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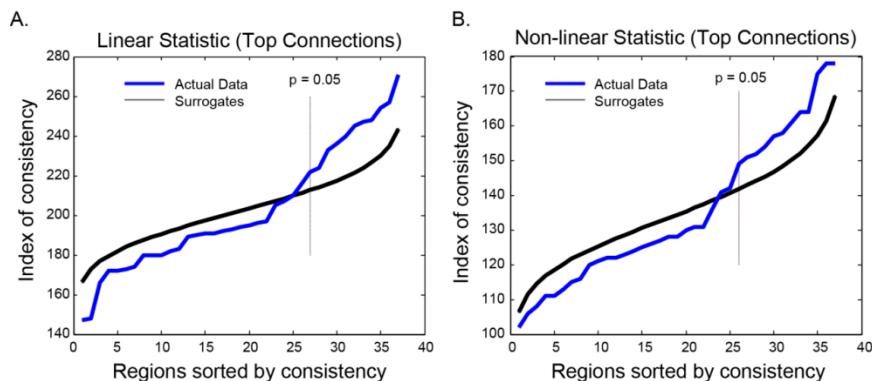
Resting State Networks

RSN REGIONS	BA	vol_cmm	max_act	peak_act (mm)		
				x	y	z
Subcortical Networks						
Basal Ganglia (IC 33)	34	20925	34.39	-24	6	-3
Thalamus (IC 58)		20142	47.91	6	-12	15
Temporal Networks						
Superior Temporal Gyrus (IC 62)	42	73845	30.36	60	-21	9
Middle Temporal Gyrus (IC 75)	39	1108	23.07	-54	72	9
Transverse Temporal Gyrus (IC 94)	13	4563	20.52	45	-3	3
Somatotmotor Networks						
Pre-Supplementary Motor Area (IC 18)	32	37098	35.53	0	6	45
Supplementary Motor Area (IC 36)	6	51057	63.2	0	9	72
Bi Paracentral Lobule (IC 49)		39852	108.21	0	-12	81
Left Precentral Gyrus (IC 54)	4	52704	44.68	-39	-24	66
Right Precentral Gyrus (IC 59)	4	47466	47.87	42	-24	66
Bi Postcentral Gyrus (IC 72)	6	68931	30.55	18	-24	72
Right Postcentral Gyrus (IC 74)	4	65151	45.37	60	-6	27
Postcentral Gyrus (IC 99)		30996	72.81	18	-30	84
Default Mode Networks						
Bi Posterior Cingulate Cortex (IC 6)	23	39663	64.95	0	-54	15
Right Angular Gyrus (IC 12)	40	7047	31.91	54	-60	36
Bi Precuneus (1) (IC 30)	7	59751	40.33	0	-51	54
Precuneus (2) (IC 34)	7	44334	44.56	0	-60	36
Left Angular Gyrus (IC 42)	39	13851	30.33	-51	-60	33
Precuneus (3) (IC 84)	7	41634	64.82	0	-78	45
Anterior Cingulate Cortex (IC 90)	10	17577	46.37	0	51	0
Visual Networks						
Lingual Gyrus (IC 17)	30	47358	27.52	21	-51	0
Calcarine Gyrus (IC 25)	31	55836	33.08	3	-72	15
Cuneus Gyrus (IC 98)	19	58050	44.82	3	-93	30
Cognitive Control Networks						
Left Inferior Parietal Lobule (IC 1)	7	49005	34.1	-30	-81	45
Left Superior Parietal Lobule (IC 24)	10	486	7.9	-33	-66	54
Right Inferior Parietal Lobule (IC 37)	40	47412	29.13	54	-36	54
Bi Superior Parietal Lobule (IC 55)	7	56214	39.59	-24	-60	66
Right Superior Parietal Lobule (IC 92)	7	47142	36.23	36	-63	54
Frontal Networks						
Superior Medial Gyrus (1) (IC 10)	8	43119	55.58	0	48	51
Inferior Frontal Gyrus (IC 31)	47	45009	35.5	-42	18	-6
Medial Frontal Gyrus (IC 39)	9	14715	26.55	0	48	27
Left Superior Frontal Gyrus (IC 47)	10	6939	40.75	-33	60	6
Right Superior Frontal Gyrus (IC 85)	10	11016	43.73	30	63	3
Superior Medial Gyrus (2) (IC 89)	10	49437	49.62	0	66	21
Superior Frontal Gyrus (IC 100)	6	55971	69.81	3	27	66
Cerebellar Networks						
Bi Cerebellum (IC 8)		8559	33.68	0	-60	-18
Right Cerebellum (IC 26)		21465	26.93	39	-42	-45

SI Table 1: Resting State Networks (RSNs). Broadmann areas (BA), activation cluster volumes (vol_cmm), peak activation intensities (max_act) and peak activation coordinates (peak_act) corresponding to the RSN spatial maps.

Evaluation of time-resolved connectivity with the CPR null model

In this analysis, we considered the consistent phase randomized (CPR) null model (used in Hindriks et al. 2016) to evaluate time-resolved dFC using a linear and a non-linear test statistic as also tested using auto-regressive surrogate data in Zalesky et al. (2014) and amplitude-adjusted phase randomized models in Betzel et al. (2016). Similar evidence as in Zalesky et al. (2014) and Betzel et al. (2016) for presence of “dynamic” inter-regional connections that rejected this null model after FDR correction was found. More specifically, alike Hindriks et al. 2016 and following Zalesky et al. 2014, we estimated the standard deviation across the time (i.e. window) dimension of the windowed FNC data (as the linear test statistic) and the same non-linear statistic as used in Zalesky et al. 2014 for all subjects in a group. These test statistics could be considered as the extent of time-varying fluctuations in the correlation coefficients. For each subject, for each ROI-pair (referred to as a “connection” in the original work), a null distribution of these test statistics was estimated, and the connections that rejected the null hypothesis were retained for further analysis. For each subject, binary graphs highlighting only the top-10 most “dynamic” connections (approximately 1.5% of total number of connections as in Zalesky et al. 2014) were constructed and the degree of each region in these graphs was evaluated. This degree was summed across the subjects to frame an index of consistency of these dynamic connections (i.e. how consistently the regions were dynamic across the subjects). The regionally sorted versions of this index for the real and 1000 surrogate datasets are presented in SI Figure 1 below. Similar to Zalesky et al. (2014), the vertical lines represent the FDR corrected p-values with a cut-off of 0.05; therefore, the regions to the right of these vertical lines could be considered dynamic more consistently than that would be expected by chance alone. For the first group, the consistent regions were all but one (10 out of 11) found to be the same for both test statistics.



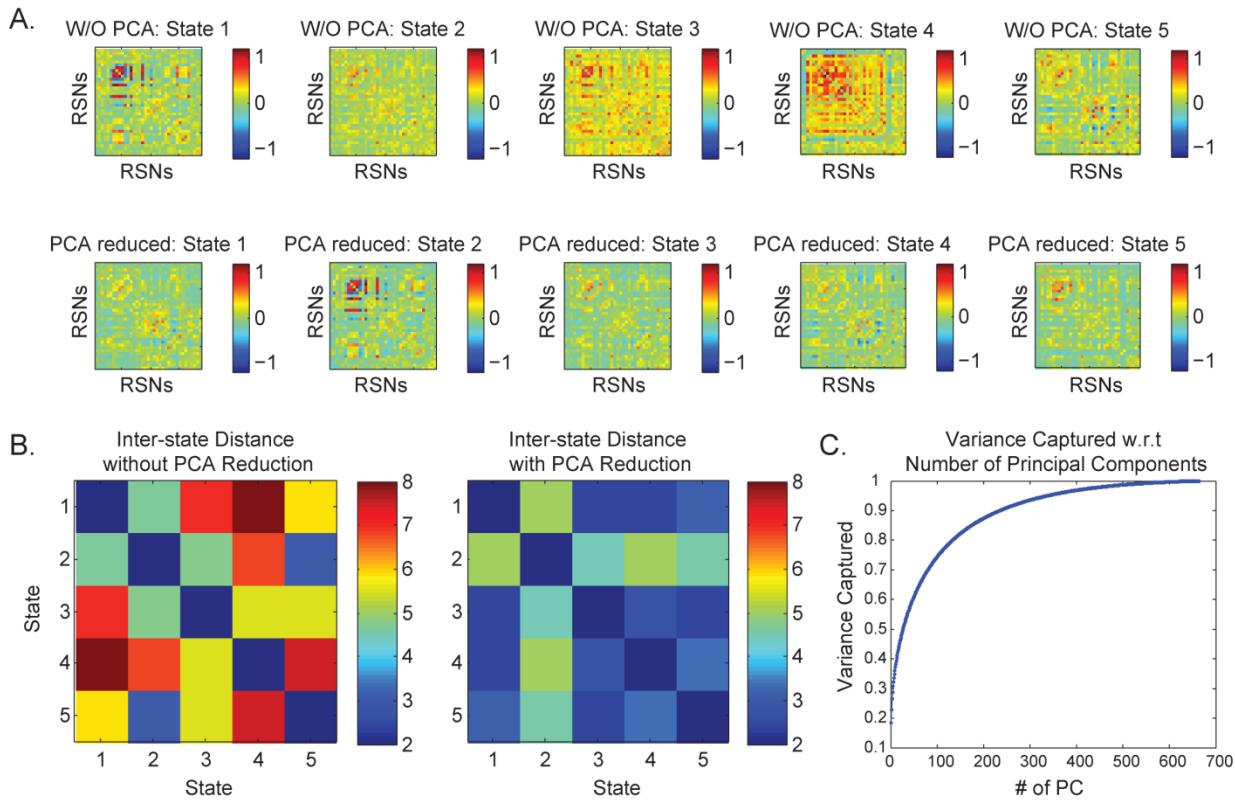
SI Figure 1: Evaluation of regions most consistently forming dynamic connections using an approach similar to Zalesky et al. (2014). The plots show the regionally sorted index of consistency for real data (in blue) and mean of the index of consistency of the 1000 surrogate datasets (also regionally sorted) with the error bars (in black) for (A) the linear test statistic; and (B) the non-linear test statistic. The regions to the right of the $p = 0.05$ cutoff could be considered dynamic more consistently than that would be expected by chance alone.

References

- Hindriks, R., M. H. Adhikari, Y. Murayama, M. Ganzetti, D. Mantini, N. K. Logothetis and G. Deco (2016). "Can sliding-window correlations reveal dynamic functional connectivity in resting-state fMRI?" *NeuroImage* 127: 242-256.
- Zalesky, A., A. Fornito, L. Cocchi, L. L. Gollo and M. Breakspear (2014). "Time-resolved resting-state brain networks." *Proceedings of the National Academy of Sciences* 111(28): 10341-10346.
- Betzel, R. F., M. Fukushima, Y. He, X.-N. Zuo and O. Sporns (2016). "Dynamic fluctuations coincide with periods of high and low modularity in resting-state functional brain networks." *NeuroImage* 127: 287-297.

Impact of dimension reduction on clustering

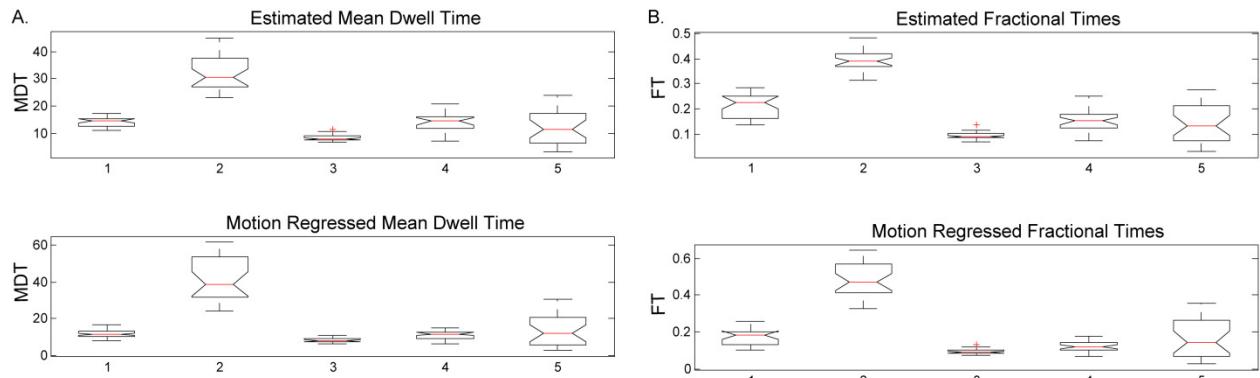
In this particular analysis, we study the impact of reducing the ROI-pair correlation dimension of the windowed FNC data on the clustering results. PCA with 30 number of principal components was used to reduce the windowed FNC data for the first group. It can be clearly seen that only a small percentage of variation in the data is retained after this dimension reduction step, and this is one reason for the apparent similarity (reduced inter-state pairwise distances) in the emergent states (SI Figure 2).



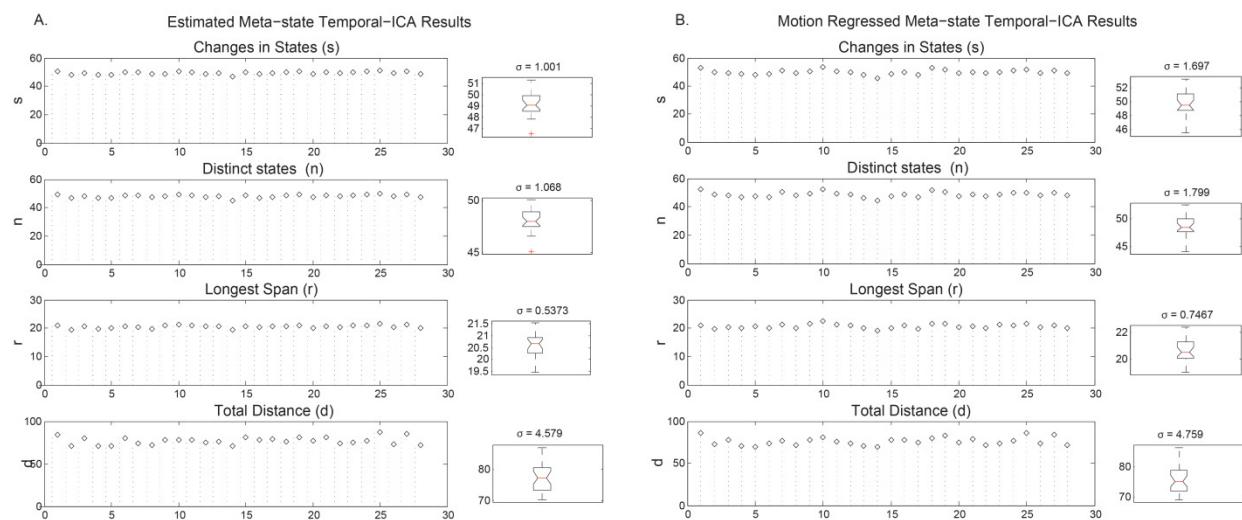
SI Figure 2: Comparison of clustering results on full dimensional windowed FNC data and PCA reduced windowed FNC data. (A) Visualization of the state profiles in both cases; **(B)** Pairwise inter-state distance matrices shows much reduced distance in the PCA reduced case; **(C)** A graph of retained variance w.r.t. number of principal components in the PCA reduction shows low levels of captured variance for lower number of principal components in the PCA reduction.

Impact of head-motion to replicability analysis

Head-motion has been shown to significantly alter correlations in the FNC (45), and so we studied the impact of head motion in the estimated replicability metrics. In this particular analysis, we regressed out the estimated head motion parameters from the observed dynamic measures, and derived the replicability metrics from the motion regressed dynamic measures. As seen in SI Figure 3 and SI Figure 4, the regressed dynamic measures in both approaches were found to be very similar to the originally estimated dynamic measures and demonstrated similar replicability, thus confirming the head motion as not being a significant contributor to the observed replicability.

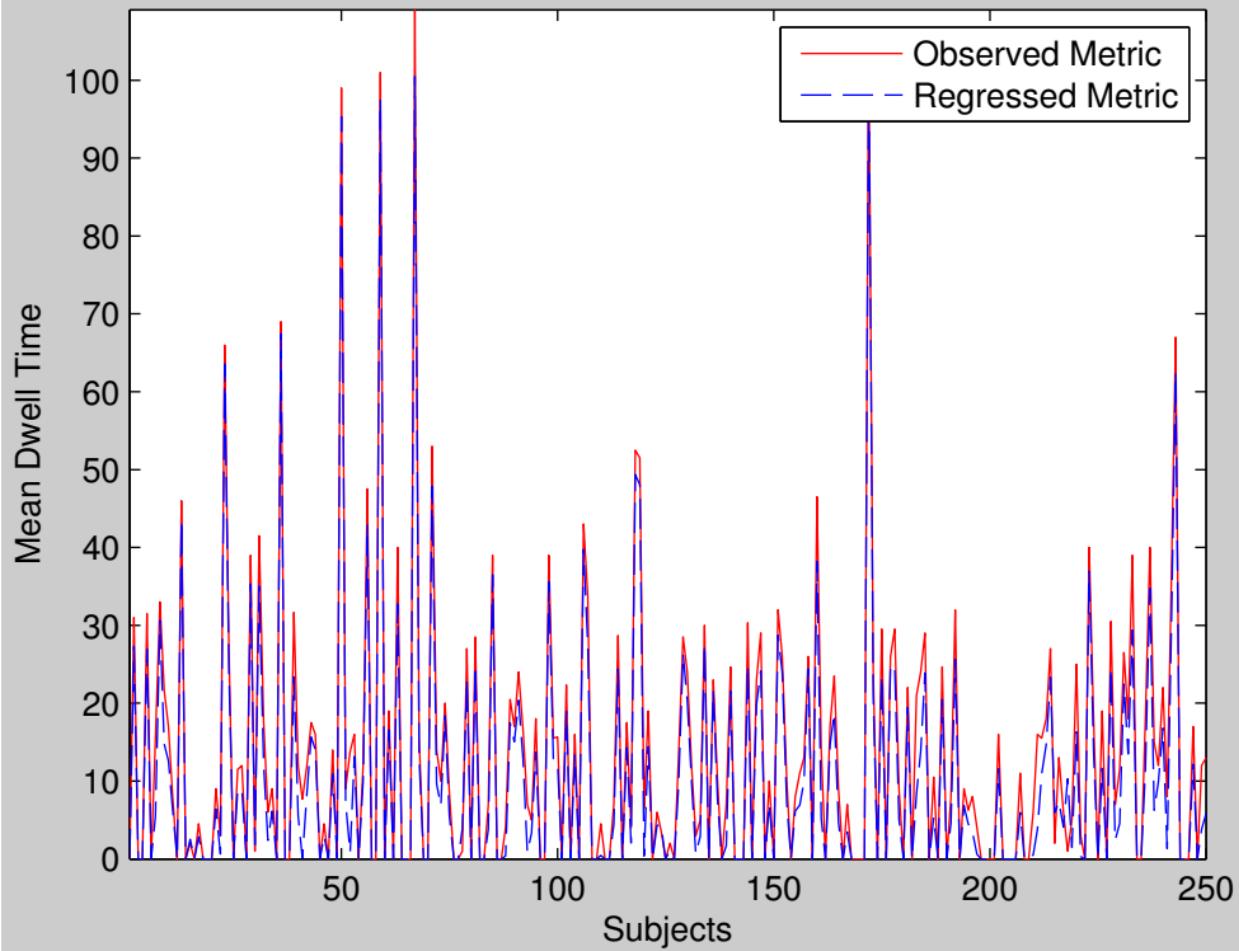


SI Figure 3: Studying impact of head-motion to the estimated dynamic measures and hence replicability in the hard clustering approach. (A) Similarity of originally estimated dynamic measures across the groups; **(B)** Similarity of motion regressed dynamic measures across the groups.

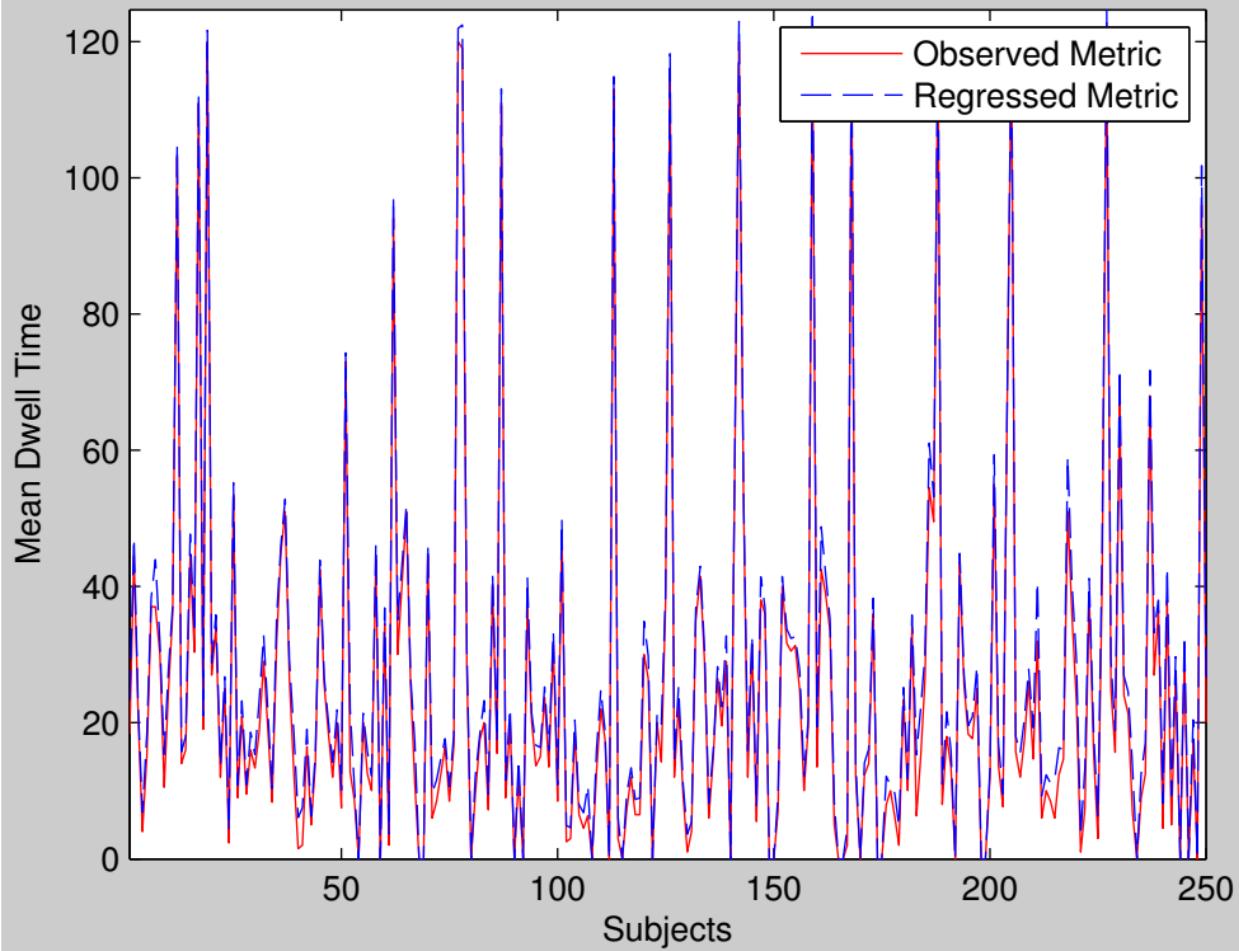


SI Figure 4: Studying impact of head-motion to the estimated dynamic measures and hence replicability in the fuzzy meta-state approach. (A) Similarity of originally estimated dynamic measures across the groups; **(B)** Similarity of motion regressed dynamic measures across the groups.

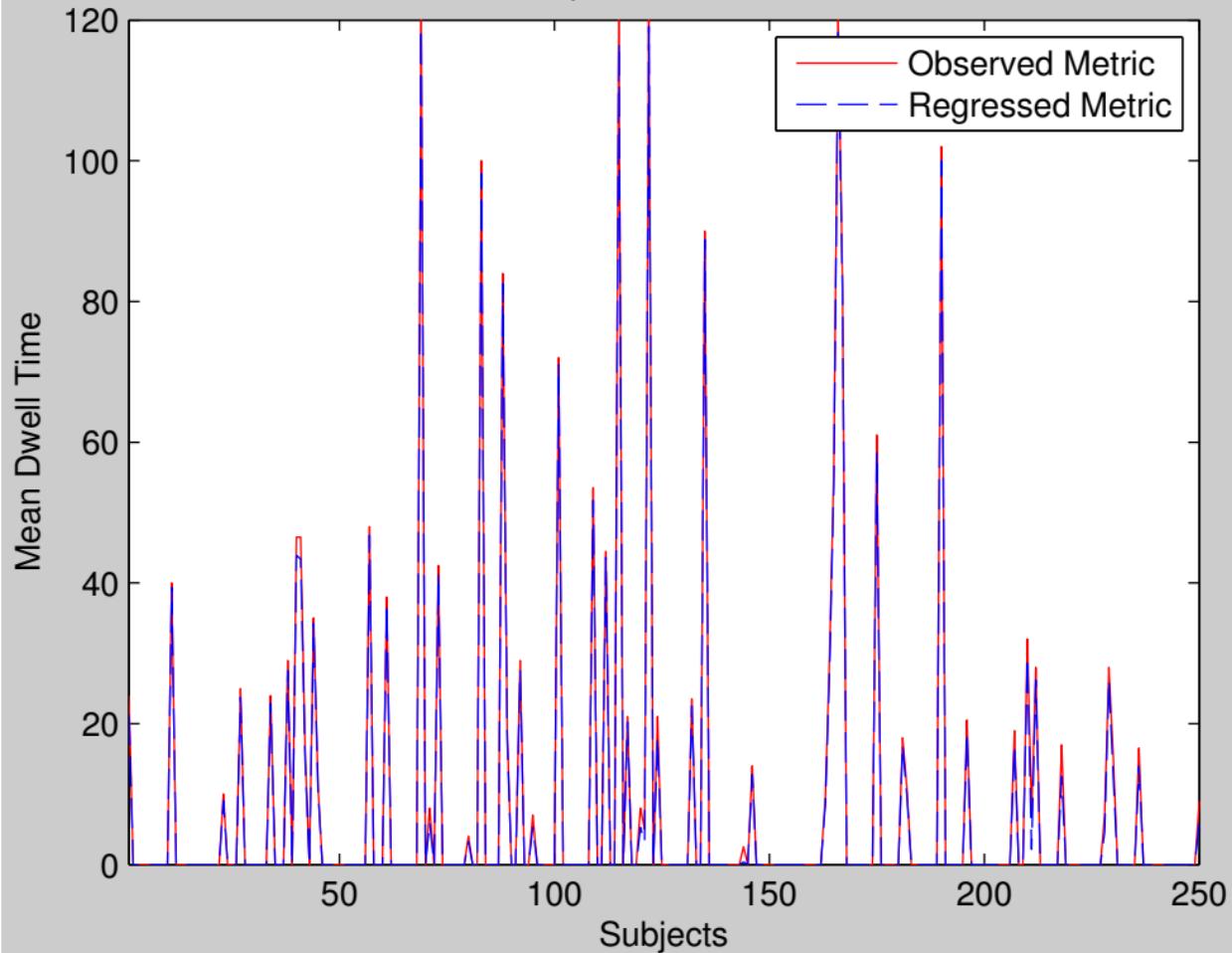
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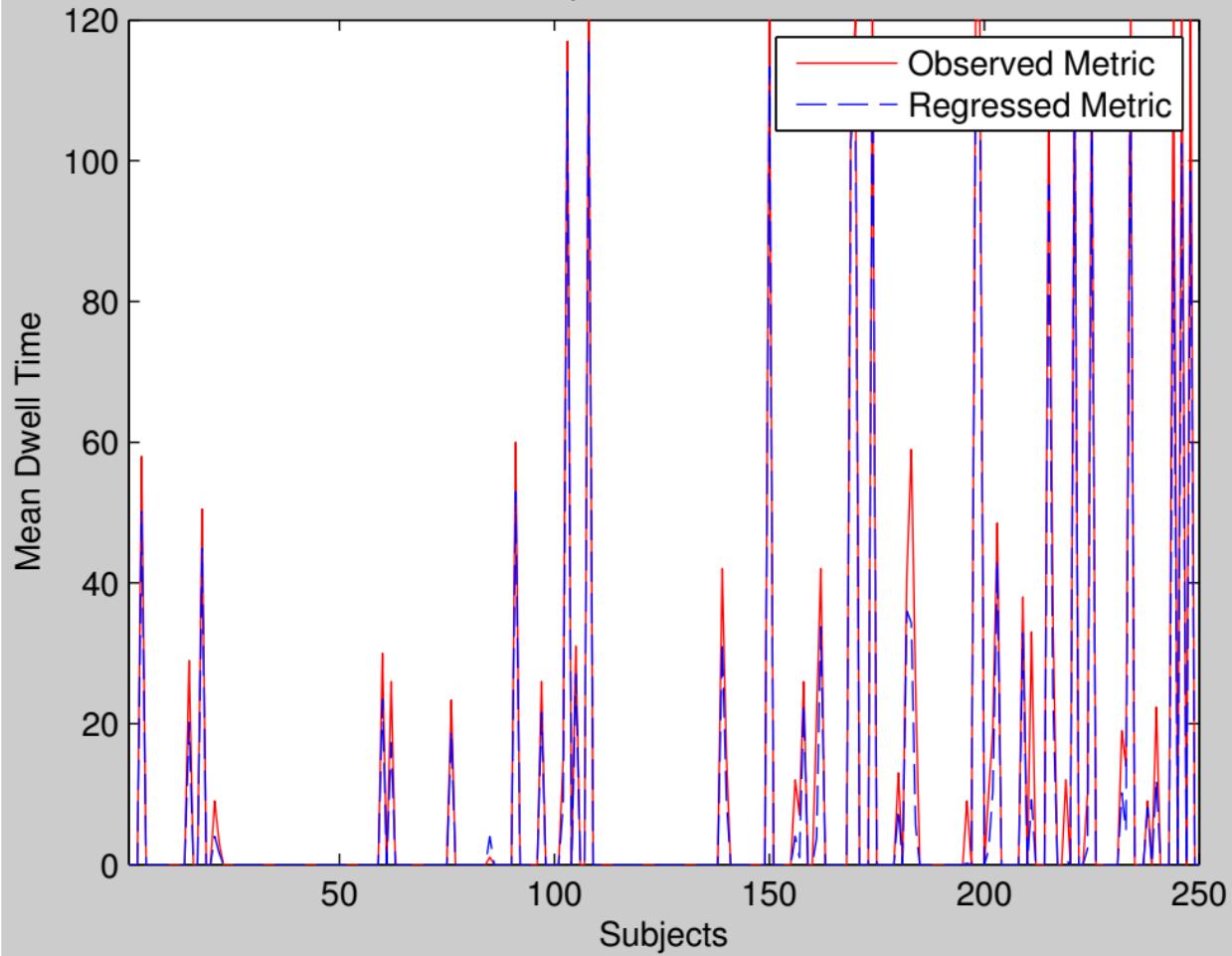
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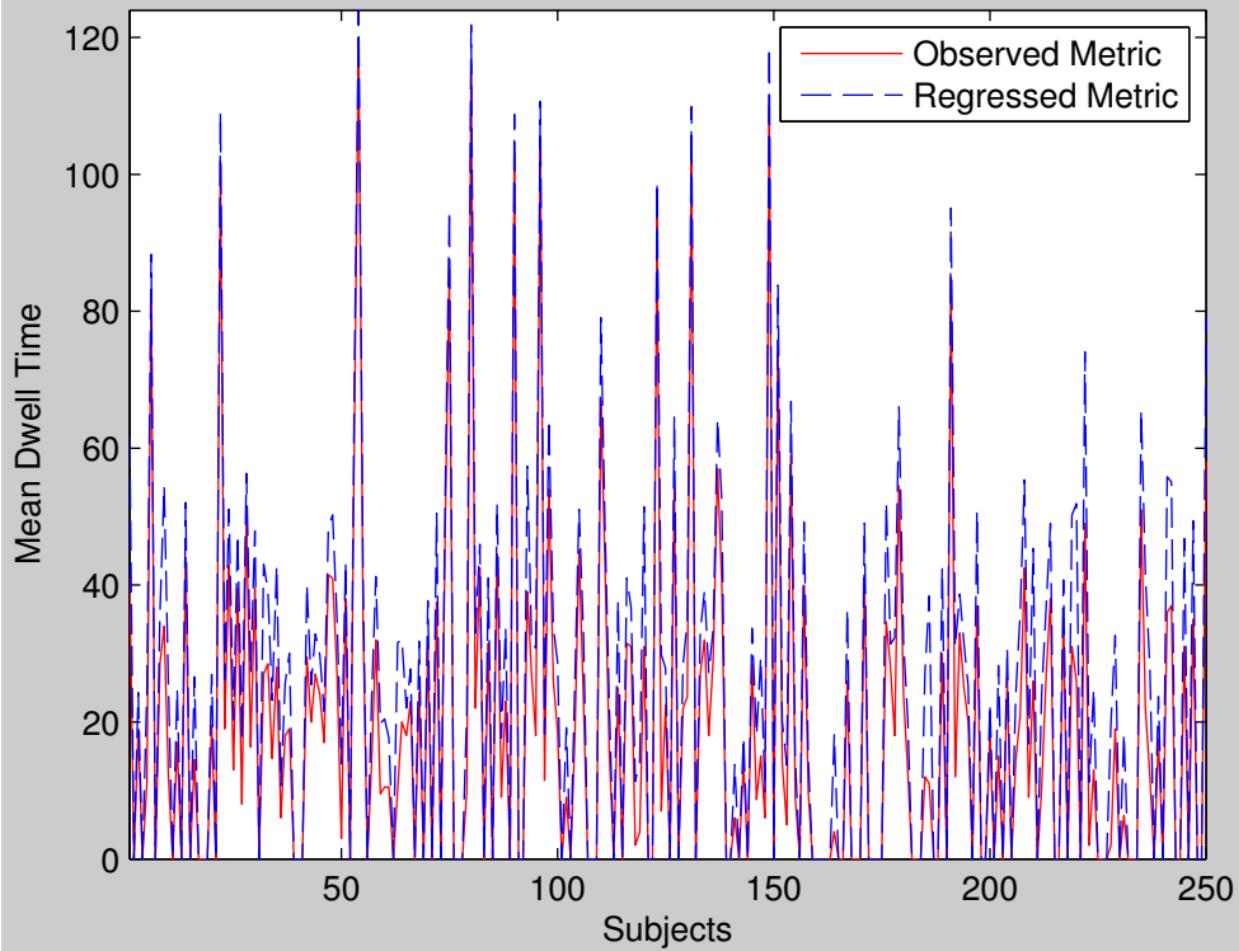
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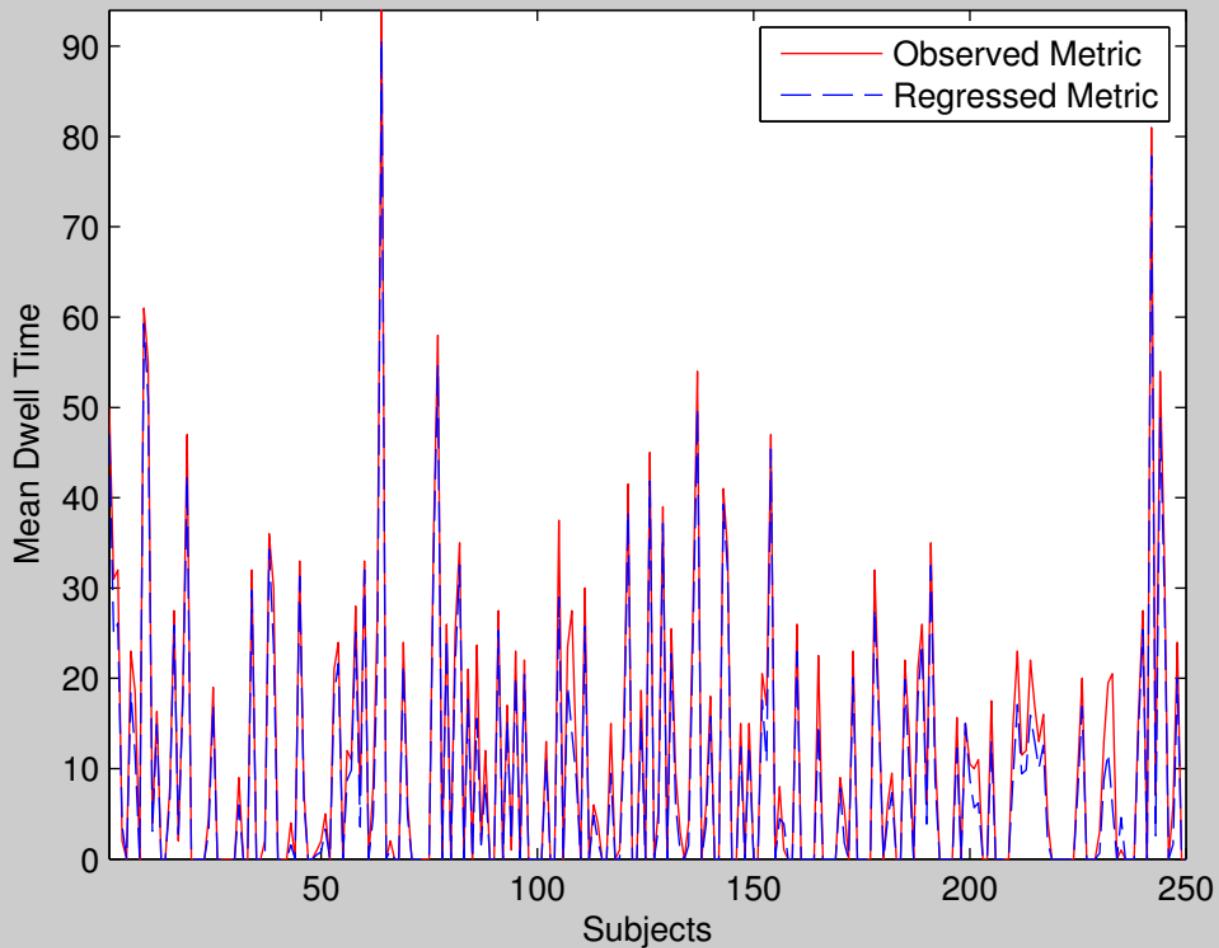
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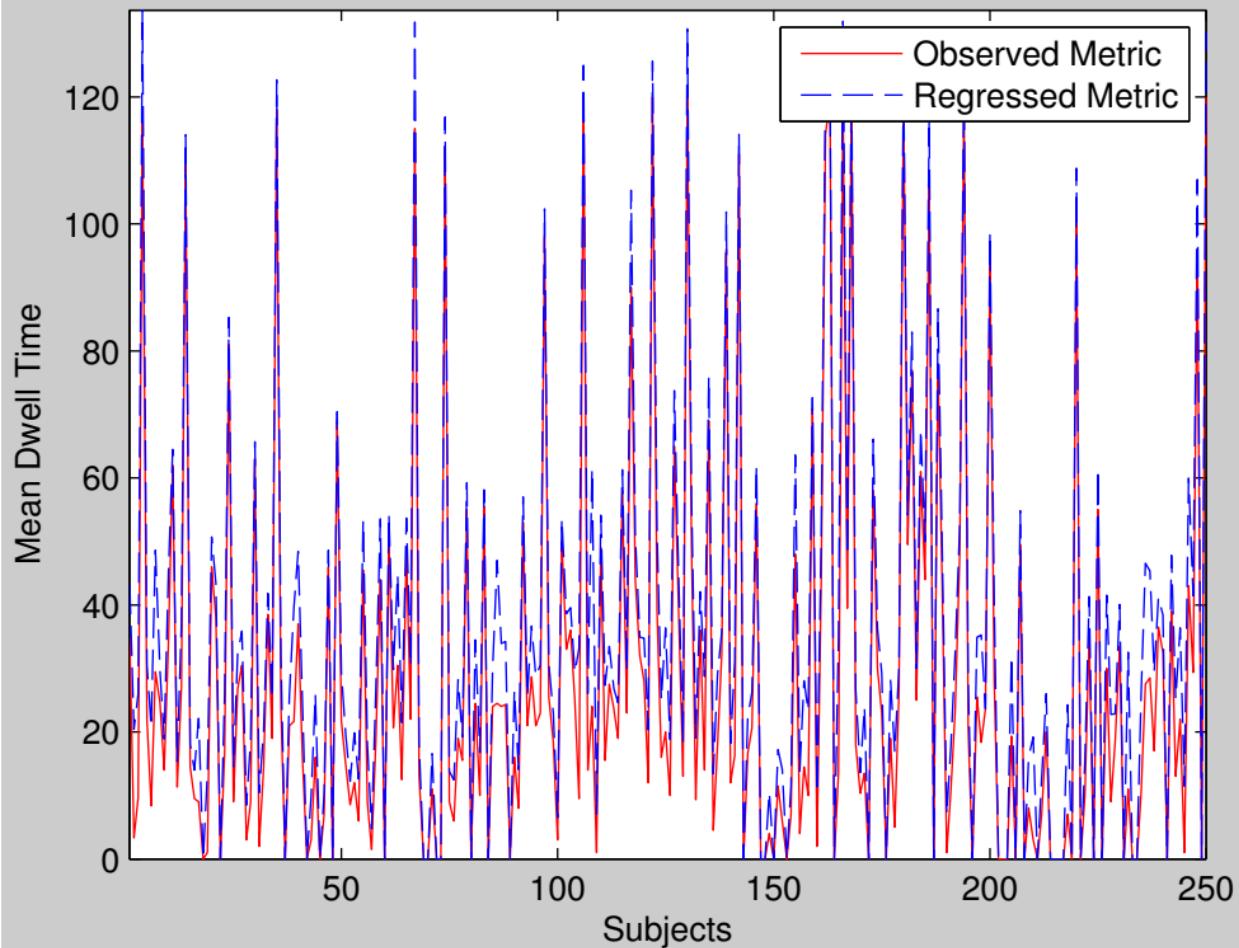
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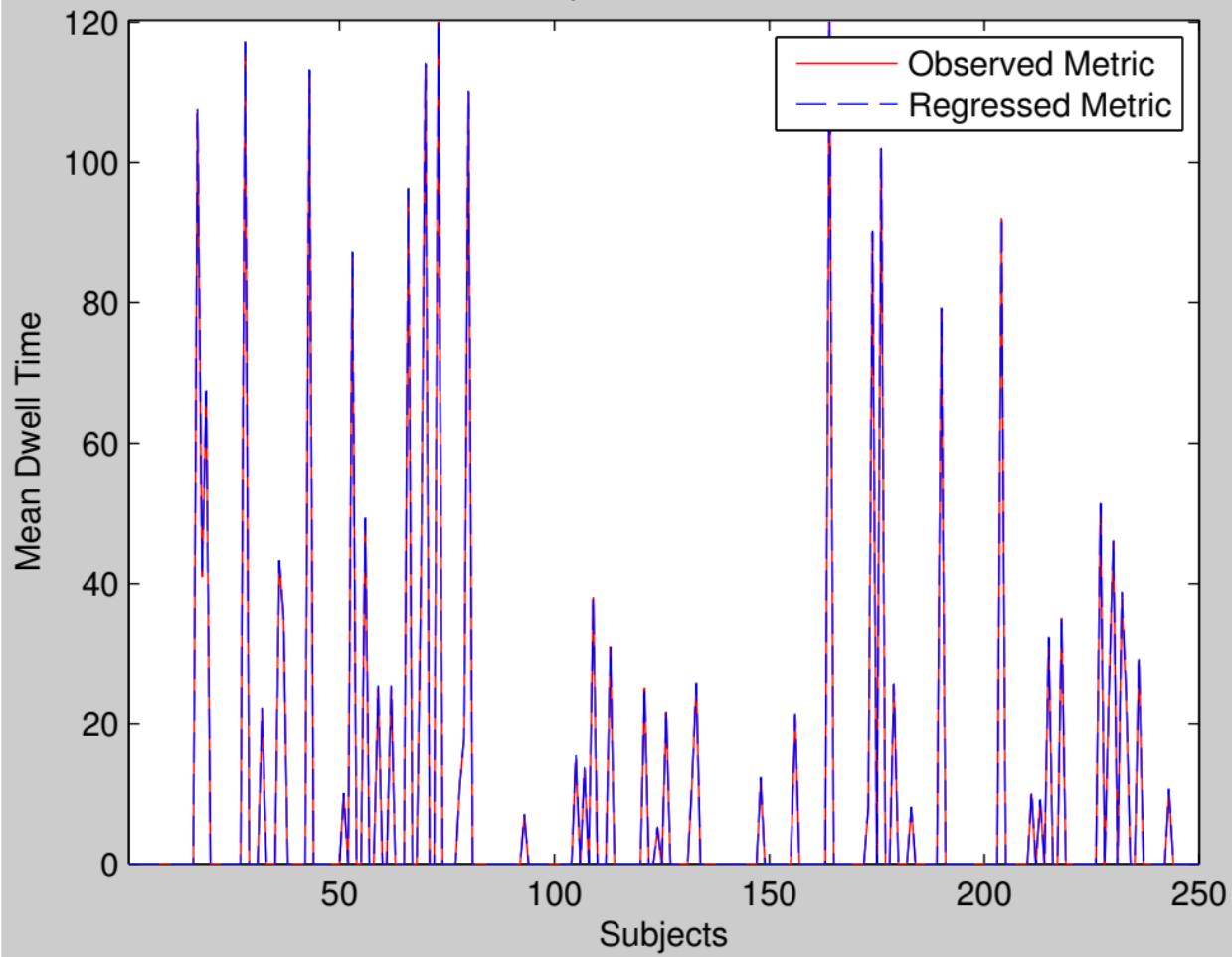
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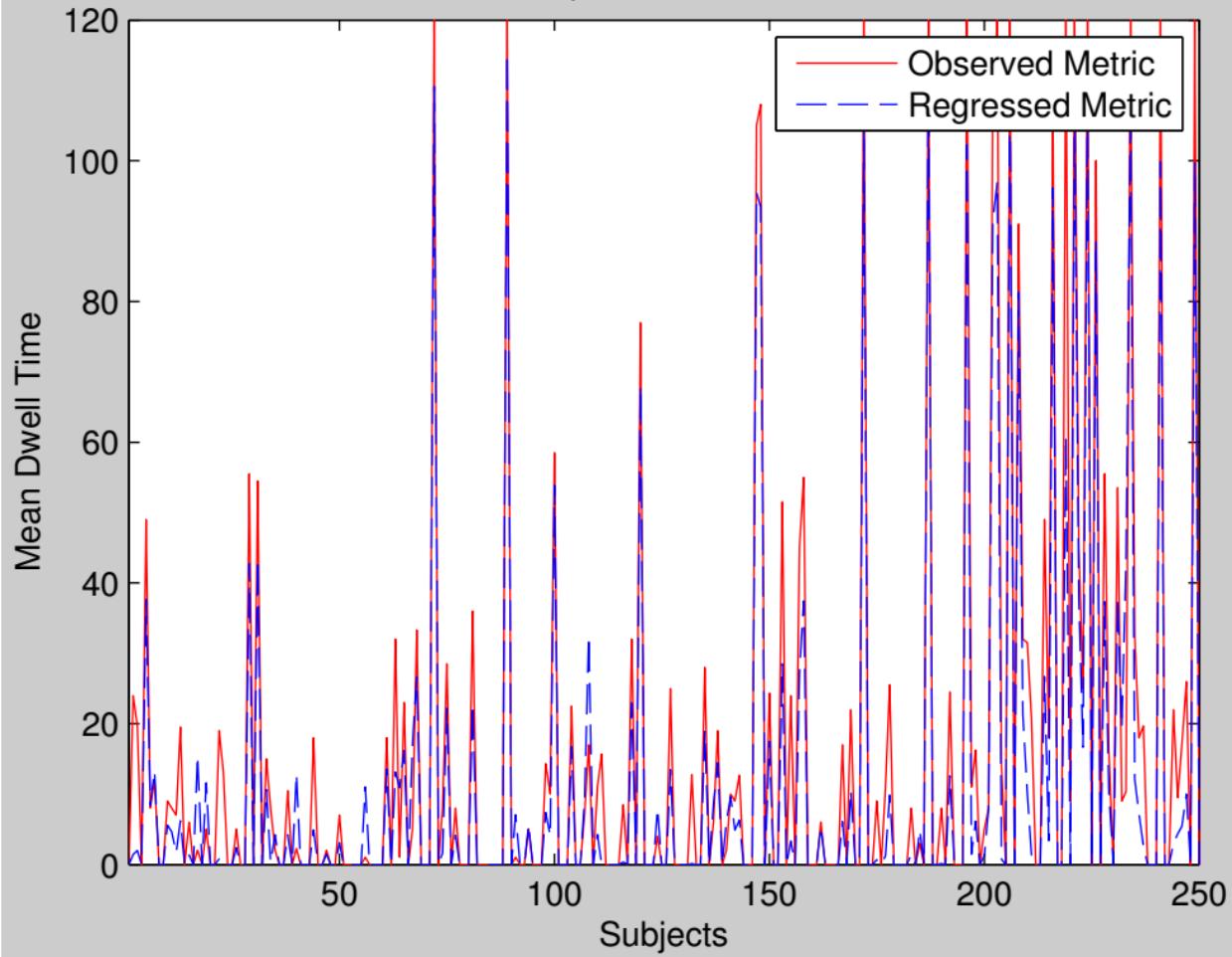
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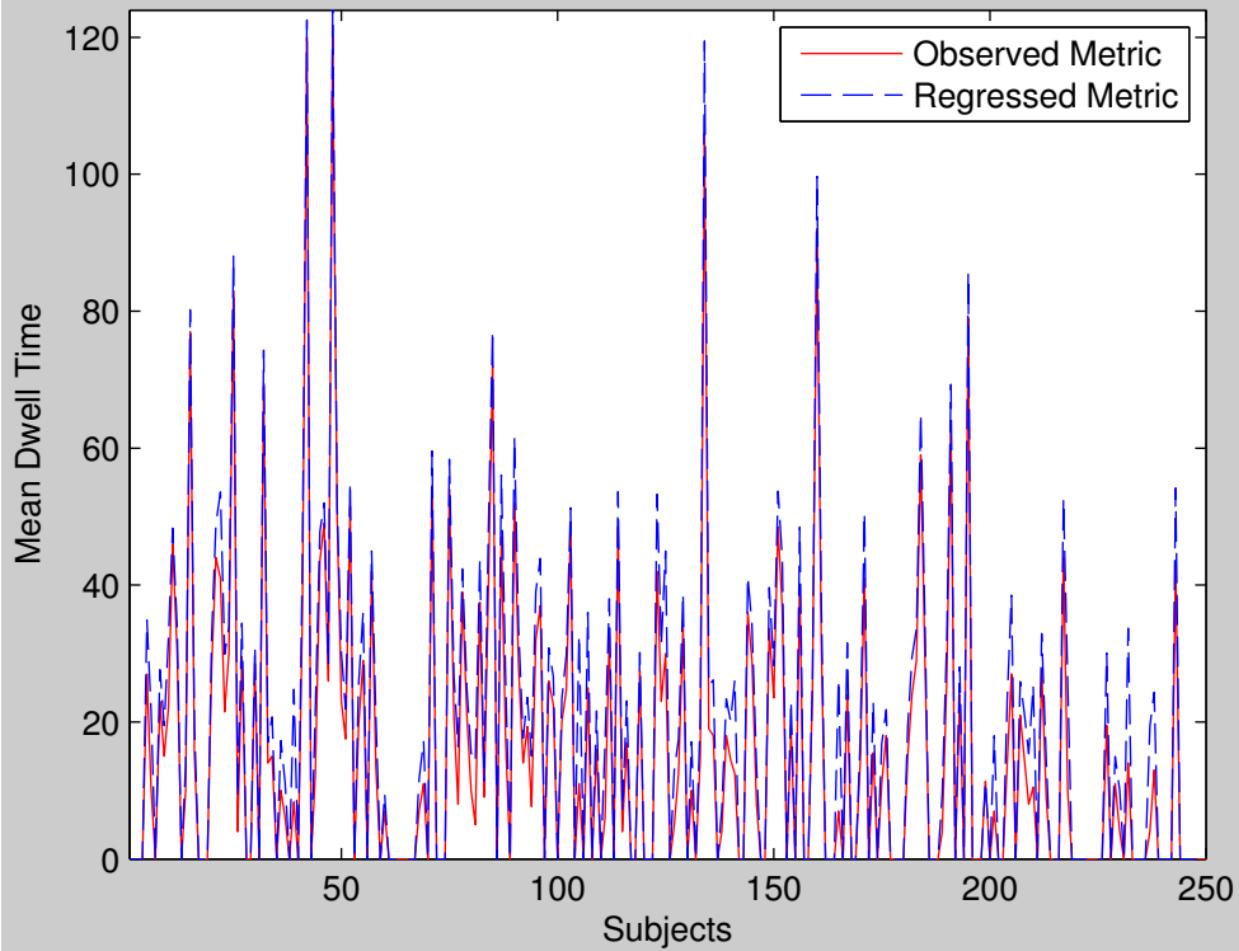
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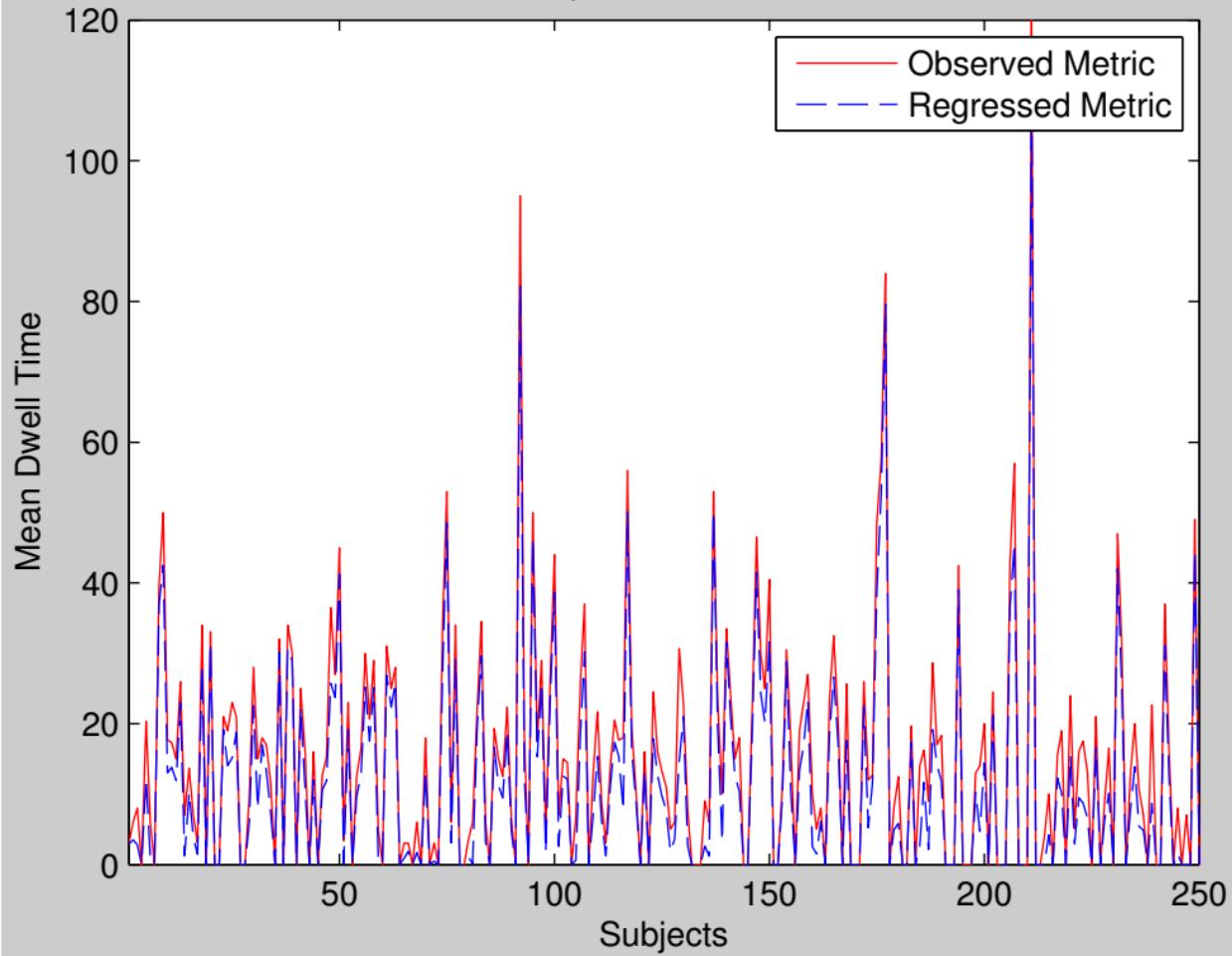
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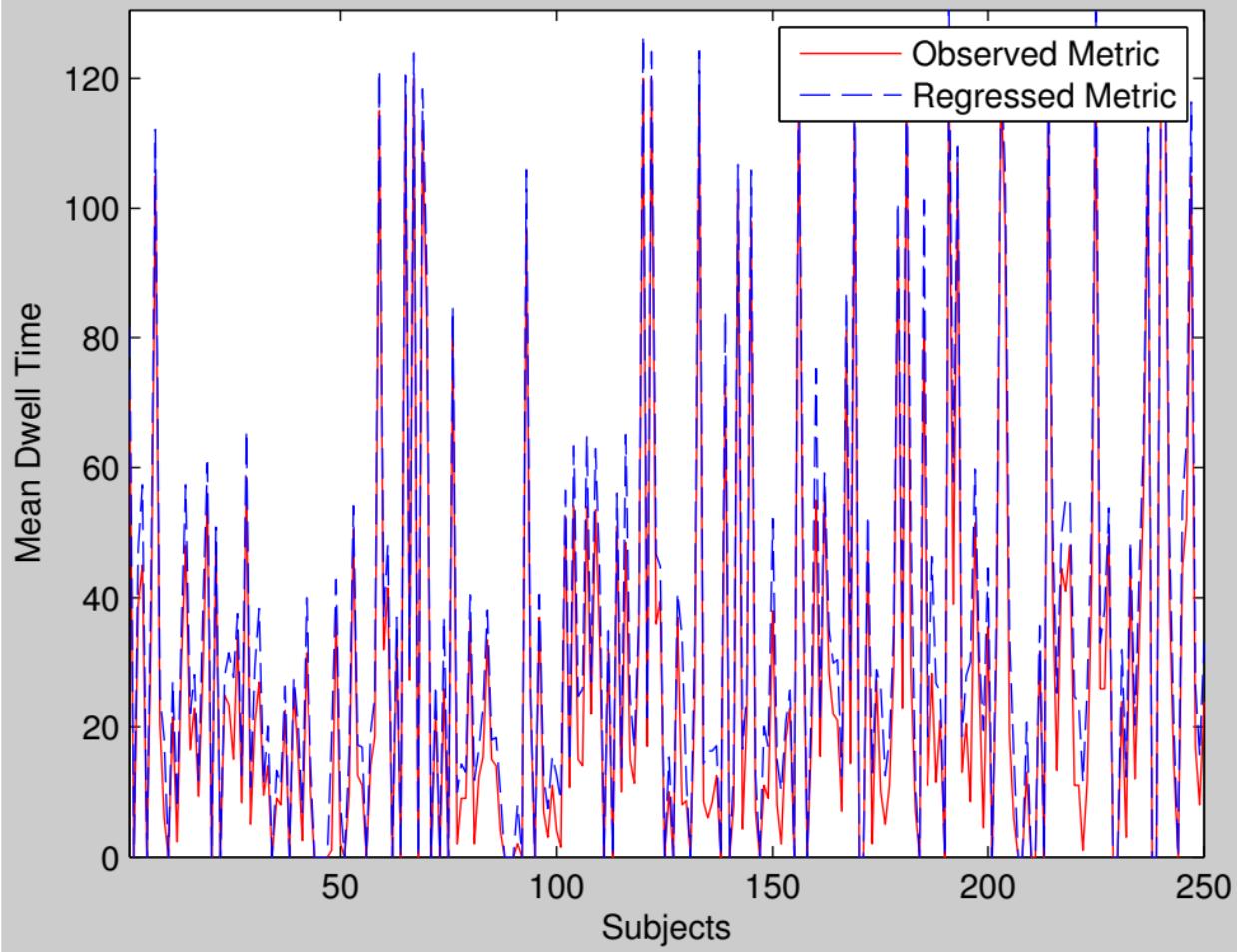
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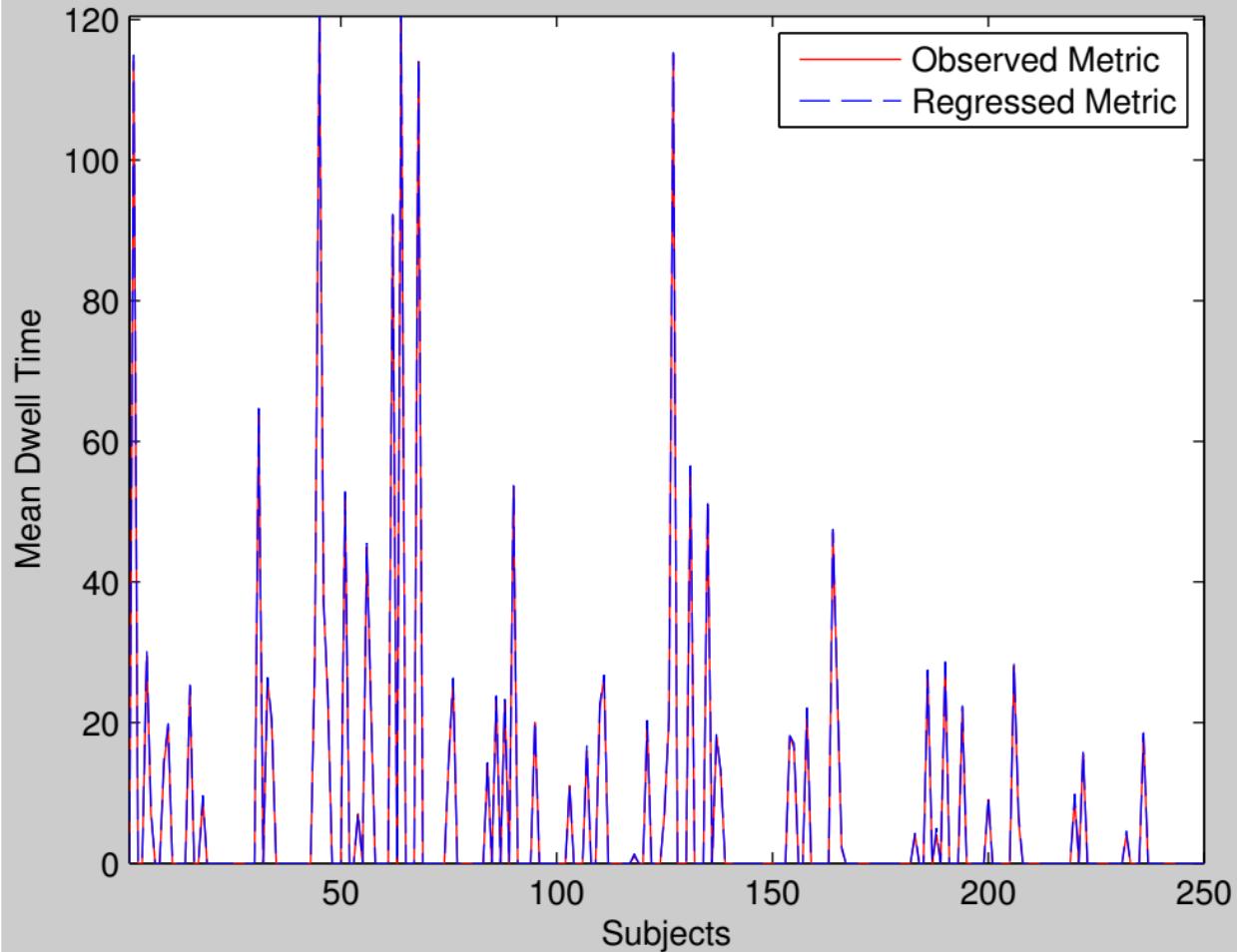
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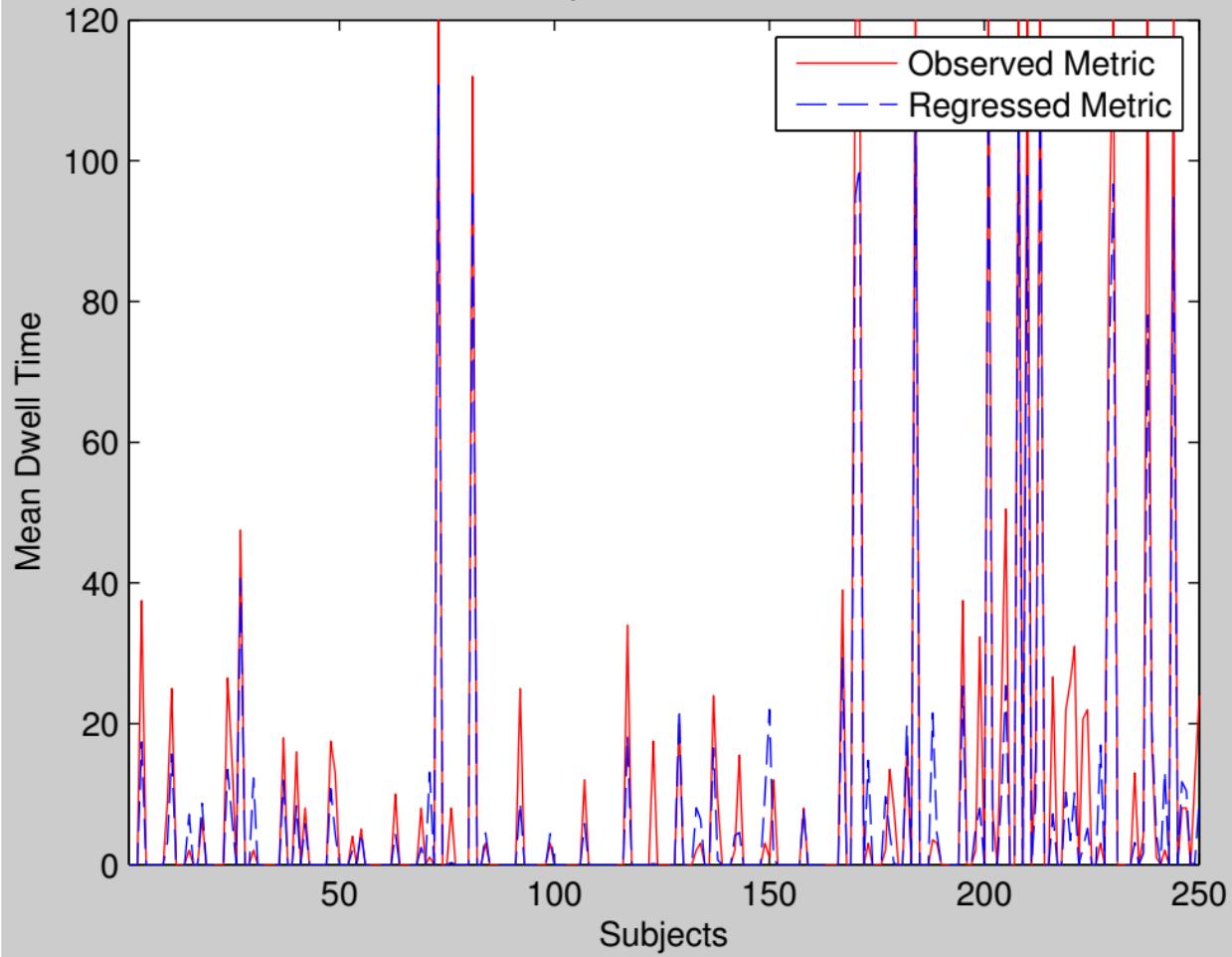
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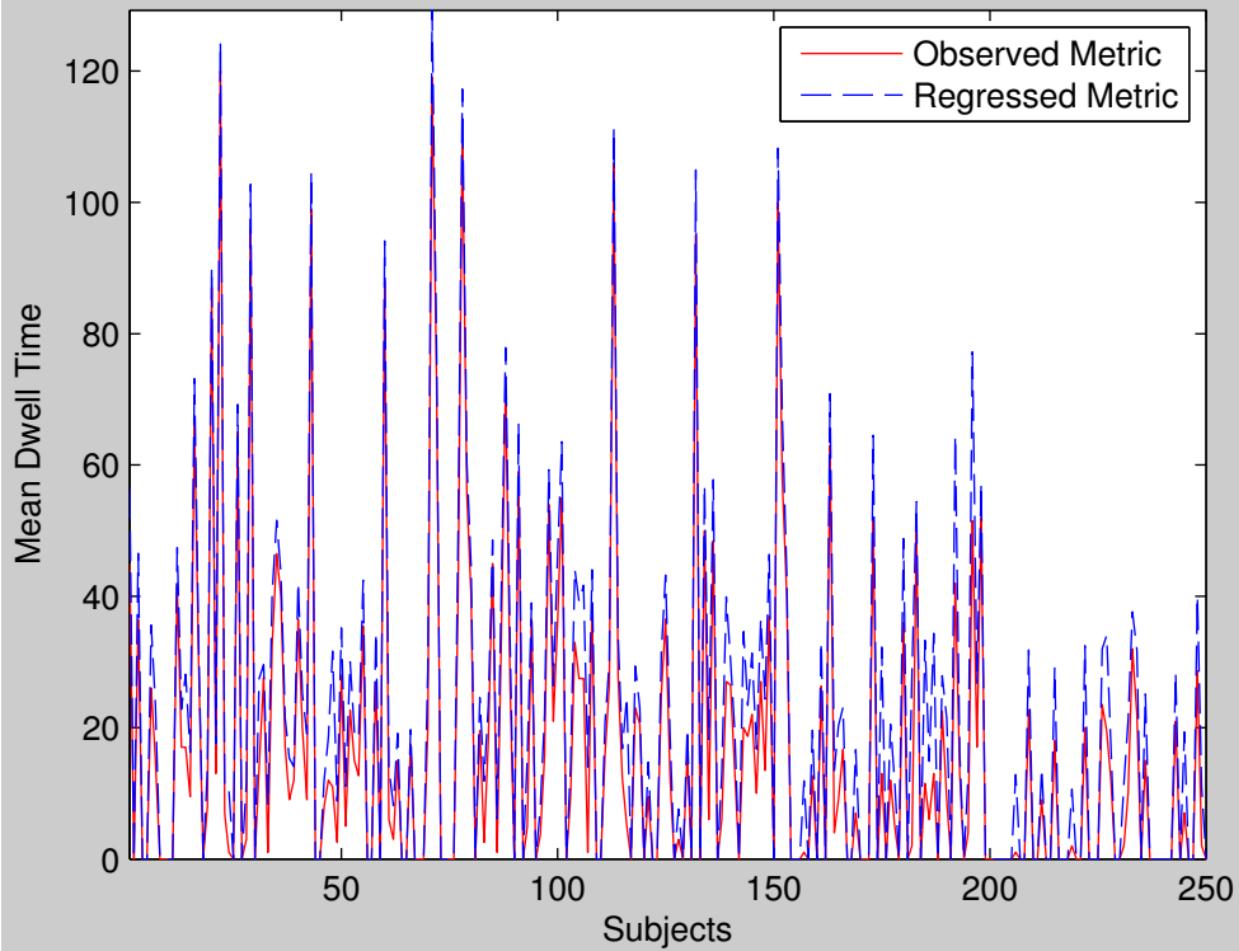
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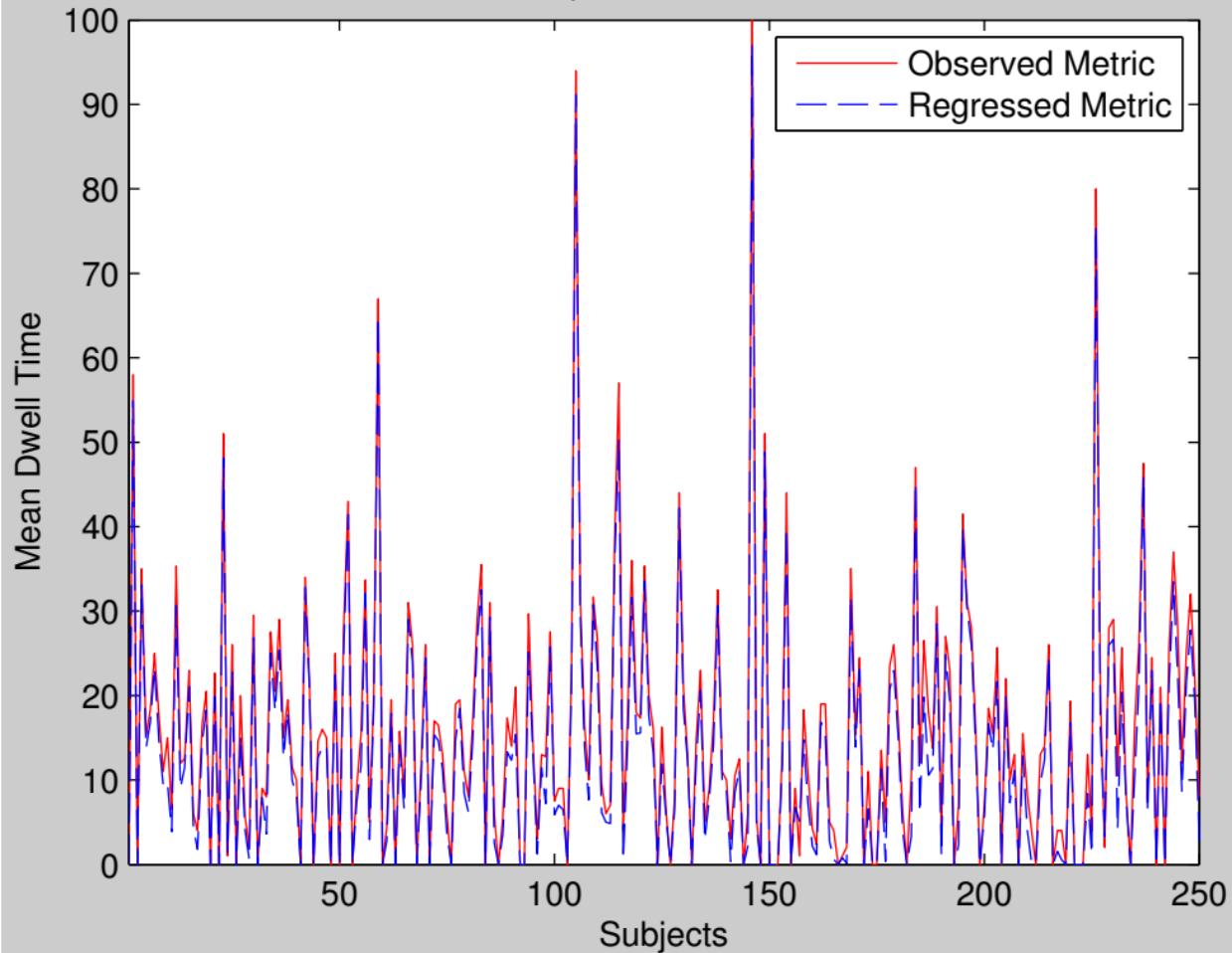
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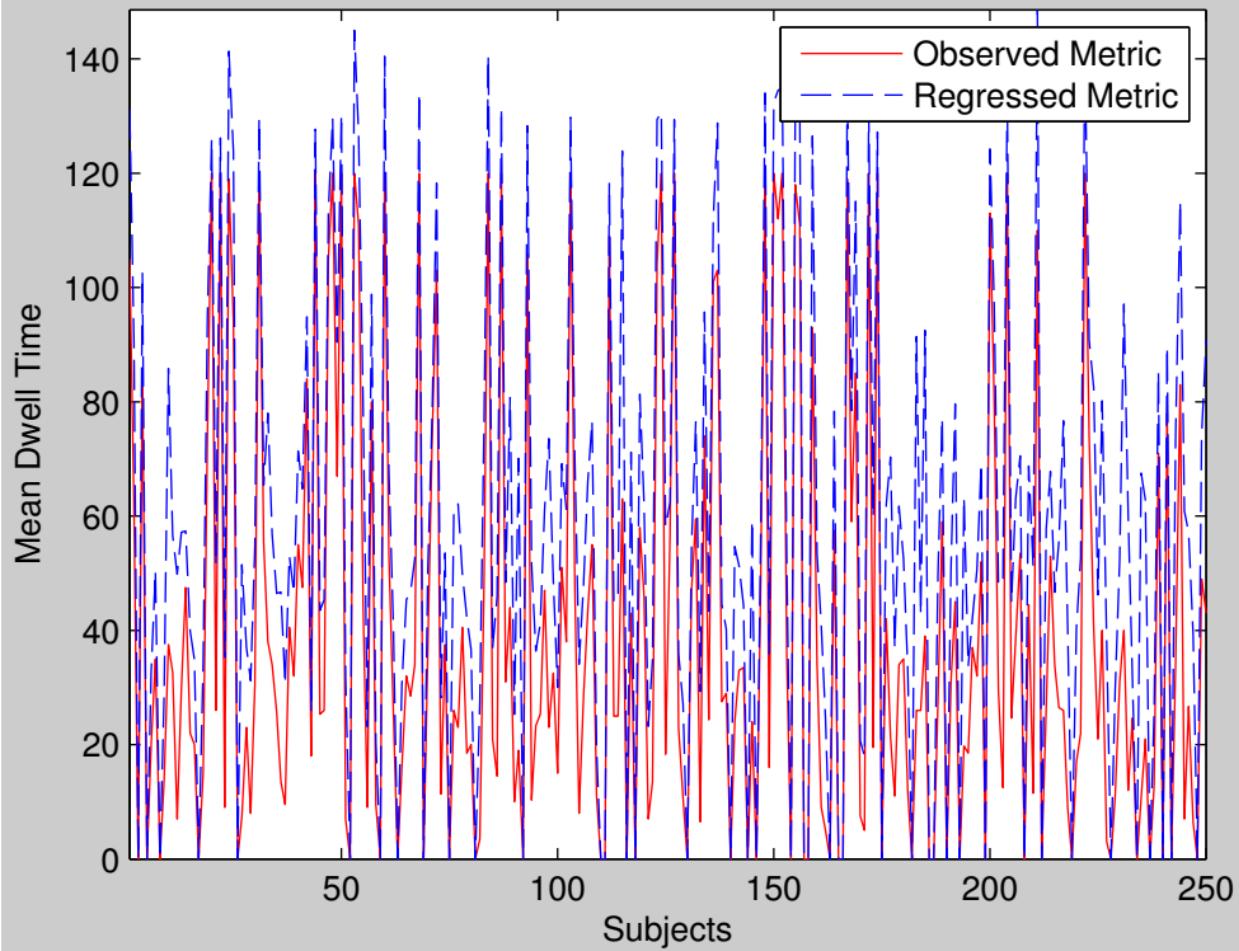
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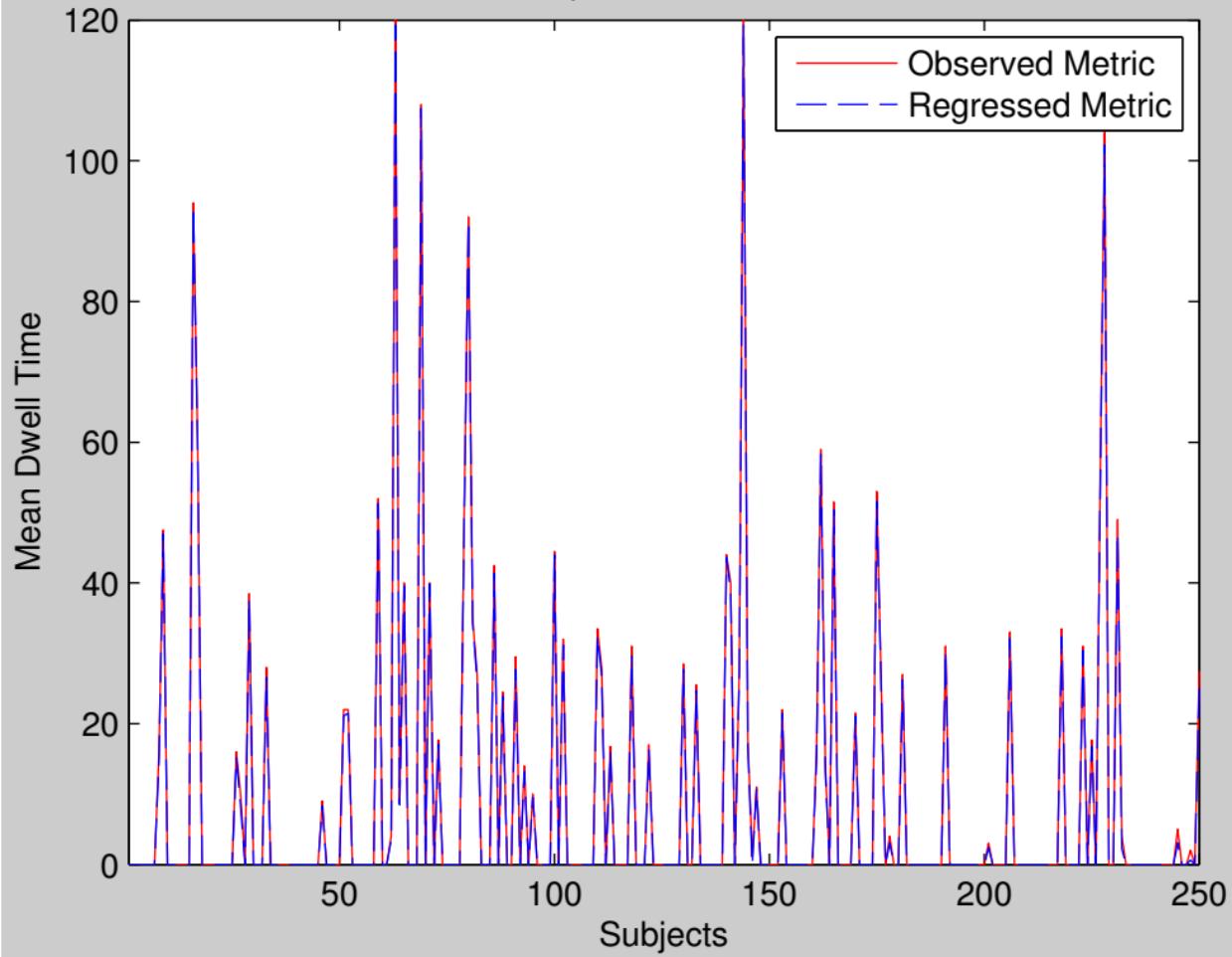
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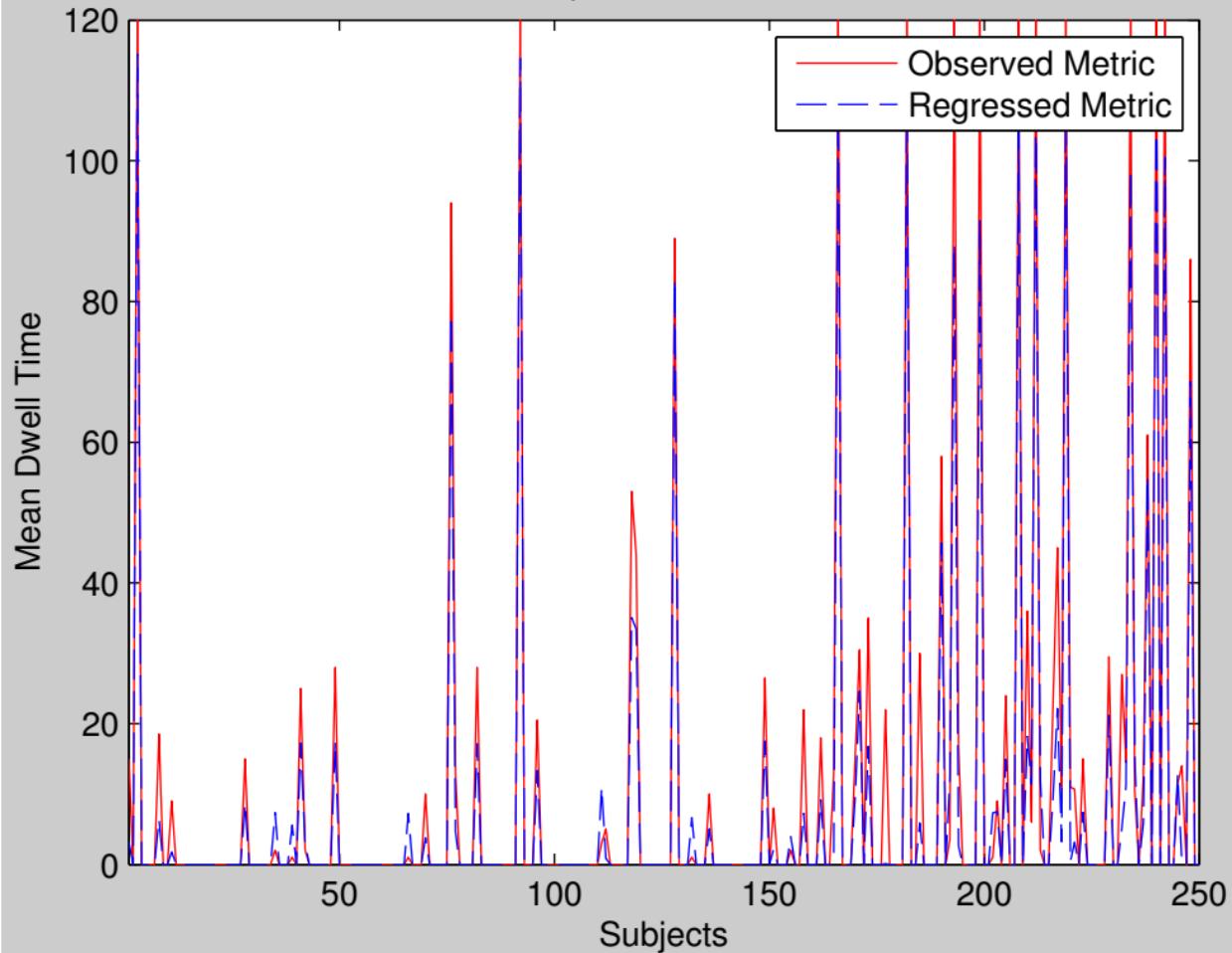
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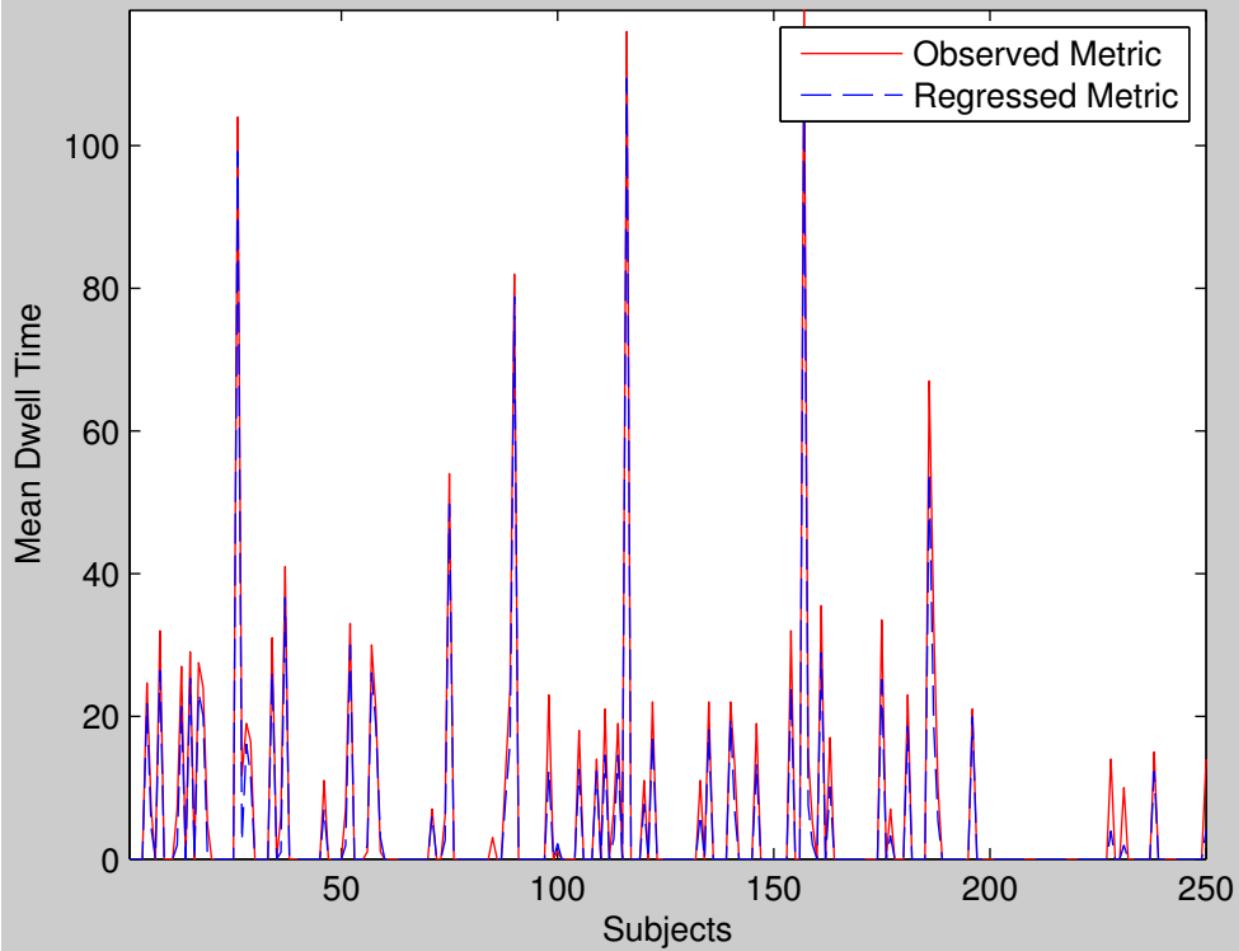
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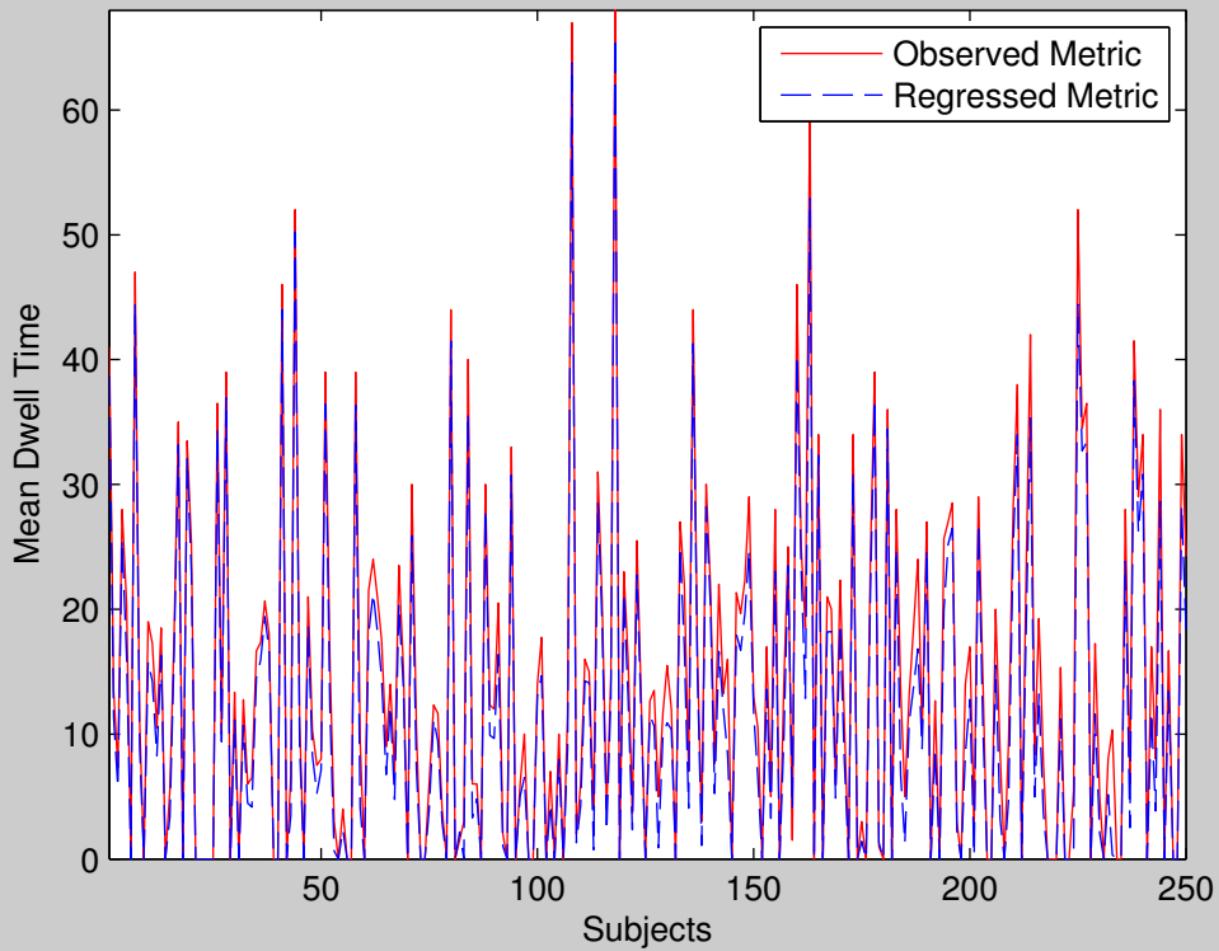
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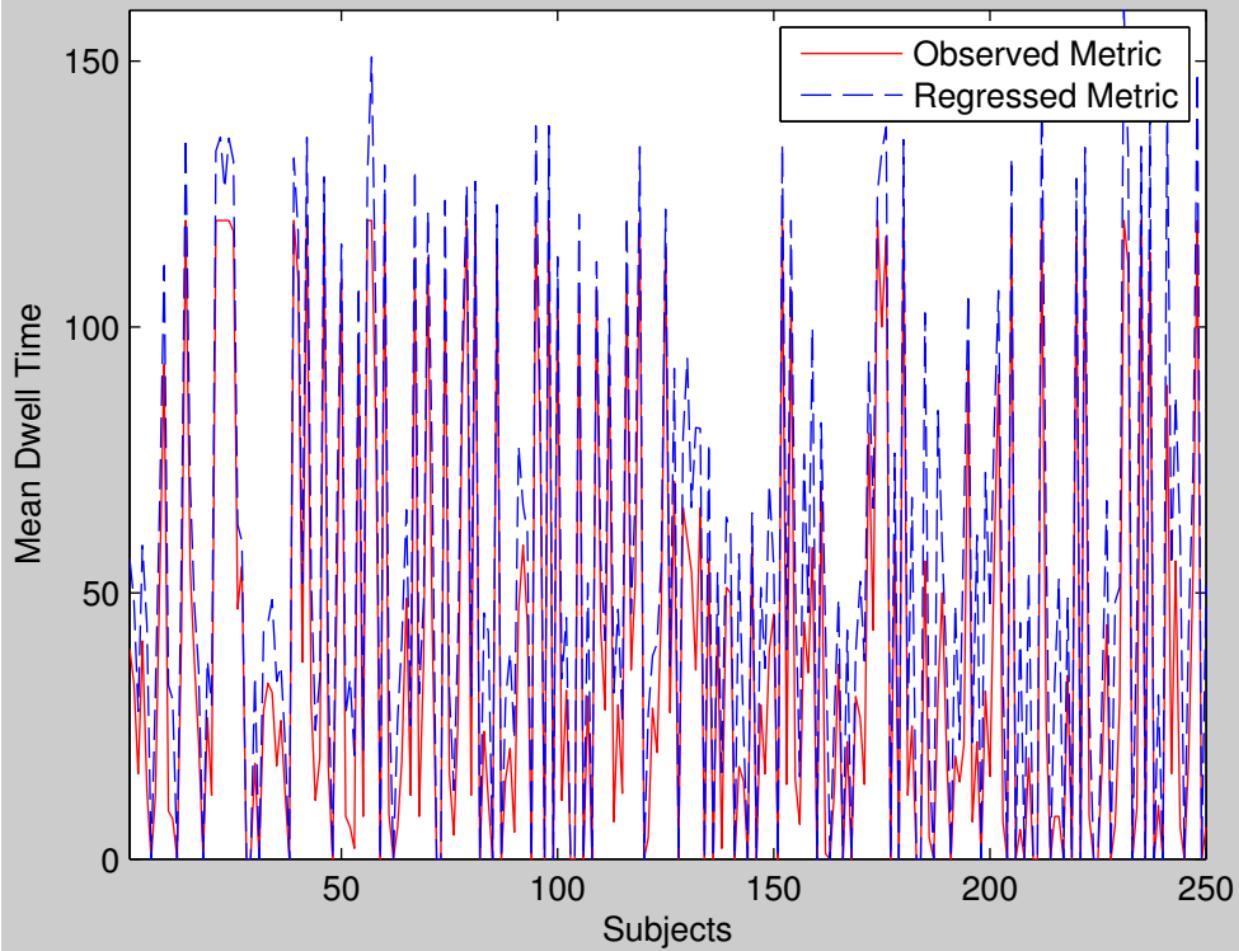
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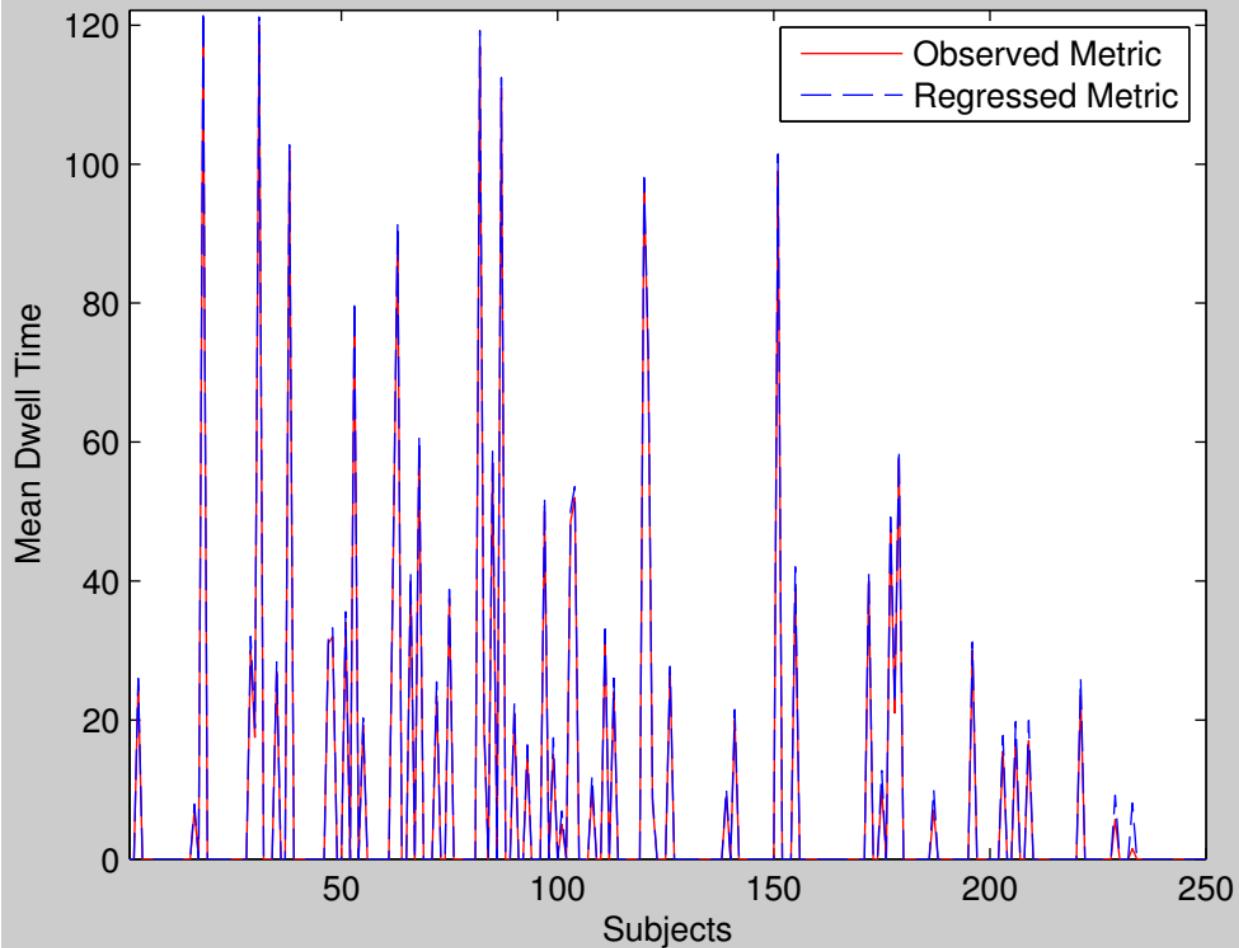
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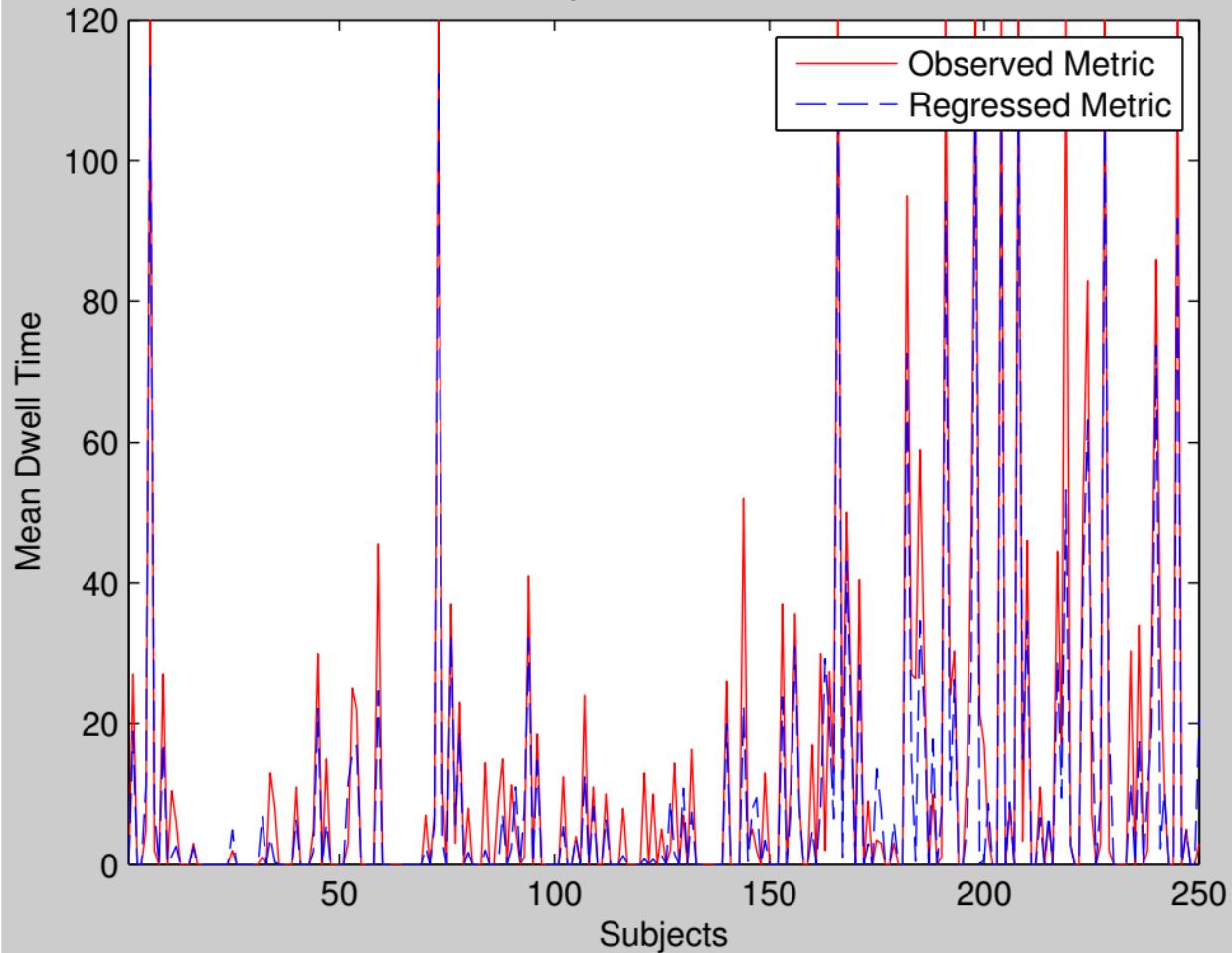
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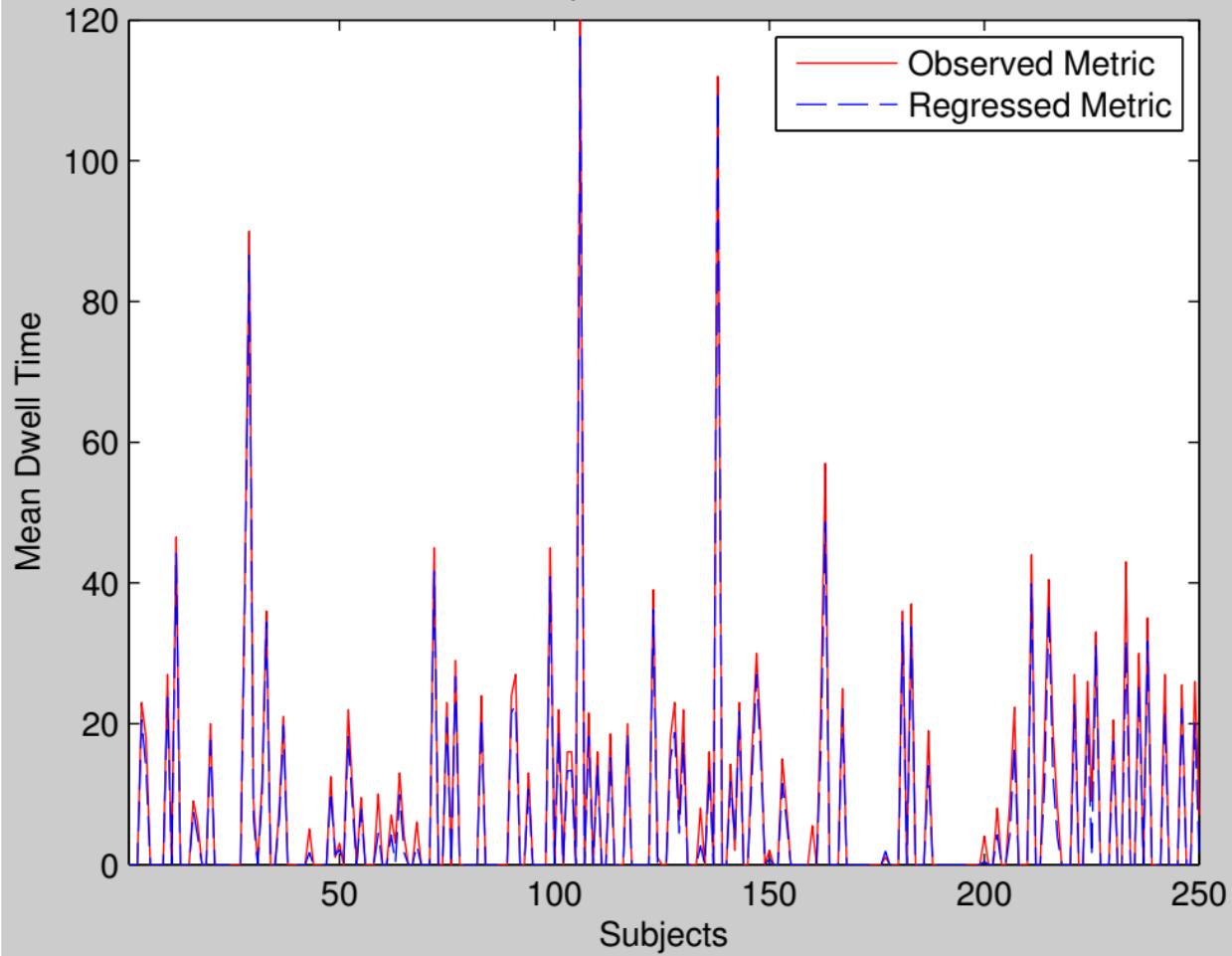
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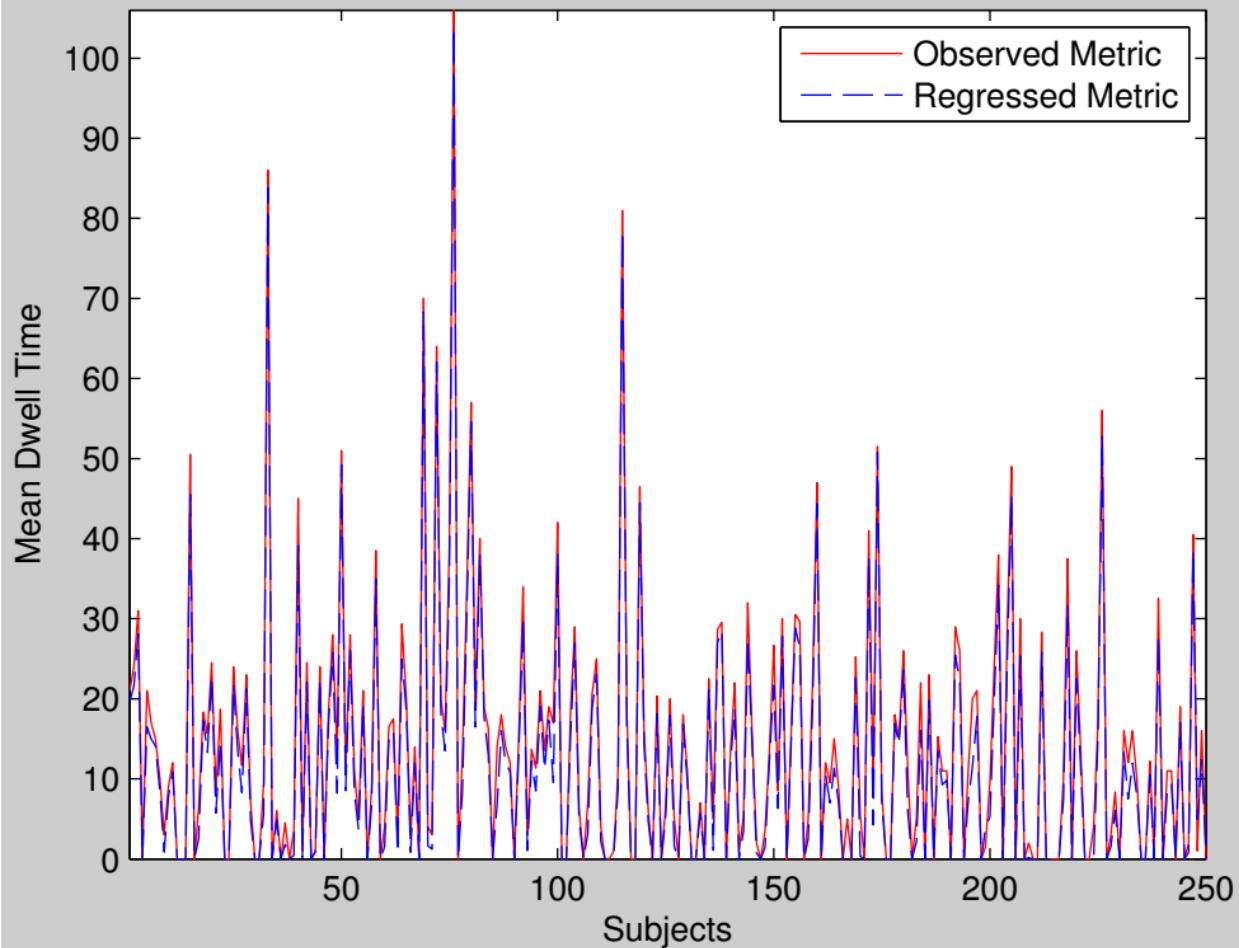
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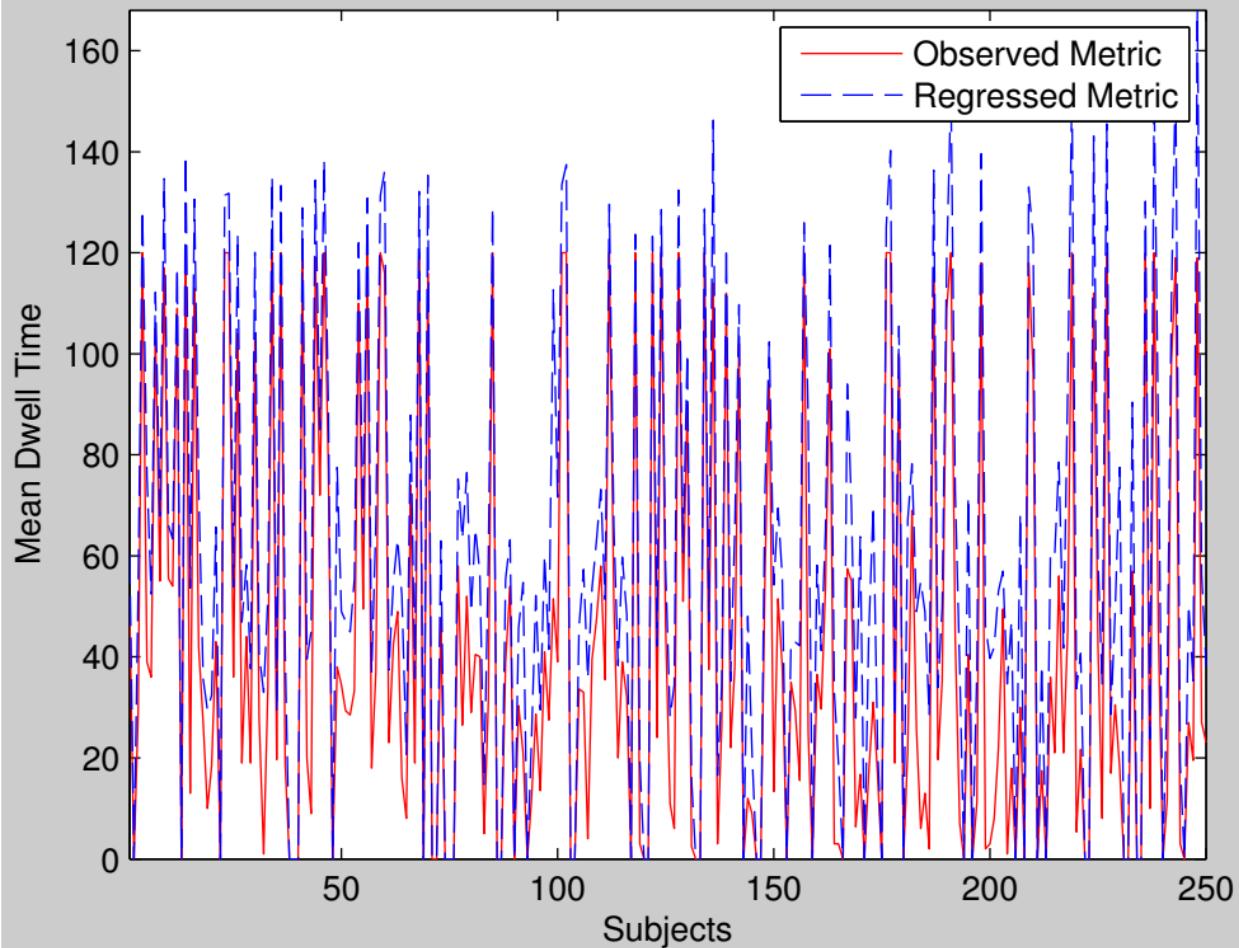
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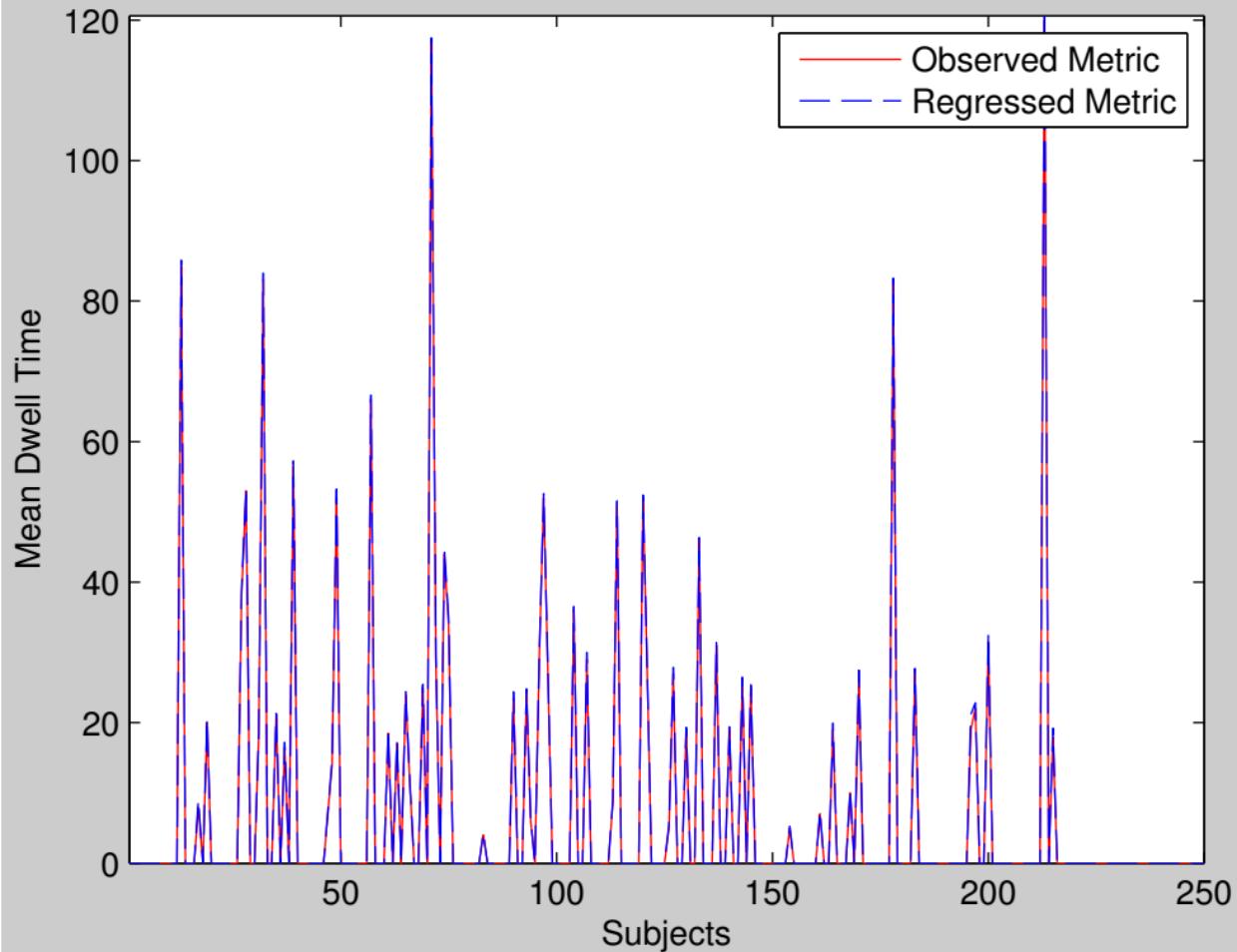
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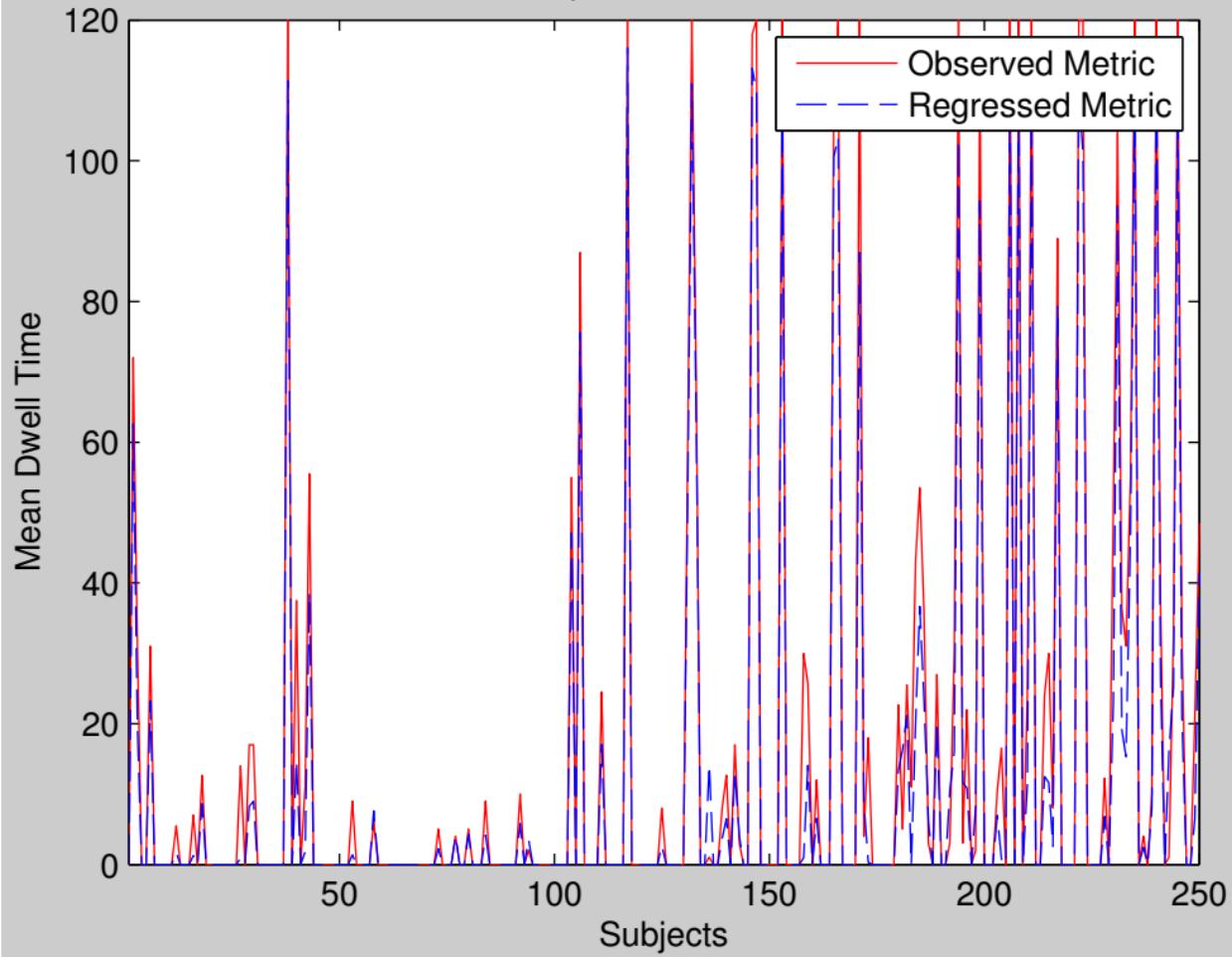
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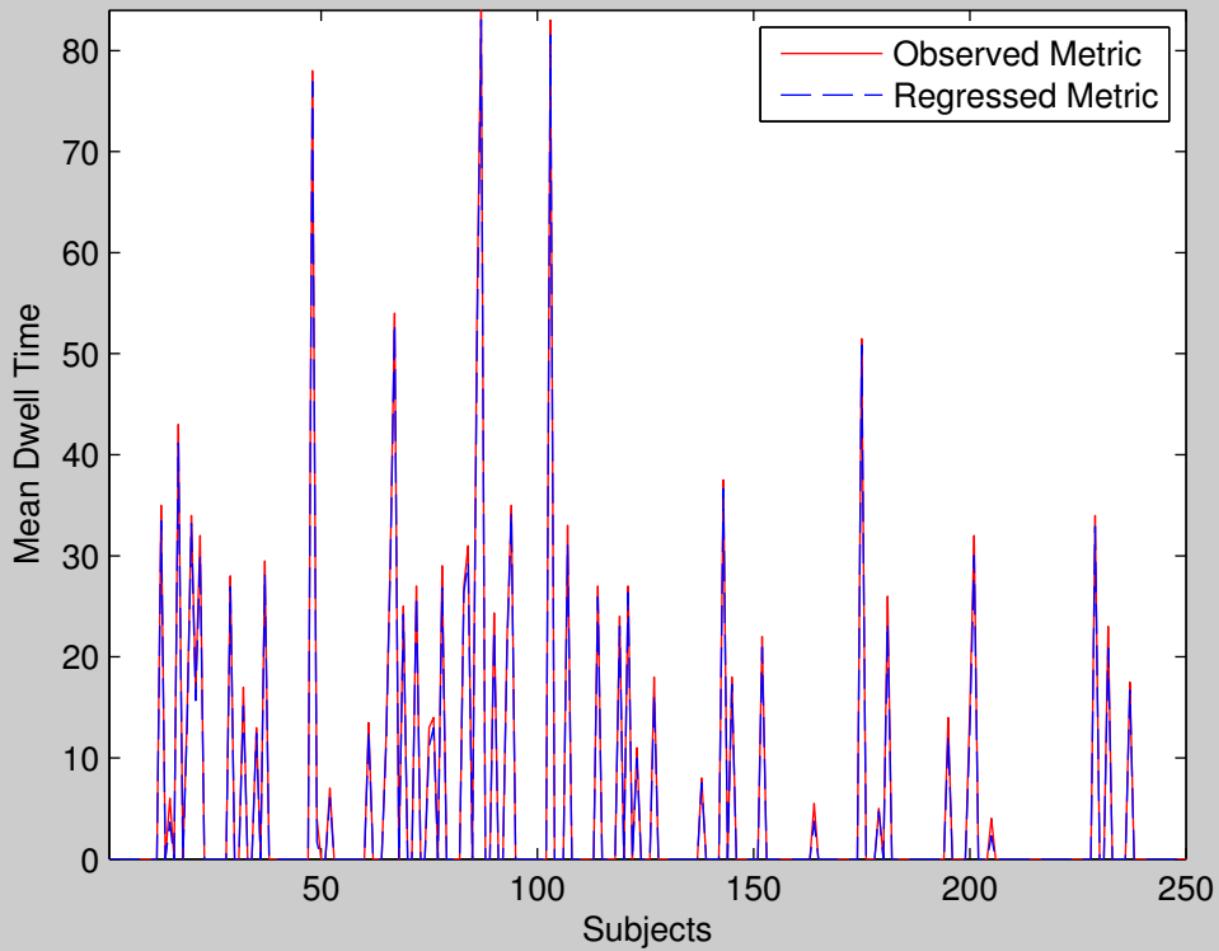
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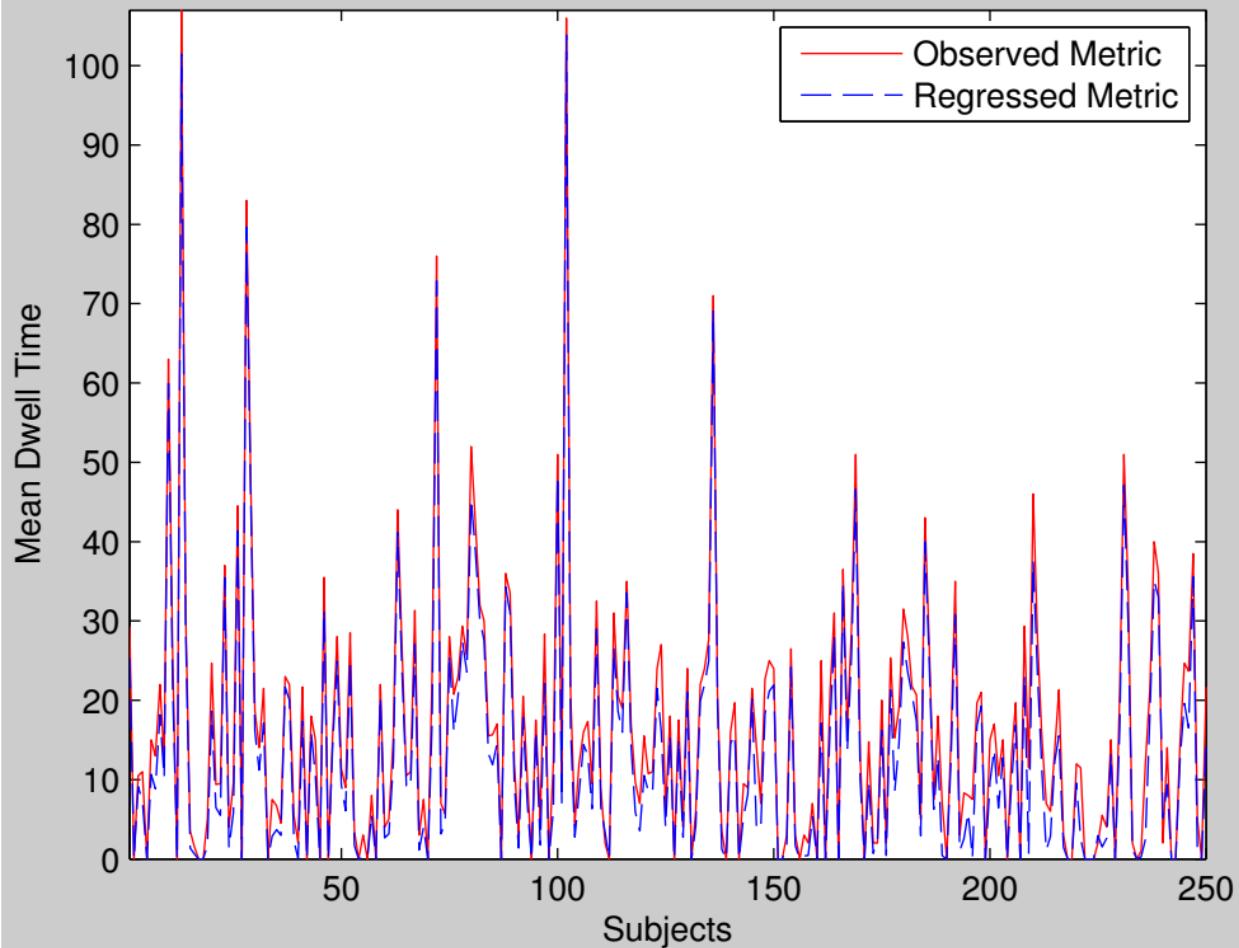
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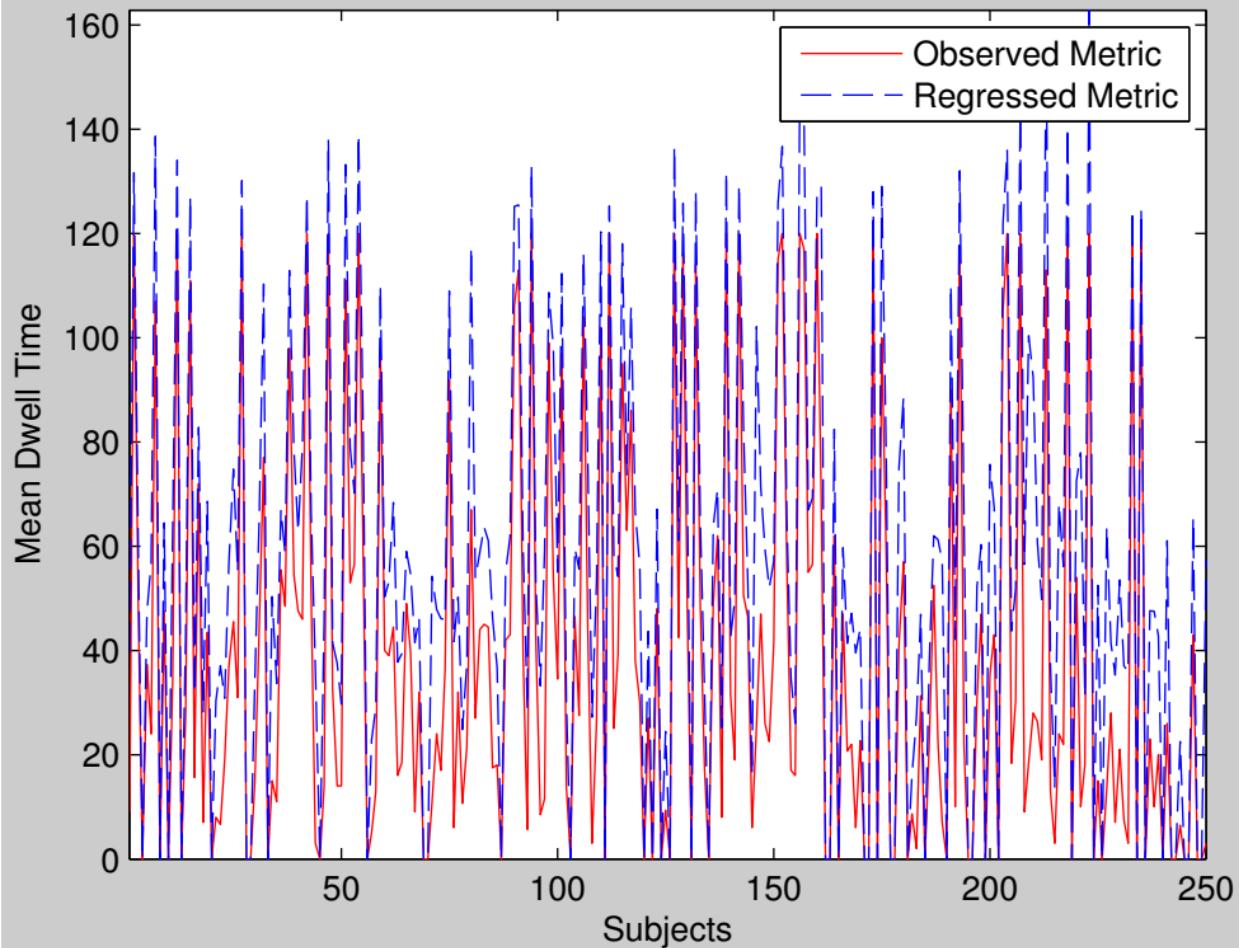
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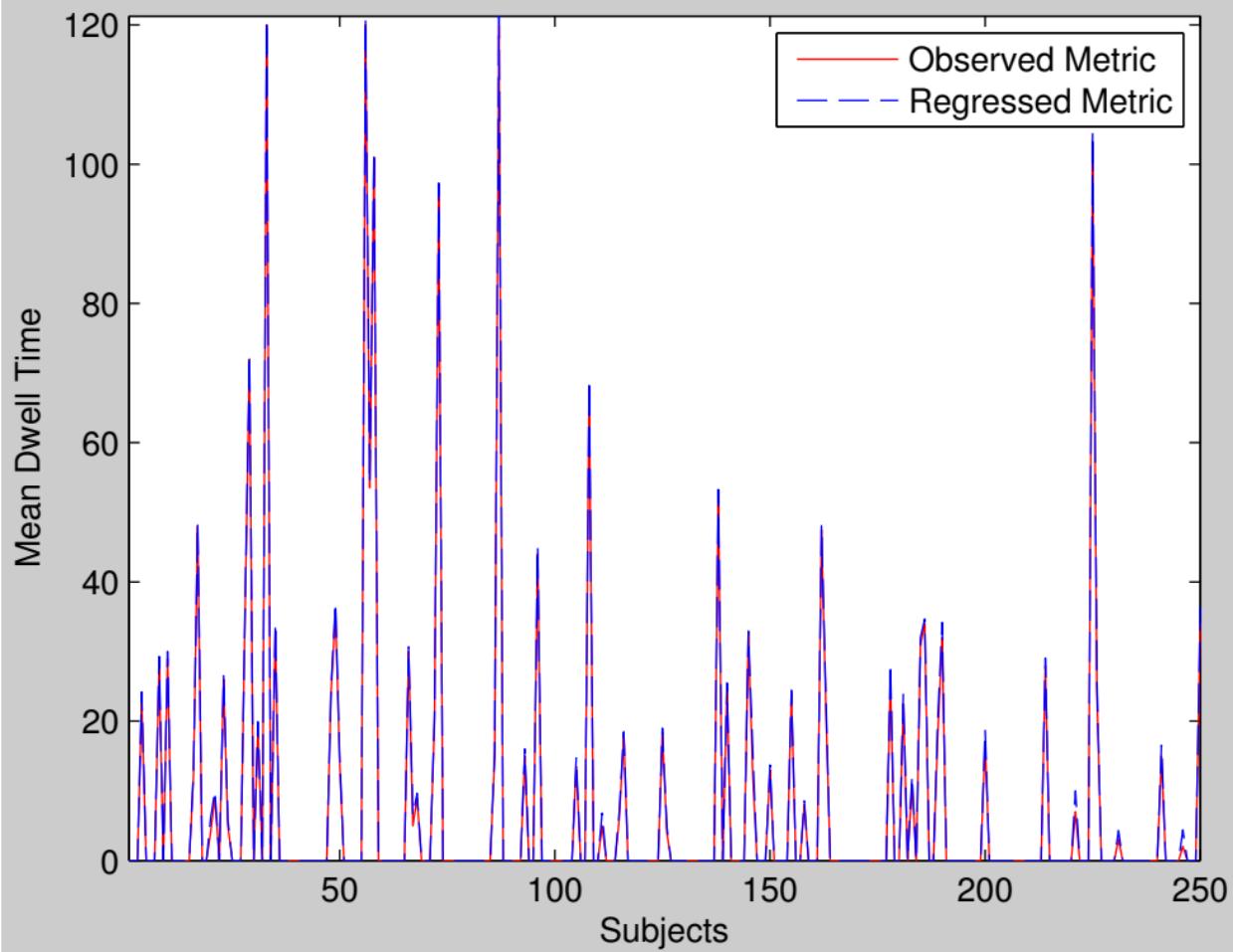
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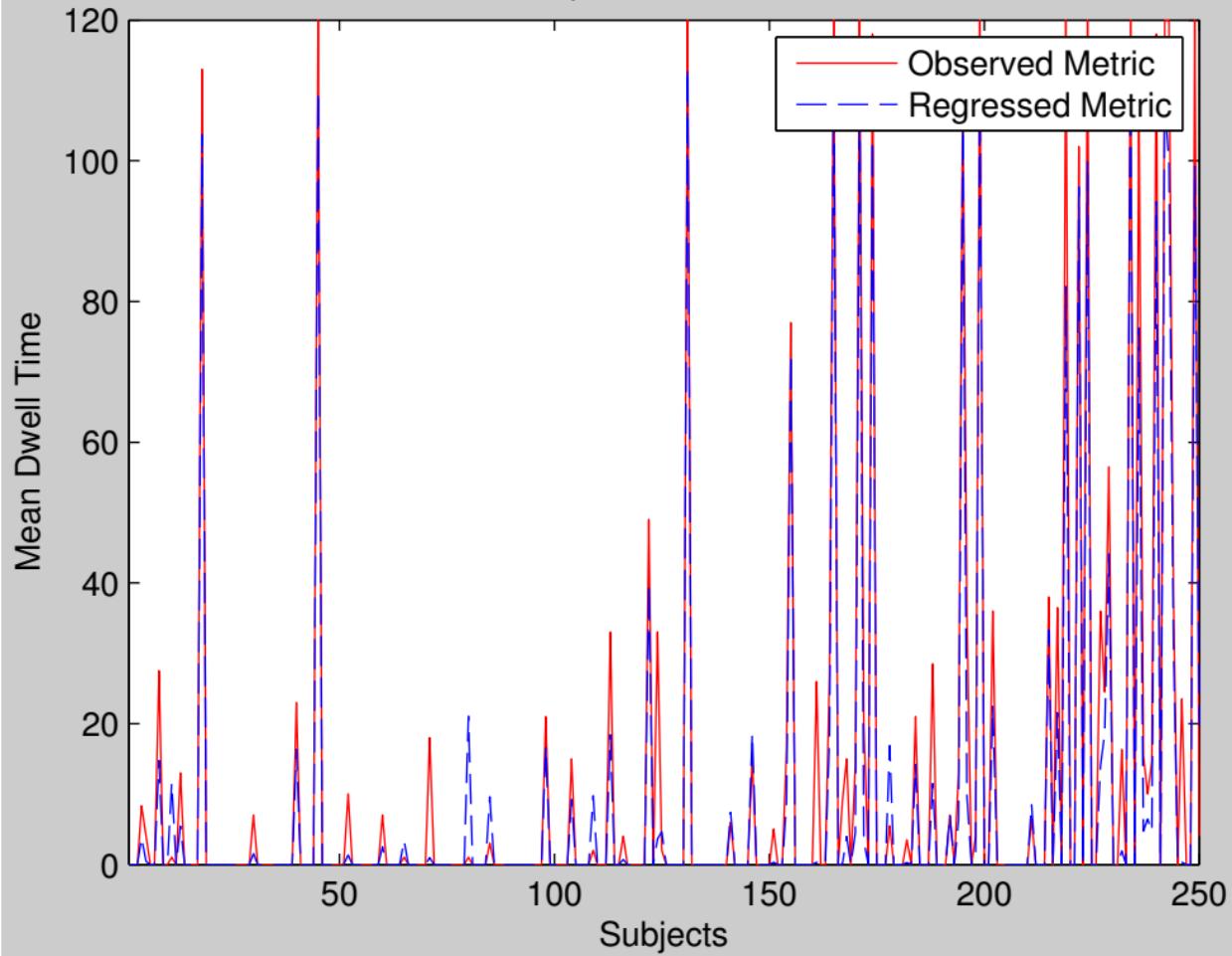
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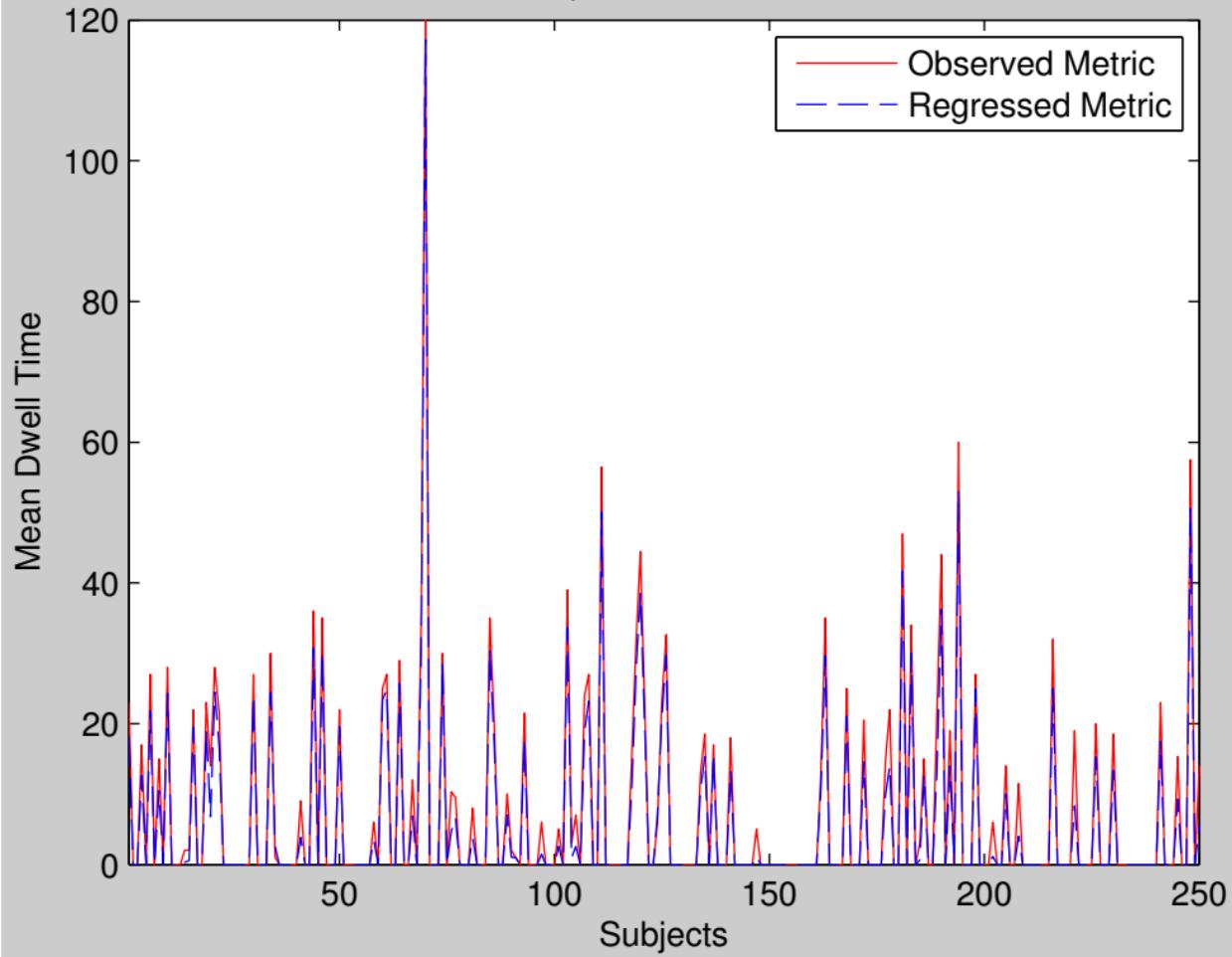
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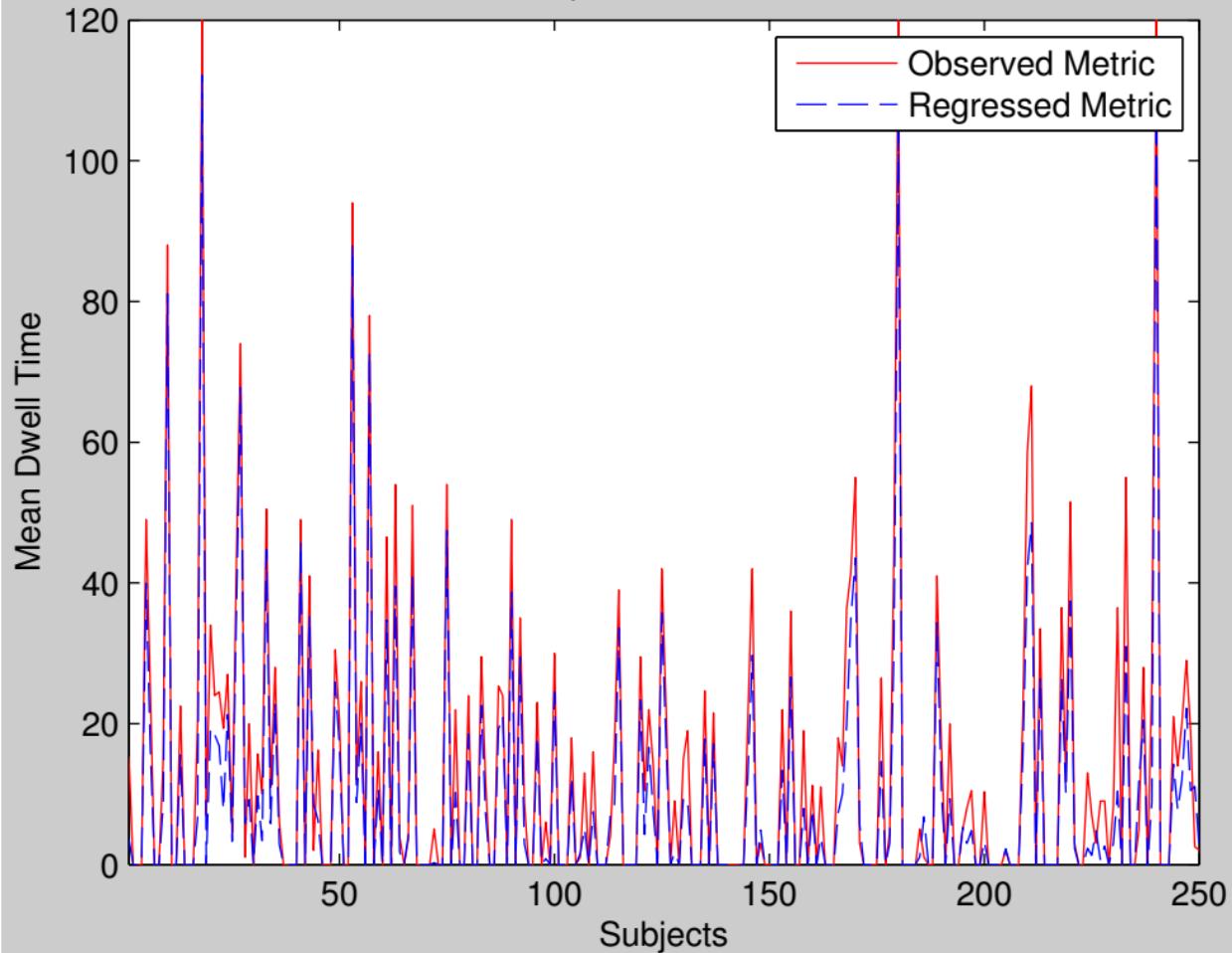
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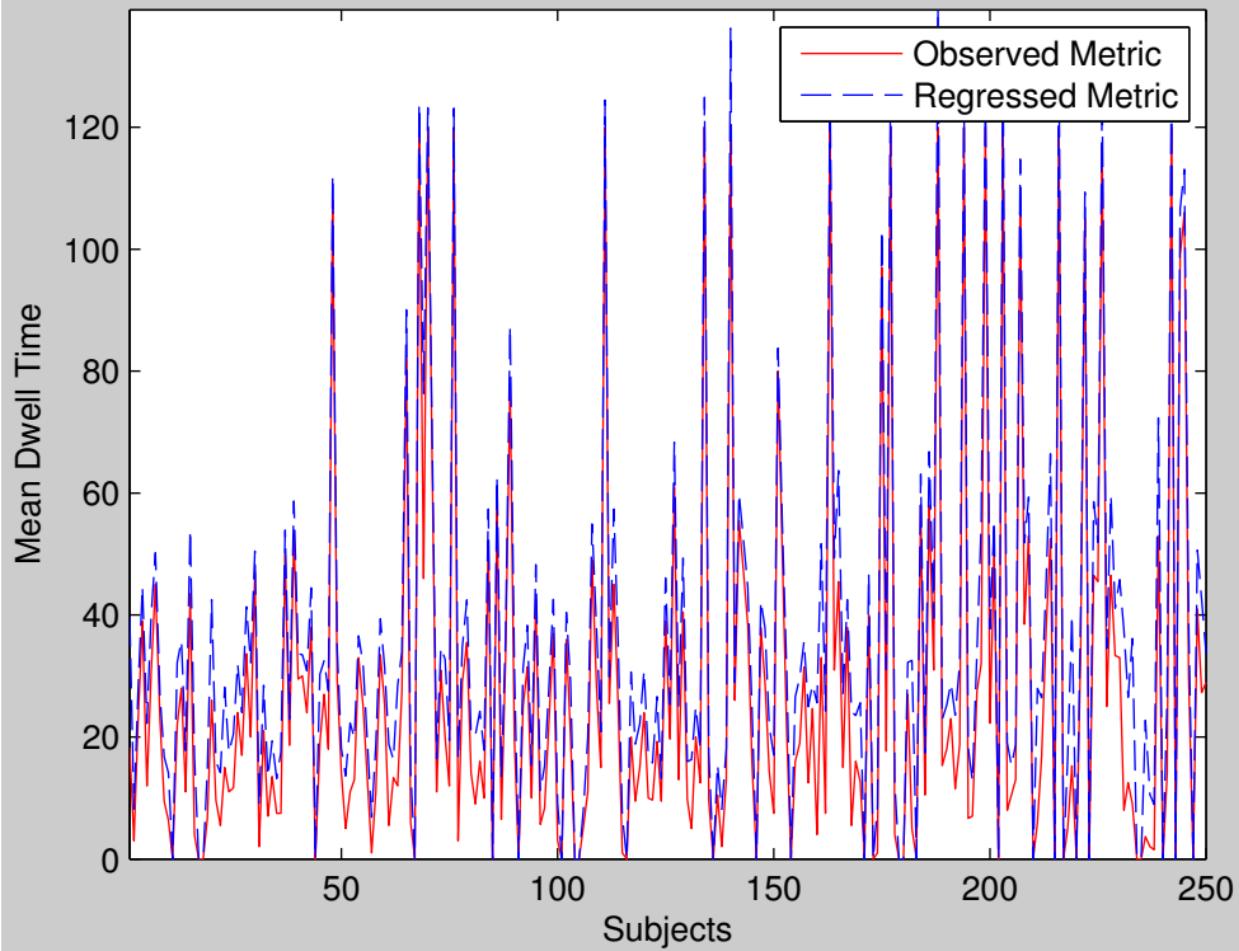
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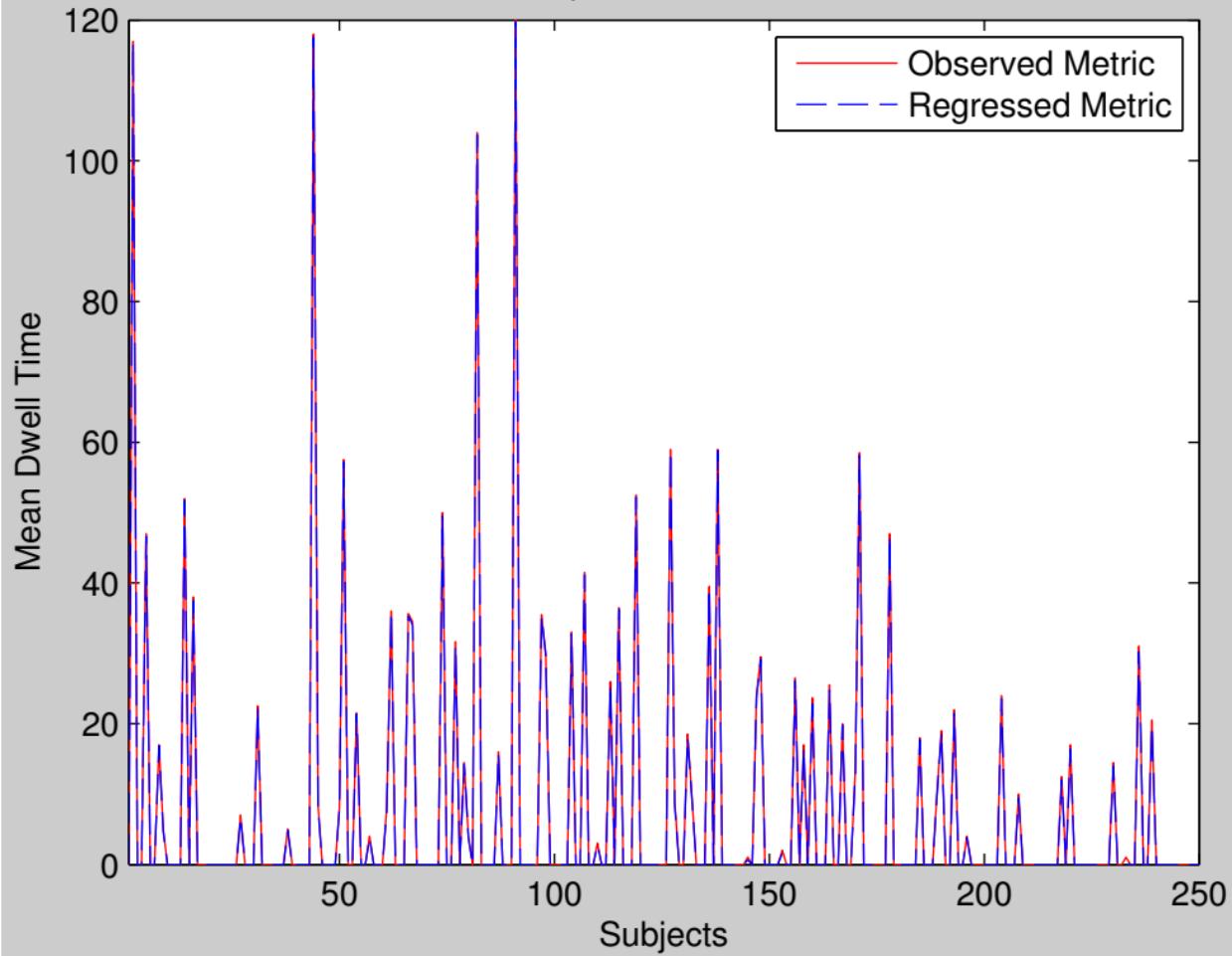
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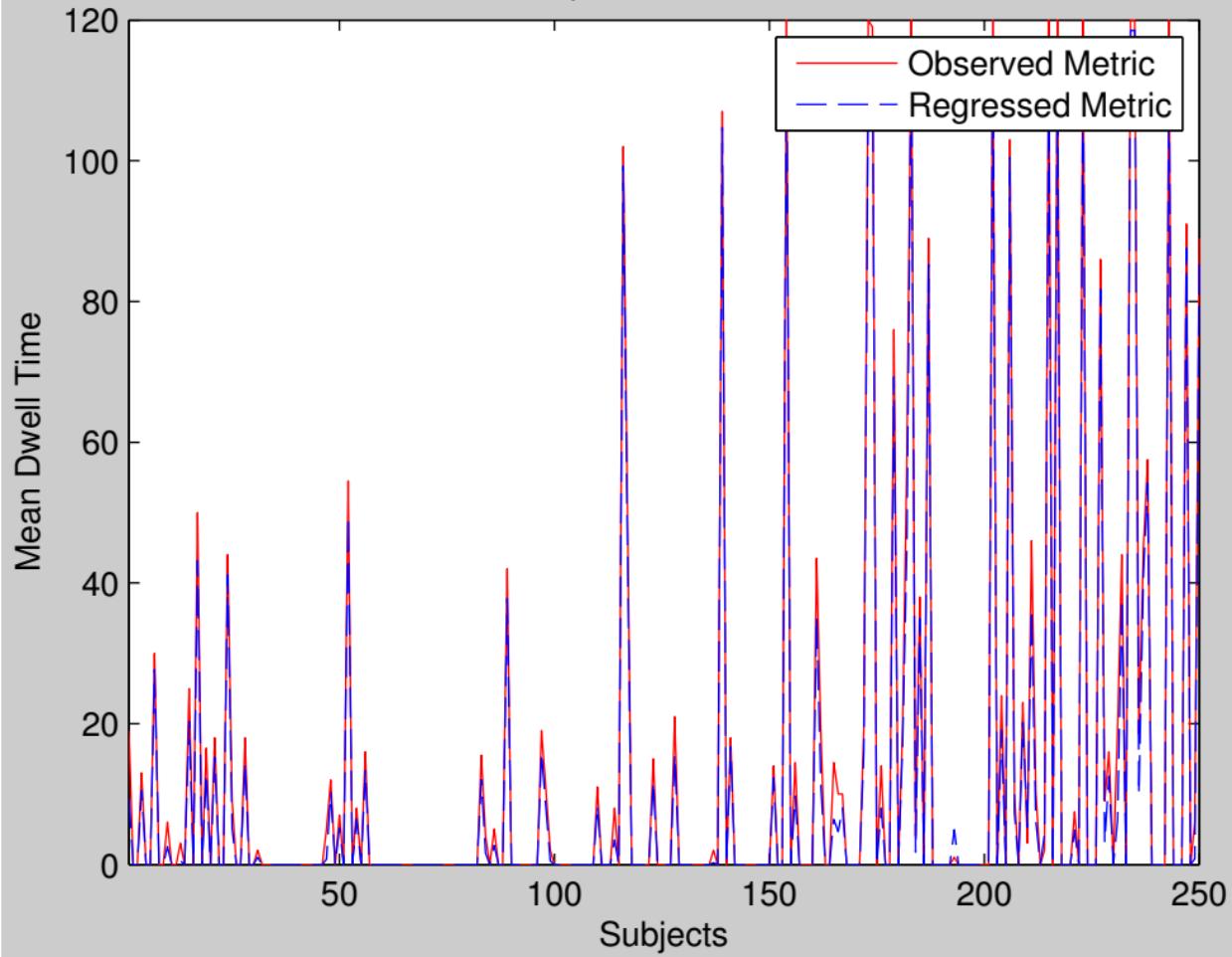
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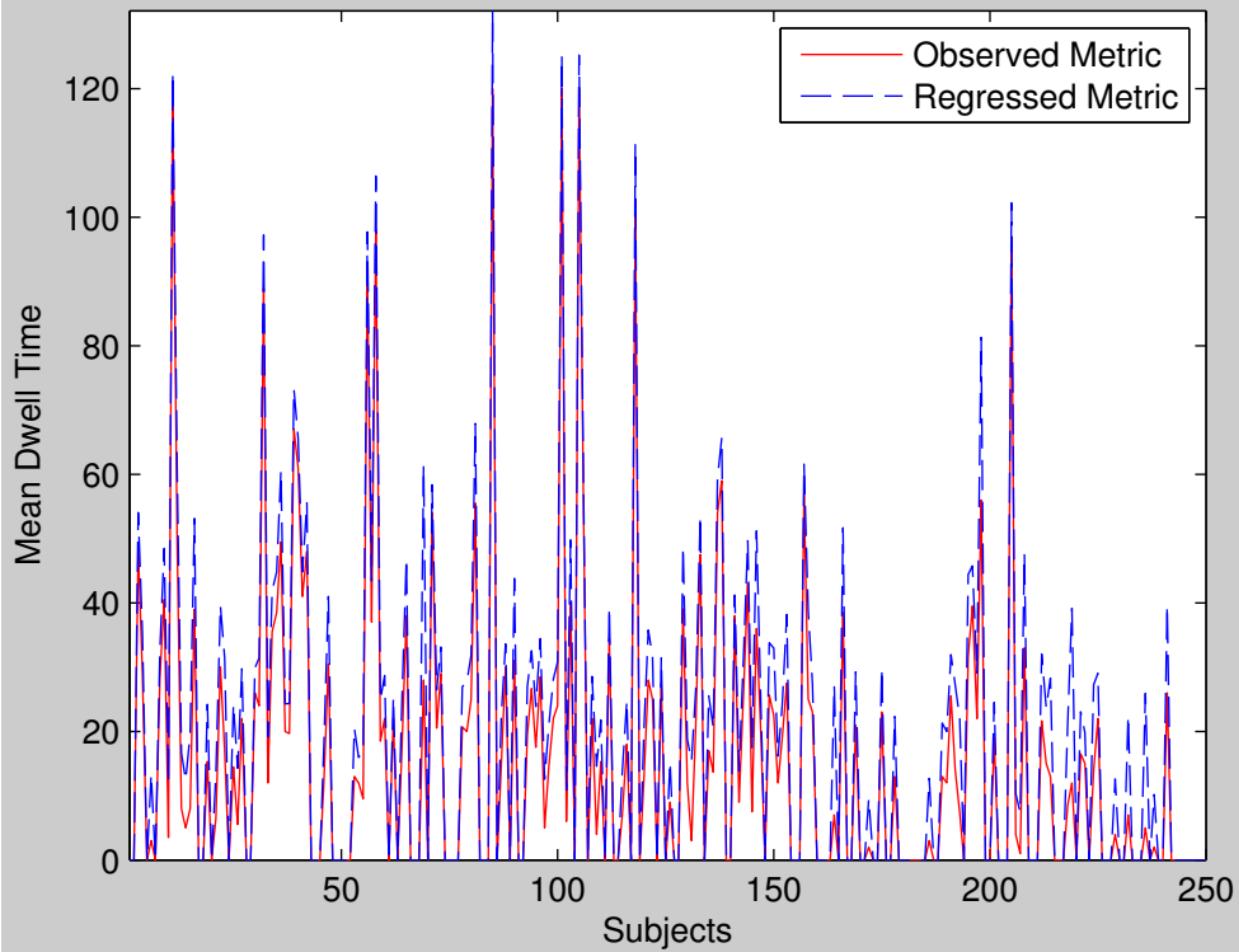
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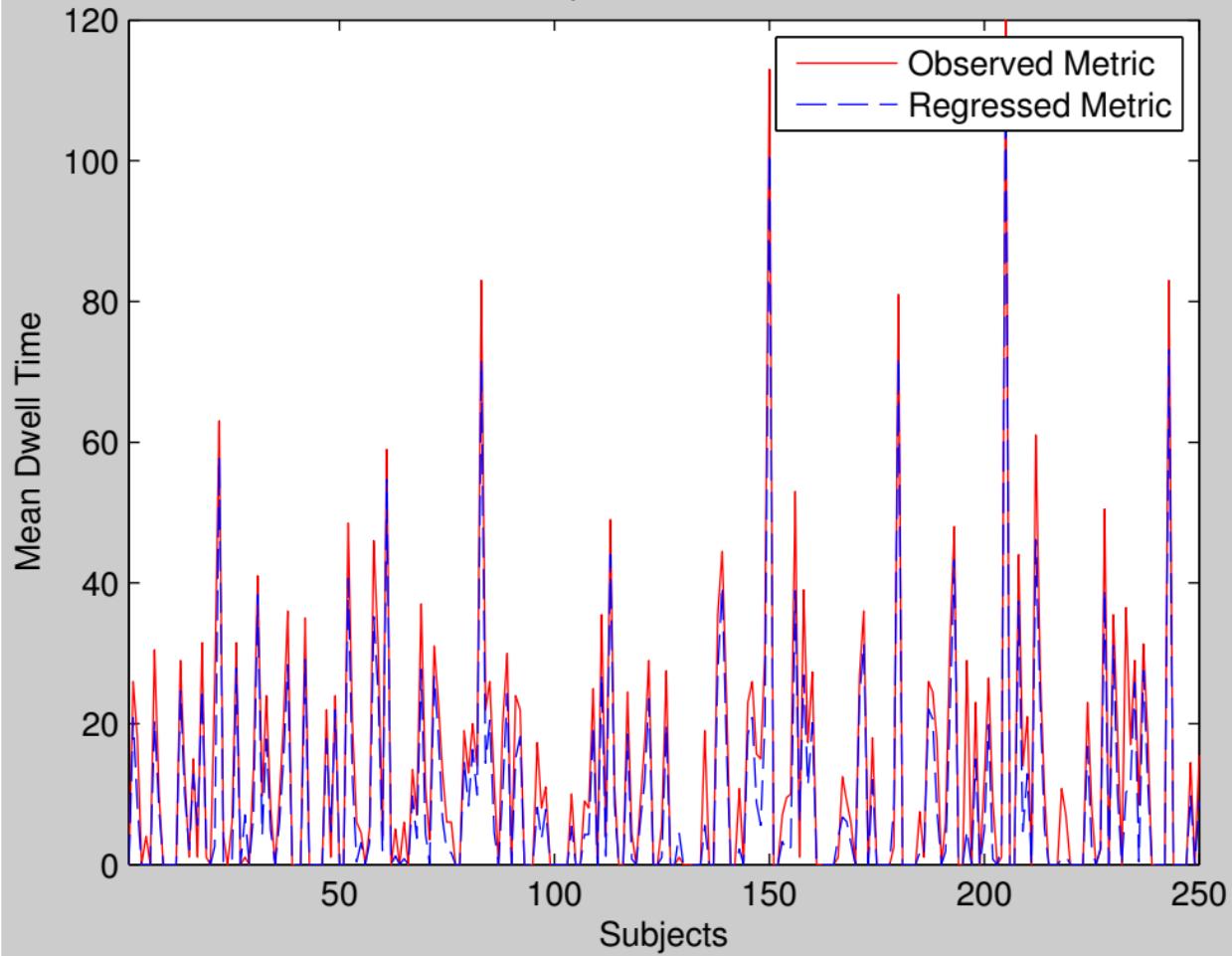
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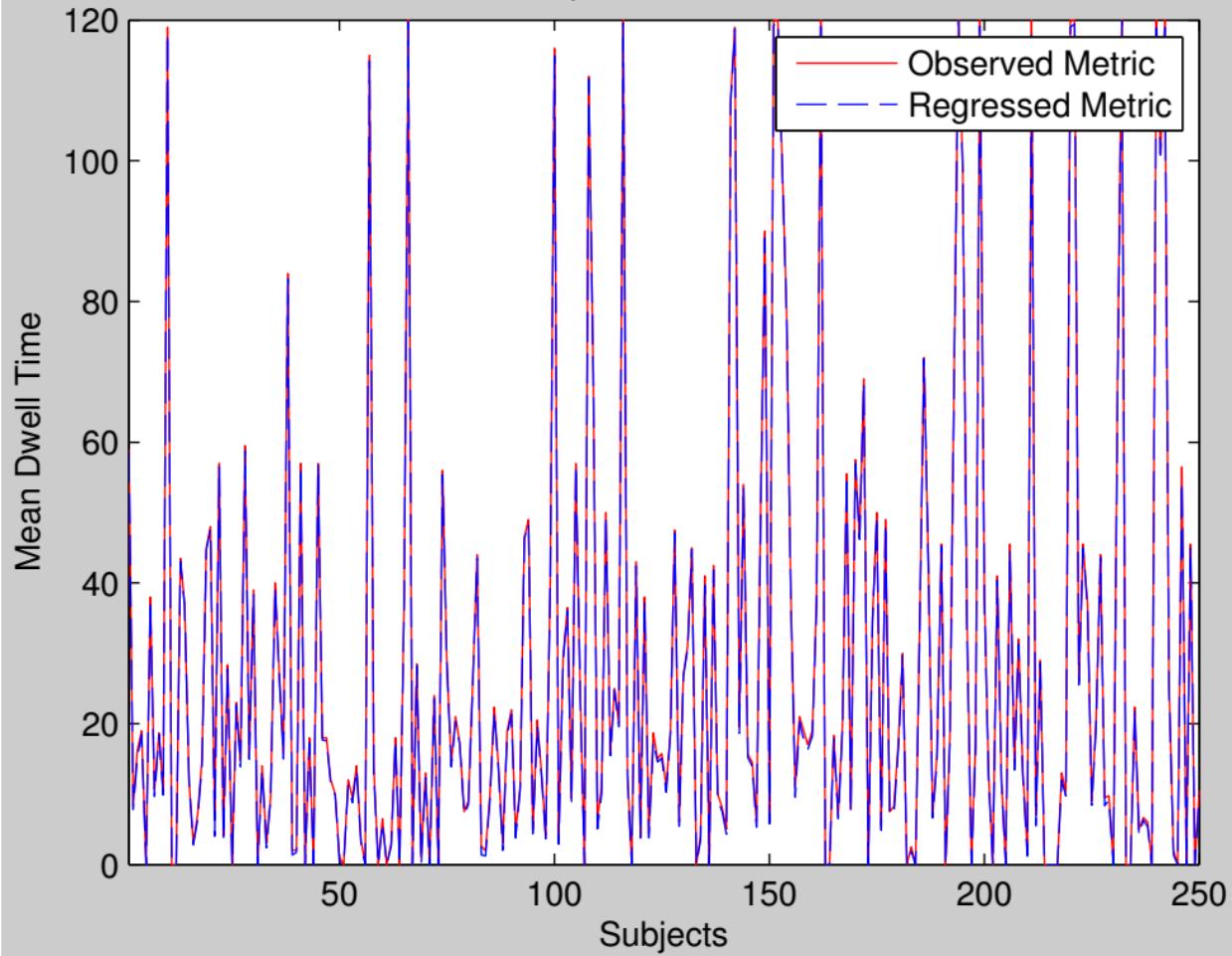
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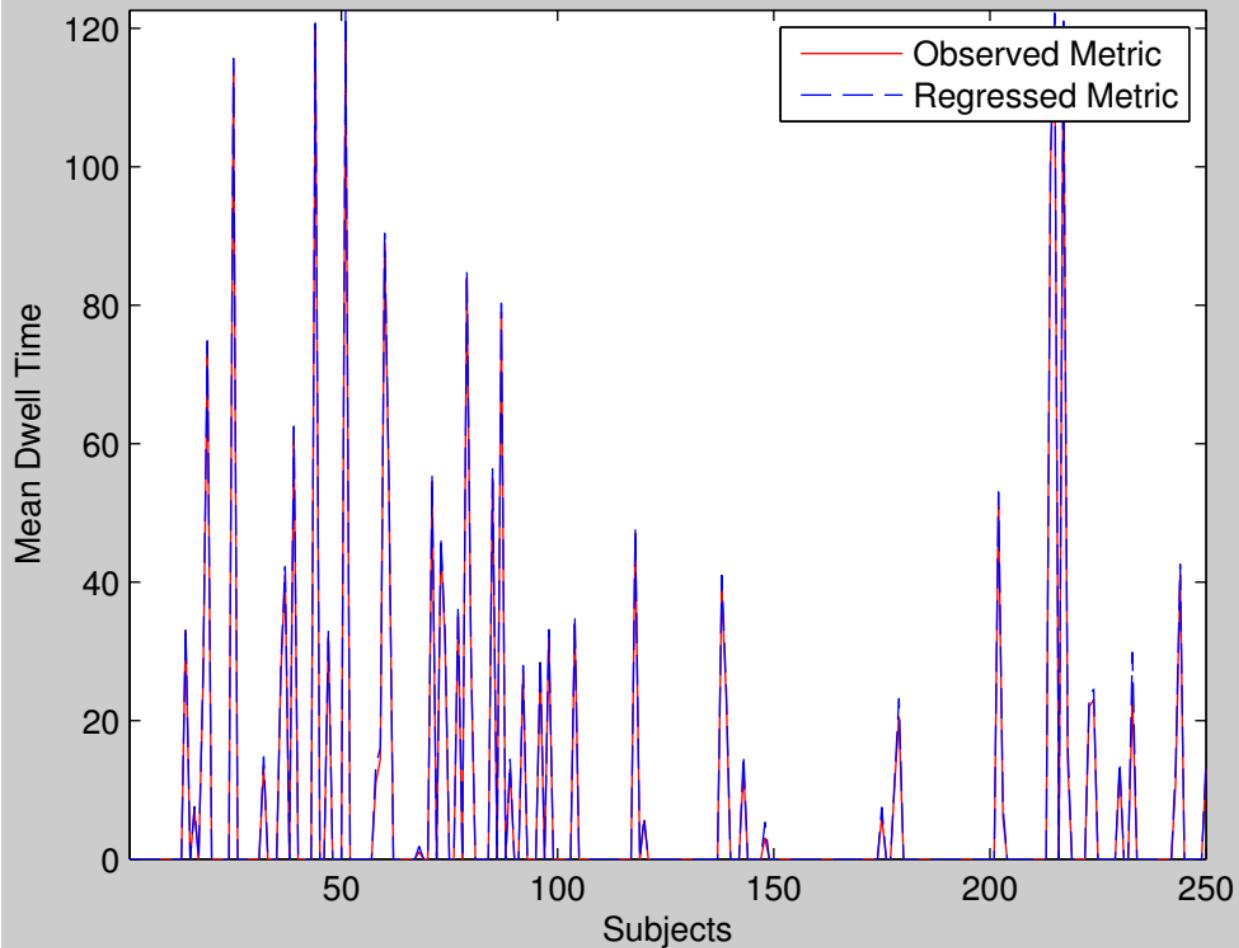
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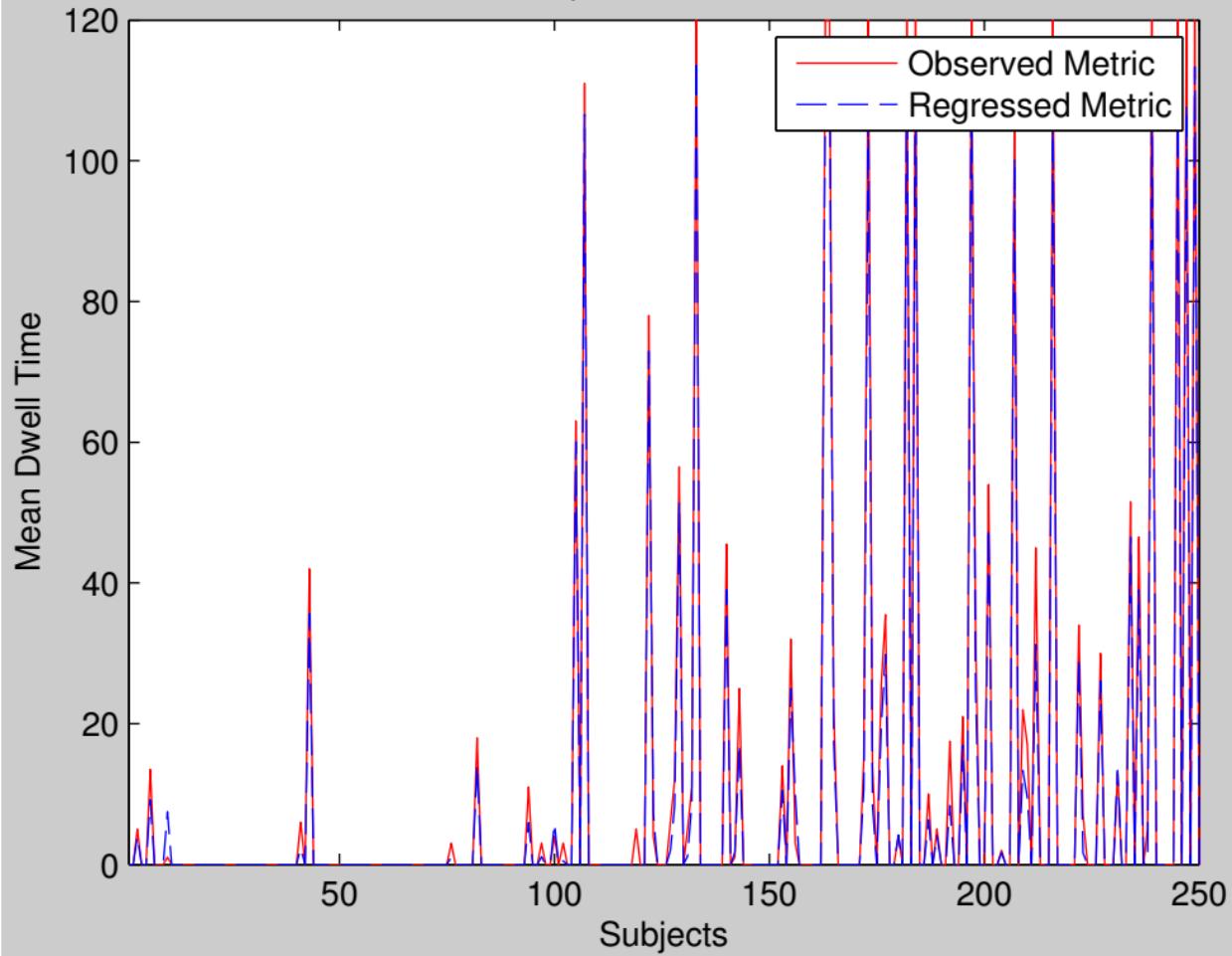
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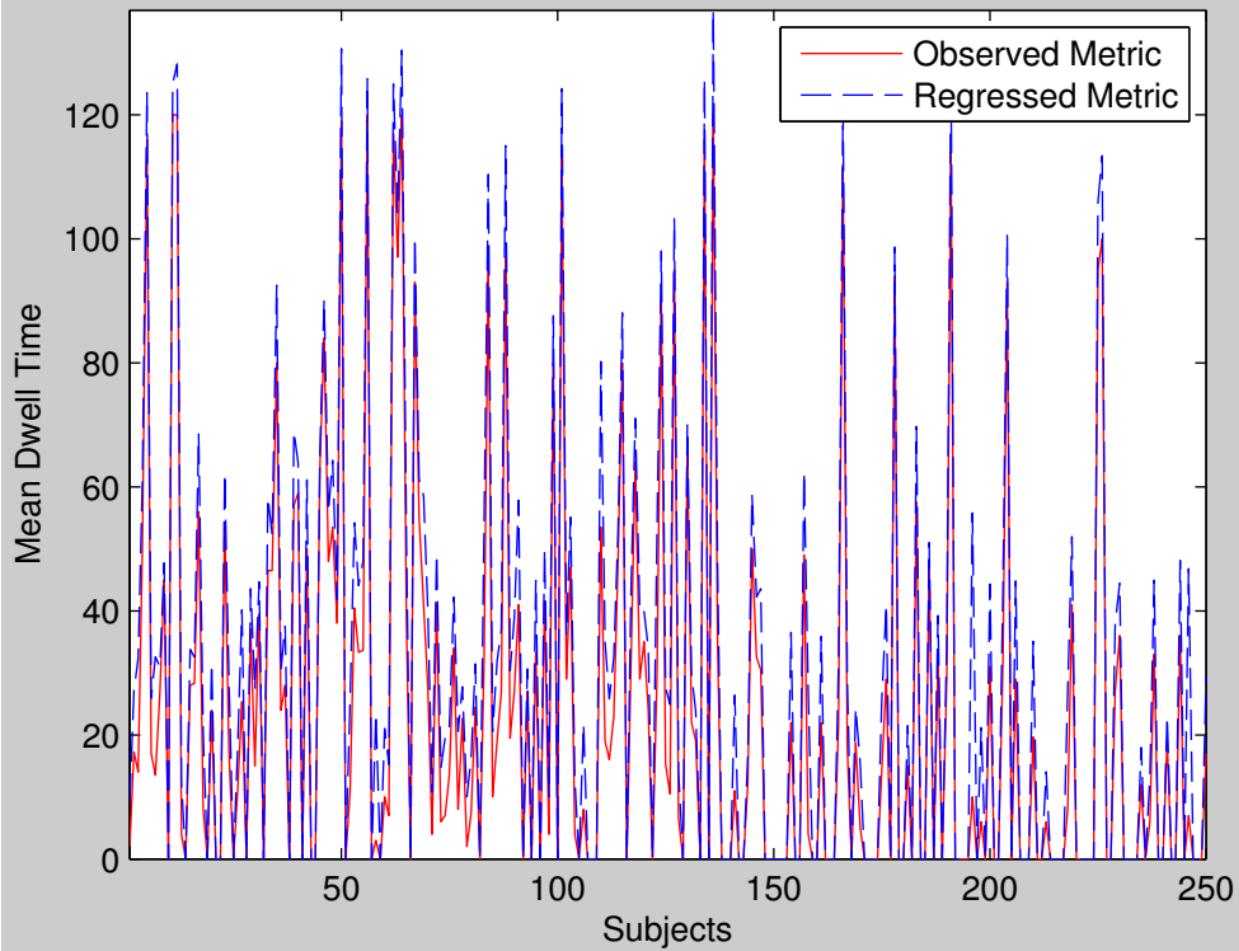
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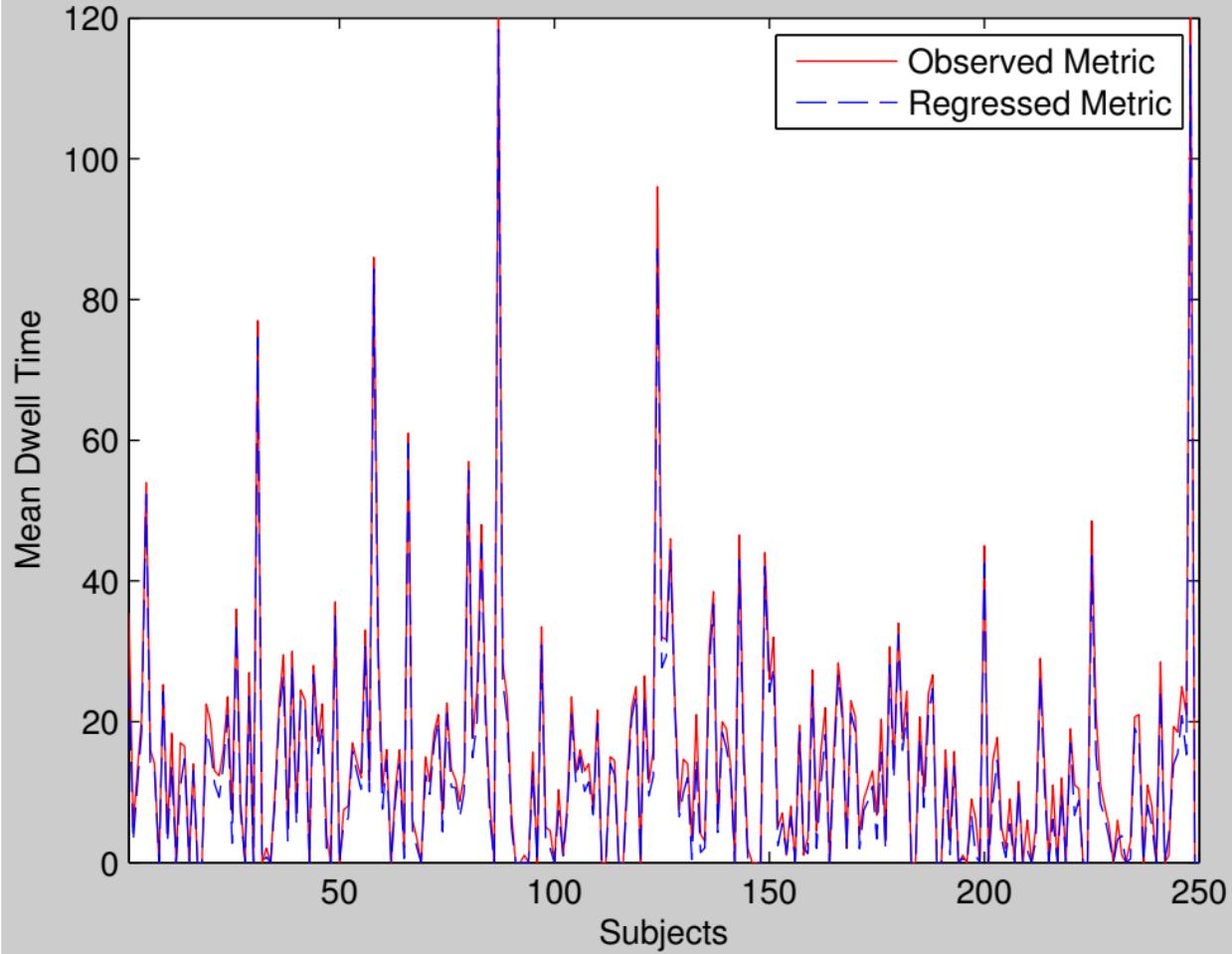
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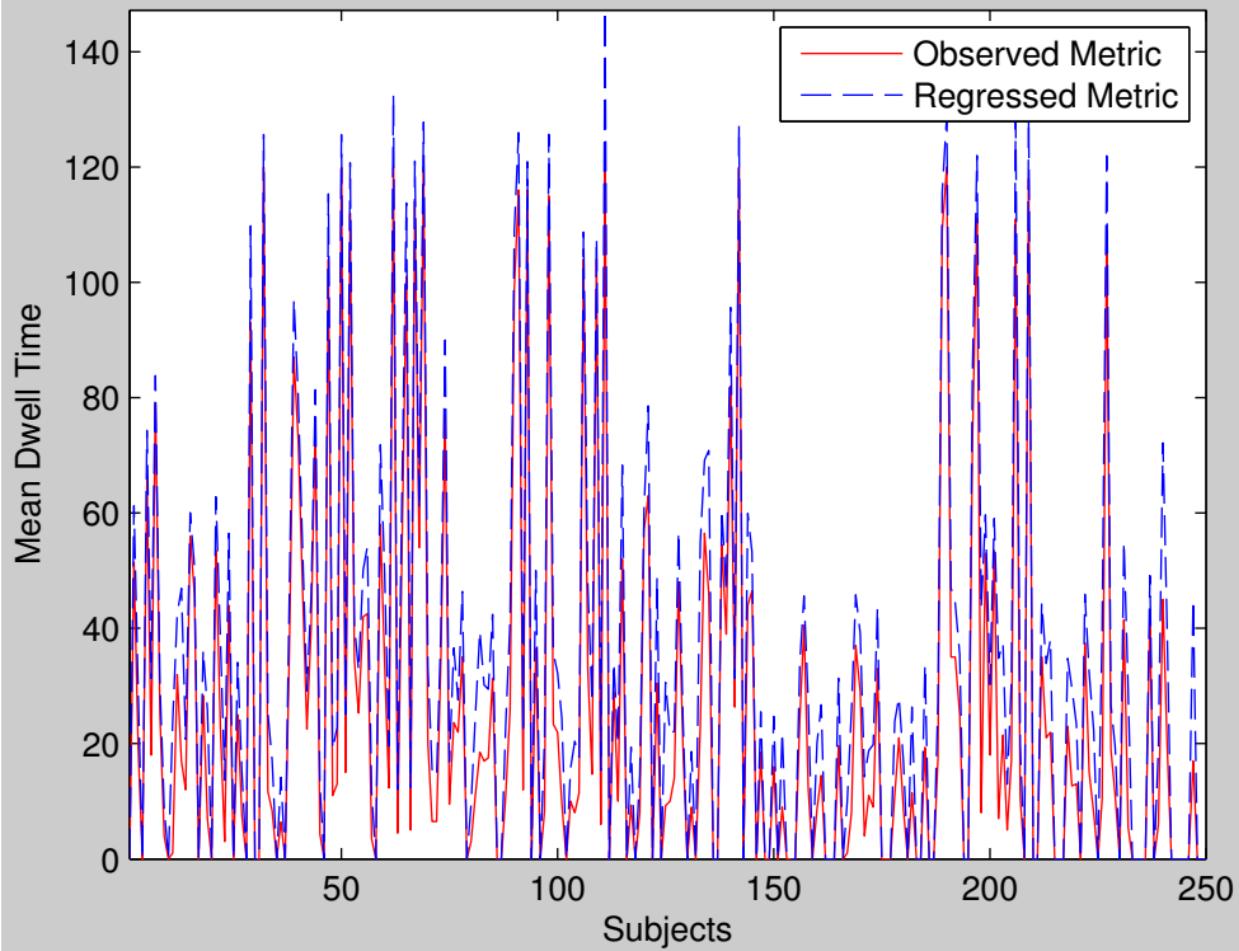
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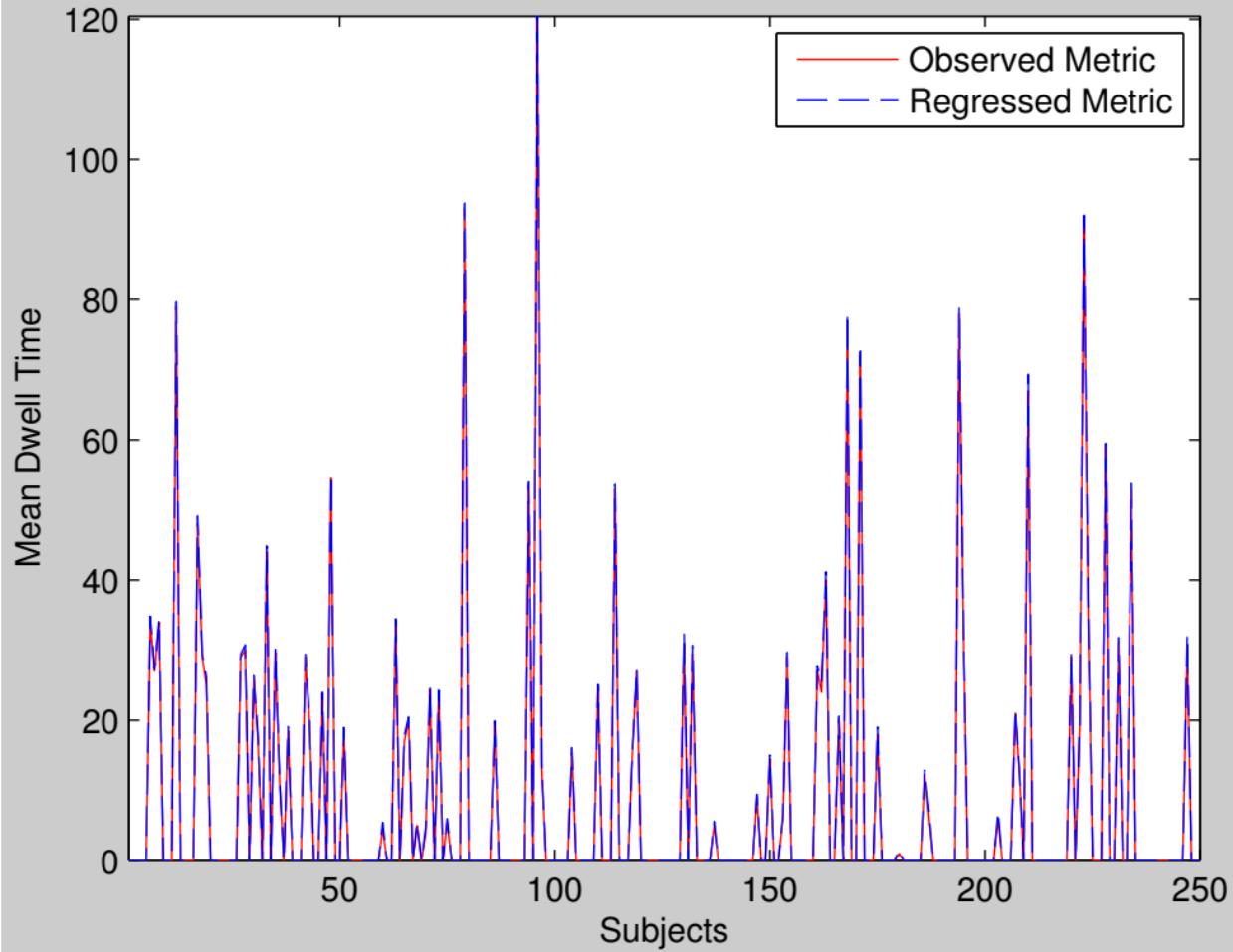
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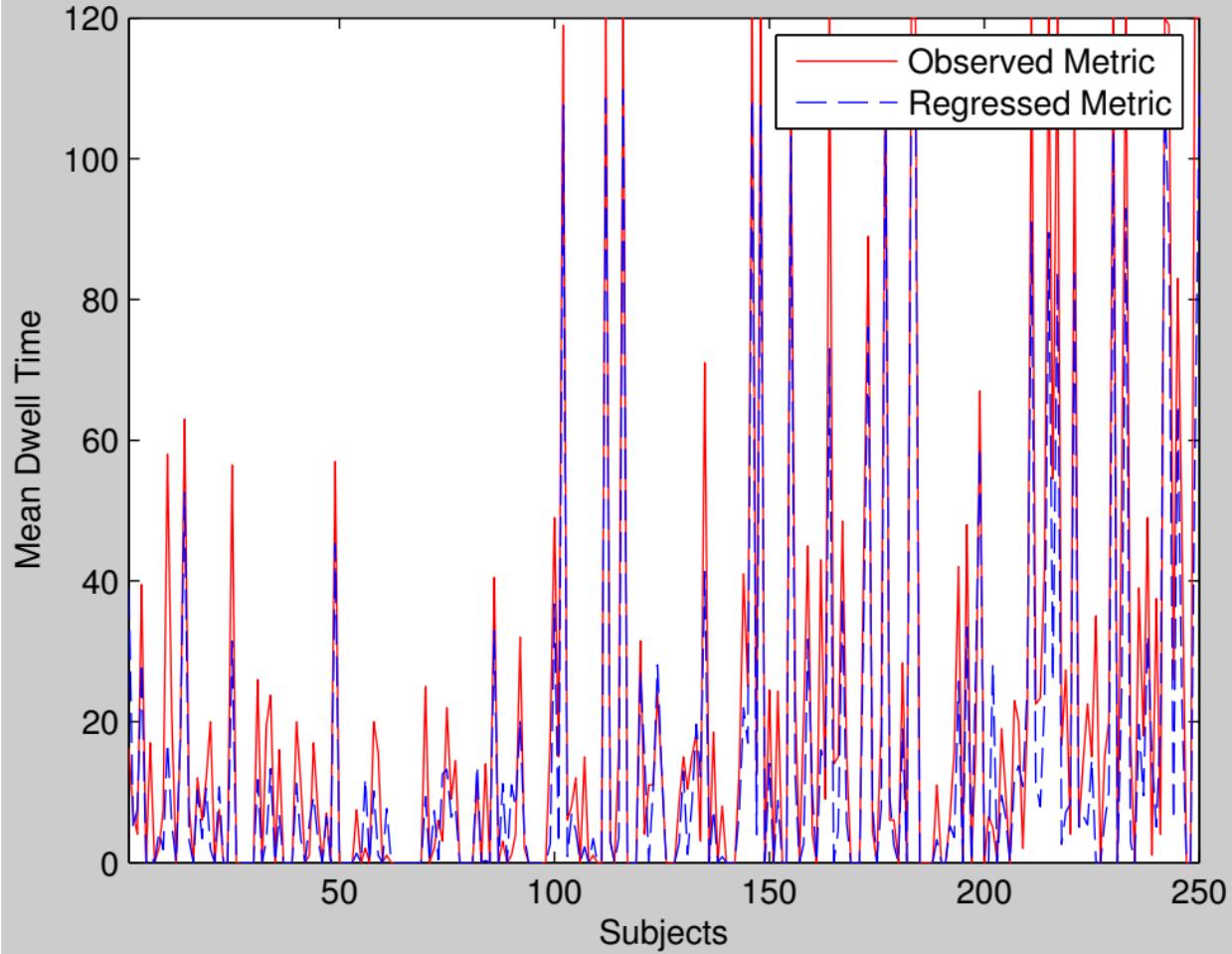
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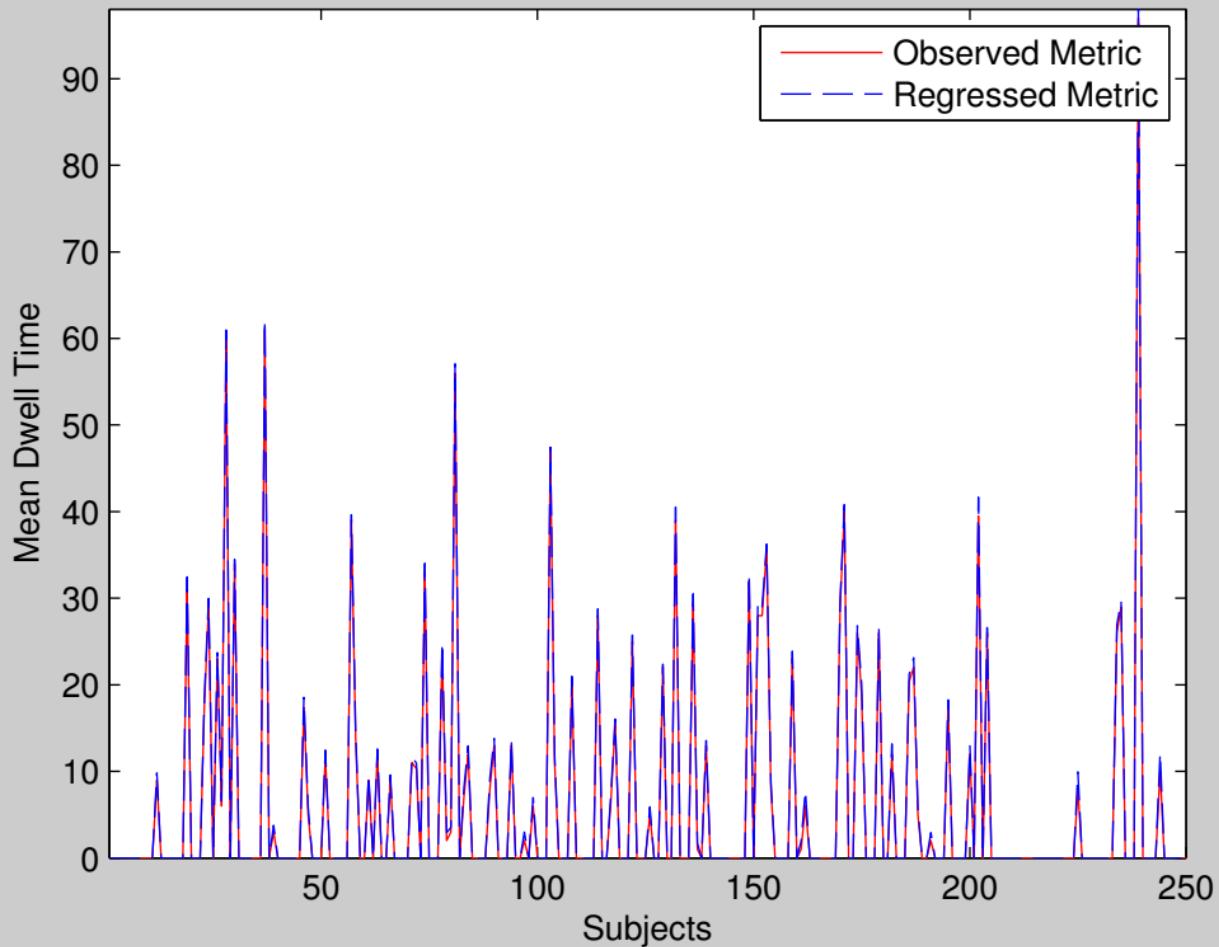
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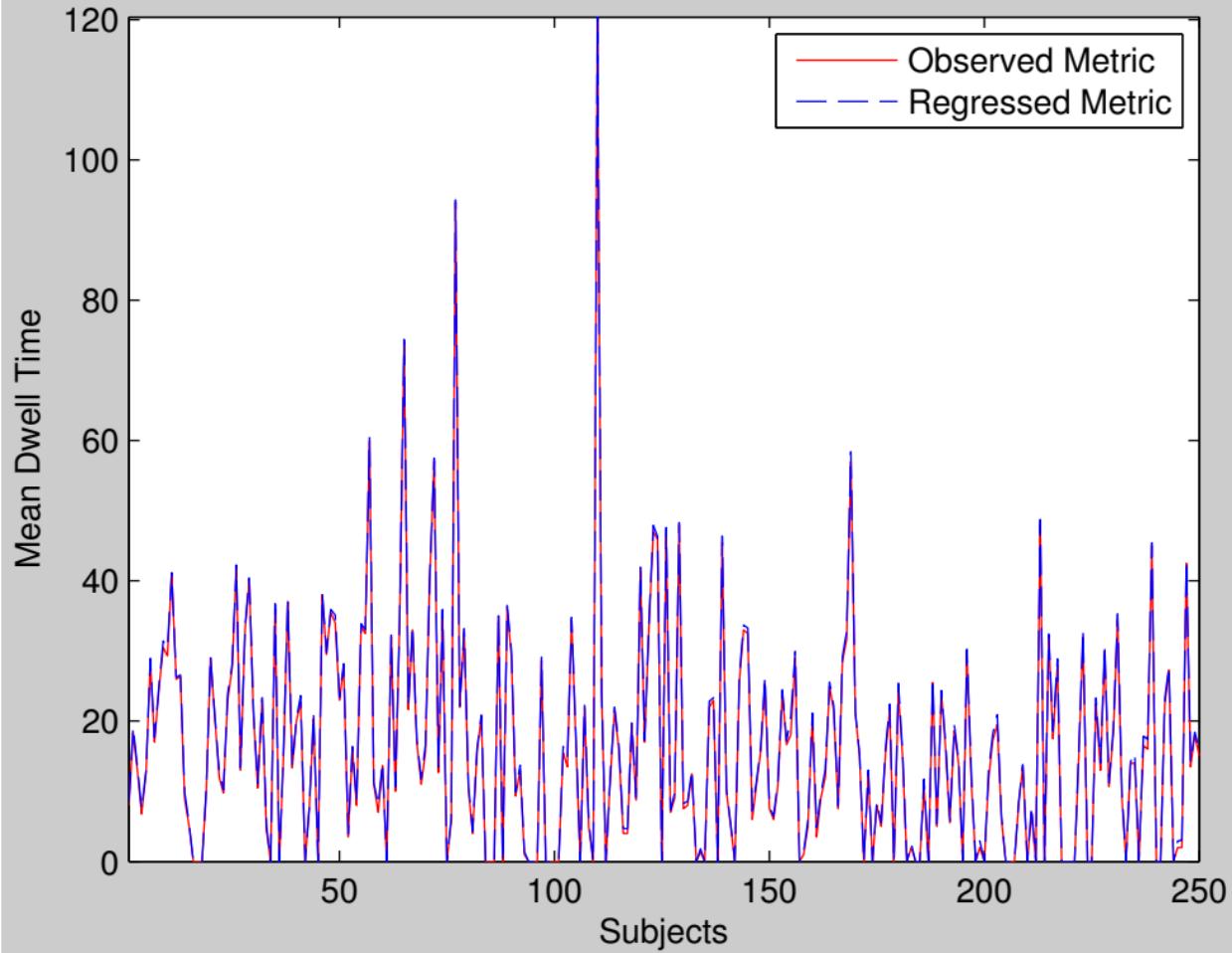
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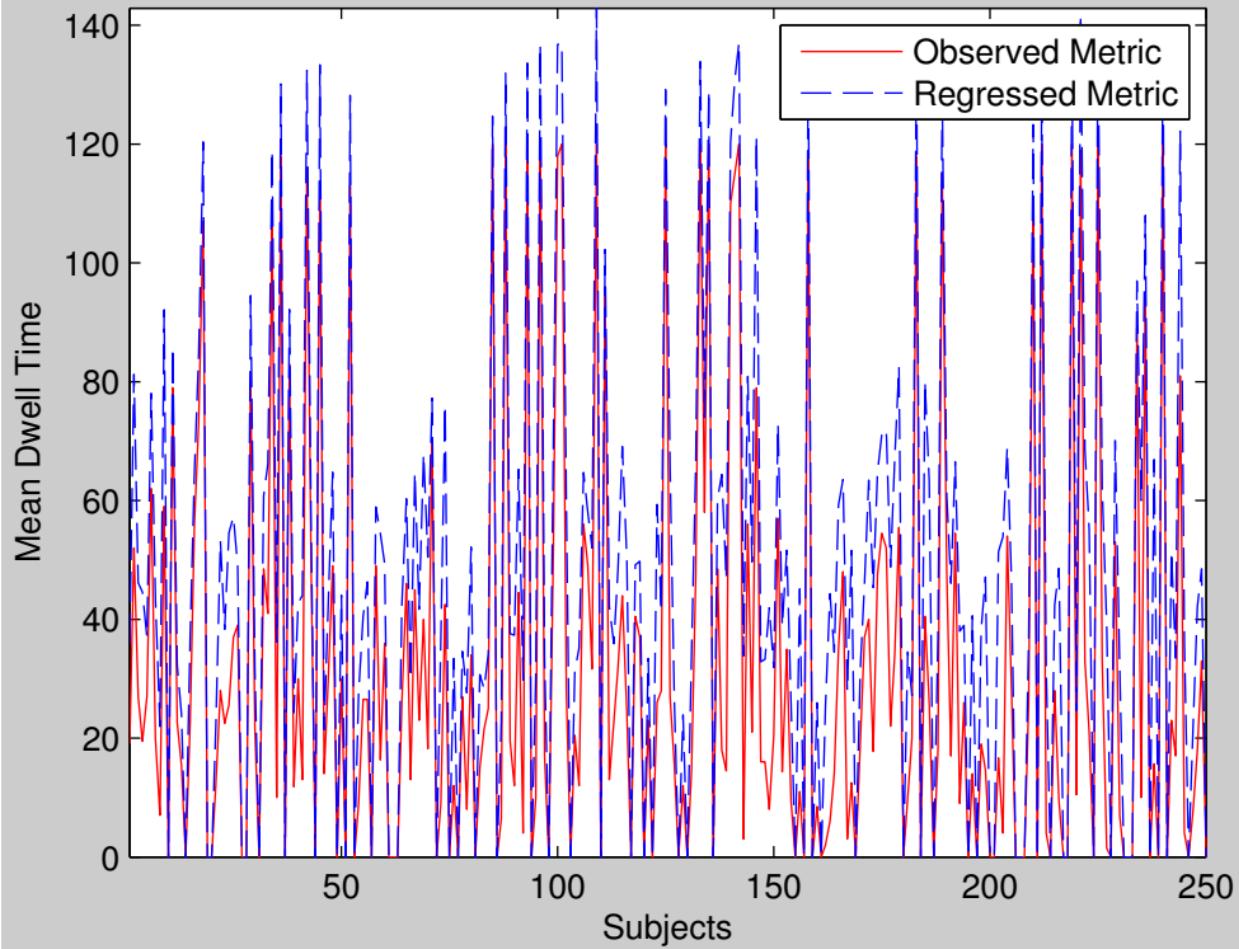
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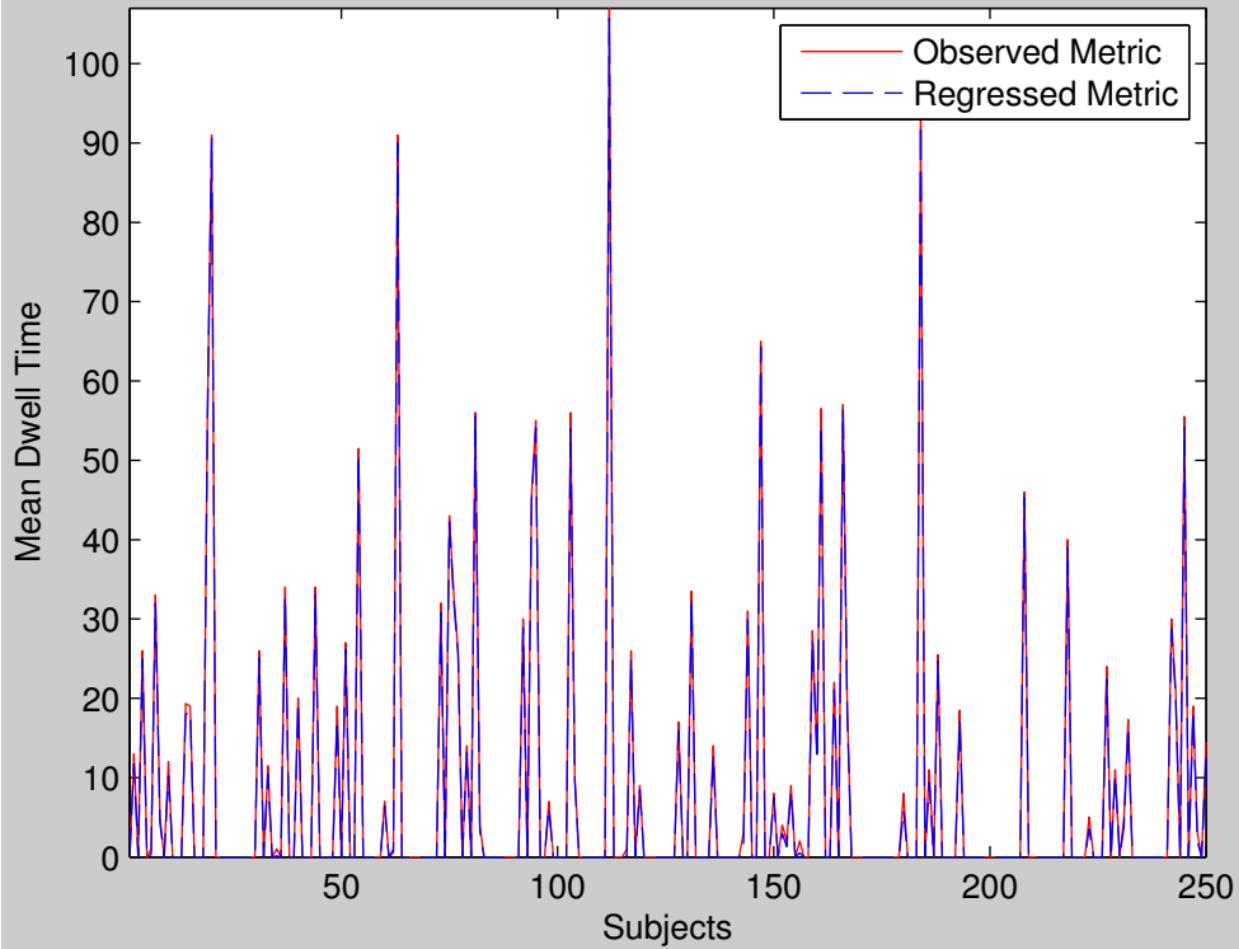
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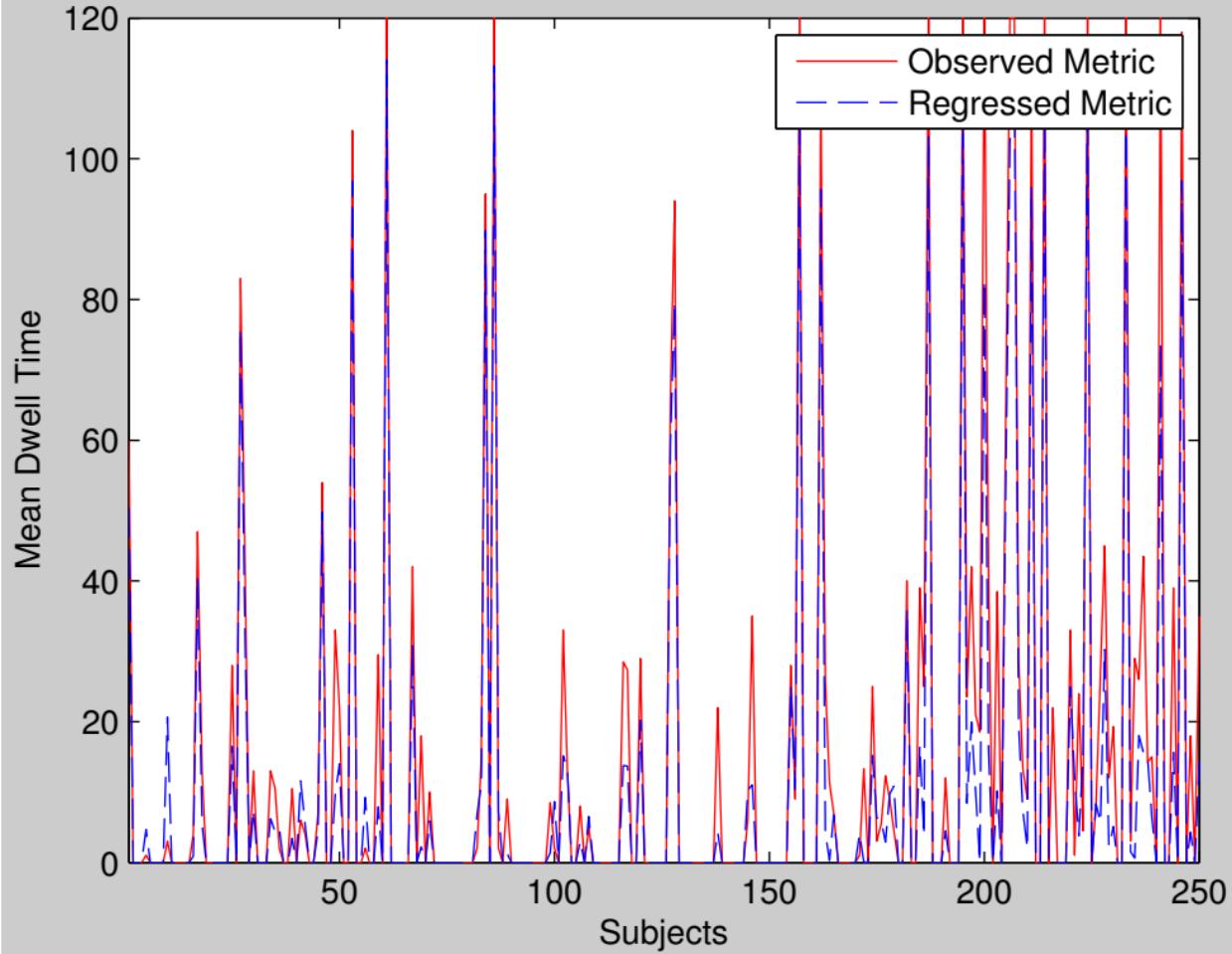
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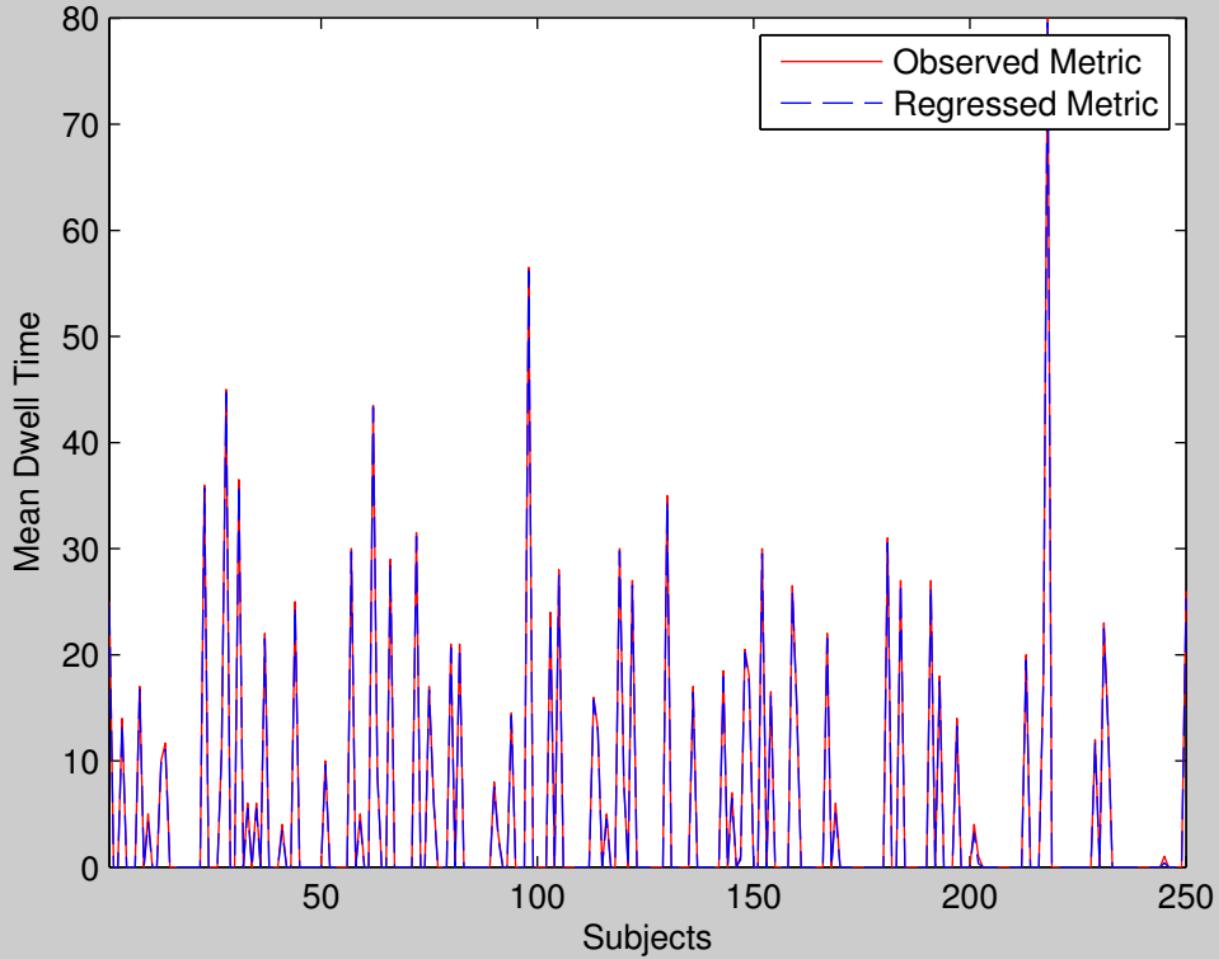
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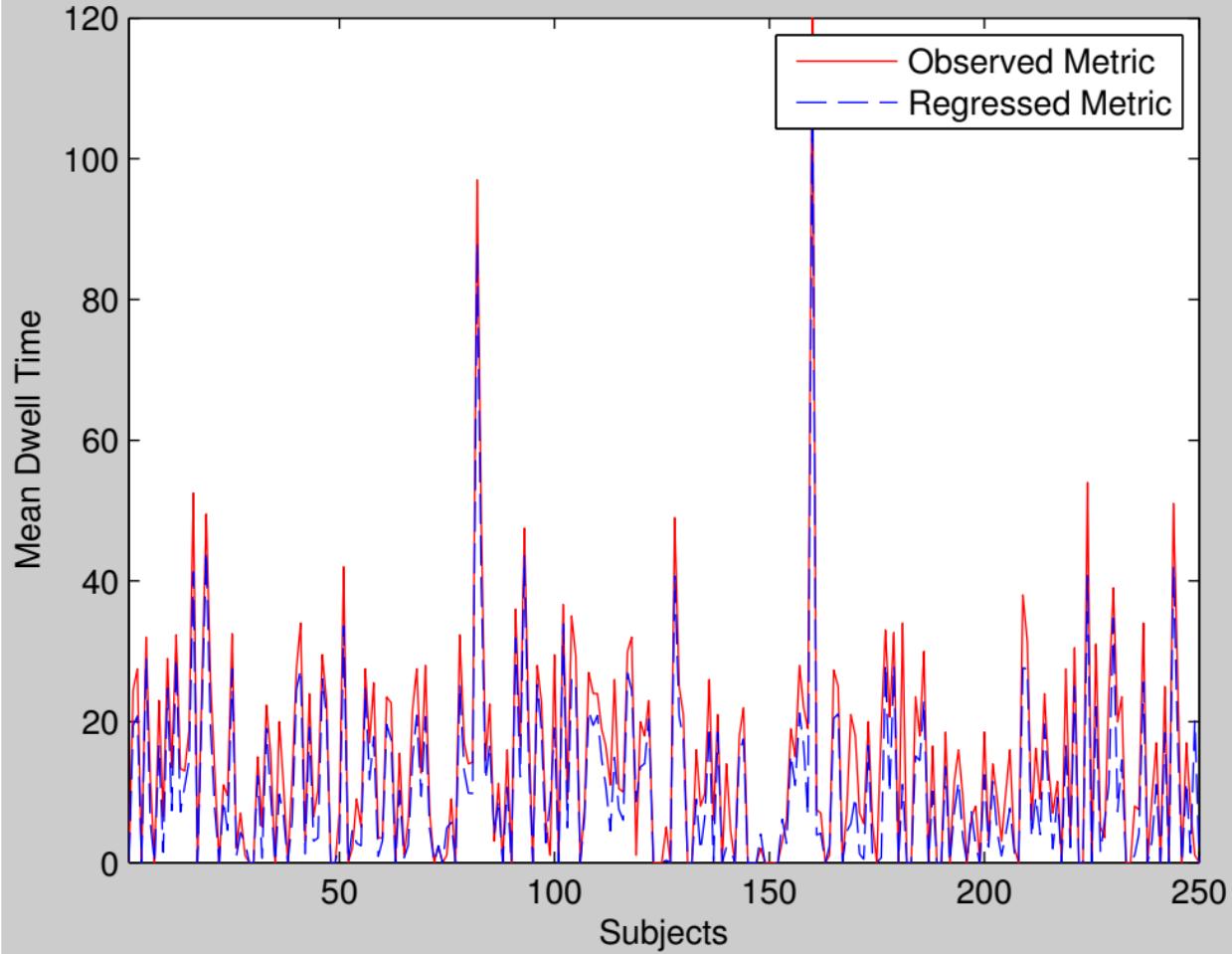
Group 11 State 4 : MDT



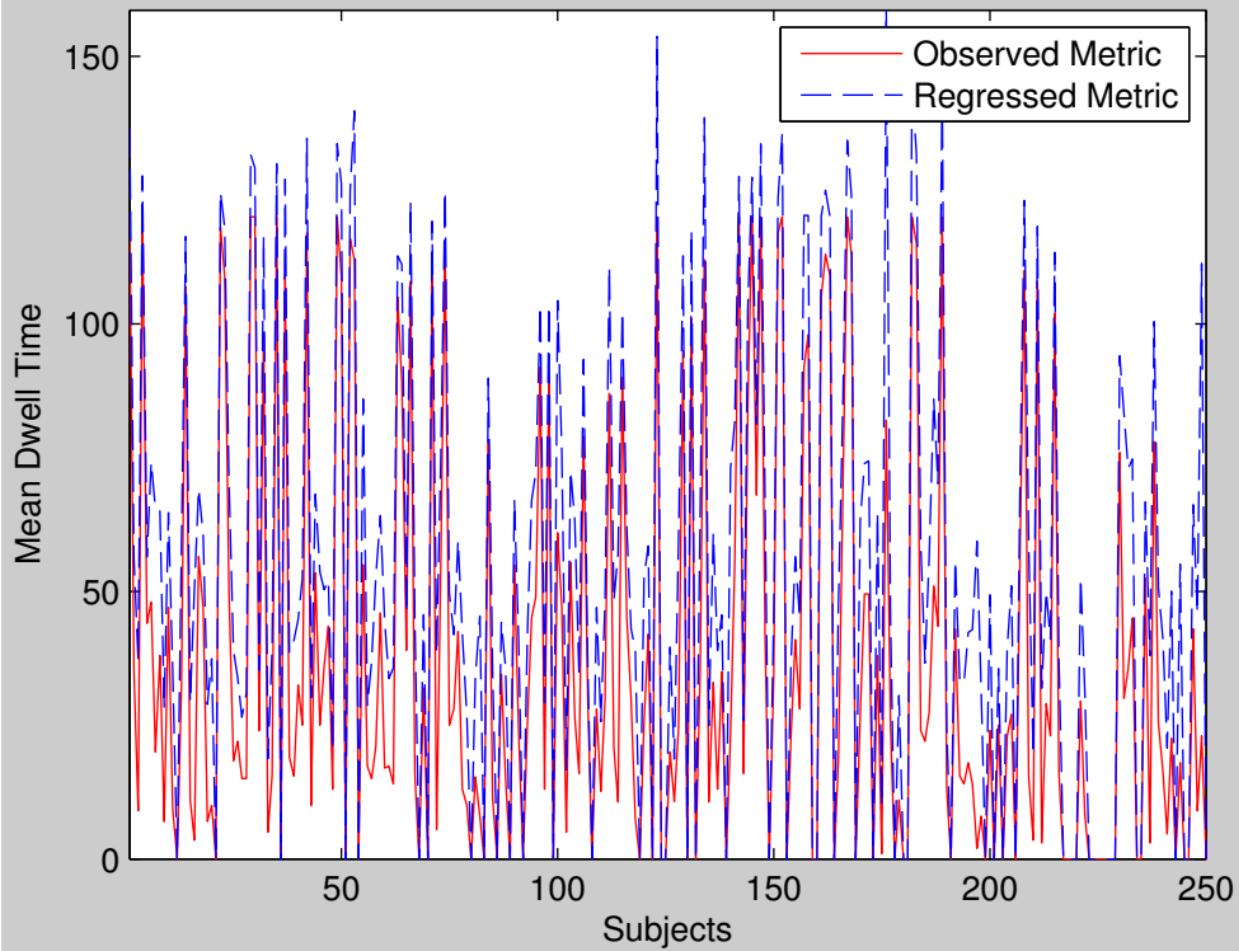
Group 11 State 5 : MDT



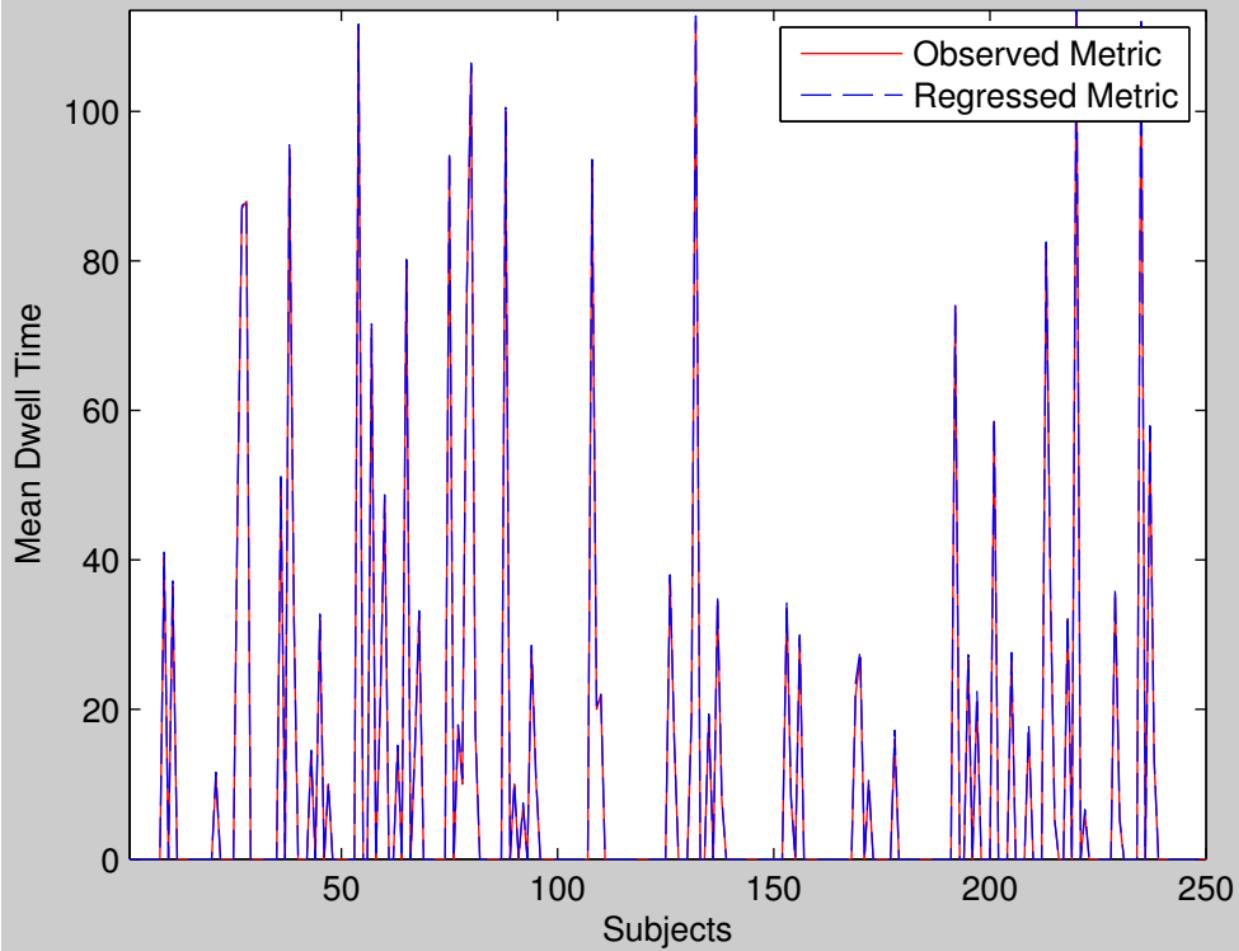
Group 12 State 1 : MDT



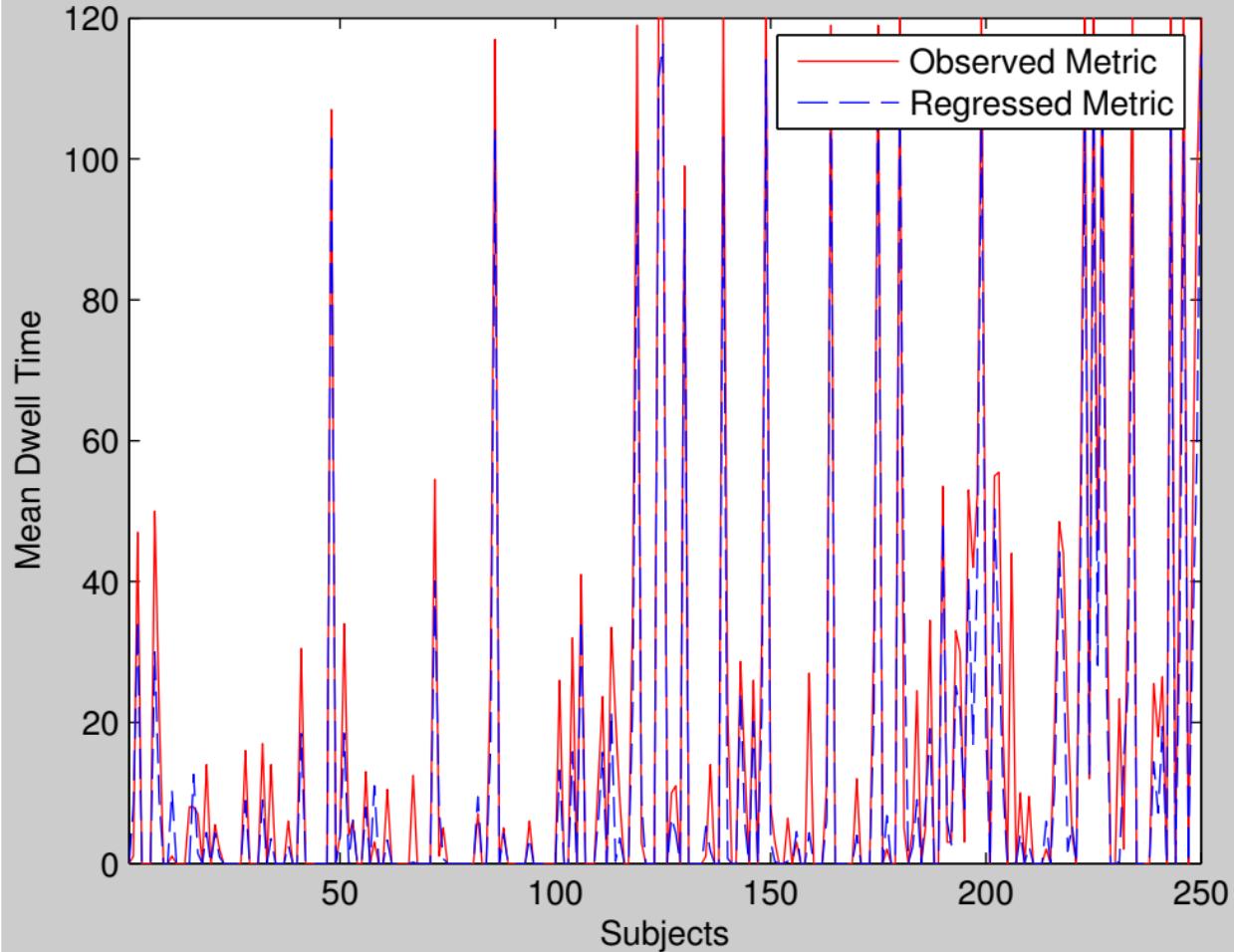
Group 12 State 2 : MDT



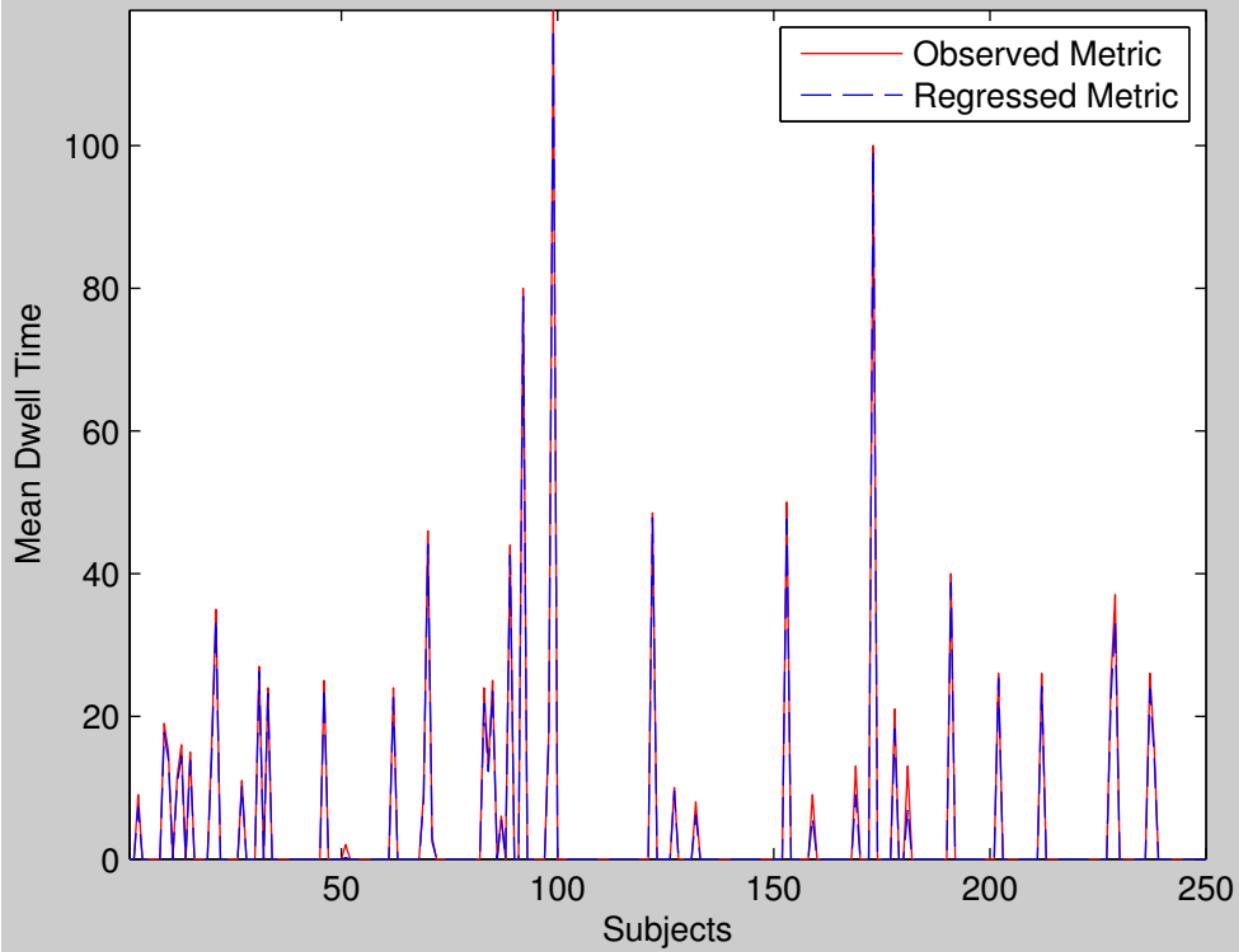
Group 12 State 3 : MDT



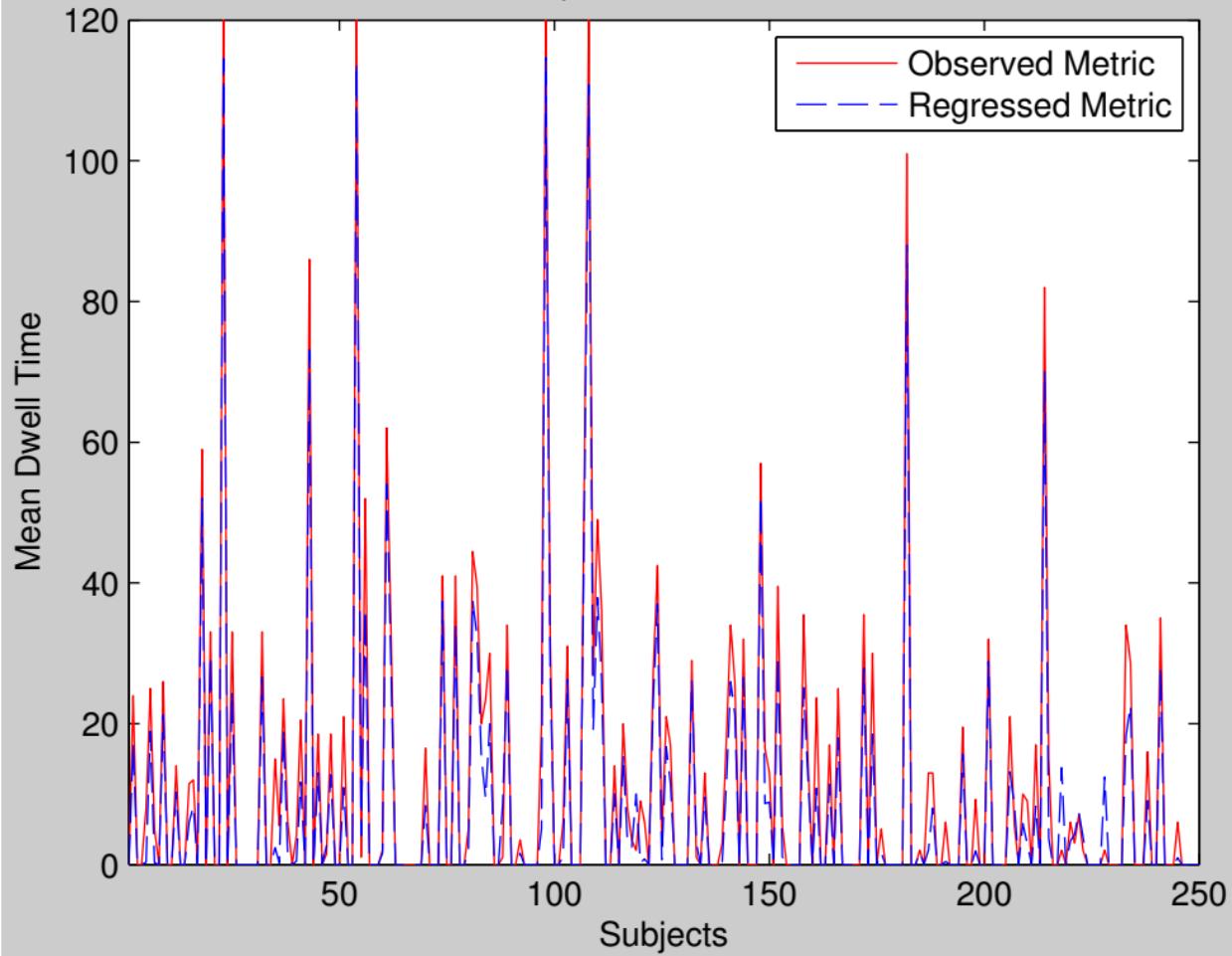
Group 12 State 4 : MDT



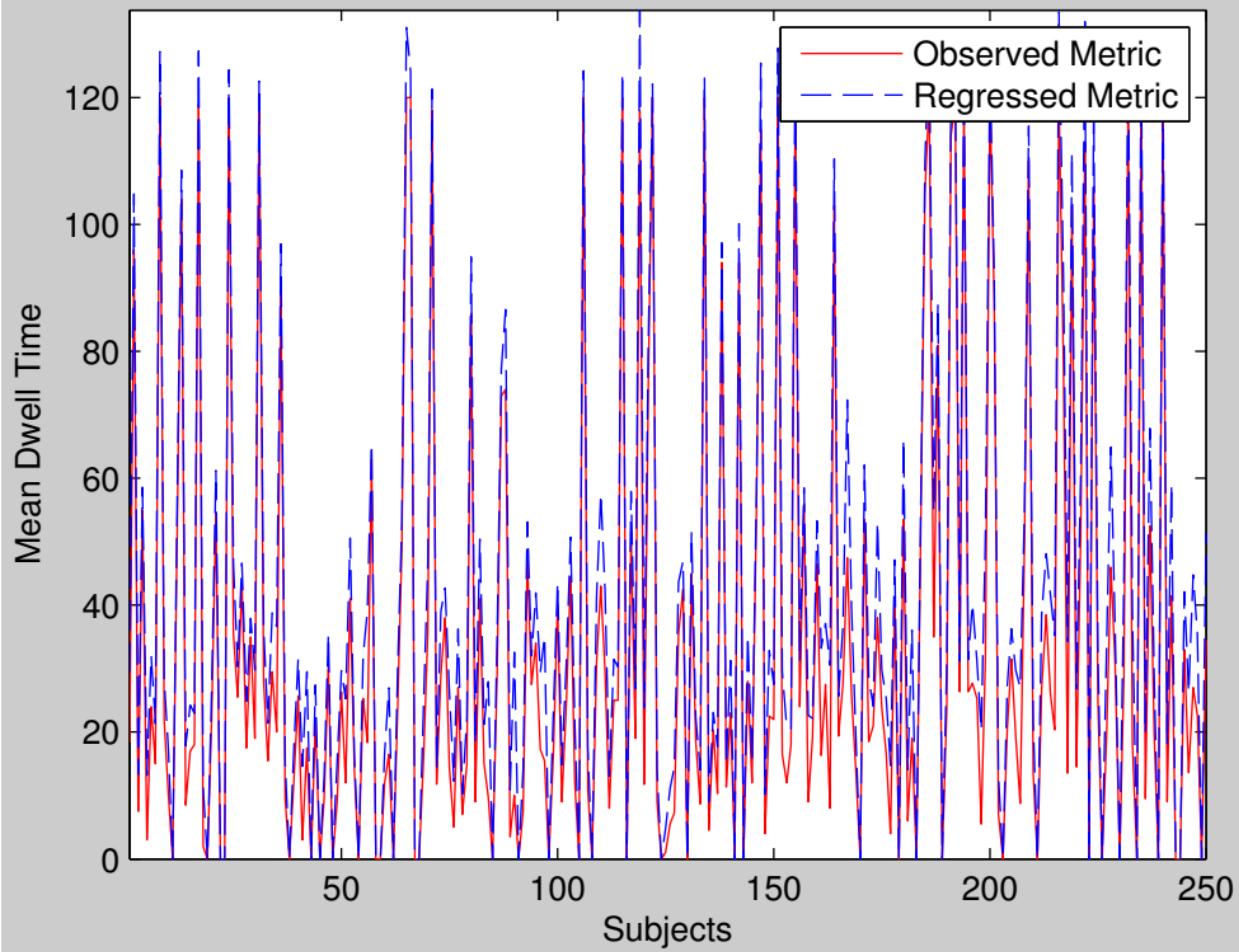
Group 12 State 5 : MDT



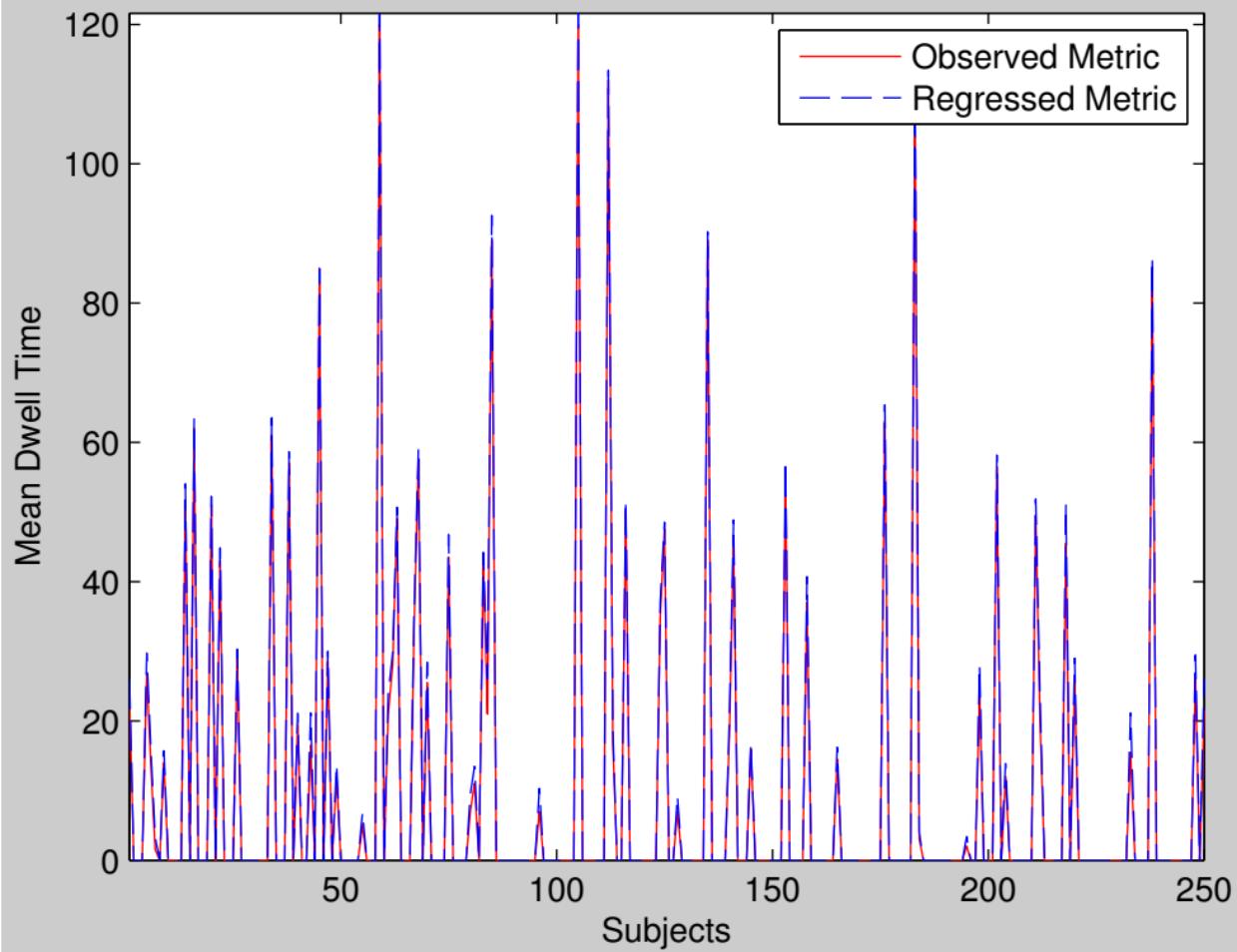
Group 13 State 1 : MDT



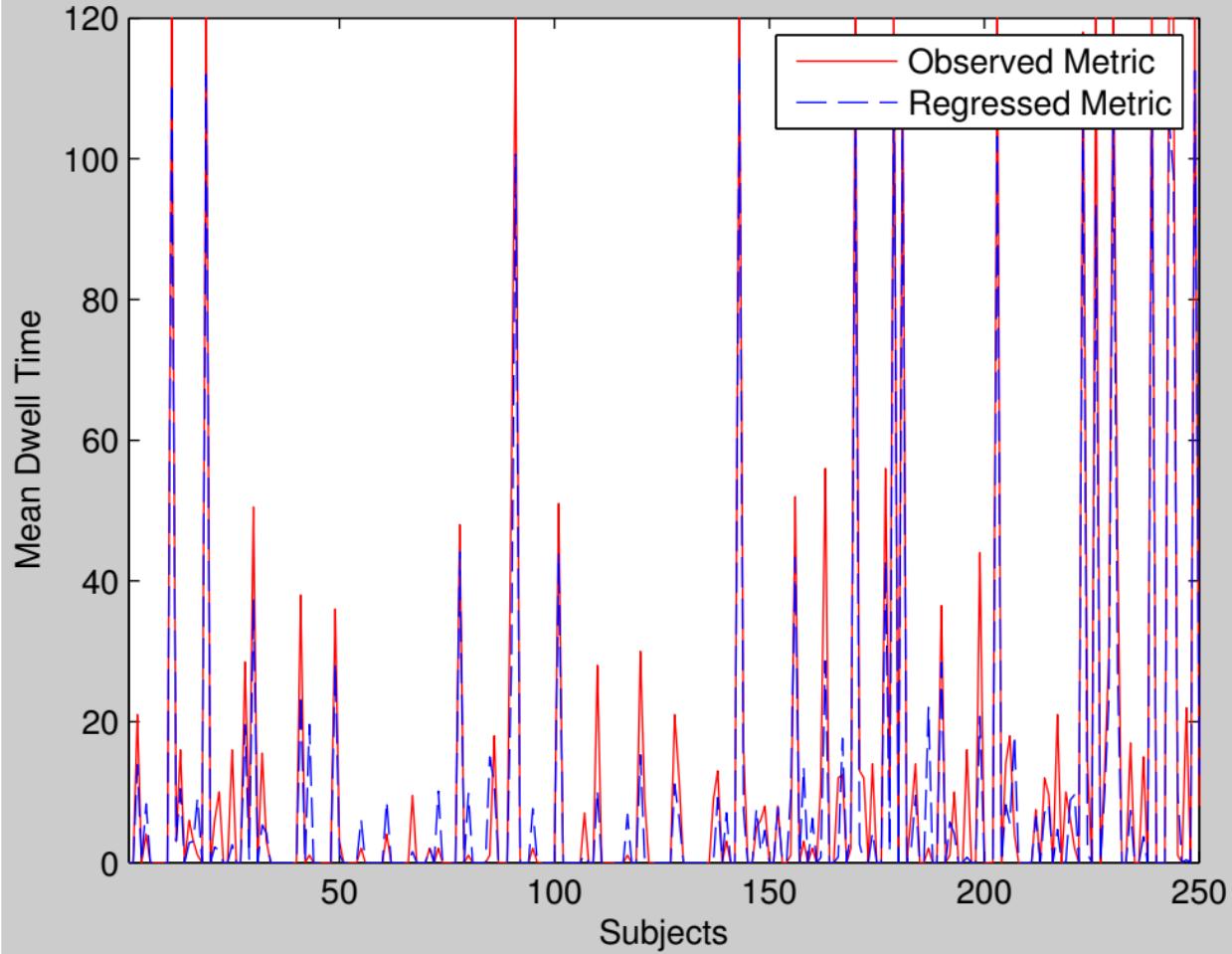
Group 13 State 2 : MDT



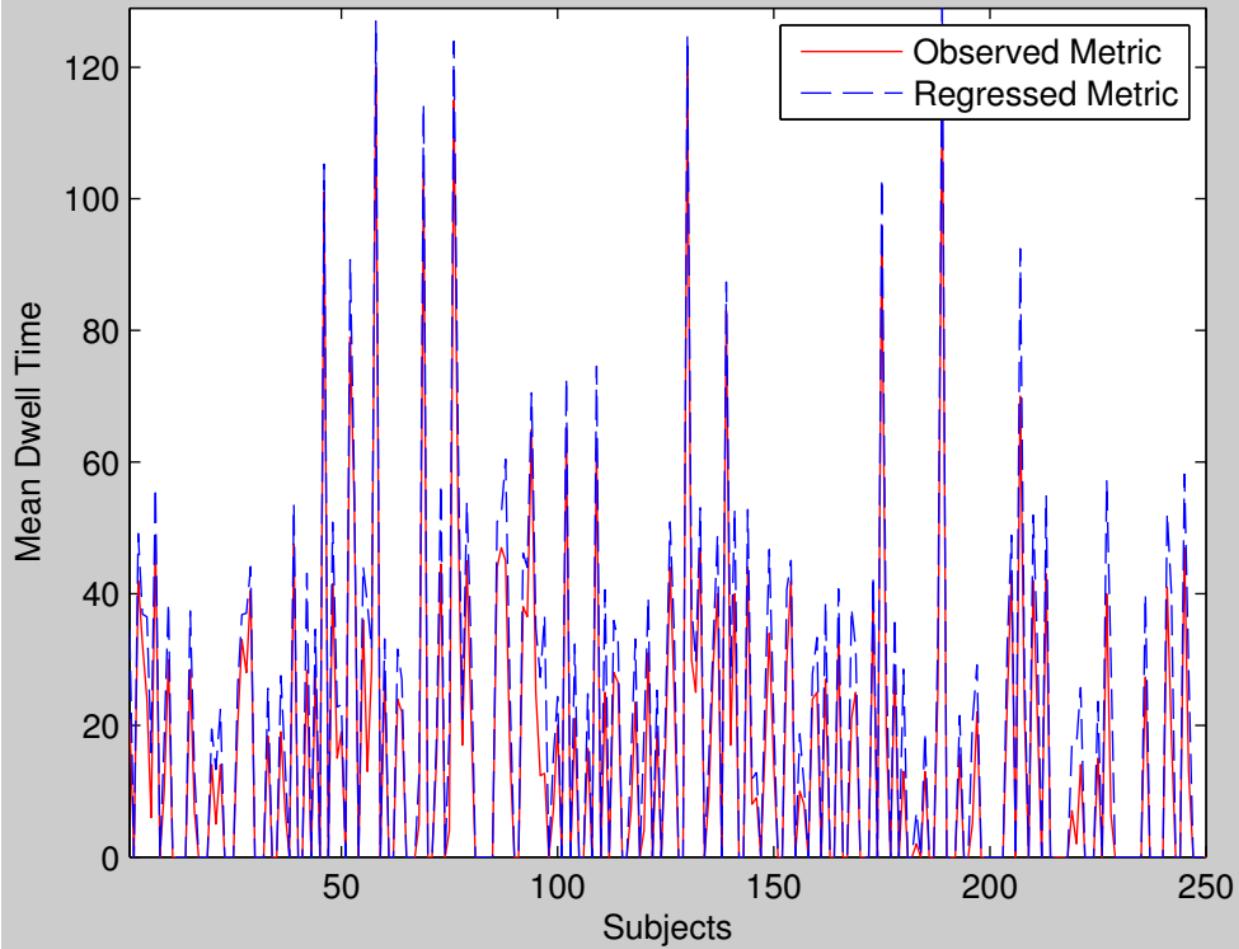
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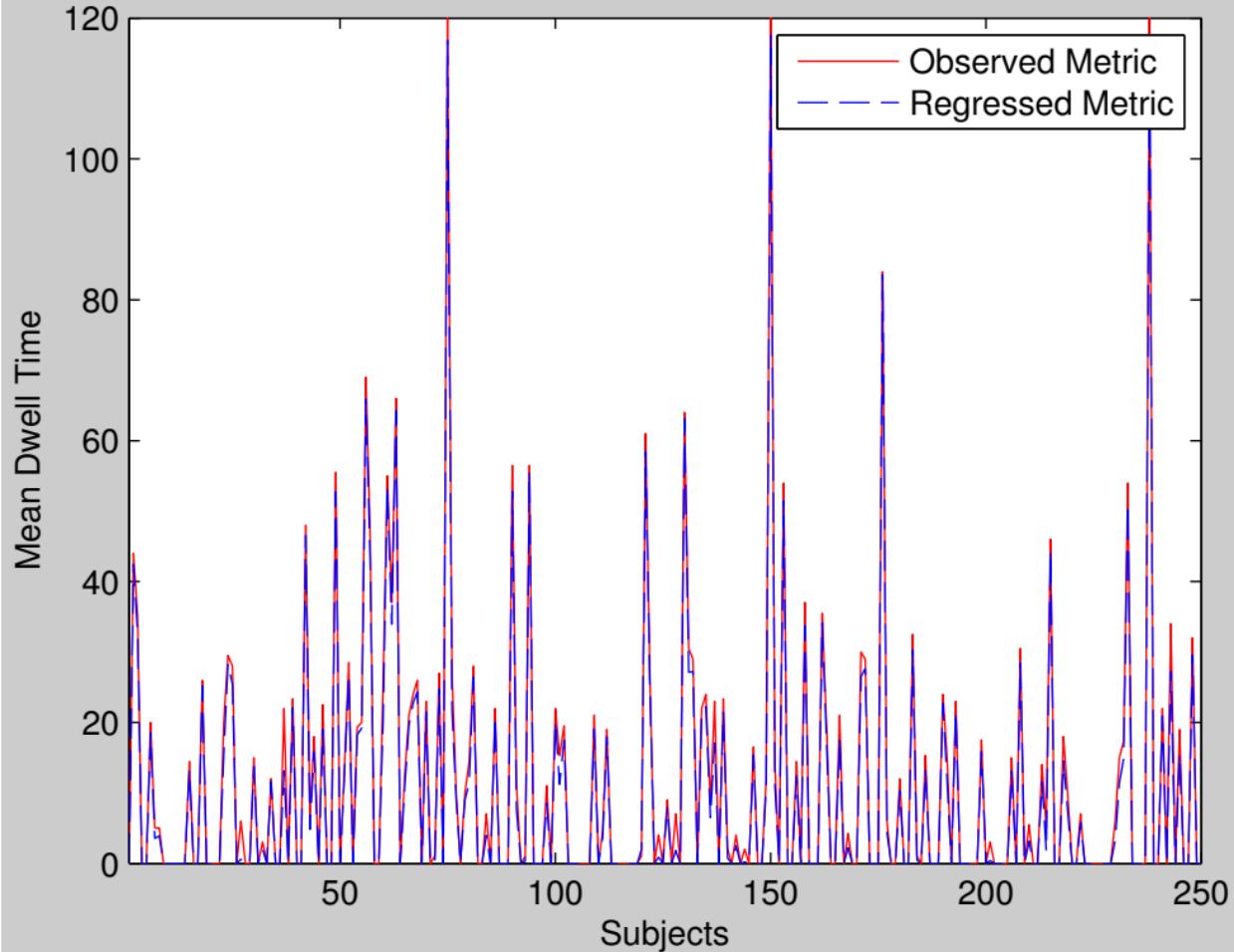
Group 13 State 4 : MDT



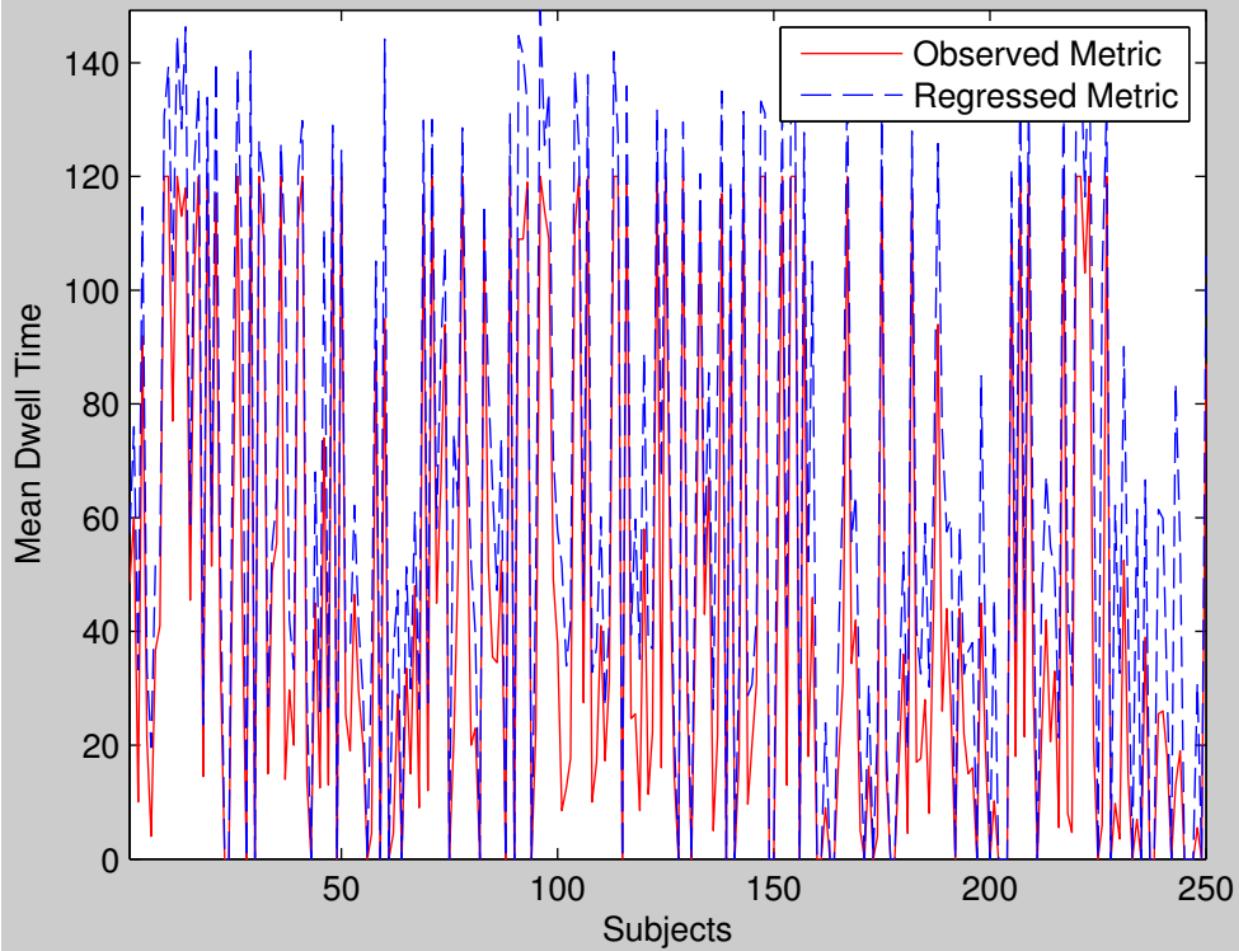
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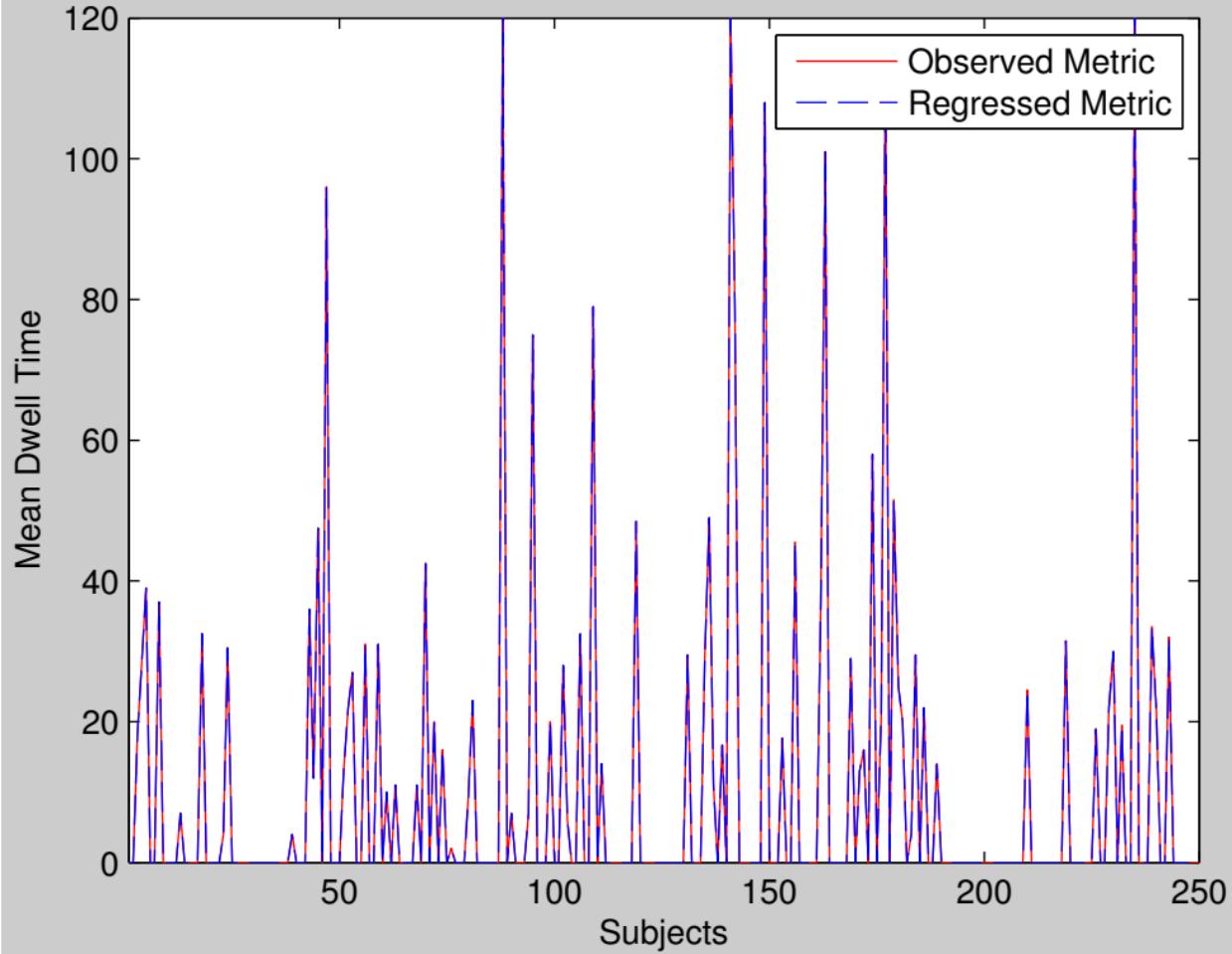
Group 14 State 1 : MDT



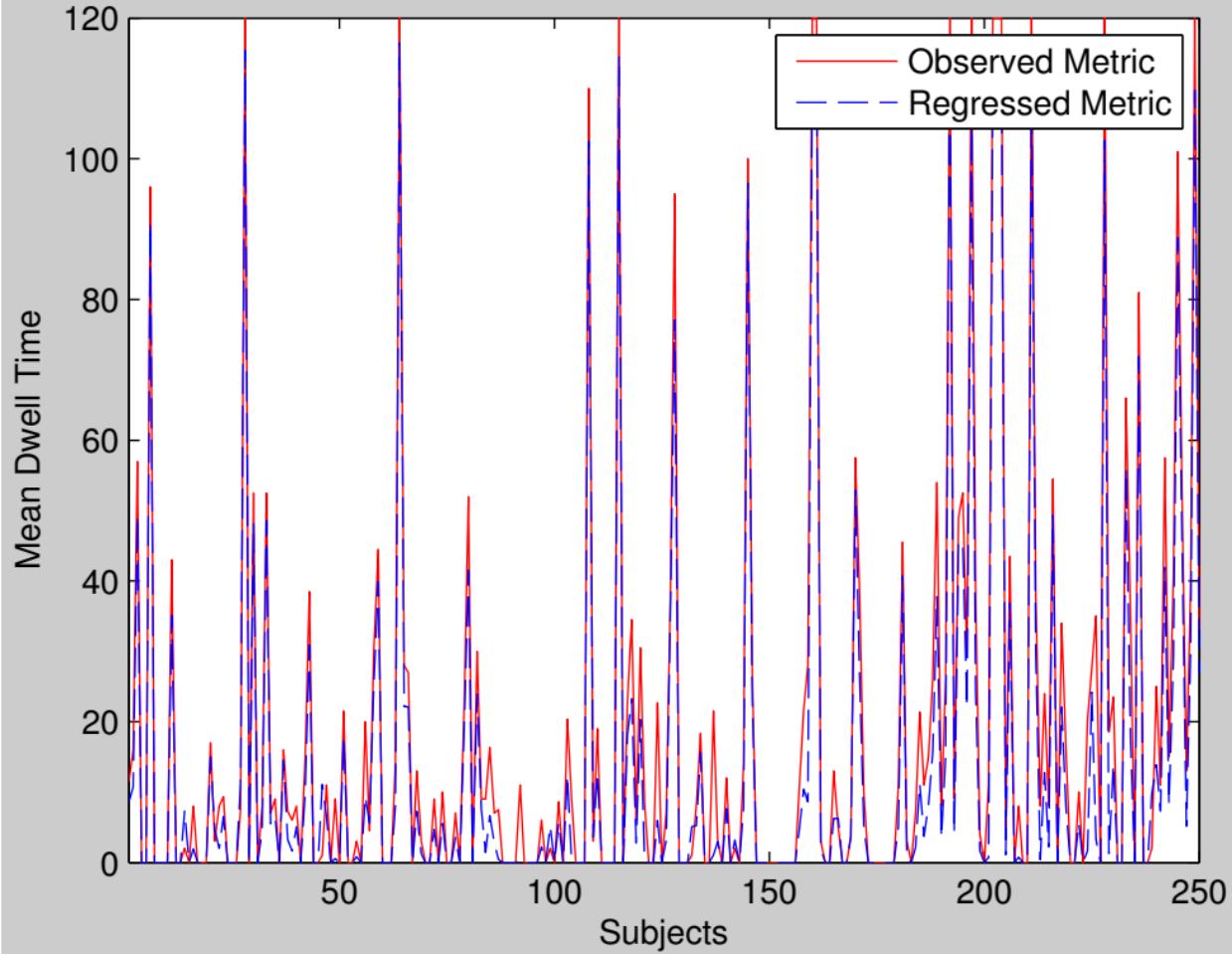
Group 14 State 2 : MDT



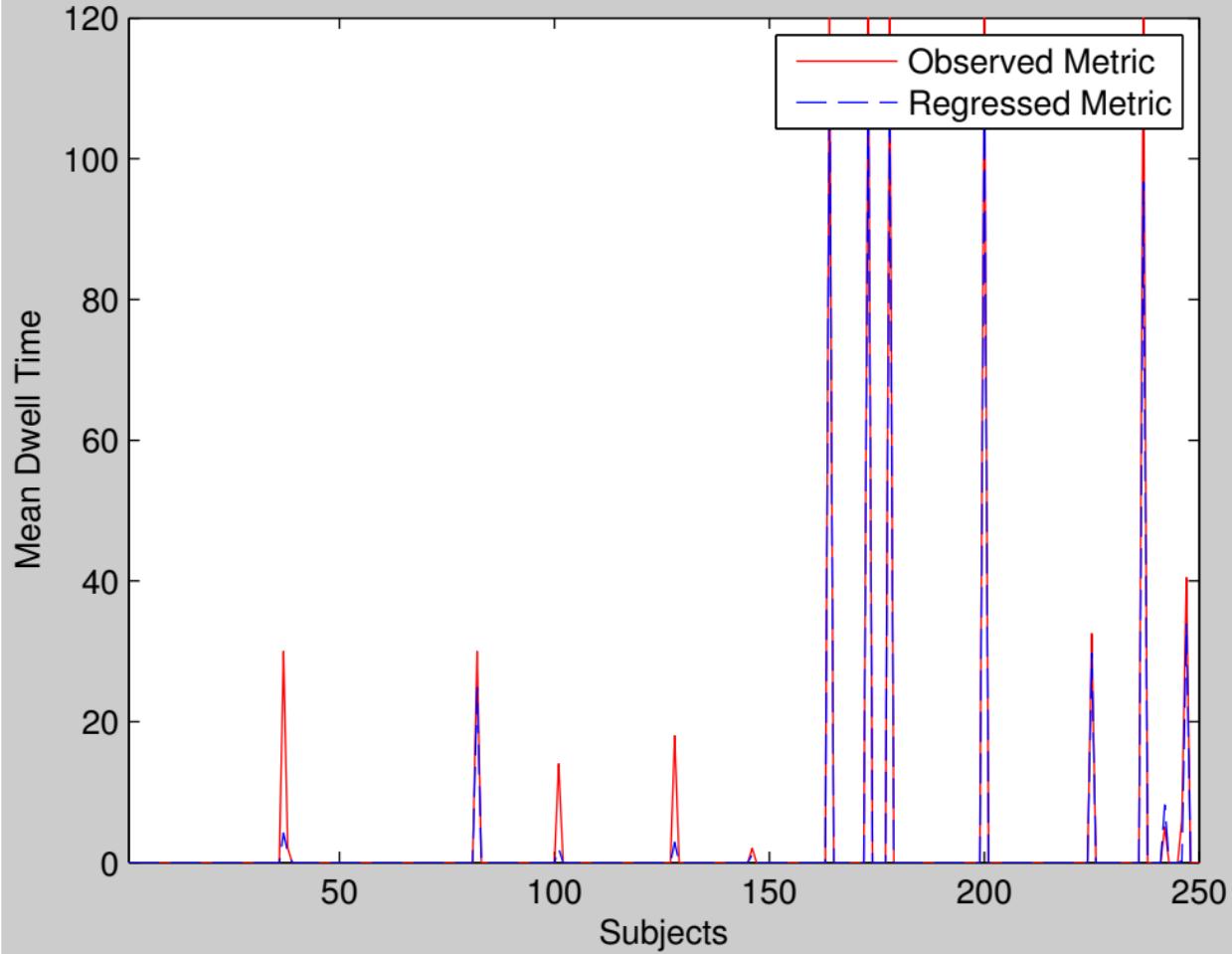
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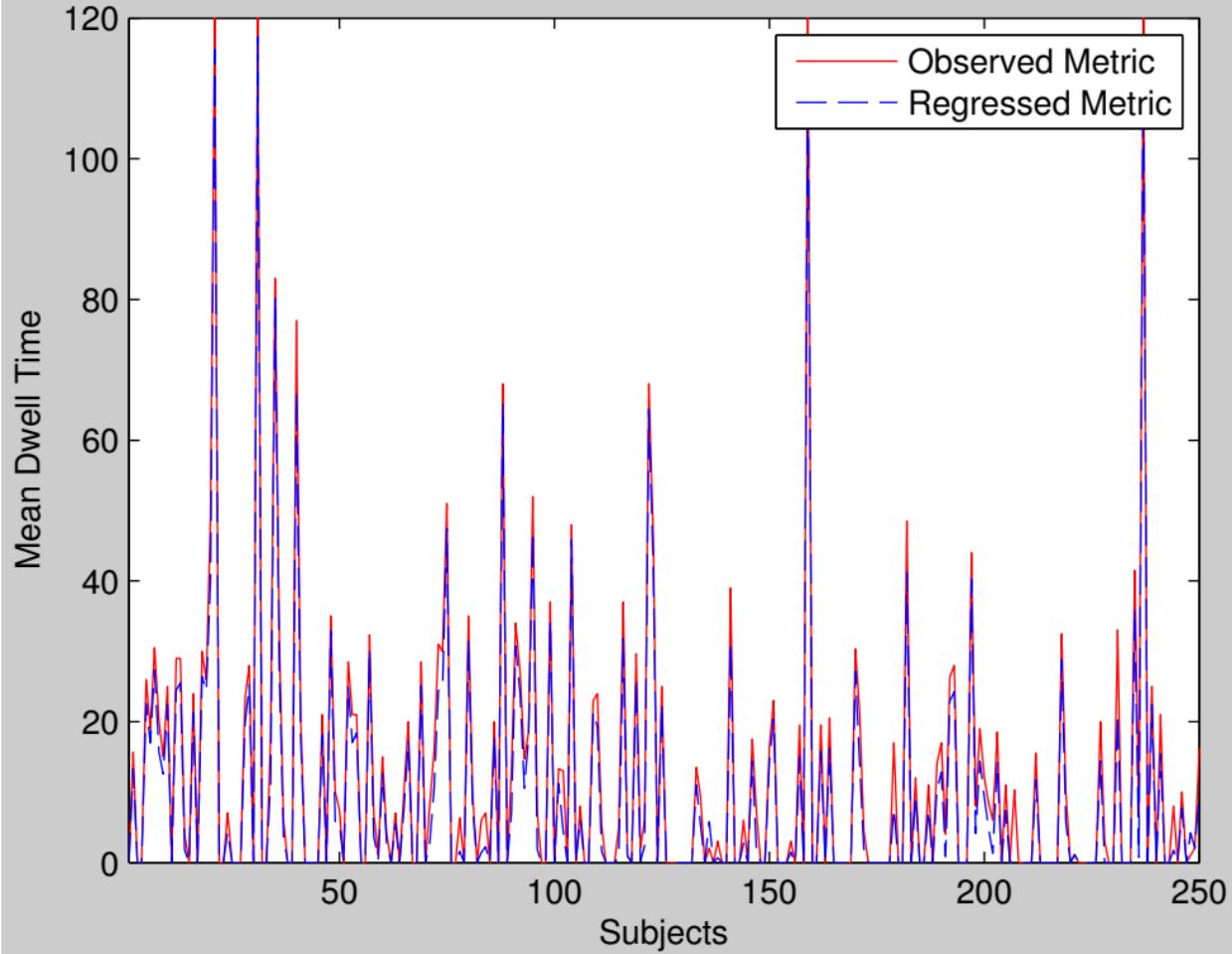
Group 14 State 4 : MDT



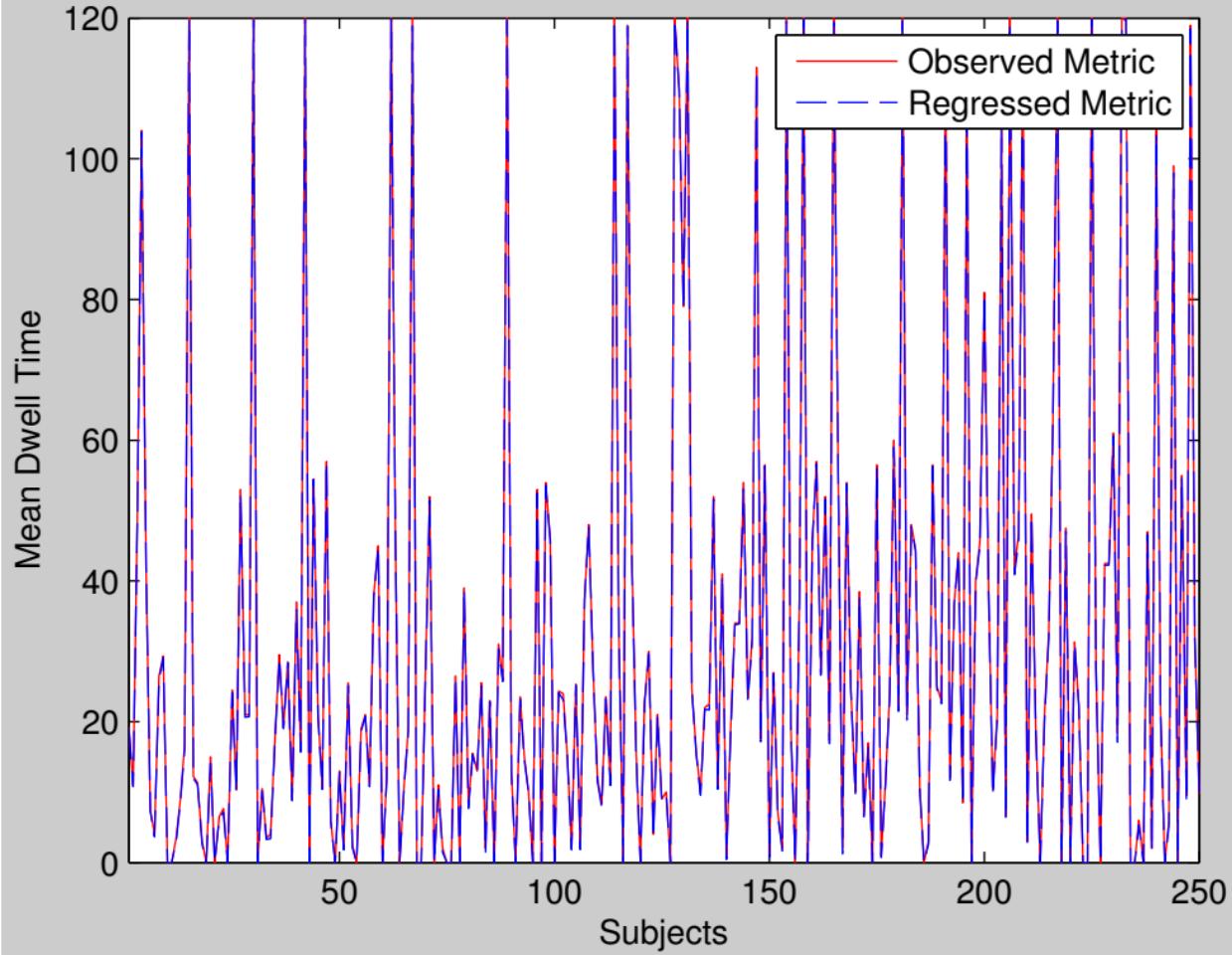
Group 14 State 5 : MDT



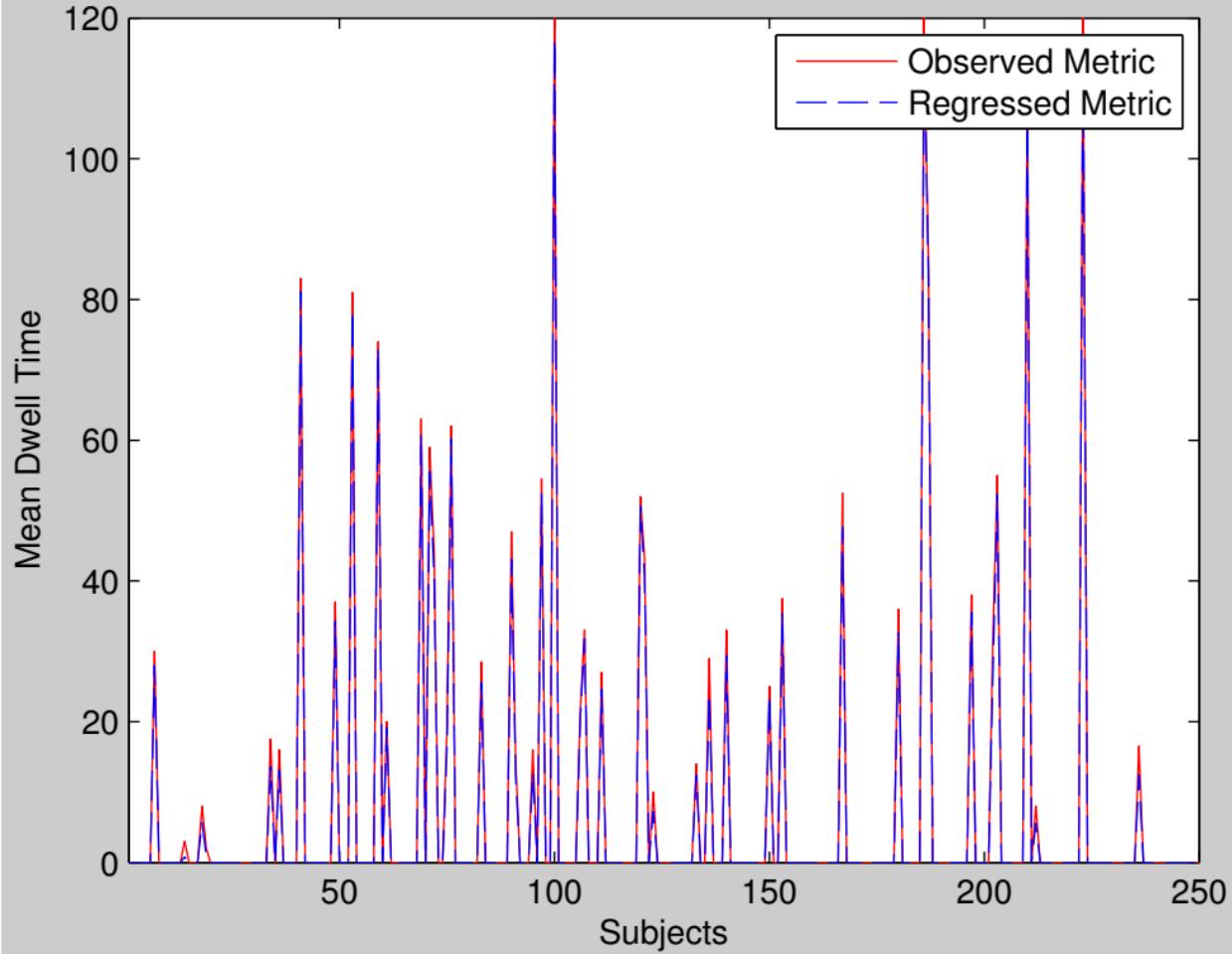
Group 15 State 1 : MDT



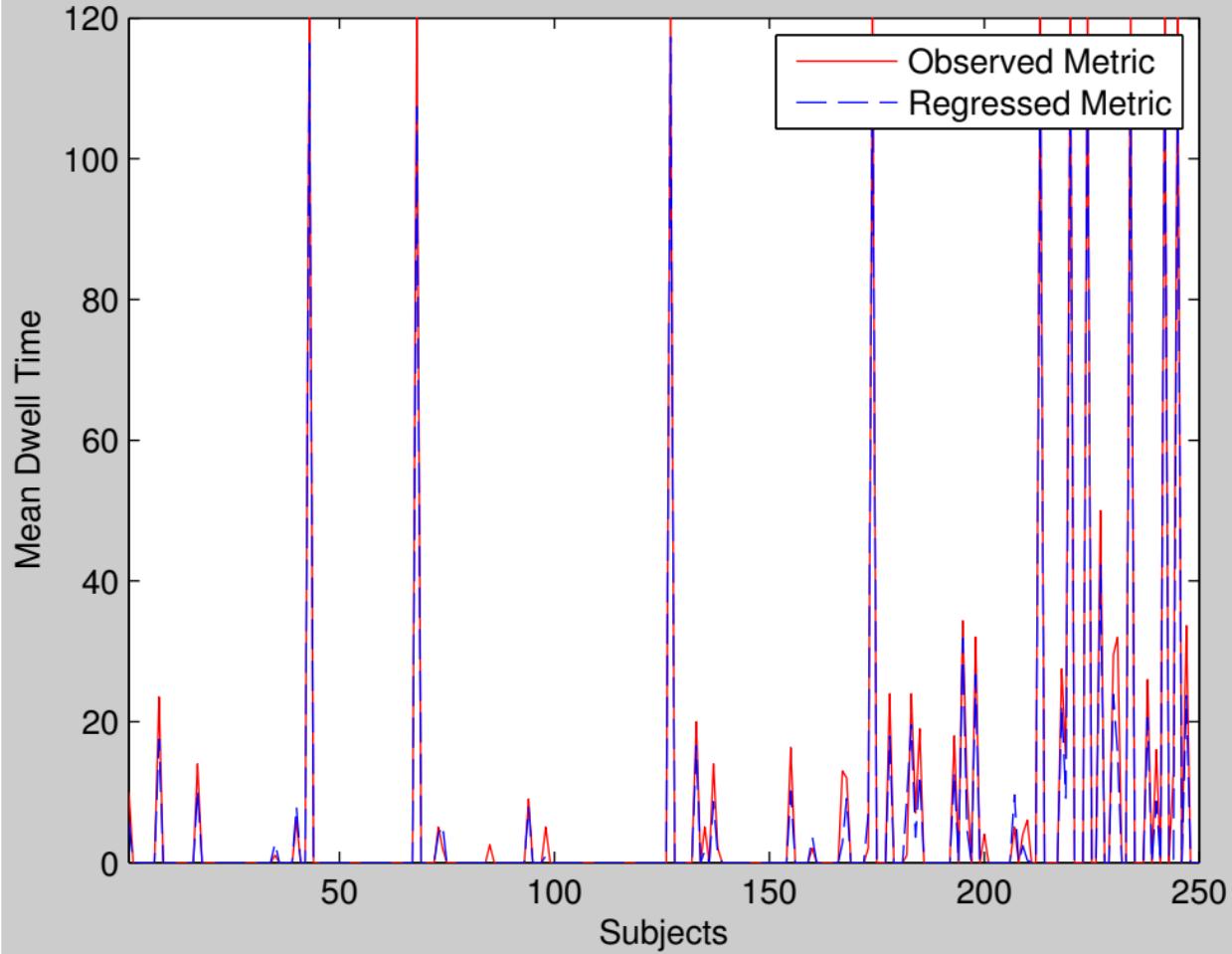
Group 15 State 2 : MDT



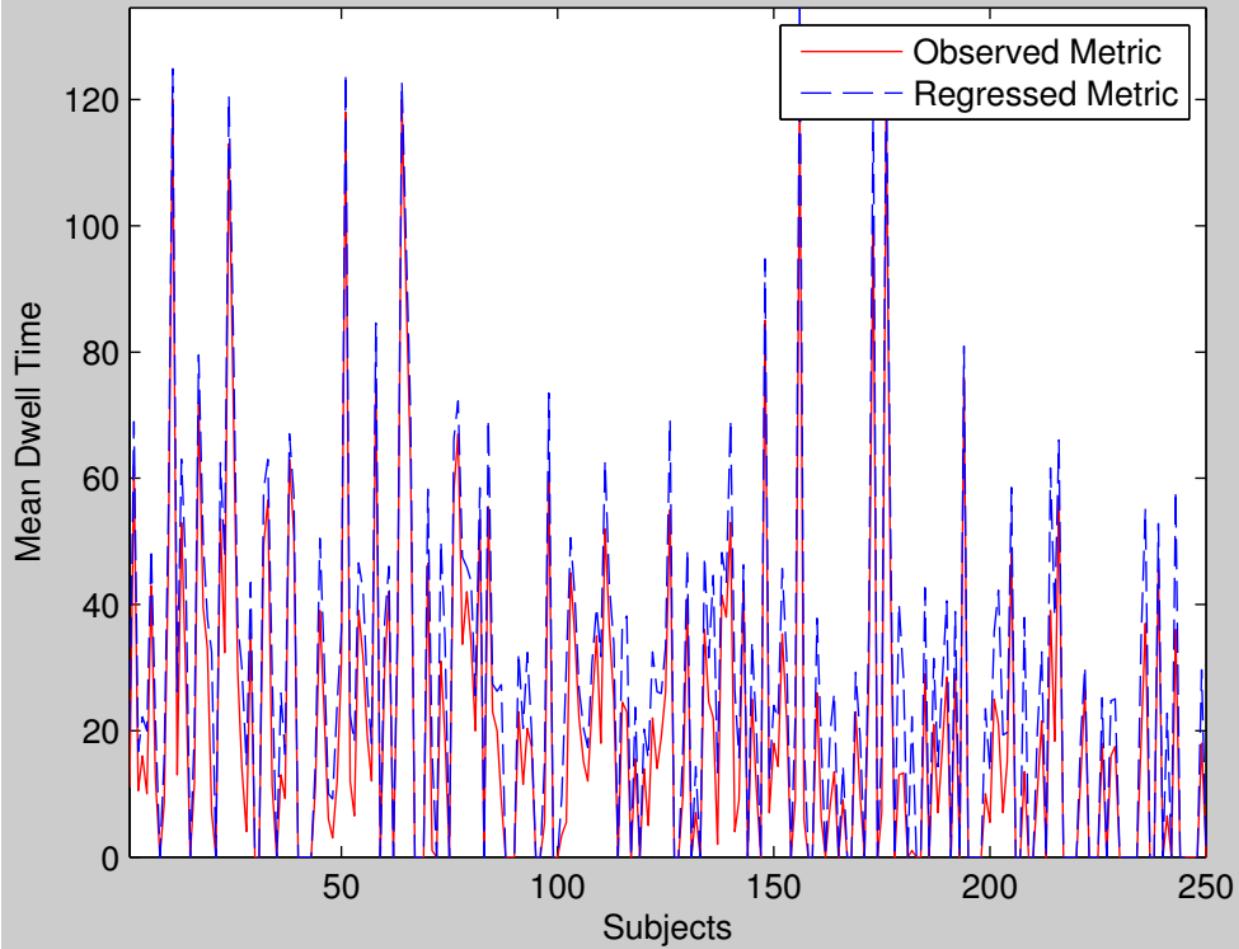
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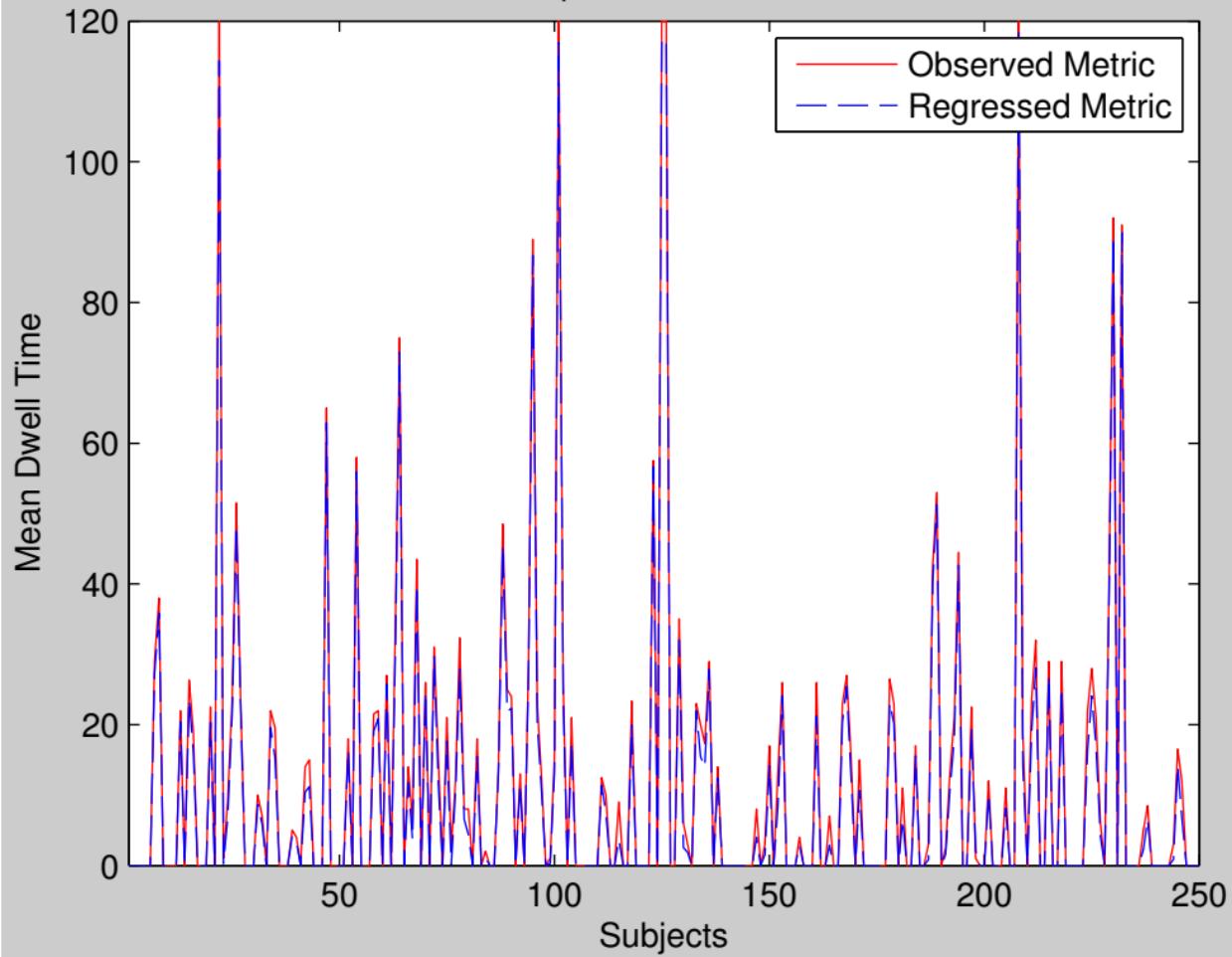
Group 15 State 4 : MDT



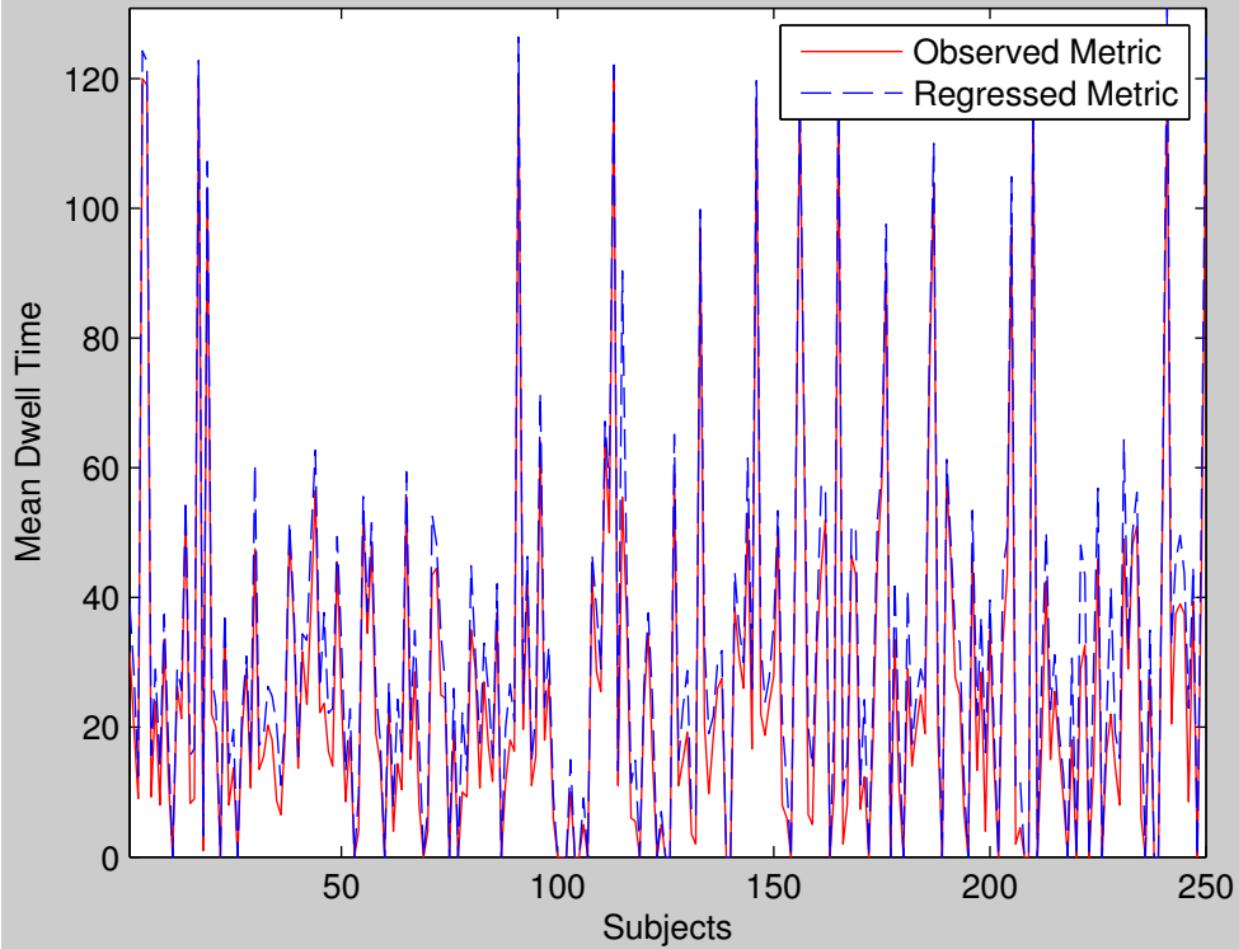
Group 15 State 5 : MDT



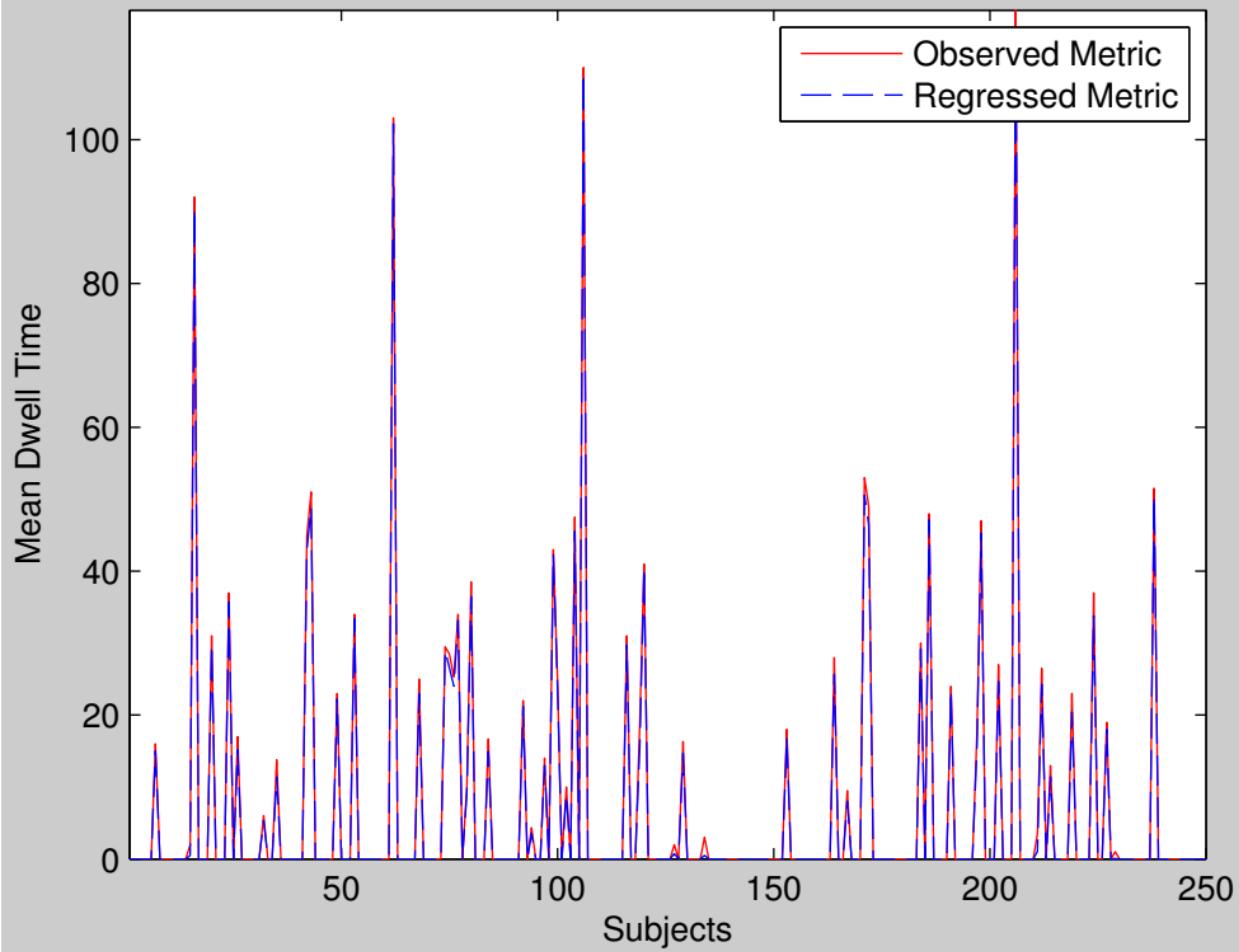
Group 16 State 1 : MDT



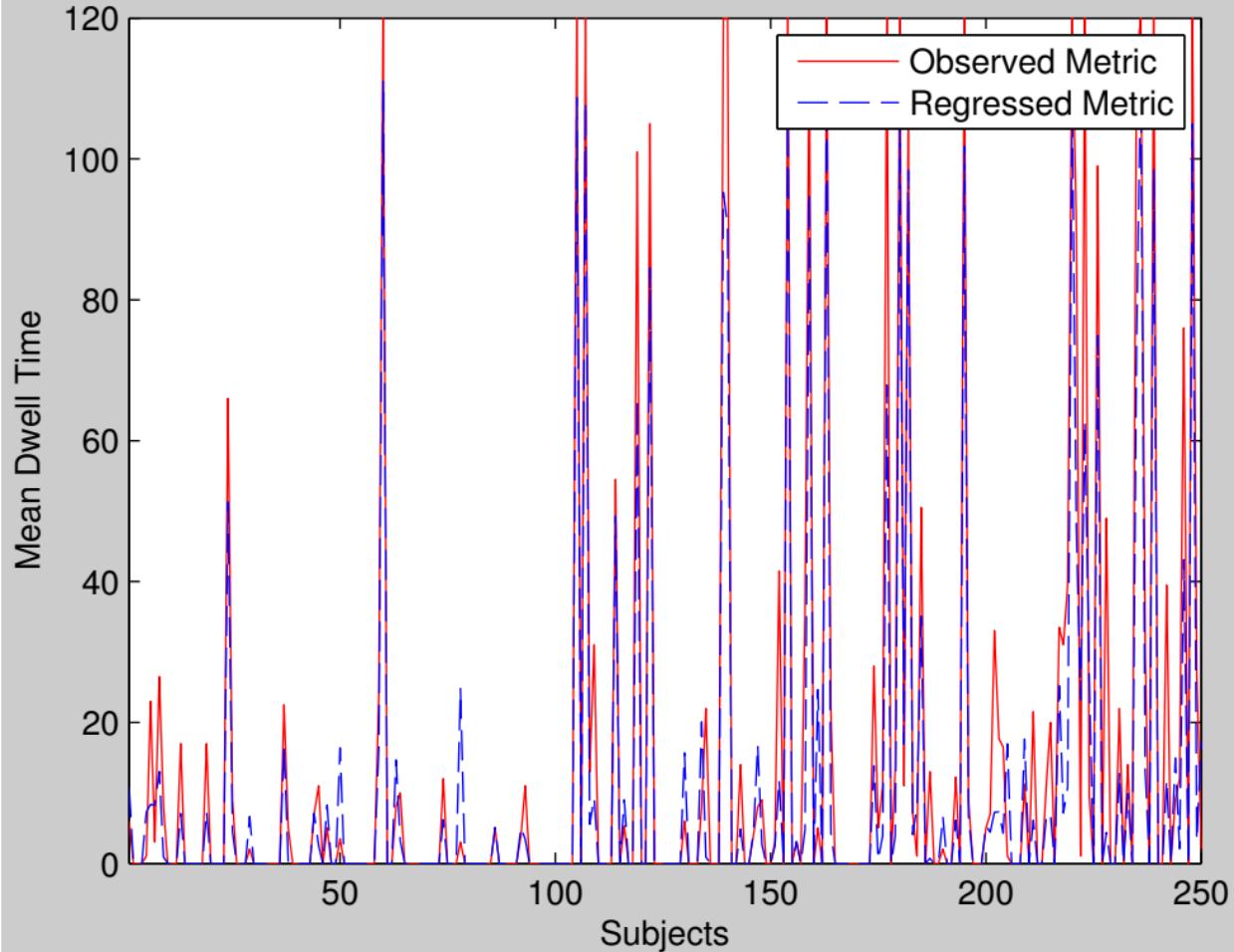
Group 16 State 2 : MDT



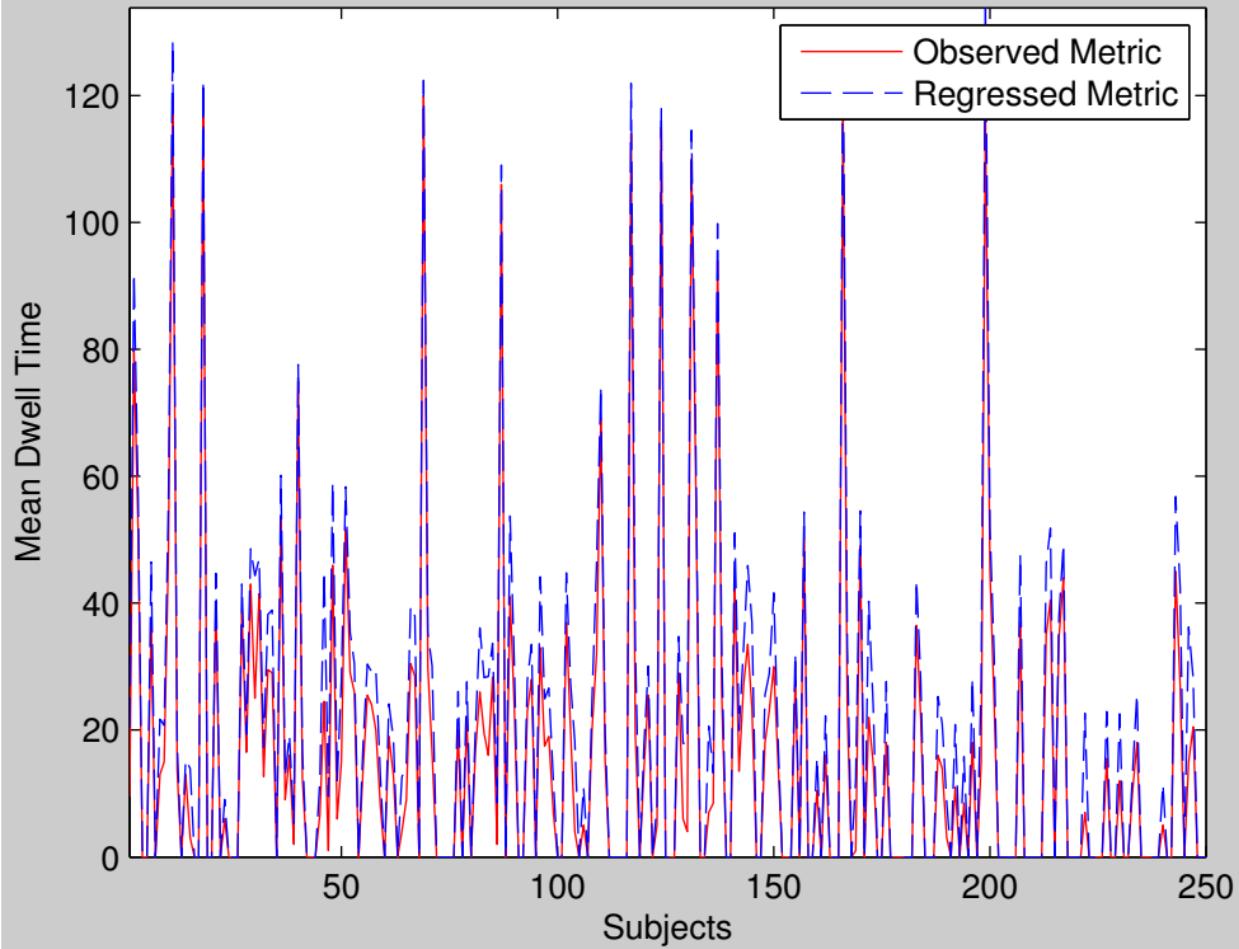
Group 16 State 3 : MDT



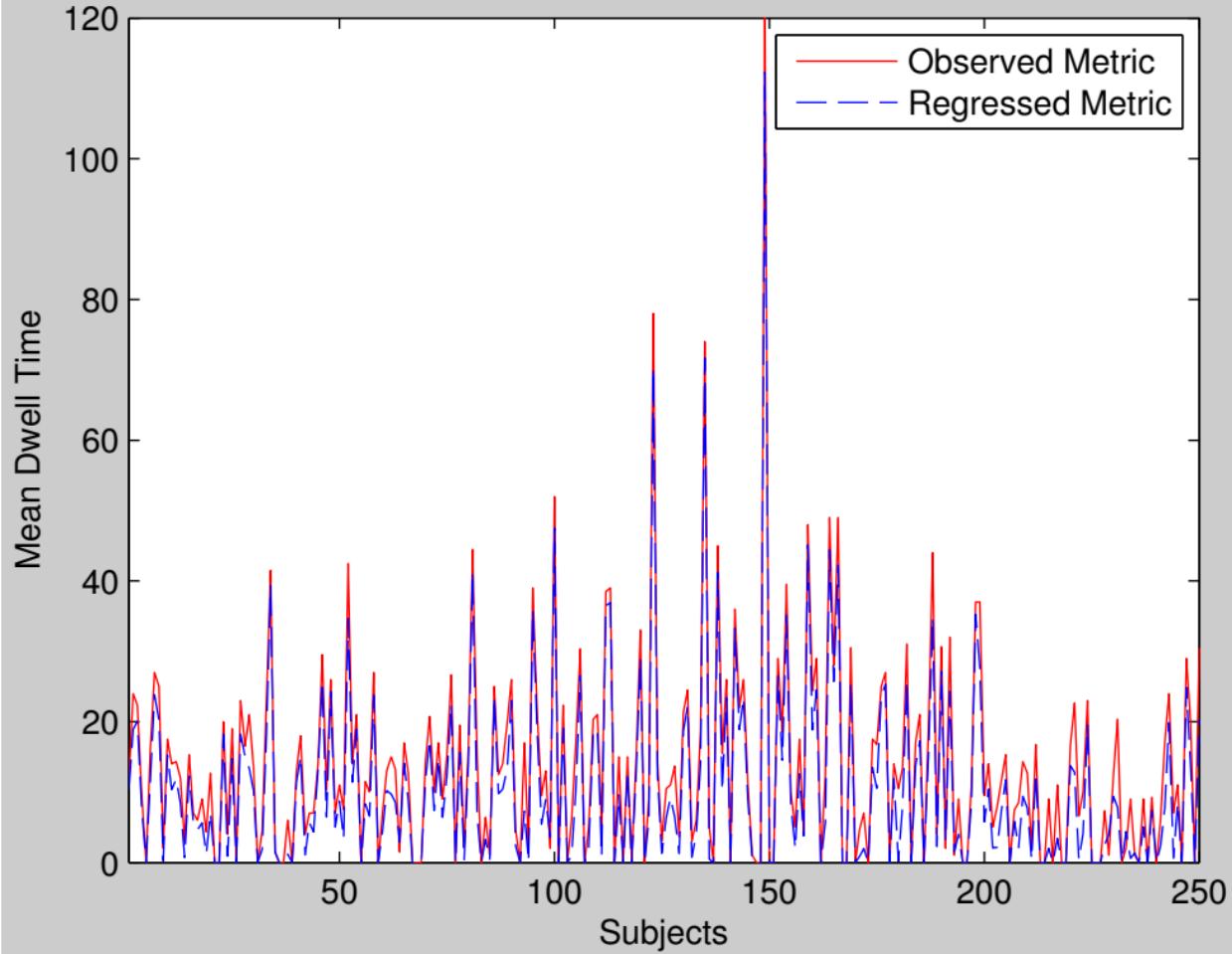
Group 16 State 4 : MDT



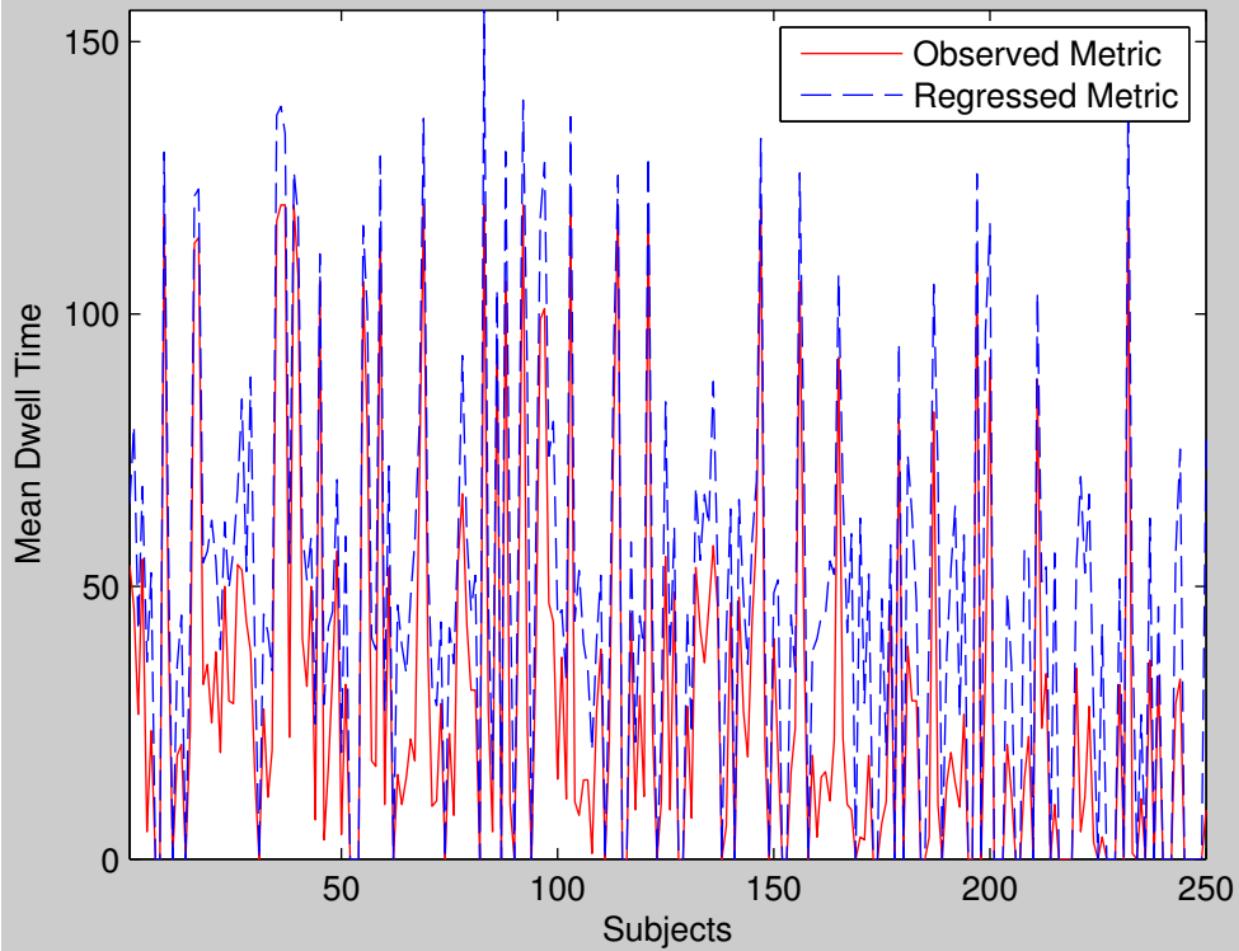
Group 16 State 5 : MDT



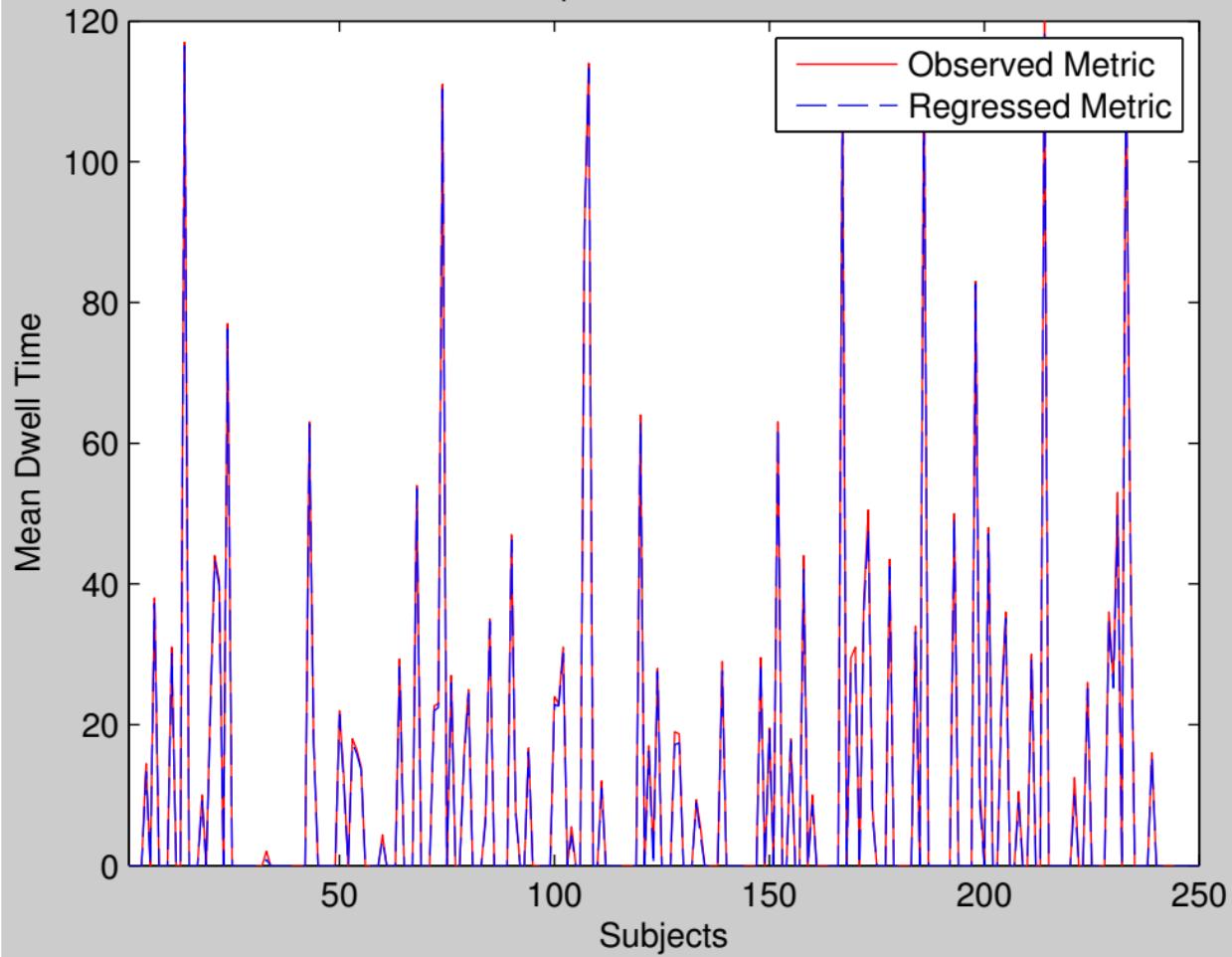
Group 17 State 1 : MDT



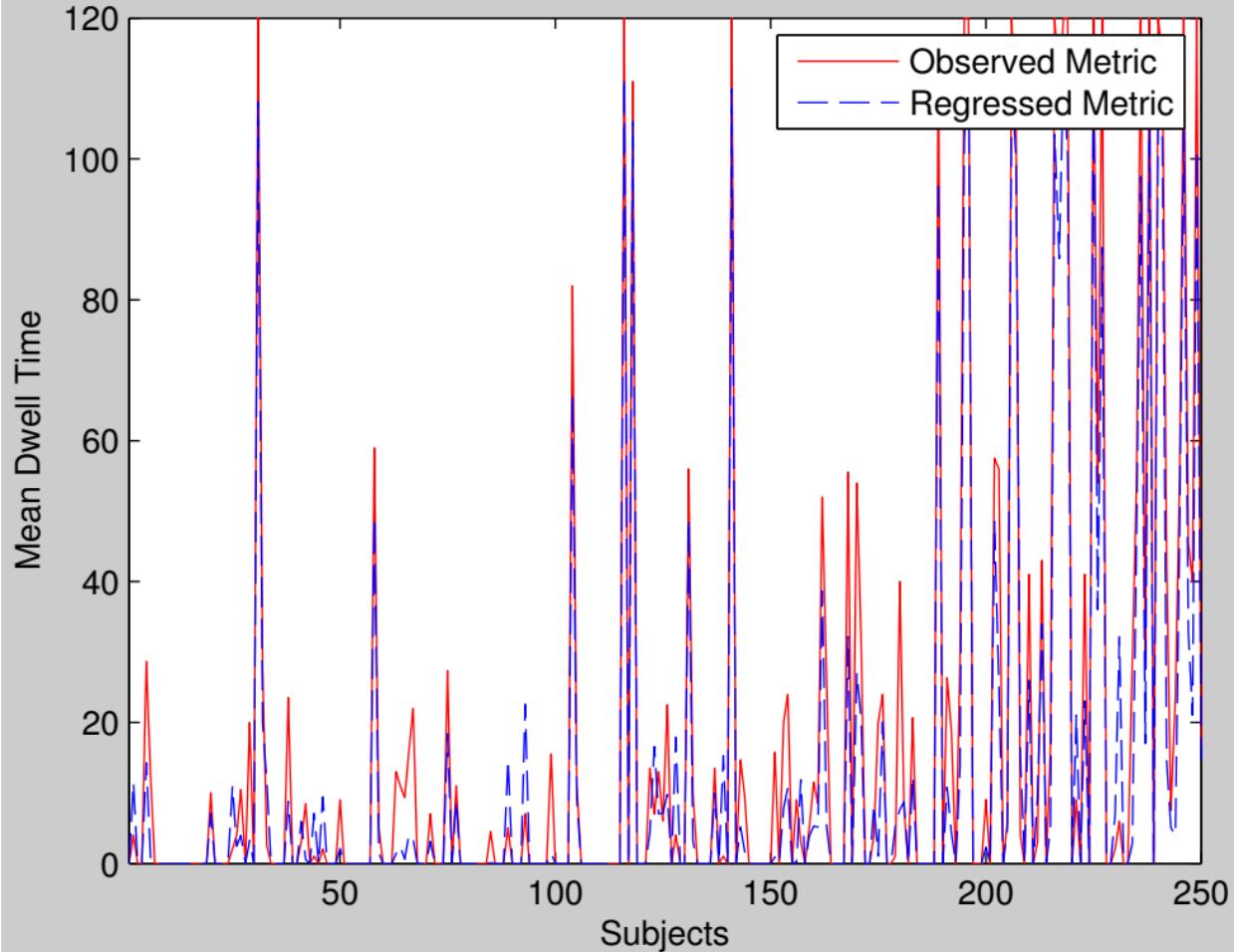
Group 17 State 2 : MDT



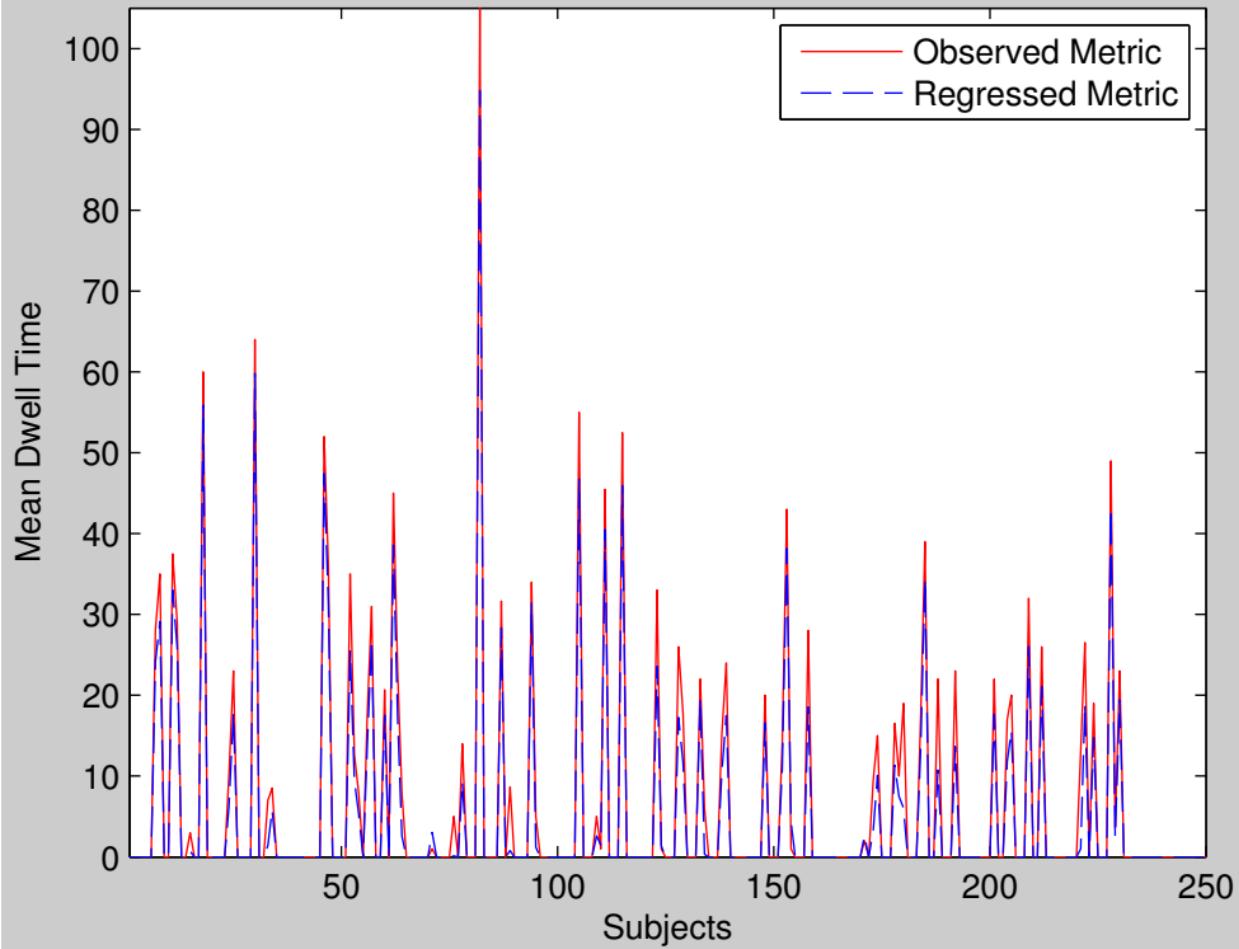
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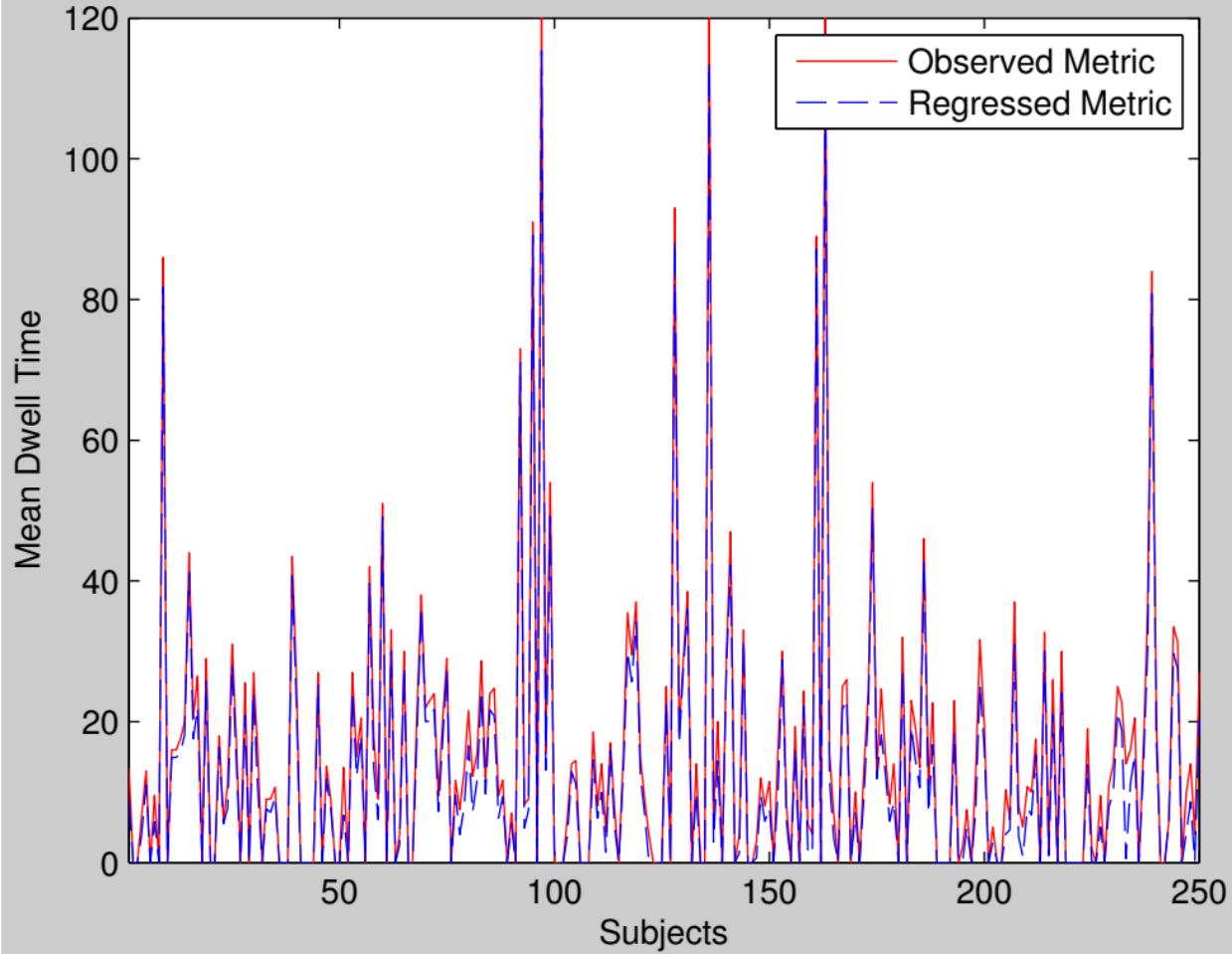
Group 17 State 4 : MDT



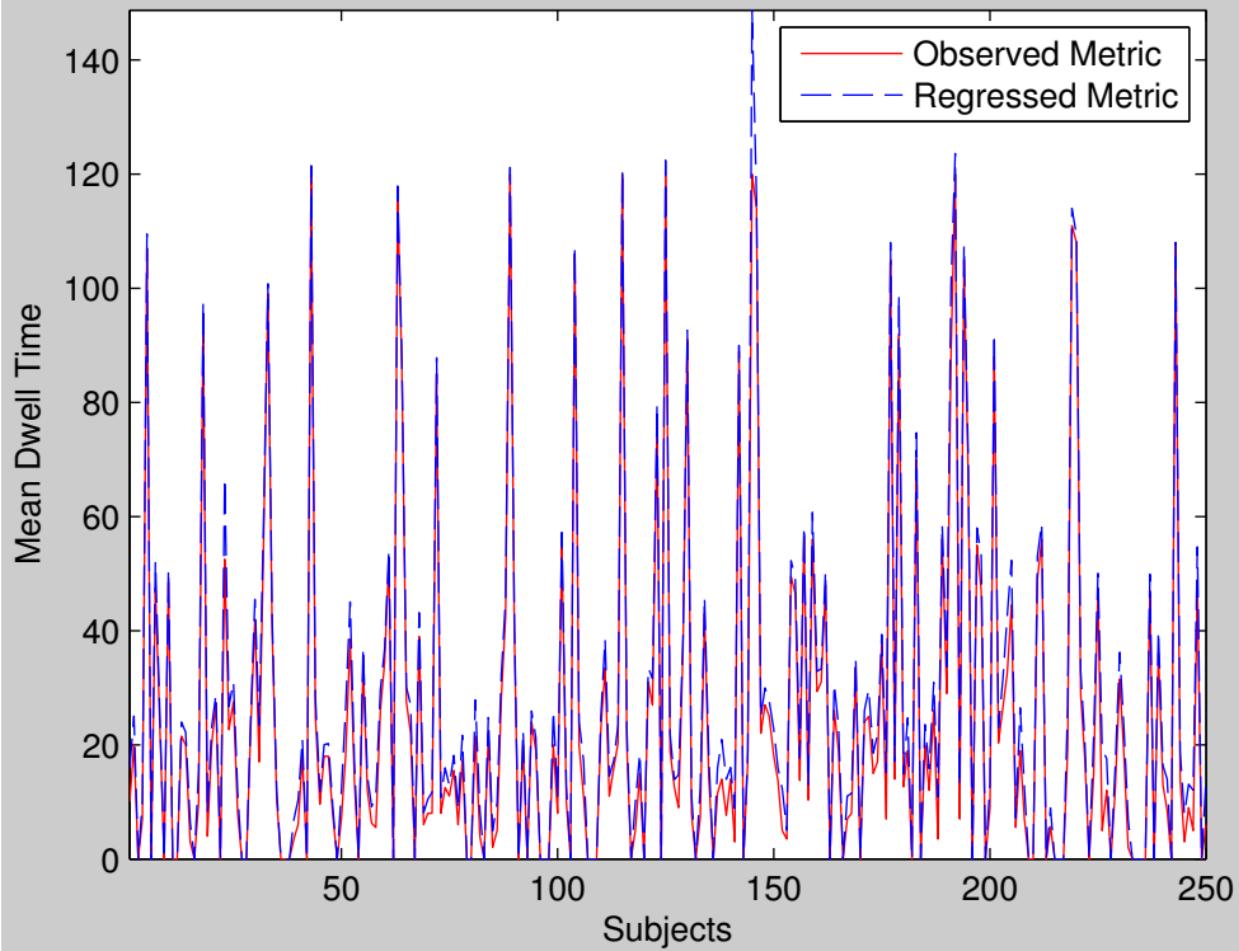
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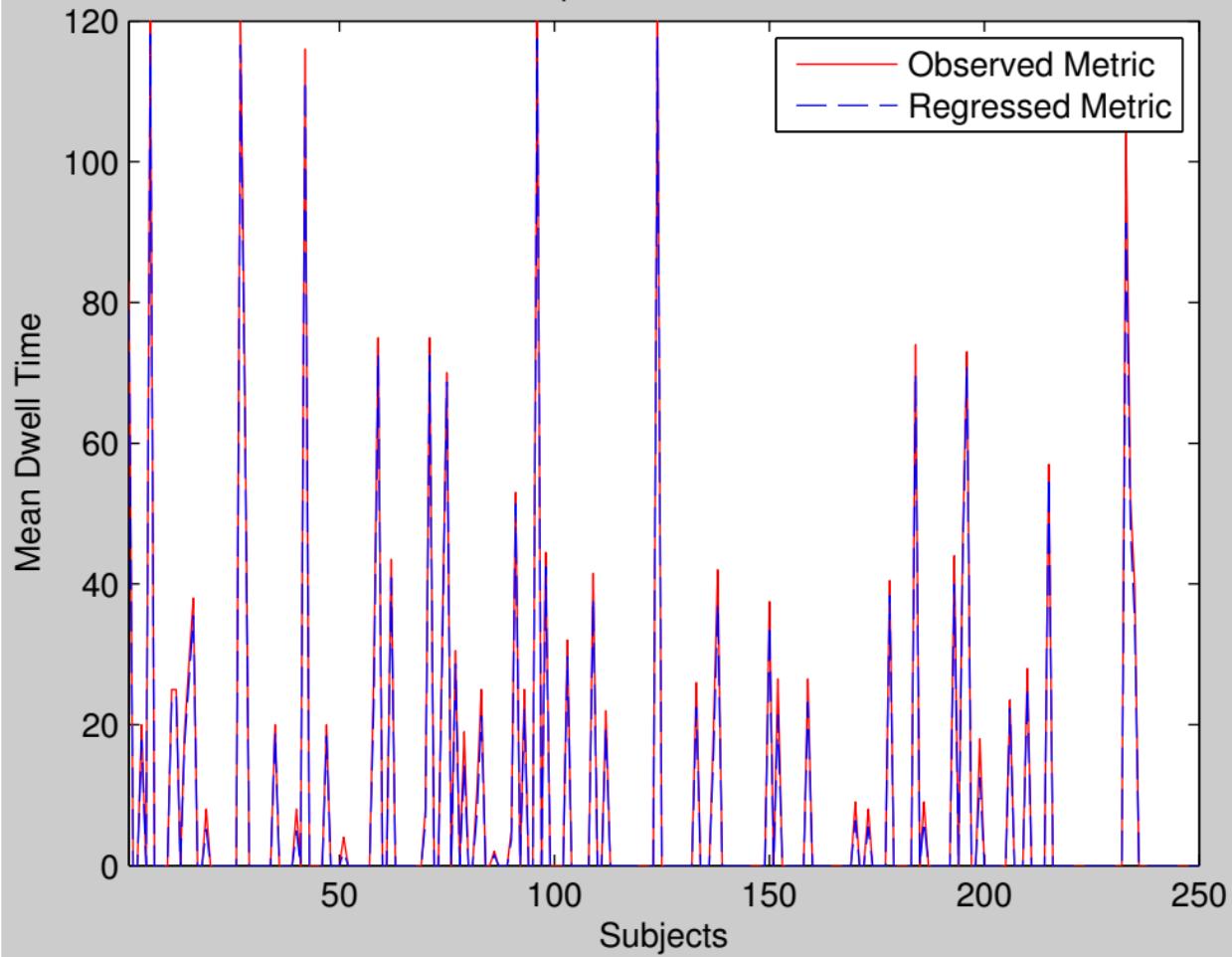
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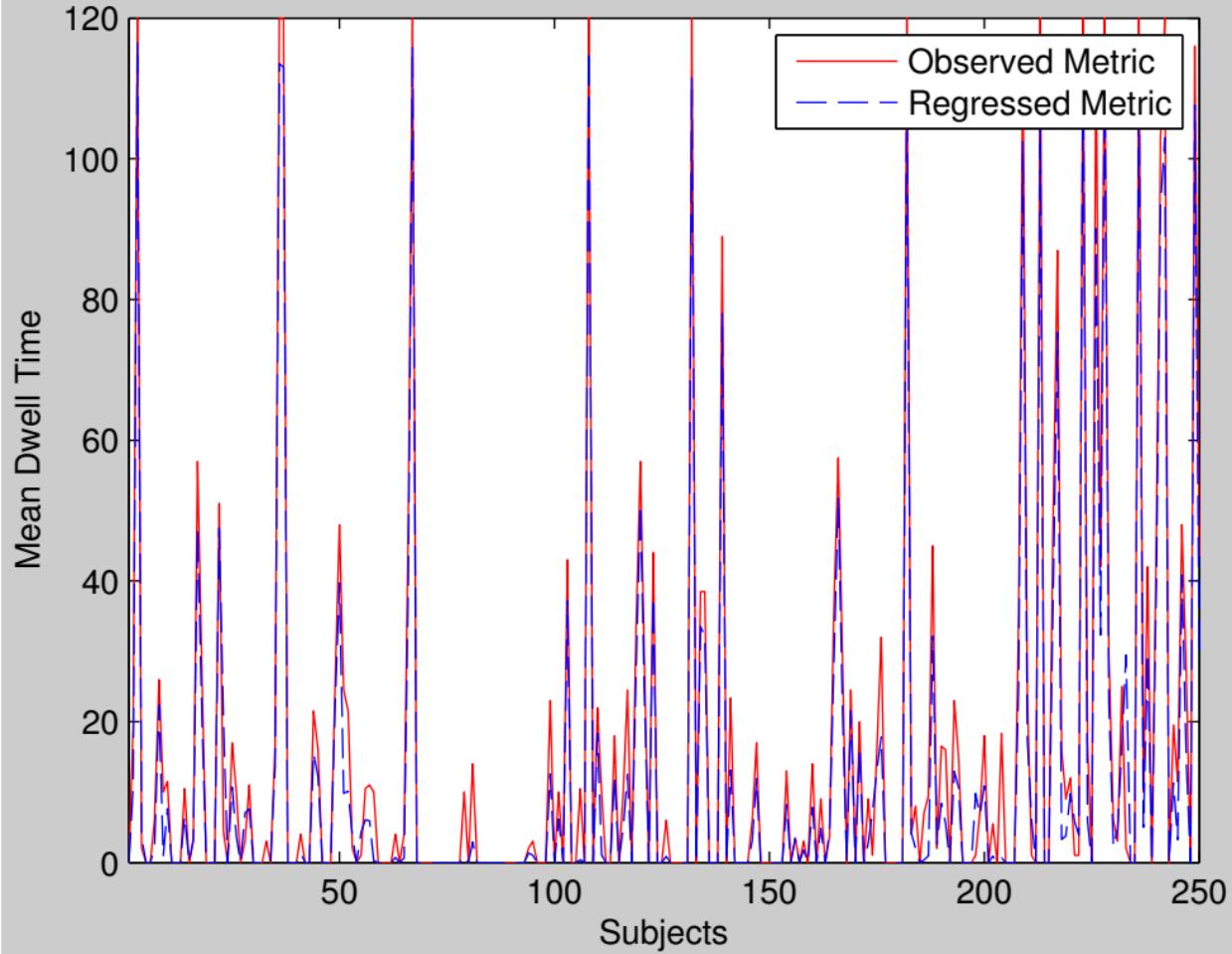
Group 18 State 2 : MDT



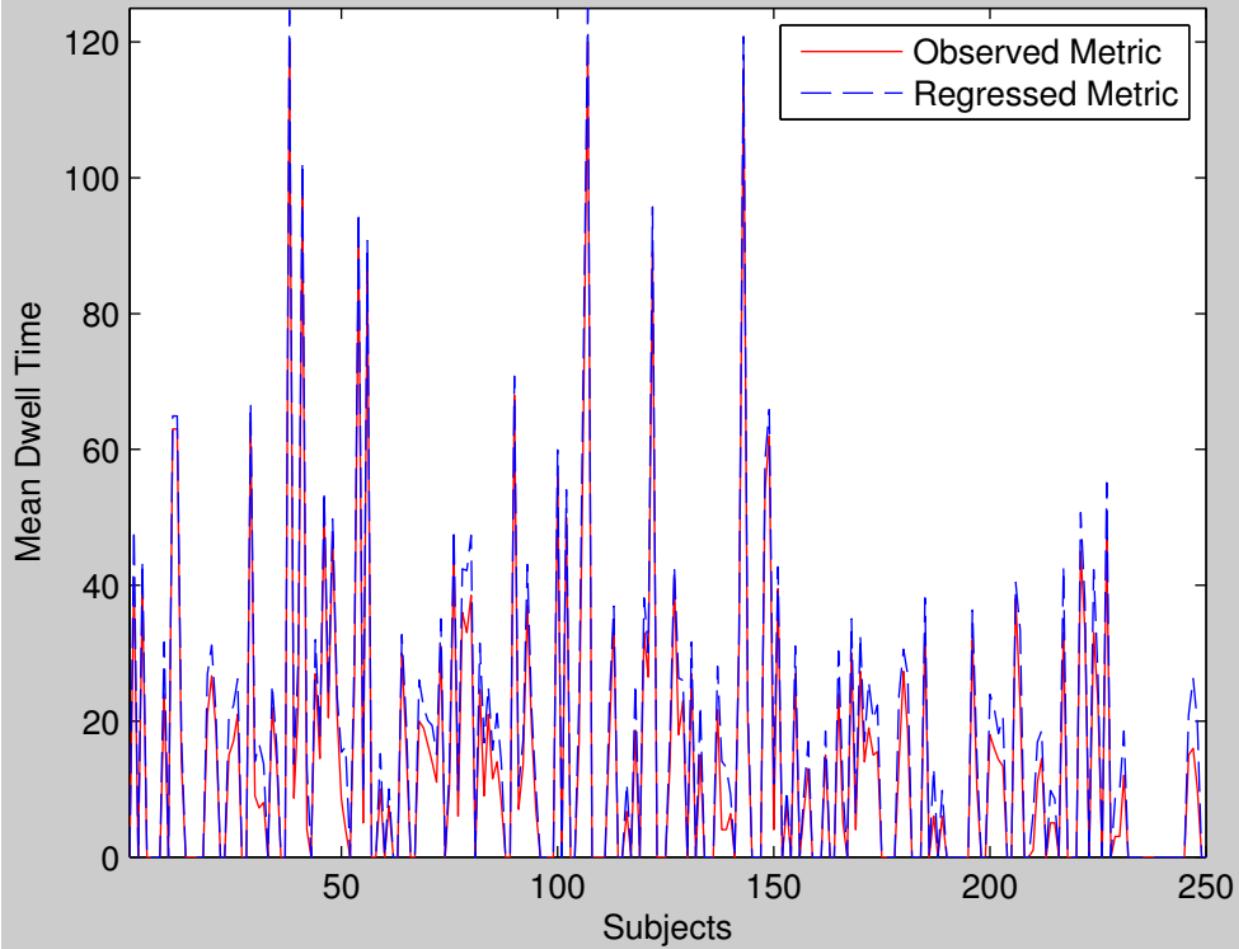
Group 18 State 3 : MDT



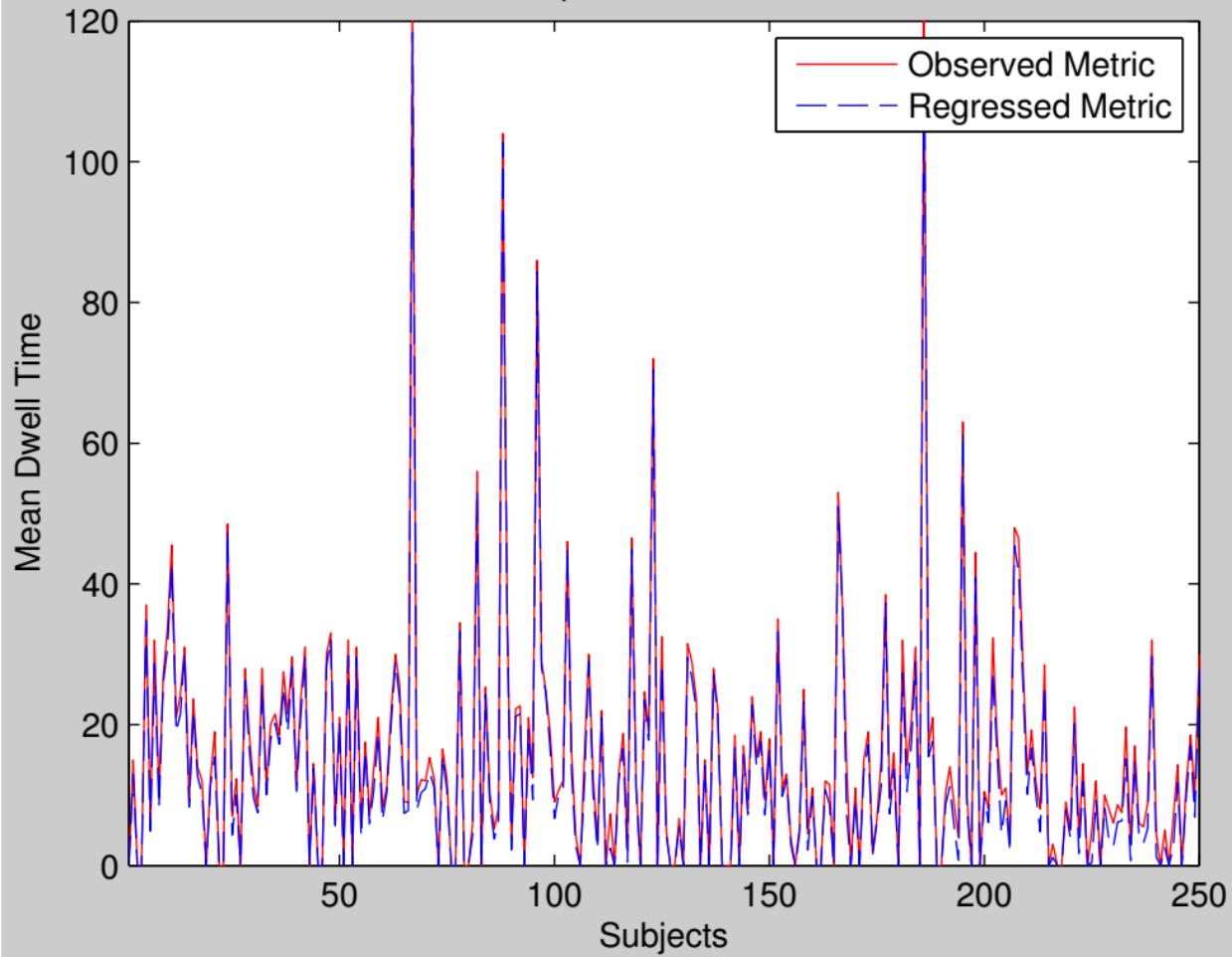
Group 18 State 4 : MDT



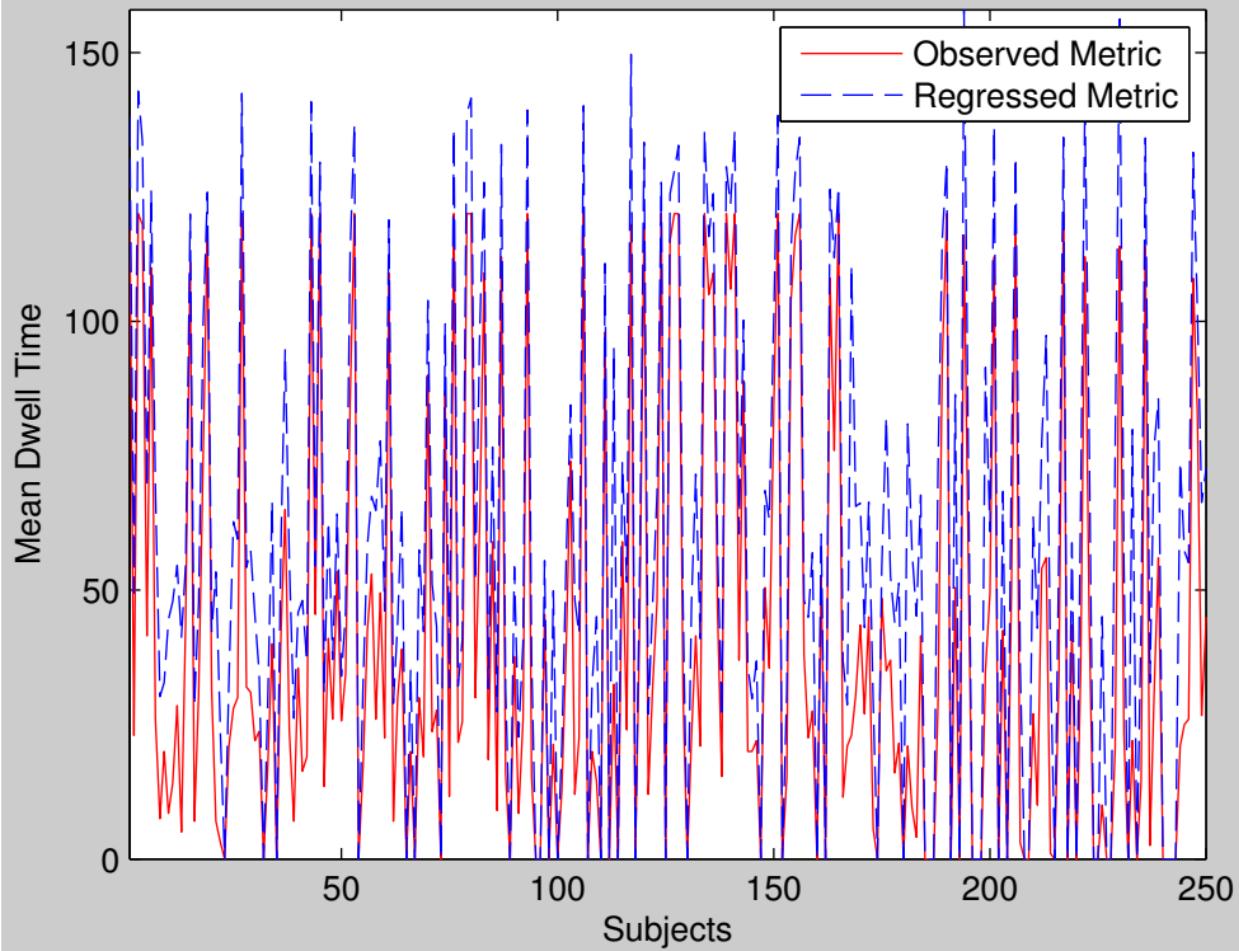
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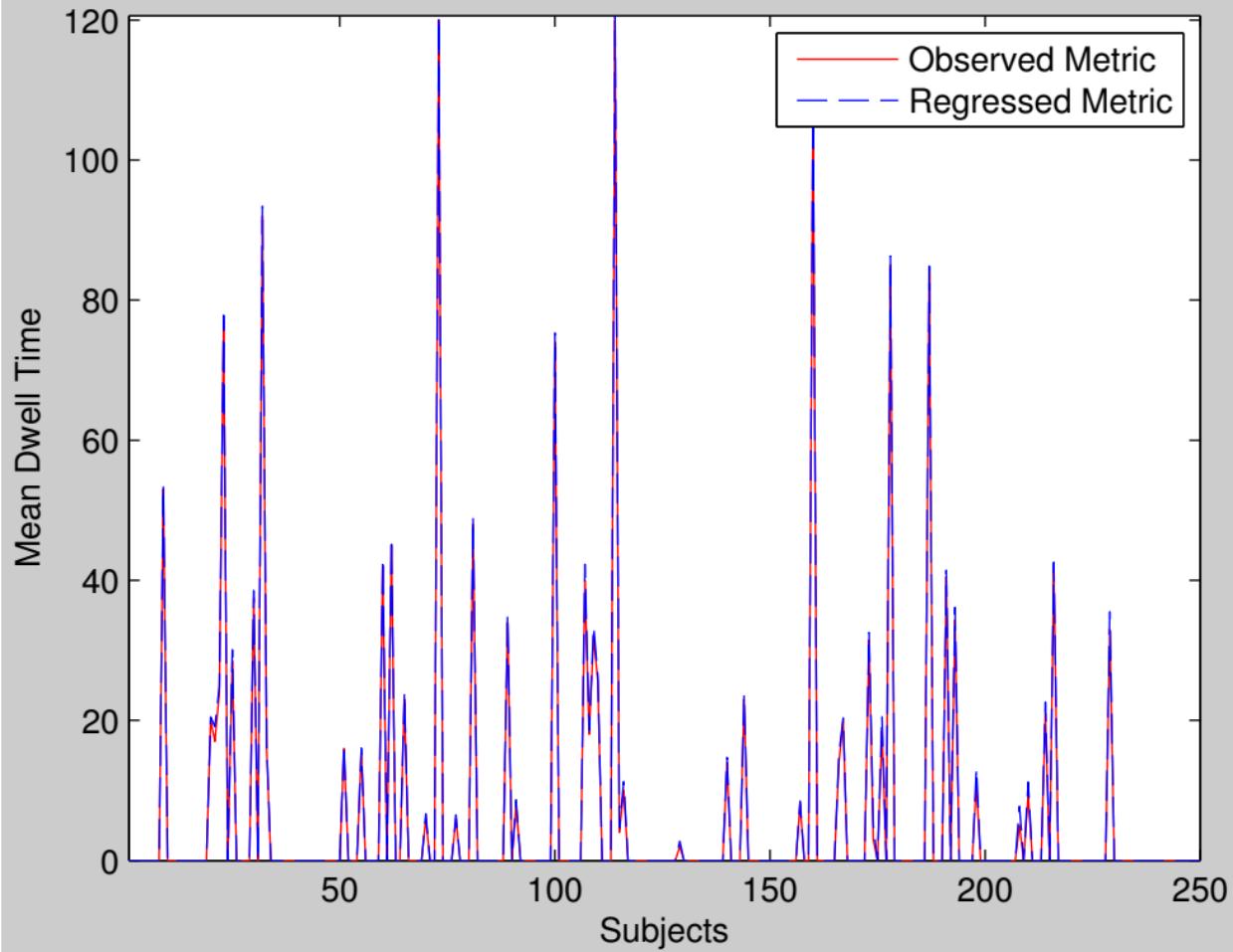
Group 19 State 1 : MDT



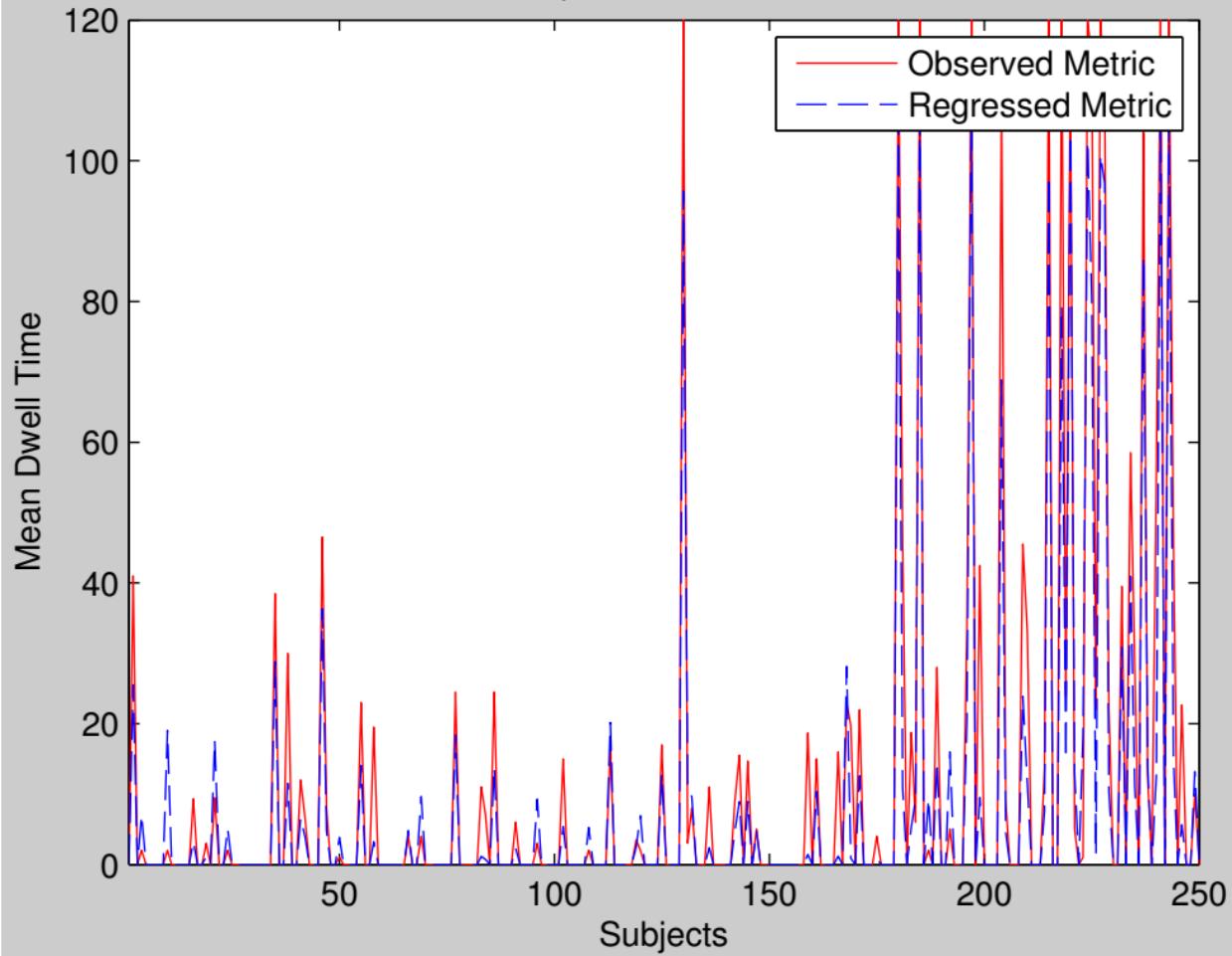
Group 19 State 2 : MDT



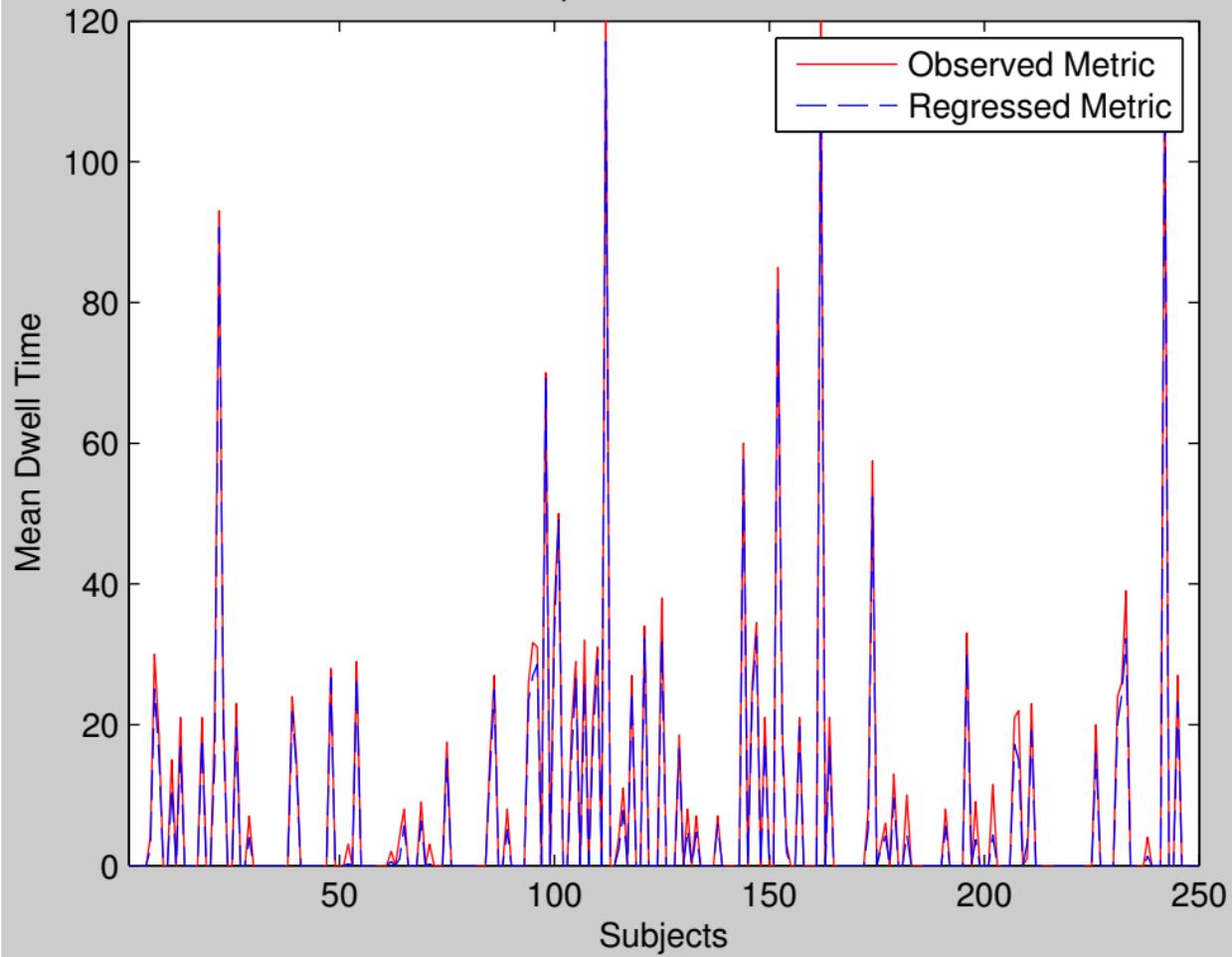
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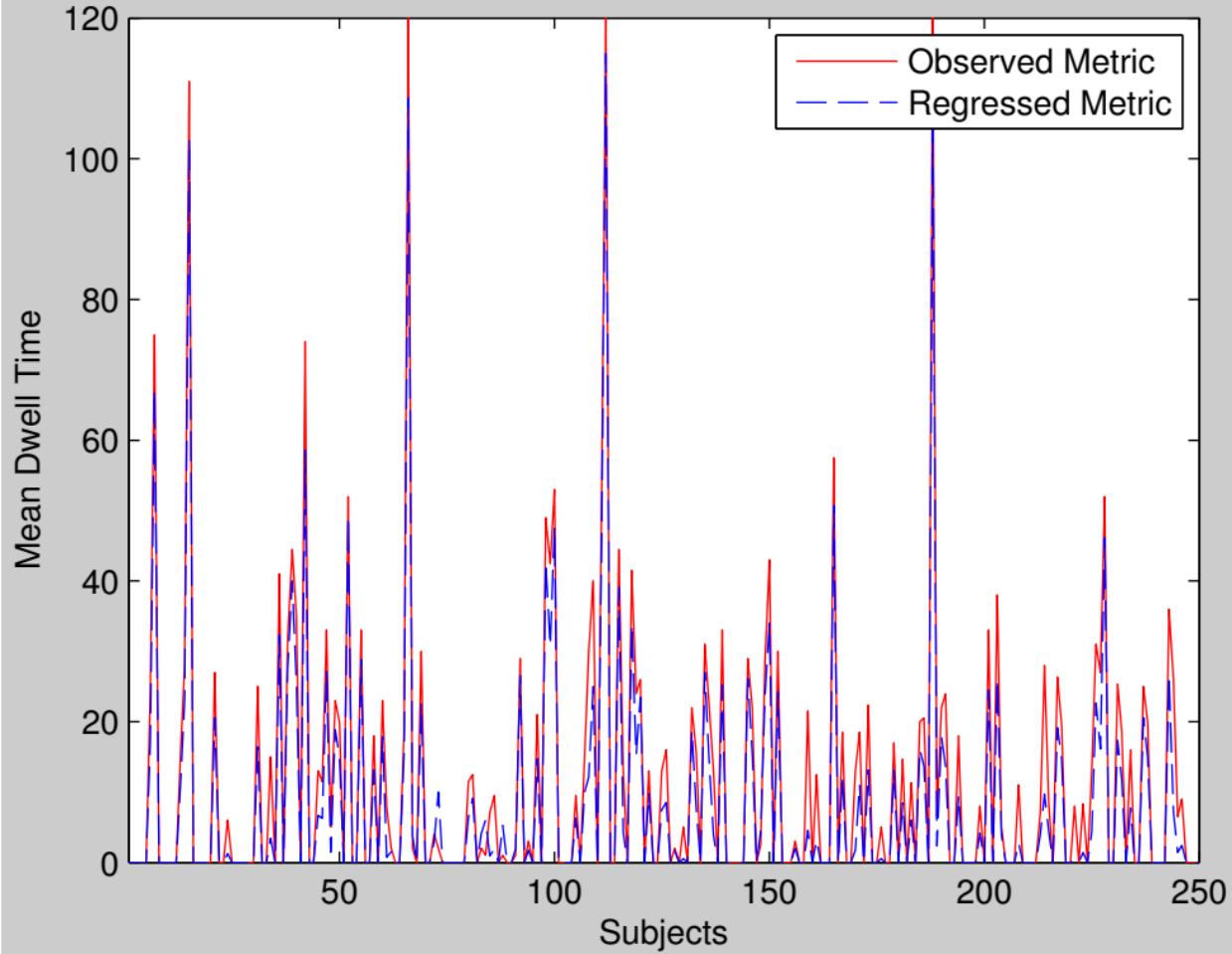
Group 19 State 4 : MDT



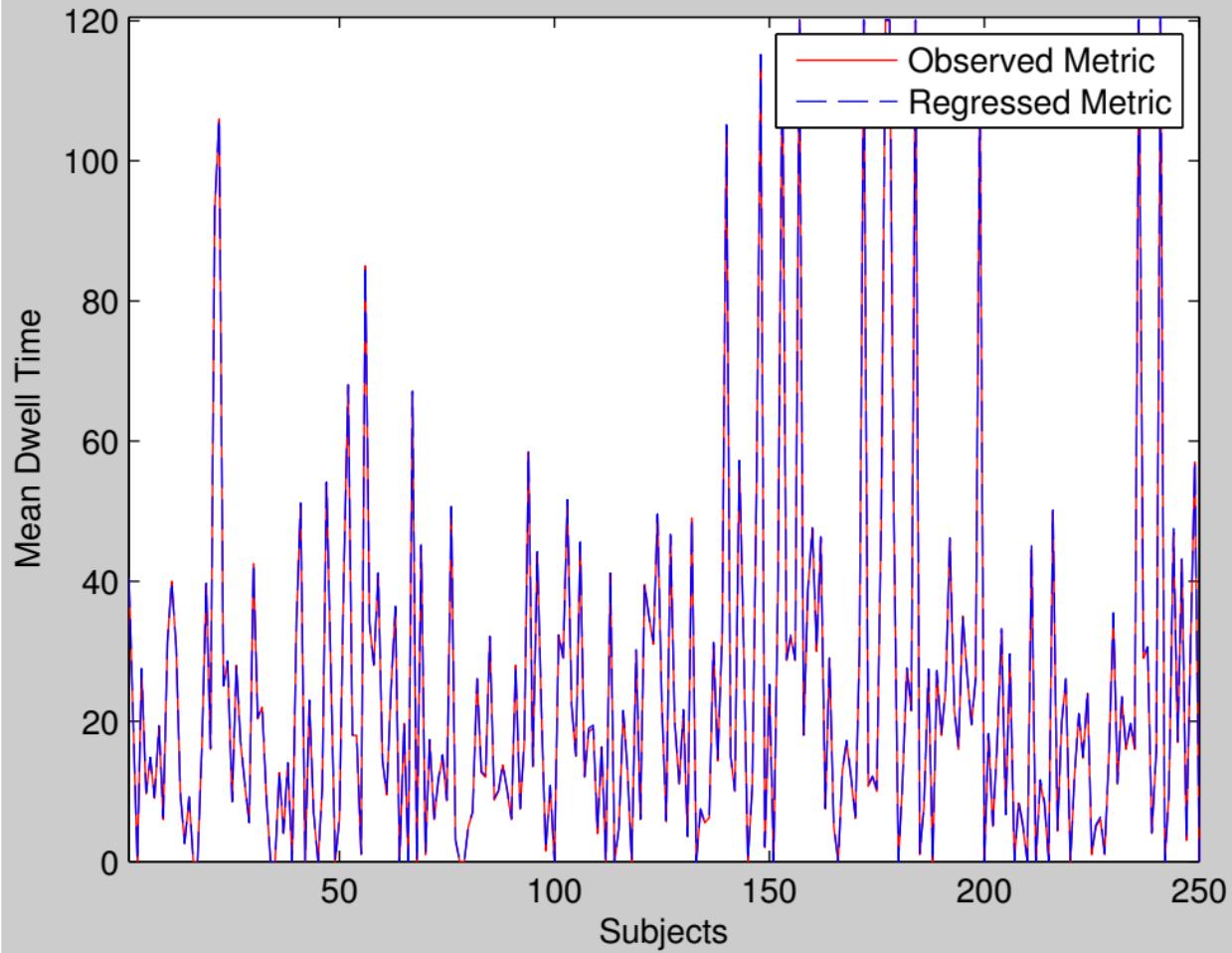
Group 19 State 5 : MDT



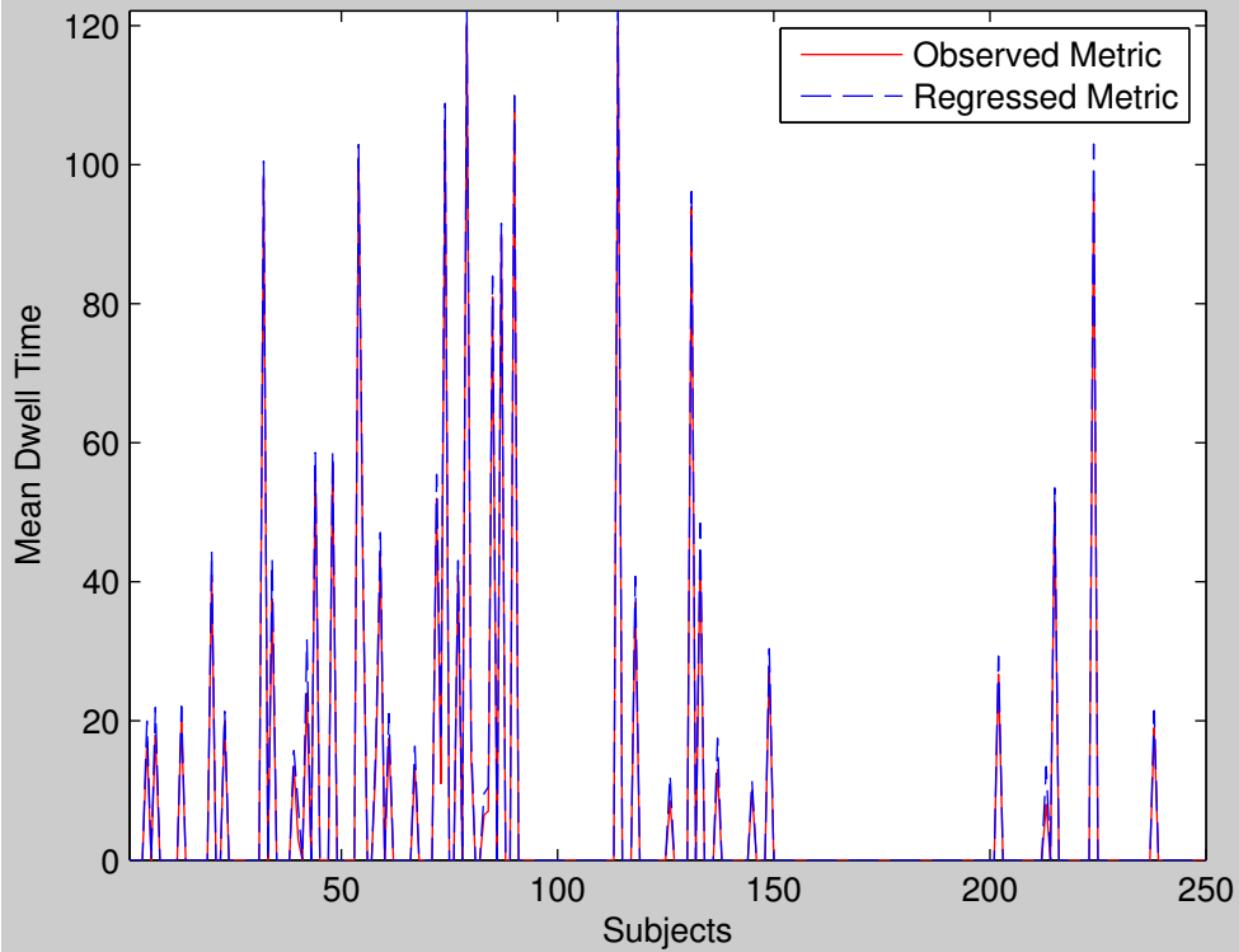
Group 20 State 1 : MDT



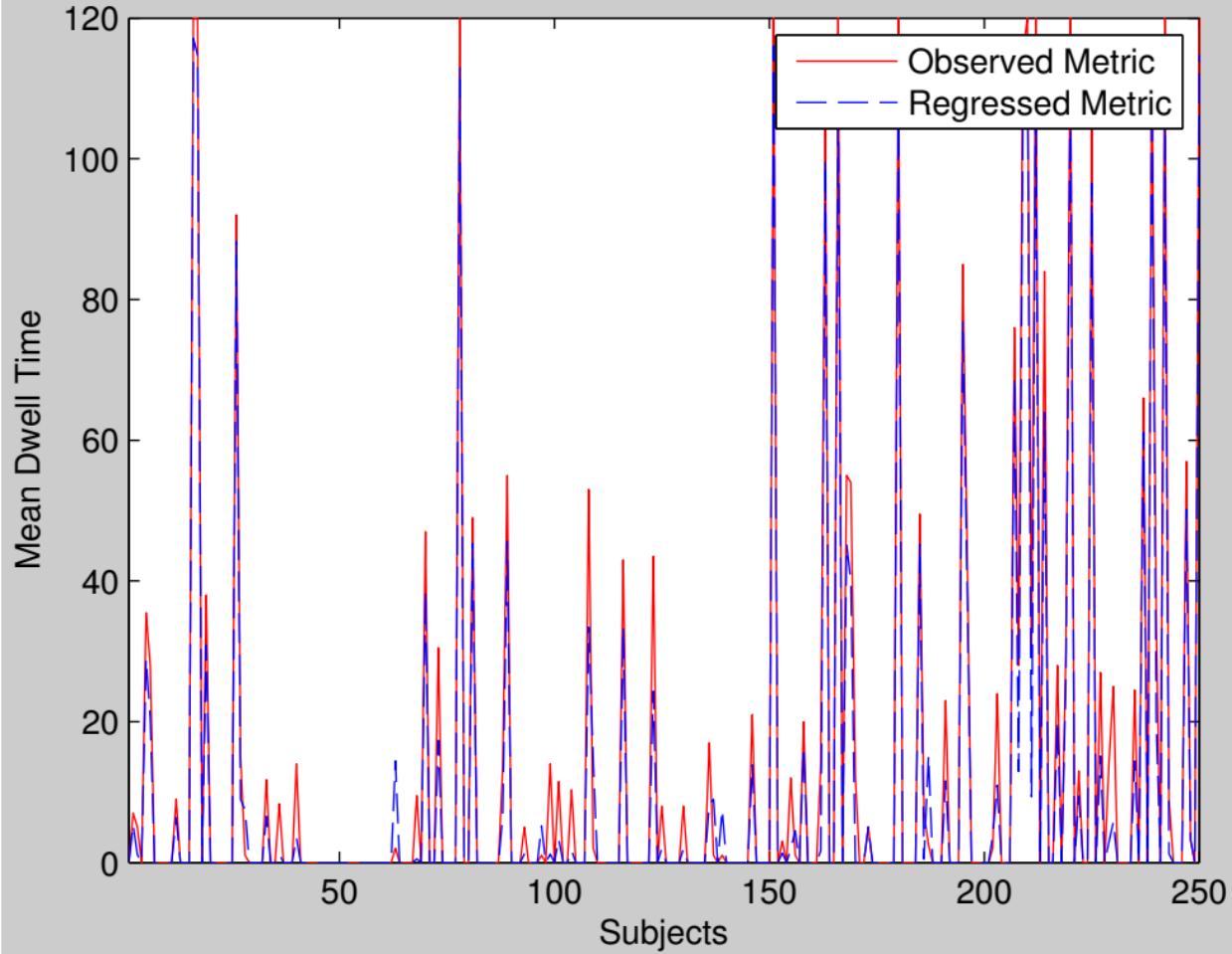
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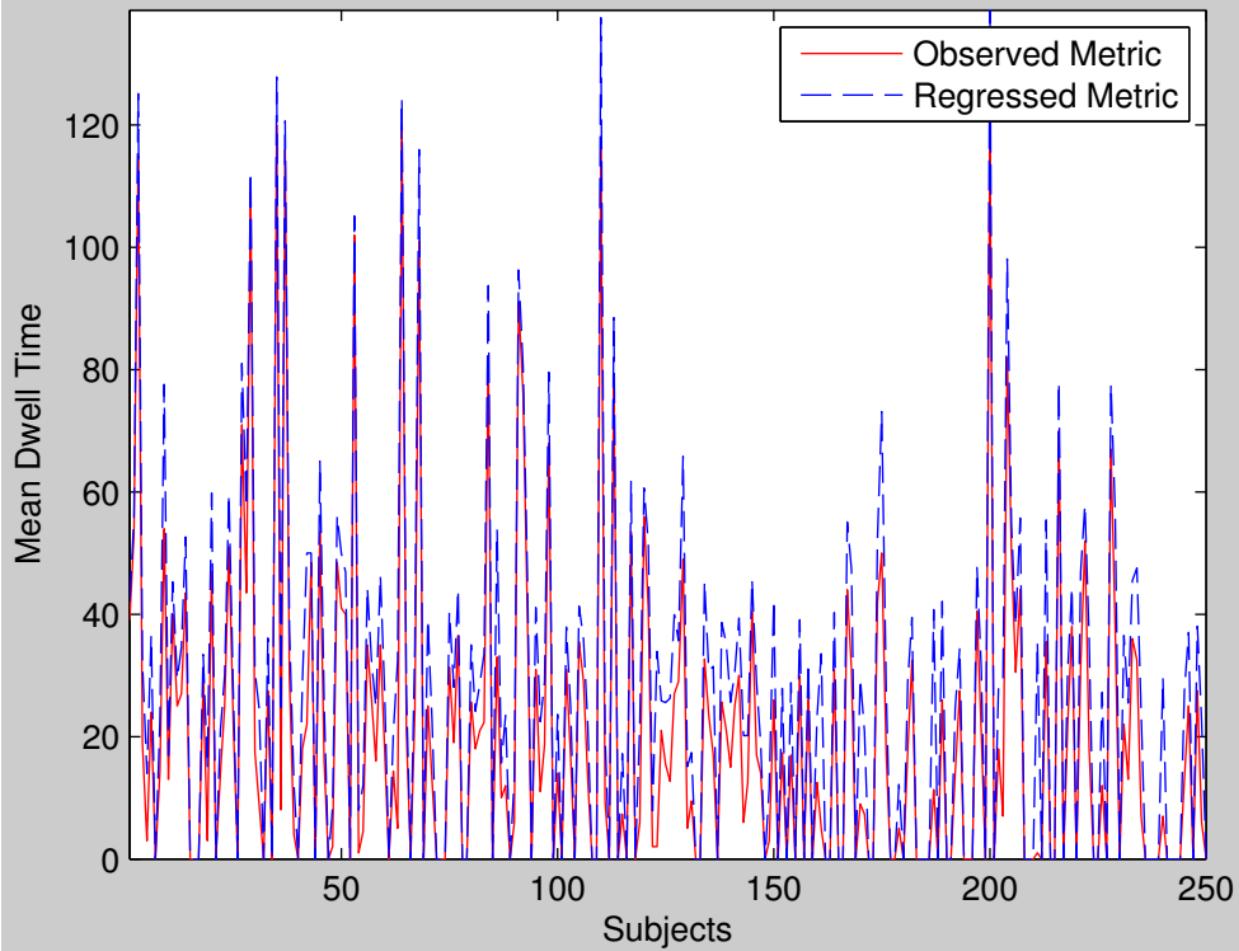
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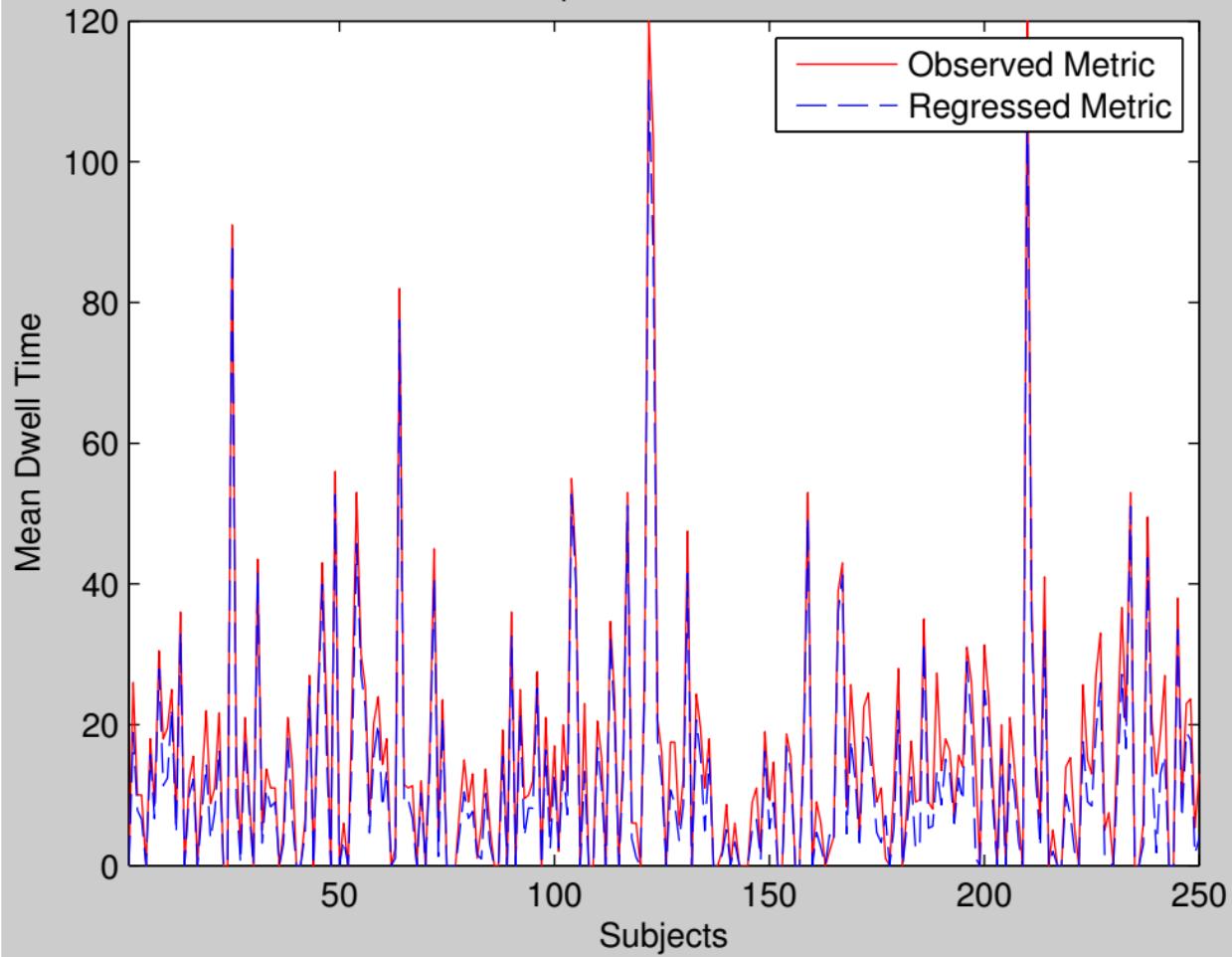
Group 20 State 4 : MDT



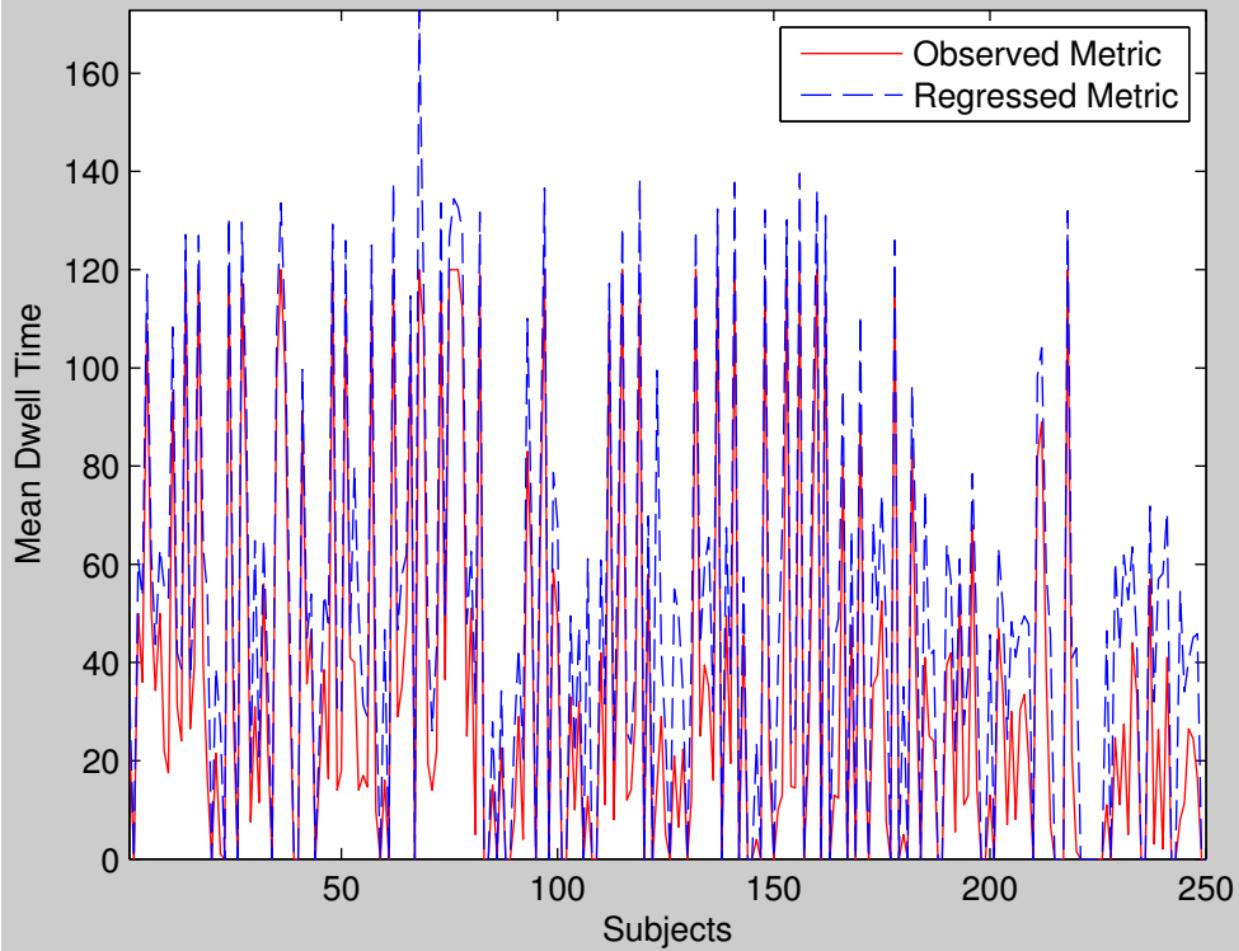
Group 20 State 5 : MDT



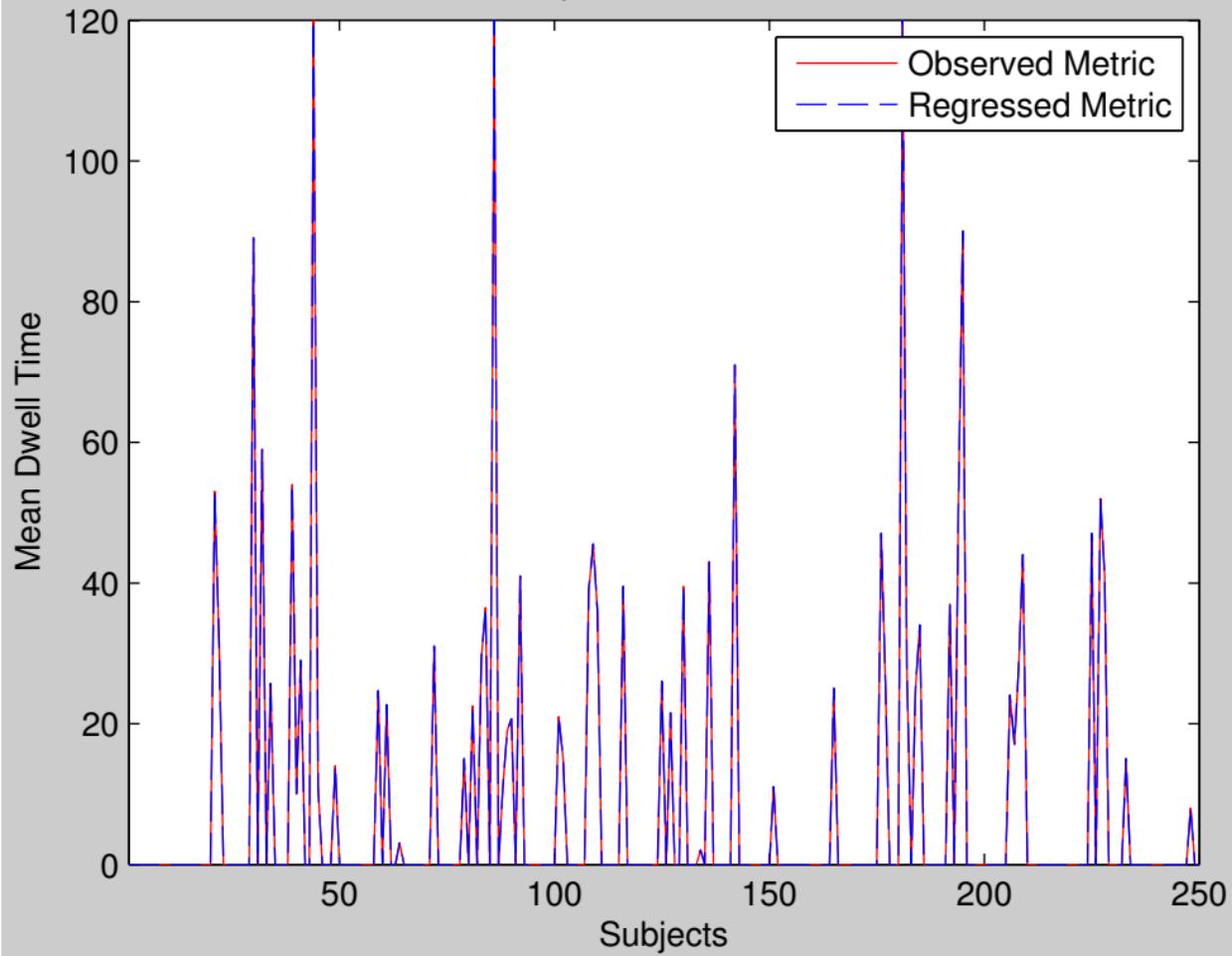
Group 21 State 1 : MDT



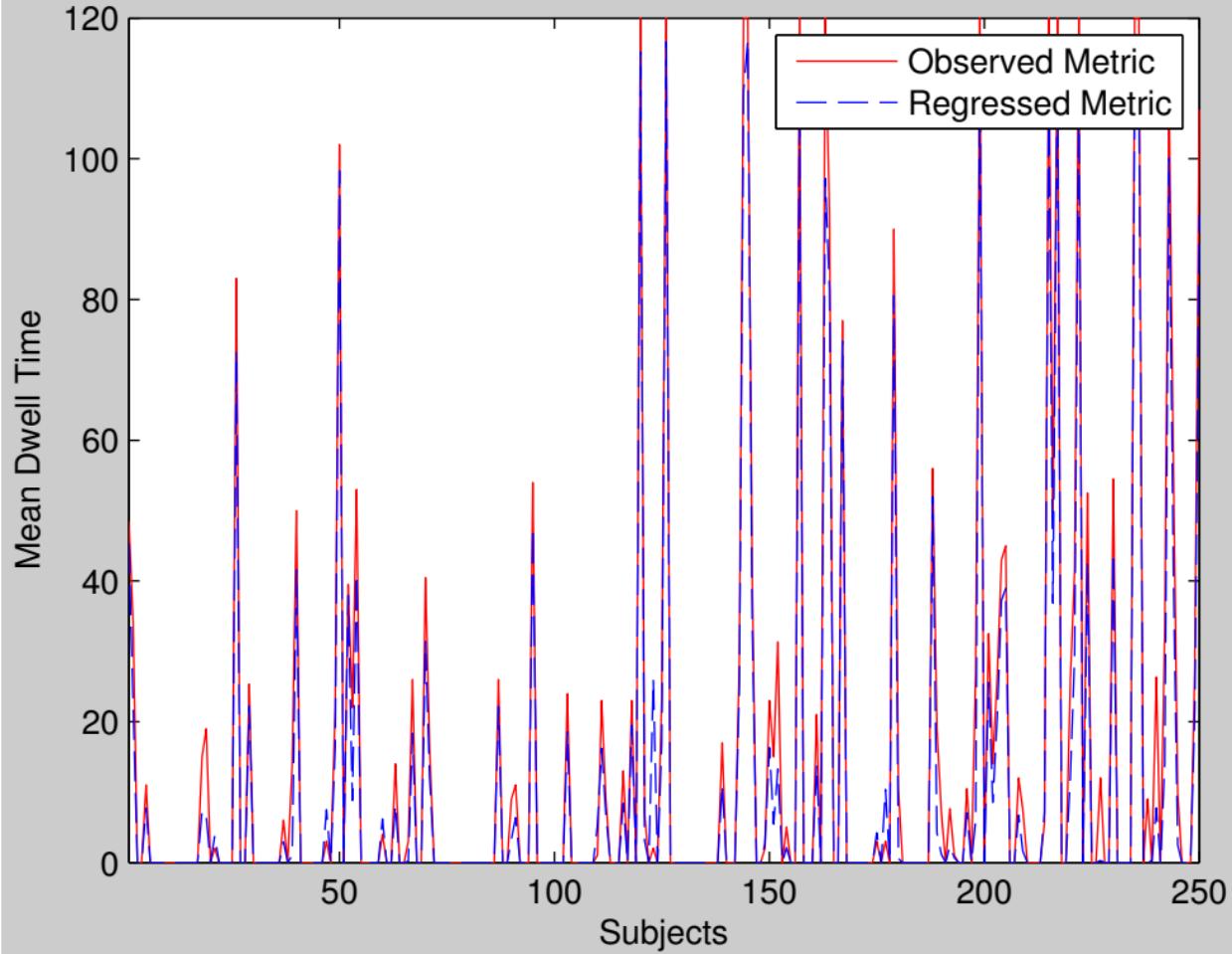
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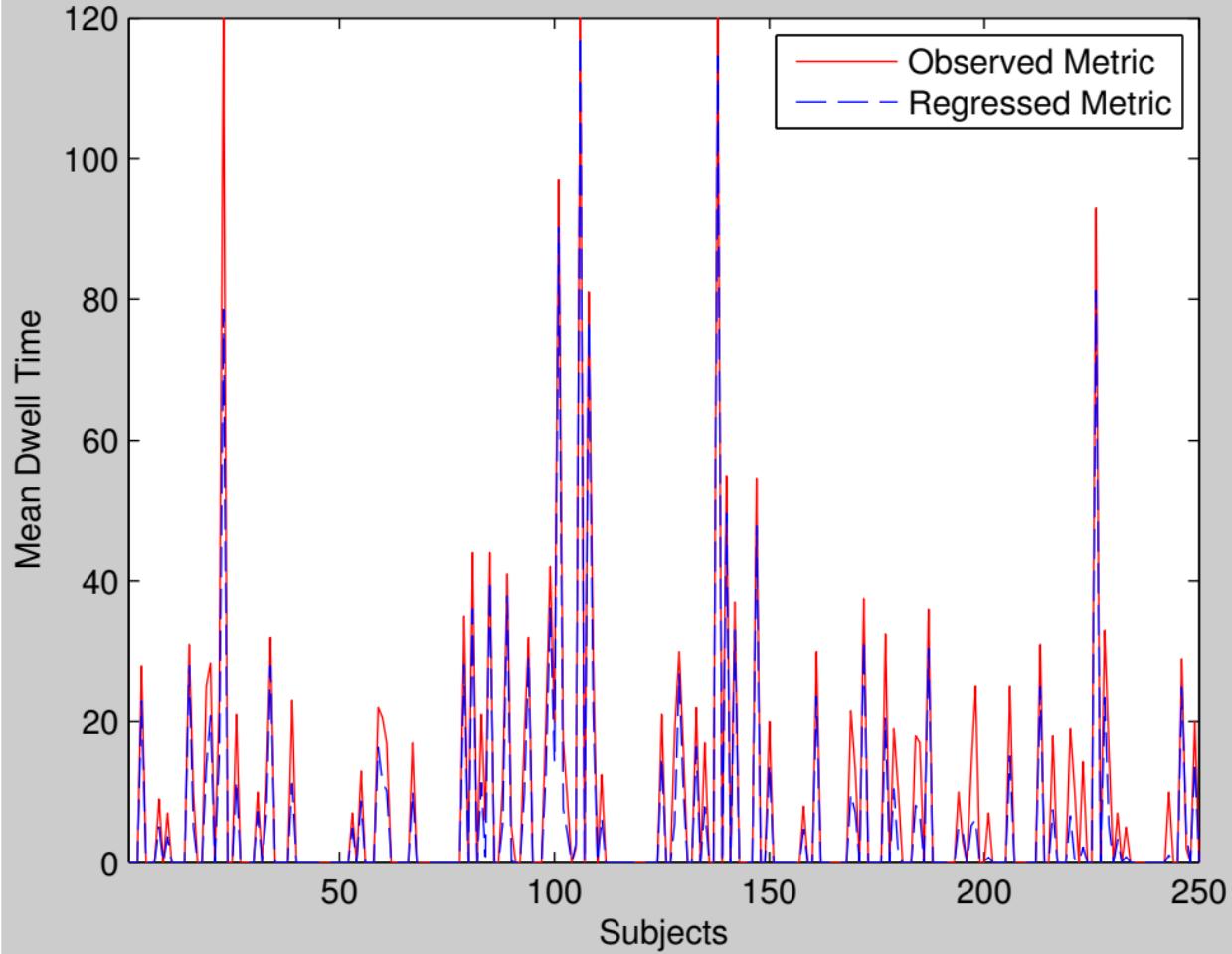
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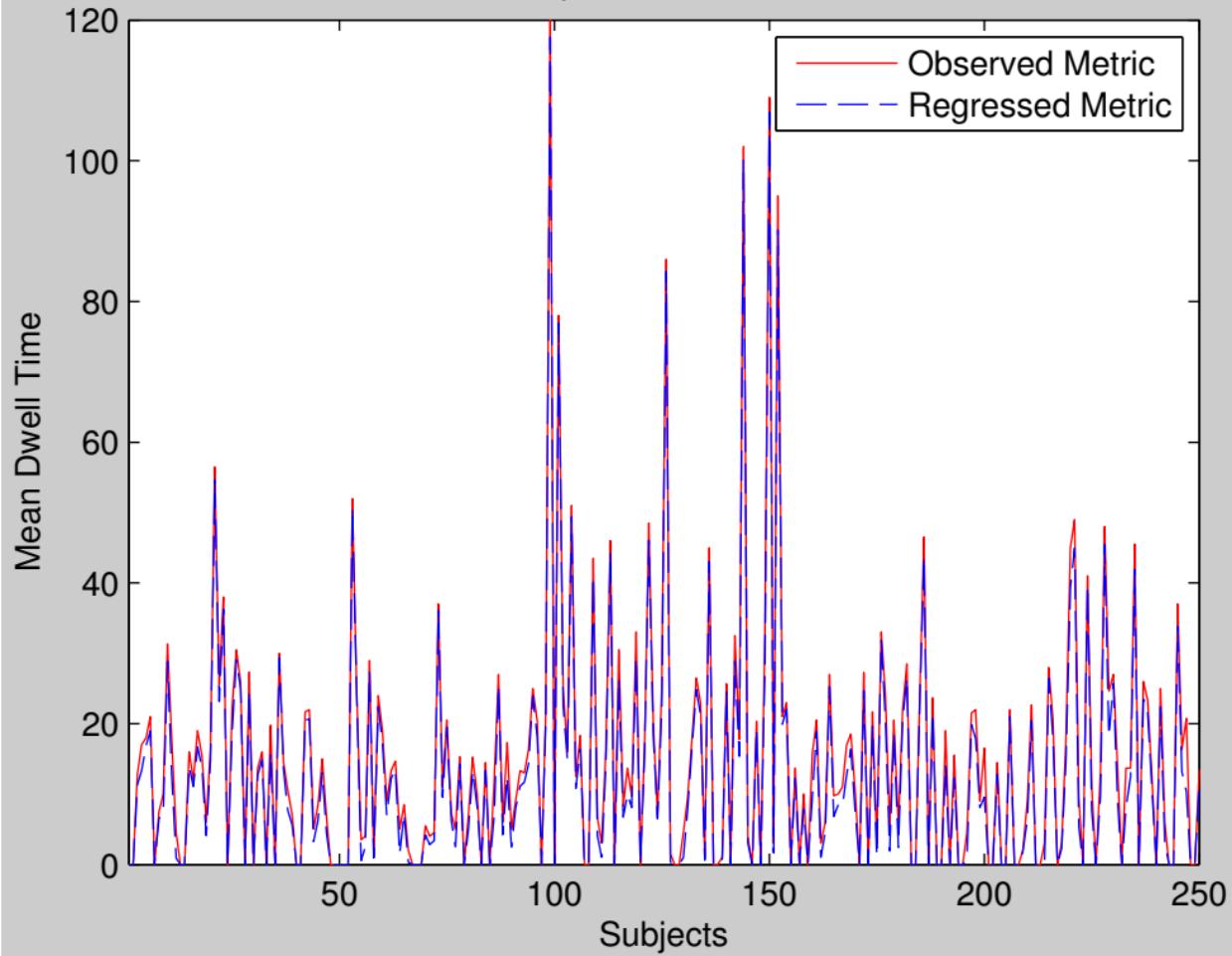
Group 21 State 4 : MDT



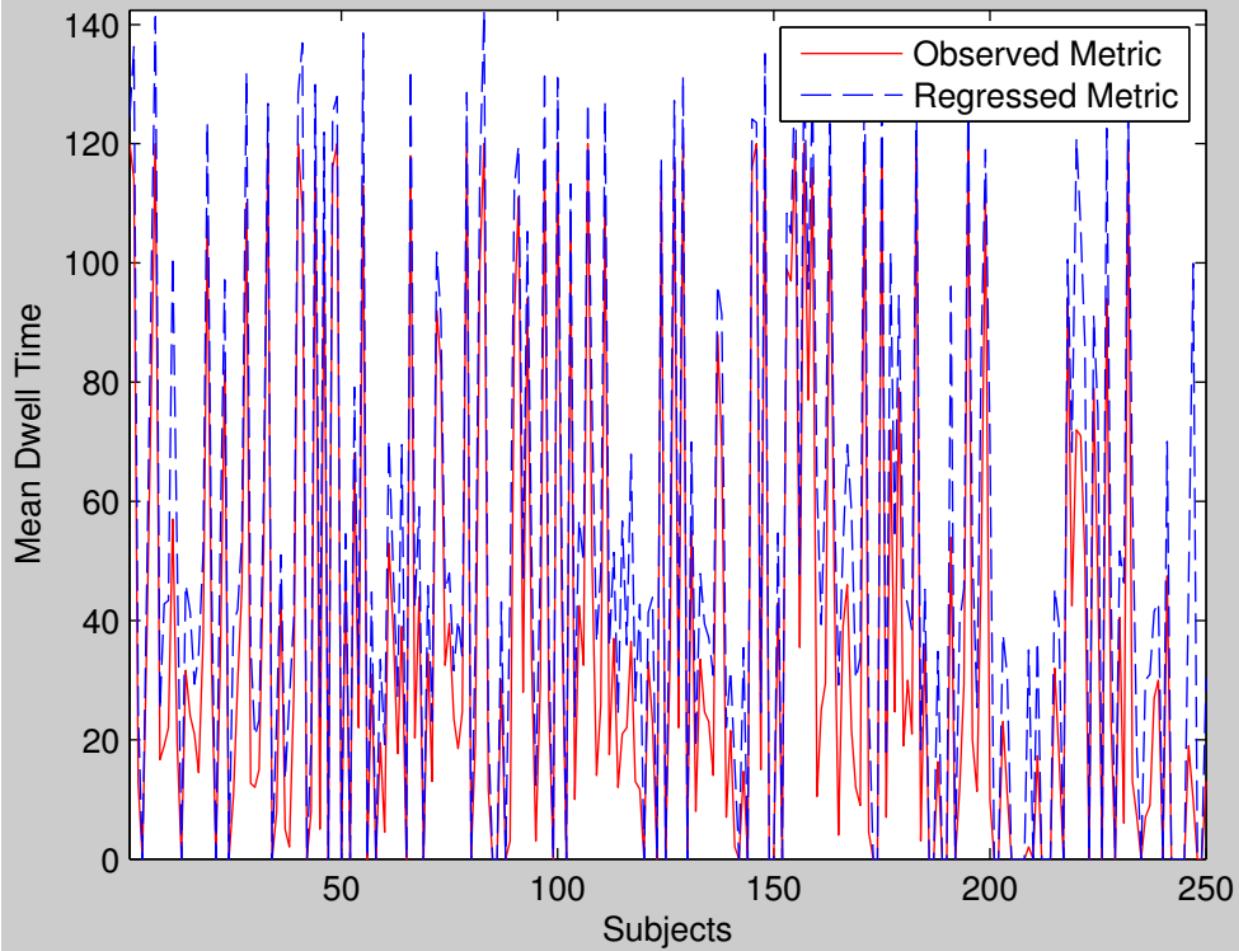
Group 21 State 5 : MDT



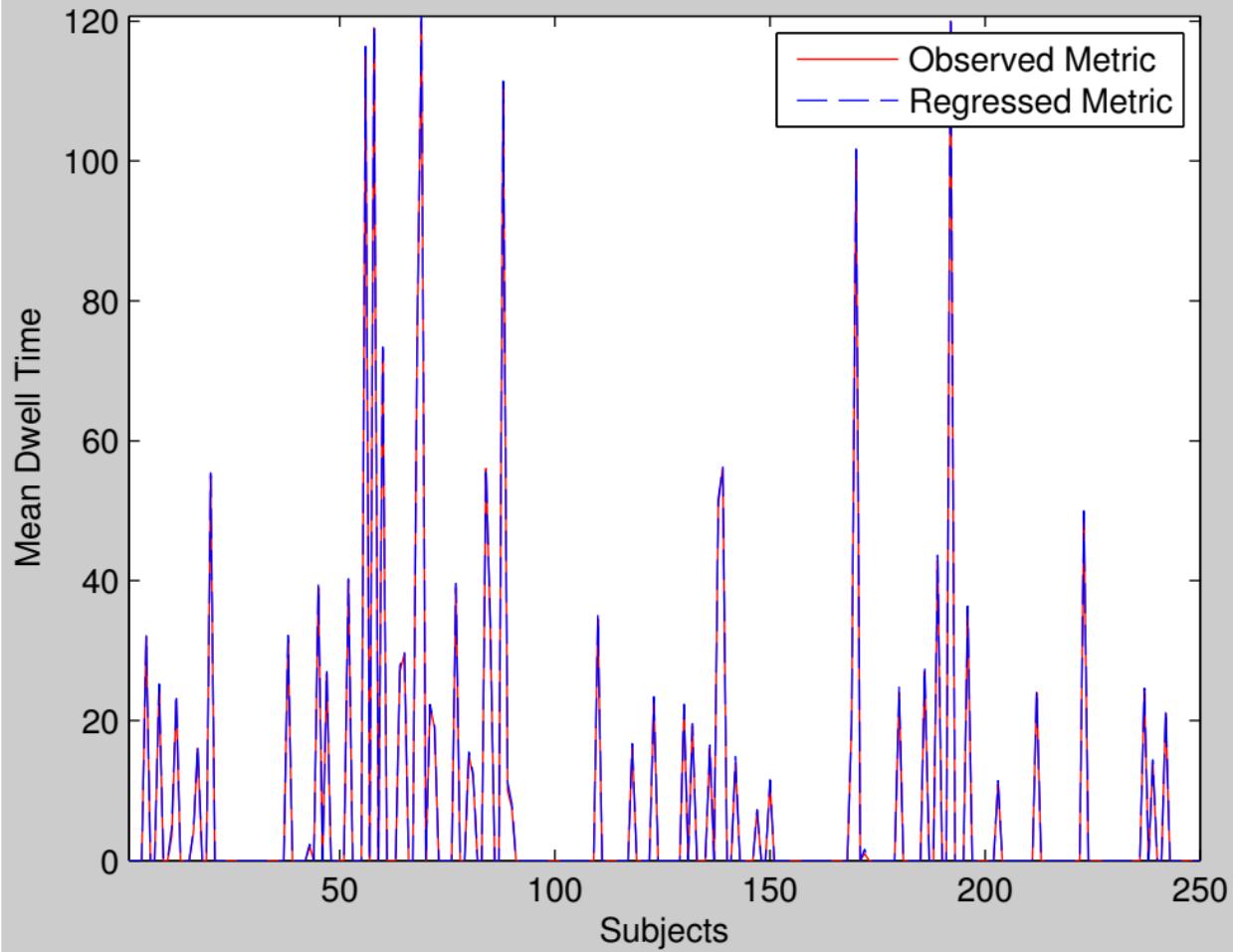
Group 22 State 1 : MDT



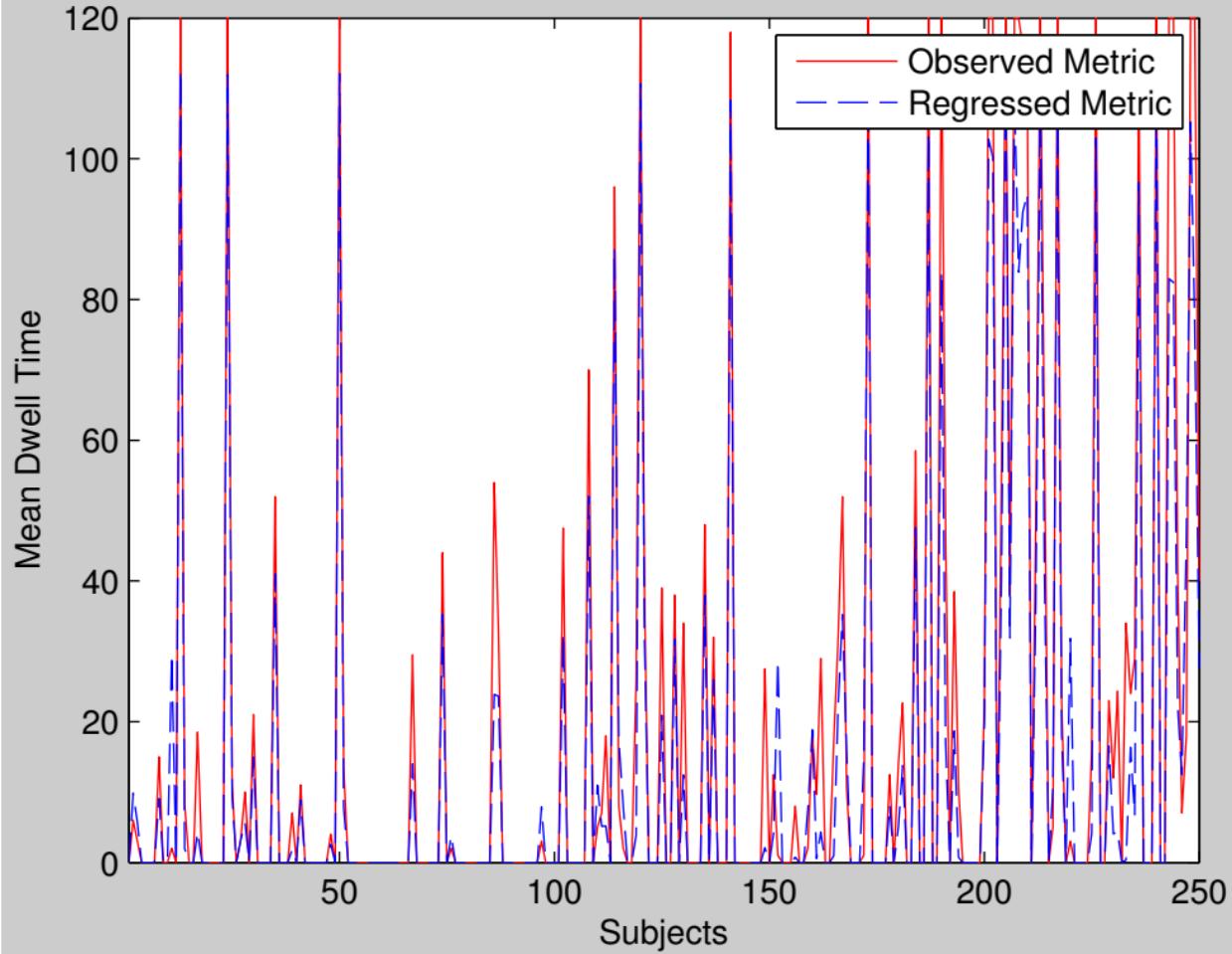
Group 22 State 2 : MDT



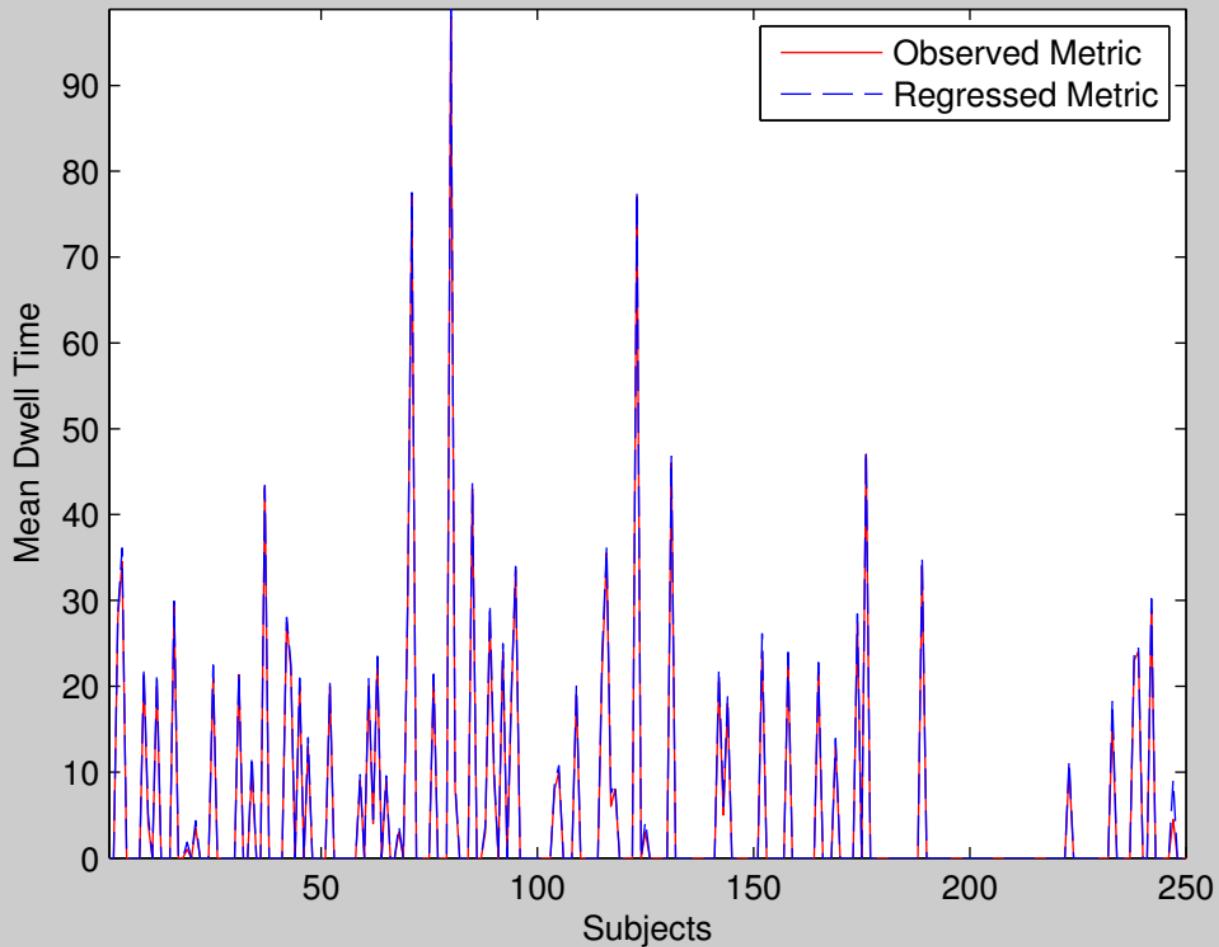
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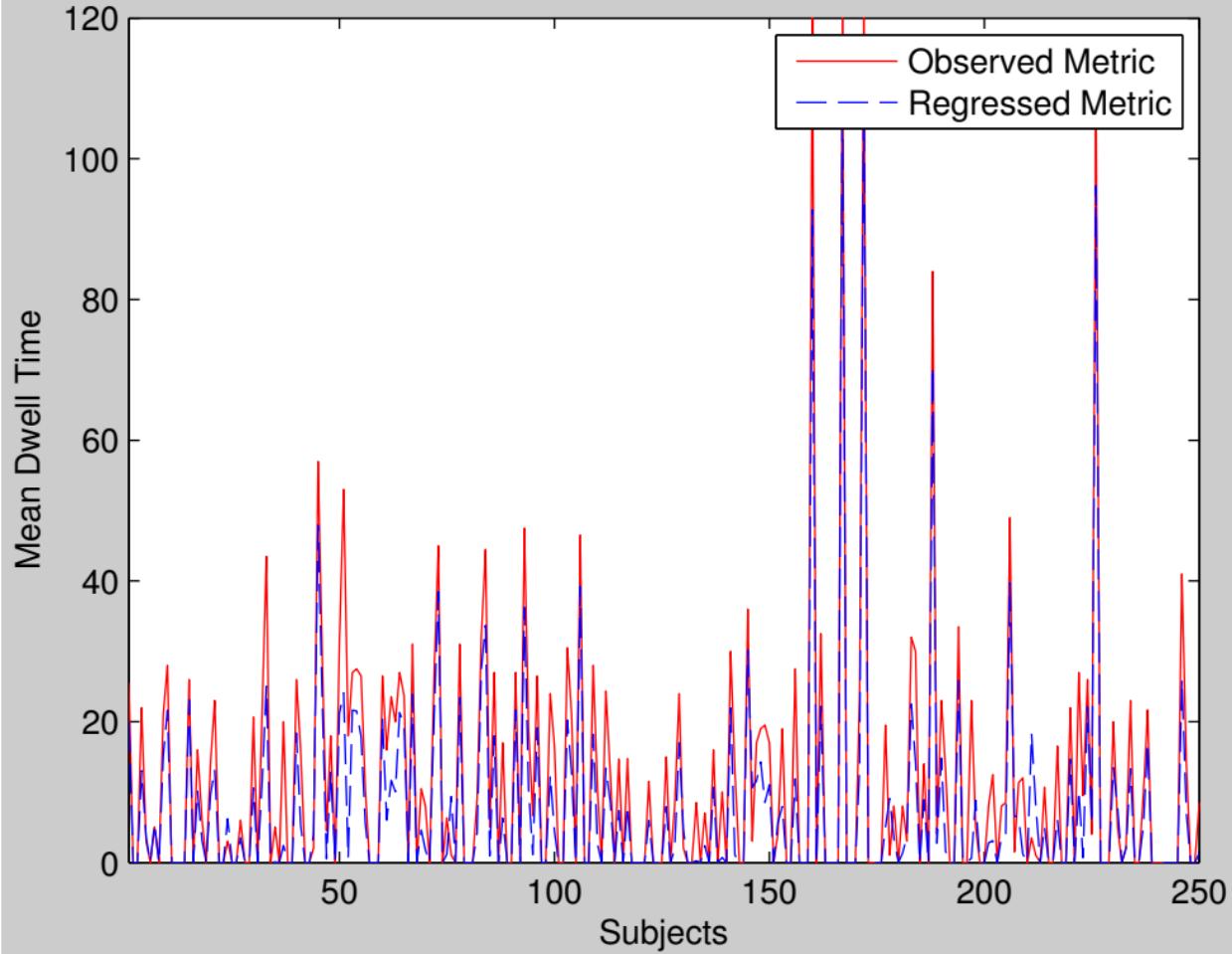
Group 22 State 4 : MDT



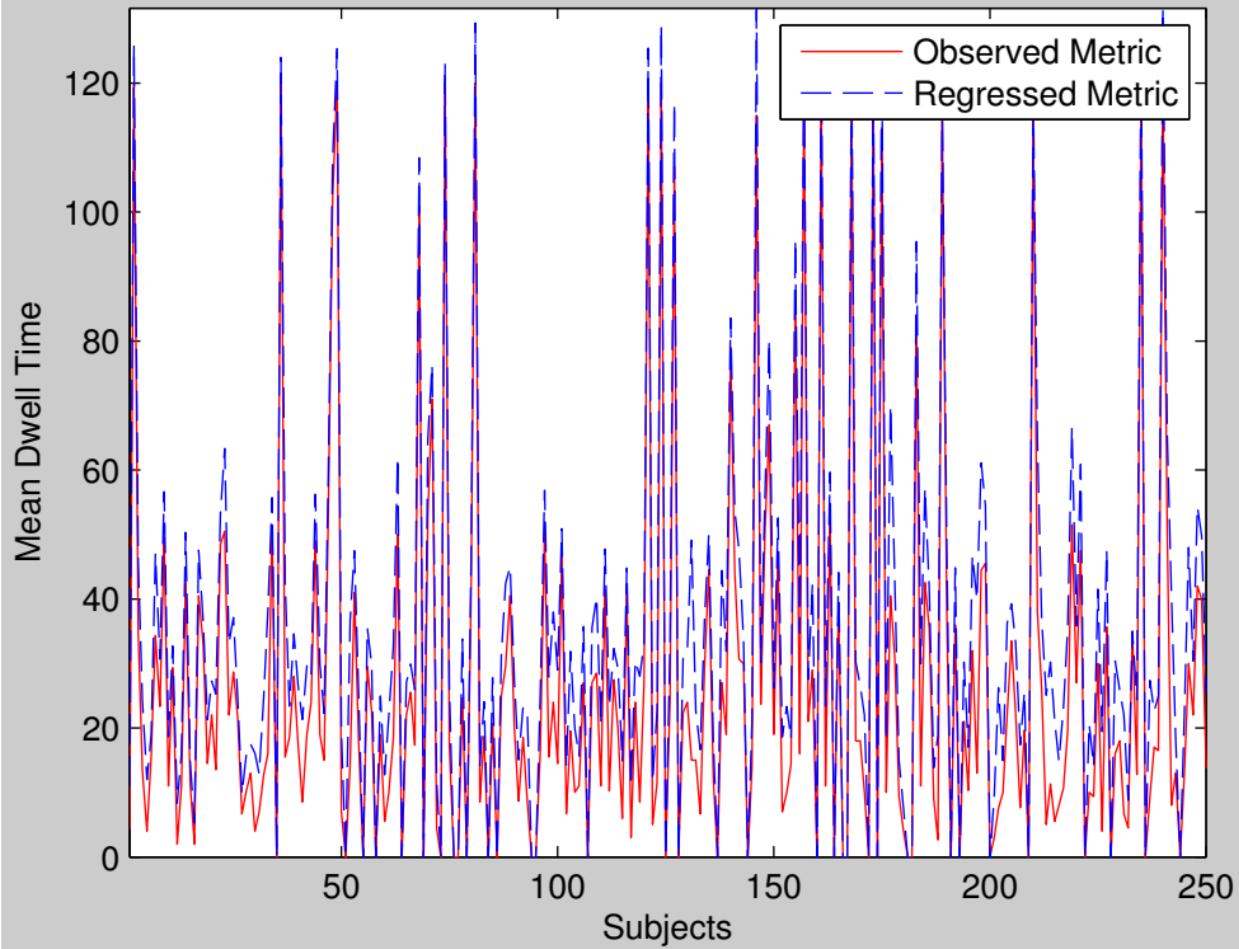
Group 22 State 5 : MDT



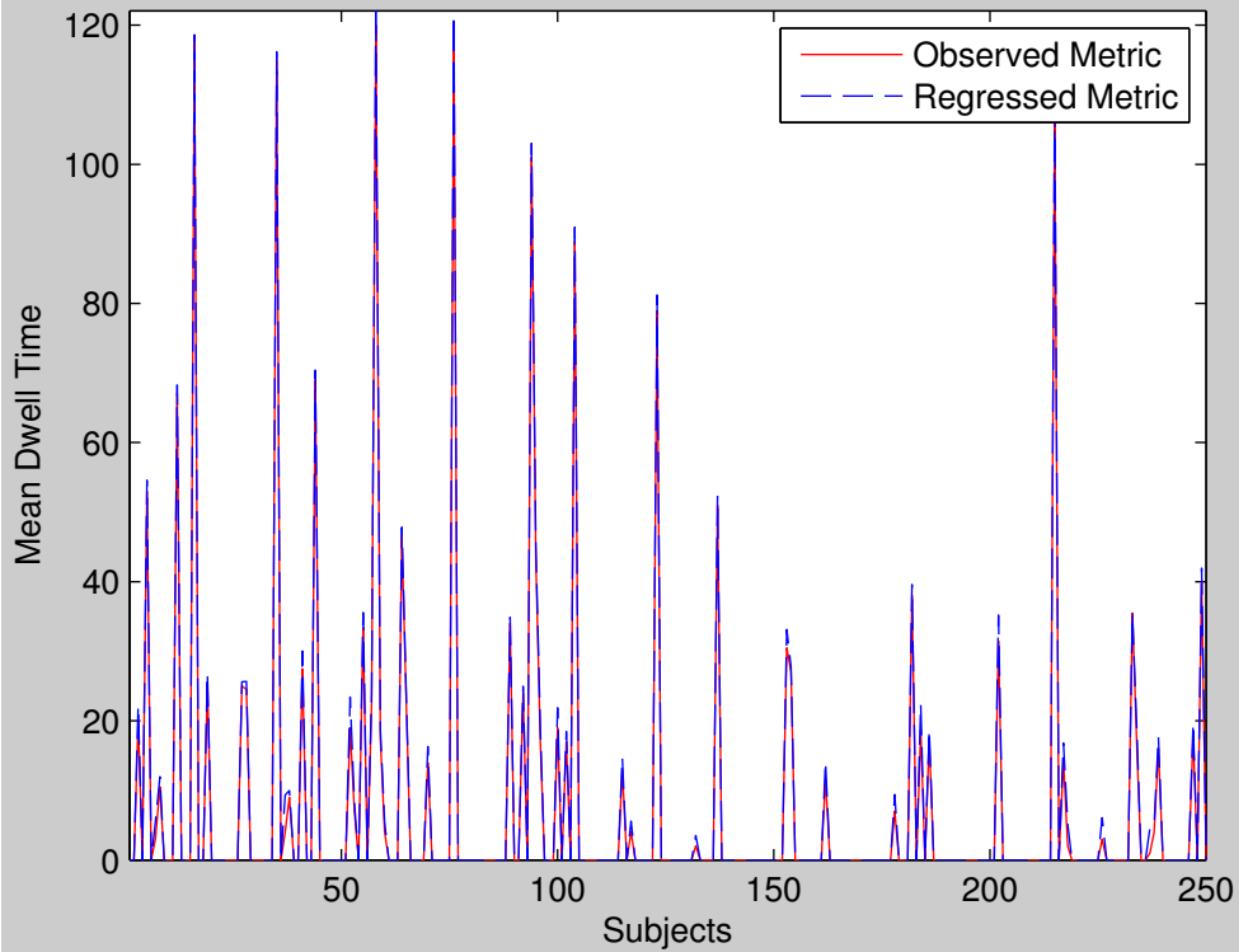
Group 23 State 1 : MDT



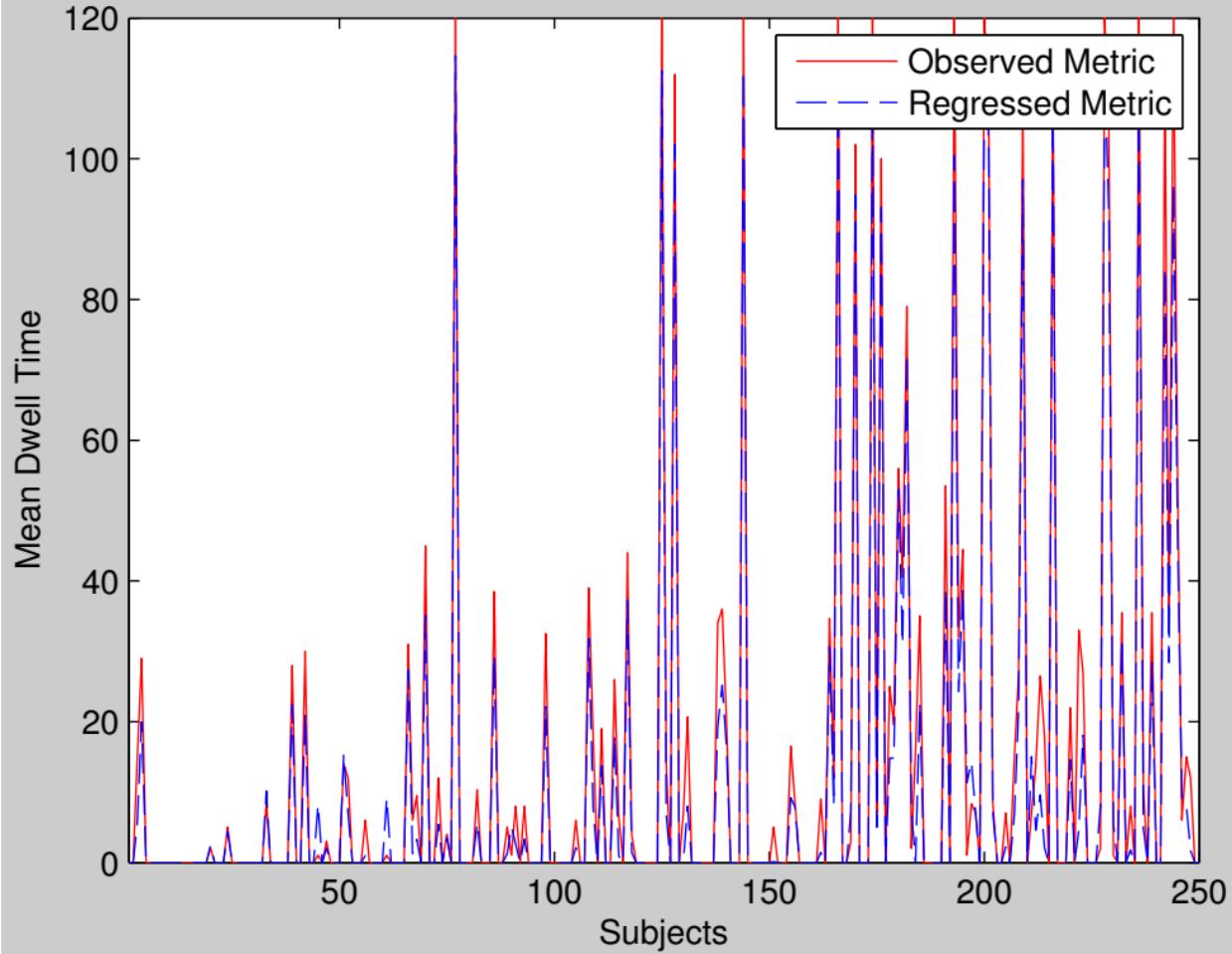
Group 23 State 2 : MDT



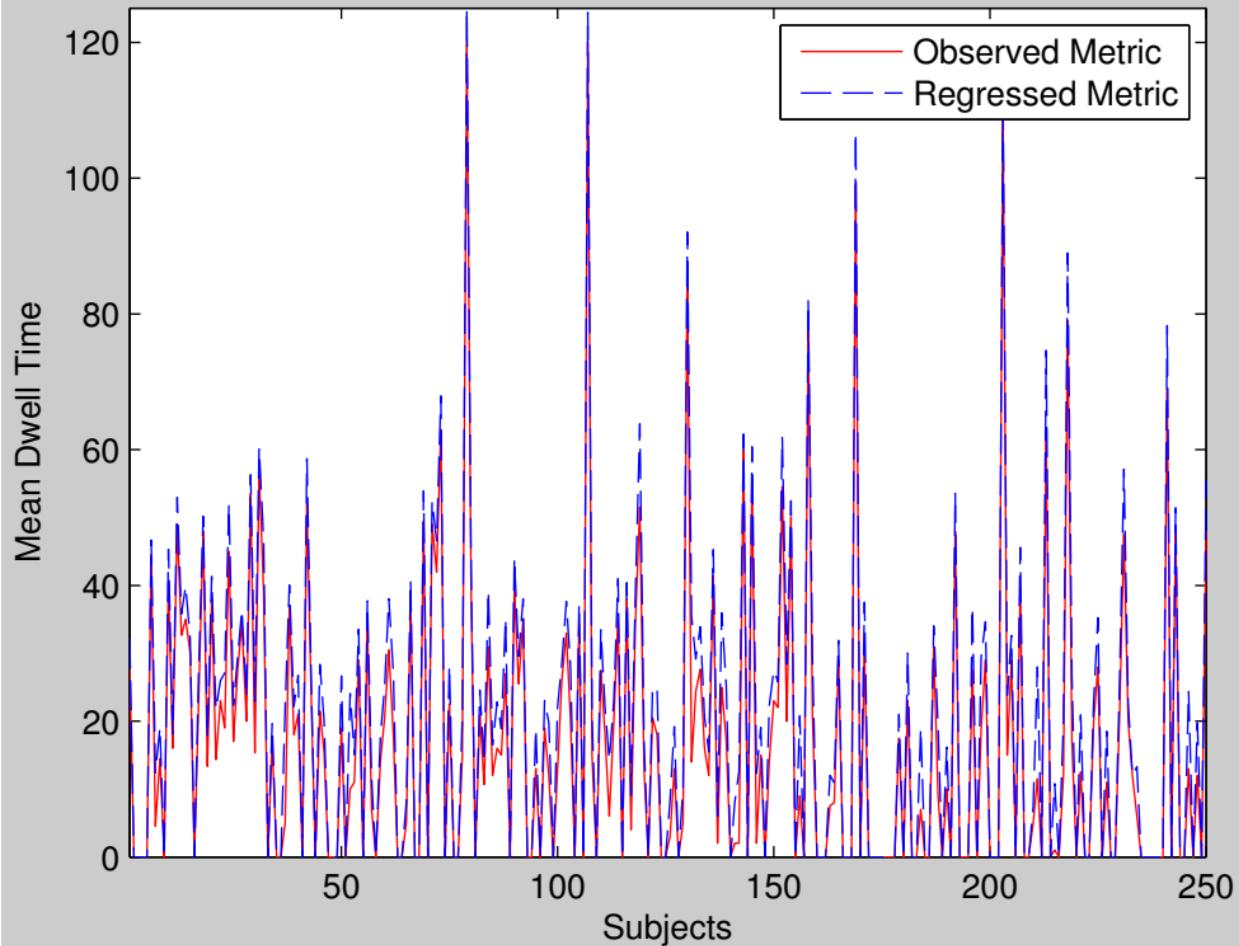
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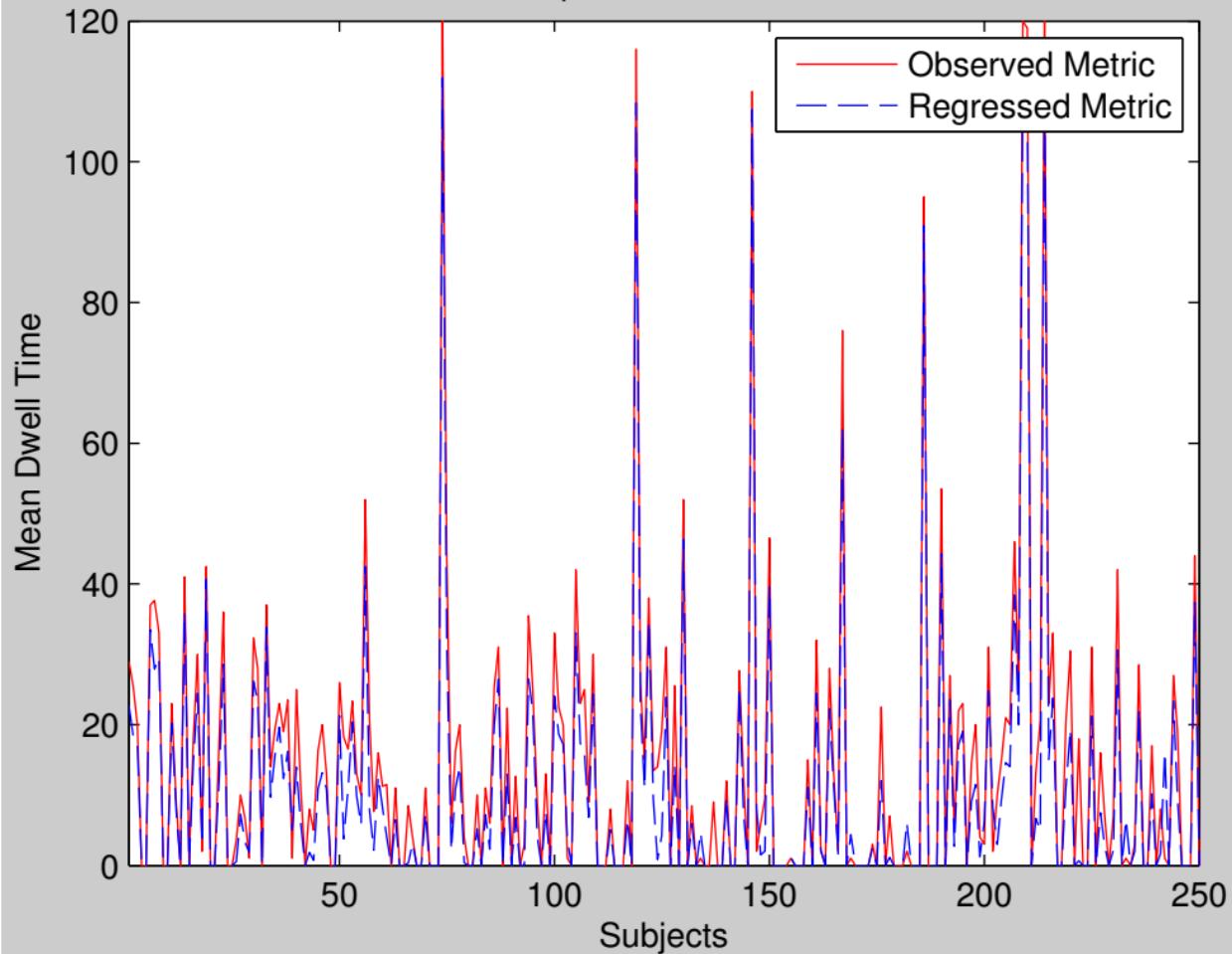
Group 23 State 4 : MDT



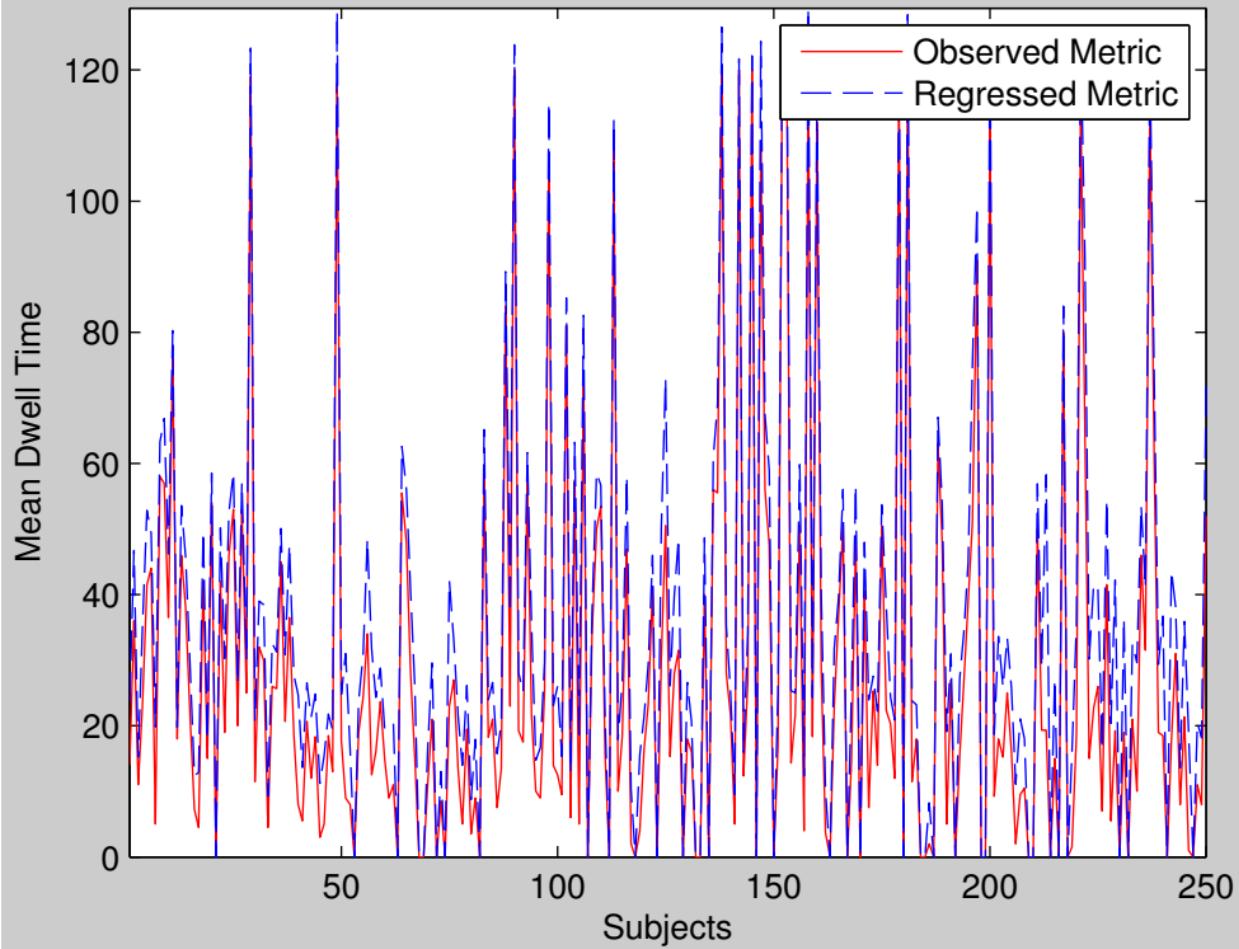
Group 23 State 5 : MDT



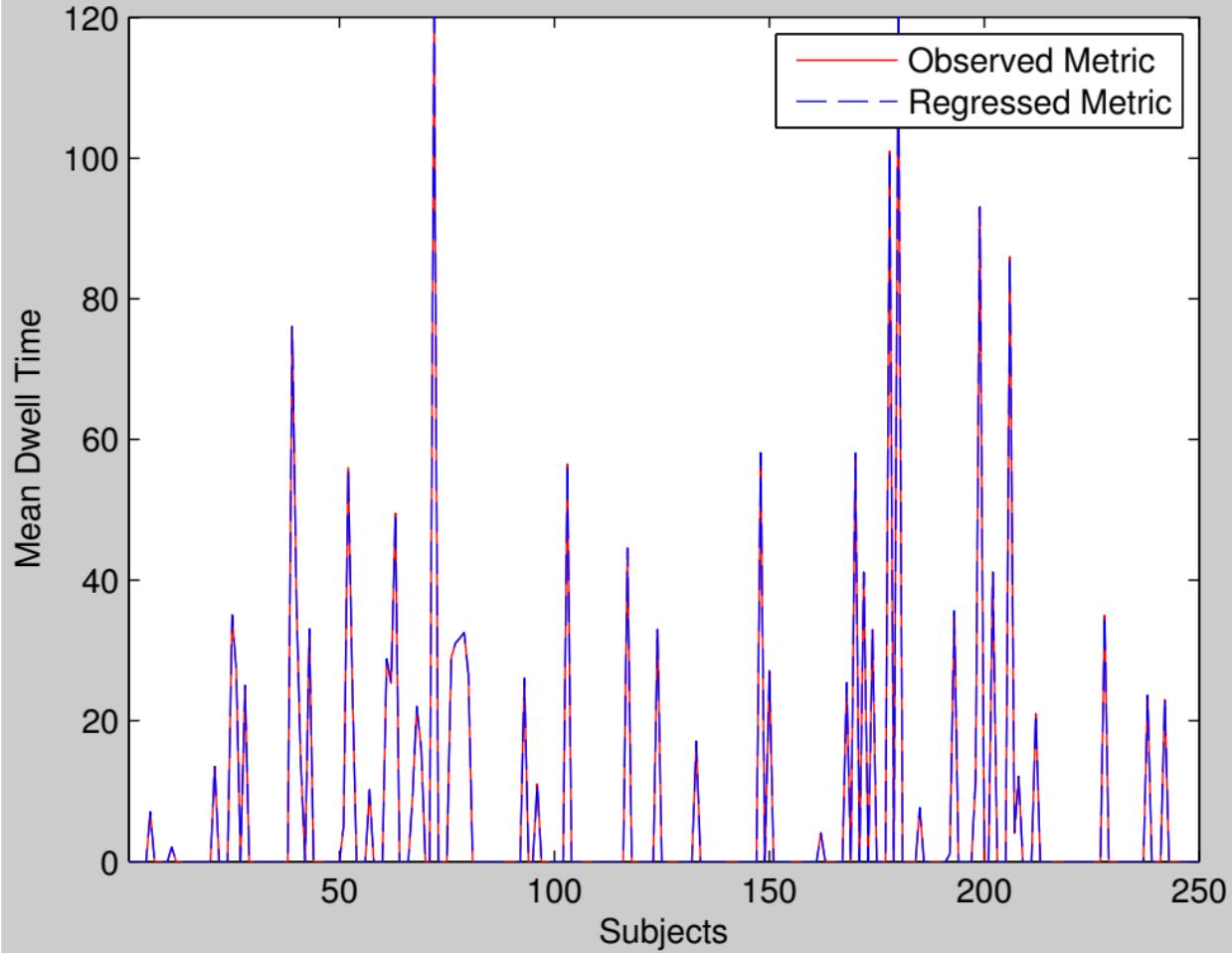
Group 24 State 1 : MDT



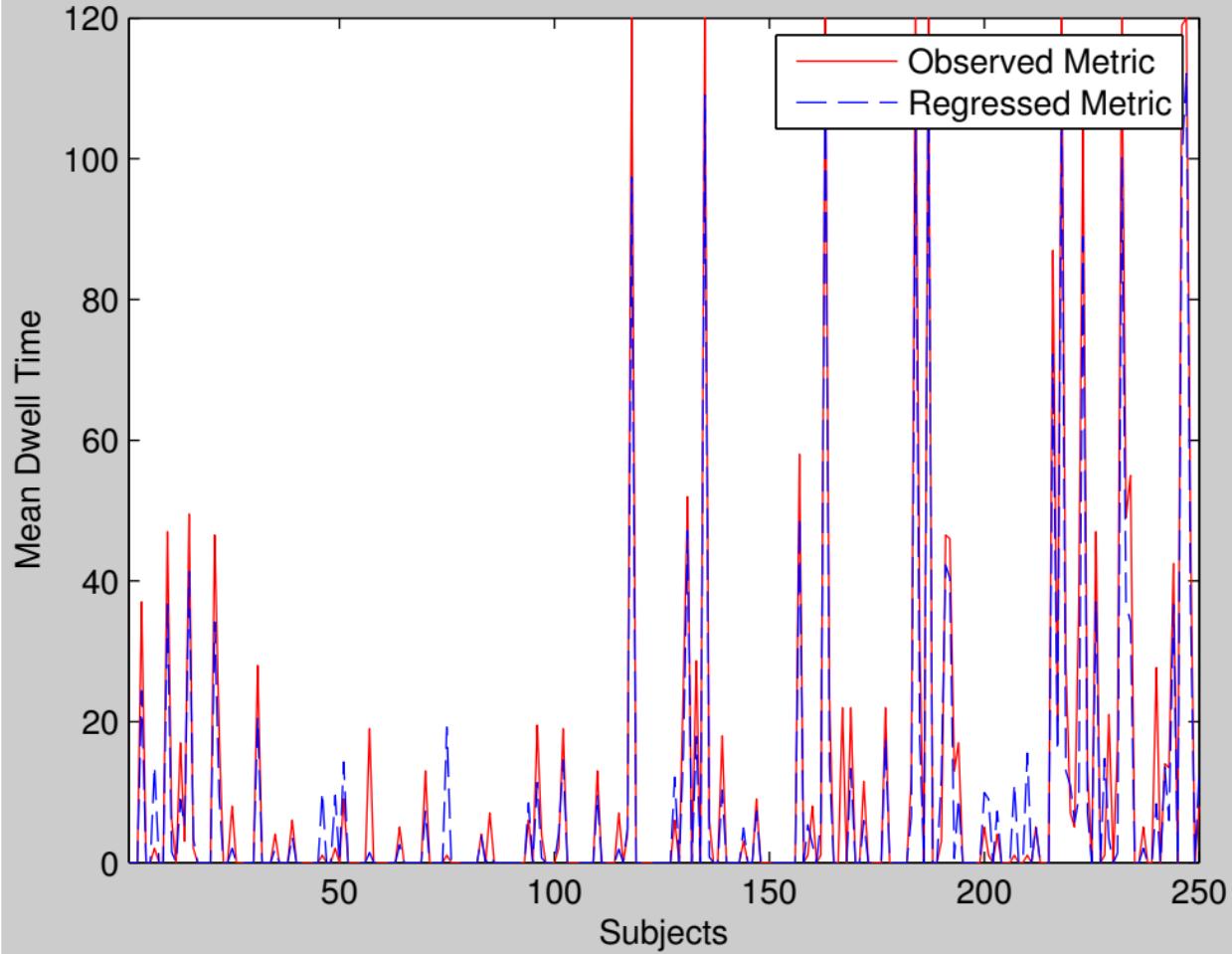
Group 24 State 2 : MDT



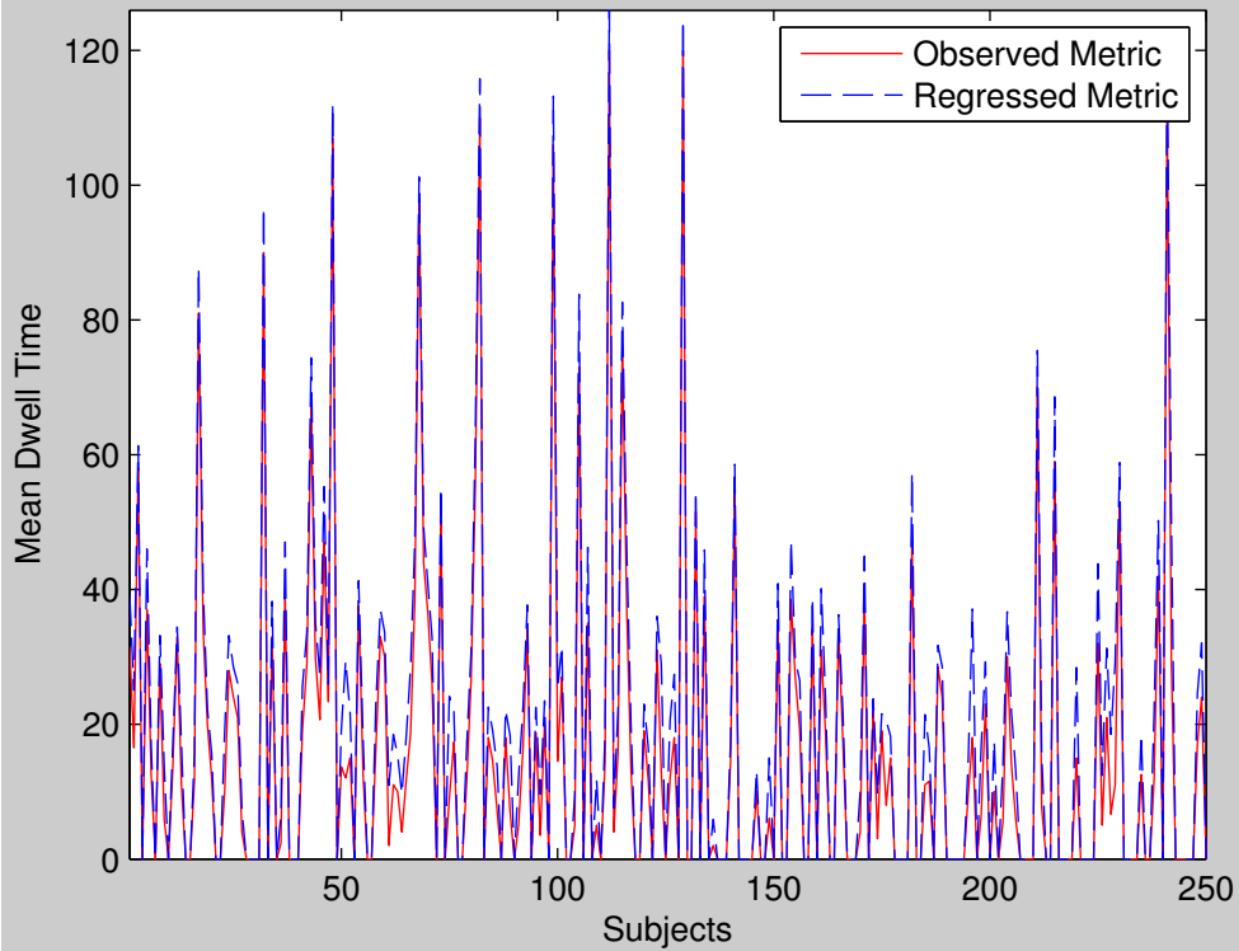
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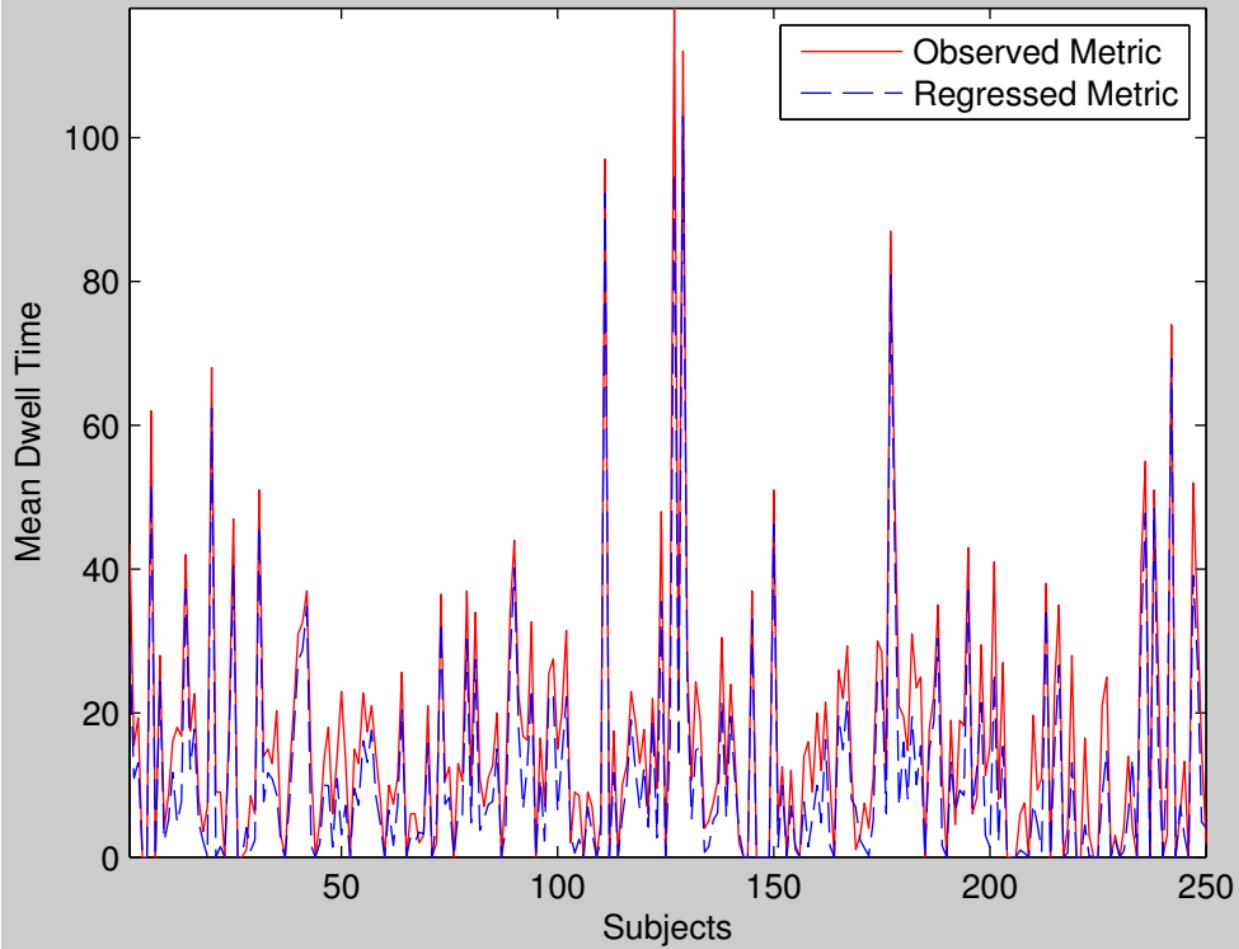
Group 24 State 4 : MDT



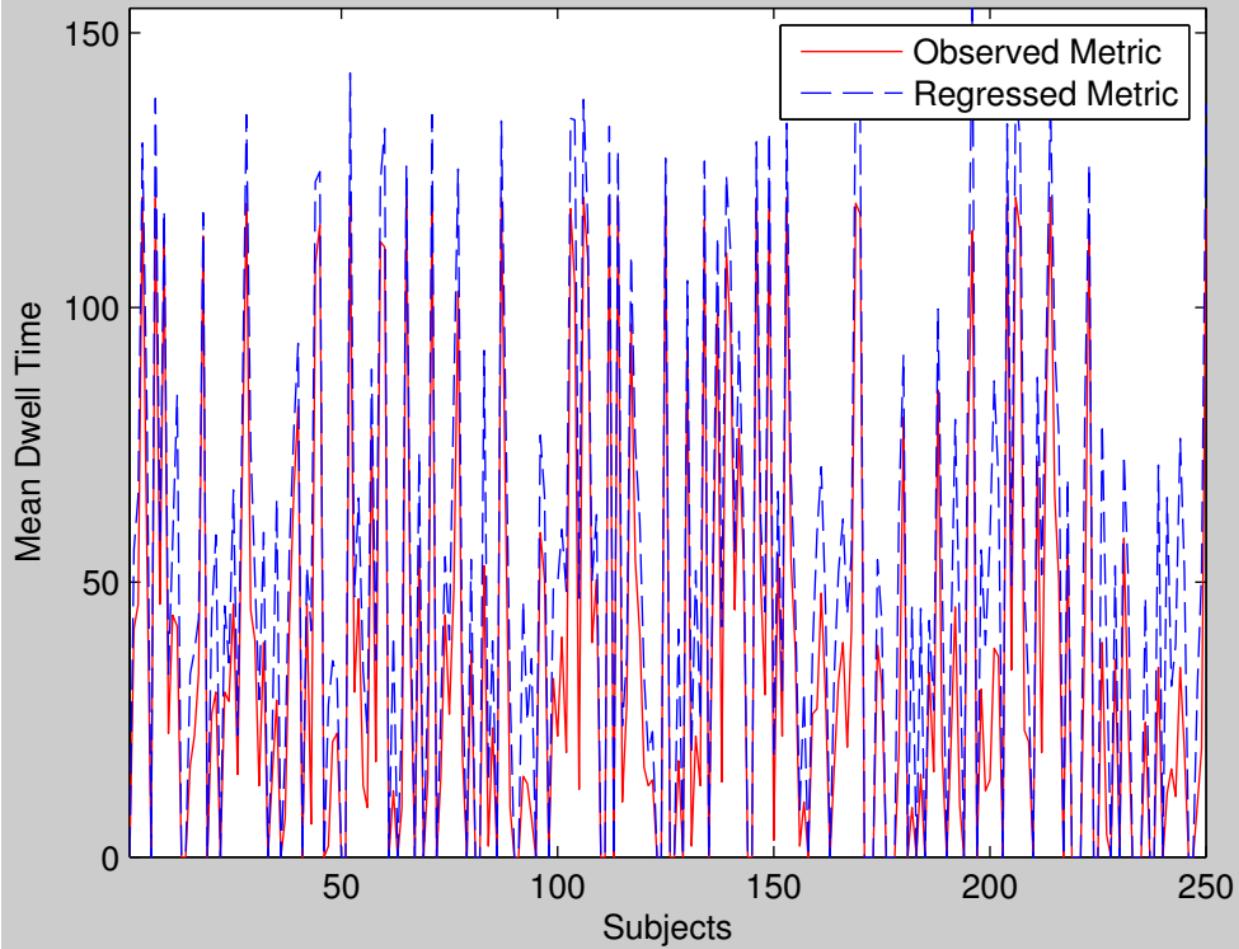
Group 24 State 5 : MDT



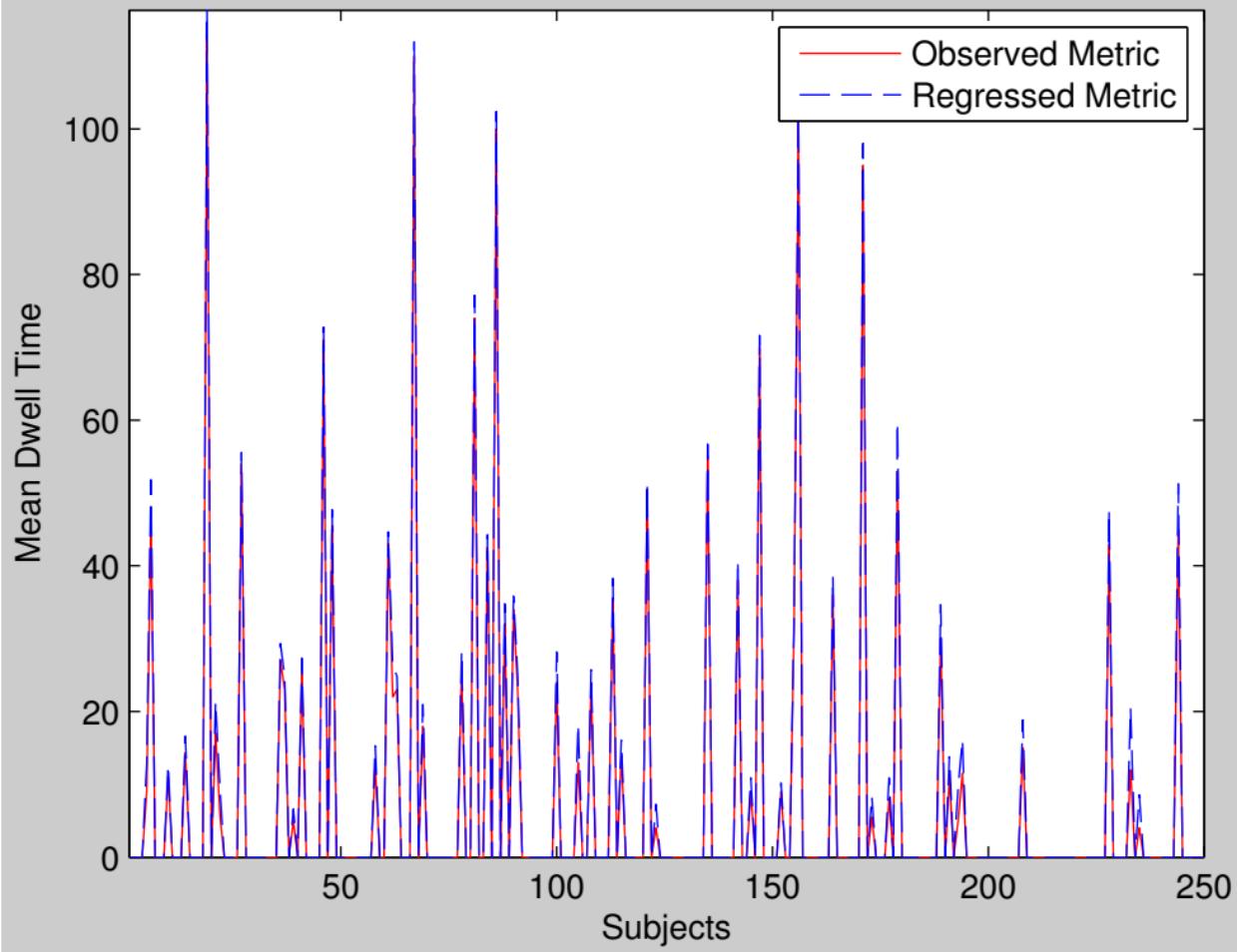
Group 25 State 1 : MDT



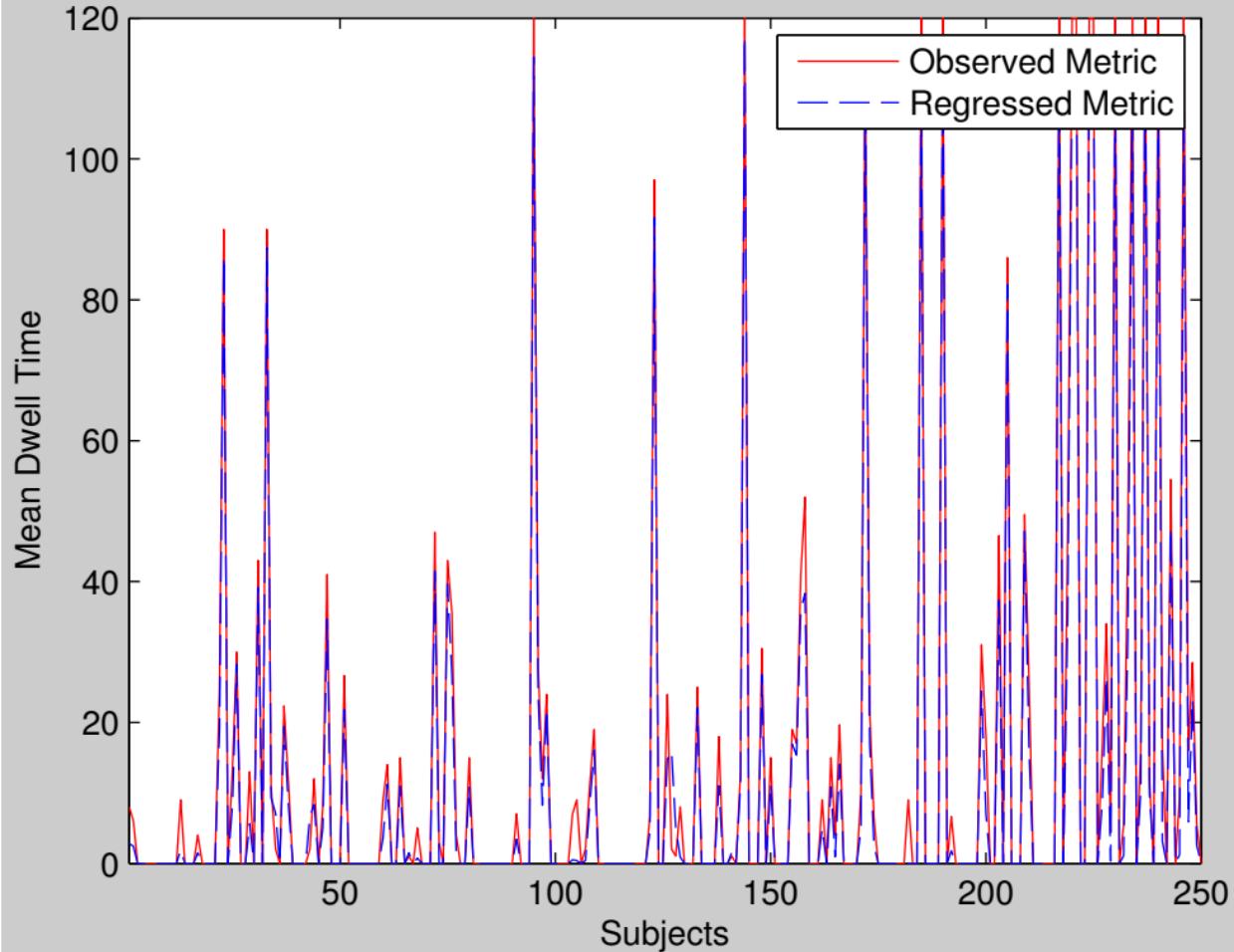
Group 25 State 2 : MDT



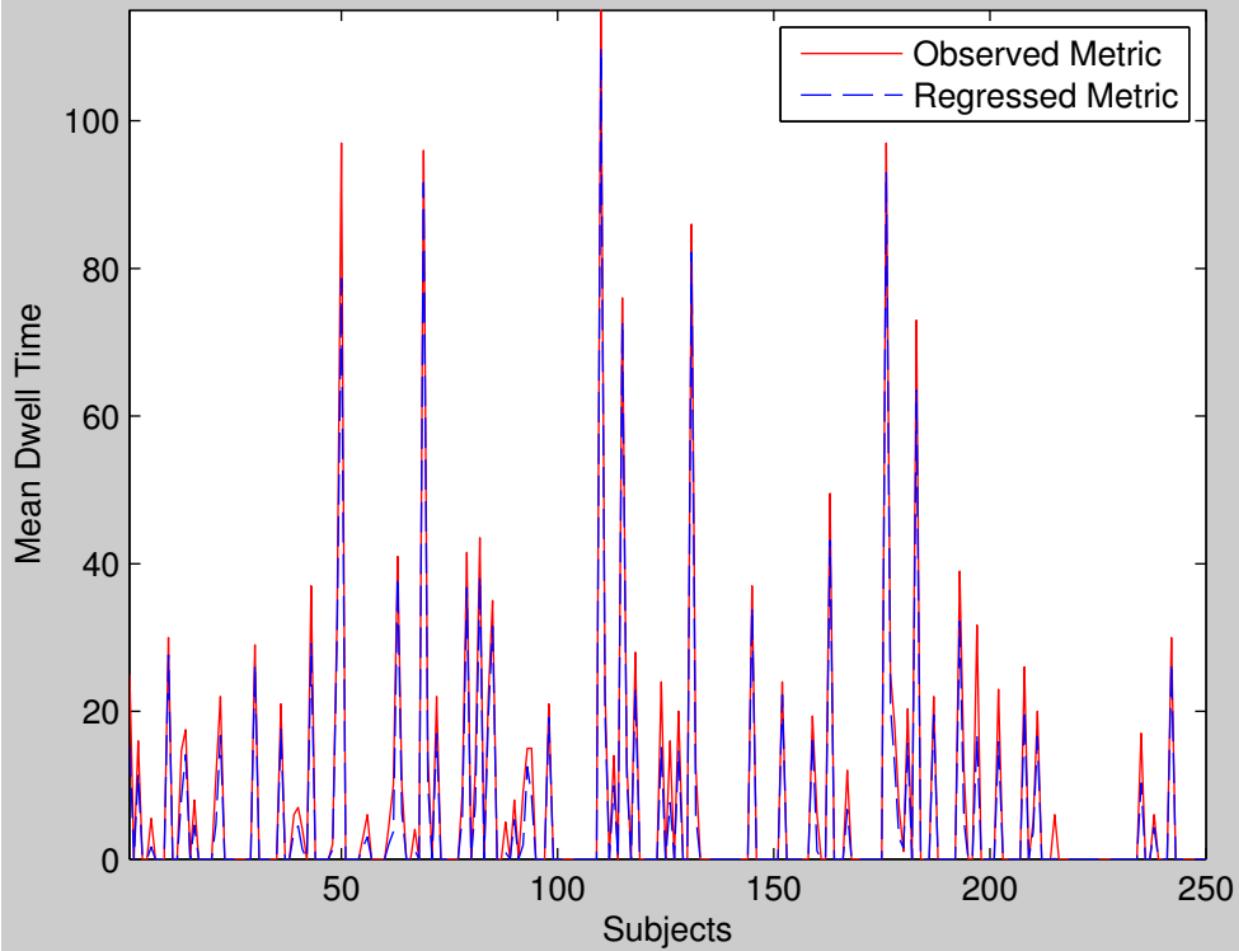
Group 25 State 3 : MDT



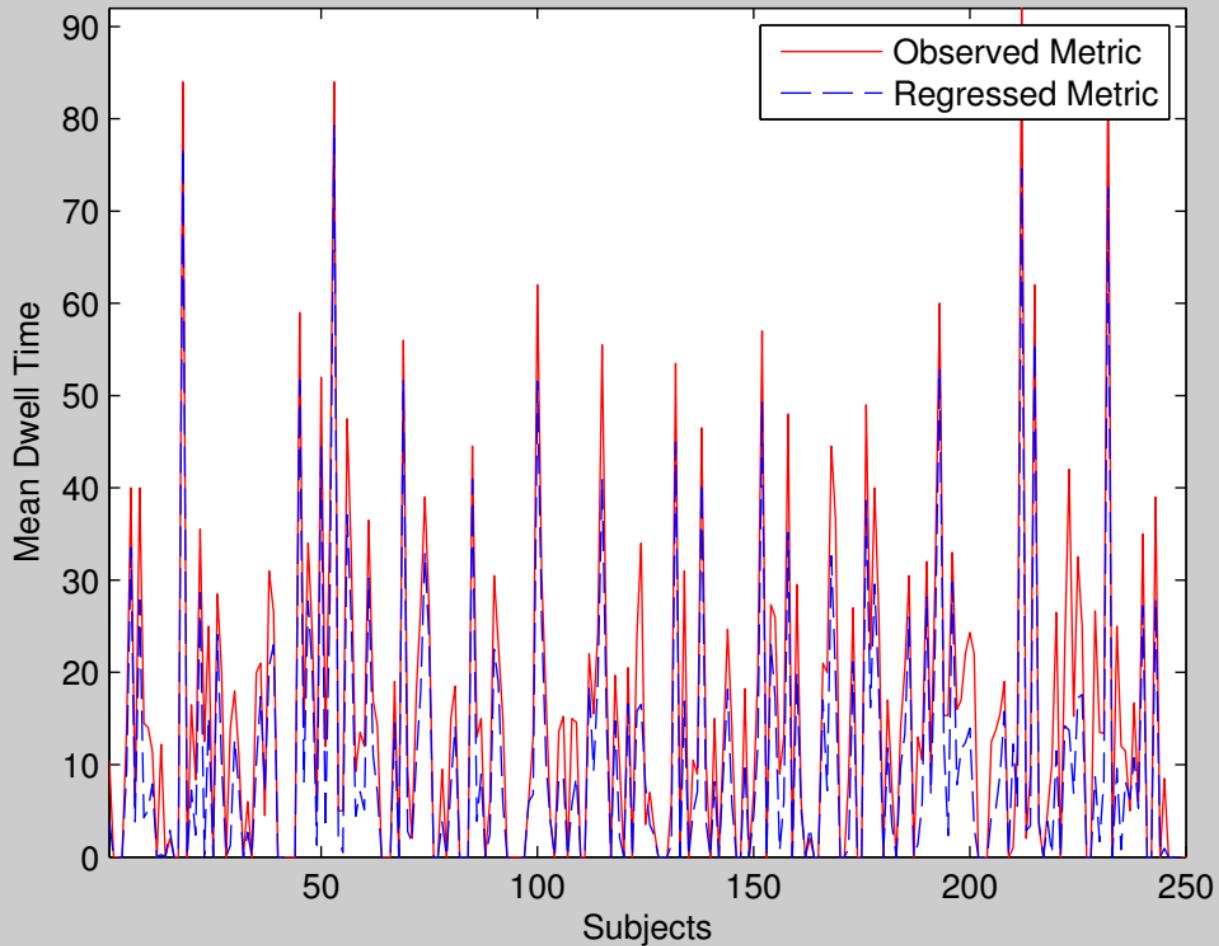
Group 25 State 4 : MDT



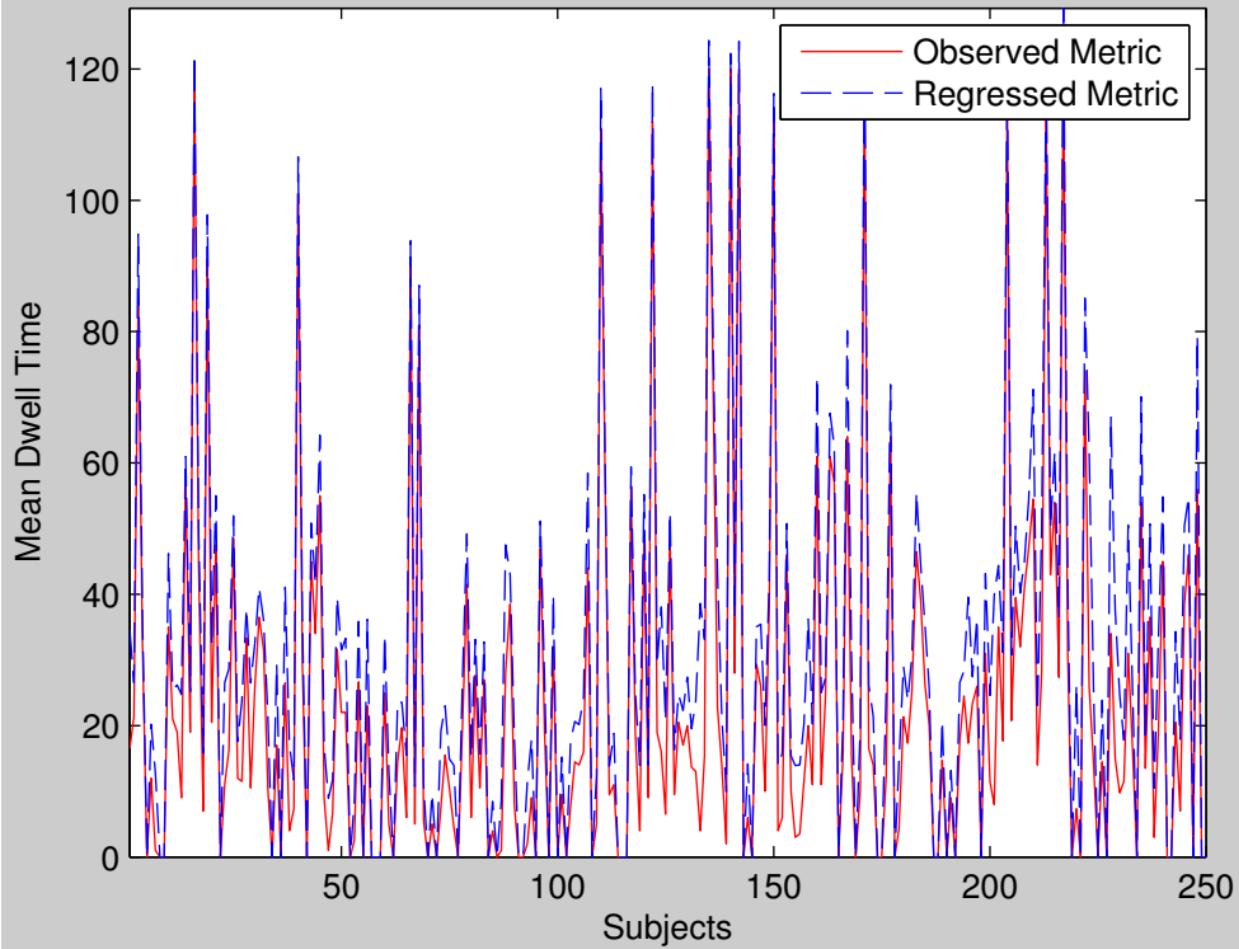
Group 25 State 5 : MDT



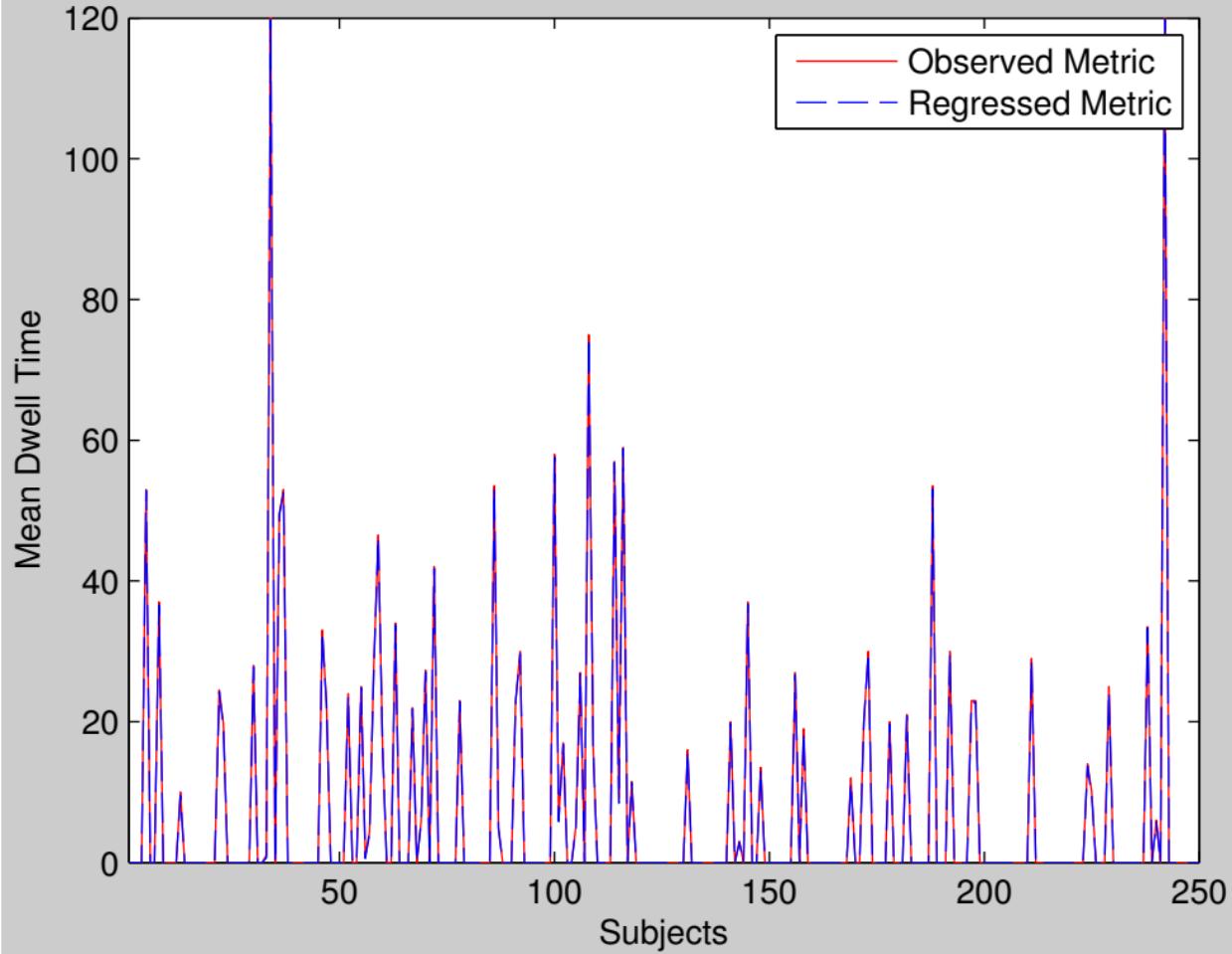
Group 26 State 1 : MDT



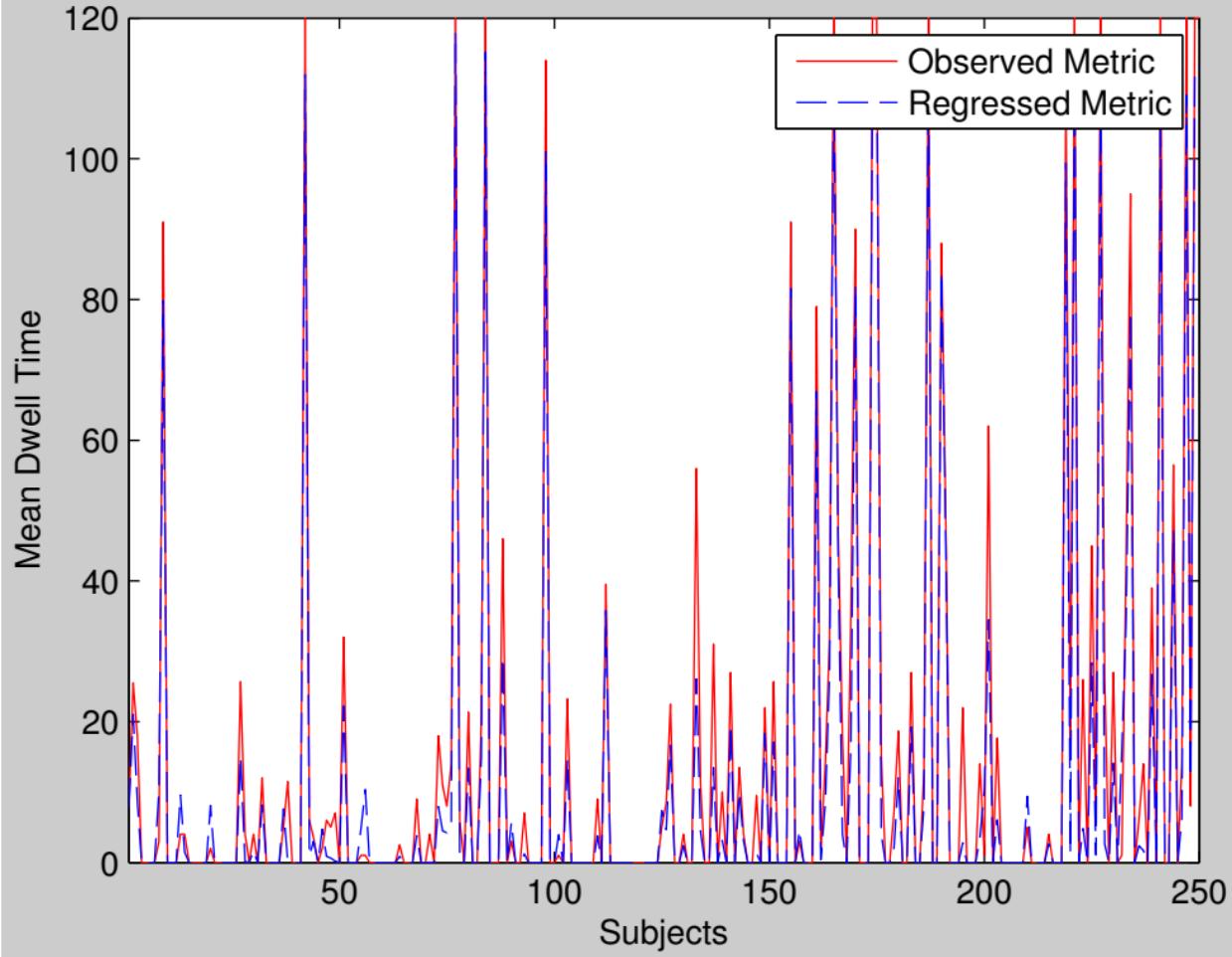
Group 26 State 2 : MDT



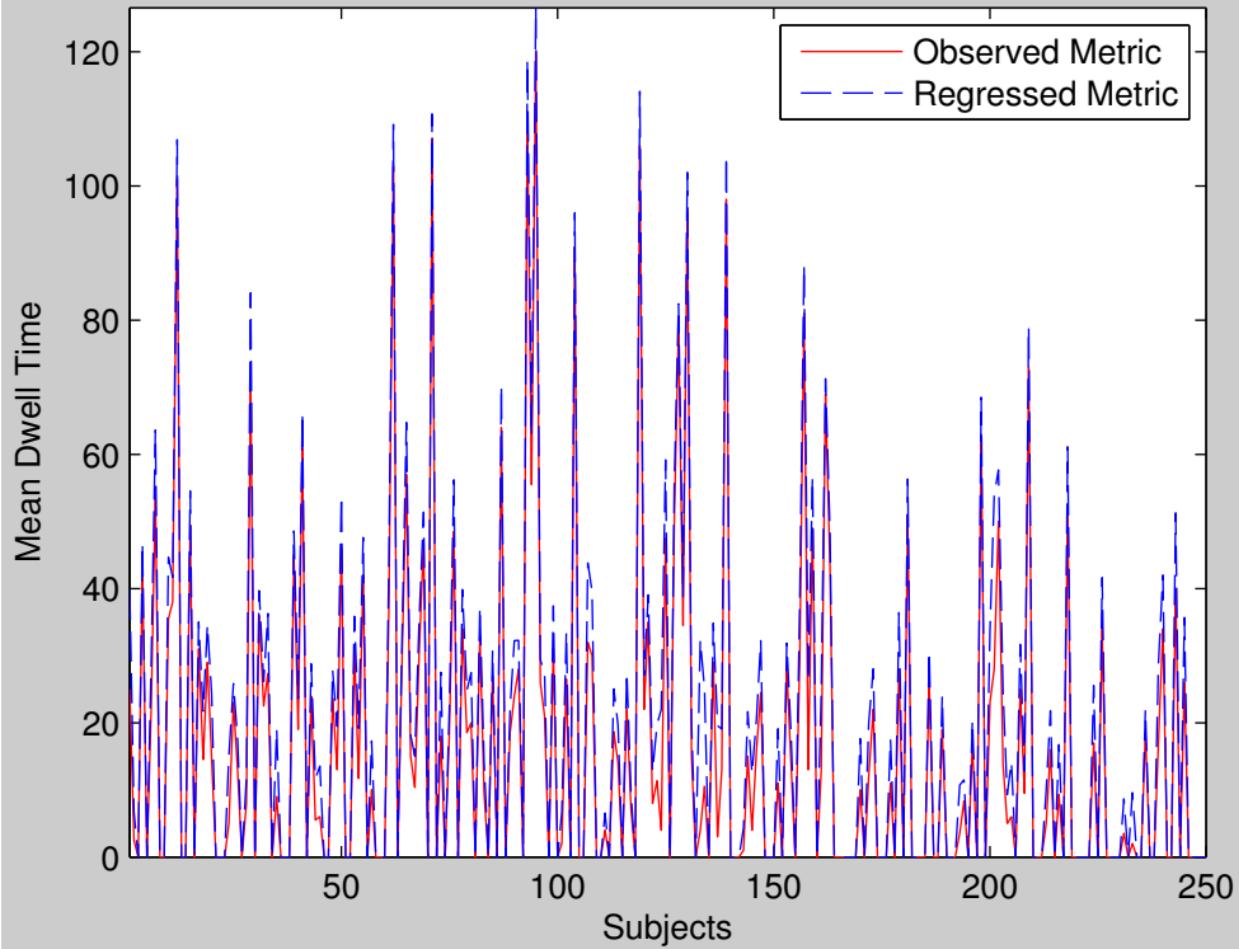
Group 26 State 3 : MDT



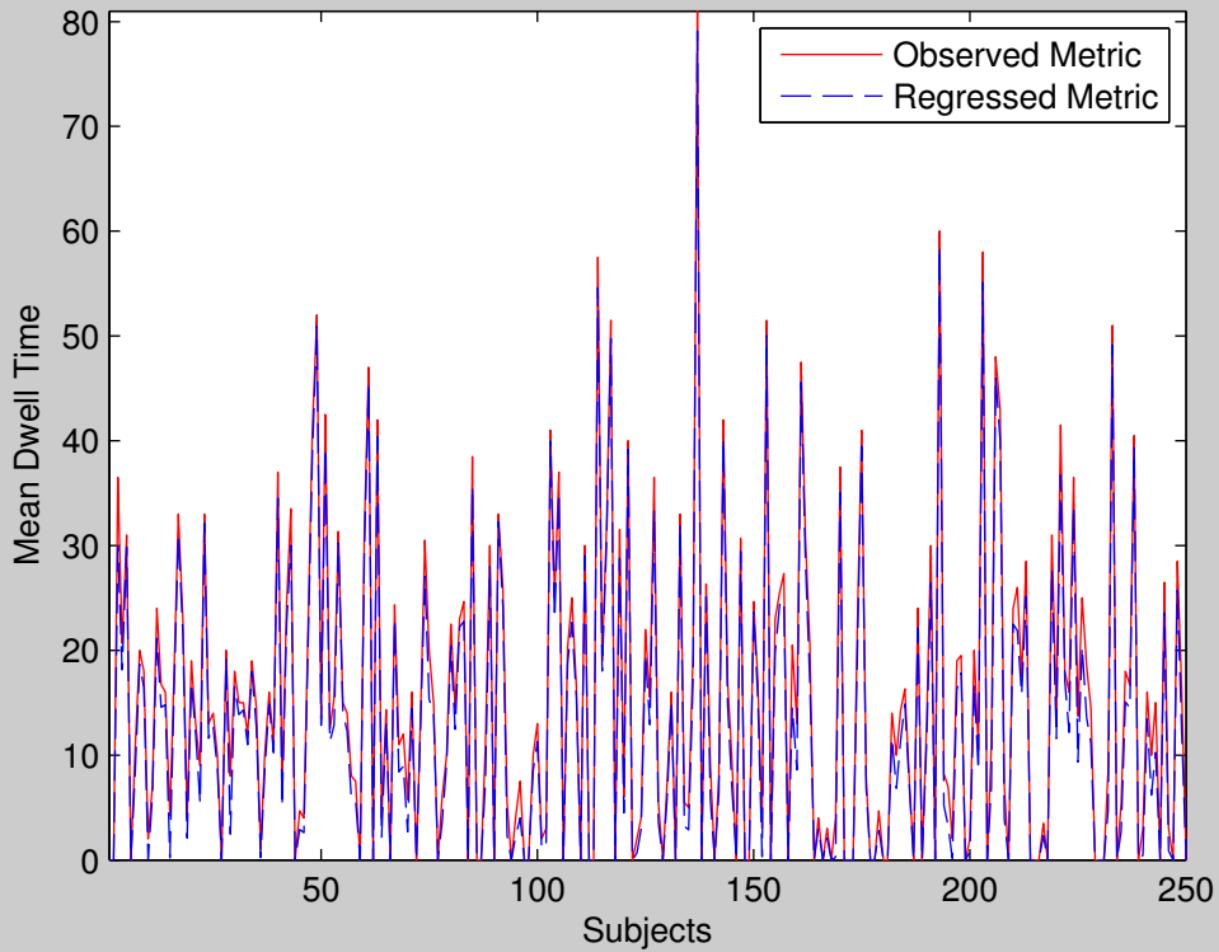
Group 26 State 4 : MDT



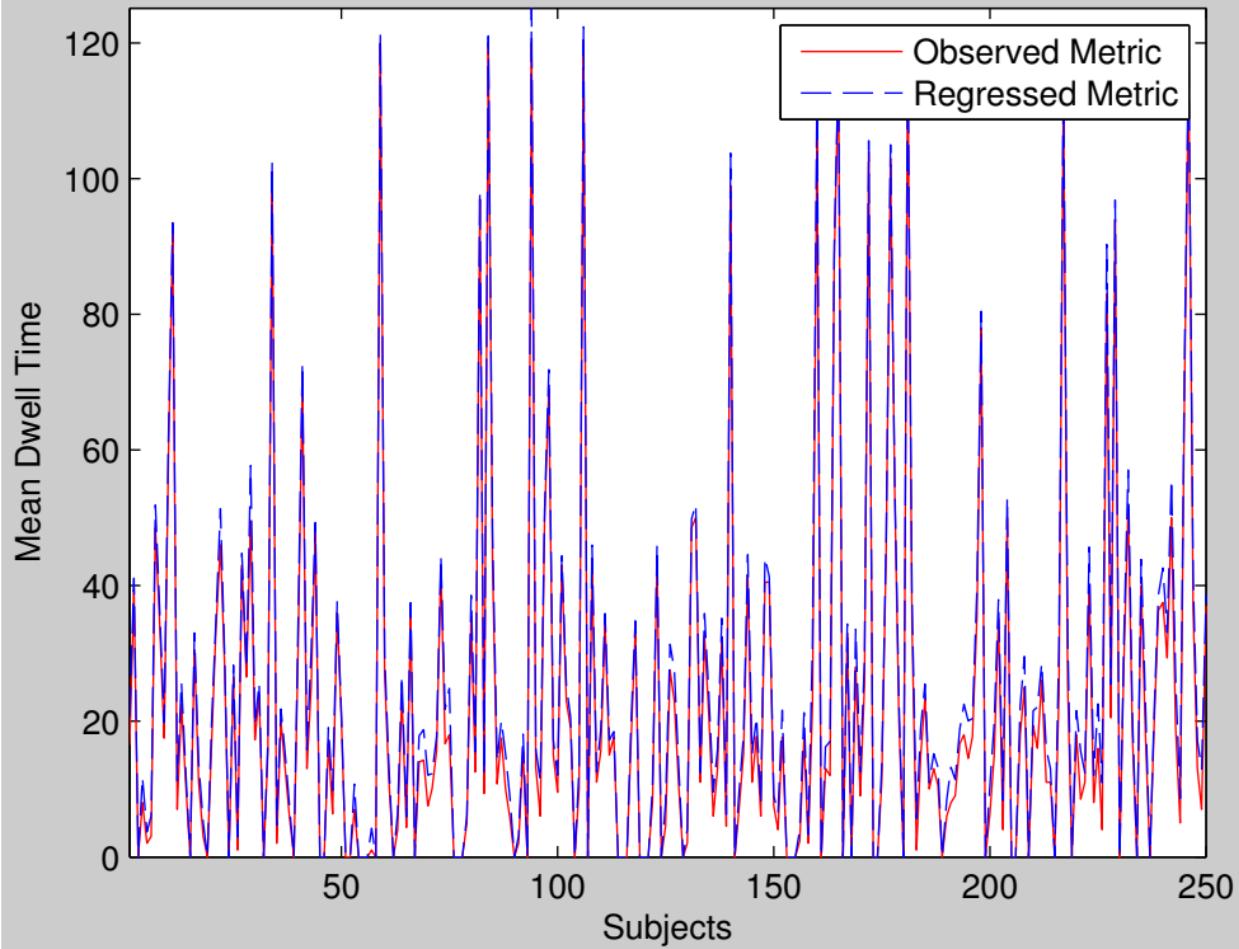
Group 26 State 5 : MDT



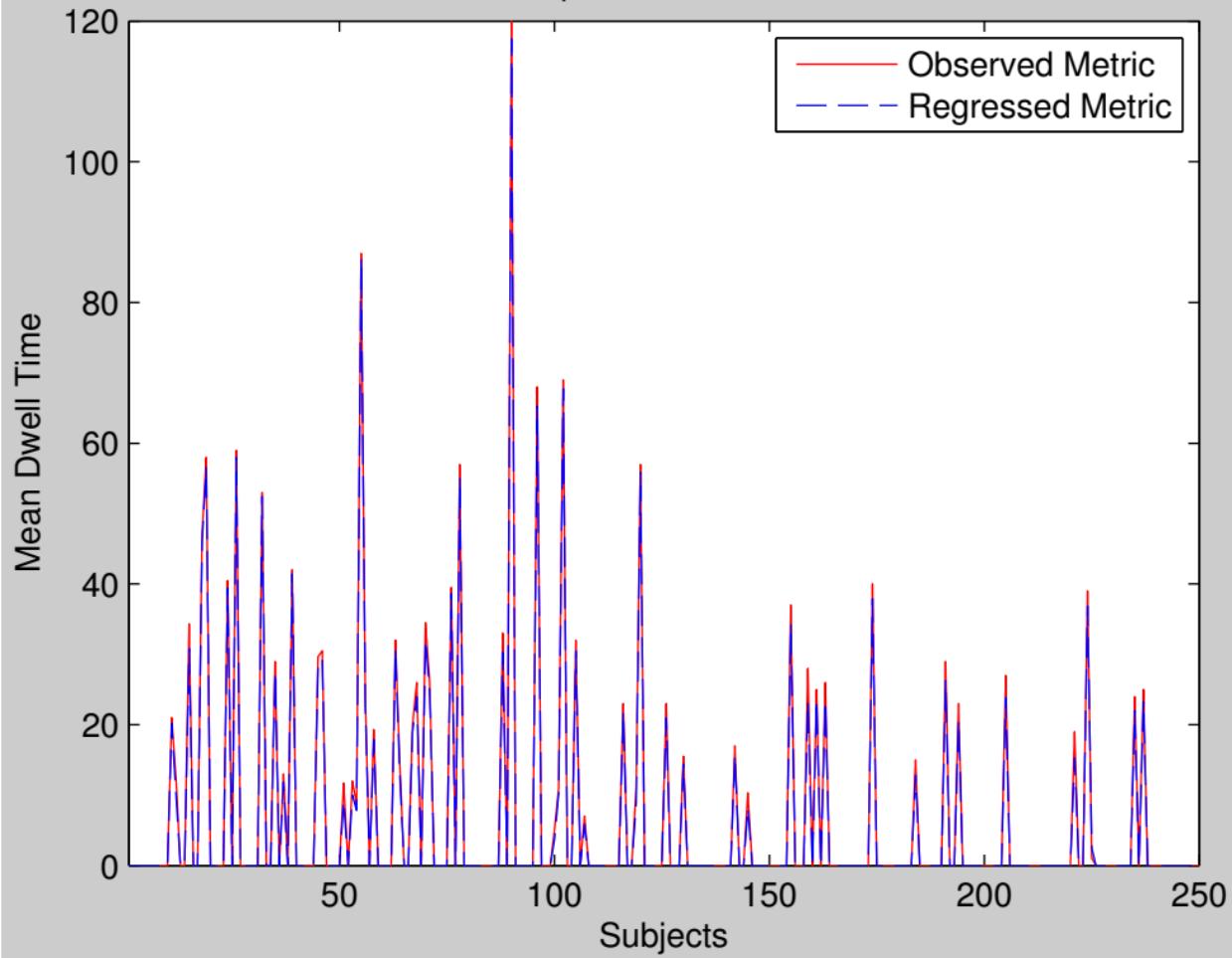
Group 27 State 1 : MDT



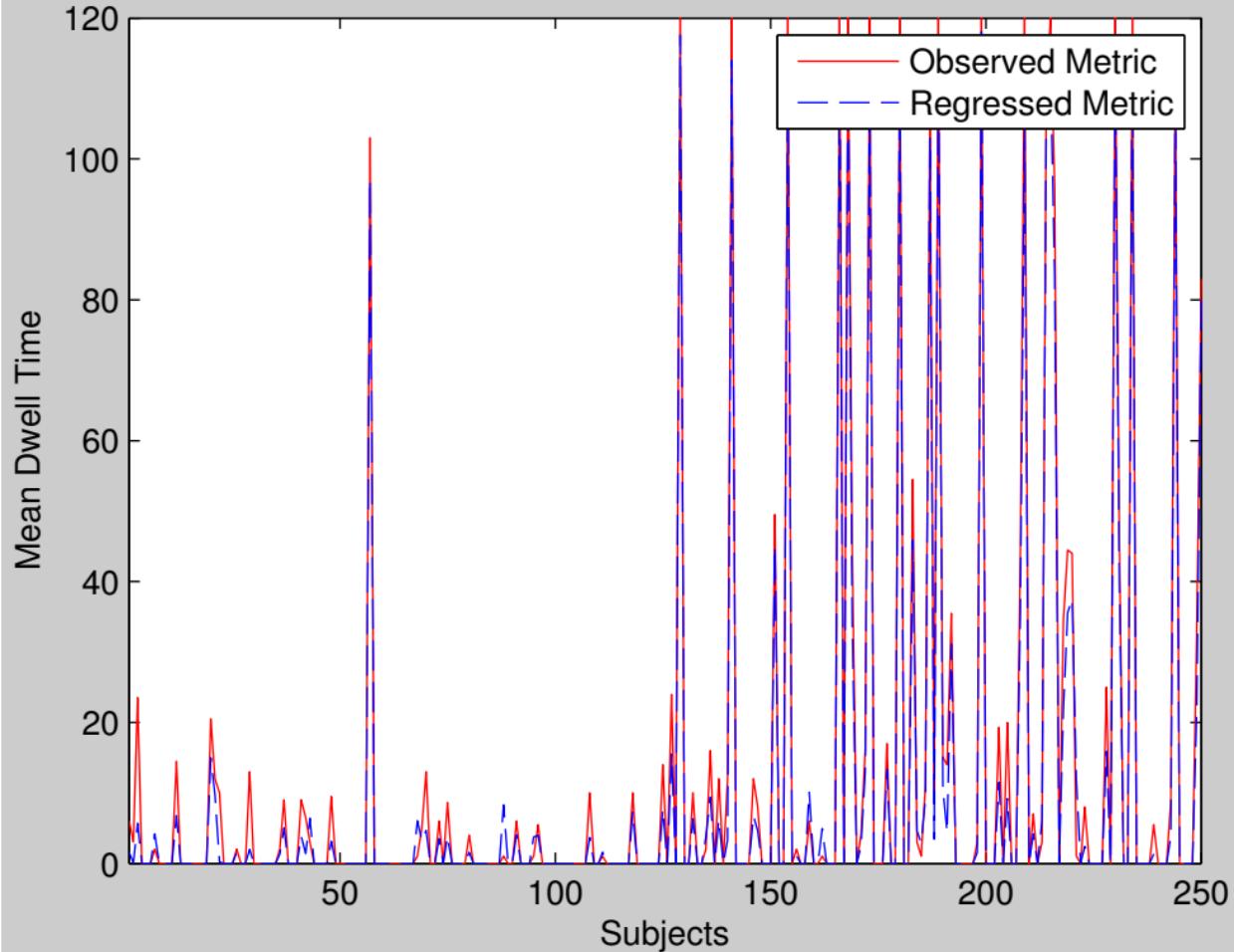
Group 27 State 2 : MDT



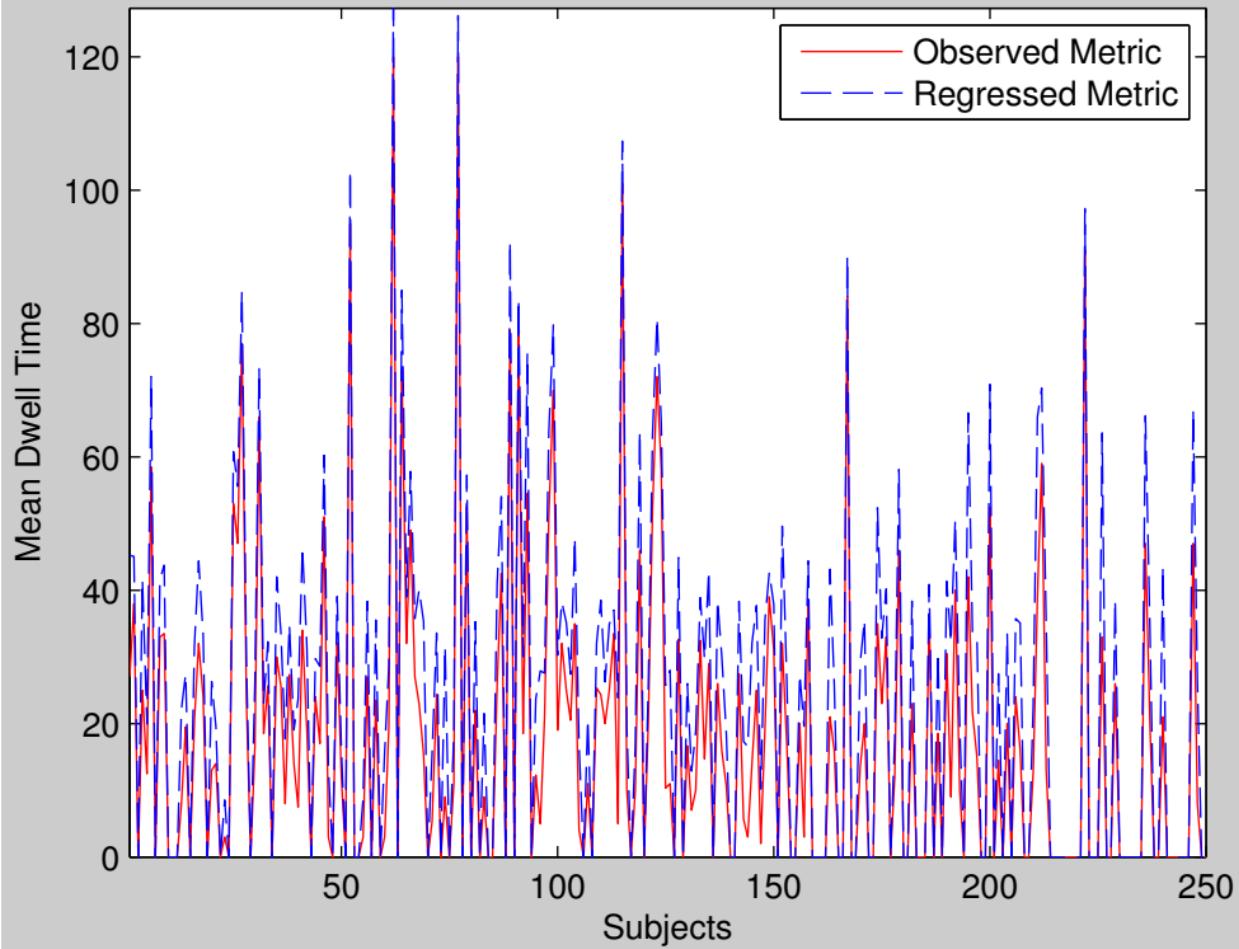
Group 27 State 3 : MDT



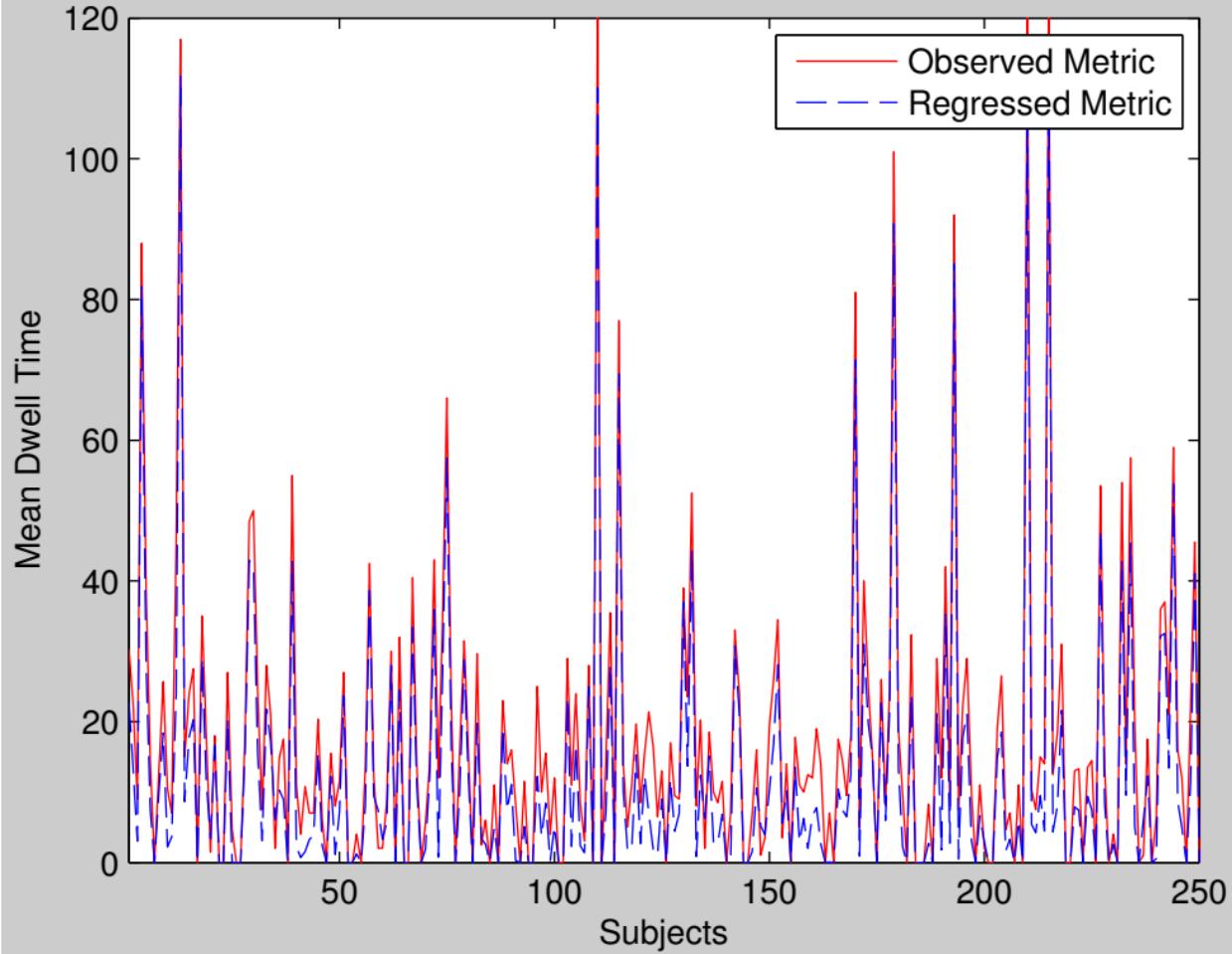
Group 27 State 4 : MDT



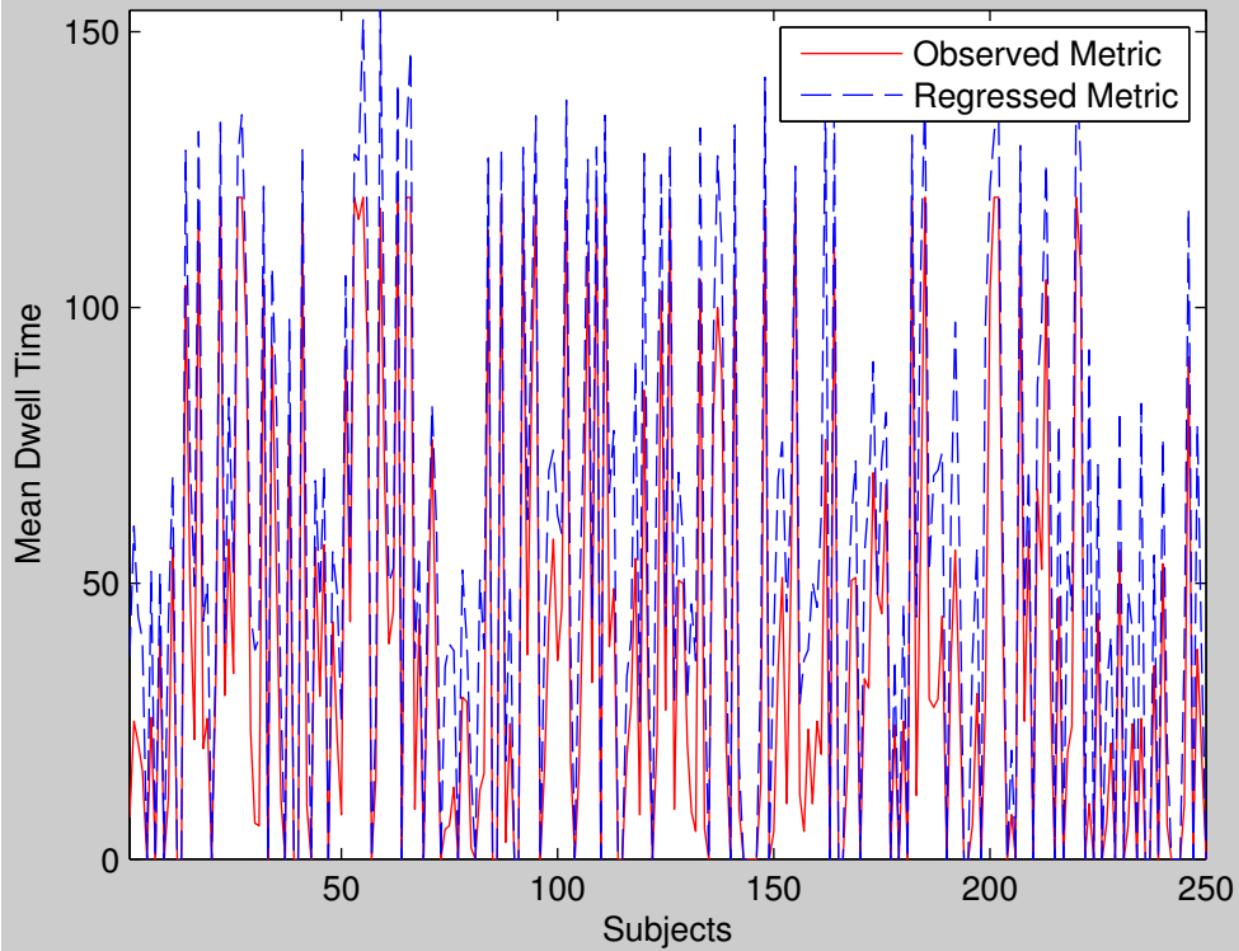
Group 27 State 5 : MDT



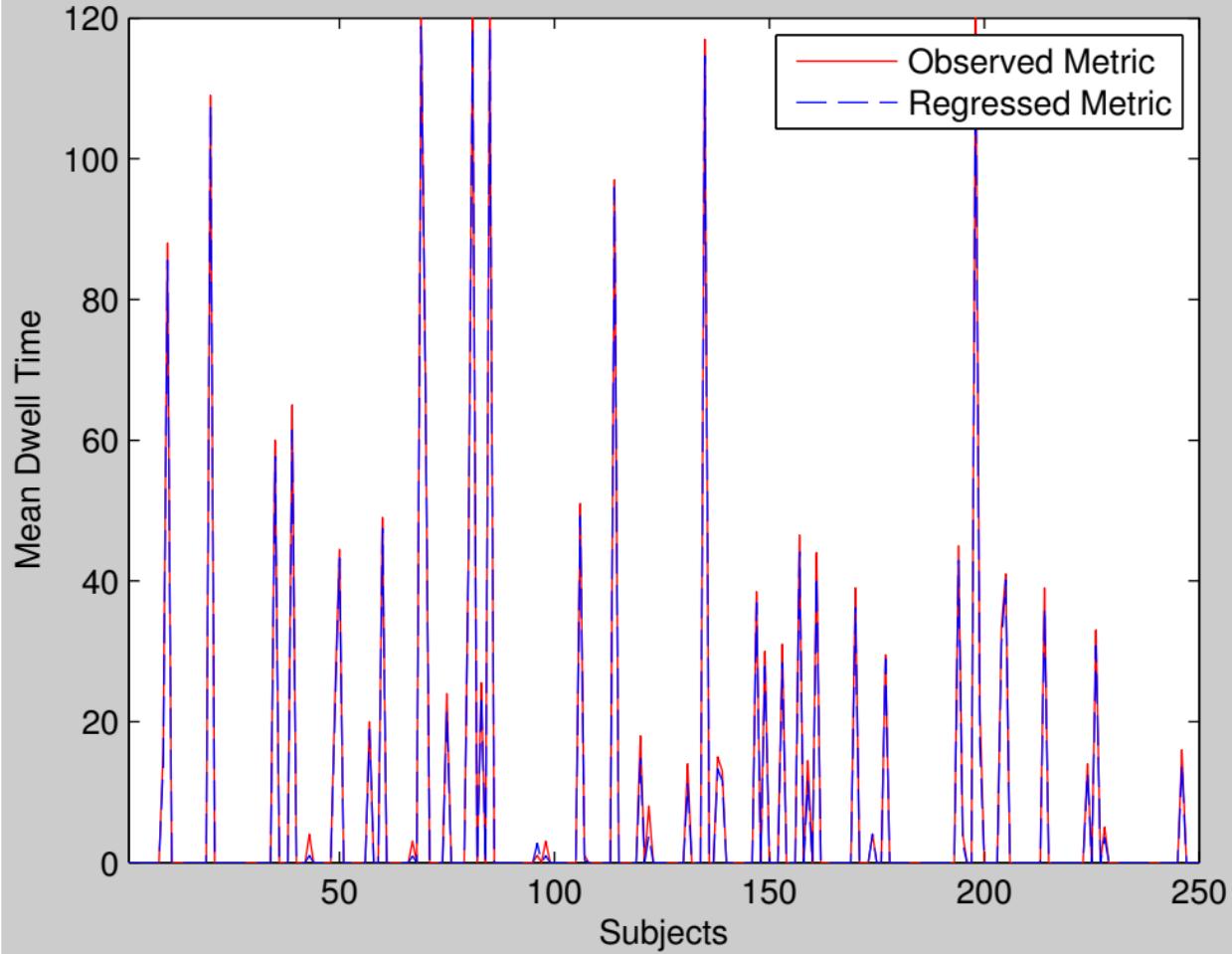
Group 28 State 1 : MDT



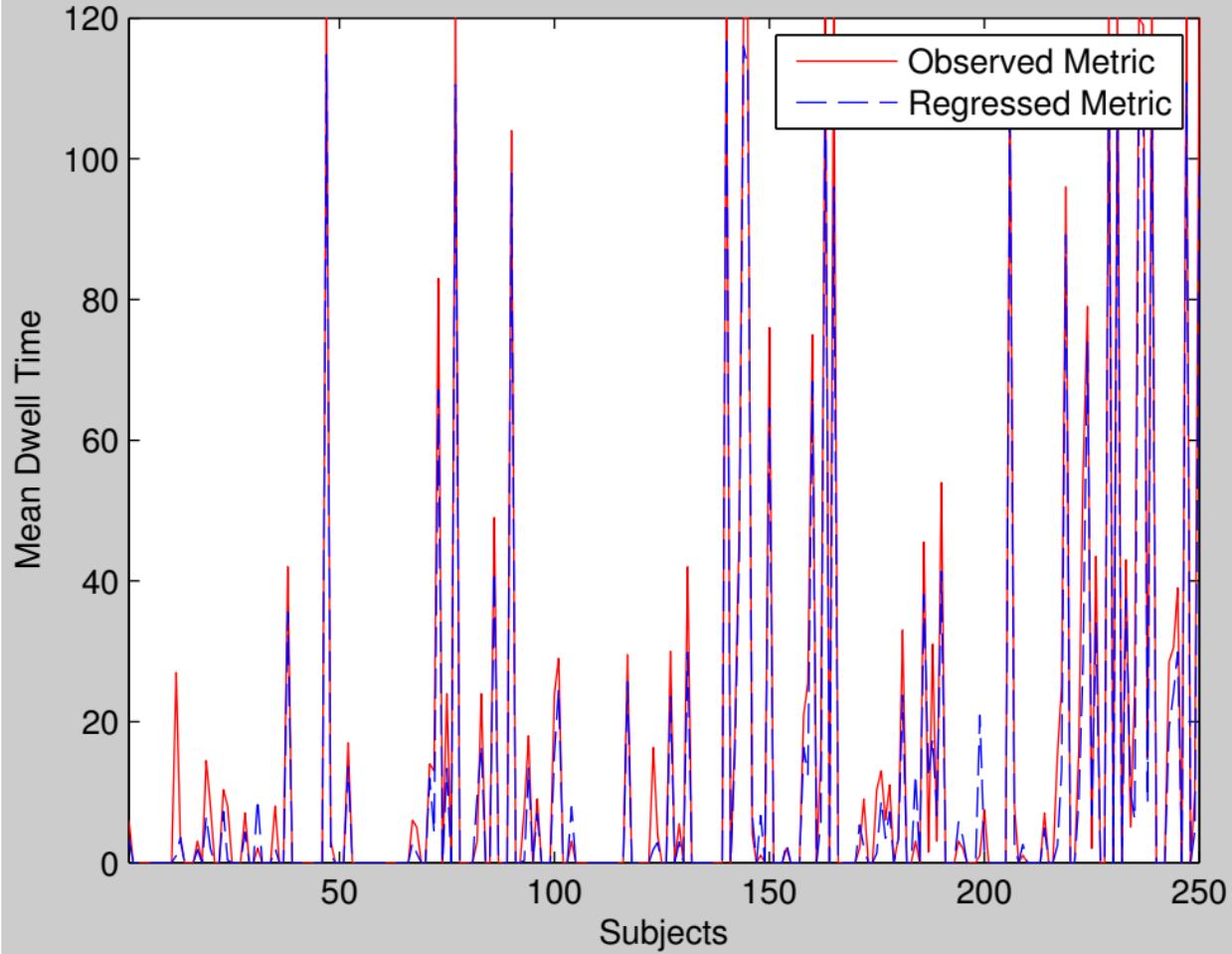
Group 28 State 2 : MDT



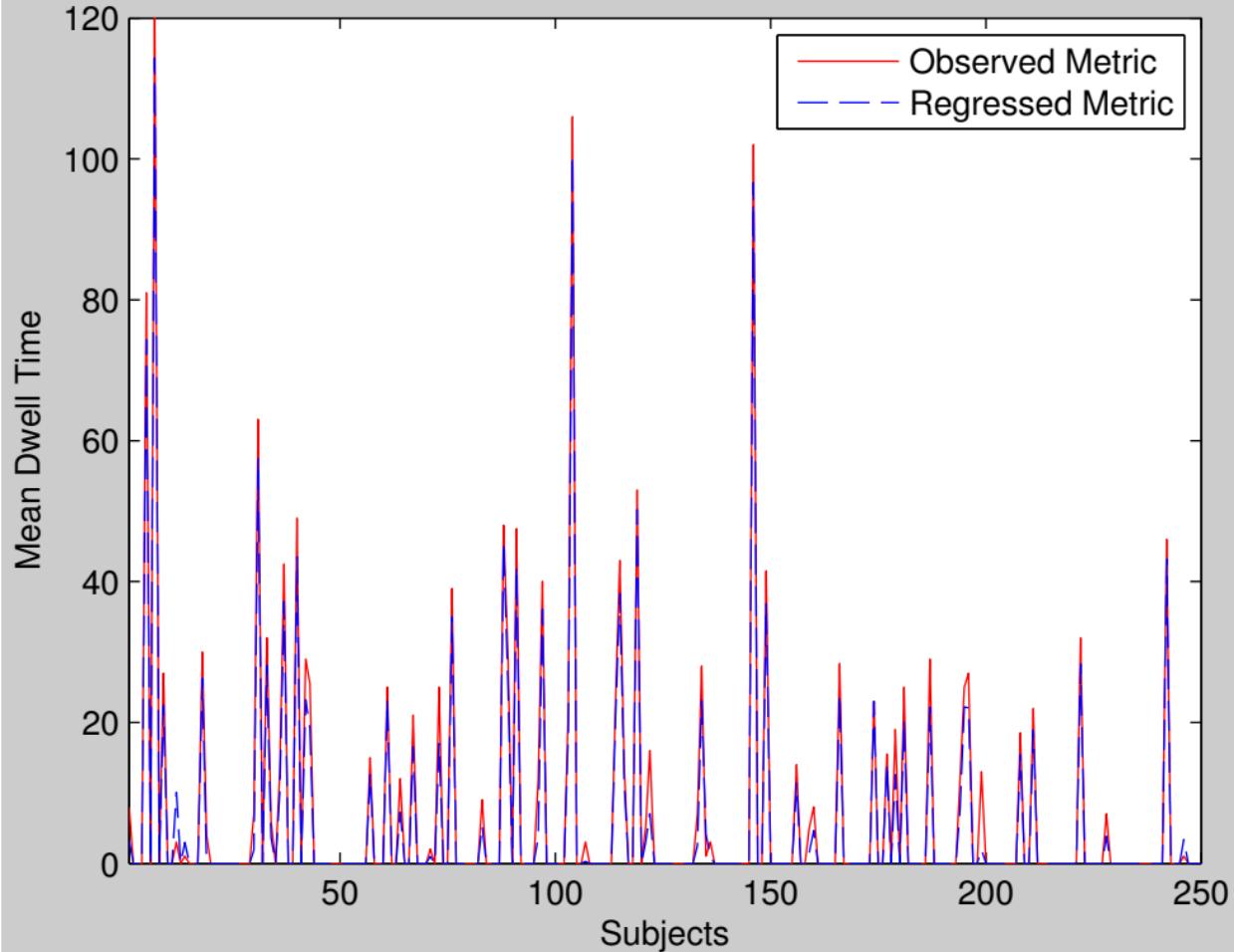
Group 28 State 3 : MDT



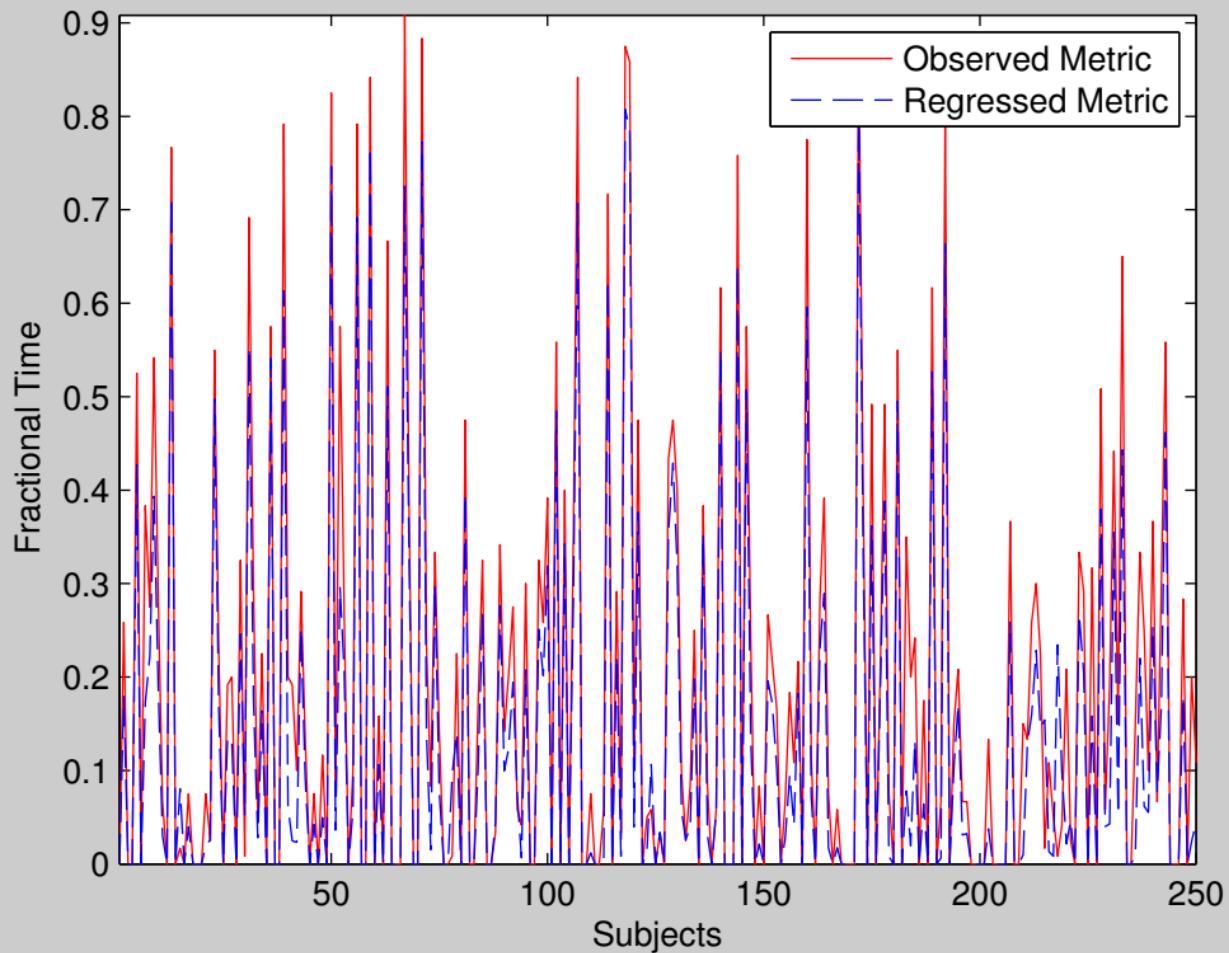
Group 28 State 4 : MDT



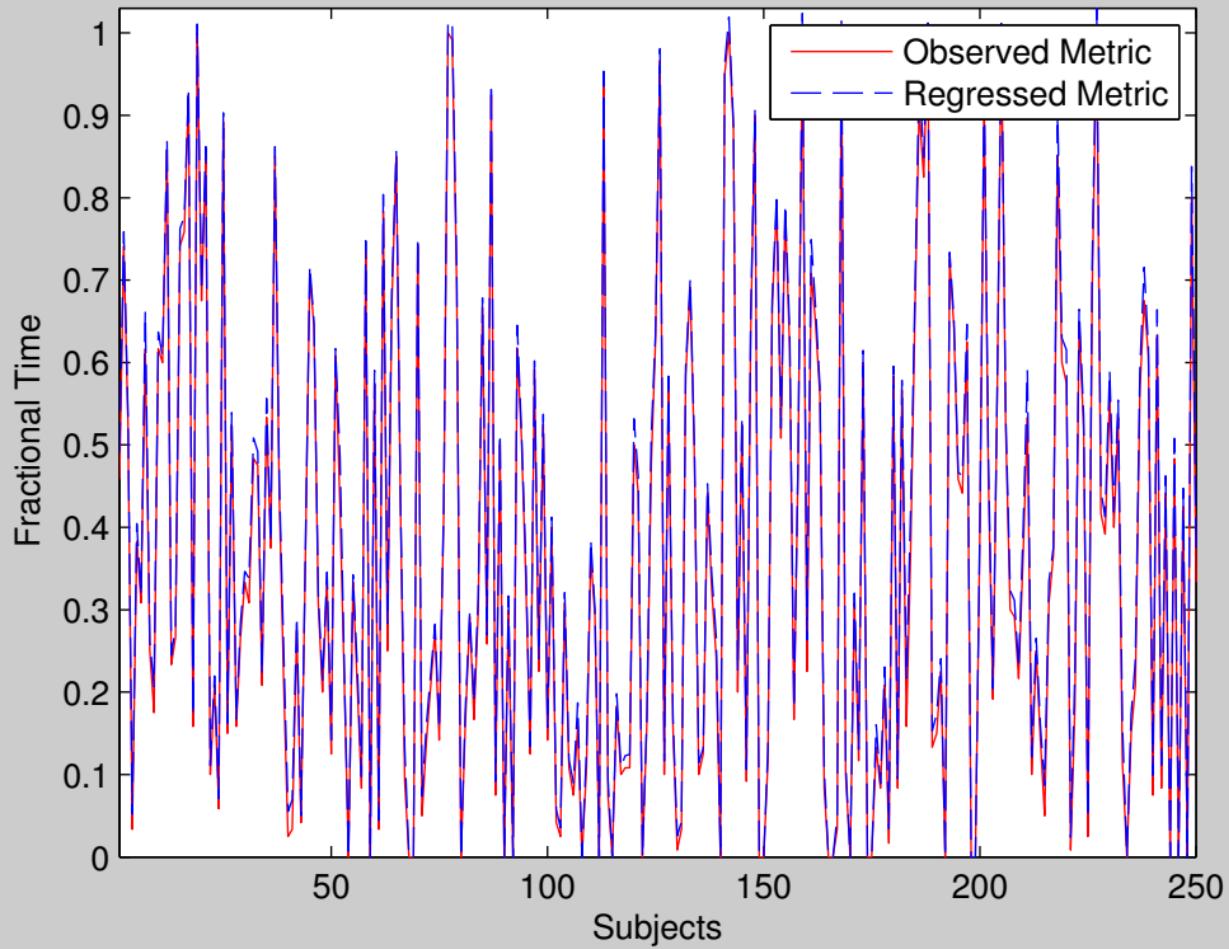
Group 28 State 5 : MDT



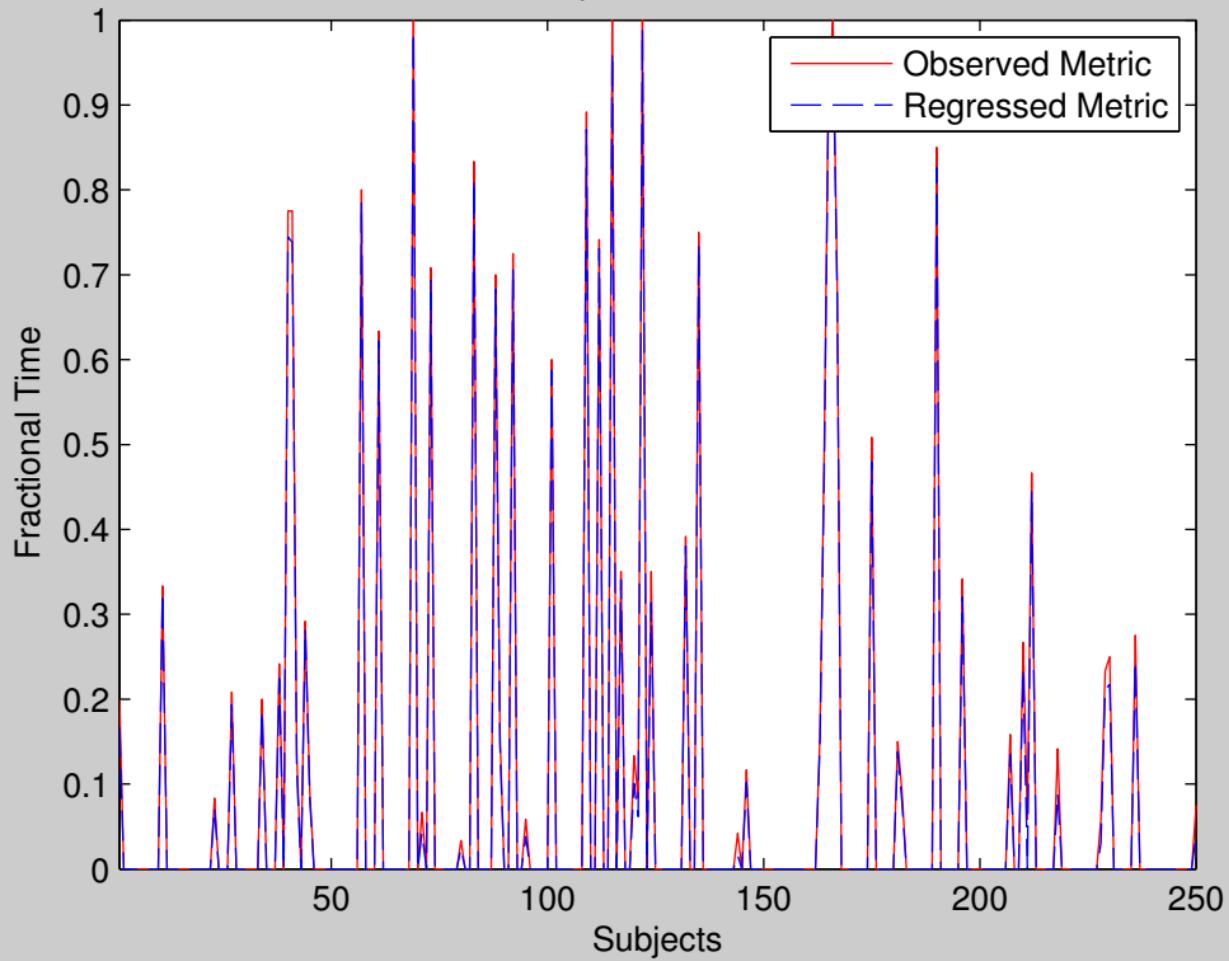
Group 1 State 1 : FT



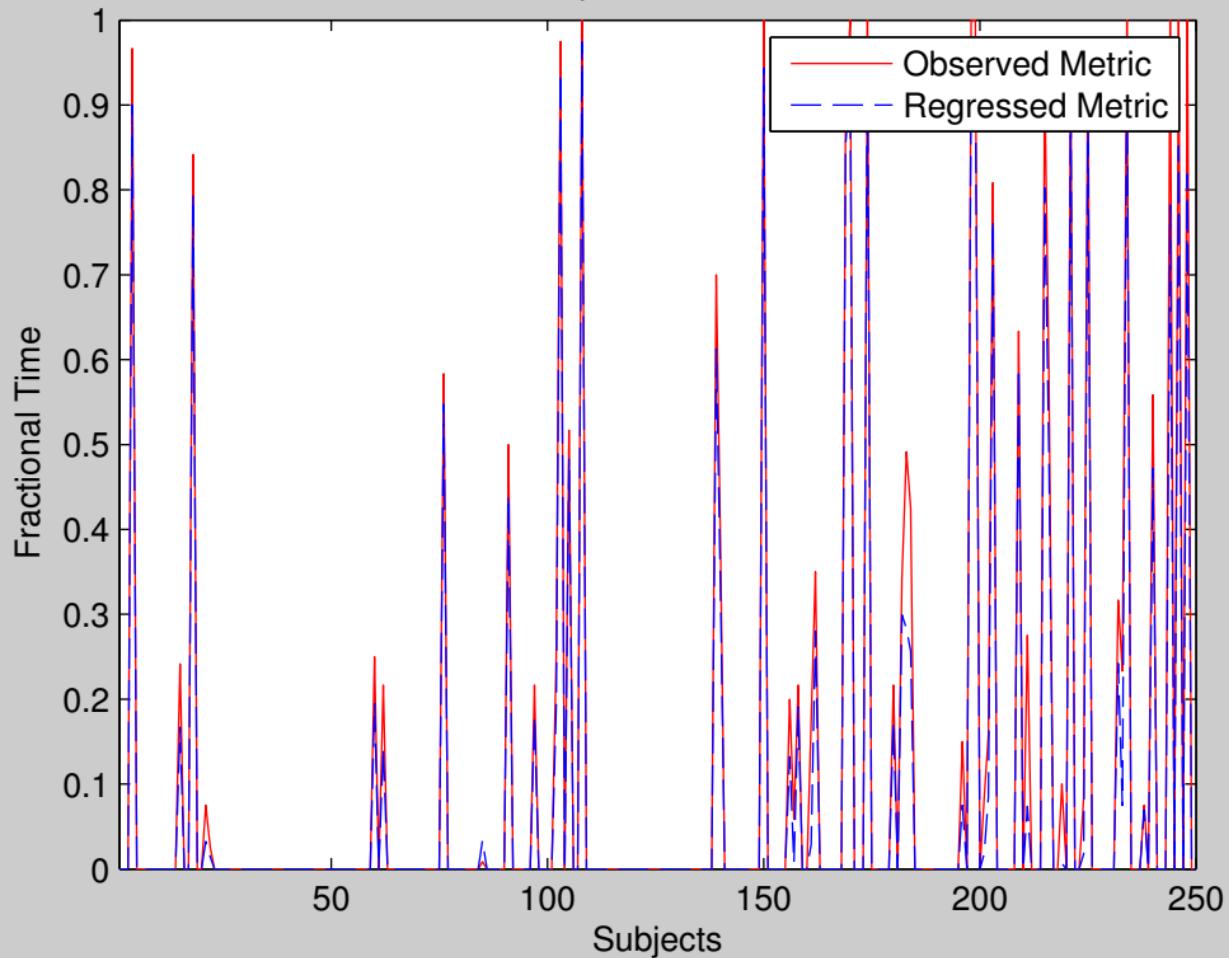
Group 1 State 2 : FT



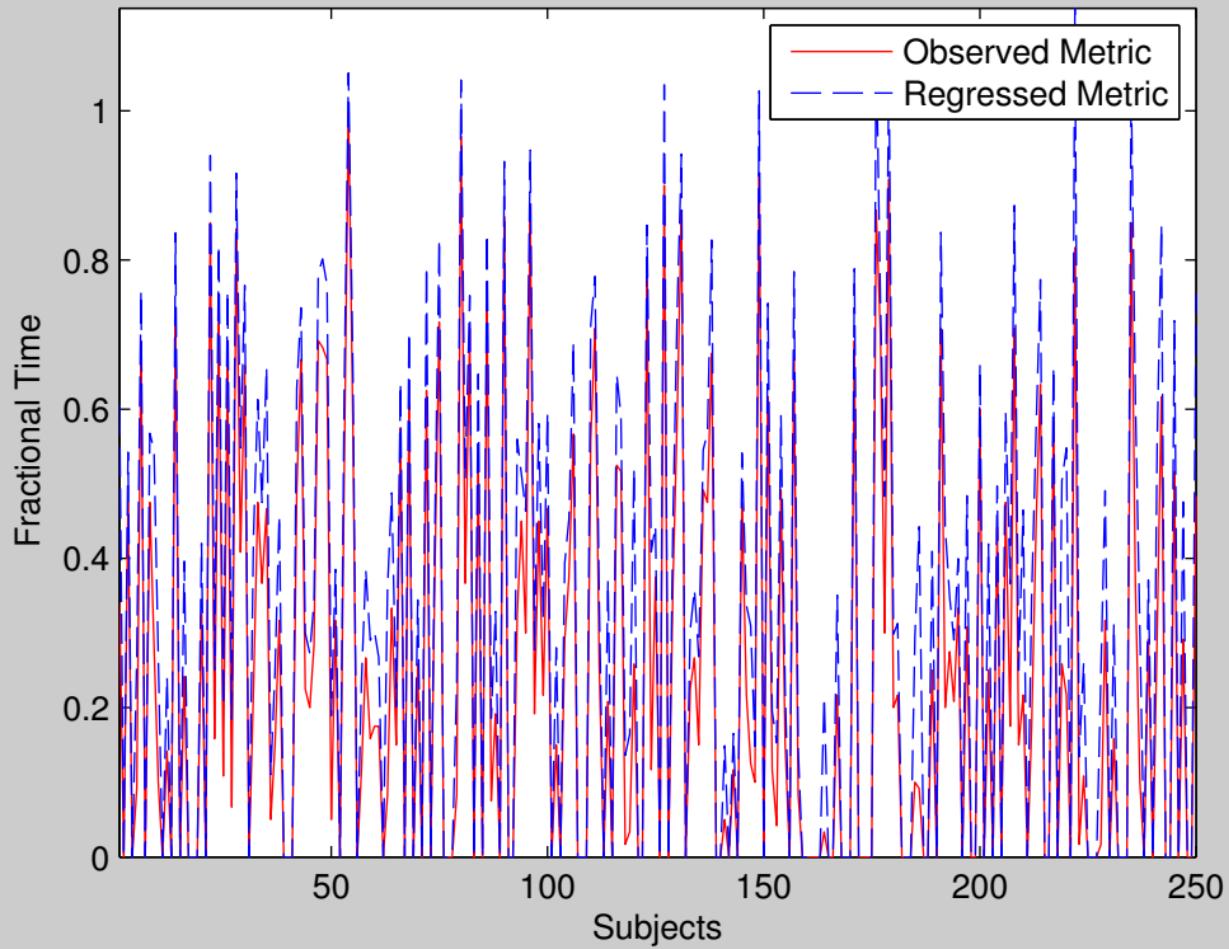
Group 1 State 3 : FT



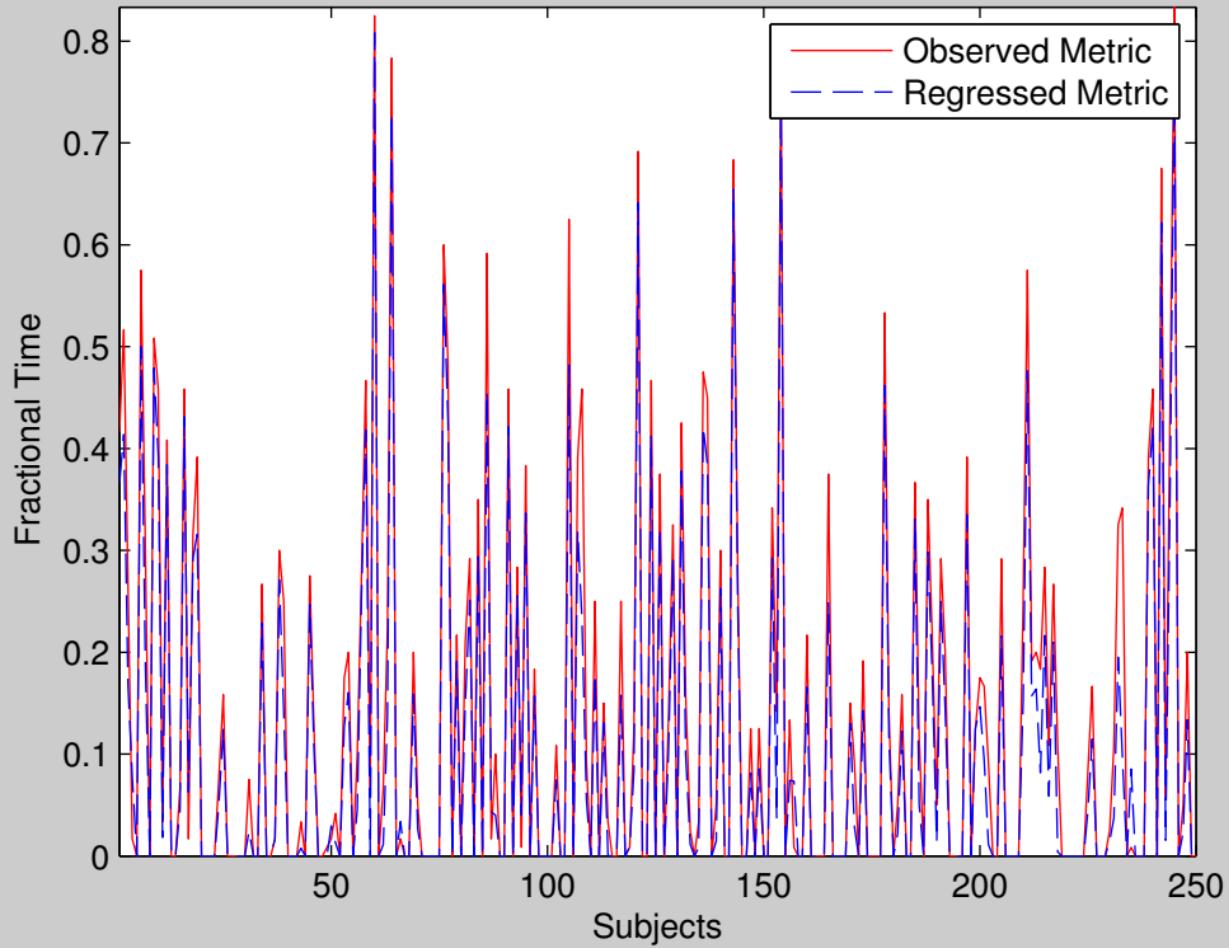
Group 1 State 4 : FT



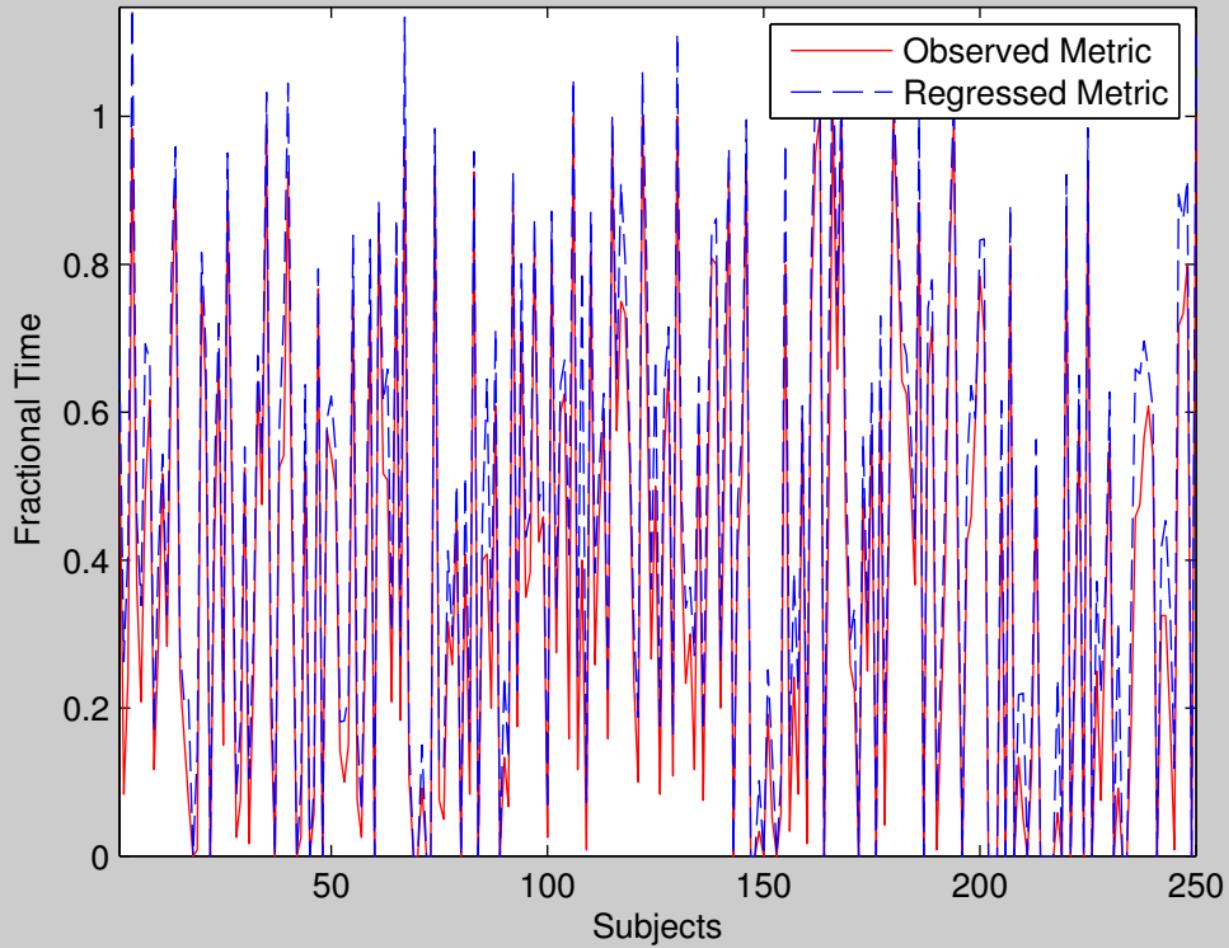
Group 1 State 5 : FT



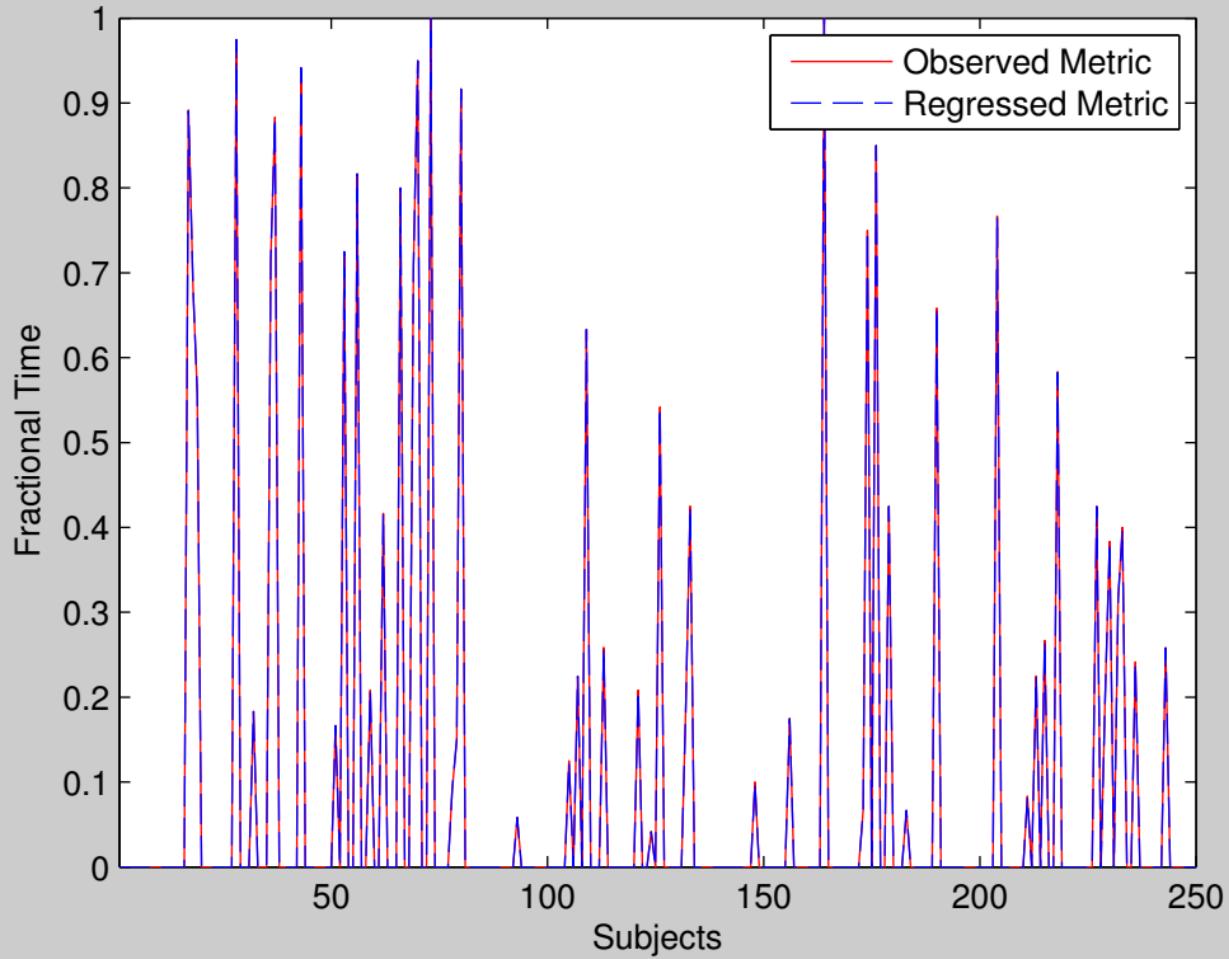
Group 2 State 1 : FT



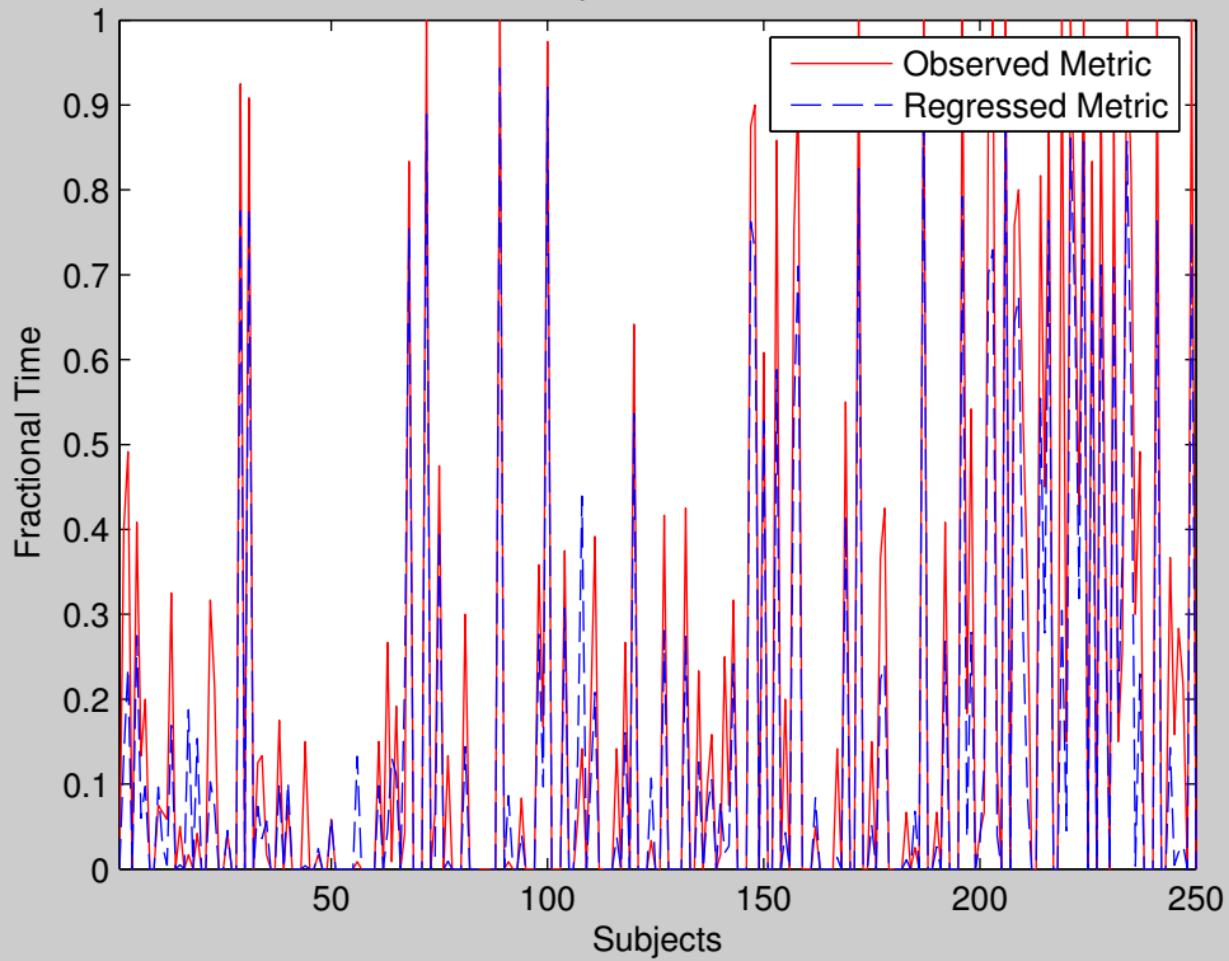
Group 2 State 2 : FT



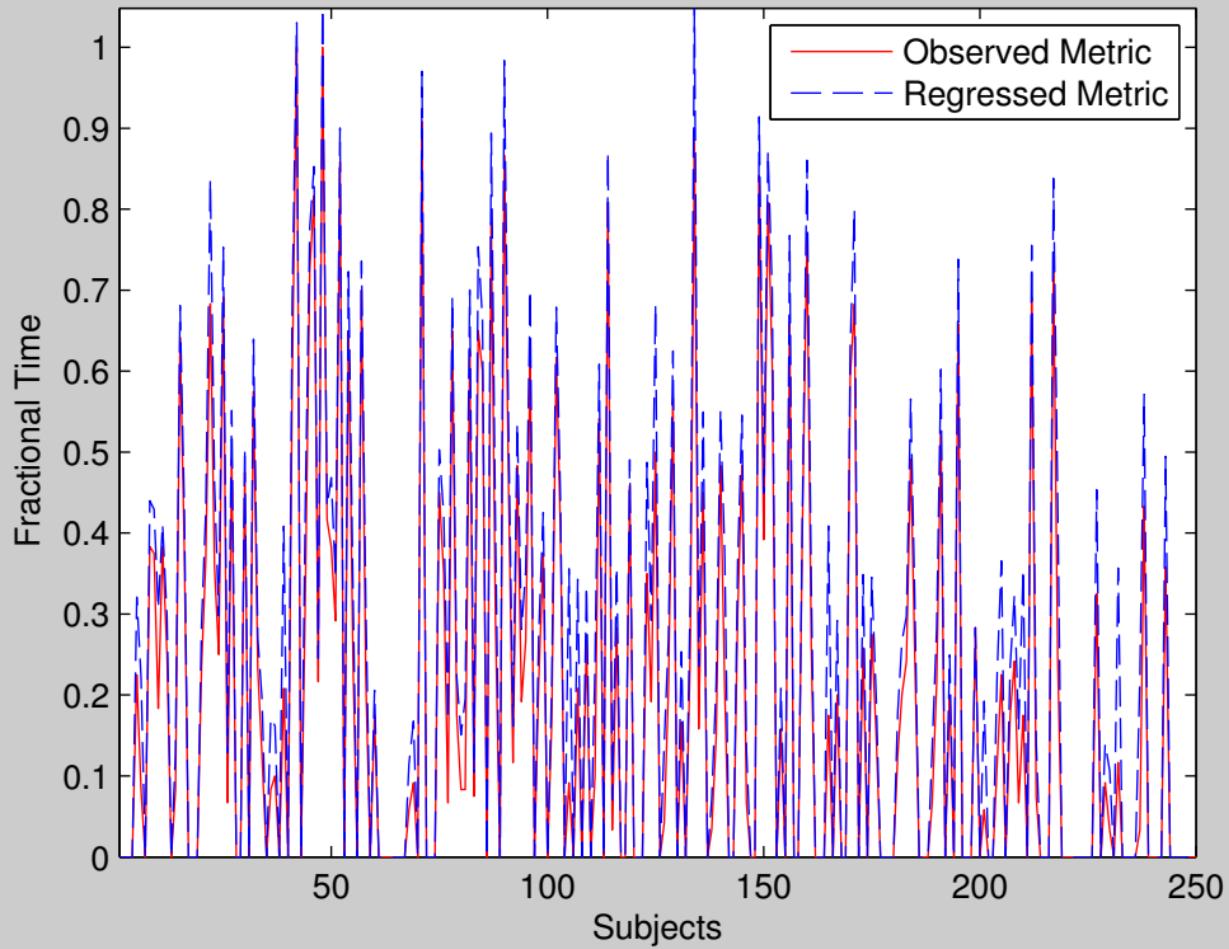
Group 2 State 3 : FT



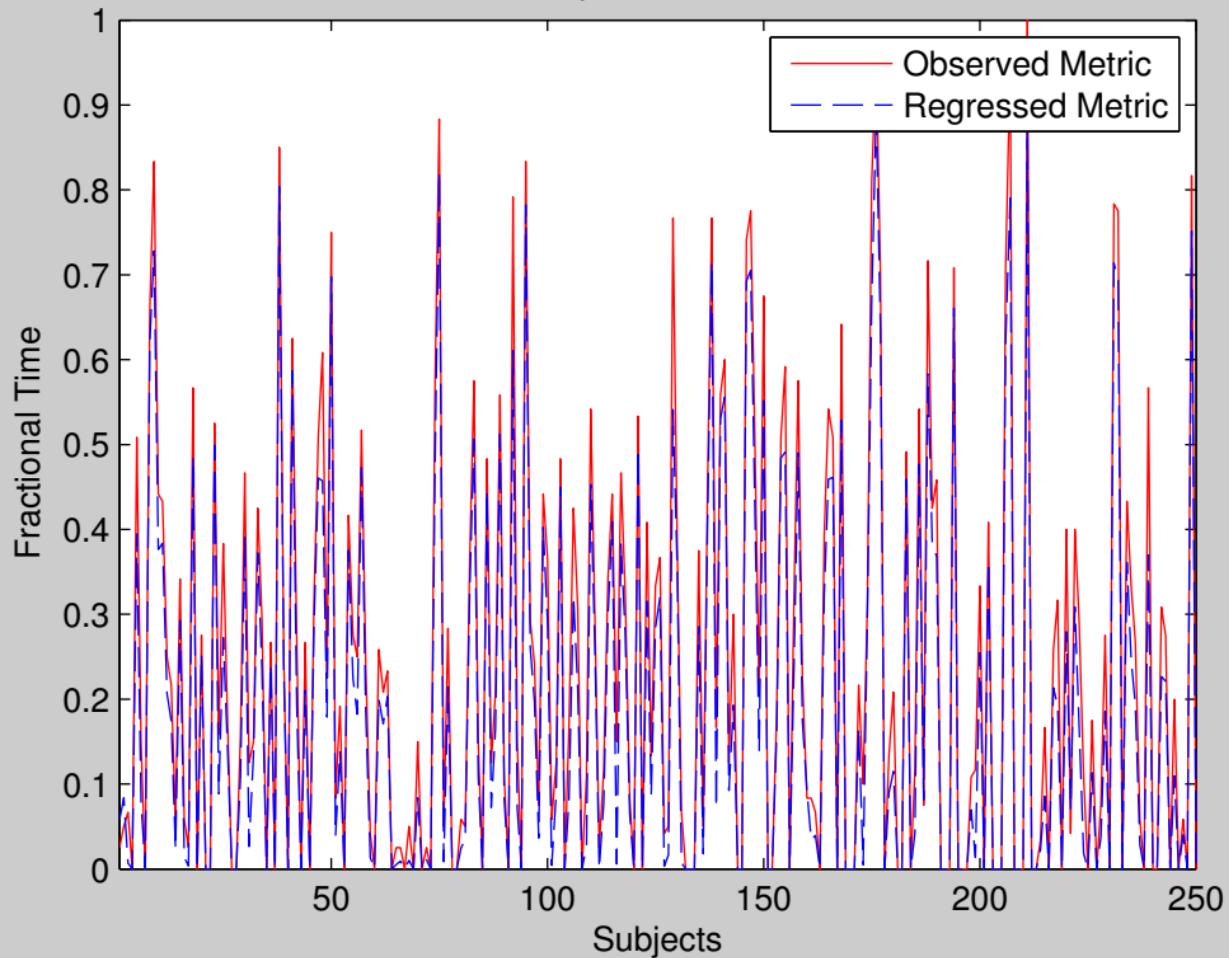
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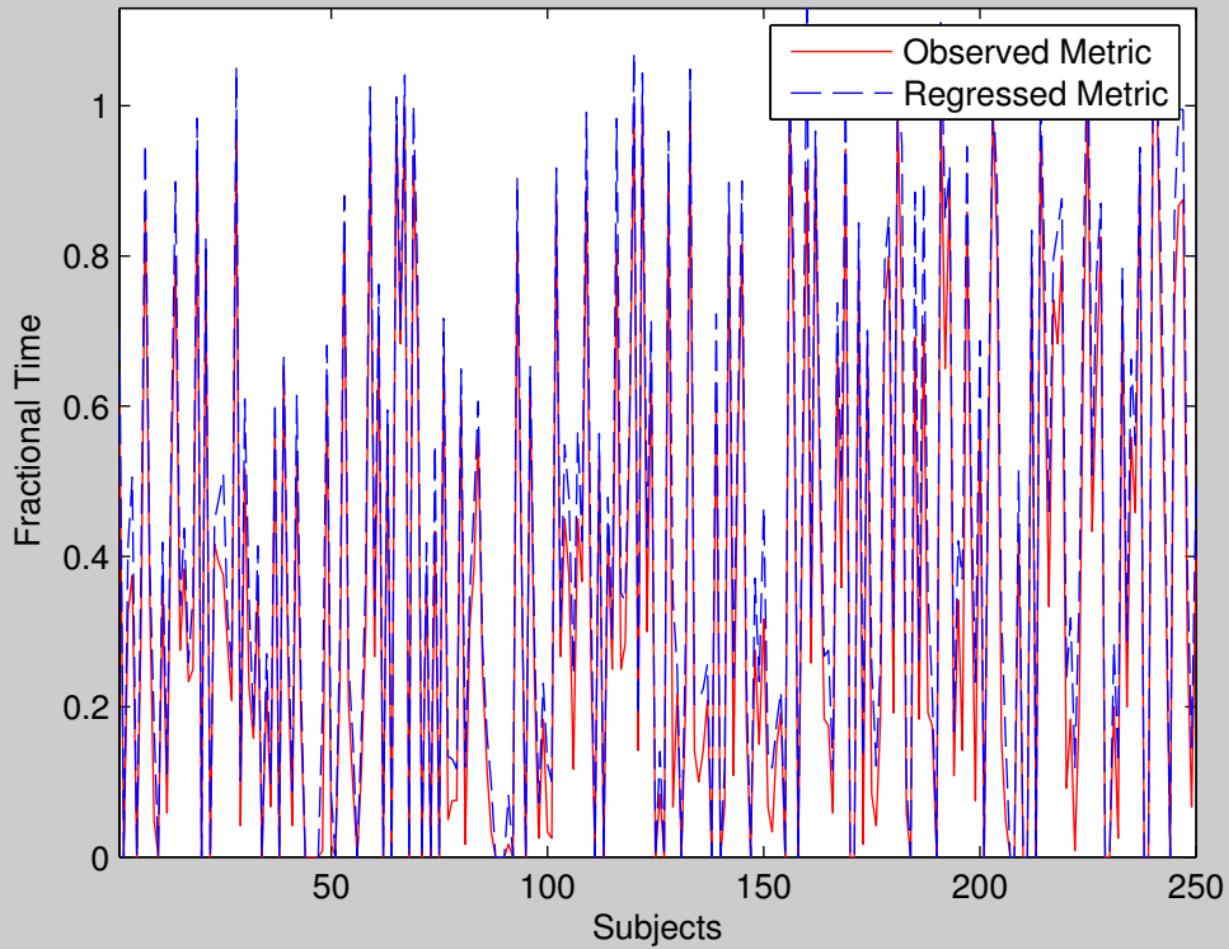
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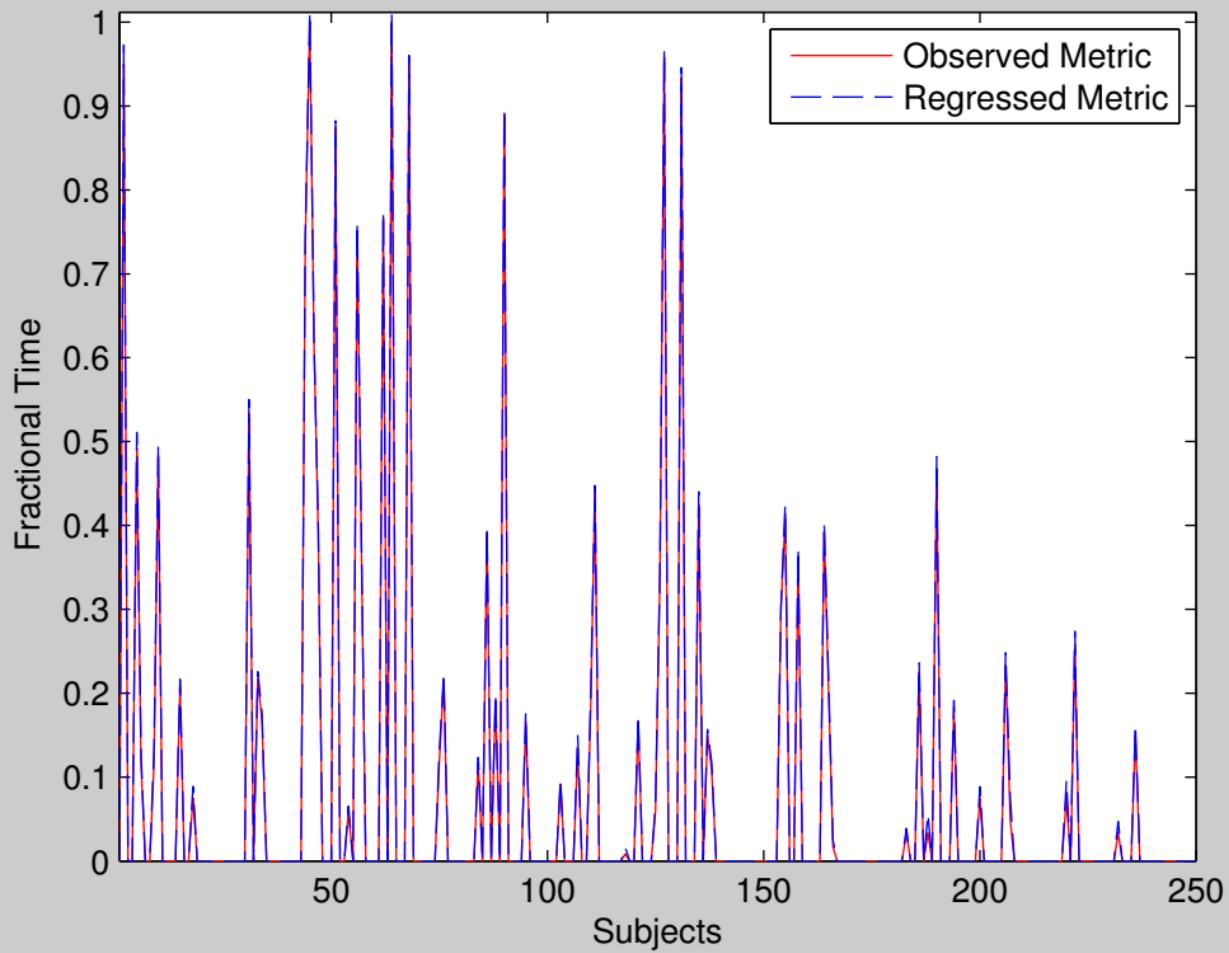
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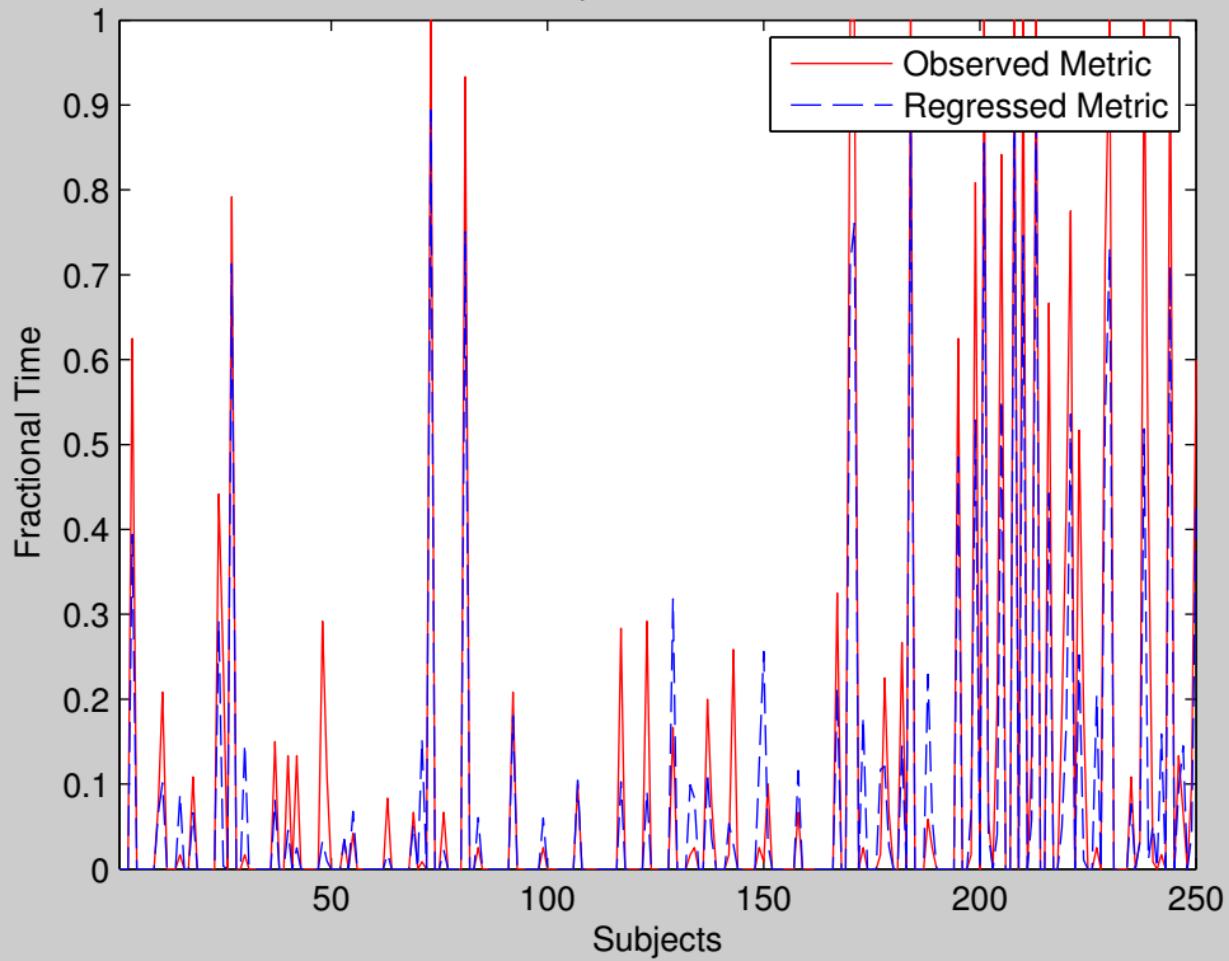
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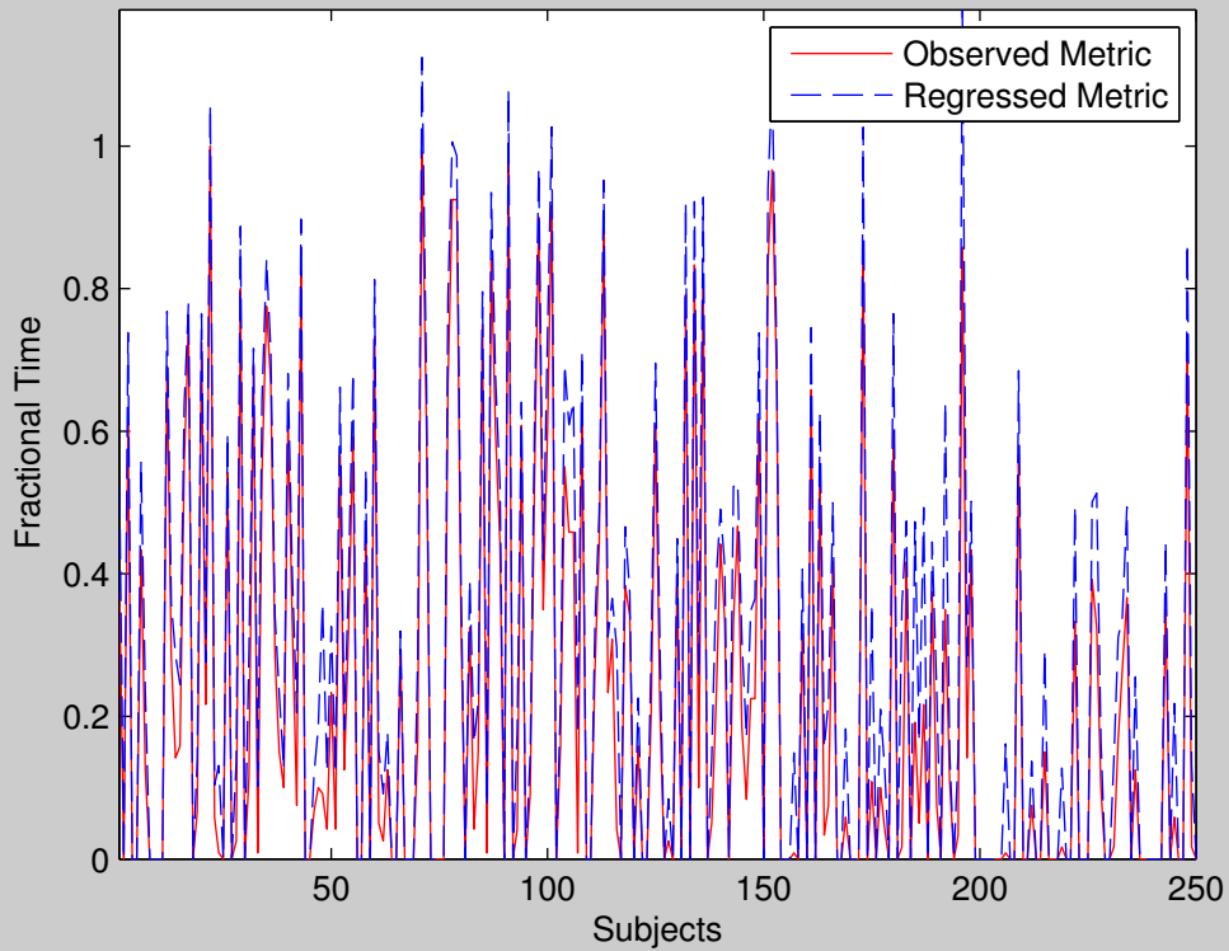
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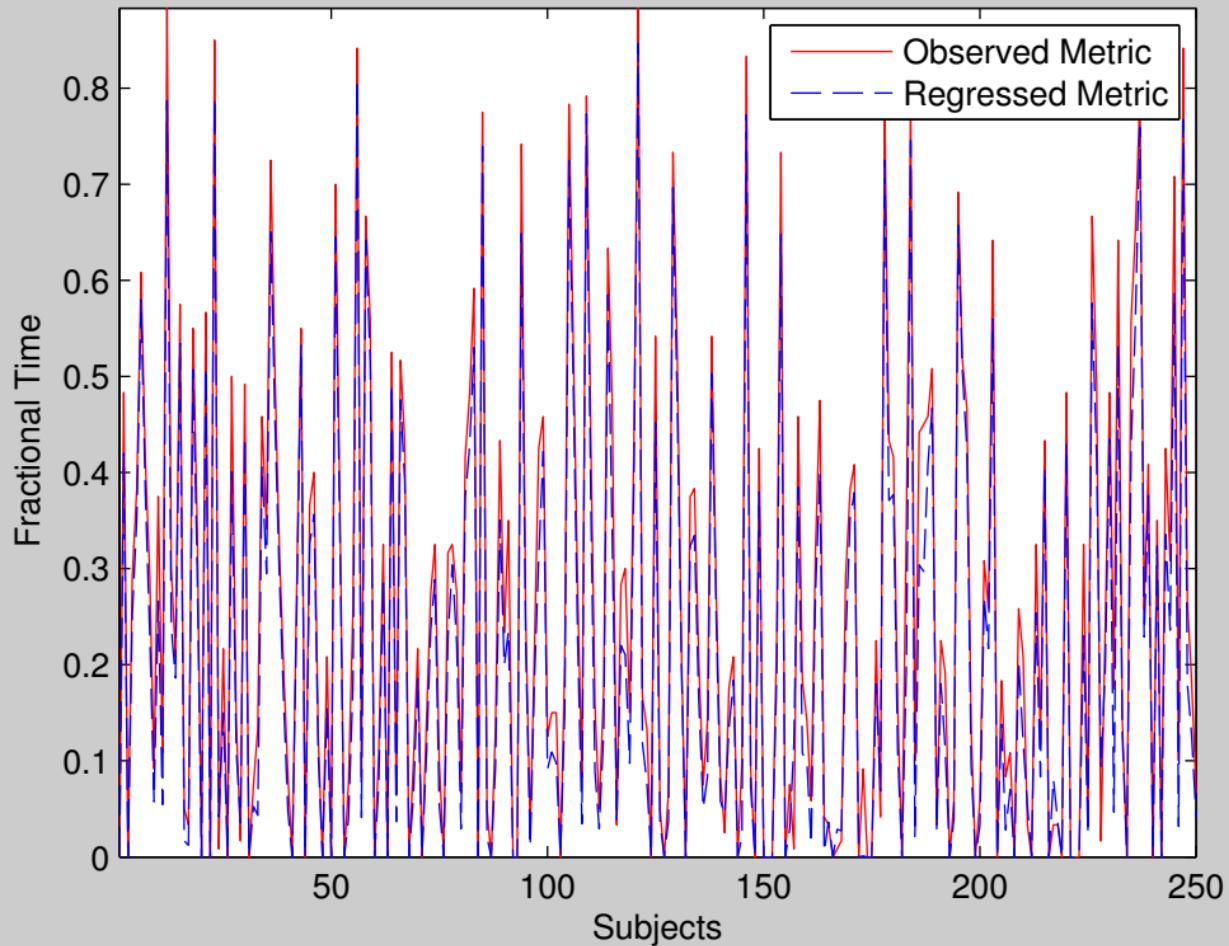
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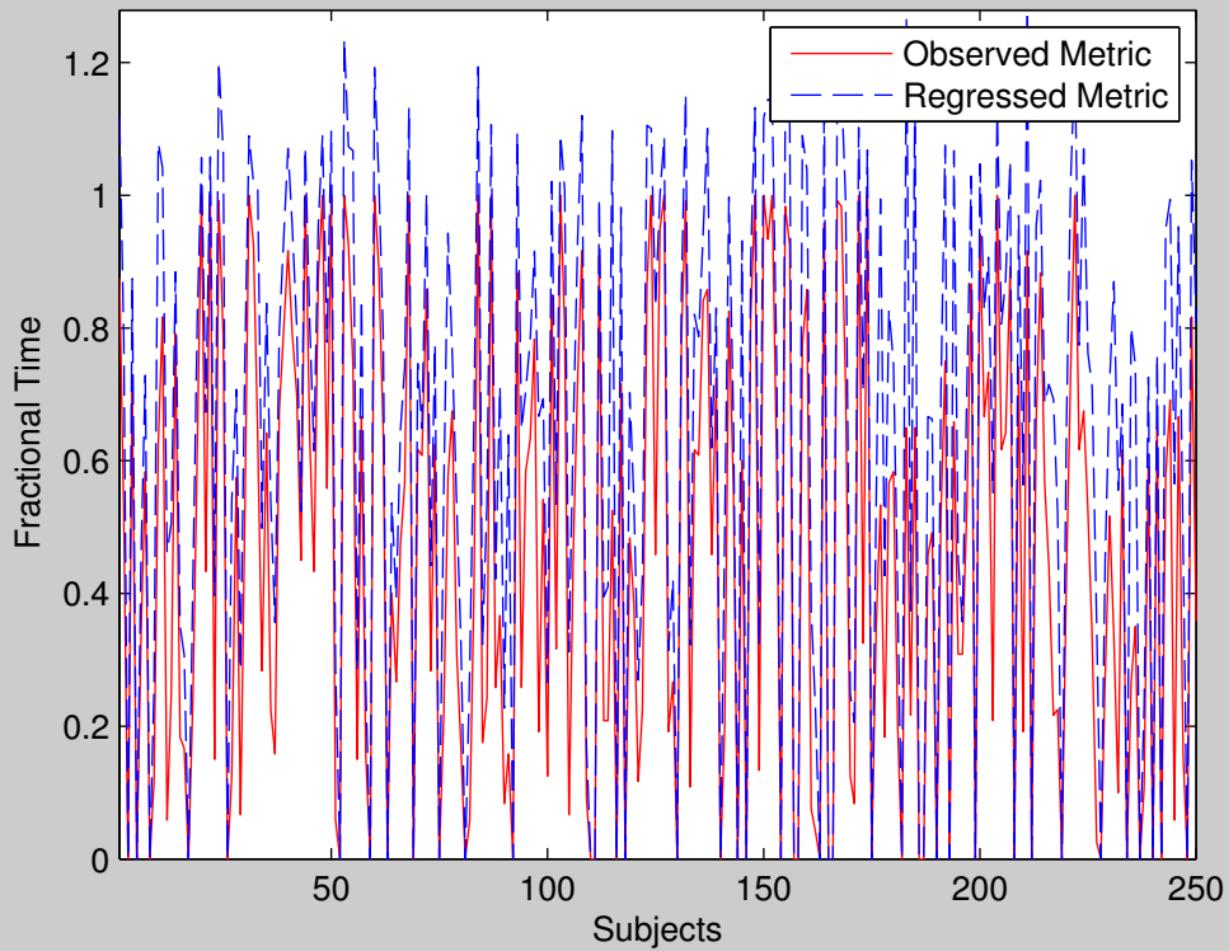
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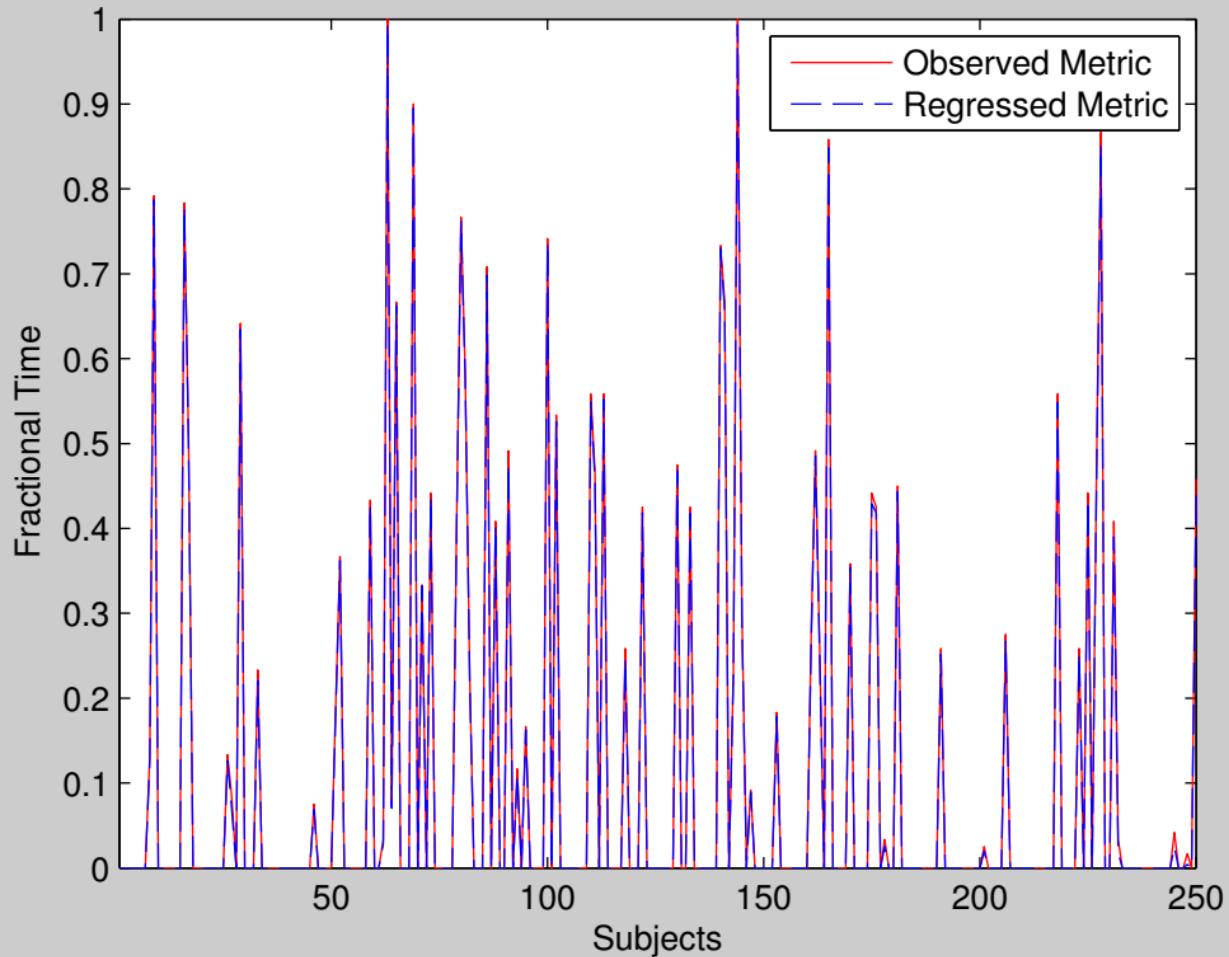
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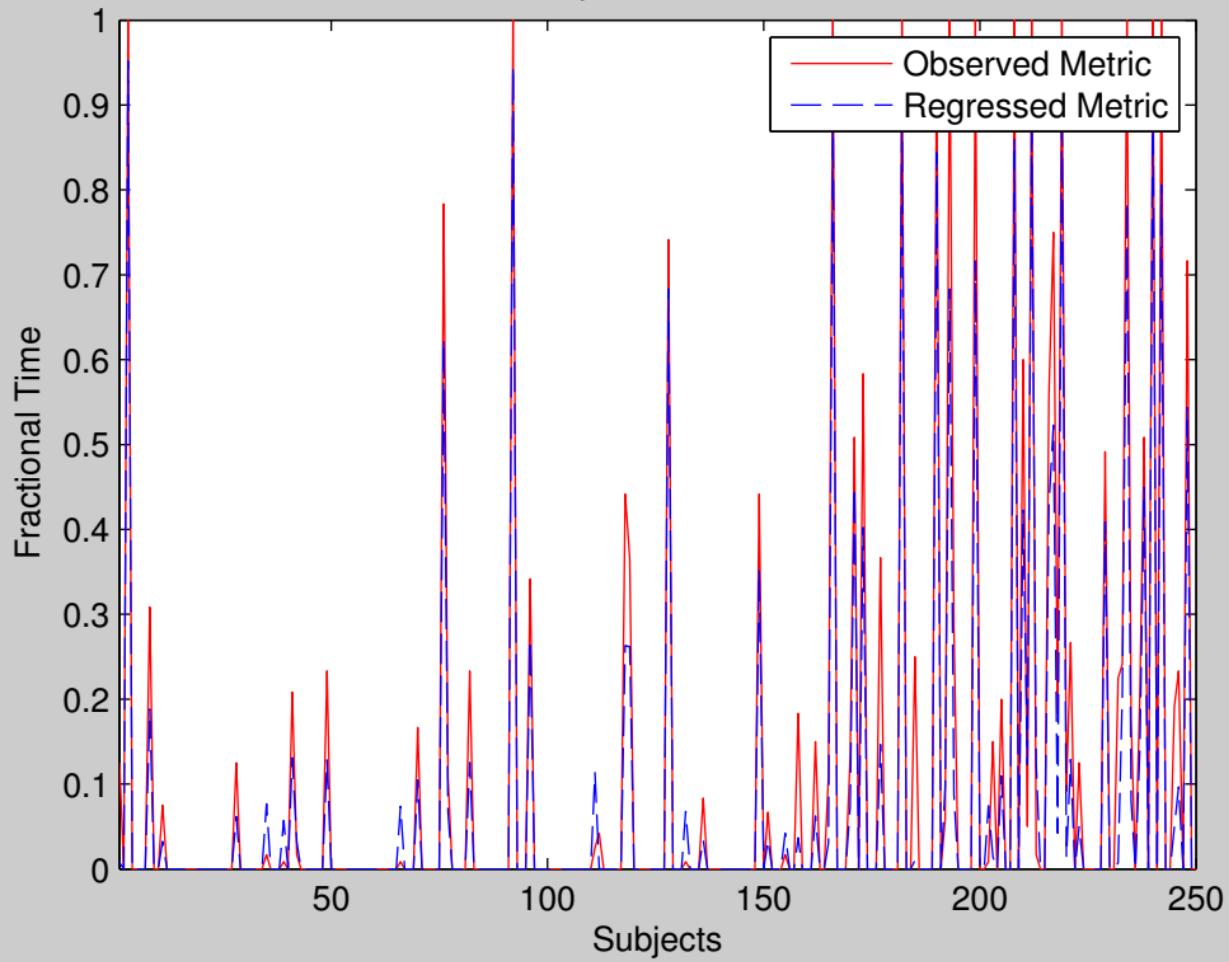
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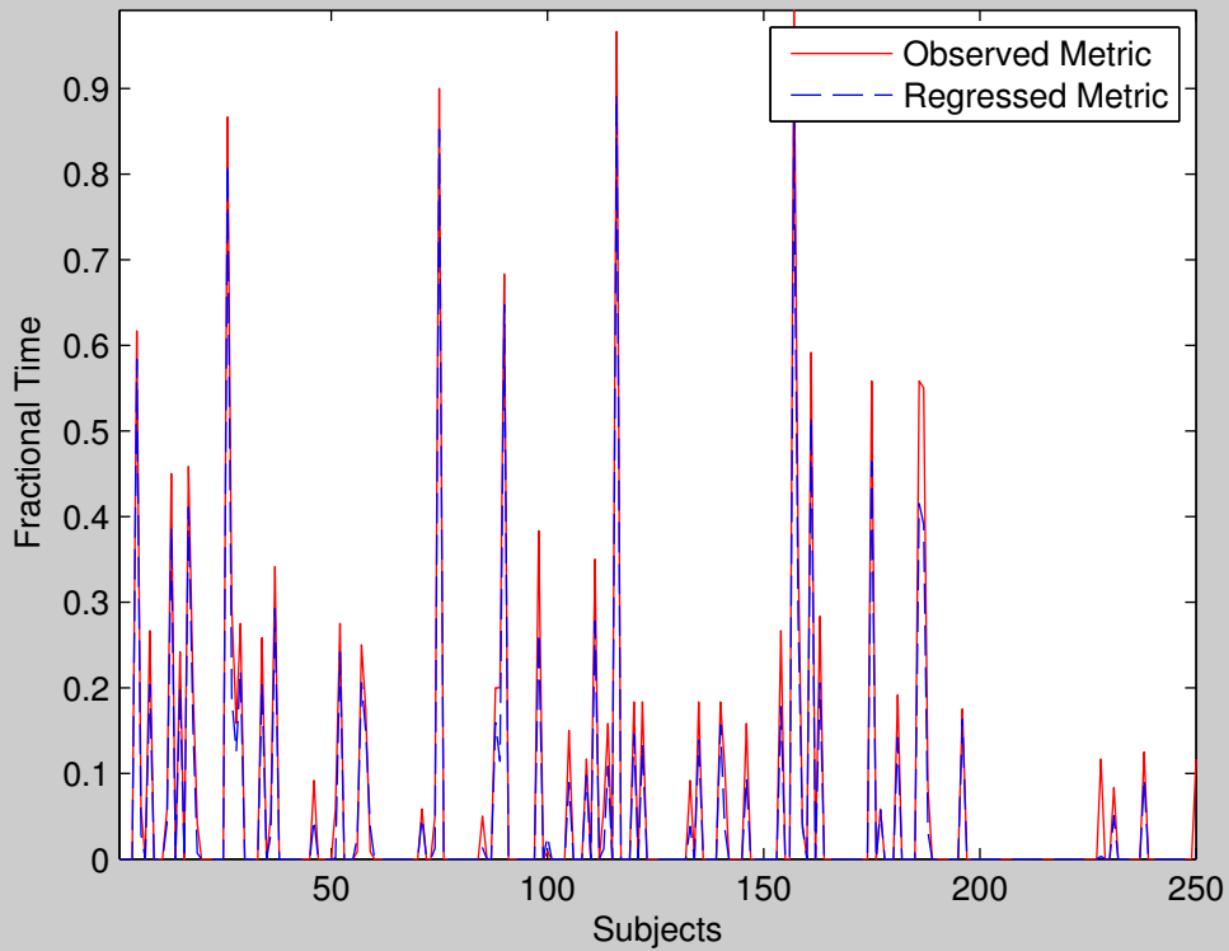
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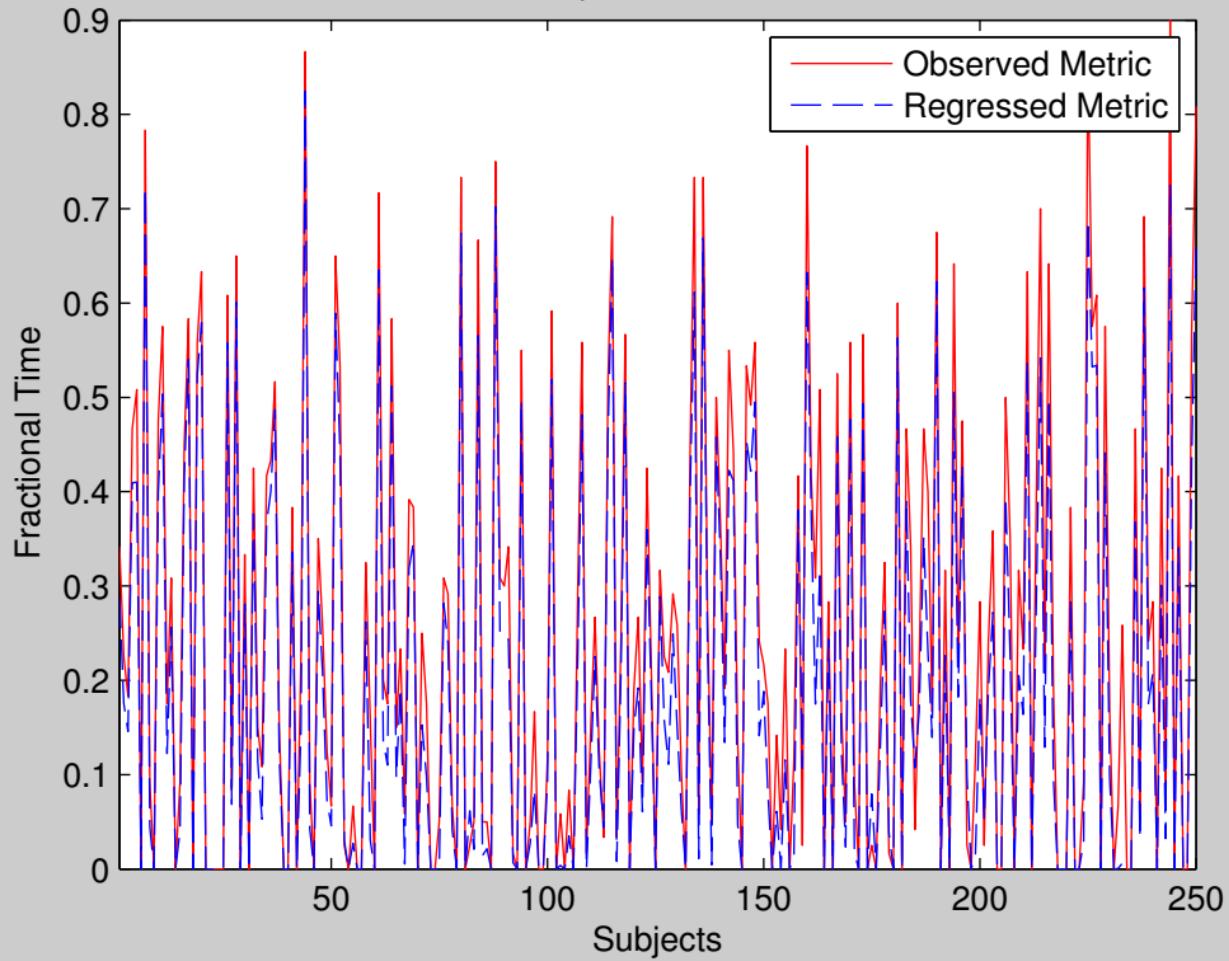
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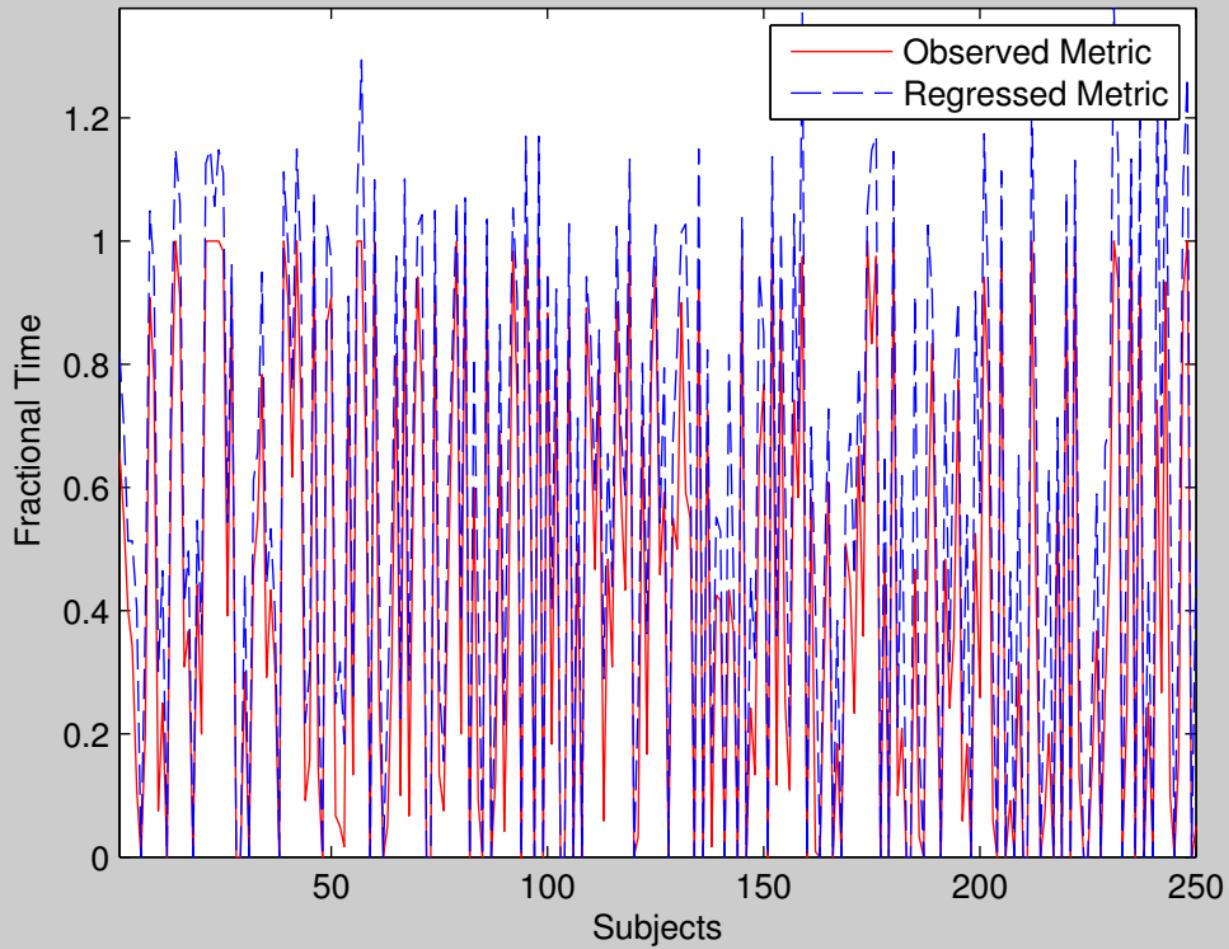
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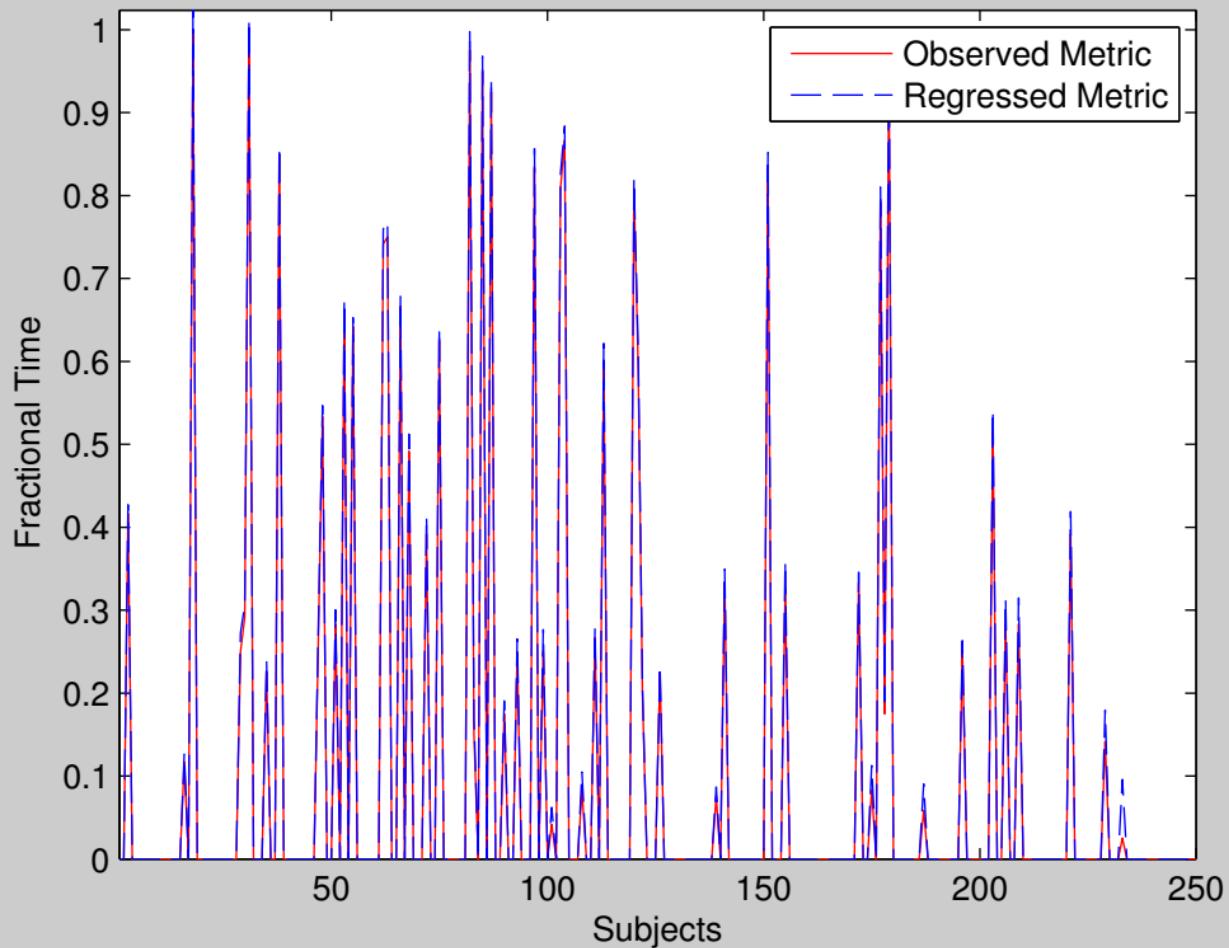
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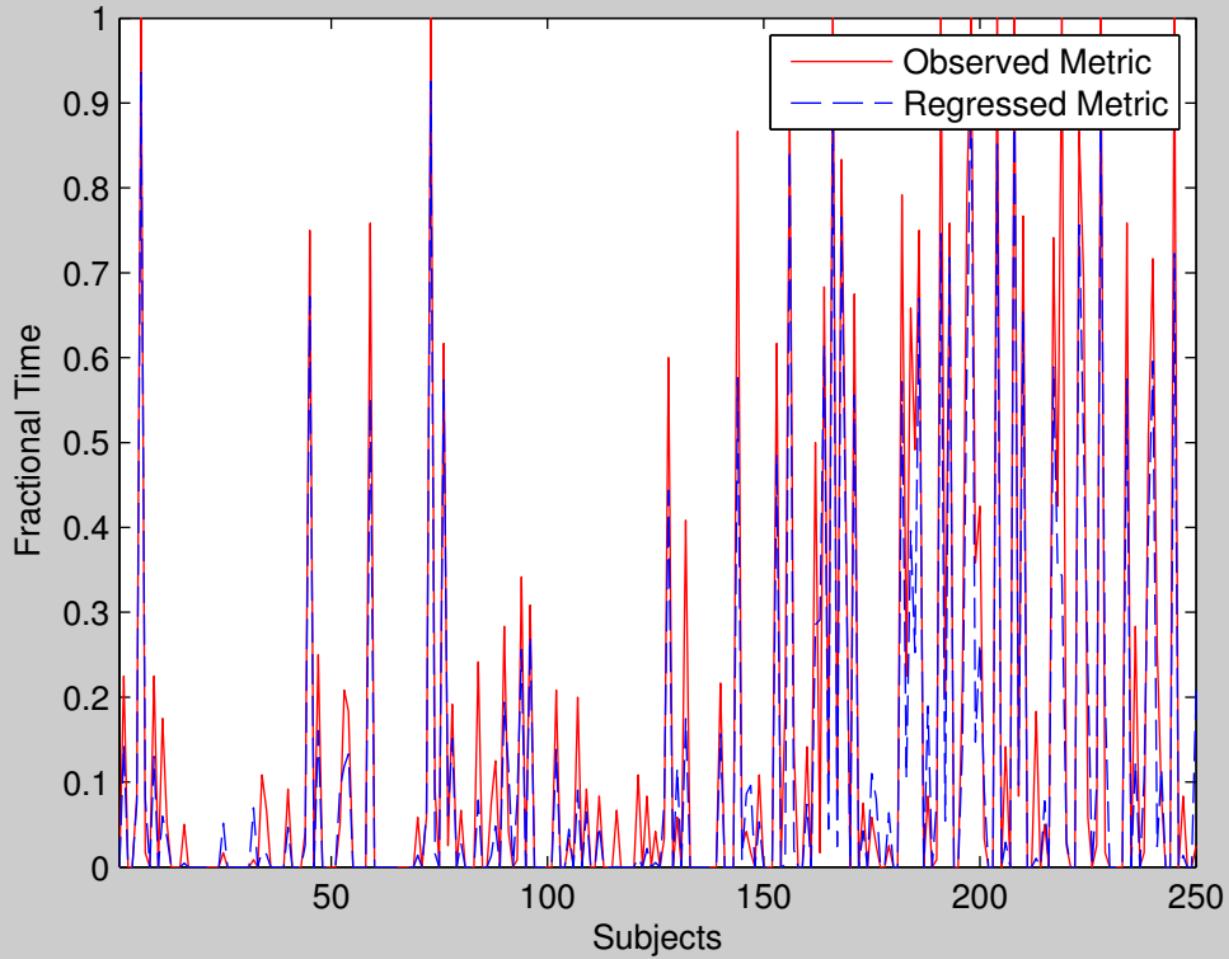
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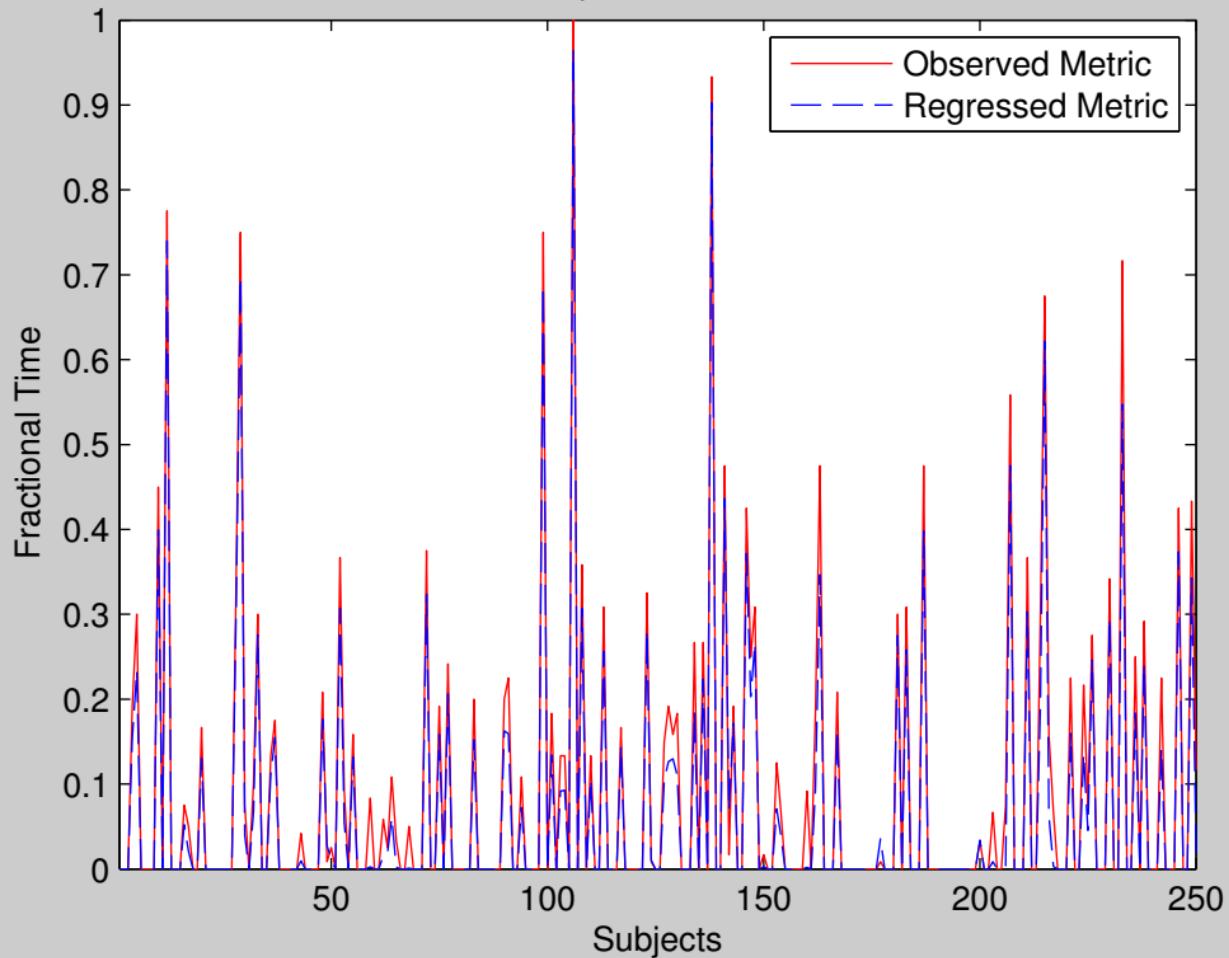
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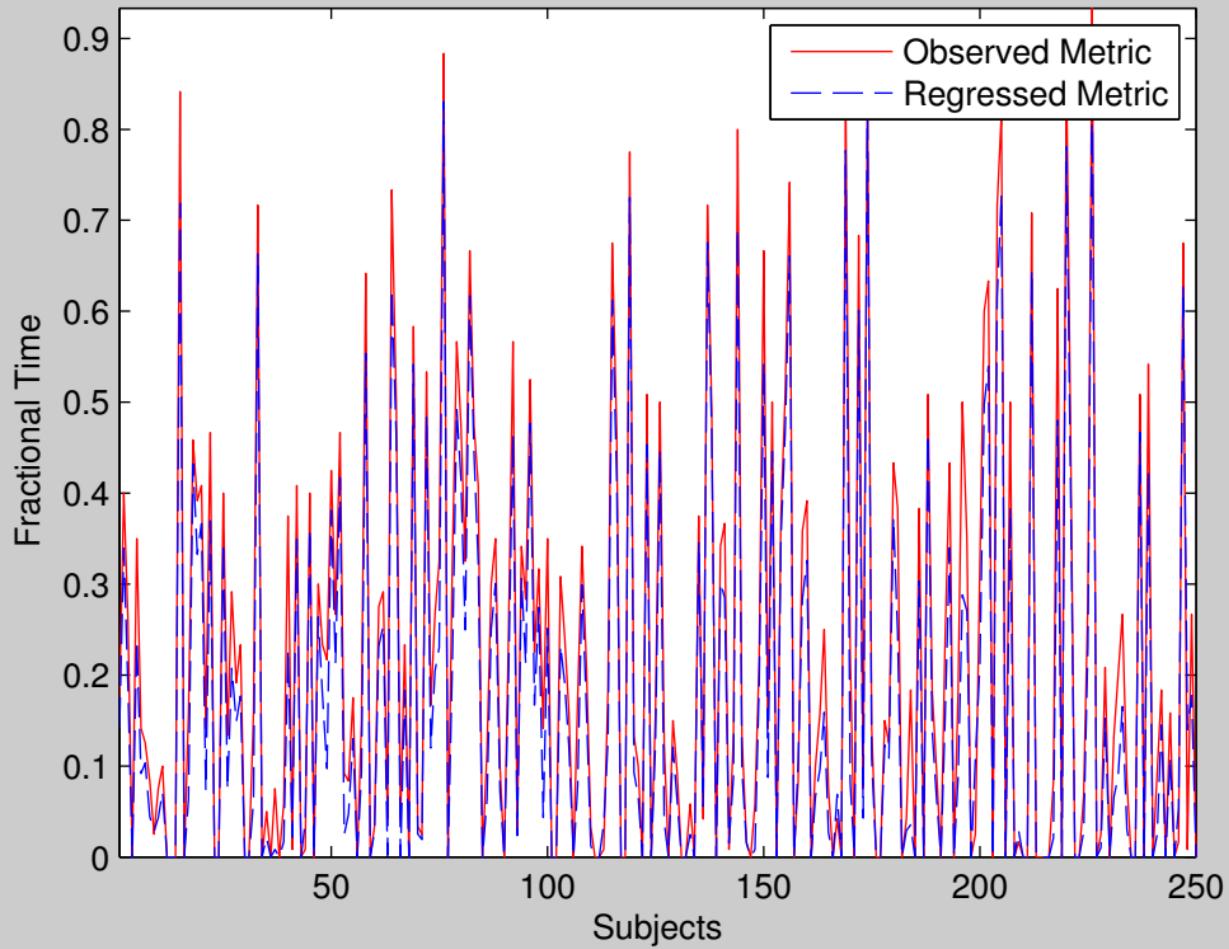
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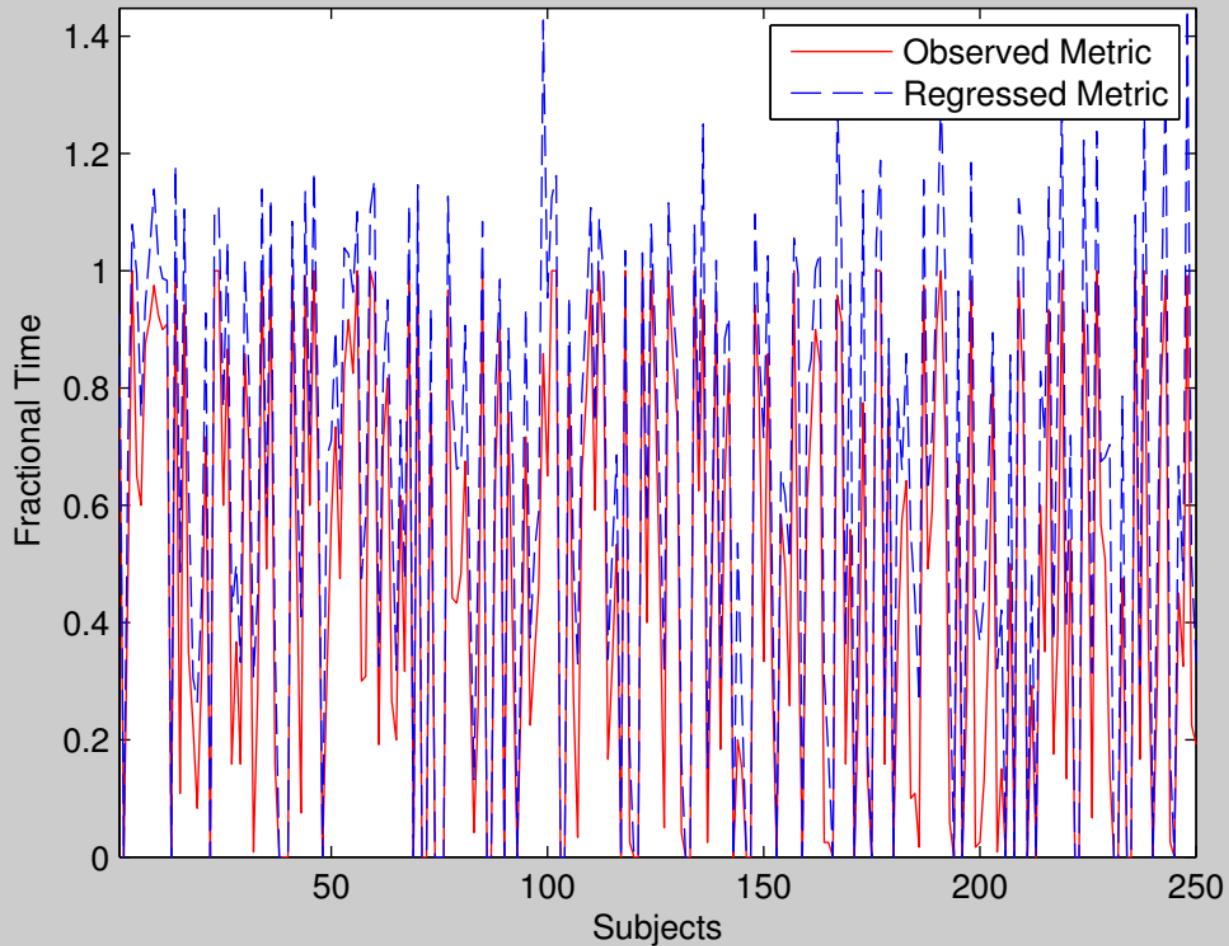
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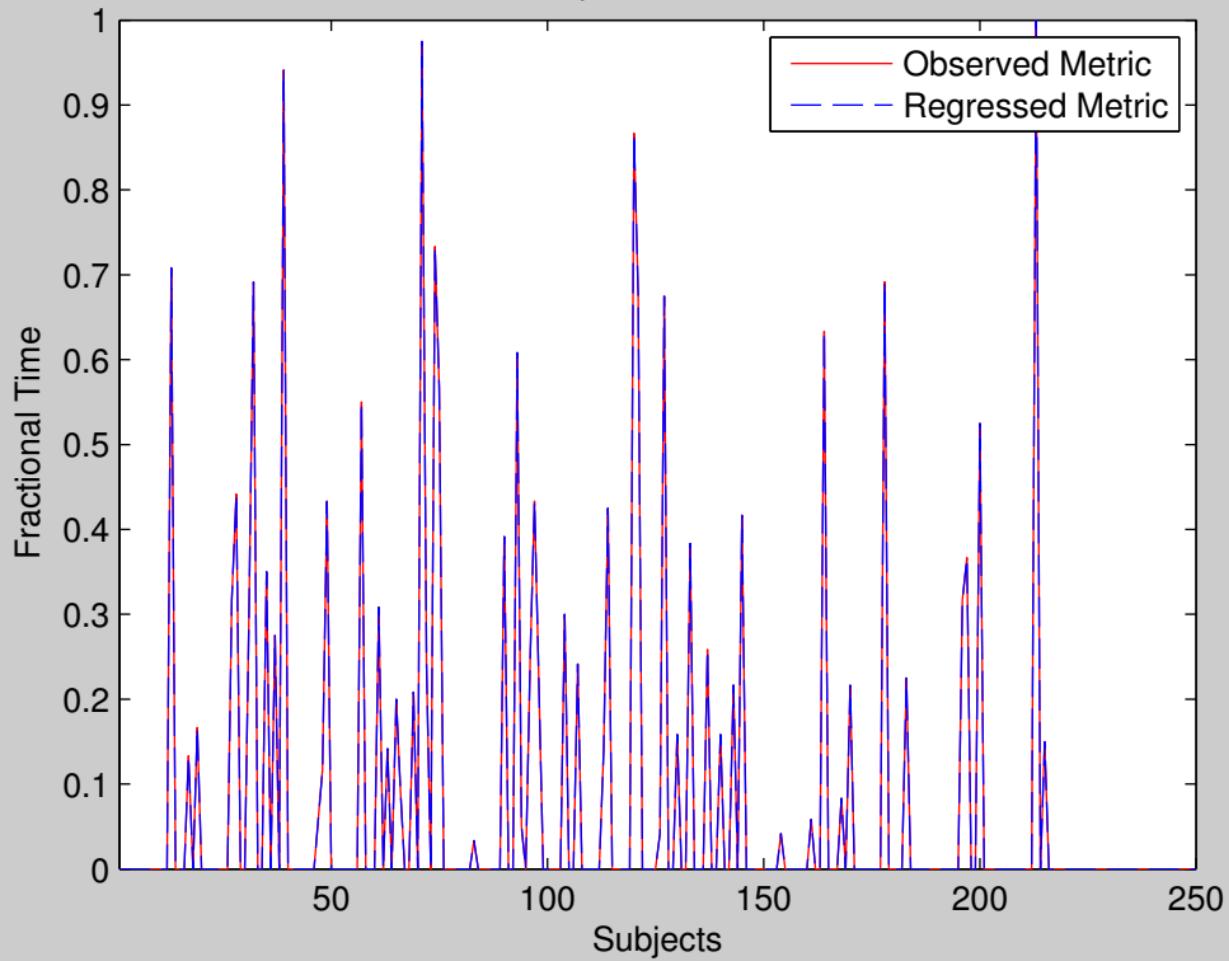
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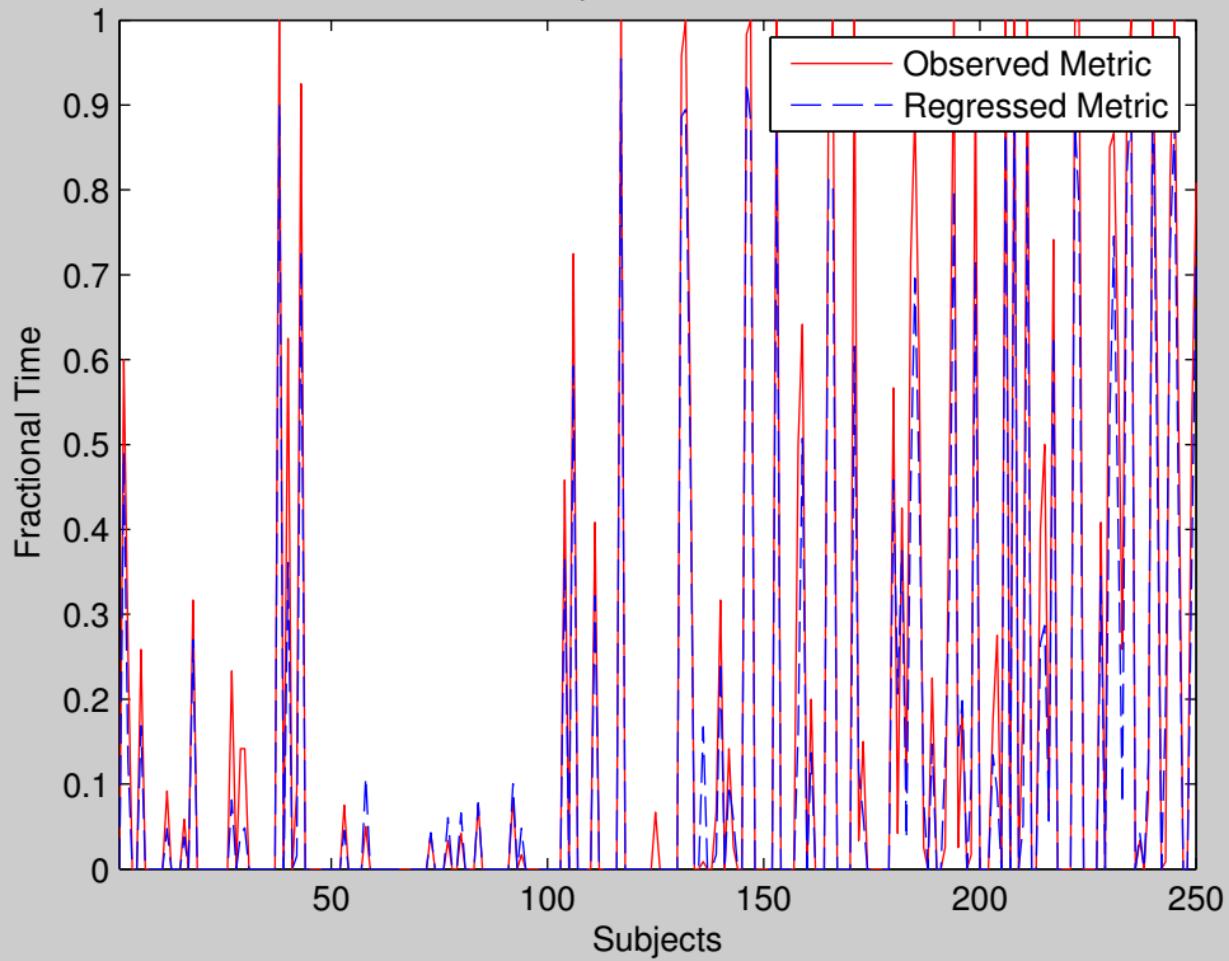
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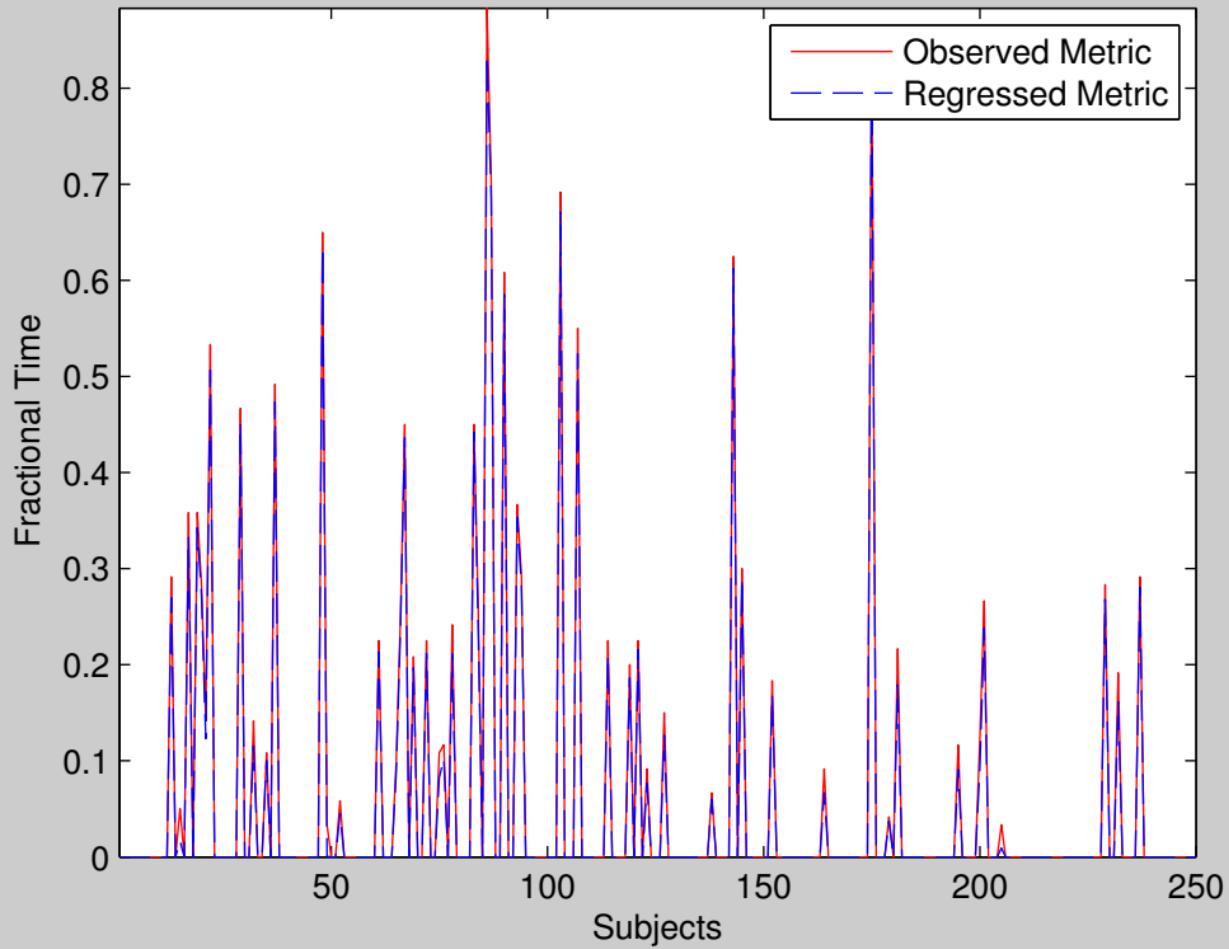
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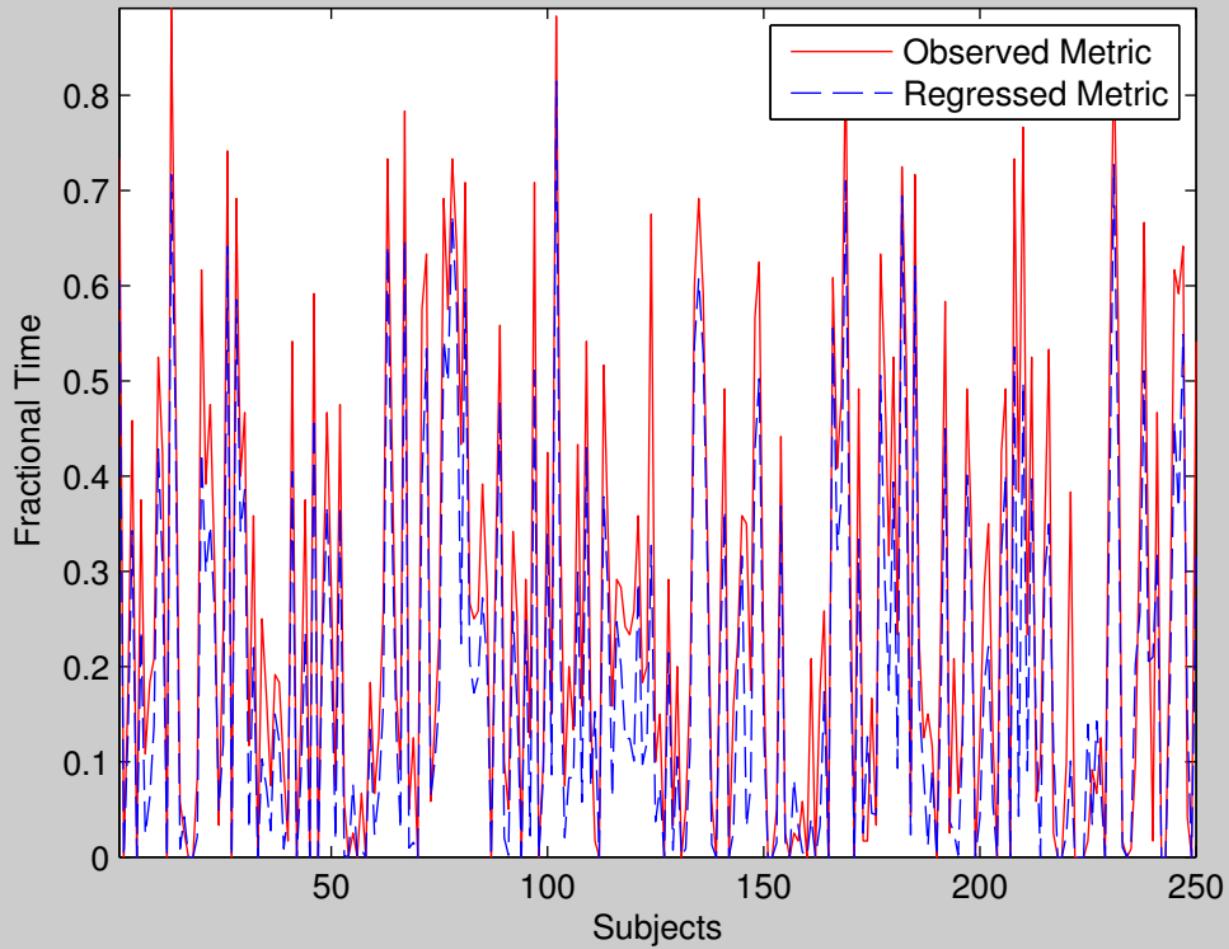
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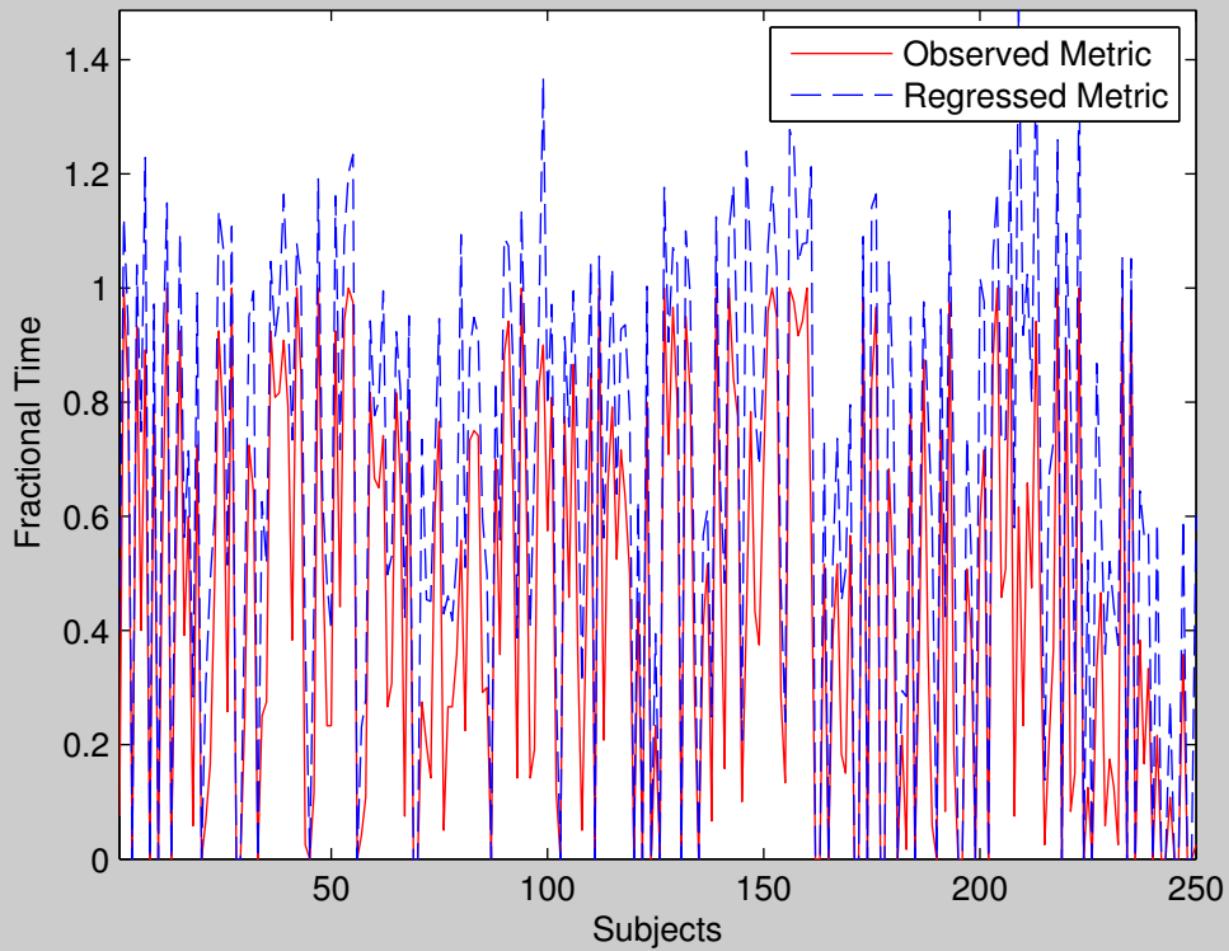
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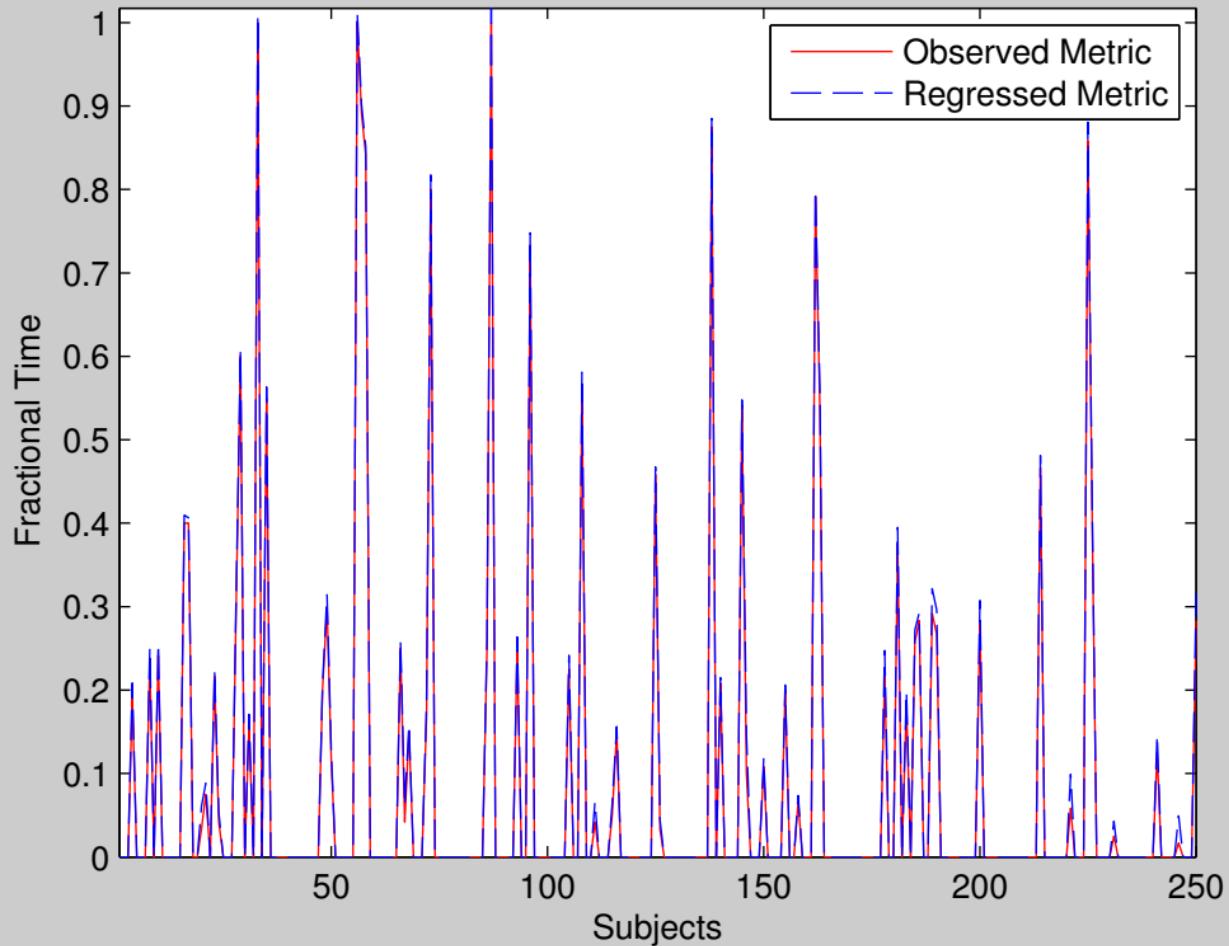
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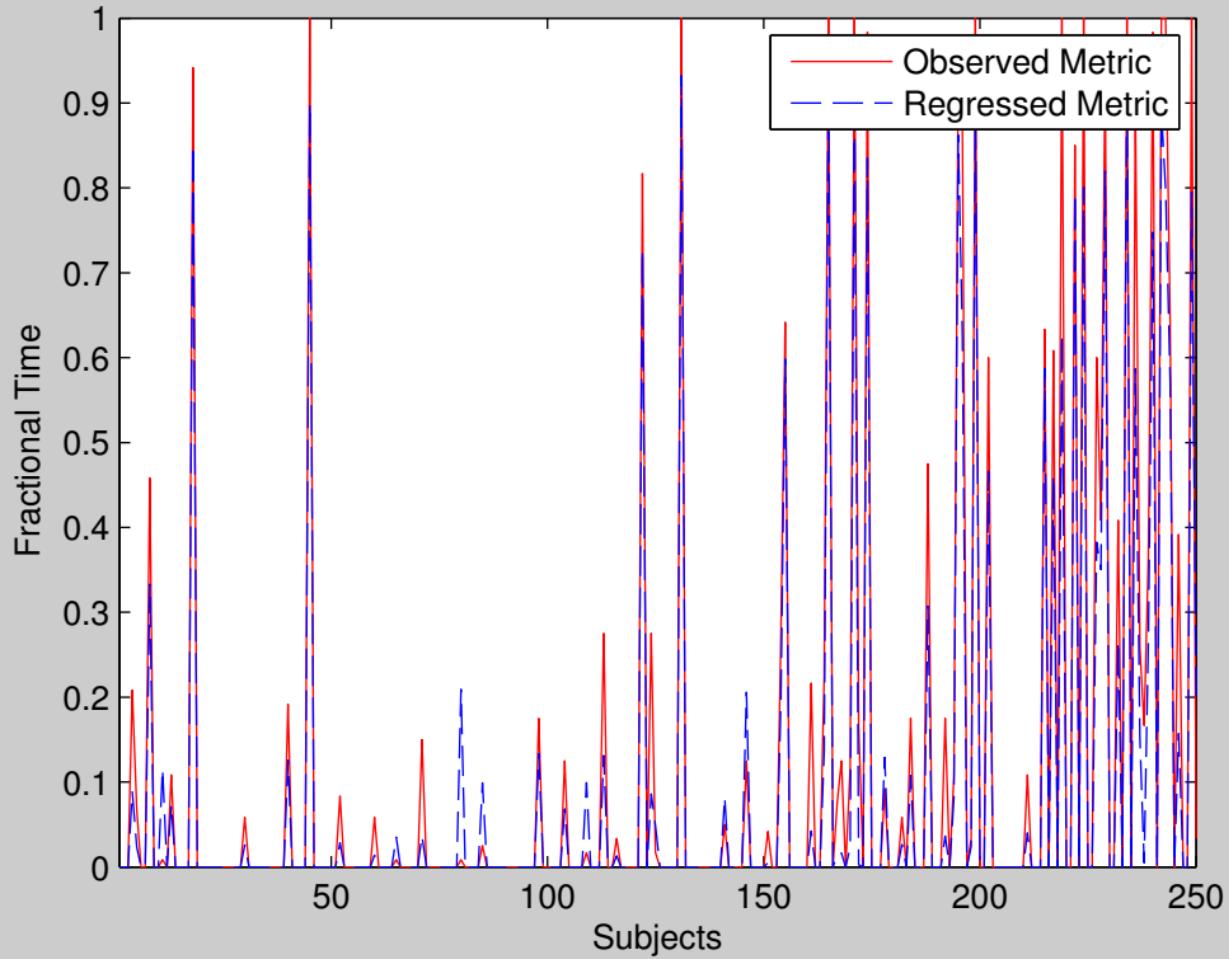
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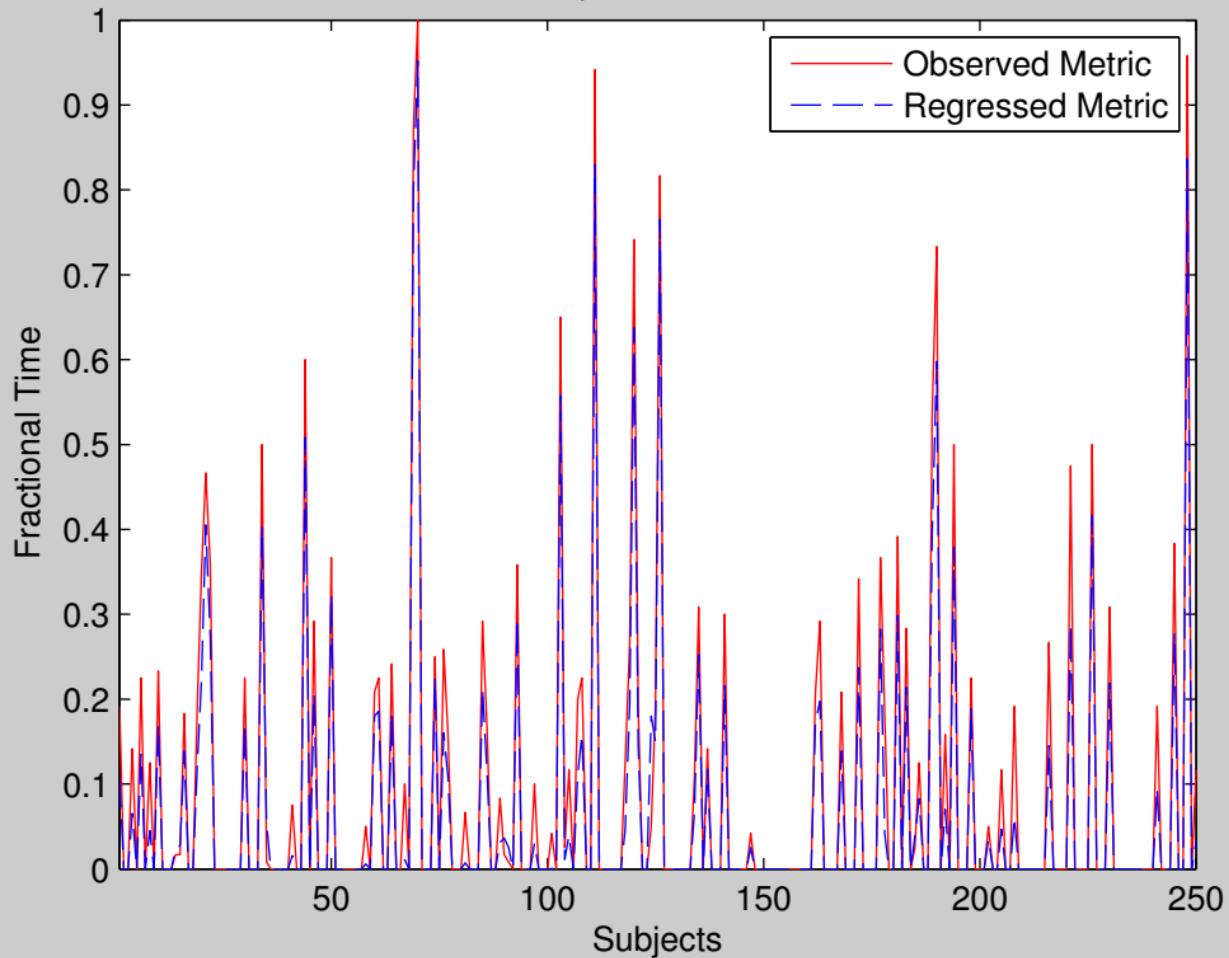
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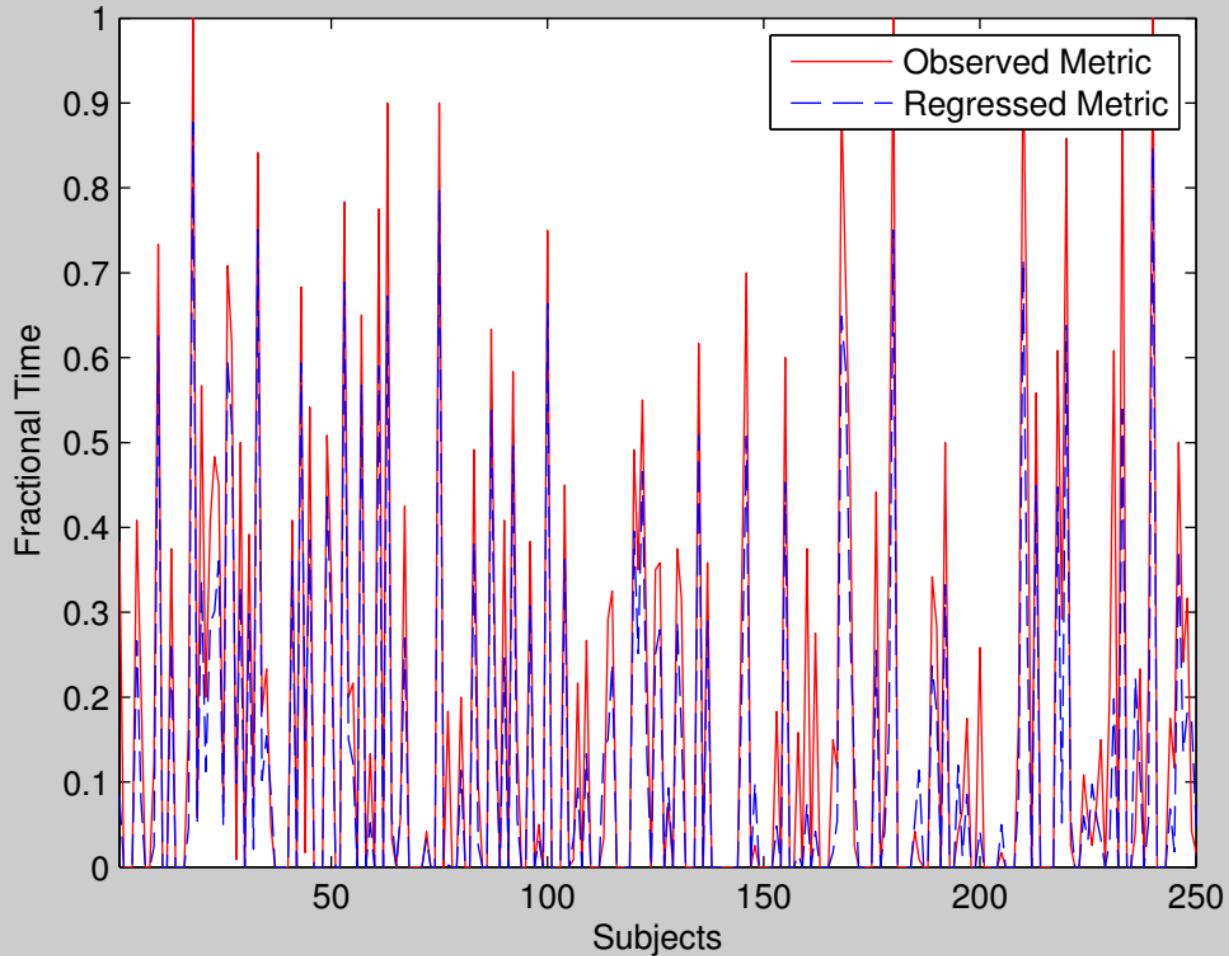
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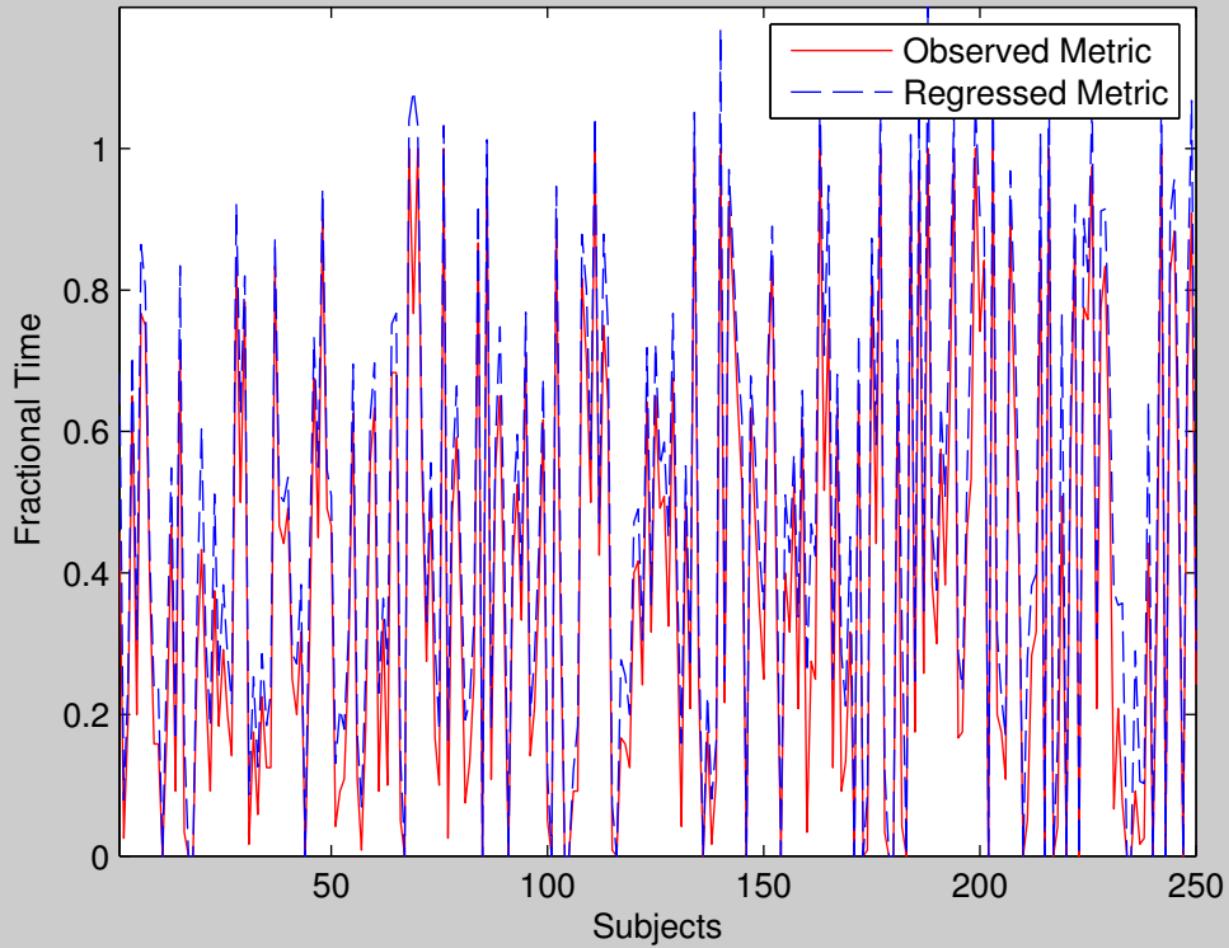
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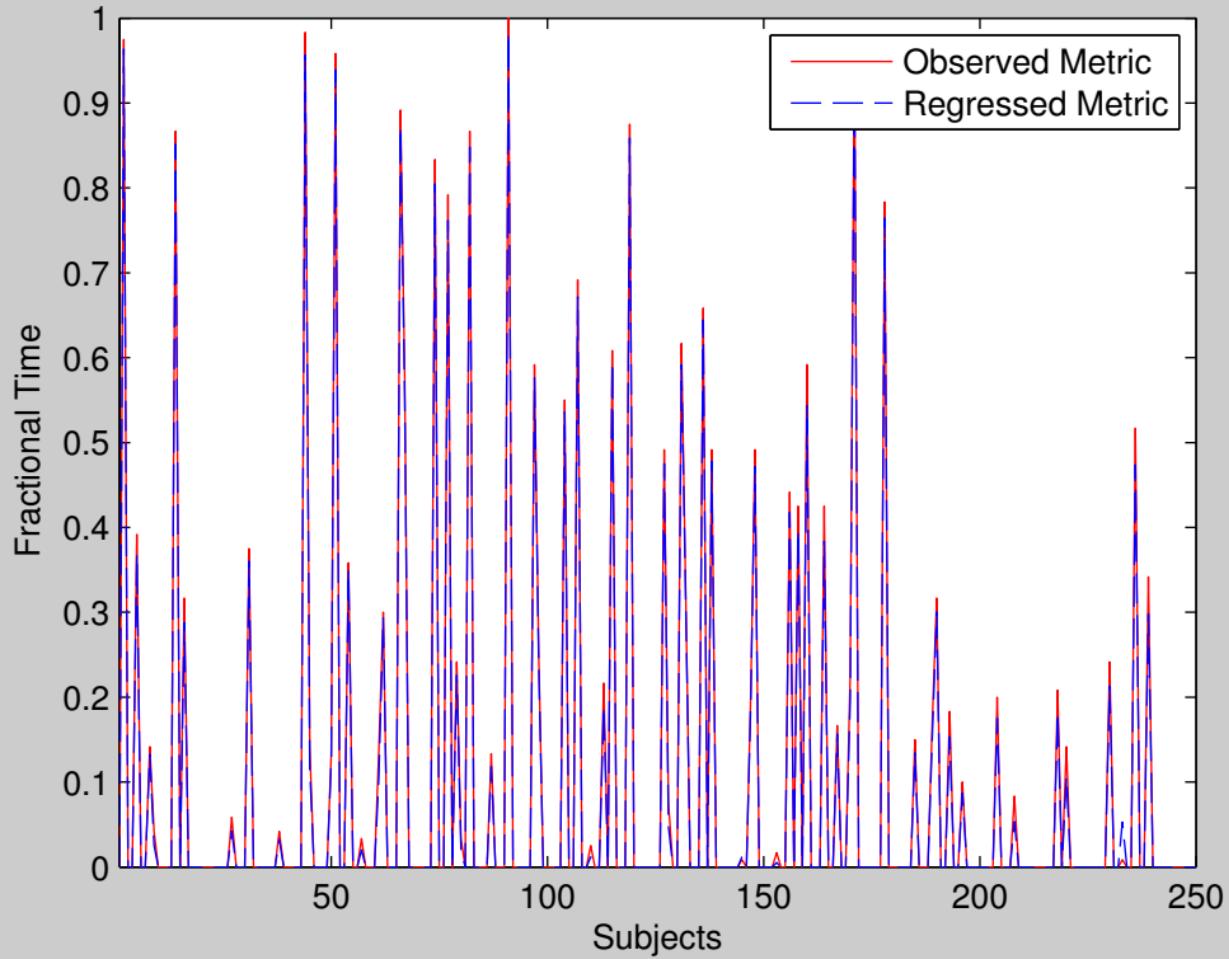
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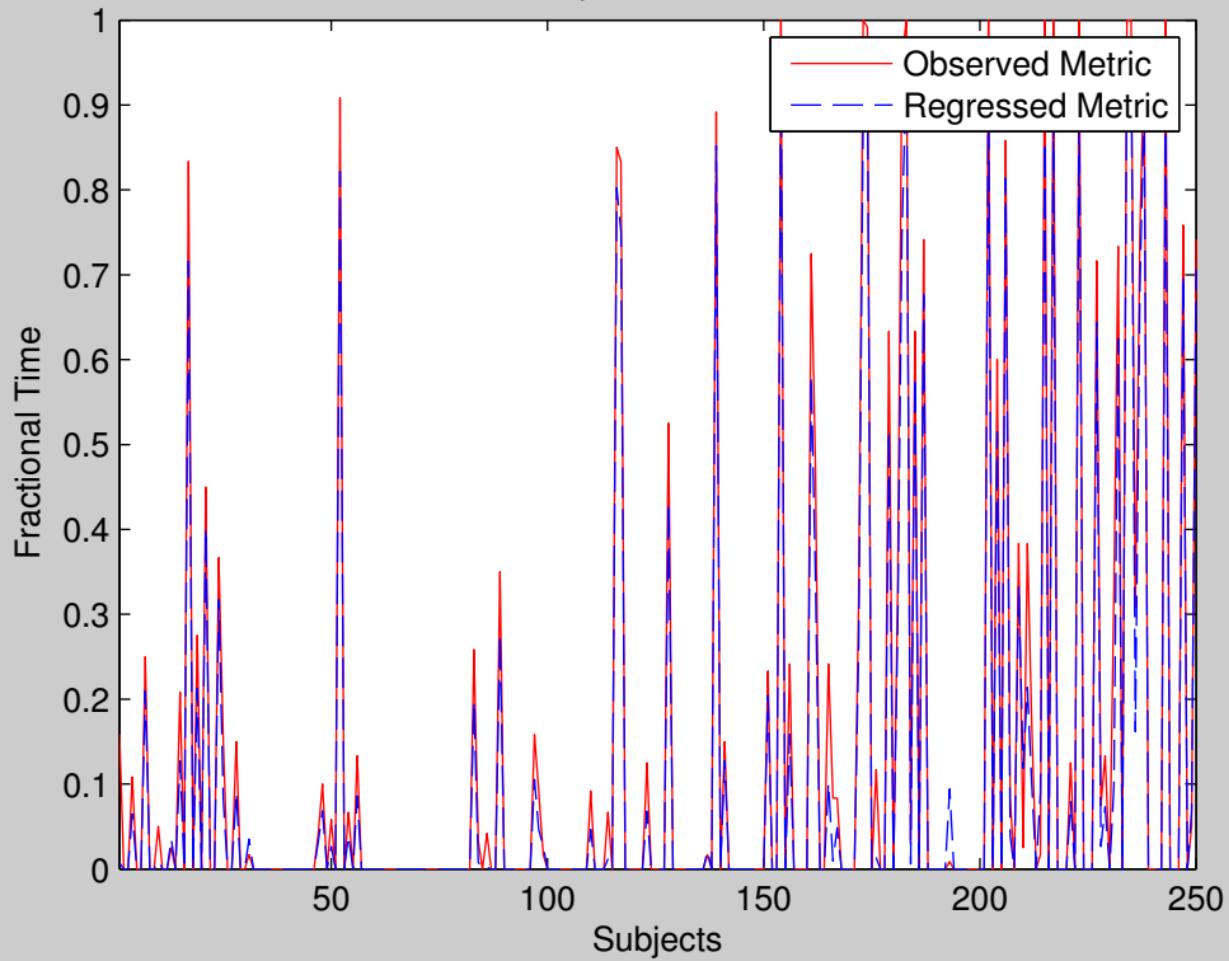
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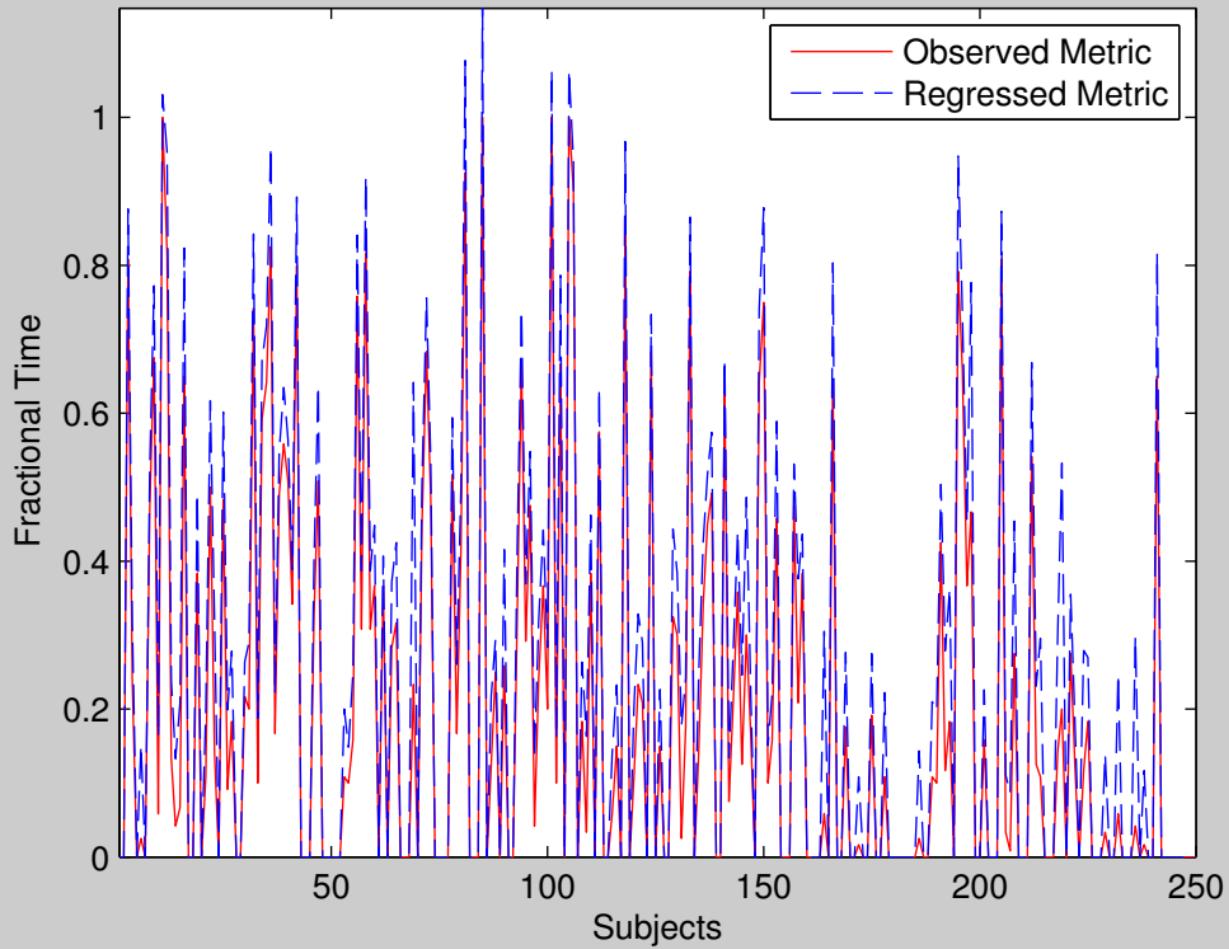
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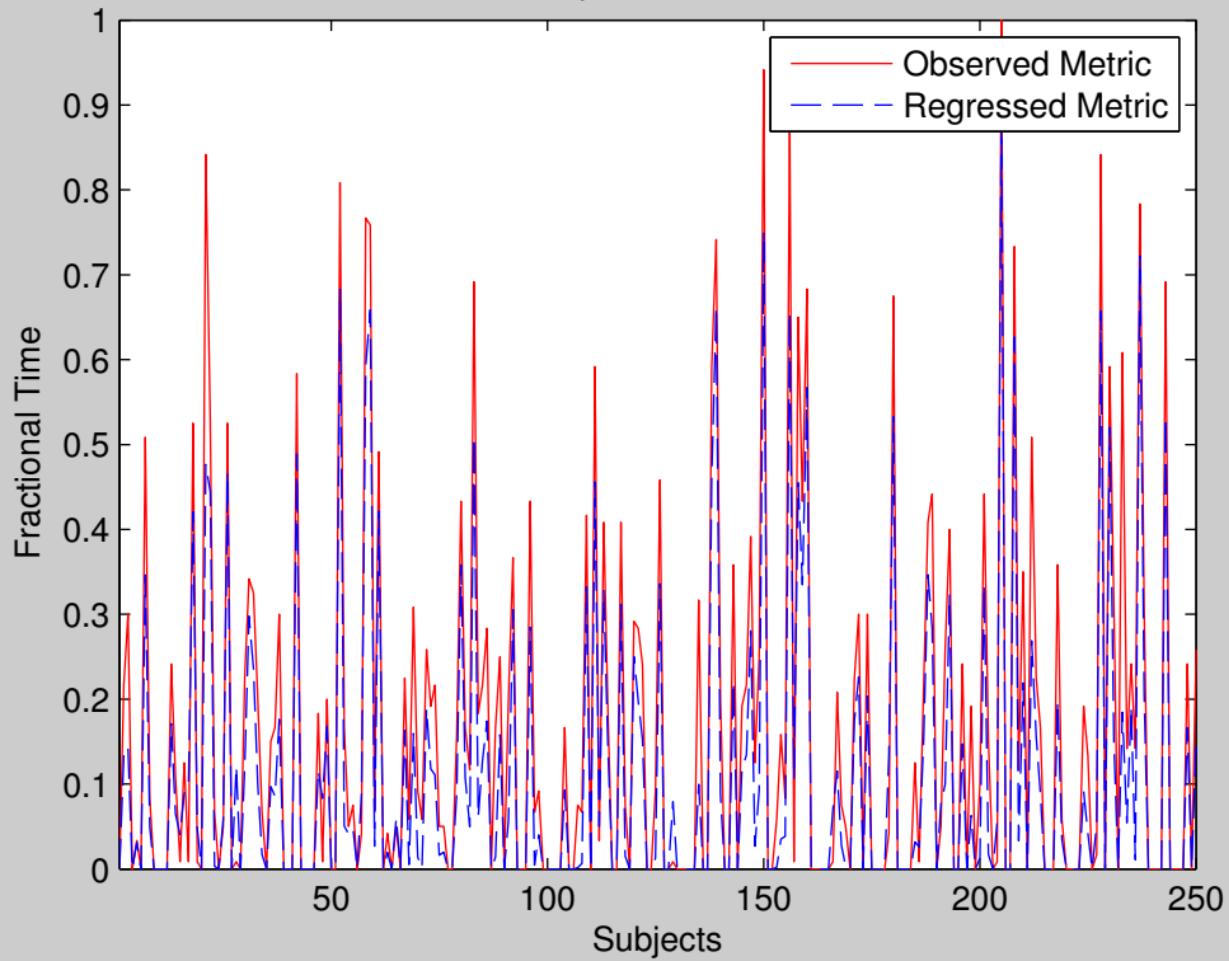
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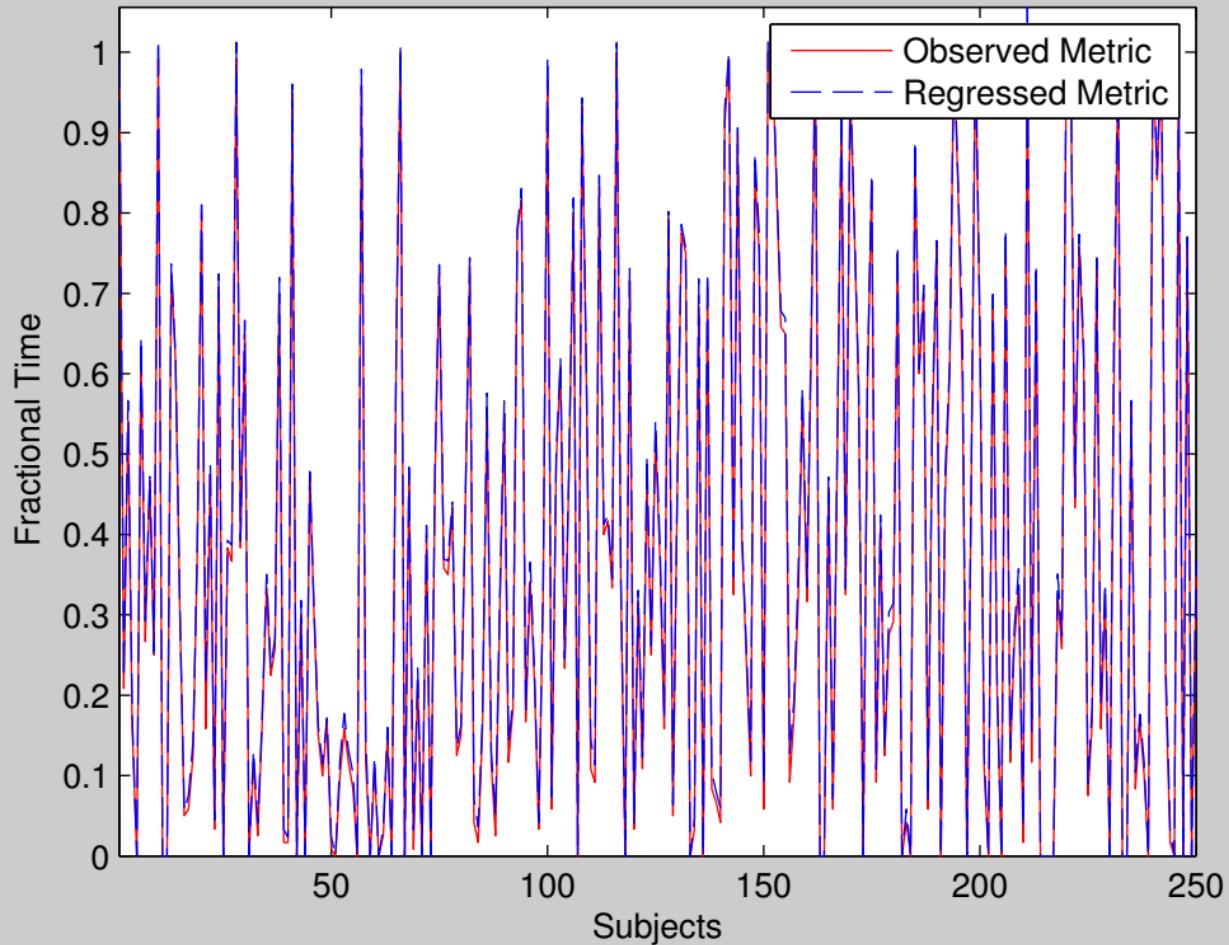
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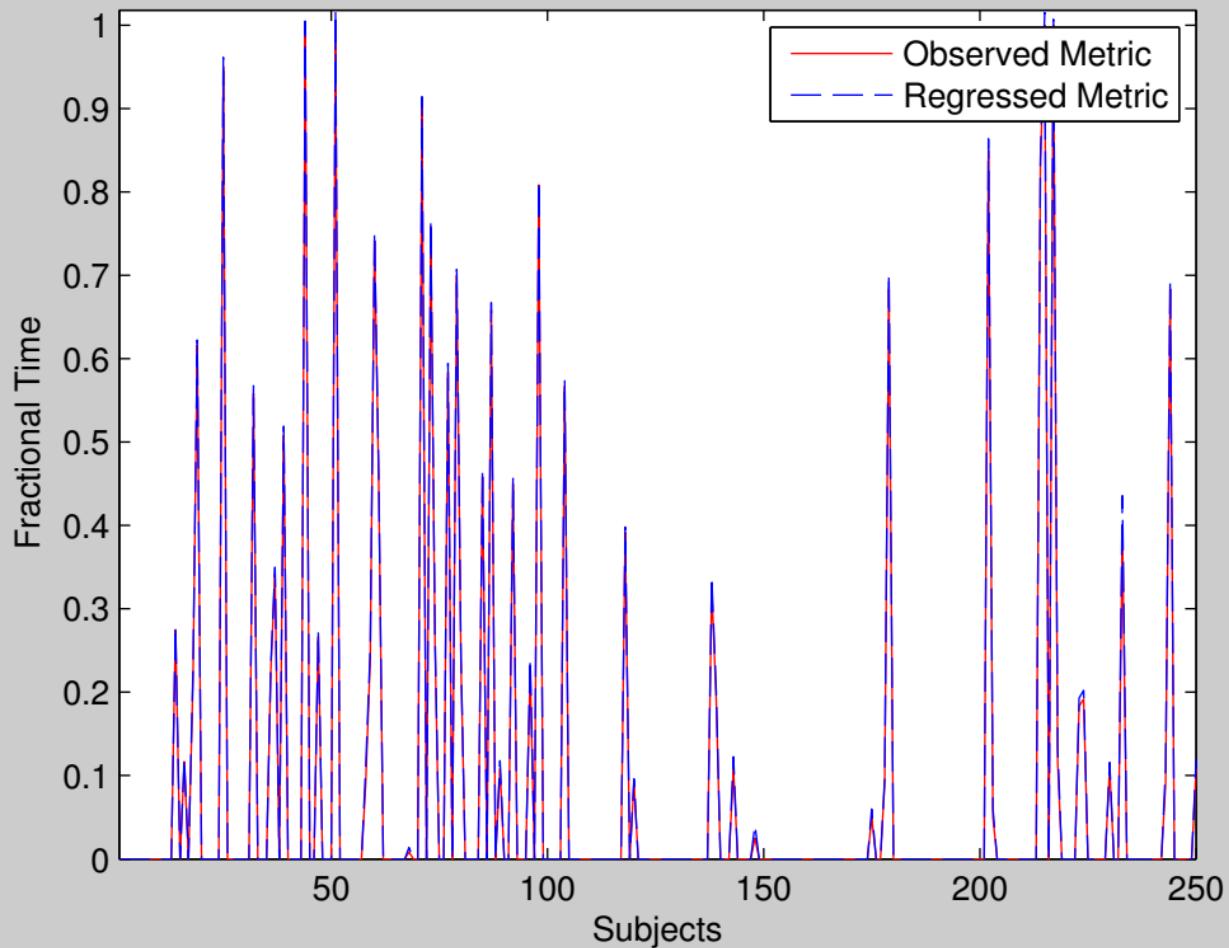
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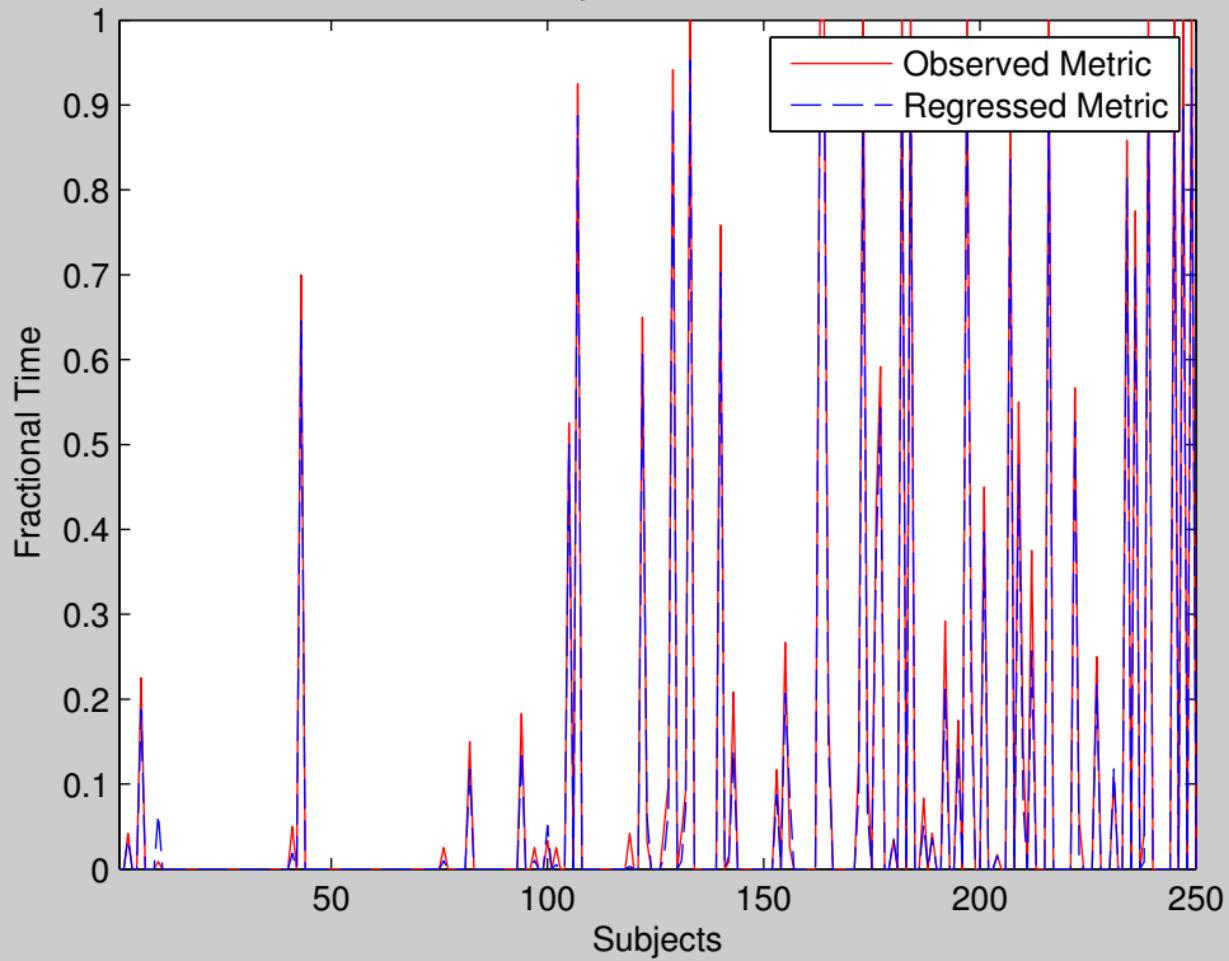
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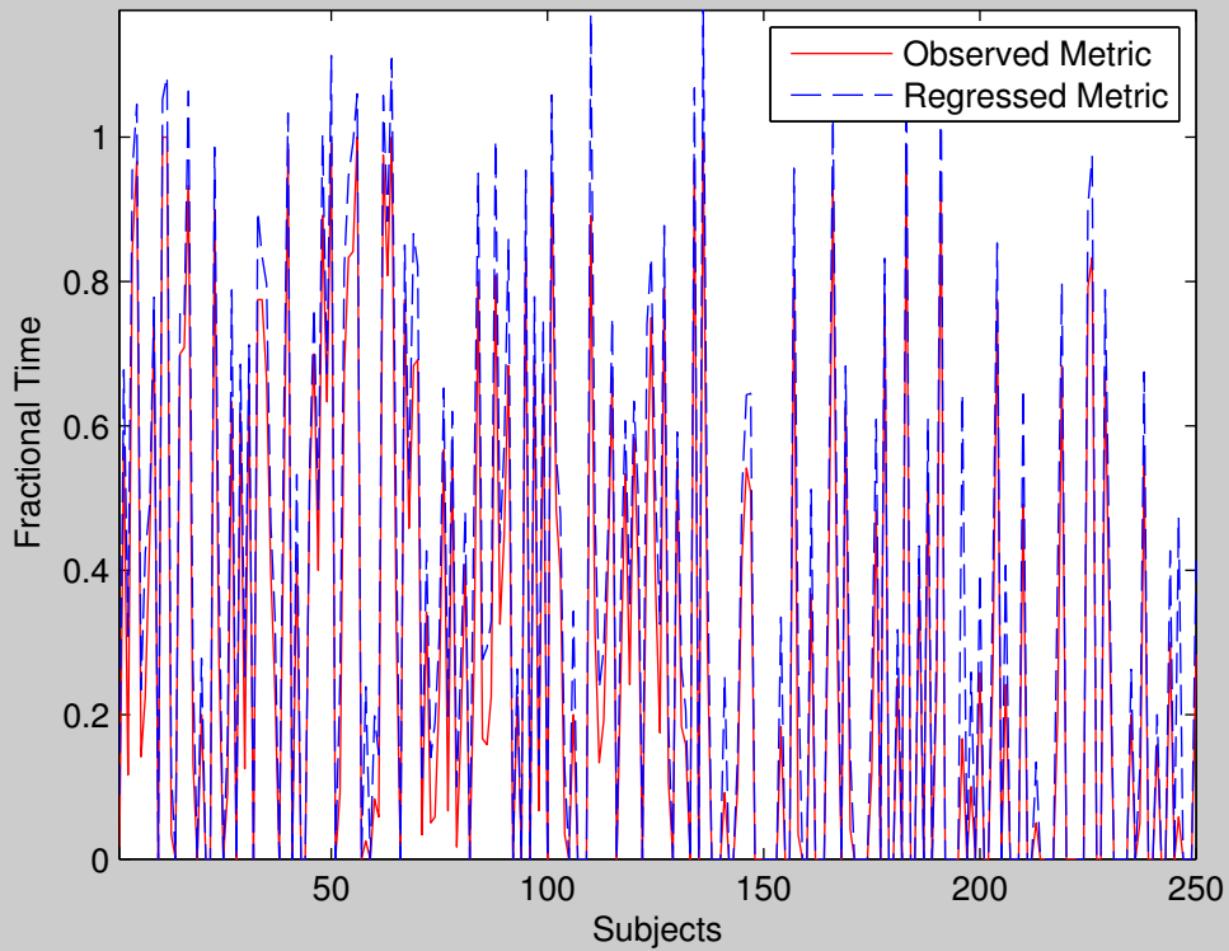
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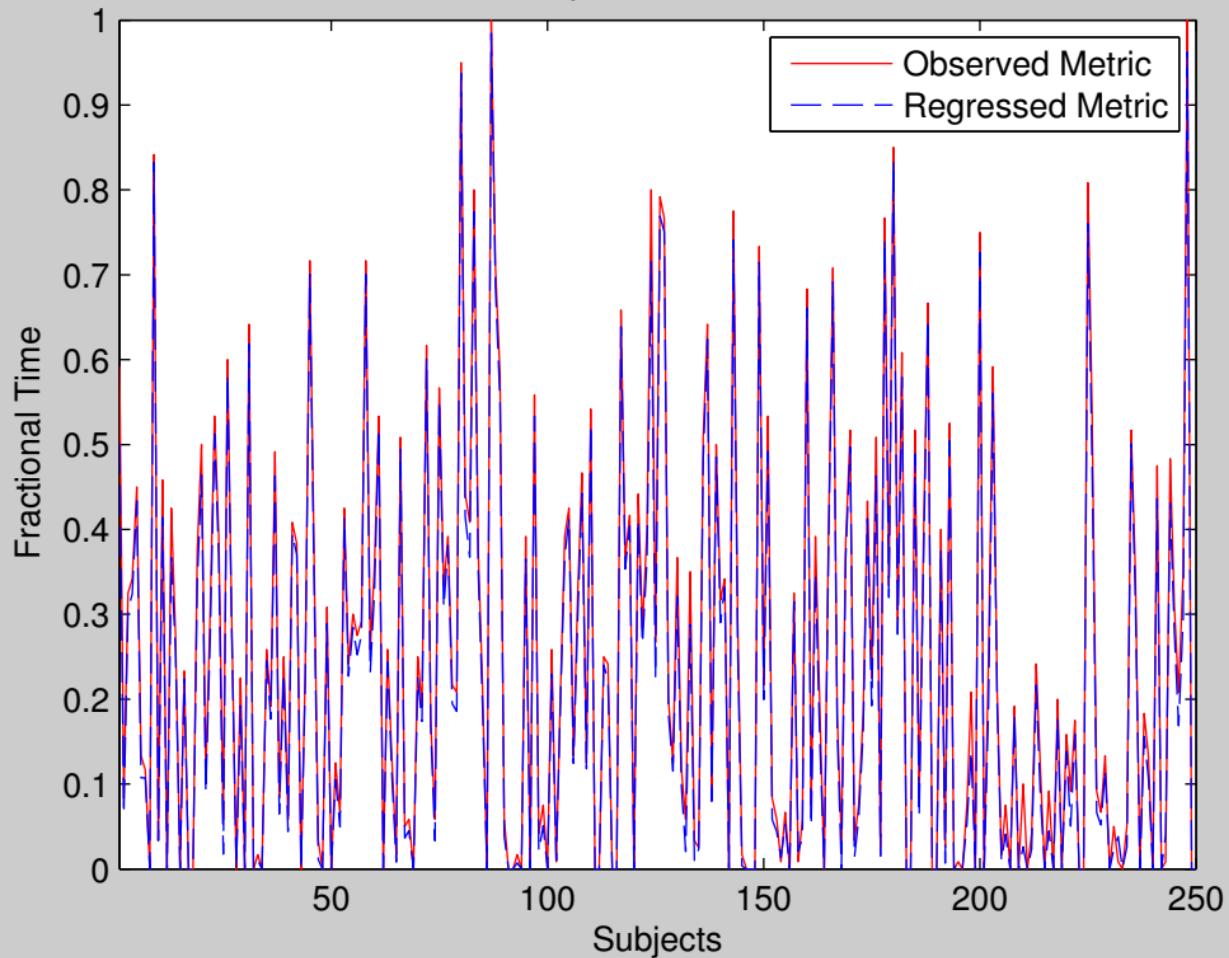
Group 9 State 4 : FT



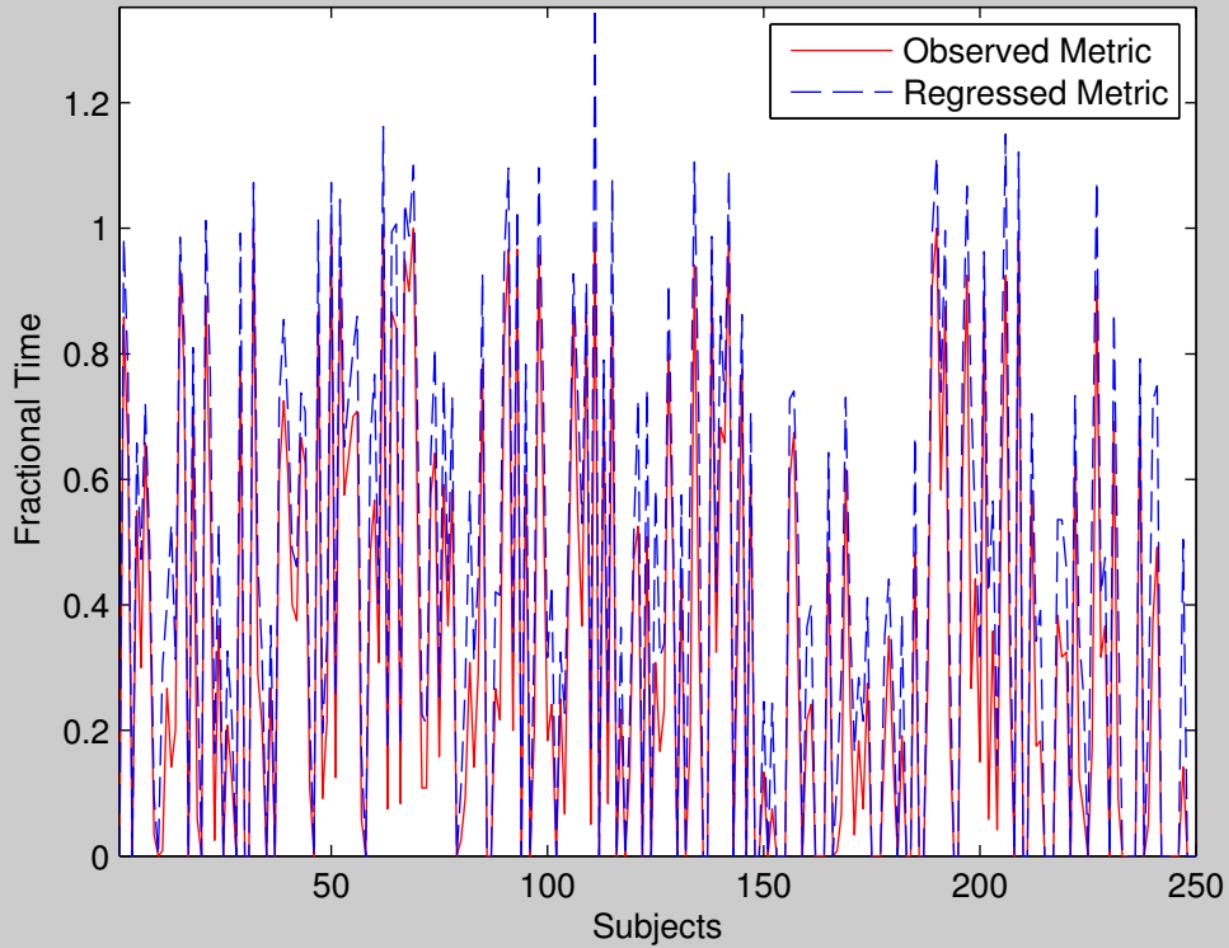
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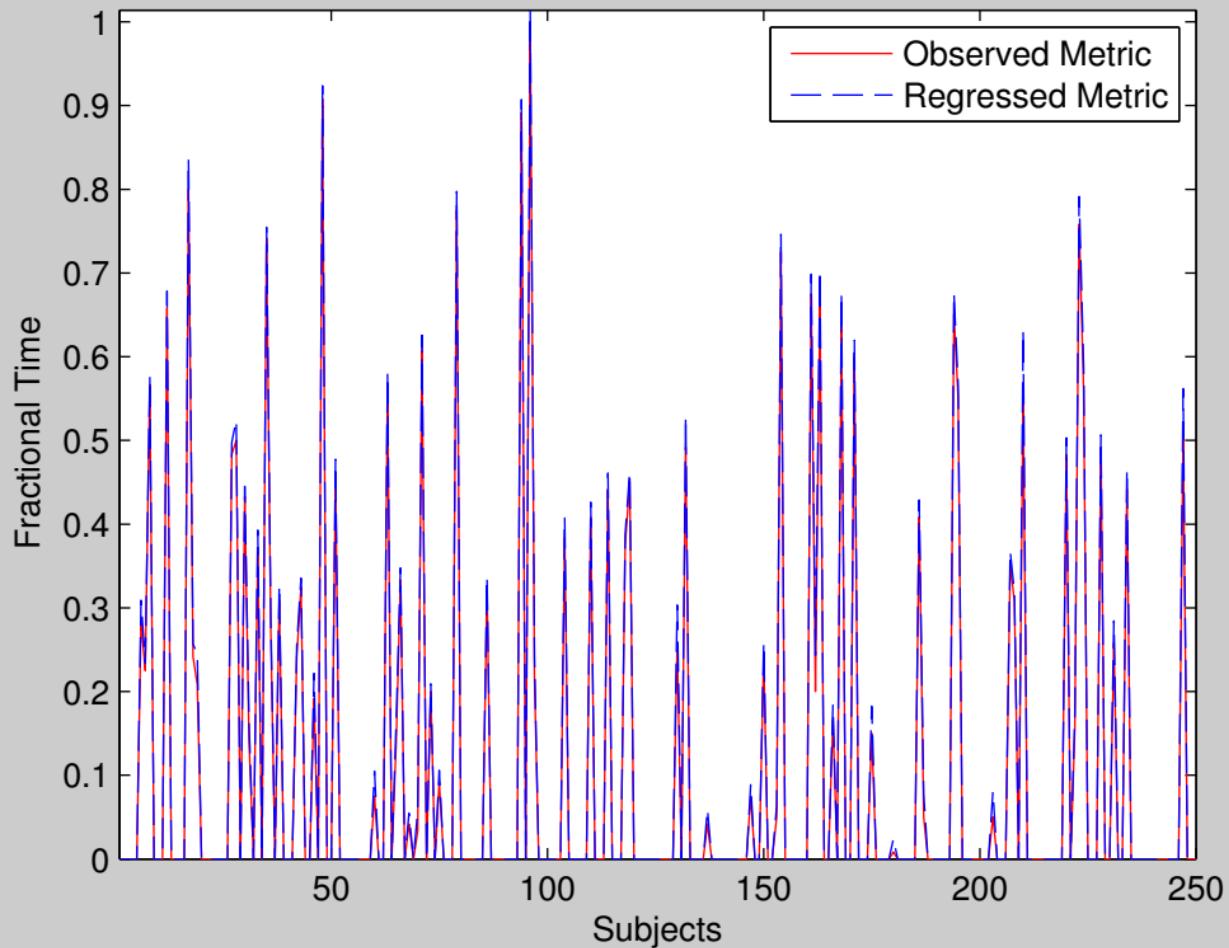
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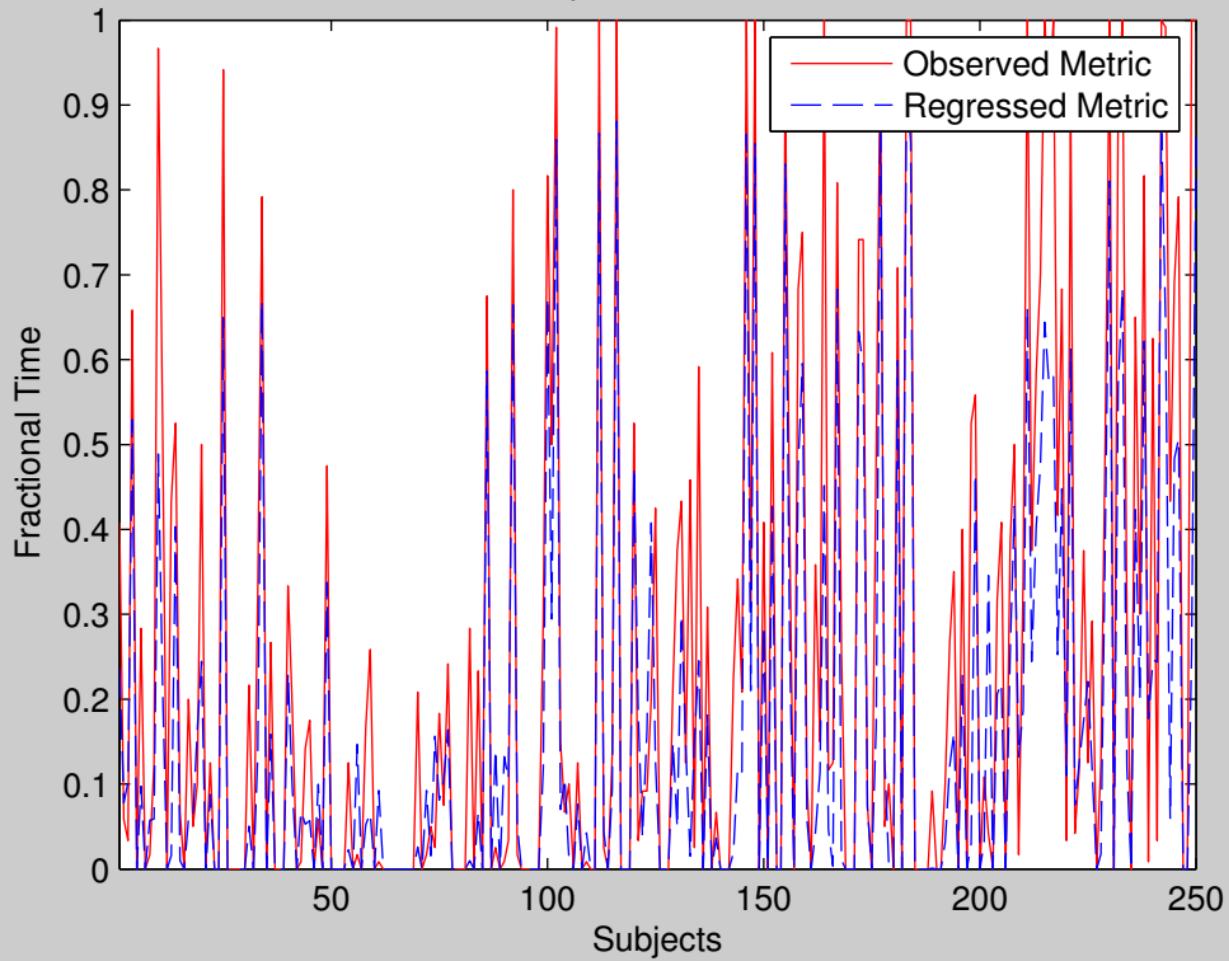
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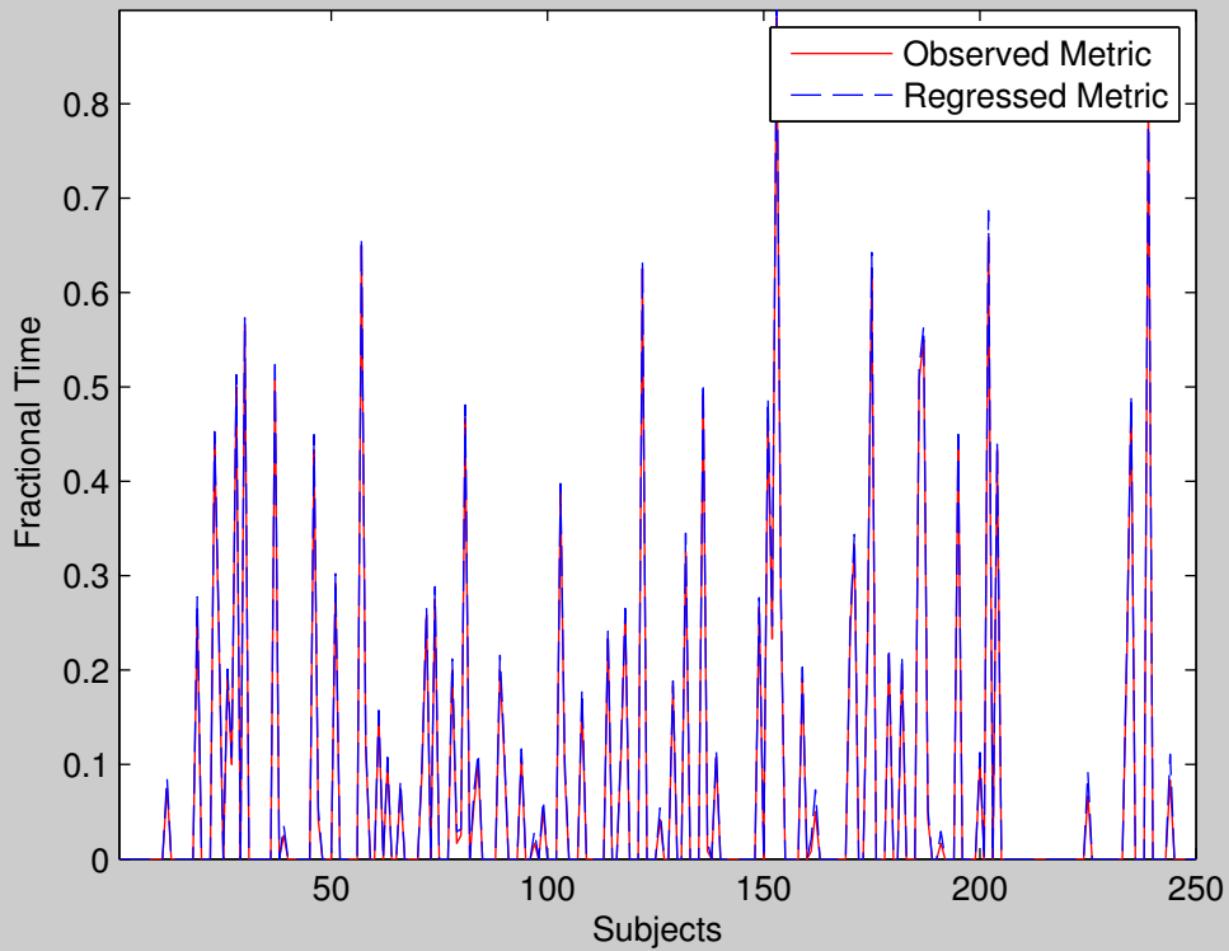
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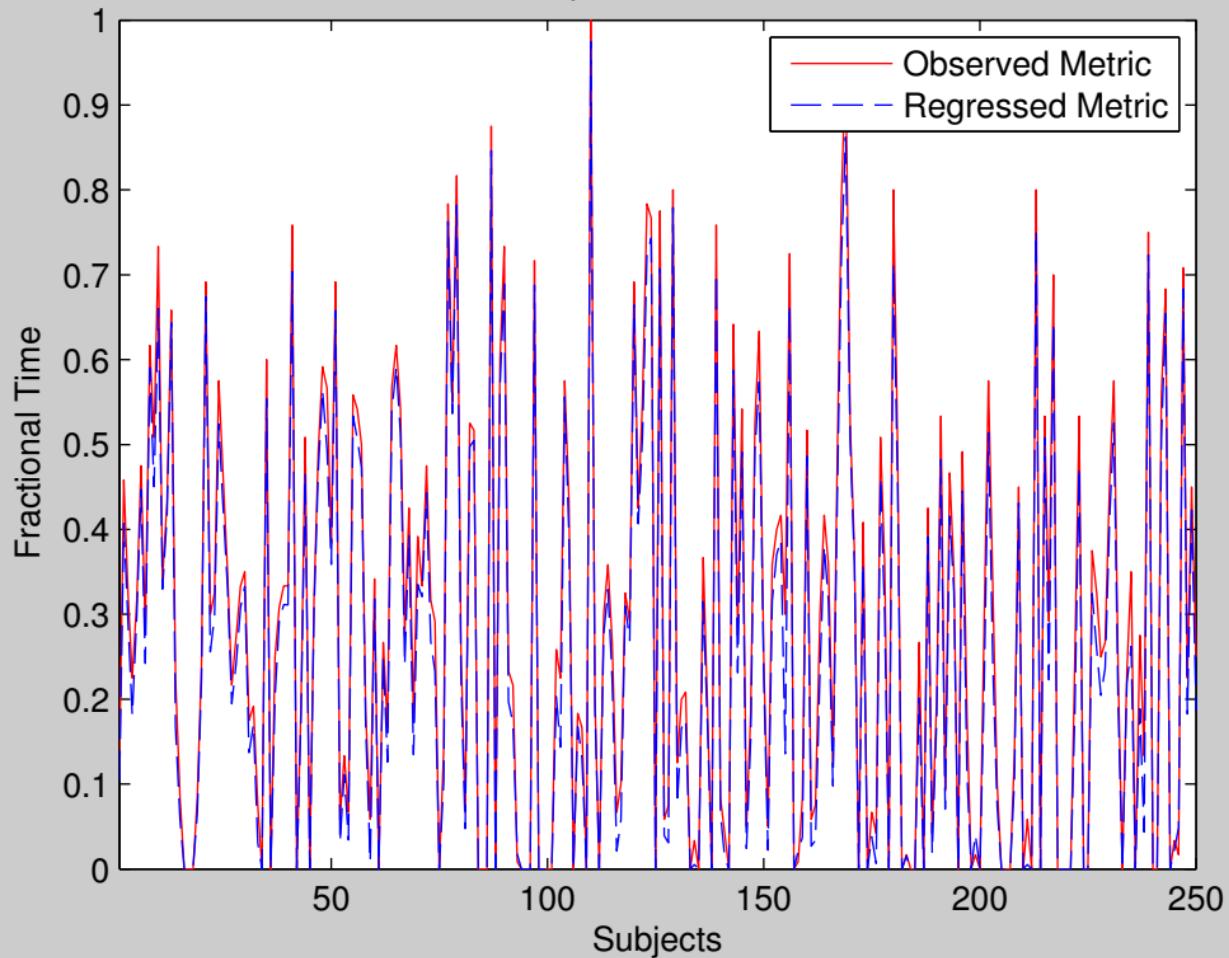
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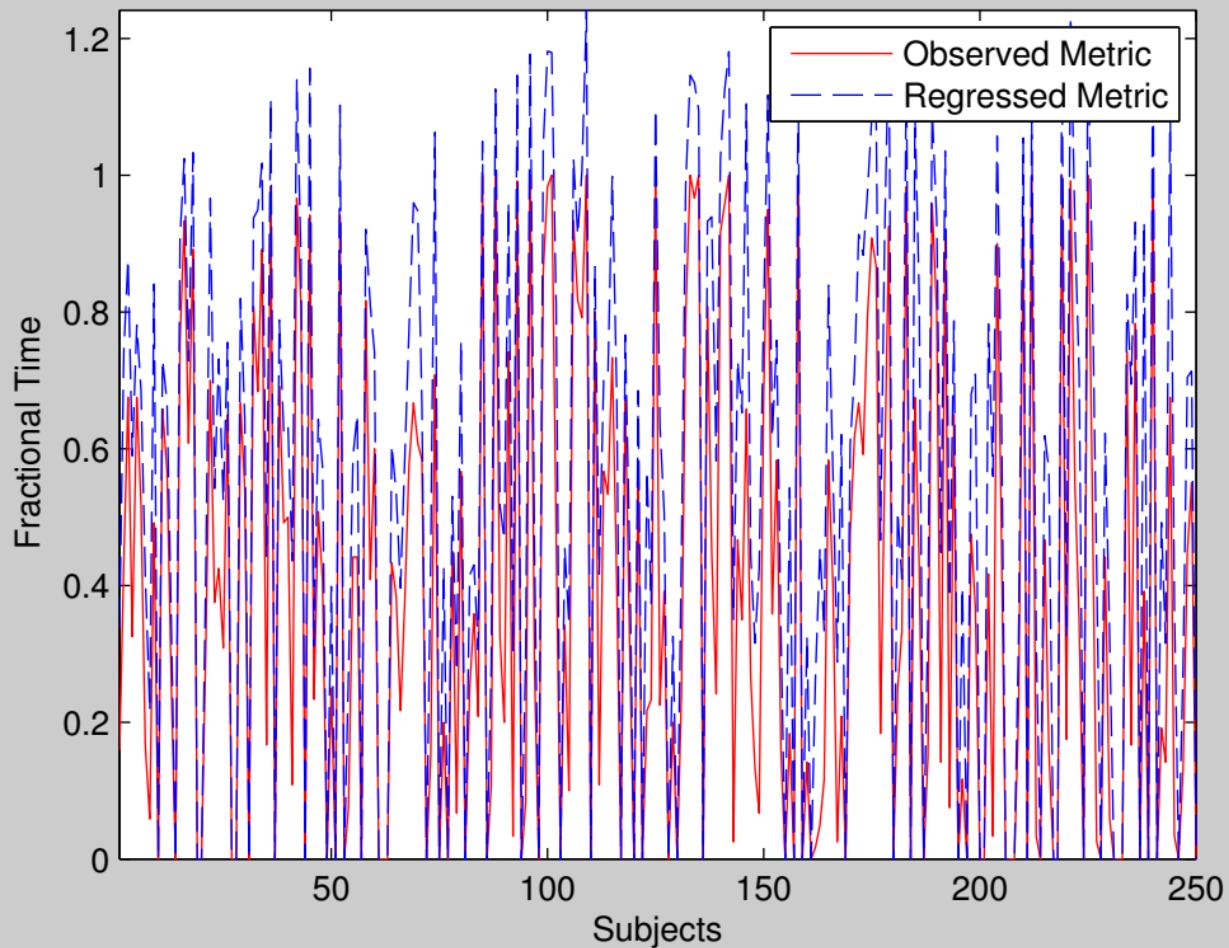
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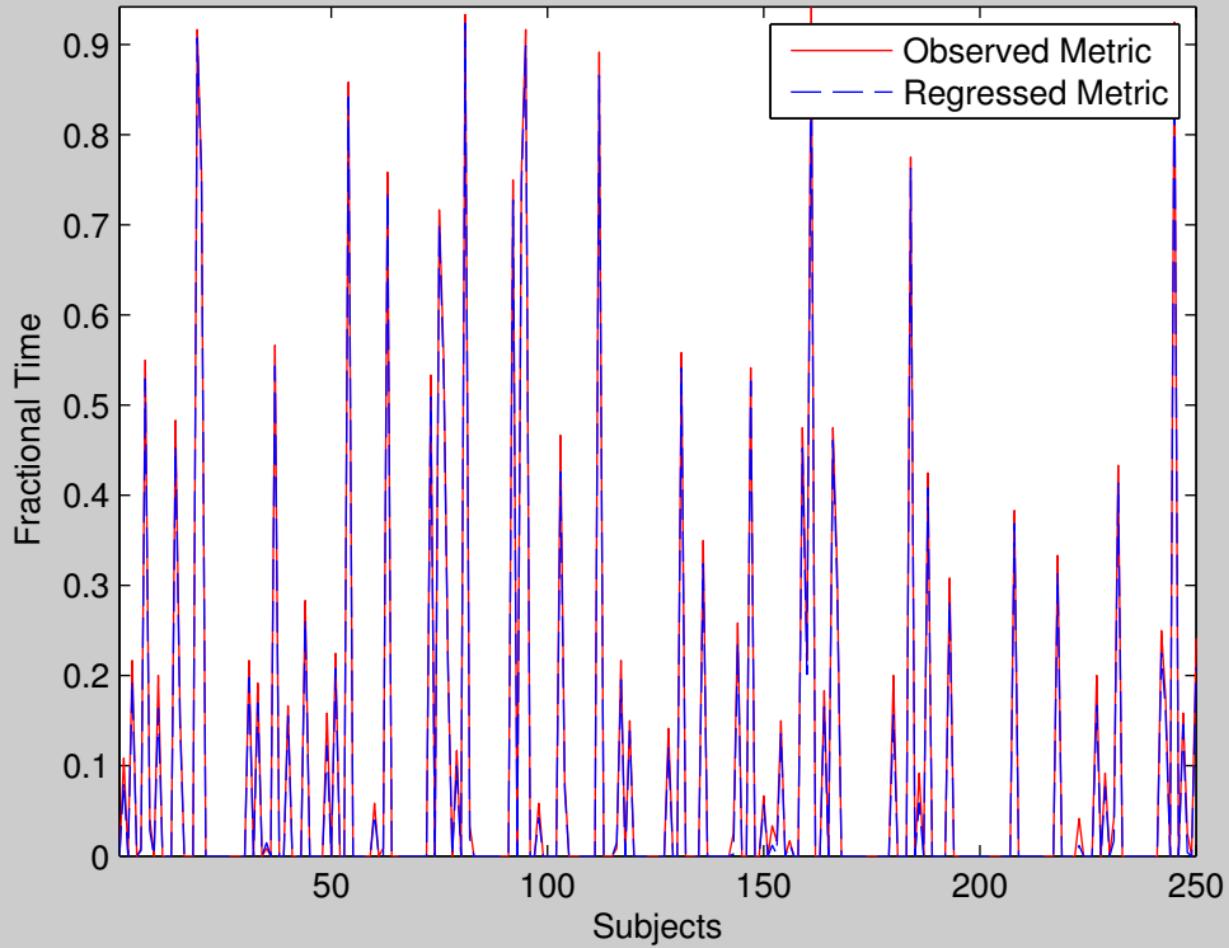
Group 11 State 1 : FT



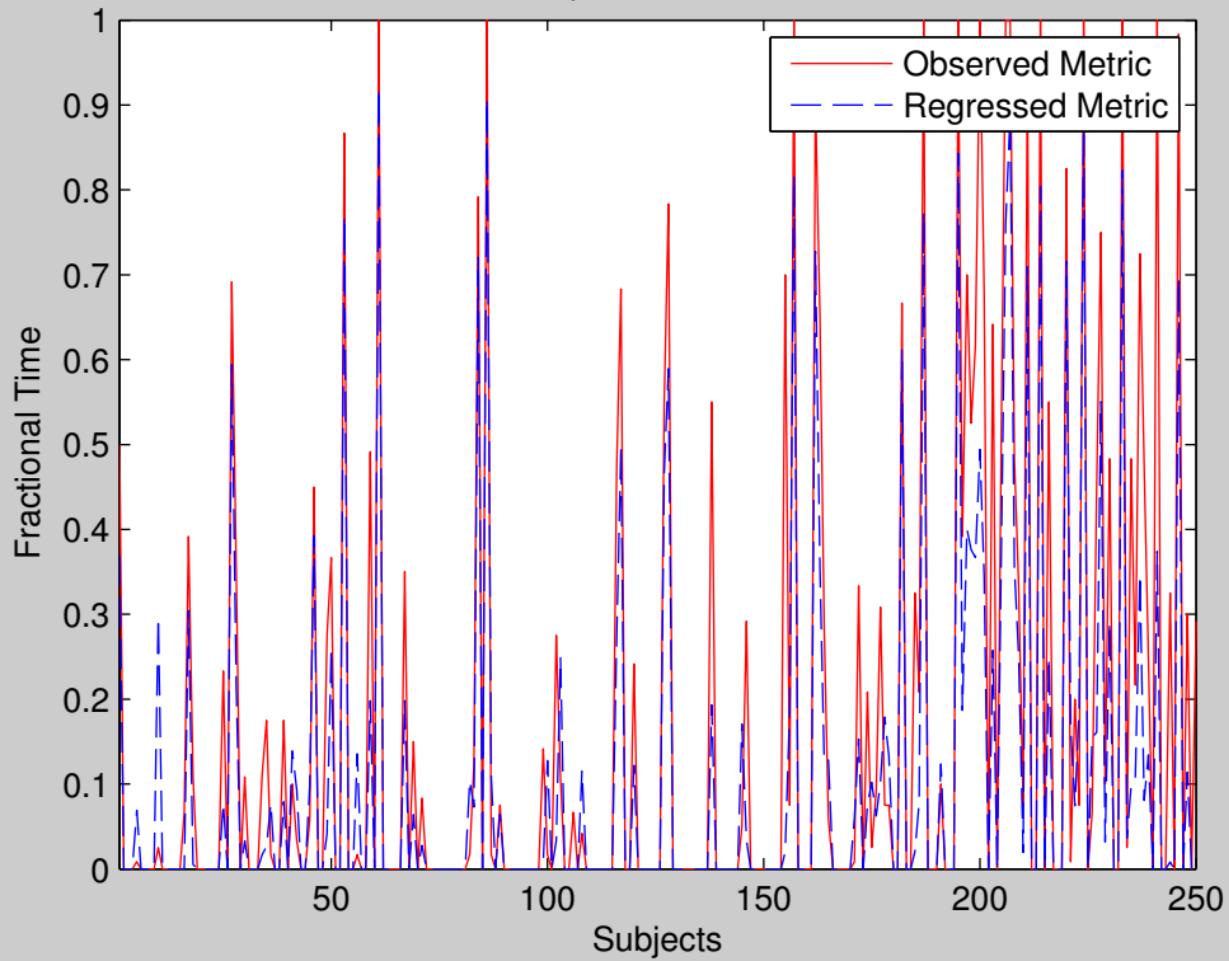
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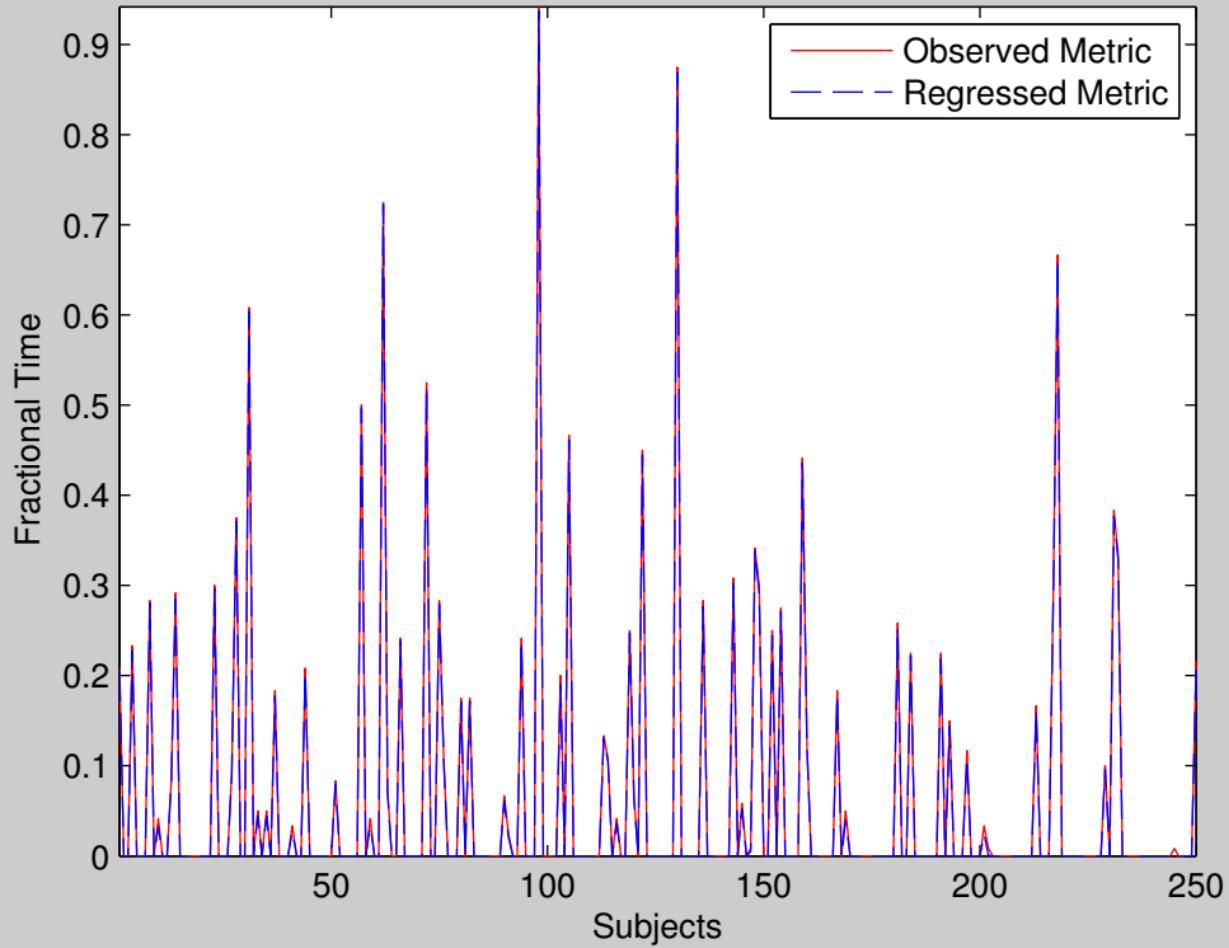
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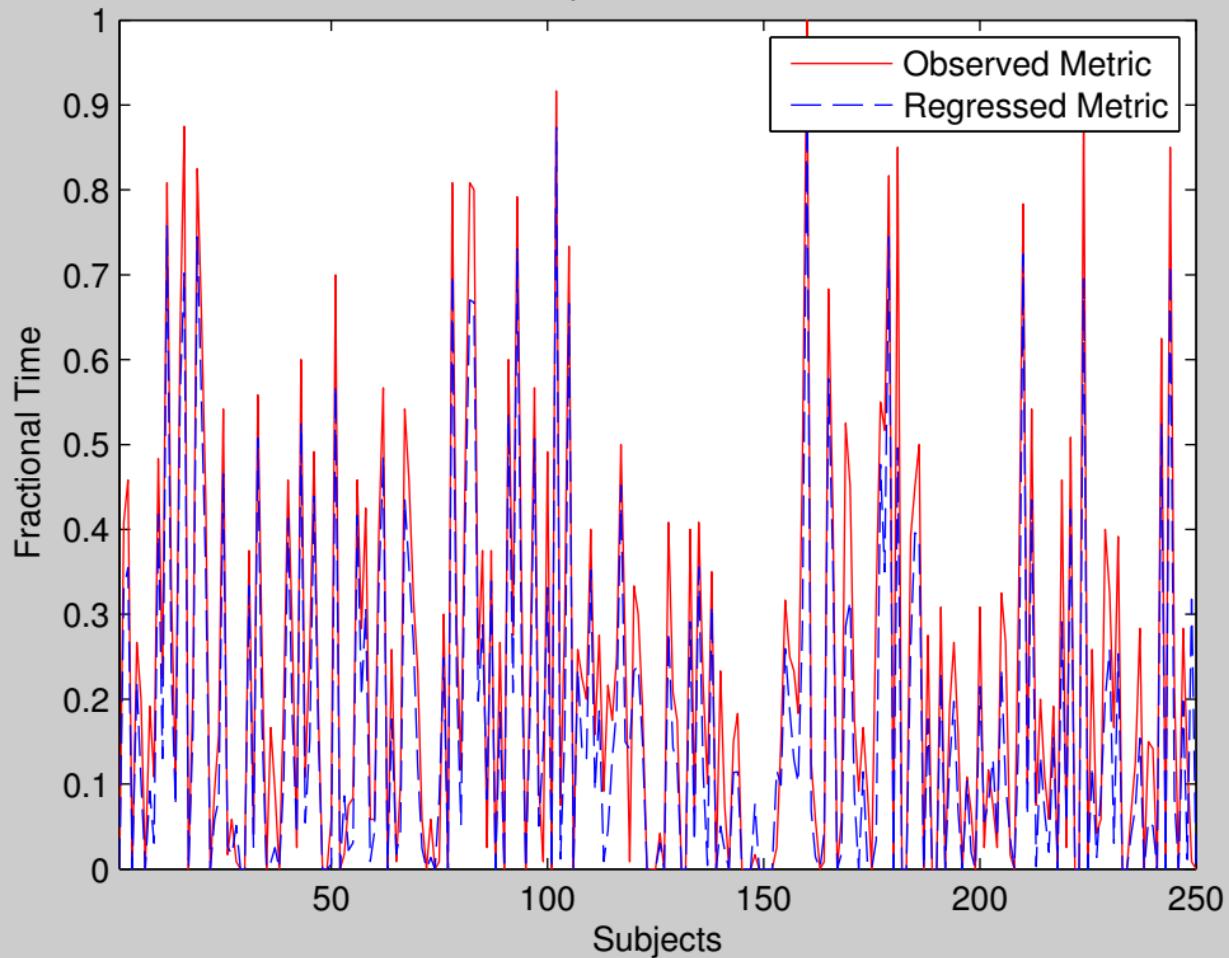
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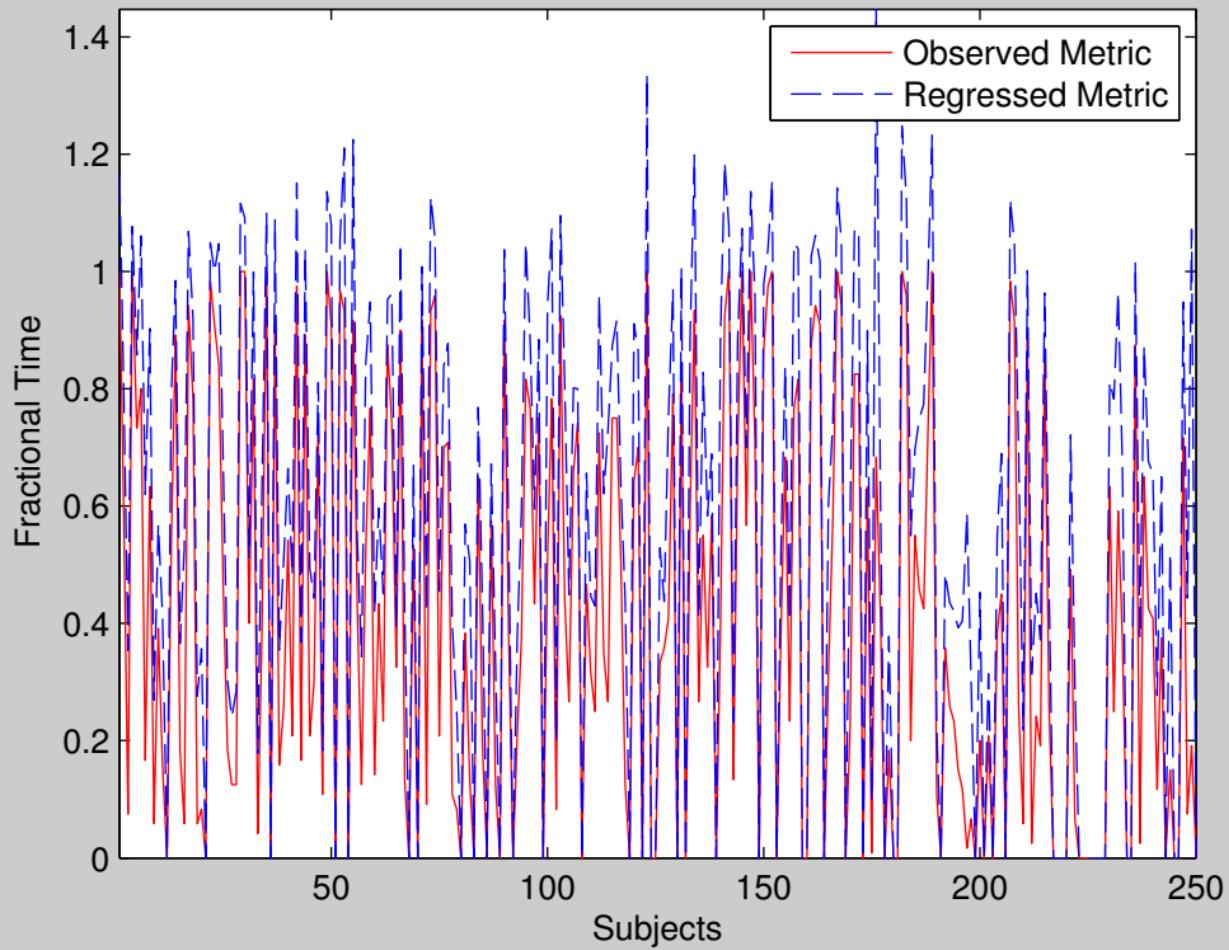
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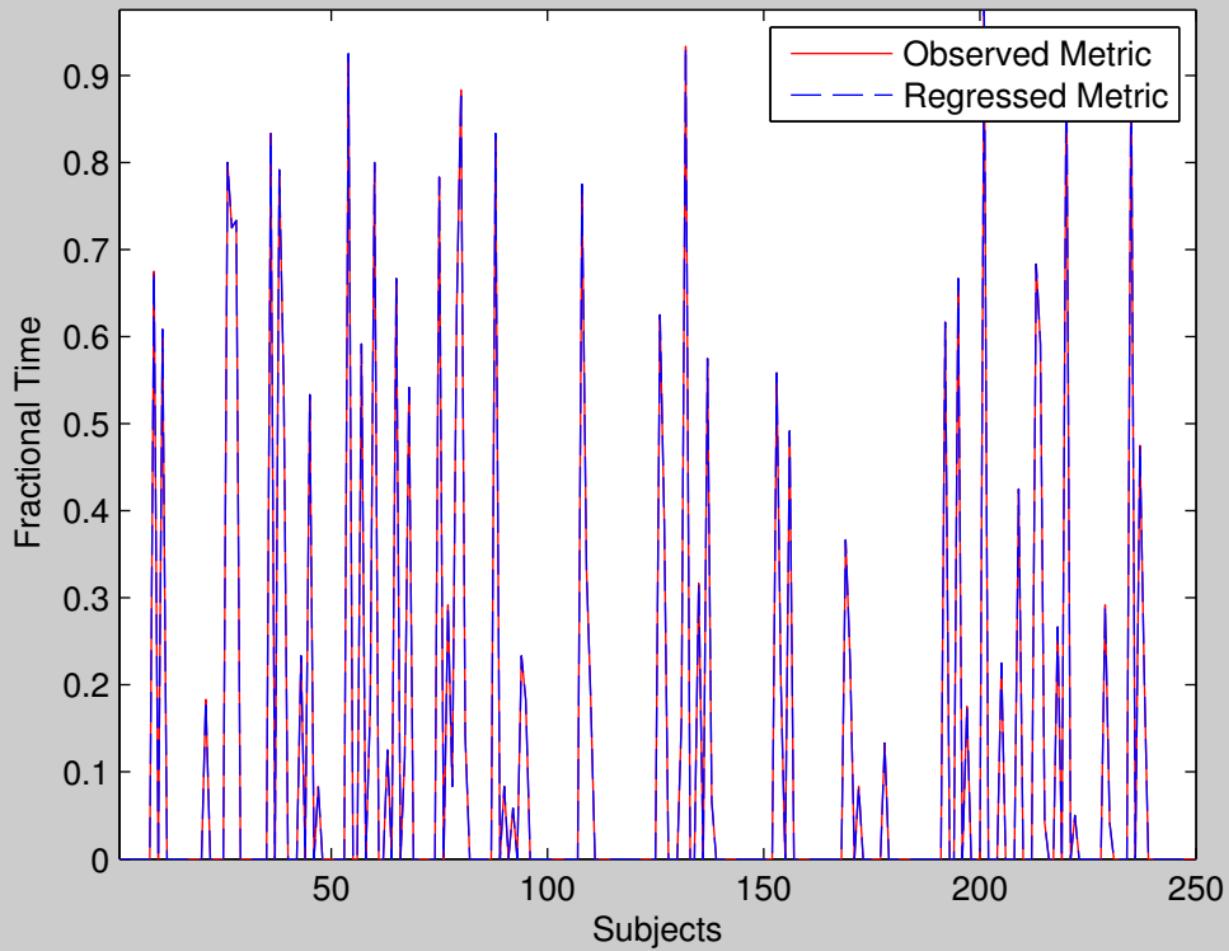
Group 12 State 1 : FT



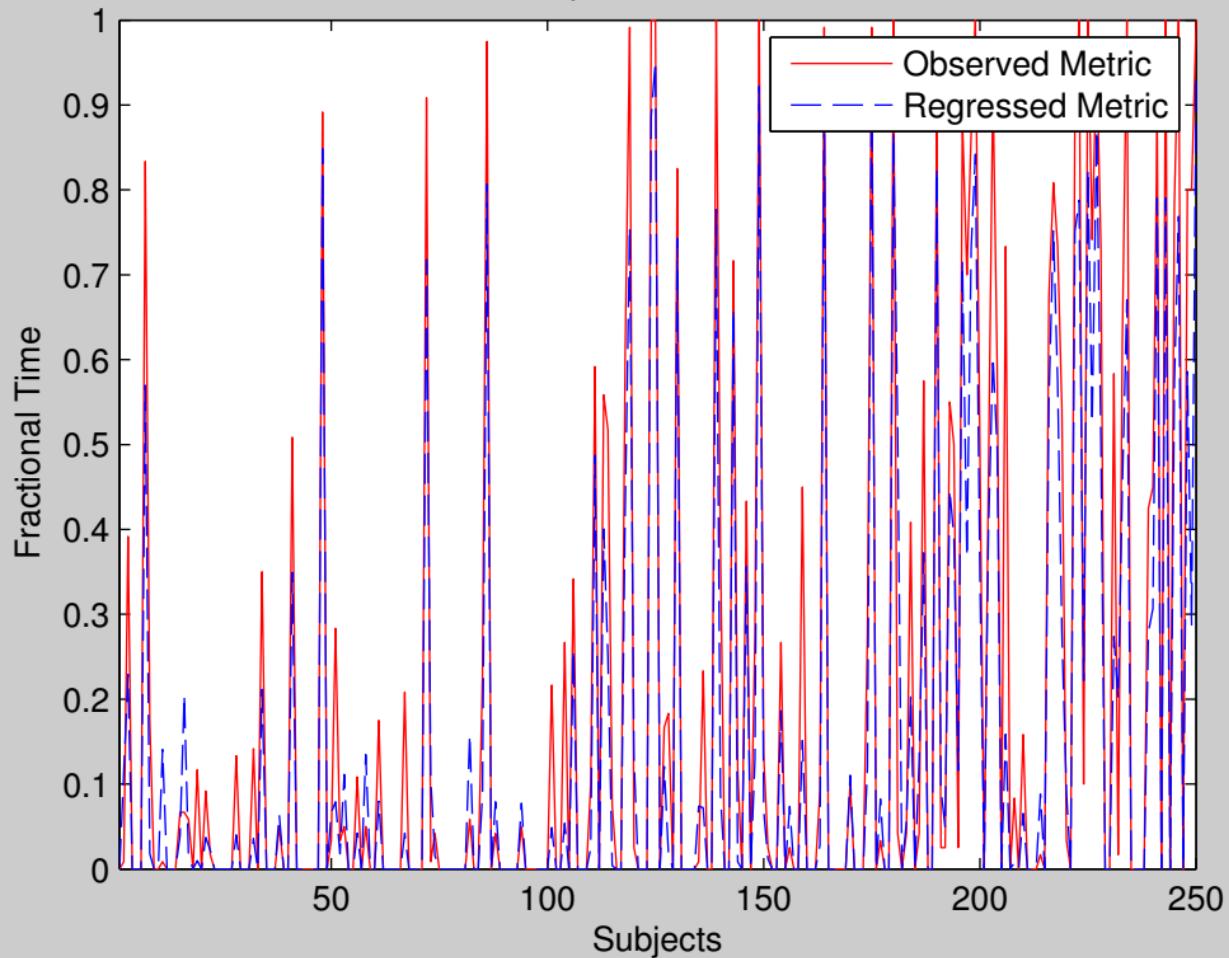
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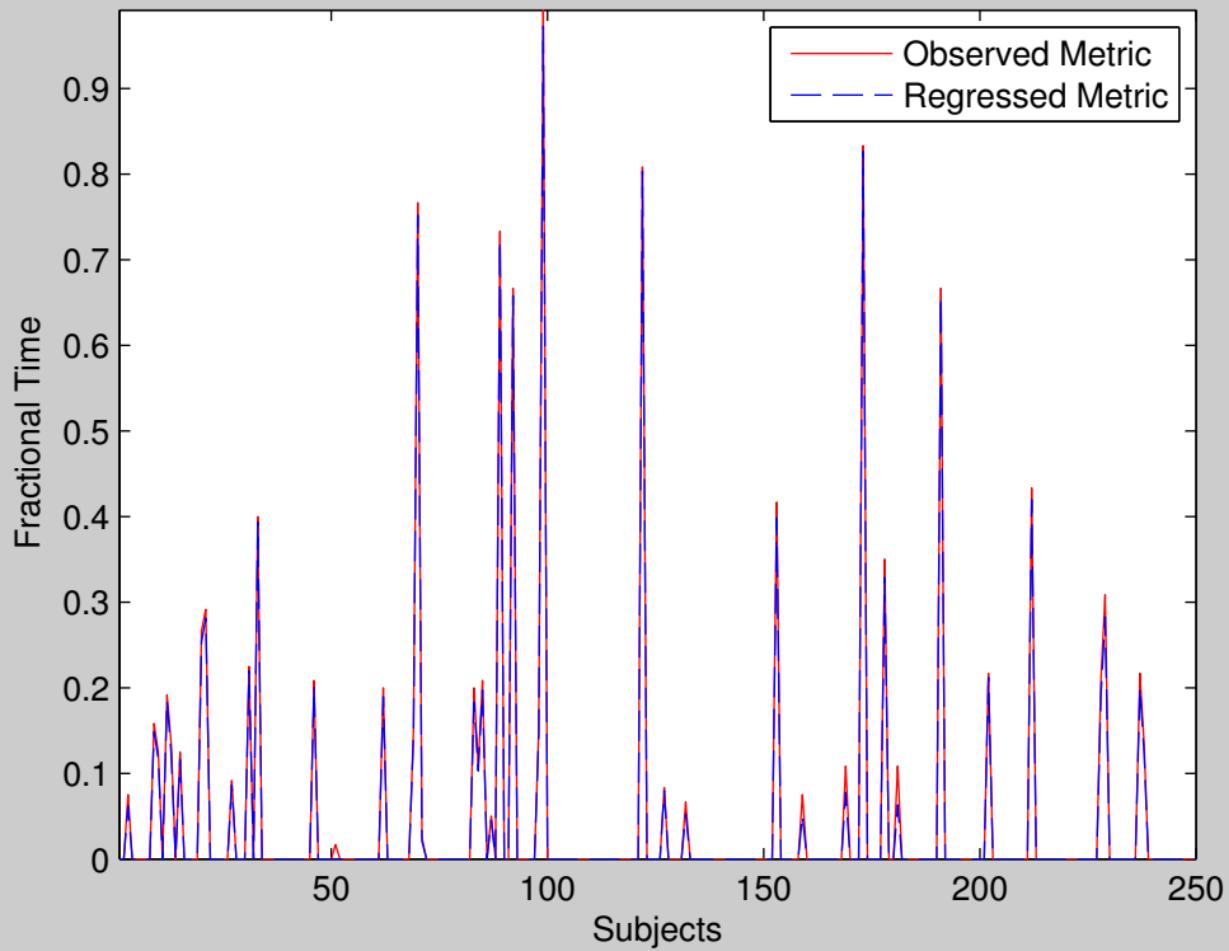
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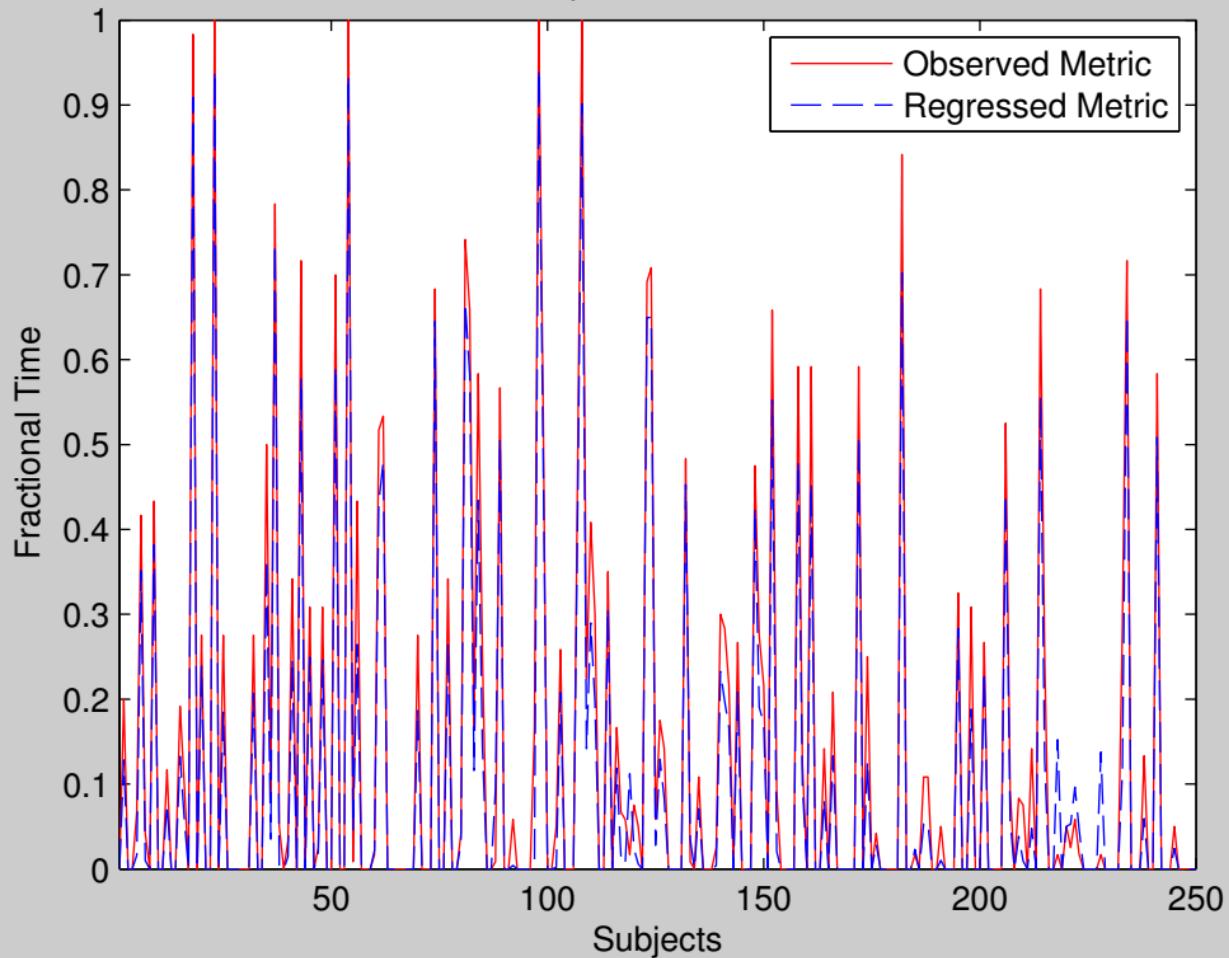
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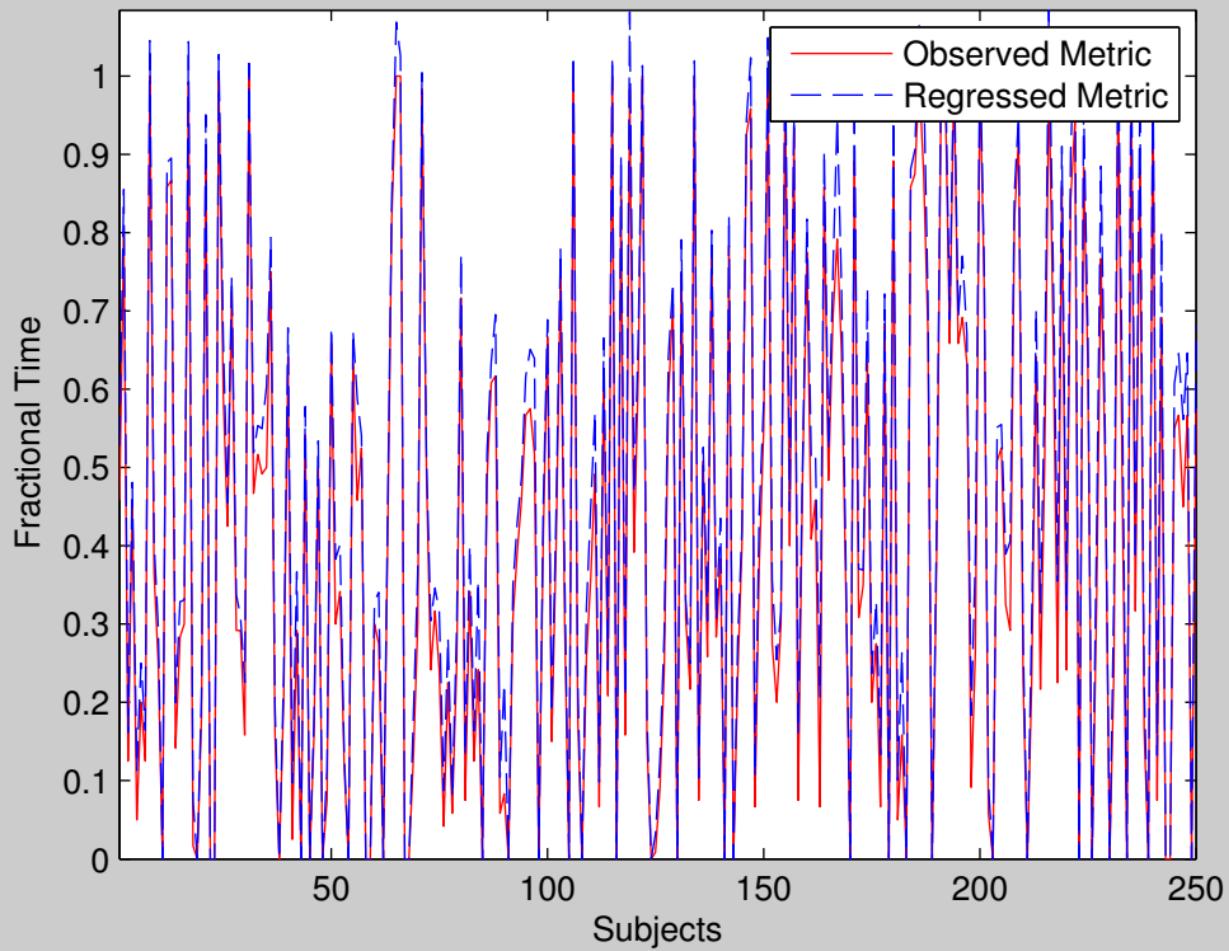
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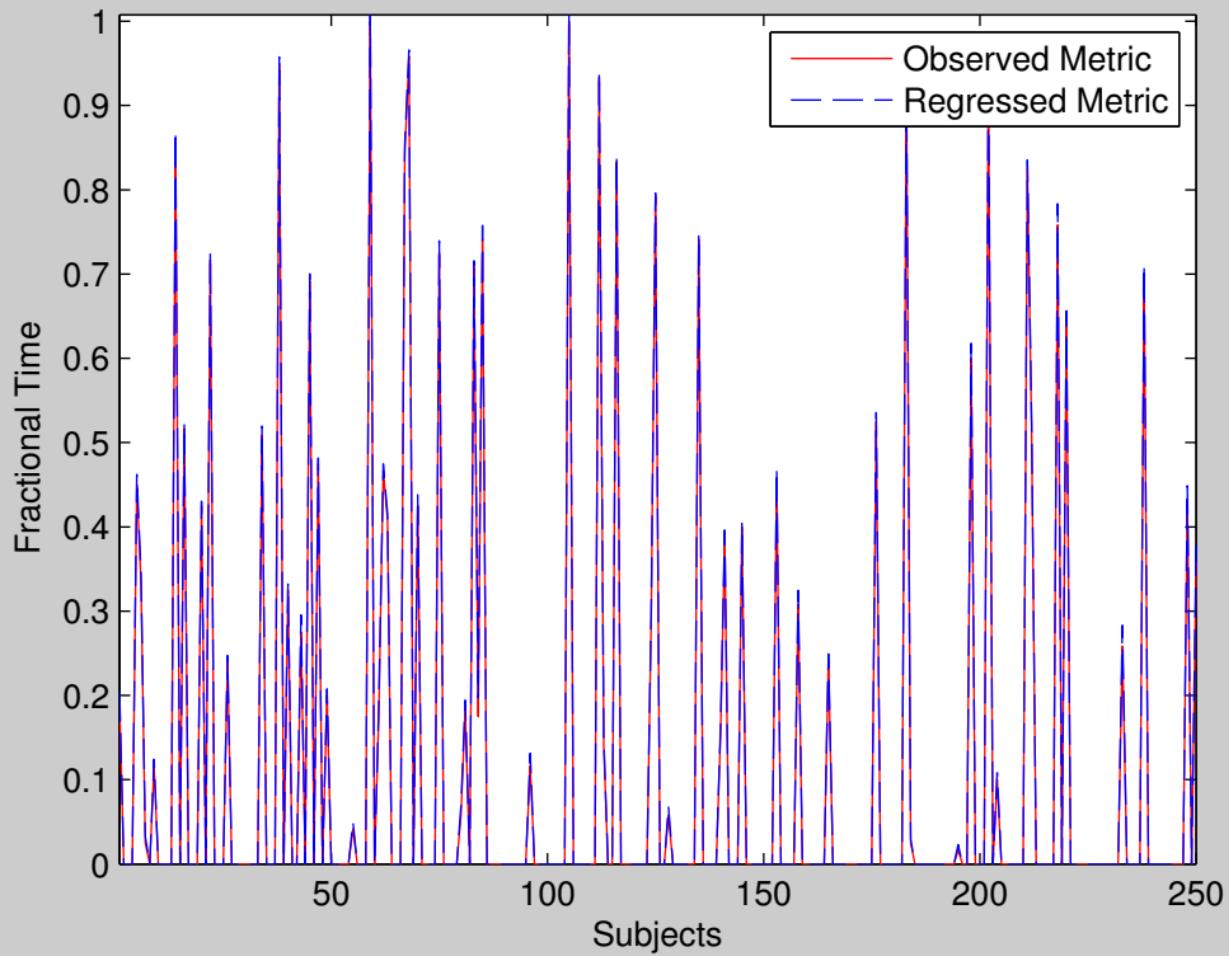
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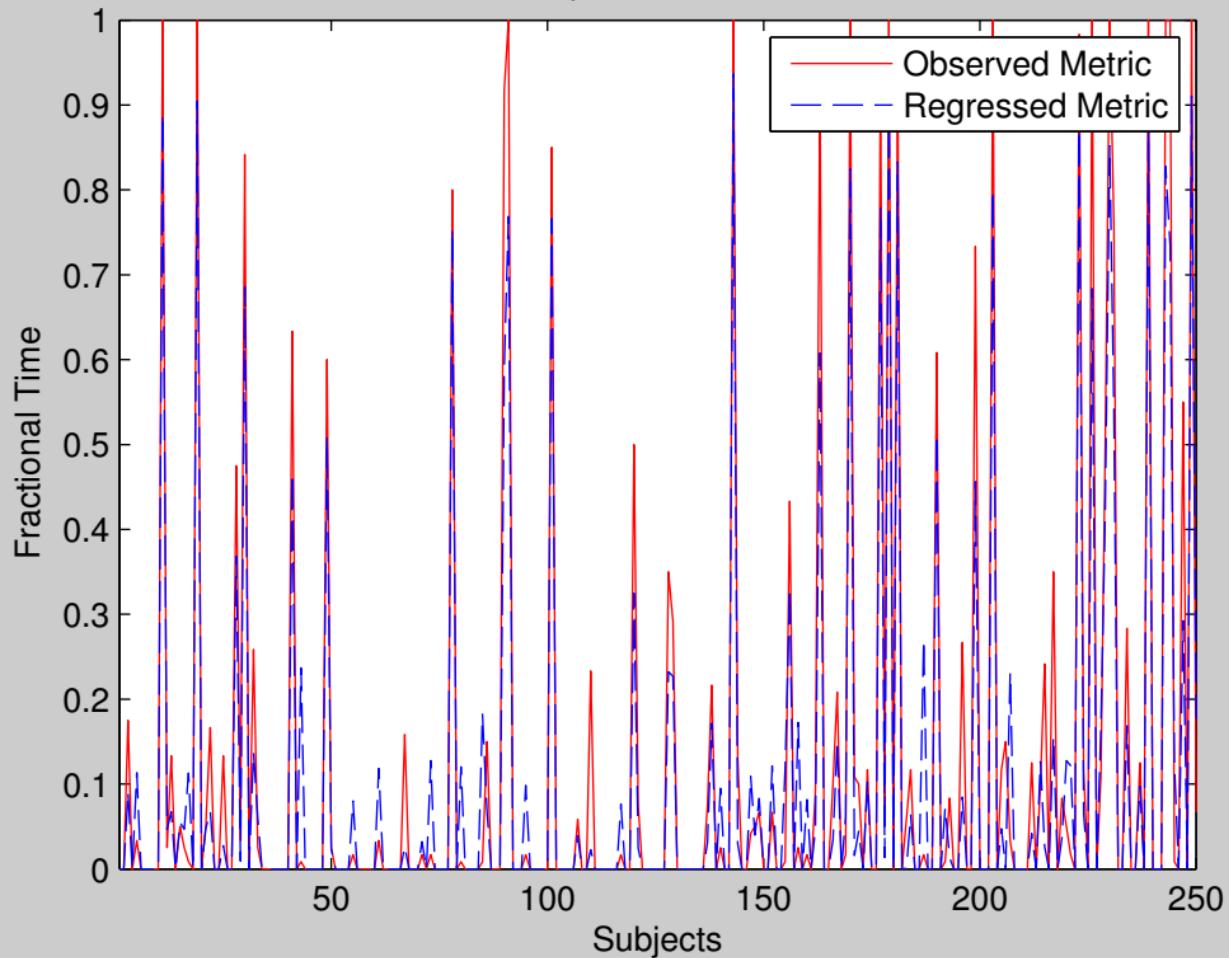
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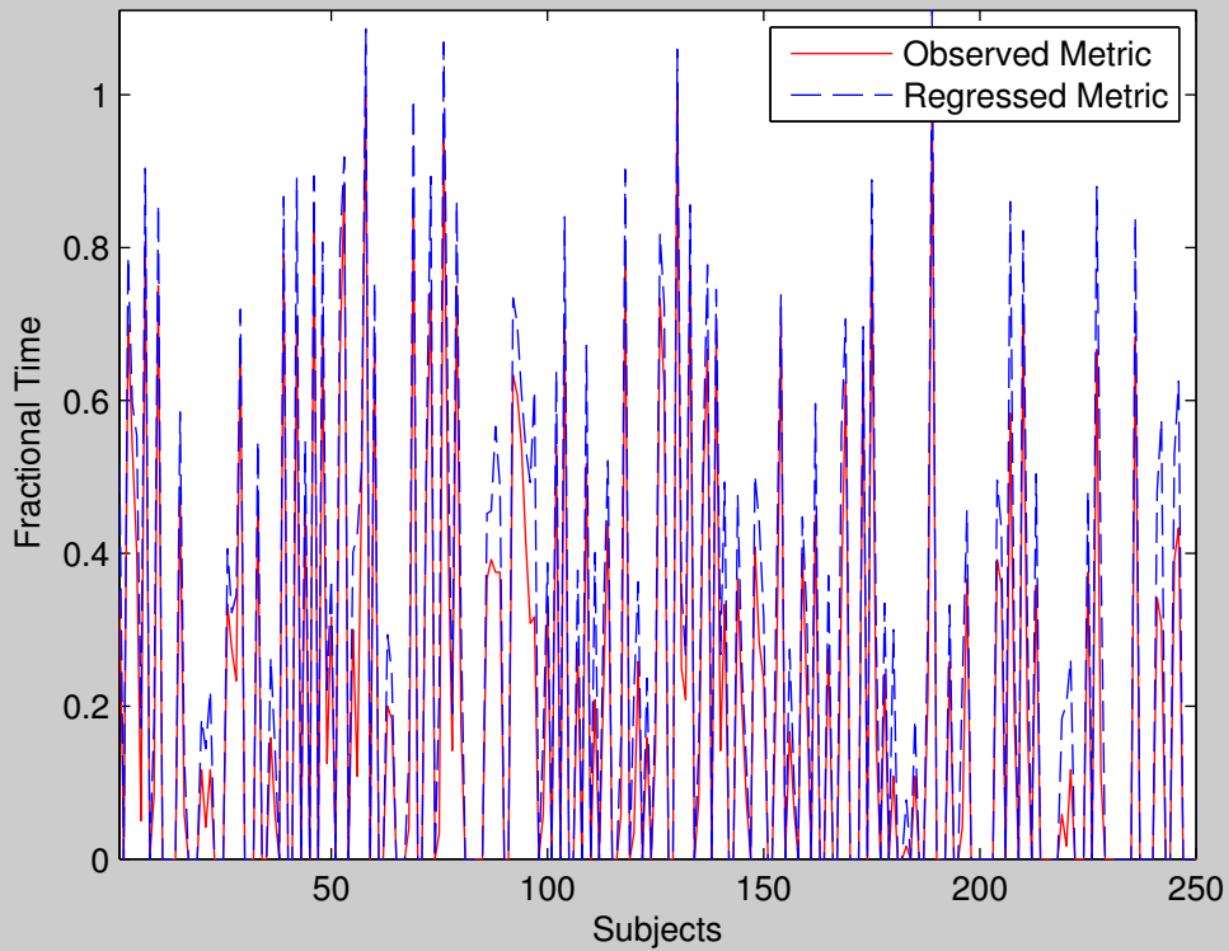
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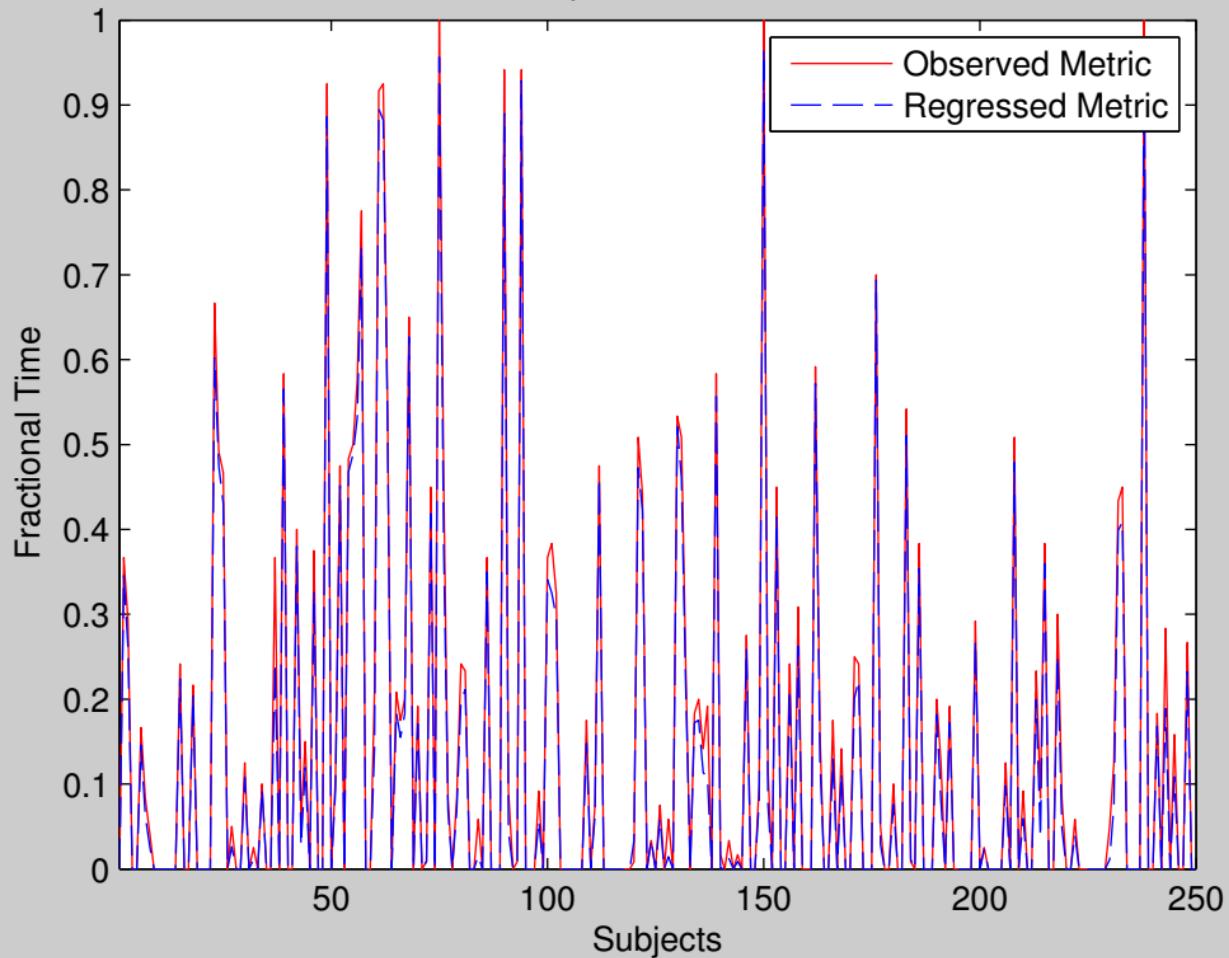
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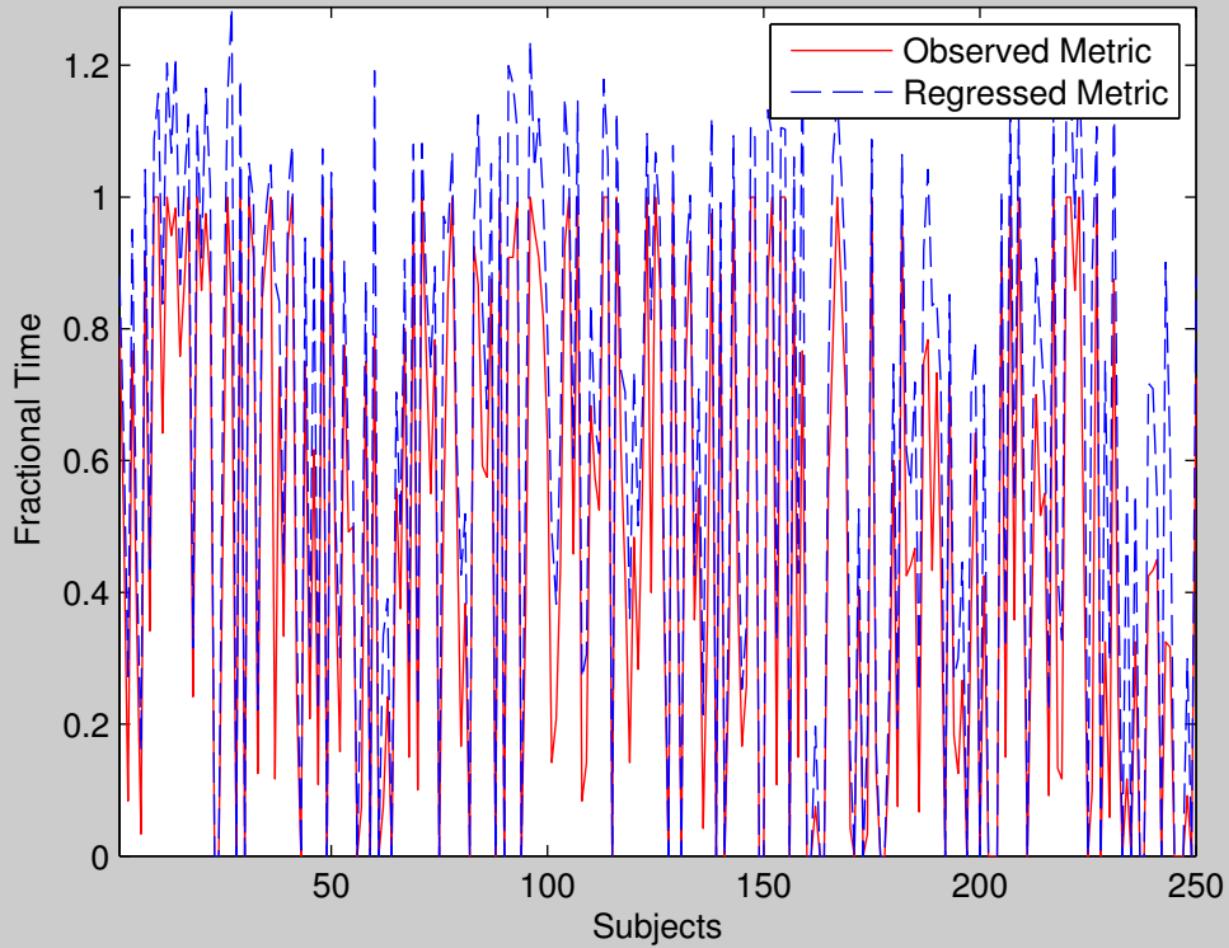
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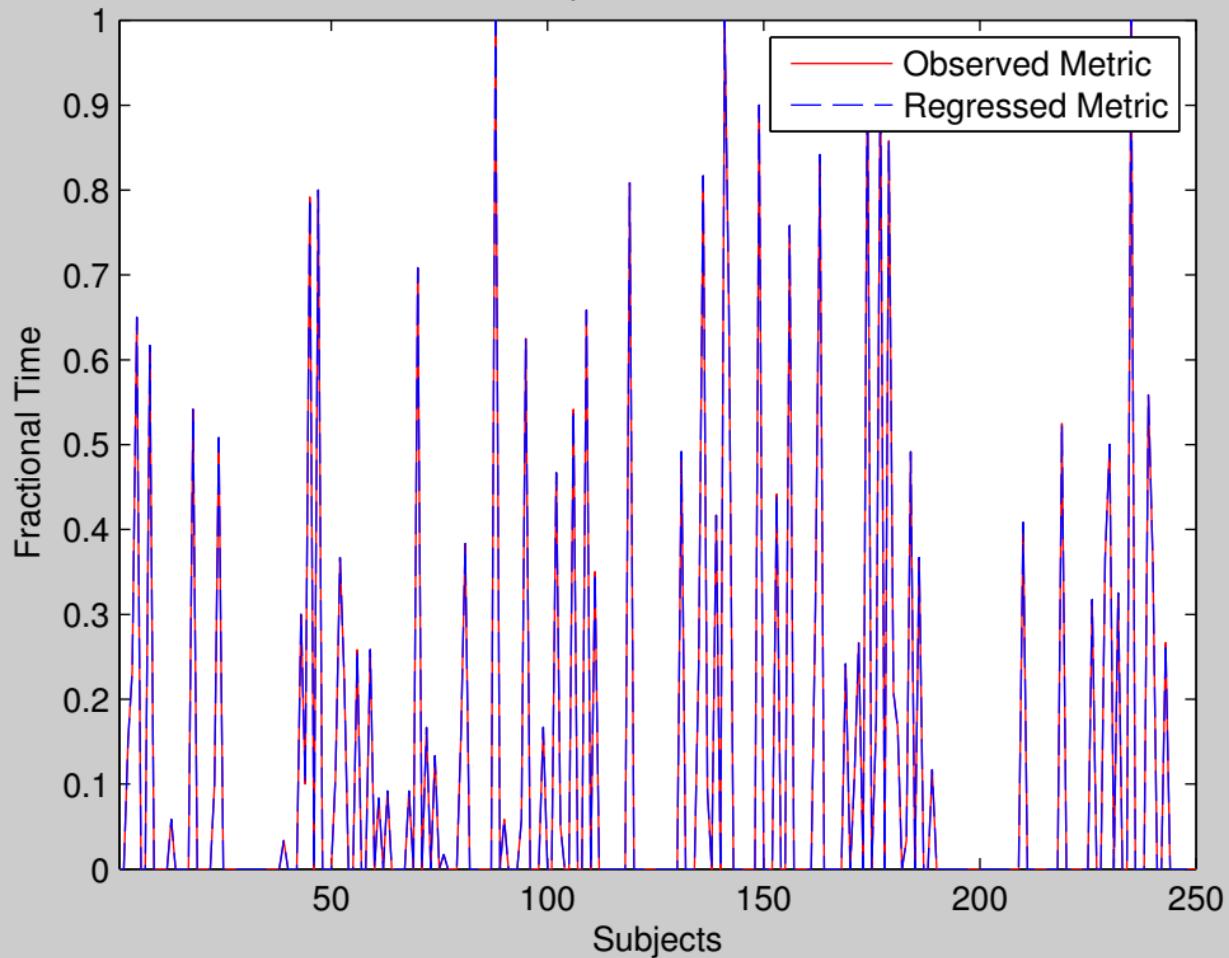
Group 14 State 1 : FT



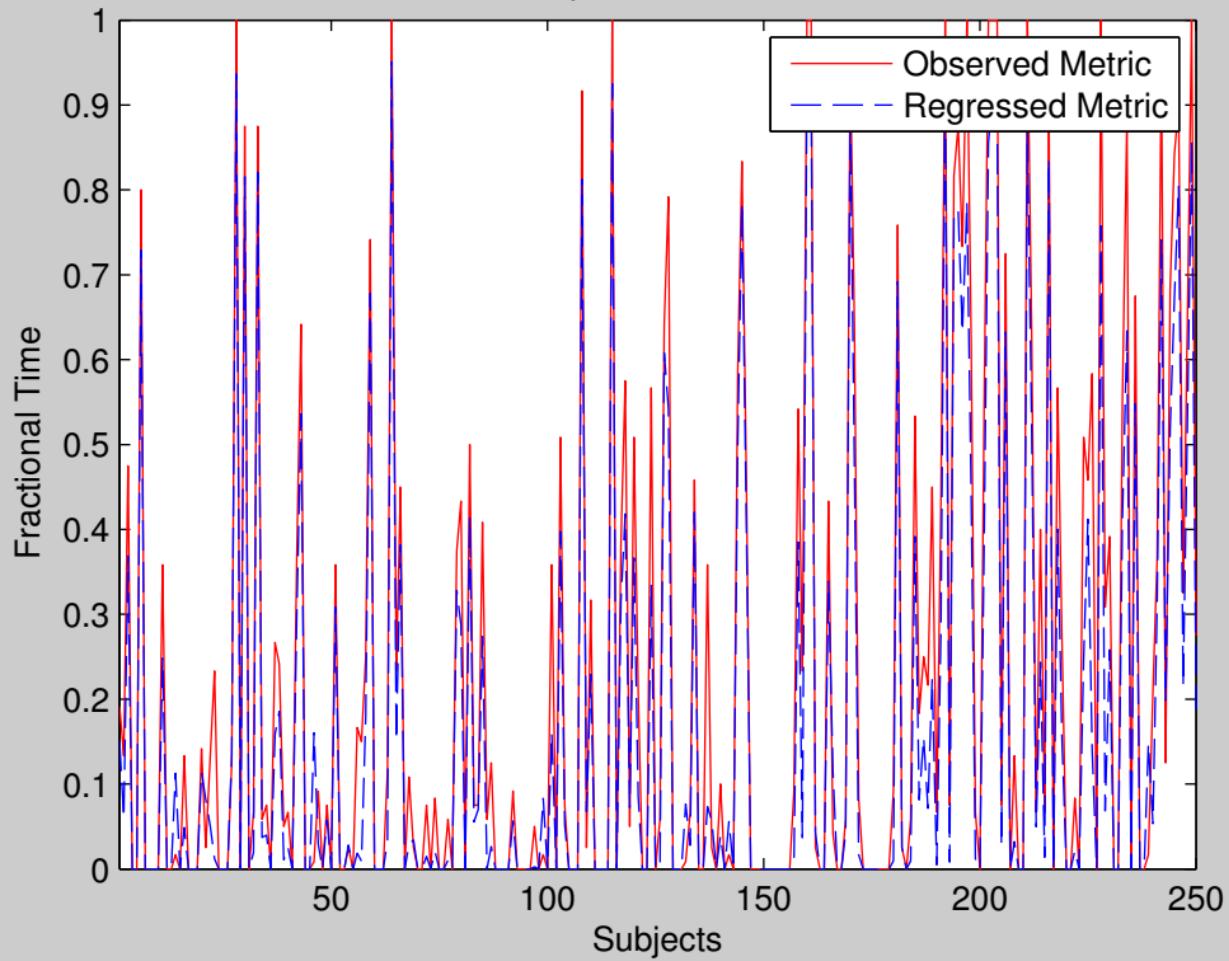
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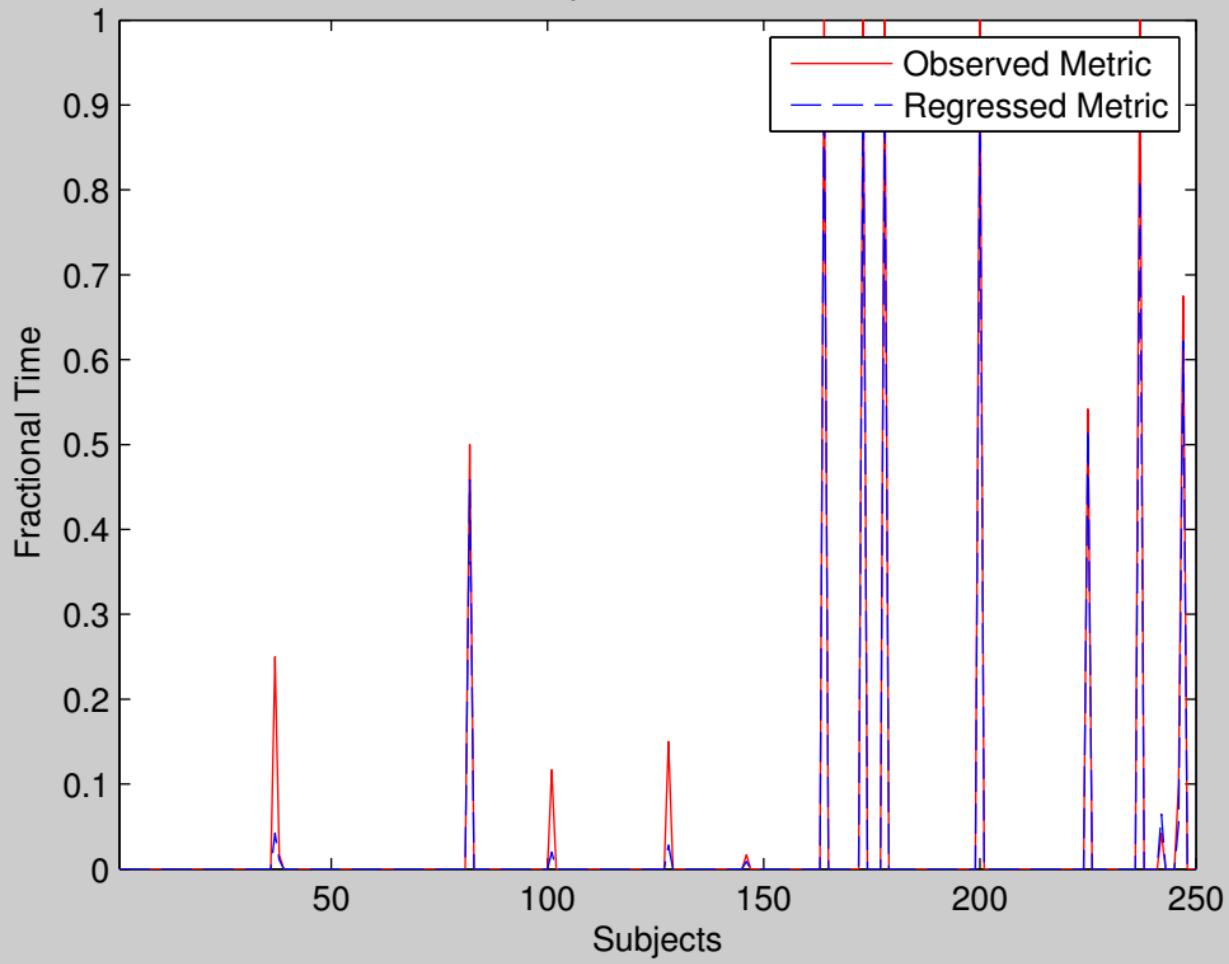
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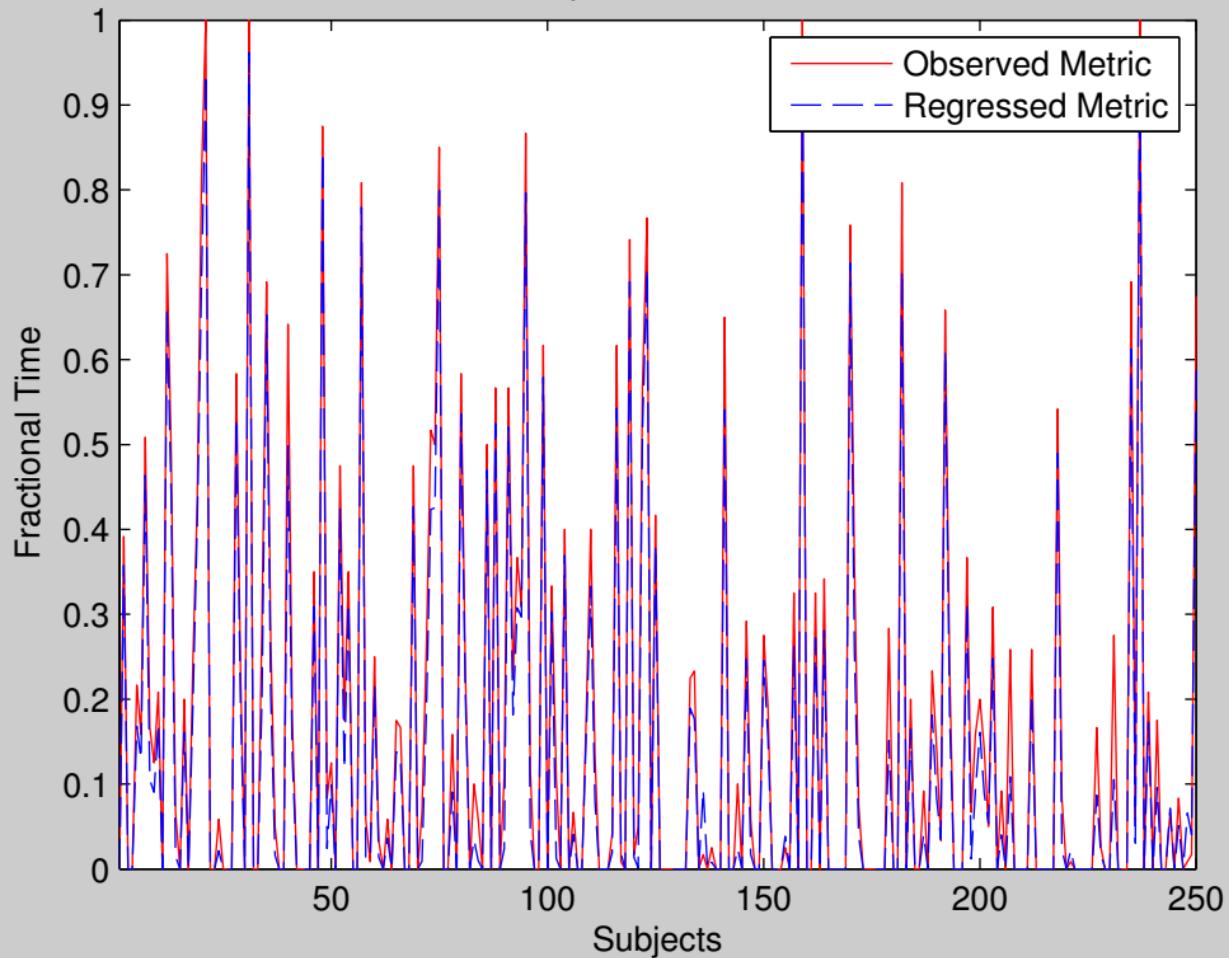
Group 14 State 4 : FT



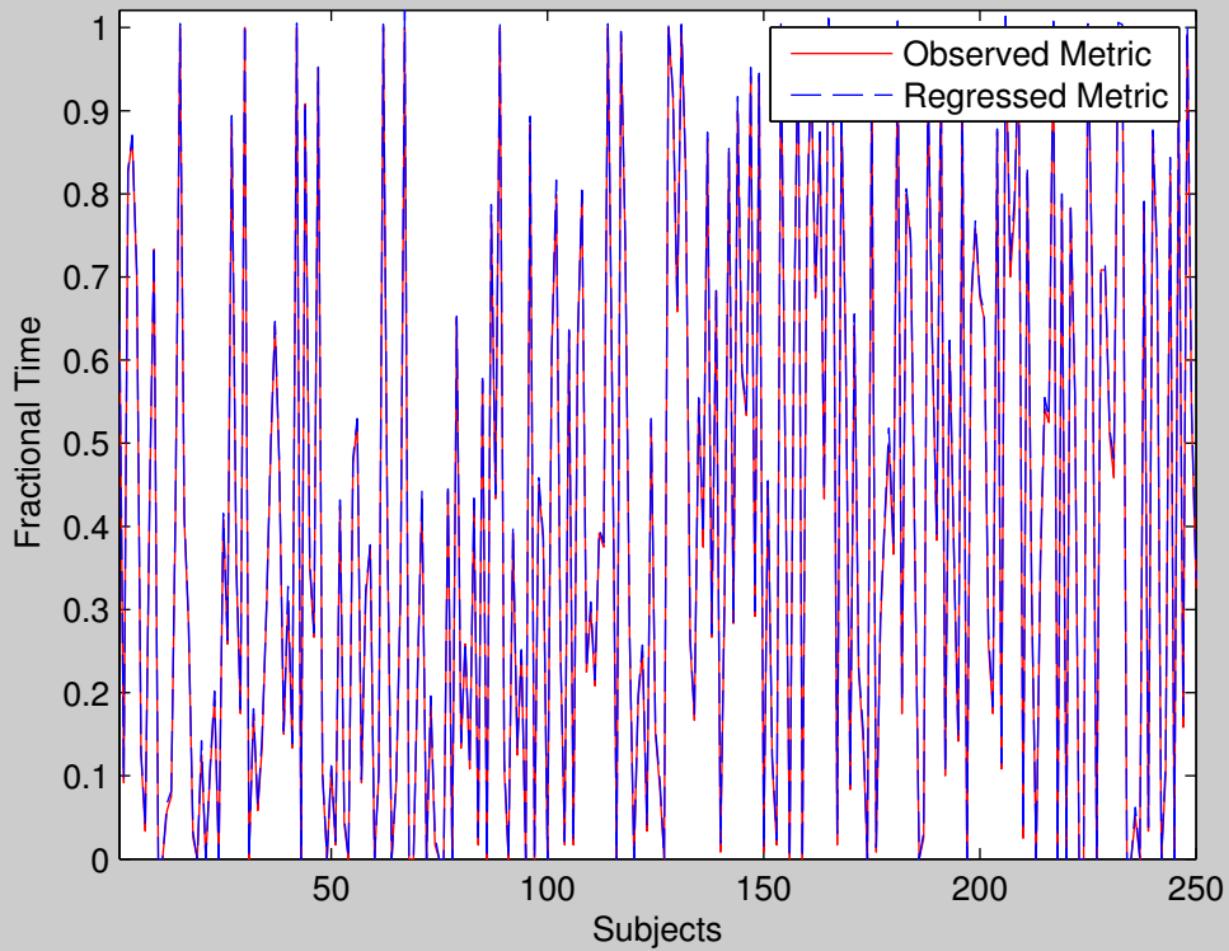
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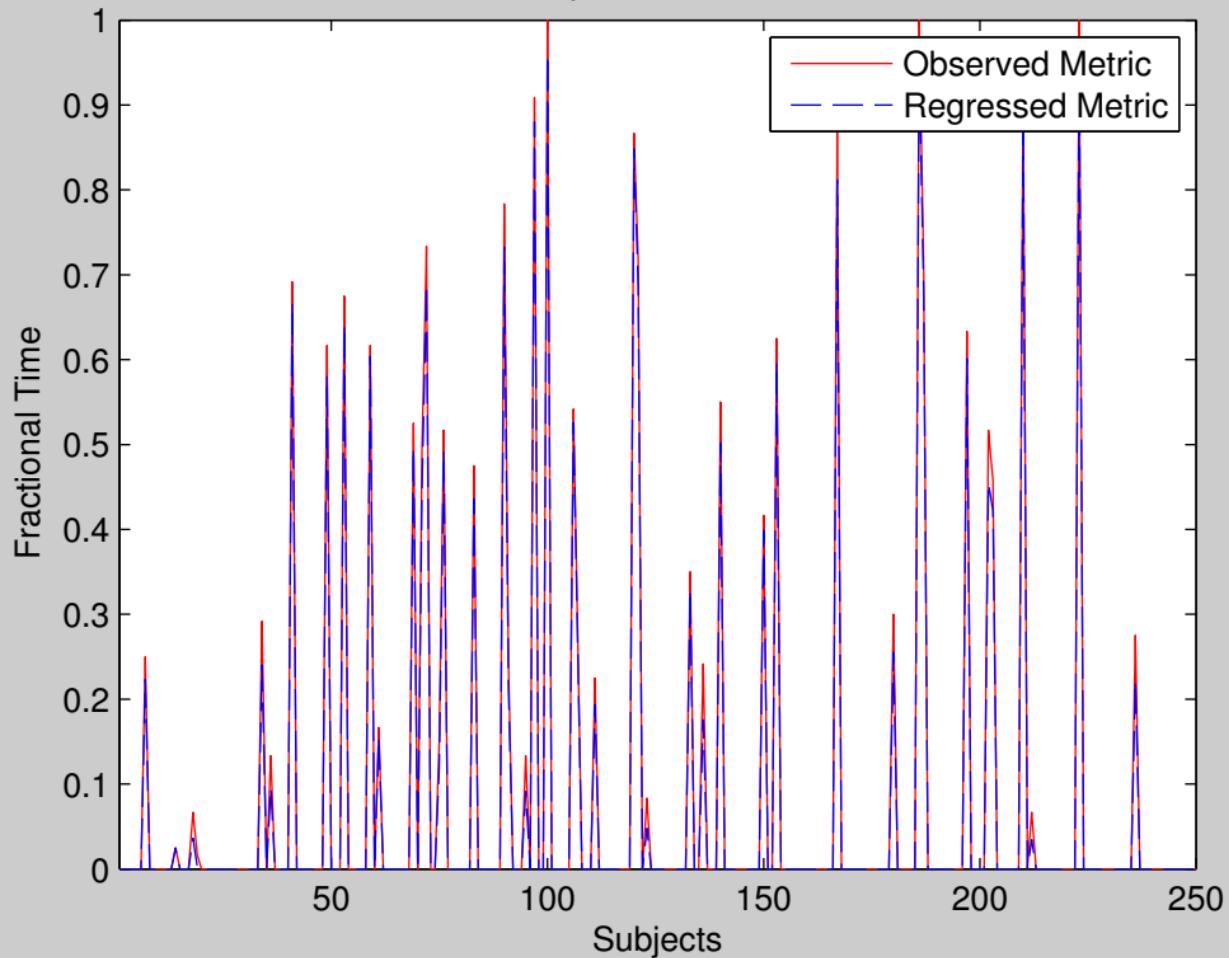
Group 15 State 1 : FT



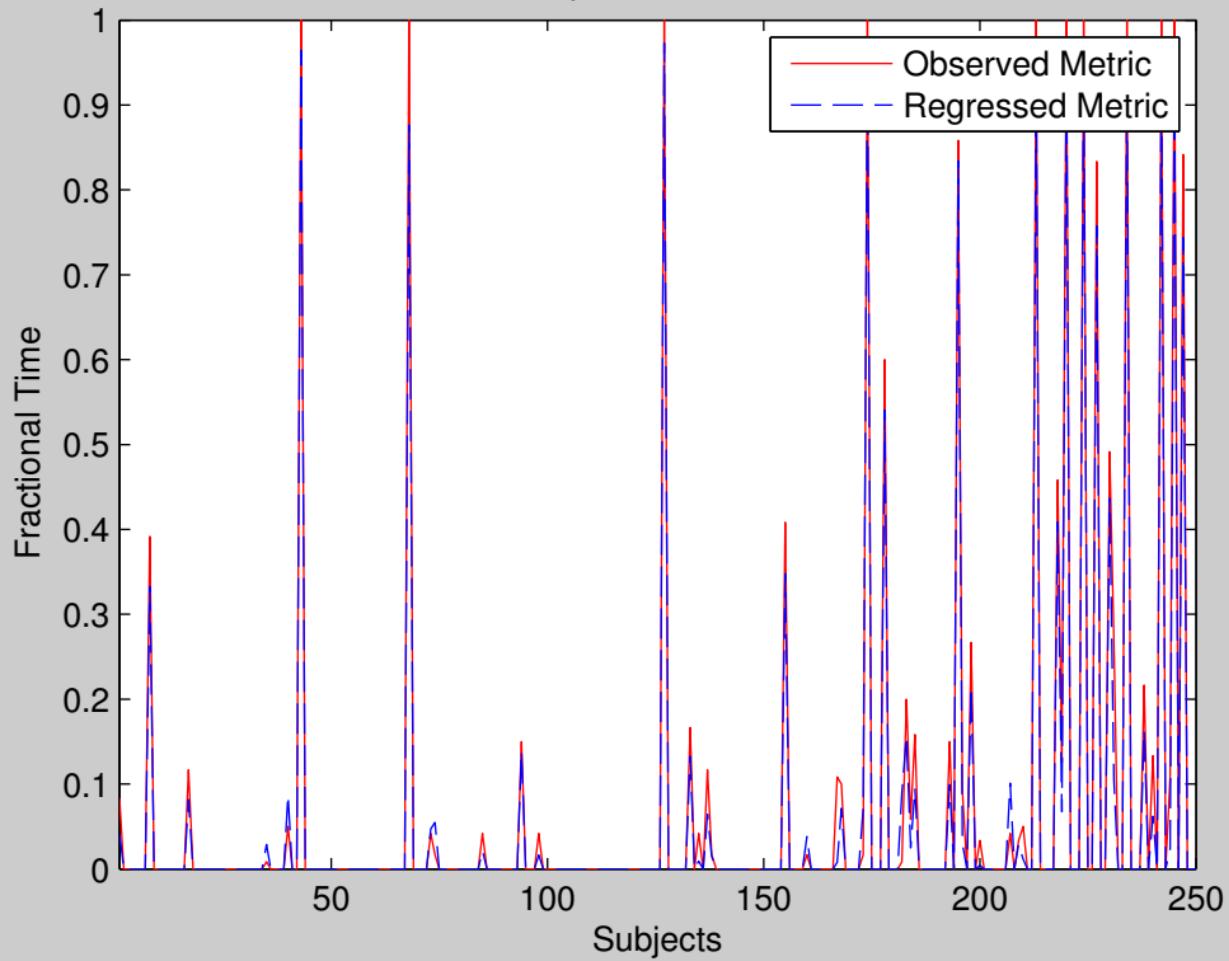
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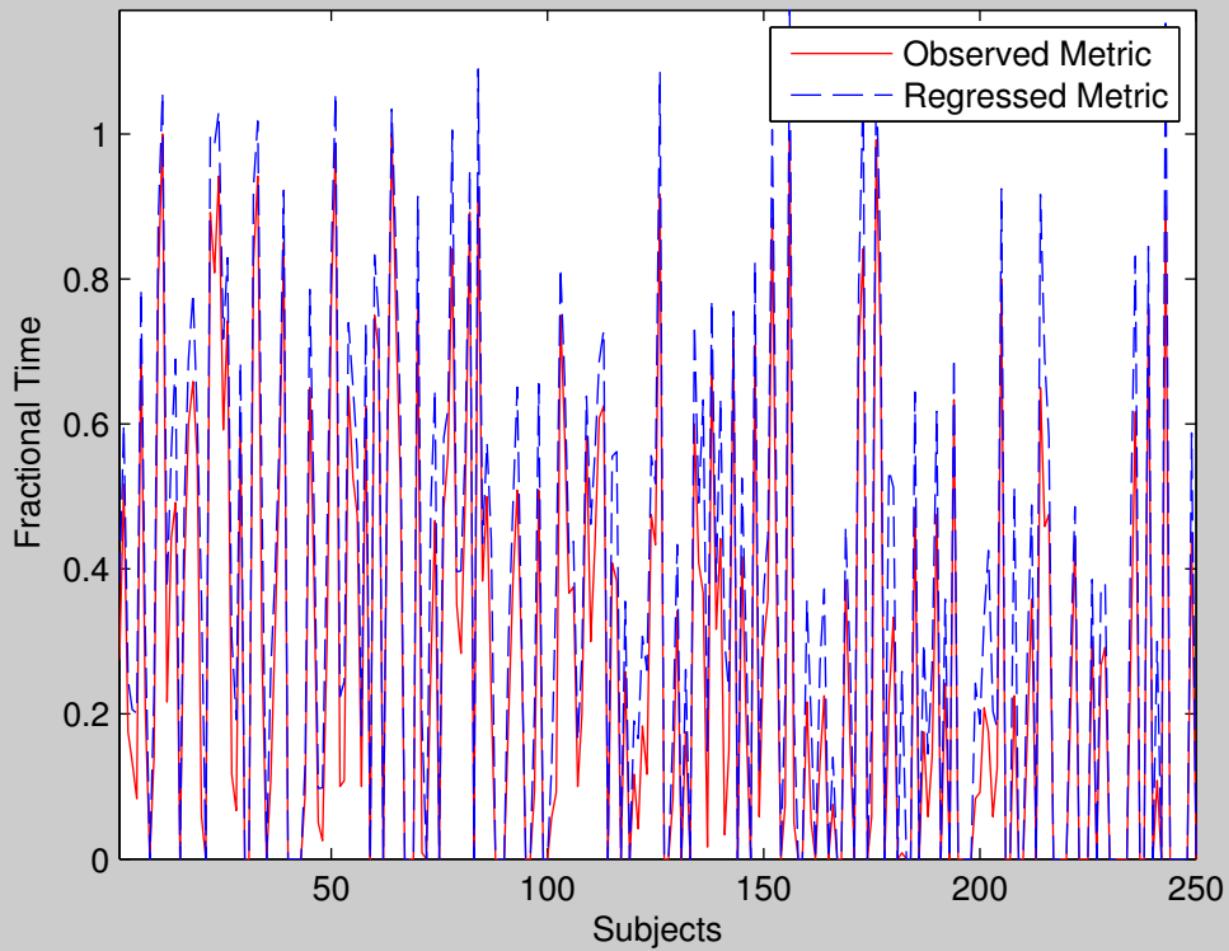
Group 15 State 3 : FT



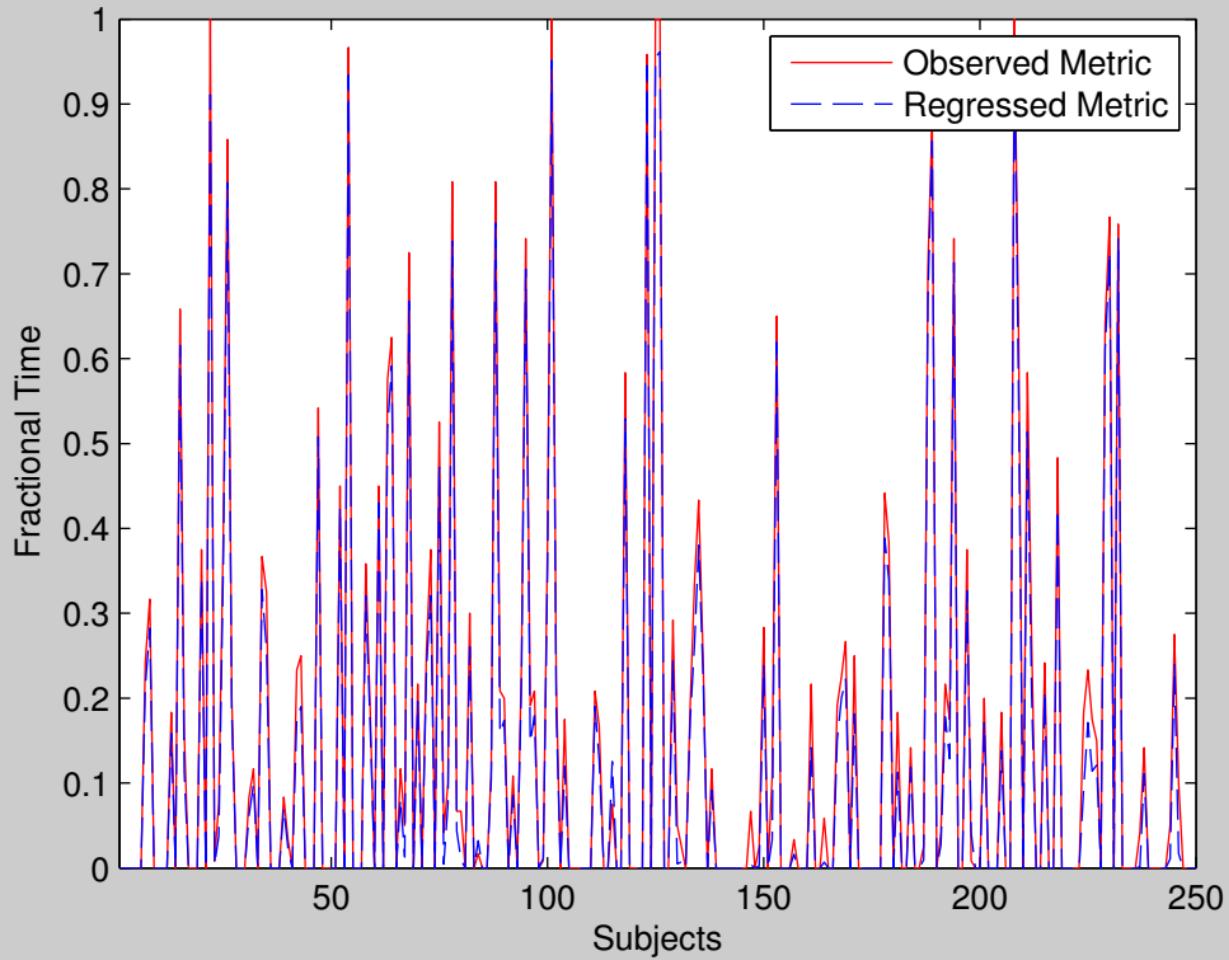
Group 15 State 4 : FT



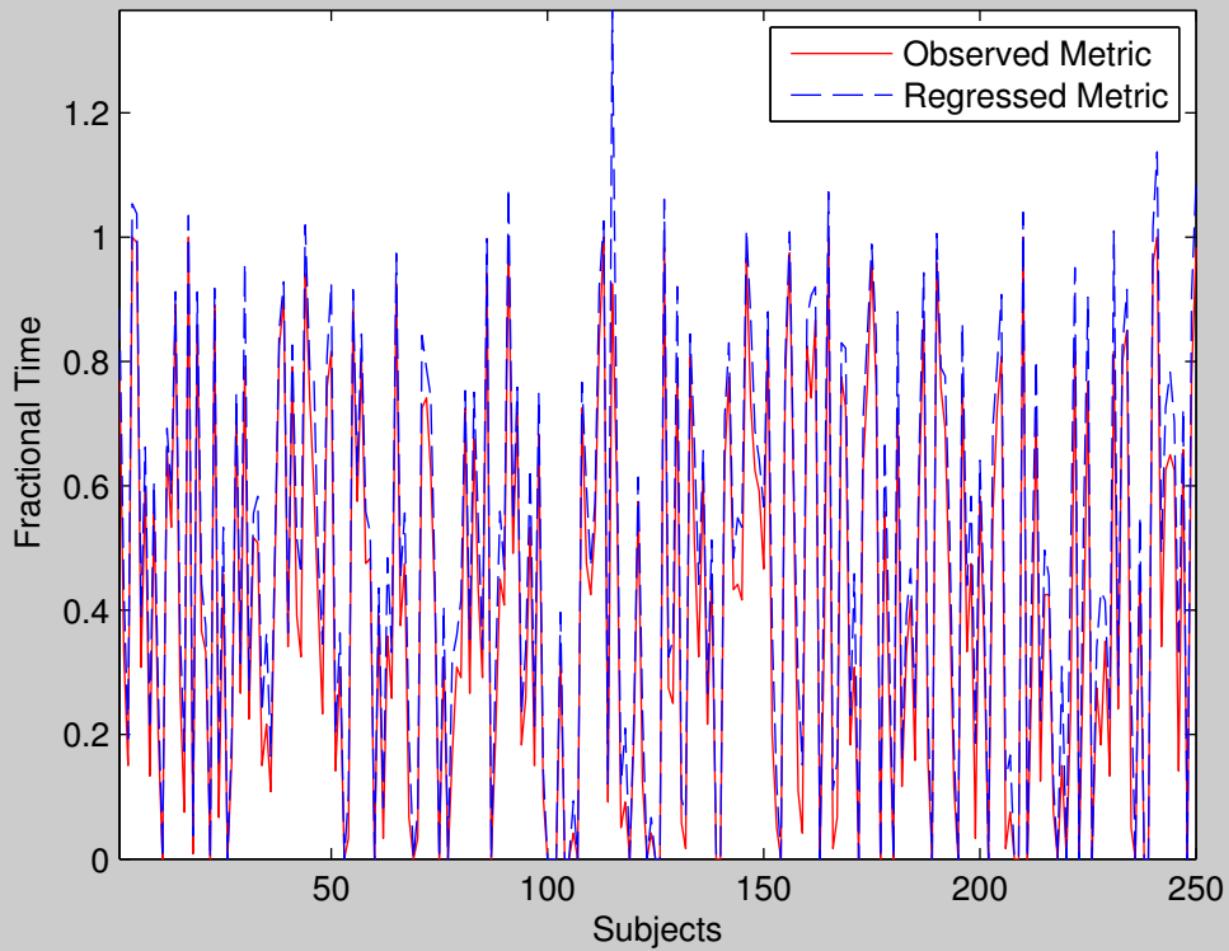
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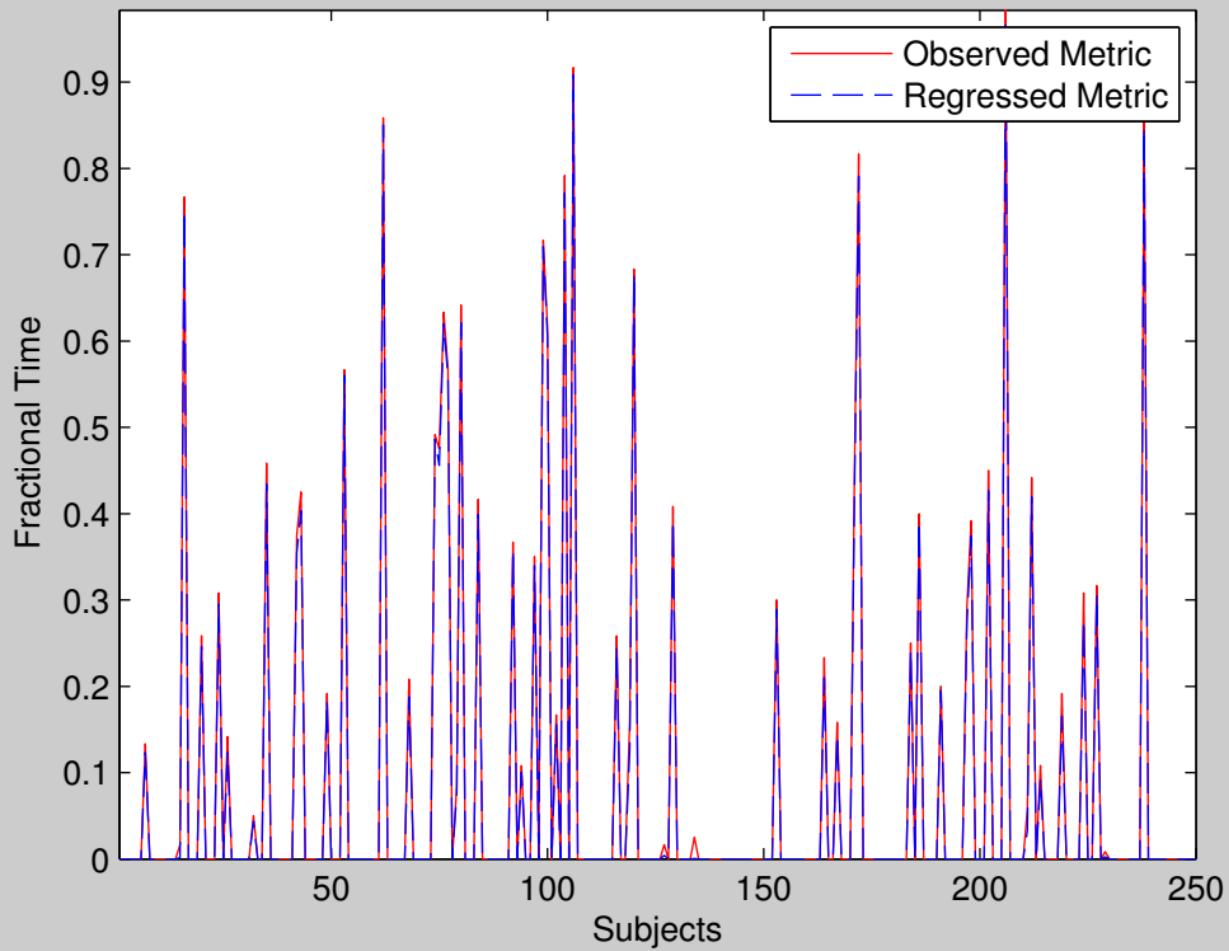
Group 16 State 1 : FT



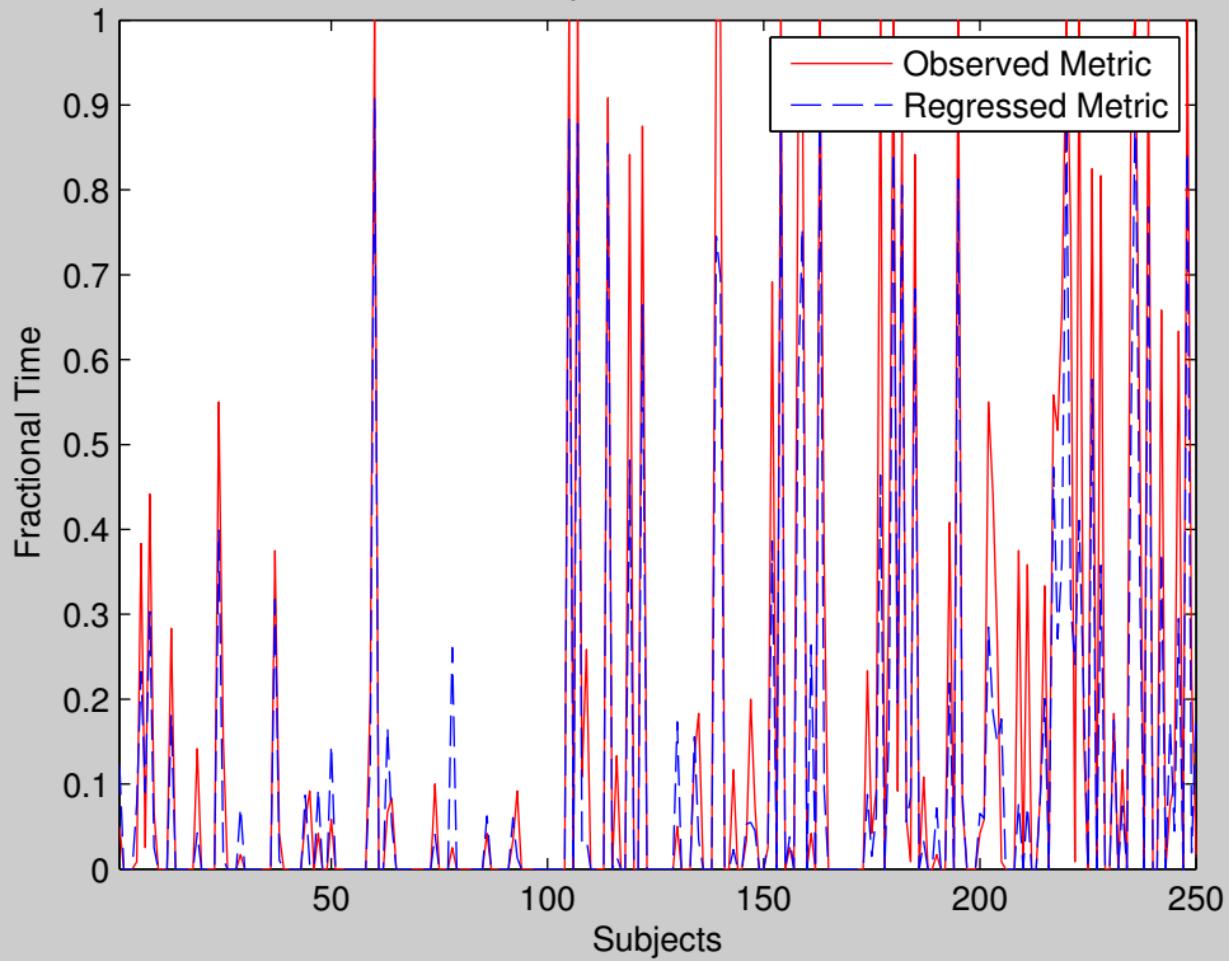
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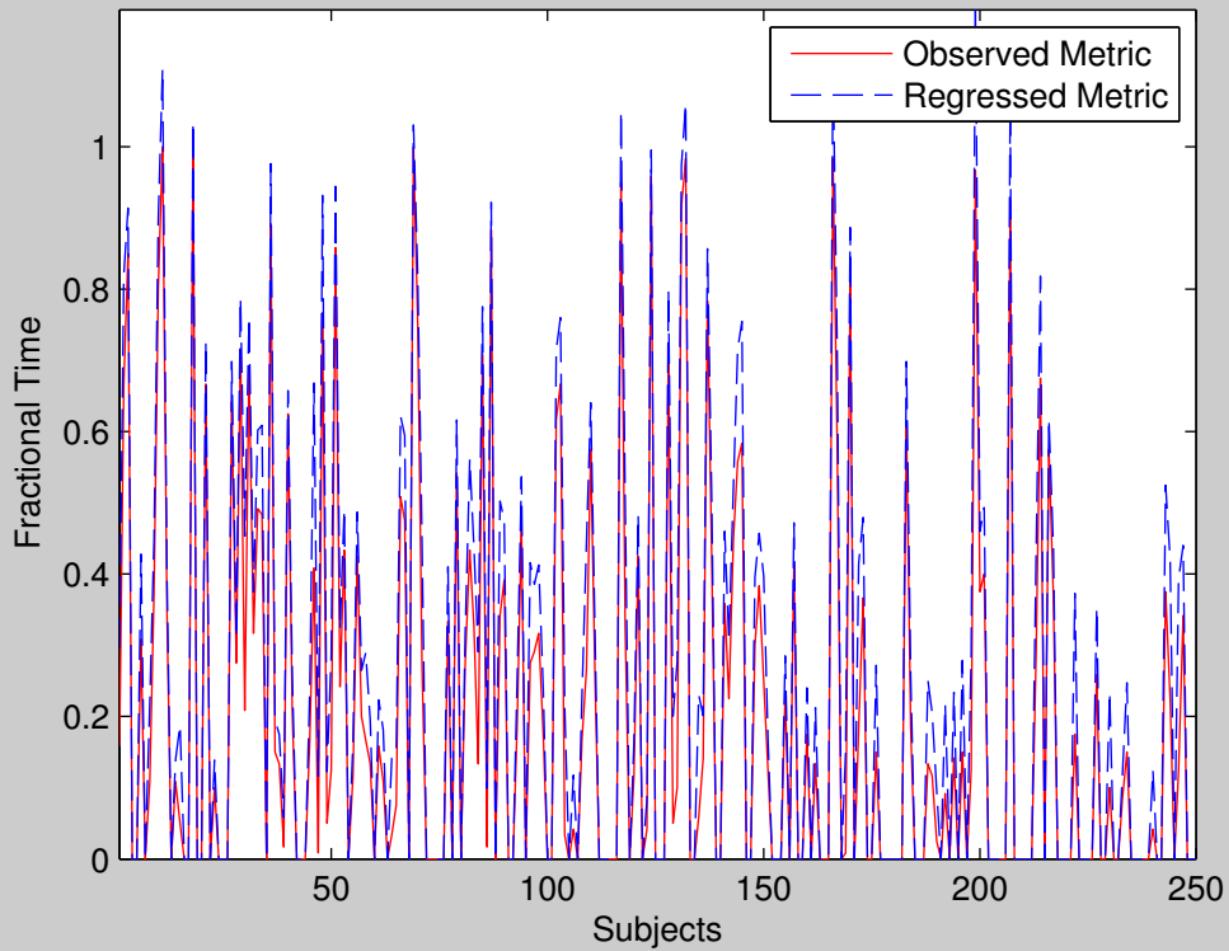
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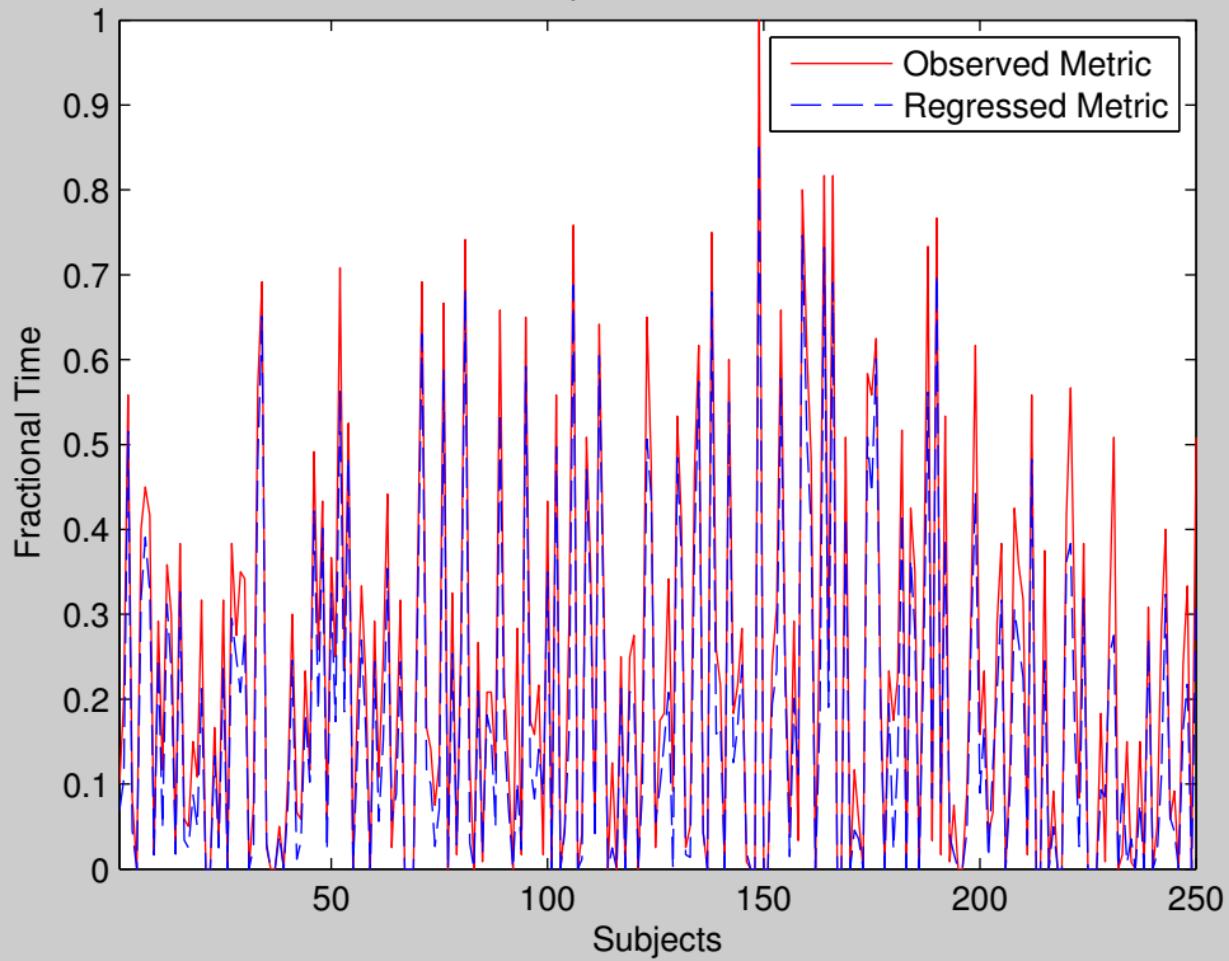
Group 16 State 4 : FT



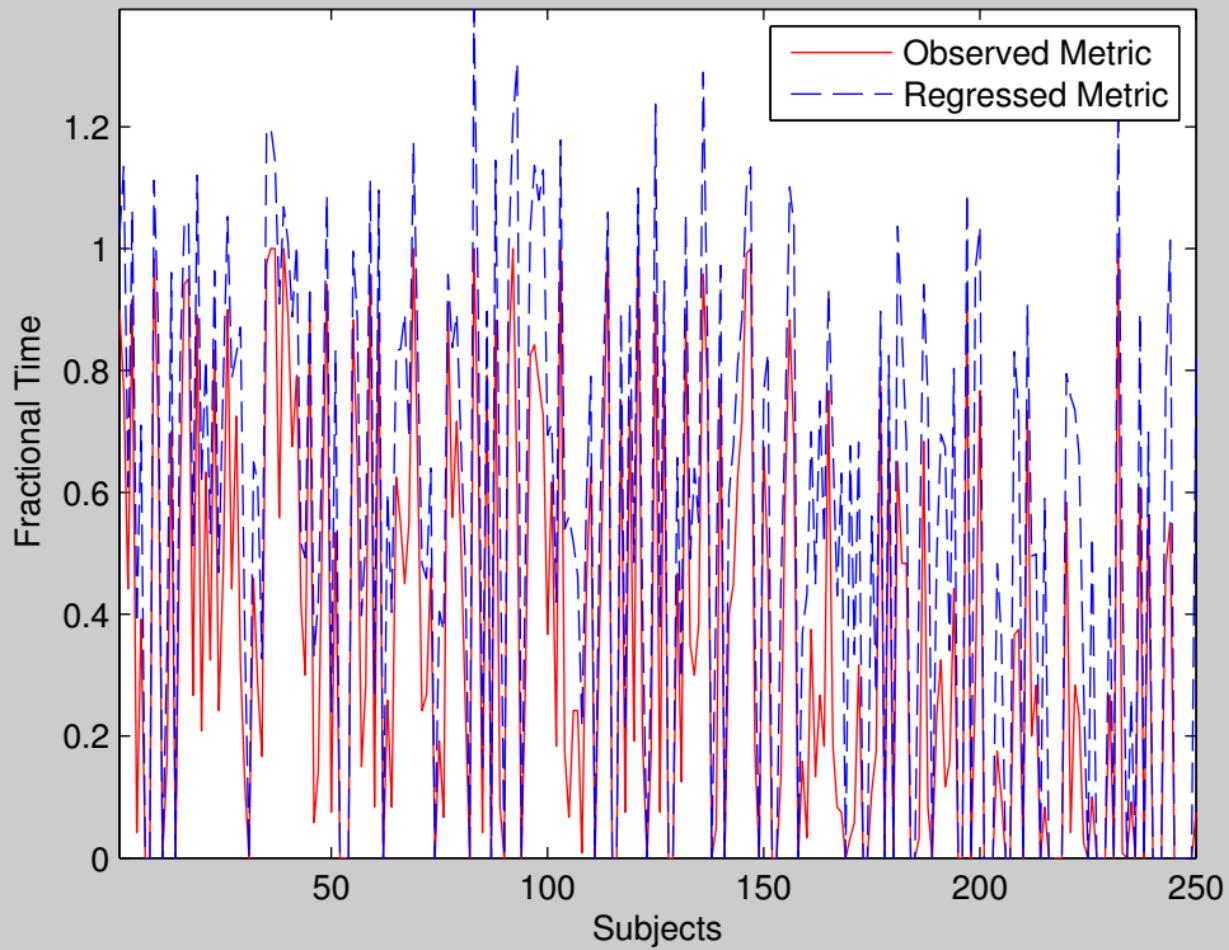
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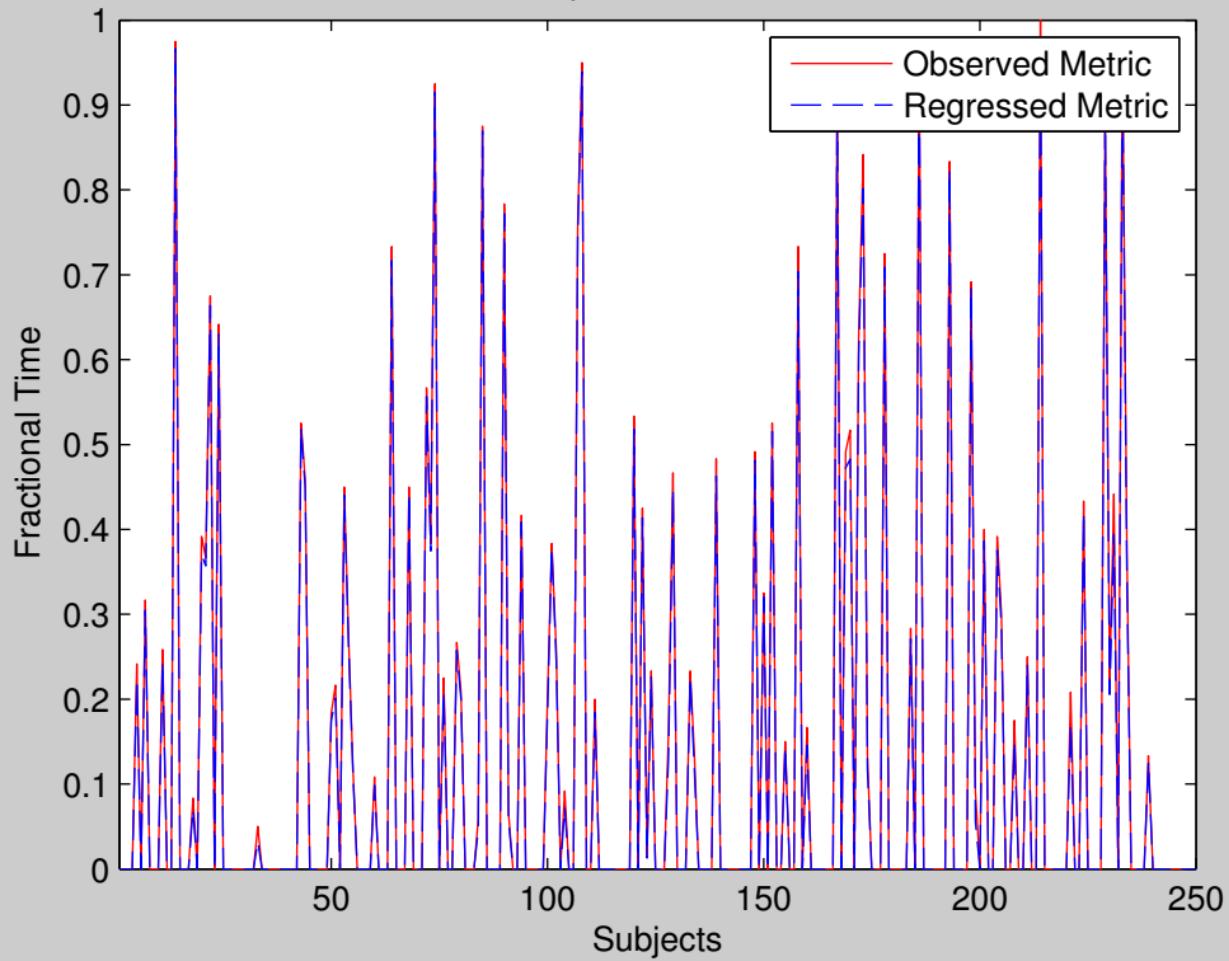
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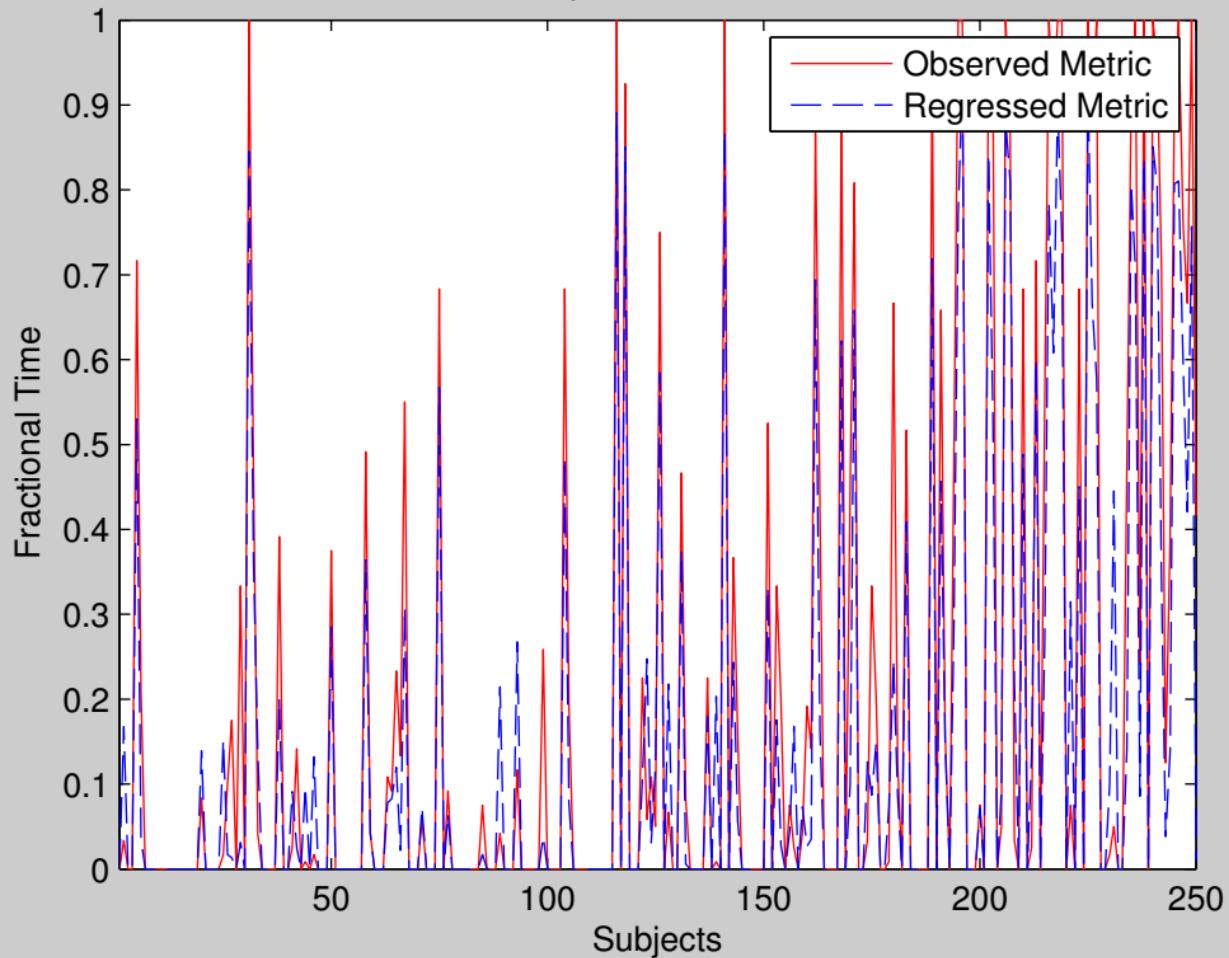
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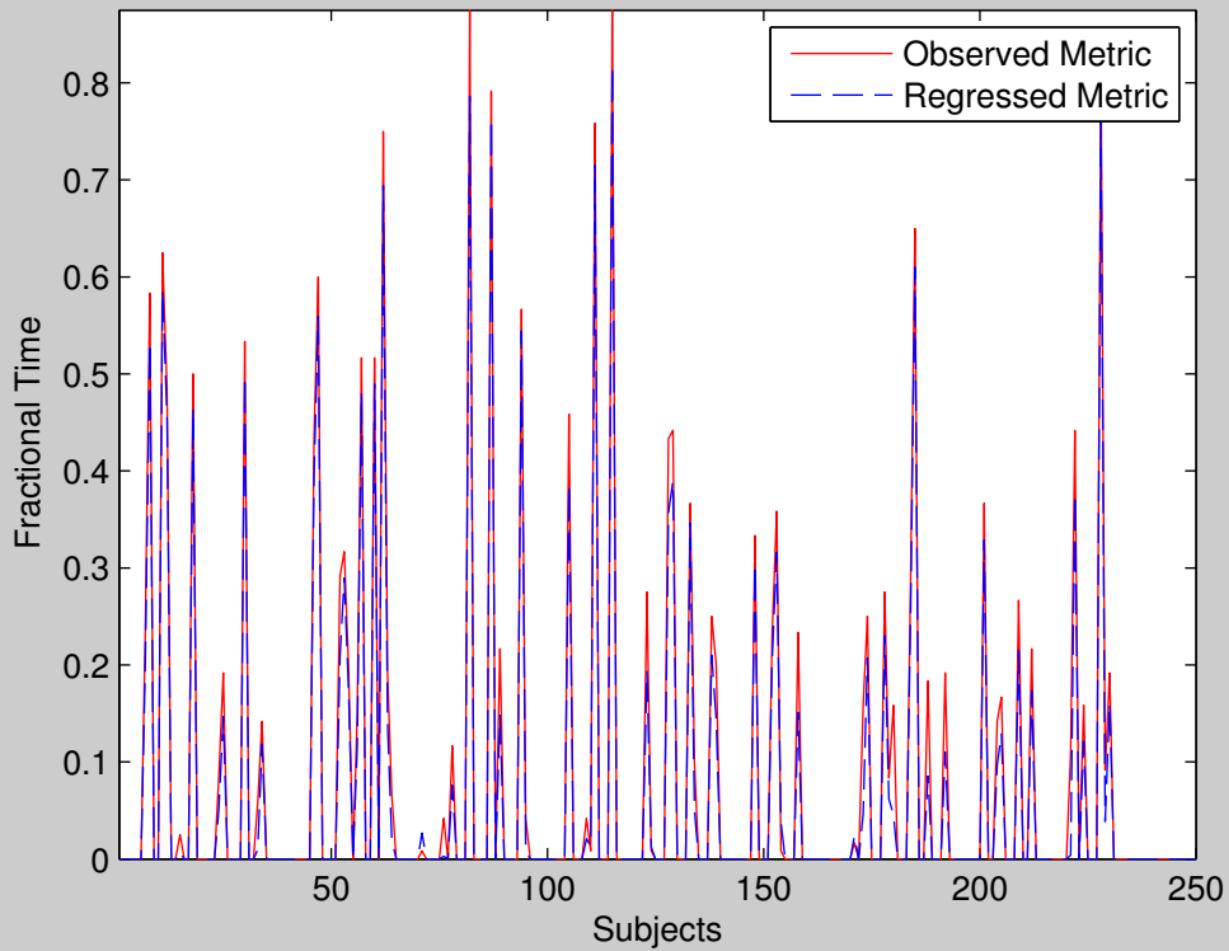
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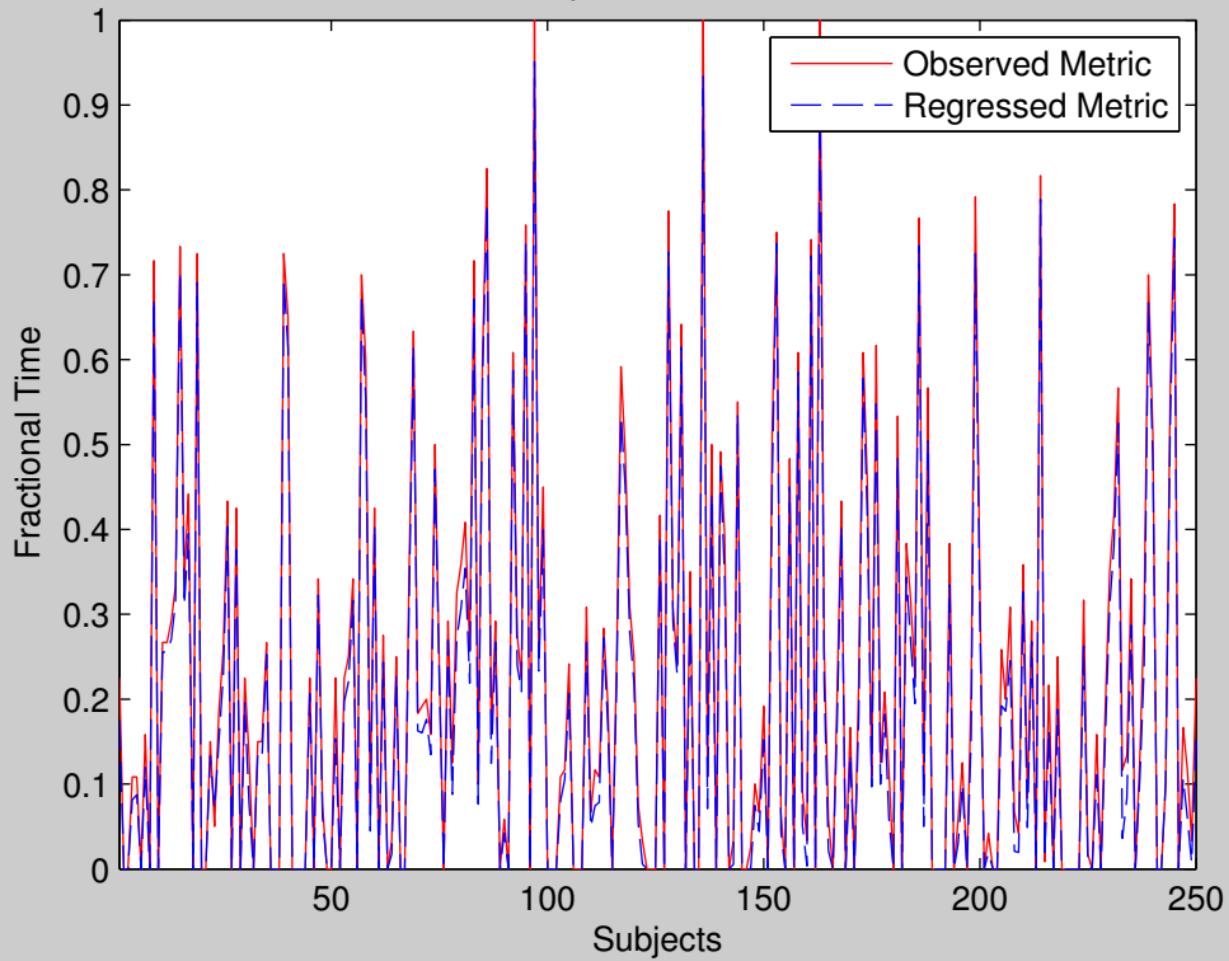
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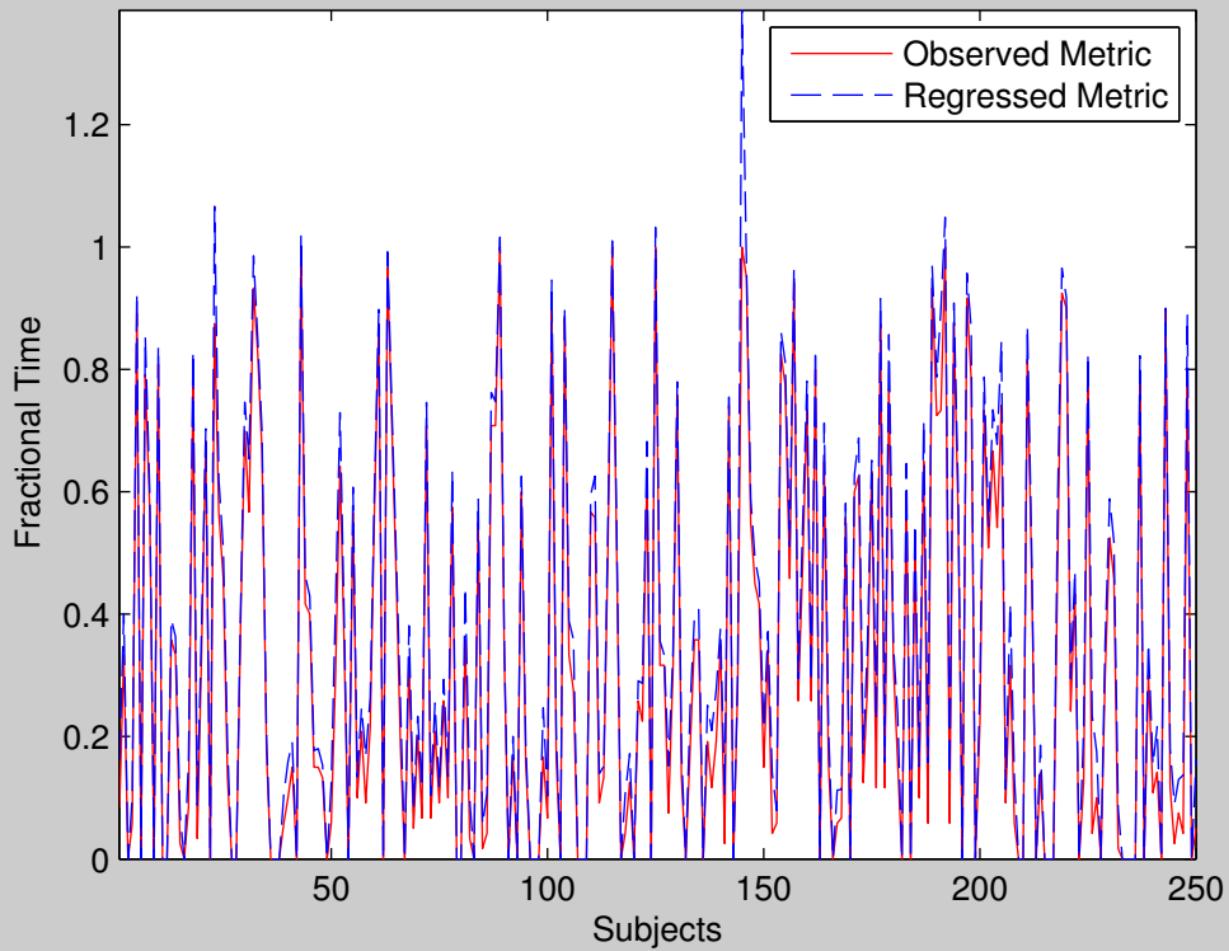
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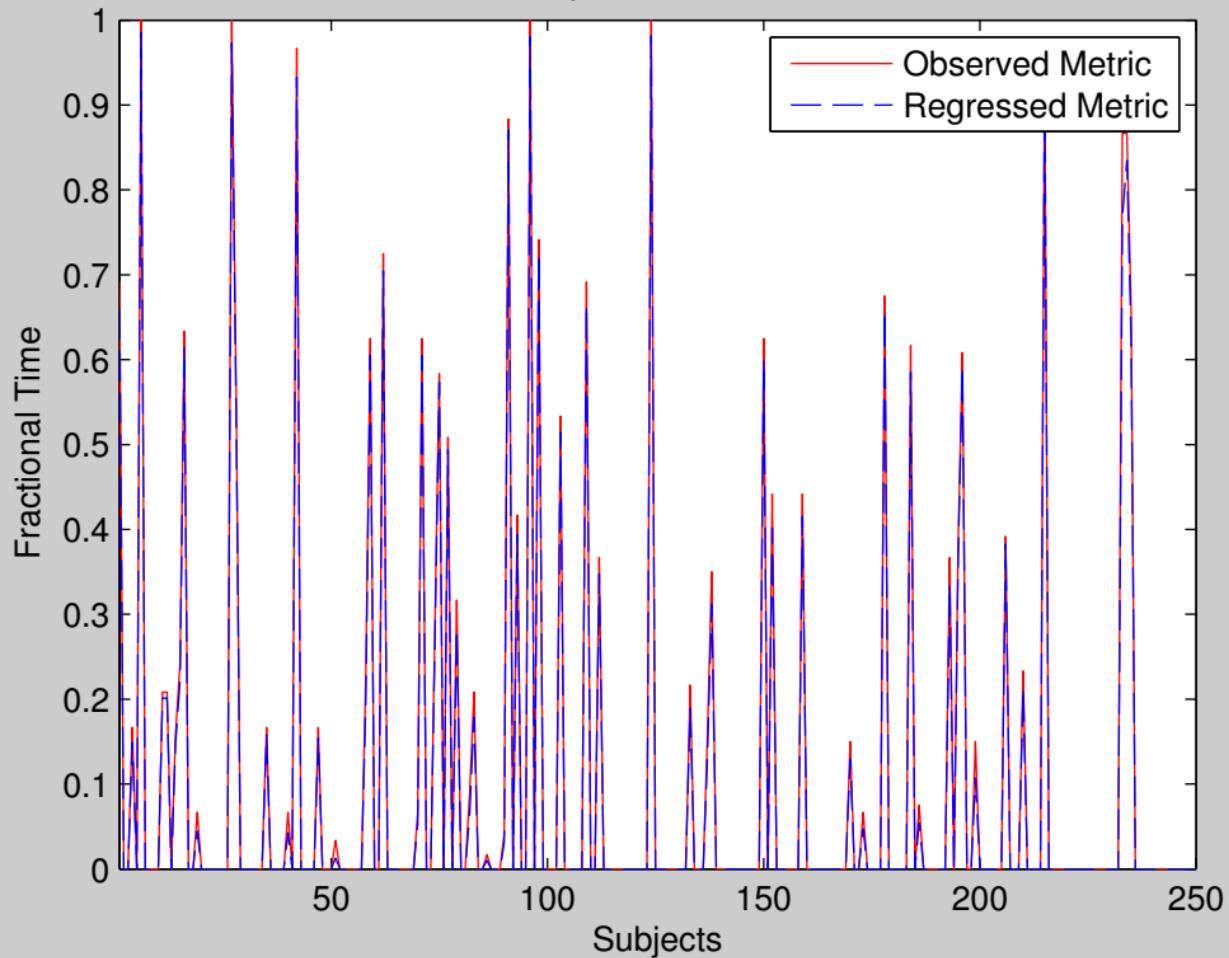
Group 18 State 1 : FT



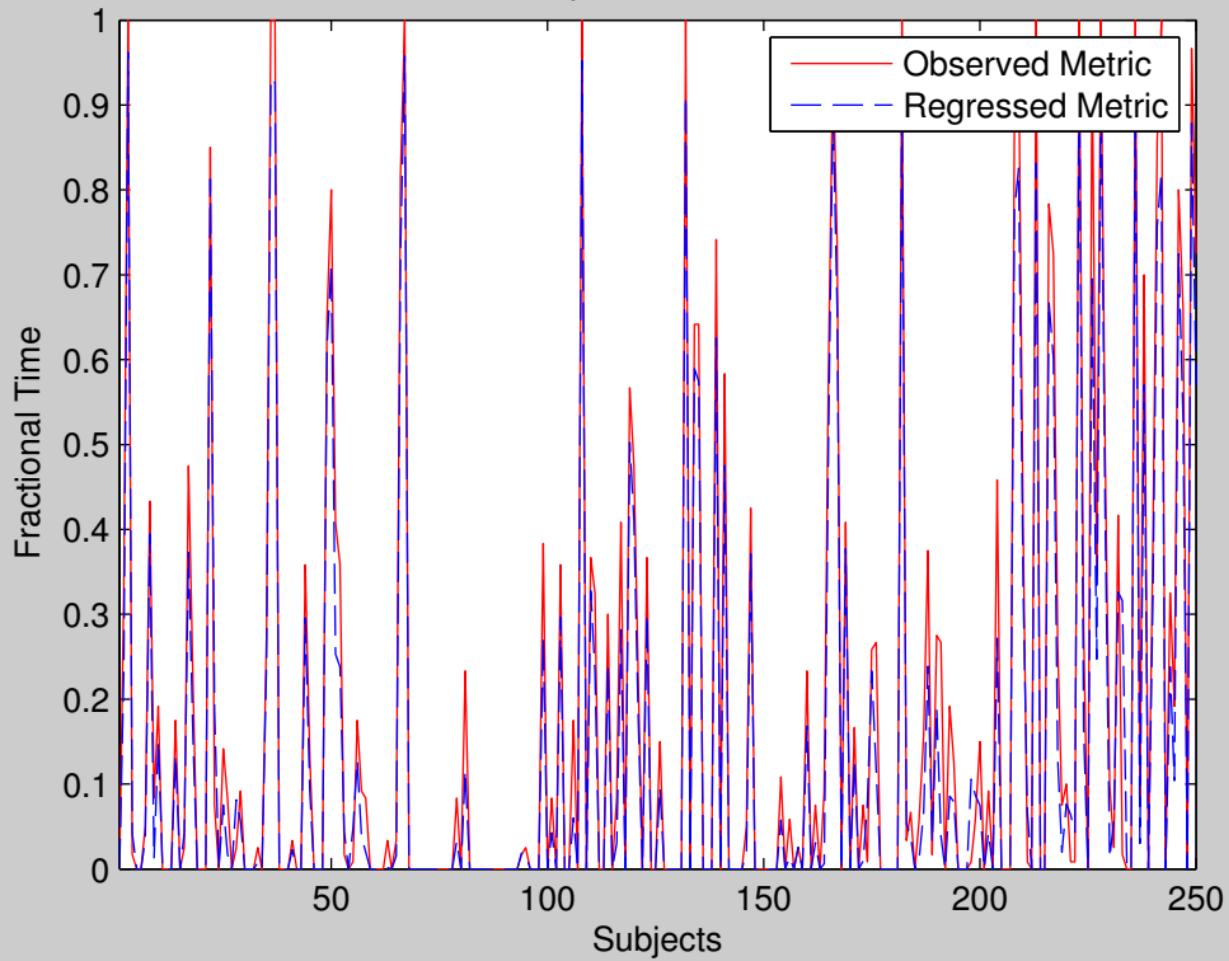
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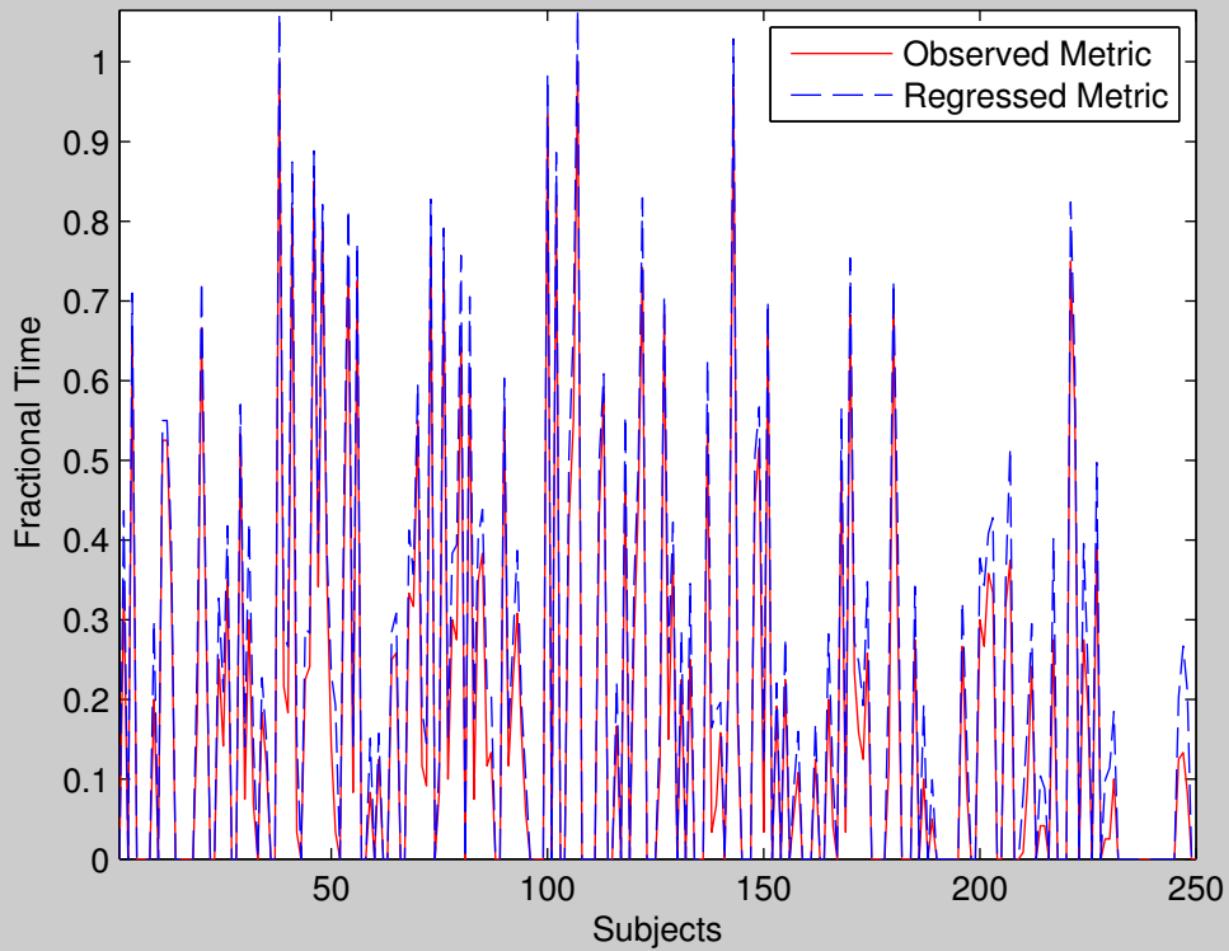
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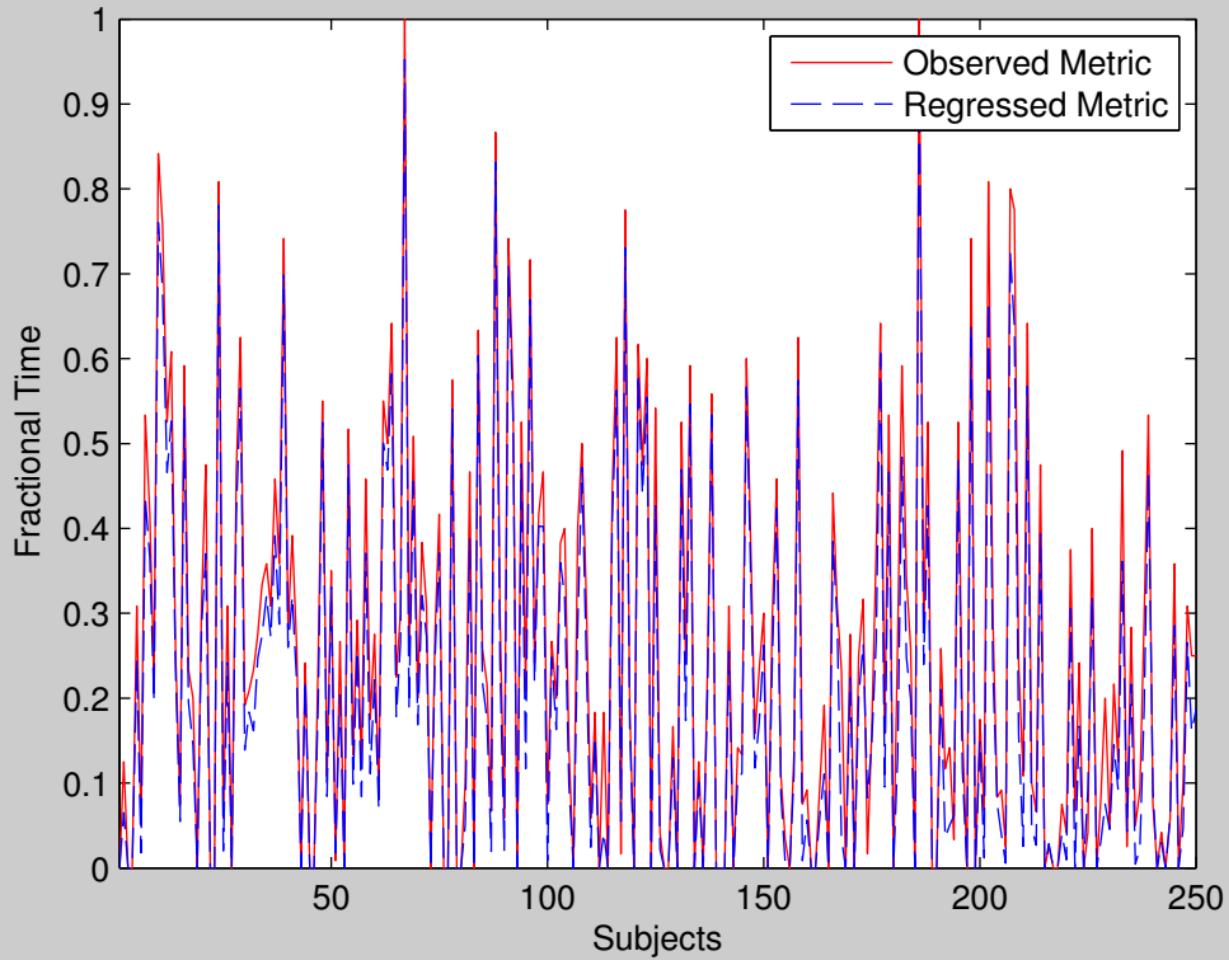
Group 18 State 4 : FT



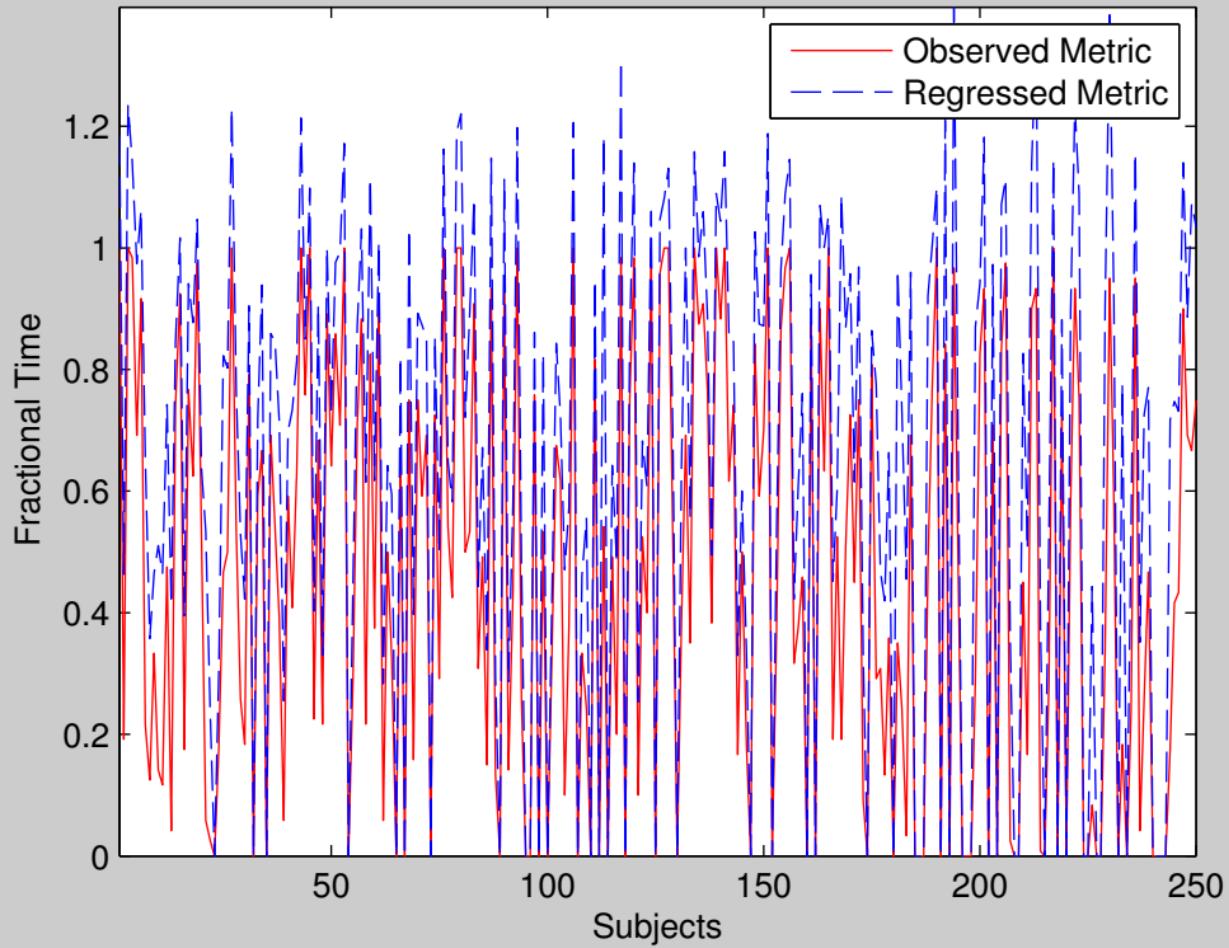
Group 18 State 5 : FT



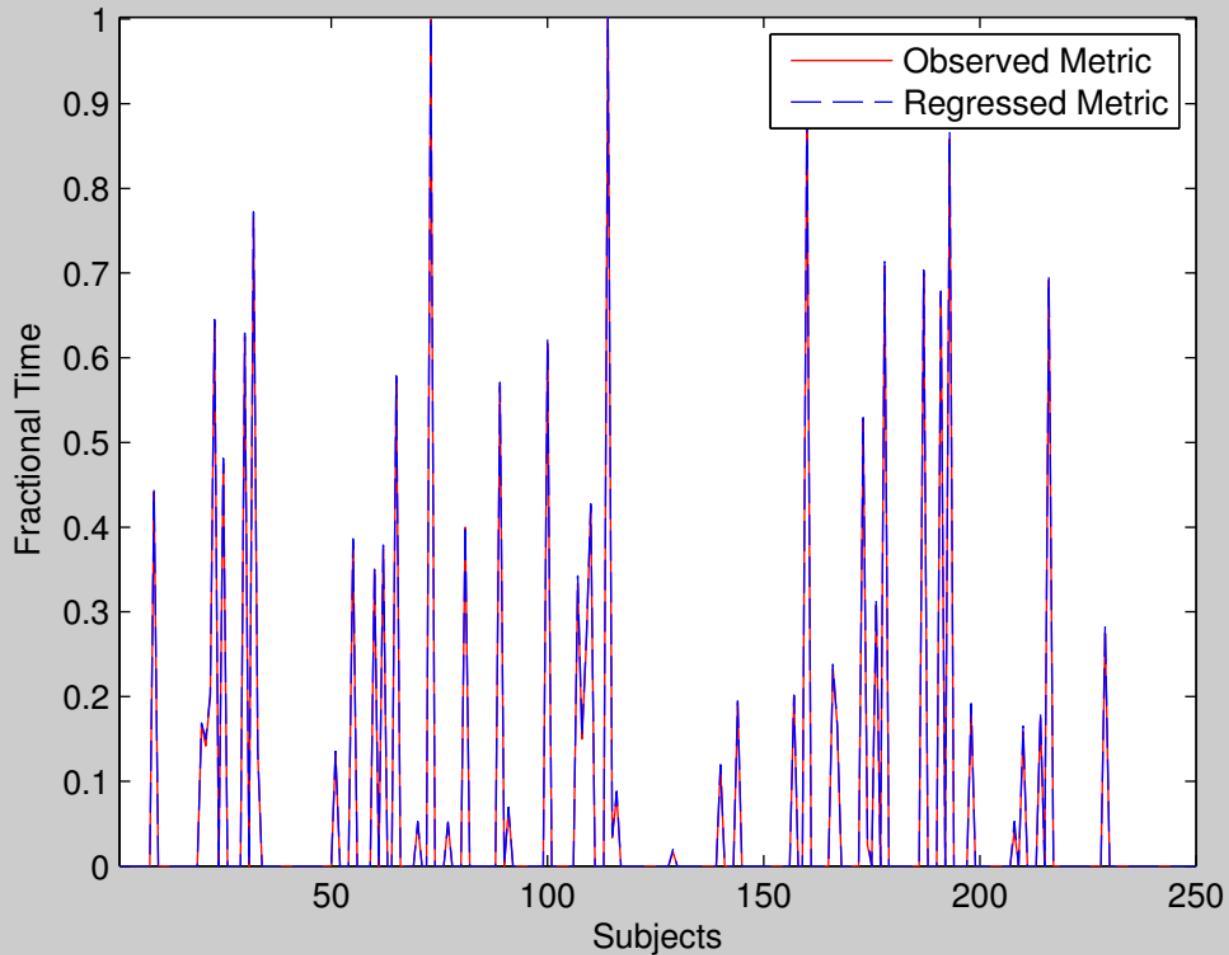
Group 19 State 1 : FT



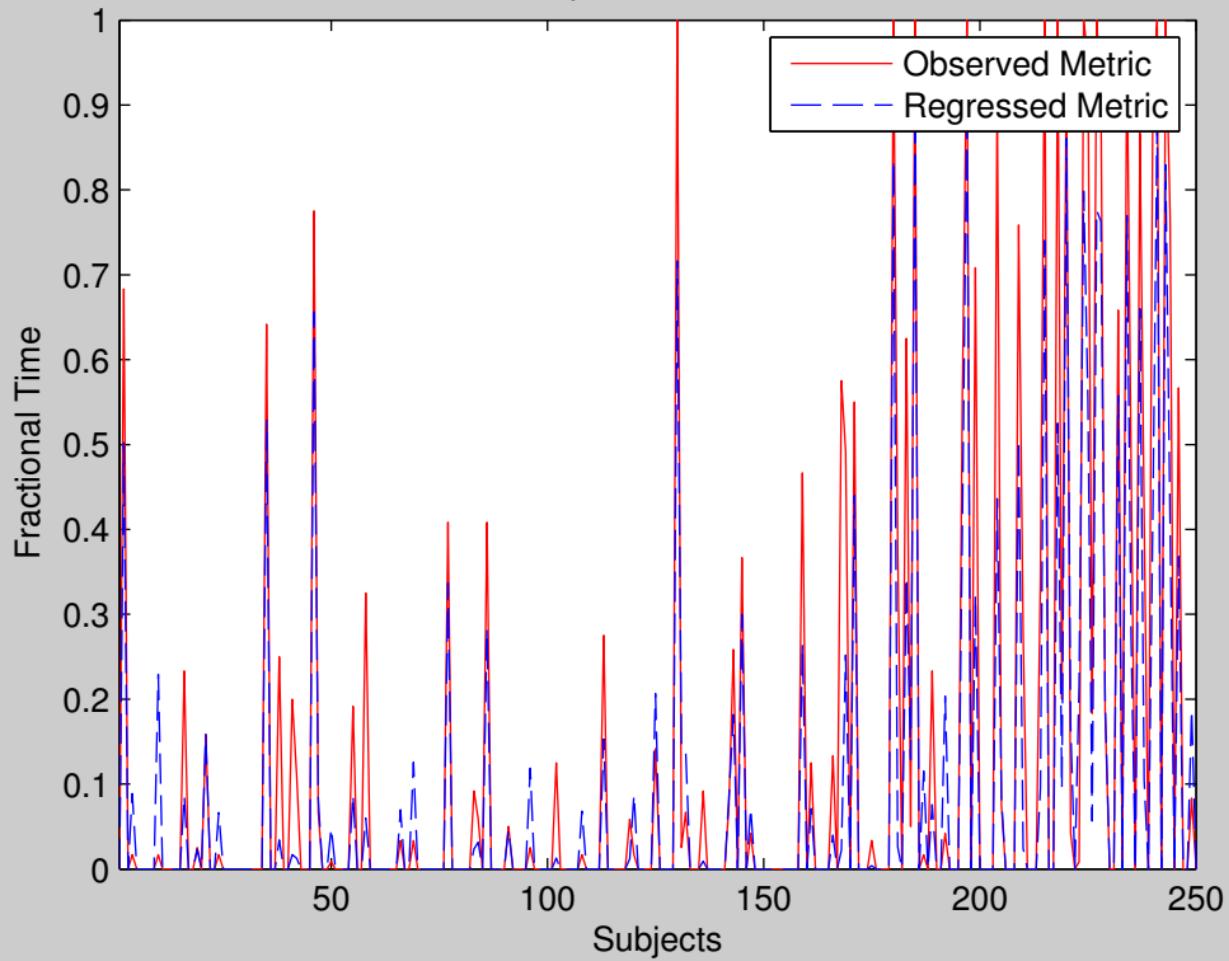
Group 19 State 2 : FT



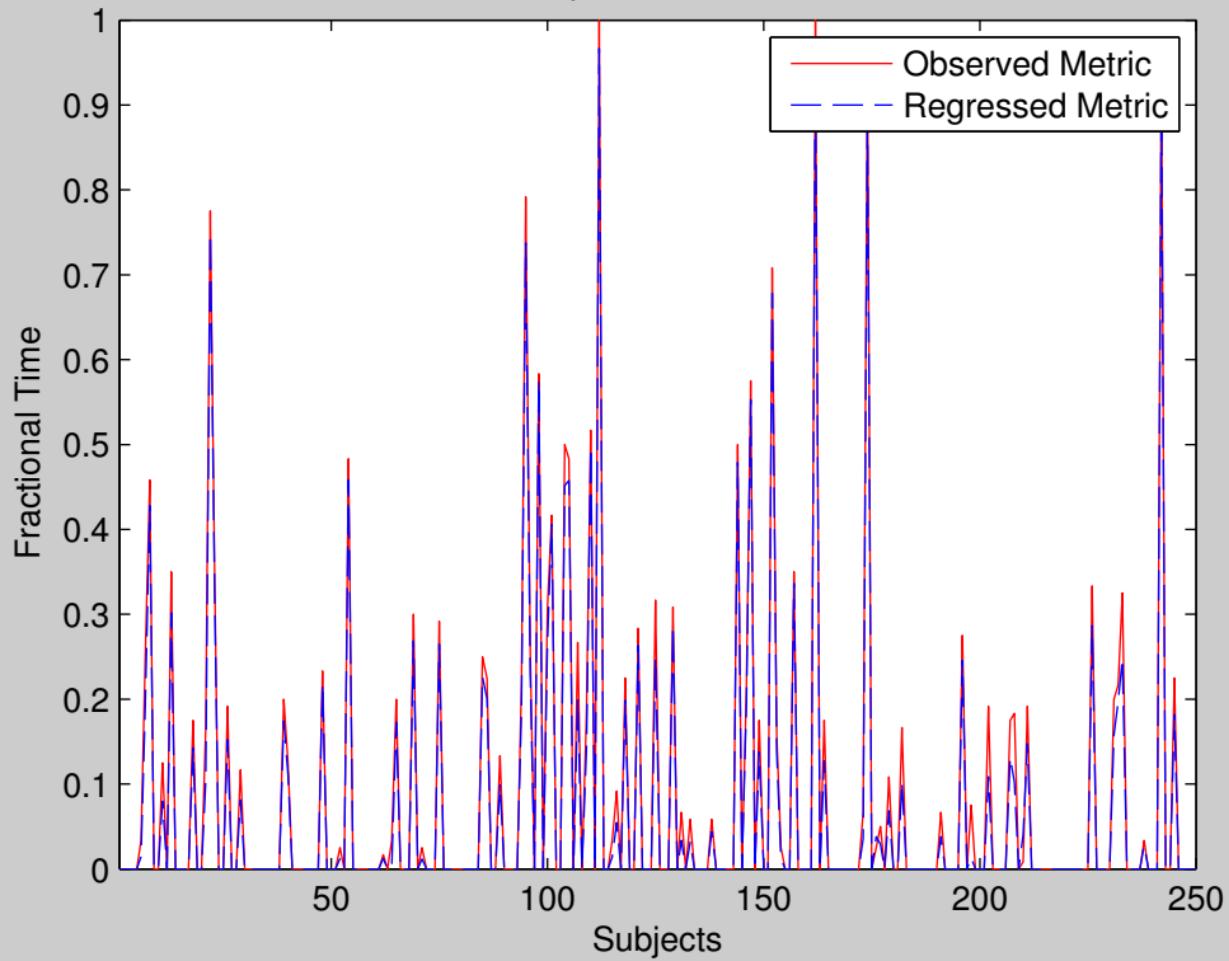
Group 19 State 3 : FT



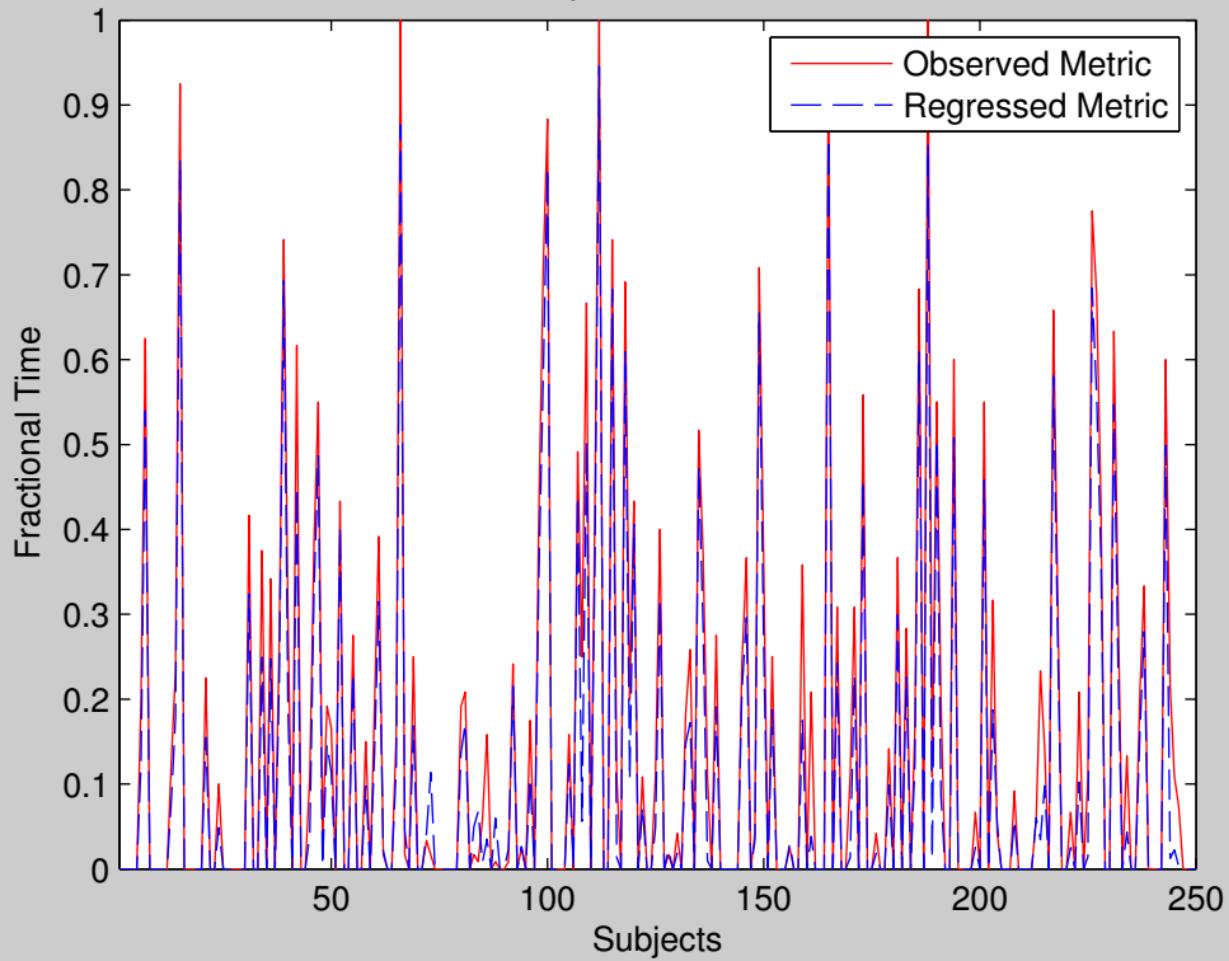
Group 19 State 4 : FT



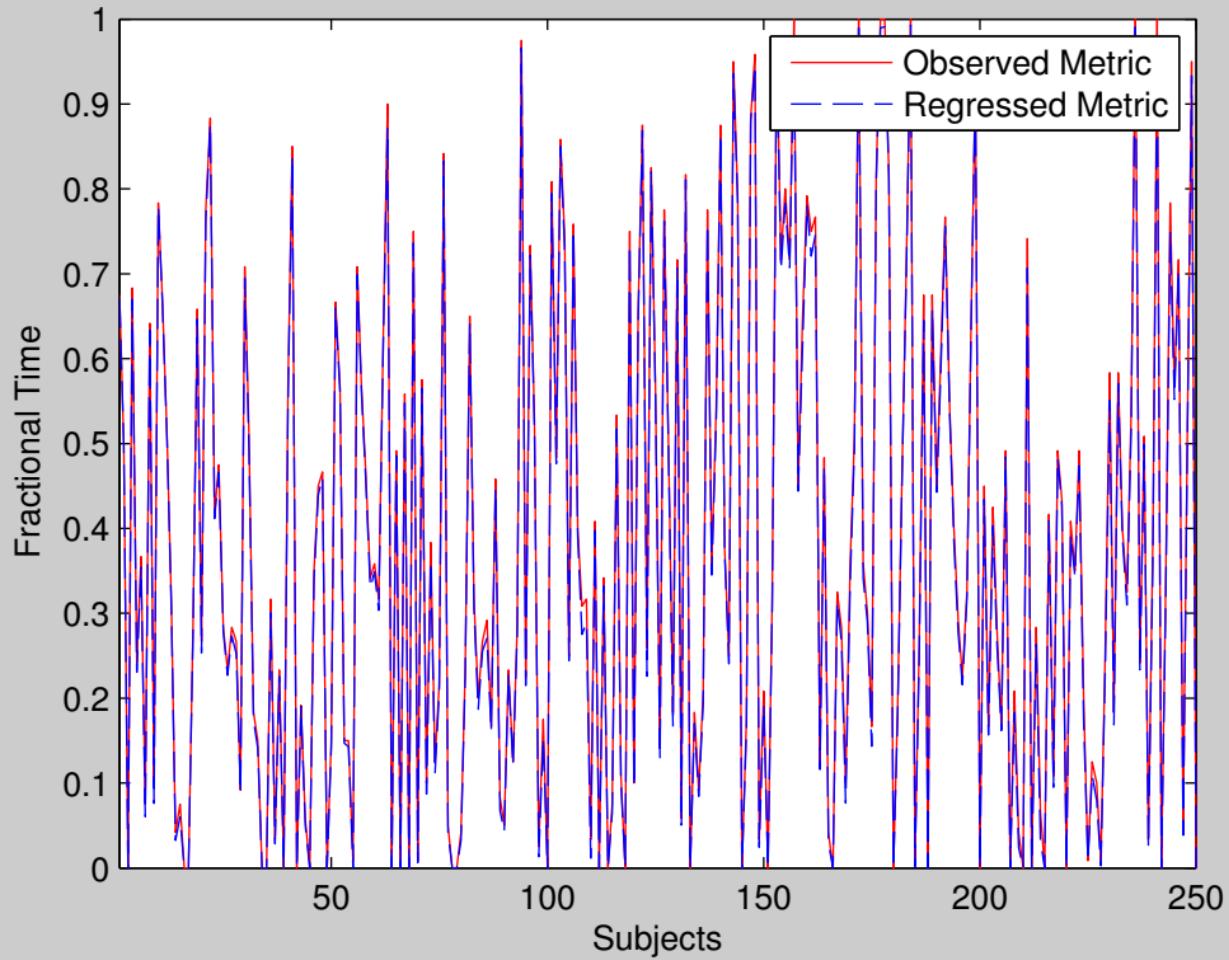
Group 19 State 5 : FT



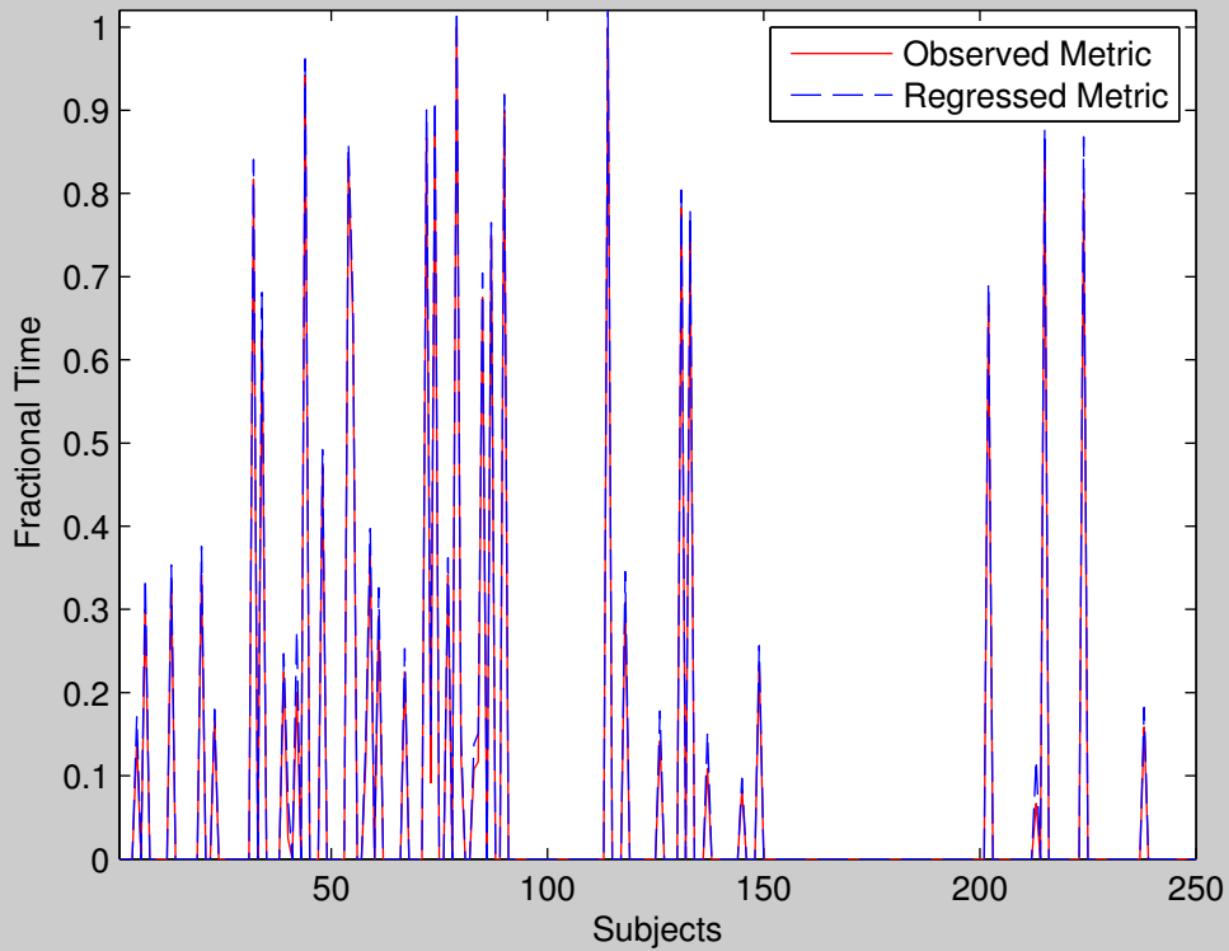
Group 20 State 1 : FT



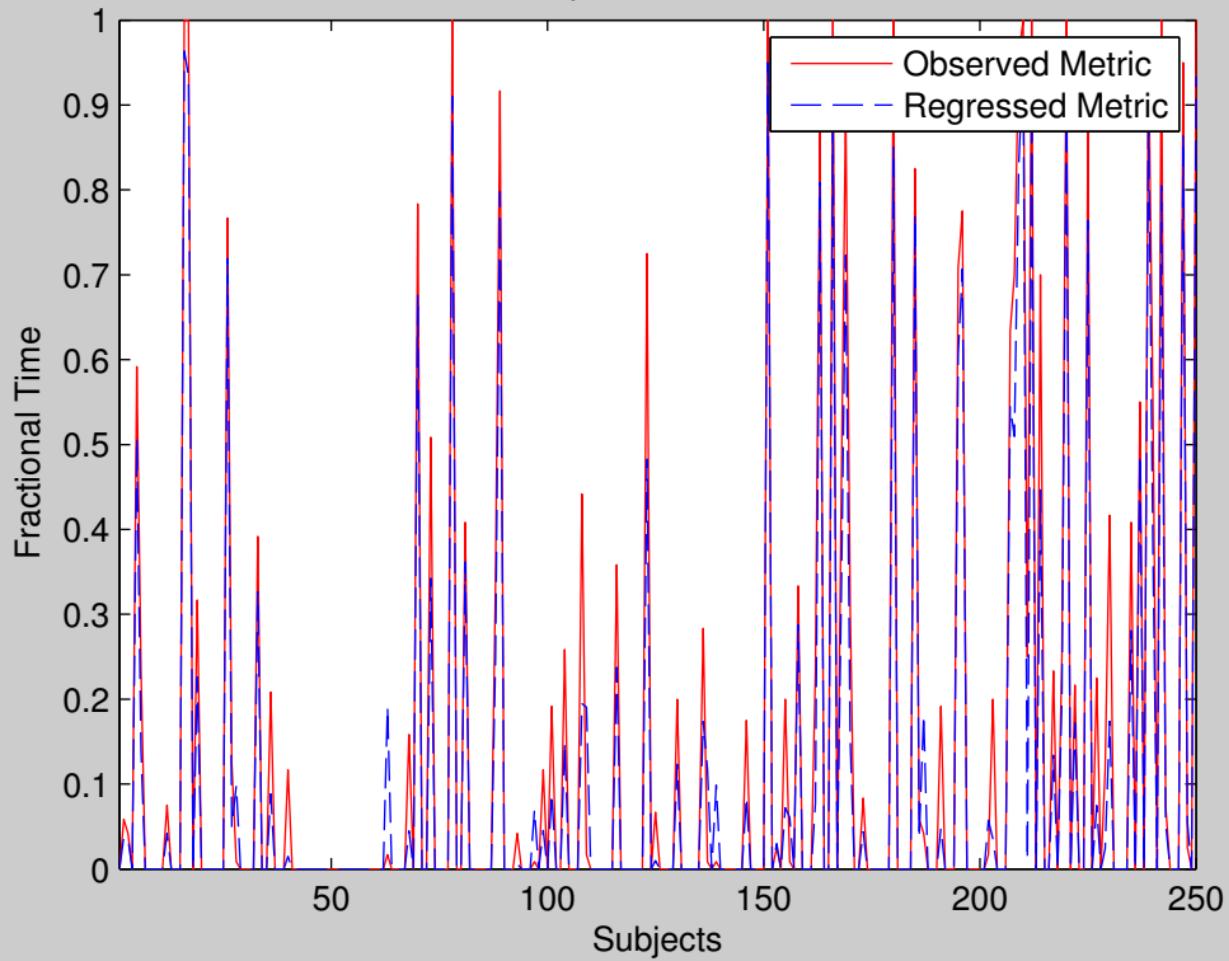
Group 20 State 2 : FT



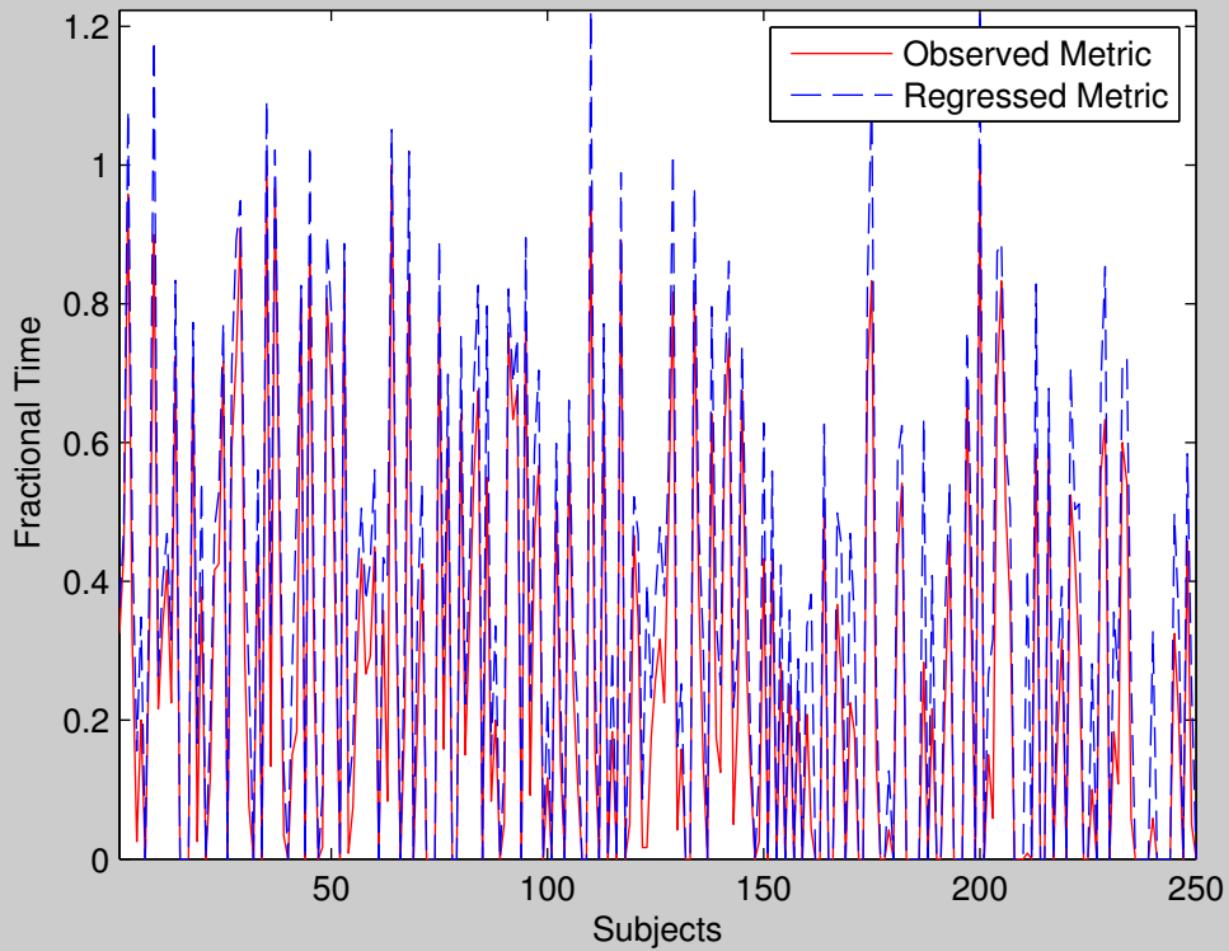
Group 20 State 3 : FT



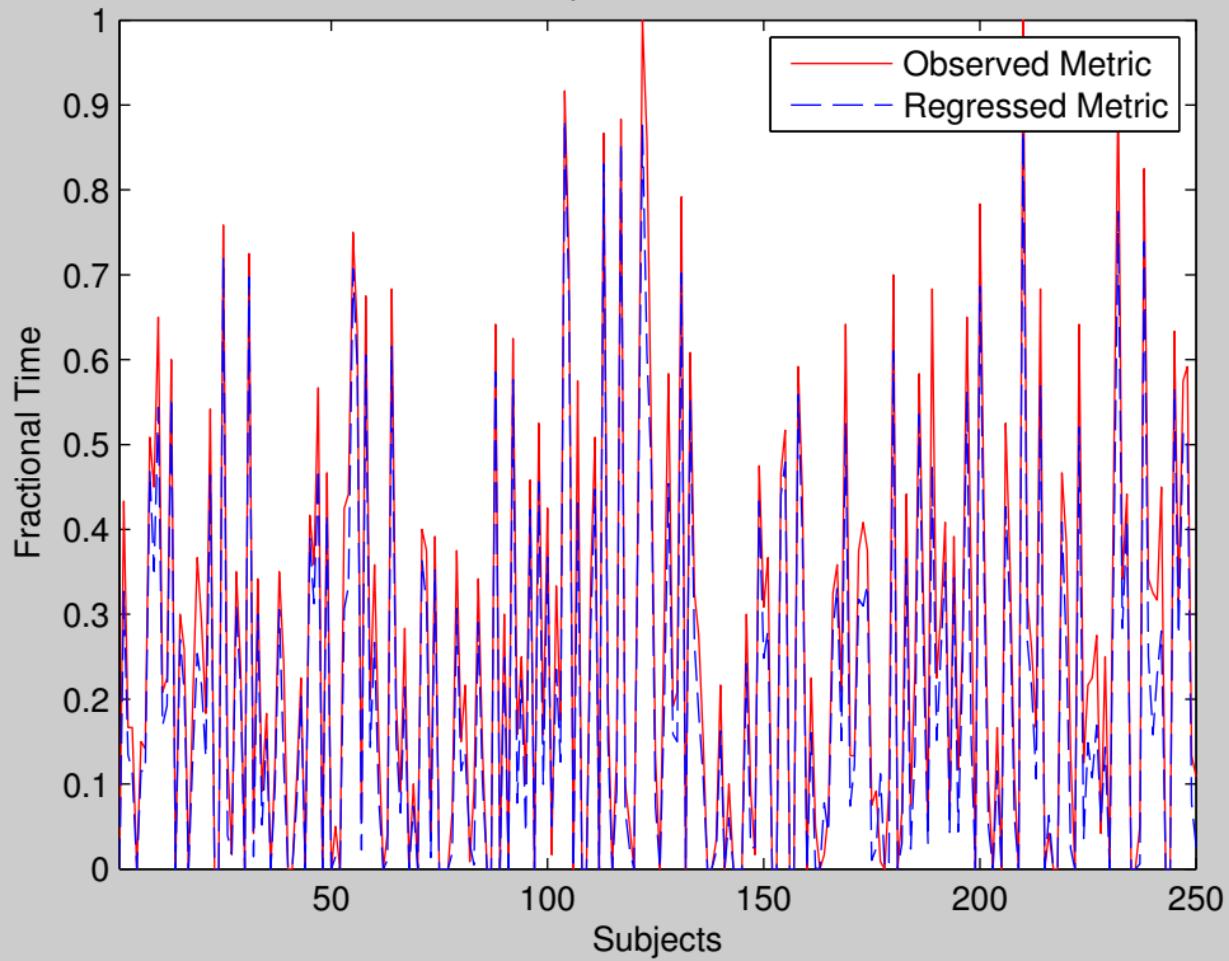
Group 20 State 4 : FT



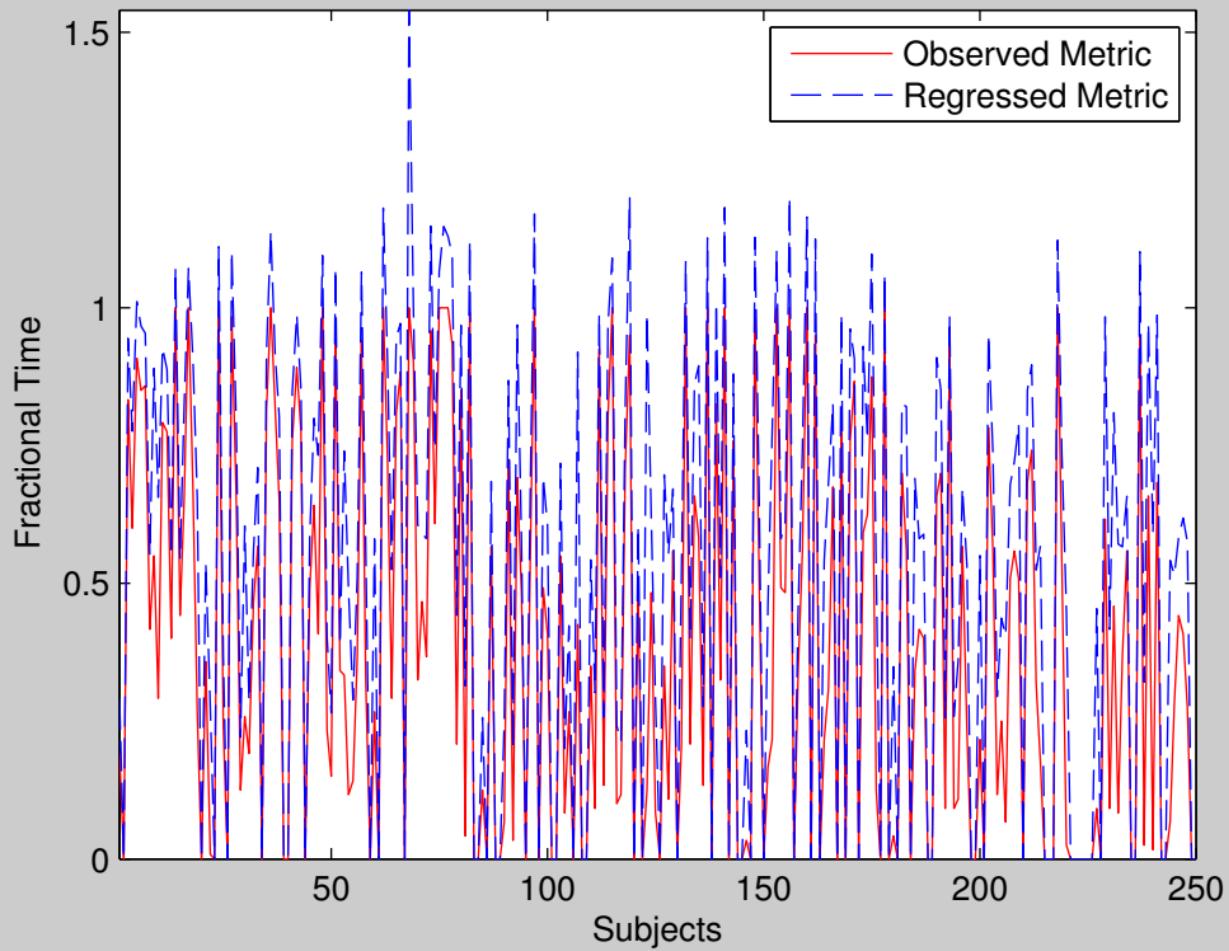
Group 20 State 5 : FT



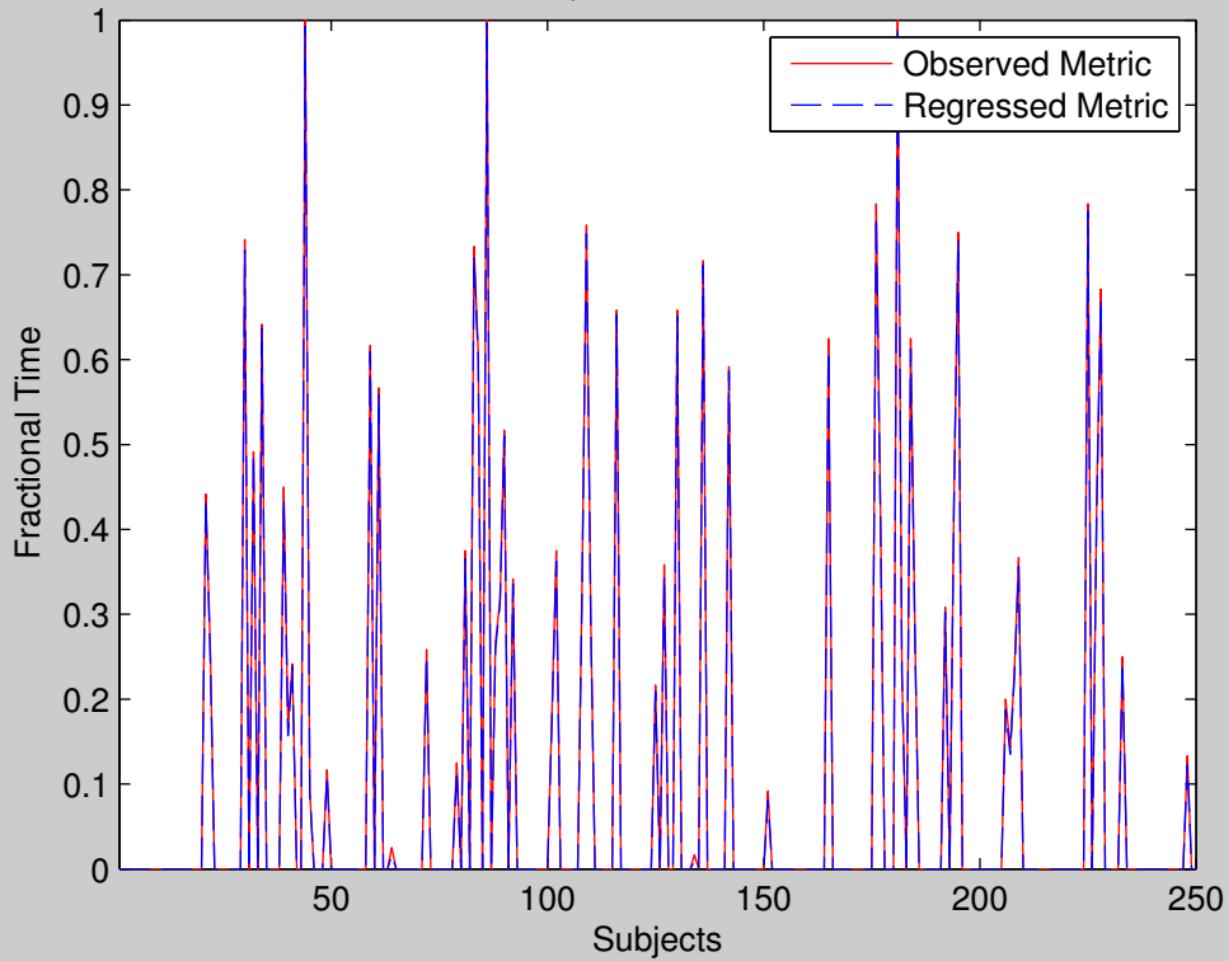
Group 21 State 1 : FT



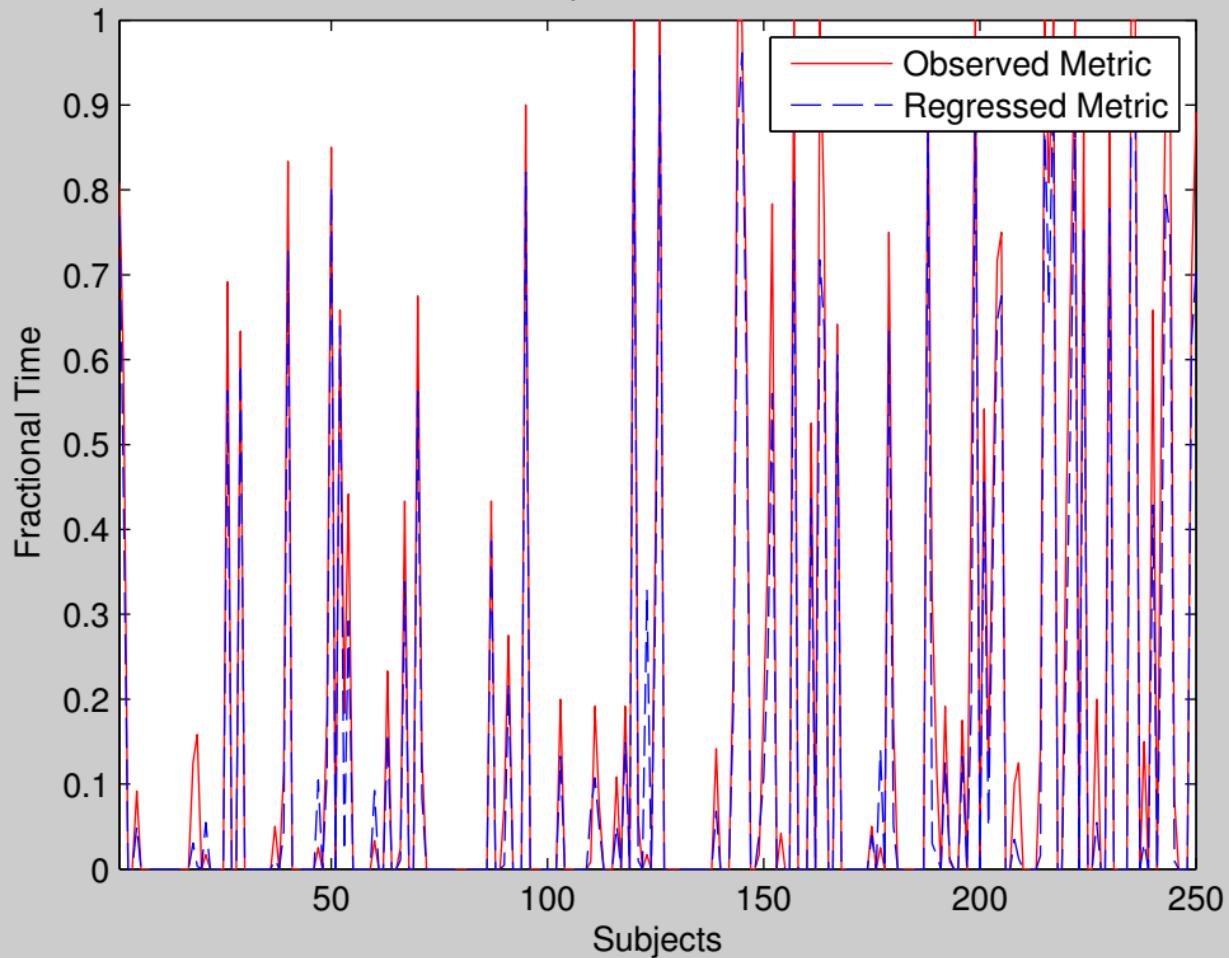
Group 21 State 2 : FT



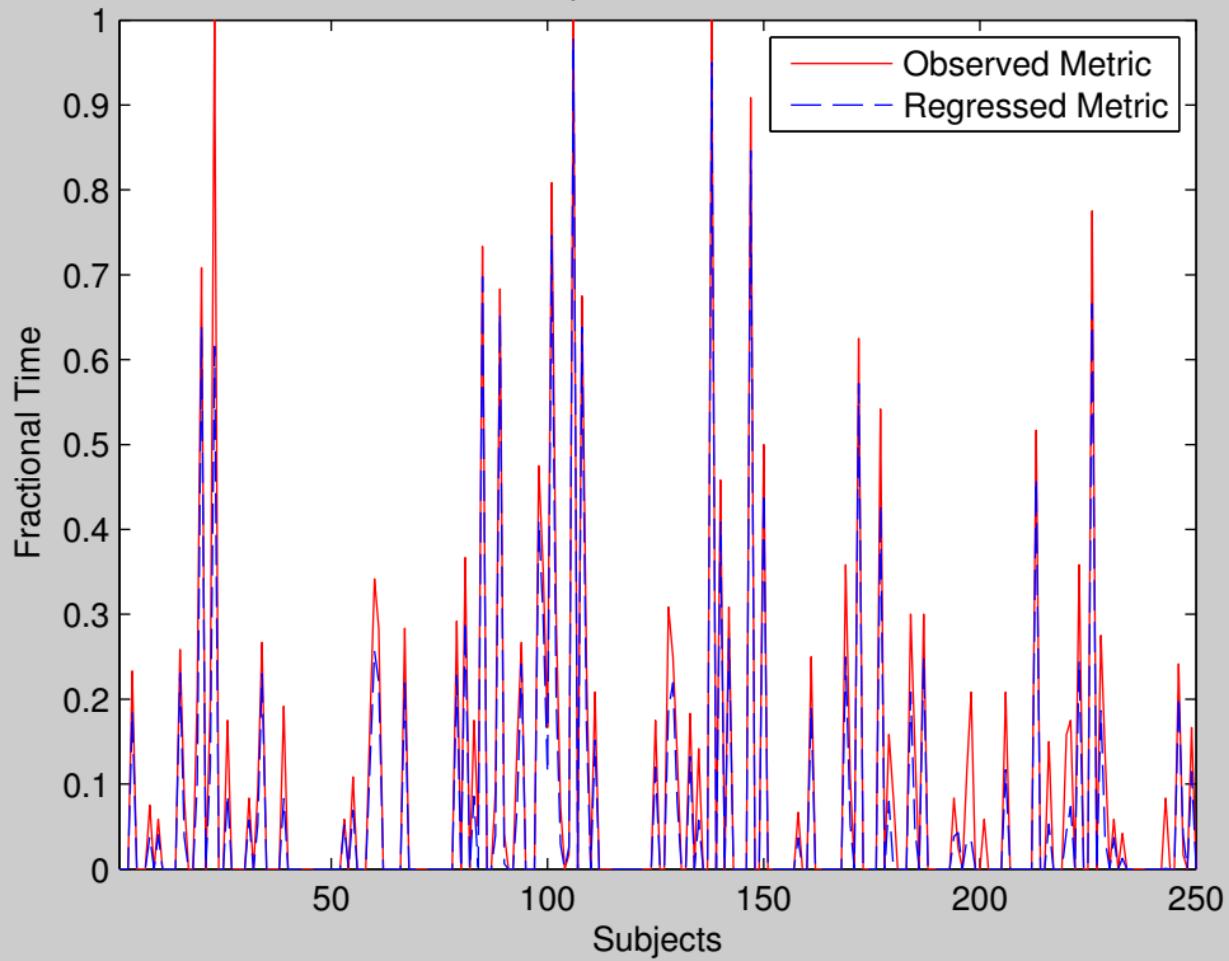
Group 21 State 3 : FT



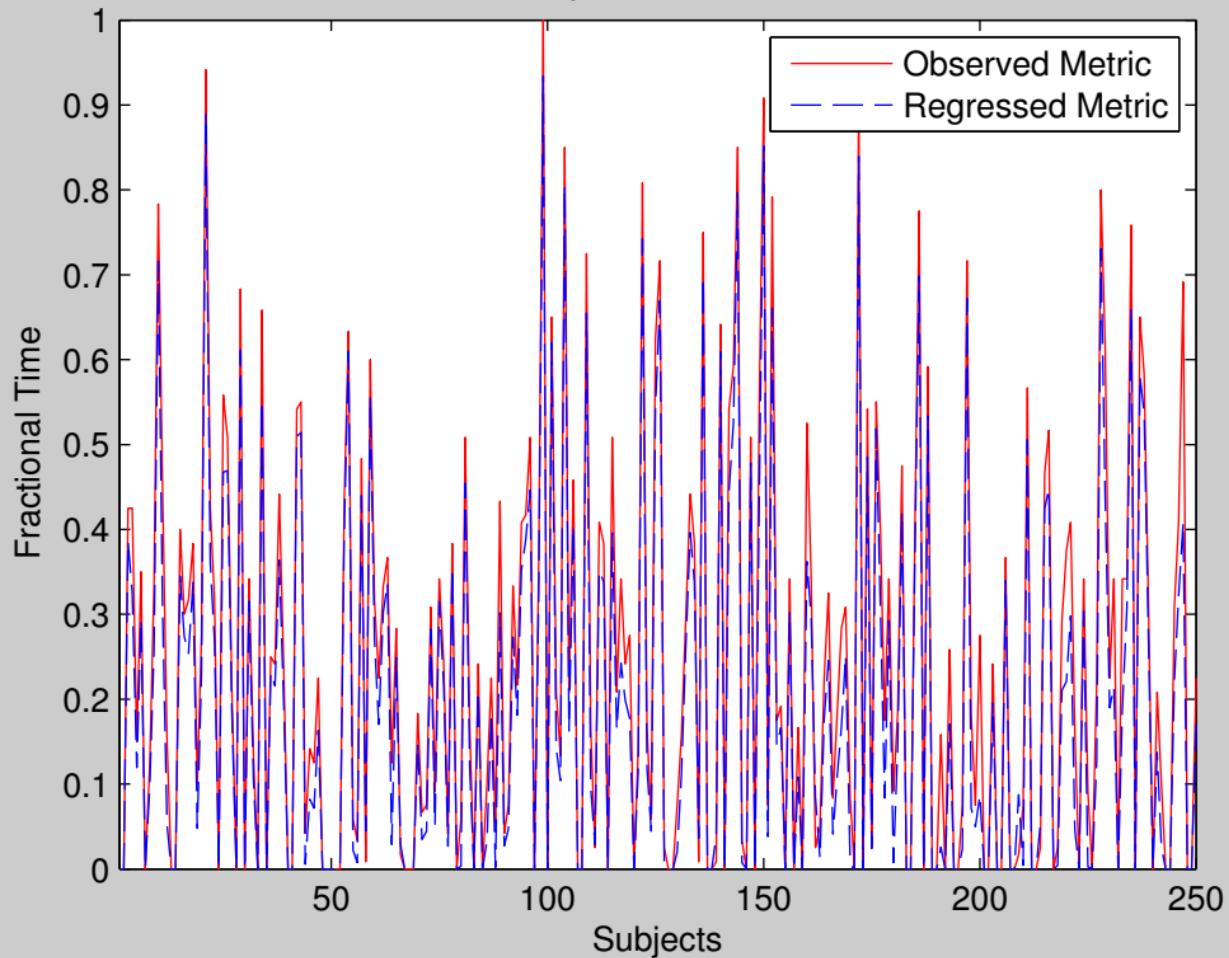
Group 21 State 4 : FT



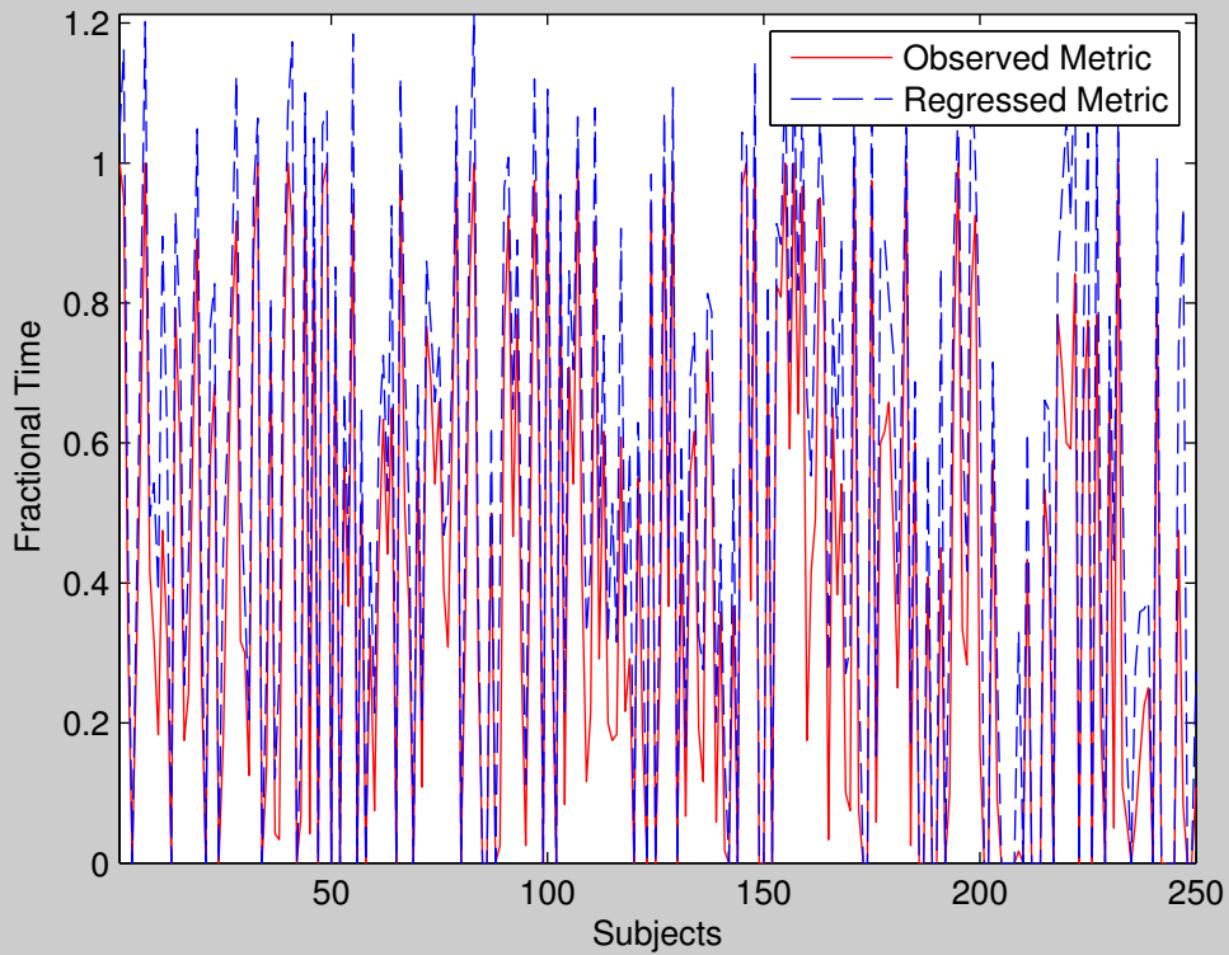
Group 21 State 5 : FT



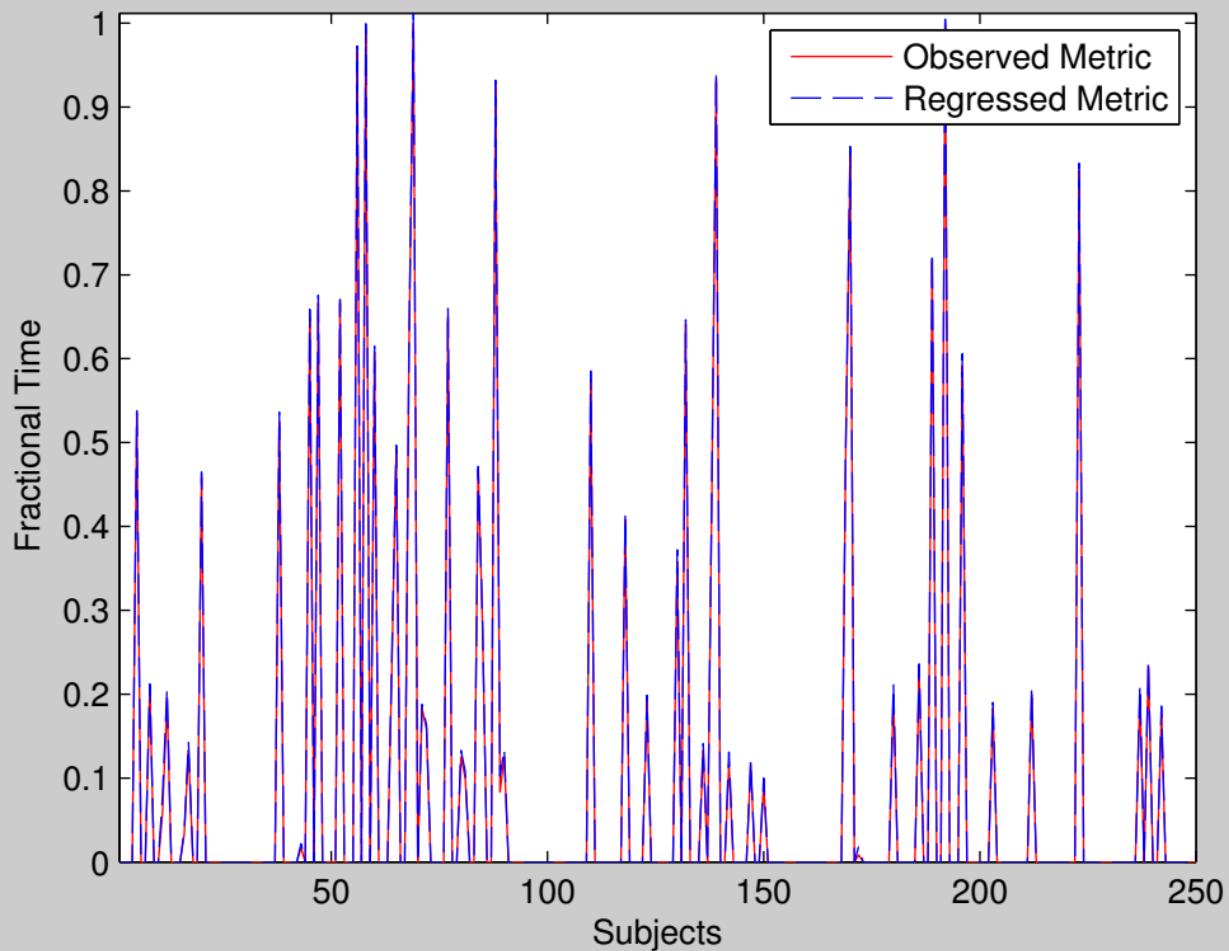
Group 22 State 1 : FT



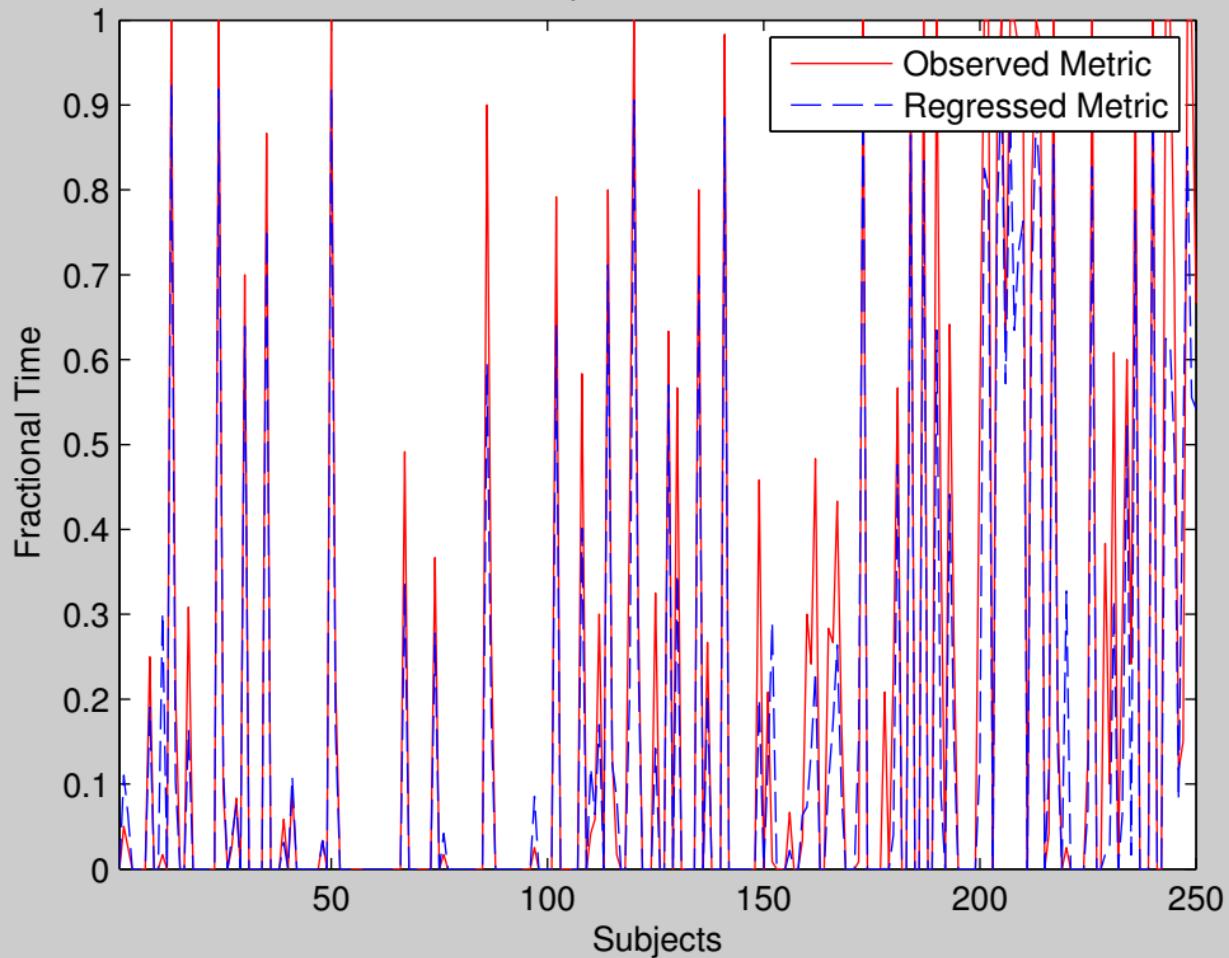
Group 22 State 2 : FT



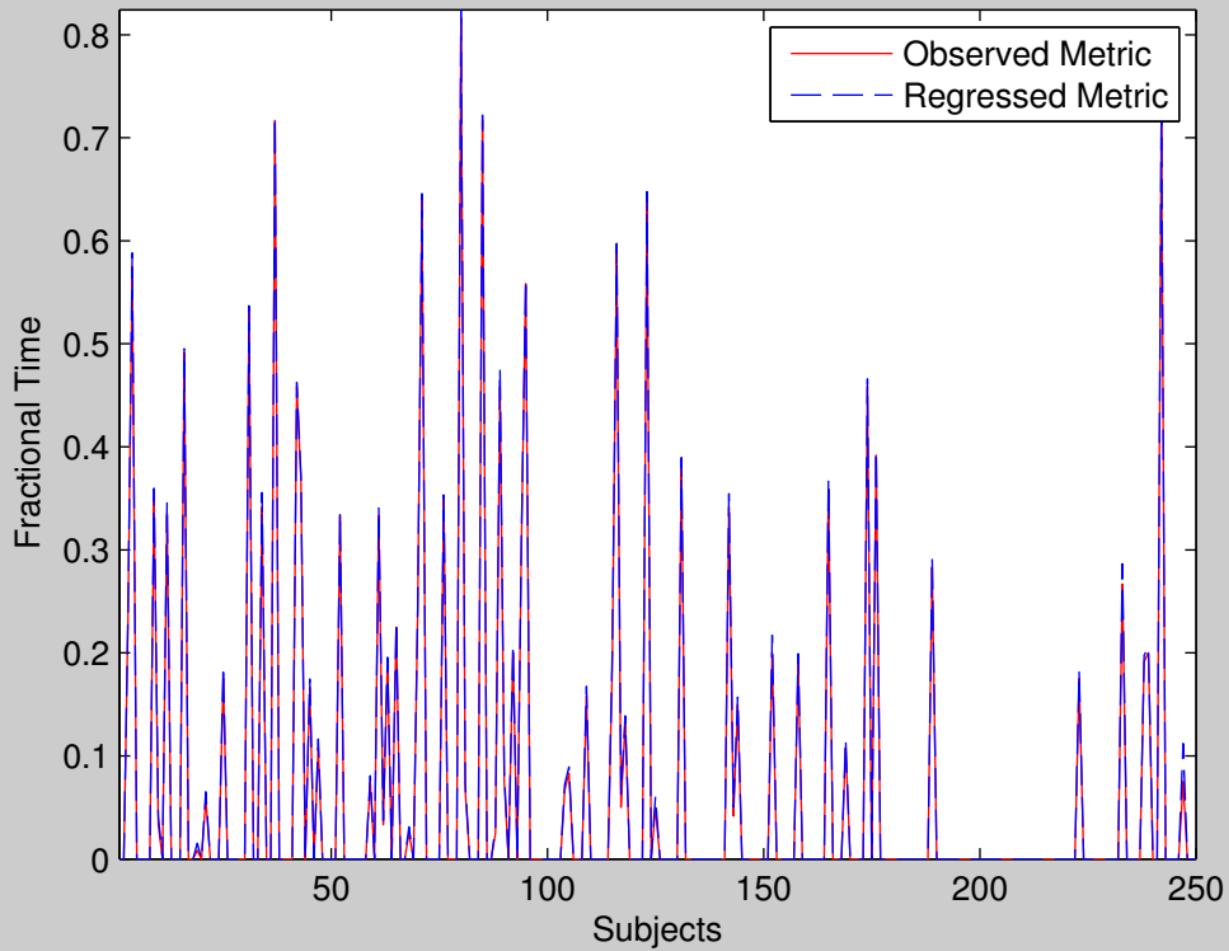
Group 22 State 3 : FT



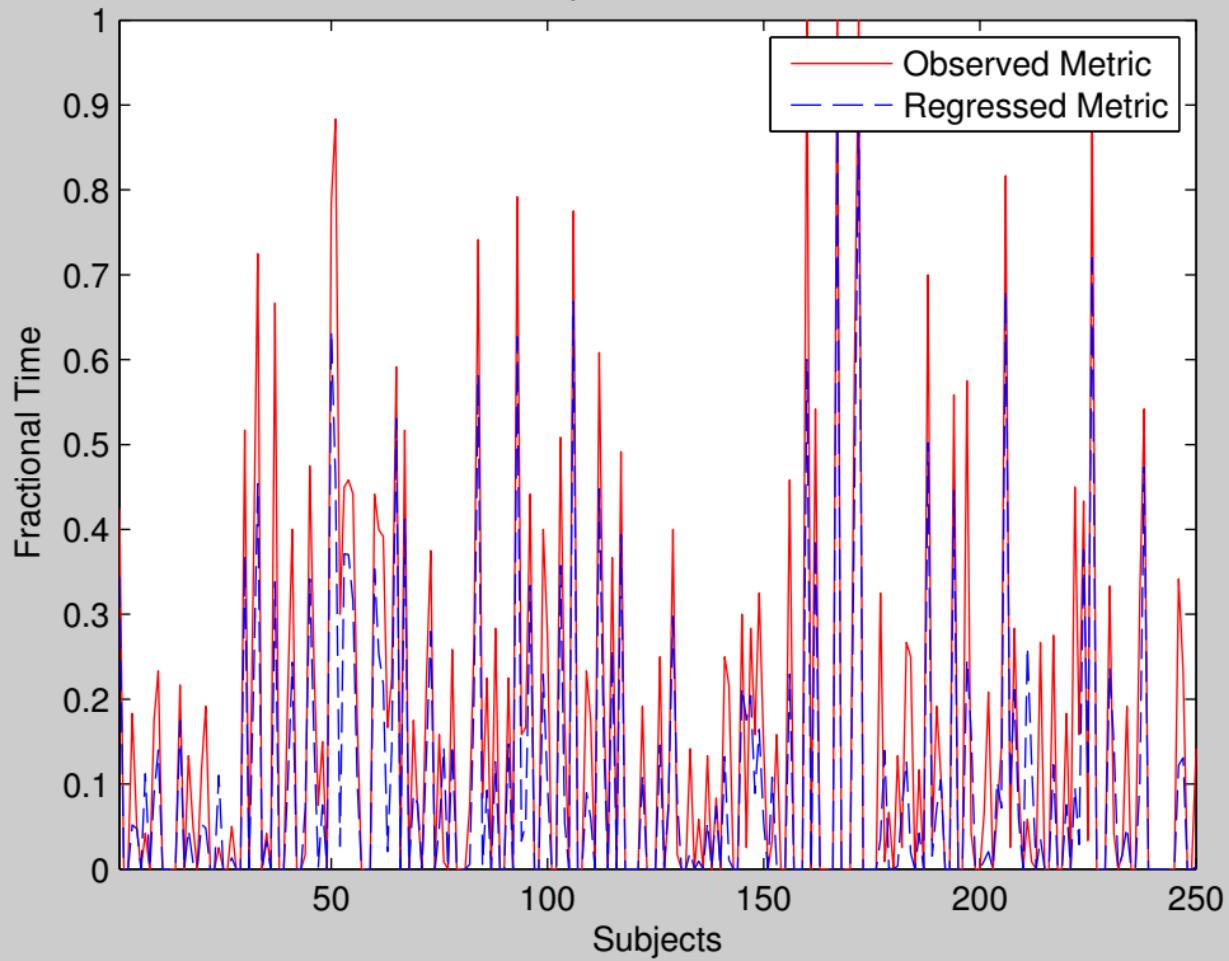
Group 22 State 4 : FT



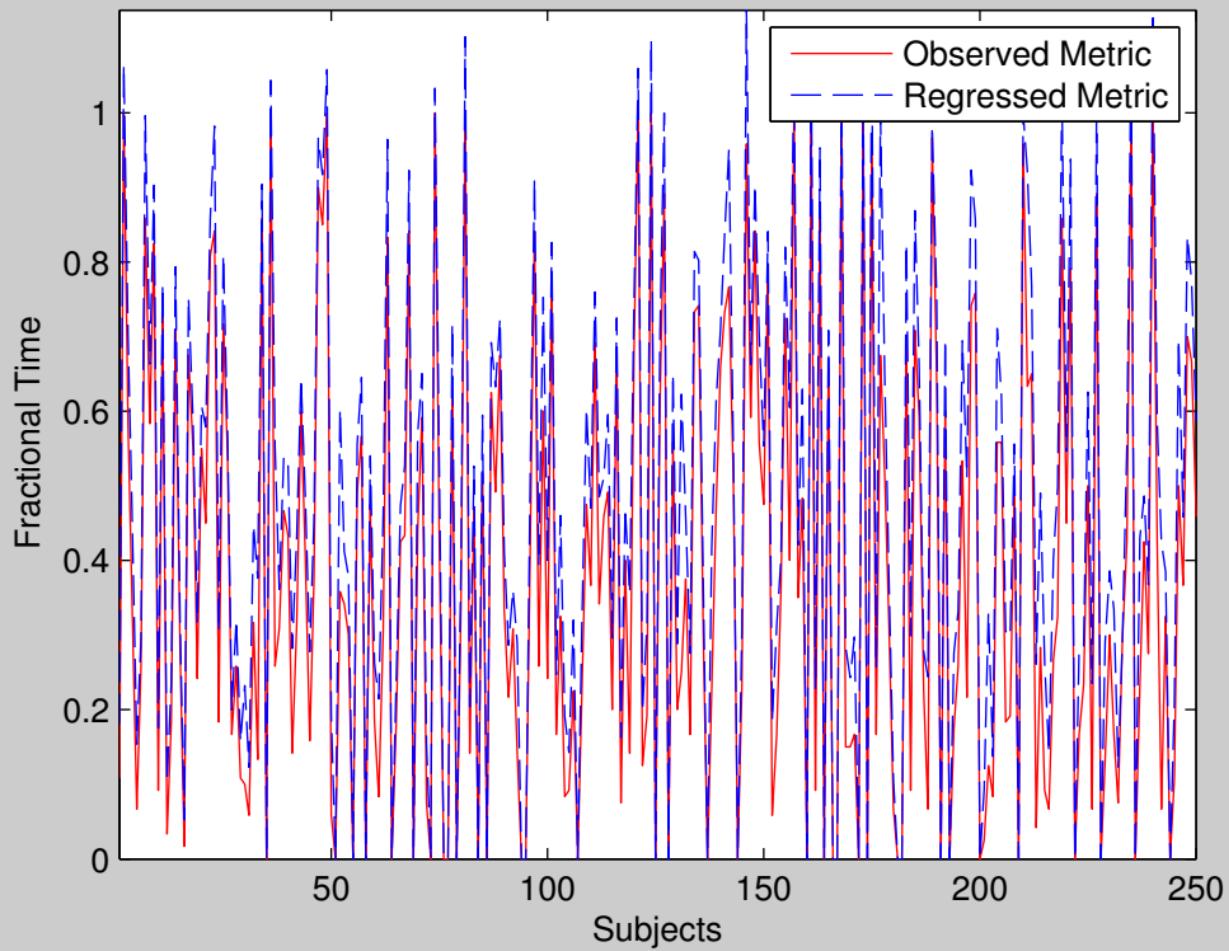
Group 22 State 5 : FT



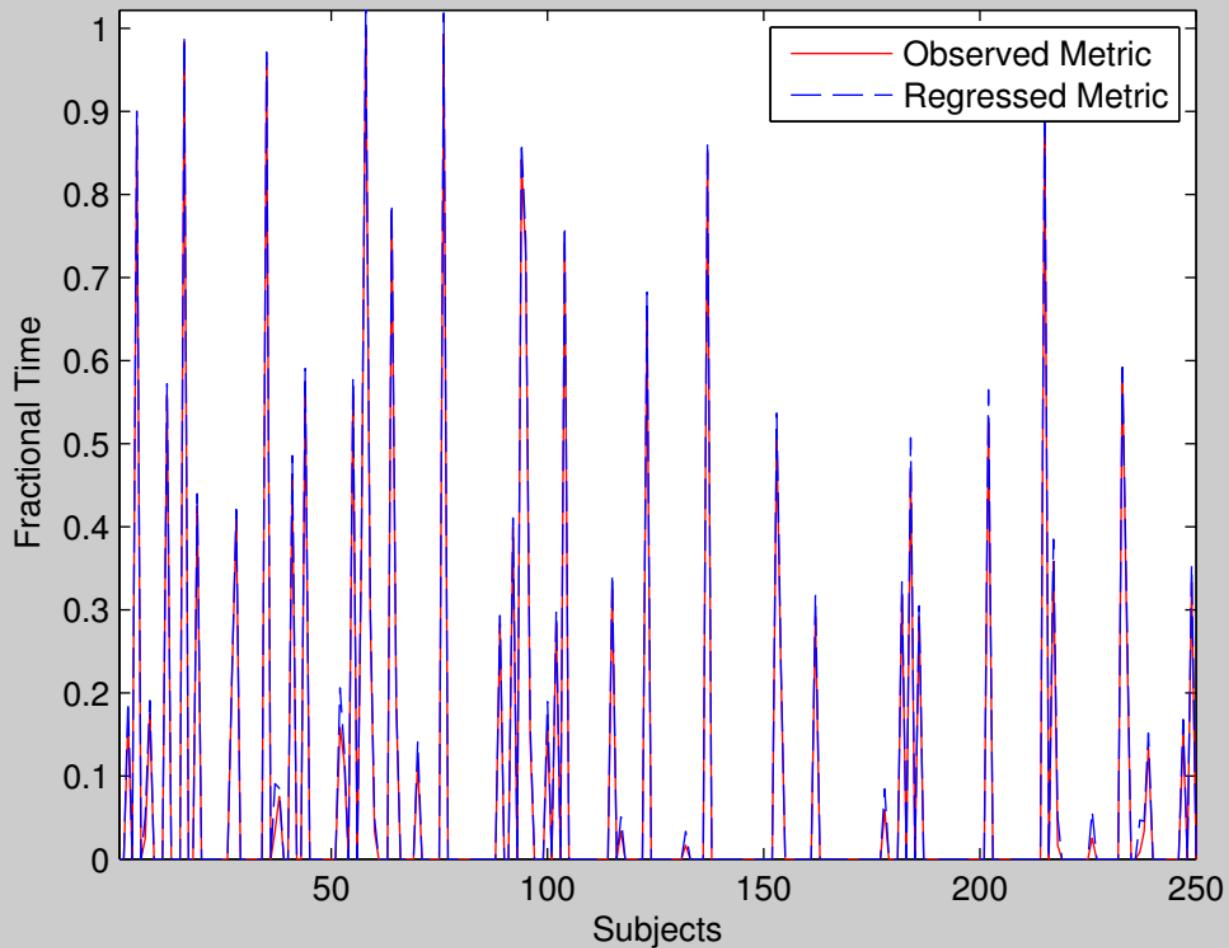
Group 23 State 1 : FT



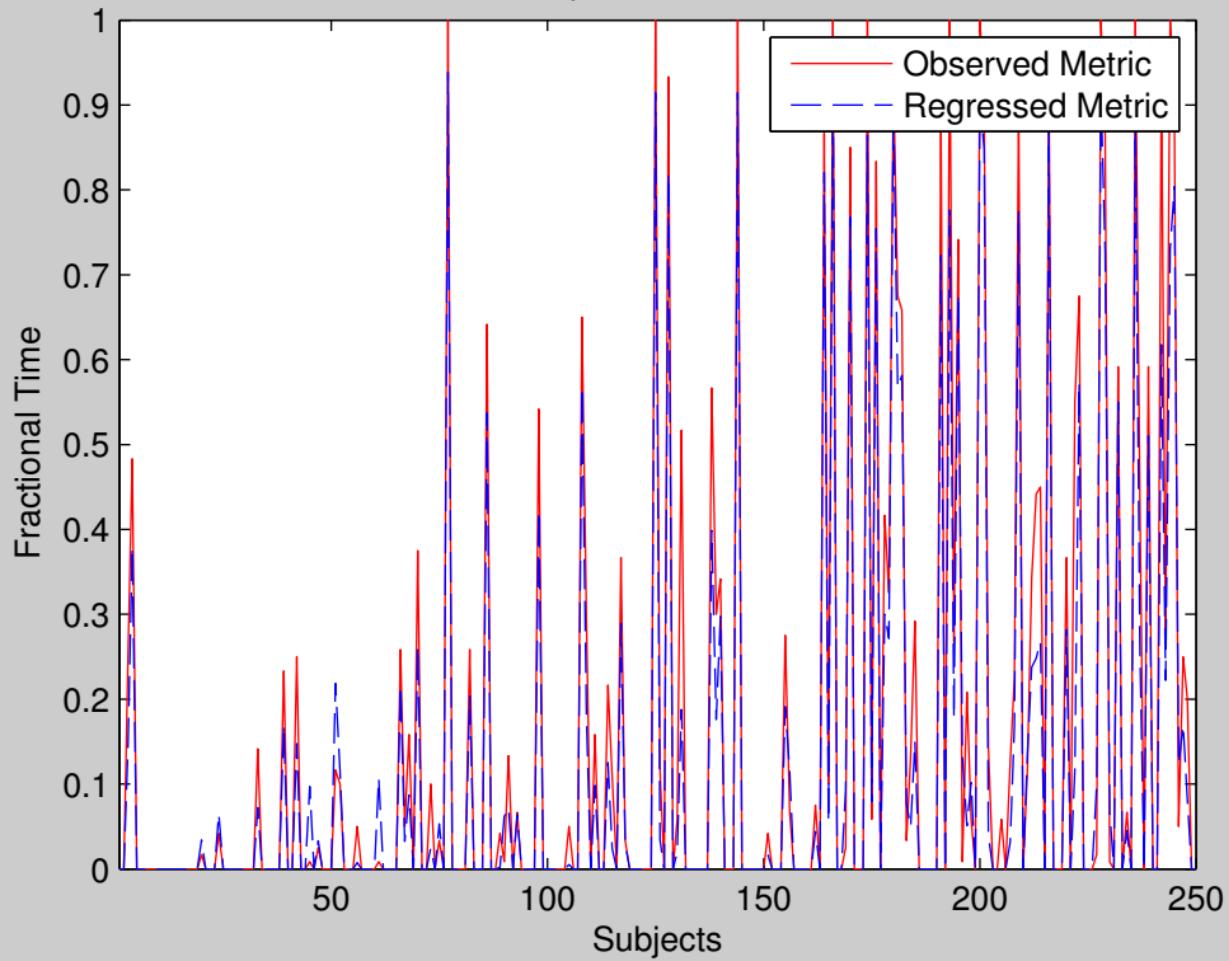
Group 23 State 2 : FT



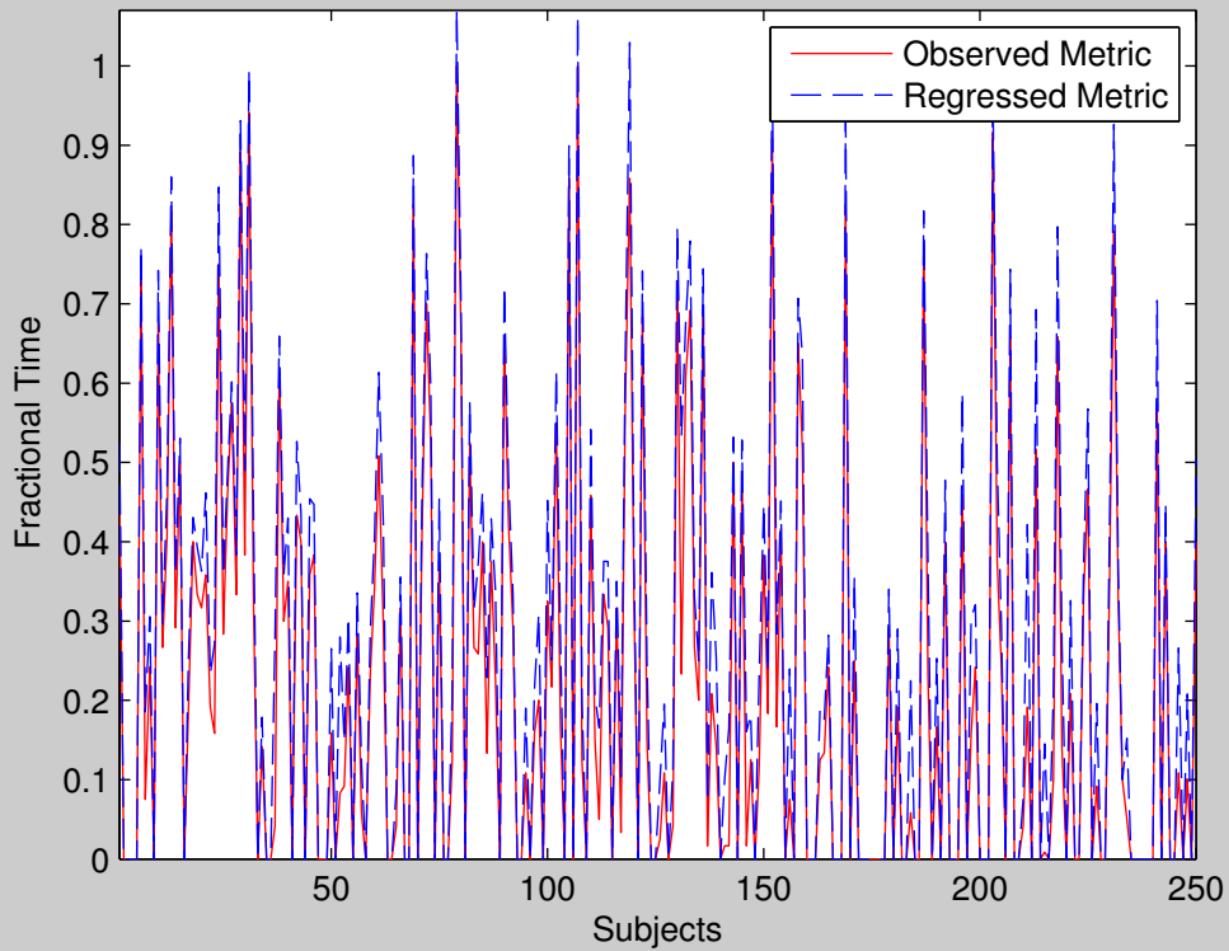
Group 23 State 3 : FT



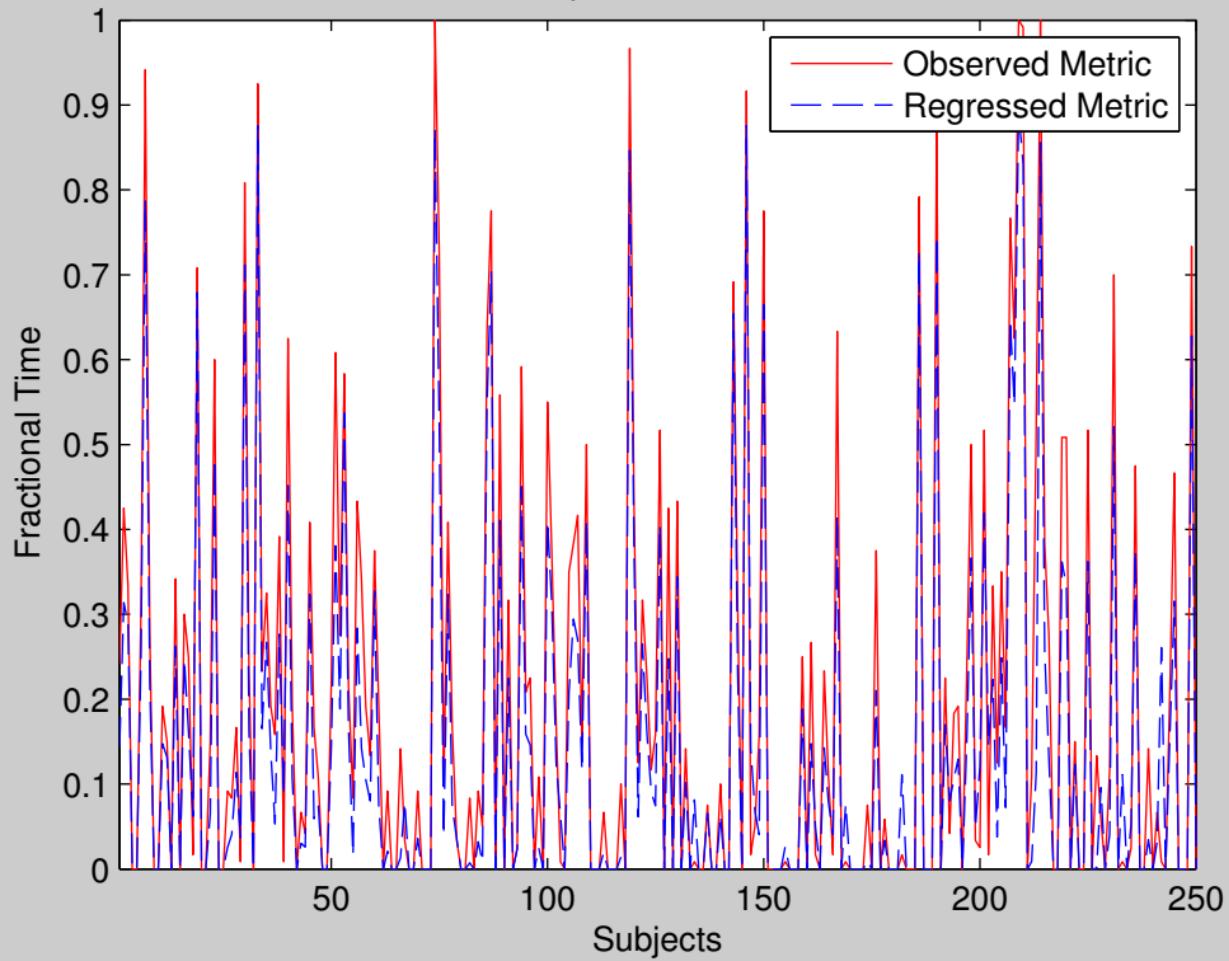
Group 23 State 4 : FT



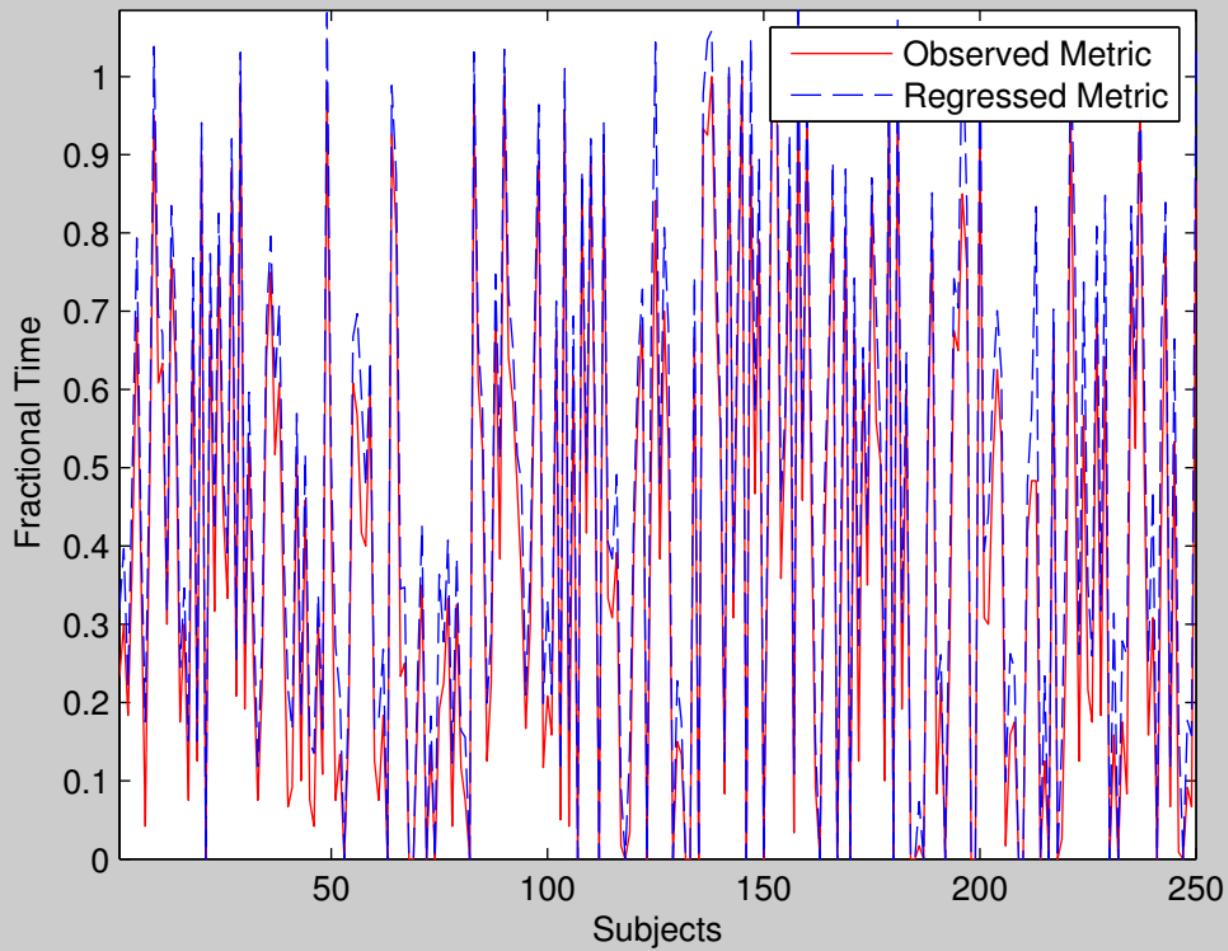
Group 23 State 5 : FT



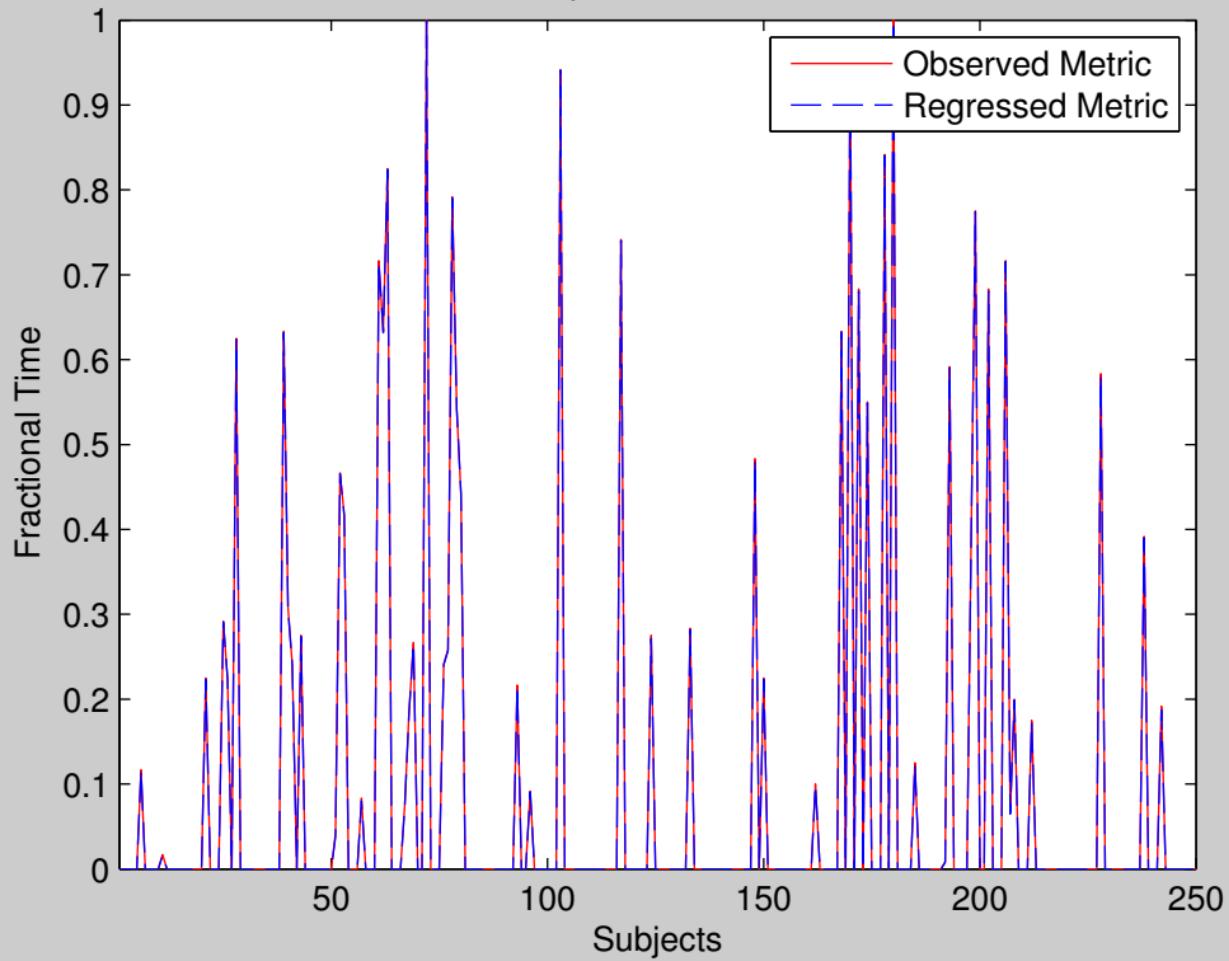
Group 24 State 1 : FT



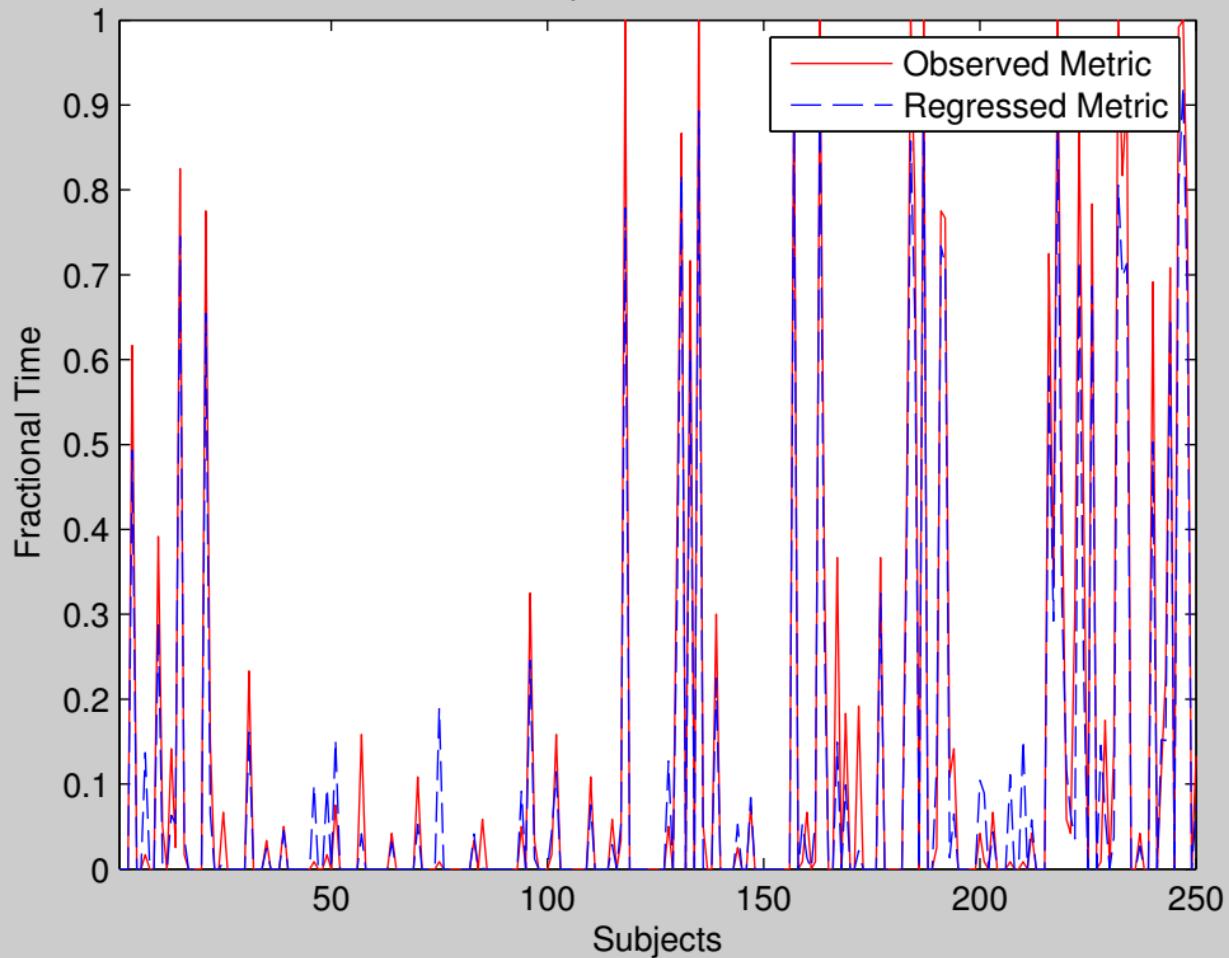
Group 24 State 2 : FT



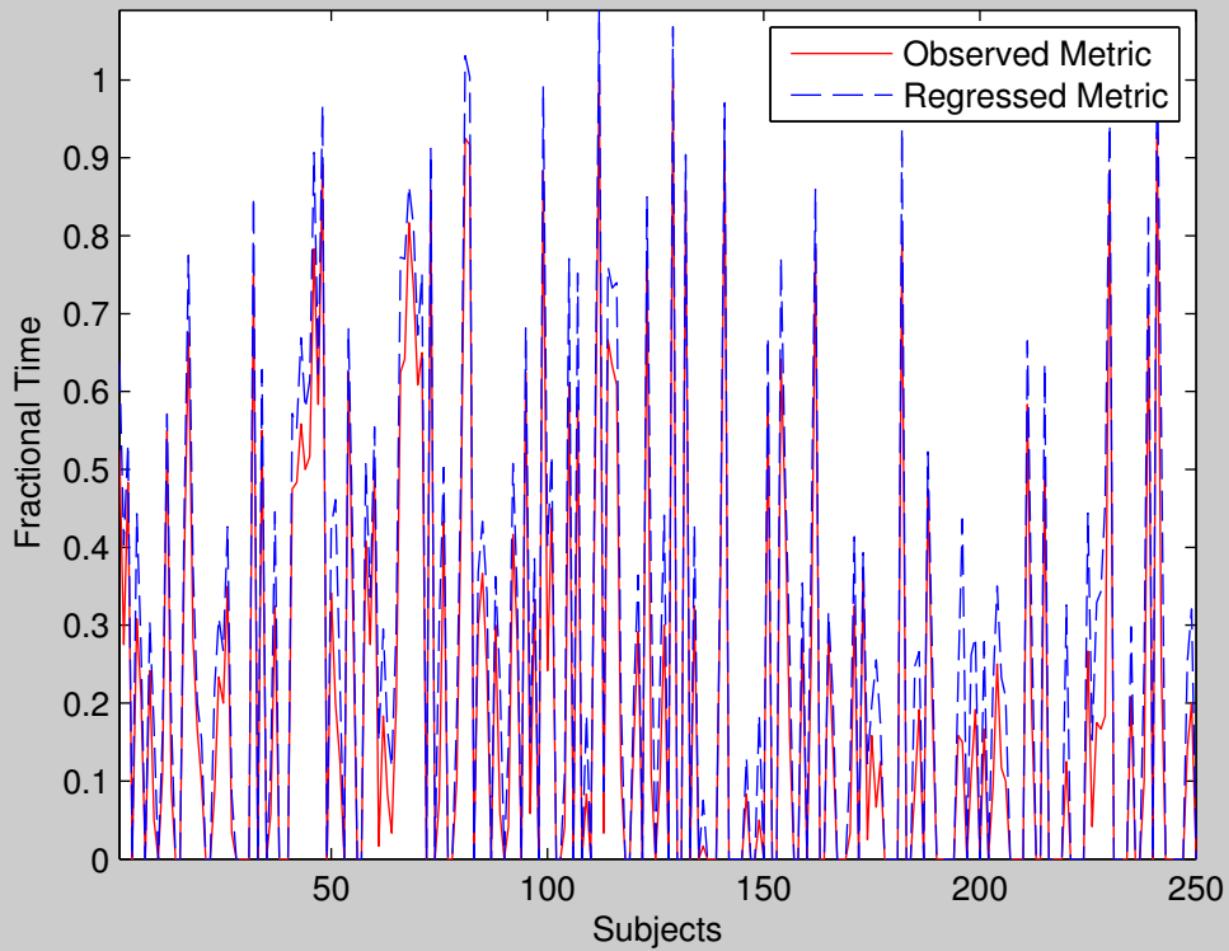
Group 24 State 3 : FT



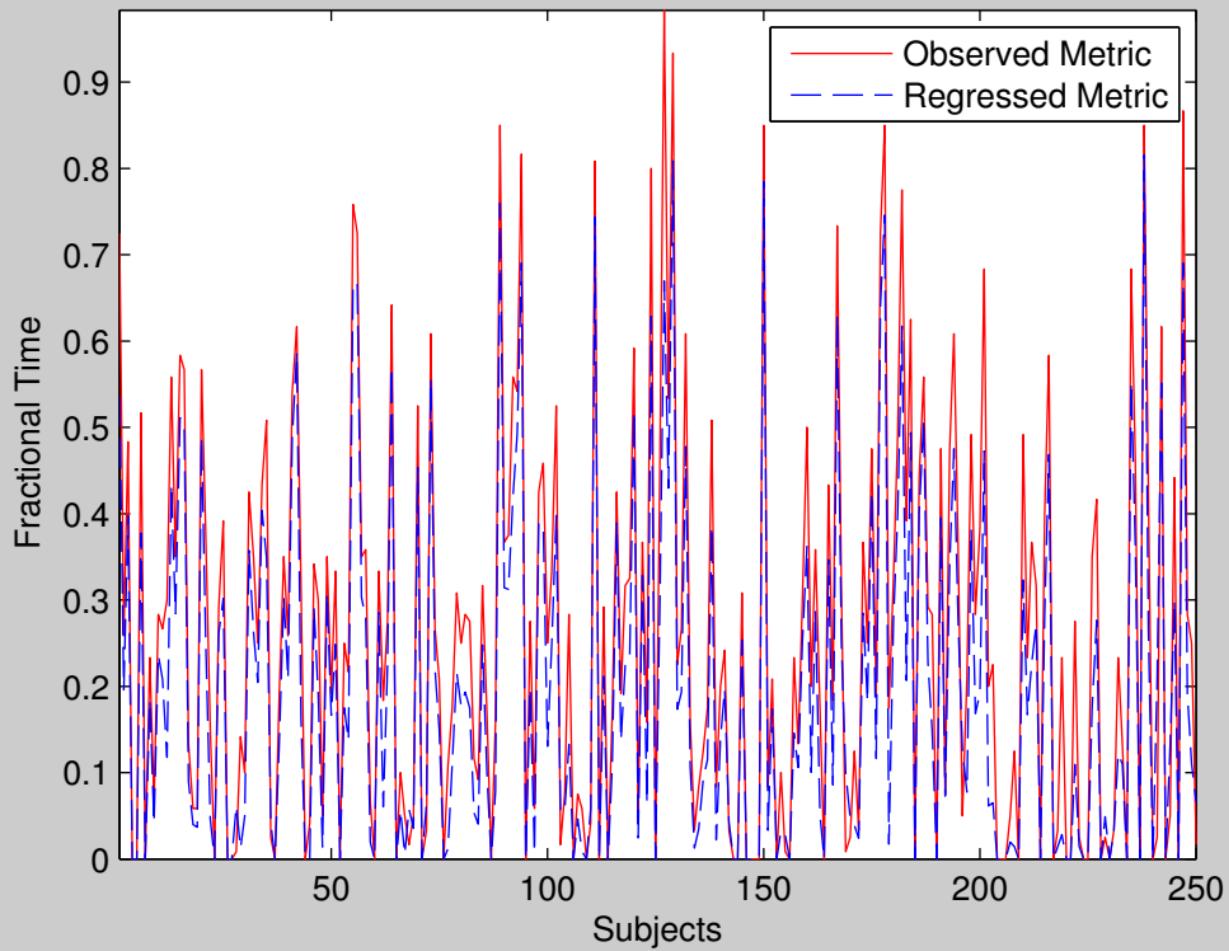
Group 24 State 4 : FT



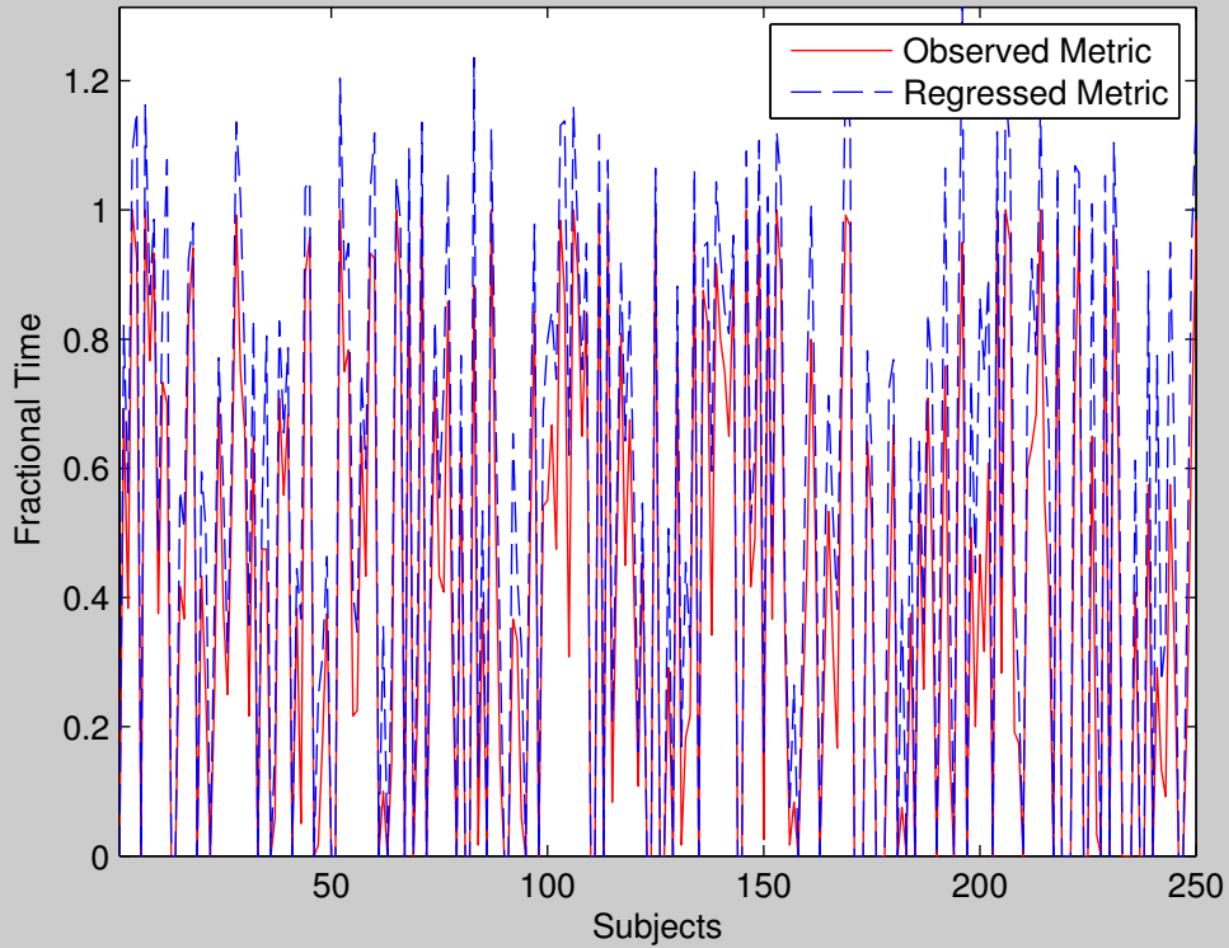
Group 24 State 5 : FT



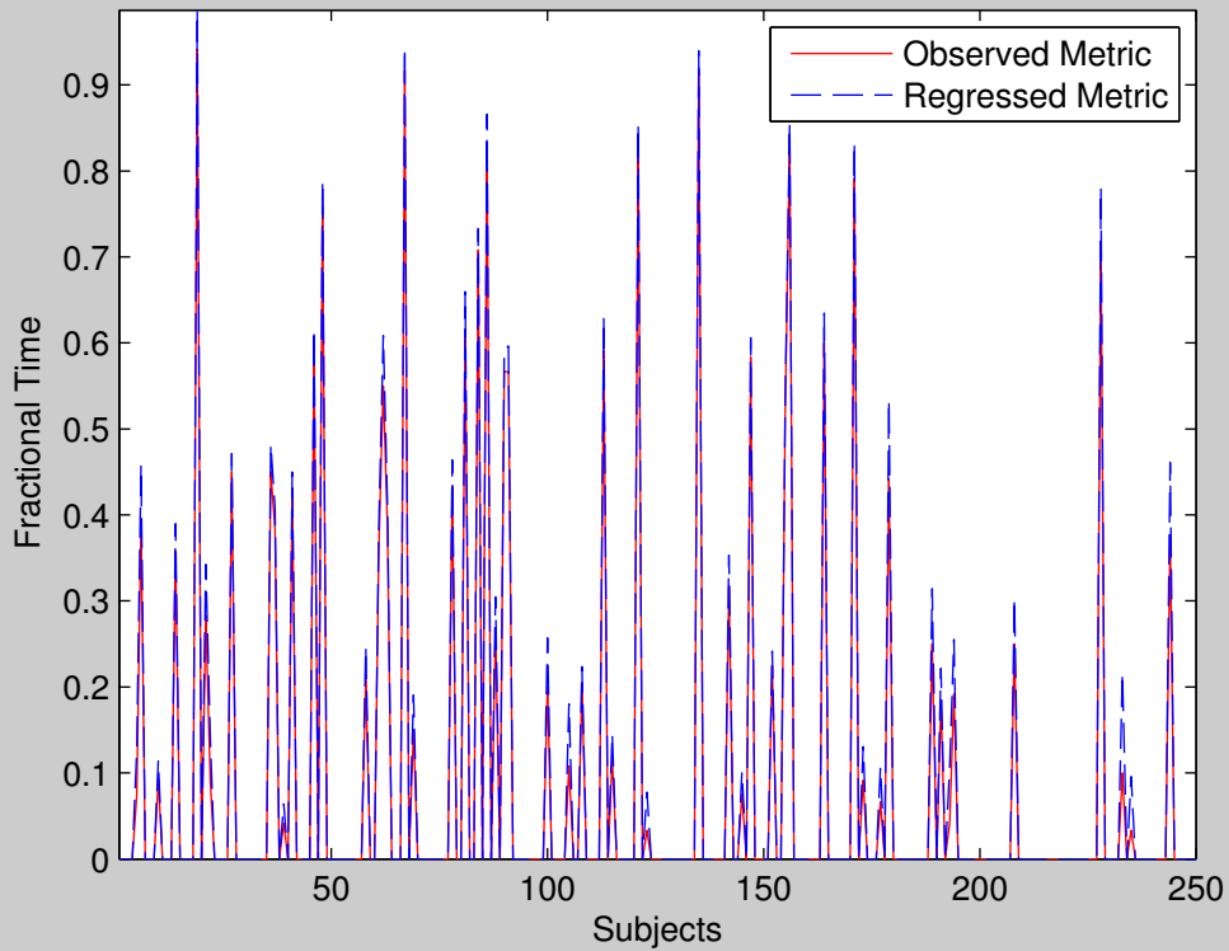
Group 25 State 1 : FT



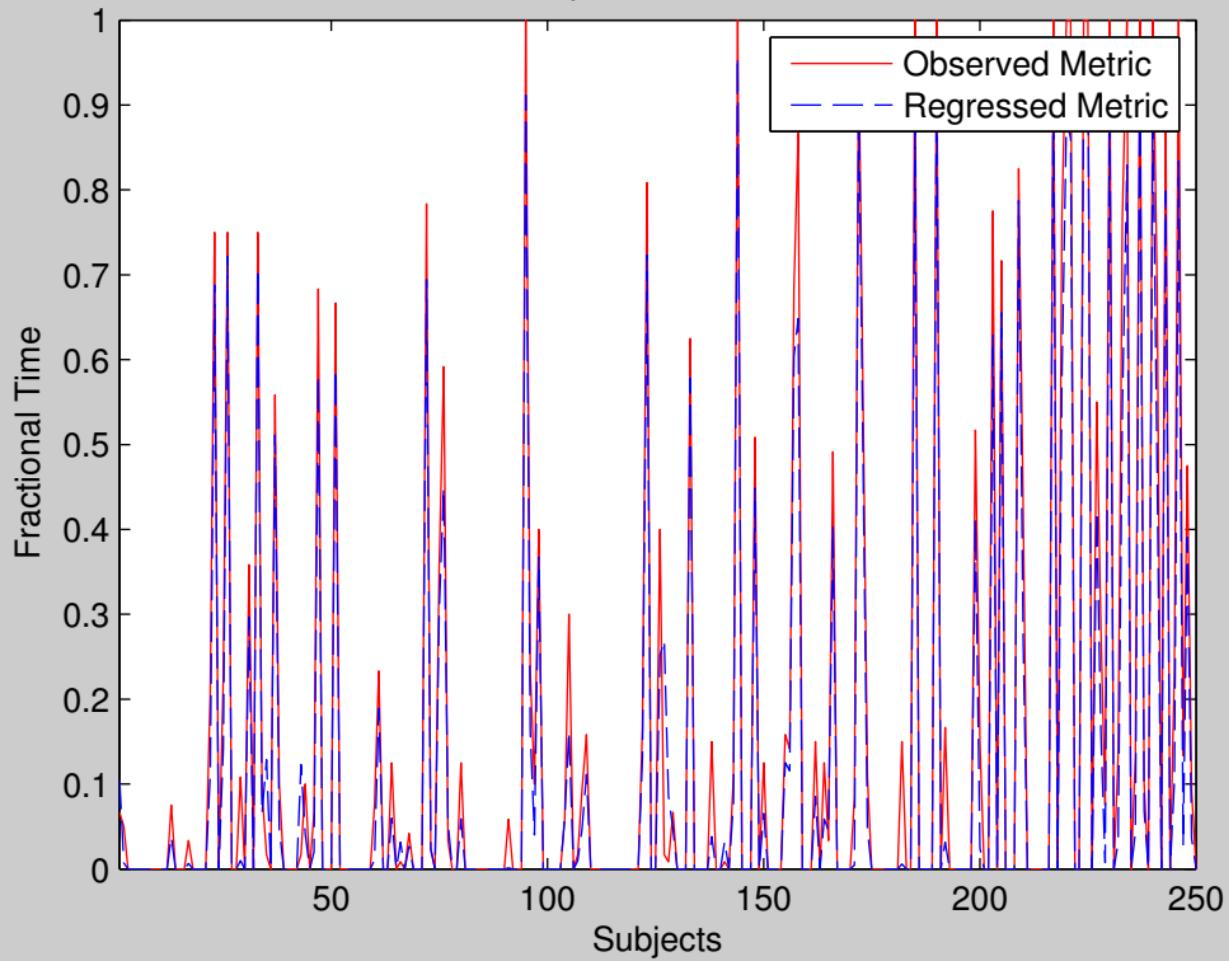
Group 25 State 2 : FT



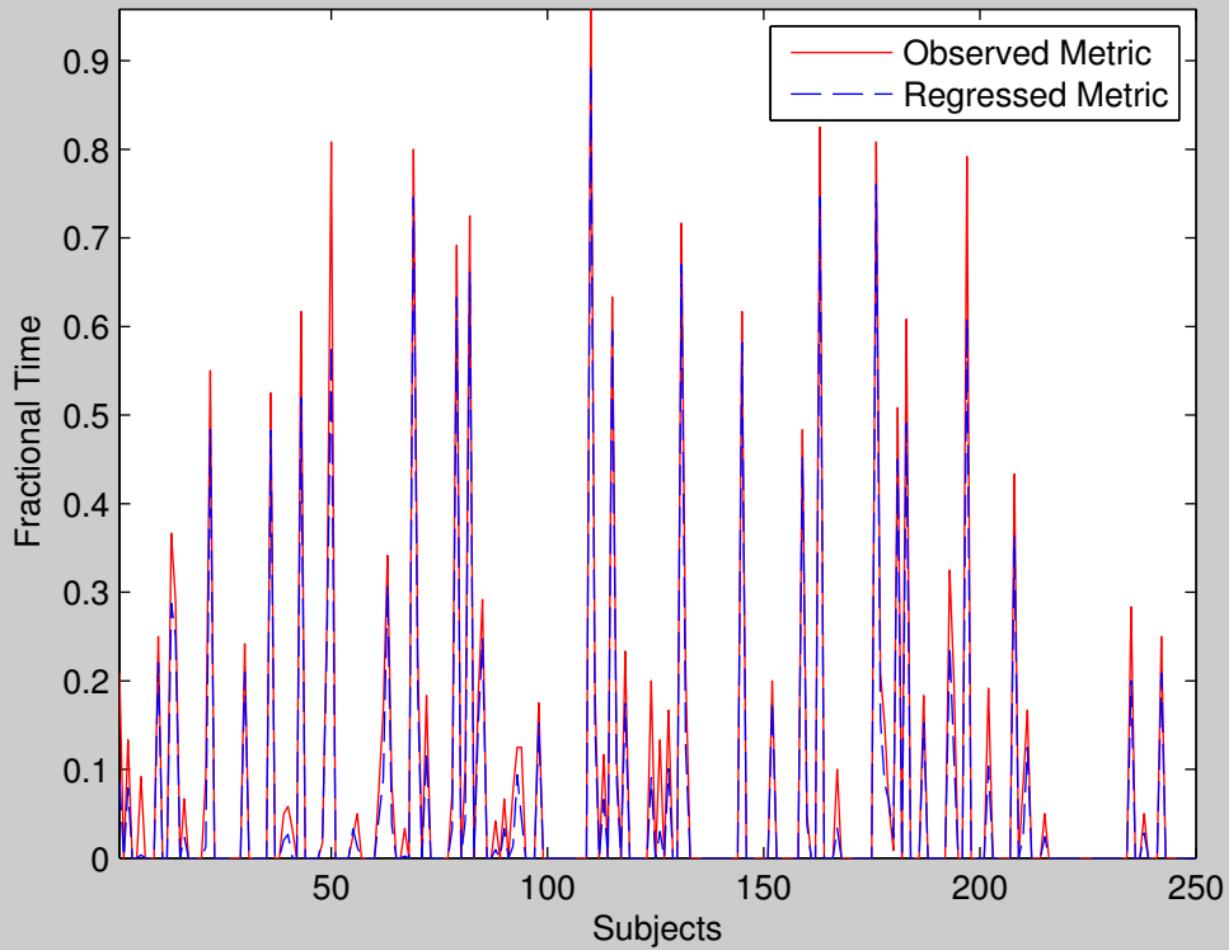
Group 25 State 3 : FT



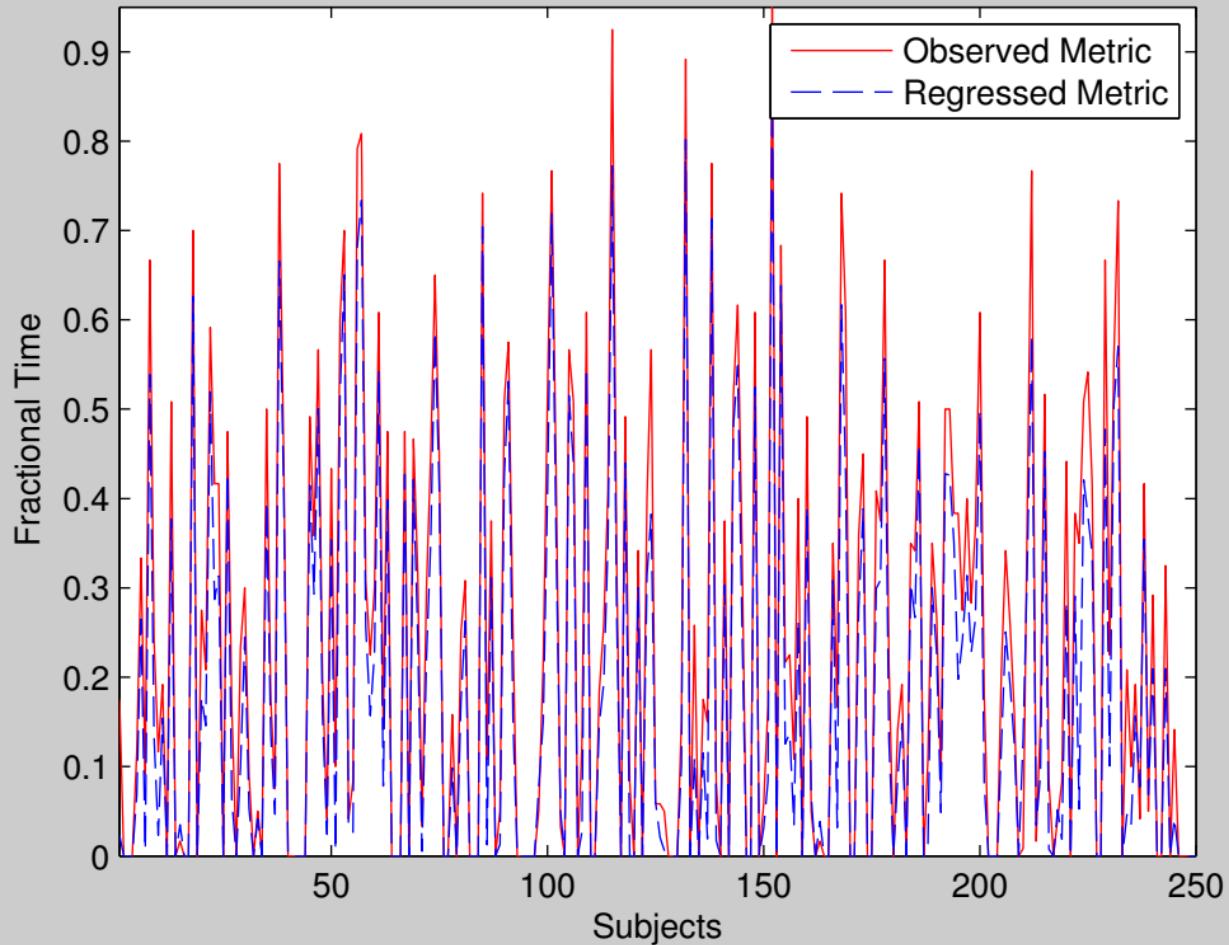
Group 25 State 4 : FT



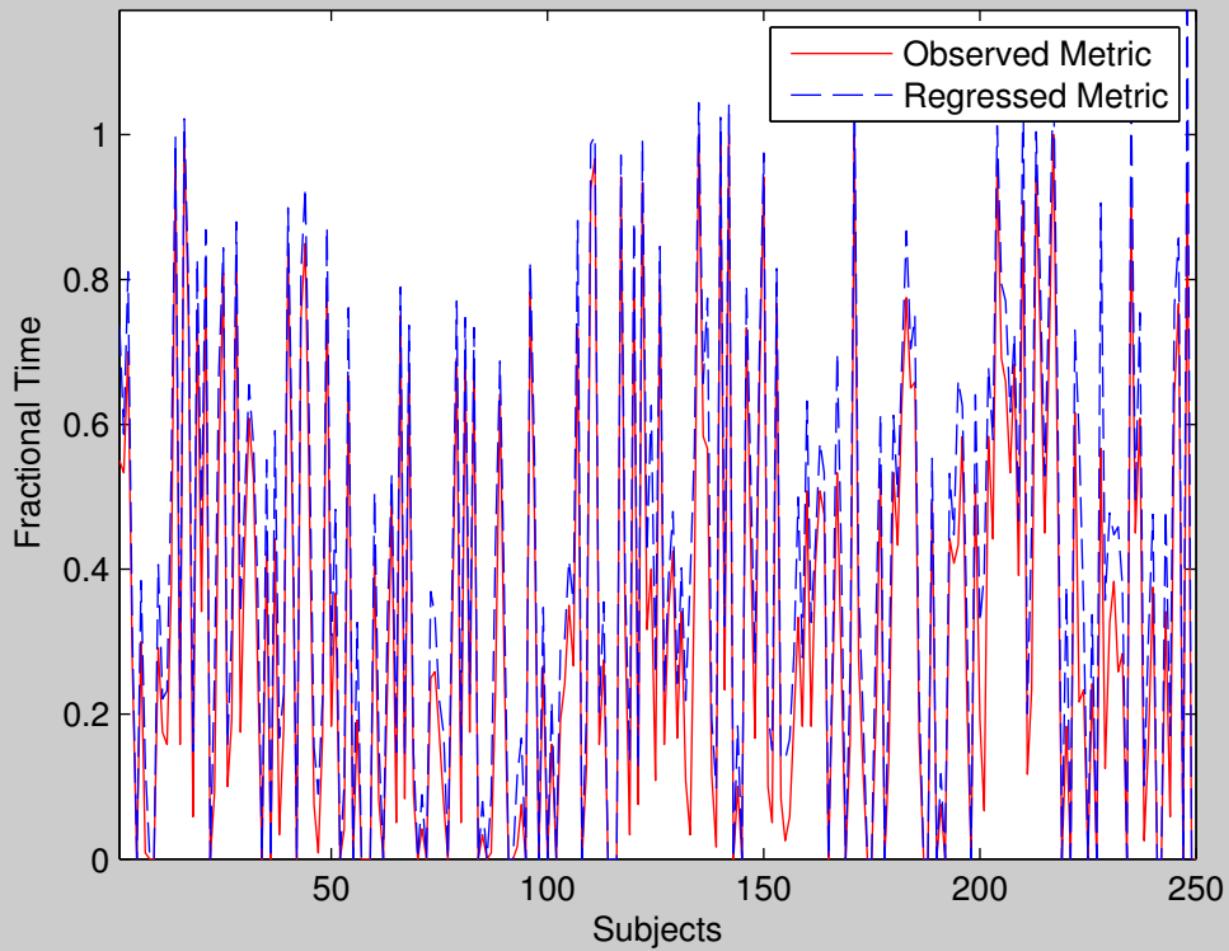
Group 25 State 5 : FT



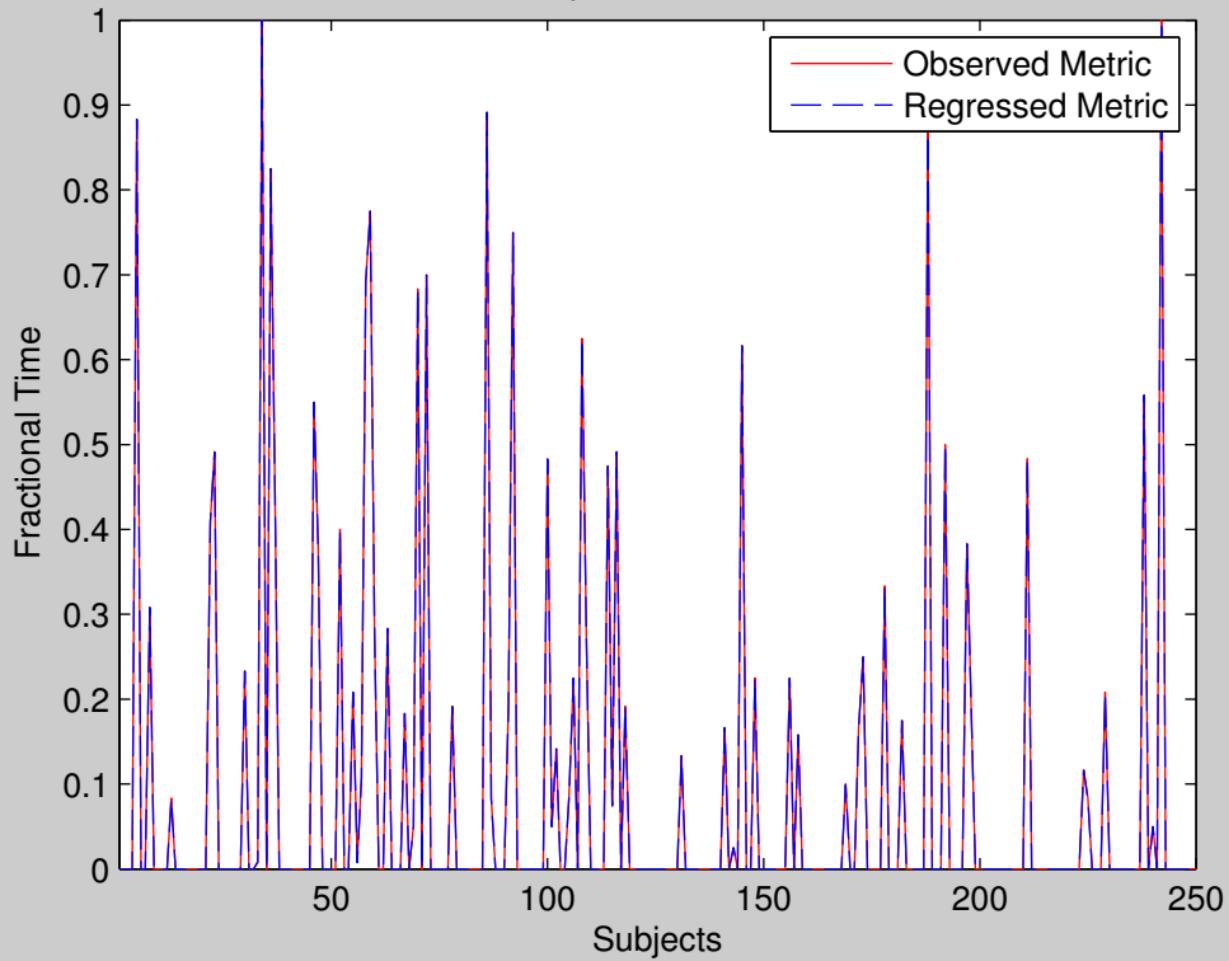
Group 26 State 1 : FT



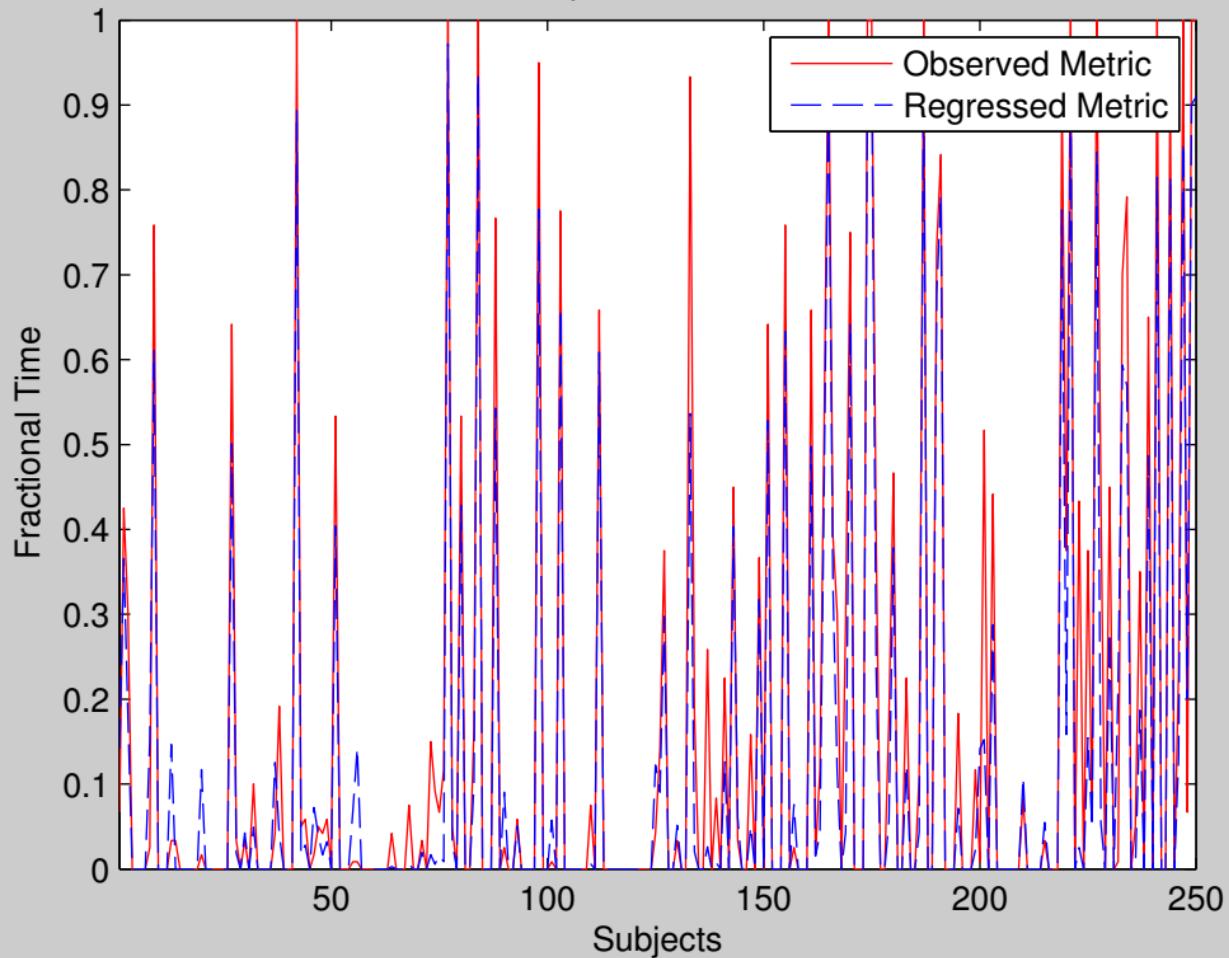
Group 26 State 2 : FT



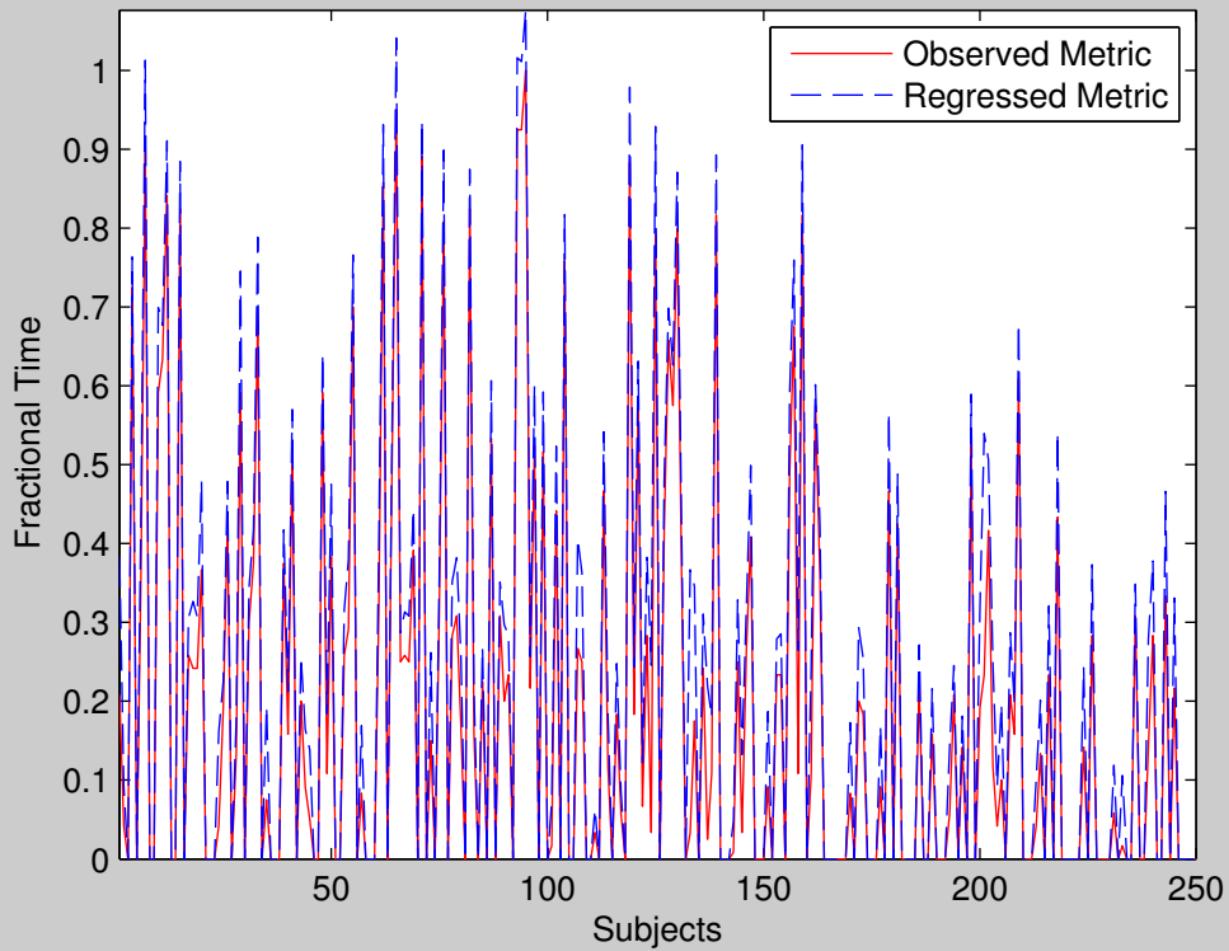
Group 26 State 3 : FT



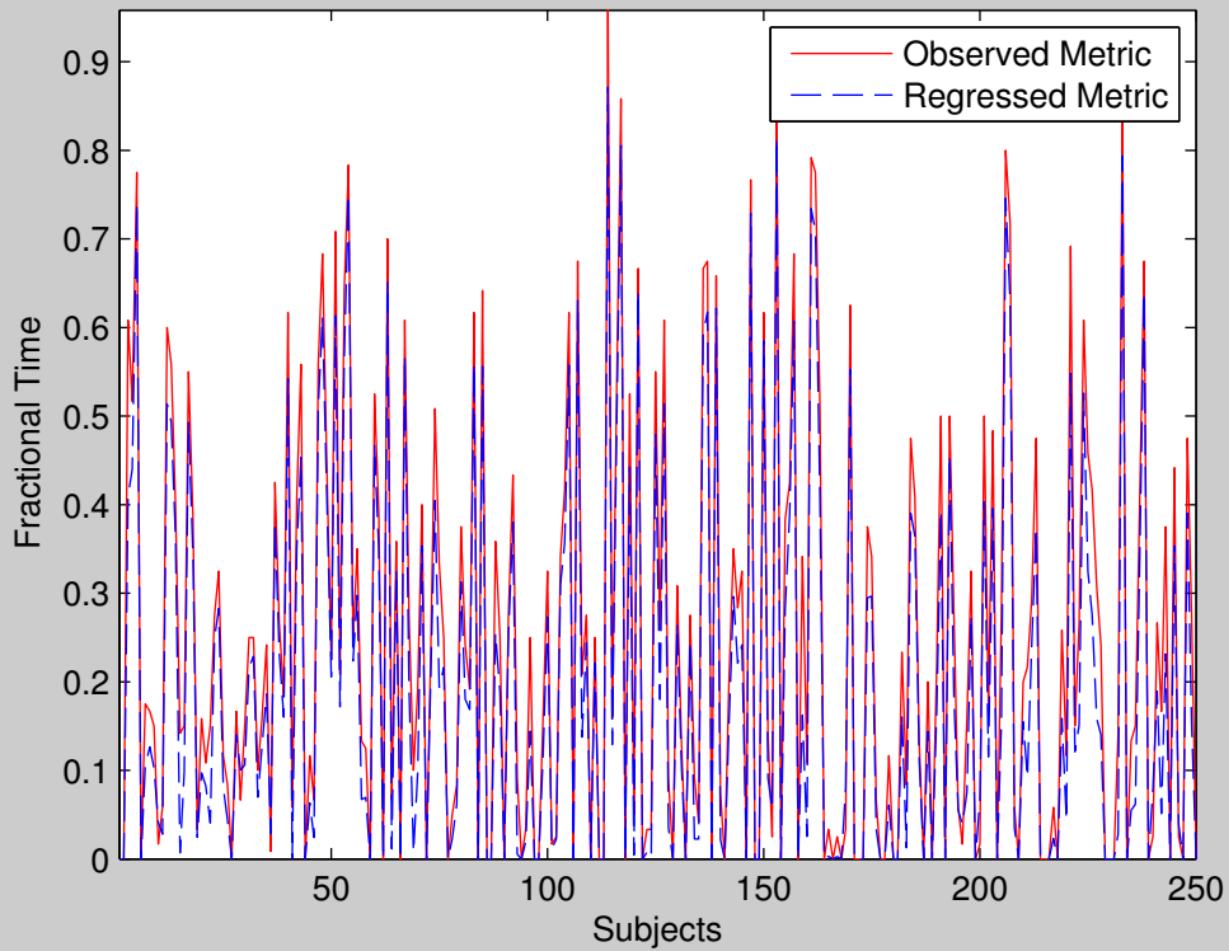
Group 26 State 4 : FT



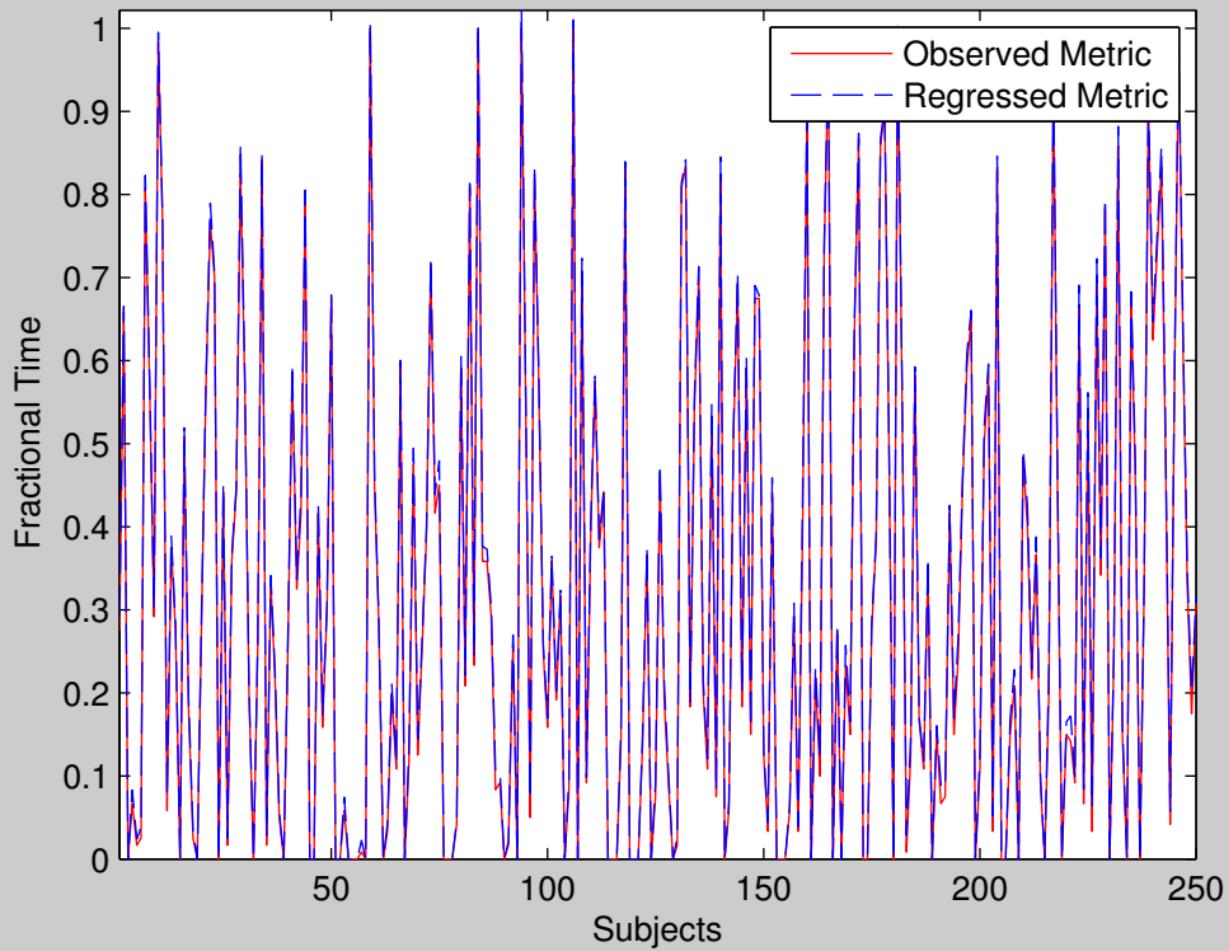
Group 26 State 5 : FT



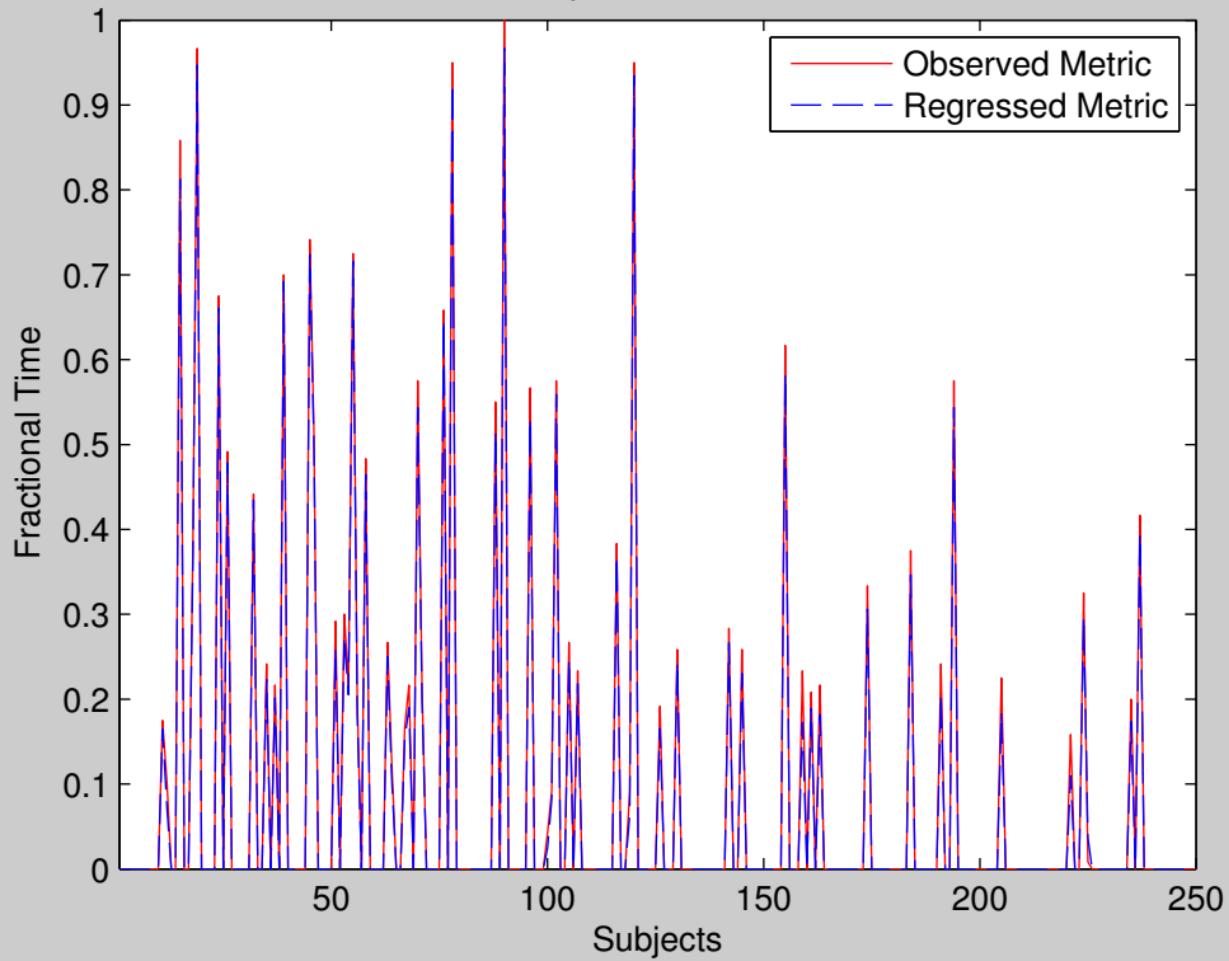
Group 27 State 1 : FT



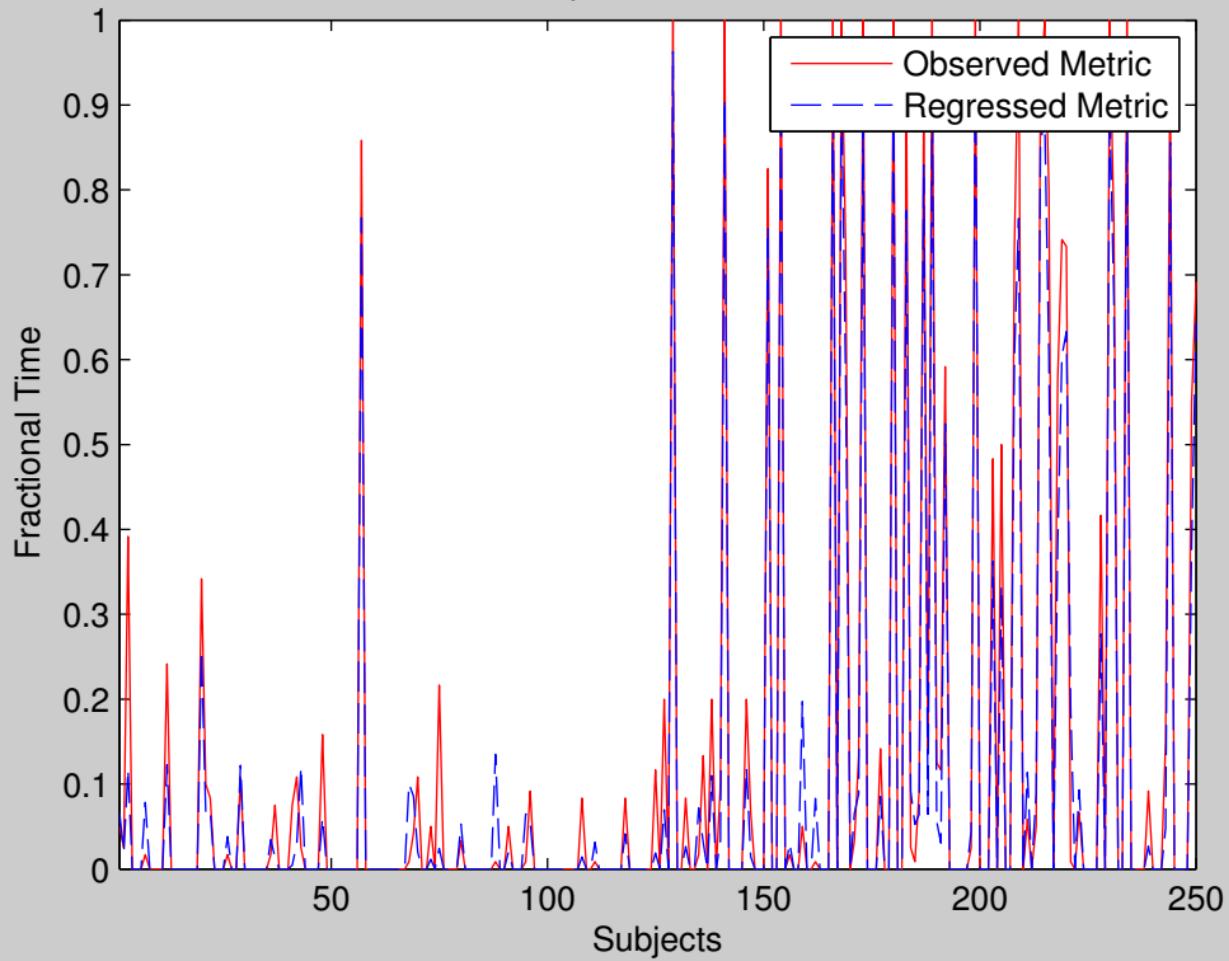
Group 27 State 2 : FT



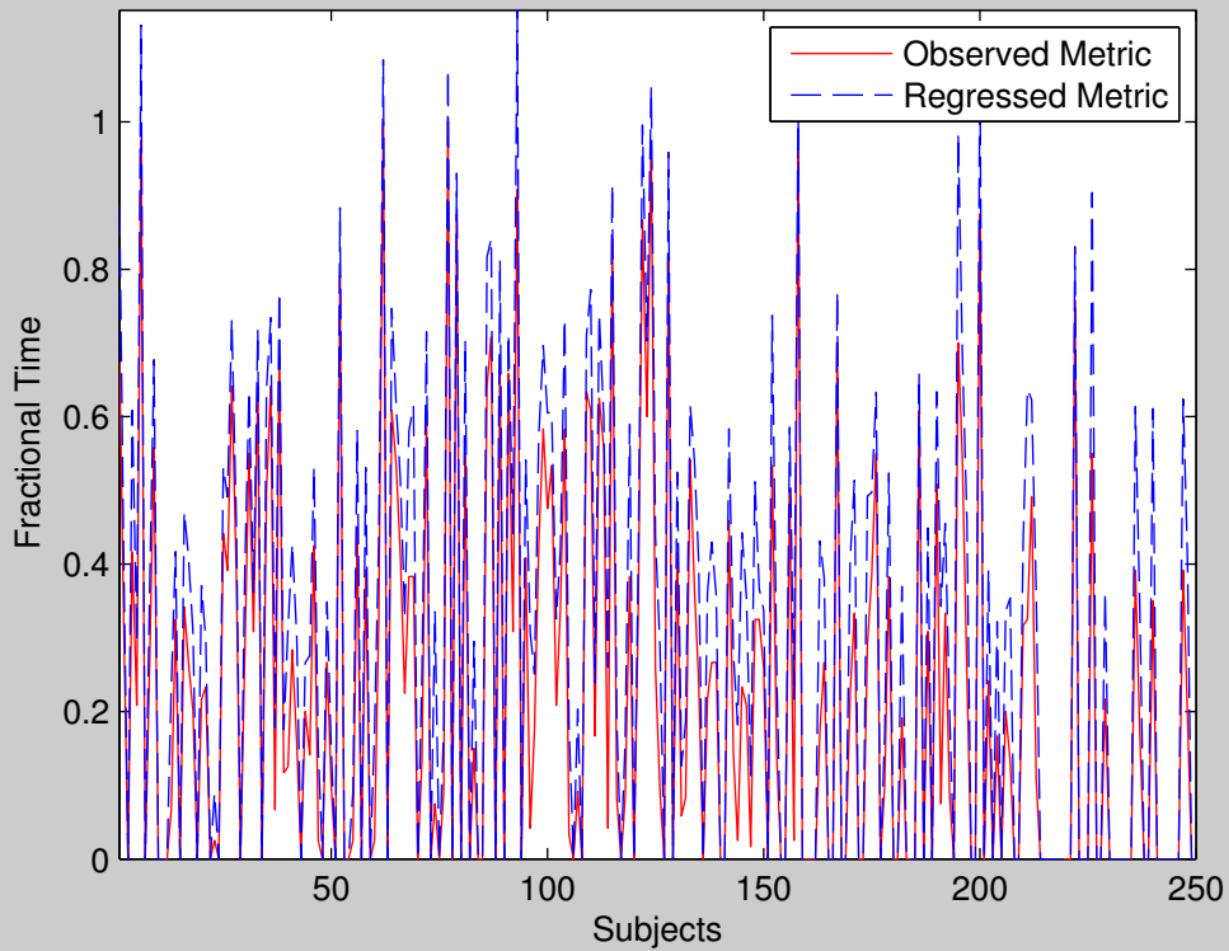
Group 27 State 3 : FT



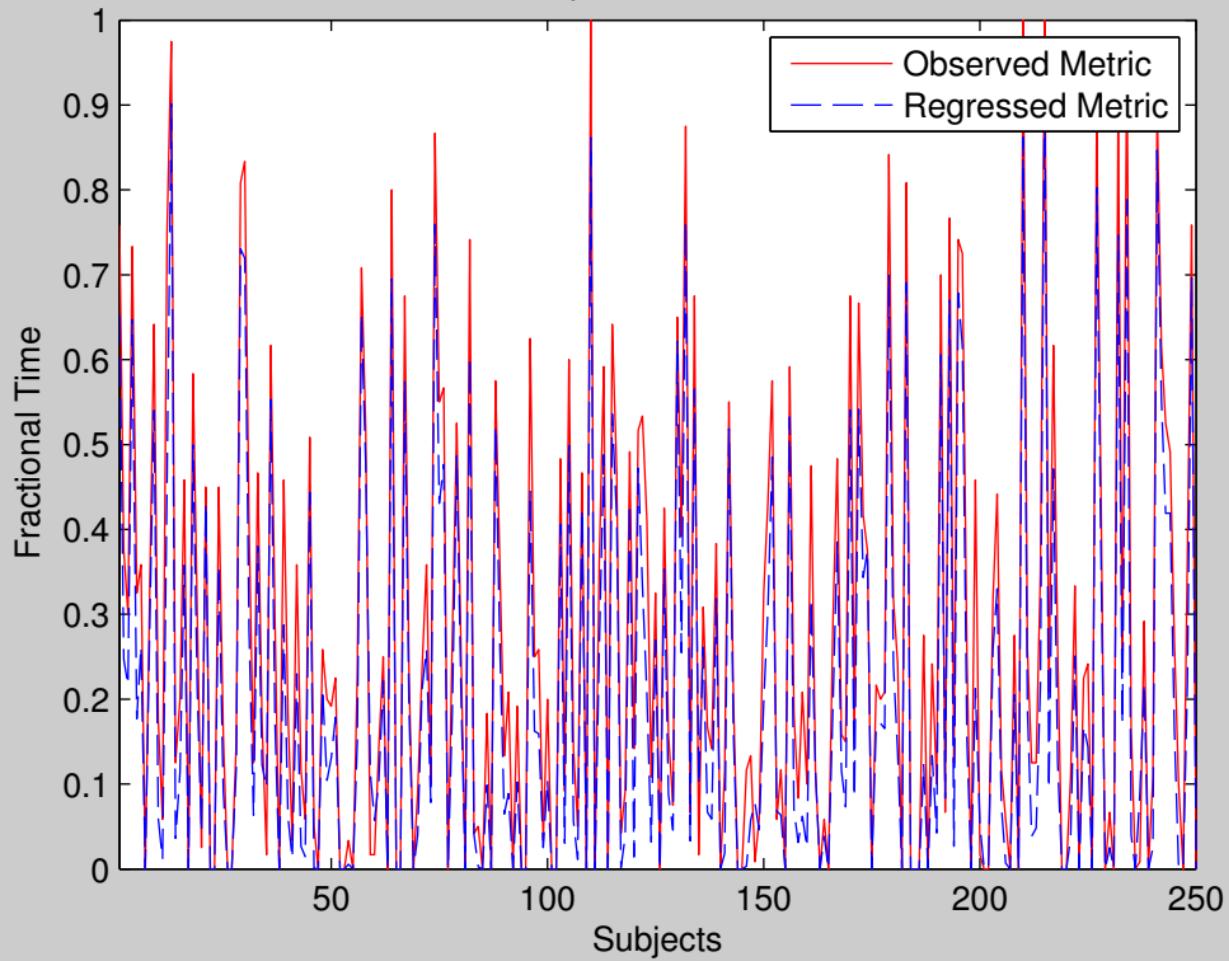
Group 27 State 4 : FT



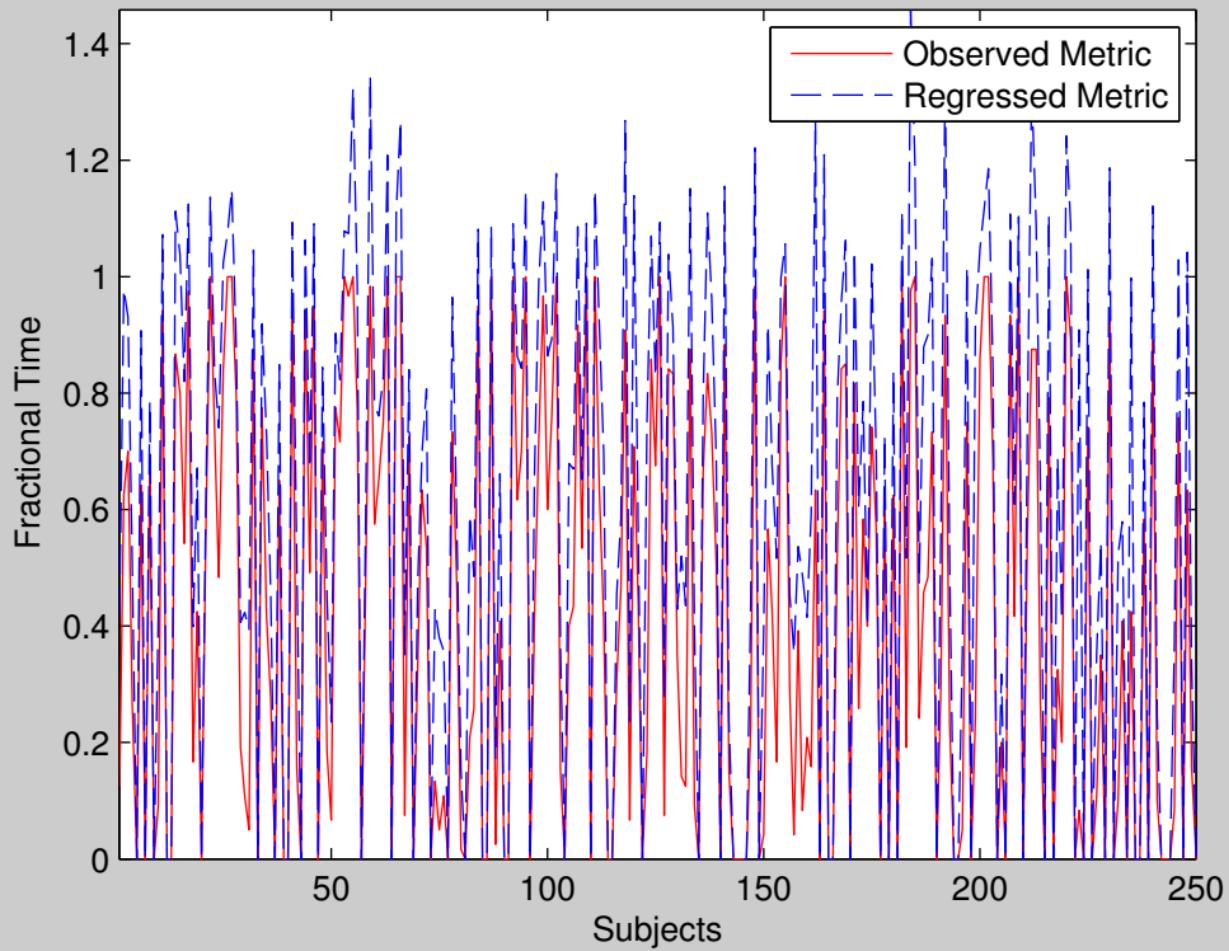
Group 27 State 5 : FT



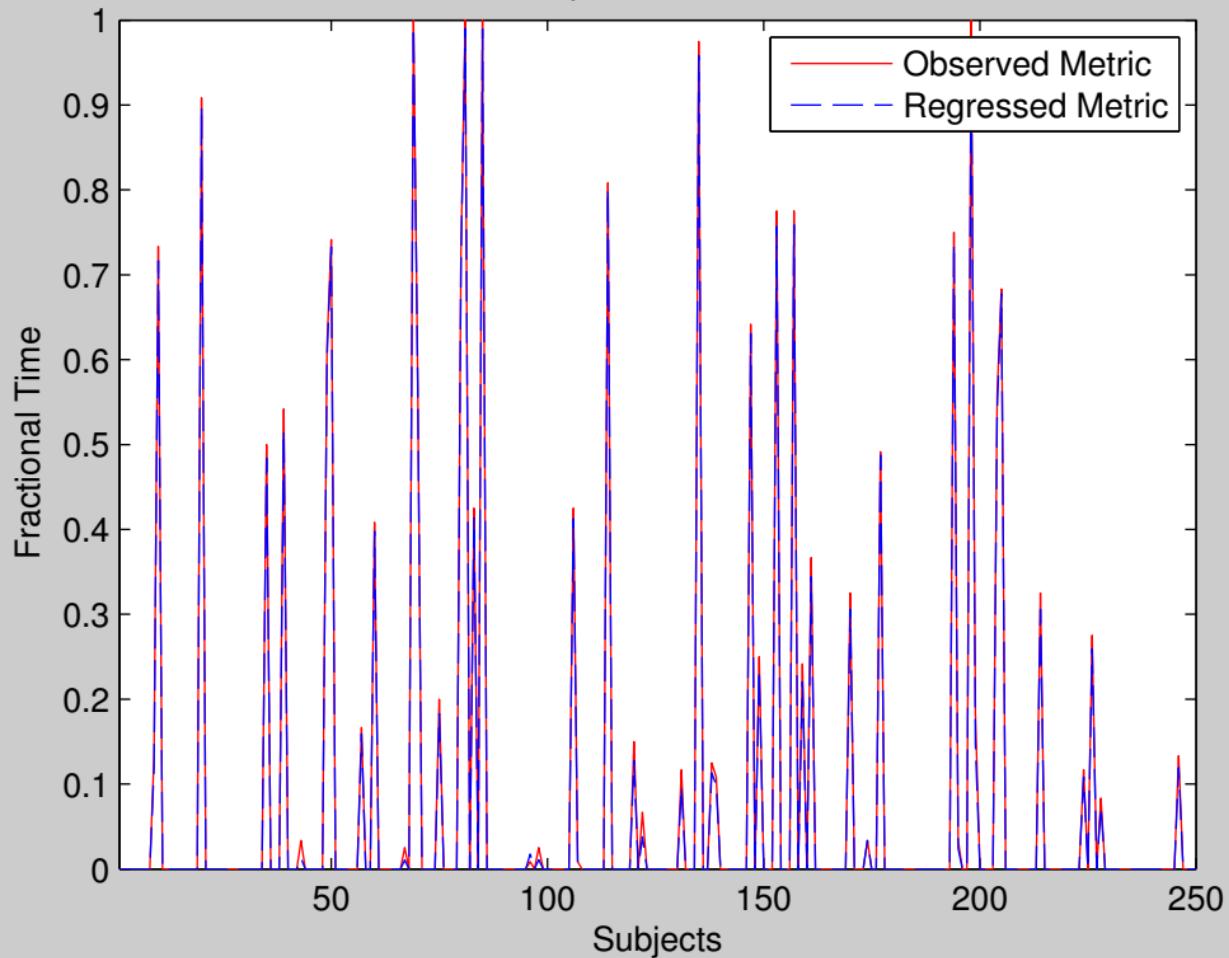
Group 28 State 1 : FT



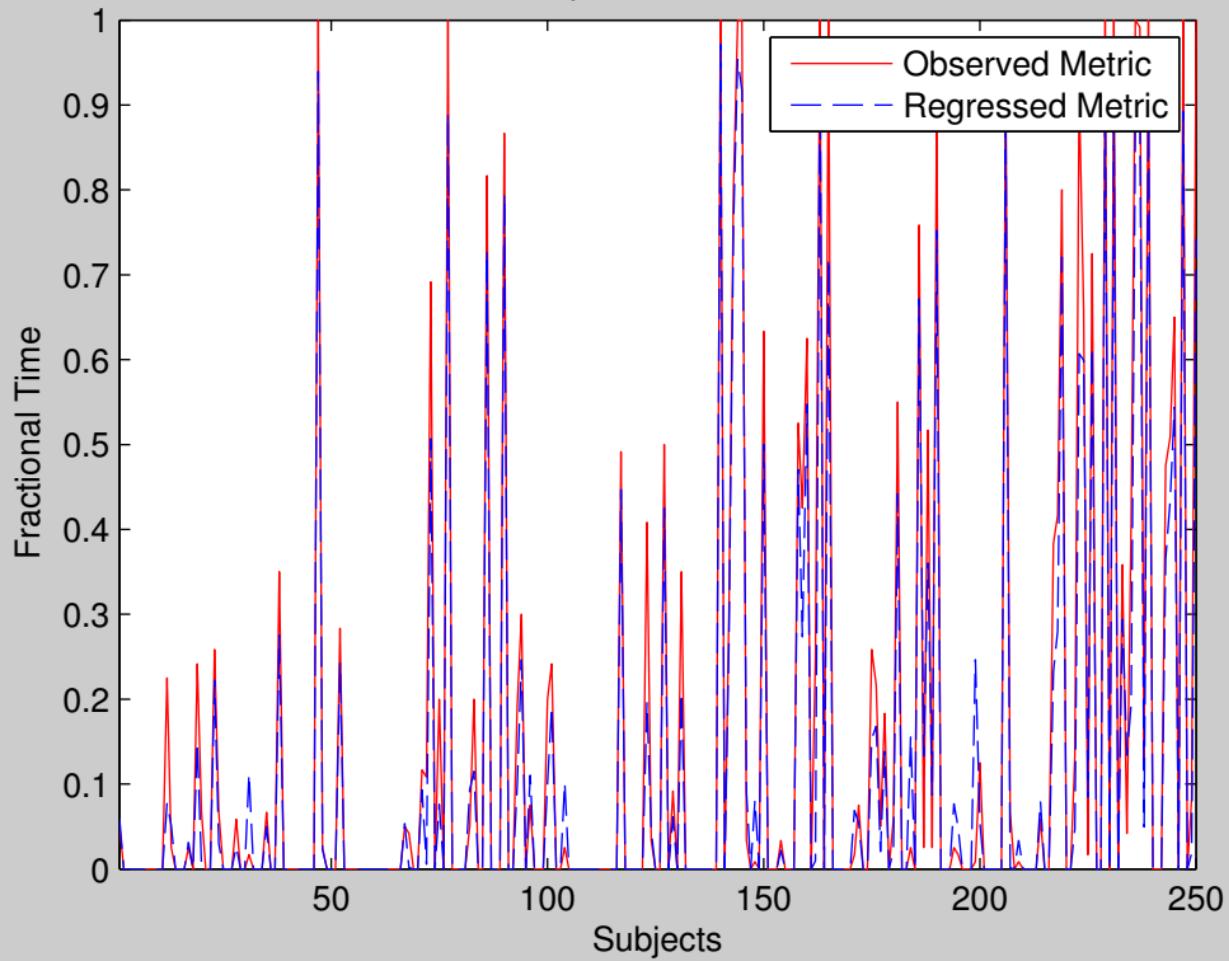
Group 28 State 2 : FT



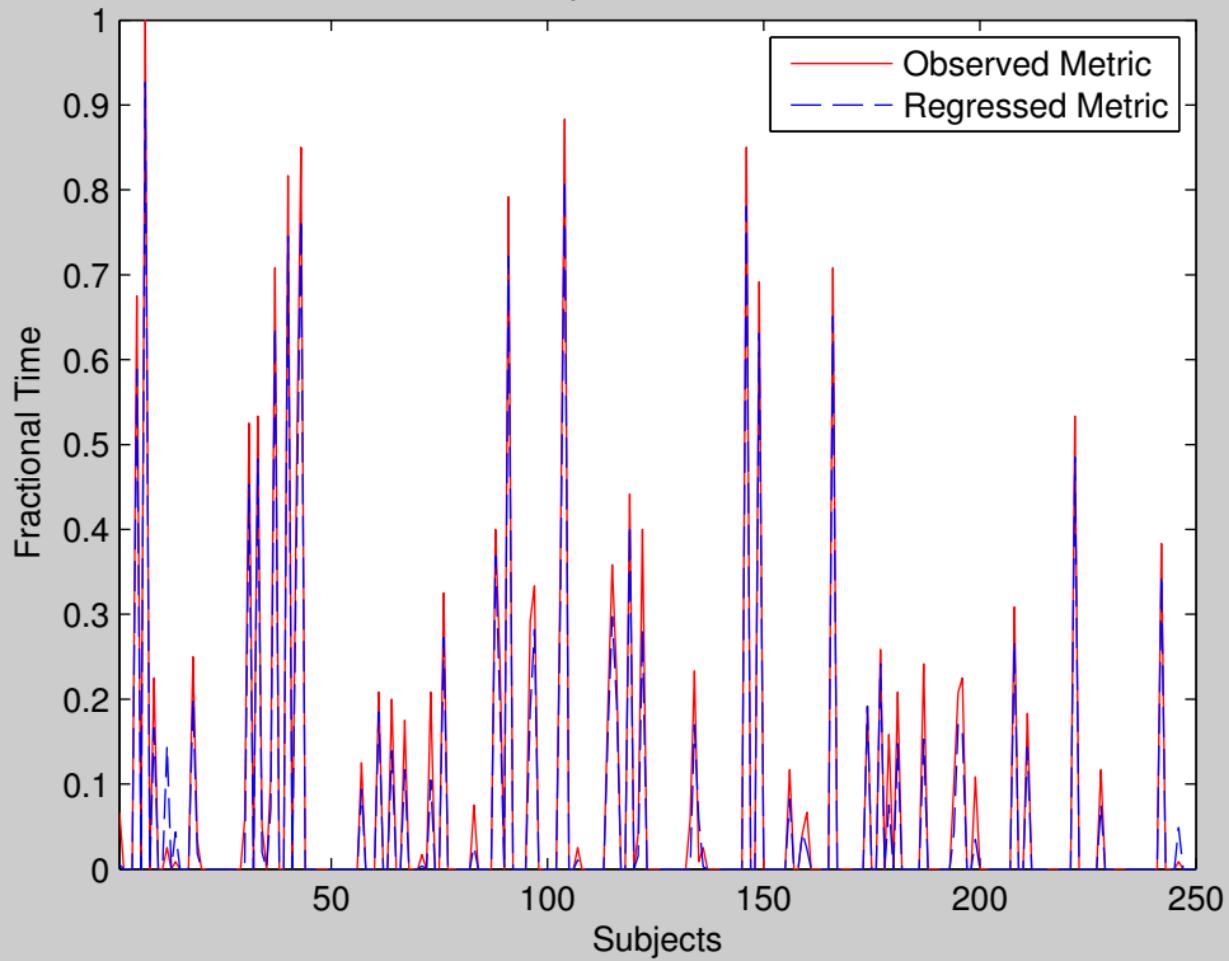
Group 28 State 3 : FT



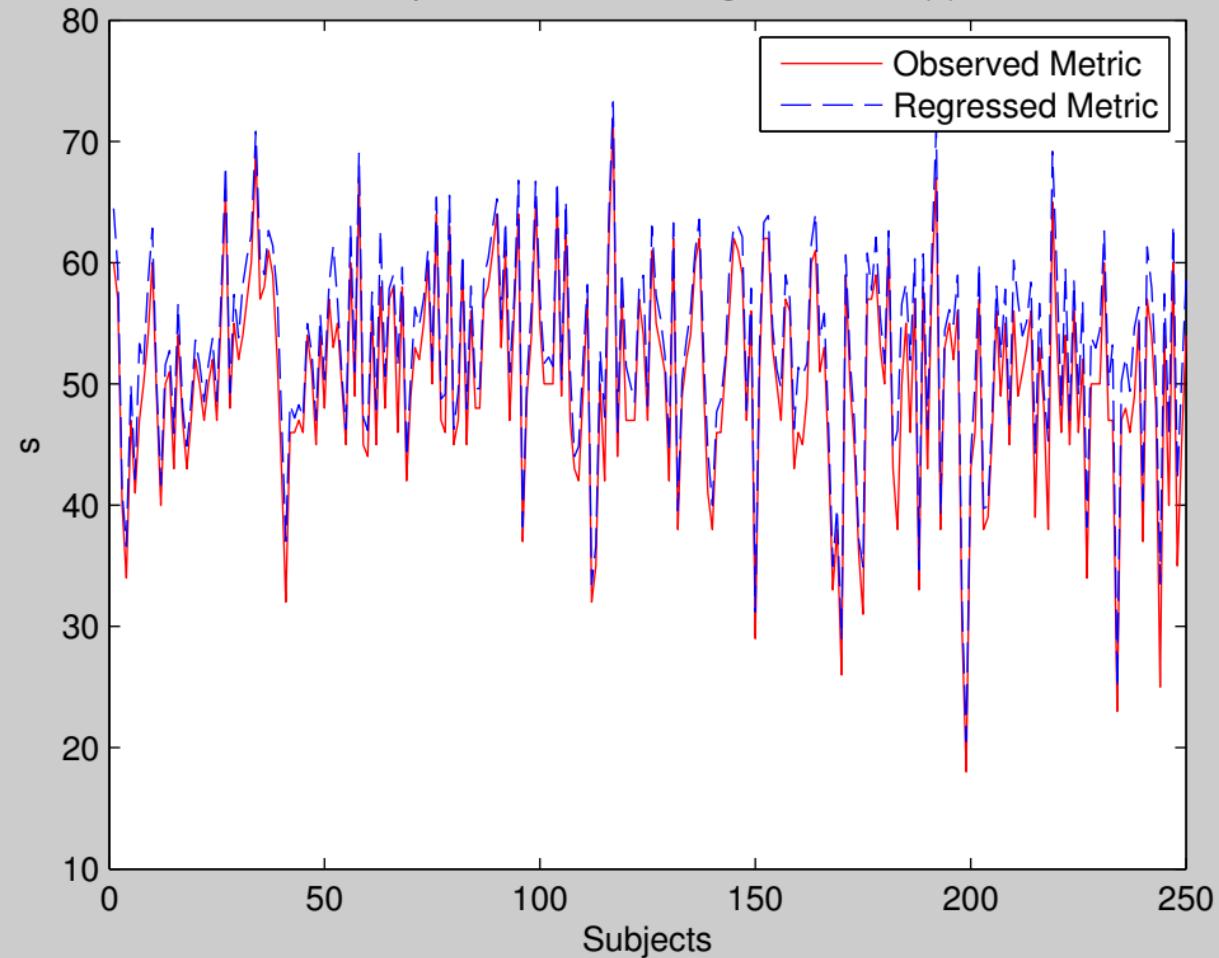
Group 28 State 4 : FT



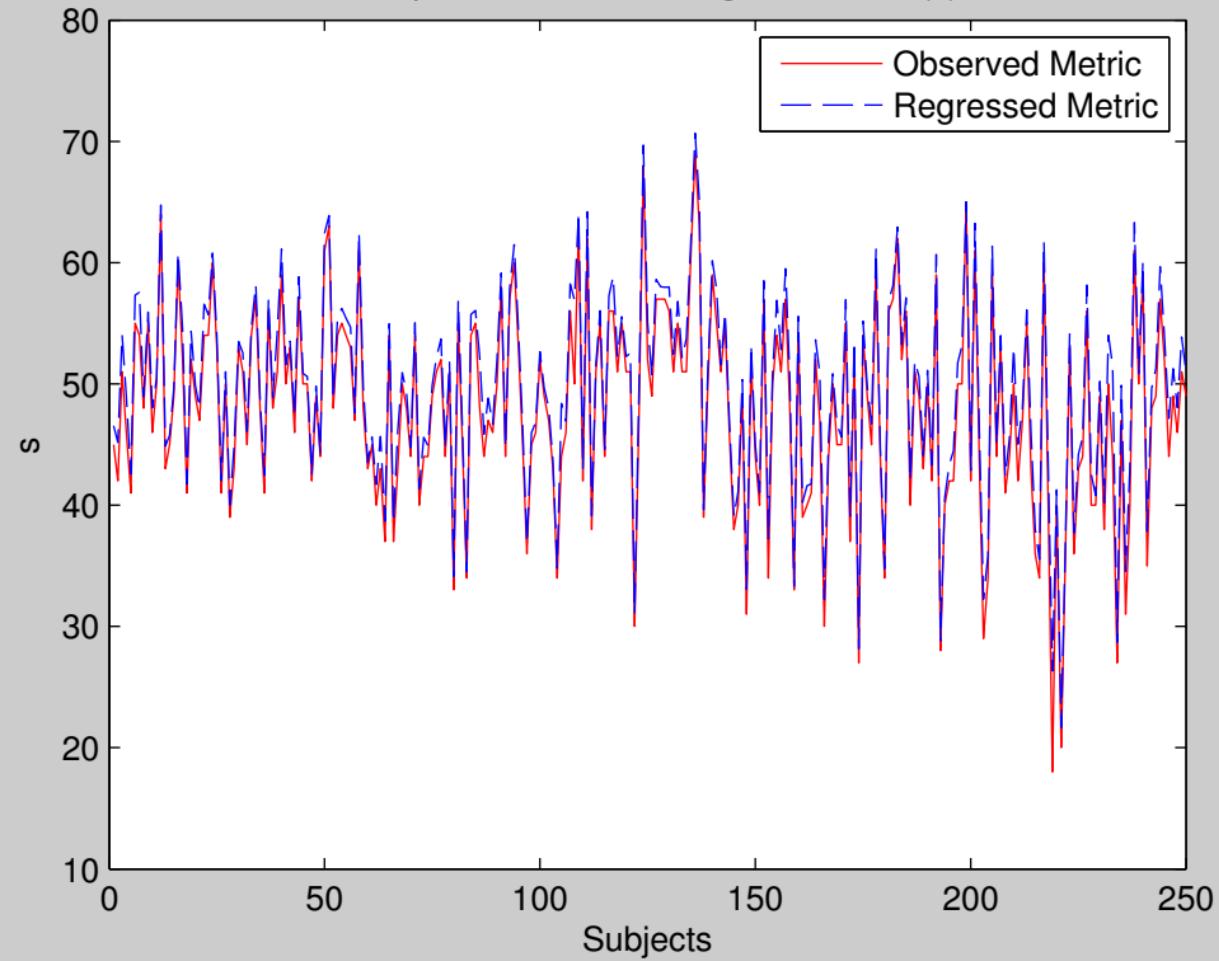
Group 28 State 5 : FT



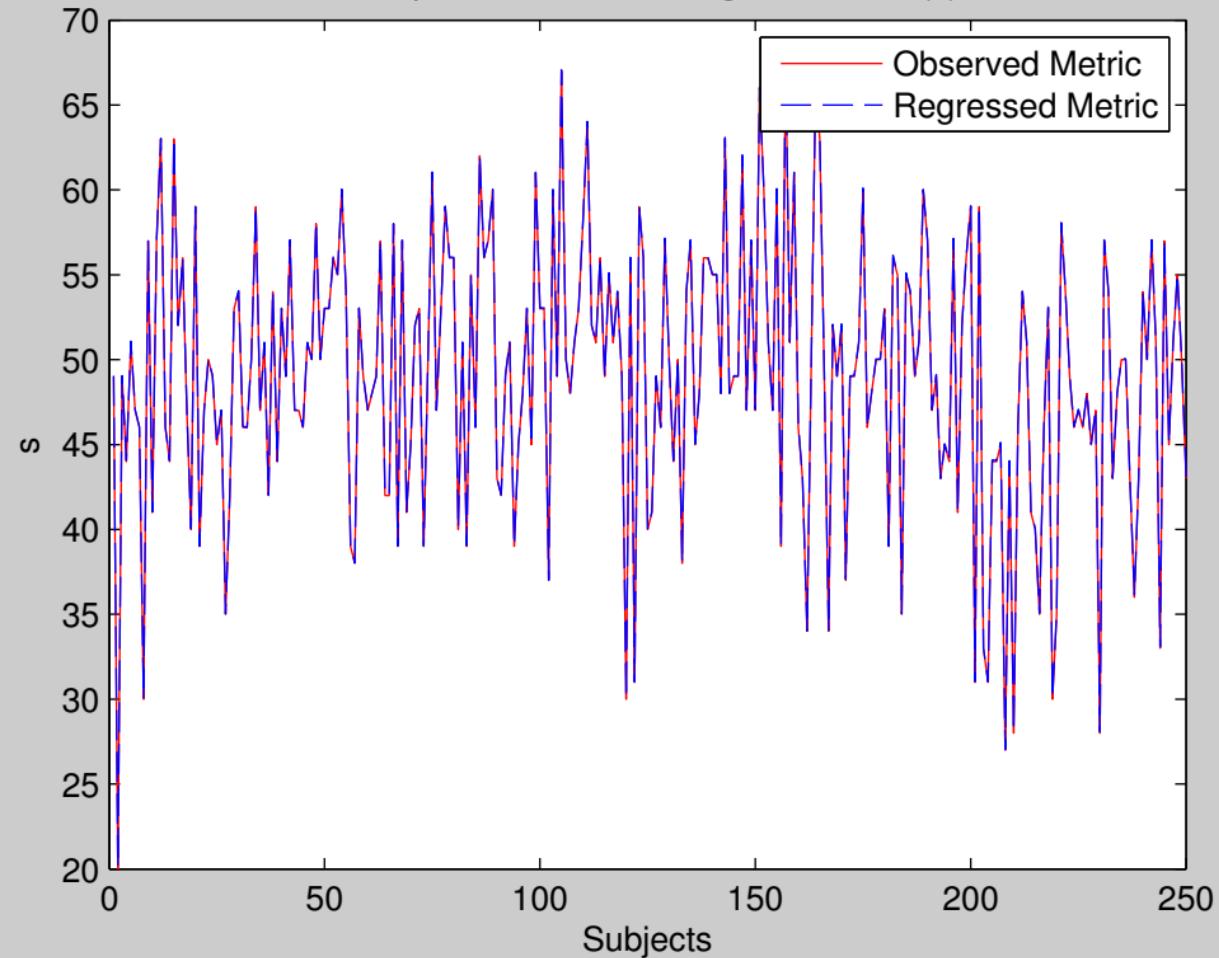
Group 1: Number of changes in states (s)



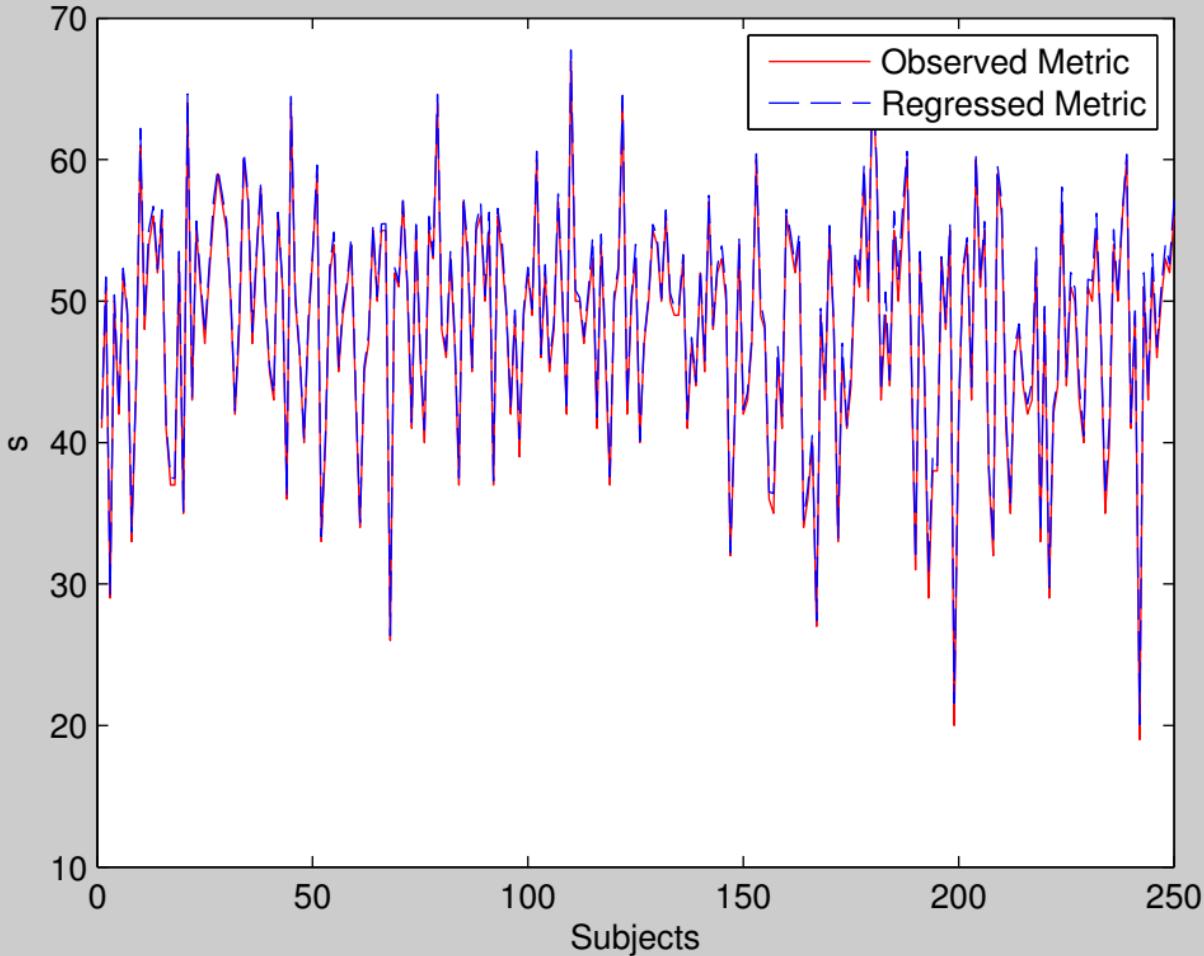
Group 2: Number of changes in states (s)



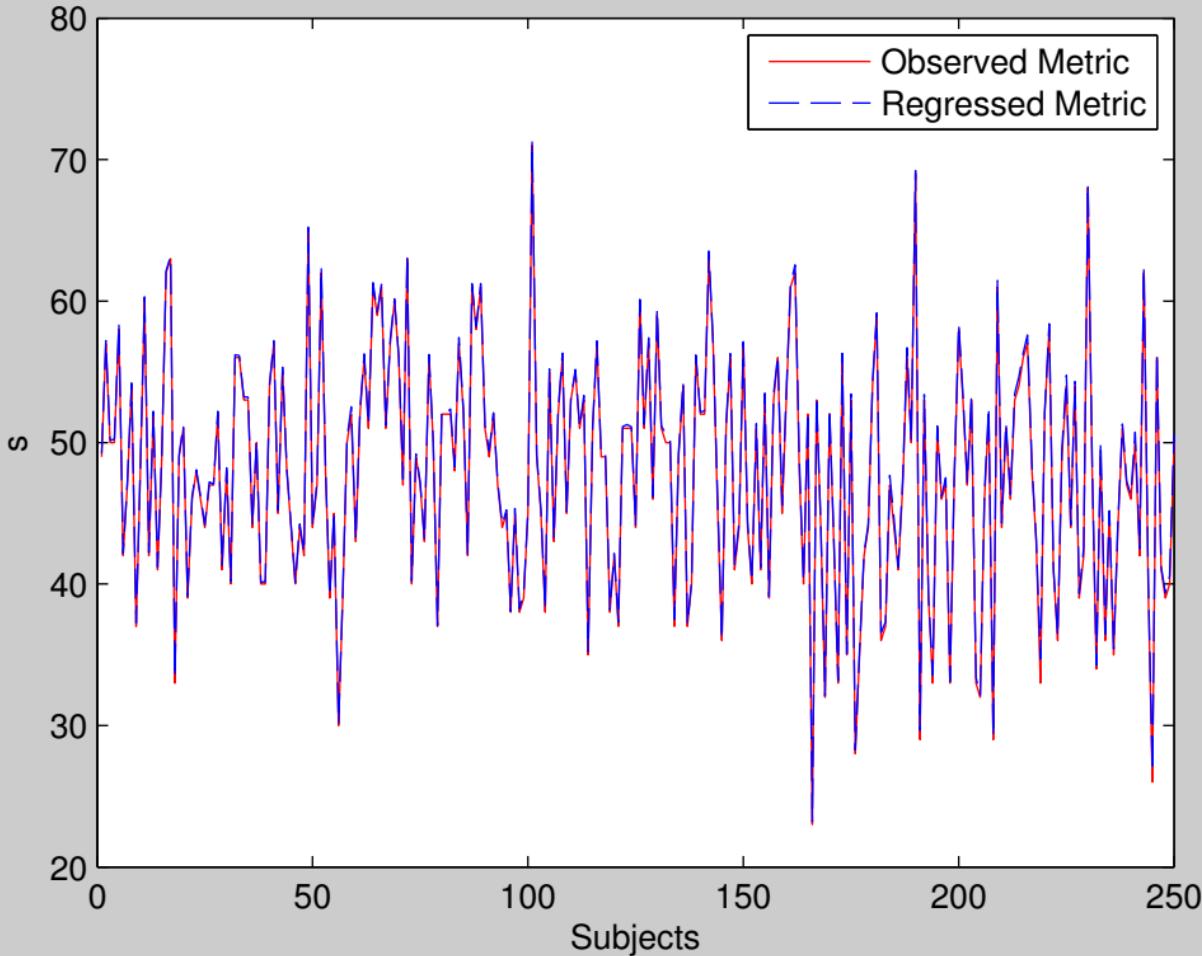
Group 3: Number of changes in states (s)



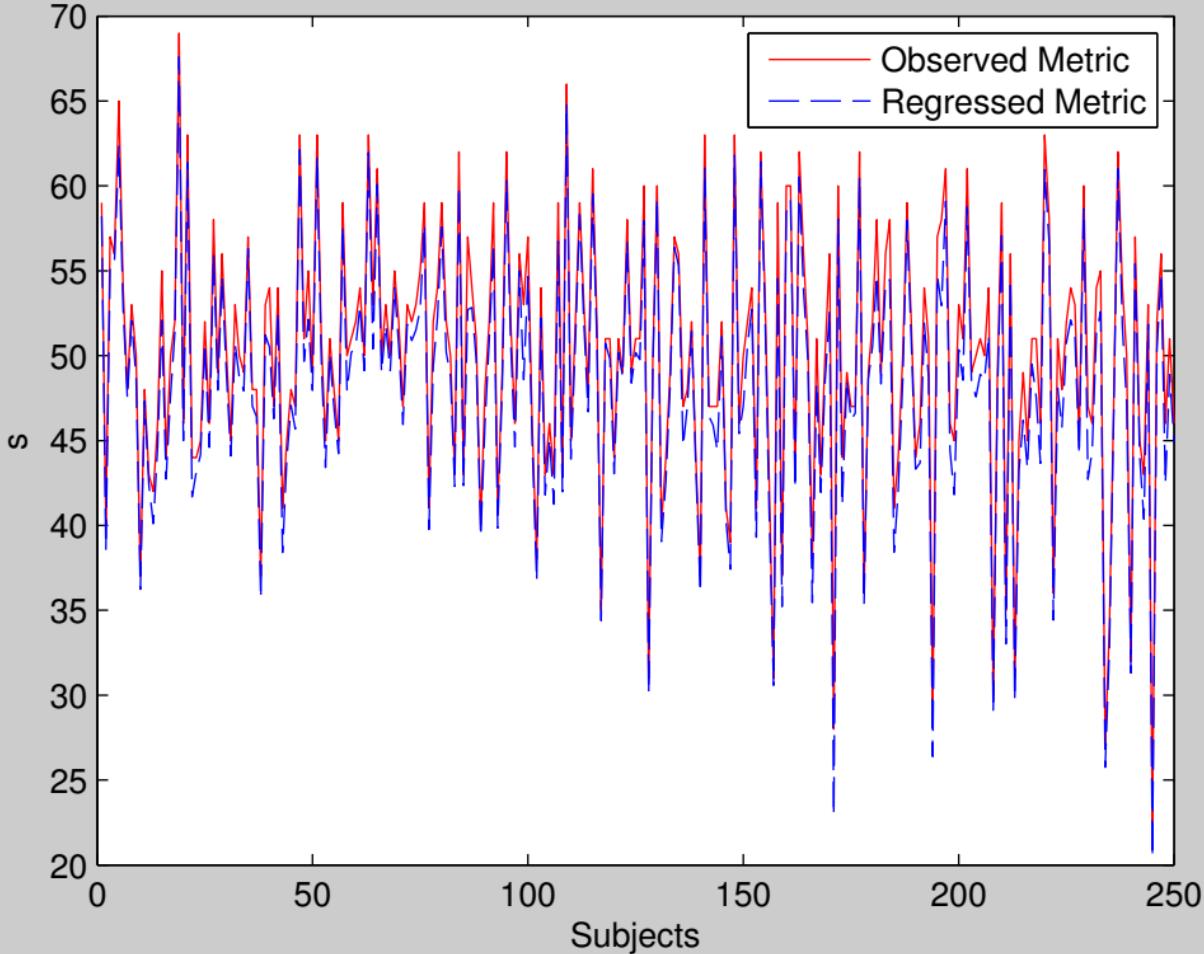
Group 4: Number of changes in states (s)



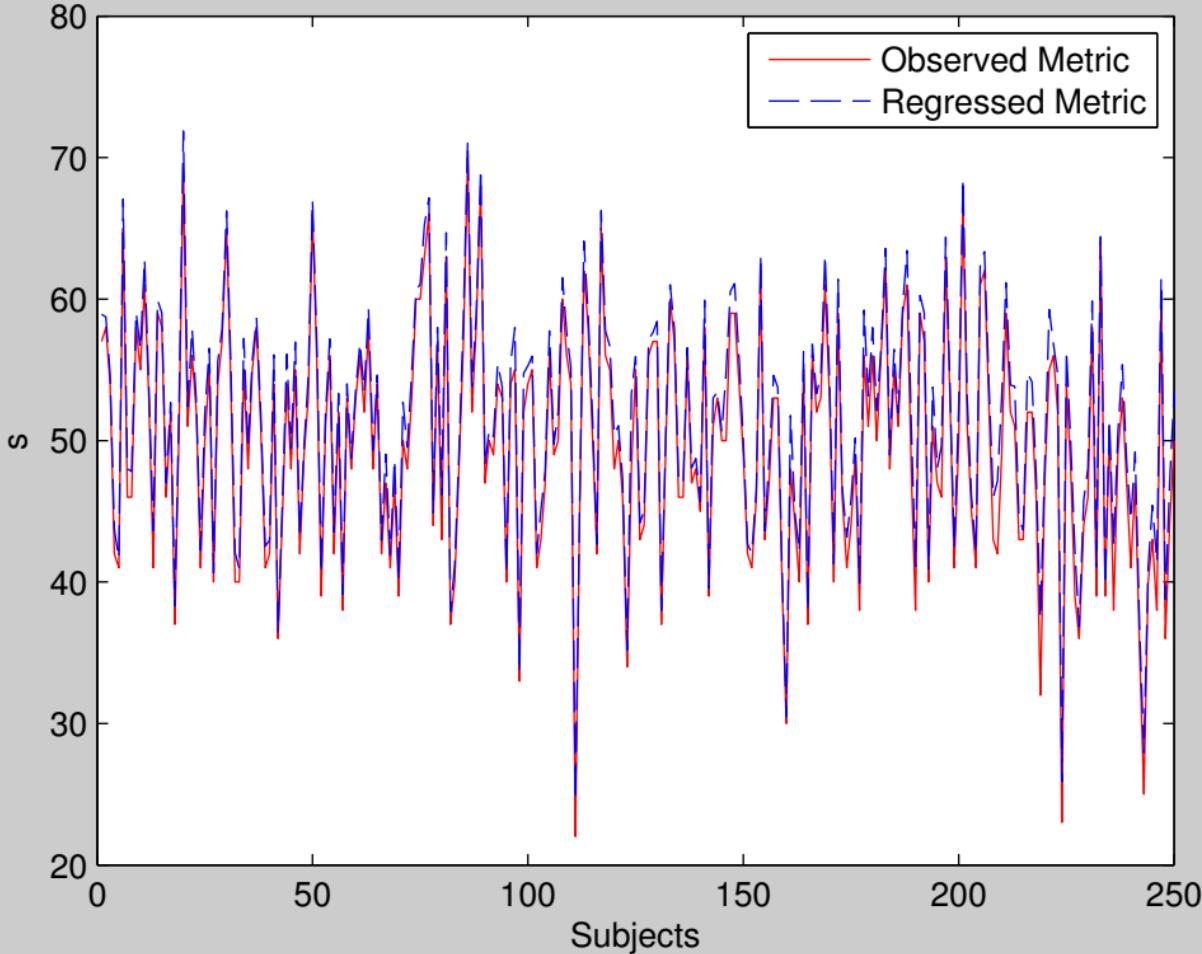
Group 5: Number of changes in states (s)



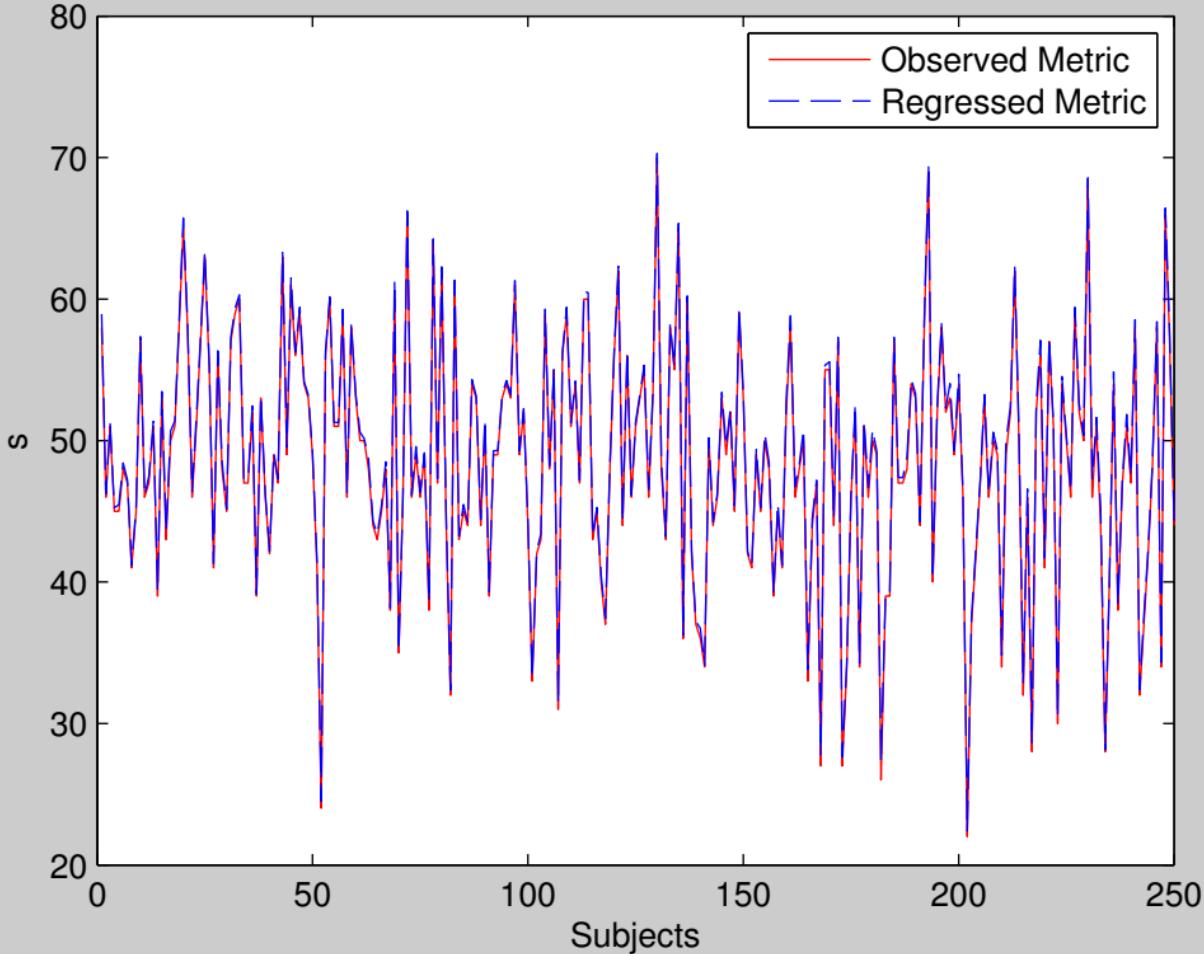
Group 6: Number of changes in states (s)



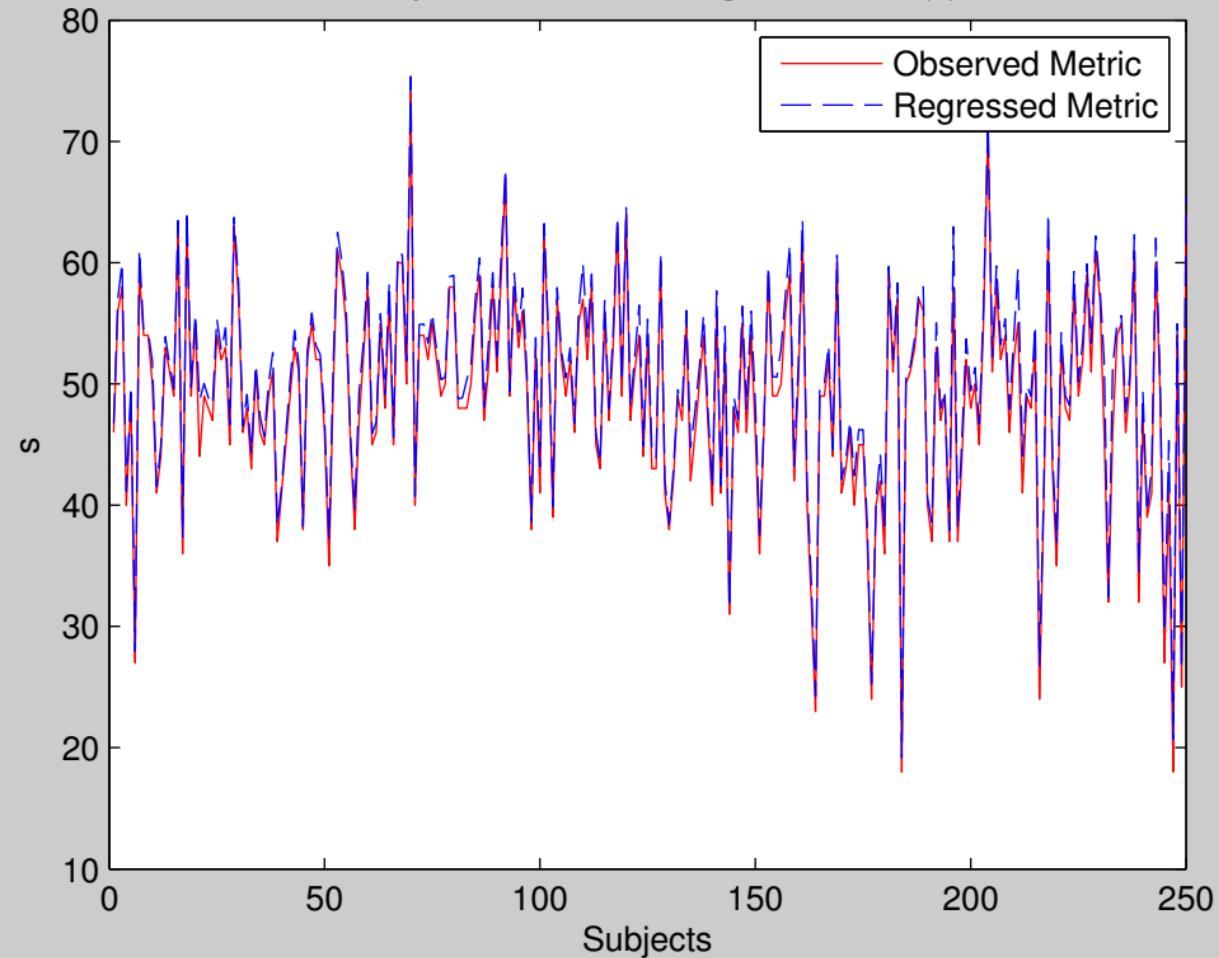
Group 7: Number of changes in states (s)



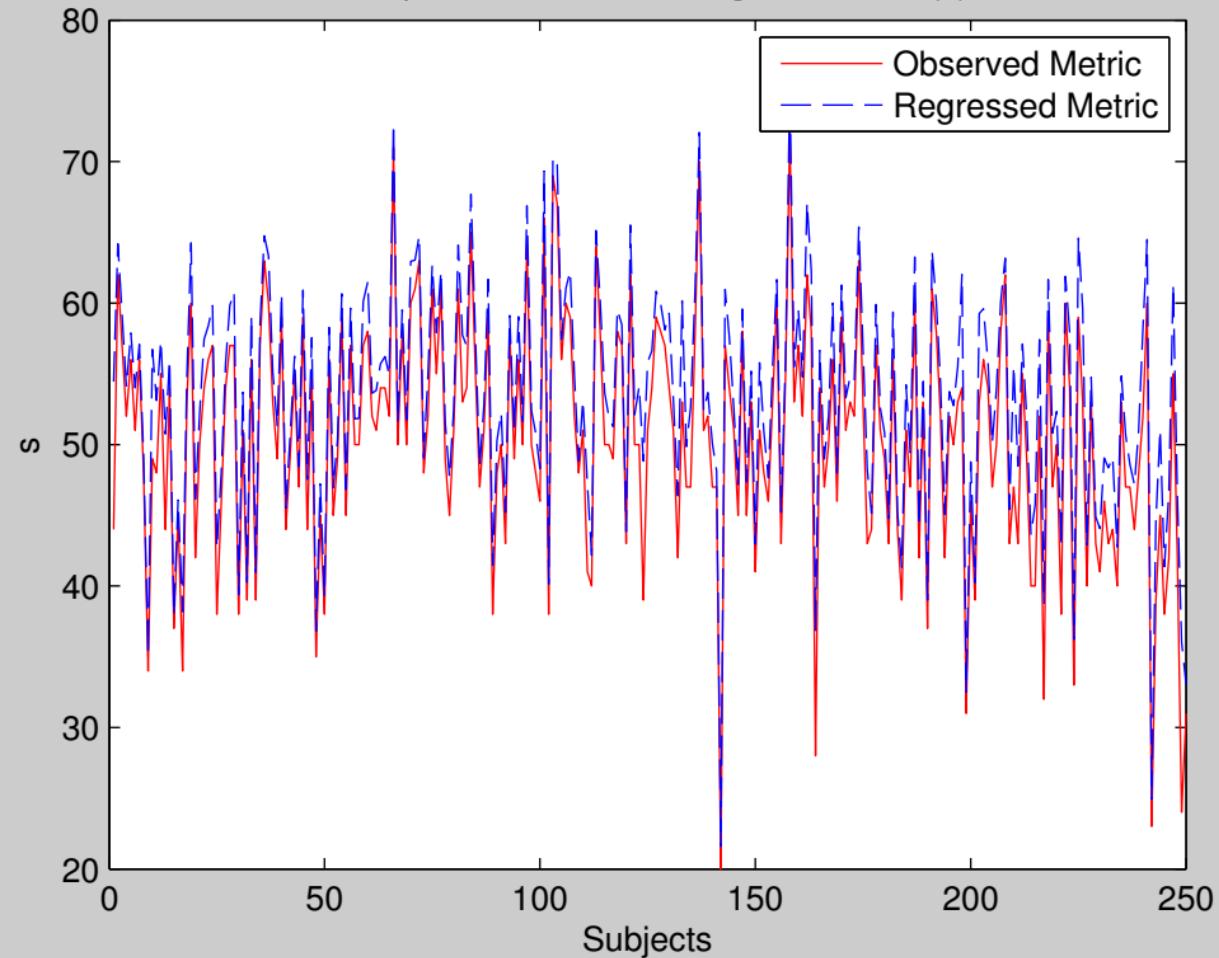
Group 8: Number of changes in states (s)



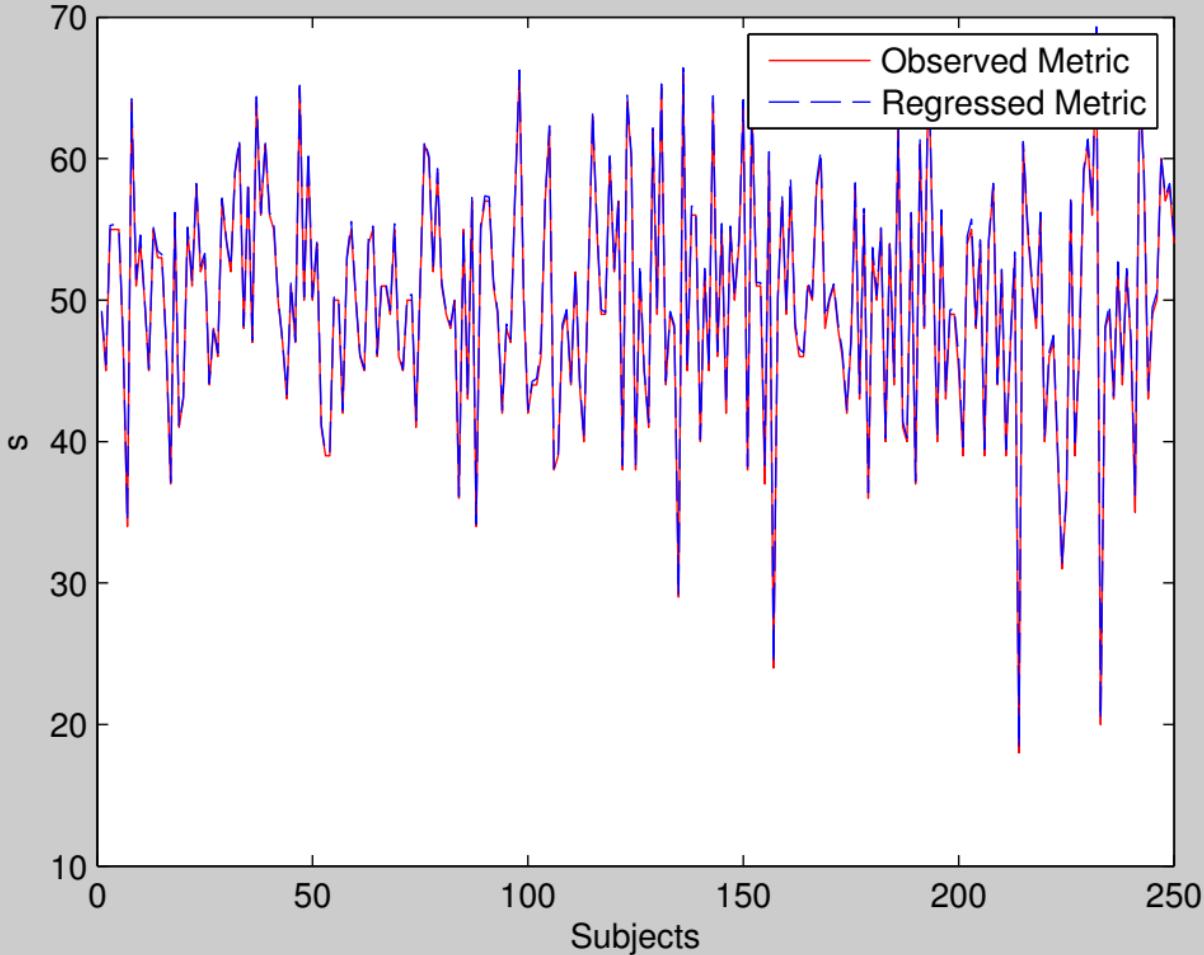
Group 9: Number of changes in states (s)



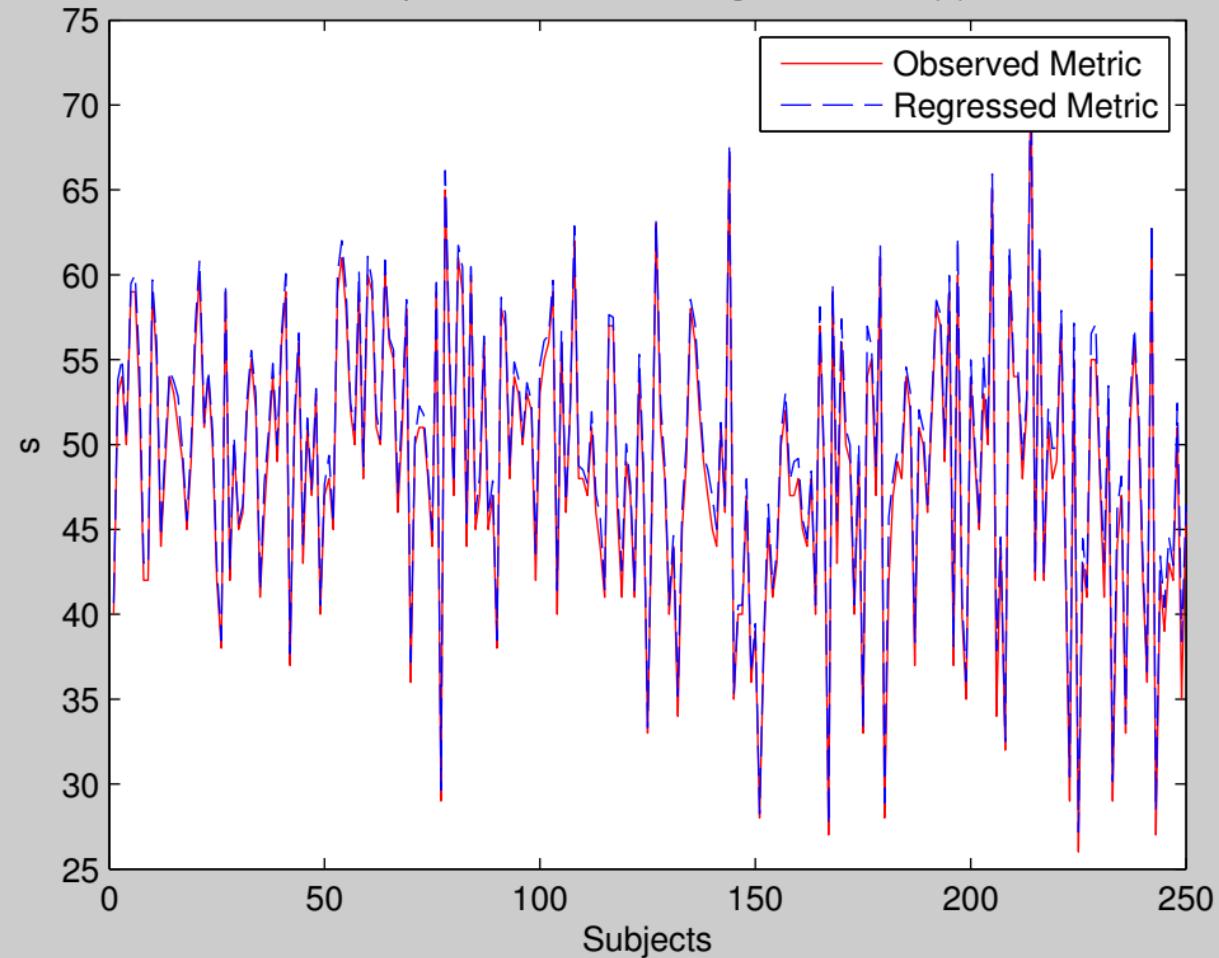
Group 10: Number of changes in states (s)



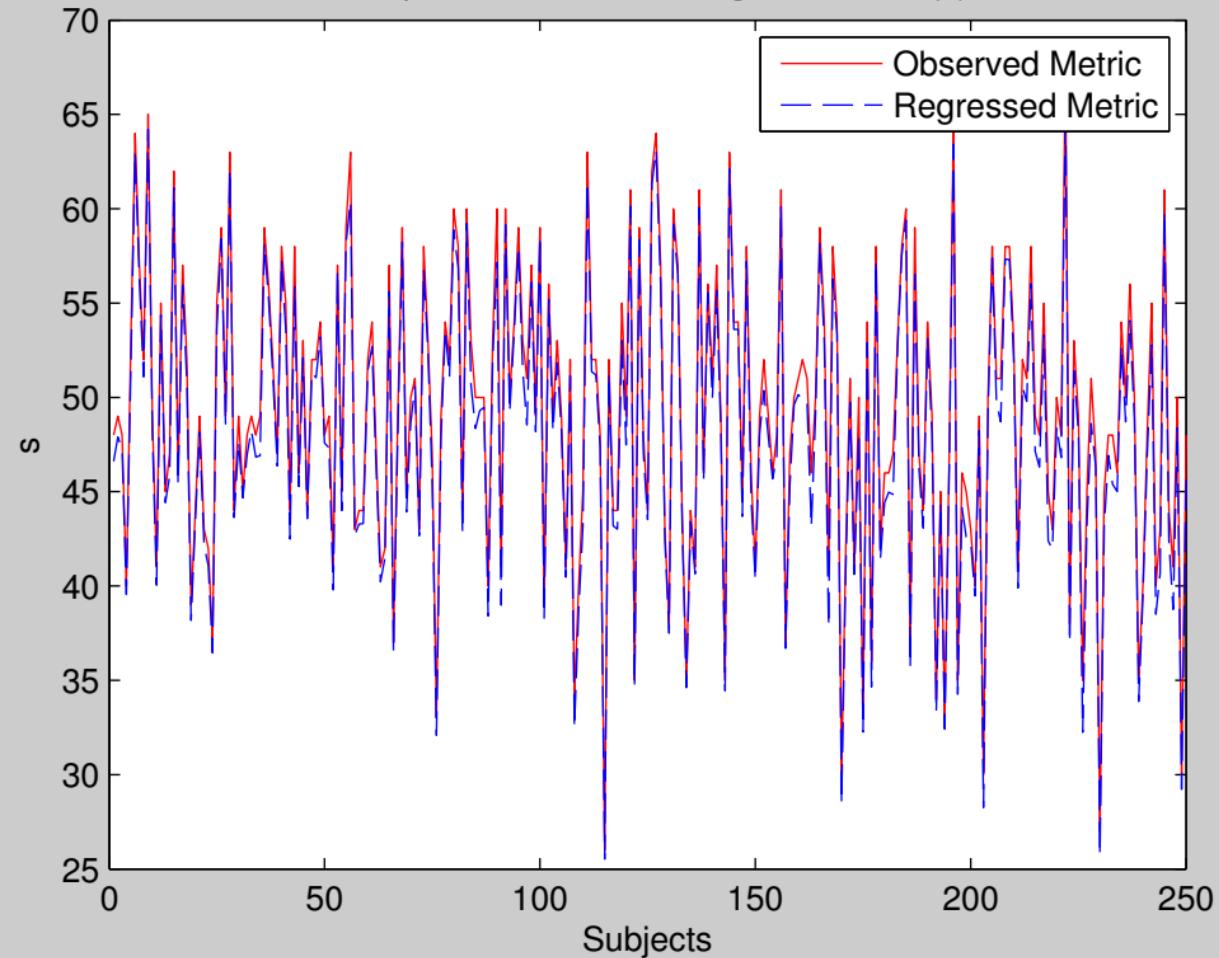
Group 11: Number of changes in states (s)



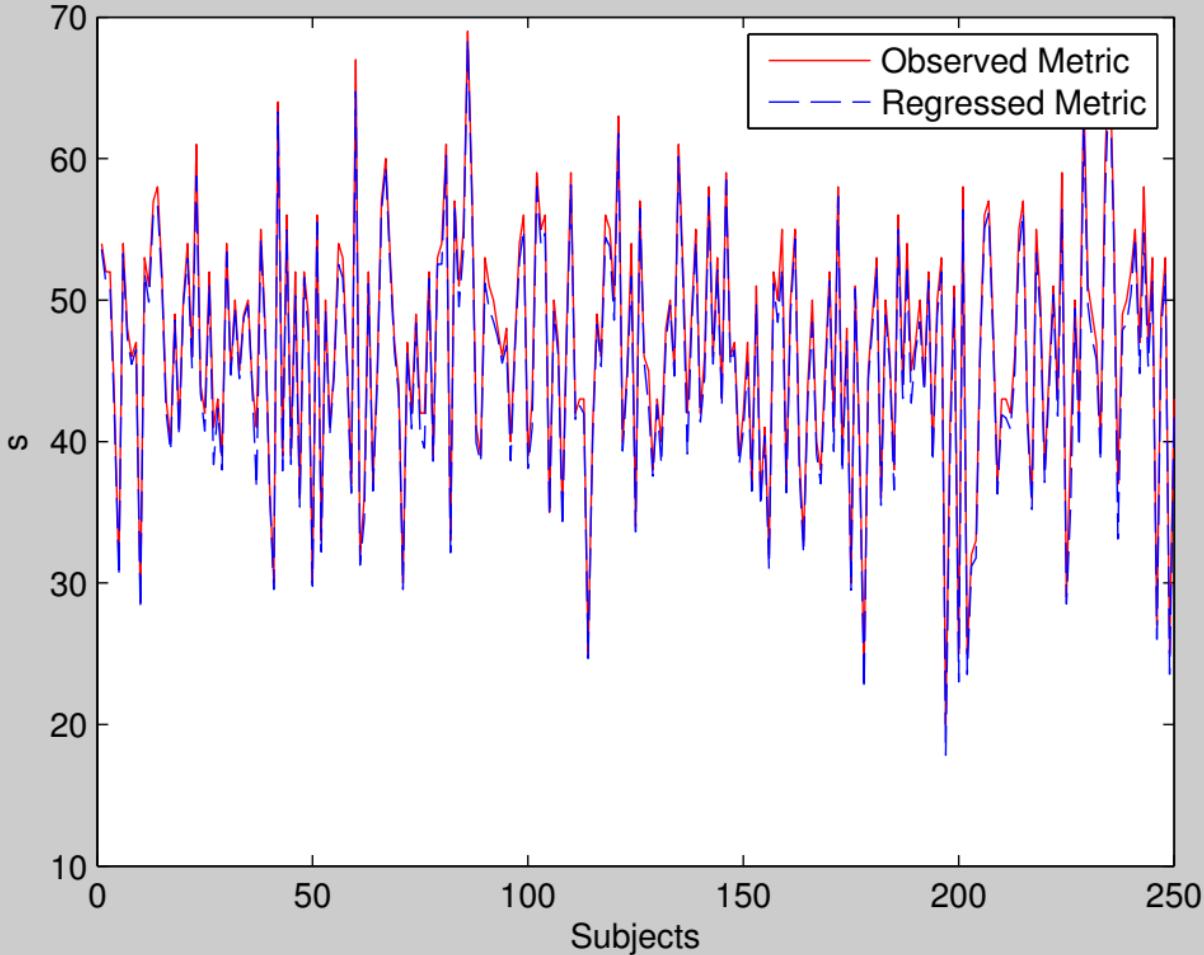
Group 12: Number of changes in states (s)



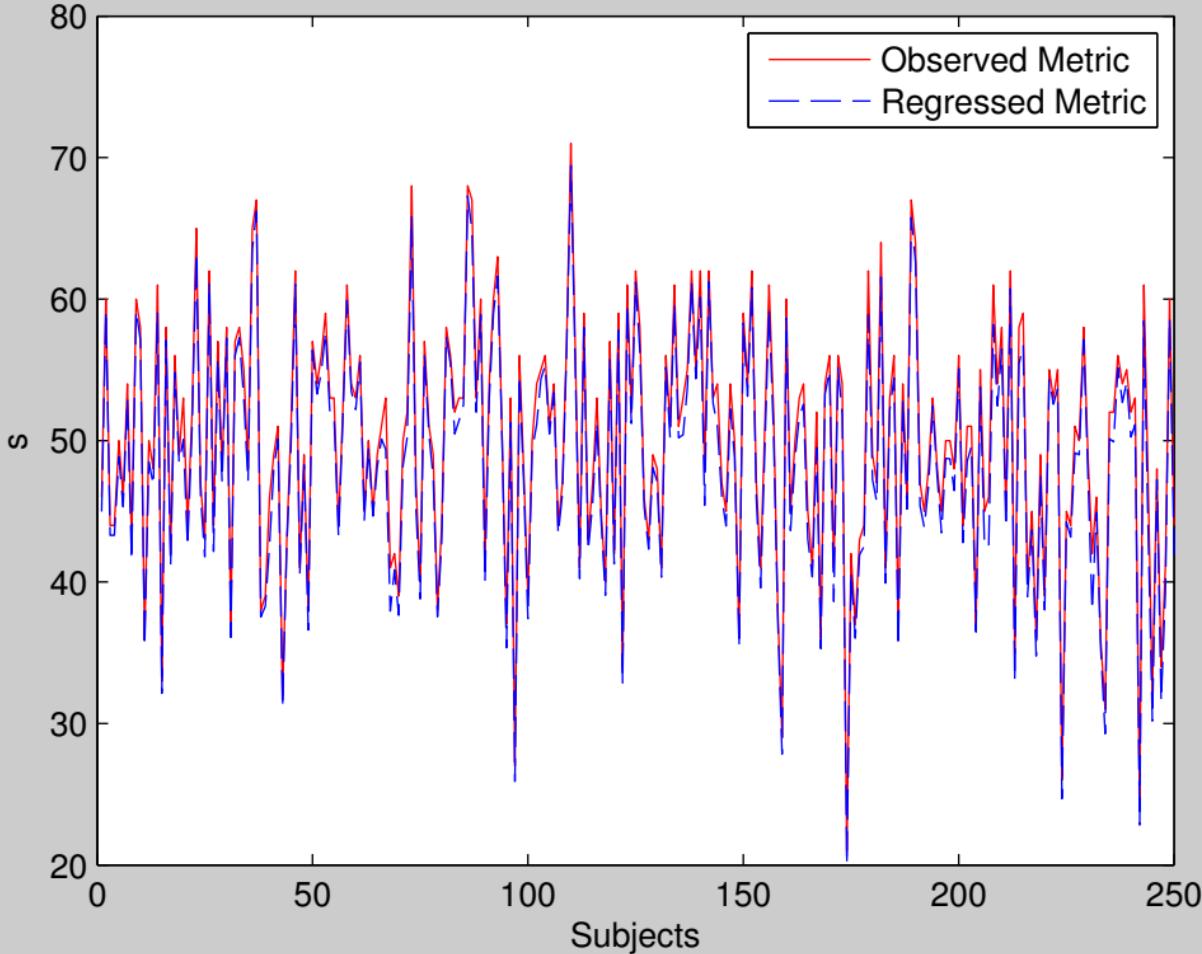
Group 13: Number of changes in states (s)



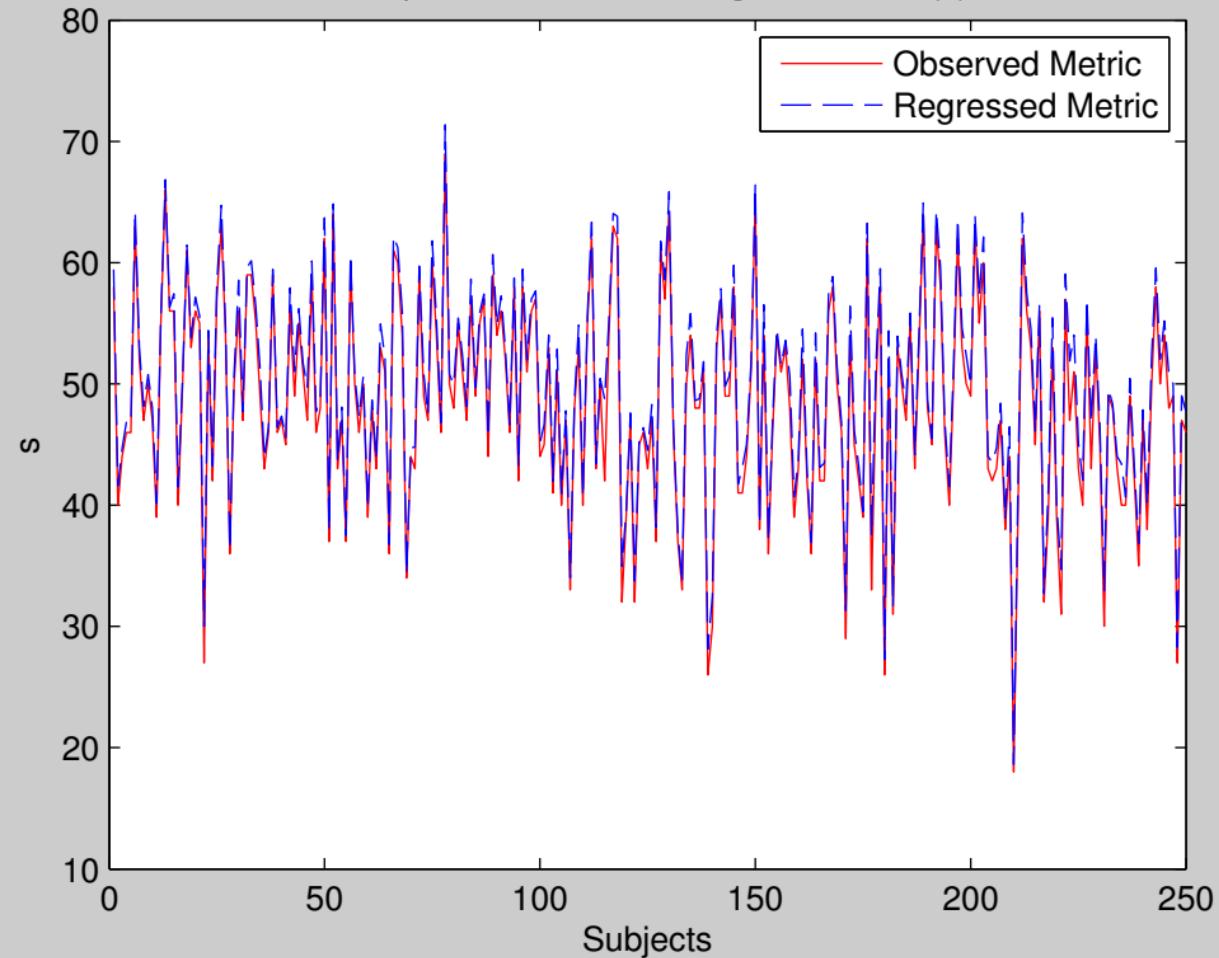
Group 14: Number of changes in states (s)



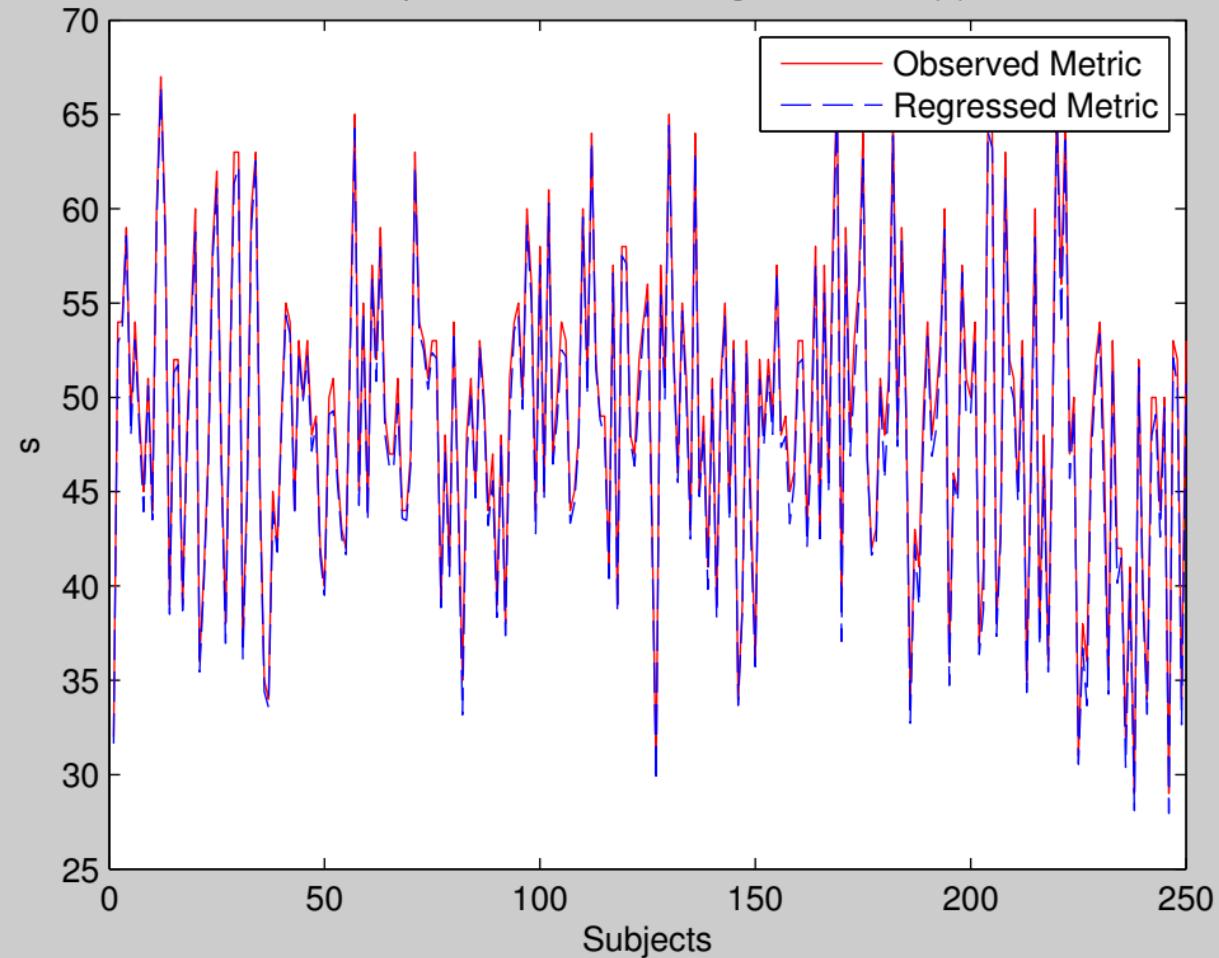
Group 15: Number of changes in states (s)



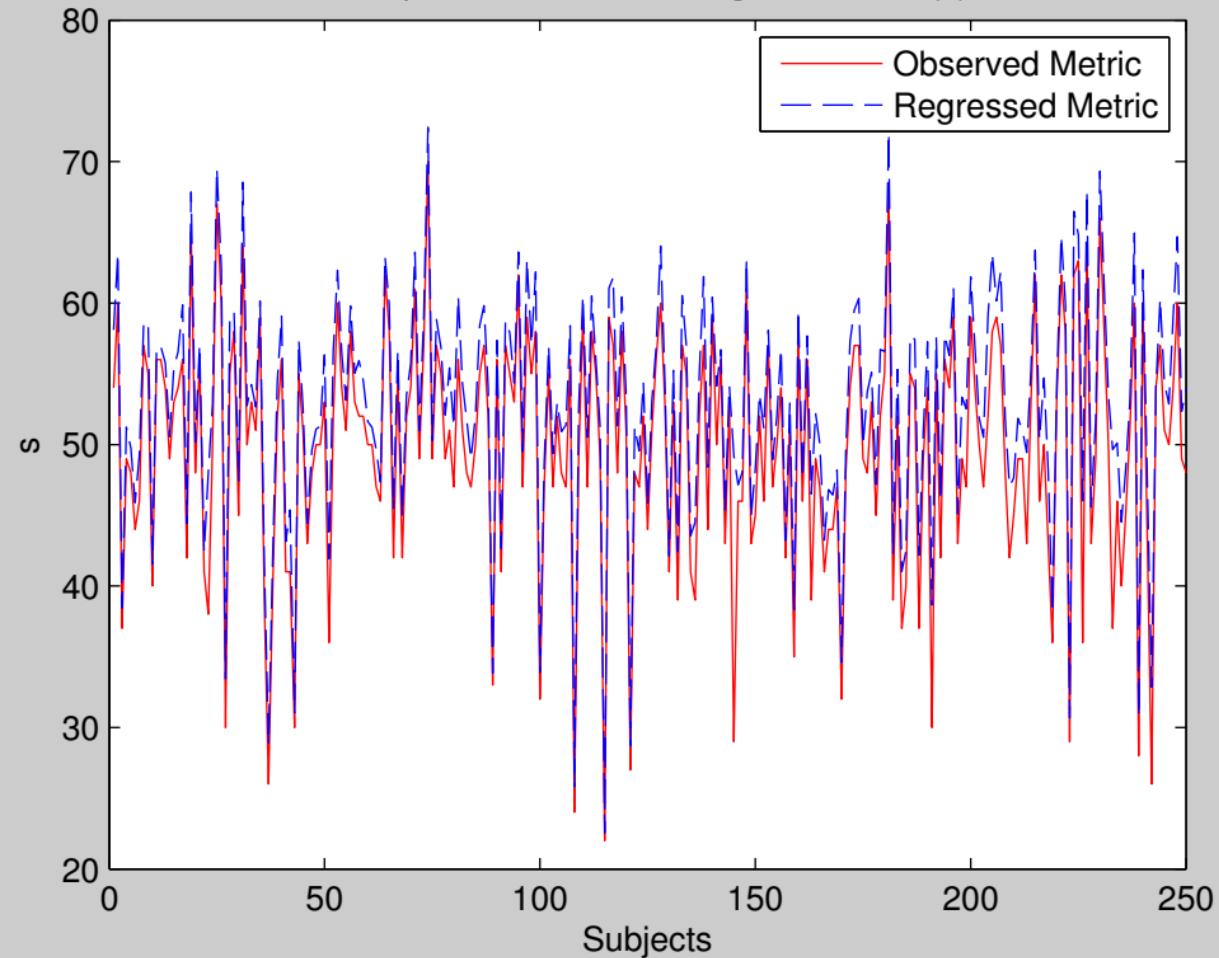
Group 16: Number of changes in states (s)



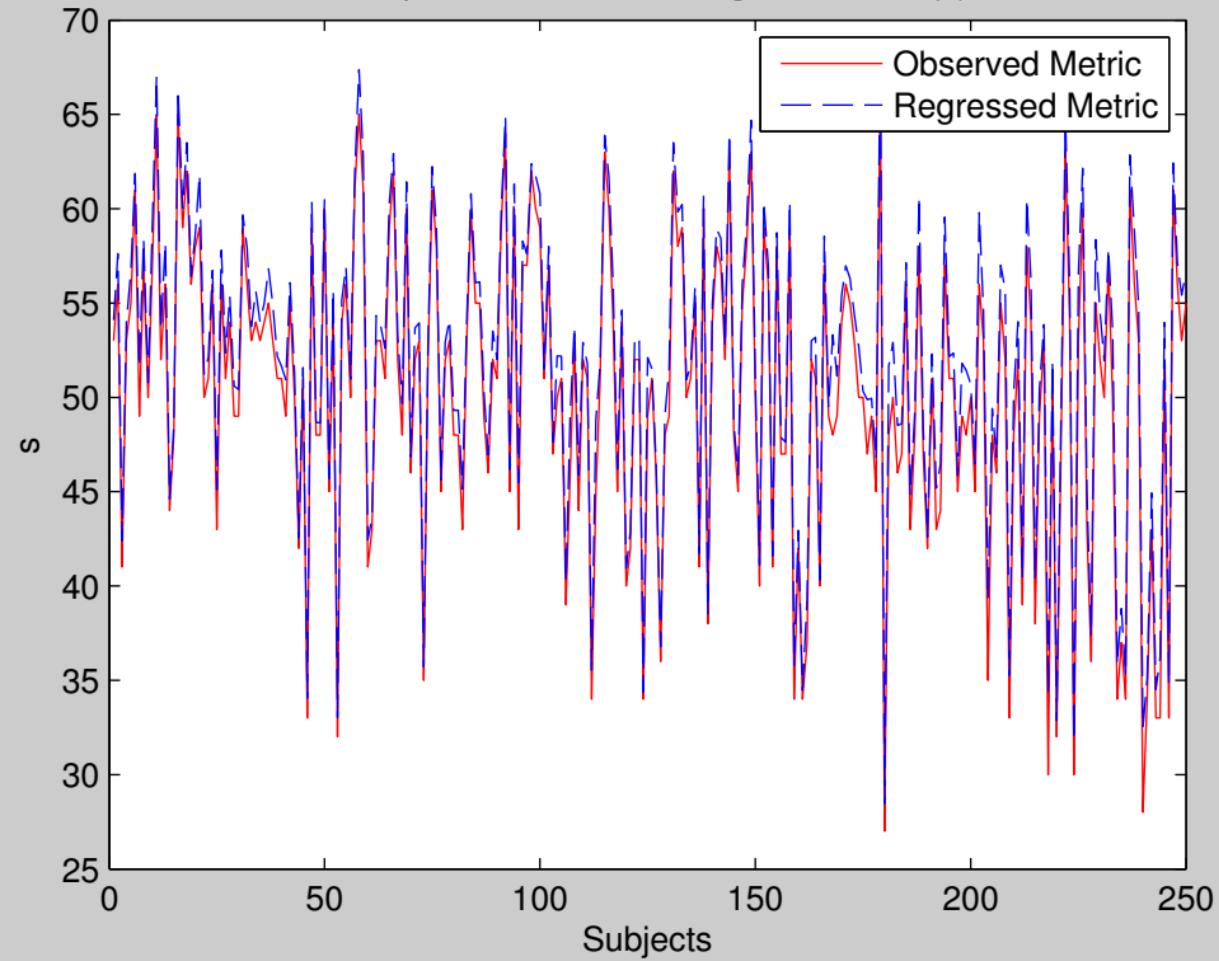
Group 17: Number of changes in states (s)



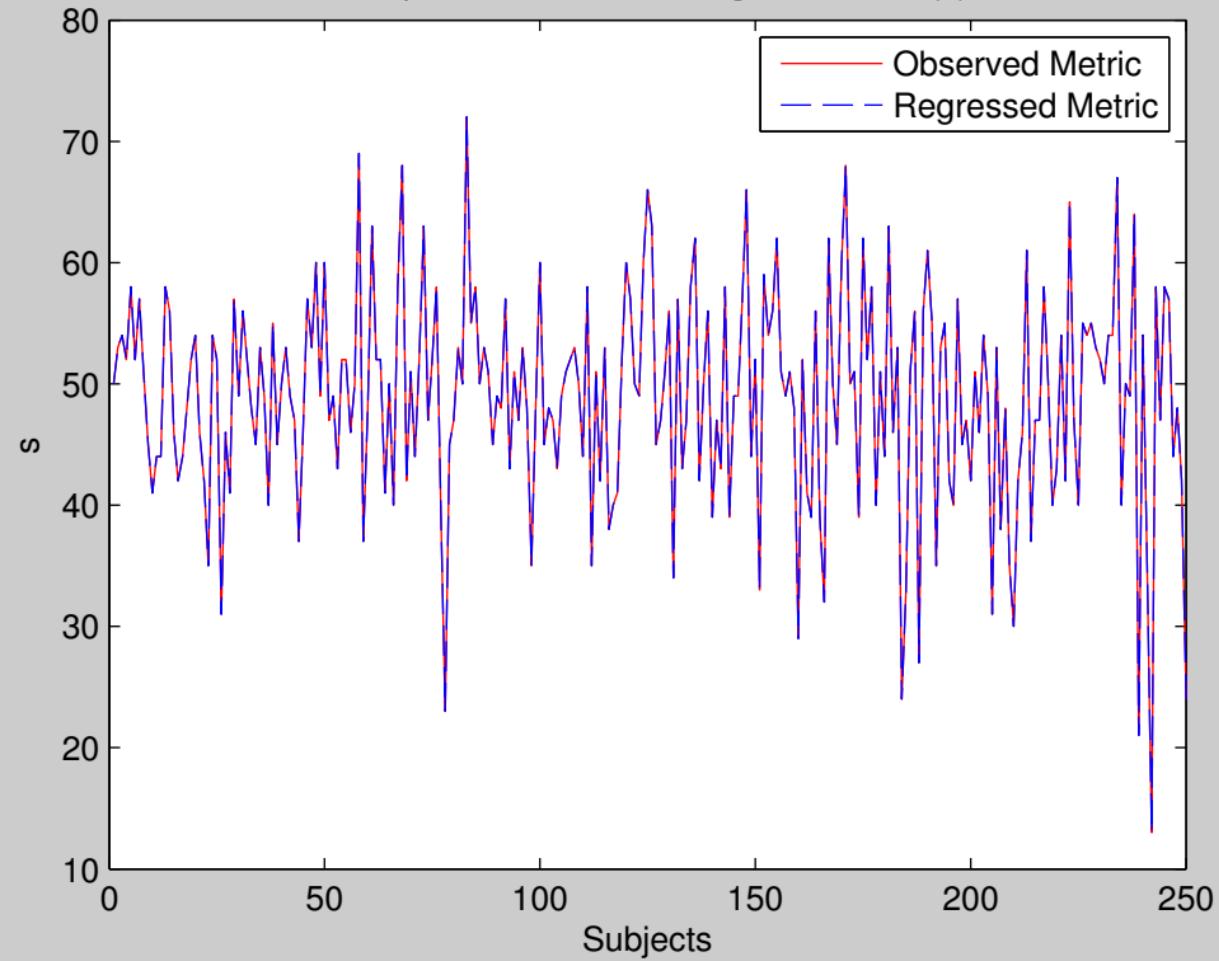
Group 18: Number of changes in states (s)



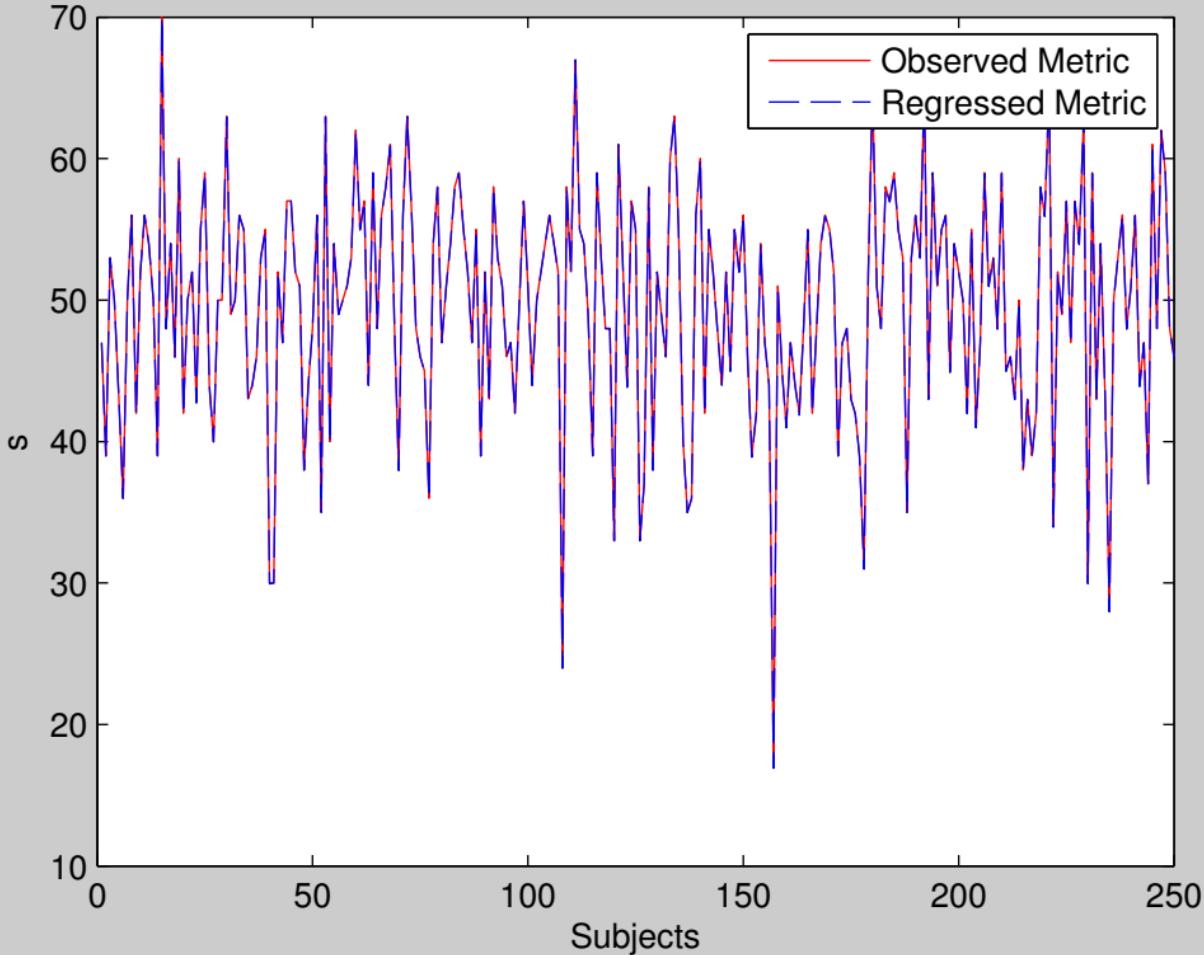
Group 19: Number of changes in states (s)



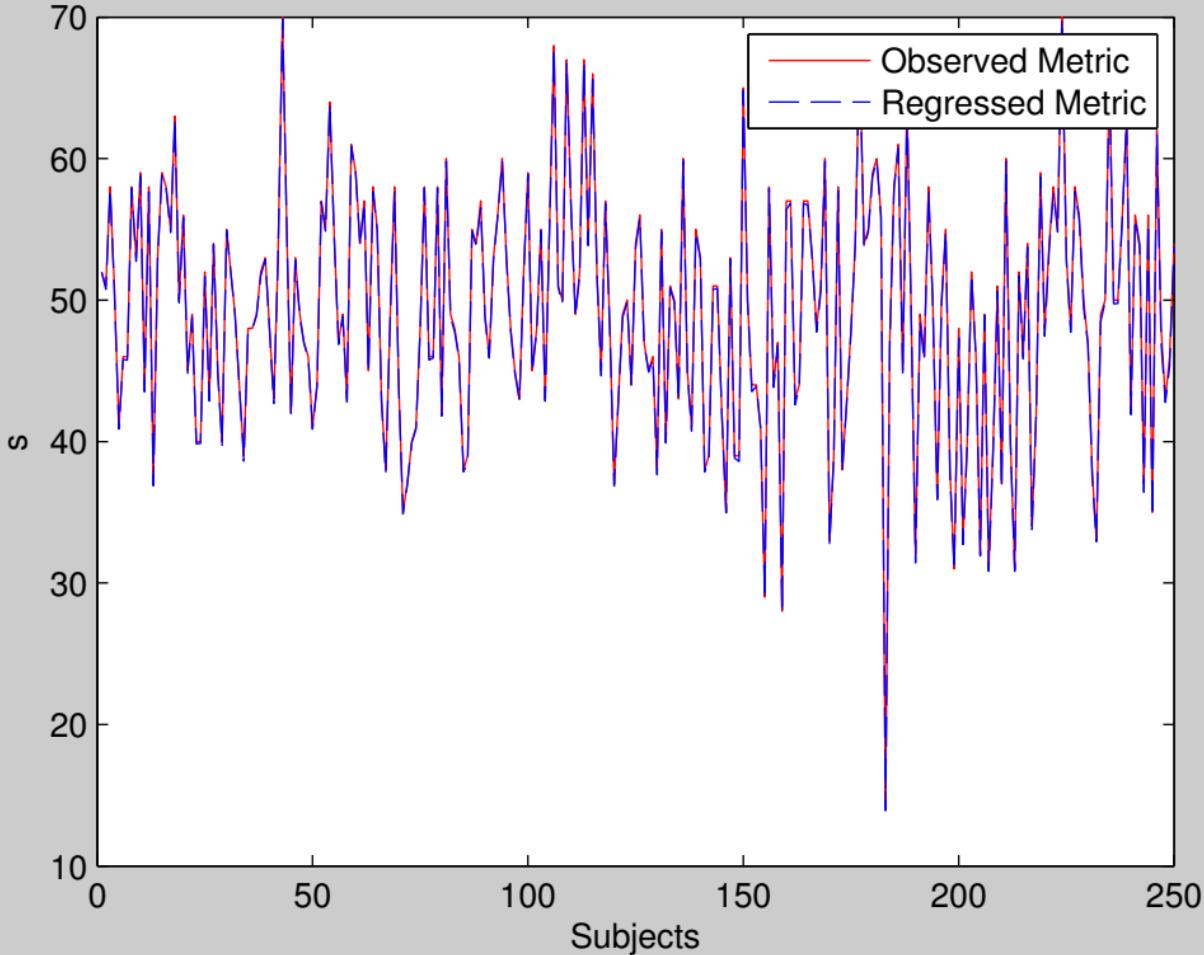
Group 20: Number of changes in states (s)



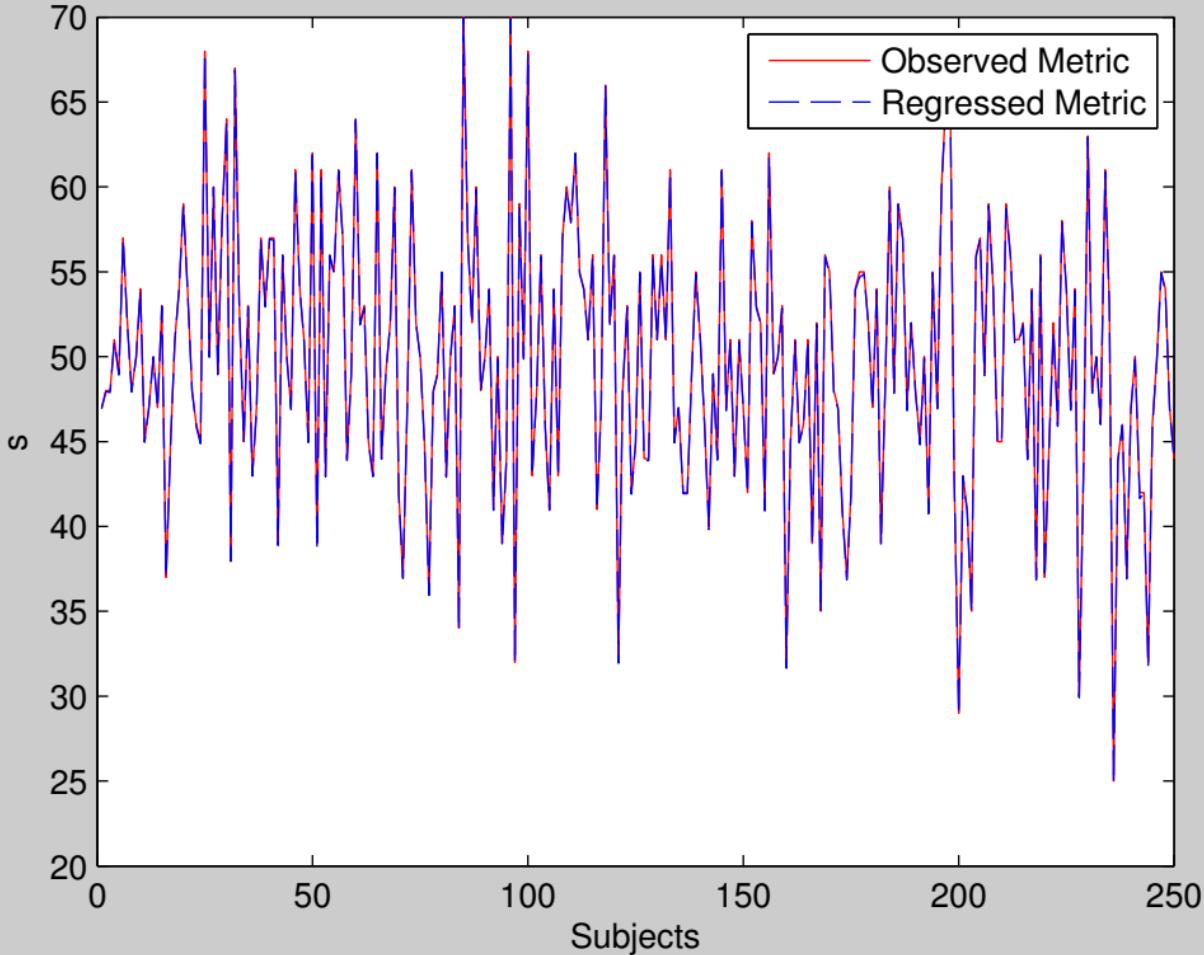
Group 21: Number of changes in states (s)



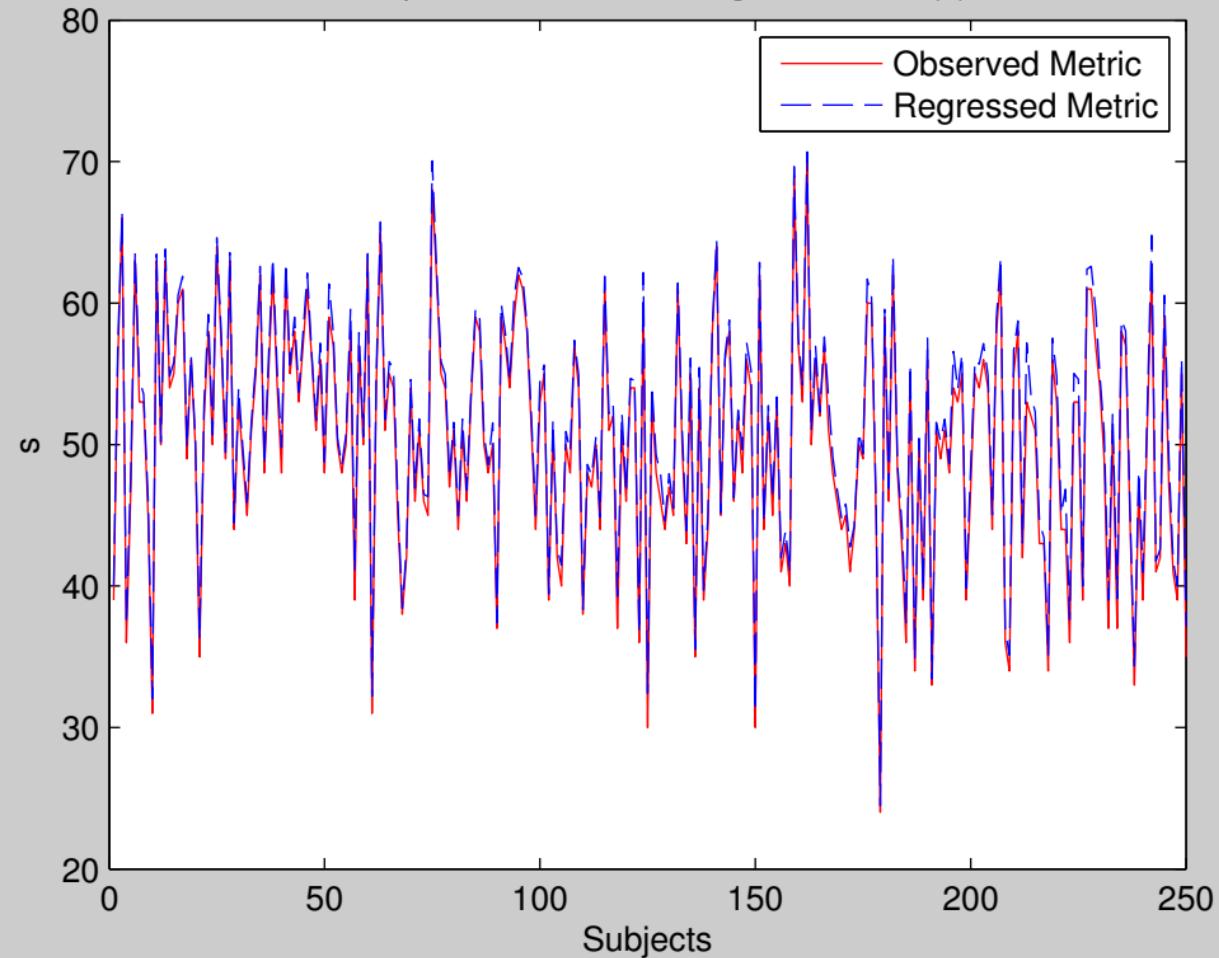
Group 22: Number of changes in states (s)



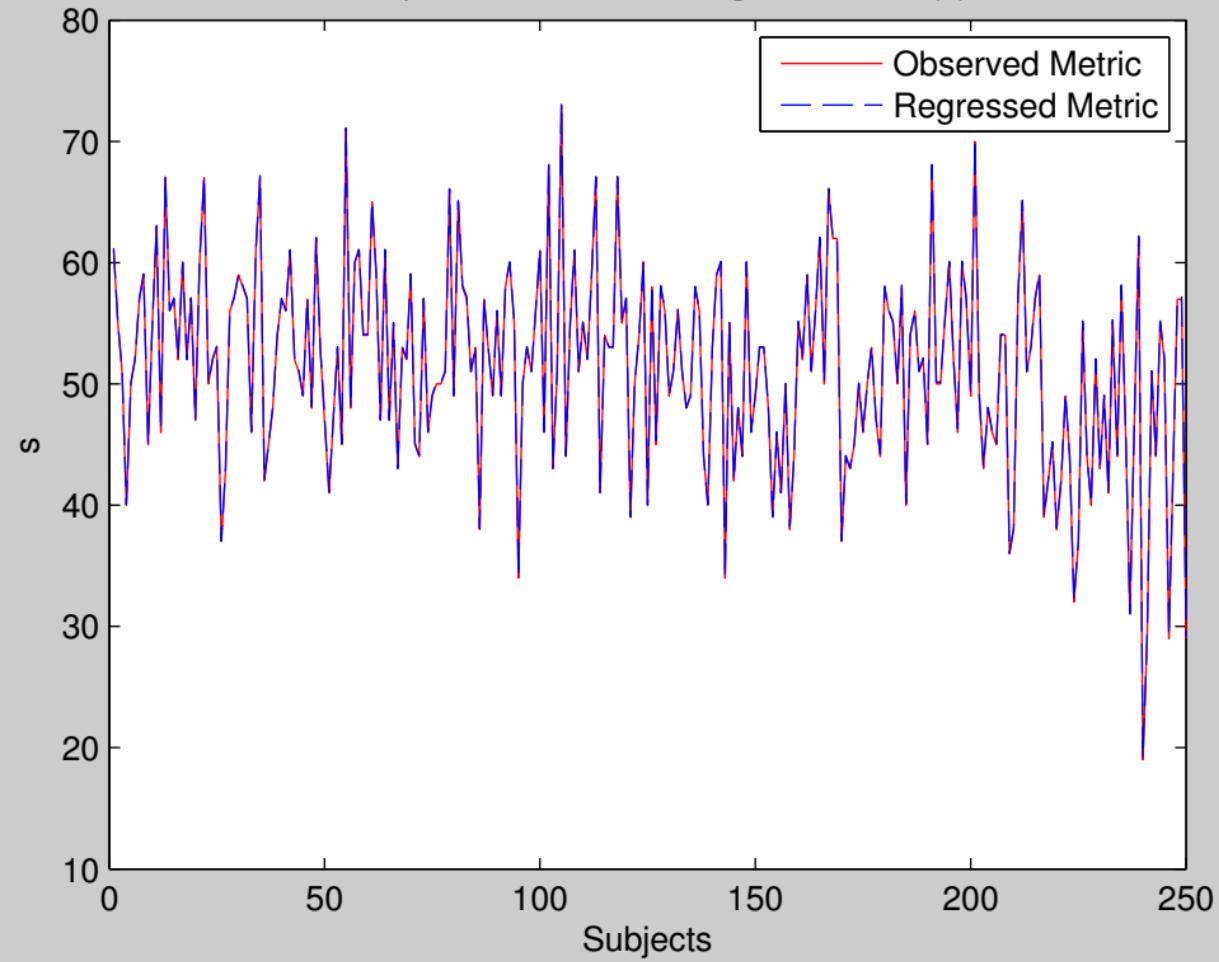
Group 23: Number of changes in states (s)



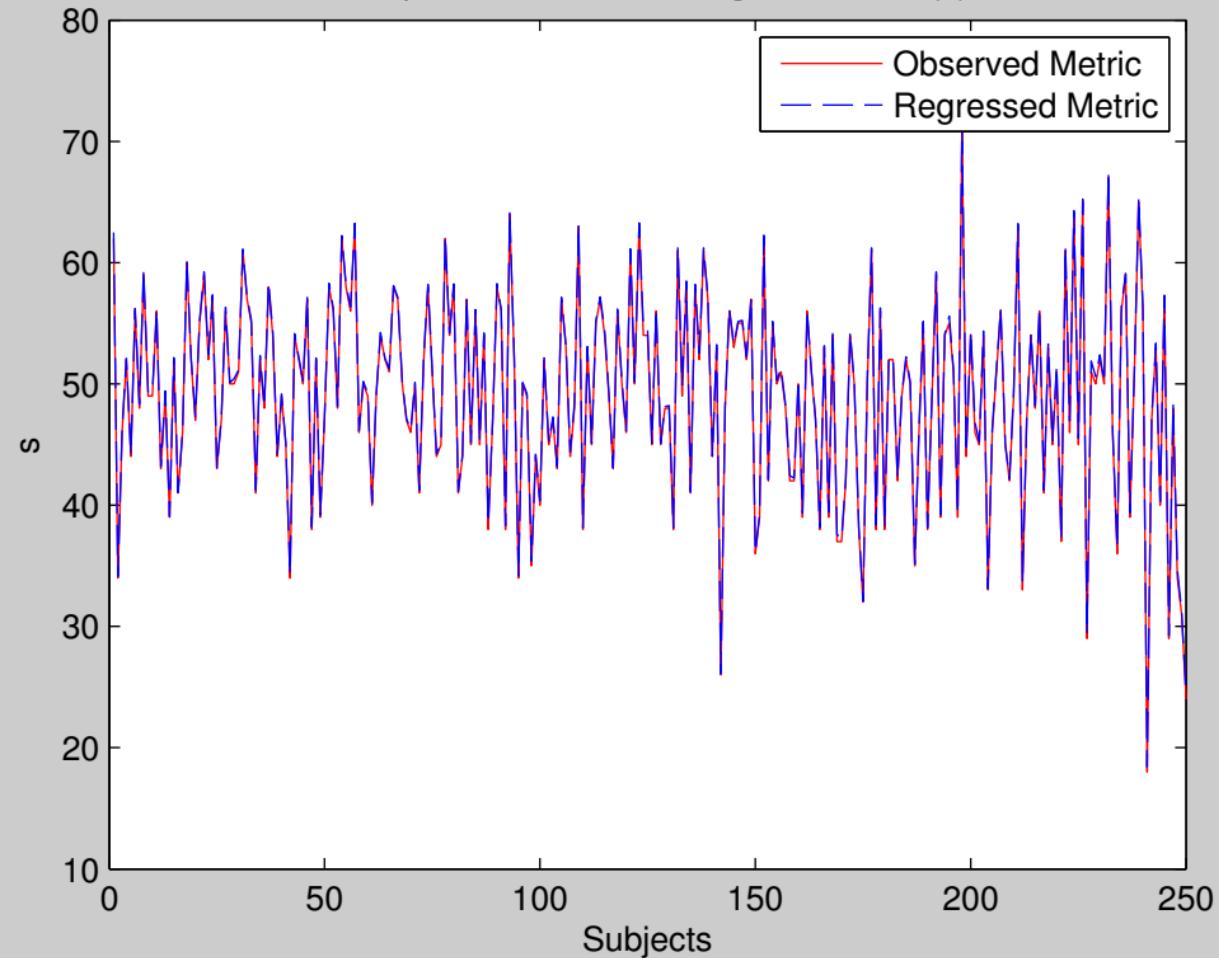
Group 24: Number of changes in states (s)



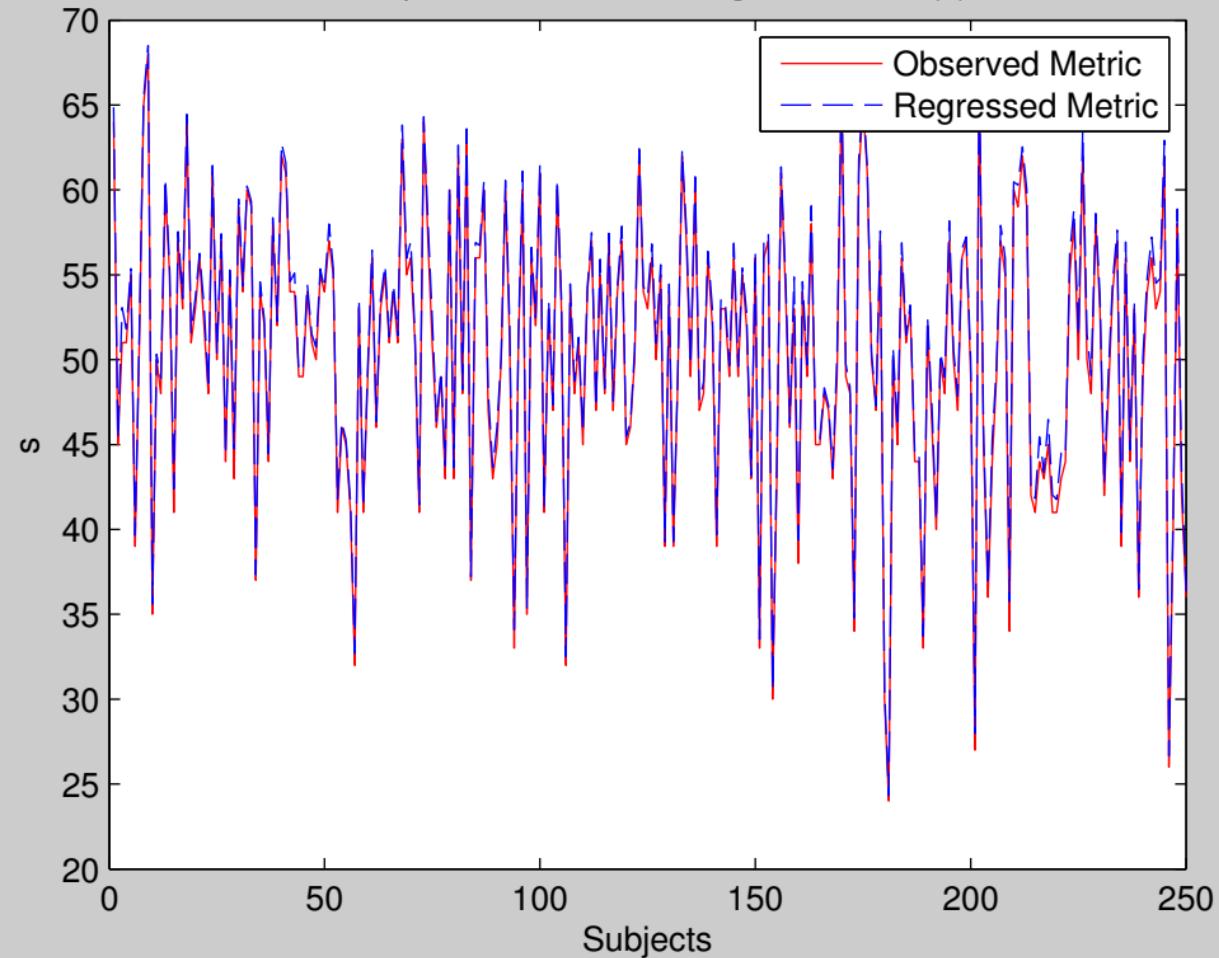
Group 25: Number of changes in states (s)



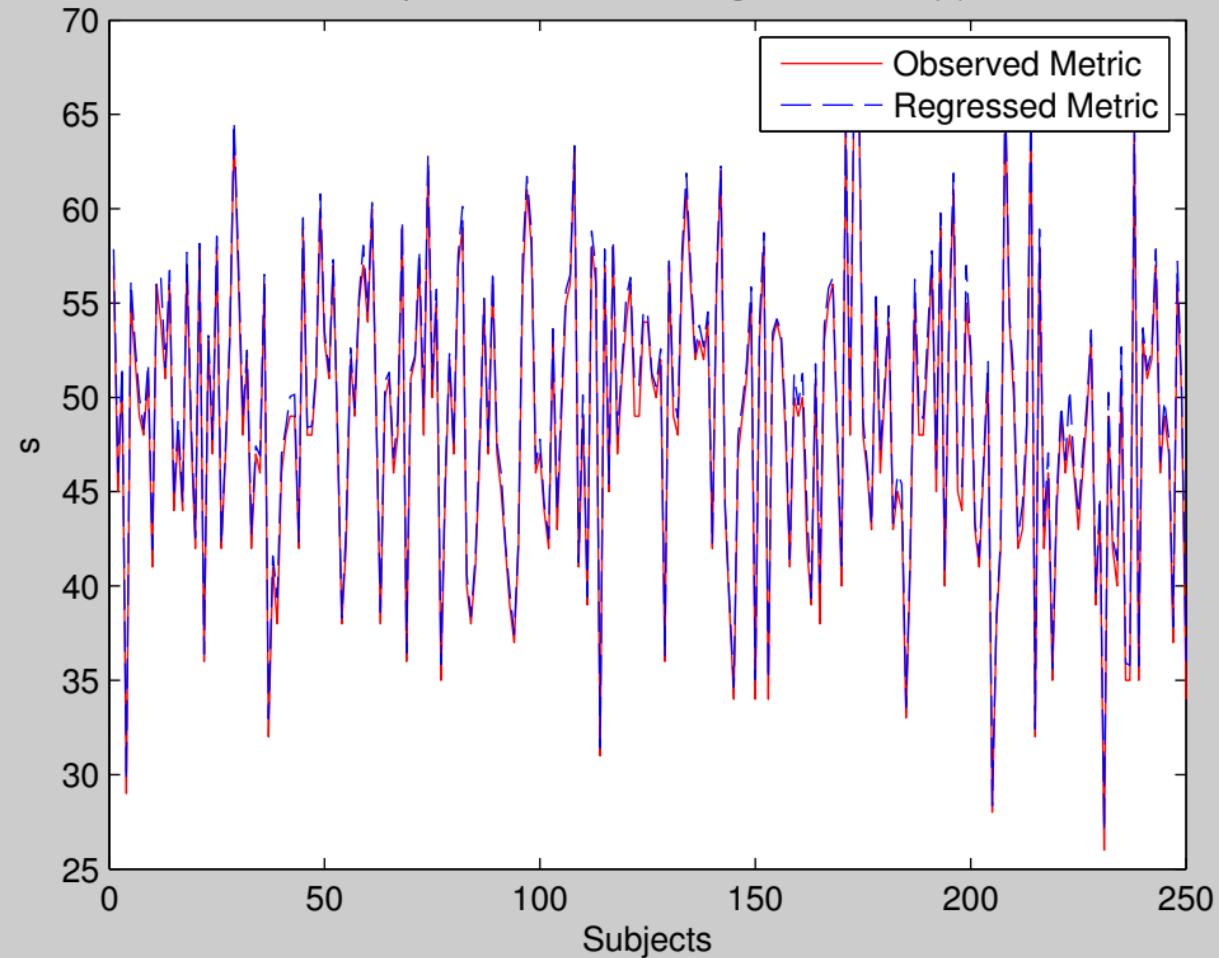
Group 26: Number of changes in states (s)



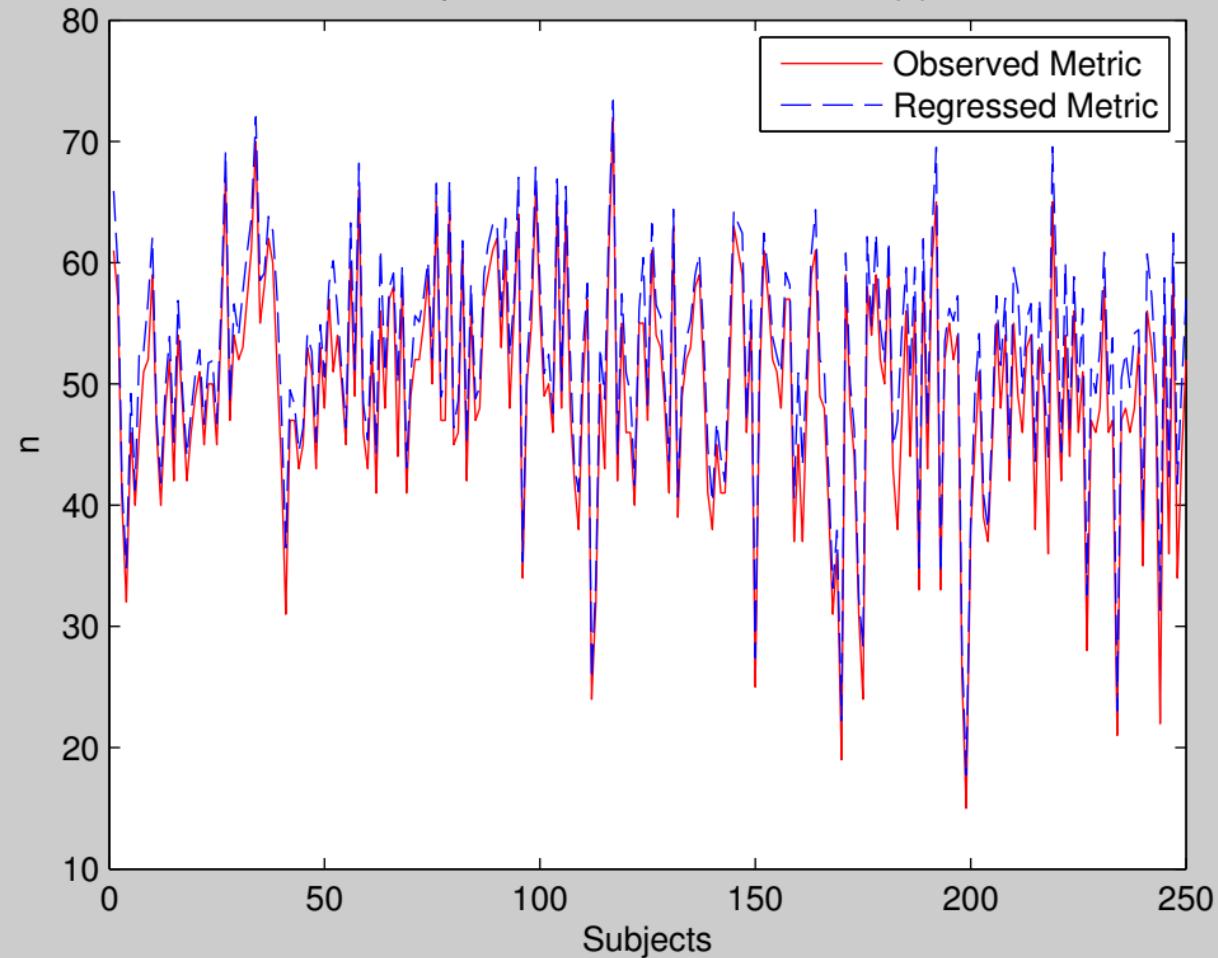
Group 27: Number of changes in states (s)



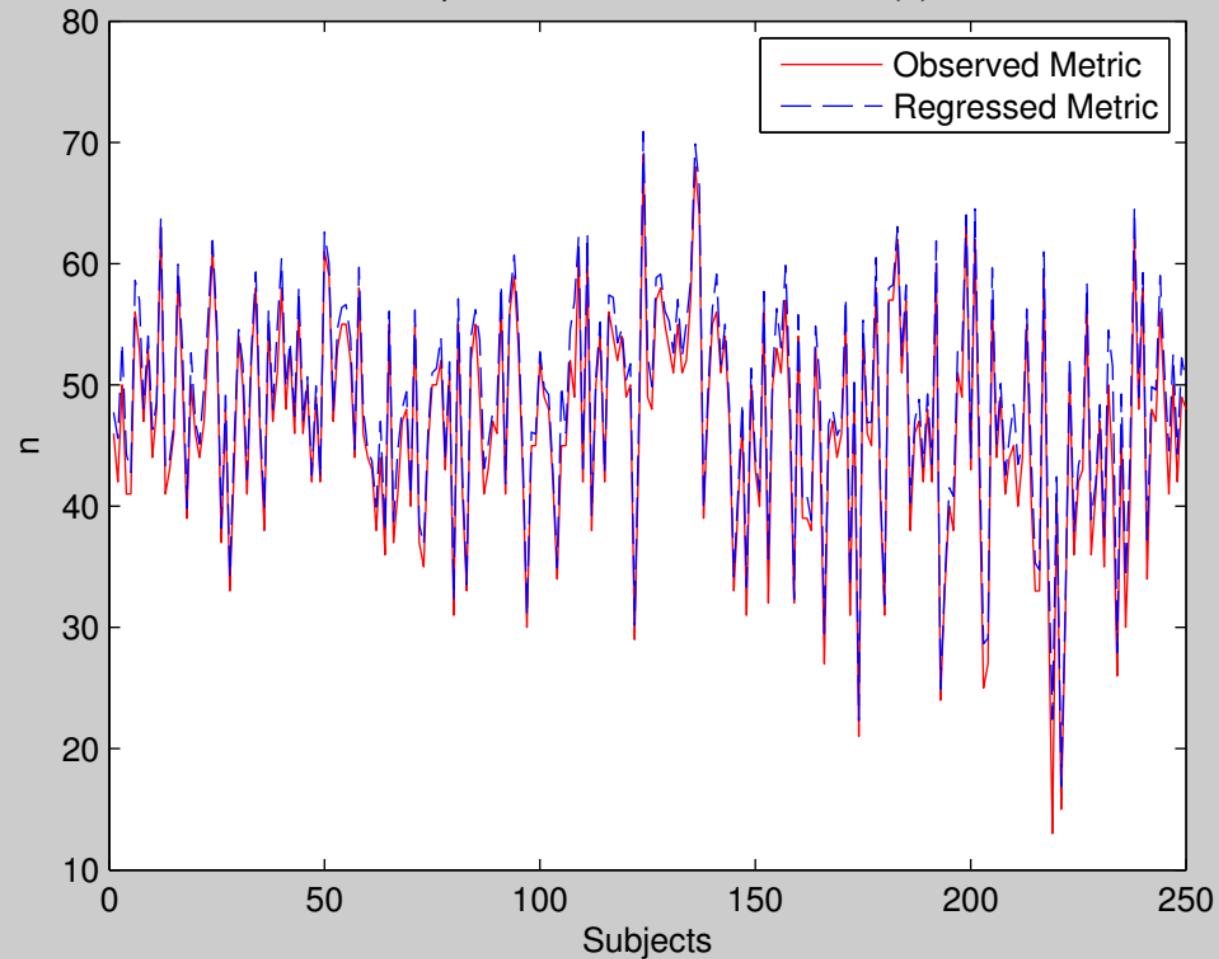
Group 28: Number of changes in states (s)



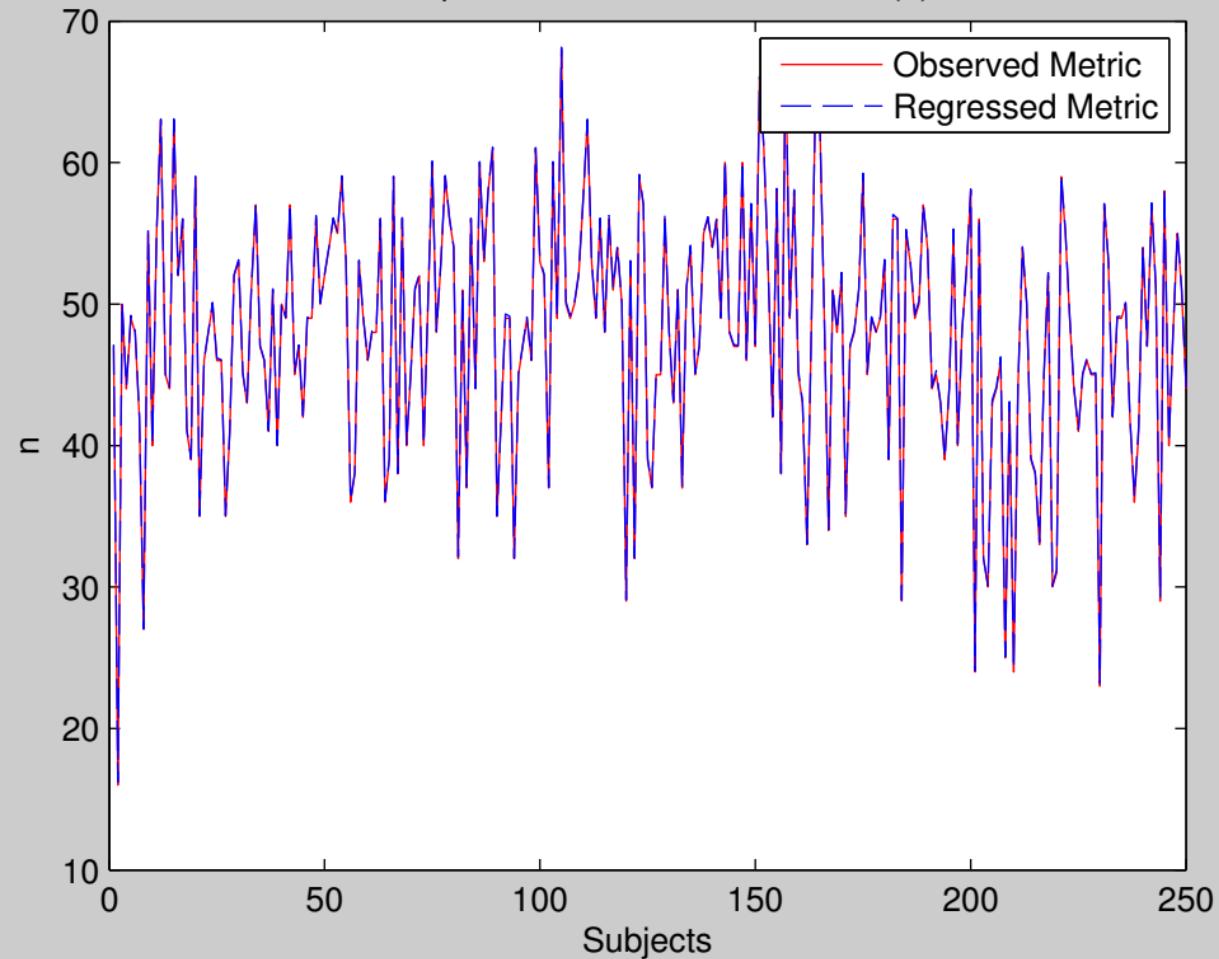
Group 1: Number of distinct states (n)



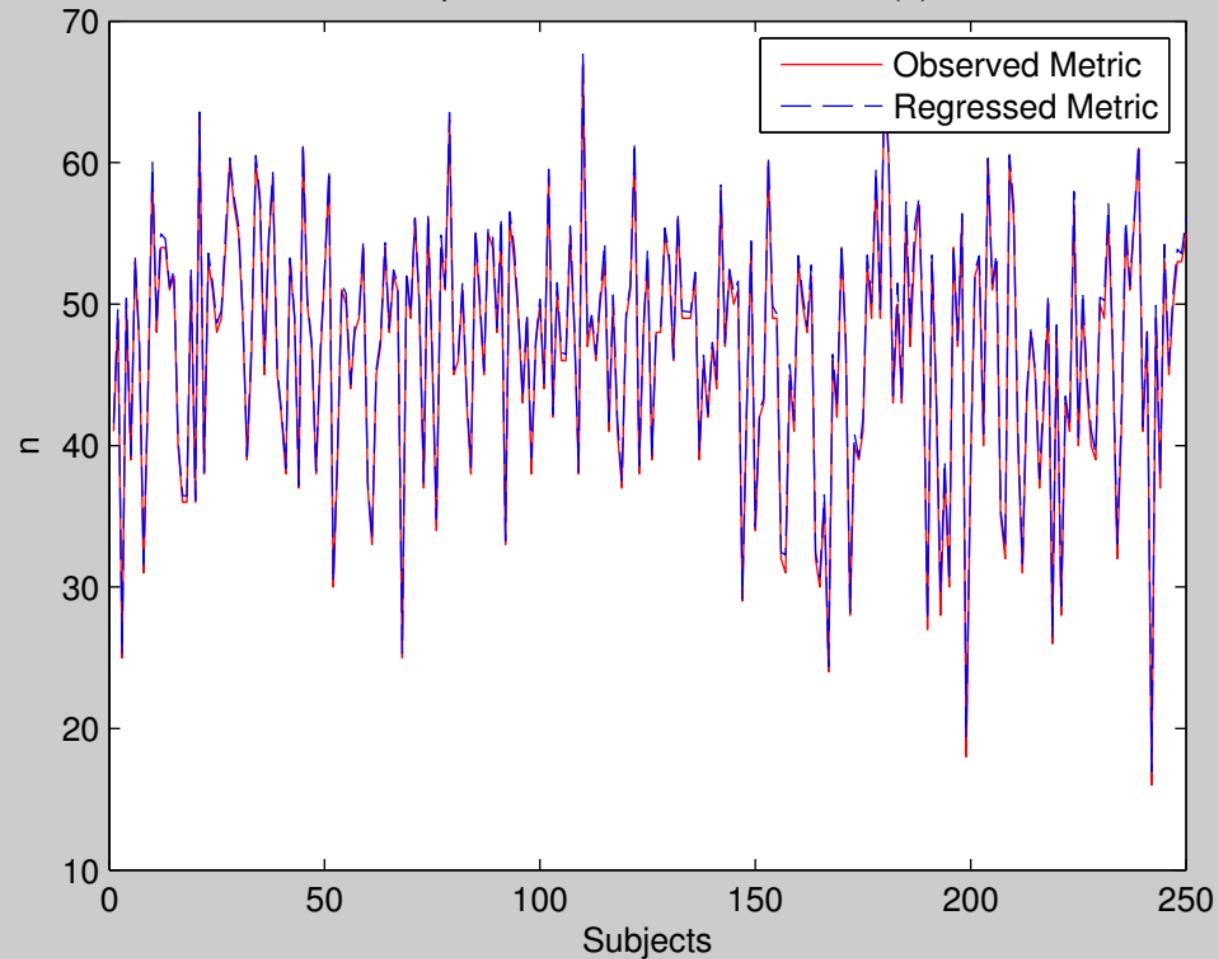
Group 2: Number of distinct states (n)



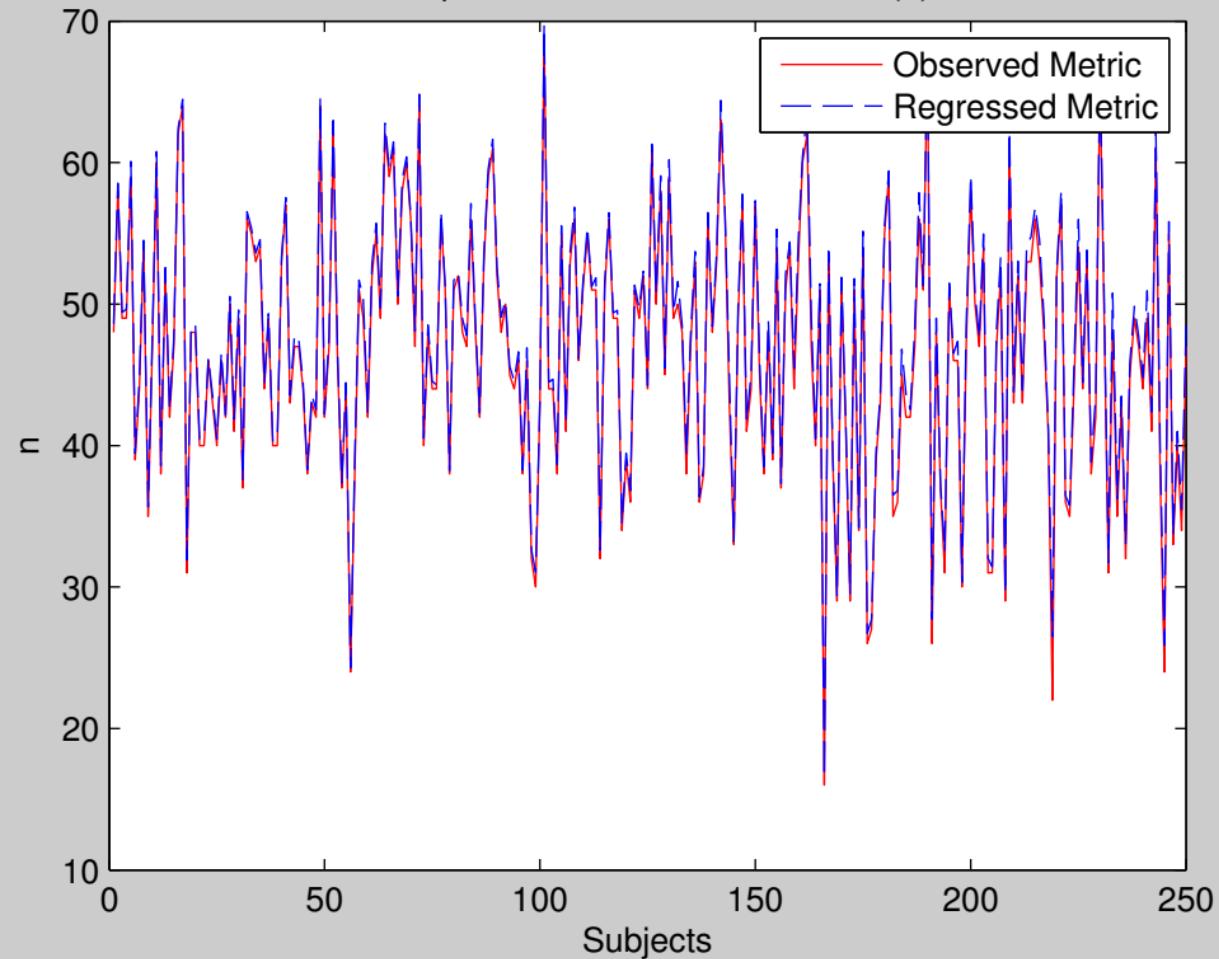
Group 3: Number of distinct states (n)



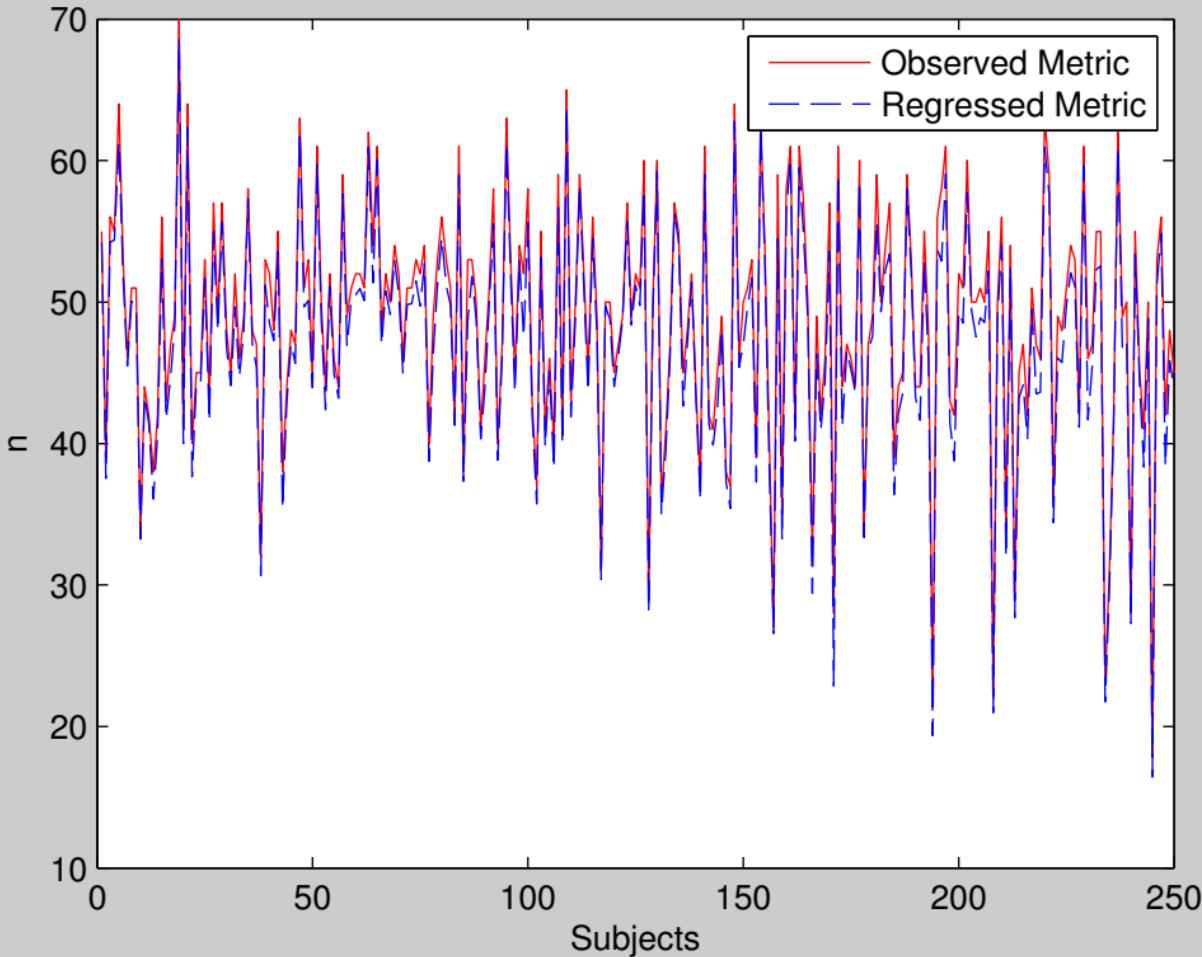
Group 4: Number of distinct states (n)



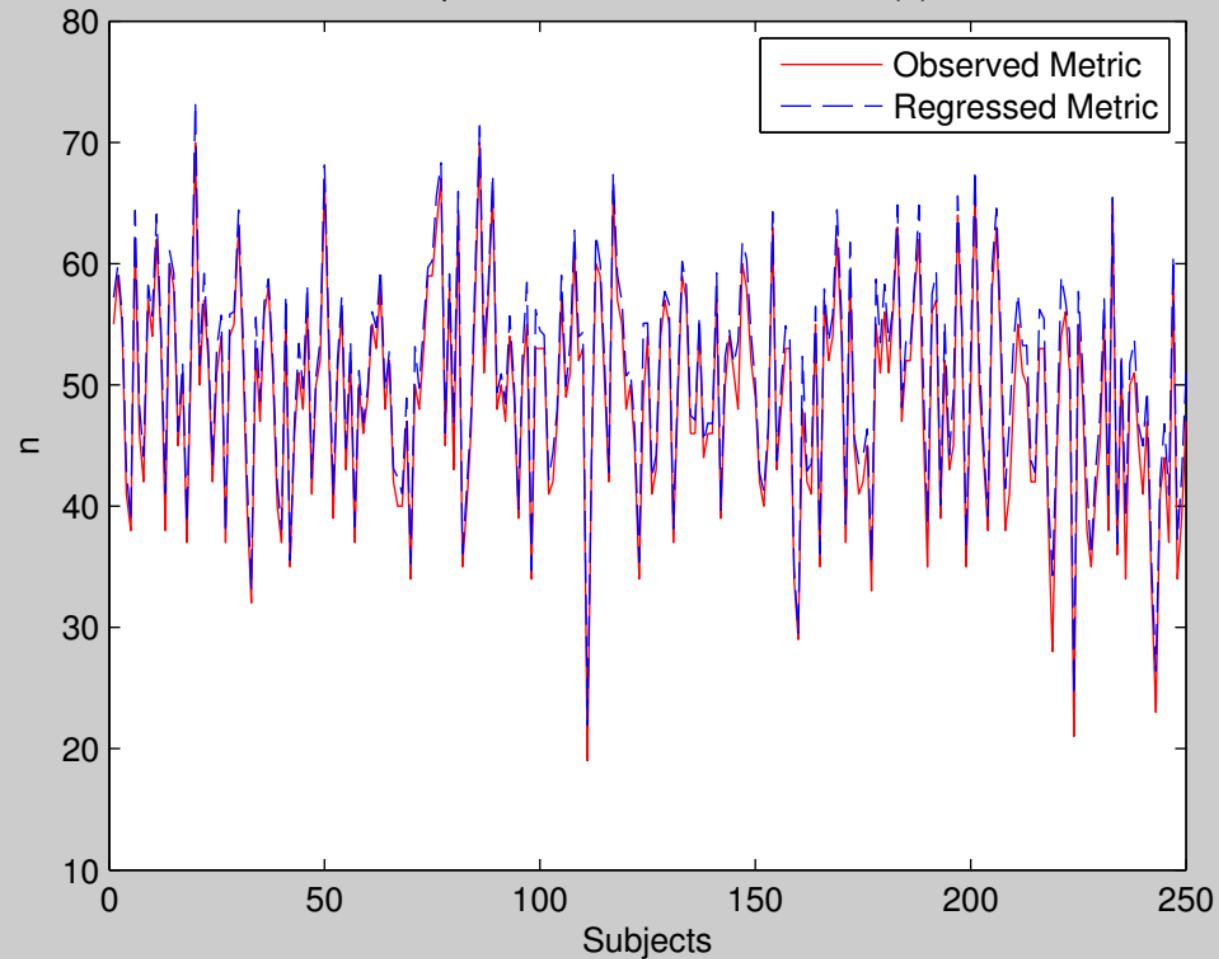
Group 5: Number of distinct states (n)



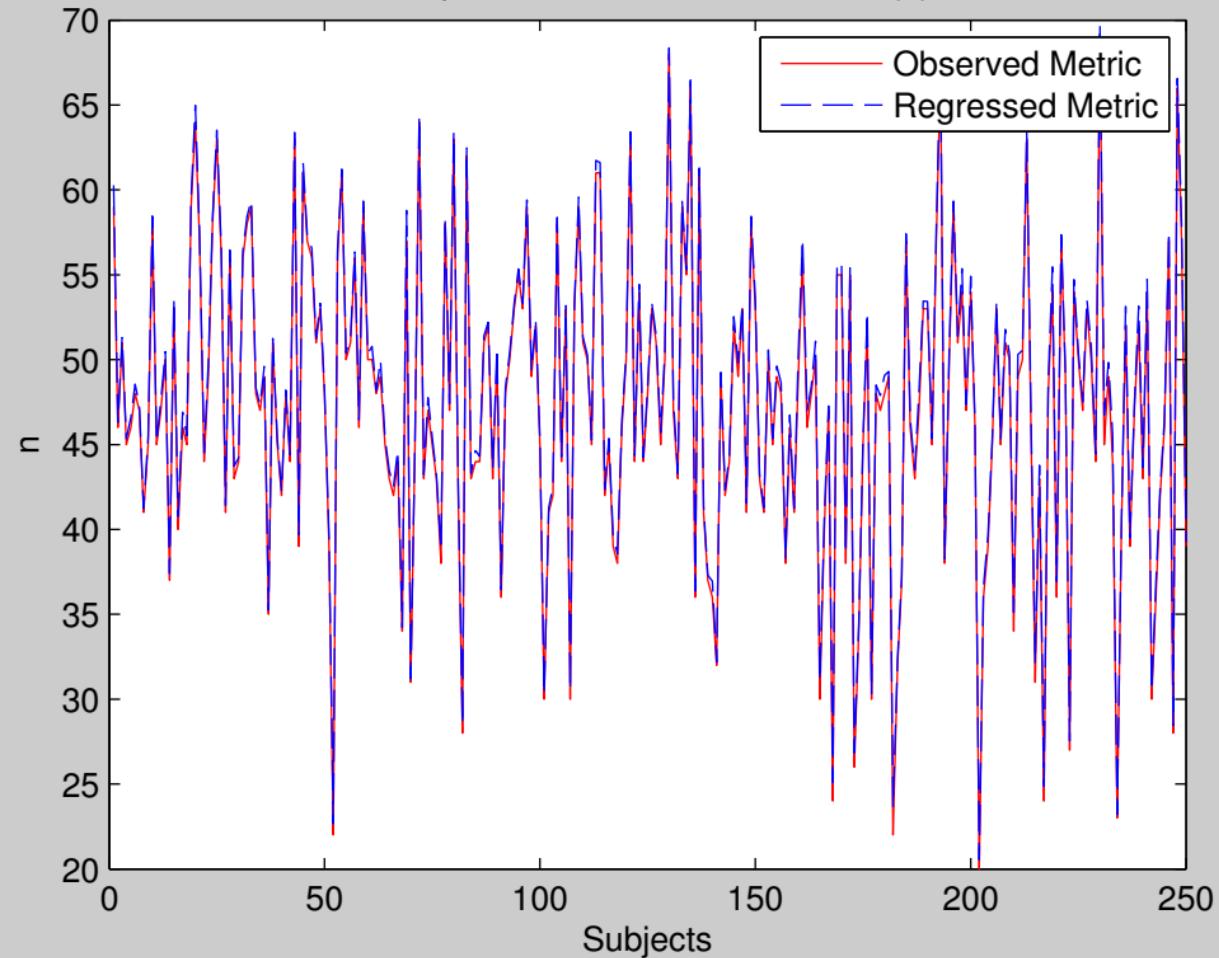
Group 6: Number of distinct states (n)



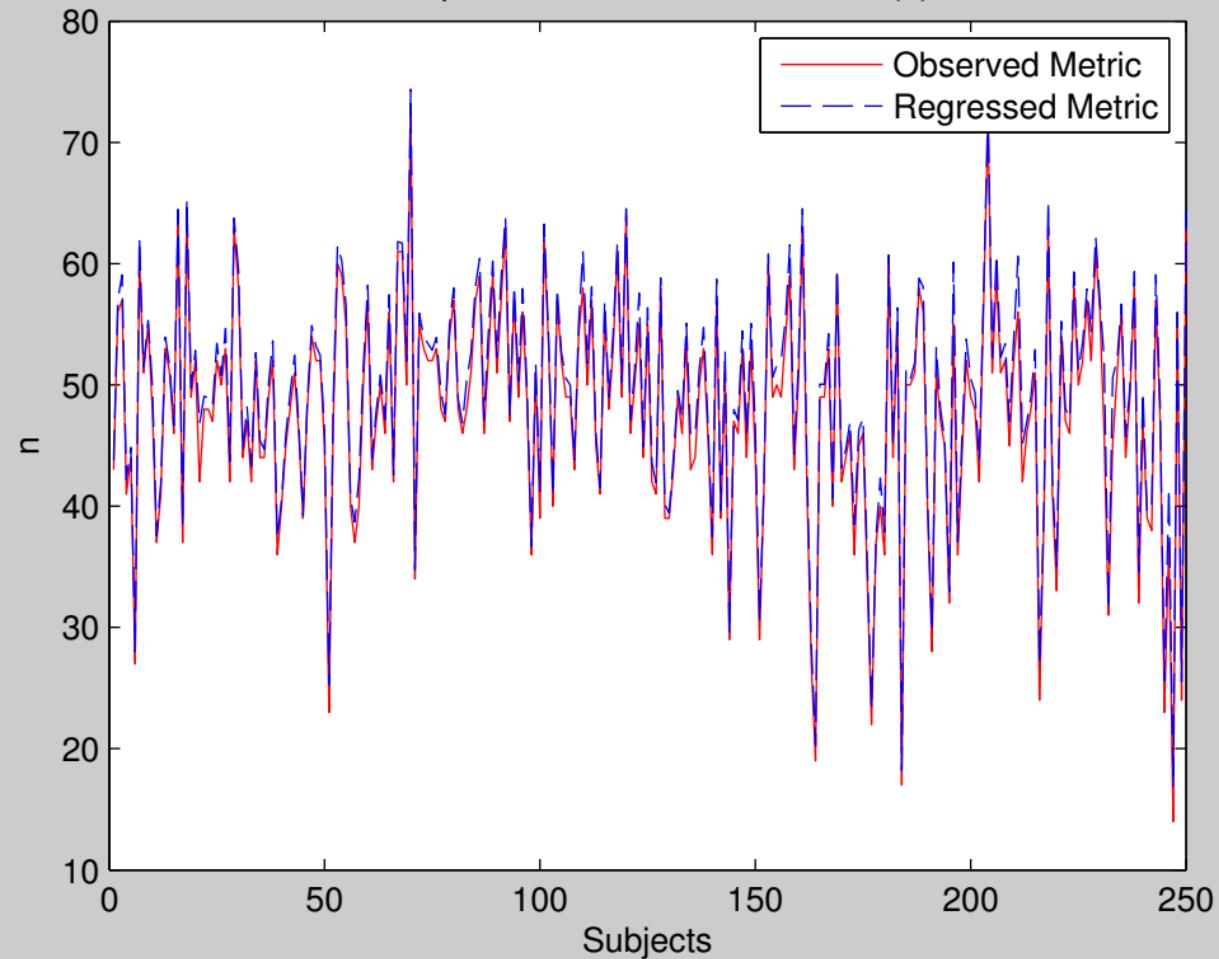
Group 7: Number of distinct states (n)



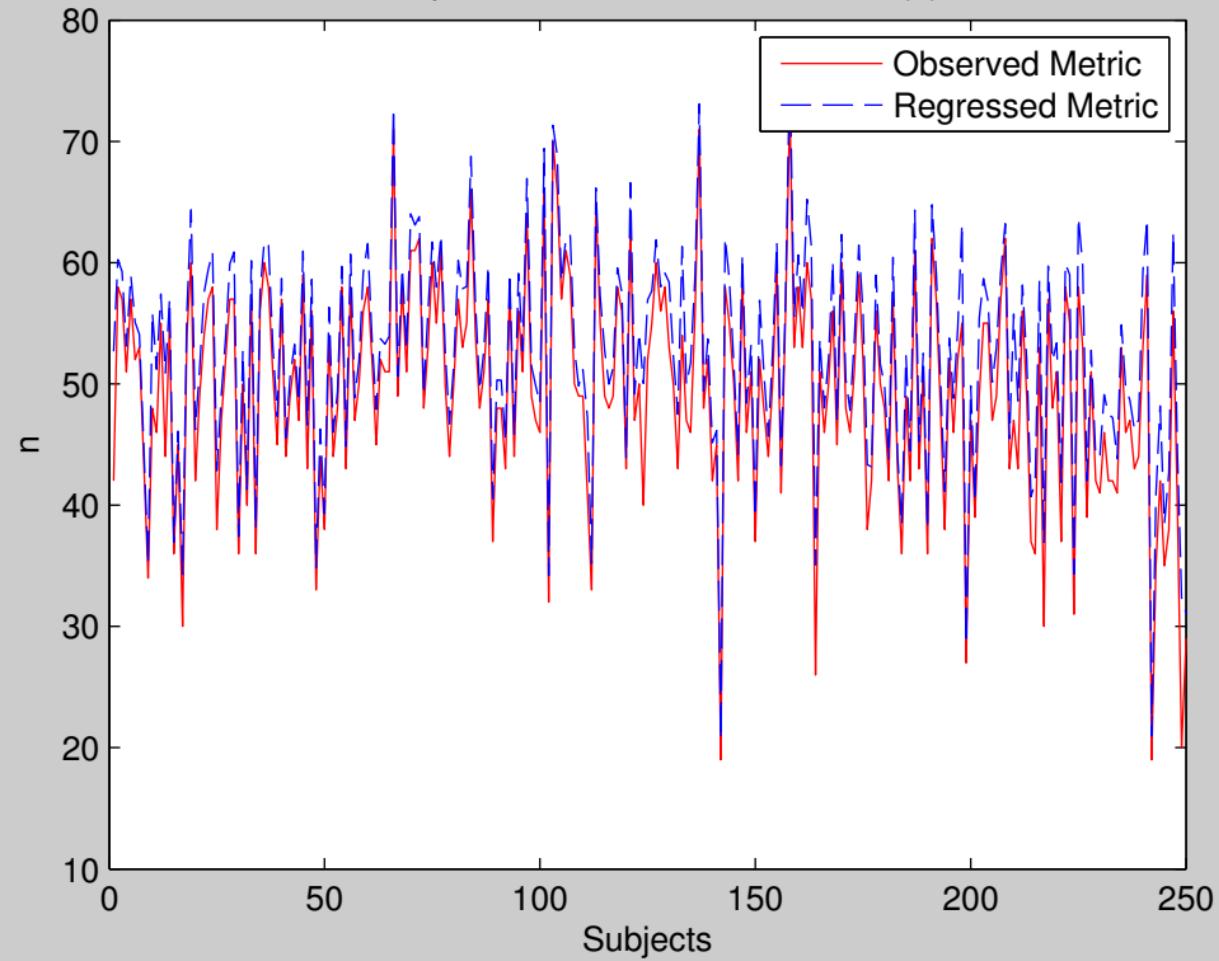
Group 8: Number of distinct states (n)



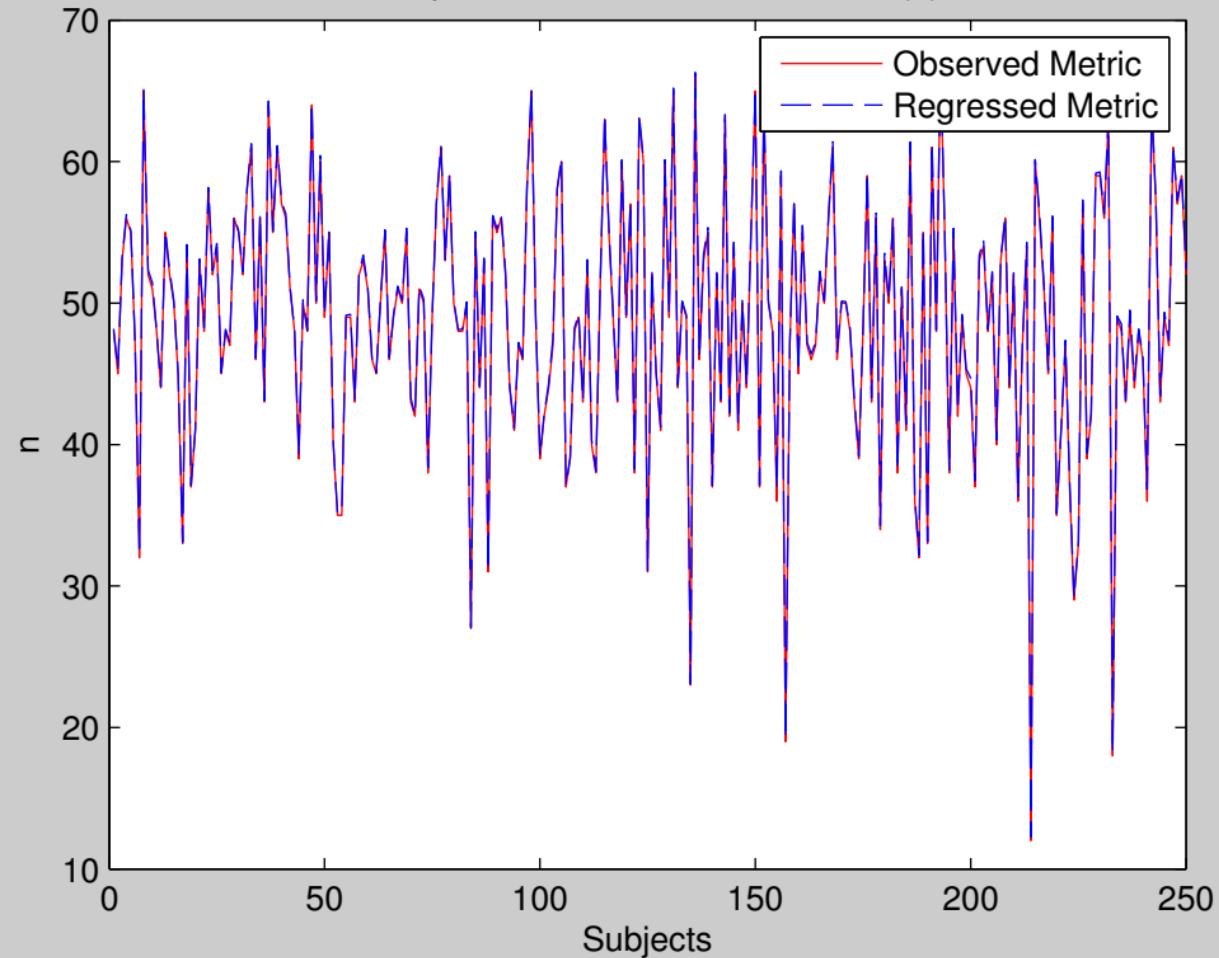
Group 9: Number of distinct states (n)



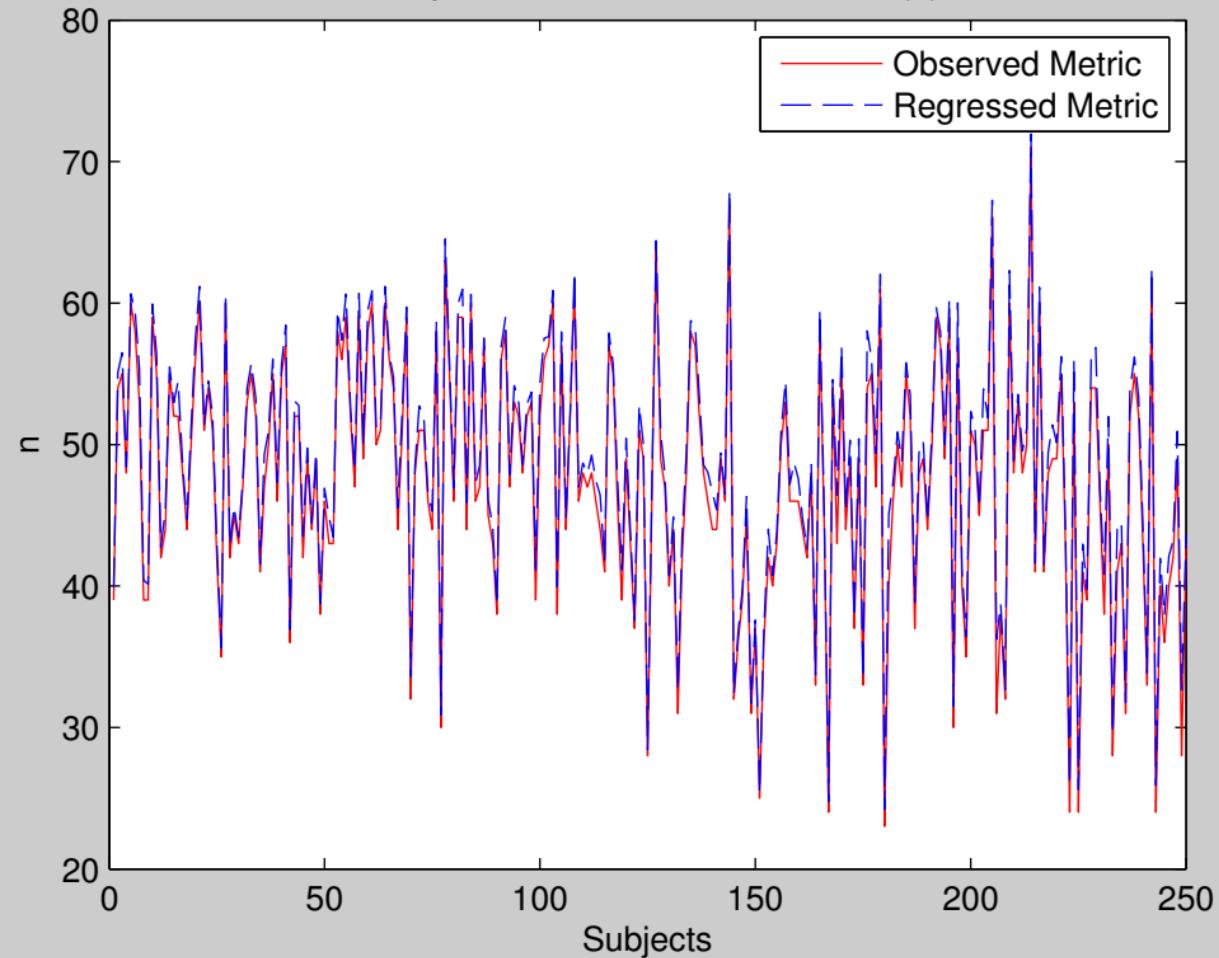
Group 10: Number of distinct states (n)



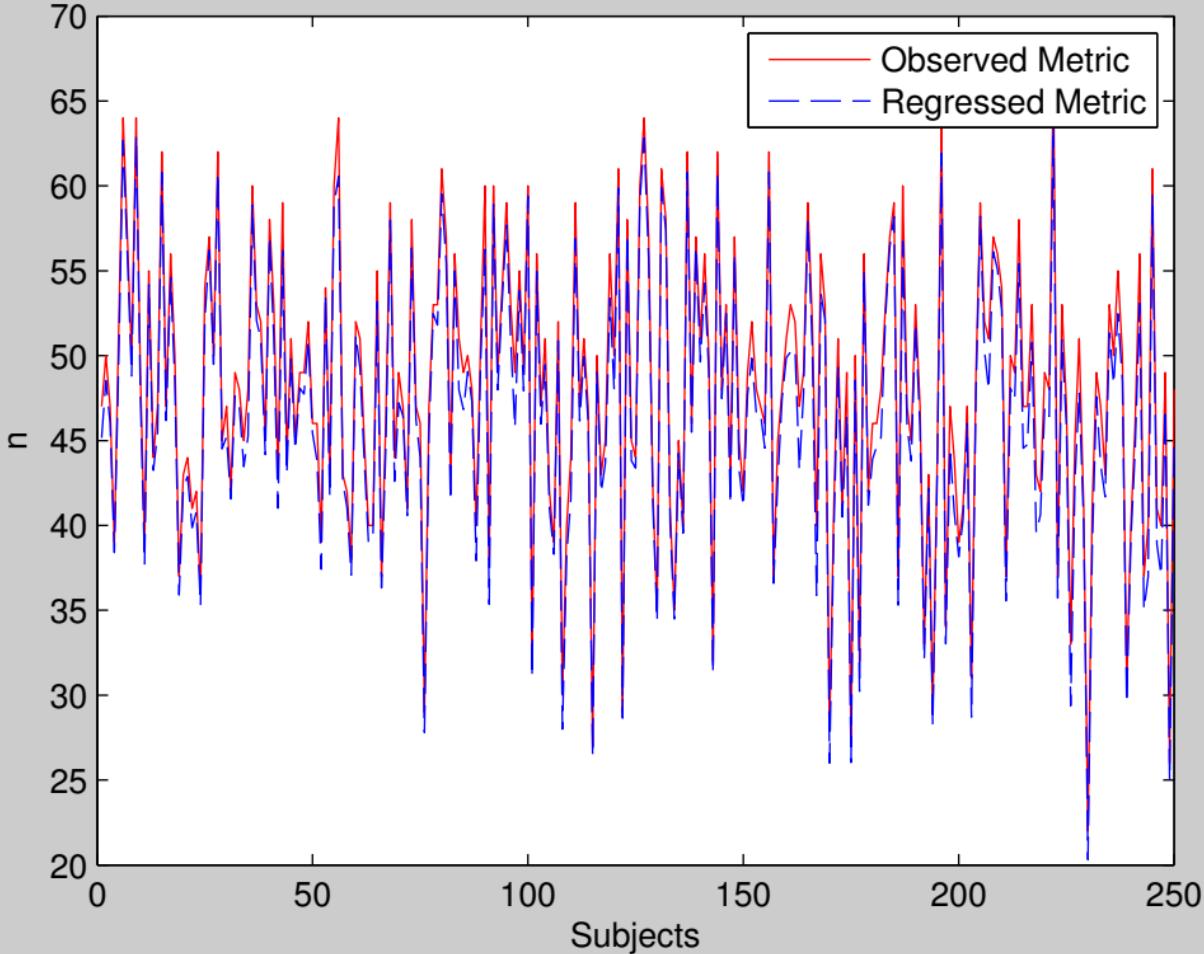
Group 11: Number of distinct states (n)



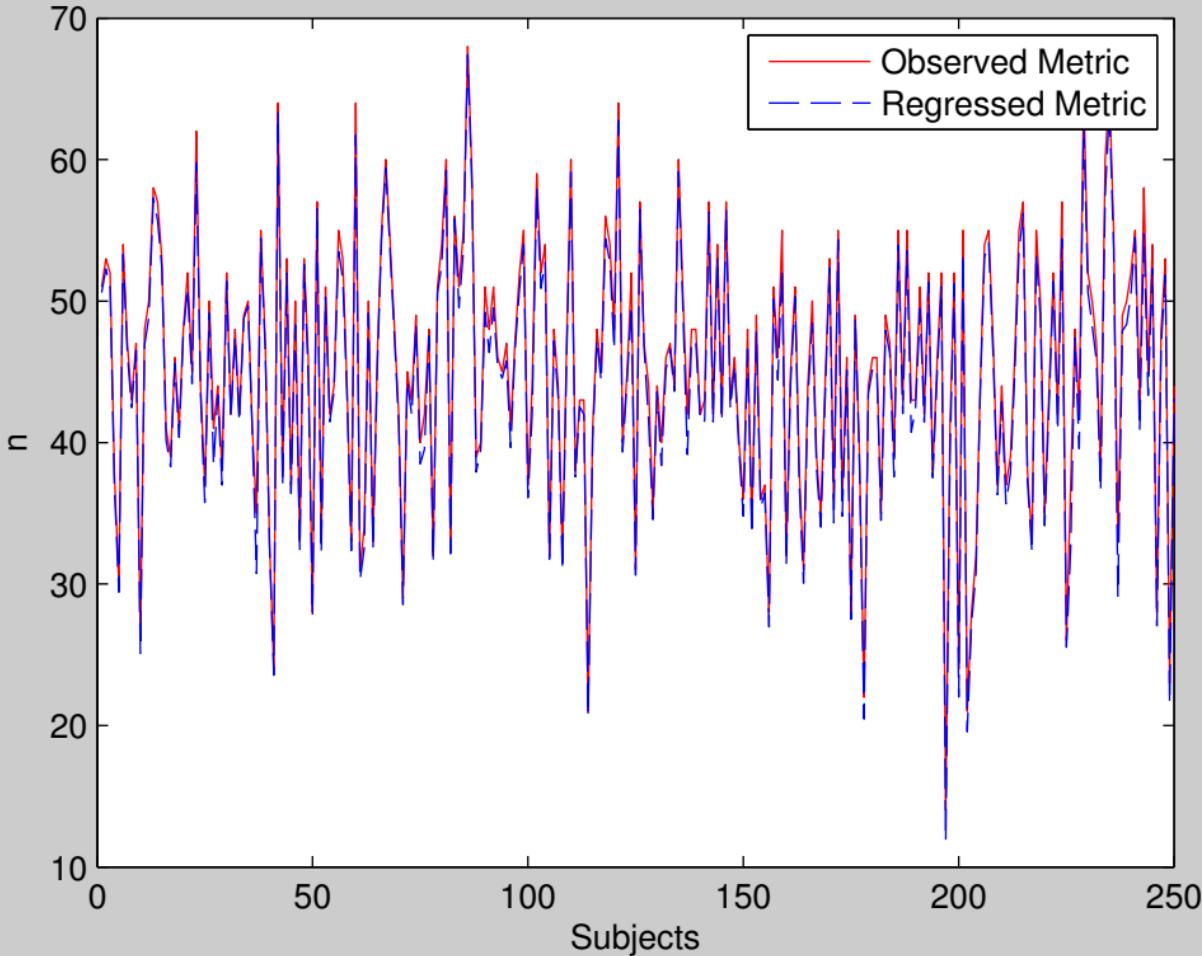
Group 12: Number of distinct states (n)



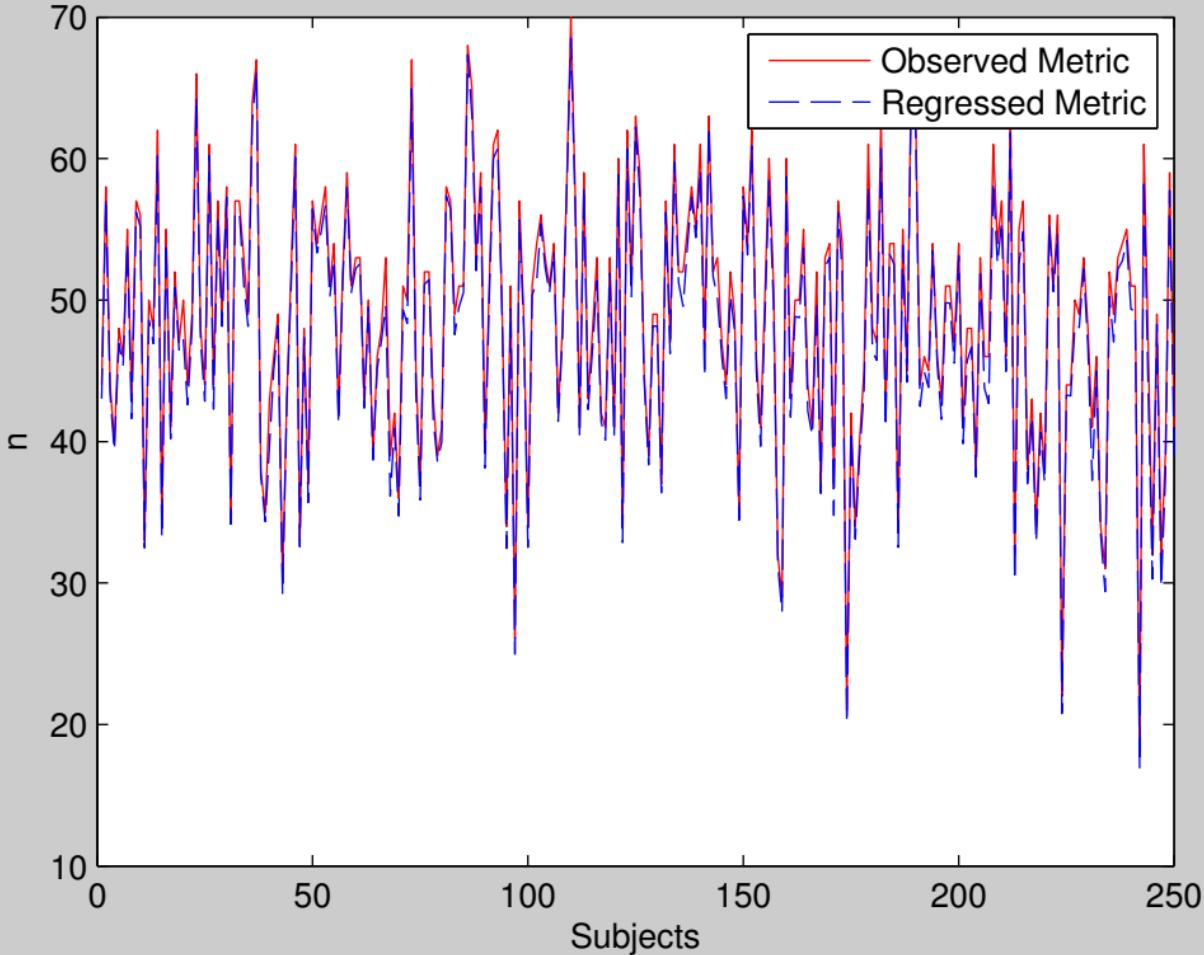
Group 13: Number of distinct states (n)



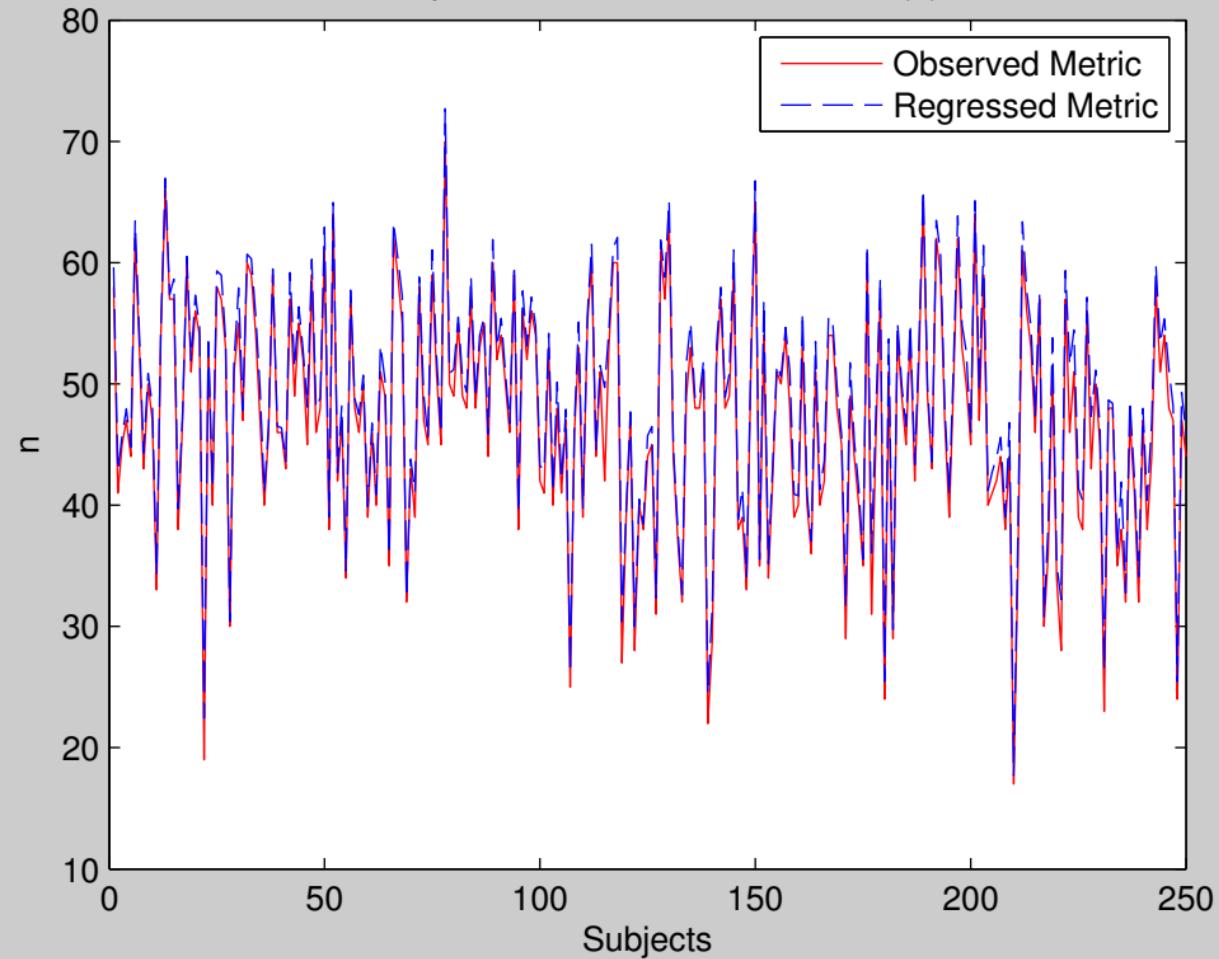
Group 14: Number of distinct states (n)



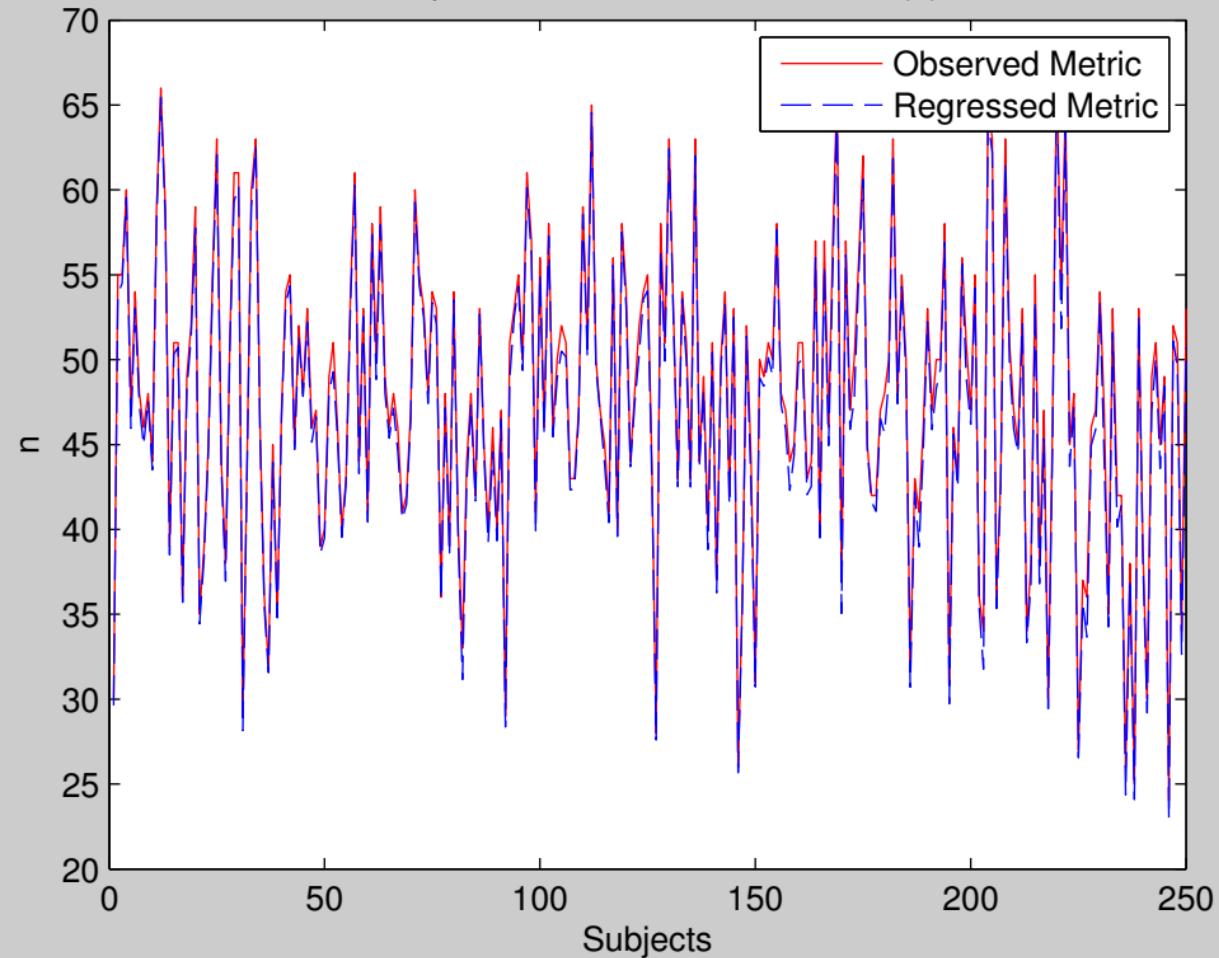
Group 15: Number of distinct states (n)



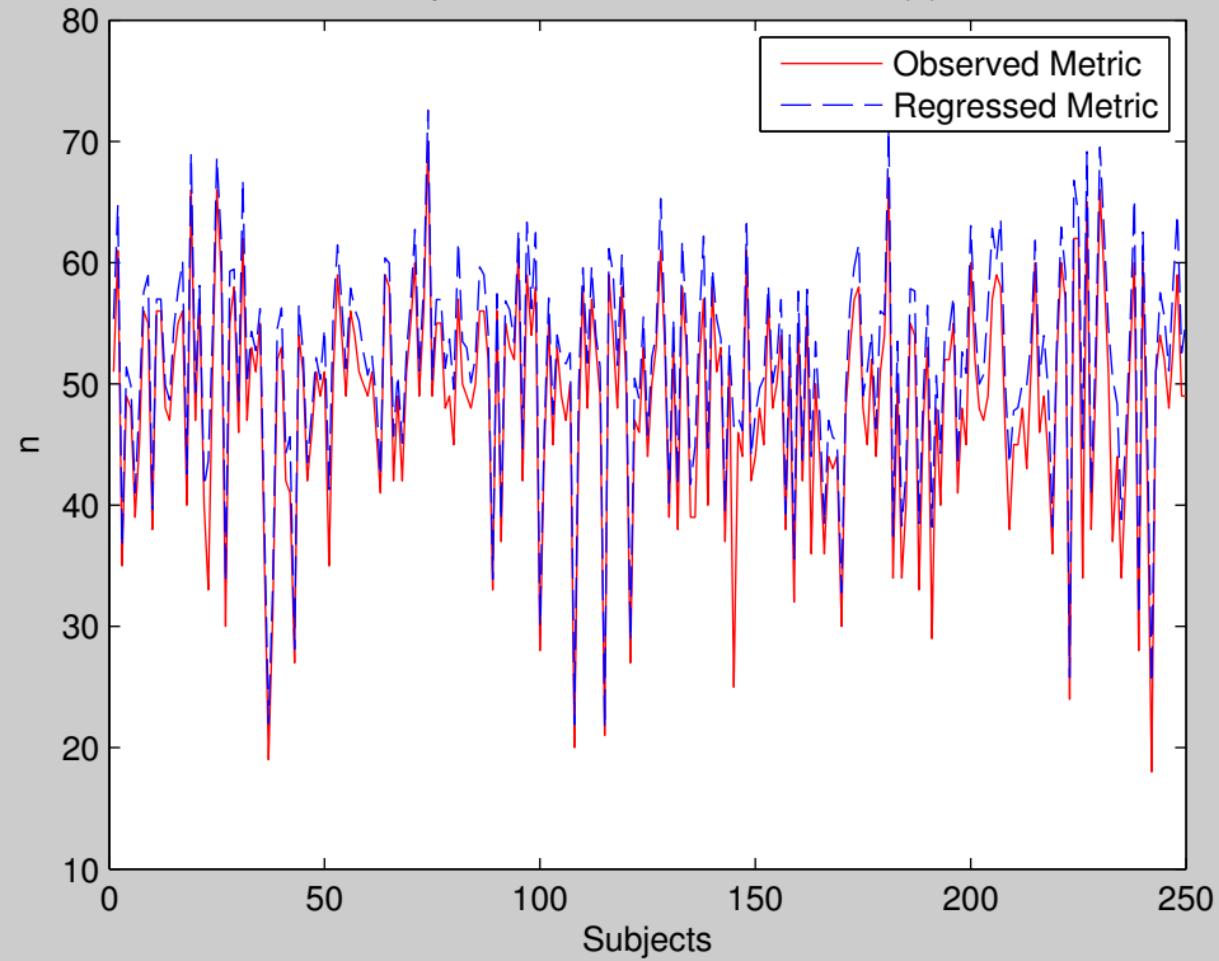
Group 16: Number of distinct states (n)



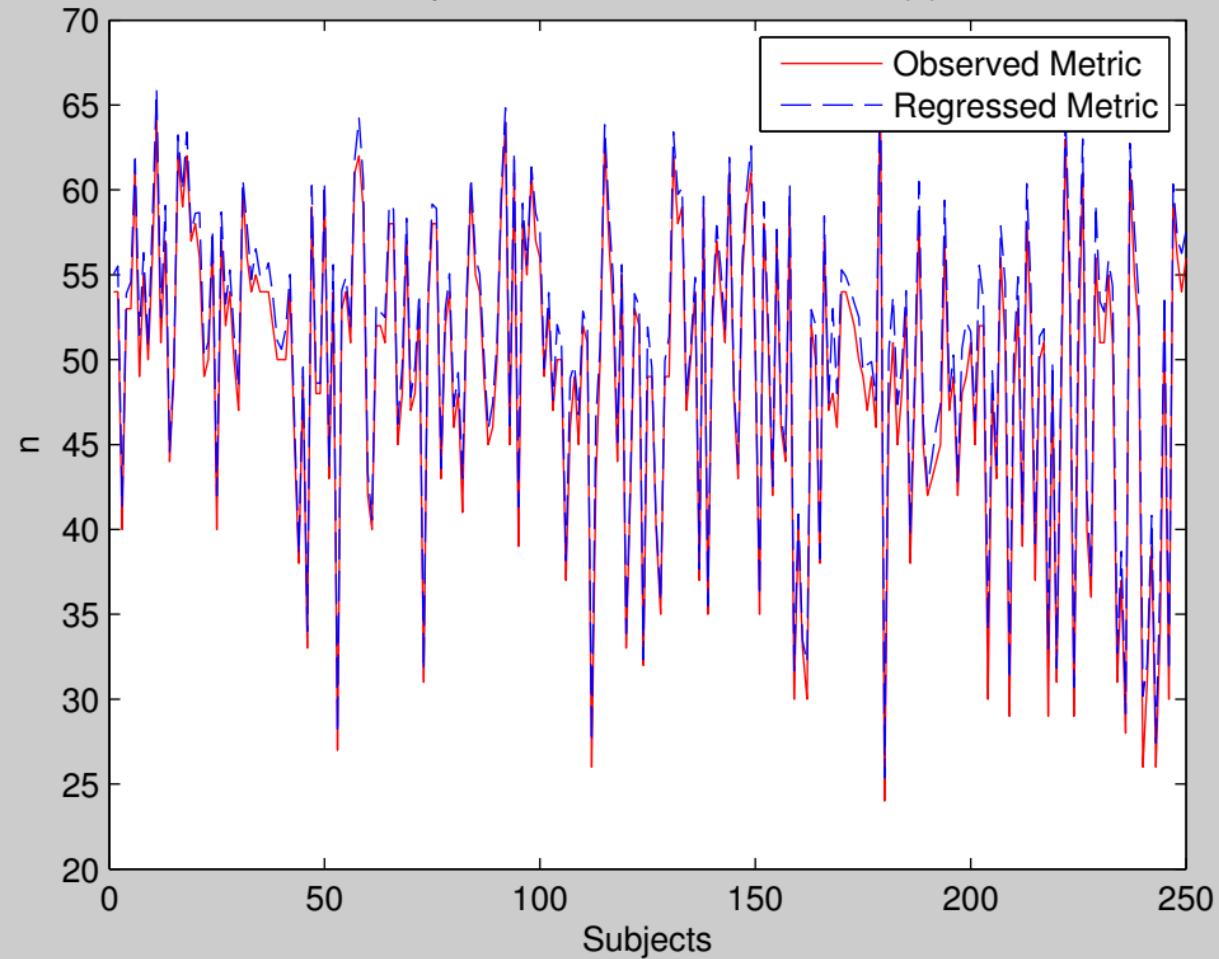
Group 17: Number of distinct states (n)



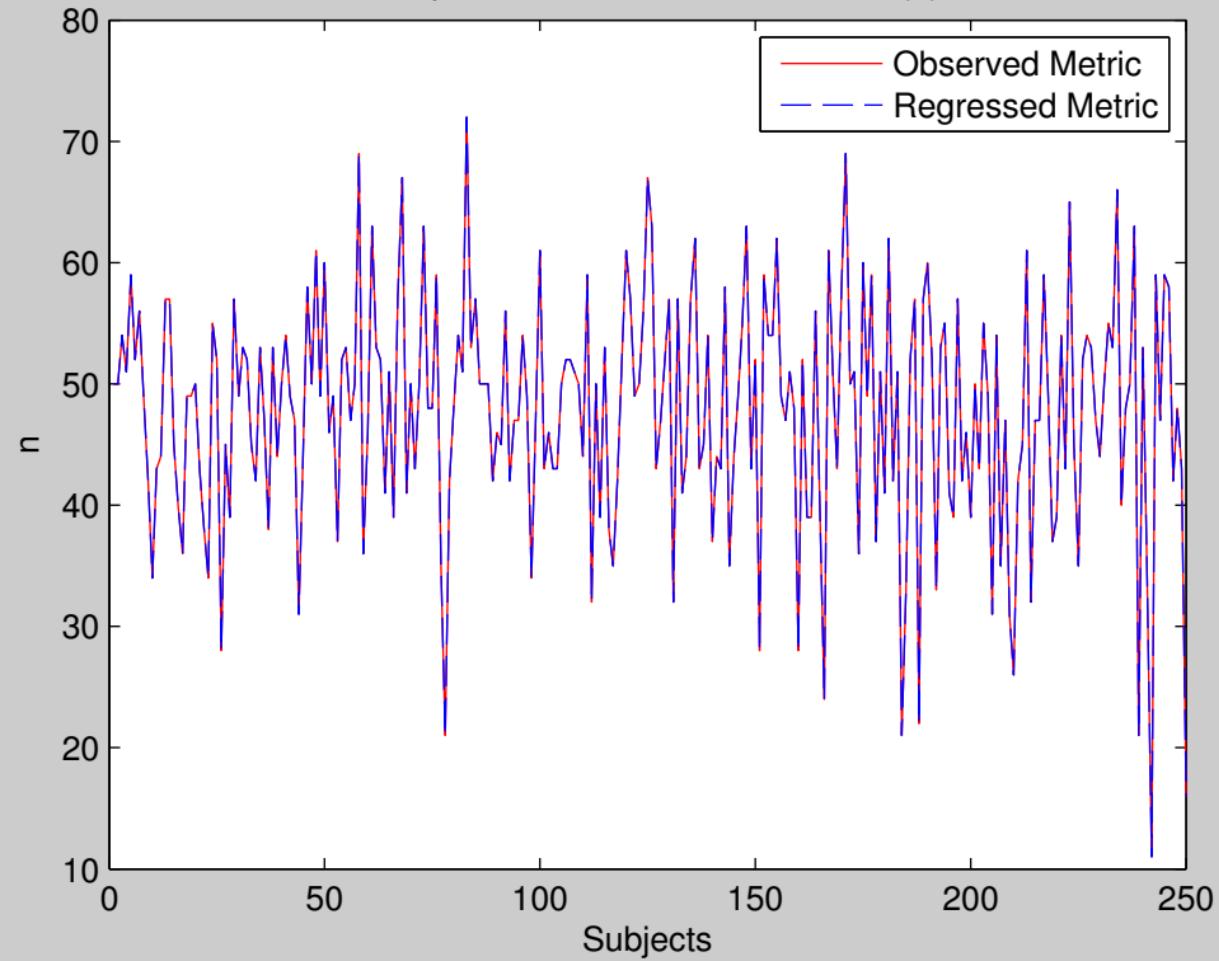
Group 18: Number of distinct states (n)



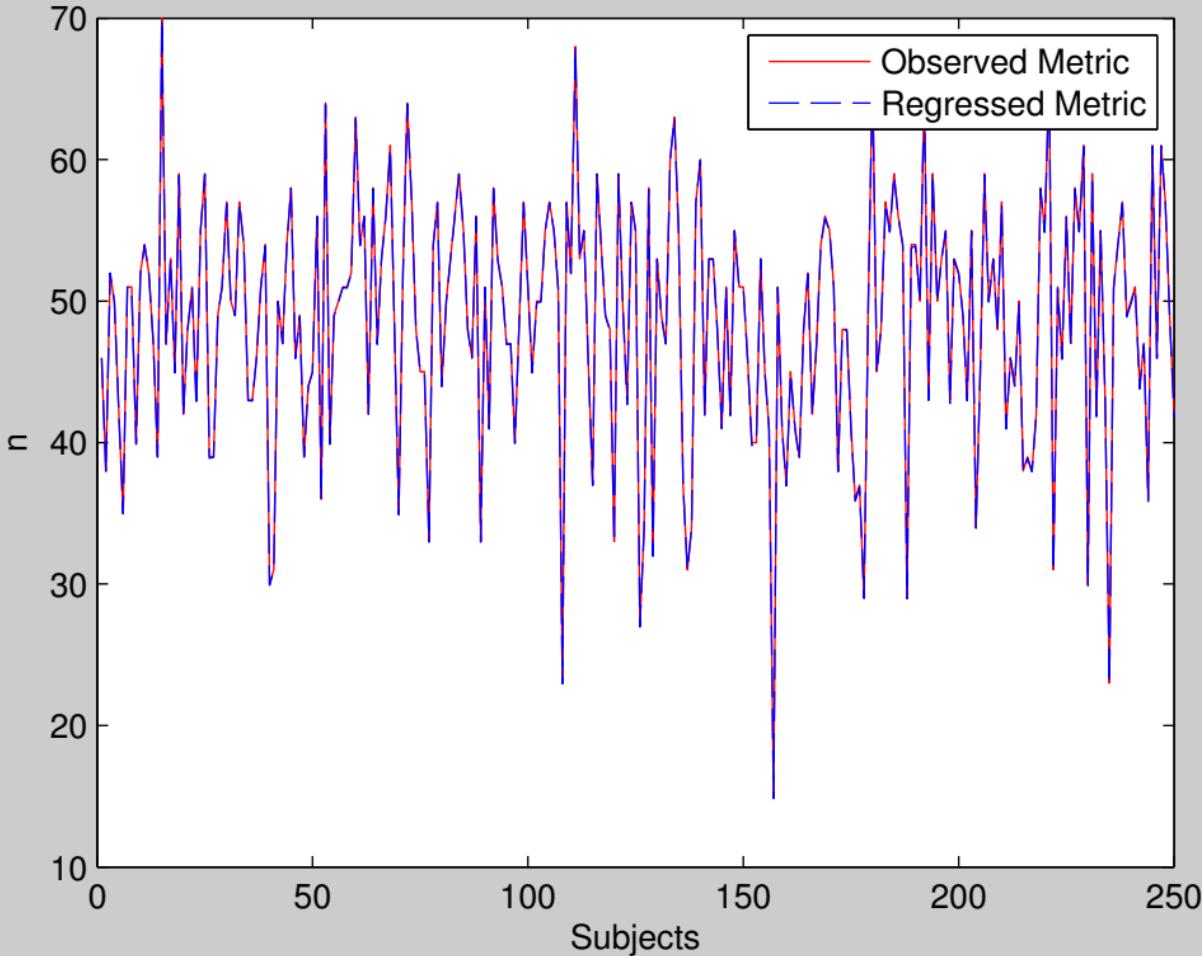
Group 19: Number of distinct states (n)



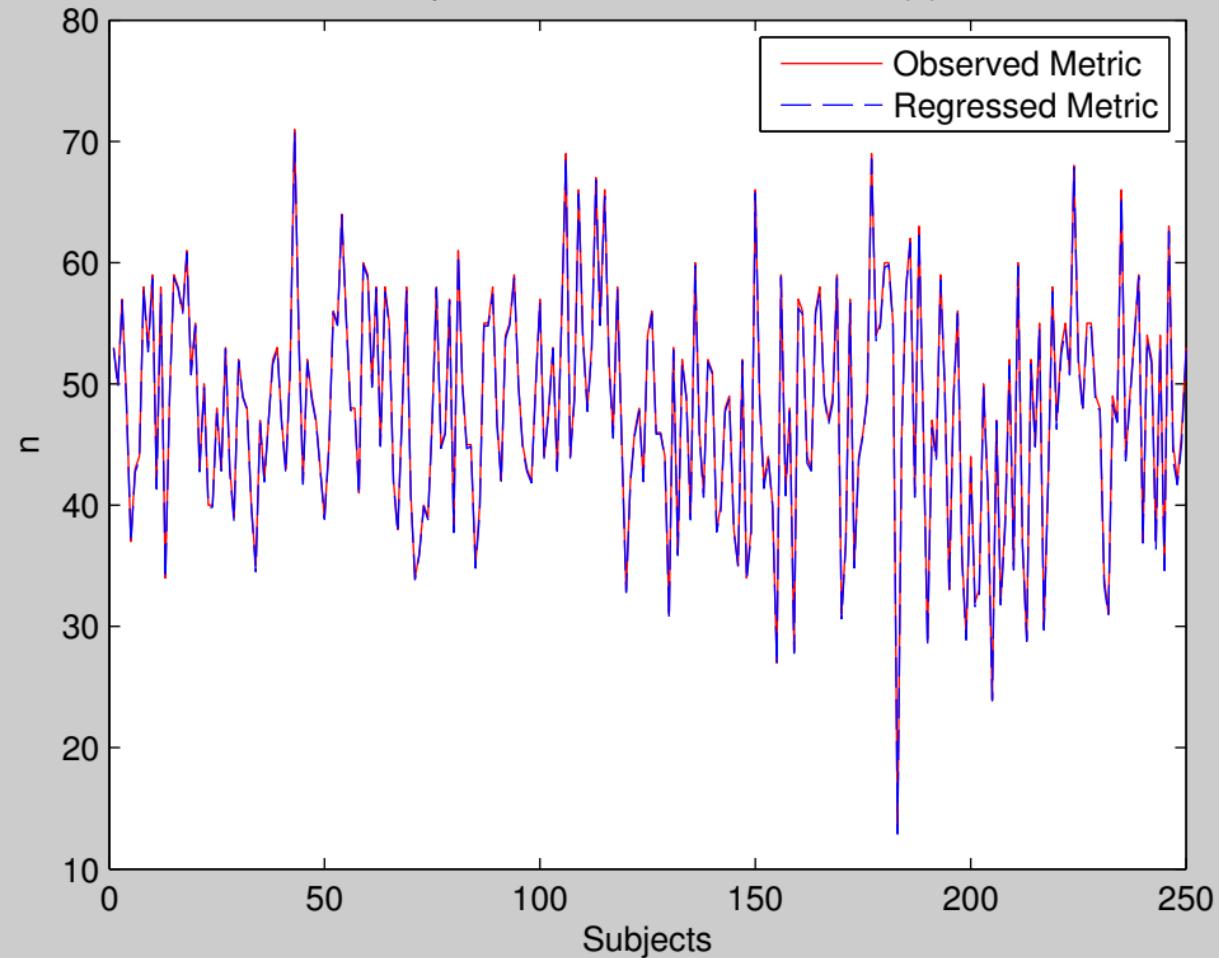
Group 20: Number of distinct states (n)



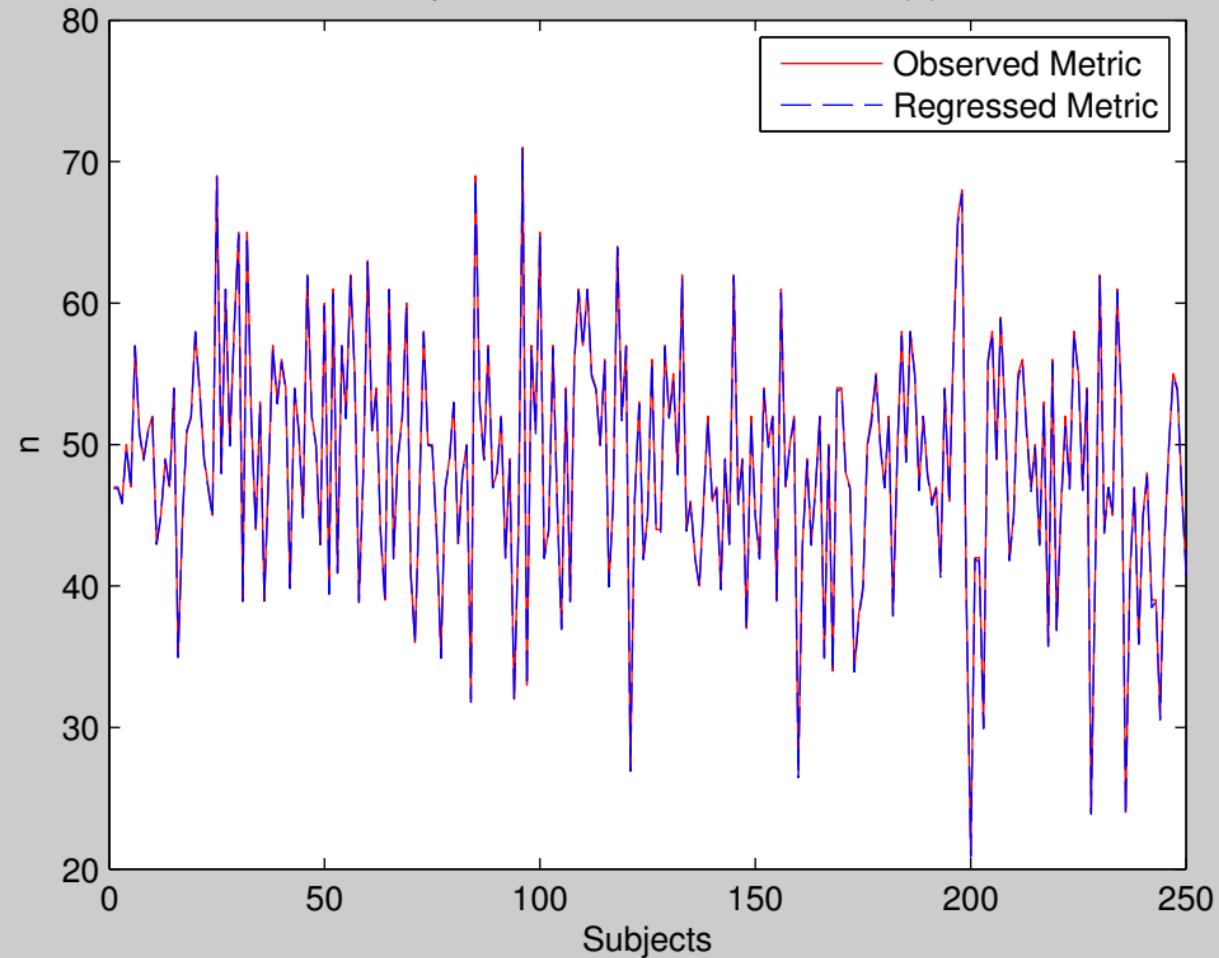
Group 21: Number of distinct states (n)



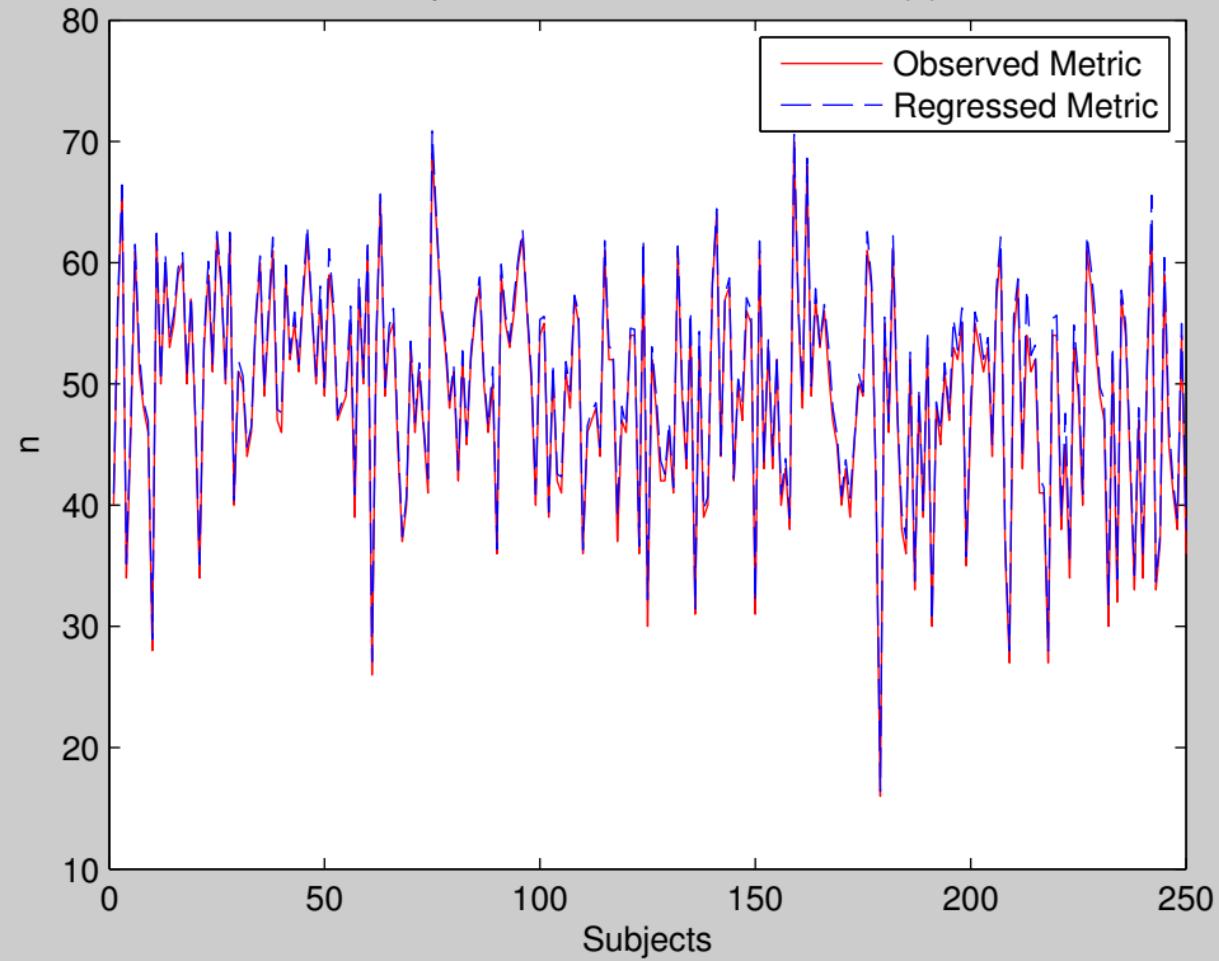
Group 22: Number of distinct states (n)



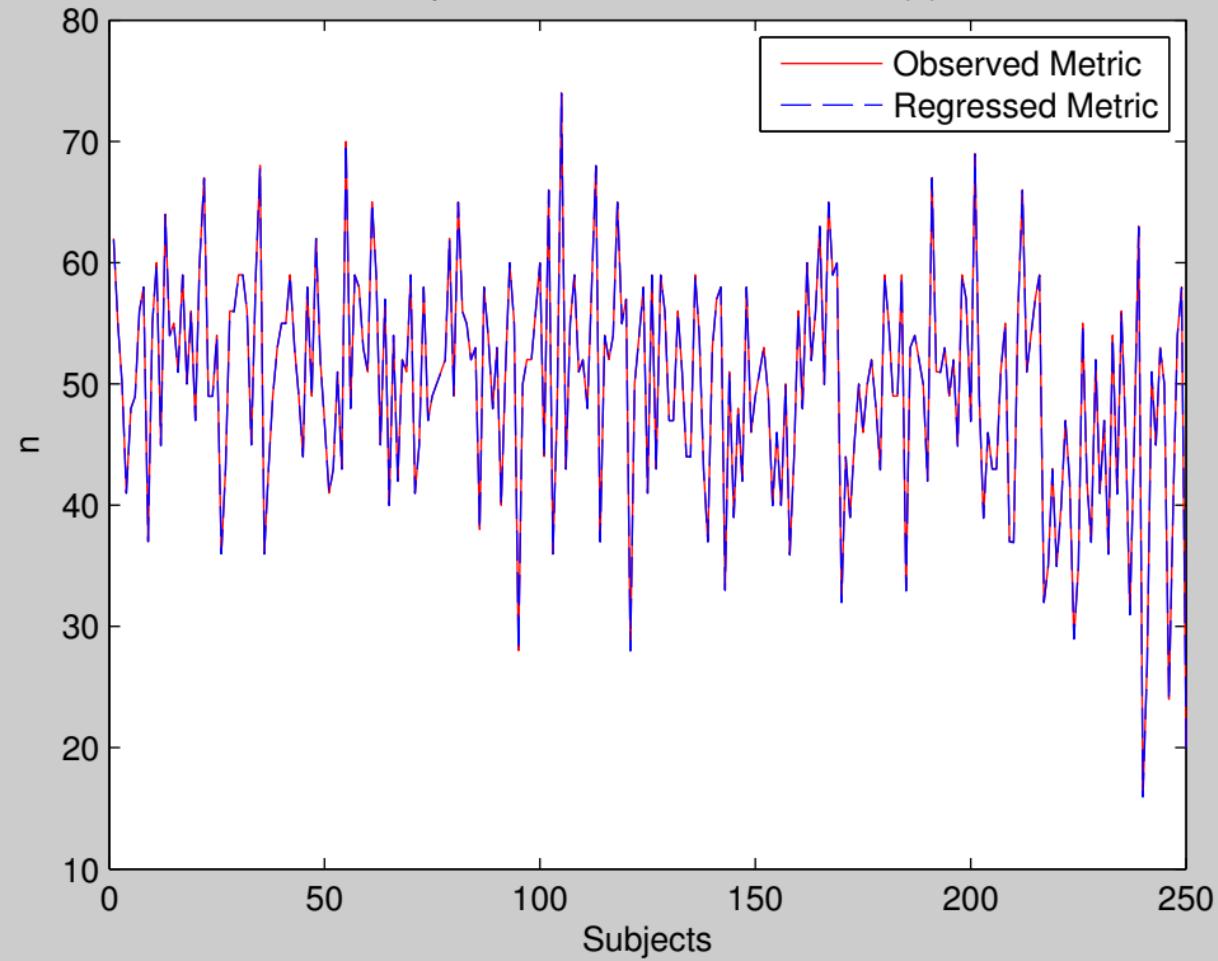
Group 23: Number of distinct states (n)



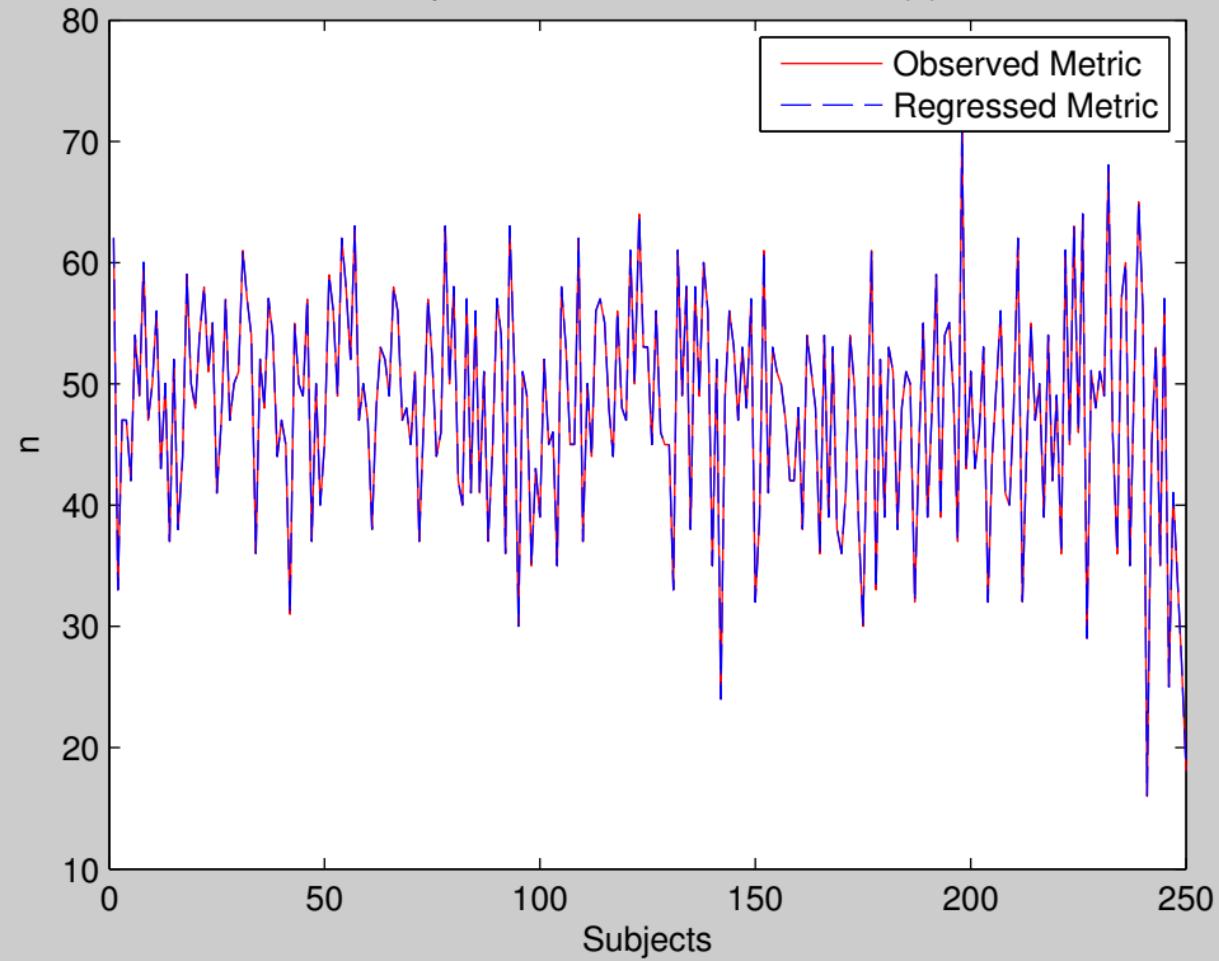
Group 24: Number of distinct states (n)



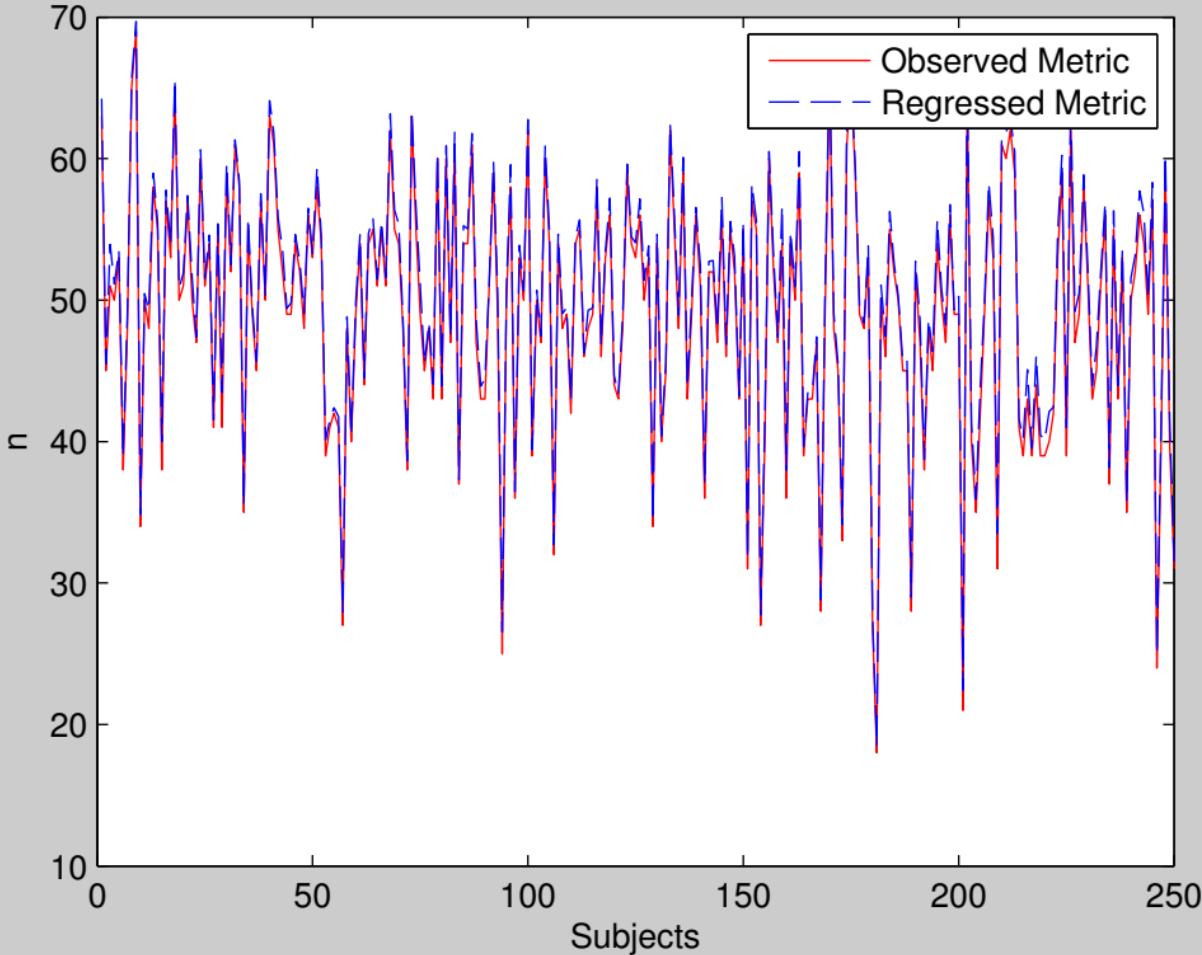
Group 25: Number of distinct states (n)



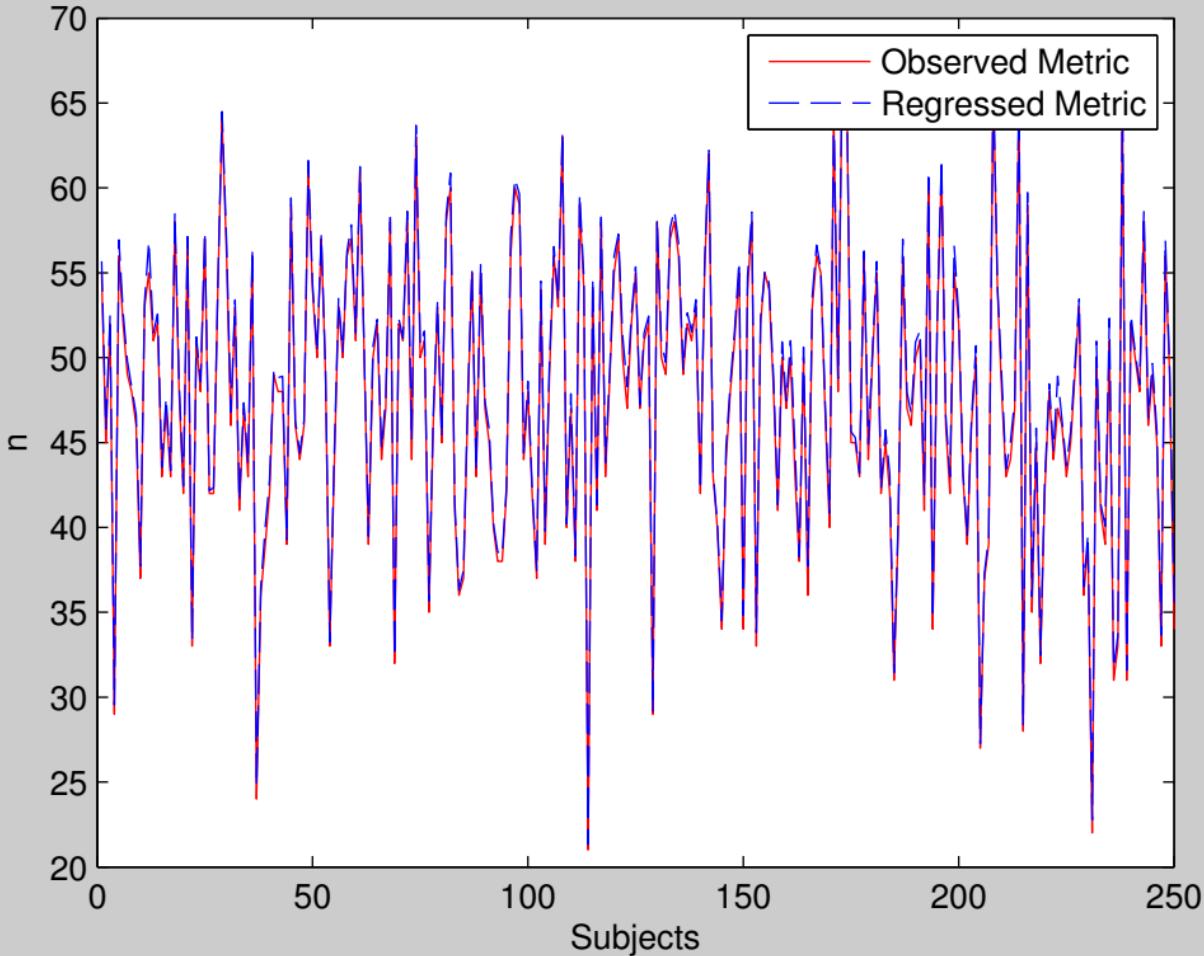
Group 26: Number of distinct states (n)



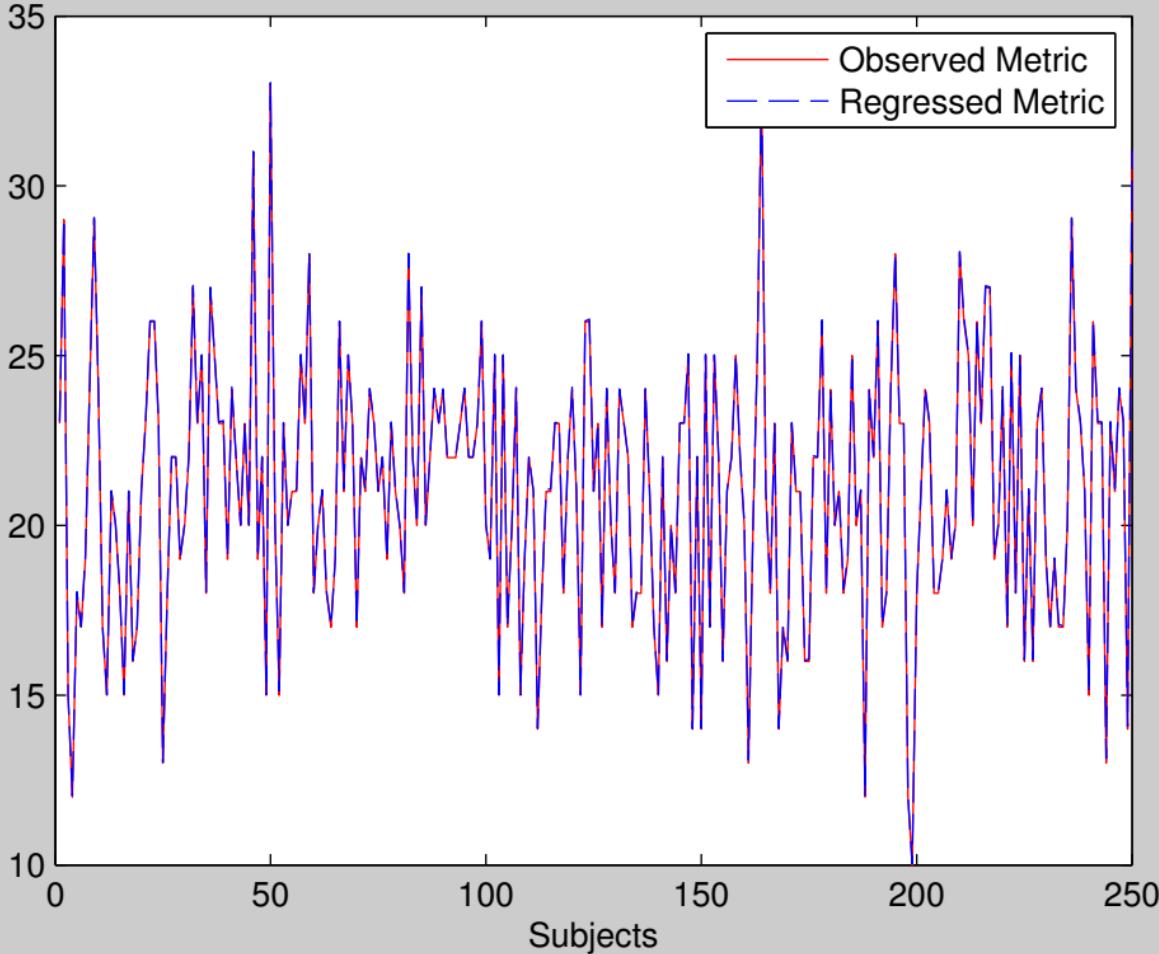
Group 27: Number of distinct states (n)



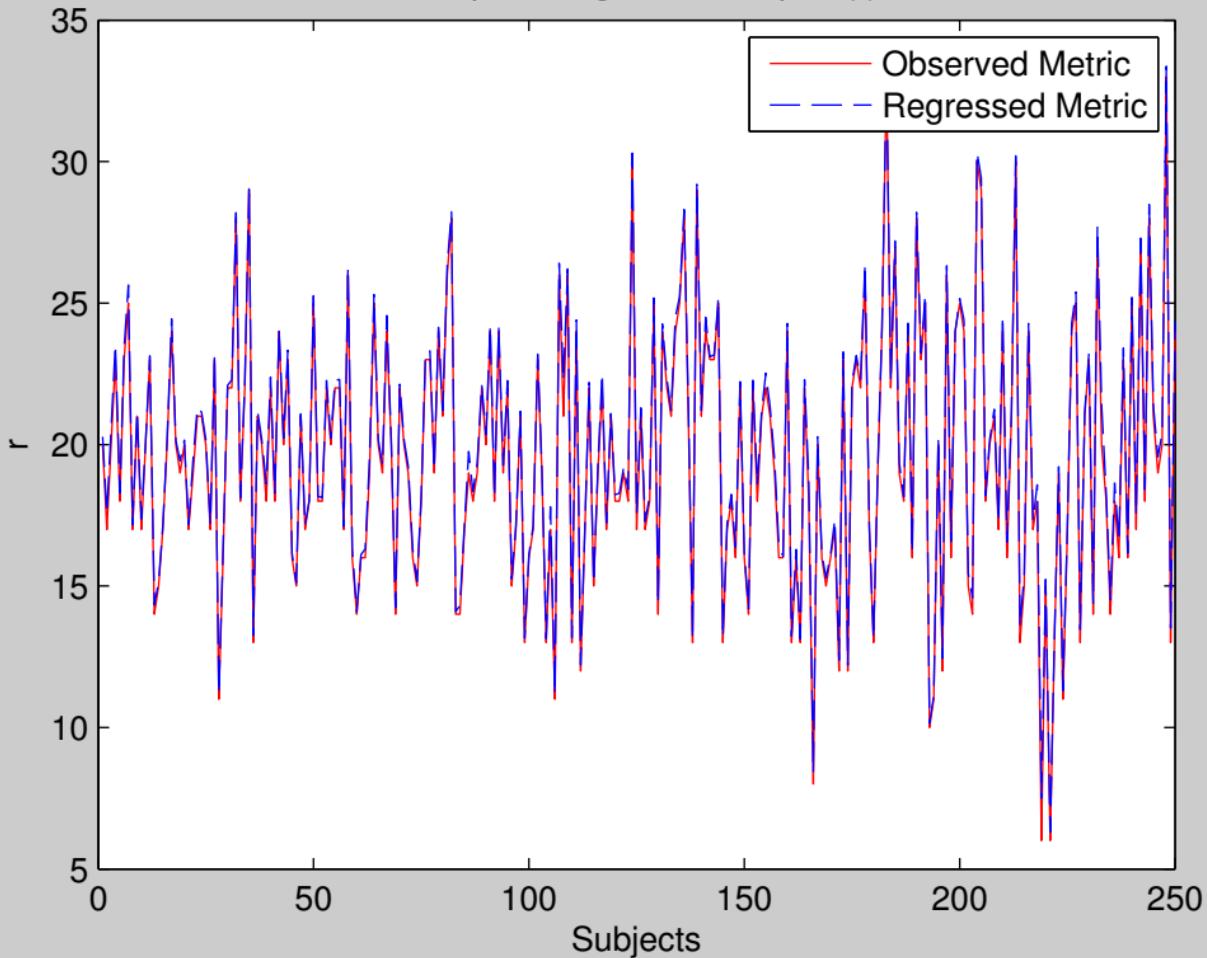
Group 28: Number of distinct states (n)



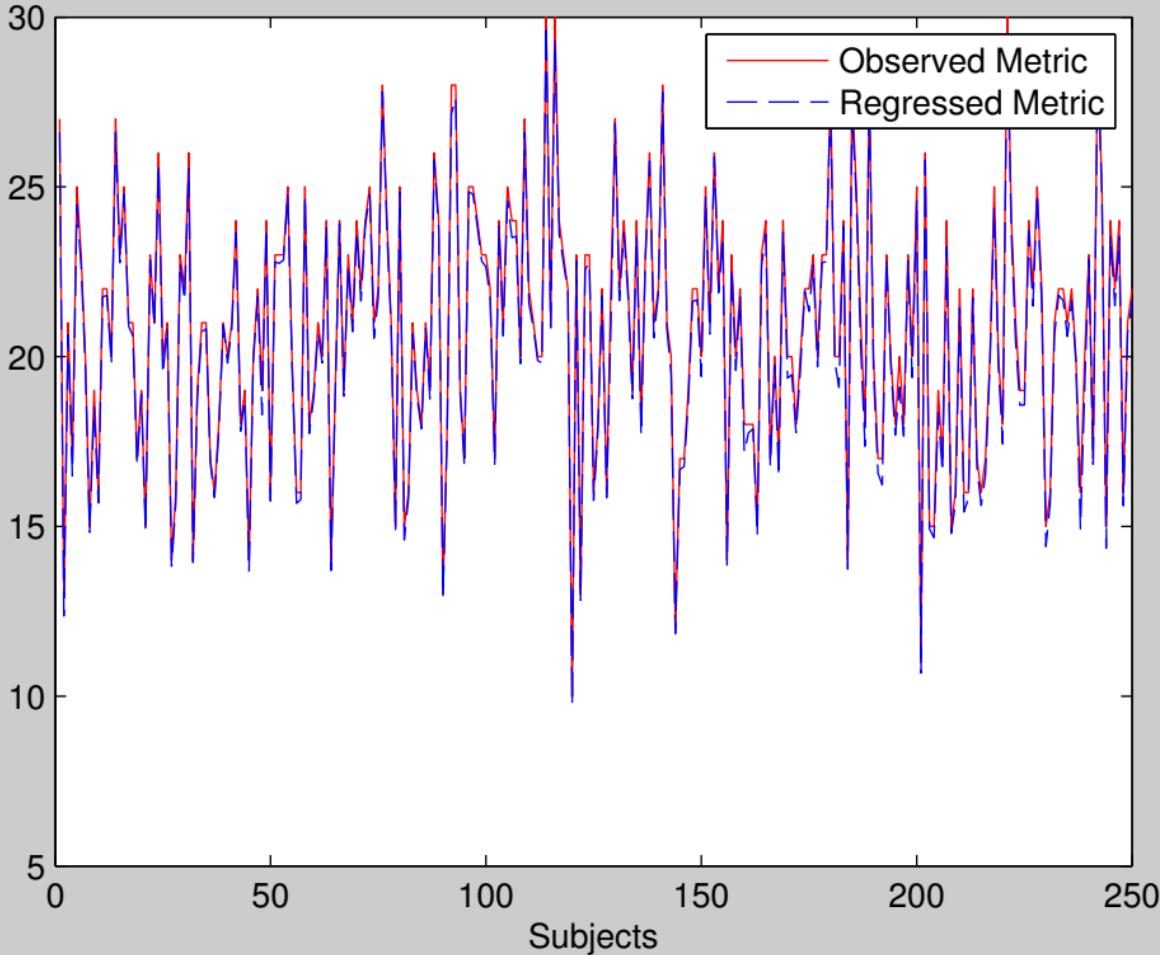
Group 1: Longest State Span (r)



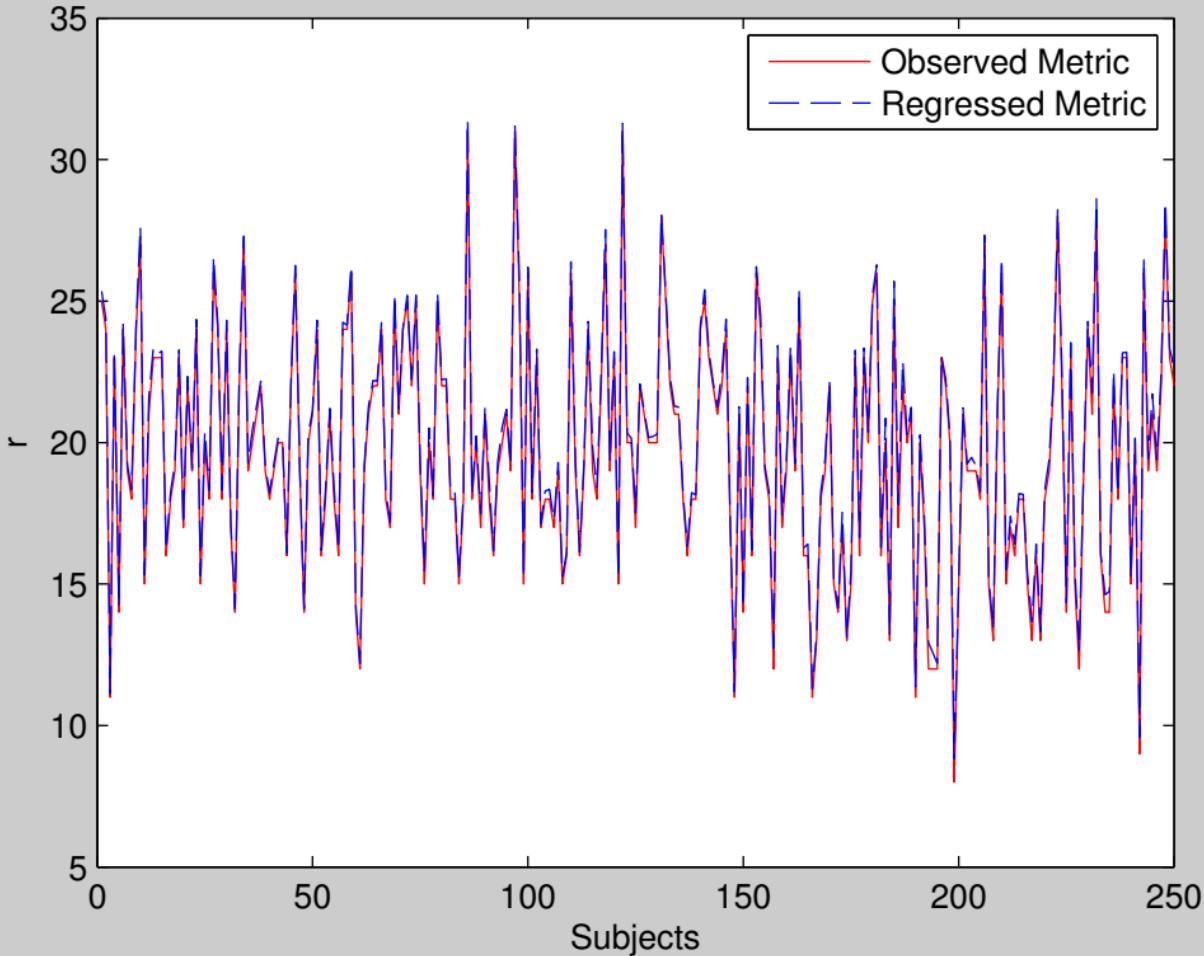
Group 2: Longest State Span (r)



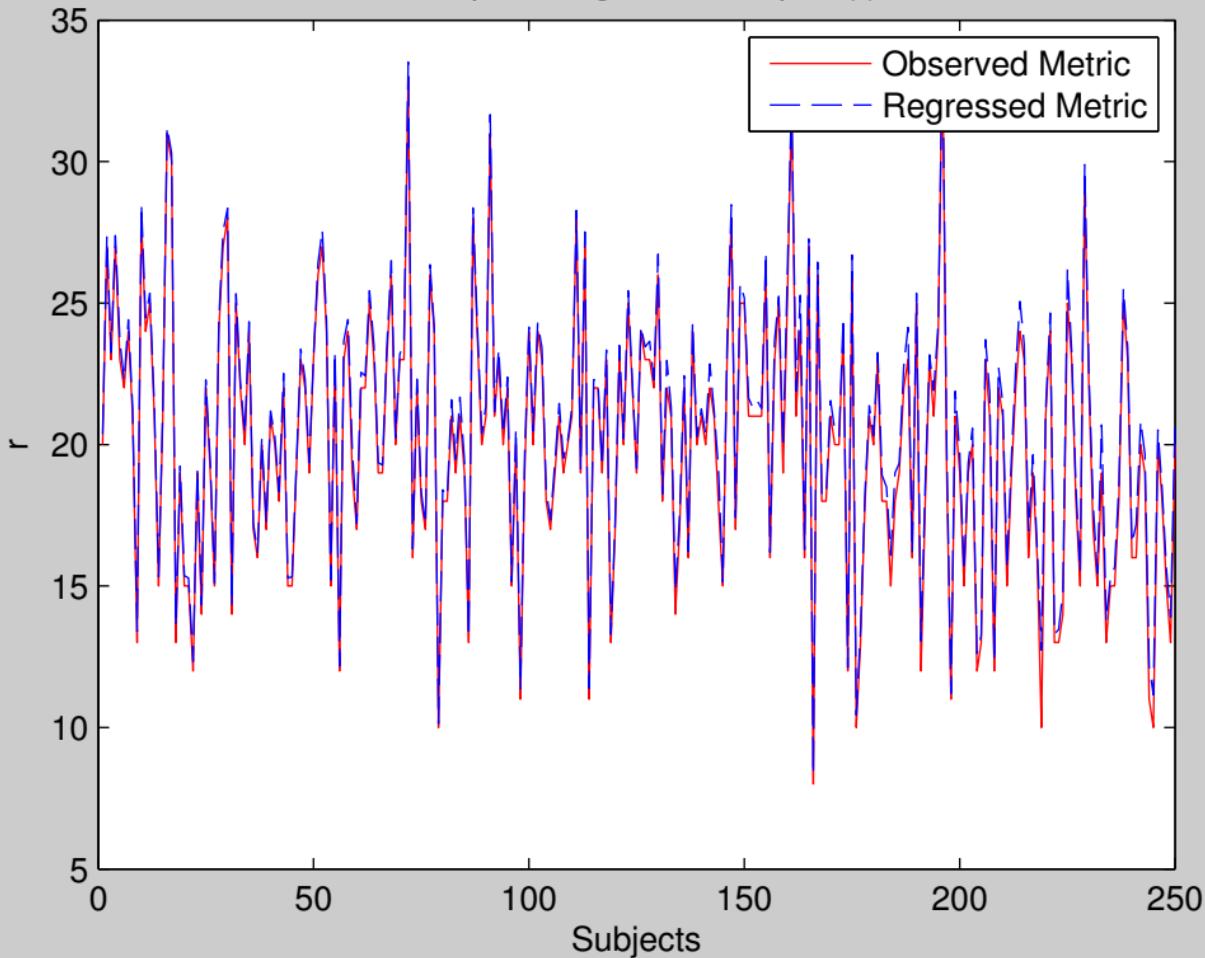
Group 3: Longest State Span (r)



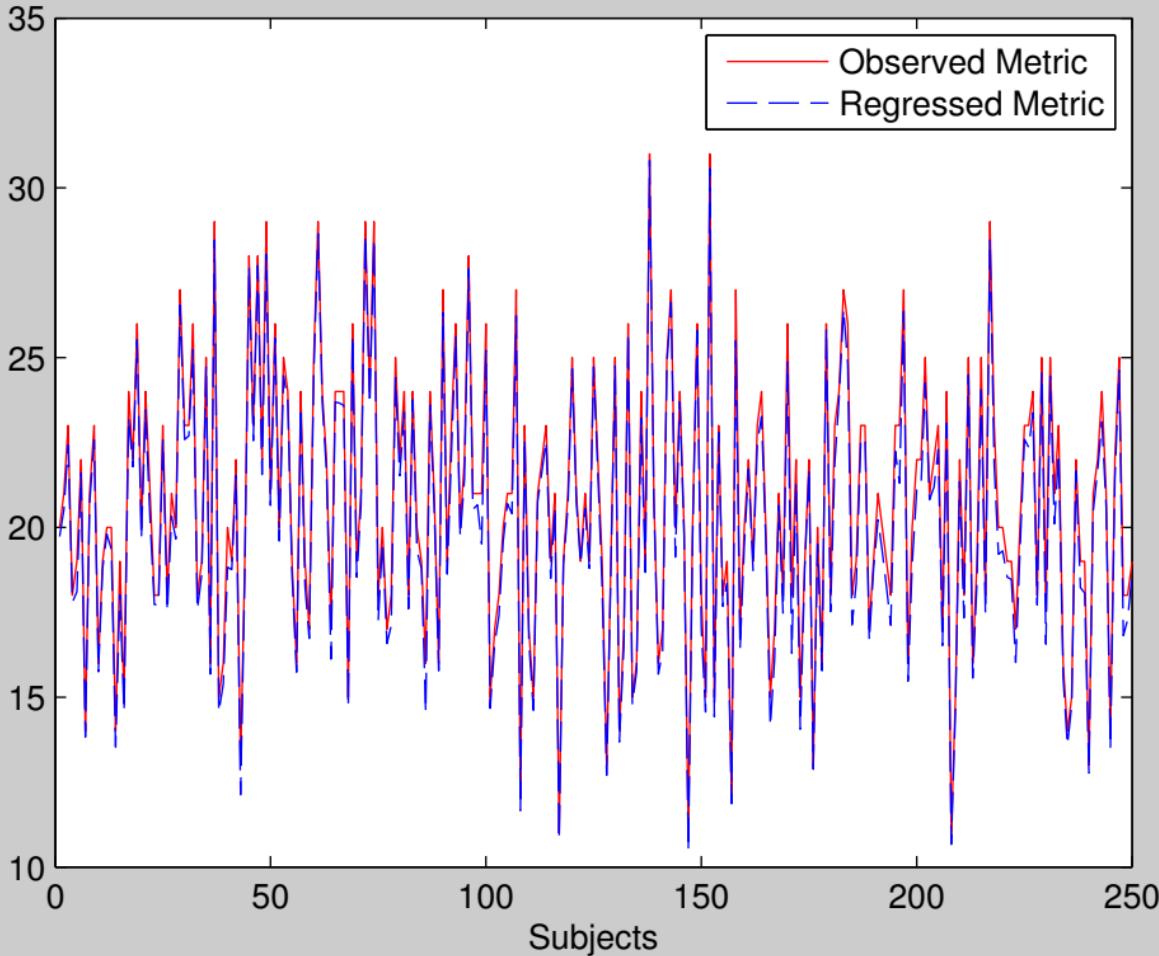
Group 4: Longest State Span (r)



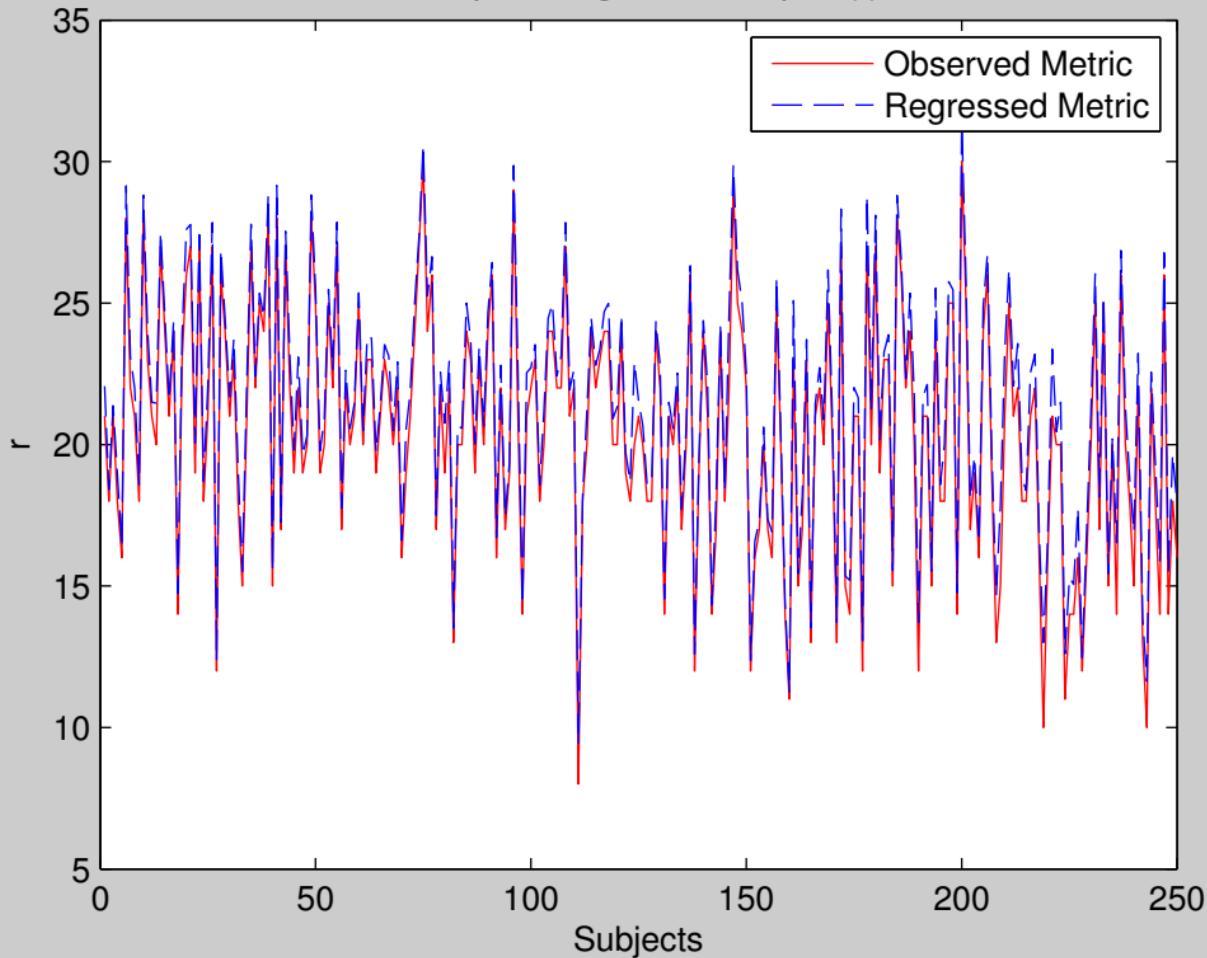
Group 5: Longest State Span (r)



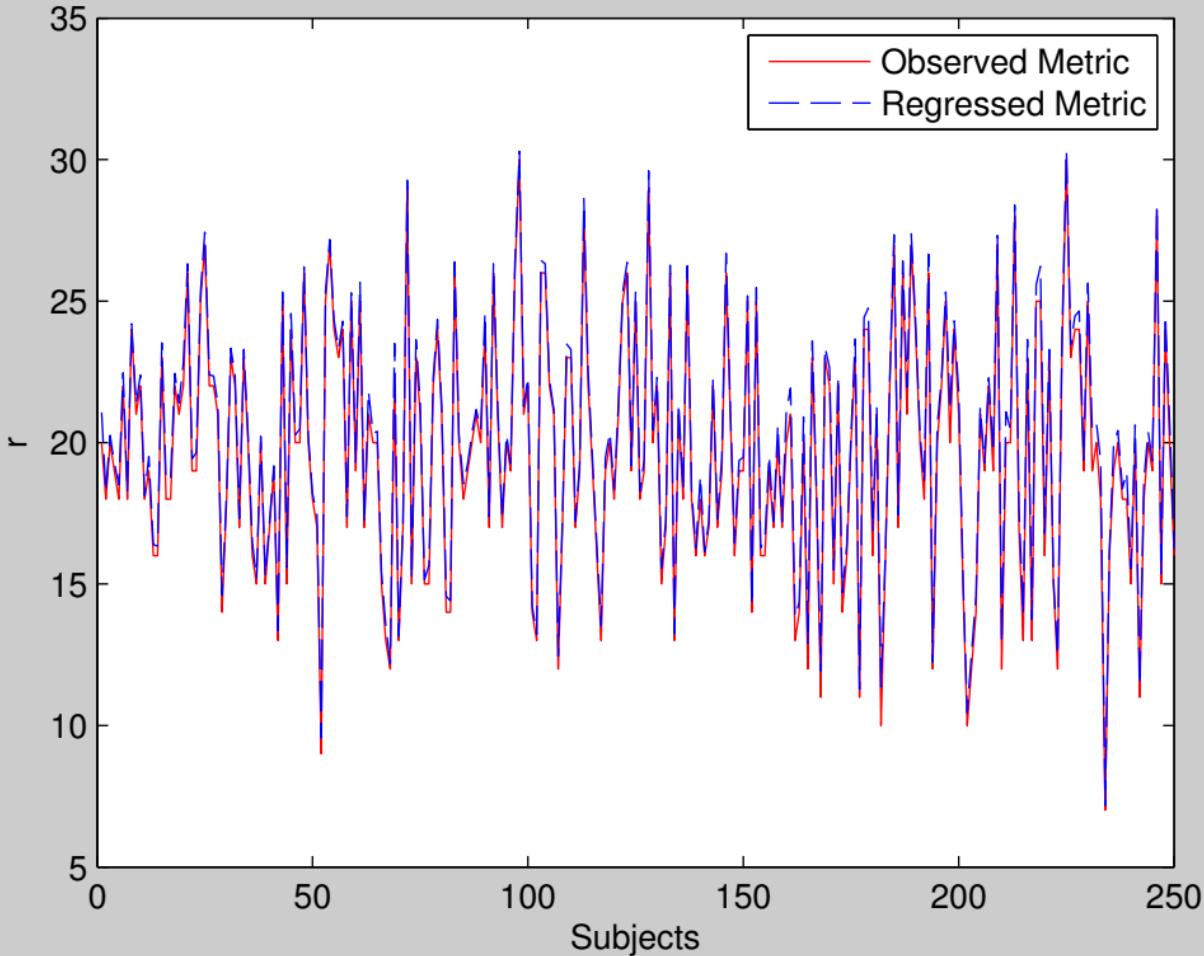
Group 6: Longest State Span (r)



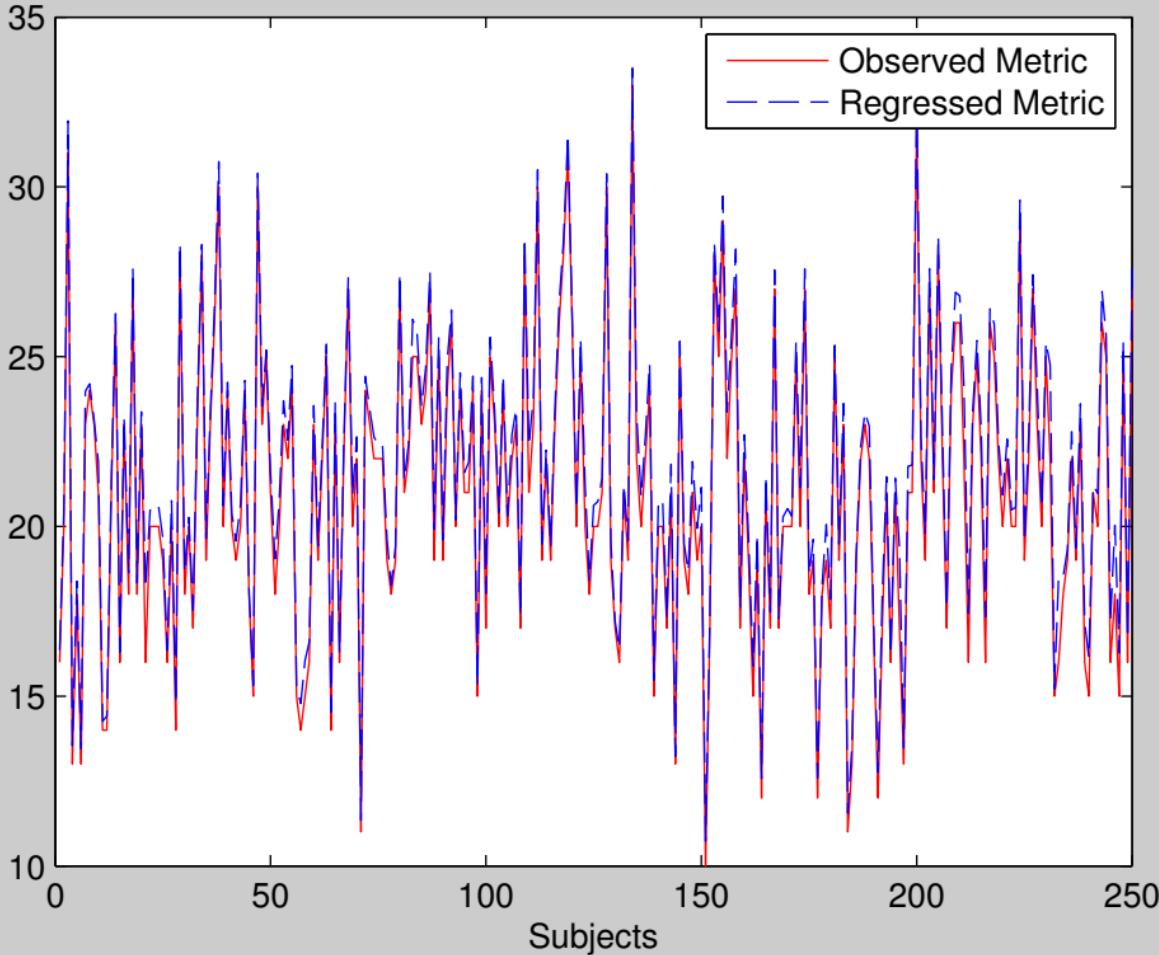
Group 7: Longest State Span (r)



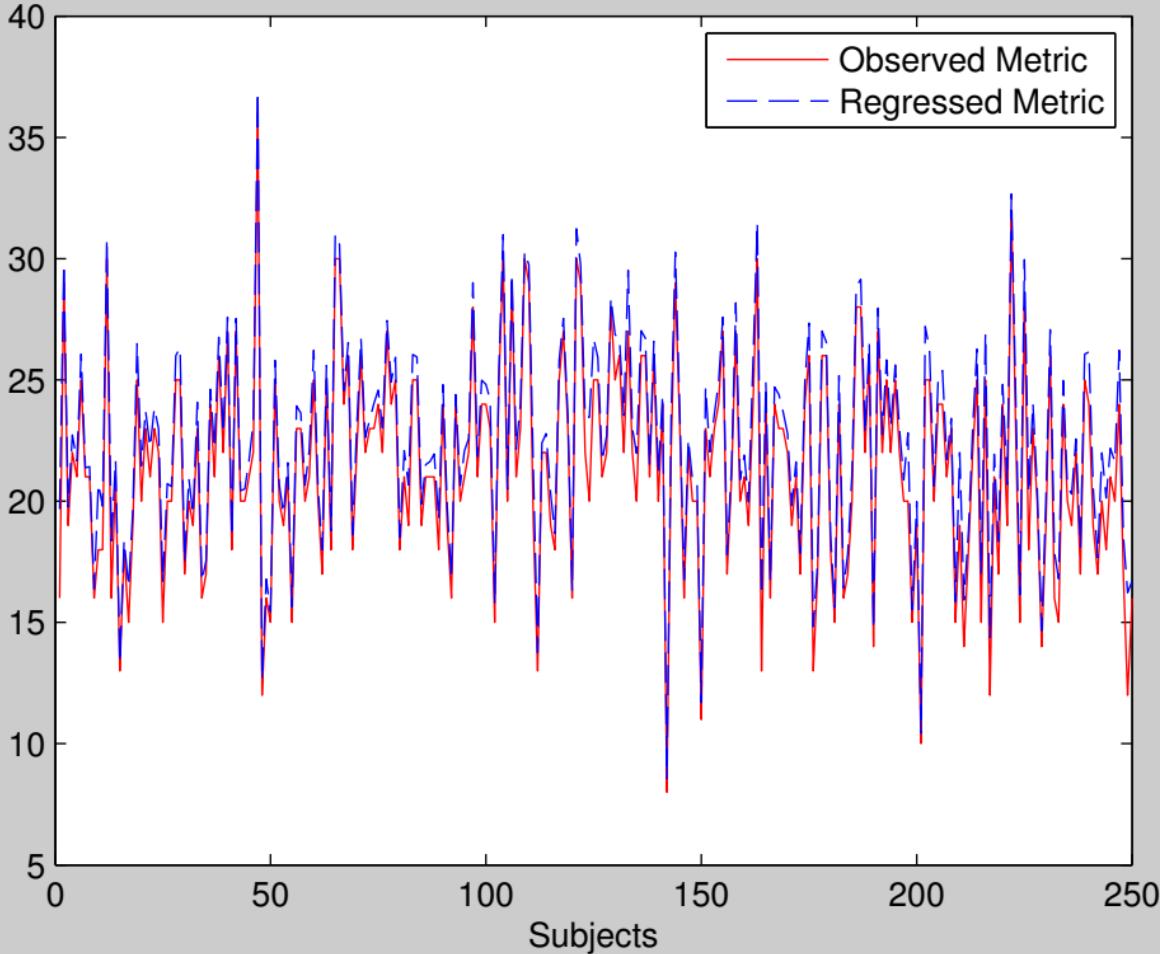
Group 8: Longest State Span (r)



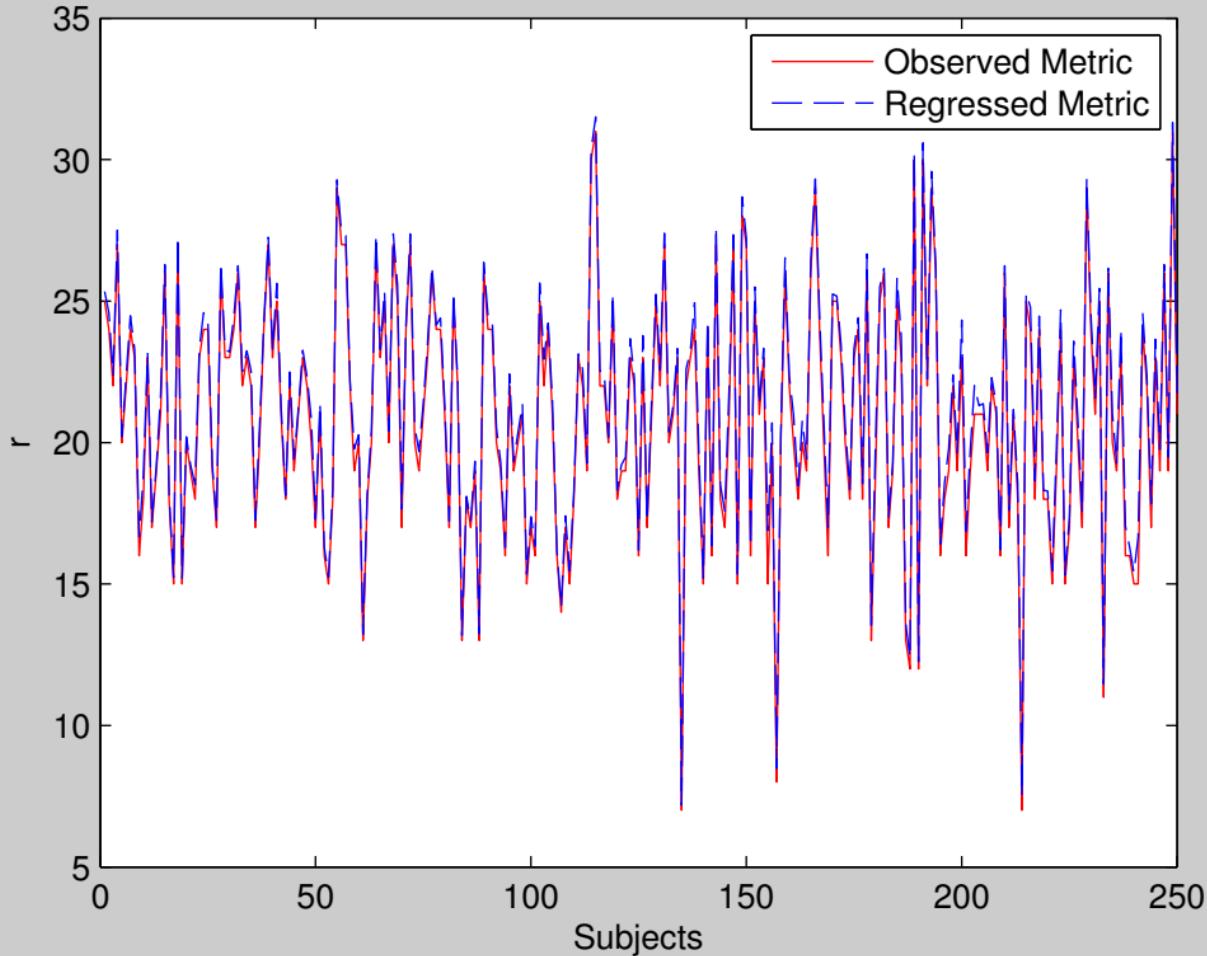
Group 9: Longest State Span (r)



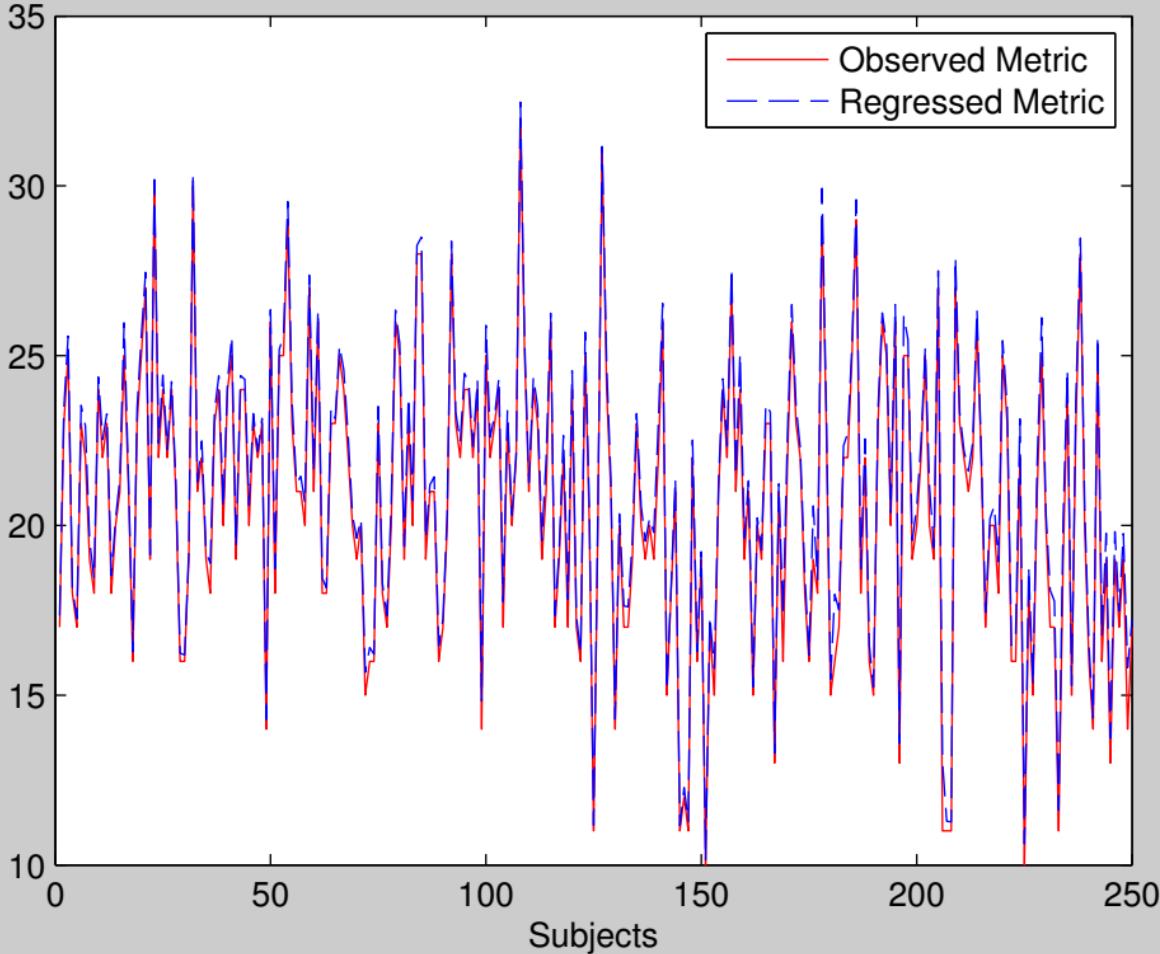
Group 10: Longest State Span (r)



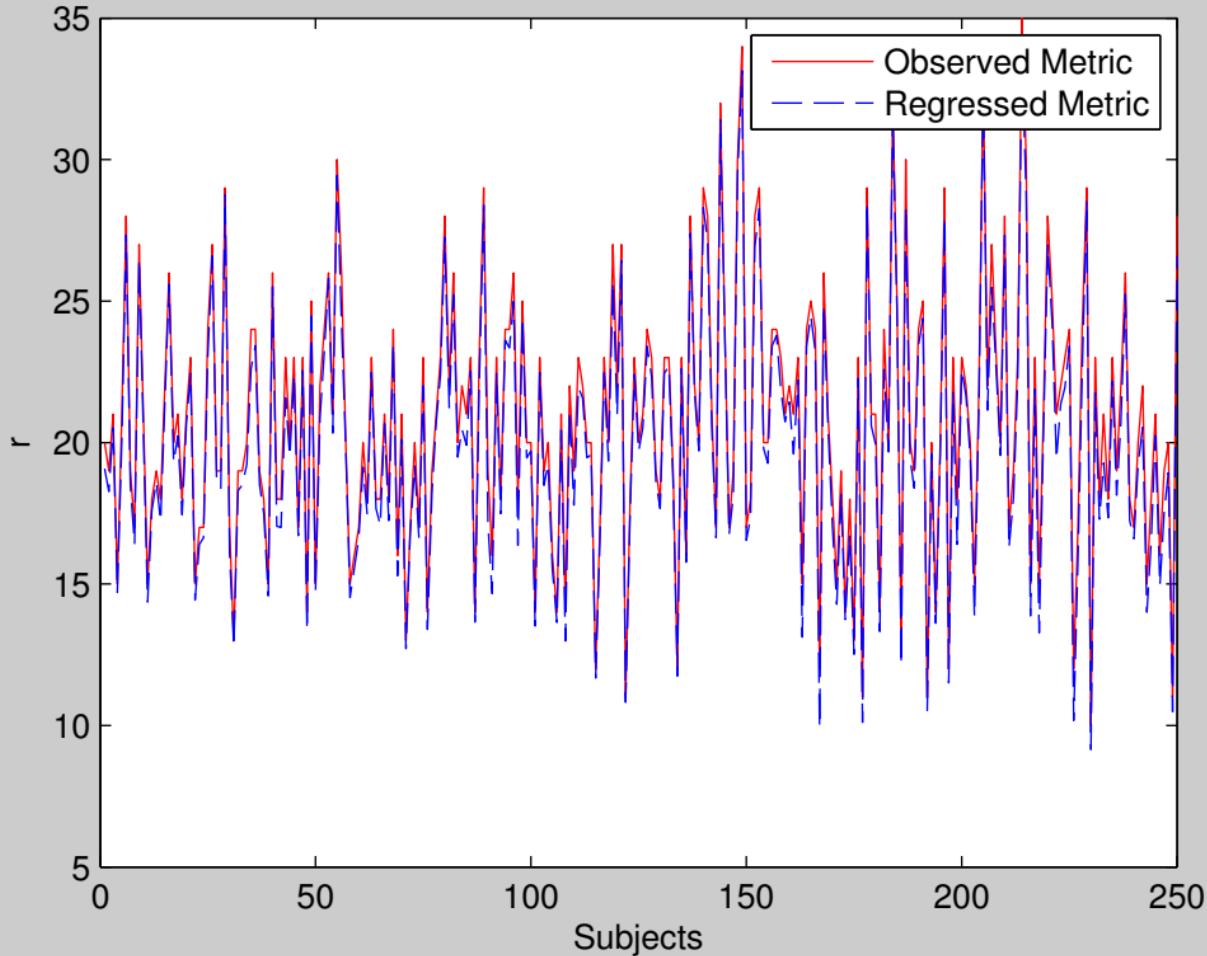
Group 11: Longest State Span (r)



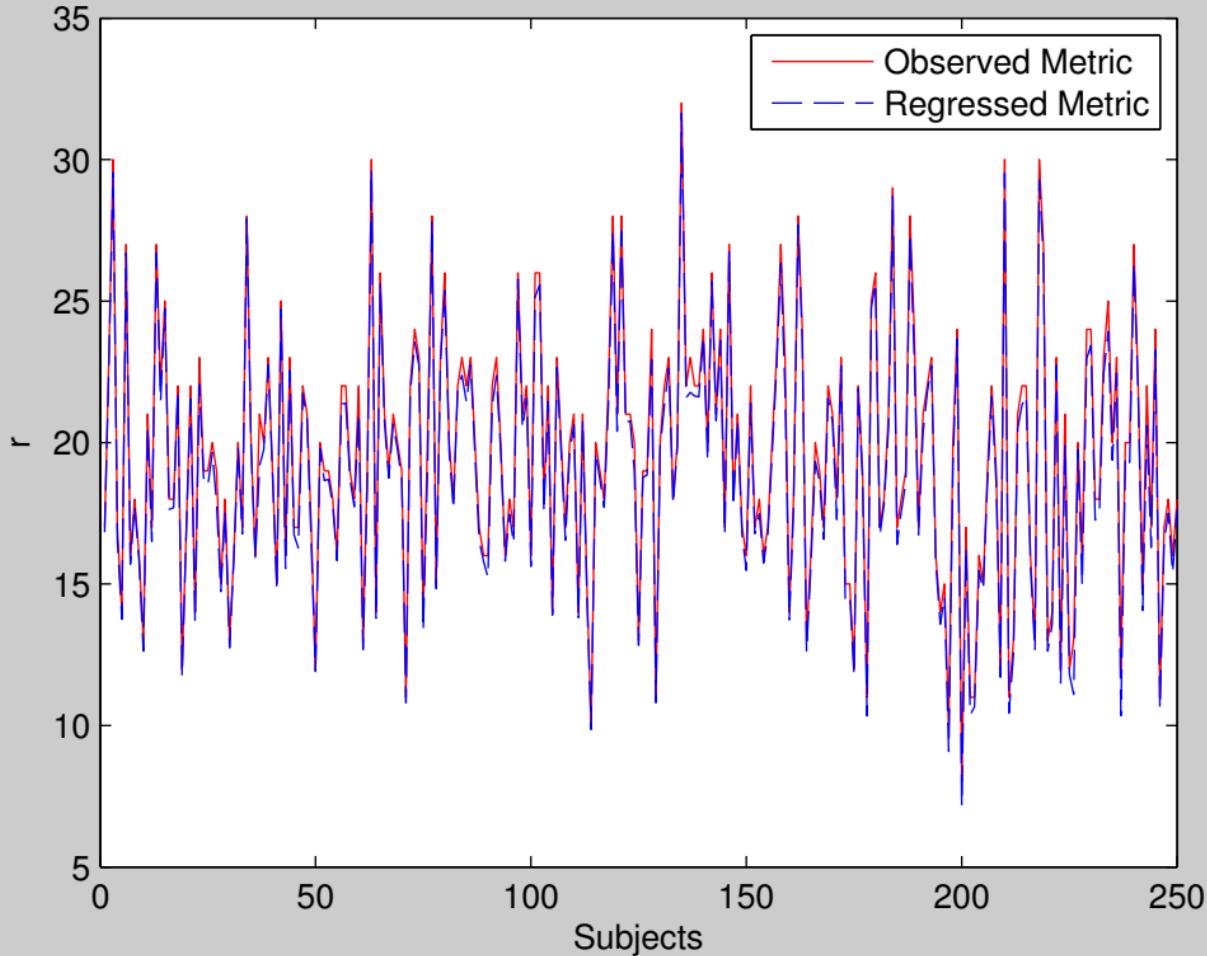
Group 12: Longest State Span (r)



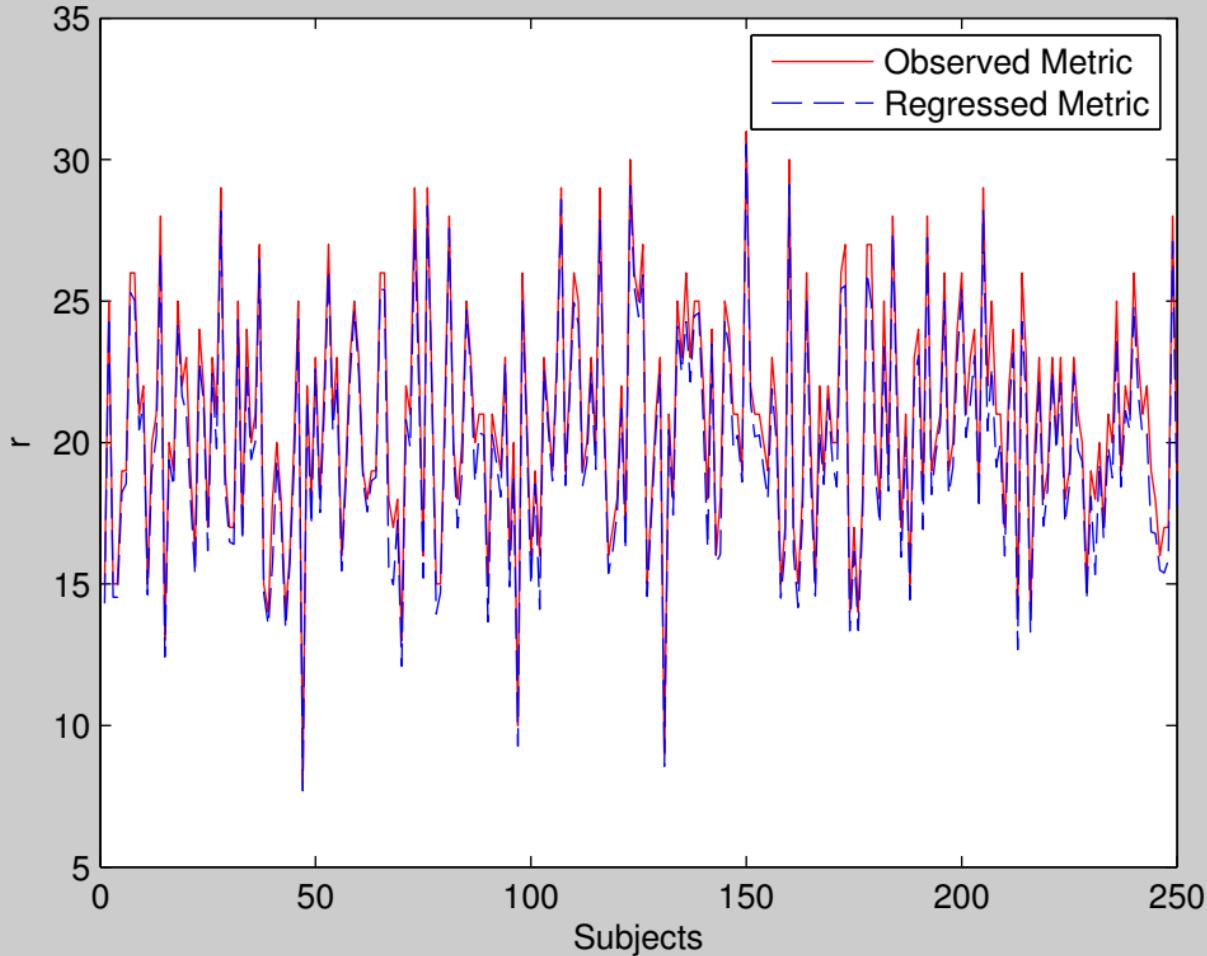
Group 13: Longest State Span (r)



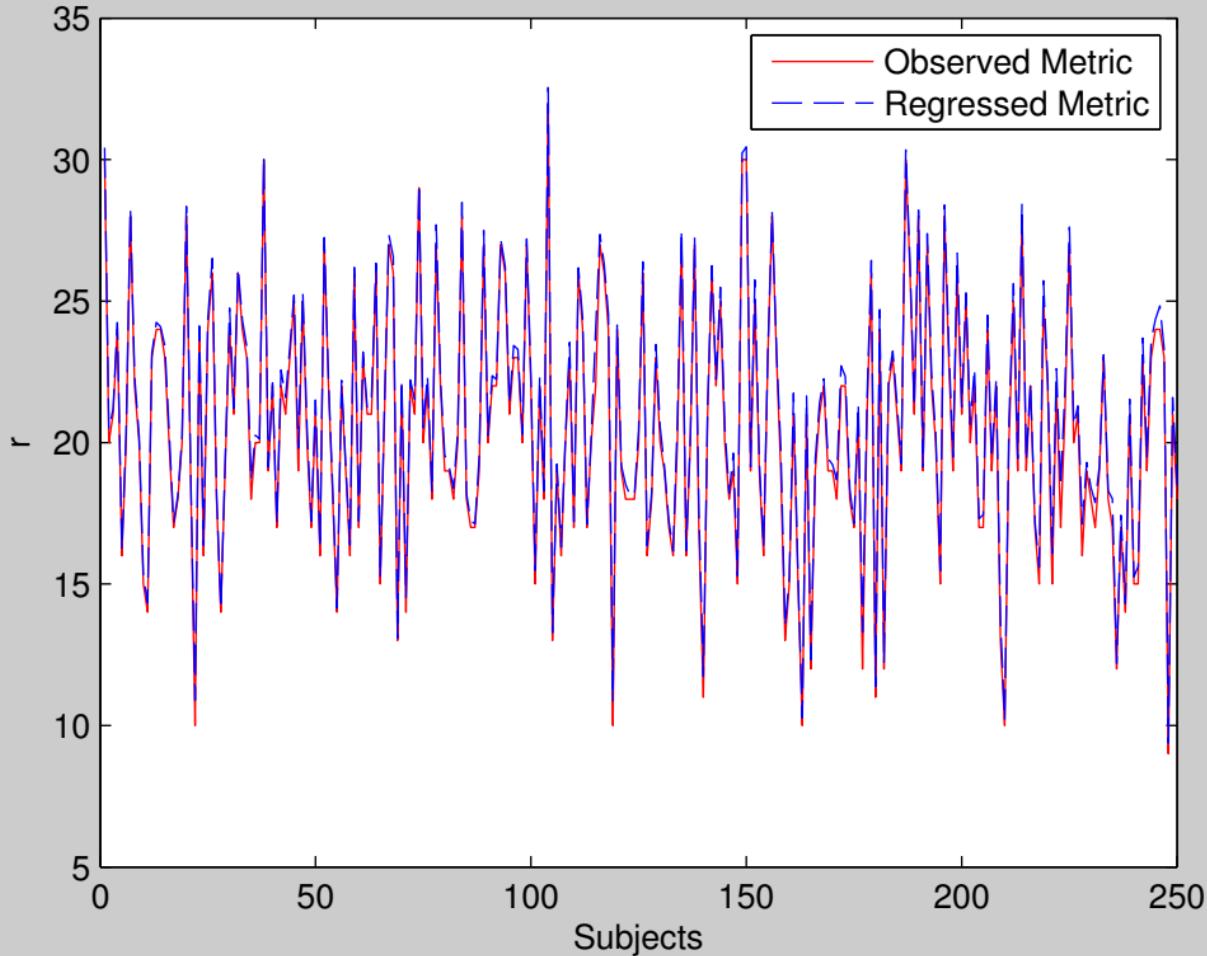
Group 14: Longest State Span (r)



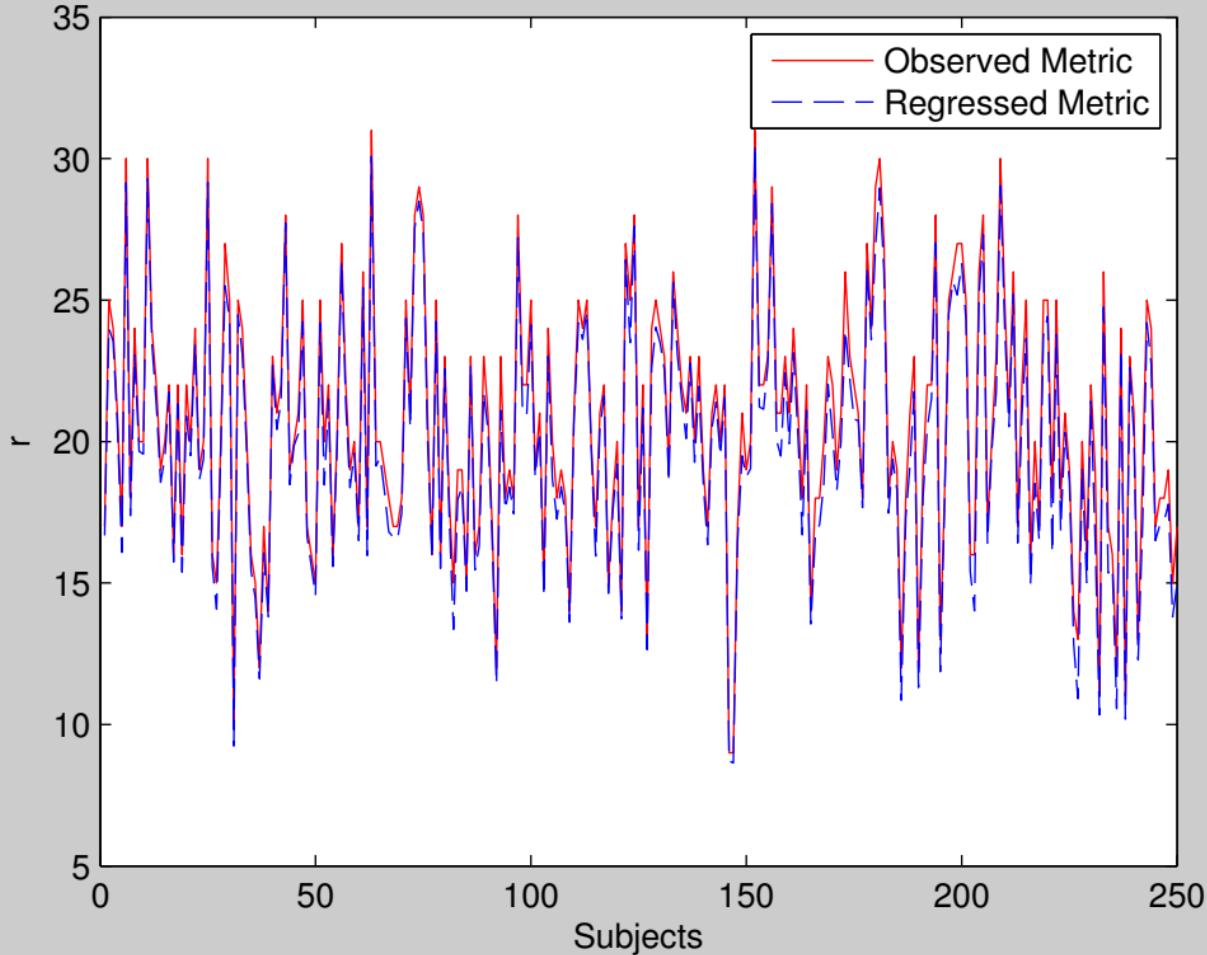
Group 15: Longest State Span (r)



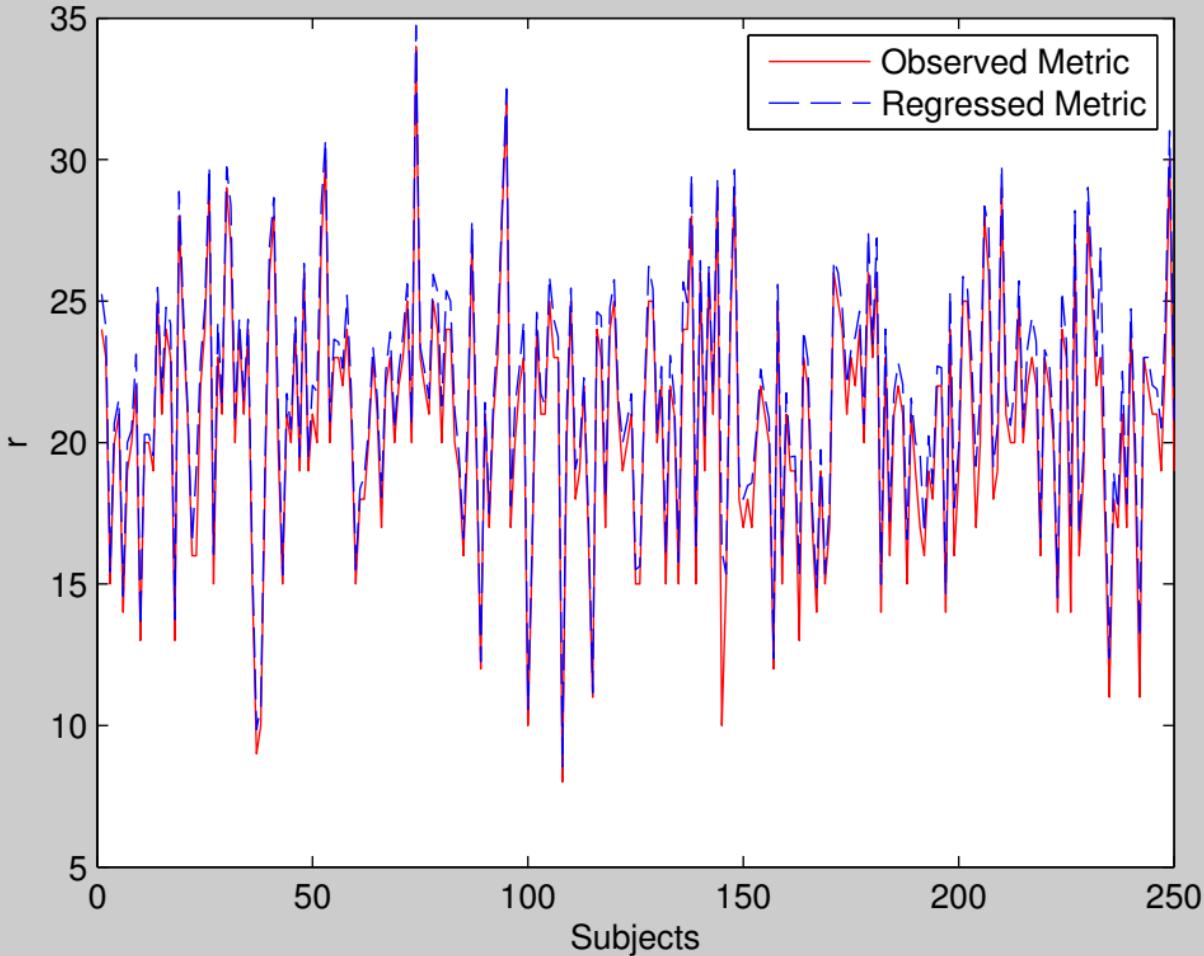
Group 16: Longest State Span (r)



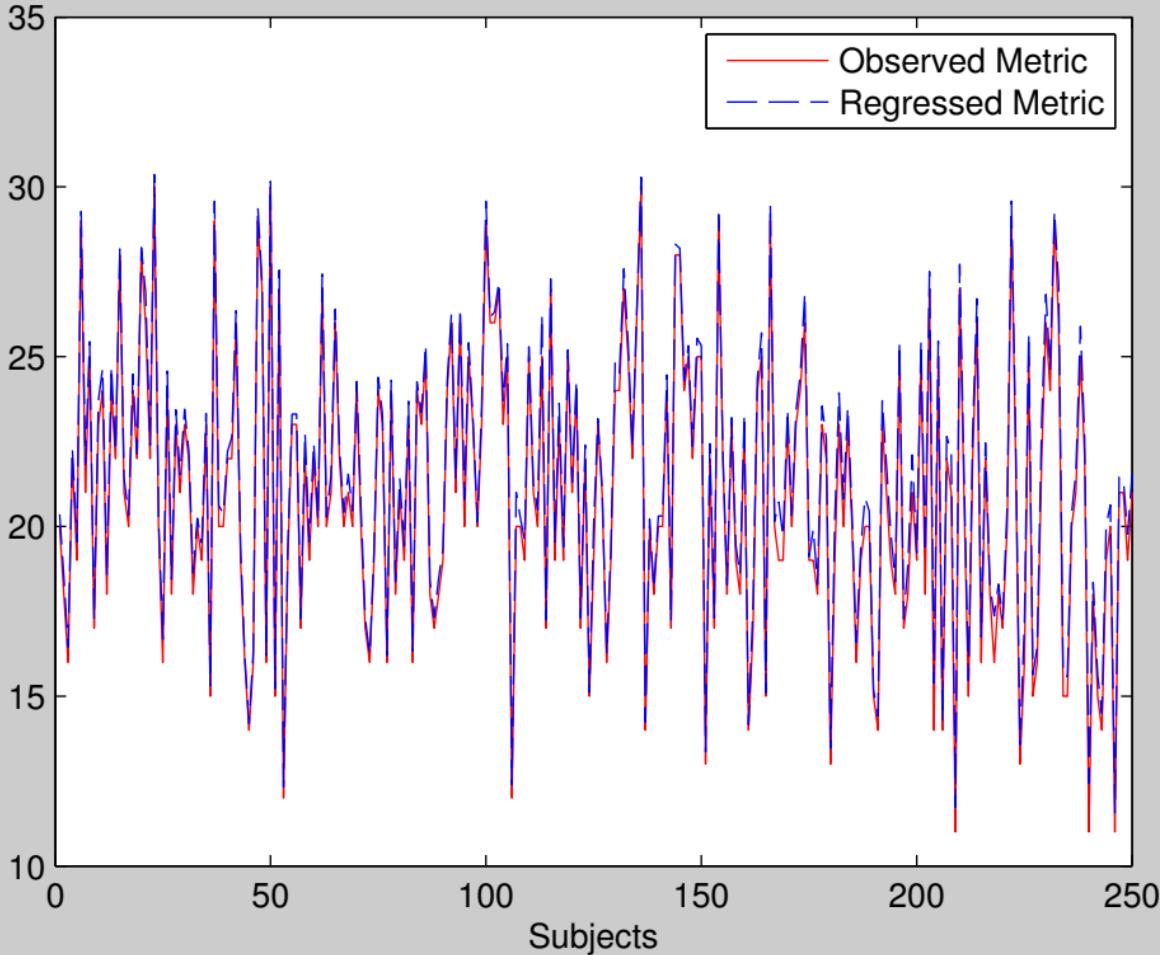
Group 17: Longest State Span (r)



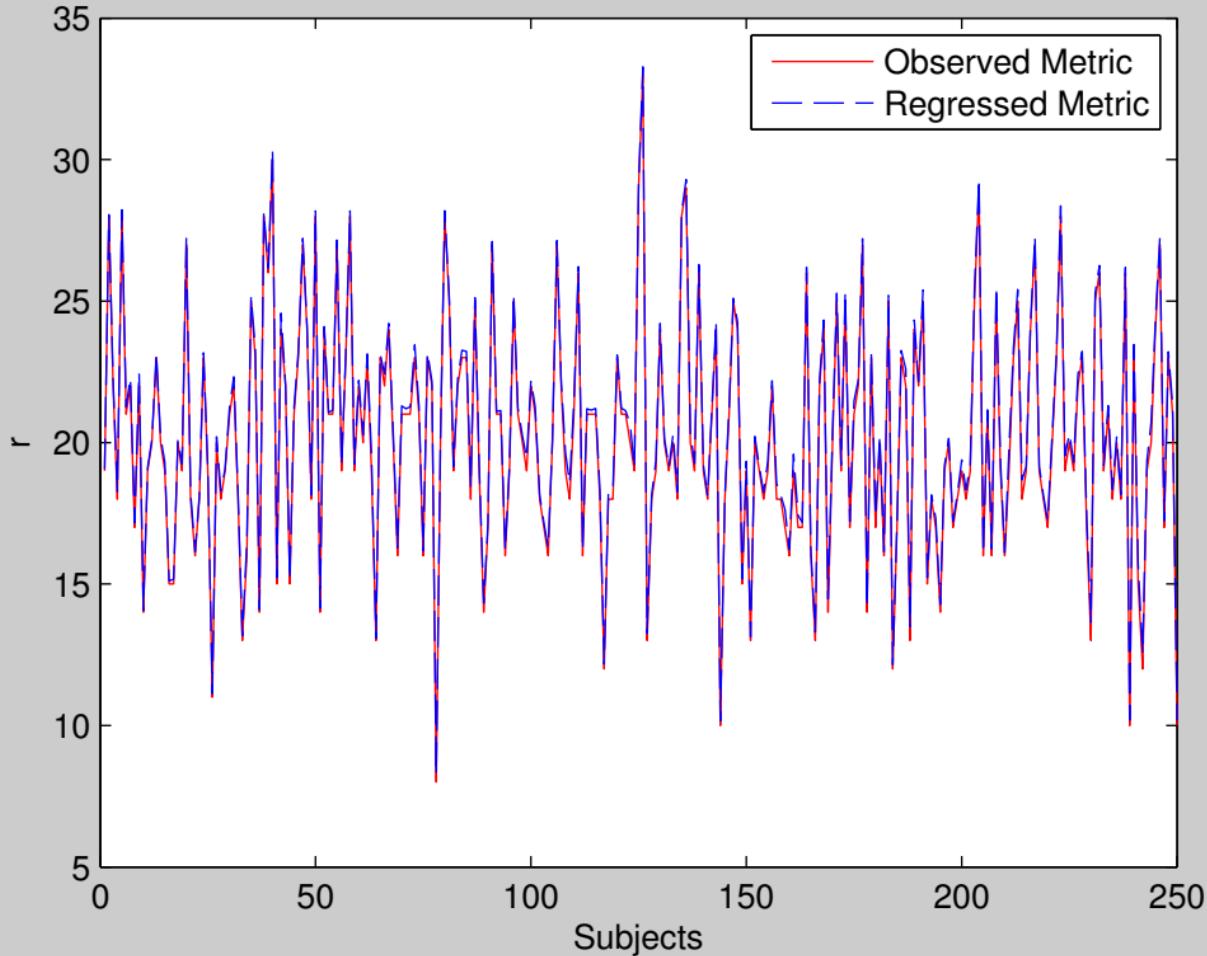
Group 18: Longest State Span (r)



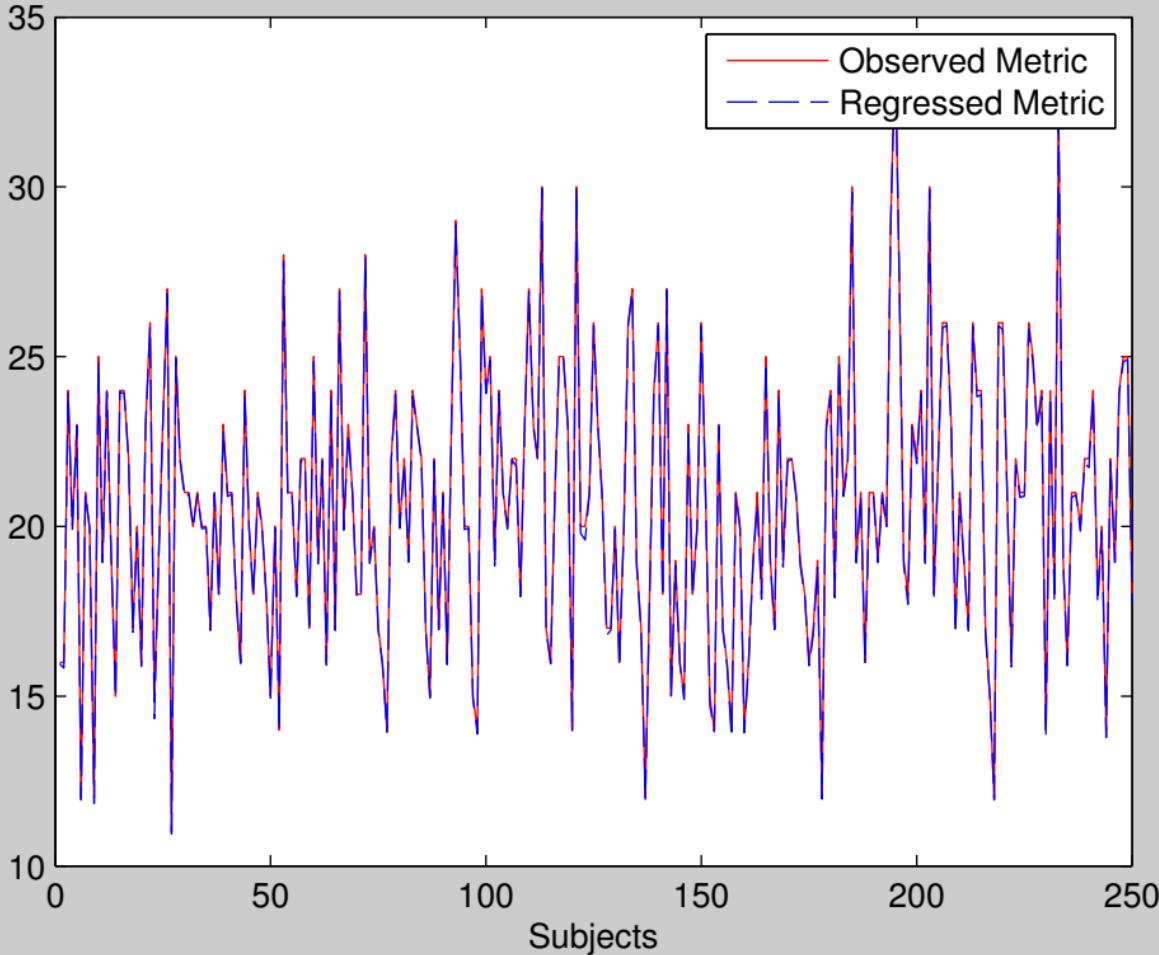
Group 19: Longest State Span (r)



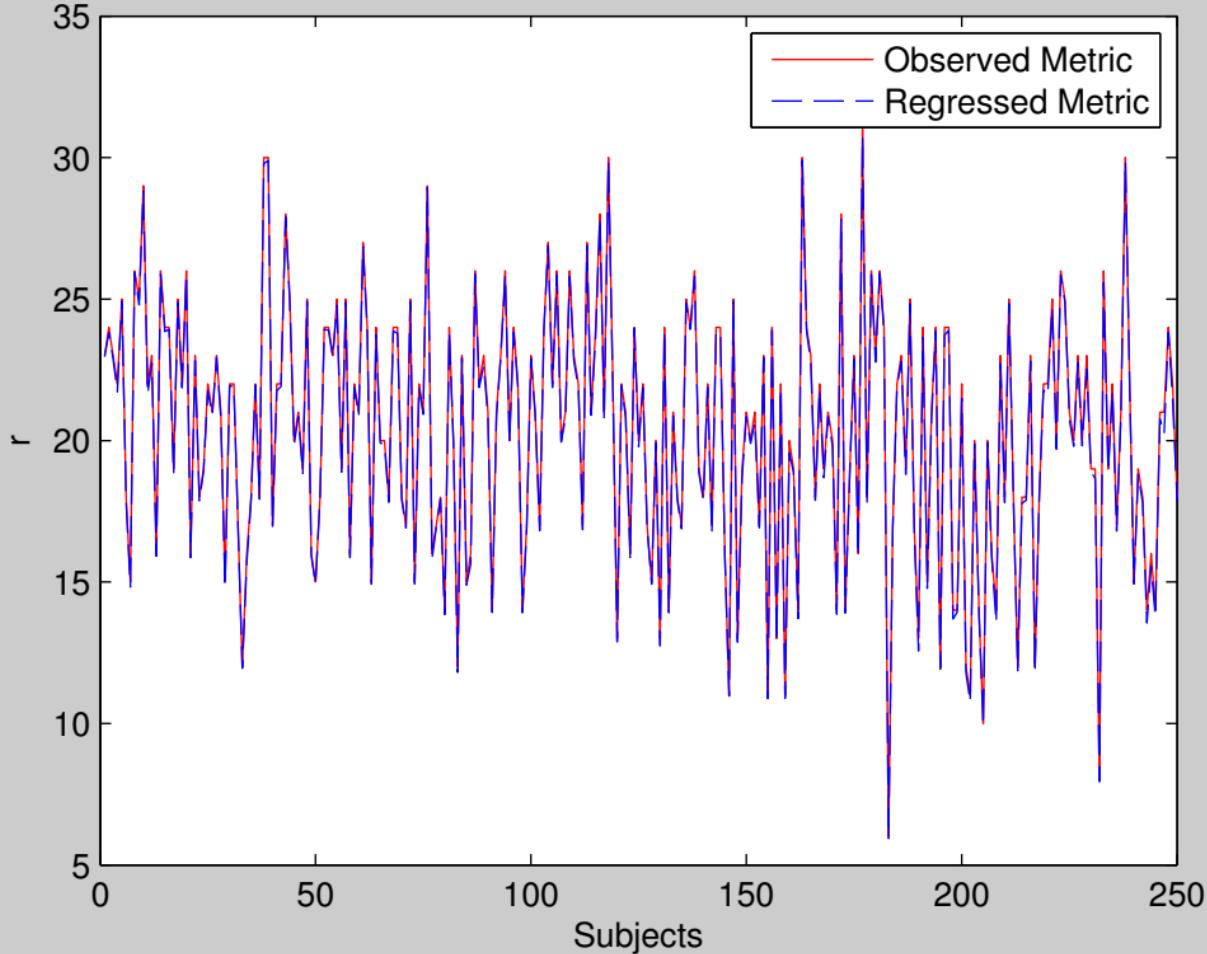
Group 20: Longest State Span (r)



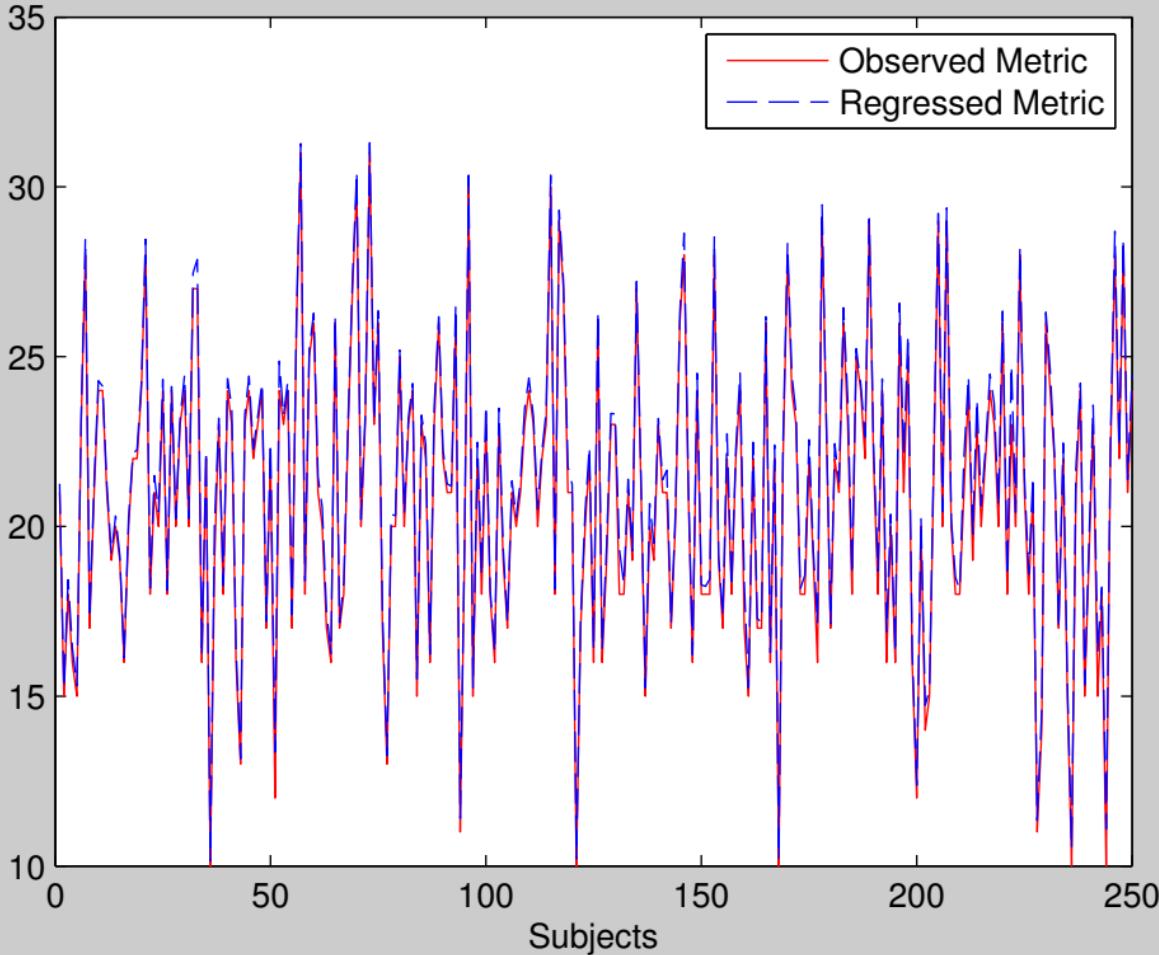
Group 21: Longest State Span (r)



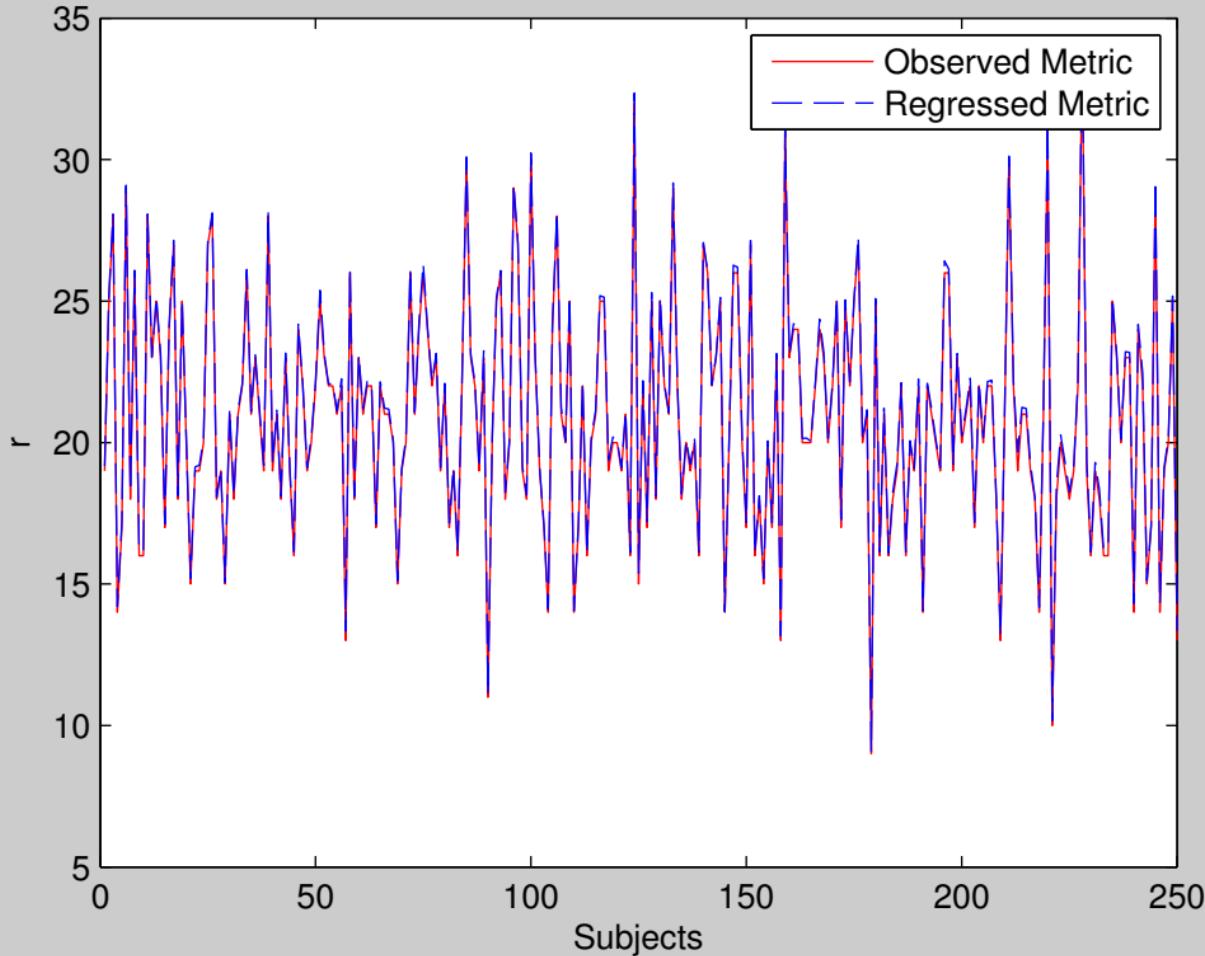
Group 22: Longest State Span (r)



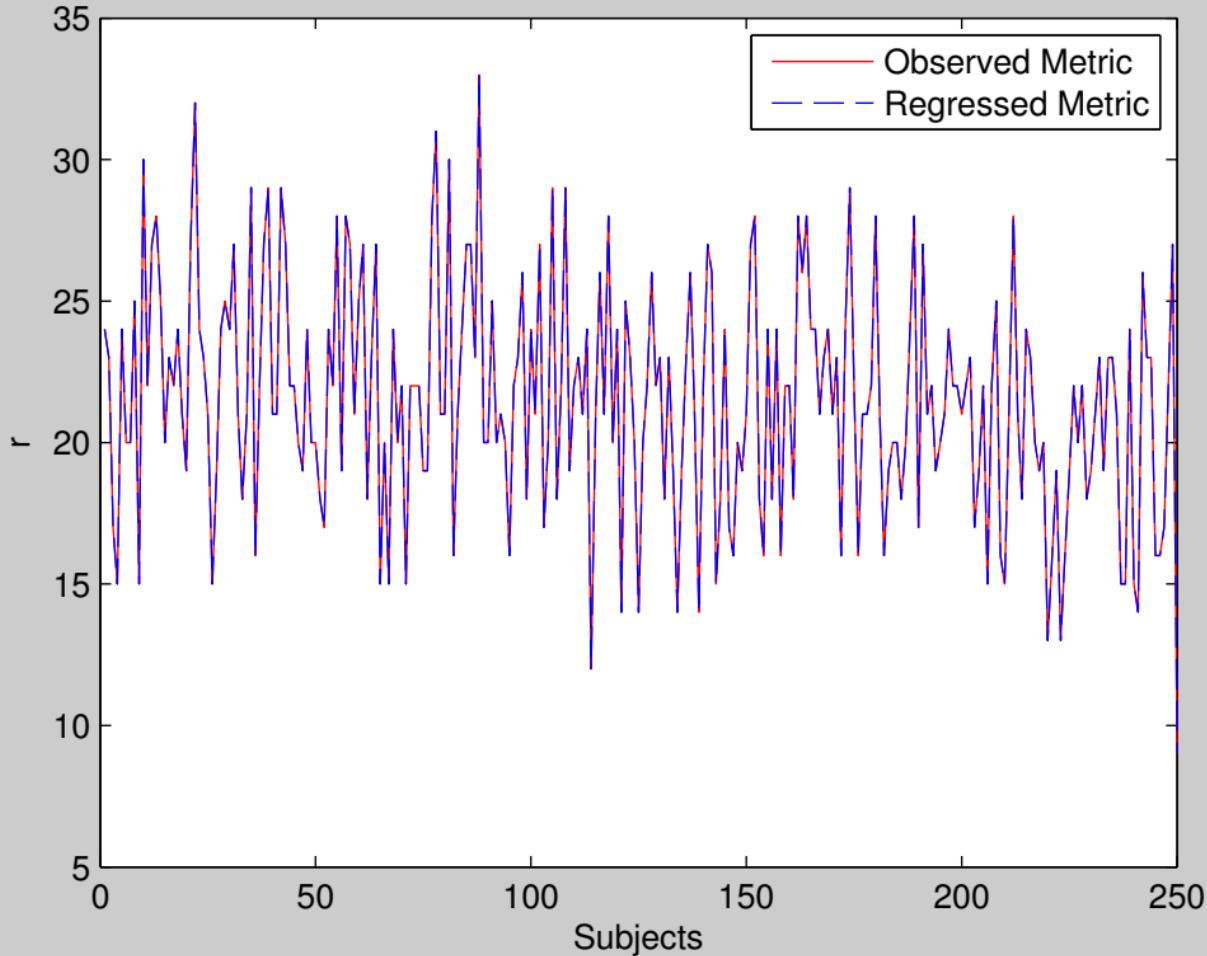
Group 23: Longest State Span (r)



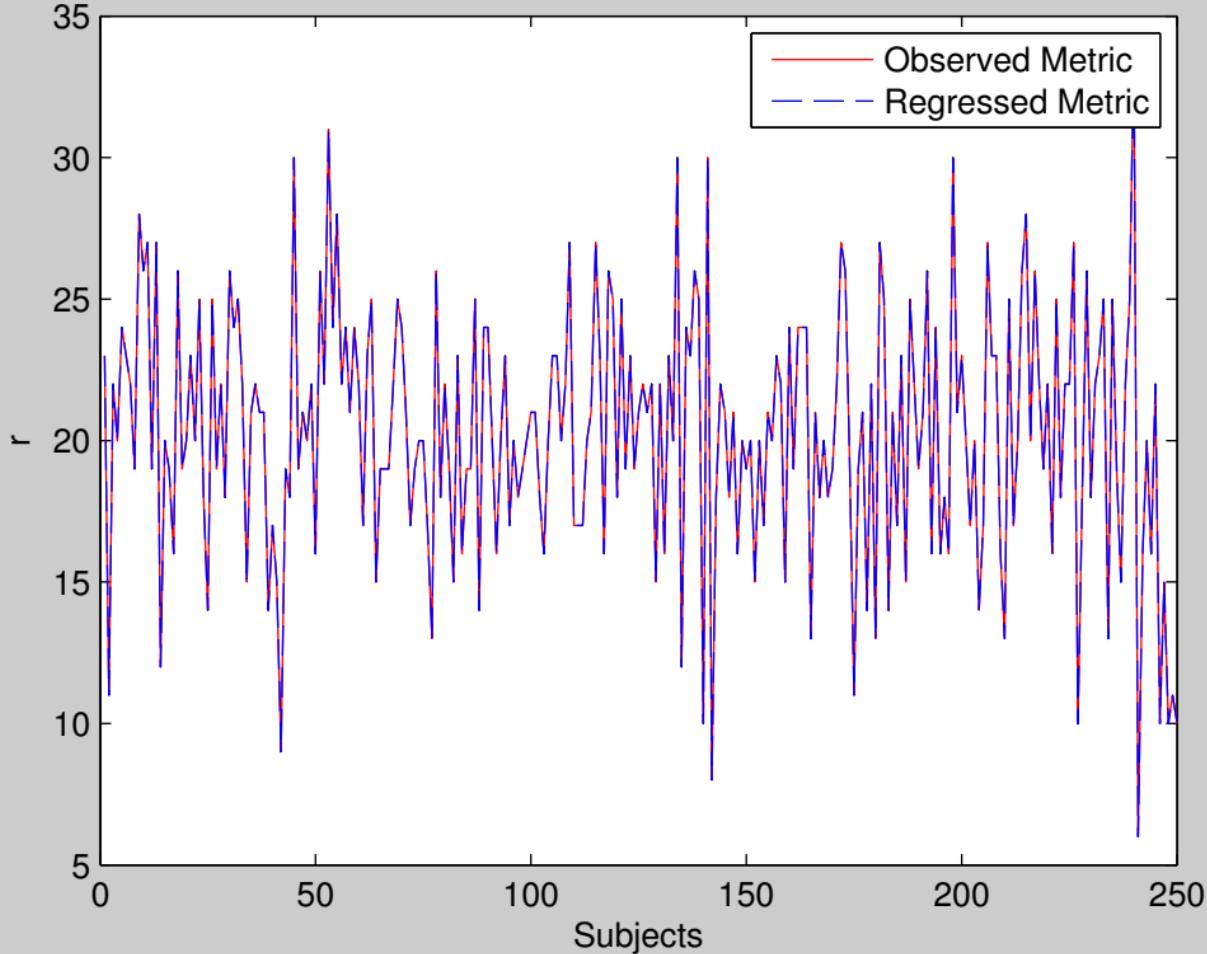
Group 24: Longest State Span (r)



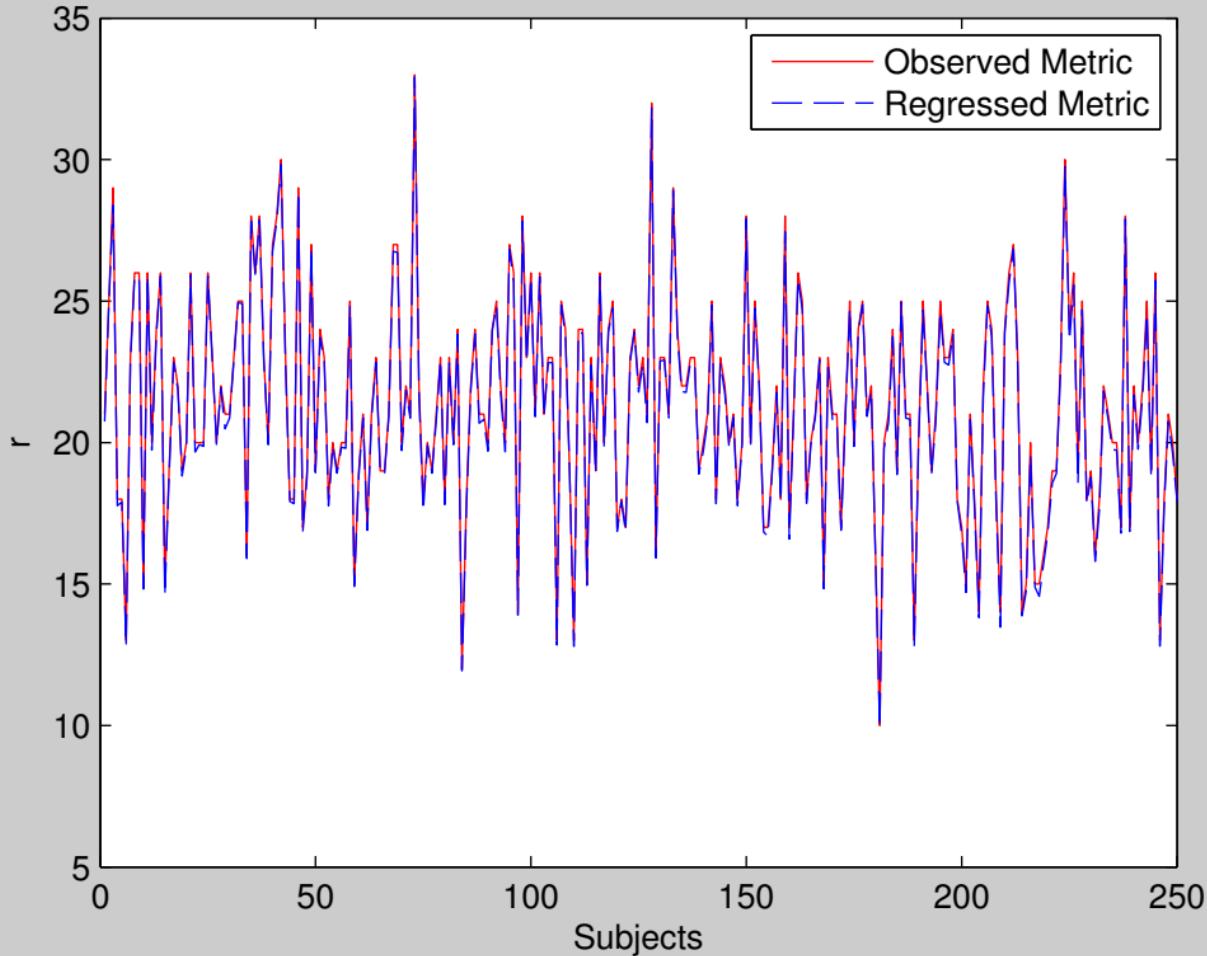
Group 25: Longest State Span (r)



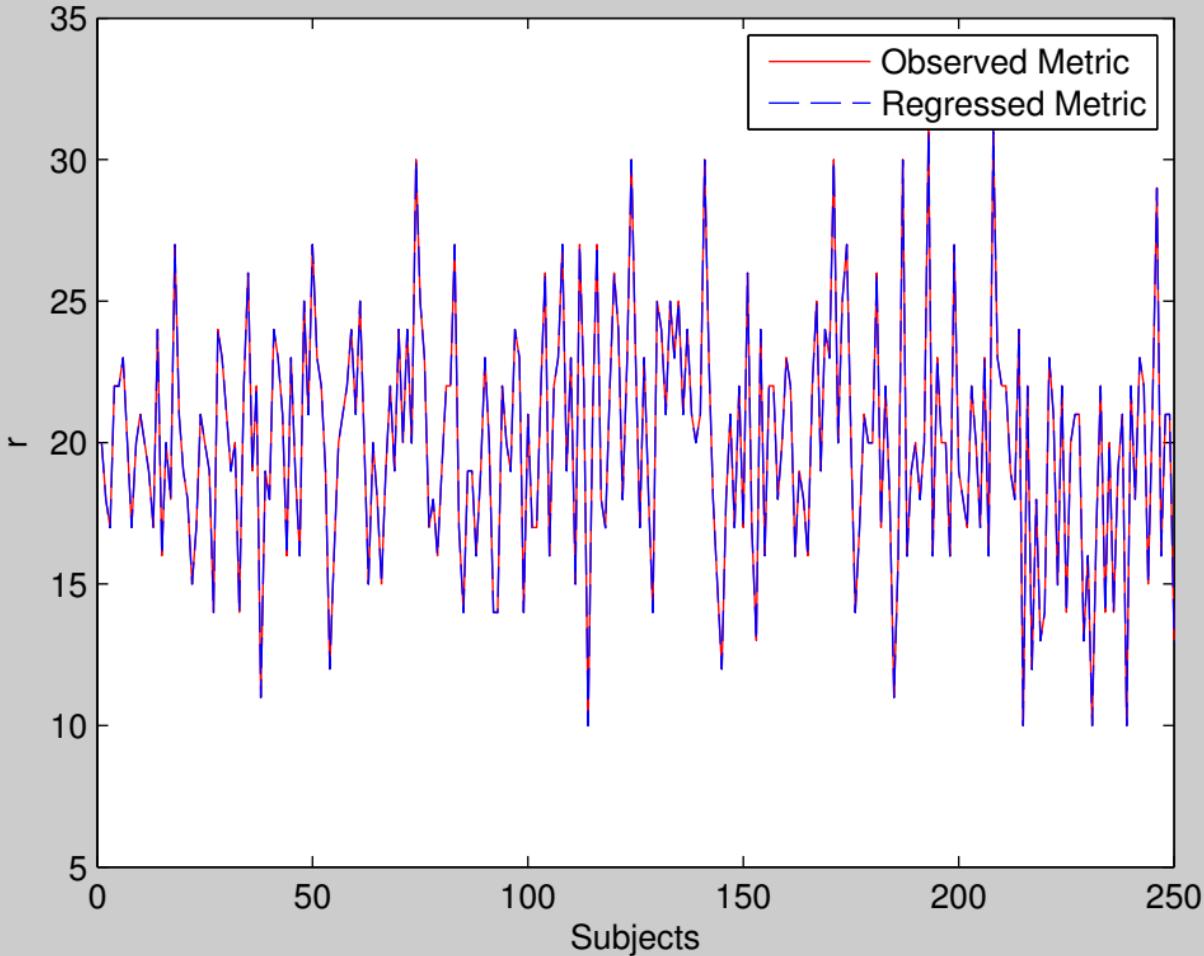
Group 26: Longest State Span (r)



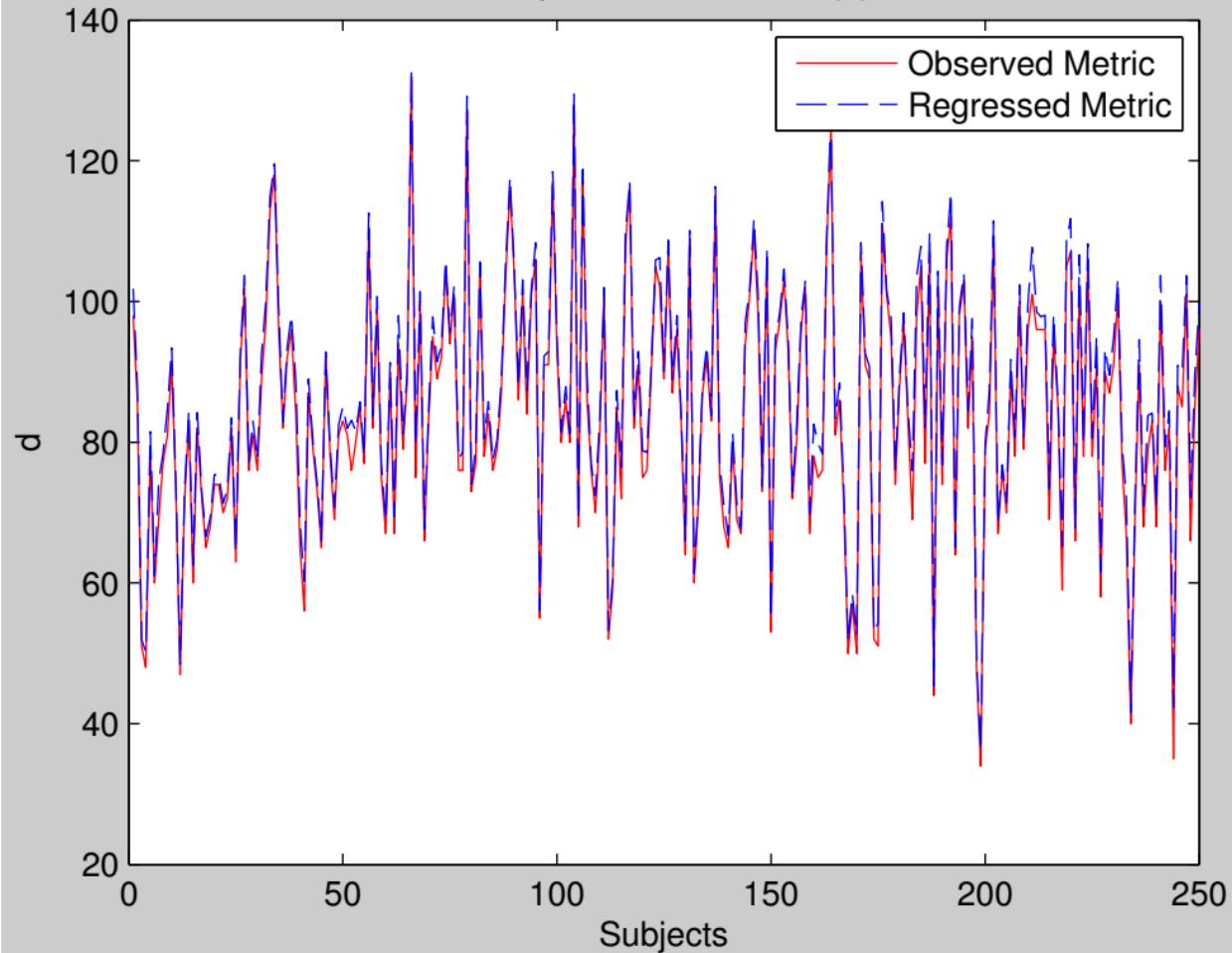
Group 27: Longest State Span (r)



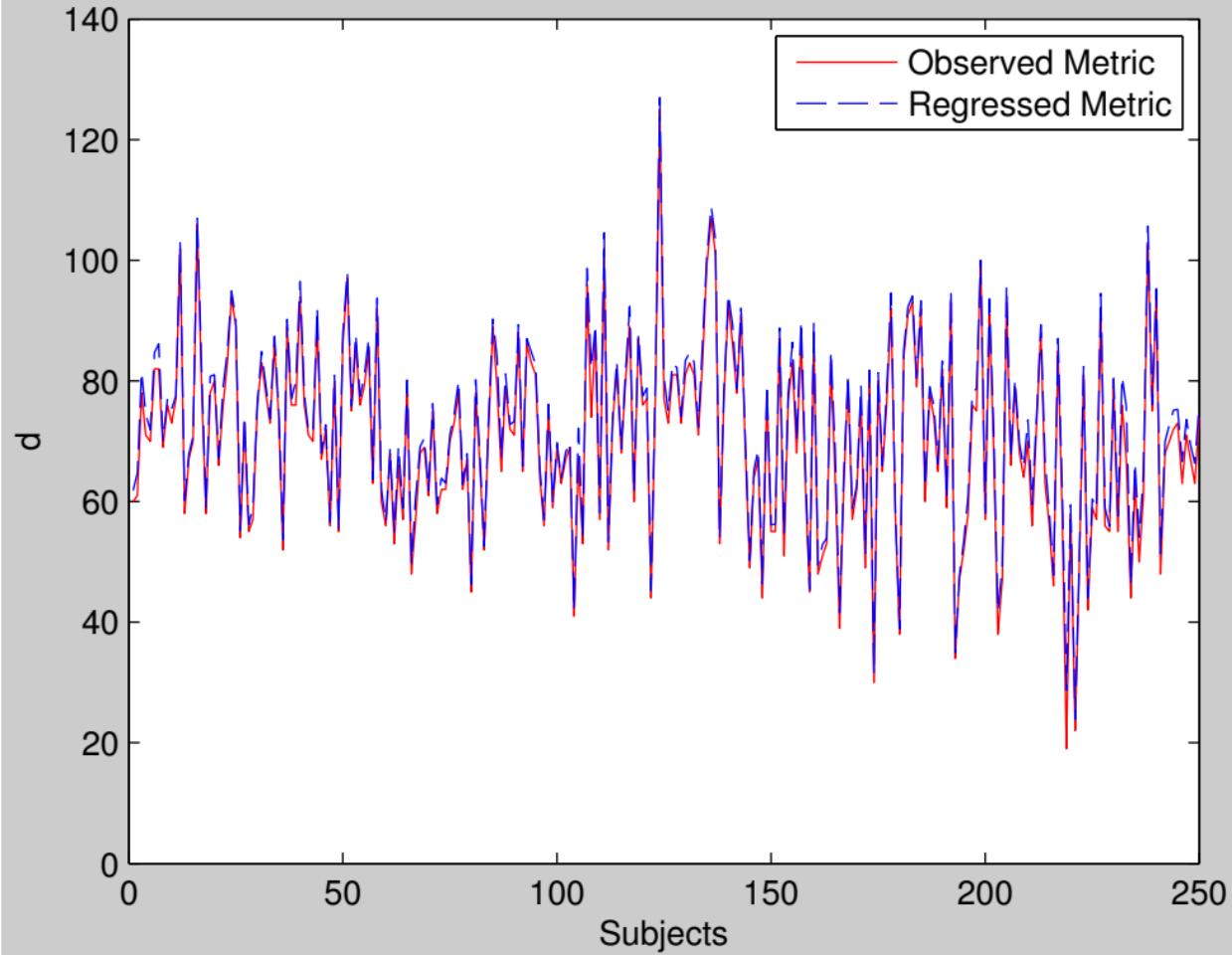
Group 28: Longest State Span (r)



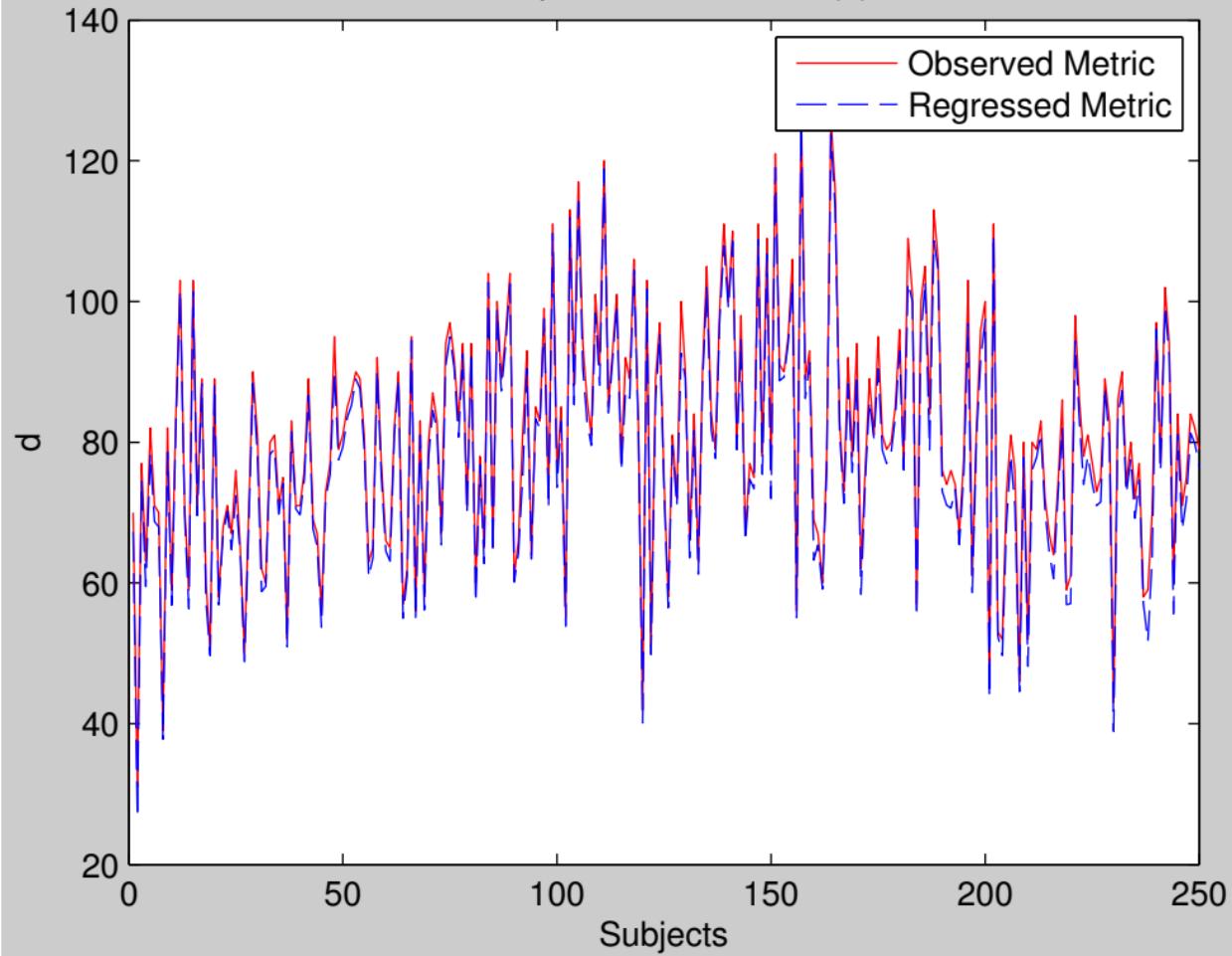
Group 1: Total Distance (d)



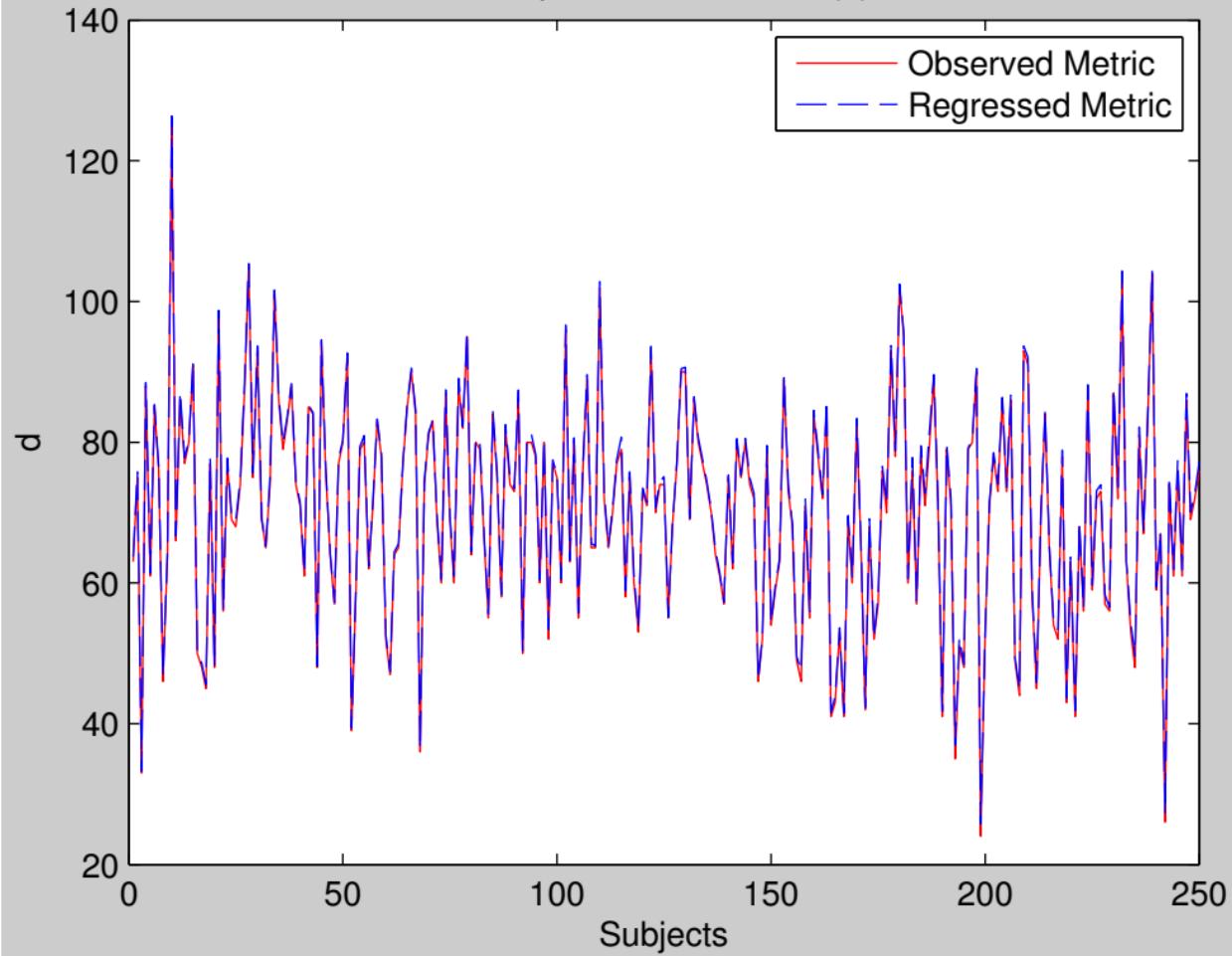
Group 2: Total Distance (d)



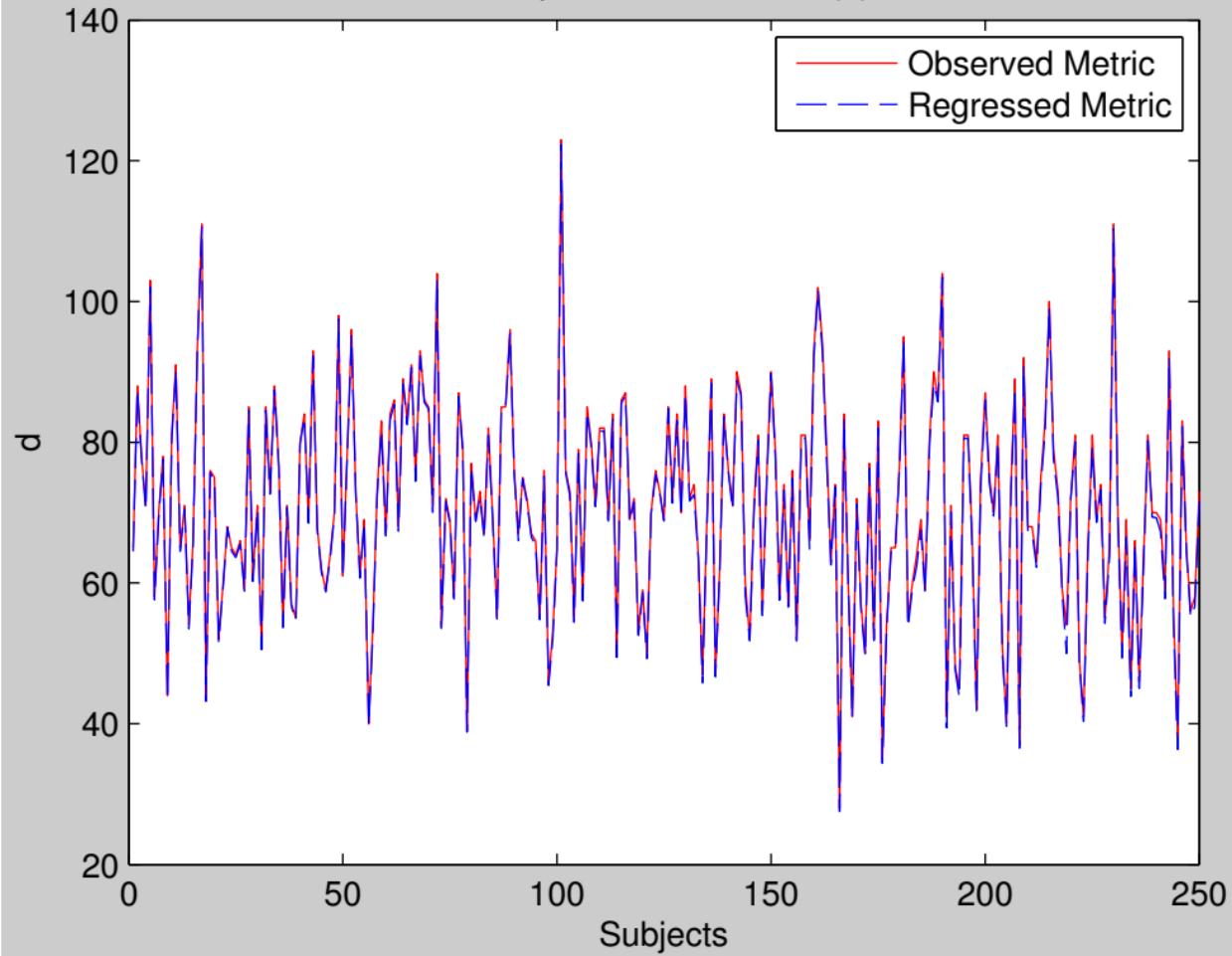
Group 3: Total Distance (d)



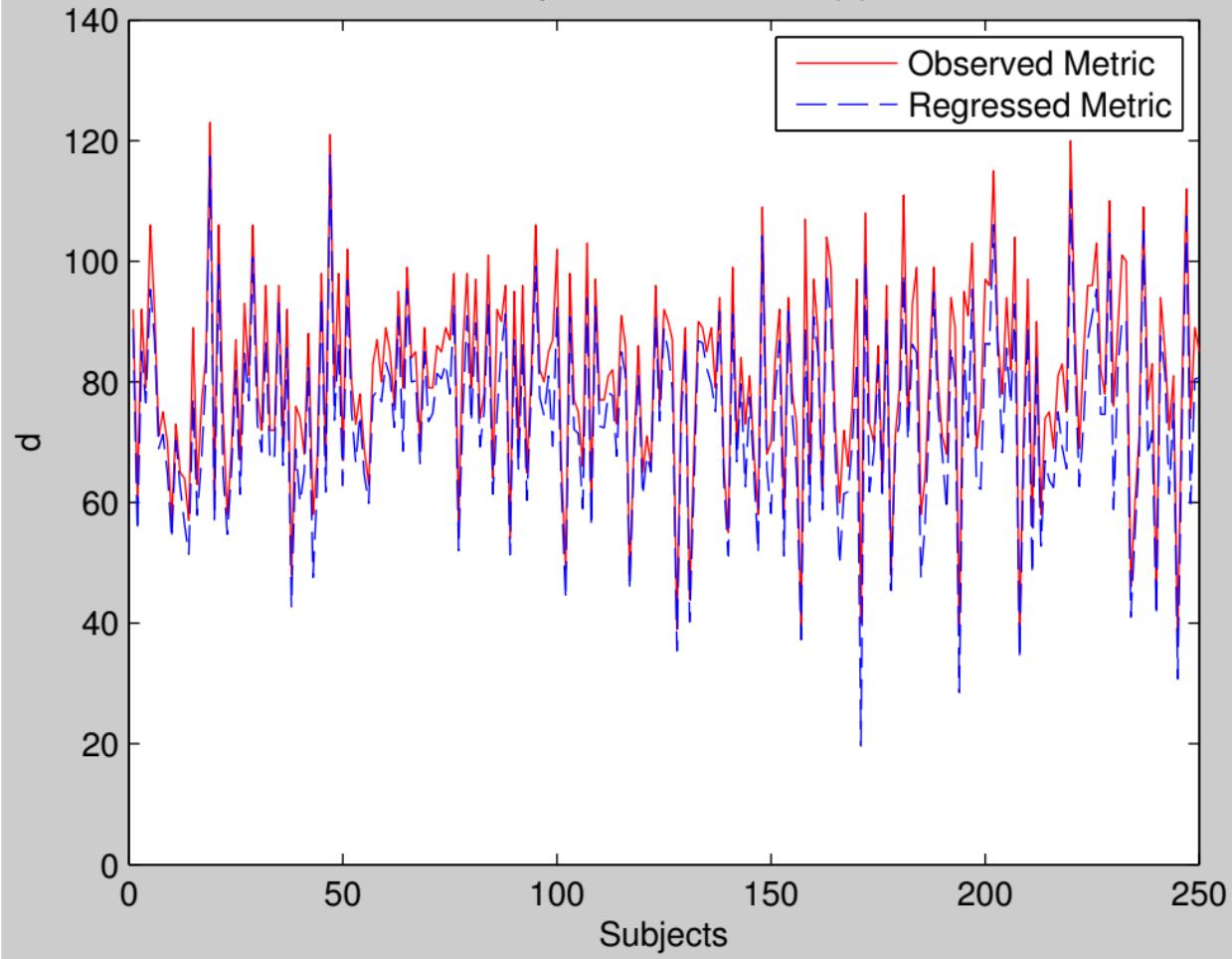
Group 4: Total Distance (d)



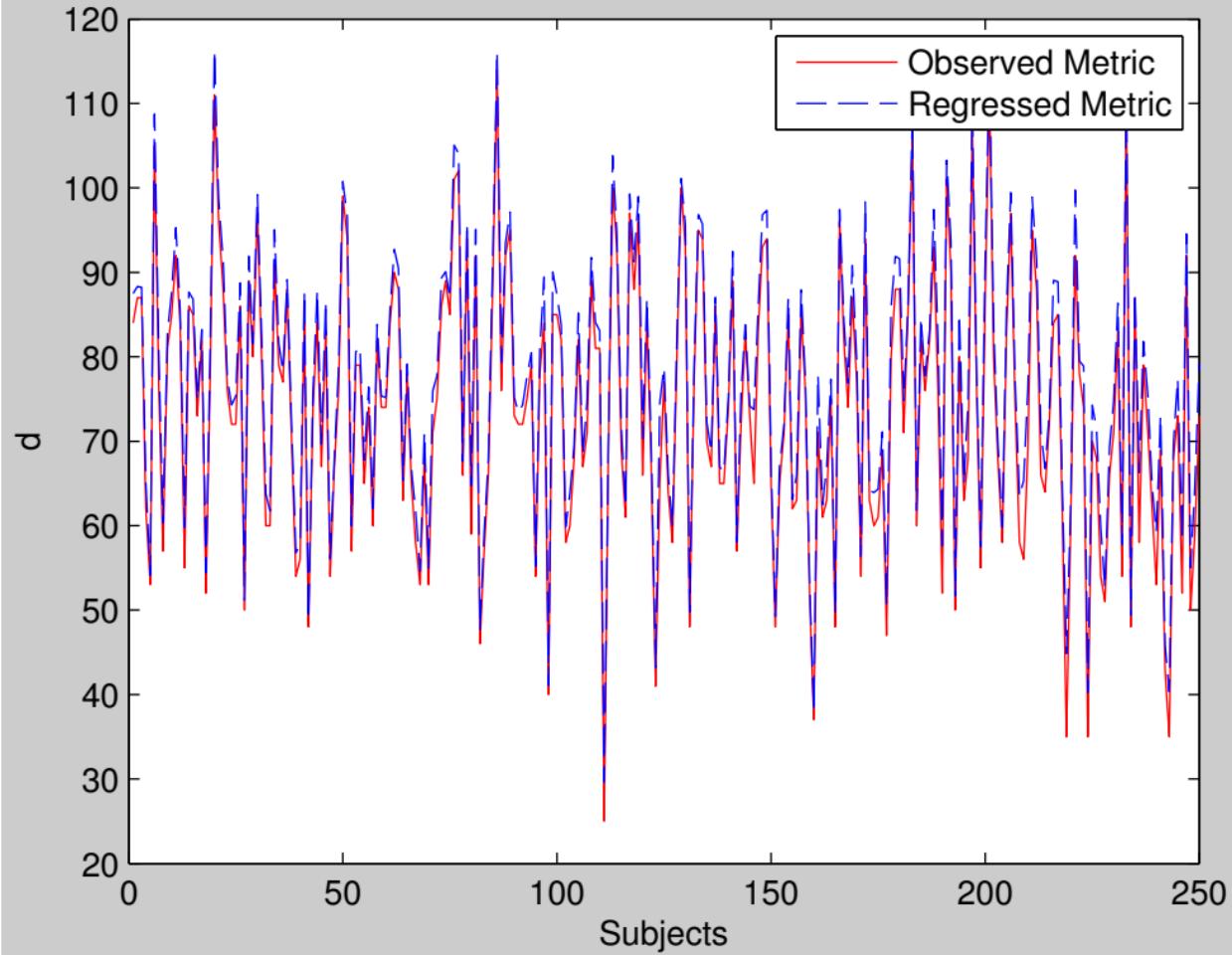
Group 5: Total Distance (d)



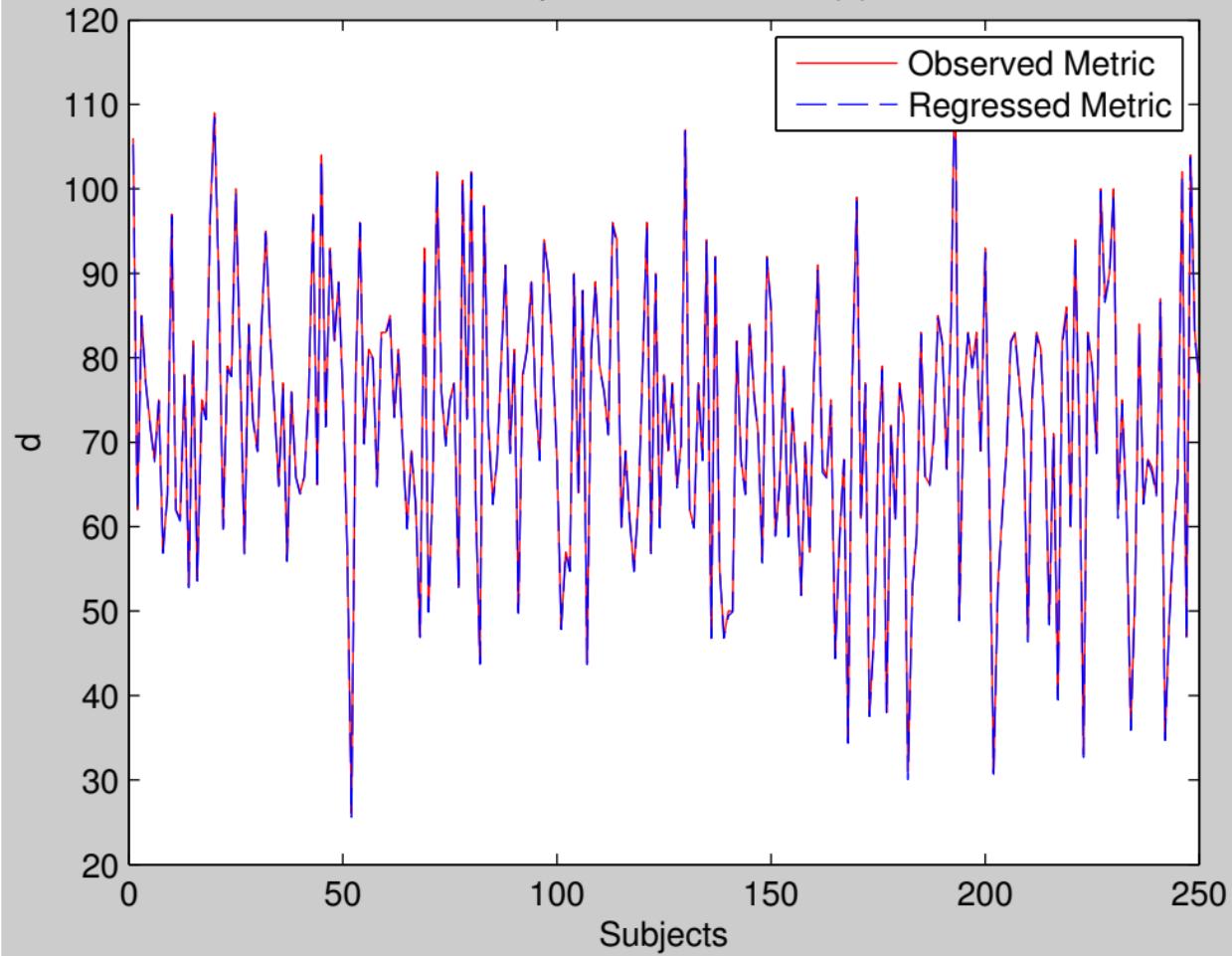
Group 6: Total Distance (d)



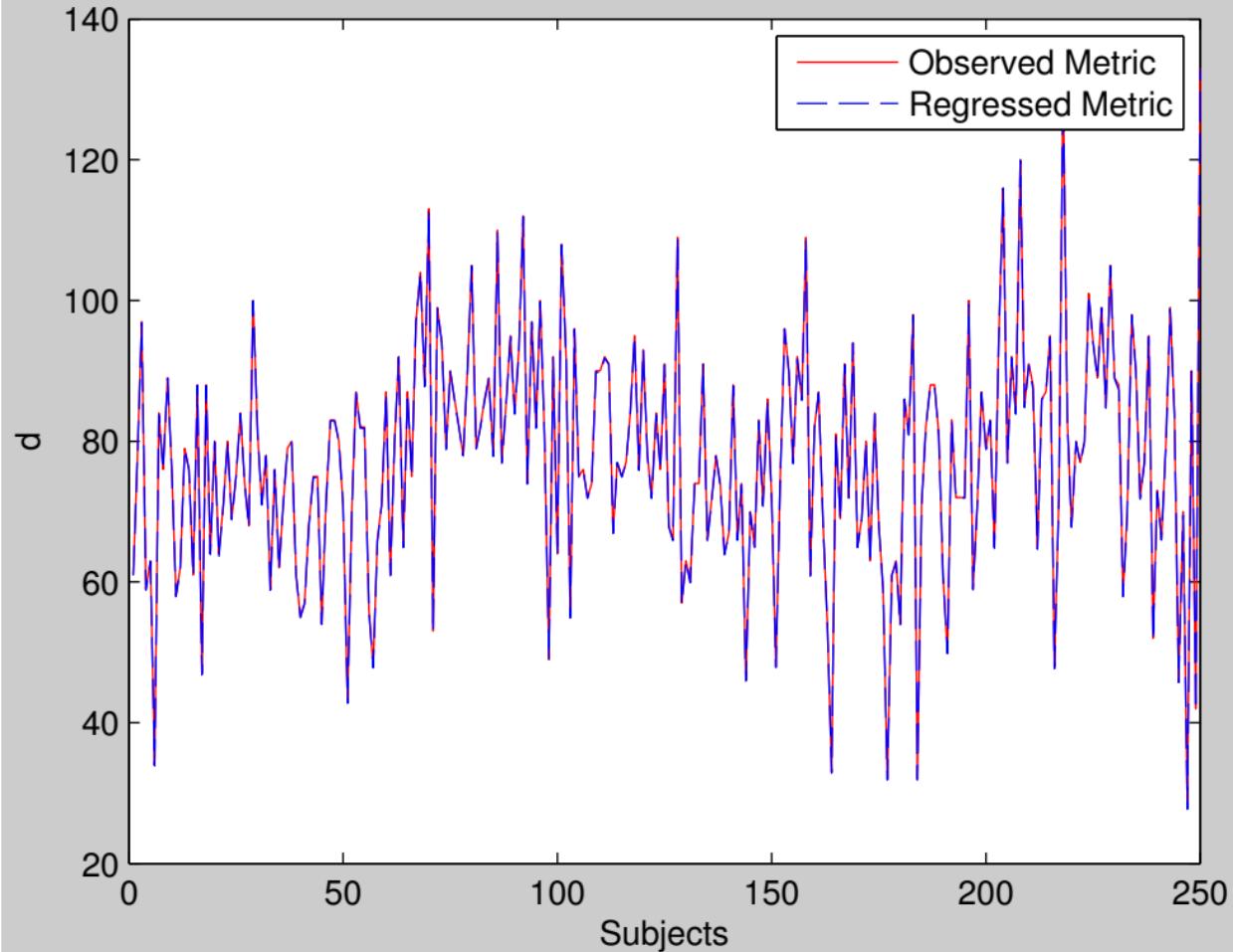
Group 7: Total Distance (d)



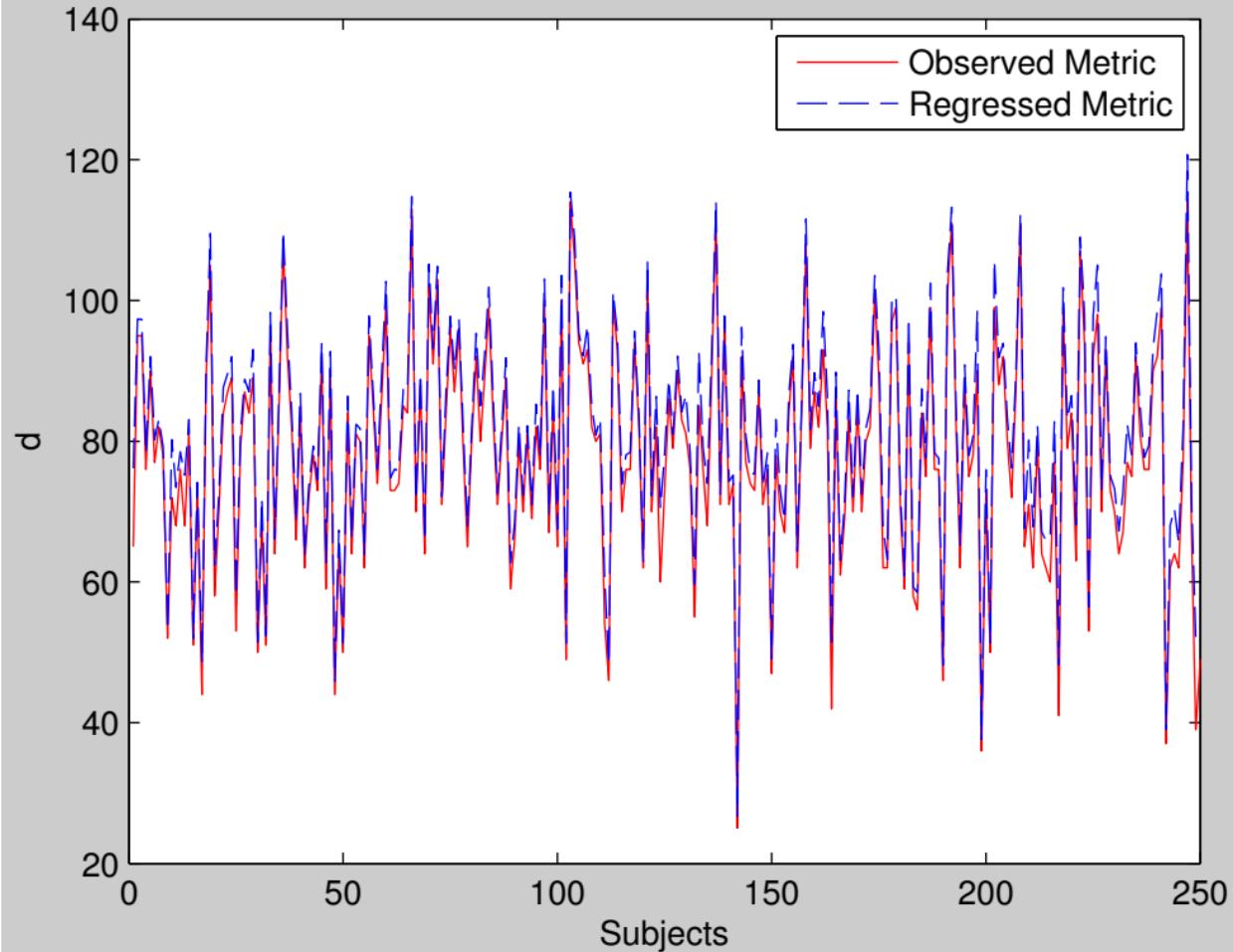
Group 8: Total Distance (d)



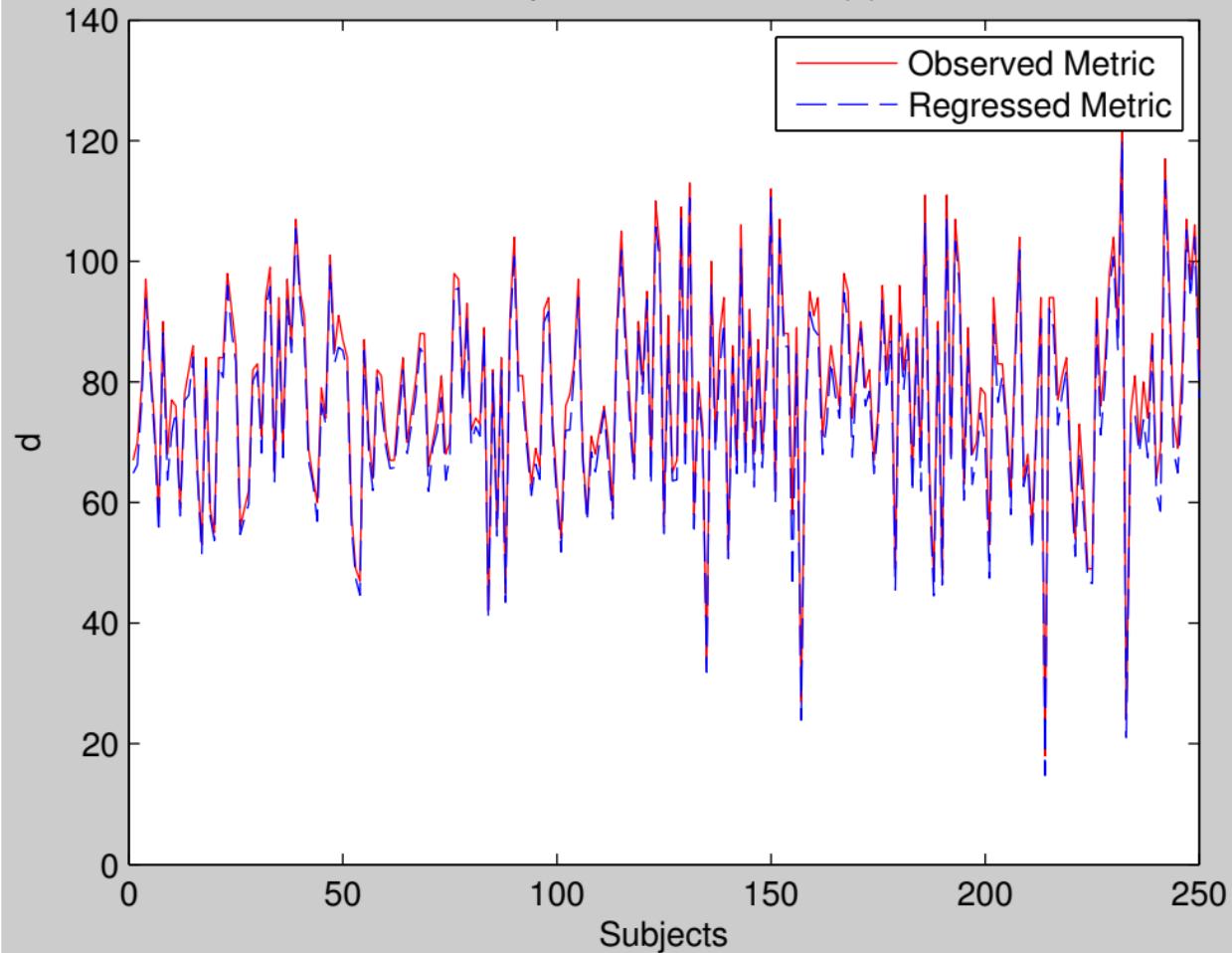
Group 9: Total Distance (d)



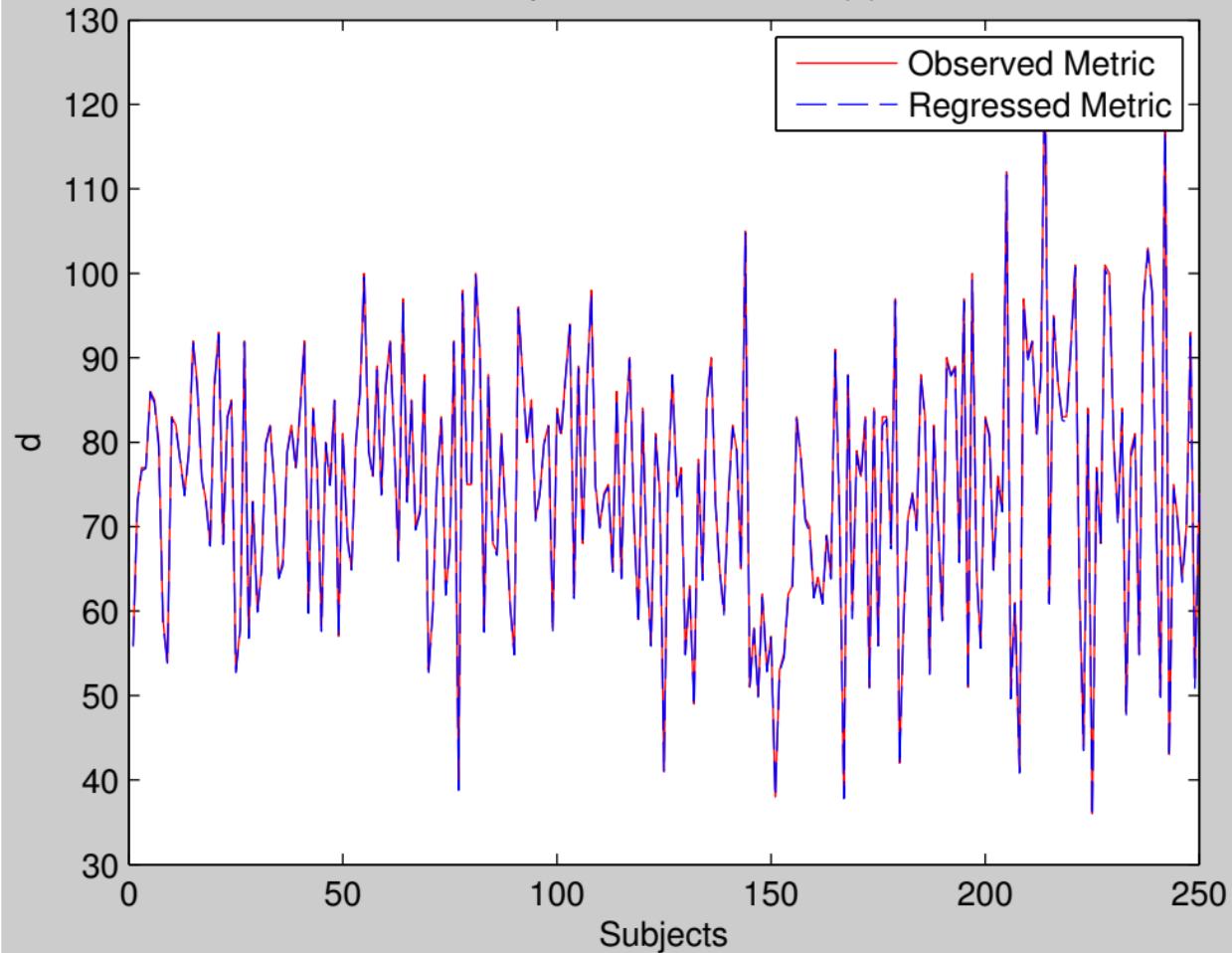
Group 10: Total Distance (d)



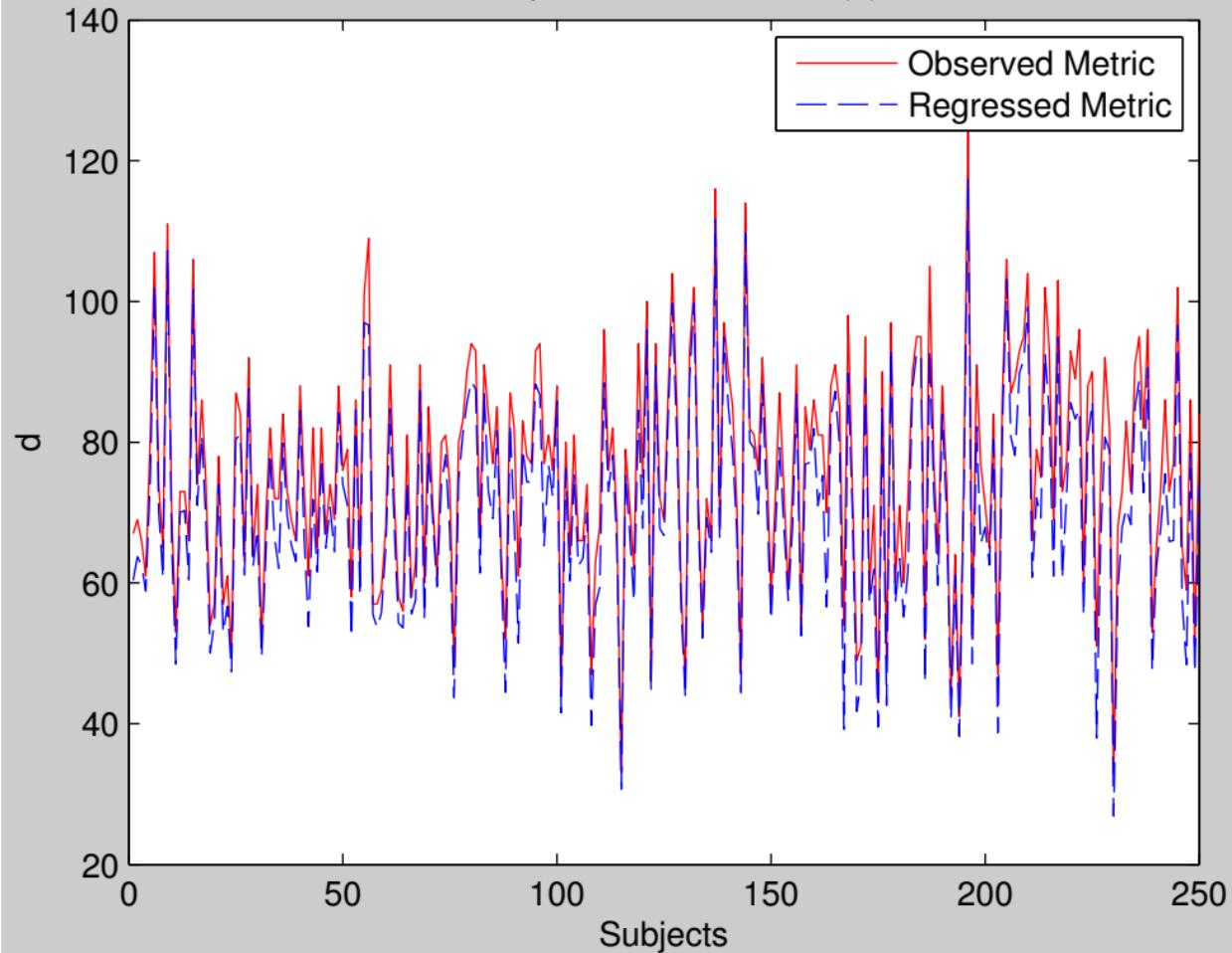
Group 11: Total Distance (d)



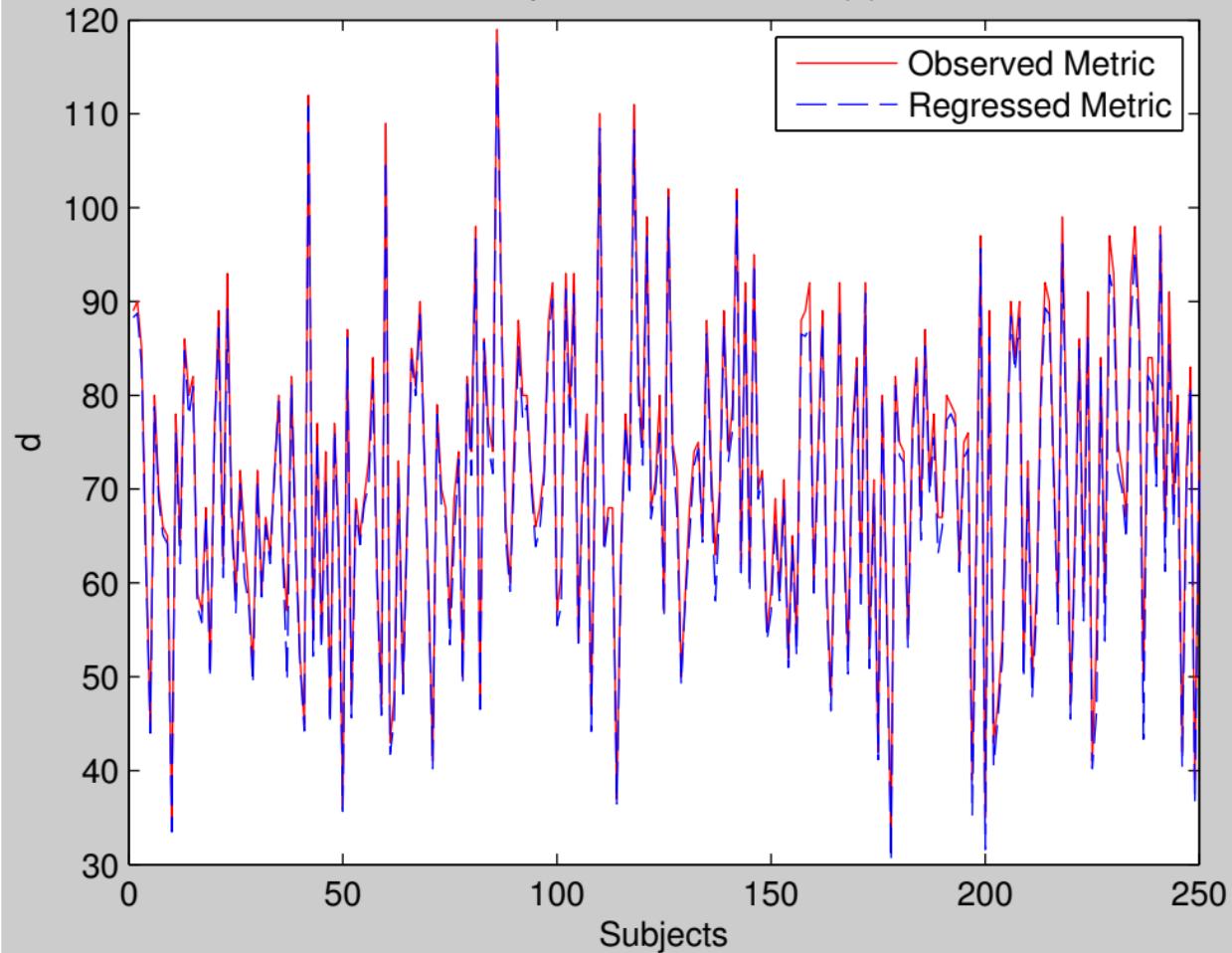
Group 12: Total Distance (d)



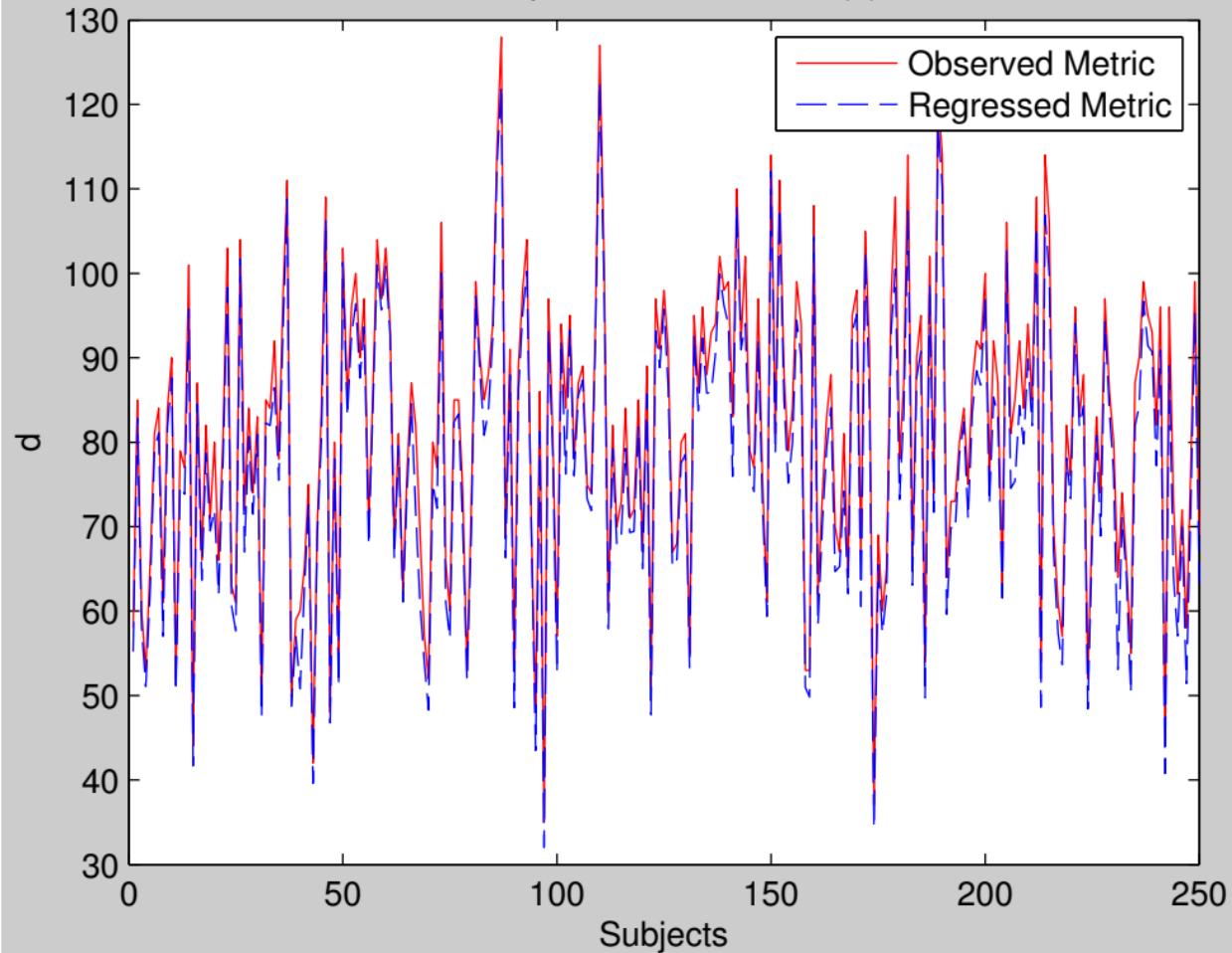
Group 13: Total Distance (d)



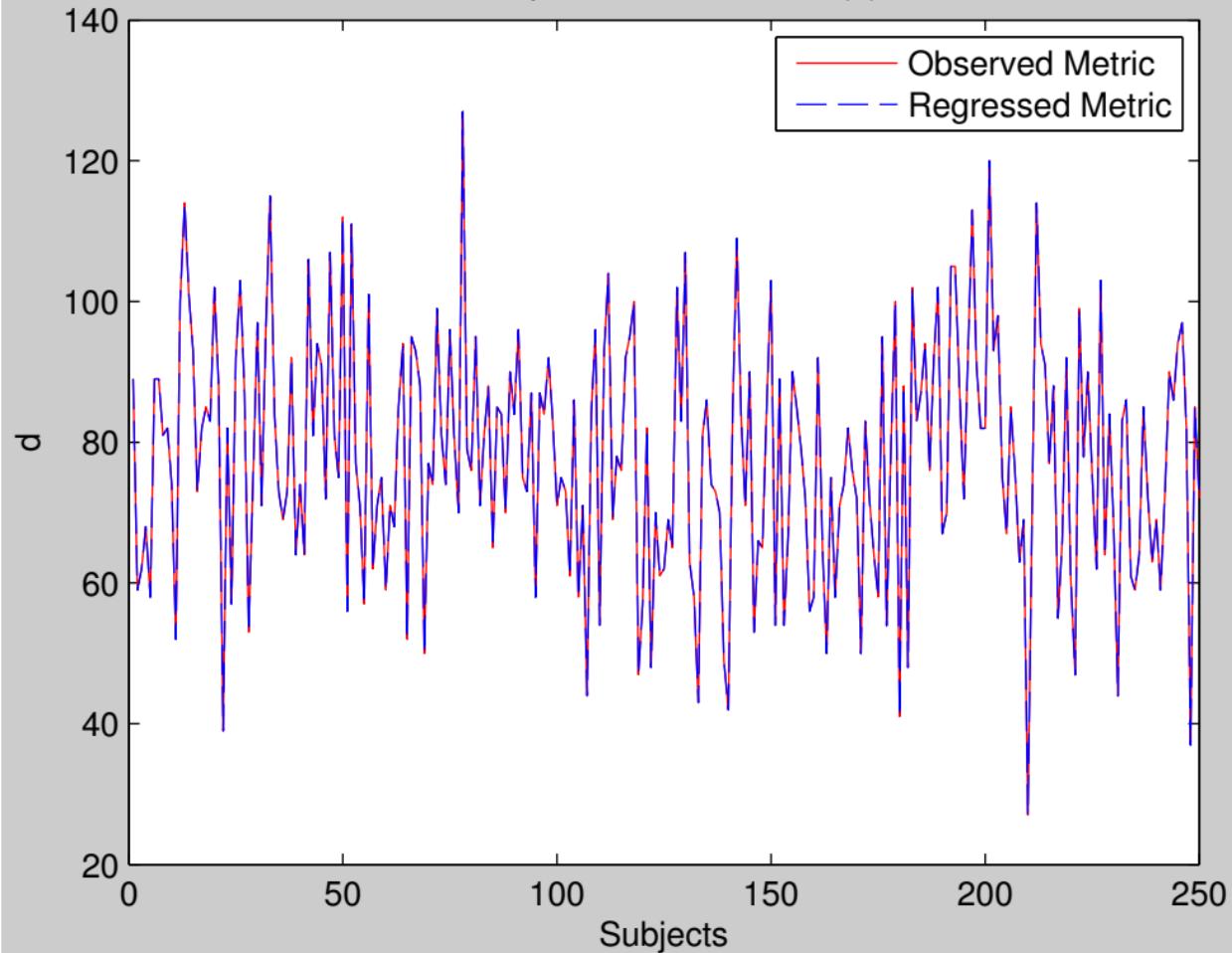
Group 14: Total Distance (d)



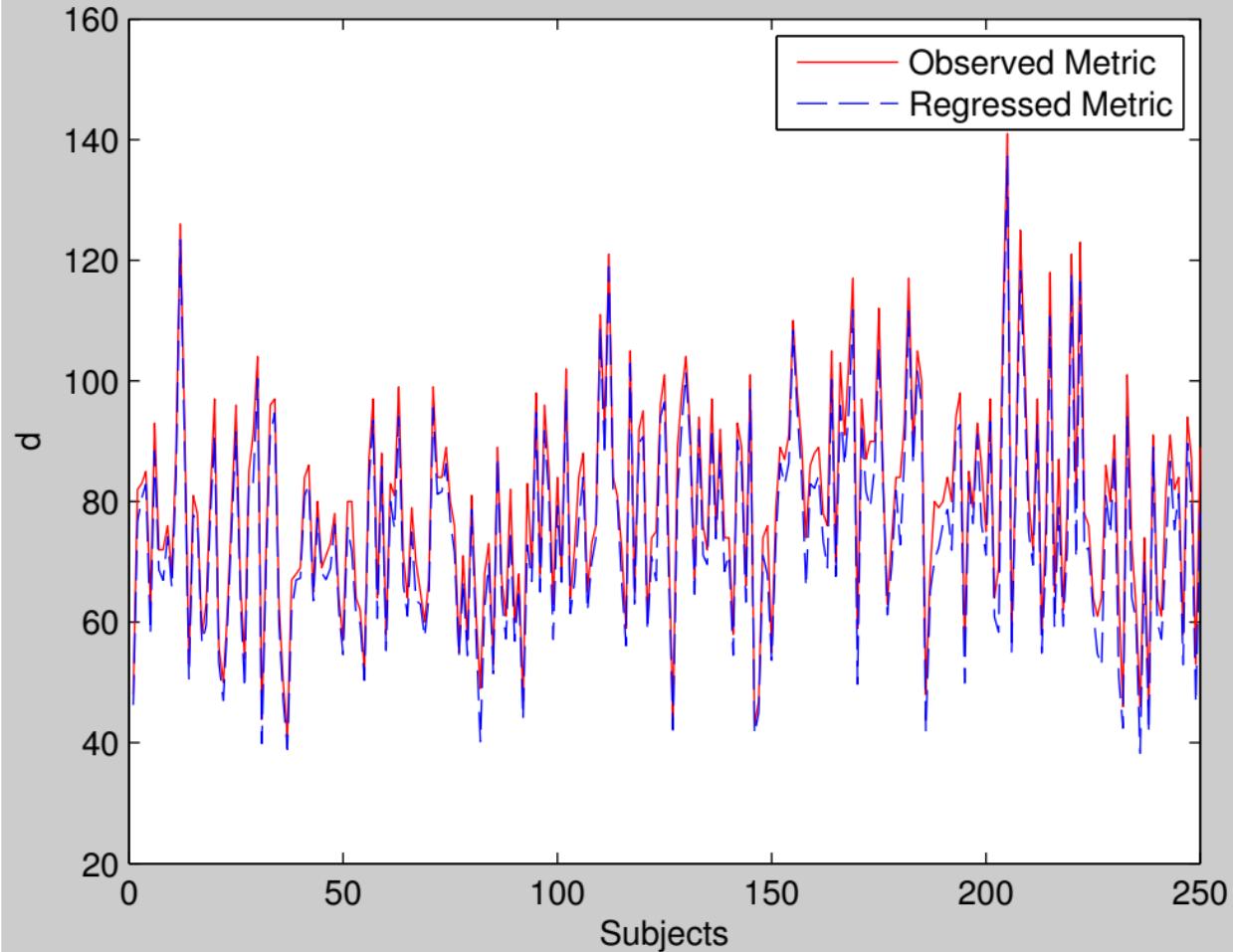
Group 15: Total Distance (d)



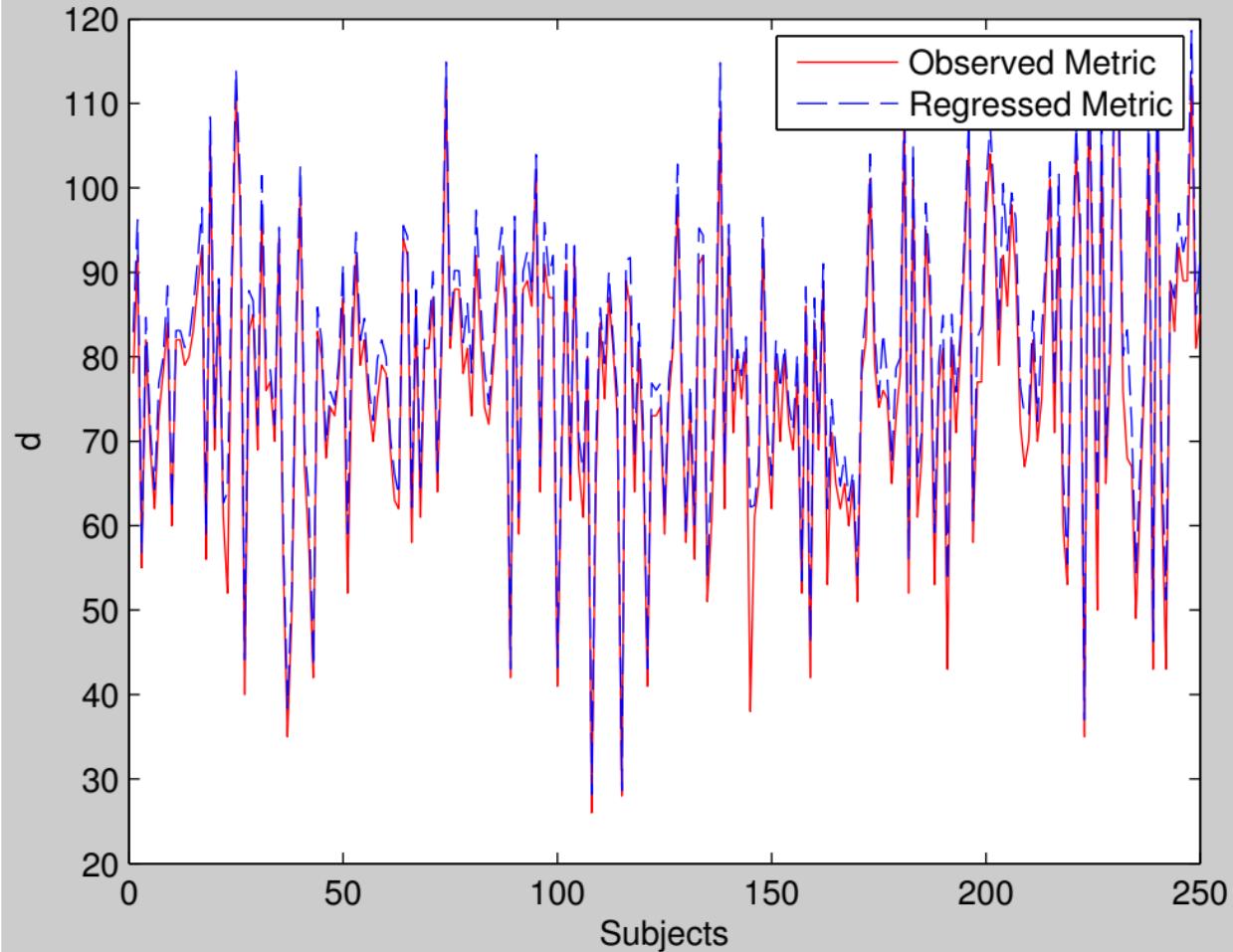
Group 16: Total Distance (d)



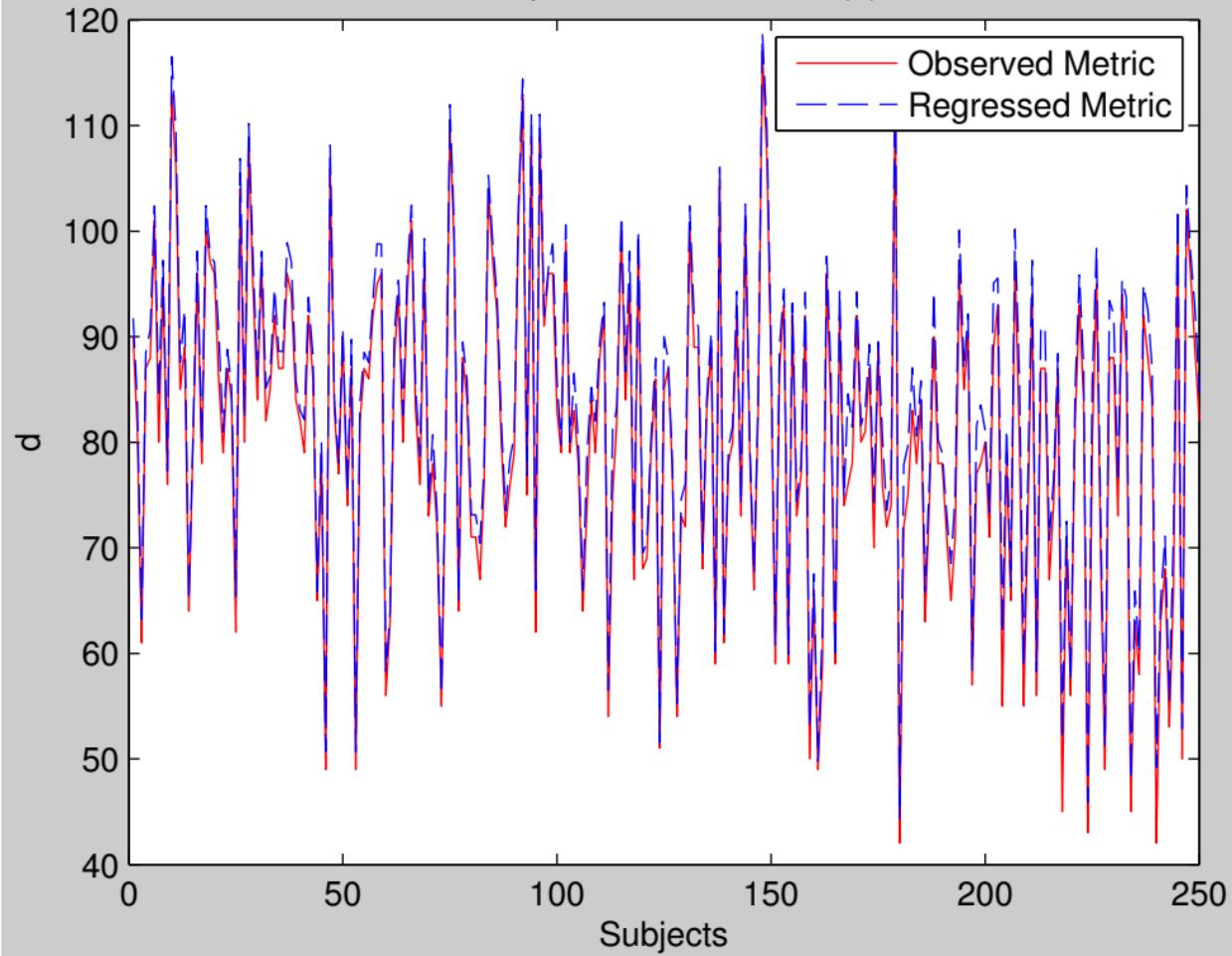
Group 17: Total Distance (d)



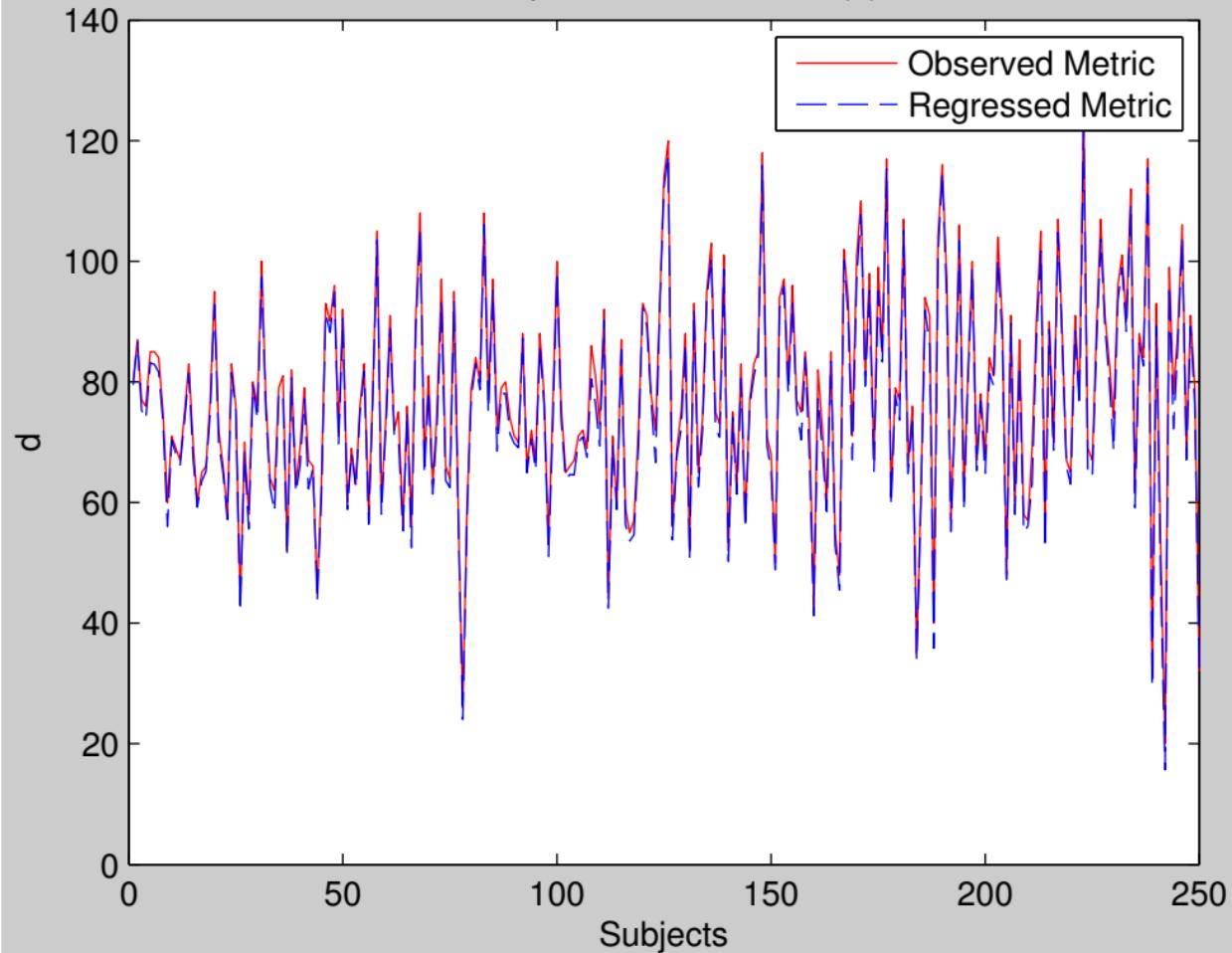
Group 18: Total Distance (d)



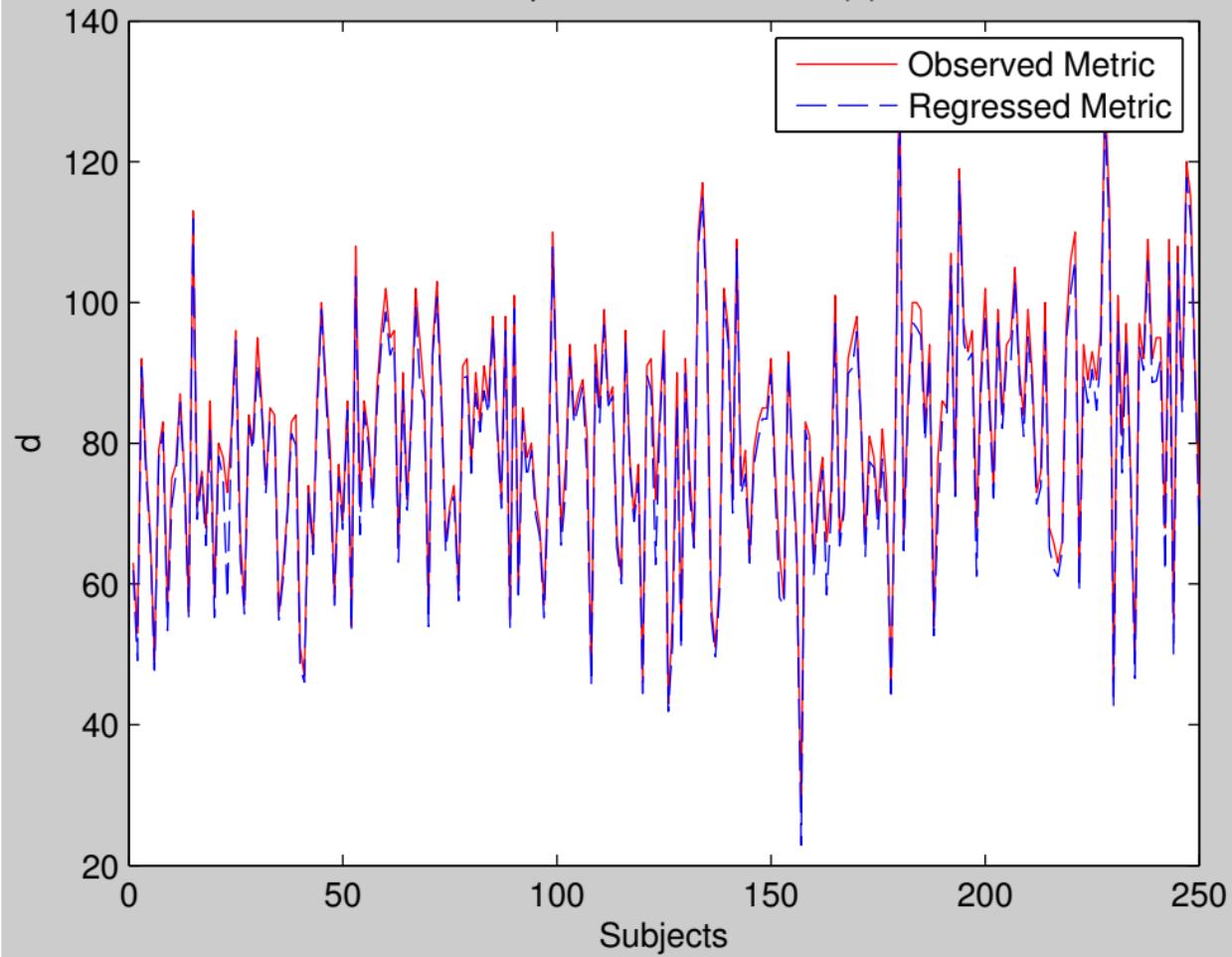
Group 19: Total Distance (d)



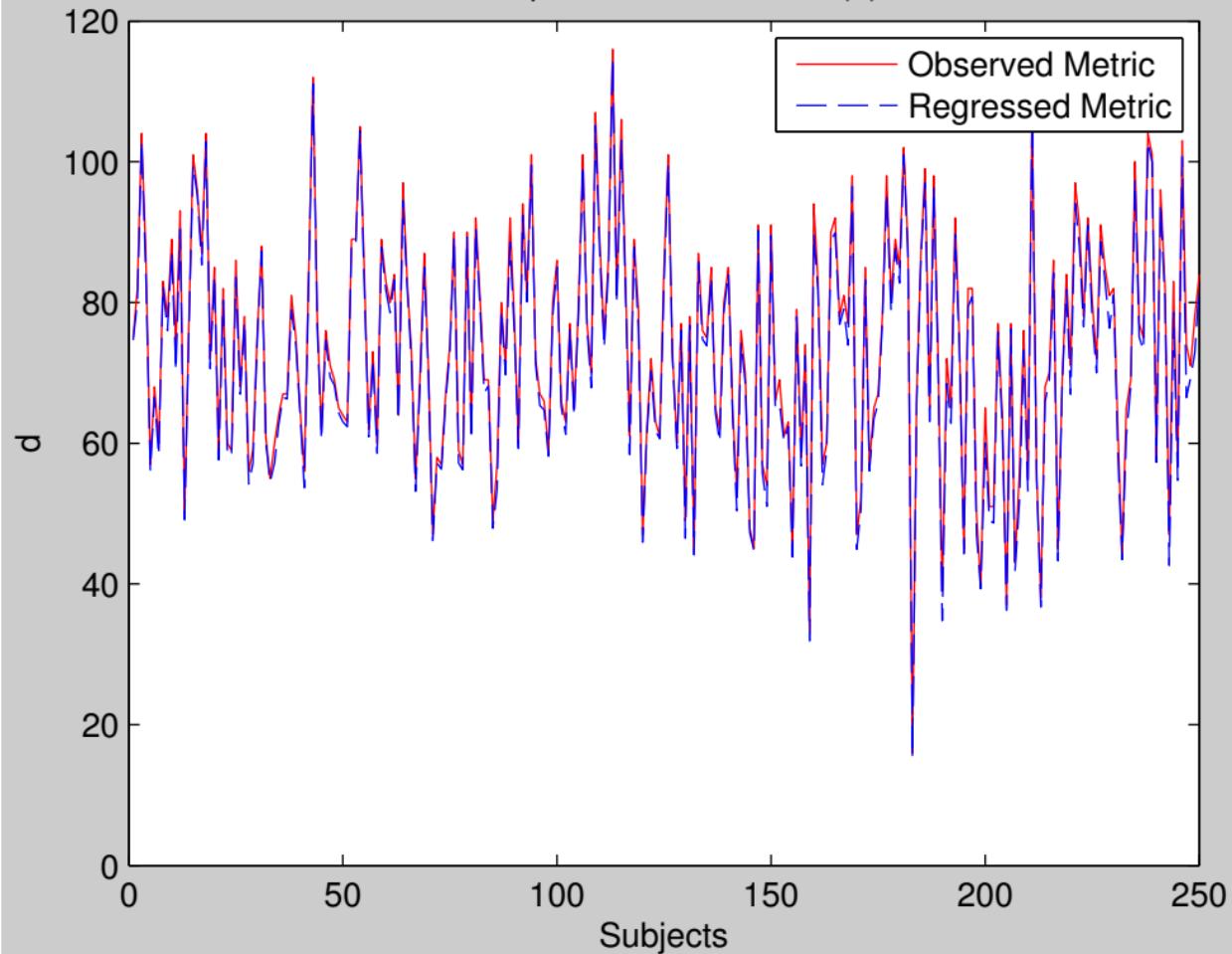
Group 20: Total Distance (d)



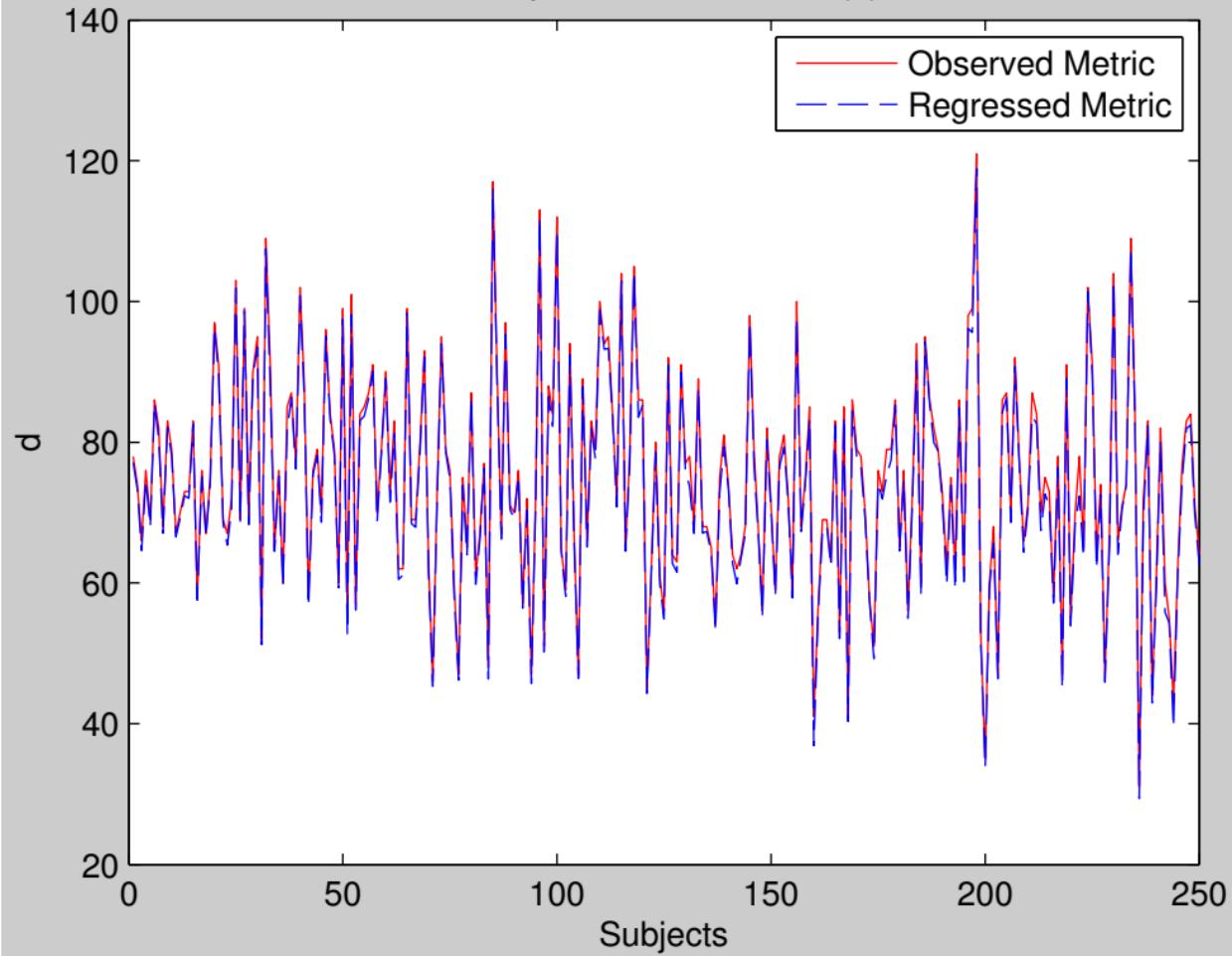
Group 21: Total Distance (d)



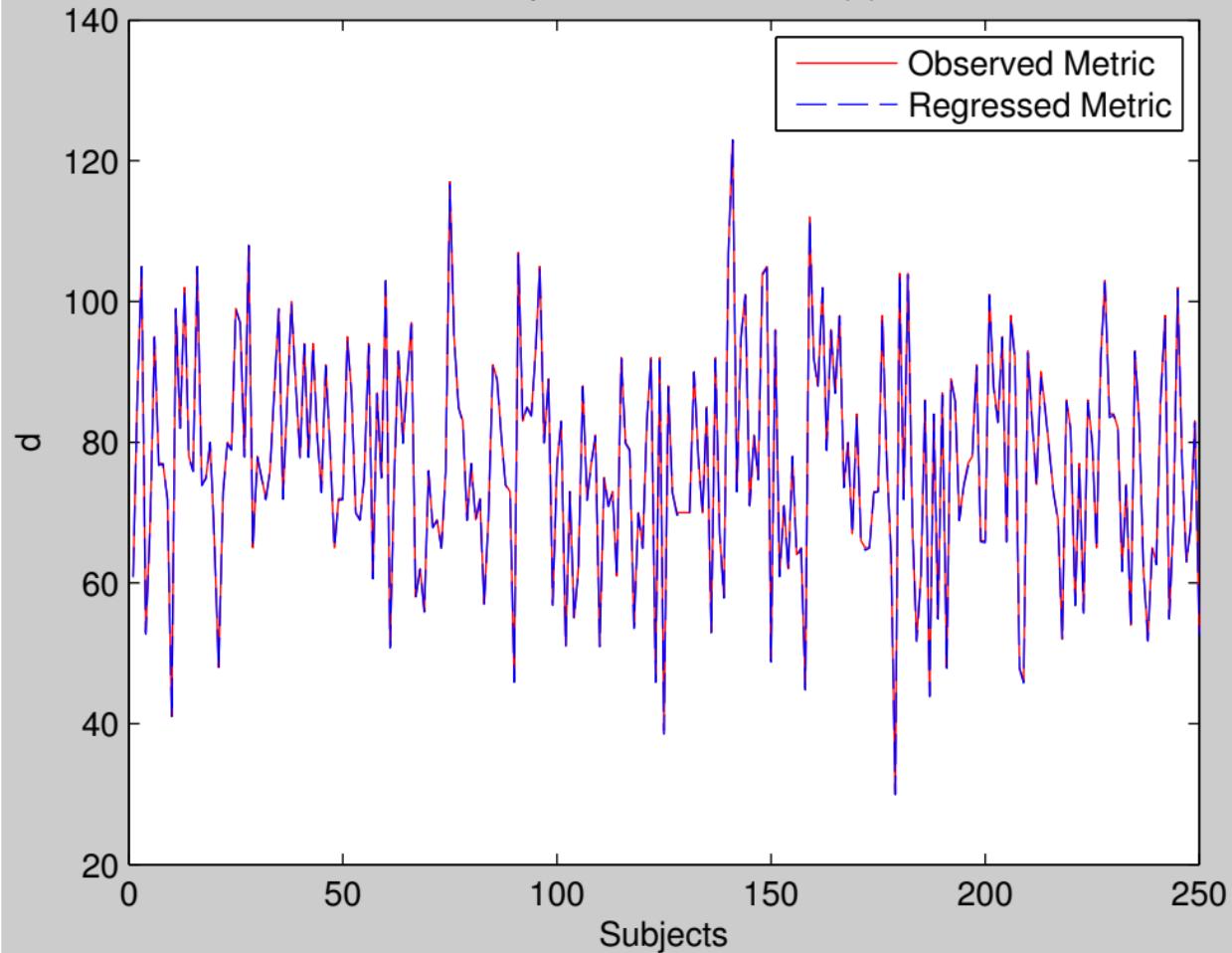
Group 22: Total Distance (d)



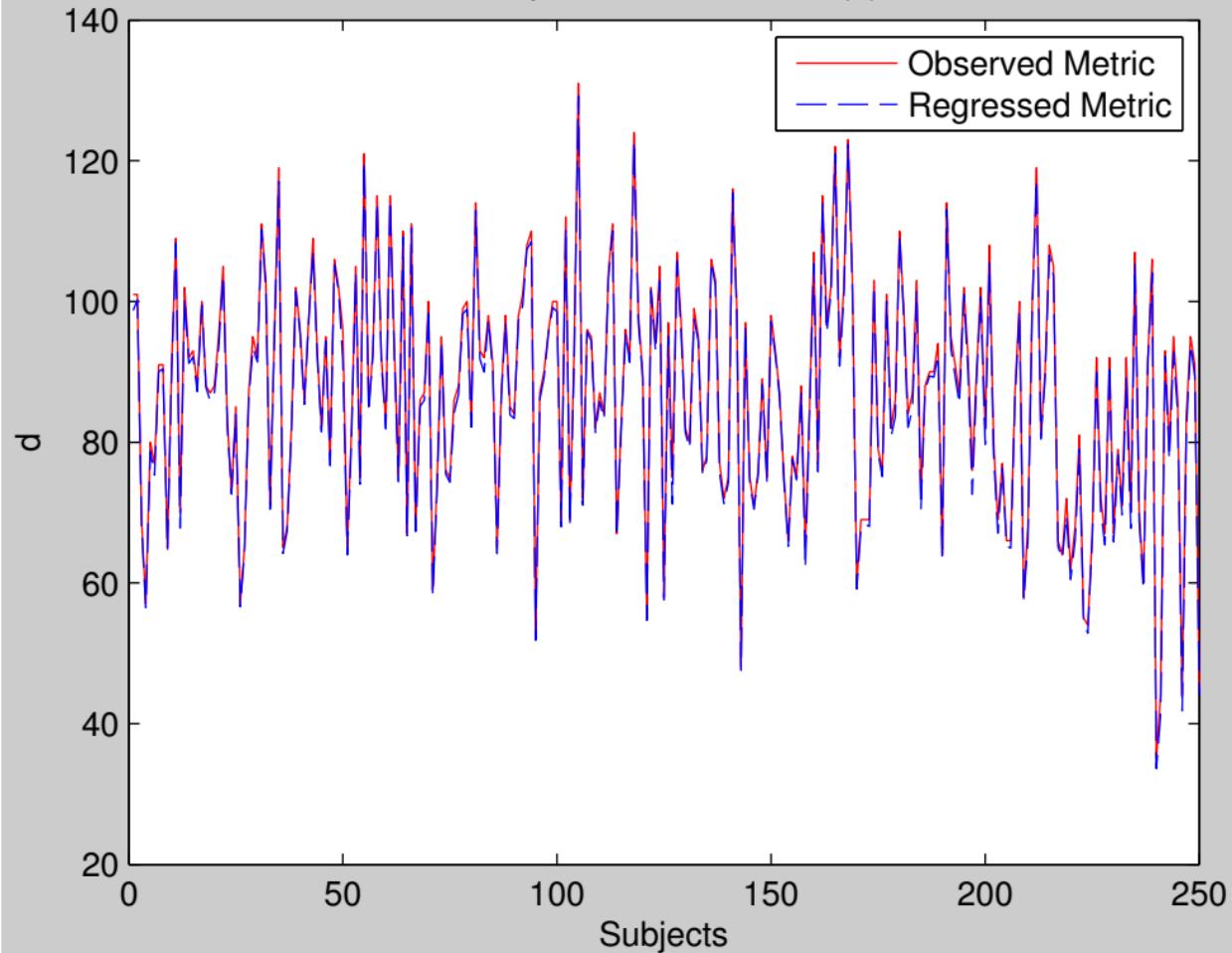
Group 23: Total Distance (d)



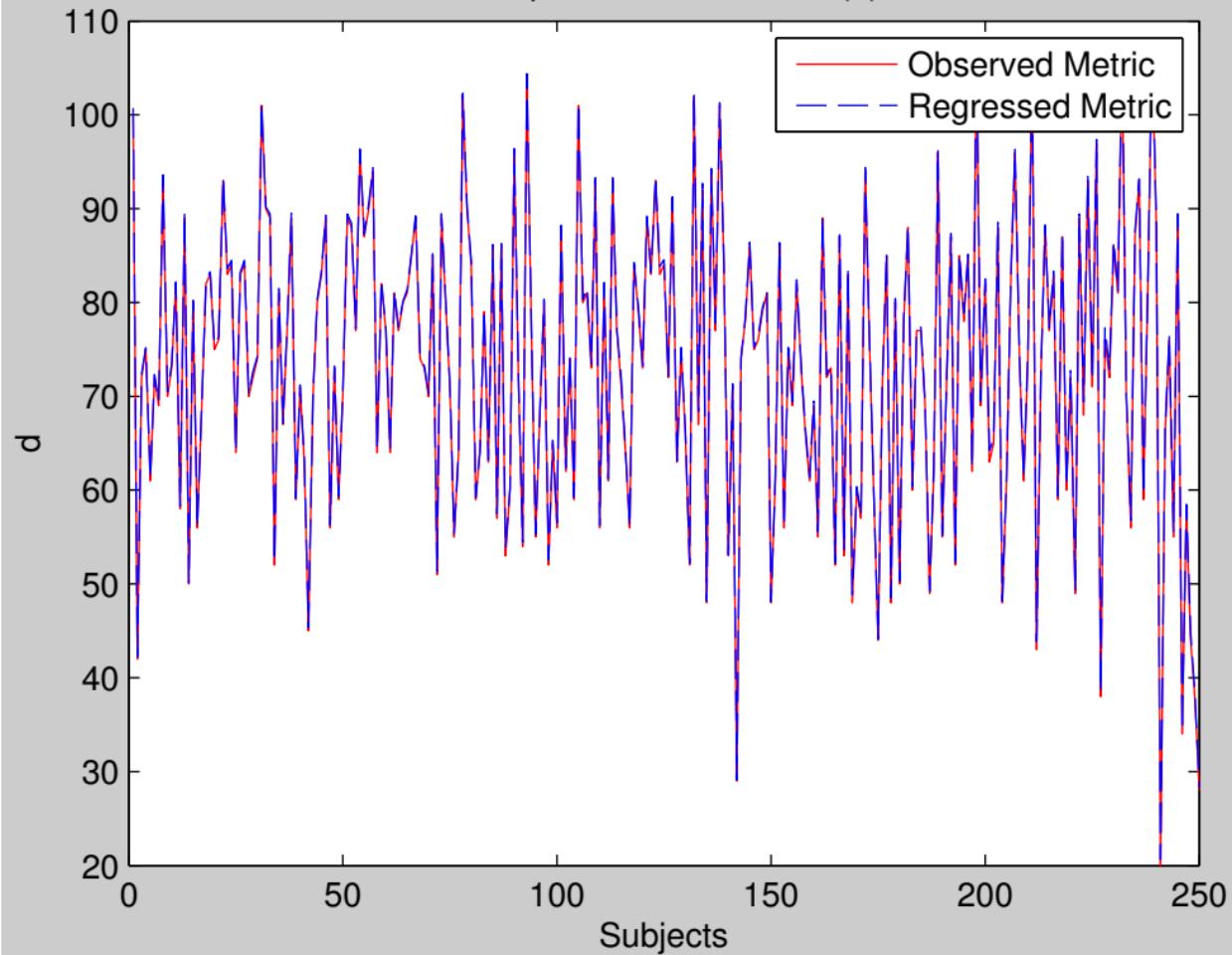
Group 24: Total Distance (d)



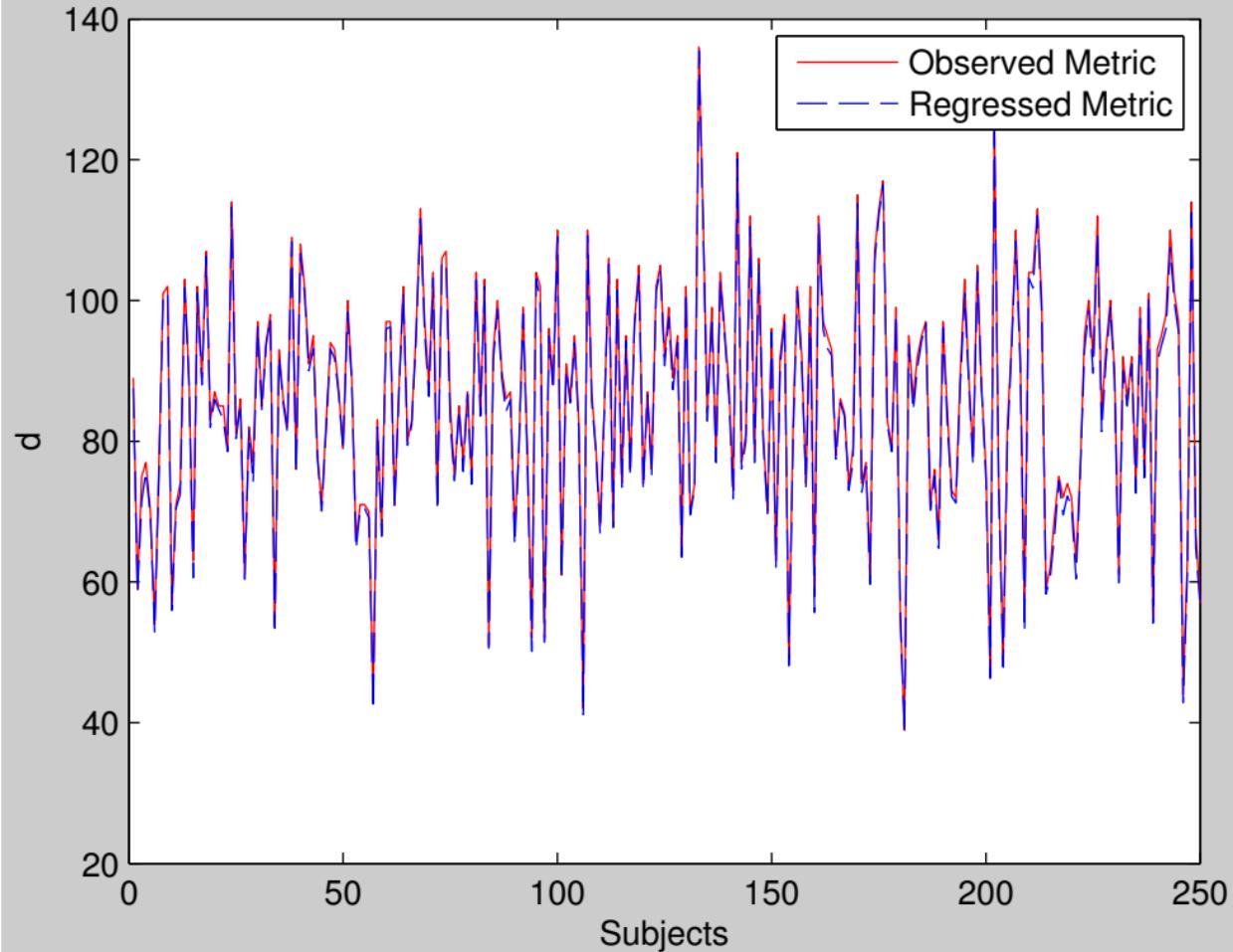
Group 25: Total Distance (d)



Group 26: Total Distance (d)



Group 27: Total Distance (d)



Group 28: Total Distance (d)

