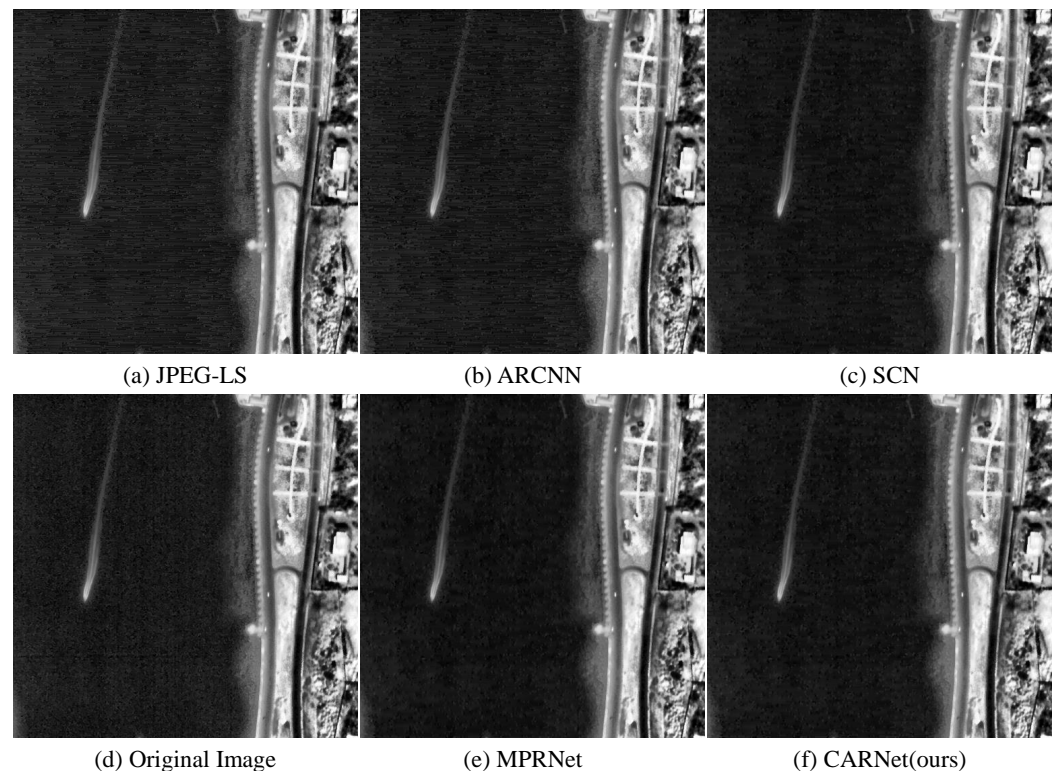


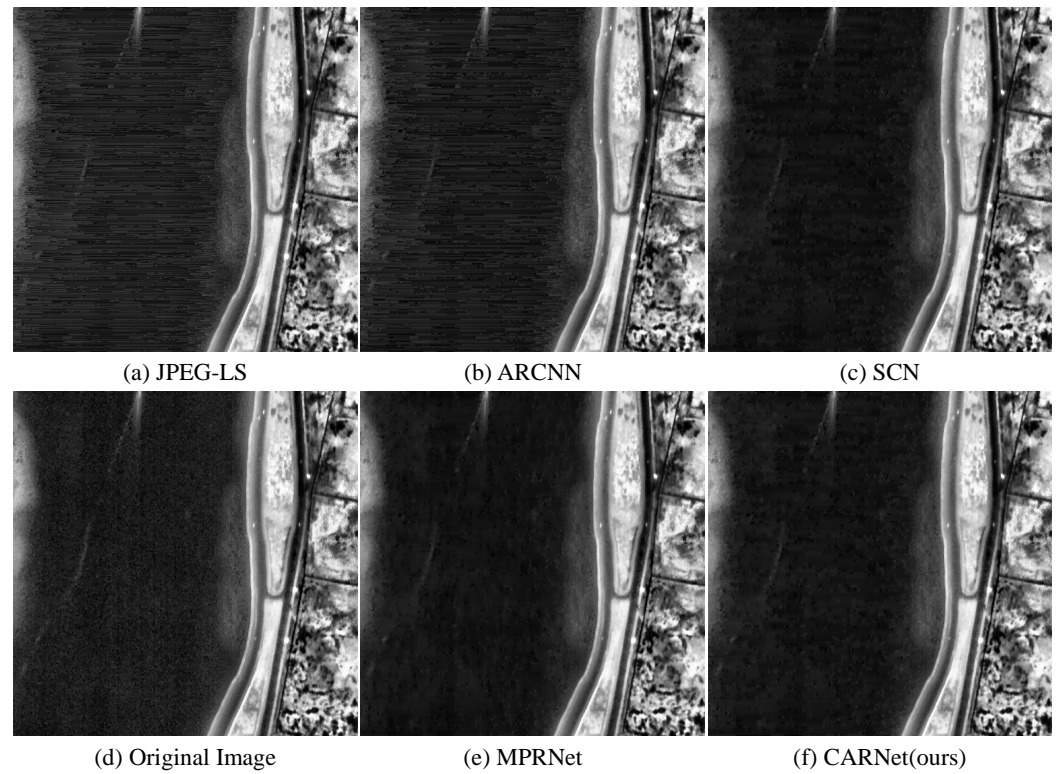
# Supplementary Materials: CARNet: Context-Aware Residual Learning for JPEG-LS Compressed Remote Sensing Image Restoration, Supplementary Materials

## 1. Subjective Comparisons

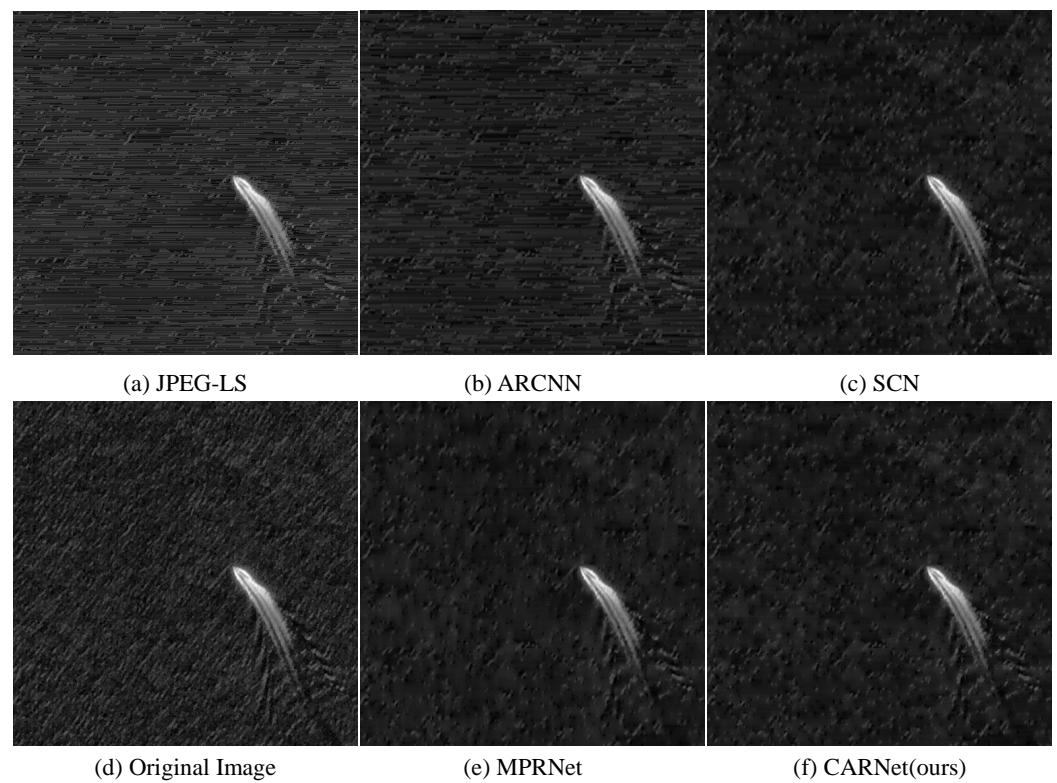
For further subjective comparisons on our 12-bit dataset, Figure S1 to Figure S3 present some restored results. JPEG-LS compressed images show severe banding artifacts. Among all restored results, the early work, ARCNN with limited receptive fields, performs worst, which almost cannot remove any banding artifacts. On the contrary, since SCN, MPRnet, and our CARNet have different effective mechanisms to expand the network's receptive fields, they all perform better than ARCNN. Among their comparison, MPRNet is relatively poor, which still shows banding artifacts, and SCN is too strong that causing the smooth problem. Our model achieves the best visual feelings, which removes most banding artifacts without presenting over-smoothing results.



**Figure S1.** Visual comparison with state-of-the-art methods on a test 12bit image patch (NEAR=8).



**Figure S2.** Visual comparison with state-of-the-art methods on a test 12bit image patch (NEAR=12).



**Figure S3.** Visual comparison with state-of-the-art methods on a test 12bit image patch (NEAR=16).