The goals of this paper are twofold: first, it is to identify exceptional cases in the representation of vowel quantity based on the Late Common Slavic accentual paradigms in Czech literary language. Stang (1957) claimed that in Czech, acute and neo-acute in disyllabic nouns are represented with a long vowel on the first syllable, while circumflex is represented with a short vowel. However, exceptional cases are often found like *kniha* ‘book’ (old acute) and *hvězda* ‘star’ (neo-acute) where the first syllable is short. Thus, it has been discussed that Czech quantitative differences may not be explained directly from LCS accent patterns. Given that background, the second goal of the paper is to find the exceptions in the Czech dialects and to see if we can find any evidence to show the first syllable of old-acute reflexes was originally long. The study shows that the western dialects (Bohemian, Hanak and Moravian-Slovak) preserve a vowel quantity whereas the eastern dialects lost it. Moreover, the southwestern part of Bohemian dialect mostly preserves the original length: most of the old-acute reflexes remain long. This means LCS tonal distinctions were originally reflected in Czech quantity, and then the acute reflexes might become short in a later period in the Czech literary language.