

DN 249-43  
JSL/lra

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The following investigation was conducted by  
SA JON S. LIPSKY at Denver, Colorado on December 22, 1988.

LARRY JENSEN, Auditing Manager for the PUBLIC SERVICE COMPANY (PSC), telephone number 571-7171, telephonically advised that the PSC steam power plant on Zuni, west of Interstate 25 and South of MILE HIGH STADIUM, has three emissions stacks. JENSEN advised that PSC records the stack influent temperature for the facility.

On December 9, 1988 at approximately 9:30 p.m., the temperature readings for the influent of the stacks were noted as follows:

1. West stack, 175 degrees Fahrenheit going into the stack.
2. Center stack, 365 degrees Fahrenheit going into the stack.
3. East stack, no reading and equivalent to the ambient outside temperature.

249-43-214

DEC 1988  
DENVER, CO  
NAT'L WEA SER OFC  
10230 SMITH ROAD

ISSN 0198-7690

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary



STAPLETON INTERNATIONAL AP

LATITUDE 39° 45' N LONGITUDE 104° 52' W ELEVATION (GROUND) 5282 FEET TIME ZONE MOUNTAIN 23062

DATE	TEMPERATURE °F			DEGREE DAYS BASE 65°F		WEATHER TYPES 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW ICE PELLETS OR ICE ON GROUND AT 0500 INCHES	PRECIPITATION		AVERAGE STATION PRESSURE IN INCHES ELEV 5332 FEET ABOVE M S L	WIND (M P H)				SUNSHINE		SKY COVER (TENTHS)							
	MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT			HEATING SEASON BEGINS WITH JUL	COOLING SEASON BEGINS WITH JAN		WATER EQUIVALENT (INCHES)	SNOW, ICE PELLETS (INCHES)	RESULTANT DIR	RESULTANT SPEED	AVERAGE SPEED	PEAK GUST	DIRECTION	FASTEST 1-MIN	MINUTES	PERCENT OF TOTAL POSSIBLE	SUNRISE TO SUNSET	MITONIGHT		
1	2	3	4	5	6	7A	7B	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
01	63	26	45	10	16	20	0	0	0.00	0	0	24.975	17	5.4	7.6	18	E	13	20	574	100	0	0	
02	68	28	48	13	12	17	0	0	0.00	0	0	24.900	20	5.4	6.9	18	S	12	20	573	100	0	0	
03	55	20	38	4	10	27	0	0	0.00	0	0	25.070	14	3.7	6.2	15	SE	10	05	543	95	1	3	
04	59	19	39	5	11	26	0	0	0.00	0	0	25.060	17	3.7	5.8	16	SW	12	20	545	95	0	1	
05	60	20	40	6	8	25	0	0	0.00	0	0	24.860	18	2.9	4.3	12	S	9	19	559	98	0	0	
06	50	21	36	2	10	29	0	0	0.00	0	0	24.770	14	4.4	6.4	13	E	12	19	553	97	0	2	
07	32	12	22	-12	21	43	0	1	0.00	0	0	24.860	04	5.7	7.8	16	NE	20	04	0	0	10	10	
08	27	2	15	-19	13	50	0	1	0.00	0	0	24.950	18	3.8	5.2	25	S	13	19	203	36	6	5	
09	49	14	32	-2	17	33	0	0	0.00	0	0	24.760	18	4.2	6.7	22	N	16	35	538	95	1	3	
10	42	16	29	-5	22	36	0	0	0.00	0	0	24.720	16	4.7	6.0	18	SE	14	31	448	79	1	2	
11	41	22	32	-1	22	33	0	0	0.01	0	0	24.780	16	3.0	5.7	18	S	13	19	210	37	7	4	
12	56	25	41	8	23	24	0	0	0.00	0	0	24.785	25	5.7	10.3	31	W	23	29	320	57	8	4	
13	70*	34	52*	19	21	13	0	0	0.00	0	0	24.580	25	5.3	10.8	43	W	21	30	519	92	6	4	
14	50	25	38	5	22	27	0	0	0.30	3	2	24.720	05	6.4	8.6	31	NW	18	07	215	38	8	6	
15	25	3	14	-19	12	51	0	1	0.20	2	6	25.000	05	3.2	8.8	38	N	25	35	359	64	6	6	
16	43	2	23	-10	15	42	0	0	0.00	0	0	24.950	19	3.1	5.3	15	S	12	20	563	100	0	0	
17	51	22	37	4	17	28	0	0	0.00	0	0	24.940	19	7.7	7.9	18	S	13	18	562	100	0	0	
18	59	36	45	13	22	20	0	0	0.00	0	0	24.620	19	9.7	10.2	25	S	16	20	540	96	0	0	
19	48	29	39	7	25	26	0	0	0.02	0	2	24.230	30	3.6	12.5	43	NW	32	32	340	61	8	8	
20	44	26	35	3	18	30	0	0	0.00	0	0	24.550	15	4.6	7.0	22	SW	13	13	300	53	7	5	
21	47	20	34	2	19	31	0	0	0.00	0	0	24.400	16	1.8	6.9	25	SE	17	18	417	74	6	5	
22	37	27	32	0	6	33	0	0	0.00	0	0	24.440	27	14.5	17.4	45	W	31	28	486	87	4	3	
23	38	17	28	-4	10	37	0	0	0.00	0	0	24.450	31	3.1	8.6	30	NW	16	31	338	60	9	7	
24	38	14	26	-5	9	39	0	0	0.00	0	0	24.620	22	2.1	7.2	28	NW	16	31	368	66	7	6	
25	30	17	24	-7	14	41	0	0	0.00	0	0	24.400	35	2.9	4.1	12	N	9	35	463	82	7	6	
26	33	-1	16	-15	12	49	0	2	0.16	2	2	24.350	30	1.7	7.7	26	W	16	29	233	41	7	6	
27	31	-2	15	-16	0	50	0	1	0.00	0	0	24.630	18	3.0	5.8	17	NW	10	36	512	91	1	1	
28	29	-3*	13*	-18	1	52	0	0	0.00	0	0	24.635	25	0.9	5.4	16	NW	13	35	541	96	3	1	
29	39	5	22	-9	3	43	0	0	0.00	0	0	24.550	19	5.7	7.6	18	S	13	29	563	100	0	0	
30	47	11	29	-1	14	36	0	0	0.00	0	0	24.550	15	3.2	5.9	15	N	9	01	553	98	2	1	
31	51	14	32	3	19	32	0	0	0.00	0	0	24.500	18	1.9	5.7	16	N	10	01	562	100	0	0	
SUM	SUM					TOTAL	TOTAL			TOTAL	TOTAL	FOR THE MONTH				TOTAL	%	SUM	SUM					
1412	515					1043	0			1.04	12.3	24.700	19	2.1	7.5	45	W	32	32	1350	100	115	96	
AVG	AVG		AVG	DEP	AVG	DEP	DEP			PRECIPITATION	DEP							DATE	DATE	PRECIPIT	NO. H	AVG	AVG	
45.5	16.6	3.1	-1.5	14.2	3.9	0	0			0.49								DATE	DATE	PRECIPIT	NO. H	AVG	AVG	
NUMBER OF DAYS						SEASON TO DATE		SNOW, ICE PELLETS		GREATEST IN 24 HOURS AND DATES				GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE										
						TOTAL	TOTAL	2.10 INCH																
MAXIMUM TEMP						MINIMUM TEMP		THUNDERSTORMS		PRECIPITATION		SNOW, ICE PELLETS												
90° & 32°						32° & 0°		0		0.50		14-15		5.8 14-15 6 16*										
0						6		30		10		5		6 16*										

\* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE  
 † TRACE AMOUNT  
 \* ALSO ON EARLIER DATE(S)  
 HEAVY FOG VISIBILITY 1/4 MILE OR LESS  
 BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR MORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. COLS 16 & 17: PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED ONE OF TWO WIND SPEEDS IS GIVEN UNDER COLS 18 & 19: FASTEST MILE - HIGHEST RECORDED SPEED FOR WHICH A MILE OF WIND PASSES STATION (DIRECTION IN COMPASS POINTS) FASTEST OBSERVED ONE MINUTE WIND - HIGHEST ONE MINUTE SPEED (DIRECTION IN TENS OF DEGREES) ERRORS WILL BE CORRECTED IN SUBSEQUENT PUBLICATIONS

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER

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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

Kenneth D. Wadsworth  
 DIRECTOR  
 NATIONAL CLIMATIC DATA CENTER

OBSERVATIONS AT 3-HOUR INTERVALS

DEC 1988  
DENVER, CO

23062

HOOR LST	VISI-BILITY				TEMPERATURE				WIND		VISI-BILITY				TEMPERATURE				WIND														
	SKY COVER	CEILING IN HUNDREDS OF FEET	WHOLE MILES	TENS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)	SKY COVER	CEILING IN HUNDREDS OF FEET	WHOLE MILES	TENS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)											
																							SKY COVER	CEILING IN HUNDREDS OF FEET	WHOLE MILES	TENS MILE	WEATHER	AIR OF	WET BULB OF	DEW POINT OF	REL HUMIDITY %	DIRECTION	SPEED (KNOTS)
DEC 1st																																	
02	0	UNL	20			27	24	18	69	17	5	0	UNL	20			30	25	15	54	20	8	0	UNL	20			24	19	9	53	15	4
05	0	UNL	20			33	28	19	56	19	8	0	UNL	20			31	25	13	47	19	8	0	UNL	20			25	20	8	48	18	4
08	0	UNL	70			36	30	20	52	20	8	0	UNL	60			35	27	11	37	19	9	0	UNL	60			27	22	11	51	19	4
11	0	UNL	70			56	41	21	26	14	7	0	UNL	70			55	37	6	14	21	7	0	UNL	60			50	35	9	19	00	6
14	0	UNL	70			62	42	13	15	04	8	0	UNL	70			65	44	15	14	17	3	1	UNL	60			53	37	11	19	05	9
17	0	UNL	60			50	35	9	19	09	7	1	UNL	60			48	33	5	17	36	5	6	UNL	40			45	33	12	26	07	6
20	0	UNL	20			37	28	13	37	15	5	0	UNL	20			36	28	14	40	19	4	7	UNL	20			34	26	11	38	14	4
23	0	UNL	20			34	27	14	44	14	6	0	UNL	20			34	25	8	34	18	5	5	UNL	20			31	24	11	43	17	6
DEC 2nd																																	
DEC 3rd																																	
DEC 4th																																	
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DEC 16th																																	
DEC 17th																																	
DEC 18th																																	

WEATHER CODES

- T TORNAO
- 1 THUNDERSTORM
- 0 SQUALL
- R RAIN
- RW RAIN SHOWERS
- ZR FREEZING RAIN
- L DRIZZLE
- ZL FREEZING DRIZZLE
- S SNOW
- SW SNOW SHOWERS
- SG SNOW GRAINS
- SP SNOW PELLETS
- IC ICE CRYSTALS
- IP ICE PELLETS
- IPW ICE PELLET SHOWERS
- A HAIL
- F FOG
- IF ICE FOG
- GF GROUND FOG
- BC BLOWING DUST
- BN BLOWING SAND
- BS BLOWING SNOW
- BY BLOWING SPRAY
- K SMOKE
- H HAZE
- D DUST

CEILING UNL INDICATES UNLIMITED  
 WIND DIRECTION DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS, INDICATED IN TENS OF DEGREES FROM TRUE NORTH 1 E, 09 FOR EAST, 08 FOR SOUTH, 27 FOR WEST AN ENTRY OF 00 INDICATES CALM  
 SPEED THE OBSERVED AVERAGE ONE-MINUTE VALUE, EXPRESSED IN KNOTS (MPH-KNOTS X 1.15)

DN 249-43  
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The following investigation was conducted by Special Agent JON S. LIPSKY at Denver, Colorado on March 23, 1989.

The NATIONAL WEATHER SERVICE OFFICE at 10230 Smith Road was visited and copies of the following were obtained:

1. Local Climatological Data, Monthly Summary for December, 1988
2. Local Climatological Data, Monthly Summary for January, 1988
3. Preliminary Local Climatological Data for February 1989

709-13 284

DN 249-43  
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The following investigation was conducted by SA JON S. LIPSKY on December 9, 1988 and December 11, 1988 at Jefferson County, Colorado:

On December 9, 1988 Special Agents FRANK MC KENZIE, STEVE STOWE, ARNOLD LIGI and MIKE HOVERMALE provided an aerial overflight of the ROCKY FLATS PLANT from about 1:10 p.m. to about 2:30 p.m. A second overflight was conducted from about 9:00 p.m. to about 11:45 p.m. The second flight was recorded on videotape, utilizing the Forward Looking Infra-Red (FLIR) system.

On December 10, 1988 a second FLIR documented overflight was conducted from about 9:00 p.m. to about 12:00 midnight. The tape was secured on December 11, 1988 at about 11:45 a.m.

249-43-207