





Fig. 4 – Bos & Wallinga (2012)





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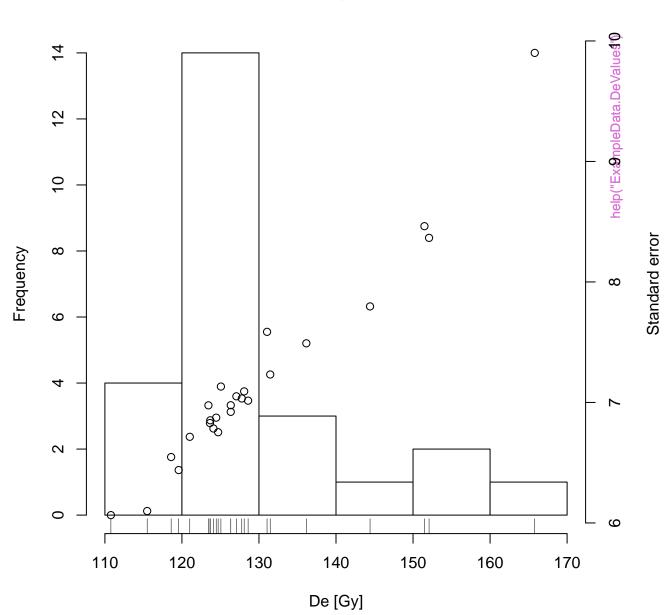




Histogram



Histogram





Χ

LxTxData\$Dose









RLum.Data.Image



OSL (UVVIS)



RLum.Data.Spectrum



IR-RF



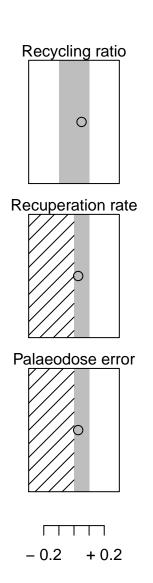


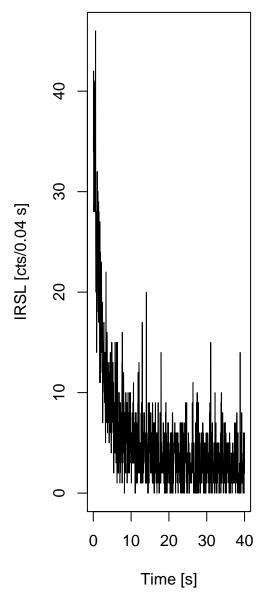
Growth curve

 $D_e = 1668.25 \pm 46.11$ | fit: EXP











Growth curve

 $D_e = 406.85 \pm 42.81$ | fit: LIN





TL pseudoIRSL1 pseudoIRSL2











D_e from MC simulation



Test dose response







Pseudo pIRIR data set based on quartz OSL

 $D_e = 1668.25 \pm 48.13$ | fit: EXP

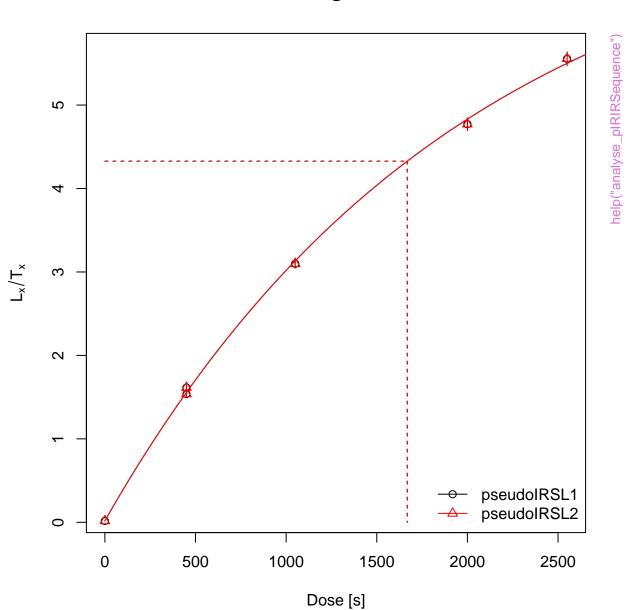


$\ensuremath{D_{e}}$ from MC simulation





Summarised growth curves



Sensitivity change

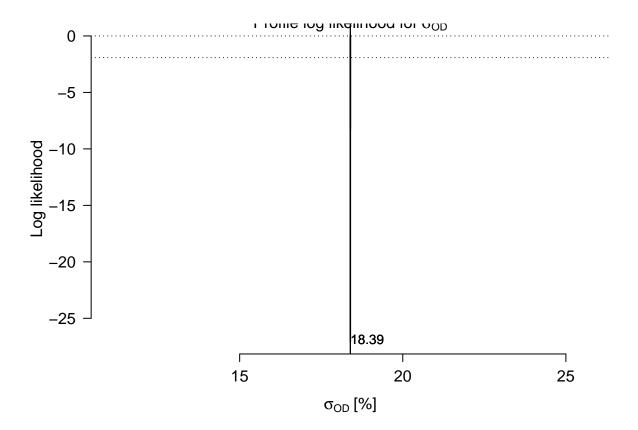


Rejection criteria



Monte Carlo Simulation









Dbar (Gy)

help("calc_IEU")

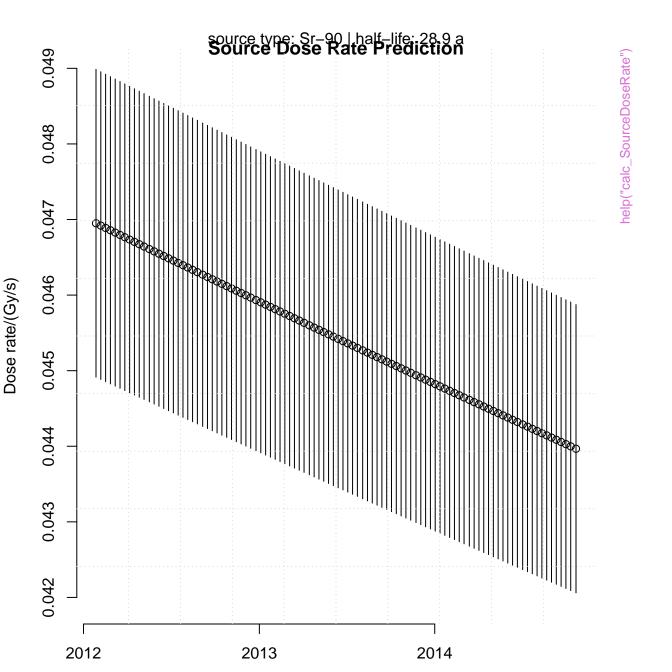






3-parameter Minimum Age Model

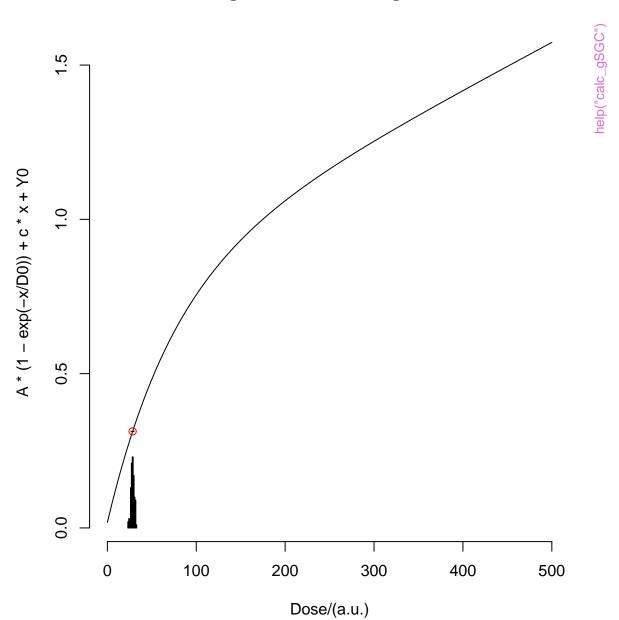




D_{e} distribution



gSGC and resulting De





Default





Background







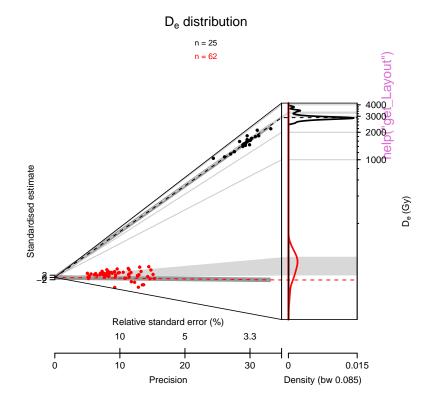


Default

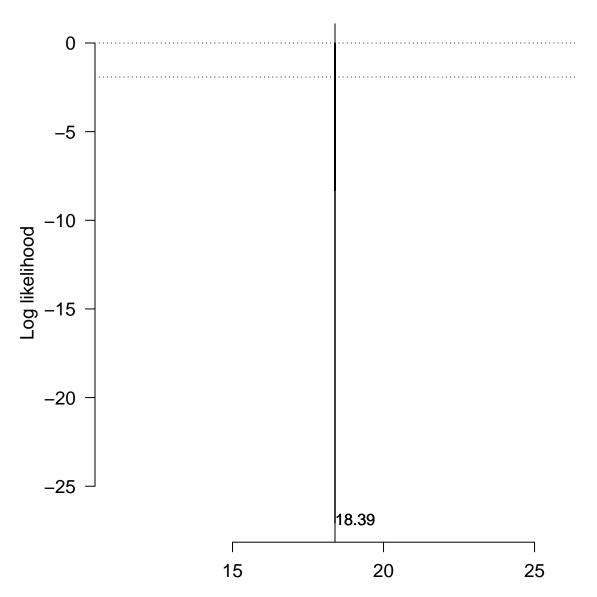








Profile log likelinood for σ_{OD}



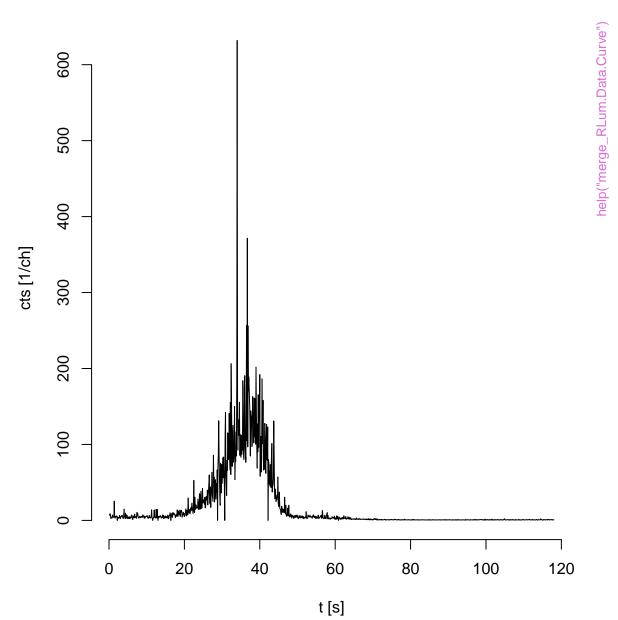
TL (UVVIS)



TL (UVVIS)



TL (UVVIS)

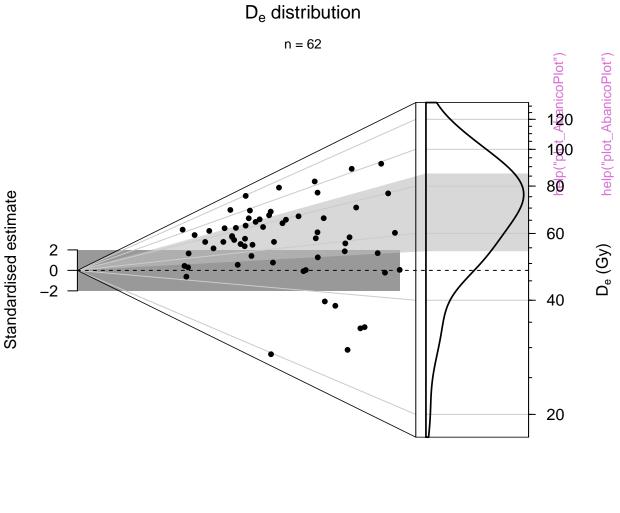


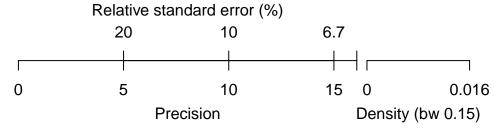
Profile log likelihood for σ_{OD}

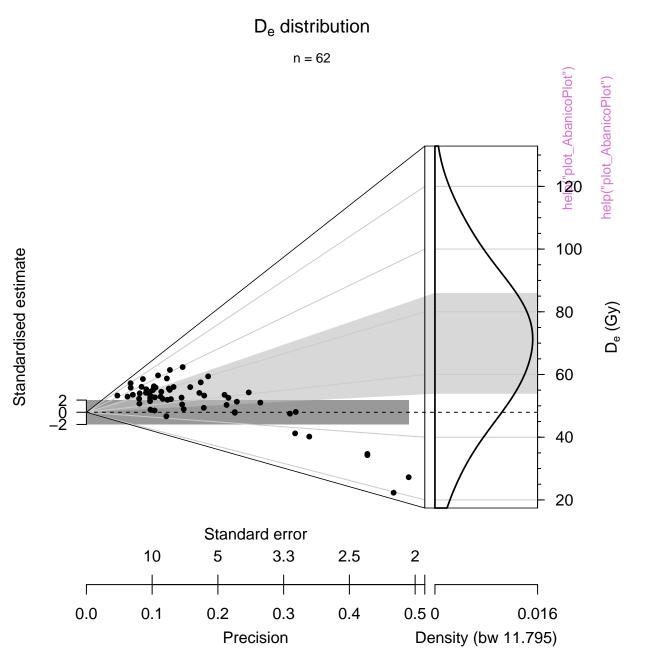


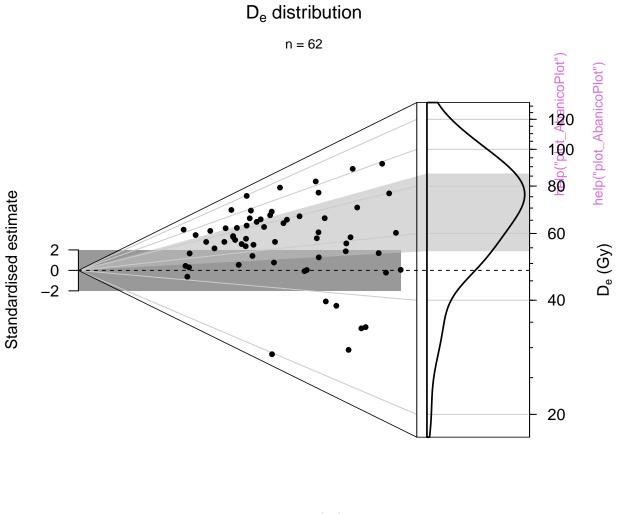
Profile log likelihood for σ_{OD}



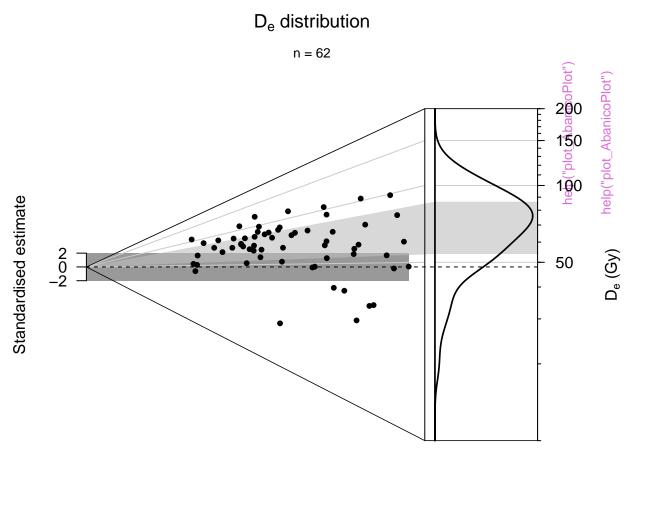


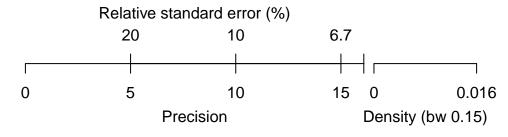




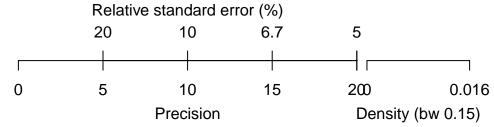




















































D_e distribution



Standardised estimate







D_{e} distribution















D_{e} distribution



20

Standardised estimate















D_e distribution





Standardised estimate











Example data











| n = 5 | weighted mean = 1.01 | | n = 5 | weighted mean = 1 |





Example data

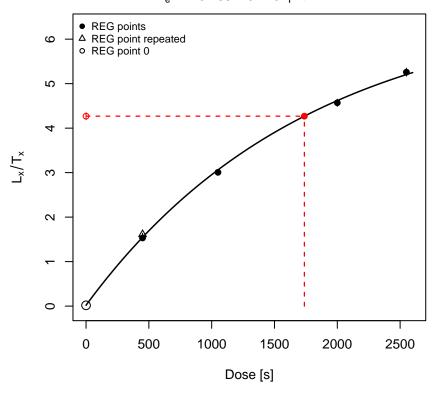


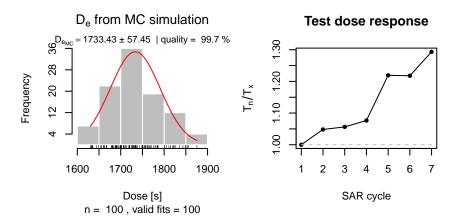




Growth curve

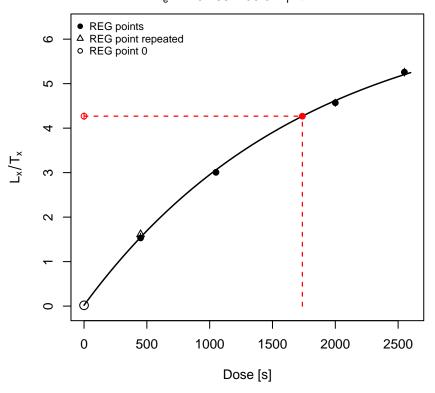
 $D_e = 1737.88 \pm 57.45$ | fit: EXP

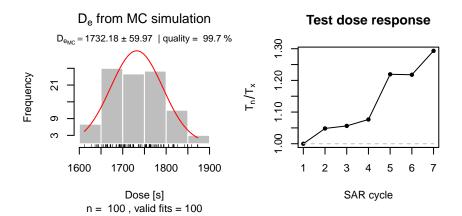




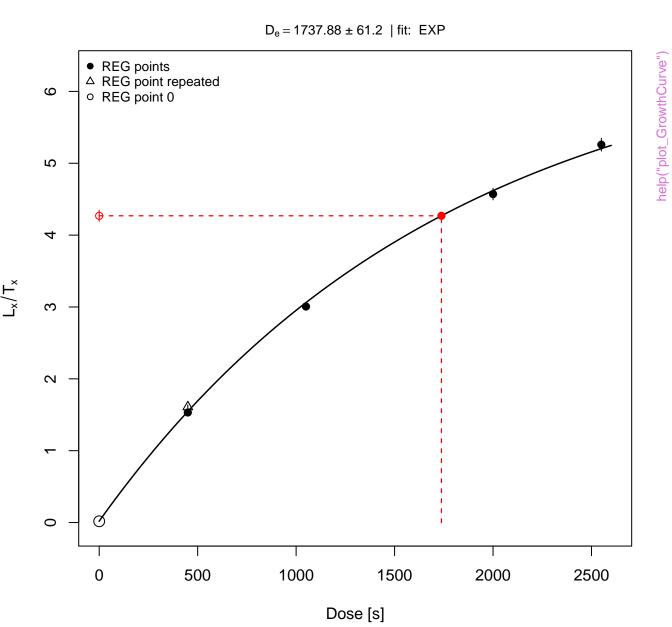
Growth curve

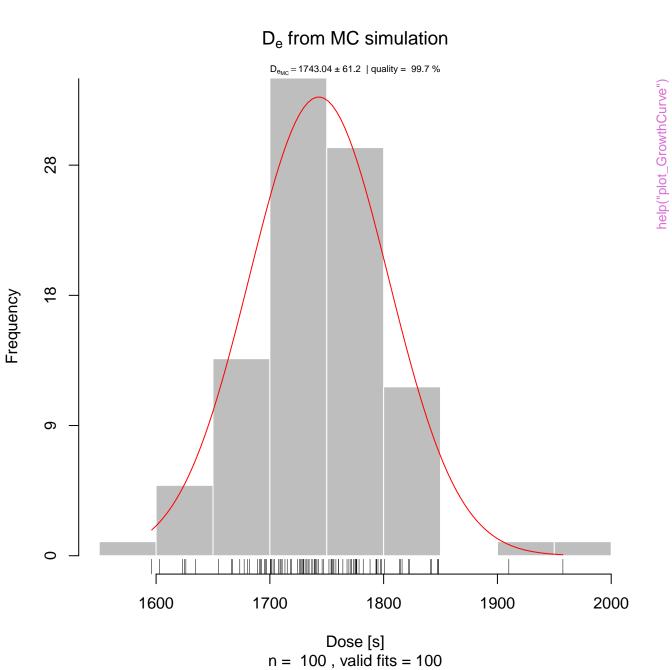
 $D_e = 1737.88 \pm 59.97$ | fit: EXP





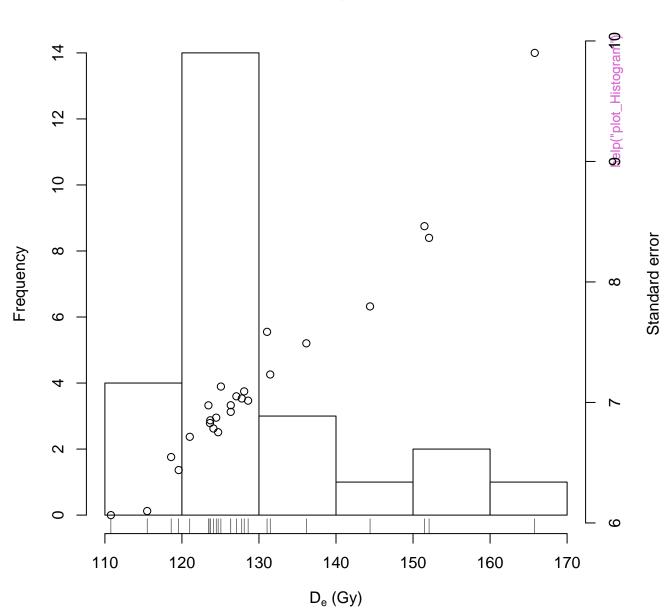
Growth curve





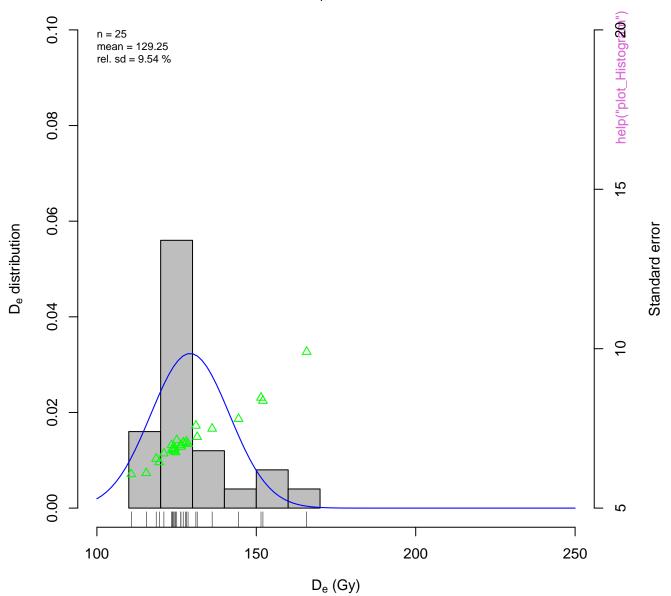


Histogram

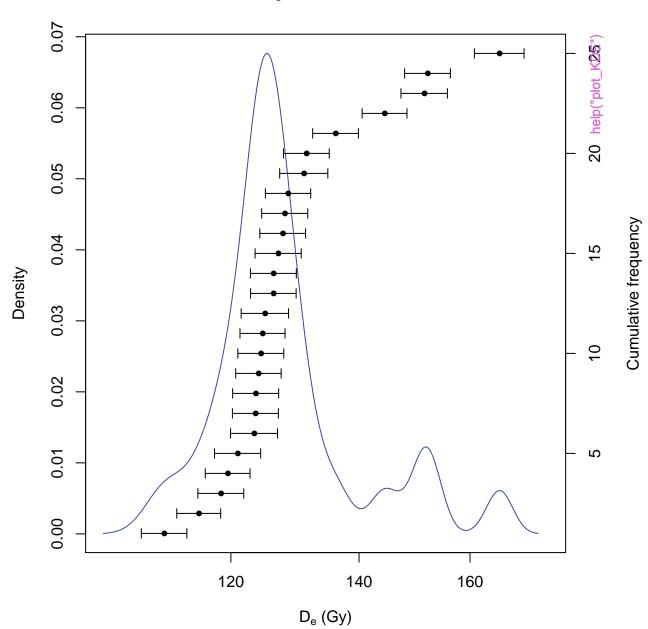


Histogram of De-values

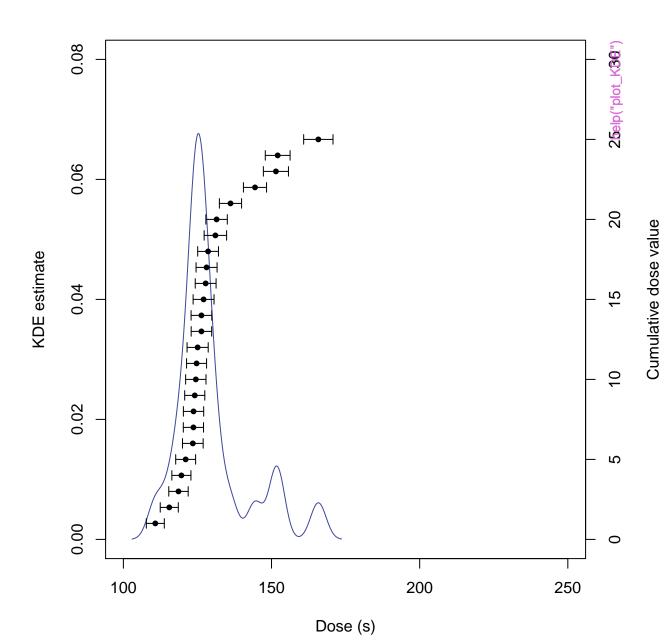
Example data set

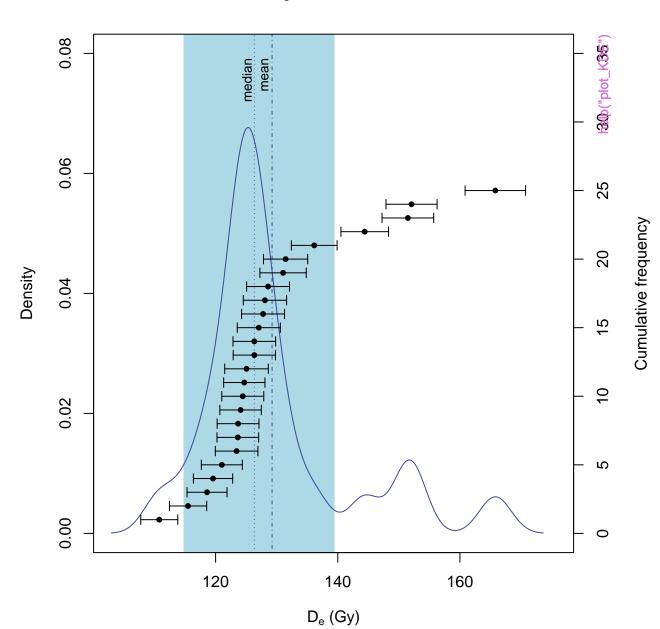


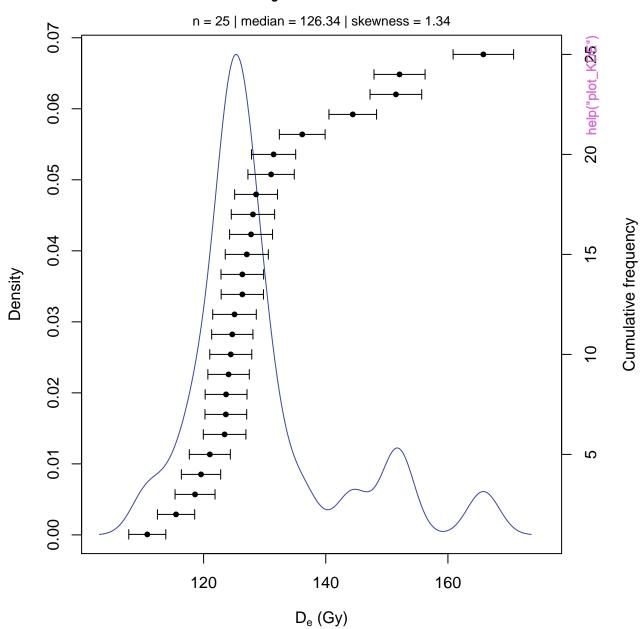


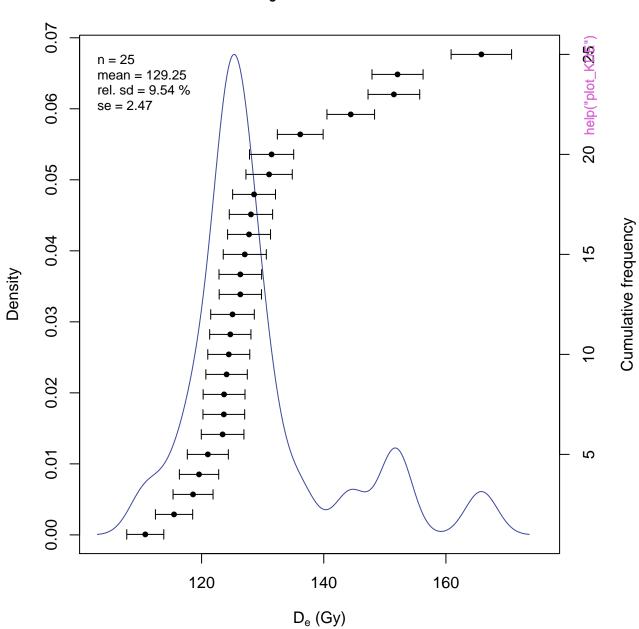


Dose distribution

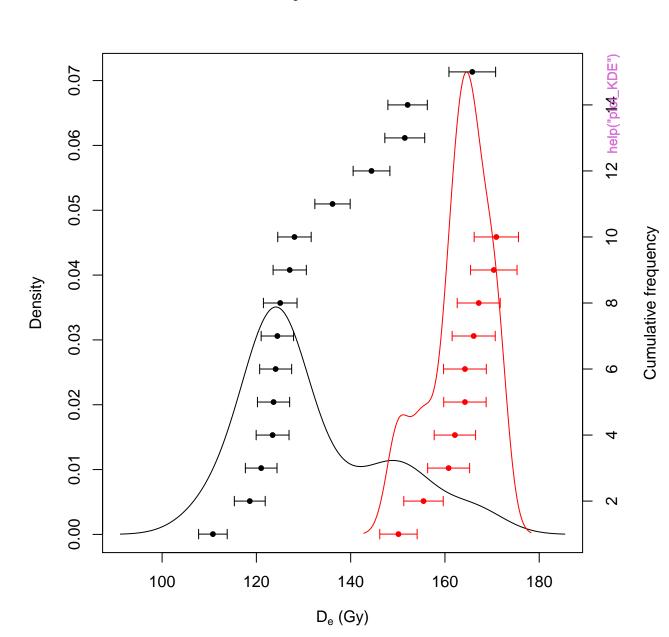


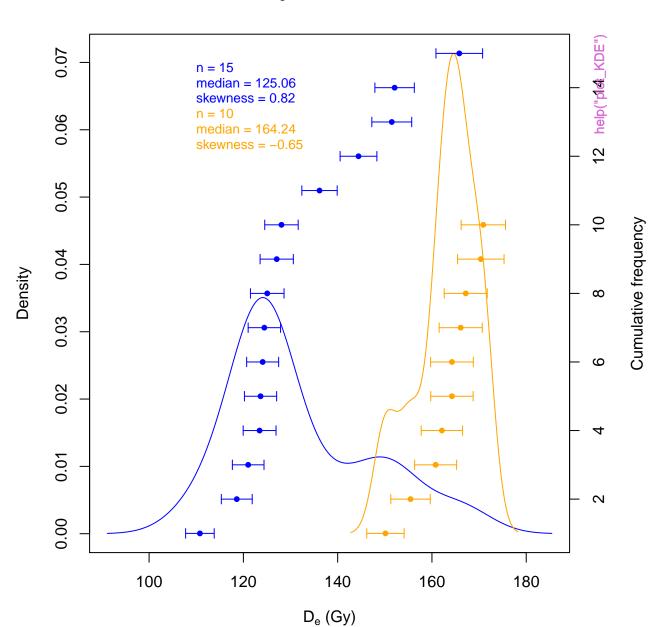






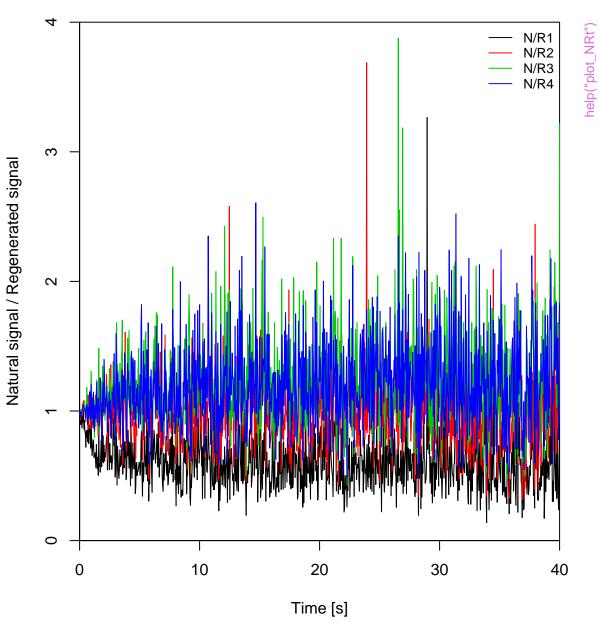
D_{e} distribution



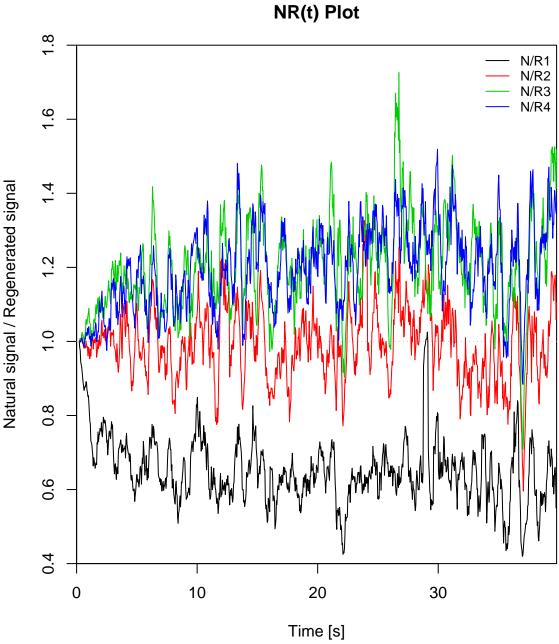




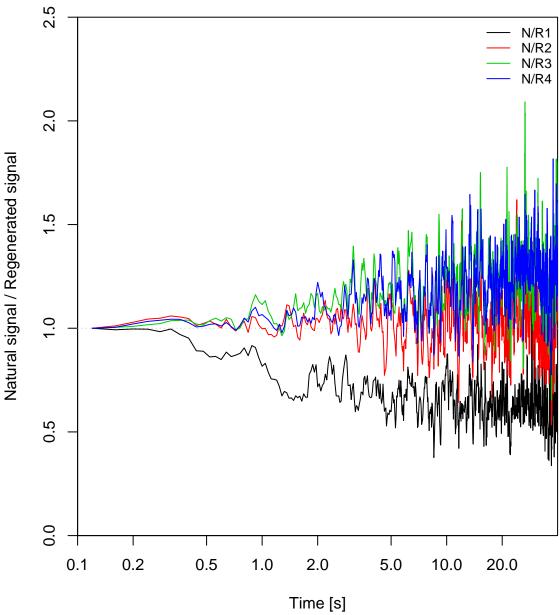
NR(t) Plot



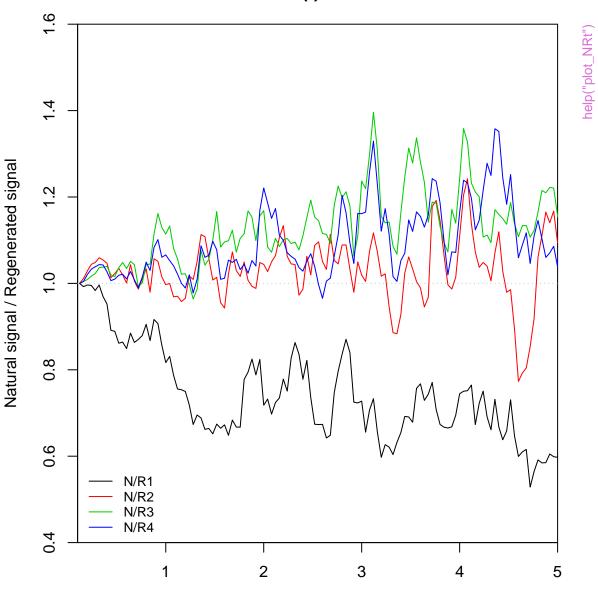
help("plot_NRt")



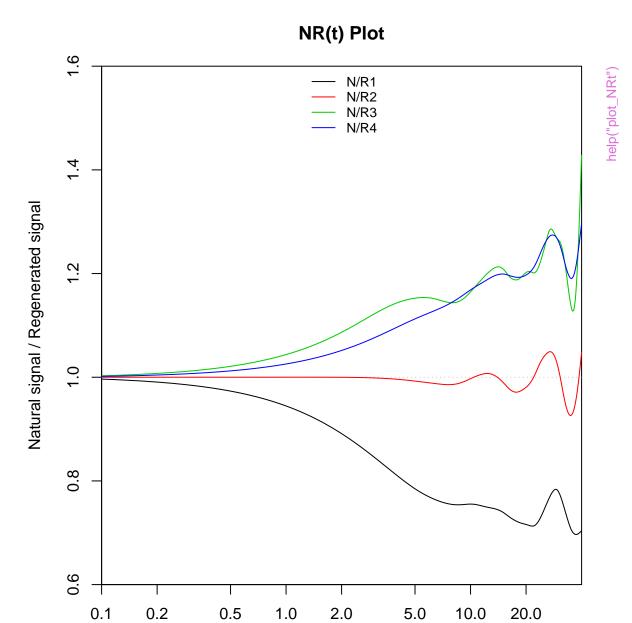
NR(t) Plot help("plot_NRt")





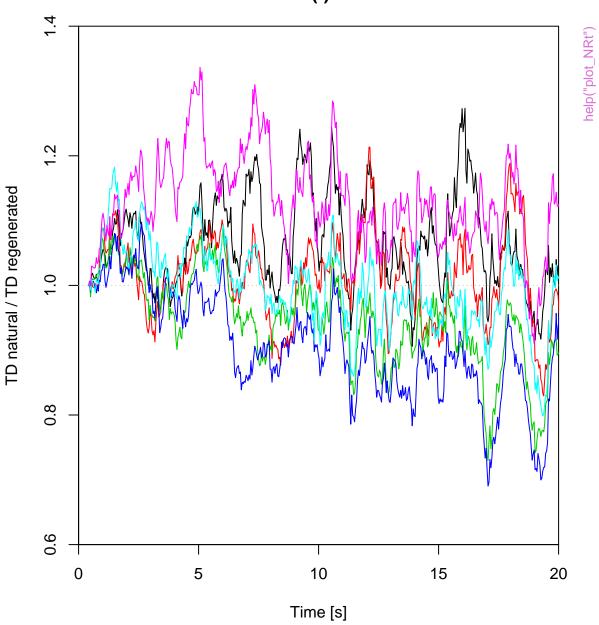


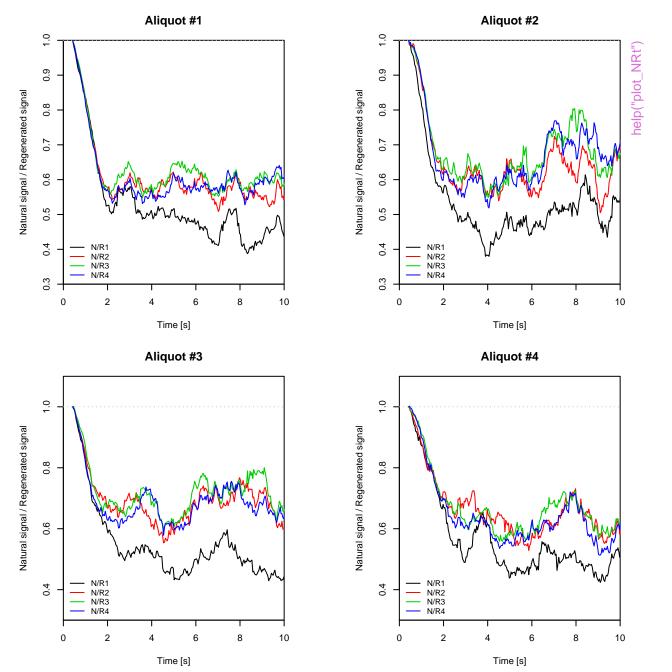
Time [s]

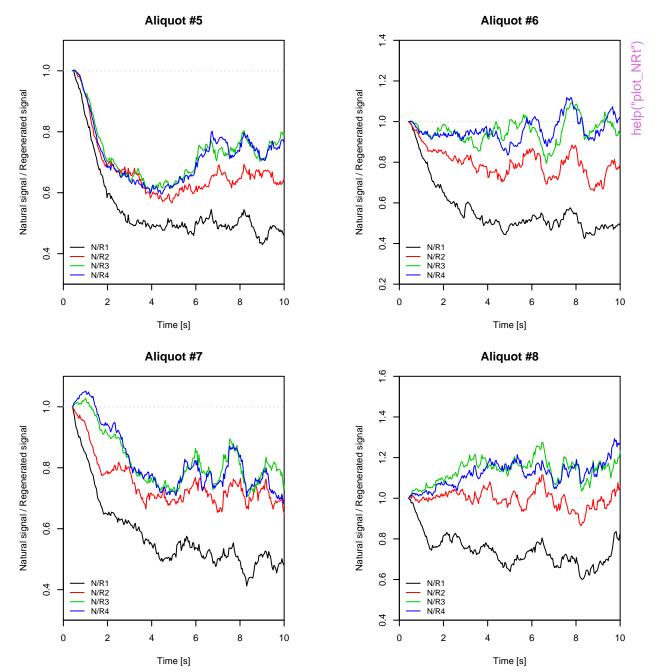


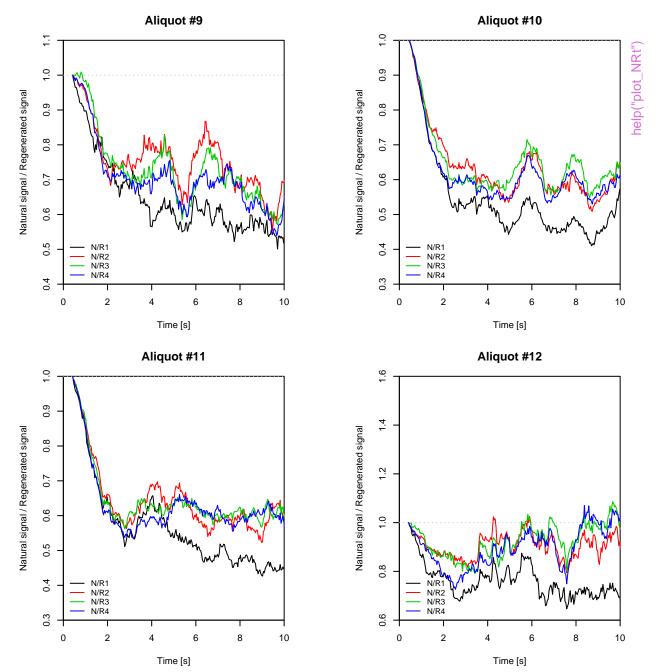
Time [s]

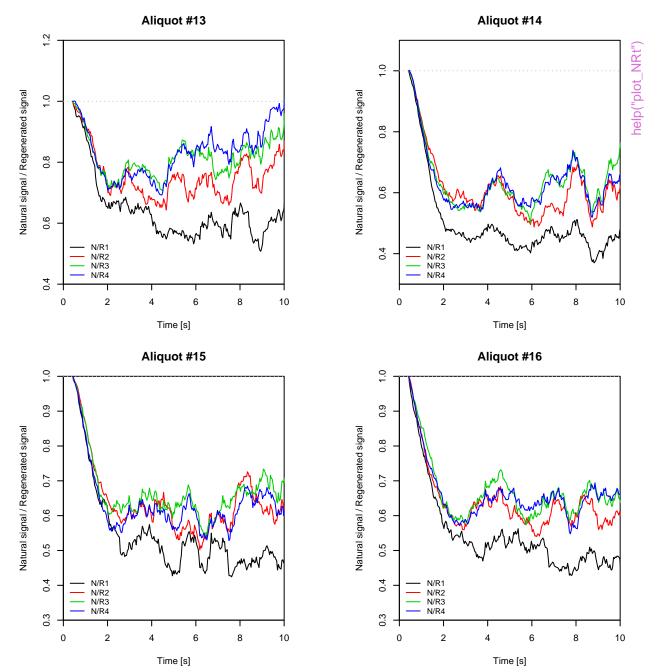
TnTx(t) Plot

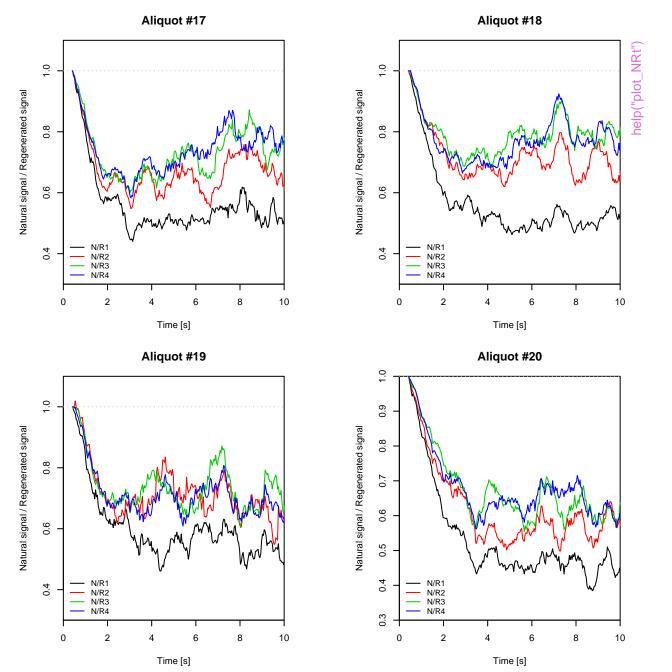


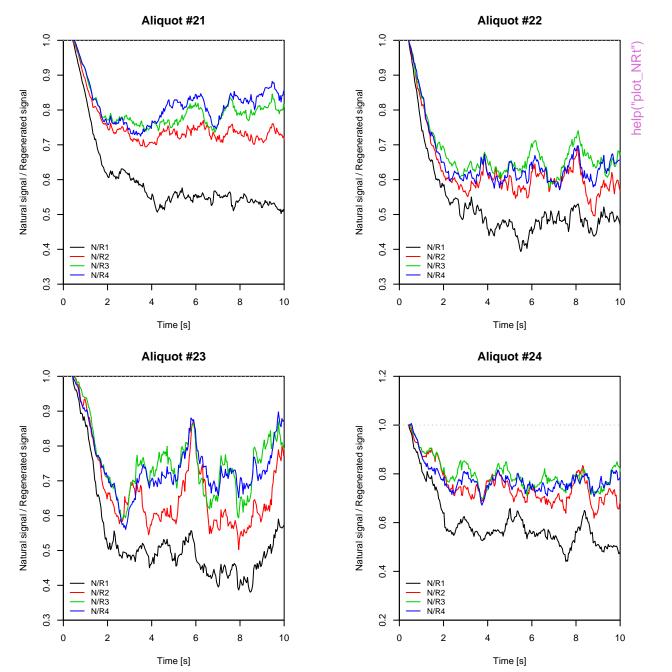


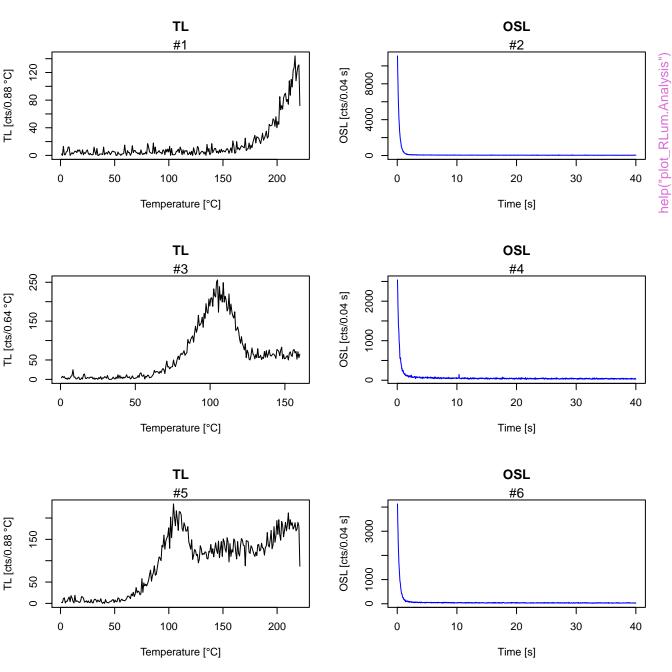


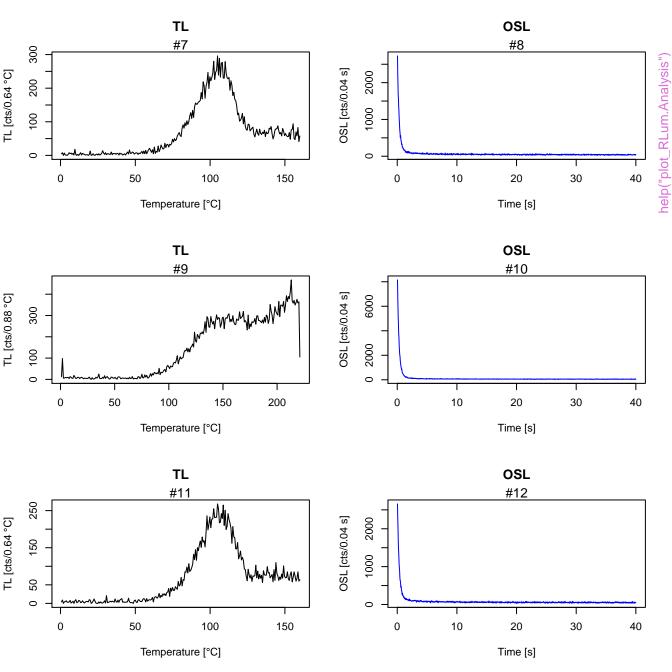


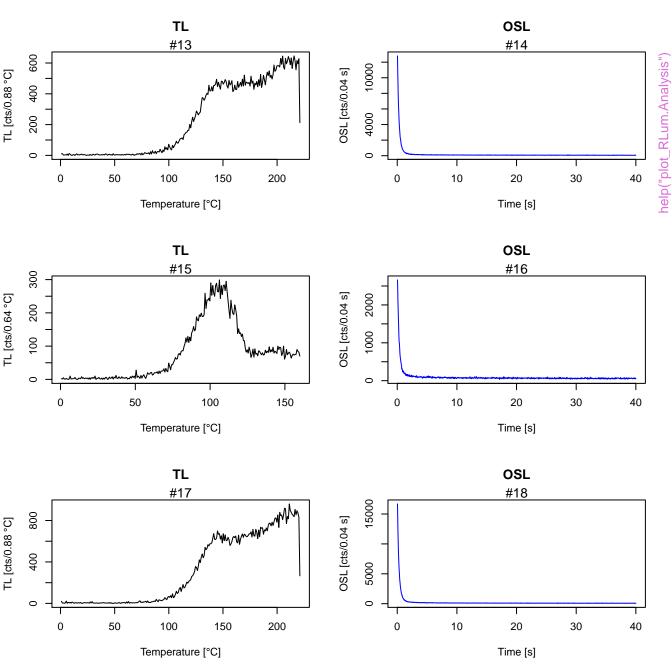


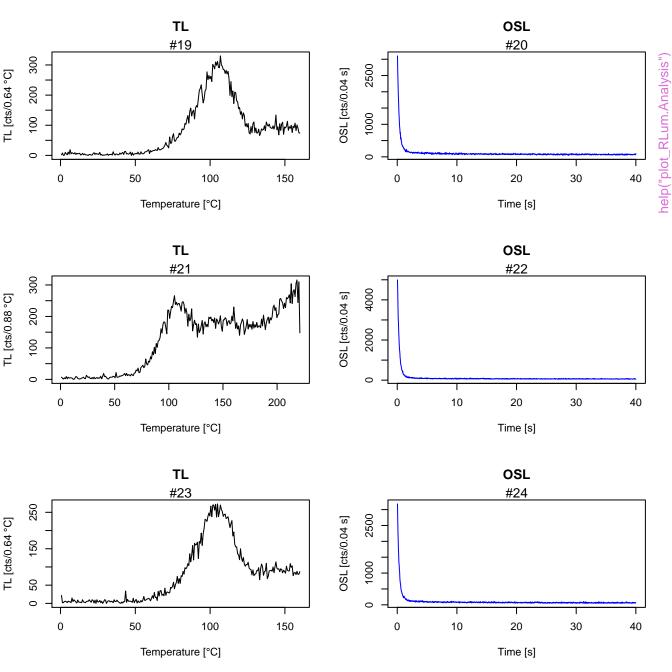


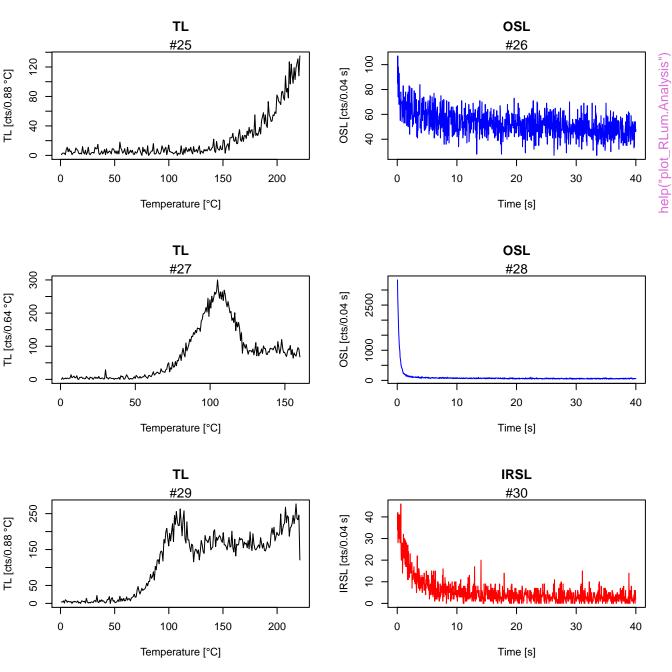




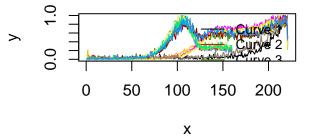








TL combined



unkown curve type



RLum.Data.Image



RLum.Data.Spectrum



help("plot_RLum.Data.Spectrum")

RLum.Data.Spectrum



unkown curve type









