

with the giant-screen "Fulldome Video" format, thanks to its high resolution and a fisheye lens. The other one uses special optics from Carl Zeiss Jena GmbH for the first time, a development of which also incorporated GEOMAR specifications. This lens is specifically designed for use at extreme depths in direct contact with seawater, and takes into account all the effects of pressure and light refraction. "With this innovation, we have moved into a quality range that is comparable to professional photography on land. In addition, we can use software for image processing that is intended for photo-based surveying on land," says Dr. Kwasnitschka. "Basically, we are dealing with an aerial camera for the deep sea." The LED flash system has also been further improved for proper illumination.

After initial tests with the Remotely Operated Vehicle (ROV) ROV PHOCA, the devices are now in operational use. Since the LIGHTHOUSE project not only produced (e)-11()5(L)-11tiodu´