

Period	Activity
1950-1951	<p>Damage-causing volcanic earthquakes in St. Kitts, and Nevis, coming just 20 years after the Montserrat crisis of the 1930's, arouses sufficient concern to cause the Colonial office to seek scientific advice. Dr. Conyngham, Head of the Department of Geodesy and Geophysics at Cambridge University, England, is consulted. A research student in his department, Patrick Willmore is put on the project. Patrick Willmore is well known in the seismological world as the designer of the Willmore seismometer, and has to hurriedly design, and have constructed simple shock recorders, which are not ready to be set out in the field until 1951. By this time the activity is declining.</p>
1952	<p>Plate 1: Dr. Patrick Willmore atop the Soufrière of St. Vincent.</p> <p>As the crisis subsides, Dr. Willmore suggests to the Colonial Office that monitoring during periods of crisis is insufficient to determine the cause of the activity. He is commissioned to make recommendations on the surveillance of the volcanoes in the English-speaking eastern Caribbean. As a result funds are provided to maintain eight seismographs in the British volcanic islands, and locate earthquakes. Dr. Geoffrey Robson (Plate 2), who had studied under Dr. Willmore, is chosen for the job.</p> <p>Plate 2: Dr. Geoffrey Robson supervising site preparation for the Unit's headquarters on Gordon Street, St. Augustine, Trinidad.</p> <p>Trinidad is chosen as the site of the headquarters for the new unit because of its community of geologists, and geophysicists in the oil fields. Accommodation is first provided in the Treasury building on Marine Square, and later in Whitehall, Queen's Park, by the government. The Trinidad seismograph is first installed in St. Clair, however, because the site proves too noisy it is moved to North Post Signal Station, at the head of the Diego Martin Valley, which although a quiet site is difficult to access. Monitoring begins with three seismograph stations in Trinidad, St. Vincent and Dominica. These are Willmore seismographs (Plate 3) which are photographic recorders. Records from St. Vincent and Dominica are collected and mailed to Trinidad weekly, or in twice weekly batches.</p> <p>Plate 3: Willmore seismograph</p>
1954	<p>Plate 4: Katz house on Sta. Margarita Cir. Road, St. Augustine, Trinidad damaged in the 1954 earthquake</p> <p>On 4th December, a damaging magnitude 6.5 earthquake just off the north-east coast of Trinidad, which also caused one death reinforces the importance of seismic studies. An example of the type of damage sustained is shown in Plate 4.</p>

1959-1960	<p>The provision of additional funding allows for the acquisition of more equipment and a second member of staff, Ken Barr, who is a seismologist and instrumentation specialist. The construction of a permanent home for seismo-volcanic studies at the corner of Bates Trace and Gordon Street, St. Augustine is located. The site is an abandoned cocoa research plot.</p> <p>Plate 5: Excavating the site for the headquarters of the Seismic Research Unit</p> <p>The operations are conducted as a project under the direction of the University of Leeds. By this time the seismograph network has grown to eight stations.</p>
1962	<p>With the establishment of the University of the West Indies, the association is changed from the University of Leeds to the University of the West Indies.</p>
1968	<p>Plate 6: Staff photograph taken at the retirement function for Dr. Robson.</p> <p>Academic Staff (seated, l to r): Desmond Woo, Geoff Robson, John Tomblin Support Staff (standing l to r): Lutchman Pollard (seismology technician), Peter LeBlanc (partly hidden, rock slide assistant), Rampersad Singh (gardener), Rosalind Mark (secretary), Anthony Providence (almost hidden, office assistant)), Sherma Edwards (seismology technician), Floyd Archer (workshop technician), Luis Canales (visiting from Venezuelan seismic monitoring agency FUNVISIS), Godfrey Almoraes (almost hidden, draughtsman), Ruby McDonald (typist), Desmond Seupersad (geochemistry technician), Judy Tomblin (part-time librarian), Hensen Almoraes (Chief Technician), Ronny Roach (seismology technician). Photo courtesy Lutchman Pollard.</p>
1970's	<p>By the mid to late 1970s advances in technology allow for an equipment upgrade whereby the recorded seismic signals are telemetered to Trinidad and recorded on 24-channel magnetic tape.</p> <p>Plate 7: 24-channel magnetic tape recording unit. Tape could record continuously for 48 hours. It was replayed at 64 times the recording speed, which brought the frequency into the audio range, allowing the signals to be heard.</p> <p>This upgrade provides data in real-time and opens the way for an immediate response to significant events, independent of calls from the affected islands.</p> <p>Dr. Tomblin, with Dr. David Beckles, of the Mathematics Department, and Peter Jutsum, of the Computer Centre, develop the first computer-based hypocentre location and bulletin printing programmes.</p>

1973	<p>Plate 8: Soufrière Summit Observatory (St. Vincent):</p> <p>Dr. Willy Aspinall having a morning cup of coffee; first wind generator installed can be seen mounted. Photo courtesy Willy Aspinall.</p> <p>A volcano observatory on the crater rim of the Soufrière, St. Vincent is built and equipped, between January and March, by the St. Vincent Ministry of Works with the assistance of the British Royal Navy, which gives helicopter support. Funding is provided by a grant from the Caribbean Office of the British Development Division.</p> <p>Plate 9: First Strong Motion Accelerograph (SMA) installed at Texaco, Pointe-a-Pierre, Trinidad.</p> <p>L to R: Dr. John Tomblin and Willy Aspinall (SRU), John Saunders (Texaco) and an onlooker. Photo courtesy Willy Aspinall.</p>
1982	<p>The first in-house computer facilities, a twin set of Digital Corporation pdp 11/34 computers, are provided under a grant. Dr. David Beckles, of the Mathematics Department, undertakes development of the WURSTMACHINE, and Soufrière Monitoring System. These systems replace the use of the computing facilities, ICL 1902A, of the Main Campus.</p>
1988	<p>In 1988, further advances in technology pave the way for recording to be done digitally on desktop computers. The signals, however, continued to be telemetered, using costly, leased circuits.</p>
1993	<p>The Caribbean Conference on Natural Hazards: Volcanoes, Earthquakes, Windstorms and Floods is organised by the Unit, under the Ag. Headship of Mr. Lloyd L. Lynch, to mark the Unit's 40th anniversary.</p> <p>Plate 10: Staff of the Seismic Research Unit taken during the 40th Anniversary conference</p> <p>Standing l to r: Carol John (substitute secretary); Desmond Seupersad (seismology technician); Lutchman Pollard (Chief Technician); Kumar Rampersad Singh (office assistant); Janet Fullerton-Rawlins (part-time Librarian); Mitra Bridgemohan (Electronics Research Technician); Yvonne Joseph (Secretary); Joan Latchman (Assistant Seismologist); Lloyd Lynch (Electronics Engineer); Nolan Ali (Workshop Technician); O. Osuji (temporary technician); (sitting Margaret Grandison, Head Earthquake Unit Jamaica).</p> <p>Front row l to r: Wilkie Balgobin (Electronics technician; substitute gardener); William Ambeh (Ag. Head); Richard Robertson (Geologist); Godfrey Almoraes (Seismology Technician); Amoorgam Moonsammy (Gardener)</p>

1998	<p>The network is grouped into nodes with recording being done on the base computer at each node. Data from these base computers are, more economically, downloaded to the Unit's computers in Trinidad, via the internet, or directly through telephone dial-up. This allows for an increase in the number of seismograph stations in operation in each island whilst simultaneously reducing telemetry costs considerably. The data can then be analysed and genuine events processed.</p>
2002	<p>The Unit marks its 50th Anniversary with November as an Open Month, in which schools and the general public are invited to visit the Unit and learn about its work. The month closes with a Long Service Awards Ceremony honouring those members of staff, both past and present, who have served for 25 years and over.</p> <p>Plate 11: Long Service Honourees</p> <p>Front row l to r: Yvonne Joseph, Nolan Ali, Godfrey Almorales, Desmond Seupersad, Joan L. Latchman, Hensen Almorales, John B. Shepherd. Back row l to r: Lutchman Pollard, Shirley Bethelmy, Wilkie Balgobin, Kumar Rampersad Singh, Lloyd Lynch</p>
2006	<p>By 2006, there are over 50 stations in the entire network (TRN Network) sending their signals to 13 nodes or sub-networks, (Trinidad, Atlantic LNG, Dominica – 2 separate nodes, Barbados, Grenada, St. Vincent, Saint Lucia, Netherlands Antilles – 3 separate nodes, St. Kitts, Antigua).</p>