

# Kothic JS:

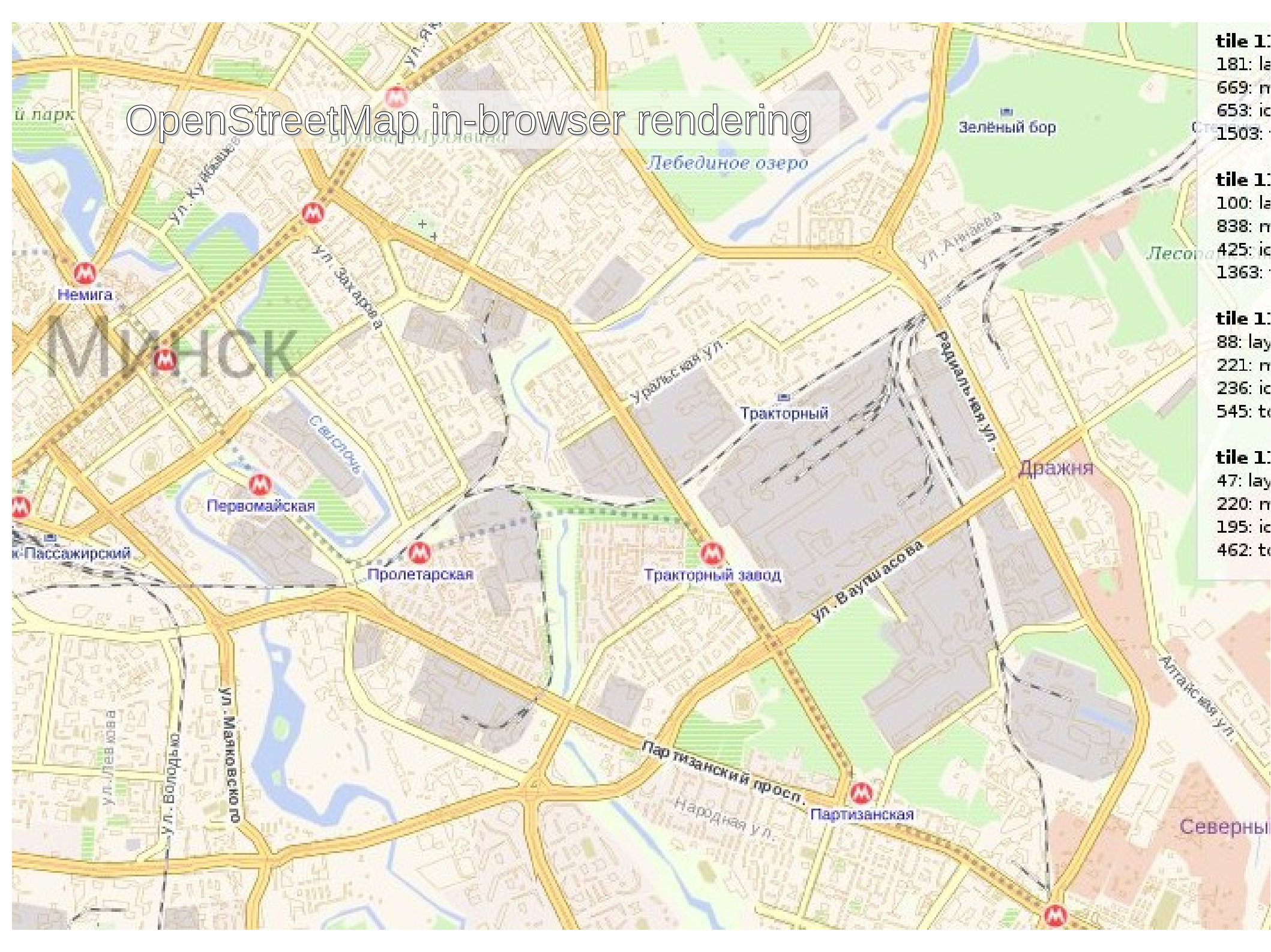
## Web browsers crash test

# Kothic JS

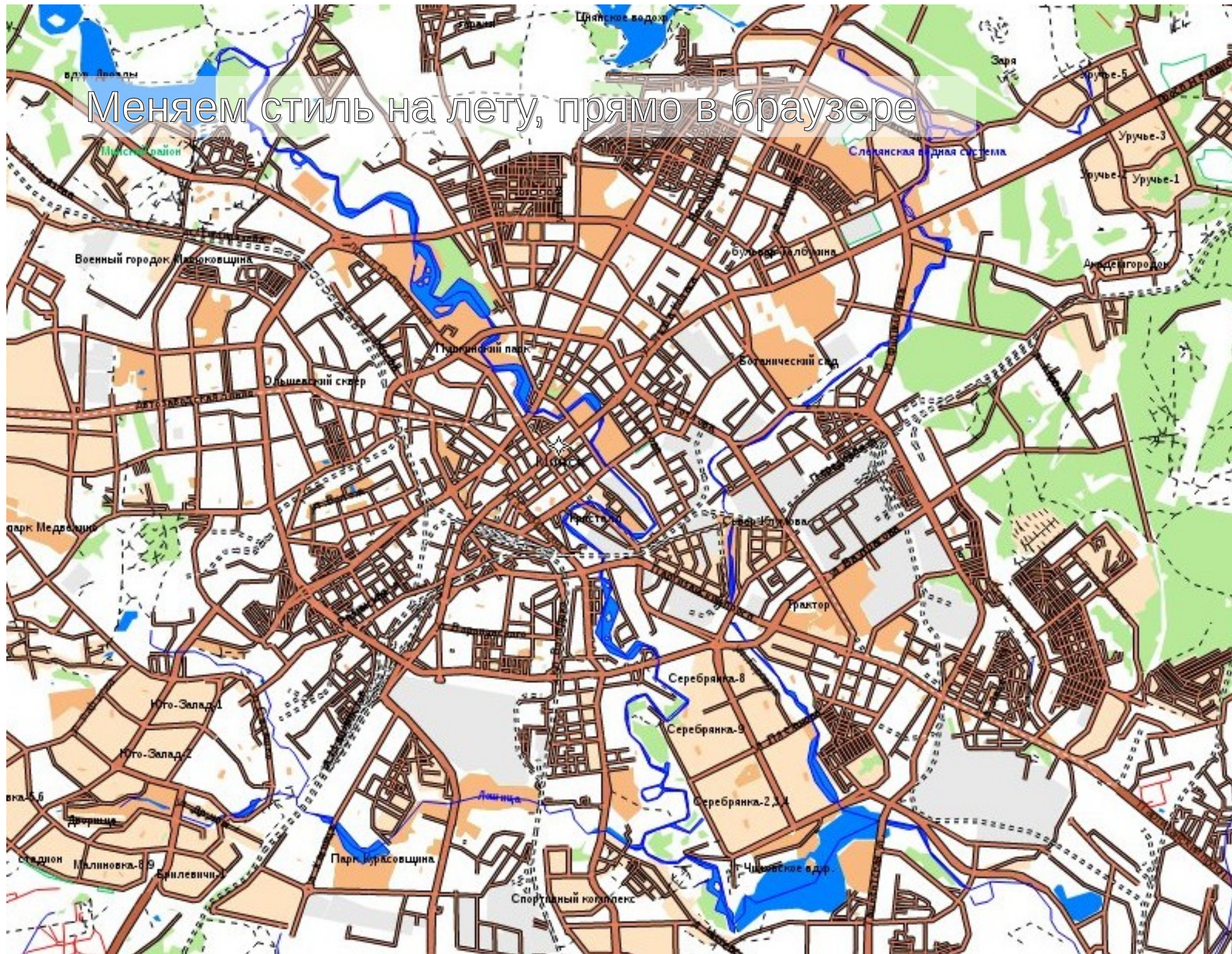
Рендеринг геоданных на client-side

- первый релиз – 10 июня (месяц назад)
- GitHub: 7 forks, 55 watchers
- License: BSD
- 3 active committers

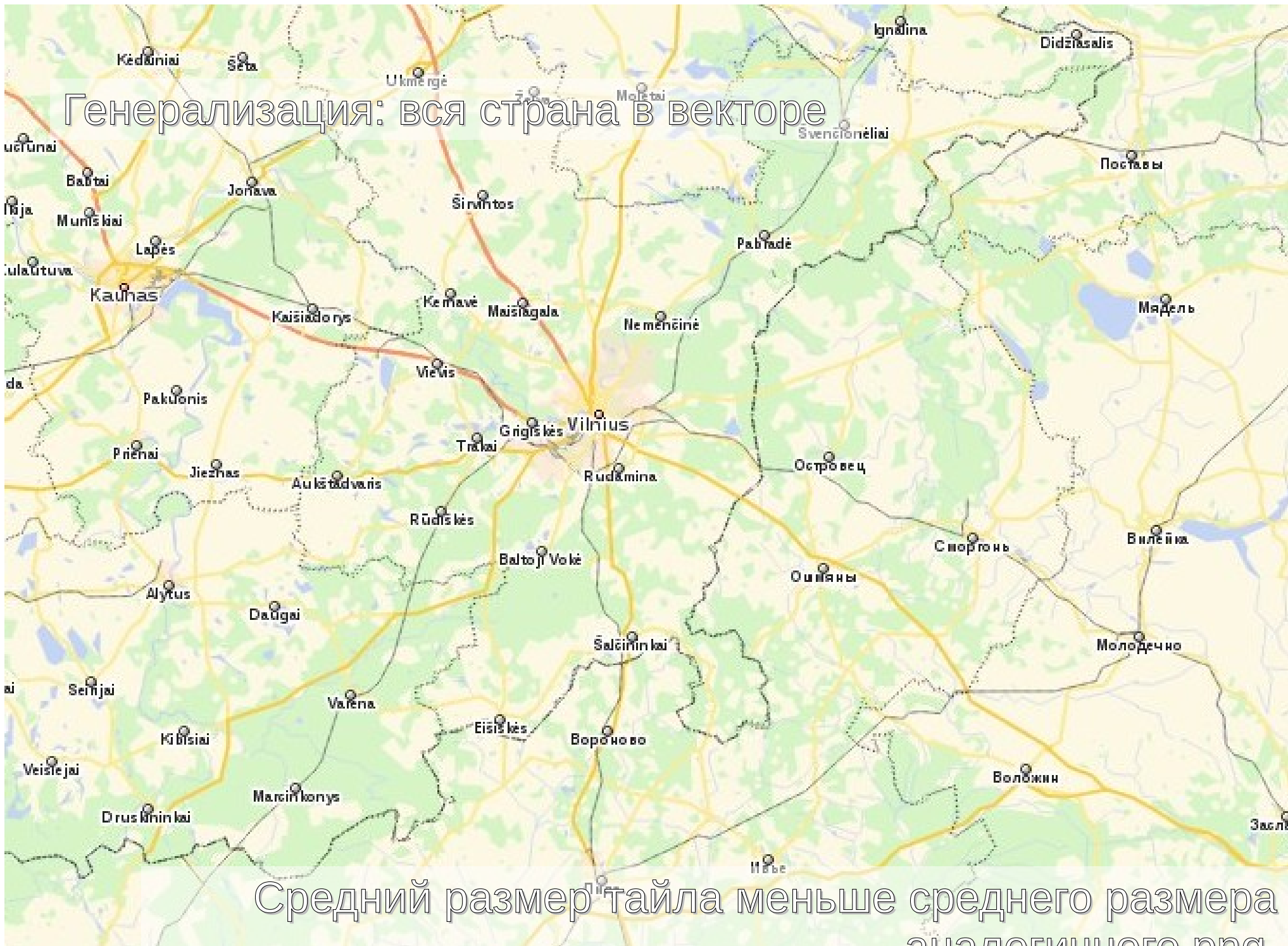
# OpenStreetMap in-browser rendering



Меняем стиль на лету, прямо в браузере



Генерализация: вся страна в векторе



Средний размер тайла меньше среднего размера аналогичного png

# Works well in:

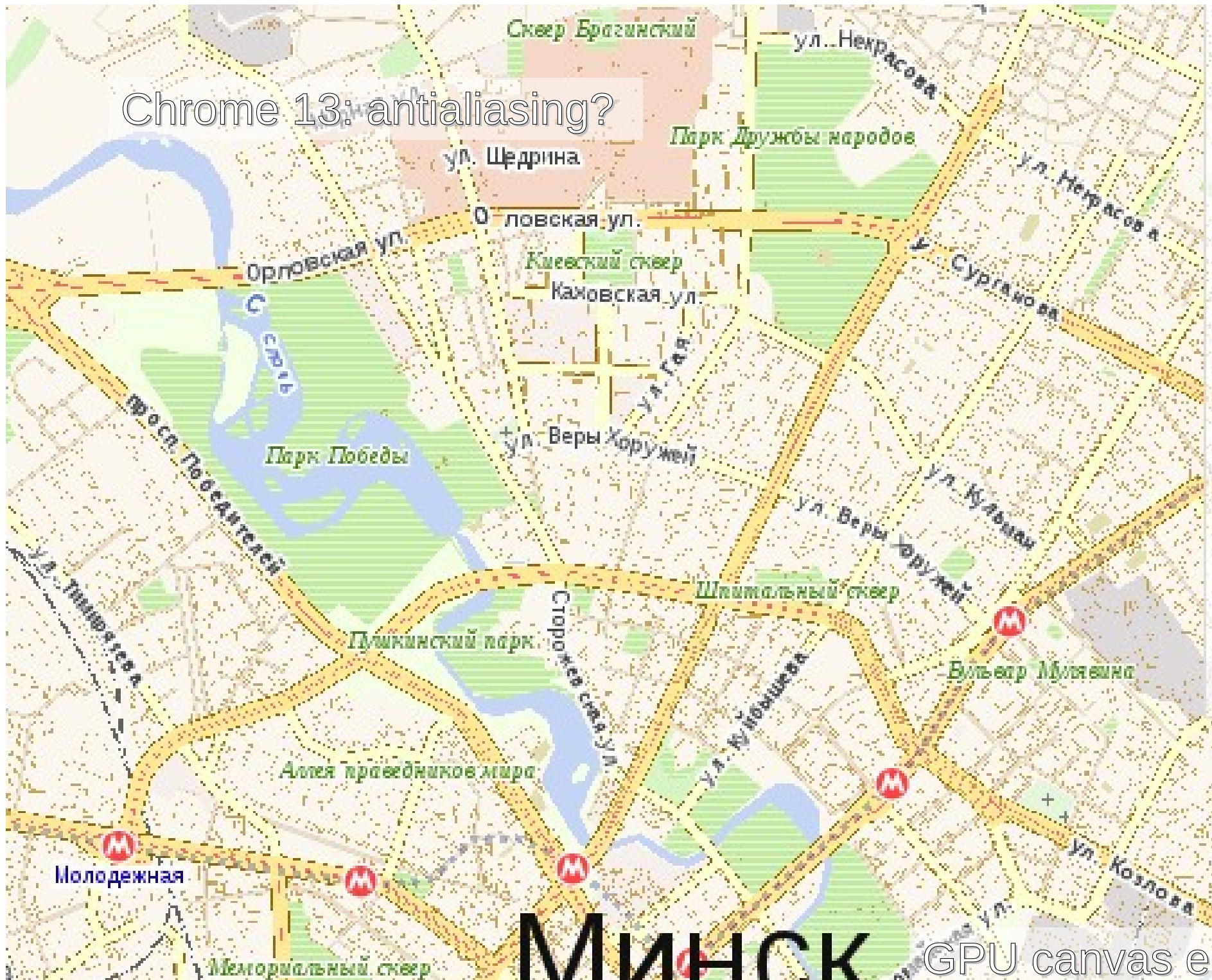
- Opera
- Chrome/Windows
- Safari
- IE9/IE10

Others: sometimes works.



**OMG WTF**

Chrome 13: antialiasing?



215  
5488  
4287  
9990

tile 11  
129  
7138  
2468  
9735

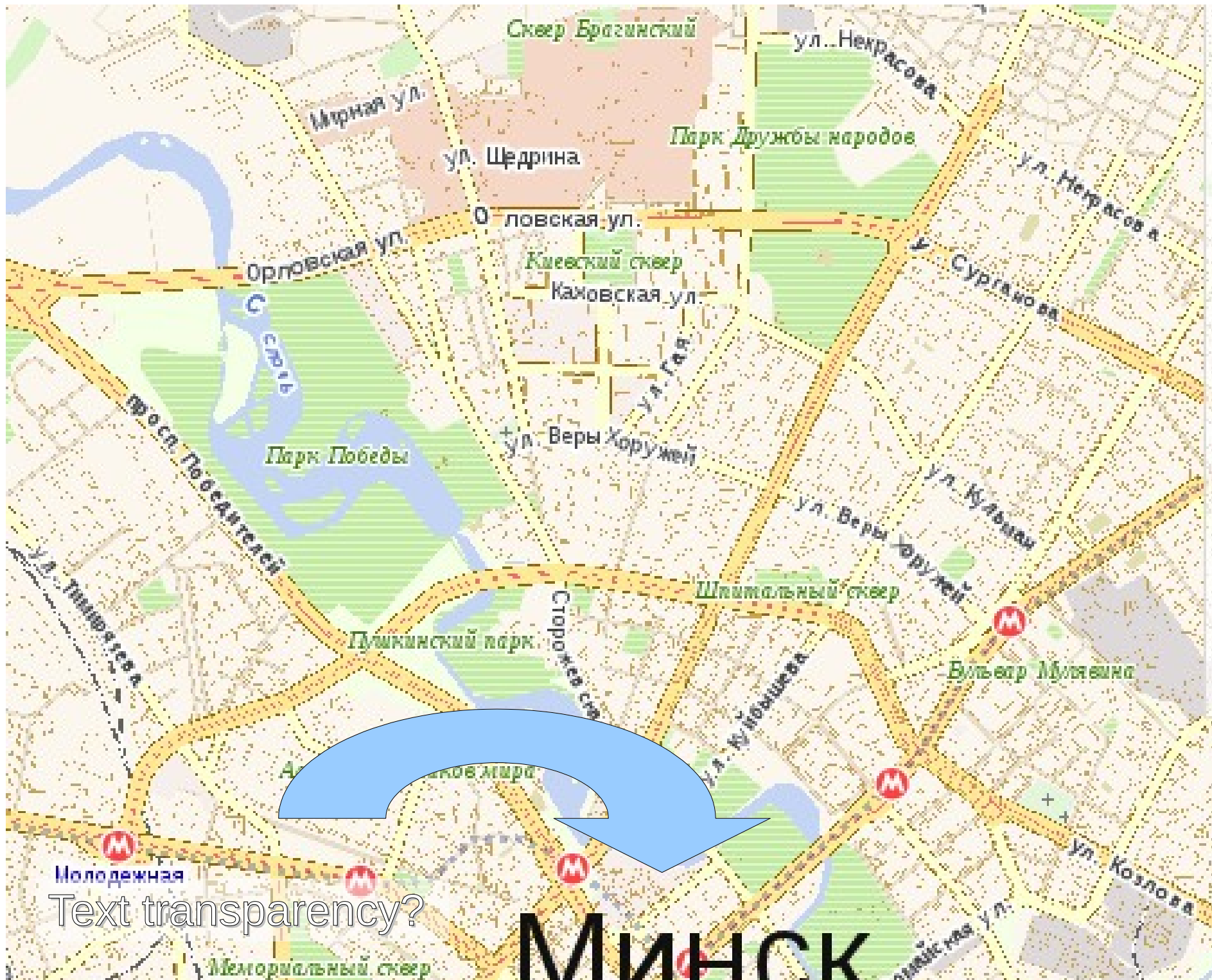
tile 11  
857  
8281  
582  
9720

tile 11  
115  
358  
112  
585

МИНСК

GPU canvas enabled

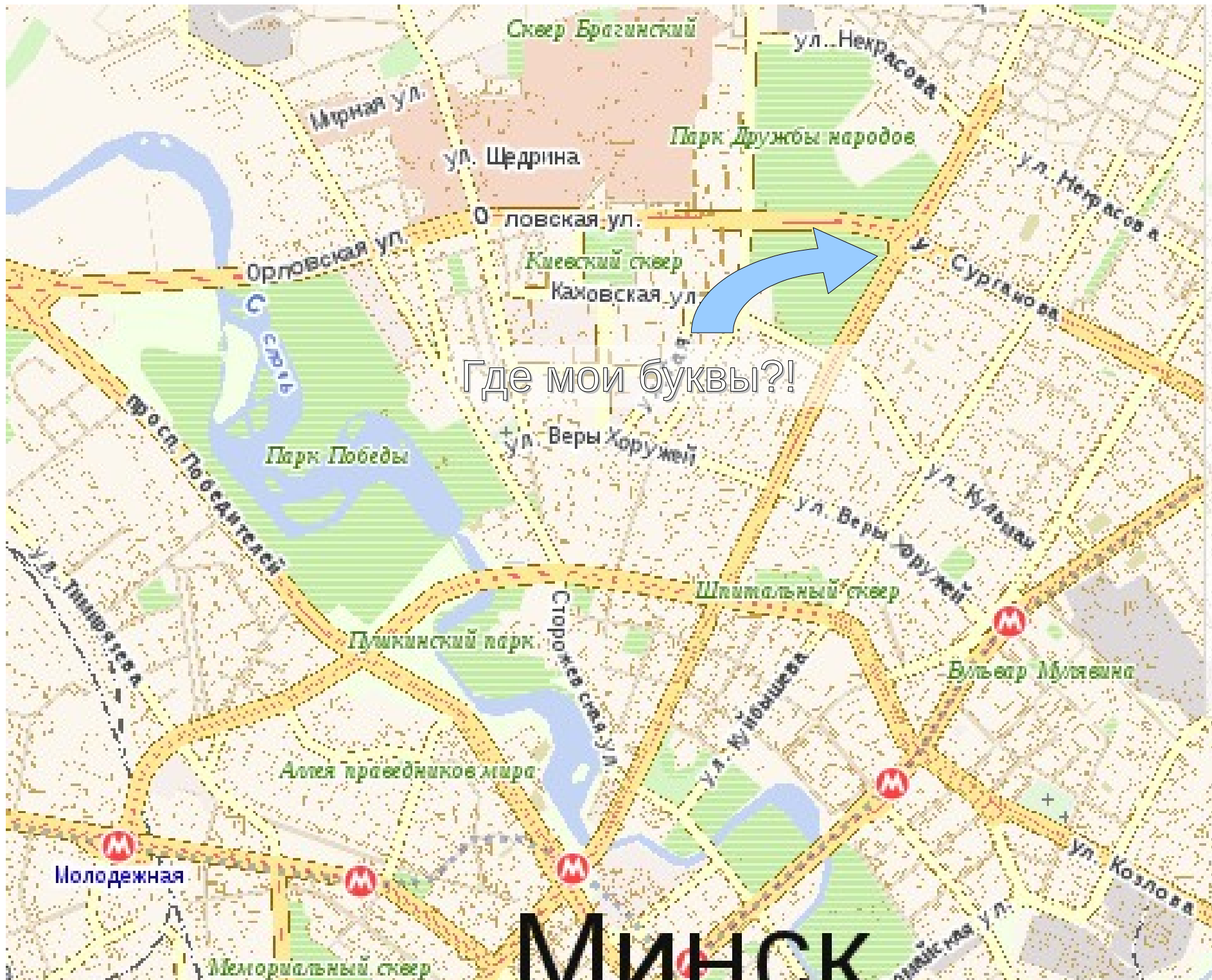




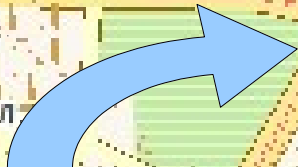
- 215
- 5488
- 4287
- 9990
- tile 11
- 129
- 7138
- 2468
- 9735
- tile 11
- 857
- 8281
- 582
- 9720
- tile 11
- 115
- 358
- 112
- 585

Text transparency?

МИНСК



Где мои буквы?!



- 215
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МИНСК

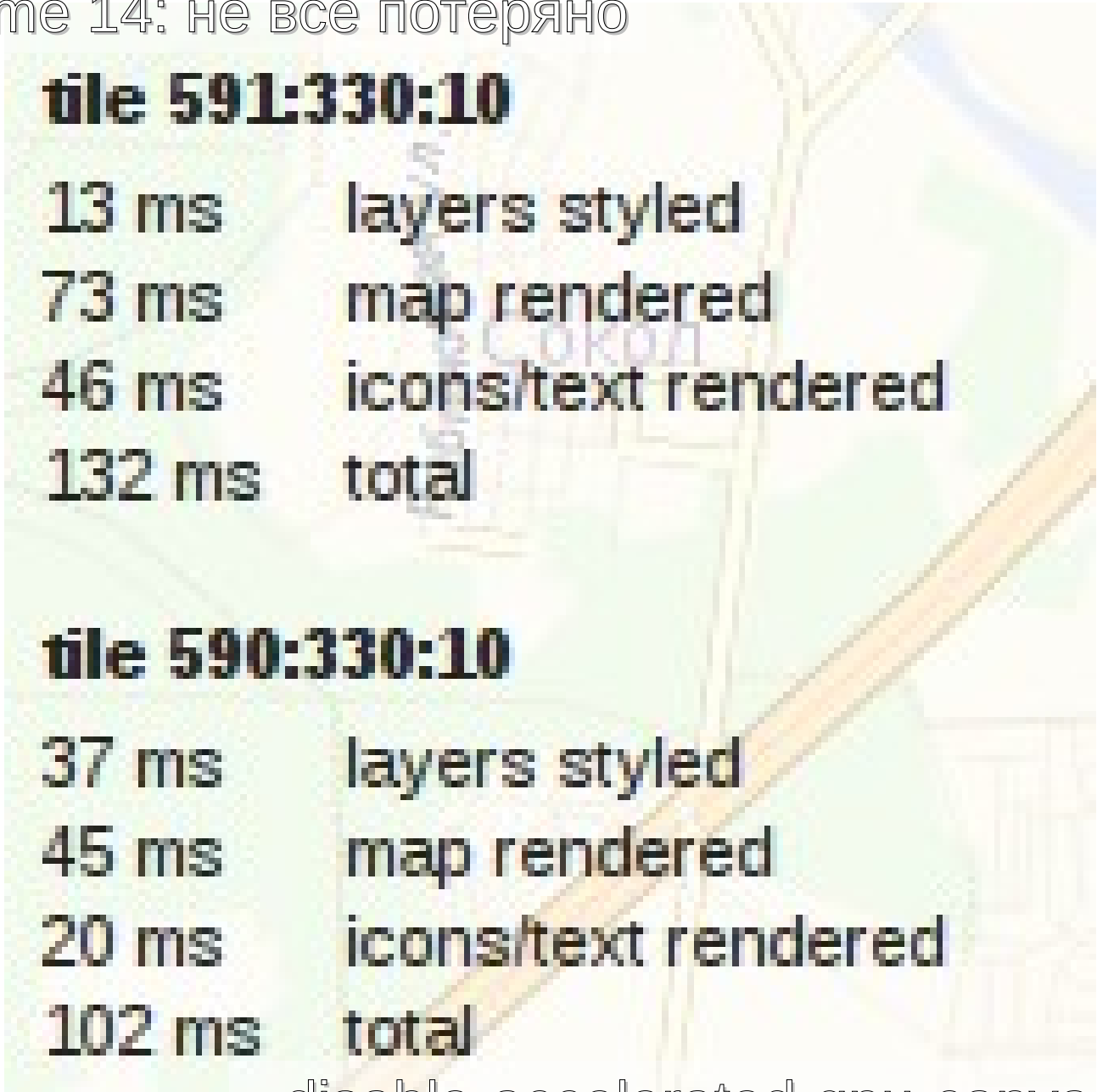
GPU acceleration?



WebKit / Linux: Bold text?



# Chrome 14: не всё потеряно



--disable-accelerated-gpu-canvas

- 15 Browser bugs
- 3 fixed
- WiP/tests

kothic / kothic-js

Fork 95 7

Source Commits Network Pull Requests (1) Fork Queue Issues (15) **Wiki (6)** Graphs Branch: master

Home Pages Wiki History Git Access

## Browser bugs

New Page Edit Page Page History

### Chrome

- Overlapping letters disappear on GPU-canvas <http://code.google.com/p/chromium/issues/detail?id=86621>
- slow rendering time on GPU-canvas <http://code.google.com/p/chromium/issues/detail?id=86287>
- rotated text non-uniform font-weight <http://code.google.com/p/chromium/issues/detail?id=85984>
- rewrite Font::drawGlyphs for Skia on Chrome ports [https://bugs.webkit.org/show\\_bug.cgi?id=62989](https://bugs.webkit.org/show_bug.cgi?id=62989)
- Skia vertex buffer cache is missing frequently <http://code.google.com/p/chromium/issues/detail?id=86490>
- **WONTFIX** antialiased paths are over-sampled in Skia <http://code.google.com/p/chromium/issues/detail?id=86488>
- **FIXED** broken antialiasing <http://code.google.com/p/chromium/issues/detail?id=85762>
- **FIXED** webkit-text-opacity [https://bugs.webkit.org/show\\_bug.cgi?id=62988](https://bugs.webkit.org/show_bug.cgi?id=62988)
- **FIXED** text opacity <http://code.google.com/p/chromium/issues/detail?id=85725>

### Safari / Windows

Looks like Safari doesn't have public bug tracker. To send another, select "Report to Apple" in browser menu. If you have an apple dev account (even free), bugs can be reported to [bugreport.apple.com](http://bugreport.apple.com)

- rotated text non-uniform font-weight (test case) <http://osmosn.lnki.ru/kothic/text-rotate>

### Safari / Mac

- Purple area labels are not rendered semi-transparent.

### Opera / Windows

Opera doesn't seem to have public bug tracker. To report a problem with a web site, go to Menu - Help - Report a Site Problem.

- Opera 11.5 labs with OpenGL acceleration (build 24661) - broken canvas antialiasing;
- Opera 11.5 beta build 1040 - text for some labels is blurry.

### Firefox

- Slow text rendering [https://bugzilla.mozilla.org/show\\_bug.cgi?id=527386](https://bugzilla.mozilla.org/show_bug.cgi?id=527386)

### Internet Explorer 10

- bad charset (cp1251 instead of utf8) <https://connect.microsoft.com/IE/feedback/details/676961/kothic-org-js-wrong-map-character-set-if-tiles-served-from-cache>

### Test cases

Want to check whether your browser has one of those issues?

- canvas rotated text non-uniform font-weight test case <http://osmosn.lnki.ru/kothic/text-rotate>
- non-canvas webkit-only rotated text non-uniform font-weight test case <http://osmosn.lnki.ru/kothic/text-rotate-no-canvas>
- globalAlpha based text opacity <http://osmosn.lnki.ru/kothic/text-opacity>

<http://kothic.org/js/>

<https://github.com/kothic/kothic-js>

pull requests welcome :)