POMPEI COCEAN¹, WILFRIED SCHREIBER², GABRIELA COCEAN³

ABSTRACT – The Someş Plateau, situated in the North - North-Western part of the Transylvanian Depression, represents one of the most controversial geographical units as its extension and subunits are concerned. The causes of this aspect are contained in the lithological, morphological, and structural-tectonic differences present in the northern part of the Transylvanian tectonic basin, as well as in the orientation of the spatial interrelation vectors and of their gravitation towards corridors, axes, or polarizing centres, defining for a functional territorial system. The critical analysis of the predecessors' opinions leads us towards the individualization of the morphologic nucleus of the Someş Plateau, consisting of the Cluj and Dej Hills, as well as the Şimişna Hills, in the arc of the circle shaped by the corridors of the Nadãş (Căpuş) – Someşul Mic – Someş rivers, to which a trans-Someş compartment is attached, made of the Purcăreţ-Boiu Mare Plateau and the Sălătruc Hills. All these subunits gravitate, naturally and anthropically, towards the above-mentioned river corridor, forming a systemic type functional unit.

Keywords: functional territorial system, regional identity, the Someş Plateau.

There are a significant number of position takings in the geographic literature with respect to the Someş Plateau. However, their absolute majority limit to defining it as component of the central unit of the Transylvanian Depression, that is of the great tectonic basin outlined in the middle part of the Carpathian range during the Neozoic. Within this basin, it occupies the northern sector, while the Transylvanian Plain and the Târnave Plateau overlie the other two units situated southwards.

When surveying the opinions expressed on the Someş Plateau, on its formation as a territorial unit, one may remark their considerable diversity. Leaving aside the natural temptation, any researcher may encounter, to impose a personal viewpoint, as original as possible, an extremely nuanced range of opinions on the subject may be identified, which is obviously still maintaining it under discussion. They refer especially to the north-eastern border of the plateau, but also of its component subunits, and their inventory, even partial, is considered useful for our approach.

The analyzed unit is found mentioned under the name of the *Someş Platform* in Vintilă Mihăilescu's studies (1934, 1936, 1937), resumed in some subsequent syntheses, where its outline is relatively equivocal (including also some areas situated outside the Intra-Carpathian Yoke, therefore outside the Transylvanian Depression). An incipient opinion which, after the observations and the researches in the region began to intensify, was not shared anymore, the units outside the Intra-Carpathian Yoke being associated to other major relief units (the Western Hills).

The toponym of *Someş Plateau* is found entirely decreed in Alexandru Savu's papers, firstly in his PhD thesis, where it appears with a more visible insistence, justified in fact, aiming obviously at its generalization and permanentization, a fact emphasized by its vehiculation in subsequent syntheses

¹ Professor, Ph.D., Babeş-Bolyai University, Faculty of Geography, no. 5-7, Clinicilor Street, 400006, Cluj Napoca. Romanian Academy - Cluj Branch, Department of Geography, no. 9, Republicii Street, Cluj Napoca, Romania. E-mail: pompei@geografie.ubbcluj.ro

² Associate Professor, Ph.D., Babeş-Bolyai University, Faculty of Geography, no. 5-7, Clinicilor Street, 400006, Cluj Napoca. Romanian Academy - Cluj Branch, Department of Geography, no. 9, Republicii Street, Cluj Napoca, Romania. E-mail: wilfried@staff.ubbcluj.ro

³ Assistant Researcher, Ph.D. Candidate, Babeş-Bolyai University, Faculty of Geography, no. 5-7, Clinicilor Street, 400006, Cluj Napoca. Romanian Academy - Cluj Branch, Department of Geography, no. 9, Republicii Street, Cluj Napoca, Romania. E-mail: ela_cocean@yahoo.com

POMPEI COCEAN, WILFRIED SCHREIBER, GABRIELA COCEAN

on the Subcarpathians or on the marginal depressions, such as the paper belonging to Prof. Victor Tufescu (1966).

Therefore, the PhD thesis of Prof. Alexandru Savu from Cluj-Napoca, entitled *Podişul Someşan – studiu geomorfologic* [The Someş Plateau – Geomorphological Study], represents a pioneer's work among the numerous attempts to approach in detail the issue of this unit. The thesis, presented publicly in 1963, remained unpublished unfortunately and therefore inaccessible for the wide public. However, we owe this author some of the most authorized opinions regarding the extension and the spatial delimitation of the plateau, as well as the dominant morphological characters.

The author initially established the position of the unit north of the Someşul Mic Corridor and, partially, of the Someşul Mare. According to his opinion, the unit expands eastwards, up to the Sălăuţa Valley. Therefore, the plateau encloses, eastwards and westwards, the entire Someş corridor between Dej and Jibou, having firm limits southwards – two corridors of major valleys – and making the connection with the mountainous areas from the north and north-west through depressions of morphological contact (Lăpuş, Almaş-Agrij). The Breaza Ridge and the Lăpuş Depression do not integrate into the plateau because of some peculiar genetic, evolutional and morphologic features. The fact that the delimitation operation has not been easy at all determines the same author to subsequently reconsider his position, enlarging the limits of the plateau, on all the facades, by including the Huedin, the Almaş-Agrij and the Lăpuş marginal depressions; the Năsăud Hills, the Ciceu Hills (with the Breaza Ridge), the Feleac Hill, inclusively, situated, as known, south of the Someşul Mic Corridor (Geografia României, vol. III., 1987).

For Alexandru Ungureanu (1993), the Someş Plateau represents a major relief unit situated north of the two Someş rivers, which combines in an "appropriate" manner the attributes of a classical plateau. He argues against the idea of attaching it to a *Someş platform* with an outer and an inner border (having practically as axis of reference the Meseş Ridge and the alignment of the crystalline horsts of the Intra-Carpathian Yoke), localizing it strictly in the interior of the Transylvanian Depression. As the extension and the component subunits are concerned, the plateau includes the Cluj and Dej Hills, the Almaş-Agrij Depression, the Şimişna-Gârbou Hills, the Boiu-Gâlgău Plateau, the Breaza Ridge, the Ciceu Hills, the Suplai Hills and the Năsăud Hills (their extension to the left side of the Someşul Mare, south of Năsăud, must be remarked !). The plateau also includes two structural plateaus carved in Eocene limestone, Păniceni-Dumbrava and Boiu-Gâlgău (Boiu Plateau, Purcăreț-Boiu Mare-Jugăstreni Plateau; Purcăreț-Boiu Mare Plateau according to other authors).

Grigor P. Pop (2001), in a study with clear, integrated regional content, on the entire Transylvanian Depression, certifies the extension of the plateau also east of the Sălăuta Valley Corridor. In fact, through comparative analysis, the extension of the unit approaches the one proposed previously by Al. Ungureanu, excepting the exclusion of the Almas-Agrij Depression from its structure (considered as belonging to the marginal unit of the Transylvanian Depression) and of the sector of the Năsăud Hills situated left of the Somesul Mare. However, he identifies a new subunit he names the Someşul Mare Hills, divided in its turn into the Ciceu Hills, the Suplai Hills and the Năsăud Hills, Thus, the limit of the plateau is pushed eastwards, up to the confluence of the Cormaia Valley with the upper sector of the Someşul Mare, including practically all the southern ramifications of the Tibles and the Rodna mountain ranges. South-westwards, the plateau preserves the limit established along the Căpus Valley. The author's arguments are numerous and take into consideration the structural, morphological, hydrographical, climatic, biopedogeographical, but also geographicalhistorical aspects (the function of northern limes for the Roman Dacia, as well as of western penetration corridor for the Hungarians, through the "Somes Gate"). For the above-mentioned author, the pedantry of regionalizing the Somes Plateau in a series of subunits must be remarked, some of them clearly spatially individualized: the marginal corridors of the three rivers, the Somesul Mic, the Somesul Mare and the Somes, which flank subunits such as the Cluj and Dej Hills, the Simisna-Surduc Hills, the Purcăret-Boiu Mare Plateau, the Breaza Ridge and the Sălătruc Hills, Somesul Mare

The author brings into discussion, aiming at enriching the same argumentative arsenal, the notion of *plateau*, omitting, however, in our opinion, its most important significance: flattened surface,

with altitudes prevalently connected to certain elevations imposed by lithology, tectonics, evolutional stages, modeling system, etc. Hence, the inclusion in its parameters of some units such as the Breaza Ridge or the Năsăud Hills, that discord, both in altimetry and in landscape, with the surrounding areas. In fact, as far as the sine qua non peculiarities of the plateaus are concerned, we consider as inspired the ones outlined by M. Ielenicz and I. Săndulache (2008): an area with flat, extended, structurally or morphogenetically determined interfluves; major amplitude, of more than 100 m; low or moderate fragmentation (the area of interfluves exceeds the one of valley corridors), the concentration of settlements on terraces or glacises, etc.

Subsequently, although the number of references from different branches of Geography has sensitively increased, a single thorough study has integrally focused its thematic towards emphasizing the demographical and habitational peculiarities of this compartment, namely the one belonging to Aurel Maier (2001), entitled *Podişul Someşan*, *populația și așezările* [The Someș Plateau, Population and Settlements].

Centered directly and in detail on a defining issue of the Someş Plateau, the one of population and settlements, the paper elaborated and published by Aurel Maier points out, in a succinct but consistent survey on "natural limits and subunits", a more spatially-restricted matrix of the unit. The author excludes, with pertinent arguments, both from a morphostructural and a morphometrical perspective, the Ciceu Hills, the Breaza Ridge and the Suplai Hills (present in the papers of other authors) from the structure of the plateau, establishing the eastern limit on the interfluve between the Sălătruc Valley and the Valea Mare. In exchange, he integrates between its limits the Almaş-Agrij Depression, together with the Nadăş, Cluj and Dej Hills, Şimişna-Gârbou and Purcăreţ-Măgura (the latter replacing the Purcăreţ-Boiu Mare Plateau, found in other authors' works and limited only to the plateau formed mainly on calcareous substratum).

M. Ielenicz and Ileana Pătru (2005) have localized the Someş Plateau in the north-western part of the Transylvanian Depression, including the Boiu Plateau, the Cluj Hills, the Dej Hills and the Ciceu Hills, as well as the corridors of the three Someş rivers (the one of the Someşul Mare only downstream Beclean, which supposes an eastern limit of the plateau on the Ilişua Valley). The Breaza Ridge is attached to the *Lăpuş Subcarpathians*, together with the homonym depression, while the *Năsăud Hills* represent an independent peri-Transylvanian entity.

Finally, the selective introspection of the position takings regarding the Someş Plateau is concluded with mentioning the study elaborated by L. Badea and coll. (2006), where this geographical unit is reconfigured as the Prisnel Ridge, the Ciceu Hills and the Almaş-Agrij Depression are also attached. Moreover, the same authors integrate into the south-western part of the plateau a distinct subdivision, the Huedin Plateau, consisting of the Căpuş Hills, the Păniceni Plateau and the Huedin Depression.

Starting from the heritage of geographical references accumulated so far, mostly of geomorphological nature, and taking into consideration the new desiderata for defining the regional identity of the unit, the morphological criterion being insufficient for delimiting a functional system region, we open the discussion on the Someş Plateau starting, as a matter of course, from its individualization as distinct spatial entity.

From the analysis of the main position takings regarding the Someş Plateau, we distinguish the following more important aspects:

- the extremely nuanced range of authors' viewpoints concerning its territorial extension (from the *Someş platform*, stretched even west of the Meseş Ridge, in Vintilă Mihăilescu's opinion, to a more restricted area in Aurel Maier's work);
- the diversity of opinions regarding its limits (with the inclusion or exclusion from its perimeter of the Almaş-Agrij Depression, the Breaza Ridge, the Năsăud, the Ciceu or the Someşul Mare Hills):
- the mosaic of opinions regarding the subunits of the plateau and the attributed toponyms (see the "bazaar" of names attributed to the Purcăreţ-Boiu Mare Plateau or to the Şimişna-Surduc Hills):

POMPEI COCEAN, WILFRIED SCHREIBER, GABRIELA COCEAN

- the predomination of morphological criteria in its regionalization (the insistency upon the presence of the monoclinal structural relief);
- the evasive taking into consideration of the altimetric criterion, which made possible the inclusion into the same unit of some areas with a notable altitudinal difference (more than 300 m). We believe that for a relief from, in whose defining the attribute of flatness is invoked as a fundamental peculiarity, this criterion was required, all the more as it is not the case of some residual massifs or of some suspended horsts in a flattened surface;
- in the delimitation based on multiple criteria, of regional type, present at Alexandru Ungureanu (1993) and Grigor P. Pop (2001), the fluency of the mass and energy-carrying vectors in the territorial system, as well as the spatial polarization towards the same gravitational centers or axes, was not taken into consideration.

On the other side, an introspective look upon the geographical space in the northern Transylvanian Depression, beyond the somehow subjective aspects induced by the imperious necessity of defining and including it into a rigorous and unanimously-accepted structure, leads us to a series of observations which must be decanted before any other attempt of regionalization proper. Such aspects are the following:

- the lithological mosaic, found in no other part of the Transylvanian Depression (from the volcanic rocks of the Ciceu Ridge, to the Dej tuff, the Eocene limestone in the Purcăreț-Boiu Mare or Păniceni-Dumbrava plateaus, the conglomerates of the Breaza Ridge or the sandstones, marls and clays preponderant in the other subunits), which indicate a convulsive geological evolution that is not at all synchronous and uniform on the entire northern border of the Transylvanian basin;
- the structural and tectonic differences registered in the disposition of different formations, from the horizontal and pseudo-horizontal strata of the Eocene limestone to the monoclines in the western part, and the waved, folded structures in the Suplai and the Năsăud Hills, respectively, which reflects different evolutional conditions and factors from one compartment to another;
- the significant altimetric amplitude reported also to the spatial, yet reduced, extension of the unit of more than 300 m, between the Cluj and Dej Hills and the Someşul Mare Hills, whose explanation leads to the invocation of some tectonic and evolutional differences between the two above-mentioned territories;
- its deep sawing by the Someş Corridor, a major geographical discontinuity, synonymous to a threshold which pregnantly individualizes, westward and eastward, two distinct units: the one of the Cluj and Dej Hills, delimited by the Someşul Mic in the south and the Someş River in the east, and the one of the Someşul Mare Hills, bordered by the Someşul Mare in the south and the Someş in the west;
- as it is spatially defined at present, the Someş Plateau does not represent a functional geographic unit, the major gravitation axes, that of the Someşul Mic and the one of the Someşul Mare, being independent, and the interrelation between the extreme units (e.g. the Năsăud Hills with the Şimişna-Surduc Hills) being inexistent;
- applying the mental space regionalization criterion, one can easily observe the association of some different mental structures, the one of the Năsăud Land, well-consolidated, in the Năsăud Hills and the Suplai Hills, a mental space of interference, namely Năsăud-Lăpuş-Chioar, in the Ciceu Hills and the area of the Breaza Ridge, as well as a mental space without a sure symbolic individualization, but homogenous in its structure, in the Cluj and Dej Hills.

Comparing the extremely nuanced range of opinions regarding the extension and the subdivisions of the Someş Plateau, with the inadvertences ascertained in case of seizing it as an integrated territorial system, the analysis leads towards a reevaluation of its spatial defining, of its limits and compartments which compose it.

Thus, the unit will firstly comprise the *Cluj and Dej Hills*, delineated south of the *Someşul Mic Corridor* and east of the *Someş Corridor*.

The three units represent, for all the authors, without exception, a common denominator that we can consider, without denial, the nucleus of the plateau proper.

The appurtenance of the *Purcăreț-Boiu Mare Plateau* to the Someş Plateau is also unquestionable (in Romanian, we propose the topic of "*platou*" instead of "*podiş*", for the following reasons: 1. to eliminate the possible confusion generated by the integration into the same unit of two different taxons but bearing the same name; 2. karst modeling has generated a flattened surface of high uniformity), the absolute majority of geographers conferring it the attribute of component part of the analyzed unit.

Another subunit which does not raise questions regarding its appurtenance to the plateau is the one situated north of the Cluj and Dej Hills. Named differently depending on author (the Şimişna Hills, the Gârbou Hills, the Şimişna-Gârbou Hills, the Bobâlna Hills, the Şimişna-Surduc Hills), it differentiates from the southern compartment through higher altitudes and stronger fragmentation. A closer look to the peculiarities of the relief invariably leads to noticing some evident altimetric and morphologic similitudes to the subunit situated on the opposite hillside of the Someş, named the Sălătruc Hills by Grigor P. Pop and extended eastwards up to the watershed between the Sălătruc Valley and the Valea Mare. We consider that the two subunits represent a unitary morphologic and landscape structure divided by the Someş Valley through deepening. We name this subdivision of the Someş Plateau *Şimişna-Sălătruc Hills*, after the two reference settlements they shelter. A more clear connection of the two units imposes a slight southward deviation of the limit of the Şimişna Hills, on the interfluve between the Vad and the Olpret valleys, which, from a morphological point of view, does not raise problems of genetic or morphographic dissonance.

In this context, the Breaza Ridge, situated north of the hilly compartment of the Sălătruc, cannot be attached to the plateau, remaining an outlier of an upstanding syncline at the interface of three distinct morphological units: the Lăpuş Depression in the north, the Someş Plateau in the south and west, and the Someşul Mare Hills in the east.

Neither the Almaş-Agrij Depression, component part of the "peri-Transylvanian" "marginal unit" (according to Gr. P. Pop and M.Ielenicz and Ileana Pătru, respectively), is integrated into the analyzed space, as it was included by Al. Ungureanu and A. Maier, as well as by other authors. This unit, formed at the morphological contact of the Meseş Mountains with the Someş Plateau, extending on the account of the latter, has resulted from the activity of two parallel watercourses, the Almaş and the Agrij, whose denudation rate, related to the size of their afferent hydrographic basin and to the small distance between them, has received superior values and, of course, a high efficiency of the fluvial sculptogenesis. Although the depression corridor encloses westwards the circle foreshadowed by the imbricate corridors of the Nadăş, Someşul Mic and Someş, its anthropic gravitation is tributary, in spite of the orographical barrier of the Meseş - of moderate difficulty however, whence its attribute of "Meseş Gate" invoked by I. Şandru (1998) – to Zalău, which polarizes the absolute majority of the settlements situated in the depression due to its proximity and to its role of urban centre with complex economic, social and administrative functions.

As regards the natural and anthropic gravitation, the spatial unit thus defined and delimited, orientates integrally towards the Nadăş-Someşul Mic-Someş semicircular corridor, its circular disposition ensuring the polarization on three out of the four facades of the plateau, a functional aspect of great efficiency.

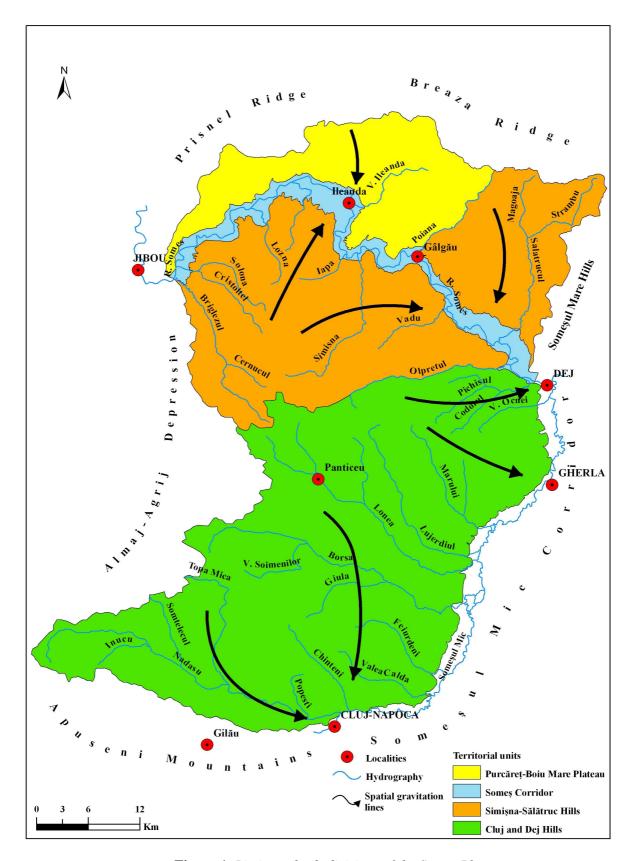


Figure 1. *Limits and sub-divisions of the Someş Plateau.*

There are also numerous other elements of regional identification, besides the morphohydrographical ones, derived from the relative uniformity of the hill and plateau climate with western influences; from the homogeneity of the vegetation composition comprising mainly mixed forests (beech and oak forests); of the fauna adapted to the low altitude biotopes, consisting of deciduous associations; of soil and subsoil resources (extended agricultural fields, forestry fund, building rocks, mineral waters).

However, it is the demographical and habitational identity which is more significant, generated by the exclusive extension of the rural space (the Someş Plateau being one of the few regions of the country lacking interior towns). The ethnical and confessional structure emphasizes the overwhelming weight of the Romanian, Orthodox population, the ethnical groups of other origin and religion being the Hungarians and the Roma.

As far as the settlements are concerned, their localization, structure, texture and functions fully respond to the natural conditions of a classic plateau: concentration in floodplains and terraces, but also on plateaus or on more extended interfluves (typical examples on the Purcăreț-Boiu Mare Plateau), linear or lobate structure, dispersed or concentrated texture, nuanced demographical sizes; agricultural or mixed functions, etc.

From an economic point of view, its identity is generated by the presence of the primary sector, of the traditional agriculture and wood exploitation, as well as of a series of handicrafts and commercial and service activities.

REFERENCES

- BADEA, L., BUZA, M., NICULESCU, GH., MARIA SANDU, SCHREIBER, W., MIHAELA ŞERBAN, KADAR, A. (2006), *Unitățile de relief ale României, II, Munții Apuseni și Podișul Transilvaniei* [The Relief Units of Romania, II, The Apuseni Mountains and the Transylvanian Plateau], Editura Ars Docendi, București.
- COCEAN, P., FILIP, S. (2008), *Geografia Regională a României* [Regional Geography of Romania], Editura Presa Universitară Clujeană, Cluj Napoca.
- DEZSI, ST. (2006), *Țara Lăpuşului. Studiu de Geografie Regională* [The Land of Lăpuş. Regional Geography Study], Editura Presa Universitară Clujeană, Cluj Napoca.
- IELENICZ, M. (1999), *Dealurile și Podișurile României* [The Hills and the Plateaus of Romania], Editura Fundației "România de Mâine", București.
- IELENICZ, M., PĂTRU, ILEANA (2005), *România. Geografie fizică* [Romania. Physical Geography], Editura Universitară, București.
- IELENICZ, M., SĂNDULACHE, I. (2008), *România. Podișuri și Dealuri (I)* [Romania. Plateaus and Hills], vol.3, Editura Universitară, București.
- ILIE, M. (1958), Podișul Transilvaniei [The Transylvanian Plateau], Editura Științifică, București.
- MAC, I. (1978), Aspects de morpholgie structurale dans la Depression de Transylvanie, RRGGG-Geographie, 22, 1, București.
- MAIER, A. (2001), *Podișul Someșan, populația și așezările* [The Someș Plateau, Population and Settlements], Editura Gh. Barițiu, Cluj Napoca.
- MARTONNE, EMM. DE (1929), *Colinele Transilvaniei* [The Hills of Transylvania], în vol. Transilvania, Banatul, Crișana și Maramureșul, 1918-1928, I, Editura Cultura Națională, București și în Lucrări geografice despre România, 2, 1985, Editura Academiei Române.
- MIHĂILESCU, V. (1934), Platforma Someşană [The Someş Platform], BSRRG, LIII, Bucureşti.
- MIHĂILESCU, V. (1936), România. Geografie Fizică [Romania. Physical Geography], București.
- MIHĂILESCU, V. (1937), Observații noi asupra Platformei Someșene (Latura Internă) [New Approaches on the Someș Platform], BSRRG, LVI, București.
- MIHĂILESCU, V. (1966), *Dealurile și Câmpiile României*. *Studiu de Geografie a Reliefului* [The Hills and the Plains of Romania. Relief Geography Study], Editura Științifică, București.

POMPEI COCEAN, WILFRIED SCHREIBER, GABRIELA COCEAN

- MORARIU, T., POSEA, GR., MAC, I. (1980), *Regionarea Depresiunii Transilvaniei* [The Regionalization of the Transylvanian Depression], SCGGG, Geografie, XXVII, 2, București.
- POP, GR. P. (2001), *Depresiunea Transilvaniei* [The Transylvanian Depression], Editura Presa Universitară Clujeană, Cluj Napoca.
- POSEA, GR. (1962), *Țara Lăpuşului studiu de geomorfologie* [The Land of Lăpuş Geomorphology Study], Editura Științifică, București.
- POSEA, GR. (1978), *Podișul Huedin-Păniceni* [The Huedin-Păniceni Plateau], SCGGG, Geografie, XXV, București.
- SAVU, AL. (1957), Contribuții la raionarea geomorfologică a Platformei Someșene (latura internă) [On the Geomorphological Regionalization of the Someș Platform (Inner Border)], Studia UBB, 1-2, Cluj.
- SAVU, AL. (1963), *Podişul Someşan Studiu geomorfologic* [The Someş Plateau Geomorphological Study], Teză de Doctorat, Universitatea Babeş-Bolyai, Cluj Napoca.
- SAVU, AL (1980), Depresiunea Transilvaniei (Regionarea fizico-geografică), Puncte de vedere, [The Transylavnian Depression (Physical-Geographycal Regionalization), Points of View], Studia UBB, XXV, 2, Cluj Napoca.
- SAVU, AL. (1986), *Podișul Purcăreț-Boiu Mare. Potențial natural și uman, perspective de dezvoltare* [Purcăreț-Boiu Mare Plateau. Natural and Human Potential, Development Perspectives], in vol. "Probleme de Geografie aplicată" [Problems of Applied Geography], Univ. Babeș-Bolyai, Cluj-Napoca.
- ŞANDRU, I. (1998), *Porți și culoare geomorfologice în spațiul carpato-danubiano-pontic* [Geomorphological Gates and Corridors in the Carpathian-Danubian-Pontic Space], Editura Conciu, Bacău.
- TUFESCU, V. (1966), *Subcarpații și depresiunile marginale ale Transilvaniei* [The Subcarpathians and the Marginal Depressions of Transylvania], Editura Științifică, București.
- UNGUREANU, AL. (1993), *Geografia podișurilor și câmpiilor României* [Geography of the Romanian Plateaus and Plains], Editura Universității "Al.I.Cuza", Iași.
- * * * (1987), Geografia României. Carpații și Depresiunea Transilvaniei [Geography of Romania. The Carpathians and the Transylvanian Depression], III, Editura Academiei Române, Bucuresti.