



ISSN 2433-2232(Online)
JAXA-SP-21-006E

JAXA Special Publication

Hayabusa2 Asteroid Sample Catalog 2021

January 2022

Japan Aerospace Exploration Agency

JAXA-SP-21-006E

Hayabusa2 Asteroid Sample Catalog 2021

CONTENTS

Hayabusa2-returned sample catalog 2021

YADA Toru, KUMAGAI Kazuya, TACHIBANA Shogo, ABE Masanao, OKADA Tatsuaki,
NISHIMURA Masahiro, YOGATA Kasumi, SAKAMOTO Kanako, NAKATO Aiko, MIYAZAKI Akiko,
NAGASHIMA Kana, KANEMARU Rei, YAMAMOTO Daiki, HAYASHI Tasuku, FUKAI Ryota, ISHIZAKI
Takuya, HATAKEDA Kentaro, HITOMI Yuya, SOEJIMA Hiromichi, SUGAHARA Haruna, SUZUKI Shino,
USUI Tomohiro1

Hayabusa2-returned sample catalog 2021.

YADA Toru¹, KUMAGAI Kazuya¹, TACHIBANA Shogo¹, ABE Masanao¹,
OKADA Tatsuaki¹, NISHIMURA Masahiro¹, YOGATA Kasumi¹,
SAKAMOTO Kanako¹, NAKATO Aiko¹, MIYAZAKI Akiko¹,
NAGASHIMA Kana¹, KANEMARU Rei¹, YAMAMOTO Daiki¹,
HAYASHI Tasuku¹, FUKAI Ryota¹, ISHIZAKI Takuya¹, HATAKEDA
Kentaro¹, HITOMI Yuya¹, SOEJIMA Hiromichi¹, SUGAHARA Haruna¹,
SUZUKI Shino¹, and USUI Tomohiro¹

¹Astromaterials Science Research Group, Institute of Space and Astronautical Science,
Japan Aerospace Exploration Agency, 3-1-1, Yoshinodai, Chuo-ku, Sagami-hara,
Kanagawa 252-5210, JAPAN.

This is the catalog of the picked-up particles from the sample catcher and collected gas from the sample container of Hayabusa2. Information on this catalog is as of the end of Oct. 2021.

The number of registered samples is total 401. Breakdown of the total is 196, 0, and 185 retrieved from the sample catcher's chamber A, B, and C respectively and 20 as a gas sample from the sample container. Some samples have been distributed. The numbers of distributed samples are 22 particles, 10 aggregate and 10 gas samples to the initial analysis teams as for preliminary examination purpose and 8 particles to Kochi and 16 samples to Misasa as for Phase 2 curation. 29 samples are planned to be distributed to NASA in Dec. 2021 following the MOU between NASA and JAXA.

Table 1 shows lists of all registered samples. Table 1a lists solid form samples and 1b lists gas form samples. The later part of this catalog shows data sheet of each sample. This sheet includes pictures or data charts obtained by the initial description work.

* Received November 11, 2021

Table 1a. Ryugu Sample List

REMARK						
- weight: mg unit, current information						
- size: micro meter unit, the maximum Feret diameter of a particle						
- label: FTIR and MicrOmega are measurement history. Initial Analysis, Phase2 Kochi or Misasa, and NASA are distribution site.						
Name	form	weight	size	label	status	sample container
A0001	particle	18.1	5130	FTIR		JX15-0001
A0002	particle	19.3	4092	MicrOmega, FTIR, Phase2 Kochi	ON-LOAN	JX15-0002
A0003	particle	19.6	4307	MicrOmega, FTIR		JX15-0003
A0004	particle	14.8	4042	MicrOmega, FTIR		JX15-0004
A0005	particle	10.2	3367	MicrOmega, FTIR, NASA	TRANSFER	JX15-0005
A0006	particle	6.3	2894	MicrOmega, FTIR		JX15-0006
A0007	particle	14.9	4834	MicrOmega, FTIR, NASA	TRANSFER	JX15-0007
A0008	particle	10.2	3858	MicrOmega, FTIR		JX15-0008
A0009	particle	9.2	3100	MicrOmega, FTIR		JX15-0009
A0010	particle	11.9	3323	FTIR		JX15-0010
A0011	particle	13.3	4937	MicrOmega, FTIR		JX15-0011
A0012	particle	8	2908	MicrOmega, FTIR		JX15-0012
A0013	particle	2.8	2086	MicrOmega, FTIR, NASA	TRANSFER	JX15-0013
A0014	particle	8.8	3924	MicrOmega, FTIR		JX15-0014
A0015	particle	14.6	3410	MicrOmega, FTIR, NASA	TRANSFER	JX15-0015
A0016	particle	14.1	4911	MicrOmega, FTIR		JX15-0016
A0017	particle	8.4	3748	MicrOmega, FTIR		JX15-0017
A0018	particle	12.6	3926	MicrOmega, FTIR		JX15-0018
A0019	particle	6.9	3534	MicrOmega, FTIR		JX15-0019
A0020	particle	6.5	3787	MicrOmega, FTIR		JX15-0020
A0021	particle	25.8	4826	MicrOmega, FTIR		JX15-0021
A0022	particle	6.3	2812	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0022
A0023	particle	6.7	3396	FTIR		JX15-0023
A0024	particle	10.3	3214	FTIR		JX15-0024
A0025	particle	7.8	3068	FTIR		JX15-0025

A0026	particle	3.9	2997	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0026
A0027	particle	10.2	4741	FTIR		JX15-0027
A0028	particle	8.2	2715	MicrOmega, FTIR		JX15-0028
A0029	particle	7.3	3069	MicrOmega, FTIR, Phase2 Kochi	ON-LOAN	JX15-0029
A0030	particle	6.9	2842	MicrOmega, FTIR		JX15-0030
A0031	particle	3.9	3105	FTIR		JX15-0031
A0032	particle	3.3	2271	MicrOmega, FTIR		JX15-0032
A0033	particle	4	2406	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0033
A0034	particle	2.1	2159	MicrOmega, FTIR		JX15-0034
A0035	particle	2.7	2102	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0035
A0036	particle	3.3	2851	FTIR		JX15-0036
A0037	particle	6	3129	MicrOmega, FTIR, Phase2 Kochi	ON-LOAN	JX15-0037
A0038	particle	3.1	2399	MicrOmega, FTIR, NASA	TRANSFER	JX15-0038
A0039	particle	3.9	2461	FTIR		JX15-0039
A0040	particle	3	2598	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0040
A0041	particle	3.5	2739	FTIR		JX15-0051
A0042	particle	11.9	3784	MicrOmega, FTIR		JX15-0052
A0043	particle	4.9	3558	FTIR		JX15-0053
A0044	particle	4.2	2663	MicrOmega, FTIR, NASA	TRANSFER	JX15-0054
A0045	particle	2.9	2806	FTIR		JX15-0055
A0046	particle	17.9	3781	FTIR		JX15-0056
A0047	particle	6.8	2569	FTIR		JX15-0057
A0048	particle	3	3734	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0058
A0049	particle	4	3173	FTIR		JX15-0059
A0050	particle	3.5	2623	MicrOmega, FTIR		JX15-0060
A0051	particle	3.5	3170	MicrOmega, FTIR		JX15-0061
A0052	particle	3	2452	FTIR		JX15-0062
A0053	particle	5	3099	FTIR		JX15-0063

A0054	particle	3.1	2582	MicrOmega, FTIR		JX15-0064
A0055	particle	5.9	2537	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0065
A0056	particle	3.1	2105	FTIR		JX15-0066
A0057	particle	4.1	2306	FTIR		JX15-0067
A0058	particle	3.3	3085	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0068
A0059	particle	7.7	3466	FTIR		JX15-0069
A0060	particle	5.4	3461	FTIR		JX15-0070
A0061	particle	4.5	3066	MicrOmega, FTIR, NASA	TRANSFER	JX15-0071
A0062	particle	8.6	3203	FTIR		JX15-0072
A0063	particle	3.8	4165	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0073
A0064	particle	6.7	2952	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0074
A0065	particle	3.1	2551			-
A0066	particle	4.3	2970	MicrOmega, FTIR		JX15-0076
A0067	particle	3.6	3108	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0077
A0068	particle	6	3053	FTIR		JX15-0078
A0069	particle	3.2	2654	MicrOmega, FTIR		JX15-0079
A0070	particle	2	2281	MicrOmega, FTIR		JX15-0080
A0071	particle	0.8	2123			JX10-0001
A0072	particle	0.7	1842			JX10-0002
A0073	particle	0.8	1480	MicrOmega, Phase2 Misasa	ON-LOAN	JX10-0003
A0074	particle	0.9	1627			JX10-0004
A0075	particle	0.7	1160			JX10-0005
A0076	particle	0.6	1314			JX10-0006
A0077	particle	0.7	1845			JX10-0007
A0078	particle	1.8	2623	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX10-0008
A0079	particle	0.8	1360	MicrOmega		JX10-0009
A0080	particle	1.4	1574	MicrOmega, Initial Analysis	ON-LOAN	JX10-0010
A0081	particle	0.6	1425			JX10-0011
A0082	particle	0.6	1590			JX10-0012

A0083	particle	1.2	1724	MicrOmega		JX10-0013
A0084	particle	1	2382			JX10-0014
A0085	particle	0.7	1225	MicrOmega, Phase2 Misasa	ON-LOAN	JX10-0015
A0086	particle	0.9	1617	MicrOmega, Initial Analysis	ON-LOAN	JX10-0016
A0087	particle	0.8	1666			JX10-0017
A0088	particle	1.7	1712	FTIR		JX10-0018
A0089	particle	1	1603	MicrOmega, Initial Analysis	ON-LOAN	JX10-0019
A0090	particle	1.3	2008			JX10-0020
A0091	particle	3.5	2588	MicrOmega, FTIR, NASA	TRANSFER	JX15-0201
A0092	particle	2.6	2409	MicrOmega, FTIR		JX15-0202
A0093	particle	1.6	1999	MicrOmega, FTIR		JX15-0203
A0094	particle	1.8	2417	MicrOmega, Initial Analysis	ON-LOAN	JX15-0204
A0095	particle	2.6	2501	MicrOmega, FTIR, NASA	TRANSFER	JX15-0205
A0096	particle	7.6	2959	MicrOmega, FTIR, NASA	TRANSFER	JX15-0206
A0097	particle	4.6	2258	FTIR		JX15-0207
A0098	particle	1.9	1868	MicrOmega, FTIR, Phase2 Kochi	ON-LOAN	JX15-0208
A0099	particle	1.8	2211	MicrOmega, FTIR		JX15-0209
A0100	particle	2.1	2551	FTIR		JX15-0210
A0101	particle	4.5	3068	MicrOmega		JX15-0221
A0102	particle	4.6	2782			JX15-0222
A0103	particle	4.2	2653			JX15-0223
A0104(Aa-MPF)	aggregate	0.3		MicrOmega, Initial Analysis	ON-LOAN	JX10-0027
A0105(Aa-VOL)	aggregate	4		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0211
A0106(Aa-MPC)	aggregate	38.4		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0213
A0107(Aa-Chem)	aggregate	31		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0214
A0108(Aa-IOM)	aggregate	3.5		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0215
A0109	particle	4	2240			JX15-0224
A0110	particle	7.9	3268	MicrOmega		JX15-0225
A0111	particle	8.5	3686	MicrOmega		JX15-0226
A0112	particle	5.1	3046	MicrOmega		JX15-0227

A0113	particle	6.8	3775	MicrOmega		JX15-0228
A0114	particle	5.2	2390			JX15-0229
A0115	particle	7.2	2978			JX15-0230
A0116	particle	2.9	2204			JX15-0231
A0117	particle	4.2	3020	MicrOmega		JX15-0232
A0118	particle	4.3	2588			JX15-0233
A0119	particle	4.9	2657			JX15-0234
A0120	particle	4.2	2376			JX15-0235
A0121	particle	3.3	2723			JX15-0236
A0122	particle	3.2	2498	MicrOmega		JX15-0237
A0123	particle	4.7	2808			JX15-0238
A0124	particle	4	2250			JX15-0239
A0125	particle	4.1	2588			JX15-0240
A0126	particle	2.4	1876			JX15-0241
A0127	particle	3.4	2584			JX15-0242
A0128	particle	1.5	2355			JX15-0243
A0129	particle	1	1320			JX15-0244
A0130	particle	1.4	1770			JX15-0245
A0131	particle	3.8	2451	MicrOmega		JX15-0246
A0132	particle	2.7	2412			JX15-0247
A0133	particle	4.1	2607			JX15-0248
A0134	particle	1.2	2379			JX15-0249
A0135	particle	3.1	2803			JX15-0250
A0136	particle	4.8	2637	MicrOmega		JX15-0251
A0137	particle	2.7	2375			JX15-0252
A0138	particle	2.4	2269			JX15-0253
A0139	particle	2.1	3227	MicrOmega		JX15-0254
A0140	particle	2.2	2507			JX15-0255
A0141	particle	3.9	2577			JX15-0256
A0142	particle	1.6	2729	MicrOmega		JX15-0257
A0143	particle	8.2	4328	MicrOmega		JX15-0258
A0144	particle	4.4	2153			JX15-0259
A0145	particle	3.3	2461			JX15-0260
A0146	particle	3.3	2614			JX15-0261
A0147	particle	3.1	2355			JX15-0262

A0148	particle	3.1	2047		JX15-0263
A0149	particle	1.8	2039		JX15-0264
A0150	particle	2.2	2047		JX15-0265
A0151	particle	3.9	2768		JX15-0266
A0152	particle	2.1	2030		JX15-0267
A0153	particle	4.1	2256		JX15-0268
A0154	particle	3.2	2183		JX15-0269
A0155	particle	1.6	2193		JX15-0270
A0156	particle	3.7	2466		JX15-0341
A0157	particle	2.4	1959		JX15-0342
A0158	particle	2.9	1947		JX15-0343
A0159	particle	3.4	2844		JX15-0344
A0160	particle	2.1	1832		JX15-0345
A0161	particle	2.5	2271		JX15-0346
A0162	particle	3.8	2405		JX15-0347
A0163	particle	1.9	2281		JX15-0348
A0164	particle	2.6	2340		JX15-0349
A0165	particle	1.8	2160		JX15-0350
A0166	particle	2.7	2553		JX15-0351
A0167	particle	2.8	2381		JX15-0352
A0168	particle	2.8	2012		JX15-0353
A0169	particle	2.4	1835		JX15-0354
A0170	particle	1.3	2094		JX15-0355
A0171	particle	2.3	1964		JX15-0356
A0172	particle	2.1	1842		JX15-0357
A0173	particle	2.3	1963		JX15-0358
A0174	particle	3.1	2350		JX15-0359
A0175	particle	1.5	2334		JX15-0360
A0176	particle	1.8	2447		JX15-0361
A0177	particle	1.1	1517		JX15-0362
A0178	particle	0.7	1561		JX15-0363
A0179	particle	1.3	1465		JX15-0364
A0180	particle	0.8	1592		JX15-0365
A0181	particle	1.5	1958		JX15-0366
A0182	particle	1.4	1944		JX15-0367

A0183	particle	1	1455			JX15-0368
A0184	particle	1	1313			JX15-0369
A0185	particle	0.9	1947			JX15-0370
A0186	particle	0.9	1394			JX15-0371
A0187	particle	0.7	1792			JX15-0372
A0188	particle	0.4	1404			JX15-0373
A0189	particle	0.4	1345			JX15-0374
A0190	particle	0.4	1366			JX15-0375
A0191	particle	0.5	1638			JX15-0376
A0192	particle	0.3	1807			JX15-0377
A0193	particle	0.4	1330			JX15-0378
A0194	particle	0.5	1558			JX15-0379
A0195	particle	0.2	1770			JX15-0380
A9000 (in vacuum)	aggregate					-
C0001	particle	100	7359	MicrOmega, FTIR, NASA	TRANSFER	JX15-L001
C0002	particle	93.5	8648	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-L002
C0003	particle	33.2	4889	FTIR		JX15-L003
C0004	particle	36	5692	MicrOmega, FTIR		JX15-0041
C0005	particle	20.8	5333	MicrOmega, FTIR		JX15-0042
C0006	particle	16.3	4523	MicrOmega, FTIR		JX15-0043
C0007	particle	13.4	4168	MicrOmega, FTIR, NASA	TRANSFER	JX15-0044
C0008	particle	10	3710	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0045
C0009	particle	11.1	3520	MicrOmega, FTIR, Phase2 Kochi	ON-LOAN	JX15-0046
C0010	particle	6.3	3509	MicrOmega, FTIR		JX15-0047
C0011	particle	9.3	3538	MicrOmega, FTIR		JX15-0048
C0012	particle	13.6	3487	MicrOmega, FTIR		JX15-0049
C0013	particle	6.7	3196	MicrOmega, FTIR, NASA	TRANSFER	JX15-0050
C0014	particle	6.8	3527	MicrOmega, FTIR, Phase2 Kochi	ON-LOAN	JX15-0081
C0015	particle	1.8	2185	MicrOmega		JX15-0082
C0016	particle	2	2198	MicrOmega		JX15-0083

C0017	particle	5.1	2753	MicrOmega, FTIR, NASA	TRANSFER	JX15-0084
C0018	particle	6.3	3438	FTIR		JX15-0086
C0019	particle	6.8	2647	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0087
C0020	particle	3.1	2226	MicrOmega		JX15-0088
C0021	particle	6.7	2803	MicrOmega, FTIR		JX15-0089
C0022	particle	1	1688	MicrOmega		JX15-0090
C0023	particle	5	2996	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0085
C0024	particle	2.2	2407	MicrOmega, FTIR		JX15-0091
C0025	particle	5.6	3002	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0092
C0026	particle	1.4	2540			JX15-0093
C0027	particle	2.2	2220	MicrOmega, Phase2 Misasa	ON-LOAN	JX15-0094
C0028	particle	1.4	2365			JX15-0095
C0029	particle	4	2479	FTIR		JX15-0096
C0030	particle	0.7	1847	MicrOmega		JX15-0097
C0031	particle	1.8	2253	FTIR		JX15-0098
C0032	particle	3.1	3212	MicrOmega, FTIR		JX15-0099
C0033	particle	2.4	2742	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0100
C0034	particle	2.4	2095	MicrOmega, FTIR		JX15-0101
C0035	particle	1.5	2739			JX15-0102
C0036	particle	1.8	1917			JX15-0103
C0037	particle	2.3	2177	MicrOmega, FTIR, NASA	TRANSFER	JX15-0104
C0038	particle	0.8	1781	MicrOmega, NASA	TRANSFER	JX15-0105
C0039	particle	1	1778	MicrOmega, Phase2 Misasa	ON-LOAN	JX15-0106
C0040	particle	4.9	3425	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0107
C0041	particle	3.3	2615	MicrOmega, FTIR		JX15-0108
C0042	particle	1	1651	MicrOmega, NASA	TRANSFER	JX15-0110
C0043	particle	1.7	2431	MicrOmega, FTIR		JX15-0109
C0044	particle	4.7	3690	MicrOmega, FTIR		JX15-0111
C0045	particle	3.2	3139	FTIR		JX15-0112

C0046	particle	2.6	2155	MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0113
C0047	particle	1.3	1864	MicrOmega, Phase2 Misasa	ON-LOAN	JX15-0114
C0048	particle	1.7	1741	MicrOmega, NASA	TRANSFER	JX15-0115
C0049	particle	12.6	3998	FTIR		JX15-0116
C0050	particle	2.2	2409	MicrOmega, FTIR		JX15-0117
C0051	particle	1.7	2462	FTIR		JX15-0118
C0052	particle	2.1	1911	MicrOmega, FTIR		JX15-0119
C0053	particle	3.2	2376	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0120
C0054	particle	2.9	2877	MicrOmega, FTIR		JX15-0131
C0055	particle	0.8	2075	MicrOmega, Initial Analysis	ON-LOAN	JX15-0132
C0056	particle	1.5	1878	MicrOmega, NASA	TRANSFER	JX15-0133
C0057	particle	0.9	1798	MicrOmega, Initial Analysis	ON-LOAN	JX15-0134
C0058	particle	0.9	1657	FTIR		JX15-0135
C0059	particle	0.8	1755	FTIR		JX15-0136
C0060	particle	1.6	1812	FTIR		JX15-0137
C0061	particle	1.3	1807	MicrOmega, Initial Analysis	ON-LOAN	JX15-0138
C0062	particle	1.1	1641			JX15-0139
C0063	particle	3.6	2580	MicrOmega, FTIR, NASA	TRANSFER	JX15-0140
C0064	particle	1.2	1767			JX15-0161
C0065	particle	0.5	1664			JX15-0162
C0066	particle	1	1831			JX15-0163
C0067	particle	0.7	1280	MicrOmega		JX15-0164
C0068	particle	1.7	1980	MicrOmega, FTIR, Phase2 Kochi	ON-LOAN	JX15-0165
C0069	particle	0.9	1636	MicrOmega		JX15-0166
C0070	particle	0.7	1288	MicrOmega		JX15-0167
C0071	particle	1	1540	MicrOmega		JX15-0168
C0072	particle	1.1	1702			JX15-0169
C0073	particle	0.9	1981			JX15-0170
C0074	particle	6.6	3441	MicrOmega, FTIR, NASA	TRANSFER	JX15-0171
C0075	particle	4.1	2758	FTIR		JX15-0172
C0076	particle	4.7	2727	MicrOmega, FTIR, initial Analysis	ON-LOAN	JX15-0173

C0077	particle	3.6	2595	FTIR		JX15-0174
C0078	particle	3.6	2562	MicrOmega, FTIR		JX15-0175
C0079	particle	2.5	3028	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0176
C0080	particle	3.9	3025	MicrOmega, FTIR		JX15-0177
C0081	particle	4.4	3235	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0178
C0082	particle	3.8	2750	MicrOmega, FTIR, Phase2 Misasa	ON-LOAN	JX15-0179
C0083	particle	3	3320	MicrOmega, FTIR		JX15-0180
C0084	particle	2.5	2383	FTIR		JX15-0181
C0085	particle	1.2	1982	MicrOmega		JX15-0182
C0086	particle	2.6	2316	FTIR		JX15-0183
C0087	particle	2	3242	MicrOmega, Phase2 Kochi	ON-LOAN	JX15-0184
C0088	others	0.1	985			JX15-0185
C0089	particle	2.5	2450	FTIR		JX15-0186
C0090	particle	2.6	2645	FTIR		JX15-0187
C0091	particle	3.8	2361	MicrOmega, FTIR		JX15-0188
C0092	particle	1.9	2371	FTIR		JX15-0189
C0093	particle	3.9	2634	MicrOmega, FTIR, NASA	TRANSFER	JX15-0190
C0094	particle	3.1	2181	MicrOmega, FTIR		JX15-0191
C0095	particle	2.1	2400	FTIR		JX15-0192
C0096	particle	2	1859	MicrOmega, FTIR, NASA	TRANSFER	JX15-0193
C0097	particle	2.5	2118	FTIR		JX15-0194
C0098	particle	0.8	2078	MicrOmega, NASA	TRANSFER	JX15-0195
C0099	particle	3.9	2730	FTIR		JX15-0196
C0100	particle	3.8	2435	FTIR		JX15-0197
C0101	particle	2.7	2095			JX15-0198
C0102	particle	2.3	2995	FTIR		JX15-0199
C0103	particle	1.5	1975	MicrOmega, Initial Analysis	ON-LOAN	JX15-0200
C0104	particle	0.2		MicrOmega		JX15-0220
C0105 (Ca-MPF)	aggregate	0.4		MicrOmega, Initial Analysis	ON-LOAN	JX10-0029
C0106 (Ca-VOL)	aggregate	4		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0212

C0107 (Ca-MPC)	aggregate	38.8		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0216
C0108 (Ca-Chem)	aggregate	33		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0217
C0109 (Ca-IOM)	aggregate	3.7		MicrOmega, FTIR, Initial Analysis	ON-LOAN	JX15-0218
C0110	others	4	7583			JX15-Q006
C0111	others	9.7	2820			JX15-Q007
C0112	others	0.3	1697			JX15-Q009
C0113	particle	2.6	2335	MicrOmega, FTIR		JX15-0311
C0114	particle	2.7	2483	MicrOmega		JX15-0271
C0115	particle	2.9	2601	MicrOmega		JX15-0272
C0116	particle	3.3	2496	MicrOmega		JX15-0273
C0117	particle	2.9	2769	MicrOmega		JX15-0274
C0118	particle	2.7	2481	MicrOmega		JX15-0275
C0119	particle	4.6	2720	MicrOmega		JX15-0276
C0120	particle	2.7	2185			JX15-0277
C0121	particle	1.8	2604	MicrOmega		JX15-0278
C0122	particle	2.2	2114			JX15-0279
C0123	particle	3.4	2158			JX15-0280
C0124	particle	2.5	2086			JX15-0281
C0125	particle	1.6	2003			JX15-0282
C0126	particle	1.8	2685	MicrOmega		JX15-0283
C0127	particle	1.2	1710			JX15-0284
C0128	particle	2.6	2243			JX15-0285
C0129	particle	2.8	2138			JX15-0286
C0130	particle	1.3	2128			JX15-0287
C0131	particle	2.4	2114			JX15-0288
C0132	particle	1.8	2246			JX15-0289
C0133	particle	1.8	2302	MicrOmega		JX15-0290
C0134	particle	1.2	2079			JX15-0291
C0135	particle	1.6	1960			JX15-0292
C0136	particle	1.4	1621			JX15-0293
C0137	particle	2.3	1955			JX15-0294
C0138	particle	1.5	1988			JX15-0295

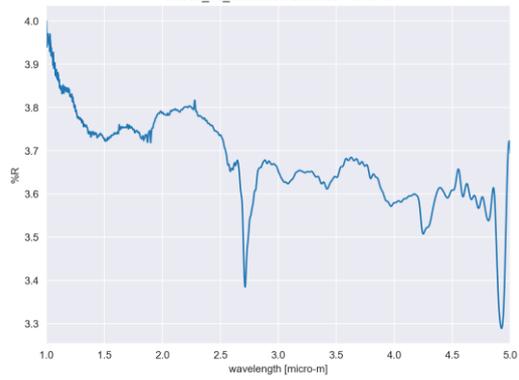
C0139	particle	2	2332	MicrOmega		JX15-0296
C0140	particle	1.9	2333	MicrOmega		JX15-0297
C0141	particle	1.1	2198			JX15-0298
C0142	particle	1.6	1730			JX15-0299
C0143	particle	1.5	2766	MicrOmega		JX15-0300
C0144	particle	1.4	2071			JX15-0301
C0145	particle	0.9	1506			JX15-0302
C0146	particle	1.4	2067			JX15-0303
C0147	particle	1.6	1870			JX15-0304
C0148	particle	0.8	1716			JX15-0305
C0149	particle	2	1976			JX15-0306
C0150	particle	1	2161			JX15-0307
C0151	particle	1.1	2079			JX15-0308
C0152	particle	1	2188			JX15-0309
C0153	particle	1.4	1788			JX15-0310
C0154	particle	1.1	2152			JX15-0312
C0155	particle	1.5	1838			JX15-0313
C0156	particle	1.2	1488			JX15-0314
C0157	particle	1.6	1964			JX15-0315
C0158	particle	1.8	1768			JX15-0316
C0159	particle	1.5	2007			JX15-0317
C0160	particle	2.1	1968			JX15-0318
C0161	particle	1.1	1834			JX15-0319
C0162	particle	1.8	1966			JX15-0320
C0163	others	1.1	3533			JX15-Q001
C0164	others	0.2	1302			JX15-Q002
C0165	particle	0.4	1912			JX10-0041
C0166	particle	0.6	2022			JX10-0042
C0167	particle	1.4	1778			JX10-0043
C0168	particle	1	1893			JX10-0044
C0169	particle	0.9	1562			JX10-0045
C0170	particle	0.9	2027			JX10-0046
C0171	particle	0.7	1621			JX10-0047
C0172	particle	0.7	1608			JX10-0048
C0173	particle	0.2	1926			JX10-0049

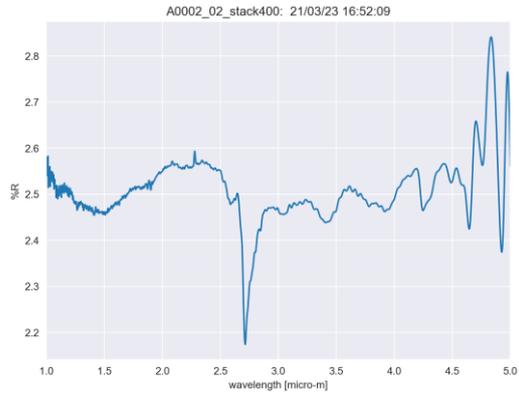
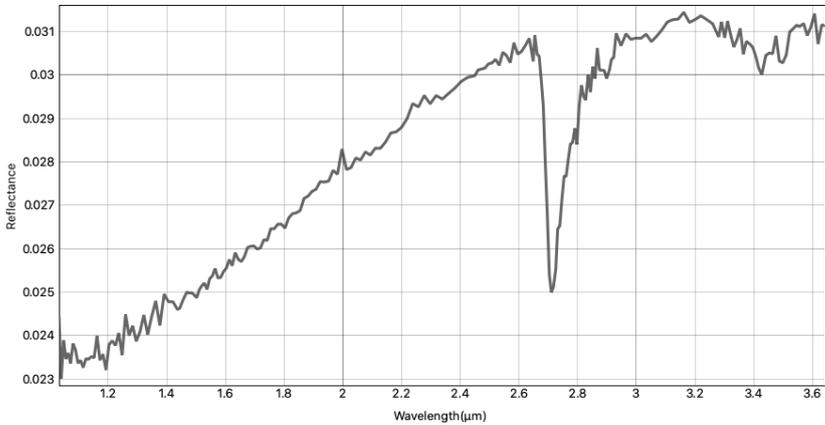
C0174	particle	1.1	2005		JX10-0050
C0175	particle	1.1	1580		JX10-0051
C0176	particle	1.1	1718		JX10-0052
C0177	particle	0.9	1768		JX10-0053
C0178	particle	1.5	1939		JX10-0054
C0179	particle	1.2	1754		JX10-0055
C0180	particle	1	1472		JX10-0056
C0181	particle	0.5	1141		JX10-0057
C0182	particle	1.3	1898		JX10-0058
C0183	particle	0.6	1697		JX10-0059
C0184	particle	1	1621		JX10-0060
C9000 (CXL)	particle	138.1	10345	MicrOmega, FTIR	CXL-deep

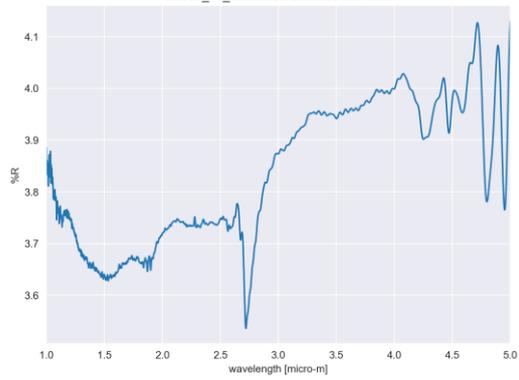
Table 1b. Ryugu Sample List (gas)

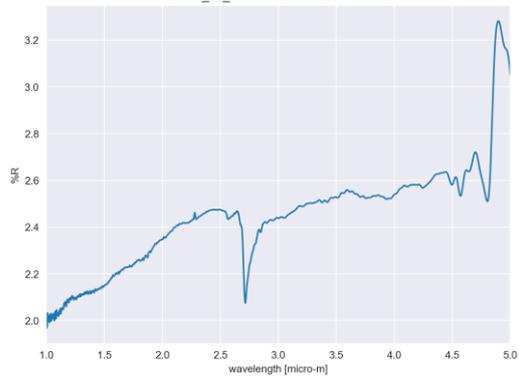
name	form	label	status	sample container
NT1	gas			gas-cylinder
NT1P1A	gas			gas-cylinder
NT1P1B	gas			gas-cylinder
NT1P2E	gas	Initial Analysis	TRANSFER	gas-cylinder
NT1P2F	gas	Initial Analysis	TRANSFER	gas-cylinder
NT1P3A	gas	Initial Analysis	TRANSFER	gas-cylinder
NT1P3B	gas	Initial Analysis	TRANSFER	gas-cylinder
NT1P4C	gas	Initial Analysis	TRANSFER	gas-cylinder
NT1P4Q1	gas	Initial Analysis	TRANSFER	gas-cylinder
NT2	gas			gas-cylinder
NT3	gas			gas-cylinder
NT4	gas			gas-cylinder
NT5 (blank-gas)	gas			gas-cylinder
NT5P1C	gas			gas-cylinder
NT5P1D	gas			gas-cylinder
NT5P2G	gas	Initial Analysis	TRANSFER	gas-cylinder
NT5P2H	gas	Initial Analysis	TRANSFER	gas-cylinder
NT5P3D	gas	Initial Analysis	TRANSFER	gas-cylinder
NT5P3Q2	gas	Initial Analysis	TRANSFER	gas-cylinder
NT6	gas			gas-cylinder

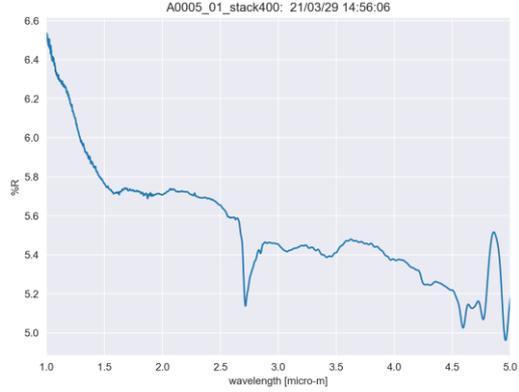
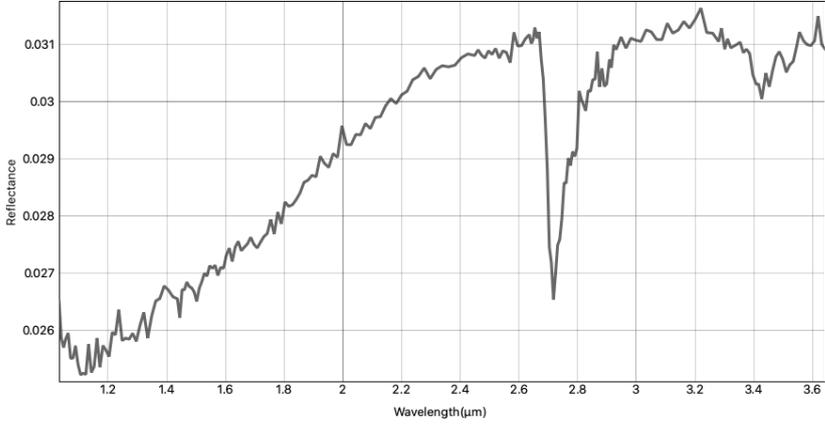
Ryugu Sample Catalog

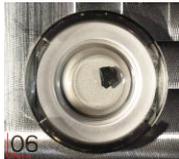
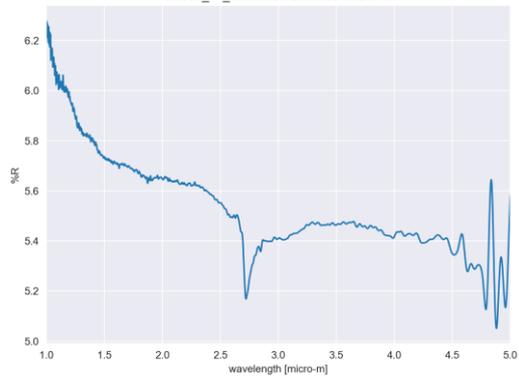
Name	A0001	
Size (μm)	5130	
Weight (mg)	18.1	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1713 571 1742">No Data</p>	

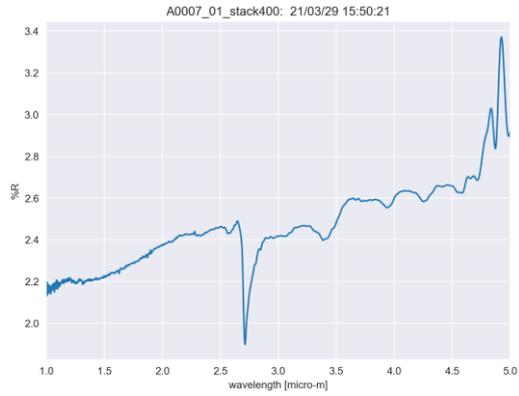
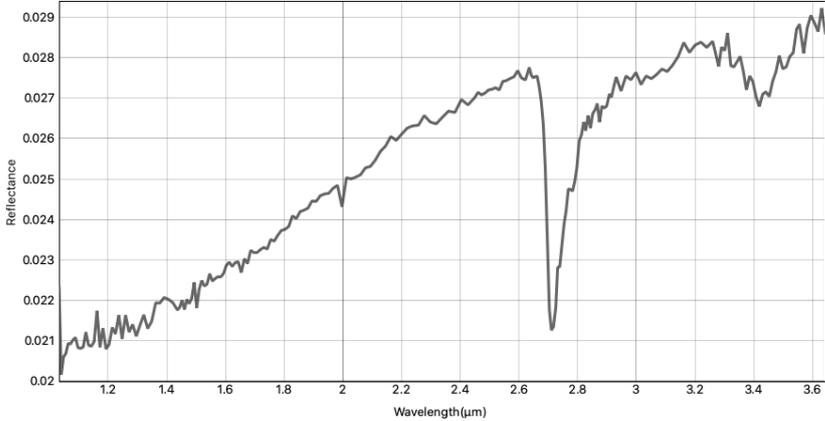
Name	A0002	
Size (μm)	4092	
Weight (mg)	19.3	
Label	MicrOmega,FTIR,Phase2 Kochi	
Microscope		
FTIR		
MicrOmega		

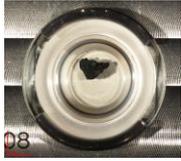
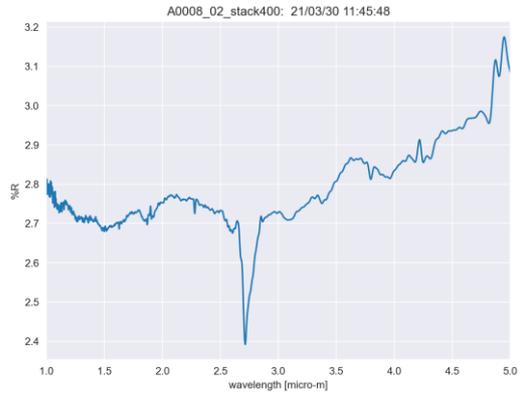
Name	A0003	
Size (μm)	4307	
Weight (mg)	19.6	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

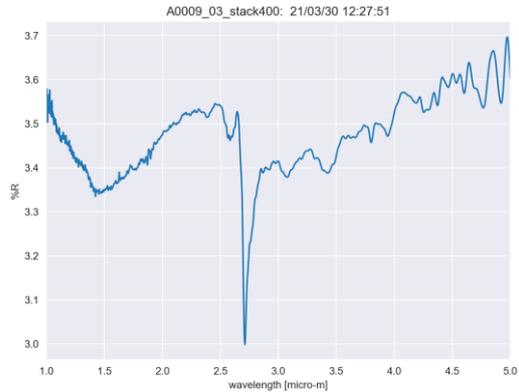
Name	A0004	
Size (μm)	4042	
Weight (mg)	14.8	
Label	MicrOmega,FTIR	
Microscope		
FTIR	<p>A0004_02_stack400: 21/03/29 14:34:59</p> 	
MicrOmega	<p>No Data</p>	

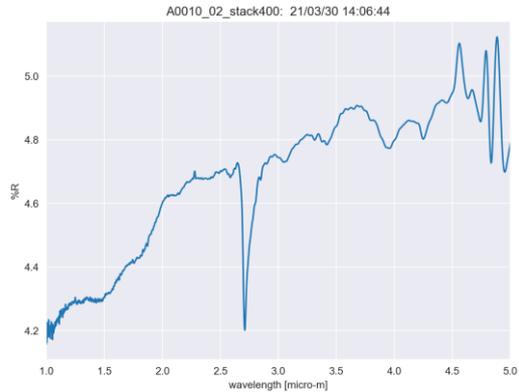
Name	A0005	
Size (μm)	3367	
Weight (mg)	10.2	
Label	MicrOmega, FTIR, NASA	
Microscope		
FTIR		
MicrOmega		

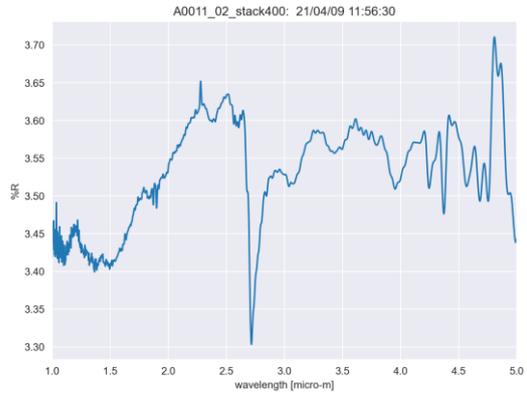
Name	A0006	
Size (μm)	2894	
Weight (mg)	6.3	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

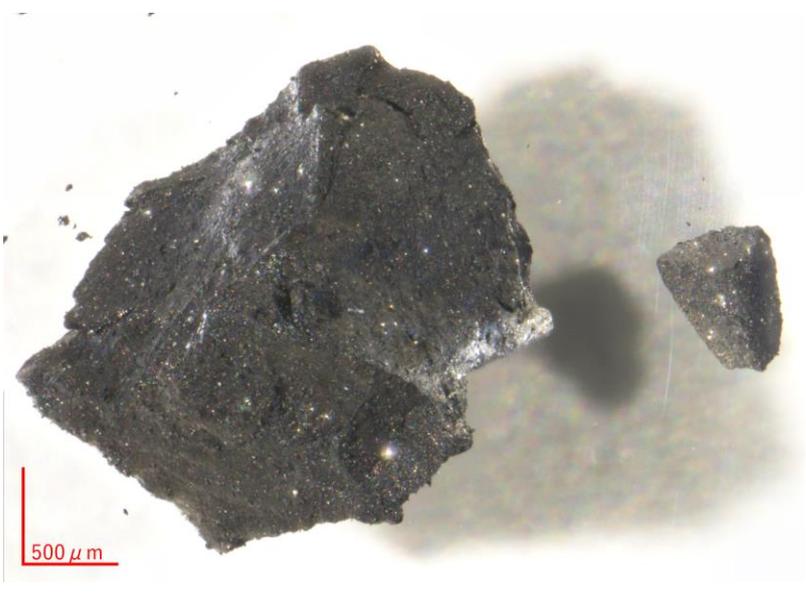
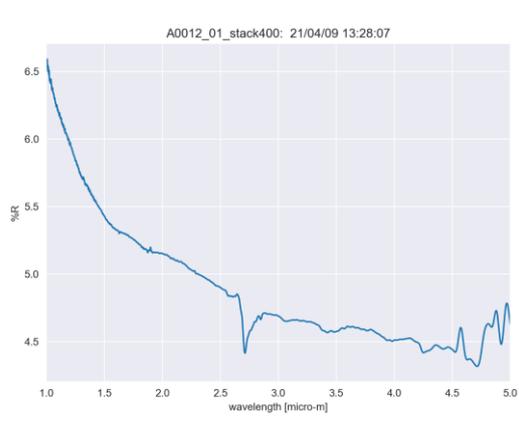
Name	A0007	
Size (μm)	4834	
Weight (mg)	14.9	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

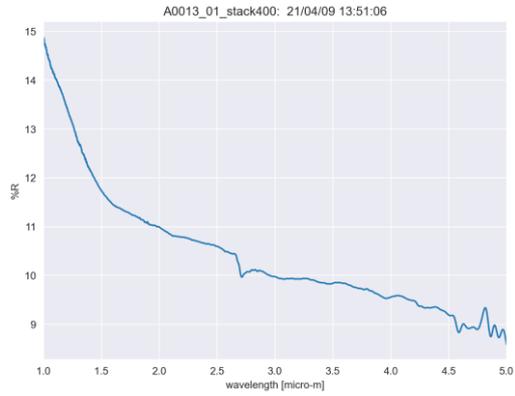
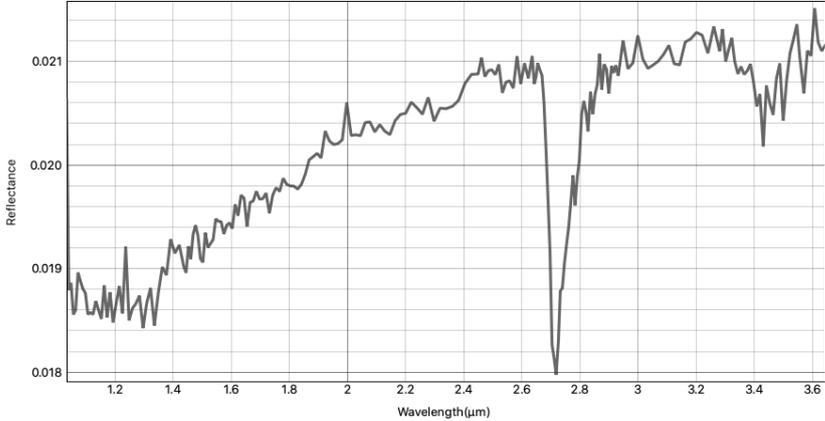
Name	A0008																							
Size (μm)	3858																							
Weight (mg)	10.2																							
Label	MicrOmega,FTIR																							
Microscope																								
FTIR	 <p>A0008_02_stack400: 21/03/30 11:45:48</p> <table border="1"><caption>FTIR Spectrum Data (Approximate)</caption><thead><tr><th>wavelength (micro-m)</th><th>%R</th></tr></thead><tbody><tr><td>1.0</td><td>2.80</td></tr><tr><td>1.5</td><td>2.70</td></tr><tr><td>2.0</td><td>2.75</td></tr><tr><td>2.5</td><td>2.75</td></tr><tr><td>2.85</td><td>2.45</td></tr><tr><td>3.0</td><td>2.75</td></tr><tr><td>3.5</td><td>2.85</td></tr><tr><td>4.0</td><td>2.90</td></tr><tr><td>4.5</td><td>2.95</td></tr><tr><td>5.0</td><td>3.15</td></tr></tbody></table>	wavelength (micro-m)	%R	1.0	2.80	1.5	2.70	2.0	2.75	2.5	2.75	2.85	2.45	3.0	2.75	3.5	2.85	4.0	2.90	4.5	2.95	5.0	3.15	
wavelength (micro-m)	%R																							
1.0	2.80																							
1.5	2.70																							
2.0	2.75																							
2.5	2.75																							
2.85	2.45																							
3.0	2.75																							
3.5	2.85																							
4.0	2.90																							
4.5	2.95																							
5.0	3.15																							
MicrOmega	No Data																							

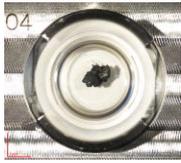
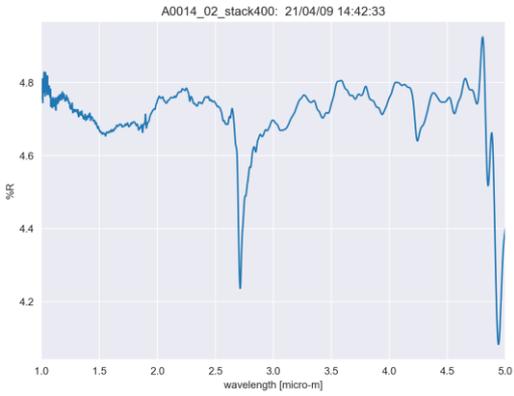
Name	A0009	
Size (μm)	3100	
Weight (mg)	9.2	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

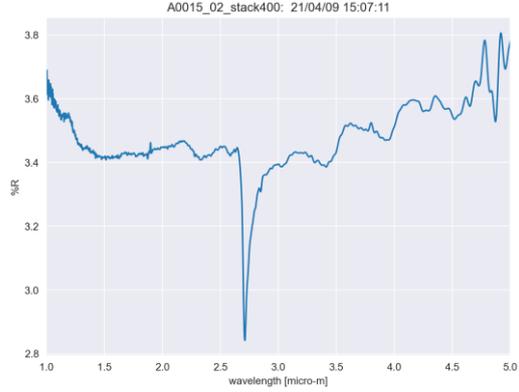
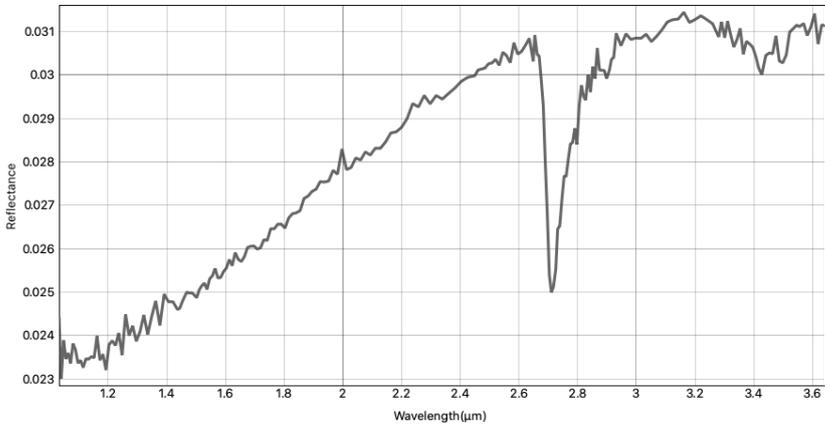
Name	A0010	
Size (μm)	3323	
Weight (mg)	11.9	
Label	FTIR	
Microscope		
FTIR	 <p>A0010_02_stack400: 21/03/30 14:06:44</p>	
MicrOmega	No Data	

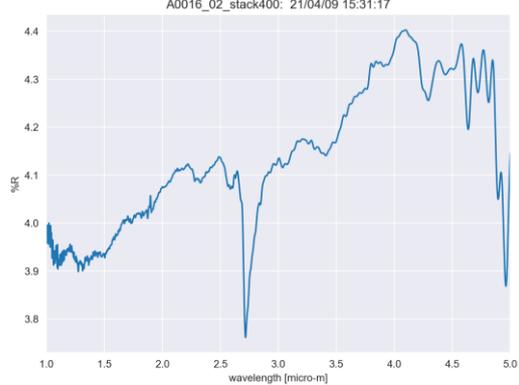
Name	A0011	
Size (μm)	4937	
Weight (mg)	13.3	
Label	MicrOmega,FTIR	
Microscope		
FTIR	 <p>A0011_02_stack400: 21/04/09 11:56:30</p>	
MicrOmega	No Data	

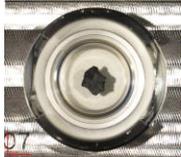
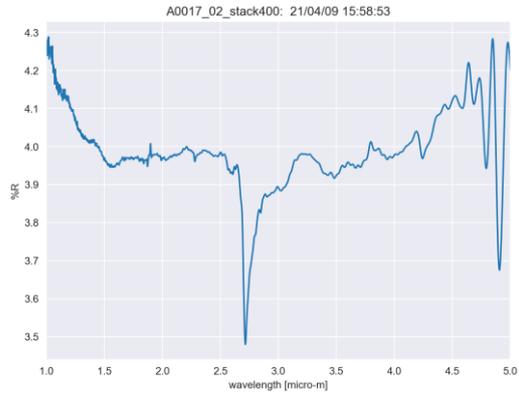
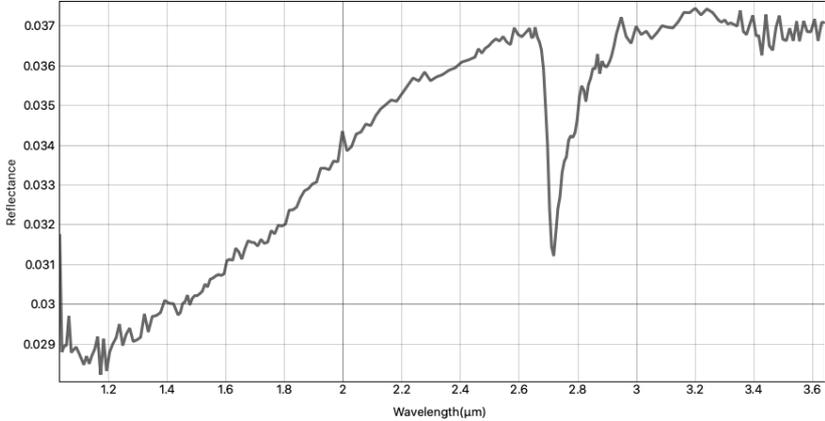
Name	A0012	
Size (μm)	2908	
Weight (mg)	8	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

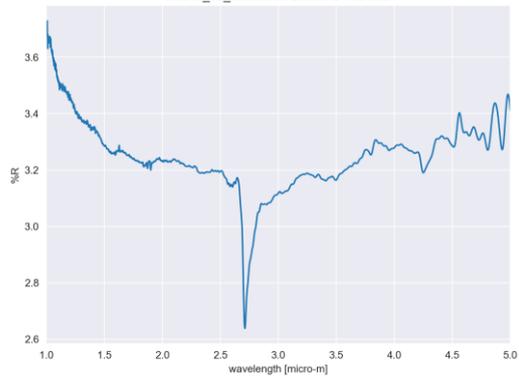
Name	A0013	
Size (μm)	2086	
Weight (mg)	2.8	
Label	MicrOmega, FTIR, NASA	
Microscope		
FTIR		
MicrOmega		

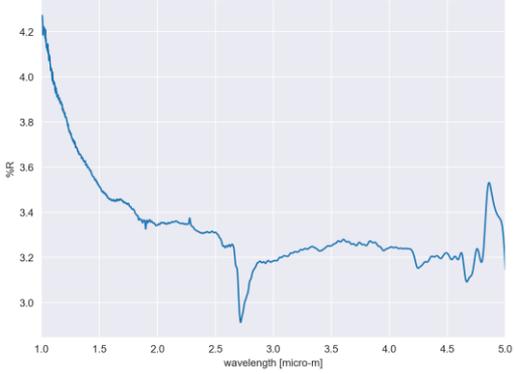
Name	A0014	
Size (μm)	3924	
Weight (mg)	8.8	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

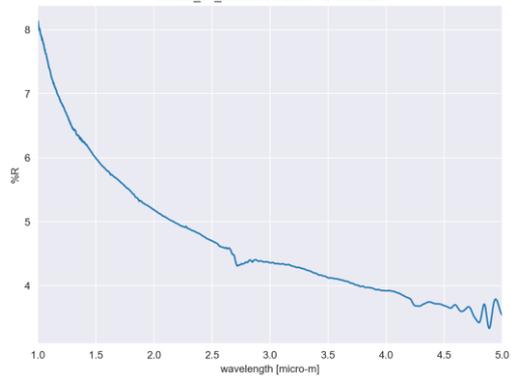
Name	A0015	
Size (μm)	3410	
Weight (mg)	14.6	
Label	MicrOmega, FTIR, NASA	
Microscope		
FTIR		
MicrOmega		

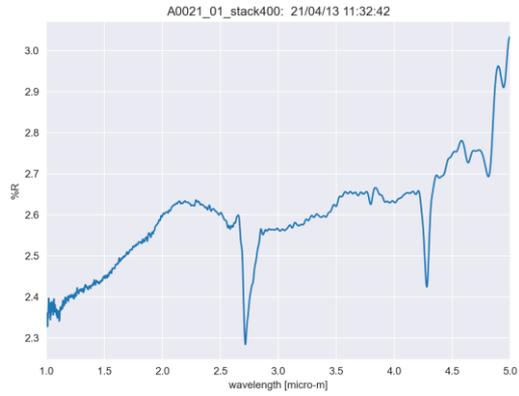
Name	A0016	
Size (μm)	4911	
Weight (mg)	14.1	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

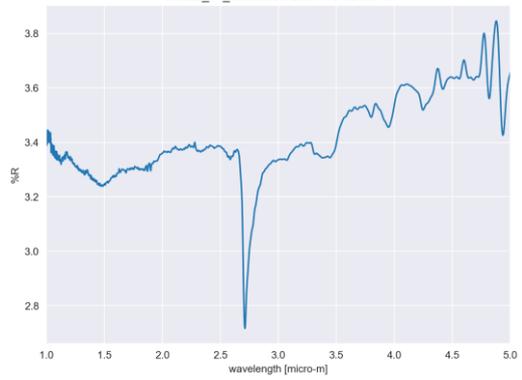
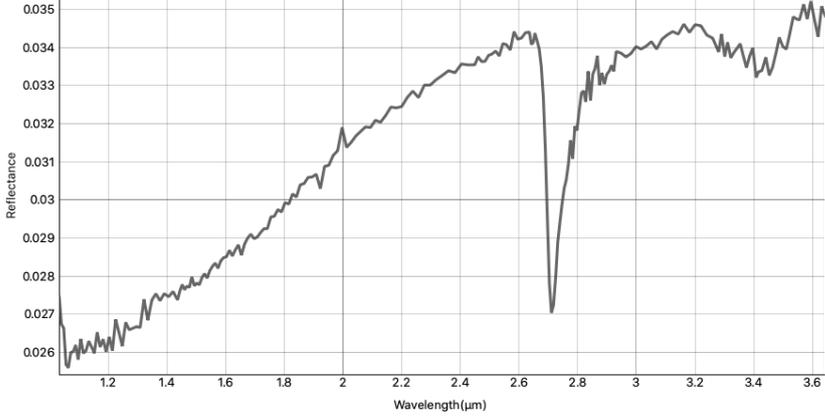
Name	A0017	
Size (μm)	3748	
Weight (mg)	8.4	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega		

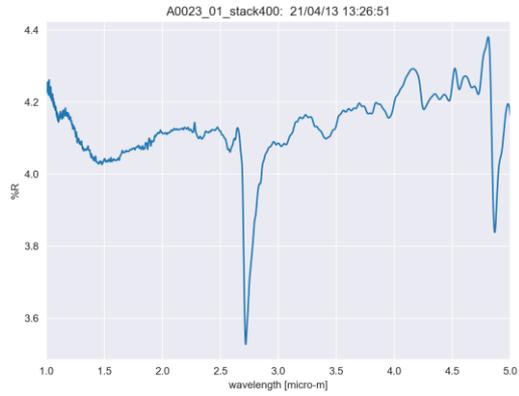
Name	A0018	
Size (μm)	3926	
Weight (mg)	12.6	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

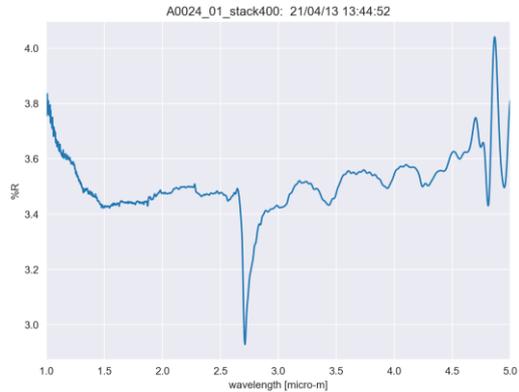
Name	A0019	
Size (μm)	3534	
Weight (mg)	6.9	
Label	MicrOmega,FTIR	
Microscope		
FTIR	<p data-bbox="612 1077 836 1097">A0019_01_stack400: 21/04/12 12:18:51</p> 	
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

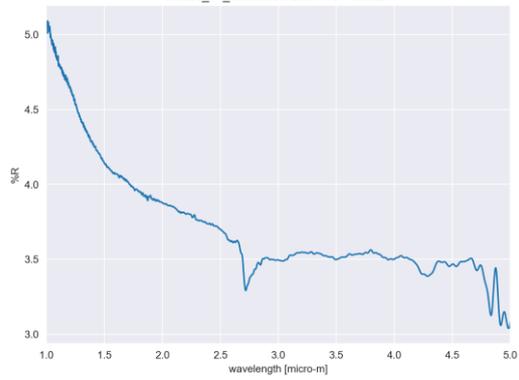
Name	A0020	
Size (μm)	3787	
Weight (mg)	6.5	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

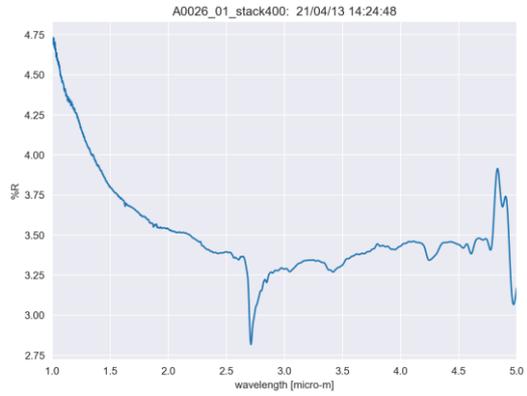
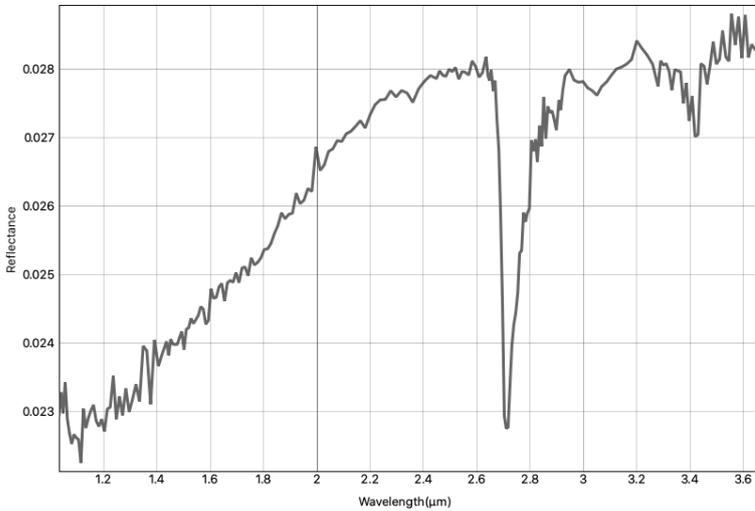
Name	A0021	
Size (μm)	4826	
Weight (mg)	25.8	
Label	MircOmega,FTIR	
Microscope		
FTIR		
MircOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

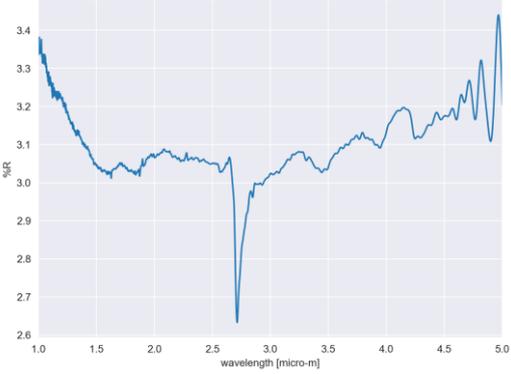
Name	A0022	
Size (μm)	2812	
Weight (mg)	6.3	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

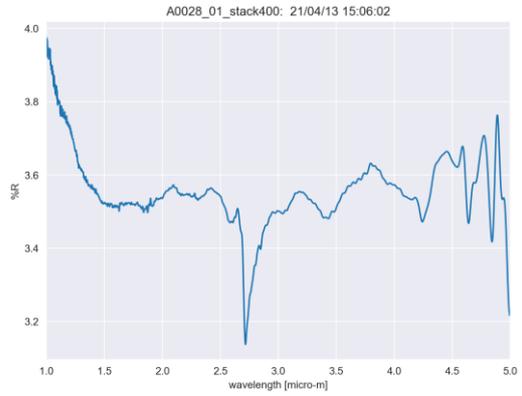
Name	A0023	
Size (μm)	3396	
Weight (mg)	6.7	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

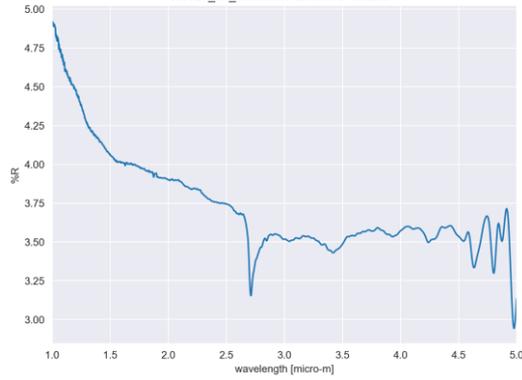
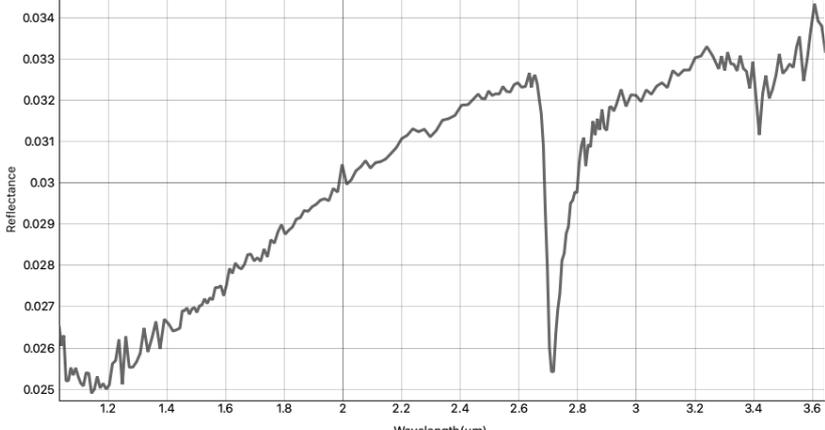
Name	A0024	
Size (μm)	3214	
Weight (mg)	10.3	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

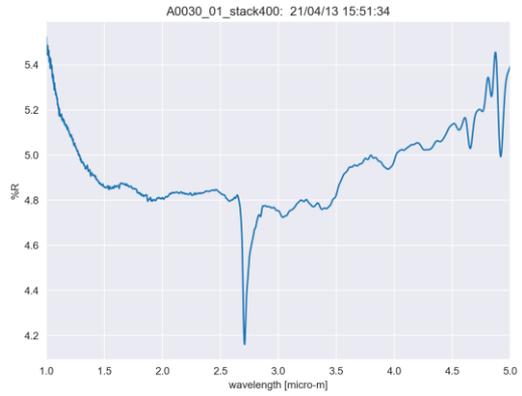
Name	A0025	
Size (μm)	3068	
Weight (mg)	7.8	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

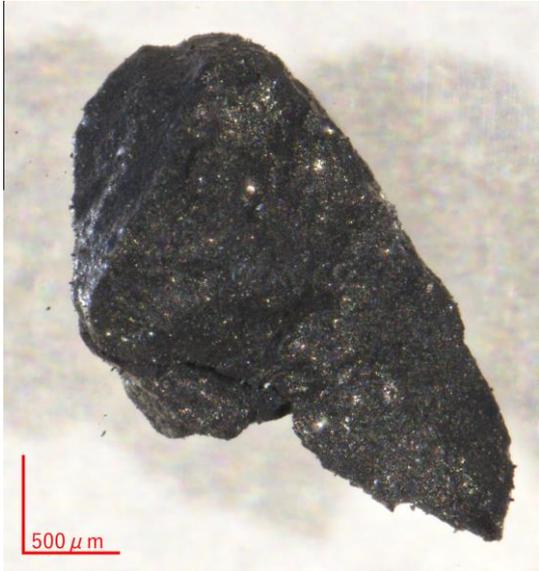
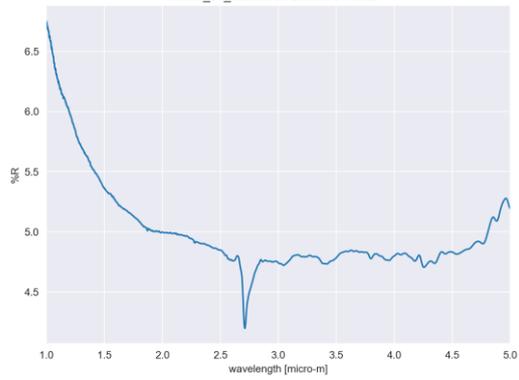
Name	A0026	
Size (μm)	2997	
Weight (mg)	3.9	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

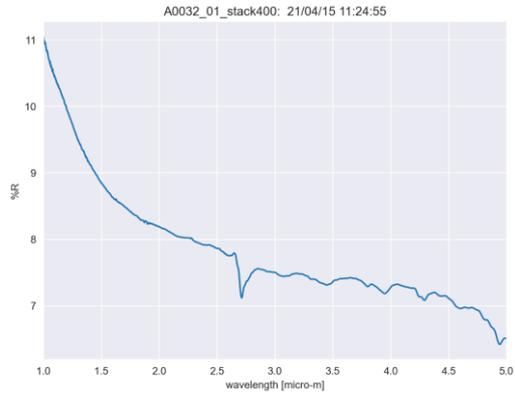
Name	A0027	
Size (μm)	4741	
Weight (mg)	10.2	
Label	FTIR	
Microscope		
FTIR	<p data-bbox="612 1077 839 1097">A0027_01_stack400: 21/04/13 14:43:04</p> 	
MicrOmega	<p data-bbox="448 1715 571 1744">No Data</p>	

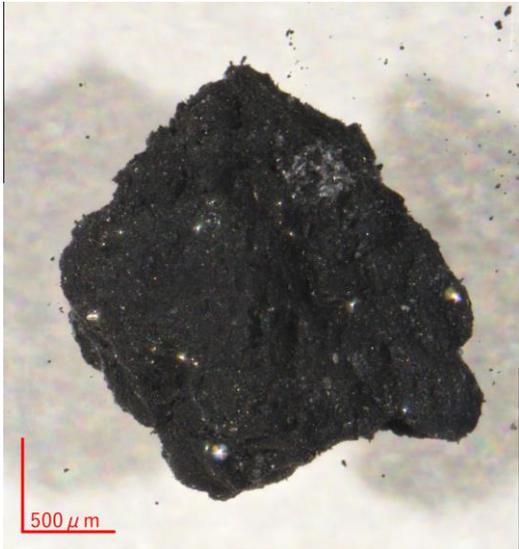
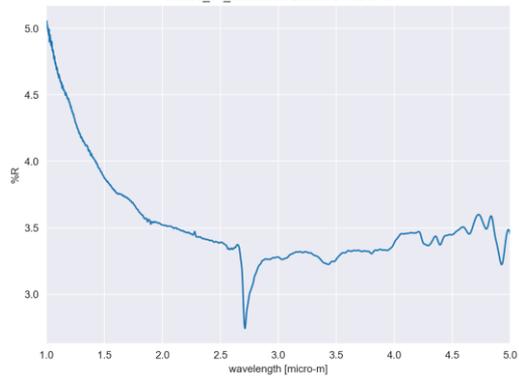
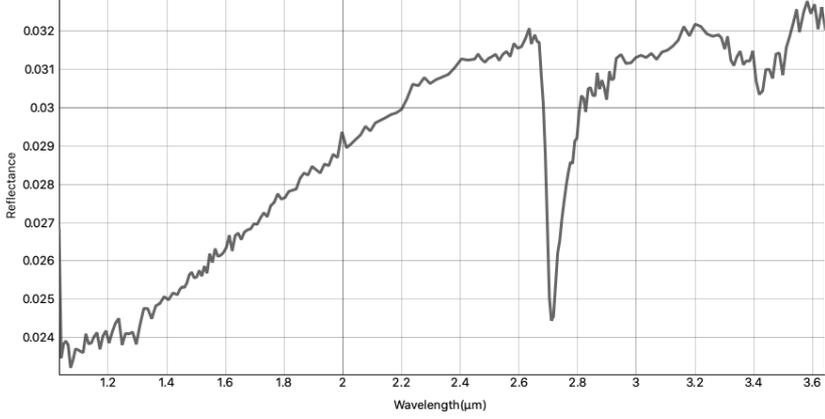
Name	A0028	
Size (μm)	2715	
Weight (mg)	8.2	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

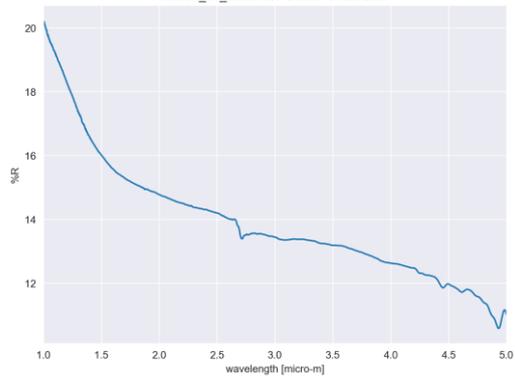
Name	A0029	
Size (μm)	3069	
Weight (mg)	7.3	
Label	MicrOmega, FTIR, Phase2 Kochi	
Microscope		
FTIR		
MicrOmega		

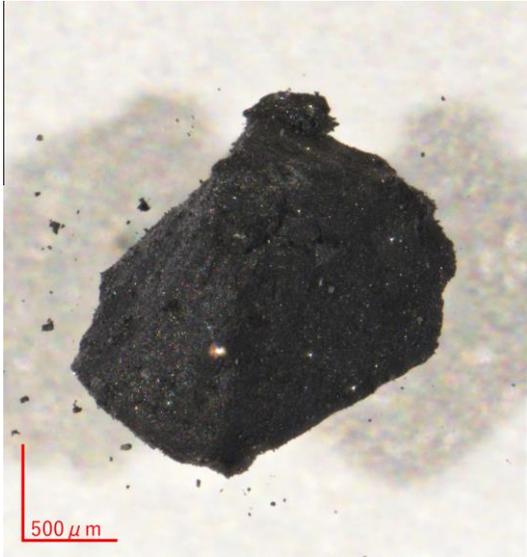
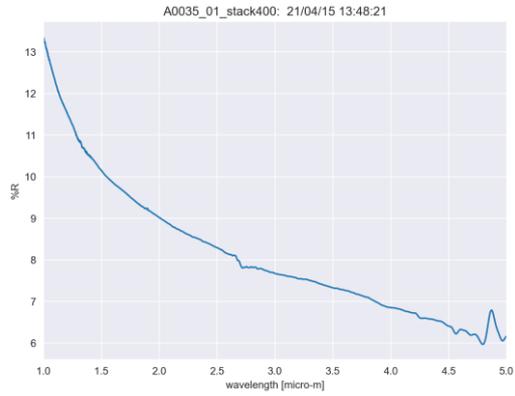
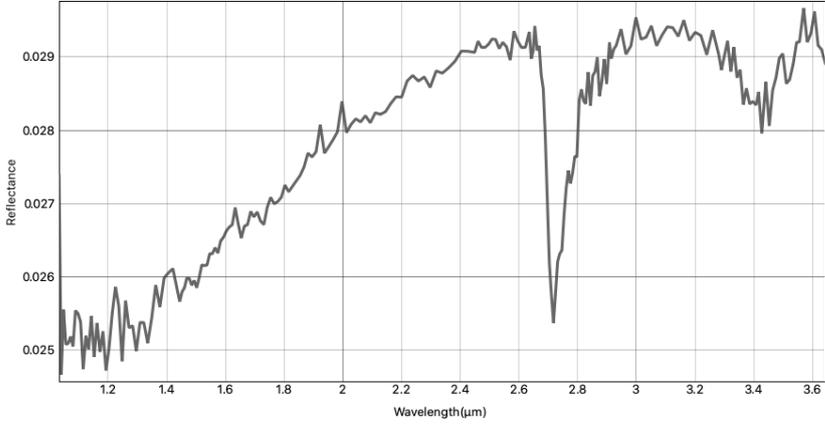
Name	A0030	
Size (μm)	2842	
Weight (mg)	6.9	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

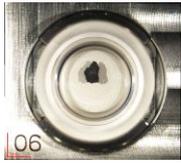
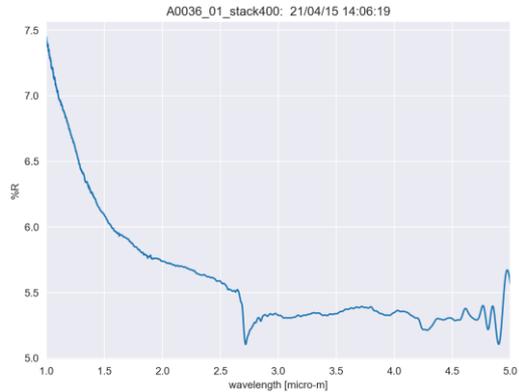
Name	A0031	
Size (μm)	3105	
Weight (mg)	3.9	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

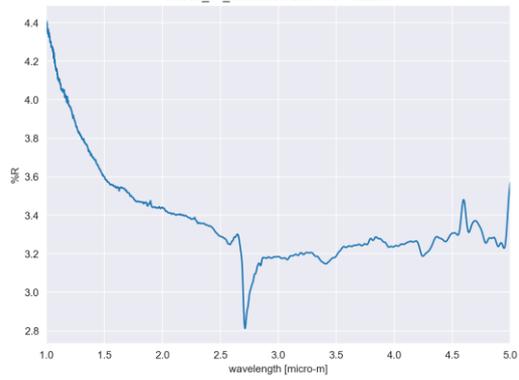
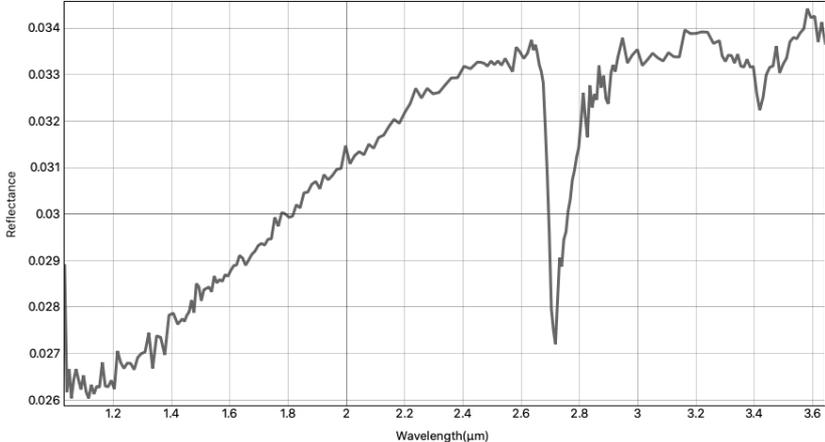
Name	A0032	
Size (μm)	2271	
Weight (mg)	3.3	
Label	MicrOmega,FTIR	
Microscope		
FTIR	 <p>A0032_01_stack400: 21/04/15 11:24:55</p>	
MicrOmega	No Data	

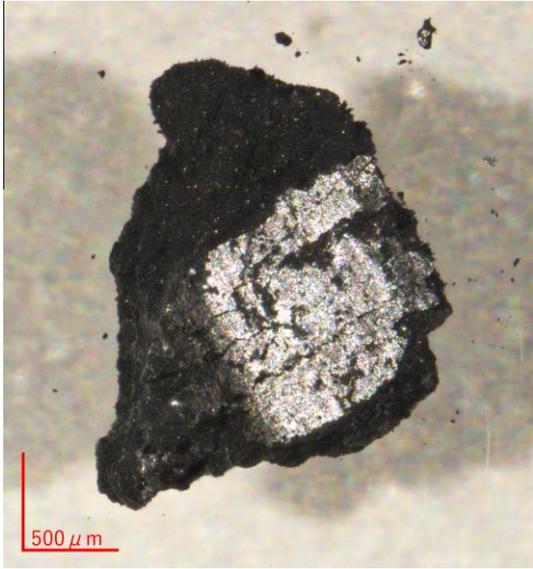
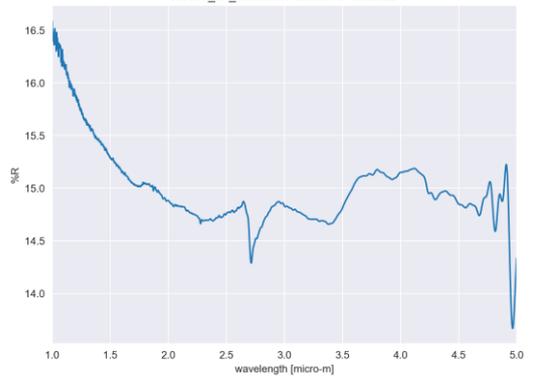
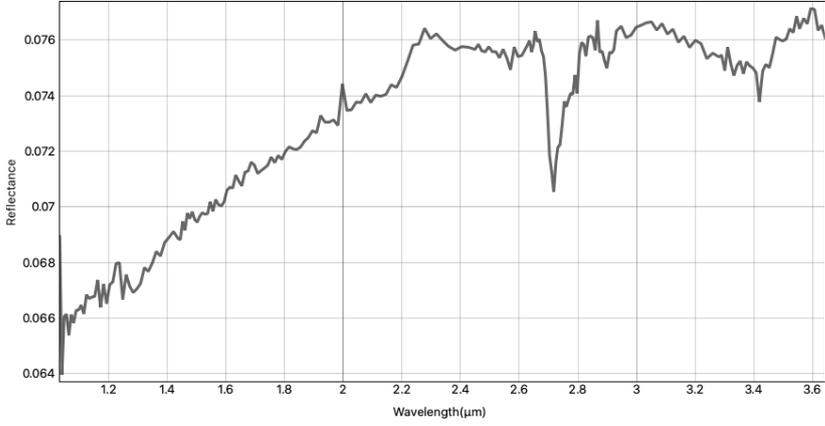
Name	A0033	
Size (μm)	2406	
Weight (mg)	4	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

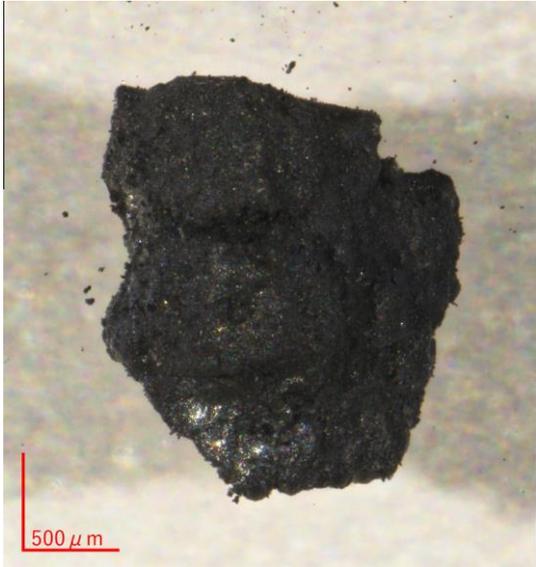
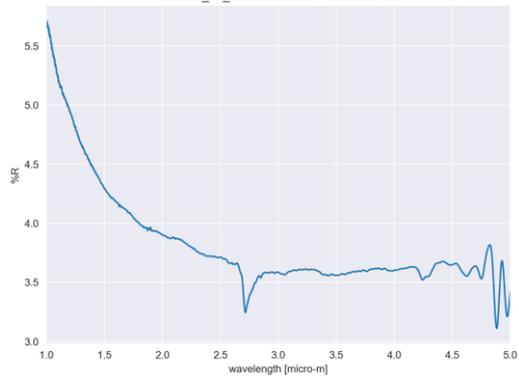
Name	A0034	
Size (μm)	2159	
Weight (mg)	2.1	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

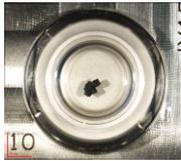
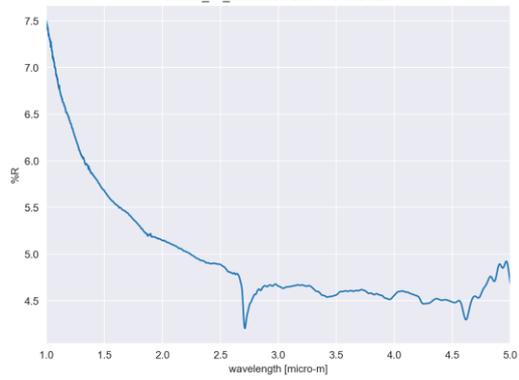
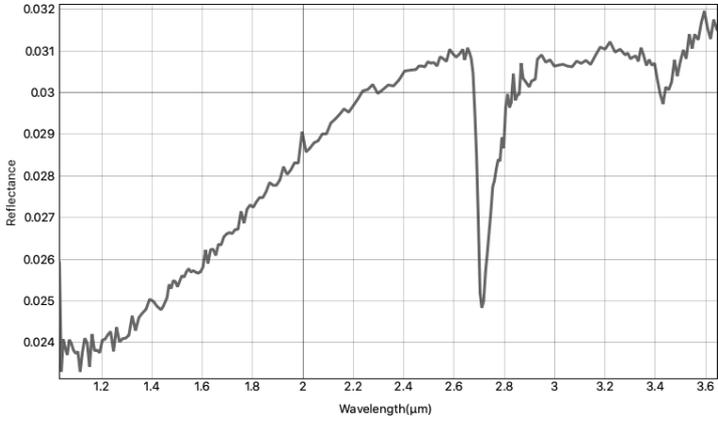
Name	A0035	
Size (μm)	2102	
Weight (mg)	2.7	
Label	MicrOmega, FTIR, Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

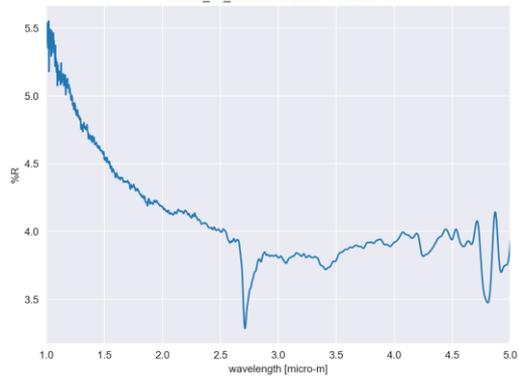
Name	A0036	
Size (μm)	2851	
Weight (mg)	3.3	
Label	FTIR	
Microscope		
FTIR	 <p>A0036_01_stack400: 21/04/15 14:06:19</p>	
MicrOmega	No Data	

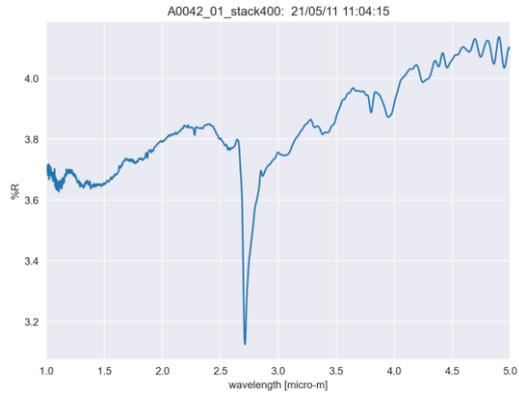
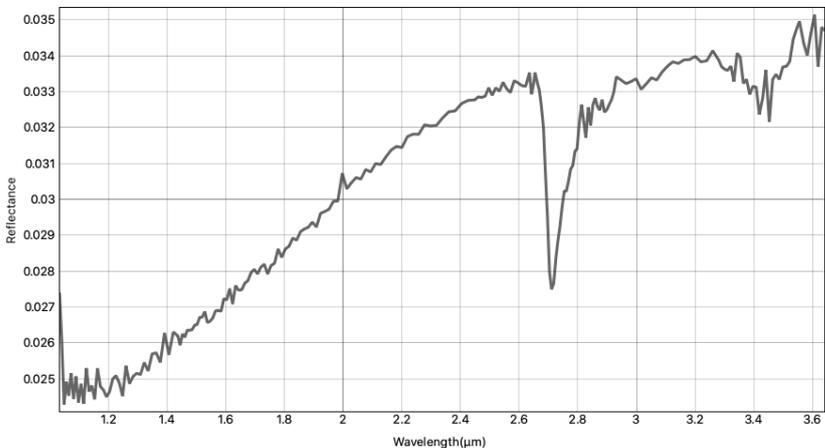
Name	A0037	
Size (μm)	3129	
Weight (mg)	6	
Label	MicrOmega,FTIR,Phase2 Kochi	
Microscope		
FTIR		
MicrOmega		

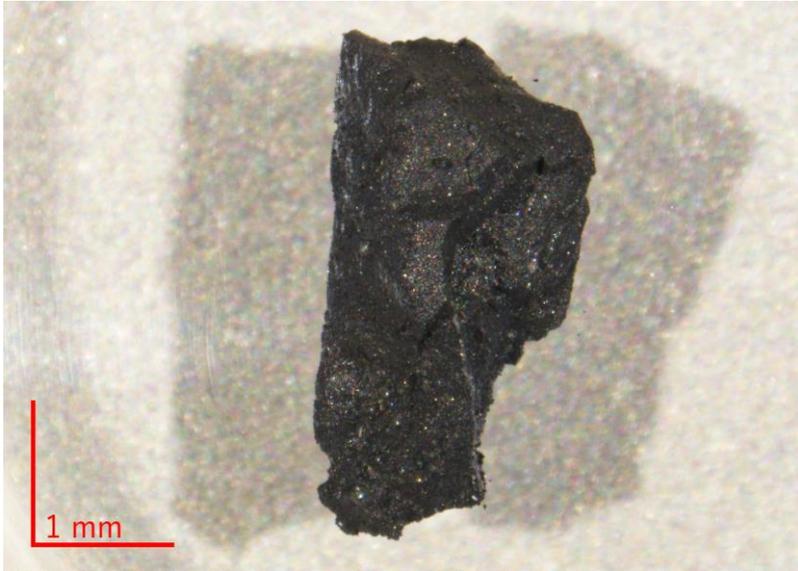
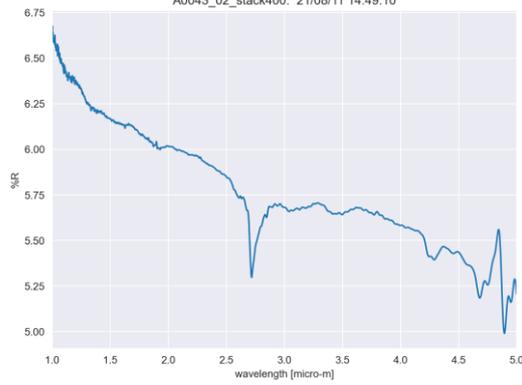
Name	A0038	
Size (μm)	2399	
Weight (mg)	3.1	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

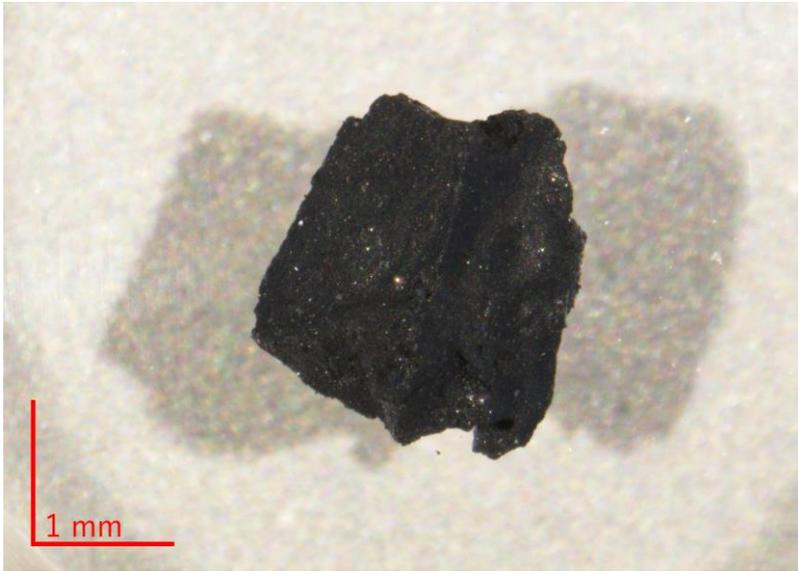
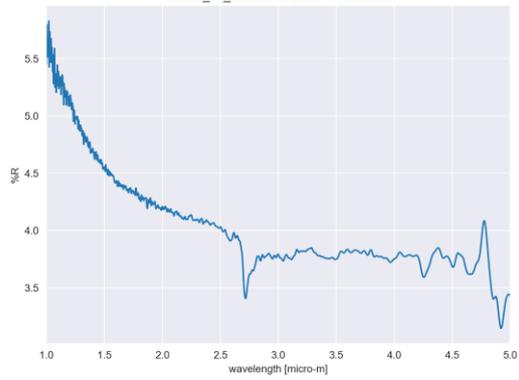
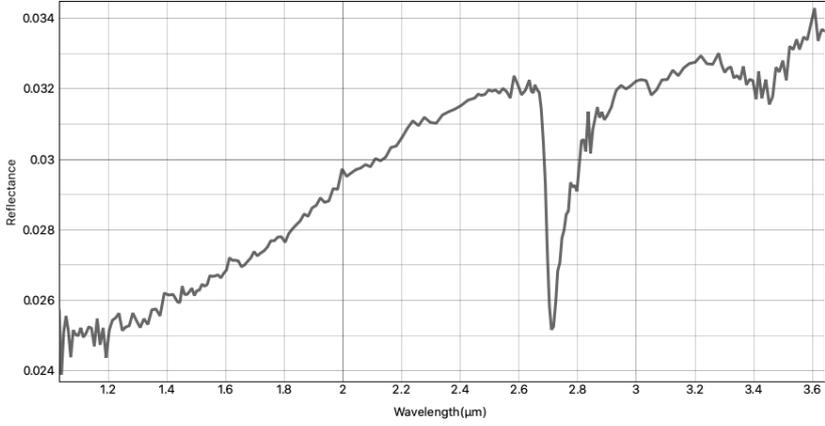
Name	A0039	
Size (μm)	2461	
Weight (mg)	3.9	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1713 571 1744">No Data</p>	

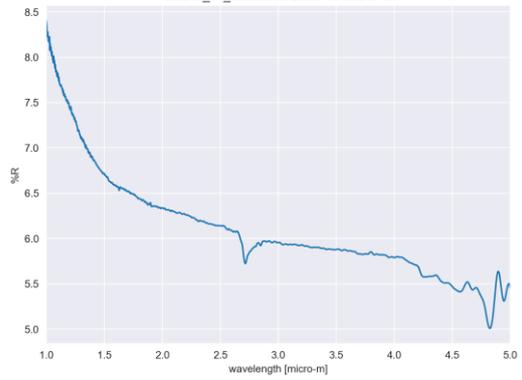
Name	A0040	
Size (μm)	2598	
Weight (mg)	3	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

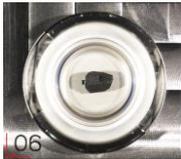
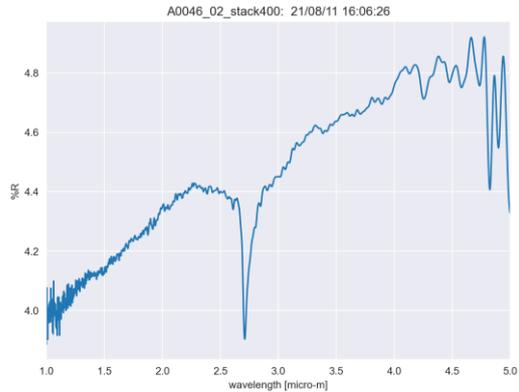
Name	A0041	
Size (μm)	2739	
Weight (mg)	3.5	
Label	FTIR	
Microscope		
FTIR	 <p>A0041_01_stack400: 21/08/11 12:29:41</p>	
MicrOmega	<p>No Data</p>	

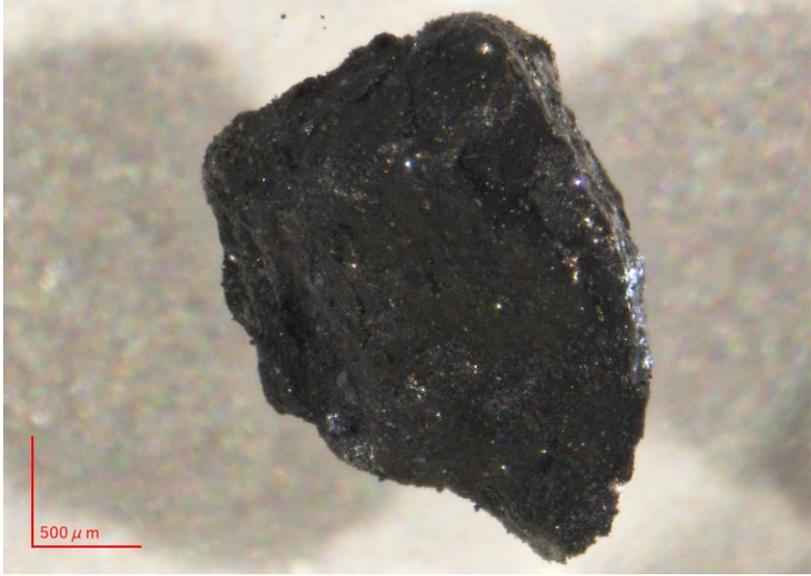
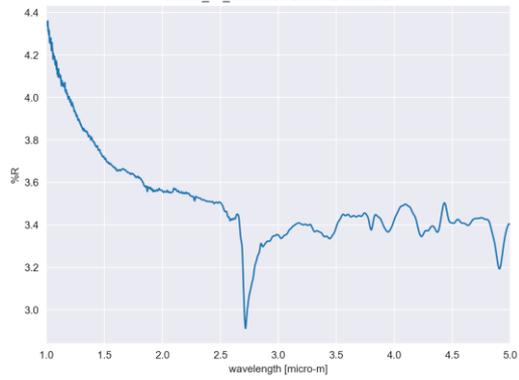
Name	A0042	
Size (μm)	3784	
Weight (mg)	11.9	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega		

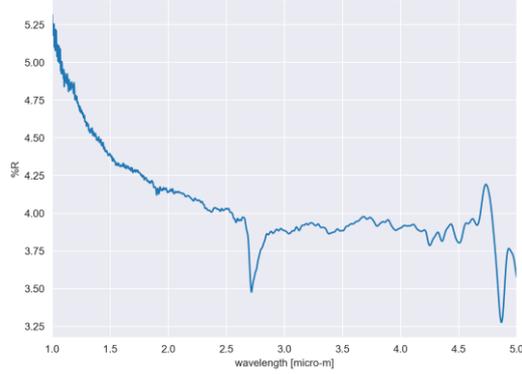
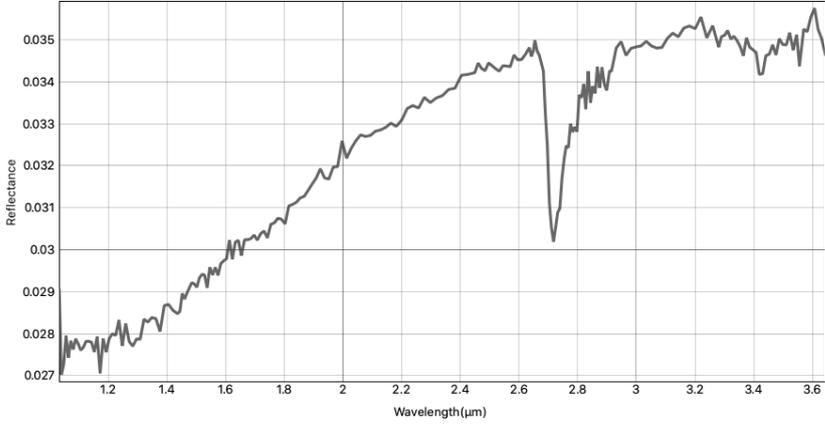
Name	A0043	
Size (μm)	3558	
Weight (mg)	4.9	
Label	FTIR	
Microscope		
FTIR	 <p>A0043_02_stack400: 21/08/11 14:49:10</p>	
MicrOmega	<p>No Data</p>	

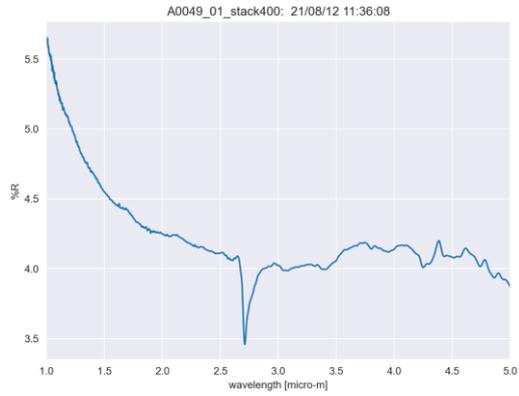
Name	A0044	
Size (μm)	2663	
Weight (mg)	4.2	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

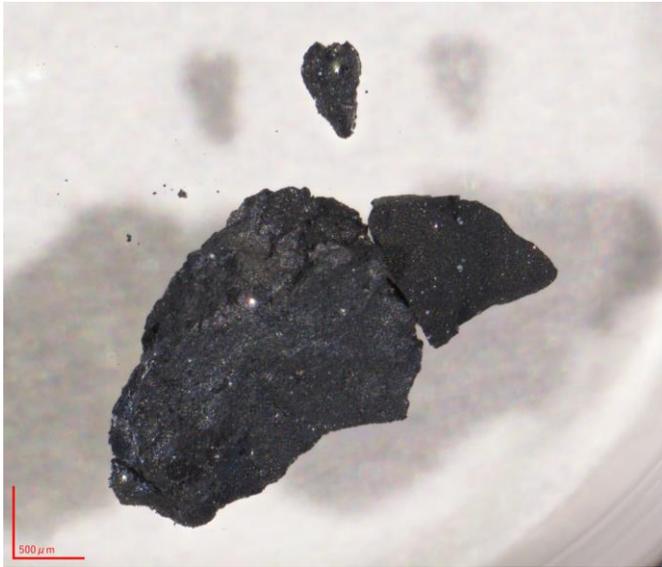
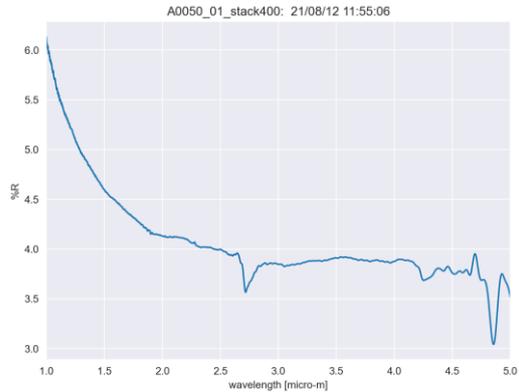
Name	A0045	
Size (μm)	2806	
Weight (mg)	2.9	
Label	FTIR	
Microscope		
FTIR	 <p>A0045_01_stack400: 21/08/11 15:30:40</p>	
MicrOmega	<p>No Data</p>	

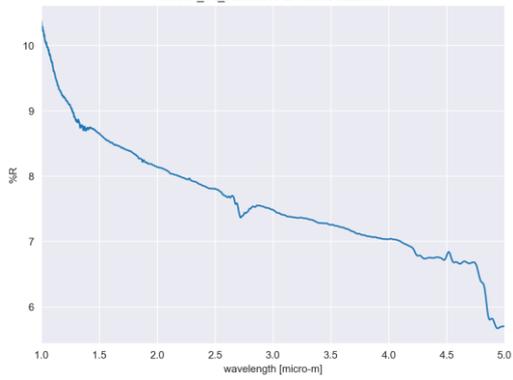
Name	A0046	
Size (μm)	3781	
Weight (mg)	17.9	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

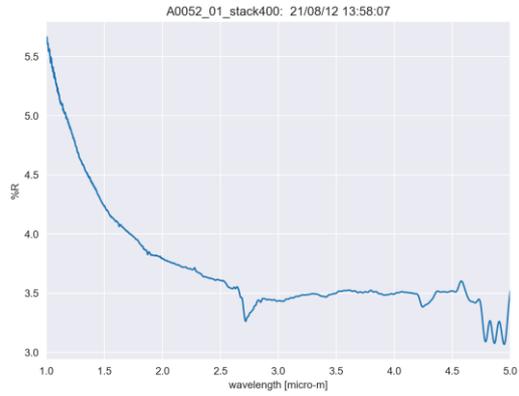
Name	A0047	
Size (μm)	2569	
Weight (mg)	6.8	
Label	FTIR	
Microscope		
FTIR	 <p>A0047_01_stack400: 21/08/12 10:53:42</p>	
MicrOmega	<p>No Data</p>	

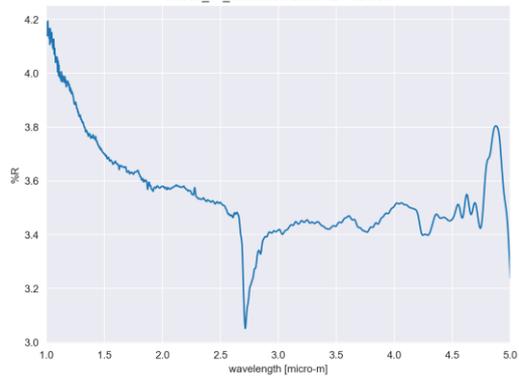
Name	A0048	
Size (μm)	3734	
Weight (mg)	3	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR	<p data-bbox="619 1077 842 1099">A0048_01_stack400: 21/05/11 11:30:42</p> 	
MicrOmega		

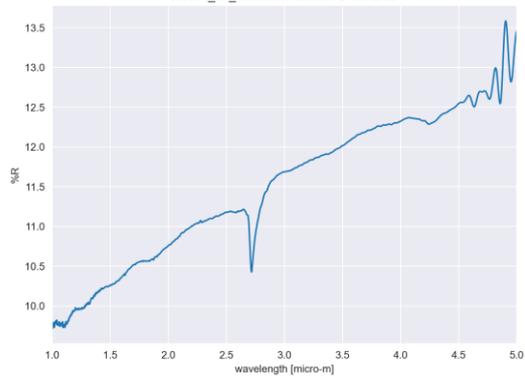
Name	A0049	
Size (μm)	3173	
Weight (mg)	4	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

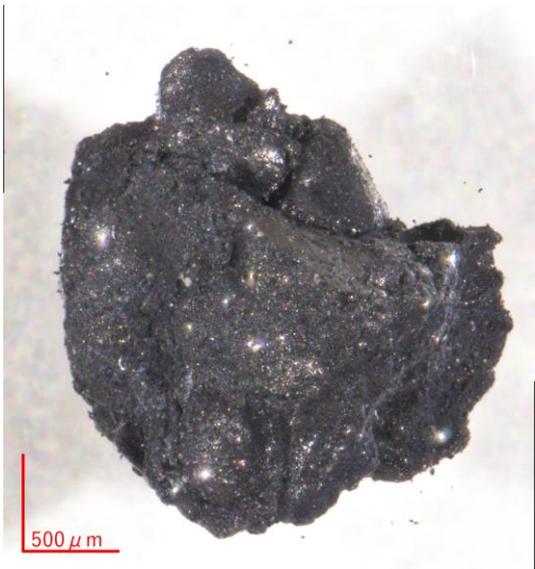
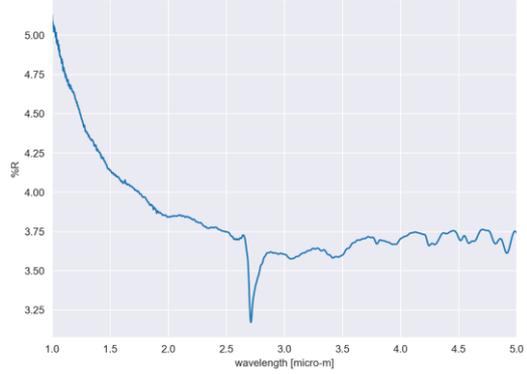
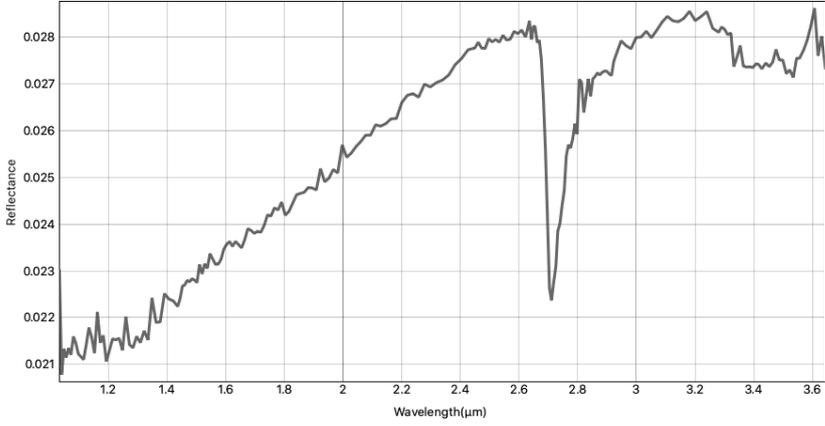
Name	A0050	
Size (μm)	2623	
Weight (mg)	3.5	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

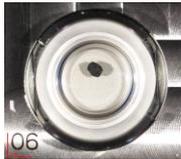
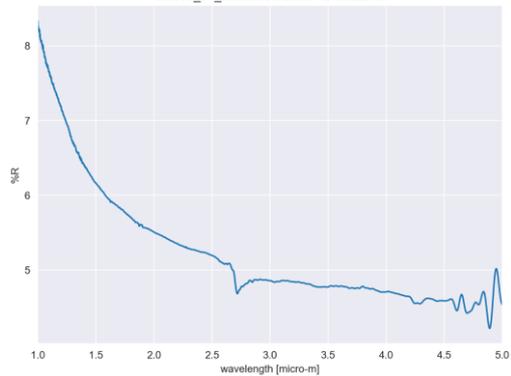
Name	A0051	
Size (μm)	3170	
Weight (mg)	3.5	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="450 1713 571 1749">No Data</p>	

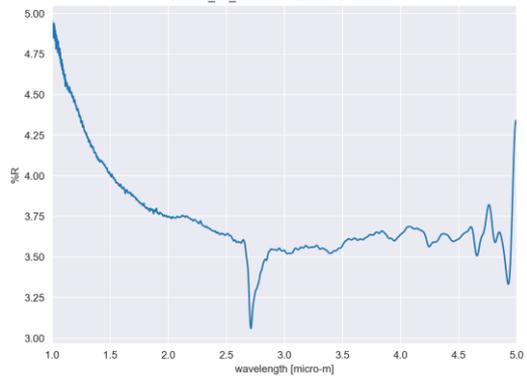
Name	A0052	
Size (μm)	2452	
Weight (mg)	3	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

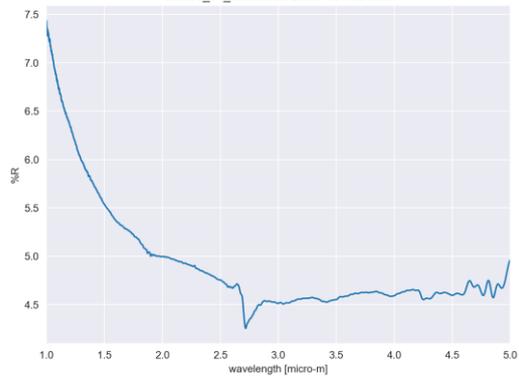
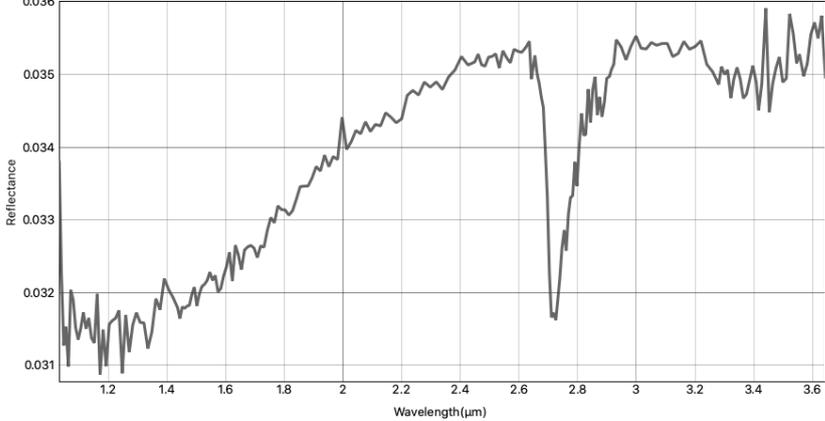
Name	A0053	
Size (μm)	3099	
Weight (mg)	5	
Label	FTIR	
Microscope		
FTIR	 <p>A0053_01_stack400: 21/08/12 14:23:59</p>	
MicrOmega	<p>No Data</p>	

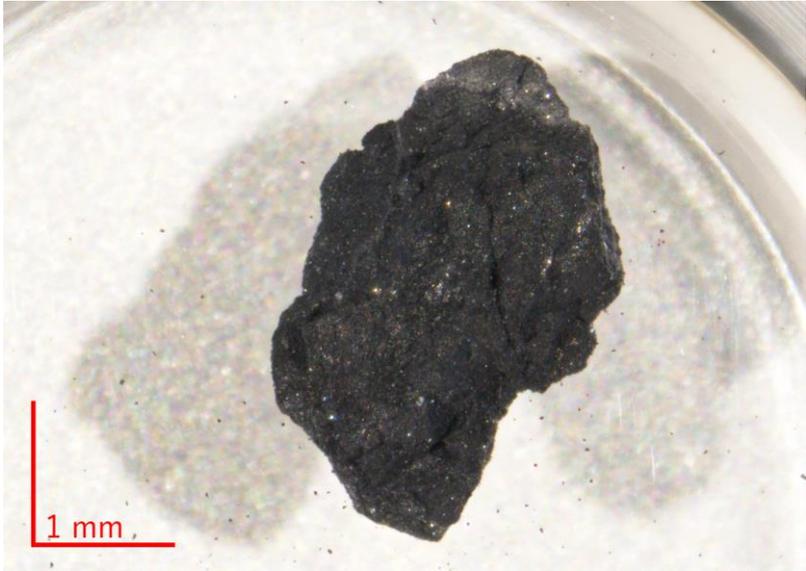
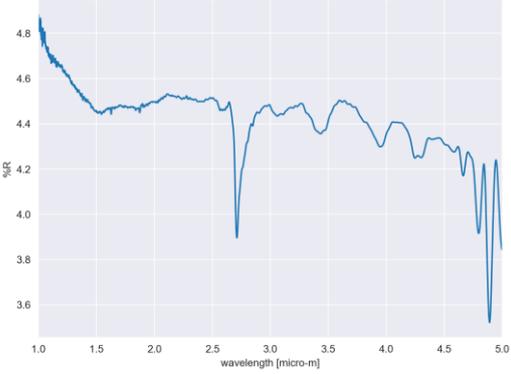
Name	A0054	
Size (μm)	2582	
Weight (mg)	3.1	
Label	MicrOmega,FTIR	
Microscope		
FTIR	 <p>A0054_01_stack400: 21/08/12 14:42:32</p>	
MicrOmega	No Data	

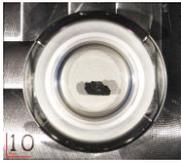
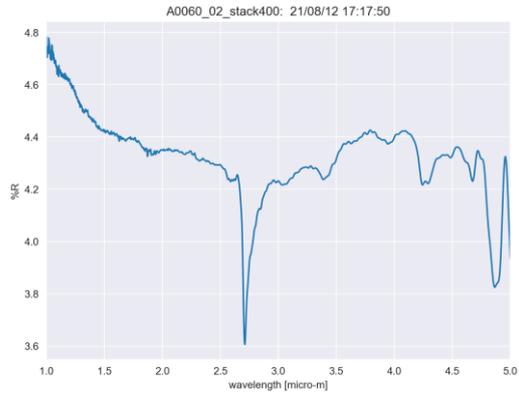
Name	A0055	
Size (μm)	2537	
Weight (mg)	5.9	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR	<p data-bbox="619 1077 847 1099">A0055_01_stack400: 21/05/14 11:28:48</p> 	
MicrOmega		

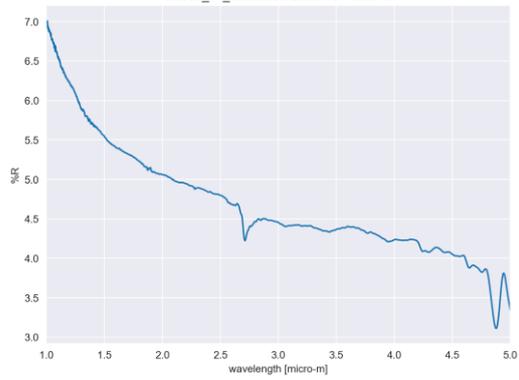
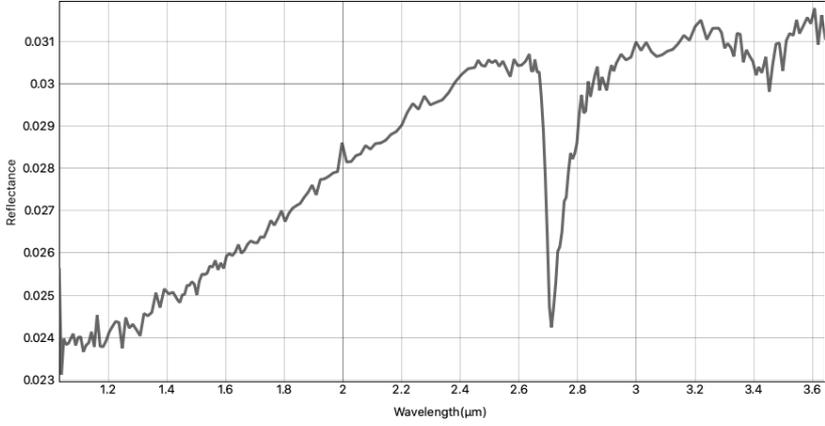
Name	A0056	
Size (μm)	2105	
Weight (mg)	3.1	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

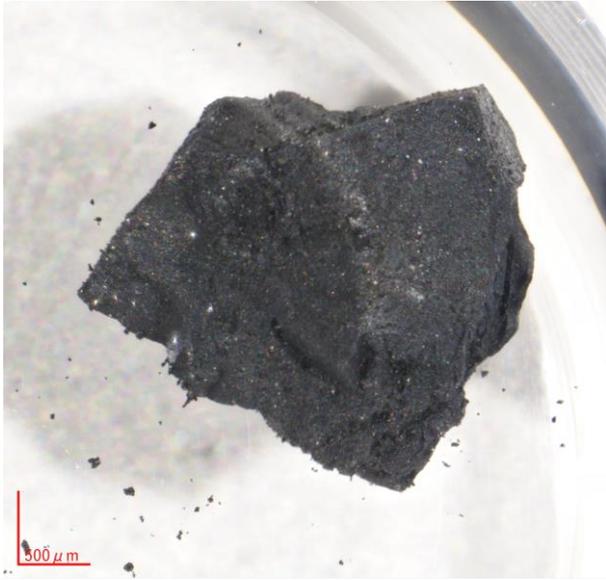
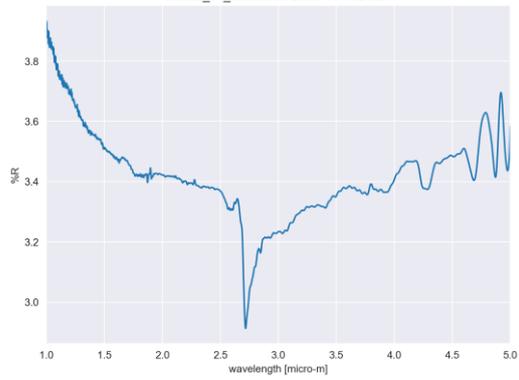
Name	A0057	
Size (μm)	2306	
Weight (mg)	4.1	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

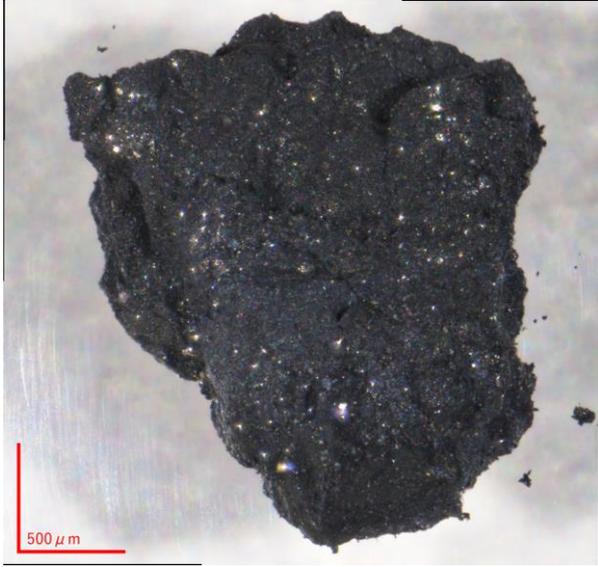
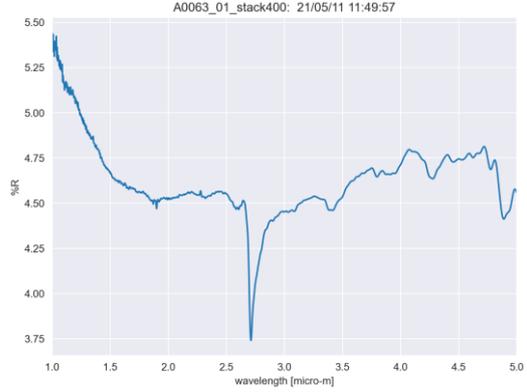
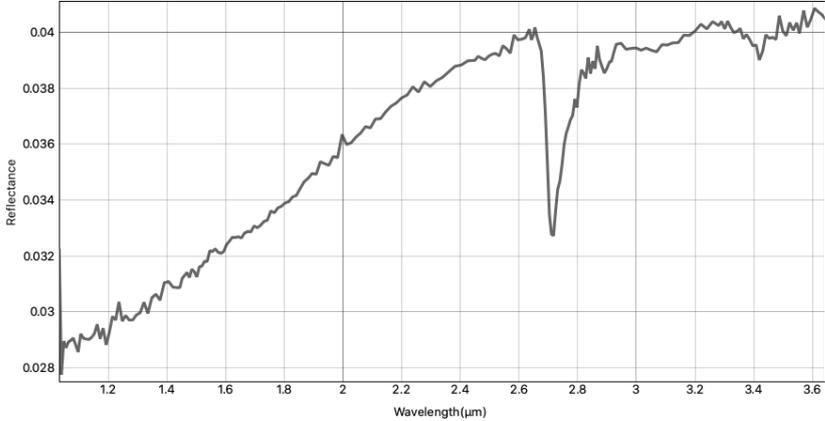
Name	A0058	
Size (μm)	3085	
Weight (mg)	3.3	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

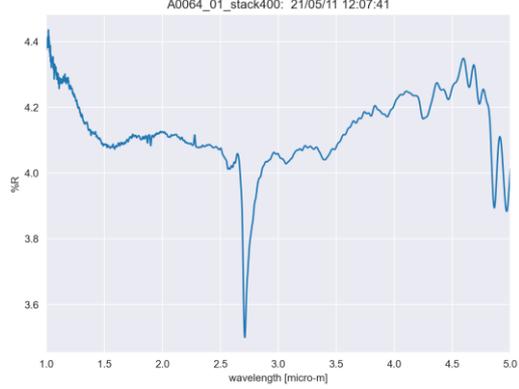
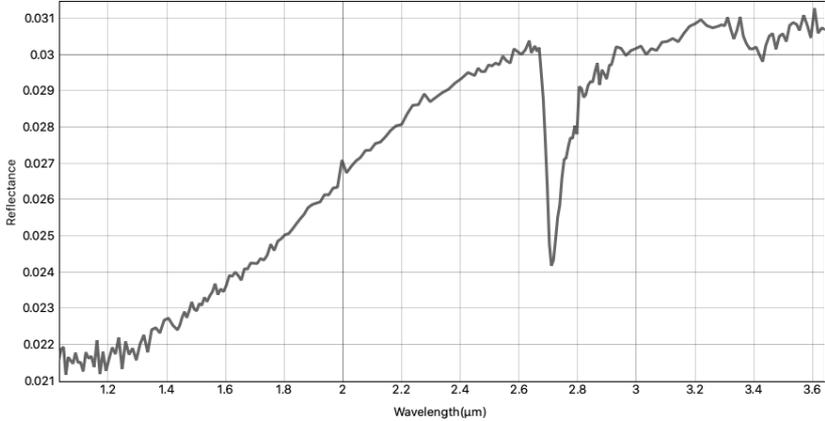
Name	A0059	
Size (μm)	3466	
Weight (mg)	7.7	
Label	FTIR	
Microscope		
FTIR	<p data-bbox="612 1077 839 1099">A0059_03_stack400: 21/08/12 16:47:13</p> 	
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

Name	A0060	
Size (μm)	3461	
Weight (mg)	5.4	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

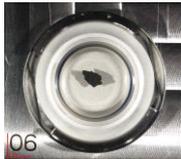
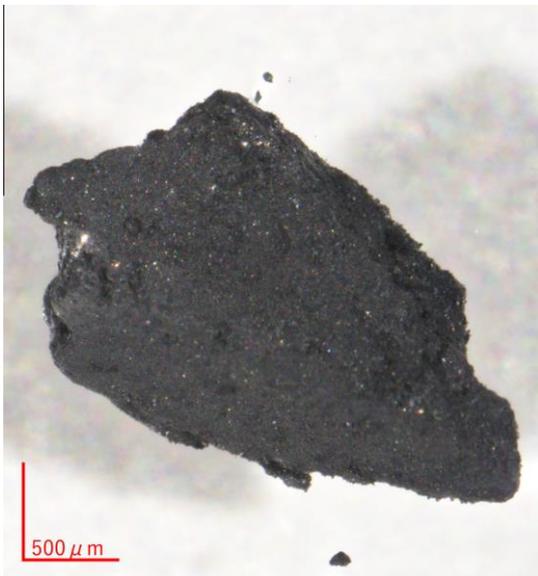
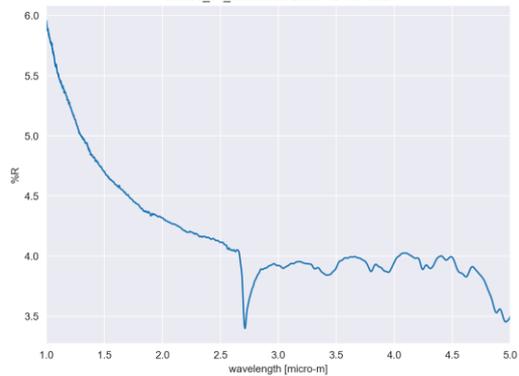
Name	A0061	
Size (μm)	3066	
Weight (mg)	4.5	
Label	MicrOmega, FTIR, NASA	
Microscope		
FTIR		
MicrOmega		

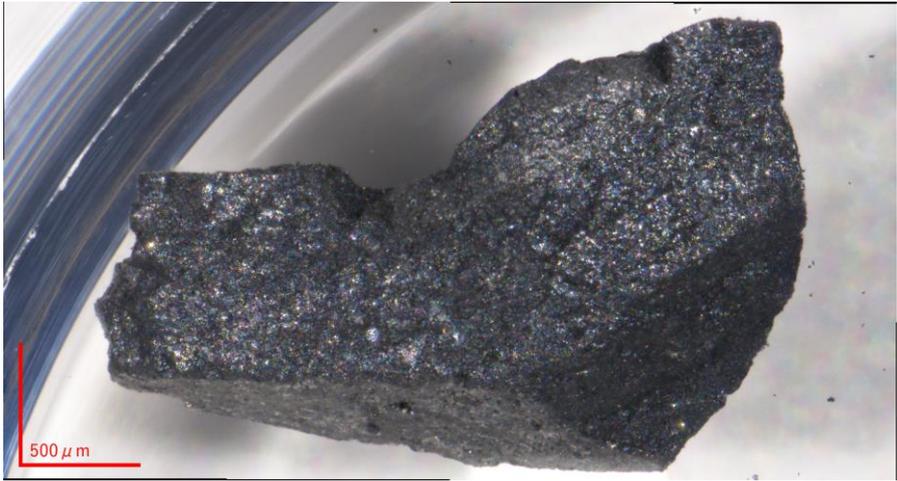
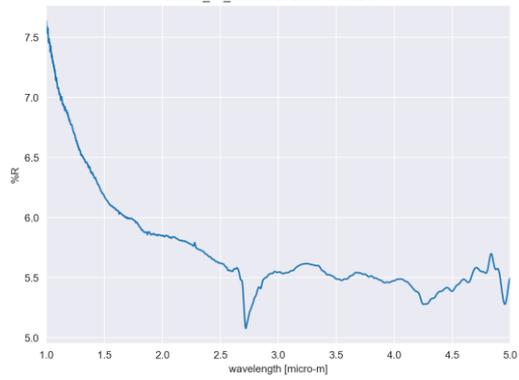
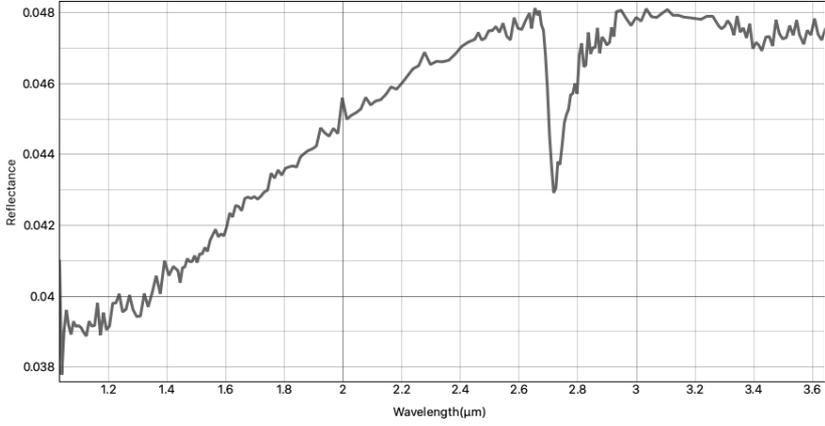
Name	A0062	
Size (μm)	3203	
Weight (mg)	8.6	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

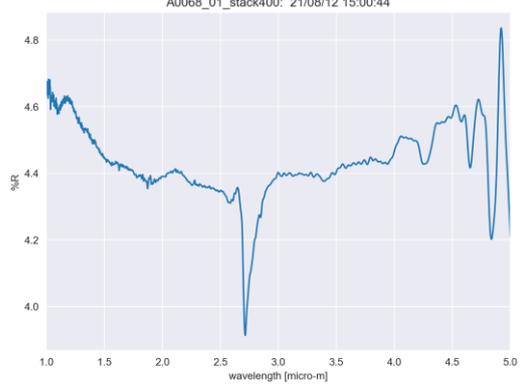
Name	A0063	
Size (μm)	4165	
Weight (mg)	3.8	
Label	MicrOmega, FTIR, Initial Analysis	
Microscope		
FTIR		
MicrOmega		

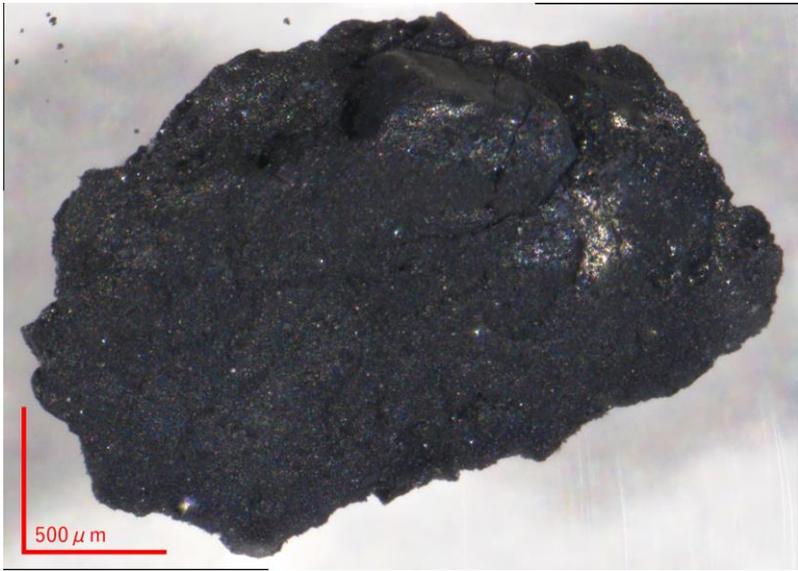
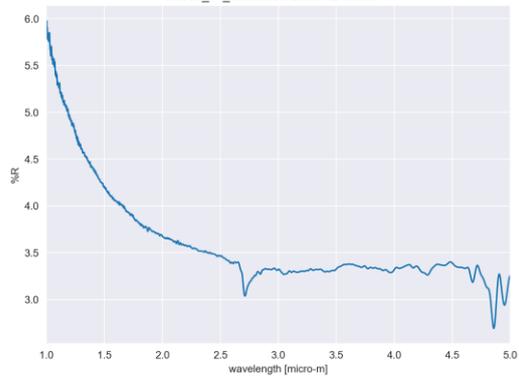
Name	A0064	
Size (μm)	2952	
Weight (mg)	6.7	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

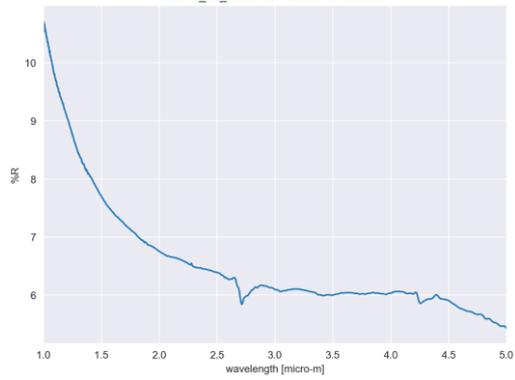
Name	A0065	
Size (μm)	2551	
Weight (mg)	3.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

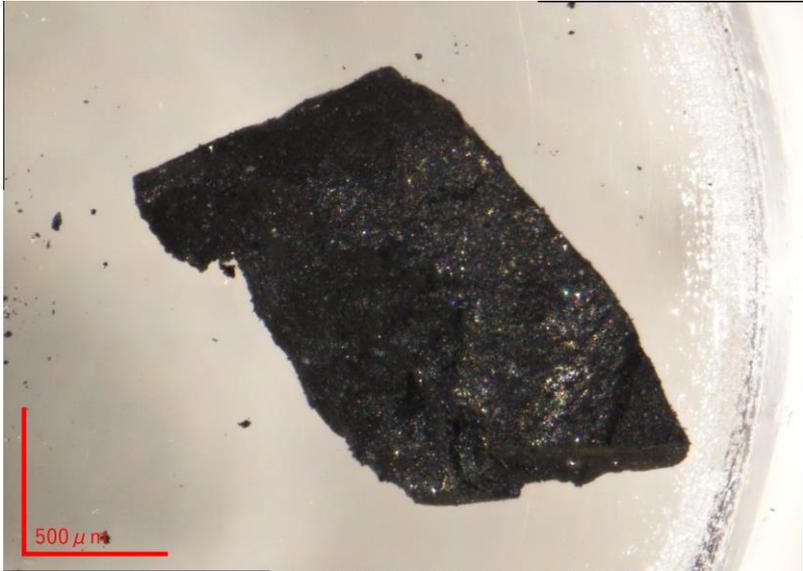
Name	A0066	
Size (μm)	2970	
Weight (mg)	4.3	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

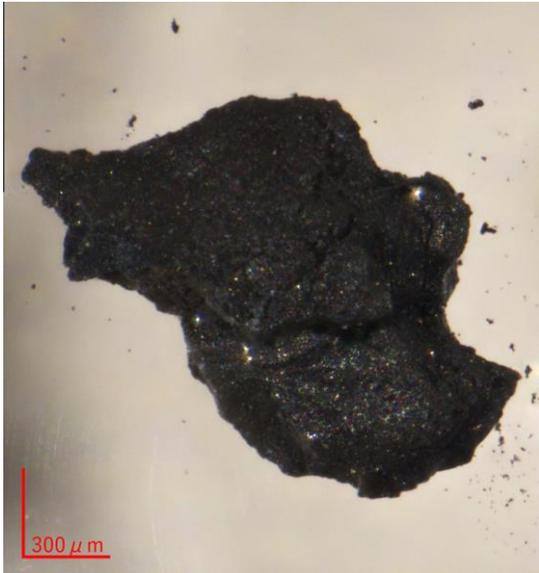
Name	A0067	
Size (μm)	3108	
Weight (mg)	3.6	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR	 <p>A0067_01_stack400: 21/05/11 12:28:41</p>	
MicrOmega		

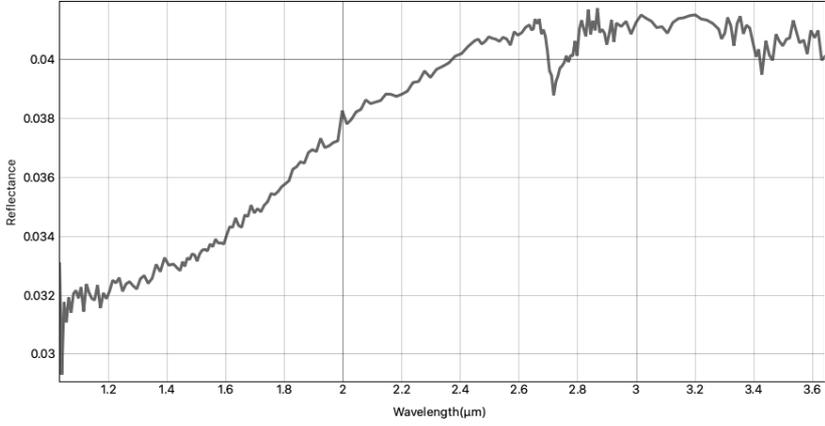
Name	A0068	
Size (μm)	3053	
Weight (mg)	6	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

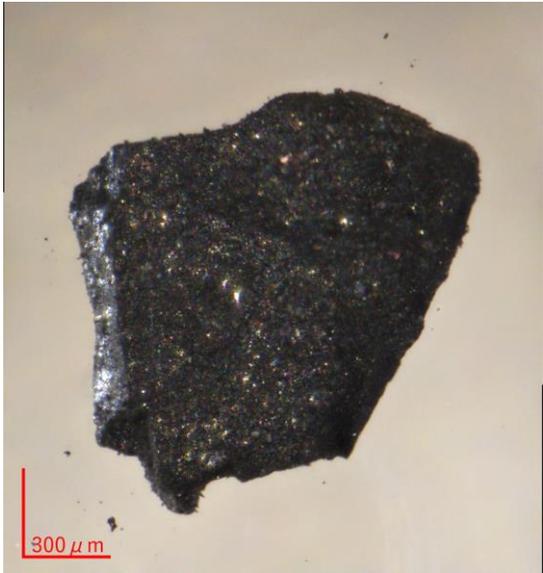
Name	A0069	
Size (μm)	2654	
Weight (mg)	3.2	
Label	MicrOmega,FTIR	
Microscope		
FTIR	 <p>A0069_01_stack400: 21/08/12 16:01:47</p>	
MicrOmega	<p>No Data</p>	

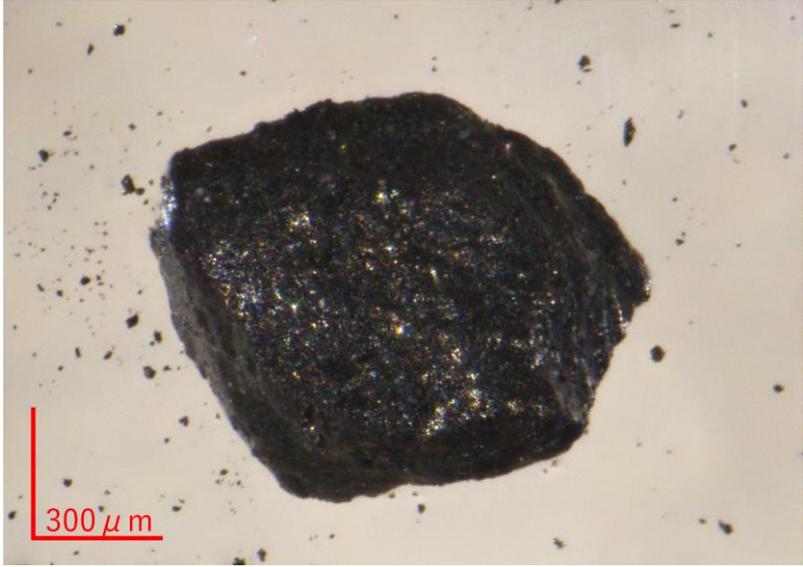
Name	A0070	
Size (μm)	2281	
Weight (mg)	2	
Label	MicrOmega,FTIR	
Microscope		
FTIR	<p>A0070_01_stack400: 21/08/19 10:56:45</p> 	
MicrOmega	<p>No Data</p>	

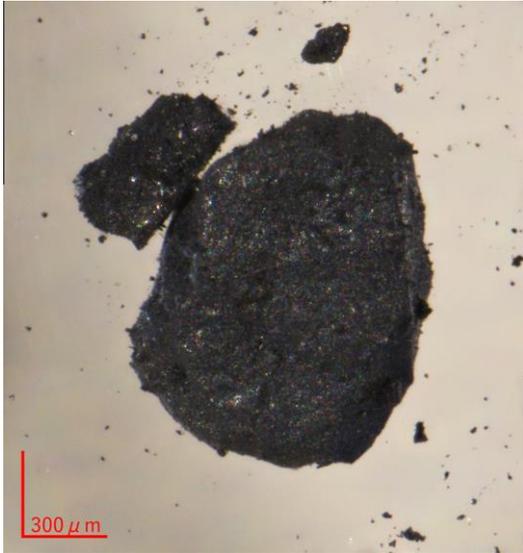
Name	A0071	
Size (μm)	2123	
Weight (mg)	0.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

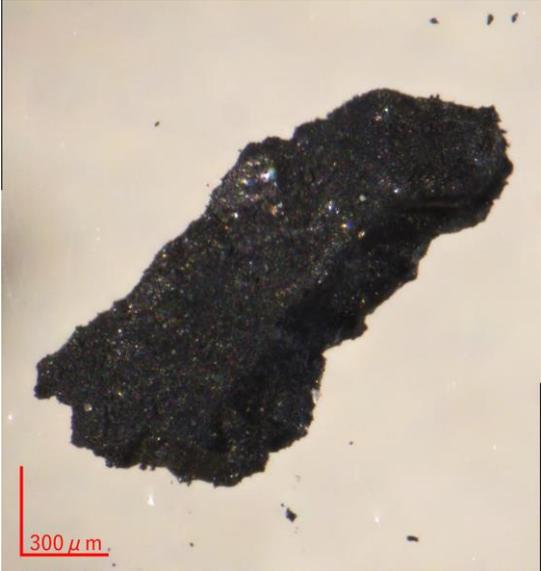
Name	A0072	
Size (μm)	1842	
Weight (mg)	0.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

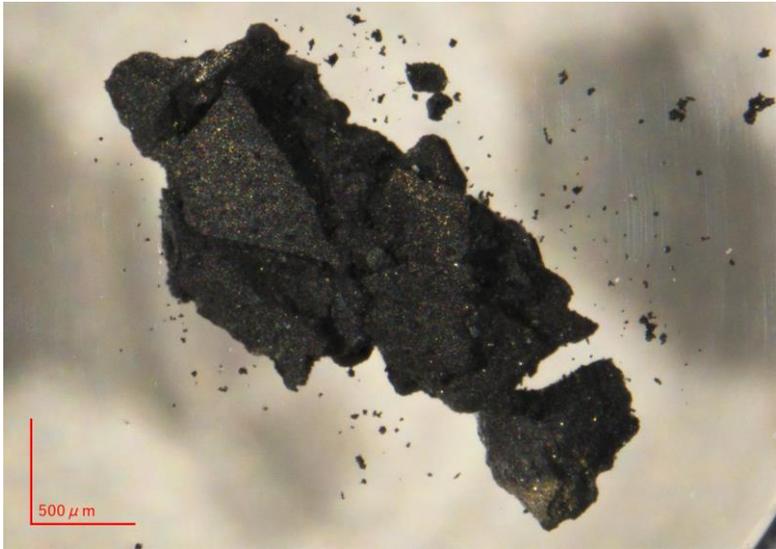
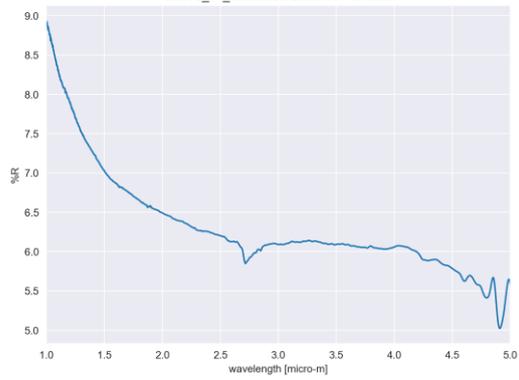
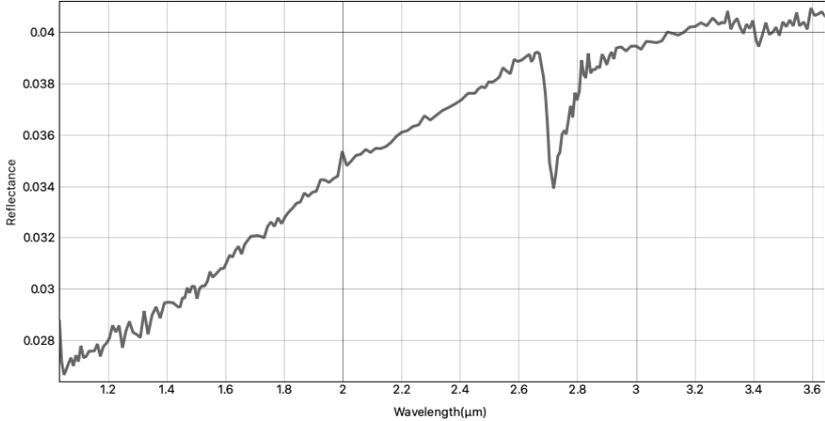
Name	A0073	
Size (μm)	1480	
Weight (mg)	0.8	
Label	MicrOmega,Phase2 Misasa	
Microscope		
FTIR	<p data-bbox="448 1261 571 1294" style="text-align: center;">No Data</p>	
MicrOmega		

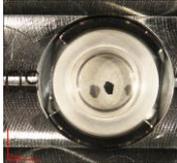
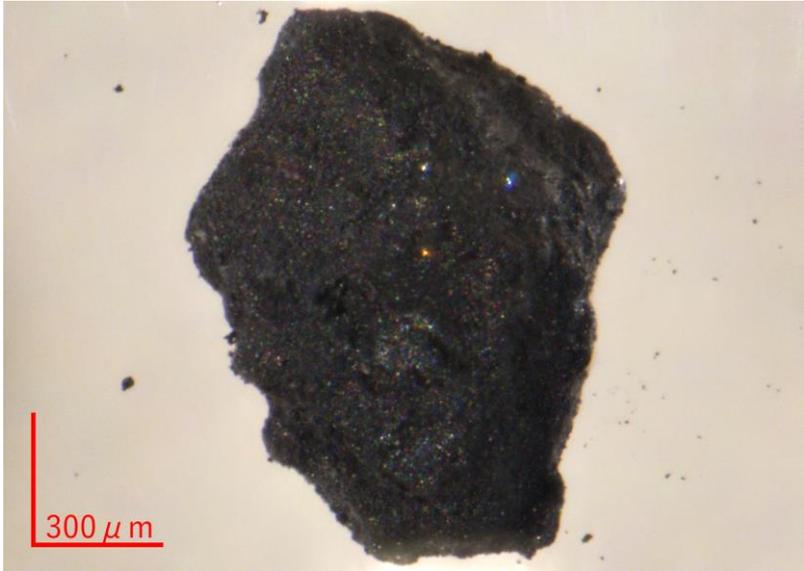
Name	A0074	
Size (μm)	1627	
Weight (mg)	0.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

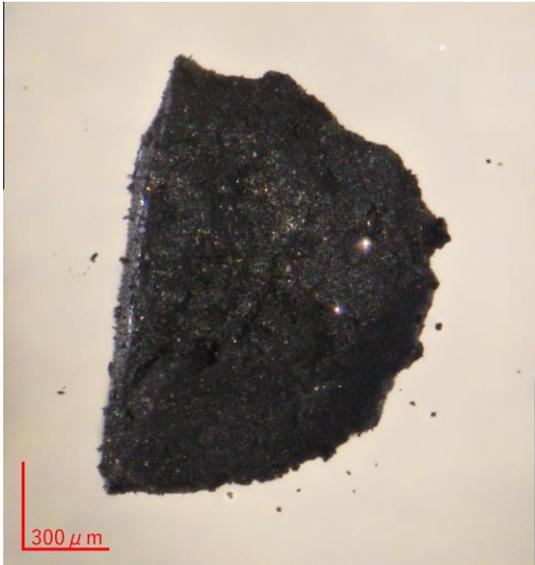
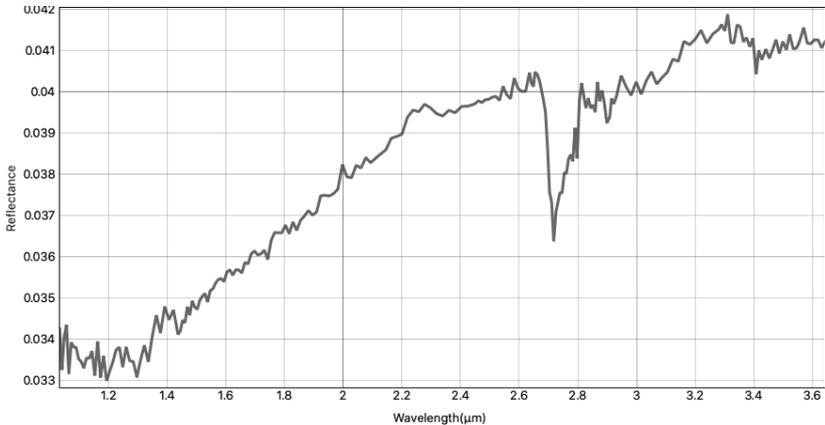
Name	A0075	
Size (μm)	1160	
Weight (mg)	0.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

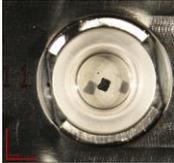
Name	A0076	
Size (μm)	1314	
Weight (mg)	0.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

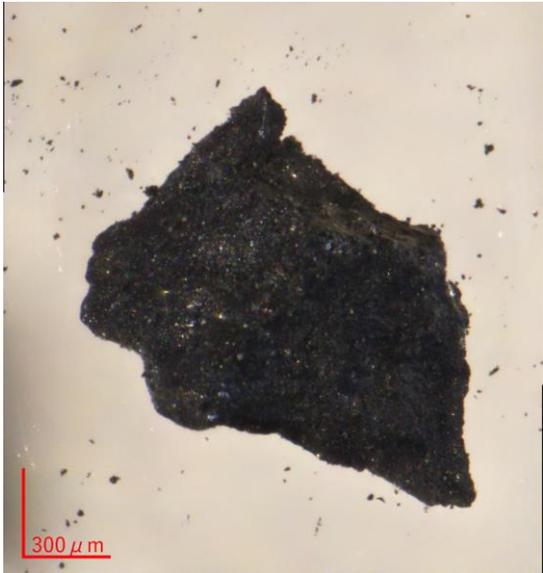
Name	A0077	
Size (μm)	1845	
Weight (mg)	0.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

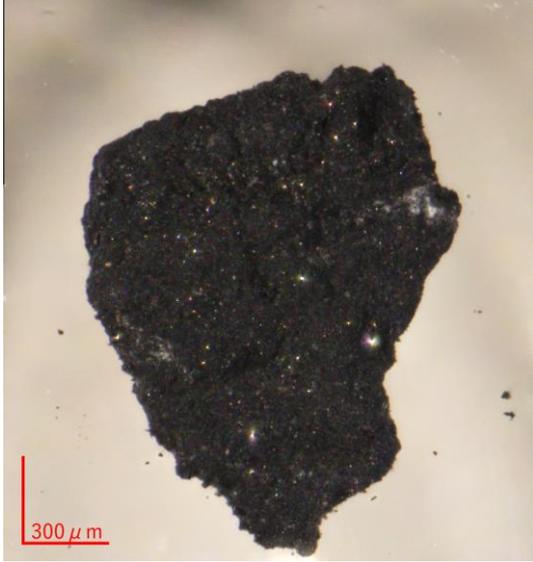
Name	A0078	
Size (μm)	2623	
Weight (mg)	1.8	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

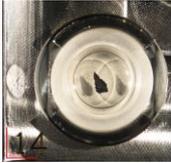
Name	A0079	
Size (μm)	1360	
Weight (mg)	0.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

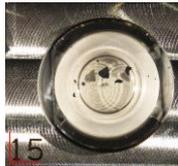
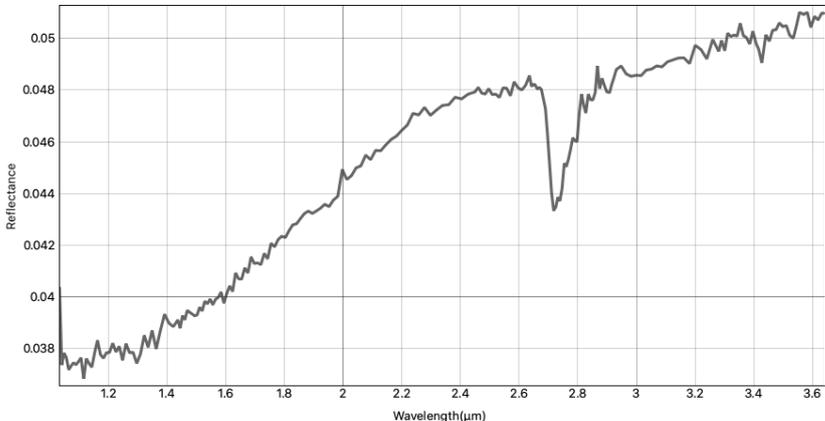
Name	A0080	
Size (μm)	1574	
Weight (mg)	1.4	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

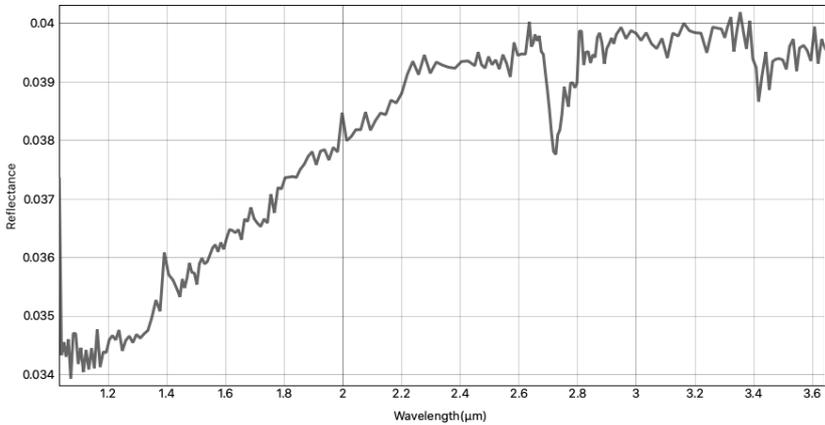
Name	A0081	
Size (μm)	1425	
Weight (mg)	0.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

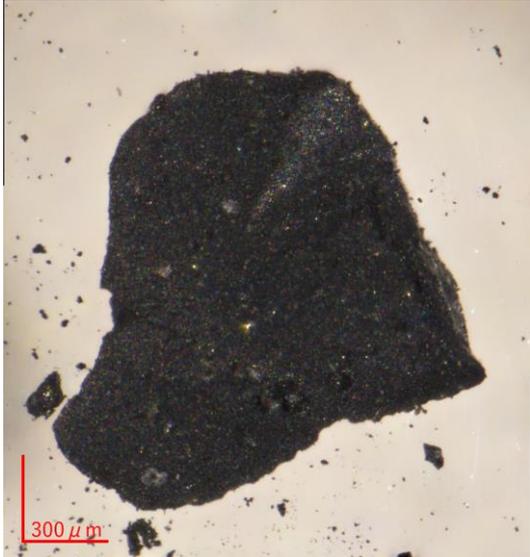
Name	A0082	
Size (μm)	1590	
Weight (mg)	0.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

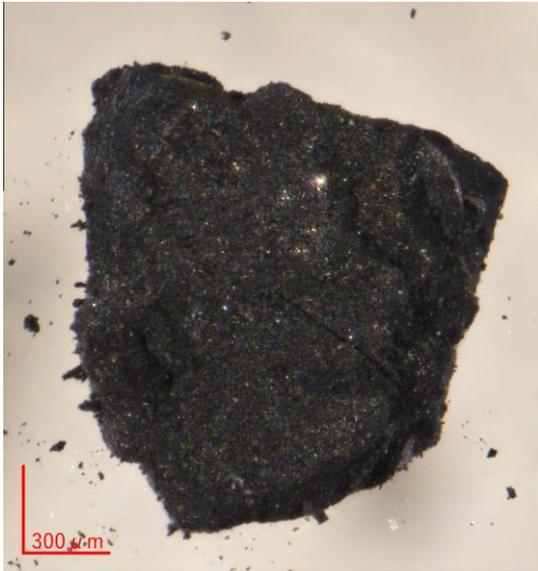
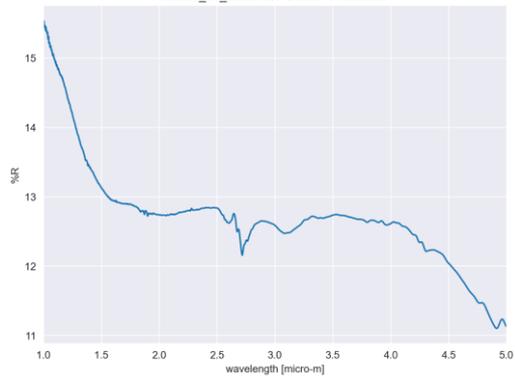
Name	A0083	
Size (μm)	1724	
Weight (mg)	1.2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

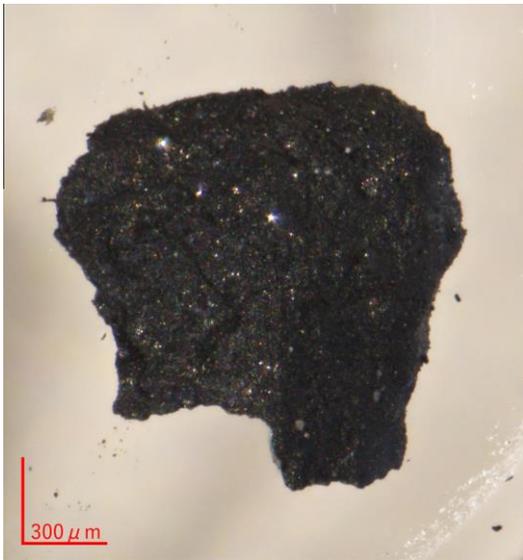
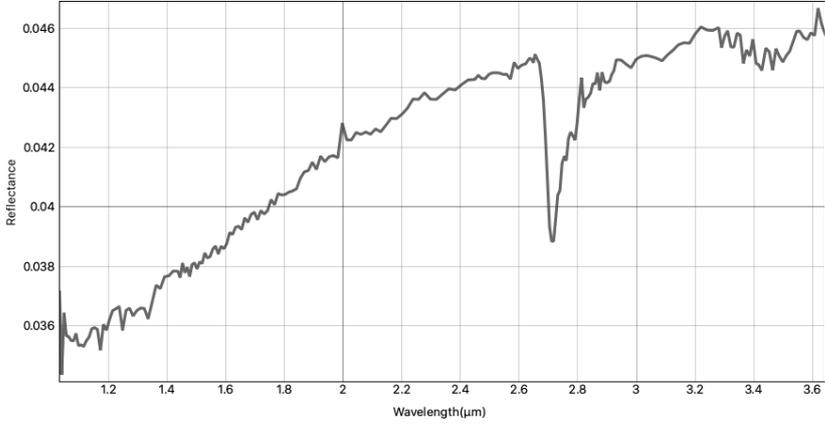
Name	A0084	
Size (μm)	2382	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

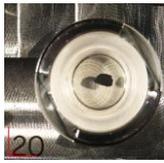
Name	A0085	
Size (μm)	1225	
Weight (mg)	0.7	
Label	MicrOmega,Phase2 Misasa	
Microscope		
FTIR	No Data	
MicrOmega		

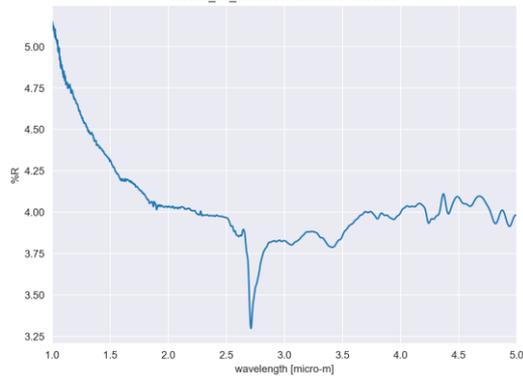
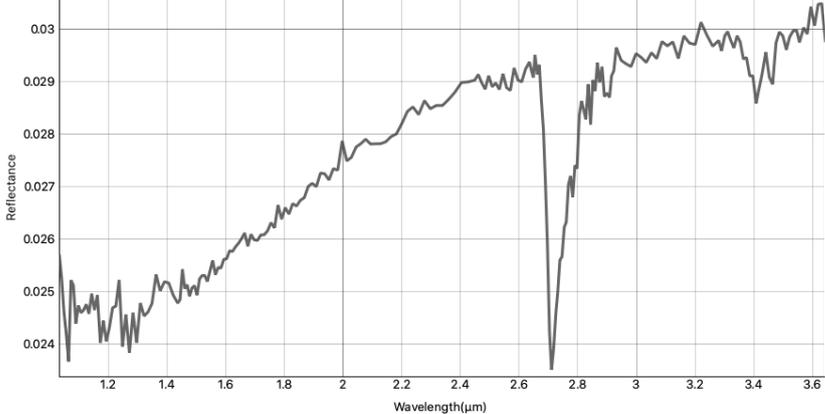
Name	A0086	
Size (μm)	1617	
Weight (mg)	0.9	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

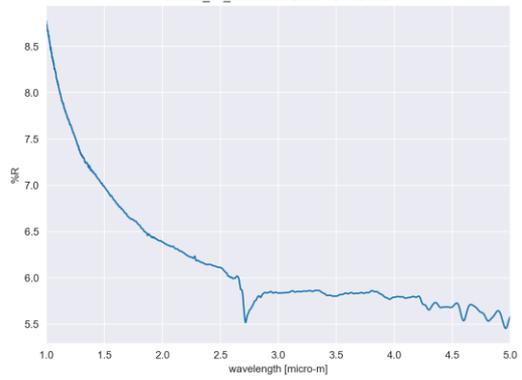
Name	A0087	
Size (μm)	1666	
Weight (mg)	0.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

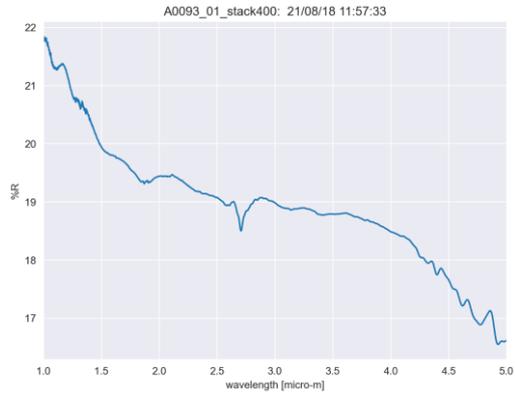
Name	A0088	
Size (μm)	1712	
Weight (mg)	1.7	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

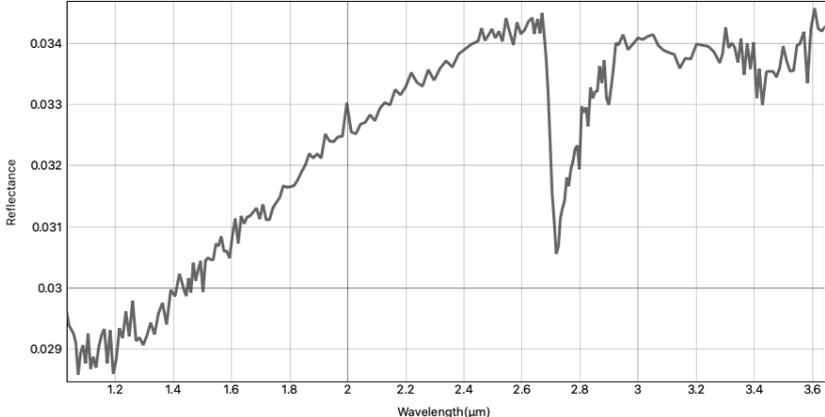
Name	A0089	
Size (μm)	1603	
Weight (mg)	1	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	<p style="text-align: center;">No Data</p>	
MicrOmega	 <p>The graph displays Reflectance on the y-axis (ranging from 0.036 to 0.046) against Wavelength (μm) on the x-axis (ranging from 1.2 to 3.6). The reflectance generally increases with wavelength, with a prominent absorption feature (dip) centered at approximately 2.7 μm, where the reflectance drops to about 0.039.</p>	

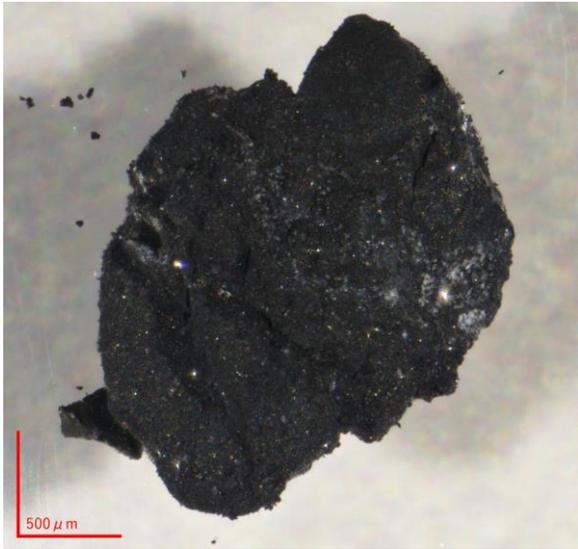
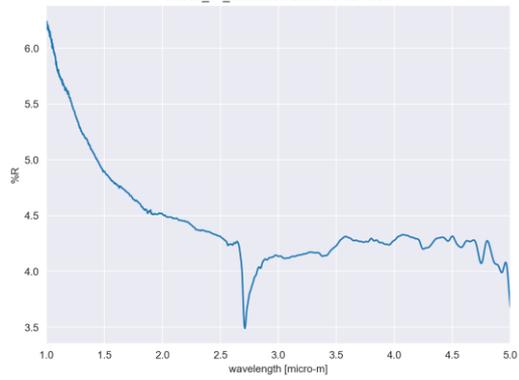
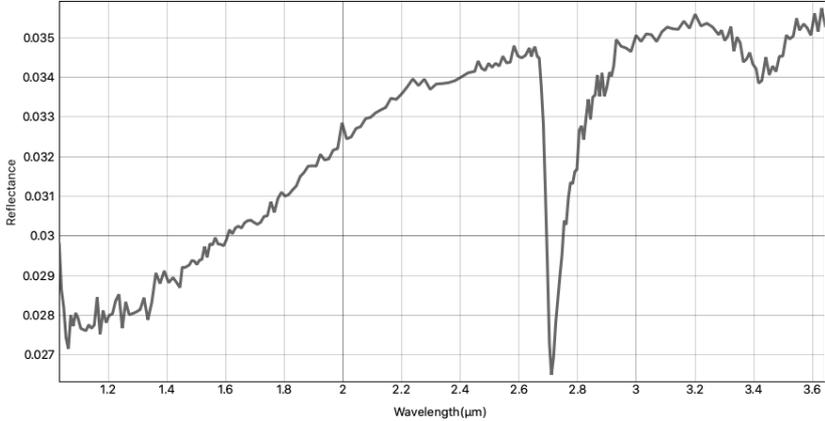
Name	A0090	
Size (μm)	2008	
Weight (mg)	1.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

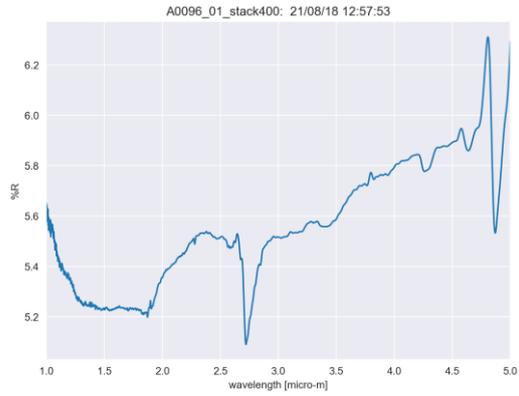
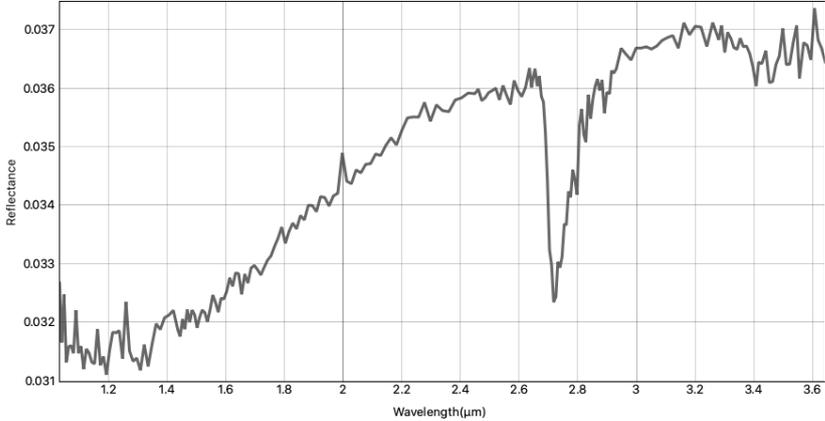
Name	A0091	
Size (μm)	2588	
Weight (mg)	3.5	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

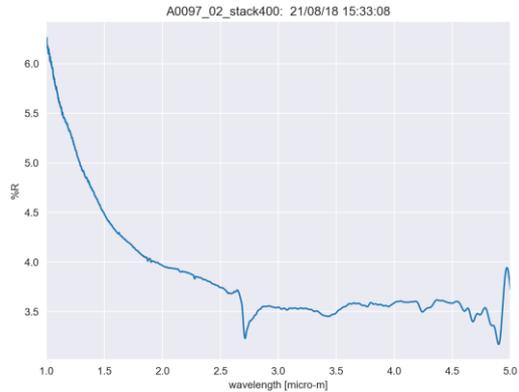
Name	A0092	
Size (μm)	2409	
Weight (mg)	2.6	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

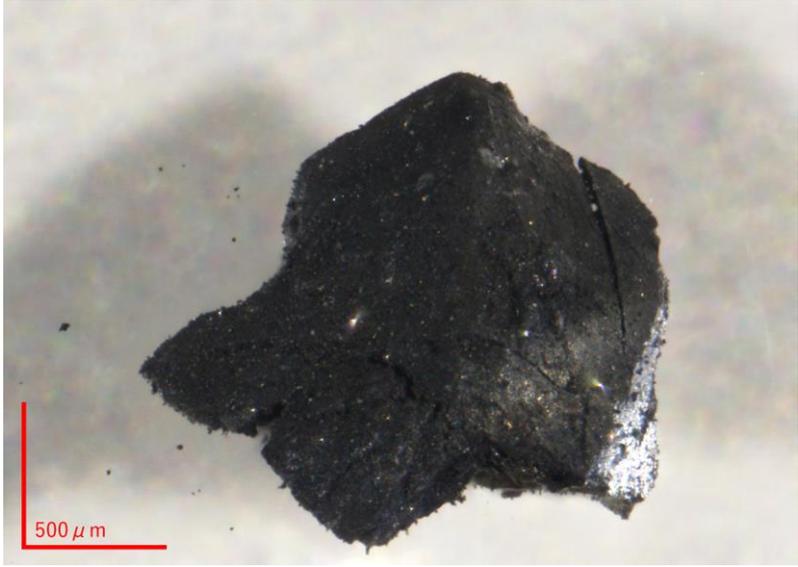
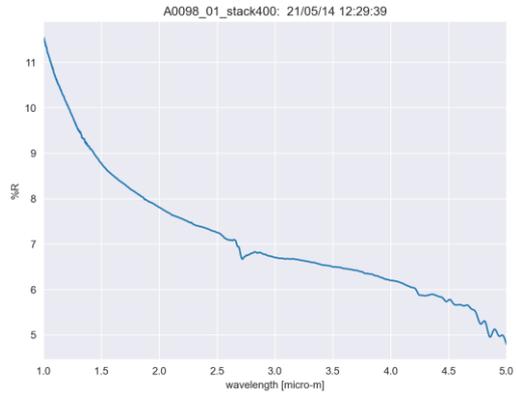
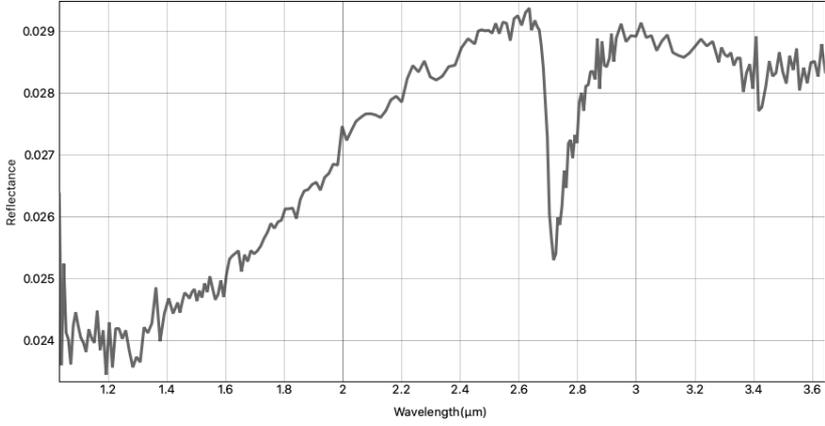
Name	A0093	
Size (μm)	1999	
Weight (mg)	1.6	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

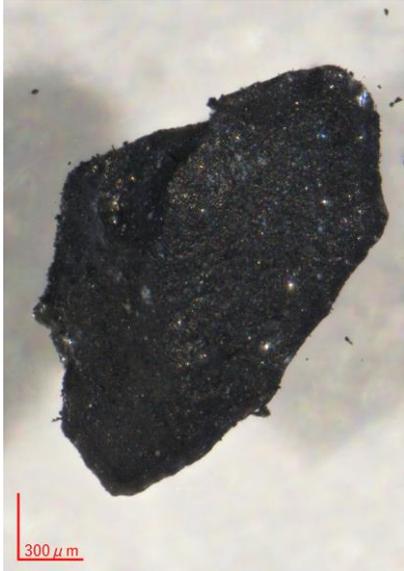
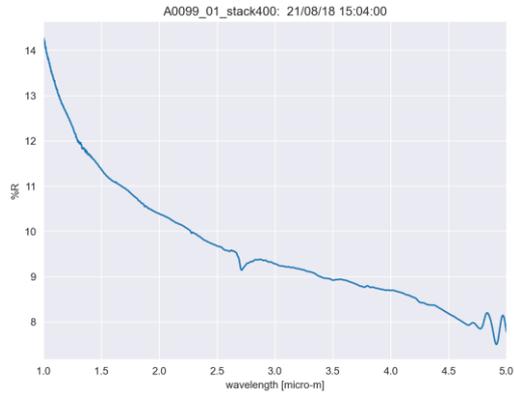
Name	A0094	
Size (μm)	2417	
Weight (mg)	1.8	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

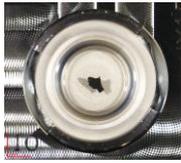
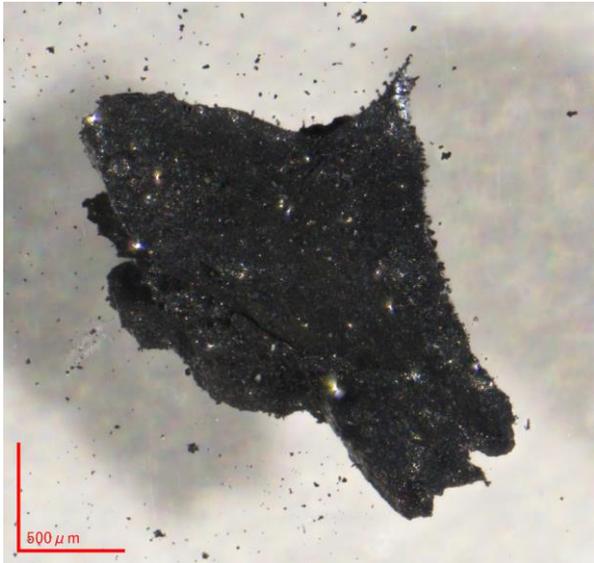
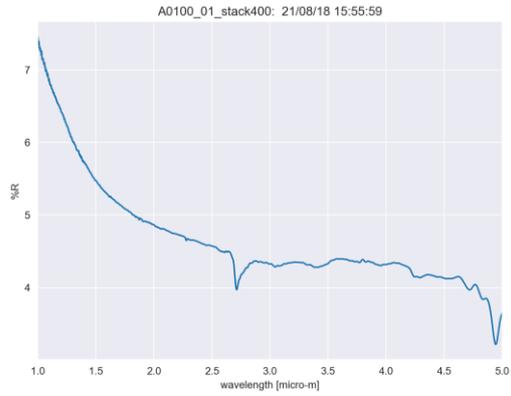
Name	A0095	
Size (μm)	2501	
Weight (mg)	2.6	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR	 <p>A0095_01_stack400: 21/08/18 12:19:55</p>	
MicrOmega		

Name	A0096	
Size (μm)	2959	
Weight (mg)	7.6	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

Name	A0097	
Size (μm)	2258	
Weight (mg)	4.6	
Label	FTIR	
Microscope		
FTIR	 <p>A0097_02_stack400: 21/08/18 15:33:08</p>	
MicrOmega	No Data	

Name	A0098	
Size (μm)	1868	
Weight (mg)	1.9	
Label	MicrOmega, FTIR, Phase2 Kochi	
Microscope		
FTIR		
MicrOmega		

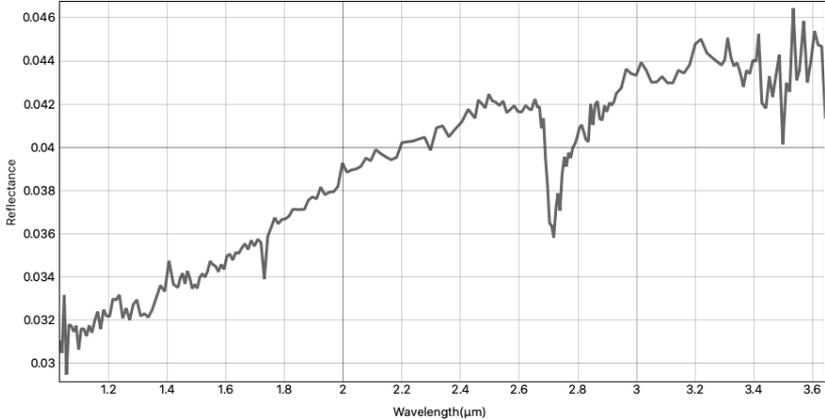
Name	A0099	
Size (μm)	2211	
Weight (mg)	1.8	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p style="text-align: center;">No Data</p>	

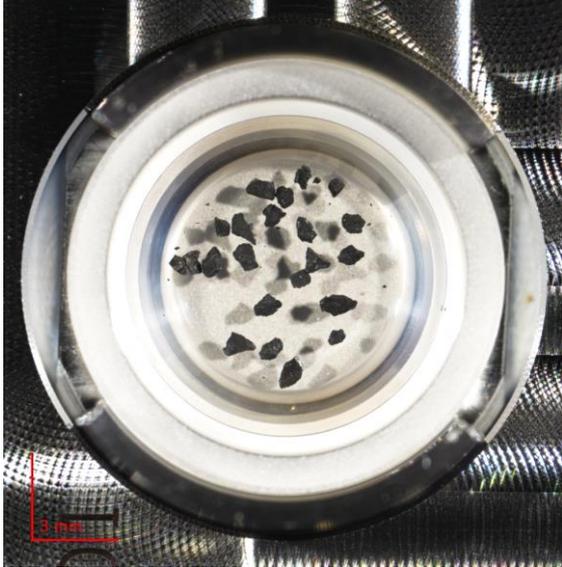
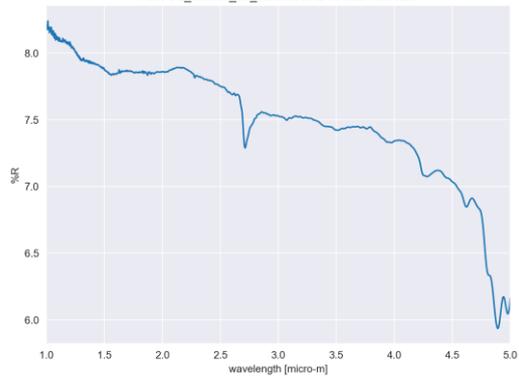
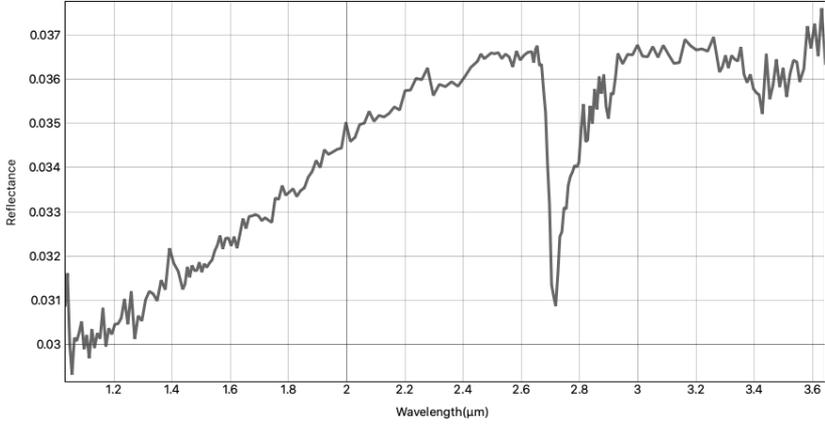
Name	A0100	
Size (μm)	2551	
Weight (mg)	2.1	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

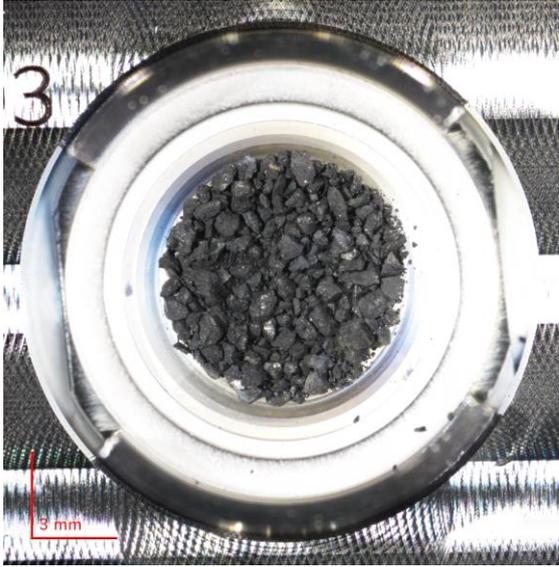
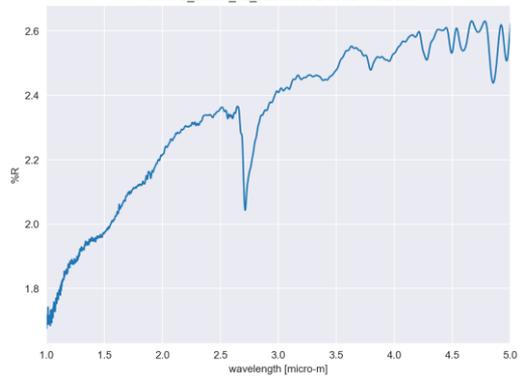
Name	A0101	
Size (μm)	3068	
Weight (mg)	4.5	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

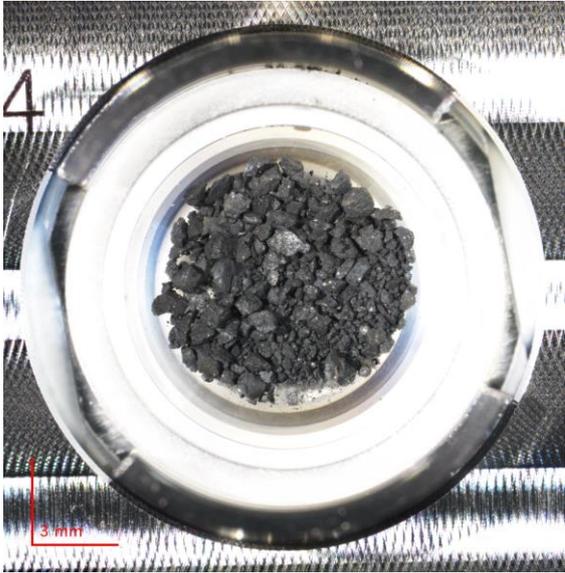
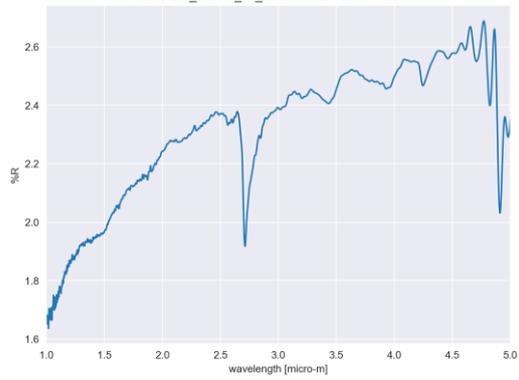
Name	A0102	
Size (μm)	2782	
Weight (mg)	4.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

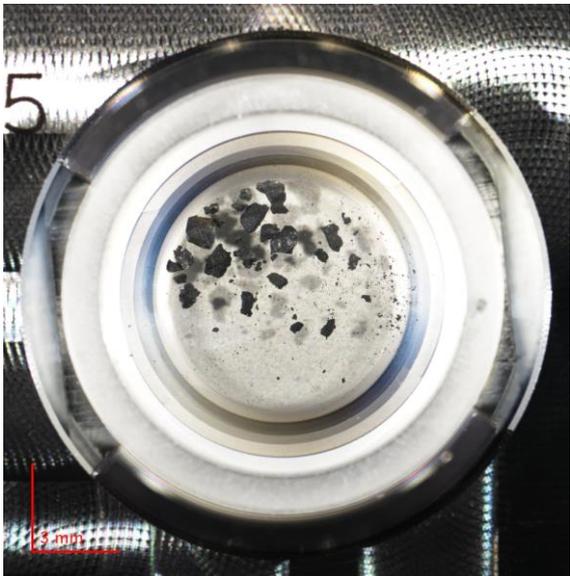
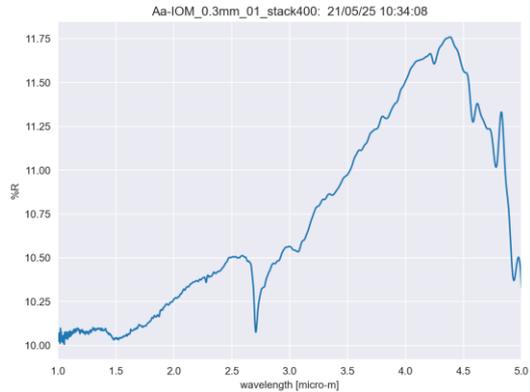
Name	A0103	
Size (μm)	2653	
Weight (mg)	4.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0104(Aa-MPF)
Size (μm)	
Weight (mg)	0.3
Label	MicrOmega,Initial Analysis
Microscope	
FTIR	No Data
MicrOmega	

Name	A0105(Aa-VOL)	
Size (μm)		
Weight (mg)	4	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR	<p data-bbox="587 1077 863 1099">Aa-VOL_0.3mm_01_stack400: 21/05/25 11:04:24</p> 	
MicrOmega		

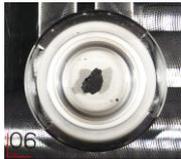
Name	A0106(Aa-MPC)
Size (μm)	
Weight (mg)	38.4
Label	MicrOmega,FTIR,Initial Analysis
Microscope	
FTIR	<p>Aa-MPC_03mm_02_stack400: 21/05/24 11:24:50</p> 
MicrOmega	<p>No Data</p>

Name	A0107(Aa-Chem)	
Size (μm)		
Weight (mg)	31	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

Name	A0108(Aa-IOM)	
Size (μm)		
Weight (mg)	3.5	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega	No Data	

Name	A0109	
Size (μm)	2240	
Weight (mg)	4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0110	
Size (μm)	3268	
Weight (mg)	7.9	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0111	
Size (μm)	3686	
Weight (mg)	8.5	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0112	
Size (μm)	3046	
Weight (mg)	5.1	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0113	
Size (μm)	3775	
Weight (mg)	6.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0114	
Size (μm)	2390	
Weight (mg)	5.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0115	
Size (μm)	2978	
Weight (mg)	7.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0116	
Size (μm)	2204	
Weight (mg)	2.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

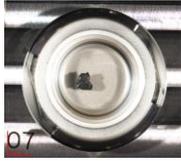
Name	A0117	
Size (μm)	3020	
Weight (mg)	4.2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0118	
Size (μm)	2588	
Weight (mg)	4.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

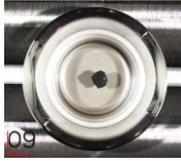
Name	A0119	
Size (μm)	2657	
Weight (mg)	4.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

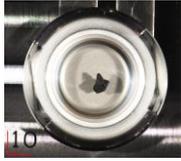
Name	A0120	
Size (μm)	2376	
Weight (mg)	4.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0121	
Size (μm)	2723	
Weight (mg)	3.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0122	
Size (μm)	2498	
Weight (mg)	3.2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0123	
Size (μm)	2808	
Weight (mg)	4.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0124	
Size (μm)	2250	
Weight (mg)	4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0125	
Size (μm)	2588	
Weight (mg)	4.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0126	
Size (μm)	1876	
Weight (mg)	2.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

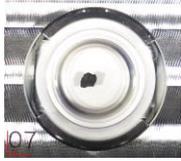
Name	A0127	
Size (μm)	2584	
Weight (mg)	3.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0128	
Size (μm)	2355	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0129	
Size (μm)	1320	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0130	
Size (μm)	1770	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0131	
Size (μm)	2451	
Weight (mg)	3.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0132	
Size (μm)	2412	
Weight (mg)	2.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0133	
Size (μm)	2607	
Weight (mg)	4.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0134	
Size (μm)	2379	
Weight (mg)	1.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0135	
Size (μm)	2803	
Weight (mg)	3.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0136	
Size (μm)	2637	
Weight (mg)	4.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0137	
Size (μm)	2375	
Weight (mg)	2.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0138	
Size (μm)	2269	
Weight (mg)	2.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0139	
Size (μm)	3227	
Weight (mg)	2.1	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0140	
Size (μm)	2507	
Weight (mg)	2.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

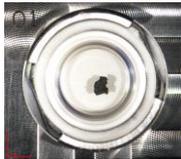
Name	A0141	
Size (μm)	2577	
Weight (mg)	3.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0142	
Size (μm)	2729	
Weight (mg)	1.6	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0143	
Size (μm)	4328	
Weight (mg)	8.2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0144	
Size (μm)	2153	
Weight (mg)	4.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0145	
Size (μm)	2461	
Weight (mg)	3.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0146	
Size (μm)	2614	
Weight (mg)	3.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0147	
Size (μm)	2355	
Weight (mg)	3.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0148	
Size (μm)	2047	
Weight (mg)	3.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0149	
Size (μm)	2039	
Weight (mg)	1.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0150	
Size (μm)	2047	
Weight (mg)	2.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

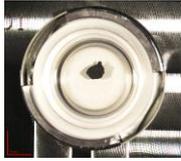
Name	A0151	
Size (μm)	2768	
Weight (mg)	3.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0152	
Size (μm)	2030	
Weight (mg)	2.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0153	
Size (μm)	2256	
Weight (mg)	4.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0154	
Size (μm)	2183	
Weight (mg)	3.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0155	
Size (μm)	2193	
Weight (mg)	1.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

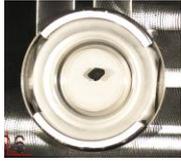
Name	A0156	
Size (μm)	2466	
Weight (mg)	3.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

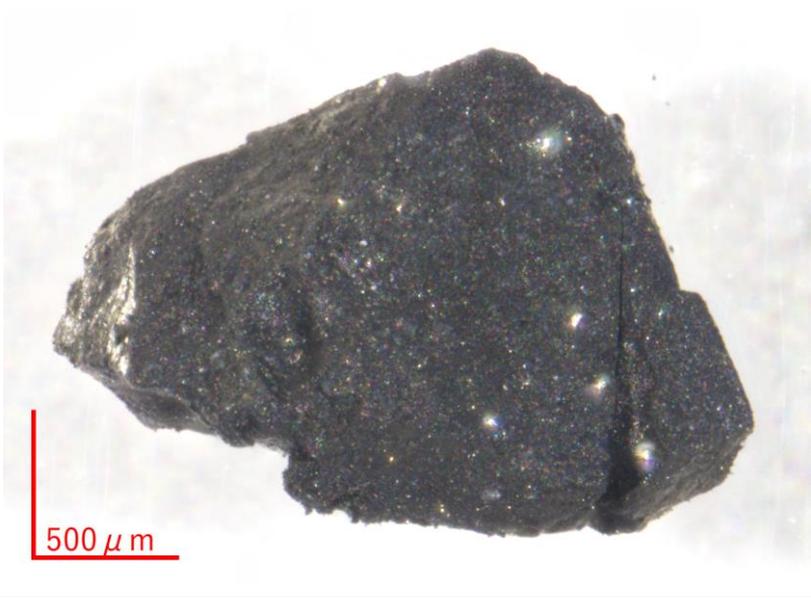
Name	A0157	
Size (μm)	1959	
Weight (mg)	2.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0158	
Size (μm)	1947	
Weight (mg)	2.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

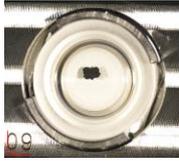
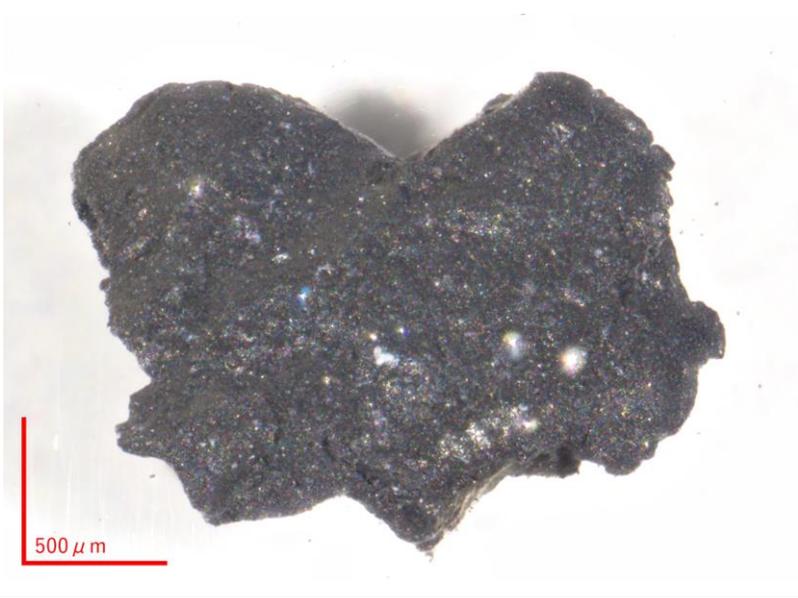
Name	A0159	
Size (μm)	2844	
Weight (mg)	3.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

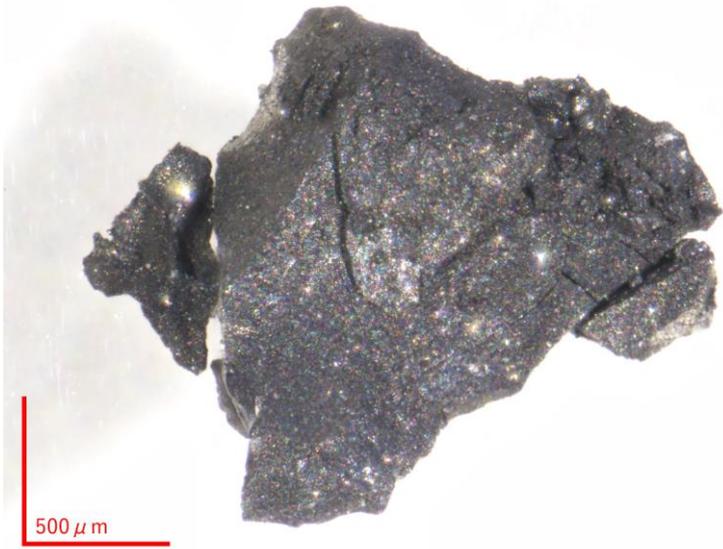
Name	A0160	
Size (μm)	1832	
Weight (mg)	2.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

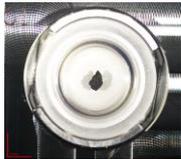
Name	A0161	
Size (μm)	2271	
Weight (mg)	2.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

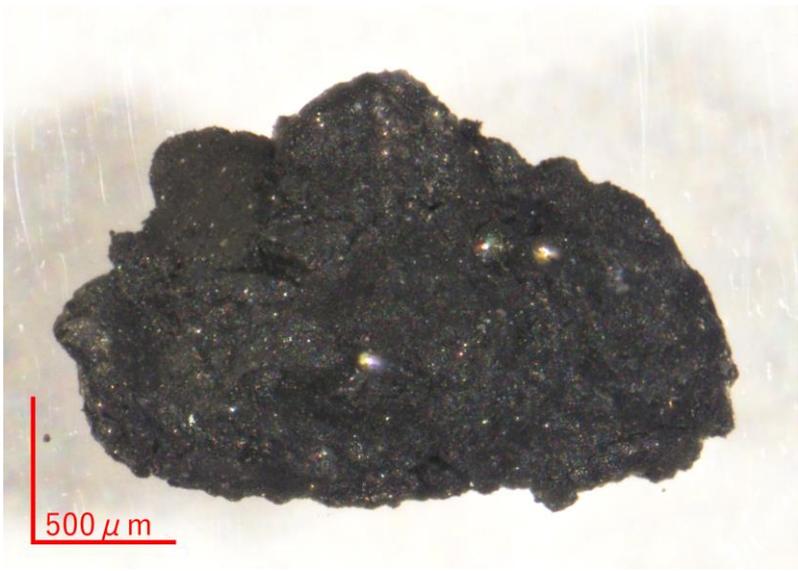
Name	A0162	
Size (μm)	2405	
Weight (mg)	3.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0163	
Size (μm)	2281	
Weight (mg)	1.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

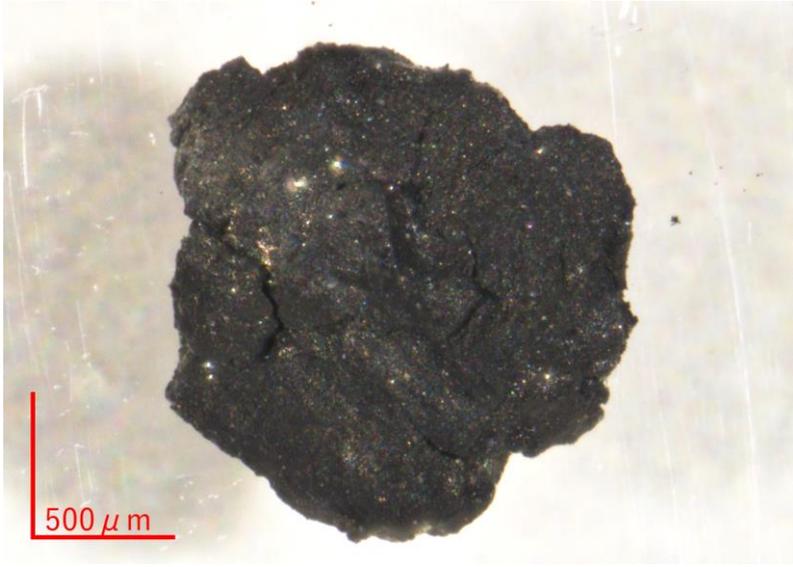
Name	A0164	
Size (μm)	2340	
Weight (mg)	2.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0165	
Size (μm)	2160	
Weight (mg)	1.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0166	
Size (μm)	2553	
Weight (mg)	2.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

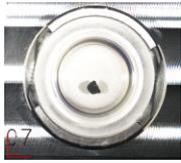
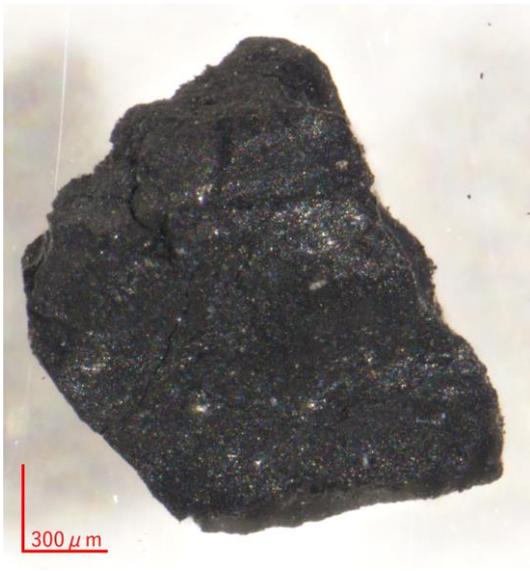
Name	A0167	
Size (μm)	2381	
Weight (mg)	2.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

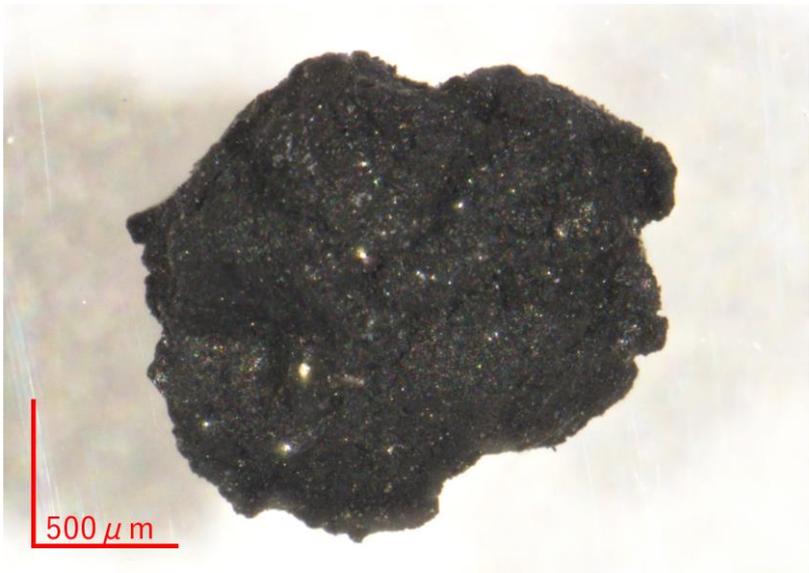
Name	A0168	
Size (μm)	2012	
Weight (mg)	2.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0169	
Size (μm)	1835	
Weight (mg)	2.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0170	
Size (μm)	2094	
Weight (mg)	1.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

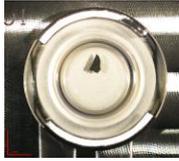
Name	A0171	
Size (μm)	1964	
Weight (mg)	2.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0172	
Size (μm)	1842	
Weight (mg)	2.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0173	
Size (μm)	1963	
Weight (mg)	2.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0174	
Size (μm)	2350	
Weight (mg)	3.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

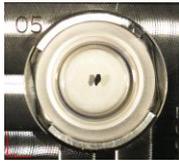
Name	A0175	
Size (μm)	2334	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0176	
Size (μm)	2447	
Weight (mg)	1.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0177	
Size (μm)	1517	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0178	
Size (μm)	1561	
Weight (mg)	0.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0179	
Size (μm)	1465	
Weight (mg)	1.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

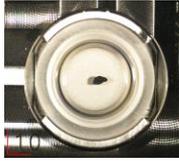
Name	A0180	
Size (μm)	1592	
Weight (mg)	0.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0181	
Size (μm)	1958	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0182	
Size (μm)	1944	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0183	
Size (μm)	1455	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

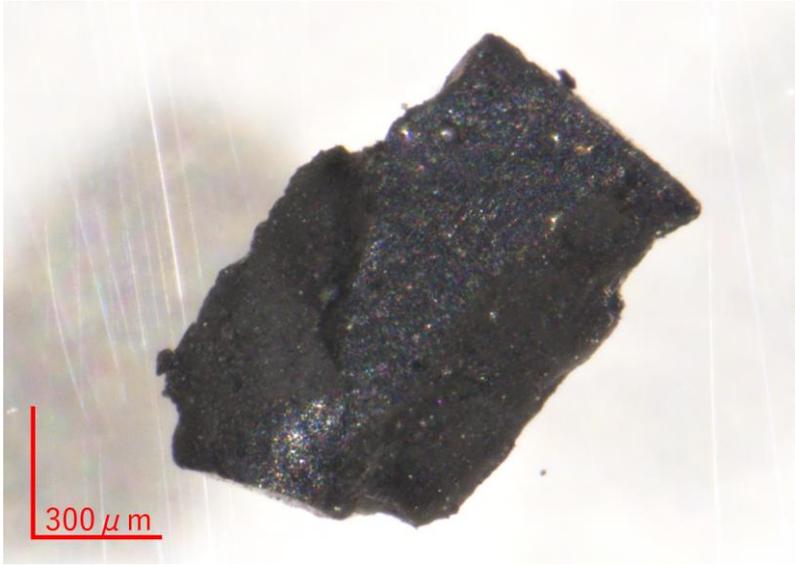
Name	A0184	
Size (μm)	1313	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0185	
Size (μm)	1947	
Weight (mg)	0.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0186	
Size (μm)	1394	
Weight (mg)	0.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0187	
Size (μm)	1792	
Weight (mg)	0.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0188	
Size (μm)	1404	
Weight (mg)	0.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

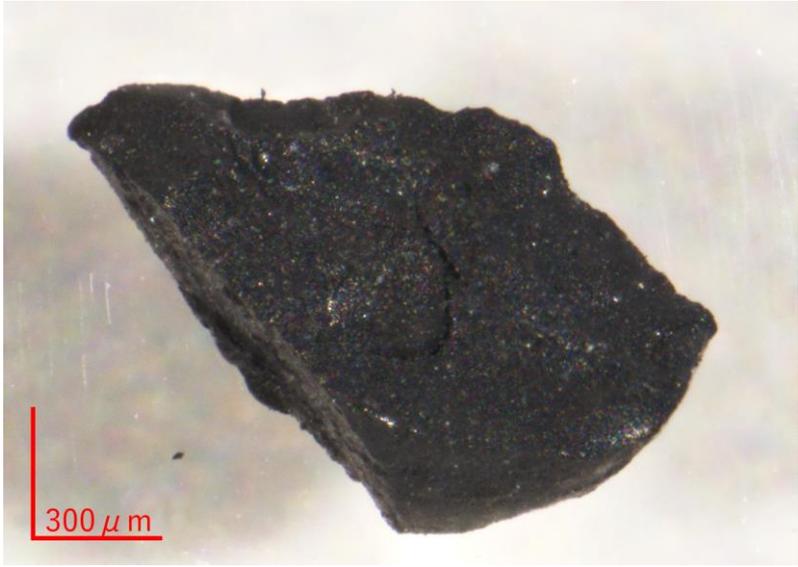
Name	A0189	
Size (μm)	1345	
Weight (mg)	0.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0190	
Size (μm)	1366	
Weight (mg)	0.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

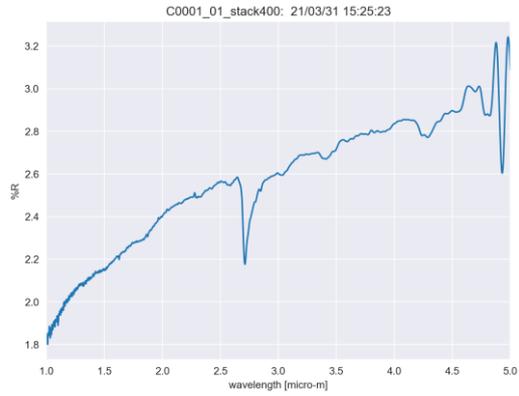
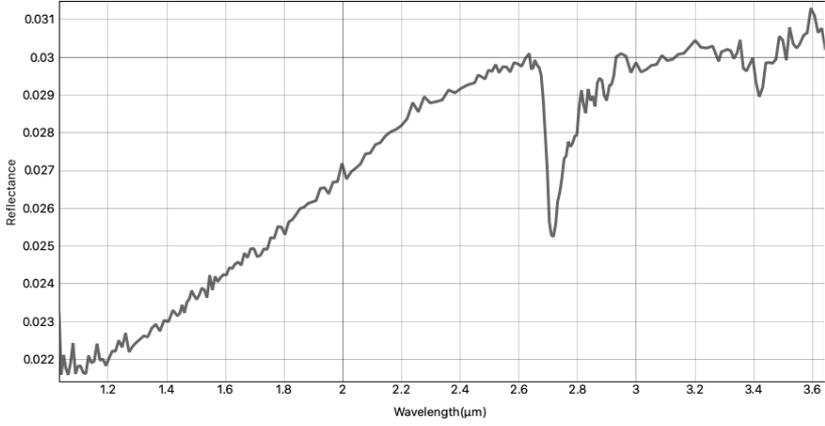
Name	A0191	
Size (μm)	1638	
Weight (mg)	0.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

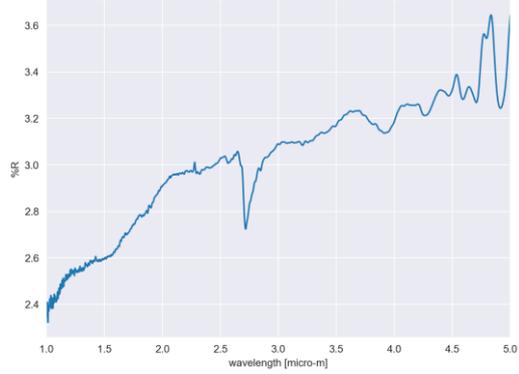
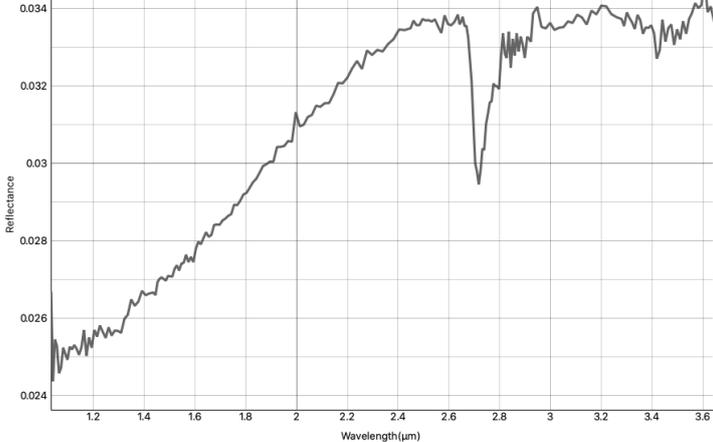
Name	A0192	
Size (μm)	1807	
Weight (mg)	0.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

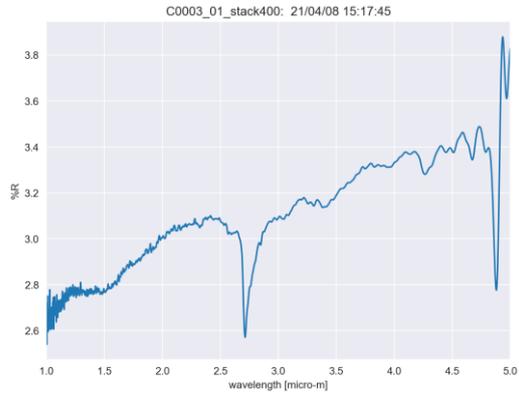
Name	A0193	
Size (μm)	1330	
Weight (mg)	0.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	A0194	
Size (μm)	1558	
Weight (mg)	0.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

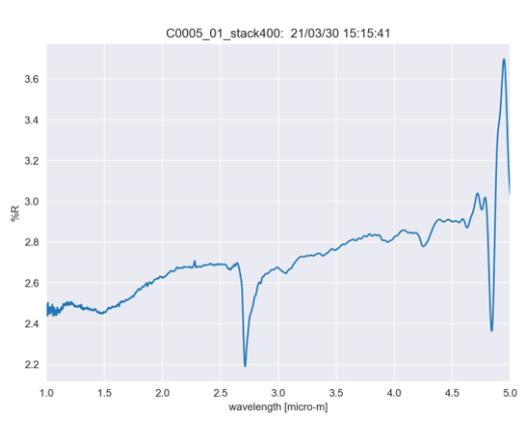
Name	A0195	
Size (μm)	1770	
Weight (mg)	0.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

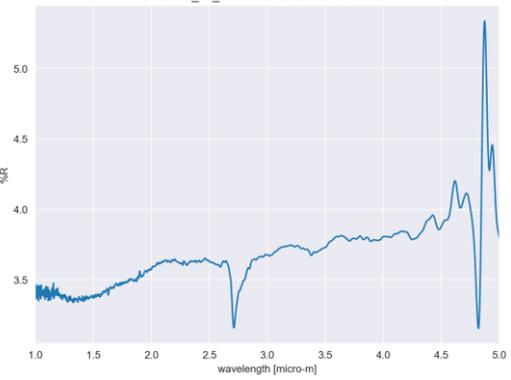
Name	C0001	
Size (μm)	7359	
Weight (mg)	100	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR	 <p>C0001_01_stack400: 21/03/31 15:25:23</p>	
MicrOmega		

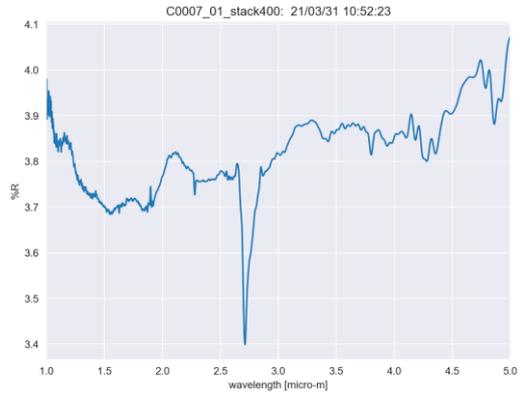
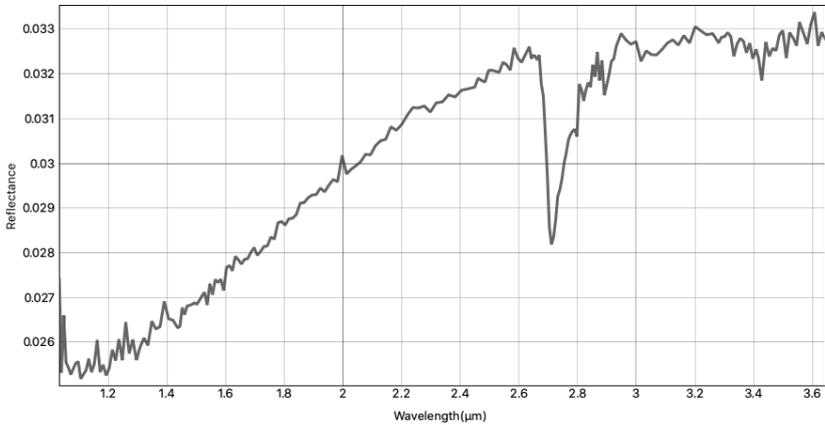
Name	C0002	
Size (μm)	8648	
Weight (mg)	93.5	
Label	MicrOmega, FTIR, Initial Analysis	
Microscope		
FTIR	<p data-bbox="612 1077 839 1099">C0002_01_stack400: 21/04/08 13:58:35</p> 	
MicrOmega		

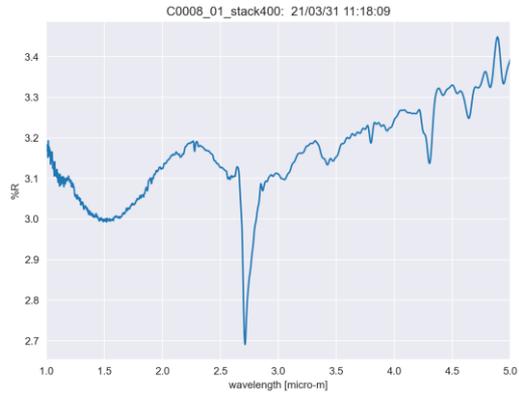
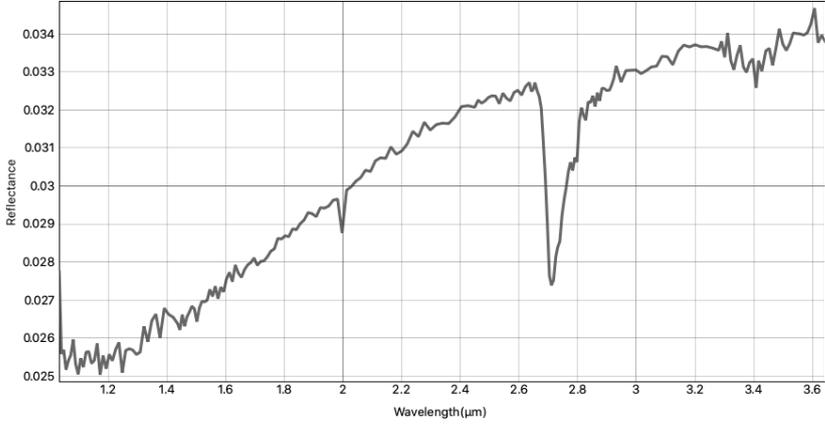
Name	C0003	
Size (μm)	4889	
Weight (mg)	33.2	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

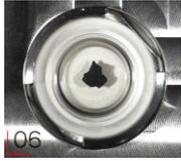
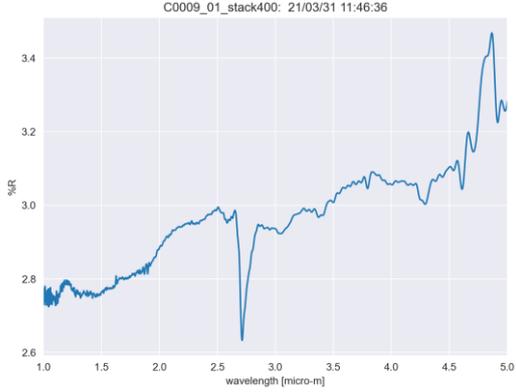
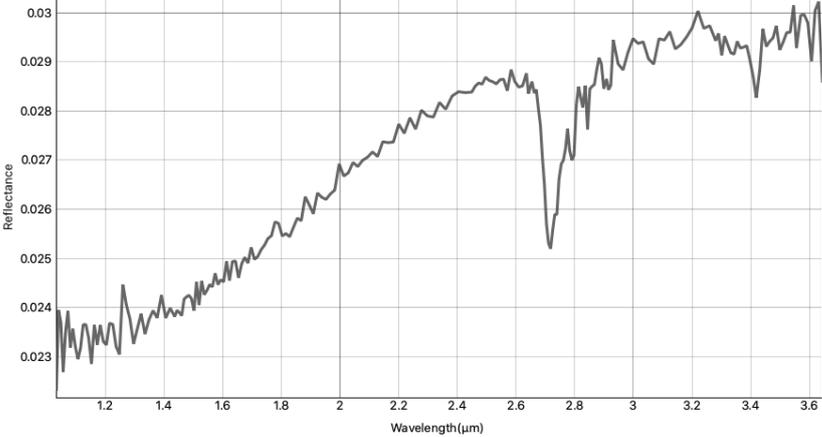
Name	C0004	
Size (μm)	5692	
Weight (mg)	36	
Label	MicrOmega,FTIR	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

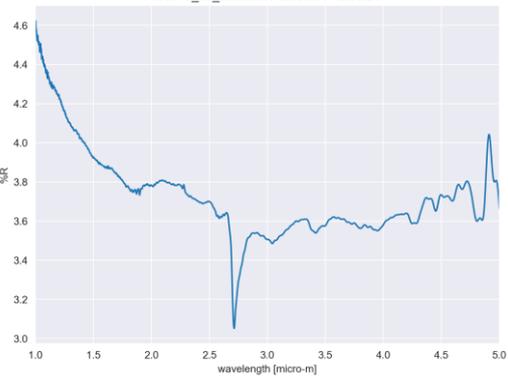
Name	C0005	
Size (μm)	5333	
Weight (mg)	20.8	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

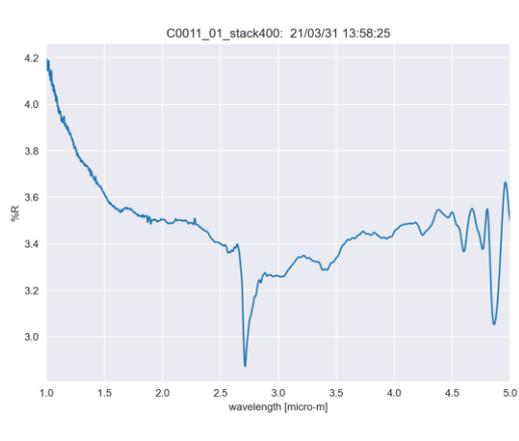
Name	C0006	
Size (μm)	4523	
Weight (mg)	16.3	
Label	MicrOmega, FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1711 571 1744">No Data</p>	

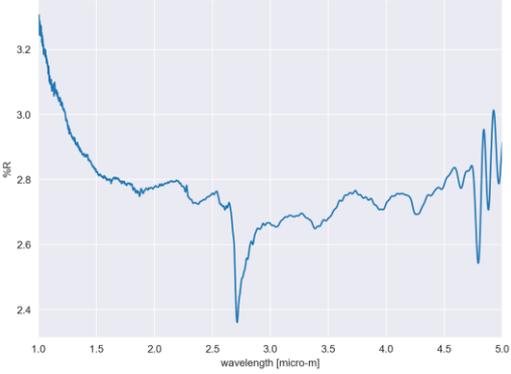
Name	C0007	
Size (μm)	4168	
Weight (mg)	13.4	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

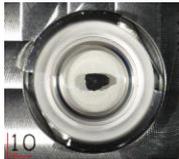
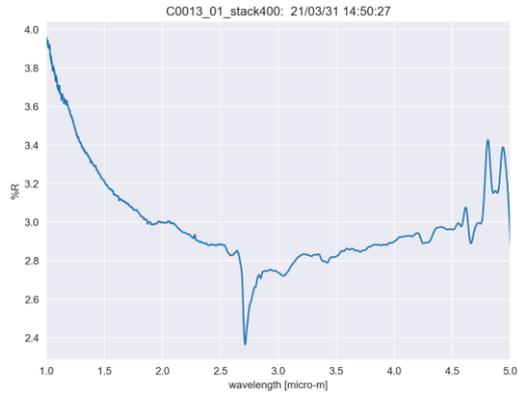
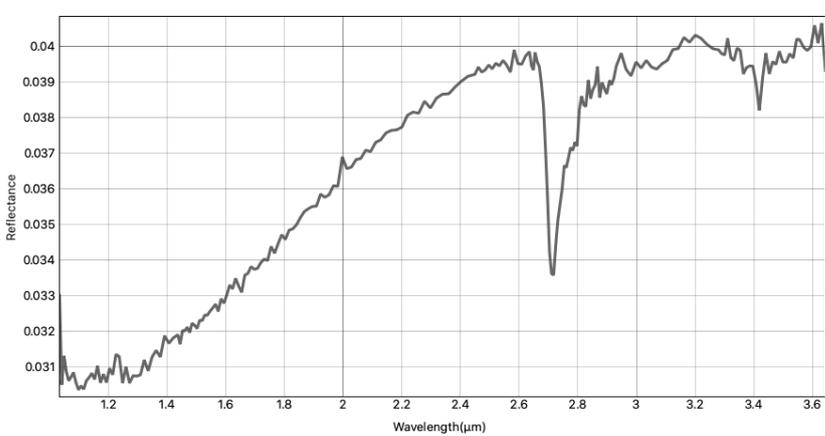
Name	C0008	
Size (μm)	3710	
Weight (mg)	10	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

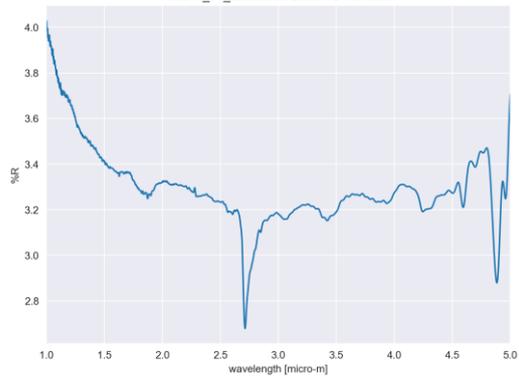
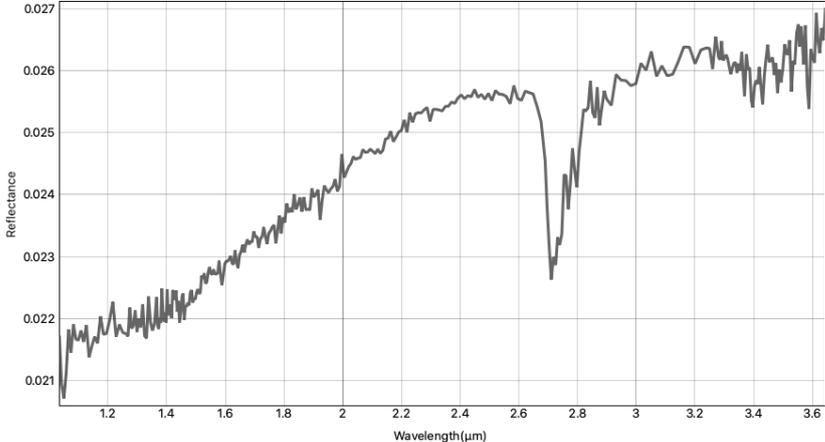
Name	C0009	
Size (μm)	3520	
Weight (mg)	11.1	
Label	MicrOmega,FTIR,Phase2 Kochi	
Microscope		
FTIR		
MicrOmega		

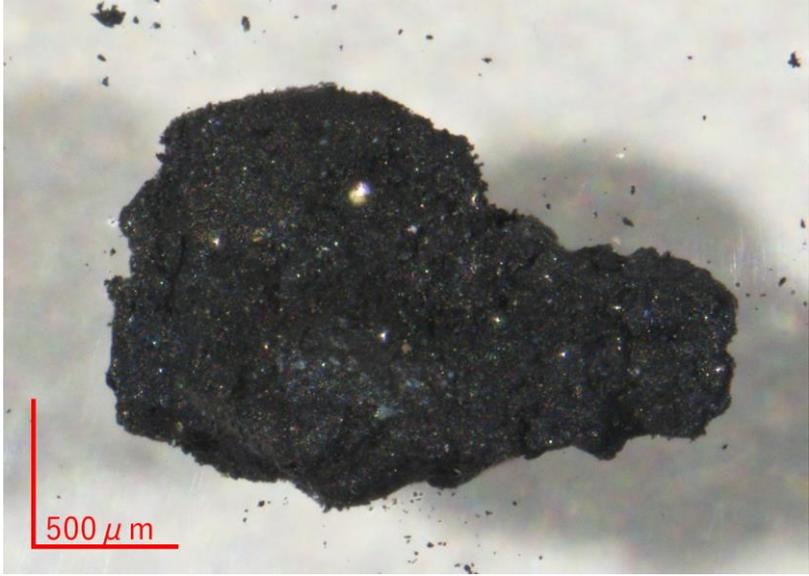
Name	C0010	
Size (μm)	3509	
Weight (mg)	6.3	
Label	MicrOmega,FTIR	
Microscope		
FTIR	 <p>C0010_01_stack400: 21/03/31 12:06:24</p>	
MicrOmega	<p>No Data</p>	

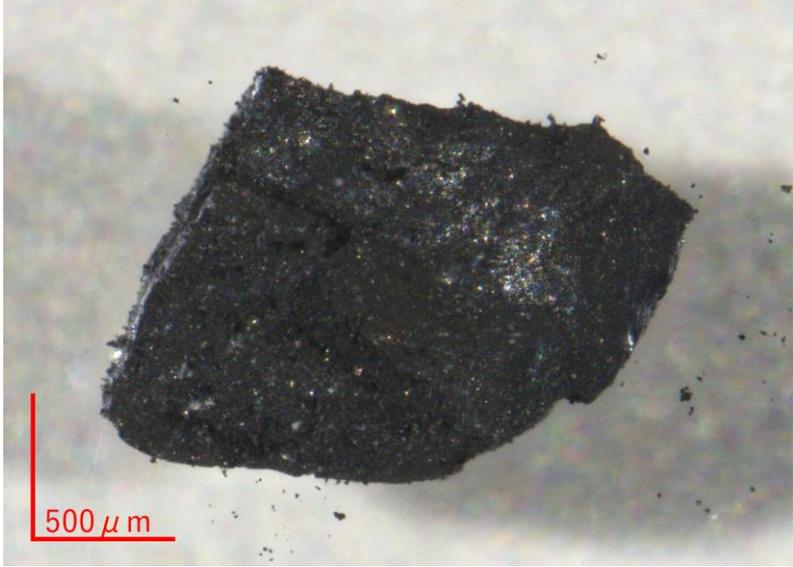
Name	C0011	
Size (μm)	3538	
Weight (mg)	9.3	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

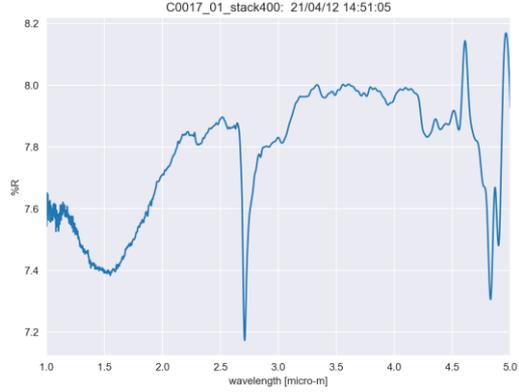
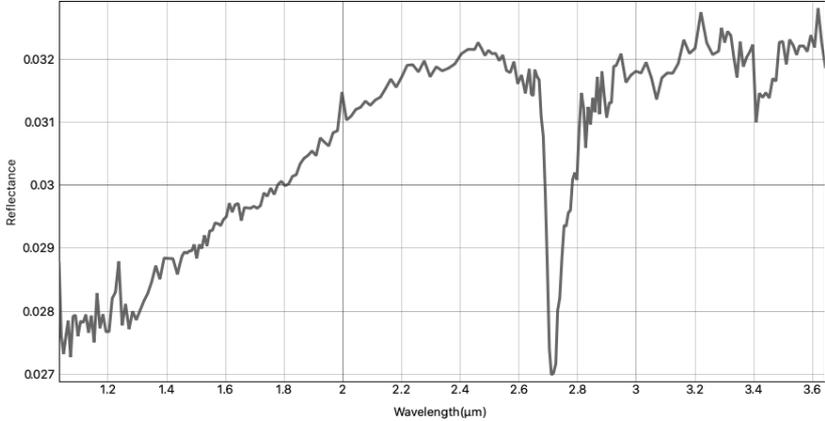
Name	C0012	
Size (μm)	3487	
Weight (mg)	13.6	
Label	MicrOmega,FTIR	
Microscope		
FTIR	<p data-bbox="612 1077 839 1099">C0012_01_stack400: 21/03/31 14:23:53</p> 	
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

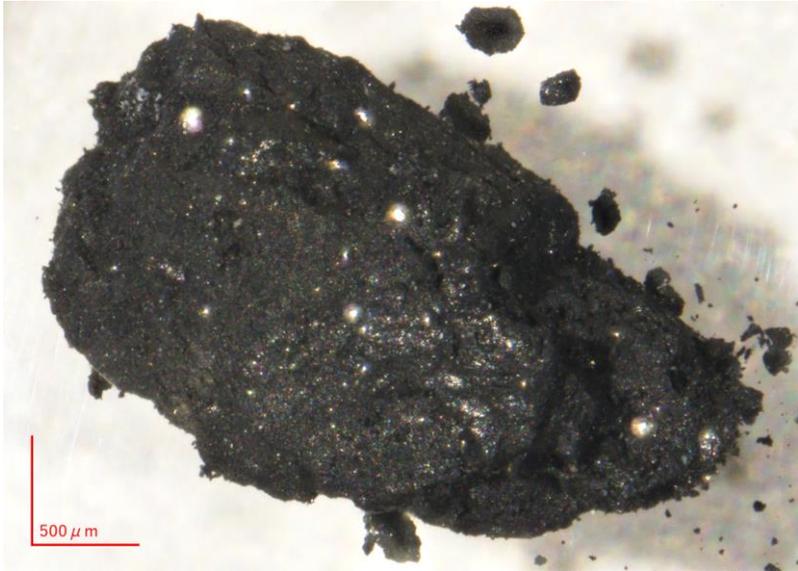
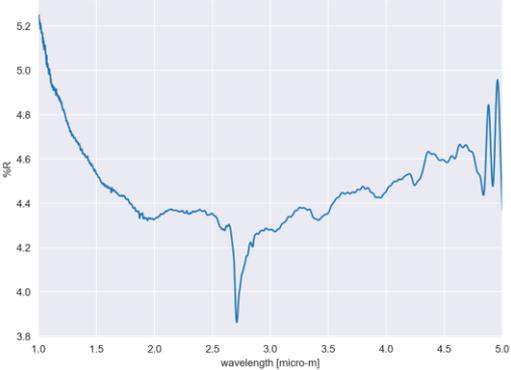
Name	C0013	
Size (μm)	3196	
Weight (mg)	6.7	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

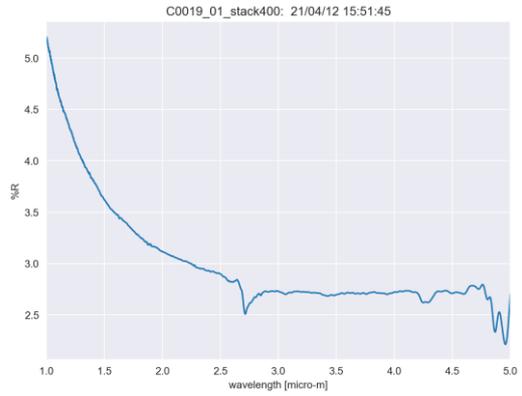
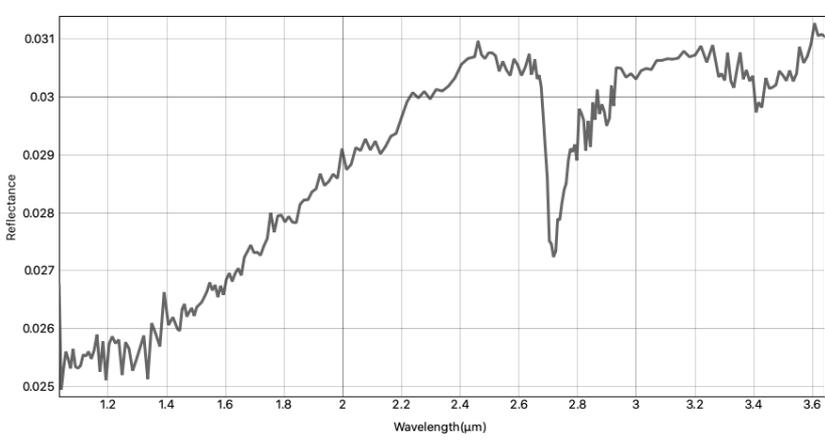
Name	C0014	
Size (μm)	3527	
Weight (mg)	6.8	
Label	MicrOmega, FTIR, Phase2 Kochi	
Microscope		
FTIR		
MicrOmega		

Name	C0015	
Size (μm)	2185	
Weight (mg)	1.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

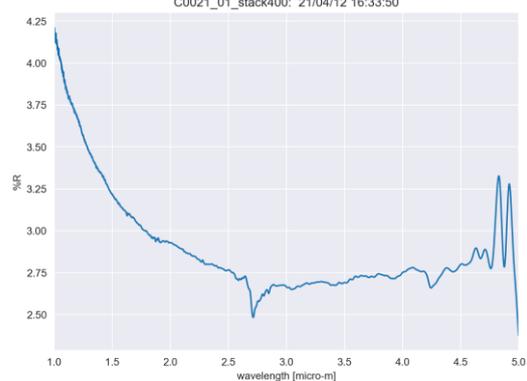
Name	C0016	
Size (μm)	2198	
Weight (mg)	2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

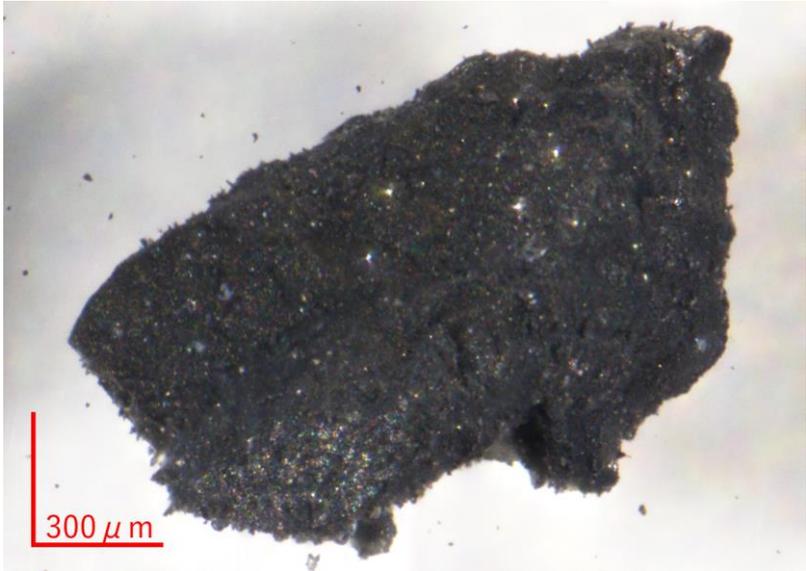
Name	C0017	
Size (μm)	2753	
Weight (mg)	5.1	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

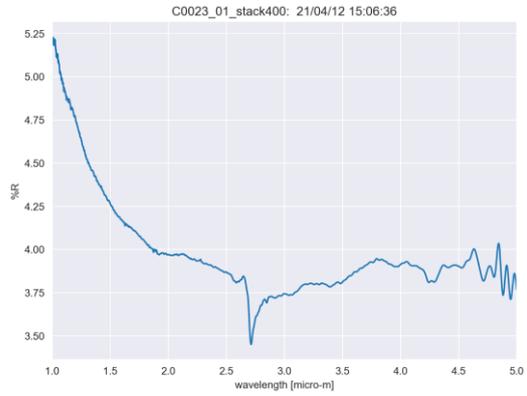
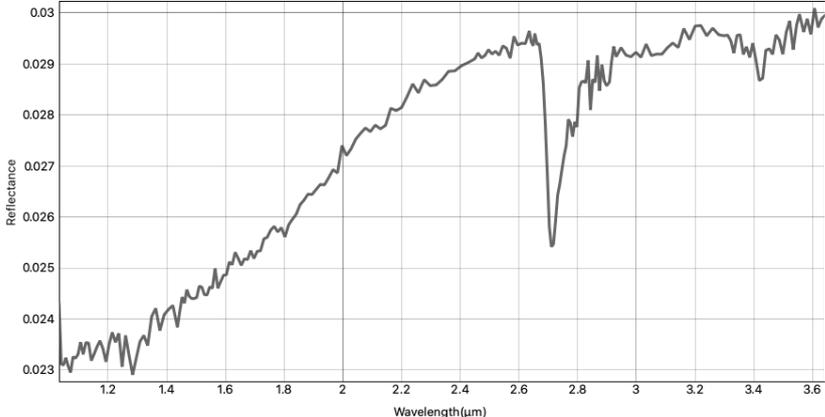
Name	C0018	
Size (μm)	3438	
Weight (mg)	6.3	
Label	FTIR	
Microscope		
FTIR	<p data-bbox="612 1077 839 1099">C0018_01_stack400: 21/04/12 15:26:02</p> 	
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

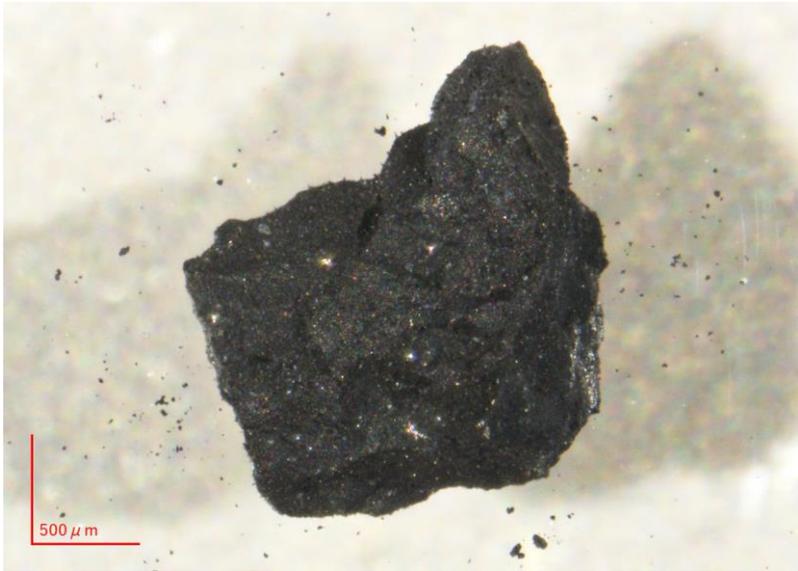
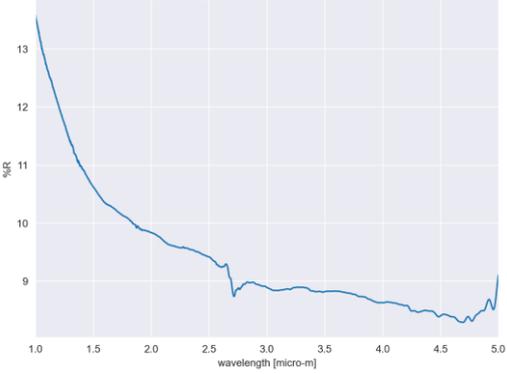
Name	C0019	
Size (μm)	2647	
Weight (mg)	6.8	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

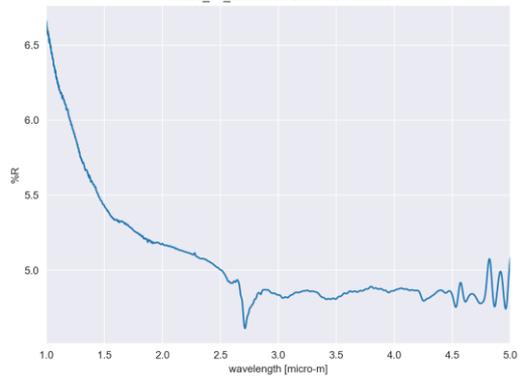
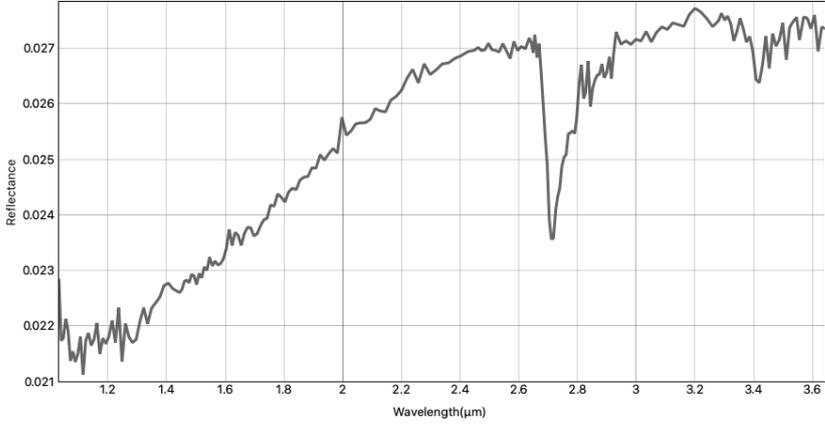
Name	C0020	
Size (μm)	2226	
Weight (mg)	3.1	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

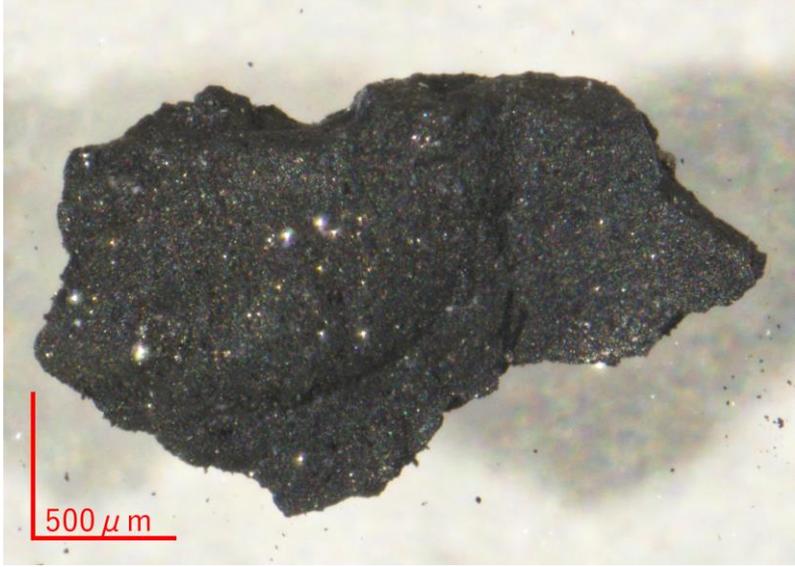
Name	C0021	
Size (μm)	2803	
Weight (mg)	6.7	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

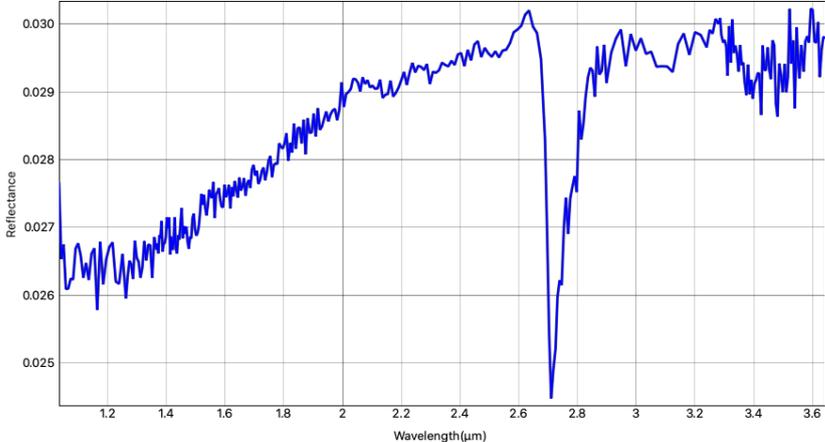
Name	C0022	
Size (μm)	1688	
Weight (mg)	1	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0023	
Size (μm)	2996	
Weight (mg)	5	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR	 <p>C0023_01_stack400: 21/04/12 15:06:36</p>	
MicrOmega		

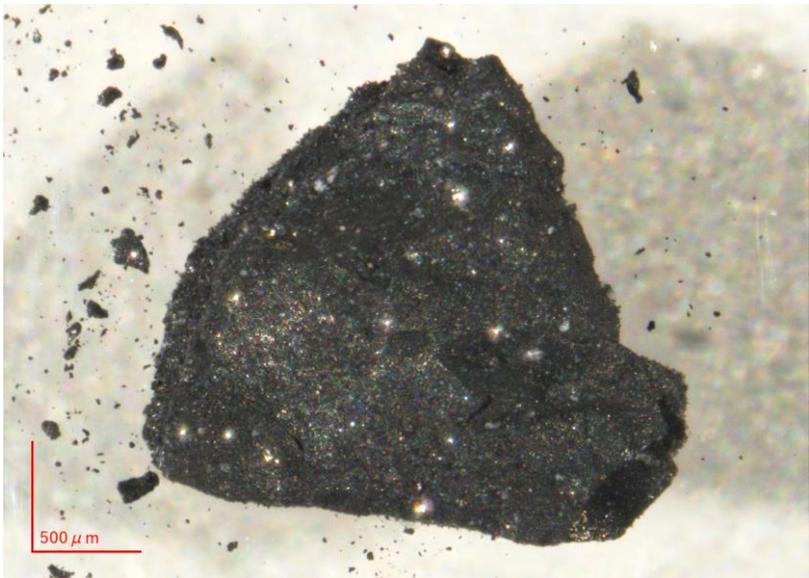
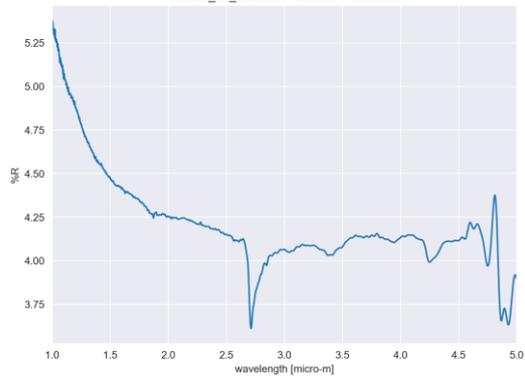
Name	C0024	
Size (μm)	2407	
Weight (mg)	2.2	
Label	MicrOmega,FTIR	
Microscope		
FTIR	<p data-bbox="608 1077 836 1099">C0024_01_stack400: 21/04/14 14:02:59</p> 	
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

Name	C0025	
Size (μm)	3002	
Weight (mg)	5.6	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

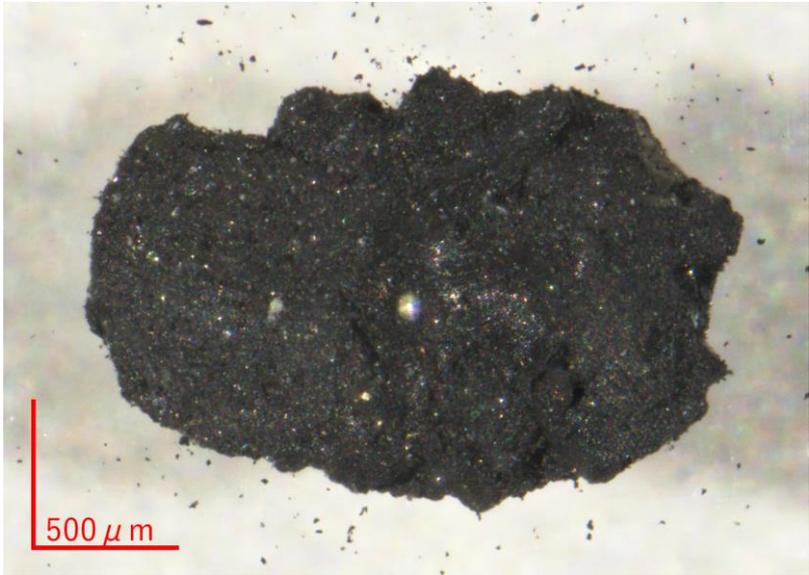
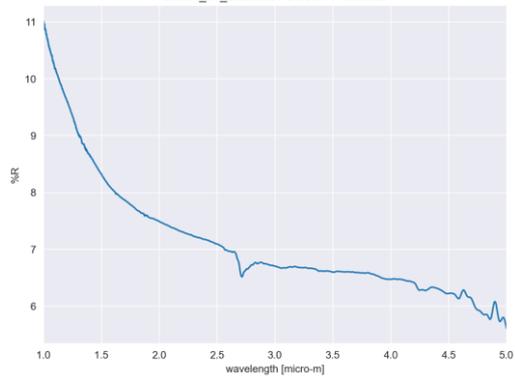
Name	C0026	
Size (μm)	2540	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

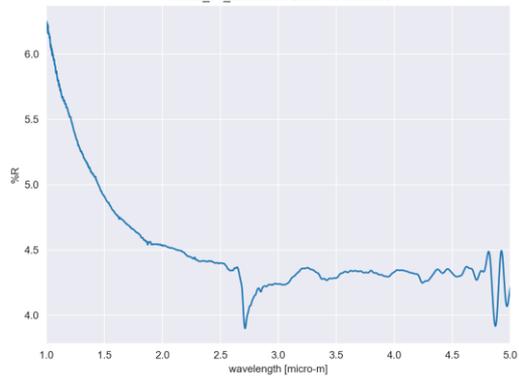
Name	C0027	
Size (μm)	2220	
Weight (mg)	2.2	
Label	MicrOmega,Phase2 Misasa	
Microscope		
FTIR	No Data	
MicrOmega		

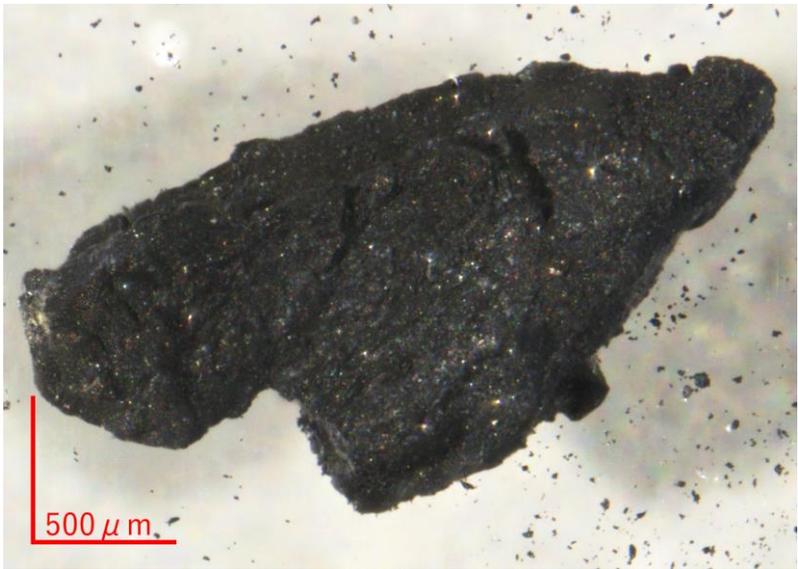
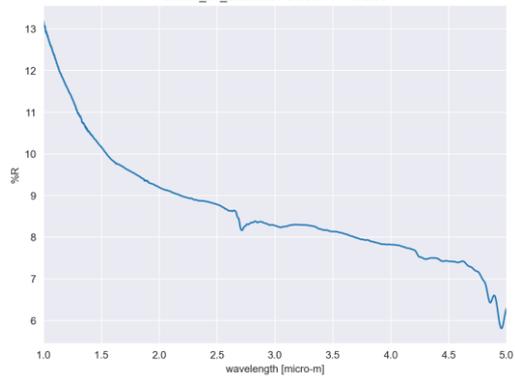
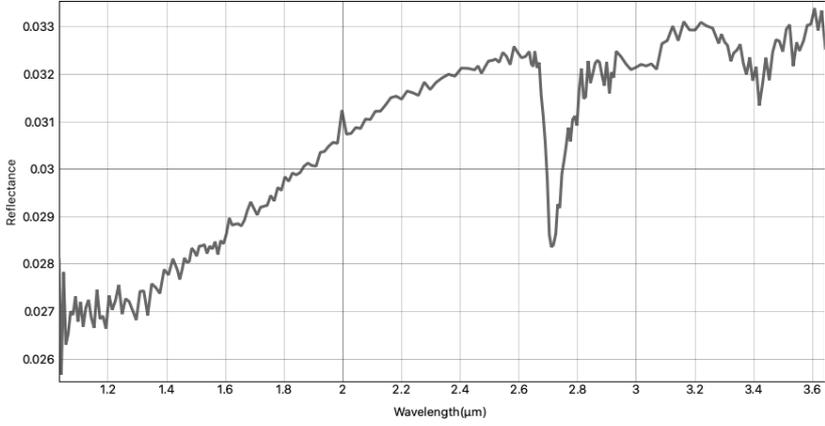
Name	C0028	
Size (μm)	2365	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

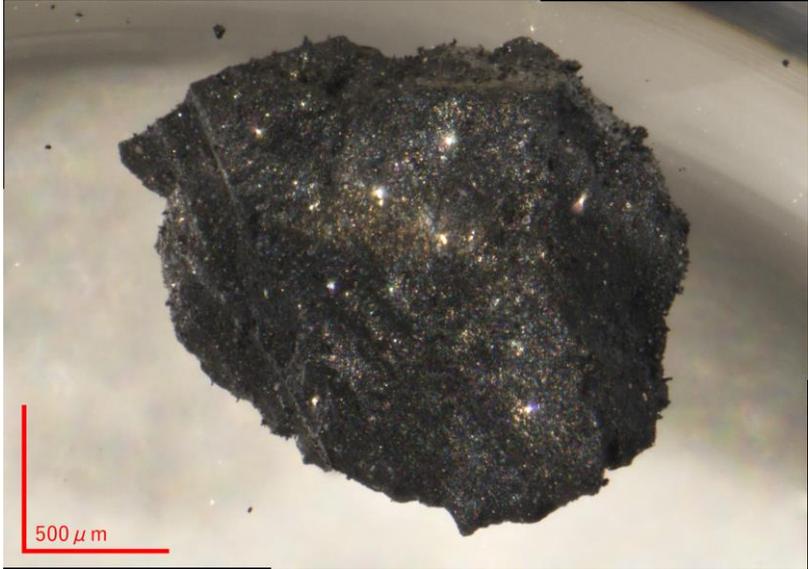
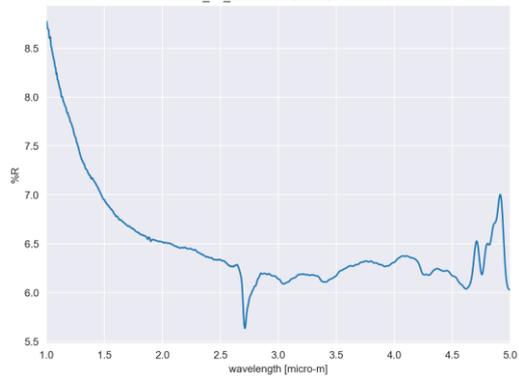
Name	C0029	
Size (μm)	2479	
Weight (mg)	4	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p>No Data</p>	

Name	C0030	
Size (μm)	1847	
Weight (mg)	0.7	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0031	
Size (μm)	2253	
Weight (mg)	1.8	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

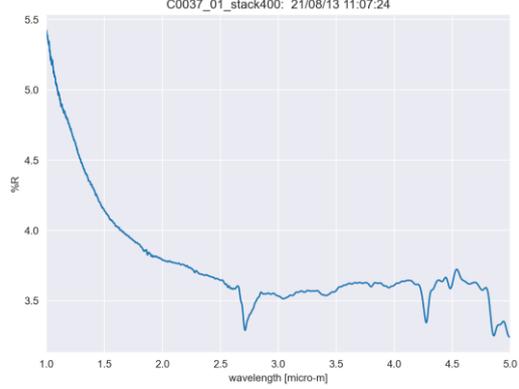
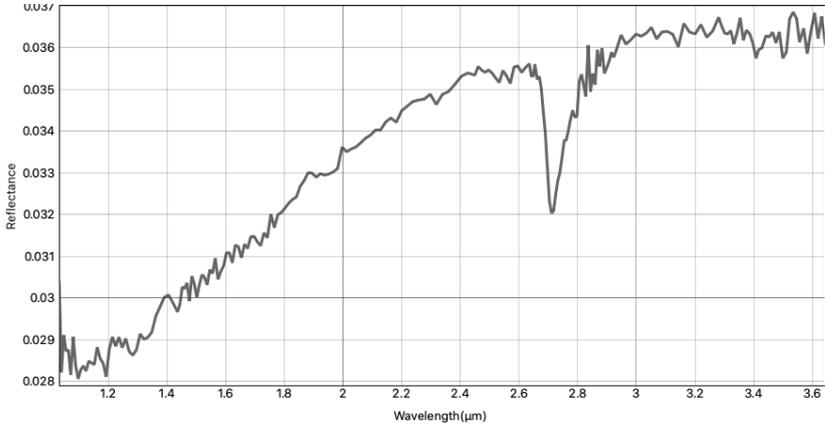
Name	C0032	
Size (μm)	3212	
Weight (mg)	3.1	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

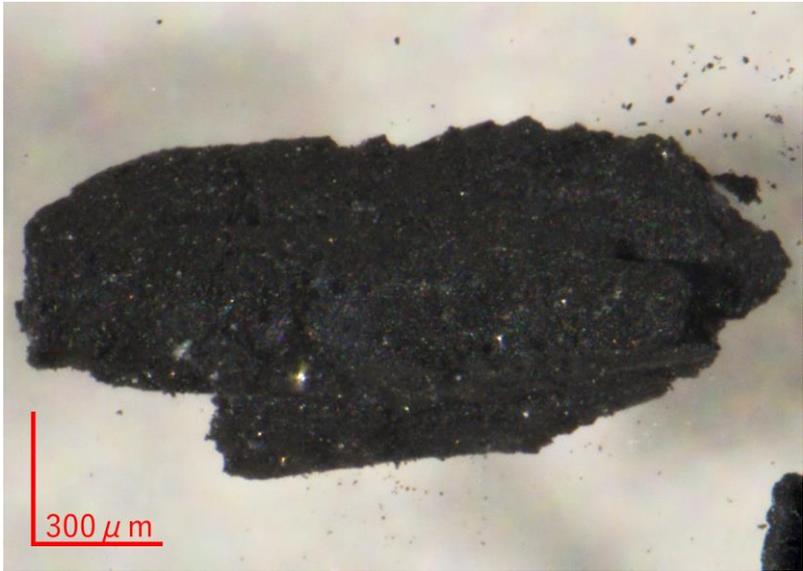
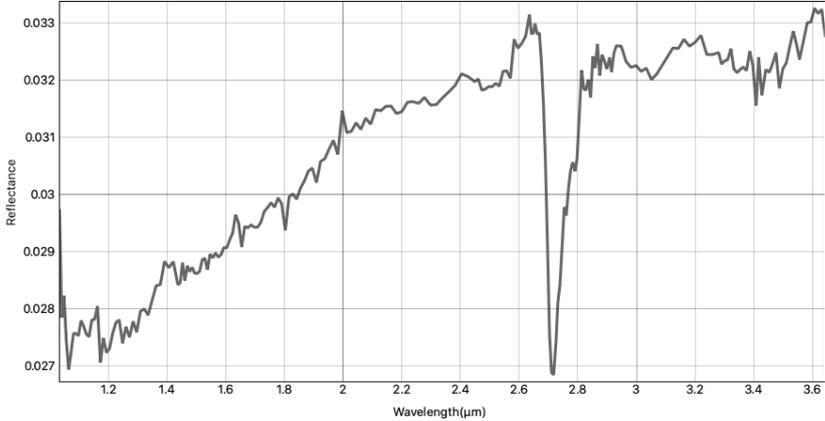
Name	C0033	
Size (μm)	2742	
Weight (mg)	2.4	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

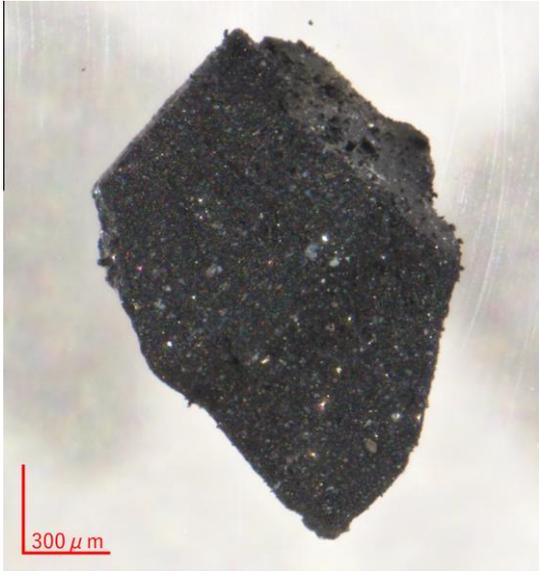
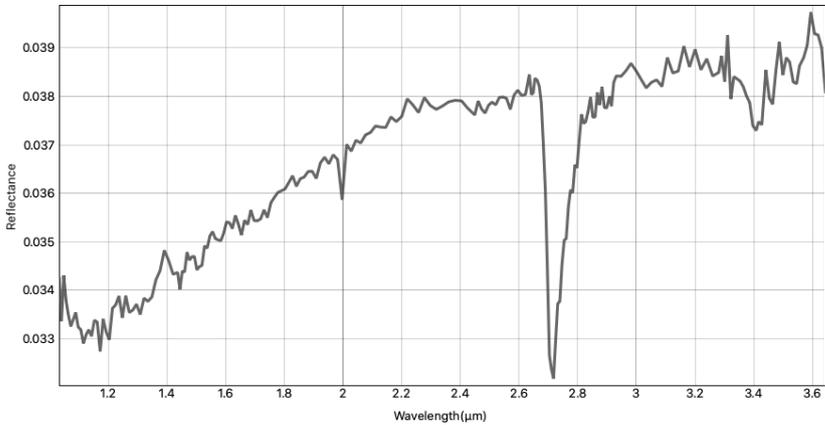
Name	C0034	
Size (μm)	2095	
Weight (mg)	2.4	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

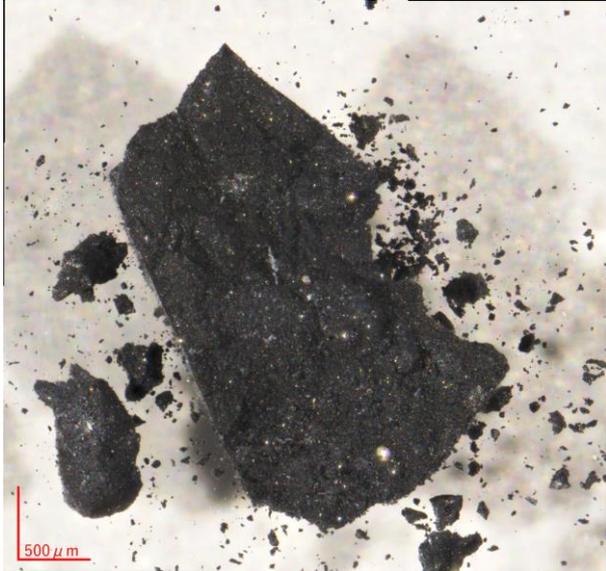
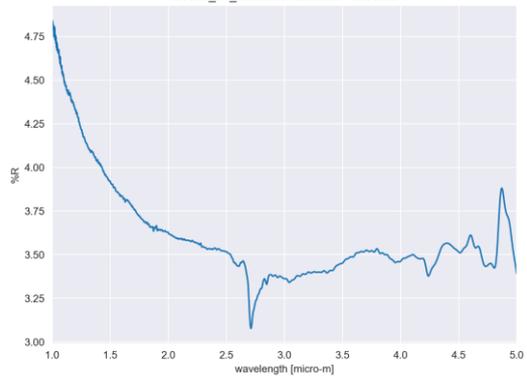
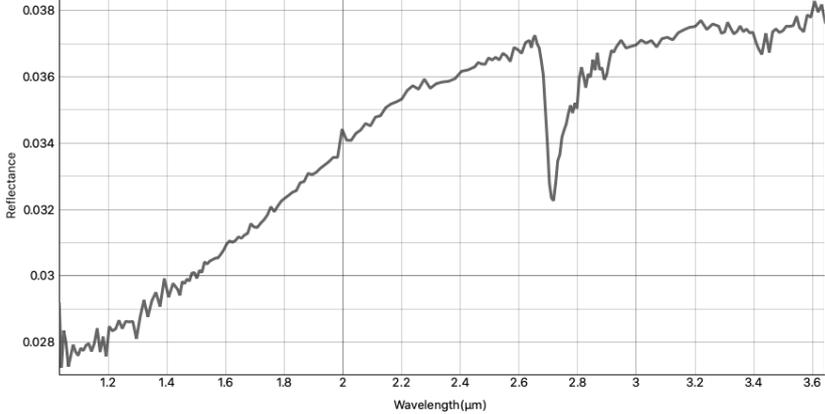
Name	C0035	
Size (μm)	2739	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

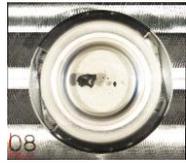
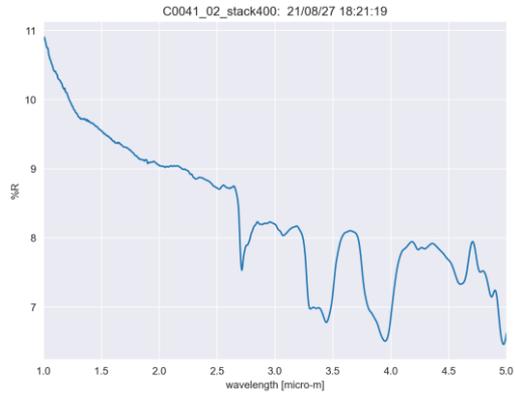
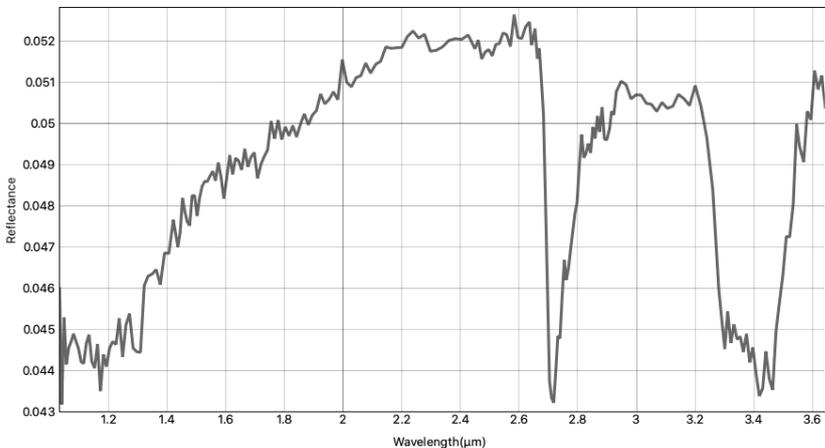
Name	C0036	
Size (μm)	1917	
Weight (mg)	1.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

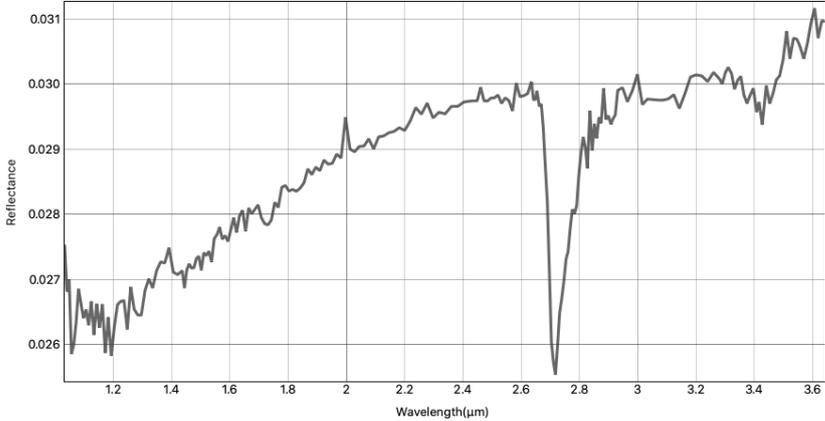
Name	C0037	
Size (μm)	2177	
Weight (mg)	2.3	
Label	MicrOmega, FTIR, NASA	
Microscope		
FTIR		
MicrOmega		

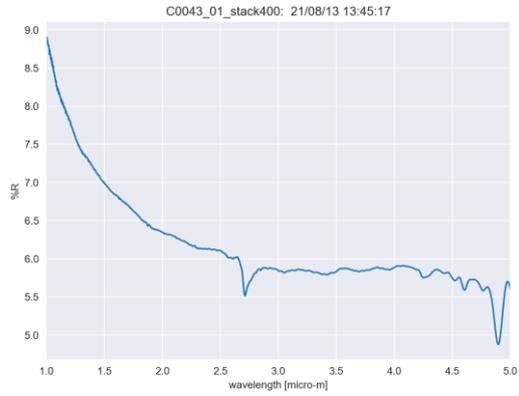
Name	C0038																															
Size (μm)	1781																															
Weight (mg)	0.8																															
Label	MicrOmega,NASA																															
Microscope																																
FTIR	<p data-bbox="448 1261 571 1294">No Data</p>																															
MicrOmega	 <p>The graph displays Reflectance on the y-axis (ranging from 0.027 to 0.033) against Wavelength (μm) on the x-axis (ranging from 1.2 to 3.6). The curve shows a general upward trend with a prominent absorption dip at approximately 2.7 μm.</p> <table border="1"><thead><tr><th>Wavelength (μm)</th><th>Reflectance</th></tr></thead><tbody><tr><td>1.2</td><td>0.0275</td></tr><tr><td>1.4</td><td>0.0285</td></tr><tr><td>1.6</td><td>0.0295</td></tr><tr><td>1.8</td><td>0.0305</td></tr><tr><td>2.0</td><td>0.0315</td></tr><tr><td>2.2</td><td>0.0320</td></tr><tr><td>2.4</td><td>0.0325</td></tr><tr><td>2.6</td><td>0.0330</td></tr><tr><td>2.7</td><td>0.0270</td></tr><tr><td>2.8</td><td>0.0320</td></tr><tr><td>3.0</td><td>0.0325</td></tr><tr><td>3.2</td><td>0.0330</td></tr><tr><td>3.4</td><td>0.0325</td></tr><tr><td>3.6</td><td>0.0330</td></tr></tbody></table>		Wavelength (μm)	Reflectance	1.2	0.0275	1.4	0.0285	1.6	0.0295	1.8	0.0305	2.0	0.0315	2.2	0.0320	2.4	0.0325	2.6	0.0330	2.7	0.0270	2.8	0.0320	3.0	0.0325	3.2	0.0330	3.4	0.0325	3.6	0.0330
Wavelength (μm)	Reflectance																															
1.2	0.0275																															
1.4	0.0285																															
1.6	0.0295																															
1.8	0.0305																															
2.0	0.0315																															
2.2	0.0320																															
2.4	0.0325																															
2.6	0.0330																															
2.7	0.0270																															
2.8	0.0320																															
3.0	0.0325																															
3.2	0.0330																															
3.4	0.0325																															
3.6	0.0330																															

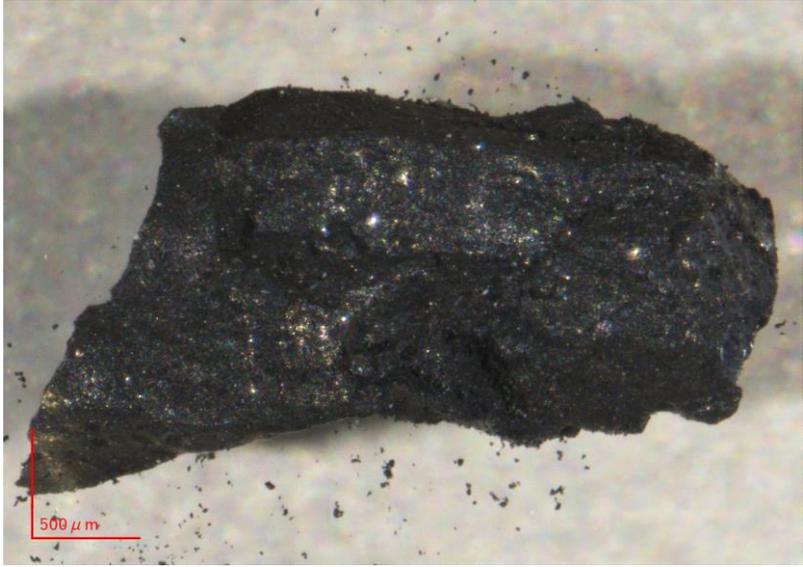
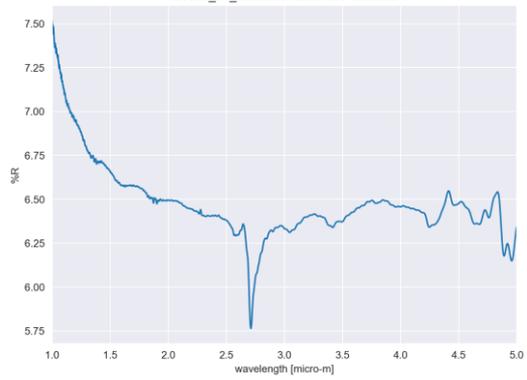
Name	C0039	
Size (μm)	1778	
Weight (mg)	1	
Label	MicrOmega,Phase2 Misasa	
Microscope		
FTIR	No Data	
MicrOmega		

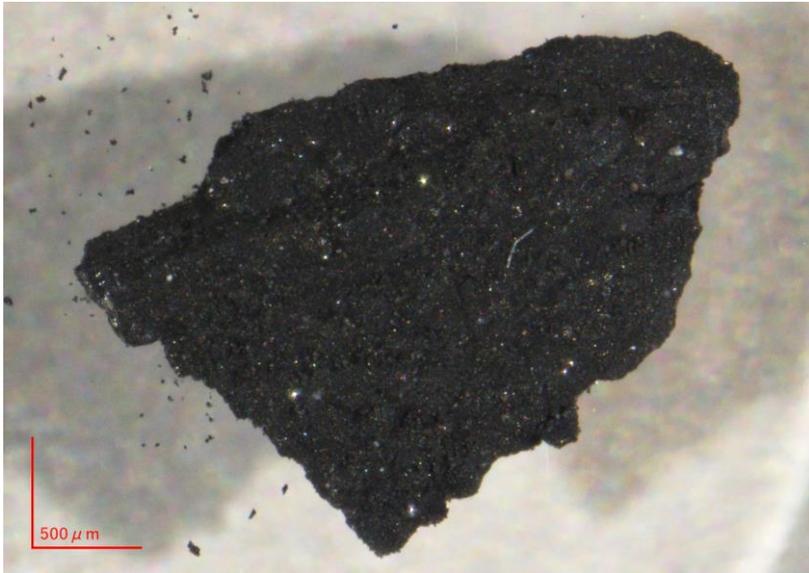
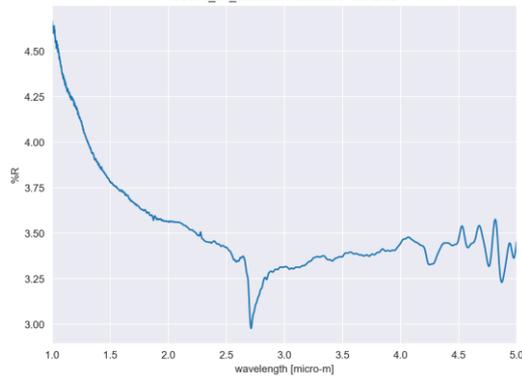
Name	C0040	
Size (μm)	3425	
Weight (mg)	4.9	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

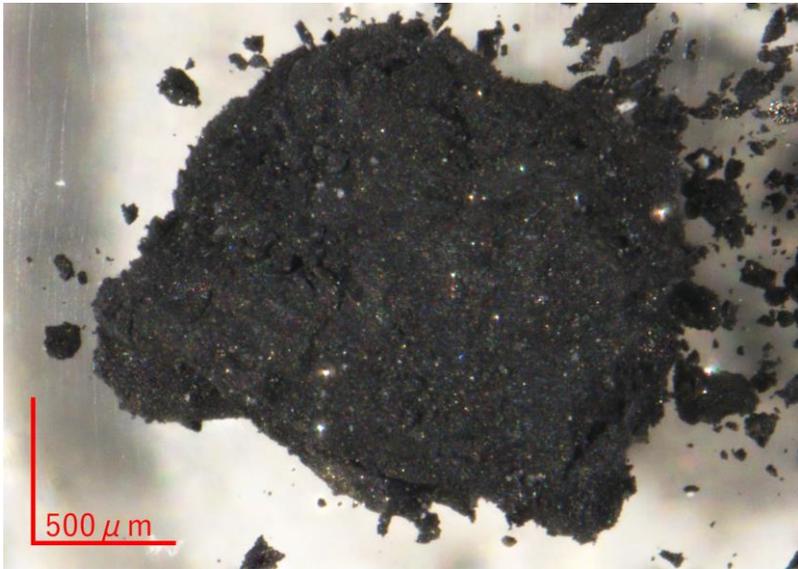
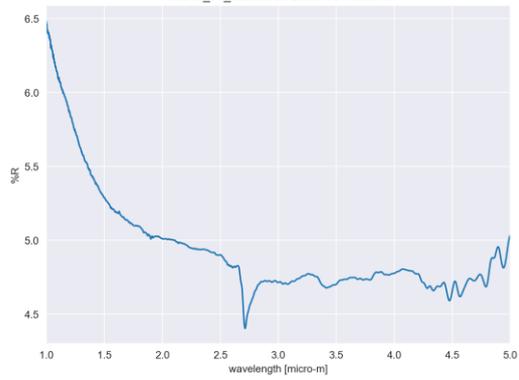
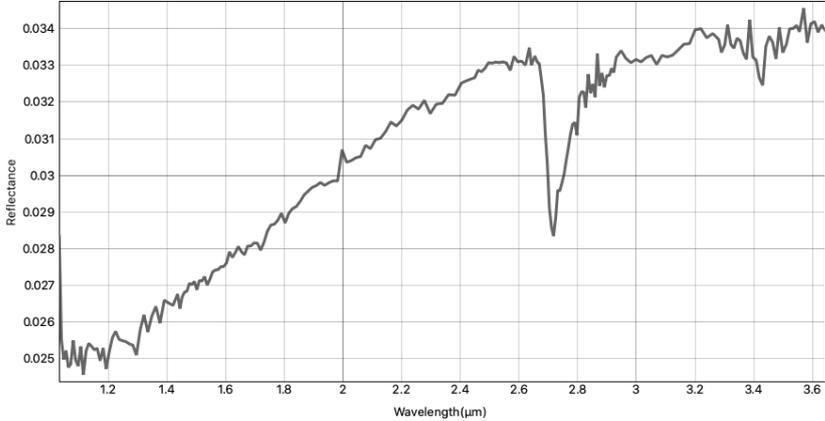
Name	C0041	
Size (μm)	2615	
Weight (mg)	3.3	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega		

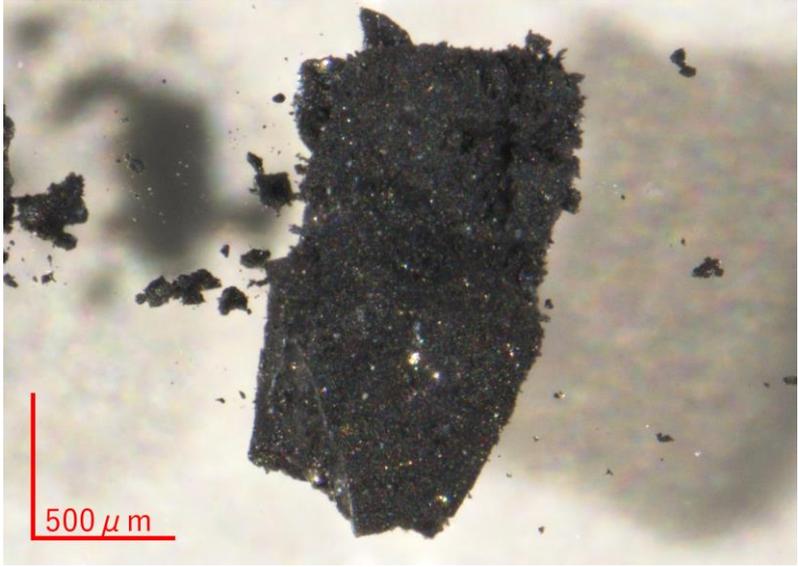
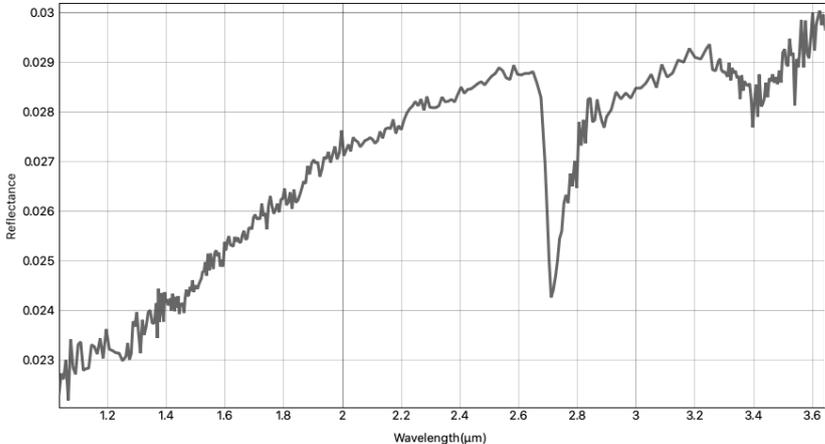
Name	C0042	
Size (μm)	1651	
Weight (mg)	1	
Label	MicrOmega,NASA	
Microscope		
FTIR	No Data	
MicrOmega		

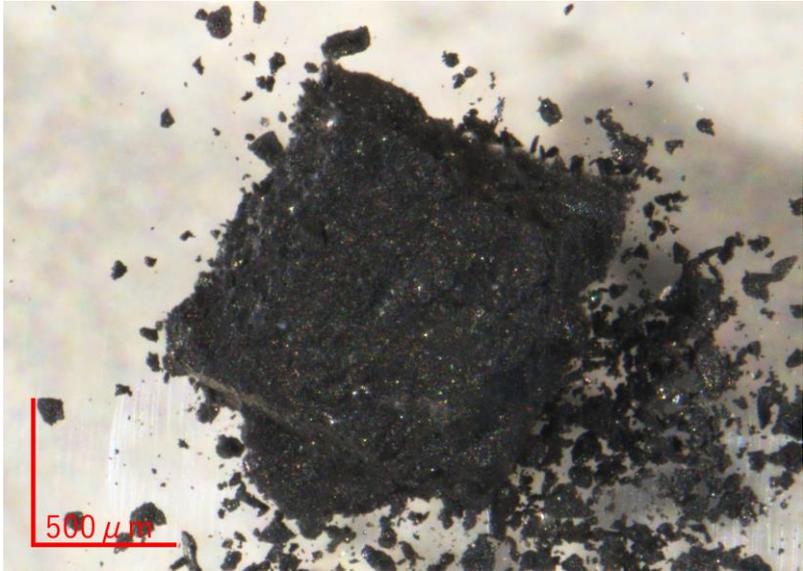
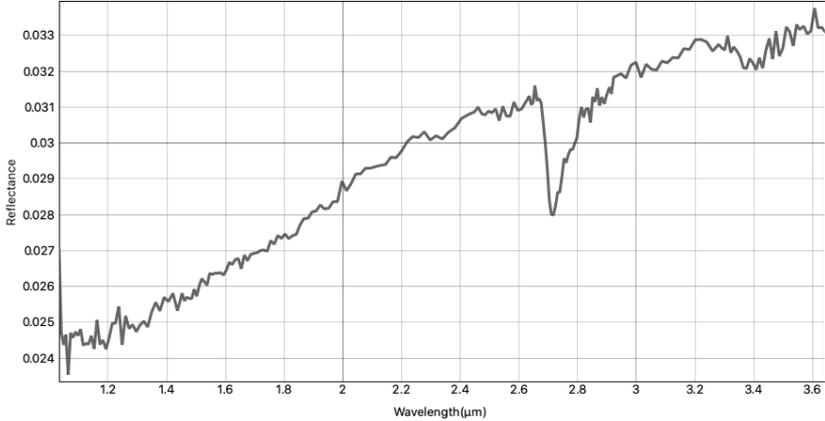
Name	C0043	
Size (μm)	2431	
Weight (mg)	1.7	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

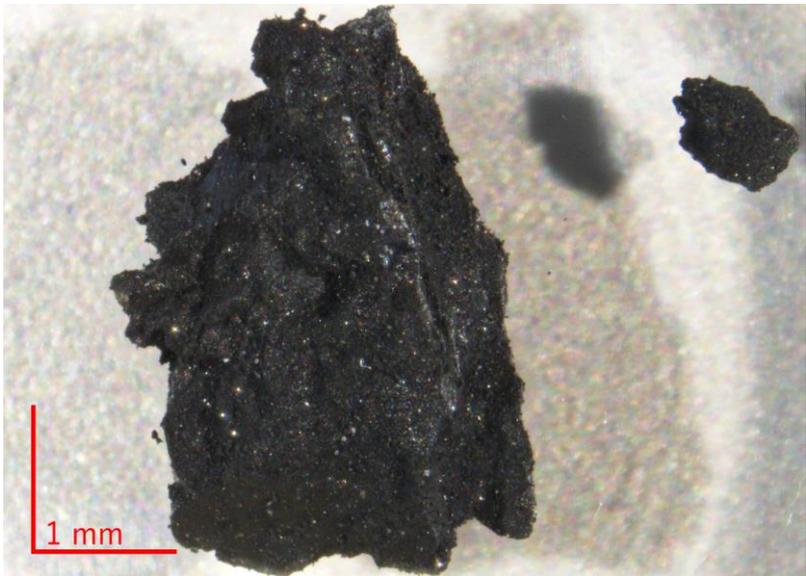
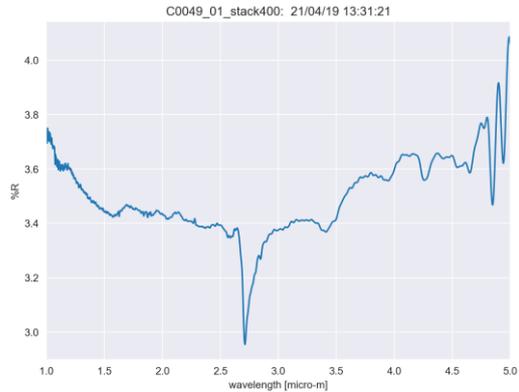
Name	C0044	
Size (μm)	3690	
Weight (mg)	4.7	
Label	MircOmega,FTIR	
Microscope		
FTIR		
MircOmega	<p data-bbox="448 1711 571 1742">No Data</p>	

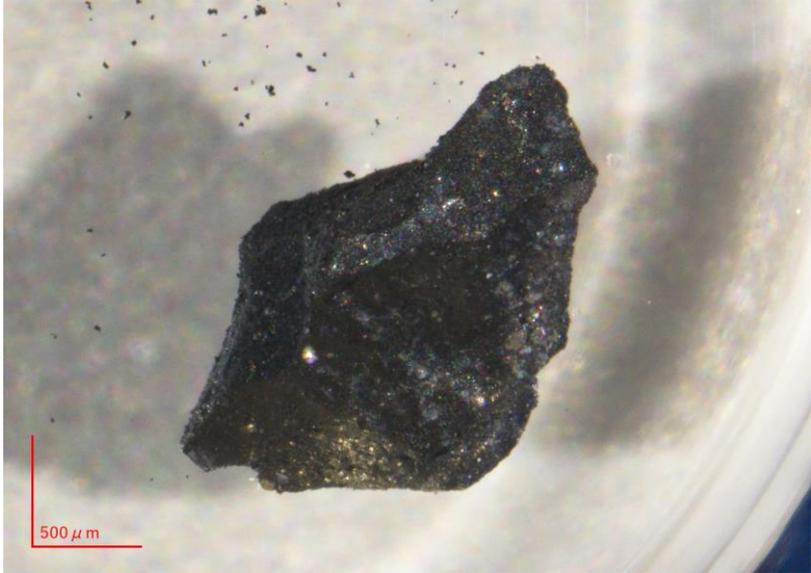
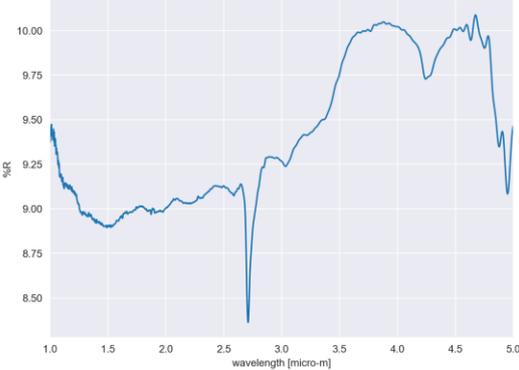
Name	C0045	
Size (μm)	3139	
Weight (mg)	3.2	
Label	FTIR	
Microscope		
FTIR	<p>C0044_01_stack400: 21/04/16 15:42:12</p> 	
MicrOmega	<p>No Data</p>	

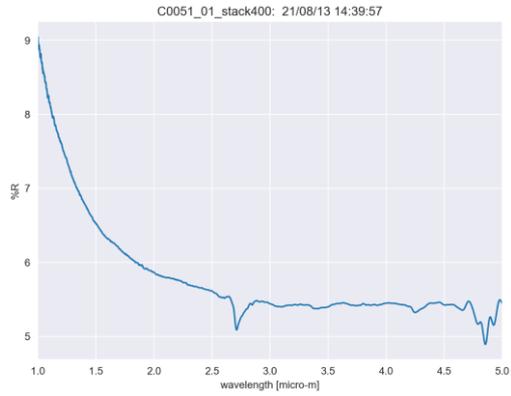
Name	C0046	
Size (μm)	2155	
Weight (mg)	2.6	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR	 <p>C0046_01_stack400: 21/04/19 11:38:48</p>	
MicrOmega		

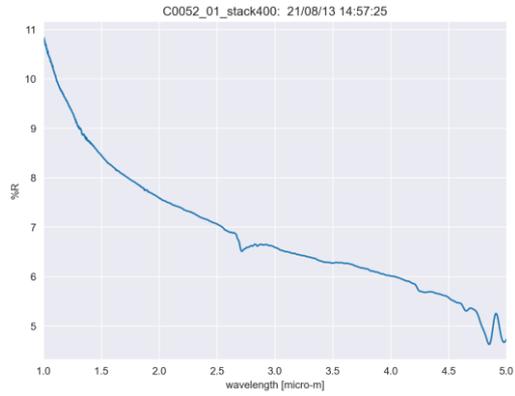
Name	C0047	
Size (μm)	1864	
Weight (mg)	1.3	
Label	MicrOmega,Phase2 Misasa	
Microscope		
FTIR	No Data	
MicrOmega		

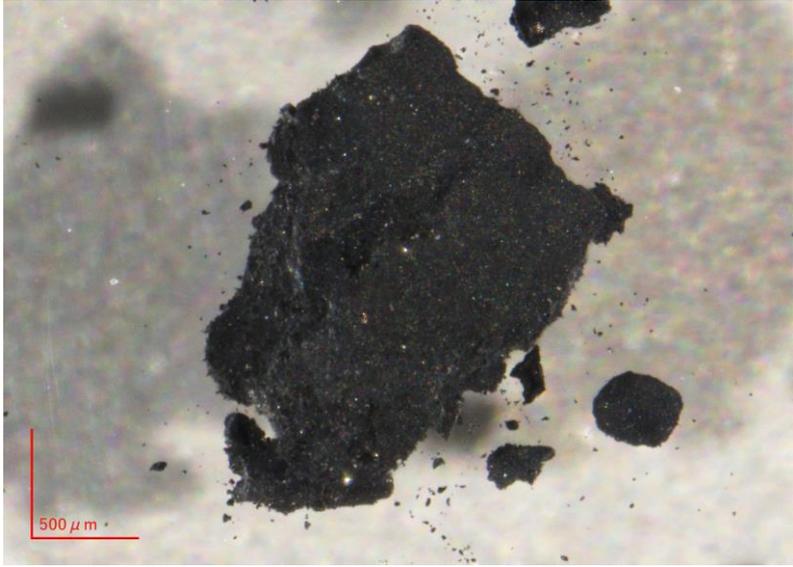
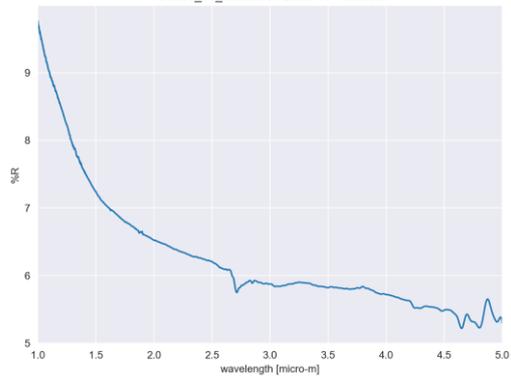
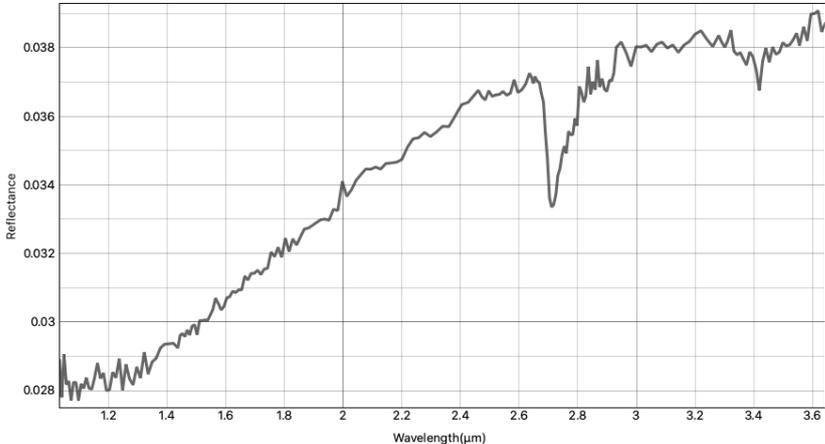
Name	C0048	
Size (μm)	1741	
Weight (mg)	1.7	
Label	MicrOmega,NASA	
Microscope		
FTIR	<p data-bbox="448 1261 571 1294" style="text-align: center;">No Data</p>	
MicrOmega		

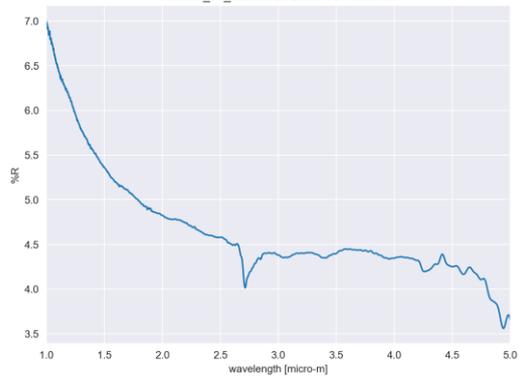
Name	C0049	
Size (μm)	3998	
Weight (mg)	12.6	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

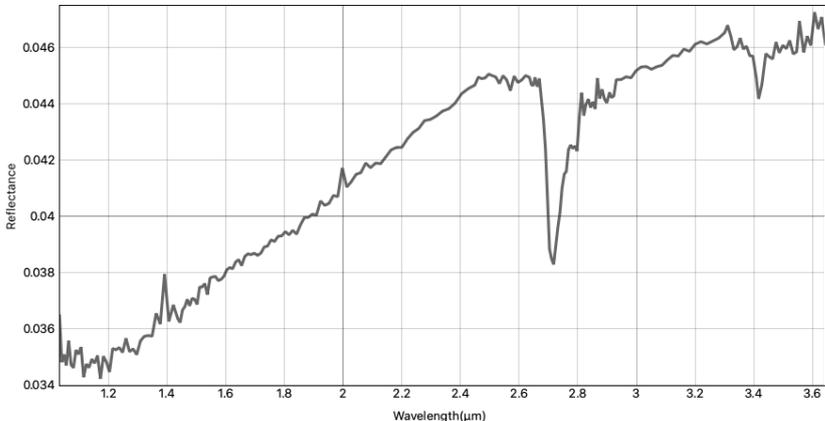
Name	C0050	
Size (μm)	2409	
Weight (mg)	2.2	
Label	MicrOmega,FTIR	
Microscope		
FTIR	<p data-bbox="624 1077 850 1097">C0050_01_stack400: 21/08/13 14:20:49</p> 	
MicrOmega	<p data-bbox="448 1715 571 1744">No Data</p>	

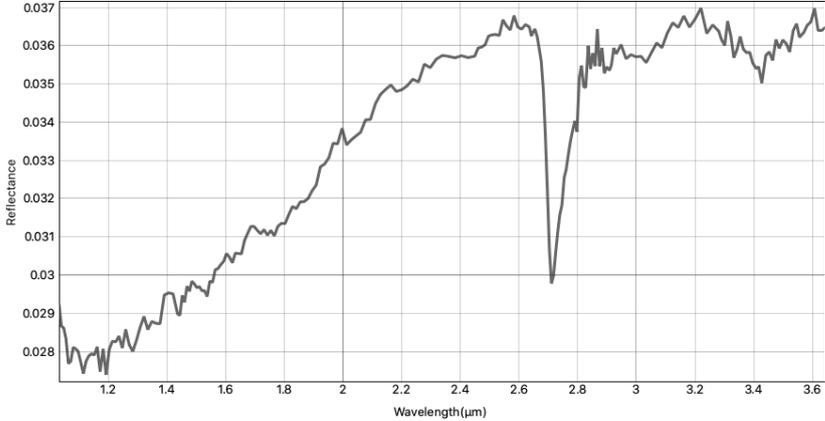
Name	C0051	
Size (μm)	2462	
Weight (mg)	1.7	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

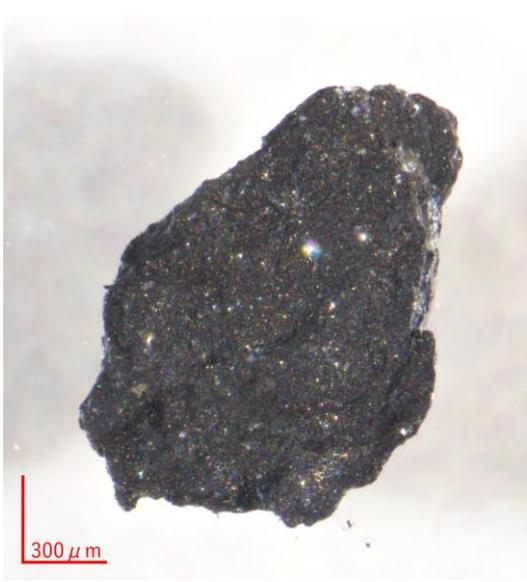
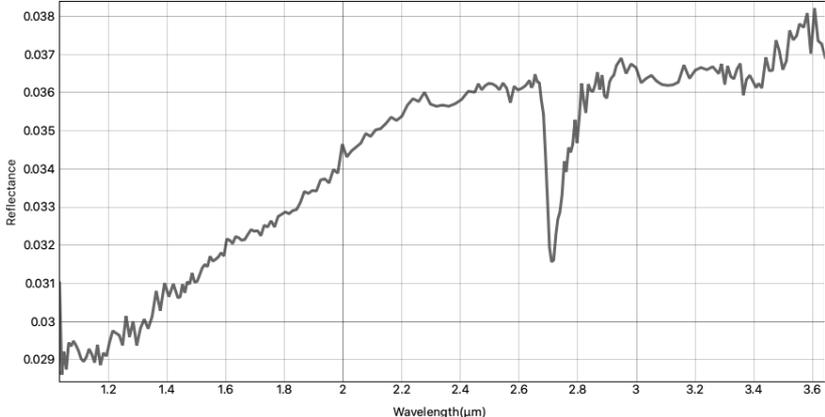
Name	C0052	
Size (μm)	1911	
Weight (mg)	2.1	
Label	MicrOmega,FTIR	
Microscope		
FTIR	 <p>C0052_01_stack400: 21/08/13 14:57:25</p>	
MicrOmega	<p>No Data</p>	

Name	C0053	
Size (μm)	2376	
Weight (mg)	3.2	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR	<p>C0053_01_stack400: 21/05/11 14:59:55</p> 	
MicrOmega		

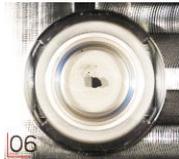
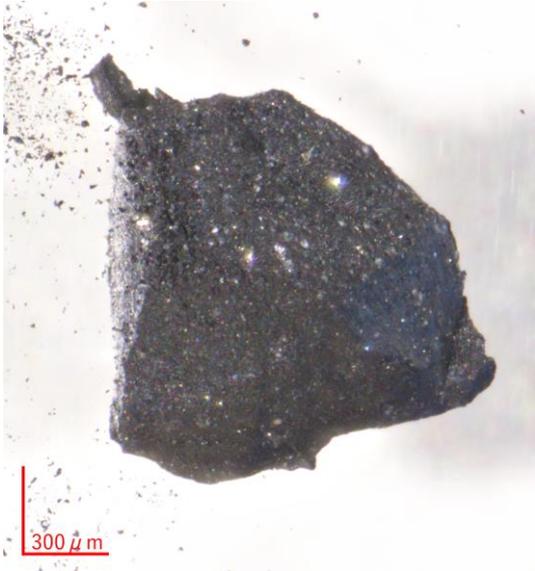
Name	C0054	
Size (μm)	2877	
Weight (mg)	2.9	
Label	MicrOmega, FTIR	
Microscope		
FTIR	 <p>C0054_01_stack400: 21/08/19 11:37:18</p>	
MicrOmega	<p>No Data</p>	

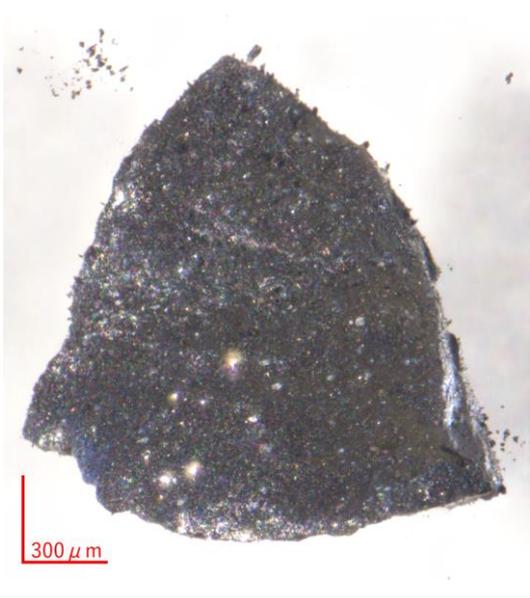
Name	C0055	
Size (μm)	2075	
Weight (mg)	0.8	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

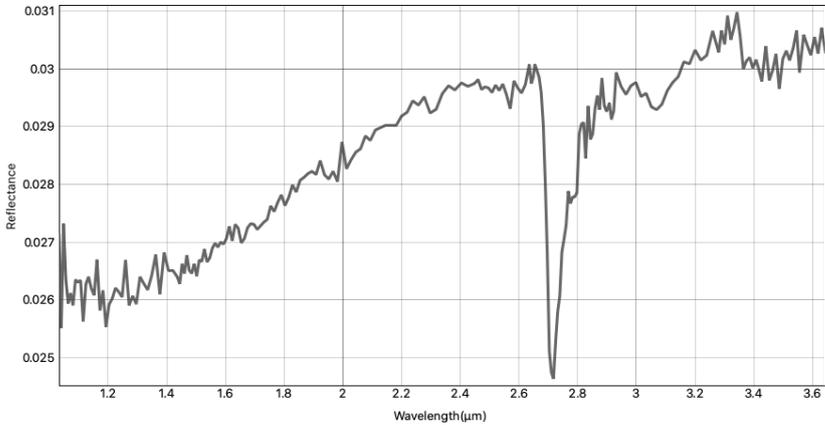
Name	C0056	
Size (μm)	1878	
Weight (mg)	1.5	
Label	MicrOmega,NASA	
Microscope		
FTIR	<p style="text-align: center;">No Data</p>	
MicrOmega	 <p>The graph plots Reflectance on the y-axis (ranging from 0.028 to 0.037) against Wavelength in micrometers on the x-axis (ranging from 1.2 to 3.6). The reflectance generally increases with wavelength, with a prominent absorption feature (dip) at approximately 2.7 μm where reflectance drops to about 0.030.</p>	

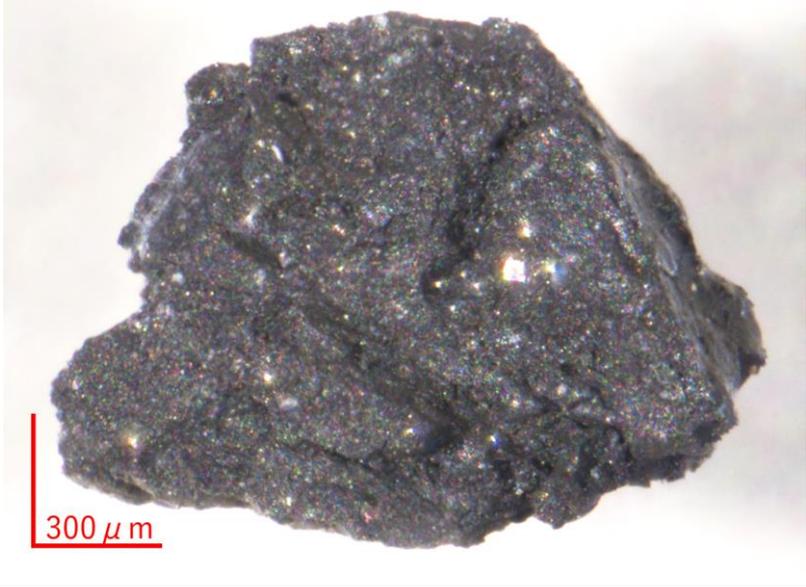
Name	C0057	
Size (μm)	1798	
Weight (mg)	0.9	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

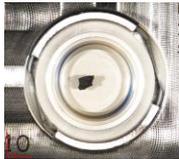
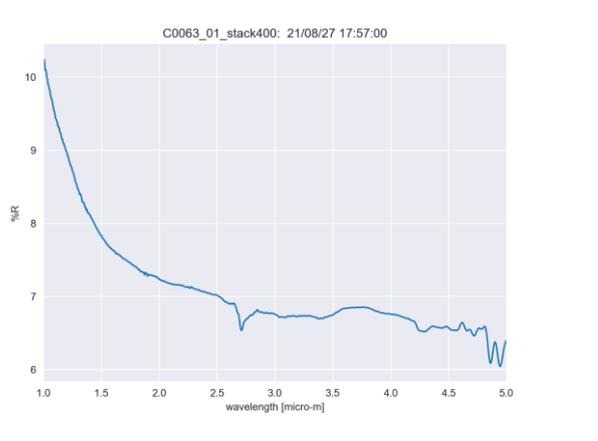
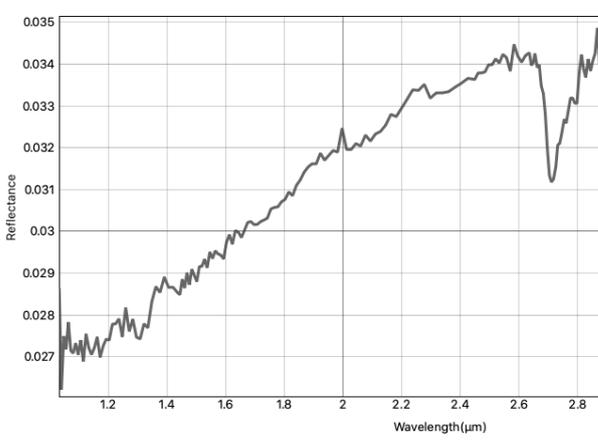
Name	C0058	
Size (μm)	1657	
Weight (mg)	0.9	
Label	FTIR	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

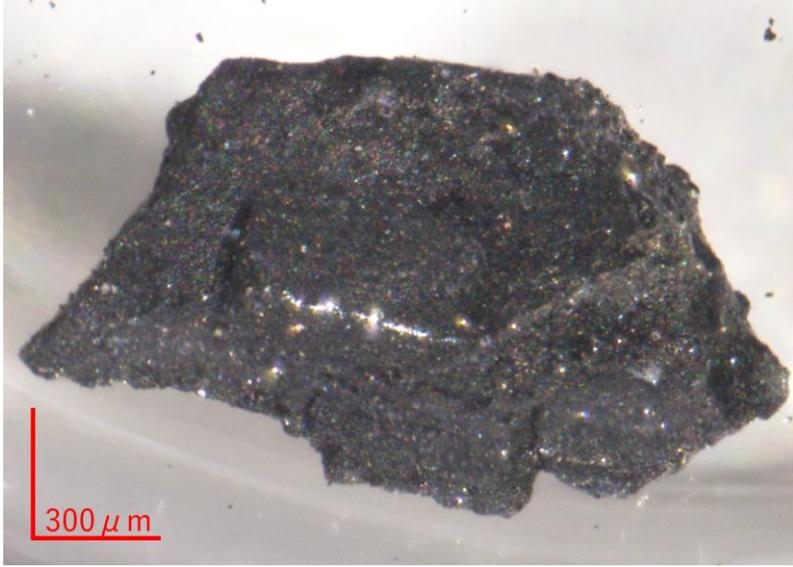
Name	C0059	
Size (μm)	1755	
Weight (mg)	0.8	
Label	FTIR	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0060	
Size (μm)	1812	
Weight (mg)	1.6	
Label	FTIR	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

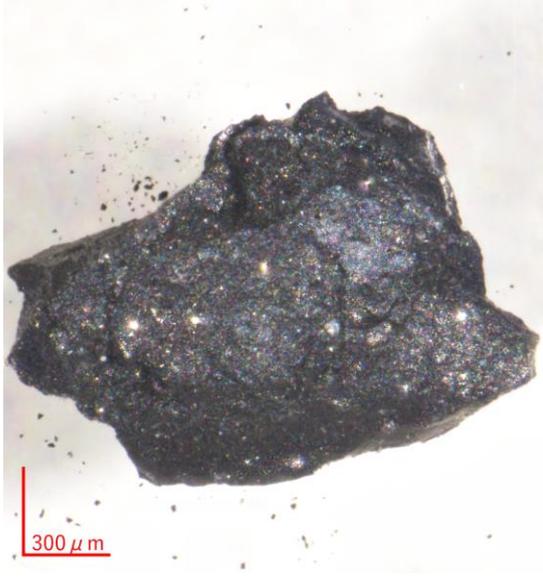
Name	C0061	
Size (μm)	1807	
Weight (mg)	1.3	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

Name	C0062	
Size (μm)	1641	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

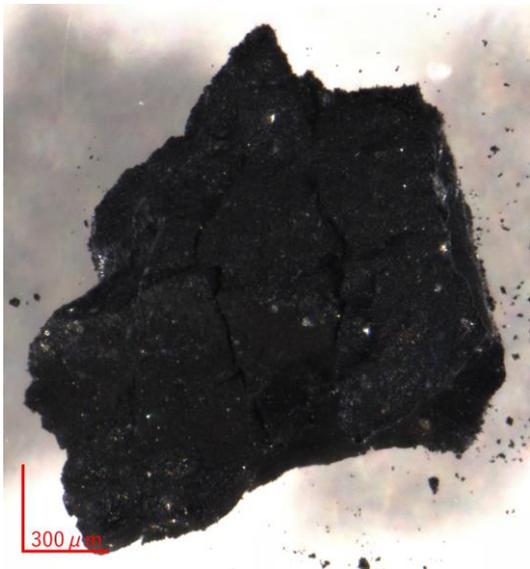
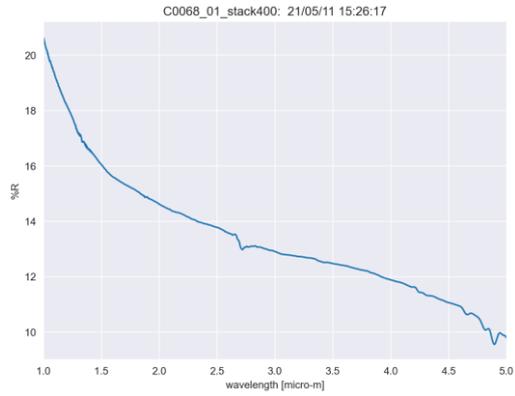
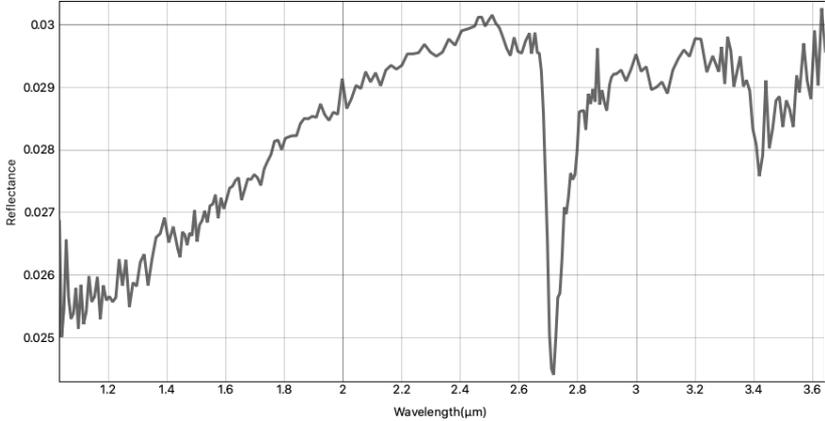
Name	C0063	
Size (μm)	2580	
Weight (mg)	3.6	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR	 <p>C0063_01_stack400: 21/08/27 17:57:00</p>	
MicrOmega		

Name	C0064	
Size (μm)	1767	
Weight (mg)	1.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0065	
Size (μm)	1664	
Weight (mg)	0.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

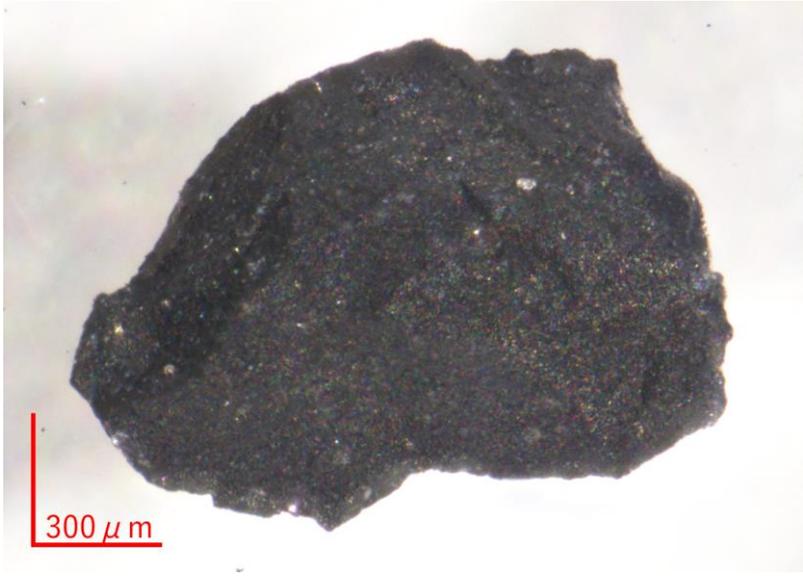
Name	C0066	
Size (μm)	1831	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0067	
Size (μm)	1280	
Weight (mg)	0.7	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

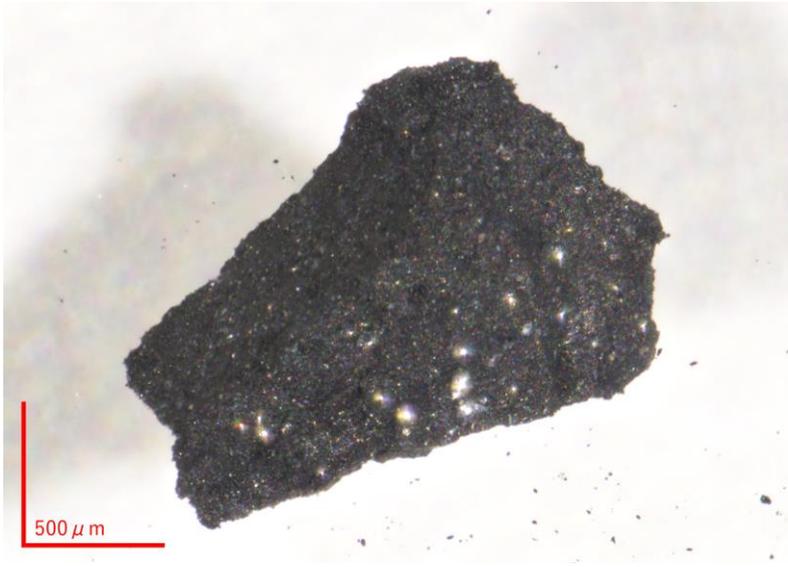
Name	C0068	
Size (μm)	1980	
Weight (mg)	1.7	
Label	MicrOmega,FTIR,Phase2 Kochi	
Microscope		
FTIR		
MicrOmega		

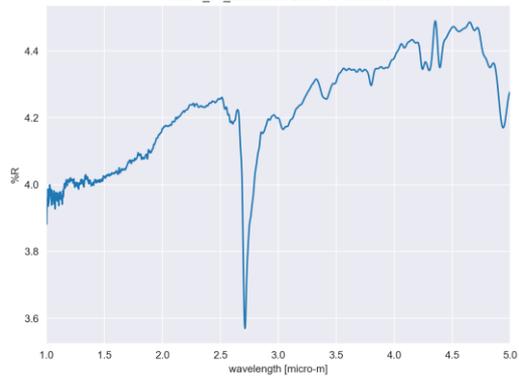
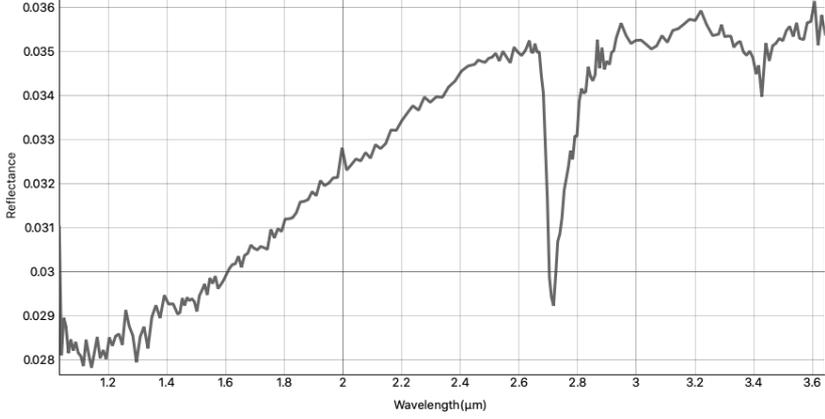
Name	C0069	
Size (μm)	1636	
Weight (mg)	0.9	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

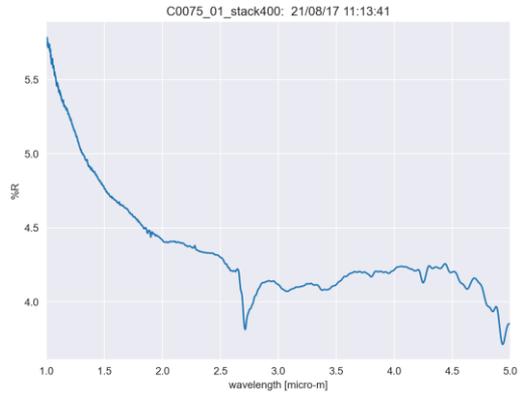
Name	C0070	
Size (μm)	1288	
Weight (mg)	0.7	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

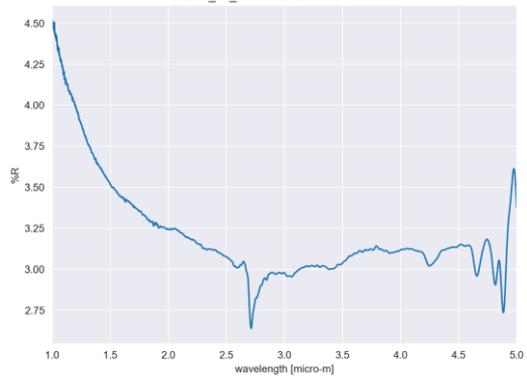
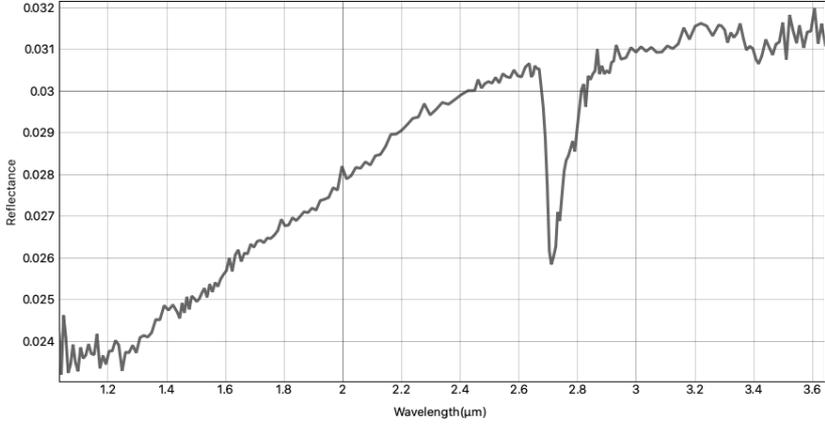
Name	C0071	
Size (μm)	1540	
Weight (mg)	1	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

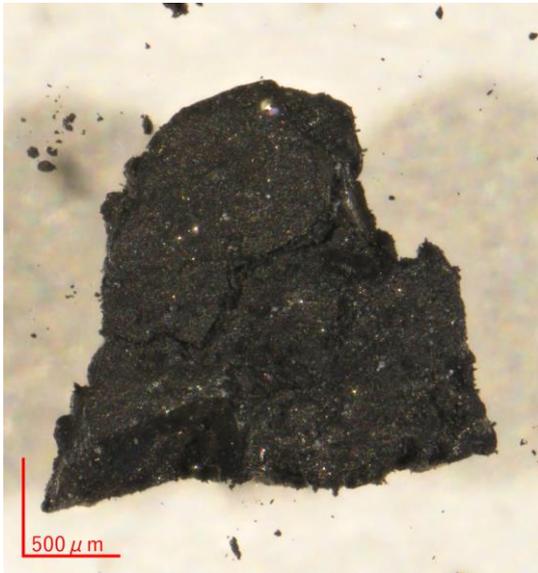
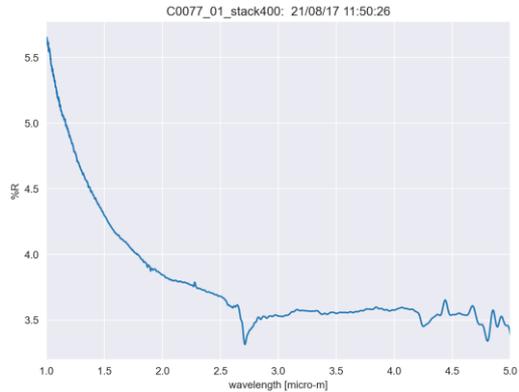
Name	C0072	
Size (μm)	1702	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

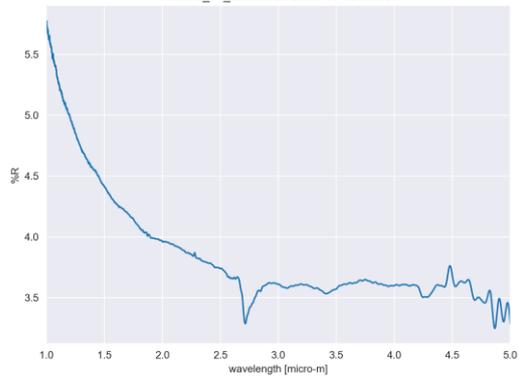
Name	C0073	
Size (μm)	1981	
Weight (mg)	0.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

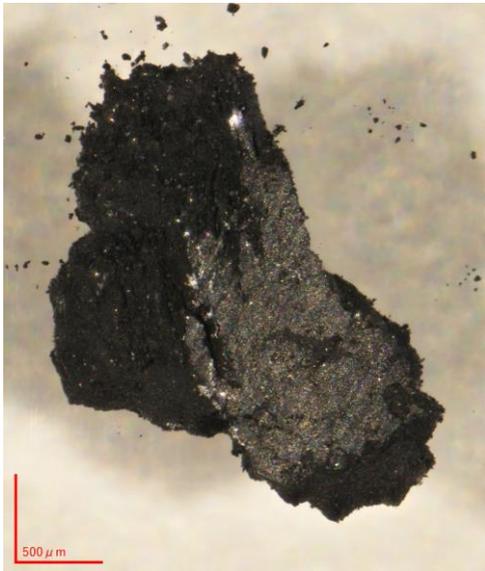
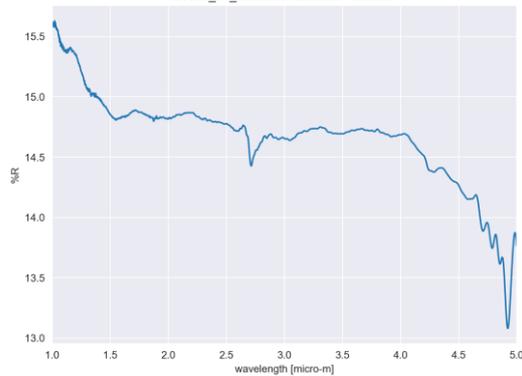
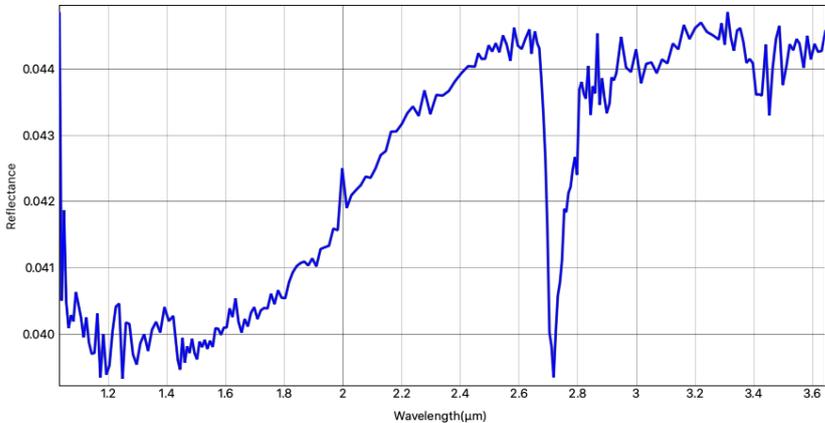
Name	C0074	
Size (μm)	3441	
Weight (mg)	6.6	
Label	MicrOmega, FTIR, NASA	
Microscope		
FTIR		
MicrOmega		

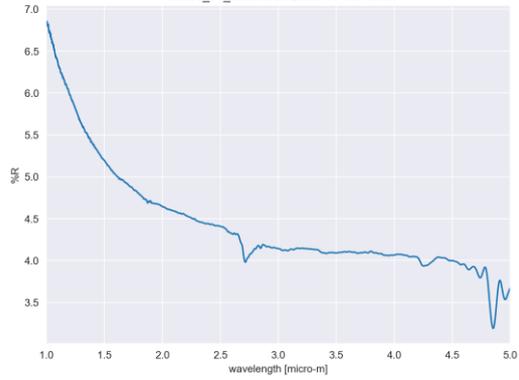
Name	C0075	
Size (μm)	2758	
Weight (mg)	4.1	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

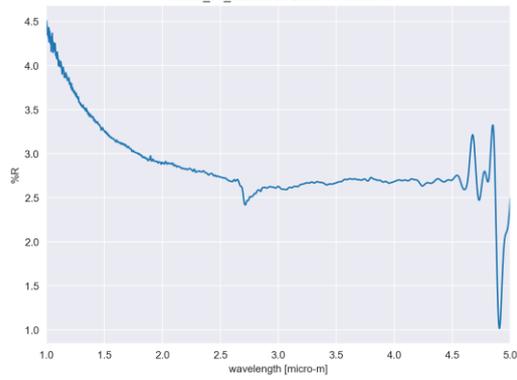
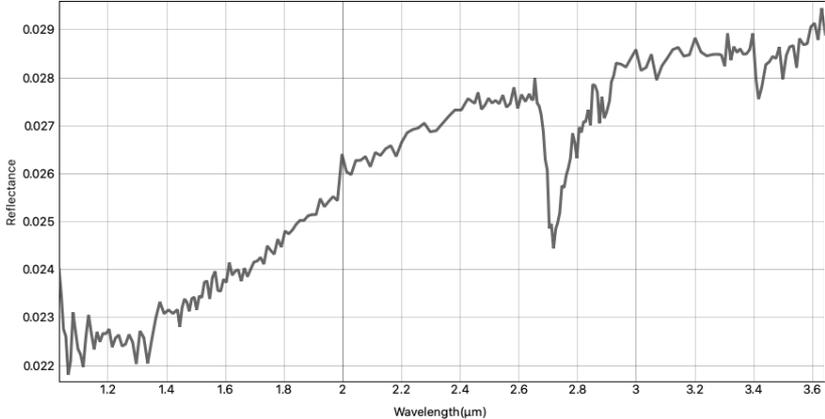
Name	C0076	
Size (μm)	2727	
Weight (mg)	4.7	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega		

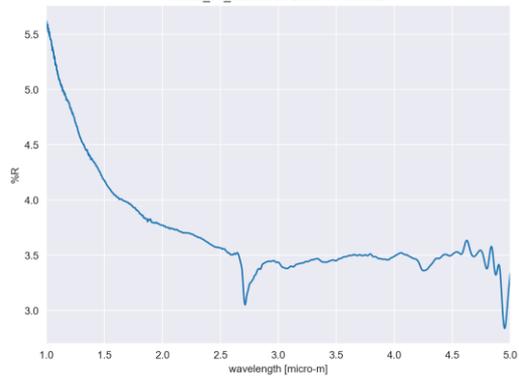
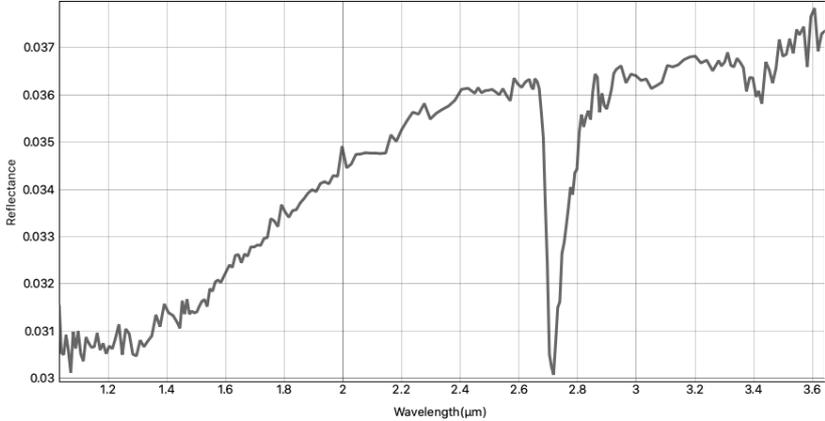
Name	C0077	
Size (μm)	2595	
Weight (mg)	3.6	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

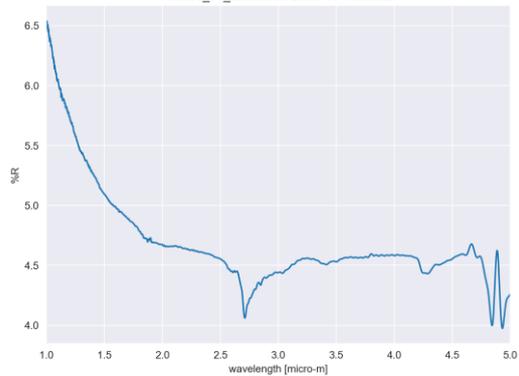
Name	C0078	
Size (μm)	2562	
Weight (mg)	3.6	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

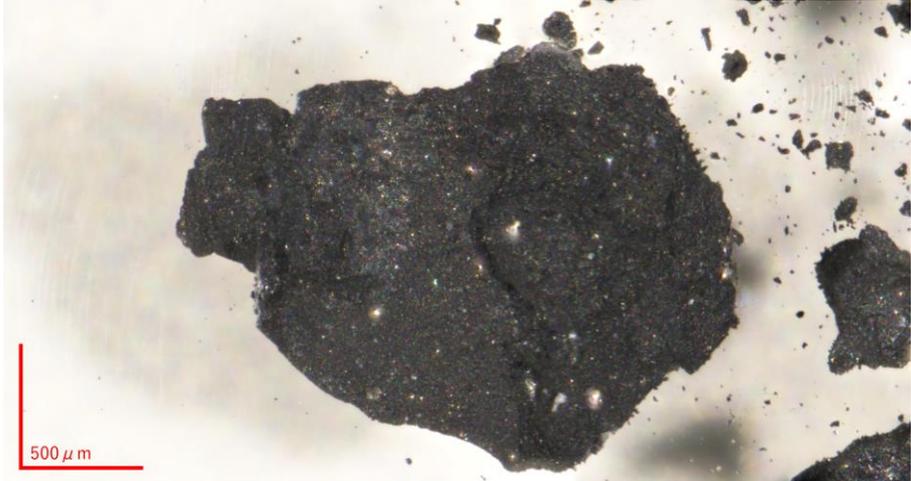
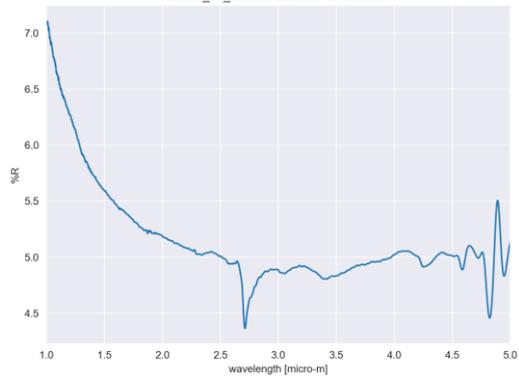
Name	C0079	
Size (μm)	3028	
Weight (mg)	2.5	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

Name	C0080	
Size (μm)	3025	
Weight (mg)	3.9	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

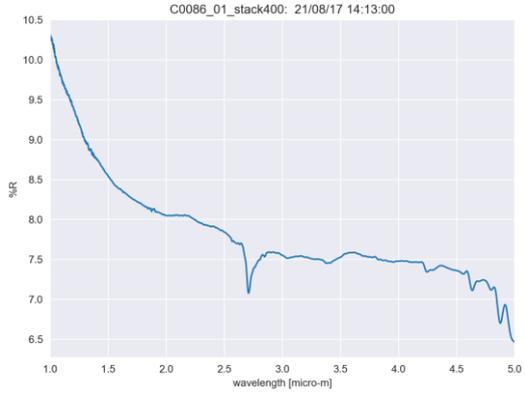
Name	C0081	
Size (μm)	3235	
Weight (mg)	4.4	
Label	MicrOmega,FTIR,Phase2 Misasa	
Microscope		
FTIR		
MicrOmega		

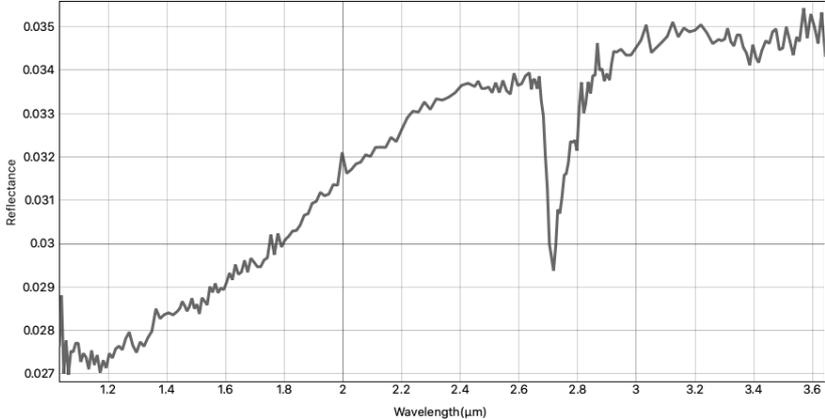
Name	C0082	
Size (μm)	2750	
Weight (mg)	3.8	
Label	MicrOmega, FTIR, Phase2 Misasa	
Microscope		
FTIR	 <p>C0082_01_stack400: 21/05/11 17:06:24</p>	
MicrOmega		

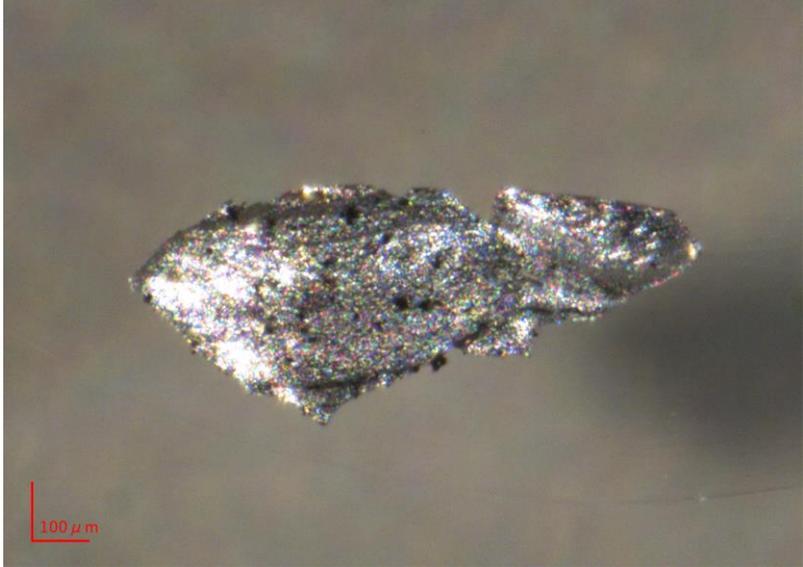
Name	C0083	
Size (μm)	3320	
Weight (mg)	3	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

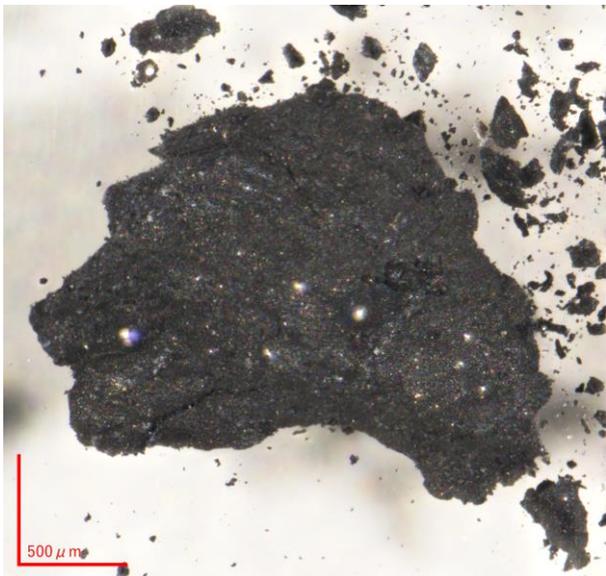
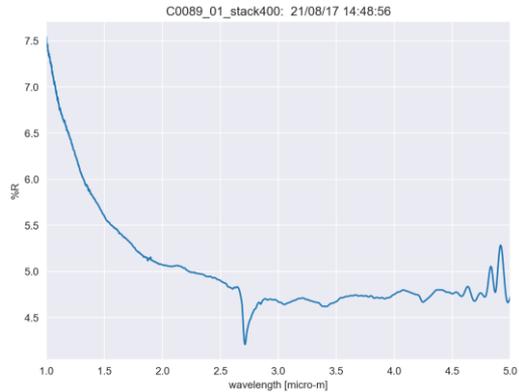
Name	C0084	
Size (μm)	2383	
Weight (mg)	2.5	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

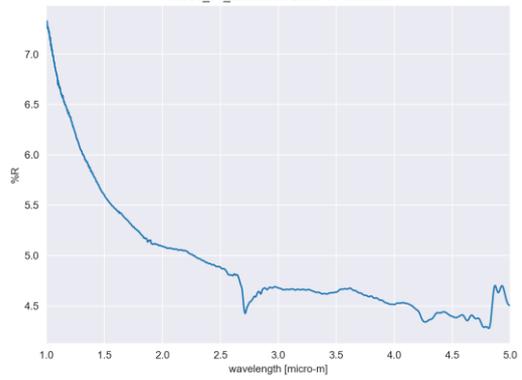
Name	C0085	
Size (μm)	1982	
Weight (mg)	1.2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

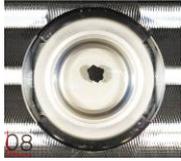
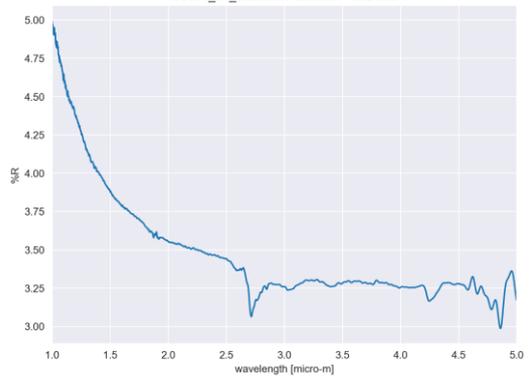
Name	C0086																							
Size (μm)	2316																							
Weight (mg)	2.6																							
Label	FTIR																							
Microscope																								
FTIR	 <p>C0086_01_stack400: 21/08/17 14:13:00</p> <table border="1"><caption>Approximate data points from the FTIR spectrum</caption><thead><tr><th>wavelength [micro-m]</th><th>%R</th></tr></thead><tbody><tr><td>1.0</td><td>10.2</td></tr><tr><td>1.5</td><td>8.5</td></tr><tr><td>2.0</td><td>8.1</td></tr><tr><td>2.5</td><td>7.8</td></tr><tr><td>2.7</td><td>7.2</td></tr><tr><td>3.0</td><td>7.5</td></tr><tr><td>3.5</td><td>7.5</td></tr><tr><td>4.0</td><td>7.4</td></tr><tr><td>4.5</td><td>7.3</td></tr><tr><td>5.0</td><td>6.8</td></tr></tbody></table>		wavelength [micro-m]	%R	1.0	10.2	1.5	8.5	2.0	8.1	2.5	7.8	2.7	7.2	3.0	7.5	3.5	7.5	4.0	7.4	4.5	7.3	5.0	6.8
wavelength [micro-m]	%R																							
1.0	10.2																							
1.5	8.5																							
2.0	8.1																							
2.5	7.8																							
2.7	7.2																							
3.0	7.5																							
3.5	7.5																							
4.0	7.4																							
4.5	7.3																							
5.0	6.8																							
MicrOmega	No Data																							

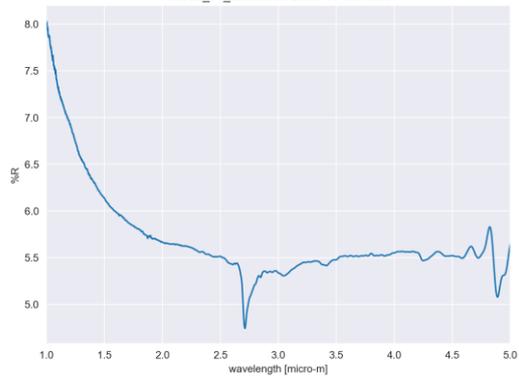
Name	C0087	
Size (μm)	3242	
Weight (mg)	2	
Label	MicrOmega,Phase2 Kochi	
Microscope		
FTIR	No Data	
MicrOmega		

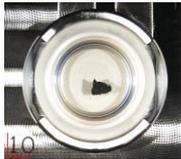
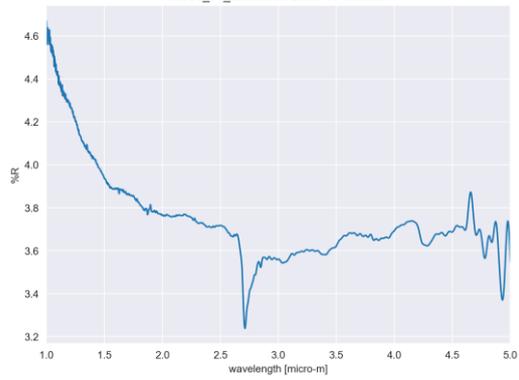
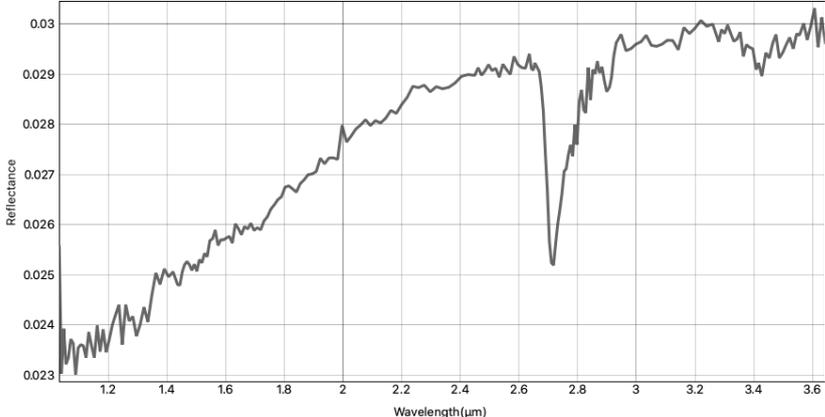
Name	C0088	
Size (μm)	985	
Weight (mg)	0.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

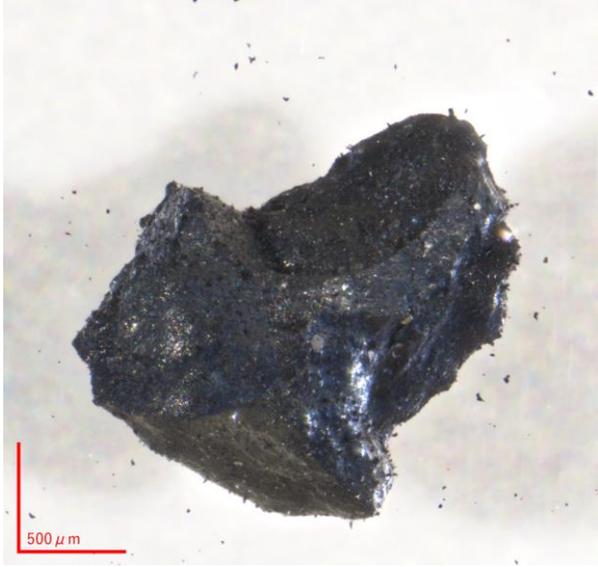
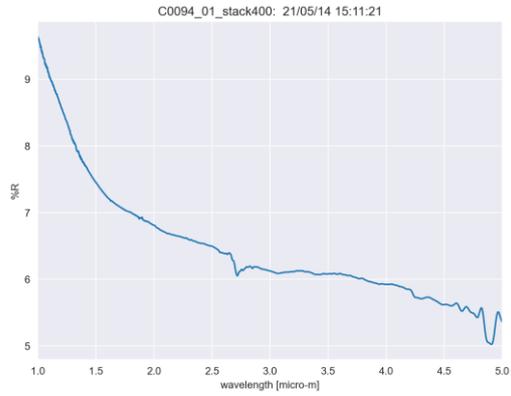
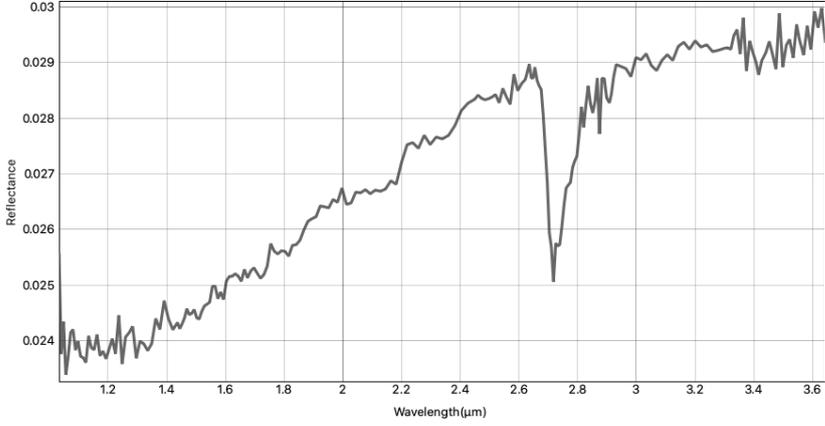
Name	C0089	
Size (μm)	2450	
Weight (mg)	2.5	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

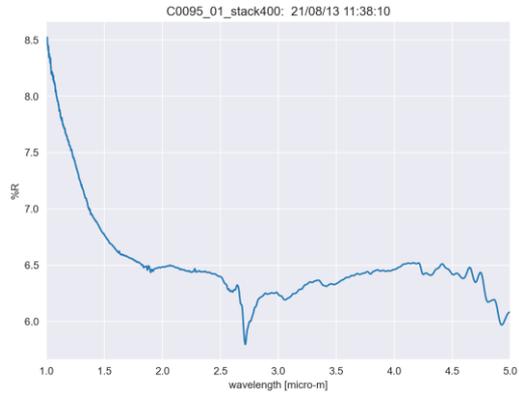
Name	C0090	
Size (μm)	2645	
Weight (mg)	2.6	
Label	FTIR	
Microscope		
FTIR	 <p>C0090_01_stack400: 21/08/17 15:05:35</p>	
MicrOmega	<p>No Data</p>	

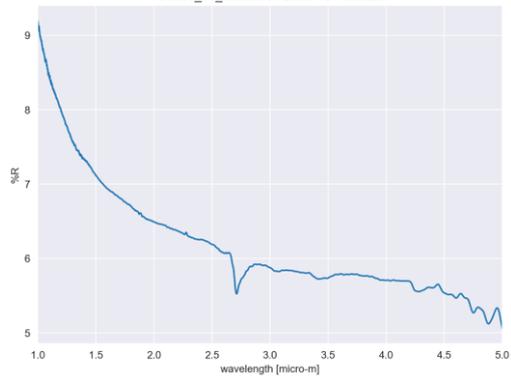
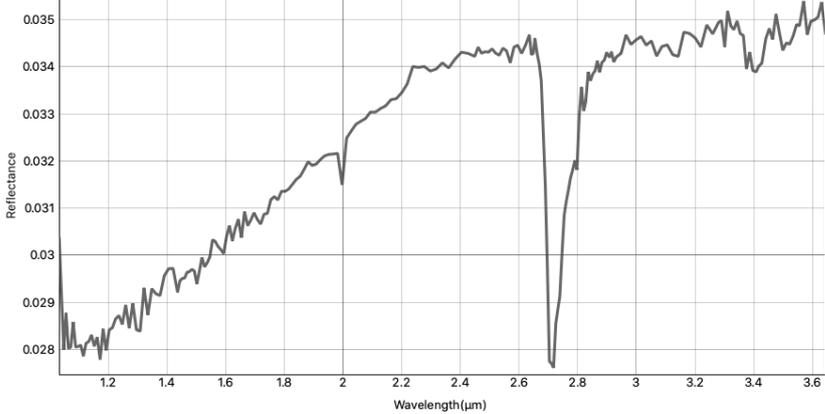
Name	C0091	
Size (μm)	2361	
Weight (mg)	3.8	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

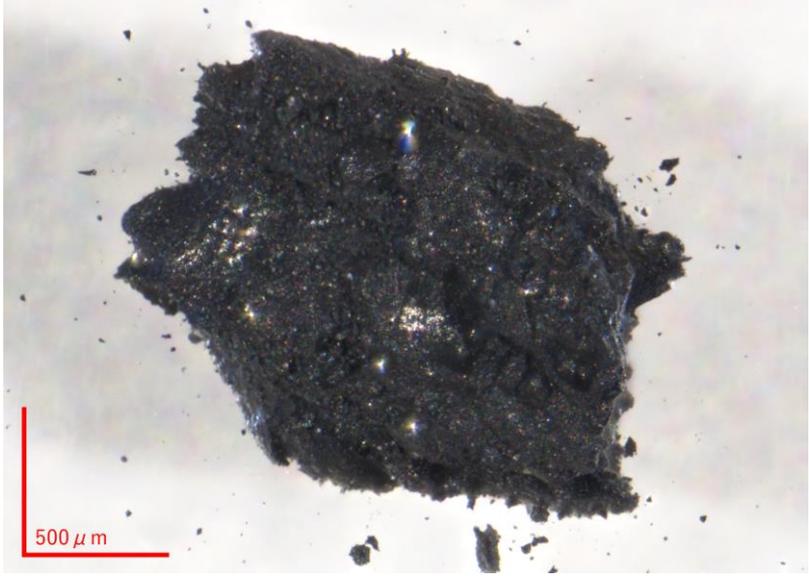
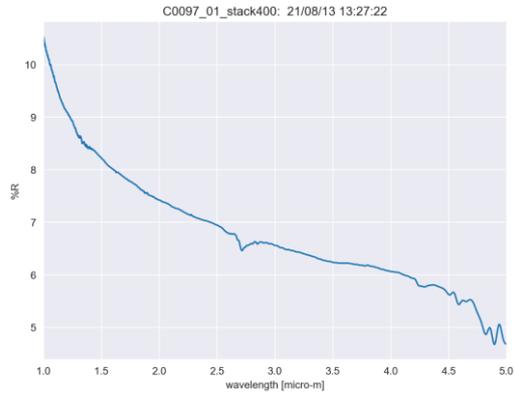
Name	C0092	
Size (μm)	2371	
Weight (mg)	1.9	
Label	FTIR	
Microscope		
FTIR	 <p>C0092_01_stack400: 21/08/17 15:41:16</p>	
MicrOmega	<p>No Data</p>	

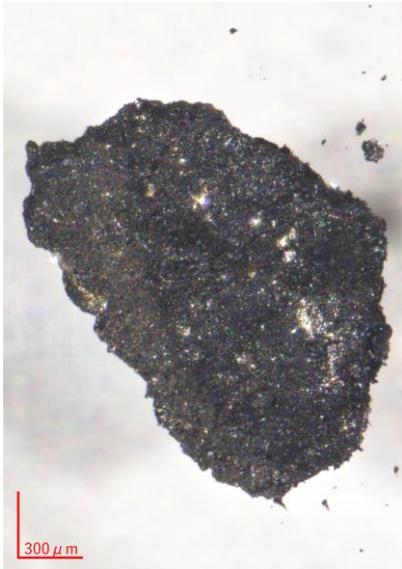
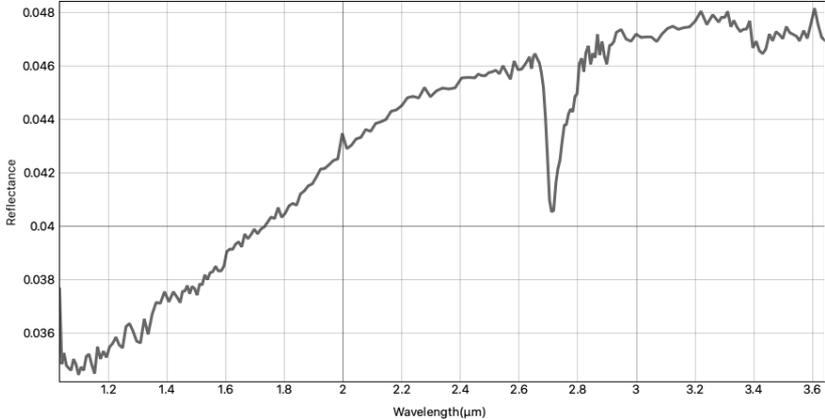
Name	C0093	
Size (μm)	2634	
Weight (mg)	3.9	
Label	MicrOmega,FTIR,NASA	
Microscope		
FTIR		
MicrOmega		

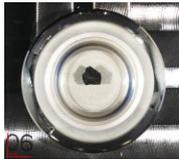
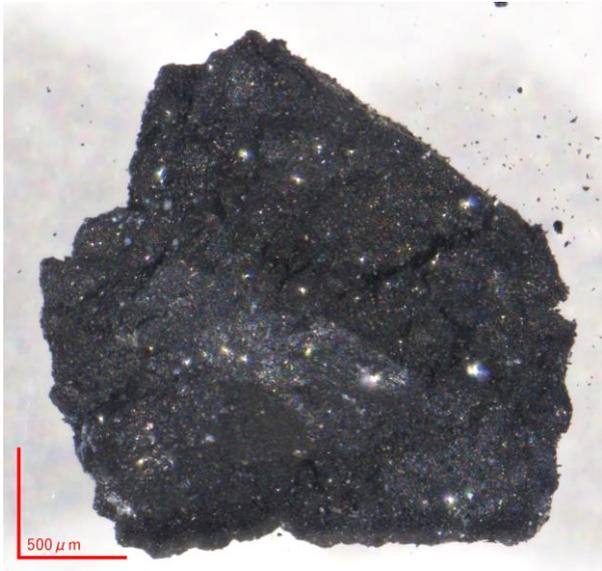
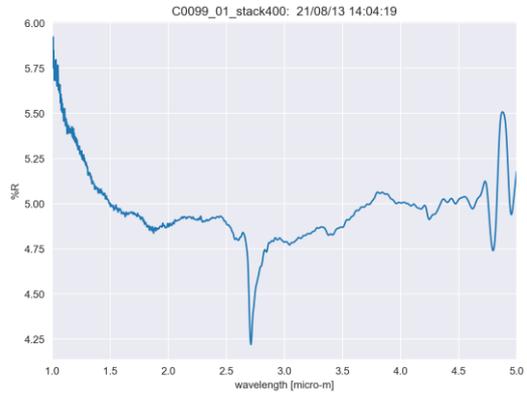
Name	C0094	
Size (μm)	2181	
Weight (mg)	3.1	
Label	MicrOmega, FTIR	
Microscope		
FTIR	 <p>C0094_01_stack400: 21/05/14 15:11:21</p>	
MicrOmega		

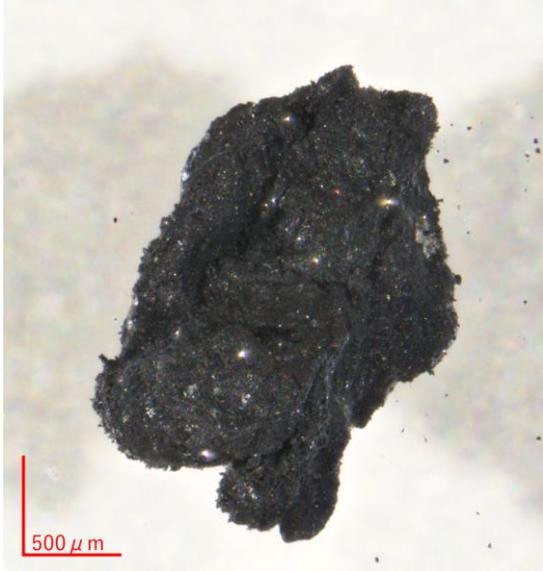
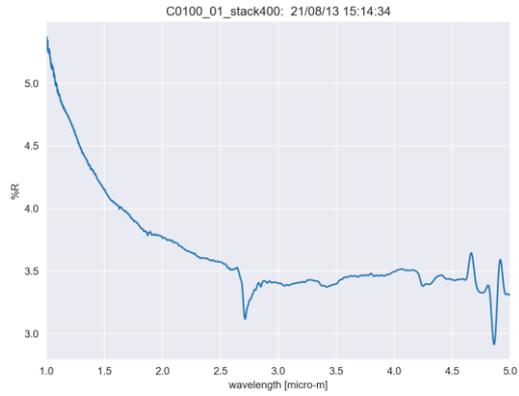
Name	C0095	
Size (μm)	2400	
Weight (mg)	2.1	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

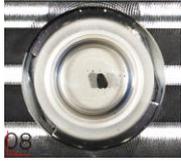
Name	C0096	
Size (μm)	1859	
Weight (mg)	2	
Label	MicrOmega, FTIR, NASA	
Microscope		
FTIR	 <p>C0096_01_stack400: 21/08/13 11:57:29</p>	
MicrOmega		

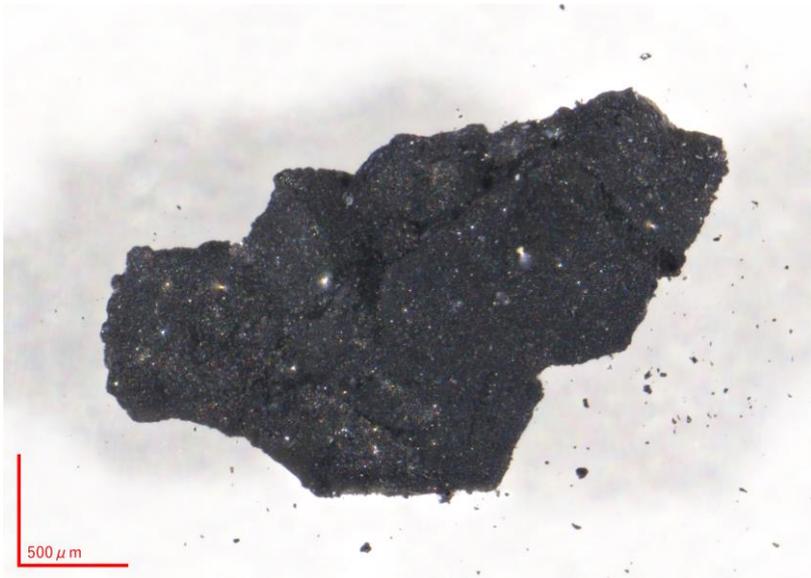
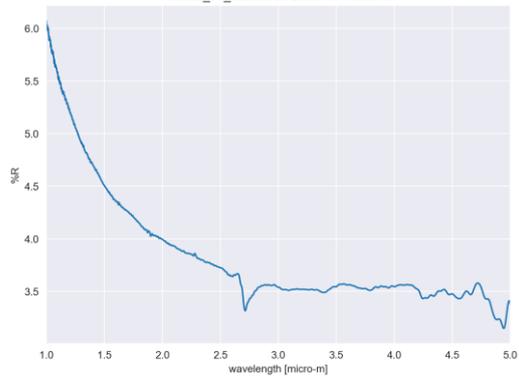
Name	C0097	
Size (μm)	2118	
Weight (mg)	2.5	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

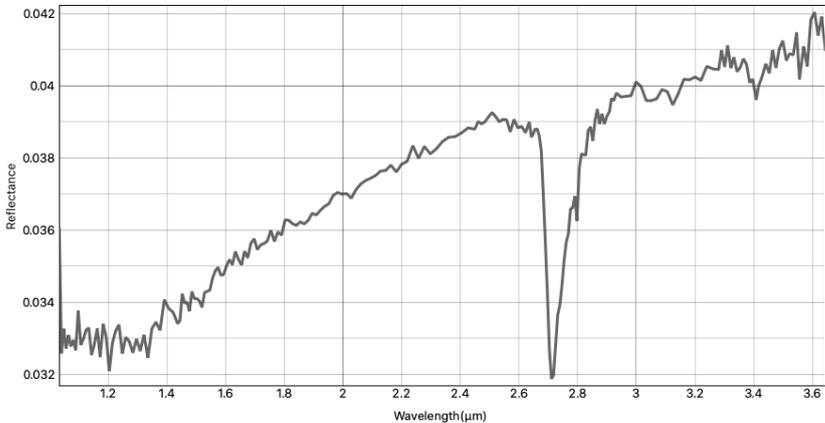
Name	C0098	
Size (μm)	2078	
Weight (mg)	0.8	
Label	MicrOmega,NASA	
Microscope		
FTIR	<p style="text-align: center;">No Data</p>	
MicrOmega	 <p>The graph plots Reflectance on the y-axis (ranging from 0.036 to 0.048) against Wavelength (μm) on the x-axis (ranging from 1.2 to 3.6). The reflectance generally increases with wavelength, with a prominent absorption dip (minimum reflectance) occurring between 2.6 and 2.8 μm.</p>	

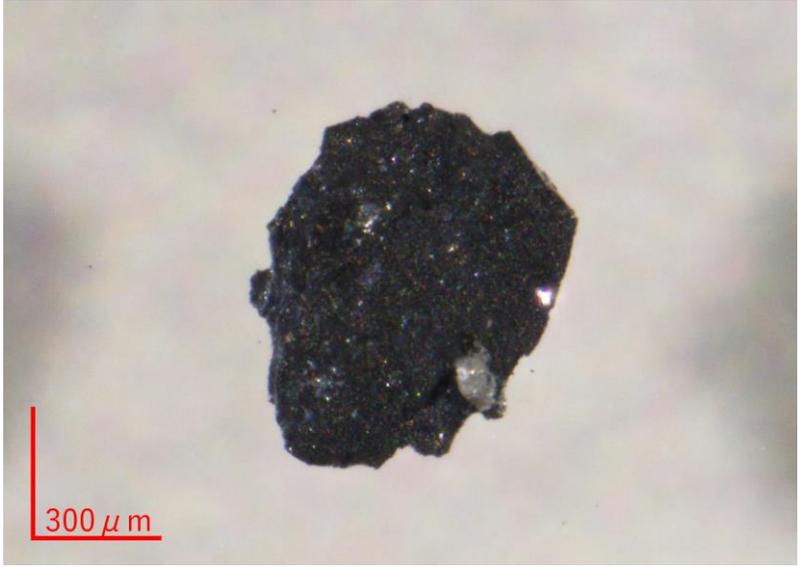
Name	C0099	
Size (μm)	2730	
Weight (mg)	3.9	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

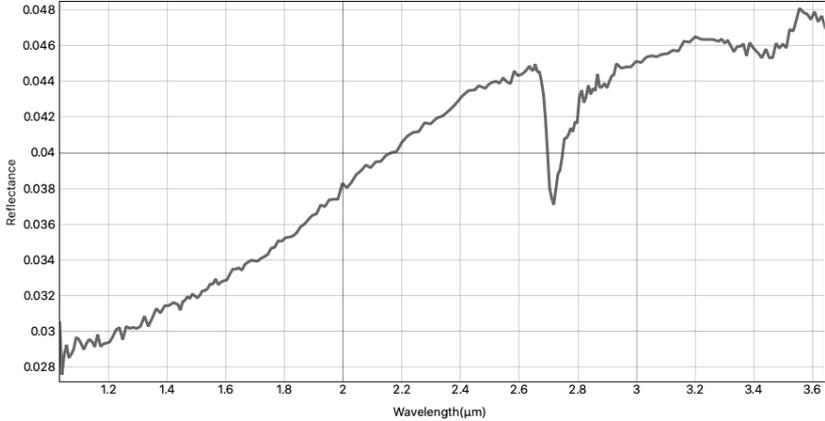
Name	C0100	
Size (μm)	2435	
Weight (mg)	3.8	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

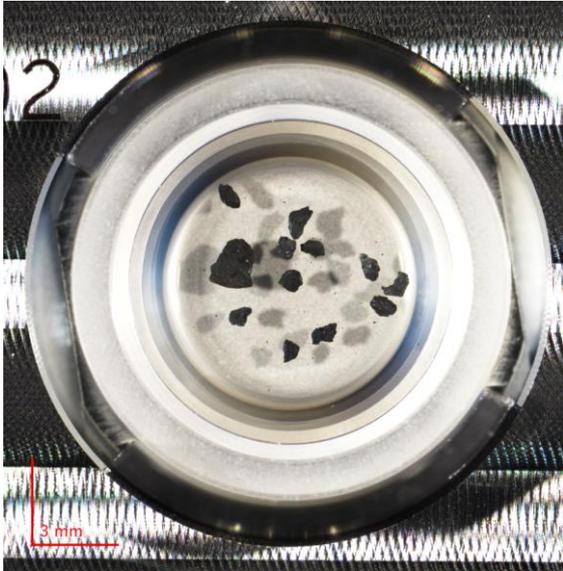
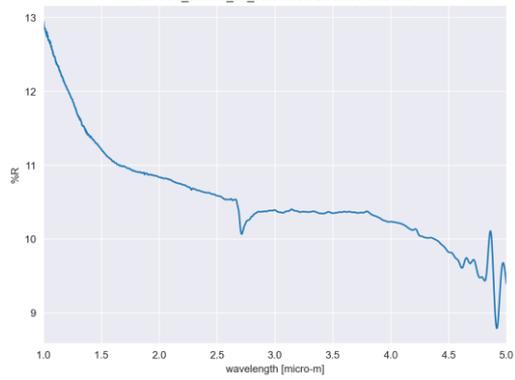
Name	C0101	
Size (μm)	2095	
Weight (mg)	2.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

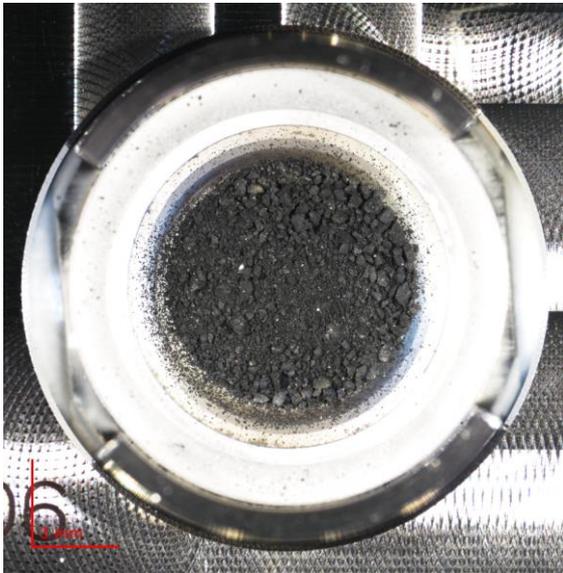
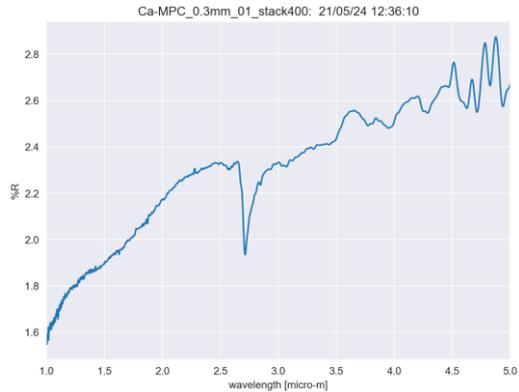
Name	C0102	
Size (μm)	2995	
Weight (mg)	2.3	
Label	FTIR	
Microscope		
FTIR		
MicrOmega	<p data-bbox="448 1715 571 1749">No Data</p>	

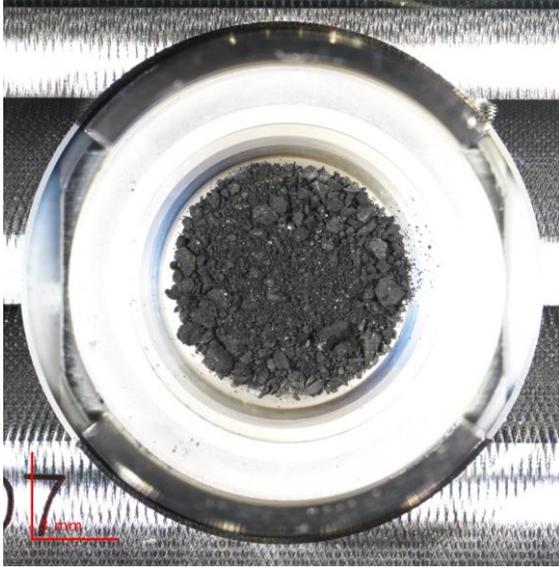
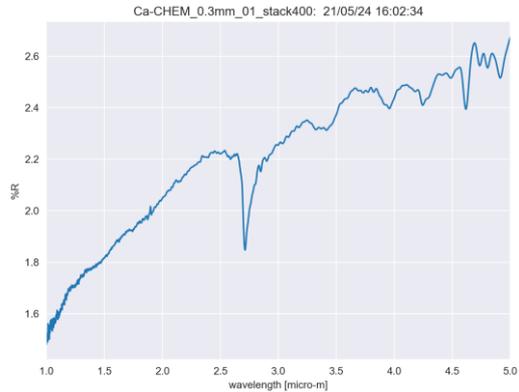
Name	C0103	
Size (μm)	1975	
Weight (mg)	1.5	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

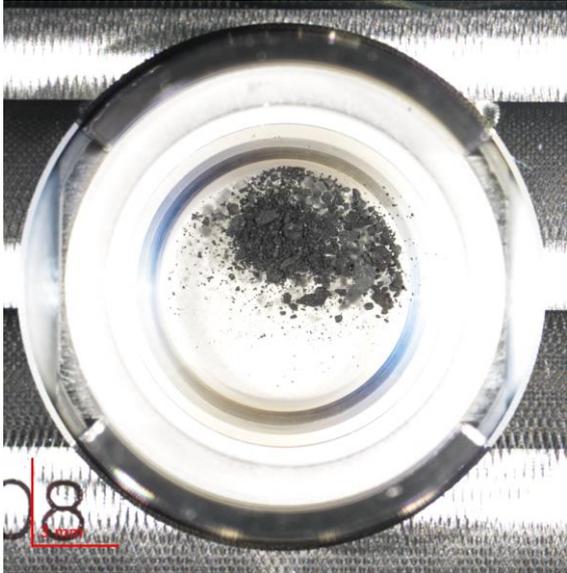
Name	C0104	
Size (μm)		
Weight (mg)	0.2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

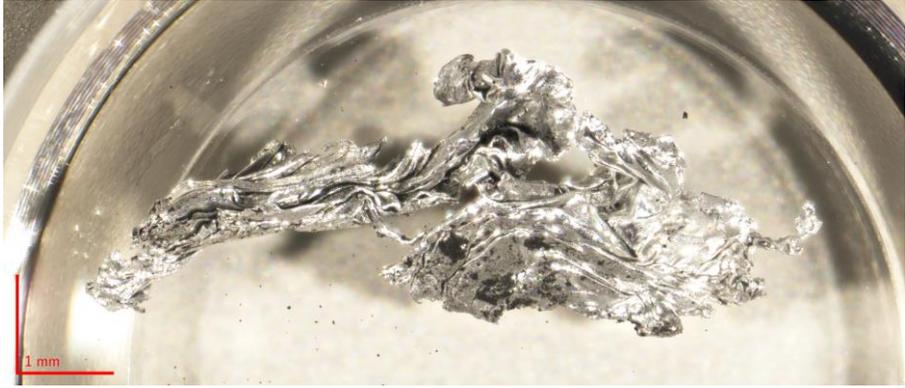
Name	C0105(Ca-MPF)	
Size (μm)		
Weight (mg)	0.4	
Label	MicrOmega,Initial Analysis	
Microscope		
FTIR	No Data	
MicrOmega		

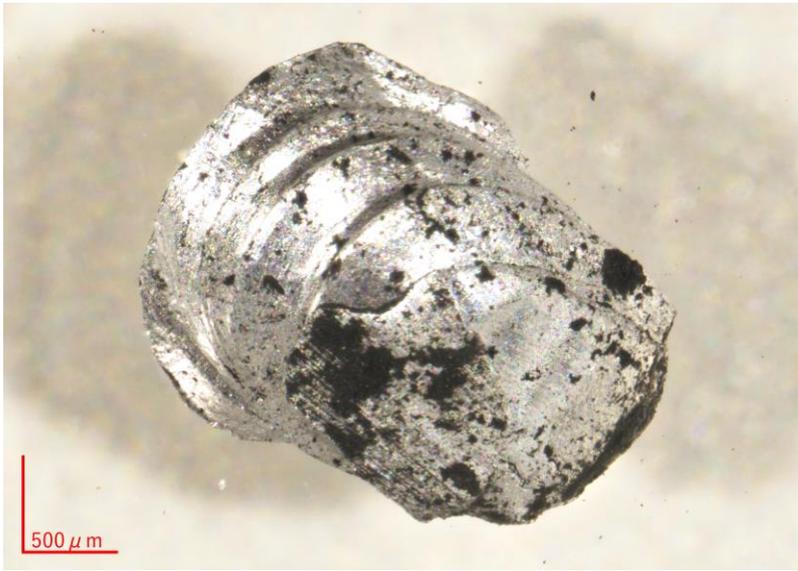
Name	C0106(Ca-VOL)	
Size (μm)		
Weight (mg)	4	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR	<p>Ca-VOL_0.3mm_01_stack400: 21/05/25 11:26:56</p> 	
MicrOmega	<p>No Data</p>	

Name	C0107(Ca-MPC)	
Size (μm)		
Weight (mg)	38.8	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega	No Data	

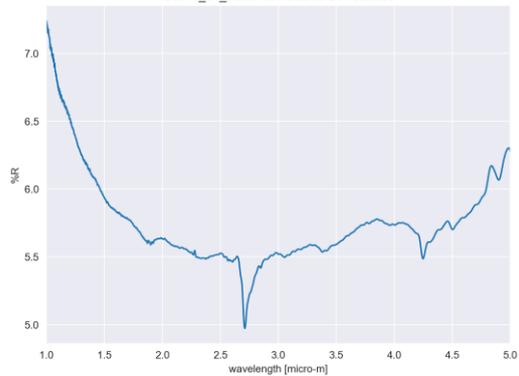
Name	C0108(Ca-Chem)	
Size (μm)		
Weight (mg)	33	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega	No Data	

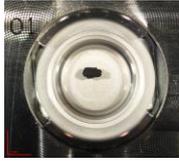
Name	C0109(Ca-IOM)	
Size (μm)		
Weight (mg)	3.7	
Label	MicrOmega,FTIR,Initial Analysis	
Microscope		
FTIR		
MicrOmega	No Data	

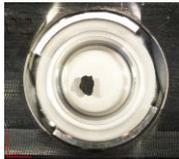
Name	C0110	
Size (μm)	7583	
Weight (mg)	4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0111	
Size (μm)	2820	
Weight (mg)	9.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

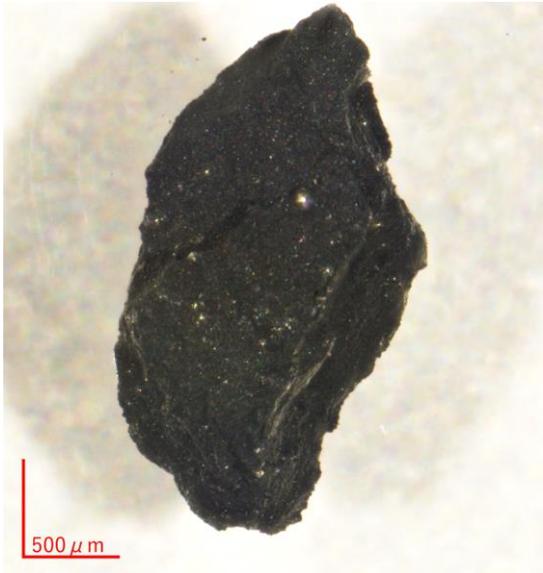
Name	C0112	
Size (μm)	1697	
Weight (mg)	0.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0113	
Size (μm)	2335	
Weight (mg)	2.6	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

Name	C0114	
Size (μm)	2483	
Weight (mg)	2.7	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0115	
Size (μm)	2601	
Weight (mg)	2.9	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

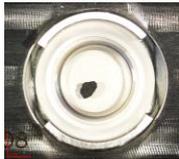
Name	C0116	
Size (μm)	2496	
Weight (mg)	3.3	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

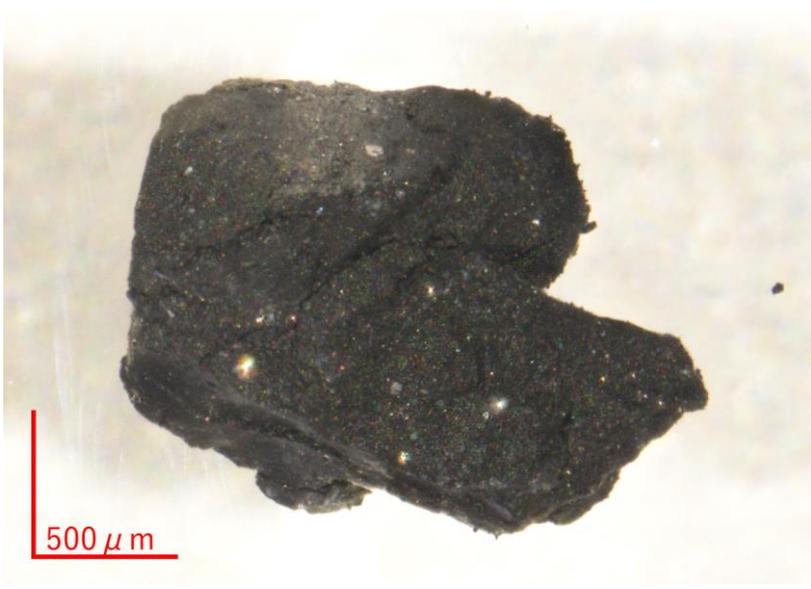
Name	C0117	
Size (μm)	2769	
Weight (mg)	2.9	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

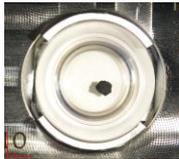
Name	C0118	
Size (μm)	2481	
Weight (mg)	2.7	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

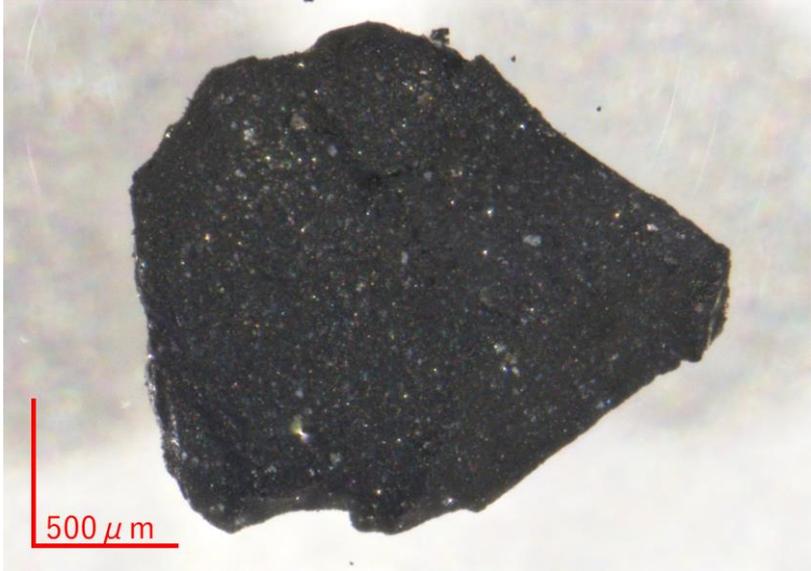
Name	C0119	
Size (μm)	2720	
Weight (mg)	4.6	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0120	
Size (μm)	2185	
Weight (mg)	2.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

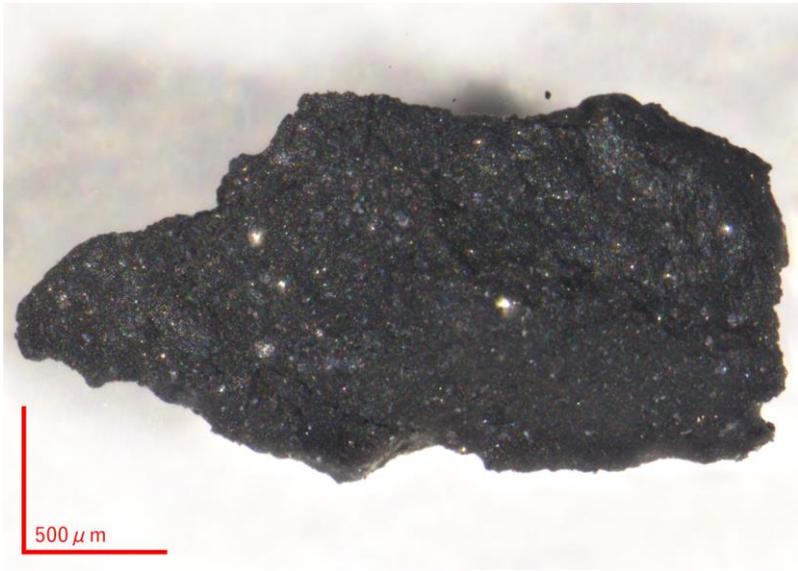
Name	C0121	
Size (μm)	2604	
Weight (mg)	1.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0122	
Size (μm)	2114	
Weight (mg)	2.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

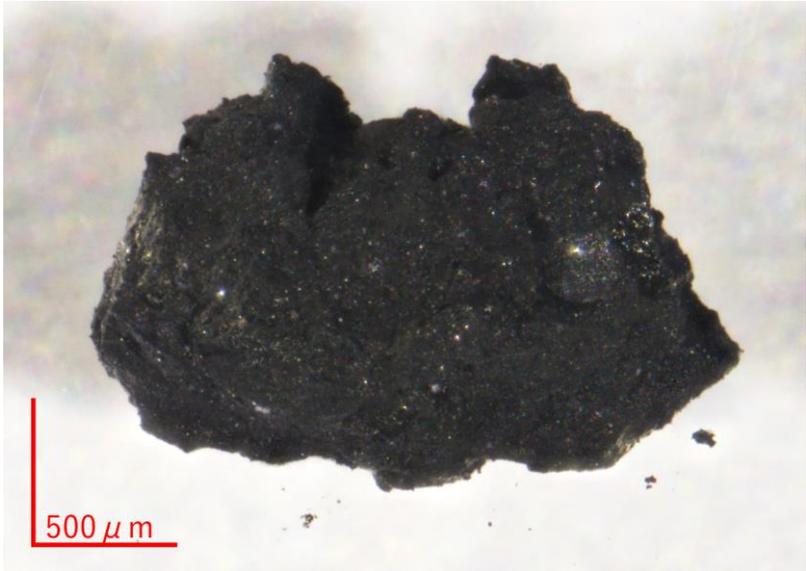
Name	C0123	
Size (μm)	2158	
Weight (mg)	3.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

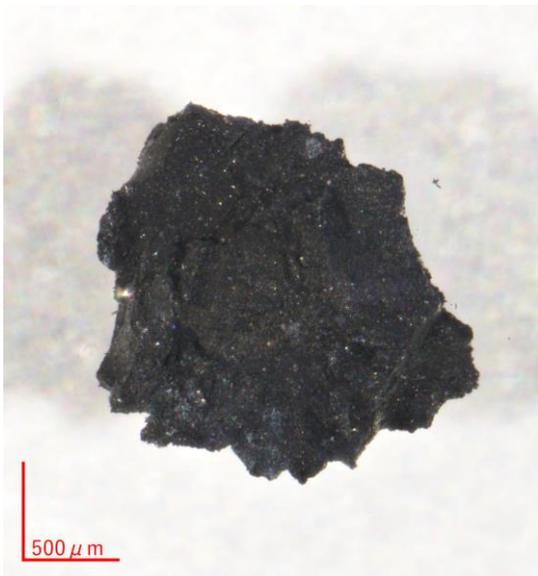
Name	C0124	
Size (μm)	2086	
Weight (mg)	2.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0125	
Size (μm)	2003	
Weight (mg)	1.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0126	
Size (μm)	2685	
Weight (mg)	1.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0127	
Size (μm)	1710	
Weight (mg)	1.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

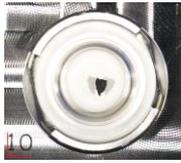
Name	C0128	
Size (μm)	2243	
Weight (mg)	2.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0129	
Size (μm)	2138	
Weight (mg)	2.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0130	
Size (μm)	2128	
Weight (mg)	1.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

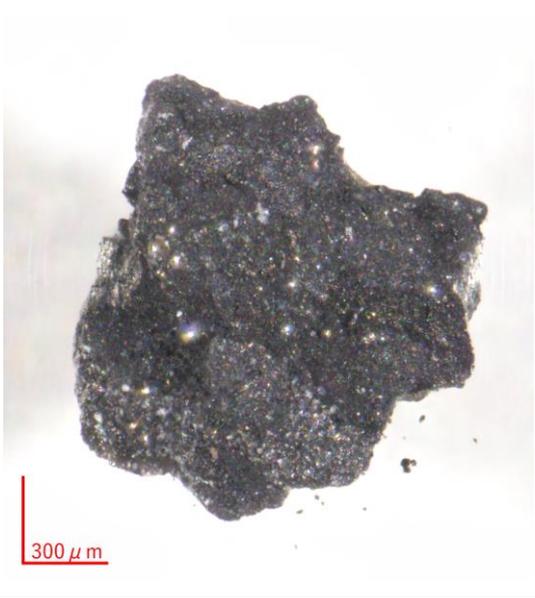
Name	C0131	
Size (μm)	2114	
Weight (mg)	2.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0132	
Size (μm)	2246	
Weight (mg)	1.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0133	
Size (μm)	2302	
Weight (mg)	1.8	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0134	
Size (μm)	2079	
Weight (mg)	1.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0135	
Size (μm)	1960	
Weight (mg)	1.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

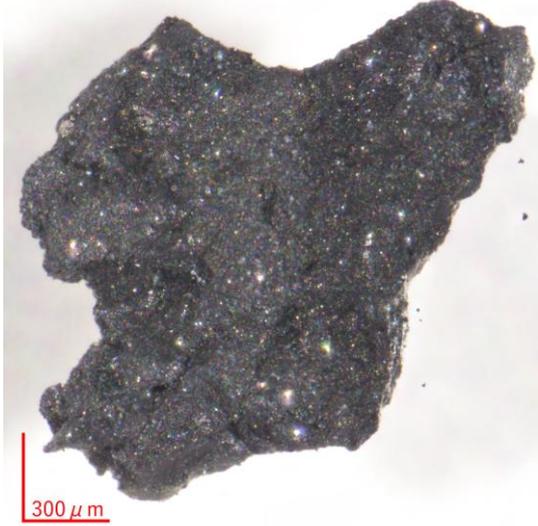
Name	C0136	
Size (μm)	1621	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0137	
Size (μm)	1955	
Weight (mg)	2.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

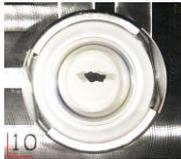
Name	C0138	
Size (μm)	1988	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

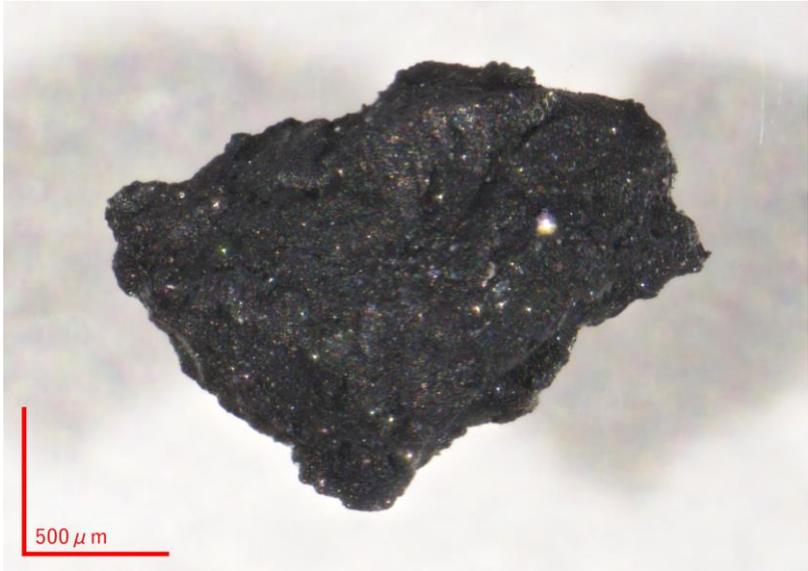
Name	C0139	
Size (μm)	2332	
Weight (mg)	2	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0140	
Size (μm)	2333	
Weight (mg)	1.9	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0141	
Size (μm)	2198	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

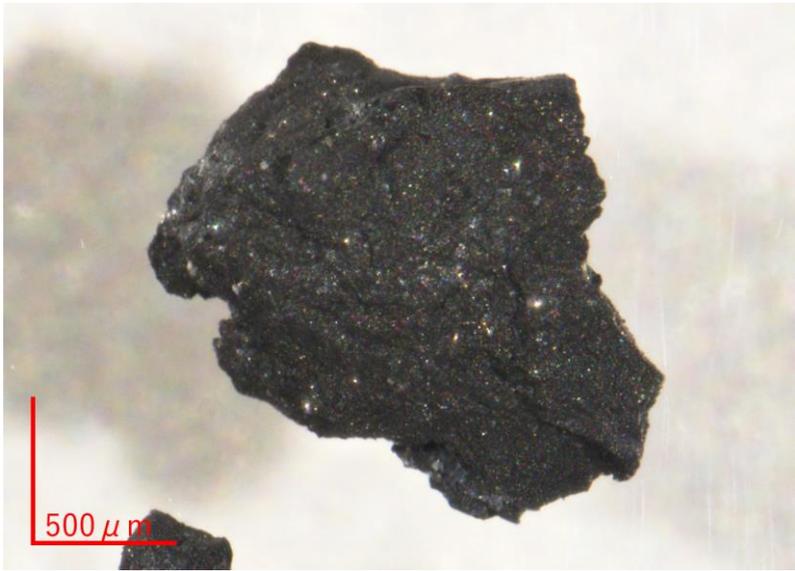
Name	C0142	
Size (μm)	1730	
Weight (mg)	1.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0143	
Size (μm)	2766	
Weight (mg)	1.5	
Label	MicrOmega	
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0144	
Size (μm)	2071	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0145	
Size (μm)	1506	
Weight (mg)	0.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0146	
Size (μm)	2067	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0147	
Size (μm)	1870	
Weight (mg)	1.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

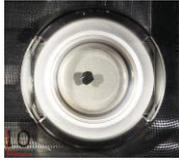
Name	C0148	
Size (μm)	1716	
Weight (mg)	0.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0149	
Size (μm)	1976	
Weight (mg)	2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0150	
Size (μm)	2161	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

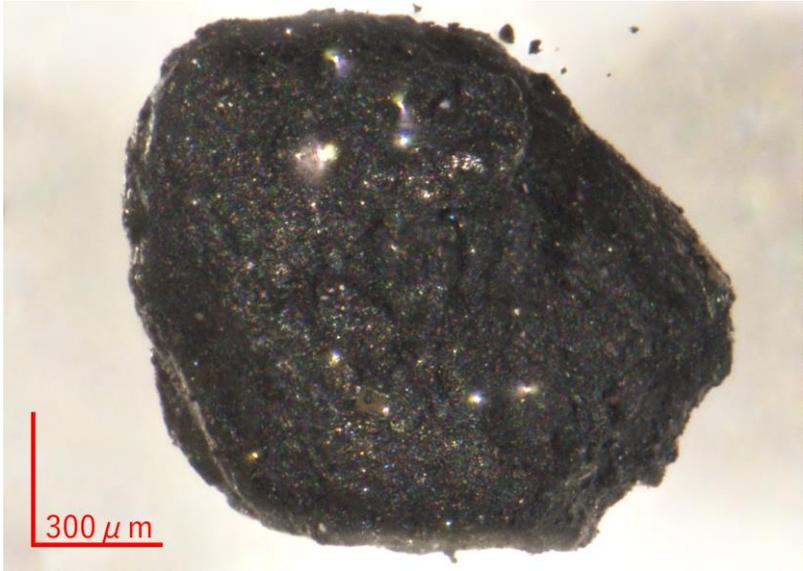
Name	C0151	
Size (μm)	2079	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0152	
Size (μm)	2188	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

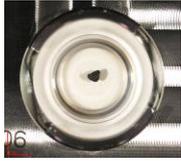
Name	C0153	
Size (μm)	1788	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0154	
Size (μm)	2152	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

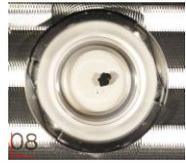
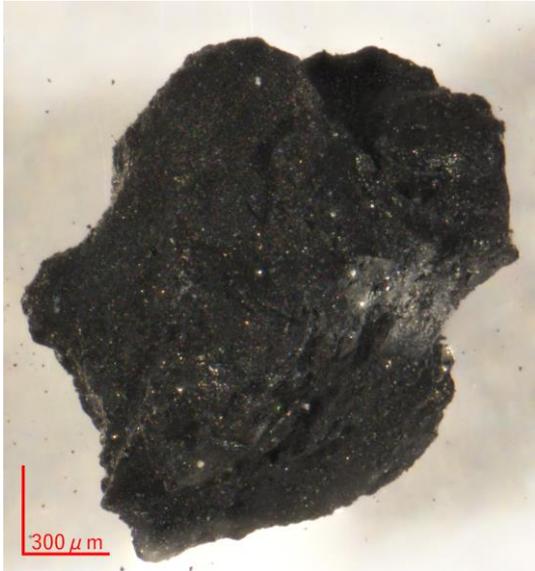
Name	C0155	
Size (μm)	1838	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0156	
Size (μm)	1488	
Weight (mg)	1.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

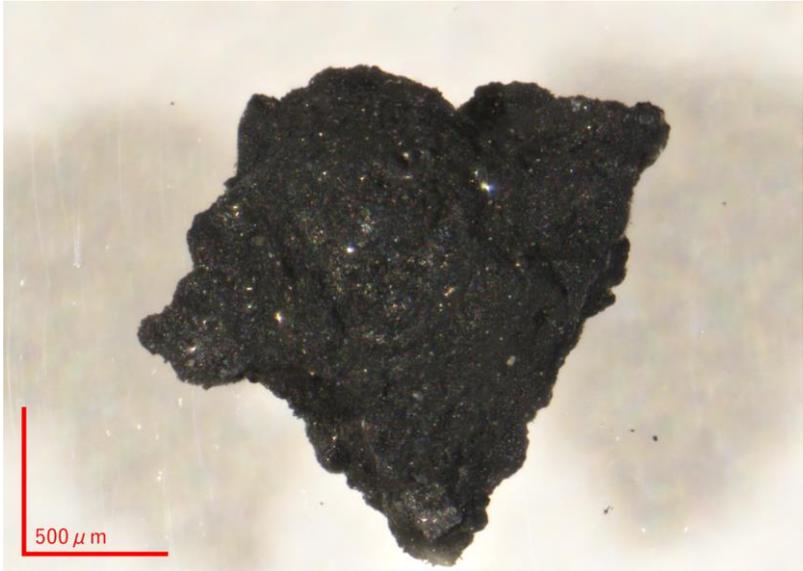
Name	C0157	
Size (μm)	1964	
Weight (mg)	1.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

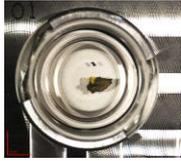
Name	C0158	
Size (μm)	1768	
Weight (mg)	1.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0159	
Size (μm)	2007	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

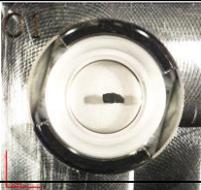
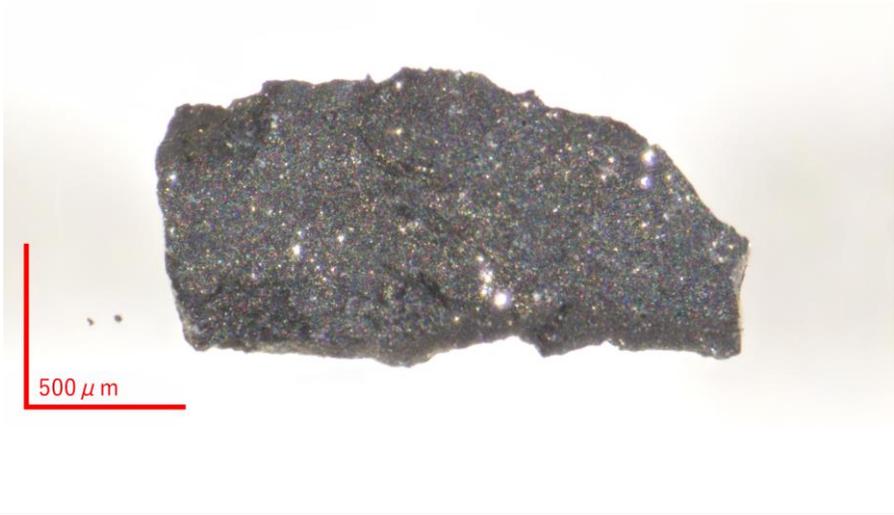
Name	C0160	
Size (μm)	1968	
Weight (mg)	2.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0161	
Size (μm)	1834	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0162	
Size (μm)	1966	
Weight (mg)	1.8	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0163	
Size (μm)	3533	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

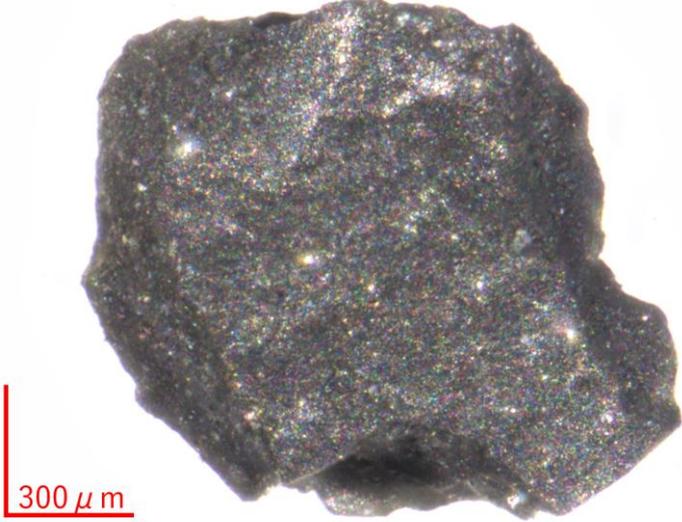
Name	C0164	
Size (μm)	1302	
Weight (mg)	0.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0165	
Size (μm)	1912	
Weight (mg)	0.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

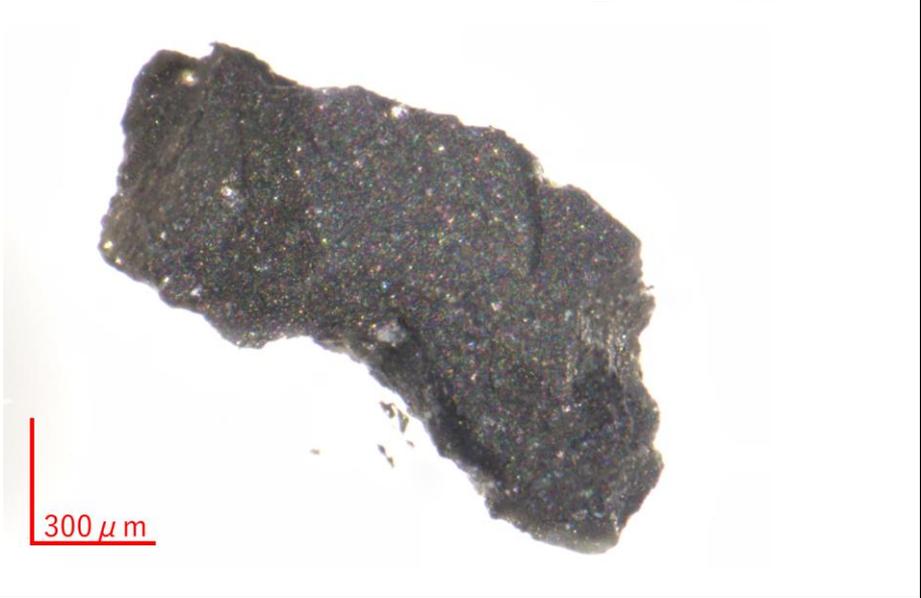
Name	C0166	
Size (μm)	2022	
Weight (mg)	0.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0167	
Size (μm)	1778	
Weight (mg)	1.4	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0168	
Size (μm)	1893	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

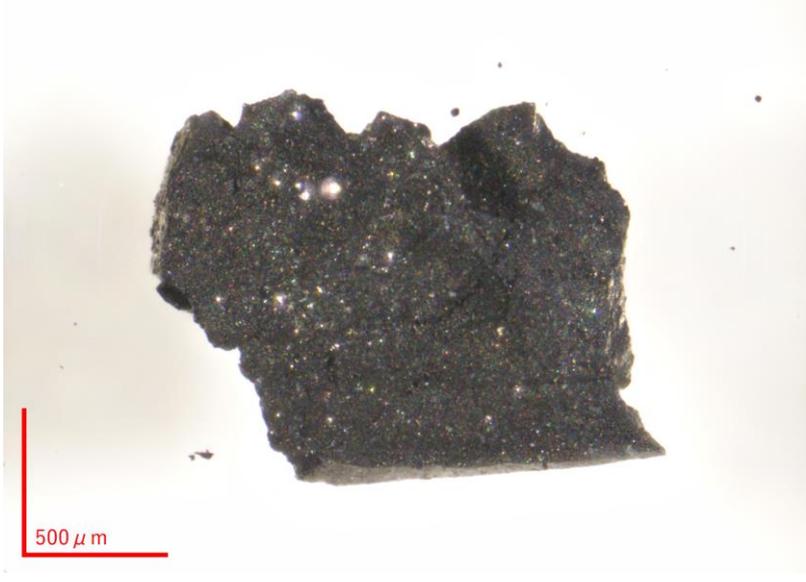
Name	C0169	
Size (μm)	1562	
Weight (mg)	0.9	
Label		
Microscope	 300 μm	
FTIR	No Data	
MicrOmega	No Data	

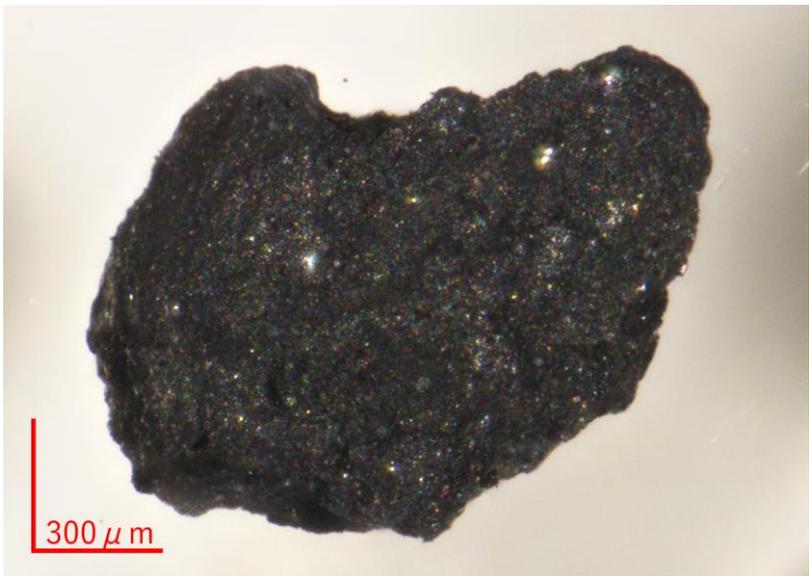
Name	C0170	
Size (μm)	2027	
Weight (mg)	0.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0171	
Size (μm)	1621	
Weight (mg)	0.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

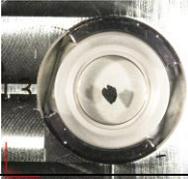
Name	C0172	
Size (μm)	1608	
Weight (mg)	0.7	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0173	
Size (μm)	1926	
Weight (mg)	0.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0174	
Size (μm)	2005	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

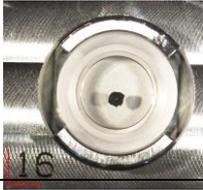
Name	C0175	
Size (μm)	1580	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

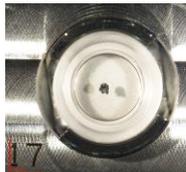
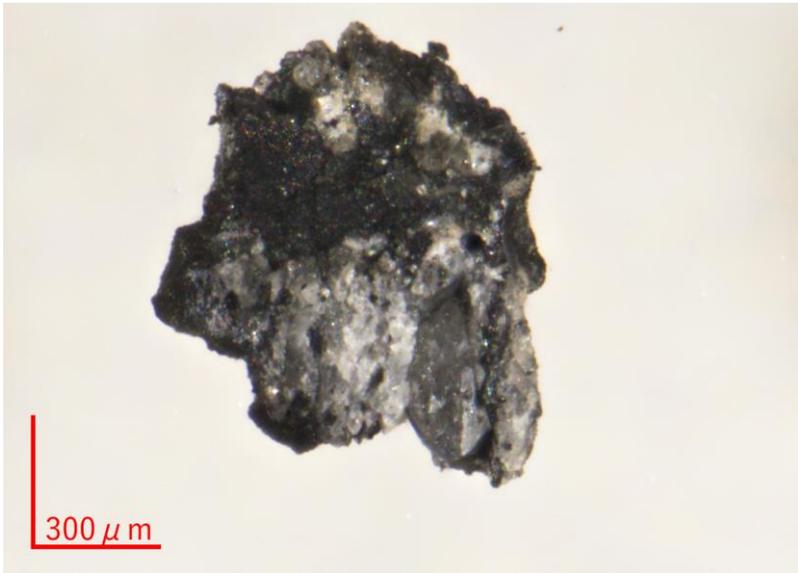
Name	C0176	
Size (μm)	1718	
Weight (mg)	1.1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0177	
Size (μm)	1768	
Weight (mg)	0.9	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0178	
Size (μm)	1939	
Weight (mg)	1.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0179	
Size (μm)	1754	
Weight (mg)	1.2	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

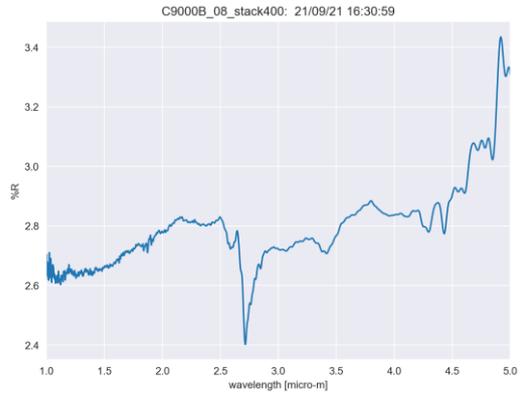
Name	C0180	
Size (μm)	1472	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0181	
Size (μm)	1141	
Weight (mg)	0.5	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0182	
Size (μm)	1898	
Weight (mg)	1.3	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0183	
Size (μm)	1697	
Weight (mg)	0.6	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C0184	
Size (μm)	1621	
Weight (mg)	1	
Label		
Microscope		
FTIR	No Data	
MicrOmega	No Data	

Name	C9000(CXL)	
Size (μm)	10345	
Weight (mg)	138.1	
Label	MicrOmega,FTIR	
Microscope		
FTIR		
MicrOmega	No Data	

JAXA Special Publication JAXA-SP-21-006E

Hayabusa2 Asteroid Sample Catalog 2021

Edited and Published by: Japan Aerospace Exploration Agency

7-44-1 Jindaiji-higashimachi, Chofu-shi, Tokyo 182-8522 Japan

URL: <http://www.jaxa.jp/>

Date of Issue: January 19, 2022

Produced by: Matsueda Printing Inc.

Unauthorized copying, replication and storage digital media of the contents of this publication, text and images are strictly prohibited. All Rights Reserved.

