

The Making of Roboto Delta

**Fully Parametric AVAR2, with blended axes
Weight, Width, Optical Size, Grade,
Thick Stroke (XOPQ), Thin Stroke (YOPQ),
Counter Width (XTRA), and their sub-axes.
Spacing (SPAC) and other typographic
special treatments.**

Default's Character Set

Latin, Cyrillic, Greek,
with combination
marks, and many
parts.

27 Blended Locations, Registered Axes, Fully Parametric

100
Roboto Delta
Roboto Delta
Roboto Delta

400
Roboto Delta
Roboto Delta
Roboto Delta

1000
Roboto Delta
Roboto Delta
Roboto Delta

14 pt
Roboto Delta
Roboto Delta
Roboto Delta

Roboto Delta
Roboto Delta
Roboto Delta

Roboto Delta
Roboto Delta
Roboto Delta

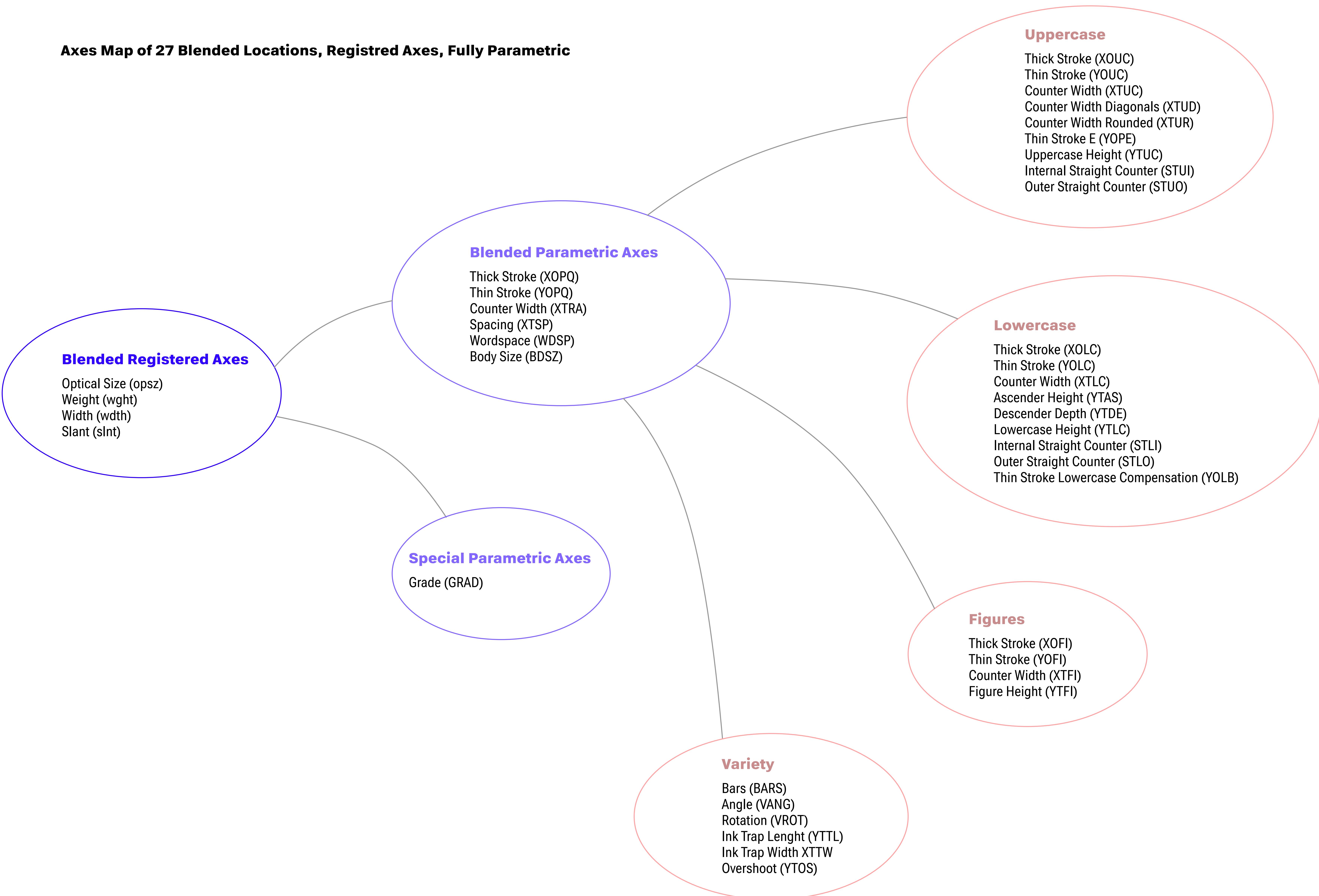
144 pt
Roboto Delta
Roboto Delta
Roboto Delta

Roboto Delta
Roboto Delta
Roboto Delta

Roboto Delta
Roboto Delta
Roboto Delta

Full designspace,
Optical Size 8–144
Weight 100–1000
Width 25–151

Axes Map of 27 Blended Locations, Registered Axes, Fully Parametric



The main advantage of AVAR2 is the ability to blend axes, meaning you can make an axis as a combination of multiple ones.

In Roboto Delta, the user axes Optical Size, Weight, & Width are a blend of the parametric axes XOPQ, YOPQ, & XTRA, which are also a blend of sub-axes split into Uppercase, lowercase, & figures.

Additionally there are more axes which adds more typographic flexibility, like Spacing, Wordspace, Grade, Lowercase Height, Ascender Height, Descender Depth.

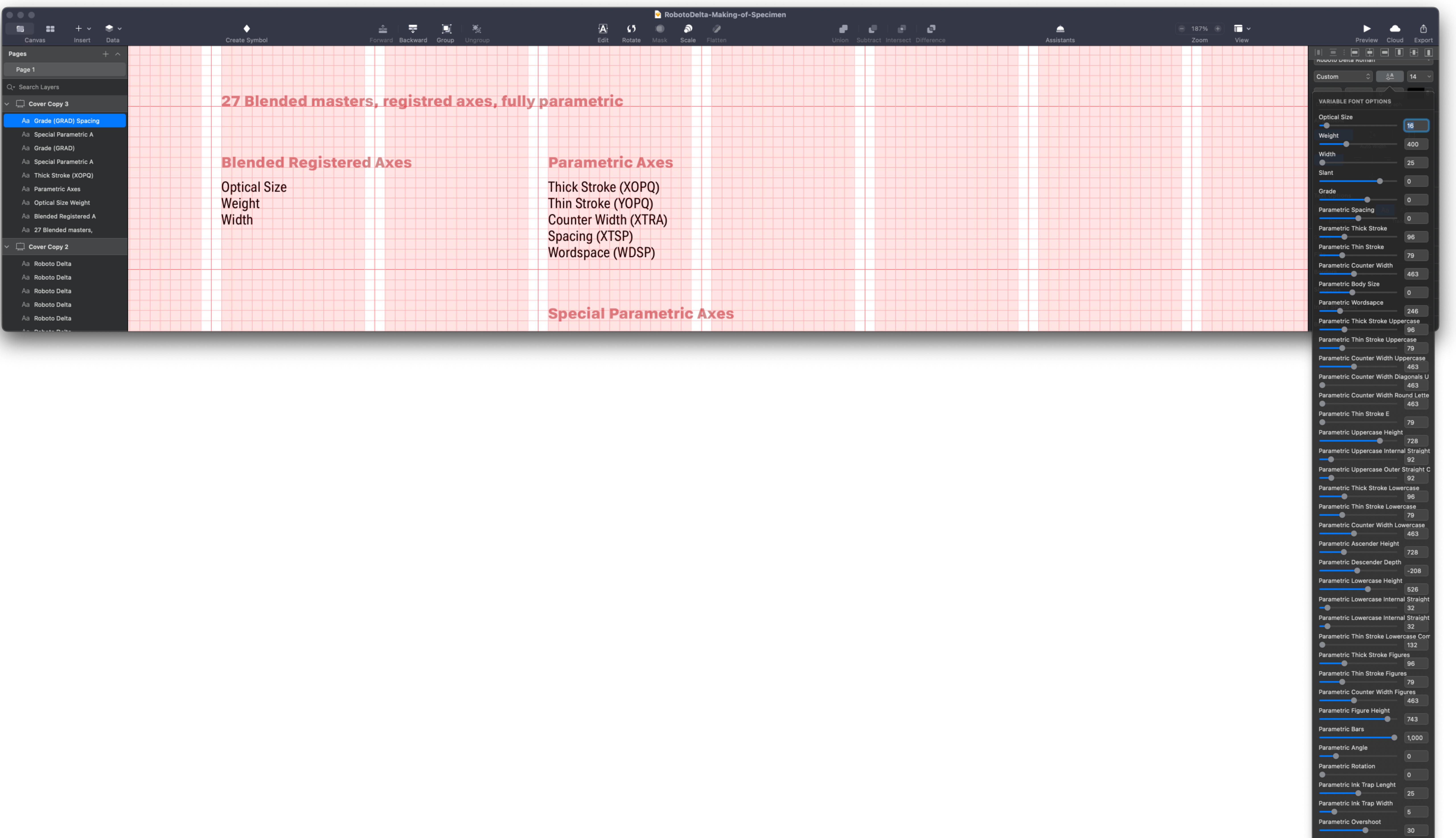
There are some axes that are enabled only to support extreme cases, like the Light Condensed Display (144 25 100), in this case STUI, STUO, STLI, & STLO helps to add the squareness needed at this location, on top of all the other parametric blends.

Also, in the Black Condensed Display, the diagonals need to be a little more open than the XTRA controls at that location, XTUD helps with it. At another location (144 151 400) XTUR helps with the rounded glyphs.

In the Black Display locations, YOLB helps adding more weight in the middle bars of a & e related glyphs.

Other variety of axes helps in micro typography details, like overshoots, ink traps, angle, open or close bars (\$).

Axes have been renamed to match the public version of Roboto Flex, with some more additions.



Currently, the only applications that supports AVAR2 due to their integration with the OS are these Apps & Webapps:

Affinity
Sketch (Where this document was made)

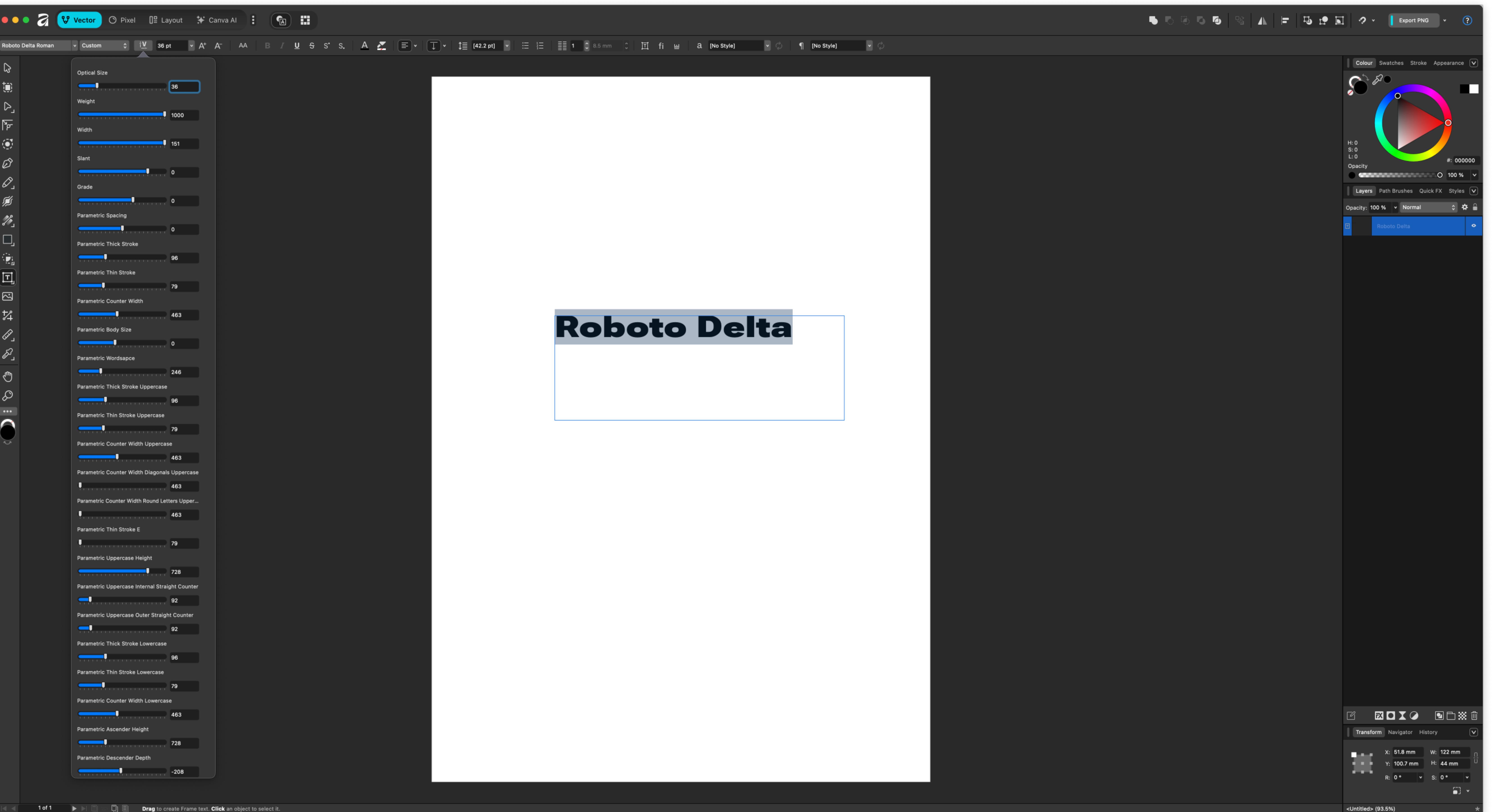
Fun Fact, Adobe InDesign crashes completely if there's an AVAR 2 font installed in the OS, it crashes and cannot be opened, and if you have it open, as soon as Roboto Delta is activated in Font Book, InDesign crashes immediately.

It can also be previewed in our web tools:

<https://fontbureau.github.io>TypeRoof/shell>
<https://videoproof.appspot.com/>

And in Fontra.

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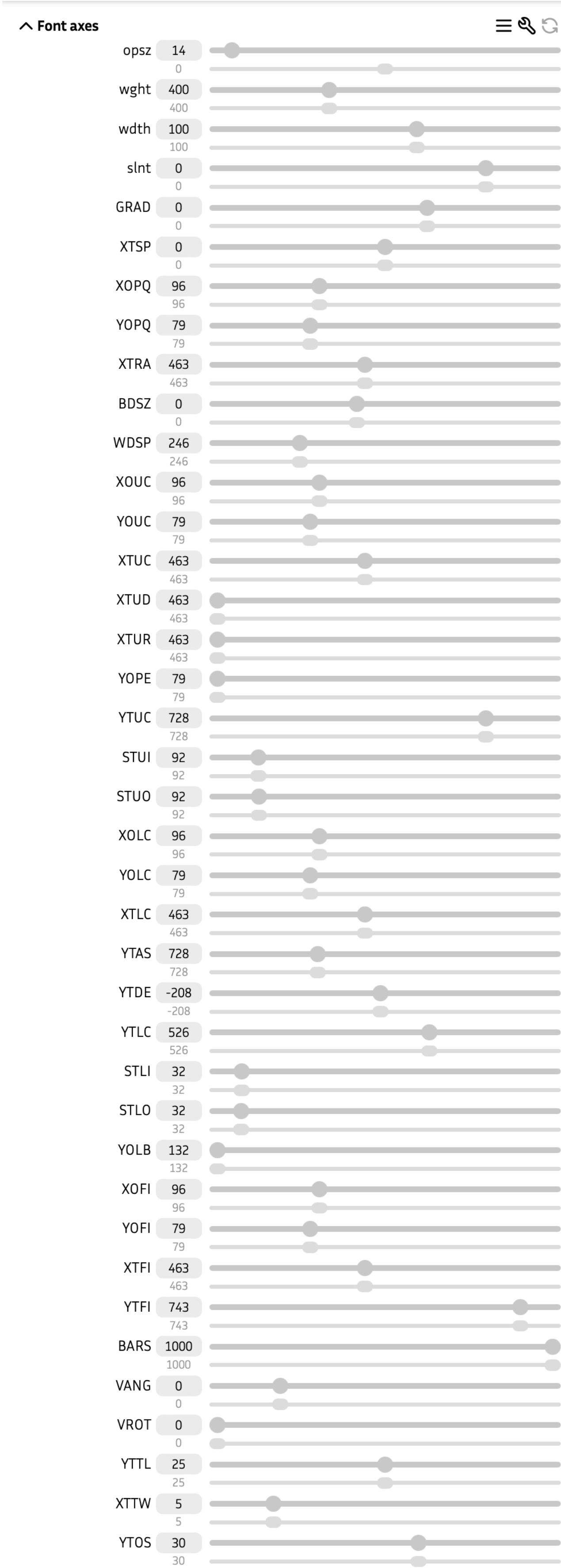
It can also be previewed in our web tools:

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<https://videoproof.appspot.com/>

And in Fontra.

Default Location, 14-100-400

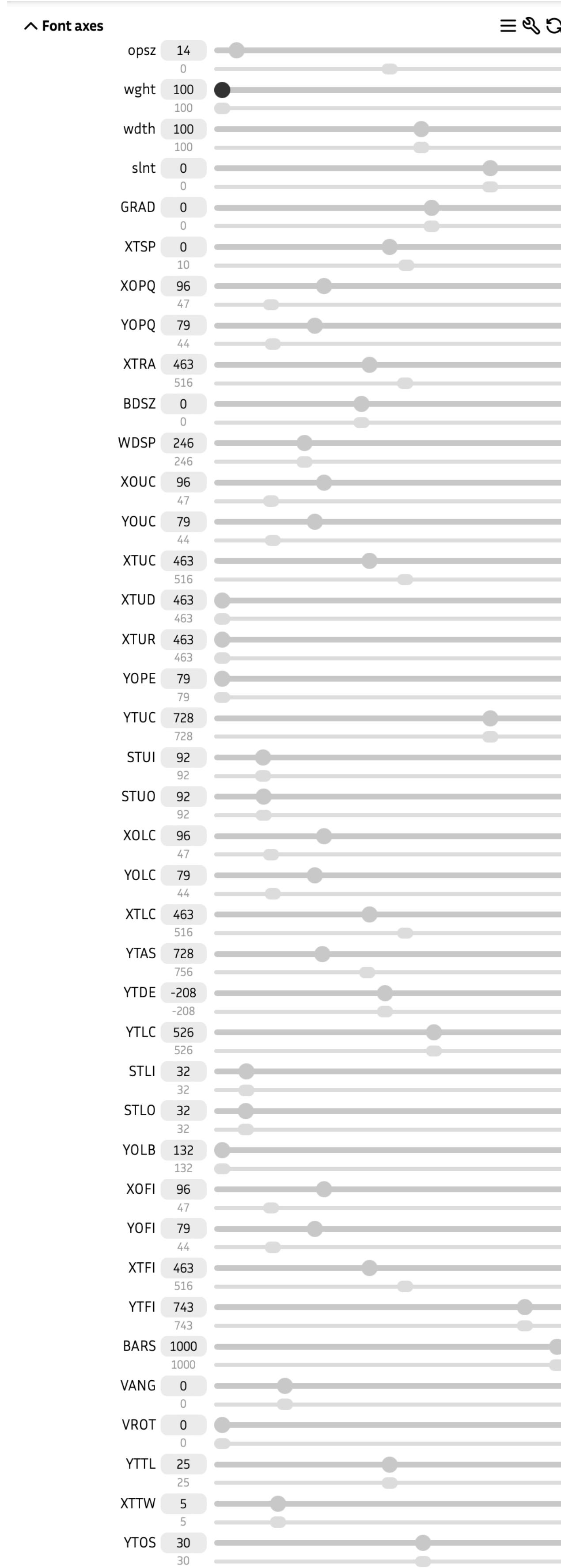
Our starting point is the Default Roboto Flex,
Optical Size 14, Weight 400, Width 100.
In Fontra, on the right side we have all axes at
their default value, by activating “Show
effective location” we can see the blend
changes in detail.



ABCDEF^{GHIJKLMNOPQRSTUVWXYZ}
abc^{defghijklmnopqrstuvwxyz}
0123456789
!"#\$%&'()*+,./';<=>?@[\]^_`{|}~

ABCDEF^{GHIJKLMNOPQRSTUVWXYZ}
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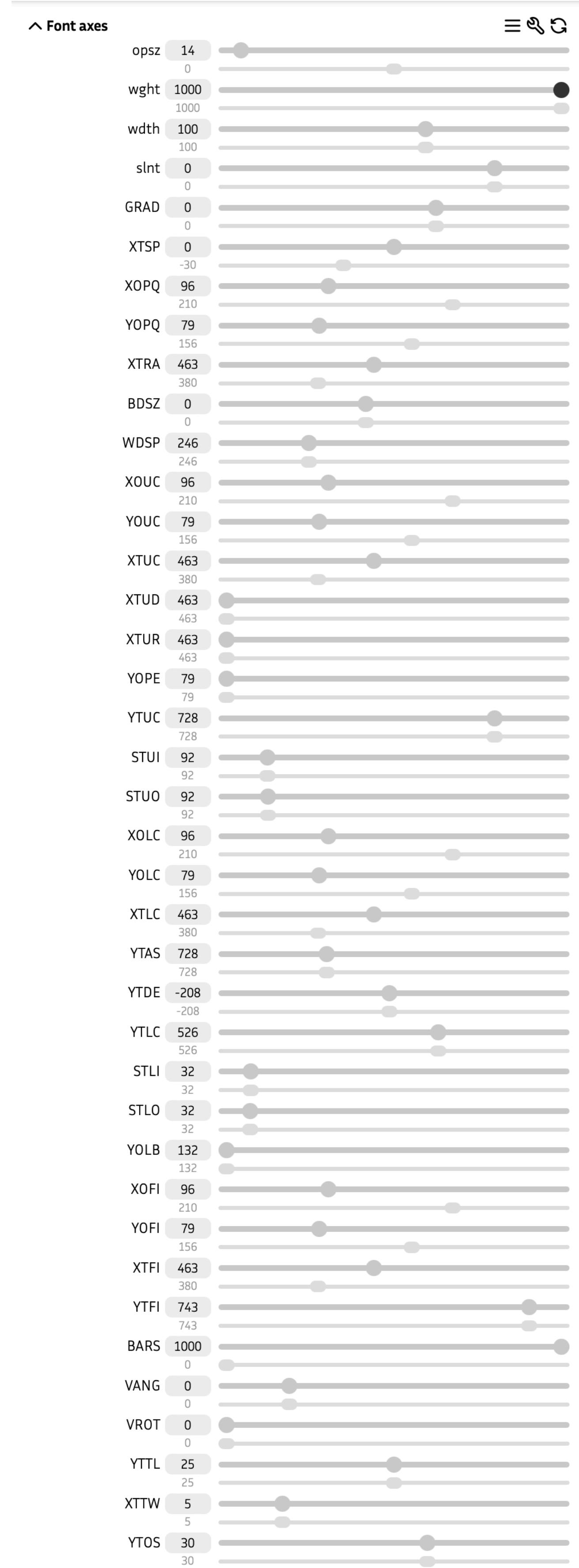
Blended Location, 14-100-100



ABCDEFGHIJKLMNOPQRSTUVWXYZ
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0123456789
!"#\$%&'()*+,./';<=>?@[\]^_`{|}~

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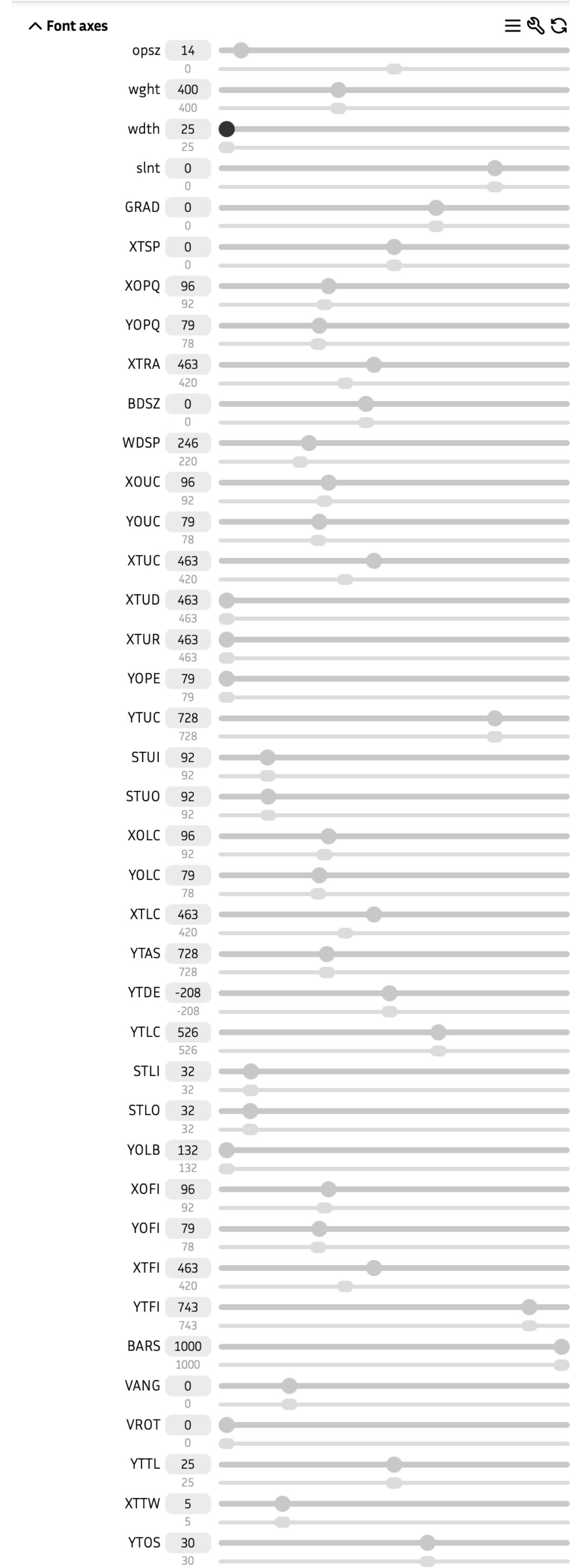
Blended Location, 14-100-1000



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { } ~

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { } ~

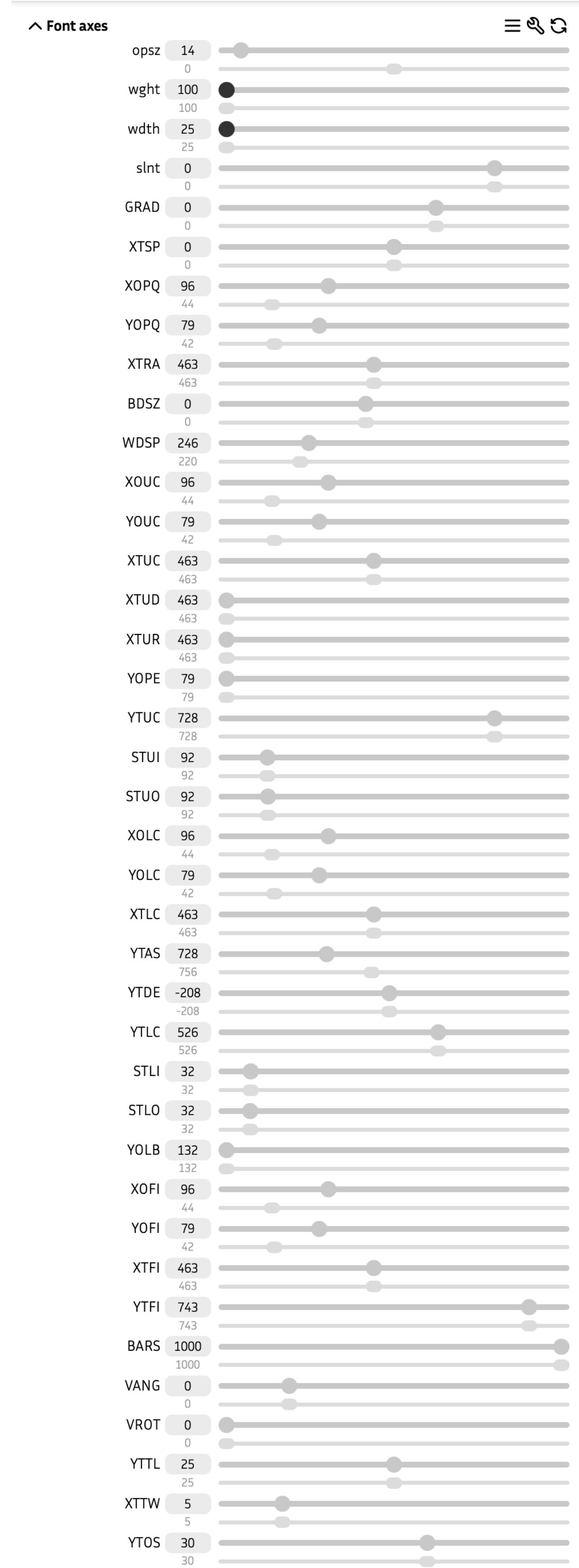
Blended Location, 14-25-400



ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789
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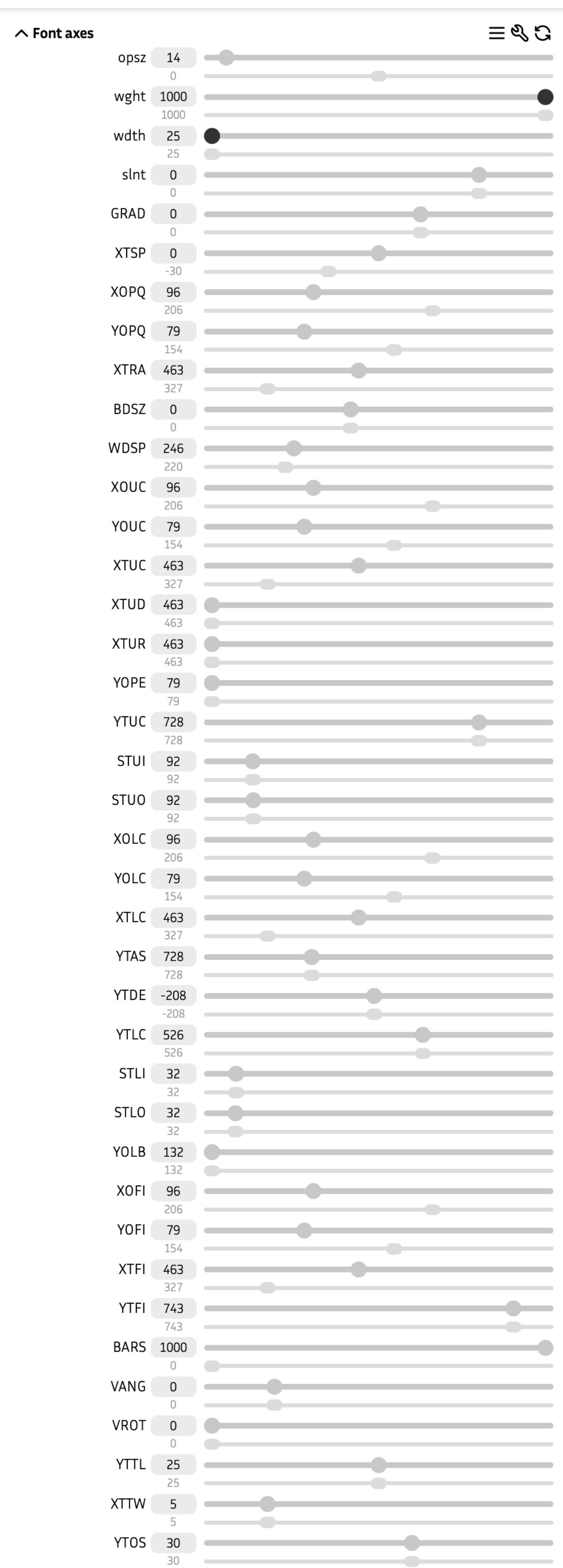
Blended Location, 14-25-100



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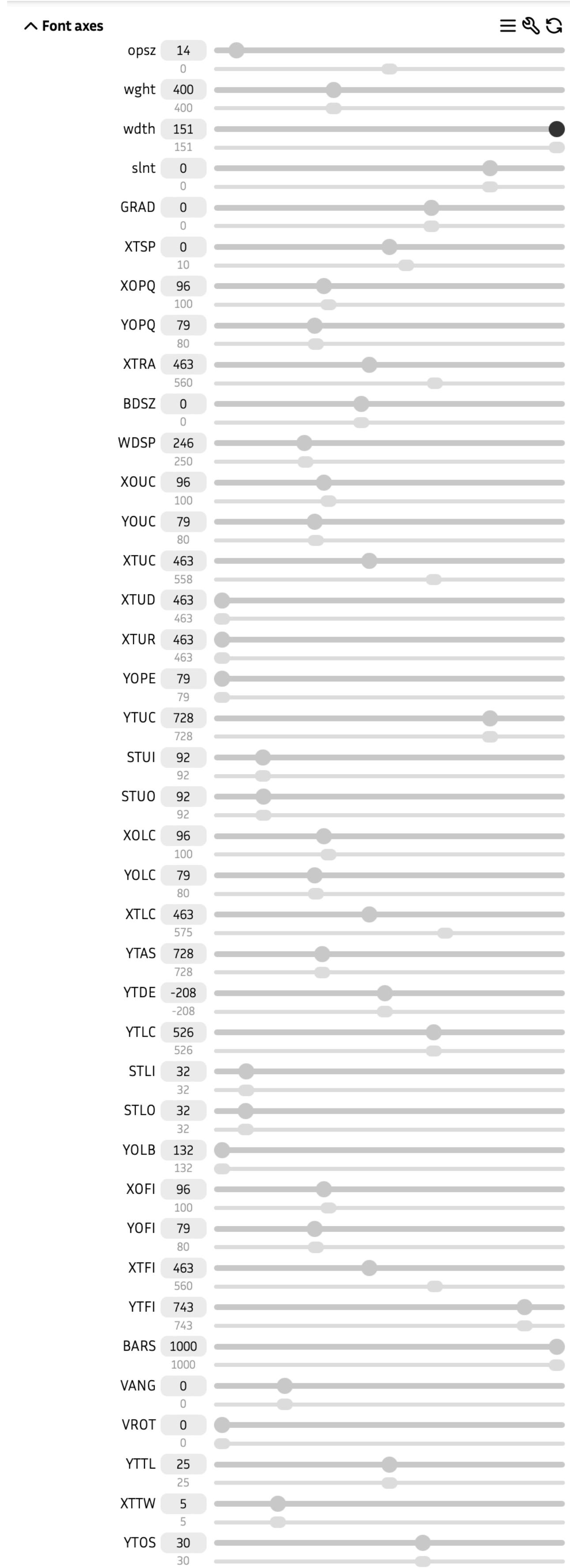
Blended Location, 14-25-1000



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / ; < = > ? @ [] ^ _ { } ~

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / ; < = > ? @ [] ^ _ { } { }

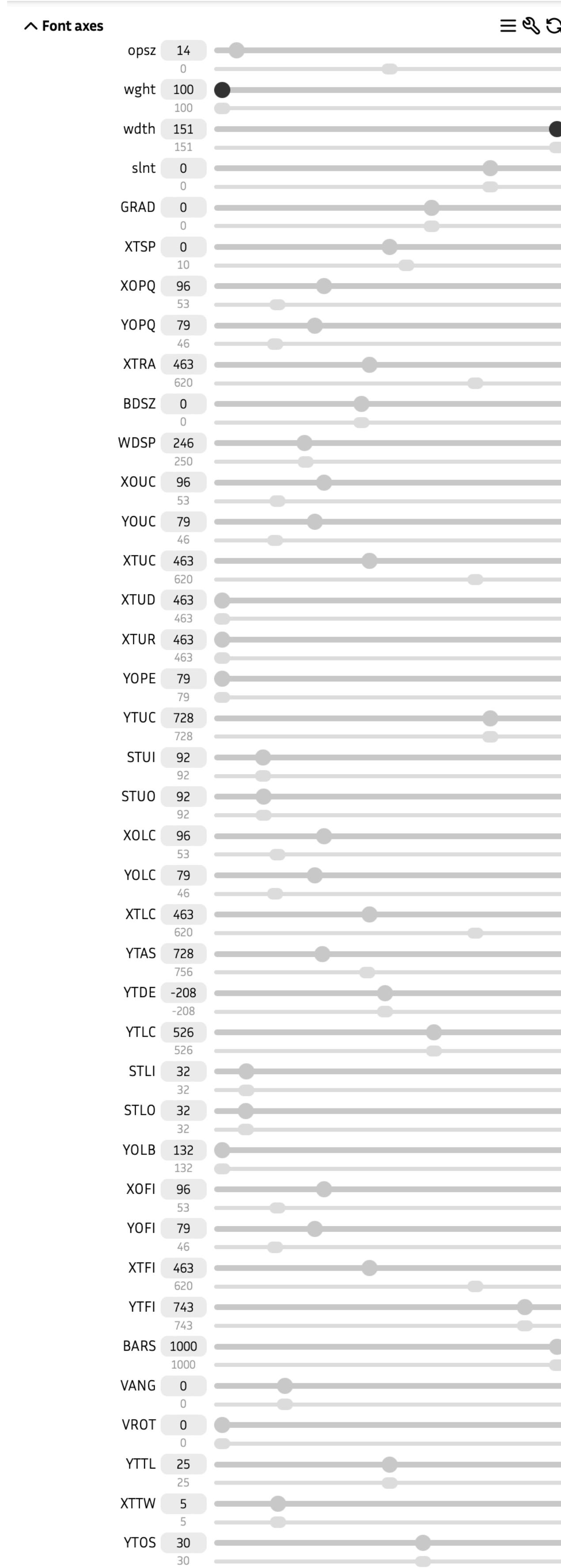
Blended Location, 14-151-400



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abcdefghijklmnopqrstuvwxyz
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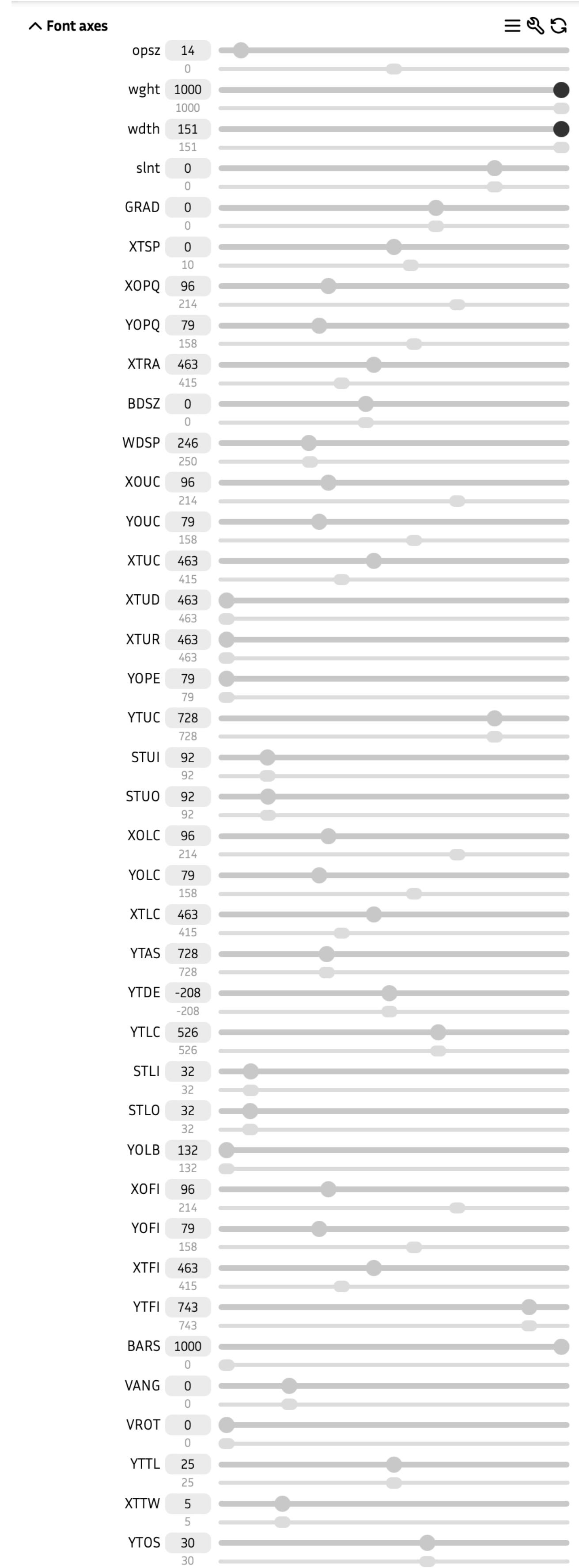
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789
!"#\$%&'()*,./:;<=>?@[\]^_`{|}~

Blended Location, 14-151-100



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / ; < = > ? @ [\] ^ _ ` { | } ~

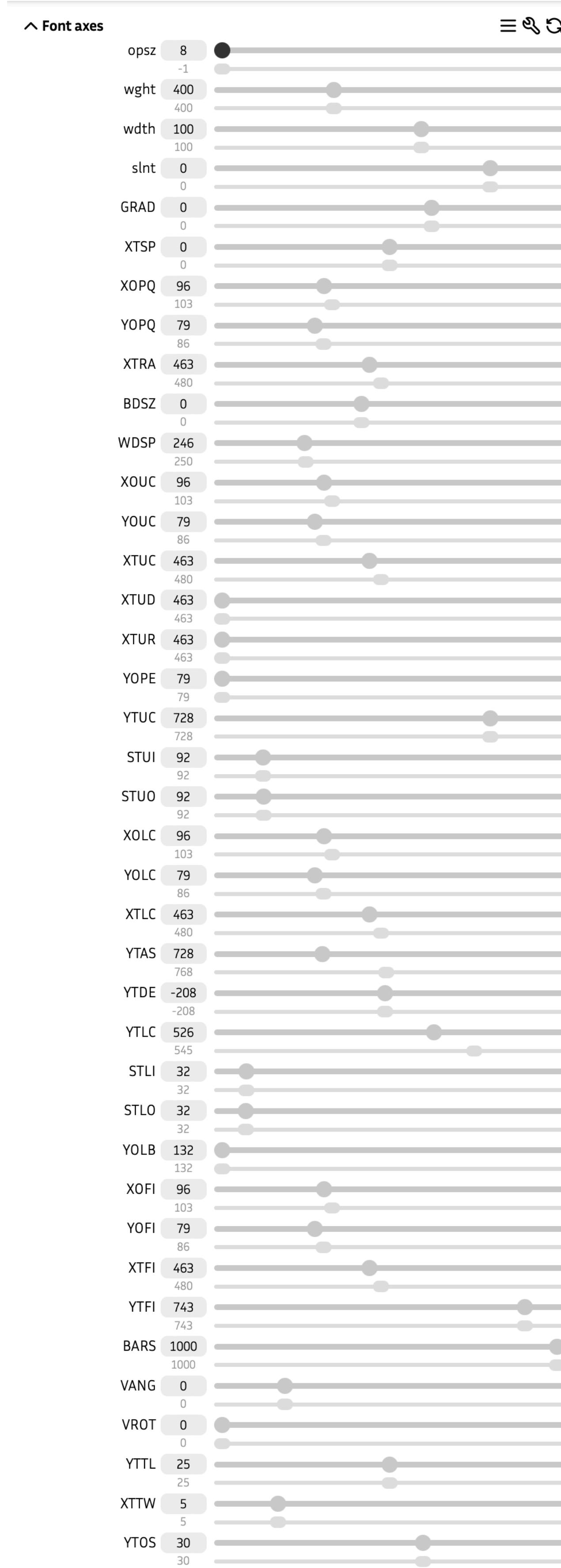
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a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / ; < = > ? @ [\] ^ _ ` { | } ~



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { } ~

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { } ~

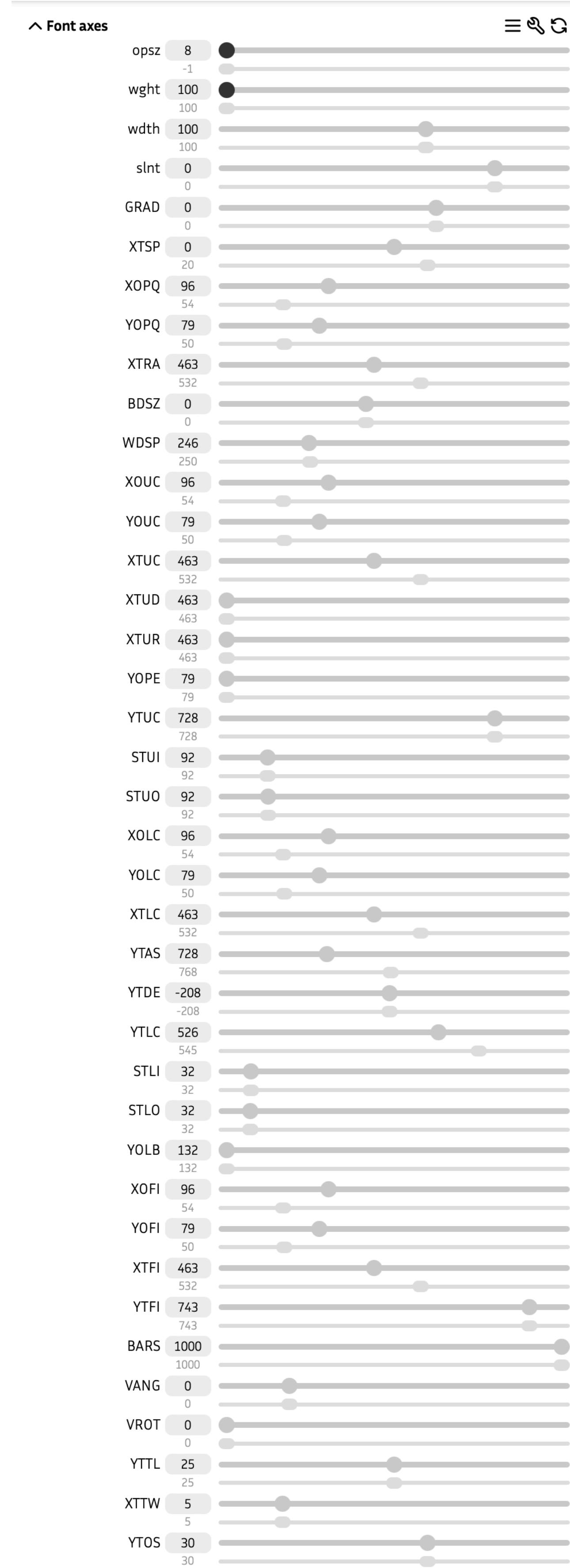
Default Location, 8-100-400



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abcdefghijklmnopqrstuvwxyz
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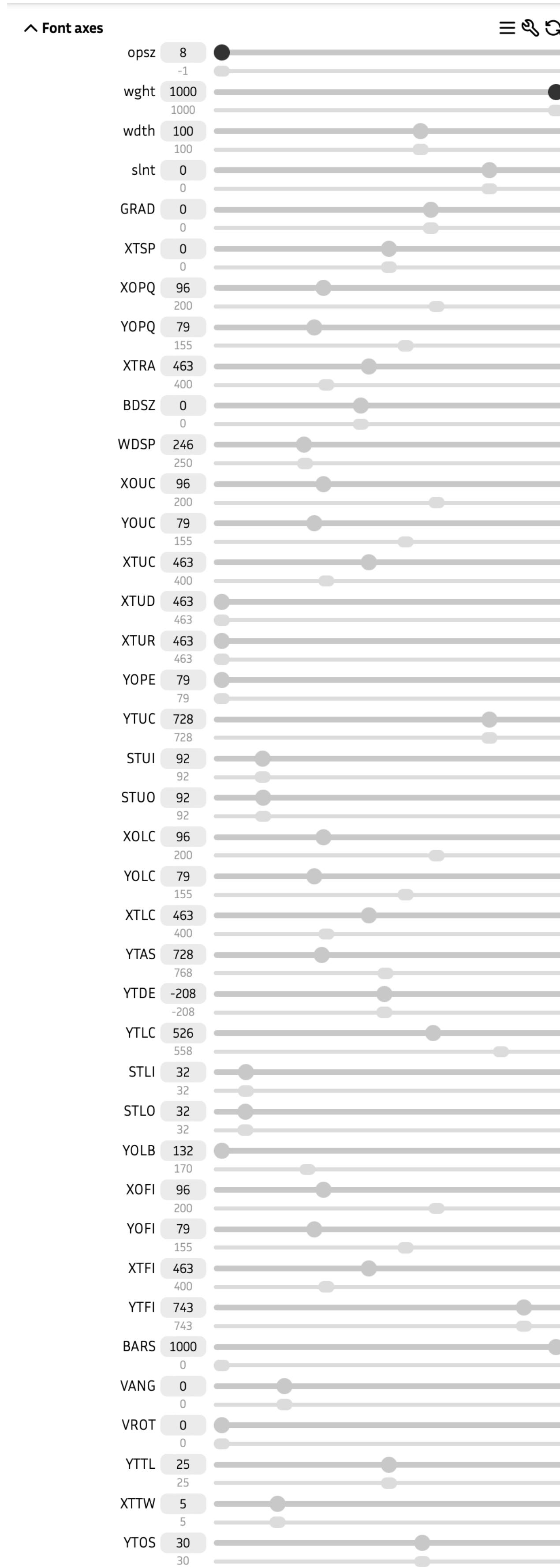
Blended Location, 8-100-100



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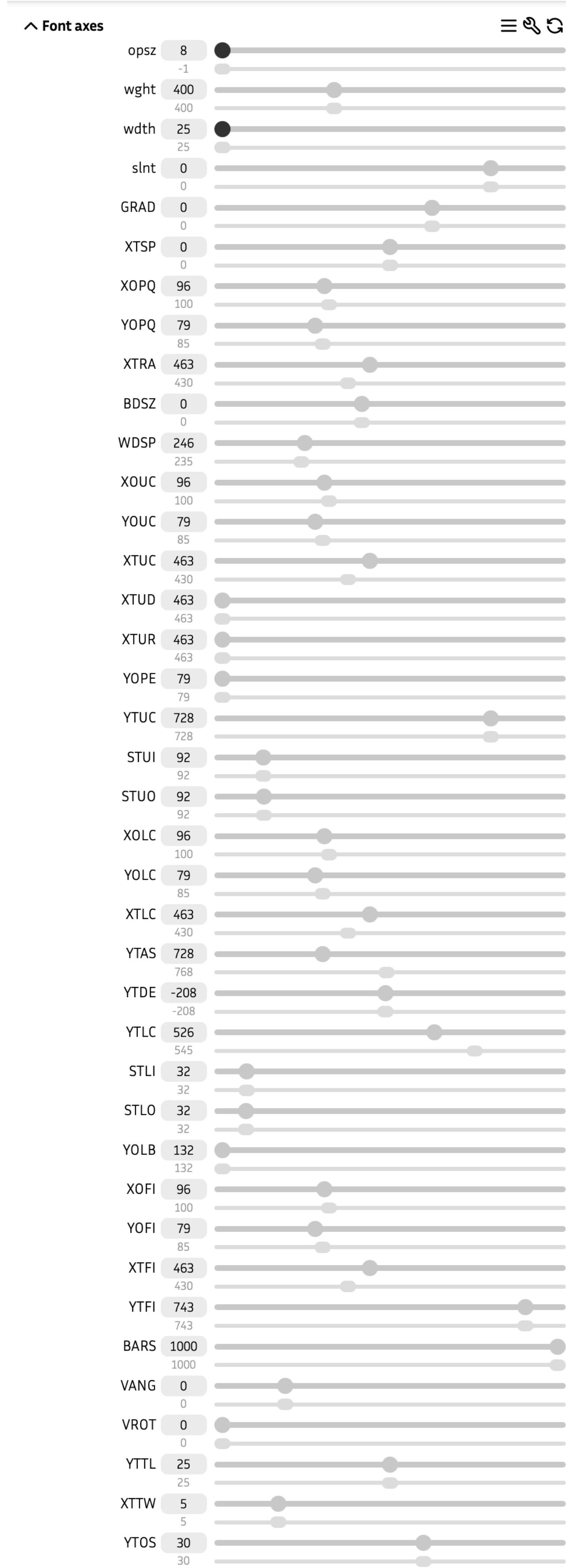
Blended Location, 8-100-1000



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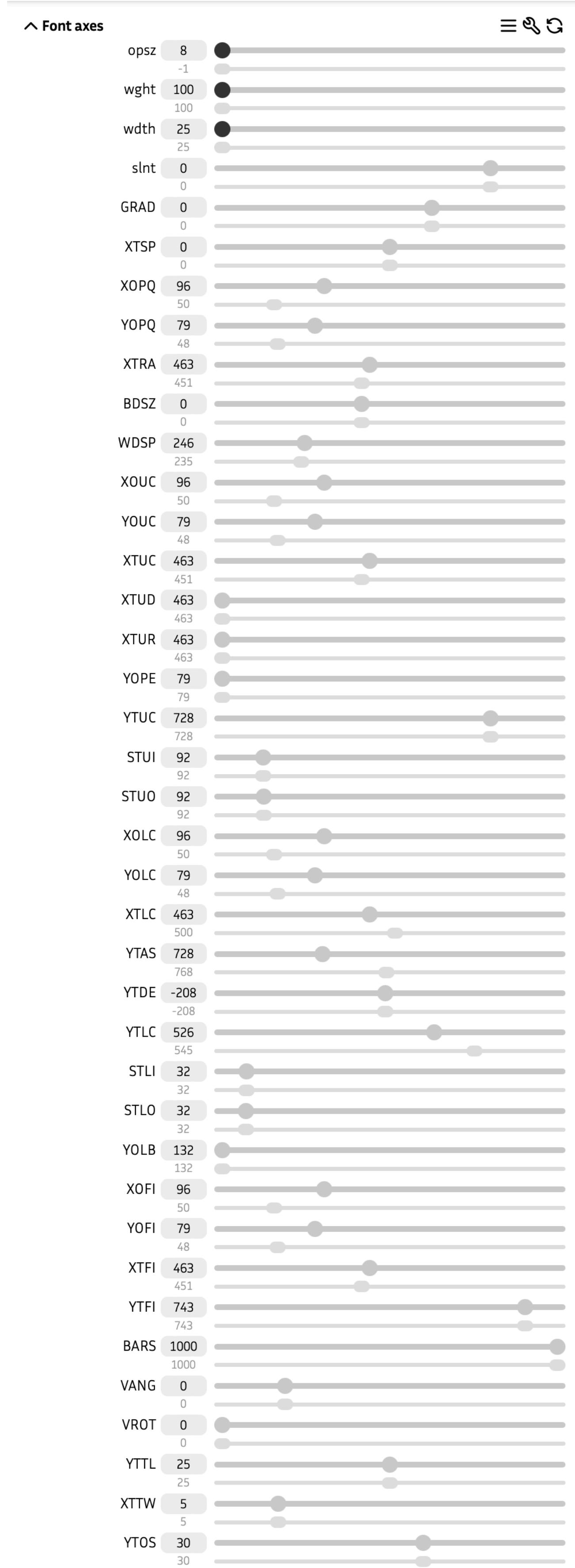
Blended Location, 8-25-400



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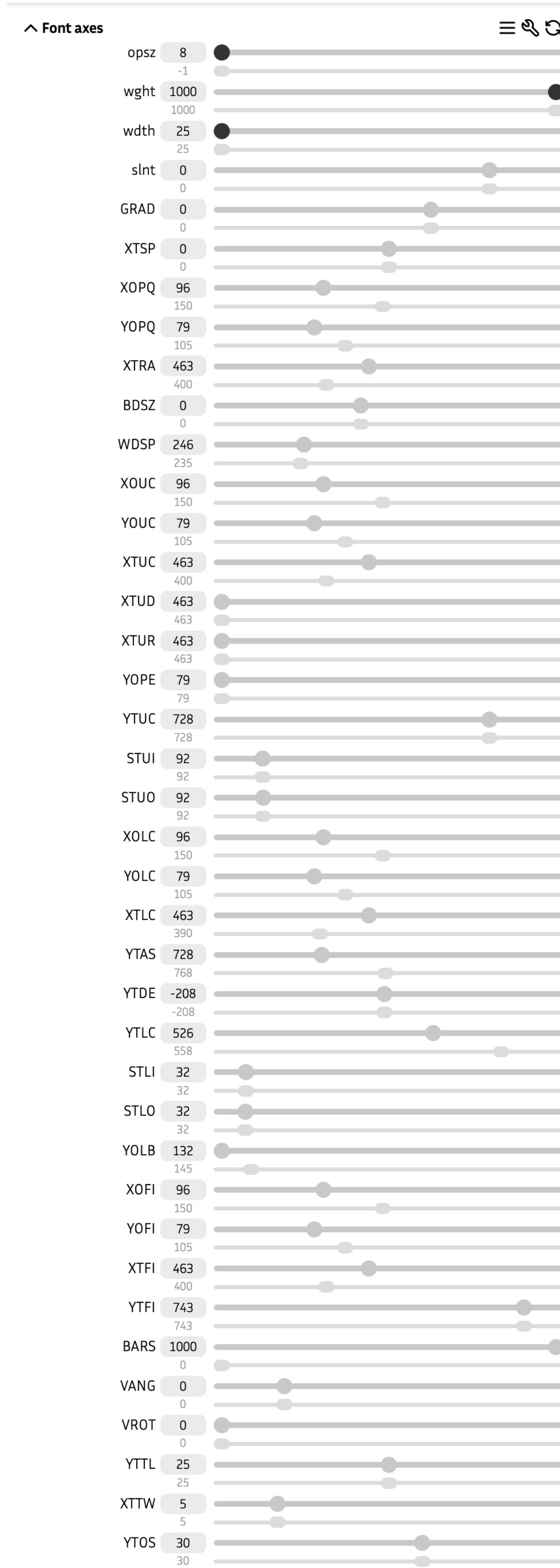
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Blended Location, 8-25-100



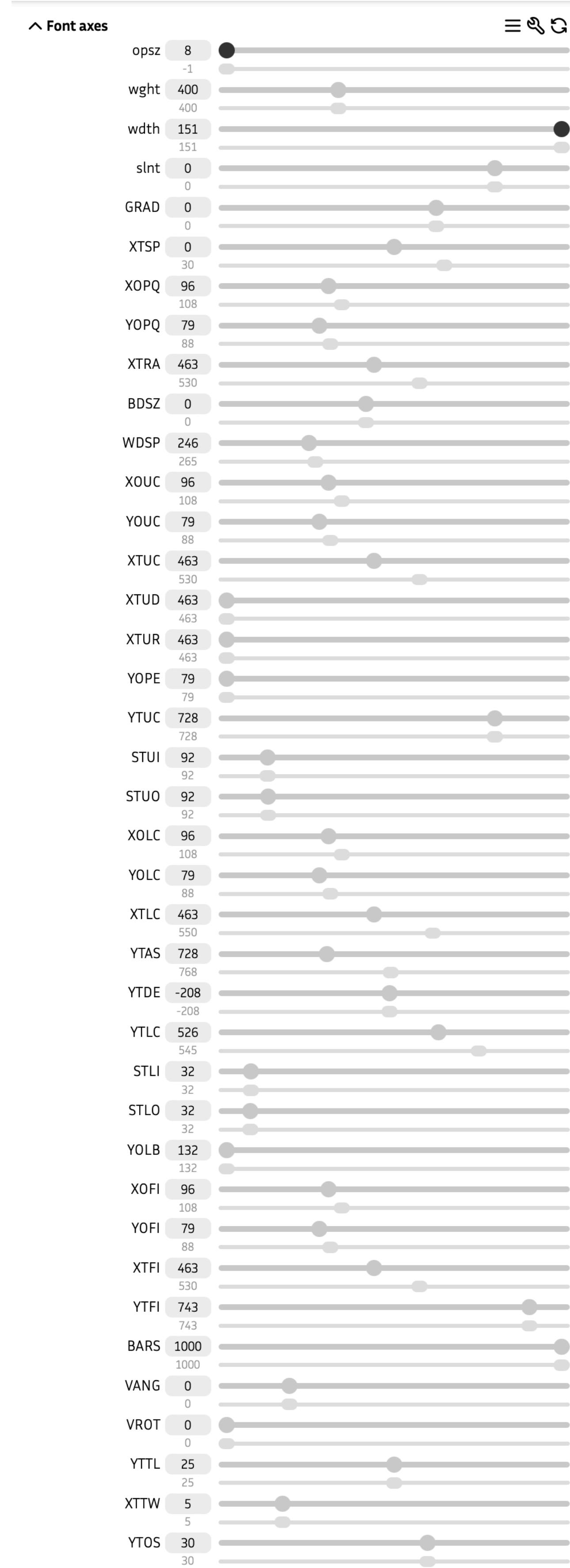
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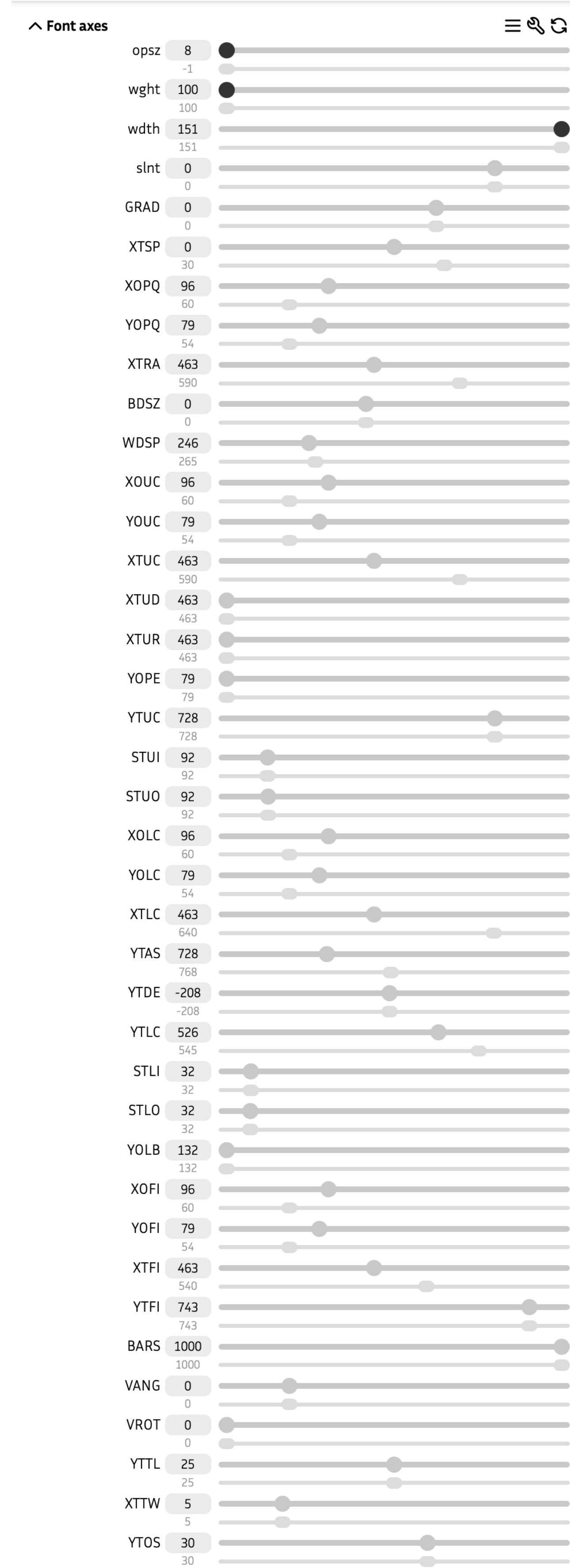
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!"#\$%&'()*+,-./:;<=>?@[\\]^_`{|}~



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~

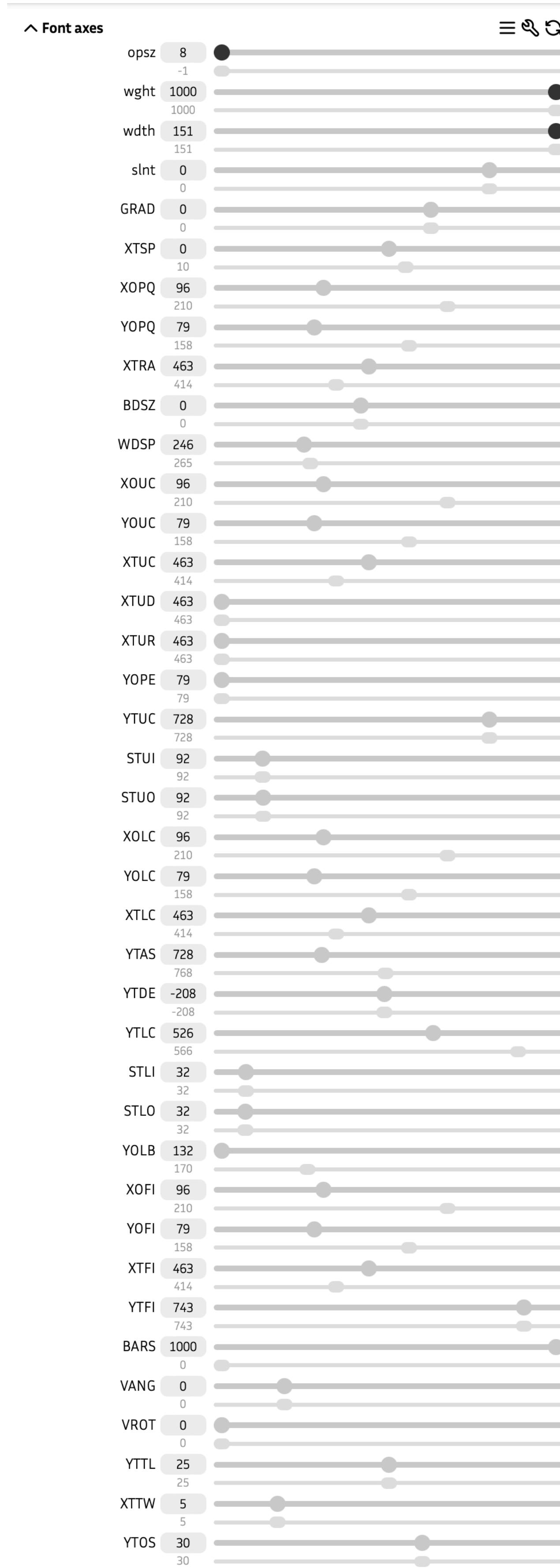
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~

Blended Location, 8-151-100



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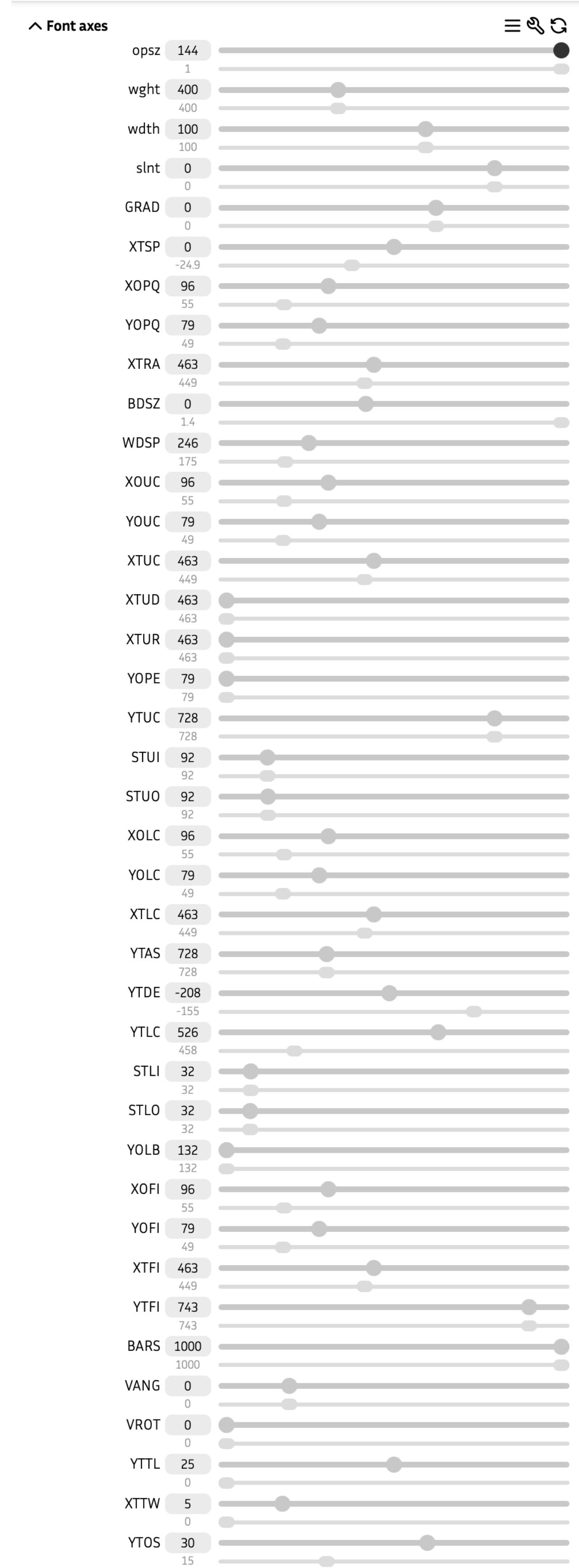
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0123456789
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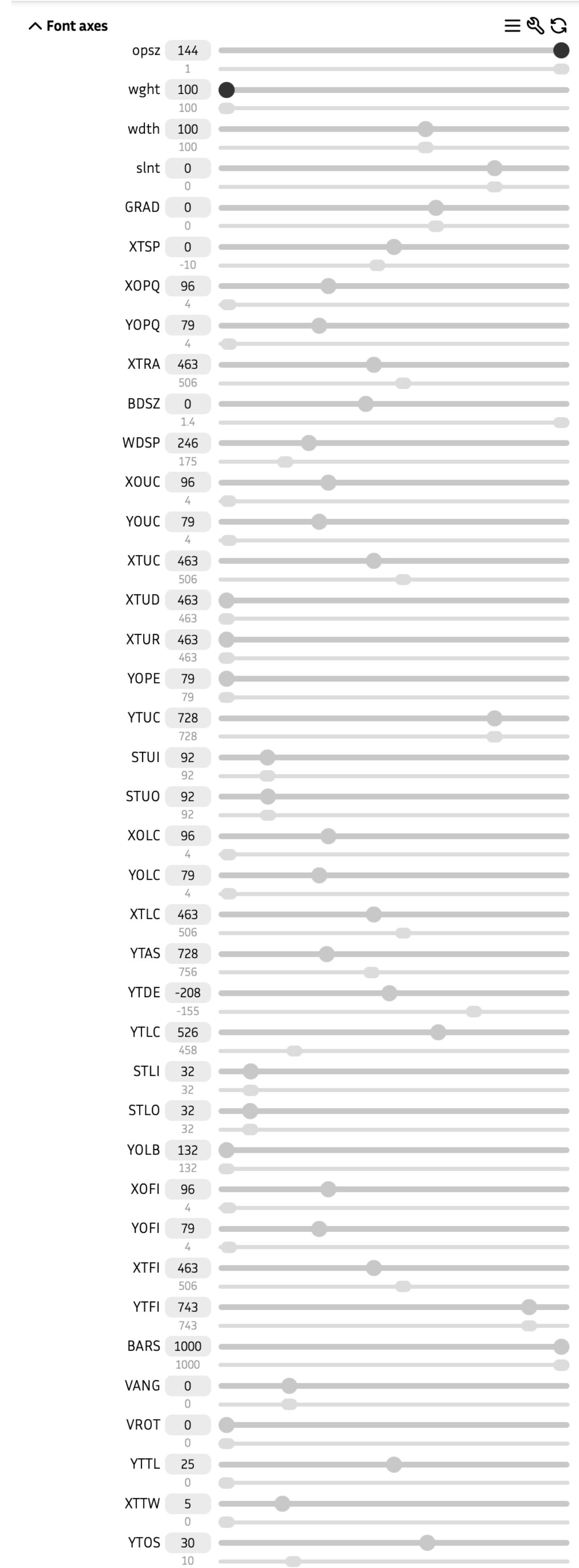
Blended Location, 144-100-400



ABCDEFGHIJKLMNOPQRSTUVWXYZ
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0123456789
!"#\$%&'()*+,./:;<=>?@[\\]^_`{|}~

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789
!"#\$%&'()*+,./:;<=>?@[\\]^_`{|}~

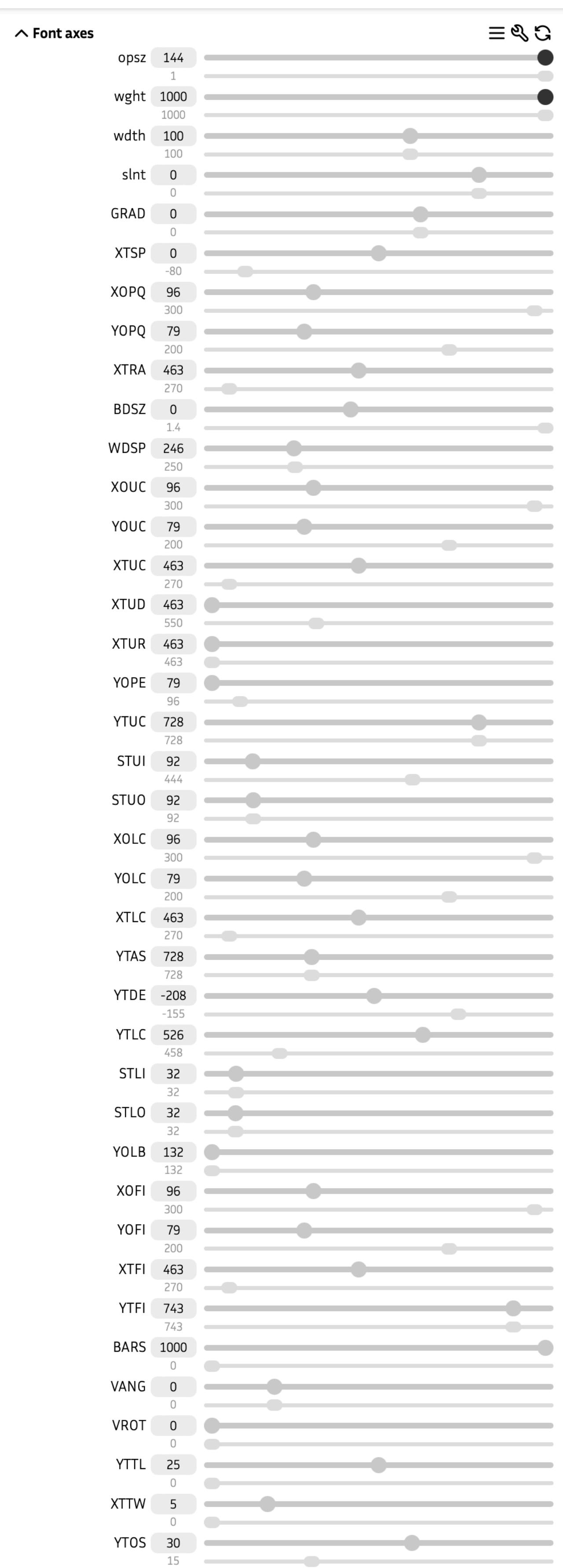
Blended Location, 144-100-100



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - / ; < = > ? @ [] ^ _ ` { } ~

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - / ; < = > ? @ [] ^ _ ` { } ~

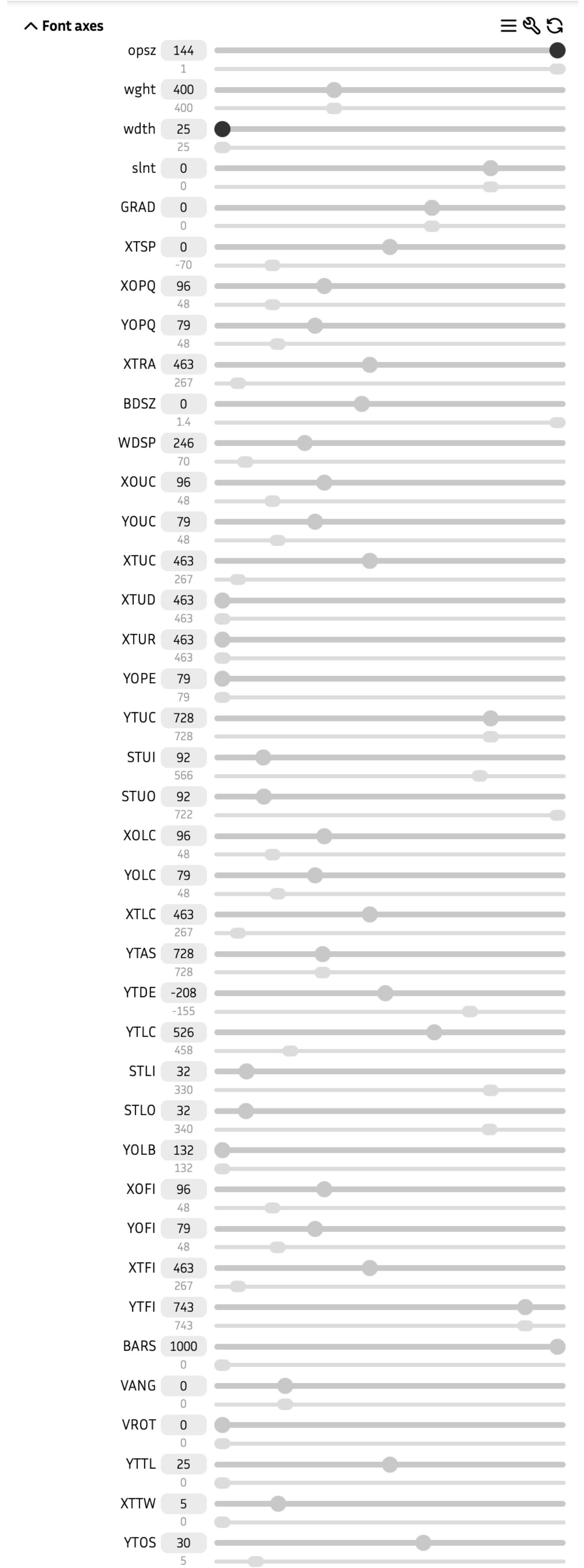
Blended Location, 144-100-1000



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . : ; < > ? @ [] ^ _ { } -

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . : ; < > ? @ [] ^ _ { } -

Blended Location, 144-25-400



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z

0 1 2 3 4 5 6 7 8 9

! " # \$ % & ' () * + , - / : ; < = ? @ [] ^ ' { } ~

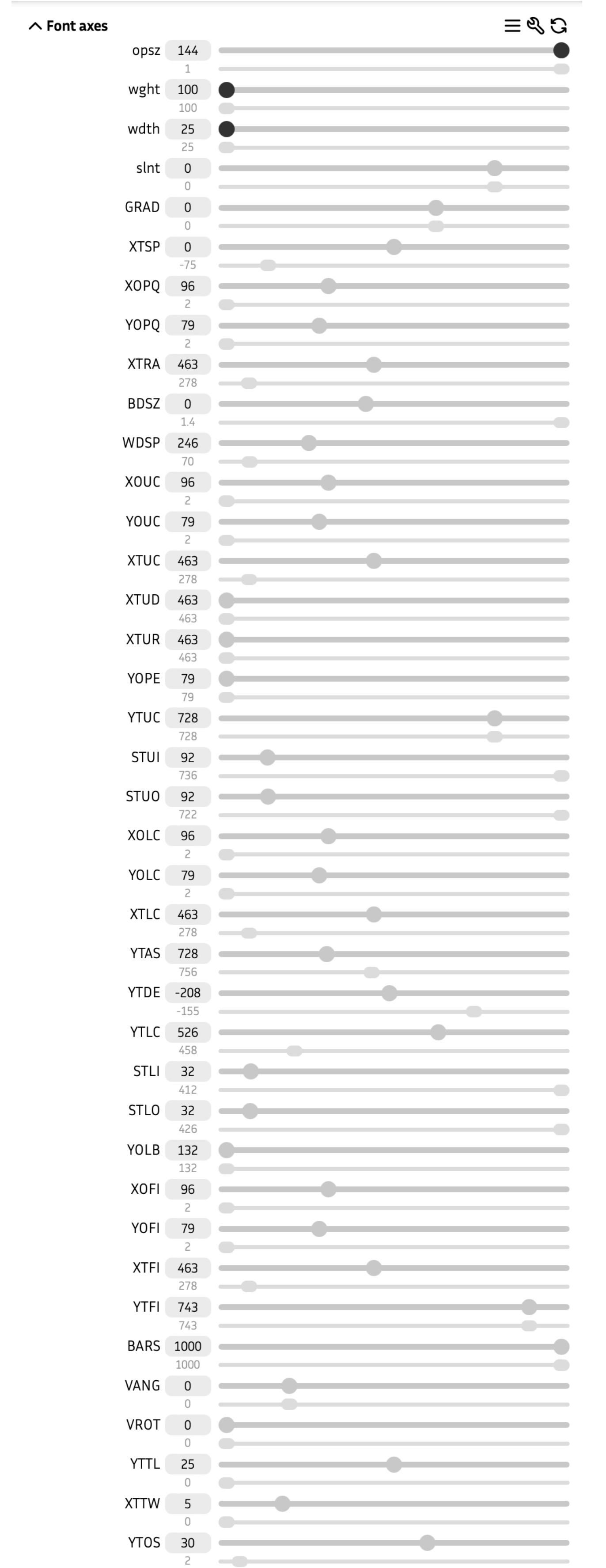
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z

0 1 2 3 4 5 6 7 8 9

! " # \$ % & ' () * + , - / : ; < = ? @ [] ^ ' { } ~

Blended Location, 144-25-100



A B C D E F G H I J K L M N O P R S T U V W Y Z

a b c d e f g h i j k l m n o p r s t u v w y z

0 1 2 3 4 5 6 7 8 9

! " # % & * + - (=) ? [] ^ { } ~

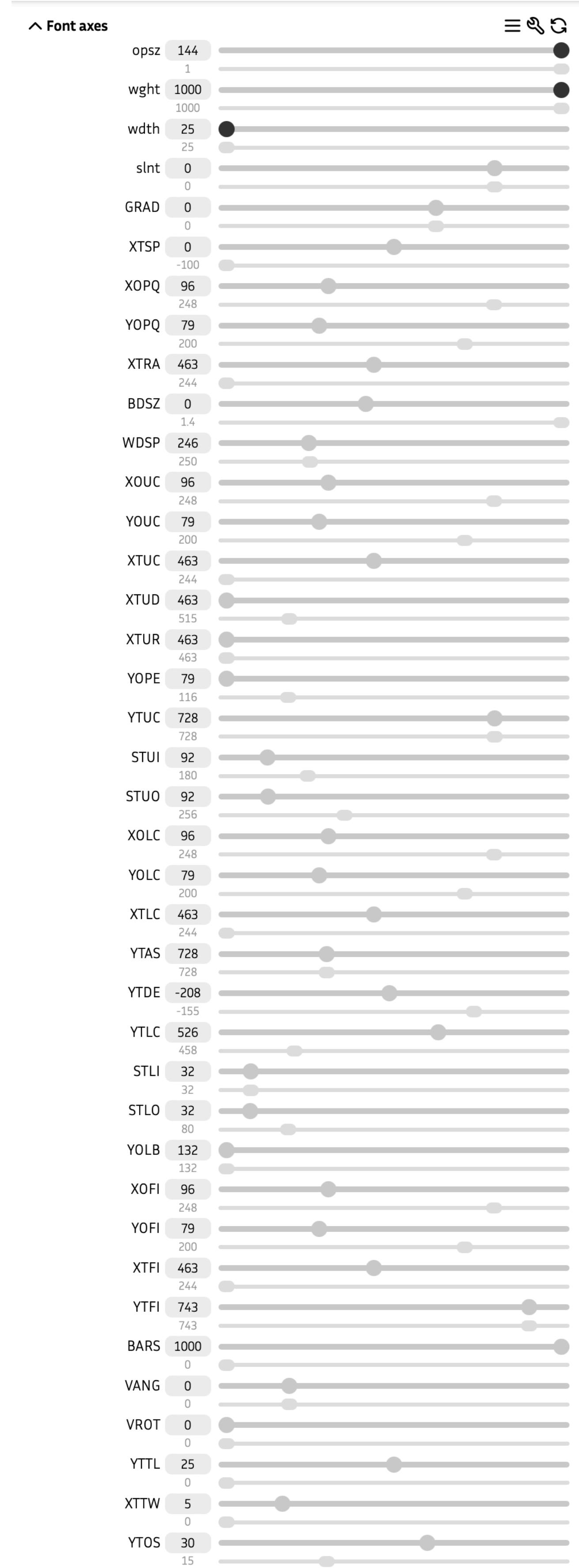
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a b c d e f g h i j k l m n o p r s t u v w y z

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! " # % & * + - (=) ? [] ^ { } ~

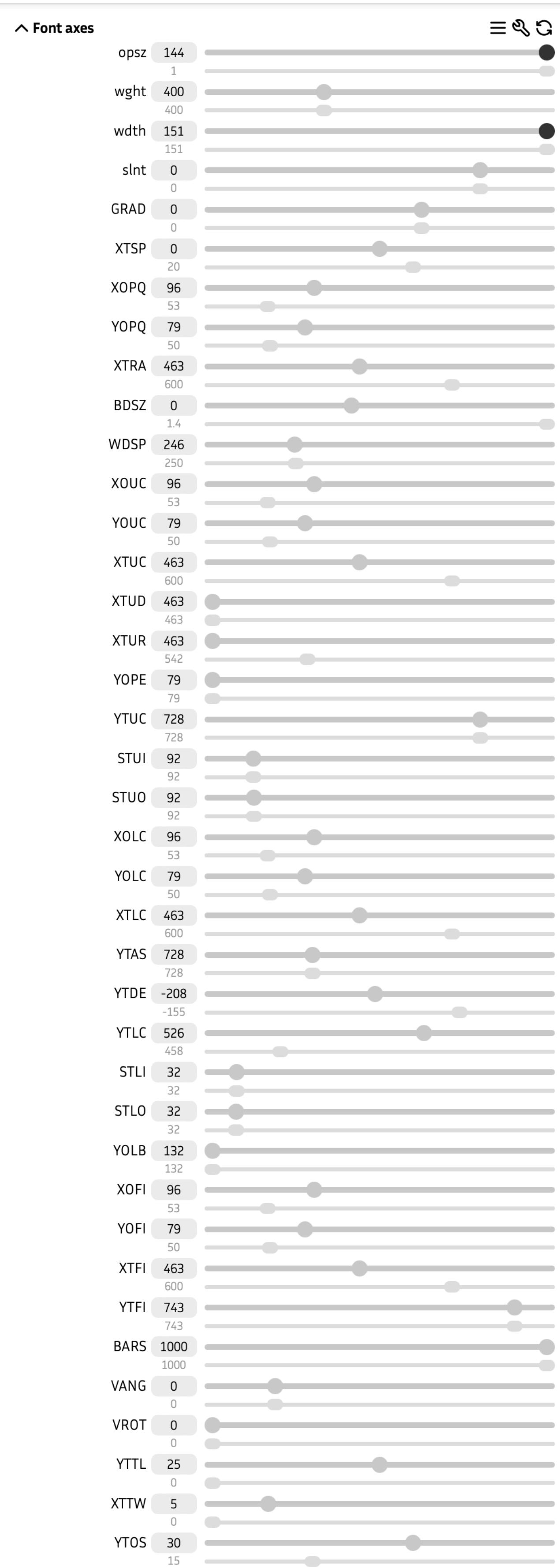
Blended Location, 144-25-1000



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' 0 * + , - . ! : ; < > ? @ [] ^ _ { } -

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' 0 * + , - . ! : ; < > ? @ [] ^ _ { } -

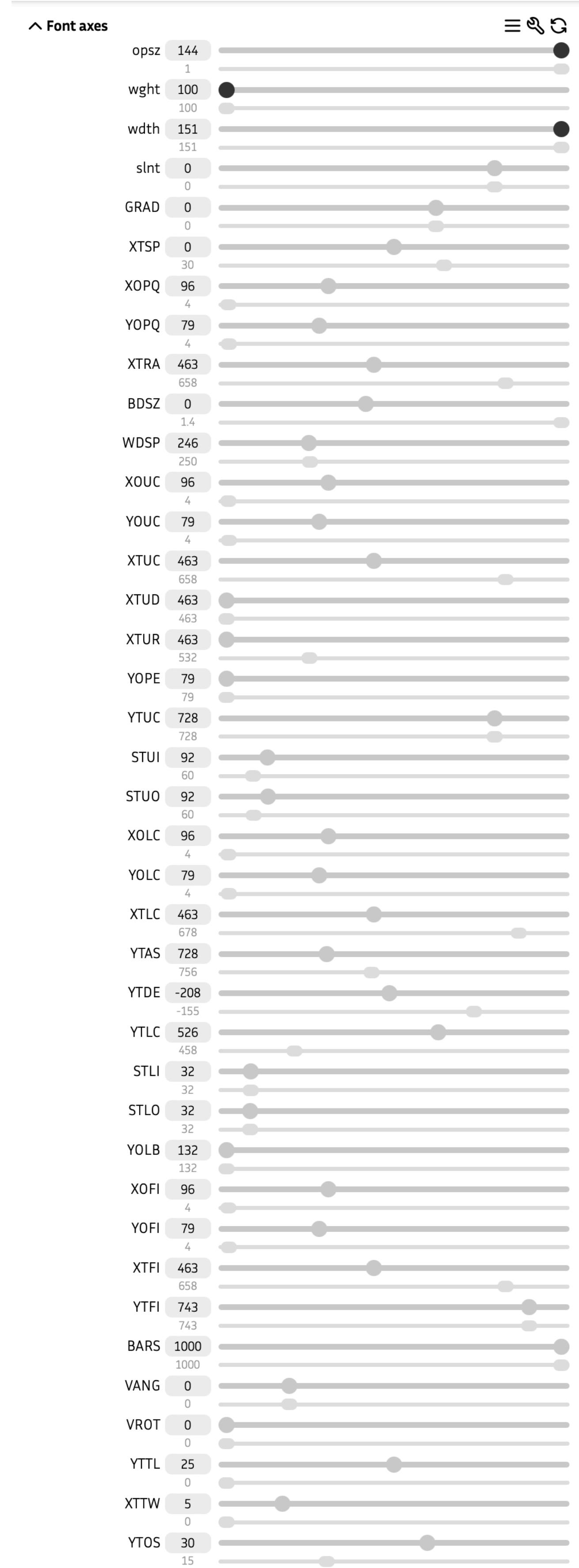
Blended Location, 144-151-400



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~

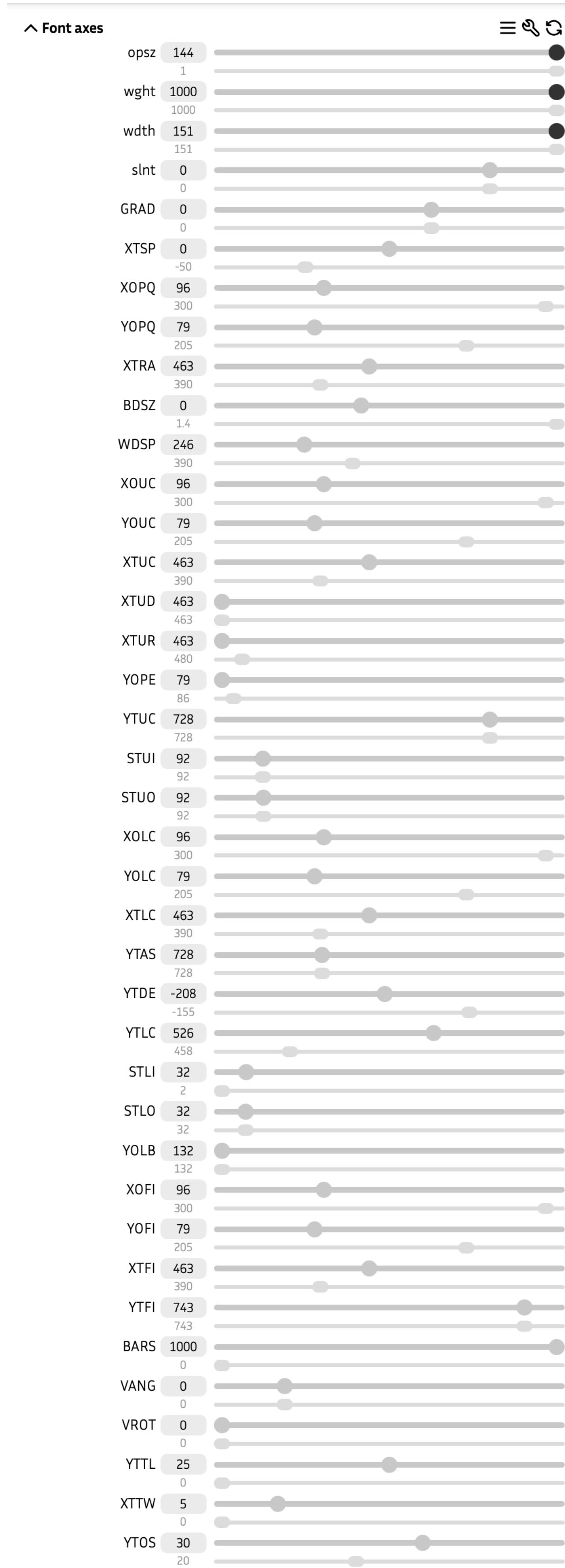
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~

Blended Location, 144-151-100



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - / ; < = > ? @ [\] ^ _ ` { | } ~

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' () * + , - / ; < = > ? @ [\] ^ _ ` { | } ~



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' 0 * + , - . / : ; < > ? @ [\] ^ _ ` { } ~

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # \$ % & ' 0 * + , - . / : ; < > ? @ [\] ^ _ ` { } ~