SEP 10 2002

```
#=====
data_(EuS)1.173NbS2
#=====
```

```
_audit_creation_method          'Jana2000 Version : 14/06/2002'
```

```
# 1. PROCESSING SUMMARY (IUCr Office Use Only)
```

```
#=====
```

```
# 2. SUBMISSION DETAILS
```

```
_publ_contact_author_name      Laurent Cario
_publ_contact_author_address
; ?
;
_publ_contact_author_email      laurent.cario@cnrs-immn.fr
_publ_contact_author_fax        ?
_publ_contact_author_phone      ?

_publ_requested_journal         Chemistry of Materials
_publ_requested_category        ?

_publ_contact_letter
; ?
;
```

```
#=====
```

```
# 3. TITLE AND AUTHOR LIST
```

```
_publ_section_title
; Mixed-valence state of europium in the misfit layer compound (EuS)1.173NbS2
;
_publ_section_title_footnote
; ?
;
loop_
  _publ_author_name
  _publ_author_footnote
  _publ_author_address
Laurent CARIO*, Pierre PALVADEAU, Alain LAFOND, Catherine DEUDON, Yves MOËLO,
Benoît CORRAZE, and Alain MEERSCHAUT.      # name
; ?      # footnote
;
; ?      # address
Institut des Matériaux Jean Rouxel, UMR 6502 CNRS-Université de Nantes;
Laboratoire de Chimie des Solides ; 2, rue de la Houssinière, BP 32229, 44322
Nantes cedex 03, France
```

```
#=====
data_(I)
#=====
```

```
# 5. CHEMICAL DATA
```

```
_chemical_name_systematic
```

```

; ?
;
_chemical_name_common          ?
_chemical_formula_moiety       ?
_chemical_formula_structural   ?
_chemical_formula_analytical   ?
_chemical_formula_iupac        ?
_chemical_formula_sum          'Eu1.173 Nb1 S3.173'
_chemical_formula_weight       372.9
_chemical_melting_point        ?
_chemical_compound_source      ?

```

```

#=====

```

6. CRYSTAL DATA

```

_symmetry_cell_setting         orthorhombic
_space_group_ssg_name          Xm2m(\alpha00)
loop_
  _space_group_symop_ssg_id
  _space_group_symop_ssg_operation_algebraic
  1  x1,x2,x3,x4
  2  x1,x2,-x3,x4
  3  -x1,x2,x3,-x4
  4  -x1,x2,-x3,-x4
  5  1/2+x1,1/2+x2,x3,1/2+x4
  6  1/2+x1,1/2+x2,-x3,1/2+x4
  7  1/2-x1,1/2+x2,x3,1/2-x4
  8  1/2-x1,1/2+x2,-x3,1/2-x4
  9  x1,1/2+x2,1/2+x3,x4
  10 x1,1/2+x2,1/2-x3,x4
  11 -x1,1/2+x2,1/2+x3,-x4
  12 -x1,1/2+x2,1/2-x3,-x4
  13 1/2+x1,x2,1/2+x3,1/2+x4
  14 1/2+x1,x2,1/2-x3,1/2+x4
  15 1/2-x1,x2,1/2+x3,1/2-x4
  16 1/2-x1,x2,1/2-x3,1/2-x4
_cell_length_a                 3.3251(10)
_cell_length_b                 5.7432(10)
_cell_length_c                 22.939(5)
_cell_angle_alpha              90
_cell_angle_beta               90
_cell_angle_gamma              90
_cell_volume                   438.07(18)
_cell_modulation_dimension      1
loop_
  _cell_wave_vector_seq_id
  _cell_wave_vector_x
  _cell_wave_vector_y
  _cell_wave_vector_z
  1  0.58675  0.00000  0.00000
_cell_subsystems_number        2
loop_
  _cell_subsystem_code
  _cell_subsystem_description
  _cell_subsystem_matrix_W_1_1
  _cell_subsystem_matrix_W_1_2
  _cell_subsystem_matrix_W_1_3
  _cell_subsystem_matrix_W_1_4
  _cell_subsystem_matrix_W_2_1
  _cell_subsystem_matrix_W_2_2

```

```

_cell_subsystem_matrix_W_2_3
_cell_subsystem_matrix_W_2_4
_cell_subsystem_matrix_W_3_1
_cell_subsystem_matrix_W_3_2
_cell_subsystem_matrix_W_3_3
_cell_subsystem_matrix_W_3_4
_cell_subsystem_matrix_W_4_1
_cell_subsystem_matrix_W_4_2
_cell_subsystem_matrix_W_4_3
_cell_subsystem_matrix_W_4_4
?      '1-st subsystem'
  1    0    0    0
  0    1    0    0
  0    0    1    0
  0    0    0    1
?      '2-nd subsystem'
  0    0    0    1
  0    1    0    0
  0    0    1    0
  1    0    0    0
_cell_formula_units_Z      4

_cell_measurement_reflms_used      40
_cell_measurement_theta_min      5.322
_cell_measurement_theta_max      26.550
_cell_measurement_temperature      300 K
_cell_special_details
; ?
;

_exptl_crystal_density_diffn      5.652
_exptl_crystal_density_meas      ?
_exptl_crystal_density_method      ?
_exptl_crystal_F_000      663

_exptl_absorpt_coefficient_mu      20.529
_exptl_crystal_description      platelet
_exptl_crystal_size_max      0.135
_exptl_crystal_size_mid      0.11
_exptl_crystal_size_min      0.02
_exptl_crystal_size_rad      ?
_exptl_crystal_colour      Black
_exptl_absorpt_correction_type      Gaussian
_exptl_absorpt_process_details      ?
_exptl_absorpt_correction_T_min      0.1998
_exptl_absorpt_correction_T_max      0.6836

=====

# 7. EXPERIMENTAL DATA

_exptl_special_details
; ?
;

_diffn_ambient_temperature      ?
_diffn_radiation_type      'Mo K\alpha'
_diffn_radiation_wavelength      0.71069
_diffn_radiation_source      ?
_diffn_radiation_monochromator      ?
_diffn_measurement_device_type      ?

```

```

_diffn_detector_area_resol_mean      ?
_diffn_measurement_method            ?

_diffn_reflns_number                 5846
_diffn_reflns_theta_min              1.78
_diffn_reflns_theta_max              32.20
_diffn_reflns_theta_full             ?
_diffn_measured_fraction_theta_max   ?
_diffn_measured_fraction_theta_full  ?
_diffn_reflns_av_R_equivalents        0.0740
_diffn_reflns_av_sigmaI/netI         0.0184
_diffn_reflns_limit_h_min            -4
_diffn_reflns_limit_h_max            4
_diffn_reflns_limit_k_min            -8
_diffn_reflns_limit_k_max            8
_diffn_reflns_limit_l_min            -26
_diffn_reflns_limit_l_max            34
_diffn_reflns_limit_index_m_l_min    -8
_diffn_reflns_limit_index_m_l_max    8
_diffn_reflns_reduction_process       ?

_diffn_standards_number              ?
_diffn_standards_interval_count       ?
_diffn_standards_interval_time        ?
_diffn_standards_decay_%              ?

```

```
#=====
```

8. REFINEMENT DATA

```

_refine_special_details
; ?
;

_reflns_number_total                958
_reflns_number_gt                   813
_reflns_threshold_expression         'I>3\s(I)'

_refine_ls_structure_factor_coef     F
_refine_ls_R_factor_gt               0.0287
_refine_ls_wR_factor_gt              0.0456
_refine_ls_R_factor_all              0.0350
_refine_ls_wR_factor_ref              0.0469
_refine_ls_goodness_of_fit_ref        1.00
_refine_ls_goodness_of_fit_gt         1.06
_refine_ls_restrained_S_gt           ?
_refine_ls_restrained_S_all          ?
_refine_ls_number_reflns             958
_refine_ls_number_parameters          31
_refine_ls_number_restraints          ?
_refine_ls_number_constraints         ?
_refine_ls_weighting_scheme           sigma
_refine_ls_weighting_details          'w=1/(\s^2^(F)+0.0016F^2^)'
_refine_ls_hydrogen_treatment         ?
_refine_ls_shift/su_max               0.0003
_refine_ls_shift/su_mean              0.0000
_refine_diff_density_max              2.97
_refine_diff_density_min              -2.43
_refine_ls_extinction_method
'B-C type 1 Gaussian isotropic (Becker & Coppens, 1974)'
_refine_ls_extinction_coef            0.16(2)

```

```

_refine_ls_abs_structure_details      ?
_refine_ls_abs_structure_Flack       ?
_refine_ls_abs_structure_Rogers      ?

loop_
  _atom_type_symbol
  _atom_type_scatter_dispersion_real
  _atom_type_scatter_dispersion_imag
  _atom_type_scatter_source
  Eu -0.158 3.668
  'International Tables Vol C Tables 4.2.6.8 and 6.1.1.1'
  Nb -2.073 0.622
  'International Tables Vol C Tables 4.2.6.8 and 6.1.1.1'
  S 0.125 0.123
  'International Tables Vol C Tables 4.2.6.8 and 6.1.1.1'

_computing_data_collection            ?
_computing_cell_refinement            ?
_computing_data_reduction             ?
_computing_structure_solution         ?
_computing_structure_refinement
  '(Jana2000; Petricek and Dusek, 2000)'
_computing_molecular_graphics         ?
_computing_publication_material
  '(Jana2000; Petricek and Dusek, 2000)'

```

```

#=====

```

9. ATOMIC COORDINATES AND DISPLACEMENT PARAMETERS

```

loop_
  _atom_site_label
  _atom_site_type_symbol
  _atom_site_adp_type
  _atom_site_fract_x
  _atom_site_fract_y
  _atom_site_fract_z
  _atom_site_U_iso_or_equiv
  _atom_site_symmetry_multiplicity
  _atom_site_occupancy
  _atom_site_calc_flag
  _atom_site_refinement_flags
  _atom_site_disorder_assembly
  _atom_site_disorder_group
  Nb Nb Uani 0 -0.0784(2) 0 0.00688(15) 4 1 d . . .
  S S Uiso 0 0.2550(3) 0.06815(6) 0.0083(3) 8 1 d . . .
  Eu Eu Uani 0 0 0.323216(15) 0.01319(14) 8 1 d . . .
  S2 S Uiso 0 0.0029(10) 0.19853(10) 0.0161(5) 8 1 d . . .

```

```

loop_
  _atom_site_aniso_label
  _atom_site_aniso_type_symbol
  _atom_site_aniso_U_11
  _atom_site_aniso_U_22
  _atom_site_aniso_U_33
  _atom_site_aniso_U_12
  _atom_site_aniso_U_13
  _atom_site_aniso_U_23
  Nb Nb 0.0077(3) 0.0053(3) 0.0077(3) 0 0 0
  Eu Eu 0.0166(3) 0.0103(2) 0.0127(2) 0 0 0.0003(3)

```

loop_

```
_atom_site_Fourier_wave_vector_seq_id
_atom_site_Fourier_wave_vector_x
_atom_site_Fourier_wave_vector_y
_atom_site_Fourier_wave_vector_z
1 3.99536 0.00000 0.00000
2 6.28641 0.00000 0.00000
```

loop_

```
_atom_site_displace_Fourier_atom_site_label
_atom_site_displace_Fourier_axis
_atom_site_displace_Fourier_wave_vector_seq_id
_atom_site_displace_Fourier_param_cos
_atom_site_displace_Fourier_param_sin
Nb x 1 0 0.0040(9)
Nb y 1 0.0048(3) 0
Nb z 1 0 0
S x 1 0 -0.018(3)
S y 1 0.0030(4) 0
S z 1 -0.0013(4) 0
Eu x 1 0 0.0034(6)
Eu y 1 0.01238(17) 0
Eu z 1 -0.00085(8) 0
Eu x 2 0 0.0004(4)
Eu y 2 0.0001(5) 0
Eu z 2 0.00042(11) 0
S2 x 1 0 -0.0194(15)
S2 y 1 0.0057(10) 0
S2 z 1 0.0000(4) 0
```

#=====

10. MOLECULAR GEOMETRY

loop_

```
_geom_bond_atom_site_label_1
_geom_bond_atom_site_label_2
_geom_bond_site_symmetry_1
_geom_bond_site_symmetry_2
_geom_bond_distance_av
_geom_bond_distance_min
_geom_bond_distance_max
_geom_bond_publ_flag
Nb Nb . 1_455 3.325(2) 3.299(4) 3.351(4) yes
Nb Nb . 1_655 3.325(2) 3.299(4) 3.351(4) yes
Nb Nb . 5_445 3.318(2) 3.288(2) 3.348(2) yes
Nb Nb . 5_455 3.318(2) 3.288(2) 3.348(2) yes
Nb Nb . 5_545 3.318(2) 3.288(2) 3.348(2) yes
Nb Nb . 5_555 3.318(2) 3.288(2) 3.348(2) yes
Nb S . . 2.472(4) 2.445(6) 2.499(6) yes
Nb S . 5_445 2.475(5) 2.413(5) 2.537(5) yes
Nb S . 5_545 2.475(5) 2.413(5) 2.537(5) yes
Nb S . 2_555 2.472(4) 2.445(6) 2.499(6) yes
Nb S . 6_445 2.475(5) 2.413(5) 2.537(5) yes
Nb S . 6_545 2.475(5) 2.413(5) 2.537(5) yes
S S . 1_455 3.326(7) 3.207(12) 3.443(12) yes
S S . 1_655 3.326(7) 3.207(12) 3.443(12) yes
S S . 5_445 3.319(5) 3.277(4) 3.360(5) yes
S S . 5_455 3.319(5) 3.277(5) 3.360(4) yes
```

S S . 5_545 3.319(5) 3.277(4) 3.360(5) yes
 S S . 5_555 3.319(5) 3.277(5) 3.360(4) yes
 S S . 2_555 3.126(7) 3.068(13) 3.185(13) yes
 S Eu . 10_555 426.4(5) 2.923(9) 6.338(4) yes
 S Eu . 10_655 426.4(5) 2.923(9) 6.338(4) yes
 S Eu . 14_555 335.9(5) 2.868(9) 4.091(6) yes
 S S2 . . 461.2(7) 3.343(13) 6.679(6) yes
 S S2 . 1_655 461.2(7) 3.343(13) 6.679(6) yes
 S S2 . 5_555 373.2(8) 3.279(13) 4.311(8) yes
 Eu Eu . 5_445 4.036(4) 3.939(3) 4.127(3) yes
 Eu Eu . 5_455 4.034(4) 3.939(3) 4.127(4) yes
 Eu Eu . 5_545 4.036(4) 3.939(3) 4.127(3) yes
 Eu Eu . 5_555 4.034(4) 3.939(3) 4.127(4) yes
 Eu S2 . . 2.862(6) 2.848(4) 2.890(11) yes
 Eu S2 . 10_545 2.900(7) 2.866(9) 2.935(9) yes
 Eu S2 . 10_555 2.932(7) 2.891(9) 2.974(9) yes
 Eu S2 . 14_455 2.877(6) 2.780(9) 2.982(8) yes
 Eu S2 . 14_555 2.877(6) 2.780(9) 2.982(8) yes
 S2 S2 . 5_445 4.035(9) 3.892(9) 4.180(9) yes
 S2 S2 . 5_455 4.035(9) 3.892(9) 4.180(9) yes
 S2 S2 . 5_545 4.035(9) 3.892(9) 4.180(9) yes
 S2 S2 . 5_555 4.035(9) 3.892(9) 4.180(9) yes
 S2 S2 . 10_545 3.718(9) 3.717(13) 3.718(13) yes
 S2 S2 . 10_555 3.718(9) 3.717(13) 3.718(13) yes
 S2 S2 . 14_455 3.689(8) 3.540(8) 3.841(8) yes
 S2 S2 . 14_555 3.689(8) 3.540(8) 3.841(8) yes

#=====

11. STRUCTURE-FACTOR LIST

loop_

_refln_index_h

_refln_index_k

_refln_index_l

_refln_intensity_meas

_refln_intensity_calc

_refln_intensity_sigma

_refln_observed_status

0 -6 0 0 3223.0 2610.4 107.5 o
 0 -6 0 2 27185.5 25158.9 172.8 o
 1 -6 0 1 638.1 551.6 169.2 o
 2 -6 0 0 13917.0 14201.4 254.2 o
 0 -4 0 0 79340.8 85520.3 282.8 o
 0 -4 0 2 48737.8 50424.5 192.0 o
 0 -4 0 4 32950.9 30294.1 364.1 o
 1 -4 0 -1 1006.3 1278.1 126.9 o
 1 -4 0 1 1202.9 1334.2 96.2 o
 2 -4 0 0 5611.6 5773.5 105.7 o
 4 -4 0 0 2067.3 2349.1 86.0 o
 0 -2 0 0 98762.2 110266.4 325.3 o
 0 -2 0 2 89909.0 86377.3 337.1 o
 0 -2 0 4 48159.8 46874.6 459.9 o
 0 -2 0 6 19572.4 20712.3 528.1 o
 1 -2 0 -1 363.6 684.5 113.5 o
 1 -2 0 1 517.6 504.3 72.1 o
 2 -2 0 0 7870.3 9155.1 116.9 o
 4 -2 0 0 2898.6 3203.5 89.2 o
 0 0 0 2 117922.8 106875.3 419.0 o
 0 0 0 4 55851.2 54431.4 422.1 o
 0 0 0 6 26806.4 23593.3 310.6 o
 0 0 0 8 10102.0 8615.8 214.5 o
 1 0 0 -1 26.0 2.2 92.3 <
 1 0 0 1 3.5 54.1 120.4 <
 2 0 0 0 36605.0 37980.7 289.0 o

4 0 0 0 11096.0 12366.6 231.5 o
 0 2 0 0 88407.4 103761.3 253.3 o
 0 2 0 2 89673.3 86473.9 232.8 o
 0 2 0 4 48937.3 46879.4 232.7 o
 0 2 0 6 20026.9 20757.9 238.5 o
 0 2 0 8 6832.8 7718.5 146.2 o
 1 2 0 -1 340.7 636.7 82.3 o
 1 2 0 1 491.9 491.9 76.9 o
 2 2 0 0 7669.2 8870.3 99.7 o
 4 2 0 0 2818.1 3037.4 85.4 o
 0 4 0 0 77605.8 82087.0 196.2 o
 0 4 0 2 51181.5 50592.6 128.3 o
 0 4 0 4 31148.0 30396.3 195.1 o
 0 4 0 6 11263.5 14413.9 222.2 o
 1 4 0 -1 924.7 1237.7 86.1 o
 1 4 0 1 1290.7 1183.1 72.0 o
 2 4 0 0 5931.5 6095.2 93.9 o
 4 4 0 0 2197.4 2485.3 91.3 o
 0 6 0 0 2023.7 1591.0 80.4 o
 0 6 0 2 27401.3 25291.2 116.7 o
 0 6 0 4 11253.0 16247.4 224.3 o
 0 6 0 6 5850.2 8183.6 131.7 o
 1 6 0 1 689.3 539.2 113.1 o
 2 6 0 0 13609.5 14194.5 255.0 o
 0 8 0 0 16578.8 15713.7 299.7 o
 0 8 0 2 10931.6 11080.5 208.8 o
 1 -7 1 0 3931.3 3913.3 96.1 o
 0 -5 1 1 4169.0 4076.0 66.8 o
 0 -5 1 3 3425.3 3155.0 118.9 o
 1 -5 1 -2 295.2 207.9 132.3 <
 1 -5 1 0 6187.7 6037.3 78.8 o
 0 -3 1 1 6927.5 7104.5 62.0 o
 0 -3 1 3 5839.3 5643.5 116.0 o
 1 -3 1 -2 206.7 146.4 118.8 <
 1 -3 1 0 39288.6 40328.7 149.9 o
 0 -1 1 1 12514.2 13554.4 120.3 o
 0 -1 1 3 7769.8 8119.4 166.9 o
 1 -1 1 -2 133.8 27.9 90.7 <
 1 -1 1 0 15116.8 17658.6 152.6 o

4	-1	1	1	18.7	142.1	313.8	<	1	-5	3	0	5018.6	5645.6	76.3	o
0	1	1	1	12475.6	13350.1	85.6	o	0	-3	3	1	39354.6	39781.3	124.8	o
0	1	1	3	8047.2	8094.7	98.8	o	0	-3	3	3	26314.0	25256.7	188.6	o
0	1	1	7	1759.4	1560.1	69.0	o	1	-3	3	-2	372.0	704.8	125.4	<
1	1	1	-2	110.3	27.3	67.0	<	1	-3	3	0	12129.7	12960.5	89.1	o
1	1	1	0	15497.6	18260.2	143.6	o	0	-1	3	1	59821.4	52806.9	186.4	o
4	1	1	1	-13.8	140.5	218.8	<	0	-1	3	3	34934.1	35697.5	364.9	o
0	3	1	1	6872.4	7118.6	46.3	o	1	-1	3	-2	51.3	129.7	122.4	<
0	3	1	3	5689.1	5625.5	71.1	o	1	-1	3	0	14985.4	14146.2	122.9	o
0	3	1	7	1216.1	1250.1	64.5	o	4	-1	3	1	20.2	37.2	295.9	<
1	3	1	-2	143.5	145.3	87.8	<	0	1	3	1	57143.7	52765.0	162.0	o
1	3	1	0	39713.9	40282.9	130.8	o	0	1	3	3	35440.7	35291.7	246.7	o
0	5	1	1	4700.1	4117.2	45.2	o	0	1	3	7	8642.7	7142.1	179.0	o
0	5	1	3	3361.7	3136.1	68.8	o	1	1	3	-2	62.0	126.5	94.6	<
1	5	1	-2	319.6	207.3	96.2	o	1	1	3	0	14593.4	14002.9	131.3	o
1	5	1	0	5802.0	5484.5	60.4	o	4	1	3	1	52.6	36.7	223.5	<
0	7	1	1	2182.4	2009.9	70.7	o	0	3	3	1	39597.0	39623.2	94.0	o
0	7	1	3	1271.4	1541.3	62.1	o	0	3	3	3	25616.1	25143.1	129.4	o
1	7	1	0	3817.6	3814.7	98.5	o	0	3	3	7	5462.2	5733.3	128.8	o
0	-8	2	0	11495.6	10280.8	313.1	o	1	3	3	-2	385.1	698.1	101.8	o
0	-6	2	0	48872.0	48935.2	190.0	o	1	3	3	0	12231.0	13030.1	78.6	o
0	-6	2	2	10872.2	10064.3	104.3	o	0	5	3	1	20735.8	20432.0	74.7	o
1	-6	2	1	1075.8	872.3	115.1	o	0	5	3	3	15273.9	14198.5	96.2	o
2	-6	2	0	8950.1	9398.7	177.2	o	1	5	3	-2	768.8	991.4	95.4	o
0	-4	2	0	29113.7	30312.2	133.2	o	1	5	3	0	5473.7	6269.1	68.7	o
0	-4	2	2	21032.8	20551.8	98.4	o	0	7	3	1	9235.7	8983.8	184.3	o
0	-4	2	4	13075.6	12258.7	190.6	o	0	7	3	3	5816.8	7055.5	127.3	o
1	-4	2	-1	486.1	550.3	88.7	o	1	7	3	0	5359.5	5747.2	113.9	o
1	-4	2	1	378.0	354.0	65.3	o	0	-8	4	0	6708.6	6354.6	201.0	o
2	-4	2	0	5450.1	5628.2	91.6	o	0	-6	4	0	10139.3	10078.6	121.1	o
4	-4	2	0	2068.4	2282.9	87.8	o	0	-6	4	2	1125.0	805.1	92.4	o
0	-2	2	0	53671.0	57677.1	193.5	o	1	-6	4	1	311.5	199.3	123.8	<
0	-2	2	2	34656.7	36471.8	149.4	o	2	-6	4	0	3638.0	3672.0	90.8	o
0	-2	2	4	19156.1	19076.4	217.2	o	0	-4	4	0	17077.5	17815.4	110.3	o
0	-2	2	6	7375.9	8335.0	310.6	o	0	-4	4	2	1665.7	1609.2	51.1	o
1	-2	2	-1	191.8	223.6	77.3	<	0	-4	4	4	1162.6	983.4	138.3	o
1	-2	2	1	153.6	151.1	52.6	<	1	-4	4	-1	234.6	215.5	88.7	<
2	-2	2	0	7724.3	8585.0	103.9	o	1	-4	4	1	154.1	162.5	75.3	<
4	-2	2	0	2950.1	3023.9	93.5	o	2	-4	4	0	8066.4	8101.1	104.2	o
0	0	2	0	123.9	87.3	126.3	<	4	-4	4	0	3070.2	3365.0	103.0	o
0	0	2	2	46059.9	46004.6	194.1	o	0	-2	4	0	12784.0	14087.9	85.7	o
0	0	2	4	22314.2	22397.8	237.5	o	0	-2	4	2	2740.8	2753.3	53.2	o
0	0	2	6	10620.0	9501.5	196.2	o	0	-2	4	4	1607.5	1504.3	126.2	o
0	0	2	8	3719.8	3428.8	104.7	o	0	-2	4	6	934.8	687.7	370.2	<
1	0	2	-1	48.9	10.3	71.6	<	1	-2	4	-1	63.2	45.5	78.7	<
1	0	2	1	5.8	0.1	78.1	<	1	-2	4	1	49.9	51.0	37.9	<
2	0	2	0	27131.5	27787.6	222.3	o	2	-2	4	0	11083.6	11869.3	124.0	o
4	0	2	0	8360.3	9059.8	180.7	o	4	-2	4	0	4204.9	4272.7	112.8	o
0	2	2	0	57300.5	61034.0	156.4	o	0	0	4	0	7151.2	7199.9	174.8	o
0	2	2	2	34743.9	36528.8	110.3	o	0	0	4	2	2783.5	3333.0	60.6	o
0	2	2	4	19559.2	19099.4	128.6	o	0	0	4	4	1782.1	1765.2	146.4	o
0	2	2	6	7878.9	8345.6	153.8	o	0	0	4	6	838.7	775.3	49.5	o
0	2	2	8	2682.7	3068.6	98.9	o	0	0	4	8	259.5	308.0	66.6	o
1	2	2	-1	187.4	231.1	64.7	<	1	0	4	-1	49.2	69.6	83.9	<
1	2	2	1	160.3	124.2	42.7	o	1	0	4	1	13.9	20.3	98.4	<
2	2	2	0	7892.1	8329.9	203.6	o	2	0	4	0	9634.8	10211.3	145.7	o
4	2	2	0	2631.0	2915.6	87.9	o	4	0	4	0	3159.4	3424.4	89.4	o
0	4	2	0	31440.7	33190.9	109.6	o	0	2	4	0	14362.6	15938.6	83.1	o
0	4	2	2	21202.6	20601.6	75.3	o	0	2	4	2	2625.7	2743.8	41.4	o
0	4	2	4	12589.3	12304.3	112.7	o	0	2	4	4	1564.9	1498.4	64.5	o
0	4	2	6	4438.9	5777.7	101.3	o	0	2	4	6	715.1	684.7	119.2	o
1	4	2	-1	448.9	565.0	70.8	o	0	2	4	8	319.7	277.9	54.7	o
1	4	2	1	407.8	379.1	55.0	o	1	2	4	-1	88.8	50.4	68.6	<
2	4	2	0	5612.5	5754.9	70.5	o	1	2	4	1	51.2	59.2	39.4	<
4	4	2	0	2150.4	2372.0	92.5	o	2	2	4	0	11514.4	11864.8	187.2	o
0	6	2	0	50160.1	49572.7	135.5	o	4	2	4	0	3979.8	4295.9	115.5	o
0	6	2	2	11169.7	10130.5	69.0	o	0	4	4	0	18235.6	19106.3	90.4	o
0	6	2	4	4604.0	6529.8	97.8	o	0	4	4	2	1617.7	1594.1	38.1	o
0	6	2	6	2162.9	3261.4	89.2	o	0	4	4	4	1114.6	975.2	89.2	o
1	6	2	1	1056.2	836.6	77.0	o	0	4	4	6	399.4	485.1	48.9	o
2	6	2	0	9342.3	9395.7	180.9	o	1	4	4	-1	229.2	231.5	73.2	o
0	8	2	0	9510.2	9222.5	197.8	o	1	4	4	1	183.9	178.5	56.0	o
0	8	2	2	4395.8	4371.1	104.1	o	2	4	4	0	8064.9	8073.0	87.9	o
1	-7	3	0	4744.1	5040.5	105.7	o	4	4	4	0	3158.3	3345.7	107.2	o
0	-5	3	1	21300.3	20730.3	95.2	o	0	6	4	0	10181.6	10222.4	90.6	o
0	-5	3	3	15462.0	14306.4	149.1	o	0	6	4	2	1103.8	792.8	58.0	o
1	-5	3	-2	684.2	1000.9	136.3	o	0	6	4	4	352.2	536.4	46.7	o

0	6	4	6	153.8	288.7	78.2	<	1	4	6	-1	523.9	639.4	78.0	o
1	6	4	1	351.9	205.5	87.3	o	1	4	6	1	569.7	514.1	56.5	o
2	6	4	0	3486.8	3679.9	90.2	o	2	4	6	0	13850.0	14070.6	115.7	o
0	8	4	0	6059.9	5984.6	128.3	o	4	4	6	0	5481.3	5506.9	131.7	o
0	8	4	2	308.3	359.3	51.8	o	0	6	6	0	12444.6	11526.7	106.7	o
1	-7	5	0	5243.1	5070.6	114.0	o	0	6	6	2	16542.4	16624.4	161.8	o
0	-5	5	1	7896.0	7446.3	76.2	o	0	6	6	4	7873.2	10797.8	171.4	o
0	-5	5	3	7045.3	6375.7	132.5	o	1	6	6	1	817.7	603.5	97.8	o
1	-5	5	-2	417.3	493.1	160.5	<	2	6	6	0	1058.3	970.9	59.9	o
1	-5	5	0	15363.3	14867.9	116.8	o	0	8	6	0	2466.5	2220.9	89.0	o
0	-3	5	1	15109.6	15372.9	82.3	o	0	8	6	2	7416.0	7468.4	155.4	o
0	-3	5	3	11396.7	11112.8	136.7	o	1	-7	7	0	8353.2	8173.5	171.3	o
1	-3	5	-2	462.5	353.1	131.0	o	0	-5	7	1	970.0	868.4	66.4	o
1	-3	5	0	7221.5	7609.1	73.8	o	0	-5	7	3	971.5	942.5	108.6	o
0	-1	5	1	21948.0	22773.7	110.2	o	1	-5	7	0	16634.7	16363.8	119.1	o
0	-1	5	3	15600.1	15515.2	160.4	o	0	-3	7	1	2460.0	2396.5	42.9	o
1	-1	5	-2	58.4	83.0	105.0	<	0	-3	7	3	1804.1	1719.2	92.4	o
1	-1	5	0	30106.8	32498.2	152.1	o	1	-3	7	-2	160.2	42.5	107.6	<
4	-1	5	1	52.8	10.0	327.1	<	1	-3	7	0	1537.2	1442.9	46.4	o
0	1	5	1	21579.4	22544.5	99.2	o	0	-1	7	1	4479.6	4511.7	60.0	o
0	1	5	3	15441.0	15432.7	136.3	o	0	-1	7	3	2562.5	2500.4	90.4	o
0	1	5	7	3837.8	3245.7	98.4	o	1	-1	7	-2	68.5	42.3	84.7	<
1	1	5	-2	62.4	79.3	89.0	<	1	-1	7	0	39188.3	38211.9	172.2	o
1	1	5	0	30197.6	32070.1	168.9	o	4	-1	7	1	153.5	56.3	346.0	<
4	1	5	1	74.9	10.8	232.6	<	0	1	7	1	4394.4	4525.8	54.6	o
0	3	5	1	15138.6	15196.7	62.3	o	0	1	7	3	2550.4	2504.1	76.2	o
0	3	5	3	11110.1	11023.3	94.4	o	0	1	7	7	419.8	419.9	51.8	o
0	3	5	7	2445.1	2624.0	104.0	o	1	1	7	-2	85.2	41.5	89.2	<
1	3	5	-2	377.0	345.8	114.6	o	1	1	7	0	38483.8	37225.2	184.0	o
1	3	5	0	7220.8	7665.7	65.4	o	4	1	7	1	-9.8	57.9	251.6	<
0	5	5	1	7943.6	7500.1	59.2	o	0	3	7	1	2368.2	2396.8	36.7	o
0	5	5	3	6706.8	6284.4	84.3	o	0	3	7	3	1813.3	1729.8	62.2	o
1	5	5	-2	316.6	485.1	123.0	<	0	3	7	7	276.5	325.2	86.9	o
1	5	5	0	15311.0	14598.1	98.5	o	1	3	7	-2	169.3	40.9	120.1	<
0	7	5	1	5583.4	4660.1	113.3	o	1	3	7	0	1497.2	1402.4	43.6	o
0	7	5	3	2641.2	3188.6	81.7	o	0	5	7	1	950.5	898.2	45.6	o
1	7	5	0	4613.9	4447.4	104.9	o	0	5	7	3	957.0	954.3	73.2	o
0	-8	6	0	1208.0	1072.8	100.9	o	1	5	7	-2	177.4	37.0	214.7	<
0	-6	6	0	12737.9	11637.6	131.7	o	1	5	7	0	16555.8	16458.3	103.2	o
1	-6	6	1	936.4	663.9	116.0	o	0	7	7	1	812.6	904.5	54.7	o
2	-6	6	0	909.6	974.5	56.7	o	0	7	7	3	388.0	431.2	50.1	o
0	-4	6	0	21645.5	22587.0	122.6	o	1	7	7	0	7690.5	7995.3	160.2	o
0	-4	6	2	33748.0	32569.8	119.4	o	0	-8	8	0	30164.3	28138.3	594.6	o
0	-4	6	4	20516.6	19863.1	221.3	o	0	-6	8	0	26877.6	26162.6	165.5	o
1	-4	6	-1	510.5	704.5	100.8	o	1	-6	8	1	928.8	861.7	142.0	o
1	-4	6	1	670.3	534.3	66.9	o	2	-6	8	0	361.6	356.4	46.6	o
2	-4	6	0	14181.1	14259.8	128.3	o	0	-4	8	0	89060.9	94823.9	234.8	o
4	-4	6	0	5788.5	5618.3	131.5	o	0	-4	8	2	32643.6	31926.3	117.4	o
0	-2	6	0	153582.9	160302.6	272.2	o	0	-4	8	4	20093.4	19534.5	224.9	o
0	-2	6	2	56138.7	54293.6	142.6	o	1	-4	8	-1	934.5	1104.1	104.9	o
0	-2	6	4	30650.8	30241.0	296.4	o	1	-4	8	1	919.6	797.2	74.3	o
1	-2	6	-1	443.6	545.4	72.8	o	2	-4	8	0	14033.8	14133.5	129.8	o
1	-2	6	1	555.5	501.5	44.2	o	4	-4	8	0	5803.5	5919.8	133.6	o
2	-2	6	0	19200.2	19673.9	141.5	o	0	-2	8	0	17925.5	19100.2	100.2	o
4	-2	6	0	7738.6	7107.3	165.4	o	0	-2	8	2	55194.8	52109.2	141.0	o
0	0	6	0	93221.4	78826.9	409.2	o	0	-2	8	4	29912.3	29545.7	239.9	o
0	0	6	2	69494.9	62739.7	214.2	o	1	-2	8	-1	199.4	236.5	73.8	<
0	0	6	4	34651.3	34945.7	275.4	o	1	-2	8	1	151.3	128.7	57.3	<
0	0	6	6	17092.6	15551.7	272.1	o	2	-2	8	0	20231.3	20654.2	142.0	o
0	0	6	8	7023.9	5847.9	153.1	o	4	-2	8	0	7695.0	7460.3	181.5	o
1	0	6	-1	-37.5	4.1	99.5	<	0	0	8	0	58443.1	56212.5	287.3	o
1	0	6	1	29.8	172.4	123.2	<	0	0	8	2	62483.4	60243.7	201.3	o
2	0	6	0	2013.3	2056.3	88.3	o	0	0	8	4	34263.4	34170.4	227.8	o
4	0	6	0	742.8	709.7	53.5	o	0	0	8	6	15857.9	15237.9	290.2	o
0	2	6	0	144142.7	157090.9	243.1	o	0	0	8	8	6630.3	5667.2	149.6	o
0	2	6	2	54610.1	53956.8	132.6	o	1	0	8	-1	11.7	1.7	101.6	<
0	2	6	4	30898.2	30162.8	206.3	o	1	0	8	1	75.2	184.8	113.2	<
0	2	6	6	15006.9	13673.4	296.3	o	2	0	8	0	1327.9	1275.2	97.3	o
0	2	6	8	5147.4	5251.1	140.1	o	4	0	8	0	432.4	438.8	53.3	o
1	2	6	-1	367.6	539.6	75.4	o	0	2	8	0	22262.7	23919.5	101.2	o
1	2	6	1	534.2	450.6	43.9	o	0	2	8	2	53337.1	51850.8	131.4	o
2	2	6	0	19785.0	19832.5	176.9	o	0	2	8	4	29892.1	29474.6	193.6	o
4	2	6	0	7539.9	7241.4	168.1	o	0	2	8	6	14875.2	13436.5	291.8	o
0	4	6	0	16465.4	17700.9	87.6	o	0	2	8	8	5367.8	5082.7	148.8	o
0	4	6	2	33501.7	32620.1	92.4	o	1	2	8	-1	147.5	235.6	91.0	<
0	4	6	4	20267.8	19896.1	149.3	o	1	2	8	1	130.0	142.9	54.5	<
0	4	6	6	7734.0	9616.6	163.5	o	2	2	8	0	21098.7	20786.7	162.4	o

4	2	8	0	7954.6	7607.9	185.2	o	1	2	10	1	146.2	369.7	53.8	<
0	4	8	0	92403.6	98087.0	189.7	o	2	2	10	0	11758.4	11893.0	123.6	o
0	4	8	2	31850.8	32024.4	91.3	o	4	2	10	0	5408.3	4712.1	147.4	o
0	4	8	4	19680.5	19592.0	160.3	o	0	4	10	0	7344.8	7670.5	70.1	o
0	4	8	6	7589.3	9422.8	167.2	o	0	4	10	2	2705.1	2610.9	52.2	o
1	4	8	-1	882.2	1140.7	78.7	o	0	4	10	4	1693.0	1572.4	118.8	o
1	4	8	1	959.2	751.2	59.1	o	0	4	10	6	549.1	705.8	65.1	o
2	4	8	0	13694.8	13827.6	119.2	o	1	4	10	-1	67.1	90.0	94.3	<
4	4	8	0	6402.3	5796.6	142.7	o	1	4	10	1	141.7	97.4	70.5	<
0	6	8	0	26301.6	26334.8	134.0	o	2	4	10	0	8850.6	8815.1	106.7	o
0	6	8	2	17137.3	16296.0	257.1	o	4	4	10	0	3831.1	3656.8	124.6	o
0	6	8	4	7870.7	10632.7	176.1	o	0	6	10	0	252.9	175.3	80.3	o
1	6	8	1	989.8	891.5	109.9	o	0	6	10	2	1468.3	1341.6	59.8	o
2	6	8	0	344.7	355.5	49.0	o	0	6	10	4	641.8	817.5	58.1	o
0	8	8	0	31078.4	27518.7	418.2	o	2	6	10	0	2342.4	2208.7	82.0	o
0	8	8	2	6914.9	7205.9	147.3	o	0	8	10	0	2373.8	2385.7	90.6	o
1	-7	9	0	11518.6	10391.3	210.8	o	1	-7	11	0	3682.5	3569.0	99.5	o
0	-5	9	1	21411.5	21207.6	108.9	o	0	-5	11	1	16616.2	15467.7	99.6	o
0	-5	9	3	14885.3	13988.7	176.0	o	0	-5	11	3	12750.0	12455.3	240.9	o
1	-5	9	0	7979.2	8007.3	93.2	o	1	-5	11	0	9560.0	9412.9	124.1	o
0	-3	9	1	36670.5	36048.3	98.3	o	0	-3	11	1	28956.8	28653.3	94.7	o
0	-3	9	3	25258.6	24141.6	168.1	o	0	-3	11	3	22738.8	21063.5	150.7	o
1	-3	9	-2	309.1	510.5	116.6	<	1	-3	11	-2	302.9	489.5	129.0	<
1	-3	9	0	806.3	774.6	47.7	o	1	-3	11	0	14250.8	14283.3	92.1	o
0	-1	9	1	52701.8	50428.7	167.4	o	0	-1	11	1	42588.6	41335.4	155.5	o
0	-1	9	3	33692.5	33005.7	203.0	o	0	-1	11	3	28273.4	28233.3	195.9	o
1	-1	9	-2	104.8	94.2	86.7	<	1	-1	11	-2	142.8	94.0	122.6	<
1	-1	9	0	25073.0	24759.6	149.9	o	1	-1	11	0	14136.3	15136.4	120.1	o
4	-1	9	1	143.3	37.9	356.7	<	0	1	11	1	41506.4	41200.4	136.2	o
0	1	9	1	52992.0	49913.3	146.5	o	0	1	11	3	28763.6	28170.0	173.0	o
0	1	9	3	33326.8	32901.6	178.9	o	0	1	11	7	7272.0	6295.9	160.5	o
0	1	9	7	7835.8	6883.5	164.7	o	1	1	11	-2	171.9	92.8	120.1	<
1	1	9	-2	100.9	94.5	89.5	<	1	1	11	0	14389.5	15306.1	119.2	o
1	1	9	0	24513.9	24383.4	148.1	o	0	3	11	1	28044.0	28353.7	87.8	o
4	1	9	1	-146.2	39.3	381.8	<	0	3	11	3	21768.1	20960.1	138.6	o
0	3	9	1	35697.9	36257.9	92.6	o	0	3	11	7	4713.0	5079.6	147.5	o
0	3	9	3	24318.8	24130.8	132.9	o	1	3	11	-2	485.1	485.5	139.1	o
0	3	9	7	5062.0	5502.3	151.6	o	1	3	11	0	13971.4	14306.7	93.4	o
1	3	9	-2	299.0	511.7	125.8	<	0	5	11	1	16577.9	15727.1	76.3	o
1	3	9	0	808.5	809.9	49.9	o	0	5	11	3	12565.4	12419.4	135.4	o
0	5	9	1	20831.7	20953.8	81.4	o	1	5	11	0	9213.4	8918.0	98.6	o
0	5	9	3	14262.7	14007.4	116.7	o	0	7	11	1	10277.6	8628.1	208.4	o
1	5	9	0	8593.4	8725.2	84.8	o	0	7	11	3	5410.9	6311.6	117.9	o
0	7	9	1	8715.8	8231.4	178.3	o	1	7	11	0	3225.6	3021.1	98.2	o
0	7	9	3	5773.7	6911.2	124.3	o	0	-8	12	0	2138.4	1869.3	124.2	o
1	7	9	0	11936.0	10791.8	220.9	o	0	-6	12	0	1007.8	1029.1	75.3	o
0	-8	10	0	2272.3	2226.4	121.2	o	2	-6	12	0	7089.5	6541.3	148.9	o
0	-6	10	0	87.3	186.5	79.0	<	0	-4	12	0	16947.7	16876.9	102.4	o
2	-6	10	0	2233.9	2199.0	80.6	o	0	-4	12	2	8939.8	8779.0	69.8	o
0	-4	10	0	8223.7	8113.7	76.6	o	0	-4	12	4	5669.5	5635.2	195.3	o
0	-4	10	2	2725.9	2605.8	76.8	o	1	-4	12	-1	295.9	278.0	98.3	o
0	-4	10	4	1712.1	1568.8	150.9	o	1	-4	12	1	403.6	283.2	76.1	o
1	-4	10	-1	113.1	94.6	113.9	<	2	-4	12	0	4755.3	4822.7	115.4	o
1	-4	10	1	106.3	100.5	71.8	<	4	-4	12	0	2116.5	2031.7	97.9	o
2	-4	10	0	8896.8	8853.0	119.3	o	0	-2	12	0	34851.4	35839.7	141.3	o
4	-4	10	0	3821.0	3708.4	120.2	o	0	-2	12	2	14753.0	13824.9	91.9	o
0	-2	10	0	38882.5	39615.8	146.7	o	0	-2	12	4	8951.3	8232.2	151.3	o
0	-2	10	2	4726.0	4395.4	57.0	o	1	-2	12	-1	169.5	168.6	82.7	<
0	-2	10	4	2702.6	2401.9	138.4	o	1	-2	12	1	256.8	261.0	57.2	o
1	-2	10	-1	85.3	220.8	75.9	<	2	-2	12	0	6827.8	6624.0	101.9	o
1	-2	10	1	120.0	370.1	55.7	<	4	-2	12	0	2628.0	2595.6	112.8	o
2	-2	10	0	12005.6	11742.7	116.8	o	0	0	12	0	79782.2	79018.0	249.5	o
4	-2	10	0	5219.0	4650.8	154.3	o	0	0	12	2	15571.2	16158.8	109.2	o
0	0	10	0	30059.2	30659.6	169.3	o	0	0	12	4	9569.1	9443.8	133.3	o
0	0	10	2	5500.4	5413.4	79.3	o	0	0	12	6	5210.0	4488.5	122.1	o
0	0	10	4	2999.3	2802.7	98.9	o	1	0	12	-1	125.2	154.3	114.4	<
0	0	10	6	1349.5	1184.6	66.2	o	1	0	12	1	41.9	259.9	96.5	<
0	0	10	8	315.6	393.5	87.3	o	2	0	12	0	15630.8	15445.9	147.3	o
1	0	10	-1	78.5	53.1	95.3	<	4	0	12	0	6334.9	5753.2	135.2	o
1	0	10	1	42.2	15.0	87.3	<	0	2	12	0	29855.5	32086.1	127.1	o
2	0	10	0	4987.4	4807.8	108.8	o	0	2	12	2	14127.4	13747.7	84.5	o
4	0	10	0	2171.9	1887.1	82.6	o	0	2	12	4	8633.5	8191.8	131.5	o
0	2	10	0	37912.0	39336.4	134.6	o	0	2	12	6	4237.1	3997.8	120.5	o
0	2	10	2	4532.5	4398.2	53.9	o	1	2	12	-1	213.3	148.9	91.4	<
0	2	10	4	2706.6	2403.9	106.3	o	1	2	12	1	207.1	268.2	58.0	o
0	2	10	6	1101.3	1038.3	80.3	o	2	2	12	0	6550.4	6487.9	110.9	o
1	2	10	-1	119.5	223.7	99.0	<	4	2	12	0	2495.5	2537.3	113.2	o

0	4	12	0	13375.0	14080.9	92.7	o	0	6	14	0	52424.6	50733.5	491.1	o
0	4	12	2	8295.6	8710.2	66.2	o	0	6	14	2	12909.1	11214.2	244.0	o
0	4	12	4	5310.8	5582.7	133.8	o	0	6	14	4	5928.3	7575.9	132.4	o
0	4	12	6	2527.3	2888.4	96.4	o	2	6	14	0	9522.2	8964.3	199.4	o
1	4	12	-1	336.1	285.2	95.0	o	1	-7	15	0	2320.9	2148.1	85.4	o
1	4	12	1	489.6	283.2	72.3	o	0	-5	15	1	11728.2	10846.9	97.2	o
2	4	12	0	4825.2	4914.0	111.5	o	1	-5	15	0	5528.8	5071.0	119.6	o
4	4	12	0	2246.0	2080.0	105.6	o	0	-3	15	1	20865.6	20124.1	90.7	o
0	6	12	0	459.8	413.9	45.3	o	0	-3	15	3	14596.7	13170.8	152.2	o
0	6	12	2	5066.0	4759.4	109.3	o	1	-3	15	-2	285.0	256.7	131.0	<
0	6	12	4	2207.6	3193.7	86.9	o	1	-3	15	0	18752.7	18658.0	115.6	o
2	6	12	0	7165.1	6516.6	159.0	o	0	-1	15	1	24418.4	24928.8	147.2	o
0	8	12	0	3276.6	2801.4	104.7	o	0	-1	15	3	17416.5	17466.7	186.1	o
1	-7	13	0	2170.8	2263.1	84.6	o	1	-1	15	-2	20.4	84.1	172.6	<
0	-5	13	1	709.4	554.1	81.0	o	1	-1	15	0	6906.5	7565.0	105.4	o
1	-5	13	0	3823.3	4075.7	90.6	o	0	1	15	1	25217.3	25125.6	112.7	o
0	-3	13	1	1022.6	937.2	48.2	o	0	1	15	3	17761.2	17480.2	147.1	o
0	-3	13	3	657.4	467.0	87.1	o	0	1	15	7	4542.2	3828.9	139.9	o
1	-3	13	-2	82.5	80.0	102.8	<	1	1	15	-2	0.7	84.1	158.6	<
1	-3	13	0	20568.8	19737.9	114.6	o	1	1	15	0	7134.1	7692.5	102.8	o
0	-1	13	1	853.5	802.5	74.4	o	0	3	15	1	20472.3	20126.6	87.5	o
0	-1	13	3	693.4	604.4	110.1	o	0	3	15	3	13638.9	13200.2	141.0	o
1	-1	13	-2	165.3	81.0	139.7	<	0	3	15	7	2930.8	3059.7	121.9	o
1	-1	13	0	9776.2	9210.3	111.3	o	1	3	15	-2	359.6	256.0	144.2	<
0	1	13	1	868.1	812.9	52.6	o	1	3	15	0	18738.3	18909.4	123.7	o
0	1	13	3	688.4	597.2	84.9	o	0	5	15	1	10882.5	10882.7	84.3	o
0	1	13	7	44.0	177.4	96.1	<	0	5	15	3	8025.3	7884.2	173.8	o
1	1	13	-2	78.0	78.7	129.0	<	1	5	15	0	5469.4	5135.2	117.4	o
1	1	13	0	9919.2	9417.2	105.7	o	0	7	15	1	5838.0	5304.3	122.5	o
0	3	13	1	989.5	944.9	41.4	o	0	7	15	3	3226.1	3900.5	103.5	o
0	3	13	3	546.6	450.3	81.3	o	1	7	15	0	2844.4	2558.6	99.0	o
0	3	13	7	198.5	150.2	68.4	<	0	-6	16	0	1854.6	2001.6	107.6	o
1	3	13	-2	32.2	75.6	129.4	<	2	-6	16	0	9000.1	8564.9	185.0	o
1	3	13	0	19990.1	19495.0	117.8	o	0	-4	16	0	16221.6	15667.2	119.3	o
0	5	13	1	463.4	454.6	59.6	o	0	-4	16	2	6985.9	6361.4	89.7	o
0	5	13	3	358.7	286.8	47.2	o	1	-4	16	-1	39.5	256.6	112.7	<
1	5	13	0	3823.7	4070.0	81.5	o	1	-4	16	1	231.7	412.0	93.7	<
0	7	13	1	131.8	225.6	76.0	<	2	-4	16	0	3344.5	3440.4	95.5	o
0	7	13	3	190.4	171.7	76.1	<	0	-2	16	0	17799.3	18622.7	128.9	o
1	7	13	0	2370.9	2509.2	92.6	o	0	-2	16	2	9801.1	9615.8	93.2	o
0	-6	14	0	50570.1	50004.0	673.6	o	0	-2	16	4	6525.1	5898.5	148.9	o
2	-6	14	0	9016.0	8971.7	190.3	o	1	-2	16	-1	253.6	137.7	113.3	<
0	-4	14	0	20573.5	20838.6	117.5	o	1	-2	16	1	31.2	57.3	93.3	<
0	-4	14	2	23116.3	20867.6	97.8	o	2	-2	16	0	5343.0	5047.3	111.3	o
1	-4	14	-1	691.9	647.6	107.9	o	4	-2	16	0	2146.6	2146.1	104.5	o
1	-4	14	1	566.7	510.6	80.6	o	0	0	16	0	73509.0	74581.8	224.4	o
2	-4	14	0	4317.1	4204.2	107.2	o	0	0	16	2	11678.0	11304.4	94.8	o
0	-2	14	0	45786.4	48709.3	169.4	o	0	0	16	4	7331.2	6739.6	132.7	o
0	-2	14	2	30486.1	31769.8	120.3	o	0	0	16	6	3896.3	3178.8	125.5	o
0	-2	14	4	20963.8	19403.8	194.6	o	1	0	16	-1	0.5	89.5	138.1	<
1	-2	14	-1	214.1	268.0	94.4	<	1	0	16	1	56.0	148.9	97.1	<
1	-2	14	1	169.4	143.4	77.6	<	2	0	16	0	17814.0	17632.9	158.8	o
2	-2	14	0	5925.5	5790.5	100.5	o	4	0	16	0	7933.6	7397.8	180.9	o
4	-2	14	0	2476.3	2387.1	110.0	o	0	2	16	0	15645.1	16501.8	119.2	o
0	0	14	0	989.8	796.6	65.4	o	0	2	16	2	9504.3	9619.3	84.1	o
0	0	14	2	36535.9	36653.2	154.1	o	0	2	16	4	6224.8	5904.9	126.2	o
0	0	14	4	22776.6	22122.6	171.5	o	0	2	16	6	3003.1	2830.8	113.8	o
0	0	14	6	11832.9	10576.5	252.3	o	1	2	16	-1	106.8	134.3	114.1	<
1	0	14	-1	97.6	3.8	102.5	<	1	2	16	1	36.3	67.0	87.2	<
1	0	14	1	-62.0	73.0	83.7	<	2	2	16	0	4878.9	4920.6	109.2	o
2	0	14	0	23888.5	23282.9	177.9	o	4	2	16	0	2117.6	2040.4	105.1	o
4	0	14	0	10014.8	8899.3	208.2	o	0	4	16	0	14767.3	14508.1	109.8	o
0	2	14	0	49978.3	52465.3	171.7	o	0	4	16	2	6643.3	6384.6	79.1	o
0	2	14	2	29917.3	31642.4	115.8	o	0	4	16	4	3980.1	4056.0	107.8	o
0	2	14	4	20373.0	19360.6	173.4	o	0	4	16	6	1818.0	2019.4	97.8	o
0	2	14	6	10404.6	9433.4	215.7	o	1	4	16	-1	114.3	241.1	124.0	<
1	2	14	-1	309.0	294.6	107.2	<	1	4	16	1	274.0	375.8	94.7	<
1	2	14	1	212.8	134.8	76.8	<	2	4	16	0	3623.1	3669.3	99.8	o
2	2	14	0	5501.9	5510.6	106.6	o	0	6	16	0	1617.9	1688.9	73.0	o
4	2	14	0	2441.7	2258.7	108.8	o	0	6	16	2	3684.0	3468.8	99.5	o
0	4	14	0	23864.4	24247.6	119.4	o	0	6	16	4	1791.2	2280.3	88.8	o
0	4	14	2	22095.2	20825.8	97.9	o	2	6	16	0	9748.7	8603.1	209.8	o
0	4	14	4	13288.9	13326.3	253.9	o	1	-7	17	0	3163.5	3168.4	101.6	o
0	4	14	6	5807.0	6779.9	145.9	o	1	-5	17	0	5138.2	5459.9	108.1	o
1	4	14	-1	633.1	660.3	112.8	o	0	-3	17	1	34071.7	32289.3	118.7	o
1	4	14	1	605.9	584.0	77.6	o	0	-3	17	3	26098.7	25010.3	189.2	o
2	4	14	0	4368.8	4352.9	116.1	o	1	-3	17	-2	307.5	432.7	154.3	<

1	-3	17	0	18833.9	18381.4	137.8	o	0	7	19	1	3408.3	2915.5	107.6	o
0	-1	17	1	42961.6	45463.5	183.6	o	0	-6	20	0	12939.3	12364.7	350.0	o
0	-1	17	3	33292.8	32469.5	221.1	o	2	-6	20	0	666.5	709.0	74.0	o
1	-1	17	-2	69.9	66.4	149.7	<	0	-4	20	0	29890.2	30769.5	173.5	o
1	-1	17	0	6951.3	6904.9	107.5	o	1	-4	20	1	848.1	443.8	137.0	o
0	1	17	1	44793.2	45200.8	146.0	o	2	-4	20	0	6472.7	6368.5	147.5	o
0	1	17	3	33583.6	32463.6	190.5	o	0	-2	20	0	4378.7	4663.7	135.5	o
0	1	17	7	9086.0	7714.1	204.5	o	0	-2	20	2	13916.2	13949.0	147.3	o
1	1	17	-2	148.4	67.4	147.9	<	1	-2	20	-1	15.7	99.4	186.6	<
1	1	17	0	7304.3	7193.7	105.3	o	1	-2	20	1	140.8	145.1	178.4	<
0	3	17	1	32685.4	32527.3	113.5	o	2	-2	20	0	8752.7	8633.7	159.3	o
0	3	17	3	25604.2	25008.4	171.1	o	0	0	20	0	7692.6	8065.4	101.9	o
1	3	17	-2	388.9	436.5	166.9	<	0	0	20	2	14089.0	15754.7	97.3	o
1	3	17	0	18554.6	18289.7	138.6	o	0	0	20	4	10079.6	10153.8	159.5	o
0	5	17	1	21497.3	19926.0	312.9	o	0	0	20	6	5591.5	5263.0	168.6	o
0	5	17	3	15745.5	15369.1	290.6	o	1	0	20	-1	81.1	98.0	128.9	<
1	5	17	0	4552.2	4858.6	106.2	o	1	0	20	1	-88.3	81.8	105.2	<
0	7	17	1	12202.2	10359.8	236.4	o	2	0	20	0	1722.8	1632.0	130.1	o
1	7	17	0	2859.0	2797.7	103.0	o	4	0	20	0	918.3	773.3	99.6	o
0	-6	18	0	2091.7	2083.7	118.9	o	0	2	20	0	7862.8	7889.8	114.0	o
2	-6	18	0	3558.6	3557.9	110.5	o	0	2	20	2	13751.3	13906.0	108.4	o
0	-4	18	0	6326.1	6188.8	105.2	o	0	2	20	4	9178.7	9018.6	198.6	o
0	-4	18	2	1283.7	1120.4	86.7	o	0	2	20	6	4856.2	4744.8	140.9	o
1	-4	18	1	51.5	62.0	120.7	<	1	2	20	-1	146.2	96.1	162.1	<
2	-4	18	0	3922.9	4113.5	105.9	o	1	2	20	1	61.4	172.4	135.2	<
0	-2	18	0	12474.9	13847.7	149.8	o	2	2	20	0	8742.2	8754.8	159.6	o
0	-2	18	2	1531.3	1562.8	85.0	o	0	4	20	0	31946.9	33451.5	175.5	o
0	-2	18	4	1187.3	1039.8	182.1	o	0	4	20	2	9429.2	9539.0	189.8	o
1	-2	18	-1	45.6	152.2	144.5	<	0	4	20	4	5914.4	6462.0	145.2	o
1	-2	18	1	134.8	302.6	132.2	<	1	4	20	1	629.7	496.4	150.6	o
2	-2	18	0	5655.5	5599.5	139.2	o	2	4	20	0	6340.9	6244.3	148.7	o
4	-2	18	0	2349.5	2311.7	112.5	o	0	6	20	0	12951.3	12466.6	251.1	o
0	0	18	0	22511.2	23032.5	133.7	o	0	6	20	2	5982.7	5576.1	134.1	o
0	0	18	2	2248.7	1833.0	72.2	o	2	6	20	0	621.0	711.9	78.8	o
0	0	18	4	1313.3	1155.4	116.1	o	1	-5	21	0	7112.5	7100.2	154.1	o
0	0	18	6	716.6	622.4	81.8	o	0	-3	21	1	2526.5	2269.3	122.6	o
1	0	18	-1	76.9	24.5	121.6	<	1	-3	21	0	341.3	424.6	115.0	<
1	0	18	1	119.9	100.0	85.0	<	0	-1	21	1	3295.6	2808.8	96.7	o
2	0	18	0	8730.7	8294.7	133.1	o	0	-1	21	3	2465.9	1991.8	171.1	o
4	0	18	0	3358.8	3279.4	133.8	o	1	-1	21	0	12138.4	12262.7	145.0	o
0	2	18	0	11200.2	12171.6	119.6	o	0	1	21	1	3308.6	2831.9	75.1	o
0	2	18	2	1475.7	1530.8	69.5	o	0	1	21	3	2302.4	1996.4	115.4	o
0	2	18	4	1115.4	1019.8	128.3	o	1	1	21	0	11828.1	12275.8	133.0	o
0	2	18	6	702.8	561.0	73.4	o	0	3	21	1	2427.7	2286.9	87.4	o
1	2	18	-1	14.7	160.9	129.7	<	0	3	21	3	1726.1	1542.5	85.1	o
1	2	18	1	121.6	317.0	118.6	<	1	3	21	0	380.8	463.1	117.8	o
2	2	18	0	5585.9	5515.4	134.4	o	0	5	21	1	1733.4	1661.1	80.5	o
4	2	18	0	2478.1	2294.9	109.4	o	0	5	21	3	868.8	945.8	76.1	o
0	4	18	0	4791.6	4813.3	92.4	o	1	5	21	0	7510.2	7503.7	157.6	o
0	4	18	2	1249.3	1083.8	83.4	o	0	-6	22	0	2164.7	1898.6	137.0	o
0	4	18	4	633.7	736.3	70.0	o	0	-4	22	0	5611.2	6077.8	182.9	o
0	4	18	6	353.0	424.8	110.5	o	2	-4	22	0	8536.5	8184.0	184.7	o
1	4	18	1	98.7	49.9	112.1	<	0	-2	22	0	37683.0	41205.6	256.5	o
2	4	18	0	4335.0	4094.8	116.2	o	0	-2	22	2	7568.5	7726.3	128.3	o
0	6	18	0	1988.9	1799.0	82.6	o	1	-2	22	-1	147.2	118.1	221.1	<
0	6	18	2	422.1	638.1	75.3	o	1	-2	22	1	-103.8	137.4	185.8	<
0	6	18	4	370.1	459.6	62.4	o	2	-2	22	0	9687.7	9305.0	205.3	o
2	6	18	0	4149.5	3529.7	121.9	o	0	0	22	0	14077.8	15287.4	123.8	o
1	-5	19	0	3684.0	3569.5	102.2	o	0	0	22	2	9006.0	8805.0	88.8	o
0	-3	19	1	11008.1	10804.2	106.2	o	0	0	22	4	5536.2	5721.0	135.2	o
0	-3	19	3	7462.4	7409.6	160.9	o	0	0	22	6	2888.4	3001.1	127.7	o
1	-3	19	0	3241.9	2845.0	103.0	o	1	0	22	-1	68.2	37.8	150.3	<
0	-1	19	1	13098.2	13243.5	111.8	o	1	0	22	1	104.5	52.6	112.9	<
0	-1	19	3	10014.0	9574.4	170.3	o	2	0	22	0	176.3	265.3	148.9	<
1	-1	19	-2	197.1	75.3	190.1	<	0	2	22	0	35733.6	39419.6	199.8	o
1	-1	19	0	9899.5	9890.6	126.4	o	0	2	22	2	7306.9	7708.3	108.7	o
0	1	19	1	13172.3	13436.9	93.6	o	0	2	22	4	4957.0	5102.2	129.6	o
0	-1	19	3	9847.4	9577.1	133.2	o	0	2	22	6	2777.9	2711.4	117.5	o
0	1	19	7	2459.8	2366.1	127.9	o	1	2	22	-1	142.7	121.5	179.1	<
1	1	19	-2	145.5	75.9	174.9	<	1	2	22	1	-25.6	131.2	147.7	<
1	1	19	0	9433.9	9655.1	115.6	o	2	2	22	0	10075.3	9538.4	206.7	o
0	3	19	1	10929.5	10706.4	91.6	o	0	4	22	0	3460.3	3651.6	110.2	o
0	3	19	3	7426.8	7411.8	122.3	o	0	4	22	2	5485.0	5453.0	131.8	o
1	3	19	0	2961.8	2756.1	104.7	o	0	4	22	4	3257.0	3690.8	123.2	o
0	5	19	1	7247.6	6685.3	150.7	o	2	4	22	0	8796.2	8107.3	189.4	o
0	5	19	3	4586.9	4613.2	117.4	o	0	6	22	0	2131.4	1820.9	100.3	o
1	5	19	0	3897.4	3785.7	110.8	o	0	6	22	2	3244.0	3215.1	112.4	o

1	-5	23	0	9860.5	9981.9	210.6	o	0	0	28	0	35169.1	37424.5	441.4	o
1	-3	23	0	1678.5	1528.5	89.2	o	0	0	28	2	6463.5	7295.2	136.4	o
0	-1	23	1	25101.8	24726.0	124.8	o	0	0	28	4	4767.5	5032.9	127.7	o
1	-1	23	0	13548.4	13297.4	156.6	o	2	0	28	0	8170.3	7659.0	174.0	o
0	1	23	1	24492.6	24867.5	119.0	o	0	2	28	0	7920.5	8854.2	163.0	o
0	1	23	3	18999.2	18484.7	335.7	o	0	2	28	2	6477.3	6635.9	145.0	o
1	1	23	0	13280.1	13029.9	144.4	o	0	2	28	4	4059.0	4543.3	129.3	o
0	3	23	1	18951.2	18868.8	356.1	o	2	2	28	0	2051.4	2208.8	102.3	o
0	3	23	3	15210.3	14508.9	305.2	o	0	4	28	0	7385.0	8596.4	184.5	o
1	3	23	0	1580.3	1485.0	90.2	o	0	4	28	2	3926.4	4787.4	134.7	o
0	5	23	1	12708.2	11063.4	259.5	o	1	-3	29	0	10741.5	10349.7	232.4	o
0	5	23	3	9108.8	9174.9	194.8	o	1	-1	29	0	3631.6	3345.7	112.3	o
1	5	23	0	10199.2	9738.3	207.8	o	0	1	29	1	5375.1	5642.4	123.2	o
0	-6	24	0	709.0	602.4	106.9	o	0	1	29	3	4368.1	4290.8	121.9	o
0	-4	24	0	6112.5	6430.8	210.0	o	1	1	29	0	3547.0	3609.3	112.0	o
2	-4	24	0	5204.8	5079.6	151.4	o	0	3	29	1	3852.4	4008.7	120.8	o
0	-2	24	0	9885.6	10291.9	194.6	o	0	3	29	3	3345.6	3461.1	118.1	o
1	-2	24	1	-104.5	22.5	196.8	<	1	3	29	0	10192.3	10153.7	206.8	o
2	-2	24	0	7144.8	7132.5	156.1	o	0	-4	30	0	1458.7	1524.0	148.3	o
0	0	24	0	2762.8	2379.6	104.4	o	0	-2	30	0	2809.0	2794.5	152.0	o
0	0	24	2	229.1	67.7	89.5	<	2	-2	30	0	1966.4	2047.9	102.7	o
0	0	24	4	-69.1	44.9	89.2	<	0	0	30	0	8039.1	7119.1	167.9	o
0	0	24	6	77.3	22.2	105.9	<	0	0	30	2	123.6	250.1	80.1	<
1	0	24	1	179.7	247.6	126.4	<	0	0	30	4	215.6	187.7	58.1	o
2	0	24	0	1378.2	1487.2	79.6	o	2	0	30	0	8316.7	8283.1	173.6	o
0	2	24	0	9978.4	10352.9	141.4	o	0	2	30	0	3006.6	3308.9	109.1	o
0	2	24	2	125.3	64.3	76.8	<	0	2	30	2	123.7	225.5	89.3	<
0	2	24	4	121.2	40.1	78.9	<	2	2	30	0	1830.9	1871.0	96.8	o
1	2	24	1	25.6	10.6	178.2	<	0	4	30	0	2357.4	2148.0	111.3	o
2	2	24	0	7110.2	7195.5	165.1	o	1	-3	31	0	4655.3	4488.1	147.2	o
0	4	24	0	5984.8	6190.1	149.5	o	1	-1	31	0	2227.5	2297.3	93.9	o
0	4	24	2	96.8	42.3	87.5	<	0	1	31	1	11104.9	11413.6	228.4	o
0	4	24	4	-1.6	28.6	99.0	<	0	1	31	3	8613.3	8704.2	177.2	o
2	4	24	0	4892.8	4907.4	149.7	o	1	1	31	0	2072.5	2339.1	96.6	o
0	6	24	0	706.1	582.3	78.7	o	0	3	31	1	9657.0	9719.3	203.1	o
1	-5	25	0	2394.3	2045.1	111.8	o	1	3	31	0	4615.8	4473.1	138.4	o
1	-3	25	0	1605.4	1538.1	98.7	o	0	-2	32	0	3695.6	3719.8	181.4	o
0	-1	25	1	19643.3	19780.9	132.5	o	0	0	32	0	112.2	91.8	68.8	<
1	-1	25	0	6242.0	6326.3	134.2	o	0	0	32	2	3339.9	3417.1	106.4	o
0	1	25	1	19725.7	19601.7	117.9	o	0	2	32	0	4410.1	4479.3	124.6	o
0	1	25	3	15208.7	14598.6	302.6	o	0	2	32	2	3470.1	3107.5	112.8	o
1	1	25	0	5678.9	6153.5	125.3	o	1	-1	33	0	1934.0	1949.4	93.1	o
0	3	25	1	16022.8	15974.0	319.5	o	0	1	33	1	3301.7	3421.4	108.1	o
0	3	25	3	11921.5	11531.2	264.2	o	1	1	33	0	1854.2	2023.6	94.2	o
1	3	25	0	1436.1	1489.6	97.9	o	0	0	34	0	13529.9	14452.0	269.3	o
0	5	25	1	11766.2	10355.2	257.2	o								
0	5	25	3	6961.3	7369.3	172.1	o								
1	5	25	0	2531.6	2277.1	124.2	o								
0	-4	26	0	10283.1	10446.9	304.8	o								
2	-4	26	0	2101.1	2401.8	120.9	o								
0	-2	26	0	5660.1	5572.9	196.4	o								
2	-2	26	0	3124.4	2989.3	115.8	o								
0	0	26	0	364.4	362.7	112.4	o								
0	0	26	2	8589.0	7790.5	184.5	o								
0	0	26	4	5450.8	5175.3	135.2	o								
2	0	26	0	4406.5	4268.7	120.0	o								
0	2	26	0	7151.0	7419.5	149.8	o								
0	2	26	2	5837.1	6825.4	132.4	o								
0	2	26	4	4469.0	4643.3	135.4	o								
2	2	26	0	2832.7	2988.5	115.4	o								
0	4	26	0	11625.7	12086.3	241.0	o								
0	4	26	2	5346.6	4983.7	148.4	o								
2	4	26	0	2402.6	2432.7	117.7	o								
1	-5	27	0	2110.5	2668.9	121.0	o								
1	-3	27	0	6650.7	6839.6	161.0	o								
1	-1	27	0	2383.8	2165.5	93.1	o								
0	1	27	1	1053.4	1039.4	65.0	o								
0	1	27	3	925.7	747.4	65.6	o								
1	1	27	0	2361.1	2268.4	91.8	o								
0	3	27	1	595.5	620.6	73.2	o								
0	3	27	3	670.3	588.2	77.6	o								
1	3	27	0	6528.3	7053.3	163.9	o								
0	5	27	1	375.0	467.8	111.0	o								
1	5	27	0	2487.2	2598.4	128.1	o								
0	-4	28	0	9811.9	10083.5	323.7	o								
0	-2	28	0	10341.0	11045.0	307.8	o								
2	-2	28	0	2311.9	2288.5	106.4	o								