

APPENDIX A

Improvement of MM5 Urban Surface Characteristics

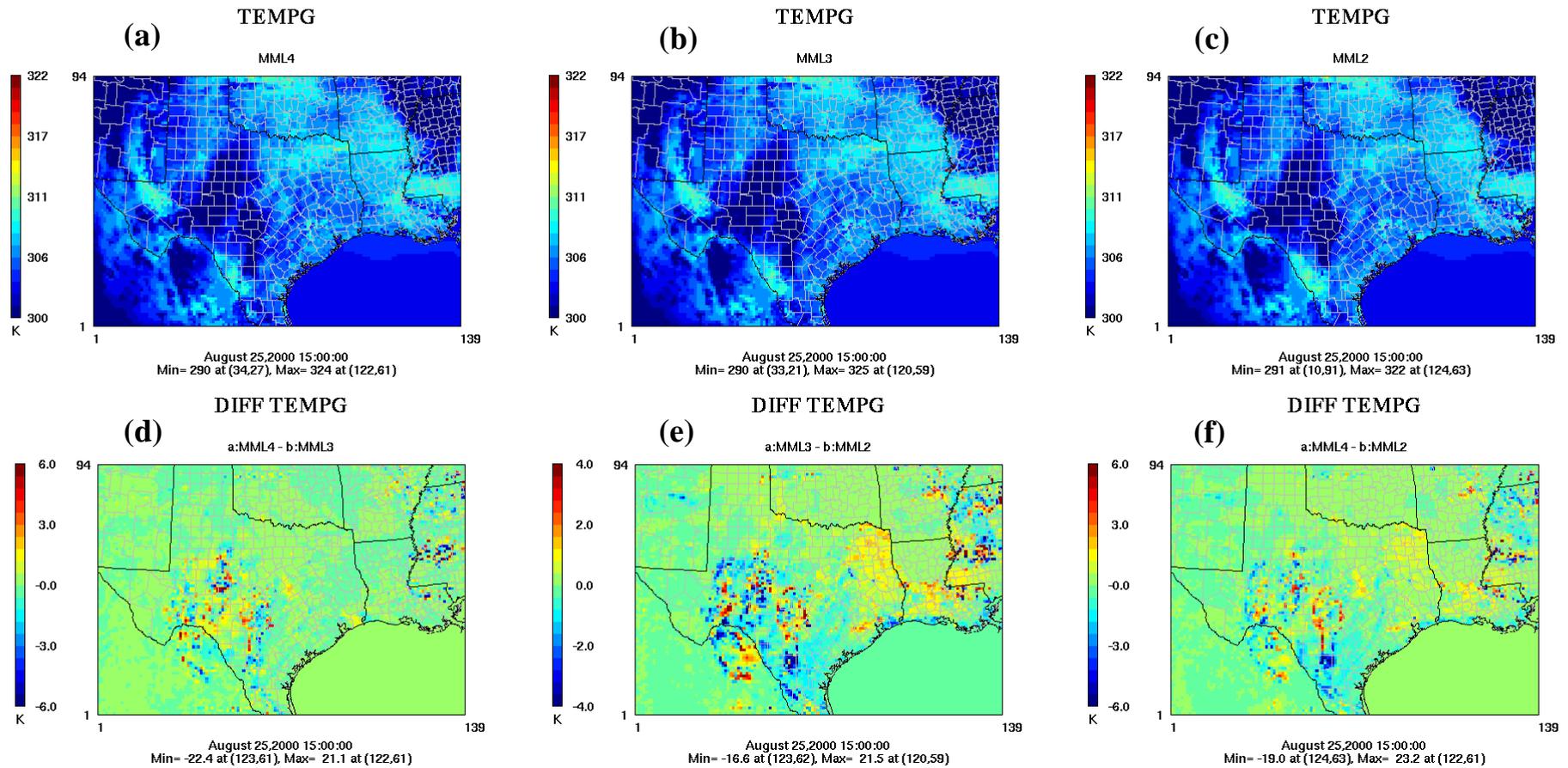


Figure A.1 12-km resolution spatial plots of ground temperature at 21 UTC 25 August 2000 from (a) MML4 (with new clay soil type), (b) MML3 (with new vegetation fraction), (c) MML2, (d) difference plot of MML4 and MML3, (e) difference plot of MML3 and MML2, (f) difference plot of MML4 and MML2.

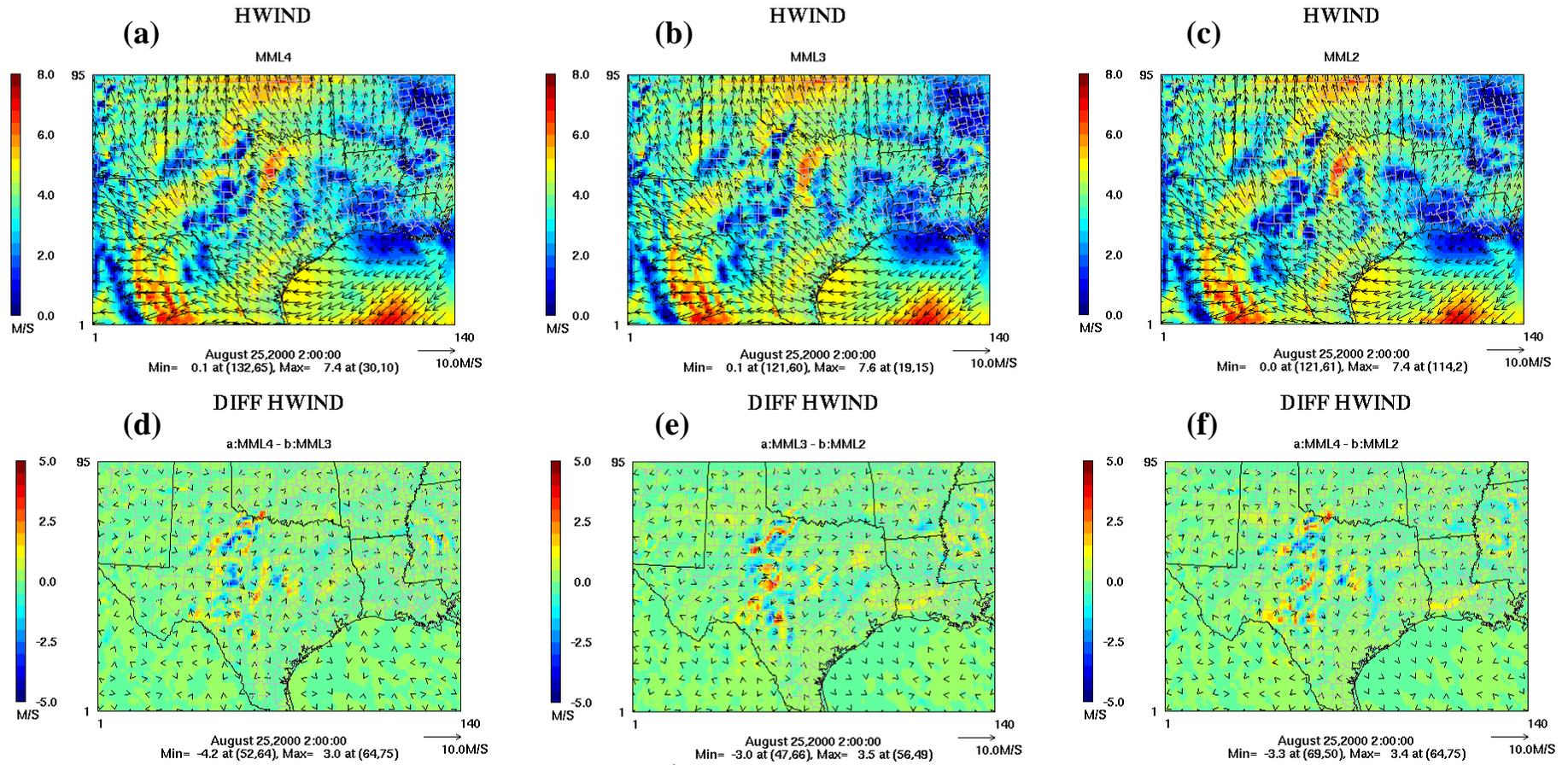


Figure A.2 Same as Figure A.1 but 12-km resolution spatial plots of 1st layer horizontal wind speed (shaded) and wind vector (arrow) at 2 UTC 25 August 2000.

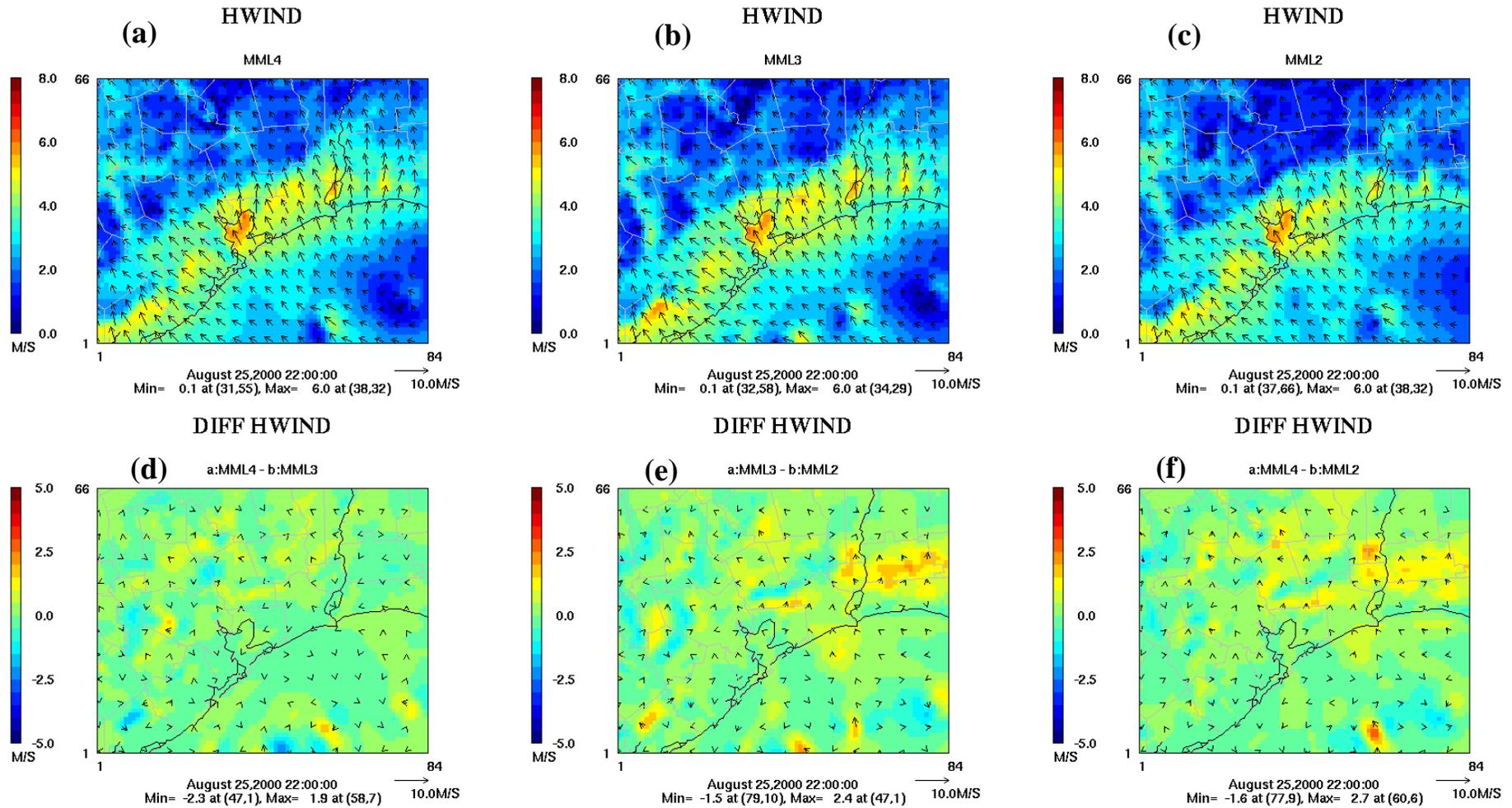


Figure A.3 Same as Figure A.1 but 4-km resolution spatial plots of 1st layer horizontal wind speed (shaded) and wind vector (arrow) at 22 UTC 25 August 2000.

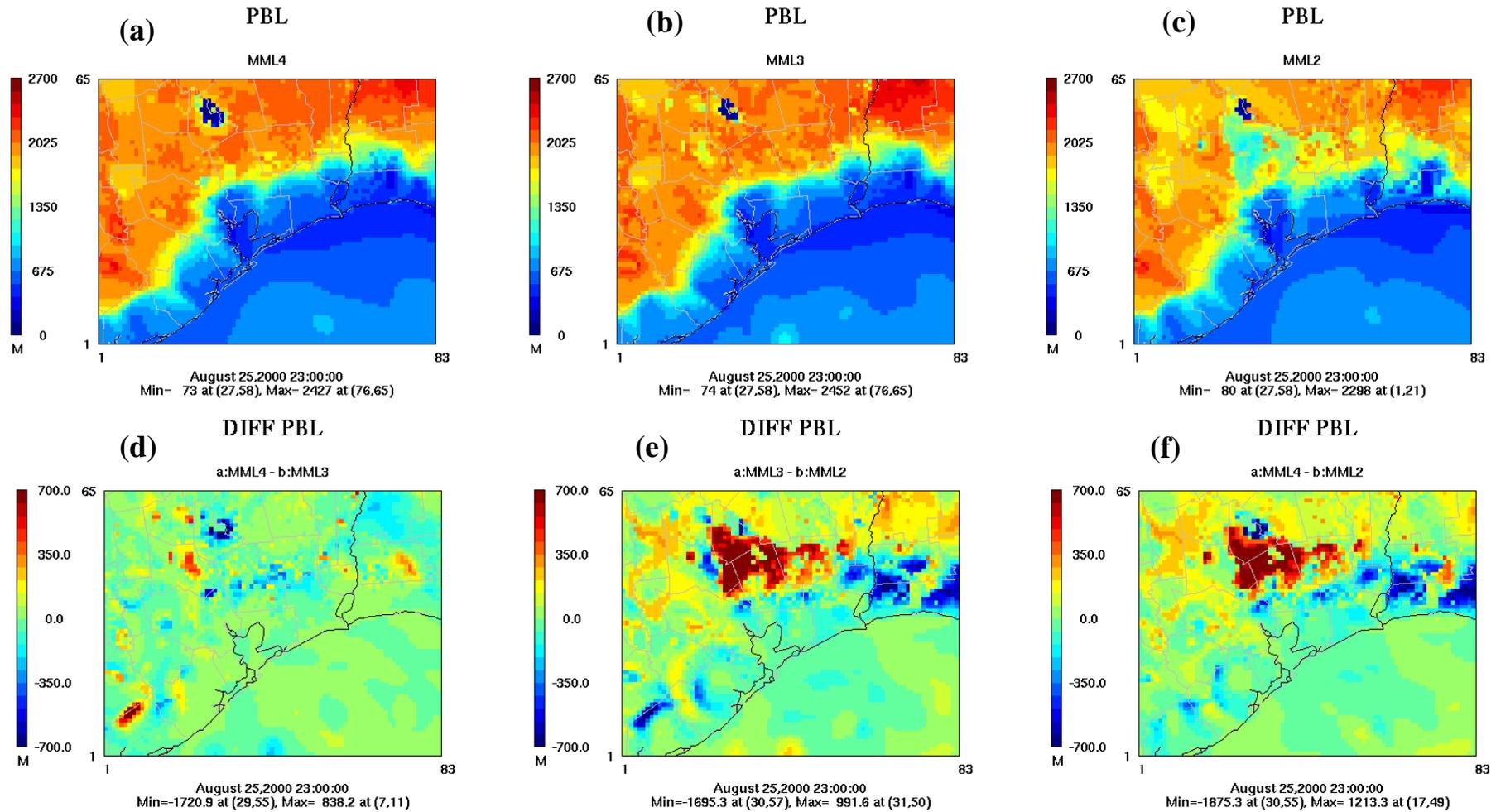


Figure A.4 Same as Figure A.1 but 4-km resolution spatial plots of PBL height at 23 UTC 25 August 2000.

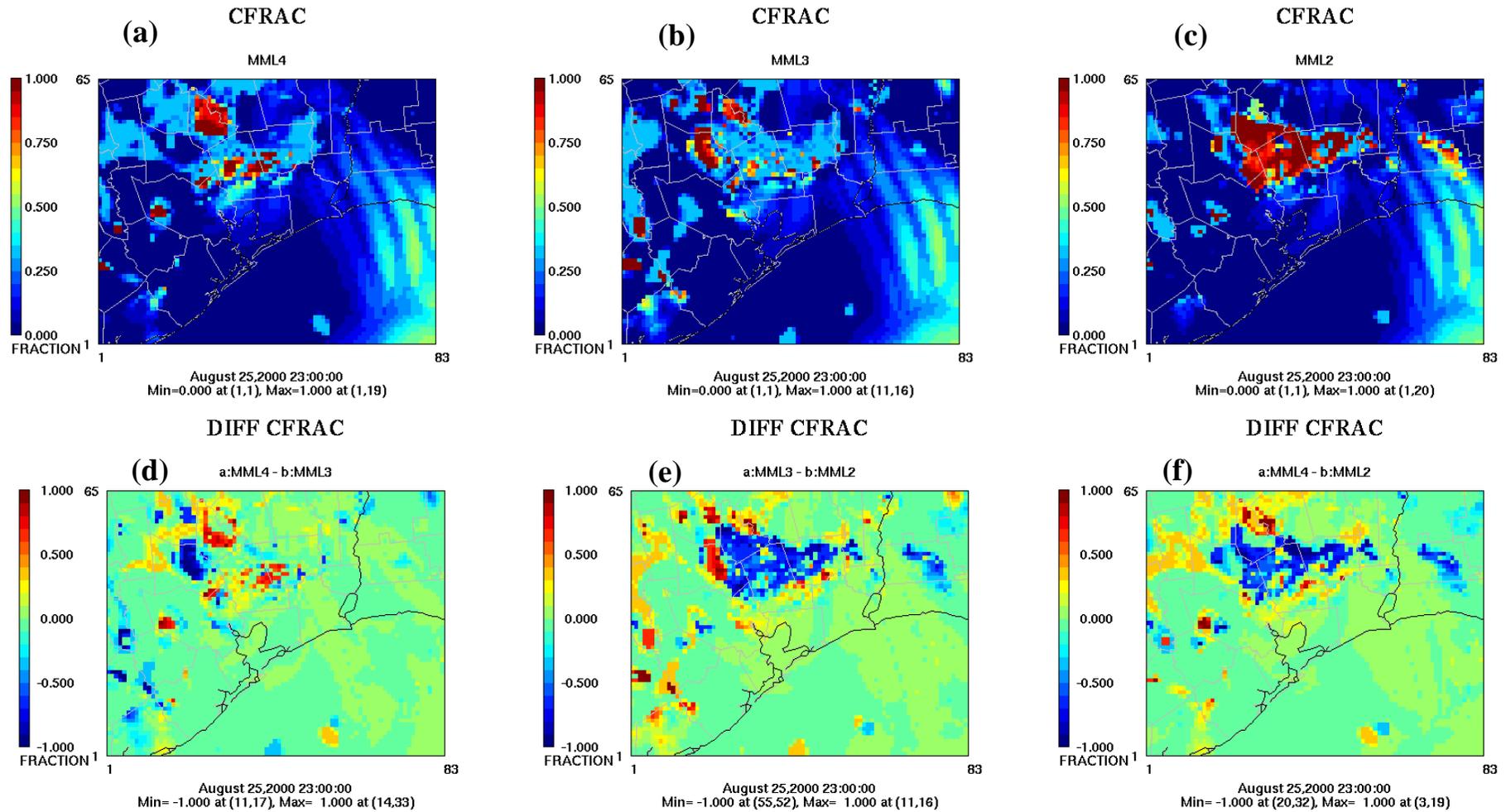


Figure A.5 Same as Figure A.1 but 4-km resolution spatial plots of cloud fraction at 23 UTC 25 August 2000.

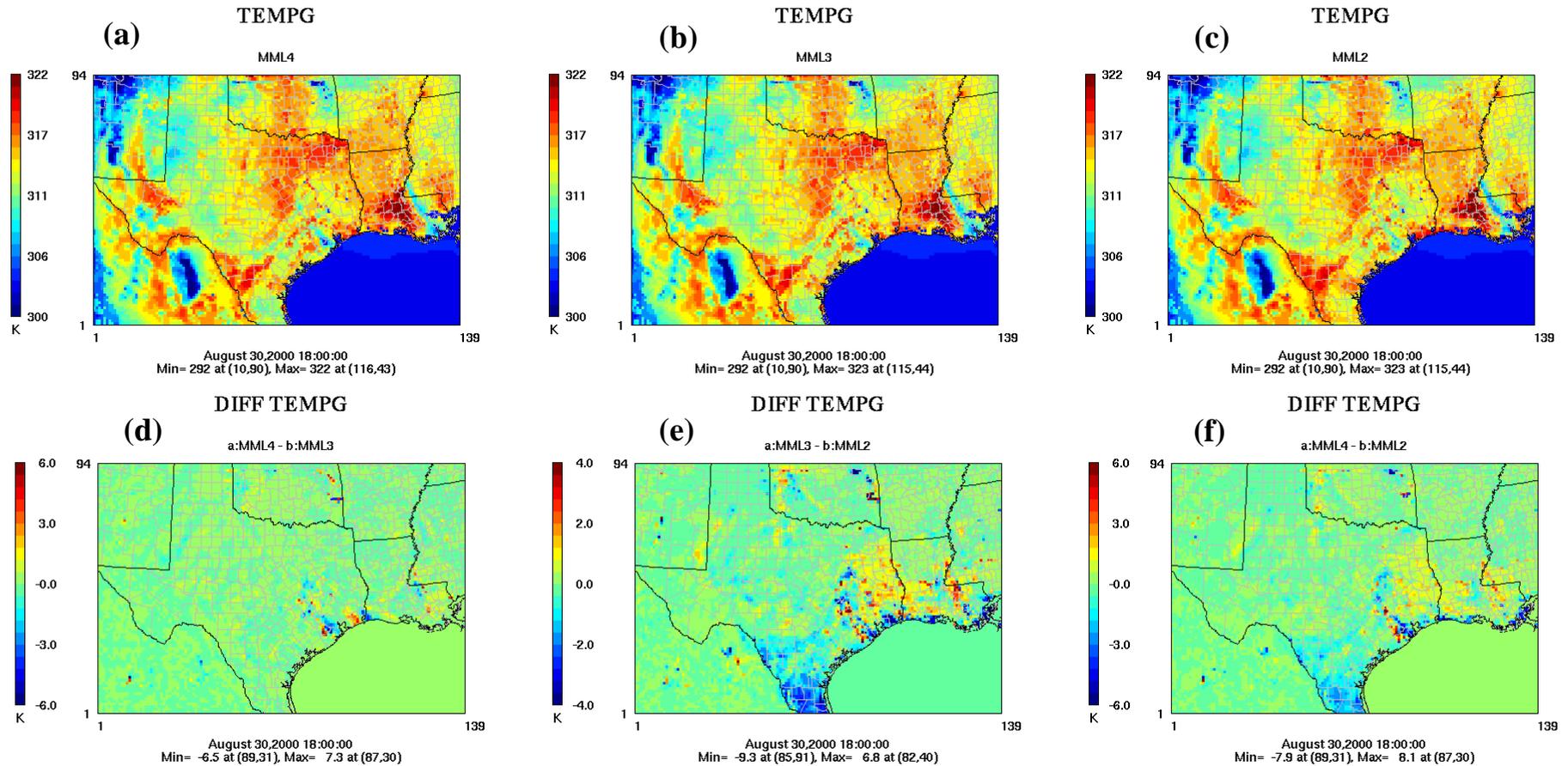


Figure A.6 12-km resolution spatial plots of ground temperature at 18 UTC 30 August 2000 from (a) MML4, (b) MML3, (c) MML2, (d) difference plot of MML4 and MML3, (e) difference plot of MML3 and MML2, (f) difference plot of MML4 and MML2.

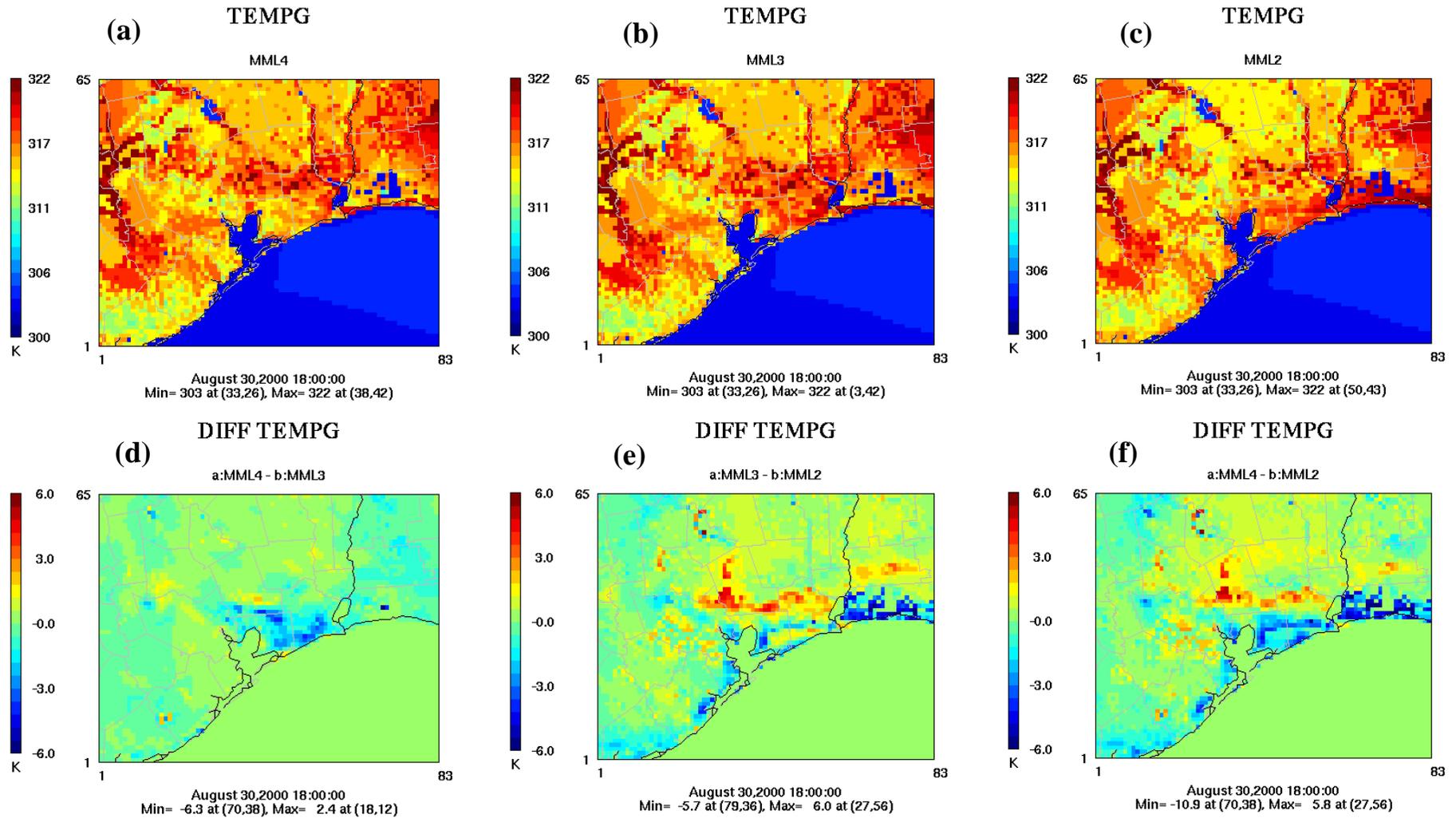


Figure A.7 Same as Figure A.6 but 4-km resolution spatial plots of ground temperature at 18 UTC 30 August 2000.

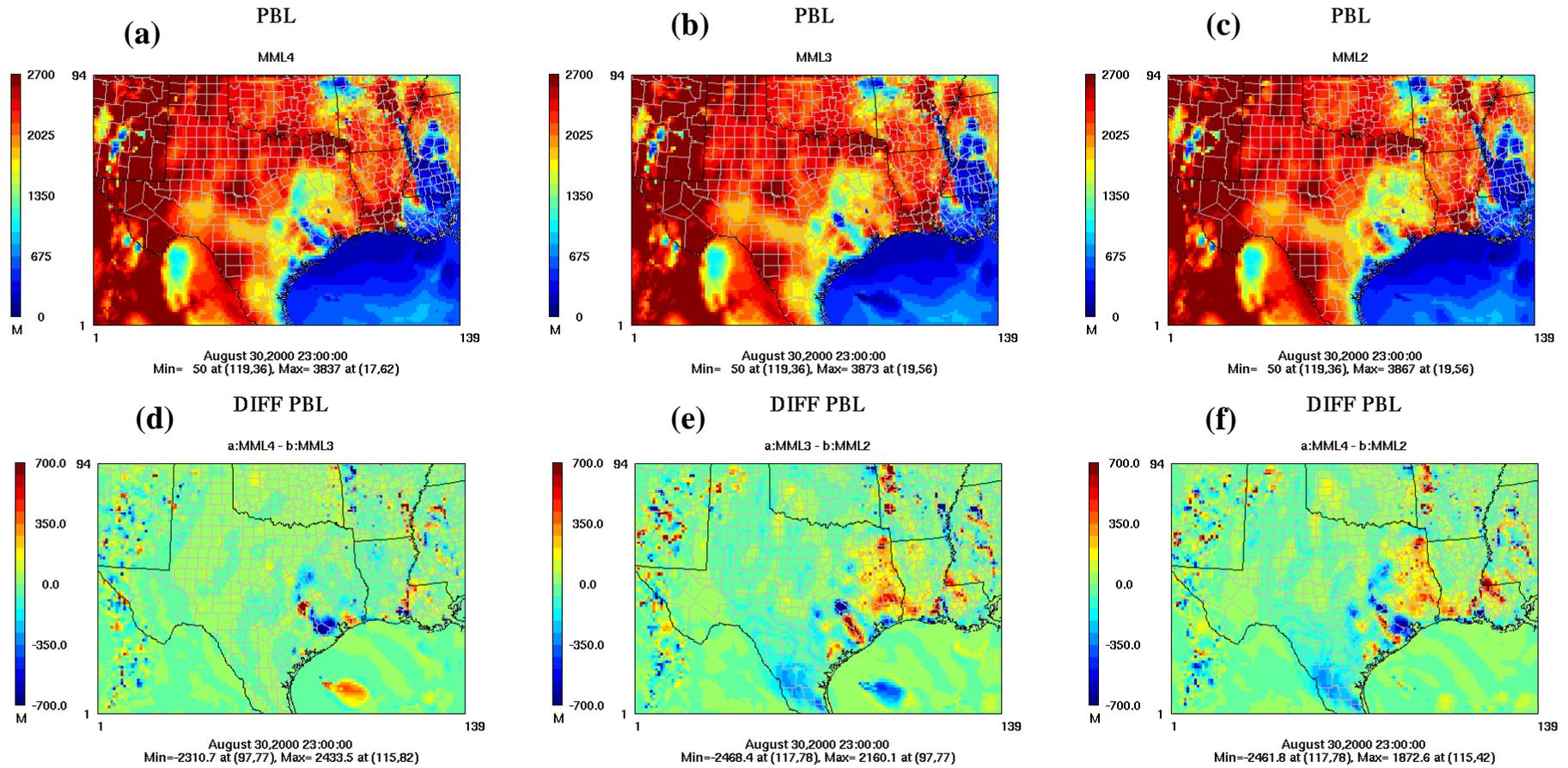


Figure A.8 Same as Figure A.6 but 12-km resolution spatial plots of PBL height at 23 UTC 30 August 2000.

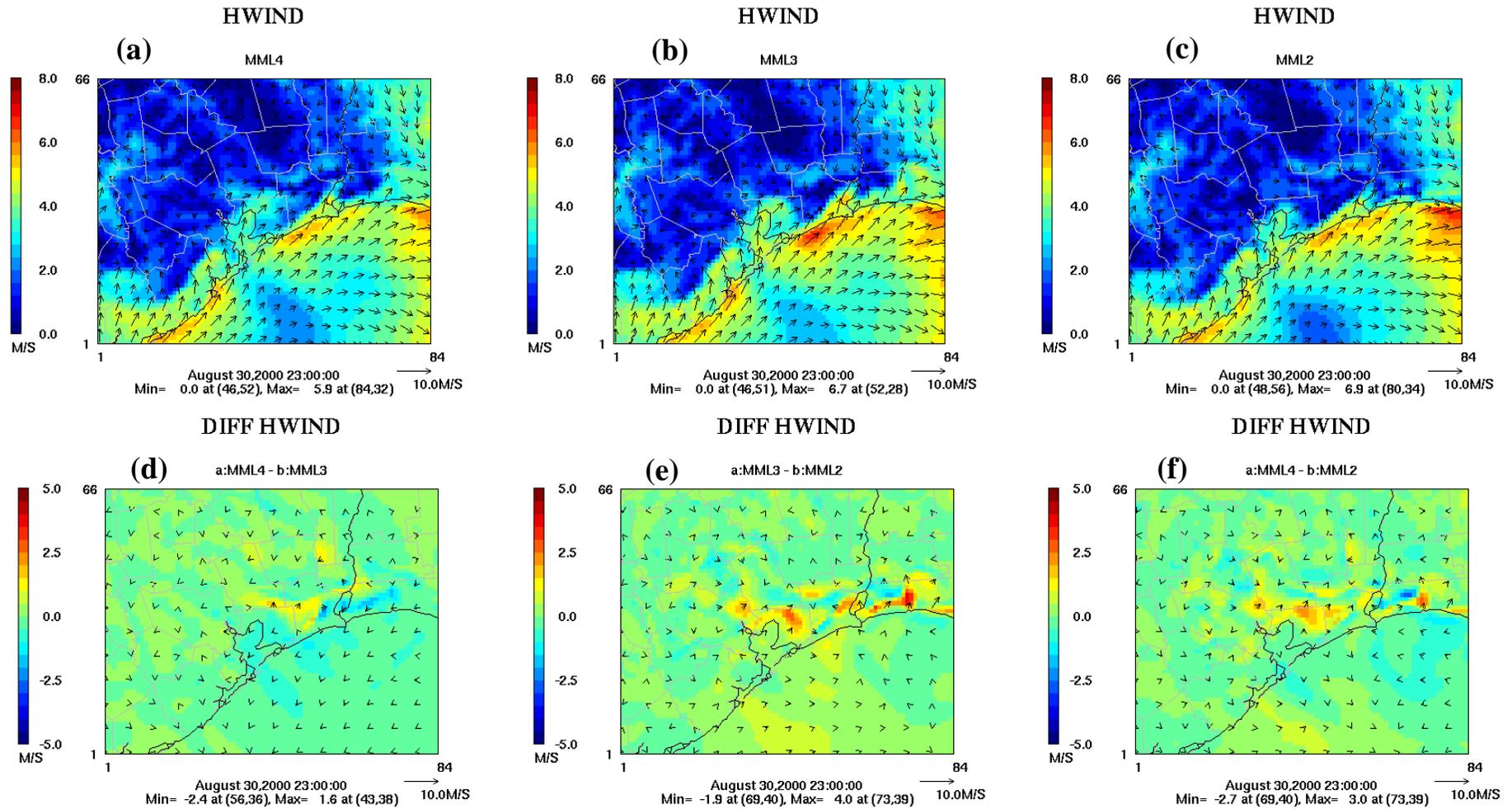


Figure A.9 Same as Figure A.6 but 4-km resolution spatial plots of horizontal wind speed (shaded) and wind vector (arrow) at 23 UTC 30 August 2000.

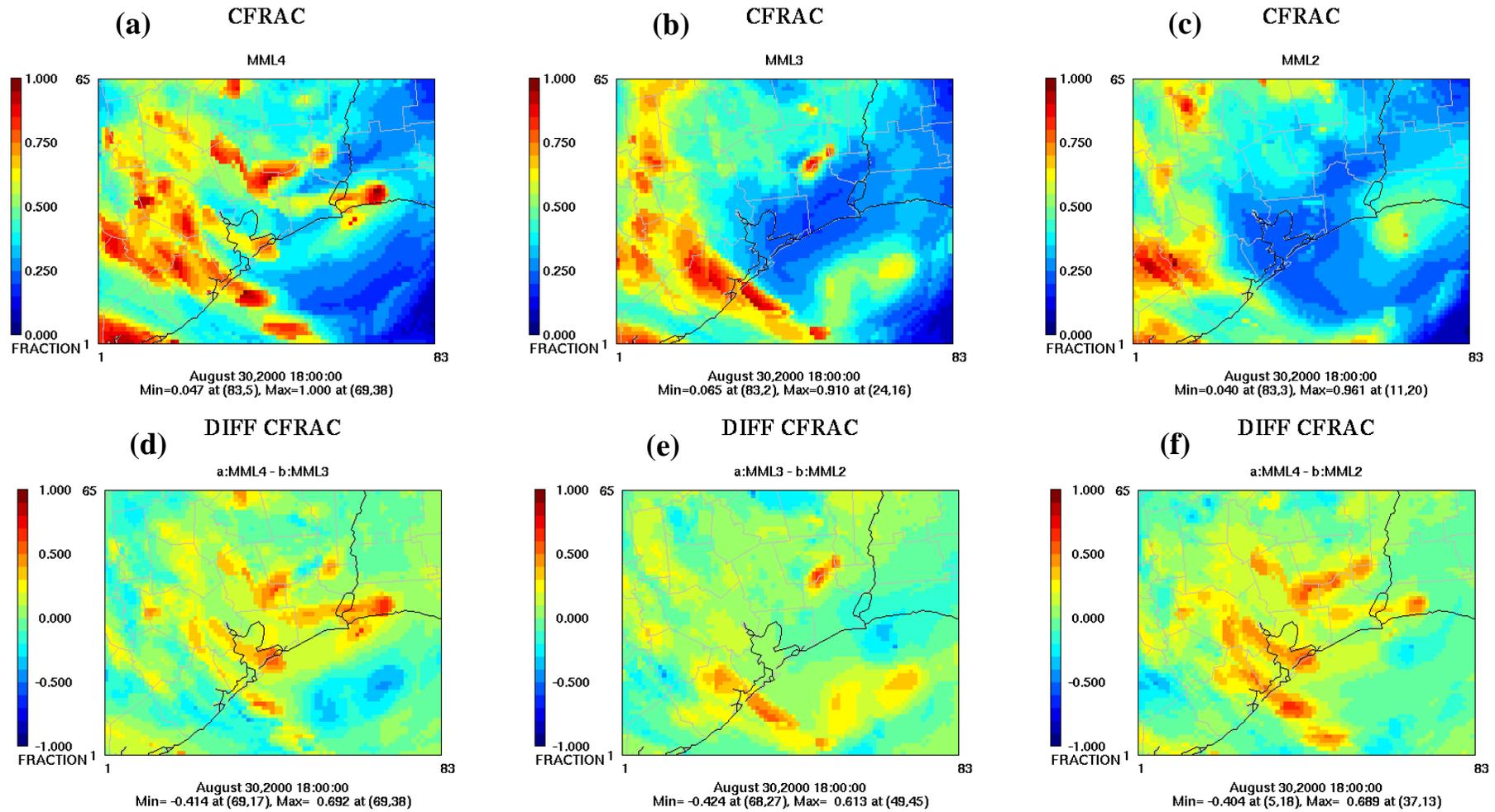


Figure A.10 Same as Figure A.6 but 4-km resolution spatial plots of cloud fraction at 18 UTC 30 August 2000.

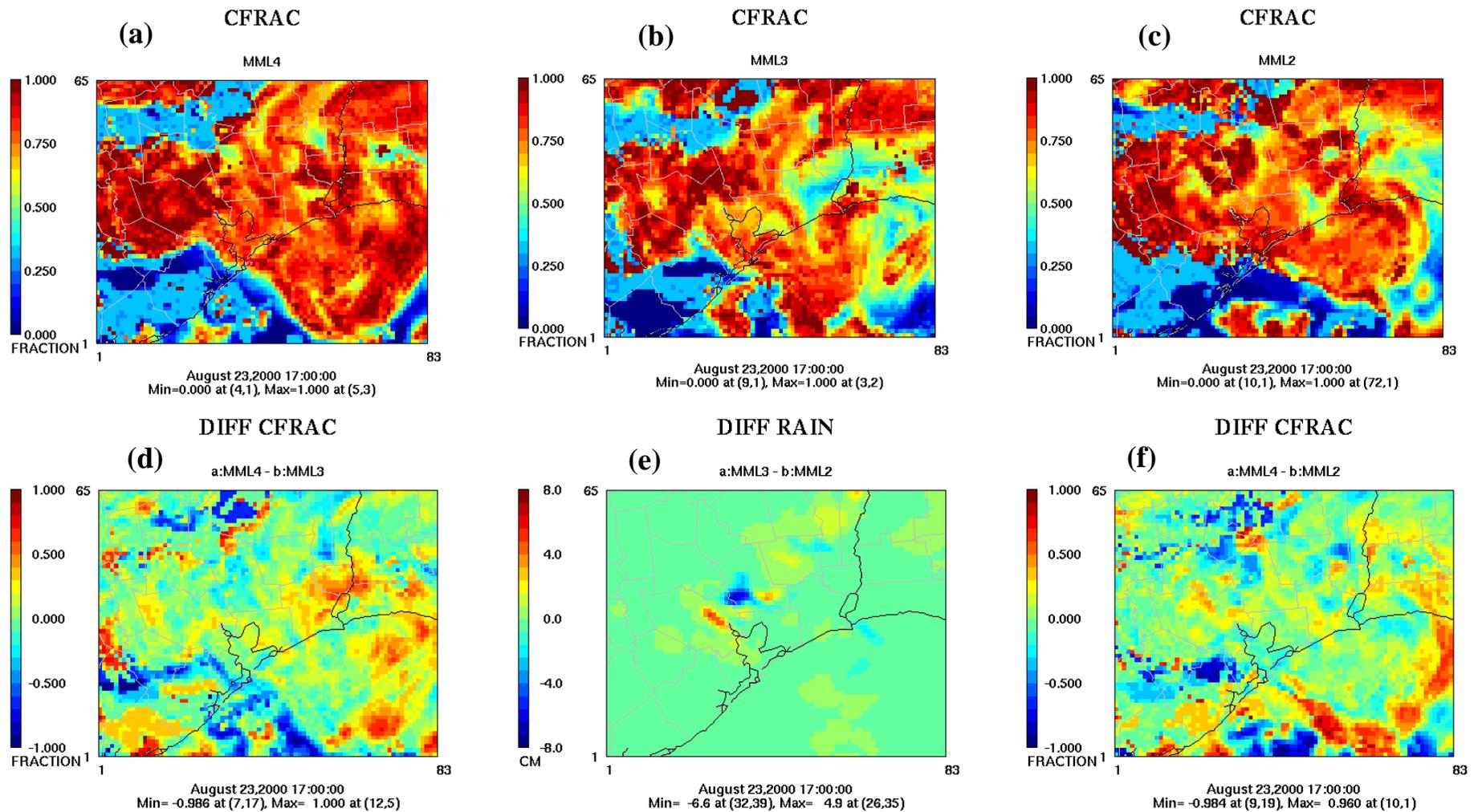


Figure A.11 12-km resolution spatial plots of cloud fraction at 17 UTC 23 August, 2000 from (a) MML4, (b) MML3, (c) MML2, (d) difference plot of MML4 and MML3, (e) difference plot of MML3 and MML2, (f) difference plot of MML4 and MML2.

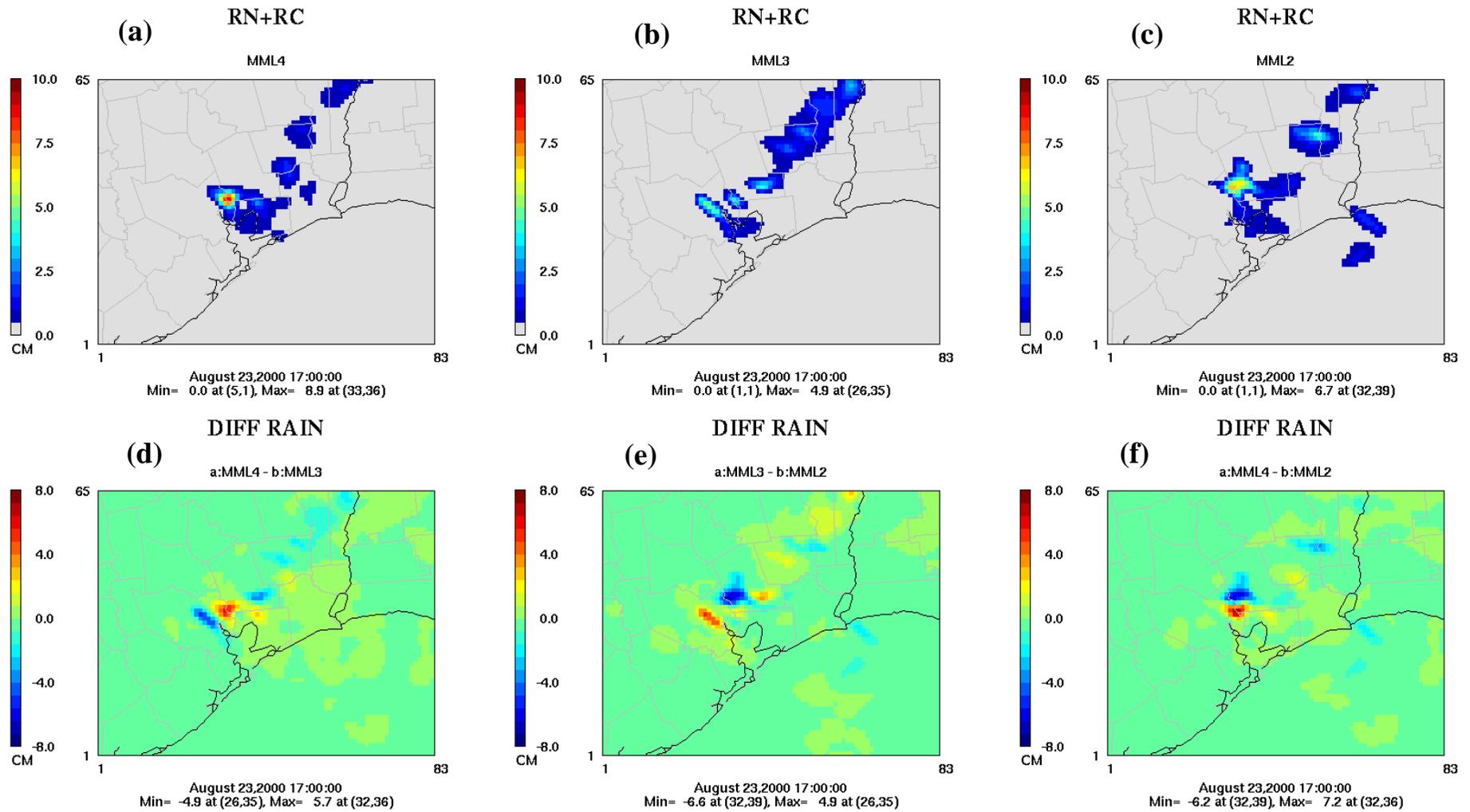


Figure A.12 Same as Figure A.11 but 4-km resolution spatial plots of precipitation at 17 UTC 23 August 2000.

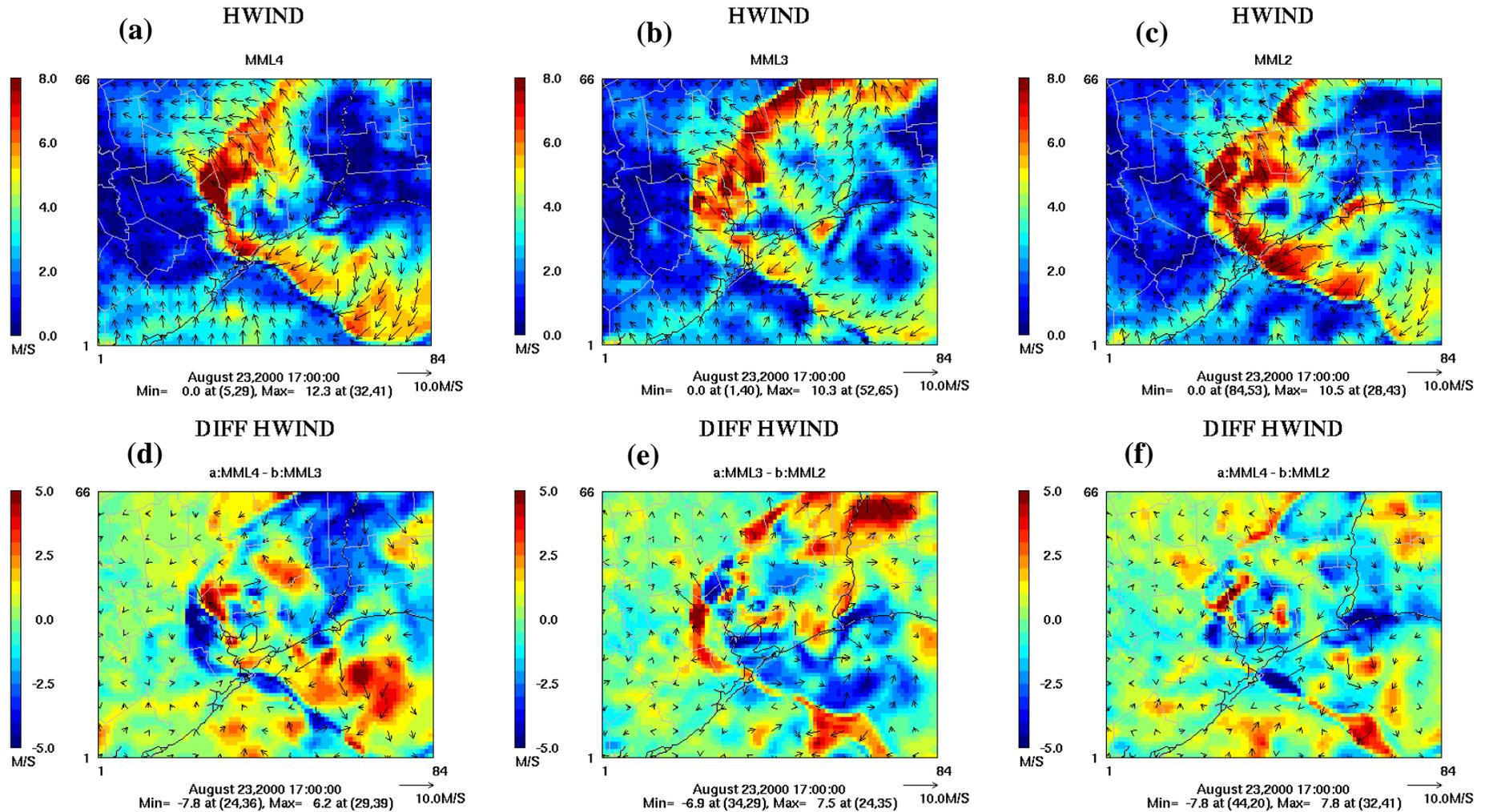


Figure A.13 Same as Figure A.11 but 4-km resolution spatial plots of 1st layer horizontal wind speed (shaded) and wind vector (arrow) at 17 UTC 23 August 2000.