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(57) Abstract

[034] The present invention discloses a deep learning-based system for meteorological satellite cloud image object detection. The system includes, but not limited to, a texture that enhances the visible cloud image and marginal information, the cloud atlas produced by this method can preserve as much of the infrared information in the infrared cloud image as feasible, and further this sort of local variance and weighting-based small echo meteorological satellite cloud picture fusion technique is offered, and furthermore, described are cloud detection techniques for a particular class of meteorological satellite cloud images, and thundercloud recognition techniques using thunderstorm cloud clusters and satellite cloud images cloud cluster perform initial data transmission for satellite Analysis, projective transformation of the cloud atlas, medium filtering process, segmentation of the cloud atlas picture, and automatic cloud cluster identification at the base. Accompanied Drawing [FIGS. 1-2]

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