

## FYS 4630. Oppgaver til 18.10.2006

**Problem 7.1** page 270 but with the following modifications:

c) Assume  $F^s = 1$  and no absorption. Plot the intensity for  $\tau^* = 0.05$  only.

d) Assume isotropic scattering for the reflected radiation.

e) Plot the ratio  $I^-(\tau^*, \mu, \varphi, \pi\rho_L) / I^-(\tau^*, \mu, \varphi, 0)$  in the principal plane of the Sun for various  $\mu$ -values. Plot first for  $\pi\rho_L = 0.05$  (bare ground in the UV and the visible) and then for  $\pi\rho_L = 0.7$  (represents snow cover).

Use the intensity expressions in d).

### **Problem 7.2.**

Solve only by using (2), i.e. the two-stream equations.