

LINE PROFILE VARIATIONS IN AGN

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An international collaboration is monitoring the variable Seyfert galaxy NGC 5548 in the optical spectral range since 1988. In Fig. 1 (left) the $H\alpha$ light curves of the blue wing (-6000 until -1000 km s^{-1}) and the red wing ($+1000$ until $+6000$ km s^{-1}) are shown for the first year of the monitoring campaign from Dec.1988 until Oct.1989. It can be seen that these line components of the $H\alpha$ profile have different amplitudes in the light curves. The mean $H\alpha$ and $H\beta$ difference spectra with respect to the minimum state are plotted in Fig. 1 (right) for the same period. The relative strength of the blue component at $v_{\text{rel}} = -2000$ km s^{-1} is different with respect to the core of the line profiles. Therefore, these components originate under different physical conditions or in regions with different dust content.

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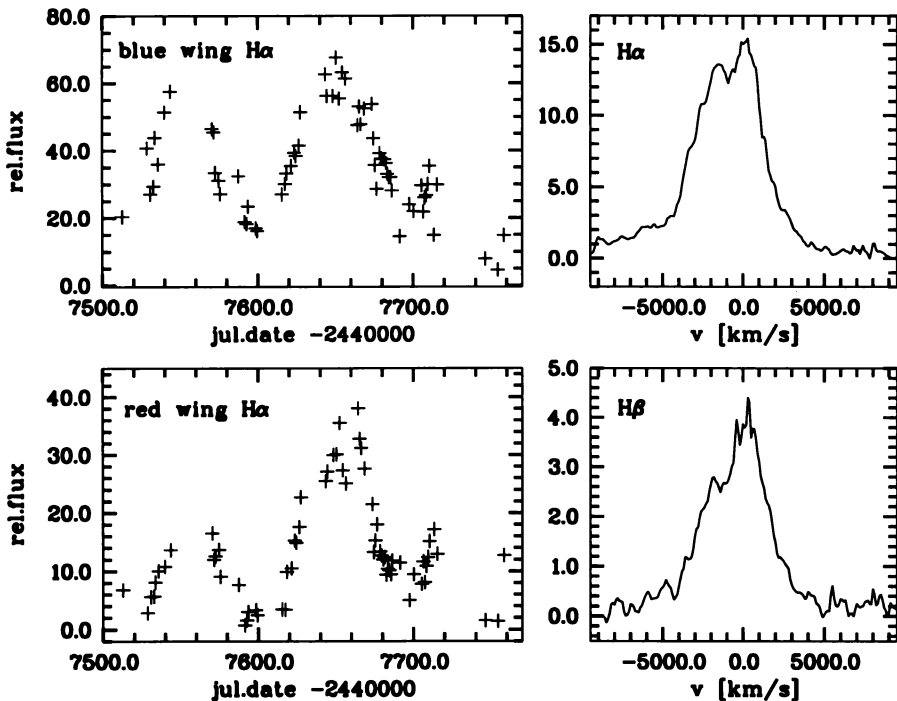


Fig. 1. Light curve of the blue and red wing of the $H\alpha$ emission line (left). Mean difference spectra of the $H\alpha$ and $H\beta$ emission lines for the first year of the monitoring campaign of NGC 5548 (right).