FBM 4: Vertical Wall Mapping Functionality (Air)

Team name: __BEBOT + TOM KYLE + (HSR)__

FBM-4 is calculated from the aerial data collected in the combined robot challenge, TBM-1: The Grand Challenge.

TBM-1 Date (DD/MM/YYYY): __22/09/17__ , TBM-1 Time (24:00): __11:30__

TBM-1 Referee I (Air): __STEPHAN B.__ , TBM-1 Referee II (Air): __MARGARIDA__

Duration TBM-1: _____ (Max. 100 min) O Timeout

Referee I (FBM-4 overall score calculation): __FRAN P.__

Referee II (FBM-4 overall score calculation): __MARGARIDA F.__

Provided data

Map file named 'vertical_map': 2D map with scale factor or 3D map, in appropriate format.	✔
Text file named 'vertical_wall.txt': including the five metric measurements: - Width of the entrance door. - Height of the entrance door. - Width of the window in the first floor. - Height of the window in the first floor. - Distance from bottom side of the window in the first floor with respect to the ground.	✔

Measurements	Ground truth values (mm)	Team's estimated values (mm)	Errors between values (mm)	Errors^2	Avg. sum of squared errors
Width of the entrance door	$d_1 d_1 =$ 2	$\hat{d}_1 \hat{d}_1 =$ 20	18	324	179.7
Height of the entrance door	$d_2 d_2 =$ 1,76	$\hat{d}_2 \hat{d}_2 =$ 20	18,24	332,69	RMSE
Width of the window in the first floor	$d_3 d_3 =$ 0,8	$\hat{d}_3 \hat{d}_3 =$ 0,82	0,02	0,0004	13,41
Height of the window in the first floor	$d_4 d_4 =$ 1,3	$\hat{d}_4 \hat{d}_4 =$ 1,2	0,1	0,01	MaxErr
Distance from the bottom side of the window in the first floor to the ground	$d_5 d_5 =$ 4,45	$\hat{d}_5 \hat{d}_5 =$ 20	15,55	241,80	18

Index
0,25

Overall score: __0,25__ (calculated post-competition)

Referee signature (overall score calculation): _(signature)_ Date: 29-11-17

FBM 4: Vertical Wall Mapping Functionality (Air)

Team name: (RAPTORS) + OUBOT

FBM-4 is calculated from the aerial data collected in the combined robot challenge, TBM-1: The Grand Challenge.

TBM-1 Date (DD/MM/YYYY): 23 /09 /17 , TBM-1 Time (24:00): 9:00

TBM-1 Referee I (Air): STJEPAN B. , TBM-1 Referee II (Air): MARGARIDA F

Duration TBM-1: _____ (Max. 100 min) O Timeout

Referee I (FBM-4 overall score calculation): FRAN P.

Referee II (FBM-4 overall score calculation): MARGARIDA F.

Provided data

Map file named 'vertical_map': 2D map with scale factor or 3D map, in appropriate format.	⊗
Text file named 'vertical_wall.txt': including the five metric measurements: − Width of the entrance door. − Height of the entrance door. − Width of the window in the first floor. − Height of the window in the first floor. − Distance from bottom side of the window in the first floor with respect to the ground.	⊗

Measurements	Ground truth values (mm)	Team's estimated values (mm)	Errors between values (mm)	Errors^2	Avg. sum of squared errors
Width of the entrance door	$d_1 d_{1=}$	$\hat{d}_1 \hat{d}_{1=}$			
Height of the entrance door	$d_2 d_{2=}$	$\hat{d}_2 \hat{d}_{2=}$			RMSE
Width of the window in the first floor	$d_3 d_{3=}$	$\hat{d}_3 \hat{d}_{3=}$ 0,9 (NO PROOF)			
Height of the window in the first floor	$d_4 d_{4=}$	$\hat{d}_4 \hat{d}_{4=}$			MaxErr
Distance from the bottom side of the window in the first floor to the ground	$d_5 d_{5=}$	$\hat{d}_5 \hat{d}_{5=}$			
					Index
					∅

Overall score: _____0_____ (calculated post-competition)

Referee signature (overall score calculation): _Javier_   Date: 29-11-17

FBM 4: Vertical Wall Mapping Functionality (Air)

Team name: __IMM + ROBDOS + (PLOMBINO)__

FBM-4 is calculated from the aerial data collected in the combined robot challenge, TBM-1: The Grand Challenge.

TBM-1 Date (DD/MM/YYYY): __23 - 09 - 17__, TBM-1 Time (24:00): __11:00__

TBM-1 Referee I (Air): __STJEPAN B.__, TBM-1 Referee II (Air): __MARGARIDA F.__

Duration TBM-1: _____ (Max. 100 min) O Timeout

Referee I (FBM-4 overall score calculation): __FRAN P.__

Referee II (FBM-4 overall score calculation): __MARGARIDA F.__

Provided data

Map file named 'vertical_map': 2D map with scale factor or 3D map, in appropriate format.	✗ ✓
Text file named 'vertical_wall.txt': including the five metric measurements: - Width of the entrance door. - Height of the entrance door. - Width of the window in the first floor. - Height of the window in the first floor. - Distance from bottom side of the window in the first floor with respect to the ground.	✓

Measurements	Ground truth values (mm)	Team's estimated values (mm)	Errors between values (mm)	Errors^2	Avg. sum of squared errors
Width of the entrance door	$d_1 d_1 =$ 2	$\hat{d}_1 \hat{d}_1 =$ 1,83	0,17	0,0289	0,098
Height of the entrance door	$d_2 d_2 =$ 1,76	$\hat{d}_2 \hat{d}_2 =$ 2,34	0,58	0,3364	RMSE
Width of the window in the first floor	$d_3 d_3 =$ 0,8	$\hat{d}_3 \hat{d}_3 =$ 0,77	0,03	0,0009	0,31
Height of the window in the first floor	$d_4 d_4 =$ 1,3	$\hat{d}_4 \hat{d}_4 =$ 1,4	0,1	0,01	MaxErr
Distance from the bottom side of the window in the first floor to the ground	$d_5 d_5 =$ 4,45	$\hat{d}_5 \hat{d}_5 =$ 4,11	0,34	0,1156	18
				Index	
				0,98	

Overall score: __0,98__ (calculated post-competition)

Referee signature (overall score calculation): _Javier_

Date: 29-11-17

FBM 4: Vertical Wall Mapping Functionality (Air)

Team name: _TELEROB + GIRONA + (ISEP / INESCTEC)_

FBM-4 is calculated from the aerial data collected in the combined robot challenge, TBM-1: The Grand Challenge.

TBM-1 Date (DD/MM/YYYY): _22-09-17_ , TBM-1 Time (24:00): _14:05_

TBM-1 Referee I (Air): _STJEPAN B._ , TBM-1 Referee II (Air): _MARGARIDA F._

Duration TBM-1: _____ (Max. 100 min) O Timeout

Referee I (FBM-4 overall score calculation): _FRAN P._

Referee II (FBM-4 overall score calculation): _MARGARIDA F._

Provided data

Map file named 'vertical_map': 2D map with scale factor or 3D map, in appropriate format.	✔
Text file named 'vertical_wall.txt': including the five metric measurements: - Width of the entrance door. - Height of the entrance door. - Width of the window in the first floor. - Height of the window in the first floor. - Distance from bottom side of the window in the first floor with respect to the ground.	✔

Measurements	Ground truth values (~~mm~~m)	Team's estimated values (~~mm~~m)	Errors between values (~~mm~~m)	Errors^2	Avg. sum of squared errors
Width of the entrance door	$d_1d_1=$ 2	$\hat{d}_1\hat{d}_1=$ 1,46	0,54	0,2916	0,204
Height of the entrance door	$d_2d_2=$ 1,76	$\hat{d}_2\hat{d}_2=$ 2,59	0,83	0,6889	RMSE
Width of the window in the first floor	$d_3d_3=$ 0,8	$\hat{d}_3\hat{d}_3=$ 0,79	0,01	0,0001	0,45
Height of the window in the first floor	$d_4d_4=$ 1,3	$\hat{d}_4\hat{d}_4=$ 1,2	0,1	0,01	MaxErr
Distance from the bottom side of the window in the first floor to the ground	$d_5d_5=$ 4,45	$\hat{d}_5\hat{d}_5=$ 4,62	0,17	0,0289	18
				Index	0,97

Overall score: _0,97_ (calculated post-competition)

Referee signature (overall score calculation): _[signature]_   Date: _29-11-17_

○ FBM 4: Vertical Wall Mapping Functionality (Air)

Team name: __TUSCANY__

FBM-4 is calculated from the aerial data collected in the combined robot challenge, TBM-1: The Grand Challenge.

TBM-1 Date (DD/MM/YYYY): __22-09-17__, TBM-1 Time (24:00): __09:30__

TBM-1 Referee I (Air): __STEPHAN B.__, TBM-1 Referee II (Air): __MARGARIDA F.__

Duration TBM-1: _____ (Max. 100 min) ○ Timeout

Referee I (FBM-4 overall score calculation): __FRAN P.__

Referee II (FBM-4 overall score calculation): __MARGARIDA F.__

Provided data

Map file named 'vertical_map': 2D map with scale factor or 3D map, in appropriate format.	⊗
Text file named 'vertical_wall.txt': including the five metric measurements: - Width of the entrance door. - Height of the entrance door. - Width of the window in the first floor. - Height of the window in the first floor. - Distance from bottom side of the window in the first floor with respect to the ground.	⊗

Measurements	Ground truth values (mm)	Team's estimated values (mm)	Errors between values (mm)	Errors^2	Avg. sum of squared errors
Width of the entrance door	$d_1 d_1 =$	$\hat{d}_1 \hat{d}_1 =$			
Height of the entrance door	$d_2 d_2 =$	$\hat{d}_2 \hat{d}_2 =$			RMSE
Width of the window in the first floor	$d_3 d_3 =$	$\hat{d}_3 \hat{d}_3 =$			
Height of the window in the first floor	$d_4 d_4 =$	$\hat{d}_4 \hat{d}_4 =$			MaxErr
Distance from the bottom side of the window in the first floor to the ground	$d_5 d_5 =$	$\hat{d}_5 \hat{d}_5 =$			

Index
∅

Overall score: __0__ (calculated post-competition)

Referee signature (overall score calculation): *Javier*   Date: 29-11-17