane Shift (PSBShift) was proposed. It offers different degrees of interest and also supports multiple ROIs coding. However, PSBShift sacrifices some qualities of ROI region in exchange of the improved quality of BG region. To some extent, it causes the ROI region to be coded at lesser quality than that of BG. In this thesis, we analyze the advantages and disadvantages of each method and propose the use of PSBShift in conjunction with Maxshift scheme to achieve the better quality in ROI with the ability to adjust degree of interest relative to their importance.