



Home About Us Contact Us View Cart My Account FAQ

username

LOGIN

New Account »  
Forgot Password?

Triggered Lightning

GO

Advanced  
Search »

#### Newsletter

To be informed of important news about our site, enter your email here. You can always unsubscribe later. Your address will not be released to others. (Read our Privacy Policy)

Your name

Your email

Unsubscribe »

SUBMIT

#### Search Results for: Triggered Lightning

Total Results: 9

Results per page:  
50

Sort by: Relevancy Title Date Pages Display: Full Text Only

[A Brief History of Laser Guided Lightning Discharge Models and Experiments](#) Jul 5, 1994 25 pages

Authors: [Matthew A. Kozma](#); [PHILLIPS LAB HANSCOM AFB MA](#)

Laser guided **lightning** discharge uses lasers instead of rockets to trigger **lightning**. Artificially **triggered lightning** has several important applications including aerospace vehicle launch protection and electrical ... line transmission protection, among others. A brief history of the theoretical models used to predict **triggered lightning**, the experimentation completed with rocket **triggered lightning**, and the work completed on laser guided **lightning** discharge is presented. A bibliography of work related to **lightning** modeling, rocket-triggered **lightning**, and ...

Full Text

[Natural and Triggered Lightning Launch Commit Criteria \(LCC\)](#) Jan 15, 1999 23 pages

Authors: [E. P. Krider](#); [H. C. Koons](#); [R. L. Walterscheid](#); [W. D. Rust](#); [J. C. Willett](#); [AEROSPACE CORP EL SEGUNDO CA TECHNOLOGY OPERATIONS](#)

This document has been prepared to document the **Lightning** Launch Commit Criteria recommended by the **Lightning** Advisory Panel (LAP) in May 1998. The LAP is a joint AF/NASA panel that provides an independent scientific assessment of, advice on, and recommended changes to the **Lightning** Launch Commit Criteria, lightning-related issues in the Flight Rules, and **Lightning** Advisories/Warnings for ground operations.

Full Text

[Lightning Launch Commit Criteria](#) Feb 1, 1996 85 pages

Authors: [H. C. Koons](#); [R. L. Walterscheid](#); [AEROSPACE CORP EL SEGUNDO CA TECHNOLOGY OPERATIONS](#)

... gather in situ airborne field mill (ABFM) data to revise the USAF and NASA **lightning** Launch Commit Criteria (LCC) for manned and unmanned space launches. The Marshall Space Flight Center recommended changes to the **lightning** LCC based on their analysis of the ABFM data obtained under the Airborne Field Mill Project. A committee known as the Peer Review Committee (PRC) was formed 'To draft and finalize a subset of the Natural and **Triggered Lightning** Launch Commit Criteria' based on ABFM Program data.' This report documents the LCC recommended by the PRC in March 1994 ...

Full Text

[Three Flights Into Thunderstorms with the Revised Rocket Electric Field Sounding \(REFS\) Payload](#) Aug 10, 1993 149 pages

Authors: [J. C. Willett](#); [D. C. Curtis](#); [G. Y. Jumper](#); [W. F. Thorn](#); [PHILLIPS LAB HANSCOM AFB MA](#)

... and electrostatic potential magnitudes over 120 MV were encountered inside the storms. The average field driving one natural cloud-to-ground **lightning** flash was estimated at 30 kV/m or less. Grounded triggering rockets were launched immediately after each sounding rocket, but no **lightning** was **triggered**, suggesting that ambient fields of 10 kV/m over the lowest 500 m were not sufficient to trigger **lightning** with the rocket-and-wire technique. **Lightning**, Field mills, **Triggered lightning**, Rocket, Electric fields.

Full Text

[Descriptive and Conditional Climatology for Specific Launch Commit Criteria for Cape Canaveral, Florida](#) Mar 2000 111 pages

Authors: [Edward C. Goetz](#); [AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF ENGINEERING](#)

In 1987, an unmanned Atlas-Centaur-67 launched from the Cape **triggered** a **lightning** discharge that disabled the on-board guidance system and Range Control destroyed the platform. This incident spurred the review and revision of the natural and **triggered lightning** launch commit criteria (LCC). The LCC are ... a descriptive or conditional climatology for many of the LCC. This thesis addresses the **lightning** and the cumulus LCC. A descriptive climatology for both the **lightning** and the cumulus LCC is presented for the 1989 to 1998 period. Additionally, the climate of the Cape is ...

Full Text

[Multiparameter Radar and Aircraft Based Studies of the Micro-Physical, Kinematic and Electrical Structure of Convective Clouds](#) Feb 14, 1993 15 pages

Authors: [V. N. Brangi](#); [I. J. Caylor](#); [COLORADO STATE UNIV FORT COLLINS DEPT OF ELECTRICAL ENGINEERING](#)

... , NCAR King Air and Wyoming King Air are in the process of being analyzed for particle type, electric field from field mills and up/down draft. Surface field mills and LLP data give an indication of first cloud-to-ground **lightning** time and location. Another on-going study is related to multiparameter radar studies of **lightning** echoes and a **triggered lightning** event.... Radar, Electrical, Storms, **Lightning**.

Full Text

[Discharge of Electrically Charged Clouds](#)

Oct 26, 1992 29 pages

Authors: [Jean-Claude Diels](#); [Xin M. Zhao](#); [Chao-Yuen Yeh](#); [Cai Y. Wang](#); [NEW MEXICO UNIV ALBUQUERQUE DEPT OF PHYSICS AND ASTRONOMY](#)

[Full Text](#)

In a one year program, we have established a new mechanism for triggering **lightning** using low energy (less than 1 mJ) ultrashort (subpicosecond) pulses. A pre-ionized 'needle-shaped' path is created by three to four photon ionization of oxygen or applied field results in a local enhancement of the field, ... , at pressure of 1/7 atm. This result and the theory indicate that less than 1 mJ in less than 1 ps duration pulses at 248nm should induce the discharge at atmospheric pressure. A fs laser oscillator-amplifier has been assembled to perform such tests.... **Lightning**, Laser, **Triggered lightning**.

[Catalog of Absolutely Calibrated, Range Normalized, Wideband, Electric Field](#)

Jun 22, 1993 106 pages

[Waveforms from Triggered Lightning Flashes in Florida](#)

Authors: [Yataka Izumi](#); [John C. Willett](#); [PHILLIPS LAB EDWARDS AFB CA](#)

[Full Text](#)

During the summer of 1987, a rocket-triggered-lightning program was conducted at the NASA Kennedy Space Center, Florida. The rocket triggering was performed from two trigger platforms - one over water and the other over land. The propagation paths from the two sites were almost entirely over brackish water. This report presents waveform plots of the electric-field time derivative, the electric field, and the high-frequency spectral density at 5 MHz.

[Atmospheric Electricity and the Apollo Series.](#)

Jun 1972 90 pages

Authors: [Joseph E. Nanevicz](#); [Edward T. Pierce](#); [Arthur L. Whitson](#); [STANFORD RESEARCH INST MENLO PARK CALIF](#)

[Full Text](#)

... to better define the electrical characteristics of a large launch vehicle. Of particular concern was the effective electrical length of the vehicle and plume since this parameter markedly affects the likelihood of a **lightning** stroke being **triggered** by a launch during disturbed weather conditions. Since no instrumentation could be carried aboard the launch vehicle, the experiments were confined to LF radio noise and electrostatic-field measurements on the ...

Total Results: 9

Results per page:

50