FCC 312 Schedule S	FEDERAL COMMUNICATIONS COMMISSION SATELLITE SPACE STATION AUTHORIZATIONS (Technical and Operational Description)	Page 1: General, Frequency Bands, and GSO Orbit

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name:		e. Estimated Date of Placement into Service:	i Will the space station(s) operate on a Common Carrier Basis:
NSS-5		9/23/1997	N
b. Construction Commencement Date:		f. Estimated Lifetime of Satellite(s):	j. Number of transponders offered on a common carrier basis:
		17 Years	0
c. Construction Completion Date:		g. Total Number of Transponders:	k. Total Common Carrier Transponder Bandwidth:
		44	0 MHz
d1. Est Launch Date Begin:	d2. Est Launch Date End:	h. Total Transponder Bandwidth (no. transponders x Bandwidth)	l. Orbit Type: Mark all boxes that apply:
9/23/1997	9/23/1997	2936 MHz	[X] GSO [ ] NGSO

S2. OPERATING FREQUENCY BANDS Identify the frequency range and transmit/receive mode for all frequency bands in which this station will oper
Also indicate the nature of service(s) for each frequency band.

Frequency Band Limits				e. T/R Mode	f. Nature of Service(s): List all that apply to this band
Lower Frequency (_Hz)		Upper Frequency (_Hz)			
a. Numeric	b. Unit (K/M/G)	c. Numeric	d. Unit (K/M/G)		
3625	M	4200	M	T	Fixed Satellite Service
5850	M	6425	M	R	Fixed Satellite Service
10950	M	11200	M	T	Fixed Satellite Service
11450	M	11700	M	T	Fixed Satellite Service
11700	M	11950	M	T	Fixed Satellite Service
12500	M	12750	M	T	Fixed Satellite Service
14000	M	14500	M	R	Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W):	b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection:
20 W			To replace Intelsat-603 satellite
Longitudinal Tolerance or E/W Station-Keeping: d. Toward West: 0.05 Degrees e. Toward East: 0.05 Degrees	f. Inclination Excursion or N/S Station-Keeping Tolerance: 0.05 Degrees	Range of orbital are in which adequate service can be provided (Optional): Degrees E/W g. Westernmost: h. Easternmost:	
i. Reason for service are selection (Optional):			

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S4. ORBITAL INFORMATION FOR NON-GEOSTATIONARY SATELLITES ONLY

S4a. Total Number of Satellites in Network or System:

S4b. Total Number of Orbital Planes in Network or System:

S4c. Celestial Reference Body (Earth, Sun, Moon, etc.):

S4d. Orbit Epoch Date:

For each Orbital Plane Provide:

(e) Orbital Plane No.	(f) No. of Satellites in Plane	(g) Inclination Angle (degrees)	(h) Orbital Period (Seconds)	(i) Apogee (km)	(j) Perigee (km)	(k) Right Ascension of the Ascending Node (Deg.)	(l) Argument of Perigee (Degrees)	Active Service Arc Range (Degrees)		
								(m) Begin Angle	(n) End Angle	(o) Other

S5. INITIAL SATELLITE PHASE ANGLE For each satellite in each orbital plane, provide the intital phase angle.

(a) Orbital Plane No.	(b) Satellite Number	(c) Initial Phase Angle (Degrees)

NO NGSO DATA FILED

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S6. SERVICE AREA CHARACTERISTICS for each service area provide:

(a) Service Area ID	(b) Type of Associated Station (Earth or Space)	(c) Service Area Diagram File Name (GXT File)	(d) Service Area Description. Provide list of geographic areas (state postal codes or ITU 3-ltr codes), satellites or Figure No. of Service Area Diagram.
GLB	E	Service Area GLB.gxt	See attached GXT file
EH	E	Service Area EH.gxt	See attached GXT file
WH	E	Service Area WH.gxt	See attached GXT file
NWZ	E	Service Area NWZ.gxt	See attached GXT file
NEZ	E	Service Area NEZ.gxt	See attached GXT file
SEZ	E	Service Area SEZ.gxt	See attached GXT file
SWZ	E	Service Area SWZ.gxt	See attached GXT file
MWZ	E	Service Area MWZ.gxt	See attached GXT file

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S7. SPACE STATION ANTENNA BEAM CHARACTERISTICS For each antenna beam provide:

(a) Beam ID	(b) T/R Mode	Isotropic Antenna Gain		(e) Pointing Error (Degrees)	(f) Rotational Error (Degrees)	(g) Min. Cross-Polar Isolation (dB)	(h) Polarization Switchable? (Y/N)	(i) Polarization Alignment Rel. Equatorial Plane (Degrees)	(j) Service Area ID	Transmit			Receive				
		(c) Peak (dBi)	(d) Edge (dBi)							(k) Input Losses (dB)	(l) Effective Output Power (W)	(m) Max. EIRP (dBW)	(n) System Noice Temp (k)	(o) G/T Max. Gain Pt. (db/K)	(p) Min. Saturation Flux Density (dBW/m2)	Input Attenuator (dB)	
																(q) Max. Value	(r) Step Size
GAU	R	20	17	0.19	0.34	30	N		GLB				692	-8.4	-92	22	1.5
GBU	R	20	17	0.19	0.34	30	N		GLB				692	-8.4	-92	22	1.5
GAD	T	19.9	16.9	0.19	0.34	30	N		GLB	1.7	22.4	33.4					
GBD	T	19.9	16.9	0.19	0.34	30	N		GLB	1.7	22.4	33.4					
WHU	R	27.3	20.6	0.19	0.34	30	N		WH				724	-1.3	-93	22	1.5
WHD	T	26.2	20.9	0.19	0.34	30	N		WH	1.7	25.7	40.3					
EHU	R	25.1	20.6	0.19	0.34	30	N		EH				724	-3.5	-94	22	1.5
EHD	T	25.9	20.7	0.19	0.34	30	N		EH	1.7	26.9	40.2					
NWZ	R	34.3	26.5	0.19	0.34	30	N		NWZ				891	4.8	-99	22	1.5
NWZ	T	35	27.3	0.19	0.34	30	N		NWZ	1.7	6.2	42.7					
NEZ	R	30.5	22.9	0.19	0.34	30	N		NEZ				776	1.6	-96	22	1.5
NEZ	T	30.8	23.6	0.19	0.34	30	N		NEZ	1.7	13.8	42.2					
SWZ	R	30.8	21.3	0.19	0.34	30	N		SWZ				851	1.5	-96	22	1.5
SWZ	T	32.1	23.3	0.19	0.34	30	N		SWZ	1.7	14.8	43.8					
SEZ	R	30.9	22.7	0.19	0.34	30	N		SEZ				741	2.2	-96	22	1.5
SEZ	T	29.8	23.1	0.19	0.34	30	N		SEZ	1.7	15.8	41.7					
S1AU	R	39.4	31	0.19	0.34	30	Y	0	GLB				708	10.4	-101	22	2
S1AD	T	37.9	29.8	0.19	0.34	30	Y	90	GLB	1.7	26.9	52.1					
S1BU	R	39.4	31	0.19	0.34	30	Y	0	GLB				708	10.4	-101	22	2
S1BD	T	37.9	29.8	0.19	0.34	30	Y	90	GLB	1.7	26.9	52.1					
S2AU	R	37.6	30.5	0.19	0.34	30	Y	90	GLB				708	9.1	-99	22	2
S2AD	T	36.9	29.6	0.19	0.34	30	Y	0	GLB	1.7	28.2	51.3					
S2BU	R	37.6	30.5	0.19	0.34	30	Y	90	GLB				708	9.1	-99	22	2
S2BD	T	36.9	29.6	0.19	0.34	30	Y	0	GLB	1.7	28.2	51.3					
MWZ	R	33.3	26.3	0.19	0.34	30	N		MWZ				1023	3.2	-99	22	2
MWZ	T	33.3	26.3	0.19	0.34	30	N		MWZ	1.7	8.3	42.5					
CMD	R	10.3	9.3	0.19	0.34	30	N		GLB				3548	-25.2	-90		
TLM	T	11.3	10.3	0.19	0.34	30	N		GLB	3	1.3	10					
BNC	T	11.3	10.3	0.19	0.34	30	N		GLB	3	1.1	11					

BNK1	T	20.3	19.3	0.19	0.34	30	N		GLB	3	0.1	13					
BNK2	T	37.9	29.8	0.19	0.34	30	Y	90	GLB	3	0.1	9					
BNK3	T	36.9	29.6	0.19	0.34	30	Y	0	GLB	3	0.1	9					

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S8. ANTENNA BEAM DIAGRAMS For each beam pattern provide the reference to the graphic image and numerical data:
Also provide the power flux density levels in each beam that result from the emission with the highest power flux density.

(a) Beam ID	(b) T/R Mode	(c) Co-or Cross Polar Mode ("C" or" X")	(d) GSO Ref. Orbital Longitude (Deg. E/W)	(e) NGSO Antenna Gain Contour Description (Figure/Table/ Exhibit)	(f) GSO Antenna Gain Contour Data (GXT File)	Max. Power Flux Density (dBW/M2/Hz) At Angle of Arrival above horizontal (for emission with highest PFD)				
						(g) 5 Deg	(h) 10 Deg	(i) 15 Deg	(j) 20 Deg	(k) 25 Deg
GAU	R	C	-20		GLB Rx.gxt					
GBU	R	C	-20		GLB Rx.gxt					
GAD	T	C	-20		GLB Tx.gxt	-159.4	-159.2	-158.9	-158.7	-158.4
GBD	T	C	-20		GLB Tx.gxt	-159.4	-159.2	-158.9	-158.7	-158.4
WHU	R	C	-20		WH Rx.gxt					
WHD	T	C	-20		WH Tx.gxt	-155.4	-154.3	-154.1	-154	-153.9
EHU	R	C	-20		EH Rx.gxt					
EHD	T	C	-20		EH Tx.gxt	-155.5	-154.4	-154.2	-154.1	-154
NWZ	R	C	-20		NWZ Rx.gxt					
NWZ	T	C	-20		NWZ Tx.gxt	-153.2	-153	-152.7	-152.4	-152.5
NEZ	R	C	-20		NEZ Rx.gxt					
NEZ	T	C	-20		NEZ Tx.gxt	-153.7	-153.5	-153.2	-152.9	-153
SWZ	R	C	-20		SWZ Rx.gxt					
SWZ	T	C	-20		SWZ Tx.gxt	-152.1	-151.9	-151.6	-151.3	-151.4
SEZ	R	C	-20		SEZ Rx.gxt					
SEZ	T	C	-20		SEZ Tx.gxt	-154.2	-154	-153.7	-153.4	-153.5
MWZ	R	C	-20		MWZ Rx.gxt					
MWZ	T	C	-20		MWZ Tx.gxt	-153.4	-153.2	-152.9	-152.6	-152.7
S1AU	R	C	-20		S1 Rx.gxt					
S1AD	T	C	-20		S1 Tx.gxt	-150.2	-150.3	-150.5	-150.9	-151.6
S1BU	R	C	-20		S1 Rx.gxt					
S1BD	T	C	-20		S1 Tx.gxt	-150.2	-150.3	-150.5	-150.9	-151.6
S2AU	R	C	-20		S2 Rx.gxt					
S2AD	T	C	-20		S2 Tx.gxt	-151	-151.1	-151.3	-151.7	-151.4
S2BU	R	C	-20		S2 Rx.gxt					
S2BD	T	C	-20		S2 Tx.gxt	-151	-151.1	-151.3	-151.7	-151.4
CMD	R	C	-20		CMD Horn.gxt					
TLM	T	C	-20		TLM Horn.gxt	-173.1	-173	-172.7	-172.5	-172.4

BNC	T	C	-20		BNC Horn.gxt	-161.3	-161.2	-160.9	-160.7	-160.6
BNK1	T	C	-20		BNK1 Horn.gxt	-159.3	-159.2	-158.9	-158.7	-158.6
BNK2	T	C	-20		BNK2 Horn.gxt	-162.3	-162.2	-162	-161.9	-161.8
BNK3	T	C	-20		BNK3 Horn.gxt	-162.3	-162.2	-162	-161.9	-161.8

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S9. SPACE STATION CHANNELS For each frequency channel provide:

(a) Channel No.	(B) Assigned Bandwidth (kHz)	(c) T/R Mode	(d) Center Frequency (MHz)	(e) Polarization (H, V, L, R)	(f) TTC or Comm Channel (T or C)
WHUA	72000	R	5890	L	C
WHUB	72000	R	5970	L	C
WHUC	72000	R	6050	L	C
WHUD	34000	R	6111	L	C
WHUE	34000	R	6149	L	C
WHUF	72000	R	6130	L	C
WHUG	72000	R	6220	L	C
WHUH	36000	R	6280	L	C
EHUA	72000	R	5890	L	C
EHUB	72000	R	5970	L	C
EHUC	72000	R	6050	L	C
EHUD	34000	R	6111	L	C
EHUE	34000	R	6149	L	C
EHUF	72000	R	6130	L	C
EHUG	72000	R	6220	L	C
EHUH	36000	R	6280	L	C
NWZUL	77000	R	5967.5	R	C
NWZU	72000	R	5970	R	C
NWZUC	72000	R	6050	R	C
NWZUD	34000	R	6111	R	C
NWZUE	34000	R	6149	R	C
NWZUF	72000	R	6130	R	C
NWZU	72000	R	6220	R	C
NWZUH	36000	R	6280	R	C
NEZUL	77000	R	5967.5	R	C
NEZUM	72000	R	5970	R	C
NEZUC	72000	R	6050	R	C
NEZUD	34000	R	6111	R	C
NEZUE	34000	R	6149	R	C
NEZUF	72000	R	6130	R	C

S10. SPACE STATION TRANSPONDERS For each transponder provide:

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
1	121.5	EHUH	EHU	GADH	GAD
2	124.6	GAUH	GAU	GADH	GAD
3	124.7	GAUI	GAU	GADI	GAD
4	124.7	GAUJ	GAU	GADJ	GAD
5	124.8	GAUK	GAU	GADK	GAD
6	121.9	S1AUH	S1AU	GADK	GAD
7	121.9	S1BUH	S1BU	GADK	GAD
8	121.3	S2AUH	S2AU	GADK	GAD
9	121.3	S2BUH	S2BU	GADK	GAD
10	118.3	WHUH	WHU	GBDH	GBD
11	124.6	GBUH	GBU	GBDH	GBD
12	124.7	GBUI	GBU	GBDI	GBD
13	124.7	GBUJ	GBU	GBDJ	GBD
14	124.8	GBUK	GBU	GBDK	GBD
15	121.9	S1AUH	S1AU	GBDK	GBD
16	121.9	S1BUH	S1BU	GBDK	GBD
17	121.3	S2AUH	S2AU	GBDK	GBD
18	121.3	S2BUH	S2BU	GBDK	GBD
19	121.5	EHUA	EHU	WHDA	WHD
20	118.3	WHUA	WHU	WHDA	WHD
21	121.6	EHUB	EHU	WHDB	WHD
22	121.7	EHUC	EHU	WHDC	WHD
23	121.8	EHUD	EHU	WHDD	WHD
24	121.9	EHUE	EHU	WHDE	WHD
25	121.9	EHUF	EHU	WHDF	WHD
26	122	EHUG	EHU	WHDG	WHD
27	122.1	EHUH	EHU	WHDH	WHD
28	118.4	WHUB	WHU	WHDB	WHD
29	118.5	WHUC	WHU	WHDC	WHD
30	118.6	WHUD	WHU	WHDD	WHD

NEZUG	72000	R	6220	R	C
NEZUH	36000	R	6280	R	C
SWZUL	77000	R	5967.5	R	C
SWZU	72000	R	5970	R	C
SWZUC	72000	R	6050	R	C
SWZUD	34000	R	6111	R	C
SWZUE	34000	R	6149	R	C
SWZUF	72000	R	6130	R	C
SWZUG	72000	R	6220	R	C
SWZUH	36000	R	6280	R	C
SEZUL	77000	R	5967.5	R	C
SEZUM	72000	R	5970	R	C
SEZUC	72000	R	6050	R	C
SEZUD	34000	R	6111	R	C
SEZUE	34000	R	6149	R	C
SEZUF	72000	R	6130	R	C
SEZUG	72000	R	6220	R	C
SEZUH	36000	R	6280	R	C
MWZUL	77000	R	5967.5	R	C
MWZU	72000	R	5970	R	C
MWZU	72000	R	6050	R	C
MWZU	34000	R	6111	R	C
MWZU	34000	R	6149	R	C
MWZUF	72000	R	6130	R	C
MWZU	72000	R	6220	R	C
MWZU	36000	R	6280	R	C
GAUH	36000	R	6280	L	C
GAUI	36000	R	6320	L	C
GAUJ	36000	R	6360	L	C
GAUK	41000	R	6402.5	L	C
GBUH	36000	R	6280	R	C
GBUI	36000	R	6320	R	C
GBUJ	36000	R	6360	R	C
GBUK	41000	R	6402.5	R	C
S1AUA	77000	R	14042.5	V	C
S1AUB	72000	R	14125	V	C
S1AUC	34000	R	14186	V	C
S1AUD	34000	R	14224	V	C
S1AUE	72000	R	14205	V	C

31	118.7	WHUE	WHU	WHDE	WHD
32	118.6	WHUF	WHU	WHDF	WHD
33	118.8	WHUG	WHU	WHDG	WHD
34	118.9	WHUH	WHU	WHDH	WHD
35	117.4	NWZUM	NWZU	WHDB	WHD
36	117.6	NWZUC	NWZU	WHDC	WHD
37	117.7	NWZUD	NWZU	WHDD	WHD
38	117.7	NWZUE	NWZU	WHDE	WHD
39	117.7	NWZUF	NWZU	WHDF	WHD
40	117.8	NWZUG	NWZU	WHDG	WHD
41	117.9	NWZUH	NWZU	WHDH	WHD
42	118.3	NEZUM	NEZU	WHDB	WHD
43	118.4	NEZUC	NEZU	WHDC	WHD
44	118.5	NEZUD	NEZU	WHDD	WHD
45	118.5	NEZUE	NEZU	WHDE	WHD
46	118.5	NEZUF	NEZU	WHDF	WHD
47	118.6	NEZUG	NEZU	WHDG	WHD
48	118.7	NEZUH	NEZU	WHDH	WHD
49	118	SWZUM	SWZU	WHDB	WHD
50	118.1	SWZUC	SWZU	WHDC	WHD
51	118.2	SWZUD	SWZU	WHDD	WHD
52	118.3	SWZUE	SWZU	WHDE	WHD
53	118.2	SWZUF	SWZU	WHDF	WHD
54	118.4	SWZUG	SWZU	WHDG	WHD
55	118.4	SWZUH	SWZU	WHDH	WHD
56	117.8	SEZUM	SEZU	WHDB	WHD
57	118	SEZUC	SEZU	WHDC	WHD
58	118.1	SEZUD	SEZU	WHDD	WHD
59	118.1	SEZUE	SEZU	WHDE	WHD
60	118.1	SEZUF	SEZU	WHDF	WHD
61	118.2	SEZUG	SEZU	WHDG	WHD
62	118.3	SEZUH	SEZU	WHDH	WHD
63	118.4	MWZUM	MWZU	WHDB	WHD
64	118.5	MWZUC	MWZU	WHDC	WHD
65	118.6	MWZUD	MWZU	WHDD	WHD
66	118.7	MWZUE	MWZU	WHDE	WHD
67	118.7	MWZUF	MWZU	WHDF	WHD
68	118.8	MWZUG	MWZU	WHDG	WHD
69	118.9	MWZUH	MWZU	WHDH	WHD

S1AUF	112000	R	14314	V	C
S1AUG	112000	R	14438	V	C
S1AUH	41000	R	14477.5	V	C
S1AUS	72000	R	14045	V	C
S1AUT	72000	R	14295	V	C
S1BUA	77000	R	14042.5	H	C
S1BUB	72000	R	14125	H	C
S1BUC	34000	R	14186	H	C
S1BUD	34000	R	14224	H	C
S1BUE	72000	R	14205	H	C
S1BUF	112000	R	14314	H	C
S1BUG	112000	R	14438	H	C
S1BUH	41000	R	14477.5	H	C
S1BUS	72000	R	14045	H	C
S1BUT	72000	R	14295	H	C
S2AUA	77000	R	14042.5	H	C
S2AUB	72000	R	14125	H	C
S2AUC	34000	R	14186	H	C
S2AUD	34000	R	14224	H	C
S2AUE	72000	R	14205	H	C
S2AUF	112000	R	14314	H	C
S2AUG	112000	R	14438	H	C
S2AUH	41000	R	14477.5	H	C
S2AUS	72000	R	14045	H	C
S2AUT	72000	R	14295	H	C
S2BUA	77000	R	14042.5	V	C
S2BUB	72000	R	14125	V	C
S2BUC	34000	R	14186	V	C
S2BUD	34000	R	14224	V	C
S2BUE	72000	R	14205	V	C
S2BUF	112000	R	14314	V	C
S2BUG	112000	R	14438	V	C
S2BUH	41000	R	14477.5	V	C
S2BUS	72000	R	14045	V	C
S2BUT	72000	R	14295	V	C
WHDA	72000	T	3665	R	C
WHDB	72000	T	3745	R	C
WHDC	72000	T	3825	R	C
WHDD	34000	T	3886	R	C

70	122.3	S1AUS	S1AU	WHDB	WHD
71	122.3	S1AUB	S1AU	WHDC	WHD
72	122.4	S1AUC	S1AU	WHDD	WHD
73	122.4	S1AUD	S1AU	WHDE	WHD
74	122.4	S1AUE	S1AU	WHDF	WHD
75	122.4	S1AUT	S1AU	WHDG	WHD
76	122.3	S1BUS	S1BU	WHDB	WHD
77	122.3	S1BUB	S1BU	WHDC	WHD
78	122.4	S1BUC	S1BU	WHDD	WHD
79	122.4	S1BUD	S1BU	WHDE	WHD
80	122.4	S1BUE	S1BU	WHDF	WHD
81	122.4	S1BUT	S1BU	WHDG	WHD
82	121.6	S2AUS	S2AU	WHDB	WHD
83	121.6	S2AUB	S2AU	WHDC	WHD
84	121.7	S2AUC	S2AU	WHDD	WHD
85	121.7	S2AUD	S2AU	WHDE	WHD
86	121.7	S2AUE	S2AU	WHDF	WHD
87	121.8	S2AUT	S2AU	WHDG	WHD
88	121.6	S2BUS	S2BU	WHDB	WHD
89	121.6	S2BUB	S2BU	WHDC	WHD
90	121.7	S2BUC	S2BU	WHDD	WHD
91	121.7	S2BUD	S2BU	WHDE	WHD
92	121.7	S2BUE	S2BU	WHDF	WHD
93	121.8	S2BUT	S2BU	WHDG	WHD
94	125.2	GBUH	GBU	WHDH	WHD
95	121.7	EHUA	EHU	EHDA	EHD
96	118.5	WHUA	WHU	EHDA	EHD
97	121.8	EHUB	EHU	EHDB	EHD
98	121.9	EHUC	EHU	EHDC	EHD
99	122	EHUD	EHU	EHDD	EHD
100	122.1	EHUE	EHU	EHDE	EHD
101	122.1	EHUF	EHU	EHDF	EHD
102	122.2	EHUG	EHU	EHDG	EHD
103	122.3	EHUH	EHU	EHDH	EHD
104	118.6	WHUB	WHU	EHDB	EHD
105	118.7	WHUC	WHU	EHDC	EHD
106	118.8	WHUD	WHU	EHDD	EHD
107	118.9	WHUE	WHU	EHDE	EHD
108	118.8	WHUF	WHU	EHDF	EHD

WHDE	34000	T	3924	R	C
WHDF	72000	T	3905	R	C
WHDG	72000	T	3995	R	C
WHDH	36000	T	4055	R	C
EHDA	72000	T	3665	R	C
EHDB	72000	T	3745	R	C
EHDC	72000	T	3825	R	C
EHDD	34000	T	3886	R	C
EHDE	34000	T	3924	R	C
EHDF	72000	T	3905	R	C
EHDG	72000	T	3995	R	C
EHDH	36000	T	4055	R	C
NWZDL	77000	T	3742.5	L	C
NWZD	72000	T	3745	L	C
NWZDC	72000	T	3825	L	C
NWZDD	34000	T	3886	L	C
NWZDE	34000	T	3924	L	C
NWZDF	72000	T	3905	L	C
NWZD	72000	T	3995	L	C
NWZDH	36000	T	4055	L	C
NEZDL	77000	T	3742.5	L	C
NEZDM	72000	T	3745	L	C
NEZDC	72000	T	3825	L	C
NEZDD	34000	T	3886	L	C
NEZDE	34000	T	3924	L	C
NEZDF	72000	T	3905	L	C
NEZDG	72000	T	3995	L	C
NEZDH	36000	T	4055	L	C
SWZDL	77000	T	3742.5	L	C
SWZD	72000	T	3745	L	C
SWZDC	72000	T	3825	L	C
SWZDD	34000	T	3886	L	C
SWZDE	34000	T	3924	L	C
SWZDF	72000	T	3905	L	C
SWZDG	72000	T	3995	L	C
SWZDH	36000	T	4055	L	C
SEZDL	77000	T	3742.5	L	C
SEZDM	72000	T	3745	L	C
SEZDC	72000	T	3825	L	C

109	119	WHUG	WHU	EHDG	EHD
110	119.1	WHUH	WHU	EHDH	EHD
111	117.6	NWZUM	NWZU	EHDB	EHD
112	117.8	NWZUC	NWZU	EHDC	EHD
113	117.9	NWZUD	NWZU	EHDD	EHD
114	117.9	NWZUE	NWZU	EHDE	EHD
115	117.9	NWZUF	NWZU	EHDF	EHD
116	118	NWZUG	NWZU	EHDG	EHD
117	118.1	NWZUH	NWZU	EHDH	EHD
118	118.5	NEZUM	NEZU	EHDB	EHD
119	118.6	NEZUC	NEZU	EHDC	EHD
120	118.7	NEZUD	NEZU	EHDD	EHD
121	118.7	NEZUE	NEZU	EHDE	EHD
122	118.7	NEZUF	NEZU	EHDF	EHD
123	118.8	NEZUG	NEZU	EHDG	EHD
124	118.9	NEZUH	NEZU	EHDH	EHD
125	118.2	SWZUM	SWZU	EHDB	EHD
126	118.3	SWZUC	SWZU	EHDC	EHD
127	118.4	SWZUD	SWZU	EHDD	EHD
128	118.5	SWZUE	SWZU	EHDE	EHD
129	118.4	SWZUF	SWZU	EHDF	EHD
130	118.6	SWZUG	SWZU	EHDG	EHD
131	118.6	SWZUH	SWZU	EHDH	EHD
132	118	SEZUM	SEZU	EHDB	EHD
133	118.2	SEZUC	SEZU	EHDC	EHD
134	118.3	SEZUD	SEZU	EHDD	EHD
135	118.3	SEZUE	SEZU	EHDE	EHD
136	118.3	SEZUF	SEZU	EHDF	EHD
137	118.4	SEZUG	SEZU	EHDG	EHD
138	118.5	SEZUH	SEZU	EHDH	EHD
139	118.6	MWZUM	MWZU	EHDB	EHD
140	118.7	MWZUC	MWZU	EHDC	EHD
141	118.8	MWZUD	MWZU	EHDD	EHD
142	118.9	MWZUE	MWZU	EHDE	EHD
143	118.9	MWZUF	MWZU	EHDF	EHD
144	119	MWZUG	MWZU	EHDG	EHD
145	119.1	MWZUH	MWZU	EHDH	EHD
146	122.5	S1AUS	S1AU	EHDB	EHD
147	122.5	S1AUB	S1AU	EHDC	EHD

SEZDD	34000	T	3886	L	C
SEZDE	34000	T	3924	L	C
SEZDF	72000	T	3905	L	C
SEZDG	72000	T	3995	L	C
SEZDH	36000	T	4055	L	C
MWZDL	77000	T	3742.5	L	C
MWZD	72000	T	3745	L	C
MWZD	72000	T	3825	L	C
MWZD	34000	T	3886	L	C
MWZD	34000	T	3924	L	C
MWZDF	72000	T	3905	L	C
MWZD	72000	T	3995	L	C
MWZD	36000	T	4055	L	C
GADH	36000	T	4055	R	C
GADI	36000	T	4095	R	C
GADJ	36000	T	4135	R	C
GADK	41000	T	4177.5	R	C
GBDH	36000	T	4055	L	C
GBDI	36000	T	4095	L	C
GBDJ	36000	T	4135	L	C
GBDK	41000	T	4177.5	L	C
S1ADA	77000	T	10992.5	H	C
S1ADB	72000	T	11075	H	C
S1ADC	34000	T	11136	H	C
S1ADD	34000	T	11174	H	C
S1ADE	72000	T	11155	H	C
S1ADF	112000	T	11514	H	C
S1ADG	112000	T	11638	H	C
S1ADH	41000	T	11677.5	H	C
S1ADI	77000	T	11747.5	H	C
S1ADJ	72000	T	11830	H	C
S1ADK	34000	T	11891	H	C
S1ADL	34000	T	11929	H	C
S1ADM	72000	T	11910	H	C
S1ADN	77000	T	12547.5	H	C
S1ADO	72000	T	12630	H	C
S1ADP	34000	T	12691	H	C
S1ADQ	34000	T	12729	H	C
S1ADR	72000	T	12710	H	C

148	122.6	S1AUC	S1AU	EHDD	EHD
149	122.6	S1AUD	S1AU	EHDE	EHD
150	122.6	S1AUE	S1AU	EHDF	EHD
151	122.6	S1AUT	S1AU	EHDG	EHD
152	122.5	S1BUS	S1BU	EHDB	EHD
153	122.5	S1BUB	S1BU	EHDC	EHD
154	122.6	S1BUC	S1BU	EHDD	EHD
155	122.6	S1BUD	S1BU	EHDE	EHD
156	122.6	S1BUE	S1BU	EHDF	EHD
157	122.6	S1BUT	S1BU	EHDG	EHD
158	121.8	S2AUS	S2AU	EHDB	EHD
159	121.8	S2AUB	S2AU	EHDC	EHD
160	121.9	S2AUC	S2AU	EHDD	EHD
161	121.9	S2AUD	S2AU	EHDE	EHD
162	121.9	S2AUE	S2AU	EHDF	EHD
163	122	S2AUT	S2AU	EHDG	EHD
164	121.8	S2BUS	S2BU	EHDB	EHD
165	121.8	S2BUB	S2BU	EHDC	EHD
166	121.9	S2BUC	S2BU	EHDD	EHD
167	121.9	S2BUD	S2BU	EHDE	EHD
168	121.9	S2BUE	S2BU	EHDF	EHD
169	122	S2BUT	S2BU	EHDG	EHD
170	125.4	GAUH	GAU	EHDH	EHD
171	116.1	S1AUA	S1AU	NWZDL	NWZD
172	116.1	S1AUB	S1AU	NWZDC	NWZD
173	116.2	S1AUC	S1AU	NWZDD	NWZD
174	116.2	S1AUD	S1AU	NWZDE	NWZD
175	116.2	S1AUE	S1AU	NWZDF	NWZD
176	116.2	S1AUT	S1AU	NWZDG	NWZD
177	116.1	S1BUA	S1BU	NWZDL	NWZD
178	116.1	S1BUB	S1BU	NWZDC	NWZD
179	116.2	S1BUC	S1BU	NWZDD	NWZD
180	116.2	S1BUD	S1BU	NWZDE	NWZD
181	116.2	S1BUE	S1BU	NWZDF	NWZD
182	116.2	S1BUT	S1BU	NWZDG	NWZD
183	115.4	S2AUA	S2AU	NWZDL	NWZD
184	115.4	S2AUB	S2AU	NWZDC	NWZD
185	115.5	S2AUC	S2AU	NWZDD	NWZD
186	115.5	S2AUD	S2AU	NWZDE	NWZD

S1ADU	72000	T	10995	H	C
S1ADV	72000	T	11750	H	C
S1ADW	72000	T	12550	H	C
S1ADX	72000	T	11245	H	C
S1BDA	77000	T	10992.5	V	C
S1BDB	72000	T	11075	V	C
S1BDC	34000	T	11136	V	C
S1BDD	34000	T	11174	V	C
S1BDE	72000	T	11155	V	C
S1BDF	112000	T	11514	V	C
S1BDG	112000	T	11638	V	C
S1BDH	41000	T	11677.5	V	C
S1BDI	77000	T	11747.5	V	C
S1BDJ	72000	T	11830	V	C
S1BDK	34000	T	11891	V	C
S1BDL	34000	T	11929	V	C
S1BDM	72000	T	11910	V	C
S1BDN	77000	T	12547.5	V	C
S1BDO	72000	T	12630	V	C
S1BDP	34000	T	12691	V	C
S1BDQ	34000	T	12729	V	C
S1BDR	72000	T	12710	V	C
S1BDU	72000	T	10995	V	C
S1BDV	72000	T	11750	V	C
S1BDW	72000	T	12550	V	C
S1BDX	72000	T	11245	V	C
S2ADA	77000	T	10992.5	V	C
S2ADB	72000	T	11075	V	C
S2ADC	34000	T	11136	V	C
S2ADD	34000	T	11174	V	C
S2ADE	72000	T	11155	V	C
S2ADF	112000	T	11514	V	C
S2ADG	112000	T	11638	V	C
S2ADH	41000	T	11677.5	V	C
S2ADI	77000	T	11747.5	V	C
S2ADJ	72000	T	11830	V	C
S2ADK	34000	T	11891	V	C
S2ADL	34000	T	11929	V	C
S2ADM	72000	T	11910	V	C

187	115.5	S2AUE	S2AU	NWZDF	NWZD
188	115.6	S2AUT	S2AU	NWZDG	NWZD
189	115.4	S2BUA	S2BU	NWZDL	NWZD
190	115.4	S2BUB	S2BU	NWZDC	NWZD
191	115.5	S2BUC	S2BU	NWZDD	NWZD
192	115.5	S2BUD	S2BU	NWZDE	NWZD
193	115.5	S2BUE	S2BU	NWZDF	NWZD
194	115.6	S2BUT	S2BU	NWZDG	NWZD
195	115.4	EHUB	EHU	NWZDM	NWZD
196	115.5	EHUC	EHU	NWZDC	NWZD
197	115.6	EHUD	EHU	NWZDD	NWZD
198	115.7	EHUE	EHU	NWZDE	NWZD
199	115.7	EHUF	EHU	NWZDF	NWZD
200	115.8	EHUG	EHU	NWZDG	NWZD
201	115.9	EHUH	EHU	NWZDH	NWZD
202	112.2	WHUB	WHU	NWZDM	NWZD
203	112.3	WHUC	WHU	NWZDC	NWZD
204	112.4	WHUD	WHU	NWZDD	NWZD
205	112.5	WHUE	WHU	NWZDE	NWZD
206	112.4	WHUF	WHU	NWZDF	NWZD
207	112.6	WHUG	WHU	NWZDG	NWZD
208	112.7	WHUH	WHU	NWZDH	NWZD
209	111.2	NWZUL	NWZU	NWZDL	NWZD
210	111.4	NWZUC	NWZU	NWZDC	NWZD
211	111.5	NWZUD	NWZU	NWZDD	NWZD
212	111.5	NWZUE	NWZU	NWZDE	NWZD
213	111.5	NWZUF	NWZU	NWZDF	NWZD
214	111.6	NWZUG	NWZU	NWZDG	NWZD
215	111.7	NWZUH	NWZU	NWZDH	NWZD
216	112.1	NEZUL	NEZU	NWZDL	NWZD
217	112.2	NEZUC	NEZU	NWZDC	NWZD
218	112.3	NEZUD	NEZU	NWZDD	NWZD
219	112.3	NEZUE	NEZU	NWZDE	NWZD
220	112.3	NEZUF	NEZU	NWZDF	NWZD
221	112.4	NEZUG	NEZU	NWZDG	NWZD
222	112.5	NEZUH	NEZU	NWZDH	NWZD
223	111.8	SWZUL	SWZU	NWZDL	NWZD
224	111.9	SWZUC	SWZU	NWZDC	NWZD
225	112	SWZUD	SWZU	NWZDD	NWZD

S2ADN	77000	T	12547.5	V	C
S2ADO	72000	T	12630	V	C
S2ADP	34000	T	12691	V	C
S2ADQ	34000	T	12729	V	C
S2ADR	72000	T	12710	V	C
S2ADU	72000	T	10995	V	C
S2ADV	72000	T	11750	V	C
S2ADW	72000	T	12550	V	C
S2ADX	72000	T	11245	V	C
S2BDA	77000	T	10992.5	H	C
S2BDB	72000	T	11075	H	C
S2BDC	34000	T	11136	H	C
S2BDD	34000	T	11174	H	C
S2BDE	72000	T	11155	H	C
S2BDF	112000	T	11514	H	C
S2BDG	112000	T	11638	H	C
S2BDH	41000	T	11677.5	H	C
S2BDI	77000	T	11747.5	H	C
S2BDJ	72000	T	11830	H	C
S2BDK	34000	T	11891	H	C
S2BDL	34000	T	11929	H	C
S2BDM	72000	T	11910	H	C
S2BDN	77000	T	12547.5	H	C
S2BDO	72000	T	12630	H	C
S2BDP	34000	T	12691	H	C
S2BDQ	34000	T	12729	H	C
S2BDR	72000	T	12710	H	C
S2BDU	72000	T	10995	H	C
S2BDV	72000	T	11750	H	C
S2BDW	72000	T	12550	H	C
S2BDX	72000	T	11245	H	C
TM1	300	T	3947.5	R	T
TM2	300	T	3948	R	T
TM3	300	T	3952	R	T
TM4	300	T	3952.5	R	T
CM1	800	R	6173.7	L	T
CM2	800	R	6176.3	L	T
BCN1	25	T	3950	V	T
BCN2	25	T	11198	R	T

226	112.1	SWZUE	SWZU	NWZDE	NWZD
227	112	SWZUF	SWZU	NWZDF	NWZD
228	112.2	SWZUG	SWZU	NWZDG	NWZD
229	112.2	SWZUH	SWZU	NWZDH	NWZD
230	111.6	SEZUL	SEZU	NWZDL	NWZD
231	111.8	SEZUC	SEZU	NWZDC	NWZD
232	111.9	SEZUD	SEZU	NWZDD	NWZD
233	111.9	SEZUE	SEZU	NWZDE	NWZD
234	111.9	SEZUF	SEZU	NWZDF	NWZD
235	112	SEZUG	SEZU	NWZDG	NWZD
236	112.1	SEZUH	SEZU	NWZDH	NWZD
237	112.2	MWZUL	MWZU	NWZDL	NWZD
238	112.3	MWZUC	MWZU	NWZDC	NWZD
239	112.4	MWZUD	MWZU	NWZDD	NWZD
240	112.5	MWZUE	MWZU	NWZDE	NWZD
241	112.5	MWZUF	MWZU	NWZDF	NWZD
242	112.6	MWZUG	MWZU	NWZDG	NWZD
243	112.7	MWZUH	MWZU	NWZDH	NWZD
244	119.6	S1AUA	S1AU	NEZDL	NEZD
245	119.6	S1AUB	S1AU	NEZDC	NEZD
246	119.7	S1AUC	S1AU	NEZDD	NEZD
247	119.7	S1AUD	S1AU	NEZDE	NEZD
248	119.7	S1AUE	S1AU	NEZDF	NEZD
249	119.7	S1AUT	S1AU	NEZDG	NEZD
250	119.6	S1BUA	S1BU	NEZDL	NEZD
251	119.6	S1BUB	S1BU	NEZDC	NEZD
252	119.7	S1BUC	S1BU	NEZDD	NEZD
253	119.7	S1BUD	S1BU	NEZDE	NEZD
254	119.7	S1BUE	S1BU	NEZDF	NEZD
255	119.7	S1BUT	S1BU	NEZDG	NEZD
256	118.9	S2AUA	S2AU	NEZDL	NEZD
257	118.9	S2AUB	S2AU	NEZDC	NEZD
258	119	S2AUC	S2AU	NEZDD	NEZD
259	119	S2AUD	S2AU	NEZDE	NEZD
260	119	S2AUE	S2AU	NEZDF	NEZD
261	119.1	S2AUT	S2AU	NEZDG	NEZD
262	118.9	S2BUA	S2BU	NEZDL	NEZD
263	118.9	S2BUB	S2BU	NEZDC	NEZD
264	119	S2BUC	S2BU	NEZDD	NEZD

BCN3	25	T	11452	R	T
BCN4	25	T	11701	V	T
BCN5	25	T	12501	V	T

265	119	S2BUD	S2BU	NEZDE	NEZD
266	119	S2BUE	S2BU	NEZDF	NEZD
267	119.1	S2BUT	S2BU	NEZDG	NEZD
268	118.9	EHUB	EHU	NEZDM	NEZD
269	119	EHUC	EHU	NEZDC	NEZD
270	119.1	EHUD	EHU	NEZDD	NEZD
271	119.2	EHUE	EHU	NEZDE	NEZD
272	119.2	EHUF	EHU	NEZDF	NEZD
273	119.3	EHUG	EHU	NEZDG	NEZD
274	119.4	EHUH	EHU	NEZDH	NEZD
275	115.7	WHUB	WHU	NEZDM	NEZD
276	115.8	WHUC	WHU	NEZDC	NEZD
277	115.9	WHUD	WHU	NEZDD	NEZD
278	116	WHUE	WHU	NEZDE	NEZD
279	115.9	WHUF	WHU	NEZDF	NEZD
280	116.1	WHUG	WHU	NEZDG	NEZD
281	116.2	WHUH	WHU	NEZDH	NEZD
282	114.7	NWZUL	NWZU	NEZDL	NEZD
283	114.9	NWZUC	NWZU	NEZDC	NEZD
284	115	NWZUD	NWZU	NEZDD	NEZD
285	115	NWZUE	NWZU	NEZDE	NEZD
286	115	NWZUF	NWZU	NEZDF	NEZD
287	115.1	NWZUG	NWZU	NEZDG	NEZD
288	115.2	NWZUH	NWZU	NEZDH	NEZD
289	115.6	NEZUL	NEZU	NEZDL	NEZD
290	115.7	NEZUC	NEZU	NEZDC	NEZD
291	115.8	NEZUD	NEZU	NEZDD	NEZD
292	115.8	NEZUE	NEZU	NEZDE	NEZD
293	115.8	NEZUF	NEZU	NEZDF	NEZD
294	115.9	NEZUG	NEZU	NEZDG	NEZD
295	116	NEZUH	NEZU	NEZDH	NEZD
296	115.3	SWZUL	SWZU	NEZDL	NEZD
297	115.4	SWZUC	SWZU	NEZDC	NEZD
298	115.5	SWZUD	SWZU	NEZDD	NEZD
299	115.6	SWZUE	SWZU	NEZDE	NEZD
300	115.5	SWZUF	SWZU	NEZDF	NEZD
301	115.7	SWZUG	SWZU	NEZDG	NEZD
302	115.7	SWZUH	SWZU	NEZDH	NEZD
303	115.1	SEZUL	SEZU	NEZDL	NEZD

304	115.3	SEZUC	SEZU	NEZDC	NEZD
305	115.4	SEZUD	SEZU	NEZDD	NEZD
306	115.4	SEZUE	SEZU	NEZDE	NEZD
307	115.4	SEZUF	SEZU	NEZDF	NEZD
308	115.5	SEZUG	SEZU	NEZDG	NEZD
309	115.6	SEZUH	SEZU	NEZDH	NEZD
310	115.7	MWZUL	MWZU	NEZDL	NEZD
311	115.8	MWZUC	MWZU	NEZDC	NEZD
312	115.9	MWZUD	MWZU	NEZDD	NEZD
313	116	MWZUE	MWZU	NEZDE	NEZD
314	116	MWZUF	MWZU	NEZDF	NEZD
315	116.1	MWZUG	MWZU	NEZDG	NEZD
316	116.2	MWZUH	MWZU	NEZDH	NEZD
317	119.9	S1AUA	S1AU	SWZDL	SWZD
318	119.9	S1AUB	S1AU	SWZDC	SWZD
319	120	S1AUC	S1AU	SWZDD	SWZD
320	120	S1AUD	S1AU	SWZDE	SWZD
321	120	S1AUE	S1AU	SWZDF	SWZD
322	120	S1AUT	S1AU	SWZDG	SWZD
323	119.9	S1BUA	S1BU	SWZDL	SWZD
324	119.9	S1BUB	S1BU	SWZDC	SWZD
325	120	S1BUC	S1BU	SWZDD	SWZD
326	120	S1BUD	S1BU	SWZDE	SWZD
327	120	S1BUE	S1BU	SWZDF	SWZD
328	120	S1BUT	S1BU	SWZDG	SWZD
329	119.2	S2AUA	S2AU	SWZDL	SWZD
330	119.2	S2AUB	S2AU	SWZDC	SWZD
331	119.3	S2AUC	S2AU	SWZDD	SWZD
332	119.3	S2AUD	S2AU	SWZDE	SWZD
333	119.3	S2AUE	S2AU	SWZDF	SWZD
334	119.4	S2AUT	S2AU	SWZDG	SWZD
335	119.2	S2BUA	S2BU	SWZDL	SWZD
336	119.2	S2BUB	S2BU	SWZDC	SWZD
337	119.3	S2BUC	S2BU	SWZDD	SWZD
338	119.3	S2BUD	S2BU	SWZDE	SWZD
339	119.3	S2BUE	S2BU	SWZDF	SWZD
340	119.4	S2BUT	S2BU	SWZDG	SWZD
341	119.2	EHUB	EHU	SWZDM	SWZD
342	119.3	EHUC	EHU	SWZDC	SWZD

343	119.4	EHUD	EHU	SWZDD	SWZD
344	119.5	EHUE	EHU	SWZDE	SWZD
345	119.5	EHUF	EHU	SWZDF	SWZD
346	119.6	EHUG	EHU	SWZDG	SWZD
347	119.7	EHUH	EHU	SWZDH	SWZD
348	116	WHUB	WHU	SWZDM	SWZD
349	116.1	WHUC	WHU	SWZDC	SWZD
350	116.2	WHUD	WHU	SWZDD	SWZD
351	116.3	WHUE	WHU	SWZDE	SWZD
352	116.2	WHUF	WHU	SWZDF	SWZD
353	116.4	WHUG	WHU	SWZDG	SWZD
354	116.5	WHUH	WHU	SWZDH	SWZD
355	115	NWZUL	NWZU	SWZDL	SWZD
356	115.2	NWZUC	NWZU	SWZDC	SWZD
357	115.3	NWZUD	NWZU	SWZDD	SWZD
358	115.3	NWZUE	NWZU	SWZDE	SWZD
359	115.3	NWZUF	NWZU	SWZDF	SWZD
360	115.4	NWZUG	NWZU	SWZDG	SWZD
361	115.5	NWZUH	NWZU	SWZDH	SWZD
362	115.9	NEZUL	NEZU	SWZDL	SWZD
363	116	NEZUC	NEZU	SWZDC	SWZD
364	116.1	NEZUD	NEZU	SWZDD	SWZD
365	116.1	NEZUE	NEZU	SWZDE	SWZD
366	116.1	NEZUF	NEZU	SWZDF	SWZD
367	116.2	NEZUG	NEZU	SWZDG	SWZD
368	116.3	NEZUH	NEZU	SWZDH	SWZD
369	115.6	SWZUL	SWZU	SWZDL	SWZD
370	115.7	SWZUC	SWZU	SWZDC	SWZD
371	115.8	SWZUD	SWZU	SWZDD	SWZD
372	115.9	SWZUE	SWZU	SWZDE	SWZD
373	115.8	SWZUF	SWZU	SWZDF	SWZD
374	116	SWZUG	SWZU	SWZDG	SWZD
375	116	SWZUH	SWZU	SWZDH	SWZD
376	115.4	SEZUL	SEZU	SWZDL	SWZD
377	115.6	SEZUC	SEZU	SWZDC	SWZD
378	115.7	SEZUD	SEZU	SWZDD	SWZD
379	115.7	SEZUE	SEZU	SWZDE	SWZD
380	115.7	SEZUF	SEZU	SWZDF	SWZD
381	115.8	SEZUG	SEZU	SWZDG	SWZD

382	115.9	SEZUH	SEZU	SWZDH	SWZD
383	116	MWZUL	MWZU	SWZDL	SWZD
384	116.1	MWZUC	MWZU	SWZDC	SWZD
385	116.2	MWZUD	MWZU	SWZDD	SWZD
386	116.3	MWZUE	MWZU	SWZDE	SWZD
387	116.3	MWZUF	MWZU	SWZDF	SWZD
388	116.4	MWZUG	MWZU	SWZDG	SWZD
389	116.5	MWZUH	MWZU	SWZDH	SWZD
390	120.2	S1AUA	S1AU	SEZDL	SEZD
391	120.2	S1AUB	S1AU	SEZDC	SEZD
392	120.3	S1AUC	S1AU	SEZDD	SEZD
393	120.3	S1AUD	S1AU	SEZDE	SEZD
394	120.3	S1AUE	S1AU	SEZDF	SEZD
395	120.3	S1AUT	S1AU	SEZDG	SEZD
396	120.2	S1BUA	S1BU	SEZDL	SEZD
397	120.2	S1BUB	S1BU	SEZDC	SEZD
398	120.3	S1BUC	S1BU	SEZDD	SEZD
399	120.3	S1BUD	S1BU	SEZDE	SEZD
400	120.3	S1BUE	S1BU	SEZDF	SEZD
401	120.3	S1BUT	S1BU	SEZDG	SEZD
402	119.5	S2AUA	S2AU	SEZDL	SEZD
403	119.5	S2AUB	S2AU	SEZDC	SEZD
404	119.6	S2AUC	S2AU	SEZDD	SEZD
405	119.6	S2AUD	S2AU	SEZDE	SEZD
406	119.6	S2AUE	S2AU	SEZDF	SEZD
407	119.7	S2AUT	S2AU	SEZDG	SEZD
408	119.5	S2BUA	S2BU	SEZDL	SEZD
409	119.5	S2BUB	S2BU	SEZDC	SEZD
410	119.6	S2BUC	S2BU	SEZDD	SEZD
411	119.6	S2BUD	S2BU	SEZDE	SEZD
412	119.6	S2BUE	S2BU	SEZDF	SEZD
413	119.7	S2BUT	S2BU	SEZDG	SEZD
414	119.5	EHUB	EHU	SEZDM	SEZD
415	119.6	EHUC	EHU	SEZDC	SEZD
416	119.7	EHUD	EHU	SEZDD	SEZD
417	119.8	EHUE	EHU	SEZDE	SEZD
418	119.8	EHUF	EHU	SEZDF	SEZD
419	119.9	EHUG	EHU	SEZDG	SEZD
420	120	EHUH	EHU	SEZDH	SEZD

421	116.3	WHUB	WHU	SEZDM	SEZD
422	116.4	WHUC	WHU	SEZDC	SEZD
423	116.5	WHUD	WHU	SEZDD	SEZD
424	116.6	WHUE	WHU	SEZDE	SEZD
425	116.5	WHUF	WHU	SEZDF	SEZD
426	116.7	WHUG	WHU	SEZDG	SEZD
427	116.8	WHUH	WHU	SEZDH	SEZD
428	115.3	NWZUL	NWZU	SEZDL	SEZD
429	115.5	NWZUC	NWZU	SEZDC	SEZD
430	115.6	NWZUD	NWZU	SEZDD	SEZD
431	115.6	NWZUE	NWZU	SEZDE	SEZD
432	115.6	NWZUF	NWZU	SEZDF	SEZD
433	115.7	NWZUG	NWZU	SEZDG	SEZD
434	115.8	NWZUH	NWZU	SEZDH	SEZD
435	116.2	NEZUL	NEZU	SEZDL	SEZD
436	116.3	NEZUC	NEZU	SEZDC	SEZD
437	116.4	NEZUD	NEZU	SEZDD	SEZD
438	116.4	NEZUE	NEZU	SEZDE	SEZD
439	116.4	NEZUF	NEZU	SEZDF	SEZD
440	116.5	NEZUG	NEZU	SEZDG	SEZD
441	116.6	NEZUH	NEZU	SEZDH	SEZD
442	115.9	SWZUL	SWZU	SEZDL	SEZD
443	116	SWZUC	SWZU	SEZDC	SEZD
444	116.1	SWZUD	SWZU	SEZDD	SEZD
445	116.2	SWZUE	SWZU	SEZDE	SEZD
446	116.1	SWZUF	SWZU	SEZDF	SEZD
447	116.3	SWZUG	SWZU	SEZDG	SEZD
448	116.3	SWZUH	SWZU	SEZDH	SEZD
449	115.7	SEZUL	SEZU	SEZDL	SEZD
450	115.9	SEZUC	SEZU	SEZDC	SEZD
451	116	SEZUD	SEZU	SEZDD	SEZD
452	116	SEZUE	SEZU	SEZDE	SEZD
453	116	SEZUF	SEZU	SEZDF	SEZD
454	116.1	SEZUG	SEZU	SEZDG	SEZD
455	116.2	SEZUH	SEZU	SEZDH	SEZD
456	116.3	MWZUL	MWZU	SEZDL	SEZD
457	116.4	MWZUC	MWZU	SEZDC	SEZD
458	116.5	MWZUD	MWZU	SEZDD	SEZD
459	116.6	MWZUE	MWZU	SEZDE	SEZD

460	116.6	MWZUF	MWZU	SEZDF	SEZD
461	116.7	MWZUG	MWZU	SEZDG	SEZD
462	116.8	MWZUH	MWZU	SEZDH	SEZD
463	117.4	S1AUA	S1AU	MWZDL	MWZD
464	117.4	S1AUB	S1AU	MWZDC	MWZD
465	117.5	S1AUC	S1AU	MWZDD	MWZD
466	117.5	S1AUD	S1AU	MWZDE	MWZD
467	117.5	S1AUE	S1AU	MWZDF	MWZD
468	117.5	S1AUT	S1AU	MWZDG	MWZD
469	117.4	S1BUA	S1BU	MWZDL	MWZD
470	117.4	S1BUB	S1BU	MWZDC	MWZD
471	117.5	S1BUC	S1BU	MWZDD	MWZD
472	117.5	S1BUD	S1BU	MWZDE	MWZD
473	117.5	S1BUE	S1BU	MWZDF	MWZD
474	117.5	S1BUT	S1BU	MWZDG	MWZD
475	116.7	S2AUA	S2AU	MWZDL	MWZD
476	116.7	S2AUB	S2AU	MWZDC	MWZD
477	116.8	S2AUC	S2AU	MWZDD	MWZD
478	116.8	S2AUD	S2AU	MWZDE	MWZD
479	116.8	S2AUE	S2AU	MWZDF	MWZD
480	116.9	S2AUT	S2AU	MWZDG	MWZD
481	116.7	S2BUA	S2BU	MWZDL	MWZD
482	116.7	S2BUB	S2BU	MWZDC	MWZD
483	116.8	S2BUC	S2BU	MWZDD	MWZD
484	116.8	S2BUD	S2BU	MWZDE	MWZD
485	116.8	S2BUE	S2BU	MWZDF	MWZD
486	116.9	S2BUT	S2BU	MWZDG	MWZD
487	116.7	EHUB	EHU	MWZDM	MWZD
488	116.8	EHUC	EHU	MWZDC	MWZD
489	116.9	EHUD	EHU	MWZDD	MWZD
490	117	EHUE	EHU	MWZDE	MWZD
491	117	EHUF	EHU	MWZDF	MWZD
492	117.1	EHUG	EHU	MWZDG	MWZD
493	117.2	EHUH	EHU	MWZDH	MWZD
494	113.5	WHUB	WHU	MWZDM	MWZD
495	113.6	WHUC	WHU	MWZDC	MWZD
496	113.7	WHUD	WHU	MWZDD	MWZD
497	113.8	WHUE	WHU	MWZDE	MWZD
498	113.7	WHUF	WHU	MWZDF	MWZD

499	113.9	WHUG	WHU	MWZDG	MWZD
500	114	WHUH	WHU	MWZDH	MWZD
501	112.5	NWZUL	NWZU	MWZDL	MWZD
502	112.7	NWZUC	NWZU	MWZDC	MWZD
503	112.8	NWZUD	NWZU	MWZDD	MWZD
504	112.8	NWZUE	NWZU	MWZDE	MWZD
505	112.8	NWZUF	NWZU	MWZDF	MWZD
506	112.9	NWZUG	NWZU	MWZDG	MWZD
507	113	NWZUH	NWZU	MWZDH	MWZD
508	113.4	NEZUL	NEZU	MWZDL	MWZD
509	113.5	NEZUC	NEZU	MWZDC	MWZD
510	113.6	NEZUD	NEZU	MWZDD	MWZD
511	113.6	NEZUE	NEZU	MWZDE	MWZD
512	113.6	NEZUF	NEZU	MWZDF	MWZD
513	113.7	NEZUG	NEZU	MWZDG	MWZD
514	113.8	NEZUH	NEZU	MWZDH	MWZD
515	113.1	SWZUL	SWZU	MWZDL	MWZD
516	113.2	SWZUC	SWZU	MWZDC	MWZD
517	113.3	SWZUD	SWZU	MWZDD	MWZD
518	113.4	SWZUE	SWZU	MWZDE	MWZD
519	113.3	SWZUF	SWZU	MWZDF	MWZD
520	113.5	SWZUG	SWZU	MWZDG	MWZD
521	113.5	SWZUH	SWZU	MWZDH	MWZD
522	112.9	SEZUL	SEZU	MWZDL	MWZD
523	113.1	SEZUC	SEZU	MWZDC	MWZD
524	113.2	SEZUD	SEZU	MWZDD	MWZD
525	113.2	SEZUE	SEZU	MWZDE	MWZD
526	113.2	SEZUF	SEZU	MWZDF	MWZD
527	113.3	SEZUG	SEZU	MWZDG	MWZD
528	113.4	SEZUH	SEZU	MWZDH	MWZD
529	113.5	MWZUL	MWZU	MWZDL	MWZD
530	113.6	MWZUC	MWZU	MWZDC	MWZD
531	113.7	MWZUD	MWZU	MWZDD	MWZD
532	113.8	MWZUE	MWZU	MWZDE	MWZD
533	113.8	MWZUF	MWZU	MWZDF	MWZD
534	113.9	MWZUG	MWZU	MWZDG	MWZD
535	114	MWZUH	MWZU	MWZDH	MWZD
536	118.6	WHUB	WHU	S1ADU	S1AD
537	118.7	WHUC	WHU	S1ADB	S1AD

538	118.8	WHUD	WHU	S1ADC	S1AD
539	118.9	WHUE	WHU	S1ADD	S1AD
540	118.8	WHUF	WHU	S1ADE	S1AD
541	118.6	WHUB	WHU	S1ADV	S1AD
542	118.7	WHUC	WHU	S1ADJ	S1AD
543	118.8	WHUD	WHU	S1ADK	S1AD
544	118.9	WHUE	WHU	S1ADL	S1AD
545	118.8	WHUF	WHU	S1ADM	S1AD
546	118.6	WHUB	WHU	S1ADW	S1AD
547	118.7	WHUC	WHU	S1ADO	S1AD
548	118.8	WHUD	WHU	S1ADP	S1AD
549	118.9	WHUE	WHU	S1ADQ	S1AD
550	118.8	WHUF	WHU	S1ADR	S1AD
551	118.6	WHUB	WHU	S1BDU	S1BD
552	118.7	WHUC	WHU	S1BDB	S1BD
553	118.8	WHUD	WHU	S1BDC	S1BD
554	118.9	WHUE	WHU	S1BDD	S1BD
555	118.8	WHUF	WHU	S1BDE	S1BD
556	118.6	WHUB	WHU	S1BDV	S1BD
557	118.7	WHUC	WHU	S1BDJ	S1BD
558	118.8	WHUD	WHU	S1BDK	S1BD
559	118.9	WHUE	WHU	S1BDL	S1BD
560	118.8	WHUF	WHU	S1BDM	S1BD
561	118.6	WHUB	WHU	S1BDW	S1BD
562	118.7	WHUC	WHU	S1BDO	S1BD
563	118.8	WHUD	WHU	S1BDP	S1BD
564	118.9	WHUE	WHU	S1BDQ	S1BD
565	118.8	WHUF	WHU	S1BDR	S1BD
566	121.8	EHUB	EHU	S1ADU	S1AD
567	121.9	EHUC	EHU	S1ADB	S1AD
568	122	EHUD	EHU	S1ADC	S1AD
569	122.1	EHUE	EHU	S1ADD	S1AD
570	122.1	EHUF	EHU	S1ADE	S1AD
571	121.8	EHUB	EHU	S1ADV	S1AD
572	121.9	EHUC	EHU	S1ADJ	S1AD
573	122	EHUD	EHU	S1ADK	S1AD
574	122.1	EHUE	EHU	S1ADL	S1AD
575	122.1	EHUF	EHU	S1ADM	S1AD
576	121.8	EHUB	EHU	S1ADW	S1AD

577	121.9	EHUC	EHU	S1ADO	S1AD
578	122	EHUD	EHU	S1ADP	S1AD
579	122.1	EHUE	EHU	S1ADQ	S1AD
580	122.1	EHUF	EHU	S1ADR	S1AD
581	121.8	EHUB	EHU	S1BDU	S1BD
582	121.9	EHUC	EHU	S1BDB	S1BD
583	122	EHUD	EHU	S1BDC	S1BD
584	122.1	EHUE	EHU	S1BDD	S1BD
585	122.1	EHUF	EHU	S1BDE	S1BD
586	121.8	EHUB	EHU	S1BDV	S1BD
587	121.9	EHUC	EHU	S1BDJ	S1BD
588	122	EHUD	EHU	S1BDK	S1BD
589	122.1	EHUE	EHU	S1BDL	S1BD
590	122.1	EHUF	EHU	S1BDM	S1BD
591	121.8	EHUB	EHU	S1BDW	S1BD
592	121.9	EHUC	EHU	S1BDO	S1BD
593	122	EHUD	EHU	S1BDP	S1BD
594	122.1	EHUE	EHU	S1BDQ	S1BD
595	122.1	EHUF	EHU	S1BDR	S1BD
596	117.6	NWZUL	NWZU	S1ADA	S1AD
597	117.8	NWZUC	NWZU	S1ADB	S1AD
598	117.9	NWZUD	NWZU	S1ADC	S1AD
599	117.9	NWZUE	NWZU	S1ADD	S1AD
600	117.9	NWZUF	NWZU	S1ADE	S1AD
601	117.6	NWZUL	NWZU	S1ADI	S1AD
602	117.8	NWZUC	NWZU	S1ADJ	S1AD
603	117.9	NWZUD	NWZU	S1ADK	S1AD
604	117.9	NWZUE	NWZU	S1ADL	S1AD
605	117.9	NWZUF	NWZU	S1ADM	S1AD
606	117.6	NWZUL	NWZU	S1ADN	S1AD
607	117.8	NWZUC	NWZU	S1ADO	S1AD
608	117.9	NWZUD	NWZU	S1ADP	S1AD
609	117.9	NWZUE	NWZU	S1ADQ	S1AD
610	117.9	NWZUF	NWZU	S1ADR	S1AD
611	117.6	NWZUL	NWZU	S1BDA	S1BD
612	117.8	NWZUC	NWZU	S1BDB	S1BD
613	117.9	NWZUD	NWZU	S1BDC	S1BD
614	117.9	NWZUE	NWZU	S1BDD	S1BD
615	117.9	NWZUF	NWZU	S1BDE	S1BD

616	117.6	NWZUL	NWZU	S1BDI	S1BD
617	117.8	NWZUC	NWZU	S1BDJ	S1BD
618	117.9	NWZUD	NWZU	S1BDK	S1BD
619	117.9	NWZUE	NWZU	S1BDL	S1BD
620	117.9	NWZUF	NWZU	S1BDM	S1BD
621	117.6	NWZUL	NWZU	S1BDN	S1BD
622	117.8	NWZUC	NWZU	S1BDO	S1BD
623	117.9	NWZUD	NWZU	S1BDP	S1BD
624	117.9	NWZUE	NWZU	S1BDQ	S1BD
625	117.9	NWZUF	NWZU	S1BDR	S1BD
626	118.5	NEZUL	NEZU	S1ADA	S1AD
627	118.6	NEZUC	NEZU	S1ADB	S1AD
628	118.7	NEZUD	NEZU	S1ADC	S1AD
629	118.7	NEZUE	NEZU	S1ADD	S1AD
630	118.7	NEZUF	NEZU	S1ADE	S1AD
631	118.5	NEZUL	NEZU	S1ADI	S1AD
632	118.6	NEZUC	NEZU	S1ADJ	S1AD
633	118.7	NEZUD	NEZU	S1ADK	S1AD
634	118.7	NEZUE	NEZU	S1ADL	S1AD
635	118.7	NEZUF	NEZU	S1ADM	S1AD
636	118.5	NEZUL	NEZU	S1ADN	S1AD
637	118.6	NEZUC	NEZU	S1ADO	S1AD
638	118.7	NEZUD	NEZU	S1ADP	S1AD
639	118.7	NEZUE	NEZU	S1ADQ	S1AD
640	118.7	NEZUF	NEZU	S1ADR	S1AD
641	118.5	NEZUL	NEZU	S1BDA	S1BD
642	118.6	NEZUC	NEZU	S1BDB	S1BD
643	118.7	NEZUD	NEZU	S1BDC	S1BD
644	118.7	NEZUE	NEZU	S1BDD	S1BD
645	118.7	NEZUF	NEZU	S1BDE	S1BD
646	118.5	NEZUL	NEZU	S1BDI	S1BD
647	118.6	NEZUC	NEZU	S1BDJ	S1BD
648	118.7	NEZUD	NEZU	S1BDK	S1BD
649	118.7	NEZUE	NEZU	S1BDL	S1BD
650	118.7	NEZUF	NEZU	S1BDM	S1BD
651	118.5	NEZUL	NEZU	S1BDN	S1BD
652	118.6	NEZUC	NEZU	S1BDO	S1BD
653	118.7	NEZUD	NEZU	S1BDP	S1BD
654	118.7	NEZUE	NEZU	S1BDQ	S1BD

655	118.7	NEZUF	NEZU	S1BDR	S1BD
656	118.2	SWZUL	SWZU	S1ADA	S1AD
657	118.3	SWZUC	SWZU	S1ADB	S1AD
658	118.4	SWZUD	SWZU	S1ADC	S1AD
659	118.5	SWZUE	SWZU	S1ADD	S1AD
660	118.4	SWZUF	SWZU	S1ADE	S1AD
661	118.2	SWZUL	SWZU	S1ADI	S1AD
662	118.3	SWZUC	SWZU	S1ADJ	S1AD
663	118.4	SWZUD	SWZU	S1ADK	S1AD
664	118.5	SWZUE	SWZU	S1ADL	S1AD
665	118.4	SWZUF	SWZU	S1ADM	S1AD
666	118.2	SWZUL	SWZU	S1ADN	S1AD
667	118.3	SWZUC	SWZU	S1ADO	S1AD
668	118.4	SWZUD	SWZU	S1ADP	S1AD
669	118.5	SWZUE	SWZU	S1ADQ	S1AD
670	118.4	SWZUF	SWZU	S1ADR	S1AD
671	118.2	SWZUL	SWZU	S1BDA	S1BD
672	118.3	SWZUC	SWZU	S1BDB	S1BD
673	118.4	SWZUD	SWZU	S1BDC	S1BD
674	118.5	SWZUE	SWZU	S1BDD	S1BD
675	118.4	SWZUF	SWZU	S1BDE	S1BD
676	118.2	SWZUL	SWZU	S1BDI	S1BD
677	118.3	SWZUC	SWZU	S1BDJ	S1BD
678	118.4	SWZUD	SWZU	S1BDK	S1BD
679	118.5	SWZUE	SWZU	S1BDL	S1BD
680	118.4	SWZUF	SWZU	S1BDM	S1BD
681	118.2	SWZUL	SWZU	S1BDN	S1BD
682	118.3	SWZUC	SWZU	S1BDO	S1BD
683	118.4	SWZUD	SWZU	S1BDP	S1BD
684	118.5	SWZUE	SWZU	S1BDQ	S1BD
685	118.4	SWZUF	SWZU	S1BDR	S1BD
686	118	SEZUL	SEZU	S1ADA	S1AD
687	118.2	SEZUC	SEZU	S1ADB	S1AD
688	118.3	SEZUD	SEZU	S1ADC	S1AD
689	118.3	SEZUE	SEZU	S1ADD	S1AD
690	118.3	SEZUF	SEZU	S1ADE	S1AD
691	118	SEZUL	SEZU	S1ADI	S1AD
692	118.2	SEZUC	SEZU	S1ADJ	S1AD
693	118.3	SEZUD	SEZU	S1ADK	S1AD

694	118.3	SEZUE	SEZU	S1ADL	S1AD
695	118.3	SEZUF	SEZU	S1ADM	S1AD
696	118	SEZUL	SEZU	S1ADN	S1AD
697	118.2	SEZUC	SEZU	S1ADO	S1AD
698	118.3	SEZUD	SEZU	S1ADP	S1AD
699	118.3	SEZUE	SEZU	S1ADQ	S1AD
700	118.3	SEZUF	SEZU	S1ADR	S1AD
701	118	SEZUL	SEZU	S1BDA	S1BD
702	118.2	SEZUC	SEZU	S1BDB	S1BD
703	118.3	SEZUD	SEZU	S1BDC	S1BD
704	118.3	SEZUE	SEZU	S1BDD	S1BD
705	118.3	SEZUF	SEZU	S1BDE	S1BD
706	118	SEZUL	SEZU	S1BDI	S1BD
707	118.2	SEZUC	SEZU	S1BDJ	S1BD
708	118.3	SEZUD	SEZU	S1BDK	S1BD
709	118.3	SEZUE	SEZU	S1BDL	S1BD
710	118.3	SEZUF	SEZU	S1BDM	S1BD
711	118	SEZUL	SEZU	S1BDN	S1BD
712	118.2	SEZUC	SEZU	S1BDO	S1BD
713	118.3	SEZUD	SEZU	S1BDP	S1BD
714	118.3	SEZUE	SEZU	S1BDQ	S1BD
715	118.3	SEZUF	SEZU	S1BDR	S1BD
716	118.6	MWZUL	MWZU	S1ADA	S1AD
717	118.7	MWZUC	MWZU	S1ADB	S1AD
718	118.8	MWZUD	MWZU	S1ADC	S1AD
719	118.9	MWZUE	MWZU	S1ADD	S1AD
720	118.9	MWZUF	MWZU	S1ADE	S1AD
721	118.6	MWZUL	MWZU	S1ADI	S1AD
722	118.7	MWZUC	MWZU	S1ADJ	S1AD
723	118.8	MWZUD	MWZU	S1ADK	S1AD
724	118.9	MWZUE	MWZU	S1ADL	S1AD
725	118.9	MWZUF	MWZU	S1ADM	S1AD
726	118.6	MWZUL	MWZU	S1ADN	S1AD
727	118.7	MWZUC	MWZU	S1ADO	S1AD
728	118.8	MWZUD	MWZU	S1ADP	S1AD
729	118.9	MWZUE	MWZU	S1ADQ	S1AD
730	118.9	MWZUF	MWZU	S1ADR	S1AD
731	118.6	MWZUL	MWZU	S1BDA	S1BD
732	118.7	MWZUC	MWZU	S1BDB	S1BD

733	118.8	MWZUD	MWZU	S1BDC	S1BD
734	118.9	MWZUE	MWZU	S1BDD	S1BD
735	118.9	MWZUF	MWZU	S1BDE	S1BD
736	118.6	MWZUL	MWZU	S1BDI	S1BD
737	118.7	MWZUC	MWZU	S1BDJ	S1BD
738	118.8	MWZUD	MWZU	S1BDK	S1BD
739	118.9	MWZUE	MWZU	S1BDL	S1BD
740	118.9	MWZUF	MWZU	S1BDM	S1BD
741	118.6	MWZUL	MWZU	S1BDN	S1BD
742	118.7	MWZUC	MWZU	S1BDO	S1BD
743	118.8	MWZUD	MWZU	S1BDP	S1BD
744	118.9	MWZUE	MWZU	S1BDQ	S1BD
745	118.9	MWZUF	MWZU	S1BDR	S1BD
746	119	WHUG	WHU	S1ADX	S1AD
747	119	WHUG	WHU	S1BDX	S1BD
748	122.2	EHUG	EHU	S1ADX	S1AD
749	122.2	EHUG	EHU	S1BDX	S1BD
750	118	NWZUG	NWZU	S1ADX	S1AD
751	118	NWZUG	NWZU	S1BDX	S1BD
752	118.8	NEZUG	NEZU	S1ADX	S1AD
753	118.8	NEZUG	NEZU	S1BDX	S1BD
754	118.6	SWZUG	SWZU	S1ADX	S1AD
755	118.6	SWZUG	SWZU	S1BDX	S1BD
756	118.4	SEZUG	SEZU	S1ADX	S1AD
757	118.4	SEZUG	SEZU	S1BDX	S1BD
758	119	MWZUG	MWZU	S1ADX	S1AD
759	119	MWZUG	MWZU	S1BDX	S1BD
760	122.5	S1AUA	S1AU	S1ADA	S1AD
761	122.5	S1AUB	S1AU	S1ADB	S1AD
762	122.6	S1AUC	S1AU	S1ADC	S1AD
763	122.6	S1AUD	S1AU	S1ADD	S1AD
764	122.6	S1AUE	S1AU	S1ADE	S1AD
765	122.5	S1AUA	S1AU	S1ADI	S1AD
766	122.5	S1AUB	S1AU	S1ADJ	S1AD
767	122.6	S1AUC	S1AU	S1ADK	S1AD
768	122.6	S1AUD	S1AU	S1ADL	S1AD
769	122.6	S1AUE	S1AU	S1ADM	S1AD
770	122.5	S1AUA	S1AU	S1ADN	S1AD
771	122.5	S1AUB	S1AU	S1ADO	S1AD

772	122.6	S1AUC	S1AU	S1ADP	S1AD
773	122.6	S1AUD	S1AU	S1ADQ	S1AD
774	122.6	S1AUE	S1AU	S1ADR	S1AD
775	122.6	S1AUF	S1AU	S1ADF	S1AD
776	122.7	S1AUG	S1AU	S1ADG	S1AD
777	122.5	S1BUA	S1BU	S1BDA	S1BD
778	122.5	S1BUB	S1BU	S1BDB	S1BD
779	122.6	S1BUC	S1BU	S1BDC	S1BD
780	122.6	S1BUD	S1BU	S1BDD	S1BD
781	122.6	S1BUE	S1BU	S1BDE	S1BD
782	122.5	S1BUA	S1BU	S1BDI	S1BD
783	122.5	S1BUB	S1BU	S1BDJ	S1BD
784	122.6	S1BUC	S1BU	S1BDK	S1BD
785	122.6	S1BUD	S1BU	S1BDL	S1BD
786	122.6	S1BUE	S1BU	S1BDM	S1BD
787	122.5	S1BUA	S1BU	S1BDN	S1BD
788	122.5	S1BUB	S1BU	S1BDO	S1BD
789	122.6	S1BUC	S1BU	S1BDP	S1BD
790	122.6	S1BUD	S1BU	S1BDQ	S1BD
791	122.6	S1BUE	S1BU	S1BDR	S1BD
792	122.6	S1BUF	S1BU	S1BDF	S1BD
793	122.7	S1BUG	S1BU	S1BDG	S1BD
794	121.8	S2AUA	S2AU	S1ADA	S1AD
795	121.8	S2AUB	S2AU	S1ADB	S1AD
796	121.9	S2AUC	S2AU	S1ADC	S1AD
797	121.9	S2AUD	S2AU	S1ADD	S1AD
798	121.9	S2AUE	S2AU	S1ADE	S1AD
799	121.8	S2AUA	S2AU	S1ADI	S1AD
800	121.8	S2AUB	S2AU	S1ADJ	S1AD
801	121.9	S2AUC	S2AU	S1ADK	S1AD
802	121.9	S2AUD	S2AU	S1ADL	S1AD
803	121.9	S2AUE	S2AU	S1ADM	S1AD
804	121.8	S2AUA	S2AU	S1ADN	S1AD
805	121.8	S2AUB	S2AU	S1ADO	S1AD
806	121.9	S2AUC	S2AU	S1ADP	S1AD
807	121.9	S2AUD	S2AU	S1ADQ	S1AD
808	121.9	S2AUE	S2AU	S1ADR	S1AD
809	122	S2AUF	S2AU	S1ADF	S1AD
810	122	S2AUG	S2AU	S1ADG	S1AD

811	121.8	S2BUA	S2BU	S1ADA	S1AD
812	121.8	S2BUB	S2BU	S1ADB	S1AD
813	121.9	S2BUC	S2BU	S1ADC	S1AD
814	121.9	S2BUD	S2BU	S1ADD	S1AD
815	121.9	S2BUE	S2BU	S1ADE	S1AD
816	121.8	S2BUA	S2BU	S1ADI	S1AD
817	121.8	S2BUB	S2BU	S1ADJ	S1AD
818	121.9	S2BUC	S2BU	S1ADK	S1AD
819	121.9	S2BUD	S2BU	S1ADL	S1AD
820	121.9	S2BUE	S2BU	S1ADM	S1AD
821	121.8	S2BUA	S2BU	S1ADN	S1AD
822	121.8	S2BUB	S2BU	S1ADO	S1AD
823	121.9	S2BUC	S2BU	S1ADP	S1AD
824	121.9	S2BUD	S2BU	S1ADQ	S1AD
825	121.9	S2BUE	S2BU	S1ADR	S1AD
826	122	S2BUF	S2BU	S1ADF	S1AD
827	122	S2BUG	S2BU	S1ADG	S1AD
828	121.8	S2AUA	S2AU	S1BDA	S1BD
829	121.8	S2AUB	S2AU	S1BDB	S1BD
830	121.9	S2AUC	S2AU	S1BDC	S1BD
831	121.9	S2AUD	S2AU	S1BDD	S1BD
832	121.9	S2AUE	S2AU	S1BDE	S1BD
833	121.8	S2AUA	S2AU	S1BDI	S1BD
834	121.8	S2AUB	S2AU	S1BDJ	S1BD
835	121.9	S2AUC	S2AU	S1BDK	S1BD
836	121.9	S2AUD	S2AU	S1BDL	S1BD
837	121.9	S2AUE	S2AU	S1BDM	S1BD
838	121.8	S2AUA	S2AU	S1BDN	S1BD
839	121.8	S2AUB	S2AU	S1BDO	S1BD
840	121.9	S2AUC	S2AU	S1BDP	S1BD
841	121.9	S2AUD	S2AU	S1BDQ	S1BD
842	121.9	S2AUE	S2AU	S1BDR	S1BD
843	122	S2AUF	S2AU	S1BDF	S1BD
844	122	S2AUG	S2AU	S1BDG	S1BD
845	121.8	S2BUA	S2BU	S1BDA	S1BD
846	121.8	S2BUB	S2BU	S1BDB	S1BD
847	121.9	S2BUC	S2BU	S1BDC	S1BD
848	121.9	S2BUD	S2BU	S1BDD	S1BD
849	121.9	S2BUE	S2BU	S1BDE	S1BD

850	121.8	S2BUA	S2BU	S1BDI	S1BD
851	121.8	S2BUB	S2BU	S1BDJ	S1BD
852	121.9	S2BUC	S2BU	S1BDK	S1BD
853	121.9	S2BUD	S2BU	S1BDL	S1BD
854	121.9	S2BUE	S2BU	S1BDM	S1BD
855	121.8	S2BUA	S2BU	S1BDN	S1BD
856	121.8	S2BUB	S2BU	S1BDO	S1BD
857	121.9	S2BUC	S2BU	S1BDP	S1BD
858	121.9	S2BUD	S2BU	S1BDQ	S1BD
859	121.9	S2BUE	S2BU	S1BDR	S1BD
860	122	S2BUF	S2BU	S1BDF	S1BD
861	122	S2BUG	S2BU	S1BDG	S1BD
862	125.6	GAUK	GAU	S1ADH	S1AD
863	125.6	GAUK	GAU	S1BDH	S1BD
864	125.6	GBUK	GBU	S1ADH	S1AD
865	125.6	GBUK	GBU	S1BDH	S1BD
866	118.8	WHUB	WHU	S2ADU	S2AD
867	118.9	WHUC	WHU	S2ADB	S2AD
868	119	WHUD	WHU	S2ADC	S2AD
869	119.1	WHUE	WHU	S2ADD	S2AD
870	119	WHUF	WHU	S2ADE	S2AD
871	118.8	WHUB	WHU	S2ADV	S2AD
872	118.9	WHUC	WHU	S2ADJ	S2AD
873	119	WHUD	WHU	S2ADK	S2AD
874	119.1	WHUE	WHU	S2ADL	S2AD
875	119	WHUF	WHU	S2ADM	S2AD
876	118.8	WHUB	WHU	S2ADW	S2AD
877	118.9	WHUC	WHU	S2ADO	S2AD
878	119	WHUD	WHU	S2ADP	S2AD
879	119.1	WHUE	WHU	S2ADQ	S2AD
880	119	WHUF	WHU	S2ADR	S2AD
881	118.8	WHUB	WHU	S2BDU	S2BD
882	118.9	WHUC	WHU	S2BDB	S2BD
883	119	WHUD	WHU	S2BDC	S2BD
884	119.1	WHUE	WHU	S2BDD	S2BD
885	119	WHUF	WHU	S2BDE	S2BD
886	118.8	WHUB	WHU	S2BDV	S2BD
887	118.9	WHUC	WHU	S2BDJ	S2BD
888	119	WHUD	WHU	S2BDK	S2BD

889	119.1	WHUE	WHU	S2BDL	S2BD
890	119	WHUF	WHU	S2BDM	S2BD
891	118.8	WHUB	WHU	S2BDW	S2BD
892	118.9	WHUC	WHU	S2BDO	S2BD
893	119	WHUD	WHU	S2BDP	S2BD
894	119.1	WHUE	WHU	S2BDQ	S2BD
895	119	WHUF	WHU	S2BDR	S2BD
896	122	EHUB	EHU	S2ADU	S2AD
897	122.1	EHUC	EHU	S2ADB	S2AD
898	122.2	EHUD	EHU	S2ADC	S2AD
899	122.3	EHUE	EHU	S2ADD	S2AD
900	122.3	EHUF	EHU	S2ADE	S2AD
901	122	EHUB	EHU	S2ADV	S2AD
902	122.1	EHUC	EHU	S2ADJ	S2AD
903	122.2	EHUD	EHU	S2ADK	S2AD
904	122.3	EHUE	EHU	S2ADL	S2AD
905	122.3	EHUF	EHU	S2ADM	S2AD
906	122	EHUB	EHU	S2ADW	S2AD
907	122.1	EHUC	EHU	S2ADO	S2AD
908	122.2	EHUD	EHU	S2ADP	S2AD
909	122.3	EHUE	EHU	S2ADQ	S2AD
910	122.3	EHUF	EHU	S2ADR	S2AD
911	122	EHUB	EHU	S2BDU	S2BD
912	122.1	EHUC	EHU	S2BDB	S2BD
913	122.2	EHUD	EHU	S2BDC	S2BD
914	122.3	EHUE	EHU	S2BDD	S2BD
915	122.3	EHUF	EHU	S2BDE	S2BD
916	122	EHUB	EHU	S2BDV	S2BD
917	122.1	EHUC	EHU	S2BDJ	S2BD
918	122.2	EHUD	EHU	S2BDK	S2BD
919	122.3	EHUE	EHU	S2BDL	S2BD
920	122.3	EHUF	EHU	S2BDM	S2BD
921	122	EHUB	EHU	S2BDW	S2BD
922	122.1	EHUC	EHU	S2BDO	S2BD
923	122.2	EHUD	EHU	S2BDP	S2BD
924	122.3	EHUE	EHU	S2BDQ	S2BD
925	122.3	EHUF	EHU	S2BDR	S2BD
926	117.8	NWZUL	NWZU	S2ADA	S2AD
927	118	NWZUC	NWZU	S2ADB	S2AD

928	118.1	NWZUD	NWZU	S2ADC	S2AD
929	118.1	NWZUE	NWZU	S2ADD	S2AD
930	118.1	NWZUF	NWZU	S2ADE	S2AD
931	117.8	NWZUL	NWZU	S2ADI	S2AD
932	118	NWZUC	NWZU	S2ADJ	S2AD
933	118.1	NWZUD	NWZU	S2ADK	S2AD
934	118.1	NWZUE	NWZU	S2ADL	S2AD
935	118.1	NWZUF	NWZU	S2ADM	S2AD
936	117.8	NWZUL	NWZU	S2ADN	S2AD
937	118	NWZUC	NWZU	S2ADO	S2AD
938	118.1	NWZUD	NWZU	S2ADP	S2AD
939	118.1	NWZUE	NWZU	S2ADQ	S2AD
940	118.1	NWZUF	NWZU	S2ADR	S2AD
941	117.8	NWZUL	NWZU	S2BDA	S2BD
942	118	NWZUC	NWZU	S2BDB	S2BD
943	118.1	NWZUD	NWZU	S2BDC	S2BD
944	118.1	NWZUE	NWZU	S2BDD	S2BD
945	118.1	NWZUF	NWZU	S2BDE	S2BD
946	117.8	NWZUL	NWZU	S2BDI	S2BD
947	118	NWZUC	NWZU	S2BDJ	S2BD
948	118.1	NWZUD	NWZU	S2BDK	S2BD
949	118.1	NWZUE	NWZU	S2BDL	S2BD
950	118.1	NWZUF	NWZU	S2BDM	S2BD
951	117.8	NWZUL	NWZU	S2BDN	S2BD
952	118	NWZUC	NWZU	S2BDO	S2BD
953	118.1	NWZUD	NWZU	S2BDP	S2BD
954	118.1	NWZUE	NWZU	S2BDQ	S2BD
955	118.1	NWZUF	NWZU	S2BDR	S2BD
956	118.7	NEZUL	NEZU	S2ADA	S2AD
957	118.8	NEZUC	NEZU	S2ADB	S2AD
958	118.9	NEZUD	NEZU	S2ADC	S2AD
959	118.9	NEZUE	NEZU	S2ADD	S2AD
960	118.9	NEZUF	NEZU	S2ADE	S2AD
961	118.7	NEZUL	NEZU	S2ADI	S2AD
962	118.8	NEZUC	NEZU	S2ADJ	S2AD
963	118.9	NEZUD	NEZU	S2ADK	S2AD
964	118.9	NEZUE	NEZU	S2ADL	S2AD
965	118.9	NEZUF	NEZU	S2ADM	S2AD
966	118.7	NEZUL	NEZU	S2ADN	S2AD

967	118.8	NEZUC	NEZU	S2ADO	S2AD
968	118.9	NEZUD	NEZU	S2ADP	S2AD
969	118.9	NEZUE	NEZU	S2ADQ	S2AD
970	118.9	NEZUF	NEZU	S2ADR	S2AD
971	118.7	NEZUL	NEZU	S2BDA	S2BD
972	118.8	NEZUC	NEZU	S2BDB	S2BD
973	118.9	NEZUD	NEZU	S2BDC	S2BD
974	118.9	NEZUE	NEZU	S2BDD	S2BD
975	118.9	NEZUF	NEZU	S2BDE	S2BD
976	118.7	NEZUL	NEZU	S2BDI	S2BD
977	118.8	NEZUC	NEZU	S2BDJ	S2BD
978	118.9	NEZUD	NEZU	S2BDK	S2BD
979	118.9	NEZUE	NEZU	S2BDL	S2BD
980	118.9	NEZUF	NEZU	S2BDM	S2BD
981	118.7	NEZUL	NEZU	S2BDN	S2BD
982	118.8	NEZUC	NEZU	S2BDO	S2BD
983	118.9	NEZUD	NEZU	S2BDP	S2BD
984	118.9	NEZUE	NEZU	S2BDQ	S2BD
985	118.9	NEZUF	NEZU	S2BDR	S2BD
986	118.4	SWZUL	SWZU	S2ADA	S2AD
987	118.5	SWZUC	SWZU	S2ADB	S2AD
988	118.6	SWZUD	SWZU	S2ADC	S2AD
989	118.7	SWZUE	SWZU	S2ADD	S2AD
990	118.6	SWZUF	SWZU	S2ADE	S2AD
991	118.4	SWZUL	SWZU	S2ADI	S2AD
992	118.5	SWZUC	SWZU	S2ADJ	S2AD
993	118.6	SWZUD	SWZU	S2ADK	S2AD
994	118.7	SWZUE	SWZU	S2ADL	S2AD
995	118.6	SWZUF	SWZU	S2ADM	S2AD
996	118.4	SWZUL	SWZU	S2ADN	S2AD
997	118.5	SWZUC	SWZU	S2ADO	S2AD
998	118.6	SWZUD	SWZU	S2ADP	S2AD
999	118.7	SWZUE	SWZU	S2ADQ	S2AD
1000	118.6	SWZUF	SWZU	S2ADR	S2AD
1001	118.4	SWZUL	SWZU	S2BDA	S2BD
1002	118.5	SWZUC	SWZU	S2BDB	S2BD
1003	118.6	SWZUD	SWZU	S2BDC	S2BD
1004	118.7	SWZUE	SWZU	S2BDD	S2BD
1005	118.6	SWZUF	SWZU	S2BDE	S2BD

1006	118.4	SWZUL	SWZU	S2BDI	S2BD
1007	118.5	SWZUC	SWZU	S2BDJ	S2BD
1008	118.6	SWZUD	SWZU	S2BDK	S2BD
1009	118.7	SWZUE	SWZU	S2BDL	S2BD
1010	118.6	SWZUF	SWZU	S2BDM	S2BD
1011	118.4	SWZUL	SWZU	S2BDN	S2BD
1012	118.5	SWZUC	SWZU	S2BDO	S2BD
1013	118.6	SWZUD	SWZU	S2BDP	S2BD
1014	118.7	SWZUE	SWZU	S2BDQ	S2BD
1015	118.6	SWZUF	SWZU	S2BDR	S2BD
1016	118.2	SEZUL	SEZU	S2ADA	S2AD
1017	118.4	SEZUC	SEZU	S2ADB	S2AD
1018	118.5	SEZUD	SEZU	S2ADC	S2AD
1019	118.5	SEZUE	SEZU	S2ADD	S2AD
1020	118.5	SEZUF	SEZU	S2ADE	S2AD
1021	118.2	SEZUL	SEZU	S2ADI	S2AD
1022	118.4	SEZUC	SEZU	S2ADJ	S2AD
1023	118.5	SEZUD	SEZU	S2ADK	S2AD
1024	118.5	SEZUE	SEZU	S2ADL	S2AD
1025	118.5	SEZUF	SEZU	S2ADM	S2AD
1026	118.2	SEZUL	SEZU	S2ADN	S2AD
1027	118.4	SEZUC	SEZU	S2ADO	S2AD
1028	118.5	SEZUD	SEZU	S2ADP	S2AD
1029	118.5	SEZUE	SEZU	S2ADQ	S2AD
1030	118.5	SEZUF	SEZU	S2ADR	S2AD
1031	118.2	SEZUL	SEZU	S2BDA	S2BD
1032	118.4	SEZUC	SEZU	S2BDB	S2BD
1033	118.5	SEZUD	SEZU	S2BDC	S2BD
1034	118.5	SEZUE	SEZU	S2BDD	S2BD
1035	118.5	SEZUF	SEZU	S2BDE	S2BD
1036	118.2	SEZUL	SEZU	S2BDI	S2BD
1037	118.4	SEZUC	SEZU	S2BDJ	S2BD
1038	118.5	SEZUD	SEZU	S2BDK	S2BD
1039	118.5	SEZUE	SEZU	S2BDL	S2BD
1040	118.5	SEZUF	SEZU	S2BDM	S2BD
1041	118.2	SEZUL	SEZU	S2BDN	S2BD
1042	118.4	SEZUC	SEZU	S2BDO	S2BD
1043	118.5	SEZUD	SEZU	S2BDP	S2BD
1044	118.5	SEZUE	SEZU	S2BDQ	S2BD

1045	118.5	SEZUF	SEZU	S2BDR	S2BD
1046	118.8	MWZUL	MWZU	S2ADA	S2AD
1047	118.9	MWZUC	MWZU	S2ADB	S2AD
1048	119	MWZUD	MWZU	S2ADC	S2AD
1049	119.1	MWZUE	MWZU	S2ADD	S2AD
1050	119.1	MWZUF	MWZU	S2ADE	S2AD
1051	118.8	MWZUL	MWZU	S2ADI	S2AD
1052	118.9	MWZUC	MWZU	S2ADJ	S2AD
1053	119	MWZUD	MWZU	S2ADK	S2AD
1054	119.1	MWZUE	MWZU	S2ADL	S2AD
1055	119.1	MWZUF	MWZU	S2ADM	S2AD
1056	118.8	MWZUL	MWZU	S2ADN	S2AD
1057	118.9	MWZUC	MWZU	S2ADO	S2AD
1058	119	MWZUD	MWZU	S2ADP	S2AD
1059	119.1	MWZUE	MWZU	S2ADQ	S2AD
1060	119.1	MWZUF	MWZU	S2ADR	S2AD
1061	118.8	MWZUL	MWZU	S2BDA	S2BD
1062	118.9	MWZUC	MWZU	S2BDB	S2BD
1063	119	MWZUD	MWZU	S2BDC	S2BD
1064	119.1	MWZUE	MWZU	S2BDD	S2BD
1065	119.1	MWZUF	MWZU	S2BDE	S2BD
1066	118.8	MWZUL	MWZU	S2BDI	S2BD
1067	118.9	MWZUC	MWZU	S2BDJ	S2BD
1068	119	MWZUD	MWZU	S2BDK	S2BD
1069	119.1	MWZUE	MWZU	S2BDL	S2BD
1070	119.1	MWZUF	MWZU	S2BDM	S2BD
1071	118.8	MWZUL	MWZU	S2BDN	S2BD
1072	118.9	MWZUC	MWZU	S2BDO	S2BD
1073	119	MWZUD	MWZU	S2BDP	S2BD
1074	119.1	MWZUE	MWZU	S2BDQ	S2BD
1075	119.1	MWZUF	MWZU	S2BDR	S2BD
1076	119.2	WHUG	WHU	S2ADX	S2AD
1077	119.2	WHUG	WHU	S2BDX	S2BD
1078	122.4	EHUG	EHU	S2ADX	S2AD
1079	122.4	EHUG	EHU	S2BDX	S2BD
1080	118.2	NWZUG	NWZU	S2ADX	S2AD
1081	118.2	NWZUG	NWZU	S2BDX	S2BD
1082	119	NEZUG	NEZU	S2ADX	S2AD
1083	119	NEZUG	NEZU	S2BDX	S2BD

1084	118.8	SWZUG	SWZU	S2ADX	S2AD
1085	118.8	SWZUG	SWZU	S2BDX	S2BD
1086	118.6	SEZUG	SEZU	S2ADX	S2AD
1087	118.6	SEZUG	SEZU	S2BDX	S2BD
1088	119.2	MWZUG	MWZU	S2ADX	S2AD
1089	119.2	MWZUG	MWZU	S2BDX	S2BD
1090	122.7	S1AUA	S1AU	S2ADA	S2AD
1091	122.7	S1AUB	S1AU	S2ADB	S2AD
1092	122.8	S1AUC	S1AU	S2ADC	S2AD
1093	122.8	S1AUD	S1AU	S2ADD	S2AD
1094	122.8	S1AUE	S1AU	S2ADE	S2AD
1095	122.7	S1AUA	S1AU	S2ADI	S2AD
1096	122.7	S1AUB	S1AU	S2ADJ	S2AD
1097	122.8	S1AUC	S1AU	S2ADK	S2AD
1098	122.8	S1AUD	S1AU	S2ADL	S2AD
1099	122.8	S1AUE	S1AU	S2ADM	S2AD
1100	122.7	S1AUA	S1AU	S2ADN	S2AD
1101	122.7	S1AUB	S1AU	S2ADO	S2AD
1102	122.8	S1AUC	S1AU	S2ADP	S2AD
1103	122.8	S1AUD	S1AU	S2ADQ	S2AD
1104	122.8	S1AUE	S1AU	S2ADR	S2AD
1105	122.8	S1AUF	S1AU	S2ADF	S2AD
1106	122.9	S1AUG	S1AU	S2ADG	S2AD
1107	122.7	S1BUA	S1BU	S2BDA	S2BD
1108	122.7	S1BUB	S1BU	S2BDB	S2BD
1109	122.8	S1BUC	S1BU	S2BDC	S2BD
1110	122.8	S1BUD	S1BU	S2BDD	S2BD
1111	122.8	S1BUE	S1BU	S2BDE	S2BD
1112	122.7	S1BUA	S1BU	S2BDI	S2BD
1113	122.7	S1BUB	S1BU	S2BDJ	S2BD
1114	122.8	S1BUC	S1BU	S2BDK	S2BD
1115	122.8	S1BUD	S1BU	S2BDL	S2BD
1116	122.8	S1BUE	S1BU	S2BDM	S2BD
1117	122.7	S1BUA	S1BU	S2BDN	S2BD
1118	122.7	S1BUB	S1BU	S2BDO	S2BD
1119	122.8	S1BUC	S1BU	S2BDP	S2BD
1120	122.8	S1BUD	S1BU	S2BDQ	S2BD
1121	122.8	S1BUE	S1BU	S2BDR	S2BD
1122	122.8	S1BUF	S1BU	S2BDF	S2BD

1123	122.9	S1BUG	S1BU	S2BDG	S2BD
1124	122	S2AUA	S2AU	S2ADA	S2AD
1125	122	S2AUB	S2AU	S2ADB	S2AD
1126	122.1	S2AUC	S2AU	S2ADC	S2AD
1127	122.1	S2AUD	S2AU	S2ADD	S2AD
1128	122.1	S2AUE	S2AU	S2ADE	S2AD
1129	122	S2AUA	S2AU	S2ADI	S2AD
1130	122	S2AUB	S2AU	S2ADJ	S2AD
1131	122.1	S2AUC	S2AU	S2ADK	S2AD
1132	122.1	S2AUD	S2AU	S2ADL	S2AD
1133	122.1	S2AUE	S2AU	S2ADM	S2AD
1134	122	S2AUA	S2AU	S2ADN	S2AD
1135	122	S2AUB	S2AU	S2ADO	S2AD
1136	122.1	S2AUC	S2AU	S2ADP	S2AD
1137	122.1	S2AUD	S2AU	S2ADQ	S2AD
1138	122.1	S2AUE	S2AU	S2ADR	S2AD
1139	122.2	S2AUF	S2AU	S2ADF	S2AD
1140	122.2	S2AUG	S2AU	S2ADG	S2AD
1141	122	S2BUA	S2BU	S2BDA	S2BD
1142	122	S2BUB	S2BU	S2BDB	S2BD
1143	122.1	S2BUC	S2BU	S2BDC	S2BD
1144	122.1	S2BUD	S2BU	S2BDD	S2BD
1145	122.1	S2BUE	S2BU	S2BDE	S2BD
1146	122	S2BUA	S2BU	S2BDI	S2BD
1147	122	S2BUB	S2BU	S2BDJ	S2BD
1148	122.1	S2BUC	S2BU	S2BDK	S2BD
1149	122.1	S2BUD	S2BU	S2BDL	S2BD
1150	122.1	S2BUE	S2BU	S2BDM	S2BD
1151	122	S2BUA	S2BU	S2BDN	S2BD
1152	122	S2BUB	S2BU	S2BDO	S2BD
1153	122.1	S2BUC	S2BU	S2BDP	S2BD
1154	122.1	S2BUD	S2BU	S2BDQ	S2BD
1155	122.1	S2BUE	S2BU	S2BDR	S2BD
1156	122.2	S2BUF	S2BU	S2BDF	S2BD
1157	122.2	S2BUG	S2BU	S2BDG	S2BD
1158	122.7	S1BUA	S1BU	S2ADA	S2AD
1159	122.7	S1BUB	S1BU	S2ADB	S2AD
1160	122.8	S1BUC	S1BU	S2ADC	S2AD
1161	122.8	S1BUD	S1BU	S2ADD	S2AD

1162	122.8	S1BUE	S1BU	S2ADE	S2AD
1163	122.7	S1BUA	S1BU	S2ADI	S2AD
1164	122.7	S1BUB	S1BU	S2ADJ	S2AD
1165	122.8	S1BUC	S1BU	S2ADK	S2AD
1166	122.8	S1BUD	S1BU	S2ADL	S2AD
1167	122.8	S1BUE	S1BU	S2ADM	S2AD
1168	122.7	S1BUA	S1BU	S2ADN	S2AD
1169	122.7	S1BUB	S1BU	S2ADO	S2AD
1170	122.8	S1BUC	S1BU	S2ADP	S2AD
1171	122.8	S1BUD	S1BU	S2ADQ	S2AD
1172	122.8	S1BUE	S1BU	S2ADR	S2AD
1173	122.8	S1BUF	S1BU	S2ADF	S2AD
1174	122.9	S1BUG	S1BU	S2ADG	S2AD
1175	122.7	S1AUA	S1AU	S2BDA	S2BD
1176	122.7	S1AUB	S1AU	S2BDB	S2BD
1177	122.8	S1AUC	S1AU	S2BDC	S2BD
1178	122.8	S1AUD	S1AU	S2BDD	S2BD
1179	122.8	S1AUE	S1AU	S2BDE	S2BD
1180	122.7	S1AUA	S1AU	S2BDI	S2BD
1181	122.7	S1AUB	S1AU	S2BDJ	S2BD
1182	122.8	S1AUC	S1AU	S2BDK	S2BD
1183	122.8	S1AUD	S1AU	S2BDL	S2BD
1184	122.8	S1AUE	S1AU	S2BDM	S2BD
1185	122.7	S1AUA	S1AU	S2BDN	S2BD
1186	122.7	S1AUB	S1AU	S2BDO	S2BD
1187	122.8	S1AUC	S1AU	S2BDP	S2BD
1188	122.8	S1AUD	S1AU	S2BDQ	S2BD
1189	122.8	S1AUE	S1AU	S2BDR	S2BD
1190	122.8	S1AUF	S1AU	S2BDF	S2BD
1191	122.9	S1AUG	S1AU	S2BDG	S2BD
1192	125.8	GAUK	GAU	S2ADH	S2AD
1193	125.8	GAUK	GAU	S2BDH	S2BD
1194	125.8	GBUK	GBU	S2ADH	S2AD
1195	125.8	GBUK	GBU	S2BDH	S2BD
1196				TM1	TLM
1197				TM2	TLM
1198				TM3	TLM
1199				TM4	TLM
1200		CM1	CMD		

1201		CM2	CMD		
1202				BCN1	BNC
1203				BCN2	BNK1
1204				BCN3	BNK1
1205				BCN4	BNK2
1206				BCN5	BNK2
1207				BCN4	BNK3
1208				BCN5	BNK3

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

S11. DIGITAL MODULATION PARAMETERS For each digital emission provide:

(a) Digital Mod. ID	(b) Emission Designator	(c) Assigned Bandwidth (kHz)	(d) No. of Phases	(e)Uncoded Data Rate (kbps)	(f) FEC Error Correction Coding Rate	(g) CDMA Processing Gain (dB)	(h) Total C/N Performance Objective (dB)	(i) Single Entry C/I Objective (dB)
D1	346KG7W	346	4	256	0.5		6	18.2
D2	461KG7W	461	4	512	0.75		9.3	21.5
D3	1M84G7W	1840	4	2048	0.75		9.3	21.5
D4	8M25G7W	8250	4	8448	0.692		6.9	19.1
D5	36M0G7W	36000	4	41470	0.692		6.9	19.1
D6	72M0G7W	72000	4	155000	0.816		12.7	24.9

FEDERAL COMMUNICATIONS COMMISSION **Page 8: Analog Modulation**

SATELLITE SPACE STATION AUTHORIZATIONS

FCC Form 312 - Schedule S: (Technical and Operational Description)

S12. ANALOG MODULATION PARAMETERS For each analog emission provide:

(a) Analog Mod. ID	(b) Emission Designator	(c) Assigned Bandwidth (kHz)	(d) Signal Type	(e) Channels per Carrier	Multi-channel Telephony				(j) Video Standard NTSC, PAL, etc.	(k) Video Noise-Weighting (dB)	(l) Video and SCPC/FM Modulation Index	(m) SCPC/FM Compander, Preemphasis, and Noise Weighting (dB)	(n) Total C/N Performance Objective (dB)	(o) Single Entry C/I Objective (dB)
					(f) Ave. Companded Talker Level (dBm0)	(g) Bottom Baseband Freq. (MHz)	(h) Top Baseband Freq. (MHz)	(i) RMS Modulation Index						
A1	36M0F3F	36000	TV/FM	1					PAL	13.2	1.5		10	24
TTC1	800KF9D	800		1									10	24
TTC2	300KF9D	300		1									0	14
TTC3	25K0N0N	25		1									0	14

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

S13. TYPICAL EMISSIONS For each planned type of emission provide:

Associated Transponder ID Range		Modulation ID		(e) Carriers per Transponder	(f) Carrier Spacing (kHz)	(g)Noise Budget Reference (Table No.)	(h) Energy Dispersal Bandwidth (kHz)	Receive Band (Assoc. Transmit Stn)			Transmit Band (This Space Station)			
								(i)Assoc. Stn. Max. Antenna Gain (dBi)	Assoc. Station Transmit Power (dBW)		EIRP (dBW)		(n) Max. Power Flux Density (dBW/m2/Hz)	(o)Assoc. Stn Rec. G/T (dB/K)
(a) Start	(b) End	(c) Digital (Table S11)	(d) Analog (Table S12)						(j) Min.	(k) Max.	(l) Min.	(m) Max.		
1	1195	D1		80	346	GL_GL_346KG		51.6	-2	1	8.4	11.4	-168.8	24
1	1195	D2		45	461	GL_GL_461KG		47.5	4.6	7.6	10.8	13.8	-167.6	27.1
1	1195	D3		5	1840	GL_GL_1M84G		55.3	6.1	9.1	20.2	23.2	-164.2	22.6
1	1195	D4		2	8250	GL_GL_8M25G		51.6	12.7	15.7	23.1	26.1	-167.8	24
1	1195	D5		1		GL_GL_36M0G		56.7	21	24	30.4	33.4	-167.5	22.6
1	1195		A1	1		GL_GL_36M0F		56.8	18.8	21.8	30.4	33.4	-155.7	27.1
1	1195	D1		85	346	HEMI_GLB_34		47.5	1	5	8	11	-169.2	24
1	1195	D2		48	461	HEMI_GLB_46		51.6	-0.6	3.4	10.6	13.6	-167.8	27
1	1195	D3		6	1840	HEMI_GLB_1M		55.3	4.3	8.3	19.1	22.1	-165.3	24
1	1195	D4		2	8250	HEMI_GLB_8M		47.5	15.8	19.8	22.8	25.8	-168.1	24
1	1195	D5		1		HEMI_GLB_36		56.8	21.1	25.1	30.4	33.4	-167.5	22.6
1	1195		A1	1		HEMI_GLB_36		56.3	13.8	17.8	30.4	33.4	-155.7	27.1
1	1195	D1		118	346	KSPOT_GLB_3		49.2	-2.8	3.2	5.2	8.2	-172	28.3
1	1195	D2		83	461	KSPOT_GLB_4		53.3	-4	2	8.2	11.2	-170.2	30.2
1	1195	D3		20	1840	KSPOT_GLB_1		53.3	2.1	8.1	14.2	17.2	-170.2	30.2
1	1195	D4		4	8250	KSPOT_GLB_8		46.7	11.3	17.3	16.8	19.8	-174.1	31.9
1	1195	D5		1		KSPOT_GLB_3		49.2	18.7	24.7	23.1	26.1	-174.8	31.9
1	1195		A1	1		KSPOT_GLB_3		49.2	24.3	30.3	28.8	31.8	-157.3	30.2
1	1195	D1		104	346	GLB_HEMI_34		47.5	-0.8	2.2	11.2	15.2	-165.3	22.5
1	1195	D2		78	461	GLB_HEMI_46		51.2	-1.5	1.5	14.3	18.3	-163.4	24
1	1195	D3		19	1840	GLB_HEMI_1M		55.3	0.4	3.4	20.3	24.3	-163.4	24
1	1195	D4		4	8250	GLB_HEMI_8M		47.5	13.9	16.9	26	30	-164.2	22.5
1	1195	D5		1		GLB_HEMI_36		56.8	17.2	20.2	33.6	37.6	-163.6	22.5
1	1195		A1	1		GLB_HEMI_36		56.8	18.8	21.8	33.2	37.2	-151.9	24
1	1195	D1		208	346	HEMI_HEMI_3		47.2	-1.6	2.4	10	14	-166.5	22.6
1	1195	D2		116	461	HEMI_HEMI_4		51.3	-3.1	0.9	12.6	16.6	-165.1	24
1	1195	D3		29	1840	HEMI_HEMI_1		55	-0.8	3.2	18.6	22.6	-165.1	24
1	1195	D4		8	8250	HEMI_HEMI_8		47.2	12.2	16.2	23.8	27.8	-166.9	22.5
1	1195	D6		1		HEMI_HEMI_7		56.4	20.5	24.5	36.2	40.2	-164.2	27

1	1195		A1	2	36000	HEMI_HEMI_3		56.3	12.8	16.8	33.3	35.3	-153.1	24
1	1195	D1		208	346	ZONE_HEMI_3		47.3	-5.1	0.9	9.6	13.6	-166.9	22.5
1	1195	D2		138	461	ZONE_HEMI_4		51.4	-7.1	-1.1	11.8	15.8	-165.9	24
1	1195	D3		34	1840	ZONE_HEMI_1		55.1	-4.7	1.3	17.8	21.8	-165.9	24
1	1195	D4		8	8250	ZONE_HEMI_8		47.3	9	15	23.7	27.7	-166.5	22.5
1	1195	D6		1		ZONE_HEMI_7		56.6	18.7	24.7	35.8	39.8	-162.6	26.1
1	1195		A1	2	36000	ZONE_HEMI_3		56.6	11.6	17.6	32.8	34.8	-151.5	24
1	1195	D1		194	346	KSPOT_HEMI_		49.6	-5	0	10.6	14.6	-165.9	22.6
1	1195	D2		128	461	KSPOT_HEMI_		49.1	-3	2	12.2	16.2	-165.5	26.1
1	1195	D3		28	1840	KSPOT_HEMI_		52.9	-0.2	4.8	18.7	22.7	-165	26.1
1	1195	D4		7	8250	KSPOT_HEMI_		49.1	9.3	14.3	24.4	28.4	-165.8	24
1	1195	D6		1		KSPOT_HEMI_		56.5	19.1	24.1	34.6	38.6	-165.8	30.2
1	1195		A1	2	36000	KSPOT_HEMI_		56.5	10.9	15.9	28.4	32.4	-157	30.2
1	1195	D1		208	346	HEMI_ZONE_3		47.3	-2.5	1.5	9.8	15.8	-165.2	22.5
1	1195	D2		146	461	HEMI_ZONE_4		51.4	-3.2	0.8	13.1	19.1	-163.1	24
1	1195	D3		35	1840	HEMI_ZONE_1		55.1	-0.7	3.3	19.4	25.4	-162.8	24
1	1195	D4		8	8250	HEMI_ZONE_8		47.3	12.3	16.3	24.6	30.6	-164.1	22.5
1	1195	D6		1		HEMI_ZONE_7		56.6	23.3	26.3	35.9	41.9	-163	27.3
1	1195		A1	2	36000	HEMI_ZONE_3		56.6	14.6	18.6	32.6	38.6	-151.3	24
1	1195	D1		208	346	ZONE_ZONE_		47.3	-5.2	0.8	9.2	15.2	-165.8	22.5
1	1195	D2		156	461	ZONE_ZONE_		51.4	-5.6	0.4	12.1	18.1	-164.1	24
1	1195	D3		39	1840	ZONE_ZONE_		55.1	-3.8	2.2	18.4	24.4	-163.8	24
1	1195	D4		8	8250	ZONE_ZONE_		47.3	9.6	15.6	23.9	29.9	-164.8	22.5
1	1195	D6		1		ZONE_ZONE_		56.6	16.4	22.4	35	41	-163.9	27.3
1	1195		A1	2	36000	ZONE_ZONE_		56.6	9.7	14.2	33.6	38.6	-151.3	24
1	1195	D1		208	346	KSPOT_ZONE		49.5	-5.3	-0.3	10.8	16.8	-164.2	22.6
1	1195	D2		156	461	KSPOT_ZONE		49.1	-3.1	1.9	12.6	18.6	-163.6	26.1
1	1195	D3		39	1840	KSPOT_ZONE		52.8	-0.8	4.2	18.7	24.7	-163.5	26.1
1	1195	D4		8	8250	KSPOT_ZONE		46.5	11.2	16.2	24.3	30.3	-164.4	24
1	1195	D6		1		KSPOT_ZONE		54.5	19.6	24.6	34.8	40.8	-163.6	30.2
1	1195		A1	2	36000	KSPOT_ZONE		56.5	9.3	14.3	28.8	34.8	-155.1	30.2
1	1195	D1		118	346	GLB_KSPOT_3		51.8	-1.9	1.1	22.4	27.4	-154.1	26.2
1	1195	D2		88	461	GLB_KSPOT_4		53.7	-1.8	1.1	24.3	29.3	-153.4	30.2
1	1195	D3		22	1840	GLB_KSPOT_1		53.7	4.1	7.1	30.3	35.3	-153.4	30.2
1	1195	D4		4	8250	GLB_KSPOT_8		55.5	8.8	11.8	36.8	41.8	-153.4	26.2
1	1195	D5		1		GLB_KSPOT_3		55.5	15.8	18.8	43.8	48.8	-153.4	26.2
1	1195		A1	1		GLB_KSPOT_3		53.7	21.9	24.9	37.2	40.2	-150.2	30.2
1	1195	D1		208	346	HEMI_KSPOT_		45.8	1	5	20.9	25.9	-155.6	26
1	1195	D2		156	461	HEMI_KSPOT_		47.3	1.2	5.2	22.7	27.7	-155	29.7

1	1195	D3		39	1840	HEMI_KSPOT_		47.3	7.2	11.2	28.7	33.7	-155	29.7
1	1195	D4		8	8250	HEMI_KSPOT_		53.4	7.8	11.8	35.3	40.3	-154.9	26
1	1195	D6		1		HEMI_KSPOT_		53.4	24.5	28.5	47	52	-153.4	31.4
1	1195		A1	2	36000	HEMI_KSPOT_		53.4	16.6	20.6	36.2	40.2	-150.2	32.6
1	1195	D1		208	346	ZONE_KSPOT		45.8	-2.9	3.1	20.2	25.2	-156.3	26
1	1195	D2		156	461	ZONE_KSPOT		47.2	-2.6	3.4	21.9	26.9	-155.8	29.7
1	1195	D3		39	1840	ZONE_KSPOT		47.3	3.4	9.4	27.9	32.9	-155.8	29.7
1	1195	D4		8	8250	ZONE_KSPOT		53.4	4.3	10.3	34.9	39.9	-155.3	26
1	1195	D6		1		ZONE_KSPOT		53.2	21.5	27.5	45.9	50.9	-154.5	31.4
1	1195		A1	2	36000	ZONE_KSPOT		53.2	10.4	16.4	36.2	40.2	-150.2	32.6
1	1195	D1		180	346	KSPOT_KSPO		54.4	-5	1	22.5	26.5	-155	23.3
1	1195	D2		100	461	KSPOT_KSPO		52.8	-0.8	5.2	25	29	-153.7	25.8
1	1195	D3		24	1840	KSPOT_KSPO		62.4	-4.3	1.7	31.1	35.1	-153.6	25.8
1	1195	D4		8	8250	KSPOT_KSPO		54.5	7.7	13.7	35.2	39.2	-156	25.8
1	1195	D6		1		KSPOT_KSPO		62.4	14.5	20.5	47.9	51.9	-153.5	29.6
1	1195		A1	2	36000	KSPOT_KSPO		63.9	8.5	14.5	37.1	40.1	-150.3	30.5
1196	1199		TTC2	1		TELEMETRY.p					3	10	-170.9	32.6
1200	1201		TTC1	1		TELECOMMAN		55.8	19.7	23.7				
1202	1202		TTC3	1		BEACON_C.pd					4	11	-159.1	27.1
1203	1204		TTC3	1		BEACON_KU1.					6	13	-157.1	29.4
1205	1208		TTC3	1		BEACON_KU2.					6	9	-161.8	29.4

FEDERAL COMMUNICATIONS COMMISSION
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S14. Is the space station(s) controlled and monitored remotely? If Yes, provide the location and telephone number of the TT and C control point(s): Yes

Remote Control (TT C) Location(s):

S14a: Street Address: SES Engineering			
S14b. City: Betzdorf	S14c. County: Luxembourg	S14d. State/Country	S14e. Zip Code: L-6815
S14f. Telephone Number: +352 710 725 1	S14g. Call Sign of Control Station (if appropriate):		

Remote Control (TT C) Location(s):

S14a: Street Address: Manassas Teleport			
S14b. City: Bristow	S14c. County:	S14d. State/Country VA	S14e. Zip Code: 20136
S14f. Telephone Number: +1 703 367 7300	S14g. Call Sign of Control Station (if appropriate):		

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a: Mass of spacecraft without fuel (kg): 1601	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 1819		
S15c. Mass of spacecraft and fuel at launch (kg): 3420	S15f. Length (m): 22.2	S15i. Payload: 0.864
S15d. Mass of fuel, in orbit, at beginning of life (kg): 517	S15g. Width (m): 8.7	S15j. Bus: 0.891
S15e. Deployed Area of Solar Array (square meters): 46.5	S15h. Height (m): 5.2	S15k. Total: 0.769

S16. SPACECRAFT ELECTRICAL CHARACTERISTICS:

Spacecraft Subsystem	Electrical Power (Watts) At Beginning of Life		Electrical Power (Watts) At End of Life	
	At Equinox	At Solstice	At Equinox	At Solstice
Payload (Watts):	(a): 3124	(f): 3080	(k): 3124	(p): 3080
Bus (Watts):	(b): 581	(g): 557	(l): 581	(q): 557
Total (Watts):	(c): 3705	(h): 3637	(m) 3705	(r): 3637
Solar Array (Watts):	(d): 6294	(i): 5637	(n): 5003	(s): 4614
Depth of Battery Discharge (%):	(e) 50 %	(j) %	(o) 70 %	(t) %

S17. CERTIFICATIONS:

a. Are the power flux density limits of § 25.208 met?:	X	**YES**		**NO**		**N/A**
b. Are the appropriate service area coverage requirements of § 25.143(b)(ii) and (iii), or § 25.145(c)(1) and (2) met?		**YES**		**NO**	X	**N/A**
c. Are the frequency tolerances of § 25.202(e) and the out-of-band emission limits of § 25.202(f)(1), (2) and (3) met?	X	**YES**		**NO**		**N/A**

In addition to the information required in this Form, the space station applicant is required to provide all the information specified in Section 25.114 of the Commission's rules, 47 C.F.R § 25.114.