Wrong towlower() result for U+038A

How to reproduce: Run this program.
Expected output:

```
wcl uppercased = 0x038A, wc2 uppercased = 0x038A
wcl lowercased = 0x03AF, wc2 lowercased = 0x03AF
```

Actual output:

```
wcl uppercased = 0x038A, wc2 uppercased = 0x038A
wcl lowercased = 0x03AF, wc2 lowercased = 0x03B0
```

#include <locale.h>
#include <stdio.h>
#include <wchar.h>
#include <wctype.h>

int main ()
{
    if (setlocale (LC_ALL, "fr_FR.UTF-8") == NULL)
        return 1;
    wchar_t wc1 = 0x03AF; /* GREEK SMALL LETTER IOTA WITH TONOS */
    wchar_t wc2 = 0x038A; /* GREEK CAPITAL LETTER IOTA WITH TONOS */
    printf ("wcl uppercased = 0x%04X, wc2 uppercased = 0x%04X\n", towupper (wc1), towupper (wc2));
    if (towupper (wc1) != towupper (wc2))
        return 2;
    printf ("wcl lowercased = 0x%04X, wc2 lowercased = 0x%04X\n", towlower (wc1), towlower (wc2));
    if (towlower (wc1) != towlower (wc2))
        return 3;
}

History

#1 - 06/15/2021 11:15 AM - swildner
An upgrade of our locale data to newer CLDR data will fix this issue. Your sample program gives the expected output here locally.
It will take me a bit to clean up what I have. Stay tuned.

#2 - 07/10/2021 03:34 AM - tuxillo
- Target version set to 6.2