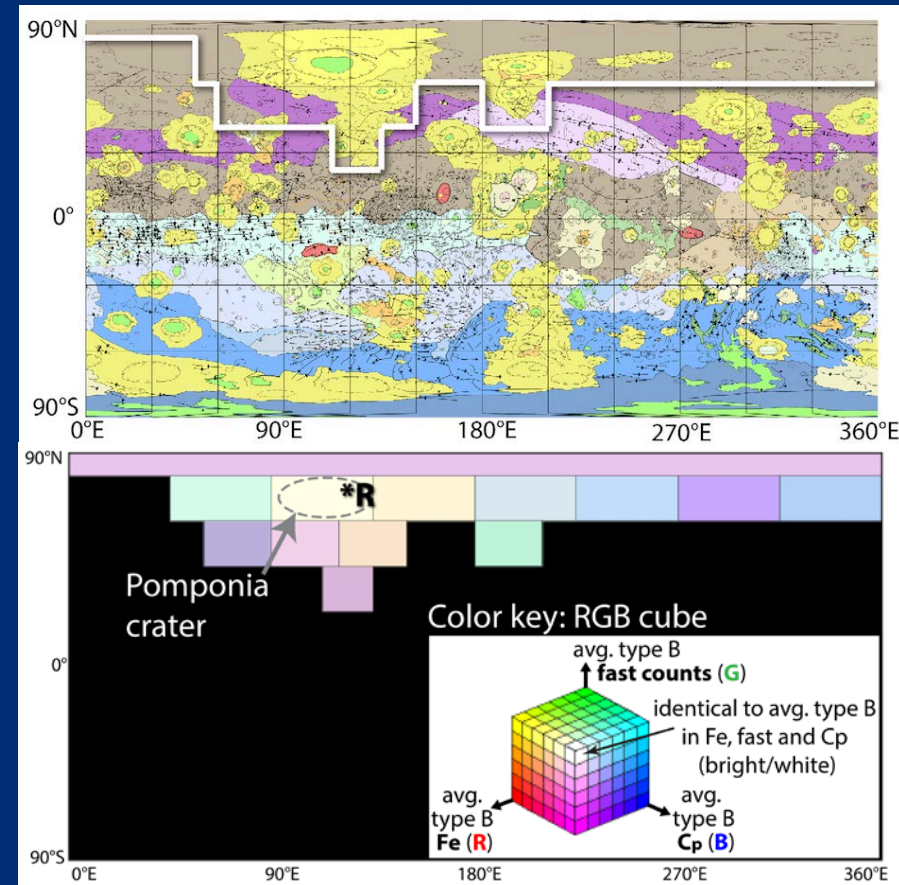


# Impact Melting on Vesta at the Rheasilvia Antipode

- Vesta is the largest differentiated silicate protoplanet and was thought to be magmatically inactive since its formation.
- One vestan meteorite has a chemical signature, potentially formed via recent melting of the basaltic crust.
- Data from the Dawn spacecraft link that meteorite to originating in a region near Vesta's north pole that is antipodal to the Rheasilvia giant impact basin.
- Antipodal melting from the Rheasilvia impact may have caused this post-formation igneous activity in the basaltic crust.



Giant impact melting may have prolonged igneous activity on protoplanets