

DUST DIOXIN CONCENTRATIONS: Weighted TEQ by region

Number of Participants: 764

Sample Type: dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 2005 TEFs

Survey Sampling Weight: wt_final_dust

Zone	N	TEQ (ppt)						
		Mean	S.E.	Median	75th %ile	95th %ile	Min.	Max.
Overall	764	28.2	3.5	13.9	24.9	86.9	1.2	1746.9
M/S FP	207	35.1	6.8	14.8	28.6	103.4	2.1	1746.9
M/S Near FP	159	14.4	1.5	8.4	18.5	33.2	1.2	188
M/S Out FP	163	29	5.8	14.5	21.8	76.5	1.4	1398.3
M/S Plume	37	31.1	4.1	27.3	38.6	89.5	7.6	94.7
Jackson/Calhoun	198	27.3	4.5	11.3	25.2	98.6	1.6	1091.6

M/S: Midland/Saginaw

FP: Floodplain

SAS program: Get_table1_figure1.sas

Created by: BH & XJ

Last Update: XZ 06/05/2008

DUST DIOXIN CONCENTRATIONS: Weighted TEQ by region

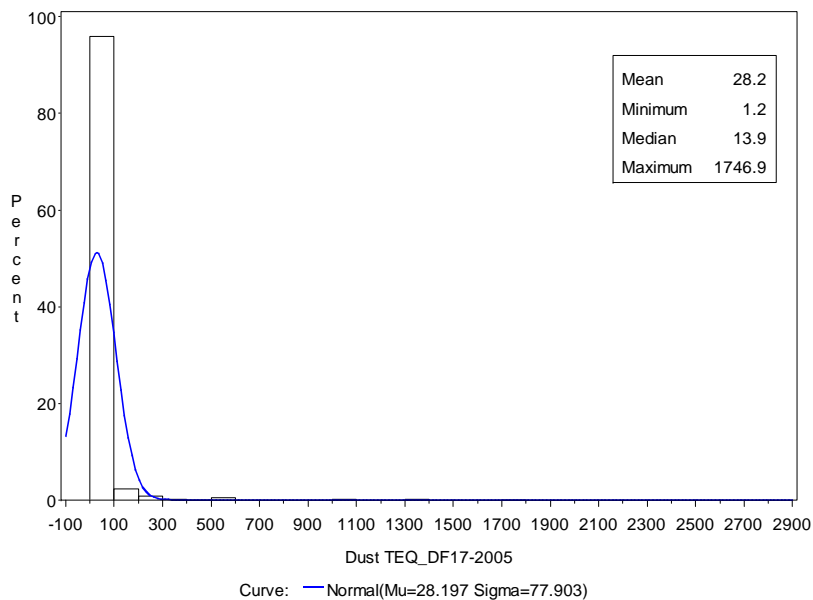
Number of Participants: 764

Sample Type: dust

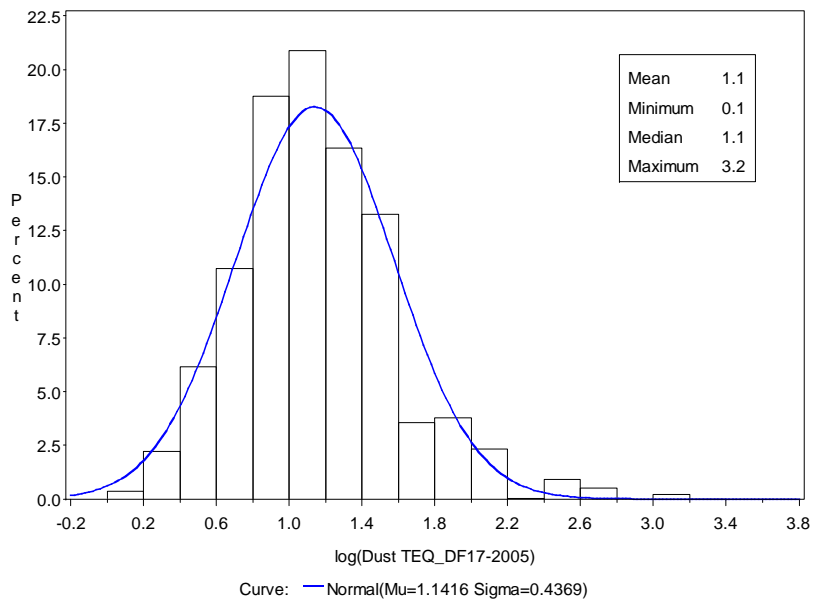
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Survey Sampling Weight: wt_final_dust

Overall Distribution of TEQ_DF17-2005 (N=764)



Overall Distribution of log10(TEQ_DF17-2005)(N=764)



SAS program: Get_table1_figure1.sas

Created by: BH & XJ

Last Update: XZ 06/05/2008

DUST DIOXIN CONCENTRATIONS: Test results for comparing weighted TEQ among regions

Number of Participants: 764

Sample Type: Dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 2005 TEFs

Survey Sampling Weight: wt_final_dust

Summary statistics for household dust weighted TEQ concentration for region comparisons

Region	Mean of log ₁₀ TEQ	% > Jackson/Calhoun's 75 th percentile, which is 25.2 ppt	% > Jackson/Calhoun's 95 th percentile, which is 98.6 ppt
1-M/S FP (n=207)	1.2153	26.2%	6.1%
2-M/S Near FP (n=159)	1.0157	15.4%	<1%
3-M/S Out FP (n=163)	1.1571	21.2%	3.9%
4-M/S Plume (n=37)	1.4164	58.0%	<1%
5-Jackson/Calhoun (n=198)	1.1093	24.8%	5.1%

M/S: Midland / Saginaw;

FP: Floodplain

Pair-wise comparisons for household dust TEQ between regions (Each cell contains the p-value and effect direction)

This table shows the results of 1) t-tests (SAS PROC Surveyreg) for comparisons of the means of log₁₀TEQ between each combination of two regions; 2) Wald chi-square tests (SAS PROC Surveylogistic) for comparisons of the odds of subjects being above the 75th percentile TEQ for Jackson/Calhoun Counties between each combination of two regions; and 3) Wald chi-square tests (SAS PROC Surveylogistic) for comparisons of the odds of subjects being above the 95th percentile TEQ for Jackson/Calhoun Counties between each combination of two regions.

"+" after p-value: the row-region has higher mean or higher odds of being above the selected cut-point than the column-region.

"-" after p-value: the row-region has lower mean or lower odds of being above the selected cut-point than the column-region.

P-value	1-M/S FP	2-M/S Near FP			3-M/S Out FP			4-M/S Plume			5-Jackson/Calhoun		
		Mean of log ₁₀ TEQ	%>J/C's 75 th	%>J/C's 95 th	Mean of log ₁₀ TEQ	%>J/C's 75 th	%>J/C's 95 th	Mean of log ₁₀ TEQ	%>J/C's 75 th	%>J/C's 95 th	Mean of log ₁₀ TEQ	%>J/C's 75 th	%>J/C's 95 th
1-M/S FP		0.0003 +	0.0626 +	0.0053 +	0.3068 +	0.3598 +	0.3621 +	0.0014 -	0.0072 -	<0.0001+	0.0480 +	0.7879 +	0.7217 +
2-M/S Near FP					0.0180 -	0.3222 -	0.0415 -	<0.0001-	0.0004 -	<0.0001+	0.0968 -	0.1080 -	0.0192 -
3-M/S Out FP								0.0001 -	0.0022 -	<0.0001+	0.4138 +	0.5181 -	0.6458 -
4-M/S Plume											<0.0001+	0.0054 +	<0.0001-

J/C: Jackson/Calhoun

SAS program: Get_dust_region_compare.sas

Created by: BH & WC

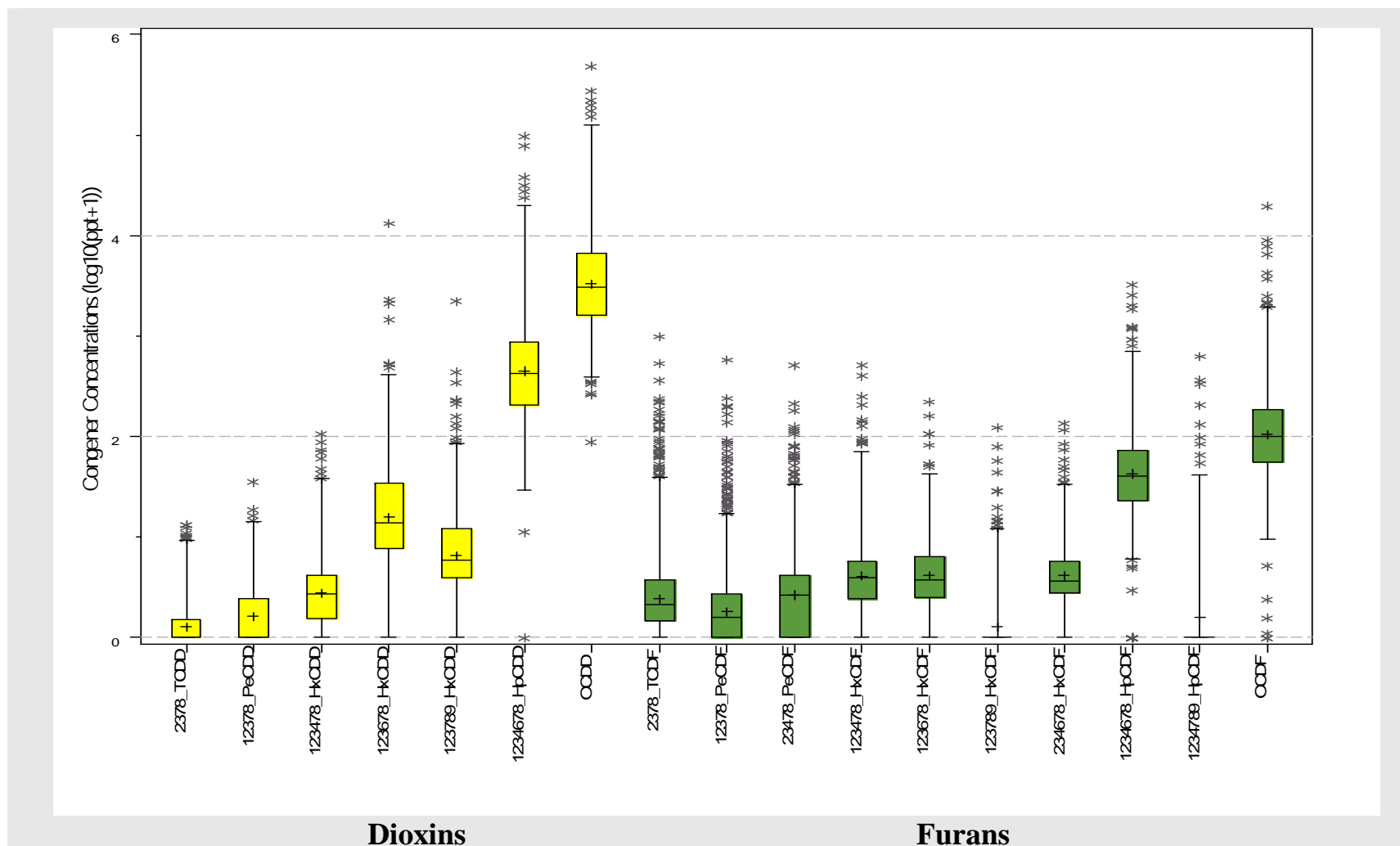
Last Update: XZ 06/17/2008

WEIGHTED DUST CONCENTRATIONS: Distribution of each dioxin and furan congener concentration, shown using box plots on the log₁₀ scale.

Number of Participants: 764

Sample Type: dust

Survey Sampling Weight: wt_final_dust



SAS program: Get_boxplot_figure2

Created by: BH

Last Update: XZ 07/01/2008

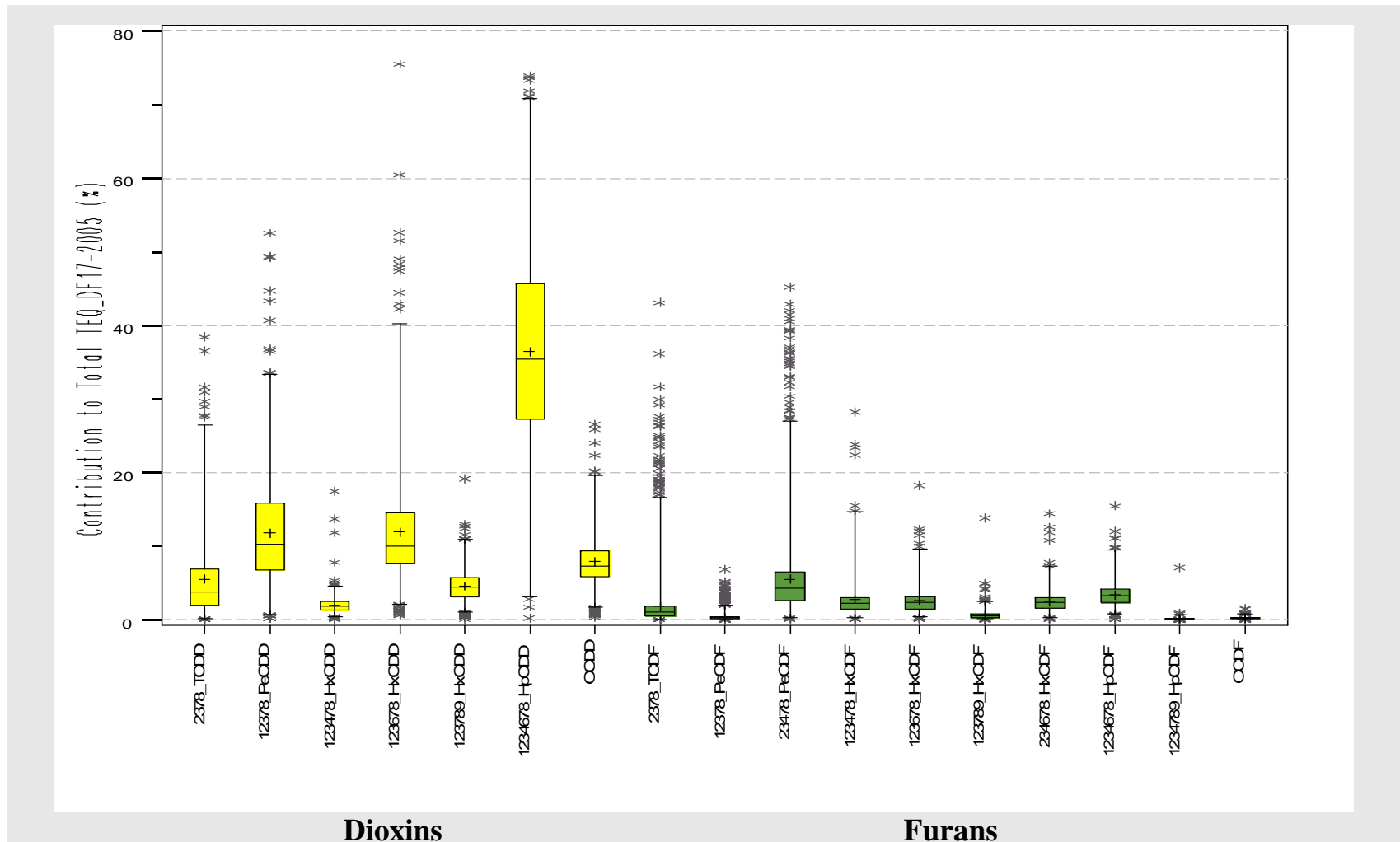
WEIGHTED DUST CONCENTRATIONS: Contribution of each congener to the total TEQ, shown using box plots

Number of Participants: 764

Sample Type: dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 2005 TEFs

Survey Sampling Weight: wt_final_dust



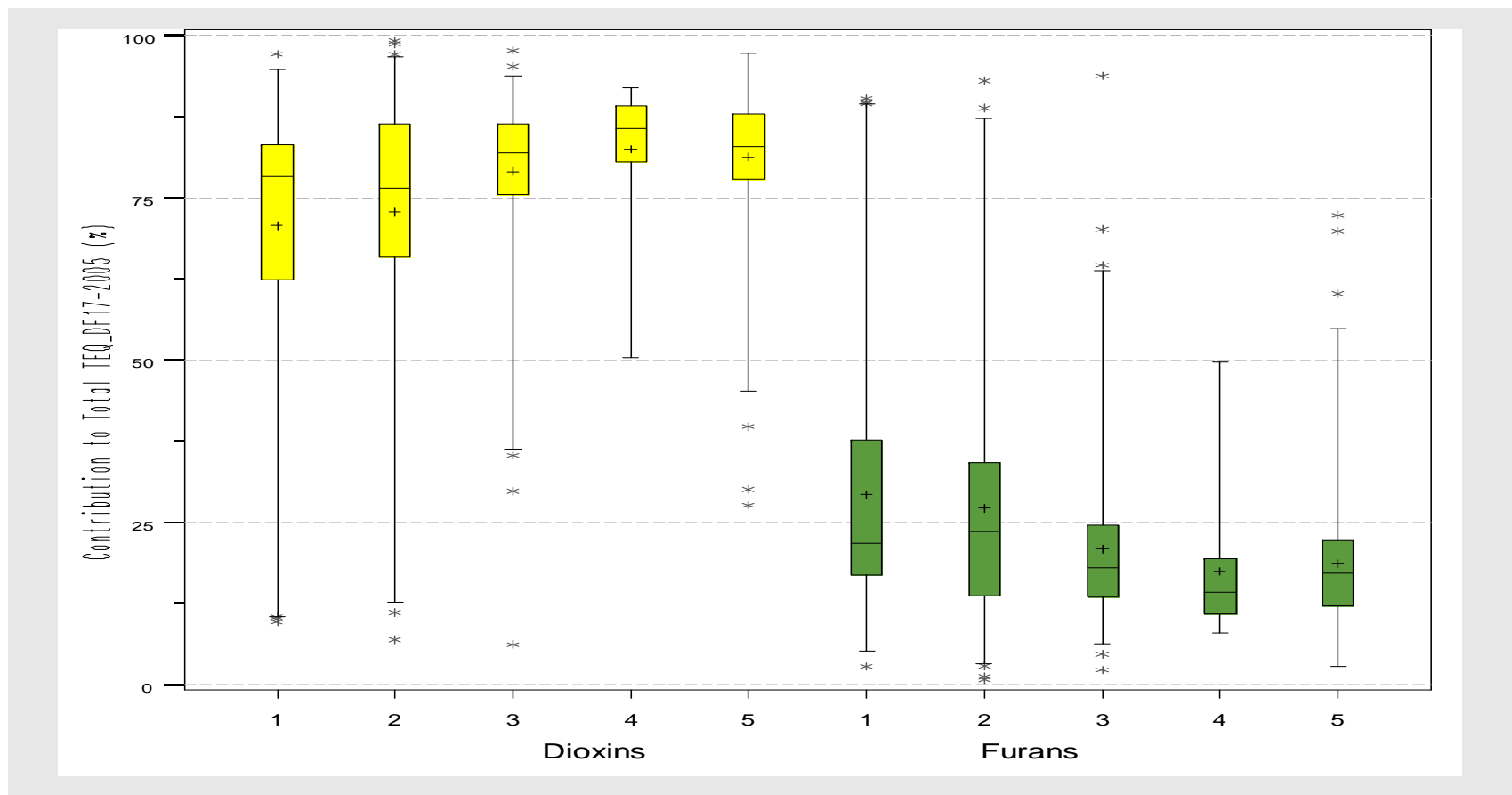
WEIGHTED DUST CONCENTRATIONS: Percent contribution to total TEQ for dioxins and furans, by region, shown using box plots

Number of Participants: 764

Sample Ttype: dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 2005 TEFs

Survey Sampling Weight: wt_final_dust



Region* 1-Midland/Saginaw FP; 2-Midland/Saginaw Near FP; 3-Midland/Saginaw Out FP;
 4-Midland/Saginaw Plume; 5-Jackson/Calhoun

SAS program: Get_boxplot_Figure3_4_TEQ05_17.sas

Created by: BH

Last Update: XZ 07/07/2008