Corrections to Factual Errors and Omissions in
The ALMA Telescope – The Story of a Megascience Project
Paul A. Vanden Bout, Robert L. Dickman, Adele L. Plunkett

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p. 2 – Delete “was the site of a major optical observatory – the National Optical Astronomy Observatory (NOAO) – with”.

p. 24 – Delete “Postdoctoral fellow” in the second paragraph.

p. 77 – Replace “Although ranked second, behind the Gemini South optical/infrared telescope, the fact that Gemini South was already underway (by fiat of Erich Bloch, the NSF Director), effectively placed the MMA at the top of the list for new, large, NSF projects” with “The MMA was ranked second, behind the Gemini North optical/infrared telescope, near the top of the list for new, large, NSF projects.”

p. 91 – In Note 14 – Replace “50 GHz” with “500 GHz”.

pp. 102. 111, & 259 – Replace “Hasagawa” with “Hasegawa”.

pp. 107 & 263 – Replace “Shibaya” with “Shibata”.

p. 118 – First full paragraph – Replace “June 1996” with “June 1997”.

p. 157 – Sentence should read “Another safety issue is fire, which is difficult to fight at high elevations due to the limited availability of water and the stressful conditions for the fire fighters in the thinner air.”

p. 229 – Replace “1 cm” with “21 cm”.

p. 229 – Delete “An interferometer for solar observations was also part of the plan.”

p. 229 – Delete “Observations at 1 cm with the 45 Meter Telescope were made in 1984 and true millimeter observations began in 1988.”

p. 230 – Replace “Olaf Rydberg” with “Olof Rydbeck”.

pp. 234 & 235 – Replace “Yutaro Sekimoto” with “Satoshi Yamamoto”.

p. 235 – Replace “4650 m” with “4860 m”.

p. 230 – insert before the section on Submillimeter Telescopes the following item:

Puschino Radio Astronomy Observatory – The Puschino Radio Astronomy Observatory was founded on 11 April 1956, a project of the Lebedev Physical Institute. Its facilities include four radio telescopes, among them a 22 m antenna that can support millimeter observations. It began operation in 1959 with observations of the Sun, planets, and the interstellar medium. Its most recent use was as a ground station for the Radioastron space VLBI mission.

Figure B.6a The Puschino 22 m telescope. Credit: Courtesy of Yuri Kovalev, reproduced by permission.

p. 237 – insert before the section on Giant Millimeter Telescopes the following items:

South Pole Telescope (SPT) – The South Pole Telescope is a 10 m diameter unblocked aperture telescope at an elevation of 2800 m at the Amundsen-Scott South Pole Station. It began operation in 2011 with capability of observations in the mm and submm bands. Its principal mode of operation was surveys of the Southern Sky which were directed to studies of the cosmic microwave background radiation.

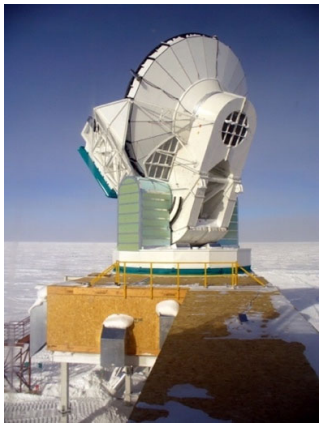

Figure B.12a The South Pole Telescope. Credit: Amble, CC BY-SA 3.0

Receiver Lab Telescope (RLT) – The Receiver Lab Telescope of the SAO was installed in 2002 on Cerro Sairecabur (40 km north of the ALMA site) at an elevation of 5525 m, the highest elevation of any astronomical telescope on Earth. The 80 cm aperture telescope had receivers operating at 800 GHz and 1.6 THz and a Fourier Transform spectrometer. The RLT demonstrated that ground-based submm observing was possible. Detections were made of the J=13-12 and J=11-10 lines of CO in the Orion Nebula. Instrumentation developed for the RLT was flown on the Herschel Mission. The RLT stopped operating in 2009 and has been removed from the site.

Figure B.12b The Receiver Lab Telescope (RLT) dome on top of its container. The RLT was powered by solar panels. Mounting the telescope to the ground would have required obtaining permissions that was precluded by this portable arrangement. Credit: Daniel Marrone, reproduced by permission.

Antarctic Submillimeter Telescope/Remote Observatory (AST/RO) – The Antarctic Submillimeter Telescope/Remote Observatory operated from 1995 To 2005 at the Amundsen-Scott South Pole Station. It had an aperture of 1.7 m and was equipped with receivers capable of observing at 230 GHz and several higher frequency bands. Among its results are the first detection of the NII line in the Large Magellanic Cloud and surveys of CO lines and NII emission in the Galaxy.

Figure B.12c Figures waving from the platform of AST/RO. A. Stark is in the blue parka. The US South Pole Dome and a transport plane are in the background. Credit: T. Bania, reproduced by permission.