

ISEE / ICE / IMP

NEWSLETTER

JUL, AUG, SEP, 1992

**I. GENERAL**

**A. NSSDC REORGANIZED**

Following is an excerpt from the Summer 1992 edition of the NSSDC News. "On May 31, 1992 the National Space Science Data Center moved from the Space Data and Computing Division of Goddard's Earth Sciences Directorate to the newly created Space Science Data Operations Office (SSDOO) of the Space Sciences Directorate. **Joseph H. King**, formerly head of the Central Data Services Facility of the old NSSDC, was named head of the new NSSDC. At the same time **James L. Green**, former NSSDC head, assumed the role of chief of the new SSDOO." Congratulations Joe.

**B. HAWAII HURRICANE**

I received the following information from Bruce Schupler of the VLBI group on Monday 14 September, 1992.

All of the Bendix personnel from Kokee Park survived Hurricane Iniki OK. Their houses sustained a range of damage from minor to moderately severe.

The status of the station at that time was follows. These are quotes and paraphrases from Mr. Schupler's message:

- There is no power at the site. We are attempting to get the Navy to start to Kokee Park power house.

- The 9-meter antenna and receiver **APPEAR** to be undamaged. However, there is no power so we can't tell for sure.
- The SATAN and SCAMP antennas **APPEAR** to be undamaged.
- At least one and possibly both of the VHF beams are gone. There was some lack of clarity on that point.
- The road to the site is passable by small vehicles but not by large ones.
- We are in the process of buying and shipping a variety of emergency supplies to the station.

All in all, first appearances are that the site and our personnel made out much better than I feared.

#### C. ICE OPERATIONS SCHEDULE

Following is the text of a memorandum sent to JPL outlining the current ICE support requirements:

This memo is to inform you of revised ICE Tracking Requirements. At least two four hour passes per week, to be separated by no more than four days, and one six hour command/ranging pass every other month, are required to maintain Control Center and DSN Tracking Station proficiency. These requirements are to become effective 1 January 1993.

All other requests for tracking support, i.e. Solar Radial Line Up with Ulysses, will be coordinated by Dr. Ed Smith. These revised ICE requirements supersede the requirements established in the latest ICE SIRD.

#### E. IMP-8 20th ANNIVERSARY

Tuesday, October 26, 1993 will be the 20th anniversary of the launch of IMP-8. That is just over one year from now. I am interested in determining if there is any interest in planning some sort of appropriate event to mark the occasion. The inputs I am most interested in are from those of you located away from Goddard Space Flight Center. An in-house party at our recreation center would more that likely be well enough attended to make the planning and implementation worth the effort. It has been suggested that a special scientific event might be considered, but I'll need input from the readers to determine what, when and where. **PLEASE LET ME KNOW IF YOU HAVE ANY INTEREST AT ALL, AND IF SO, WHAT YOU WOULD LIKE.**

## II. DATA PROCESSING

A - Most current data shipped as of .

	(Group # - Day/Year)	
	IMP-8	ICE
DECOM	1696 - 229/92	736 - 263/92
MCE	1696 - 229/92	N/A

B - Redo's in progress

IMP-8 Group 1681 X-44  
ICE None

C. DATA GAPS - NONE FOR IMP-8 OR ICE

## III. OPERATIONS

### ICE

There were 66 real time passes with 20 commands transmitted to the ICE spacecraft, with a 16.1 percent coverage rate during this period.

The 70 meter antenna at the Goldstone DSN station (D14) was damaged during the California earthquake in late June. Support scheduled for ICE on July 3 was subsequently canceled. The antenna was returned to operation on July 22, 1992 with the first ICE support on July 25.

The Steinberg experiment was turned back On, on August 14 and the Heckman experiment was turned back On, on August 28, 1992 as the ICE spacecraft moved closer to the Sun increasing available solar power.

The ICE/IMP Transportable Payload Operations Control Center (TPOCC) software release 4.2 was installed on July 9, 1992. Testing of this release was completed on August 18, 1992. Release 5.0 was installed on System 1 on September 25 and the test team started testing on September 30, 1992. Release 4.2 is the operational software on System 2 being used for operations. The PDP 11/70 is being used as a backup to the TPOCC System.

### IMP-8

There were 79 real time passes with 311 commands transmitted to the IMP-8 spacecraft with a 65.4 percent coverage rate during this period.

The Hawaii station used to support IMP was severely damaged during Hurricane Iniki and will be out of operation until November 1, 1992. Commercial power was cut off and site generators are only available for 8 hours a day. Personnel are working to restore the station before starting spacecraft operations. Scheduled Hawaii support is being scheduled at other stations where possible.

IMP-8 support was maximized on August 13, 14, 17, and 18 to coincide with a campaign at the Sondrestrom Incoherent Scatter Radar Facility. A 94.7 percent recovery rate of IMP-8 data was accomplished during the period requested.

IMP-8 support was maximized on August 2, 3, 5, 6, 12, 13, 14, 15, 16, 17, 18, and 19, and on September 19, 20, 21, 22, 23, and 24 to provide solar wind magnetic field and plasma data, during the time the Geotail spacecraft was in the Earth's magnetotail. An 86.9 percent recovery rate of IMP-8 data was accomplished during the August time period and 96.98 percent during the September time period.

Data recovery

The overall telemetry coverages for this period were:

	July	August	September
ICE	13.1%	21.3%	13.8%
IMP-8	62.88%	72.47%	60.82%

DATA RECOVERY

THE OVERALL TELEMETRY COVERAGES FOR THIS PERIOD WERE:

	APRIL	MAY	JUNE
ICE			
IMP-8			

DETAILS OF THE COVERAGES FOR ICE AND IMP-8 ARE LISTED IN ATTACHMENT "A".

## ATTACHMENT A

## DATA COVERAGE

FOR JULY 1,1992 (DAY 183) THROUGH SEPTEMBER 30,1992 (DAY 274)

<u>DDD</u>	<u>HH-MM (IN UT)</u>	<u>HH-MM (IN UT)</u>
	<b>ICE</b>	<b>IMP</b>
183	NONE	0028-0336 0438-1147 2128-2345
184	0315-0745	0813-1314
185	NONE	NONE
186	NONE	0714-1118
187	0325-1245	0240-1437 2216-2400
188	0315-0745	0000-0050 0123-1705 1800-2352
189	NONE	0101-2400
190	NONE	0000-2400
191	0328-0729	0000-2400
192	0315-0740	0000-2400
193	NONE	0000-1202 1231-2400
194	NONE	0000-0353 1724-2400
195	0320-0740	0000-0321 1921-2345
196	0300-0720	0337-1145 2258-2345
197	0310-0700	2301-2400
198	NONE	0000-0023 0700-0858 0955-1750 2209-2400

199	0345-0656 0707-0900	0000-0038 0239-0459 0541-1955
200	2235-2400	0041-2000
201	0000-0200	0015-1757 2331-2400
202	0310-0900	0000-2400
203	NONE	0000-0545 0709-2400
204	0315-0715	0000-1115 1223-2400
205	0310-0700	0000-0821 1215-1415 1555-2400
206	0515-0915	0000-0903 1431-2400
207	1053-1445	0000-0330 0425-0628 1730-2400
208	1050-1417 1427-1600	0000-0330 2133-2400
209	0255-0900	0000-0330 2322-2400
210	0313-0700	0000-0330 1000-1617
211	0249-0705	0000-0330 0502-1830
212	0249-1200	0012-2012 2332-2400
213	NONE	0000-0230 0430-2154 2301-2400
214	1050-1610	0000-2400
215	NONE	0000-2400
216	0253-1000	0000-2400

217	NONE	0000-0159 0310-2400
218	0457-1115	0000-0803 1223-1319 1758-2400
219	0453-1115	0000-1600 1629-2400
220	NONE	0000-0131 0258-0920 1009-1812 2009-2400
221	1605-1945	0000-0255 0643-1129 1225-2030 2222-2400
222	2055-2400	0000-0330 0800-1450 2319-2400
223	0000-0030 0315-1040 1055-1500	0422-1330 2343-2400
224	NONE	0000-0101 0350-1850 2245-2400
225	0300-0705	0000-1427 1800-2025 2223-2400
226	0256-0705 1055-1445	0000-1740 1800-2232
227	1134-1221 1233-1429 1435-1945	0405-2400
228	1212-1328 1456-1645	0000-2400
229	1049-1738 1755-1800	0000-0057 0537-2400
230	0333-0900	0000-0120 0133-0500

		0507-1010 1103-2400
231	NONE	0000-0105 0139-0948 0951-1450 1533-2345
232	0320-0650	0147-0821 1858-2345
233	NONE	2127-2345
234	NONE	0707-1334 2207-2330
235	NONE	0346-0811 2316-2400
236	1439-1810	0000-1103
237	0322-0900	0251-1312 1800-1916 2139-2400
238	1341-1800 2045-2310	0000-1540 1800-2400
239	2230-2335 2353-2400	0000-2400
240	0000-0255	0000-2400
241	1130-1645	0000-0504 1149-2400
242	NONE	0000-0130 1005-2400
243	0500-0900	0000-0015 1441-2330 2339-2400
244	0530-0930	0000-0244 0257-1100 1809-2400
245	2034-2350	0610-1410 2042-2400
246	1100-1545	0620-1233 2115-2345



247	0358-0820	0310-0704 2240-2400
248	0345-0943 1315-1510 1640-1615	0000-1651 2115-2400
249	0335-0900	0000-1222 2049-2400
250	NONE	0000-1459 2001-2400
251	1200-1800	0000-2400
252	1345-1745	0000-2400
253	1145-1430 1532-1545	0000-2400
254	NONE	0000-0130 0507-0847 0936-2400
255	2145-2400	0000-0603 1514-2253
256	0000-0245	1719-2330
257	NONE	1954-2330
258	1200-1845	2028-2345
259	NONE	0226-1409 2155-2400
260	1120-1149 1209-1845	0000-1604 2027-2400
261	NONE	0000-1140 2000-2400
262	2039-2400	0000-1427 1955-2400
263	0000-0145	0000-2400
264	1350-1830	0000-2239
265	1222-1505	0341-2255

266	1438-1645	0450-2238
267	1215-1332 1336-1645	0754-1203 1315-2202
268	1624-2100	0733-1500 1600-2250
269	1130-1530 2050-2400	1853-2330
270	0000-0200 1234-1558 1603-1705	1935-2330
271	2000-2400	0146-0455 2117-2400
272	0000-0305	0000-0822 1939-2400
273	NONE	0000-1045 1912-2400
274	NONE	0000-1324 1823-2400