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Poster
Specification of neutral density for LEO satellite drag calculations has become a Space Weather top priority. Data Assimilation schemes using physics based background models have made significant progress and are now ready for operational use. We present results from over 5 years of neutral density assimilation using the Thermosphere Ionosphere Data Assimilation (TIDA) scheme assimilating CHAMP and GRACE neutral density measurements. As TIDA can now also assimilate ionosphere and plasmasphere measurements we show what improvements can be expected from the combined assimilation of neutral and plasma datasets. TIDA can be used to estimate the uncertainty and bias of any dataset, a critical feature as no uncertainties are specified and no biases are known for the assimilation measurements available today. Recognition of biases and identification of true uncertainties for real time applications is now our top priority.
Poster session day
Wednesday, April 29, 2026
Poster location
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Meeting homepage
2026 Space Weather Workshop
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