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3D Remote Sensing Images Parallax Refining Based On HTML5

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Abstract : Horizontal parallax is the foundation of stereoscopic viewing. However, the human eye will feel uncomfortable and it will occur diplopia if horizontal parallax is larger than eye separation. Therefore, we need to do parallax refining before conducting stereoscopic observation. Although some scholars have been devoted to online remote sensing refining, the main work of image refining is completed on the server side. There will be a significant delay when multiple users access the server at the same time. The emergence of HTML5 technology in recent years makes it possible to develop rich browser web application. Authors complete the image parallax refining on the browser side based on HTML5, while server side only need to transfer image data and parallax file to browser side according to the browser's request. In this way, we can greatly reduce the server CPU load and allow a large number of users to access server in parallel and respond the user's request quickly.

Keywords : 3D remote sensing images, parallax, online refining, rich browser web application, HTML5
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