11/8/23, 1:51 PM FURS Input Validation

October 2023 Fund Rating System Input Validation

Model ID	518
Run Date	08-Nov-2023
Validation File Excel	
Validation File HTML	
Analyst	brian com

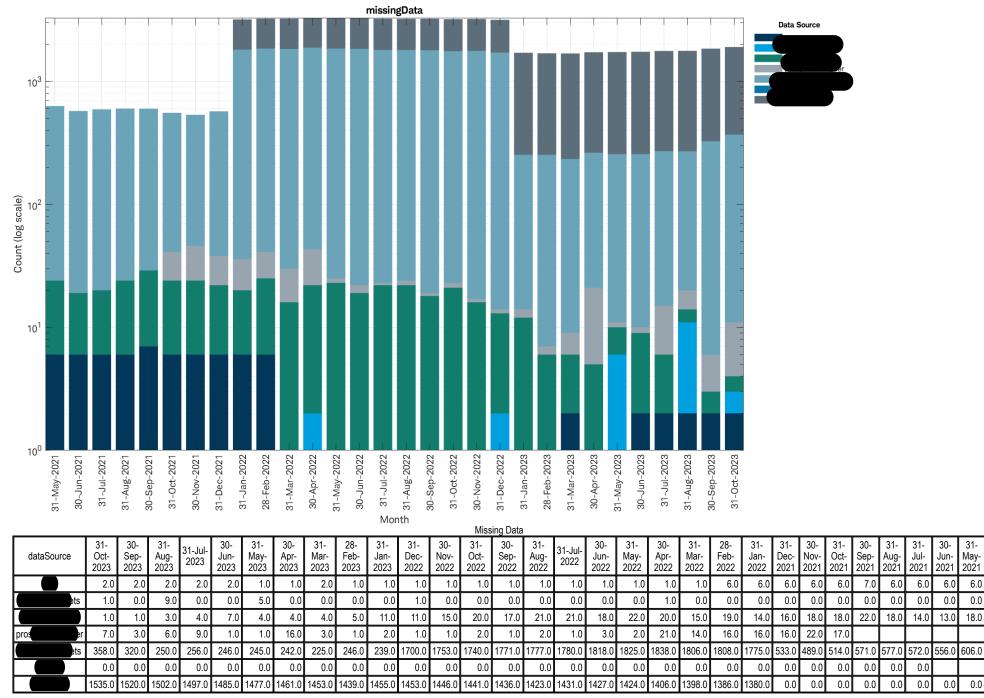
FURS Input Validation 11/8/23, 1:51 PM

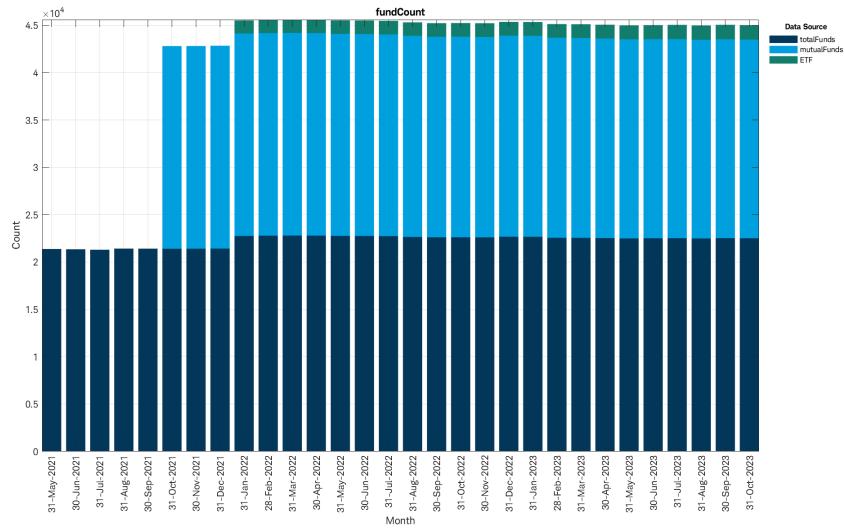


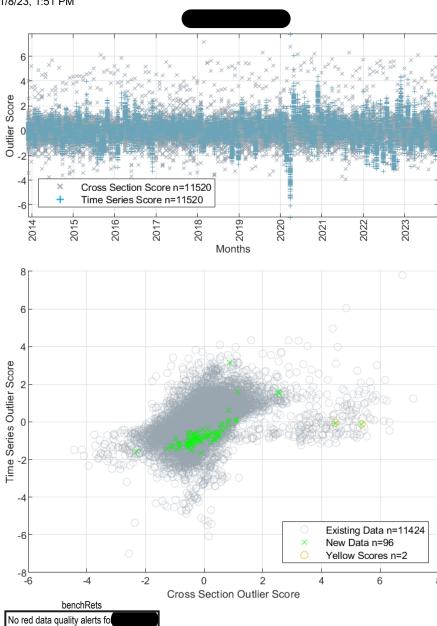
HIGH/MEDIUM/LOW: Sensitivity Rating Green: No outlier score breach Yellow: Score breach only

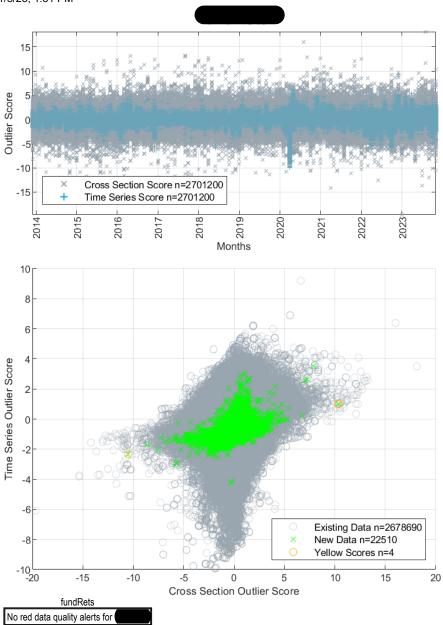
Red: Score breach and breadth breach

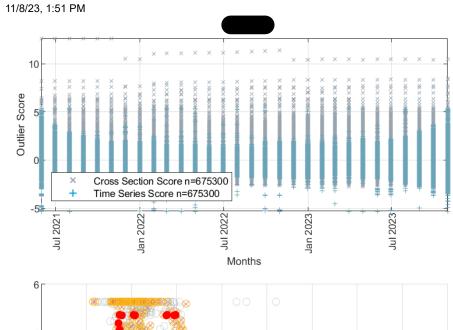


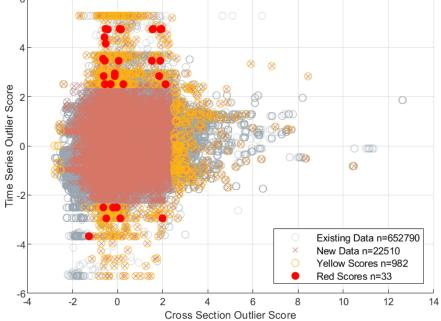








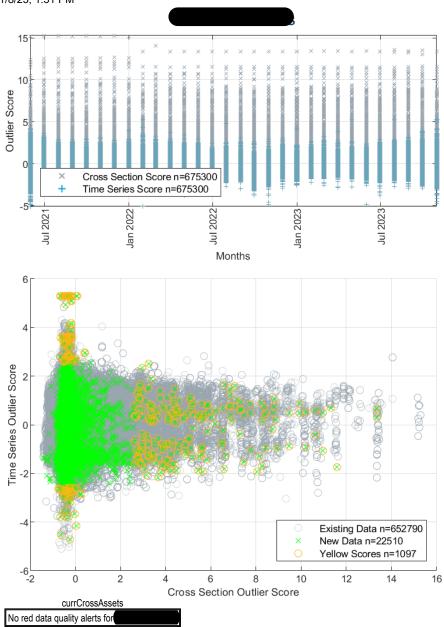




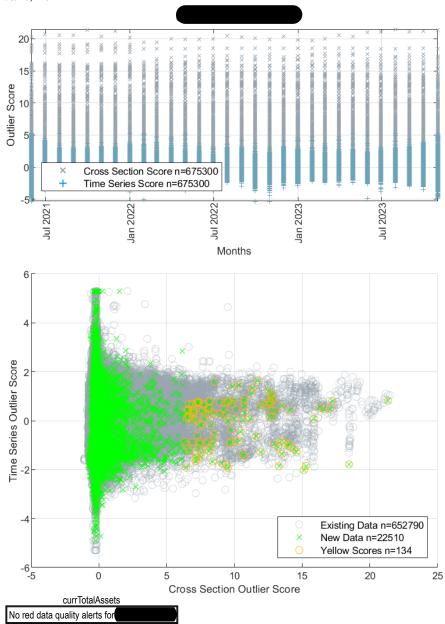
dataSource	subComp	outlierDimesion	dataQuality	catCode	Cusip	Ticker	fundName	outlierScore	31-Oct-2023	30-Sep-2023	31-Aug-2023	31-Jul-2023	30-Jun-2023	31-May-2023
		timeseries	Red	MJ	746915107	PTNJX	Putnam NJ Tax Exempt Income A	4.8	0.9	0.8	0.8	0.8	0.8	0.8
		timeseries	Red	MJ	746915404	PNJCX	Putnam NJ Tax Exempt Income C	4.8	1.6	1.6	1.6	1.6	1.6	1.6
		timeseries	Red	MJ	746915503	PNJYX	Putnam NJ Tax Exempt Income Y	4.8	0.6	0.6	0.6	0.6	0.6	0.6
		timeseries	Red	MJ	746915206	PNJBX	Putnam NJ Tax Exempt Income B	4.8	1.5	1.4	1.4	1.4	1.4	1.4
		timeseries	Red	MO	746849504	POTYX	Putnam OH Tax Exempt Income Y	4.7	0.7	0.6	0.6	0.6	0.6	0.6
		timeseries	Red	MO	746849306	PXOHX	Putnam OH Tax Exempt Income A	4.7	0.9	0.9	0.9	0.9	0.9	0.9
		timeseries	Red	MO	746849405	POOCX	Putnam OH Tax Exempt Income C	4.7	1.7	1.6	1.6	1.6	1.6	1.6

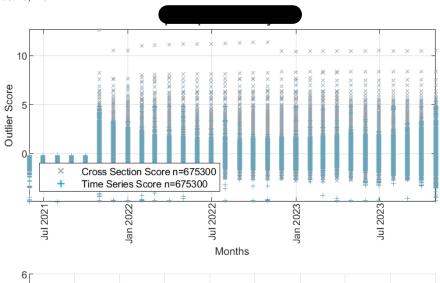
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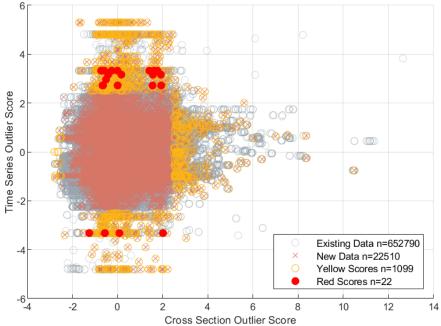
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	timeseries	Red	MO	746849108	POXBX	Putnam OH Tax Exempt Income B	4.7	1.5	1.5	1.5	1.5	1.5	1.5
	timeseries	Red	MJ	746915701	PNJRX	Putnam NJ Tax Exempt Income R6	4.4	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MO	746849702	POHRX	Putnam OH Tax Exempt Income R6	4.2	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MP	746852706	PPTRX	Putnam PA Tax Exempt Income R6	3.5	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MP	746852508	PPTYX	Putnam PA Tax Exempt Income Y	3.5	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MP	746852102	PTEPX	Putnam PA Tax Exempt Income A	3.5	0.9	0.8	0.8	0.8	0.8	0.8
	timeseries	Red	MP	746852201	PPNBX	Putnam PA Tax Exempt Income B	3.5	1.5	1.4	1.4	1.4	1.4	1.4
	timeseries	Red	MP	746852409	PPNCX	Putnam PA Tax Exempt Income C	3.5	1.6	1.6	1.6	1.6	1.6	1.6
	timeseries	Red	MP	52469L744	SBPAX	Western Asset Pennsylvania Municipals A	2.9	0.8	0.8	0.8	0.8	0.8	0.8
	timeseries	Red	MP	67065L583	FPCCX	Nuveen PA Municipal Bond C	2.8	1.6	1.6	1.6	1.6	1.6	1.6
	timeseries	Red	MP	67065L740	FPNTX	Nuveen PA Municipal Bond A	2.8	0.8	0.8	0.8	0.8	0.8	0.8
	timeseries	Red	MP	67065L716	NBPAX	Nuveen PA Municipal Bond I	2.8	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MF	09253A664	MKCMX	BlackRock California Munl Opps Inv K	2.5	0.6	0.6	0.4	0.4	0.4	0.4
	timeseries	Red	MF	72201P332	PCFCX	PIMCO CA Intermediate Muni Bd C	2.5	1.5	1.5	1.5	1.5	1.5	1.5
	timeseries	Red	MF	693389785	PCMBX	PIMCO CA Intermediate Muni Bd A	2.5	0.8	0.8	0.8	0.8	0.8	0.8
	timeseries	Red	MF	72201M859	PCIPX	PIMCO CA Intermediate Muni Bd I2	2.5	0.6	0.6	0.6	0.6	0.5	0.5
	timeseries	Red	MF	693389769	PCIMX	PIMCO CA Intermediate Muni Bd Instl	2.5	0.5	0.5	0.5	0.5	0.4	0.4
	timeseries	Red	MF	72202G323	GCMFX	PIMCO Ca Muni Oppc Val Instl	-2.5	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MJ	05587D408	DNMIX	BNY Mellon New Jersey Municipal Bond I	-2.5	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MJ	05587D507	DNJYX	BNY Mellon New Jersey Municipal Bond Y	-2.5	0.6	0.6	0.6	0.6	0.6	0.6
	timeseries	Red	MJ	05587D101	DRNJX	BNY Mellon New Jersey Municipal Bond A	-2.5	0.8	0.8	0.8	0.8	0.8	0.8
	timeseries	Red	MF	19765J715	NACMX	Columbia California Itmt Muncpl Bd A	-2.9	0.7	0.7	0.7	0.8	0.8	0.8
	timeseries	Red	MF	19765J673	NCMAX	Columbia California Itmt Muncpl Bd Inst	-2.9	0.5	0.5	0.5	0.5	0.5	0.5
	timeseries	Red	MF	19765J681	CCICX	Columbia California Itmt Muncpl Bd C	-2.9	1.5	1.5	1.5	1.5	1.5	1.5
	timeseries	Red	MF	19766B158	CCMRX	Columbia California Itmt Muncpl Bd Adv	-2.9	0.5	0.5	0.5	0.5	0.5	0.5
	timeseries	Red	MO	479164402	JMUNX	Johnson Municipal Income	-3.7	0.3	0.3	0.7	0.7	0.7	0.7



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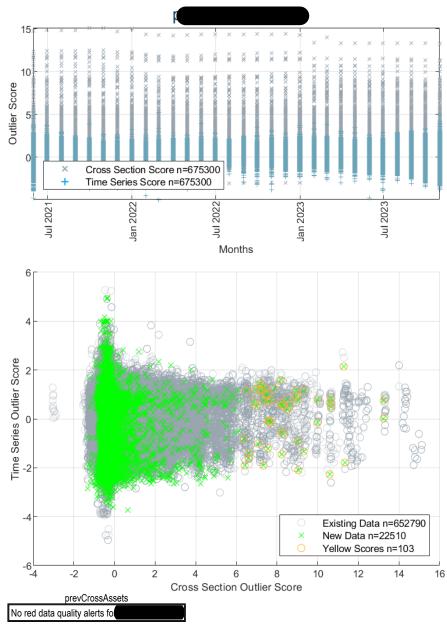


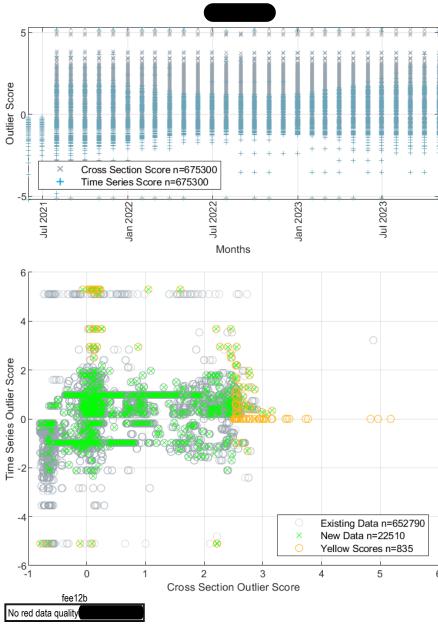


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dataSource	subComp	outlierDimesion	dataQuality	catCode	Cusip	Ticker	fundName	outlierScore	31-Oct-2023	30-Sep-2023	31-Aug-2023	31-Jul-2023	30-Jun-2023	31-May-2023
		timeseries	Red	SM	670678184	FJMNX	Nuveen Minnesota Municipal Bond A	3.3	0.8	0.8	0.8	0.8	0.8	0.8
		timeseries	Red	SM	74683M407	PMOCX	Putnam MN Tax Exempt Income C	3.3	1.6	1.6	1.6	1.6	1.6	1.6
		timeseries	Red	SM	74683M308	PXMNX	Putnam MN Tax Exempt Income A	3.3	0.9	0.9	0.9	0.9	0.9	0.9
		timeseries	Red	SM	74683M506	PMNYX	Putnam MN Tax Exempt Income Y	3.3	0.7	0.7	0.6	0.6	0.6	0.6
		timeseries	Red	SM	74683M704	PMVTX	Putnam MN Tax Exempt Income R6	3.3	0.6	0.6	0.6	0.6	0.6	0.6
		timeseries	Red	SM	670678192	FYMNX	Nuveen Minnesota Municipal Bond I	3.3	0.6	0.6	0.6	0.6	0.6	0.6
		timeseries	Red	SM	670693209	NTCCX	Nuveen Minnesota Municipal Bond C	3.3	1.6	1.6	1.6	1.6	1.6	1.6

timeseries	Red	SM	74683M100	PMTBX	Putnam MN Tax Exempt Income B	3.3	1.5	1.5	1.5	1.5	1.5	1.5
timeseries	Red	MO	746849504	POTYX	Putnam OH Tax Exempt Income Y	3.2	0.7	0.7	0.6	0.6	0.6	0.6
timeseries	Red	MO	746849306	PXOHX	Putnam OH Tax Exempt Income A	3.2	0.9	0.9	0.9	0.9	0.9	0.9
timeseries	Red	MO	746849405	POOCX	Putnam OH Tax Exempt Income C	3.2	1.7	1.7	1.6	1.6	1.6	1.6
timeseries	Red	MO	746849108	POXBX	Putnam OH Tax Exempt Income B	3.2	1.5	1.5	1.5	1.5	1.5	1.5
timeseries	Red	MO	746849702	POHRX	Putnam OH Tax Exempt Income R6	3.0	0.6	0.6	0.6	0.6	0.6	0.6
timeseries	Red	MT	74683H408	PMMCX	Putnam MA Tax Exempt Income C	2.7	1.6	1.6	1.5	1.5	1.5	1.5
timeseries	Red	MT	74683H101	PMABX	Putnam MA Tax Exempt Income B	2.7	1.4	1.4	1.4	1.4	1.4	1.4
timeseries	Red	MT	74683H705	PMATX	Putnam MA Tax Exempt Income R6	2.7	0.6	0.6	0.5	0.5	0.5	0.5
timeseries	Red	MT	74683H309	PXMAX	Putnam MA Tax Exempt Income A	2.7	0.8	0.8	0.8	0.8	0.8	0.8
timeseries	Red	MT	74683H507	PMAYX	Putnam MA Tax Exempt Income Y	2.7	0.6	0.6	0.5	0.5	0.5	0.5
timeseries	Red	MT	25158X864	SQMCX	DWS Massachusetts Tax Free C	-3.3	1.6	1.6	1.6	1.6	1.6	1.6
timeseries	Red	MT	25158X880	SQMAX	DWS Massachusetts Tax Free A	-3.3	0.8	0.8	0.9	0.9	0.9	0.9
timeseries	Red	MT	25158X856	SCMAX	DWS Massachusetts Tax Free S	-3.3	0.6	0.6	0.6	0.6	0.6	0.6
timeseries	Red	MO	479164402	JMUNX	Johnson Municipal Income	-3.3	0.3	0.3	0.7	0.7	0.7	0.7





FURS Input Validation

