Dr. Stoyan Sargoytchev scientific career in space research projects

(publications related to government projects funded by NSF USA and CSA Canada)

1. Papers in peer-reviewed journals

M. J. Lopez-Gonzalez, E. Rodrigez, G. G. Shepherd, M. G. Shepherd, S. Sargoytchev, V. M. Aushev, M. Garcia-Comas, S. Brown and R. H. Wiens, O2 Atmospheric band and OH(6-2) airglow and temperature variability over Space using SATI observations: Planetary scale oscillations during autumn, Can. J. Phys. v. 85, 153-172 (2007)

S. I. Sargoytchev, S. Brown, B. H. Solheim, Y-M. Cho, G. G> Shepherd and M. J. Lopez-Gonzalez, Spectral airglow temperature imager (SATI): a ground-based instrument for the monitoring of mesosphere temperature, Appl. Optics., V. 43, No 30, 5712-5721, 2004.

M. J. Lopez-Gonzales, E. Rodrigez, R. H. Wiens, G. G. Shepherd, S. Sargoytchev, S. Brown, M. G. Shepherd, V. M. Aushev, J.J. Lopez-Moreno, R. Rodrigez and Y.-M. Cho, Seasonal variations of O2 atmospheric and OH(6,2) airglow and temperature at mid-latitude from SATI observations, Ann. Geophys. v. 22, 819-828, 2004.

Y.-M. Cho , G. G. Shepherd, Y.-I. Won, S. Sargoytchev, S. Brown, B. Solheim, MLT cooling during stratospheric warming events, GRL, v. 31, L10104, 2004

M. G. Shepherd, S. I. Sargoytchev, S. Brown, M. Moulins, J. Peterson, Measurements of water vapour in the mesosphere with the spectral absorption line imager (SALI), Adv. Space Res. Vol. 27, Nos 6-7, pp. 1081-1086, 2001

H. Takahashi, J. A. Neri, M. A. Abdu. P. Muralikrishna, U. B. Jayanthi, N. B. Trivedi, J. H. Sobral, S. Okano, G. Shepherd, S. Sargoytchev, K-I Oyama and C. T. Russell, Global Scale Earth's Upper Atmosphere Monitoring by SACI-1 Micro-satellite, Adv. Space Res, Vol. 26, No. 6, pp 929-937, 2000

R. Mani, S. Brown, W. Gault, S. Sargoytchev, N. Rowlands, P. P. Proulx, Narrow-band etalon filters for stratospheric wind measurements, SPIE, Infrared Spaceborne Remote Sensing, VII, vol. 3759 (1999), 142-152.

W.A. Gault, S. Sargoytchev and G.G. Shepherd, Divided-mirror scanning technique for a small Michelson interferometer, SPIE, Optical Spectroscopic Technique and Instr., vol. 2830, p. 15-18, 1996.

R.H. Wiens, S. Brown, S.I. Sargoytchev, R.N. Peterson, W.A. Gault, G.G. Shepherd, A. Moise, T. Ivanko, G. Fazekas, SATI - Spectral Airglow Temperature Imager, 2830-48, SPIE, Denver, August, 1996

R. J. Sica, S. Sargoytchev, P.S. Argall, E.F. Borra, L. Girrard, C.T. Sparrow, and S. Flatt, Lidar measurements taken with a Large Apperture Liquid Mirror,

1. Rayleigh-scatter system, Appl. Optics, 34, 6935-6936, 1995

C.A. Tepley, S.I. Sargoytchev, and R.J. Rojas, The Doppler rayleigh radar system at Arecibo, IEEE Transactions on Geoscience and Remote Sensing, 31, 36-46, 1993

C.A. Tepley, S.I. Sargoytchev, and C.O. Hines, Initial Doppler Rayleigh lidar results from Arecibo, Geophys. Res. Lett., 18, 167-170, 1991

2. Papers in conference proceedings

M. G. Shepherd, M. Mullins, S. Brown, S. I. Sargoytchev, Measurements of mesospheric water vapour, aerosols and temperatures with the spectral absorption line imager (SALI-AT), proceedings of the 15th EAS symposium on European Rocket and Balloon Programmes and related research, Biarritz, France, 28-31 May 2001 (ESA SP-471, August 2001).

W.A. Gault, S. Sargoytchev, W.E. Ward, G.G. Shepherd, D. Tarasick, S. Bazley, N. Rowlands, MIMI: Mesospheric Imaging Michelson Interferometer, 9th CASI Conference of Astronautics, Nov. 12-15, 1996, Ottawa, p. 237-242

W. Gault, S. Sargoytchev, N. Rowlands, J. Wimperis, Michelson Interferometer for the SWIFT Project, 9th CASI Conference of Astronautics, Nov. 12-15, 1996, Ottawa, p. 204-208