Composite Leading Indicator (1)

Monthly Economic Indicators:

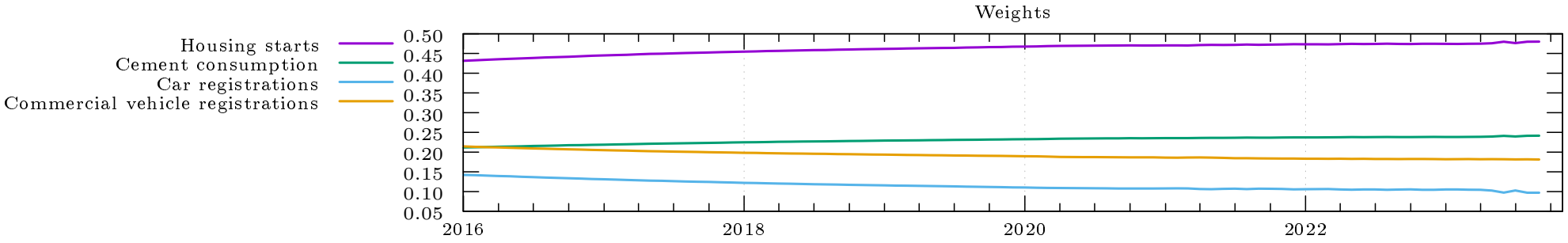
1. Housing starts: from 1978M01 to 2023M09
2. Cement consumption: from 1964M01 to 2023M11
3. Car registrations: from 1960M01 to 2023M11
4. Commercial vehicle registrations: from 1975M01 to 2023M11

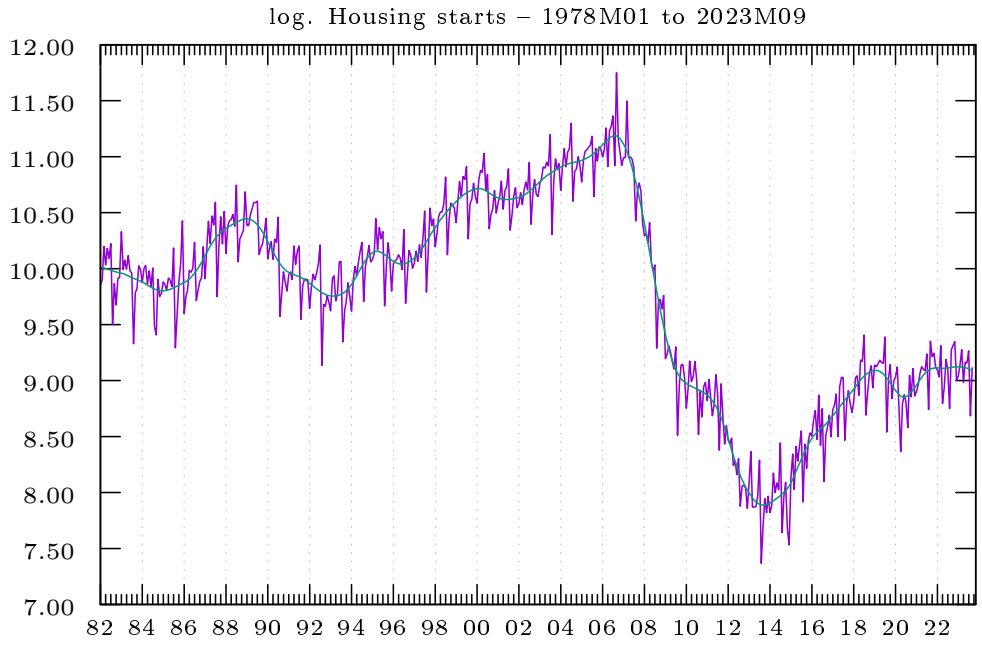
Common sample: from **1978M01** (97) to **2023M09** (645)

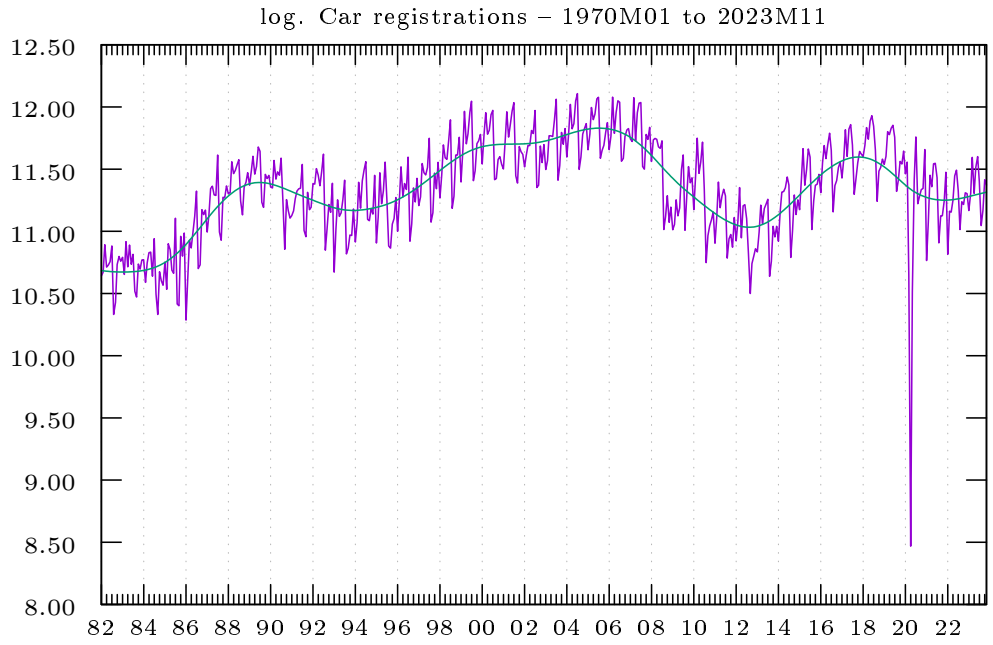
Series	Trend	S12	S6	S4	S3	S2.4	S2
Housing starts	0.0031	0.0050	0.0019	0.0021	0.0044	0.0027	0.0026
Cement consumption	0.0030	0.0133	0.0053	0.0032	0.0115	0.0088	0.0001
Car registrations	0.0015	0.0390	0.0237	0.0073	0.0117	0.0019	0.0000
Commercial vehicle registrations	0.0028	0.0069	0.0036	0.0040	0.0103	0.0008	0.0004

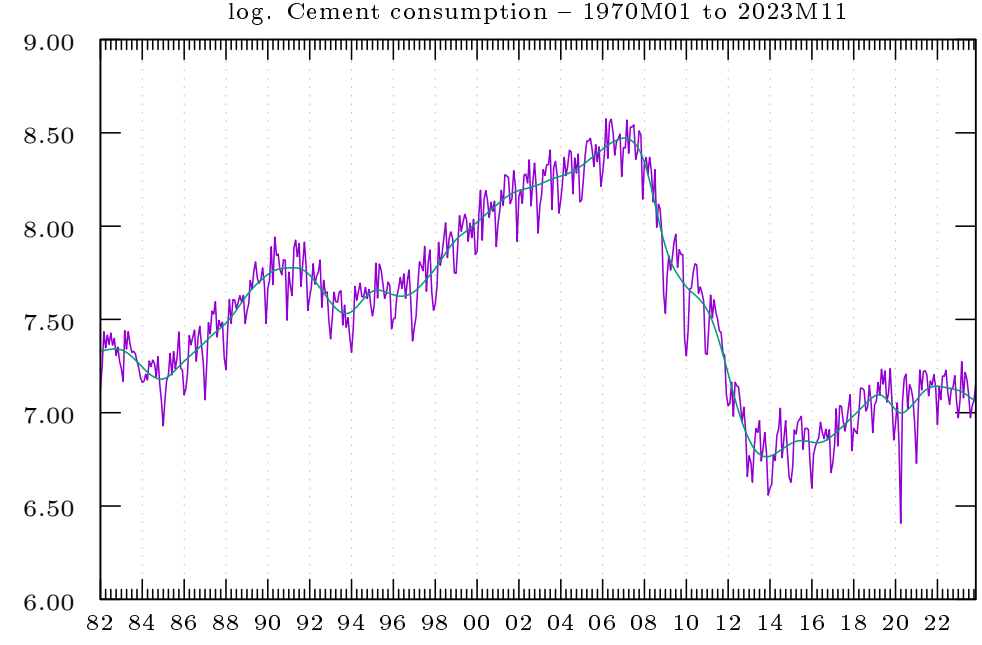
Table 1: Estimated Noise Variance Ratios

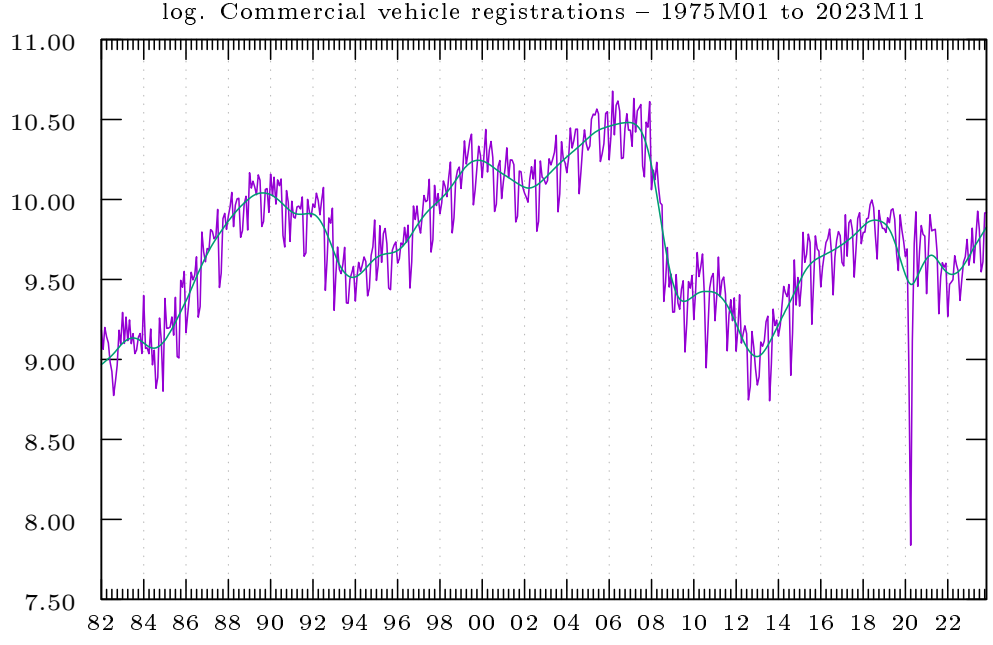
Sample up to 2023M09

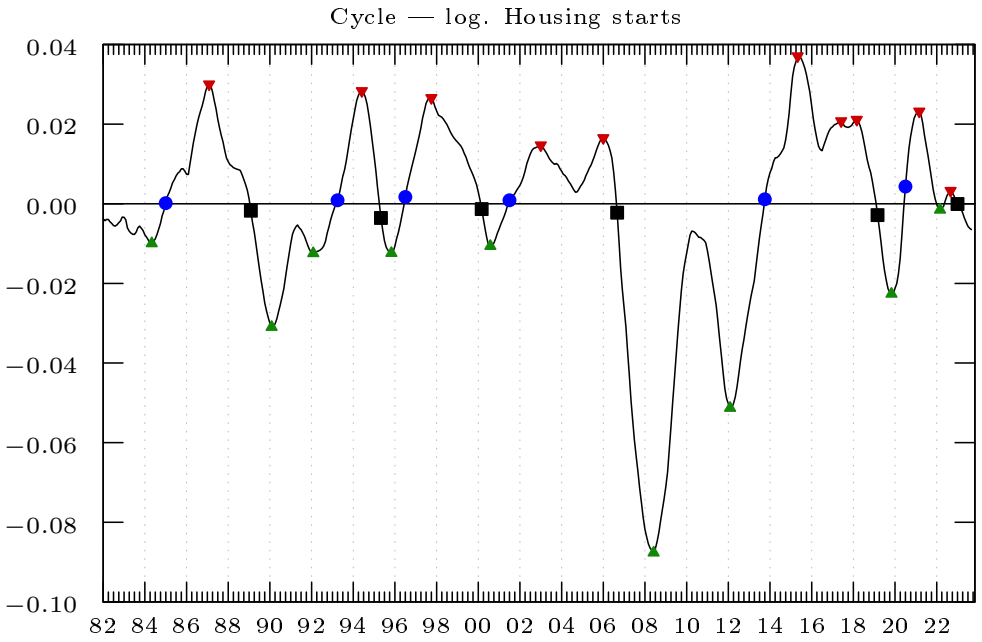


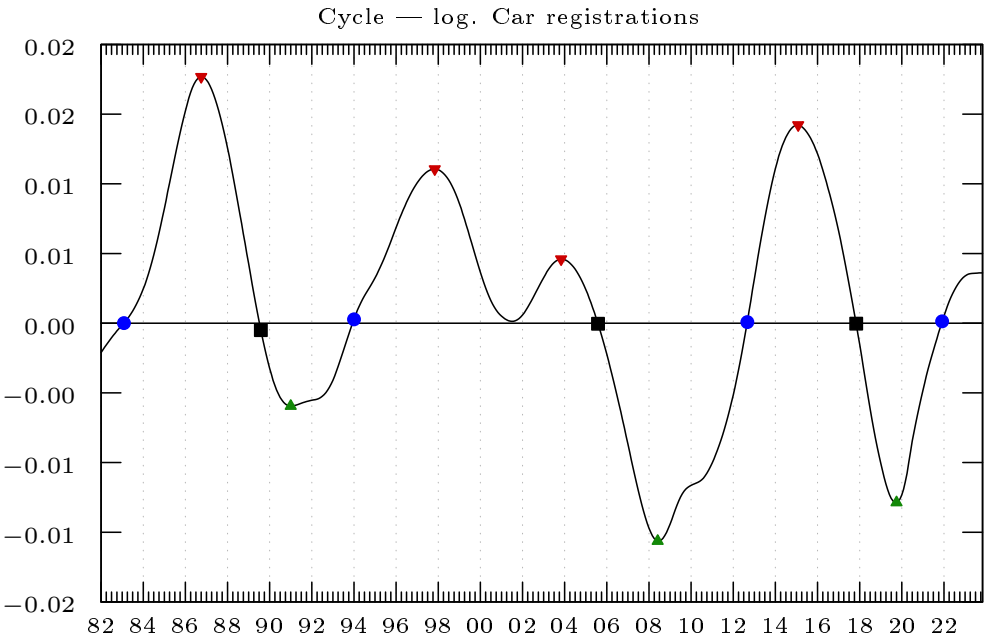

log. Housing starts – 1978M01 to 2023M09
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22

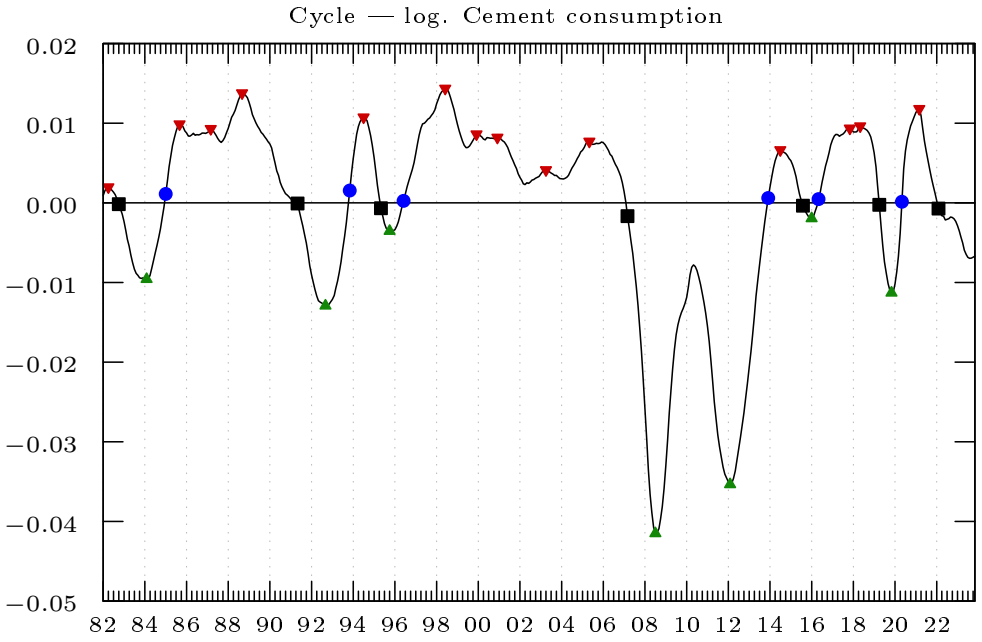

log. Car registrations – 1970M01 to 2023M11
12.50
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22

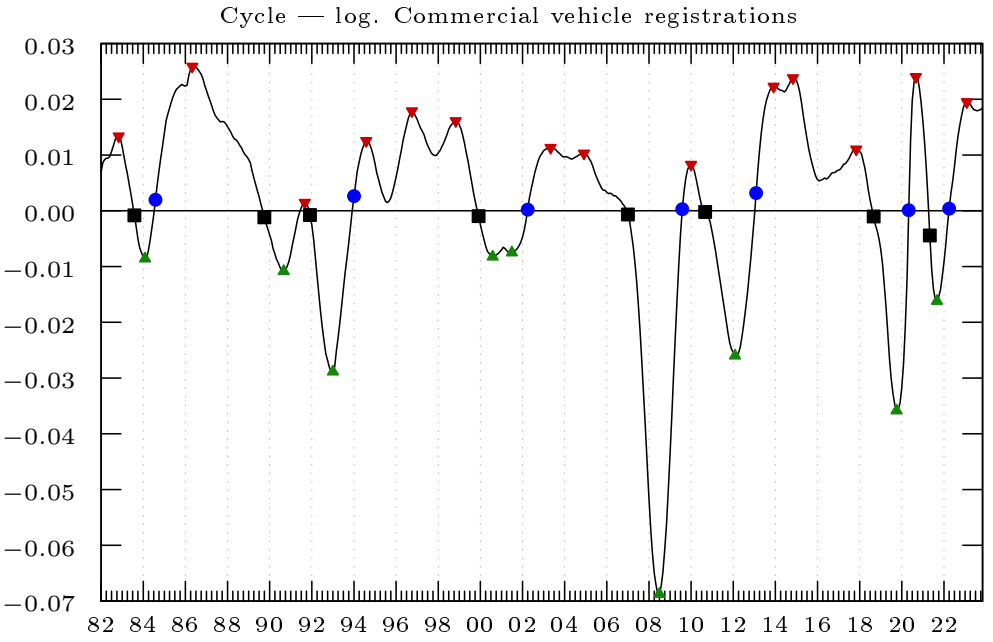

log. Cement consumption – 1970M01 to 2023M11
9.00
8.50
8.00
7.50
7.00
6.50
6.00
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22


log. Commercial vehicle registrations – 1975M01 to 2023M11
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22

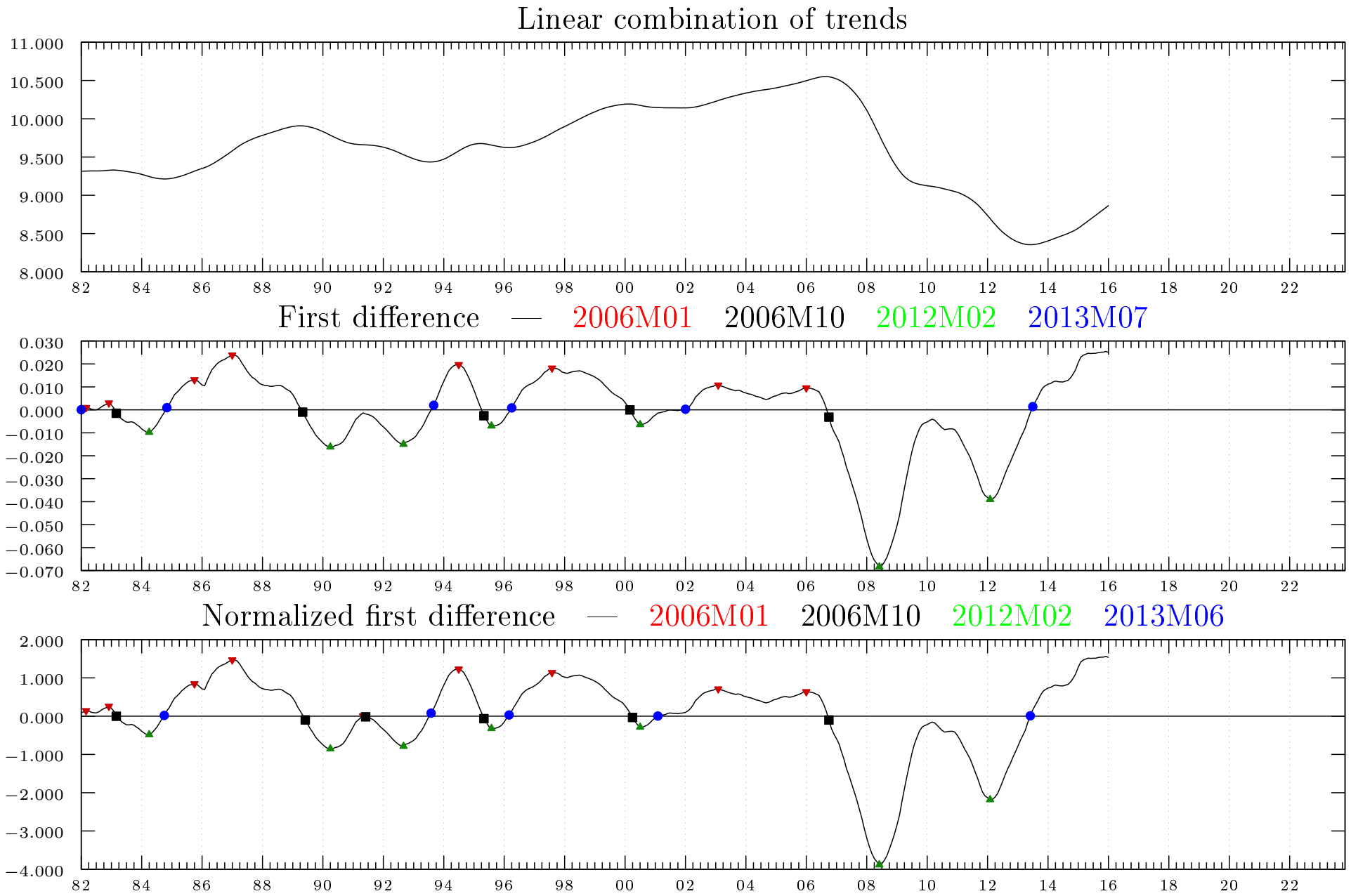

Cycle — log. Housing starts
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
−0.10
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22


Cycle — log. Car registrations
0.02
0.02
0.01
0.01
0.00
−0.00
−0.01
−0.01
−0.02
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22

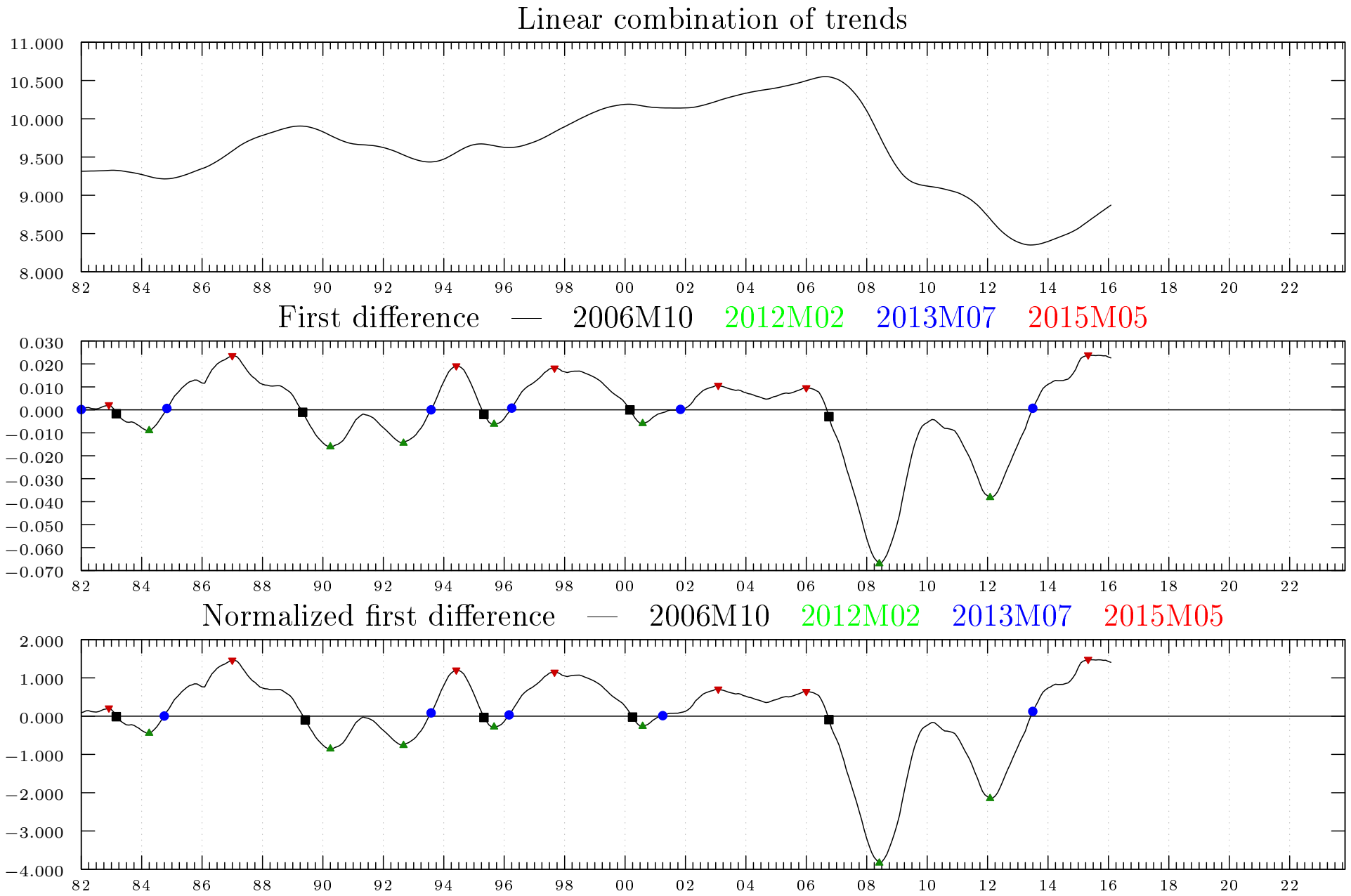

Cycle — log. Cement consumption
0.02
0.01
0.00
−0.01
−0.02
−0.03
−0.04
−0.05
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22


Cycle — log. Commercial vehicle registrations
0.03
0.02
0.01
0.00
−0.01
−0.02
−0.03
−0.04
−0.05
−0.06
−0.07
82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22

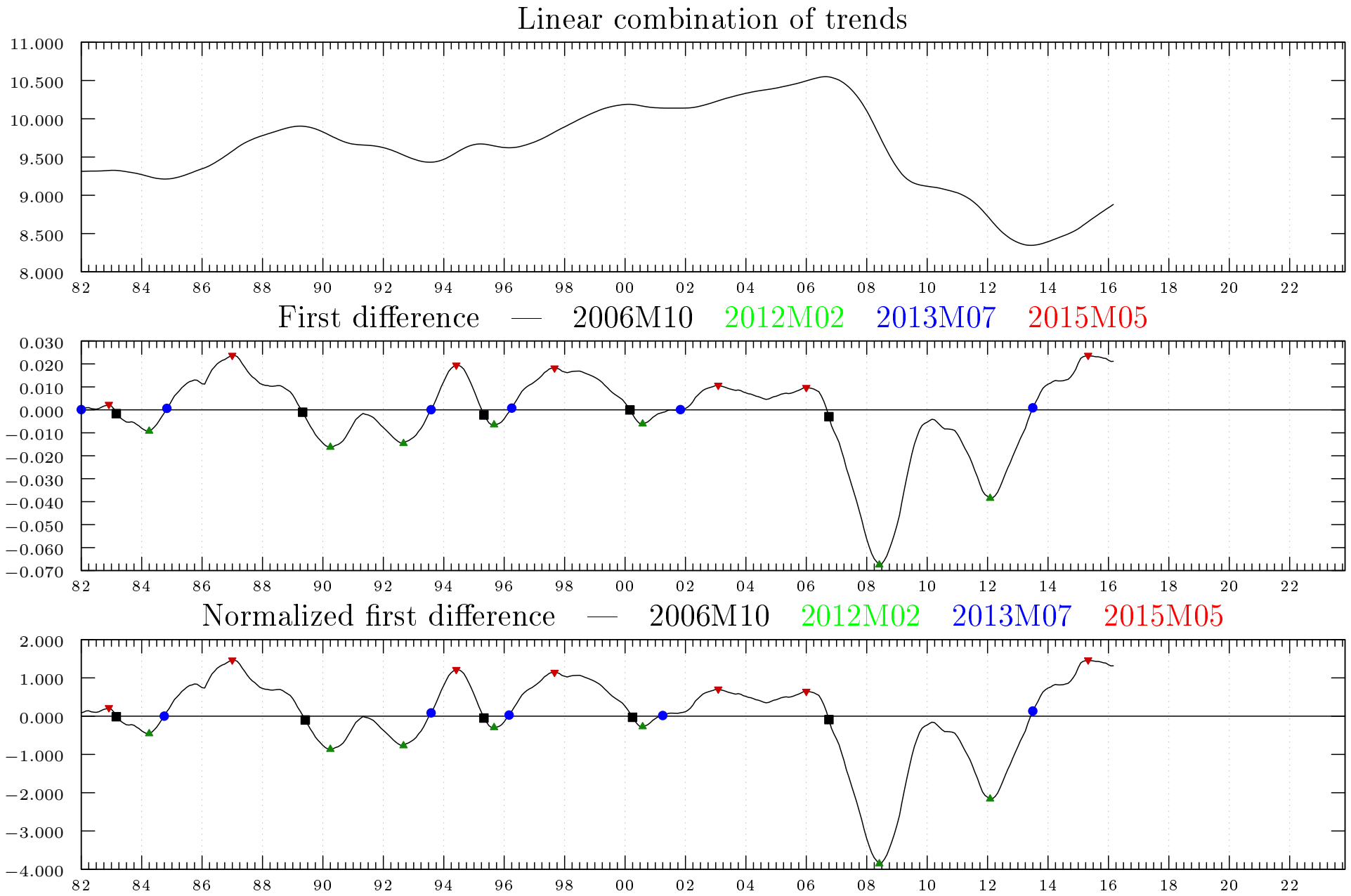
Composite Leading Indicator (1) : **2016M01** — (553)



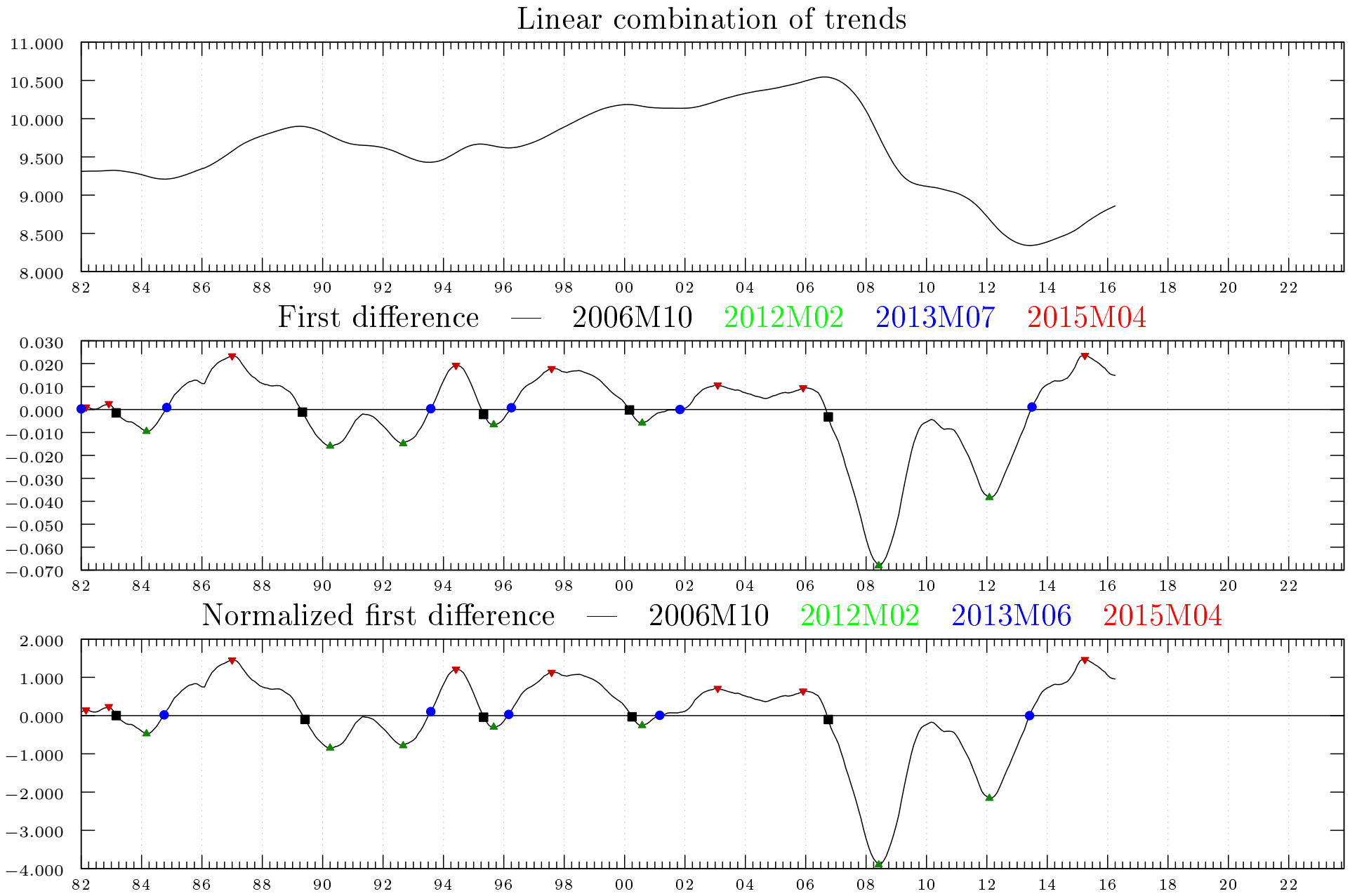
Composite Leading Indicator (1) : **2016M02** — (554)



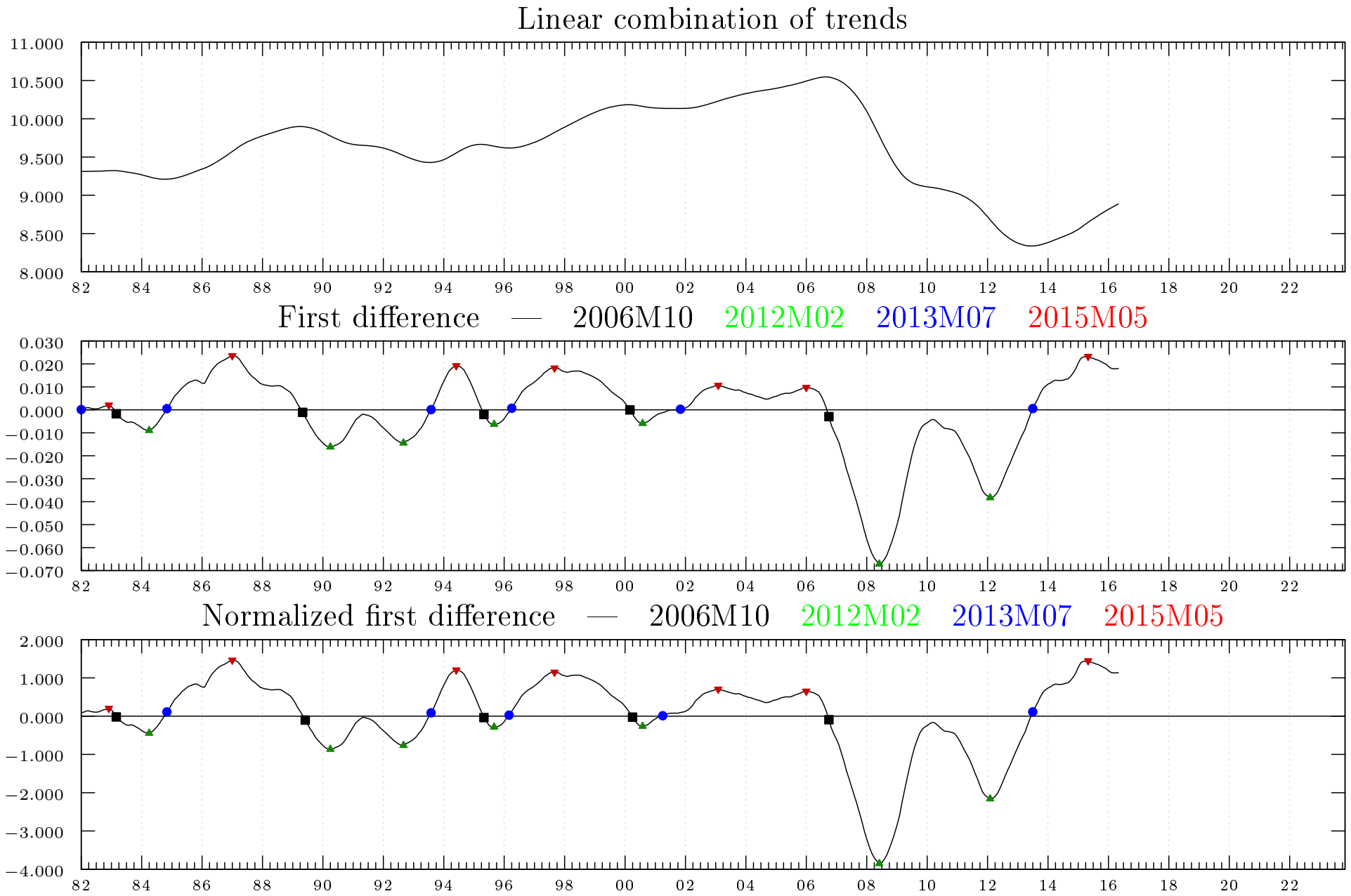
Composite Leading Indicator (1) : **2016M03** — (555)



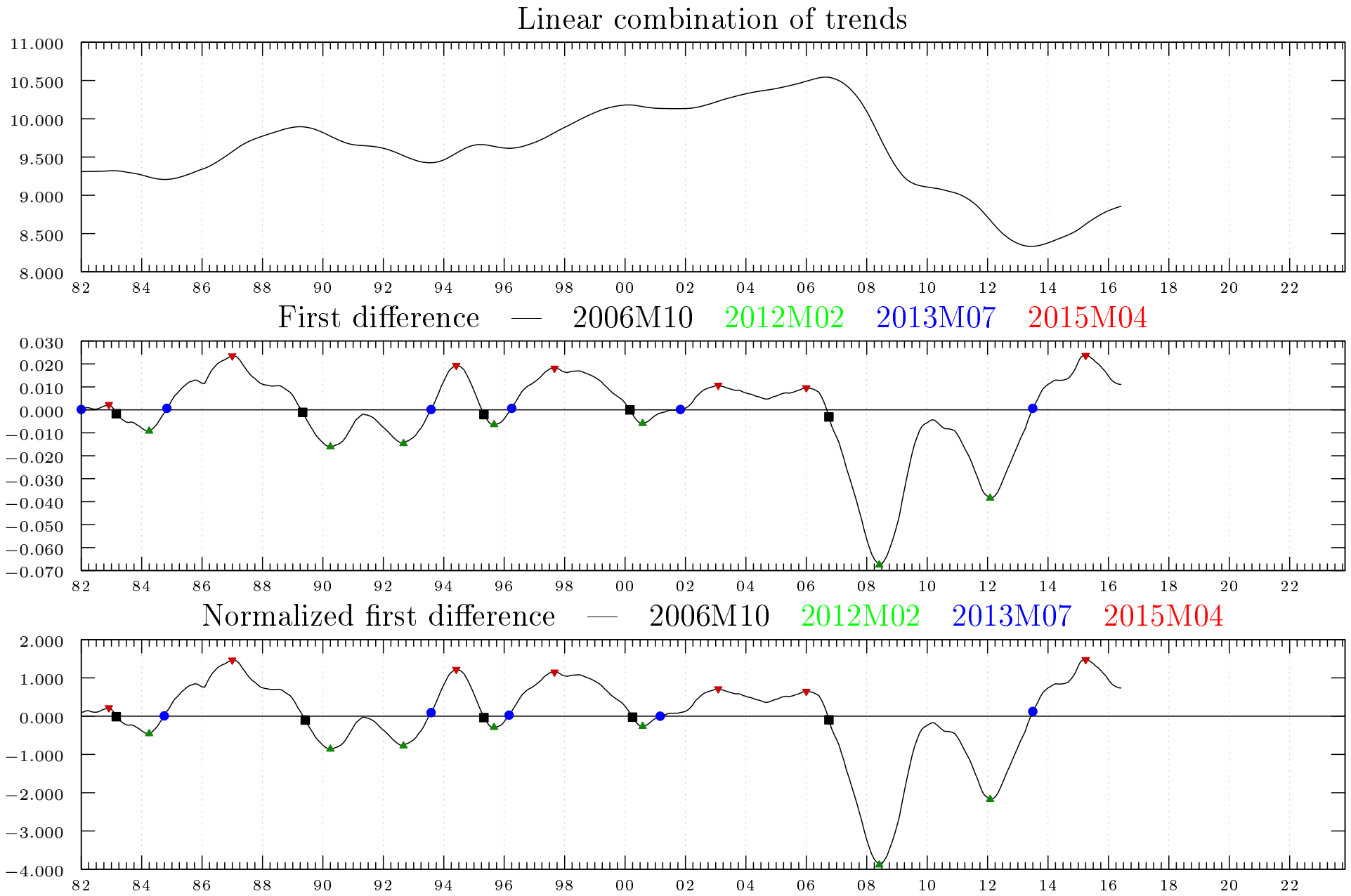
Composite Leading Indicator (1) : **2016M04** — (556)



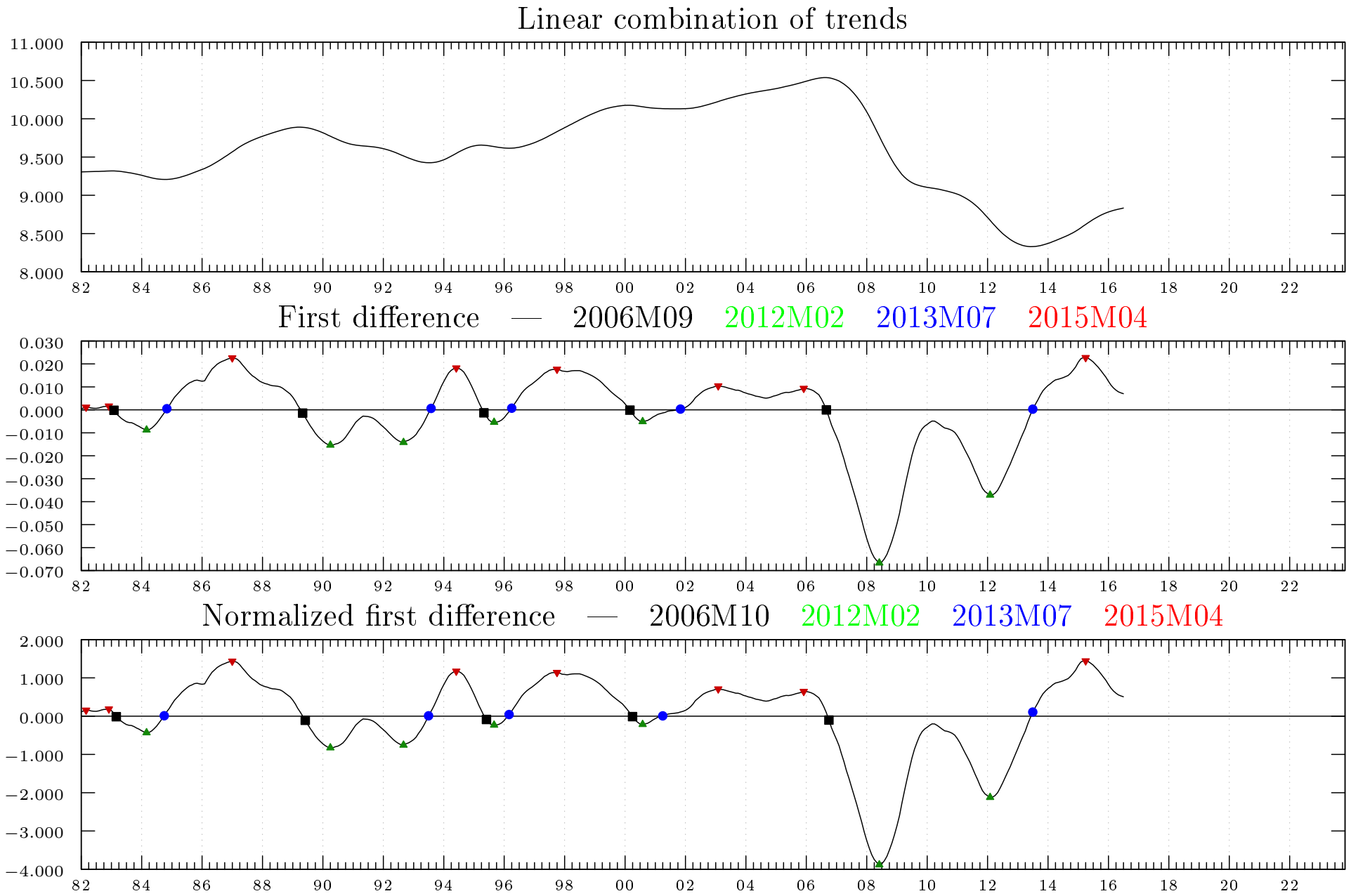
Composite Leading Indicator (1) : **2016M05** — (557)



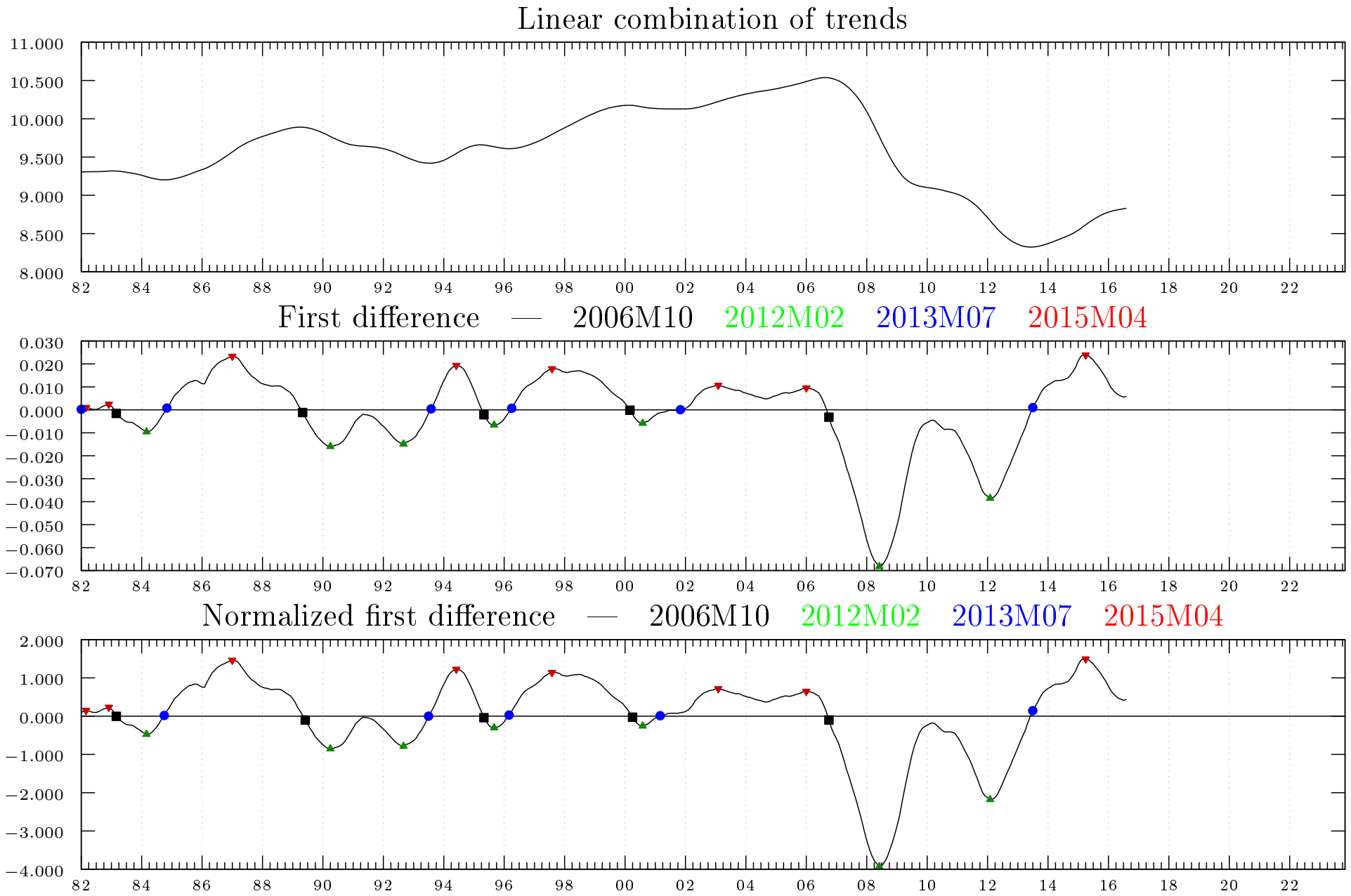
Composite Leading Indicator (1) : **2016M06** — (558)



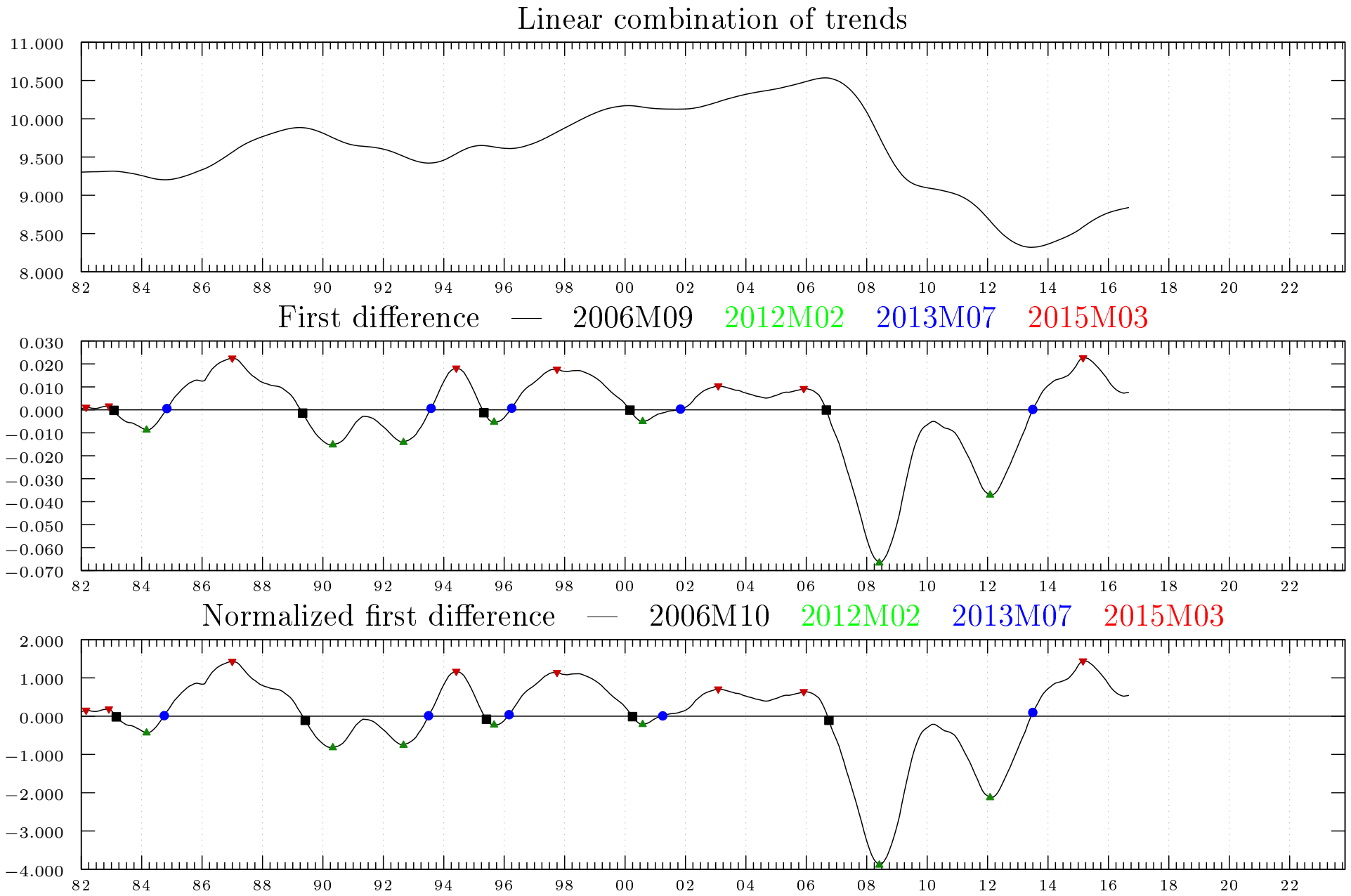
Composite Leading Indicator (1) : **2016M07** — (559)



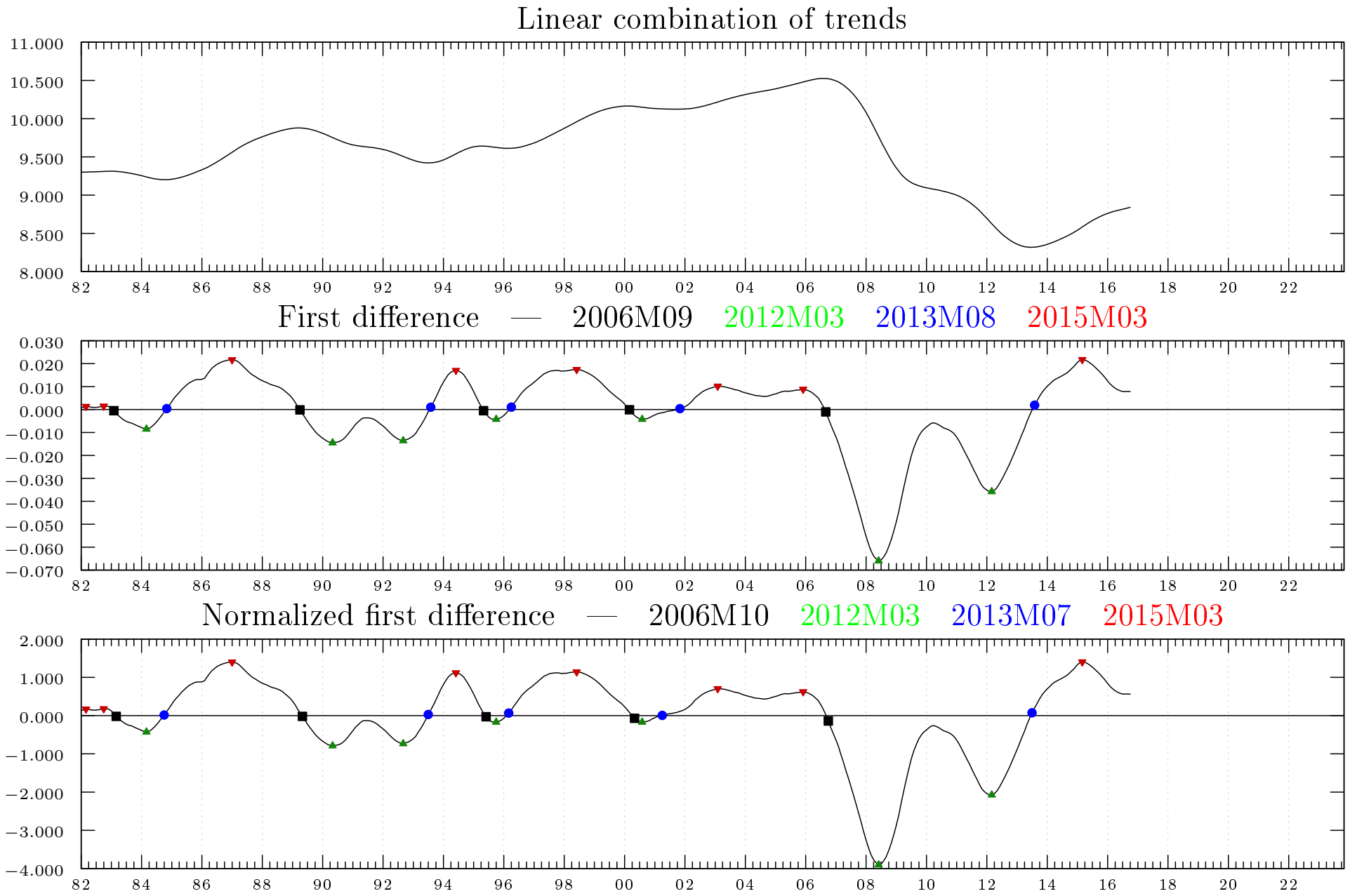
Composite Leading Indicator (1) : **2016M08** — (560)



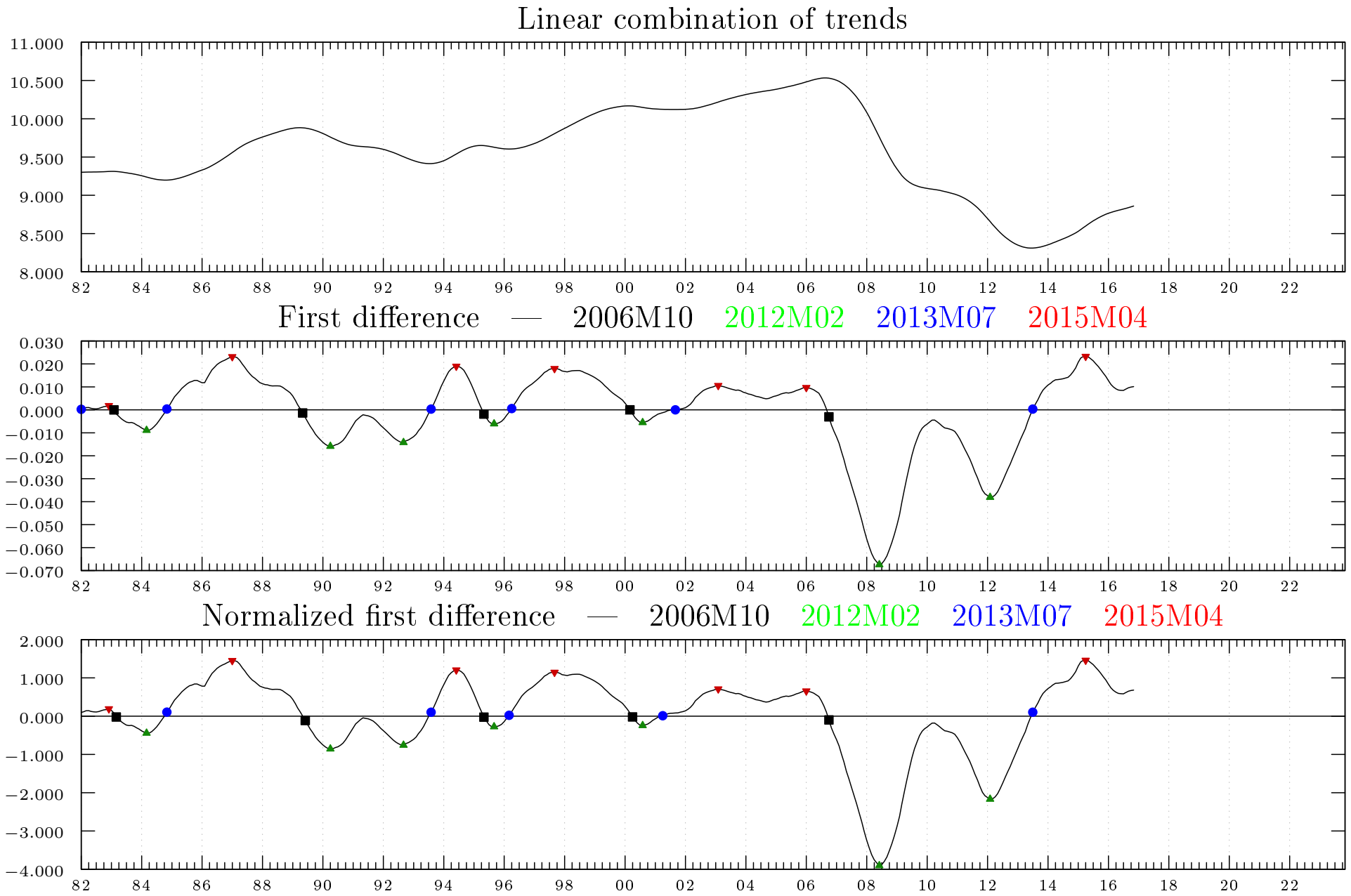
Composite Leading Indicator (1) : **2016M09** — (561)



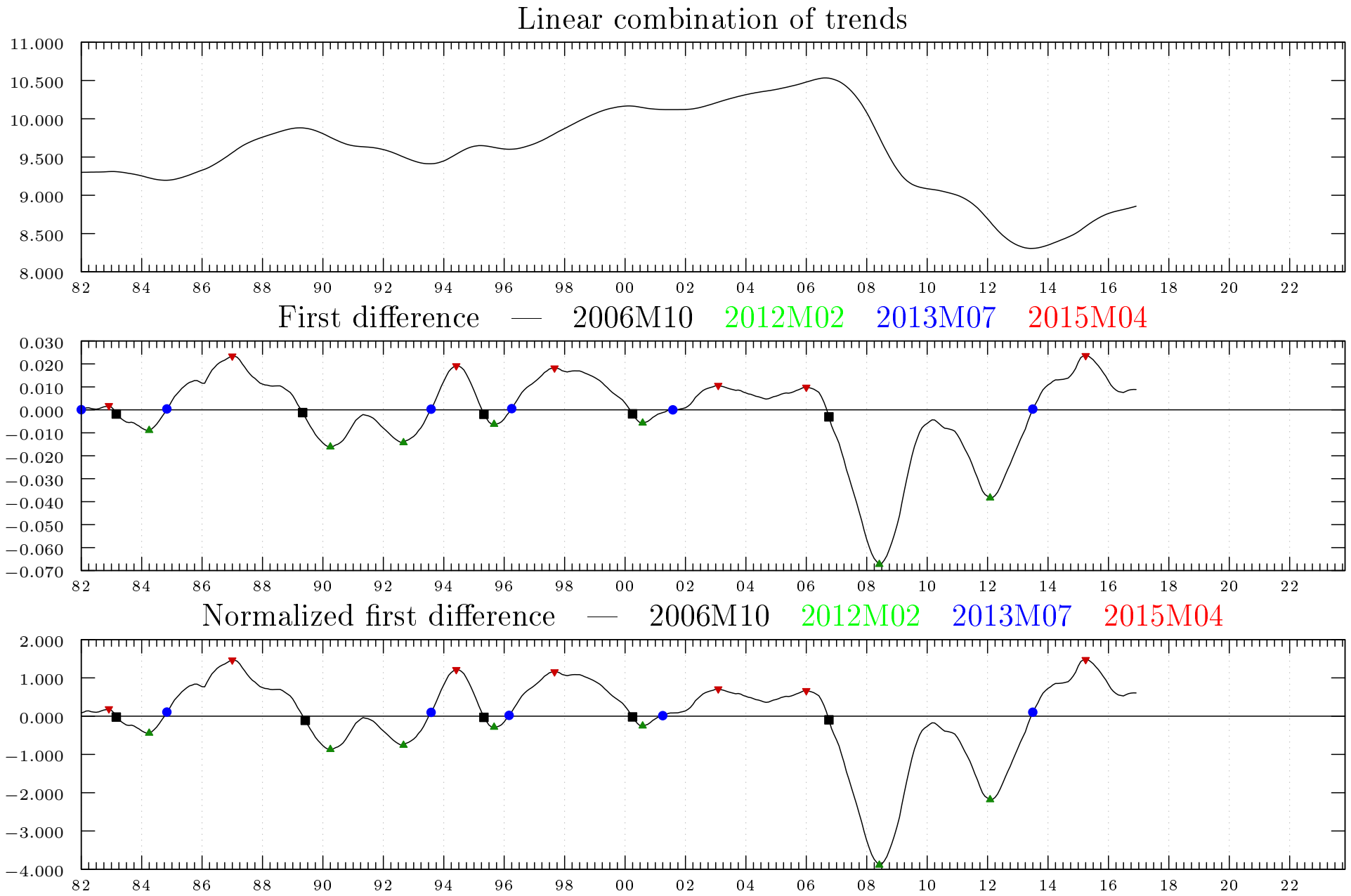
Composite Leading Indicator (1) : **2016M10** — (562)



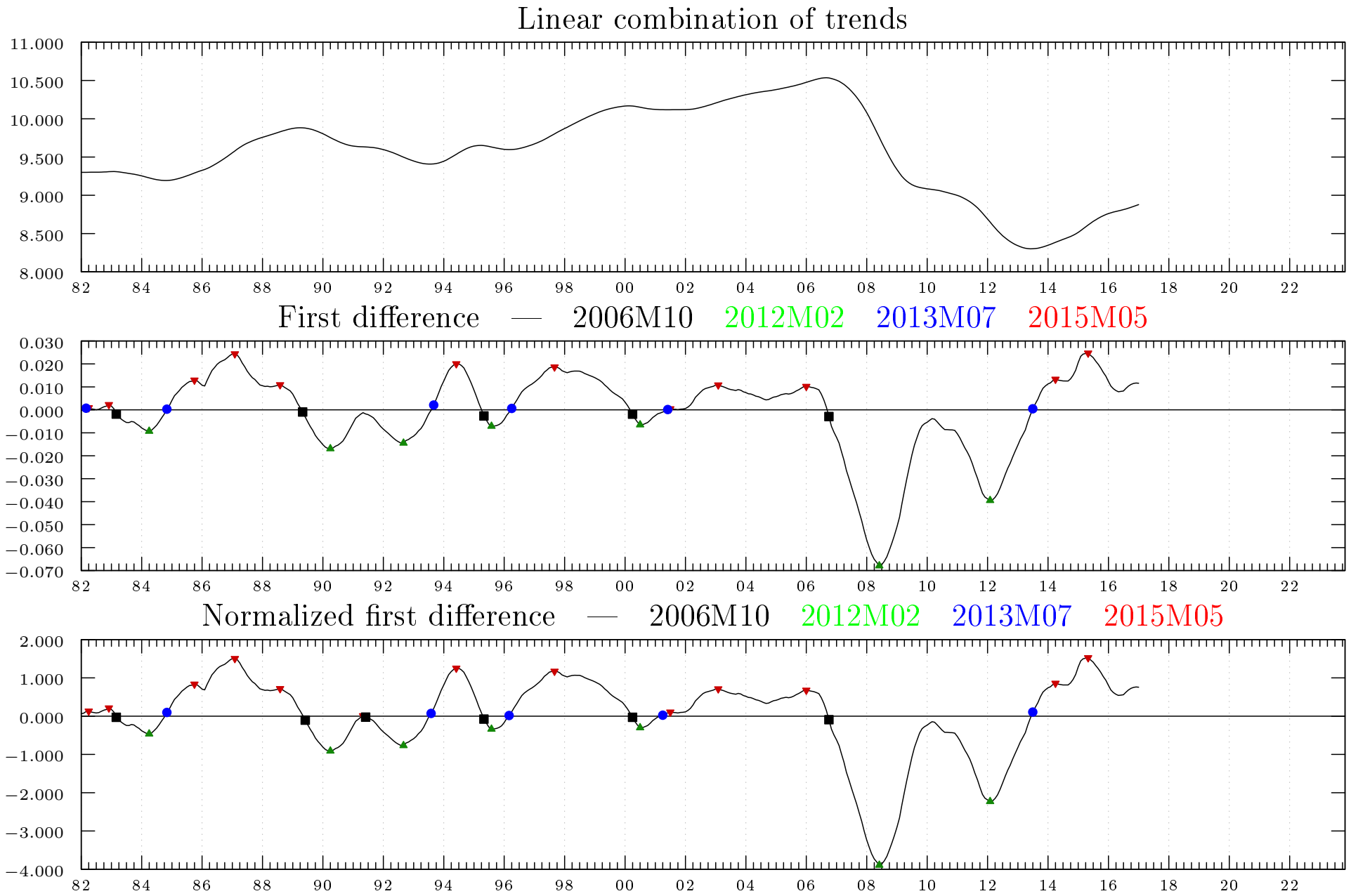
Composite Leading Indicator (1) : **2016M11** — (563)



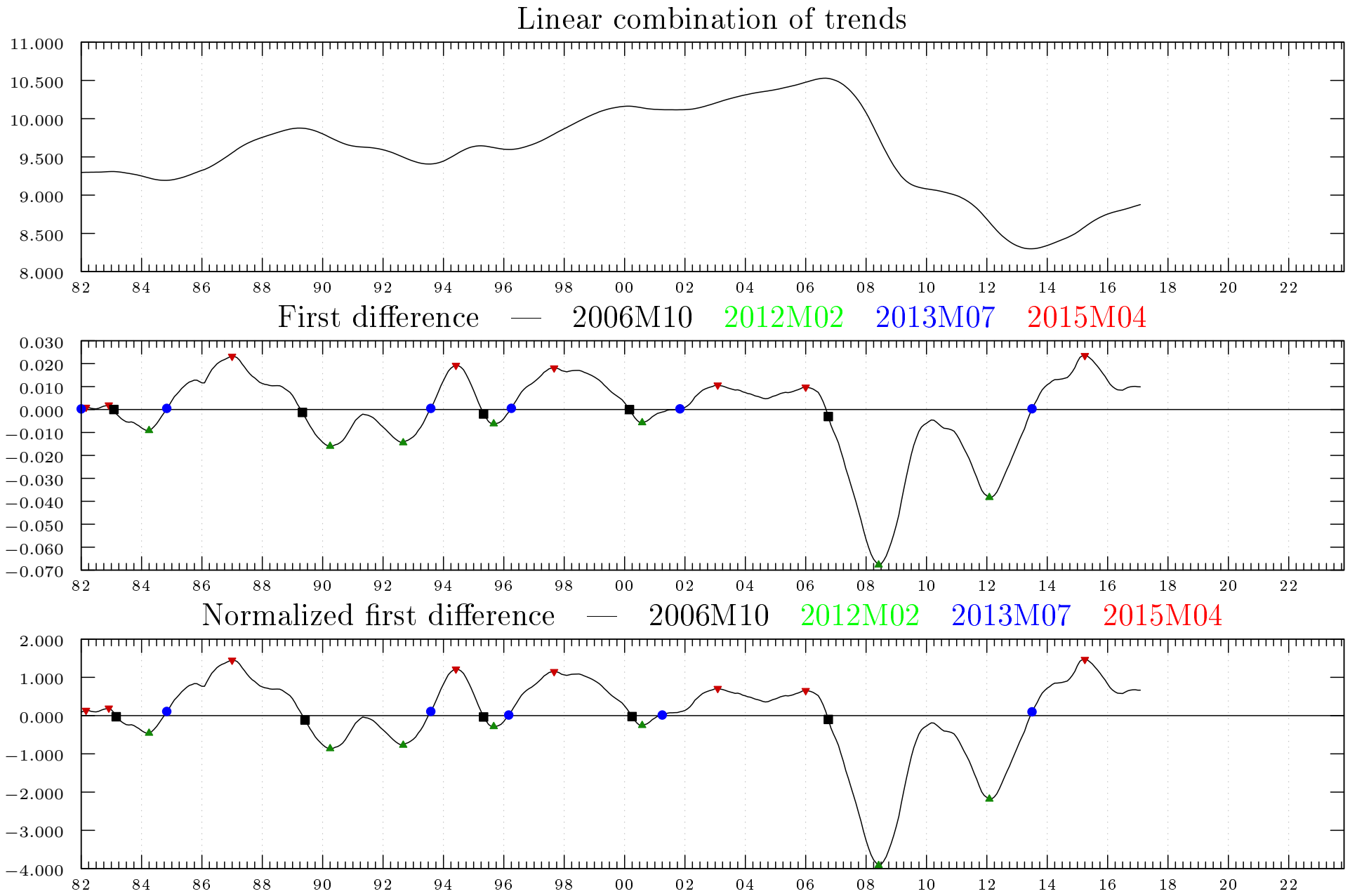
Composite Leading Indicator (1) : **2016M12** — (564)



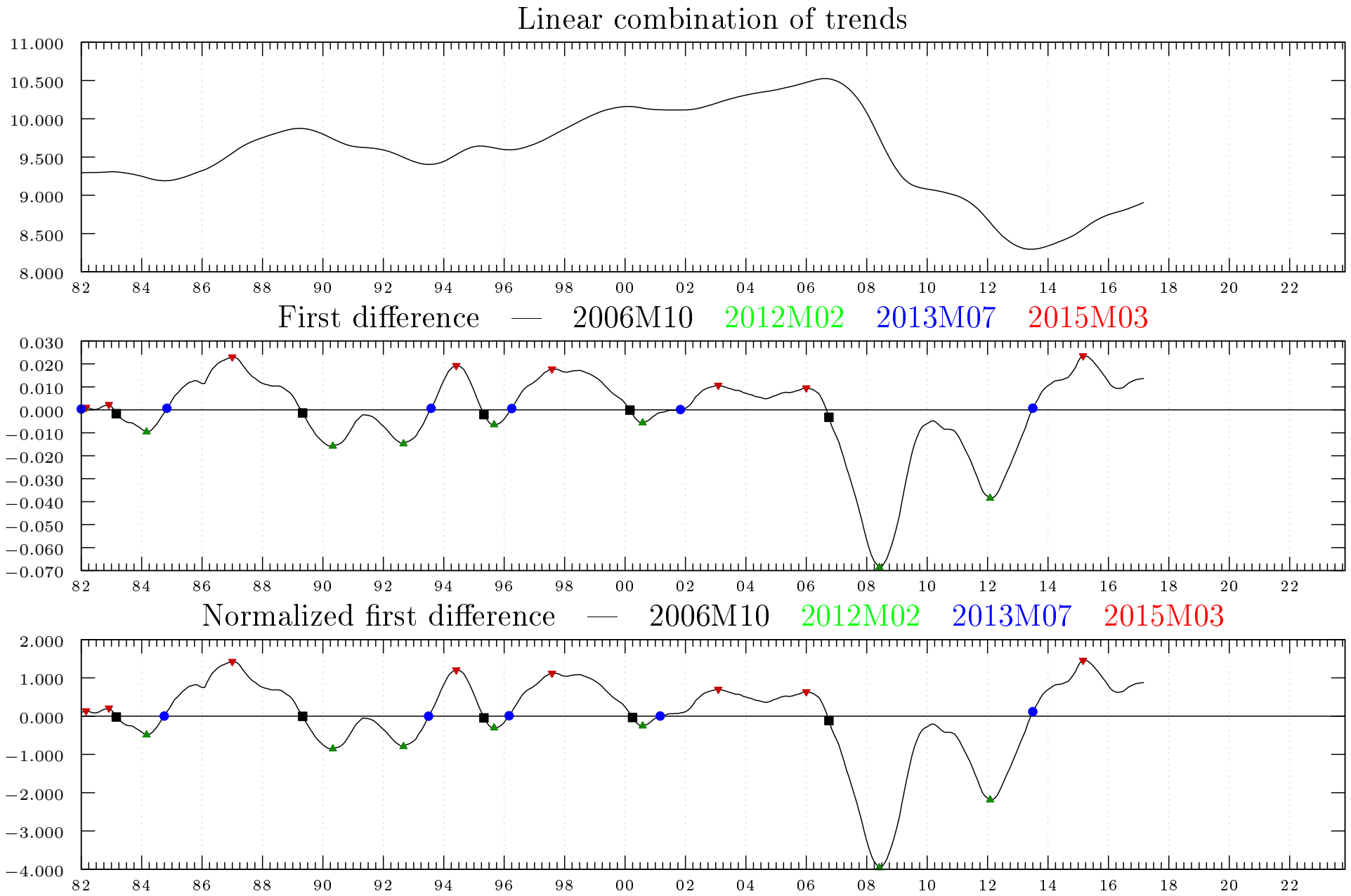
Composite Leading Indicator (1) : **2017M01** — (565)



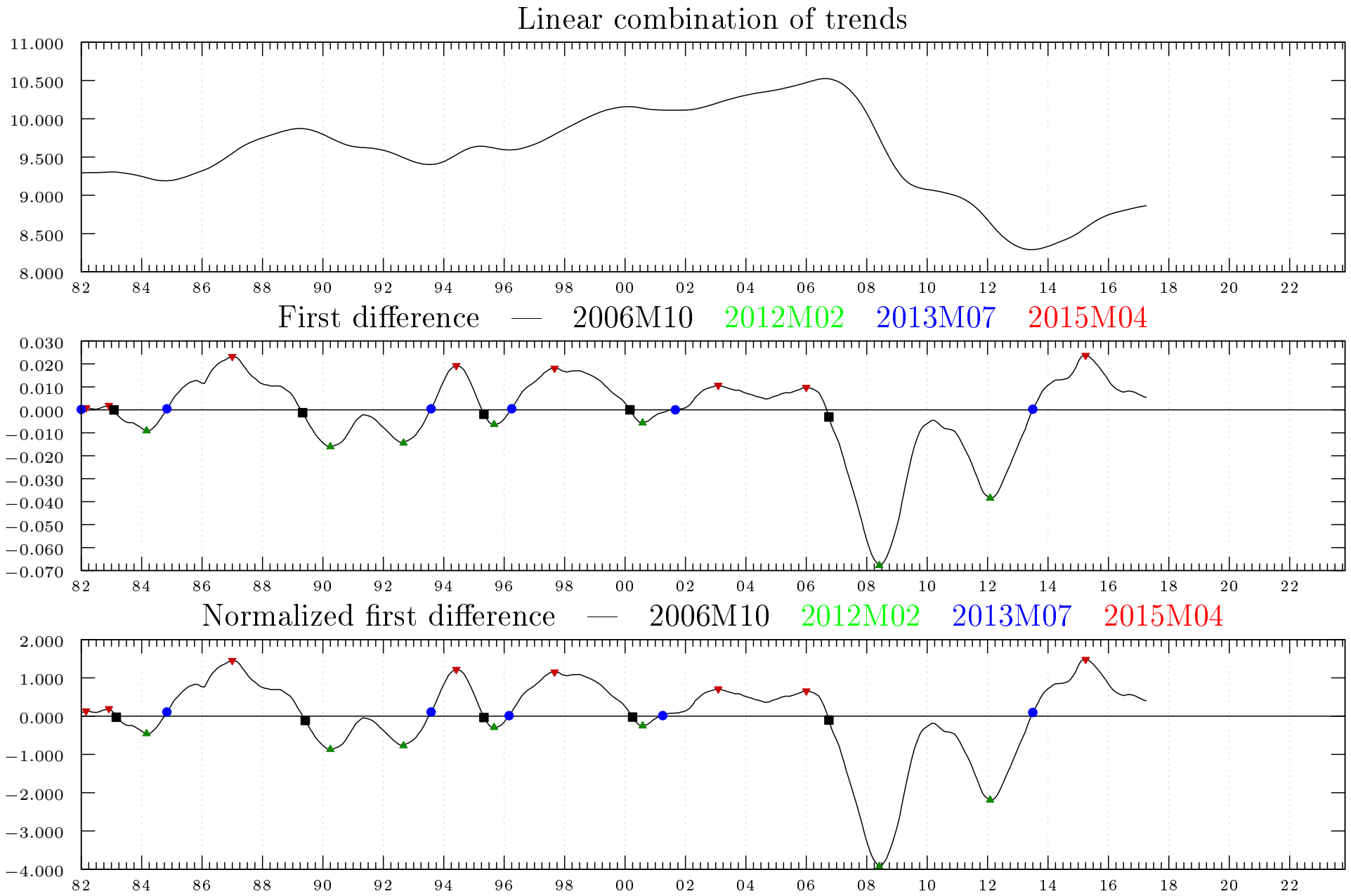
Composite Leading Indicator (1) : **2017M02** — (566)



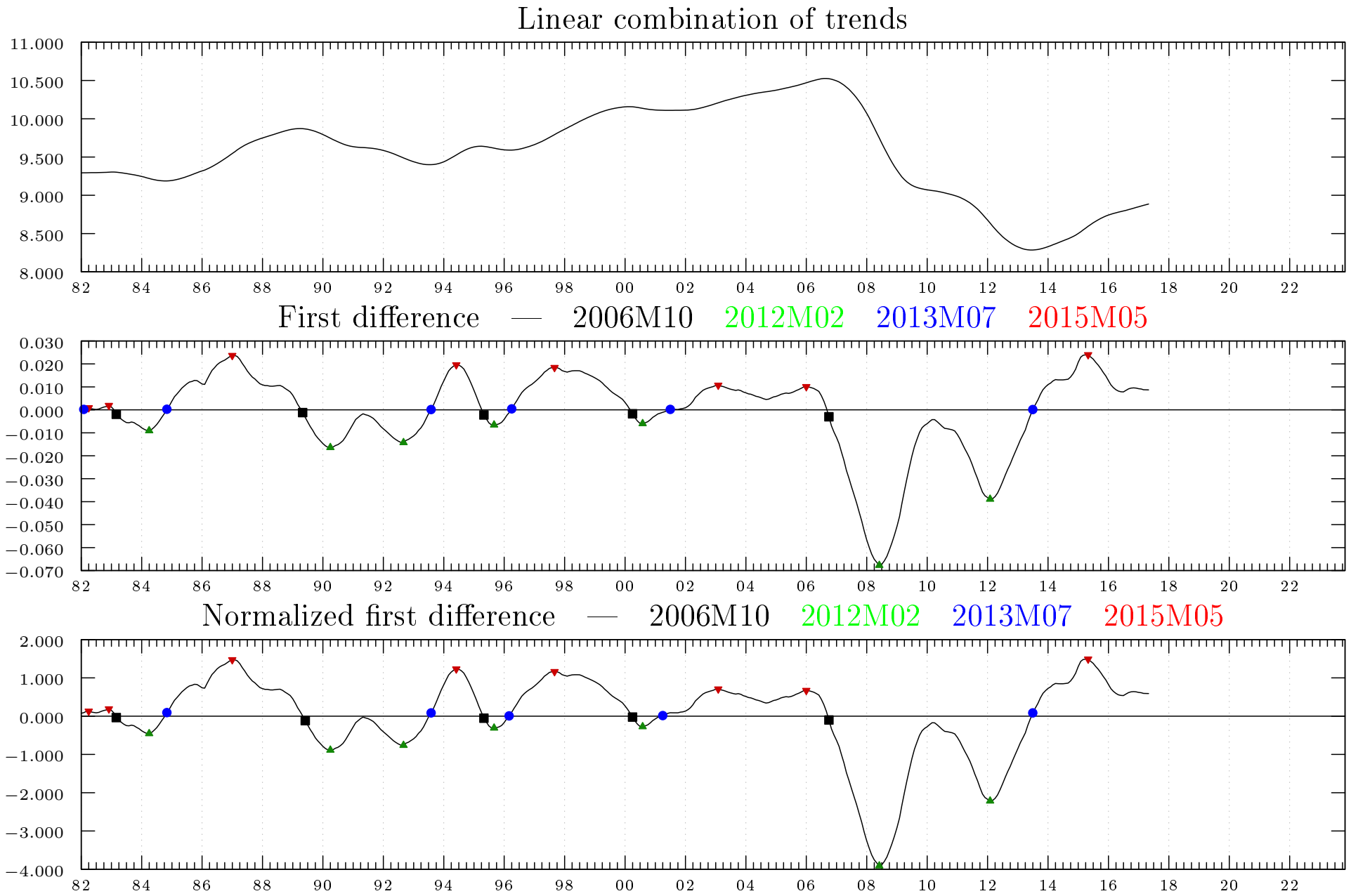
Composite Leading Indicator (1) : **2017M03** — (567)



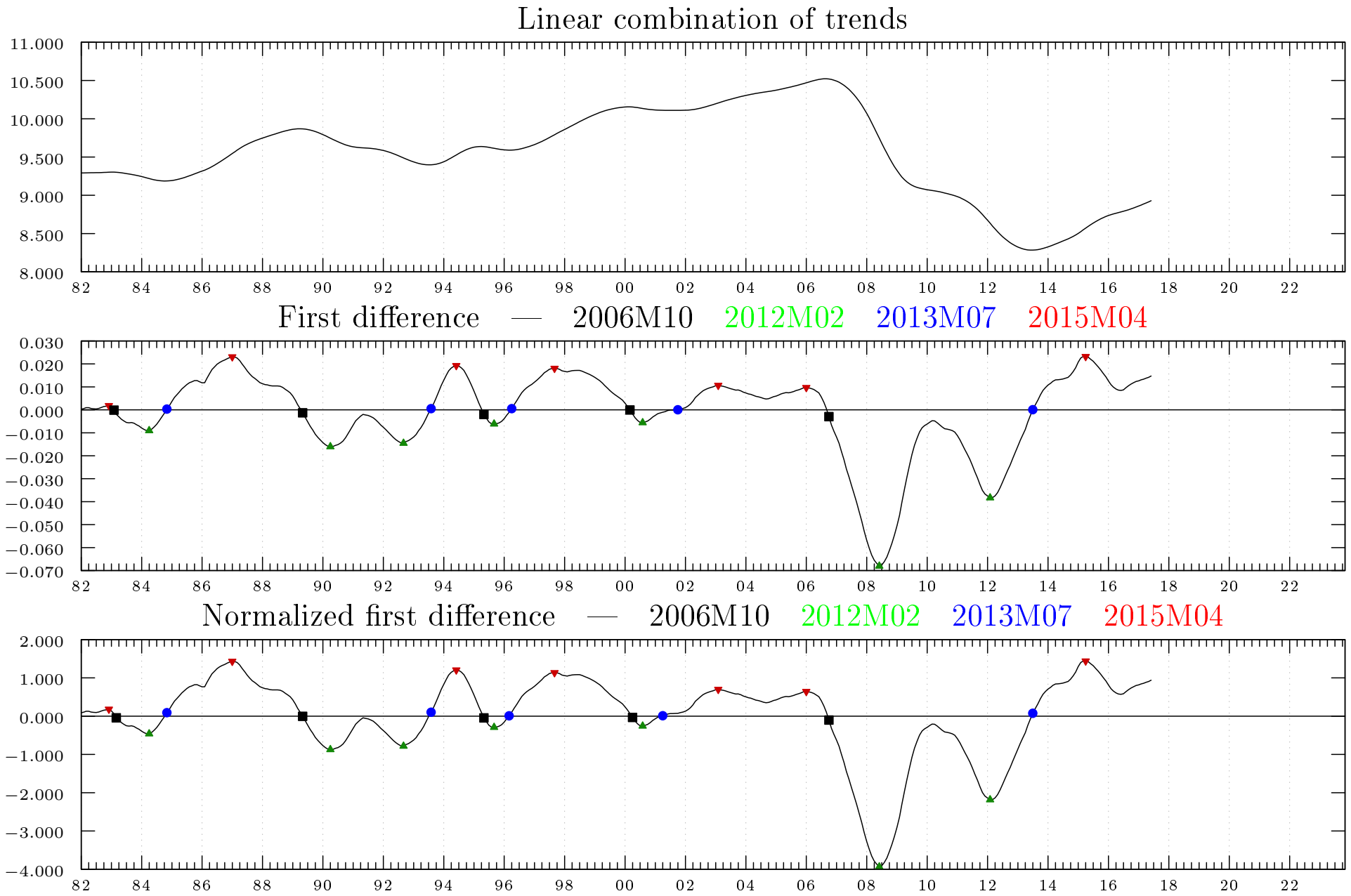
Composite Leading Indicator (1) : **2017M04** — (568)



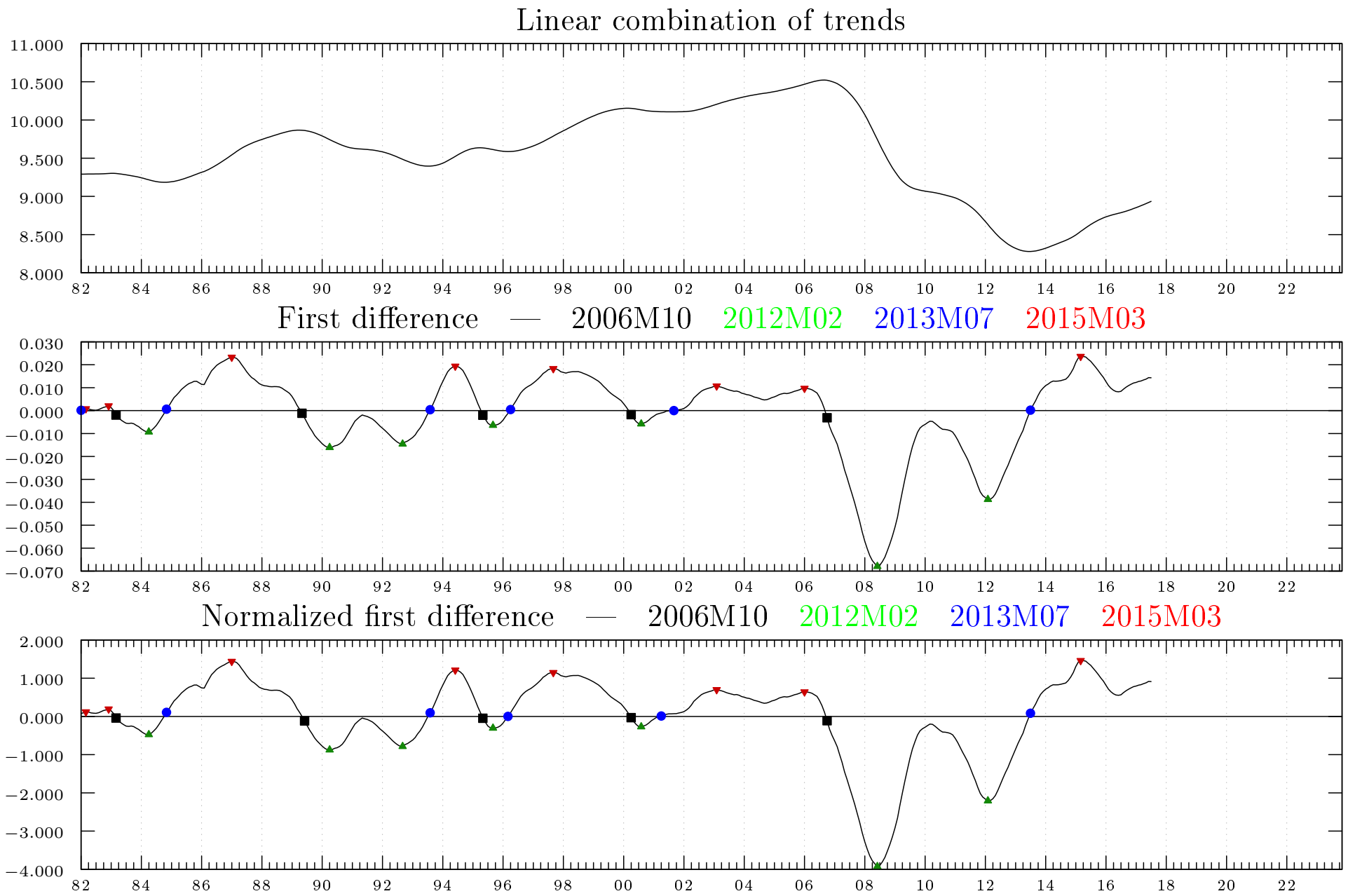
Composite Leading Indicator (1) : **2017M05** — (569)



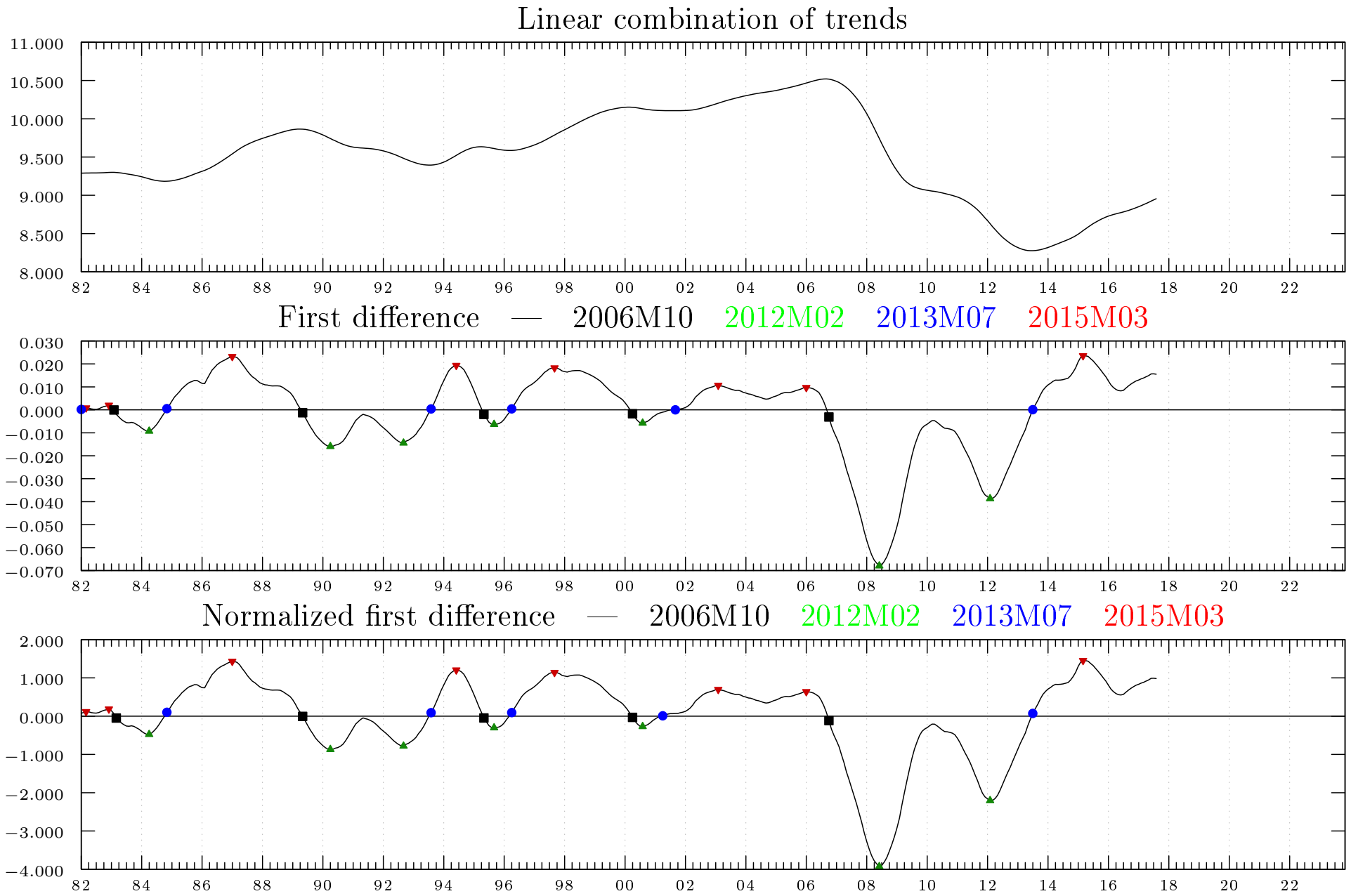
Composite Leading Indicator (1) : **2017M06** — (570)



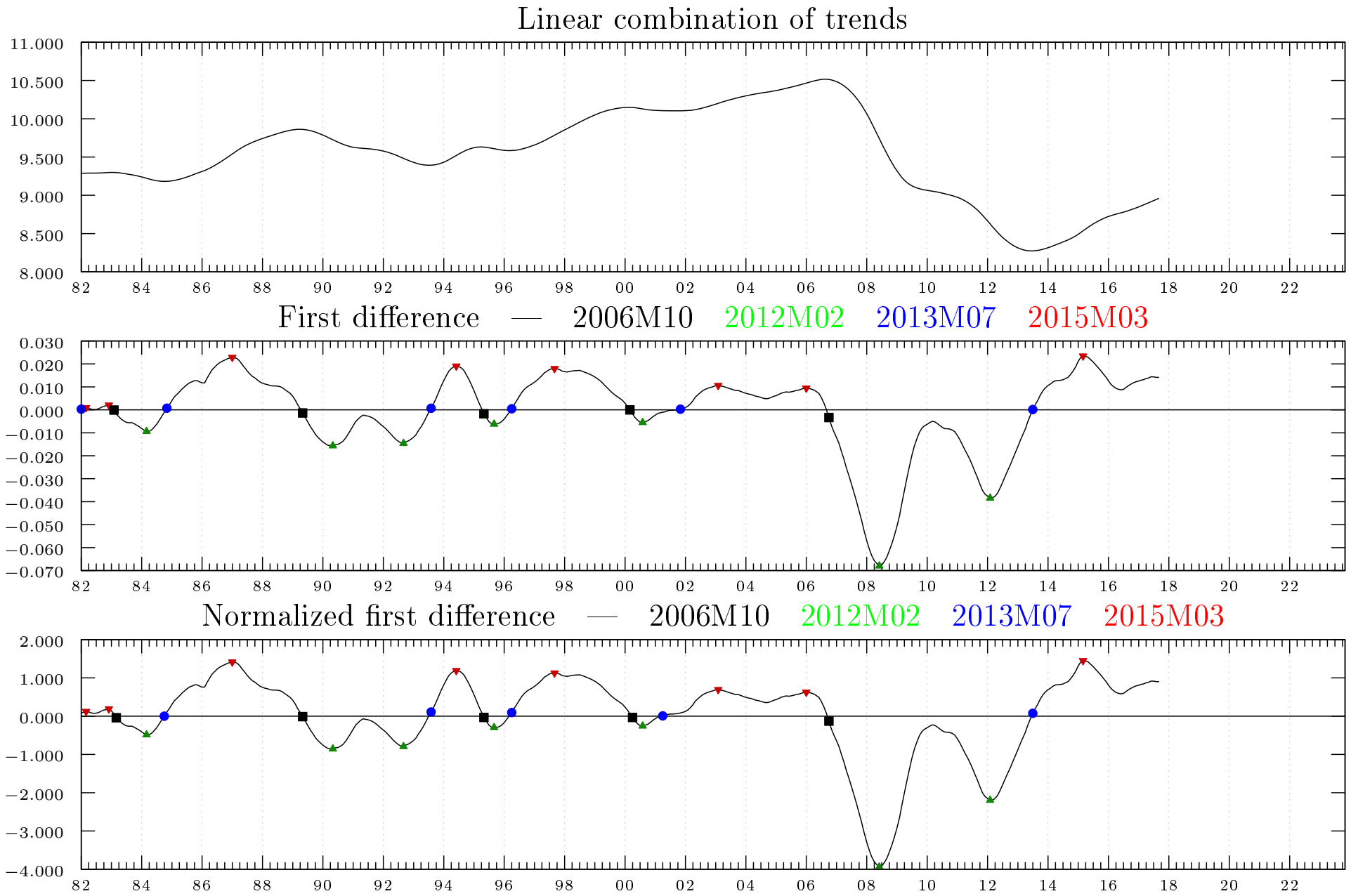
Composite Leading Indicator (1) : **2017M07** — (571)



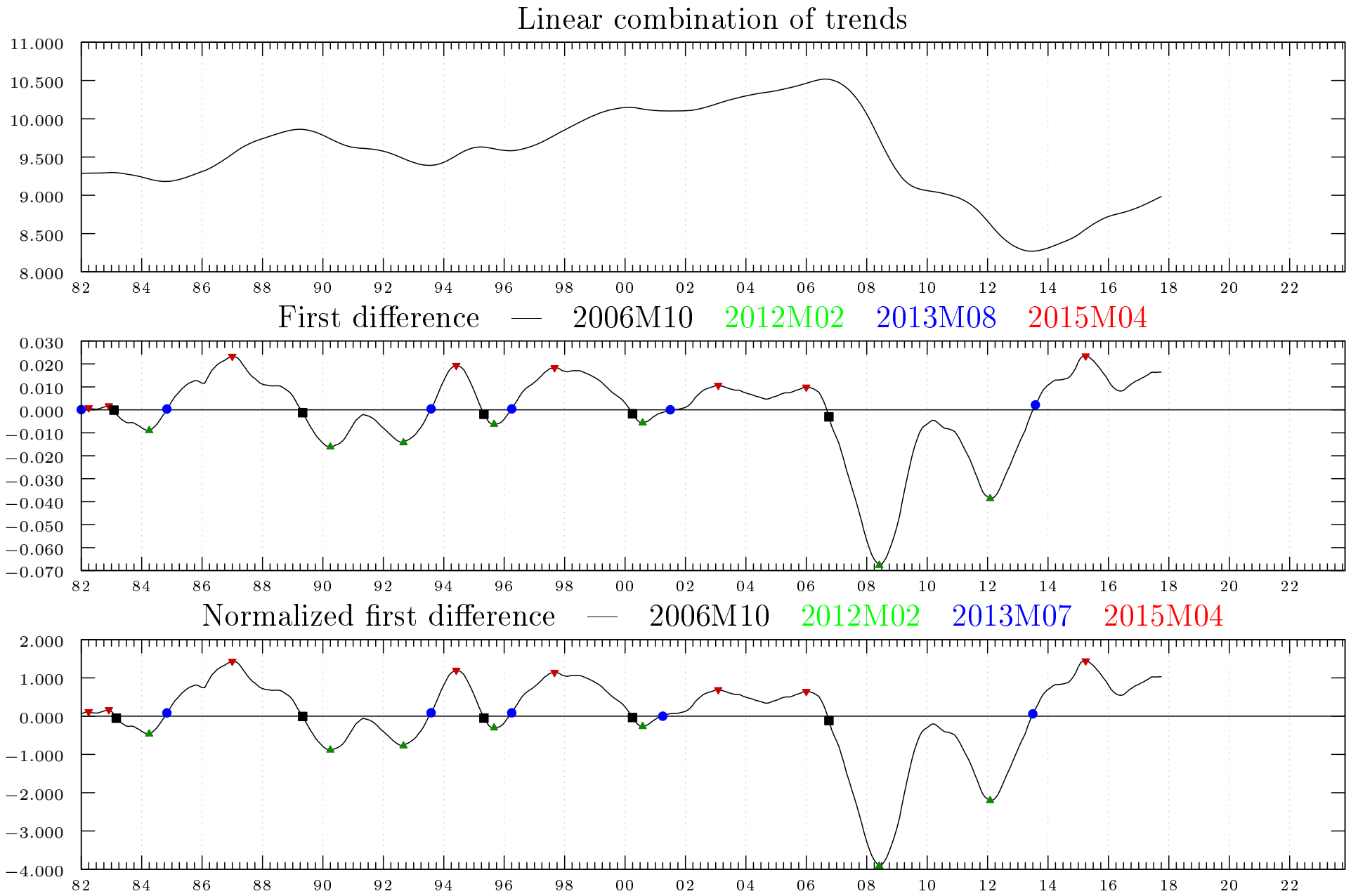
Composite Leading Indicator (1) : **2017M08** — (572)



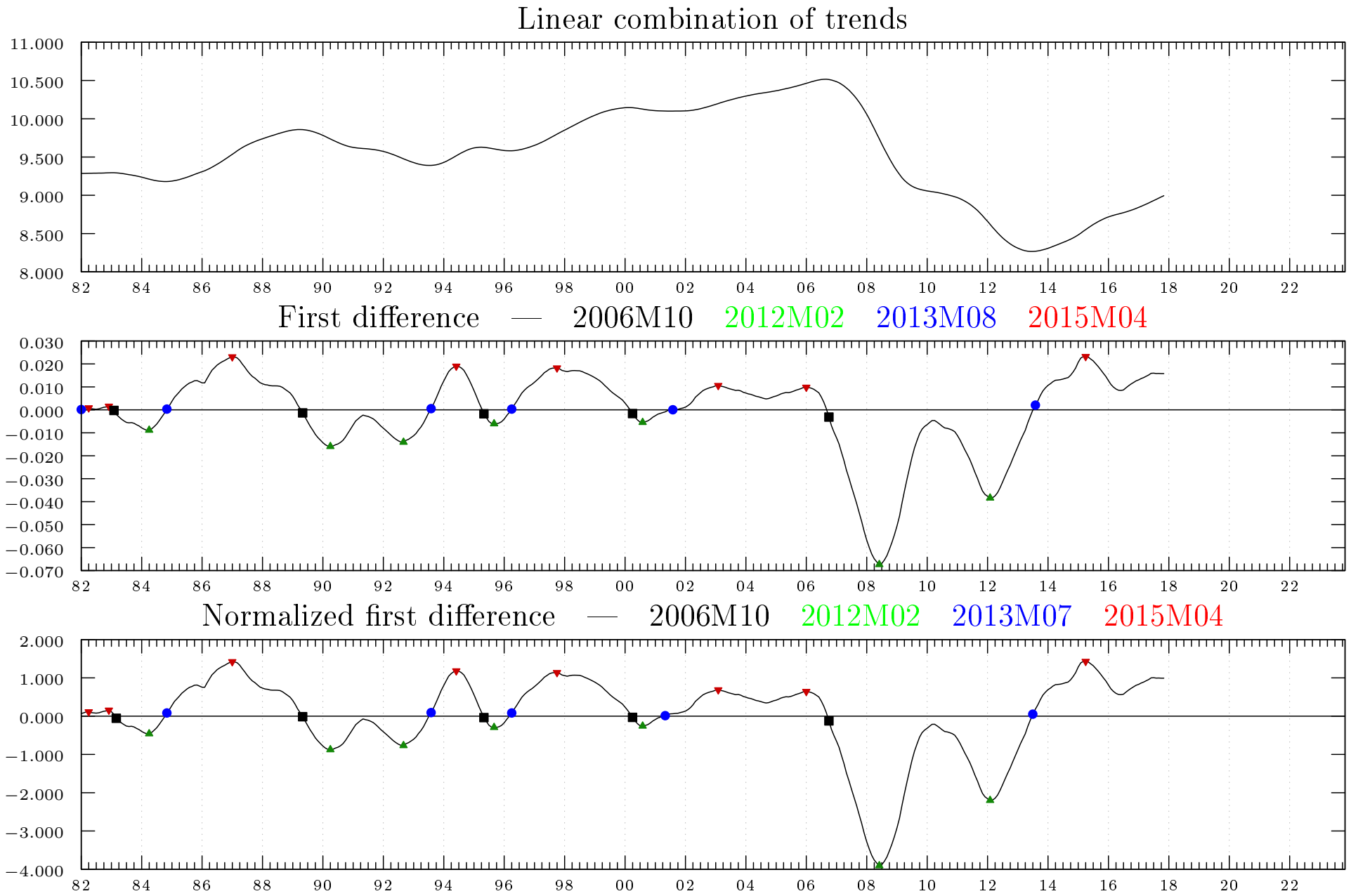
Composite Leading Indicator (1) : **2017M09** — (573)



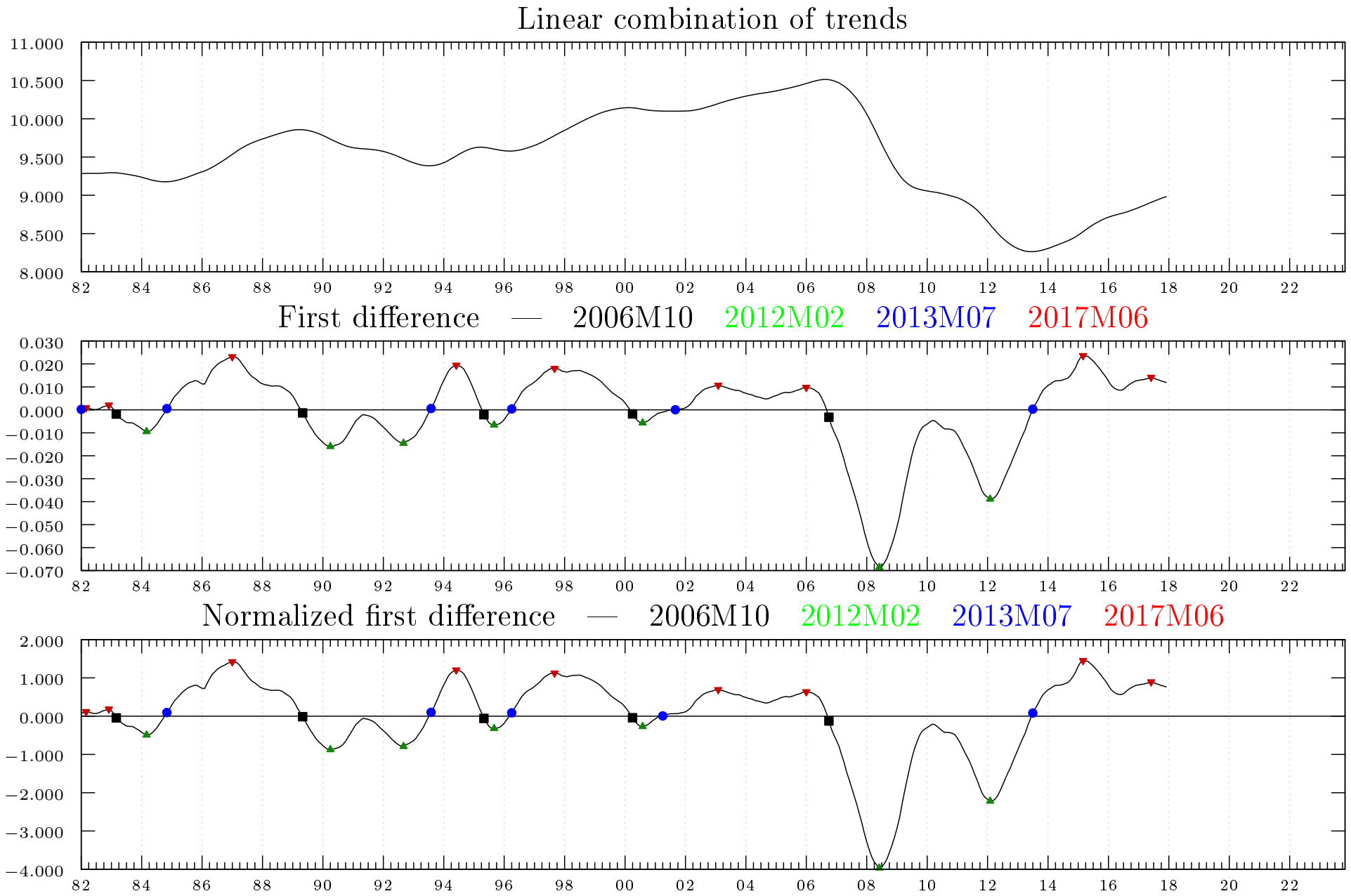
Composite Leading Indicator (1) : **2017M10** — (574)



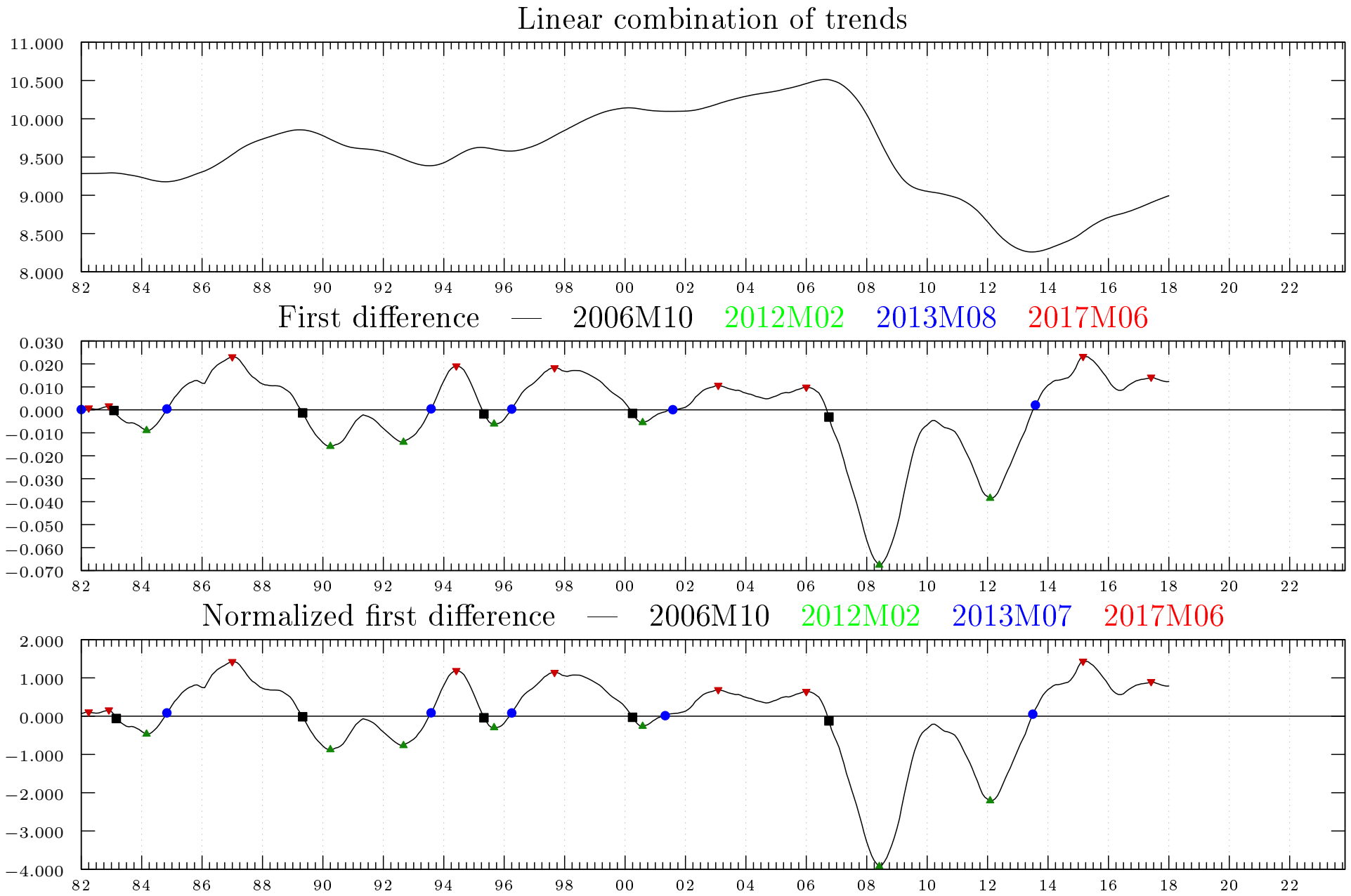
Composite Leading Indicator (1) : **2017M11** — (575)



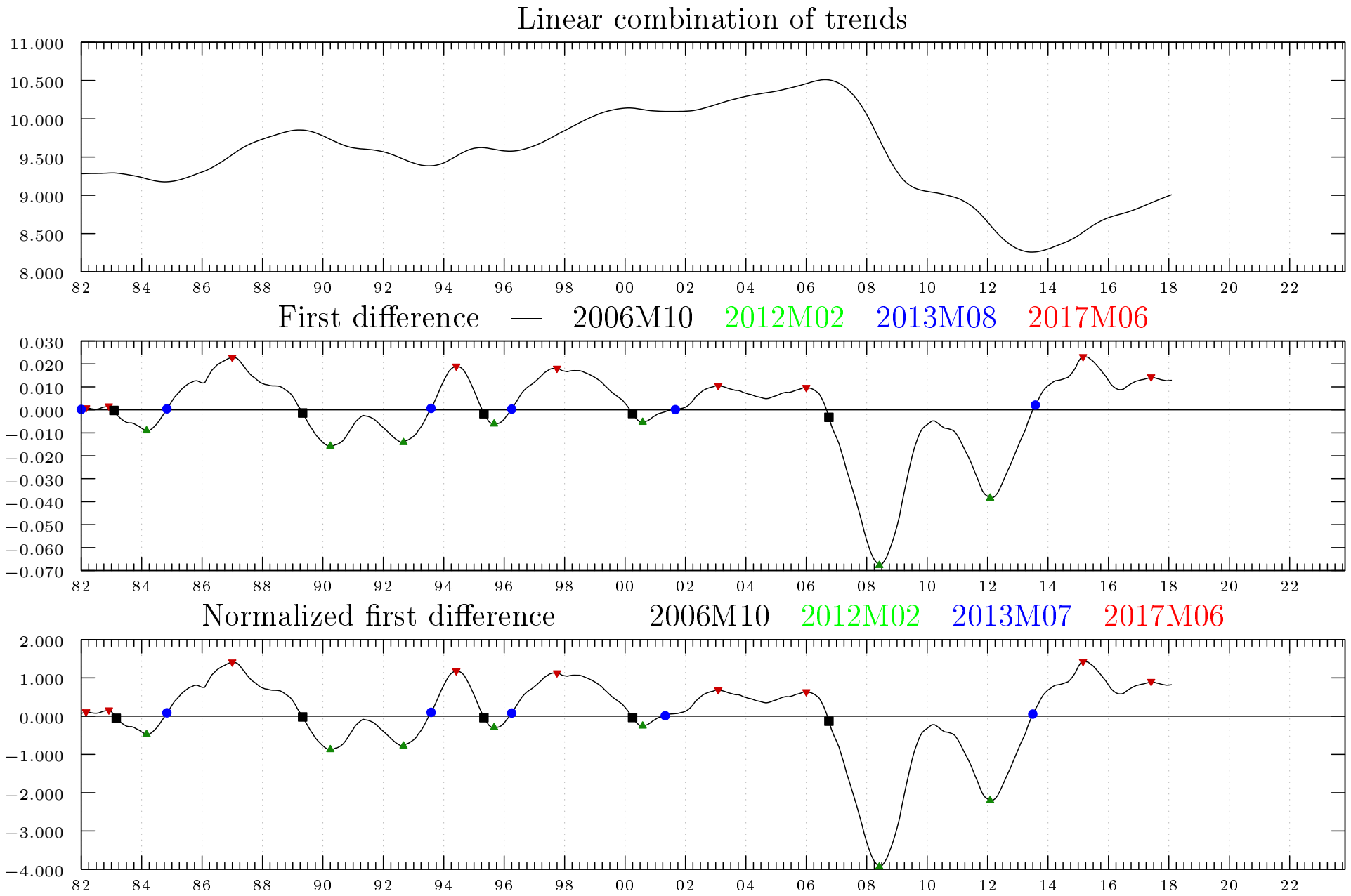
Composite Leading Indicator (1) : **2017M12** — (576)



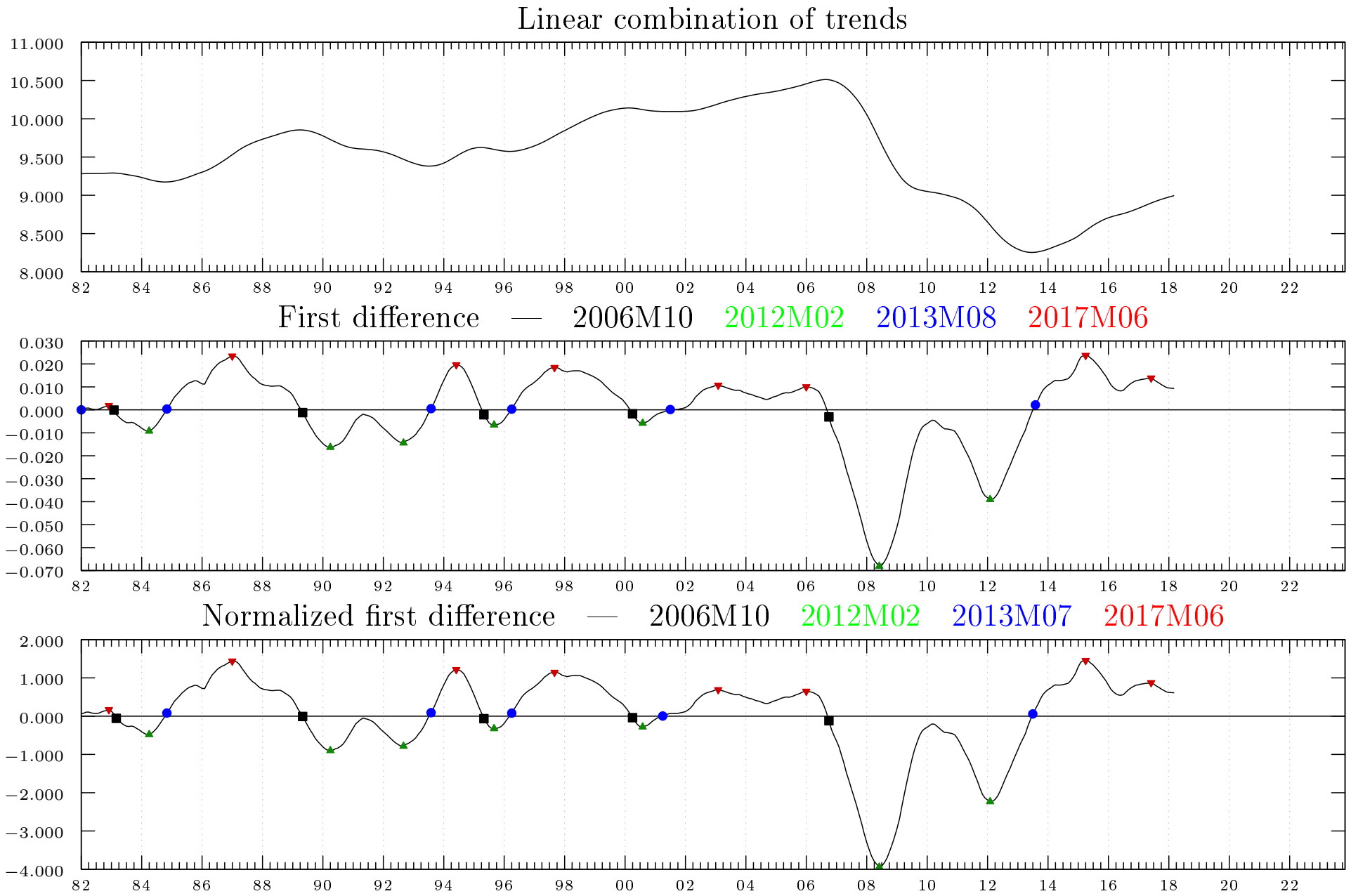
Composite Leading Indicator (1) : **2018M01** — (577)



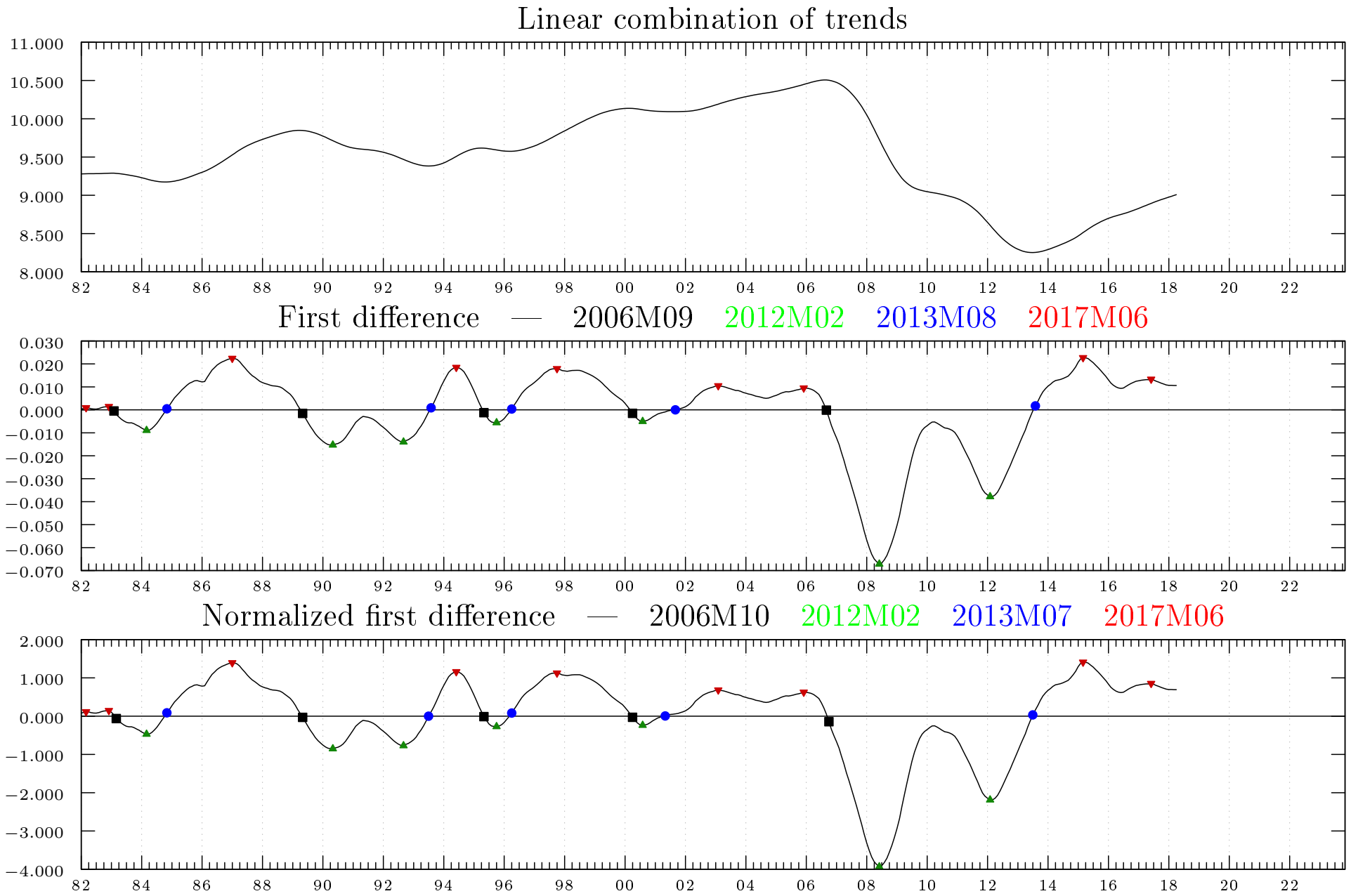
Composite Leading Indicator (1) : **2018M02** — (578)



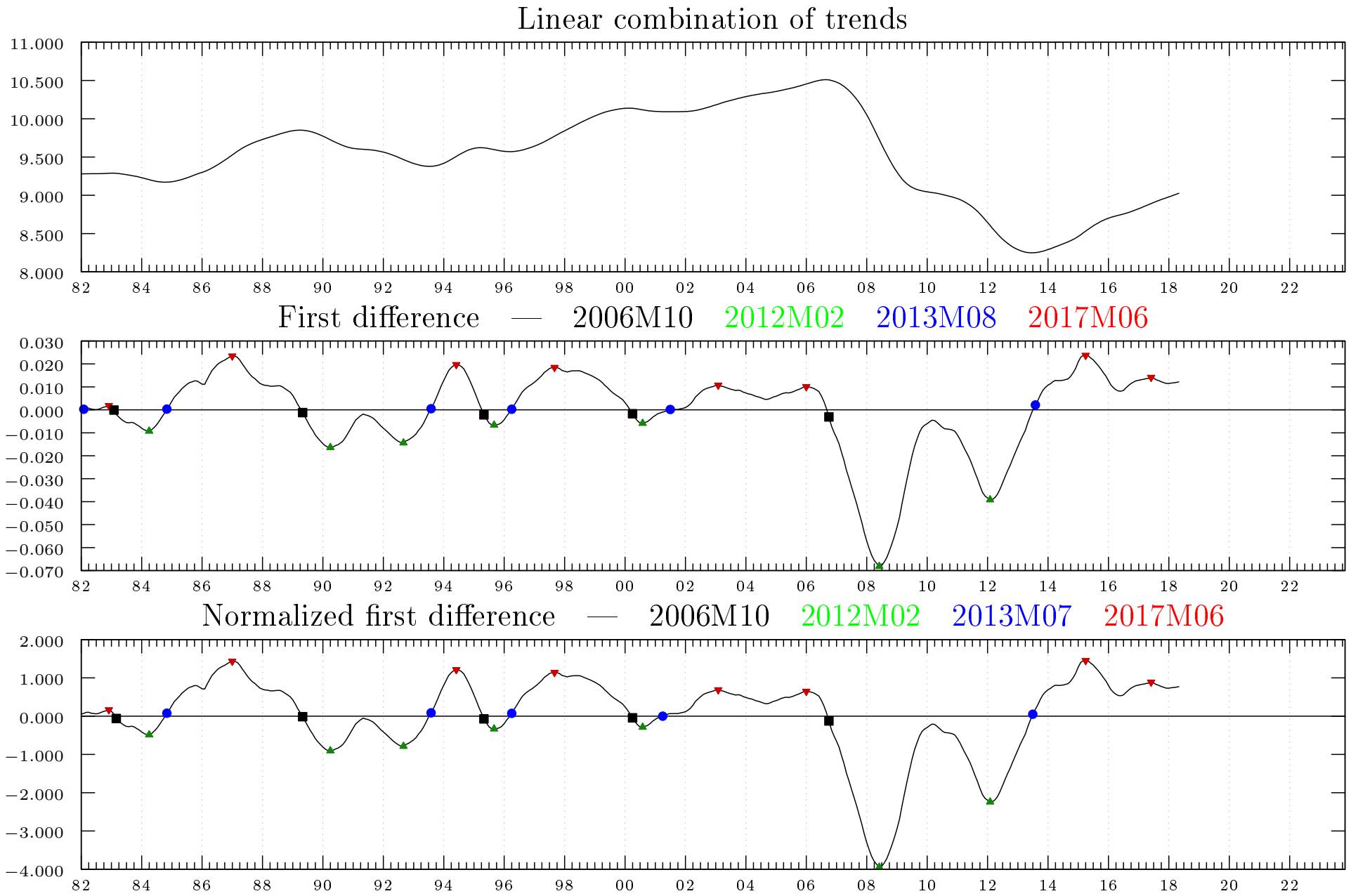
Composite Leading Indicator (1) : **2018M03** — (579)



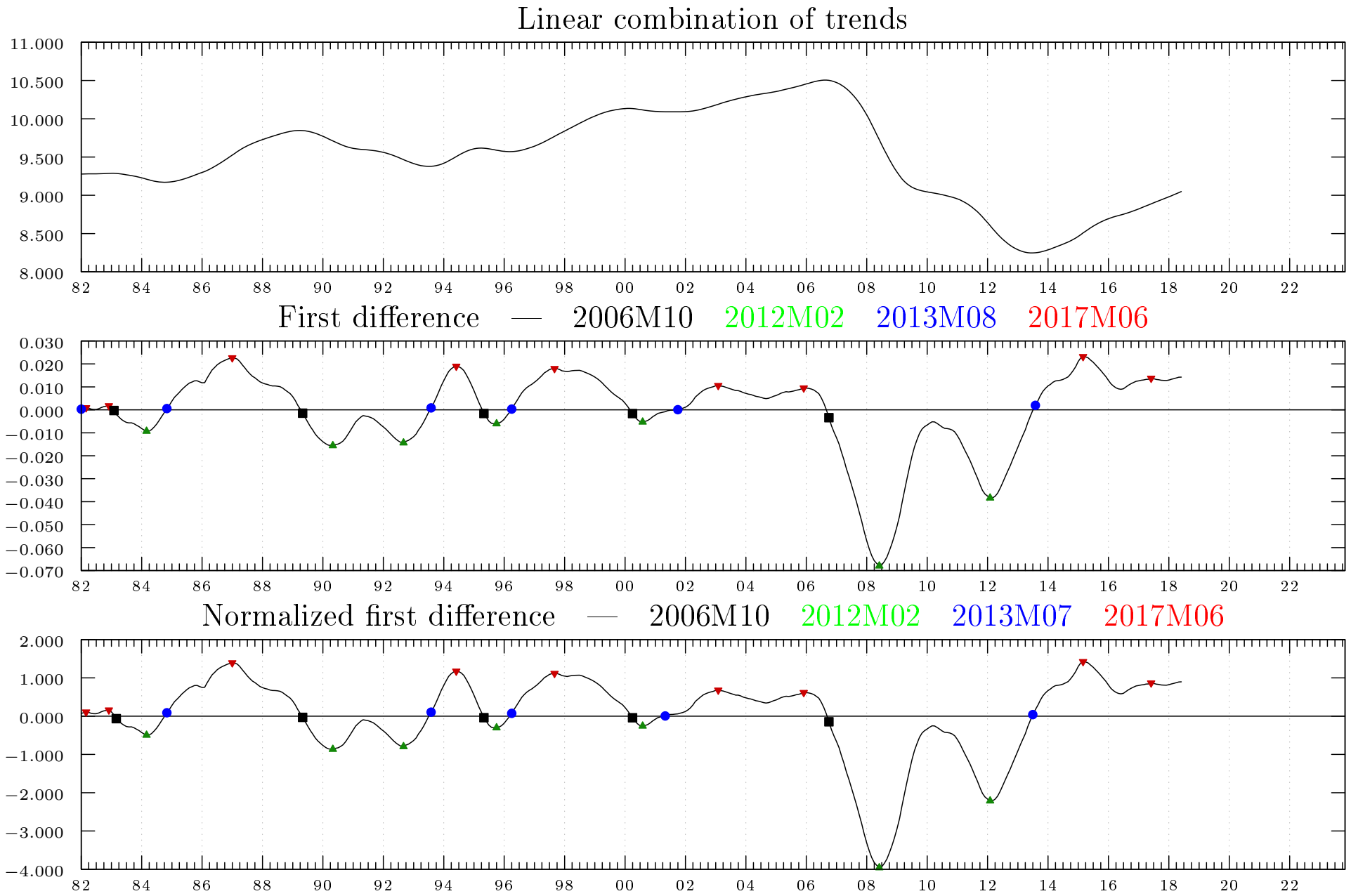
Composite Leading Indicator (1) : **2018M04** — (580)



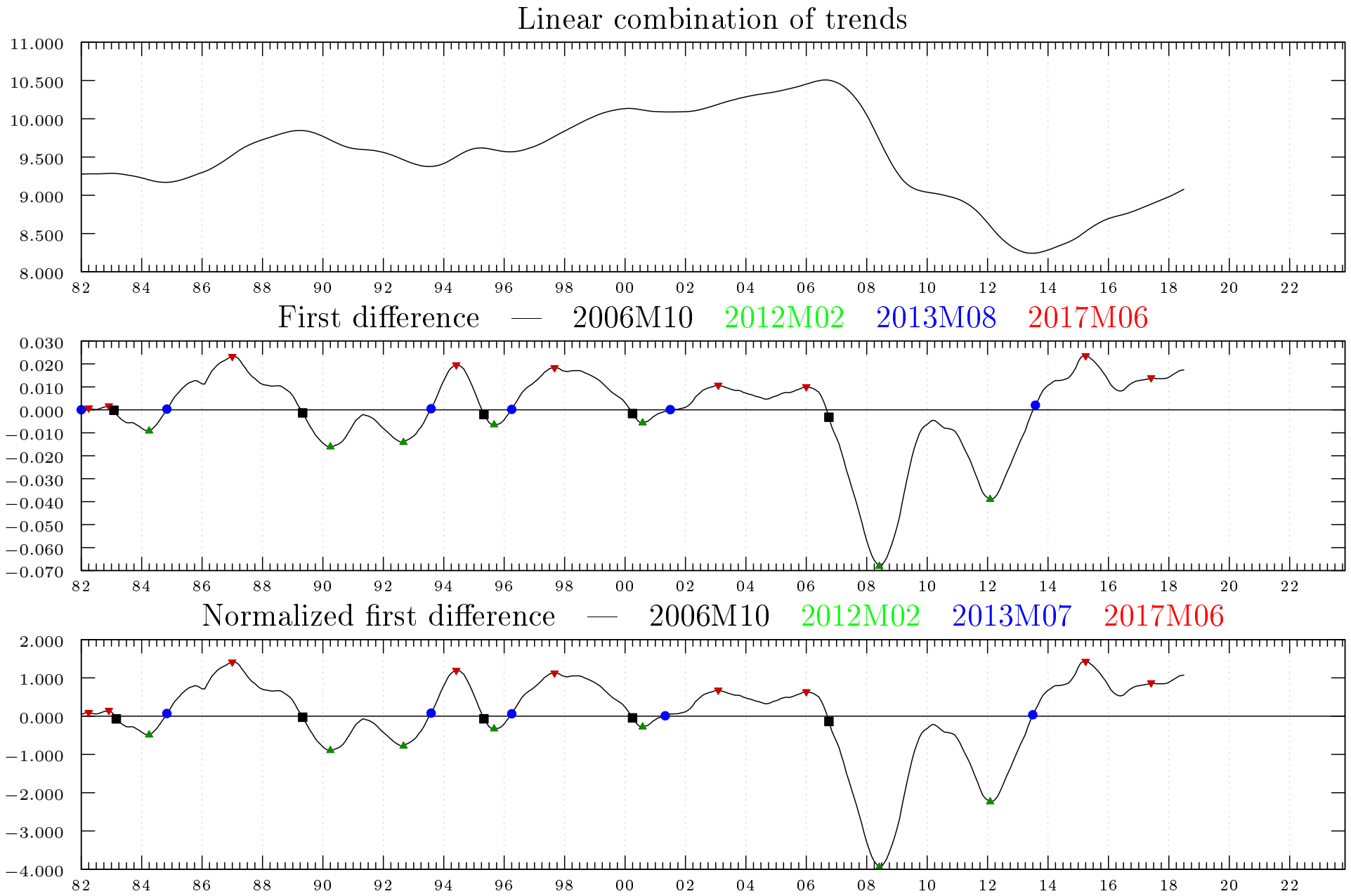
Composite Leading Indicator (1) : **2018M05** — (581)



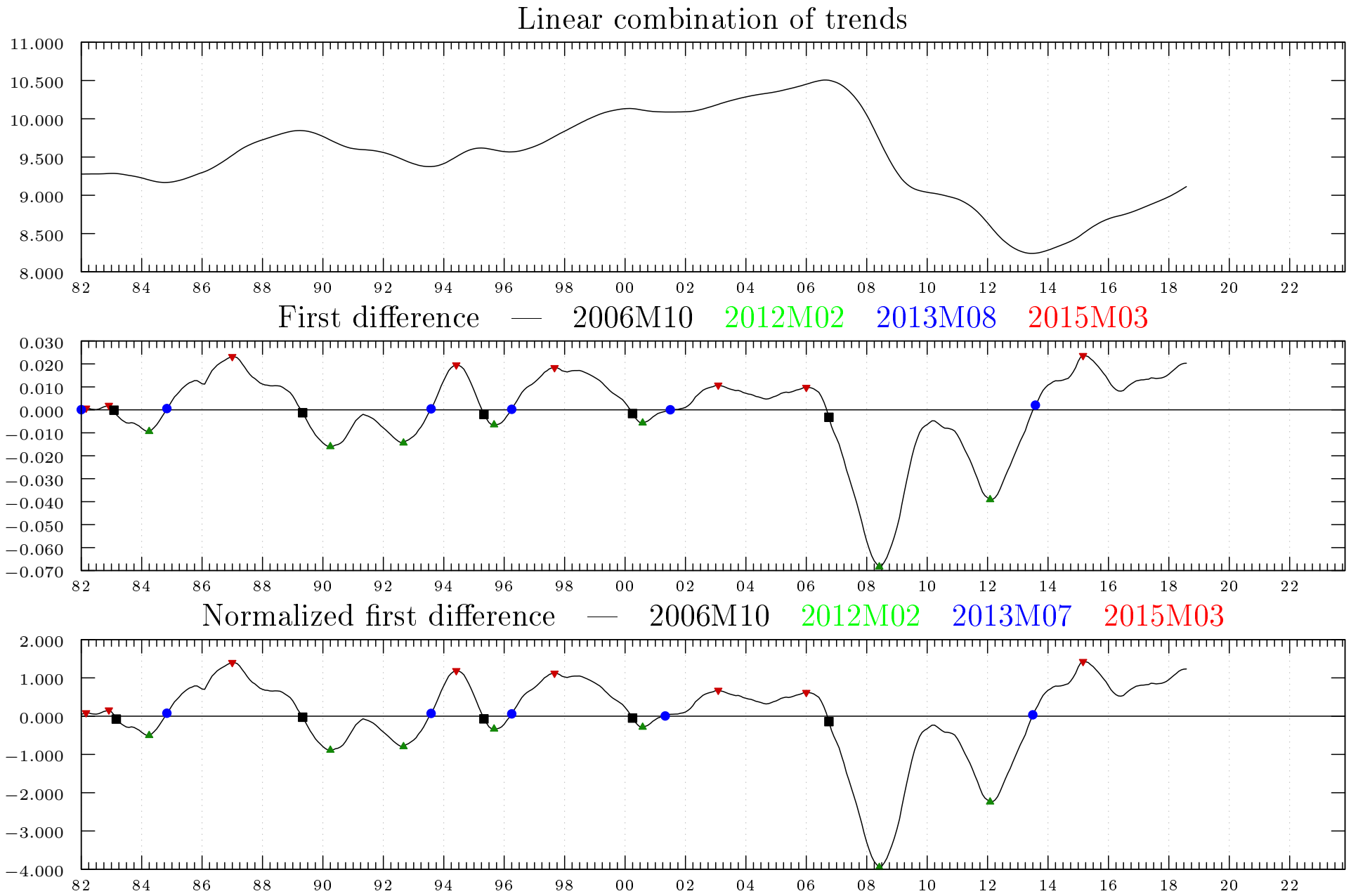
Composite Leading Indicator (1) : **2018M06** — (582)



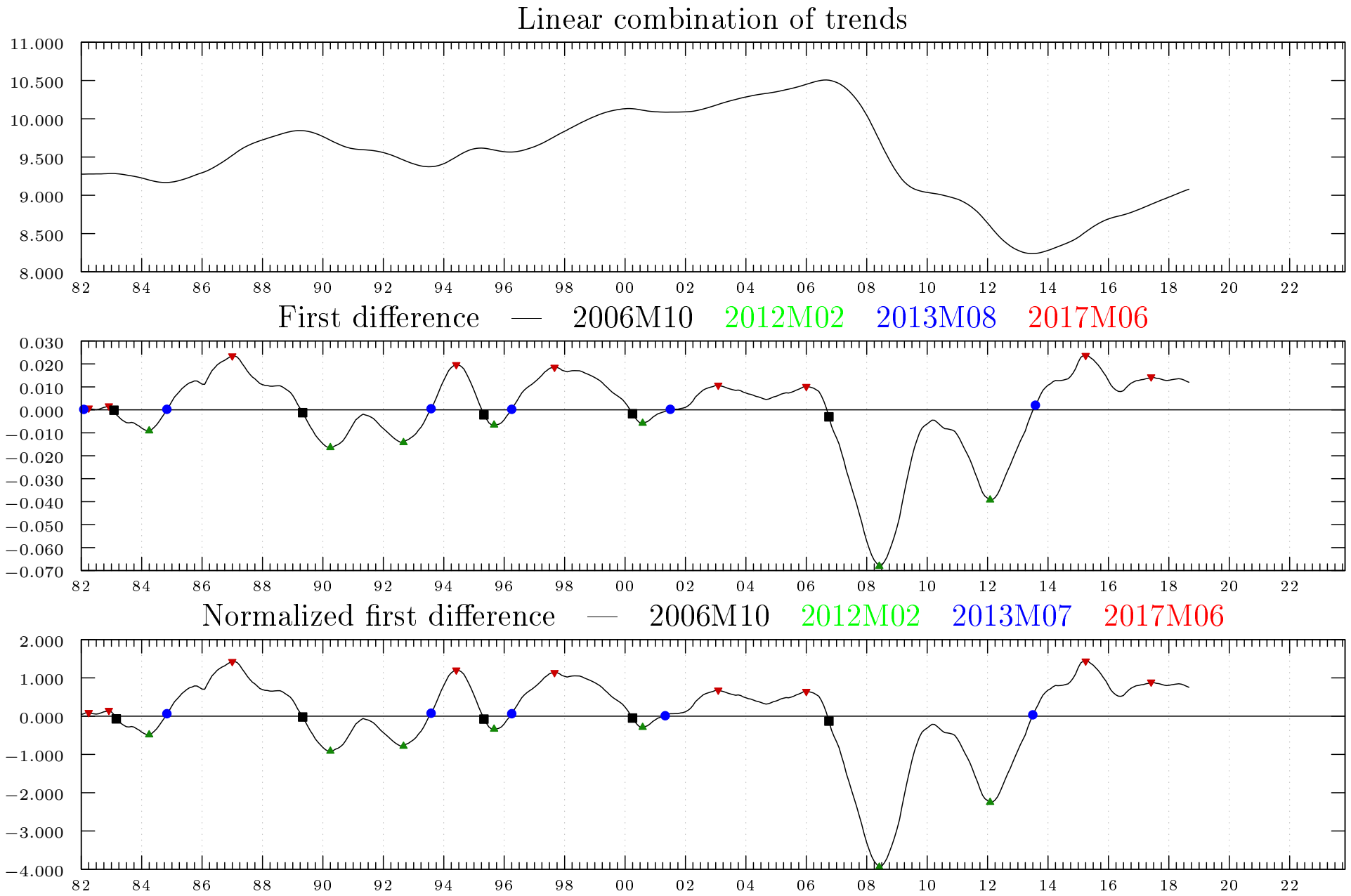
Composite Leading Indicator (1) : **2018M07** — (583)



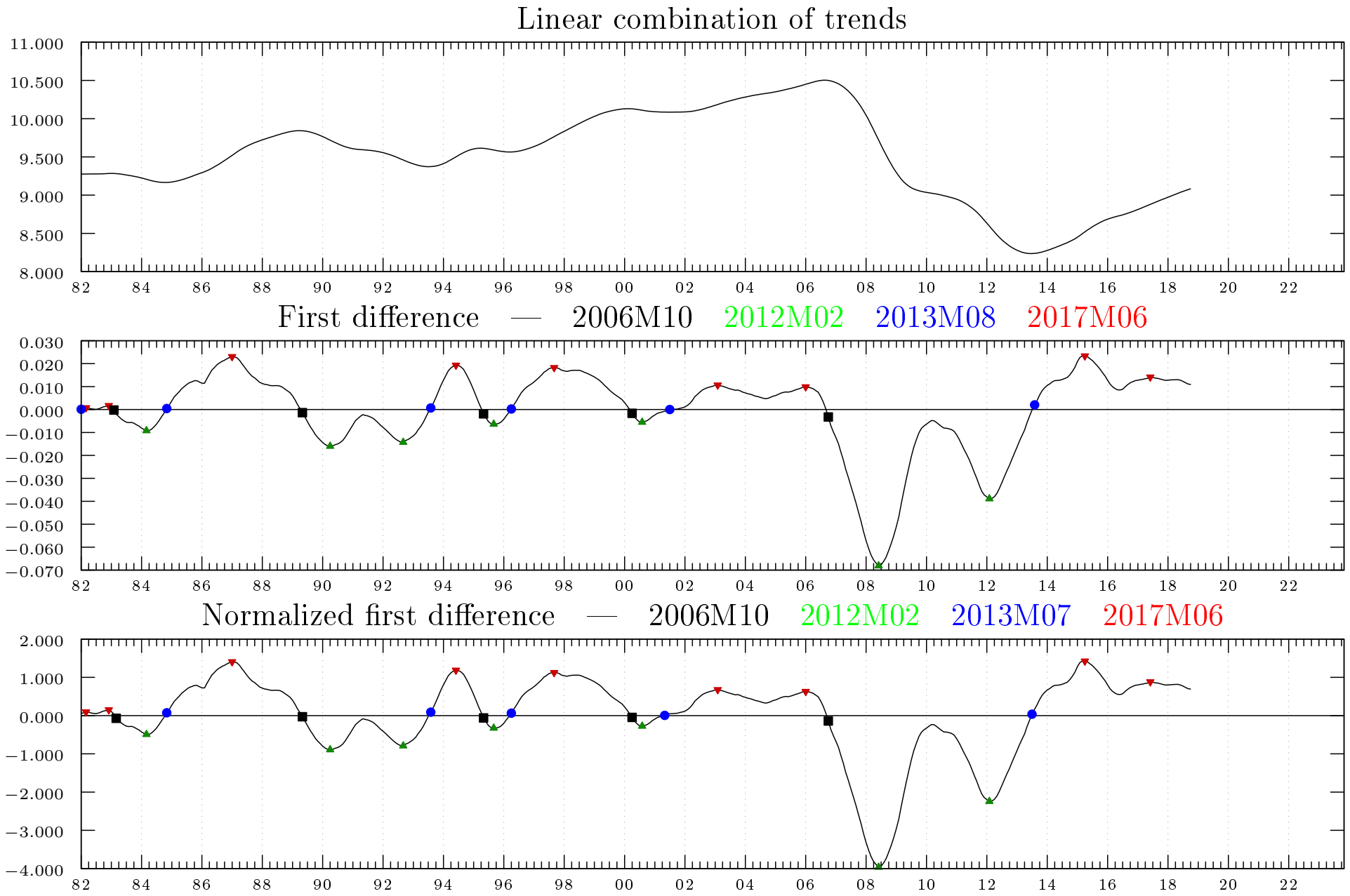
Composite Leading Indicator (1) : **2018M08** — (584)



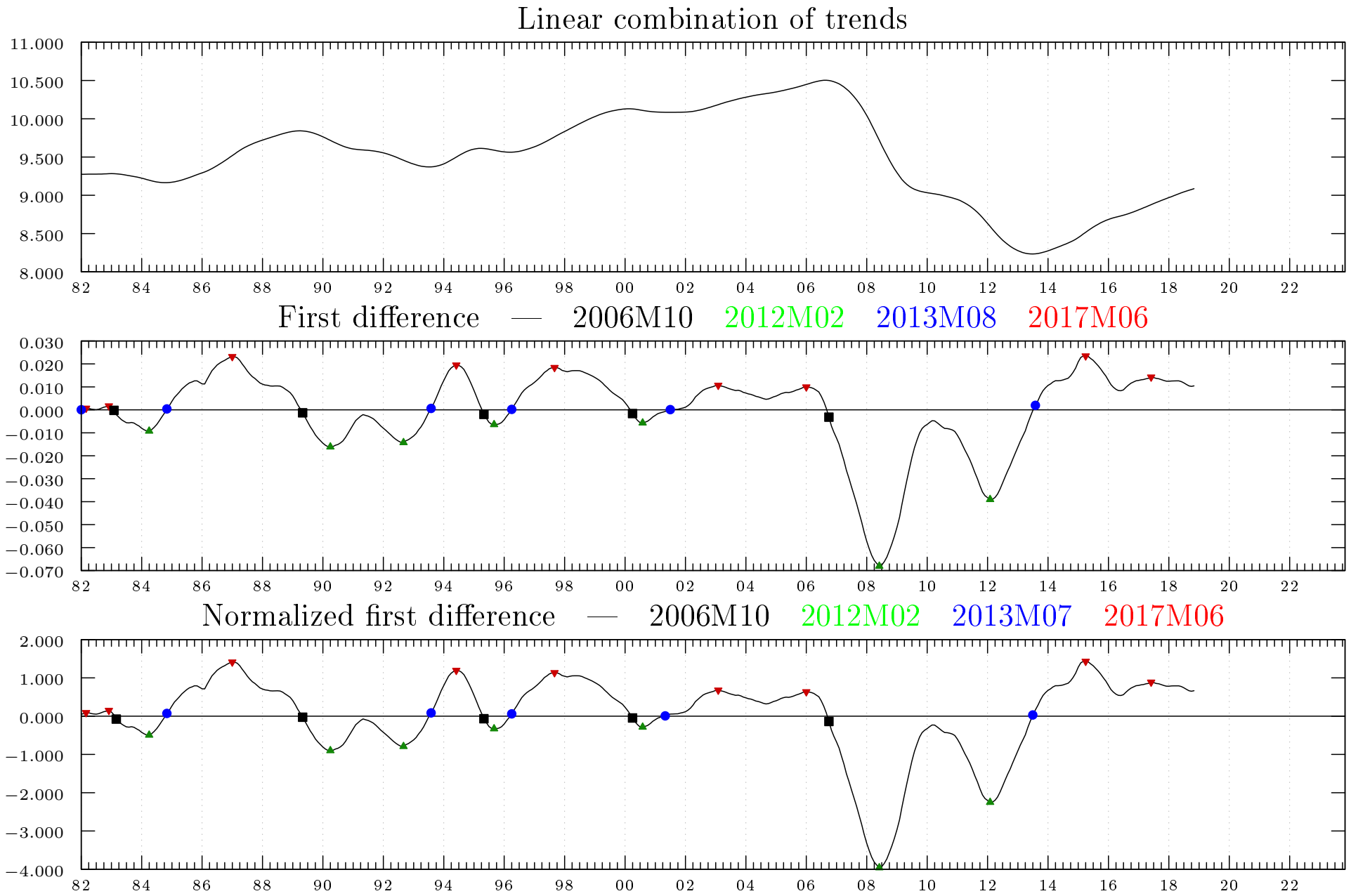
Composite Leading Indicator (1) : **2018M09** — (585)



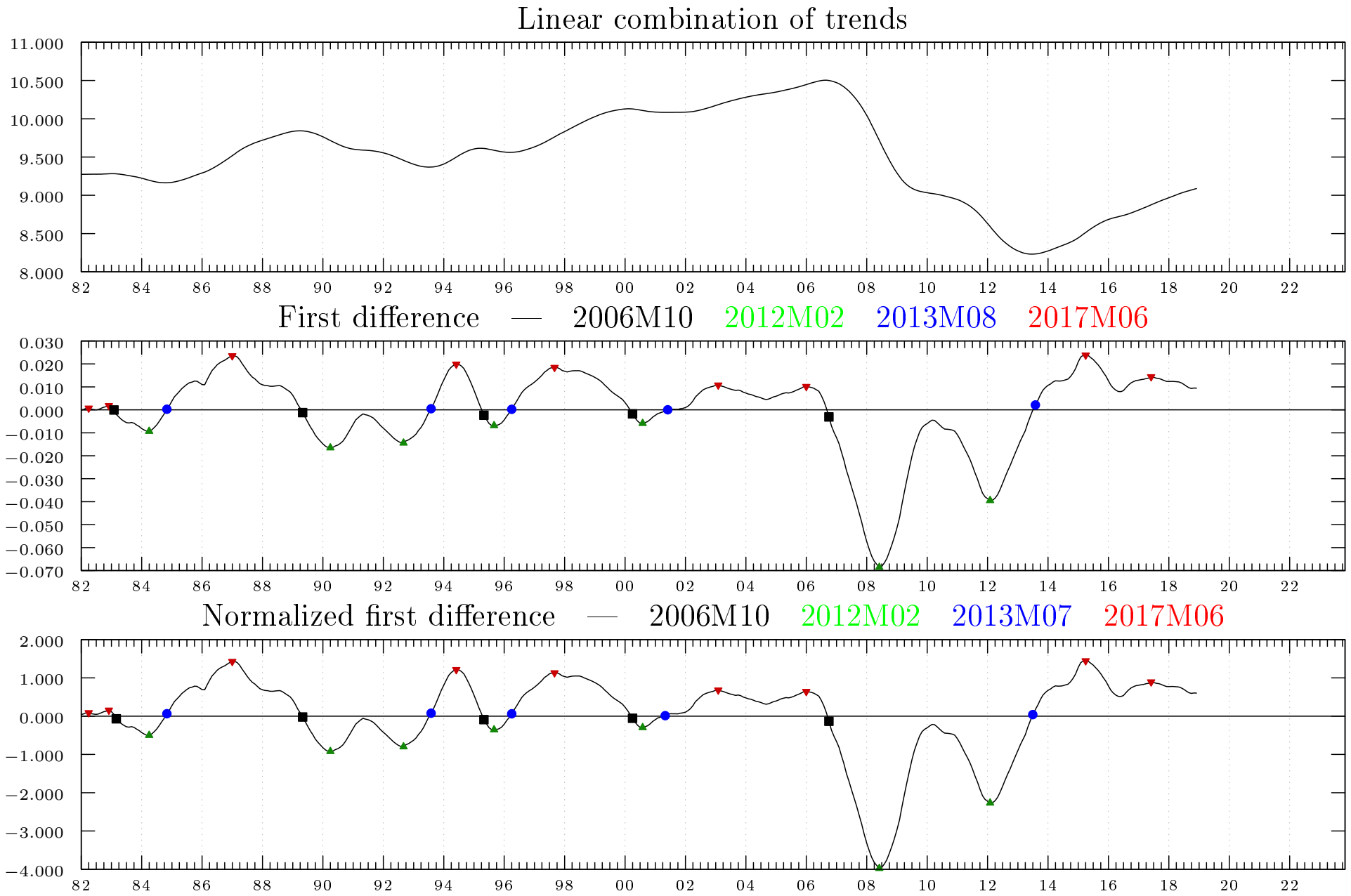
Composite Leading Indicator (1) : **2018M10** — (586)



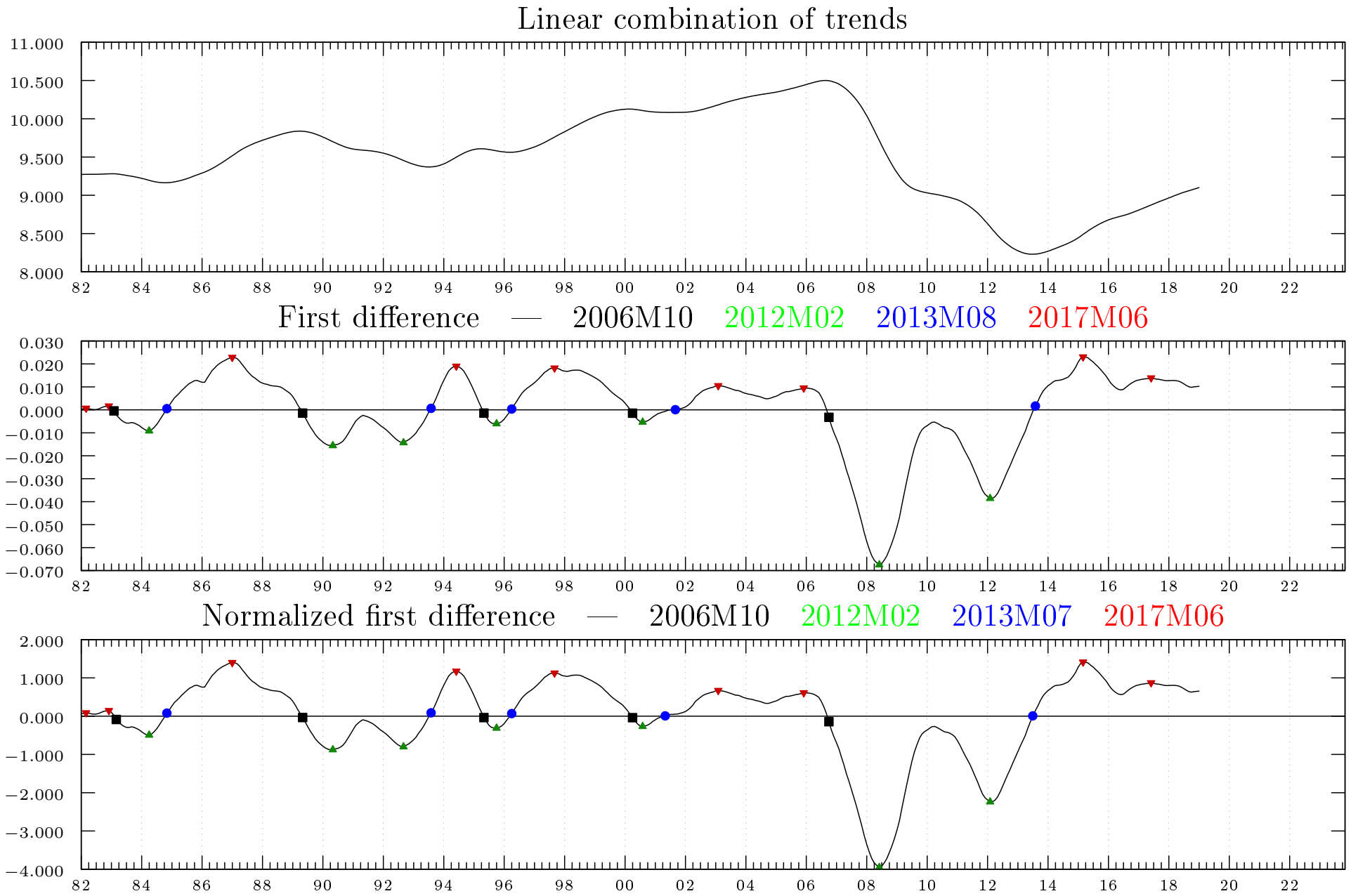
Composite Leading Indicator (1) : **2018M11** — (587)



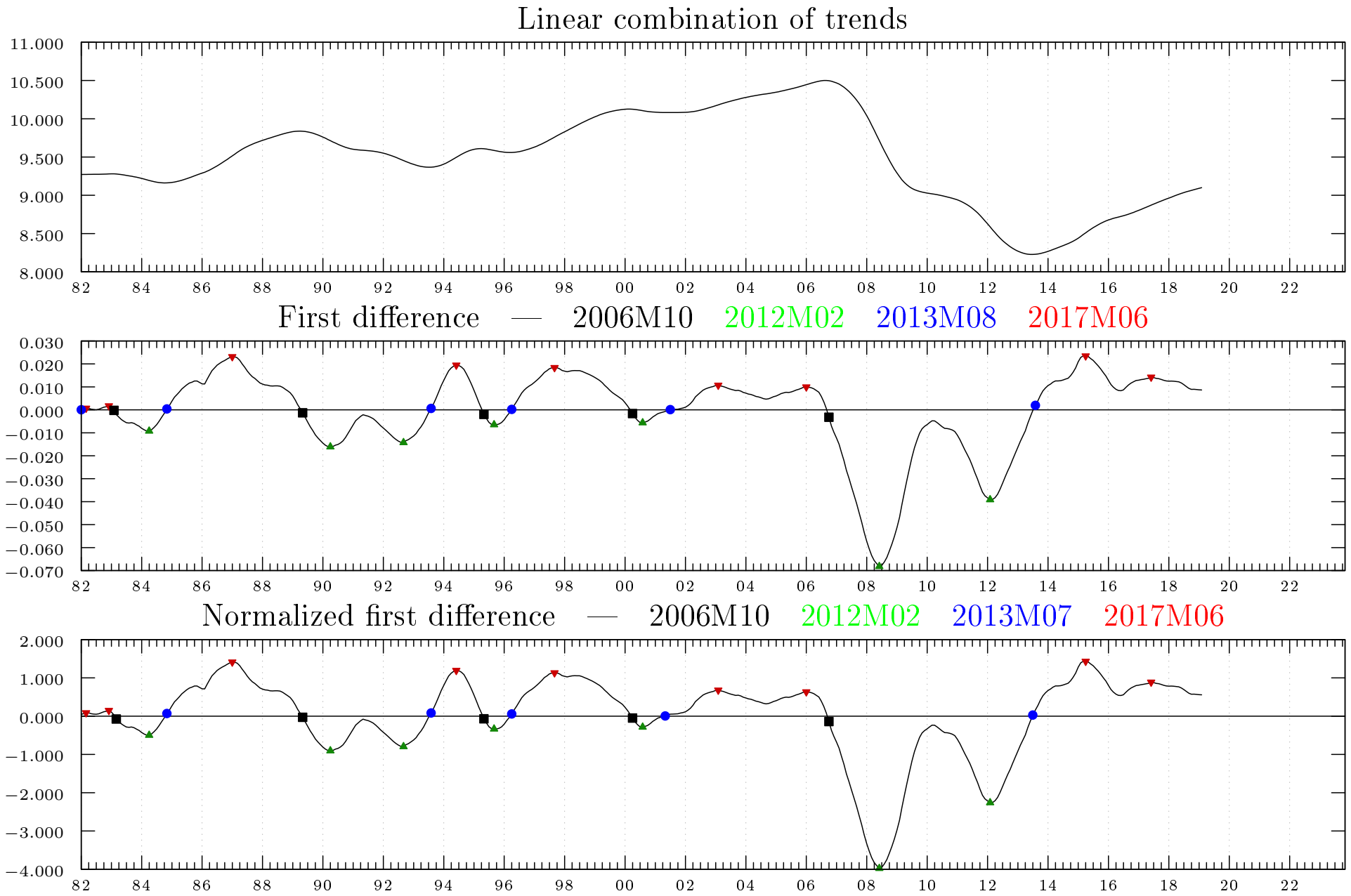
Composite Leading Indicator (1) : **2018M12** — (588)



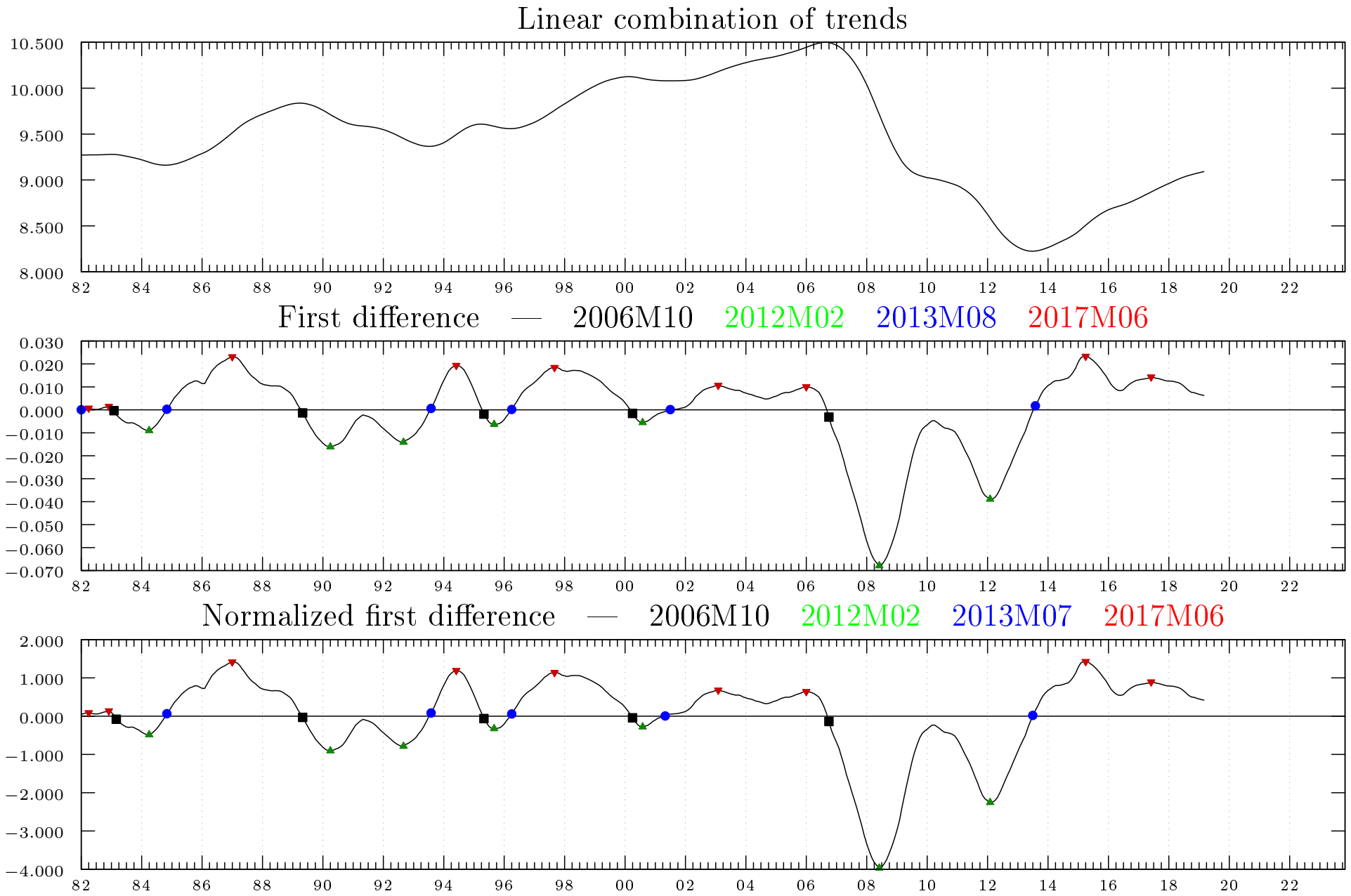
Composite Leading Indicator (1) : **2019M01** — (589)



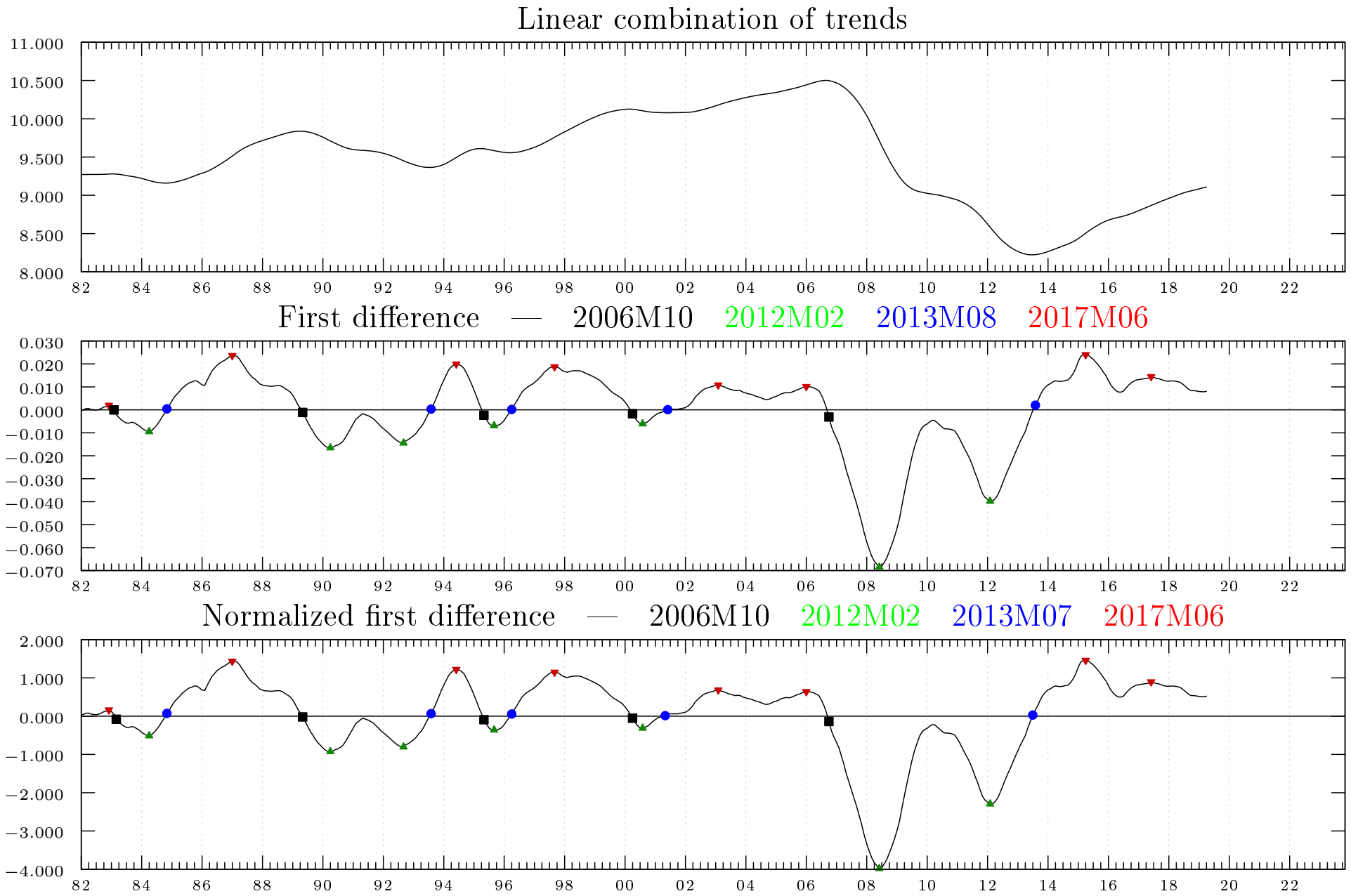
Composite Leading Indicator (1) : **2019M02** — (590)



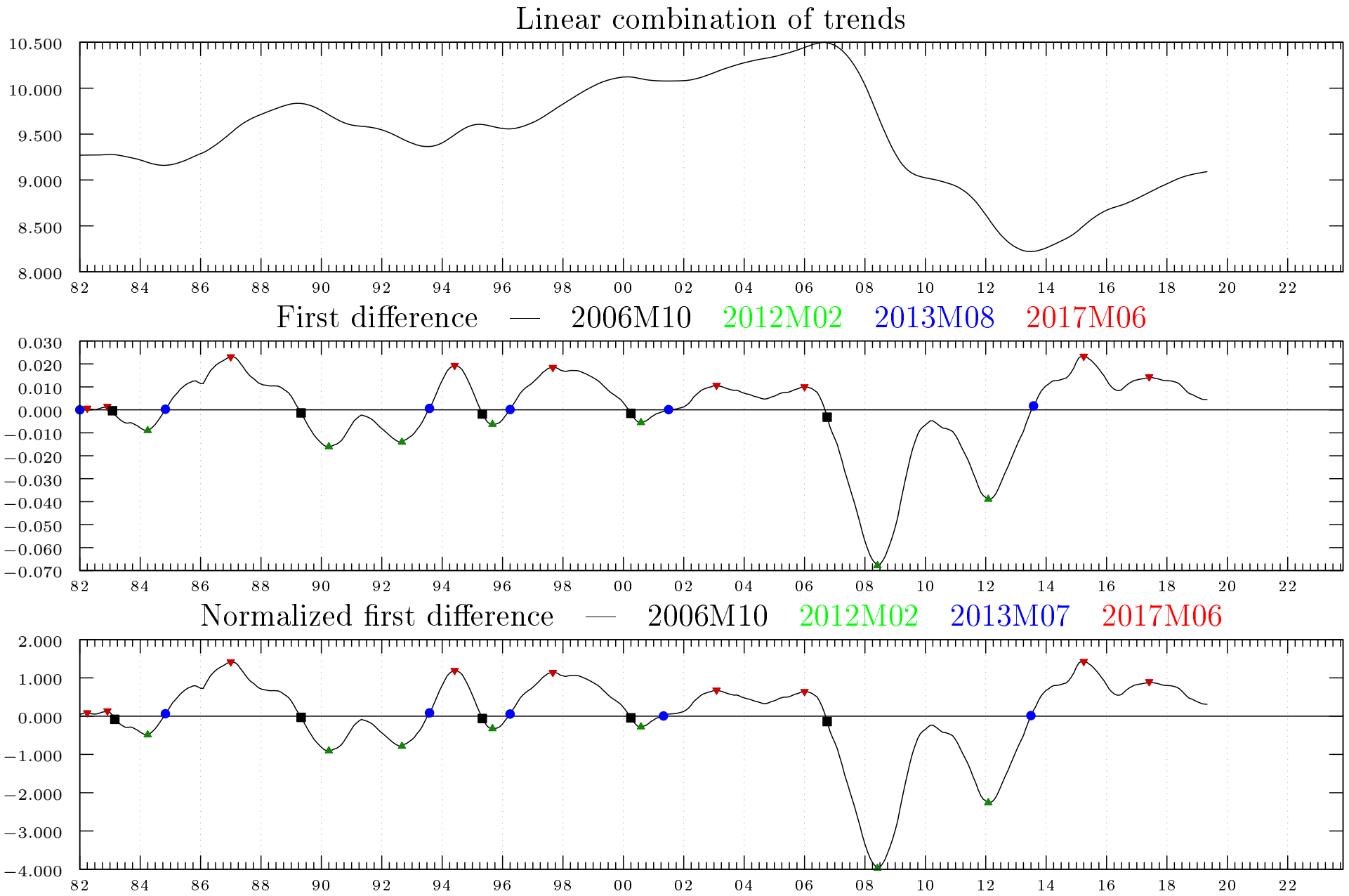
Composite Leading Indicator (1) : **2019M03** — (591)



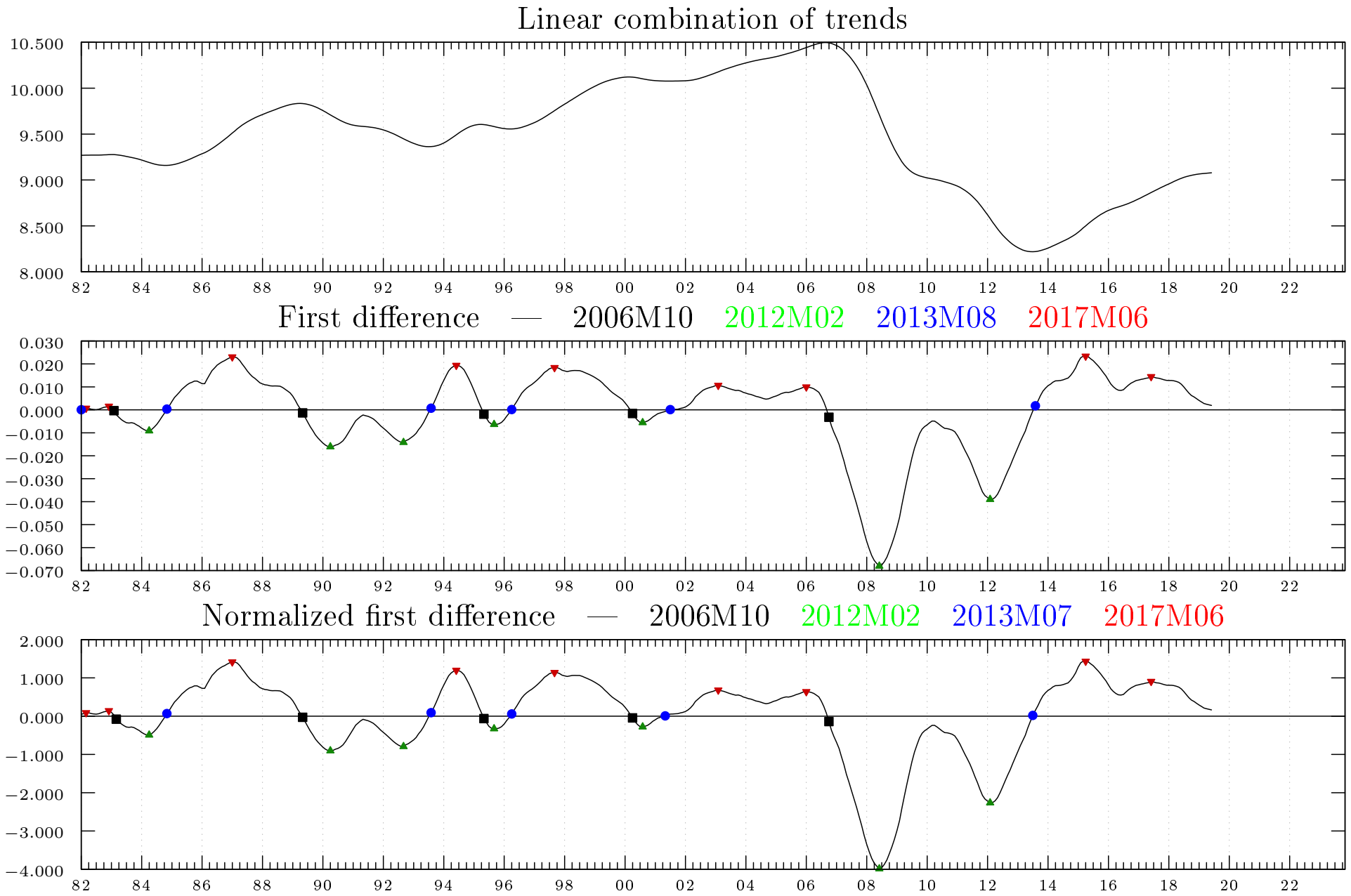
Composite Leading Indicator (1) : **2019M04** — (592)



Composite Leading Indicator (1) : **2019M05** — (593)



Composite Leading Indicator (1) : **2019M06** — (594)



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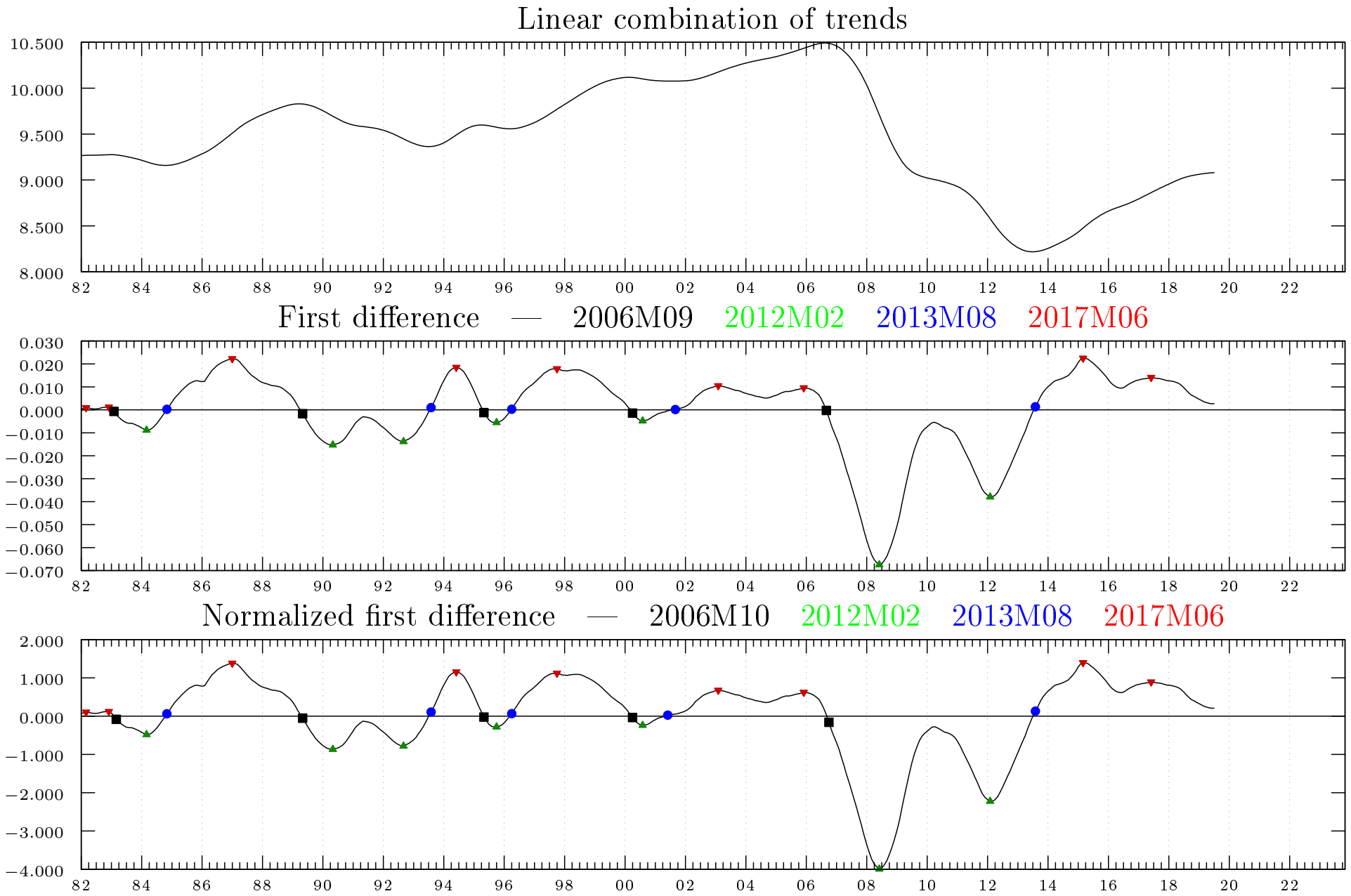
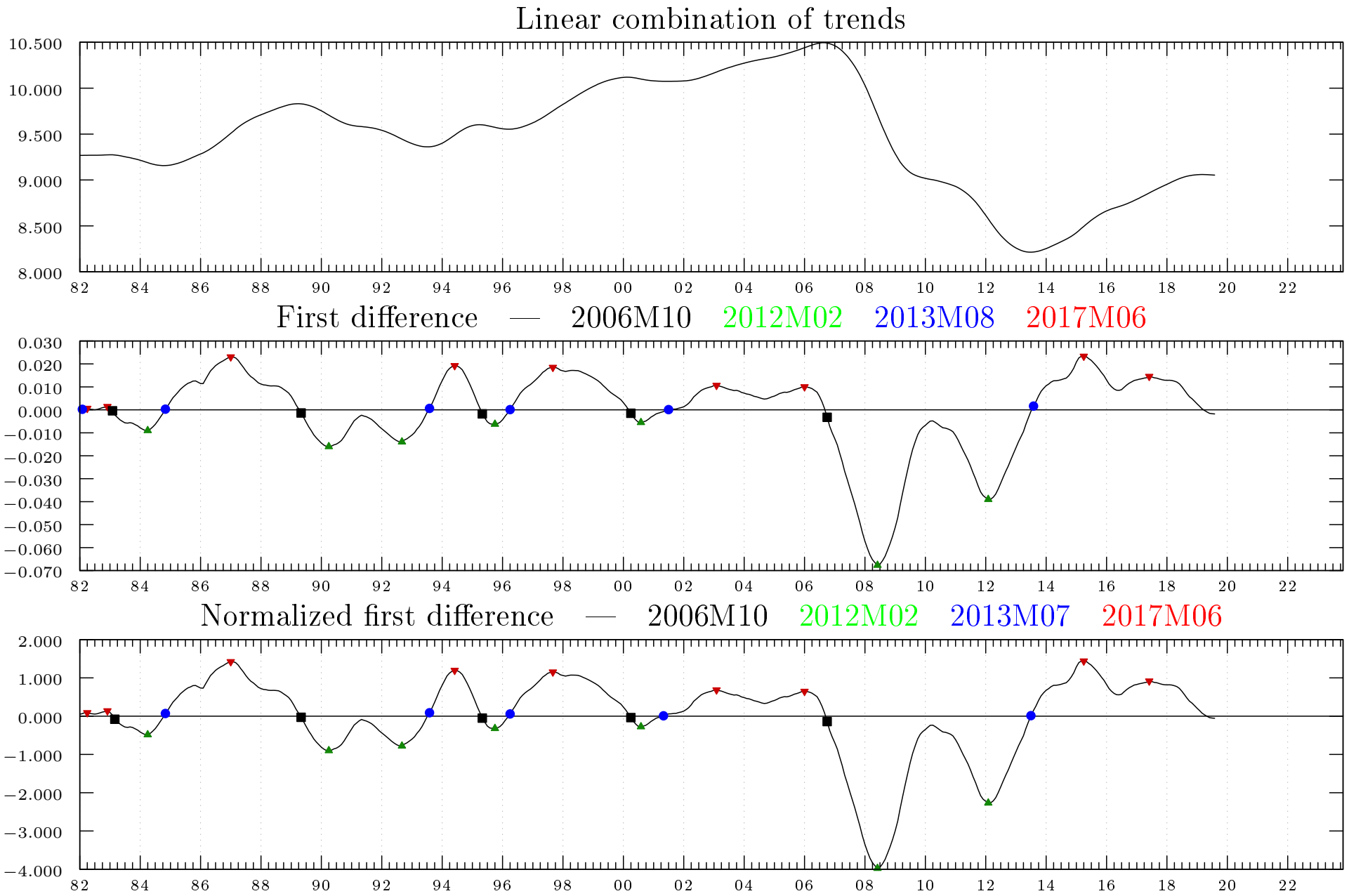
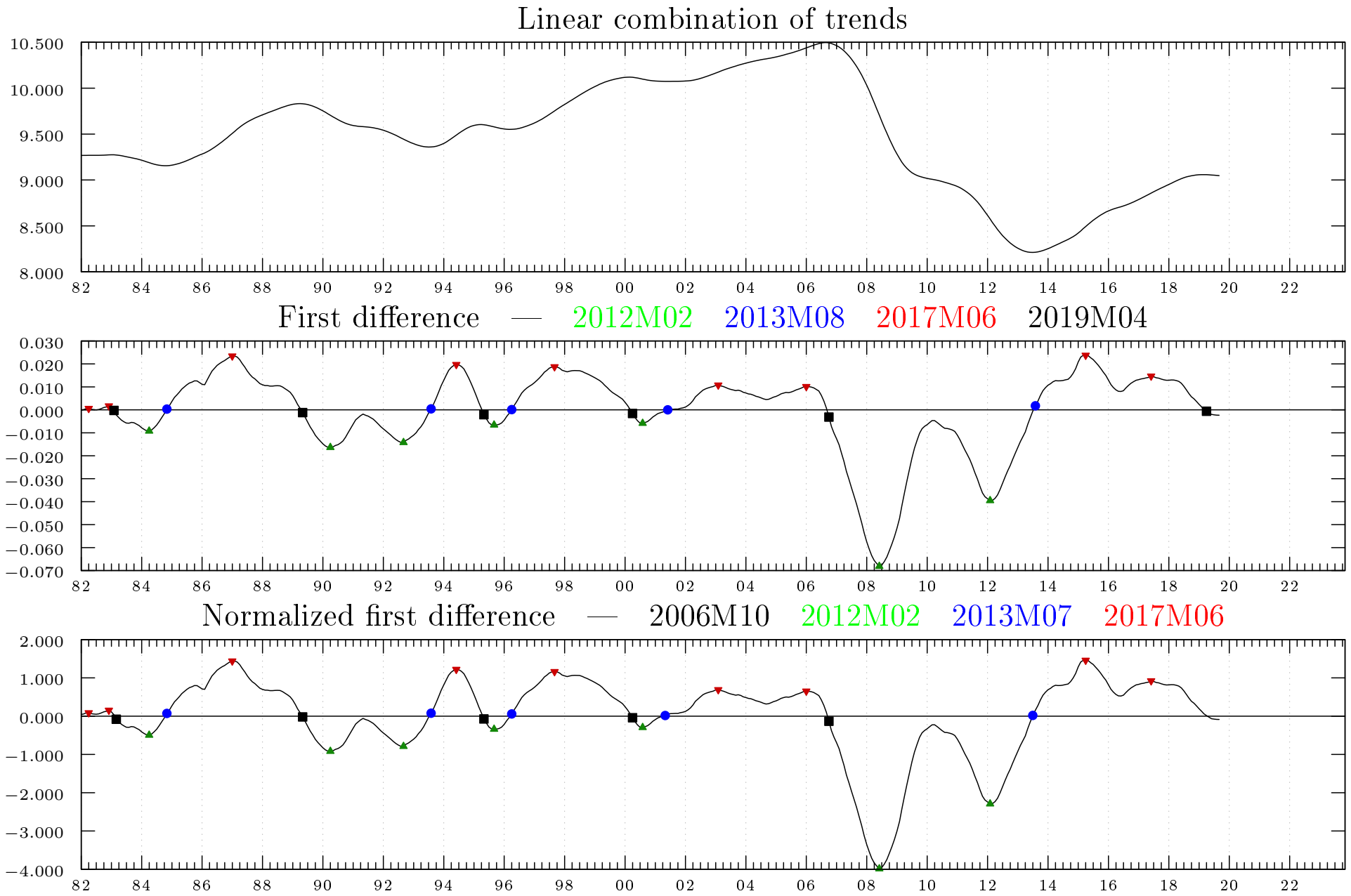


Composite Leading Indicator (1) : **2019M08** — (596)



Composite Leading Indicator (1) : **2019M09** — (597)



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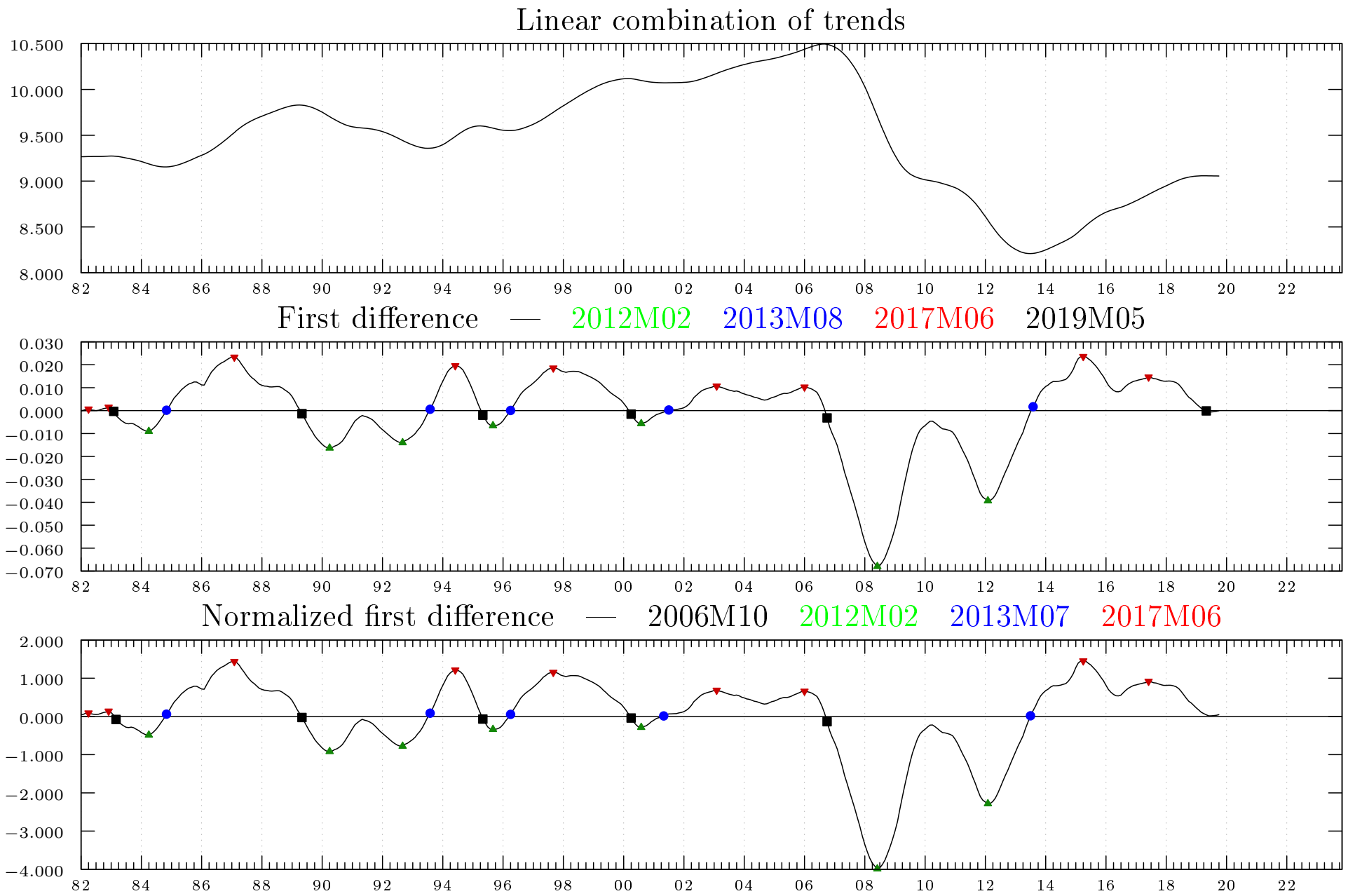

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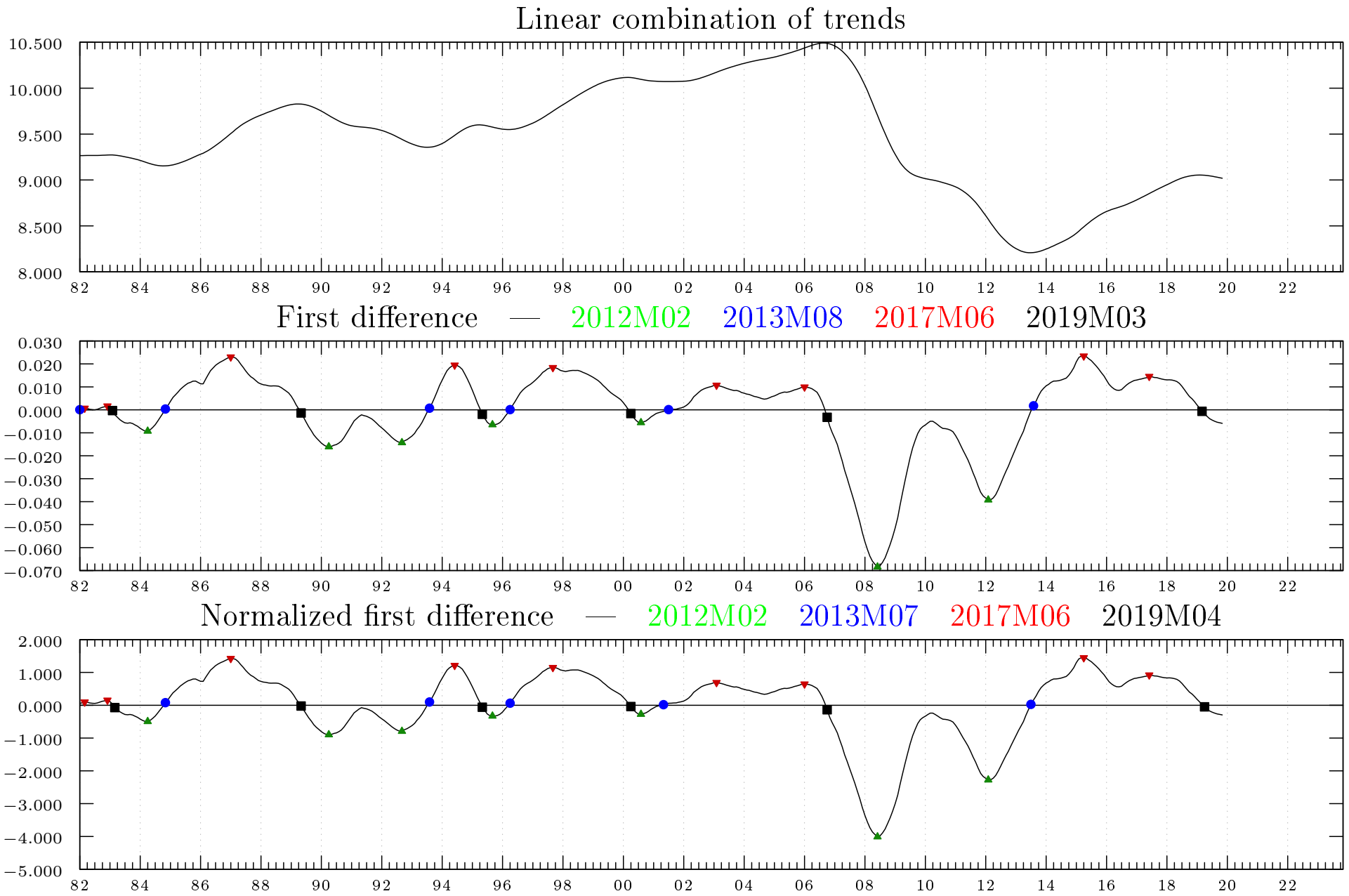
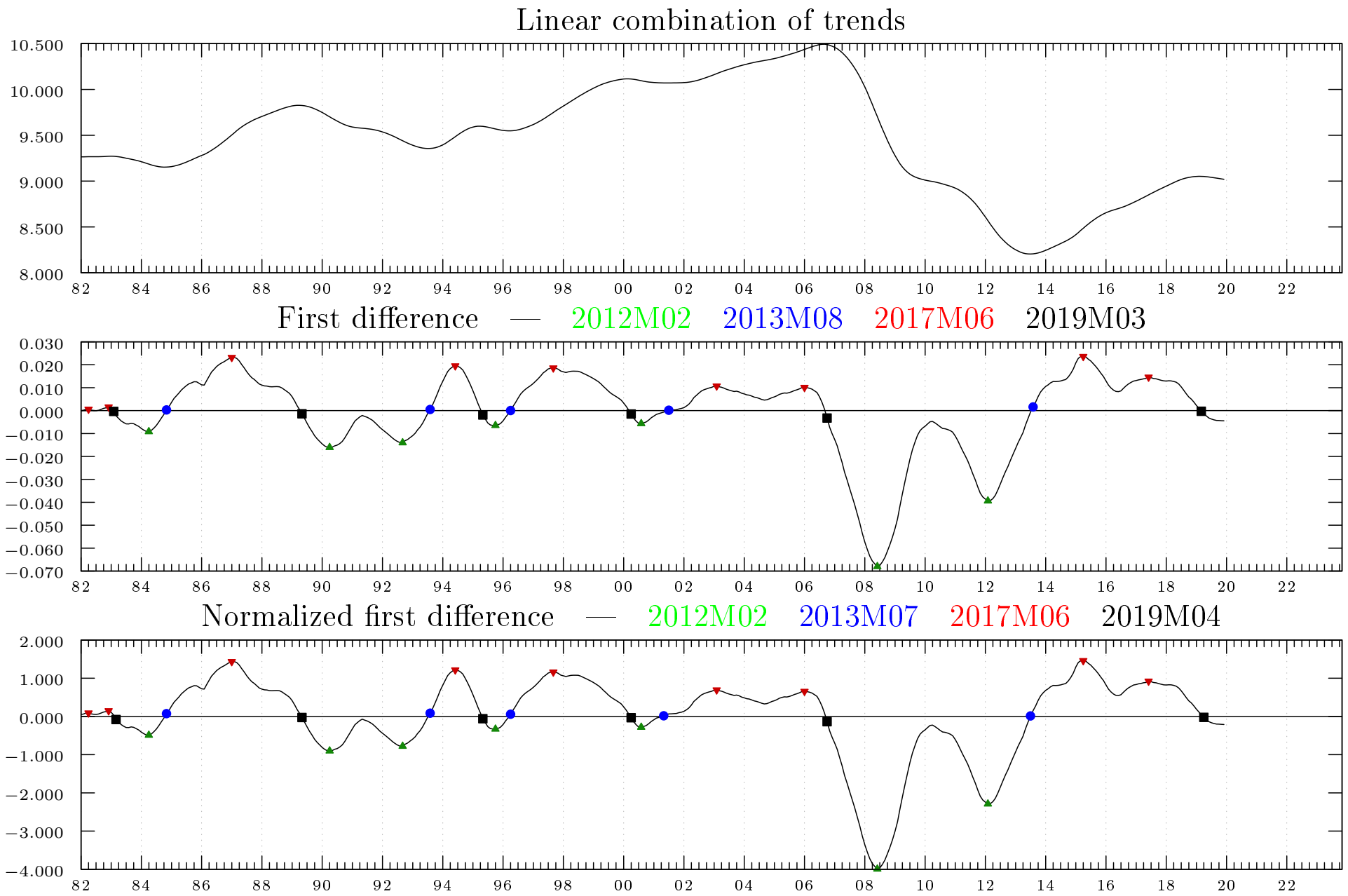
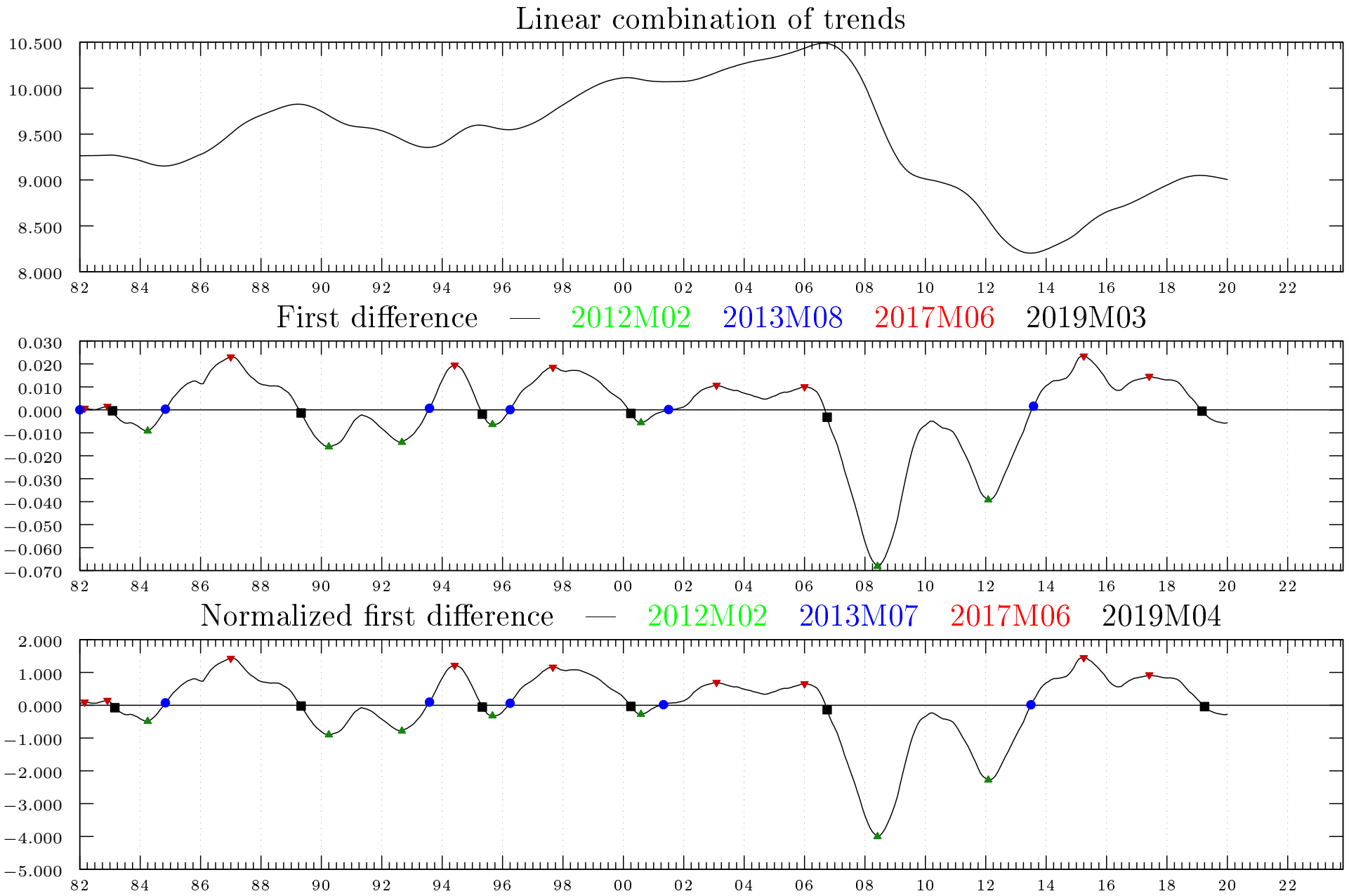


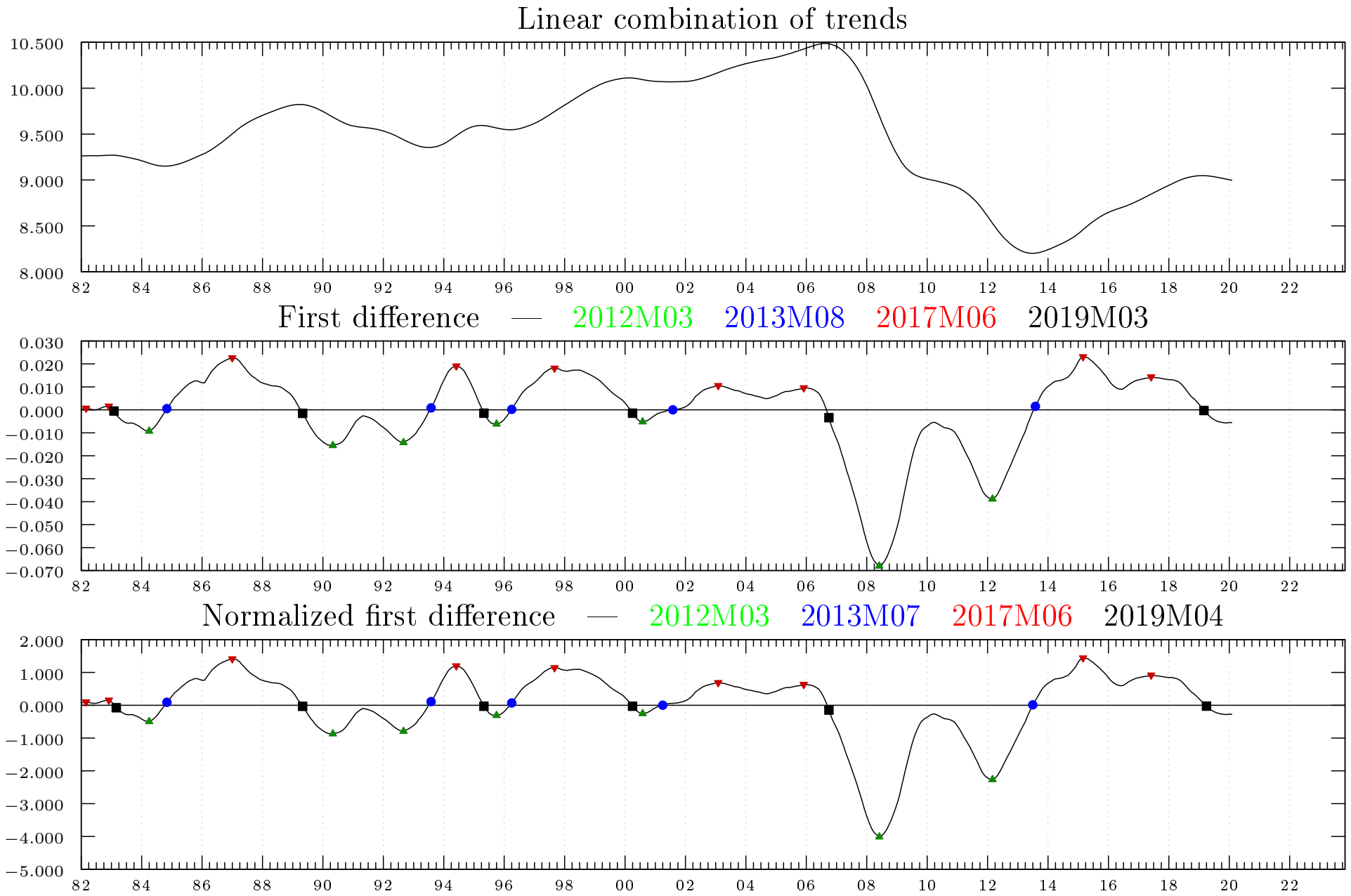
Composite Leading Indicator (1) : **2019M12** — (600)



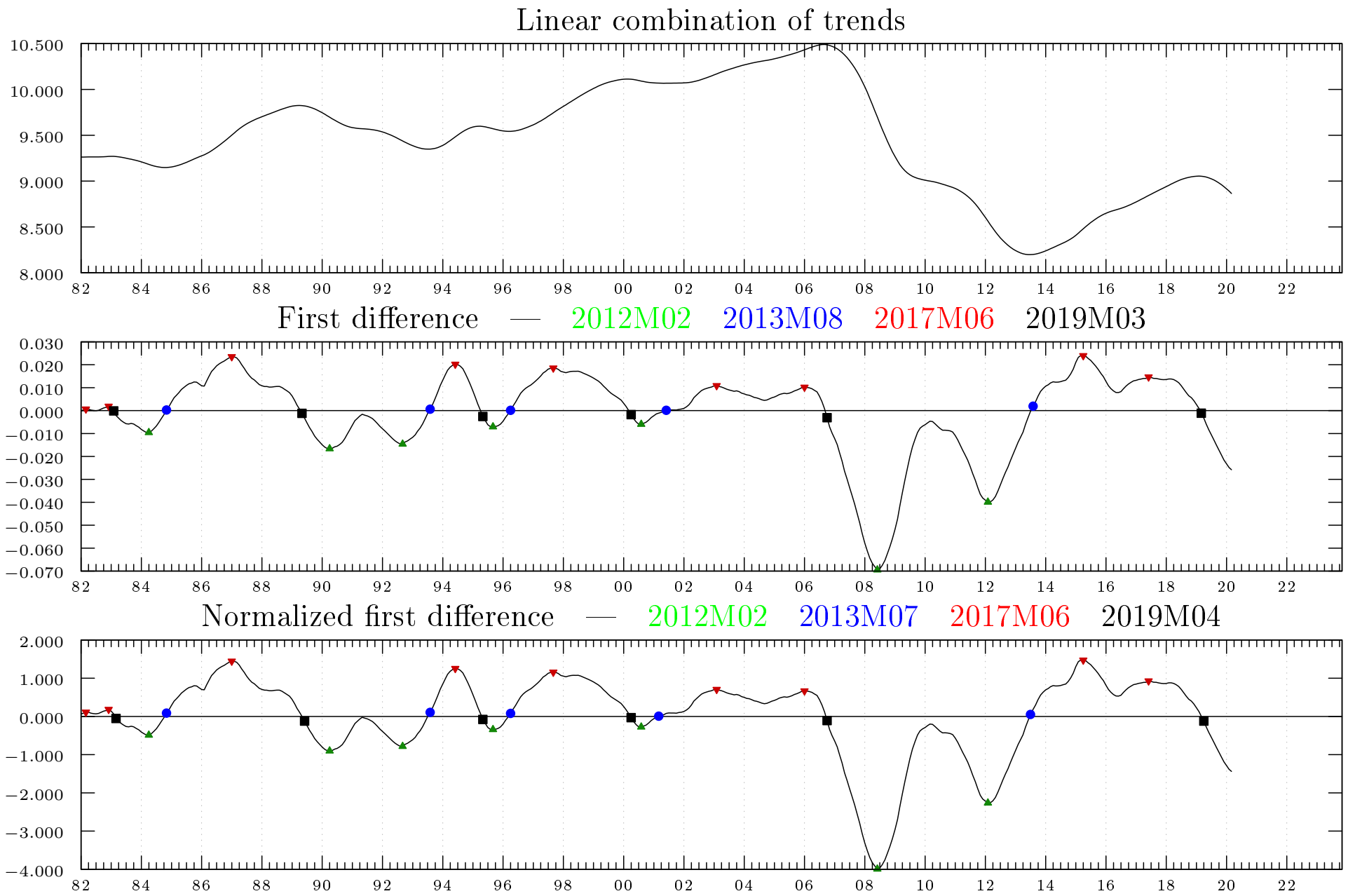
Composite Leading Indicator (1) : **2020M01** — (601)



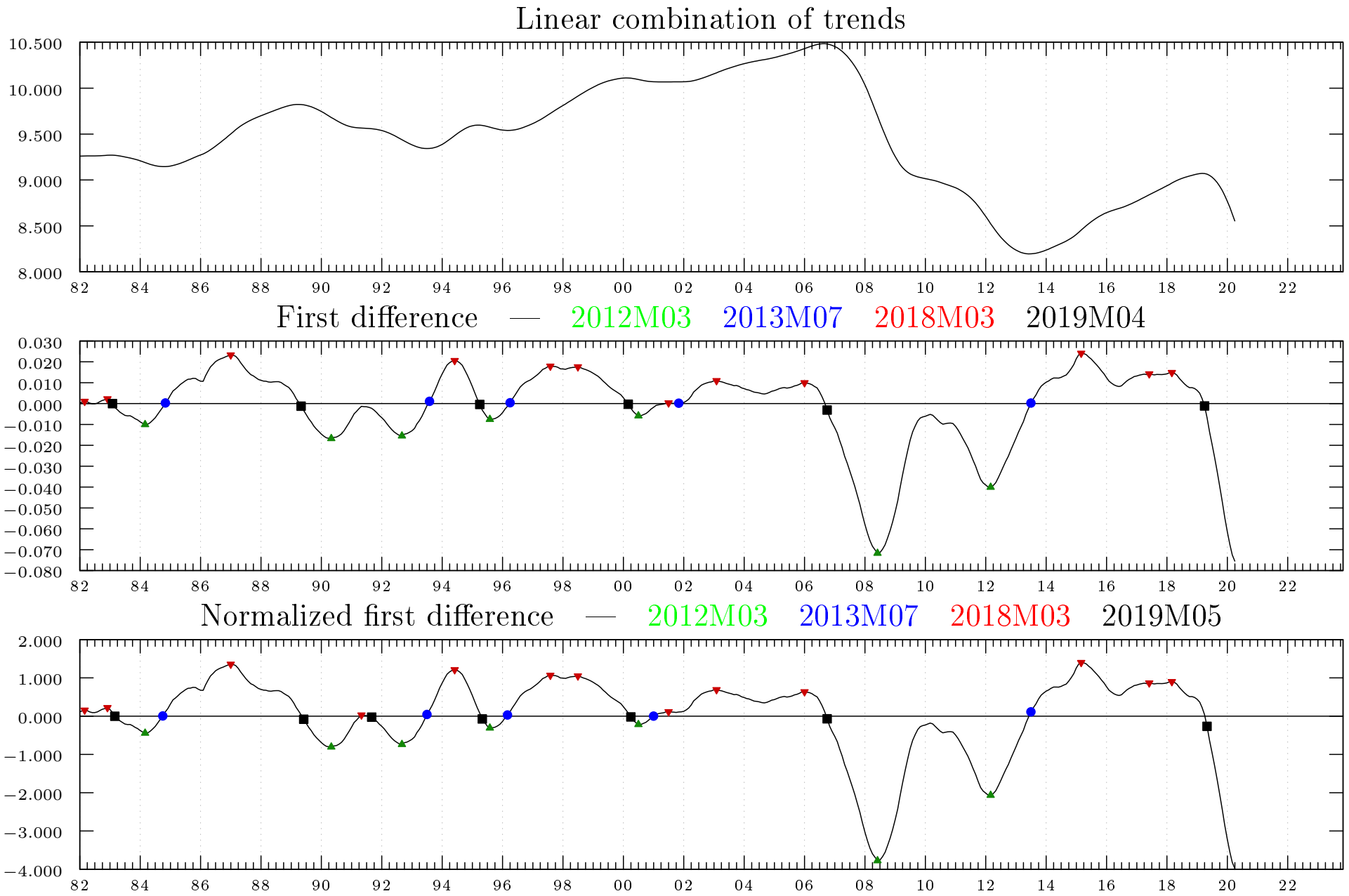
Composite Leading Indicator (1) : **2020M02** — (602)



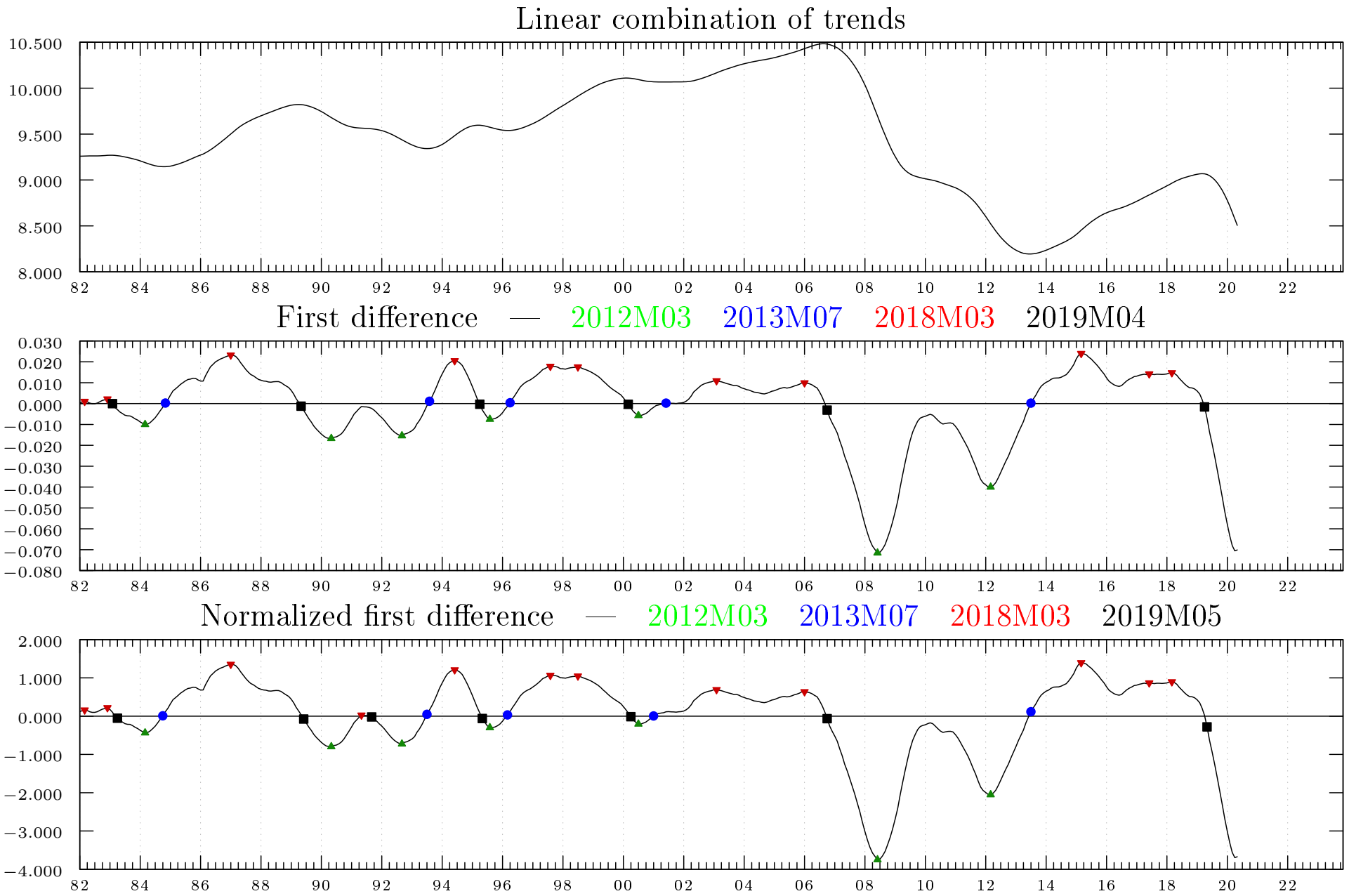
Composite Leading Indicator (1) : **2020M03** — (603)



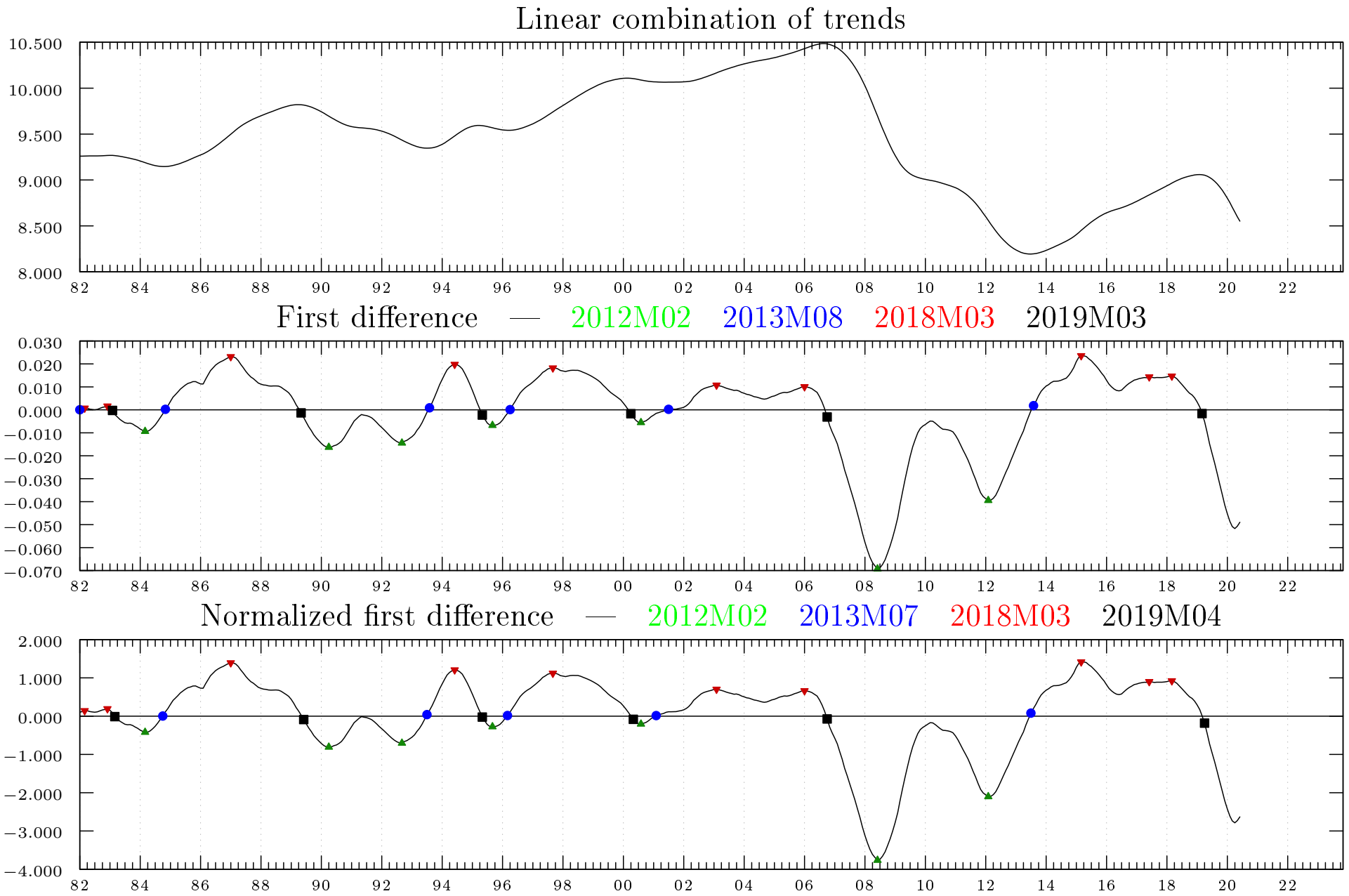
Composite Leading Indicator (1) : **2020M04** — (604)



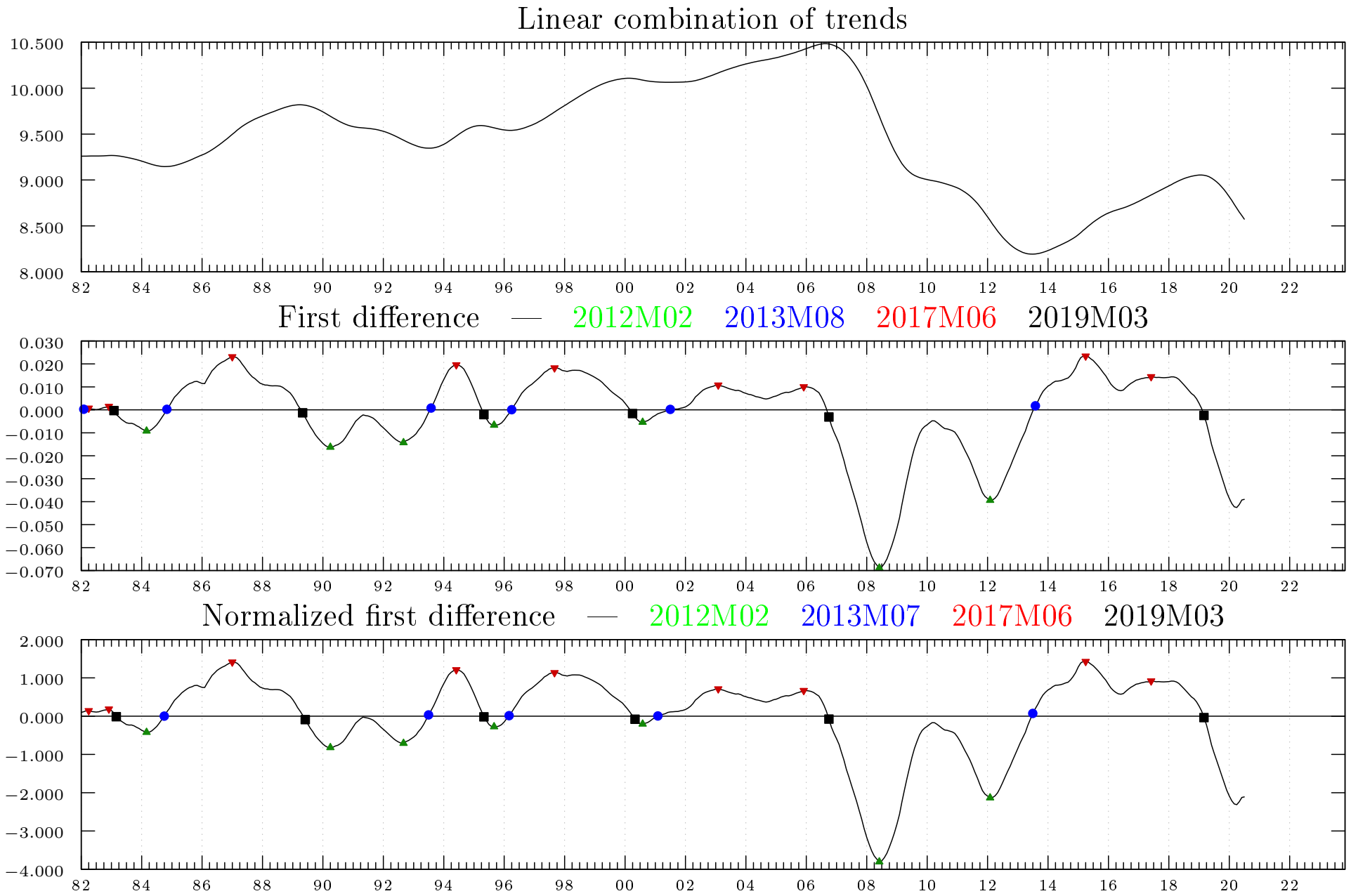
Composite Leading Indicator (1) : **2020M05** — (605)



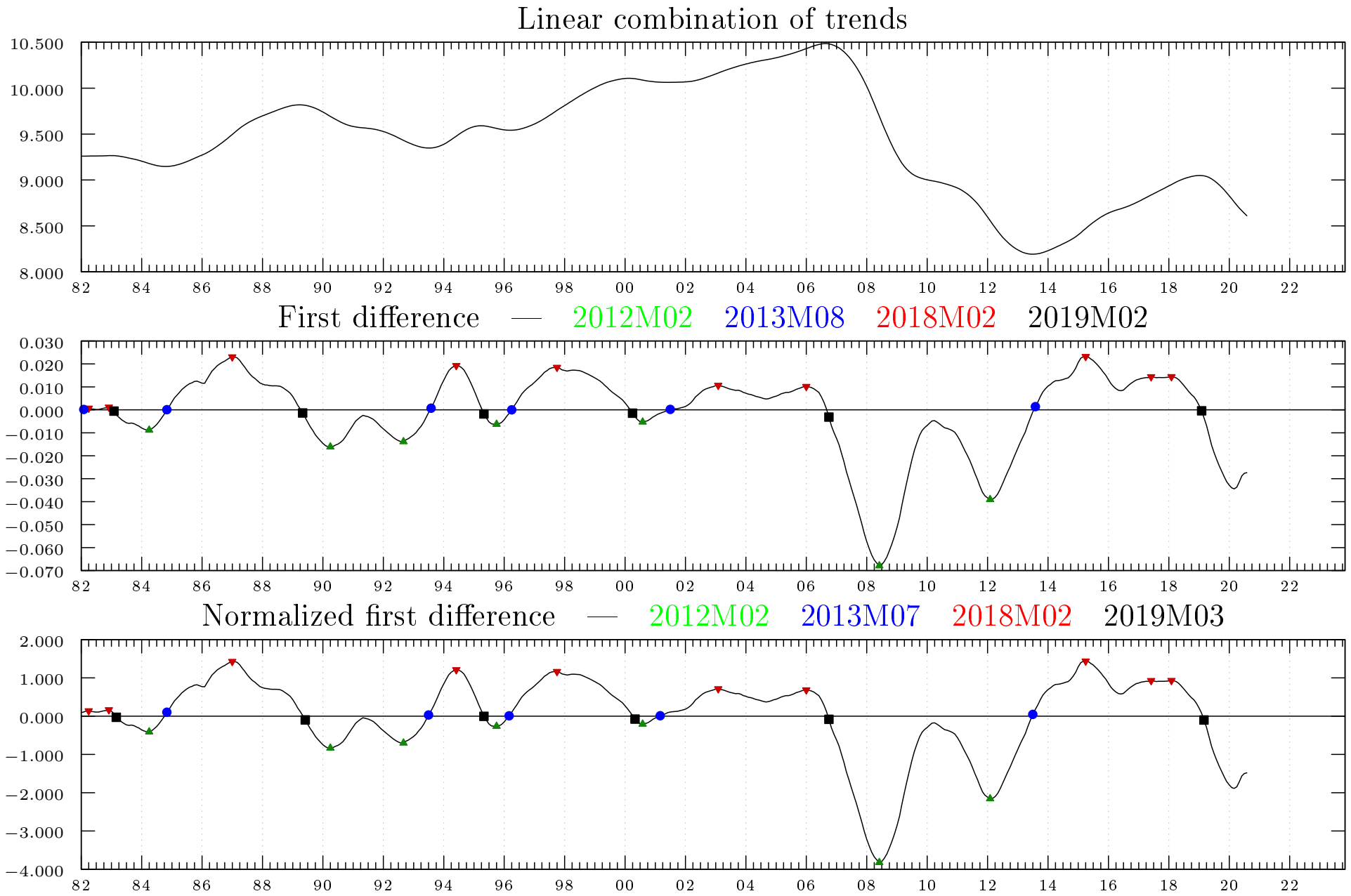
Composite Leading Indicator (1) : **2020M06** — (606)



Composite Leading Indicator (1) : **2020M07** — (607)



Composite Leading Indicator (1) : **2020M08** — (608)



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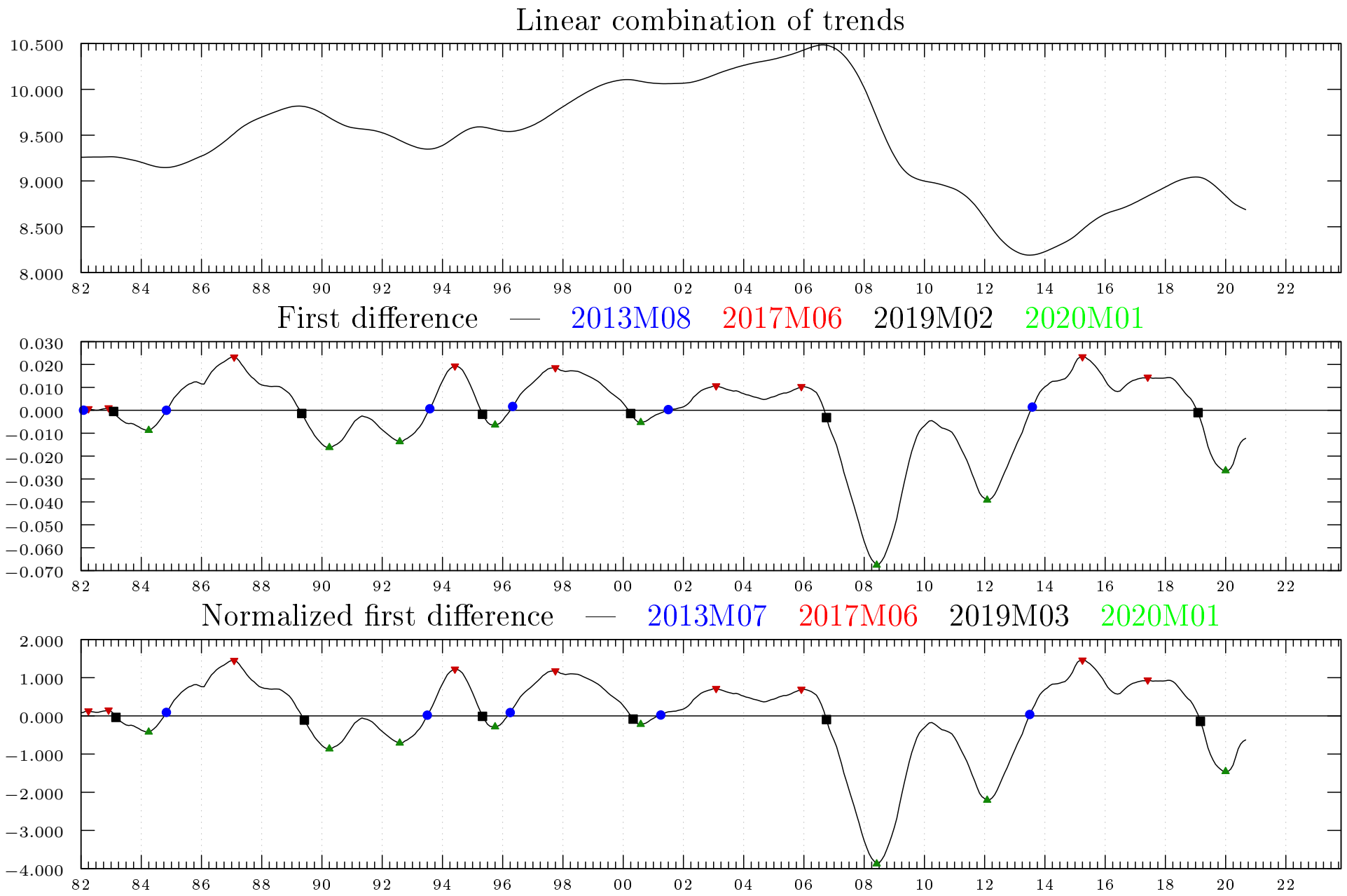

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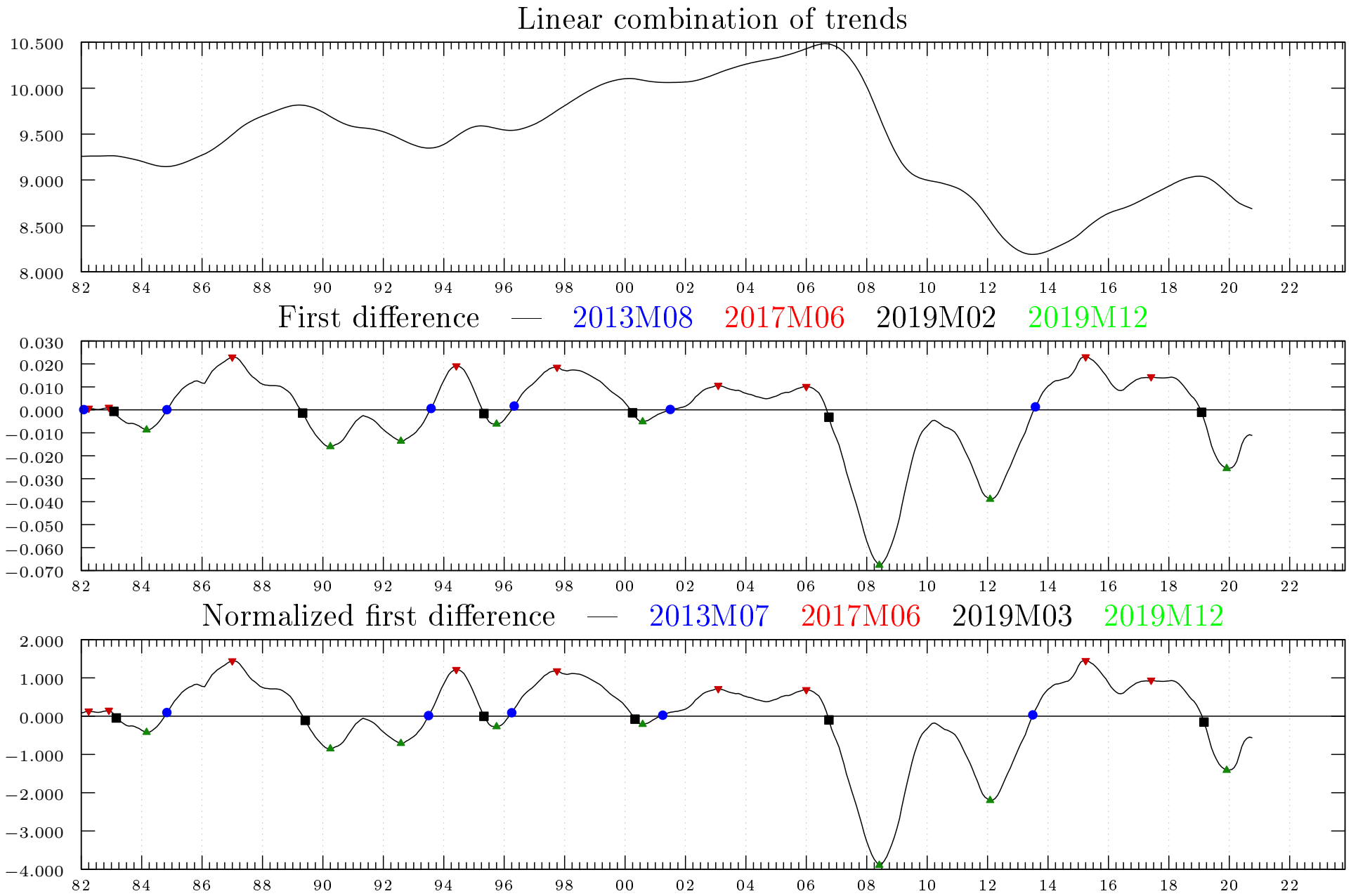
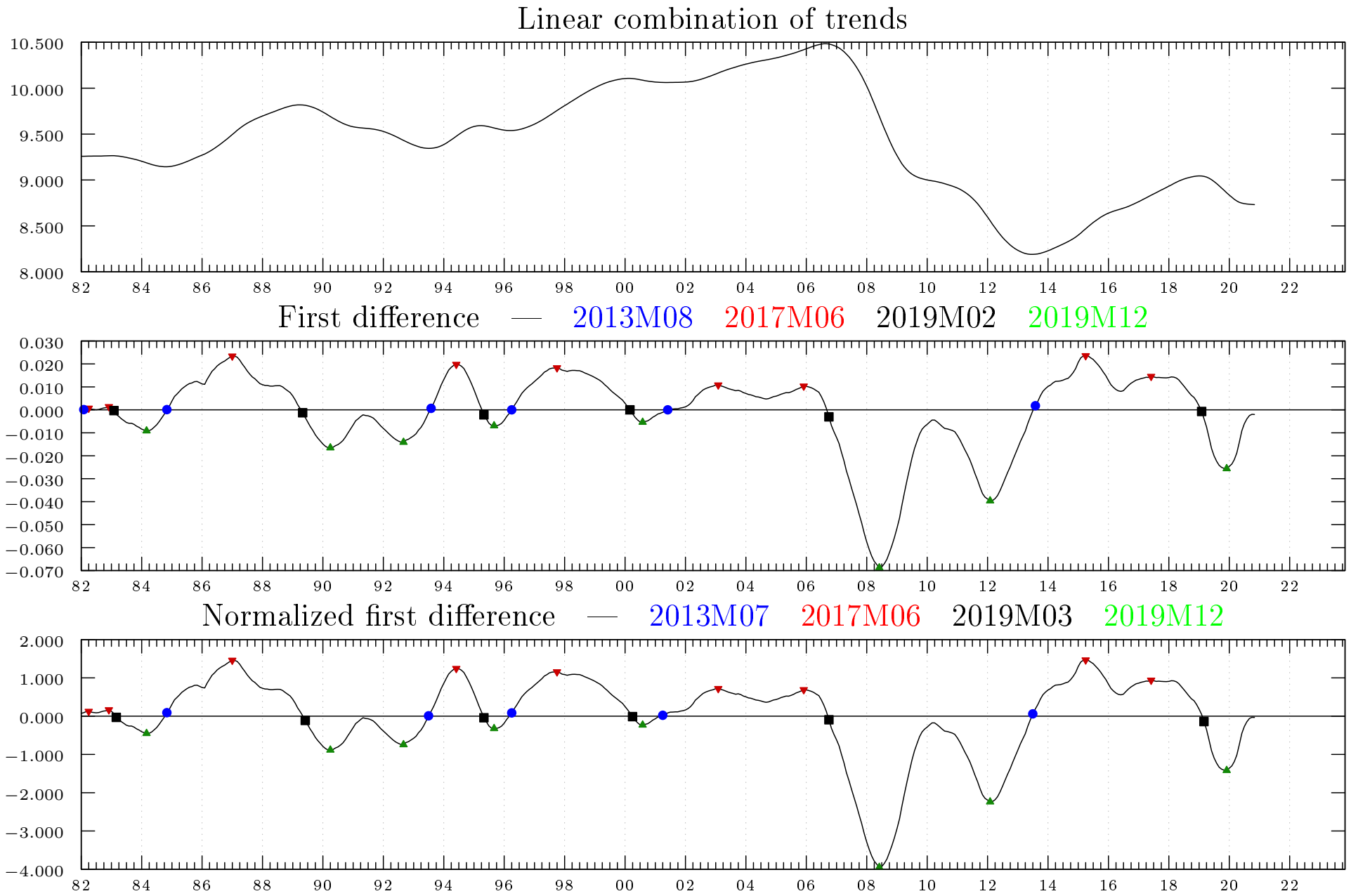
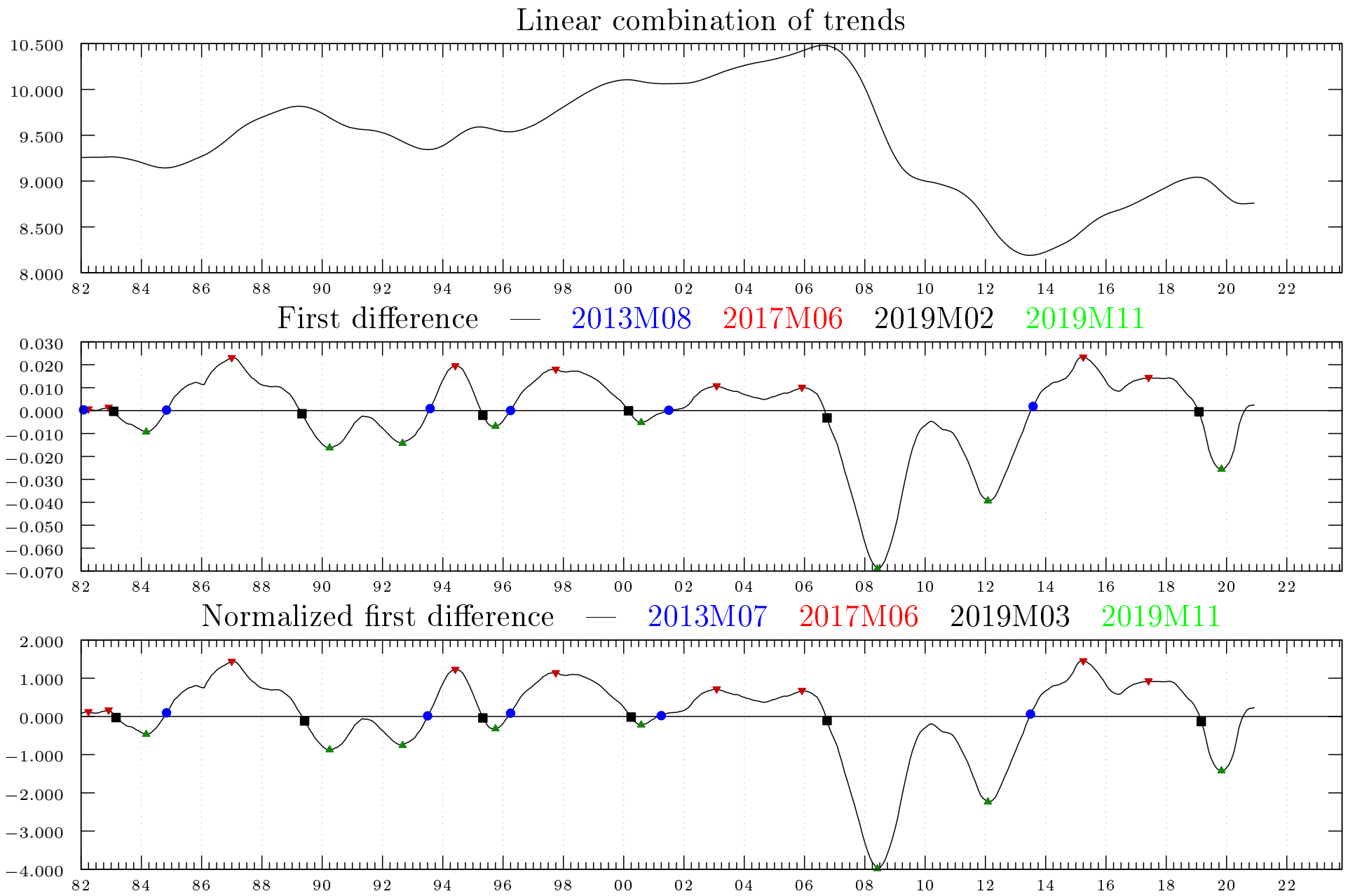


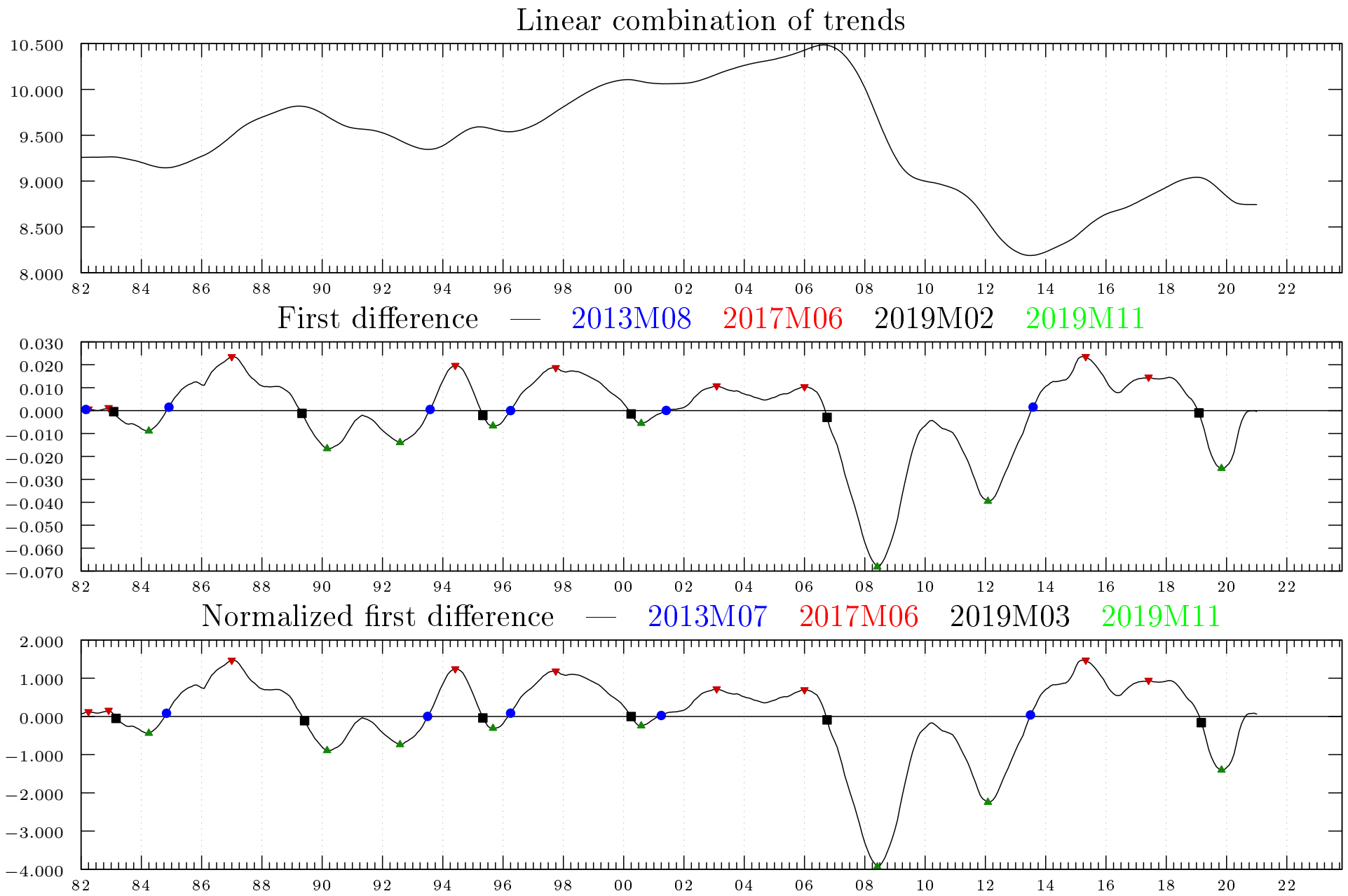
Composite Leading Indicator (1) : **2020M11** — (611)



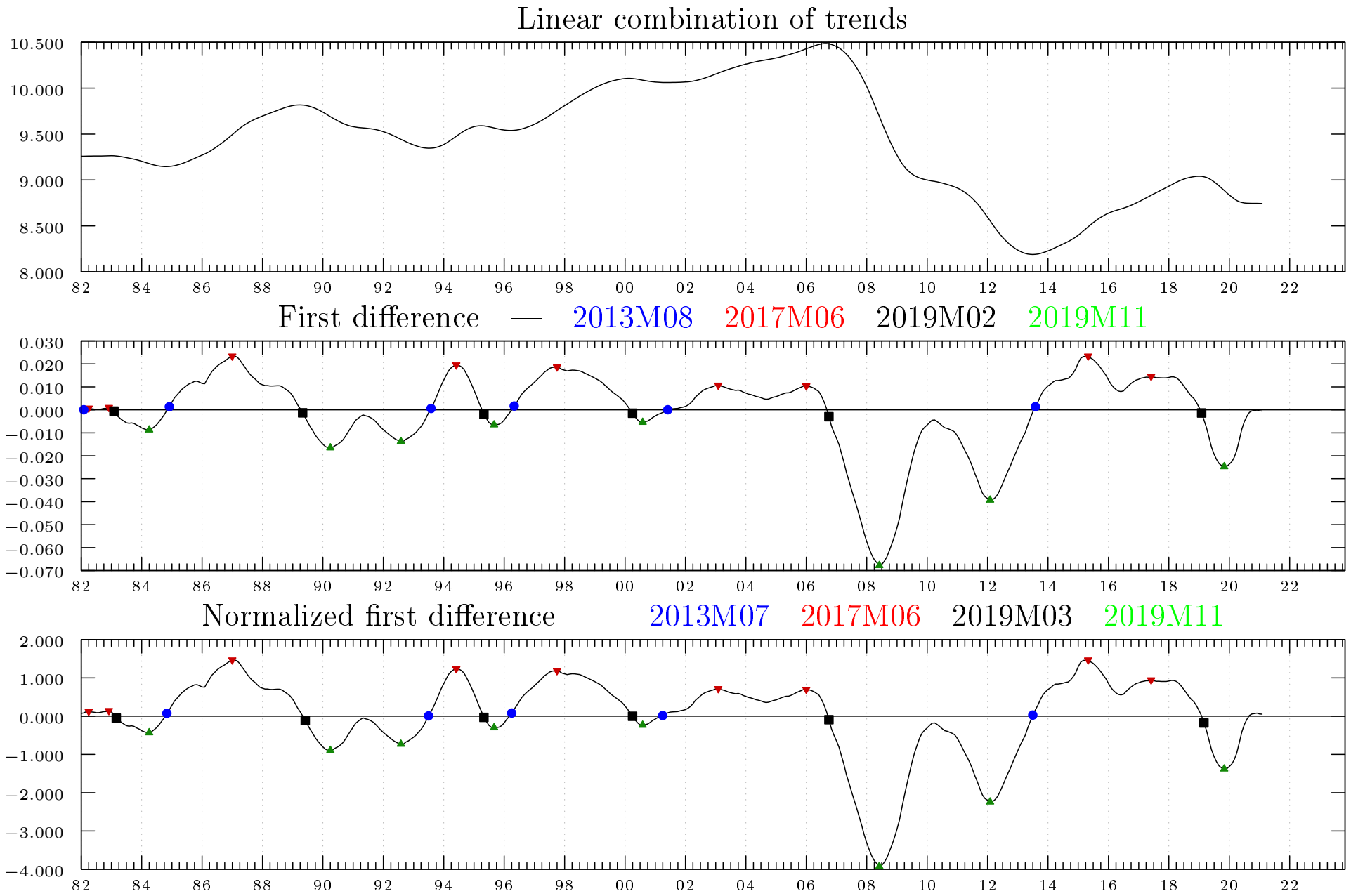
Composite Leading Indicator (1) : **2020M12** — (612)



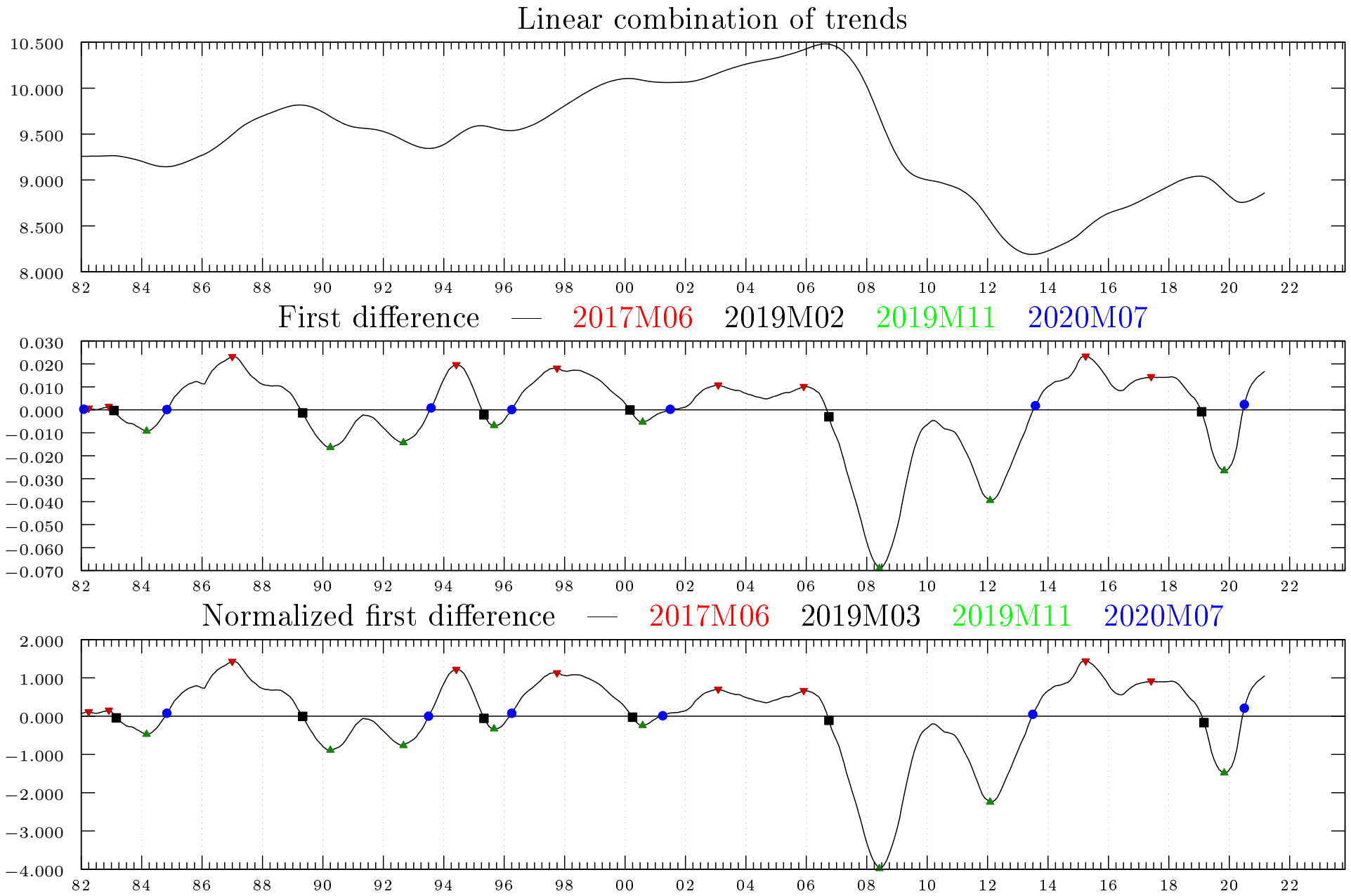
Composite Leading Indicator (1) : **2021M01** — (613)



Composite Leading Indicator (1) : **2021M02** — (614)



Composite Leading Indicator (1) : **2021M03** — (615)



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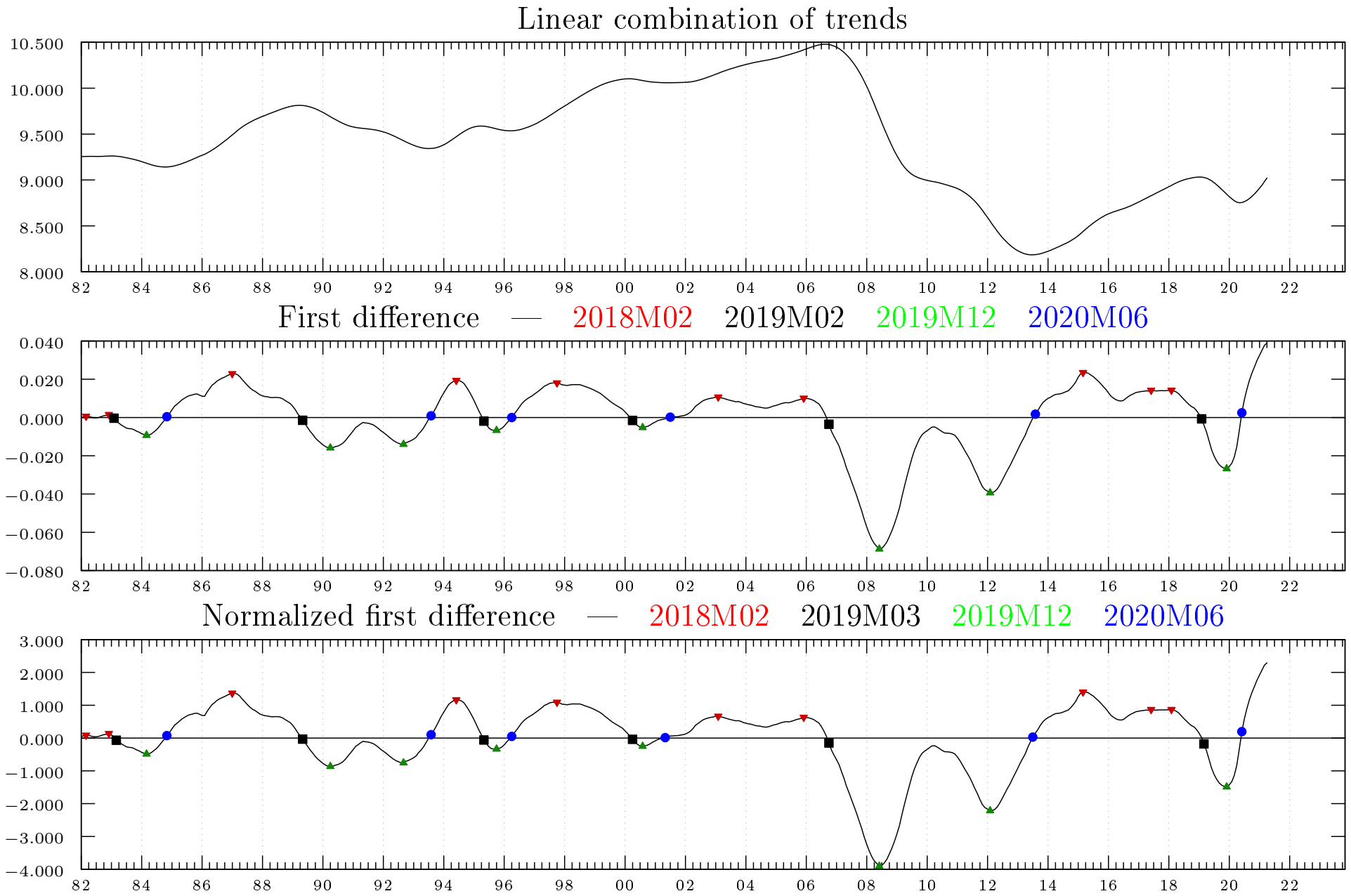
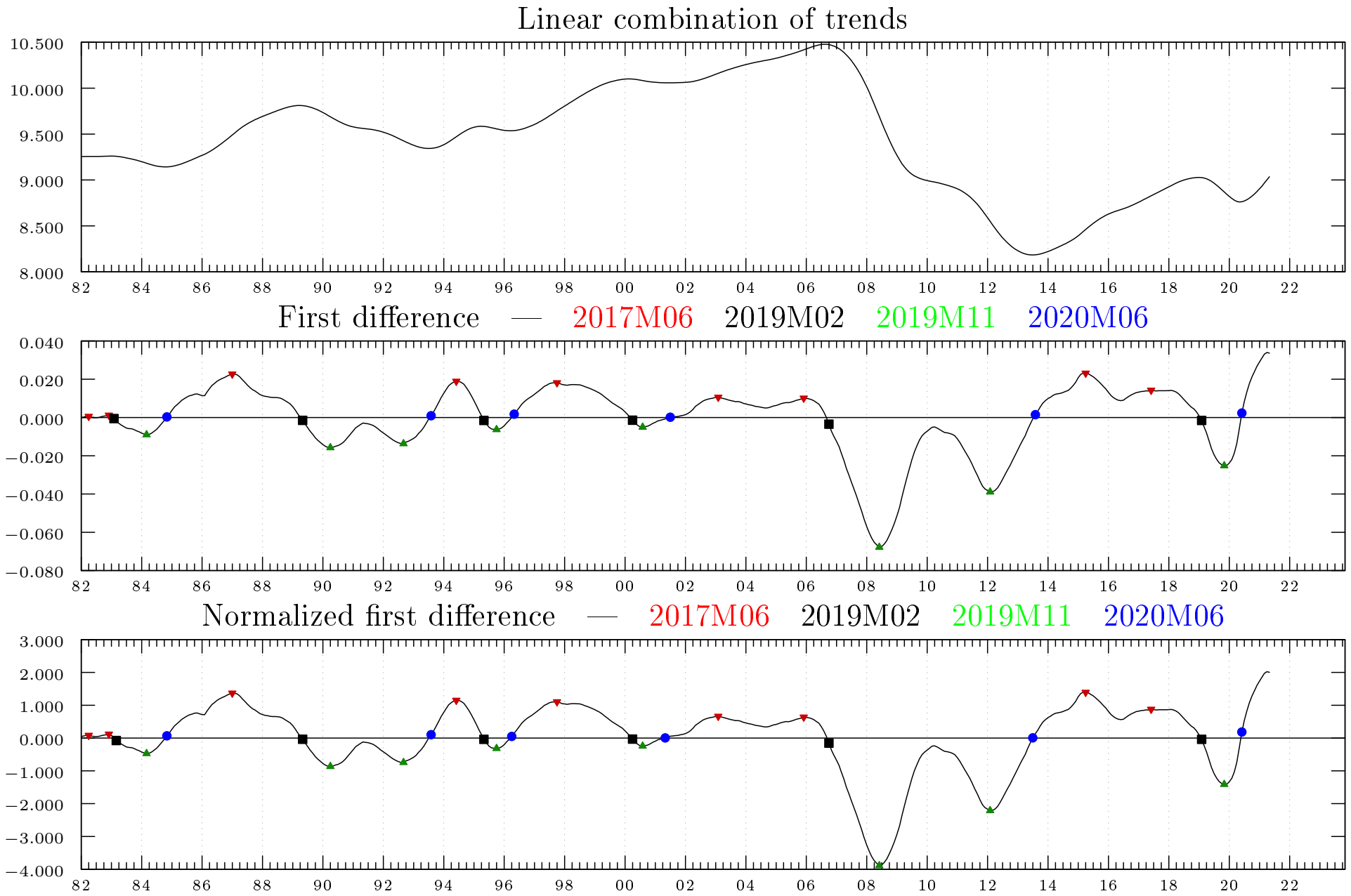
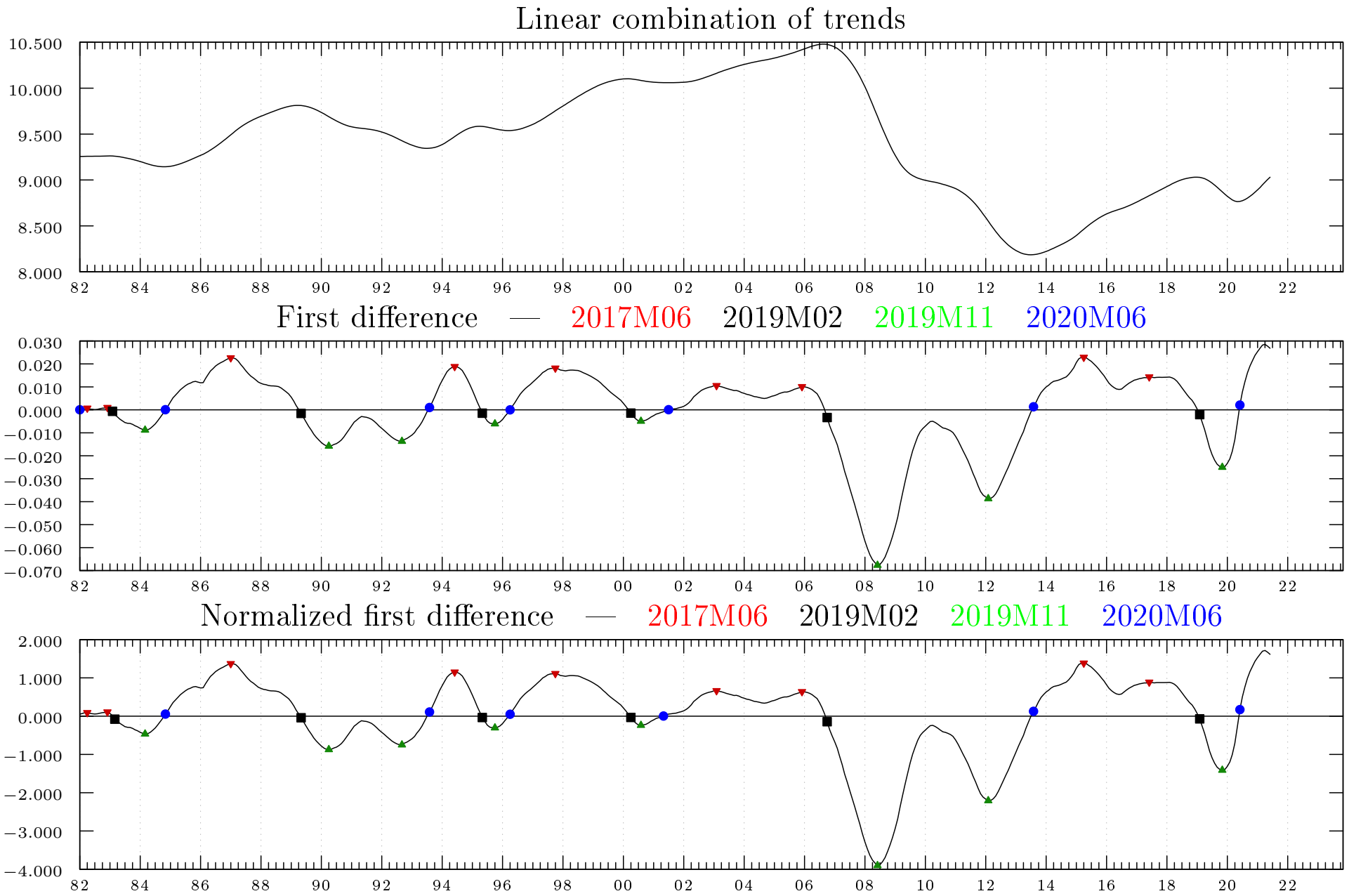


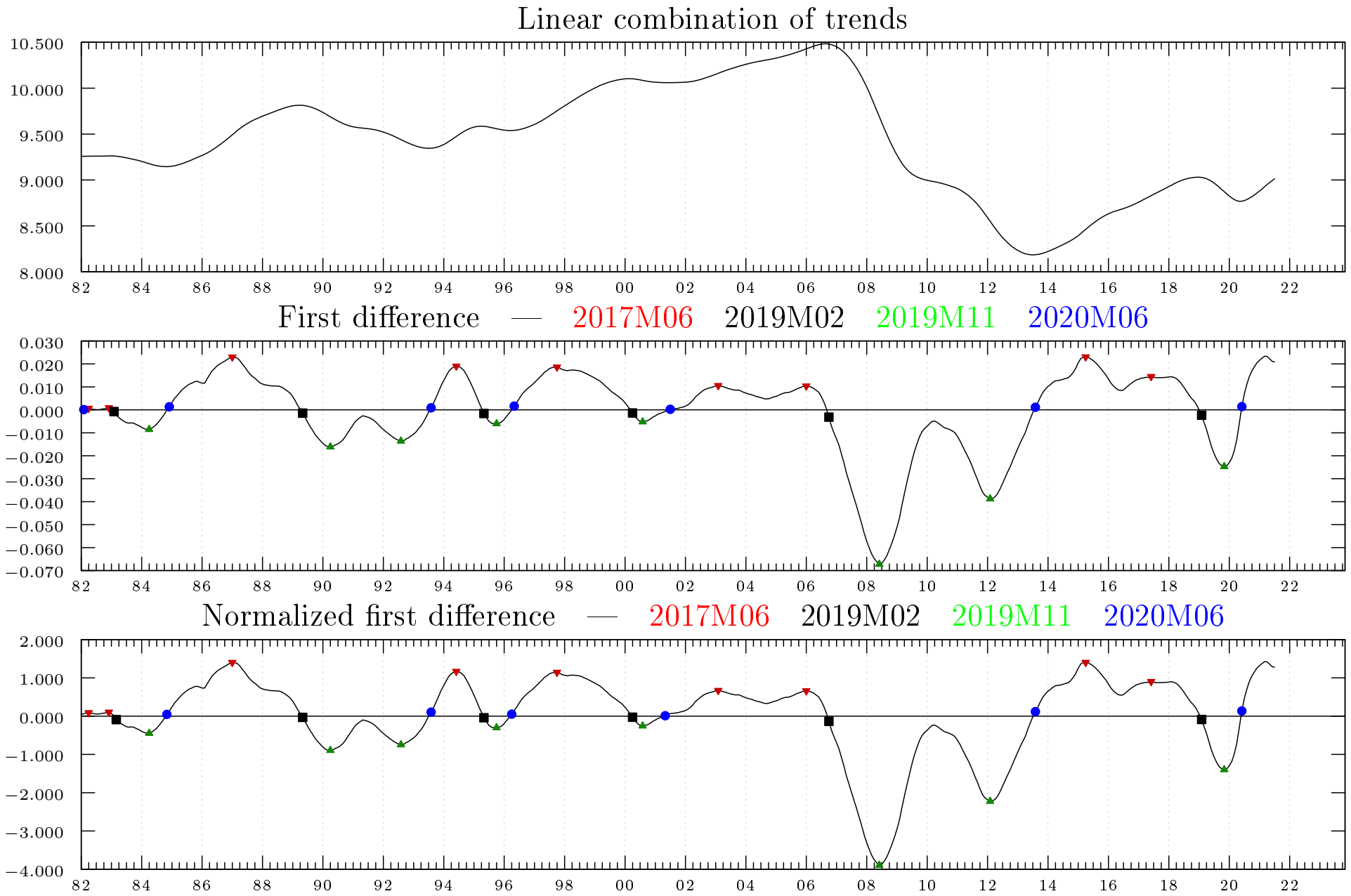
Composite Leading Indicator (1) : **2021M05** — (617)



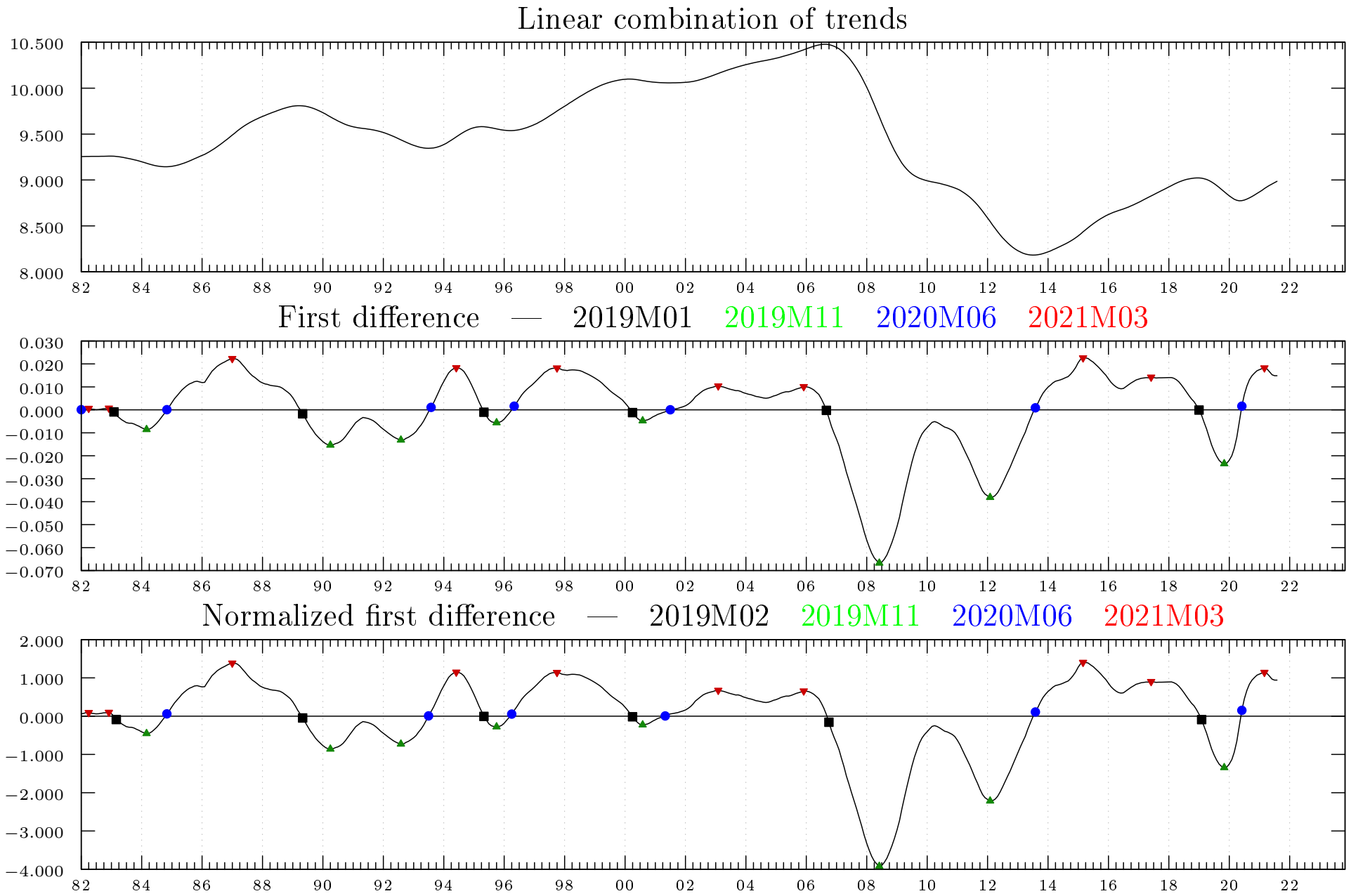
Composite Leading Indicator (1) : **2021M06** — (618)



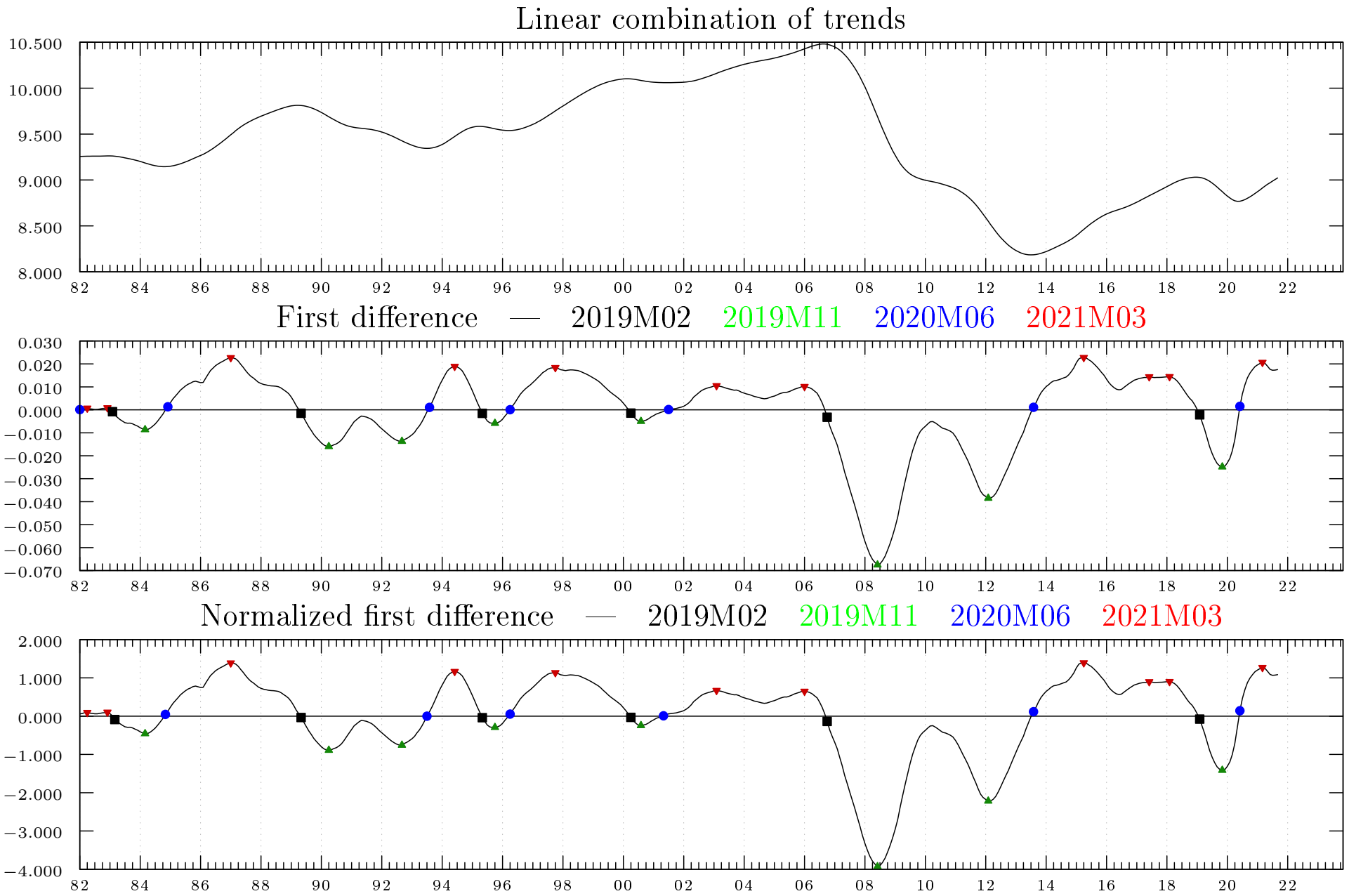
Composite Leading Indicator (1) : **2021M07** — (619)



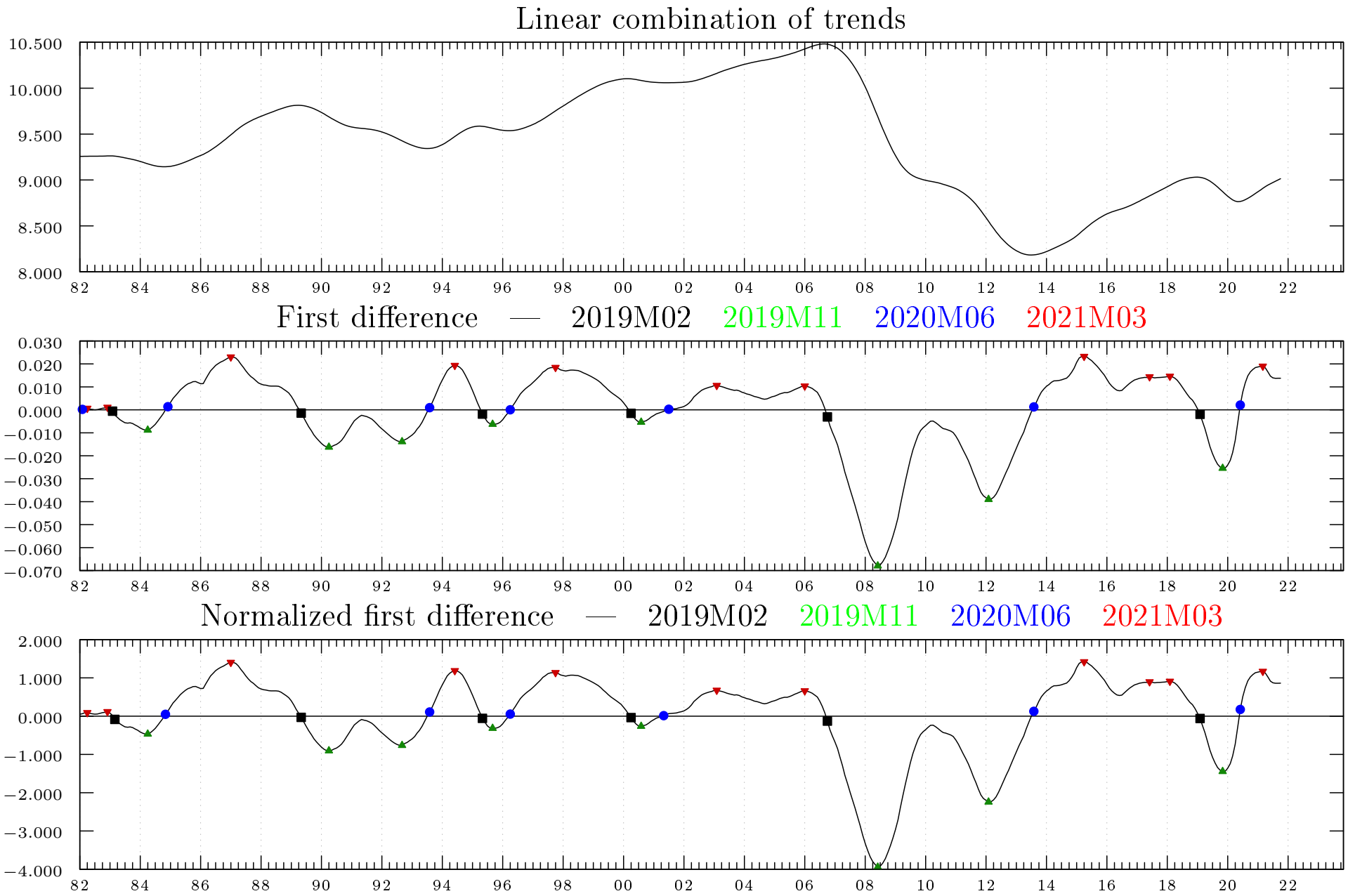
Composite Leading Indicator (1) : **2021M08** — (620)



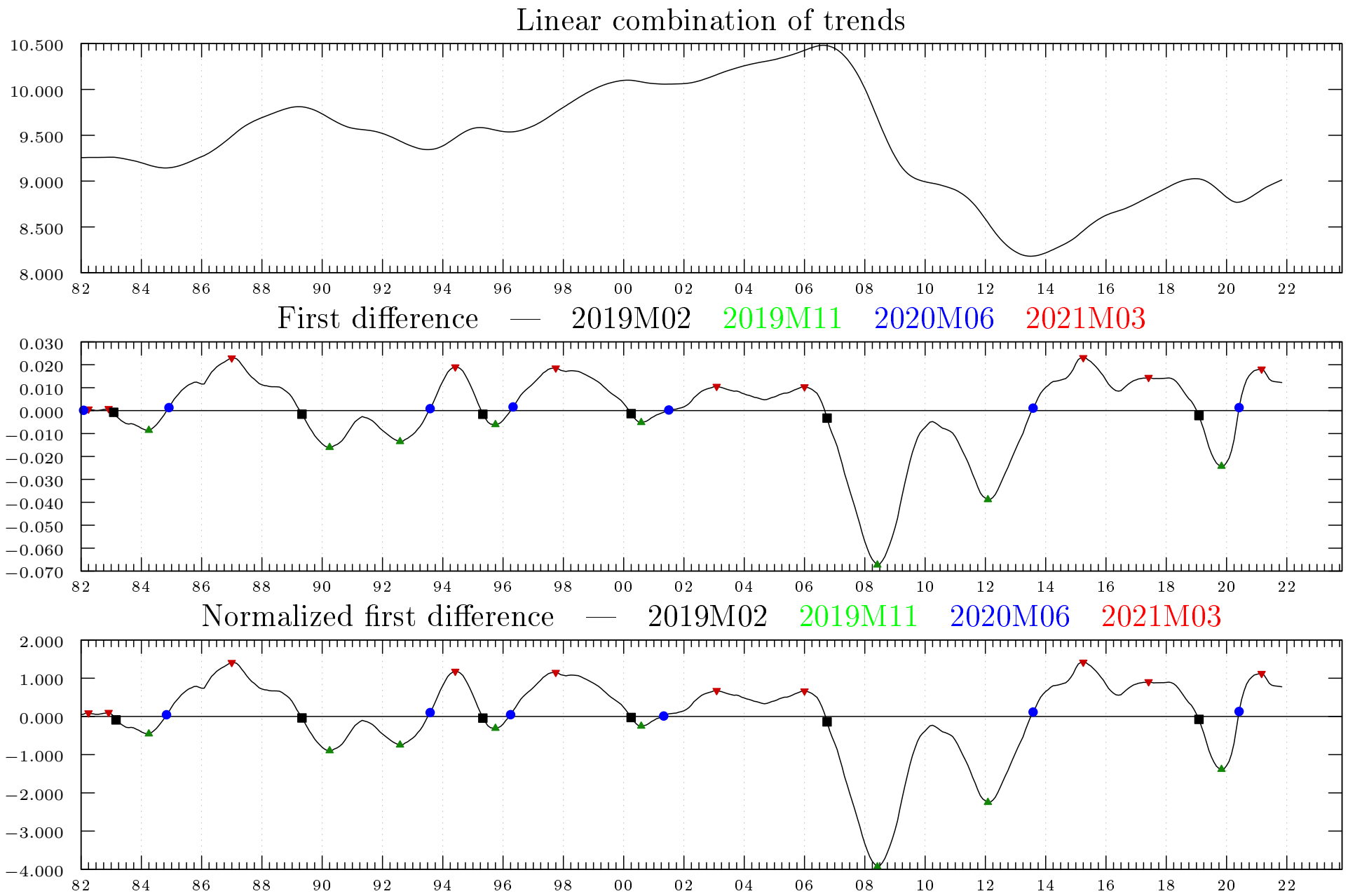
Composite Leading Indicator (1) : **2021M09** — (621)



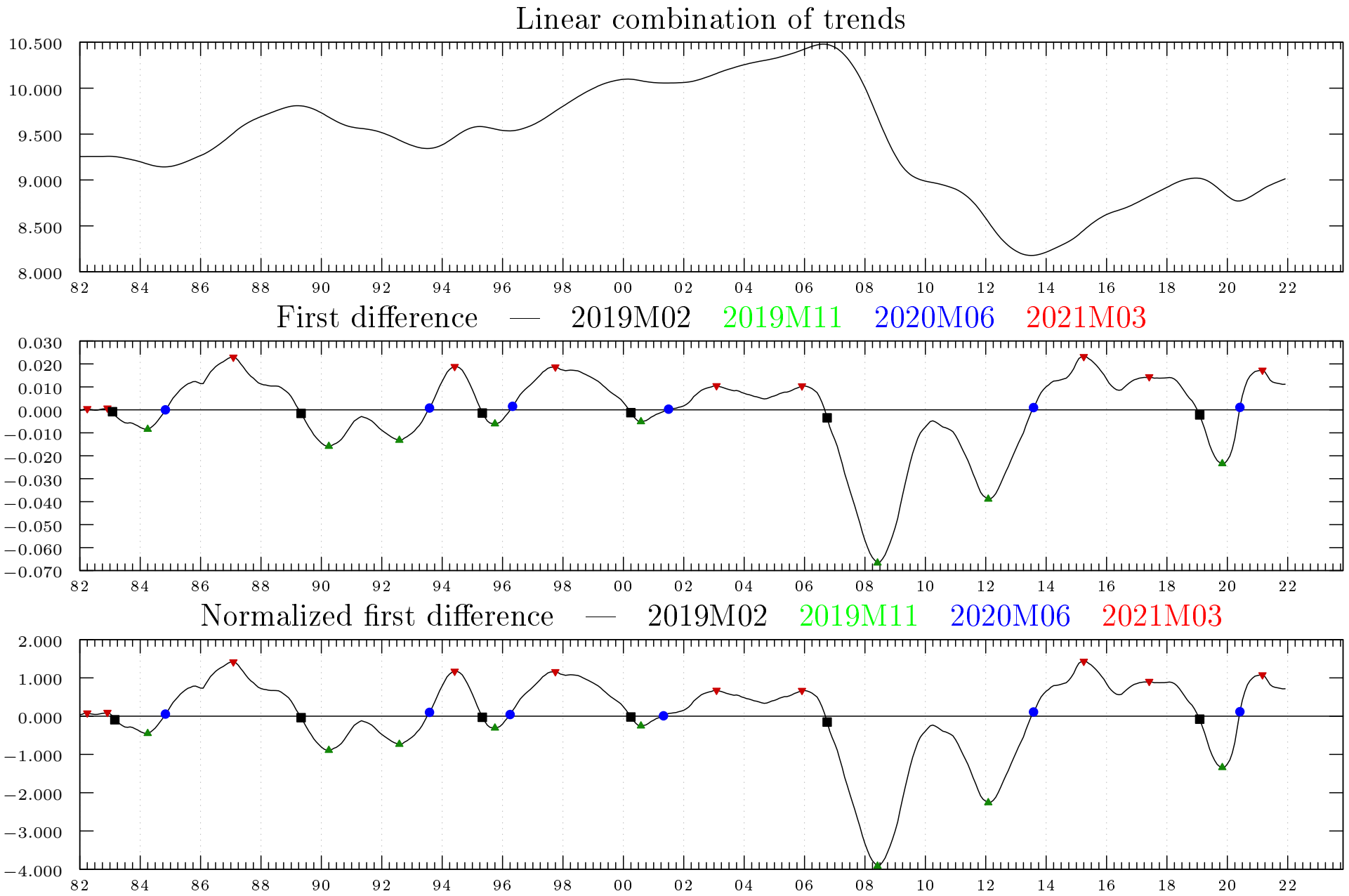
Composite Leading Indicator (1) : **2021M10** — (622)



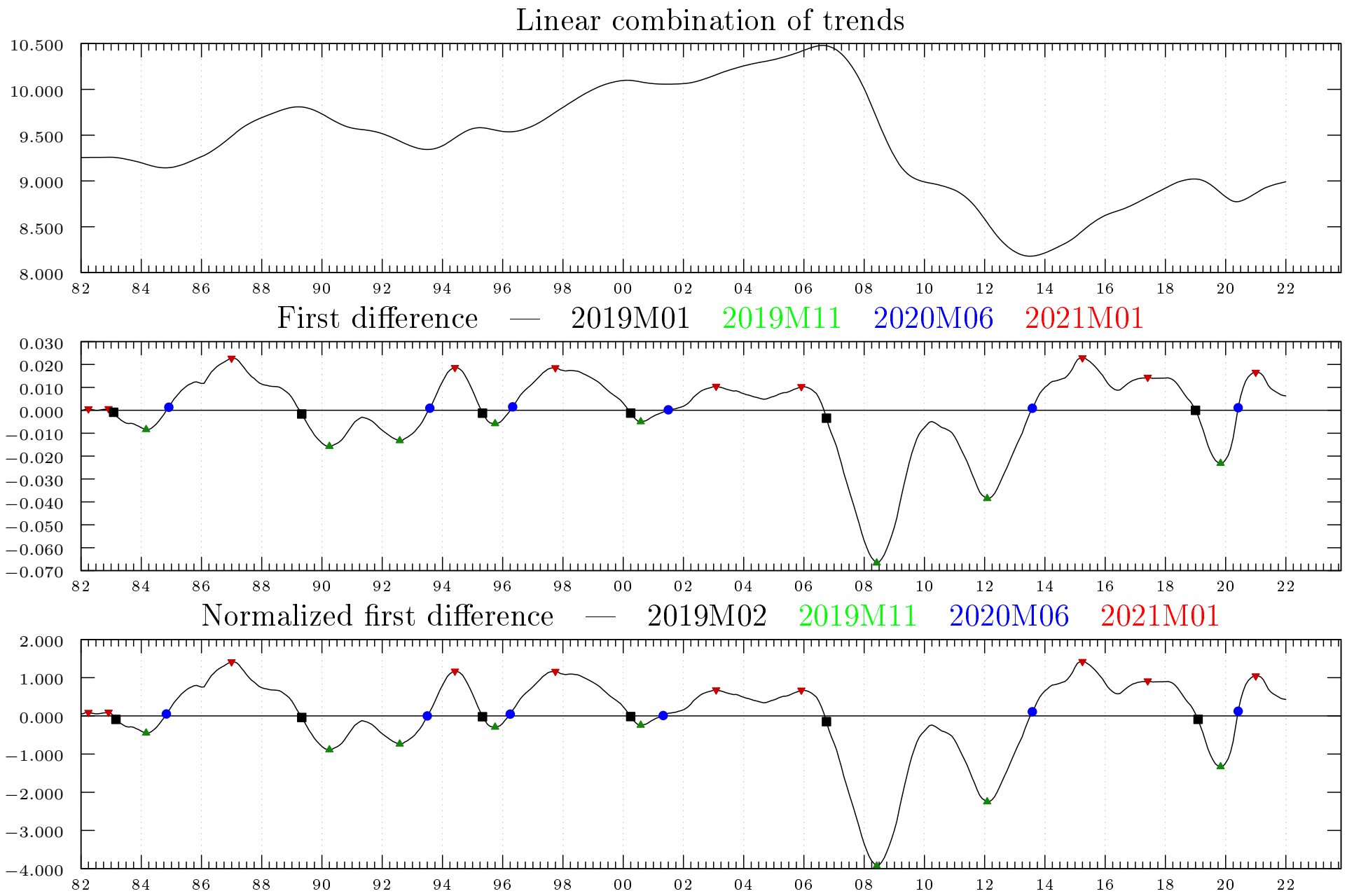
Composite Leading Indicator (1) : **2021M11** — (623)



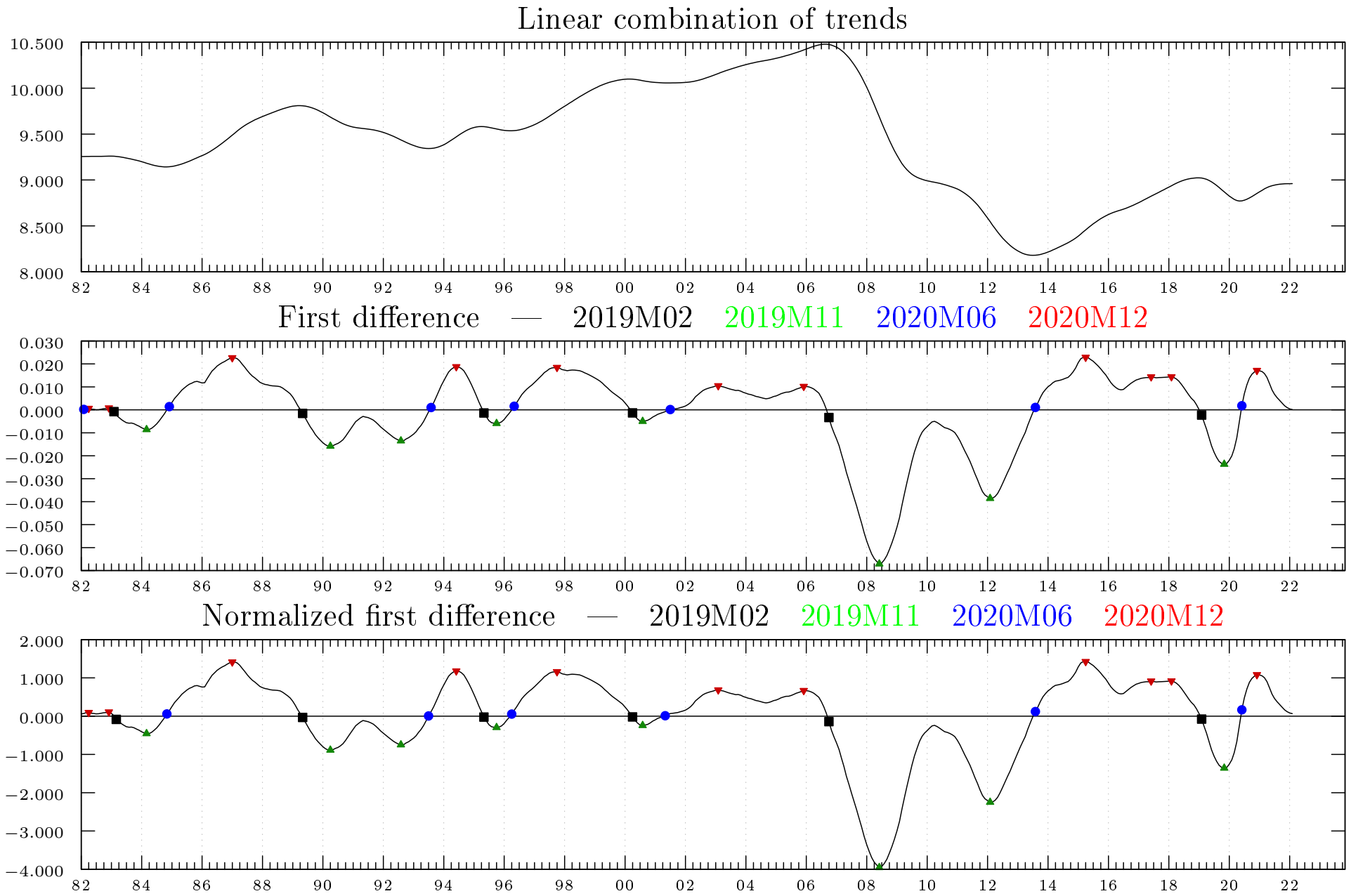
Composite Leading Indicator (1) : **2021M12** — (624)



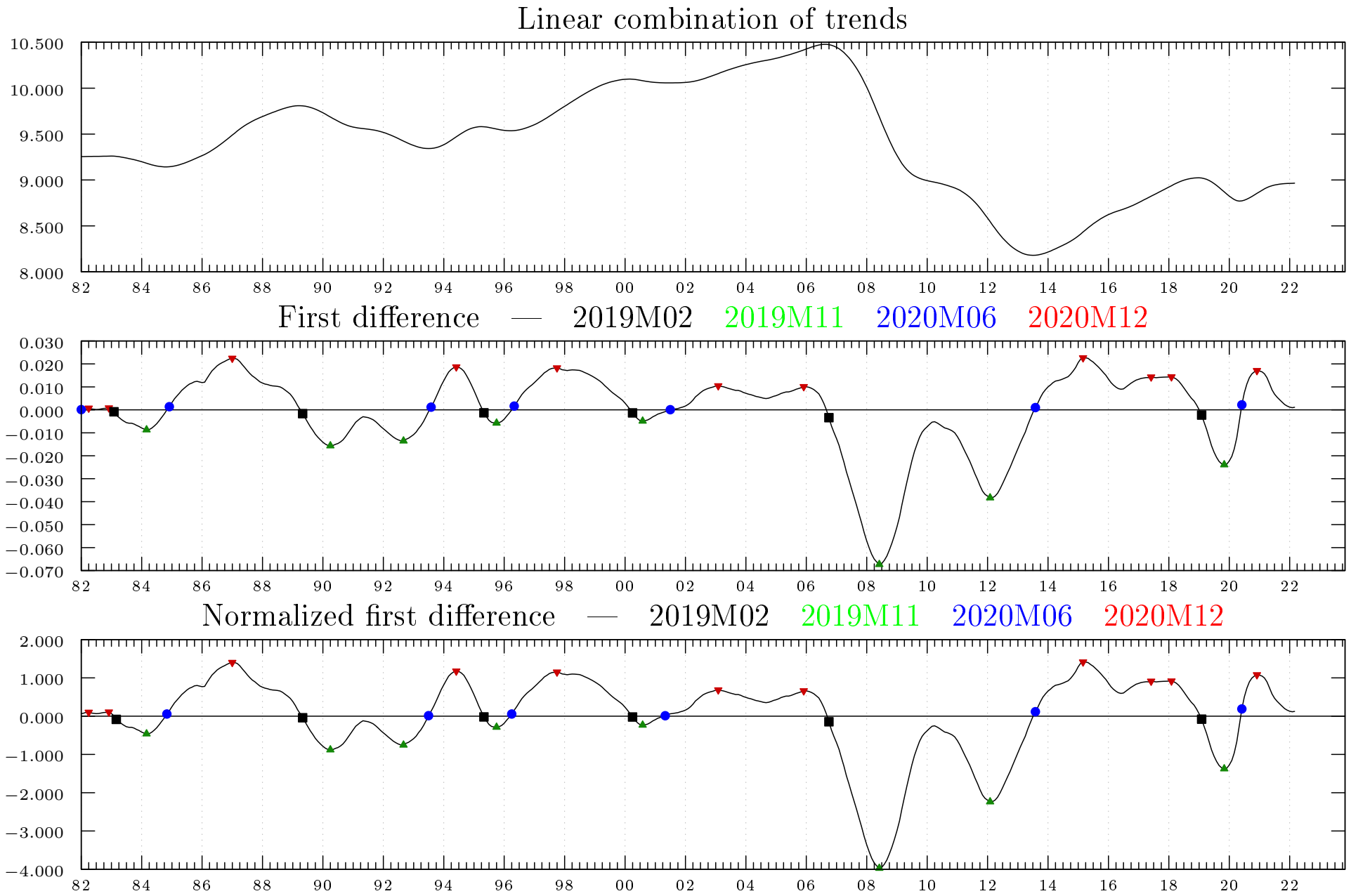
Composite Leading Indicator (1) : **2022M01** — (625)



Composite Leading Indicator (1) : **2022M02** — (626)



Composite Leading Indicator (1) : **2022M03** — (627)



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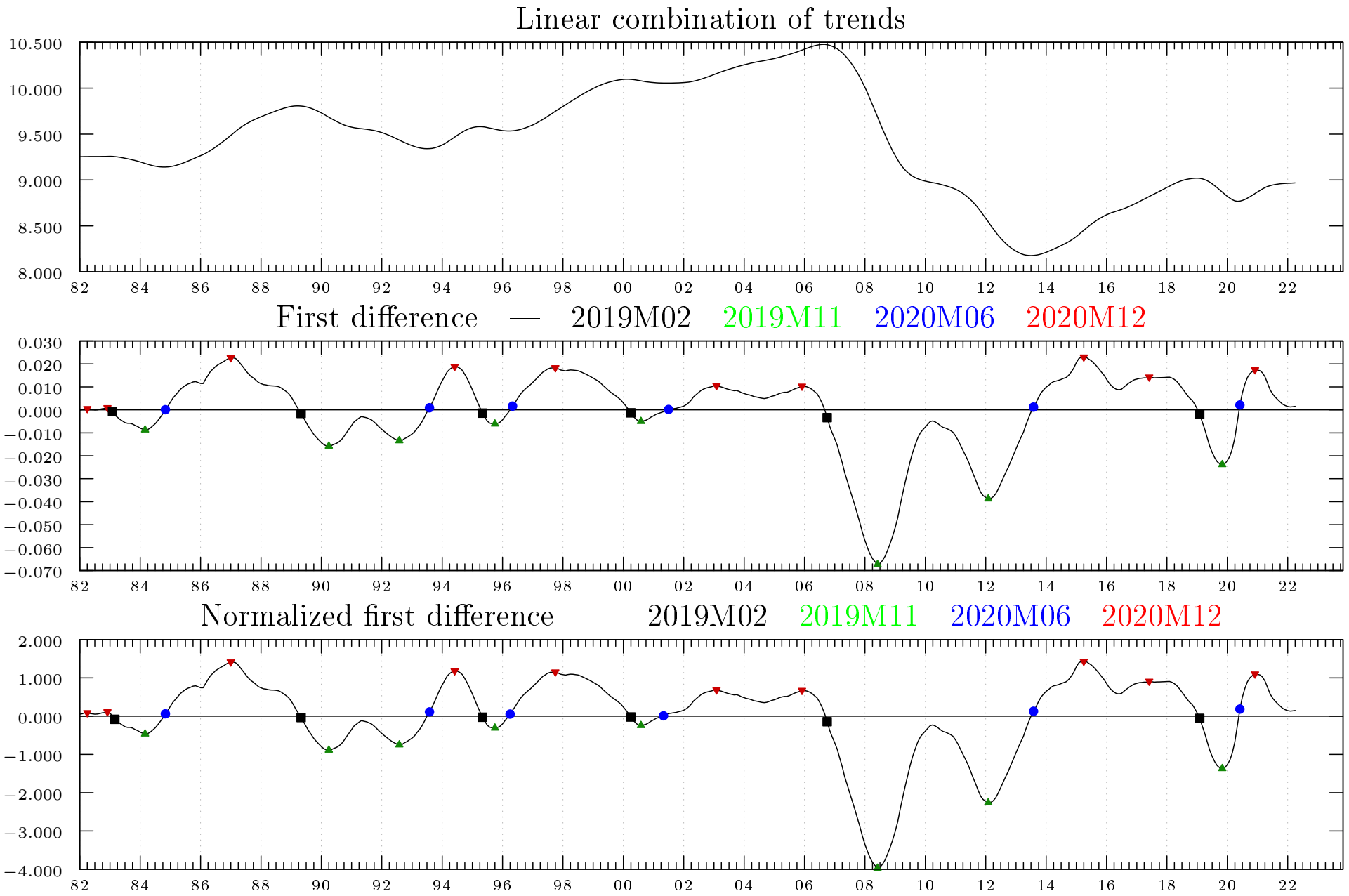

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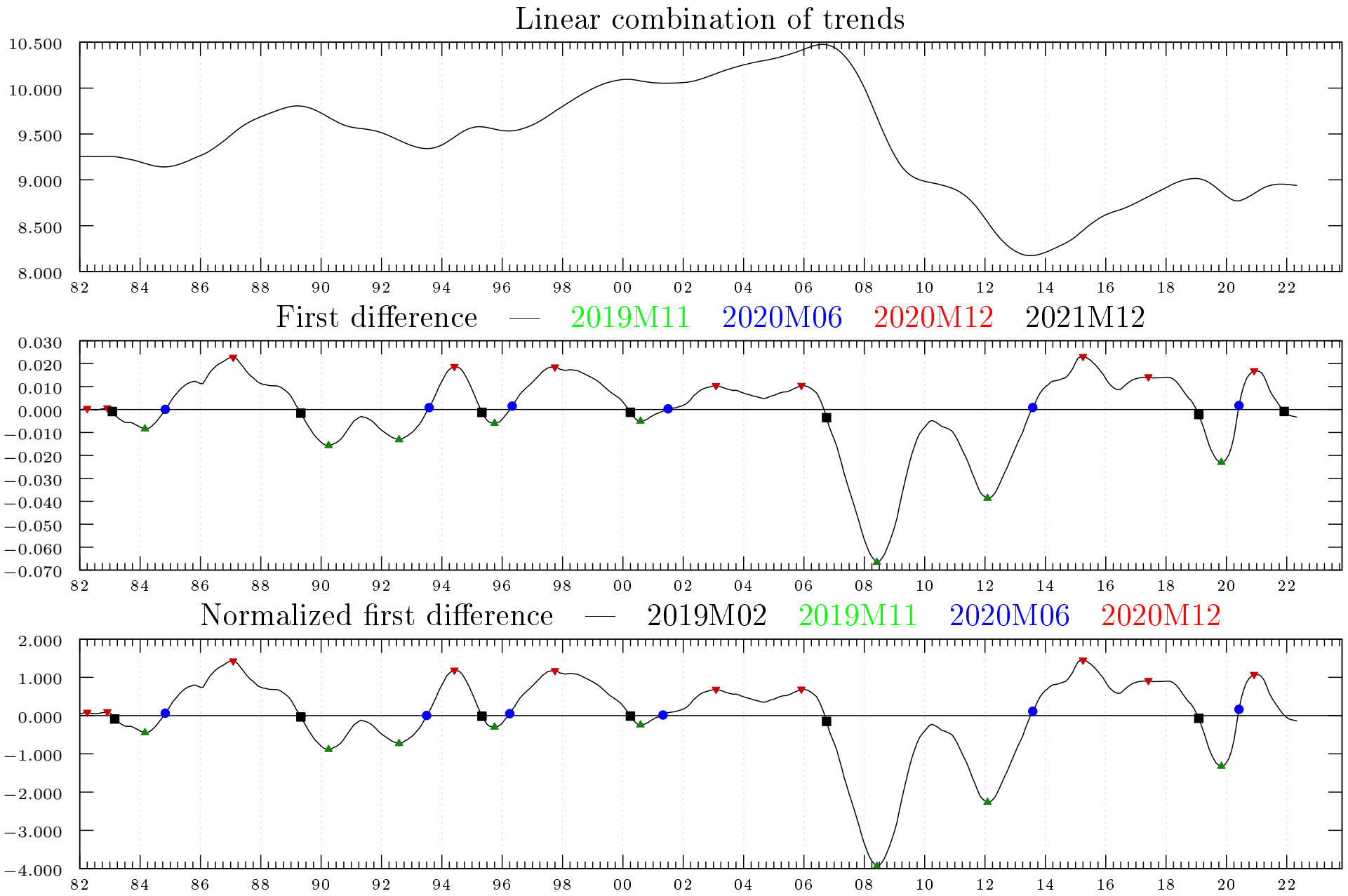
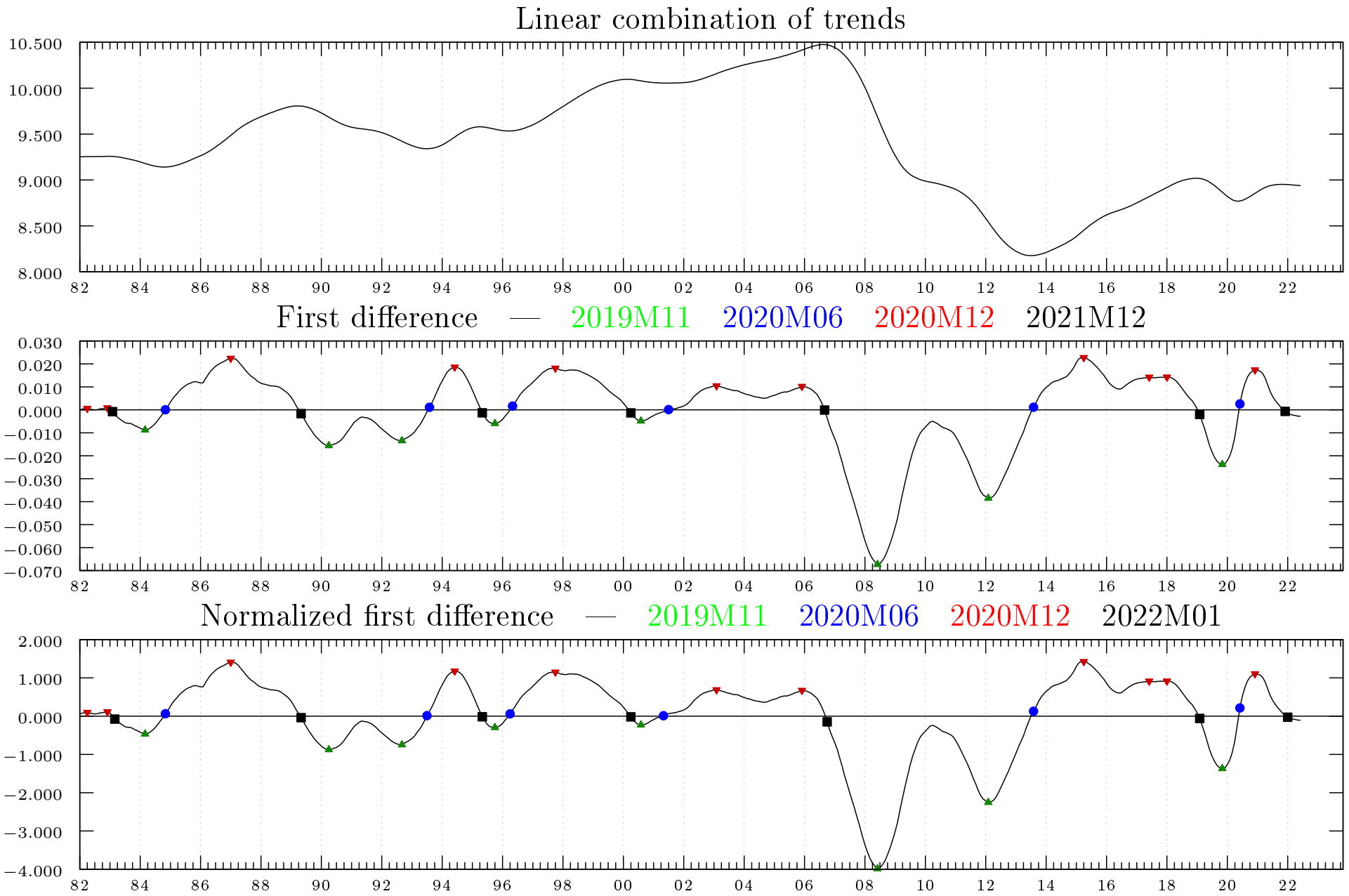
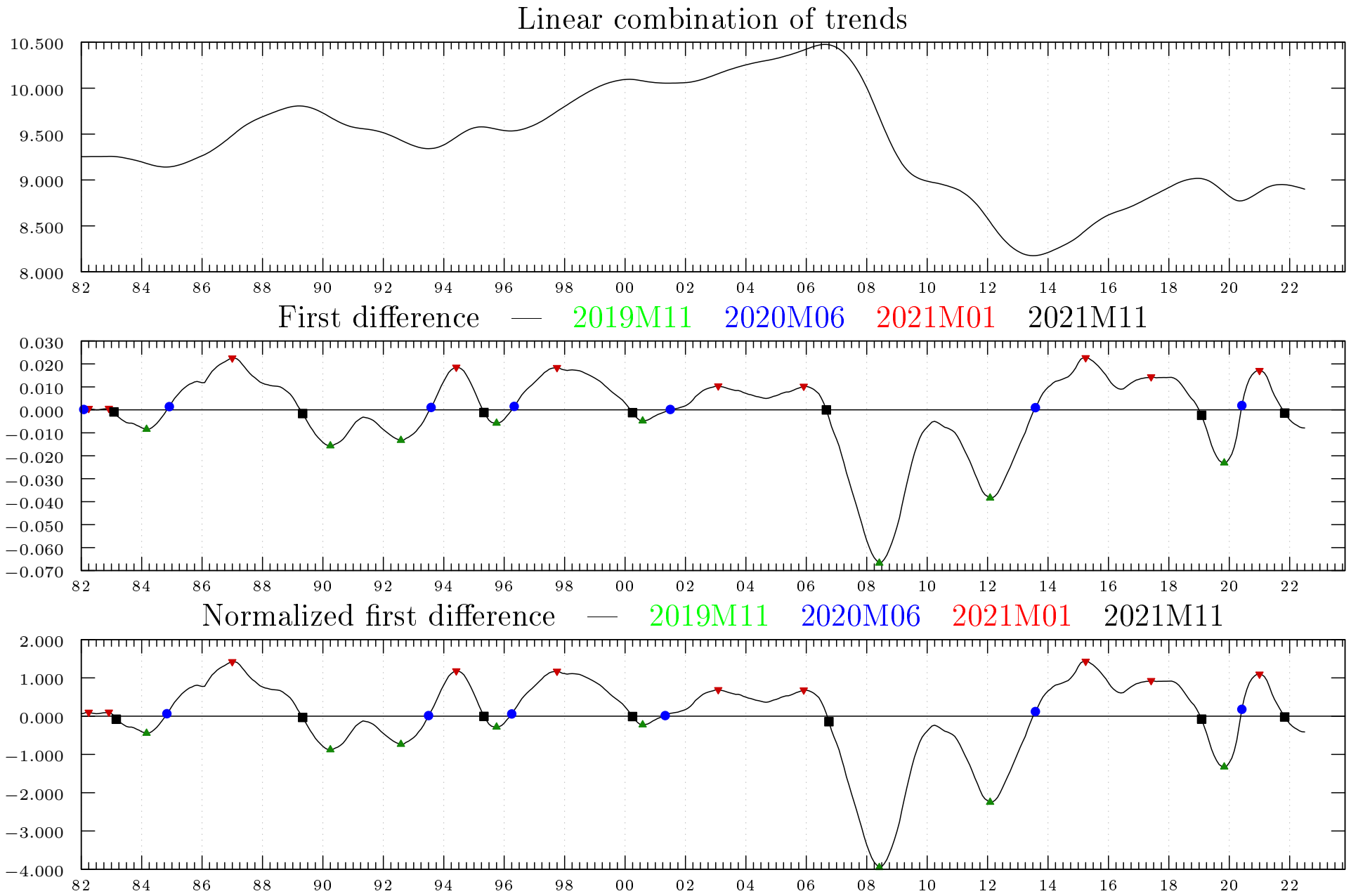


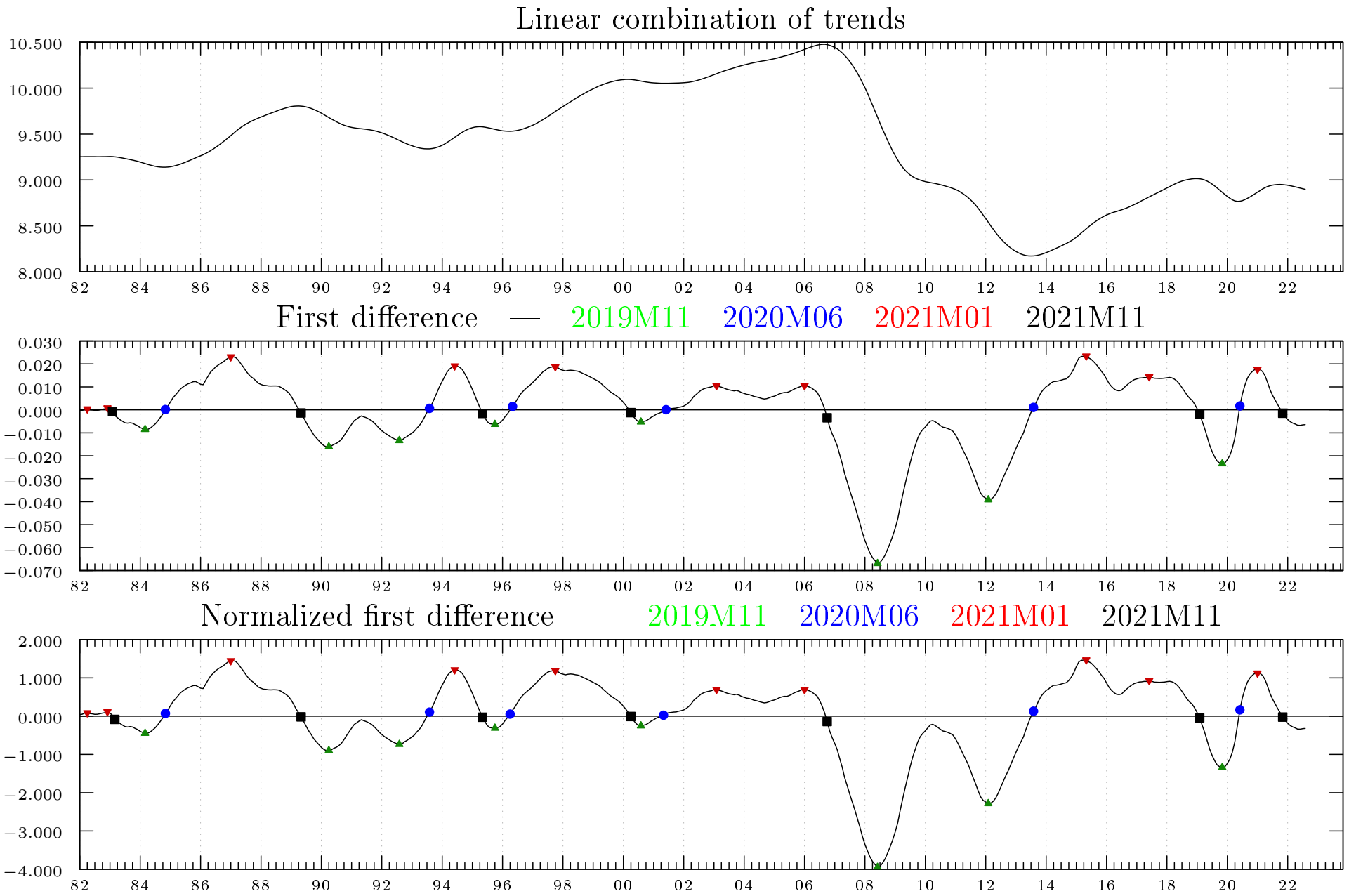
Composite Leading Indicator (1) : **2022M06** — (630)



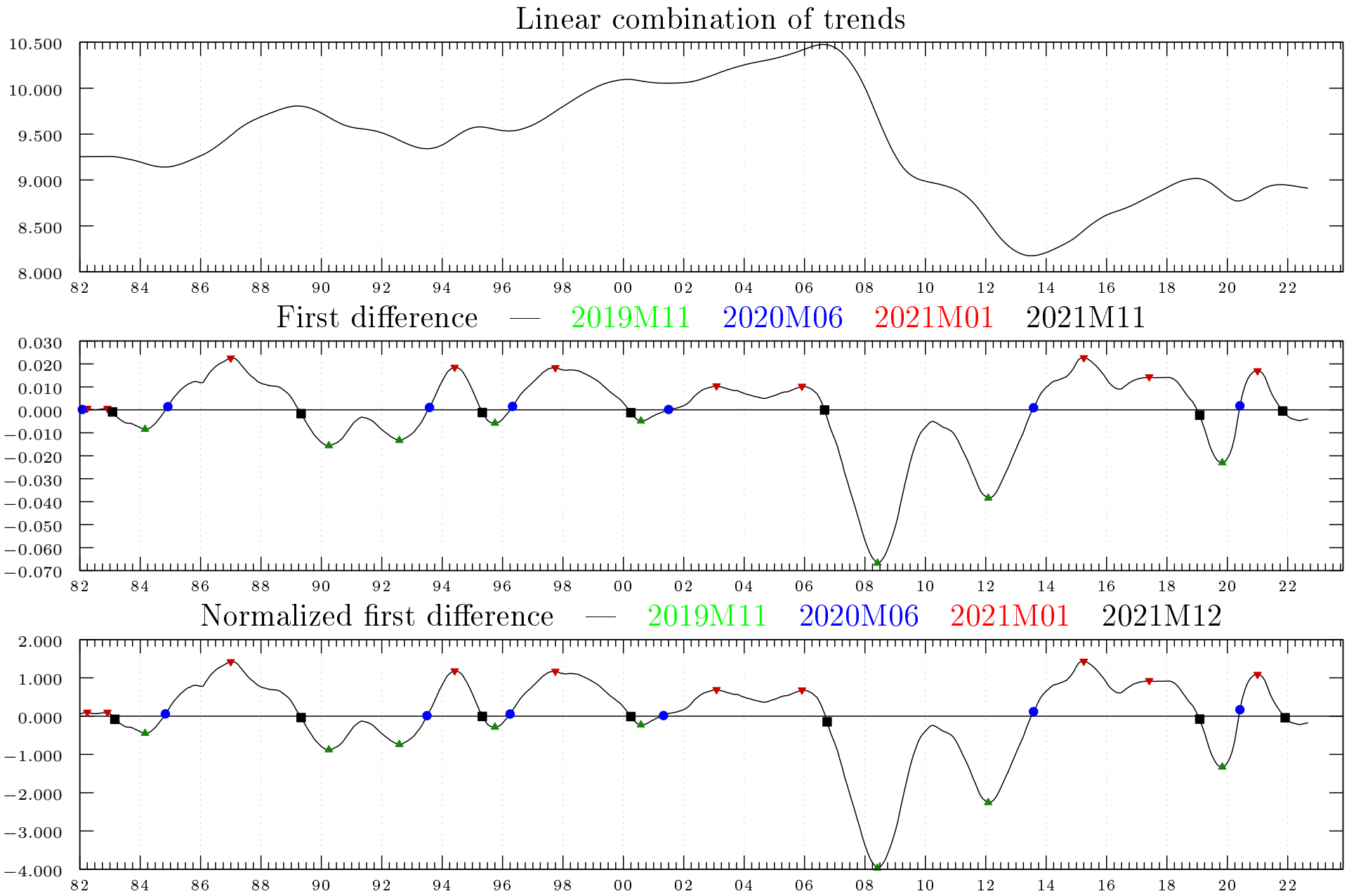
Composite Leading Indicator (1) : **2022M07** — (631)



Composite Leading Indicator (1) : **2022M08** — (632)



Composite Leading Indicator (1) : **2022M09** — (633)



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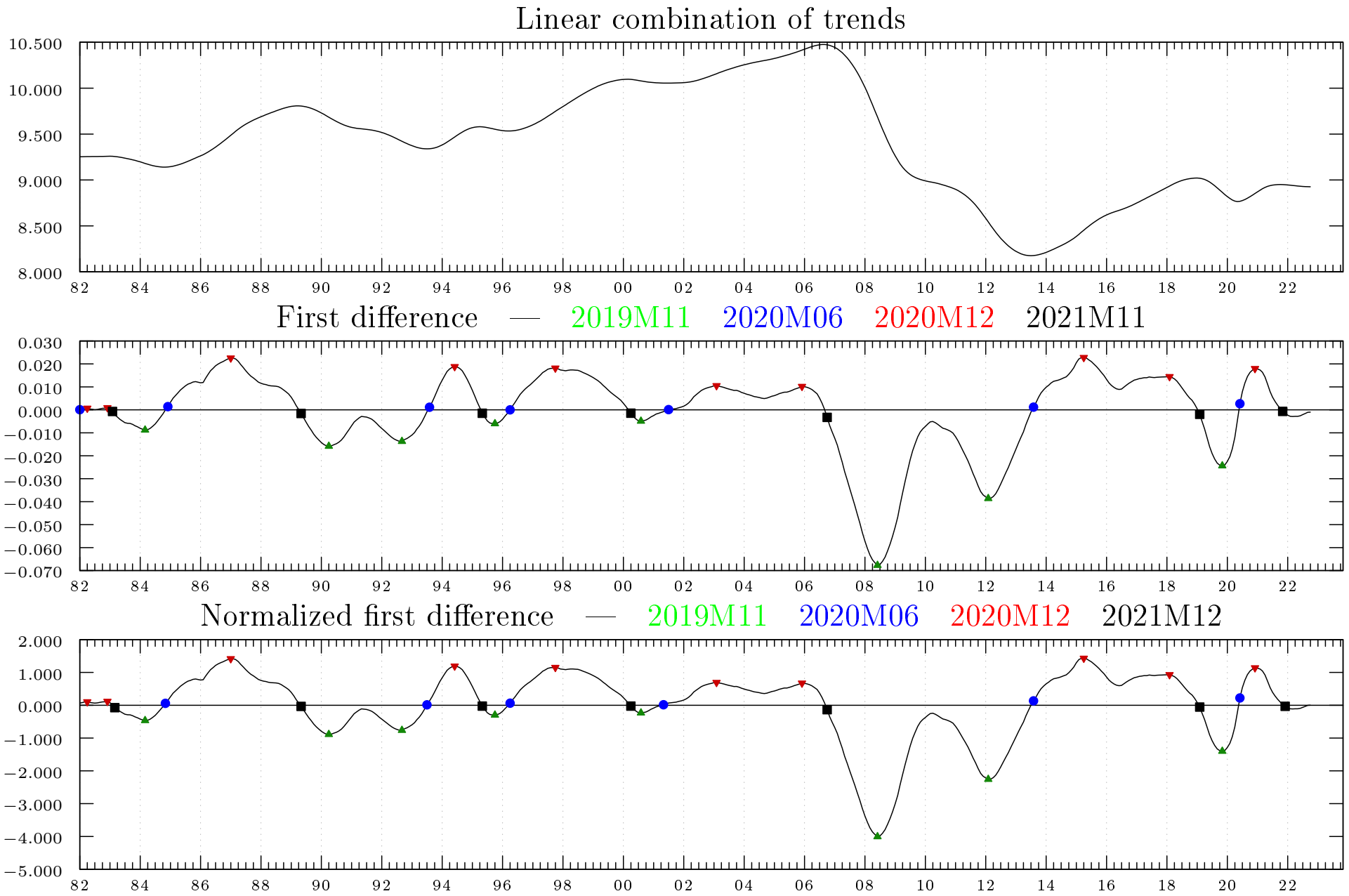

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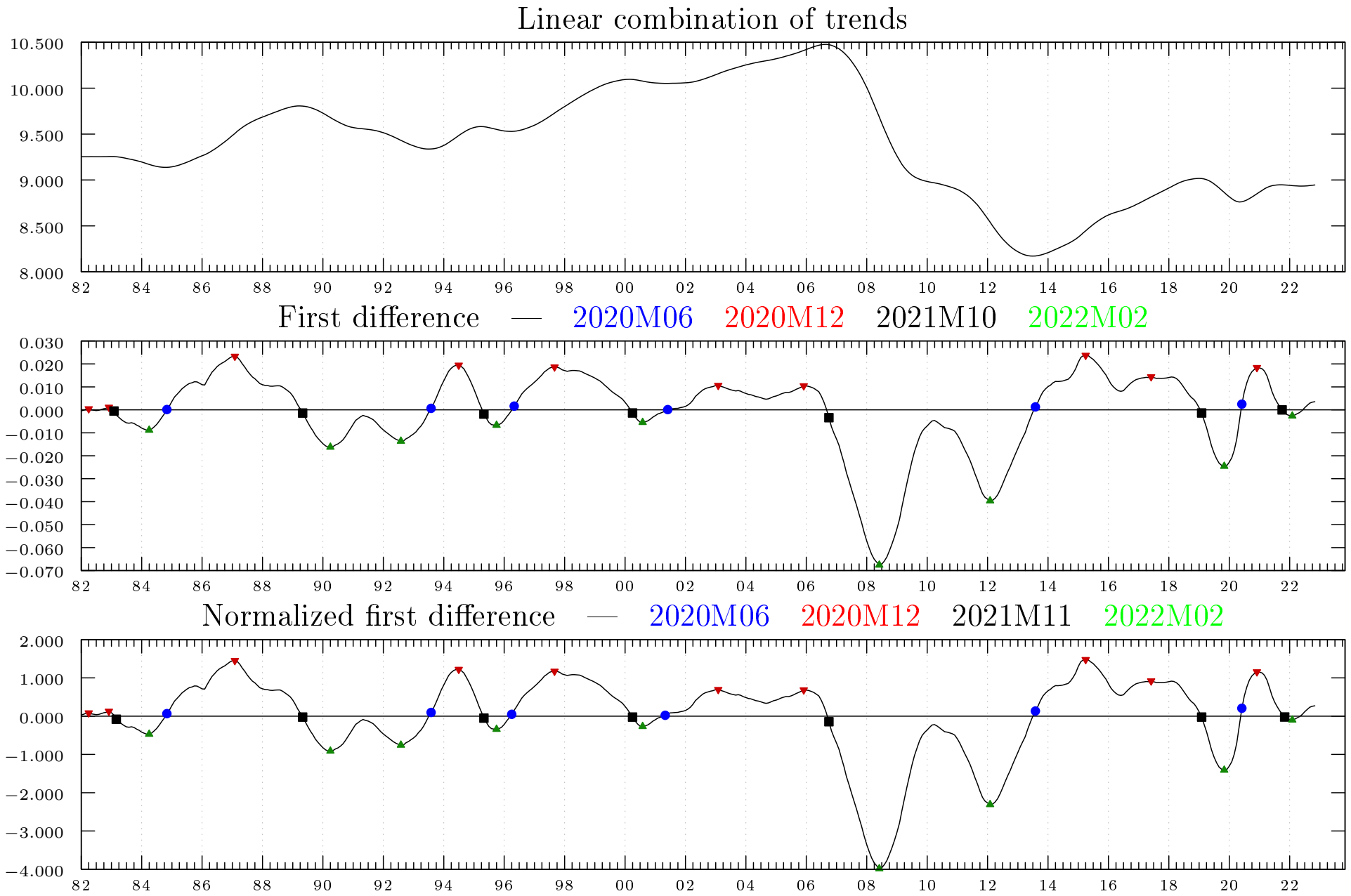
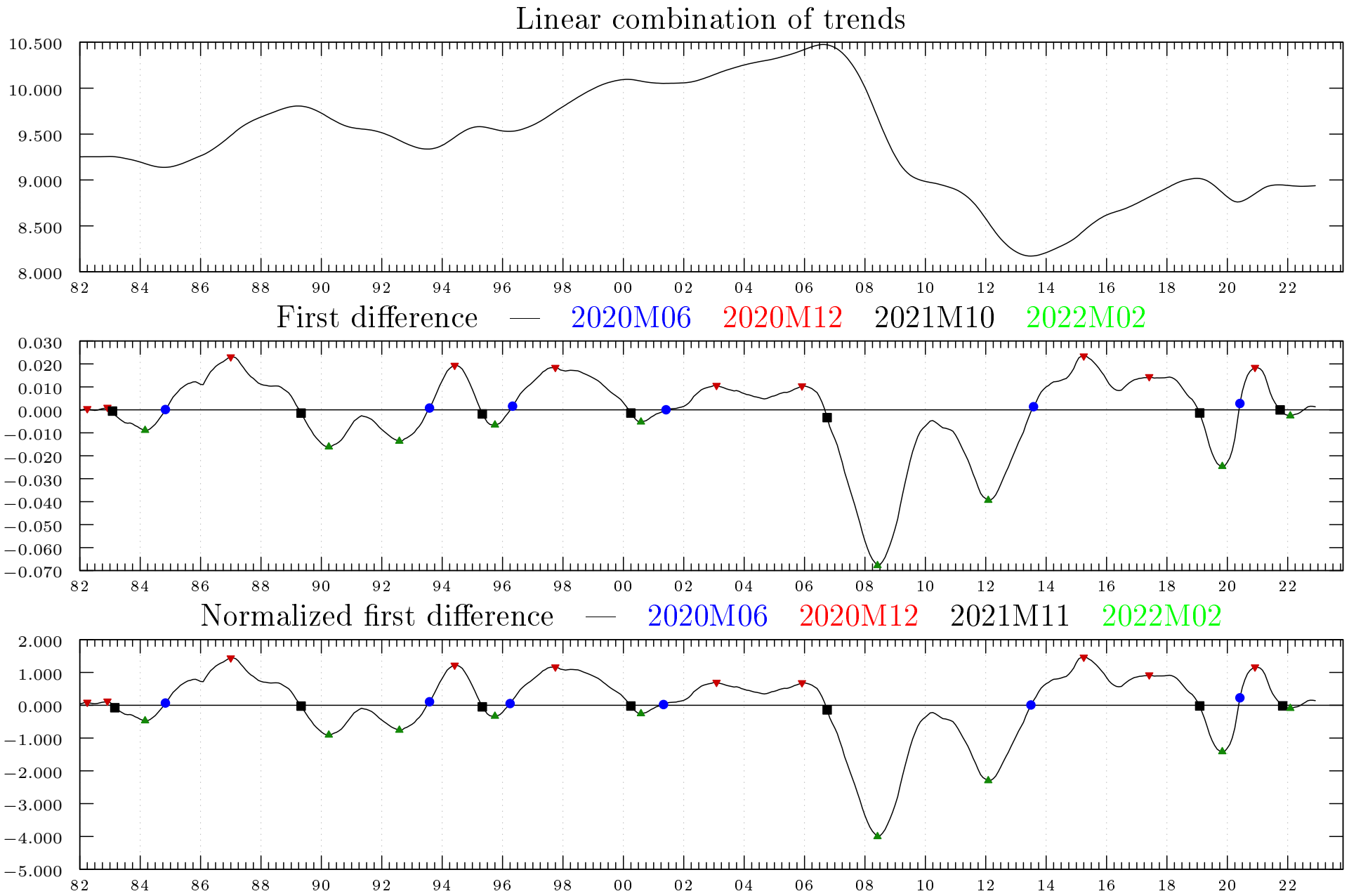
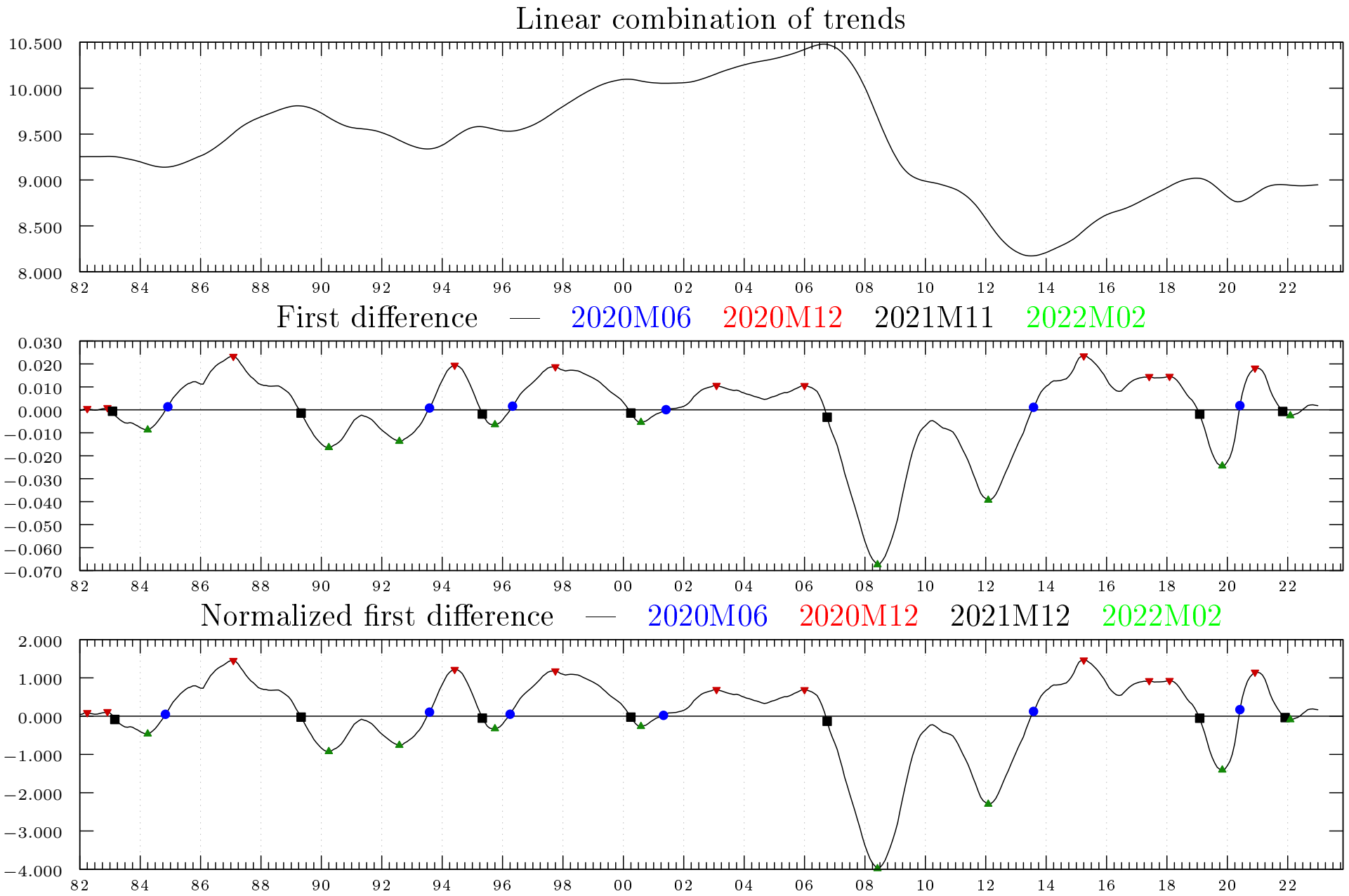


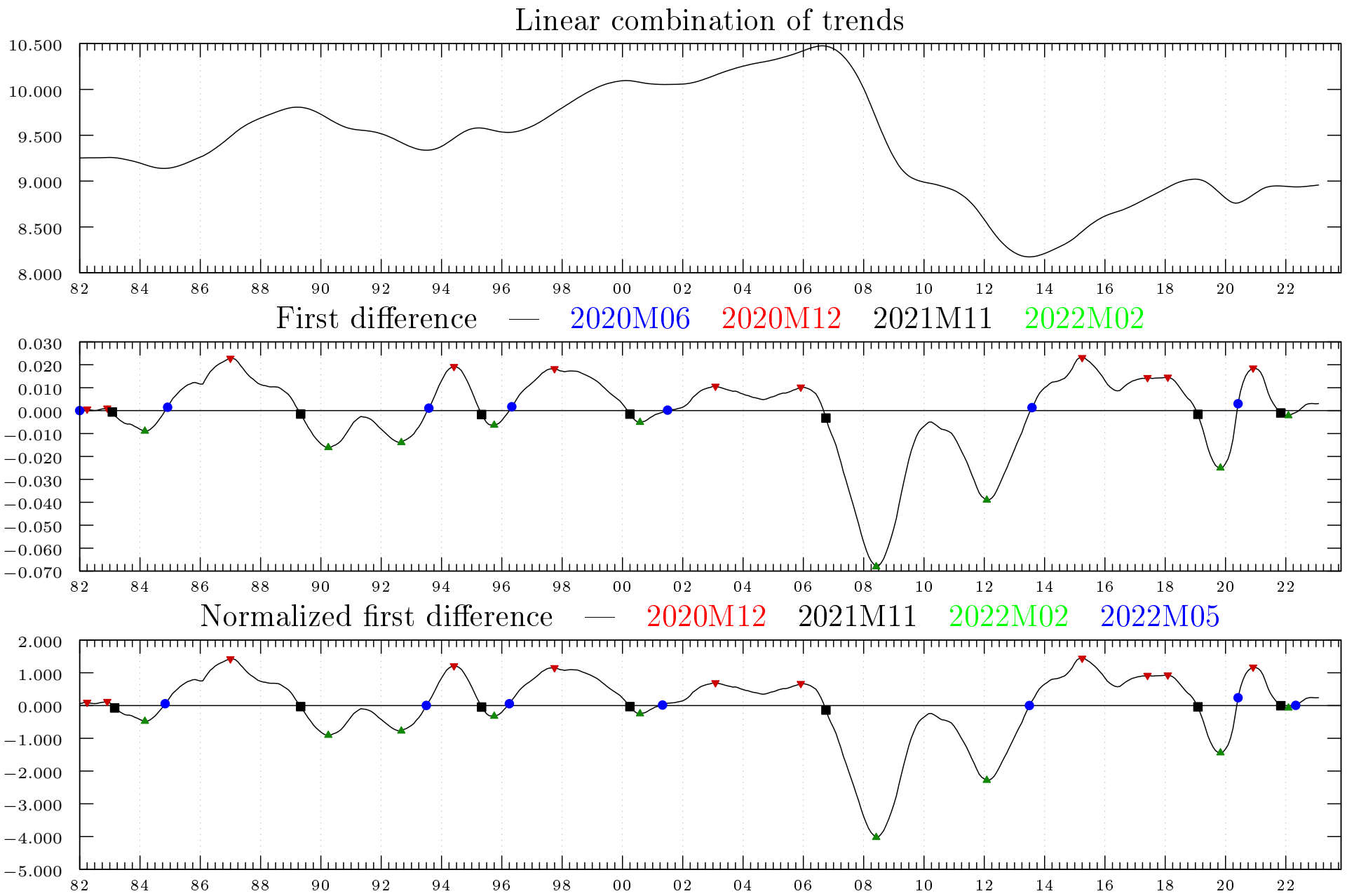
Composite Leading Indicator (1) : **2022M12** — (636)



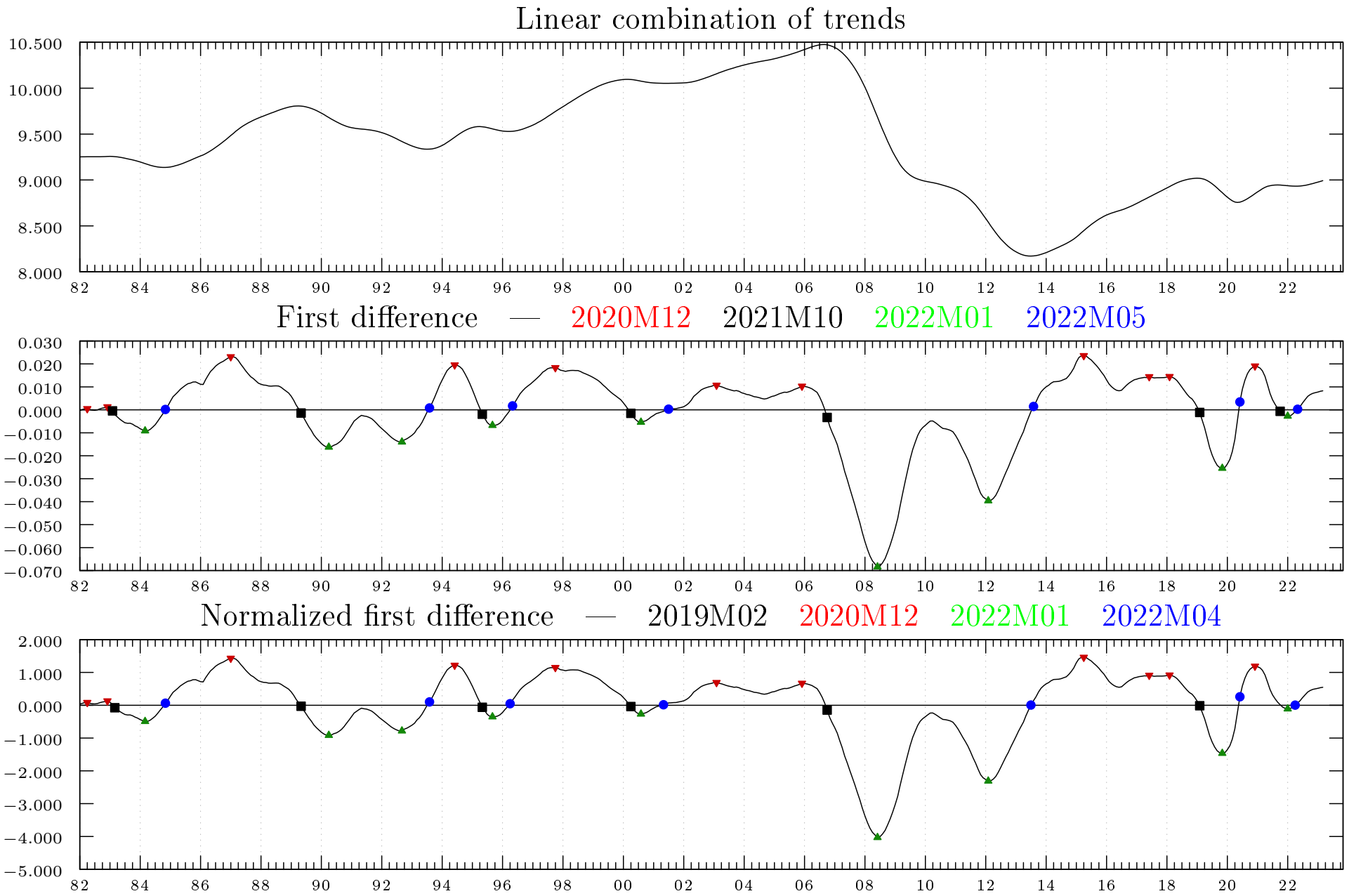
Composite Leading Indicator (1) : **2023M01** — (637)



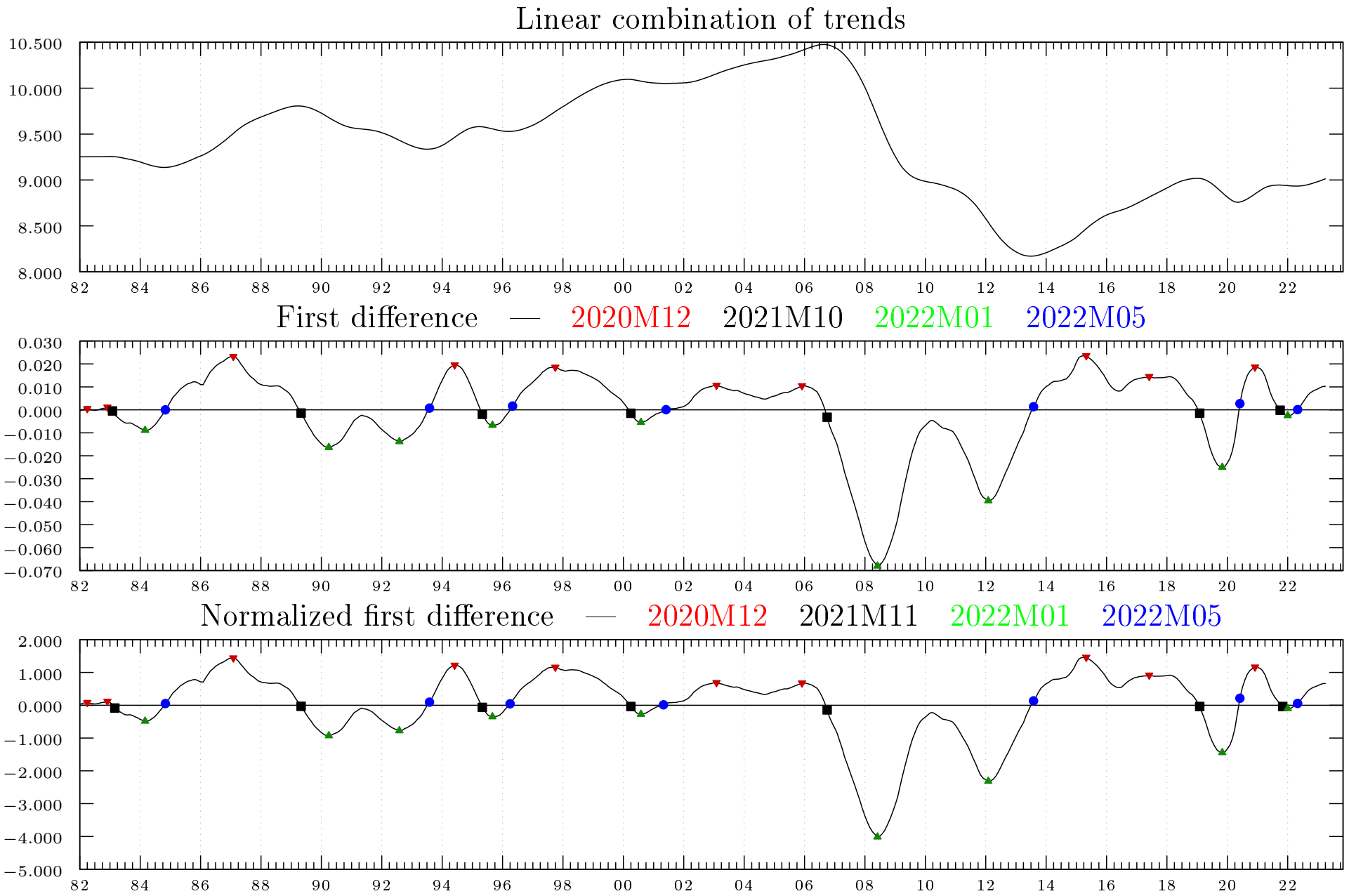
Composite Leading Indicator (1) : **2023M02** — (638)



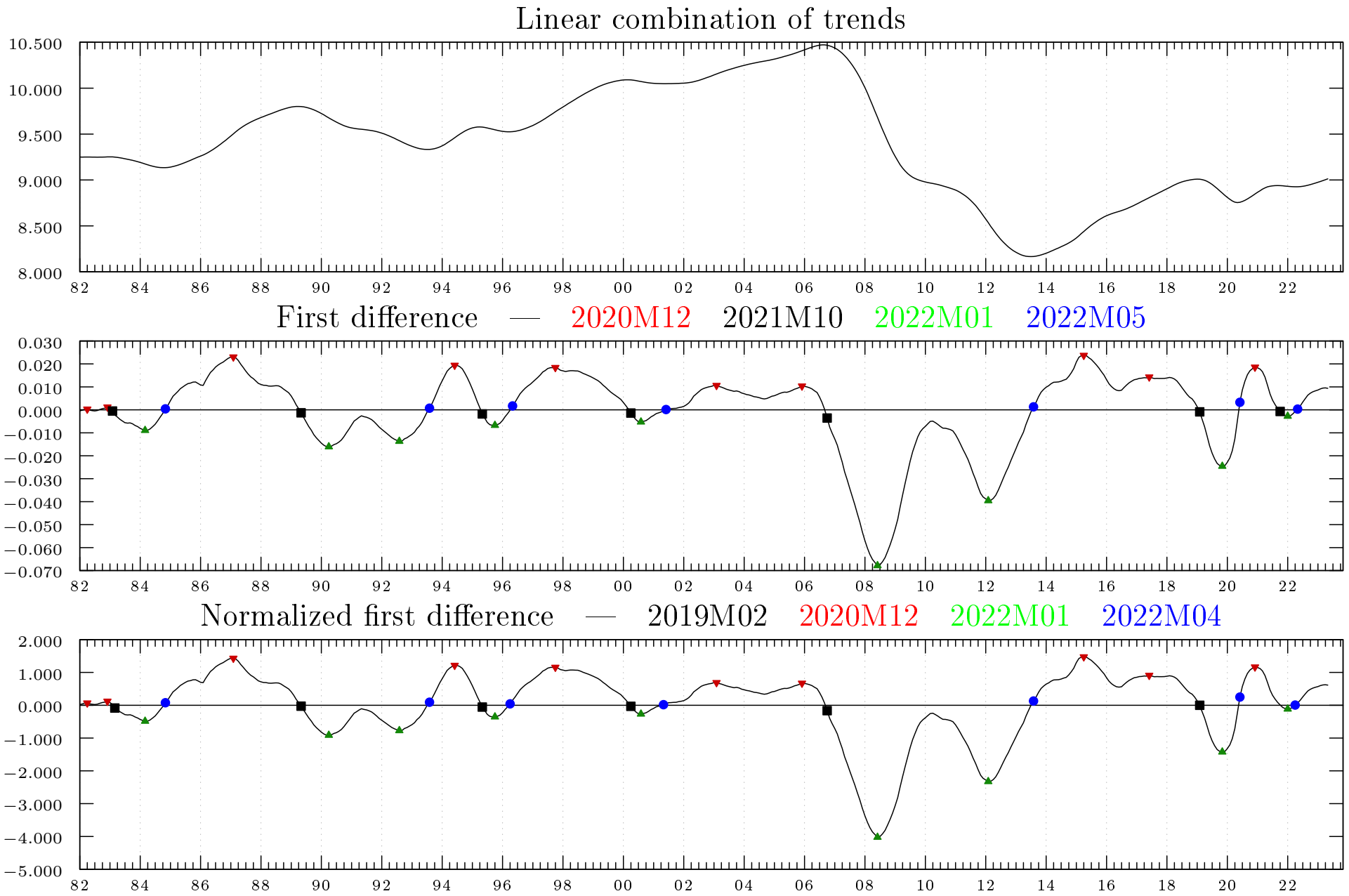
Composite Leading Indicator (1) : **2023M03** — (639)



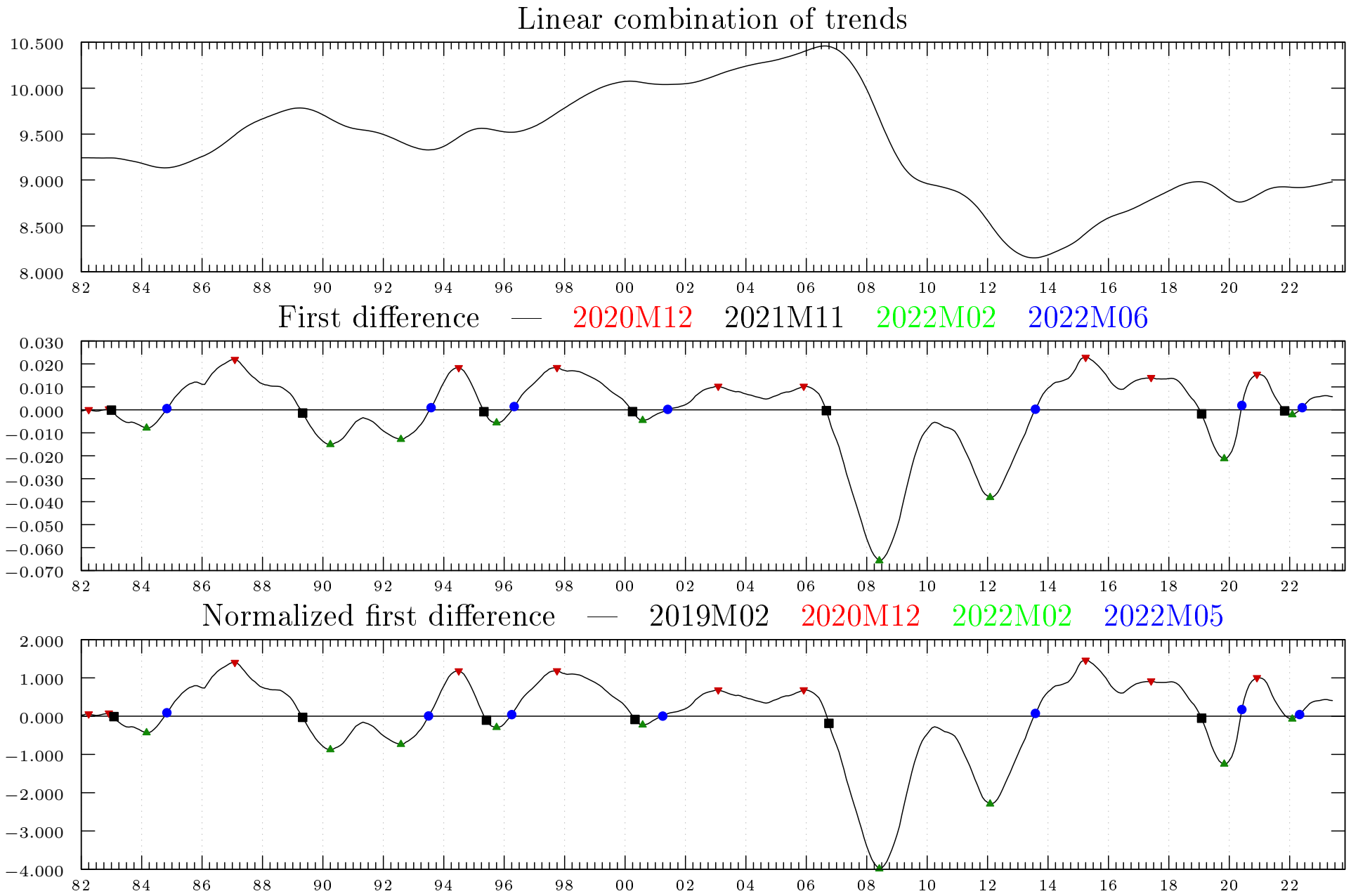
Composite Leading Indicator (1) : **2023M04** — (640)



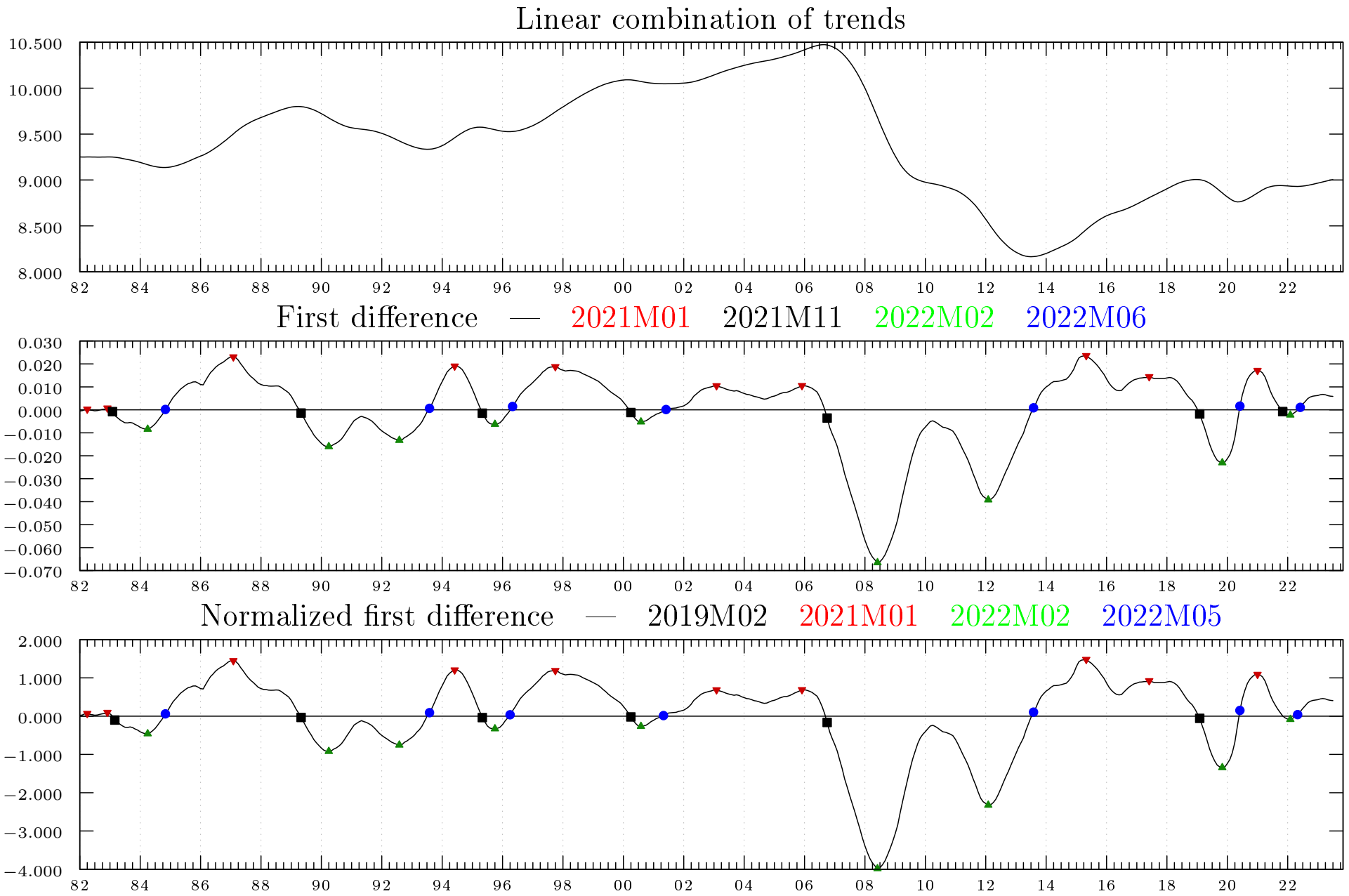
Composite Leading Indicator (1) : **2023M05** — (641)



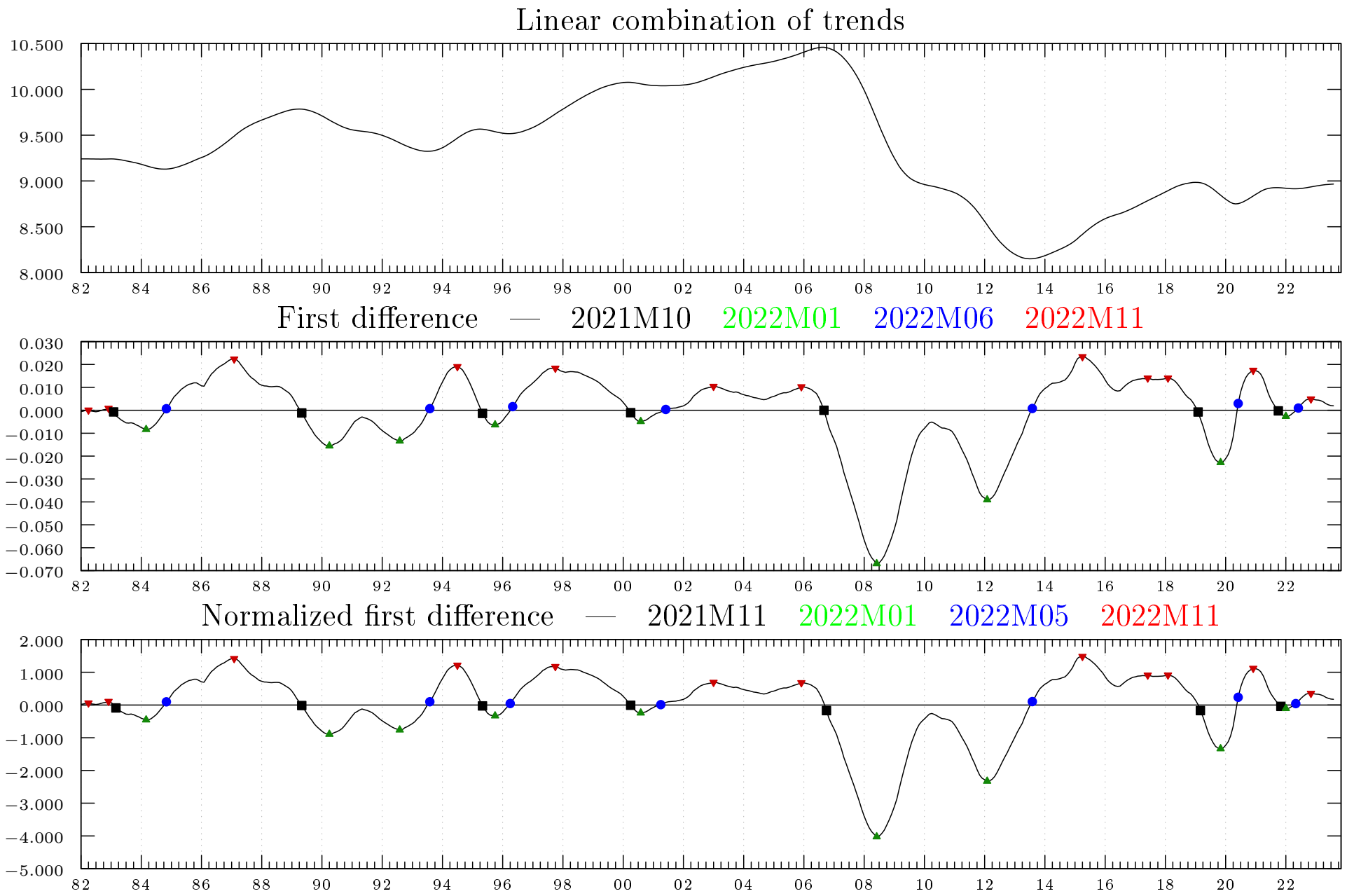
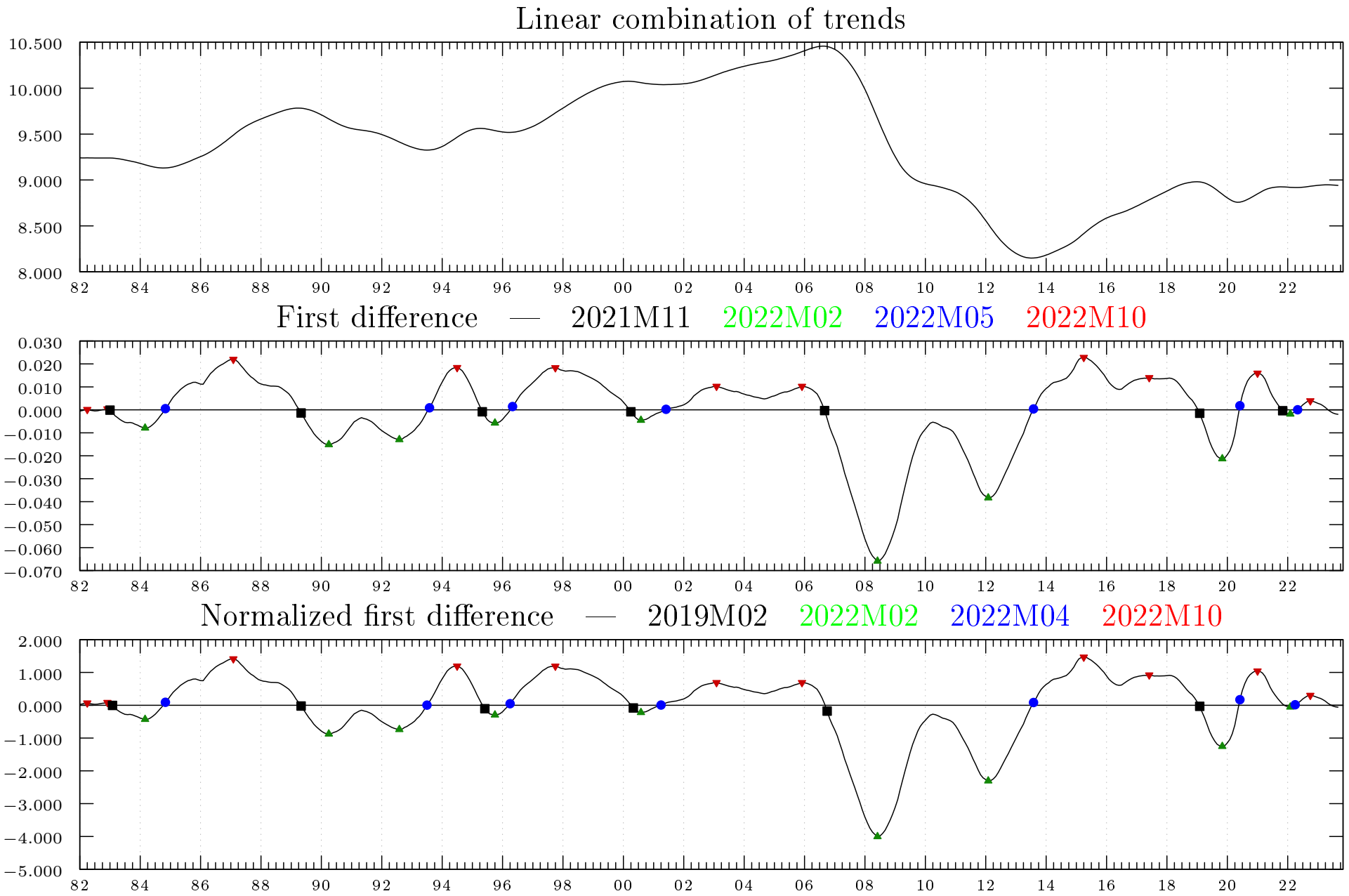
Composite Leading Indicator (1) : **2023M06** — (642)



Composite Leading Indicator (1) : **2023M07** — (643)



Composite Leading Indicator (1) : **2023M08** — (644)



Composite Leading Indicator (1) : **2023M09** — (645)