

Review article

25 YEARS OF *REPORTS ON GEODESY AND GEOINFORMATICS*

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Abstract

The article presents an outline of the 25-year history of the journal "Reports on Geodesy and Geoinformatics". The source of information was mainly the journal issues themselves. Attention was drawn to changes that the journal underwent over a quarter of a century and its relationship with the Institute of Geodesy and Geodetic Astronomy and later the Department of Geodesy and Geodetic Astronomy. Many issues were dedicated to materials from Polish conferences – those organised by the Institute and the international ones attended by the employees of the Institute, which was indicated in the section on the history of the journal.

The second part of the article concerns the current activity and importance of the journal. Attention was paid to visibility of "Reports on Geodesy and Geoinformatics" in the domestic and foreign databases. Polish databases where the journal is indexed have been identified and briefly described. A separate issue is the evaluation of the journal, which forms a measure of its popularity among consumers. For this purpose, various parameters and biometrics indicators are used. The article used the Web of Science, Google Scholar and the Ministerial List databases for the assessment of the journal.

Keywords: journals, history, geodesy

1. History

In 1990 when the journal "Reports on Geodesy" (now called "Reports on Geodesy and Geoinformatics") first appeared, there were several journals dealing with issues of geodesy on the Polish publishing market. The most important include: "Przegląd geodezyjny" published since 1945, scientific works conducted by Warsaw University of Technology. Geodezja – since 1969, AHG scientific journals. Geodezja – since 1956. Other titles appeared a little later: "Archiwum Fotogrametrii, Kartografii i Teledetekcji" – since 1994, "Geodeta" – 1995, "Artificial Satellites" – 1997 and "Roczniki Geomatyki" – 2003.

The journal "Reports on Geodesy" was started at the initiative of the staff of the Institute of Geodesy and Geodetic Astronomy at the Faculty of Geodesy and Cartography of Warsaw University of Technology. It was issued by the Institute, printed by the WUT Printing House

and distributed directly to libraries and academic institutions both in the country and abroad. The circulation of the journal was 500-600 copies. The journal appeared at irregular intervals. In the first year, two issues were published, but this number rose to 5 issues in 1994 and 9 issues in 1998. The increase in frequency was associated with the publishing of conference materials in the "Reports on Geodesy".

From 1990 to 2012, the editorial committee remained unchanged and comprised: Janusz Śledziński (Editor-In-Chief), Marcin Barlik (scientific secretary), Zdzisław Adamczewski, Kazimierz Czarnecki and Jerzy B. Rogowski.

One should emphasise the significant contribution to the process of publishing the journal that two people responsible for the administrative and technical matters made. Jadwiga Bronisz and Małgorzata Jaroszewska dealt with all organisational and administrative matters related to print preparation.

When the journal was started, the Institute employed 8 scientific staff with the title of professor, 10 people with a PhD title, 2 assistants and 13 technical and administrative employees.

"Reports on Geodesy" was started mainly because of the need to quickly report the results of the research in the area of geodesy, gravimetry, geodynamics, astronomy and information science that the Institute conducted. The journal set itself two goals from the very beginning. The first one concerned the scientific and research nature of the texts being published and the second one was maintaining the connection of the journal with the Institute. All the articles were reviewed. Initially, the reviewers included the members of the Editorial Committee. Currently, the journal is working with approx. 80 reviewers from Poland and abroad.

The first issue provided general information about the Institute of Geodesy and Geodetic Astronomy. Short biographies presented employees of the Institute and projects and research conducted in the Institute. This issue also described two facilities used for research and practical exercises: the centre in Grybów and the Astro-Geodetic Observatory in Józefosław. The authors of the first articles were the members of the Editorial Committee. From the very beginning, the journal was published in English. It was assumed that English is the most widely spoken language among geodesists and professionals in other fields of geoscience (Śledziński, 1990).

Since 1992, a report on the activities of the Institute was included in each first issue of the year – in the books bearing the title "Annual Report". The information concerned general news about the Faculty and the Institute, its organisational structure, personnel and participation in academic organisations and associations, awards and honours, teaching programmes, individual and team projects, cooperation with national and foreign centres, visits and participation in conferences, as well as research equipment used by the Institute and its finances (Śledziński, 1992).

Articles written by authors outside the Institute appeared as early as in 1992, who represented both Polish and increasingly foreign research centres, such as those from Germany, Vietnam, Slovakia, Finland, the Soviet Union, the United States and Hungary. A closer international cooperation was established, which resulted in co-authored articles and participation of the Institute staff in projects, conferences and meetings.

The journal provided current information about important international events related to geodesy. These included reports from conferences, symposia, workshops and scientific meetings. One of the first issues contained articles presented by the Institute staff at the 20th General Assembly of the International Union of Geodesy and Geophysics, which was

held in Vienna between 11 and 24 August 1991. The subsequent issues included reports from conferences taking place mainly in Europe.

Most materials in "Reports on Geodesy" were related to conferences held by Central European Initiative, an organisation founded in 1989 that brings together the countries of Central and Eastern Europe. The CEI is a forum for regional cooperation in various areas. As part of the CEI, Working Group Science and Technology (WGST) Section C "Geodesy" was established. The international coordinator participating in the joint 17-country programme was Janusz Śledziński. "Reports" posted information on geodesic and geodynamic projects implemented in the international cooperation with the Member States.

The structure of the CEI WGST Section C "Geodesy" included the following working groups:

- European and Local Geodetic and Geodynamic Project
- Working Group on University Education Standards (Chairman – Prof. K. Czarnecki)
- Working Group on Satellite Navigation Systems
- Cooperation CEI WGST Section C – European Geophysical Society (EGS)
- Cooperation CEI WGST Section C – International Association of Geodesy (IAG)

A joint Polish-Hungarian initiative resulted in creation of the CERGOP (Central Europe Regional Geodynamics Project) project, whose aim was to establish the CEGRN (Central European Geodynamic Reference Network) network. The project consisted of two phases: CERGOP-1 1995 and CERGOP-2 1998.

The third project was called Project UNIGRACE (Unification of Gravity Systems in Central and Eastern Europe) 1997. Between 1997 and 2011, 39 volumes of "Reports on Geodesy" presented materials from all conferences held within the working groups and projects.

The Institute staff participated actively in these projects by taking part in seminars held on international conferences. The Institute also organised conferences, such as:

- EUREF Permanent Network EUREF Permanent Network 3rd Local Analysis Centres Workshop, 2001.
- Scientific-Technical Conference "Current problems in engineering surveying" in 2005, 2007.
- Bilateral Geodetic Meeting Poland-Italy in 1997, 2000, 2003, 2006.

In 1999, the editorial staff of the journal was extended by the International Editorial Advisory Board, with an editor-in-chief Professor Janusz Śledziński. The Committee included representatives from Germany, Hungary, Slovakia, Austria, Czech Republic, Sweden and Slovenia, as well. Since 2006, after the death of Professor Kazimierz Czarnecki, the Editorial Committee consisted of 4 persons. During the last period of Editorial Advisory Board work two members of this committee have passed away: Professor István Fejes (†2011) and Professor Giorgio Manzoni (†2012).

Issue 93/2012 was the last to be published in paper. At the same time, an electronic version was released, which was made available on the department website. From issue 94/2013 on, "Reports on Geodesy" began to appear in electronic format only. It was founded on the deGruyter Open platform.

The year of 2012 saw organisational changes at the Department of Geodesy and Cartography of Warsaw University of Technology. Institutes were replaced by Departments and Faculties. The Institute of Geodesy and Geodetic Astronomy became the Department of Geodesy and Geodetic Astronomy. Professor Janusz Śledziński resigned from the position of the Editor-In-Chief of "Reports on Geodesy". The new editor-in-chief was first Tomasz Liwosz and then from issue 93 – professor Marcin Barlik. (Śledziński & Barlik, 2012). Since 2012, the Editorial Committee has included:

Editor-in-Chief	Prof. Marcin Barlik	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
Managing Editor	Ryszard Szpunar	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
Editors Geodesy/ Geosciences	Tomasz Olszak	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
	Tomasz Liwosz	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
	Grzegorz Lenda	AGH University of Science and Technology, Faculty of Mining Surveying and Environmental Engineering, Poland
Geoinformatics	Paweł Pędzich	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
	Paweł Kowalski	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
Photogrammetry and Remote Sensing	Dorota Zawieska	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
	Jerzy Chmiel	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
Technical Editor	Dominik Próchniewicz	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland
Statistical Editor	Tadeusz Knap	Warsaw University of Technology, Faculty of Geodesy and Cartography, Poland

The year 2013 brought a new chapter in the history of the journal. "Reports on Geodesy" changed its name to "Reports on Geodesy and Geoinformatics" and from that moment on it has been issued by the Department of Geodesy and Cartography of Warsaw University of Technology. The goal of the extended formula is to attract a larger group of scientists and specialists from specialities such as cartography, photogrammetry, remote sensing, geography, geology, information science and other disciplines related to geodesy that develop new methods and technologies of geovisualisation. The main profile of the journal remains and continues to be directed at the development of research in the area of theoretical geodesy, astronomy, geodesy, navigation, geodynamics, that is the classic problems faced by geodesy.

We would like to stress that our journal, while fully in keeping with tradition, is intent on presenting the whole of technological and scientific progress taking place in modern geodesy and cartography, where research and implementation of geoinformatic character play an exceptionally important role in accelerating the development of our discipline. It is for this reason that we have decided to expand the journal's formula so as to encourage a broader group of scientists and specialists in the realms of geodesy, computer science, cartography, photogrammetry, remote sensing, geography, geology, and related sciences who are developing new methods and technologies of geovisualisation and are involved in the modelling of space applying GIS technology to collaborate with us. At the same time, the journal's profiles shall maintain the importance of other theoretical, industrial, and development research in the areas of theoretical geodesy, geodetic astronomy, navigation, and studies on displacements and the classic problems facing geodesic surveying

Barlik and Gotlib, 2013

In 2013 (issue 94), "Reports on Geodesy and Geoinformatics" received a DOI (digital object identifier) number. This is an identifier of an electronic document given by one of the authorised agencies supervised by the International DOI Foundation – the so-called *DOI Registration Agencies (RA)*. Holding a DOI number carries prestige because it is used by all important journals and allows to find a specific article without mistakes. This identifier remains unmodified even after the publisher is changed or the transfer of rights is made to another institution.

2. Statistics

The current publisher, deGruyter, provides various statistics that allow for ongoing evaluation of the functioning of the journal. According to the information provided since 2011, the number of articles published in the journal decreased and at the same time there was an increase in the number of scientific articles in relation to all articles published in a given year. In 2015 all articles were evaluated as scientific. Articles within year (including scientific ones in parentheses): 2011 – 90 (87), 2012 – 27 (24), 2013 – 14 (13), 2014 – 16 (16), 2015 – 12 (12)

Statistics on reviewers go as follows. In total years 2013 and 2014 – number of reviewers: 29; foreign affiliation: 11 (38%), affiliation of Warsaw University of Technology: 3 (10%). In 2015: number of reviewers: 16; foreign affiliation: 7 (43%), affiliation of Warsaw University of Technology: 2 (12%)

3. Visibility of the journal

3.1. Open Access

Nowadays, for a journal to be seen by the widest audience possible, it must be indexed in Internet databases, especially the public ones. This makes it possible to access the journal by searching the databases using a variety of tools provided. The Open Access scientific communication model has been developed since the 1990s. It provides a free and universal access to digital forms of data storage and scientific and educational content.

"Reports on Geodesy and Geoinformatics" pursues a policy of openness. It makes its articles available in the open Internet through Polish and foreign databases, catalogues and browsers.

3.2. De Gruyter Open (formerly Versita)

The 2013 placement of the journal on the de Gruyter Open platform confirms the consistent implementation of the principle of open access.

De Gruyter Open is one of the leading publishers providing open access to scientific content. With over 400 journals on its website, De Gruyter Open is currently the second largest open access publisher in the world.

3.3. BazTech

The first Polish base to index “Reports on Geodesy and Geoinformatics” was BazTech. It is a database that contains Polish technical journals. BazTech is a bibliography and abstract database, which has been recording articles from 645 Polish journals in the field of technical sciences, exact science and environmental protection since 1998. These were initially only bibliographic descriptions of individual articles but later on – since 2008 – the database has included a full text access. The placement of the journal in BazTech allows for the integration of resources from a single publication to whole databases.

This platform does not have tools to analyse citations but placement of the journal in this type of database increases its visibility and reach and thereby increases its popularity, especially if there is a possibility of accessing full text.

BazTech is one of the resources of the Virtual Library of Science, which is one of the first Polish digital libraries. It is a system for making scientific databases available via the Internet, maintained by the Interdisciplinary Centre for Mathematical and Computational Modelling of the University of Warsaw in collaboration with the University Library in Warsaw.

The collection of BazTech records was incorporated into the resources of the Infona science communication portal maintained by the WUT Interdisciplinary Centre for Mathematical and Computational Modelling. The Infona database has 1,113 records from “Reports on Geodesy” and “Reports on Geodesy and Geoinformatics” for the period between 1998 and 2015. Currently, there are 1144 records registered in BazTech.

3.4. Base of Knowledge

An important role in the making journals available as part of Open Access is performed by repositories. Since 2013, “Reports on Geodesy and Geoinformatics” has been indexed in the Base of Knowledge repository of Warsaw University of Technology.

The database was started in 2012. The aim of the database is to disseminate the results of scientific research in accordance with the idea of “open science”. In its digital version, the Base of Knowledge repository archives full texts of journal articles.

Until 2016, the Base of Knowledge has recorded 53 articles from “Reports on Geodesy” and “Reports on Geodesy and Geoinformatics”.

3.5. Mercuriusz

In 2016, “Reports on Geodesy and Geoinformatics” was placed on the Integrated Platform of Polish Scientific Journals “Mercuriusz”. This project is implemented by the WUT Main Library in collaboration with the National Library and its aim is to provide digitised versions of articles from scientific journals included in the list of the scientific journals ranked by the Ministry of Science and Higher Education. The database will include journal articles published between 2002 and 2012. Plans exist to update the database. The access to the articles will be possible via the Internet. The journals will be made available in the open Internet, with the exception of the titles limited by licenses. The resources protected by other licenses will be made available free of charge through a network of academic libraries throughout the country as part of the ACADEMICA system.

Merkuriusz database will include whole issues of "Reports on Geodesy" from years 2002-2012. Thanks to the policy of openness, 732 articles were published with an access to full texts.

3.6. Google Scholar

The resources of the journal published in the open Internet increase its visibility in the Google Scholar scientific search engine. It is a free specialist science search engine used to search a database containing a variety of scientific publications from many fields of knowledge. Thanks to Google Scholar search engine, the journal is visible at the level of individual articles.

Approx. 1,290 articles are currently indexed for "Reports on Geodesy" and 63 articles for "Reports on Geodesy and Geoinformatics". An analysis of the results indicates that most of the results are from BazTech and INFONA databases. For "Reports on Geodesy and Geoinformatics", however, most of the results are from deGruyter and WUT Base of Knowledge.

3.7. DOAJ

The next step made by the Editorial Team was the inclusion of the journal in DOAJ directory in 2015. DOAJ is an on-line directory that indexes and provides open access to high-quality peer-reviewed journals. The aim of DOAJ is to increase the visibility and ease of use of the open access for scientific and academic journals, thereby promoting their growth, use and impact.

Currently, the database contains 11,467 journal records and 2,239,511 articles. The DOAJ directory includes 21 articles from 3 issues of "Reports on Geodesy and Geoinformatics" from 2015.

3.8. Other databases

According to deGruyter, "Reports on Geodesy and Geoinformatics" is currently indexed by the following global databases: Astrophysics Data System (ADS), Baidu Scholar, Celdes, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC, EBSCO (relevant databases), EBSCO Discovery Service, GenamicsJournalSeek, GeoArchive, GeoRef, Index Copernicus, J-Gate, JournalTOCs, Naviga(Softweco), Primo Central (ExLibris), ReadCube, ResearchGate, Summon (Serials Solutions/ProQuest), TDOne(TDNet), WorldCat(OCLC)

4. Parametric rating of the journal

In the world of science, the assessment of the value of a journal is done based on scientifically measurable and biometrics parameters:

- Impact Factor
- Hirsh Index for publications according to the Web of Science database,
- points of the Ministry of Science and Higher Education
- number of citations,

Citations are used for biometrics studies on the popularity of authors and journals. The true test of the value on the scientific market is the creative use of the results by others, as measured by the number of citations. "Reports on Geodesy" is indexed in the Web of Science and Google Scholar databases.

4.1. Google Scholar

Google Scholar indexes scientific texts from all fields of knowledge. It is one of the largest and most popular search engines of scientific texts, which is often the first tool to be used by

scientists in the search for the information they need. Currently, Google Scholar is also a tool for creating biometrics analyses.

Google Scholar provides Publish or Perish programme, which is used for the calculation of biometrics indicators, such as the Hirsch Index or the number of citations, on the basis of publications indexed in Google Scholar. The National Science Centre acknowledges “Publish or Perish” as a source of information on the number of citations and the Hirsch index.

“Reports on Geodesy” citations for years 1990–2012: Articles – 994; Citations – 1,399; Hirsch Index – 12. The citation analysis shows that about 89% of the citations are for the period between 1998 and 2012, when the journal was first indexed on the Internet, in BazTech database. “Reports on Geodesy and Geoinformatics” citations for years 2013-2015: Articles – 63; Citations – 56; Hirsch Index – 4.

4.2. Web of Science (WoS)

Web of Science (WoS) is a commercial database provided by Thomson Reuters. Web of Science provides access to the most reliable integrated multidisciplinary research. The access is possible thanks to the connection of the content of the related citations from multiple sources in one interface. The number of “Reports on Geodesy” citations for the period 1990-2016 is 231.

4.3. Ministry of Science and Higher Education

Since 2010, the journal has been on the B list of journals ranked by the Ministry of Science and Higher Education. The system for assessment of journals has existed since 1999. Every year, a list of Polish scientific journals is published, which are awarded a number of points by the team at the ministry according to established criteria. The ranking awards a number of points for a scientific publication in a given journal. A journal in the B list can receive up to 15 points.

Between 2010 and 2015, “Reports on Geodesy” was awarded the following number of points: 2010 – 6 points, 2013 – 7 points, 2014 – 7 points. After changing the title to “Reports on Geodesy and Geoinformatics”, the journal received 13 points for 2015 and ranks high on the Ministerial List.

4.4. POL-index

POL-index, the Polish citation database, is a part of the POL-on system of information on the higher education. POL-index aims to collect information about articles published in Polish scientific journals and citations in these articles. The database will be used to develop the Polish Impact Factor (PIF). The aim of the database is to internationalise Polish science and facilitate the integration with databases worldwide through unification of the format. The Polish Impact Factor will probably be the main criterion for evaluating journals in 2017.

Currently, the POL-index includes 9 issues and 201 articles of “Reports on Geodesy” for the period between 2009 and 2011, with the number of citations being 117, and 4 issues and 29 articles and 1 citation from the “Reports on Geodesy and Geoinformatics” for the period between 2013 and 2015.

5. Summary

The journal “Reports on Geodesy” (“Reports on Geodesy and Geoinformatics”) has played and continues to play a significant role in promoting research results, authored both by the staff of the Institute, now called the Department of Geodesy and Geodetic Astronomy, and other geodesists in Europe.

It is a kind of chronicle of the life of the department. From the beginning, the journal editorial team set high standards and ambitiously sought to maintain this high level of texts.

The use of English language, the peer-reviewed texts and the large number of conference materials testify to the quality and the desire to maintain the prestige of the scientific journal. The ever growing assessment of the journal reflects the high quality of the journal and its adjustment to the current tendencies among scientific journals.

“Reports on Geodesy” has never had a commercial character. It has always been an open journal with free access to full texts. It is highly listed in citation databases compared to other Polish geodesic periodicals. It meets all the criteria to be listed in other citation databases, such as Scopus JRC.

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