GSN

Station Summary

Reports

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August 22, 2006

Report Objectives

- To provide summaries of Integrated Surface Hourly (ISH) data and CLIMAT monthly Flags.

- Produce reports in Region and WMO Station Number order.

Processing Overview

- From Integrated Surface database, extract WMO, Date/Time, and Report Type for ALL WMO stations for a particular year.

- Create yearly summary files of Surface data:
  1. Total ob types and synoptic ob types by month
  2. Report types by hour

- Add CLIMAT flags to “totals by month” summary file from Monthly Climatic Data of the World (MCDW) annual file.

- Sort yearly files and generate reports

Sample Short-term Report

GSN Summary Of Surface Hourly Obs (HLY), Synoptic Obs (SYN), and CLIMAT Data (M) For 2006 / 01 Through 2006 / 06

HLY = a count of ALL the obs for a month in the Integrated Surface Hourly (ISH) file at NCDC
SYN = a count of the SYNOPTIC ob types for a month in the Integrated Surface Hourly (ISH) file at NCDC
M = Presence (C) or absence (-) of CLIMAT data in the Monthly Climatic Data for the World (MCDW) at NCDC

				January			February			March			April			May			June			July			. . .	December		
R	WMO	Station	Year	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	. . .	HLY	SYN	M
1	08522	FUNCHAL	2006	176	176	C	216	216	C	239	239	C	235	235	C	243	243	C	238	238	-							
1	08583	MINDELO	2006	53	53	-	53	53	-	113	113	-	102	102	-	108	108	-	111	111	-							
1	60010	IZANA	2006	20	20	C	16	16	C	23	23	C	33	33	C	37	37	C	39	39	C							
1	60040	LANZAROTE/AE	2006	1140	237	C	1050	216	C	1273	691	C	1249	715	C	1267	725	C	1258	716	C							
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2	20069	OSTROV VIZE	2006	241	241	C	220	220	C	246	246	C	238	238	C	241	241	C	239	239	C							
2	20087	OSTROV GOLOM	2006	241	241	C	218	218	C	247	247	C	240	240	C	243	243	C	240	240	C							

Sample Long-term Report

GSN Summary Of Surface Hourly Obs (HLY), Synoptic Obs (SYN), and CLIMAT Data (M) For 2001 / 01 Through 2006 / 06

HLY = a count of ALL the obs for a month in the Integrated Surface Hourly (ISH) file at NCDC
SYN = a count of the SYNOPTIC ob types for a month in the Integrated Surface Hourly (ISH) file at NCDC
M = Presence (C) or absence (-) of CLIMAT data in the Monthly Climatic Data for the World (MCDW) at NCDC

				January			February			March			April			May			June			July			. . .	December		
R	WMO	Station	Year	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	. . .	HLY	SYN	M
1	08522	FUNCHAL	2001	458	458	C	426	426	C	435	435	C	463	463	C	457	457	C	424	424	C	476	476	C	. . .	484	484	C
1	08522	FUNCHAL	2002	463	463	C	449	449	C	321	321	C	360	360	C	447	447	C	416	416	C	500	500	C	. . .	564	564	C
1	08522	FUNCHAL	2003	573	573	C	443	443	C	544	544	C	552	552	C	521	521	C	544	544	C	292	292	C	. . .	124	124	C
1	08522	FUNCHAL	2004	280	280	C	518	518	C	344	344	C	120	120	C	114	114	C	114	114	C	119	119	C	. . .	123	123	C
1	08522	FUNCHAL	2005	123	123	C	112	112	C	122	122	C	115	115	C	122	122	C	119	119	C	138	138	-	. . .	218	218	C
1	08522	FUNCHAL	2006	176	176	C	216	216	C	239	239	C	235	235	C	243	243	C	238	238	-							
1	08583	MINDELO	2001	84	84	-	86	86	-	106	106	-	94	94	-	78	78	-	61	61	-	48	48	-	. . .	34	34	-
1	08583	MINDELO	2002	41	41	-	38	38	-	44	44	-	34	34	-	47	47	-	41	41	-	28	28	-	. . .	23	23	-
1	08583	MINDELO	2003	33	33	-	43	43	-	42	42	-	71	71	-	104	104	-	104	104	-	73	73	-	. . .	103	103	-
1	08583	MINDELO	2004	110	110	-	100	100	-	114	114	-	97	97	-	100	100	-	99	99	-	100	100	-	. . .	110	110	-
1	08583	MINDELO	2005	102	102	-	106	106	-	106	106	-	111	111	-	109	109	-	107	107	-	89	89	-	. . .	105	105	-
1	08583	MINDELO	2006	53	53	-	53	53	-	113	113	-	102	102	-	108	108	-	111	111	-							
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2	20069	OSTROV VIZE	2001	199	199	C	222	222	C	245	245	C	233	233	C	245	245	C	235	235	C	246	246	C	. . .	241	241	C
2	20069	OSTROV VIZE	2002	242	242	C	111	111	C	249	249	C	234	234	C	248	248	C	227	227	C	244	244	C	. . .	255	255	C
2	20069	OSTROV VIZE	2003	251	251	C	217	217	C	250	250	C	242	242	C	242	242	C	244	244	C	255	255	C	. . .	253	253	C
2	20069	OSTROV VIZE	2004	233	233	C	221	221	C	251	251	C	239	239	C	249	249	C	240	240	C	247	247	C	. . .	247	247	C
2	20069	OSTROV VIZE	2005	250	250	C	208	208	C	246	246	C	243	243	C	248	248	C	242	242	C	250	250	C	. . .	245	245	C
2	20069	OSTROV VIZE	2006	241	241	C	220	220	C	246	246	C	238	238	C	241	241	C	239	239	C							

Sample Report Types Report

SURFACE DATA TYPES FOR GSN STATIONS IN THE INTEGRATED SURFACE HOURLY (ISH)
DATABASE AT NCDC FOR 2006 / 01 THROUGH 2006 / 06

Report Types:
FM-12 = SYNOP Report from a fixed land station,
FM-15 = METAR Aviation routine weather report,
FM-16 = SPECI Aviation selected special weather report,
SAO = Airways report (includes record specials),
SAOSP = Airways special report (excluding record specials),
AUTO = Report from an automatic station,
SY-AE = Synoptic and aero merged report
SY-SA = Synoptic and airways merged report,
SY-MT = Synoptic and METAR merged report,
SY-AU = Synoptic and AUTO merged report,
S-S-A = Synoptic, airways, and AUTO merged,
SA-AU = Airways and AUTO merged report

R	WMO	STATION	TYPE	H0	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	. . .	H23	TOTAL
1	08522	FUNCHAL	FM-12	165	0	0	159	0	0	158	0	0	175	0	0	180	0	. . .	0	1347
1	08583	MINDELO	FM-12	131	0	0	0	0	0	137	0	0	0	0	0	134	0	. . .	0	540
1	60010	IZANA	FM-12	0	0	0	0	0	0	57	0	0	0	0	0	111	0	. . .	0	168
1	60040	LANZAROTE/AE	FM-12	95	119	118	179	119	20	4	4	2	3	7	2	5	2	. . .	2	716
1	60040	LANZAROTE/AE	FM-15	4	1	0	0	0	97	177	239	239	179	238	236	179	233	. . .	158	3933
1	60040	LANZAROTE/AE	FM-16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. . .	0	4
1	60040	LANZAROTE/AE	SY-MT	85	0	0	0	0	97	176	115	116	172	111	116	174	116	. . .	112	2584
1	60156	NOUASSEUR	FM-12	2	0	0	2	0	0	1	0	0	4	0	0	2	0	. . .	0	17
1	60156	NOUASSEUR	FM-15	165	327	317	145	325	353	176	347	355	179	356	327	174	325	. . .	319	6751
1	60156	NOUASSEUR	FM-16	2	0	1	2	0	4	1	3	2	1	1	0	0	0	. . .	3	29
1	60156	NOUASSEUR	SY-MT	170	0	0	165	0	0	171	0	0	166	0	0	171	2	. . .	0	1354
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2	20069	OSTROV VIZE	FM-12	178	0	0	177	0	0	177	0	0	179	0	1	179	1	. . .	0	1425
2	20087	OSTROV GOLOM	FM-12	179	0	0	177	0	0	179	1	0	179	0	0	181	1	. . .	0	1429
2	20982	VOLOCHANKA							NO SURFACE DATA											
2	21432	OSTROV KOTEL	FM-12	171	0	0	169	0	0	174	0	0	172	0	0	172	0	. . .	0	1351

Newly Developed Reports

1. ISH / CLIMAT report for ALL WMO stations worldwide for their POR.

2. ISH / CLIMAT report for GSN stations (active and inactive) for their POR.

Sample Worldwide Report

Worldwide (Region 1) Summary Of Surface Hourly Obs (HLY), Synoptic Obs (SYN), and CLIMAT Data (M) For 1901 / 01 Through 2006 / 06

HLY = a count of ALL the obs for a month in the Integrated Surface Hourly (ISH) file at NCDC
SYN = a count of the SYNOPTIC ob types for a month in the Integrated Surface Hourly (ISH) file at NCDC
M = Presence (C) or absence (-) of CLIMAT data in the Monthly Climatic Data for the World (MCDW) at NCDC
NOTE: CLIMAT Data begins around 1990

				January			February			March			April			May			June			July			August			. . .	November			December		
R	WMO	Station	Year	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	. . .	HLY	SYN	M	HLY	SYN	M
1	085210	FUNCHAL/S.CA	1948	40	40	-	54	54	-	58	58	-	58	58	-	57	57	-	57	57	-	59	59	-	58	58	-	. . .	59	59	-	58	58	-
1	085210	FUNCHAL/S.CA	1949	58	58	-	55	55	-	61	61	-	57	57	-	58	58	-	57	57	-	61	61	-	60	60	-	. . .	58	58	-	59	59	-
1	085210	FUNCHAL/S.CA	1950	57	57	-	56	56	-	62	62	-	60	60	-	59	59	-	59	59	-	61	61	-	61	61	-	. . .	60	60	-	61	61	-
1	085210	FUNCHAL/S.CA	1951	60	60	-	56	56	-	62	62	-	60	60	-	62	62	-	60	60	-	60	60	-	60	60	-	. . .	60	60	-	62	62	-
1	085210	FUNCHAL/S.CA	1952	62	62	-	58	58	-	61	61	-	60	60	-	60	60	-	60	60	-	62	62	-	61	61	-	. . .	59	59	-	61	61	-
1	085210	FUNCHAL/S.CA	1953	60	60	-	56	56	-	61	61	-	59	59	-	58	58	-	55	55	-	62	62	-	61	61	-	. . .	56	56	-	54	54	-
1	085210	FUNCHAL/S.CA	1954	55	55	-	55	55	-	60	60	-	60	60	-	62	62	-	60	60	-	61	61	-	62	62	-	. . .	60	60	-	61	61	-
1	085210	FUNCHAL/S.CA	1955	61	61	-	55	55	-	61	61	-	59	59	-	62	62	-	60	60	-	62	62	-	61	61	-	. . .	59	59	-	60	60	-
1	085210	FUNCHAL/S.CA	1956	61	61	-	57	57	-	61	61	-	58	58	-	61	61	-	59	59	-	61	61	-	61	61	-	. . .	58	58	-	62	62	-
1	085210	FUNCHAL/S.CA	1957	62	62	-	55	55	-	60	60	-	59	59	-	56	56	-	57	57	-	61	61	-	58	58	-	. . .	58	58	-	62	62	
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1	085210	FUNCHAL/S.CA	1999	692	239	-	656	218	-	654	242	-	702	237	-	701	245	-	695	229	-	723	244	-	709	244	-	. . .	692	238	C	696	238	-
1	085210	FUNCHAL/S.CA	2000	747	243	-	700	230	-	749	243	-	723	234	-	748	248	-	715	240	-	748	245	-	747	246	-	. . .	718	237	-	248	248	-
1	085210	FUNCHAL/S.CA	2001	247	247	-	228	228	-	247	247	-	241	241	-	245	245	-	234	234	-	248	248	-	243	243	-	. . .	237	237	-	247	247	-
1	085210	FUNCHAL/S.CA	2002	247	247	-	222	222	-	249	249	-	237	237	-	245	245	-	228	228	-	244	244	-	240	240	-	. . .	243	243	-	255	255	-
1	085210	FUNCHAL/S.CA	2003	245	245	-	229	229	-	251	251	-	241	241	-	245	245	-	242	242	-	209	209	-	246	246	-	. . .	241	241	-	250	250	-
1	085210	FUNCHAL/S.CA	2004	249	249	-	237	237	-	248	248	-	239	239	-	246	246	-	236	236	-	245	245	-	246	246	-	. . .	245	245	-	243	243	-
1	085210	FUNCHAL/S.CA	2005	248	248	-	228	228	-	251	251	-	244	244	-	251	251	-	244	244	-	249	249	-	249	249	-	. . .	238	238	-	247	247	-
1	085210	FUNCHAL/S.CA	2006	241	241	-	221	221	-	246	246	-	240	240	-	243	243	C	239	239	-													

				January			February			March			April			May			June			July			August			. . .	November			December		
R	WMO	Station	Year	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	. . .	HLY	SYN	M	HLY	SYN	M
1	085220	FUNCHAL	1931	67	67	-	64	64	-	64	64	-	0	0	-	46	46	-	67	67	-	61	61	-	55	55	-	. . .	52	52	-	55	55	-
1	085220	FUNCHAL	1932	49	49	-	40	40	-	66	66	-	80	80	-	79	79	-	73	73	-	73	73	-	56	56	-	. . .	62	62	-	55	55	-
1	085220	FUNCHAL	1933	47	47	-	62	62	-	58	58	-	55	55	-	54	54	-	63	63	-	52	52	-	57	57	-	. . .	51	51	-	48	48	-

GSN Period Of Record Report

GSN Summary Of Surface Hourly Obs (HLY), Synoptic Obs (SYN), and CLIMAT Data (M) For 1901 / 01 Through 2006 / 07

NOTE: * Between Region and WMO means Inactive GSN Station; otherwise, station is Active

HLY = a count of ALL the obs for a month in the Integrated Surface Hourly (ISH) file at NCDC

SYN = a count of the SYNOPTIC ob types for a month in the Integrated Surface Hourly (ISH) file at NCDC

M = Presence (C) or absence (-) of CLIMAT data in the Monthly Climatic Data for the World (MCDW) at NCDC

				January			February			March			April			May			June			July			August			. . .	November			December		
R	WMO	Station	Year	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	. . .	HLY	SYN	M	HLY	SYN	M
1	08522	FUNCHAL	1931	67	67	-	64	64	-	64	64	-	0	0	-	46	46	-	67	67	-	61	61	-	55	55	-	. . .	52	52	-	55	55	-
1	08522	FUNCHAL	1932	49	49	-	40	40	-	66	66	-	80	80	-	79	79	-	73	73	-	73	73	-	56	56	-	. . .	62	62	-	55	55	-
1	08522	FUNCHAL	1933	47	47	-	62	62	-	58	58	-	55	55	-	54	54	-	63	63	-	52	52	-	57	57	-	. . .	51	51	-	48	48	-
1	08522	FUNCHAL	1934	52	52	-	72	72	-	81	81	-	80	80	-	74	74	-	80	80	-	78	78	-	76	76	-	. . .	79	79	-	78	78	-
1	08522	FUNCHAL	1935	76	76	-	77	77	-	89	89	-	89	89	-	86	86	-	79	79	-	80	80	-	75	75	-	. . .	80	80	-	81	81	-
1	08522	FUNCHAL	1936	85	85	-	76	76	-	84	84	-	81	81	-	82	82	-	71	71	-	67	67	-	64	64	-	. . .	84	84	-	85	85	-
1	08522	FUNCHAL	1937	79	79	-	72	72	-	85	85	-	77	77	-	71	71	-	80	80	-	78	78	-	74	74	-	. . .	80	80	-	89	89	-
1	08522	FUNCHAL	1938	87	87	-	77	77	-	82	82	-	82	82	-	84	84	-	78	78	-	86	86	-	78	78	-	. . .	80	80	-	88	88	-
1	08522	FUNCHAL	1939	89	89	-	73	73	-	86	86	-	85	85	-	88	88	-	87	87	-	86	86	-	84	84	-	. . .	47	47	-	41	41	-
1	08522	FUNCHAL	1990	0	0	C	0	0	C	0	0	C	0	0	C	0	0	C	0	0	C	0	0	C	0	0	C	. . .	17	17	C	23	23	C
1	08522	FUNCHAL	1991	9	9	-	13	13	-	16	16	-	22	22	-	23	23	-	22	22	-	21	21	-	25	25	-	. . .	17	17	-	17	17	–
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1	08522	FUNCHAL	2001	458	458	C	426	426	C	435	435	C	463	463	C	457	457	C	424	424	C	476	476	C	457	457	C	. . .	440	440	C	484	484	C
1	08522	FUNCHAL	2002	463	463	C	449	449	C	321	321	C	360	360	C	447	447	C	416	416	C	500	500	C	521	521	C	. . .	188	188	C	564	564	C
1	08522	FUNCHAL	2003	573	573	C	443	443	C	544	544	C	552	552	C	521	521	C	544	544	C	292	292	C	349	349	C	. . .	120	120	C	124	124	C
1	08522	FUNCHAL	2004	280	280	C	518	518	C	344	344	C	120	120	C	114	114	C	114	114	C	119	119	C	120	120	C	. . .	120	120	C	123	123	C
1	08522	FUNCHAL	2005	123	123	C	112	112	C	122	122	C	115	115	C	122	122	C	119	119	C	138	138	-	231	231	C	. . .	190	190	C	218	218	C
1	08522	FUNCHAL	2006	176	176	C	216	216	C	239	239	C	235	235	C	243	243	C	238	238	-	240	240	-										

GSN Period Of Record Report

				January			February			March			April			May			June			July			August			. . .	November			December		
R	WMO	Station	Year	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	HLY	SYN	M	. . .	HLY	SYN	M	HLY	SYN	M
1*	67964	BULAWAYO (GO	1962	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	186	186	-	186	186	-	. . .	180	180	-	186	186	-
1*	67964	BULAWAYO (GO	1963	186	186	-	168	168	-	186	186	-	180	180	-	186	186	-	180	180	-	186	186	-	186	186	-	. . .	180	180	-	186	186	-
1*	67964	BULAWAYO (GO	1964	186	186	-	174	174	-	186	186	-	180	180	-	186	186	-	180	180	-	186	186	-	186	186	-	. . .	179	179	-	186	186	-
1*	67964	BULAWAYO (GO	1965	186	186	-	168	168	-	186	186	-	180	180	-	186	186	-	180	180	-	186	186	-	186	186	-	. . .	180	180	-	186	186	–
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1*	67964	BULAWAYO (GO	2000	15	15	-	11	11	-	10	10	C	5	5	-	9	9	C	5	5	C	6	6	-	11	11	C	. . .	8	8	-	3	3	C
1*	67964	BULAWAYO (GO	2001	12	12	C	9	9	C	9	9	-	9	9	C	10	10	C	7	7	-	16	16	C	24	24	C	. . .	15	15	C	17	17	C
1*	67964	BULAWAYO (GO	2002	14	14	C	13	13	C	15	15	C	10	10	C	10	10	C	15	15	C	3	3	C	14	14	C	. . .	20	20	C	10	10	C
1*	67964	BULAWAYO (GO	2003	17	17	C	14	14	-	13	13	C	24	24	C	17	17	C	21	21	C	22	22	C	28	28	C	. . .	19	19	C	4	4	-
1*	67964	BULAWAYO (GO	2004	23	23	C	20	20	C	28	28	-	23	23	-	24	24	-	27	27	C	23	23	-	8	8	C	. . .	28	28	-	27	27	-
1*	67964	BULAWAYO (GO	2005	25	25	-	25	25	-	20	20	-	14	14	-	26	26	-	12	12	-	26	26	-	28	28	-	. . .	26	26	-	22	22	-
1*	67964	BULAWAYO (GO	2006	28	28	-	22	22	-	24	24	-	24	24	-	30	30	-	26	26	-	27	27	-										

Table of Reports

Current Reports	.txt*	.csv**	Size (MB)
GSN Short Term (Latest 6-Months)	X	X	.3
GSN Long Term (2001 - Present)	X	X	1.0
GSN Types of Surface Reports (by Year)	X		.3
Recently Developed Reports			
GSN Period-Of-Record (POR)	X	X	7.0
Worldwide POR - Region 1	X	X	6.0
Worldwide POR - Region 2	X	X	22.0
Worldwide POR - Region 3	X	X	4.5
Worldwide POR - Region 4	X	X	15.0
Worldwide POR - Region 5	X	X	5.0
Worldwide POR - Region 6	X	X	20.0
Worldwide POR - Region 7	X	X	.3
Worldwide POR - Region Unknown	X	X	.1
Worldwide POR - All Regions	X	X	73.0

* .txt = Text Files
** .csv = Comma Delimited File, importable into a spreadsheet or database

Routine Processing

- Updated reports get generated monthly (around mid-month to add last month's data).
- Files FTP'd to www1.ncdc.noaa.gov/pub/data/gcos/
- E-mail gets sent to known interested parties.
- Accessible from gosic.org.