Image fusion is capable of integrating different imagery to produce more information than can be derived from a single sensor. So far, many pixel level fusion methods for remote sensing images have been presented, in which the lower resolution multispectral image's structural and textural details are enhanced by adopting the higher resolution panchromatic image corresponding to the multispectral image. For this reason, it is also called pan sharpening. In this paper we will list current situation of pixel level image fusion by dividing those methods into three categories, i.e., component substitution technique, modulation based technique and multi-resolution analysis based technique according to fusion mechanism. Also, the properties of the three categories for applications are discussed.

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Index Terms

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