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**Capturing Event metadata in the sky:
A Java-based application for receiving astronomical
Internet Feeds**

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Abstract

When an astronomical observer discovers a transient event in the sky, how can the information be immediately shared and delivered to others? Not too long time ago, people shared the information about what they discovered in the sky by books, telegraphs, and telephones. The new generation of transferring the event data is the way by the Internet. The information of astronomical events is able to be packed and put online as an Internet feed. For receiving these packed data, an Internet feed listener software would be required in a terminal computer. In other applications, the listener would connect to an intelligent robotic telescope network and automatically drive a telescope to capture the instant Astrophysical phenomena. However, because the technologies of transferring the astronomical event data are in the initial steps, the only resource available is the Perl-based Internet feed listener developed by the team of eSTAR. In this research, a Java-based Internet feed listener was developed. The application supports more features than the Perl-based application. After applying the rich Java benefits, the application is able to receive, parse and manage the Internet feed data in an efficient way with the friendly user interface.

Keywords: Java, socket programming, VOEvent, real-time astronomy

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