
Monday, 23 June 2008

15:30-18:30 **Poster Session I**

Session 1P: Advances in Lidar Components and Techniques – Poster Presentations

Co-Chairs: Geary Schwemmer, Scott Spuler

- S01P-01** New remotely-operated Raman-Mie-Rayleigh lidar in the High Canadian Arctic --- *G. J. Nott, M. E. W. Coffin, L. Bourdages, J. G. Doyle, T. J. Duck*
- S01P-02** Development of a helicopter-borne lidar for boundary layer studies --- *W. Eichinger, R. Avissar, H. Holder*
- S01P-03** Pre-launch validation of ADM-AEOLUS with an airborne direct-detection wind lidar --- *O. Reitebuch, M. Endemann, D. Engelbart, V. Freudenthaler, V. Lehmann, C. Lemmerz, E. Nagel, U. Paffrath, S. Rahm, B. Witschas*
- S01P-04** Portable Raman lidar PollyXT for automatic profile measurements of aerosol backscatter and extinction coefficient --- *D. Althausen, R. Engelman, H. Baars, B. Heese, M. Komppula*
- S01P-05** Pressure Retrieval using CW Laser Absorption Spectroscopy of an O₂ Line near 1271 nm with a Spectrally Broad Laser Source --- *J. Dobler, M. Dobbs, W. Erxleben, D. McGregor, B. Moore III, W. Harrison, S. Hager*
- S01P-06** Development of a laser air motion sensor for aircraft wind speed and direction - -- *S. M. Spuler, M. Spowart, D. Richter*
- S01P-07** The design of a new airborne of a high spectral resolution lidar --- *I. A. Razenkov, E. W. Eloranta, J. P. Hedrick, J. P. Garcia*
- S01P-08** Optical Autocovariance Wind Lidar (OAWL) for Efficient Space-Based Direct-Detection High-Resolution Aerosol Backscatter Winds --- *C. J. Grund, M. Lieber, B. Pierce, M. Stephens, C. Weimer*
- S01P-09** Direct-detection wind lidar system based on Fizeau interferometer --- *L. Bu, K. Shan, X. Huang, J. Liu, J. Zhou, W. Chen*
- S01P-10** Development and application of the TOPAZ airborne lidar system by the NOAA Earth System Research Laboratory --- *R. J. Alvarez II, W. A. Brewer, D. C. Law, J. L. Machol, R. D. Marchbanks, S. P. Sandberg, C. J. Senff, A. M. Weickmann*
- S01P-11** 3D flash imaging lidar for space exploration, Ball efforts to date --- *R. Craig, P. Earhart, L. Ruppert, K. Miller, J. Applegate, C. Centamore*
- S01P-12** Dual-wavelength and polarization-sensitive lidar for Japanese cloud seeding experiment for precipitation augmentation (JCSEPA) --- *T. Sakai, T. Nagai, Y. Mano, M. Murakami*

- S01P-13** In-line typed high-precision polarization lidar --- *T. Shiina, M. Miyamoto, T. Honda, K. Noguchi, T. Fukuchi*
- S01P-14** Performance of a pseudo-random noise continuous wave backscatter lidar for surface and cloud detection --- *V. Mitev, R. Matthey, J. Pereira do Carmo*
- S01P-15** Airborne and ground-based measurements of water vapor and aerosols using a high-performance Raman lidar --- *D. N. Whiteman, K. Rush, S. Rabenhorst, M. Cadirola, D. Venable, R. Connel, I. Veselovskii, B. Demoz, T. Leblanc, H. Vömel, L. Miloshevich, E. Joseph*
- S01P-16** CAELI – A multi-wavelength Raman lidar for the diurnal observation of clouds, aerosol, and water vapour profiles and boundary layer structures --- *K. M. Wilson, A. Apituley, C. Potma*
- S01P-17** Mini-lidar for balloon-borne and aircraft-borne measurements --- *P. Chazette, J. Sanak, J.-C. Raut, S. Berthier*
- S01P-18** CSIR NLC - South Africa mobile lidar, system description --- *V. Sivakumar, A. Sharma, D. Moema, C. Bollig, C. van der Westhuizen, H. van Wyk*
- S01P-19** Laser frequency stabilization for coherent lidar applications using novel all-fiber gas reference cell fabrication technique --- *P. Meras Jr., I. Y. Poberezhskiy, D. H. Chang, J. Levin, G. D. Spiers*
- S01P-20** Development of a prototype diode pumped laser for space lidar --- *X. Hou, W. Chen, H. Feng, G. Chen, G. Xin, J. Bi, X. Zhu*
- S01P-21** Imaging lidar technology development for future ESA planetary landing missions --- *I. Bakalski, R. Bond, C. Jackson, M. Humphries, J. Pereira Do Carmo, M. Foster, D. Reece, S. Bellis, S. Sutton*
- S01P-22** Er-doped laser transmitter for 1.6- μm CO₂-differential absorption lidar --- *V. Wulfmeyer, H-D. Wizemann, M. Schiller, M. Fechner, G. Huber*
- S01P-23** Backscatter lidar detection system using IR phototransistors --- *T. F. Refaat, S. Ismail, M. Nurul Abedin, S. M. Spuler, S. D. Mayor*
- S01P-24** Final report for the laser risk reduction program at GSFC --- *W. S. Heaps*
- S01P-25** Development of 2 μm conductive-cooled laser for CO₂ and wind observations --- *K. Mizutani, S. Ishii, T. Itabe, T. Aoki, A. Sato, K. Asai, H. Fukuoka, T. Ishikawa*
- S01P-26** Single-mode, All-Solid-State Nd:YAG Laser Pumped UV Converter --- *N. S. Prasad, D. J. Armstrong, W. C. Edwards, U. N. Singh*
- S01P-27** Frequency doubled single-longitudinal-mode Nd:YAG laser for remote sensing --- *J. Zhou, H. Zang, D. Liu, X. Zhu, J. Liu, W. Chen*

- S01P-28** A Chirped AM 808nm Miniaturized High Power light Source for FPA Ladar --- *J. Peng, L. Wei, W. Qi*
- S01P-29** CRRL/CTC: Labview-software-based laser frequency locking servo system for atmospheric Doppler lidar --- *J. A. Smith, X. Chu, W. Huang, J. Wiig, A. T. Brown*
- S01P-30** The Telecover Test: A quality assurance tool for the optical part of a lidar system --- *V. Freudenthaler*
- S01P-31** On the calibration of water vapor Raman lidar and its applicability to the long-term monitoring of atmospheric water vapor --- *T. Leblanc, I. S. McDermid*
- S01P-32** Simultaneous extraction of temporal, spatial, and spectral information from multi-wavelength lidar data --- *C. E. Davidson, A. Ben-David*
- S01P-33** Comparison of alternative techniques for extracting the extinction coefficient and the lidar ratio from optical depth and backscatter coefficient profiles --- *V. A. Kovalev, A. Kolgotin*
- S01P-34** Method to monitor the optical alignment deterioration using backscatter signals in lidar system --- *Z. Yan, X. Hu, S. Gu, Y. Cheng, Q. Sun*
- S01P-35** Uncertainty analysis in Doppler wind lidars based on Fizeau wedges --- *A. Belmonte*
- S01P-36** Retrieval of Aerosol Distribution from Lidar Data with Adaptive Base Points --- *L. Osterloh, C. Böckmann*
- S01P-37** Retrieving properties of atmosphere with an optimal estimation inverse method using ground based lidar measurements --- *W. Carlos de Jesus, E. Landulfo*
- S01P-38** A Method to Obtain Multiple Scattering Measurements Using a Micro-Pulse Lidar --- *T. A. Berkoff, E. J. Welton*
- S01P-39** Depolarization ratio measurements at three wavelengths using a coherent white light continuum to infer Asian dust particle size --- *M. C. D. Galvez, T. Somekawa, C. Yamanaka, M. Fujita*
- S01P-40** Water vapor mixing ratio comparisons from a Raman lidar, radiosonde, and satellites --- *M. Adam, J. Fitzgibbon, J. Wei, A. Gambacorta, M. W. Shephard, R. L. Herman, D. N. Whiteman, R. Connell, D. D. Venable, B. B. Demoz, E. Joseph*
- S01P-41** Progress on the use of combined analog and photon counting detection for Raman lidar --- *R. Newsom, D. Turner, M. Clayton, R. Ferrare*
- S01P-42** A method for determination of aerosol extinction-to-backscatter ratio --- *J. Zhang*

- S01P-43** Multi-wavelength high-spectral-resolution lidar ($2\alpha+3\beta+2\delta$) for the next generation lidar network --- *N. Sugimoto, T. Nishizawa, I. Matsui, T. Kobayashi*
- S01P-44** Greenland Lidar Depolarization Measurement Technique for Polar Mesospheric Cloud Detection --- *M. Hayman, J. P. Thayer, W. Pan, N. Bradley, S. Mitchell*
- S01P-45** Two-wavelength lidar construction, calibration and data interpretation for the purpose of aerosol observation --- *D. S. Hoffman, K. S. Repasky, J. A. Reagan, J. L. Carlsten*
- S01P-46** Water vapor Raman lidar independent calibration --- *A. S. Torres, E. Landulfo, D. N. Whiteman, D. Venable*