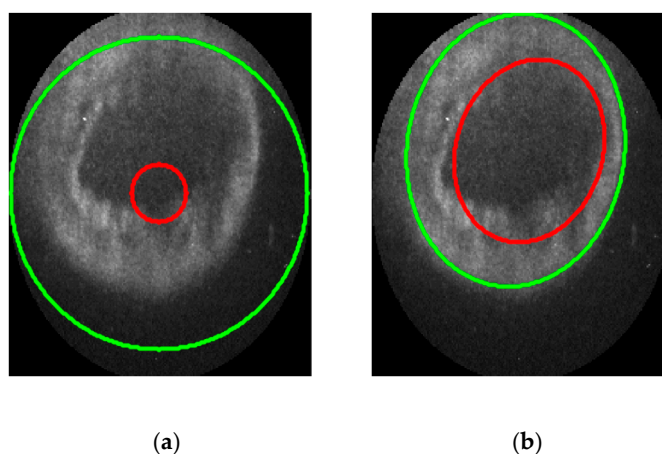
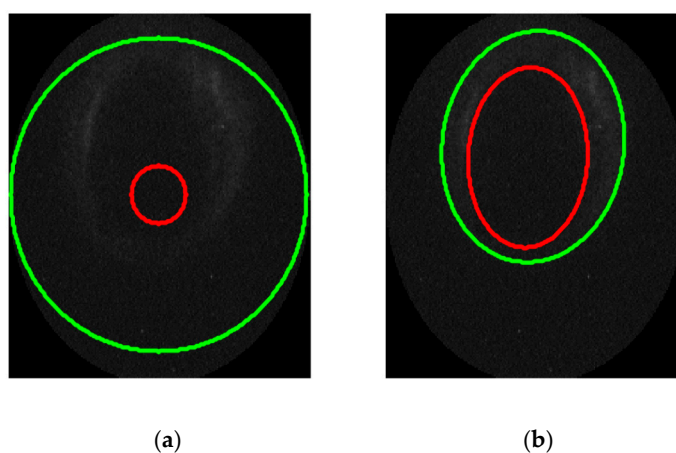


# Supplementary Materials: UVI Image Segmentation of Auroral Oval: Dual Level Set and Convolutional Neural Network Based Approach

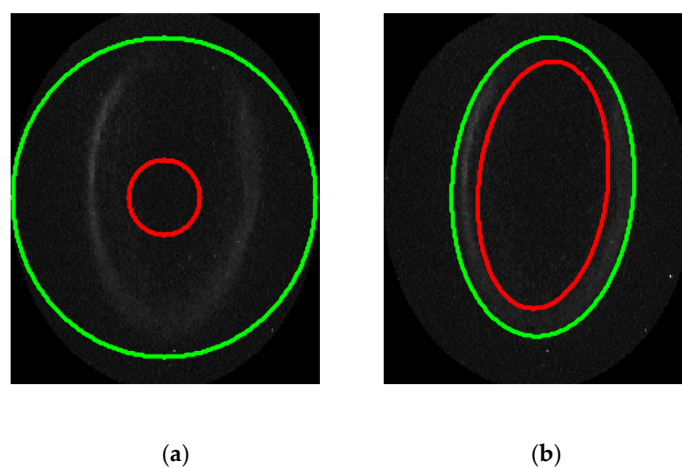
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**Figure S1.** The contour initializations of different methods when segmenting the first UVI image in Section 4.3.1. (a) Initial level set curves (concentric circles) of DFALS. (b) Initial level set curves (LLS-RHT result) of SIILSM and LIDLSM.



**Figure S2.** The contour initializations of different methods when segmenting the second UVI image in Section 4.3.1. (a) Initial level set curves (concentric circles) of DFALS. (b) Initial level set curves (LLS-RHT result) of SIILSM and LIDLSM.



**Figure S3.** The contour initializations of different methods when segmenting the third UVI image in Section 4.3.1. **(a)** Initial level set curves (concentric circles) of DFALS. **(b)** Initial level set curves (LLS-RHT result) of SIIALSM and LIDLSM.