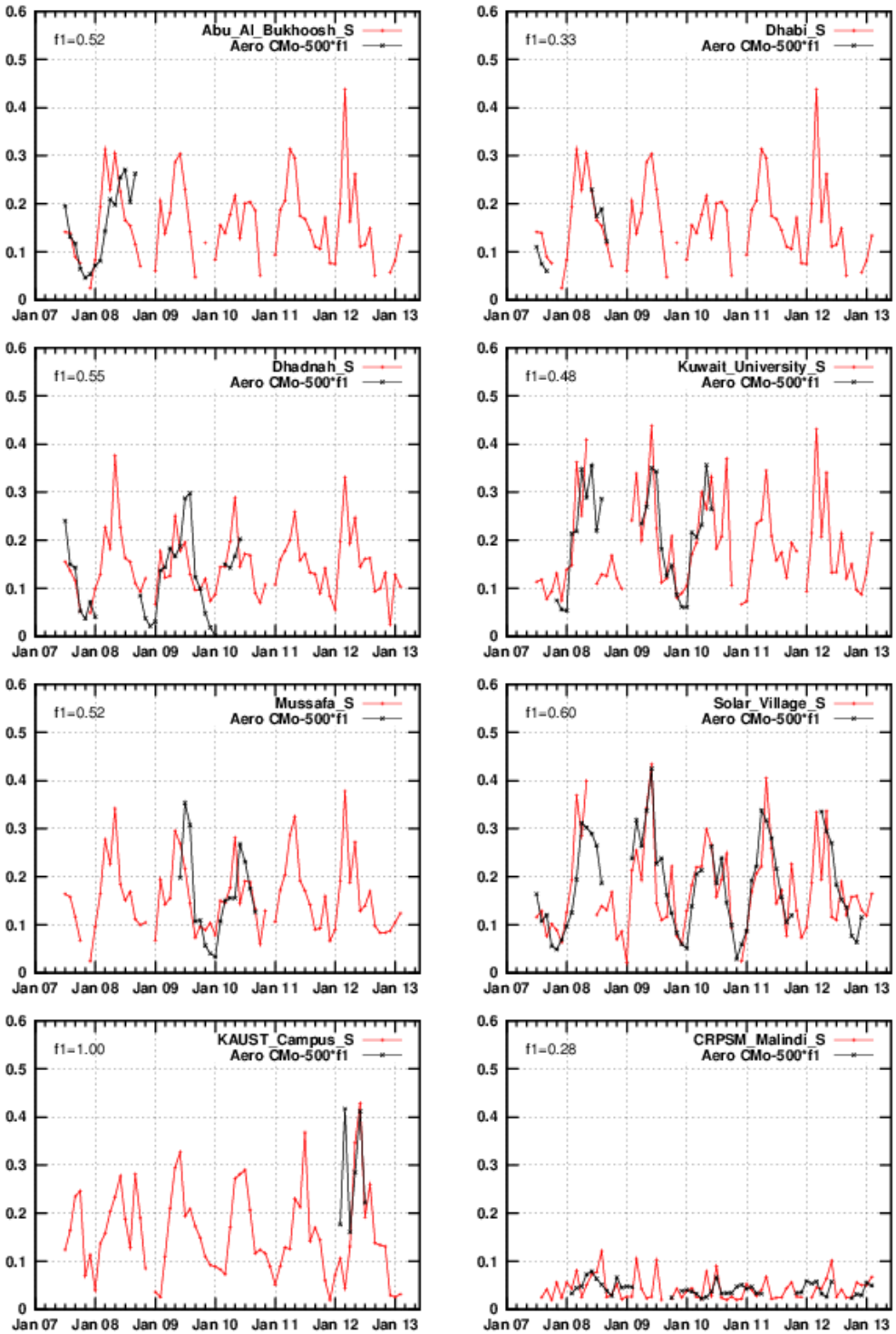
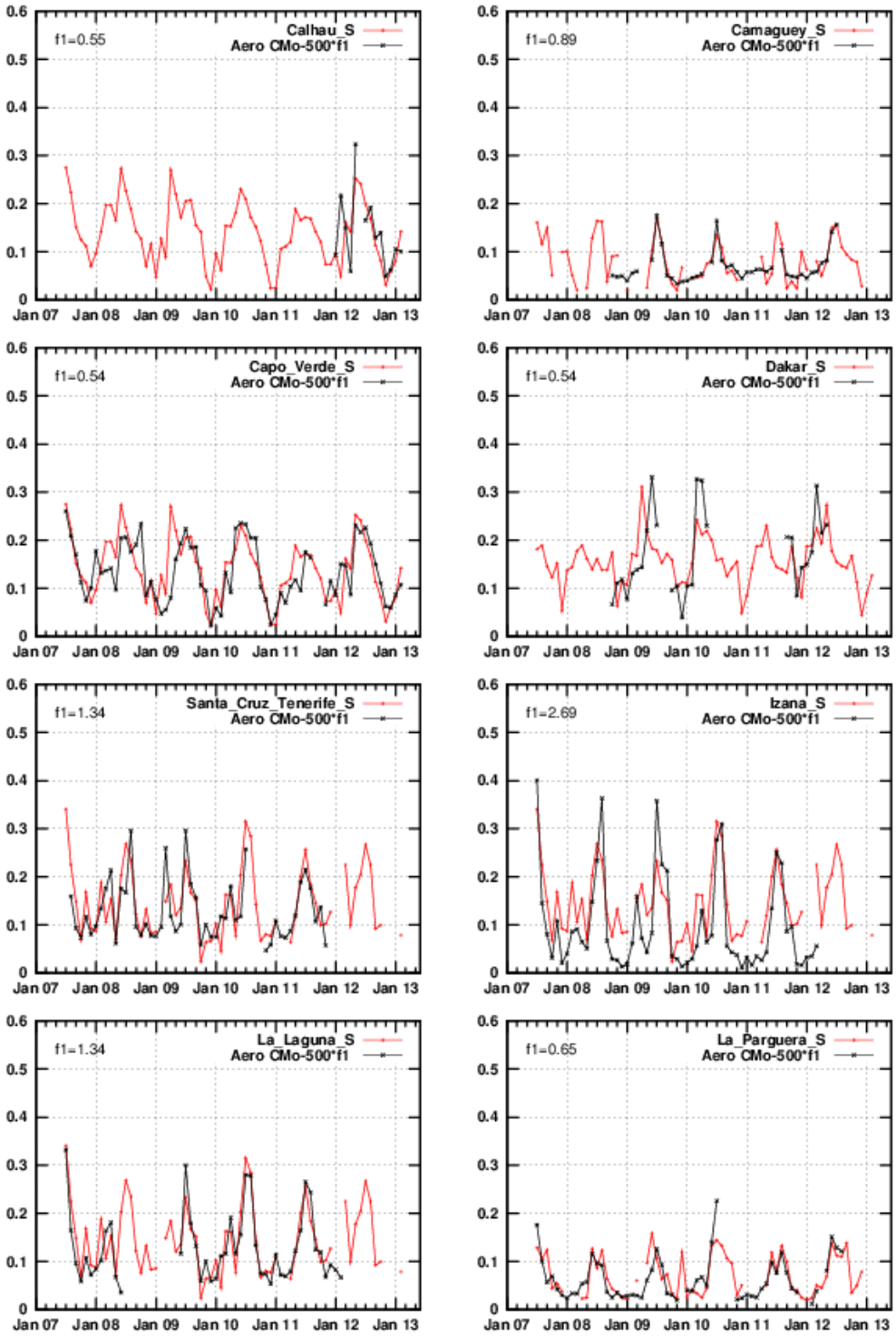
Supplementary Material

Paper title: “Evaluation of IASI derived dust aerosols characteristics over the tropical belt” by V. Capelle et al. (2013).

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Aero CMo-500*f1
f1=0.89
Camaguey_S
Aero CMo-500*f1
f1=0.54
Capo_Verde_S
Aero CMo-500*f1
f1=0.54
Dakar_S
Aero CMo-500*f1
f1=1.34
Santa_Cruz_Tenerife_S
Aero CMo-500*f1
f1=2.69
Izana_S
Aero CMo-500*f1
f1=1.34
La_Laguna_S
Aero CMo-500*f1
f1=0.65
La_Parguera_S
Aero CMo-500*f1
0
0.1
0.2
0.3
0.4
0.5
0.6
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13

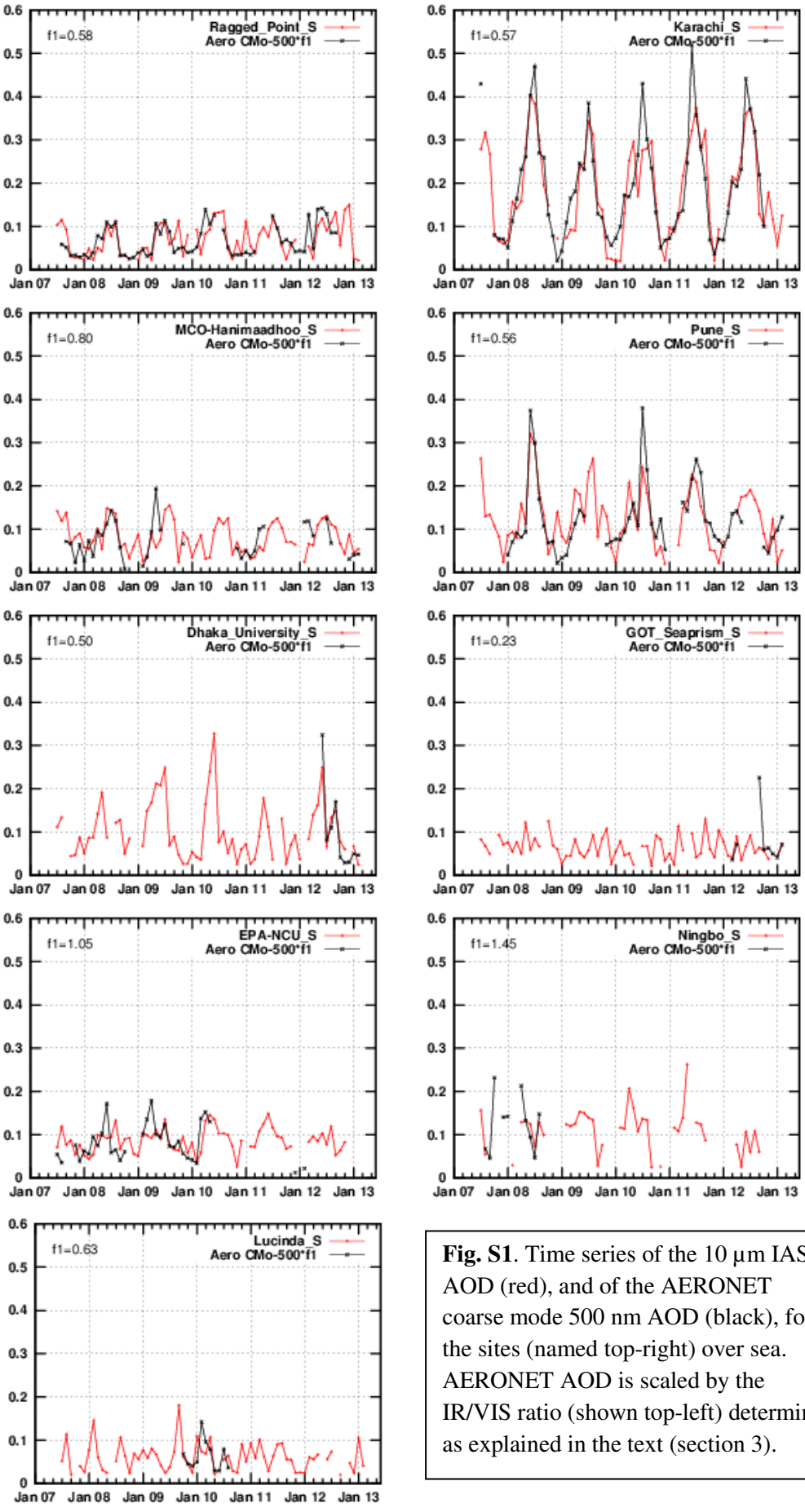
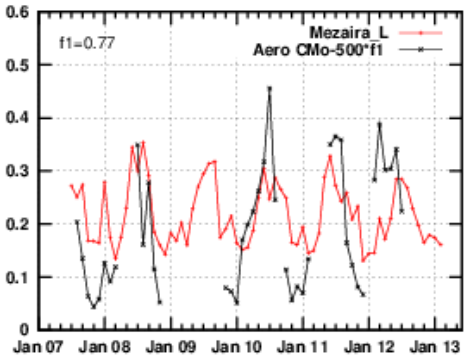


Fig. S1. Time series of the 10 µm IASI AOD (red), and of the AERONET coarse mode 500 nm AOD (black), for the sites (named top-right) over sea. AERONET AOD is scaled by the IR/VIS ratio (shown top-left) determined as explained in the text (section 3).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0.1
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Jan 08
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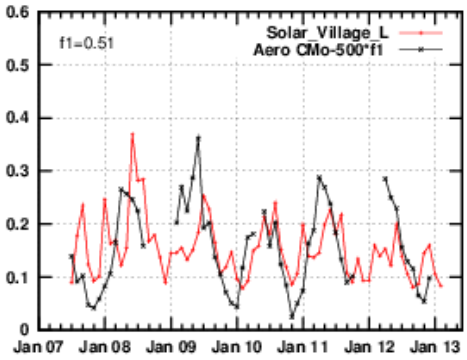
Jan 10
Jan 11
Jan 12
Jan 13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Solar_Village_L
Aero CMo-500*f1
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0.1
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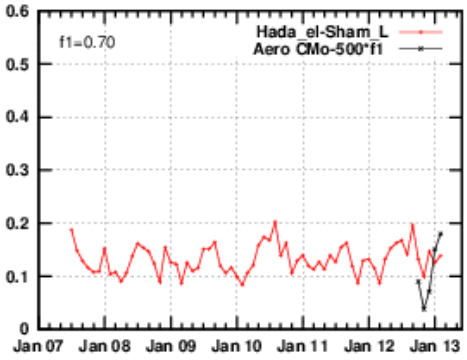
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13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Hada_el-Sham_L
Aero CMo-500*f1
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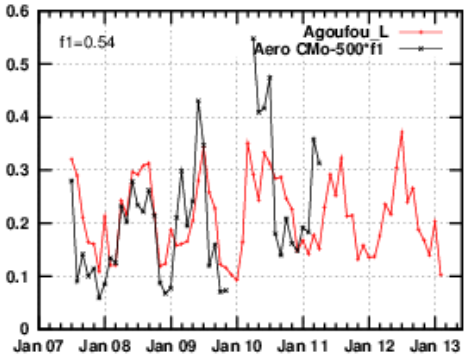
0.2
0.1
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13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Agoufou_L
Aero CMo-500*f1
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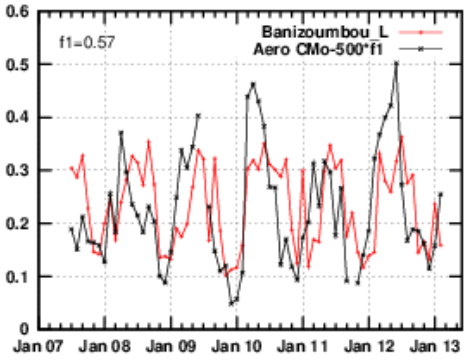
0.4
0.3
0.2
0.1
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


f1=0.57
Banizoumbou_L
Aero CMo-500*f1
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0.5
0.4
0.3
0.2
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0
Jan 07
Jan 08
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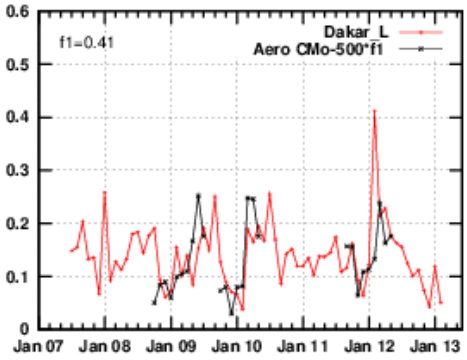
Jan 10
Jan 11
Jan 12
Jan 13


f1=0.41
Dakar_L
Aero CMo-500*f1
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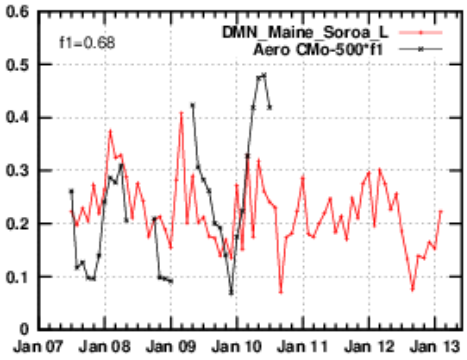
0.5
0.4
0.3
0.2
0.1
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13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DMN_Maine_Soroa_L
Aero CMo-500*f1
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0.5
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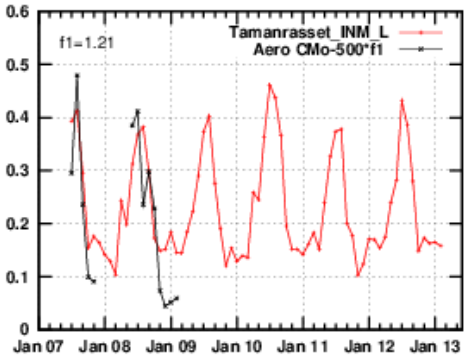
0.3
0.2
0.1
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


f1=1.21
Tamanrasset_INM_L
Aero CMo-500*f1
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0.5
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0.3
0.2
0.1
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13

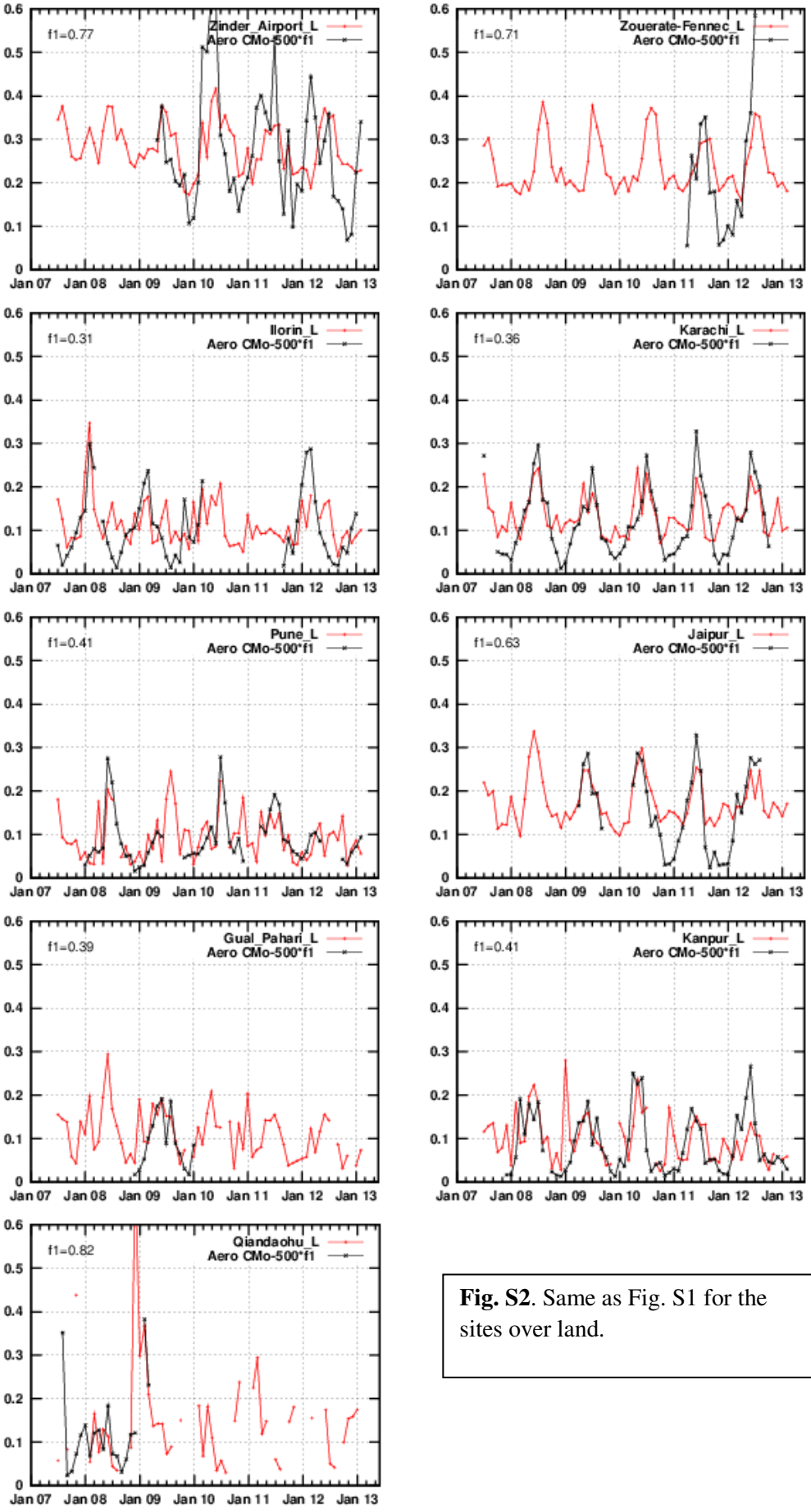


Fig. S2. Same as Fig. S1 for the sites over land.

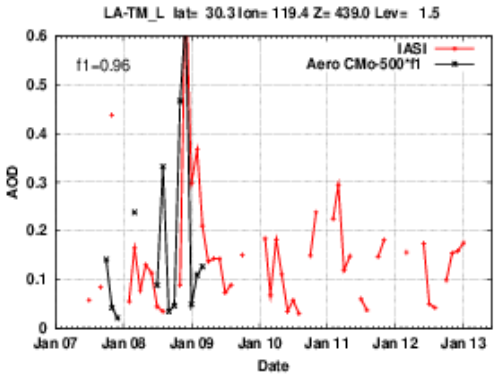
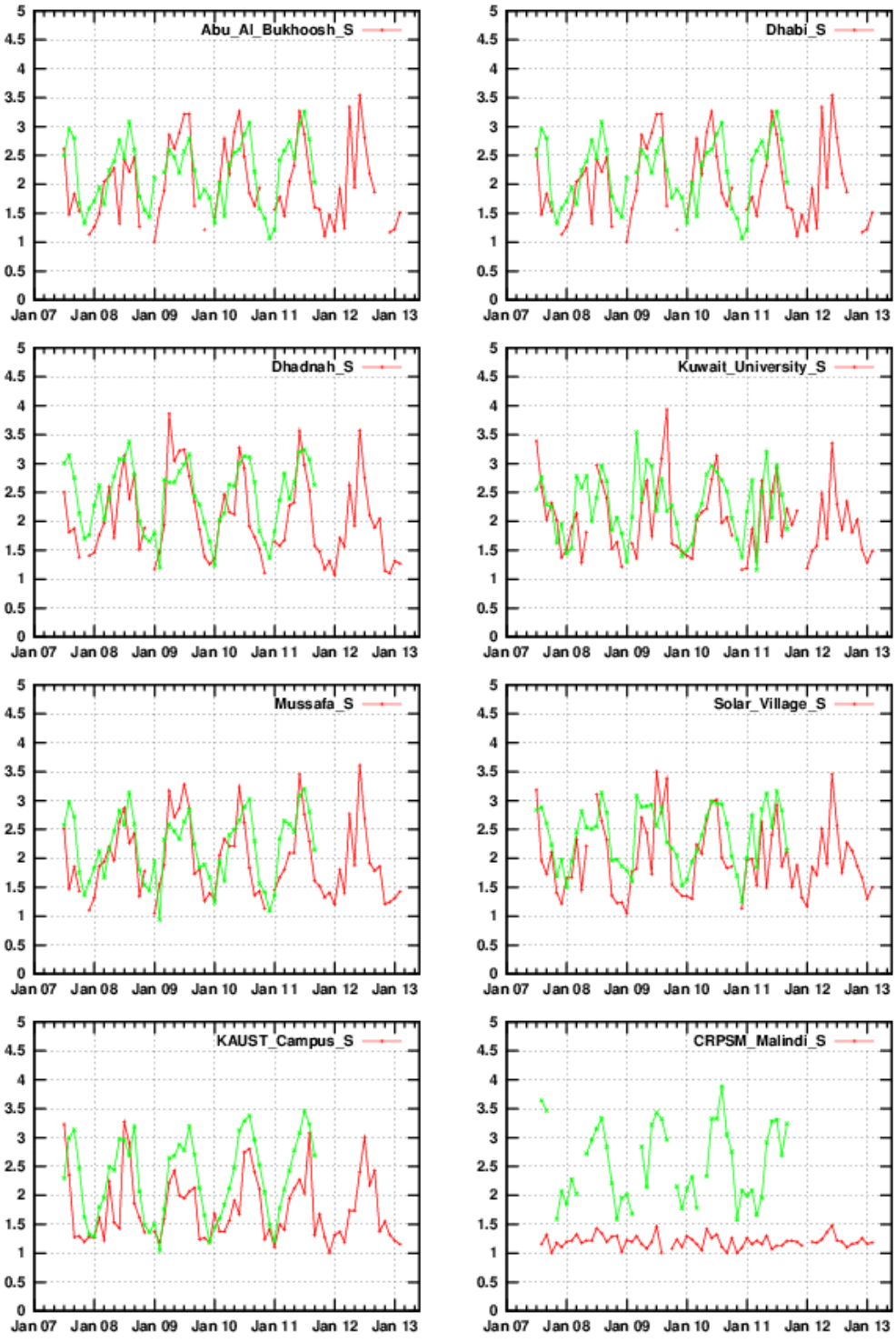
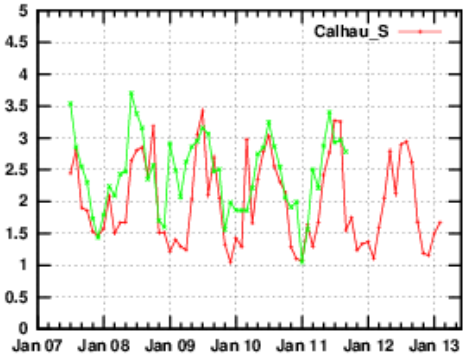
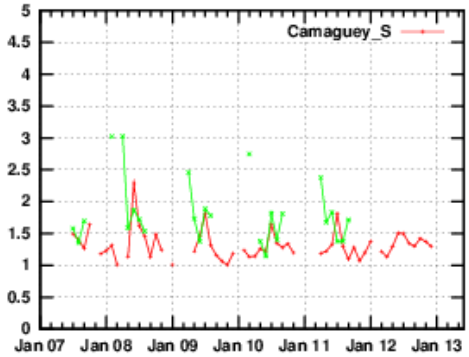
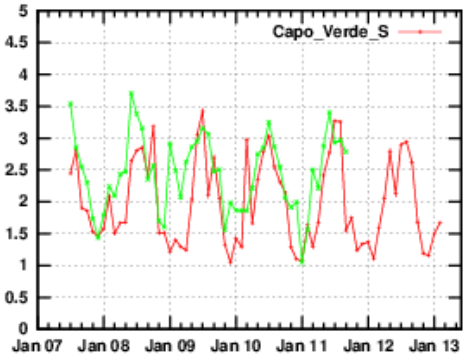


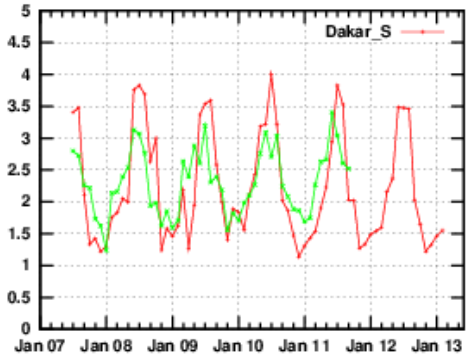
Fig. S3. Same as Fig. S1 for the site of LA_TM close to the site of Qiandaohu. Note the strong event in December 2008 seen by both IASI and AERONET.

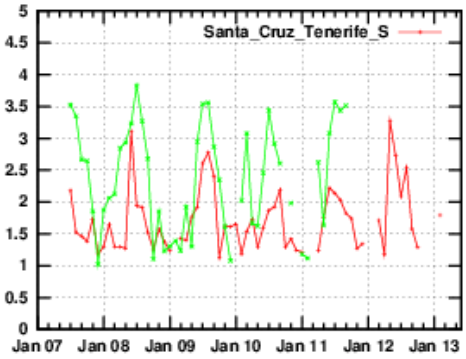


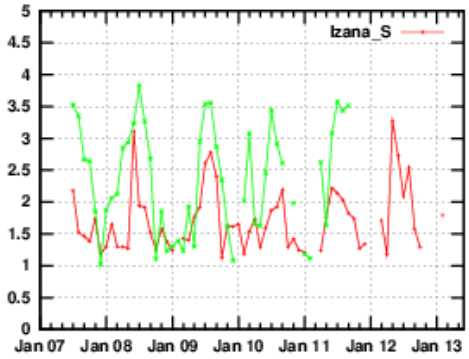

Calhau_S
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


Camaguey_S
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


Capo_Verde_S
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


Dakar_S
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


Santa_Cruz_Tenerife_S
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


Izana_S
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
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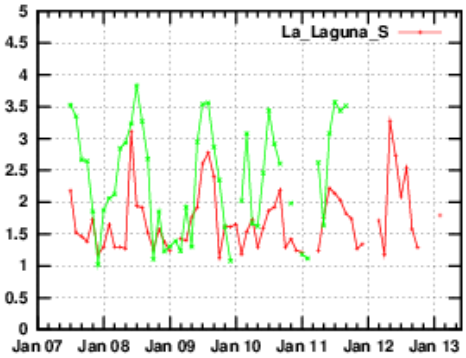
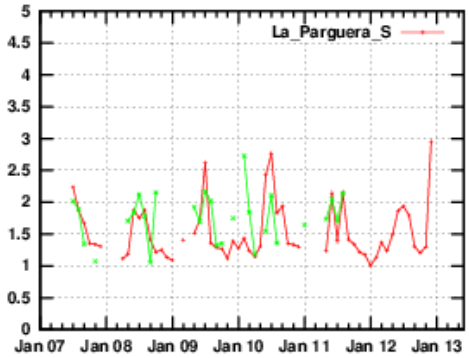
Jan 13


La_Laguna_S
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
Jan 12
Jan 13


La_Parguera_S
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4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan 07
Jan 08
Jan 09
Jan 10
Jan 11
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Jan 13

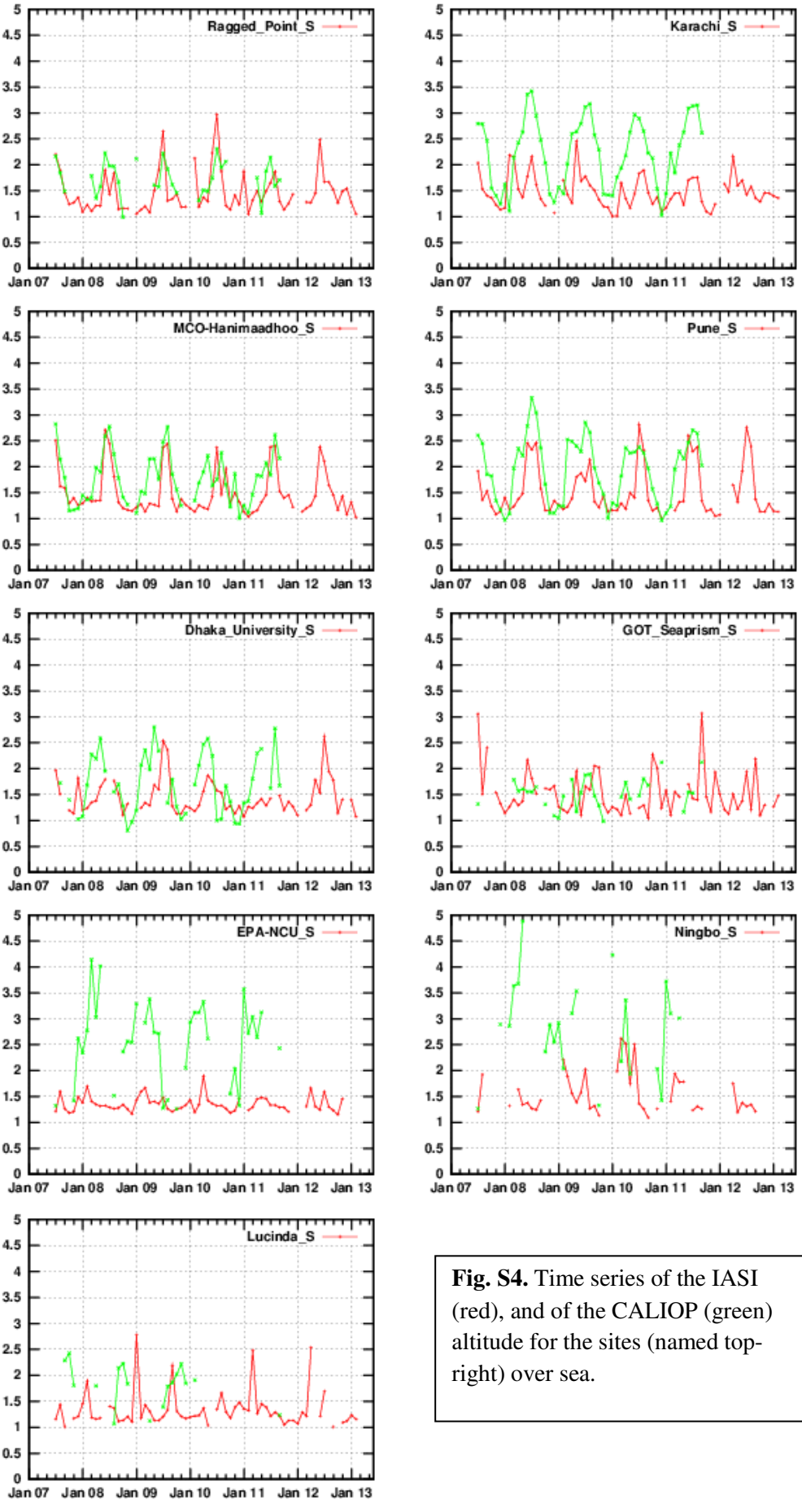

Fig. S4. Time series of the IASI (red), and of the CALIOP (green) altitude for the sites (named top-right) over sea.