Contents

Usage of CRG_RERENDER

Introducing the usage of crg_rerender. Examples are included. The file comments are optimized for the matlab publishing makro.

```
%   Copyright 2005-2011 OpenCRG - VIRES Simulationstechnologie GmbH -
%   Holger Helmich
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%   you may not use this file except in compliance with the License.
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%   WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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%   limitations under the License.
```

```
%
%   More Information on OpenCRG open file formats and tools can be found at
%
%       http://www.opencrg.org
%
%   $Id: crg_test_map_rerender.m 1 2011-06-08 11:36:00Z hhelmich $
```

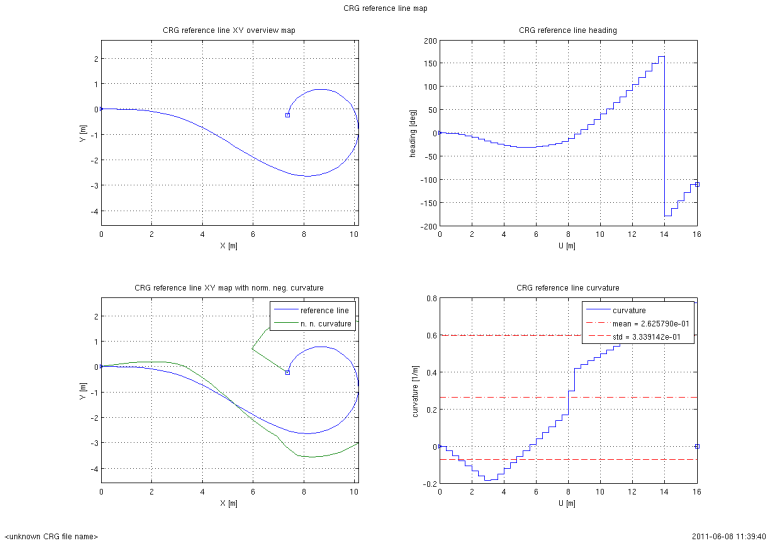
Test proceedings

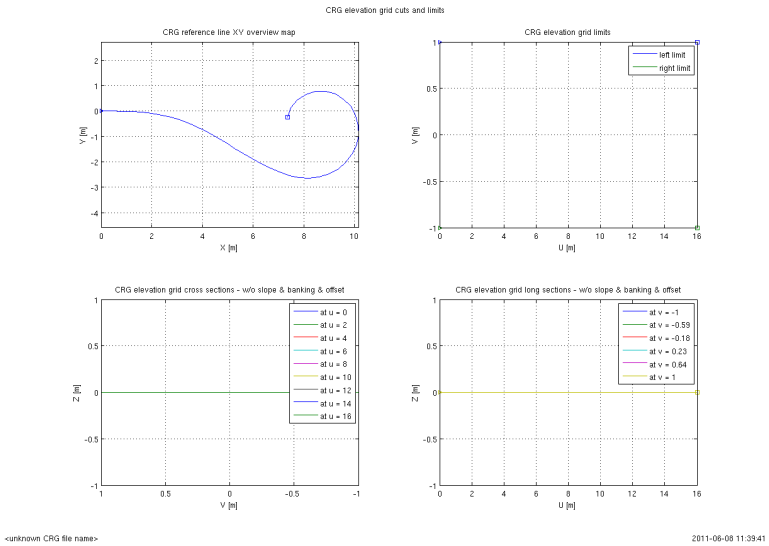
- generate 0-z-crg file
- add z-values (optional)
- rerender crg
- display result

```
% DEFAULT SETTINGS
% clear enviroment
clear all;
close all;
```

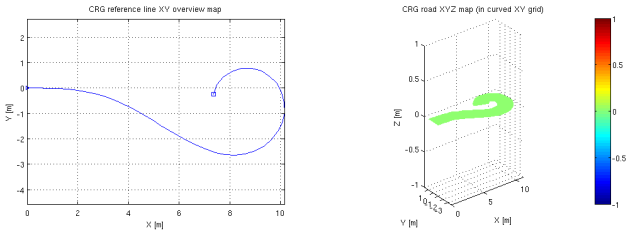
Test1 (different uinc)

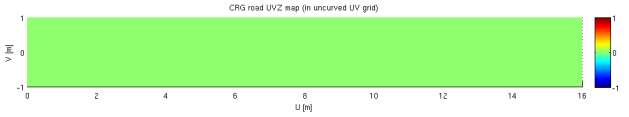
```
c = {  3   {   0  -0.2/3 }  ...    % klothoide
     ; 5   {-0.2   0.4/5 }  ...    % turning klothoide
     ; 8   { 0.4   0.4/8 }  ...    % circle
    };

dat1 = crg_gen_csb2crg0([], 16, 1, c);
data = crg_rerender( dat1, 0.4 );

crg_show(data);
```





CRG road surface



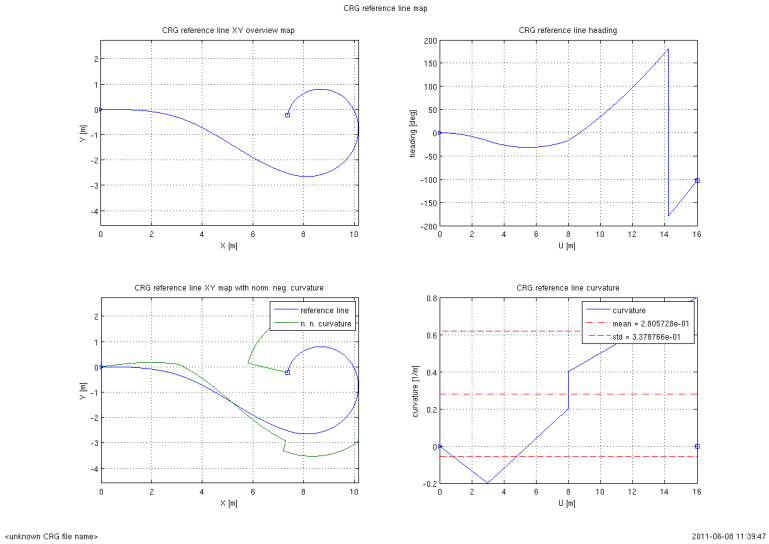


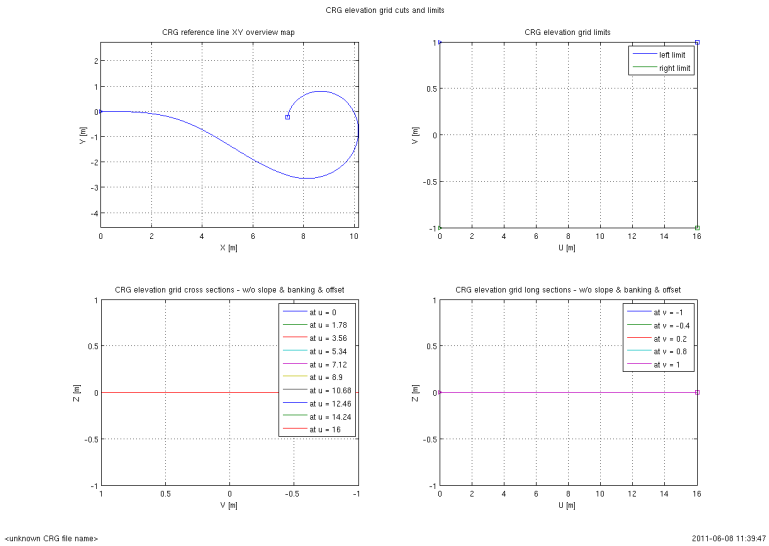
CRG information

CRG comment data:

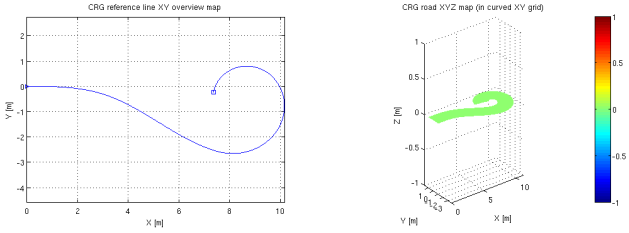
Test2 (different vinc)

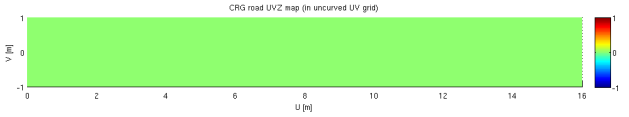
```
c = {  3   {   0  -0.2/3 }  ...    % klothoide
     ; 5   {-0.2   0.4/5 }  ...    % turning klothoide
     ; 8   { 0.4   0.4/8 }  ...    % circle
    };

dat1 = crg_gen_csb2crg0([], 16, 1, c);
data = crg_rerender( dat1, [0.01, 0.2] );

crg_show(data);
```





CRG road surface



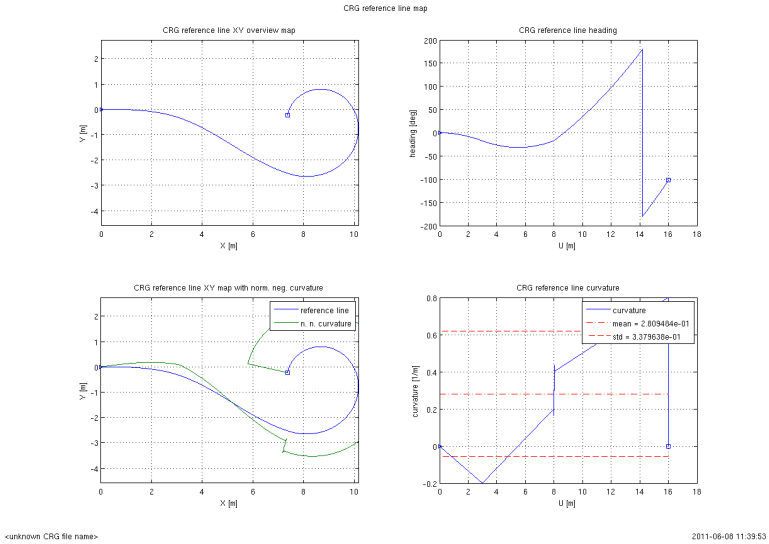


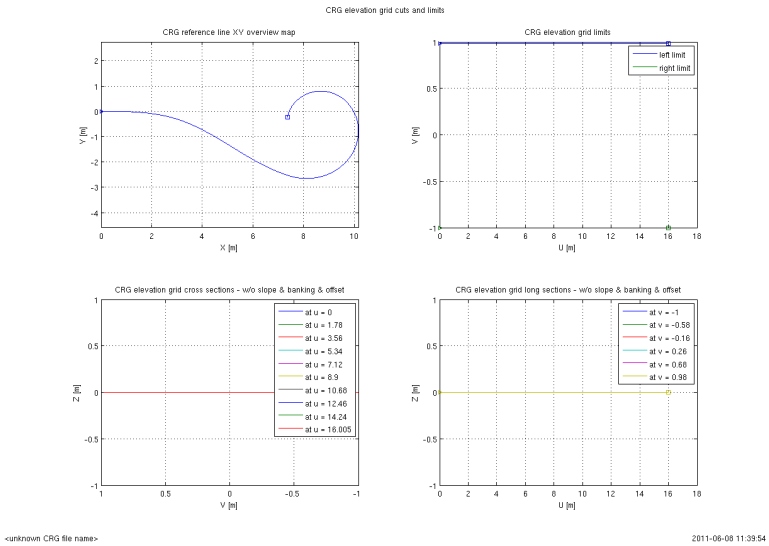
CRG information

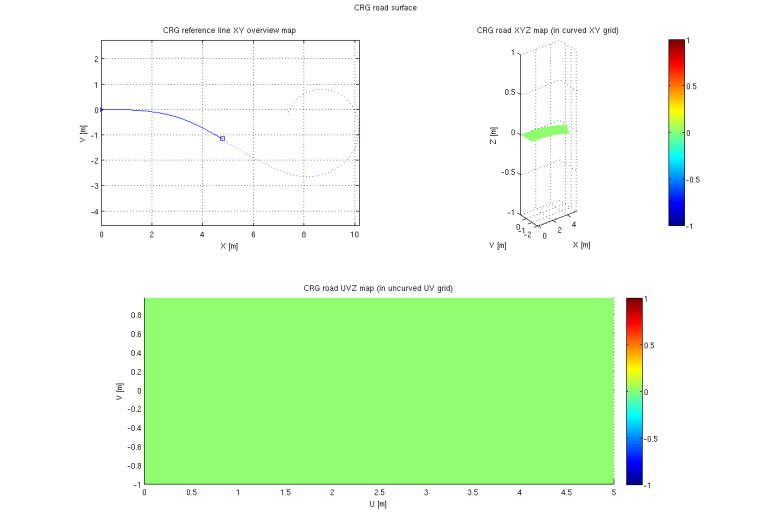
CRG comment data:

Test3 (different uinc, vinc)

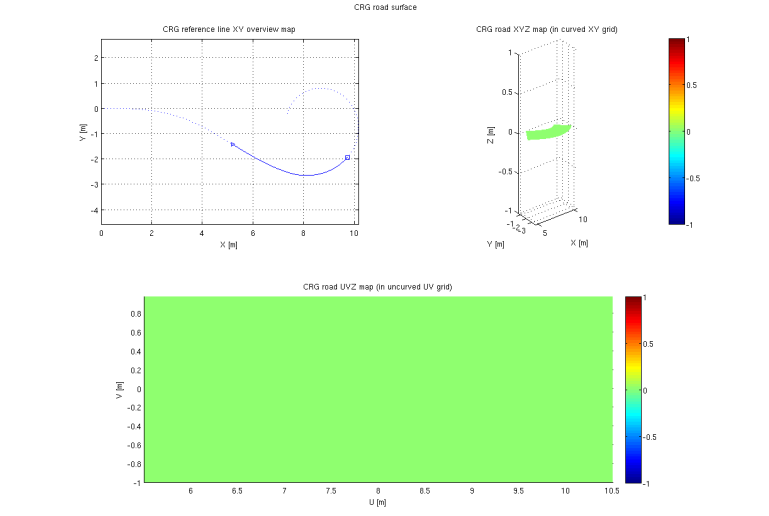
```
c = {  3   {   0  -0.2/3 }  ...    % klothoide
     ; 5   {-0.2   0.4/5 }  ...    % turning klothoide
     ; 8   { 0.4   0.4/8 }  ...    % circle
    };

dat1 = crg_gen_csb2crg0([], 16, 1, c);
data = crg_rerender( dat1, [0.005, 0.03] );

crg_show(data);
```





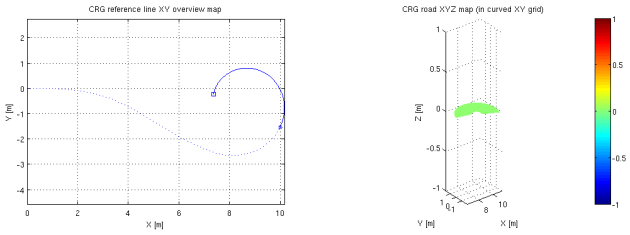


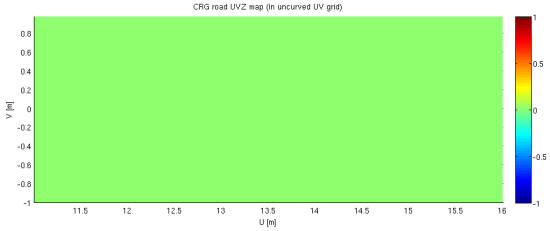
<unknown CRG file name> 2011-06-08 11:39:56



<unknown CRG file name> 2011-06-08 11:39:56

CRG road surface





<unknown CRG file name> 2011-06-08 11:39:58

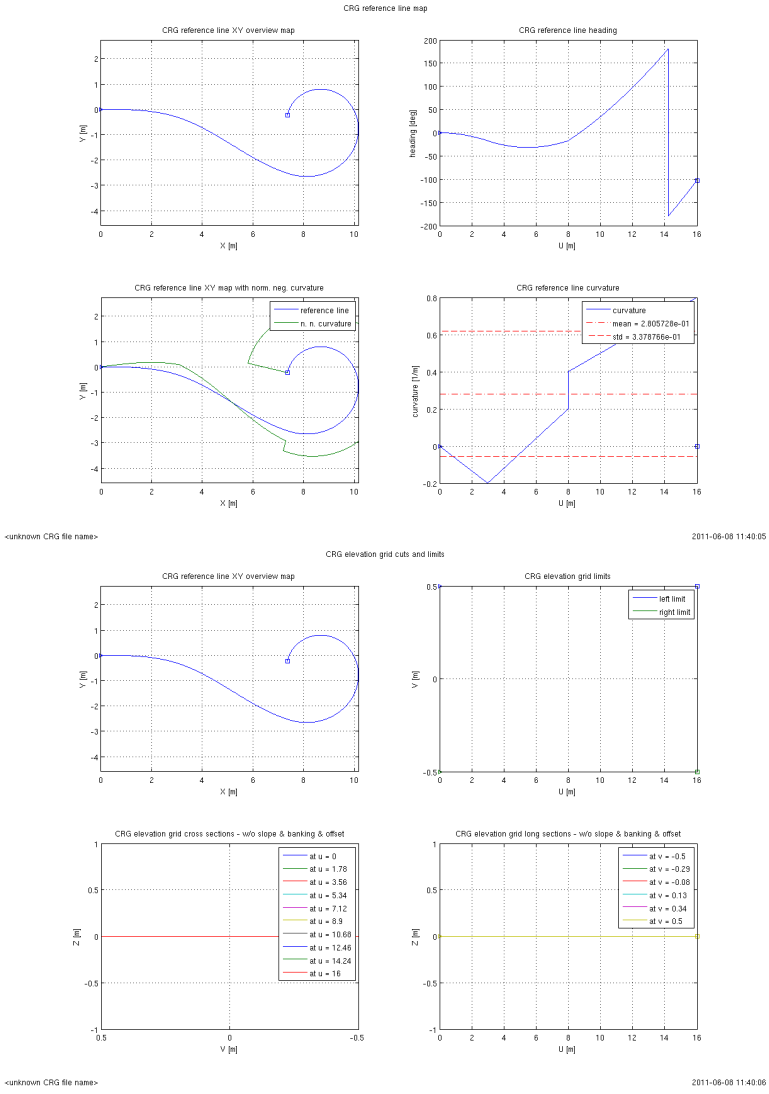
CRG information

CRG comment data:

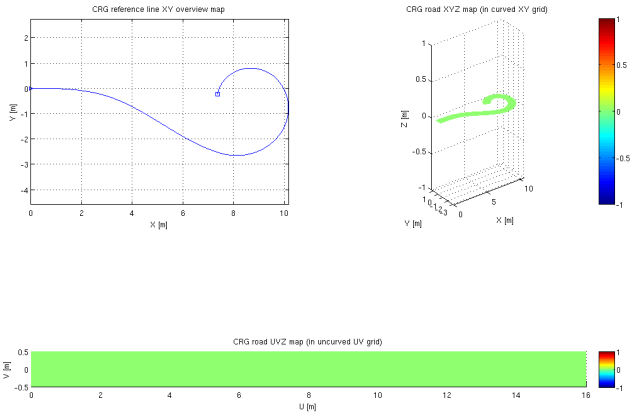
<unknown CRG file name> 2011-06-08 11:40:00

Test4 (different v)

```
c = {  3   {   0  -0.2/3 }  ...    % klothoide
     ; 5   {-0.2   0.4/5 }  ...    % turning klothoide
     ; 8   { 0.4   0.4/8 }  ...    % circle
    };

dat1 = crg_gen_csb2crg0([], 16, 1, c);
data = crg_rerender( dat1, [], 0.5 );

crg_show(data);
```



CRG road surface



<unknown CRG file name> 2011-06-08 11:40:07

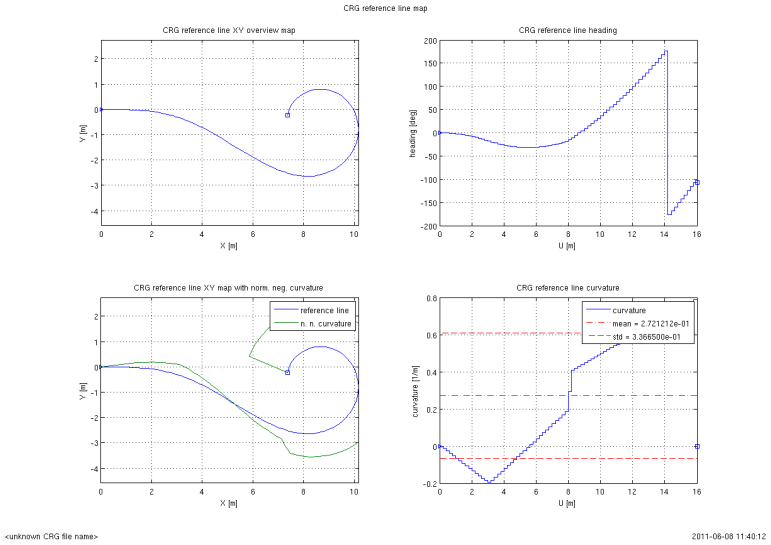
CRG information

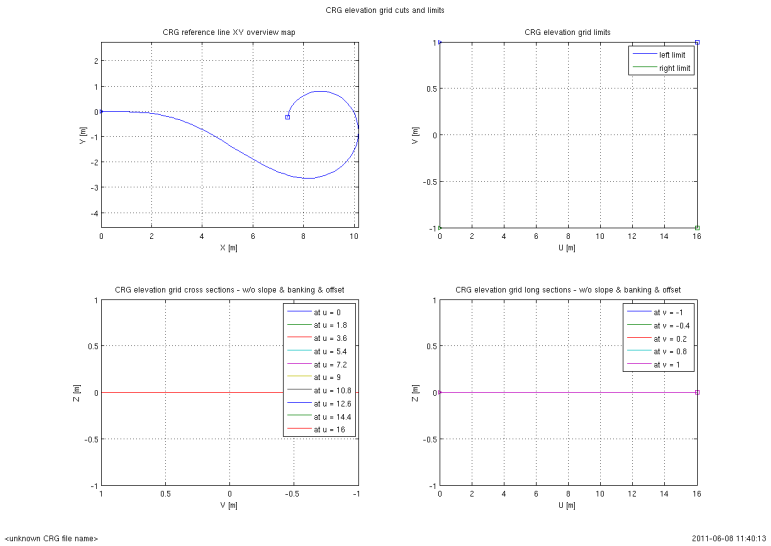
CRG comment data:

<unknown CRG file name> 2011-06-08 11:40:08

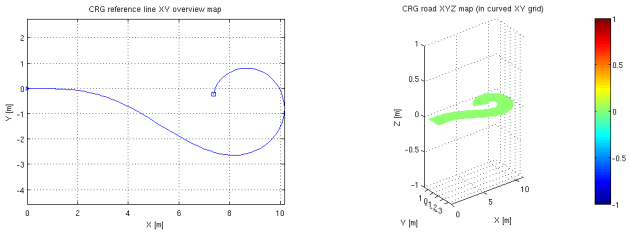
Test5 (interpolation method)

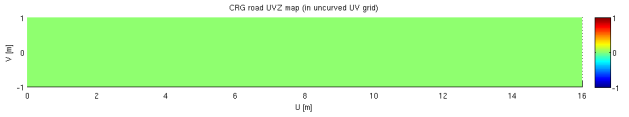
```
c = {  3   {   0  -0.2/3 }  ...    % klothoide
     ; 5   {-0.2   0.4/5 }  ...    % turning klothoide
     ; 8   { 0.4   0.4/8 }  ...    % circle
    };

dat1 = crg_gen_csb2crg0([], 16, 1, c);
data = crg_rerender( dat1, [0.2, 0.2] );

crg_show(data);
```





CRG road surface



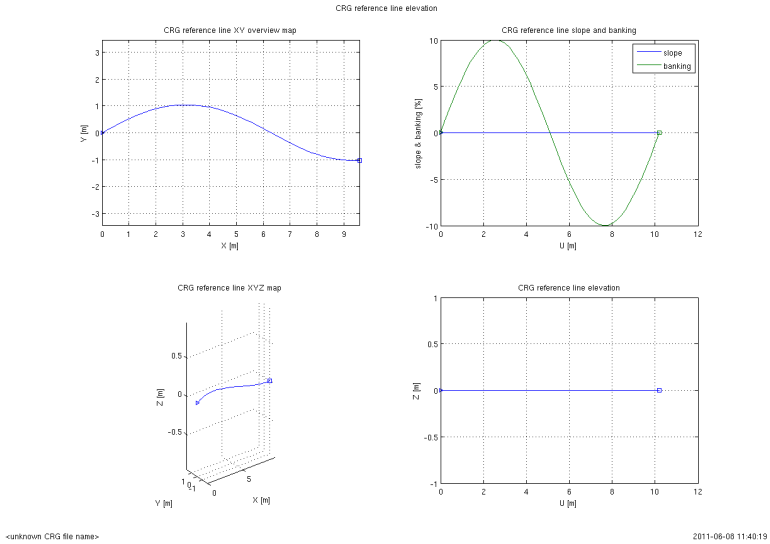


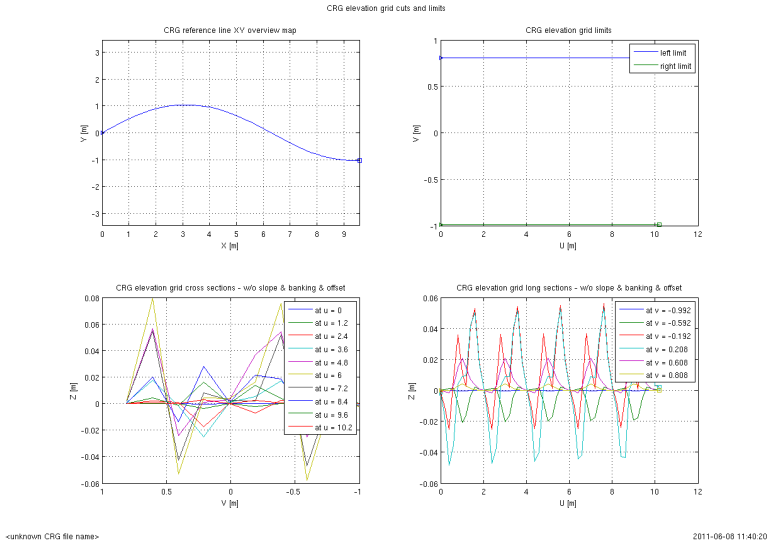
CRG information

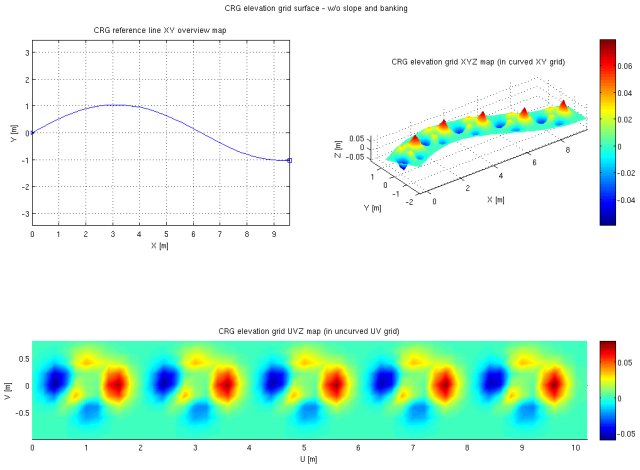
CRG comment data:

Test6 (incl. z-values)

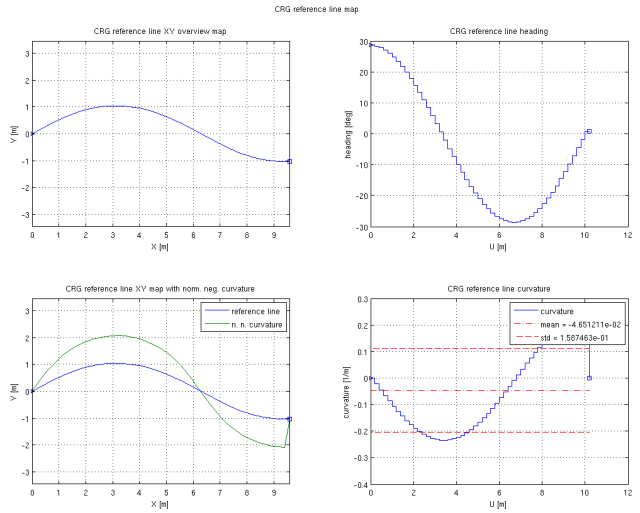
```
dat1 = crg_read('demo7.crg');

data = crg_rerender( dat1, [0.2, 0.2] );

crg_show(data);
```





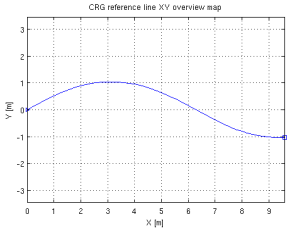


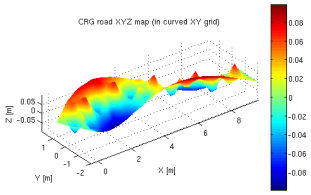
<unknown CRG file name> 2011-06-08 11:40:21

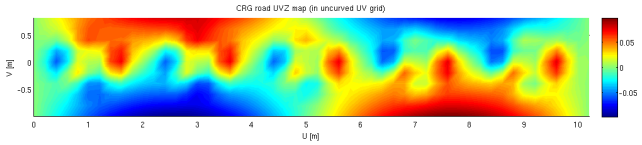


<unknown CRG file name> 2011-06-08 11:40:18

CRG road surface







<unknown CRG file name> 2011-06-08 11:40:21

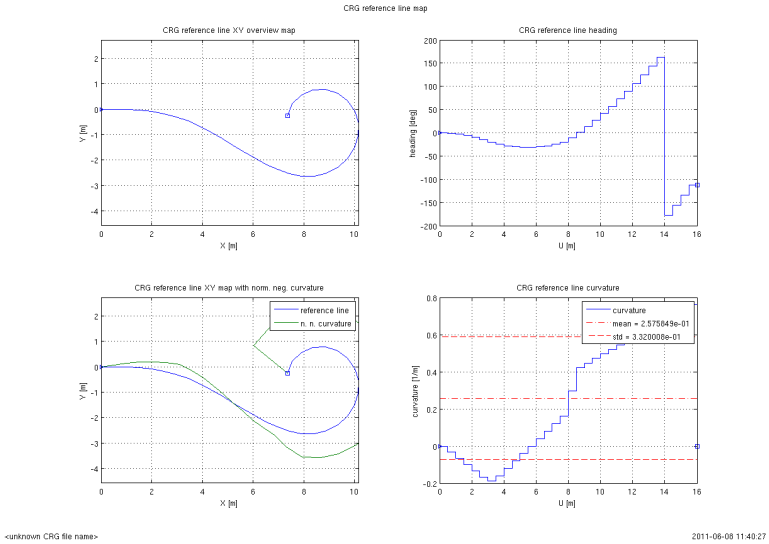
CRG information

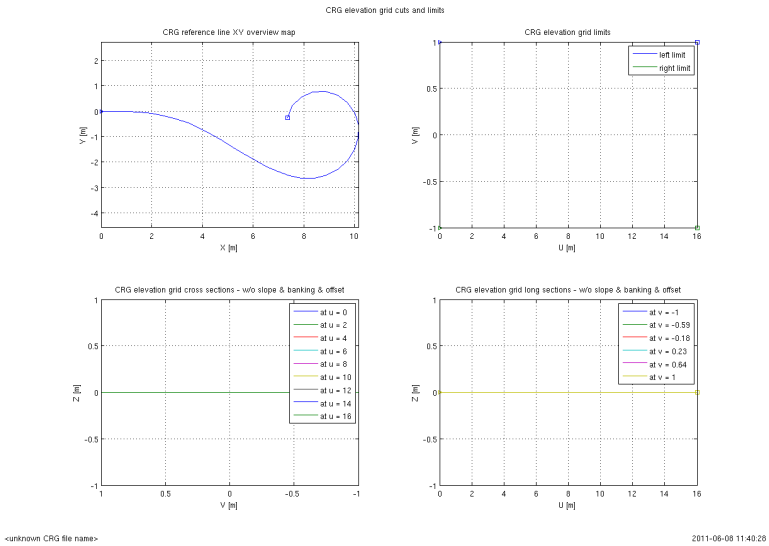
CRG comment data:

<unknown CRG file name> 2011-06-08 11:40:22

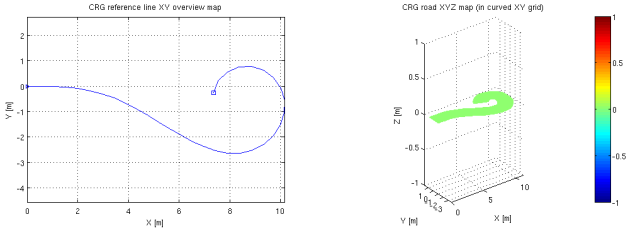
Test7 (try uinc > 0.45)

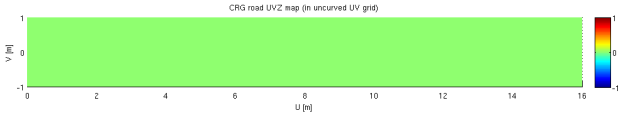
```
c = {  3   {   0  -0.2/3 }  ...    % klothoide
     ; 5   {-0.2   0.4/5 }  ...    % turning klothoide
     ; 8   { 0.4   0.4/8 }  ...    % circle
    };

dat1 = crg_gen_csb2crg0([], 16, 1, c);
data = crg_rerender( dat1, 0.5 );

crg_show(data);
```





CRG road surface





CRG information

CRG comment data:

Test8 (real case:)

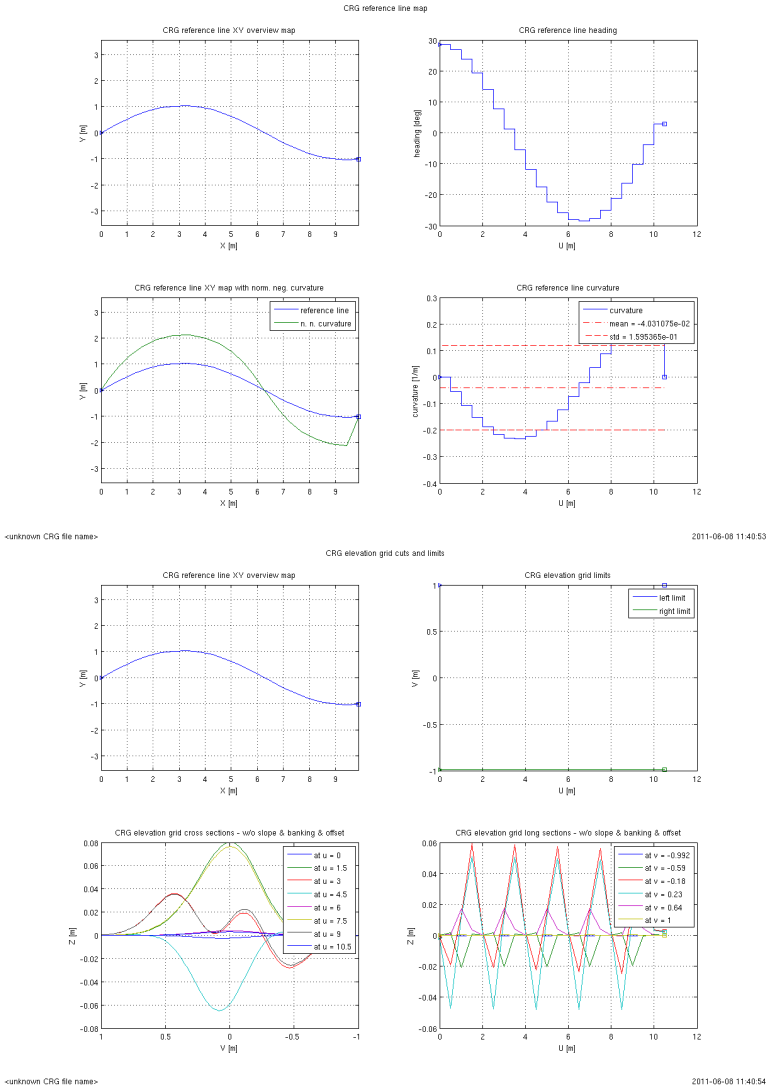
```
dat1 = crg_read('../crg-bin/country_road.crg');

data = crg_rerender(dat1, 0.4);
crg_show(data);
```

Test9 (no curvature)

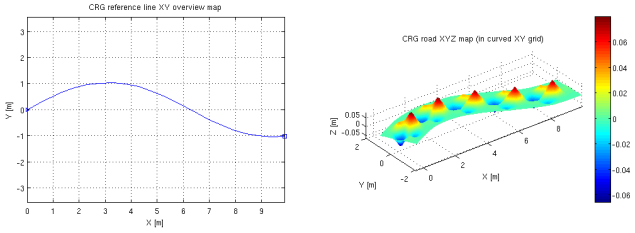
```
dat = crg_read('demo1.crg');
data = crg_rerender(dat, 0.5);

crg_show(data);
```

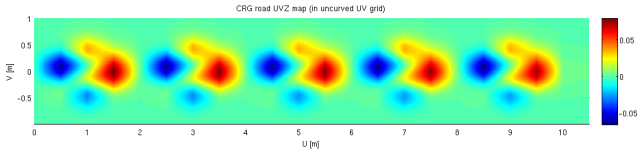
Test10 (curvature)

```
dat = crg_read('demo6.crg');
data = crg_rerender(dat, 0.5);

crg_show(data);
```



CRG road surface





<unknown CRG file name> 2011-06-08 11:40:55

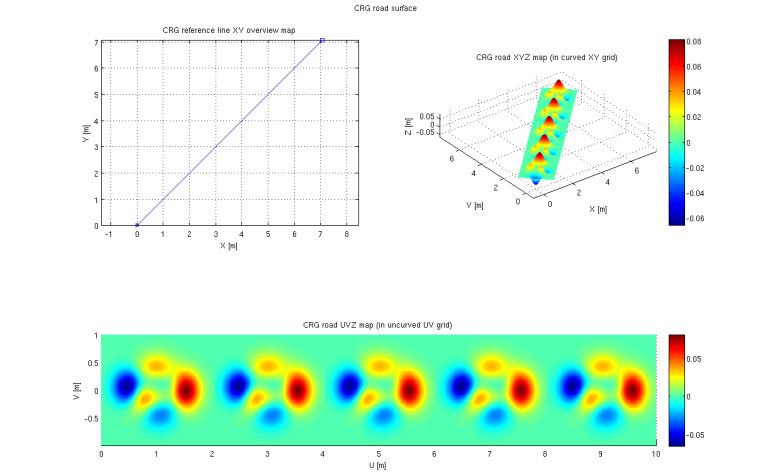
CRG information

CRG comment data:

<unknown CRG file name> 2011-06-08 11:40:56

Test11 (constant curvature)

```
dat = crg_read('demo4.crg');
data = crg_rerender(dat, 0.05);

crg_show(data);
```



CRG information

CRG comment data: