



Inverted Channels in Colorful Kasimov Crater

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The image shows a bluish ridge that runs from bottom center to upper left. The ridge is joined by smaller one in the middle of the image like small tributary rivers join together with larger ones on Earth. Indeed, this is exactly what happened here on Mars billions of years ago. These ridges are called “inverted channels” and mark the locations of ancient Martian river beds (in this case the river flowed towards the upper left of the image). They form because the bottoms of these rivers tend to be full of gravel-sized rocks, whereas the area around the river is made of fine clays. Long after the river stops flowing the wind slowly removes the clays, but can’t blow away the gravel. After all the clays are gone, the old river bed gets left as a high-standing gravel ridge such as visible here.