

Lat 36-59-60
Lon 89-12-26
River
Mile 6

ADP
10/24/08

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No.	2
Station Number		ADCP Discharge Measurement Notes				Processed by	ES
370000039122601						Checked by	ES
Station Name MISSISSIPPI AB CONFLUENCE							
Date		4-30-2011		Party	ESS/ JRM		
Width		(Area) Rated Area		Velocity	Index Vel.	Gage Height	Discharge
9490		255,000		3.29	-	-	836,000
Gage Height Change		Meas. plots		From rating	Shift	ADCP Sync'd to WT	
in hrs.		-% diff		No.		Dat or N	
ADCP Mfr / Model / Frequency		Serial No.		Firmware	Software		
RD1 / R10 / 600		1127		10.16	2.07		
Boat/Motors Used		GPS Used		ADCP Depth	Diag. Test / Errors?		
MO WSC QW		TRIMB AG		2.4	Y or N		
Compass Calib. & Total Error		Mag. Var		Mag/Var Method	Moving Bed?		
Y or N		-8		-1.6	On-site (Model) Previous	Y or N	
Meas. Water Temp		ADCP Water Temp		Weather / Air Temp	Wind Speed / Dir.		
14.2 °F @		14.2 °F @		RAIN COOL	5-10 SSE		
Gage Readings							
Time		Inside	Outside	Site Conditions			
1651 (S)				Max Water Depth	70.9		
				Max Water Speed			
				Max Boat Speed			
1742 (P)				Water Mode	12		
				Bottom Mode	5		
				Streambed material			
				Salinity			
				ppt at			
Weighted MGH				Checkbar found			
GH corrections				Checkbar changed to:			
Correct MGH				at			
Wading, cable, ice, boat, upstr., downstr., side bridge							
Measurement rated: excellent (2%) good (5%) fair (8%) poor (>8%)							
Flow FAIRLY EVEN							
Cross section:							
Control: CHANNEL							
Gage operating: Y or N		Record removed: Y or N		Filename:			
Battery voltage		V		Intakes/Orifice cleaned/purged:			
Bubble-gage psi:		Tank		Line		Bubble rate / min	
Extreme-GH indicators:		Max		Min		CSG Checked Y or N	
HWM on stick		Ref elev.		HWM elevation			
GH of zero flow = GH		- depth at control		ft.		Rated =	
				Sheet No.		of sheets	

Meas. Location:

Party:	Width: 2,160 ft	Processed by:
Boat/Motor:	Area: 128,000 ft ²	Mean Velocity: 5.06 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 646,000 ft ³ /s

Area Method: Avg. Course	ADCP Depth: 2.400 ft	Index Vel.: 0.00 ft/s	Rating No.: 1
Nav. Method: DGPS	Shore Ens.:10	Adj.Mean Vel: 0.00 ft/s	Qm Rating: U
MagVar Method: None (-1.6°)	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft ²	Diff.: 0.000%
Depth Sounder: Not Used	Top Est: Power (0.1667)	Control1: Unspecified	
		Control2: Unspecified	
		Control3: Unspecified	

Screening Thresholds:		ADCP:	
BT 3-Beam Solution: YES	Max. Vel.: 13.6 ft/s	Type/Freq.: Rio Grande / 600 kHz	
WT 3-Beam Solution: NO	Max. Depth: 70.9 ft	Serial #: 1127	Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 59.2 ft	Bin Size: 50 cm	Blank: 25 cm
WT Error Vel.: 3.50 ft/s	% Meas.: 82.20	BT Mode: 5	BT Pings: 1
BT Up Vel.: 1.00 ft/s	Water Temp.: None	WT Mode: 12	WT Pings: 1
WT Up Vel.: 12.00 ft/s	ADCP Temp.: 14.1 °C	WV : 254	WO : 1, 19
Use Weighted Mean Depth: YES			

Performed Diag. Test: NO

Project Name: mississippiabconflu043011_0_n

Performed Moving Bed Test: YES

Software: 2.08

Performed Compass Test: NO

Meas. Location:

Tr.#		Edge Distance		#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad	
		L	R		Top	Middle	Bottom	Left	Right	Total			Start	End	Boat	Water	Ens.	Bins
000	R	252	0	470	51583	541116	55031	14423	0.000	662153	2148	127964	17:09	17:14	6.00	5.17	0	0
001	L	250	0	657	49793	521095	50730	8455	0.000	630073	2166	127468	17:14	17:22	4.35	4.94	0	0
Mean		251	0	563	50688	531105	52881	11439	0.000	646113	2157	127716	Total	00:12	5.18	5.06	0	0
SDev		1	0	132	1266	14157	3041	4220	0.000	22684	12.6	350.7			1.17	0.16		
SD/M		0.01	0.00	0.23	0.02	0.03	0.06	0.37	0.00	0.04	0.01	0.00			0.23	0.03		

Remarks: This mmt subsectioned by TAK on 2/14/12 to determine main channel vs overflow for the purpose of estimating overflow on other dates.

Party:	Width: 7,340 ft	Processed by:
Boat/Motor:	Area: 127,000 ft ²	Mean Velocity: 1.50 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 190,000 ft ³ /s

Area Method: Avg. Course	ADCP Depth: 2.400 ft	Index Vel.: 0.00 ft/s	Rating No.: 1
Nav. Method: DGPS	Shore Ens.:10	Adj.Mean Vel: 0.00 ft/s	Qm Rating: U
MagVar Method: None (-1.6°)	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft ²	Diff.: 0.000%
Depth Sounder: Not Used	Top Est: Power (0.1667)	Control1: Unspecified	
		Control2: Unspecified	
		Control3: Unspecified	

Screening Thresholds:		ADCP:	
BT 3-Beam Solution: YES	Max. Vel.: 8.43 ft/s	Type/Freq.: Rio Grande / 600 kHz	
WT 3-Beam Solution: NO	Max. Depth: 44.3 ft	Serial #: 1127	Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 17.3 ft	Bin Size: 50 cm	Blank: 25 cm
WT Error Vel.: 3.50 ft/s	% Meas.: 56.25	BT Mode: 5	BT Pings: 1
BT Up Vel.: 1.00 ft/s	Water Temp.: None	WT Mode: 12	WT Pings: 1
WT Up Vel.: 12.00 ft/s	ADCP Temp.: 14.2 °C	WV : 254	WO : 1, 19
Use Weighted Mean Depth: YES			

Performed Diag. Test: NO

Project Name: mississippiabconflu043011_0_c

Performed Moving Bed Test: YES

Software: 2.08

Performed Compass Test: NO

Meas. Location:

Tr.#		Edge Distance		#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad	
		L	R		Top	Middle	Bottom	Left	Right	Total			Start	End	Boat	Water	Ens.	Bins
000	R	0	602	1596	57945	113074	30872	0.000	248	202139	7349	125979	16:51	17:09	6.21	1.60	0	1
001	L	0	643	1771	50633	100782	27299	0.000	-632	178082	7330	127994	17:22	17:42	5.60	1.39	0	1
Mean		0	623	1683	54289	106928	29086	0.000	-192	190111	7339	126986	Total	00:51	5.91	1.50	0	1
SDev		0	29	124	5170	8692	2526	0.000	622	17011	13.3	1425.0			0.44	0.15		
SD/M		0.00	0.05	0.07	0.10	0.08	0.09	0.00	3.25	0.09	0.00	0.01			0.07	0.10		

Remarks: This mmt subsectioned by TAK on 2/14/12 to determine main channel vs overflow for the purpose of estimating overflow on other dates.

- transect has been subsectioned

Discharge for transects in *italics* have a total Q more than 5% from the mean