

## **Ball Aerospace Expands Opticks Open Source Software**

PRNewswire-FirstCall  
BOULDER, Colo.

Ball Aerospace & Technologies Corp. announced today that it has expanded its Opticks open-source software offerings to include new extensions that perform hyperspectral, multispectral and image spectroscopy analysis.

Ball Aerospace launched Opticks in 2007 as its first open source software project designed to enable detailed analysis of remote sensing data and complement strategy promoted by the Department of Defense's Open Technology Development Roadmap. Opticks is used by scientists and analysts within the DoD community to analyze remote sensing data and produce actionable intelligence.

Ball's Opticks expansion includes a new Spectral Processing Extension. The extension includes tools to convert imagery from radiance to reflectance as well as tools to load and display signatures, specifically wavelength versus reflectance. The extension also includes signature matching algorithms to help locate specified materials within an image. This extension, along with Opticks, will be a valuable resource for environmental scientists.

Ball is also expanding Opticks to include new extensions focused on scripting, specifically for the Python and Interactive Data Language (IDL) languages preferred by researchers and scientists. The new scripting extensions allow an analyst or remote sensing researcher to directly prototype new algorithms and techniques for use with the Opticks application. Opticks can be used to load and visualize imagery and Python or IDL scripts can be used to manipulate the imagery. In addition, Python- or IDL-based algorithms can be packaged into a new Opticks extension, creating easy distribution to others in the scientific and remote sensing community.

Opticks supports Imagery, Motion Imagery, Synthetic Aperture Radar (SAR), and multi-spectral and hyper-spectral remote sensing data. Ball Aerospace expects Opticks to increase the demand for remote sensing data and broaden the features available in existing remote sensing software. To become a part of the open source community, download the Ball Aerospace Opticks software at: [www.opticks.org](http://www.opticks.org).

Ball Aerospace & Technologies Corp. supports critical missions of important national agencies such as the Department of Defense, NASA, NOAA and other U.S. government and commercial entities. The company develops and manufactures spacecraft, advanced instruments and sensors, components, data exploitation systems and RF solutions for strategic, tactical and scientific applications. For more information visit [www.ballaerospace.com](http://www.ballaerospace.com).

Ball Corporation is a supplier of high-quality metal and plastic packaging for beverage, food and household products customers, and of aerospace and other technologies and services, primarily for the U.S. government. Ball Corporation and its subsidiaries employ more than 14,000 people worldwide and reported 2009 sales of approximately \$7.3 billion.

### **Forward-Looking Statements**

This release contains "forward-looking" statements concerning future events and financial performance. Words such as "expects," "anticipates," "estimates" and similar expressions are intended to identify forward-looking statements. Such statements are subject to risks and uncertainties which could cause actual results to differ materially from those expressed or implied. The company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Key risks and uncertainties are summarized in filings with the Securities and Exchange Commission, including Exhibit 99.2 in our Form 10-K, which are available at our Web site and at [www.sec.gov](http://www.sec.gov). Factors that might affect our packaging segments include fluctuation in product demand and preferences; availability and cost of raw materials; competitive packaging availability, pricing and substitution; changes in climate and weather; crop yields; competitive activity; failure to achieve anticipated productivity improvements or production cost reductions; mandatory deposit or other restrictive packaging laws; changes in major customer or supplier contracts or loss of a major customer or supplier; and changes in foreign exchange rates or tax rates. Factors that might affect our aerospace segment include: funding, authorization, availability and returns of government and commercial contracts; and delays, extensions and technical uncertainties affecting segment contracts. Factors that might affect the company as a whole include those listed plus: accounting changes; changes in senior management; the current global recession and its effects on liquidity, credit risk, asset values and the economy; successful or unsuccessful acquisitions, joint ventures or divestitures; integration of recently acquired businesses; regulatory action or laws including tax, environmental, health and workplace safety, including in respect of climate change, or chemicals or substances used in raw materials or in the manufacturing process; governmental investigations; technological developments and innovations; goodwill impairment; antitrust,

patent and other litigation; strikes; labor cost changes; rates of return projected and earned on assets of the company's defined benefit retirement plans; pension changes; reduced cash flow; interest rates affecting our debt; and changes to unaudited results due to statutory audits or other effects.

First Call Analyst:

FCMN Contact: rbrown@ball.com

SOURCE: Ball Aerospace & Technologies Corp.

CONTACT: Roz Brown of Ball Aerospace & Technologies Corp.,  
+1-303-533-6059, rbrown@ball.com

Web Site: <http://www.ballaerospace.com/>

<http://www.opticks.org/>

---

<https://ball.mediaroom.com/2010-04-12-Ball-Aerospace-Expands-Opticks-Open-Source-Software>