

Performance metrics for multivariable integrated evaluation

two modes of stats provided:

M-variables

var-1 $[d_1][N]$

var-2 $[d_2][N]$

var-3 $[d_3][N]$

.....

var-M $[d_M][N]$

Normalize
with rms of
Reference

Group into



$$\begin{bmatrix} a_{11} & a_{12} & a_{13} & \cdots & a_{1N} \\ a_{21} & a_{22} & a_{23} & \cdots & a_{2N} \\ a_{31} & a_{32} & a_{33} & \cdots & a_{3N} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ a_{D1} & a_{D2} & a_{D3} & \cdots & a_{DN} \end{bmatrix}$$

$$(D = \sum_{m=1}^M d_m)$$

Multivariable Integrated field

◆ Uncentered statistics

uCORR Eq. 2 ($M = d_m$)

VSC Eq. 2 ($M = D$)

rms Eq. 1 ($M = d_m$)

RMSL Eq. 1 ($M = D$)

rms_std Eq. 6

RMSD Eq. 3 ($M = d_m$)

RMSVD Eq. 3 ($M = D$)

MISS Eqs. 2, 8–10

◆ Centered statistics

CORR Eq. 12 ($M = d_m$)

cVSC Eq. 12 ($M = D$)

SD Eq. 11 ($M = d_m$)

cRMSL Eq. 11 ($M = D$)

SD_std Eq. 18

cRMSD Eq. 13 ($M = d_m$)

cRMSVD Eq. 13 ($M = D$)

ME Eq. 14 ($M = d_m$)

VME Eq. 14 ($M = D$)
/ MEVM (MEVD)

MISS Eqs. 2, 8–10

Grades of Performance metrics

Statistics for individual variables

Statistics for multivariable integrated field

An index summarizing overall performance