

LONGITUDINAL SECTION KALI PROGO

SCALE Hor. 1 : 750.000
Vert. 1 : 7.500

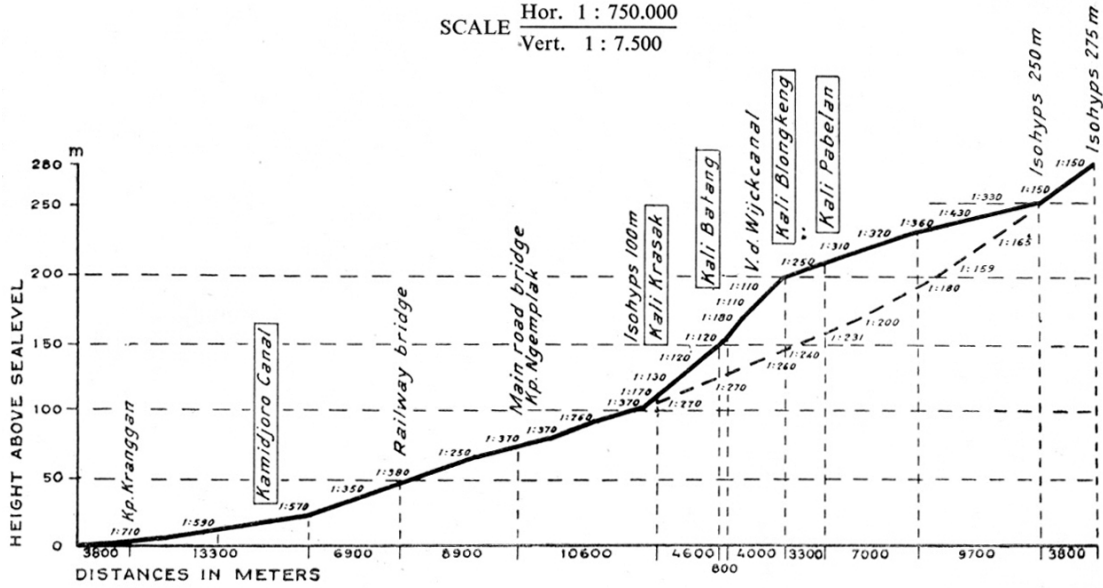


FIG. 273. Differences in the levels of the Progo River. (From SCHMIDT, 1934, fig. 62 on p. 158)

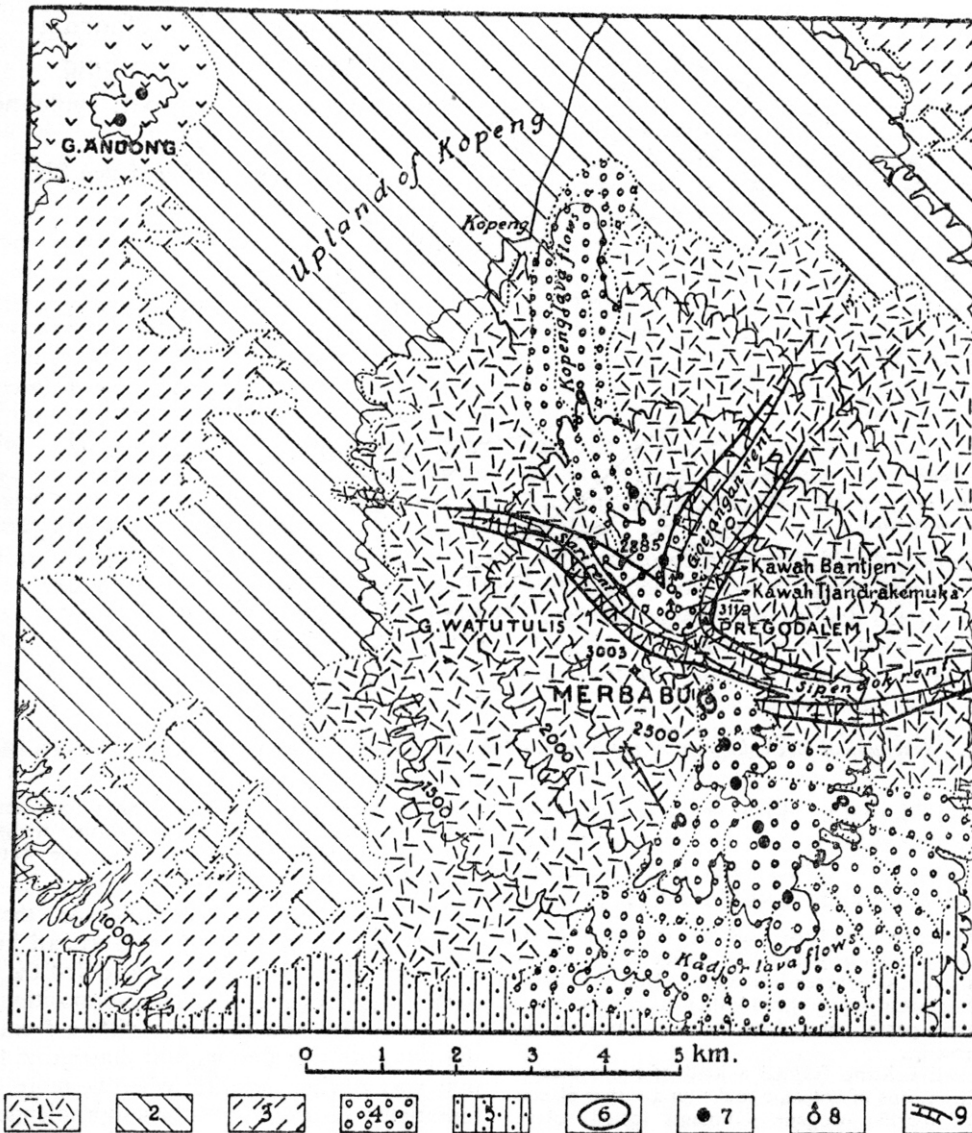


FIG. 274. Geological sketchmap of the Merbabu. (From VAN BEMMELEN, 1943, fig. 13, p. 65)

1. Merbabu Cone (mainly basalto-andesitic lavas and breccias).
2. Highlands of Kopeng, covered by volcanic ashes.
3. Foot of the Merbabu Cone (chiefly lahar-breccias and subordinately intercalated lava flows).
4. Youngest lava flows of the Merbabu, with the centres of eruption arranged along a NNW-SSE line, forming part of the major transverse zone of volcanic activity from Ungaran to Merapi. The Kopeng lava descended northward and the Kadjor lavas flowed southward.
5. Northern foot of the Merapi volcano, covered by Merapi ashes (Selo pass, between the Merbabu and the Merapi).
6. and 7. Centres of eruption of the Kopeng and Kadjor lava flows, and of the small Andong volcano (NW of the Merbabu).
8. Mofettes and very weak exhalations of sulphuretted hydrogen on the summit (Kawah Bantjen, and Kawah Tjondrokemuko).
9. Volcano-tectonic rents or sector graben; presumably caused by a final doming up of the Merbabu Cone, when the central vent was definitely clogged by a lava plug and the magma, pressing upward, could not reach the surface anymore.

The structure of the **Merbabu volcano** has already been treated as an example of radial sector-graben in the chapter on volcanology (See fig. 274).

This older Merbabu structure shows a NNW-SSE rift across the top. From this rift the young lava-flows of Kopeng issued to the North and the Kadjor lava flows to the South. The present Merbabu cone is younger than the Soropati, North of it, and of about the same age as the older Merapi to the South, which is at least partly Holocene. Possibly a still older Merbabu structure of Notopuro age (younger Pleistocene) is completely buried under the present cone.

The **Soropati-Telemojo volcanic complex**. The Soropati is another volcanic ruin situated on the major transverse fault of the Ungaran-Merapi row of volcanoes. This interesting volcanic complex has been described by the author in his papers of 1941 d (p. 103-109) and 1943 (p. 75-78).

Its southern part is buried under the young Tele-mojo cone and the North foot of the Merbabu volcano. (See fig. 275.)

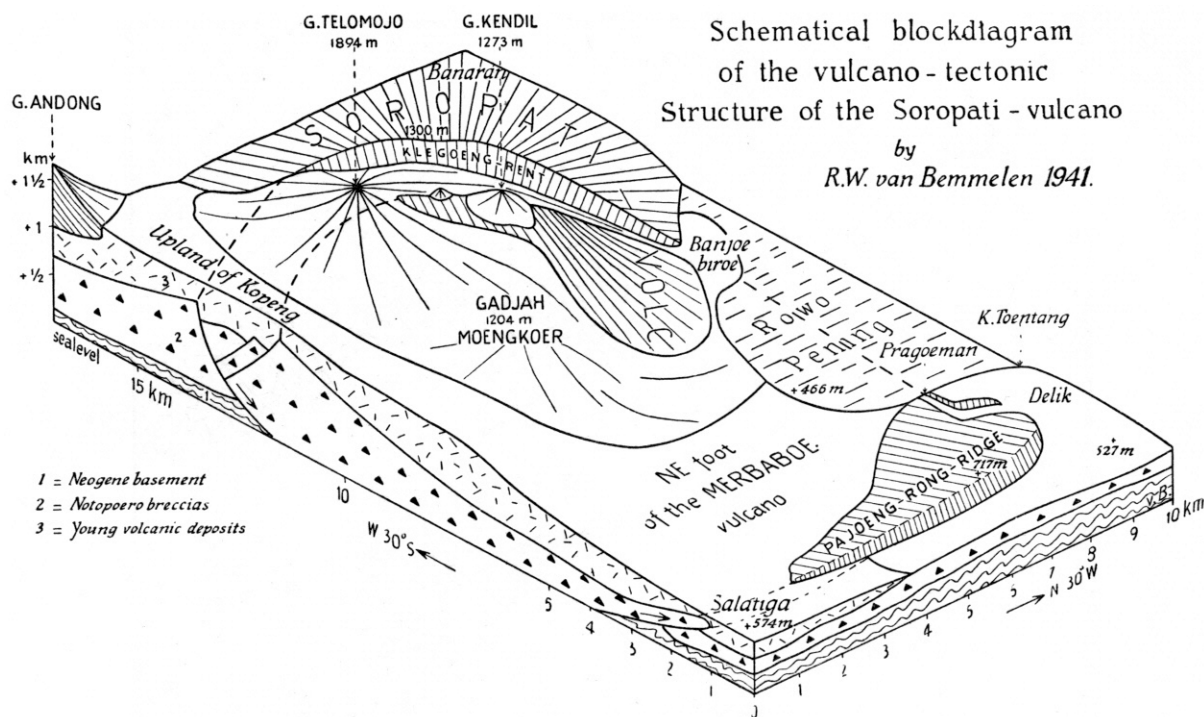


FIG. 275. Schematical block diagram of the Soropati-Telemojo Complex. (From VAN BEMMELEN, 1943, fig. 18)

To the North the eruption products of the Soropati have mixed with those of the Old Ungaran, forming in combination the Notopuro breccias.

The exposed part of the Soropati cone is rifted by a very conspicuous sector-graben, called the Klegung rent, which has a U-shaped cross-section and a crescentic course. The southern extension of this rent is masked by the young Telemojo cone.

For an understanding of the volcano-tectonic significance of the Klegung rent it is necessary to make a closer study of the Pajung-Rong ridge near Salatiga at the East foot of the Soropati, situated at a distance of about 10 km from the summit.

It appears that there the Notopuro breccias belonging to the East foot of the Soropati have been thrust over the horizontal or only slightly warped Notopuro breccias of the foreland. This overthrust of the Pajung-Rong ridge took place at the end of the Pleistocene while at the same time the Soropati