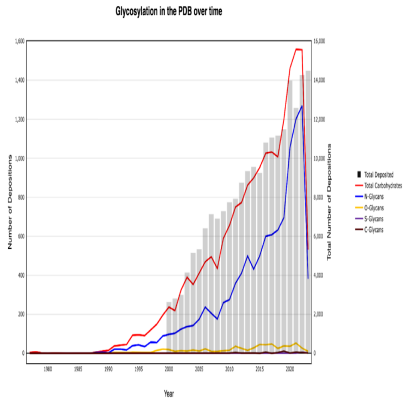
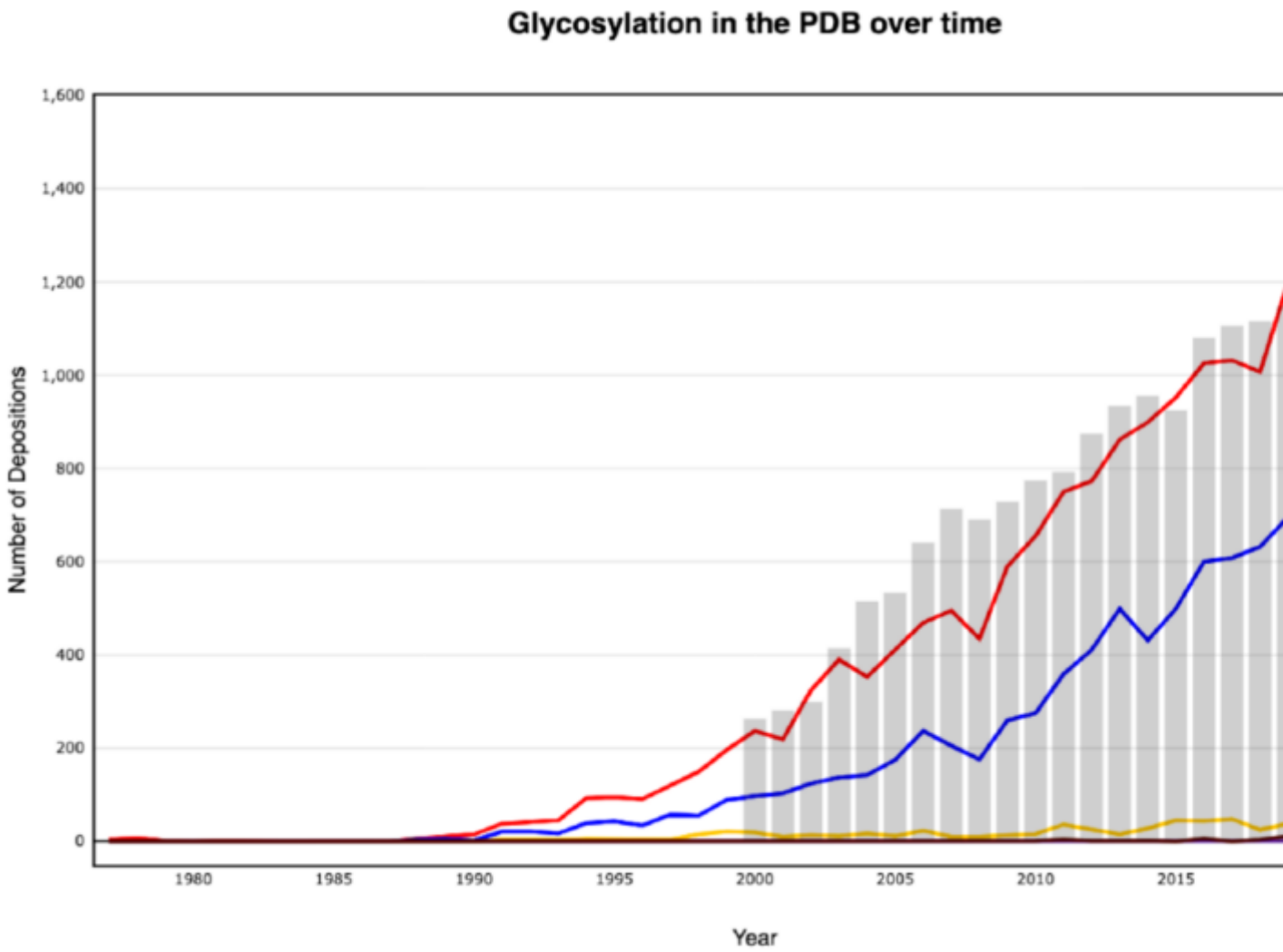


Monitoring carbohydrate 3D structure quality with the Privateer database

Description

The Protein Data Bankâ??s (PDB) carbohydrate data clean-up has brought many improvements in the discoverability and interpretability of deposited glycan structures, but crucial quality indicators are either missing or difficult to find on the PDB pages. Without the ability to access the broader glycochemical context, problematic structures can be taken as fact by eager but inexperienced scientists. The Privateer software is a validation and analysis tool that provides access to a range of metrics and links to external experimental resources, allowing users to evaluate structures using carbohydrate-specific methods. The authors present the Privateer database, a free resource designed to complement the growing glycan content of the PDB



The plot shows trends in deposition in the PDB from 1975 to the present. Grey bars show the total number of models deposited into the PDB for all structural determination methods. Lines show glycosylation in the PDB over time, split into *N*-glycans, *O*-glycans, *S*-glycans, and *C*-glycans.

Category

1. News