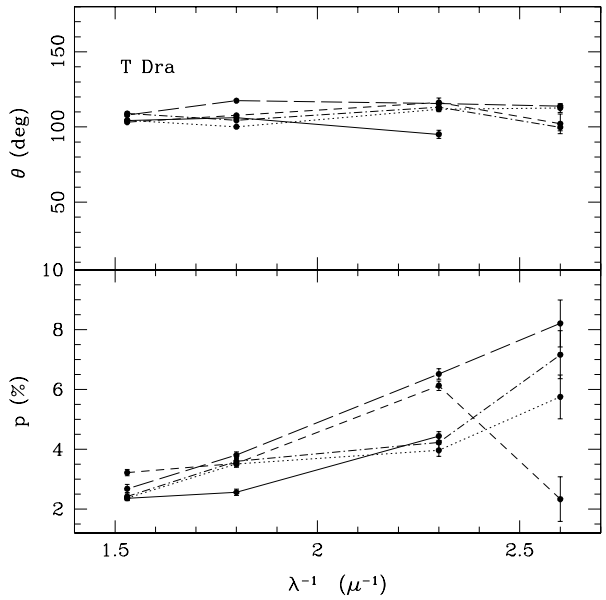

Fig. 6. Same as Figure 1, but for T Dra on JD=2454913.93 (solid line), 2454951.88 (dotted line), 2455000.77 (short-dashed line), 245503972 (long-dashed line), and 2455067.69 (dot-short-dashed line).

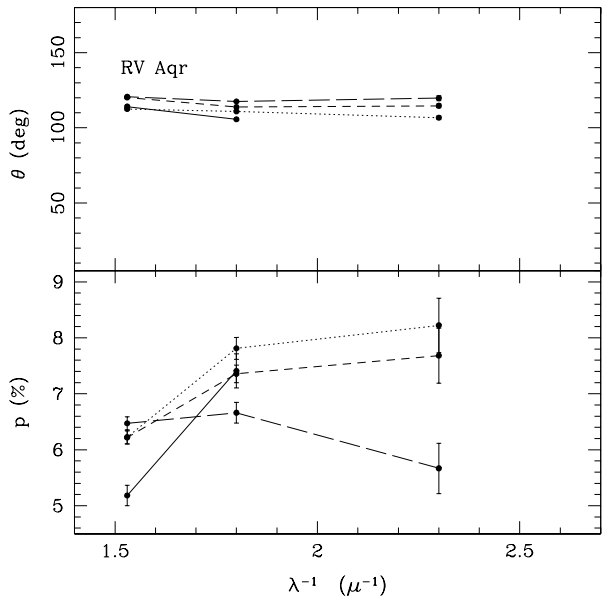

Fig. 7. Same as Figure 1, but for RV Aqr on JD=2455000.97 (solid line), 2455038.87 (dotted line), 2455096.64 (short-dashed line), and 2455126.63 (long-dashed line).

polarization was presumed to be negligible because of their high galactic latitude ($|b^{II}| \geq 20°$).

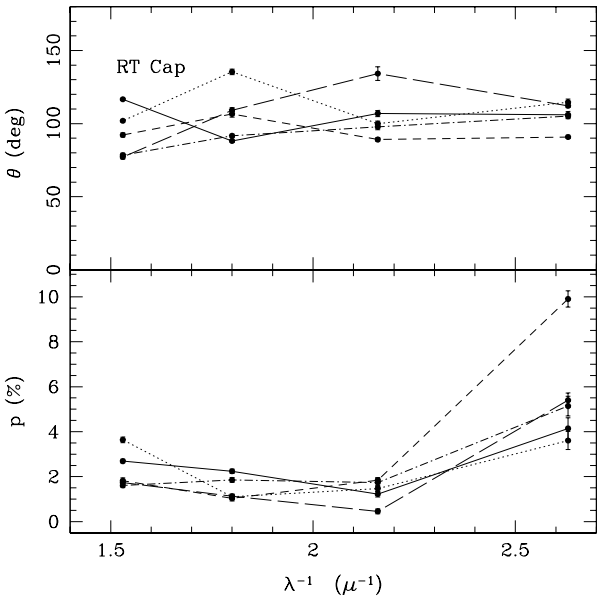

Fig. 8. Same as Figure 1, but for RT Cap on JD=2455003.90 (solid line), 2455038.85 (dotted line), 2455067.76 (short-dashed line), 2455095.63 (long-dashed line), and 2455127.58 (dot short-dashed line).

4.2. *Polarization mechanism*

Harrington (1969) has shown that light emerging from the limb of a star would be highly polarized due to Raleigh scattering by molecules or atoms, if the Planck function has a steep gradient in the atmosphere. However, for a net observable polarization, a photospheric asymmetry should be present and the proposed sources of asymmetry are non-radial pulsation of the star, variation of the temperature over the surface, and the presence of giant convection cells (Harrington 1969; Schwarzschild 1975).

Another suggested mechanism is the scattering by molecules or dust grains in an extended asymmetric circumstellar envelope (Kruszewski et al. 1968; Shawl 1975; Daniel 1978). This is the main mechanisms usually invoked to explain the intrinsic linear polarization of late-type stars in general.

4.3. *Time dependence*

The observed carbon stars show large variations of the degree of polarization and of the position angle over time. Some stars show a large swing from being highly polarized to being almost unpolarized.

T Dra and RV Aqr show an almost constant position angle during the period of observation: their spread is about 30 degrees. This suggests that the formation and destruction of dust and molecules proceeds without changes of the geometry of the inner