

Obituary

**In Memory of Professor Sergei Soloviev
(1930–1994)***

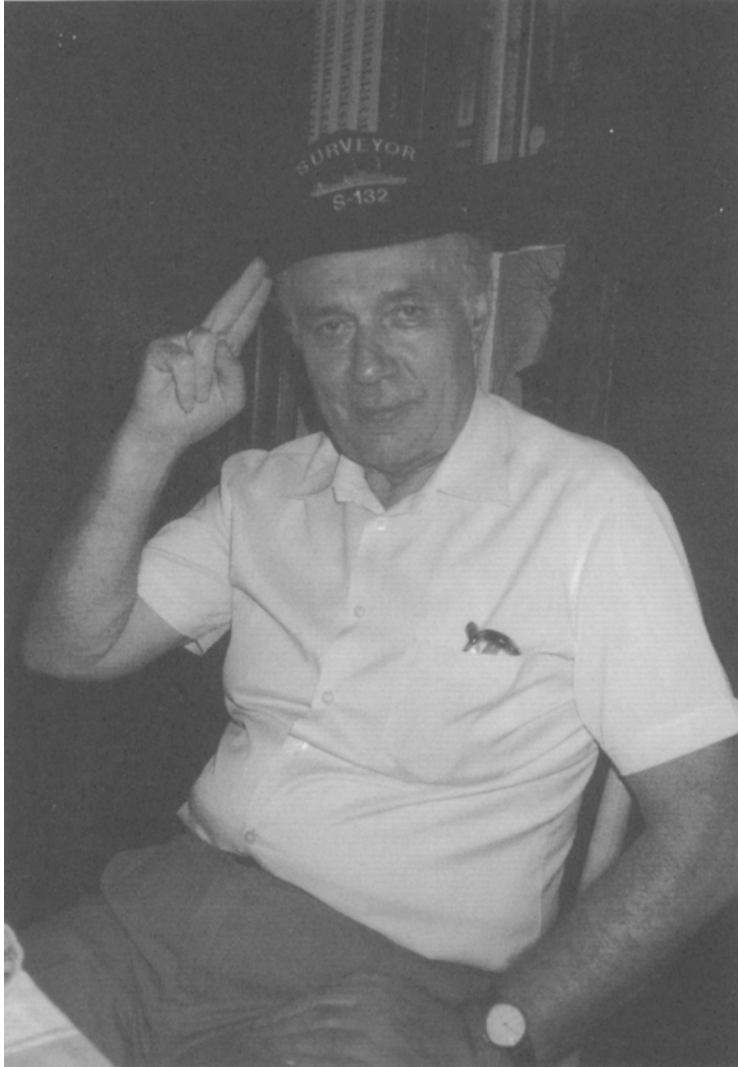


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The news of Prof. Sergei Soloviev's sudden death on 9 March 1994, saddened the international tsunami community where he had established himself as a renowned tsunami researcher and leader in fostering the development of international scientific cooperation. Fellow tsunami researchers, scientists and his many friends will remember his spirit of cooperation in furthering the science of tsunamis and the mitigation of their effects. We will miss his diligence, professionalism, and friendly personal manner.

Prof. Sergei Soloviev was born on 12 April 1930 in the ancient Russian city of Novogorod. He attended secondary school in Novogorod, but in 1941 had to evacuate to Kostroma due to the German invasion. In 1947 he finished secondary school in Leningrad with a gold medal award and began the study of physics at Leningrad University where he specialized in geophysics. He became especially interested in the problems of observational seismology. Sergei graduated from the University in 1953 and continued his education with postgraduate courses at the Geophysical Institute (now the Institute of Physics of the Earth) in Moscow. He was a student of Prof. E. Savarensky a leading Russian seismologist who was Director of the Moscow Seismological Observatory. As the main subject for his research work, Prof. Savarensky proposed a serious (for the graduate student) task to adjust the magnitude scale introduced by K. Richter and B. Gutenberg in the U.S.A. for the regional earthquakes recorded in the U.S.S.R.

In 1956, Sergei finished his graduate courses and defended his Masters thesis entitled 'Magnitude Classification of the Earthquakes in the U.S.S.R.'. In the same year he became a junior researcher in the Institute. As a part-time job, he took the position of Learned Secretary of the Seismological Council of the U.S.S.R. Academy of Sciences and continued until 1961. His main work during this period of almost five years was editing the fundamental book prepared by the group of authors entitled, 'Atlas of the Earthquakes in the U.S.S.R.' This book was the first attempt at collecting together the original observational data on all historical earthquakes in Soviet territory and classifying them on the basis of the unified magnitude scale.

In 1961, he moved from Moscow to Sakhalin and took the position of Head of the Seismological Department of the Sakhalin Complex Research Institute (SCRI). Due to the geographical position of the institute near one of the most active segments of the Pacific 'Ring of Fire', the tsunami problem inevitably became the focus of his attention. He helped establish the Soviet Tsunami Warning System on the Far East Coast, and proposed and elaborated a set of magnitude criteria for issuing tsunami warnings. He established the Hydrophysical Observatory on Shikotan Island where the experimental work on T-phase observations and the direct bottom measurements of tsunami by cable sensors started in 1963.

Among the scope of his research work at that time, was the investigation of seismicity of the Sakhalin area which resulted in the publication of the first monograph on this subject. The compilation of observational data for the tsunami

occurrence in the Pacific region was made during this period. Two volumes of the tsunami catalogs for the Pacific were published in Moscow in 1974–75 and later were translated into English. For a whole generation of tsunami researchers in the Soviet Union, these books were the primary source of information for historical tsunami data.

In 1965, Sergei Soloviev was appointed Deputy Director of the SCRI; however, in 1968 due to the illness of his daughter, he had to return to Moscow and during the next three years he again worked in the Institute of Physics of the Earth. There he prepared and in 1970 defended his PhD thesis entitled ‘Seismological Aspects of Tsunami Occurrence’. In 1972, he was elected as a Corresponding Member of the Academy of Sciences of the U.S.S.R. Soon after that, he was invited back to Sakhalin and took the vacant position of Director of the SCRI. During the next several years, he reactivated the institute and initiated several new projects. One of his primary concerns was the development of the research and technical basis of the Institute. As a result, the Institute obtained three research vessels; *Pegas*, *Sea Geophysics*, and *Audacious*, and the intensive program of geophysical investigation of the Okhotsk and adjacent seas was started.

In these years, the first steps in the Soviet–American cooperation in the field of tsunami research were taken. Prof. Soloviev was at the forefront of these programs and actively supported all cooperative projects. He took part in the Washington (1974) and Novosibirsk (1976) U.S.A.–U.S.S.R. meetings of experts on the tsunami problem and initiated two joint Soviet–American tsunami expeditions in the Kuril–Kamchatka region. His good command of the English language was revealed during these activities.

In 1971, he was elected as Chairman of the IUGG Tsunami Commission and held this position until 1979. In 1985 he attended the Tsunami Symposium in Victoria (Canada) where he was awarded the special IUGG Memorial Plate for his active research in the field of tsunami problems. In 1988, he received the Adams Award in recognition of his long-term contributions in tsunami research. At ITSU-XI, in Beijing 1987, Prof. Soloviev was elected Vice-Chairman of the Group.

In 1977, Prof. Soloviev returned to Moscow from Sakhalin and took the position of Chairman of Seismological Council of the U.S.S.R Academy of Sciences. His work during this period was connected with automation of seismological observations in the U.S.S.R. territory for the Academy of Sciences, and included initiation of the program for detailed estimation of seismic risk in earthquake-prone zones of the U.S.S.R. Following his retirement from the position in 1978, he moved to the Institute of Oceanology where he led the Institute’s program of ocean bottom seismology. He had gained experience in this field when in Sakhalin, where the first work on the development and construction of Ocean Bottom Seismographs (OBS) started in the 1970s. Several new types of the OBSs were developed and manufactured at the Institute’s design bureau in Gelengic on the Black Sea. Prof. Soloviev participated in several cruises of the research vessel

Dmitriy Mendeleev in the Mediterranean and the Atlantic where the new OBSs were successfully deployed. Results of his work for this period were summarized in the book 'History and the Perspectives of Sea Seismology', published in Moscow in 1985. Despite the fact that ocean bottom seismology became the primary part of his official work in the Academy of Sciences, Prof. Soloviev continued his active participation in coordination of tsunami research and investigation in the Soviet Union and encouraged greater international cooperation. Since 1971, he was the permanent Chairman of the Tsunami Commission of the U.S.S.R. Academy of Sciences and his leadership in this field was recognized by all his colleagues. He always paid special attention to the involvement of young scientists and worked to attract the attention of specialists from other fields to the tsunami problem.

Prof. Soloviev died on 9 March 1994, at the age 63, from cerebral thrombosis while he was working in his Moscow apartment, editing his second book on ocean bottom observations. He recently completed a Catalogue of Tsunamis in the Mediterranean Sea, which is ready for publication. He was an active member of the Editorial Advisory Board of *Natural Hazards* since 1988.

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