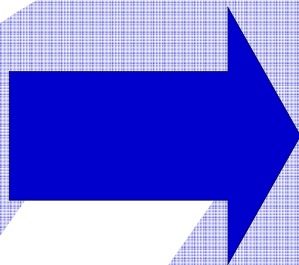
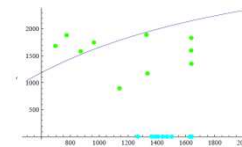
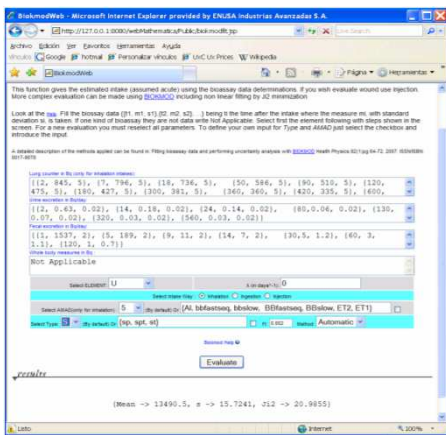




BIOKMOD APPLICATION FOR THE EVALUATION OF DIFFERENT TYPES OF BIOASSAYS

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The Biokmod software for bioassay evaluation, allows to perform different types of calculations (dose calculation, retention fractions, etc.). This latest module, using data from different bioassay, gives the estimated intake using best fit approach.



Using the data, the best fit is applied

[Mean → 81.285, s → 1.17044]

Insert the data from the bioassay (date, activity, deviation) and intake way (inhalation, injection)

The final result is the intake and standard deviation

In the web version only acute intake can be used. There is a full version (Biokmod for use with Mathematica) where constant or chronic intakes can be simulated, as well as fitting the AMAD.

For the fit of the bioassay in Biokmodweb the following equations are used

$$I = \frac{\sum_{i=1}^N r_{c,j}(t_i) \frac{m_i}{u_i^2}}{\sum_{i=1}^N \frac{r_{c,j}^2(t_i)}{u_i^2}}$$

$$U_i = \frac{1}{\sum_{j=1}^N \frac{r_{c,j}^2(t_i)}{u_i^2}}$$

I=intake
 $r_{c,j}$ =retention function associated with measure i (for chronic or acute intakes)
 u_i =uncertainty associated with measure i
 m_i =measure of bioassay

CONCLUSION

With this new module for Biokmod it is possible to study the best estimation for intake and AMAD, using as input the data from different bioassays. The software is available for free in the following webpage.

BIOKMOD WEBPAGE

<http://www3.enusa.es/webMathematica/Public/biokmod.html>