

Geological Map of the Republic of Croatia at the Scale 1:300 000

Introduction

The Geological Map of the Republic of Croatia at the scale 1:300 000 is the first geological map displaying geological features of the Croatian territory in its entirety. The map and the accompanying Map Book were published in 2009 by the Croatian Geological Survey. The map's content was compiled reusing data of the Basic Geological Map, scale 1:100 000, which was produced between 1962 and 1989. The map was finally completed by experts of the Department of Geology of the Croatian Geological Survey who were, as a rule, authors of individual sheets and map books of the Basic Geological Map. After the Basic Geological Map 1:100 000, it was the greatest and most significant piece of Croatian geologic cartography.

Even before the map was produced, Croatian territory had been displayed on small-scale, regional geological maps. The first geology of the area covering the Republic of Croatia is comprehensively represented on the Geological Map of FNR Yugoslavia. The map was made and edited by Vjekoslav Mikičić and published at the scale 1:500 000 in 1953. Its production was mostly based on geological maps at the scale 1:75 000, at least considering the Croatian territory. The initial stage of the map dates from the late 19th century when Austrian geologists on the territory under Austrian administration and Croatian geologists in the area under Hungarian rule began geological mappings. When the Austro-Hungarian Empire ceased to exist, Croatian geologists continued to work on geological maps at the same scale until the breakdown of the Kingdom of Yugoslavia.

The year 1970 saw the publication of a new version of the small-scale state-wide geological map at the scale 1:500 000. It was the Geological Map of SFR Yugoslavia which was followed by the Map Book published in 1971. The map was founded on data compiled from applied geological maps of different

scales but chiefly on draft versions or already finalized maps within the project The Basic Geological Map of SFRJ at the scale 1:100 000 from the period between 1962 and 1968. The map and map book were anonymous while edited by the Federal Geological Institute, Beograd.

The third version of the geological map of the same scale was planned after completion of the Basic Geological Map, scale 1:100 000, established on its database. The intention was to create a modern map based on a unique methodological approach and uniform criteria. Officially heralded by the end of 1989, the completion of the map was deterred due to clear symptoms of breakdown of the former state which silenced the announcement of the new mutual project.

Geological Map

With a desire to produce both the modern small-scale geological map and

the wall geological map at a smaller scale, the Department of Geology of the Croatian Geological Survey decided in early 1990s to start working on the Geological Map of the Republic of Croatia at the scale 1:300 000. The map would conclude the great enterprise epitomized in the Basic Geological Map, at the scale 1:100 000. The idea was realized immediately and the map was completed before long and promoted in a single copy at the first Croatian Geological congress held in 1995.

Although the geological map was finished in a short time period, its publication had to wait for the accompanying map book. The latter, however, was delayed for fifteen years due to objective and subjective reasons. Thanks to persistence of the former Head of the Department and current Director of the Croatian Geological Survey, Dr. Josip Halamić, the map book was successfully finalized and edited. In the meantime, the



Geološka karta Republike Hrvatske u mjerilu 1:300 000

Uvod

Geološka karta Republike Hrvatske u mjerilu 1:300 000 prva je geološka karta koja u cijelosti prikazuje geološku građu hrvatskoga državnog teritorija. Kartu je s pripadajućim Tumačom izdao Hrvatski geološki institut 2009. godine. Sadržaj karte temeljio se na podacima Osnovne geološke karte 1:100 000 koja je izvođena u razdoblju od 1962. do 1989. godine. Kartu su izradili i Tumač napisali stručnjaci Zavoda za geologiju Hrvatskog geološkog instituta koji su mahom bili i autori pojedinih listova i tumača Osnovne geološke karte. To je poslije Osnovne geološke karte 1:100 000 najveće i najznačajnije djelo hrvatske geološke kartografije.

Hrvatski teritorij je i prije izrade te karte prikazivan na preglednim geo-loškim kartama sitnijega mjerila. Prvi puta u cijelosti je geologija u prostoru koji obuhvaća Republika Hrvatska prikazana na Geološkoj karti FNR Jugoslavije. Ta je karta bila u mjerilu 1:500 000, izradio ju je i uredio Vjekoslav Mikinčić, a objavljena je 1953. godine. Njezina izrada se temeljila uglavnom na, barem što se hrvatskoga teritorija tiče, geološkim kartama mjerila 1:75 000. Izradbu tih karata započeli su još krajem XIX. stoljeća austrijski geolozi i to u područjima koja su administrativno pripadala Austriji, te hrvatski geolozi u područjima koja su bila pod upravom Mađarske. Raspadom Austro-Ugarske Monarhije hrvatski geolozi nastavili su izrađivati geološke karte u istome mjerilu sve do sloma Kraljevine Jugoslavije.

Godine 1970. objavljena je nova verzija pregledne geološke karte mjerila 1:500 000. To je bila Geološka karta SFR Jugoslavije, a imala je i Tumač koji je tiskan 1971. godine. Karta je bila utemeljena na podacima namjenskih geoloških karata različitih mjerila te ponajviše na rukopisnim ili već završenim kartama iz programa izrade Osnovne geološke karte SFRJ 1:100 000 između 1962. i 1968. godine. Izdavač je bio Savezni geološki zavod iz Beograda.

Izrada treće verzije geološke karte istoga mjerila bila je u planu nakon završetka Osnovne geološke karte 1:100 000 i na podacima koje se ona trebala temeljiti. To je trebala biti moderna karta jer se izvođenje Osnovne geološke karte temeljilo na jedinstvenom metodološkom postupku i jednakim kriterijima u izradbi. Službeni završetak izradbe Osnovne geološke karte 1:100 000 bio je krajem 1989. godine, a budući da već tada postojale naznake za raspad bivše države, o tom novom zajedničkom projektu, odnosno o toj novoj karti nije se više razgovaralo.

Geološka karta

Sa željom da se izradi suvremena pregledna geološka karta, a i zbog potrebe za zidnom geološkom kartom sitnijega mjerila, u Zavodu za geologiju Hrvatskoga geološkog instituta početkom 1990-ih godina odlučeno je da se pristupi izradi Geološke karte Republike Hrvatske u mjerilu 1:300 000. Njezinom izvedbom ujedno bi bio okončan veliki pothvat izrade Osnovne geološke karte 1:100 000 u Republici Hrvatskoj. Realizaciji se pristupilo odmah i karta je u kratkom roku završena i promovirana u jednom originalnom primjerku na 1. hrvatskom geološkom kongresu 1995. godine.

Iako je geološka karta bila napravljena, njezino objavljivanje je čekalo izradu popratnog Tumača. Međutim, rad na tumaču se otegnuo što zbog objektivnih, a još više subjektivnih teškoća na punih petnaest godina. Samo zahvaljujući upornosti tadašnjega predstojnika Zavoda, a današnjega ravnatelja Hrvatskoga geološkog instituta dr. sc. Josipa Halamića, Tumač je ipak uspješno završen i recenziran. Kroz to vrijeme na karti su obavljana poboljšanja i nadopunjavanja novim relevantnim podatcima. Tako su Karta i Tumač promovirani i objavljeni 2009. godine u čast 100-te obljetnice Hrvatskoga geološkog instituta (1909-2009).

Geološka karta Republike Hrvatske 1:300 000 prikazuje geološku građu državnoga teritorija i njezinu geološku povijest stvaranja od nastanka najstarijih stijena u prekambriju pa sve do današnjih dana. Izrada karte zasnivala se na podacima 74 lista Osnovne geološke karte 1:100 000 koji prikazuju geologiju hrvatskoga teritorija. Osnovna karta izrađivana je u razdoblju 1962–1989. godine i u njezinoj je izradi sudjelovalo više od 50 autora. S obzirom na vremensku distancu i različitost autorskih koncepcija pri izradi pojedinih listova tom je kartom trebalo objediniti i verificirati sve dobivene rezultate istraživanja, što je uz puno truda i kompromisa uspješno i obavljeno.

Karta i Tumač su se baš kao i Osnovna geološka karta, temeljili na krono-stratigrafskoj podjeli. Geologija Hrvatske na karti je prikazana kroz 58 kronostratigrafskih članova, odnosno stratigrafskih jedinica koje su izdvojene pretežito na razini serija, u mlađim naslagama na razini katova, ali i na razini sistema u starijim naslagama. Svaka izdvojena jedinica je u karti i legendi prikazana bojom, simbolom, a dodatno i rednim brojem koji je identičan onome u Tumaču. Jedinice, odnosno izdvojene geološke cjeline na karti su omeđene geološkim granicama.

Već sam pogled na geološku kartu jasno ukazuje da se prostor Republike Hrvatske može geološki odijeliti na dva različita područja. Jedno se nalazi sjeverno od rijeke Save i u njemu je dominantna žuta boja, dok su u području južno od Save prevladavajuće plava i zelena boja. Takva oštra podijeljenost posljedica je geološke građe, odnosno pripadnosti tih područja različitim geotektonskim jedinicama, Panonskom bazenu na sjeveru i Dinaridima na jugu. Generalno, prostor Panonskog bazena ili Panona izgrađuju magmatske, metamorfne i klastične stijene stratigrafskog raspona prekambrij-kvartar, dok u Dinaridima, odnosno su u prostoru od Istre do Konavala pretežito karbonatne naslage mezozoika.

GEOLOŠKA KARTA REPUBLIKE HRVATSKE

M 1:300.000

IZRAĐENA JE NA TEMELJU OSNOVNE GEOLOŠKE KARTE M 1:100.000 – PODRUČJE REPUBLIKE HRVATSKE



HRVATSKI GEOLOŠKI INSTITUT
Zavod za geologiju
Zagreb, Sachsova 2



MINISTARSTVO ZNANOSTI, OBRAZOVANJA
I ŠPORTA REPUBLIKE HRVATSKE

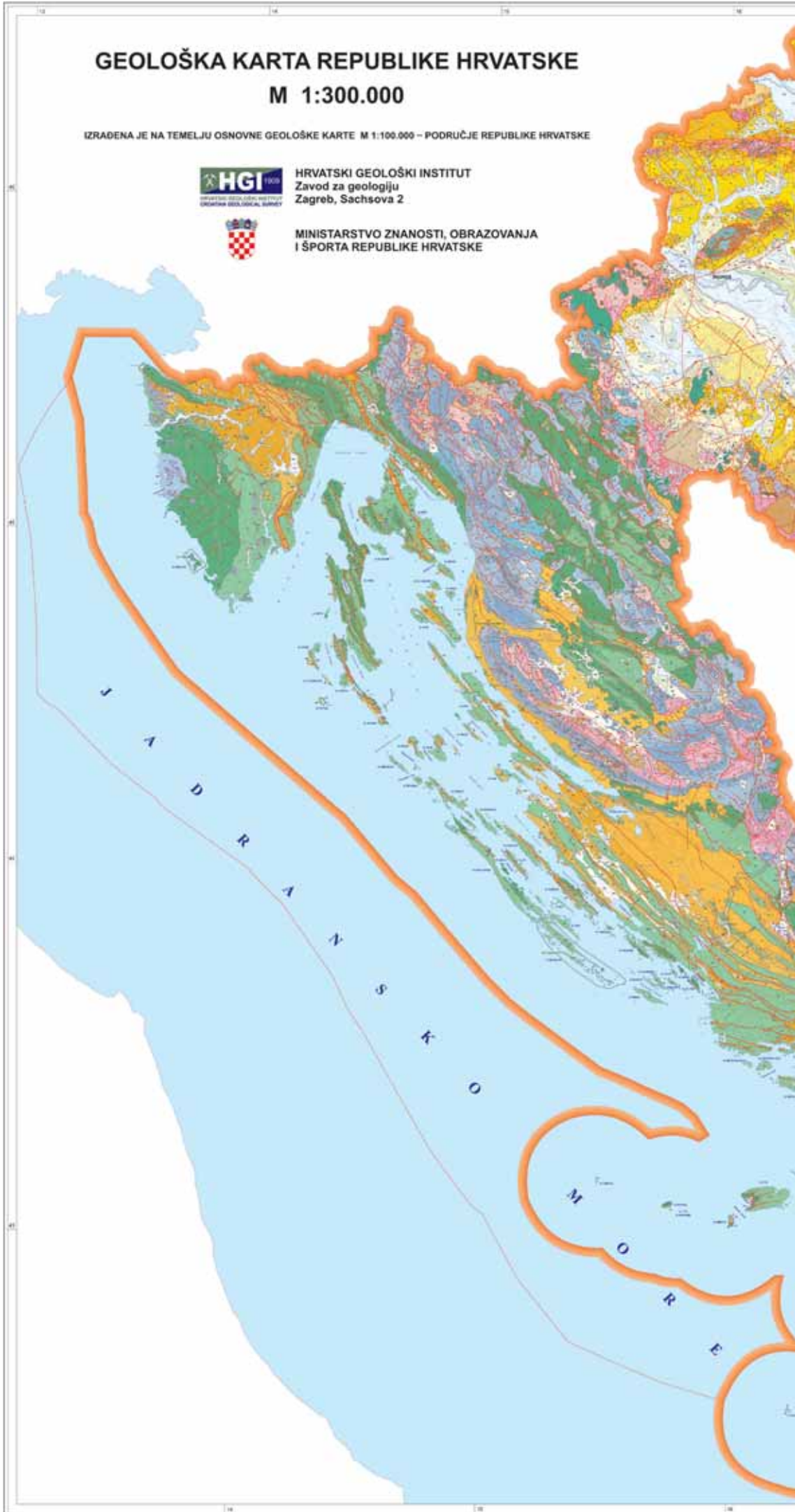


Fig. 1. Geological Map of the Republic of Croatia at the scale 1:300 000

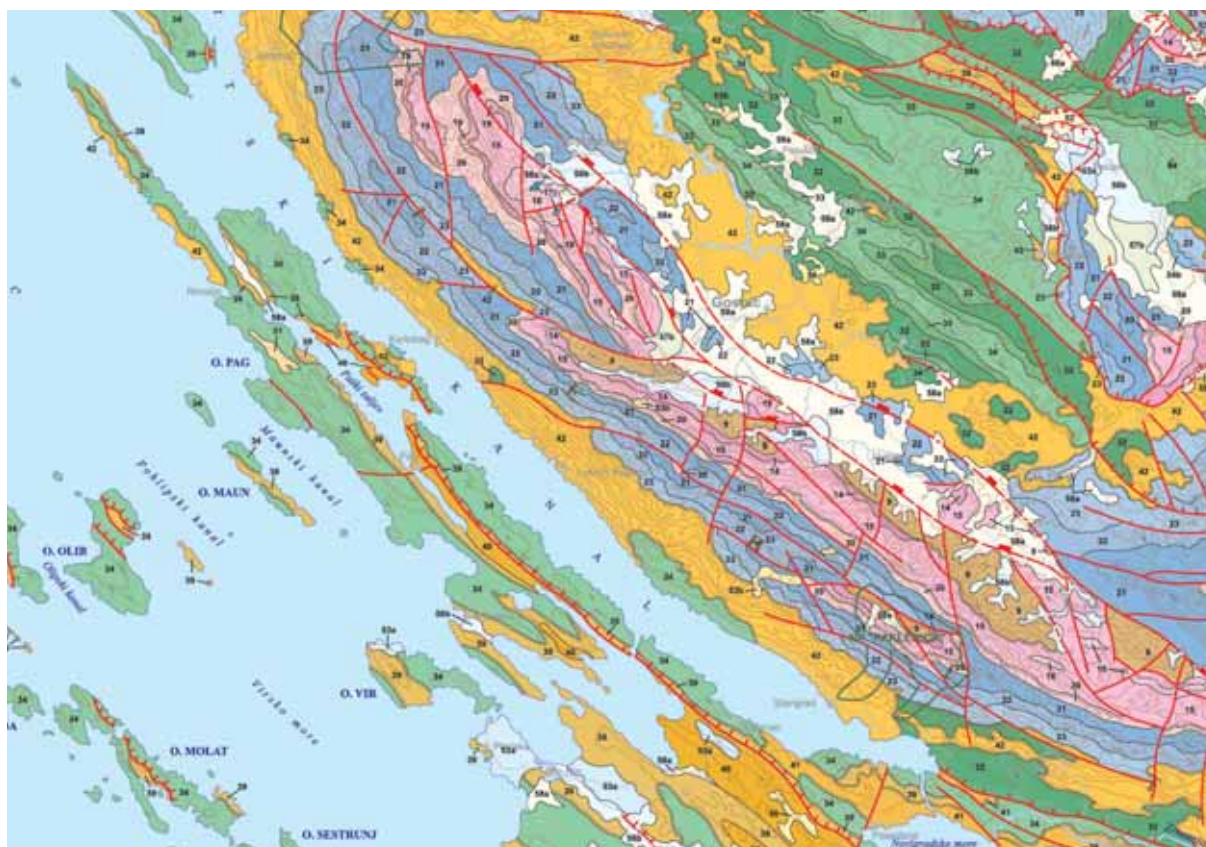


Fig. 2. Section of the Geological Map
Sl. 2. Isječak Geološke karte

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map was improved and supplemented with new relevant data. Owing to these efforts, both the Map and the Map Book were promoted and published in honour of the 100th anniversary of the Croatian Geological Survey (1909–2009).

The Geological Map of the Republic of Croatia 1:300 000 displays information on geological features of the state territory and its geological history from the oldest rocks formed in the Precambrian to the most recent times. During its production, the map was based on data compiled from 74 sheets of the Basic Geological Map 1:100 000 showing the geology of the Croatian territory. The basic map was produced by over 50 authors between 1962 and 1989. Taking into account the time period and range of authors' conceptions in making individual sheets, all achieved results of previous researches had to be combined and verified, which was finally completed with much effort and compromise.

Both the Map and the Map Book were founded on chrono-stratigraphic division, much in the same way as the former Basic Geological Map. Geology of Croatia is shown using 58 chrono-stratigraphic members, i.e. stratigraphic

units, mostly singled out on the level of series. However, it was done on the level of stages in younger sedimentary rocks and on the level systems in the older ones. Each unit is represented on the map and in the legend by its colour, symbol, and, additionally by ordinal number identical to the one in the map book. Units or individual geological divisions are outlined on the map by geological boundaries.

Even a cursory glance at the geological map clearly indicates that the Croatian state territory can be divided into two different regions: one, situated to the north of the Sava River, is characterized by shades of yellow; the other, spread to the south of the Sava River is dominated by shades of blue and green. Such a sharp division is a result of geological setting, i.e. affiliation of mentioned regions to different geotectonic units, the Pannonian Basin to the north and Dinarides to the south. In general, the Pannonian Basin is built of igneous, metamorphic and clastic sedimentary rocks spanning stratigraphically from the Precambrium to the Quaternary, while carbonate sedimentary rocks of the Mesozoic age prevail in the Dinarides, i.e. the area spreading from Istria to Konavle.

According to chrono-stratigraphic succession, the oldest rocks in the Republic of Croatia belong to the Precambrian. Their outcroppings can be found in the Pannonian area, especially on the Moslavačka Mountain and Slavonian mountains (Papuk, Psunj and Krndija Mts) represented by the metamorphic rock complex.

Rocks are more diverse in the Paleozoic, which follows the Precambrian. Twelve geological units are represented on the map and separated on the system level. The metamorphic complex (para- and ortho-) and granitic intrusions are dominant in the Pannonian region. Paleozoic sedimentary rocks, originating from the marine environment also occur in the Dinarides, specifically in Lika, on the Velebit Mountain, in the Gorski Kotar area. These are predominantly carbonate-clastic sedimentary rocks abounding with fossils.

The Mesozoic era begins with the Triassic. The latter is represented by seven geological members separated as series, and partly as stages. The Triassic is developed in the karst Dinaric area, in Žumberak, in Croatian Zagorje, Slavonic mountains and Banovina. It is generally

Slijedom kronostratigrafije najstarije stijene u Republici Hrvatskoj pripadaju prekambriju. Otkrivene su u području Panona i to na Moslavačkoj gori i u slavonskim planinama (Papuku, Psunju i Krndiji), a predstavljene su metamorfnim kompleksom stijena.

U paleozoiku, koji slijedi nakon prekambrija, stijene su veće raznolikosti. Na karti je prikazano 12 geoloških članova izdvojenih na razini sistema. U području Panona dominantan je metamorfni kompleks (para i orto) te granitni proboji. Paleozojske naslage pojavljuju se i u prostoru Dinarida i to u Lici, Velebitu, Gorskom Kotaru, a taložene su u marinskom okolišu. To su pretežito karbonatno-klastične naslage s brojnim fosilnim ostacima.

Mezozojska era započinje trijasom. Prikazan je kroz sedam geoloških članova izdvojenih kao serije, ali dijelom i kao katovi. Trijas je razvijen u krškom dinaridskom području te na Žumberku, u Hrvatskom zagorju, Slavonskim planinama i Banovini. Izgrađuju ga, generalno gledajući, klastično-karbonatne naslage u donjem trijasu, karbonatne naslage s pojavama klastita i piroklastita u srednjem trijasu te klastiti i dolomiti u gornjem trijasu.

U juri nastupa diferencijacija taložnih okoliša. U krškom području Dinarida egzistirala je plitkovodna, platformska karbonatna sedimentacija, dok je u području Panona ona bila dubokovodna, odnosno bazenska. Na karbonatnoj platformi, znanom i kao Jadranska, kroz cijelu juru talože se uglavnom vapneni dolomiti (izdvojeno šest geoloških članova kao serije i katovi). U bazenskim prostorima osim dubokovodnih vapnenaca susreću se na području Banovine, Medvednice i Hrvatskoga zagorja ofiolitno-sedimentni kompleks stijena te orto i parametamorfiti, a prikazani su kroz pet stratigrafskih jedinica razine serije.

Plitkovodna sedimentacija je na Jadranskoj karbonatnoj platformi trajala i kroz cijelu kredu. To je bilo jednolično taloženje karbonata za čije su predstavljene bile dovoljne samo tri geološka člana ranga serije. Isto tako monotona sedimentacija bila je i u području Panona s tim da je tamo egzistiralo dubokovodno taloženje karbonatno-klastičnih naslaga, uz rijetke pojave vulkanita.

Krajem krede bitno se mijenjaju sedimentacijski okoliši na cijelom prostoru Hrvatske. U području Panona započinje taloženje turbidita koje je trajalo kroz cijeli paleocen i eocen. Na karbonatnoj platformi prestaje marinska sedimentacija i nastupa kopnena faza koja traje sve do eocena. U eocenu nastupa transgresija i

talože se najprije slatkovodne naslage s ugljenima, nakon kojih je uslijedila marinska sedimentacija te se talože vapnenci i završno flišne naslage. Krajem eocena nastupa regresija koja je obilježena sedimentacijom karbonatnih klastita znatnih debljina (poznate kao Prominske naslage) da bi u oligocenu uslijed intenzivnog izdizanja bile odlagane velike količine karbonatnih breča (Jelar breče). Početak miocena označava završetak sedimentacije u prostoru Dinarida nakon čega je nastupila duga kopnena faza koja traje do u kvartar.

U neogenu dolazi do formiranja Panonskog bazena kojem su pripadali i hrvatski tereni i to oni koji se nalaze sjeverno od rijeke Save te područja Banovine i Karlovačke kotline. Oni su se nalazili u priobalnom području koje je karakterizirala česta izmjena marinskih, brakičnih i slatkovodnih okoliša, ali i intenzivna tektonska aktivnost. Sedimentaciju je obilježavalo taloženje karbonatno-klastičnog kompleksa naslaga vrlo velikih debljina, ponegdje debelih i više od 6000 metara. Na geološkoj karti neogenski sedimenti prikazani su kroz osam stratigrafskih jedinica, odnosno katova. U Hrvatskoj one imaju posebno značenje jer se u njima nalaze ležišta ugljikovodika, kaustobiolita i nemetalnih mineralnih sirovina.

U kvartaru, u najmlađem geološkom razdoblju, uslijedilo je završno izdizanje cjelokupnog teritorija Hrvatske. Nastupila je kopnena faza sedimentacije i formiranje suvremenoga reljefa. Kvartarne naslage su na karti prikazane kroz šest genetskih tipova sedimenata koji su nastali u fluvijalnom, eolskom i jezersko-barskom okolišu. One izgrađuju, odnosno prekrivaju znatne površine državnog teritorija, a posebice u dolinama velikih rijeka Kupe, Save i Drave.

Tumač geološke karte

Geološkoj karti pripada i Tumač. To je tekstualni prikaz geološke građe, odnosno opis grafičkoga sadržaja karte. Tumač je formata 171×245 cm, ima 141 stranicu teksta koji je razvrstan u sedam poglavlja. Prva dva poglavlja čine riječi ravnatelja Hrvatskoga geološkog instituta dr. sc. Josipa Halamića te urednika tumača dr. sc. Ive Velića i dr. sc. Igora Vlahovića. Treće i najobimnije poglavlje sadrži opis stratigrafskih jedinica, a četvrto kratak pregled tektonike. U petom poglavlju *Literatura* nalazi se popis objavljenih listova i tumača prema autorima te popis citiranih radova u Tumaču. Šesto i sedmo poglavlje su dodaci Tumaču, a sastoj se od shematskog prikaza te popisa

listova i tumača Osnovne geološke karte koji prekrivaju područje Republike Hrvatske.

Najvažnije poglavlje u tumaču je *Opis stratigrafskih jedinica* u kojem je na 90 stranica podrobno opisano svih 58 geoloških članova, odnosno stratigrafskih jedinica koje su izdvojene na karti. Jedinice su uniformirano prikazane, a sadrže opise njihova geografskoga smještaja, odnosno rasprostranjenosti, zatim opise geoloških odnosa prema drugim jedinicama, sadrže podatke o litološkom sastavu, zatim sedimentološke značajke, opise njihovog paleontološkog, odnosno mineralološkog sadržaja te podatke o uvjetima i okolišima taloženja. Uz to, za značajnija geološka razdoblja, paleozojsku i predpaleozojsku eru te mezozojske i kenozojske periode, dan je sažeti opis i pregled geoloških zbivanja u to doba čime se čitatelju koji nije geolog na jasan način prikazuje geološka građa i povijest stvaranja terena Republike Hrvatske.

Zaključak

Za hrvatsku geologiju Geološka karta RH u mjerilu 1:300 000 jedinstveno je djelo jer se po prvi puta cjelovito prikazuje teritorij samostalne Hrvatske. Karta ima veliko značenje zato što je geologija Republike Hrvatske predstavljena na suvremeni način, temeljen na rezultatima tridesetogodišnjih istraživanja provedenih na izradi Osnovne geološke karte 1:100 000 upotpunjenih s aktualnim geološkim podacima.

Karta i pripadajući Tumač pružaju jasan uvid u geološku građu Republike Hrvatske i predstavljaju veliki pomak u znanstvenom sadržaju. Osim u znanstvenim razmatranjima Geološka karta pruža mogućnost preglednog, ali i detaljnog uvida u geološke odnose koje je neophodno poznavati u svim regionalnim istraživanjima i planiranjima uključujući hidrogeologiju, hidrotehniku, energetiku, vodoopskrbu, inženjersku geologiju, građevinarstvo, eksploataciju mineralnih sirovina, ekologiju, zaštitu okoliša, kao i u mnogim drugim aspektima ljudske aktivnosti.

Geološka karta je javnosti dostupna u tiskanom i digitalnom obliku, a tumač u tiskanoj formi. Naklada karte i tumača je 2800 primjeraka, čije je izdavanje potpomognuto sredstvima Ministarstva znanosti, obrazovanja i športa. Osim znanstvene i stručne važnosti karta ima i širokoodgojnu funkciju jer je podijeljena svim osnovnim i srednjim školama u Hrvatskoj te hrvatskim školama u inozemstvu.

Ivan Hećimović

built of clastic-carbonate sedimentary rocks of the Lower Triassic, followed by carbonate sedimentary rocks with clastic and pyroclastic occurrences in the Middle Triassic and clastic sedimentary rocks and dolomites in the Upper Triassic.

Jurassic commences with a differentiation between sedimentary environments. In the Dinaric karst area, the shallow-water platform carbonate deposition was in existence while sedimentary environment was deep-water or basinal in the Pannonian area. Primarily limestone dolomites (six geologic members are separated as series and stages) were layered during the Jurassic on the carbonate platform, known also as the Adriatic. In addition to deep-water limestones in the basin area of Banovina, Medvednica Mountain and Hrvatsko Zagorje, one can find ophiolitic-sedimentary complex together with ortho- and parametamorphites spread in five stratigraphic units representing levels within a series.

Shallow-water deposition on the Adriatic carbonate platform was ongoing during the Cretaceous. It was represented by monotonic deposition of carbonates where only three geological members of the series range were sufficient for adequate description. The same monotone deposition also characterized the Pannonian region where the deep-water sedimentation of carbonate-clastic sedimentary rocks was dominant with rare occurrences of vulcanite.

By the end of the Cretaceous, sedimentary environments were substantially altered on the whole territory of Croatia. In the Pannonian region, deposition of turbidites started and spanned through the entire Paleocene and Eocene. The Eocene saw an onset of transgression with sedimentation of fresh-water deposits with coal at the beginning, followed by marine sediments containing limestone, and ultimately by flysch deposits. At the end of the Eocene Epoch, regression began, characterized with deposition of carbonate clastic material of considerable thickness (known as "Promina beds"). Finally, great quantities of carbonate breccias were deposited in the Oligocene due to an intense uplift. The beginning of the Miocene saw a cessation of sedimentary processes in the Dinaric region, after which a long regression phase extended into the Quaternary period.

During the Neogene, the Pannonian Basin was formed which included our

terrains to the north of the Sava River, as well as the Banovina area and the Karlovac ravine. These terrains occupied the coastal areas characterized by frequent alternation of marine, brackish and fresh-water environments, as well as intense tectonic activity. Deposition was marked by the carbonate-clastic complex of considerable thickness, in some places over 6000 meters. On the geological map the Neogene, sedimentary rocks are represented by eight stratigraphic units or stages. In our country, these are of particular importance due to significant hydrocarbon, caustobolite and non-metal mineral deposits.

The youngest geological period, the Quaternary was distinguished by the final uplift spreading over the entire territory of Croatia. The regression phase and formation of modern landscape started then. Quaternary sediments are shown on the map by six genetic types which originated in the fluvial, aeolian and lacustrine environments. They cover considerable areas of the state territory, especially valleys of big rivers such as Kupa, Sava and Drava.

The Map Book

The geological map is accompanied by its Map Book. It contains a description of geological features or the graphic contents of the map. The size of the book is 171x245 cm, with 141 pages of text in seven chapters. The first two chapters convey the words of the Director of Croatian Geological Survey, Dr. Josip Halamić, as well as the book editors, Dr. Ivo Velić and Dr. Igor Vlahović. The third and most voluminous chapter contains a description of the stratigraphic units, while the fourth one is a brief review of the tectonic setting. In the fifth, labelled References, there is a list of published sheets and accompanying map books arranged by the authors' names, as well as a list of references cited in the map book. The sixth and seventh chapters are the supplements to the book consisting of a schematic display together with a catalogue of map sheets and map books of the Basic Geological Map which cover the territory of the Republic of Croatia.

The most important chapter in the Map Book is represented by Description of stratigraphic units in which all of the 58 mapped geological members are meticulously described on a total of 90 pages. The units are uniformly

shown with reports on their geographic locations, or areal distribution and description of geologic settings. They also include information on lithological composition and sedimentologic features, descriptions of their paleontological and mineralogical compositions, as well as data on sedimentary conditions and environments. In addition, there is a brief report on geological events for each significant geologic time span, including Archean and Paleozoic eras and Mesozoic and Cenozoic periods presenting to the reader who may not be familiar with geology a clear description of geologic setting and geological history of the territory of the Republic of Croatia.

Conclusion

The Geological Map of Croatia at the scale 1:300000 is to the Croatian geology a unique accomplishment, since it is the first to comprehensively represent the territory of the independent Croatia. The map is of great importance because the geology of Croatia is displayed in a modern way, based on results of thirty years of research work on production of the Basic Geological Map at the scale 1:100 000 and supplemented with recent geological data.

The Map and the accompanying Map Book offer a clear insight into the geologic setting of the Republic of Croatia and represent a great shift in the scientific thought. In addition to scientific considerations, the map offers both general and detailed insights into geologic relationships that ought to be known in all regional investigations and planning schemes including hydrogeology, hydrotechnics, energetics, water supply, engineering geology, building sector, exploitation of mineral resources, ecology, environmental protection, as well as many other aspects of human activity.

The map is available to public in both printed and digital version, while the Map Book is available only as a hard copy. The map and its book were published in 2800 copies. The publishing was supported by the Ministry of Science, Education and Sport. In addition to scientific and professional significance, the map has a wide educational function, since it is distributed to all elementary and high schools in Croatia as well as to Croatian schools abroad.

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