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Purpose: Processing crop areas and yields from EarthStat

1. Downloaded data from http://www.earthstat.org/harvested-area-yield-175-crops/

2. Sorted crop types to align with Eurostat categories (CROPNAME is the code given in EarthStat, OUR_CODE is the crop code used in D1 database metadata and reflects the Eurostat categories). Note: not all crops are processed here, only those who have NUTSO data in Eurostat (e.g., cereals have NUTS2 data in Eurostat, which is used preferentially over EarthStat data).

CROPNAME	Cropname_FAO	GROUP	OUR_CODE	
berrynes	Berries Nes	Fruit	berries	
blueberry	Blueberries	Fruit	berries	
cranberry	Cranberries	Fruit	berries	
currant	Currants	Fruit	berries	
gooseberry	Gooseberries Fruit		berries	
rasberry	Raspberries Fruit		berries	
strawberry	Strawberries	Fruit	berries	
cabbage	Cabbages and other brassicas	Vegetables&Melons	brassic	
cauliflower	Cauliflowers and broccoli	Vegetables&Melons	brassic	
citrusnes	Citrus fruit, nes	Fruit	citrus	
grapefruitetc	Grapefruit (inc. pomelos)	Fruit	citrus	
lemonlime	Lemons and limes	Fruit	citrus	
orange	Oranges	Fruit	citrus	
tangetc	Tangerines, mandarins, clem.	Fruit	citrus	
apple	Apples	Fruit	frtrees	
apricot	Apricots	Fruit	frtrees	
cherry	Cherries	Fruit	frtrees	
peachetc	Peaches and nectarines	Fruit	frtrees	
pear	Pears	Fruit	frtrees	
plum	Plums and sloes	Fruit	frtrees	
quince	Quinces	Fruit	frtrees	
sourcherry	Sour cherries	Fruit	frtrees	
stonefruitnes	Stone fruit, nes	Fruit	frtrees	
grape	Grapes	Fruit	grapes	
artichoke	Artichokes	Vegetables&Melons	greens	
asparagus	Asparagus	Vegetables&Melons	greens	
lettuce	Lettuce and chicory	Vegetables&Melons	greens	
spinach	Spinach	Vegetables&Melons	greens	
almond	Almonds, with shell	Treenuts	nuts	
brazil	Brazil nuts, with shell	Treenuts	nuts	
cashew	Cashew nuts, with shell Treenuts		nuts	
chestnut	Chestnuts	Treenuts	nuts	
hazelnut	Hazelnuts, with shell	Treenuts	nuts	
nutnes	Nuts, nes	Treenuts	nuts	

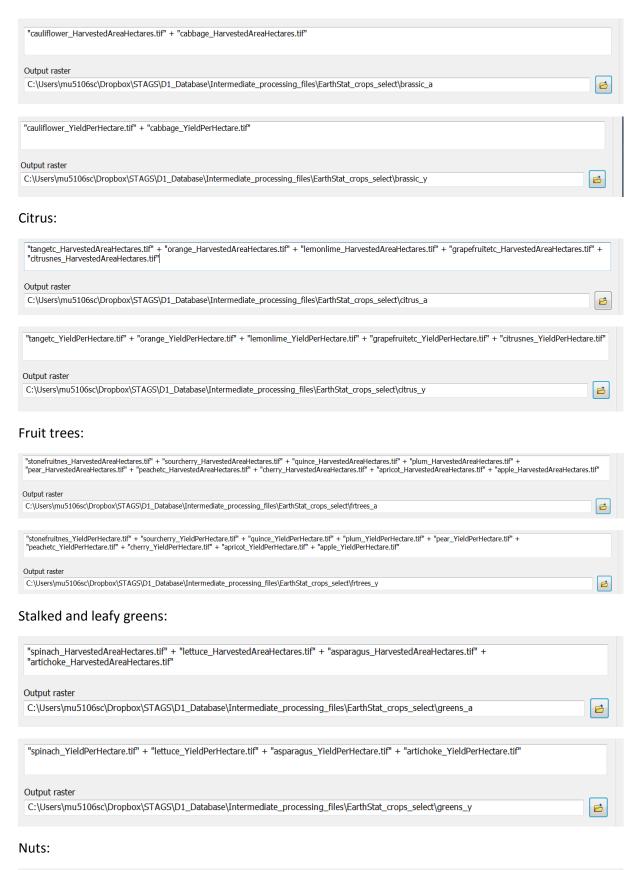
pistachio	Pistachios	Treenuts	nuts	
walnut	Walnuts, with shell	Treenuts	nuts	
olive	Olives Oilcrops		olives	
vegetablenes	Vegetables fresh nes Vegetables&Melons		oth_veg	
greenbean	Beans, green	Vegetables&Melons	peas	
greenbroadbean	Leguminous vegetables, nes	Vegetables&Melons	peas	
greenpea	Peas, green	Vegetables&Melons	peas	
stringbean	String beans	Vegetables&Melons	peas	
carrot	Carrots and turnips	Vegetables&Melons	rootveg	
garlic	Garlic	Vegetables&Melons	rootveg	
greenonion	Onions (inc. shallots), green	Vegetables&Melons	rootveg	
onion	Onions, dry	Vegetables&Melons	rootveg	
avocado	Avocados	Fruit	tropfr	
banana	Bananas	Fruit	tropfr	
date	Dates	Fruit	tropfr	
fig	Figs Fruit		tropfr	
kiwi	Kiwi fruit Fruit		tropfr	
mango	Mangoes, mangosteens, guavas	Fruit	tropfr	
papaya	Papayas	Fruit	tropfr	
pineapple	Pineapples	Fruit	tropfr	
plantain	Plantains	Fruit	tropfr	
tropicalnes	Fruit, tropical fresh nes	Fruit	tropfr	
chilleetc	Chillies and peppers, green	Vegetables&Melons	vfruits	
cucumberetc	Cucumbers and gherkins	Vegetables&Melons	vfruits	
eggplant	ent Eggplants (aubergines) Vegetables&N		vfruits	
melonetc	Other melons (inc.cantaloupes)	other melons (inc.cantaloupes) Vegetables&Melons		
okra	okra Okra		vfruits	
pumpkinetc	Pumpkins, squash and gourds	Vegetables&Melons	vfruits	
tomato	Tomatoes	Vegetables&Melons	vfruits	
watermelon	Watermelons	Vegetables&Melons	vfruits	

3. Summed all production areas and yields for TIFFs within our categories

Berries:

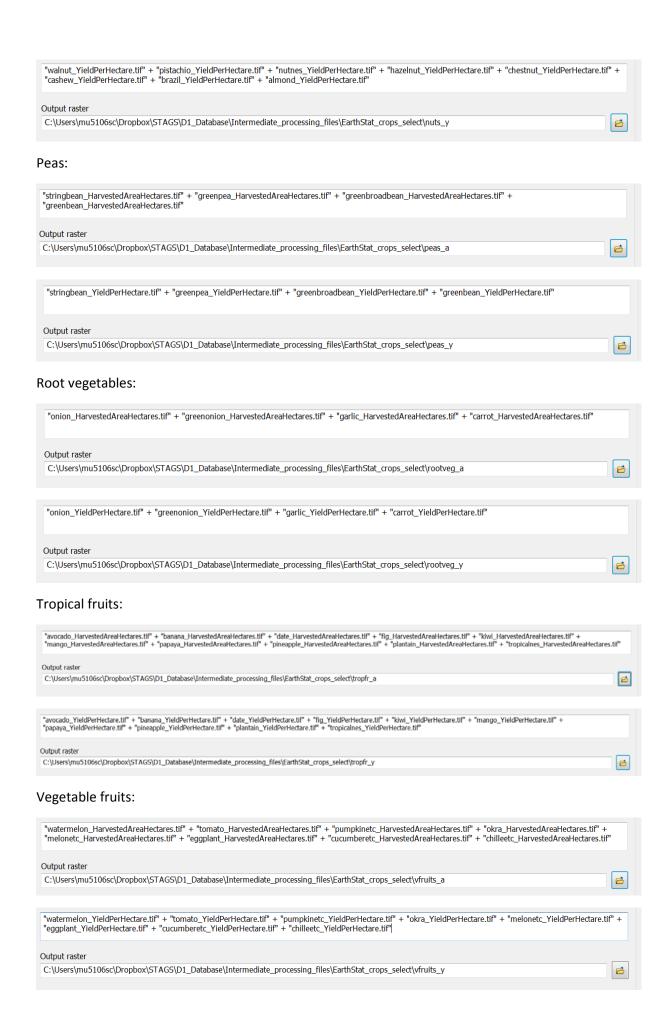


Brassicas:

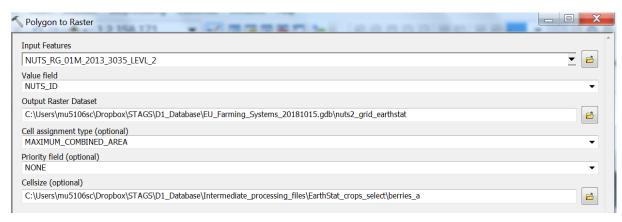


"walnut_HarvestedAreaHectares.tif" + "pistachio_HarvestedAreaHectares.tif" + "nutnes_HarvestedAreaHectares.tif" + "hazelnut_HarvestedAreaHectares.tif" + "chestnut_HarvestedAreaHectares.tif" + "brazil_HarvestedAreaHectares.tif" + "almond_HarvestedAreaHectares.tif" + "Output raster

C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\Intermediate_processing_files\EarthStat_crops_select\nuts_a



4. Created a NUTS2 grid with same cell size and extent as crop grids



5. Calculate zonal statistics as table (SUM for sum of areas; MEAN for average yield)

	Input raster or feature	Zone field	Input value raster	Output table	Ignore	Statistics type
1	nuts2_grid_earthstat	NUTS_ID	berries_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_berries_a	true	SUM
2	nuts2_grid_earthstat	NUTS_ID	brassic_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_brassic_a	true	SUM
3	nuts2_grid_earthstat	NUTS_ID	citrus_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_citrus_a	true	SUM
4	nuts2_grid_earthstat	NUTS_ID	frtrees_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_frtrees_a	true	SUM
5	nuts2_grid_earthstat	NUTS_ID	greens_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_greens_a	true	SUM
6	nuts2_grid_earthstat	NUTS_ID	nuts_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_nuts_a	true	SUM
7	nuts2_grid_earthstat	NUTS_ID	peas_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_peas_a	true	SUM
8	nuts2_grid_earthstat	NUTS_ID	rootveg_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_rootveg_a	true	SUM
9	nuts2_grid_earthstat	NUTS_ID	tropfr_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_tropfr_a	true	SUM
10	nuts2_grid_earthstat	NUTS_ID	vfruits_a	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_vfruits_a	true	SUM
11	nuts2_grid_earthstat	NUTS_ID	grape_HarvestedAreaHectares.tif	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_grapes_a	true	SUM
12	nuts2_grid_earthstat	NUTS_ID	olive_HarvestedAreaHectares.tif	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_olives_a	true	SUM
13	nuts2_grid_earthstat	NUTS_ID	vegetablenes_HarvestedAreaHectares.tif	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_oth_veg_a	true	SUM
14	nuts2_grid_earthstat	NUTS_ID	berries_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_berries_y	true	MEAN
15	nuts2_grid_earthstat	NUTS_ID	brassic y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_brassic_y	true	MEAN
16	nuts2_grid_earthstat	NUTS_ID	citrus_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_citrus_y	true	MEAN
17	nuts2_grid_earthstat	NUTS_ID	frtrees_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_frtrees_y	true	MEAN
18	nuts2_grid_earthstat	NUTS_ID	greens_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_greens_y	true	MEAN
19	nuts2_grid_earthstat	NUTS_ID	nuts_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_nuts_y	true	MEAN
20	nuts2_grid_earthstat	NUTS_ID	peas_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_peas_y	true	MEAN
21	nuts2_grid_earthstat	NUTS_ID	rootveg_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_rootveg_y	true	MEAN
22	nuts2_grid_earthstat	NUTS_ID	tropfr_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_tropfr_y	true	MEAN
23	nuts2_grid_earthstat	NUTS_ID	vfruits_y	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_vfruits_y	true	MEAN
24	nuts2_grid_earthstat	NUTS_ID	grape_YieldPerHectare.tif	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_grapes_y	true	MEAN
25	nuts2_grid_earthstat	NUTS_ID	olive_YieldPerHectare.tif	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_olives_y	true	MEAN
26	nuts2_grid_earthstat	NUTS_ID	vegetablenes YieldPerHectare.tif	C:\Users\mu5106sc\Dropbox\STAGS\D1_Database\EU_Farming_Systems_20181015.gdb\crop_oth_veg_y	true	MEAN