Ex post analyses
Contribution of MSC-W

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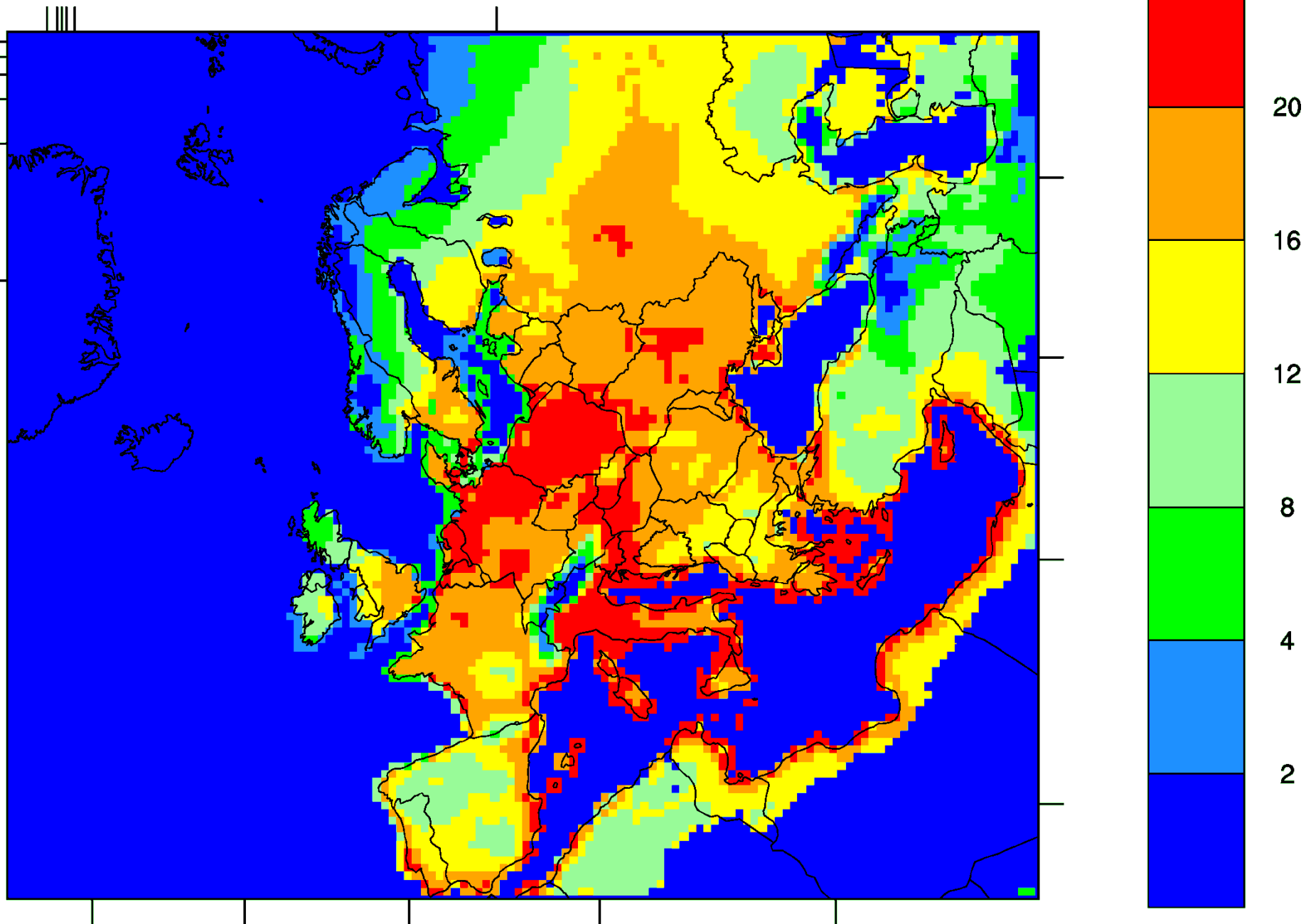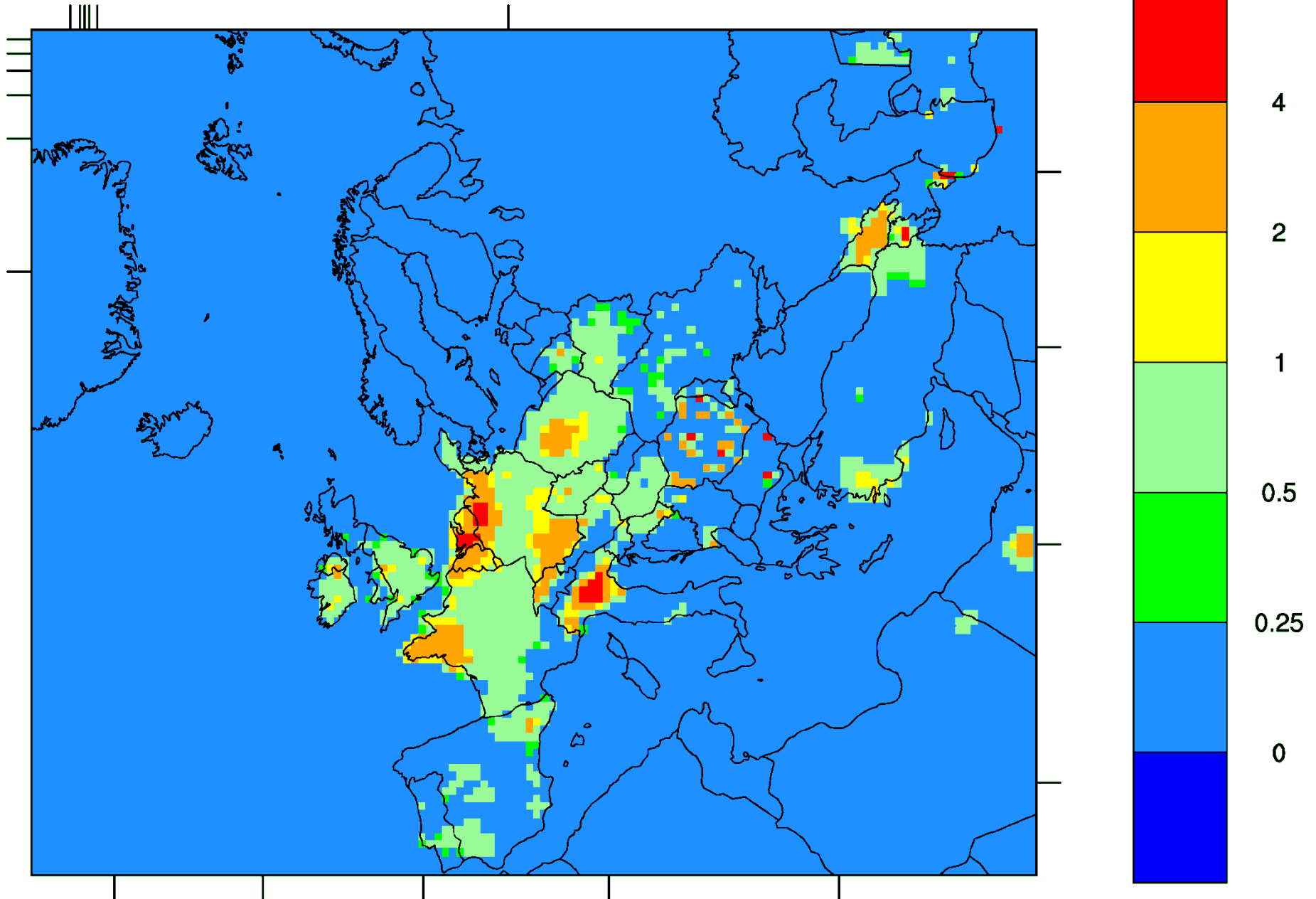MSC-W

EMEP calculations for ex post analyses

- Work started last summer
    - 5 different scenarios from IIASA (outdated)
    - 5 meteorological years (averaged)
- Calculations of air concentrations and depositions
- Output to CCE / effects community
- Time from delivery of scenario to results: ~ 2 weeks

2020NAT09_POD3.0_IAM_CR   [mmole/m2]

2020NAT09_SURF_ugN_NH3   ugN/m3

Unified EMEP model
List of output variables

Area_Conif_Frac	EVAP_NF	POD1.6_IAM_MF	SURF_ug_PM10
Area_Crops_Frac	Emis_mgm2_C5H8	POD3.0_IAM_CR	SURF_ug_PM25
Area_Decid_Frac	Emis_mgm2_co	POD6.0_IAM_CR	SURF_ug_PMc
Area_Grid_km2	Emis_mgm2_nh3	PSURF	SURF_ug_PPM25
Area_Seminat_Frac	Emis_mgm2_nox	RH_BF	SURF_ug_PPM25_FIRE
COLUMN_C2H6_k20	Emis_mgm2_pm25	RH_CF	SURF_ug_PPMCO
COLUMN_CH4_k20	Emis_mgm2_pmco	RH_DF	SURF_ug_SEASALT_C
COLUMN_CO_k20	Emis_mgm2_sox	RH_NF	SURF_ug_SEASALT_F
COLUMN_HCHO_k20	Emis_mgm2_voc	Rns_NH3_Grid	SURF_ug_SIA
COLUMN_NO2_k20	FstO3_BF	Rns_SO2_Grid	SoilWater
CanopyO3_BF	FstO3_CF	Rs_NH3_Grid	SoilWater_deep
CanopyO3_CF	FstO3_DF	Rs_SO2_Grid	USTAR_NWP
CanopyO3_DF	FstO3_NF	SOMO35	VG_O3_Grid
CanopyO3_NF	Gns_NH3_Grid	SURF_MAXO3	VPD_BF
DDEP_OXN_m2Conif	Gns_SO2_Grid	SURF_ppbC_VOC	VPD_CF
DDEP_OXN_m2Crops	Gsto_BF	SURF_ppb_HCHO	VPD_DF
DDEP_OXN_m2Decid	Gsto_CF	SURF_ppb_NO	VPD_NF
DDEP_OXN_m2Grid	Gsto_DF	SURF_ppb_NO2	WDEP_HNO3
DDEP_OXN_m2Seminat	Gsto_NF	SURF_ppb_O3	WDEP_NH3
DDEP_RDN_m2Conif	HMIX	SURF_ugC_HCHO	WDEP_OXN
DDEP_RDN_m2Crops	MMAOT40_IAM_CR	SURF_ugN_ANH4	WDEP_PREC
DDEP_RDN_m2Decid	MMAOT40_IAM_DF	SURF_ugN_HNO3	WDEP_RDN
DDEP_RDN_m2Grid	MMAOT40_IAM_MF	SURF_ugN_NH3	WDEP_SO2
DDEP_RDN_m2Seminat	POD0.0_IAM_CR	SURF_ugN_NO	WDEP_SO4
DDEP_SOX_m2Conif	POD0.0_IAM_DF	SURF_ugN_NO2	WDEP_SOX
DDEP_SOX_m2Crops	POD1.0_CF	SURF_ugN_NOX	WDEP_aNH4
DDEP_SOX_m2Decid	POD1.0_DF	SURF_ugN_OXN	WDEP_pNO3_c
DDEP_SOX_m2Grid	POD1.0_IAM_DF	SURF_ugN_PNO3_C	WDEP_pNO3_f
DDEP_SOX_m2Seminat	POD1.0_IAM_MF	SURF_ugN_PNO3_F	lat
EUAOT40_IAM_CR	POD1.6_BF	SURF_ugN_RDN	lon
EVAP_BF	POD1.6_CF	SURF_ugN_TNO3	
EVAP_CF	POD1.6_DF	SURF_ugS_SO2	
EVAP_DF	POD1.6_IAM_DF	SURF_ugS_SO4	

Future work

- Model calculations with relevant emission scenarios : co-operation with IIASA & CCE & effects community