

EXOSAT IA

User Manual



About EXOSAT IA

The European X-ray Observatory Satellite Interactive Analysis (EXOSAT IA) is a legacy software system used to view and analyse the data that was captured by the EXOSAT during its three years in operation. EXOSAT was a satellite telescope that operated from 26 May 1983 to 9 April 1986. EXOSAT was the first of its kind in that it was the first telescope that was devoted exclusively to the study of X-Ray wavelengths i.e. wavelengths between 0.05-50 keV, in the universe. Since then there have been many X-Ray telescopes, for example, the ESA's XMM-Newton telescope. During its operation, EXOSAT made 1780 observations of many different objects which emitted X-Ray wavelengths. Indeed some of the observations made proved significant within the field of astronomy. [3]

The data collected was stored originally in magnetic tapes but later moved to more modern forms of storage. The EXOSAT IA is used to view and analyse this data.

The system below improves a part of EXOSAT IA, specifically the Gas Scintillation Proportional Counter Data Analyser and also provides a secure login sub-system.

User Instructions

1. Registration

Upon opening the website, the user will be led to the registration page shown in Figure 1.

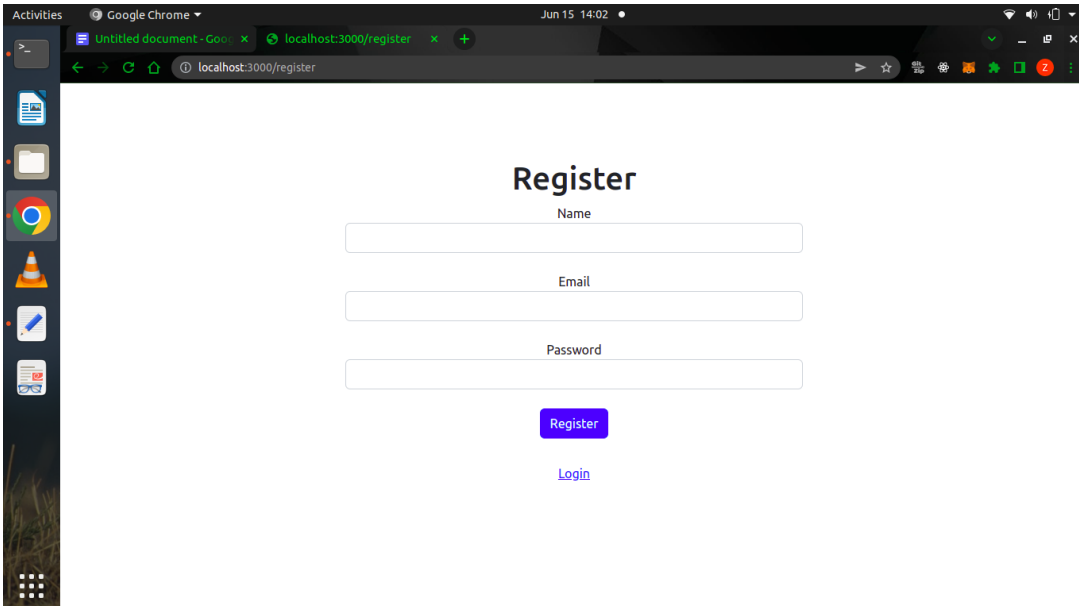
A screenshot of a web browser showing a registration page. The browser's address bar displays 'localhost:3000/register'. The page has a dark background with a light-colored sidebar on the left containing icons for various applications. The main content area is white and features the title 'Register' in a bold, black font. Below the title are three input fields labeled 'Name', 'Email', and 'Password'. At the bottom of the form is a blue 'Register' button and a blue 'Login' link.

Figure 1: EXOSAT IA Registration Page

Enter the details i.e your name, your email address and choose a password.

Once the details have been entered click the blue “Register” button at the bottom of the screen. After clicking the register button you will automatically be taken to the Login page. To login follow the instructions on 2.

If already registered the user can click the login button at the bottom to login.

2. Login

To login enter your email address and your password and click the blue login button at the bottom of the screen.

Once the login button has been clicked 1 of 3 things will happen

- 1 Login Successfully- If the login is successful you should be taken to the login page
- 2 Incorrect Password - The system will show “incorrect password” - This means that the email address is correct but the password is wrong.
- 3 Incorrect email address - The system will show the following “no user with that email address”

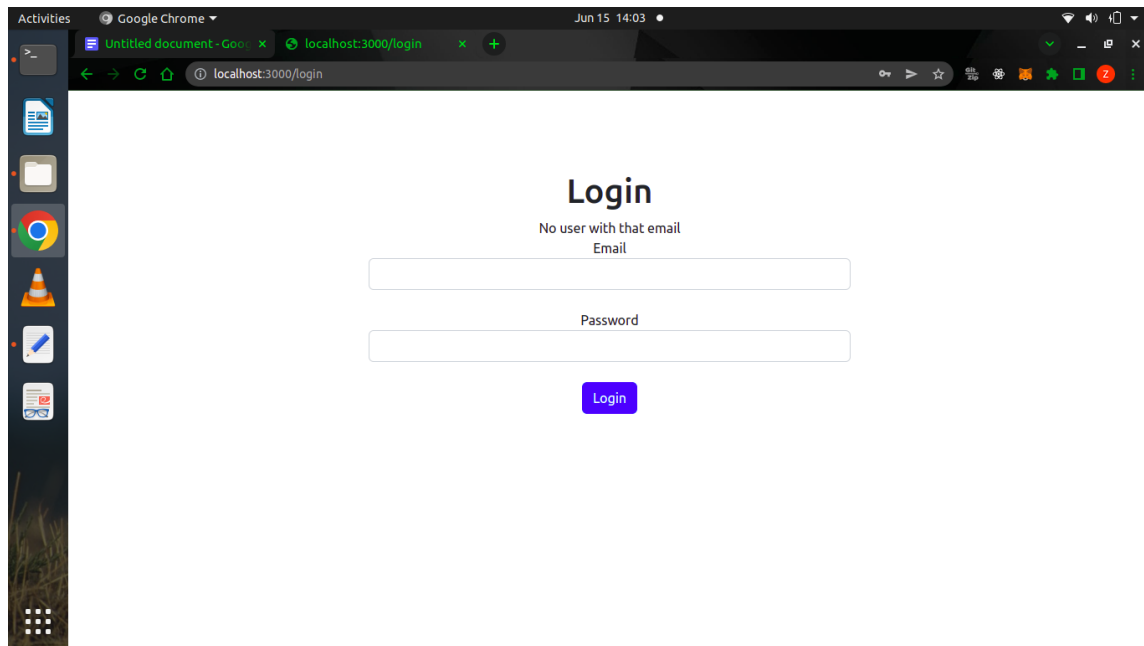
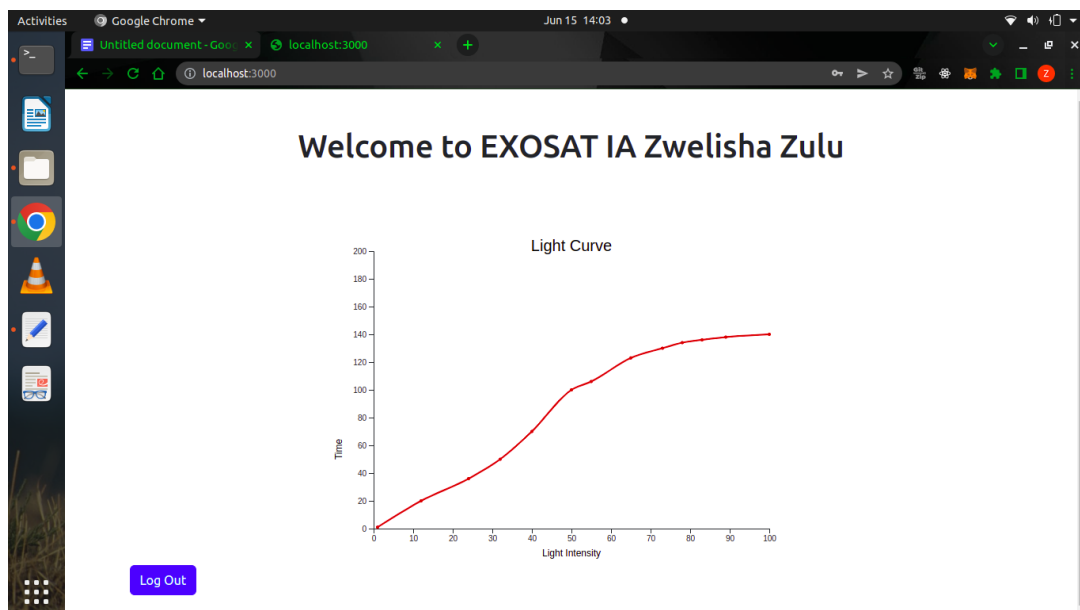


Figure 2: EXOSAT IA Login Page

3. Light Curve

Once logged in the user will be allowed to view the light curve from the EXOSAT data as shown in the figure below. The user's name will be displayed on top.



4. Logout

The user has the option to logout by pressing the 'logout' button at the bottom left corner.

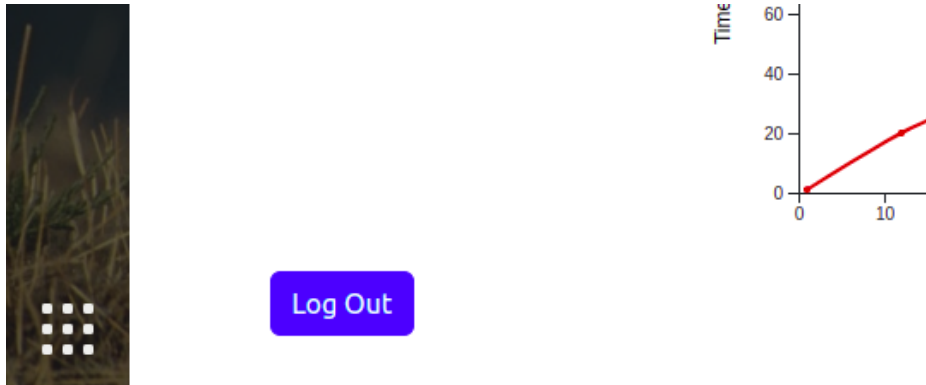


Figure 4: EXOSAT Logout button

Upon clicking this button you will be sent to the login page where you will have the option to login again.