

Spectral data peer review document for CGDB v36.0

Lawrence Berkeley National Laboratory

May 7, 2025

1 Introduction

This document contains table summary and graphs of spectral data files submitted for publication in CGDB v36.0. Directions for submitting data to the CGDB is found at our LBNL web site.

Each table has the manufacturer's name at the top, and an x/y indicator which page x out that manufacturer's y total pages is the current.

After each table follows the graphs for that manufacturer's submissions

2 Description of the table columns

Filename Filename of the submitted spectral properties

Product name Product name listed in the file

Id CGDB ID number

Type Product type e.g. fabric.

Thick Material thickness in mm.

Flr **Y** if the product has been modified to remove measurement error due to the spectrophotometer not handling fluorescence.

Tfsol Solar integrated direct-hemispherical transmittance for light incident on the front/exterior of the material

Tbsol Solar integrated direct-hemispherical transmittance for light incident on the back/interior of the material

Rfsol Solar integrated direct-hemispherical reflectance for light incident on the front/exterior of the product

R_{bsol} Solar integrated direct-hemispherical reflectance for light incident on the back/interior of the material

T_{fvis} Visible integrated direct-hemispherical transmittance for light incident on the front/exterior of the material

T_{bvis} Visible integrated direct-hemispherical transmittance for light incident on the back/interior of the material

R_{fvis} Visible integrated direct-hemispherical reflectance for light incident on the front/exterior of the product

R_{bvis} Visible integrated direct-hemispherical reflectance for light incident on the back/interior of the material

E_f Thermal emissivity of the front of the material

E_b Thermal emissivity of the back of the material

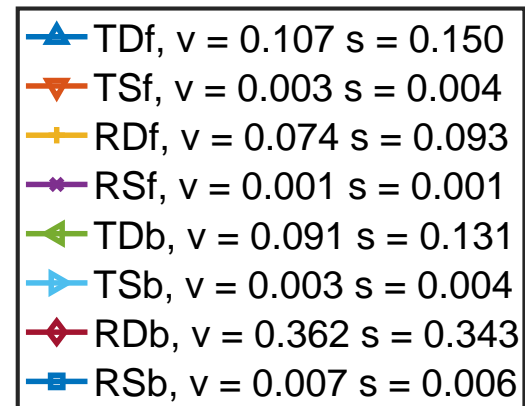
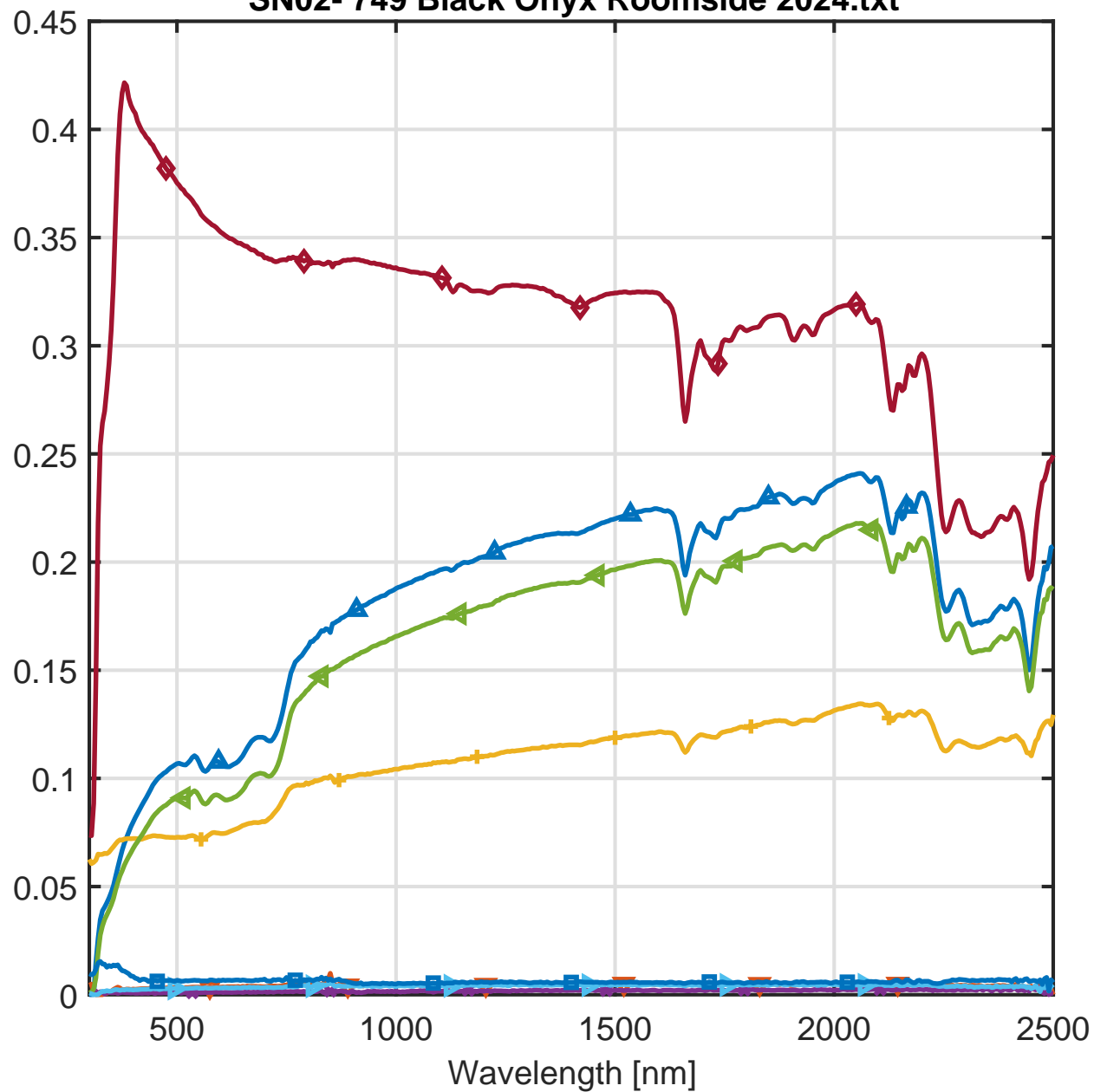
TIR Thermal IR transmittance

To get the specular and diffuse components of the transmittance and reflectance you have to look at the graphs, where integrated numbers are displayed in the legend.

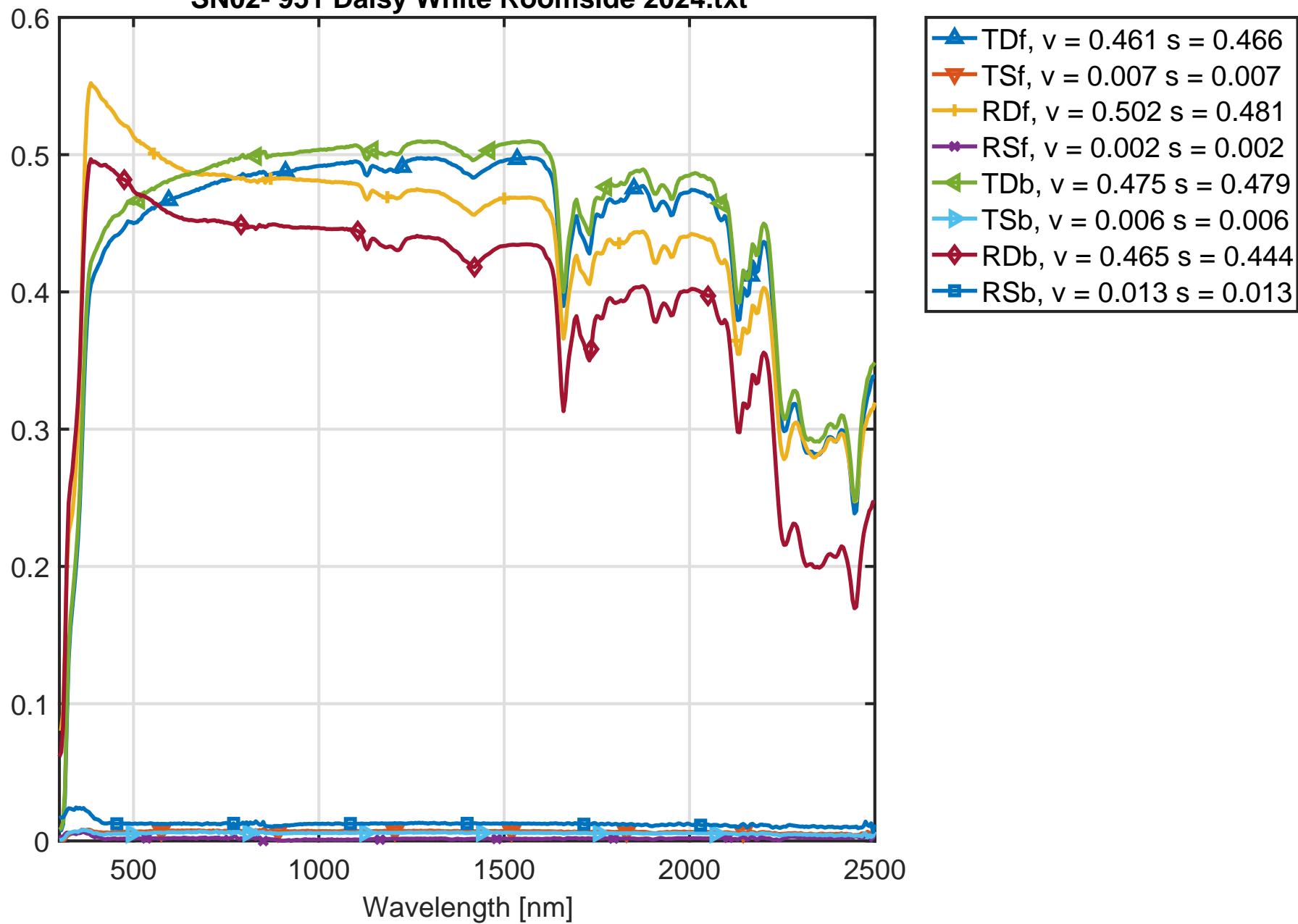
3 Table: Hunter Douglas (1/1)

Filename	Product name	ID	Type	Thick	Flr	Tfsol	Tbsol	Rfsol	Rbsol	Tfvis	Tbvis	Rfvis	Rbvis	Ef	Eb	TIR
SN02- 749 Black Onyx Roomside 2024.txt	SN02- 749 Black Onyx Roomside 2024	46062		0.264		0.154	0.135	0.094	0.349	0.110	0.094	0.075	0.369	0.707	0.780	0.086
SN02- 951 Daisy White Roomside 2024.txt	SN02- 951 Daisy White Roomside 2024	46060		0.264		0.473	0.485	0.482	0.456	0.468	0.481	0.504	0.477	0.753	0.768	0.096
SN02- Streetside 2 024.txt	SN02- Streetside 2024	46061		0.244		0.000	0.000	0.754	0.764	0.000	0.000	0.750	0.772	0.852	0.857	0.000
SN06- 235 Stone Creek Roomside 2024.txt	SN06- 235 Stone Creek Roomside 2024	46065		0.251		0.352	0.321	0.249	0.445	0.324	0.288	0.214	0.461	0.781	0.788	0.072
SN06- 951 Daisy White Roomside 2024.txt	SN06- 951 Daisy White Roomside 2024	46063		0.251		0.419	0.423	0.525	0.524	0.414	0.420	0.559	0.552	0.770	0.778	0.076
SN06- Streetside.txt	SN06- Streetside	46064		0.226		0.000	0.000	0.760	0.746	0.000	0.000	0.751	0.755	0.791	0.798	0.000

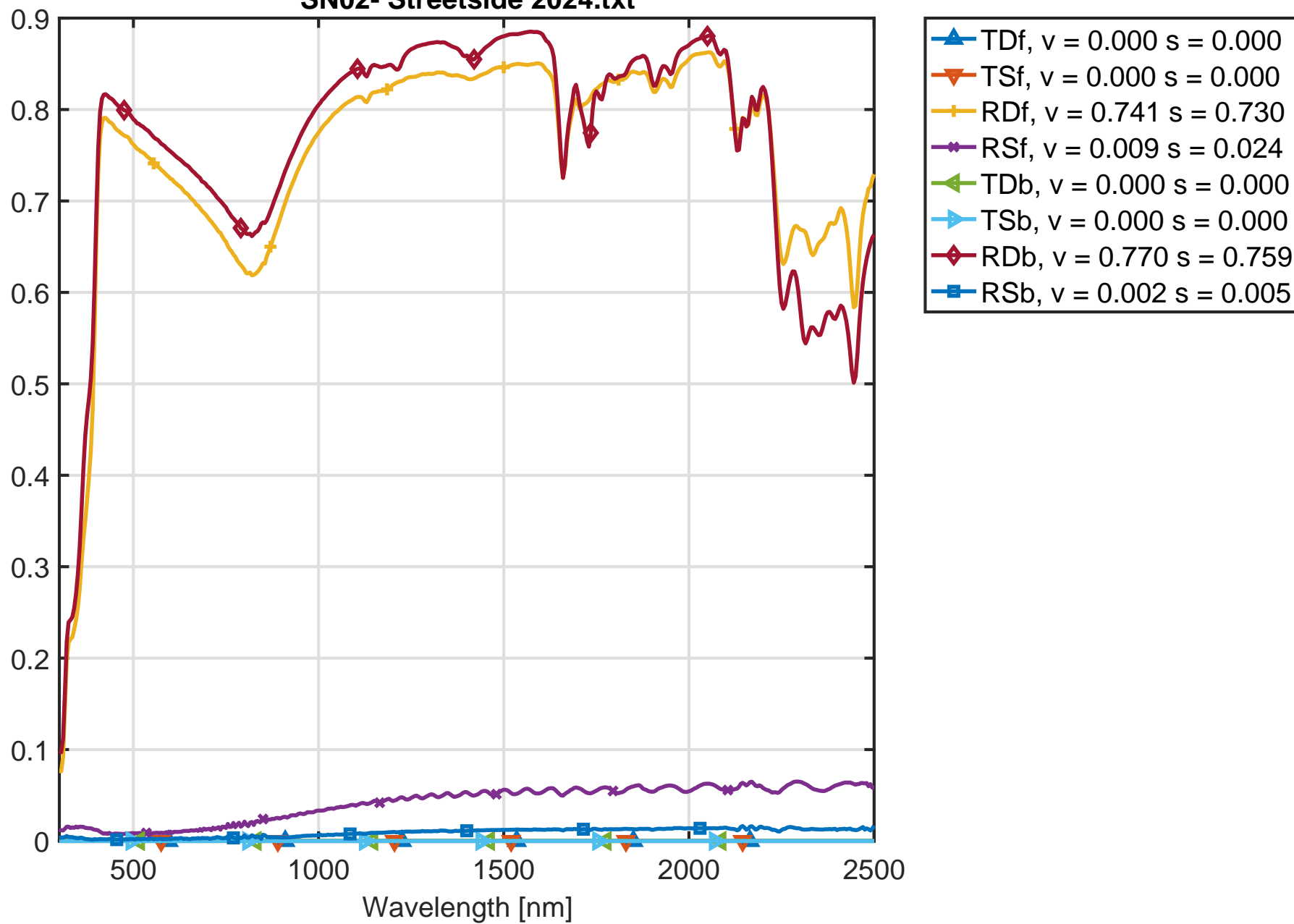
SN02- 749 Black Onyx Roomside 2024.txt



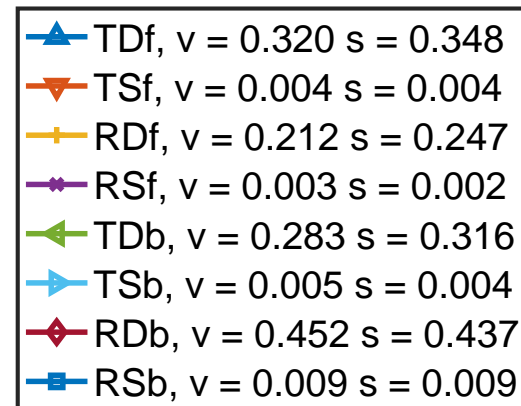
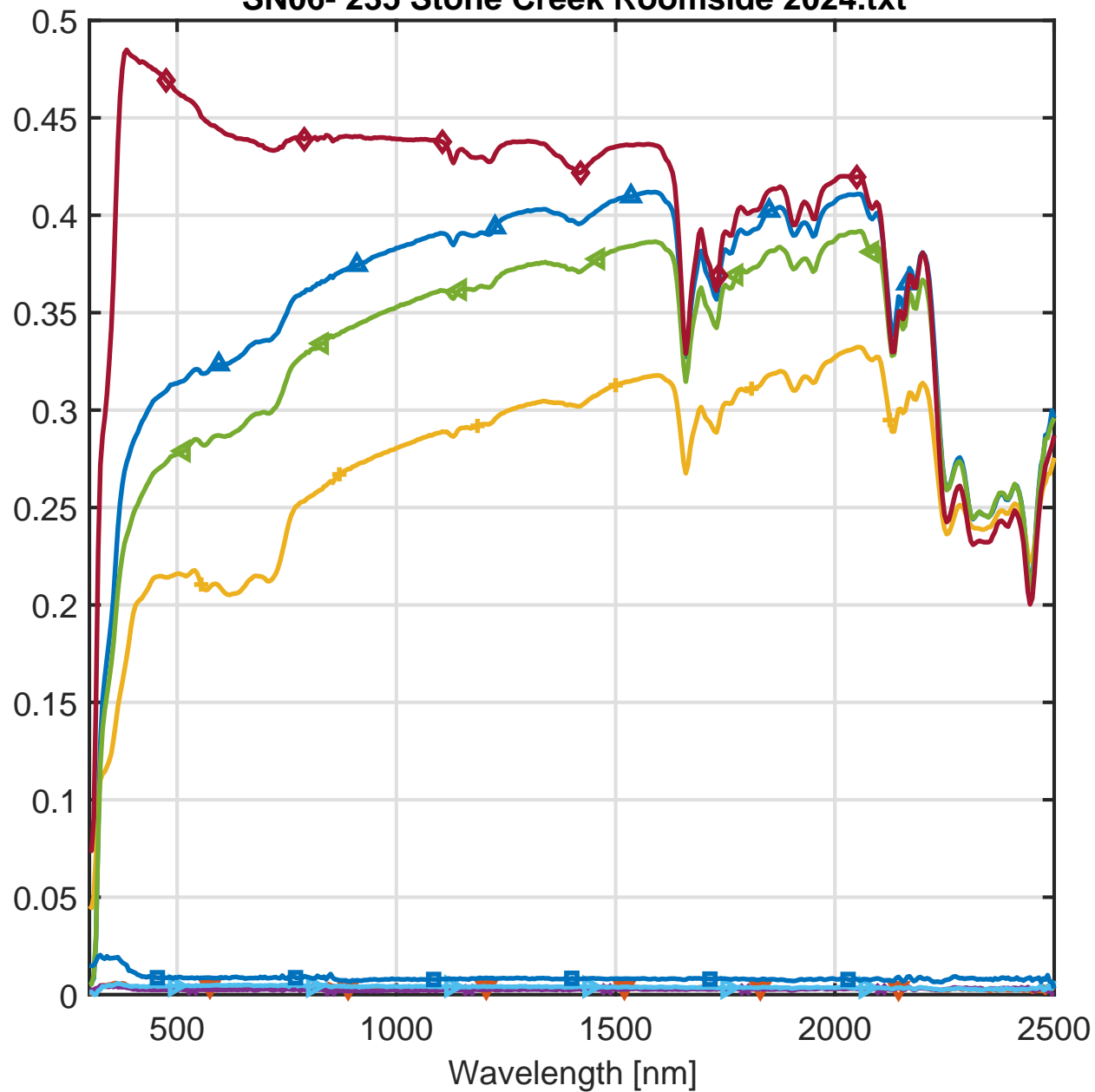
SN02- 951 Daisy White Roomside 2024.txt



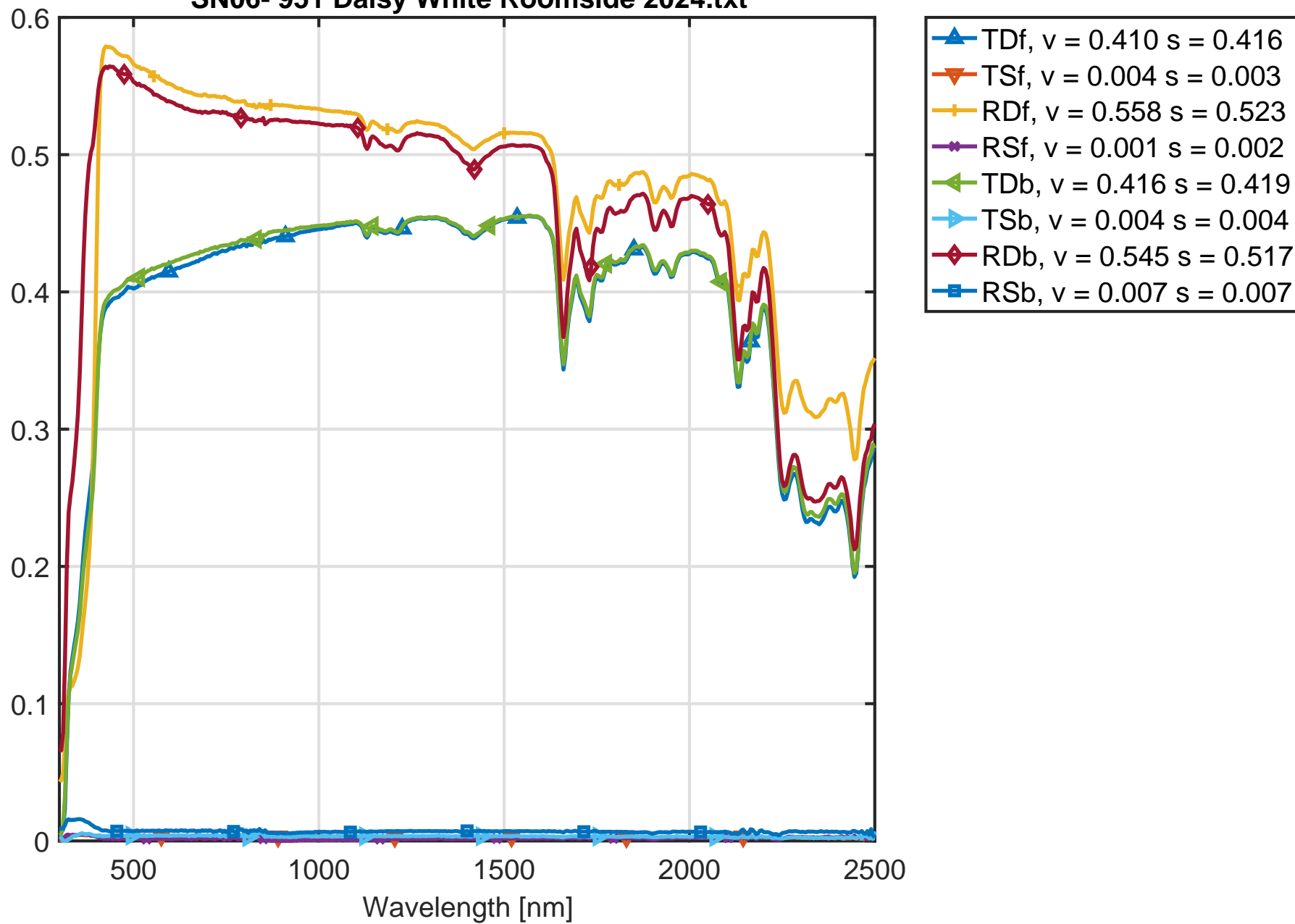
SN02- Streetside 2024.txt



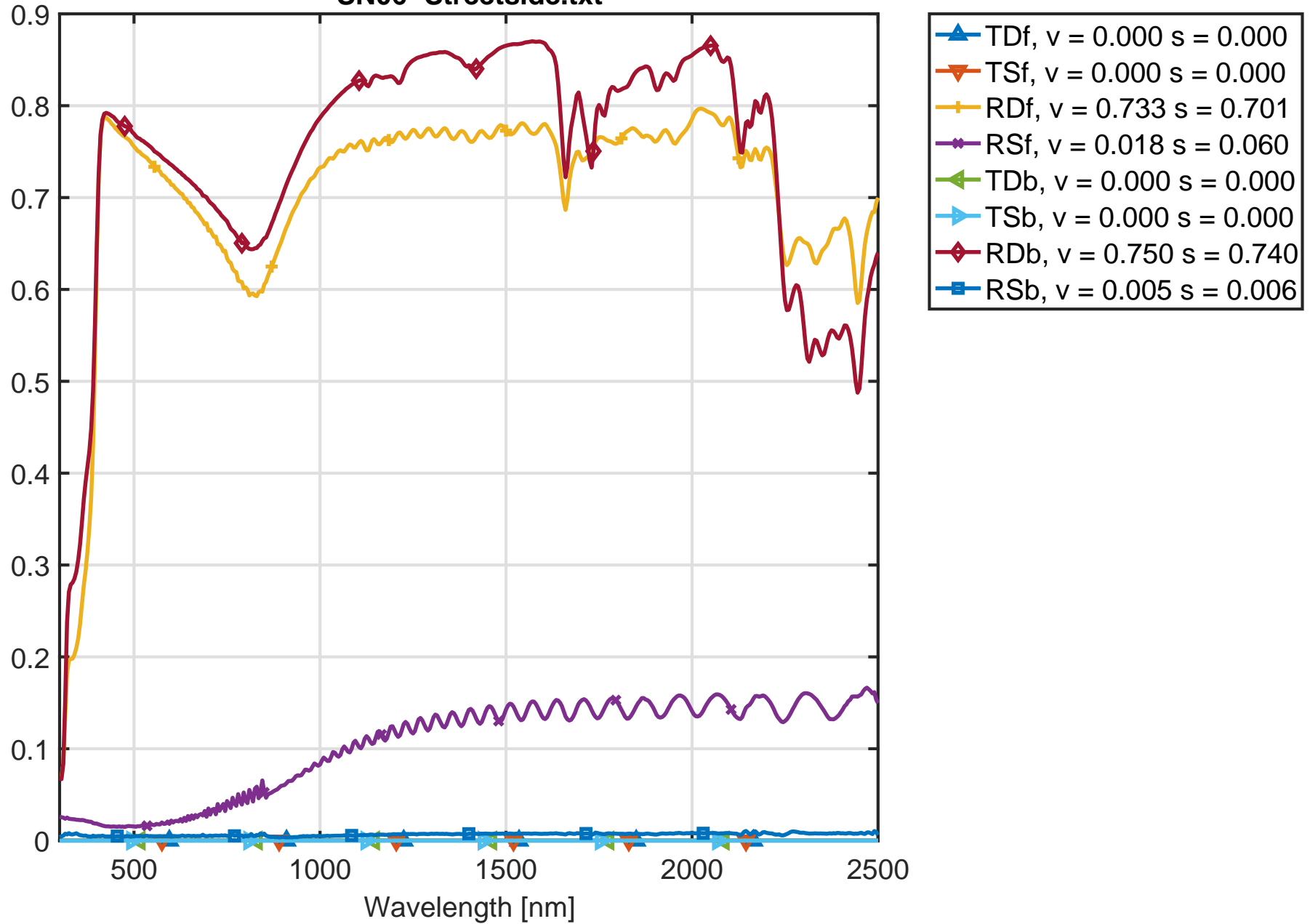
SN06- 235 Stone Creek Roomside 2024.txt



SN06- 951 Daisy White Roomside 2024.txt



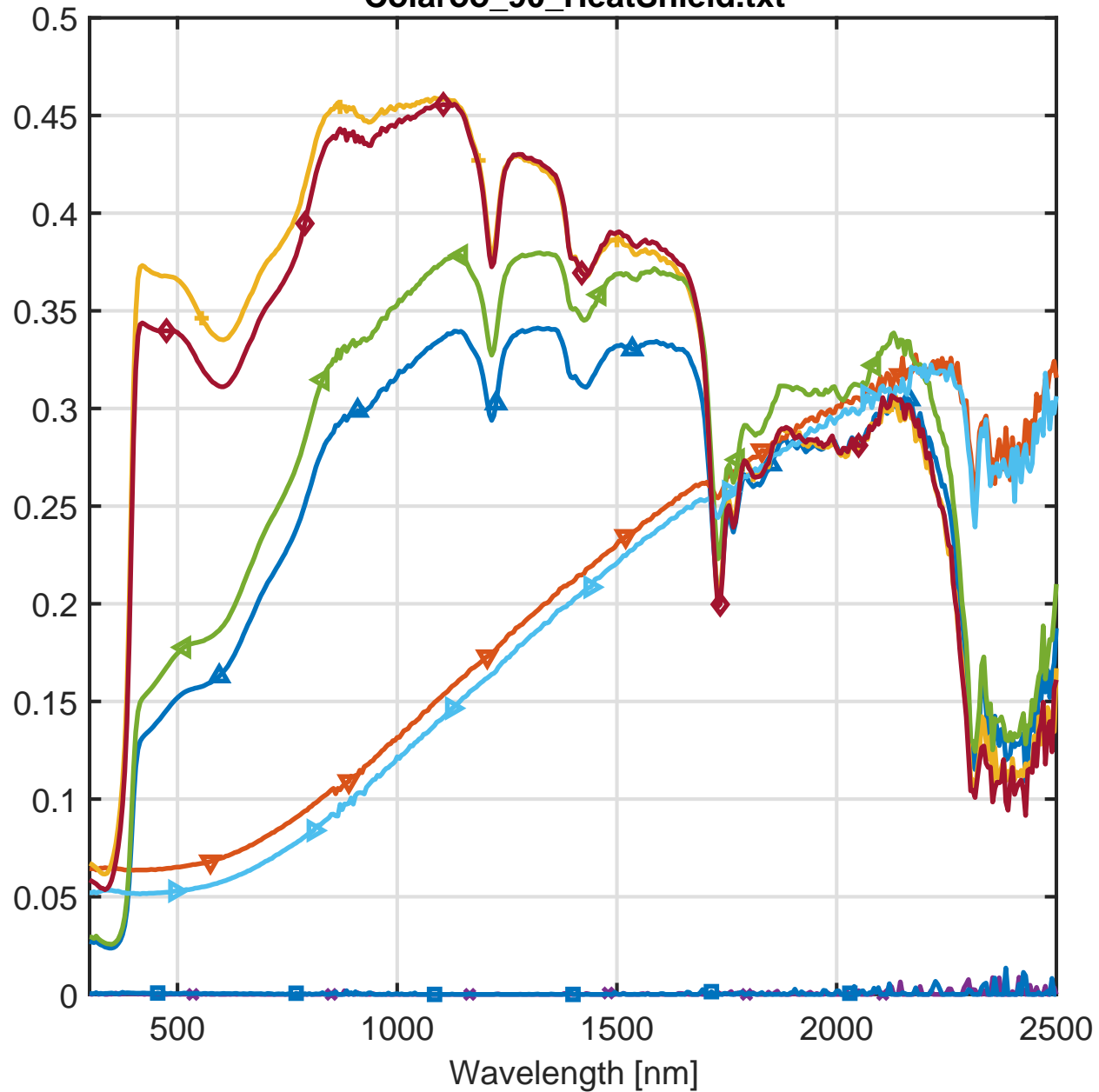
SN06- Streetside.txt



4 Table: GALE Pacific(1/1)

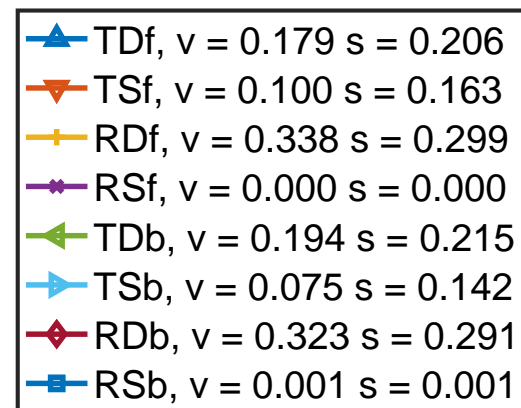
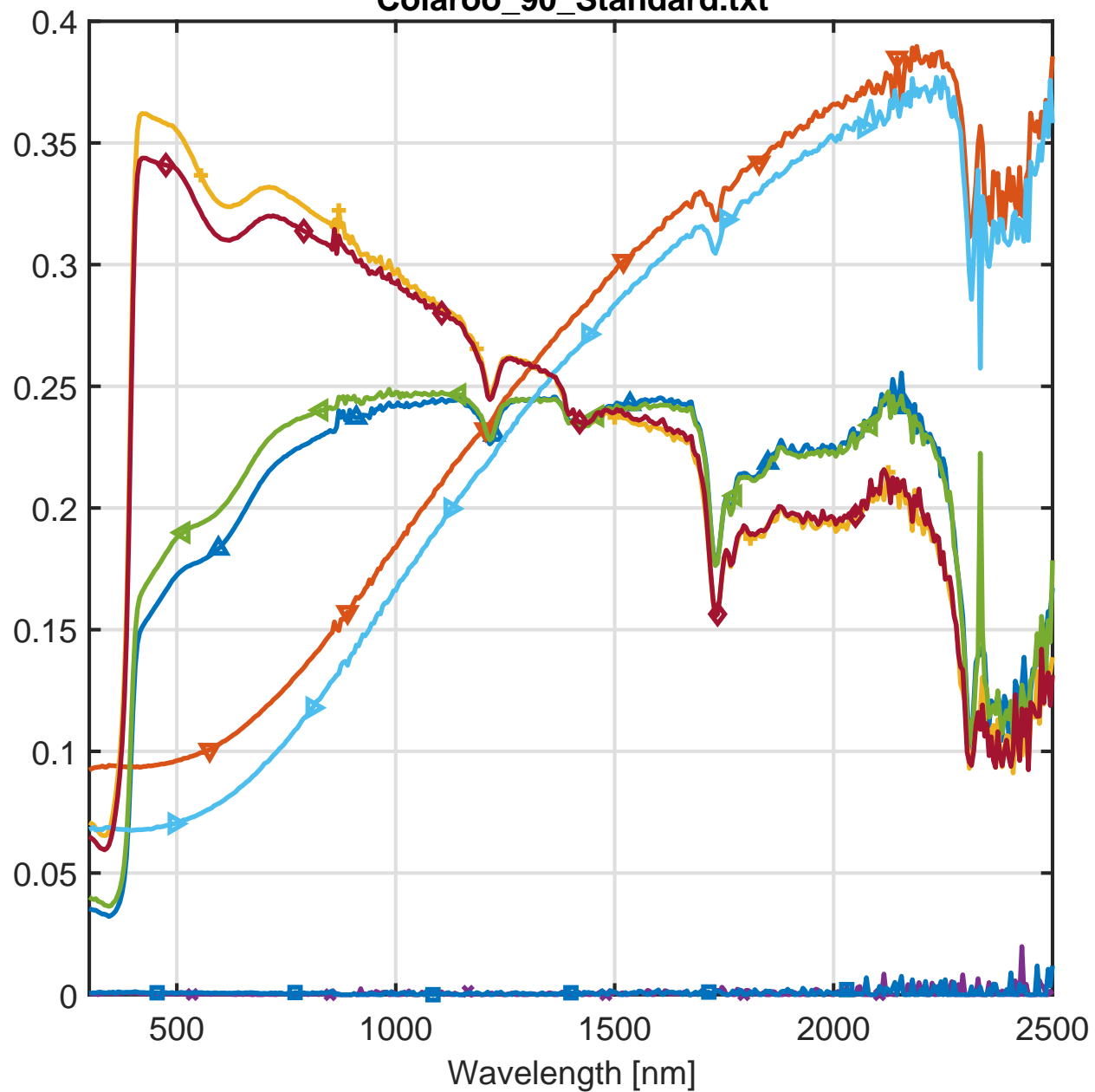
Filename	Product name	ID	Type	Thick	Flr	Tfsol	Tbsol	Rfsol	Rbsol	Tfvis	Tbvis	Rfvis	Rbvis	Ef	Eb	TIR
Colaroo_90_HeatShield.txt	90% Coolaroo Heat-Shield tape/tape	4		1.200		0.351	0.369	0.377	0.362	0.227	0.238	0.349	0.324	0.462	0.444	0.432
Colaroo_90_Standard.txt	90% Coolaroo Standard tape/tape	4		1.200		0.369	0.357	0.300	0.291	0.279	0.270	0.338	0.323	0.440	0.441	0.445
Colaroo_95_HeatShield.txt	95% Coolaroo Heat-Shield tape/tape	4		1.200		0.301	0.302	0.312	0.296	0.217	0.220	0.343	0.323	0.498	0.539	0.371
Colaroo_95_Standard.txt	95% Coolaroo Standard tape/tape	4		1.200		0.333	0.340	0.387	0.384	0.211	0.217	0.351	0.339	0.456	0.488	0.385
Colaroo_Dartmoor_90_-HeatShield.txt	Coolaroo signature 90% Dartmoor Heat-Shield	4		1.200		0.195	0.192	0.210	0.213	0.133	0.130	0.063	0.064	0.614	0.624	0.294
Interior_95_Woven_mono.txt	Interior 95% woven mono/mono	4		0.400		0.061	0.068	0.052	0.053	0.060	0.067	0.035	0.036	0.795	0.757	0.146
Interior_95_knitted_mono.txt	Interior 95% knitted mono/mono	4		1.200		0.059	0.059	0.167	0.167	0.005	0.005	0.039	0.039	0.750	0.694	0.202
Interior_WovenJoey_100.txt	Interior woven Joey HS 100% blackout	4		0.700		0.000	0.000	0.039	0.047	0.000	0.000	0.034	0.046	0.896	0.820	0.033
Joey_Stiffened_Black_1_-HeatShield.txt	Joey Stiffened Black 1% (HeatShield)	4		0.300		0.001	0.001	0.030	0.045	0.000	0.000	0.028	0.046	0.843	0.873	0.049
Joey_Uncoated.txt	Joey 240gsm uncoated	4		0.400		0.115	0.115	0.378	0.378	0.021	0.021	0.239	0.239	0.676	0.646	0.108
Woven_Mono_95_HDPE_-HeatShield95.txt	95% woven mono/mono HDPE (HeatShield)	4		0.300		0.054	0.054	0.171	0.171	0.004	0.004	0.042	0.042	0.741	0.746	0.181

Colaroo_90_HeatShield.txt

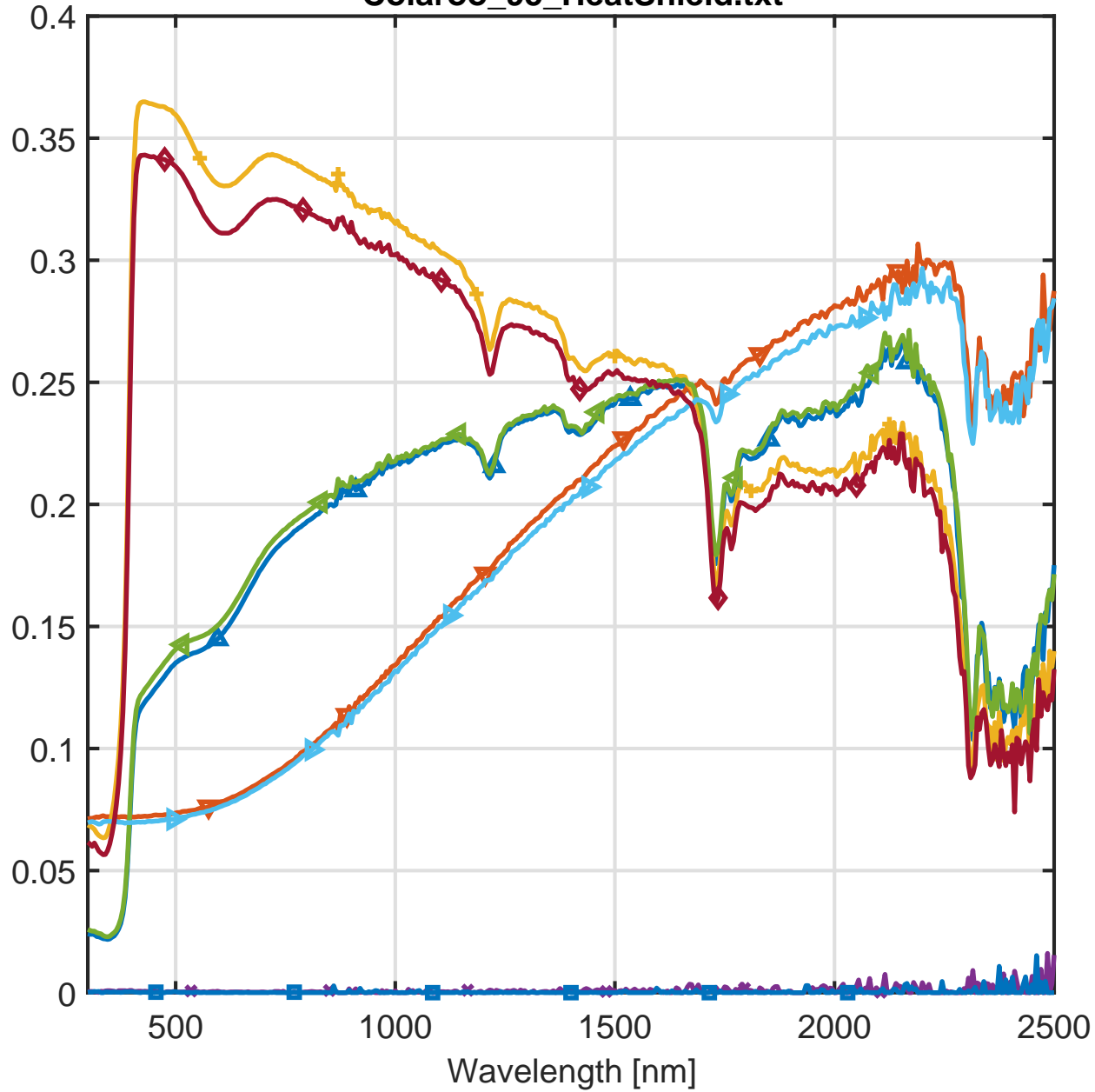


- TDf, $v = 0.159$ $s = 0.232$
- TSf, $v = 0.068$ $s = 0.119$
- RDf, $v = 0.349$ $s = 0.377$
- RSf, $v = 0.000$ $s = 0.000$
- TDb, $v = 0.182$ $s = 0.261$
- TSb, $v = 0.055$ $s = 0.107$
- RDb, $v = 0.323$ $s = 0.362$
- RSb, $v = 0.000$ $s = 0.000$

Colaroo_90_Standard.txt

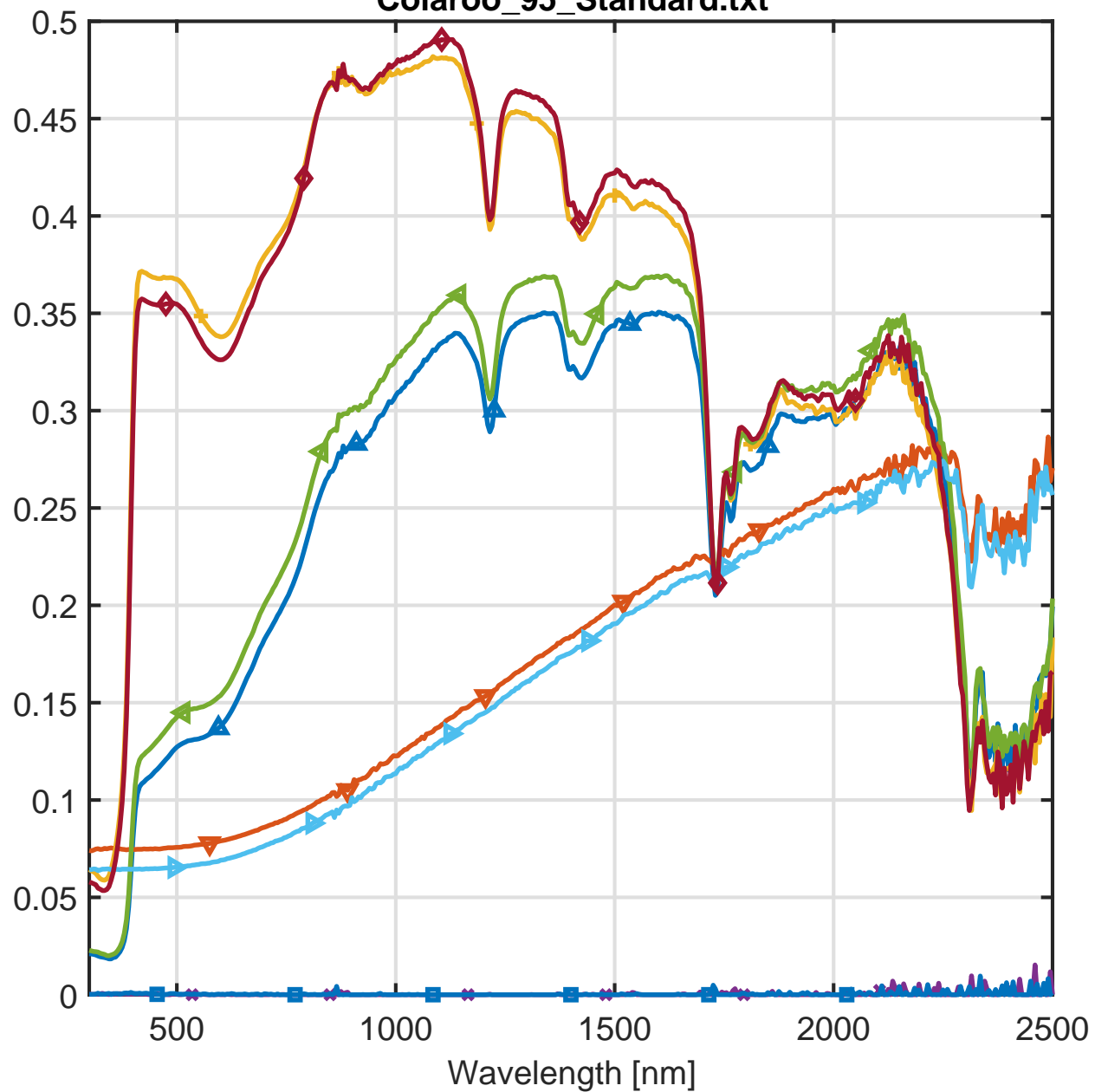


Colaroo_95_HeatShield.txt



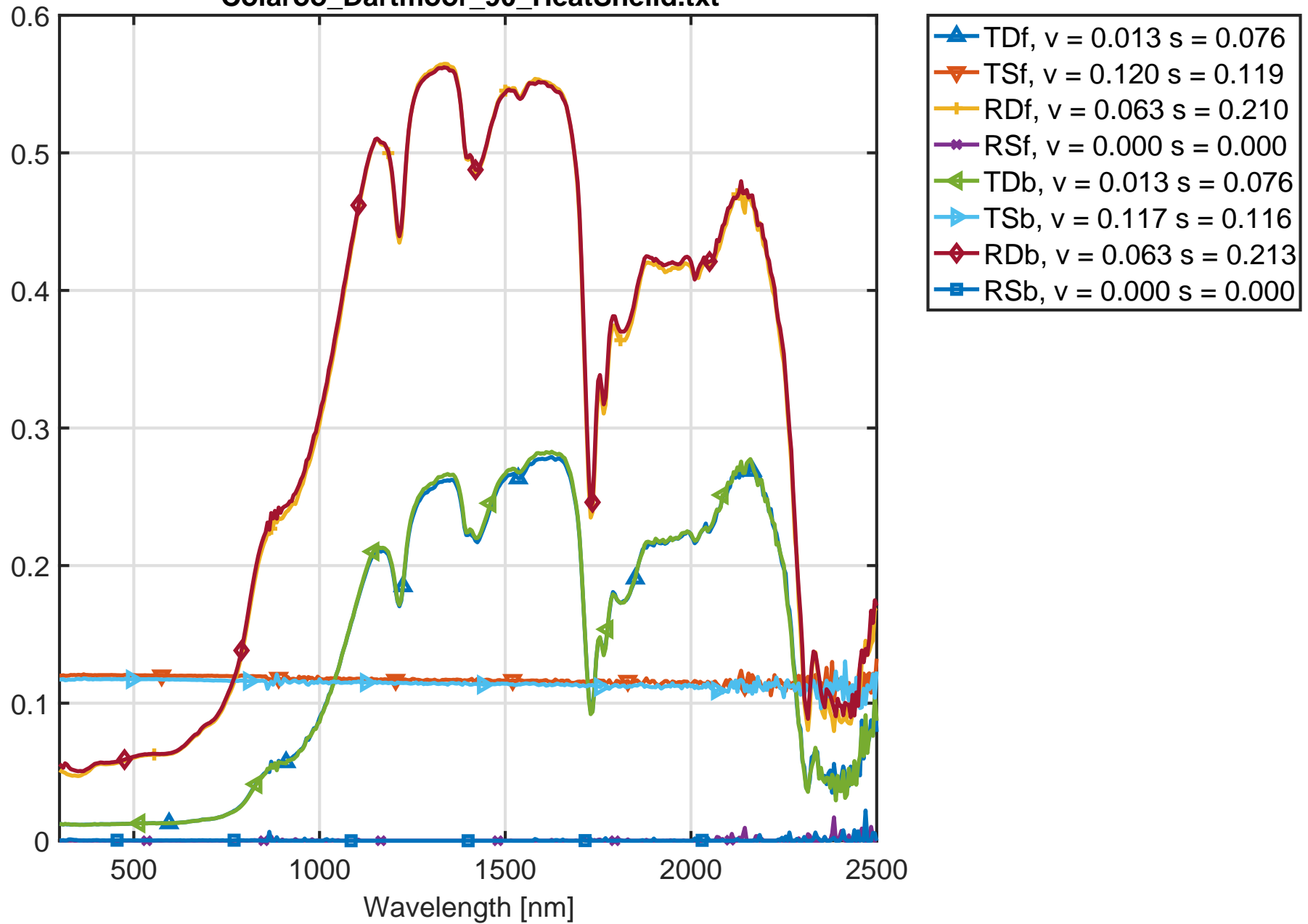
- TDf, $v = 0.141$ $s = 0.179$
- TSf, $v = 0.076$ $s = 0.122$
- RDf, $v = 0.343$ $s = 0.312$
- RSf, $v = 0.000$ $s = 0.000$
- TDb, $v = 0.147$ $s = 0.183$
- TSb, $v = 0.074$ $s = 0.119$
- RDb, $v = 0.323$ $s = 0.296$
- RSb, $v = 0.000$ $s = 0.000$

Colaroo_95_Standard.txt

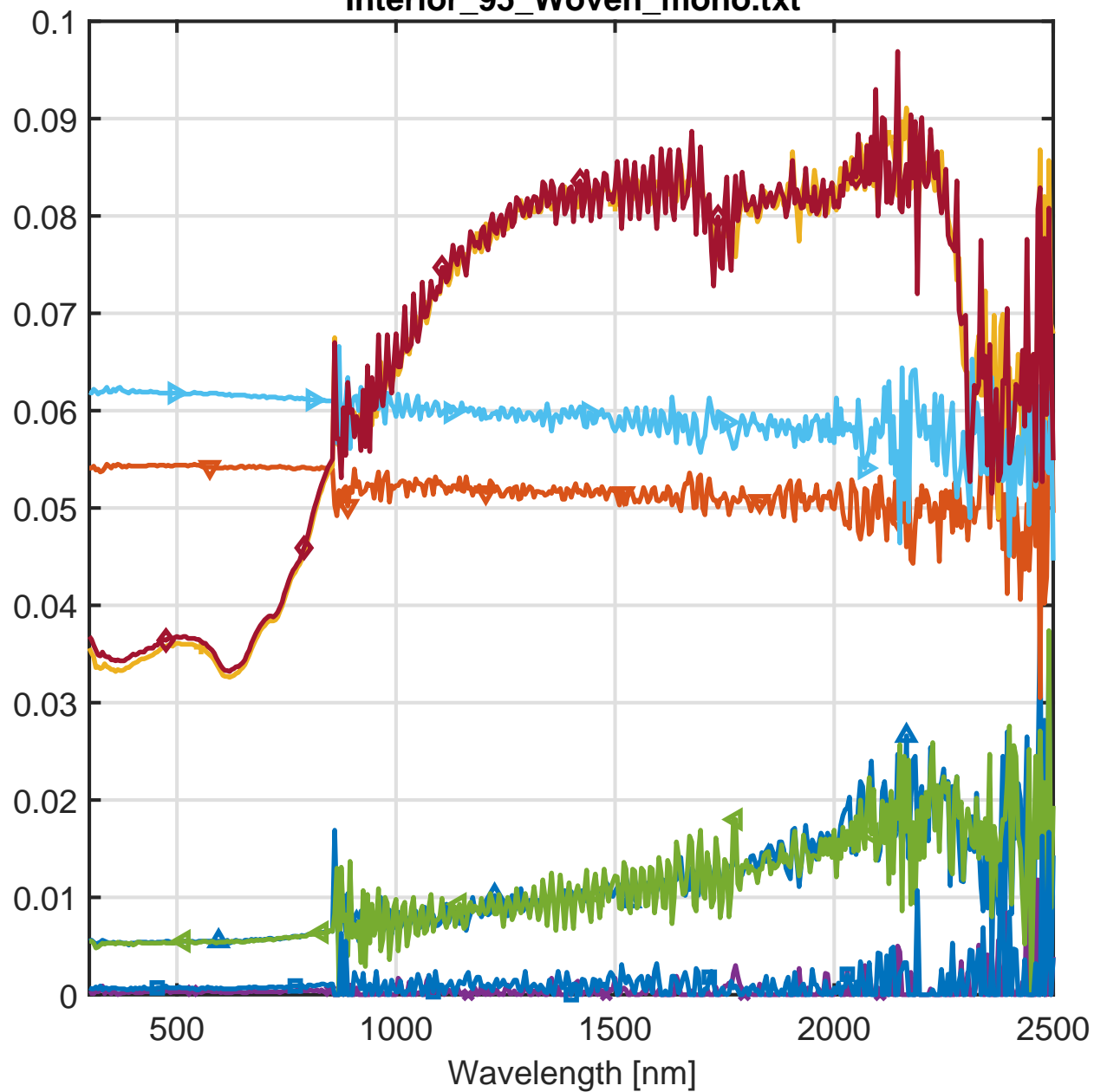


- TDf, $v = 0.133$ $s = 0.218$
- TSf, $v = 0.077$ $s = 0.115$
- RDf, $v = 0.351$ $s = 0.387$
- RSf, $v = 0.000$ $s = 0.000$
- TDb, $v = 0.149$ $s = 0.235$
- TSb, $v = 0.067$ $s = 0.106$
- RDb, $v = 0.339$ $s = 0.384$
- RSb, $v = 0.000$ $s = 0.000$

Colaroo_Dartmoor_90_HeatSheild.txt

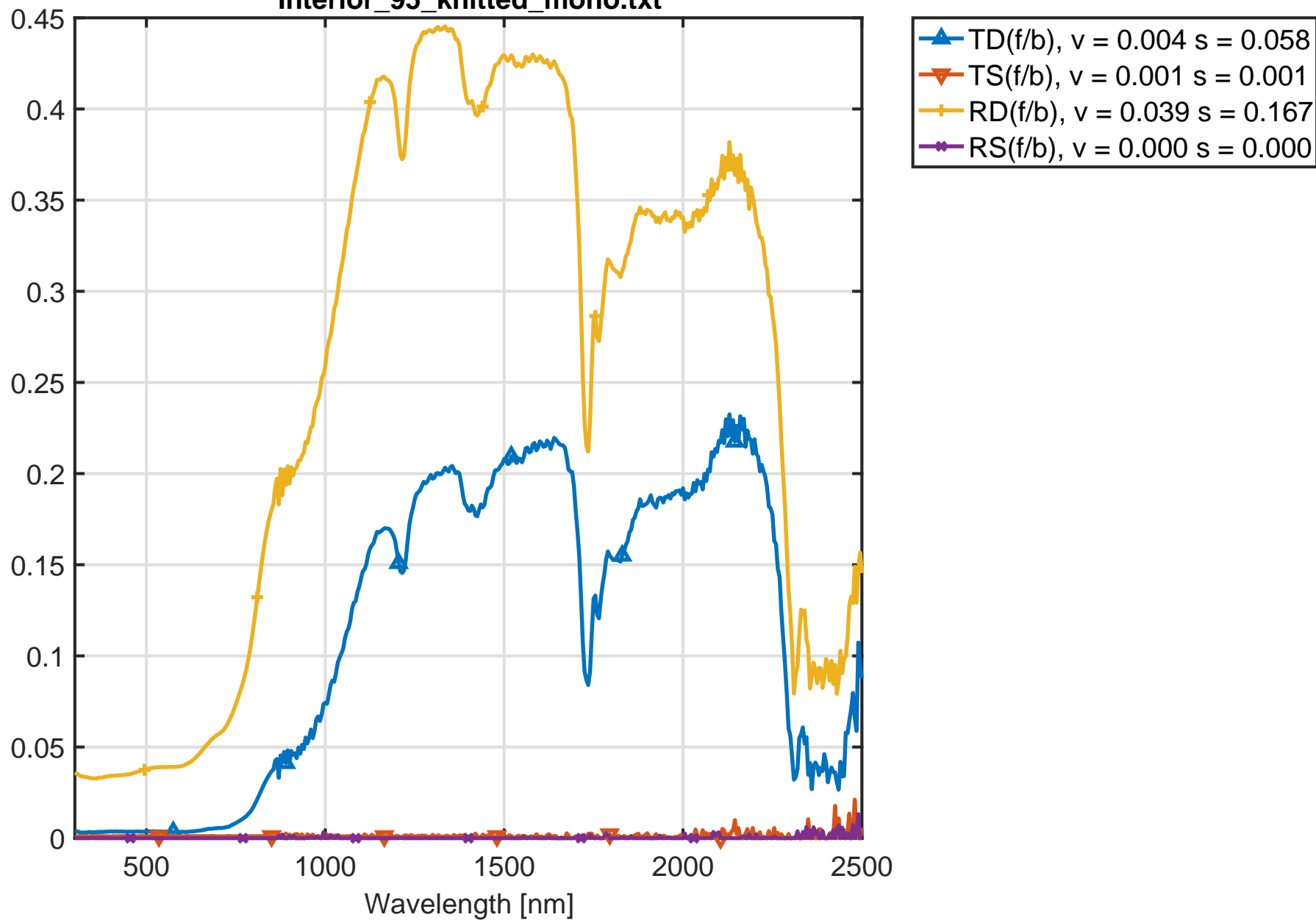


Interior_95_Woven_mono.txt

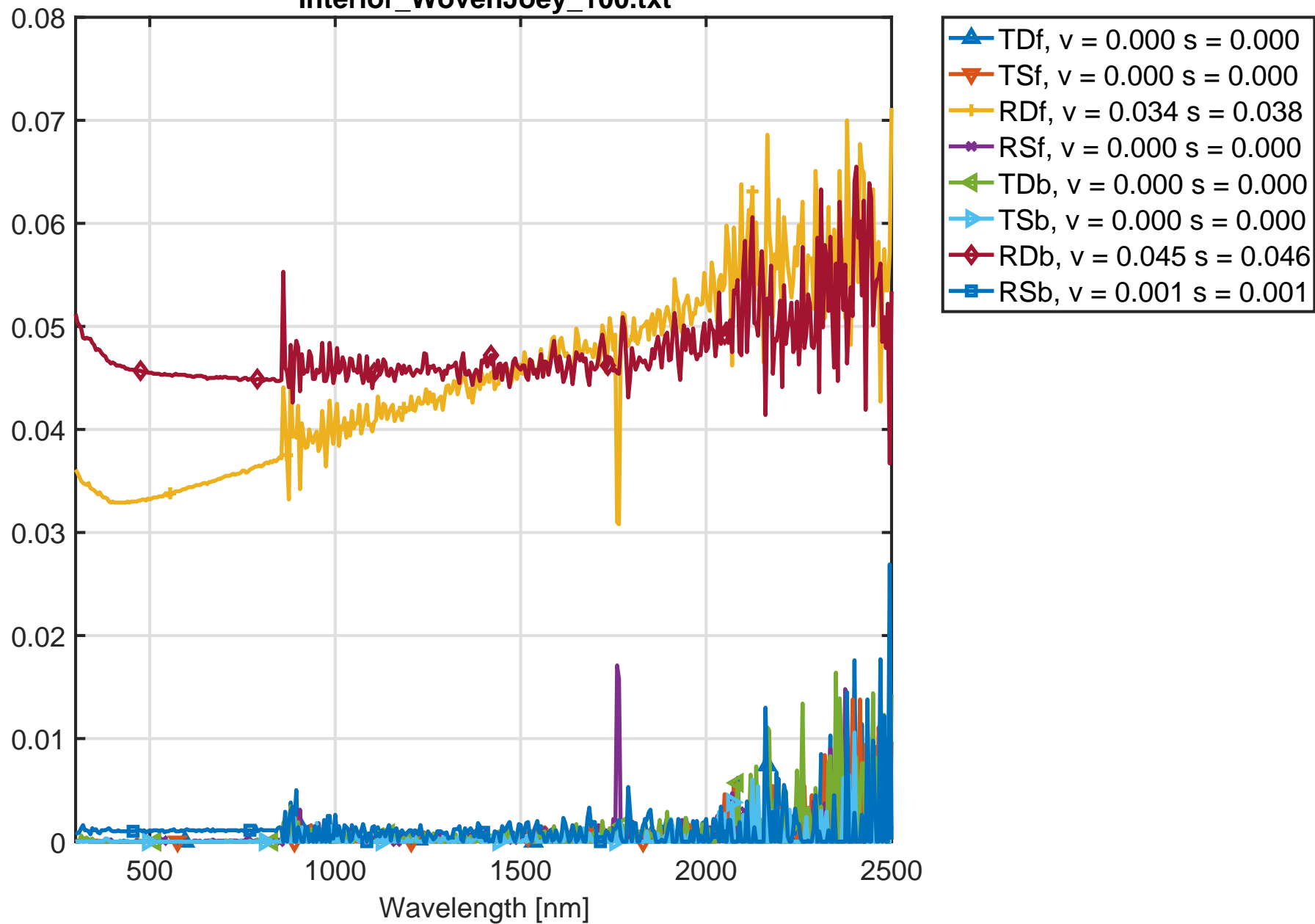


- TDf, $v = 0.005$ $s = 0.007$
- TSf, $v = 0.054$ $s = 0.053$
- RDf, $v = 0.035$ $s = 0.052$
- RSf, $v = 0.000$ $s = 0.000$
- TDb, $v = 0.005$ $s = 0.007$
- TSb, $v = 0.062$ $s = 0.061$
- RDb, $v = 0.036$ $s = 0.052$
- RSb, $v = 0.001$ $s = 0.001$

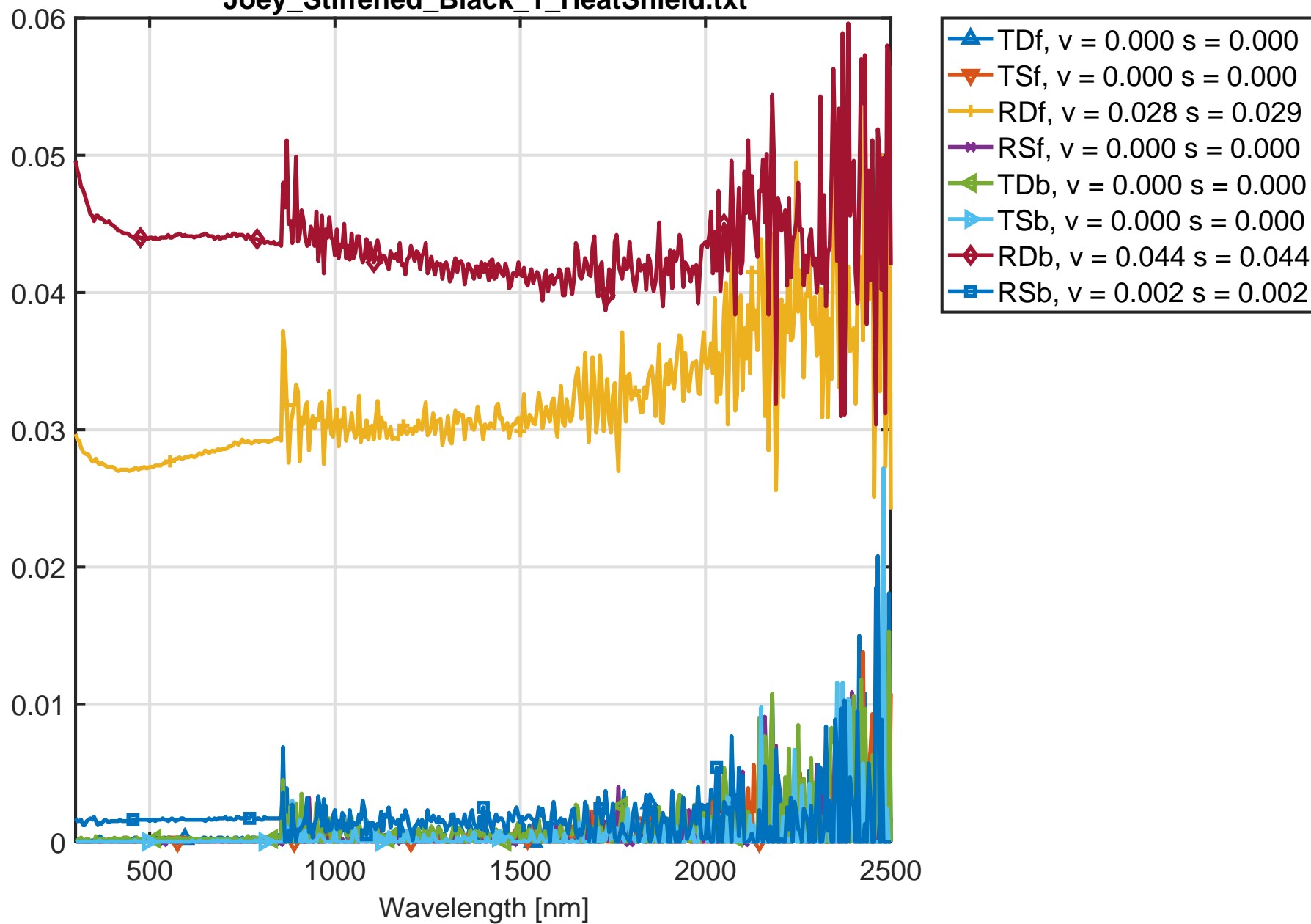
Interior_95_knitted_mono.txt



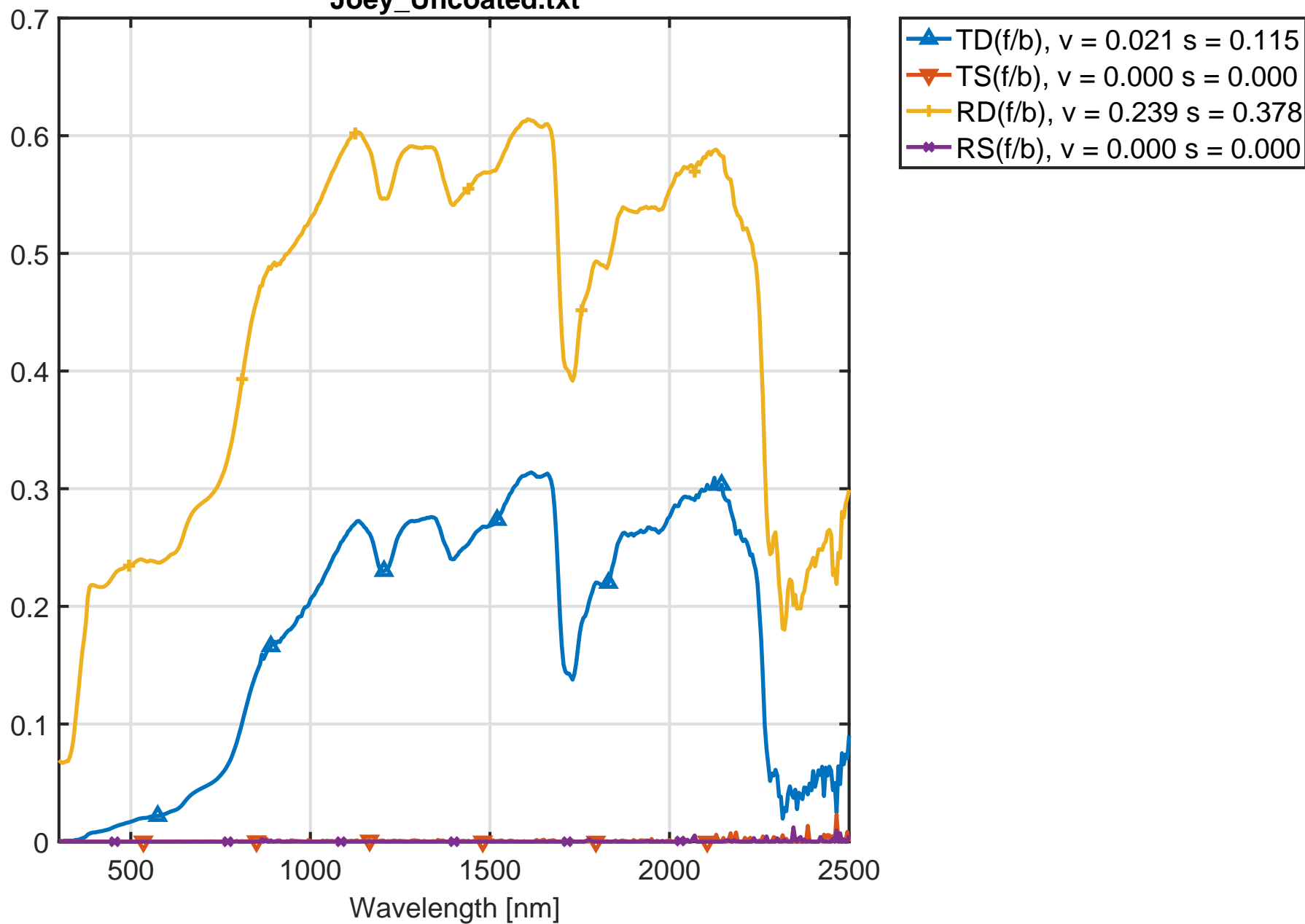
Interior_WovenJoey_100.txt



Joey_Stiffened_Black_1_HeatShield.txt



Joey_Uncoated.txt



Woven_Mono_95_HDPE_HeatShield95.txt

