Supplementary material

Matlab sequence 1

```
nr_sim=1000; % number of simulation
URR=URR_min+(URR_max-URR_min)*rand(nr_sim,1); %
URR_max=1.05*URR, URR_min=0.95*URR
sigma=sigma_min+(sigma_max-sigma_min)*rand(nr_sim,1); %
sigma_max=13.5, sigma_min=12.5
tm=tm_min+(tm_max-tm_min)*rand(nr_sim,1); % tm_max=10.5,
tm_min=9.5
for i=1:nr_sim;
Qm(i)=URR(i)/sigma(i)/sqrt(2*pi);
Q(i)=Qm(i)*exp(-((t-tm(i))/1.41/sigma(i))^2); %Q production values
End
```

Matlab sequence 2

```
    [h,p]=lillietest(Q); % values of h=0, and p=0.5 the null hypothesis is
verified
normplot(Q);
hist(Q);
```

Matlab sequence 3

```
    [mu,s,muci,sci] = normfit(Q)
    p1 = 1-normcdf(Q,mu,s);
    plot(Q,p1,'.');
```