REF 5 10-4-2

1 Tape readability is guaranteed to original purchaser provided that the National Climatic Data Center furnished the blank tape and the user attempts to read the tape and notify NCDC of any problems within 60 days of receipt.

2 The program you are receiving is a copy of an active piece of software on the UNIVAC 1100 System used by the National Climatic Data Center for its internal use and as such is in the public domain. The fee paid to receive this program covers only the cost of transfer of the source code to your desired output medium. Since this center is not a software broker, we do not:

a. Provide support in making the program run on your system.
b. Automatically provide possible changes or updates made to enhance the program.

4 The National Climatic Data Center considers that, in some cases, the reported values on Cooperative Climatological Observation forms, January 1982 and later, are questionable due to recording errors. The best estimates of observed values may be obtained from our Climatological Data publication or from our digital data files.

5 The National Climatic Data Center considers the accuracy of the solar radiation data you have requested to be questionable. The best estimates of observed solar radiation consist of data prior to 1981 which may be obtained from our magnetic tapes in the SOLMET format.

6 IF PAYMENT IS MADE BY CHECK, IT MUST BE DRAWN ON A UNITED STATES BANK OR A U. S. BRANCH OF A FOREIGN BANK, PAYABLE IN UNITED STATES CURRENCY. INTERNATIONAL MONEY ORDERS OR UNESCO COUPONS ALSO ARE ACCEPTABLE AS PAYMENT. PLEASE INCLUDE PAYMENT FOR ANY RUSH OR SPECIAL MAILING CHARGES WHEN REQUIRED. IF YOU PLAN TO SEND VIA "ELECTRONIC TRANSFER", WIRE DIRECTLY TO: FIRST UNION NATIONAL BANK, CHARLOTTE, NC; ROUTING TRANSIT CODE 0530-00219. PLEASE ADD AN ADDITIONAL $6.50 TO YOUR ORDER FEE TO COVER FIRST UNION'S SERVICE CHARGE.

7 Since no weather records are received for your specified area, we are substituting available data of the type desired from the nearest reporting station. Because of the distances involved or differences in terrain features, these data may not be completely representative.

8 If assistance is needed in the application of the data on these records, a list of addresses for private consulting meteorologists may be obtained from:

A72Q 1.0

The American Meteorological Society
45 Beacon Street
Boston, MA 02108

161295

Site: Atlantic Water
ID #: 1AD0399 54300
Break: 1768
Other: N/D
n/d

9 DU-00

URGENT

Regulations will not permit the National Climatic Data Center to absorb cost for services provided customers on a reimbursable basis. UNTIL WE RECEIVE PAYMENT, OR JUSTIFICATION FOR NON-PAYMENT WE WILL NOT BE ABLE TO HONOR FUTURE REQUESTS FOR DATA. Should your records show that payment has been made for this invoice, please send proof of payment. We prefer to remove your name from our past-due accounts RATHER THAN TURN IT OVER TO THE NOAA OFFICE OF GENERAL COUNSEL FOR COLLECTION.

10 Excess payment may be used as automatic credit on future orders or refunded upon request only.

(NOTE: Customer number must be used when placing an order, when checking on order status, or when requesting a refund.)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NCC FORM 5443

ANNUAL CLIMATOLOGICAL SUMMARY

ENVIRONMENTAL DATA SERVICE
NATIONAL CLIMATIC CENTER
NOAA FORM 27-326 (11-74)

10" snow : 1" rain

STATION NUMBER: 13 0364 07 ATLANTIC 1 NE IOWA ELEVATION 0 1195 FT. ABOVE SEA-LEVEL. LAT.: 41° 25' N: LONG.: 95° 00' CDD

DATE YR.	MO.	TEMPERATURES (°F.) MEAN MAXIMUM	MEAN MINIMUM	MEAN	DEPART. FROM NORMAL	DEGREE DAYS	HIGHEST	DATE	LOWEST	DATE	NUMBER OF DAYS MAX. ≥ 90°	MAX. ≤ 32°	MIN. ≤ 32°	MIN. ≤ 0°	PRECIPITATION (INCHES) TOTAL	DEPART. FROM NORMAL	GREATEST OBSERVED DAY	DATE	SNOW, SLEET TOTAL FALL	GREATEST DEPTH	DATE	NO OF DAYS ≥ .10	≥ .50	≥ 1.00	
80	01	30.6	14.1	22.4	2.2	1316	55	13	- 16	31	0	18	30	6	1.15	.30	.85	16		4	31+	2	1	0	0
80	02	28.4	11.5	20.0	- 5.3	1298	41	26	- 17	1	0	19	29	6	.42	- .55	.15	4		4	8+	2	0	0	0
80	03	43.1	23.2	33.2	- 1.5	977	62	19+	- 3	1	0	7	24	3	.75	- 1.31	.33	28	3.5			3	0	0	0
80	04	64.9	35.4	50.2	.4	451	90	22	22	13	1	0	11	0	1.25	- 1.63	.47	3	.0	0		4	0	0	12
80	05	75.7	45.8	60.8	.0	184	88	29	24	9	0	0	3	0	1.96	- 2.31	.72	17	.0	0		6	1	0	56
80	06	84.1	60.0M	72.1M	2.4	13	101	27	46	8	8	0	0	0	6.83	1.74	2.01	6	.0	0		6	4	3	236
80	07	91.6	66.3	79.0	4.7	0	100	14+	50	27	19	0	0	0	2.87	- .70	1.37	5	.0	0		8	2	1	444
80	08	87.6	64.4	76.0	3.4	0	97	9	52	5	10	0	0	0	6.55	2.64	1.82	16	.0	0		9	4	3	348
80	09	79.2	52.6	65.9	2.3	92	92	8+	29	26	4	0	3	0	.63	- 2.69	.25	25	.0	0		3	0	0	126
80	10	63.3	33.6	48.5	- 5.1	506	85	8	14	29+	0	0	12	0	1.72	- .30	.71	16	4.4	4	27	3	2	0	0
80	11	52.2	25.7	39.0	1.5	772	75	6	6	25	0	0	20	0	.10	- 1.15	.10	13	.0	0		1	0	0	0
80	12	35.2	16.0	25.6	.1	1215	59	5	- 11	25	0	10	30	3	.55	- .30	.41	7	.5	1	24+	1	0	0	0
80	ANN.	61.3	37.4M	49.4M	.4	6824	101	6	- 17	2	42	54	162	18	24.78	- 6.26	2.01	6		4	10+	48	14	7	1222
		ANNUAL MEANS				SUM	ANNUAL EXTREMES				ANNUAL SUMS						EXTREME		SUM	EXTREME		SUMS			
		SUM	SUM	SUM	NORMAL	DEP. .4	DIFF.	ERROR							NORMAL	DEP.	DIFF.	ERROR							

"M" = MISSING DAYS
"+" AFTER DATE : ALSO OTHER DAYS
"T" = TRACE

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NCC FORM 5443

ANNUAL CLIMATOLOGICAL SUMMARY

ENVIRONMENTAL DATA SERVICE
NATIONAL CLIMATIC CENTER
NOAA FORM 27-326 (11-74)

STATION NUMBER: 13 0364 07 ATLANTIC 1 NE IOWA ELEVATION 1195 FT. ABOVE SEA-LEVEL. LAT.: 41° 25' N: LONG.: 95° 00' W

DATE YR.	DATE MO.	TEMPERATURES (°F.) MEAN MAXIMUM	MEAN MINIMUM	MEAN	DEPART. FROM NORMAL	DEGREE DAYS	HIGHEST	DATE	LOWEST	DATE	NUMBER OF DAYS MAX. ≥ 90°	MAX. ≤ 32°	MIN. ≤ 32°	MIN. ≤ 0°	PRECIPITATION (INCHES) TOTAL	DEPART. FROM NORMAL	GREATEST OBSERVED DAY	DATE	SNOW, SLEET TOTAL FALL	GREATEST DEPTH	DATE	NO. OF DAYS ≥ .10	≥ .50	≥ 1.00	
81	01	36.9	10.5	23.7	3.5	1274	66	24	- 10	10	0	11	31	5	.34	- .51	.30	31	5.0	5	31	1	0	0	0
81	02	M	M	M	M	M	M		M		0				E .73	- .24									0
81	03	M	M	M	M	M	M		M		0				E 1.06	- 1.00								0	0
81	04	72.6	45.1	58.9	9.1	221	90	25	22	15	1	0	6	0	1.43	- 1.45	.43	22	.0	0		6	0	0	43
81	05	71.8	45.9M	58.9M	- 1.9	218	85	31	27	11	0	0	2	0	2.41	- 1.86	1.07	4	.0	0		6	1	1	27
81	06	84.9	59.6	72.3	2.6	6	96	7	47	19	6	0	0	0	4.72	- .37	1.66	2	.0	0		5	3	2	230
81	07	84.1	63.8	74.0	- .3	17	98	14+	52	29+	8	0	0	0	3.52	- .05	.94	25	.0	0		8	2	0	302
81	08	80.2	58.2	69.2	- 3.4	26	88	4	41	19	0	0	0	0	4.73	.82	1.22	2	.0	0		10	3	1	165
81	09	78.5	51.7	65.1	1.5	77	92	29	33	18	2	0	0	0	2.36	- .96	1.20	7	.0	0		2	2	1	87
81	10	61.0	38.1	49.6	- 4.0	470	77	5	16	26+	0	0	9	0	3.58	1.56	1.26	17	.0	0		4	3	1	0
81	11	51.0	29.8	40.4	2.9	732	64	17	14	21	0	2	19	0	2.19	.94	.85	30				5	2	0	0
81	12	30.6M	12.3M	21.5M	- 4.0	1333	49	7	- 22	19	0	16	31	7	1.25	.40	.85	1	9.7			2	1	0	0
81	ANN.						98	7			17				28.32E	- 2.72	1.66	6							854
		ANNUAL MEANS				SUM	ANNUAL EXTREMES				ANNUAL SUMS						EXTREME		SUM	EXTREME		SUMS			
		SUM	SUM	SUM	NORMAL	DEP.	DIFF.	ERROR							NORMAL	DEP.	DIFF.	ERROR							

"M" = MISSING DAYS
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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ANNUAL CLIMATOLOGICAL SUMMARY

NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA
28801

STATION IDENTIFICATION

13070364 ATLANTIC 1 NE IOWA ELEVATION 1195 FT. ABOVE SEA LEVEL LAT. 41 25N LONG. 95 0W

DATE		TEMPERATURE (°F)										NUMBER OF DAYS				PRECIPITATION (INCHES)							NO. OF DAYS		
YR.	MO.	MEAN MAXIMUM	MEAN MINIMUM	MEAN	DEPART. FROM NORMAL	HEATING DEGREE DAYS	COOLING DEGREE DAYS	HIGHEST	DATE	LOWEST	DATE	MAX ≥ 90°	MAX ≤ 32°	MIN ≤ 32°	MIN ≤ 0°	TOTAL	DEPART. FROM NORMAL	GREATEST OBSERVED DAY	DATE	SNOW, SLEET TOTAL FALL	SNOW, SLEET MAX DEPTH	SNOW, SLEET DATE	≥.10	≥.50	≥1.0
82	1	17.8	-2.2	7.8	-12.4	1771	0	35	29*	-27	10	0	29	31	21	1.75M	M	1.00	22	12.5	M		5	1	1
82	2	M	M	M				M		M		M	M	M	M	M	M			M	M		M	M	M
82	3	42.9	23.3	33.1	-1.6	976	0	64	31	-12	7	0	7	23	3	3.48	1.42	1.47	19	6.0	6	4	5	2	2
82	4	58.1	32.7	45.4	-4.4	582	3	81	2	6	6	0	2	14	0	1.22	-1.66	.52	16	3.0	2	5	4	1	0
82	5	72.1	52.7	62.4	1.6	117	42	86	4	32	1	0	0	1	0	7.24	2.97	1.48	5	.0	0		13	5	2
82	6	76.9	54.0	65.5	-4.2	64	85	90	28	41	1	1	0	0	0	2.59	-2.50	.85	30	.0	0		6	2	0
82	7	87.5	63.3	75.4	1.1	0	330	96M	4	49M	31	10	0	0	0	2.28	-1.29	.90	2	.0	0		5	2	0
82	8	80.0	61.0	70.5	-2.1	26	205	96	3	44	28	4	0	0	0	6.17	2.26	3.09	5	.0	0		7	4	2
82	9	72.9	52.5	62.7	-.9	146	82	84M	11	30M	21	0	0	2	0	3.63	.31	1.73	13	.0	0		5	2	1
82	10	62.9	40.0	51.5	-2.1	418	7	80M	1	20M	21	0	0	6	0	2.24	.22	.57	2	.0	0		8	2	0
82	11	44.6	26.3	35.5	-2.0	879	0	62	11*	4	24	0	5	21	0	1.74	.49	1.04	11	.0	0		4	1	1
82	12	37.1	19.9	28.5	3.0	1123	0	60	1	-4	12	0	11	27	3	3.54	2.69	1.25	28	5.0	5	31*	8	2	1
	ANN.	M	M	M	M	M	M	96M	AUG*	M		15M	54M	125M	27M		M	3.09M	AUG	26.5M	6M	MAR	70M	24M	10M

M MISSING DATA. APPEARS WITH MONTHLY DATA WHEN LESS THAN 10 DAYS ARE MISSING, AND IT APPEARS ALONE IF 10 OR MORE DAYS ARE MISSING. IT APPEARS WITH ANNUAL DATA, WHEN DERIVED FROM MONTHS WITH MISSING DATA.

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T TRACE

V INCLUDES TOTAL FOR PREVIOUS MONTH.

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ANNUAL CLIMATOLOGICAL SUMMARY

NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA
28801

STATION IDENTIFICATION

13070364 ATLANTIC 1 NE IOWA ELEVATION 1195 FT. ABOVE SEA LEVEL LAT. 41 25N LONG. 95 0W

DATE		TEMPERATURE (°F)														PRECIPITATION (INCHES)									
												NUMBER OF DAYS								SNOW, SLEET			NO. OF DAYS		
YR.	MO.	MEAN MAXIMUM	MEAN MINIMUM	MEAN	DEPART. FROM NORMAL	HEATING DEGREE DAYS	COOLING DEGREE DAYS	HIGHEST	DATE	LOWEST	DATE	MAX ≥ 90°	MAX ≤ 32°	MIN ≤ 32°	MIN ≤ 0°	TOTAL	DEPART. FROM NORMAL	GREATEST OBSERVED DAY	DATE	TOTAL FALL	MAX DEPTH	DATE	≥ .10	≥ .50	≥ 1.0
83	1	30.4	16.4M	23.4M	5.5	1278B	0B	47	13	1	18+	0	20	30	0	.60	-.16	.26	10	2.9	0T	9+	2	0	0
83	2	36.3	21.0	28.7	4.6	1012	0	58	28	-20	7	0	9	26	2	.97	.00	.37	2	11.5	M		4	0	0
83	3	43.4	27.1	35.3	.5	916	0	79	3	11	21	0	7	23	0	4.55	2.48	.85	25	7.8	0		10	5	0
83	4	52.4	32.7	42.6	-7.2	666	0	77	26	22	15	0	0	16	0	1.57	-1.43	.42	9	2.0	0		5	0	0
83	5	68.5M	44.0	56.3M	-4.8	278B	19B	87	27	28	8	0	0	2	0	5.83	1.92	2.50	1	.0	0		12	3	1
83	6	81.7	58.0	69.9	-.4	35	189	92	23	33	6	3	0	0	0	4.39	.22	.94	29	.0	0		10	4	0
83	7	90.7	65.9	78.3	3.9	0	420	101	22	51	26	16	0	0	0	1.56	-1.81	1.45	29	.0	0		1	1	1
83	8	93.6	66.9	80.3	8.4	0	483	101	17+	53	12	25	0	0	0	.78	-3.27	.64	21	.0	0		1	1	0
83	9	82.6	52.0	67.3	4.0	107	182	97	9+	23	23	10	0	3	0	2.91	-.85	1.29	20	.0	0		4	2	2
83	10	62.2	41.0	51.6	-.8	432	24	88	2	29	17	0	0	7	0	2.75	.58	1.13	11	.0	0		8	1	1
83	11	45.5	30.7	38.1	.9	799	0	70	2	7	25	0	5	18	0	3.67	2.31	.73	9	5.0	1	12	7	3	0
83	12	12.8	-2.2	5.3	-19.7	1848	0	30	11+	-33	19	0	31	31	15	1.76	.98	.43	21	17.3	M		7	0	0
	ANN.	58.3M	37.8M	48.1M	-.4	7371B	1317B	101	AUG+	-33	DEC	54	72	156	17	31.34	.97	2.50	MAY	46.5	1M	NOV	71	20	5

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ANNUAL CLIMATOLOGICAL SUMMARY

NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA
28801

STATION IDENTIFICATION

13070364 ATLANTIC 1 NE IOWA ELEVATION 1195 FT. ABOVE SEA LEVEL LAT. 41 25N LONG. 95 0W

DATE		TEMPERATURE (°F)														PRECIPITATION (INCHES)									
												NUMBER OF DAYS								SNOW, SLEET			NO. OF DAYS		
YR.	MO.	MEAN MAXIMUM	MEAN MINIMUM	MEAN	DEPART. FROM NORMAL	HEATING DEGREE DAYS	COOLING DEGREE DAYS	HIGHEST	DATE	LOWEST	DATE	MAX ≥ 90°	MAX ≤ 32°	MIN ≤ 32°	MIN ≤ 0°	TOTAL	DEPART. FROM NORMAL	GREATEST OBSERVED DAY	DATE	TOTAL FALL	MAX DEPTH	DATE	≥.10	≥.50	≥1.0
84	1	25.2	4.4	14.8	-3.1	1553	0	43	5	-28	18	0	19	31	12	.85	.09	.75	1	8.0	M		1	1	0
84	2	42.0	23.4	32.7	8.6	929	0	63	22	-8	5	0	4	27	2	.47	-.50	.39	18	.0T	0T	29*	1	0	0
84	3	37.9	21.9	29.9	-4.9	1082	0	55	25	-7	9	0	12	29	1	1.87	-.20	.52	19	10.0	0T	31*	5	1	0
84	4	55.7	36.6	46.2	-3.6	563	5	81	26	21	1	0	0	8	0	7.71	4.71	2.61	29	.0	0		10	5	2
84	5	69.0	46.2	57.6	-3.5	243	22	84	17	31	1	0	0	1	0	4.51	.60	1.72	25	.0	0		8	3	1
84	6	83.3	60.7	72.0	1.7	5	220	91	26*	43	3	2	0	0	0	6.40	2.23	1.34	15	.0	0		12	5	2
84	7	88.0	61.0	74.5	.1	2	305	99	9	45	7	11	0	0	0	4.08	.71	2.67	15	.0	0		6	2	1
84	8	88.4	60.4	74.4	2.5	8	308	100	28	43	23	13	0	0	0	.62	-3.43	.28	21*	.0	0		2	0	0
84	9	75.5	49.2	62.4	-.9	184	113	96	1	20	29	6	0	3	0	2.33	-1.43	.68	2	.0	0		5	2	0
84	10	63.2	41.8	52.5	.1	384	5	80	3	21	23	0	0	10	0	4.83M	M	1.76	15	.0	0		10	3	1
84	11	50.1	27.9	39.0	1.8	775	0	66	8	12	20	0	0	23	0	.67	-.69	.55	1	1.0	0		1	1	0
84	12	37.4	16.6	27.0	2.0	1170	0	65	28	-7	25	0	14	29	3	3.46	2.68	.65	24	6.0M	0T	31*	7	4	0
	ANN.	59.6	37.5	48.6	.1	6898	978	100	AUG	-28	JAN	32	49	161	18	37.80M	M	2.67	JUL	25.0M	0M		68	27	7

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ANNUAL CLIMATOLOGICAL SUMMARY

NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA
28801

STATION IDENTIFICATION

13070364 ATLANTIC 1 NE IOWA ELEVATION 1195 FT. ABOVE SEA LEVEL LAT. 41 25N LONG. 95 0W

DATE		TEMPERATURE (°F)										NUMBER OF DAYS				PRECIPITATION (INCHES)							NO. OF DAYS		
																				SNOW, SLEET					
YR.	MO.	MEAN MAXIMUM	MEAN MINIMUM	MEAN	DEPART. FROM NORMAL	HEATING DEGREE DAYS	COOLING DEGREE DAYS	HIGHEST	DATE	LOWEST	DATE	MAX ≥ 90°	MAX ≤ 32°	MIN ≤ 32°	MIN ≤ 0°	TOTAL	DEPART. FROM NORMAL	GREATEST OBSERVED DAY	DATE	TOTAL FALL	MAX DEPTH	DATE	≥.10	≥.50	≥1.0
85	1	26.0	3.6	14.8	-3.1	1550	0	44	6	-23	20	0	22	31	13	.42	-.34	.15	9	6.0	M		2	0	0
85	2	29.5	9.5	19.5	-4.6	1271	0	53	28	-23	6	0	15	26	9	1.08	.11	.64	21	6.0	M		4	1	0
85	3	53.3	28.7	41.0	6.2	734	0	73	18	16	5	0	1	23	0	1.91	-.16	.44	23	8.0	8	31	6	0	0
85	4	66.7	42.0	54.4	4.6	347	37	87	18	16	1	0	0	7	0	2.91	-.09	.77	30	.0	0		8	1	0
85	5	77.3	51.2	64.3	3.2	78	62	88	26	39	18	0	0	0	0	2.41	-1.50	.62	20	.0	0		7	2	0
85	6	81.3	53.8	67.6	-2.7	37	121	102	8	38	13	2	0	0	0	3.13	-1.04	1.30	17	.0	0		5	3	1
85	7	86.6	60.5	73.6	-.8	0	274	94	9	47	16	12	0	0	0	4.29	.92	3.00	19	.0	0		4	2	1
85	8	80.0	57.1	68.6	-3.3	12	129	91	31	46	18	3	0	0	0	3.15	-.90	.82	14	.0	0		5	4	0
85	9	71.9	54.4M	63.2M	-.1	200B	147B	93	7+	33	29	5	0	0	0	3.80	.04	1.02	29	.0	0		10	3	1
85	10	62.7	41.0	51.9	-.5	400	1	74	22	25	14	0	0	5	0	3.02	.85	1.00	18	.0	0		7	3	1
85	11	37.0	19.4	28.2	-9.0	1095	0	67	18	-1	21+	0	13	26	2	.72	-.64	.20	15	5.5	3	19	4	0	0
85	12	24.2	3.0	13.6	-11.4	1587	0	40	26+	-18	18	0	22	31	15	.63	-.15	.42	1	8.0M	M		2	0	0
	ANNL.	58.0	35.3M	46.7M	-1.8	7311B	771B	102	JUN	-23	FEB+	22	73	149	39	27.47	-2.90	3.00	JUL	33.5M	8M	MAR	64	19	4

M MISSING DATA. APPEARS WITH MONTHLY DATA WHEN LESS THAN 10 DAYS ARE MISSING, AND IT APPEARS ALONE IF 10 OR MORE DAYS ARE MISSING. IT APPEARS WITH ANNUAL DATA, WHEN DERIVED FROM MONTHS WITH MISSING DATA.

+ OCCURRED ON ONE OR MORE PREVIOUS DATES DURING THE MONTH.

T TRACE

V INCLUDES TOTAL FOR PREVIOUS MONTH.

B ADJUSTED MONTHLY OR ANNUAL VALUE TOTAL CONTAINS ESTIMATED VALUE(S) FOR MISSING DATA.

A AMOUNT PRECIPITATION MAY INCLUDE PRECIPITATION THAT OCCURRED DURING THE PREVIOUS MONTHS.

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ANNUAL CLIMATOLOGICAL SUMMARY

NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA
28801

STATION IDENTIFICATION

13070364 ATLANTIC 1 NE IOWA ELEVATION 1195 FT. ABOVE SEA LEVEL LAT. 41 25N LONG. 95 0W

DATE		TEMPERATURE (°F)										NUMBER OF DAYS				PRECIPITATION (INCHES)							NO. OF DAYS		
																				SNOW, SLEET					
YR.	MO.	MEAN MAXIMUM	MEAN MINIMUM	MEAN	DEPART. FROM NORMAL	HEATING DEGREE DAYS	COOLING DEGREE DAYS	HIGHEST	DATE	LOWEST	DATE	MAX ≥ 90°	MAX ≤ 32°	MIN ≤ 32°	MIN ≤ 0°	TOTAL	DEPART. FROM NORMAL	GREATEST OBSERVED DAY	DATE	TOTAL FALL	MAX DEPTH	DATE	≥.10	≥.50	≥1.0
86	1	40.4	17.2	28.8	10.9	1115	0	58	20	-3	6	0	3	30	2	.00	-.76	.00	31+	.0	0		0	0	0
86	2	29.8	9.1	19.5	-4.6	1270	0	54	2	-24	12	0	18	27	9	2.09	1.12	1.44	4	M	M		4	1	1
86	3	54.7	29.3	42.0	7.2	711	6	90	29	8	7	1	1	23	0	3.06	.99	1.08	12	.0	0		4	4	1
86	4	64.4	40.0	52.2	2.4	383	6	82	25	24	22	0	0	7	0	7.24	4.24	1.60	3	.0	0		11	4	3
86	5	72.9	50.7M	61.8M	.7	1308	36B	85	31+	36	2	0	0	0	0	5.63	1.72	2.02	10	.0	0		7	4	2
86	6	84.1	62.5	73.3	3.0	0	258	93	27	51	3	8	0	0	0	5.92	1.75	1.88	21	.0	0		8	5	2
86	7	85.8	65.7	75.8	1.4	0	340	92	28+	54	21	10	0	0	0	8.53	5.16	2.65	8	.0	0		9	6	3
86	8	77.9	57.5	67.7	-4.2	34	125	87	25+	45	27+	0	0	0	0	2.61	-1.44	1.08	13	.0	0		5	2	1
86	9	75.9	57.1	66.5	3.2	55	110	87	21	36	8	0	0	0	0	8.72	4.96	2.01	15	.0	0		14	5	2
86	10	62.8	41.7	52.3	-.1	388	0	77	7	25	14	0	0	4	0	4.36	2.19	2.08	11	.0	0		8	2	1
86	11	M	M	M				M		M		M	M	M	M	M	M			M	M		M	M	M
86	12	34.3	19.4	26.9	1.9	1176	0	46	23	-7	13	0	11	31	2	.92	.14	.39	7	1.0	M		3	0	0
	ANN.	M	M	M	M	M	M	93M	JUN	M		19M	33M	122M	13M	M	M	2.65M	JUL	1.0M	0M		73M	33M	16M

M MISSING DATA. APPEARS WITH MONTHLY DATA WHEN LESS THAN 10 DAYS ARE MISSING, AND IT APPEARS ALONE IF 10 OR MORE DAYS ARE MISSING. IT APPEARS WITH ANNUAL DATA, WHEN DERIVED FROM MONTHS WITH MISSING DATA.

+ OCCURRED ON ONE OR MORE PREVIOUS DATES DURING THE MONTH.

T TRACE

V INCLUDES TOTAL FOR PREVIOUS MONTH.

B ADJUSTED MONTHLY OR ANNUAL VALUE TOTAL CONTAINS ESTIMATED VALUE(S) FOR MISSING DATA.

A AMOUNT PRECIPITATION MAY INCLUDE PRECIPITATION THAT OCCURRED DURING THE PREVIOUS MONTHS.

Punched 13617

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

Atlantic Iowa Jan 1987

STATION (Climatological) ATLANTIC	(River Station, if different)	MONTH Jan.	19 87
STATE IOWA	COUNTY CASS	RIVER	
TIME (local) OF OBSERVATION RIVER ~~CST~~	TEMP. 11 PM	PRECIPITATION 11 PM	STANDARD TIME IN USE CST
TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO Ft.	FLOOD STAGE Ft.	NORMAL POOL STAGE Ft.

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets, hail (ins. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (ins.)	Draw a straight line (——) through hours precipitation was observed, and a waved line (~~~) through hours precipitation probably occurred unobserved. A.M. 1 2 3 4 5 6 7 8 9 10 11 NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Calendar Day) Mark 'X' for all types occurring each day. Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___ A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	33	23	23			O												
2	37	11	26															
3	36	26	31															
4	36	26	27															
5	40	25	30															
6	37	29	31															
7	32	27	29															
8	38	18	21															
9	35	21																
10	24	19	21	TRC	T	O												
11	47	15	35															
12	57	22	29															
13	62	27	35															
14	45	24	30															
15	22	14	14															
16	23	8	19															
17	25	14	22	TRC	T	O												
18	34	9	14															
19	35	2	17															
20	34	10	24															
21	42	21	21															
22	22	2	2															
23	11	-19	-4															
24	28	-4	16															
25	25	8	19															
26	32	17	25															
27	46	15	21															
28	49	34	40															
29	49	34	22															
30	44	17	18															
31	57	13	40															
SUM			SUM	T	T	X	CHECK BAR (For wire-weight) NORMAL CK. BAR	Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM			X	
				Greatest			READING / DATE											

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER

SUPERVISING OFFICE

STATION INDEX NO. 13-0364 -7

Punched 66835

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

STATION (Climatological): ATLANTIC (River Station, if different:)
MONTH: Feb. 19 87
STATE: IOWA
COUNTY: CASS
RIVER:
TIME (local) OF OBSERVATION: 11 AM
TEMP.: 11 AM
PRECIPITATION: 11 AM
STANDARD TIME IN USE: CST
TYPE OF RIVER GAGE:
ELEVATION OF RIVER GAGE ZERO: Ft.
FLOOD STAGE: Ft.
NORMAL POOL STAGE: Ft.

Draw a straight line (——) through hours precipitation was observed, and a waved line (~~~) through hours precipitation probably occurred unobserved.

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets, hail (ins. and tenths)	At Ob. Snow, ice pellets, ice on ground (ins.)	WEATHER (Calendar Day) Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___ A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	58	20	25			0											
2	62	24	32														
3	37	22	32														
4	40	28	36														
5	37	30	33														
6	52	23	32														
7	64	21	41														
8	45	17	17														
9	44	9	34														
10	55	14	30														
11	45	19	20														
12	49	14	27														
13	55	19	44														
14	55	19	30														
15	35	26	37														
16	35	26	27														
17	37	19	24														
18	37	12	13														
19	43	10	29														
20	45	15	17														
21	51	13	23	T													
22	41	18	24														
23	51	10	34														
24	51	29	34														
25	52	28	35														
26	55	28	37														
27	40	33	38														
28	38	33	33	.54													
29	54																
30																	
31																	
SUM			SUM	.54	0		Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM				

Greatest

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER

SUPERVISING OFFICE

STATION INDEX NO. 13-0364 -7

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

Atlantic Iowa

STATION (Climatological) ATLANTIC INE	(River Station, if different)	MONTH MARCH	19 87
STATE Ia.	COUNTY CASS	RIVER	
TIME (local) OF OBSERVATION RIVER	TEMP. 11PM	PRECIPITATION 11PM	STANDARD TIME IN USE CST
TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO Ft.	FLOOD STAGE Ft.	NORMAL POOL STAGE Ft.

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets, hail (ins. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (ins.)	WEATHER (Calendar Day) Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	39	27	27			0											
2	38	33	36														
3	64	20	26														
4	64	35	36														
5	71	26	42														
6	73	29	54														
7	72	39	39														
8	57	27	38														
9	34	23	23														
10	35	3	27														
11	48	15	36														
12	51	27	37	.04													
13	67	30	51														
14	63	30	38	.02													
15	38	34	34	.107													
16	42	34	42	trace													
17	43	39	41	.22													
18	48	36	39	.97													
19	59	31	46	—													
20	68	44	51														
21	56	34	34	.17													
22	70	28	56														
23	73	51	38	.09													
24	51	42	42	.68													
25	48	38	38	.02													
26	46	30	31														
27	58	31	44	.18	E												
28	34	23	23	.43	2.0	M											
29	27	19	19	.10	3.0	M											
30	31	15	15			M											
31	45	13	37			T											
SUM			SUM	2.99 Greatest	5.0		Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM				

44

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER

SUPERVISING OFFICE

STATION INDEX NO. 13-0364 -7

Punched 66835

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

STATION (Climatological) ATLANTIC	(River Station, if different)	MONTH APRIL	19 82
STATE IOWA	COUNTY CASS	RIVER	
TIME (local) OF OBSERVATION RIVER	TEMP. 11PM	PRECIPITATION 11PM	STANDARD TIME IN USE CST
TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO Ft.	FLOOD STAGE Ft.	NORMAL POOL STAGE Ft.

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (inc. and hundredths)	Snow, ice pellets, hail (inc. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (inc.)	WEATHER (Calendar Day) Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___ A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	44	29	29			0											
2	37	22	25														
3	46	17	25														
4	63	17															
5	64	21	55														
6	65	27	48														
7	73	26	37														
8	76	26	40														
9	77	30	53														
10	68	36	41														
11	47	33	34	.11													
12	65	27	56														
13	67	46	46	.31													
14	60	46	48	.94													
15	52	44	44	.11													
16	78	37	54														
17	81	40	60														
18	81	48	60														
19	87	60	81														
20	81	54	54														
21	54	46	47														
22	46	42	43	.07													
23	74	38	54														
24	73	44	59														
25	84	53															
26	92	47															RECORD HIGH (OLD RECORD 88 1981)
27	75	47	48														
28	81	32	69														
29	93	57	62														
30	73	42	50														
31																	
SUM			SUM	1.44	0		Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM				
				Greatest													

Draw a straight line (——) through hours precipitation was observed, and a waved line (~~~) through hours precipitation probably occurred unobserved.

A.M. NOON P.M.

Mark "X" for all types occurring each day.

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER

SUPERVISING OFFICE

STATION INDEX NO. 13-0364 -7

Punched 13617

STATION (Climatological): ATLANTIC (River Station, if different)
MONTH: MAY 19 87
STATE: IOWA
COUNTY: CASS
RIVER:
TIME (local) OF OBSERVATION RIVER:
TEMP.: 11 PM
PRECIPITATION: 11 PM
STANDARD TIME IN USE: DST
TYPE OF RIVER GAGE:
ELEVATION OF RIVER GAGE ZERO: Ft.
FLOOD STAGE: Ft.
NORMAL POOL STAGE: Ft.

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (inc. and hundredths)	Snow, ice pellets, hail (inc. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (inc.)	WEATHER (Calendar Day) Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___ A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	89	42	73			0											
2	85	59	62	.52													
3	63	54	55	.08													
4	61	48	55	.08													
5	63	49	54	.03													
6	77	41	62														
7	79	42	62														
8	80	40	65														
9	85	56	70														
10	88	59	81														
11	85	64	64														
12	80	47	61														
13	90	55	77														
14	86	62	60														
15	81	46	67														
16	86	51	68														
17	90	60	80														
18	84	62	65														
19	88	53	67	.20													
20	82	67	71	.43													
21	70	49	49	.40													
22	52	42	50														
23	69	46	69														
24	61	53	60	.11"													
25	77	54	70	.82"													
26	74	61	65	1.57													
27	71	62	64	.23													
28	79	61	69														
29	77	63	67	.11													
30	80	60	60	TRC													
31	83	57	69	.58													
SUM			SUM	5.55	0												
				Greatest			Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM				

Draw a straight line (——) through hours precipitation was observed, and a waved line (~~) through hours precipitation probably occurred unobserved.

A.M. NOON P.M.

1 2 3 4 5 6 7 8 9 10 11 | 1 2 3 4 5 6 7 8 9 10 11

Mark 'X' for all types occurring each day.

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER: KUAN AM/FM

SUPERVISING OFFICE:

STATION INDEX NO.: 13-0364 -7

Punched 00749

STATION (Climatological)	(River Station, if different)	MONTH	19
[illegible]	[illegible]	JUNE	87

STATE	COUNTY	RIVER
FL	CASS	

TIME (local) OF OBSERVATION	TEMP.	PRECIPITATION	STANDARD TIME IN USE
	11AM	11AM	CSST

TYPE OF RIVER GAGE	ELEVATION OF RIVER GAGE ZERO Ft.	FLOOD STAGE Ft.	NORMAL POOL STAGE Ft.

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

Atlantic Ga

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets hail (ins. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (ins.)	Draw a straight line (——) through hours precipitation was observed, and a waved line (~~~) through hours precipitation probably occurred unobserved. (A.M. 1 2 3 4 5 6 7 8 9 10 11; NOON; P.M. 1 2 3 4 5 6 7 8 9 10 11)	WEATHER (Calendar Day) Mark 'X' for all types occurring each day. Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___ A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	85	66	68			0												
2	75	55	55	.06														
3	74	51	54															
4	78	42	66															
5	83	60	68															
6	86	58	74															
7	90	66	84															
8	90	64	73															
9	73	63	66	.02														
10	72	64	68	.10														
11	86	65	73	.11														
12	92	59	78															
13	96	58	81															
14	97	71	90															
15	94	70	80															
16	92	68	76															
17	87	70	70															
18	91	70	70															
19	87	71	71															
20	82	63	66															
21	90	60	86															
22	93	70	70															
23	90	65	71															
24	88	61	64	.60														
25	80	62	65	.06														
26	78	62	60															
27	87	58	79															
28	87	55																
29	81	63	63	.06														
30	78	51	62															
31	~~87~~	~~55~~	~~69~~															
SUM			SUM	1.01	0	X		Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM			X	
				Greatest														

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER

SUPERVISING OFFICE

STATION INDEX NO. 13-0364 -7

Punched 13617

STATION (Climatological): ATLANTIC (River Station, if different):

MONTH: JULY 19 87

STATE: IOWA

COUNTY: CASS

RIVER:

TIME (local) OF OBSERVATION: TEMP. 11pm PRECIPITATION 11pm

STANDARD TIME IN USE: CDT

TYPE OF RIVER GAGE:

ELEVATION OF RIVER GAGE ZERO: Ft.

FLOOD STAGE: Ft.

NORMAL POOL STAGE: Ft.

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

Atlantic Ia

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets, hail (ins. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (ins.)	Weather (Calendar Day) Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	River Stage Condition	Gage Reading at ___ A.M.	Tendency	Remarks (Special observations, etc.,)
1	83	63	63			0											
2	87	55	69	.03													
3	84	62	71														
4	85	62	70	.03													
5	84	64	77														
6	91	64	78	.83													
7	79	62	70	1.32													
8	79	66	71	1.00													
9	85	63	74	~~.96~~													
10	85	65	77	1.21													
11	87	73	80														
12	79	65	65	1.55													
13	72	55	58	.03													
14	75	50	60	.86													
15	87	52	69														
16	87	65	75														
17	86	70	73														
18	85	69	78	.44													
19	89	74	83														
20	90	75	78														
21	90	71	73														
22	86	74	74														
23	89	68	79														
24	91	70	70	.05													
25	92	65	76														
26	93	69	84														
27	92	74	76														
28	93	69	81														
29	93	68	79														
30	95	70	78														
31	95	70	81														
SUM	96	70	SUM	6.42	0												
				Greatest			Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM				

Mark "X" for all types occurring each day.

Draw a straight line (——) through hours precipitation was observed, and a waved line (~~~) through hours precipitation probably occurred unobserved.

A.M. NOON P.M.

51

87

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER: KWAN AM FM

SUPERVISING OFFICE:

STATION INDEX NO.: 13-0364 -7

Punched 887333

STATION (Climatological): ATLANTIC (River Station, if different)

MONTH: AUG 1987

STATE: IOWA

COUNTY: CASS

RIVER:

TIME (local) OF OBSERVATION: RIVER

TEMP.: 11 P.M.

PRECIPITATION: 11 P.M.

STANDARD TIME IN USE: DST

TYPE OF RIVER GAGE:

ELEVATION OF RIVER GAGE ZERO: Ft.

FLOOD STAGE: Ft.

NORMAL POOL STAGE: Ft.

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (ins. and hundredths)	Snow, ice pellets, hail (ins. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (ins.)	WEATHER (Calendar Day) Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___ A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	96	70	84			0											
2	96	71															
3	82	73	73														
4	80	62	79														
5	83	52	65														
6	81	53	68														
7	77	64	70	.62													
8	79	66	74	4.90													
9	82	60	77														
10	86	56	70														
11	78	62	70														
12	78	68	70	.29													
13	78	67	72	.14													
14	86	67	77	.03													
15	89	69	79														
16	85	71															
17	79	59	70														
18	78	60	62	1.37													
19	75	53	60	.22													
20	83	56	71	.03													
21	92	72	85														
22	64	50	58	.05													
23	71	51	62														
24	64	55	56	.01													
25	58	53	57	2.22													
26	62	55	58	.69													
27	69	55	57														
28	72	49	53														
29	81	48	75														
30	72	58	62														
31	72	45	49														
SUM			SUM	10.57	0		Fog	Ice Pel.	Glaze	Thund.	Hail	Dam. Winds	SUM				
				Greatest													

Draw a straight line (——) through hours precipitation was observed, and a waved line (~~~) through hours precipitation probably occurred unobserved.

A.M. NOON P.M.

Mark 'X' for all types occurring each day.

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

OBSERVER: KJAN AM/FM

SUPERVISING OFFICE:

STATION INDEX NO.: 13-0364 -7

Pinched 13617

WS FORM E-15 (7-79)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

STATION (Climatological): ATLANTIC	(River Station, if different):	MONTH: SEPT	19 87
STATE: IOWA	COUNTY: CASS	RIVER:	
TIME (local) OF OBSERVATION:	TEMP.: 11PM	PRECIPITATION: 11PM	STANDARD TIME IN USE: CDT
TYPE OF RIVER GAGE:	ELEVATION OF RIVER GAGE ZERO: Ft.	FLOOD STAGE: Ft.	NORMAL POOL STAGE: Ft.

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (Inc. and hundredths)	Snow, ice pellets, hail (Inc. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (Inc.)	WEATHER (Calendar Day) Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___A.M.	TENDENCY	REMARKS (Special observations, etc.,)
1	80	48	61			0											
2	76	46	60														
3	77	55	67														
4	87	60	71														
5	85	46	62	.20													
6	79	57	68	T													
7	73	54		.04													
8	73	51	51														
9	74	44	57	.45													
10	76	51	62														
11	71	50	55	.02													
12	68	41	51														
13	75	51	65														
14	82	56	64														
15	68	59		.61													
16	66	57	63	2.70													
17	70	59	64	.28													
18	69	50	50														
19	65	45	60	.05													
20	68	47	58														
21	68	46	46														
22	67	42	46														
23	80	39	52														
24	82	43	69	—													
25	79	46	60														
26	85	49	71														
27	84	44	64														
28	71	46	50														
29	71	42	50														
30	73	42	49														
31																	
SUM			SUM	3.85	0	X	Fog	Ice Pel.	Glaze	Thund	Hail	Dam. Winds	SUM			X	
				Greatest													

Draw a straight line (——) through hours precipitation was observed, and a waved line (~~) through hours precipitation probably occurred unobserved.

A.M. NOON P.M.

Mark 'X' for all types occurring each day.

CHECK BAR (For wire-weight) NORMAL CK. BAR

READING	DATE

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H. Pool stage.

OBSERVER: KJAN AM-PM

SUPERVISING OFFICE:

STATION INDEX NO.: 13-0364 -7