

Table 1 – Synthesis of flight characteristics and photos excluded from the modelling due to lack of calibration or manually disabled in the pre-processing.

Flight nr	Date (2016)	Start time	Duration (min)	Area (km ²)	Weather	Camera	Nr of Photos	First and last photo ID (IMG)	Used	Uncalibrated images IDs (IMG)	Disabled images IDs (IMG)
1	12/12	14:58	20	0.99	Cloudfree	Canon G9X	92	0425 - 0516	Yes	448, 470	425-428, 451-460, 513-516
2	12/12	15:21	29	1.21	Cloudfree	Canon G9X	150	0517 - 0666	Yes		517-519, 542, 564-568, 613-615, 639-642
3	12/12	15:52	28	1.44	Cloudfree	Canon G9X	181	0667 - 0847	Yes		671, 683
4	12/12	16:43	33	0.37	Cloudfree	Canon G9X	50	0849 - 0898	Yes		
5	13/12	11:04	25	1.52	Cloudfree	Canon G9X	161	0900 - 1060	Yes		1053-1060
6	13/12	11:31	35	1.37	Cloudfree	Canon G9X	181	1061 - 1241	Yes	1200, 1241	1113-1116, 1155
7	13/12	12:59	30	1.41	Cloudfree	Canon G9X	166	1243 - 1408	Yes		1244-1260, 1352, 1406-1408
8	14/12	11:00	19	1.40	Cloudfree	Canon IXUS	215	0146 - 365	Yes		
9	14/12	11:55	27	1.19	Cloudfree	Canon IXUS	205	366 - 570	Yes		
10	14/12	12:33	31	1.35	Cloudfree	Canon IXUS	216	0571 - 0786	Yes	786	
11	14/12	13:06	30	0.82	Cloudfree	Canon IXUS	135	0787 - 0921	Yes		
12	14/12	13:41	42	1.43	Cloudfree	Canon IXUS	213	0922 - 1134	Yes		
13	14/12	14:28	15	0.41	Cloudfree	Canon IXUS	65	1135 - 1199	Yes		
14	14/12	17:03	34	1.23	Cloudfree	Canon IXUS	196	1200 - 1395	Yes		
15	15/12	12:45	29	1.31	Scattered/low clouds	Canon IXUS	198	1396 - 1593	No		
16	15/12	14:07	21	0.58	Scattered clouds*	Canon IXUS	119	1594 - 1712	Yes		
17	15/12	14:30	30	1.16	Scattered clouds*	Canon IXUS	196	1713 - 1908	Yes		
18	15/12	15:02	32	1.25	Scattered clouds*	Canon IXUS	209	1909 - 2117	Yes		
19	15/12	15:49	15	0.16	Scattered clouds*	Canon IXUS	37	2118 - 2154	Yes		
20	15/12	16:06	32	1.26	Scattered clouds*	Canon IXUS	197	2155 - 2351	Yes		

* Illumination problems, probably due to light scattering associated to fog entering the caldera from the NE and the dark wall of the bordeira in the S and W, resulting in striping.

Table 2 – Accuracy of the densified point cloud per check point in X, Y and Z.

Check Point	ErrorX (m)	Error Y (m)	Error Z (m)	Projection Error (pixel)
beco03	-0.0218	-0.0110	0.0729	1.02
beco05	-0.1511	-0.1224	-0.0617	0.40
beco10	-0.0597	0.0347	0.2638	0.45
beco23	-0.0026	0.0791	0.0287	0.39
beco24	-0.0076	0.0844	0.1193	0.53
beco26	0.0286	0.1193	-0.0298	0.52
beco28	0.0671	0.0423	-0.0542	0.28
beco29	-0.0872	-0.0194	-0.1591	0.54
amarelo03	-0.0451	-0.1036	0.0280	0.41
amarelo05	-0.1162	-0.3011	0.2447	0.80
amarelo13	0.0567	0.0098	-0.1135	0.97
amarelo14	0.1900	0.0138	0.1076	0.74
amarelo16	-0.0011	0.1119	0.0940	0.60
Mean (m)	-0.0107	-0.0045	0.039	
RMSE (m)	0.082	0.107	0.125	

