

# TECHNICKÁ ZPRÁVA

Vyhotovil:

Ing. Milan Hlaváček,  
K Trativodům 1090  
281 63 Kostelec n.Č.L.  
Tel. 606328723

číslo zakázky: **144/2018**

**Objednatel :** IM-PROJEKT s.r.o., Vodní 1, Brno 602 00

**Předmět zakázky:** Polohopisný-výškopisný plán mostu 0172-1, Opatovice I

**Zaměřeno dne:** 30.7.2018

**Použité přístroje:** Elektrooptický dálkoměr Nikon Nivo 5.M – kalibrační list č.042, 043-2018,  
pásma – kalibrační list č.HKM-039-001-10-N, GNSS stanice ProMark 500

**Souřadný systém:** S-JTSK

**Výškový systém:** B.p.v.

**Okres:** Kutná Hora

**Katastrální území:** Opatovice I

**Popis měřičských prací:** Po připojení měř.sítě do S-JTSK a B.P.V. metodou GNSS byly určeny souřadnice podrobných bodů předmětu měření.

**Popis kancelářských prací:** Zpracování naměřených údajů bylo provedeno na počítači programem Groma a zobrazení automatickým kreslícím zařízením HP. Dále byl do výkresu převzat aktuální stav hranic dle mapy katastru nemovitostí.

**Přesnost zobrazení:**  $\pm 0,1\text{mm}$

**Zaměřil:** Ing.Milan Hlaváček,K Trativodům 1090,Kostelec n.Č.I, tel. 321679325, 606328723

**Vyhotovil:** Ing. Milan Hlaváček :

Náležitostí a přesností odpovídá  
právním předpisům



(jméno, příjmení, podpis, razítko zhotovitele)

Číslo ověření: 140/2018

V Kostelci nad Černými lesy dne: 6.8.2018

# Technická zpráva

Určování bodů S-JTSK metodou GNSS

**Název zakázky: 144/2018**

**Datum měření: 30.07.2018**

<b>Firma:</b>	<b>Ing. Milan Hlaváček</b>
<b>Zpracoval:</b>	<b>Ing. Milan Hlaváček</b>
<b>Okres:</b>	<b>Kutná Hora</b>
<b>Katastrální území:</b>	<b>Opatovice I</b>
<b>Lokalita:</b>	
<b>Související geometrický plán:</b>	<b>144/2018</b>
<b>Ověřil:</b>	<b>Ing. Milan Hlaváček</b>

Měřil: Ing. Milan Hlaváček

Stažení dat: 6.8.2018

Výpočet: 6.8.2018

Transformace: 6.8.2018

## Použité přístroje a postup

Magellan Mobile Mapper – dvoufrekvenční  
Výr. číslo 0143524309195

Magellan ProMark 500 – dvoufrekvenční  
Výr. číslo Výr. číslo 200951026

Použitý software: Fast Survey 3.1.12

Použité souřadnice: Souřadnice byly navázány na ETRS89 (ETRF2000), pomocí referenční stanice (viz. další podrobnosti)

## Základnové body

Všechna měření byla navázána na body navázané na ETRS89(ETRF2000).

### Souřadnice z RTK

329      Délka                    15° 14' 53.91696" E  
         Šířka                    49° 51' 12.34014" N  
         Elips. výška                    449.918 m

### Monitoring stanic

Stabilita virtuální stanice byla ověřena monitoringem na webu ČÚZK:

Statuty stanic a ověřené souřadnice pro den 30.7.2018 (pondělí)

Trimble VRS NOW : Síťové řešení ověřeno

## Informace o observacích

ID	stanoviště	Šikmá v. antény	Poloměr antény	Svislá v. antény	Počet odměrů	Datum a čas konce		SVs/PDOP/Řešení	
1	329	0.000	0.000	0.000		30/07/18	15:52:50		
2	4001	0.000	0.000	2.085	30	30/07/18	10:07:54	13/1.2/	-
3	4002	0.000	0.000	2.085	30	30/07/18	10:09:23	14/1.2/	-
4	4003	0.000	0.000	2.085	30	30/07/18	10:16:46	14/1.2/	-
5	4004	0.000	0.000	2.085	30	30/07/18	10:24:04	14/1.2/	-
6	4005	0.000	0.000	2.085	30	30/07/18	10:25:31	11/1.6/	-
7	1	0.000	0.000	2.085	5	30/07/18	10:40:09	11/2.0/	FIXED
8	2	0.000	0.000	2.085	5	30/07/18	10:42:04	14/1.2/	FIXED
9	3	0.000	0.000	2.085	5	30/07/18	10:44:03	13/1.3/	FIXED
10	4	0.000	0.000	2.085	5	30/07/18	10:44:14	13/1.3/	FIXED
11	5	0.000	0.000	2.085	5	30/07/18	10:44:32	14/1.2/	FIXED
12	6	0.000	0.000	2.085	5	30/07/18	10:44:53	14/1.2/	FIXED
13	7	0.000	0.000	2.085	5	30/07/18	10:45:03	13/1.3/	FIXED
14	8	0.000	0.000	2.085	5	30/07/18	10:45:24	13/1.3/	FIXED
15	9	0.000	0.000	2.085	5	30/07/18	10:46:11	12/1.8/	FIXED
16	10	0.000	0.000	2.085	5	30/07/18	10:46:47	12/1.8/	FIXED
17	11	0.000	0.000	2.085	5	30/07/18	10:46:58	13/1.4/	FIXED
18	12	0.000	0.000	2.085	5	30/07/18	10:47:10	13/1.4/	FIXED
19	13	0.000	0.000	2.085	5	30/07/18	10:47:27	13/1.4/	FIXED
20	14	0.000	0.000	2.085	5	30/07/18	10:47:35	13/1.4/	FIXED
21	16	0.000	0.000	2.085	5	30/07/18	10:47:59	14/1.3/	FIXED
22	17	0.000	0.000	2.085	5	30/07/18	10:48:09	13/1.4/	FIXED
23	18	0.000	0.000	2.085	5	30/07/18	10:48:24	14/1.3/	FIXED
24	19	0.000	0.000	2.085	5	30/07/18	10:48:53	14/1.3/	FIXED
25	20	0.000	0.000	2.085	5	30/07/18	10:49:08	14/1.3/	FIXED
26	21	0.000	0.000	2.085	5	30/07/18	10:49:24	14/1.2/	FIXED
27	22	0.000	0.000	2.085	5	30/07/18	10:49:34	14/1.3/	FIXED
28	23	0.000	0.000	2.085	5	30/07/18	10:49:54	14/1.3/	FIXED
29	24	0.000	0.000	2.085	5	30/07/18	10:50:00	14/1.3/	FIXED
30	25	0.000	0.000	2.085	5	30/07/18	10:50:14	14/1.2/	FIXED
31	26	0.000	0.000	2.085	5	30/07/18	10:50:29	14/1.3/	FIXED
32	27	0.000	0.000	2.085	5	30/07/18	10:50:43	14/1.2/	FIXED
33	28	0.000	0.000	2.085	5	30/07/18	10:50:59	14/1.3/	FIXED
34	29	0.000	0.000	2.085	5	30/07/18	10:52:55	14/1.3/	FIXED
35	30	0.000	0.000	2.085	5	30/07/18	10:54:21	14/1.3/	FIXED
36	31	0.000	0.000	2.085	5	30/07/18	10:54:51	14/1.3/	FIXED
37	32	0.000	0.000	2.085	5	30/07/18	10:55:29	13/1.3/	FIXED
38	33	0.000	0.000	2.085	5	30/07/18	10:55:44	13/1.3/	FIXED
39	34	0.000	0.000	2.085	5	30/07/18	10:56:11	13/1.3/	FIXED
40	35	0.000	0.000	2.085	5	30/07/18	11:04:16	14/1.4/	FIXED

41	36	0.000	0.000	2.085	5	30/07/18	11:05:10	14/1.4/	FIXED
42	37	0.000	0.000	2.085	5	30/07/18	11:05:18	14/1.4/	FIXED
43	38	0.000	0.000	2.085	5	30/07/18	11:05:34	13/1.4/	FIXED
44	39	0.000	0.000	2.085	5	30/07/18	11:05:49	13/1.4/	FIXED
45	40	0.000	0.000	2.085	5	30/07/18	11:05:55	13/1.4/	FIXED
46	41	0.000	0.000	2.085	5	30/07/18	11:06:15	13/1.5/	FIXED
47	42	0.000	0.000	2.085	5	30/07/18	11:06:27	13/1.5/	FIXED
48	43	0.000	0.000	2.085	5	30/07/18	11:06:59	12/1.6/	FIXED
49	44	0.000	0.000	2.085	5	30/07/18	11:07:08	12/1.6/	FIXED
50	45	0.000	0.000	2.085	5	30/07/18	11:07:16	12/1.6/	FIXED
51	46	0.000	0.000	2.085	5	30/07/18	11:07:33	12/1.6/	FIXED
52	47	0.000	0.000	2.085	5	30/07/18	11:07:44	12/1.6/	FIXED
53	48	0.000	0.000	2.085	5	30/07/18	11:07:50	12/1.6/	FIXED
54	49	0.000	0.000	2.085	5	30/07/18	11:07:58	13/1.5/	FIXED
55	50	0.000	0.000	2.085	5	30/07/18	11:10:08	12/1.6/	FIXED
56	51	0.000	0.000	2.085	5	30/07/18	11:11:20	13/1.5/	FIXED
57	52	0.000	0.000	2.085	5	30/07/18	11:11:29	13/1.5/	FIXED
58	53	0.000	0.000	2.085	5	30/07/18	11:11:36	13/1.5/	FIXED
59	54	0.000	0.000	2.085	5	30/07/18	11:11:51	13/1.5/	FIXED
60	55	0.000	0.000	2.085	5	30/07/18	11:12:01	13/1.5/	FIXED
61	56	0.000	0.000	2.085	5	30/07/18	11:12:08	13/1.5/	FIXED
62	57	0.000	0.000	2.085	5	30/07/18	11:12:49	13/1.5/	FIXED
63	58	0.000	0.000	2.085	5	30/07/18	11:12:55	12/1.6/	FIXED
64	59	0.000	0.000	2.085	5	30/07/18	11:12:59	12/1.6/	FIXED
65	60	0.000	0.000	2.085	5	30/07/18	11:13:10	12/1.6/	FIXED
66	61	0.000	0.000	2.085	5	30/07/18	11:13:14	12/1.6/	FIXED
67	62	0.000	0.000	2.085	5	30/07/18	11:13:21	12/1.6/	FIXED
68	63	0.000	0.000	2.085	5	30/07/18	11:13:50	12/1.6/	FIXED
69	64	0.000	0.000	2.085	5	30/07/18	11:14:31	13/1.5/	FIXED
70	65	0.000	0.000	2.085	5	30/07/18	11:15:18	13/1.5/	FIXED
71	66	0.000	0.000	2.085	5	30/07/18	11:15:27	13/1.5/	FIXED
72	67	0.000	0.000	2.085	5	30/07/18	11:15:34	13/1.5/	FIXED
73	68	0.000	0.000	2.085	5	30/07/18	11:16:13	13/1.5/	FIXED
74	69	0.000	0.000	2.085	5	30/07/18	11:16:18	13/1.5/	FIXED
75	70	0.000	0.000	2.085	5	30/07/18	11:17:23	13/1.5/	FIXED
76	71	0.000	0.000	2.085	5	30/07/18	11:17:41	13/1.5/	FIXED
77	72	0.000	0.000	2.085	5	30/07/18	11:18:23	13/1.5/	FIXED
78	73	0.000	0.000	2.085	5	30/07/18	11:18:43	12/1.6/	FIXED
79	74	0.000	0.000	2.085	5	30/07/18	11:19:20	12/1.6/	FIXED
80	75	0.000	0.000	2.085	5	30/07/18	11:19:33	12/1.6/	FIXED
81	76	0.000	0.000	2.085	5	30/07/18	11:20:10	11/2.0/	FIXED
82	77	0.000	0.000	2.085	5	30/07/18	11:20:35	12/1.9/	FIXED
83	78	0.000	0.000	2.085	5	30/07/18	11:20:49	13/1.6/	FIXED
84	79	0.000	0.000	2.085	5	30/07/18	11:20:57	13/1.6/	FIXED
85	80	0.000	0.000	2.085	5	30/07/18	11:21:11	13/1.6/	FIXED
86	81	0.000	0.000	2.085	5	30/07/18	11:21:53	14/1.5/	FIXED
87	82	0.000	0.000	2.085	5	30/07/18	11:22:07	14/1.5/	FIXED
88	83	0.000	0.000	2.085	5	30/07/18	11:22:14	14/1.5/	FIXED
89	84	0.000	0.000	2.085	5	30/07/18	11:22:25	14/1.5/	FIXED
90	85	0.000	0.000	2.085	5	30/07/18	11:22:36	14/1.5/	FIXED
91	86	0.000	0.000	2.085	5	30/07/18	11:22:44	14/1.5/	FIXED
92	87	0.000	0.000	2.085	5	30/07/18	11:27:16	14/1.5/	FIXED
93	88	0.000	0.000	2.085	5	30/07/18	11:27:25	14/1.5/	FIXED
94	89	0.000	0.000	2.085	5	30/07/18	11:27:52	14/1.5/	FIXED
95	90	0.000	0.000	2.085	5	30/07/18	11:28:26	14/1.5/	FIXED
96	91	0.000	0.000	2.085	5	30/07/18	11:28:41	14/1.5/	FIXED
97	92	0.000	0.000	2.085	5	30/07/18	11:28:56	14/1.5/	FIXED
98	93	0.000	0.000	2.085	5	30/07/18	11:29:14	14/1.5/	FIXED
99	94	0.000	0.000	2.085	5	30/07/18	11:29:20	14/1.5/	FIXED
100	95	0.000	0.000	2.085	5	30/07/18	11:31:21	14/1.5/	FIXED
101	96	0.000	0.000	2.085	5	30/07/18	11:31:28	14/1.5/	FIXED
102	97	0.000	0.000	2.085	5	30/07/18	11:31:47	14/1.5/	FIXED
103	98	0.000	0.000	2.085	5	30/07/18	11:32:10	14/1.4/	FIXED
104	99	0.000	0.000	2.085	5	30/07/18	11:32:17	14/1.5/	FIXED
105	100	0.000	0.000	2.085	5	30/07/18	11:32:31	14/1.5/	FIXED
106	101	0.000	0.000	2.085	5	30/07/18	11:32:53	14/1.5/	FIXED

107	102	0.000	0.000	2.085	5	30/07/18	11:33:09	14/1.5/	FIXED
108	103	0.000	0.000	2.085	5	30/07/18	11:33:15	14/1.5/	FIXED
109	104	0.000	0.000	2.085	5	30/07/18	11:33:24	14/1.5/	FIXED
110	105	0.000	0.000	2.085	5	30/07/18	11:33:30	14/1.5/	FIXED
111	106	0.000	0.000	2.085	5	30/07/18	11:33:39	14/1.5/	FIXED
112	107	0.000	0.000	2.085	5	30/07/18	11:38:13	13/1.6/	FIXED
113	108	0.000	0.000	2.085	5	30/07/18	11:38:19	13/1.6/	FIXED
114	109	0.000	0.000	2.085	5	30/07/18	11:38:31	13/1.6/	FIXED
115	110	0.000	0.000	2.085	5	30/07/18	11:38:45	13/1.6/	FIXED
116	111	0.000	0.000	2.085	5	30/07/18	11:39:07	14/1.5/	FIXED
117	112	0.000	0.000	2.085	5	30/07/18	11:39:15	14/1.5/	FIXED
118	113	0.000	0.000	2.085	5	30/07/18	11:39:25	13/1.6/	FIXED
119	114	0.000	0.000	2.085	5	30/07/18	11:40:11	14/1.5/	FIXED
120	115	0.000	0.000	2.085	5	30/07/18	11:40:17	14/1.5/	FIXED
121	116	0.000	0.000	2.085	5	30/07/18	11:40:34	14/1.5/	FIXED
122	117	0.000	0.000	2.085	5	30/07/18	11:40:49	14/1.5/	FIXED
123	118	0.000	0.000	2.085	5	30/07/18	11:40:59	14/1.5/	FIXED
124	119	0.000	0.000	2.085	5	30/07/18	11:41:21	14/1.5/	FIXED
125	120	0.000	0.000	2.085	5	30/07/18	11:41:32	14/1.5/	FIXED
126	121	0.000	0.000	2.085	5	30/07/18	11:43:01	14/1.5/	FIXED
127	122	0.000	0.000	2.085	5	30/07/18	11:43:16	14/1.5/	FIXED
128	123	0.000	0.000	2.085	5	30/07/18	11:43:45	14/1.5/	FIXED
129	124	0.000	0.000	2.085	5	30/07/18	11:43:54	14/1.5/	FIXED
130	125	0.000	0.000	2.085	5	30/07/18	11:45:11	14/1.5/	FIXED
131	126	0.000	0.000	2.085	5	30/07/18	11:46:08	14/1.5/	FIXED
132	127	0.000	0.000	2.085	5	30/07/18	11:49:34	12/1.8/	FIXED
133	128	0.000	0.000	2.085	5	30/07/18	11:49:41	12/1.8/	FIXED
134	129	0.000	0.000	2.085	5	30/07/18	11:49:56	12/1.8/	FIXED
135	130	0.000	0.000	2.085	5	30/07/18	11:50:02	12/1.8/	FIXED
136	131	0.000	0.000	2.085	5	30/07/18	11:50:06	12/1.8/	FIXED
137	132	0.000	0.000	2.085	5	30/07/18	11:50:11	12/1.8/	FIXED
138	133	0.000	0.000	2.085	5	30/07/18	11:50:21	12/1.8/	FIXED
139	134	0.000	0.000	2.085	5	30/07/18	11:52:33	14/1.5/	FIXED
140	135	0.000	0.000	2.085	5	30/07/18	11:52:50	14/1.5/	FIXED
141	136	0.000	0.000	2.085	5	30/07/18	11:55:45	14/1.5/	FIXED
142	137	0.000	0.000	2.085	5	30/07/18	11:58:28	14/1.5/	FIXED
143	138	0.000	0.000	2.085	5	30/07/18	11:58:37	14/1.6/	FIXED
144	139	0.000	0.000	2.085	5	30/07/18	11:58:51	14/1.5/	FIXED
145	140	0.000	0.000	2.085	5	30/07/18	11:59:02	14/1.6/	FIXED
146	143	0.000	0.000	2.085	5	30/07/18	12:00:07	14/1.6/	FIXED
147	144	0.000	0.000	2.085	5	30/07/18	12:00:14	14/1.6/	FIXED
148	145	0.000	0.000	2.085	5	30/07/18	12:00:20	14/1.6/	FIXED
149	146	0.000	0.000	2.085	5	30/07/18	12:00:25	14/1.6/	FIXED
150	147	0.000	0.000	2.085	5	30/07/18	12:00:48	14/1.5/	FIXED
151	148	0.000	0.000	2.085	5	30/07/18	12:00:54	14/1.6/	FIXED
152	149	0.000	0.000	2.085	5	30/07/18	12:01:13	14/1.4/	FIXED
153	150	0.000	0.000	2.085	5	30/07/18	12:01:33	14/1.4/	FIXED
154	151	0.000	0.000	2.085	5	30/07/18	12:01:48	14/1.6/	FIXED
155	152	0.000	0.000	2.085	5	30/07/18	12:01:57	14/1.6/	FIXED
156	153	0.000	0.000	2.085	5	30/07/18	12:02:06	14/1.4/	FIXED
157	154	0.000	0.000	2.085	5	30/07/18	12:02:11	14/1.4/	FIXED
158	155	0.000	0.000	2.085	5	30/07/18	12:02:32	14/1.7/	FIXED
159	156	0.000	0.000	2.085	5	30/07/18	12:02:39	14/1.4/	FIXED
160	157	0.000	0.000	2.085	5	30/07/18	12:02:51	14/1.2/	FIXED
161	158	0.000	0.000	2.085	5	30/07/18	12:03:00	14/1.6/	FIXED
162	159	0.000	0.000	2.085	5	30/07/18	12:03:09	14/1.4/	FIXED
163	160	0.000	0.000	2.085	5	30/07/18	12:03:23	14/1.4/	FIXED
164	161	0.000	0.000	2.085	5	30/07/18	12:03:29	14/1.4/	FIXED
165	162	0.000	0.000	2.085	5	30/07/18	12:03:52	14/1.4/	FIXED
166	163	0.000	0.000	2.085	5	30/07/18	12:04:04	14/1.4/	FIXED
167	164	0.000	0.000	2.085	5	30/07/18	12:04:17	14/1.4/	FIXED
168	165	0.000	0.000	2.085	5	30/07/18	12:04:29	14/1.4/	FIXED
169	166	0.000	0.000	2.085	5	30/07/18	12:04:38	14/1.4/	FIXED
170	167	0.000	0.000	2.085	5	30/07/18	12:04:50	14/1.4/	FIXED
171	168	0.000	0.000	2.085	5	30/07/18	12:04:56	14/1.4/	FIXED
172	169	0.000	0.000	2.085	5	30/07/18	12:05:04	14/1.6/	FIXED

173	170	0.000	0.000	2.085	5	30/07/18	12:05:51	14/1.4/	FIXED
174	171	0.000	0.000	2.085	5	30/07/18	12:06:52	14/1.6/	FIXED
175	172	0.000	0.000	2.085	5	30/07/18	12:07:08	14/1.4/	FIXED
176	173	0.000	0.000	2.085	5	30/07/18	12:07:20	14/1.6/	FIXED
177	175	0.000	0.000	2.085	5	30/07/18	12:07:36	14/1.5/	FIXED
178	176	0.000	0.000	2.085	5	30/07/18	12:07:43	14/1.5/	FIXED
179	177	0.000	0.000	2.085	5	30/07/18	12:07:51	14/1.6/	FIXED
180	178	0.000	0.000	2.085	5	30/07/18	12:08:32	14/1.4/	FIXED
181	179	0.000	0.000	2.085	5	30/07/18	12:08:39	14/1.5/	FIXED
182	180	0.000	0.000	2.085	5	30/07/18	12:08:46	14/1.6/	FIXED
183	181	0.000	0.000	2.085	5	30/07/18	12:09:07	14/1.5/	FIXED
184	182	0.000	0.000	2.085	5	30/07/18	12:09:17	14/1.5/	FIXED
185	183	0.000	0.000	2.085	5	30/07/18	12:09:40	14/1.4/	FIXED
186	184	0.000	0.000	2.085	5	30/07/18	12:10:07	14/1.4/	FIXED
187	185	0.000	0.000	2.085	5	30/07/18	12:10:23	14/1.3/	FIXED
188	186	0.000	0.000	2.085	5	30/07/18	12:11:40	14/1.3/	FIXED
189	187	0.000	0.000	2.085	5	30/07/18	12:11:46	14/1.3/	FIXED
190	4006	0.000	0.000	2.085	5	30/07/18	15:48:21	14/1.3/	-
191	4007	0.000	0.000	2.085	5	30/07/18	15:50:36	13/1.5/	-
192	4008	0.000	0.000	2.085	10	30/07/18	15:51:42	14/1.4/	-
193	4009	0.000	0.000	2.085	10	30/07/18	15:52:50	13/1.3/	-

## Měřené body

Jméno	Souřadnice								HRMS	VRMS	
4001	49°	51'	12.33296"	N,	15°	14'	54.63910"	E,	448.465m	0.009	0.012
4002	49°	51'	13.55752"	N,	15°	14'	53.63685"	E,	447.543m	0.010	0.012
4003	49°	51'	11.09087"	N,	15°	14'	58.57548"	E,	448.547m	0.012	0.014
4004	49°	51'	11.39470"	N,	15°	14'	58.23682"	E,	448.391m	0.011	0.013
4005	49°	51'	10.11056"	N,	15°	14'	59.36828"	E,	450.069m	0.011	0.014
1	49°	51'	9.90606"	N,	15°	14'	59.41871"	E,	450.400m	0.010	0.015
2	49°	51'	9.87288"	N,	15°	14'	59.15099"	E,	450.408m	0.008	0.014
3	49°	51'	9.97662"	N,	15°	14'	59.07726"	E,	450.077m	0.009	0.014
4	49°	51'	10.02611"	N,	15°	14'	59.06754"	E,	449.885m	0.009	0.014
5	49°	51'	10.03518"	N,	15°	14'	58.98360"	E,	450.122m	0.016	0.026
6	49°	51'	10.32299"	N,	15°	14'	58.91796"	E,	449.396m	0.008	0.015
7	49°	51'	10.32479"	N,	15°	14'	59.03496"	E,	449.505m	0.009	0.016
8	49°	51'	10.35431"	N,	15°	14'	59.31107"	E,	449.727m	0.012	0.021
9	49°	51'	10.62473"	N,	15°	14'	59.24790"	E,	449.135m	0.011	0.018
10	49°	51'	10.59840"	N,	15°	14'	59.21832"	E,	449.312m	0.008	0.015
11	49°	51'	10.61327"	N,	15°	14'	58.92156"	E,	448.997m	0.010	0.017
12	49°	51'	10.45379"	N,	15°	14'	58.87944"	E,	449.115m	0.008	0.016
13	49°	51'	10.82549"	N,	15°	14'	58.71120"	E,	448.547m	0.010	0.019
14	49°	51'	10.83857"	N,	15°	14'	58.80762"	E,	448.698m	0.007	0.013
16	49°	51'	10.90547"	N,	15°	14'	59.17025"	E,	448.934m	0.010	0.016
17	49°	51'	10.95965"	N,	15°	14'	59.22234"	E,	449.084m	0.009	0.017
18	49°	51'	11.09435"	N,	15°	14'	59.41638"	E,	449.793m	0.010	0.019
19	49°	51'	10.79772"	N,	15°	14'	58.50810"	E,	448.662m	0.008	0.015
20	49°	51'	10.92468"	N,	15°	14'	58.45595"	E,	448.061m	0.014	0.045
21	49°	51'	10.78998"	N,	15°	14'	58.44545"	E,	448.433m	0.008	0.014
22	49°	51'	10.79555"	N,	15°	14'	58.34567"	E,	447.108m	0.008	0.015
23	49°	51'	10.55267"	N,	15°	14'	58.52189"	E,	448.737m	0.011	0.016
24	49°	51'	10.55603"	N,	15°	14'	58.46724"	E,	448.604m	0.014	0.019
25	49°	51'	10.52808"	N,	15°	14'	58.37670"	E,	447.084m	0.014	0.019
26	49°	51'	10.45086"	N,	15°	14'	58.54121"	E,	448.924m	0.009	0.015
27	49°	51'	10.29792"	N,	15°	14'	58.58243"	E,	449.291m	0.010	0.015
28	49°	51'	10.29120"	N,	15°	14'	58.43477"	E,	449.007m	0.011	0.015
29	49°	51'	10.41720"	N,	15°	14'	58.35612"	E,	447.138m	0.011	0.014
30	49°	51'	10.50797"	N,	15°	14'	58.69920"	E,	449.160m	0.009	0.015
31	49°	51'	11.10090"	N,	15°	14'	58.35377"	E,	447.280m	0.008	0.014
32	49°	51'	11.10791"	N,	15°	14'	58.16855"	E,	447.336m	0.008	0.015
33	49°	51'	11.11601"	N,	15°	14'	58.18745"	E,	447.338m	0.010	0.017
34	49°	51'	11.10023"	N,	15°	14'	58.43550"	E,	447.451m	0.010	0.016
35	49°	51'	11.10719"	N,	15°	14'	58.43052"	E,	447.361m	0.009	0.016
36	49°	51'	11.11044"	N,	15°	14'	58.41953"	E,	447.325m	0.010	0.018
37	49°	51'	11.12711"	N,	15°	14'	58.43393"	E,	446.926m	0.020	0.037

38	49° 51' 11.23499"	N, 15° 14' 58.33145"	E, 446.866m	0.010	0.019
39	49° 51' 11.22870"	N, 15° 14' 58.31177"	E, 447.319m	0.010	0.018
40	49° 51' 11.23877"	N, 15° 14' 58.29203"	E, 447.369m	0.008	0.016
41	49° 51' 11.25354"	N, 15° 14' 58.28729"	E, 447.389m	0.011	0.022
42	49° 51' 11.24748"	N, 15° 14' 58.29503"	E, 447.335m	0.008	0.016
43	49° 51' 11.24015"	N, 15° 14' 58.35491"	E, 446.866m	0.008	0.014
44	49° 51' 11.25432"	N, 15° 14' 58.34064"	E, 447.441m	0.008	0.016
45	49° 51' 11.26079"	N, 15° 14' 58.33374"	E, 447.448m	0.010	0.019
46	49° 51' 11.17007"	N, 15° 14' 58.27733"	E, 447.299m	0.009	0.017
47	49° 51' 11.13635"	N, 15° 14' 58.45014"	E, 446.888m	0.011	0.019
48	49° 51' 11.12040"	N, 15° 14' 58.46472"	E, 447.429m	0.008	0.016
49	49° 51' 11.11362"	N, 15° 14' 58.47035"	E, 447.615m	0.008	0.015
50	49° 51' 11.19114"	N, 15° 14' 58.23240"	E, 447.288m	0.009	0.017
51	49° 51' 11.03093"	N, 15° 14' 58.54956"	E, 448.472m	0.008	0.015
52	49° 51' 11.03783"	N, 15° 14' 58.56893"	E, 448.479m	0.009	0.017
53	49° 51' 11.06273"	N, 15° 14' 58.62426"	E, 448.469m	0.008	0.015
54	49° 51' 11.20073"	N, 15° 14' 58.39560"	E, 448.363m	0.008	0.015
55	49° 51' 11.20589"	N, 15° 14' 58.41821"	E, 448.405m	0.008	0.017
56	49° 51' 11.23013"	N, 15° 14' 58.47293"	E, 448.424m	0.010	0.018
57	49° 51' 11.29842"	N, 15° 14' 58.29852"	E, 448.305m	0.010	0.019
58	49° 51' 11.30424"	N, 15° 14' 58.31945"	E, 448.383m	0.008	0.014
59	49° 51' 11.31972"	N, 15° 14' 58.37597"	E, 448.372m	0.008	0.014
60	49° 51' 11.39771"	N, 15° 14' 58.26773"	E, 448.310m	0.008	0.014
61	49° 51' 11.37984"	N, 15° 14' 58.24001"	E, 448.343m	0.008	0.016
62	49° 51' 11.37132"	N, 15° 14' 58.22190"	E, 448.330m	0.009	0.017
63	49° 51' 11.35781"	N, 15° 14' 58.22093"	E, 447.452m	0.008	0.017
64	49° 51' 11.34024"	N, 15° 14' 58.09932"	E, 447.242m	0.014	0.029
65	49° 51' 11.52371"	N, 15° 14' 58.05612"	E, 448.288m	0.009	0.017
66	49° 51' 11.51370"	N, 15° 14' 58.03656"	E, 448.334m	0.008	0.016
67	49° 51' 11.50434"	N, 15° 14' 58.01807"	E, 448.410m	0.008	0.014
68	49° 51' 11.62091"	N, 15° 14' 58.20545"	E, 448.430m	0.008	0.016
69	49° 51' 11.59722"	N, 15° 14' 58.24193"	E, 448.416m	0.009	0.015
70	49° 51' 11.70989"	N, 15° 14' 58.13393"	E, 448.486m	0.008	0.016
71	49° 51' 11.68908"	N, 15° 14' 58.08677"	E, 448.472m	0.010	0.019
72	49° 51' 11.74031"	N, 15° 14' 58.26605"	E, 447.038m	0.008	0.015
73	49° 51' 11.78100"	N, 15° 14' 58.42361"	E, 447.036m	0.013	0.022
74	49° 51' 11.49498"	N, 15° 14' 58.42860"	E, 448.525m	0.009	0.017
75	49° 51' 11.36993"	N, 15° 14' 58.57649"	E, 448.511m	0.010	0.018
76	49° 51' 11.38913"	N, 15° 14' 58.60728"	E, 448.507m	0.012	0.020
77	49° 51' 11.39495"	N, 15° 14' 58.62257"	E, 448.492m	0.009	0.018
78	49° 51' 11.21592"	N, 15° 14' 58.76489"	E, 448.631m	0.011	0.021
79	49° 51' 11.22342"	N, 15° 14' 58.78656"	E, 448.576m	0.008	0.017
80	49° 51' 11.17050"	N, 15° 14' 58.85376"	E, 448.704m	0.011	0.020
81	49° 51' 11.04377"	N, 15° 14' 58.95462"	E, 448.702m	0.007	0.014
82	49° 51' 10.82346"	N, 15° 14' 59.11721"	E, 449.036m	0.008	0.016
83	49° 51' 10.94333"	N, 15° 14' 59.13461"	E, 448.770m	0.010	0.018
84	49° 51' 11.11548"	N, 15° 14' 59.21339"	E, 448.564m	0.008	0.016
85	49° 51' 11.11313"	N, 15° 14' 59.07989"	E, 448.487m	0.007	0.015
86	49° 51' 11.06939"	N, 15° 14' 59.02674"	E, 448.615m	0.007	0.014
87	49° 51' 11.63766"	N, 15° 14' 57.81894"	E, 448.358m	0.008	0.016
88	49° 51' 11.58029"	N, 15° 14' 57.83579"	E, 448.295m	0.010	0.019
89	49° 51' 11.50800"	N, 15° 14' 57.76835"	E, 447.373m	0.008	0.015
90	49° 51' 11.48609"	N, 15° 14' 57.99324"	E, 448.471m	0.009	0.018
91	49° 51' 11.55246"	N, 15° 14' 57.84258"	E, 448.466m	0.007	0.013
92	49° 51' 11.60742"	N, 15° 14' 57.74003"	E, 448.712m	0.007	0.014
93	49° 51' 11.84597"	N, 15° 14' 57.78090"	E, 448.581m	0.007	0.013
94	49° 51' 11.82978"	N, 15° 14' 57.76409"	E, 448.514m	0.008	0.015
95	49° 51' 11.97426"	N, 15° 14' 57.42479"	E, 448.461m	0.008	0.014
96	49° 51' 11.95121"	N, 15° 14' 57.40932"	E, 448.453m	0.007	0.013
97	49° 51' 11.80091"	N, 15° 14' 57.32898"	E, 448.310m	0.008	0.014
98	49° 51' 11.66256"	N, 15° 14' 57.61686"	E, 448.436m	0.008	0.014
99	49° 51' 11.67995"	N, 15° 14' 57.53982"	E, 448.267m	0.008	0.014
100	49° 51' 11.63154"	N, 15° 14' 57.38255"	E, 447.224m	0.009	0.017
101	49° 51' 11.81166"	N, 15° 14' 57.08069"	E, 448.840m	0.008	0.014
102	49° 51' 11.87135"	N, 15° 14' 56.91731"	E, 448.112m	0.010	0.018
103	49° 51' 11.90616"	N, 15° 14' 56.90975"	E, 448.278m	0.008	0.016

104	49° 51' 12.05633"	N, 15° 14' 56.98883"	E, 448.373m	0.008	0.014
105	49° 51' 12.07943"	N, 15° 14' 56.98038"	E, 448.358m	0.009	0.018
106	49° 51' 12.10044"	N, 15° 14' 56.88996"	E, 448.360m	0.008	0.016
107	49° 51' 12.31625"	N, 15° 14' 56.54862"	E, 444.578m	0.013	0.022
108	49° 51' 12.32286"	N, 15° 14' 56.56572"	E, 444.836m	0.010	0.018
109	49° 51' 12.31103"	N, 15° 14' 56.57699"	E, 444.225m	0.010	0.021
110	49° 51' 12.39011"	N, 15° 14' 56.60934"	E, 444.183m	0.011	0.022
111	49° 51' 12.45107"	N, 15° 14' 56.45910"	E, 443.936m	0.013	0.021
112	49° 51' 12.41970"	N, 15° 14' 56.41499"	E, 443.986m	0.018	0.032
113	49° 51' 12.33005"	N, 15° 14' 56.50685"	E, 444.206m	0.013	0.021
114	49° 51' 12.55847"	N, 15° 14' 56.33328"	E, 443.923m	0.008	0.016
115	49° 51' 12.54780"	N, 15° 14' 56.30843"	E, 443.945m	0.008	0.015
116	49° 51' 12.49229"	N, 15° 14' 56.36910"	E, 443.916m	0.010	0.018
117	49° 51' 12.55331"	N, 15° 14' 56.36484"	E, 444.282m	0.008	0.015
118	49° 51' 12.52296"	N, 15° 14' 56.32314"	E, 444.421m	0.009	0.016
119	49° 51' 12.46991"	N, 15° 14' 56.48039"	E, 444.467m	0.010	0.017
120	49° 51' 12.41814"	N, 15° 14' 56.62524"	E, 444.664m	0.011	0.018
121	49° 51' 12.48858"	N, 15° 14' 56.35763"	E, 444.382m	0.008	0.013
122	49° 51' 12.42389"	N, 15° 14' 56.38158"	E, 444.424m	0.011	0.017
123	49° 51' 12.32171"	N, 15° 14' 56.48597"	E, 445.747m	0.013	0.023
124	49° 51' 12.29501"	N, 15° 14' 56.56578"	E, 445.848m	0.011	0.018
125	49° 51' 12.43583"	N, 15° 14' 56.12154"	E, 444.741m	0.018	0.028
126	49° 51' 12.65616"	N, 15° 14' 55.18056"	E, 444.837m	0.009	0.015
127	49° 51' 12.23166"	N, 15° 14' 56.92439"	E, 446.900m	0.011	0.015
128	49° 51' 12.22248"	N, 15° 14' 56.91612"	E, 446.875m	0.011	0.017
129	49° 51' 12.20946"	N, 15° 14' 56.91839"	E, 446.973m	0.013	0.016
130	49° 51' 12.21767"	N, 15° 14' 56.93070"	E, 446.849m	0.015	0.019
131	49° 51' 12.21317"	N, 15° 14' 56.94144"	E, 446.852m	0.013	0.017
132	49° 51' 12.20424"	N, 15° 14' 56.93453"	E, 447.047m	0.011	0.014
133	49° 51' 12.19799"	N, 15° 14' 57.02297"	E, 446.910m	0.014	0.020
134	49° 51' 12.03162"	N, 15° 14' 57.74105"	E, 445.242m	0.009	0.014
135	49° 51' 11.89403"	N, 15° 14' 58.04178"	E, 445.881m	0.011	0.019
136	49° 51' 12.18323"	N, 15° 14' 56.59608"	E, 448.244m	0.009	0.013
137	49° 51' 11.99574"	N, 15° 14' 56.49755"	E, 448.161m	0.009	0.013
138	49° 51' 12.01272"	N, 15° 14' 56.42196"	E, 448.177m	0.008	0.013
139	49° 51' 11.93357"	N, 15° 14' 56.38650"	E, 447.101m	0.009	0.013
140	49° 51' 11.92217"	N, 15° 14' 56.45580"	E, 447.299m	0.008	0.013
143	49° 51' 11.95956"	N, 15° 14' 56.32140"	E, 448.305m	0.008	0.012
144	49° 51' 11.97072"	N, 15° 14' 56.29043"	E, 448.299m	0.008	0.011
145	49° 51' 11.99603"	N, 15° 14' 56.31233"	E, 448.154m	0.010	0.014
146	49° 51' 11.98595"	N, 15° 14' 56.34162"	E, 448.121m	0.008	0.011
147	49° 51' 12.18870"	N, 15° 14' 56.40143"	E, 448.256m	0.011	0.015
148	49° 51' 12.20784"	N, 15° 14' 56.42117"	E, 448.300m	0.011	0.017
149	49° 51' 12.02261"	N, 15° 14' 56.16156"	E, 447.990m	0.009	0.012
150	49° 51' 12.08375"	N, 15° 14' 55.86509"	E, 448.413m	0.009	0.013
151	49° 51' 12.04763"	N, 15° 14' 55.71335"	E, 447.220m	0.009	0.014
152	49° 51' 12.14760"	N, 15° 14' 55.79610"	E, 448.328m	0.009	0.014
153	49° 51' 12.28391"	N, 15° 14' 55.93271"	E, 448.316m	0.014	0.019
154	49° 51' 12.31416"	N, 15° 14' 55.94867"	E, 448.142m	0.015	0.018
155	49° 51' 12.12215"	N, 15° 14' 55.53480"	E, 448.401m	0.008	0.013
156	49° 51' 12.15522"	N, 15° 14' 55.43897"	E, 448.683m	0.010	0.014
157	49° 51' 12.18372"	N, 15° 14' 55.31597"	E, 448.810m	0.011	0.016
158	49° 51' 12.12239"	N, 15° 14' 55.25526"	E, 447.203m	0.008	0.013
159	49° 51' 12.22770"	N, 15° 14' 55.30391"	E, 448.441m	0.010	0.014
160	49° 51' 12.37770"	N, 15° 14' 55.39211"	E, 448.486m	0.017	0.021
161	49° 51' 12.40512"	N, 15° 14' 55.39607"	E, 448.241m	0.013	0.017
162	49° 51' 12.19938"	N, 15° 14' 55.09715"	E, 448.568m	0.011	0.015
163	49° 51' 12.23784"	N, 15° 14' 54.82674"	E, 448.372m	0.012	0.017
164	49° 51' 12.27150"	N, 15° 14' 54.61686"	E, 448.443m	0.009	0.014
165	49° 51' 12.19031"	N, 15° 14' 54.63372"	E, 447.264m	0.009	0.012
166	49° 51' 12.31404"	N, 15° 14' 54.69161"	E, 448.431m	0.009	0.012
167	49° 51' 12.46986"	N, 15° 14' 54.83825"	E, 448.494m	0.009	0.012
168	49° 51' 12.49560"	N, 15° 14' 54.87426"	E, 448.639m	0.009	0.014
169	49° 51' 12.48240"	N, 15° 14' 54.73680"	E, 448.499m	0.011	0.015
170	49° 51' 12.51737"	N, 15° 14' 54.89429"	E, 448.264m	0.009	0.014
171	49° 51' 12.52812"	N, 15° 14' 54.38183"	E, 448.418m	0.008	0.012

172	49° 51' 12.61632" N, 15° 14' 53.94594" E,	448.094m	0.008	0.012
173	49° 51' 12.44400" N, 15° 14' 53.71889" E,	448.345m	0.010	0.015
175	49° 51' 12.31895" N, 15° 14' 54.11285" E,	448.697m	0.008	0.013
176	49° 51' 12.29346" N, 15° 14' 54.23351" E,	448.254m	0.010	0.015
177	49° 51' 12.27875" N, 15° 14' 54.41226" E,	448.405m	0.009	0.014
178	49° 51' 12.20010" N, 15° 14' 54.28578" E,	447.062m	0.011	0.015
179	49° 51' 12.17148" N, 15° 14' 54.26388" E,	447.286m	0.010	0.014
180	49° 51' 12.07638" N, 15° 14' 54.23621" E,	447.279m	0.011	0.015
181	49° 51' 12.26352" N, 15° 14' 53.85995" E,	448.313m	0.010	0.015
182	49° 51' 12.16607" N, 15° 14' 53.79456" E,	448.225m	0.010	0.015
183	49° 51' 12.32640" N, 15° 14' 53.79816" E,	448.291m	0.008	0.012
184	49° 51' 12.39041" N, 15° 14' 53.98271" E,	448.435m	0.013	0.019
185	49° 51' 12.34602" N, 15° 14' 53.87771" E,	448.384m	0.011	0.015
186	49° 51' 12.65178" N, 15° 14' 54.52739" E,	448.332m	0.010	0.015
187	49° 51' 12.67721" N, 15° 14' 54.58235" E,	448.303m	0.011	0.014
4006	49° 51' 12.33191" N, 15° 14' 54.63996" E,	448.435m	0.010	0.013
4007	49° 51' 11.09081" N, 15° 14' 58.57488" E,	448.551m	0.012	0.014
4008	49° 51' 11.39472" N, 15° 14' 58.23774" E,	448.362m	0.010	0.013
4009	49° 51' 10.11052" N, 15° 14' 59.36881" E,	450.055m	0.012	0.016

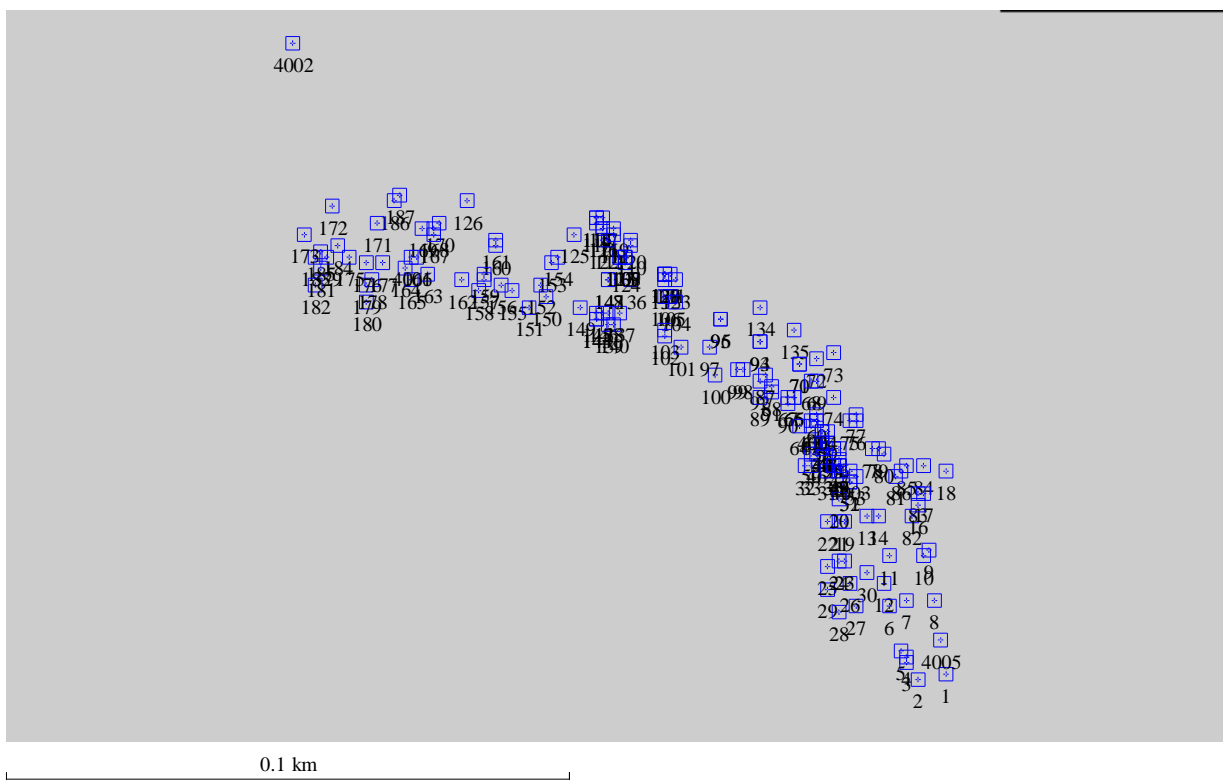
### Parametry transformace

Pro transformaci byla použita zpřesněná globální transformace mezi ETR89 a S-JTSK.

### Aritmetický průměr souřadnic blízkých bodů

Číslo bodu	Y	X	H(Bpv)
<b>4001</b>	687384.712	1076583.385	403.610
4006	687384.699	1076583.419	403.580
-----			
<b>Průměr:</b>	<b>687384.71</b>	<b>1076583.40</b>	<b>403.60</b>
Max. rozdíl:	0.006	0.017	0.015
Čas. odstup:	5:40:57		
 <b>4003</b>	 687311.518	 1076631.313	 403.692
4007	687311.530	1076631.313	403.696
-----			
<b>Průměr:</b>	<b>687311.52</b>	<b>1076631.31</b>	<b>403.69</b>
Max. rozdíl:	0.006	0.000	0.002
Čas. odstup:	5:34:20		
 <b>4004</b>	 687317.052	 1076621.152	 403.536
4008	687317.034	1076621.154	403.507
-----			
<b>Průměr:</b>	<b>687317.04</b>	<b>1076621.15</b>	<b>403.52</b>
Max. rozdíl:	0.009	0.001	0.014
Čas. odstup:	5:28:08		
 <b>4005</b>	 687299.605	 1076663.344	 405.213
4009	687299.594	1076663.346	405.199
-----			
<b>Průměr:</b>	<b>687299.60</b>	<b>1076663.35</b>	<b>405.21</b>
Max. rozdíl:	0.005	0.001	0.007
Čas. odstup:	5:27:49		

### Schéma rozložení měřených bodů



## Seznam definitivních souřadnic S-JTSK

Číslo bodu	Y	X	H(Bpv)
<b>4001</b>	687384.71	1076583.40	403.60
4002	687399.83	1076543.34	402.69
<b>4003</b>	687311.52	1076631.31	403.69
<b>4004</b>	687317.04	1076621.15	403.52
<b>4005</b>	687299.60	1076663.35	405.21
1	687299.40	1076669.74	405.54
2	687304.83	1076670.08	405.55
3	687305.89	1076666.72	405.22
4	687305.89	1076665.18	405.03
5	687307.52	1076664.69	405.27
6	687307.71	1076655.71	404.54
7	687305.38	1076655.94	404.65
8	687299.79	1076655.73	404.87
9	687300.00	1076647.28	404.28
10	687300.69	1076648.02	404.46
11	687306.51	1076646.82	404.14
12	687307.96	1076651.60	404.26
13	687309.86	1076639.79	403.69
14	687307.89	1076639.63	403.84
16	687300.45	1076638.48	404.08
17	687299.21	1076636.95	404.23
18	687294.84	1076633.31	404.94
19	687313.99	1076640.13	403.81
20	687314.53	1076636.11	403.21
21	687315.26	1076640.21	403.58
22	687317.22	1076639.79	402.25
23	687314.66	1076647.67	403.88
24	687315.73	1076647.43	403.75
25	687317.64	1076648.06	402.23
26	687314.68	1076650.84	404.07
27	687314.45	1076655.63	404.43

28	687317.40	1076655.47	404.15
29	687318.47	1076651.41	402.28
30	687311.32	1076649.49	404.30
31	687315.87	1076630.45	402.42
32	687319.52	1076629.77	402.48
33	687319.11	1076629.57	402.48
34	687314.26	1076630.68	402.60
35	687314.33	1076630.45	402.51
36	687314.53	1076630.32	402.47
37	687314.18	1076629.85	402.07
38	687315.80	1076626.28	402.01
39	687316.21	1076626.43	402.46
40	687316.56	1076626.07	402.51
41	687316.60	1076625.61	402.53
42	687316.47	1076625.81	402.48
43	687315.31	1076626.18	402.01
44	687315.54	1076625.71	402.59
45	687315.65	1076625.50	402.59
46	687317.12	1076628.14	402.44
47	687313.83	1076629.60	402.03
48	687313.60	1076630.13	402.57
49	687313.51	1076630.35	402.76
50	687317.93	1076627.38	402.43
51	687312.26	1076633.08	403.62
52	687311.85	1076632.92	403.62
53	687310.66	1076632.30	403.61
54	687314.66	1076627.49	403.51
55	687314.19	1076627.39	403.55
56	687313.01	1076626.79	403.57
57	687316.20	1076624.26	403.45
58	687315.76	1076624.13	403.53
59	687314.58	1076623.80	403.52
60	687316.43	1076621.14	403.45
61	687317.05	1076621.62	403.49
62	687317.44	1076621.83	403.47
63	687317.51	1076622.24	402.60
64	687319.99	1076622.48	402.39
65	687320.13	1076616.75	403.43
66	687320.56	1076617.00	403.48
67	687320.96	1076617.24	403.55
68	687316.80	1076614.14	403.58
69	687316.17	1076614.96	403.56
70	687317.87	1076611.23	403.63
71	687318.89	1076611.75	403.62
72	687315.13	1076610.63	402.18
73	687311.85	1076609.78	402.18
74	687312.86	1076618.56	403.67
75	687310.42	1076622.76	403.66
76	687309.73	1076622.25	403.65
77	687309.41	1076622.11	403.64
78	687307.28	1076627.95	403.78
79	687306.82	1076627.78	403.72
80	687305.69	1076629.57	403.85
81	687304.19	1076633.71	403.85
82	687301.82	1076640.87	404.18
83	687301.01	1076637.23	403.91
84	687298.78	1076632.16	403.71
85	687301.44	1076631.89	403.63
86	687302.66	1076633.10	403.76
87	687324.39	1076612.66	403.50

88	687324.28	1076614.46	403.44
89	687325.90	1076616.51	402.52
90	687321.52	1076617.74	403.62
91	687324.25	1076615.33	403.61
92	687326.07	1076613.39	403.86
93	687324.34	1076606.18	403.73
94	687324.73	1076606.63	403.66
95	687330.90	1076601.36	403.61
96	687331.29	1076602.02	403.60
97	687333.47	1076606.43	403.46
98	687328.30	1076611.39	403.58
99	687329.76	1076610.66	403.41
100	687333.06	1076611.75	402.37
101	687338.35	1076605.48	403.99
102	687341.35	1076603.24	403.26
103	687341.37	1076602.15	403.42
104	687339.22	1076597.75	403.52
105	687339.30	1076597.02	403.50
106	687341.01	1076596.15	403.51
107	687346.94	1076588.68	399.72
108	687346.57	1076588.52	399.98
109	687346.39	1076588.91	399.37
110	687345.45	1076586.57	399.33
111	687348.19	1076584.32	399.08
112	687349.18	1076585.17	399.13
113	687347.71	1076588.15	399.35
114	687350.27	1076580.72	399.07
115	687350.80	1076580.98	399.09
116	687349.81	1076582.83	399.06
117	687349.66	1076580.95	399.43
118	687350.60	1076581.78	399.57
119	687347.69	1076583.80	399.61
120	687345.02	1076585.75	399.81
121	687350.05	1076582.92	399.53
122	687349.83	1076584.96	399.57
123	687348.16	1076588.36	400.89
124	687346.68	1076589.37	400.99
125	687354.94	1076583.94	399.89
126	687372.73	1076574.84	399.98
127	687339.82	1076592.21	402.05
128	687340.02	1076592.47	402.02
129	687340.02	1076592.88	402.12
130	687339.75	1076592.66	401.99
131	687339.55	1076592.82	402.00
132	687339.72	1076593.08	402.19
133	687337.99	1076593.49	402.06
134	687324.41	1076600.39	400.39
135	687318.98	1076605.36	401.03
136	687346.51	1076592.88	403.39
137	687349.19	1076598.38	403.31
138	687350.62	1076597.67	403.32
139	687351.63	1076600.00	402.25
140	687350.30	1076600.53	402.44
143	687352.82	1076599.04	403.45
144	687353.39	1076598.62	403.44
145	687352.86	1076597.90	403.30
146	687352.32	1076598.28	403.27
147	687350.35	1076592.22	403.40
148	687349.88	1076591.68	403.45
149	687355.74	1076596.71	403.14

150	687361.38	1076594.09	403.56
151	687364.53	1076594.82	402.37
152	687362.50	1076591.96	403.47
153	687359.27	1076588.13	403.46
154	687358.83	1076587.24	403.29
155	687367.78	1076592.09	403.55
156	687369.55	1076590.84	403.83
157	687371.88	1076589.65	403.96
158	687373.32	1076591.38	402.35
159	687371.95	1076588.28	403.59
160	687369.62	1076583.90	403.63
161	687369.43	1076583.07	403.39
162	687376.15	1076588.63	403.71
163	687381.36	1076586.77	403.52
164	687385.39	1076585.21	403.59
165	687385.37	1076587.74	402.41
166	687383.74	1076584.10	403.58
167	687380.23	1076579.69	403.64
168	687379.42	1076578.99	403.78
169	687382.20	1076579.05	403.64
170	687378.94	1076578.37	403.41
171	687389.05	1076576.76	403.56
172	687397.35	1076572.96	403.24
173	687402.52	1076577.68	403.49
175	687395.19	1076582.50	403.84
176	687392.90	1076583.58	403.40
177	687389.42	1076584.48	403.55
178	687392.23	1076586.57	402.21
179	687392.77	1076587.39	402.43
180	687393.69	1076590.24	402.42
181	687400.42	1076583.56	403.46
182	687402.09	1076586.38	403.37
183	687401.40	1076581.48	403.44
184	687397.50	1076579.98	403.58
185	687399.75	1076581.08	403.53
186	687385.69	1076573.33	403.48
187	687384.50	1076572.69	403.45

GROMA v. 12.0		SEZNAM MĚŘENÝCH HODNOT				str. 1/3
Soubor:      Zápisník měření						
Zakázka: 144/2018				Lokalita: K.ú. Opatovice I		
Měřič: Ing. Milan Hlaváček				Stroj: Nikon Nivo5.M		
Datum: 30-Jul-2018						
Číslo	Hz	Z	Vod.délka	Signál	Popis	
000004005				1.68		
000004001	343.488	101.178	116.79	1.15		
000004004	370.548	103.111	45.65	1.15		
000004003	372.816	103.851	34.17	1.15		
000004006	395.186	102.905	28.81	1.72		
000000186	6.001	104.574	17.38	1.15		
000000187	394.997	104.973	17.12	1.15		
000000188	0.860	102.633	18.59	1.62		
000000189	3.054	103.338	22.70	1.15		
000000190	56.107	110.030	4.12	1.15		
000000191	176.918	99.242	12.43	1.15		
000000192	187.656	99.224	14.30	1.15		
000000193	218.883	98.350	17.44	1.15		
000000194	214.535	96.754	21.74	1.15		
000000195	212.979	97.409	19.24	1.15		
000000196	195.268	97.775	21.30	1.15		
000000197	191.841	98.247	21.34	1.15		
000000198	189.677	98.174	22.26	1.15		
000000199	181.693	98.085	22.75	1.15		
000000200	177.081	98.195	19.59	1.15		
000000201	178.616	89.770	25.20	2.02		
000000202	172.388	86.513	22.34	2.15		
000000203	182.164	89.620	30.86	2.02		
000000204	193.583	95.229	36.74	2.15		
000000205	196.680	96.891	37.23	1.15		
000000206	192.374	96.177	37.83			
000000207	207.056	96.780	36.85	1.15		
000000208	212.579	98.396	40.16	0.08		
000000209	210.385	96.462	44.80	1.15		
000000210	196.934	96.559	44.13	1.15		
000000211	231.954	99.825	12.14	1.15		
000000212	235.573	101.078	11.18	1.15		
000000213	235.055	94.788	12.57			
000000214	251.777	102.200	10.26	1.15		
000000215	257.777	102.438	9.61	1.15		
000000216	263.078	97.771	7.67	1.15		
000000217	288.815	100.631	14.60			
000000218	390.755	104.142	31.14	1.15		
000000219	377.491	102.918	46.11	1.15		
000000220	377.611	103.732	52.36	1.15		
000004006				1.64		
000004004	27.932	102.450	21.88	1.15		
000004005	285.740	97.071	28.80	1.62		
000000221	106.370	110.463	9.67	1.15		
000000222	90.036	110.469	9.72	1.15		
000000223	110.954	106.947	10.98	1.62		
000000224	102.726	106.789	17.15	1.62		
000000225	93.236	107.080	17.04	1.62		
000000226	103.786	106.761	20.30	1.62		
000000227	97.408	106.345	27.44	1.62		
000000228	96.313	105.766	30.67	1.62		
000000229	93.822	106.025	30.98	1.62		
000000230	90.374	107.244	30.79	1.15		
000000231	93.130	108.175	20.99	1.15		
000000232	89.446	107.613	28.27	1.15		
000004004				1.69		
000004005	384.040	98.390	45.65	1.15		
000004006	350.936	99.483	21.88	1.52		
000000233	248.309	108.422	10.81	1.15		
000000234	268.553	105.399	9.30	1.15		
000000235	241.639	112.268	13.45	1.15		
000004007	254.079	109.676	23.49	1.15		
000004007				1.70		
000004004	338.508	93.246	23.49	1.15		
000000236	293.937	106.036	9.44	1.15		
000000237	292.001	106.153	9.40	1.15		
000000238	288.707	95.815	10.59			
000000239	307.213	106.192	24.21	0.08		

GROMA v. 12.0		SEZNAM MĚŘENÝCH HODNOT				str. 2/3	
Soubor:      Zápisník měření							
Zakázka: 144/2018				Lokalita: K.ú. Opatovice I			
Měřič: Ing. Milan Hlaváček				Stroj: Nikon Nivo5.M			
Datum: 30-Jul-2018							
Číslo	Hz	Z	Vod.délka	Signál	Popis		
000000240	309.874	101.289	23.08	0.08			
000000241	308.696	106.223	22.94	0.08			
000000242	312.457	104.126	21.07	1.15			
000000243	302.325	106.551	23.80	0.08			
000000244	300.496	102.230	21.82	1.82			
000000245	306.070	104.764	19.92	1.15			
000000246	311.086	105.312	18.68	1.15			
000000247	300.673	107.008	14.57	1.15			
000000248	313.950	108.097	12.77	1.15			
000000249	329.407	111.204	9.29	1.15			
000000250	299.609	110.721	10.17	1.15			
000000251	300.064	120.120	5.57	1.15			
000000252	292.047	121.164	1.77	1.15			
000000253	303.086	134.501	1.92	1.15			
000000254	315.171	142.715	1.40	1.15			
000000255	351.738	121.081	3.32	1.15			
000000256	361.684	113.702	5.40	1.15			
000000257	367.848	113.168	5.28	1.15			
000000258	358.527	114.678	4.97	2.05			
000000259	347.536	94.918	8.33	2.05			
000000260	366.296	120.961	4.38	2.05			
000000261	281.763	92.229	5.14	2.05			
000000262	286.945	100.623	7.84	2.02			
000000263	278.844	91.495	8.52				
000000264	285.100	95.149	15.25			1.50	
000000265	287.076	95.384	13.67			1.15	
000000266	199.716	104.096	3.52				
000000267	187.134	112.182	1.87				
000000268	138.939	124.892	1.13				
000000269	335.334	138.675	2.80				
000000270	358.339	132.456	2.80				2.05
000000271	48.323	123.064	3.29				1.15
000000272	69.095	116.138	3.53				1.15
000000273	83.577	111.613	5.25				1.15
000000274	72.248	108.535	10.04	1.15			
000000275	67.922	110.634	10.67	1.15			
000000276	79.028	107.515	12.28	1.15			
000000277	71.052	107.717	13.52	1.15			
000000278	77.842	107.187	15.21	1.15			
000000279	73.303	107.418	17.75	1.15			
000000280	76.206	106.441	21.08	1.15			
000000281	77.870	105.606	24.22	1.15			
000000282	80.442	105.906	23.00	1.15			
000000283	66.895	108.065	22.67	1.15			
000000284	72.753	107.432	21.30	1.15			
000000285	65.552	108.459	13.77	1.82			
000000286	53.090	108.421	14.80	1.82			
000000287	45.665	108.348	12.77	1.82			
000000288	40.987	108.285	11.87	1.82			
000000289	64.285	116.335	9.75	1.15			
000000290	62.257	116.641	7.40	1.15			
000000291	41.931	114.331	10.06	1.15			
000000292	24.105	108.409	9.58	1.64			
000000293	23.350	117.847	6.88	1.15			
000000294	43.506	119.661	7.89	1.15			
000000295	394.765	108.934	8.23	1.15			
000000296	57.955	121.249	6.73	1.15			
000000297	57.278	121.254	5.19	1.15			
000004006				1.63			
000004005	270.720	96.615	28.80	1.82			
000004003	388.030	103.483	12.20	1.15			
000000298	70.277	107.831	14.66	1.52			
000000299	51.831	107.798	5.44	1.52			
000004003				1.68			
000004006	47.779	101.813	12.22	1.15			
000000300	0.689	109.363	6.56	1.15			
000000301	8.475	106.703	6.74	1.15			
000000302	14.664	104.771	6.81	1.15			

GROMA v. 12.0		SEZNAM MĚŘENÝCH HODNOT					str. 3/3
Soubor:    Zápisník měření							
Zakázka: 144/2018					Lokalita: K.ú. Opatovice I		
Měřič: Ing. Milan Hlaváček					Stroj: Nikon Nivo5.M		
Datum: 30-Jul-2018							
Číslo	Hz	Z	Vod.délka	Signál	Popis		
000000303	14.594	103.972	8.37	1.15			
000000304	12.733	105.141	7.68	2.02			
000000305	11.076	112.194	7.36	2.02			
000004004	299.121	103.837	11.57	1.15			

## [1] POLÁRNÍ METODA DÁVKOU

Orientace osnovy na bodě 000000000004005:

Bod	Y	X	Z
000000000004005	687299.60	1076663.35	405.21

Orientace:

Bod	Y	X	Z
000000000004001	687384.71	1076583.40	403.60
000000000004004	687317.04	1076621.15	403.52
000000000004003	687311.52	1076631.31	403.69

Bod	Hz	Směrník	V or.	Délka	V délky	V přev.	m0 Red.
000000000004001	343.488	148.010	0.011	116.79	-0.02	0.02	0.004 *
000000000004004	370.548	175.051	-0.009	45.65	0.01	0.01	0.009
000000000004003	372.816	177.326	-0.002	34.17	0.02	0.02	0.014

Orientační posun : 204.512g  
m0 = SQRT([vv]/(n-1)) : 0.010g  
SQRT([vv]/(n\*(n-1))) : 0.006g

Test polární metody:

Oprava orientace [g]: Skutečná hodnota: 0.011, Mezní hodnota: 0.080  
Mezní odchylky stanovené pro práci v katastru nemovitostí byly dodrženy.

Podrobné body

Polární metoda

Bod	Hz	Z	dH	V cíle	Délka	Y	X	Z	Popis
000000000004006	395.186	102.905		1.72	28.81	687299.74	1076634.54	403.85	
000000000000186	6.001	104.574		1.15	17.38	687296.74	1076646.21	404.49	
000000000000187	394.997	104.973		1.15	17.12	687299.73	1076646.23	404.40	
000000000000188	0.860	102.633		1.62	18.59	687298.03	1076644.83	404.50	
000000000000189	3.054	103.338		1.15	22.70	687296.91	1076640.81	404.55	
000000000000190	56.107	110.030		1.15	4.12	687296.24	1076660.96	405.09	
000000000000191	176.918	99.242		1.15	12.43	687296.03	1076675.25	405.89	
000000000000192	187.656	99.224		1.15	14.30	687297.85	1076677.54	405.91	
000000000000193	218.883	98.350		1.15	17.44	687305.87	1076679.63	406.19	
000000000000194	214.535	96.754		1.15	21.74	687306.01	1076684.12	406.85	
000000000000195	212.979	97.409		1.15	19.24	687304.82	1076681.87	406.52	
000000000000196	195.268	97.775		1.15	21.30	687299.53	1076684.65	406.48	
000000000000197	191.841	98.247		1.15	21.34	687298.38	1076684.65	406.33	
000000000000198	189.677	98.174		1.15	22.26	687297.57	1076685.52	406.38	
000000000000199	181.693	98.085		1.15	22.75	687294.71	1076685.57	406.42	
000000000000200	177.081	98.195		1.15	19.59	687294.01	1076682.13	406.30	
000000000000201	178.616	89.770		2.02	25.20	687293.00	1076687.67	408.95	
000000000000202	172.388	86.513		2.15	22.34	687291.67	1076684.24	409.54	
000000000000203	182.164	89.620		2.02	30.86	687293.19	1076693.54	409.95	
000000000000204	193.583	95.229		2.15	36.74	687298.50	1076700.07	407.50	
000000000000205	196.680	96.891		1.15	37.23	687300.30	1076700.57	407.56	
000000000000206	192.374	96.177			37.83	687297.75	1076701.13		
000000000000207	207.056	96.780		1.15	36.85	687306.26	1076699.59	407.61	
000000000000208	212.579	98.396		0.08	40.16	687310.25	1076702.07	407.82	
000000000000209	210.385	96.462		1.15	44.80	687309.99	1076706.93	408.23	
000000000000210	196.934	96.559		1.15	44.13	687300.60	1076707.47	408.13	
000000000000211	231.954	99.825		1.15	12.14	687306.18	1076673.55	405.77	
000000000000212	235.573	101.078		1.15	11.18	687306.18	1076672.39	405.55	
000000000000213	235.055	94.788			12.57	687306.92	1076673.57		
000000000000214	251.777	102.200		1.15	10.26	687307.54	1076669.85	405.39	
000000000000215	257.777	102.438		1.15	9.61	687307.57	1076668.72	405.37	
000000000000216	263.078	97.771		1.15	7.67	687306.30	1076667.09	406.01	
000000000000217	288.815	100.631			14.60	687314.12	1076664.88		
000000000000218	390.755	104.142		1.15	31.14	687301.91	1076632.30	403.71	
000000000000219	377.491	102.918		1.15	46.11	687312.46	1076619.07	403.63	
000000000000220	377.611	103.732		1.15	52.36	687314.11	1076613.04	402.67	

Orientace osnovy na bodě 000000000004006:

Bod	Y	X	Z
000000000004006	687299.74	1076634.54	403.85

Orientace:

Bod	Y	X	Z
000000000004004	687317.04	1076621.15	403.52
000000000004005	687299.60	1076663.35	405.21

Bod	Hz	Směrník	V or.	Délka	V délky	V přev.	m0 Red.
000000000004004	27.932	141.933	0.025	21.88	-0.00	0.02	
000000000004005	285.740	399.691	-0.025	28.80	0.01	0.01	

Orientační posun : 113.976g  
m0 = SQRT([vv]/(n-1)) : 0.035g  
SQRT([vv]/(n\*(n-1))) : 0.025g

Test polární metody:

Oprava orientace [g]: Skutečná hodnota: 0.025, Mezní hodnota: 0.080  
Mezní odchylky stanovené pro práci v katastru nemovitostí byly dodrženy.

## Podrobné body

## Polární metoda

Bod	Hz	Z	dH	V cíle	Délka	Y	X	Z	Popis
000000000000221	106.370	110.463		1.15	9.67	687296.70	1076625.36	402.74	
000000000000222	90.036	110.469		1.15	9.72	687299.13	1076624.84	402.73	
000000000000223	110.954	106.947		1.62	10.98	687295.55	1076624.39	402.67	
000000000000224	102.726	106.789		1.62	17.15	687295.29	1076617.98	402.03	
000000000000225	93.236	107.080		1.62	17.04	687297.81	1076617.61	401.97	
000000000000226	103.786	106.761		1.62	20.30	687294.15	1076615.02	401.71	
000000000000227	97.408	106.345		1.62	27.44	687294.86	1076607.54	401.13	
000000000000228	96.313	105.766		1.62	30.67	687294.80	1076604.27	401.08	
000000000000229	93.822	106.025		1.62	30.98	687295.95	1076603.79	400.93	
000000000000230	90.374	107.244		1.15	30.79	687297.64	1076603.82	400.82	
000000000000231	93.130	108.175		1.15	20.99	687297.40	1076613.68	401.63	
000000000000232	89.446	107.613		1.15	28.27	687298.22	1076606.31	400.94	

Orientace osnovy na bodě 000000000004004:

Bod	Y	X	Z
000000000004004	687317.04	1076621.15	403.52

Orientace:

Bod	Y	X	Z
000000000004005	687299.60	1076663.35	405.21
000000000004006	687299.74	1076634.54	403.85

Bod	Hz	Směrník	V or.	Délka	V délky	V přev.	m0	Red.
000000000004005	384.040	375.051	0.007	45.65	0.01	-0.01		
000000000004006	350.936	341.933	-0.007	21.88	-0.00	-0.02		

Orientační posun : 391.004g

m0 = SQRT([vv]/(n-1)) : 0.010g

SQRT([vv]/(n\*(n-1))) : 0.007g

Test polární metody:

Oprava orientace [g]: Skutečná hodnota: 0.007, Mezní hodnota: 0.080  
Mezní odchylky stanovené pro práci v katastru nemovitostí byly dodrženy.

## Podrobné body

## Polární metoda

Bod	Hz	Z	dH	V cíle	Délka	Y	X	Z	Popis
000000000000233	248.309	108.422		1.15	10.81	687310.78	1076612.34	402.62	
000000000000234	268.553	105.399		1.15	9.30	687309.55	1076615.63	403.27	
000000000000235	241.639	112.268		1.15	13.45	687310.44	1076609.43	401.44	
0000000000004007	254.079	109.676		1.15	23.49	687301.76	1076603.31	400.46	

Orientace osnovy na bodě 000000000004007:

Bod	Y	X	Z
000000000004007	687301.76	1076603.31	400.46

Orientace:

Bod	Y	X	Z
000000000004004	687317.04	1076621.15	403.52

Bod	Hz	Směrník	V or.	Délka	V délky	V přev.	m0	Red.
000000000004004	338.508	45.089	0.000	23.49	-0.00	0.01		

Orientační posun : 106.581g

Test polární metody:

Mezní odchylky stanovené pro práci v katastru nemovitostí byly dodrženy.

## Podrobné body

## Polární metoda

Bod	Hz	Z	dH	V cíle	Délka	Y	X	Z	Popis
000000000000236	293.937	106.036		1.15	9.44	687301.84	1076612.75	400.11	
000000000000237	292.001	106.153		1.15	9.40	687301.55	1076612.71	400.10	
000000000000238	288.707	95.815			10.59	687300.98	1076613.87		
000000000000239	307.213	106.192		0.08	24.21	687306.96	1076626.95	399.72	
000000000000240	309.874	101.289		0.08	23.08	687307.66	1076625.62	401.61	
000000000000241	308.696	106.223		0.08	22.94	687307.21	1076625.59	399.83	
000000000000242	312.457	104.126		1.15	21.07	687307.97	1076623.44	399.64	
000000000000243	302.325	106.551		0.08	23.80	687305.08	1076626.88	399.62	
000000000000244	300.496	102.230		1.82	21.82	687304.18	1076625.00	399.58	
000000000000245	306.070	104.764		1.15	19.92	687305.69	1076622.84	399.52	
000000000000246	311.086	105.312		1.15	18.68	687306.88	1076621.28	399.45	
000000000000247	300.673	107.008		1.15	14.57	687303.42	1076617.79	399.40	
000000000000248	313.950	108.097		1.15	12.77	687305.81	1076615.42	399.38	
000000000000249	329.407	111.204		1.15	9.29	687306.74	1076611.15	399.36	
000000000000250	299.609	110.721		1.15	10.17	687302.75	1076613.43	399.28	
000000000000251	300.064	120.120		1.15	5.57	687302.34	1076608.85	399.19	
000000000000252	292.047	121.164		1.15	1.77	687301.72	1076605.08	400.40	

000000000000253	303.086	134.501	1.15	1.92	687302.05	1076605.21	399.85
000000000000254	315.171	142.715	1.15	1.40	687302.23	1076604.63	399.90
000000000000255	351.738	121.081	1.15	3.32	687304.39	1076605.33	399.87
000000000000256	361.684	113.702	1.15	5.40	687306.50	1076605.89	399.83
000000000000257	367.848	113.168	1.15	5.28	687306.62	1076605.37	399.90
000000000000258	358.527	114.678	2.05	4.97	687306.00	1076605.90	398.94
000000000000259	347.536	94.918	2.05	8.33	687308.02	1076608.81	400.78
000000000000260	366.296	120.961	2.05	4.38	687305.75	1076605.12	398.61
000000000000261	281.763	92.229	2.05	5.14	687300.82	1076608.36	400.74
000000000000262	286.945	100.623		7.84	687300.96	1076611.11	
000000000000263	278.844	91.495	2.02	8.52	687299.83	1076611.61	401.29
000000000000264	285.100	95.149	1.50	15.25	687299.77	1076618.43	401.82
000000000000265	287.076	95.384		13.67	687300.40	1076616.91	
000000000000266	199.716	104.096	1.15	3.52	687298.26	1076603.66	400.78
000000000000267	187.134	112.182	1.15	1.87	687299.90	1076603.13	400.65
000000000000268	138.939	124.892	1.15	1.13	687301.02	1076602.46	400.54
000000000000269	335.334	138.675	1.15	2.80	687303.47	1076605.52	399.06
000000000000270	358.339	132.456	2.05	2.80	687304.15	1076604.78	398.54
000000000000271	48.323	123.064	1.15	3.29	687303.90	1076600.81	399.76
000000000000272	69.095	116.138	1.15	3.53	687303.08	1076600.03	400.10
000000000000273	83.577	111.613	1.15	5.25	687302.57	1076598.12	400.04
000000000000274	72.248	108.535	1.15	10.04	687305.04	1076593.82	399.66
000000000000275	67.922	110.634	1.15	10.67	687305.92	1076593.48	399.21
000000000000276	79.028	107.515	1.15	12.28	687304.51	1076591.34	399.55
000000000000277	71.052	107.717	1.15	13.52	687306.41	1076590.62	399.36
000000000000278	77.842	107.187	1.15	15.21	687305.44	1076588.55	399.29
000000000000279	73.303	107.418	1.15	17.75	687307.28	1076586.44	398.93
000000000000280	76.206	106.441	1.15	21.08	687307.39	1076583.00	398.87
000000000000281	77.870	105.606	1.15	24.22	687307.62	1076579.81	398.87
000000000000282	80.442	105.906	1.15	23.00	687306.42	1076580.79	398.87
000000000000283	66.895	108.065	1.15	22.67	687310.93	1076582.58	398.12
000000000000284	72.753	107.432	1.15	21.30	687308.55	1076583.12	398.51
000000000000285	65.552	108.459	1.82	13.77	687307.60	1076590.84	398.50
000000000000286	53.090	108.421	1.82	14.80	687310.52	1076591.38	398.37
000000000000287	45.665	108.348	1.82	12.77	687310.47	1076593.97	398.66
000000000000288	40.987	108.285	1.82	11.87	687310.47	1076595.24	398.79
000000000000289	64.285	116.335	1.15	9.75	687306.07	1076594.56	398.45
000000000000290	62.257	116.641	1.15	7.40	687305.24	1076596.78	399.03
000000000000291	41.931	114.331	1.15	10.06	687309.04	1076596.36	398.71
000000000000292	24.105	108.409	1.64	9.58	687310.25	1076598.87	399.25
000000000000293	23.350	117.847	1.15	6.88	687307.89	1076600.19	399.03
000000000000294	43.506	119.661	1.15	7.89	687307.33	1076597.72	398.49
000000000000295	394.765	108.934	1.15	8.23	687309.99	1076603.14	399.85
000000000000296	57.955	121.249	1.15	6.73	687305.32	1076597.60	398.68
000000000000297	57.278	121.254	1.15	5.19	687304.55	1076598.93	399.21

Orientace osnovy na bodě 000000000004006:

Bod	Y	X	Z
000000000004006	687299.74	1076634.54	403.85

Orientace:

Bod	Y	X	Z
000000000004005	687299.60	1076663.35	405.21
000000000004003	687311.52	1076631.31	403.69

Bod	Hz	Směrník	V or.	Délka	V délky	V přev.	m0 Red.
000000000004005	270.720	399.691	-0.018	28.80	0.01	0.02	
000000000004003	388.030	117.037	0.018	12.20	0.01	0.03	

Orientační posun : 128.989g  
m0 = SQRT([vv]/(n-1)) : 0.026g  
SQRT( [vv]/(n\*(n-1)) ) : 0.018g

Test polární metody:

Oprava orientace [g]: Skutečná hodnota: 0.018, Mezní hodnota: 0.080  
Mezní odchylky stanovené pro práci v katastru nemovitostí byly dodrženy.

Podrobné body

Polární metoda	Bod	Hz	Z	dH	V cíle	Délka	Y	X	Z	Popis
000000000000298	70.277	107.831			1.52	14.66	687299.91	1076619.88	402.15	
000000000000299	51.831	107.798			1.52	5.44	687301.35	1076629.35	403.29	

Orientace osnovy na bodě 000000000004003:

Bod	Y	X	Z
000000000004003	687311.52	1076631.31	403.69

Orientace:

Bod	Y	X	Z
000000000004006	687299.74	1076634.54	403.85
000000000004004	687317.04	1076621.15	403.52

Bod	Hz	Směrník	V or.	Délka	V délky	V přev.	m0 Red.
000000000004006	47.779	317.037	0.031	12.22	-0.01	-0.02	
000000000004004	299.121	168.316	-0.031	11.57	-0.01	-0.00	

Orientační posun : 269.227g

m0 = SQRT([vv]/(n-1)) : 0.044g  
SQRT( [vv]/(n\*(n-1)) ) : 0.031g

Test polární metody:  
-----  
Oprava orientace [g]: Skutečná hodnota: 0.031, Mezní hodnota: 0.080  
Mezní odchylky stanovené pro práci v katastru nemovitostí byly dodrženy.

Podrobné body

Polární metoda	Bod		Hz	Z	dH	V cíle	Délka	Y	X	Z	Popis
000000000000300			0.689	109.363		1.15	6.56	687305.68	1076628.32	403.25	
000000000000301			8.475	106.703		1.15	6.74	687305.19	1076629.00	403.51	
000000000000302			14.664	104.771		1.15	6.81	687304.93	1076629.61	403.71	
000000000000303			14.594	103.972		1.15	8.37	687303.42	1076629.21	403.70	
000000000000304			12.733	105.141		2.02	7.68	687304.15	1076629.16	402.73	
000000000000305			11.076	112.194		2.02	7.36	687304.51	1076629.07	401.92	

GROMA v. 12.0		SEZNAM SOUŘADNIC			str. 1/5
Soubor: Seznam souřadnic zaměřených bodů					
Zakázka: 144/2018				Lokalita: K.ú. Opatovice I	
Souř. systém: S-JTSK				Výškový systém: B.p.v.	
Číslo	Y	X	Z	Popis	
000000001	687 299.40	1 076 669.74	405.54		
000000002	687 304.83	1 076 670.09	405.55		
000000003	687 305.89	1 076 666.72	405.22		
000000004	687 305.89	1 076 665.18	405.03		
000000005	687 307.52	1 076 664.69	405.27		
000000006	687 307.71	1 076 655.71	404.54		
000000007	687 305.38	1 076 655.94	404.65		
000000008	687 299.79	1 076 655.73	404.87		
000000009	687 300.00	1 076 647.28	404.28		
000000010	687 300.69	1 076 648.02	404.46		
000000011	687 306.51	1 076 646.82	404.14		
000000012	687 307.96	1 076 651.60	404.26		
000000013	687 309.86	1 076 639.79	403.69		
000000014	687 307.90	1 076 639.63	403.84		
000000016	687 300.45	1 076 638.48	404.08		
000000017	687 299.21	1 076 636.95	404.23		
000000018	687 294.84	1 076 633.31	404.94		
000000019	687 313.99	1 076 640.13	403.81		
000000020	687 314.53	1 076 636.11	403.21		
000000021	687 315.26	1 076 640.21	403.58		
000000022	687 317.22	1 076 639.79	402.25		
000000023	687 314.67	1 076 647.67	403.88		
000000024	687 315.74	1 076 647.43	403.75		
000000025	687 317.64	1 076 648.06	402.23		
000000026	687 314.68	1 076 650.84	404.07		
000000027	687 314.45	1 076 655.63	404.44		
000000028	687 317.40	1 076 655.47	404.15		
000000029	687 318.47	1 076 651.41	402.28		
000000030	687 311.32	1 076 649.49	404.30		
000000031	687 315.87	1 076 630.45	402.43		
000000032	687 319.52	1 076 629.77	402.48		
000000033	687 319.11	1 076 629.57	402.48		
000000034	687 314.26	1 076 630.68	402.60		
000000035	687 314.33	1 076 630.45	402.51		
000000036	687 314.53	1 076 630.32	402.47		
000000037	687 314.18	1 076 629.85	402.07		
000000038	687 315.80	1 076 626.28	402.01		
000000039	687 316.21	1 076 626.43	402.46		
000000040	687 316.56	1 076 626.07	402.51		
000000041	687 316.60	1 076 625.61	402.53		
000000042	687 316.47	1 076 625.81	402.48		
000000043	687 315.31	1 076 626.19	402.01		
000000044	687 315.54	1 076 625.72	402.59		
000000045	687 315.65	1 076 625.50	402.59		
000000046	687 317.12	1 076 628.14	402.44		
000000047	687 313.83	1 076 629.61	402.03		
000000048	687 313.60	1 076 630.13	402.57		
000000049	687 313.51	1 076 630.35	402.76		
000000050	687 317.93	1 076 627.38	402.43		
000000051	687 312.26	1 076 633.09	403.62		
000000052	687 311.85	1 076 632.92	403.62		
000000053	687 310.66	1 076 632.30	403.61		
000000054	687 314.66	1 076 627.50	403.51		
000000055	687 314.19	1 076 627.39	403.55		
000000056	687 313.01	1 076 626.79	403.57		
000000057	687 316.20	1 076 624.26	403.45		
000000058	687 315.77	1 076 624.13	403.53		
000000059	687 314.59	1 076 623.80	403.52		
000000060	687 316.43	1 076 621.14	403.46		
000000061	687 317.05	1 076 621.62	403.49		
000000062	687 317.44	1 076 621.83	403.48		
000000063	687 317.51	1 076 622.24	402.60		
000000064	687 319.99	1 076 622.48	402.39		
000000065	687 320.13	1 076 616.75	403.43		
000000066	687 320.56	1 076 617.00	403.48		
000000067	687 320.96	1 076 617.24	403.56		
000000068	687 316.80	1 076 614.14	403.58		
000000069	687 316.17	1 076 614.96	403.56		
000000070	687 317.87	1 076 611.23	403.63		
000000071	687 318.89	1 076 611.75	403.62		

GROMA v. 12.0		SEZNAM SOUŘADNIC			str. 2/5
Soubor: Seznam souřadnic zaměřených bodů					
Zakázka: 144/2018				Lokalita: K.ú. Opatovice I	
Souř. systém: S-JTSK				Výškový systém: B.p.v.	
Číslo	Y	X	Z	Popis	
000000072	687 315.13	1 076 610.63	402.18		
000000073	687 311.85	1 076 609.78	402.18		
000000074	687 312.86	1 076 618.56	403.67		
000000075	687 310.42	1 076 622.76	403.66		
000000076	687 309.73	1 076 622.25	403.65		
000000077	687 309.41	1 076 622.11	403.64		
000000078	687 307.28	1 076 627.95	403.78		
000000079	687 306.82	1 076 627.78	403.72		
000000080	687 305.70	1 076 629.57	403.85		
000000081	687 304.19	1 076 633.71	403.85		
000000082	687 301.82	1 076 640.87	404.18		
000000083	687 301.01	1 076 637.24	403.91		
000000084	687 298.78	1 076 632.16	403.71		
000000085	687 301.44	1 076 631.89	403.63		
000000086	687 302.66	1 076 633.10	403.76		
000000087	687 324.39	1 076 612.66	403.50		
000000088	687 324.28	1 076 614.46	403.44		
000000089	687 325.90	1 076 616.51	402.52		
000000090	687 321.53	1 076 617.74	403.62		
000000091	687 324.25	1 076 615.33	403.61		
000000092	687 326.07	1 076 613.39	403.86		
000000093	687 324.34	1 076 606.18	403.73		
000000094	687 324.74	1 076 606.63	403.66		
000000095	687 330.90	1 076 601.36	403.61		
000000096	687 331.29	1 076 602.02	403.60		
000000097	687 333.47	1 076 606.43	403.46		
000000098	687 328.30	1 076 611.39	403.58		
000000099	687 329.76	1 076 610.66	403.41		
000000100	687 333.06	1 076 611.75	402.37		
000000101	687 338.35	1 076 605.48	403.99		
000000102	687 341.35	1 076 603.24	403.26		
000000103	687 341.37	1 076 602.15	403.42		
000000104	687 339.22	1 076 597.75	403.52		
000000105	687 339.30	1 076 597.02	403.50		
000000106	687 341.01	1 076 596.15	403.51		
000000107	687 346.94	1 076 588.68	399.72		
000000108	687 346.57	1 076 588.52	399.98		
000000109	687 346.39	1 076 588.91	399.37		
000000110	687 345.45	1 076 586.57	399.33		
000000111	687 348.19	1 076 584.32	399.08		
000000112	687 349.18	1 076 585.17	399.13		
000000113	687 347.71	1 076 588.15	399.35		
000000114	687 350.27	1 076 580.72	399.07		
000000115	687 350.80	1 076 580.98	399.09		
000000116	687 349.81	1 076 582.83	399.06		
000000117	687 349.66	1 076 580.95	399.43		
000000118	687 350.60	1 076 581.78	399.57		
000000119	687 347.69	1 076 583.80	399.61		
000000120	687 345.02	1 076 585.75	399.81		
000000121	687 350.05	1 076 582.92	399.53		
000000122	687 349.83	1 076 584.96	399.57		
000000123	687 348.16	1 076 588.36	400.89		
000000124	687 346.68	1 076 589.37	400.99		
000000125	687 354.94	1 076 583.95	399.89		
000000126	687 372.73	1 076 574.84	399.98		
000000127	687 339.82	1 076 592.21	402.05		
000000128	687 340.02	1 076 592.47	402.02		
000000129	687 340.02	1 076 592.88	402.12		
000000130	687 339.75	1 076 592.66	402.00		
000000131	687 339.55	1 076 592.82	402.00		
000000132	687 339.72	1 076 593.08	402.19		
000000133	687 338.00	1 076 593.49	402.06		
000000134	687 324.41	1 076 600.39	400.39		
000000135	687 318.98	1 076 605.36	401.03		
000000136	687 346.51	1 076 592.88	403.39		
000000137	687 349.19	1 076 598.38	403.31		
000000138	687 350.62	1 076 597.67	403.32		
000000139	687 351.63	1 076 600.00	402.25		
000000140	687 350.30	1 076 600.53	402.44		
000000143	687 352.82	1 076 599.04	403.45		

GROMA v. 12.0		SEZNAM SOUŘADNIC			str. 3/5
Soubor: Seznam souřadnic zaměřených bodů					
Zakázka: 144/2018				Lokalita: K.ú. Opatovice I	
Souř. systém: S-JTSK				Výškový systém: B.p.v.	
Číslo	Y	X	Z	Popis	
000000144	687 353.39	1 076 598.62	403.44		
000000145	687 352.86	1 076 597.90	403.30		
000000146	687 352.32	1 076 598.29	403.27		
000000147	687 350.35	1 076 592.22	403.40		
000000148	687 349.88	1 076 591.68	403.45		
000000149	687 355.74	1 076 596.71	403.14		
000000150	687 361.38	1 076 594.09	403.56		
000000151	687 364.53	1 076 594.82	402.37		
000000152	687 362.50	1 076 591.96	403.47		
000000153	687 359.27	1 076 588.13	403.46		
000000154	687 358.83	1 076 587.24	403.29		
000000155	687 367.78	1 076 592.09	403.55		
000000156	687 369.55	1 076 590.84	403.83		
000000157	687 371.88	1 076 589.65	403.96		
000000158	687 373.32	1 076 591.38	402.35		
000000159	687 371.95	1 076 588.28	403.59		
000000160	687 369.62	1 076 583.90	403.63		
000000161	687 369.43	1 076 583.07	403.39		
000000162	687 376.15	1 076 588.63	403.71		
000000163	687 381.36	1 076 586.77	403.52		
000000164	687 385.39	1 076 585.21	403.59		
000000165	687 385.37	1 076 587.74	402.41		
000000166	687 383.74	1 076 584.10	403.58		
000000167	687 380.24	1 076 579.69	403.64		
000000168	687 379.42	1 076 578.99	403.79		
000000169	687 382.20	1 076 579.05	403.65		
000000170	687 378.94	1 076 578.37	403.41		
000000171	687 389.05	1 076 576.76	403.56		
000000172	687 397.35	1 076 572.96	403.24		
000000173	687 402.52	1 076 577.68	403.49		
000000175	687 395.19	1 076 582.50	403.84		
000000176	687 392.90	1 076 583.58	403.40		
000000177	687 389.42	1 076 584.48	403.55		
000000178	687 392.23	1 076 586.57	402.21		
000000179	687 392.77	1 076 587.39	402.43		
000000180	687 393.69	1 076 590.24	402.42		
000000181	687 400.42	1 076 583.56	403.46		
000000182	687 402.09	1 076 586.39	403.37		
000000183	687 401.40	1 076 581.48	403.44		
000000184	687 397.50	1 076 579.98	403.58		
000000185	687 399.75	1 076 581.08	403.53		
000000186	687 296.74	1 076 646.21	404.49		
000000187	687 299.73	1 076 646.23	404.40		
000000188	687 298.03	1 076 644.83	404.50		
000000189	687 296.91	1 076 640.81	404.55		
000000190	687 296.24	1 076 660.96	405.09		
000000191	687 296.03	1 076 675.25	405.89		
000000192	687 297.85	1 076 677.54	405.91		
000000193	687 305.87	1 076 679.63	406.19		
000000194	687 306.01	1 076 684.12	406.85		
000000195	687 304.82	1 076 681.87	406.52		
000000196	687 299.53	1 076 684.65	406.48		
000000197	687 298.38	1 076 684.65	406.33		
000000198	687 297.57	1 076 685.52	406.38		
000000199	687 294.71	1 076 685.57	406.42		
000000200	687 294.01	1 076 682.13	406.30		
000000201	687 293.00	1 076 687.67	408.95		
000000202	687 291.67	1 076 684.24	409.54		
000000203	687 293.19	1 076 693.54	409.95		
000000204	687 298.50	1 076 700.07	407.50		
000000205	687 300.30	1 076 700.57	407.56		
000000206	687 297.75	1 076 701.13			
000000207	687 306.26	1 076 699.59	407.61		
000000208	687 310.25	1 076 702.07	407.82		
000000209	687 309.99	1 076 706.93	408.23		
000000210	687 300.60	1 076 707.47	408.13		
000000211	687 306.18	1 076 673.55	405.77		
000000212	687 306.18	1 076 672.39	405.55		
000000213	687 306.92	1 076 673.57			
000000214	687 307.54	1 076 669.85	405.39		

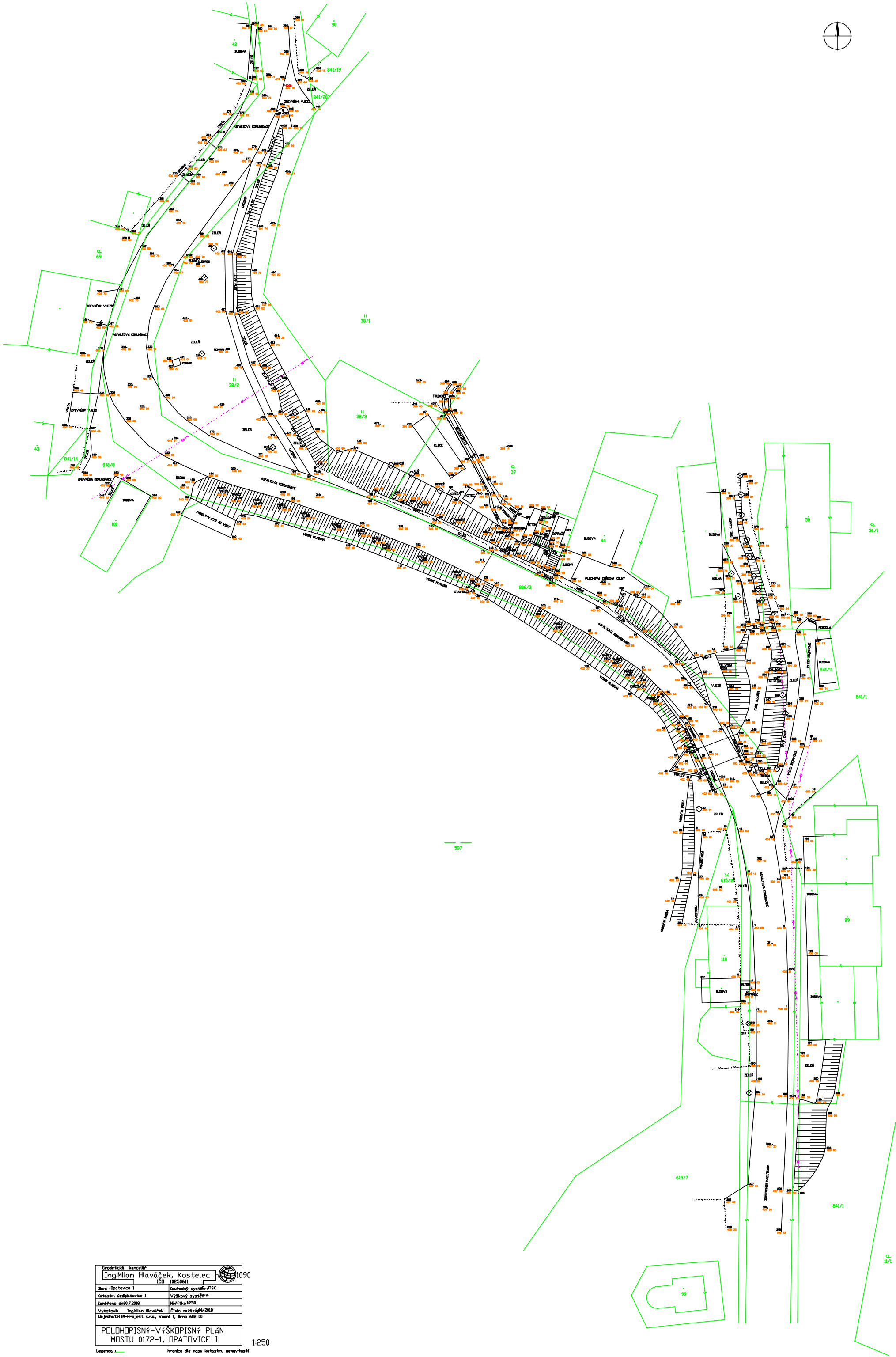
GROMA v. 12.0		SEZNAM SOUŘADNIC			str. 4/5
Soubor: Seznam souřadnic zaměřených bodů					
Zakázka: 144/2018				Lokalita: K.ú. Opatovice I	
Souř. systém: S-JTSK				Výškový systém: B.p.v.	
Číslo	Y	X	Z	Popis	
000000215	687 307.57	1 076 668.72	405.37		
000000216	687 306.30	1 076 667.09	406.01		
000000217	687 314.12	1 076 664.88			
000000218	687 301.91	1 076 632.30	403.71		
000000219	687 312.46	1 076 619.07	403.63		
000000220	687 314.11	1 076 613.04	402.67		
000000221	687 296.70	1 076 625.36	402.74		
000000222	687 299.13	1 076 624.84	402.73		
000000223	687 295.55	1 076 624.39	402.67		
000000224	687 295.29	1 076 617.98	402.03		
000000225	687 297.81	1 076 617.61	401.97		
000000226	687 294.15	1 076 615.02	401.71		
000000227	687 294.86	1 076 607.54	401.13		
000000228	687 294.80	1 076 604.27	401.08		
000000229	687 295.95	1 076 603.79	400.93		
000000230	687 297.64	1 076 603.82	400.82		
000000231	687 297.40	1 076 613.68	401.63		
000000232	687 298.22	1 076 606.31	400.94		
000000233	687 310.78	1 076 612.34	402.62		
000000234	687 309.55	1 076 615.63	403.27		
000000235	687 310.44	1 076 609.43	401.44		
000000236	687 301.84	1 076 612.75	400.11		
000000237	687 301.55	1 076 612.71	400.10		
000000238	687 300.98	1 076 613.87			
000000239	687 306.96	1 076 626.95	399.72		
000000240	687 307.66	1 076 625.62	401.61		
000000241	687 307.21	1 076 625.59	399.83		
000000242	687 307.97	1 076 623.44	399.64		
000000243	687 305.08	1 076 626.88	399.62		
000000244	687 304.18	1 076 625.00	399.58		
000000245	687 305.69	1 076 622.84	399.52		
000000246	687 306.88	1 076 621.28	399.45		
000000247	687 303.42	1 076 617.79	399.40		
000000248	687 305.81	1 076 615.42	399.38		
000000249	687 306.74	1 076 611.15	399.36		
000000250	687 302.75	1 076 613.43	399.28		
000000251	687 302.34	1 076 608.85	399.19		
000000252	687 301.72	1 076 605.08	400.40		
000000253	687 302.05	1 076 605.21	399.85		
000000254	687 302.23	1 076 604.63	399.90		
000000255	687 304.39	1 076 605.33	399.87		
000000256	687 306.50	1 076 605.89	399.83		
000000257	687 306.62	1 076 605.37	399.90		
000000258	687 306.00	1 076 605.90	398.94		
000000259	687 308.02	1 076 608.81	400.78		
000000260	687 305.75	1 076 605.12	398.61		
000000261	687 300.82	1 076 608.36	400.74		
000000262	687 300.96	1 076 611.11			
000000263	687 299.83	1 076 611.61	401.29		
000000264	687 299.77	1 076 618.43	401.82		
000000265	687 300.40	1 076 616.91			
000000266	687 298.26	1 076 603.66	400.78		
000000267	687 299.90	1 076 603.13	400.65		
000000268	687 301.02	1 076 602.46	400.54		
000000269	687 303.47	1 076 605.52	399.06		
000000270	687 304.15	1 076 604.78	398.54		
000000271	687 303.90	1 076 600.81	399.76		
000000272	687 303.08	1 076 600.03	400.10		
000000273	687 302.57	1 076 598.12	400.04		
000000274	687 305.04	1 076 593.82	399.66		
000000275	687 305.92	1 076 593.48	399.21		
000000276	687 304.51	1 076 591.34	399.55		
000000277	687 306.41	1 076 590.62	399.36		
000000278	687 305.44	1 076 588.55	399.29		
000000279	687 307.28	1 076 586.44	398.93		
000000280	687 307.39	1 076 583.00	398.87		
000000281	687 307.62	1 076 579.81	398.87		
000000282	687 306.42	1 076 580.79	398.87		
000000283	687 310.93	1 076 582.58	398.12		
000000284	687 308.55	1 076 583.12	398.51		

GROMA v. 12.0		SEZNAM SOUŘADNIC			str. 5/5
Soubor: Seznam souřadnic zaměřených bodů					
Zakázka: 144/2018				Lokalita: K.ú. Opatovice I	
Souř. systém: S-JTSK				Výškový systém: B.p.v.	
Číslo	Y	X	Z	Popis	
000000285	687 307.60	1 076 590.84	398.50		
000000286	687 310.52	1 076 591.38	398.37		
000000287	687 310.47	1 076 593.97	398.66		
000000288	687 310.47	1 076 595.24	398.79		
000000289	687 306.07	1 076 594.56	398.45		
000000290	687 305.24	1 076 596.78	399.03		
000000291	687 309.04	1 076 596.36	398.71		
000000292	687 310.25	1 076 598.87	399.25		
000000293	687 307.89	1 076 600.19	399.03		
000000294	687 307.33	1 076 597.72	398.49		
000000295	687 309.99	1 076 603.14	399.85		
000000296	687 305.32	1 076 597.60	398.68		
000000297	687 304.55	1 076 598.93	399.21		
000000298	687 299.91	1 076 619.88	402.15		
000000299	687 301.35	1 076 629.35	403.29		
000000300	687 305.68	1 076 628.32	403.25		
000000301	687 305.19	1 076 629.00	403.51		
000000302	687 304.93	1 076 629.61	403.71		
000000303	687 303.42	1 076 629.21	403.70		
000000304	687 304.15	1 076 629.16	402.73		
000000305	687 304.51	1 076 629.07	401.92		
000000306	687 385.69	1 076 573.33	403.48		
000000307	687 384.50	1 076 572.69	403.45		
000004001	687 384.71	1 076 583.40	403.60		
000004002	687 399.83	1 076 543.34	402.69		
000004003	687 311.52	1 076 631.31	403.69		
000004004	687 317.04	1 076 621.15	403.52		
000004005	687 299.60	1 076 663.35	405.21		
000004006	687 299.74	1 076 634.54	403.85		
000004007	687 301.76	1 076 603.31	400.46		



Legenda :  hranice dle mapy katastru nemovitostí

1:250



Geodetická kancelář	
Ing. Milan Hlaváček, Kostelec	
IČO 10250611	
Obec: Opatovice I	Souřadný systém: JTSK
Katastr. území: Opatovice I	Výškový systém: B-V
Zaměřeno dne: 20.7.2018	Měřítko: 1:250
Vyhotovl.: Ing. Milan Hlaváček	Číslo zakázky: 4/2018
Objednatel: BH-Projekt s.r.o., Vodiň 1, Brno 602 00	
POLOHOPISNÝ-VÝŠKOPISNÝ PLÁN	
MOSTU 0172-1, OPATOVICE I	

1:250

Legenda: — hranice dle mapy katastru nemovitostí