

# DĚJINY STAVEB 2011

## Technologie tvorby fotoplánů a možnosti použití free software SIMphoto

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Katedra mapování a kartografie

Nečtiny, 25. - 27. března 2011

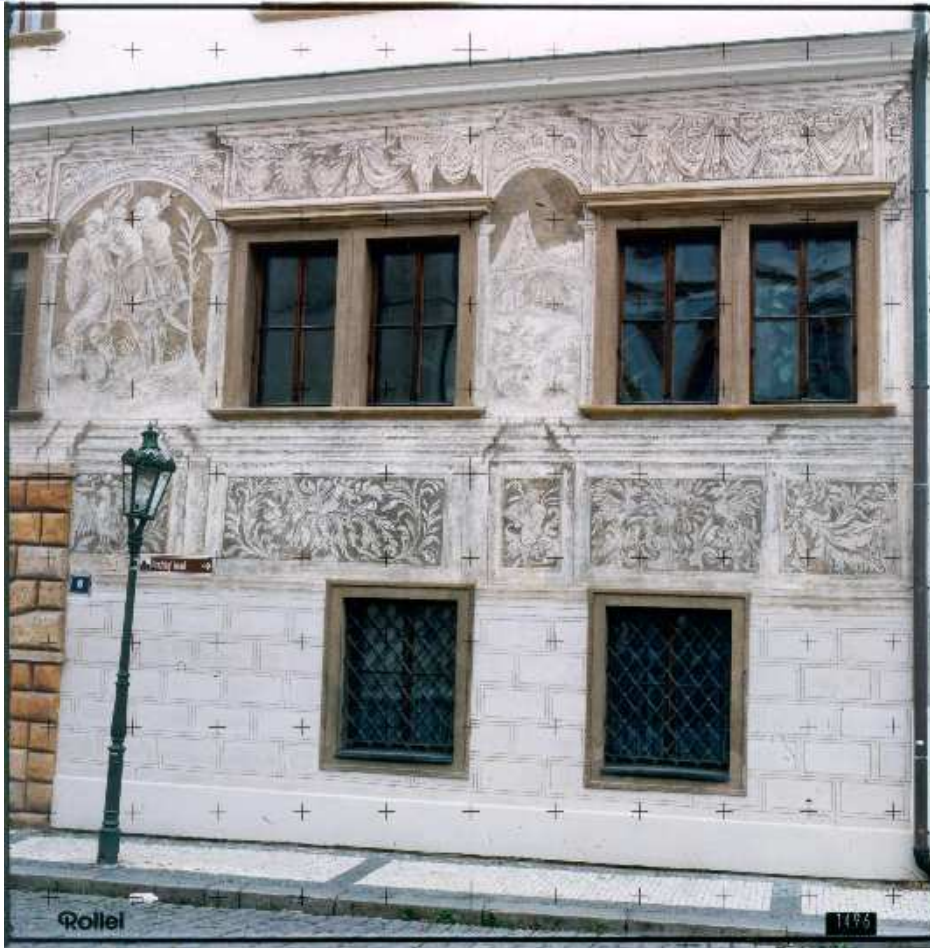


## Obsah příspěvku

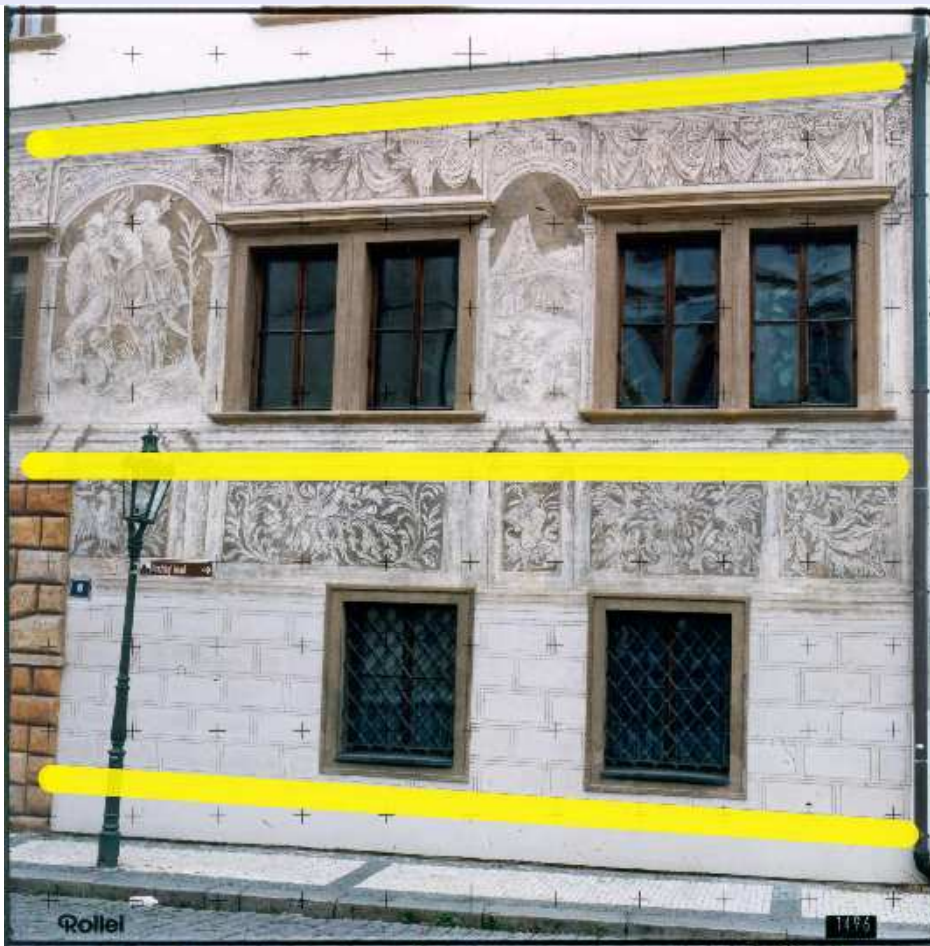
- snímkování ⇒ **konfigurace**
- snímek ⇒ **zkreslení** (distorze)
- **měřené** hodnoty ⇒ možnosti
- fotoplán ⇒ **přesnost**
- free software **SIMphoto**

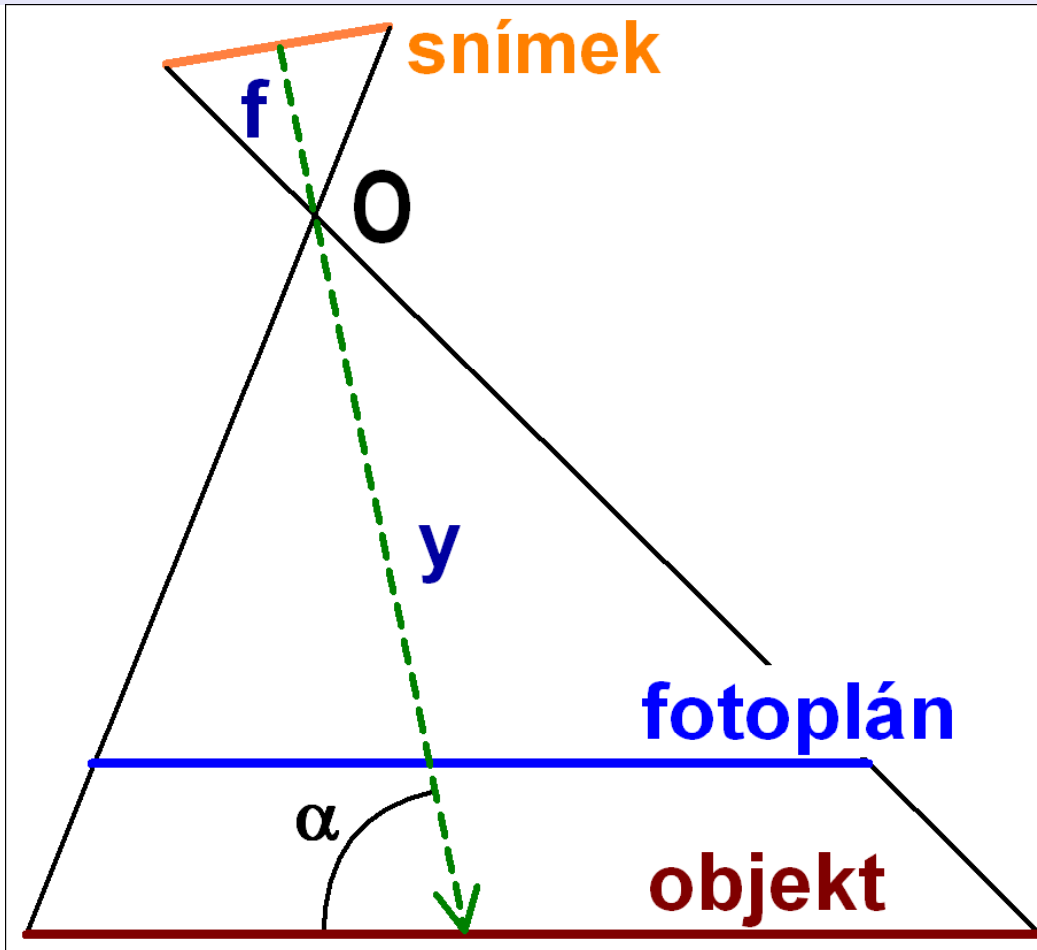


F:\\_DESTA 2011\Hodač\03\_k1\_snimek\_perspektiva.jpg



F:\\_DESTA 2011\Hodač\04\_k2\_snimek\_perspektiva.jpg



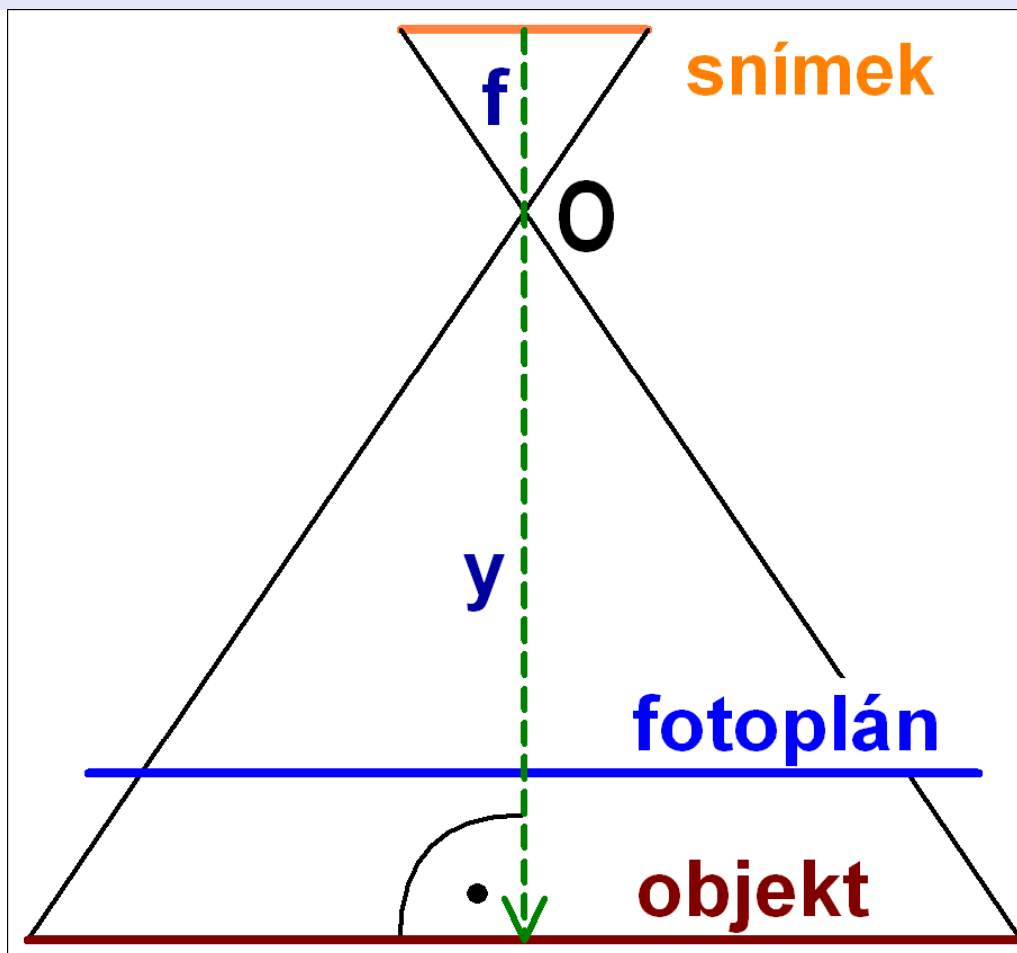


F:\\_DESTA 2011\Hodač\07\_k5\_snimek\_transformace.jpg

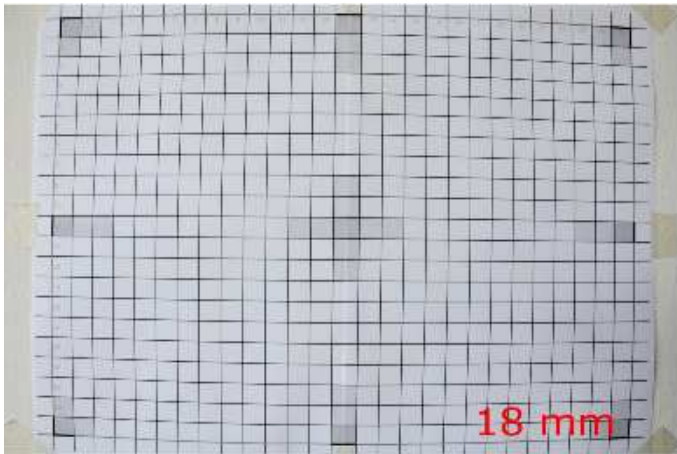


F:\\_DESTA 2011\Hodač\08\_k6\_snimek\_frontalni.jpg

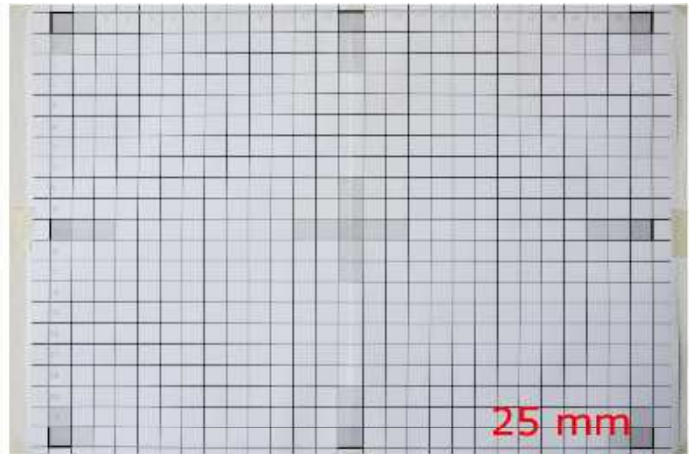




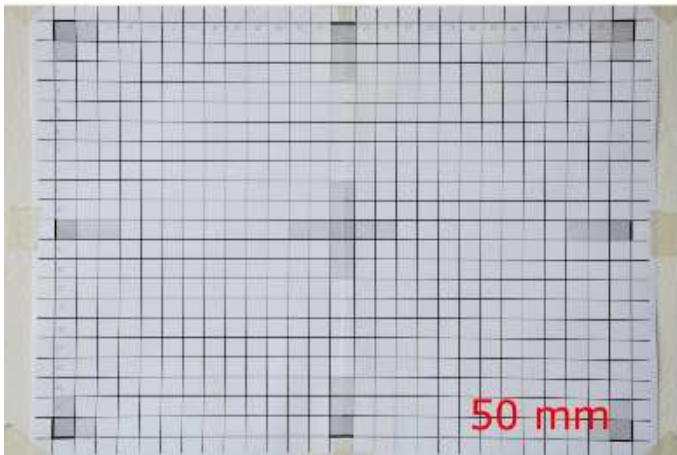
F:\\_DESTA 2011\Hodač\11\_d2\_snimek\_distorze\_zoom\_W-T.jpg



18 mm



25 mm

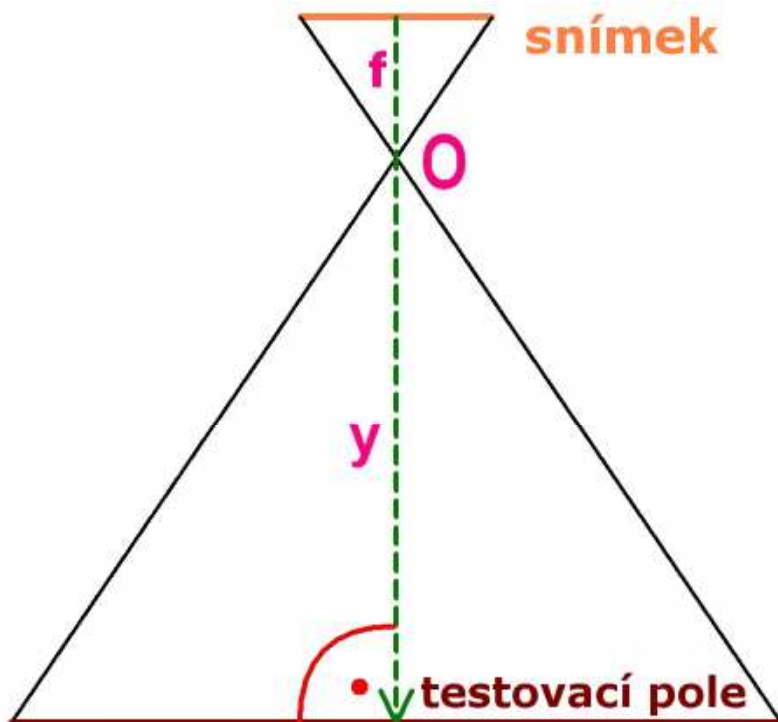


50 mm

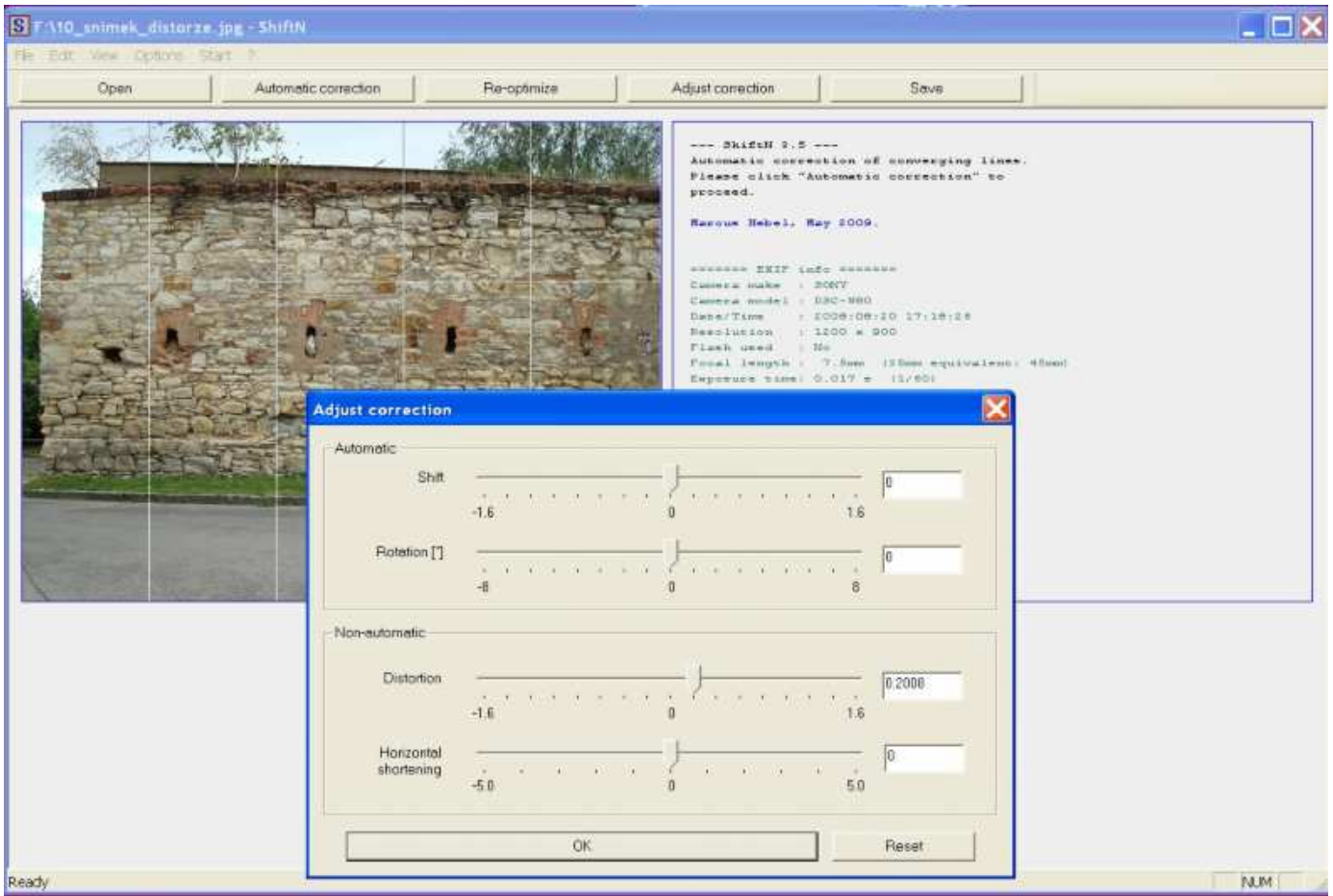


75 mm

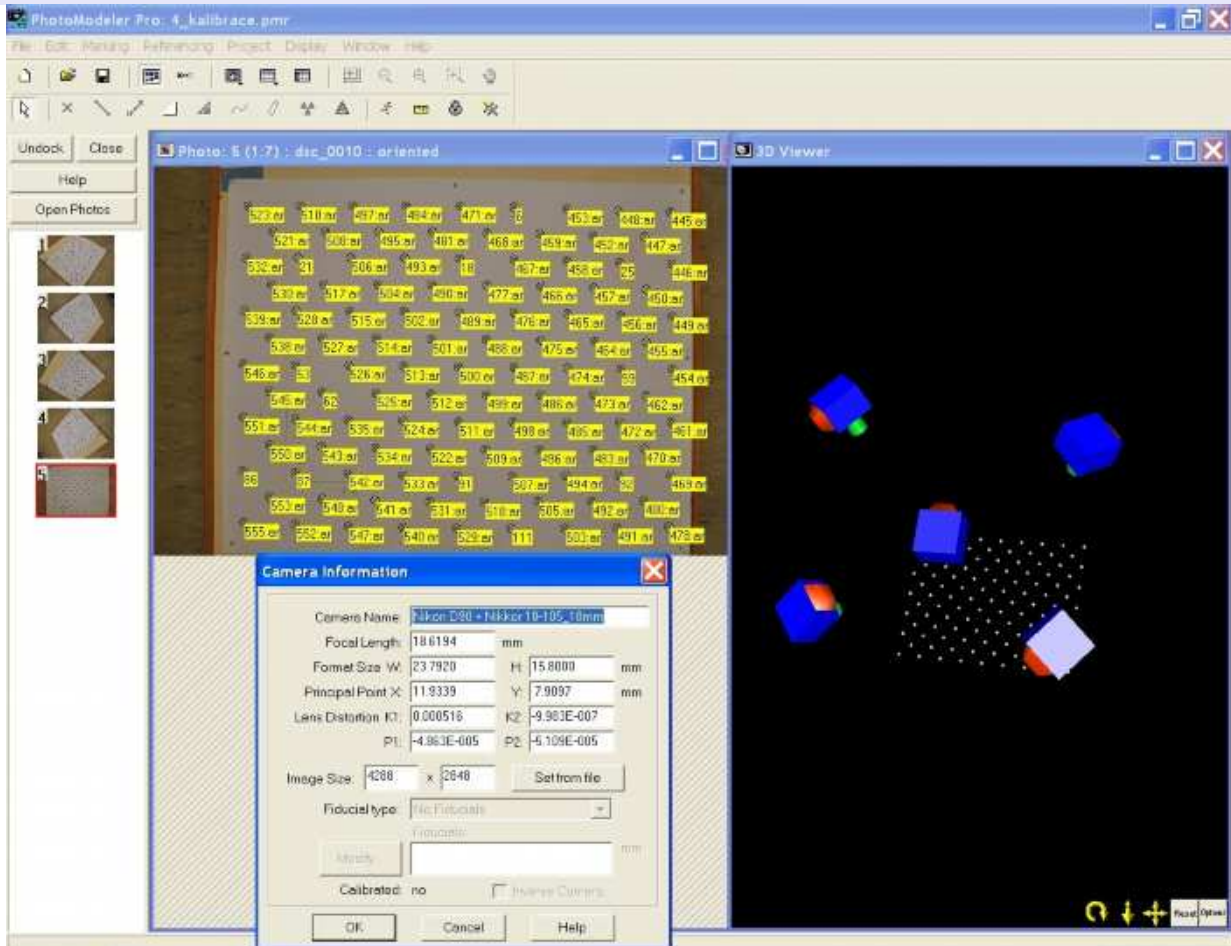
F:\\_DESTA 2011\Hodač\12\_d3\_distorze\_kalibrace.jpg



F:\\_DESTA 2011\Hodač\13\_d4\_distorze\_kalibrace\_ShiftN.jpg



F:\\_DESTA 2011\Hodač\14\_d5\_distorze\_kalibrace\_Photomodeler.jpg



F:\\_DESTA 2011\Hodač\15\_m1\_mereni.jpg



F:\\_DESTA 2011\Hodač\16\_m2\_mereni\_body.jpg





F:\\_DESTA 2011\Hodač\17\_m3\_mereni\_delky.jpg



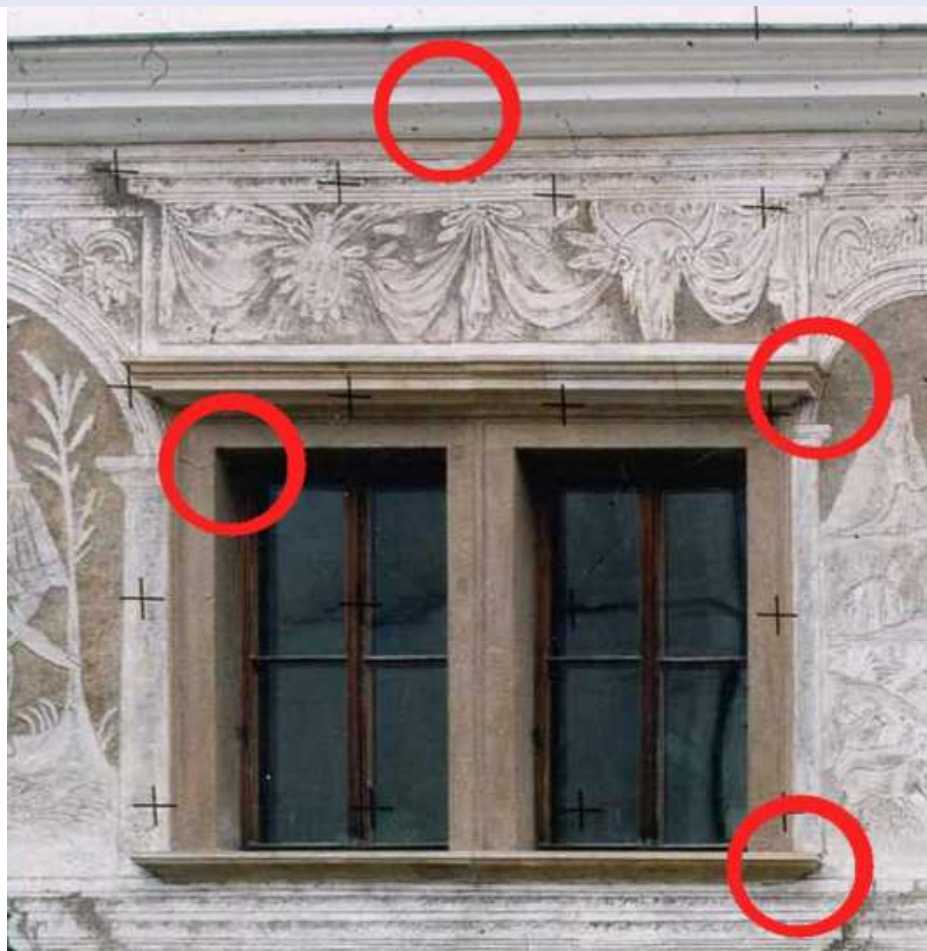
F:\\_DESTA 2011\Hodač\18\_m4\_mereni\_meritko.jpg



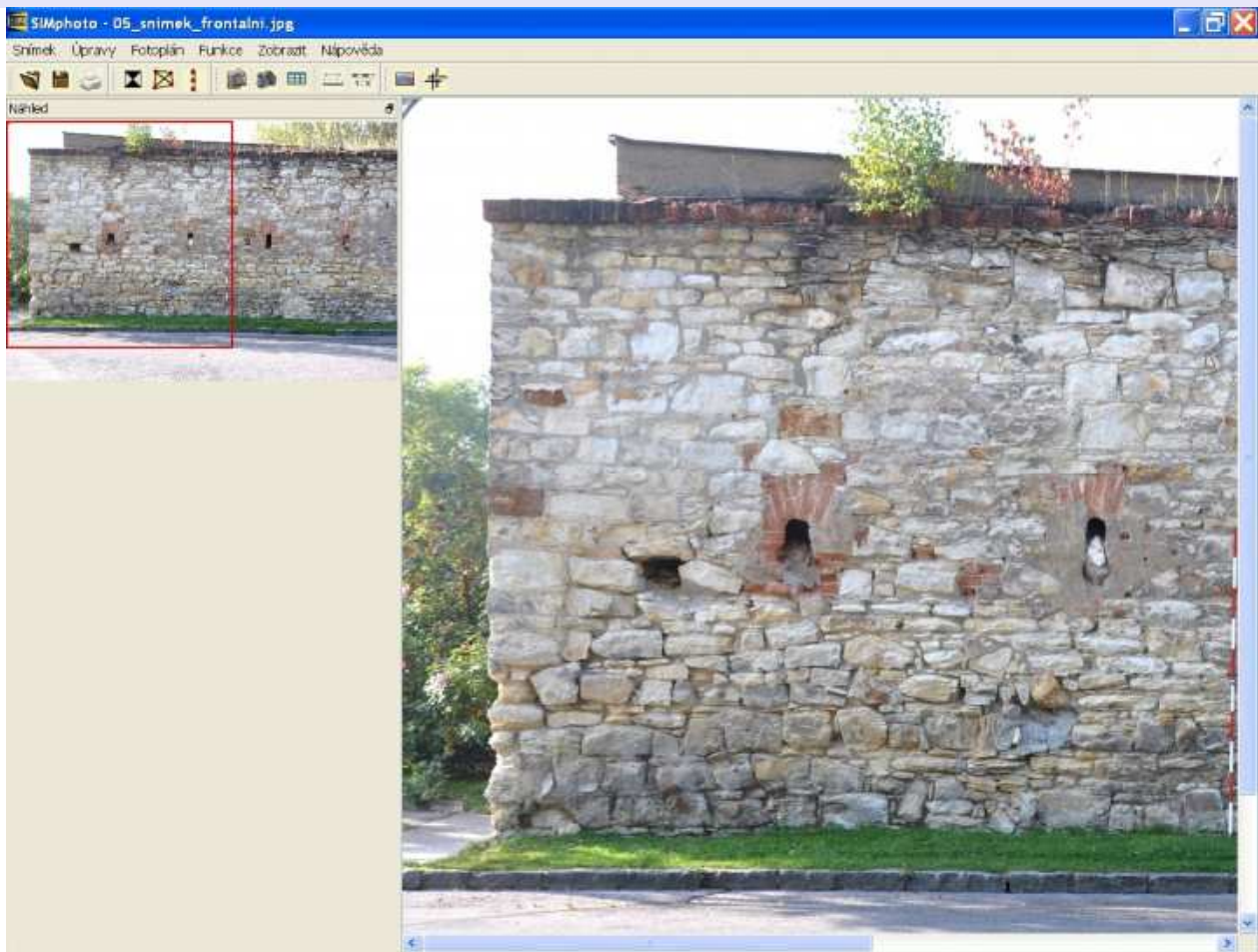
F:\\_DESTA 2011\Hodač\19\_p1\_fotoplan\_presnost.jpg



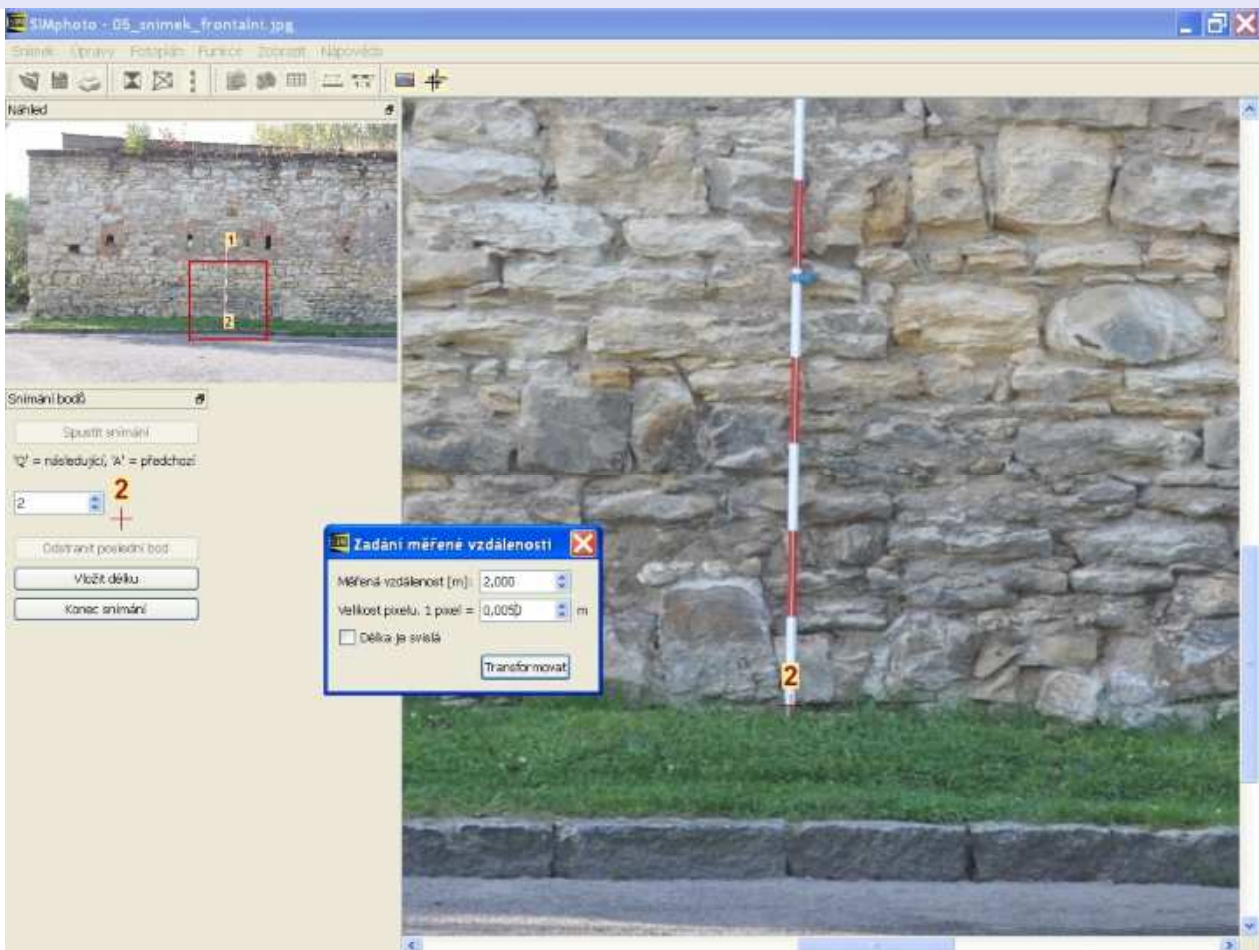
F:\\_DESTA 2011\Hodač\20\_p2\_fotoplan\_presnost.jpg



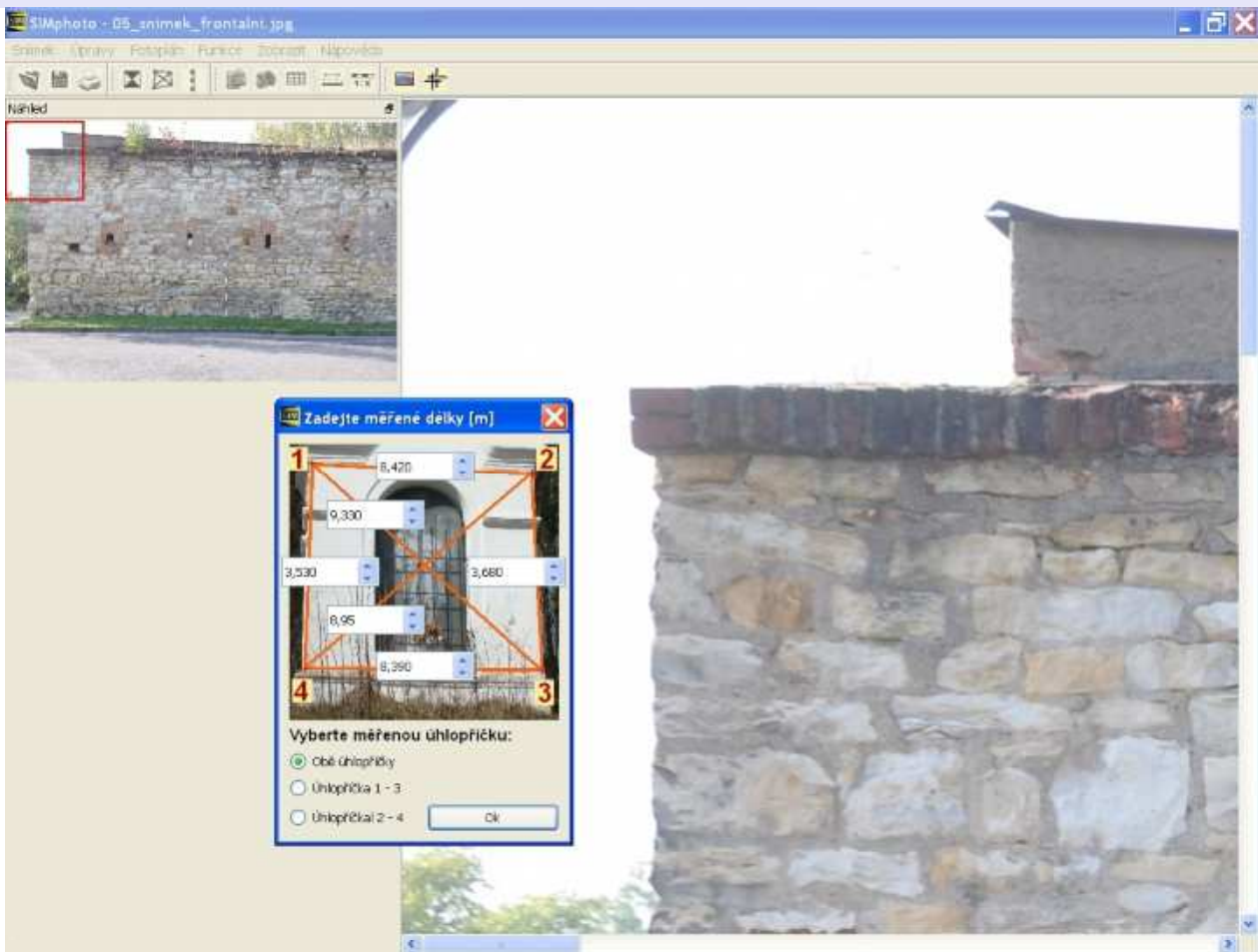
F:\\_DESTA 2011\Hodač\21\_s1\_SIMphoto.jpg



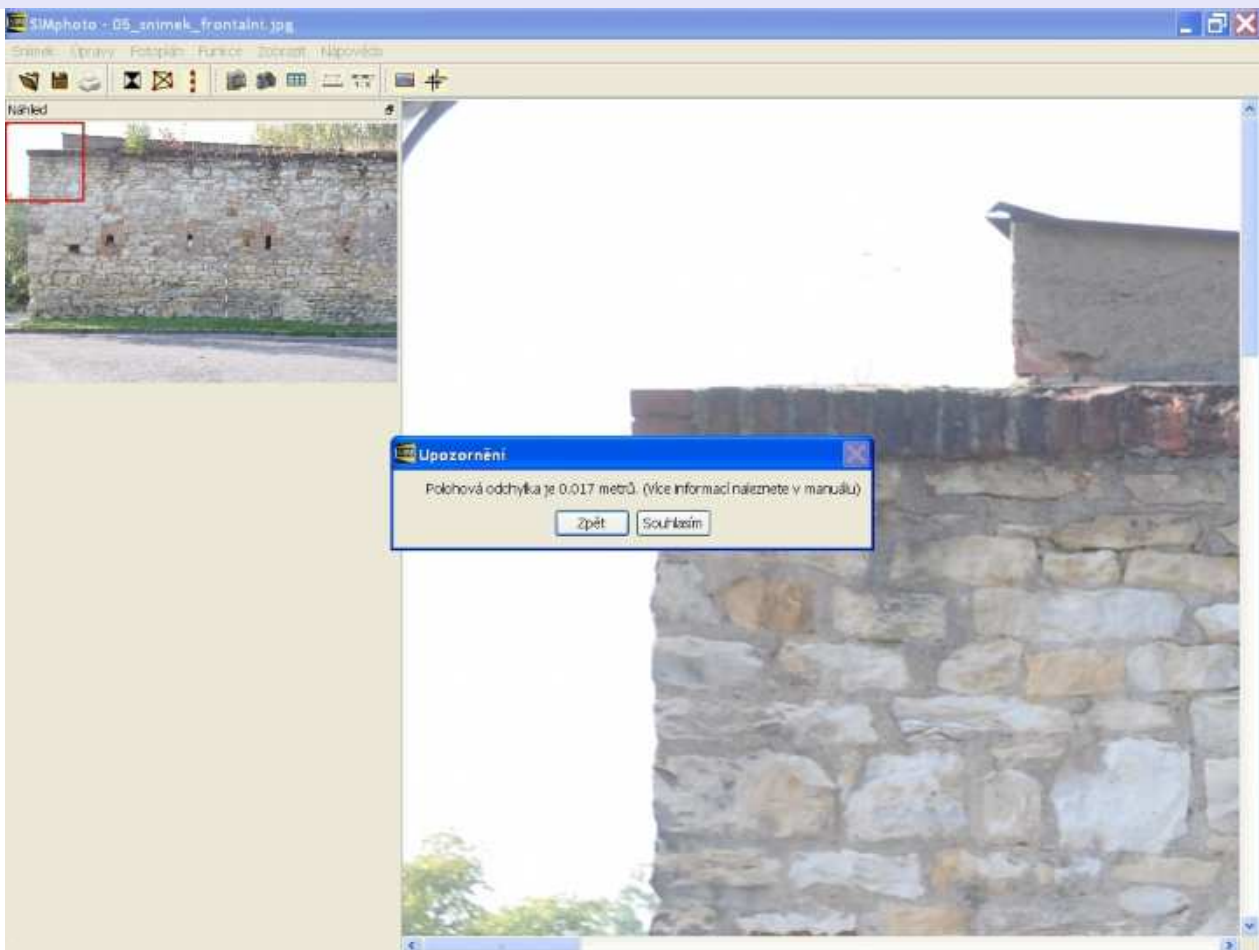
F:\\_DESTA 2011\Hodač\22\_s2\_SIMphoto\_1delka.jpg



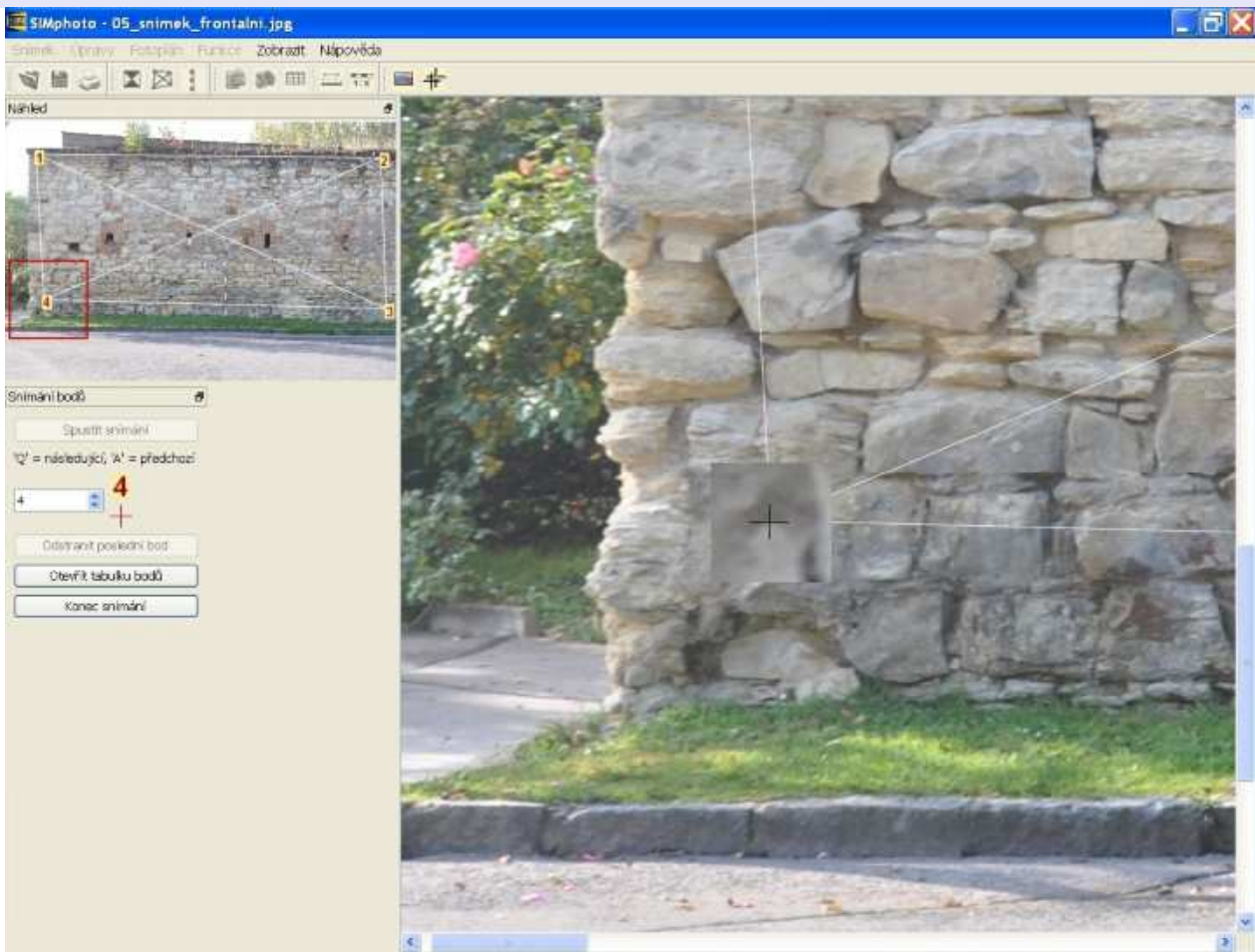
F:\\_DESTA 2011\Hodač\23\_s3\_SIMphoto\_obdelnik.jpg



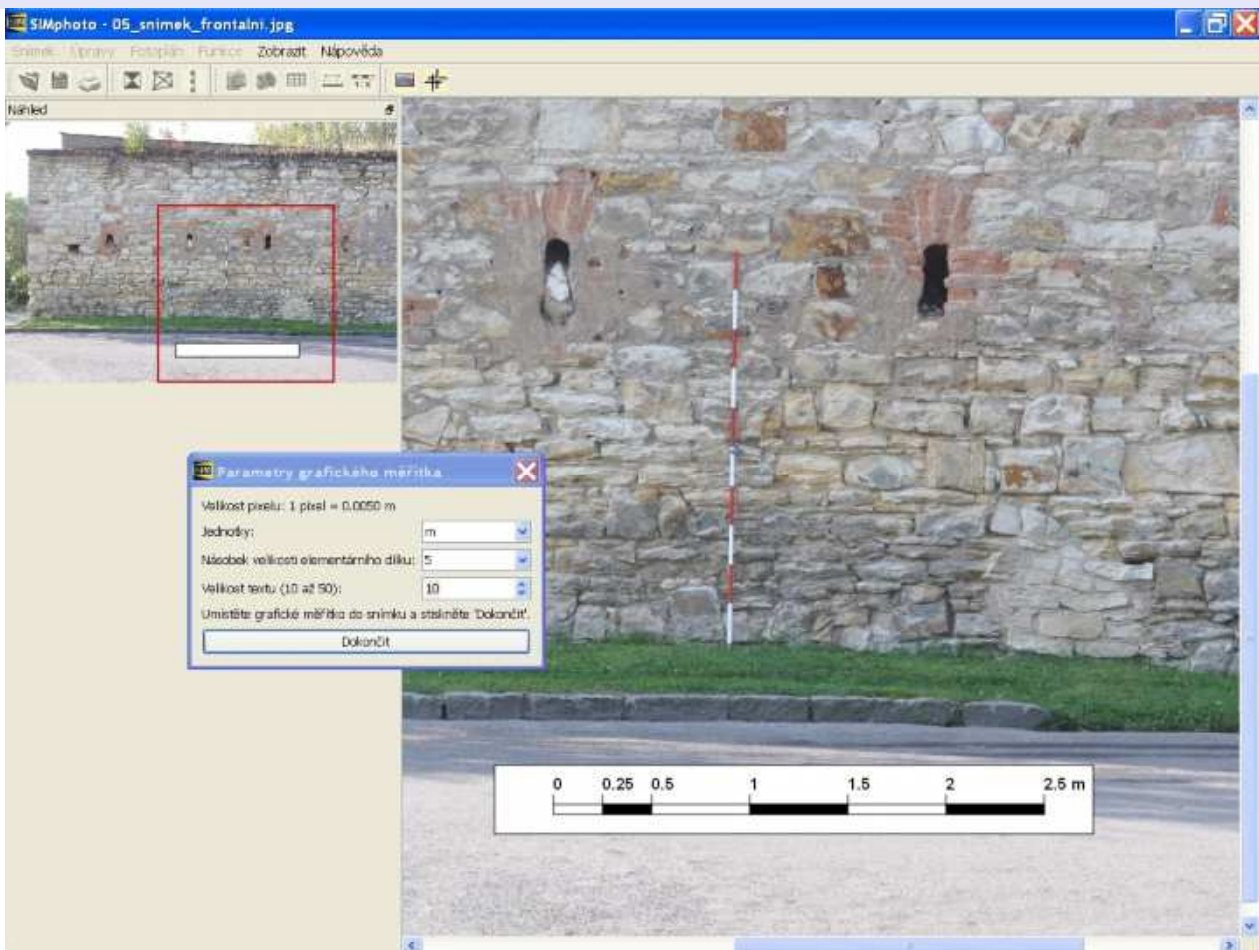
F:\\_DESTA 2011\Hodač\24\_s4\_SIMphoto\_obdelnik\_presnost.jpg



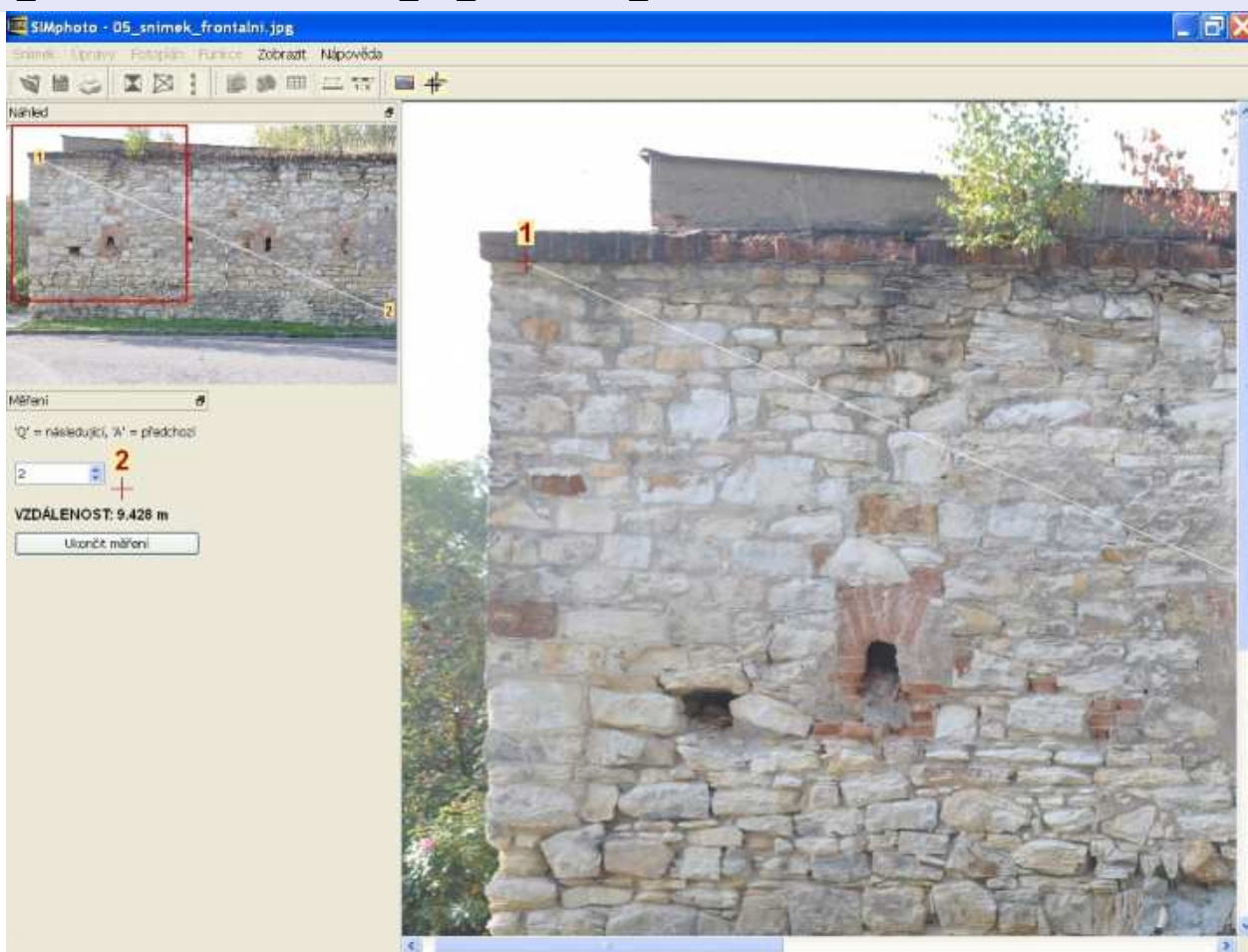
F:\\_DESTA 2011\Hodač\25\_s5\_SIMphoto\_obdelnik.jpg



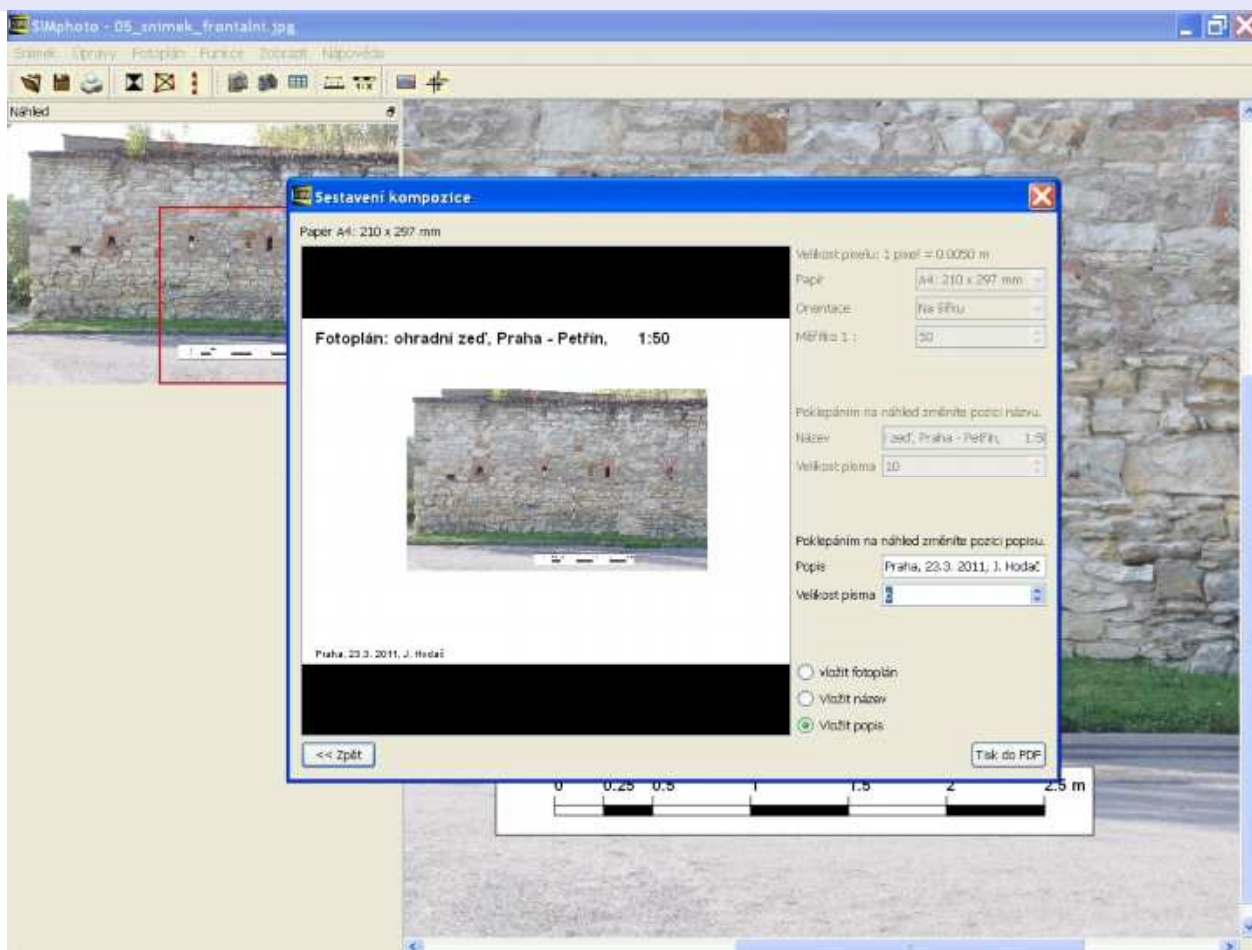
F:\\_DESTA 2011\Hodač\26\_s6\_SIMphoto\_graficke meritko.jpg



F:\\_DESTA 2011\Hodač\27\_s7\_SIMphoto\_mereni\_delek.jpg



F:\\_DESTA 2011\Hodač\28\_s8\_SIMphoto\_tisk.jpg



F:\\_DESTA 2011\Hodač\29\_s9\_SIMphoto\_body+presnost.jpg

The screenshot shows the SIMphoto software interface. On the left, there is a thumbnail of the building facade with nine control points marked. The main window displays a close-up of the facade with these points overlaid. A dialog box titled "Tabulka bodů kolineární transformace" is open, showing a table of control points and their corrections.

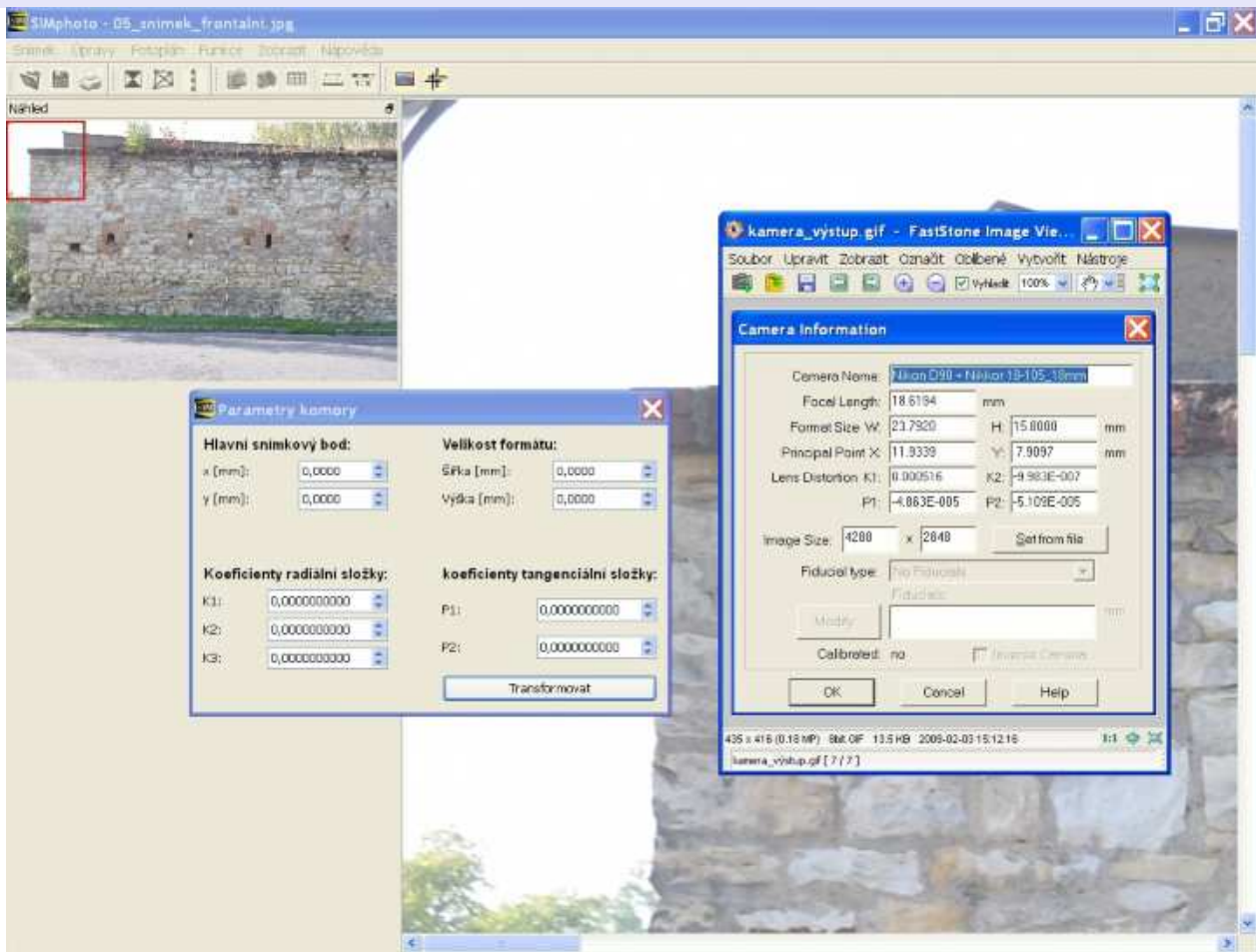
Použití	Bod	X [m]	Y [m]	x [p]	y [p]	Oprava dX [m]	Oprava dY [m]
<input checked="" type="checkbox"/>	1	18,420	0,035	2318	2100	-0,0029	0,0057
<input checked="" type="checkbox"/>	2	18,384	3,056	2306	1241	0,0115	-0,0043
<input checked="" type="checkbox"/>	3	18,157	6,701	2236	271	-0,0044	-0,0134
<input checked="" type="checkbox"/>	4	14,465	0,363	1221	1946	0,0003	-0,0046
<input checked="" type="checkbox"/>	5	14,582	3,671	1277	1074	-0,0040	0,0063
<input checked="" type="checkbox"/>	6	14,309	6,640	1233	335	-0,0042	0,0197
<input checked="" type="checkbox"/>	7	10,384	0,369	242	1889	0,0009	-0,0005
<input checked="" type="checkbox"/>	8	9,669	3,680	138	1080	-0,0062	-0,0032
<input checked="" type="checkbox"/>	9	9,522	6,665	158	396	0,0089	-0,0058

F:\\_DESTA 2011\Hodač\30\_s10\_SIMphoto\_body+presnost.jpg

The screenshot shows the SIMphoto software interface. On the left, there is a thumbnail of the building facade with nine control points marked. The main window displays a close-up of the facade with these points overlaid. A dialog box titled "Tabulka bodů kolineární transformace" is open, showing a table of control points and their corrections.

Použití	Bod	X [m]	Y [m]	x [p]	y [p]	Oprava dX [m]	Oprava dY [m]
<input checked="" type="checkbox"/>	1	18,420	0,035	2318	2100	-0,0022	0,0035
<input checked="" type="checkbox"/>	2	18,384	3,056	2306	1241	0,0114	-0,0012
<input checked="" type="checkbox"/>	3	18,157	6,701	2236	271	-0,0055	-0,0046
<input checked="" type="checkbox"/>	4	14,465	0,363	1221	1946	-0,0007	-0,0059
<input checked="" type="checkbox"/>	5	14,582	3,671	1277	1074	-0,0064	0,0099
<input type="checkbox"/>	6	14,309	6,640	1233	335		
<input checked="" type="checkbox"/>	7	10,384	0,369	242	1889	0,0024	-0,0016
<input checked="" type="checkbox"/>	8	9,669	3,680	138	1080	-0,0062	-0,0004
<input checked="" type="checkbox"/>	9	9,522	6,665	158	396	0,0071	0,0003

F:\\_DESTA 2011\Hodač\31\_s11\_SIMphoto\_distorze.jpg



F:\\_DESTA 2011\Hodač\32\_s12\_SIMphoto\_web.jpg





# Závěr

**Děkuji Vám za pozornost ...**

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[hodac@fsv.cvut.cz](mailto:hodac@fsv.cvut.cz)**

