

Angular Dependence of the Mie Scattering

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Abstract

Angular dependence of the Mie scattering can now be studied with the Mie scattering code (dust.c). Use options **-th**= θ or **-ct**= $\cos \theta$ to select angle at which the fraction of the light scattered to that angle (proportional to S_{11}) is evaluated.

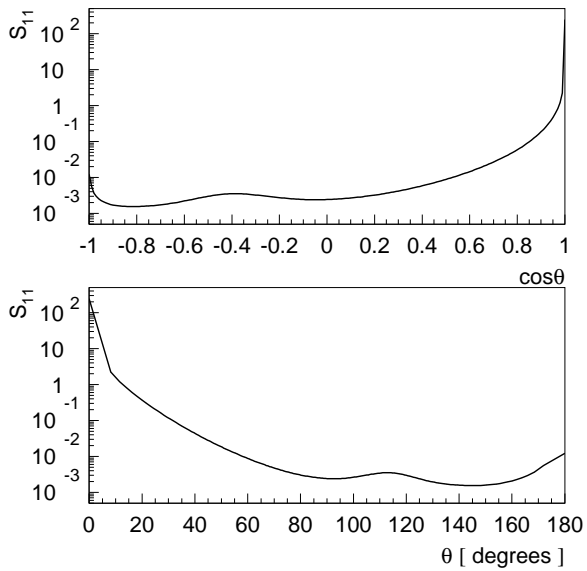
Mie scattering code homepage is

<http://area51.berkeley.edu/~dima/work/ICESCA/>

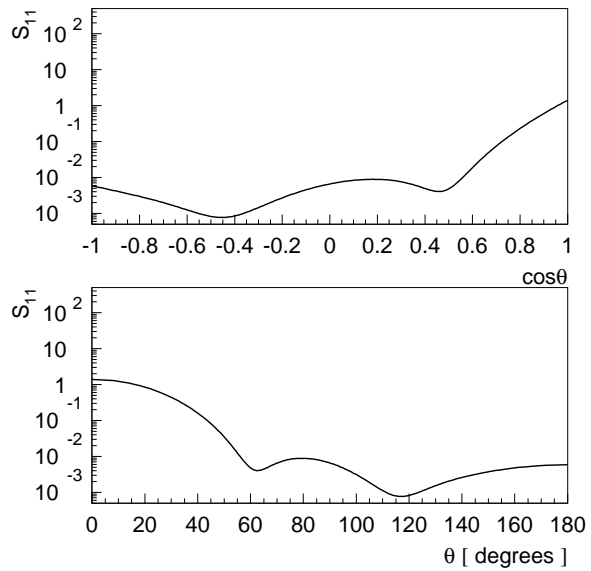
Mie scattering code available at

<http://area51.berkeley.edu/~dima/work/ICESCA/BKP/dust.c>

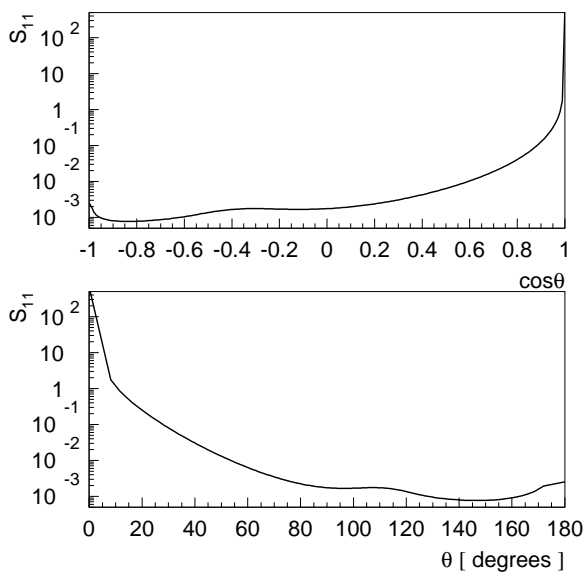
1 Mineral Component



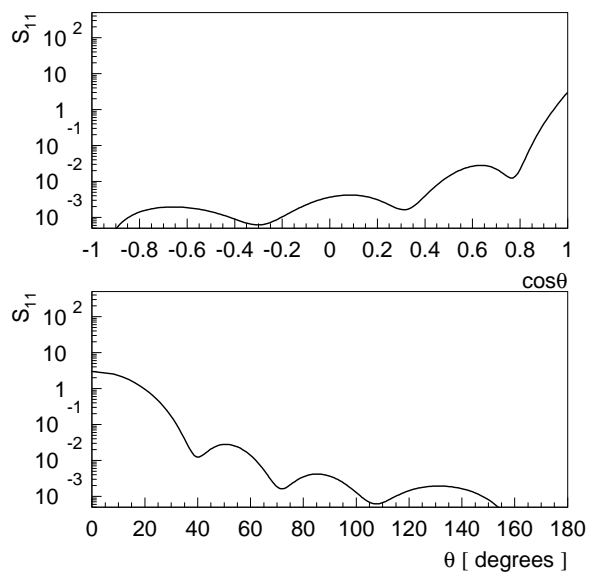
$\lambda = 550$ nm, regular radii spread



$\lambda = 550$ nm, fixed radius

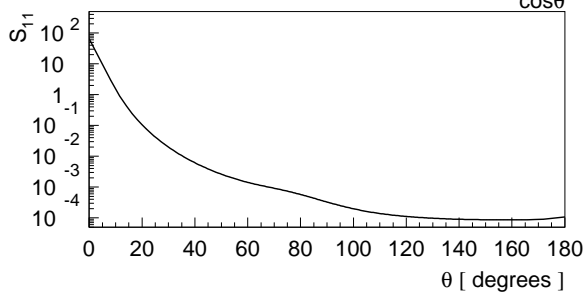
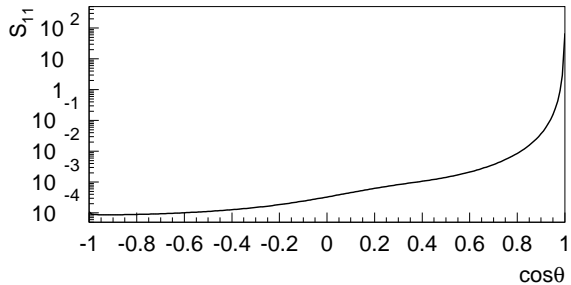


$\lambda = 370$ nm, regular radii spread

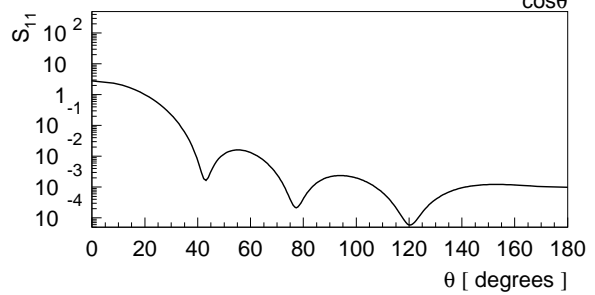
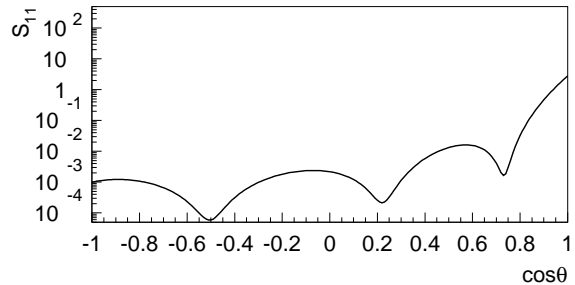


$\lambda = 370$ nm, fixed radius

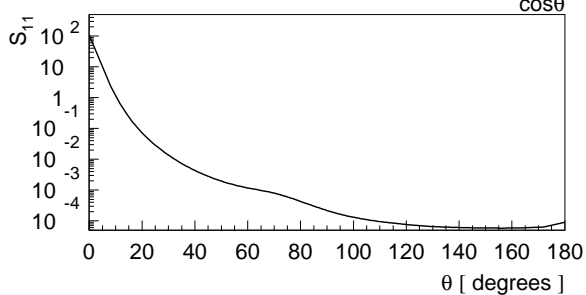
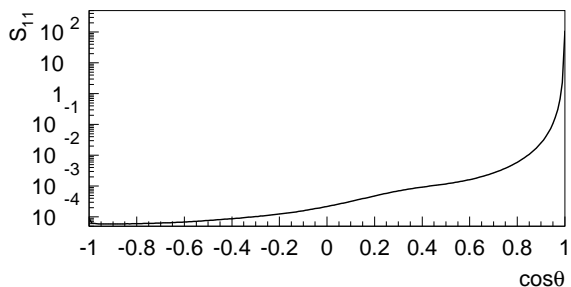
2 Salt Component



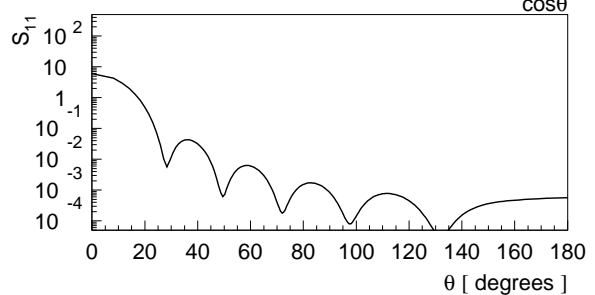
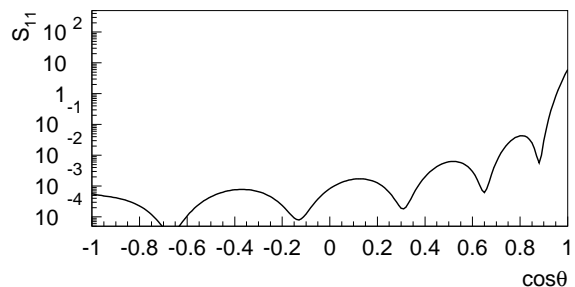
$\lambda = 550$ nm, regular radii spread



$\lambda = 550$ nm, fixed radius

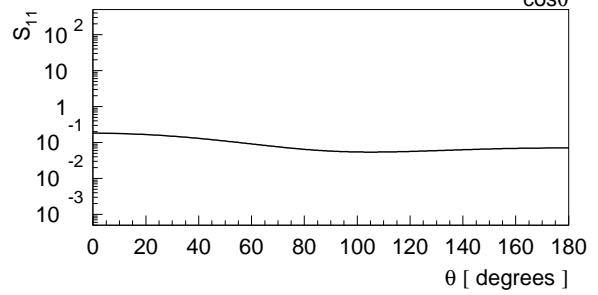
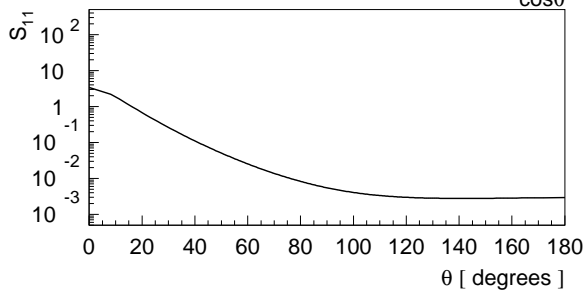
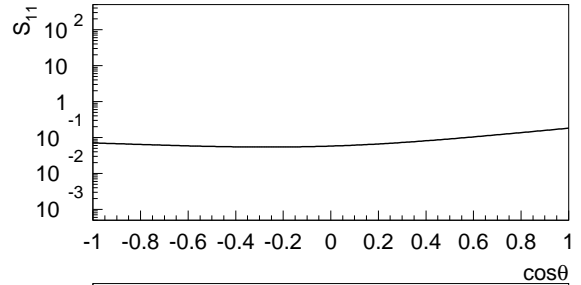
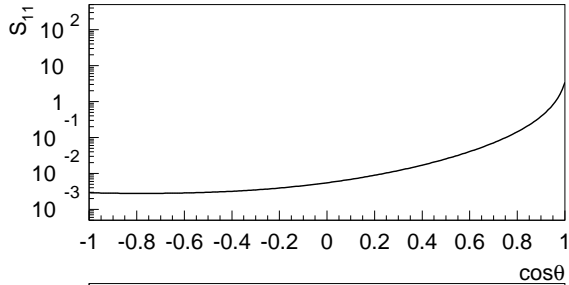


$\lambda = 370$ nm, regular radii spread



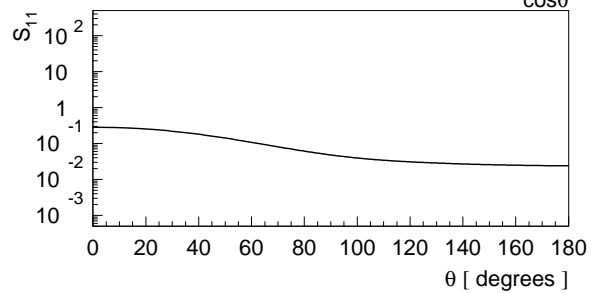
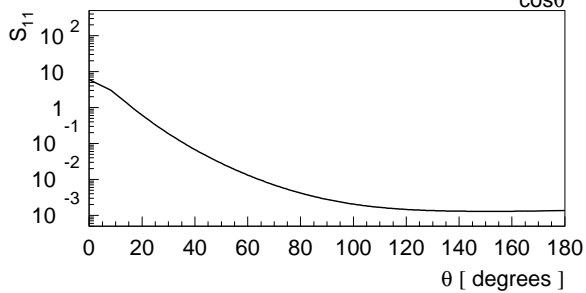
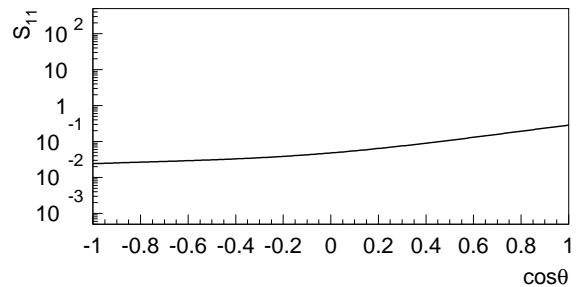
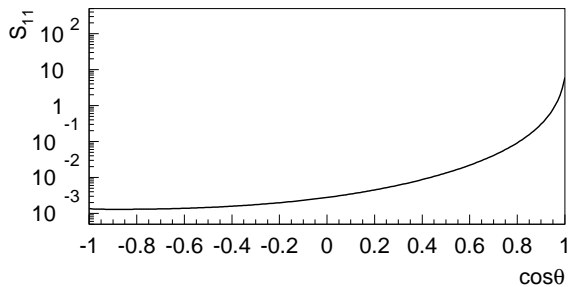
$\lambda = 370$ nm, fixed radius

3 Acid Component



$\lambda = 550$ nm, regular radii spread

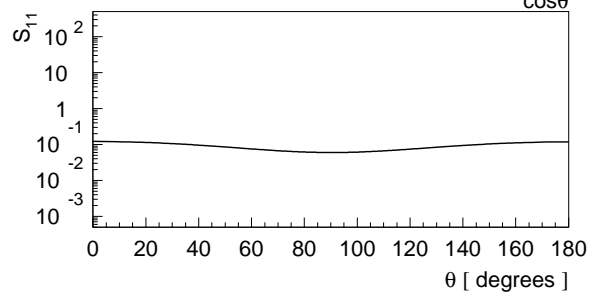
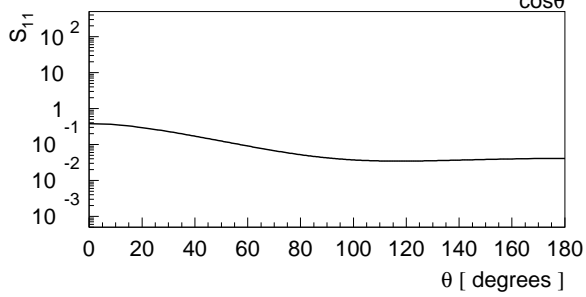
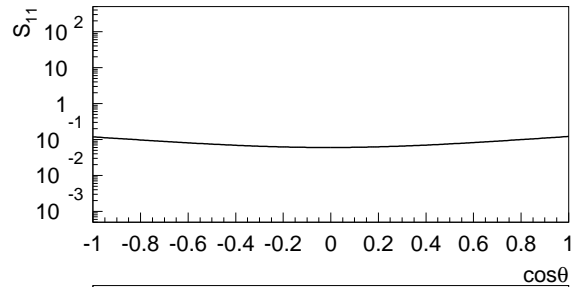
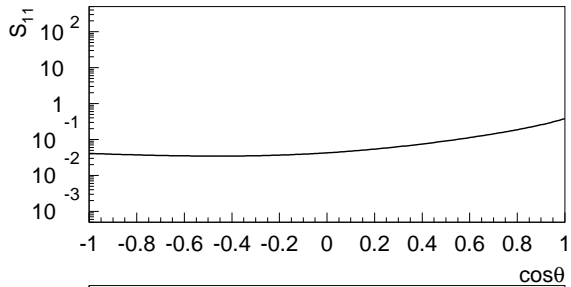
$\lambda = 550$ nm, fixed radius



$\lambda = 370$ nm, regular radii spread

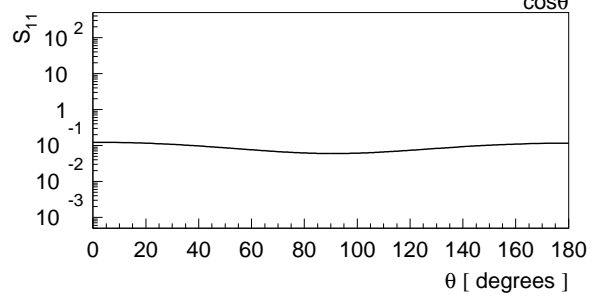
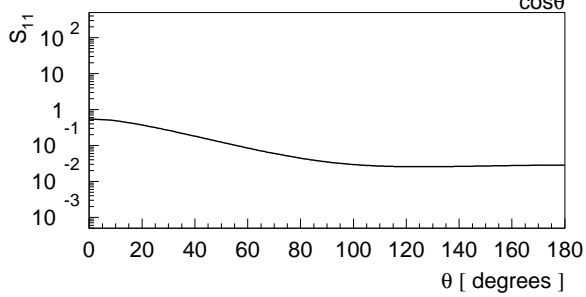
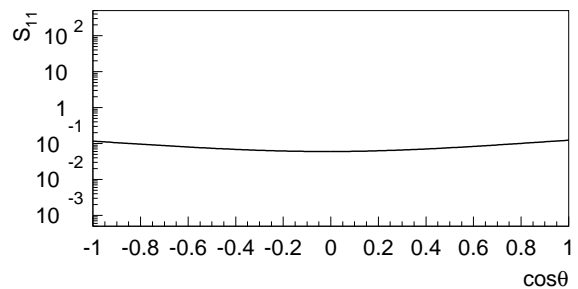
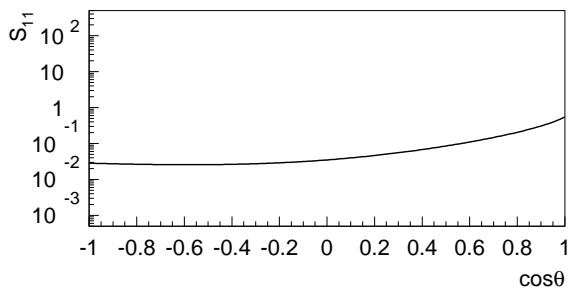
$\lambda = 370$ nm, fixed radius

4 Soot Component



$\lambda = 550$ nm, regular radii spread

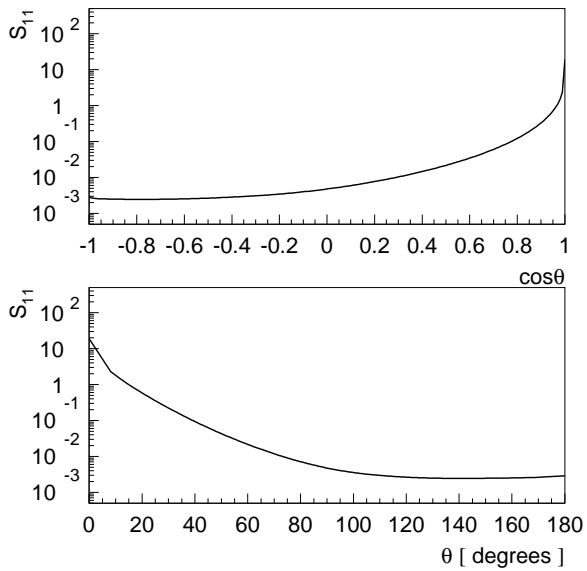
$\lambda = 550$ nm, fixed radius



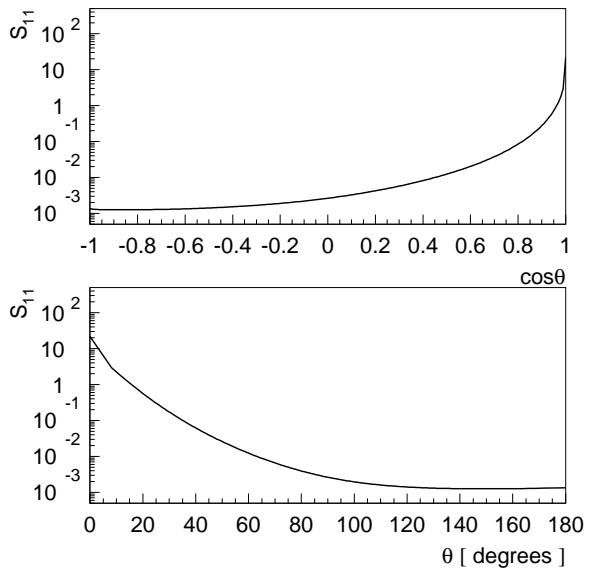
$\lambda = 370$ nm, regular radii spread

$\lambda = 370$ nm, fixed radius

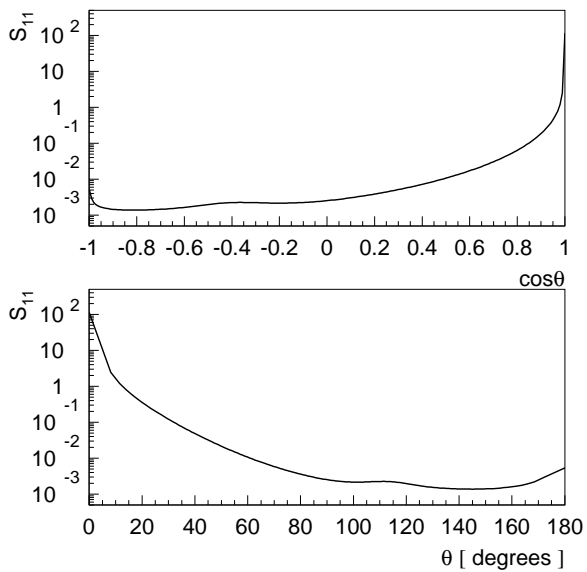
5 4-Component Mixtures



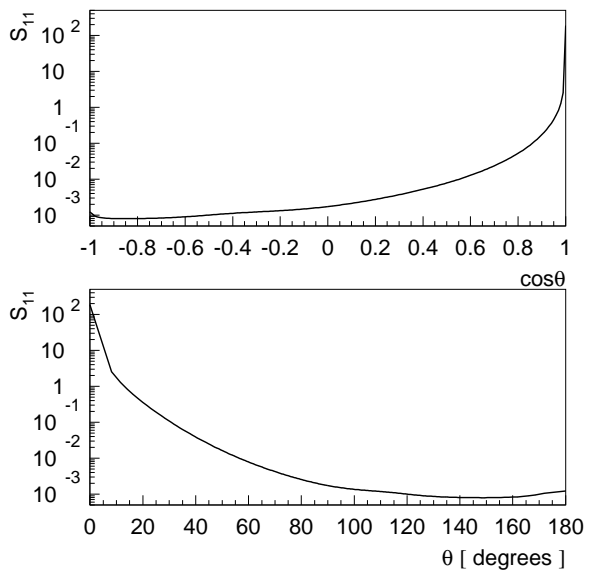
$\lambda = 550$ nm, default mixture



$\lambda = 370$ nm, default mixture

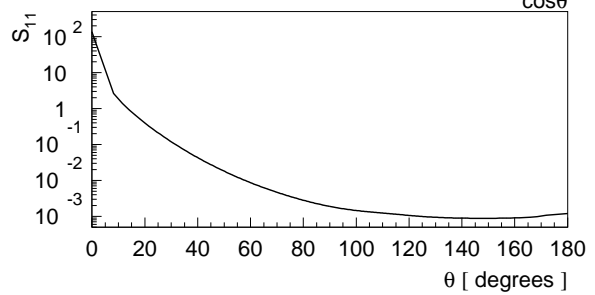
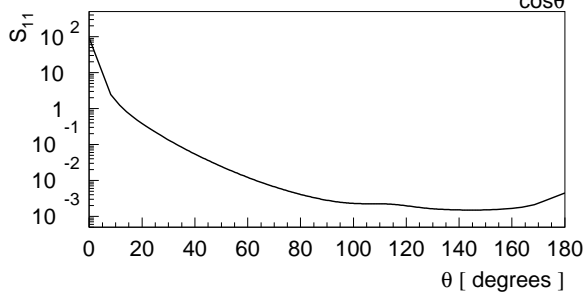
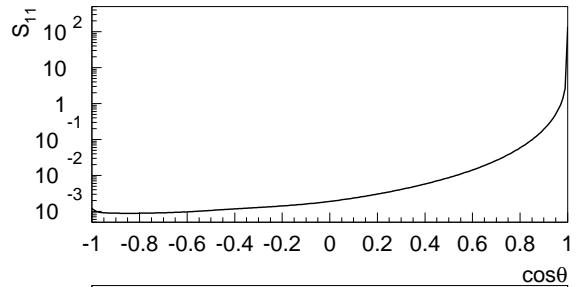
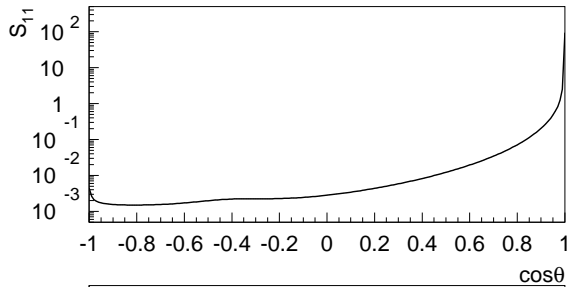


$\lambda = 550$ nm, region 1



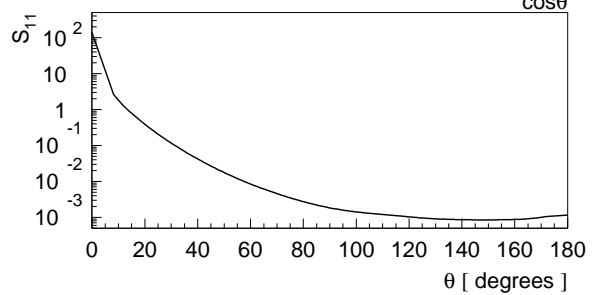
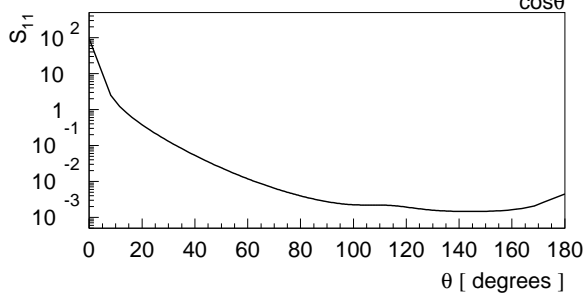
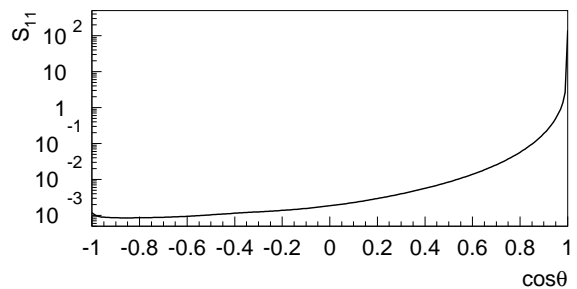
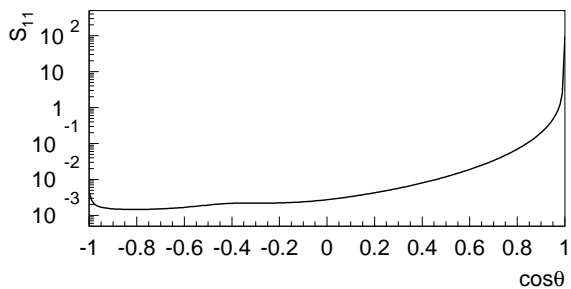
$\lambda = 370$ nm, region 1

6 4-Component Mixtures (continued)



$\lambda = 550$ nm, region 2

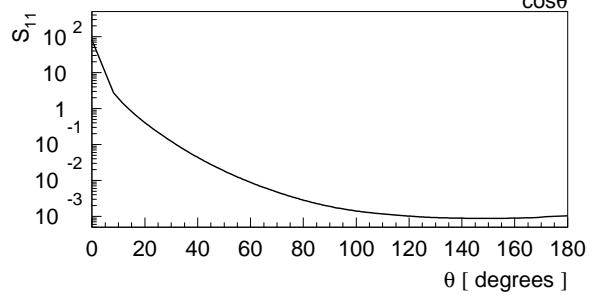
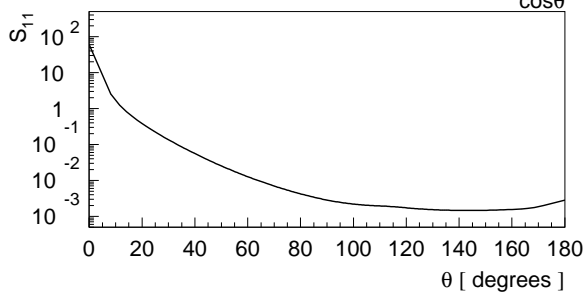
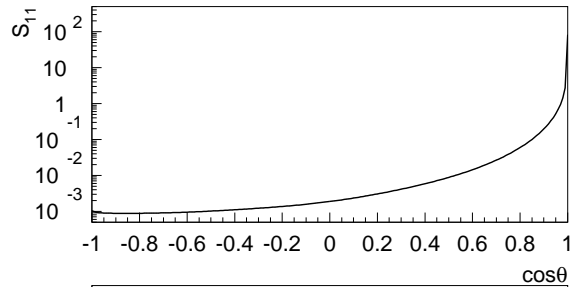
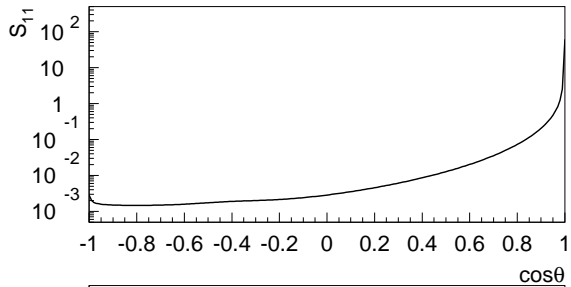
$\lambda = 370$ nm, region 2



$\lambda = 550$ nm, region 3

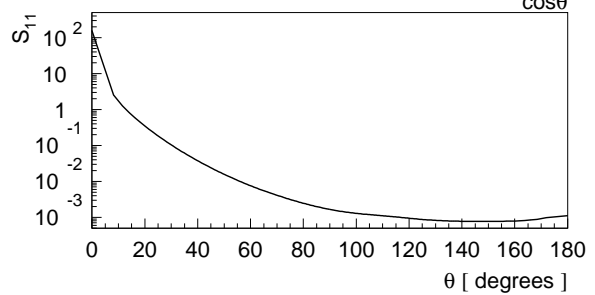
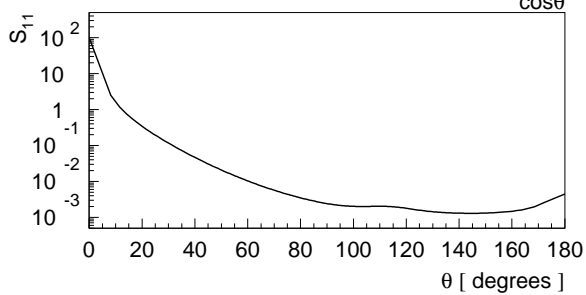
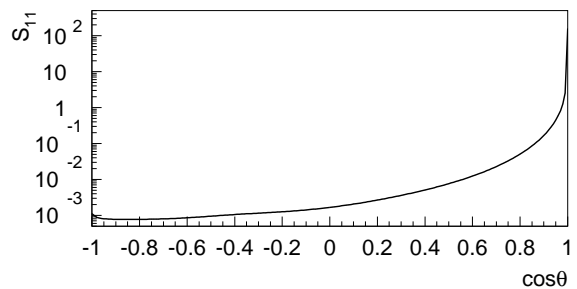
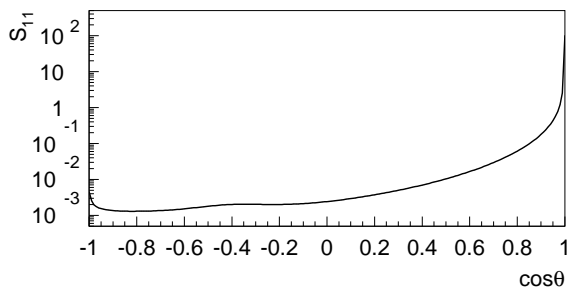
$\lambda = 370$ nm, region 3

7 4-Component Mixtures (continued)



$\lambda = 550$ nm, region 4

$\lambda = 370$ nm, region 4



$\lambda = 550$ nm, region 5

$\lambda = 370$ nm, region 5