

Atmo 1 (House 003)

SH feature name explanation, organized by prefix

H: Hourly Data	ALevel: Activity Level	WD: Open area of Window / Door
T: Temperature	Label: Duration of automatically labelled activity	

H2O: Breathe/ cook/personal hygiene

Infor	RF	J48
0.349 HTMainEntry	ALevelOtherLivingroom	HLabelEnter_Home
0.15 HTKitchen	HLabelBed_Toilet_Transition	HLabelPersonal_Hygiene
0.128 HTMasterBathroom	HLabelSleep	HTKitchen
	HLabelWork	HTMainEntry
	HTKitchen	HTMasterBathroom
	HTMainEntry	HTUtility
	HTMasterBathroom	
	HTUtility	
	WDBedroomAWindowB	
	WDBedroomBWindowA	

Monoterpene (/alpha-Pinene) (9/10): Air freshners / soaps washing dishes (pinene/ lemana)

Infor	RF	J48
0.319 HTKitchen	ALevelMasterBathroom	ALevelUtilityRoom
0.142 ALevelKitchen	ALevelMasterBedroom	HTOtherLivingRoom
0.126 ALevelOtherLivingroom	ALevelOtherBathroom	
0.126 ALevelMasterBathroom	HLabelWork	
0.126 HTMainEntry	HTKitchen	
	HTMainEntry	
	HTMasterBathroom	
	HTMasterBedroom	
	HTMasterOffice	
	HTOtherLivingRoom	
	HTUtility	
	WDBedroomAWindowA	
	WDBedroomAWindowB	
	WDBedroomBWindowA	

	WDEntrywayBDoor	

Acetaldehyde (10/10): Alcohol

Infor	RF	J48
0.53 HTMainEntry	HLabelBathe	ALevelDiningRoom
0.505 HTMasterBathroom	HLabelEat	ALevelMasterBedroom
0.212 HTKitchen	HTKitchen	ALevelUtilityRoom
0.155 ALevelMasterLivingRoom	HTMainEntry	HLabelEat
0.138 HTUtility	HTMasterBathroom	HTMainEntry
0.137 HTOtherLivingRoom	HTMasterBedroom	HTMasterBathroom
0.133 HTMasterBedroom	HTMasterOffice	HTMasterBedroom
0.128 ALevelMasterBathroom	HTUtility	HTUtility
0.108 HTMasterLivingRoom	WDEntrywayBDoor	
	WDMainDoor	

CH₄: Nature gas for oven or kitchen, hittng the hot water (leak)

Infor	RF	J48
0.222 HTKitchen	HTKitchen	ALevelMasterBathroom
0.1994 HTMainEntry	HTMainEntry	HLabelCook
0.107 ALevelOtherLivingRoom	HTMasterBathroom	HTKitchen
0.0793 HTMasterBathroom	HTMasterOffice	HTMainEntry
	HTUtility	HTMasterBathroom
	WDBedroomAWindowB	HTOtherLivingRoom
	WDEntrywayBDoor	HTUtility
	WDBedroomAWindowB	

Acetonitrile (10/10): Smoke (cigarette/ burns/fires)

Infor	RF	J48
0.73 HTMainEntry	HLabelBathe	HLabelTake_Medicine
0.294 HTKitchen	HLabelSleep	HTMainEntry
0.219 HTOtherLivingRoom	HTKitchen	HTMasterBedroom
0.175 HTMasterOffice	HTMainEntry	WDEntrywayCDoorA
	HTMasterBathroom	WDMainDoor

	WDEntrywayCDoorA	
--	------------------	--

Methanol (10/10): Human breathe /solvent

Infor	RF	J48
0.246 HTOtherLivingRoom	HTKitchen	ALevelDiningRoom
0.201 HTMasterBathroom	HTMasterBathroom	HLabelCook
0.181 HTMainEntry	HTMasterLivingRoom	HLabelSleep
0.152 HTMasterOffice	HTMasterOffice	HTKitchen
0.106 HTKitchen	HTOtherLivingRoom	HTMasterBathroom
	WDBedroomAWindowA	HTOtherLivingRoom

large PM number: vacumm/ dog shakes/ dust

Infor	RF	J48
0.402 ALevelOtherHallway	ALevelOtherHallway	ALevelOtherHallway
0.27 ALevelMainEntryway	HLabelCook	HLabelSleep
0.25 ALevelKitchen	HLabelPersonal_Hygiene	HTMasterOffice
0.213 ALevelMasterLivingRoom	HTKitchen	
0.19 ALevelDiningRoom	HTMainEntry	
0.18 ALevelMasterBathroom	HTUtility	
0.18 HLabelLeave_Home	WDEntrywayBDoor	
0.179 HLabelPersonal_Hygiene		
0.167 HLabelRelax		
0.157 HLabelEnter_Home		
0.136 HLabelSleep		
0.136 HTKitchen		
0.134 HTMainEntry		
0.122 ALevelUtilityRoom		
0.11 HLabelWash_Dishes		

Comment [LB1]: I assume "Vacumm/ dog shakes/ Dust" will INCREASE the large PM number. But I also think "personal_hygiene, activity in bathroom" will also DECREASE the large PM number. Is that right/

C₄-Benzene (9/10): Gaso line, fuil cans

Infor	RF	J48
0.172 HTKitchen	ALevelMasterOffice	HTOtherLivingRoom
0.145 HTMainEntry	HLabelBathe	WDEntrywayBDoor
	HTOtherLivingRoom	
	WDBedroomAWindowB	

C₃-Benzene (9/10): Gaso line, fuel cans

Infor	RF	J48
0.242 HTMainEntry	AlevelMasterOffice	HLabelBed_Toilet_Transition
0.205 HTMasterOffice	HLabelBathe	HLabelTake_Medicine
0.184 HTOtherLivingRoom	HTMainEntry	HLabelWash_Dishes
0.16 HTKitchen	WDBedroomAWindowA	HTKitchen
	WDBedroomAWindowB	HTMainEntry
		HTMasterOffice
		HTUtility
		WDEntrywayBDoor

C₂-Benzene (7/10; could be benzaldehyde): Gaso line, fuel cans (cooking, others?)

Infor	RF	J48
0.406 HTMainEntry	AlevelMasterLivingRoom	AlevelDiningRoom
0.195 HTOtherLivingRoom	HLabelEnter_Home	AlevelMainEntryway
0.191 HTUtility	HLabelTake_Medicine	HLabelWork
0.162 HTMasterOffice	HTKitchen	HTKitchen
0.139 HTKitchen	HTMainEntry	HTOtherLivingRoom
	HTMasterOffice	
	HTUtility	

Styrene (10/10): plastics

Infor	RF	J48
0.4763 HTMainEntry	AlevelKitchen	HLabelEnter_Home
0.3059 HTOtherLivingRoom	HLabelBed_Toilet_Transition	HTKitchen
0.1621 HTMasterOffice	HTKitchen	HTMainEntry
0.1471 HTMasterBathroom	HTMainEntry	HTMasterBathroom
0.1432 HTKitchen	HTMasterBathroom	WDEntrywayBDoor
0.1357 HTUtility	WDBedroomAWindowB	
0.1331 HTMasterBedroom		
0.0829 WDEntrywayCDoorA		

Toluene (10/10): Gaso line, fuel cans, solvent from garage

Infor	RF	J48
0.155 HTOtherLivingRoom	AlevelOtherBathroom	HTMainEntry
0.131 HTMasterOffice	HTMasterLivingRoom	HTMasterLivingRoom

	HTOtherLivingRoom	HTOtherLivingRoom
	WDBedroomAWindowB	WDEntrywayBDoor
	WDBedroomBWindow	

Monoterpene (/alpha-Pinene fragment)

Infor	RF	J48
0.186	HTOtherLivingRoom	ALevelUtilityRoom
0.16	HTMasterOffice	HTKitchen
		HTMasterBathroom
		HTOtherLivingRoom

Benzene (10/10): Gaso line, fuel cans

Infor	RF	J48
0.337	HTKitchen	ALevelOtherBathroom
0.284	HTMainEntry	HLabelRelax
0.218	HTOtherLivingRoom	HLabelBathe
0.161	HTMasterOffice	HTMainEntry
		WDEntrywayBDoor
		HTMainEntry
		HTMasterBathroom
		HTOtherLivingRoom

2-butanone, butanal (8/10): Solvent / cooking?

Infor	RF	J48
0.206	HTOtherLivingRoom	HLabelBathe
0.191	HTMainEntry	ALevelMasterBathroom
0.106	HTKitchen	HLabelBathe
		HTMainEntry
		HTMasterBathroom
		HTMasterBedroom
		HTMasterOffice
		HTUtility
		WDEntrywayBDoor

MVK (methyl vinyl ketone)?

Infor	RF	J48
0.166	HTMainEntry	ALevelKitchen
0.158	HTOtherLivingRoom	ALevelMasterBathroom
0.129	HTMasterOffice	HTMasterBathroom
		HTOtherLivingRoom
		HLabelEnter_Home
		HLabelWork

	HTKitchen	
	HTMasterOffice	
	HTOtherLivingRoom	
	WDEntrywayBDoor	
	WDMainDoor	

Isoprene (7/10 ; could be also furan from carpets): Breathe

Infor	RF	J48
0.257 HTMainEntry	ALevelOtherBathroom	HLabelEat
0.201 HTOtherLivingRoom	HLabelBed_Toilet_Transition	HLabelPersonal_Hygiene
0.143 HTMasterOffice	HLabelWork	HTKitchen
0.135 HTKitchen	HTMainEntry	HTMainEntry
	WDBedroomAWindowB	HTUtility
	WDBedroomBWindow	
	WDDiningRoomAWindowAA	
	WDDiningRoomAWindowAB	

Acetone / propanal (10/10): Breathe and solvent

Infor	RF	J48
0.398 HTMainEntry	HLabelCook	ALevelOtherBathroom
0.26 HTKitchen	HLabelRelax	HLabelTake_Medicine
0.232 HTOtherLivingRoom	HLabelSleep	HTMasterLivingRoom
0.218 HTMasterBedroom	HTKitchen	HTOtherLivingRoom
0.173 HTMasterOffice	HTMainEntry	WDEntrywayCDoorA
	HTMasterBathroom	
	HTMasterLivingRoom	
	HTUtility	

small PM number

Infor	RF	J48
0.529 HTMainEntry	HLabelBathe	ALevelMainEntryway
0.465 HTKitchen	HLabelPersonal_Hygiene	HTMainEntry
0.22 ALevelKitchen	HLabelRelax	HTOtherLivingRoom
0.206 HTMasterBedroom	HLabelTake_Medicine	
0.195 HTMasterOffice	HTMainEntry	

0.184	HTMasterBathroom	HTMasterBathroom	
0.164	AlevelMasterLivingRoom	HTUtility	
0.14	AlevelOtherHallway	WDBedroomAWindowA	
0.135	AlevelDiningRoom	WDBedroomAWindowB	
0.125	AlevelMainEntryway	WDBedroomBWindow	
0.124	AlevelMasterBathroom	WDEntrywayCDoorA	
0.123	HLabelPersonal_Hygiene	WDEntrywayCDoorB	
0.118	HTMasterLivingRoom		
0.115	HLabelLeave_Home		
0.111	HLabelWash_Dishes		

CO₂: Breathe

Infor	RF	J48	
0.168	HTMasterOffice	HLabelEat	HTKitchen
0.161	HTOtherLivingRoom	HTKitchen	HTMainEntry
0.153	HTMasterBathroom	HTMainEntry	HTMasterBedroom
		HTMasterBathroom	HTMasterOffice
		HTMasterLivingRoom	
		HTOtherLivingRoom	
		WDBedroomAWindowA	

O₃: outside

Infor	RF	J48	
0.164	HTMasterBedroom	HLabelCook	AlevelMasterBathroom
0.136	HTMainEntry	HLabelEat	HLabelSleep
		HLabelTake_Medicine	HTKitchen
		HLabelWork	HTMainEntry
		HTKitchen	HTMasterBathroom
		HTMasterBedroom	HTMasterBedroom
		HTMasterLivingRoom	HTMasterLivingRoom
		WDBedroomAWindowB	

Formaldehyde (reliabilty 10/10): Carpets, building material

Infor	RF	J48	
0.295	HTMasterBathroom	HLabelWash_Dishes	HTMainEntry

0.185	HTKitchen	HTKitchen	WDMainDoor
0.183	HTMainEntry	HTMainEntry	
0.164	HTOtherLivingRoom	HTMasterBathroom	
0.147	HTUtility	HTMasterBedroom	
0.13	HTMasterBedroom	HTOtherLivingRoom	
0.11	HTMasterOffice	WDBedroomAWindowB	
		WDBedroomBWindowA	
		WDEntrywayBDoor	