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Spectroscopic Analysis of ROTSE Supernovae GOVINDA DHUN-GANA, Southern Methodist University — We present the results from spectroscopic analysis of several of the recent SNe found by the 0.45m ROTSE-IIIb telescope, located at McDonald Observatory, Texas. The spectra are obtained from the 9.2m Hobby-Eberly Telescope (HET) located at the same site. Our analysis includes the identification of the SNe, study of spectral features and develop the understanding of possible inherent physical phenomenon that affects the evolution. Occasionally, we take multiple spectra of relatively interesting objects to better understand the evolution. We use SNID code (Blondin and Tonry 2007, Ap.J. 666, 1024) for preliminary identification and redshift estimation, and later generate the synthetic spectrum using Syn++ code (Thomas, R. C., Nugent, P. E., & Meza, J. C., 2011, PASP, 123, 237) to identify and understand the spectral features. Often, we are able to infer some of pre-explosion properties also.

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