

DANIEL B. SEATON

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EDUCATION

- 2003—Present **University of New Hampshire** Durham, NH
Ph.D. Candidate in Space Physics
New Hampshire Space Grant Fellow
- 2002 **Boston University** Boston, MA
Center for Integrated Space Weather Modeling (CISM) Summer School
Two-week intensive training course in space weather, emphasizing modeling for both prediction and analysis
- 1997—2001 **Williams College** Williamstown, MA
Bachelor of Arts, Cum Laude, in Astrophysics & Mathematics
Senior Honors Thesis in Astrophysics, Highest Honors Awarded
Sigma Xi

SCIENTIFIC RESEARCH & EXPERIENCE

- 2001—2003 **Harvard Smithsonian Center for Astrophysics** Cambridge, MA
Astrophysicist. Solar & Stellar X-Ray Group, TRACE
❖ Wrote IDL code to reduce and analyze TRACE data.
❖ Participated in TRACE planner rotation.
❖ Participated in Solar B design and testing process.
Teaching Fellow. Harvard University Physics Department
❖ Planned, wrote, and supervised laboratory experiments.
❖ Graded lab reports and exams.
- 2000—2001 **Williams College** Williamstown, MA
Senior Thesis in Astrophysics. Solar coronal heating and large-scale structure
❖ Observed 1999 & 2001 total solar eclipses.
❖ Reduced and analyzed images and high frequency movies.
❖ Wrote code in IDL to reduce, analyze, and simulate eclipse data.
- 1998—1999 **Swarthmore & Haverford Colleges** Swarthmore & Haverford, PA
Keck Summer Fellow. All southern-sky H-alpha survey & radio afterglows of GRBs
❖ Wrote code in IDL to automate processing and mapping procedures for automated H-alpha survey.
❖ Reduced and analyzed VLA radio data with AIPS.
- 1997—2001 **Williams College** Williamstown, MA
Teaching Assistant. Astronomy & Physics Departments, Hopkins Observatory, & Milham Planetarium
❖ Supervised students and observed with Williams' 24-inch telescope.
❖ Planned, wrote, and delivered planetarium shows for college, school, and public groups.
❖ Tutored and graded students in astronomy, physics, and laboratories.
❖ Led tutorial and homework help sessions.

SKILLS, INTERESTS, PUBLICATIONS, ETC.

Design	<p>Accord Music Group: Promotional Materials, T-shirts, and Brand Design, Saltwater Music Festival, 2003 Williams College Ephlats: <i>Live from The Spa City Diner</i>, CD, 1999; Promotional Materials & Web Site Williams College: Web Sites, Posters, T-shirts for several Williams College groups <i>A partial design portfolio is available at http://www.zorga.org/.</i></p>
Professional	<p>Publications: Please see the attached list of publications and presentations. Professional Societies: American Astronomical Society & AAS Solar Physics Division, American Geophysical Union, Sigma Xi</p>
Computer	<p>Data Analysis & Reduction: IDL, AIPS, IRAF Programming: IDL, BASIC, Visual BASIC, HTML, TeX/LaTeX Multimedia Processing: IDL, Adobe Photoshop, Adobe Illustrator, Final Cut Pro Operating Systems: Mac OS X, UNIX, Linux</p>
Activities	<p>Cycling: Williams College Cycling Team, Co-captain for Mountain Biking Chief Mechanic, Purple Bike Coalition (Williams College Community Bike Program) Member of Harpoon-International-JRA Mountain Bike Team Member of University of New Hampshire Cycling Team</p>

JOURNAL PUBLICATIONS

1. Winebarger, A. R., Warren, H. P., & **Seaton, D. B.**, 2003.
“Evolving Active Region Loops Observed with *TRACE*: I. Observations”
Astrophysical Journal, **593**:1164-1173.
2. Pasachoff, J. M., Babcock, B. A., Russell, K. D., & **Seaton, D. B.**, 2002.
“Short-Period Waves that Heat the Corona Detected at the 1999 Eclipse”
Solar Physics, **207**:241-257.
3. **Seaton, D. B.**, Winebarger, A. R., DeLuca, E. E., Golub, L., Reeves, K. K., & Gallagher, P. T., 2001.
“Active Region Transient Events Observed with *TRACE*”
Astrophysical Journal Letters, **563**:L173-L177.
4. **Seaton, D. B.** & Partridge, R. B., 2001.
“Possible Radio Afterglow of a 1989 Gamma-Ray Burst”
Publications of the Astronomical Society of the Pacific, **113**:6-9.

PRESENTATIONS & POSTERS

1. **Seaton, D. B.**, DeLuca, E. E., Cooper, F. C., & Nakariakov, V. M., 2003.
“Coronal ‘Tadpoles’ Observed by *TRACE*”
Solar Physics Division Meeting 34 (Spring 2003), abstract #16.18 (Poster)
2. Weber, M. A., **Seaton, D. B.**, DeLuca, E. E., & Lee, E., 2003.
“Moss Loop Cooling in the *TRACE* 171 Å Passband”
Solar Physics Division Meeting 34 (Spring 2003), abstract #17.04 (Poster)
3. Cooper, F. C., Nakariakov, V. M., **Seaton, D. B.**, Walker, D., Wingham, M., & DeLuca, E.E., 2003.
“Coronal EUV ‘Tadpoles’”
EGS-AGU-EUG Joint Assembly, April 2003, abstract #EAE03-A-12198 (Poster)
4. **Seaton, D. B.**, Pasachoff, J. M., Babcock, B. A., & Russell, K. D., 2002.
“Further Analysis of Short-Period Waves for Coronal Heating from the 1999 Eclipse”
American Astronomical Society Meeting 200 (Spring 2002), abstract #88.04 (Talk)
5. **Seaton, D. B.**, Winebarger, A. R., DeLuca, E. E., Golub, L., Reeves, K. K., & Gallagher, P. T., 2001.
“Active Region Transient Events Observed with *TRACE*”
American Geophysical Union, Fall Meeting 2001, abstract #SH11A-0705 (Poster)
6. Pasachoff, J. M., Russell, K. D., **Seaton, D. B.**, Babcock, B. A., & Martin, S., 2001.
“Eclipse/SOHO Joint Observations of Solar Eclipses”
American Geophysical Union, Spring Meeting 2001, abstract #SH41B-25 (Poster)

UNDERGRADUATE

1. **Seaton, D. B.**, 2001.
Continuing Science from the 1998 & 1998 Eclipses: High Frequency Oscillations, General Structure, & Correlation with Space Based Observations, Senior Honors Thesis, Williams College, Williamstown, MA.
2. **Seaton, D. B.**, 2000.
“More From Romania: Further Results from the 1999 Eclipse”
Poster, Undergraduate Symposium on Research in Astronomy, Keck Northeast Astronomy Consortium, Middlebury College, Middlebury, VT.
3. **Seaton, D.**, 1999.
“The Possible Serendipitous Detection of the Radio Afterglow of a Gamma-Ray Burst”
Proceedings of the 1999 Undergraduate Symposium on Research in Astronomy, Keck Northeast Astronomy Consortium, Wesleyan University, Middletown, CT.
4. Voellmy, A. R., Austin, P. A., **Seaton, D. B.**, 1999.
“A Southern Sky H-alpha Survey”
Proceedings of the 1999 Undergraduate Symposium on Research in Astronomy, Keck Northeast Astronomy Consortium, Wesleyan University, Middletown, CT.
5. Hall, K. J. & **Seaton, D.**, 1998.
“An H-alpha Southern Sky Survey”
Proceedings of the 1998 Undergraduate Symposium on Research in Astronomy, Keck Northeast Astronomy Consortium, Vassar College, Poughkeepsie, NY.