

Data generation steps by MT

1) Generate Ec_{true} by MT

2) Compute POC_{comb}



EC_{true}
EC_{true1}
EC_{true2}
EC_{true3}
EC_{true4}
EC_{true5}
EC_{true6}
EC_{true7}
.....
EC_{true}
EC_{true}

$(OC/EC)_{pri}$
$(OC/EC)_{pri1}$
$(OC/EC)_{pri2}$
$(OC/EC)_{pri3}$
$(OC/EC)_{pri4}$
$(OC/EC)_{pri5}$
$(OC/EC)_{pri6}$
$(OC/EC)_{pri7}$
.....
$(OC/EC)_{pri}$
$(OC/EC)_{pri}$



POC_{comb}
POC_{comb1}
POC_{comb2}
POC_{comb3}
POC_{comb4}
POC_{comb5}
POC_{comb6}
POC_{comb7}
.....
POC_{comb}
POC_{comb}

\times

=

3) Compute POC_{true}



POC_{true}
POC_{true1}
POC_{true2}
POC_{true3}
POC_{true4}
POC_{true5}
POC_{true6}
POC_{true7}
.....
POC_{true}
POC_{true}

+

$POC_{non-comb}$
$POC_{non-comb1}$
$POC_{non-comb2}$
$POC_{non-comb3}$
$POC_{non-comb4}$
$POC_{non-comb5}$
$POC_{non-comb6}$
$POC_{non-comb7}$
.....
$POC_{non-comb}$
$POC_{non-comb}$



POC_{true}
POC_{true1}
POC_{true2}
POC_{true3}
POC_{true4}
POC_{true5}
POC_{true6}
POC_{true7}
.....
POC_{true}
POC_{true}

(4-a) Compute ε_{POC} and ε_{EC} with $\gamma_{Unc-nonlinear}$

$$-\sqrt{\frac{LOD_{POC}}{POC_{true}}} \times \alpha_{POC} \times POC_{true} \leq \varepsilon_{POC} \leq +\sqrt{\frac{LOD_{POC}}{POC_{true}}} \times \alpha_{POC} \times POC_{true}$$

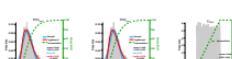
$$-\sqrt{\frac{LOD_{EC}}{EC_{true}}} \times \alpha_{EC} \times EC_{true} \leq \varepsilon_{EC} \leq +\sqrt{\frac{LOD_{EC}}{EC_{true}}} \times \alpha_{EC} \times EC_{true}$$

(4-b) Compute ε_{POC} and ε_{EC} with $\gamma_{Unc-linear}$

$$-\gamma_{POCunc} POC_{true} \leq \varepsilon_{POC} \leq +\gamma_{POCunc} POC_{true}$$

$$-\gamma_{ECunc} EC_{true} \leq \varepsilon_{EC} \leq +\gamma_{ECunc} EC_{true}$$

5) Compute $POC_{measured}$ and $EC_{measured}$



$POC_{measured}$
$POC_{measured1}$
$POC_{measured2}$
$POC_{measured3}$
$POC_{measured4}$
$POC_{measured5}$
$POC_{measured6}$
$POC_{measured7}$
.....
$POC_{measured}$
$POC_{measured}$

+

\times

=



EC_{true}
EC_{true1}
EC_{true2}
EC_{true3}
EC_{true4}
EC_{true5}
EC_{true6}
EC_{true7}
.....
EC_{true}
EC_{true}

+



Y_{unc}
Y_{unc1}
Y_{unc2}
Y_{unc3}
Y_{unc4}
Y_{unc5}
Y_{unc6}
Y_{unc7}
.....
Y_{unc}
Y_{unc}

+



$EC_{measured}$
$EC_{measured1}$
$EC_{measured2}$
$EC_{measured3}$
$EC_{measured4}$
$EC_{measured5}$
$EC_{measured6}$
$EC_{measured7}$
.....
$EC_{measured}$
$EC_{measured}$