

**Table S1: List of African countries by region**

**Southern Africa**

- 1- Lesotho
- 2- Swaziland
- 3- Botswana
- 4- Namibia
- 5- South Africa

**Middle Africa**

- 1- Angola
- 2- Cameroon
- 3- Equatorial Guinea
- 4- Gabon
- 5- Congo
- 6- Chad
- 7- Central African Republic
- 8- Congo, the Democratic Republic
- 9- Sao Tome and Principe

**Eastern Africa**

- 1- Burundi
- 2- Eritrea
- 3- Madagascar
- 4- Reunion
- 5- Somalia
- 6- Comoros
- 7- Ethiopia
- 8- Rwanda
- 9- Djibouti
- 10- Kenya
- 11- Mayotte
- 12- Seychelles
- 13- Uganda
- 14- Mozambique
- 15- Zambia
- 16- Malawi
- 17- Tanzania,
- 18- Zimbabwe

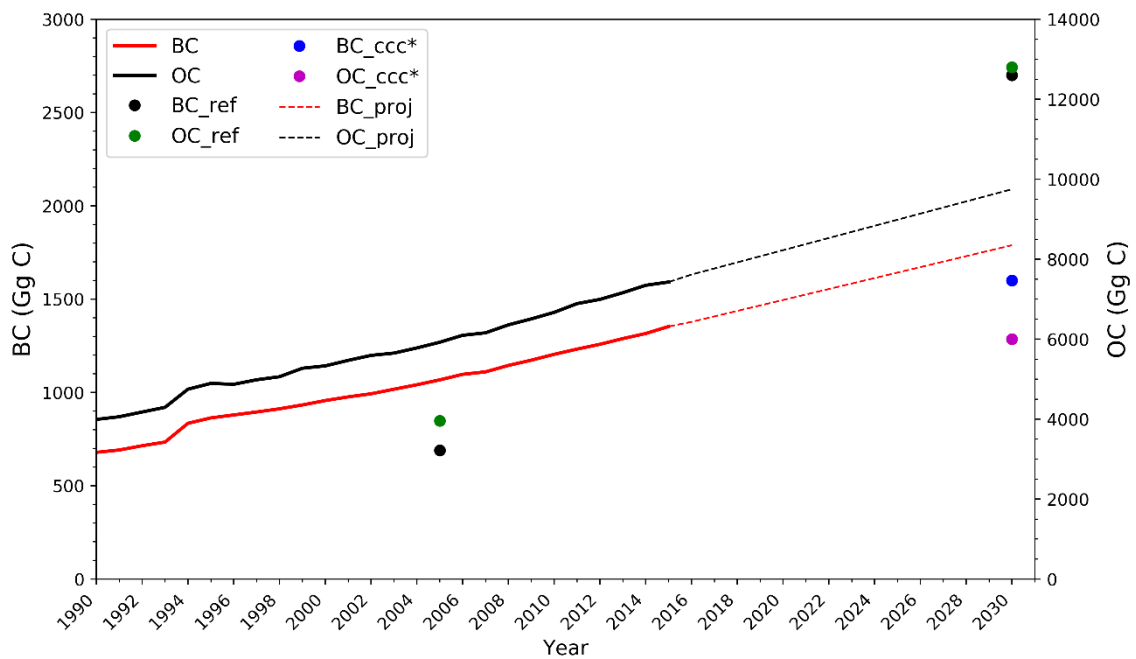
**Western Africa**

- 1- Benin
- 2- Liberia
- 3- Saint Helena
- 4- Burkina Faso
- 5- Gambia
- 6- Mali
- 7- Ghana
- 8- Mauritania

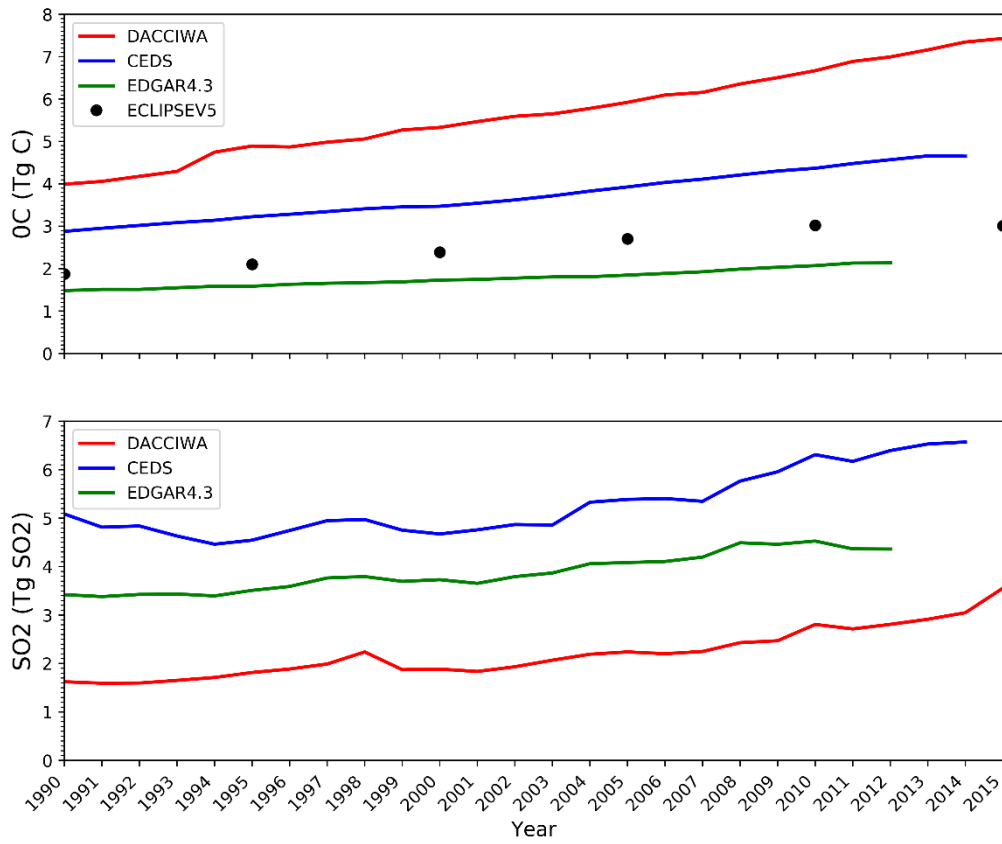
- 9- Senegal
- 10- Cape Verde
- 11- Cote D'ivoire
- 12- Guinea
- 13- Niger
- 14- Sierra Leone
- 15- Guinea-Bissau
- 16- Nigeria
- 17- Togo

**Northern Africa**

- 1- Algeria
- 2- Egypt
- 3- Libyan Arab Jamahiriya
- 4- Morocco
- 5- Tunisia
- 6- Western Sahara
- 7- Sudan



**Figure S1: Comparison of OC and BC emissions between DACCIWA inventory (this work in solid line and its projection in dash line) and Lioussé et al. (2014) inventory (in dot).**



**Figure S2: Comparison of OC (top) and SO<sub>2</sub> (bottom) between DACCIWA inventory (this work) and global inventories (CEDS, EDGAR and ECLIPSE inventories).**