Subject	IMU hand		IMU chest		IMU ankle	
	Count	*%*	*Count*	*%*	*Count*	*%*
1	1454	0.39	509	0.14	1327	0.35
2	2729	0.61	387	0.09	2445	0.55
3	522	0.21	183	0.07	527	0.21
4	2214	0.67	213	0.06	1101	0.33
5	1541	0.41	312	0.08	1980	0.53
6	1021	0.28	343	0.09	1372	0.38
7	1506	0.48	257	0.08	1037	0.33
8	2151	0.53	1308	0.32	1951	0.48

Table 1. The count and percentage of missing values in PAMAP2.

Subject	Mean		Sample		LOCF		PMM	
	RBias	*RMSE*	*RBias*	*RMSE*	*RBias*	*RMSE*	*RBias*	*RMSE*
1	7.949	15.723	11.163	22.291	0.431	1.737	6.231	13.144
2	5.238	9.932	7.422	14.038	0.338	1.315	4.171	8.593
3	4.757	8.909	6.709	12.623	0.289	0.991	3.605	7.537
4	5.367	10.467	7.633	14.759	0.299	0.856	4.192	8.720
5	5.457	10.692	7.783	15.119	0.387	1.471	4.637	9.510
6	5.438	10.286	7.683	14.503	0.432	1.923	4.555	9.121
7	5.396	10.391	7.657	14.735	0.372	1.764	3.919	8.256
8	5.315	10.091	7.537	14.288	0.377	1.741	4.094	8.223

Table 2. Evaluation of different imputation methods on PAMAP2 dataset.

Raw Bias (RBias), has a similar form Mean Absolute Error (MAE):

$$\text{RBias} = \frac{1}{n}\sum_{i=1}^{n}|\hat{Q}-Q| \tag{1}$$

Percent Bias (PBias):

$$\text{PBias} = \frac{1}{n}\sum_{i=1}^{n}|(\hat{Q}-Q)/Q| \times 100 \tag{2}$$

Root Mean Square Error (RMSE)

$$\text{RMSE} = \sqrt{\frac{1}{n}\sum_{i=1}^{n}(\hat{Q}-Q)^2} \tag{3}$$

where Q is missing values, $\hat{Q}$ is the corresponding predicted values, and n is the count of missing values.

$$X_e[k] = \sum_{n=0}^{N-1} X_e[n]e^{-j\frac{2\pi kn}{N}}, \quad S_e[k] = |X_e[k]|^2. \tag{4}$$

$$\overline{E} = \frac{\sum_{k=0}^{N-1} S_e[k]}{N}, \quad \text{SNR} = \frac{S_e[\frac{N}{3}]}{\overline{E}}. \tag{5}$$