

Map of id numbers for SFIT, HITRAN, ATM lists

The list directory structure is the key to the gas names and the molecule id numbers

Those id's and names must be the same in the reference.pr file

eg a files containing hitran lines is read from one subdir in linelist then the mold will be changed

To the 2digit integer ONN of the subdir name and assumed to be for gas ONN_abcdef

For ATM: see isotopologs.dat for 2020 list of (potential) isotopes, see gggmol.txt for isotopes in linelist. Water #1, 49, 71 combined into sfit H2O linelist

All available isotopes id's are in order except ATM2020 NH3 niso=4: 1, 2, 3, 5

	SFIT				HITRAN 2016				NO_LINES EXIST	PSEUDO LINES	ATM.161 Mat 2020			
	Molecule #	Name	Lines	isotopes	Molecule #	Name	Lines	isotopes			Lines	isotopes	Molecule #	Quanta
SFIT & HITRAN Same ID#	1	H2O	X	7	1	H2O	X	7			X	3 (3, 1)	1, 49, 71	3
	2	CO2	X	12	2	CO2	X	12			X	12		4
	3	O3	X	5	3	O3	X	5			X	5		1
	4	N2O	X	8	4	N2O	X	5			X	8		3
	5	CO	X	6	5	CO	X	6			X	6		3
	6	CH4	X	4	6	CH4	X	4			X	4		3
	7	O2	X	3	7	O2	X	3			X	3		3
	8	NO	X	3	8	NO	X	3			X	3		3
	9	SO2	X	2	9	SO2	X	2			X	2		3
	10	NO2	X	1	10	NO2	X	1			X	1		3
	11	NH3	X	2	11	NH3	X	2			X	4		3
	12	HNO3	X	2	12	HNO3	X	2			X	2		3
	13	OH	X	3	13	OH	X	3			X	3		3
	14	HF	X	2	14	HF	X	2			X	1		3
	15	HCL	X	4	15	HCL	X	4			X	2		3
	16	HBR	X	4	16	HBR	X	4			X	2		3
	17	HI	X	2	17	HI	X	2			X	1		3
	18	CLO	X	2	18	CLO	X	2			X	2		3
	19	OCS	X	5	19	OCS	X	5			X	5		3
	20	H2CO	X	3	20	H2CO	X	3			X	3		3
	21	HOCL	X	2	21	HOCL	X	2			X	2		3
SFIT & ATM Same ID#	22	HO2	X	1	33	HO2	X	1		X	X	1		3
	23	H2O2	X	1	25	H2O2	X	1			X	1		1
	24	HONO		1					X			1		
	25	HO2NO2		1					X			1		
	26	N2O5	X	1						X		1		
	27	CLONO2	X	2	35	CLONO2		2		X		2		
	28	HCN	X	3	23	HCN	X	3			X	3		3
	29	CH3F		1								1		
	30	CH3CL	X	2	24	CH3CL	X	2			X	2		1
	31	CF4	X	1	42	CF4		1		X		1		
	32	CCL2F2	X	1						X		1		
	33	CCL3F	X	1						X		1		
	34	CH3CCL3		1								1		
	35	CCL4	X	1						X		1		
	36	COF2	X	2	29	COF2	X	2	X		X	1		3
	37	COCLF	X	1						X		1		
	38	C2H6	X+P	2	27	C2H6	X	2		X	X	1		3
	39	C2H4	X	2	38	C2H4	X	2			X	2		3
	40	C2H2	X	3	26	C2H2	X	3			X	2		3
	41	N2	X	2	22	N2	X	2			X	2		3
	42	CHF2CL	X	1						X		1		
43	COCL2	X+P	3	49	COCL2	X	2		X		3			
44	CH3BR	X	2	40	CH3Br	X	2				2			
45	CH3I		1					X			1			
46	HCOOH	X	1	32	HCOOH	X	1		X	X	1		3	
47	H2S	X	3	31	H2S	X	3			X	3		1	
48	CHCL2F		1						X		1			
49	O2CIA	X	2							X				
50	SF6	X	1	30	SF6		1		X		1			
SFIT & ATM Same ID#	51	NF3	X	1						X				
	52	N2CIA	X	2							X			
	53	OTHER		0										
	54	OTHER		0										
	55	PH3	X	1							X	1	55 PH3	
	56	OTHER		0										
	57	OTHER		0										
	58	OCLO		1					X					
	59	F134A		1					X					
	60	C3H8	X	1						X				
	61	F142B	X	1						X		1	53	
	62	CFCl13	X	1						X		1	51	
	63	F141B		1					X					
	64	CH3OH	X	1	39	CH3OH	X	1			X	1	56	
	65	OTHER		0										
	66	OTHER		0										
	67	PAN		1						X				
	68	CH3CHO		1						X				
	69	CH3CN	X	1	41	CH3CN	X	1		X				
	70	CHF3		1						X				
	71	CH3COOH		1						X				
	72	C5H8		1						X				
	73	MVK		1						X				
	74	MACR		1						X				
	75	C3H6		1						X				
	76	C4H8		1						X				
	77	OTHER		0										
	78	OTHER		0										
	79	OTHER		0										
	80	OTHER		0										
	81	OTHER		0										
	82	OTHER		0										
	83	OTHER		0										
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	97	OTHER		0										
	98	OTHER		0										
	99	OTHER		0										