Mark P. Shuman Branch Chief - Legal Division of Corporation Finance Securities and Exchange Commission 100 F. Street, N.E. Washington, DC 20549

Re: Data Storage Corporation

Registration Statement on Form S-1 Filed February 6, 2012

File No. 333-179396

Received by the Securities and Exchange Commission on February 6, 2012

Ladies and Gentlemen:

On behalf of Data Storage Corporation (the "<u>Company</u>"), set forth below is the Company's response to your letter of comment dated March 2, 2012 to Mr. Charles M. Piluso, the Company's Chief Executive Officer, relating to the above-captioned Registration Statement on Form S-1, dated February 6, 2012. The numbered responses of the Company and related captions contained in this letter correspond to the numbered paragraphs and related captions in the letter of comment. For your convenience, we have repeated each comment below followed by the Company's response thereto.

General

1. Please update your filing to include audited financial statements and related disclosures for the fiscal year ended December 31, 2011. Refer to Item 8-08(b) of Regulation S-X.

The Company has updated its filing to include audited financial statements and related disclosures for the fiscal year ended December 31, 2011.

Cover Page

2. You indicate on the cover page that you may put up to \$20,000,000 of shares of your common stock to Southridge Partners over a two-year period. Please indicate on the cover page that the actual proceeds you draw down from the facility could be substantially less than the full amount.

April 20, 2012 Page 2

The Company has revised the cover page to indicate that the actual proceeds it may draw down from the Equity Purchase Agreement could be substantially less than the full amount.

3. You disclose on the cover page that the closing price of your common stock on February 3, 2012 was \$0.56 per share. Please also disclose the market for your securities. Refer to Item 501(b)(4) of Regulation S-K.

The Company has revised the cover page to disclose that its common stock is quoted on the OTC Bulletin Board under the symbol "DTST.OB."

Prospectus Summary, page 1

4. Please include a discussion of the likelihood that you will receive the full amount of proceeds available under the equity purchase agreement in light of your current liquidity needs and business plans. Also discuss the business circumstances that may lead you to draw on the facility. Disclose the number of shares you could issue and the amount of proceeds you could receive under the equity line based upon the current price of your common stock, the amount of shares being registered on behalf of Southridge Partners and in light of all the limitations contained in the equity purchase agreement.

The Company has revised page 6 (section entitled "Prospectus Summary") accordingly.

Risk Factors

We may not have access to the full amount available under the Equity Purchase Agreement, page 11

5. Please expand your risk factor disclosure to address the risks associated with the equity purchase agreement, including the uncertainty that you will have access to the full amount available under the equity line. In addition to addressing your registration requirements, specifically address the limitations in the purchase agreement on your ability to sell shares to Southridge Partners.

The Company has revised page 11(section entitled Risk Factors – "We may not have access to the full amount available under the Equity Purchase Agreement.") accordingly.

Undertakings, page II-4

6. Please provide the undertaking at Item 512(a)(5)(i) or (a)(5)(ii), as appropriate.

The Company revised page II-4 (section entitled "Undertakings") to include the undertaking at Item 512(a)(5)(ii).

Signatures

7. Please amend the signature page to identify your Chief Accounting Officer or Controller, as required by Instruction 1 to Signatures on Form S-1.

The Company has amended the signature page to identify the Mr. Charles M. Piluso, is the Company's Chief Accounting Officer.

The Company appreciates the efforts of the SEC and your staff in reviewing its response to your letter of comment. We are fully committed to working with you and your staff to respond to your comments and to provide you with all the information you require. Accordingly, should you have any questions regarding the Company's response herein to your comments, please contact the undersigned at (203) 351-8023 or M. Ridgway Barker at (203) 351-8032.

Sincerely,

By: /s/ Michael A. Rueda

Michael A. Rueda