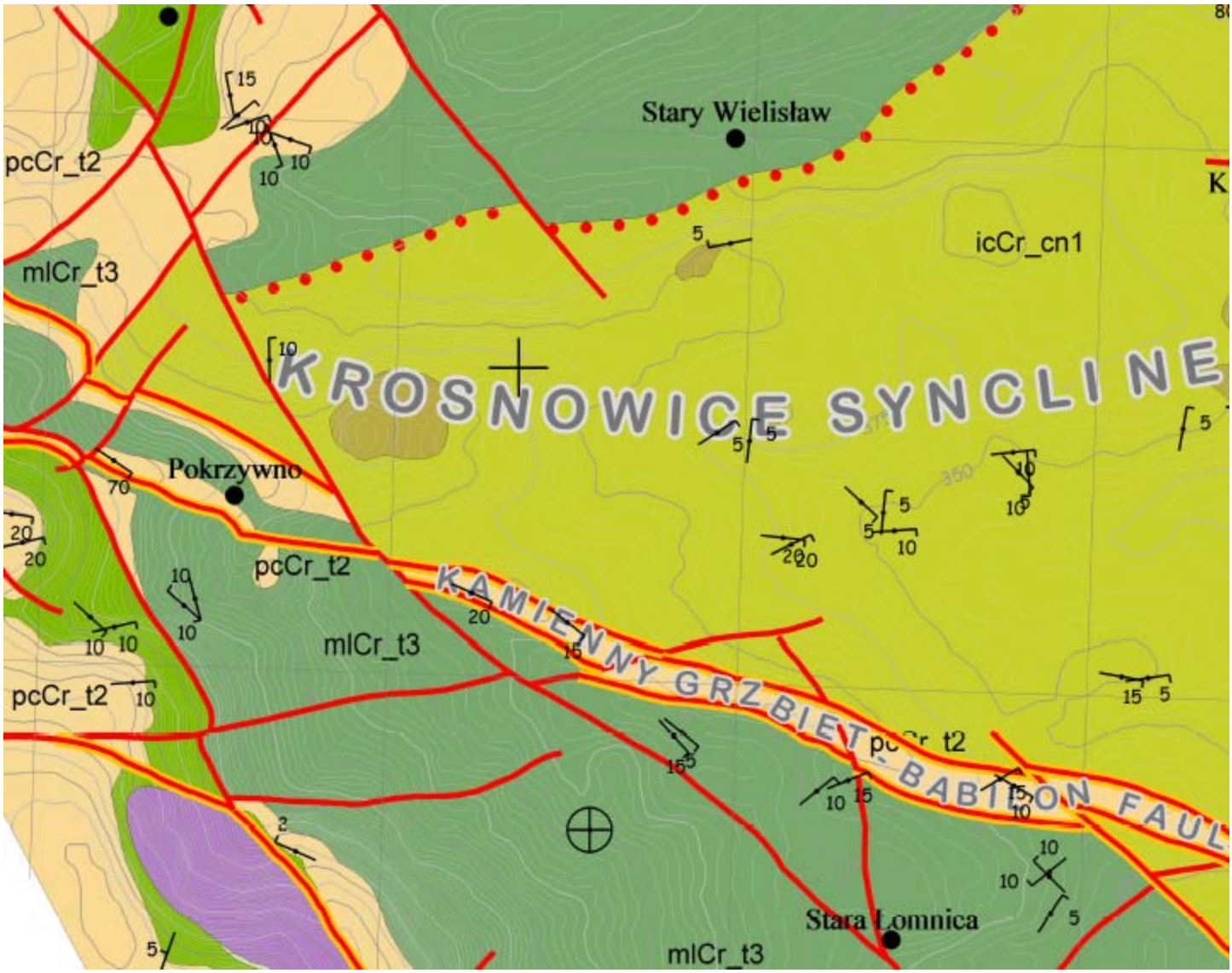
Complex Geologic Map Created in TNTmips

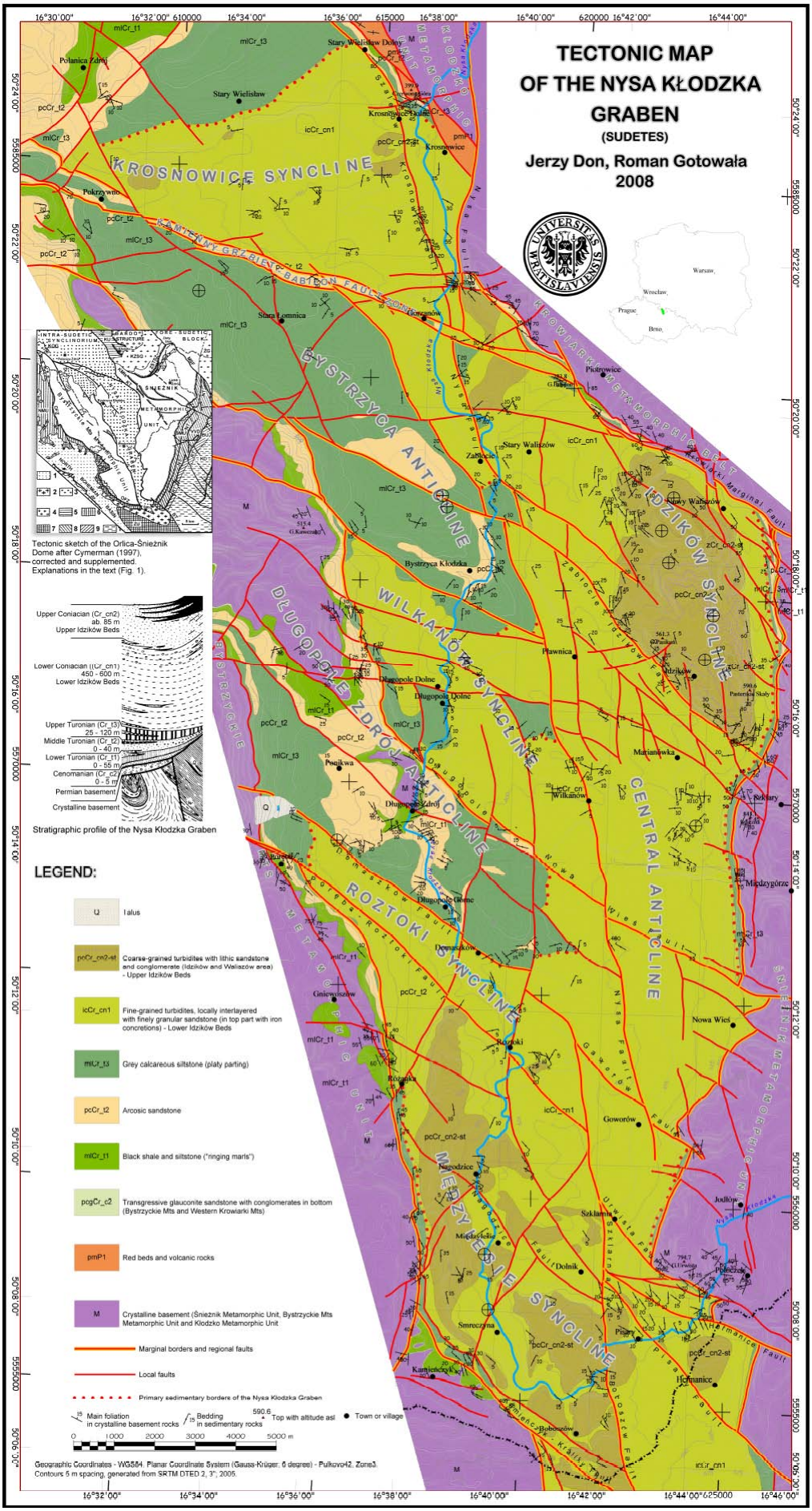
Geologists Jerzy Don and Roman Gotowala of the Institute of Geological Sciences, Wroclaw University, Poland, have used TNTmips to create a complex, large-format geologic map of an area in southern Poland and the Czech Republic. Entitled *Tectonic Map of the Nysa Klodzka Graben (Sudetes)*, the hardcopy version of the map is 15.75 by 29.4 inches (40 by 75.6 centimeters) in size and covers an area of about 450 square kilometers at a scale of 1:50,000. This colorful map (excerpted at full scale below) portrays the distribution of 9 rock units, major faults and tectonic boundaries, and local structural measurements. The map makes use of many of the cartographic capabilities available in TNTmips map layouts: solid and patterned polygon fills, varied line styles, a complex legend, text annotations, a scale bar, and several map grids. Each of the numerous geologic strike/dip point symbols is rendered with the proper orientation and label using a CartoScript that reads the required values from the associated point database. Topographic contours with a 5 meter contour interval were generated from SRTM DTED 2 using the TNTmips Surface Modeling process.



Full scale portion of the *Tectonic Map of the Nysa Klodzka Graben (Sudetes)* by Jerzy Don and Roman Gotowala.

This tectonic map was created to accompany an article by these authors entitled *Tectonic evolution of the late Cretaceous Nysa Klodzka Graben, Sudetes, SW Poland* in the journal Geologia Sudetica, volume 40, 2008, pages 51-63. A PDF file including the article and the full-size map can be downloaded free at http://www.ing.pan.pl/sudewww/tom040.html. A reduced-size version of the entire map is shown on the reverse of this page.

(over)


TECTONIC MAP
OF THE NYSA KŁODZKA
GRABEN
(SUDETES)
Jerzy Don, Roman Gotowała
2008
KROSNOWICE SYNCLINE
BYSTRZYCA ANTICLINE
WILKANÓW SYNCLINE
DŁUGOPOLE ZDRÓJ ANTICLINE
ROZTOKI SYNCLINE
CENTRAL ANTICLINE
IDZIKÓW SYNCLINE
MIĘDZYLESIE SYNCLINE
Tectonic sketch of the Orlica-Śnieżnik Dome after Cymerman (1997), corrected and supplemented. Explanations in the text (Fig. 1).
Stratigraphic profile of the Nysa Kłodzka Graben
LEGEND:
Talus
Coarse-grained turbidites with lithic sandstone and conglomerate (Idzików and Wellaszów area) - Upper Idzików Beds
Fine-grained turbidites, locally interlayered with finely granular sandstone (in top part with iron concretions) - Lower Idzików Beds
Grey calcareous siltstone (platy parting)
Arcosic sandstone
Black shale and siltstone ("ringing marls")
Transgressive glauconite sandstone with conglomerates in bottom (Bystrzyckie Mts and Western Krowiarki Mts)
Red beds and volcanic rocks
Crystalline basement (Śnieżnik Metamorphic Unit, Bystrzyckie Mts Metamorphic Unit and Klodzko Metamorphic Unit
Marginal borders and regional faults
Local faults
Primary sedimentary borders of the Nysa Kłodzka Graben
Main foliation in crystalline basement rocks
Bedding in sedimentary rocks
Top with altitude asl
Town or village
Geographic Coordinates - WGS84. Planar Coordinate System (Gauss-Krüger, 6 degree) - Pulkovo42, Zone3.
Contours 5 m spacing, generated from SRTM DTED 2, 3", 2005.