



Aviation Weather Package

Prepared for

Textron Aviation

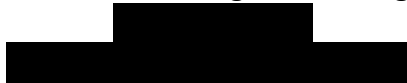
Beechcraft 58, N678DD

Ulysses, KS

February 22, 2018

John Lavin

Certified Consulting Meteorologist



N678DD /Beechcraft 58, Ulysses, KS
February 22, 2018

Surface Observations:

Grant County Kansas State Mesonet, (GTUK1), Kansas

	Station	Temperature	Relative Humidity	Precipitation	Wind Direction	Wind Speed
Time		F	%	inches	degrees	mph
2/23/2018 00:00 UTC	Grant	30.2	84.1	0	96.5	8.2
2/23/2018 01:00 UTC	Grant	28.7	91.2	0	81.5	10.8
2/23/2018 02:00 UTC	Grant	28	99.4	0	84.9	9.6
2/23/2018 03:00 UTC	Grant	27.8	96.7	0	93	9.1
2/23/2018 04:00 UTC	Grant	27.5	98	0	89	8.7

Ulysses, (KULS), Kansas

StationID	Date Time	Altimeter	Temperature	Relative Humidity	Wind Speed	Wind Direction	Wind Gust	Visibility	Dew Point	Wind Cardinal Direction	Sea Level Pressure	Weather Condition
		INHG	Fahrenheit	%	MPH	Degrees	MPH	SM	Fahrenheit	Code	INHG	Code
KULS	02/23/2018 02:13 UTC	29.98	30.22	80.04	16.11	140	20.69	10	24.73	SE	28.28	Clear
KULS	02/23/2018 02:18 UTC	29.98	30.22	86.26	16.11	140		10	26.56	SE	28.17	Clear
KULS	02/23/2018 02:23 UTC	29.98	28.42	86.15	16.11	140		10	24.76	SE	28.34	Clear
KULS	02/23/2018 02:28 UTC	29.98	26.62	86.04	17.25	140		10	22.96	SE	28.49	Clear
KULS	02/23/2018 02:33 UTC	29.99	26.62	86.04	14.94	140		10	22.96	SE	28.5	Clear
KULS	02/23/2018 02:38 UTC	29.99	26.62	92.79	16.11	140		10	24.79	SE	28.4	Clear
KULS	02/23/2018 02:43 UTC	29.99	26.62	92.79	14.94	140	18.41	10	24.79	SE	28.4	Clear
KULS	02/23/2018 02:48 UTC	30	26.62	92.79	12.64	140	18.41	10	24.79	SE	28.41	Clear
KULS	02/23/2018 02:53 UTC	30	26.62	92.79	12.64	140	18.41	10	24.79	SE	28.41	Clear
KULS	02/23/2018 02:58 UTC	30.01	26.62	92.79	11.5	150	18.41	10	24.79	SSE	28.42	Clear
KULS	02/23/2018 03:03 UTC	30.01	26.62	92.79	10.33	160	18.41	10	24.79	SSE	28.42	Clear
KULS	02/23/2018 03:08 UTC	30.01	26.62	92.79	13.8	150		10	24.79	SSE	28.42	Clear
KULS	02/23/2018 03:13 UTC	30.01	26.62	92.79	11.5	160		10	24.79	SSE	28.42	Clear

Johnson, (KJHN), Kansas

KJHN 230015Z 12015KT 10SM SCT090 06/M05 A2992 RMK A02 T00591055=
KJHN 230035Z 12016G20KT 10SM SCT090 05/M05 A2993 RMK A02 T00461053=
KJHN 230055Z 12015KT 10SM CLR 04/M05 A2993 RMK A02 T00361050=
KJHN 230115Z 12011KT 10SM CLR 03/M05 A2994 RMK A02 T00291048=
KJHN 230135Z 12011KT 10SM CLR 02/M05 A2996 RMK A02 T00171047=
KJHN 230155Z 12010KT 10SM CLR 01/M04 A2997 RMK A02 T00131044=
KJHN 230215Z 13008KT 10SM CLR 00/M04 A2998 RMK A02 T00041041=
KJHN 230235Z 14010KT 10SM CLR 00/M04 A2999 RMK A02 T00001039=
KJHN 230255Z 16008KT 10SM CLR M01/M04 A3001 RMK A02 T10071040=
KJHN 230315Z 15007KT 10SM CLR M01/M04 A3001 RMK A02 T10071040=

Hugoton, (KHQG), Kansas

KHQG 230015Z 14013KT 10SM CLR 05/M04 A2996 RMK A02 T00511043=
KHQG 230035Z 14015G19KT 10SM CLR 04/M04 A2997 RMK A02 T00441036=
KHQG 230055Z 14015KT 10SM CLR 03/M03 A2998 RMK A02 T00331032=
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KHQG 230255Z 17012KT 10SM CLR 01/M02 A3002 RMK A02 T00051021=
KHQG 230315Z 18011KT 10SM CLR 01/M02 A3002 RMK A02 T00051020=

Pilot Reports:

GCK UA /OV GCK/TM 0212/FL034/TP C501/SK TOP 045 OVC 034/TA M01/RM ZKC FDC

AIRMETS:

WAUS43 KNCI 222045

WA3S

CHIS WA 222045

AIRMET SIERRA UPDT 4 FOR IFR AND MTN OBSCN VALID UNTIL 230300

.

AIRMET IFR...ND SD NE KS MN IA MO WI LM LS MI IL IN KY
FROM 50SE INL TO 20WSW BAE TO 20E GIJ TO FWA TO CVG TO HNN TO
50WSW BKW TO 30S LOZ TO RZC TO OSW TO 30E LBL TO 30W LBF TO 60NW
ANW TO 40NE DPR TO 60WSW GFK TO 50SE INL
CIG BLW 010/VIS BLW 3SM PCPN/BR/FG. CONDS CONTG BYD 03Z THRU 09Z.

WAUS43 KNCI 222045

WA3T

CHIT WA 222045

AIRMET TANGO UPDT 3 FOR TURB AND LLWS VALID UNTIL 230300

.

AIRMET TURB...ND SD NE KS MN IA MO WI LM LS MI LH IL IN KY
FROM 30N INL TO YQT TO SSM TO YVV TO 30SE ECK TO FWA TO CVG TO
50SSE PXV TO 30NNW RZC TO OSW TO 50W LBL TO GLD TO BFF TO 70SW
RAP TO 40NNE MOT TO 30N INL
MOD TURB BTN FL180 AND FL350. CONDS CONTG BYD 03Z THRU 09Z.

.

AIRMET TURB...SD NE KS MN IA MO WI IL IN KY
FROM 30N MSP TO 40S IOW TO 60S JOT TO 30SE PXV TO 70WNW BNA TO
RZC TO OSW TO 50W LBL TO GLD TO 30SSE SNY TO 20S ABR TO 30N MSP
MOD TURB BLW 150. CONDS CONTG BYD 03Z THRU 09Z.

.

LLWS POTENTIAL...KS OK TX
BOUNDED BY 40S GLD-60E GCK-60SW MMB-60NNW AMA-40S GLD
LLWS EXP. CONDS DVLPNG 00-03Z. CONDS CONTG BYD 03Z ENDG 06-09Z.

WAUS43 KNCI 222045

WA3Z

CHIZ WA 222045

AIRMET ZULU UPDT 3 FOR ICE AND FRZLVL VALID UNTIL 230300

.

AIRMET ICE...ND SD NE KS MN IA MO WI LM LS MI IL
FROM 20NE BJI TO 50E DLH TO 20E GRB TO 50WSW MKG TO 50E DBQ TO
40WNW IOW TO 40NNE SLN TO 30WNW OBH TO 40W ANW TO BFF TO 40WSW
RAP TO 30SW DPR TO 70ENE BIS TO 20NE BJI
MOD ICE BLW FL180. CONDS CONTG BYD 03Z THRU 09Z.

.
AIRMET ICE...NE KS IA MO WI IL IN KY OK TX AR TN MS
FROM 20ESE DBQ TO 40NE AXC TO 40WSW TTH TO 30SSW IIU TO 60WSW BNA
TO 60SSE MEM TO 20WSW TXK TO 30SSW FSM TO 30N ADM TO 30W SLN TO
40WNW IOW TO 20ESE DBQ
MOD ICE BTN FRZLVL AND FL220. FRZLVL 070-120. CONDS CONTG BYD 03Z
THRU 09Z.

.
AIRMET ICE...SD NE KS
FROM 40W ANW TO 30WNW OBH TO 40NNE SLN TO 70WSW SLN TO 40S HLC TO
BFF TO 40W ANW
MOD ICE BLW 080. CONDS DVLPG 21-00Z. CONDS CONTG BYD 03Z THRU
09Z.

Convective SIGMETs:

There were no pertinent Convective SIGMETs.

Light Data:

Ulysses, Grant County, KS (Longitude W101° 22', Latitude N37° 35')
Thursday, February 22, 2018 Central Standard Time

Sun

Begin civil twilight	7:00 a.m.
Sunrise	7:26 a.m.
Sun transit	12:59 p.m.
Sunset	6:32 p.m.
End civil twilight	6:59 p.m.

Moon

Moonset	12:32 a.m.
Moonrise	11:31 a.m.
Moon transit	6:31 p.m.
Moonset	1:37 a.m. on following day

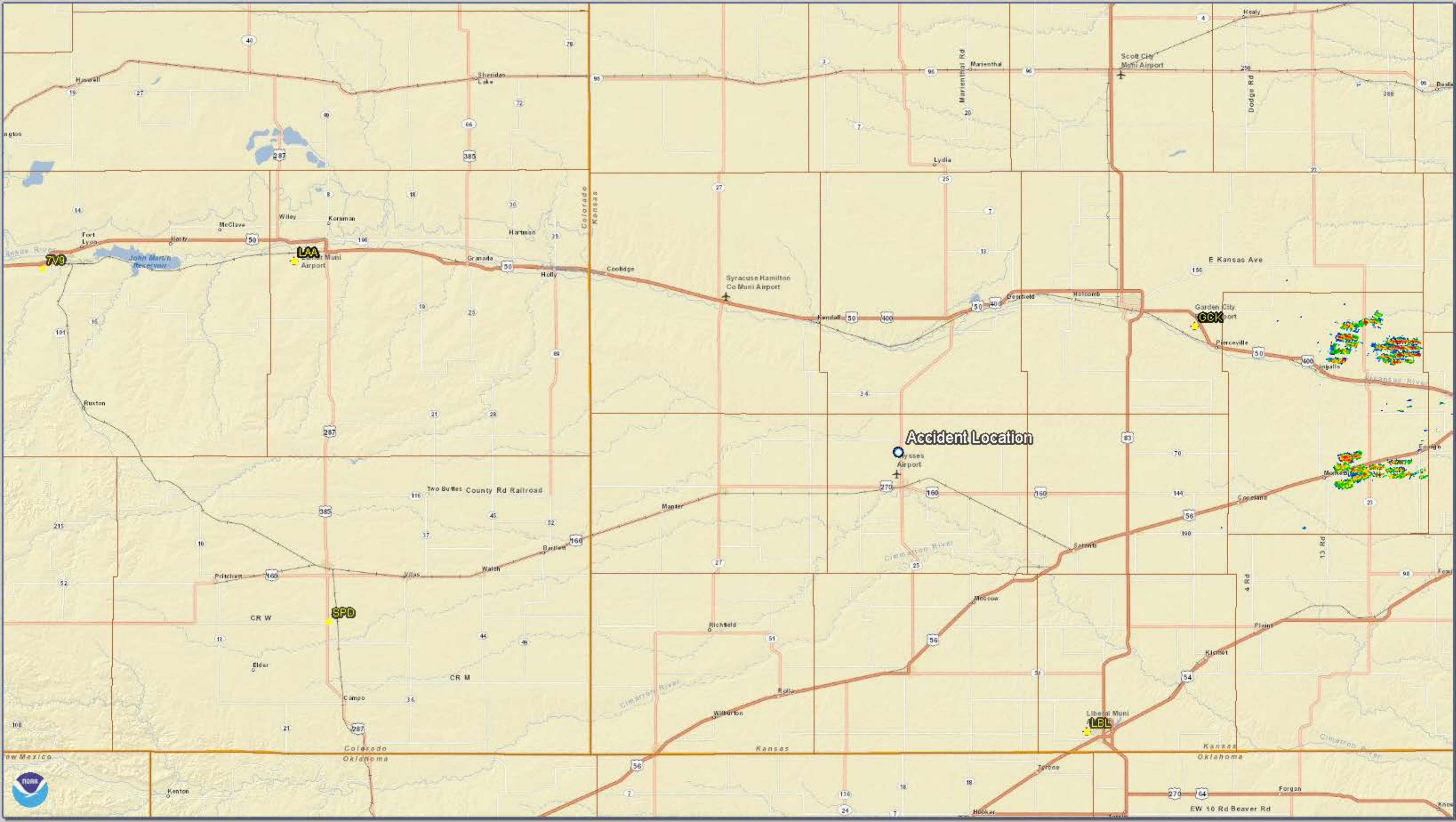
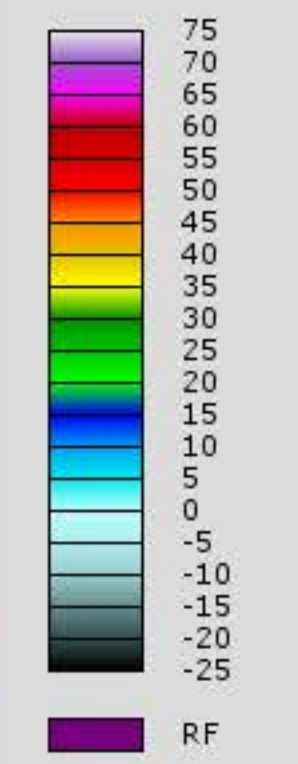
Closest Primary Moon Phase: First Quarter on February 23, 2018 at 2:09 a.m. (local standard time)

Phase of the Moon on February 22, 2018: Waxing Crescent with 44% of the Moon's visible disk illuminated.

NEXRAD LEVEL-II
KDDC - DODGE CITY, KS
02/23/2018 03:07:54 Z
LAT: 37/45/38 N
LON: 99/58/05 W
ELEV: 2590 FT
VCP: 32

REFLECTIVITY
ELEV ANGLE: 0.44
SWEEP TIME: 03:08:10 Z

Legend: dBZ



Accident Location



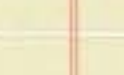
Lysses Airport



Lysses Airport



Lysses Airport



Lysses Airport



Lysses Airport



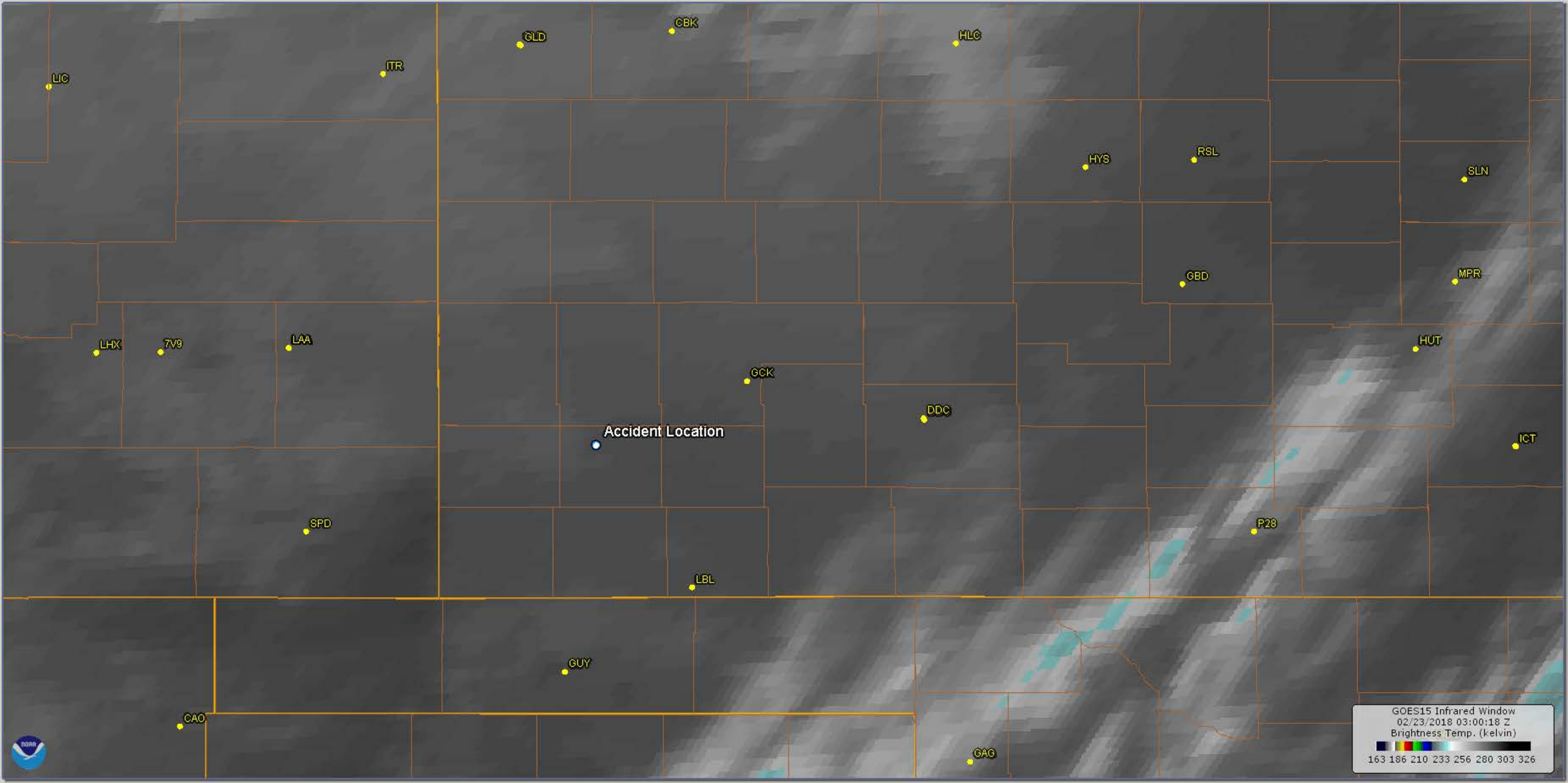
Lysses Airport



Lysses Airport



Lysses Airport



Accident Location

GOES15 Infrared Window
02/23/2018 03:00:18 Z
Brightness Temp. (kelvin)

163 186 210 233 256 280 303 326

RAOB: RAW SOUNDING DATA.TXT // 72451 - KDDC - DODGE CITY, KS US at 23/0000Z

Data Type: CODED Integrated data levels: 77

Lat: 37°46'12" N Lon: 99°58'12" W Elev: 790 meters

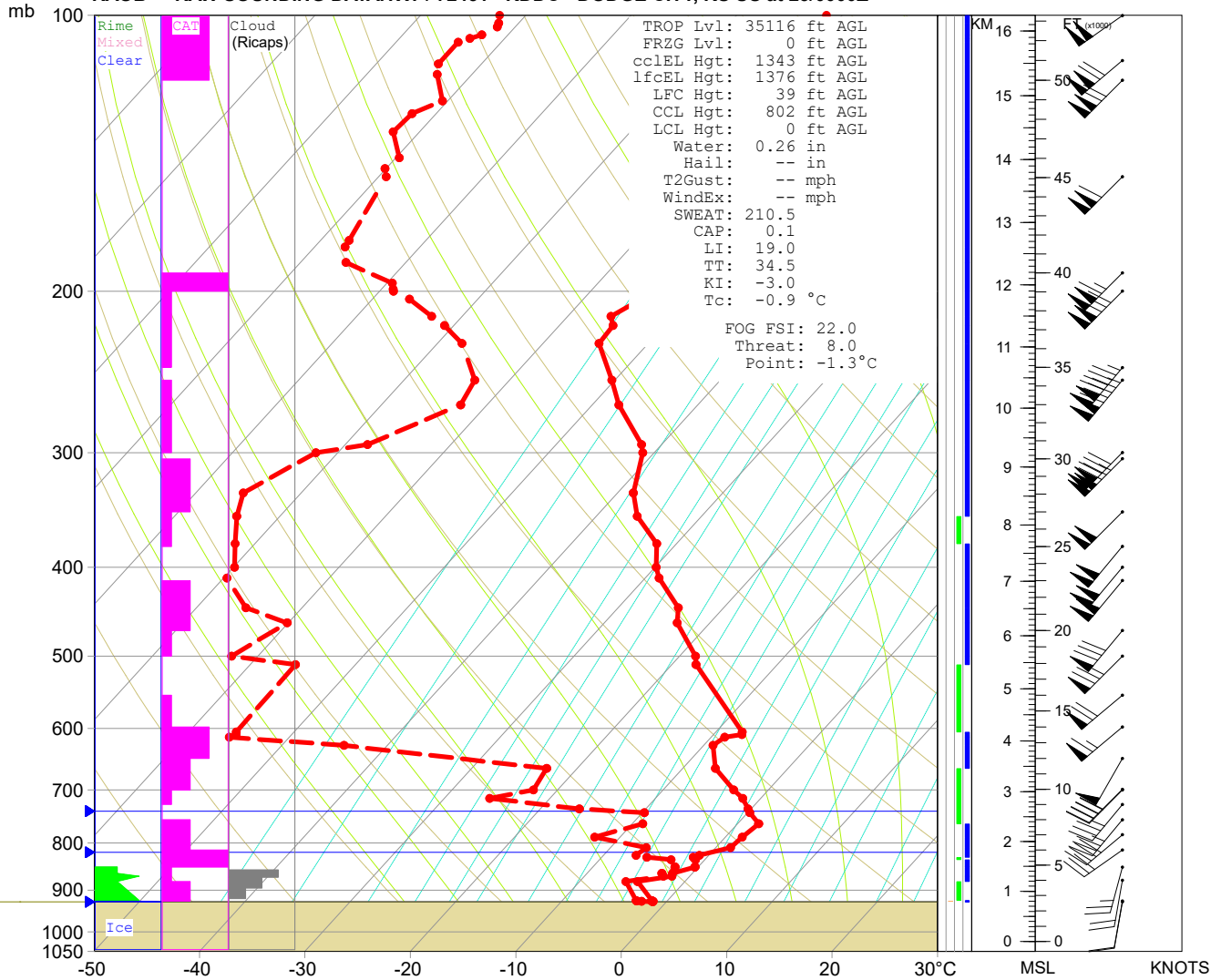
Level	Height (ft-AGL)	Pres (mb)	T (C)	Td (C)	RH (%)	DD/FF (deg/kts)	CAT	LLWS	Icing - Type	
1	0	927	-1.3	-1.3	100	190/10			MDT	Clear
2	28	926	-1.3	-2.4	92	n/			LGT	Clear
3	56	925	-1.5	-2.9	90	190/10			LGT	Clear
4	84	924	-1.5	-3.0	89	n/	MDT		LGT	Clear
5	1323	881	-4.5	-5.6	92	190/20			TRC	Rime
6	1680	869	-1.7	-2.5	94	n/			LGT	Rime
7	1861	863	-1.9	-2.9	93	n/	LGT		TRC	Rime
8	2259	850	-0.3	-2.2	87	195/24			TRC	Rime
9	2290	849	-0.3	-2.2	87	n/			TRC	Rime
10	2758	834	-0.9	-3.2	84	n/				
11	2916	829	-1.3	-5.7	72	n/				
12	3043	825	-0.9	-6.9	64	n/	XTR			
13	3408	814				235/29				
14	3558	809	1.4	-6.6	55	n/				
15	4253	788	1.6	-12.4	34	n/	MDT			
16	4408	783				230/38				
17	5141	762	2.0	-9.0	44	n/	MDT			
18	5408	754				220/36				
19	5879	741	0.2	-9.8	47	n/				
20	6128	734	-0.3	-16.3	29	n/				
21	6408	726				220/37				
22	6814	715	-1.7	-25.7	14	n/	LGT			
23	7366	700	-3.3	-22.3	21	225/39				
24	8766	663	-6.9	-22.9	27	n/	MDT			
25	9408	647				210/52				
26	10230	626	-9.1	-44.1	4	n/				
27	10763	613	-8.7	-55.7	1	n/				
28	10930	609	-7.3	-55.3	1	n/				
29	11098	605	-7.5	-55.5	1	n/	SVR			
30	11408	598				230/64	LGT			
31	13408	552				230/72				
32	15326	511	-17.7	-55.7	2	n/				
33	15859	500	-18.5	-62.5	1	225/75	LGT			
34	17408	469				220/80				
35	17881	460	-23.1	-60.1	2	n/				
36	18784	443	-24.3	-65.3	1	n/	MDT			
37	20408	414				220/100				
38	20561	411	-28.7	-69.7	1	n/				
39	21197	400	-29.9	-69.9	1	220/98				
40	22408	380				220/98				
41	22576	377	-31.9	-71.9	1	n/				
42	24153	352	-36.1	-74.1	1	n/	LGT			
43	24408	348				225/100				
44	25479	332	-38.5	-75.5	1	n/	MDT			
45	27408	305				225/127				
46	27752	300	-41.1	-72.1	2	225/128				
47	28202	294	-41.9	-67.9	4	n/				
48	30399	266	-47.5	-62.5	16	n/	LGT			
49	31736	250	-50.3	-63.3	20	220/145				
50	32408	242				220/146				
51	33689	228	-54.7	-67.7	19	n/				
52	34630	218	-54.9	-70.9	12	n/				
53	35116	213	-55.9	-72.9	10	n/				
54	36020	204	-54.5	-76.5	5	n/	LGT			
55	36436	200	-54.7	-78.7	4	225/132				
56	36541	199	-54.9	-78.9	4	n/				
57	36861	196	-53.5	-79.5	3	n/	XTR			
58	37408	191				225/114				

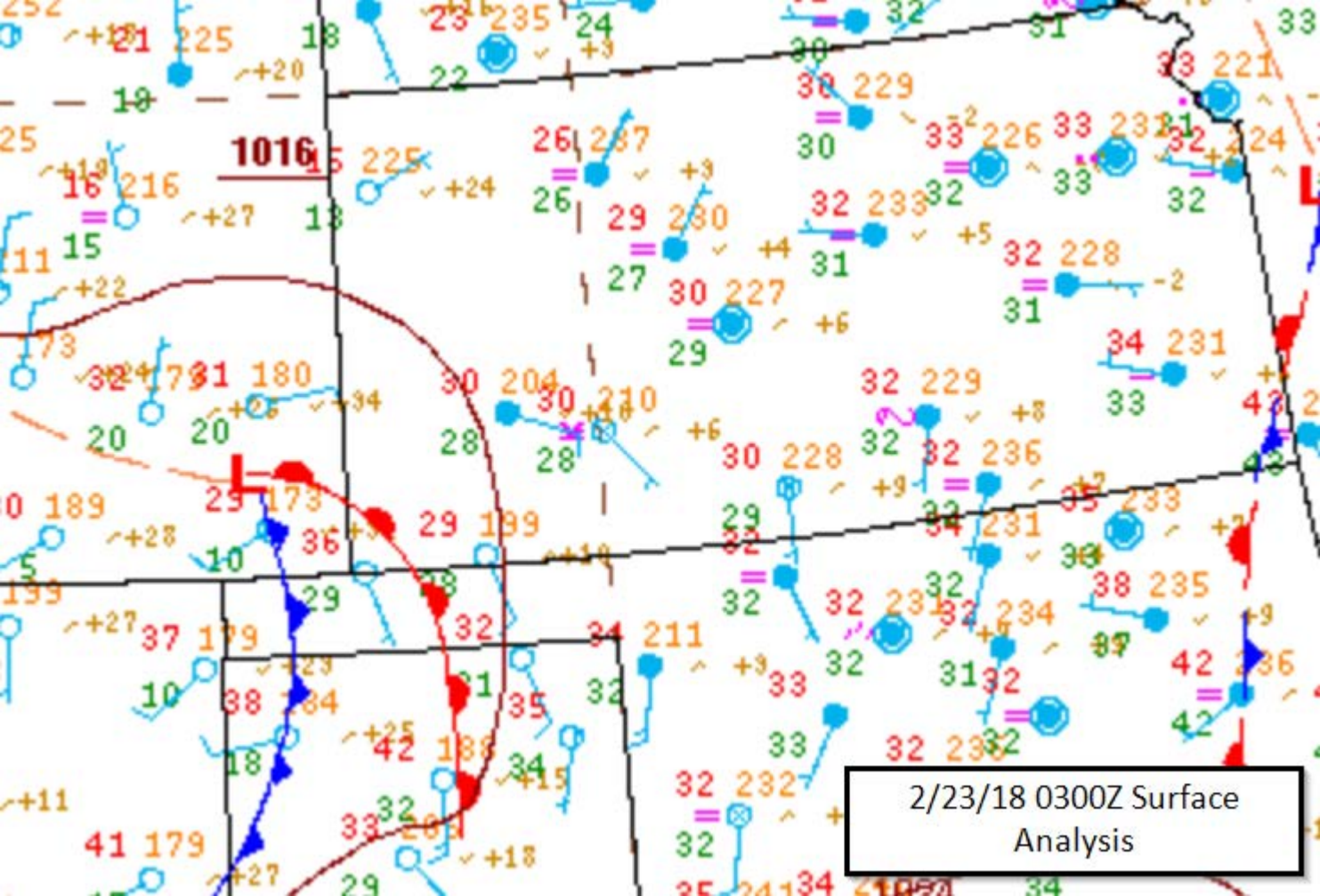
RAOB: RAW SOUNDING DATA.TXT // 72451 - KDDC - DODGE CITY, KS US at 23/0000Z

Level	Height (ft-AGL)	Pres (mb)	T (C)	Td (C)	RH (%)	DD/FF (deg/kts)	CAT	LLWS	Icing - Type
59	37966	186	-53.7	-85.7	1	n/			
60	38772	179	-55.1	-87.1	1	n/			
61	39127	176	-54.3	-87.3	1	n/			
62	42458	150	-58.3	-89.3	1	225/112			
63	42874	147	-59.1	-90.1	1	n/			
64	43442	143	-58.7	-89.7	1	n/			
65	44773	134	-61.5	-92.5	1	n/			
66	45705	128	-61.3	-92.3	1	n/			
67	46354	124	-59.5	-90.5	1	n/			
68	47408	118				225/118			
69	47711	116	-63.3	-93.3	1	n/			
70	48238	113	-64.1	-94.1	1	n/	SVR		
71	48408	112				230/121			
72	49334	107	-64.1	-94.1	1	n/			
73	49523	106	-63.3	-93.3	1	n/			
74	49715	105	-61.5	-92.5	1	n/			
75	50106	103	-61.7	-91.7	1	n/			
76	50305	102	-60.9	-91.9	1	n/	SVR		
77	50708	100	-61.5	-92.5	1	235/100			

RAOB - RAW SOUNDING DATA.TXT / 72451 - KDDC - DODGE CITY, KS US at 23/0000Z

Stn Elev: 2592 ft
 QNH = 1018.5 mb
 DA: 1123 ft, ISA





2/23/18 0300Z Surface
Analysis

