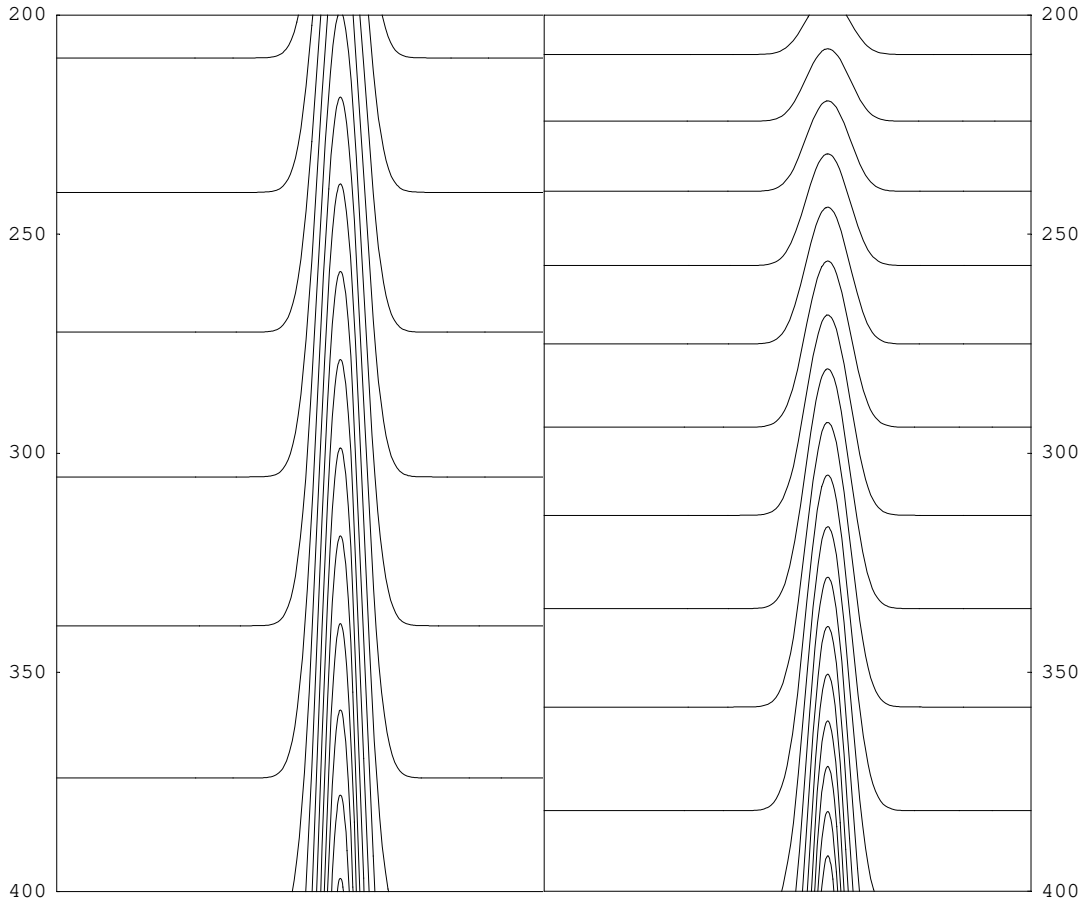L46 oper MF and project L70 HL70bbL