Figure 4: Conditions for fire detection in the 3.7µm channel: relationships between fire temperature and fraction of pixel covered, for brightness temperature anomalies $\Delta T = 0.1, 1, 5, 20$ and 35 C, assuming a uniform background temperature of 13 C. Conditions below the noise level of the AVHRR, $\Delta T < 0.1$ C, and above saturation, $T > 48$ C or $\Delta T > 35$ C, are shaded. The dashed lines show similar relationships in the less sensitive 10.8µm channel; equation (1) can be solved for both $p$ and $T_f$ only in the unshaded sector above the 0.1 C dashed line. The conditions for the Manchester avenue pixel are marked with a u.