

files\_needed

files\_needed.txt  
files\_needed for pairwise rectification

pr10.m ————— pairwise rectify main program  
meas2refined.m  
im2ideal2.m  
refined2meas.m  
inv\_id2.m ) ————— functions to support pr10.m

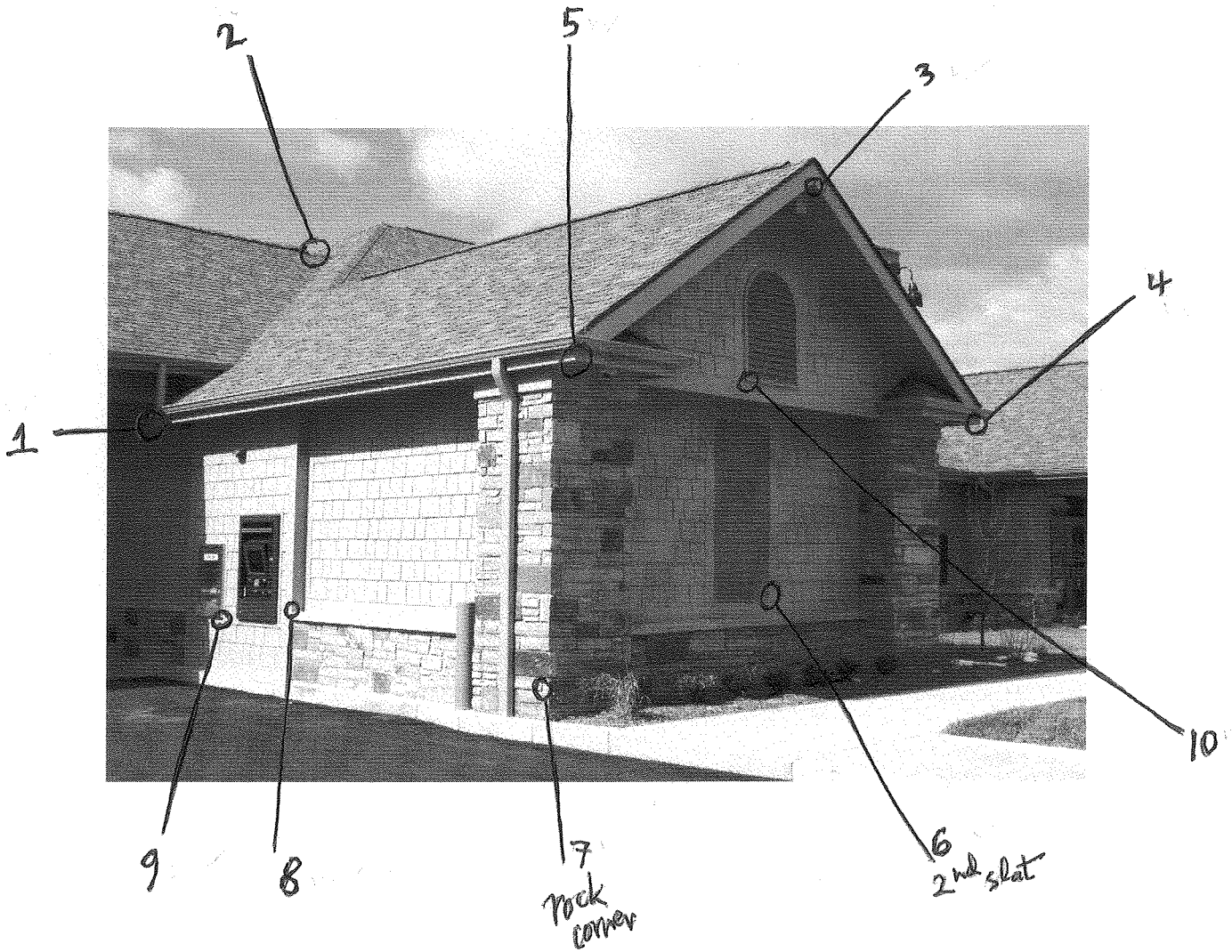
cam.dat  
left.txt  
right.txt  
ro.txt  
p1.jpg  
p2.jpg

cam.dat: same camera info as cam.dat used by pba\_sc.m but formatted a little differently  
left.txt: left photo measurements (made with imeas.m)  
right.txt: right photo measurements (points in same order, left and right)  
ro.txt: results of relative orientation  
p1.jpg: the left photo  
p2.jpg: the right photo

cam. dat

x0	-29.330	0.00001
y0	1.519	0.00001
foc	4457.796	0.00001
k1	0.028382796	0.00001
k2	-0.018956408	0.00001
k3	0.011558139	0.00001
p1	0.16170141	0.00001
p2	-0.58011127	0.00001
opti on	2	0
ncol	3456	0
nrow	2304	0

for ease of matlab file reading, there are three columns. first column is data label, second column is numeric value, third column is not used just a number. it is like the file of the same name used by pba\_sc.m but with slightly different formatting. you should copy the numbers from the output of pba\_sc.m from the "free" run into this file, so you are working with your estimated calibration parameters.



a way to keep track of which points were used and what the point ID's are. can be done on hardcopy or in digital file with annotation overlay.

7203

Right

7204

Left

left

1	31.2	1019.2
2	498.1	410.1
3	2496.6	245.8
4	2948.4	1079.8
5	1816.3	833.9
6	2299.8	1639.8
7	1664.6	1983.1
8	606.6	1703.2
9	302.7	1722.3
10	2267.2	913.0

captured using the program  
imeas.m, or you can just write  
down the numbers from  
photoshop or other image  
measure program. units = pixels,  
that is important.

right

1	164.7	1051.6
2	731.7	452.0
3	2496.0	200.9
4	3081.6	1052.2
5	1655.1	822.7
6	2343.6	1638.4
7	1539.4	1983.8
8	657.1	1708.1
9	404.6	1727.9
10	2261.1	894.2

ro

0. 0000000000

0. 0000000000

0. 0000000000

0. 00000000

0. 00000000

0. 00000000

0. 0044614623

0. 1275202363

-0. 0183460402

100. 00000000

-3. 94670959

-12. 26209538

6

parameters from relative orientation  
XL,YL,ZL,omega,phi,kappa left

XL,YL,ZL,omega,phi,kappa right

point number of one of the measured points which is in "the middle" of the depth range. this is needed to adjust the x-parallax in the anaglyph image so it is comfortable for stereo viewing



left photo





right photo





anaglyph stereo image, output of pr10.m. view with red lens on the left and blue/cyan lens on the right.

