

User Guide for FEMS Daily Values Spreadsheet

The intent of this spreadsheet is to provide users one method to ingest FEMS data and produce the NFDRS output values and percentiles for a single station or averaged outputs for multiple stations. It will also provide staffing levels, dispatch levels and adjective rating from the old WIMS calculations. Those calculations are not a national standard and are for reference purposes only. Field units and dispatch centers should utilize breakpoints if they have completed a fires analysis for the local area. The outputs on the spreadsheet are based solely on climatological data. The spreadsheet is not a national standard document and users are encouraged to develop their own products as needed. Averaging multiple stations together should be done with caution since it is likely to reduce the overall understanding of fire danger values that individual stations provide, and it is encouraged to monitor all stations of interest individually.

The spreadsheet is locked except for the yellow highlighted cells and the green highlighted Station ID cells.

Step 1. When the spreadsheet is opened for the first time on your machine Excel may ask about privacy levels. Choose Ignore Privacy levels for this file. From the drop down, click on <https://fems.fs2c.usda.gov/>. Click OK.

The screenshot displays the FEMS Daily Values Spreadsheet in Excel. The spreadsheet is divided into several sections:

- Initial inputs:** This section contains fields for SIG Name (Test5), Fuel Model (Y-Timber), Percentile Date Filter Start (01/01), Percentile Date Filter End (12/31), Day of Year (1), and Day of Year (365). It also includes a table for 5 Class Staffing Level Inputs with Breakpoint 1 (12.20), Breakpoint 2 (24.40), Breakpoint 3 (48.80), and Breakpoint 4 (54.20).
- Privacy levels dialog:** A dialog box is open, asking the user to choose a privacy level. The options are "Ignore Privacy Levels" (selected), "Current Workbook", and "https://fems.fs2c.usda.gov/". The "Ignore Privacy Levels" option is circled in red.
- FEMS NFDRS Outputs and Percentiles:** This section contains a table with columns for dates from 08/01/2025 to 08/11/2025. The rows show various output values and percentiles for different stations.

	08/01/2025	08/02/2025	08/03/2025	08/04/2025	08/05/2025	08/06/2025	08/07/2025	08/08/2025	08/09/2025	08/10/2025	08/11/2025	#VALUE!
Number of Stations	5	5	5	5	5	5	5	5	5	5	5	0
Reporting	9.77	9.2	9.63	9.24	8.02	8.11	8.32	6.48	5.67	5.82	6.39	
10 Hr. Percentile	36.7	32.4	36	33.2	21.9	23	25.4	5.7	1.1	1.9	4.9	0
100 Hr. Percentile	12.32	13.02	13.18	13.08	12.21	11.47	11.42	10.63	9.46	8.82	8.84	
1000 Hr. Percentile	28.60	33.00	33.70	33.00	27.90	21.50	15.10	15.10	6.00	2.40	2.40	0.00
1000 Hr. Percentile	12.38	12.79	13.25	13.4	13.35	13.18	13.04	12.64	12.05	11.48	11.31	
1000 Hr. Percentile	17.80	20.40	23.60	24.40	24.40	22.90	19.80	15.60	11.10	10.10	10.10	0.00
KBDI	609.4	613.6	617.2	620	621.8	624.4	626.6	629.8	634.2	639.2	644.4	

The screenshot displays a Microsoft Excel spreadsheet used for generating fire station reports. The interface includes the standard Excel ribbon at the top with tabs for File, Home, Insert, Draw, Page Layout, Formulas, Data, Review, View, Automate, Help, and Acrobat. The spreadsheet is organized into three main sections:

- Initial inputs:** This section (rows 3-10) contains input fields for 'Group Name' (PSA NC01), 'Fuel Model' (Y - Timber), 'Number of RAWs' (6), and various dates for 'Percentile Date Filter Start' (01/01), 'Percentile Date Filter End' (12/31), 'Day of Year' (1), and 'Day of Year' (365). It also includes 'Enter WIMS/FEMS ID' (40102, 40421, 40425, 40427, 40428, 40429).
- Dispatch Level Inputs:** This section (rows 11-16) includes '5 Class Staffing Level Inputs' (Index, ERC, J), 'SL Break Points' (80th / 95th), 'Number of Classes' (3), and 'Breakpoint 1' (20), 'Breakpoint 2' (32).
- FEMS NFRS Outputs and Percentiles:** This section (rows 17-24) is a table with columns for dates from 08/09/2025 to 08/19/2025, and a final column for '#VALUE! Forecast'. The rows represent different stations: 'Type', 'Number of Stations Reporting', '100 Hr.', and '100 Hr. Percentile'. The '100 Hr. Percentile' row shows values for various stations, with 'FDRA 1' highlighted by a red circle.

[illegible]

Step 4. Enter the station ID number in the green highlighted cells.

	A	B	C	D	E	F	G	H	I	J
1										
2	Initial inputs									
3	User inputs required in shaded / highlighted cells .									
4	FDRA Name	PSA NC01								
5	Fuel Model	Y - Timber			Percentile Date Filter Start	01/01		Day of Year: 1		
6	Number of RAWS	6			Percentile Date Filter End	12/31		Day of Year: 365		
7		RAWS 1	RAWS 2	RAWS 3	RAWS 4	RAWS 5	RAWS 6			
8	Station ID	40102	40421	40425	40427	40428	40429			
9										
10		5 Class Staffing Level Inputs					Dispatch Level inputs			
11			Index	ERC	J			Index	BI	L
12			SL Break Points	80th / 95th				Number of Classes	3	
13		Breakpoint 1	Breakpoint 2	Breakpoint 3	Breakpoint 4			Breakpoint 1	Breakpoint 2	
14		80th / 4	80th / 2	80th	95th			20	32	
15		7.27	14.53	29.06	36.10					

Step 5. Choose the staffing level inputs index and breakpoints in the drop-down menu. No options for customized breakpoints exists.

	A	B	C	D	E	F	G	H	I	J
1										
2	Initial inputs									
3	User inputs required in shaded / highlighted cells .									
4	FDRA Name	PSA NC01								
5	Fuel Model	Y - Timber			Percentile Date Filter Start	01/01		Day of Year: 1		
6	Number of RAWS	6			Percentile Date Filter End	12/31		Day of Year: 365		
7		RAWS 1	RAWS 2	RAWS 3	RAWS 4	RAWS 5	RAWS 6			
8	Station ID	40102	40421	40425	40427	40428	40429			
9										
10			5 Class Staffing Level Inputs					Dispatch Level inputs		
11			Index	ERC	J			Index	BI	L
12			SL Break Points	80th / 95th				Number of Classes	3	
13		Breakpoint 1	Breakpoint 2	Breakpoint 3	Breakpoint 4			Breakpoint 1	Breakpoint 2	
14		80th / 4	80th / 2	80th	95th			20	32	
15		7.27	14.53	29.06	36.10					

Step 6. OPTIONAL: If you have completed an analysis with FEMS data for Dispatch levels enter the Index, number of classes and the breakpoints in the Dispatch Levels Inputs.

	A	B	C	D	E	F	G	H	I	J
1										
2	Initial inputs									
3	User inputs required in shaded / highlighted cells .									
4	FDRA Name	PSA NC01								
5	Fuel Model	Y - Timber			Percentile Date Filter Start	01/01		Day of Year: 1		
6	Number of RAWS	6			Percentile Date Filter End	12/31		Day of Year: 365		
7		RAWS 1	RAWS 2	RAWS 3	RAWS 4	RAWS 5	RAWS 6			
8	Station ID	40102	40421	40425	40427	40428	40429			
9										
10			5 Class Staffing Level Inputs					Dispatch Level inputs		
11			Index	ERC	J			Index	BI	L
12			SL Break Points	80th / 95th				Number of Classes	3	
13		Breakpoint 1	Breakpoint 2	Breakpoint 3	Breakpoint 4			Breakpoint 1	Breakpoint 2	
14		80th / 4	80th / 2	80th	95th			20	32	
15		7.27	14.53	29.06	36.10					

Daily Listing											
Ensure daily listing values are for same fuel model as user selected fuel model in cell B5 above.											
Yellow columns are required for staffing level, percentile values					Recommended climatology is FEMS gap-filled Period of Record (POR) 2005 to 2022. Avoid using first 60 days of model initialization, if using POR data start climatological data on 03/01/2005						
Climatology Start Year: 2005			Climatology End Year: 2022								
Day of Year	Date	100 Hr.	1000 Hr.	KBDI	GSI	Woody FM	Herb FM	IC	ERC	SC	BI
60	03/01/2005	22.588	22.05	23.8		60	30	3.407	9.335	2.023	10.638
61	03/02/2005	21.81	22.329	18.8		60	30	5.853	10.448	1.582	10.065
62	03/03/2005	20.873	22.349	20.4		60	30	5.822	11.833	2.02	12.31
63	03/04/2005	20.919	22.28	21.4		60	30	3.457	9.979	1.736	10.438
64	03/05/2005	19.776	22.132	22.7		60	30	14.451	15.402	2.35	14.809
65	03/06/2005	17.921	21.541	28.1		60	30	19.523	18.357	2.649	17.136
66	03/07/2005	16.815	20.803	34.7		60	30	17.216	19.554	2.322	16.677
67	03/08/2005	16.273	20.093	41.9		60	30	19.173	21.673	2.495	17.684
68	03/09/2005	15.746	19.507	50.3		60	30	22.129	23.746	2.852	20.123
69	03/10/2005	14.726	18.792	57.5		60	30	30.905	26.953	4.007	24.074
70	03/11/2005	13.726	17.981	66		60	30	32.076	29.667	3.261	23.179
71	03/12/2005	13.253	17.352	77.4		60	30	29.709	30.876	3.12	23.584
72	02/13/2005	13.129	17.017	86.1		60	30	25.785	30.765	2.933	22.876

The screenshot shows the Microsoft Excel interface. The 'Data' tab is selected on the ribbon. The 'Refresh All' button, represented by a circular arrow icon, is circled in red. Below the ribbon, the formula bar displays 'B51' and the date '3/1/2005'. The spreadsheet grid shows columns A through N, with row 1 highlighted in green and labeled 'Initial inputs'.