Defect in Compatibility Mappings
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May 2, 2002

The Unicode Standard contains several compatibility mappings for integral signs.
U+222F maps to U+222E, U+222E:
U+2230 maps to U+222E, U+222E, U+222E

U+222F ∯ is a surface integral and U+2230 ∰ is a volume integral. If you choose appropriate coordinate systems, e.g., polar and spherical coordinates, respectively, you can write these integrals in terms of single integrals, for example:

$$\oiint dS \rightarrow \iint r\,d\theta\,dr.$$

Note the fact that in rewriting the integral, the integrand must change from dS to $r\,d\theta\,dr$ at the same time.

Being able to rewrite the integral does not mean that the *character* U+222F ∯ maps to the sequence of characters U+222B ∫, U+222B ∫, since the integrand must change from dS to $r\,d\theta\,dr$ at the same time.

The *character* U+222F ∯ certainly never maps to the sequence U+222E ∮, U+222E ∮.

U+222E ∮ is a contour integral along some path, combinations of which are not normally used to calculate surface and volume integrals. A product of two such integrals does have dimensions of area, but applying a decomposition is clearly wrong.

Decompositions of other characters, such as U+222D TRIPLE INTEGRAL ∭ into a sequence of three integrals ∫∫∫ is a different matter, merely affecting the layout of the symbol. That compatibility decomposition is therefore acceptable, but extending it by analogy to surface and volume integrals has been a clear mistake.