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Mont Mégantic - New observatory

Quebec astronomers and astrophysicists will have a new research tool at their disposal starting in 1978. Canada's third largest optical telescope will start operation on the highest summit of Mont Mégantic, a 3,600-foot (1080 m) mountain some 40 miles (64 km) east of Sherbrooke. Both the National Research Council and the Quebec Department of Education are financing the purchase and construction of an observatory with a 62-inch (1.58 m) aperture telescope. This will be the first large telescope in Canada east of Toronto. The decision to build an observatory follows an agreement between Laval University and the University of Montreal which will help finance the operation of the observatory through a joint management board comprising scientists and administrators from the two universities.

Total cost for the observatory is estimated at \$4 million including a \$2.1 million NRC contribution. The telescope itself will cost \$1 million with the remainder of the cost going for the construction of an access road to the site, for buildings and instrumentation, and for part of the salaries of the scientific and technical personnel for the first five years.

The new observatory will be directed by Dr. René Racine, a seasoned astronomer specializing in photometry and galactic studies.

The main research activities will center around the formation, evolution and death of stars, heavy element formation and the structure and evolution of galaxies and the universe. In addition to being a valuable teaching and research tool, the observatory will allow Quebec and other Canadian astronomers to share in the benefits of the new large Canada-France-Hawaii telescope. With its large 144-inch (3.6 m) aperture and excellent location some 14,000 feet (4250 m) above sea level, the Hawaii observatory will be among the best in the world and observation time there will be in great demand. The more modest Mont Mégantic installation will facilitate testing and development of equipment and research programs to be expanded eventually at the Hawaii observatory.

While remaining easily accessible to astronomers from Quebec City and Montreal, the observatory site on Mont Mégantic will be reasonably far from city lights and pollution. Urban development is quite unlikely in this area for several years. Being an isolated mountain surrounded for 20 to 30 miles (30-50 km) by flat ground some 2,500 feet (750 m) below, Mont Mégantic is a good site for an observatory and should have adequate "seeing" for the size of telescope contemplated; weather records indicate a possibility of about 1,200 clear night hours per year for astronomy. Finally, Laval University is already operating a small 16-inch (40 cm) aperture telescope at Saint-Elzéar de Beauce, some 60 miles (128 km) from Mont Mégantic: this should be a useful complement to the new observatory and help to accommodate visiting amateurs and members of the general public.

According to Dr. Racine, work at the observatory site is progressing well; the access road and the observatory building will be completed in the fall of 1977, allowing fall delivery and installation of the telescope. The latter will be adjusted during the following winter and should be available to scientists beginning in the summer of 1978, in time to fully operational when the International Astronomy Union holds its meeting at the University of Montreal in mid-1979. □