



Dr. Raymond D. Watts

May 17, 2026

Raymond D. Watts lived a life of curiosity, adventure, intellect, humor, and deep human connection. He was a scientist, explorer, storyteller, husband, father, grandfather-to-be, brother, colleague, mentor, and friend whose life carried him from the mountains and coastlines of Southern California to the Moon, Antarctica, and countless places in between.

Ray passed away on May 17, 2026, surrounded by the love of his family, leaving behind not only an extraordinary scientific legacy, but also generations of stories, laughter, wisdom, and unforgettable memories.

Born and raised in Southern California, Ray grew up with an adventurous spirit and an insatiable curiosity about the natural world. He attended Santa Monica High School before continuing his education at Pomona College, the Massachusetts Institute of Technology, and eventually the University of Toronto, where he completed his Ph.D. in geophysics. Learning was never simply a career path for Ray — it was part of who he was. He was endlessly fascinated by how the world worked and driven by a desire to understand what lay beneath the surface of things.

That curiosity led him into some of the most remarkable scientific work of the twentieth century.

During the Apollo era, Ray contributed to lunar science associated with NASA's Apollo 17 mission, helping interpret electromagnetic data returned from the Moon. He belonged to a generation of scientists whose work expanded humanity's understanding of worlds beyond our own. Long before modern computing became commonplace, Ray was already working at the frontier of scientific data interpretation and remote sensing.

His scientific journey later sent him to Antarctica, where he helped pioneer radar methods used to measure the thickness and structure of polar ice. In recognition of his contributions to Antarctic science, a summit on that continent was named Watts Needle in his honor in 1979 — a distinction quietly reflecting the respect he earned within the scientific community. His work contributed to the growing understanding of glaciers, ice sheets, and the hidden landscapes buried beneath them.

Ray spent much of his career with the United States Geological Survey, where his work ranged from geophysics and remote sensing to environmental and spatial analysis. Over the decades, his research contributed to fields as varied as planetary science, glaciology, mapping, and conservation science. He was widely respected for his understanding of America's roadless landscapes and served as the principal researcher and first author of the *Science* article 'Roadless Space of the Conterminous United States.' *Science* remains the most sought-after journal for scientific publication.

But for all of his professional accomplishments, the people who loved Ray will remember far more than his résumé.

They will remember his warmth, intelligence, dry wit, brilliance with puns, generosity, and storytelling ability. They will remember conversations that wandered from science to philosophy to history to humor — often all at once. They will remember his deep love of the outdoors and a life filled with

bodysurfing, skiing, hiking, climbing, kayaking, rivers, mountains, oceans, campfires, maps, adventures, and long walks and runs with Kona.

They will remember the way he could make people laugh.

They will remember his curiosity about nearly everything and his ability to make others curious, too.

They will remember the joy he found in sharing stories, ideas, and experiences with the people around him. Ray loved both discovery and connection, and he carried those gifts throughout his life.

Ray was never a man who fit neatly into a single category. He could be deeply analytical and deeply sentimental, intensely thoughtful and wonderfully funny. He approached life with bountiful intelligence, sincere humility, and a genuine appreciation for both the beauty of the natural world and the people he shared it with.

Most of all, Ray was deeply loved by his family.

To them, he was not the scientist whose work reached from the Moon to Antarctica. He was the son of Seymour (who died 30 years to the day before Ray) and Margaret Watts (also deceased). Ray was the husband who built a life of partnership and adventure with Beth. He was the best dad ever to his daughter, Kelly, the father-in-law of Kevin Wilkins, and the grandfather-to-be of a beautiful little girl who will grow up hearing many wonderful stories of her grandfather. He was the beloved and only brother of Judy McKinley, Carol Watts, Kathleen Watts, and Dorothy Dobson. He was the brother-in-law of Sue Fox, Barbara Lewis, Victor O'Brien, and Janet Bryant. Ray was the loving master of his loyal dog, Kona. Ray was a ready friend to many, with a

presence that shaped their lives in countless ways. His family — and his friends as well — knew his kindness, his humor, his imperfections, his wisdom, and the enormous depth of his heart.

Ray's legacy lives not only in scientific publications, maps, and discoveries, but in stories told around dinner tables, photographs from adventures shared, lessons quietly passed down, and the impact he had on the people who loved him most.

A private celebration of life will be held at a future time. For those who wish to make a donation in Ray's memory, two of his favorite charities were The Nature Conservancy and The Sierra Club. The family also welcomes friends and loved ones to share stories, photographs, and memories on this memorial page so that the many chapters of Ray's life may continue to be remembered and celebrated.

Ray spent his life helping humanity better understand hidden worlds — beneath the Moon's surface, beneath Antarctic ice, and across the vast landscapes of Earth. But those closest to him know that his greatest legacy was never simply what he discovered.

It was the life he shared with others along the way.

Tribute Wall

DW

“ 4 files added to the tribute wall



David Wright - June 06 at 06:32 PM

DW

“ 1 file added to the album Raymond D. Watts



David Wright - June 06 at 06:13 PM

DW

“ I am grieved to learn of Ray’s passing. He and I exchanged emails recently reminiscing about things we did together at the United States Geological Survey years ago. I did not realize they would be the last interaction I would have with Ray. I owe him my thirty-year career at the USGS.

I met Ray in 1977 when he came to Fort Collins where I had been a faculty member in electrical engineering at Colorado State University. Ray wanted to develop an airborne ice-penetrating radar for use on the temperate ice of Columbia Glacier, Alaska. I thought, with Ray’s collaboration, we could do it. The USGS gave CSU a contract and in one year we had a working system.

Ray wanted me to accompany the system to Alaska and the USGS accomplished that by hiring me, initiating my USGS career.

Our successful airborne mapping of the bottom topography of Columbia Glacier through temperate ice was a pioneering accomplishment and Ray took great satisfaction in that first. Our maps provided glacier modelers the spatial boundary conditions necessary for their modeling that correctly predicted Columbia Glacier would go unstable, calving numerous icebergs into Prince William Sound making navigation more challenging for the tankers that took on oil from the southern terminus of the Trans-Alaska Oil pipeline in Valdez. Fortunately, the tankers still managed. I have seen our 1981 paper in the Journal of Glaciology cited several times.

Ray loved climbing and other outdoor sports. I didn’t share most of those with Ray, but we were both private pilots. Another fond memory I have is flying a plane Ray owned a share of from what was then Jeffco Airport to Cape Cod, MA and back. We took turns flying the plane. We did some geophysical studies related to groundwater contamination using techniques including ground penetrating radar near what was then Otis Air Force Base. On the way back we landed at Meigs Field, Chicago, which Mayor Richard

Daily destroyed in 2003. I remember the lovely dinner we had together at the Palmer House.

I was bummed when Ray moved to USGS headquarters in Reston, though he had good reasons. Not everything in Reston went as he hoped, but had he not made the move he would not have met Beth! Ray and Beth later moved to Ft. Collins, the place I left.

Many noticed Ray's intelligence, wide-ranging interests and accomplishments. Ray was brilliant, but his brilliance was clothed with grace, compassion, and humor. He was a good friend and great first USGS boss.

Ray was proud of Beth and her counseling practice and publications. He told me where Beth published so I could read some of her papers.

Ray had a great appreciation for natural beauty. I am uploading a few photos from our 1978 Columbia Glacier project. There was beauty everywhere. I am so glad I got to see it with Ray.

May all be comforted and grateful for Ray's place in your lives.

David Wright - June 06 at 05:57 PM

JV

“*The Watts family lived across the street from us when I was growing up. I have so many wonderful memories of this dear family. I enjoyed reading about Ray's many accomplishments. As a young man, you could tell he was headed for something great. I remember when the family bought a set of the Encyclopedia Britannica, and I recall hearing that he sat down and read the books straight through — from A to Z. An amazing person, from a wonderful family. I'm so grateful to have been a part of their lives.*”

Janet VanRiper - May 31 at 07:41 PM

RG

“ Whenever I was around Ray I felt good. He had a smile on his face and energy to get out and do things - ski, hike, bike, or all the many other sports he enjoyed. I will miss my ski companion. He will be in my memory every time I look out over Winter Park on a cold, sunny day, the sort of day he cherished. Thinking of you all.

Raym Geis - May 26 at 08:15 AM

DF

“ I met Ray when we worked together in the early 1990's on the US Global Change Research Program. Our collaboration led to Ray moving to Ft Collins from Washington to establish together with CSU, IBM, USDA and USDI scientists the Center for Regional Research and Analysis a multiagency public private research activity focusing on regional impacts of climate change. We started a very exciting ground breaking research collaboration that unfortunately died an early death in 1996 when Congress stopped our funding. I will always remember what a delight it was to work with Ray. He was an excellent scientist and I will miss him. My thoughts and prayers are with Beth and the rest of his family.

Douglas Gary Fox - May 24 at 02:23 PM

DP

“ I loved working with Ray and being his friend. In addition to being very bright and inquisitive in all things, he also had such enthusiasm to explore and to share his thoughts. We both enjoyed being the relatively obscure Deputy Assistant Directors of the US Geological Survey along with Ozzie Girard while working in Reston. The "thrones behind the power", we collaborated on many projects to move things along behind the scenes. Ray and Beth then set up shop in Fort Collins. Ray invited me to check out the many benefits of work and life in Fort Collins tapping into the Colorado State University talent pool. Not long after my wife and I moved there, working together once again for the USGS. I will miss the long conversations with Ray. But I have the memories of them, and the pleasure of having viewed this family life with Beth and Kelly.

Douglas Posson - May 24 at 01:29 PM

DG

I met Ray around 1974 when we both worked at the USGS, Branch of Regional Geophysics in Denver. We got to know each other better in July of 1975 when we were part of a team on a three week field project in Alaska. Ray and I shared the back seat of the helicopter as we flew to data collection sites around Mts. Drum, Sanford and nearby parts of the Wrangell Mountains. We found that we had a common love of the outdoors, including skiing. I lost touch with Ray around 1980 when he relocated to the USGS headquarters in Virginia and I moved to Fort Collins for graduate school. Then sometime in the mid-1990s my wife, Katharine, received a phone call from her junior-high era friend, Beth O'Brien, who said her husband wanted to know if she was married to "the Dan Gregory who skis." Beth and Ray had relocated to Fort Collins and ever since our families have shared various adventures and gatherings; and Ray and I have skied and hiked together many times. I will miss sharing these times with Ray but most of all I will miss the smile with which he always greeted you and which seemed to remain with him no matter the circumstances. I feel lucky to have known Ray Watts.

Dan Gregory - June 06 at 05:46 PM